



July 12, 2024

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
400 North Street  
Harrisburg, PA 17120

Application of the Department of Transportation of the Commonwealth of Pennsylvania for approval of the construction of a new grade-separated crossing where the extension of State Route 0116 (Eisenhower Drive) crosses above the tracks of CSX Transportation Inc., DOT Number New in Conewago Township, Adams County and the allocation of costs incident thereto.

Dear Secretary Chiavetta:

Enclosed for filing, please find the Application of the Department of Transportation.

A copy of this Application and Exhibits has been served upon the parties in the Certificate of Service to the Application.

Sincerely,

A handwritten signature in black ink, appearing to read "Ahmed Lasloudji".

Ahmed Lasloudji  
Grade Crossing Administrator  
Engineering District 8-0  
Department of Transportation

Attachments

cc: Parties of Record  
Mark J. Chappell P.E., Chief, Right-of-Way, Utilities, & Grade Crossing Division  
Karen L. Cummings, Senior Assistant Counsel, Office of Chief Counsel  
William M. Sinick, P.E., Supervisor, Rail Safety Engineering Section PUC

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of the Department of Transportation of the Commonwealth of Pennsylvania for approval of the construction of a new grade-separated crossing where the extension of State Route 0116 (Eisenhower Drive) crosses above the tracks of CSX Transportation Inc., DOT Number New in Conewago Township, Adams County and the allocation of costs incident thereto.

Application  
Docket No. \_\_\_\_\_

**Electronically Filed**

APPLICATION OF THE COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF  
TRANSPORTATION

Applicant, Commonwealth of Pennsylvania, Department of Transportation, files this Application pursuant to the provisions of 66 Pa.C.S § 2702 and 52 Pa. Code § 5.13 for the construction of a new public grade-separated crossing where the extension of State Route 0116 (Eisenhower Drive) crosses above the tracks of the CSX Transportation Inc., at DOT Number New<sup>1</sup> in Conewago Township, Adams County as described below:

1. The name and address of the Applicant are Commonwealth of Pennsylvania, Department of Transportation, Richard A. Reisinger, P.E., Assistant District Executive, Engineering District 8-0, 2140 Herr Street, Harrisburg, PA 17103-1699.
2. The name and address of the attorney for the Applicant are Leah Bobula, Assistant Counsel, Commonwealth of Pennsylvania, Department of Transportation, Office of Chief Counsel, PO Box 8212, Harrisburg, PA 17105-8212.

3. The Applicant is an agency of the Commonwealth of Pennsylvania, organized and existing under the Administrative Code of 1929, 71 P.S. § 511, et seq. and generally 36 P.S. § 670 - 401 et seq.

4. The names and addresses of the persons, parties, and entities concerned in, or affected by the proposed construction, to the best of the Applicant's knowledge, are shown in the certificate of service. In addition to those served, the Applicant requests that the following also receive service of all documents in this matter:

Mark J. Chappell P.E., Chief  
Right-of-Way, Utilities & Grade Crossing  
Division  
Pennsylvania Department of Transportation  
PO Box 3362  
Harrisburg, PA 17105-3362  
[marchappel@pa.gov](mailto:marchappel@pa.gov)

Karen L. Cummings  
Counsel for Applicant  
Office of Chief Counsel  
Pennsylvania Department of Transportation  
PO Box 8212  
Harrisburg, PA 17105-8212  
[kcummings@pa.gov](mailto:kcummings@pa.gov)

5. The Applicant is seeking approval to extend State Route 0116 (Eisenhower Drive) by constructing a new bridge that will carry State Route 0116 (Eisenhower Drive) over the tracks of CSX Transportation Inc., DOT Number New, RR MP: BAS-56.06. A Location Map is attached hereto and marked as Exhibit "A". A copy of the Type, Size, and Location Plans, along with the Right-Of-Way Plans, are attached hereto and marked as Exhibit "B".

6. The Applicant is not aware of prior Public Utility Commission proceedings for this New crossing.

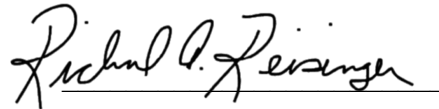
7. The anticipated average daily traffic for State Route 0116 (Eisenhower Drive) at this crossing is 15,983.00 vehicles with 8% trucks.

8. The estimated total cost for the project subject to the application and described above is \$72,144,419.00. It is anticipated that the funding for the project will be federal and/or state funds.

9. This project is necessary and proper for the safety and convenience of the public.
10. A conference of all parties of interest should be held to discuss the proposed alteration.

Wherefore, Applicant respectfully requests that the Public Utility Commission approve this application:

Respectfully Submitted:

A handwritten signature in black ink, reading "Richard A. Reisinger", written over a horizontal line.

Richard A. Reisinger, P.E.  
Assistant District Executive  
Engineering District 8-0  
Department of Transportation  
2140 Herr Street  
Harrisburg, PA 17103-1699  
Phone: (717) 772-0032

Dated: 7/12/2024

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of the Department of Transportation of the Commonwealth of Pennsylvania for approval of the construction of a new grade-separated crossing where the extension of State Route 0116 (Eisenhower Drive) crosses above the tracks of CSX Transportation Inc., DOT Number New in Conewago Township, Adams County and the allocation of costs incident thereto.

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VERIFICATION

I, Ahmed Lasloudji, hereby state that the facts above set forth are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. §4904 (relating to unsworn falsification to authorities).

Date: 7/12/2024



\_\_\_\_\_  
Ahmed Lasloudji  
Grade Crossing Administrator

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of the Department of Transportation of the Commonwealth of Pennsylvania for approval of the construction of a new grade-separated crossing where the extension of State Route 0116 (Eisenhower Drive) crosses above the tracks of CSX Transportation Inc., DOT Number New in Conewago Township, Adams County and the allocation of costs incident thereto.

Application  
Docket No.: \_\_\_\_\_

**Electronically Filed**

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of the foregoing document upon the participants listed below, in accordance with the requirements of 52 Pa. Code § 1.54, by:

**First Class Mail:**

CSX Transportation, Inc.  
c/o CT Corporation System  
600 North Second Street, Suite 401  
Harrisburg, PA 17101

**Electronic Mail:**

Michael Sliper  
Public Work Manager  
CSX Transportation,  
1 Bell Crossing  
Selkirk, NY 12158  
[michael\\_sliper@csx.com](mailto:michael_sliper@csx.com)

Holly Zepp,  
Sewer Authority  
Conewago Township  
541 Oxford Avenue  
Hanover, PA 17331  
[hzepp@conewagotwp.us](mailto:hzepp@conewagotwp.us)

Randy Phiel, Chairman  
Adams County Commissioners  
117 Baltimore Street, Room 201  
Gettysburg, PA 17325  
[rphiel@adamscountypa.gov](mailto:rphiel@adamscountypa.gov)

Dale Ault  
Hanover Borough Water Department  
44 Frederick Street  
Hanover, PA 17331  
[dault@hanoverboroughpa.gov](mailto:dault@hanoverboroughpa.gov)

David Arndt  
Conewago Township  
541 Oxford Avenue  
Hanover, PA 17331  
[darndt@conewagotwp.us](mailto:darndt@conewagotwp.us)

Lisa Woodward  
Columbia, Gas of PA Inc.  
1600 Dublin Road  
Columbus, OH 43215  
[lmwoodward@adamdcountypa.gov](mailto:lmwoodward@adamdcountypa.gov)

Rich Lewis  
Huber Engineered Materials  
3100 Cumberland Blvd, Suite 600  
Atlanta, GA 30339  
[rich.lewis@huber.com](mailto:rich.lewis@huber.com)

Larry Hubbard  
Shenandoah Telecommunications Co.  
500 Shentel Way  
P.O Box 459  
Edinburg, VA 17401  
[larry.hubbard@emp.shentel.com](mailto:larry.hubbard@emp.shentel.com)

Michael Brown  
Sprint Communication Co.  
484 Williamsport Pike  
P.O Box 113  
Martinsburg, WV 25404  
[mpbrown@cogentco.com](mailto:mpbrown@cogentco.com)

Jeff Jacovidis  
Comcast of Southern Pennsylvania  
13085 Hamilton Crossing Blvd, Suite 200  
Carmel, IN 46032  
[jeff\\_jacovidis@cable.comcast.com](mailto:jeff_jacovidis@cable.comcast.com)

Kevin Lewandowski Bergmann  
6 Tower Bridge, Suite 430  
181 Washington Street  
Conshohoken, PA 19428  
[klewandowski@bergmannpc.com](mailto:klewandowski@bergmannpc.com)

Lisa Collins  
Columbia, Gas of PA Inc.  
1600 Dublin Road  
Columbus, OH 43215  
[ldugan@nisource.com](mailto:ldugan@nisource.com)

Chris Fourhman  
Metropolitan Edison Co/First Energy Corp.  
2800 Pottsville Pike  
Reading, PA 19612  
[cfourhman@firstenergycorp.com](mailto:cfourhman@firstenergycorp.com)

Dated this twelve Day of July of 2024 \_\_\_\_\_



\_\_\_\_\_  
Ahmed Lasloudji  
2140 Herr Street  
Harrisburg, PA 17103-1699  
(717) 787-4732  
[alasloudji@pa.gov](mailto:alasloudji@pa.gov)

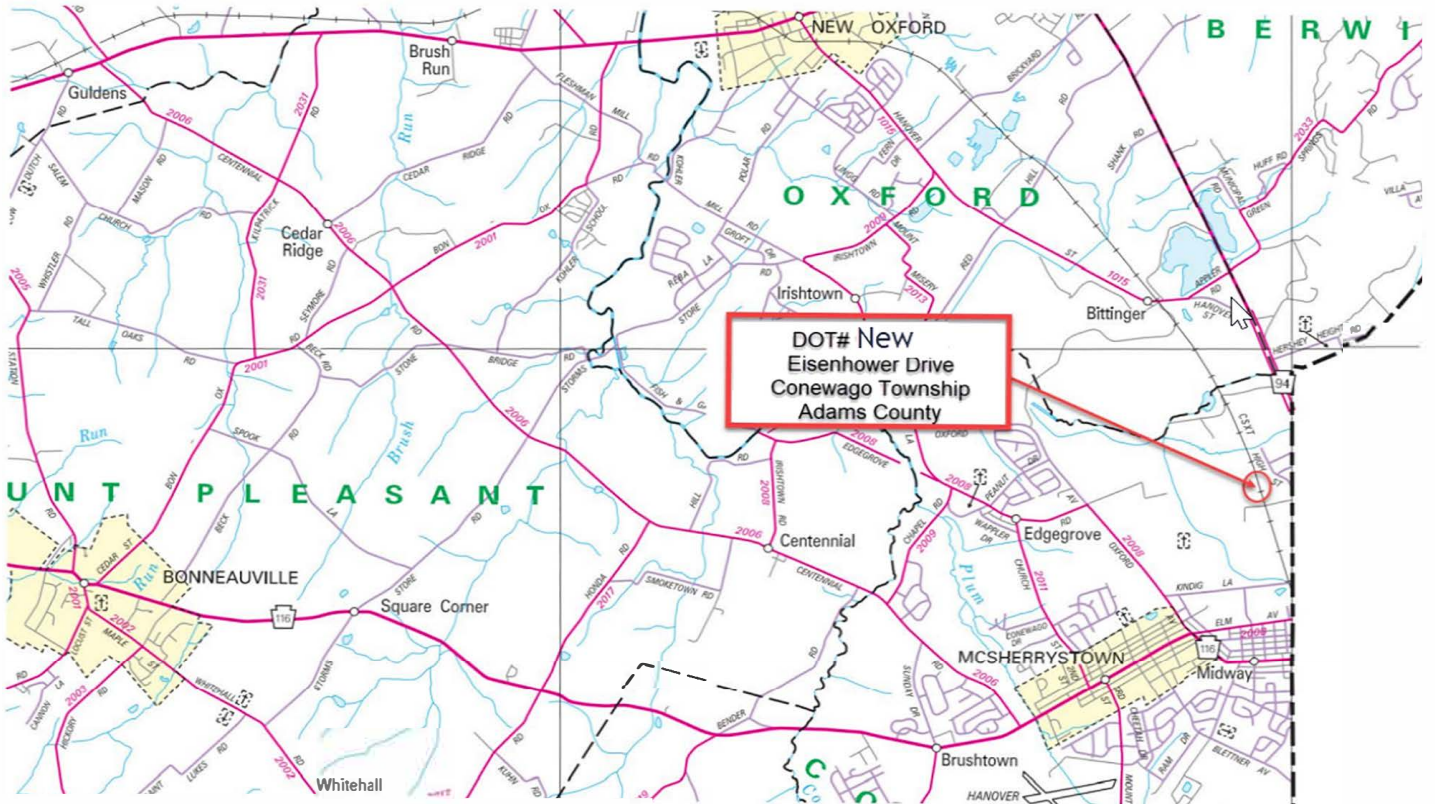
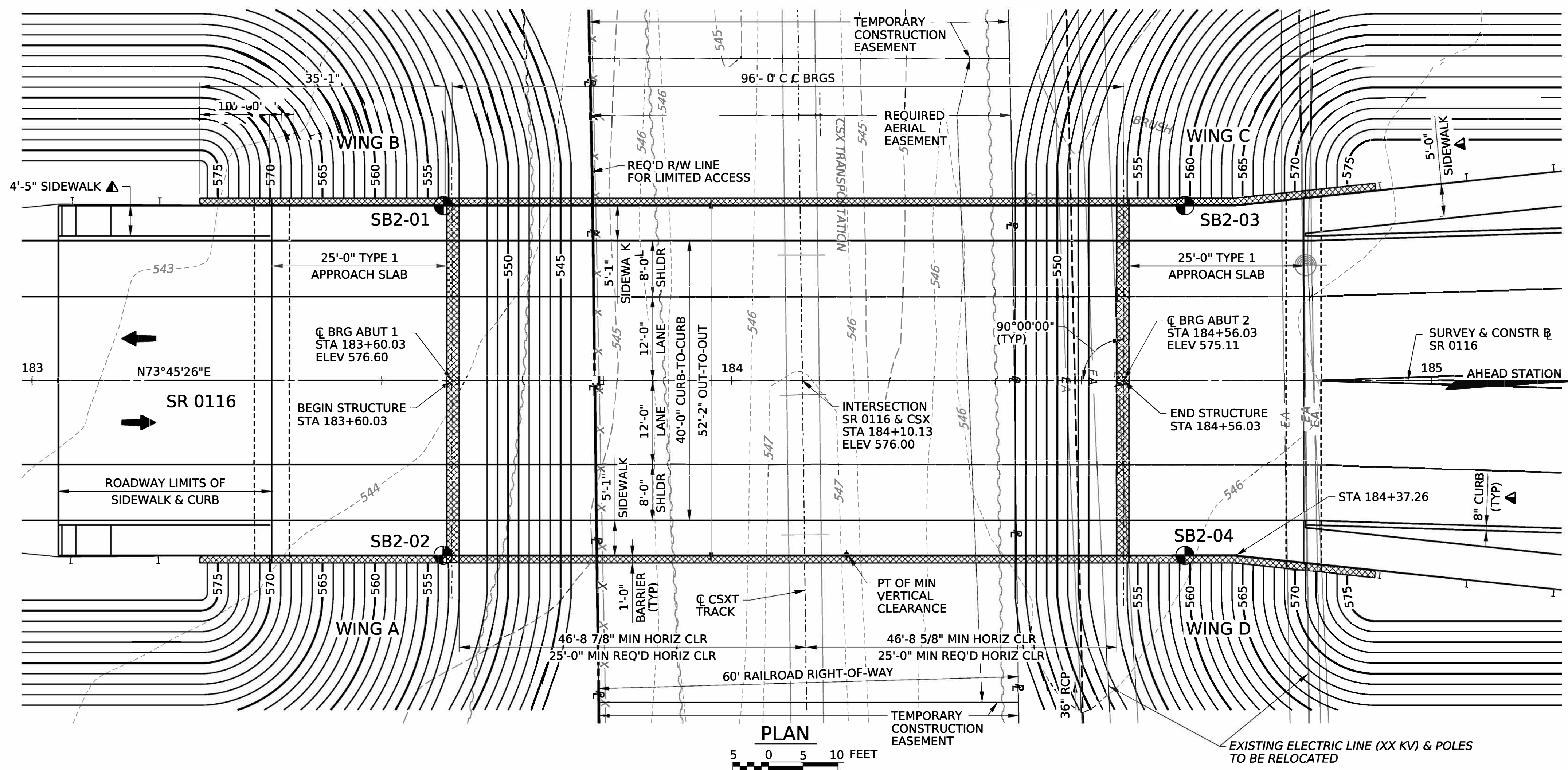


Exhibit "A"



**LEGEND**

- ▲ ROADWAY ITEM
- PROPOSED TEST BORINGS
- 5'-0" PROPOSED CONTOUR
- 1'-0" PROPOSED CONTOUR
- - - 5'-0" EXISTING CONTOUR
- - - 1'-0" EXISTING CONTOUR
- ▨ PROPOSED STRUCTURE
- (R-4)

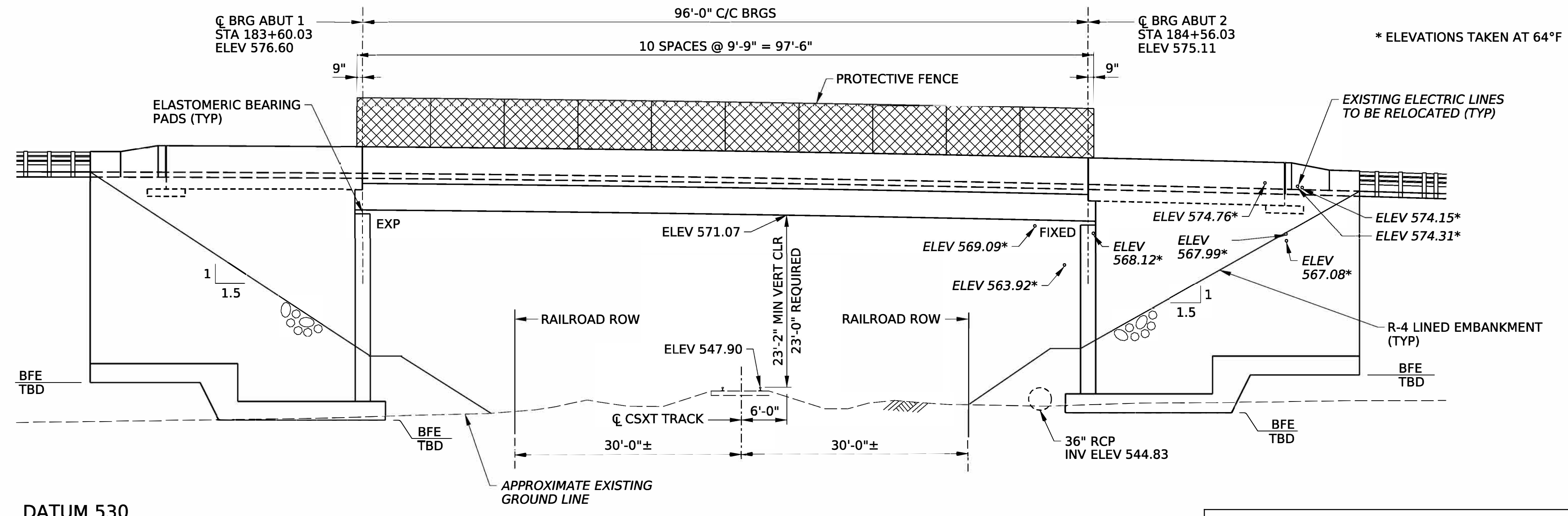
**VERTICAL CURVE DATA**  
SR 0116

PVI STA 184+25.00  
ELEV 578.93  
VC 400.00'  
MO -3.18'  
SSD 337'  
DS = 45 MPH  
+1.35% @ -5.00%

PROPOSED TEST BORINGS			
BORING NO	STATION	OFFSET (FT)	APPROX EXIST GROUND ELEV
SB2-01	183+24	25' LT	543.5
SB2-02	183+24	25' RT	544.5
SB2-03	184+30	25' LT	546.0
SB2-04	184+30	25' RT	546.0

**INDEX OF DRAWINGS**

SHEET NO	TITLE
1	TYPE, SIZE & LOCATION
2	TYPICAL SECTION
3	GENERAL NOTES



Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS STR ID: 01-0116-0544-0000 MPMS/ECMS PROJ: 58137 BRKEY: 70028

**COMMONWEALTH OF PENNSYLVANIA**  
DEPARTMENT OF TRANSPORTATION

**ADAMS COUNTY**  
SR 0116 SECTION RWY  
SEGMENT 0544 OFFSET 0000  
SR 0116 STA 184+08.03  
OVER CSXT  
1-SPAN COMPOSITE P/S CONCRETE  
SPREAD BOX BEAM BRIDGE  
TYPE, SIZE & LOCATION

RECOMMENDED _____	SHEET <u>1</u> OF <u>3</u>
DISTRICT BRIDGE ENGINEER _____	AND SUPPLEMENTAL DRAWINGS
	S-41894

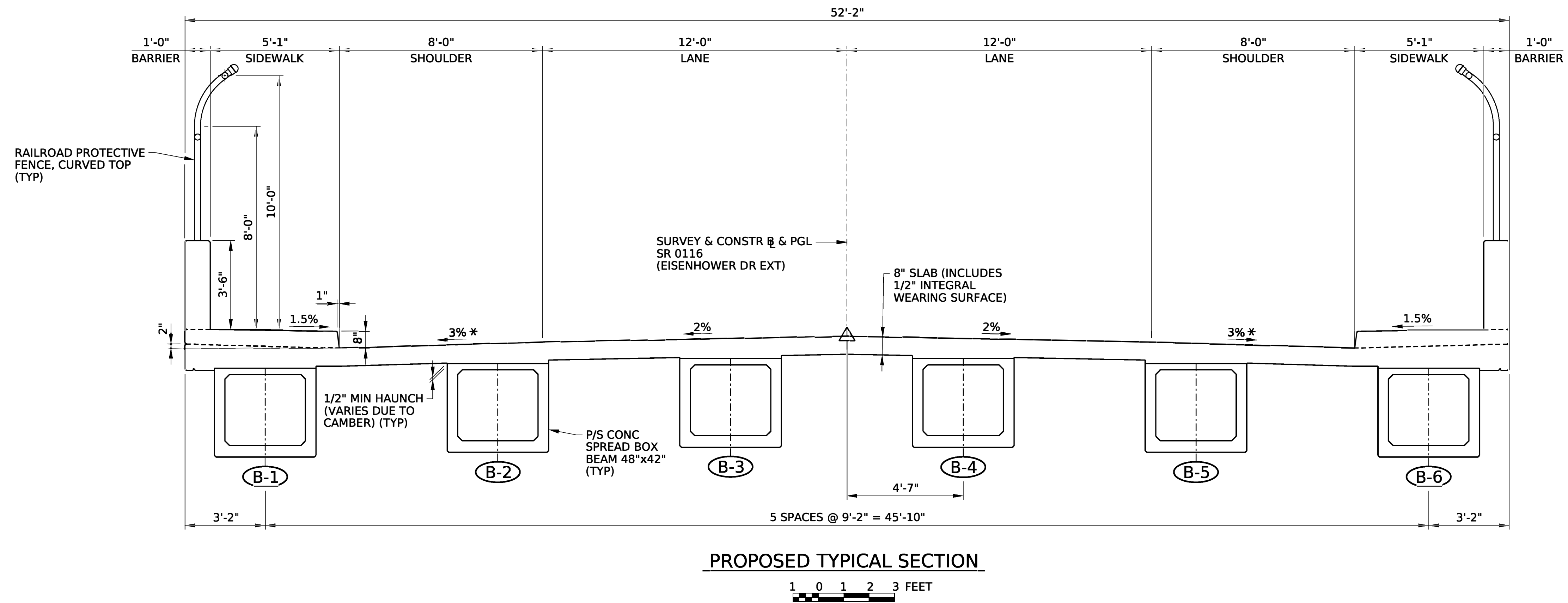
PREPARED BY:  
JOHNSON, MIRMIRAN & THOMPSON  
220 ST. CHARLES WAY,  
SUITE 200  
YORK, PA 17402

SIGNATURE AND DATE \_\_\_\_\_

**EXHIBIT "B"**

**PAGE 1 of 3**

FILE: c:\pwworking\jmtcaplinger@jmt.com\d0239765\GPE\_0116CSX.dgn  
 DATE: 12/19/2023 11:32:35 AM  
 DES: KJM | DWG: ALC | CKD: MDR



PROPOSED TYPICAL SECTION



\* VARIES FROM 6% AT STA 183+10.03 TO 3% AT STA 183+35.03  
 3% FROM STA 183+35.03 TO STA 184+81.03  
 VARIES FROM 3% AT STA 184+81.03 TO 6% AT STA 185+06.03

**EXHIBIT "B"**

**Page 2 of 3**

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS STR ID: 01-0116-0544-0000 MPMS/ECMS PROJ: 58137 BRKEY: 70028

**COMMONWEALTH OF PENNSYLVANIA**  
 DEPARTMENT OF TRANSPORTATION

**ADAMS COUNTY**  
 SR 0116 SECTION RWY  
 SEGMENT 0544 OFFSET 0000  
 SR 0116 STA 184+08.03  
 OVER CSXT  
 1-SPAN COMPOSITE P/S CONCRETE  
 SPREAD BOX BEAM BRIDGE  
 TYPICAL SECTION

RECOMMENDED _____	SHEET <u>2</u> OF <u>3</u>
S-41894	

PROTECTIVE FENCE	BC-701M	11/23/2022
PERMANENT METAL DECK FORMS	BC-732M	11/23/2022
ANCHOR SYSTEMS	BC-734M	2/19/2021
WALL CONSTRUCTION & EXPANSION JOINT DETAILS	BC-735M	9/30/2016
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	11/23/2022
BRIDGE DRAINAGE	BC-751M	1/31/2019
CONCRETE DECK SLAB DETAILS	BC-752M	11/23/2022
BEARINGS	BC-755M	1/31/2019
PRESTRESSED CONCRETE BEAM BRACING	BC-772M	11/23/2022
MISCELLANEOUS PRESTRESS DETAILS	BC-775M	11/23/2022
TYPICAL WATERPROOFING & EXPANSION DETAILS	BC-788M	11/23/2022
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	6/1/2010
BACKFILL AT STRUCTURES	RC-12M	11/1/2022
GUIDE RAIL TO BRIDGE BARRIER TRANSITIONS	RC-50M	2/27/2023
DESCRIPTION	DWG NO	APP DATE

SUPPLEMENTAL DRAWINGS

**GENERAL NOTES**

- DESIGN SPECIFICATIONS:  
2017 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EIGHTH EDITION, AND AS SUPPLEMENTED BY DESIGN MANUAL PART 4, DECEMBER 2019 EDITION.  
  
LIVE LOAD DISTRIBUTION TO BEAMS IS BASED UPON DM-4 DISTRIBUTION FACTORS.  
  
DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.
- DESIGN LIVE LOADS:  
PHL-93, P-82 (204 KIP PERMIT LOAD) AND P2016-13 (330K PERMIT LOAD)  
  
FATIGUE DESIGN IS BASED ON THE FOLLOWING: ADTT = 810 (2046)  
(ONE-DIRECTIONAL)  
  
MAXIMUM ALLOWABLE TENSILE STRESS IN PRECOMPRESSED TENSILE ZONE:  $0.0948\sqrt{f_c}$
- DEAD LOADS:  
INCLUDES SURFACE AREA DENSITY OF 30 LBS. PER SQUARE FT. FOR FUTURE WEARING SURFACE ON THE DECK SLAB.  
  
INCLUDES A SURFACE AREA DENSITY OF 15 LBS. PER SQUARE FT. FOR PERMANENT METAL DECK FORMS WHICH TAKES INTO ACCOUNT THE WEIGHT OF THE FORM PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS.
- PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408/2020, ANSI/AASHTO/AWS BRIDGE WELDING CODE D1.5-2015, AND CONTRACT SPECIAL PROVISIONS.
- USE  $f_c = 10,000$  PSI FOR PRESTRESSED CONCRETE PA BULB TEE BEAMS.
- PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.
- ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.
- USE CLASS AAAP CEMENT CONCRETE IN DECK SLAB.
- USE CLASS AA CEMENT CONCRETE IN BARRIERS, CHEEKWALLS, CONCRETE DIAPHRAGMS, ABUTMENT END DIAPHRAGMS, SHEAR BLOCKS, TYPE 1 APPROACH SLABS AND U-WINGS ABOVE BRIDGE SEAT CONSTRUCTION JOINT, AS SHOWN ON DRAWINGS.
- USE CLASS A CEMENT CONCRETE IN ABUTMENTS BELOW BRIDGE SEAT, PEDESTALS, PIERS, WINGWALLS BELOW CONSTRUCTION JOINT, CURTAIN WALLS, AND FOOTINGS.
- A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT.
- PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A615, A996 OR A706. 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 (A996) REINFORCEMENT BARS IN PIERS, ABUTMENTS, SHEAR BLOCKS, BEAMS, FOOTINGS, BARRIERS OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.
- USE EPOXY-COATED REINFORCEMENT BARS IN THE DECK SLAB, BARRIERS, U-WINGS ABOVE THE CONSTRUCTION JOINT, AND STIRRUPS PROTRUDING FROM DIAPHRAGMS AND PRESTRESSED BEAMS INTO THE DECK SLAB. EPOXY COAT SUBSTRUCTURE REINFORCEMENT BARS AS INDICATED.
- GALVANIZED REINFORCING STEEL BARS MAY BE SUBSTITUTED FOR EPOXY-COATED STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.
- RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.
- SITE CLASS IS OR IS NOT CLASS E.
- PLACE CHEEKWALL, CONCRETE SHEAR BLOCKS AND CONCRETE END DIAPHRAGMS AFTER BEAMS ARE SET IN POSITION.
- USE EITHER PERMANENT METAL DECK FORMS OR REMOVABLE FORMS TO CONSTRUCT THE DECK SLAB.
- DECK SLAB THICKNESS INCLUDES A 1/2" INTEGRAL WEARING SURFACE.
- CHAMFER EXPOSED CONCRETE EDGES 3/4"x3/4", EXCEPT AS NOTED.
- SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68°F.
- PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STD DWG BC-736M, UNLESS OTHERWISE INDICATED.
- NOTIFY THE REGIONAL HEADQUARTERS OF THE FISH COMMISSION PRIOR TO CONSTRUCTION AND COOPERATE WITH THE FISH COMMISSION DURING CONSTRUCTION.

PFBC SOUTHCENTRAL REGION OFFICE  
1704 PINE ROAD  
NEWVILLE, PA 17241  
(717)486-7087

- PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES:  
APPLY A PENETRATING SEALER AS SPECIFIED IN PUB. 408, SECTION 1019.3(c)2 TO THE DECK, APPROACH SLAB AND DECK OR APPROACH SLAB BARRIERS. APPLY PROTECTIVE COATING TO TOP AND ROADWAY FACE OF BARRIERS. APPLY PROTECTIVE COATING AFTER MECHANICAL TEXTURING IS COMPLETED.
- PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(k)9.
- BRIDGE IS NOT WEIGHT RESTRICTED. SEE PUBLICATION 408 SECTION 105.17 FOR CONSTRUCTION LOADING LIMITS.
- CONSTRUCT DECK SLAB TRANSVERSE CONSTRUCTION JOINTS PARALLEL TO THE BRIDGE CENTERLINE OF BEARINGS.
- MECHANICAL TEXTURING TO OCCUR PRIOR TO PLACEMENT OF PROTECTIVE COATING. TERMINATE GROOVES 12 INCHES FROM BARRIER GUTTERLINE AND 3 INCHES FROM TRANSVERSE EDGE OF DECK OR JOINT STEEL EXTRUSION.

**UTILITY NOTES**

- COORDINATE, LOCATE AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 105.06 AND 107.12.
- VERIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO STARTING WORK; CONDUCT OPERATIONS IN A MANNER WHICH ENSURES THAT THE UTILITIES WILL NOT BE DISTURBED OR ENDANGERED AND ASSUME RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION. THE DEPARTMENT DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISIONS, OR LIABILITY FOR ACCURACY OF TYPE, SIZE, AND LOCATION OF ANY UTILITY.

**FOUNDATION NOTES**

- PRIOR TO FOOTING CONSTRUCTION, ALLOW THE DISTRICT GEOTECHNICAL ENGINEER (DGE) TO INSPECT AND APPROVE THE BOTTOM OF FOOTING EXCAVATION. AS DIRECTED BY THE DGE, EXCAVATE ANY SOFT, YIELDING, OR UNSUITABLE MATERIAL BELOW THE INDICATED BOTTOM OF FOOTING ELEVATION AND REPLACE WITH COMPACTED PENNDOT 2A COARSE AGGREGATE OR APPROVED EQUIVALENT.
- SPREAD FOOTINGS MAY BE ORDERED BY THE REPRESENTATIVE TO BE AT ANY ELEVATION OR OF ANY DIMENSIONS NECESSARY TO PROVIDE A PROPER FOUNDATION.
- THE PROPOSED FOUNDATIONS WILL BE BELOW THE NORMAL WATER LEVEL. THEREFORE, DEWATERING OF FOOTING EXCAVATIONS WILL BE NECESSARY DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE NECESSARY DEWATERING SO THAT ALL EXCAVATIONS ARE DRY ENOUGH FOR CONSTRUCTION AND INSPECTION. ALL CONCRETE MUST BE PLACED ON A BEARING SURFACE FREE OF DEBRIS, LOOSE MATERIAL, AND SURFACE WATER.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF ALL EXCAVATED SLOPES. CONSTRUCT ALL TEMPORARY SLOPES NO STEEPER THAN 1.5H:1V. STABILIZE THESE SLOPES FOLLOWING SECTION 806 OF PENNDOT PUBLICATION 408. TEMPORARY SLOPES TO BE IN ACCORDANCE WITH OSHA REQUIREMENTS.
- TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM (SEE SPECIAL PROVISIONS)

IF SPACE LIMITATION PREVENTS USE OF AN OPEN EXCAVATION, USE A SHORING SYSTEM. UTILIZE THE FOLLOWING EFFECTIVE SOIL PARAMETERS FOR THE DESIGN OF THE TEMPORARY GROUND SUPPORT:

EFFECTIVE ANGLE OF FRICTION, $\nu$	= 30°
MOIST UNIT WEIGHT OF SOIL, Gm	= 120 LB/FT <sup>3</sup>
SATURATED UNIT WEIGHT OF SOIL, gSAT	= 125 LB/FT <sup>3</sup>
EFFECTIVE COHESION, c	= 0.0 PSF
STATIC GROUNDWATER LEVEL AT ELEVATION	= 51X.X
UNDRAINED SHEAR STRENGTH OF COHESIVE SOIL	= N/A
SHEAR STRENGTH OF ROCK MASS	= XX

FOUNDATION PARAMETERS		
	ABUT 1, WINGS A & B	ABUT 2, WINGS C & D
APPLICABLE BORINGS	SB2-01 & SB2-02	SB2-03 & SB2-04
BOTTOM OF FOOTING ELEVATION (FT)	54X	54X
BEARING STRATUM	X	X
RECOVERY / RQD	X	X
INTACT ELASTIC MODULUS (KSI)	X	X
POISSON'S RATIO, $\nu$	X	X
ROCK MASS MODULUS (KSI)	X	X
BEARING RESISTANCE FACTOR, $V_b$	0.50	0.50
SLIDING RESISTANCE FACTOR, $V_r$	1.00	1.00
CONCRETE / ROCK FRICTION	X	X

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

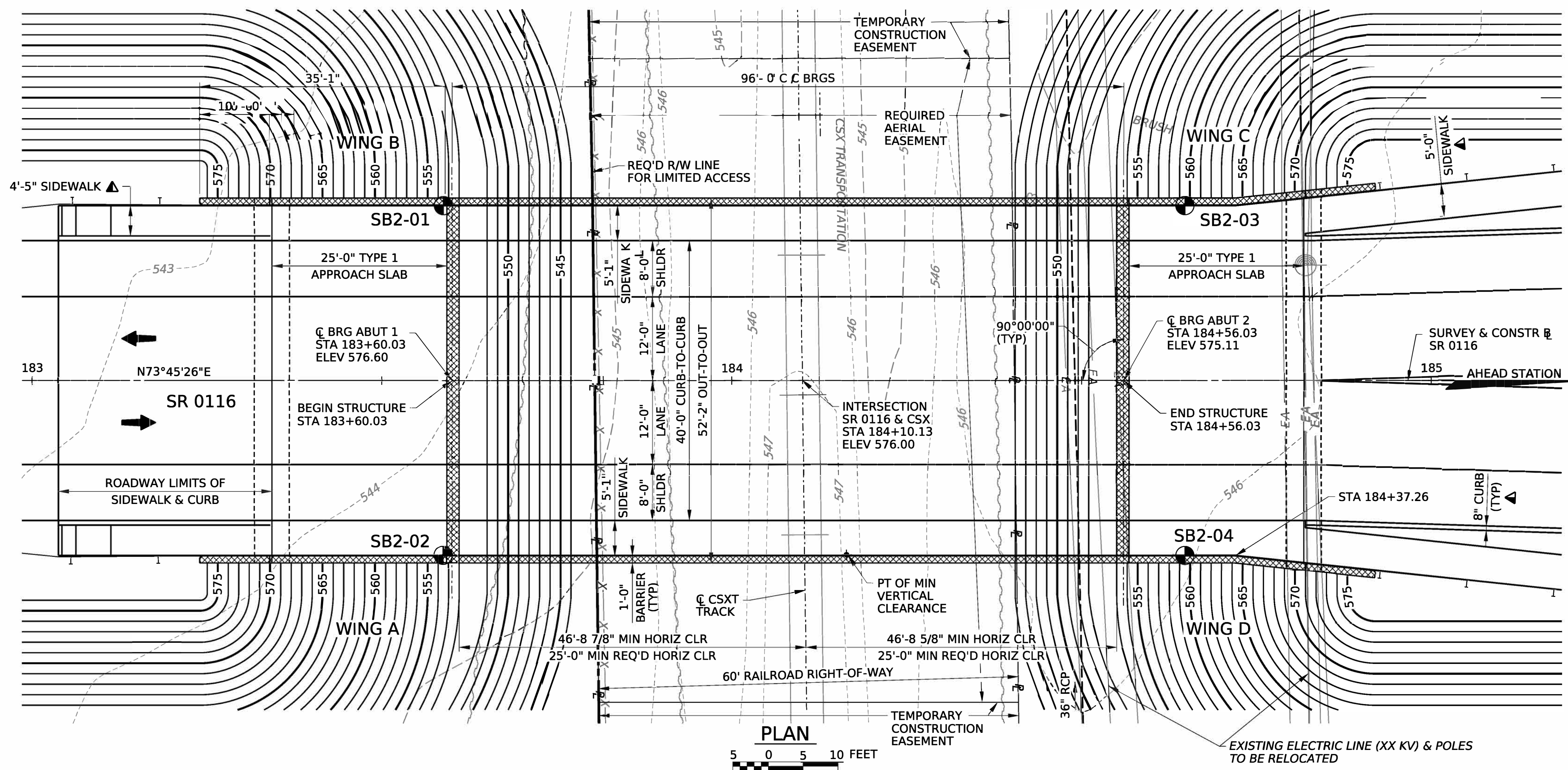
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**COMMONWEALTH OF PENNSYLVANIA**  
DEPARTMENT OF TRANSPORTATION

**ADAMS COUNTY**  
SR 0116 SECTION RWY  
SEGMENT 0544 OFFSET 0000  
SR 0116 STA 184+08.03  
OVER CSXT  
1-SPAN COMPOSITE P/S CONCRETE  
SPREAD BOX BEAM BRIDGE  
**GENERAL NOTES**

RECOMMENDED _____	SHEET <u>3</u> OF <u>3</u>
S-41894	

**EXHIBIT "B"**



**PLAN**  
5 0 5 10 FEET

- LEGEND**
- ▲ ROADWAY ITEM
  - PROPOSED TEST BORINGS
  - 5'-0" PROPOSED CONTOUR
  - 1'-0" PROPOSED CONTOUR
  - - - 5'-0" EXISTING CONTOUR
  - - - 1'-0" EXISTING CONTOUR
  - ▨ PROPOSED STRUCTURE
  - (R-4)

**VERTICAL CURVE DATA**  
**SR 0116**

PVI STA 184+25.00  
ELEV 578.93  
VC 400.00'  
MO -3.18'  
SSD 337'  
DS = 45 MPH

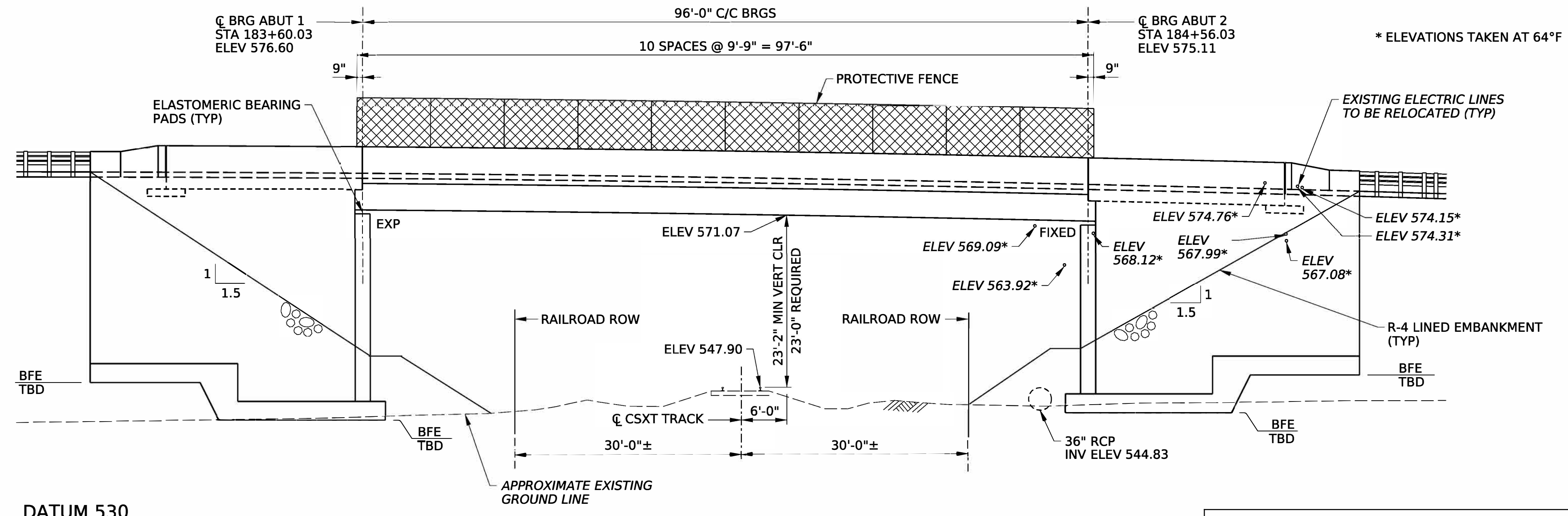
+1.35% @ -5.00%

**PROPOSED TEST BORINGS**

BORING NO	STATION	OFFSET (FT)	APPROX EXIST GROUND ELEV
SB2-01	183+24	25' LT	543.5
SB2-02	183+24	25' RT	544.5
SB2-03	184+30	25' LT	546.0
SB2-04	184+30	25' RT	546.0

**INDEX OF DRAWINGS**

SHEET NO	TITLE
1	TYPE, SIZE & LOCATION
2	TYPICAL SECTION
3	GENERAL NOTES



**ELEVATION**  
5 0 5 10 FEET

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS STR ID: 01-0116-0544-0000 MPMS/ECMS PROJ: 58137 BRKEY: 70028

**COMMONWEALTH OF PENNSYLVANIA**  
**DEPARTMENT OF TRANSPORTATION**

**ADAMS COUNTY**  
**SR 0116 SECTION RWY**  
SEGMENT 0544 OFFSET 0000  
SR 0116 STA 184+08.03  
OVER CSXT  
**1-SPAN COMPOSITE P/S CONCRETE**  
**SPREAD BOX BEAM BRIDGE**  
**TYPE, SIZE & LOCATION**

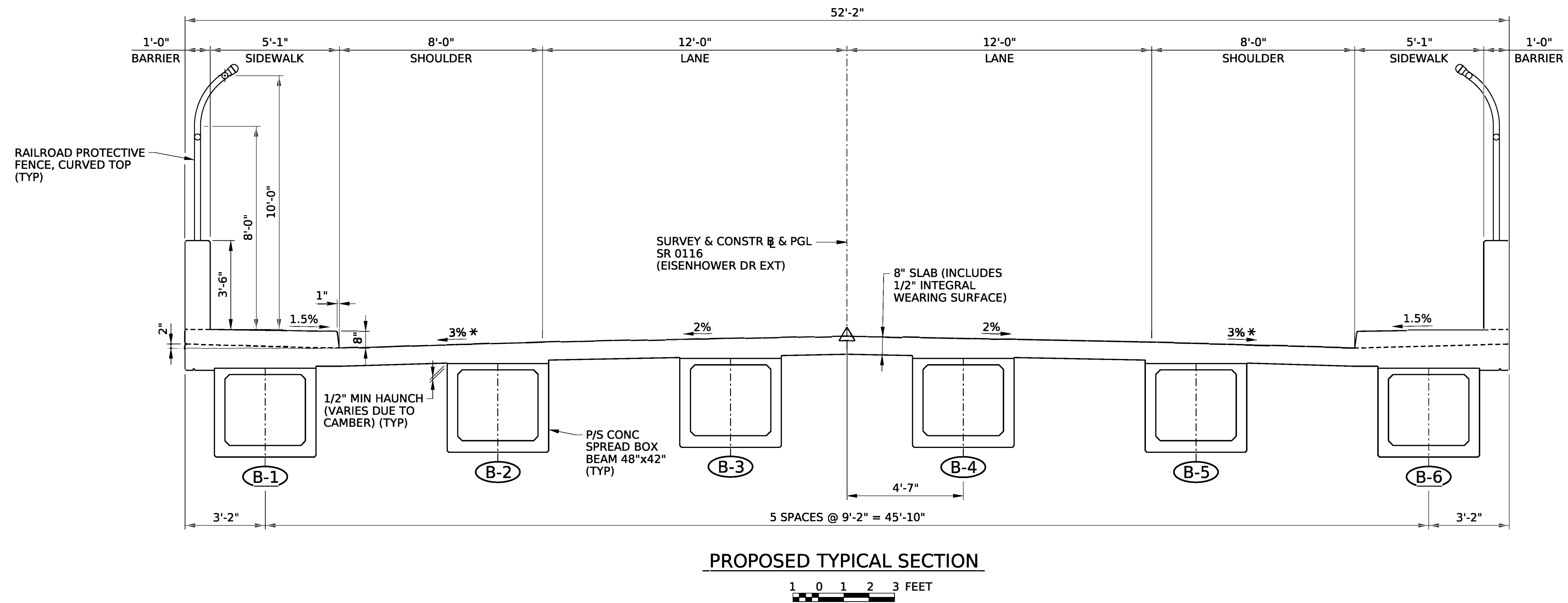
RECOMMENDED \_\_\_\_\_  
DISTRICT BRIDGE ENGINEER

SHEET 1 OF 3  
AND  
SUPPLEMENTAL DRAWINGS  
**S-41894**

**EXHIBIT "B"**

SIGNATURE AND DATE

FILE: c:\pwworking\jmtcaplinger\jmt.com\d0239765\GPE\_0116CSX.dgn  
 DATE: 12/19/2023 11:32:35 AM  
 DES: KJM | DWG: ALC | CKD: MDR



\* VARIES FROM 6% AT STA 183+10.03 TO 3% AT STA 183+35.03  
 3% FROM STA 183+35.03 TO STA 184+81.03  
 VARIES FROM 3% AT STA 184+81.03 TO 6% AT STA 185+06.03

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS STR ID: 01-0116-0544-0000 MPMS/ECMS PROJ: 58137 BRKEY: 70028

**COMMONWEALTH OF PENNSYLVANIA**  
 DEPARTMENT OF TRANSPORTATION

**ADAMS COUNTY**  
 SR 0116 SECTION RWY  
 SEGMENT 0544 OFFSET 0000  
 SR 0116 STA 184+08.03  
 OVER CSXT  
 1-SPAN COMPOSITE P/S CONCRETE  
 SPREAD BOX BEAM BRIDGE  
 TYPICAL SECTION

RECOMMENDED _____	SHEET <u>2</u> OF <u>3</u>
S-41894	

PROTECTIVE FENCE	BC-701M	11/23/2022
PERMANENT METAL DECK FORMS	BC-732M	11/23/2022
ANCHOR SYSTEMS	BC-734M	2/19/2021
WALL CONSTRUCTION & EXPANSION JOINT DETAILS	BC-735M	9/30/2016
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	11/23/2022
BRIDGE DRAINAGE	BC-751M	1/31/2019
CONCRETE DECK SLAB DETAILS	BC-752M	11/23/2022
BEARINGS	BC-755M	1/31/2019
PRESTRESSED CONCRETE BEAM BRACING	BC-772M	11/23/2022
MISCELLANEOUS PRESTRESS DETAILS	BC-775M	11/23/2022
TYPICAL WATERPROOFING & EXPANSION DETAILS	BC-788M	11/23/2022
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	6/1/2010
BACKFILL AT STRUCTURES	RC-12M	11/1/2022
GUIDE RAIL TO BRIDGE BARRIER TRANSITIONS	RC-50M	2/27/2023
DESCRIPTION	DWG NO	APP DATE

**SUPPLEMENTAL DRAWINGS**

**EXHIBIT "B"**

**GENERAL NOTES**

- DESIGN SPECIFICATIONS:  
2017 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EIGHTH EDITION, AND AS SUPPLEMENTED BY DESIGN MANUAL PART 4, DECEMBER 2019 EDITION.  
  
LIVE LOAD DISTRIBUTION TO BEAMS IS BASED UPON DM-4 DISTRIBUTION FACTORS.  
  
DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.
- DESIGN LIVE LOADS:  
PHL-93, P-82 (204 KIP PERMIT LOAD) AND P2016-13 (330K PERMIT LOAD)  
  
FATIGUE DESIGN IS BASED ON THE FOLLOWING: ADTT = 810 (2046)  
(ONE-DIRECTIONAL)  
  
MAXIMUM ALLOWABLE TENSILE STRESS IN PRECOMPRESSED TENSILE ZONE:  $0.0948\sqrt{f_c}$
- DEAD LOADS:  
INCLUDES SURFACE AREA DENSITY OF 30 LBS. PER SQUARE FT. FOR FUTURE WEARING SURFACE ON THE DECK SLAB.  
  
INCLUDES A SURFACE AREA DENSITY OF 15 LBS. PER SQUARE FT. FOR PERMANENT METAL DECK FORMS WHICH TAKES INTO ACCOUNT THE WEIGHT OF THE FORM PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS.
- PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408/2020, ANSI/AASHTO/AWS BRIDGE WELDING CODE D1.5-2015, AND CONTRACT SPECIAL PROVISIONS.
- USE  $f_c = 10,000$  PSI FOR PRESTRESSED CONCRETE PA BULB TEE BEAMS.
- PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.
- ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.
- USE CLASS AAAP CEMENT CONCRETE IN DECK SLAB.
- USE CLASS AA CEMENT CONCRETE IN BARRIERS, CHEEKWALLS, CONCRETE DIAPHRAGMS, ABUTMENT END DIAPHRAGMS, SHEAR BLOCKS, TYPE 1 APPROACH SLABS AND U-WINGS ABOVE BRIDGE SEAT CONSTRUCTION JOINT, AS SHOWN ON DRAWINGS.
- USE CLASS A CEMENT CONCRETE IN ABUTMENTS BELOW BRIDGE SEAT, PEDESTALS, PIERS, WINGWALLS BELOW CONSTRUCTION JOINT, CURTAIN WALLS, AND FOOTINGS.
- A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT.
- PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A615, A996 OR A706. 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 (A996) REINFORCEMENT BARS IN PIERS, ABUTMENTS, SHEAR BLOCKS, BEAMS, FOOTINGS, BARRIERS OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.
- USE EPOXY-COATED REINFORCEMENT BARS IN THE DECK SLAB, BARRIERS, U-WINGS ABOVE THE CONSTRUCTION JOINT, AND STIRRUPS PROTRUDING FROM DIAPHRAGMS AND PRESTRESSED BEAMS INTO THE DECK SLAB. EPOXY COAT SUBSTRUCTURE REINFORCEMENT BARS AS INDICATED.
- GALVANIZED REINFORCING STEEL BARS MAY BE SUBSTITUTED FOR EPOXY-COATED STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.
- RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.
- SITE CLASS IS OR IS NOT CLASS E.
- PLACE CHEEKWALL, CONCRETE SHEAR BLOCKS AND CONCRETE END DIAPHRAGMS AFTER BEAMS ARE SET IN POSITION.
- USE EITHER PERMANENT METAL DECK FORMS OR REMOVABLE FORMS TO CONSTRUCT THE DECK SLAB.
- DECK SLAB THICKNESS INCLUDES A 1/2" INTEGRAL WEARING SURFACE.
- CHAMFER EXPOSED CONCRETE EDGES 3/4"x3/4", EXCEPT AS NOTED.
- SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68°F.
- PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STD DWG BC-736M, UNLESS OTHERWISE INDICATED.
- NOTIFY THE REGIONAL HEADQUARTERS OF THE FISH COMMISSION PRIOR TO CONSTRUCTION AND COOPERATE WITH THE FISH COMMISSION DURING CONSTRUCTION.

PFBC SOUTHCENTRAL REGION OFFICE  
1704 PINE ROAD  
NEWVILLE, PA 17241  
(717)486-7087

- PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES:  
APPLY A PENETRATING SEALER AS SPECIFIED IN PUB. 408, SECTION 1019.3(c)2 TO THE DECK, APPROACH SLAB AND DECK OR APPROACH SLAB BARRIERS. APPLY PROTECTIVE COATING TO TOP AND ROADWAY FACE OF BARRIERS. APPLY PROTECTIVE COATING AFTER MECHANICAL TEXTURING IS COMPLETED.
- PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(k)9.
- BRIDGE IS NOT WEIGHT RESTRICTED. SEE PUBLICATION 408 SECTION 105.17 FOR CONSTRUCTION LOADING LIMITS.
- CONSTRUCT DECK SLAB TRANSVERSE CONSTRUCTION JOINTS PARALLEL TO THE BRIDGE CENTERLINE OF BEARINGS.
- MECHANICAL TEXTURING TO OCCUR PRIOR TO PLACEMENT OF PROTECTIVE COATING. TERMINATE GROOVES 12 INCHES FROM BARRIER GUTTERLINE AND 3 INCHES FROM TRANSVERSE EDGE OF DECK OR JOINT STEEL EXTRUSION.

**UTILITY NOTES**

- COORDINATE, LOCATE AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 105.06 AND 107.12.
- VERIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO STARTING WORK; CONDUCT OPERATIONS IN A MANNER WHICH ENSURES THAT THE UTILITIES WILL NOT BE DISTURBED OR ENDANGERED AND ASSUME RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION. THE DEPARTMENT DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISIONS, OR LIABILITY FOR ACCURACY OF TYPE, SIZE, AND LOCATION OF ANY UTILITY.

**FOUNDATION NOTES**

- PRIOR TO FOOTING CONSTRUCTION, ALLOW THE DISTRICT GEOTECHNICAL ENGINEER (DGE) TO INSPECT AND APPROVE THE BOTTOM OF FOOTING EXCAVATION. AS DIRECTED BY THE DGE, EXCAVATE ANY SOFT, YIELDING, OR UNSUITABLE MATERIAL BELOW THE INDICATED BOTTOM OF FOOTING ELEVATION AND REPLACE WITH COMPACTED PENNDOT 2A COARSE AGGREGATE OR APPROVED EQUIVALENT.
- SPREAD FOOTINGS MAY BE ORDERED BY THE REPRESENTATIVE TO BE AT ANY ELEVATION OR OF ANY DIMENSIONS NECESSARY TO PROVIDE A PROPER FOUNDATION.
- THE PROPOSED FOUNDATIONS WILL BE BELOW THE NORMAL WATER LEVEL. THEREFORE, DEWATERING OF FOOTING EXCAVATIONS WILL BE NECESSARY DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE NECESSARY DEWATERING SO THAT ALL EXCAVATIONS ARE DRY ENOUGH FOR CONSTRUCTION AND INSPECTION. ALL CONCRETE MUST BE PLACED ON A BEARING SURFACE FREE OF DEBRIS, LOOSE MATERIAL, AND SURFACE WATER.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF ALL EXCAVATED SLOPES. CONSTRUCT ALL TEMPORARY SLOPES NO STEEPER THAN 1.5H:1V. STABILIZE THESE SLOPES FOLLOWING SECTION 806 OF PENNDOT PUBLICATION 408. TEMPORARY SLOPES TO BE IN ACCORDANCE WITH OSHA REQUIREMENTS.
- TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM (SEE SPECIAL PROVISIONS)

IF SPACE LIMITATION PREVENTS USE OF AN OPEN EXCAVATION, USE A SHORING SYSTEM. UTILIZE THE FOLLOWING EFFECTIVE SOIL PARAMETERS FOR THE DESIGN OF THE TEMPORARY GROUND SUPPORT:

EFFECTIVE ANGLE OF FRICTION, $\nu$	= 30°
MOIST UNIT WEIGHT OF SOIL, Gm	= 120 LB/FT <sup>3</sup>
SATURATED UNIT WEIGHT OF SOIL, gSAT	= 125 LB/FT <sup>3</sup>
EFFECTIVE COHESION, c	= 0.0 PSF
STATIC GROUNDWATER LEVEL AT ELEVATION	= 51X.X
UNDRAINED SHEAR STRENGTH OF COHESIVE SOIL	= N/A
SHEAR STRENGTH OF ROCK MASS	= XX

FOUNDATION PARAMETERS		
	ABUT 1, WINGS A & B	ABUT 2, WINGS C & D
APPLICABLE BORINGS	SB2-01 & SB2-02	SB2-03 & SB2-04
BOTTOM OF FOOTING ELEVATION (FT)	54X	54X
BEARING STRATUM	X	X
RECOVERY / RQD	X	X
INTACT ELASTIC MODULUS (KSI)	X	X
POISSON'S RATIO, $\nu$	X	X
ROCK MASS MODULUS (KSI)	X	X
BEARING RESISTANCE FACTOR, $V_b$	0.50	0.50
SLIDING RESISTANCE FACTOR, $V_r$	1.00	1.00
CONCRETE / ROCK FRICTION	X	X

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OVER CSXT**

**1-SPAN COMPOSITE P/S CONCRETE  
SPREAD BOX BEAM BRIDGE  
GENERAL NOTES**

RECOMMENDED \_\_\_\_\_ SHEET 3 OF 3

S-41894

**EXHIBIT "B"**