pennsylvania
DEPARTMENT OF TRANSPORTATION

November 3, 2022

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
400 North Street
Harrisburg, PA 17105-3265

Re: Allegheny County, Westmoreland County
East Deer Township, City of New Kensington
SR 1038, Section A01
ECMS 63515
DOT 510878N
PUC Docket A-2019-3010031

Dear Secretary Chiavetta:

In accordance with ordering paragraph number 5 of the PUC Order No. A-2019-3010031 dated August 5, 2021, please find attached for your approval a copy of the final signed structure plans and final signed construction plans for the State Route 1038, Section A01 project.

The Department of Transportation hereby avers that a set of the aforesaid final signed plans are being sent to the parties of record, by email, as permitted by the Emergency Order.

Sincerely,

Philip M. Mutunga, P.E.
Grade Crossing Engineer
Department of Transportation
District 11-0

Enclosure

cc: Parties of Record
Mark J. Chappell, P.E., Chief, Right-of-Way and Utilities Section, 7th Floor, CKB
Karen Cummings, Senior Counsel in Charge, Office of Chief Counsel, 9th Floor, CKB
William Sinick, P.E., C.B.S.I, Rail Safety Engineering Section PUC, 3rd Floor, CKB

PLOTTED: 10/11/2022 2:14:39 PM

FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\ARD00010FX.dgn

PLAN PREPARATION:
DISTRICT 11-0 PROJECT MANAGER: MICHAEL L. SZURLEY, P.E.
DESIGNER: MARKOSKY ENGINEERING

DISTRICT	COUNTY	TOWNSHIP	BOROUGH	ROUTE	SECTION	TOTAL SHEETS
11-0	ALLEGHENY	EAST DEER	---	1038	A01	19
	WESTMORELAND	---	NEW KENSINGTON	0056	A01	

SR 1038 PREVIOUSLY KNOWN AS LR 188
SR 0056 PREVIOUSLY KNOWN AS LR 188
ECMS NO.: 63515

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

DRAWINGS
FOR
CONSTRUCTION
OF

STATE ROUTE 1038 **SECTION** A01

IN ALLEGHENY **COUNTY**

FROM STA. 0+00.00 TO STA. 5+92.00 LENGTH 592.00 FT. 0.112 MI.
FROM SEG. 0010 OFFSET 0000 TO SEG. 0010 OFFSET 0592

AND

STATE ROUTE 1038 **SECTION** A01

IN WESTMORELAND **COUNTY**

FROM STA. 0+00.00 TO STA. 10+10.00 LENGTH 1010.00 FT. 0.191 MI.
FROM SEG. 0010 OFFSET 0592 TO SEG. 0010 OFFSET 1010

AND

STATE ROUTE 0056 **SECTION** A01

IN WESTMORELAND **COUNTY**

FROM STA. 10+10.00 TO STA. 11+30.00 LENGTH 70.00 FT. 0.013 MI.
FROM SEG. 0004 OFFSET 0000 TO SEG. 0004 OFFSET 0120

AND

STATE ROUTE 1001 **SECTION** A01

IN ALLEGHENY **COUNTY**

FROM STA. 973+50.00 TO STA. 984+67.00 LENGTH 1017.00 FT. 0.193 MI.
FROM SEG. 0320 OFFSET 2594 TO SEG. 0330 OFFSET 0589

ALSO

STATE ROUTE 9109 **SECTION** A01

IN ALLEGHENY **COUNTY**

ALSO INCLUDED:

TRAFFIC CONTROL PLAN	17 SHEETS
AIDS TO NAVIGATION PLAN	3 SHEETS
SIGNING, PAVEMENT MARKING AND DELINEATION PLAN	7 SHEETS
UTILITY RELOCATION PLAN - COMCAST	4 SHEETS
EROSION AND SEDIMENT POLLUTION CONTROL PLAN	7 SHEETS
LIGHTING PLAN	9 SHEETS
SIGN STRUCTURE PLAN S-40254	3 SHEETS
STRUCTURE PLAN S-40253	124 SHEETS

SCALE
HORIZONTAL 0 25 50 FEET

DESIGN DESIGNATION - SR 1038 & SR 0056

HIGHWAY CLASSIFICATION	- OTHER PRINCIPAL ARTERIAL
DESIGN SPEED	- 35 MPH
PAVEMENT WIDTH	- 24' (2-12' LANES)
SHOULDER WIDTH	- 0'

TRAFFIC DATA

CURRENT ADT	- 15,851 (2023)
DESIGN YEAR ADT	- 15,851 (2043)
DHV	- 2,060
D	- 55%
T	- 7%

Prepared by:
MARKOSKY
3689 Route 711
Ligonier, PA 15658

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL NICHOLAS AARON WAGNER ENGINEER No. PE074498

NICHOLAS A. WAGNER, PE
DATE: OCTOBER 13, 2022

RECOMMENDED DATE: _____
DISTRICT EXECUTIVE

RECOMMENDED DATE: _____
DEPUTY SECRETARY

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

PLOTTED: 10/11/2022 2:14:58 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000020FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	2 OF 19
	*			

REV NO	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

LIST OF SEGMENT EQUALITIES

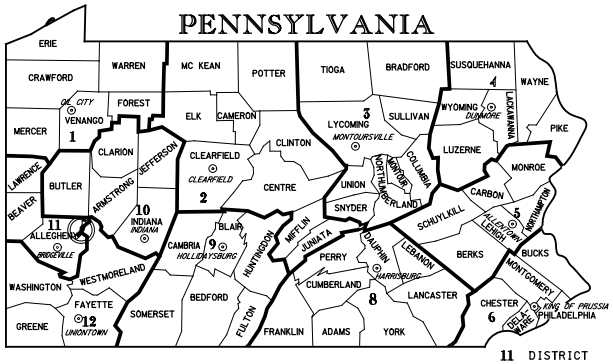
LIMIT OF WORK SR 1038 STA 0+00.00 = SEGMENT 0010 OFFSET 0000

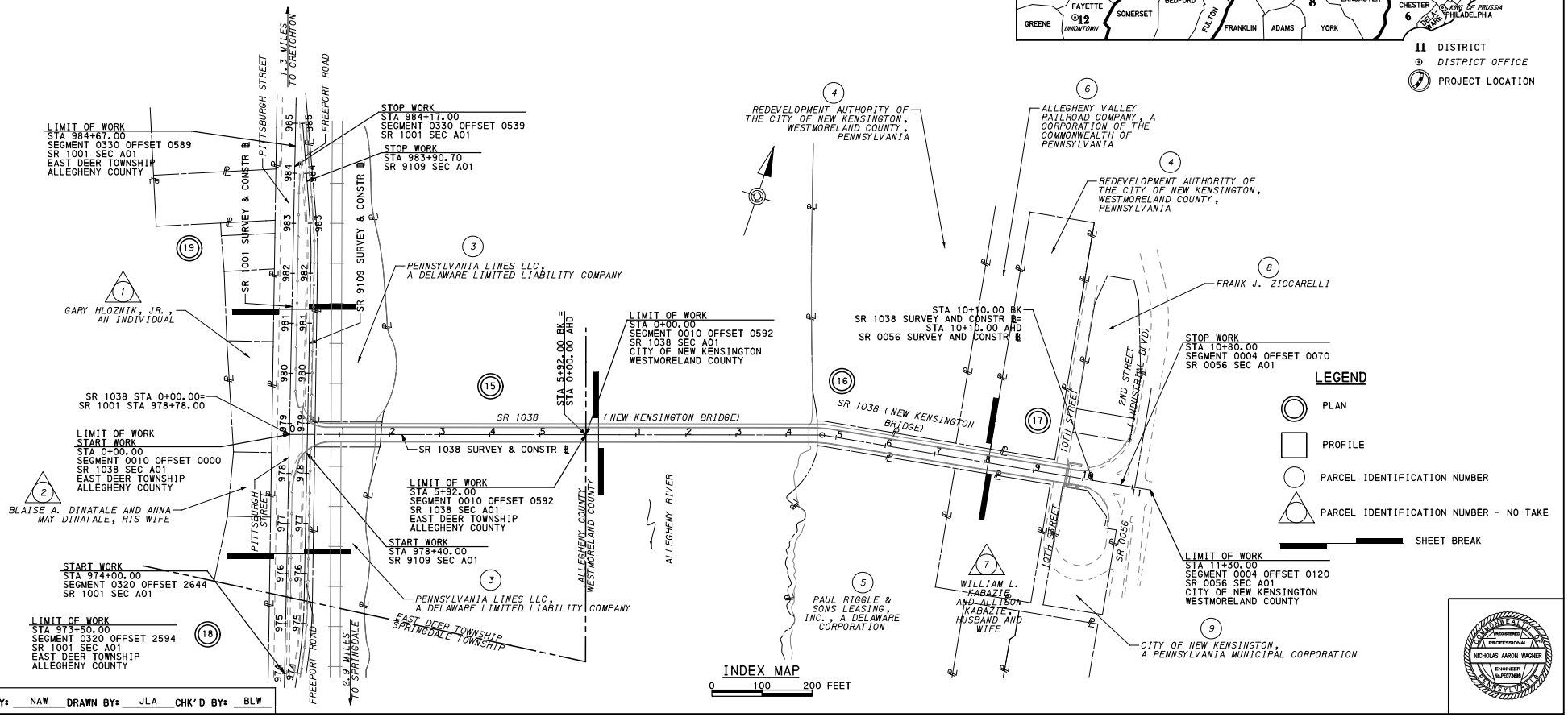
SEGMENT 0010 OFFSET 1602 = SR 1038 STA 10+10.00 BK =
SEGMENT 0004 OFFSET 0000 = SR 0056 STA 10+10.00 AHD

LIMIT OF WORK SR 1001 STA 973+50.00 = SEGMENT 0320 OFFSET 2594

SR 1001 STA 978+78.00 = SEGMENT 0320 OFFSET 3122
SEGMENT 0330 OFFSET 0000

SHEET INDEX BLOCK	
DESCRIPTION	SHEET
TITLE SHEET	1
INDEX MAP	2
LOCATION MAP AND GENERAL NOTES	3
LIST OF PUBLIC UTILITIES	4
TYPICAL SECTIONS	5
DETAILS	6-7
DRAINAGE DITCH DETAIL	8
SUMMARY SHEETS	9-11
TABULATION SHEETS	12-14
PLAN SHEETS	15-19





DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

PLOTTED: 10/11/2022 12:55:17 PM

FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\AR000030FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	3 OF 19

*

REV NO	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

FOR LIST OF PUBLIC UTILITIES SEE SHEET 4

SUMMARY OF PROJECT COORDINATES

BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM

ROUTE	STATION	POINT	COORDINATES NORTH	COORDINATES EAST	BEARING
SR 1038 AND SR 0056 SURVEY & CONSTR ℄	0+00.00	POT	454622.1777	1406125.3579	N71°16′34"E
	5+92.00	EQNBK	454812.2151	1406686.0269	
	0+00.00	EQNAHD	454812.2151	1406686.0269	
	4+72.00	PI	454963.7314	1407133.0469	N80°43′34"E
	11+36.67	POT	455076.5401	1407823.8972	
SR 1001 SURVEY & CONSTR ℄	970+00.00	POT	453785.1416	1406394.0295	N17°54′56"W
	985+03.29	POT	455217.4285	1405937.4706	
SR 9109 SURVEY & CONSTR ℄	972+50.40	POT	454028.0071	1406321.7687	N9°38′41"W
	974+04.31	PC	454179.7443	1406295.9823	N17°54′56"W
	974+72.93	PI	454247.3888	1406284.4867	
	975+41.32	PT	454312.7565	1406263.6305	N17°54′56"W
	982+21.13	PC	454960.4563	1406057.1684	
	982+68.78	PI	455005.8533	1406042.6841	N17°41′45"W
	983+16.36	PT	455049.6673	1406023.9487	
	985+00.00	POT	455218.5216	1405951.7447	N23°09′08"W

NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO (2) PLACES.

TABULATION OF OVERALL LENGTH

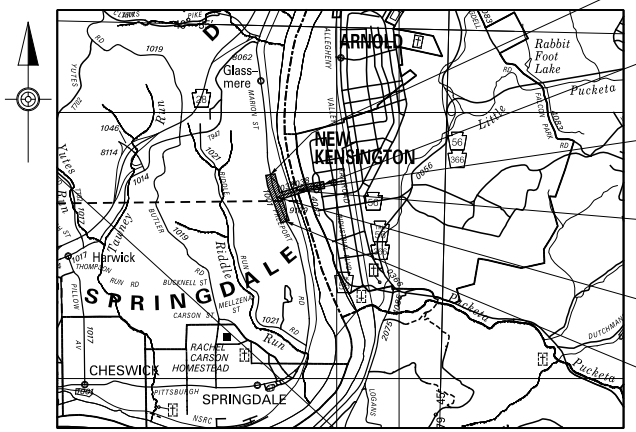
SR 1038 STA 0+00.00 TO STA 5+92.00 = 592.00 FEET = 0.112 MILES
SR 1038 STA 0+00.00 TO STA 10+10.00 = 1010.00 FEET = 0.191 MILES
SR 0056 STA 10+10.00 TO STA 11+30.00 = 120.00 FEET = 0.023 MILES
SR 1001 STA 973+50.00 TO STA 984+67.00 = 1117.00 FEET = 0.212 MILES
TOTAL = 2839.00 FEET = 0.538 MILES

TABULATION OF CONSTRUCTION LENGTH

SR 1038 STA 0+00.00 TO STA 5+92.00 = 592.00 FEET = 0.112 MILES
SR 1038 STA 0+00.00 TO STA 10+10.00 = 1010.00 FEET = 0.191 MILES
SR 0056 STA 10+10.00 TO STA 10+80.00 = 70.00 FEET = 0.013 MILES
SR 1001 STA 974+00.00 TO STA 984+17.00 = 1017.00 FEET = 0.193 MILES
TOTAL = 2689.00 FEET = 0.509 MILES

LIST OF EQUALITIES

SR 1038 SURVEY & CONSTR ℄ STA 0+00.00 = SR 1001 SURVEY & CONSTR ℄ STA 978+78.00
SR 1038 SURVEY & CONSTR ℄ STA 5+92.00 BK = SR 1038 SURVEY & CONSTR ℄ STA 0+00.00 AHD
SR 1038 SURVEY & CONSTR ℄ STA 10+10.00 = SR 0056 SURVEY & CONSTR ℄ STA 10+10.00



LIMIT OF WORK
STA 984+67.00
SEGMENT 0330 OFFSET 0589
SR 1001 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

LIMIT OF WORK
STA 11+30.00
SEGMENT 0004 OFFSET 0120
SR 0056 SEC A01
CITY OF NEW KENSINGTON
WESTMORELAND COUNTY

LIMIT OF WORK
STA 0+00.00
SEGMENT 0010 OFFSET 0592
SR 1038 SEC A01
CITY OF NEW KENSINGTON
WESTMORELAND COUNTY

LIMIT OF WORK
STA 5+92.00
SEGMENT 0010 OFFSET 0592
SR 1038 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

LIMIT OF WORK
STA 0+00.00
SEGMENT 0010 OFFSET 0000
SR 1038 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

LIMIT OF WORK
STA 973+50.00
SEGMENT 0320 OFFSET 2594
SR 1001 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

LEGEND

PROJECT
STATE HIGHWAY
TOWNSHIP ROAD

LOCATION MAP

0 0.5 1
SCALE IN MILES

DETAILS, OTHER THAN THOSE INDICATED, ARE ON THE FOLLOWING STANDARD DRAWINGS:

RC-10M	JUN 01, 2010	BC-721M	FEB 19, 2021
RC-11M	JUN 01, 2010	BC-734M	FEB 19, 2021
RC-12M	FEB 08, 2019	BC-735M	SEP 30, 2016
RC-13M	JUN 01, 2010	BC-736M	JAN 31, 2019
RC-23M	FEB 08, 2019	BC-751M	JAN 31, 2019
RC-28M	FEB 08, 2019	BC-752M	FEB 19, 2021
RC-50M	FEB 19, 2021	BC-753M	JAN 31, 2019
RC-51M	NOV 30, 2021	BC-762M	JAN 31, 2019
RC-54M	NOV 30, 2021	BC-767M	FEB 19, 2021
RC-58M	AUG 04, 2017	BC-783M	JAN 31, 2019
RC-64M	FEB 19, 2021	BC-788M	JAN 31, 2019
RC-67M	FEB 19, 2021	TC-8600	JUN 13, 2013
RC-70M	FEB 08, 2019	TC-8604	AUG 17, 2021
RC-72M	FEB 08, 2019	TC-8702B	JUN 13, 2013
RC-73M	FEB 08, 2019	TC-8702C	JUN 13, 2013
BC-701M	FEB 19, 2021	TC-8716	JUN 13, 2013
BC-719M	JAN 31, 2019	TC-8717	JUN 13, 2013

GENERAL NOTES

THE LEGAL RIGHT-OF-WAY ON SR 1038, FORMERLY KNOWN AS LR 188, FROM STATION 0+51.00 TO STATION 1+88.00 IS FIFTY (50) FEET BASED ON THE PLAN OF LR 188, SECTION 007 R/W, SIGNED ON JUNE 29, 1987, AND RECORDED ON OCTOBER 27, 1987, IN THE ALLEGHENY RECORDER'S OFFICE IN STATE HIGHWAY BOOK 98, PAGE 24.

THE LEGAL RIGHT-OF-WAY ON SR 1038, FORMERLY KNOWN AS LR 188, FROM STATION 4+62.00 TO STATION 8+03.00 IS FIFTY (50) FEET BASED ON TECH PLAN OF SR 1038, SECTION 007, SIGNED ON MARY 16, 1988.

THE LEGAL RIGHT-OF-WAY ON SR 0056, FORMERLY KNOWN AS LR 188, FROM STATION 10+13.00 TO STATION 10+79.93 VARIES IN WIDTH BASED ON THE PLAN OF SR 1038, SECTION 007, SIGNED ON MAY 16, 1988.

THE LEGAL RIGHT-OF-WAY ON SR 1001, FORMERLY KNOWN AS LR 70, AND ON SR 9109, FORMERLY KNOWN AS LR 70 EB, VARIES IN WIDTH BASED ON THE PLAN OF LR 199, SECTION 007 R/W, SIGNED ON JUNE 29, 1987, AND RECORDED ON OCTOBER 27, 1987, IN THE ALLEGHENY RECORDER'S OFFICE IN STATE HIGHWAY BOOK 98, PAGE 24.

PRIVATE PROPERTY LINES ARE PLOTTED FROM THE DEED OF RECORD, RECORDED SUBDIVISION OR LOT PLANS, EXISTING TOPOGRAPHICAL FEATURES AND LIMITED FIELD DATA. PRIVATE PROPERTY LINES WERE NOT SURVEYED BY THE PROFESSIONAL LAND SURVEYOR RESPONSIBLE FOR THE PROJECT.

DO NOT INTERFERE WITH THE OPERATION OF ANY FIRE HYDRANT, FIRE CALL BOX OR POLICE CALL BOX.

THREE TO TEN WORKING DAYS PRIOR TO EXCAVATION BASED ON THE COMPLEXITY OF THE PROJECT, THE CONTRACTOR MUST CONTACT THE PA ONE-CALL SYSTEM INC., PHONE 1-800-242-1776. SERIAL NO. _____FOR CITY OF NEW KENSINGTON, WESTMORELAND COUNTY, SERIAL NO. _____ FOR EAST DEER TOWNSHIP, ALLEGHENY COUNTY. ADDITIONAL INFORMATION IS AVAILABLE AT https://www.paiall.org/PA811/Public/.

THE CONTRACTOR IS REQUIRED TO NOTIFY THE DEPARTMENT AND SUBMIT AN ALLEGED VIOLATION REPORT (AVR) TO THE PA PUBLIC UTILITY COMMISSION THROUGH THE PA ONE CALL SYSTEM, WWW.PAICALL.ORG, WITHIN TEN (10) BUSINESS DAYS AFTER A UTILITY LINE IS STRUCK, DAMAGED, OR PREVIOUS DAMAGE IS DISCOVERED AS REQUIRED BY PENNSYLVANIA'S UNDERGROUND UTILITY LINE PROTECTION LAW ACT 50 (P.L.852, NO. 287 AMENDED OCT. 30, 2017).

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

SLOPE EASEMENT. AN EASEMENT FOR THE SUPPORT AND PROTECTION OF THE HIGHWAY, INCLUDING THE RIGHT TO CONSTRUCT, INSPECT, MAINTAIN, REPAIR, RECONSTRUCT AND ALTER DRAINAGE FACILITIES AND THE CONTOUR OF THE LAND. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY SUPPORT AND PROTECTION OF THE HIGHWAY RIGHT-OF-WAY AND THE SAFETY OF THE TRAVELING PUBLIC.

LEGAL RIGHT-OF-WAY CONVERTED TO AERIAL EASEMENT. PROPERTY IN WHICH THE DEPARTMENT INTENDS TO VACATE ITS EXISTING SURFACE EASEMENT FOR HIGHWAY PURPOSES AND RETAIN AN AERIAL EASEMENT AS DEFINED ELSEWHERE ON THIS PLAN. SUBJECT TO THE APPROVAL OF THIS PLAN BY THE GOVERNOR, THE FILING OF THIS PLAN AS A PUBLIC RECORD IN THE OFFICE OF THE DEPARTMENT AND THE RECORDING OF THIS PLAN IN THE COUNTY RECORDER OF DEEDS OFFICE, THIS NOTE SHALL CONSTITUTE AN ORDER OF VACATION PURSUANT TO SECTION 210 OF THE STATE HIGHWAY LAW, 36 P.S. SECTION 670-210, AS TO THE SURFACE EASEMENT FOR HIGHWAY PURPOSES, EFFECTIVE WHEN THE CONSTRUCTION IS COMPLETED.

HORIZONTAL CONTROL IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SPCS 83) (SOUTH ZONE).

VERTICAL CONTROL IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

ALL CURVE DATA IS BASED ON ARC DEFINITION UNLESS OTHERWISE NOTED.

SR 1038 AND SR 0056 PREVIOUSLY KNOWN AS LR 188.

THE ALLEGHENY RIVER IS NAVIGABLE.

EARTHWORK SUMMARY ENTIRE PROJECT

THE INFORMATION ON ESTIMATED AMOUNTS OF EARTHWORK HAS BEEN USED IN THE PRELIMINARY ESTIMATE. DO NOT USE AS A WAIVER OF ANY PROVISIONS OF THE SPECIFICATIONS AND CONTRACTS.

CUBIC YARDS OF EXCAVATION						CUBIC YARDS OF COMPLETED EMBANKMENT	CUBIC YARDS OF BORROW EXCAVATION	CUBIC YARDS OF SELECTED BORROW EXC, ROCK, CLASS R-4	CUBIC YARDS OF SELECTED BORROW EXC., STR BACKFIL	CUBIC YARDS OF WASTE
CLASS 1	CLASS 1A	CLASS 1B	CLASS 2	CLASS 3**	CLASS 4					
		63	333					203		396

* INCLUDES ALL BORROW ITEMS
** CY PART OF LUMP SUM STRUCTURE ITEM

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

LOCATION MAP AND GENERAL NOTES

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

PLOTTED: 10/11/2022 12:55:17 PM

FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\AR000040FX.dgn

PA ONE CALL SYSTEM, INC. PHONE 1-800-242-1776
PRELIMINARY ENGINEERING
CITY OF NEW KENSIGNTON, WESTMORELAND COUNTY
DESIGN SERIAL NO. 20180181983

LOWER BURRELL CITY, WESTMORELAND COUNTY
DESIGN SERIAL NO. 20180181984

EAST DEER TOWNSHIP, ALLEGHENY COUNTY
DESIGN SERIAL NO. 20180181998

FINAL DESIGN
CITY OF NEW KENSIGNTON, WESTMORELAND COUNTY
DESIGN SERIAL NO. 20222560097

LOWER BURRELL CITY, WESTMORELAND COUNTY
DESIGN SERIAL NO. 20222560100

EAST DEER TOWNSHIP, ALLEGHENY COUNTY
DESIGN SERIAL NO. 20222560099

SPRINGDALE TOWNSHIP, ALLEGHENY COUNTY
DESIGN SERIAL NO. 20222560098

LIST OF PUBLIC UTILITIES

SYMBOL	UTILITY COMPANY	TELEPHONE	MAILING ADDRESS
—FO— —FOU—	AT&T LOCAL SERVICE ATTN: JAMES SCHRENK METROPOLITAN COMMUNICATIONS GROUP JS9723@ATT.COM OR JSCHRENK@ATT.COM	PHONE: 412-316-9930 412-670-4949 (CELL)	2500 ALLEGHENY CENTER PITTSBURGH, PA 15212
—FO— —FOU— —CTV—	COMCAST ATTN: MR. RICK MOSLEN RICHARD_MOSLEN@COMCAST.COM	PHONE: 412-999-0590	1530 CHARTIERS AVE. PITTSBURGH, PA 15204
—FO2— —FOU2—	CROWN CASTLE (SUNESYS) ATTN: ROBERT PACHOLARZ ROBERT.PACHOLARZ@CROWNCASTLE.COM	PHONE: 724-231-3803 732-718-9078 (CELL)	2000 CORPORATE DR. CANONSBURG, PA 15317
—FO4— —FOU4—	DQE COMMUNICATIONS, LLC ATTN: ADAM NULPH ACNULPH@DQE.COM	PHONE: 724-919-7258	424 SOUTH 27TH STREET SUITE 220 PITTSBURGH, PA 15203
— W —	NEW KENSINGTON WATER AUTHORITY ATTN: ED SALIBA ESALIBA@NEWKENWATER.NET	PHONE: 724-337-3577	920 BARNES STREET PO BOX 577 NEW KENSINGTON, PA 15068
— S —	NEW KENSINGTON CITY SANITARY MUNICIPAL AUTHORITY ATTN: DANIEL H. ROWE, JR., AUTHORITY MANAGER DROWE@MSANK.ORG	PHONE: 724-335-9813	120 LOGANS FERRY ROAD NEW KENSINGTON, PA 15068
— G —	PEOPLE NATURAL GAS COMPANY ATTN: BOB LAYHEW (WEST) ATTN: DAVE HILTY (EAST)	PHONE: 724-444-3231 PHONE: 412-208-7205	432 HYDE PARK ROAD LEECHBURG, PA 15656
— G —	LENNON, SMITH, SOULERET ENGINEEERING, INC. REPRESENTING PEOPLES NATURAL GAS COMPANY ATTN: GARY M. BAIRD, PROJECT MANAGER GBAIRD@LSSE.COM	PHONE: 724-837-1057 X 104 412-260-5601 (CELL)	4536 ROUTE 136, SUITE 1 GREENSBURG, PA 15601
— T — —TU—	VERIZON PENNSYLVANIA, LLC ATTN: ARIN P. BIONDI ARIN.P.BIONDI@VERIZON.COM	PHONE: 724-652-4175 724-406-5443 (CELL)	508 OLD FRANKSTOWN ROAD MONROEVILLE, PA 15146
— E — —EU—	WEST PENN POWER COMPANY ATTN: RICHARD P. HOBBINS RHOBBIN@FIRSTENERGYCORP.COM	PHONE: 724-334-5237	2127 KENNETH AVENUE ARNOLD, PA 15068
—FOU3—	WINDSTREAM ENTERPRISE ATTN: FRANK HALAS FRANK.HALAS@WINDSTREAM.COM ATTN: LARRY GOGLIN - CONSTRUCTION MANAGER III LARRY.GOGLIN@WINDSTREAM.COM	PHONE: 315-706-9799 PHONE: 814-849-3551 814-715-1692 (CELL)	98 INDUSTRIAL PARK ROAD BROOKVILLE, PA 15825
—FOI— —FOUI—	ZAYO GROUP (ALLEGHENY COMMUNITY CONNECT) ATTN: JOHN LYNCH, OPERATION MANAGER JOHN.LYNCH@ZAYOCOM	PHONE: 724-838-6999 724-972-5667 (CELL)	800 CABIN HILL DRIVE, ROOM M213 GREENSBURG, PA 15601
—FO3— —FOUI—	SALSGIVER, INC. ATTN: DAVID SALSGIVER DAVID@SALSGIVER.COM	PHONE: 724-295-1970 X 112	301, 5TH STREET FREEPORT, PA 16229

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	4 OF 19
		*		

REV NO	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

LIST OF PUBLIC UTILITIES

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

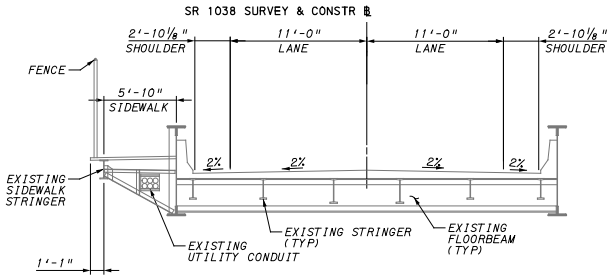
PLOTTED: 10/11/2022 12:55:18 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000050FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	5 OF 19
		*		

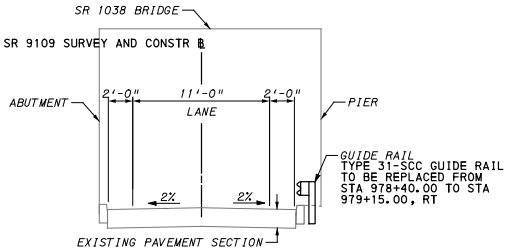
REV NO	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY



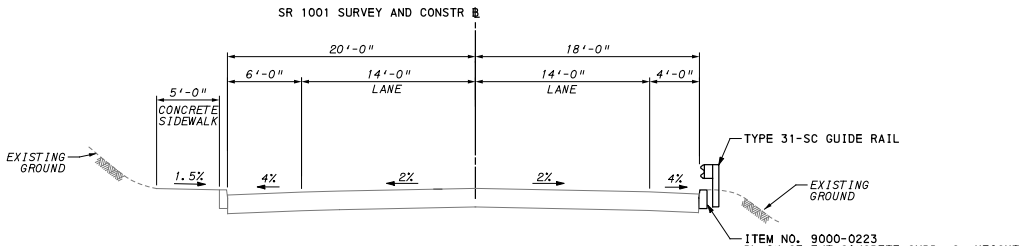
SR 1038 TYPICAL SECTION

STA 0+00.00 TO STA 10+10.00
NOT TO SCALE



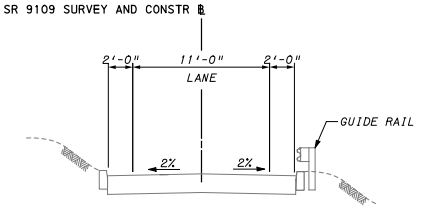
SR 9109 TYPICAL SECTION

STA 978+40.00 TO STA 979+15.00
NOT TO SCALE



SR 1001 TYPICAL SECTION

STA 974+00.00 TO STA 984+17.00
NOT TO SCALE



SR 9109 TYPICAL SECTION

STA 974+00.00 TO STA 978+40.00
STA 979+15.00 TO STA 984+00.00
NOT TO SCALE

TYPICAL SECTIONS

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

PLOTTED: 10/11/2022 12:55:19 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000060FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	6 OF 19
		*		

REV NO.	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

PAVEMENT LEGEND:

(A) SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H

(B) SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH

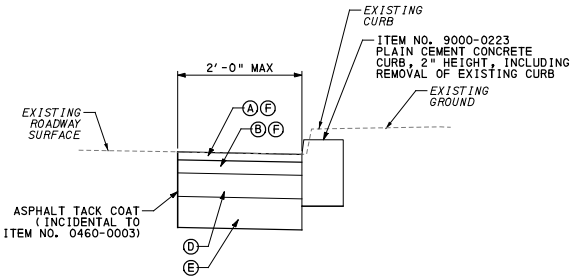
(C) SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 19.0 MM MIX, (3 1/2" MIN DEPTH)

(D) SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 25.0 MM MIX, 5 1/2" DEPTH

(E) SUBBASE 8" DEPTH (NO. 2A)

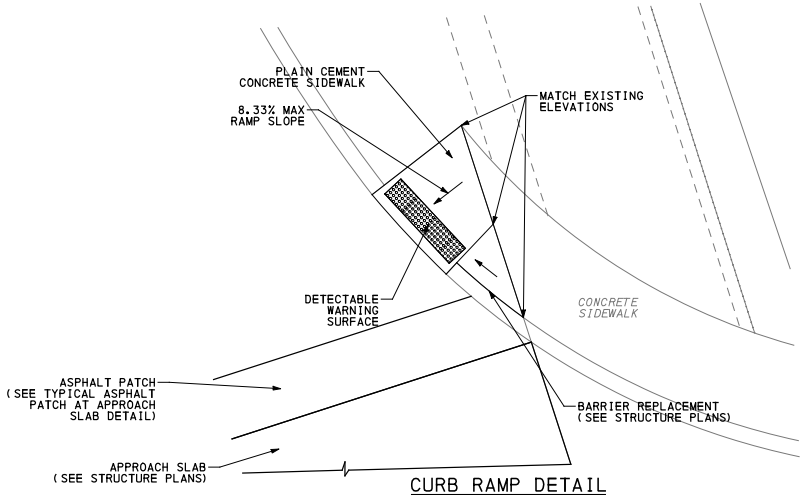
(F) APPLY SEPARATE LAYER OF ASPHALT TACK COAT FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL.

(G) MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR

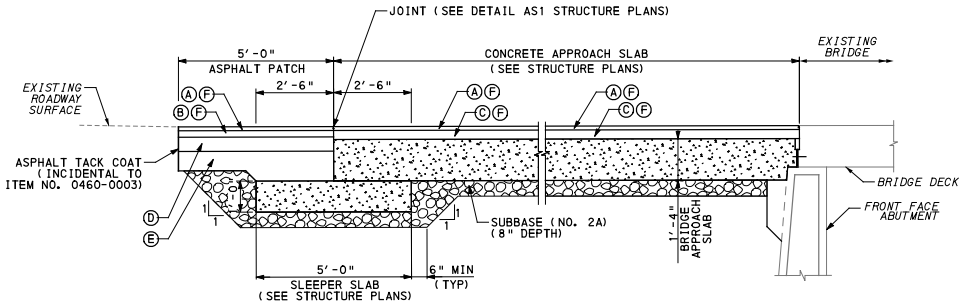


TYPICAL ASPHALT PATCH AT CURB DETAIL

STA 975+31.44 TO STA 975+66.44, RT
STA 983+74.30 TO STA 984+09.30, RT
NOT TO SCALE

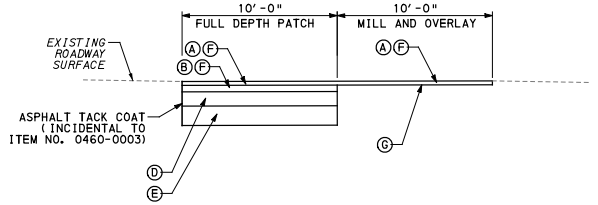


CURB RAMP DETAIL



TYPICAL ASPHALT PATCH AT APPROACH SLAB

STA 978+18.00 TO STA 979+38.00, RT
NOT TO SCALE



TYPICAL ASPHALT PATCH AT APPROACH SLAB

STA 9+92.72 TO 10+13.00
NOT TO SCALE

DETAILS

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL NICHOLAS AARON WAGNER ENGINEER No.PE073688

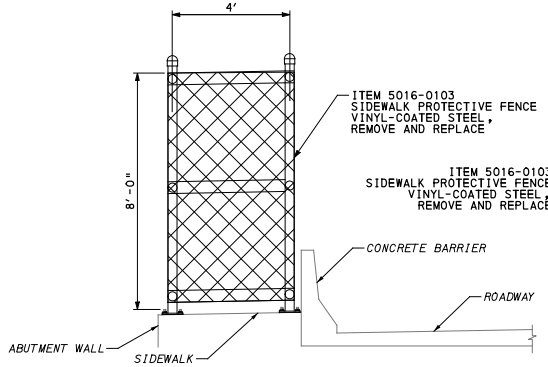
PLOTTED: 10/11/2022 2:16:20 PM
FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\AR000070FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	7 OF 19

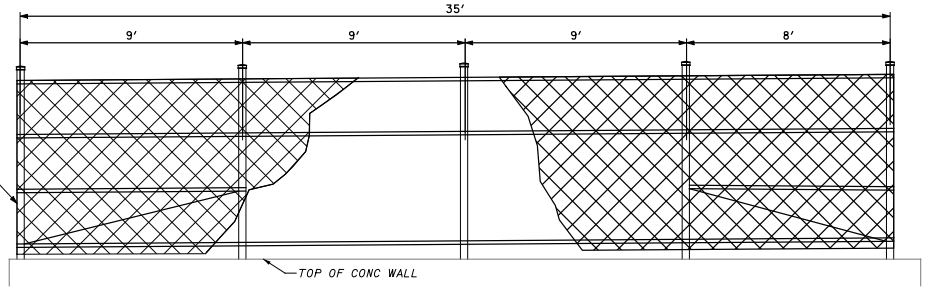
*

REV NO	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY



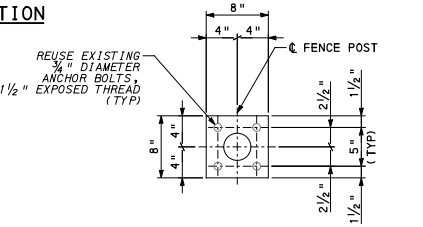
FENCE SECTION
NOT TO SCALE



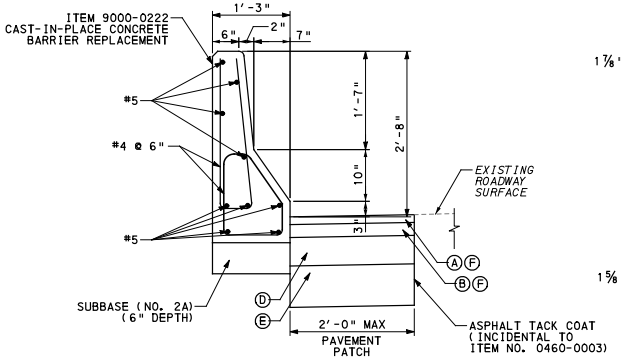
FENCE ELEVATION SECTION
NOT TO SCALE

NOTE:
EXISTING "WELCOME TO NEW KENSINGTON" SIGN MOUNTED TO PROTECTIVE FENCE TO BE REMOVE AND REPLACED REUSING EXISTING MOUNTING HARDWARE.

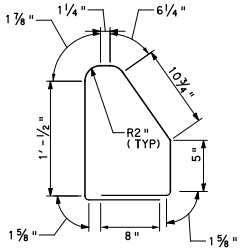
EXISTING FENCE BASE PLATE

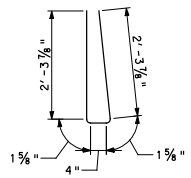


FENCE BASE PLATE SECTION
NOT TO SCALE

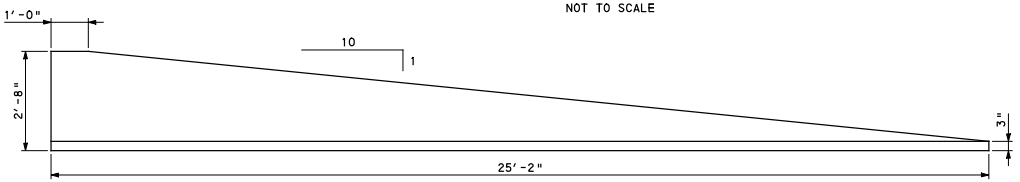


CONCRETE BARRIER CROSS SECTION
NOT TO SCALE





REINFORCEMENT BAR
BEND DETAILS
NOT TO SCALE



FAR APPROACH BARRIER SIDE VIEW
STA 9+92.72 TO 10+17.89, LT
NOT TO SCALE

PAVEMENT LEGEND:

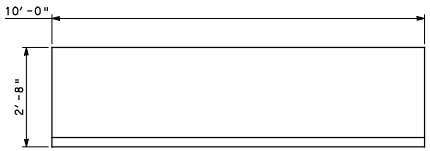
Ⓐ SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H

Ⓑ SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH

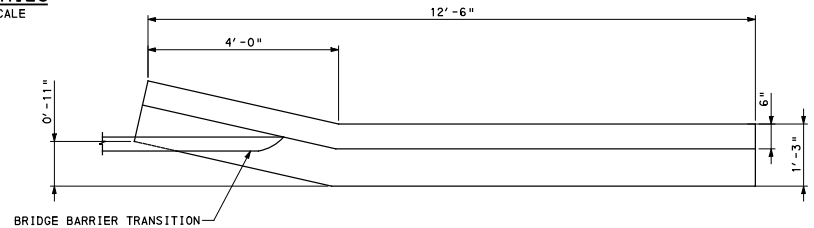
Ⓓ SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 25.0 MM MIX, 5 1/2" DEPTH

Ⓔ SUBBASE 8" DEPTH (NO. 2A)

Ⓕ APPLY SEPARATE LAYER OF ASPHALT TACK COAT FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL.



NEAR APPROACH BARRIER SIDE VIEW
STA 0+20 TO 0+25, RT
NOT TO SCALE



FAR APPROACH BARRIER TOP VIEW
STA 9+74.26 TO 9+86.76, RT
NOT TO SCALE

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

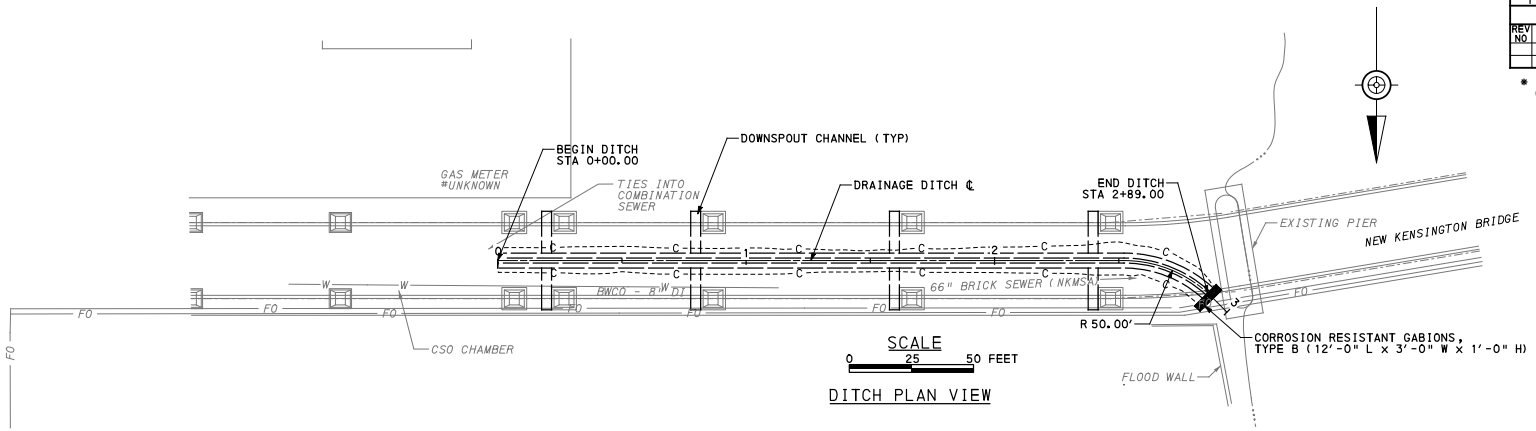
PLOTTED: 10/11/2022 12:55:22 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000080FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	8 OF 19
		*		

REV NO	REVISIONS	DATE	BY	APPD

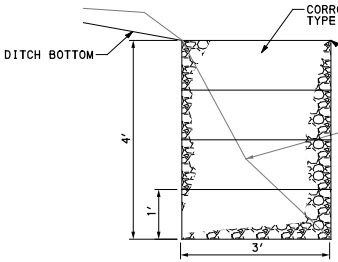
* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY



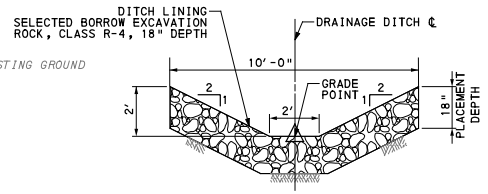
SCALE
0 25 50 FEET

DITCH PLAN VIEW

ROUTE	STATION	POINT	COORDINATES		BEARING
			NORTH	EAST	
DRAINAGE DITCH ℄	0+00.00	POT	455007.9983	1407404.1414	
	2+52.10	PC	454967.3715	1407155.3394	S 80°43'34"W
	2+72.90	PI	454964.0198	1407134.8130	
	2+91.52	PT	454976.2145	1407117.9650	N 54°06'10"W
	3+00.00	POT	454981.1887	1407111.0927	

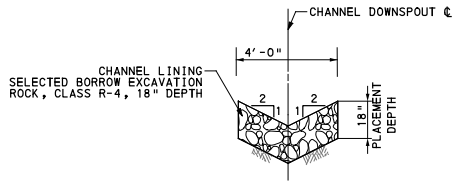


DITCH OUTLET DETAIL

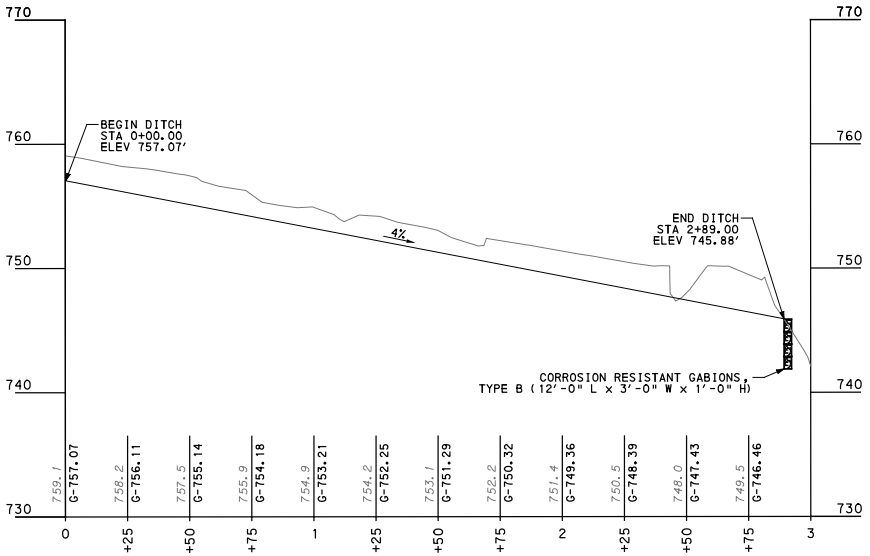


DITCH CROSS-SECTION

SWALE NUMBER	STATION	TO	STATION	SIDE	DIMENSIONS (FT)		DITCH SLOPE	DITCH LINING
					BOTTOM WIDTH B	DEPTH D		
SW-1	0+00	TO	2+89	LT/RT	2.0	2.0	4.0%	R-4



DOWNSPOUT CHANNEL CROSS-SECTION



SCALE
HORIZONTAL 0 25 50 FEET
VERTICAL 0 5 10 FEET

DITCH PROFILE

DRAINAGE DITCH DETAIL

NICHOLAS AARON WAGNER
ENGINEER
PROFESSIONAL

DES BY: ZTH DRAWN BY: ZTH CHK'D BY: NAW

TCP - TRAFFIC CONTROL PLAN
S & PMP - SIGNING, PAV'T MARKING AND DELIN PLAN
STR - STRUCTURE PLANS
♦ - SEE SPECIAL PROVISIONS

SUMMARY

LP - LIGHTING PLAN
SSP - SIGN STRUCTURE PLAN

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY & WESTMORELAND	1038 & 0056	A01	9 OF 19
				EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON				

QUANTITY	ITEM NO / UNIT	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET
63	0203 0004 / CY	CLASS 1B EXCAVATION		12-13
333	0204 0001 / CY	CLASS 2 EXCAVATION		14
203	0205 0264 / CY	SELECTED BORROW EXCAVATION ROCK, CLASS R-4		14
8	0212 0014 / SY	GEOTEXTILE, CLASS 4, TYPE A		14
1000	0213 0002 / DOLLA	TEMPORARY PROJECT AIR POLLUTION CONTROL		NO TAB
129	0313 0425 / SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 5 1/2" DEPTH		12-13
129	0350 0108 / SY	SUBBASE 8" DEPTH (NO. 2A)		12-13
141	0350 0121 / TON	SUBBASE (NO. 2A)		12-13
393	0413 0245 / SY	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H		12-13
129	0413 6045 / SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH		12-13
48	0413 6047 / TON	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX		12-13
258	0460 0003 / SY	ASPHALT TACK COAT (NTT/CNTT)		12-13
37	0491 0012 / SY	MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR		12-13
	0608 0001 / LS	MOBILIZATION		NO TAB
	0609 0003 / LS	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE B		NO TAB
	0609 0009 / LS	EQUIPMENT PACKAGE ♦		NO TAB
2	0619 0459 / EACH	PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3, TANGENT (MASH)		12-13
943	0620 0503 / LF	REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY)		12-13
1	0620 0872 / EACH	BURIED-IN-BACKSLOPE TERMINAL, SINGLE PANEL		12-13
138	0620 1600 / LF	TYPE 31-S GUIDE RAIL		12-13
588	0620 1625 / LF	TYPE 31-SC GUIDE RAIL		12-13
75	0620 1635 / LF	TYPE 31-SCC GUIDE RAIL		12-13
4	0620 1660 / EACH	TYPE 31-STRONG POST ANCHOR TERMINAL		12-13
1	0620 1670 / EACH	TYPE 31-STRONG POST IN-LINE ANCHOR		12-13
3	0620 2011 / EACH	THRIE-BEAM GUIDE RAIL TO CONCRETE BRIDGE BARRIER TRANSITION WITH CURB AND INLET		12-13
6	0626 0030 / CY	CORROSION RESISTANT GABIONS, TYPE B		14
1	0627 0011 / EACH	TEMPORARY END TRANSITION		TCP
410	0627 3019 / LF	TEMPORARY BARRIER, TEST LEVEL 3, BARRIER DEFLECTION DISTANCE < /=1'		TCP
9	4676 0001 / SY	CEMENT CONCRETE SIDEWALK FOR ADA RAMPS ♦		12-13
	0686 0030 / LS	CONSTRUCTION SURVEYING, TYPE B, MODIFIED		NO TAB
	0686 0060 / LS	CONSTRUCTION SURVEYING, TYPE D, MODIFIED		NO TAB
	0689 0005 / LS	CPM SCHEDULE, WITH UPDATES		NO TAB
EITHER 14	0695 0004 / SF	DETECTABLE WARNING SURFACE, POLYMER COMPOSITE	1	12-13
OR 14	0695 0003 / SF	DETECTABLE WARNING SURFACE, POLYMER CONCRETE	1	12-13
OR 14	0695 0002 / SF	DETECTABLE WARNING SURFACE, CAST IRON	1	12-13
1	0696 0610 / EACH	TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (STANDARD), TEST LEVEL 3		TCP
1	0703 0025 / CY	NO. 57 COARSE AGGREGATE		14
800	0811 0003 / LF	TEMPORARY PROTECTIVE FENCE		14
1000	0845 0001 / DOLLA	UNFORESEEN WATER POLLUTION CONTROL		NO TAB
2	0850 0031 / CY	ROCK, CLASS R-3		14
1	0856 0001 / EACH	REMOVAL SEDIMENT AND ROCK BARRIER		14
1	0860 0000 / EACH	INLET FILTER BAG FOR TYPE M INLET		14
8	0860 0002 / EACH	INLET FILTER BAG FOR TYPE C INLET		14
87	0867 0012 / LF	COMPOST FILTER SOCK, 12" DIAMETER		14
	0901 0001 / LS	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION ♦		TCP
2	0901 0203 / EACH	ARROW PANEL		TCP
50	0901 0231 / DAY	ADDITIONAL WARNING LIGHTS, TYPE B		TCP
50	0901 0232 / DAY	ADDITIONAL WARNING LIGHTS, TYPE C		TCP
750	0901 0240 / SF	ADDITIONAL TRAFFIC CONTROL SIGNS		TCP
4820	4901 0320 / LF	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW MODIFIED ♦		TCP
2232	4901 0331 / LF	6" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE MODIFIED ♦		TCP
6	0901 0450 / EACH	3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS		TCP
12	0910 0006 / EACH	JUNCTION BOXES J.B.-25		12-13
5800	0910 4115 / LF	AWG 6 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR		NO TAB
7200	0910 4116 / LF	AWG 8 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR		NO TAB
127	0910 5255 / LF	2" CONDUIT IN STRUCTURE		NO TAB
2	0910 7020 / EACH	COMPLETE POWER SUPPLY SYSTEM	1	12-13
	0910 7210 / LS	TESTING OF ENTIRE LIGHTING SYSTEM	1	12-13
59	0931 0001 / SF	POST MOUNTED SIGNS, TYPE B		14
30	0932 0001 / SF	POST MOUNTED SIGNS, TYPE C		TCP
27	0935 0001 / SF	POST MOUNTED SIGNS, TYPE F		14
245	0936 0200 / SF	STRUCTURE MOUNTED FLAT SHEET ALUMINUM SIGNS		14
18	0937 0106 / EACH	GUIDE RAIL MOUNTED DELINEATOR TYPE B, (W/B)		NO TAB
9	0945 0001 / EACH	RESET POST MOUNTED SIGNS, TYPE F		14
	4948 0300 / LS	STEEL SIGN STRUCTURE - CANTILEVER, AS DESIGNED, S-40254 ♦	2	SSP
1	0958 0341 / EACH	TEMPORARY MODIFICATIONS TO EXISTING PERMANENT TRAFFIC SIGNAL (3 APPROACHES)		TCP
1	0958 0361 / EACH	TEMPORARY MODIFICATIONS TO EXISTING PERMANENT TRAFFIC SIGNAL (4 OR MORE APPROACHES)		TCP
394	0962 1002 / LF	8" WHITE WATERBORNE PAVEMENT MARKINGS		TCP
231	0962 1004 / LF	24" WHITE WATERBORNE PAVEMENT MARKINGS		TCP
6432	0962 1005 / LF	4" YELLOW WATERBORNE PAVEMENT MARKINGS		S & PMP
40	0962 1009 / LF	24" YELLOW WATERBORNE PAVEMENT MARKINGS		TCP
30	0962 1019 / LF	24" WHITE WATERBORNE TRANSVERSE PAVEMENT MARKINGS		S & PMP
3716	0963 0001 / SF	PAVEMENT MARKING REMOVAL		TCP
10	1001 0500 / EACH	LIGHTING POLE, ANCHORAGE		STR
4849	1001 0970 / SY	MECHANICAL TEXTURING WITH TRANSVERSE SAWED GROOVES		STR
160	1001 1100 / CY	CLASS AA CEMENT CONCRETE, ACCELERATED		STR
32400	1002 0052 / LB	REINFORCEMENT BARS, EPOXY COATED		STR
160	1003 0005 / EACH	DOWEL HOLES, 12" DEPTH		STR
92	5016 0006 / LF	BARRIER PROTECTIVE FENCE, VINYL-COATED STEEL, REMOVE AND REPLACE ♦		STR
1585	5016 0103 / LF	SIDEWALK PROTECTIVE FENCE VINYL-COATED STEEL, REMOVE AND REPLACE ♦		STR, 12-13
	1018 0050 / LS	REMOVAL OF PORTION OF EXISTING BRIDGE		STR
	1018 0051 / LS	REMOVAL OF PORTION OF EXISTING BRIDGE	2	SSP
3223	1019 0040 / SY	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES)		STR
569	1019 0050 / SY	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE)		STR
8600	5020 0002 / LB	TOOTH EXPANSION DAM WITH DRAIN TROUGH, REMOVE AND REPLACE ♦		STR
4849	1039 0010 / SY	CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION		STR
92	1040 0120 / SF	CONCRETE BRIDGE DECK REPAIR ACCELERATED, TYPE 2 USING ASC		STR
28	1040 0210 / SF	CONCRETE BRIDGE BARRIER REPAIR ACCELERATED, TYPE 2 USING ASC		STR
9698	1041 0020 / SY	SCARIFICATION, 1/2" DEPTH		STR
4849	1042 0030 / SY	3 HOUR ACCELERATED LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/4" DEPTH		STR
168	1042 0070 / CY	3 HOUR ACCELERATED LATEX MODIFIED CONCRETE, VARIABLE DEPTH		STR
1021	1046 0010 / SY	EPOXY OVERLAY		STR
815	1050 0020 / LB	FABRICATED STRUCTURAL STEEL		STR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER NICHOLAS AARON WAGNER PE037090

PROJECT ID: 4316
MPMS: 63515
ECMS: 63515
10/12/2022 5:21:56 PM

TCP - TRAFFIC CONTROL PLAN
S & PMP - SIGNING, PAV'T MARKING AND DELIN PLAN
STR - STRUCTURE PLANS
♦ - SEE SPECIAL PROVISIONS

SUMMARY

LP - LIGHTING PLAN
SSP - SIGN STRUCTURE PLAN

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY & WESTMORELAND	1038 & 0056	A01	10 OF 19
				EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON				

QUANTITY	ITEM NO / UNIT	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET
780	1050 0021 / LB	FABRICATED STRUCTURAL STEEL	2	SSP
2	1050 0085 / EACH	LAMINATED NEOPRENE BEARING PAD		STR
36	1050 0089 / EACH	SHEAR CONNECTORS		STR
500000	1050 0100 / DOLLA	UNFORESEEN FABRICATED STRUCTURAL STEEL REPAIRS		STR
3738	1050 0110 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
447	1050 0111 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
1803	1050 0112 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
1072	1050 0113 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
145	1050 0114 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
443	1050 0115 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
20	1050 0116 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
2111	1050 0117 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
525	1050 0118 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
35	1050 0119 / LB	FABRICATED STRUCTURAL STEEL REPAIR		STR
26	1050 0201 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 1		STR
3	1050 0202 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 2		STR
23	1050 0203 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 3		STR
4	1050 0204 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 4		STR
1	1050 0205 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 5		STR
2	1050 0206 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 6		STR
4	1050 0207 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 7		STR
2	1050 0208 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 8		STR
14	1050 0210 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 10		STR
3	1050 0211 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 11		STR
10	1050 0212 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 12		STR
15	1050 0213 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 13		STR
2	1050 0214 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 14		STR
23	1050 0215 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 15		STR
2	1050 0216 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 16		STR
14	1050 0217 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 17		STR
86	1050 0218 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 18		STR
9	1050 0219 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 19		STR
7	1050 0220 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 20		STR
9	1050 0221 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 21		STR
1445	1050 0222 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 22		STR
47	1050 0223 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 23		STR
249	1050 0224 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 24		STR
29	1050 0225 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 25		STR
23	1050 0226 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 26		STR
1299	1050 0227 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 27		STR
1247	1050 0228 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 28		STR
28	1050 0229 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 29		STR
20	1050 0230 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 30		STR
9	1050 0231 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 31		STR
1	1050 0232 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 32		STR
1	1050 0233 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 33		STR
480	1050 0234 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 34		STR
24	1050 0235 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 35		STR
330	1050 0236 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 36		STR
11	1050 0237 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 37		STR
9	1050 0238 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 38		STR
13	1050 0239 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 39		STR
5	1050 0240 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 40		STR
294	1050 0241 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 41		STR
14	1050 0242 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 42		STR
2	1050 0243 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 43		STR
12	1050 0244 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 44		STR
1	1050 0245 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 45		STR
20	1050 0246 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 46		STR
11	1050 0247 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 47		STR
7	1050 0248 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 48		STR
629	1050 0249 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 49		STR
32	1050 0250 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 50		STR
75	1050 0251 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 51		STR
6	1050 0252 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 52		STR
10	1050 0253 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 53		STR
9	1050 0254 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 54		STR
3	1050 0255 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 55		STR
1	1050 0256 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 56		STR
1	1050 0257 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 57		STR
4	1050 0258 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 58		STR
2	1050 0259 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 59		STR
28	1050 0260 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 60		STR
2	1050 0261 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 61		STR
1	1050 0262 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 62		STR
670	1050 0263 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 63		STR
62	1050 0264 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 64		STR
11	1050 0265 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 65		STR
1	1050 0266 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 66		STR
6	1050 0267 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 67		STR
1	1050 0268 / EACH	FABRICATED STRUCTURAL STEEL REPAIR 68		STR
800	5051 0000 / LF	DOWNSPOUTING, GALVANIZED, REMOVE AND REPLACE ♦		STR
	1070 0200 / LS	PAINTING EXISTING STRUCTURAL STEEL		STR
	1070 0325 / LS	PRIMING TOP FLANGES		STR
220000	1070 0350 / DOLLA	PENETRATING SEALER AND CAULKING APPLICATION		STR
	1072 0100 / LS	CONTAINMENT ♦		STR
	1072 0200 / LS	WASTE MANAGEMENT ♦		STR
	1072 0300 / LS	WORKER HEALTH AND SAFETY ♦		STR
31	1090 1014 / LF	ACCELERATED EXPANSION DAM REPLACEMENT, 3" MOVEMENT		STR
62	5090 1015 / LF	ACCELERATED EXPANSION DAM REPLACEMENT, 3 1/2" MOVEMENT, NON-STANDARD RETAINER ♦		STR
31	5090 1016 / LF	ACCELERATED EXPANSION DAM REPLACEMENT, 4" MOVEMENT, NON-STANDARD RETAINER ♦		STR
203	1091 0331 / LF	EPOXY INJECTION CRACK SEAL		STR
1008	9000 0120 / HOUR	PEDESTRIAN SHUTTLE SERVICE DURING CONSTRUCTION ♦		TCP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER NICHOLAS AARON WAGNER PE037090

PROJECT ID: 4316 MPMS: 63515 ECMS: 63515 10/12/2022 5:21:56 PM

TCP - TRAFFIC CONTROL PLAN
S & PMP - SIGNING, PAV'T MARKING AND DELIN PLAN
STR - STRUCTURE PLANS
♦ - SEE SPECIAL PROVISIONS

SUMMARY

LP - LIGHTING PLAN
SSP - SIGN STRUCTURE PLAN

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY & WESTMORELAND	1038 & 0056	A01	11 OF 19
				EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON				

QUANTITY	ITEM NO / UNIT	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO / UNIT	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO / UNIT	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO / UNIT	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET
843	9000 0121 HOUR	BUS SHUTTLE SERVICE DURING CONSTRUCTION ♦		TCP	11	9000 0224 EACH	LED DECORATIVE LUMINAIRE ♦		LP										
28	9000 0201 EACH	PACK RUST REPAIRS, EYE BARS ♦		STR		9000 0225 LS	REMOVE EXISTING LIGHTING ♦		LP										
57	9000 0202 EACH	PACK RUST REPAIR, JOINT OR CHORD ♦		STR		9000 0226 LS	COMPLETE NAVIGATION LIGHTING SYSTEM ♦		LP										
	9000 0203 LS	JACKING BRIDGE SUPERSTRUCTURE ♦		STR	10	9000 0227 EACH	DECORATIVE LIGHTING POLE WITH 4-FOOT DECORATIVE BRACKET ARM (28 1/2-FT MOUNTING HEIGHT) ♦		LP										
8	9000 0204 EACH	CLEAN AND LUBRICATE BEARINGS ♦		STR	1	9000 0228 EACH	4-FOOT DECORATIVE BRACKET ARM (28 1/2-FT MOUNTING HEIGHT) AND WIRING ASSEMBLY ♦		LP										
2	9000 0205 EACH	CLEAN AND FLUSH BRIDGE SEATS ♦		STR	1	9000 5001 EACH	DESIGN OF CEMENT CONCRETE CURB RAMPS ♦		12-13										
90	9000 0206 LF	REPLACE WALL EXPANSION JOINT MATERIAL ♦		STR	1893	9000 9002 CF	REPAIR DETERIORATED CONCRETE ♦		STR										
524	9000 0207 LF	INSTALL BARRIER FLASHING ♦		STR	37500	9000 9011 DOLLA	OFF DUTY UNIFORMED POLICE OFFICER ♦		TCP										
	9000 0208 LS	REMOVE VEGETATION ♦		STR	6500	9000 9015 DOLLA	REPAIR OF TEMPORARY IMPACT ATTENUATING DEVICE ♦		TCP										
14	9000 0209 EACH	INSTALL SPLASH BLOCK ♦		STR															
90	9000 0210 LF	REPLACE CONDUIT ♦		STR															
38	9000 0211 EACH	CORE NEW WEEPHOLE AND INSTALL WEEPHOLE FILTER ♦		STR															
	9000 0212 LS	REMOVE EXISTING UTILITY LINES AND CONDUIT ♦		STR															
	9000 0213 LS	INSTALL COMCAST CONDUIT ♦		STR															
1	9000 0214 EACH	SEAL BEARING ♦		STR															
6	9000 0215 EACH	SCUPPER, TYPE 1, NEW INSTALLATION ♦		STR															
6	9000 0216 EACH	SCUPPER, TYPE 1, REPLACEMENT INSTALLATION ♦		STR															
4	9000 0217 EACH	SCUPPER REMOVAL ♦		STR															
62	9000 0218 LF	ACCELERATED EXPANSION DAM REPLACEMENT, 5" MOVEMENT, NON-STANDARD RETAINER ♦		STR															
2	9000 0219 CALL	TEMPORARY TIMING REVISIONS ♦		TCP															
5000	9000 0220 DOLLA	REPAIR OF DETOUR ROUTE ♦		TCP															
31	9000 0221 LF	REMOVAL OF PORTION OF EXISTING CONCRETE BARRIER ♦		12-13															
48	9000 0222 LF	CAST-IN-PLACE CONCRETE BARRIER REPLACEMENT ♦		12-13															
70	9000 0223 LF	PLAIN CEMENT CONCRETE CURB, 2" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB ♦		12-13															

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER NICHOLAS AARON WAGNER PE037000

PROJECT ID: 4316 MPMS: 63515 ECMS: 63515 10/12/2022 5:21:56 PM

TABULATION OF QUANTITIES

ROADWAY

(+) SEE SUMMARY SHEET FOR COMPLETE ITEM NUMBERS

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY & WESTMORELAND	1038 & 0056	A01	12 OF 19
				EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON				

CLASS 1B EXCAVATION 0203 0004 CY	SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 5 1/2" DEPTH 0313 0425 SY	SUBBASE 8" DEPTH (NO. 2A) 0350 0108 SY	SUBBASE (NO. 2A) 0350 0121 TON	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H 0413 0245 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH 0413 6045 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX 0413 6047 TON	ASPHALT TACK COAT (NTT/CNTT) 0460 0003 SY	MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR 0491 0012 SY	PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3, TANGENT (MASH) 0619 0459 EACH	REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY) 0620 0503 LF	BURIED-IN-BACKSLOPE TERMINAL, SINGLE PANEL 0620 0822 EACH	TYPE 31-S GUIDE RAIL 0620 1600 LF	TYPE 31-SC GUIDE RAIL 0620 1625 LF	TYPE 31-SCC GUIDE RAIL 0620 1635 LF	TYPE 31-STRONG POST ANCHOR TERMINAL 0620 1660 EACH	TYPE 31-STRONG POST IN-LINE ANCHOR 0620 1670 EACH	THRIE-BEAM GUIDE RAIL TO CONCRETE BRIDGE BARRIER TRANSITION WITH CURB AND INLET 0620 2011 EACH	CEMENT CONCRETE SIDEWALK FOR ADA RAMPS 4676 0001 SY	DETECTABLE WARNING SURFAC DESIGN NO. 1 0695 (+) SF	SIDEWALK PROTECTIVE FENCE VINYL-COATED STEEL, REMOVE AND REPLACE 5016 0103 LF	REMOVAL OF PORTION OF EXISTING CONCRETE BARRIER 9000 0221 LF	CAST-IN-PLACE CONCRETE BARRIER REPLACEMENT 9000 0222 LF	PLAIN CEMENT CONCRETE CURB, 2" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB 9000 0223 LF	DESIGN OF CEMENT CONCRETE CURB RAMPS 9000 5001 EACH				ITEM NUMBER / UNIT	REMARKS	SIDE	STATIONS
																														SR 1001 SECTION A01		
4	8	8		8	8		16															35						CURB REPLACEMENT WITH FULL DEPTH PAVEMENT PATCH	RT	975+31.44 to 975+66.44
									1					162.5					1										BRIDGE BARRIER TRANSITION, TYPE 31-SC, PERMANENT IMPACT ATTENUATOR	RT	975+41.44 to 977+66.44
										215																				RT	975+50.64 to 977+66.44
37	76	76		76	76		152																						FULL DEPTH PAVEMENT PATCH AT APPROACH SLAB	RT	978+33.00 to 979+21.00
									1	436				375					1										BRIDGE BARRIER TRANSITION, TYPE 31-SC, PERMANENT IMPACT ATTENUATOR	RT	979+61.80 to 983+99.30
4	8	8		8	8		16															35						CURB REPLACEMENT WITH FULL DEPTH PAVEMENT PATCH	RT	983+74.30 to 984+09.30
																													SR 9109 SECTION A01		
										75					75														REMOVE AND REPLACE FOR CONSTRUCTION ACCESS	RT	978+40.00 to 979+15.00
											1	62.5				1													BURIED-IN-BACKSLOPE TERMINAL, TYPE 31-S, TYPE 31 STRONG POST ANCHOR TERMINAL	LT	983+06.50 to 983+90.70
																													SR 1038 SECTION A01 (ALLEGHENY COUNTY)		
			141	227		48																							ASPHALT OVERLAY AND SUBBASE BELOW APPROACH SLAB/SLEEPER SLAB	RT	0+00.00 to 0+25.83
1	3	3		3	3		6												9	14					1				CURB RAMP WITH FULL DEPTH PAVEMENT PATCH	LT	0+18.00 to 0+26.50
1	1	1		1	1		2															10	10						CONCRETE BARRIER REPLACEMENT WITH FULL DEPTH PAVEMENT PATCH	RT	0+20.00 to 0+25.00
																													SR 1038 SECTION A01 (WESTMORELAND COUNTY)		
																													DRAINAGE DITCH	LT	4+56.00 to 7+47.00
																														LT	4+69.00 to 8+01.00
																					39								SIDEWALK PROTECTIVE FENCE	RT	9+68.00 to 9+92.00
																							12.5						CONCRETE BARRIER REPLACEMENT	RT	9+74.26 to 9+86.76
																						20.5	25						CONCRETE BARRIER REPLACEMENT	LT	9+86.76 to 10+11.47
										100				50		1			1										BRIDGE BARRIER TRANSITION, TYPE 31-SC, TYPE 31 STRONG POST ANCHOR TERMINAL	RT	9+86.76 to 10+62.50
16	33	33		33	33		66																						FULL DEPTH PAVEMENT	LT / RT	9+92.72 to 10+03.00

PROJECT ID: 4316 MPMS: 63515 ECMS: 63515 10/11/2022 9:05:28 AM

TABULATION OF QUANTITIES

ROADWAY

(+) SEE SUMMARY SHEET FOR COMPLETE ITEM NUMBERS

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY & WESTMORELAND	1038 & 0056	A01	13 OF 19
				EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON				

0203 0004 CY	0313 0425 SY	0350 0108 SY	0350 0121 TON	0413 0245 SY	0413 6045 SY	0413 6047 TON	0460 0003 SY	0491 0012 SY	0619 0459 EACH	0620 0503 LF	0620 0822 EACH	0620 1600 LF	0620 1625 LF	0620 1635 LF	0620 1660 EACH	0620 1670 EACH	0620 2011 EACH	4676 0001 SY	0695 (+) SF	5016 0103 LF	9000 0221 LF	9000 0222 LF	9000 0223 LF	9000 5001 EACH			ITEM NUMBER UNIT	REMARKS	SIDE	STATIONS
				37				37																				MILL AND OVERLAY	LT / RT	10+03.00 to 10+13.00
												75			2	1												TYPE 31 STRONG POST ANCHOR TERMINAL, TYPE 31-S, TYPE 31 STRONG POST ANCHOR TERMINAL	LT	10+04.09 to 10+67.10
										117																			LT	10+04.09 to 10+79.43
63	129	129	141	393	129	48	258	37	2	943	1	137.5	587.5	75	4	1	3	9	14	39	30.5	47.5	70	1				TOTALS		

PROJECT ID: 4316 MPMS: 63515 ECMS: 63515 10/11/2022 9:05:28 AM

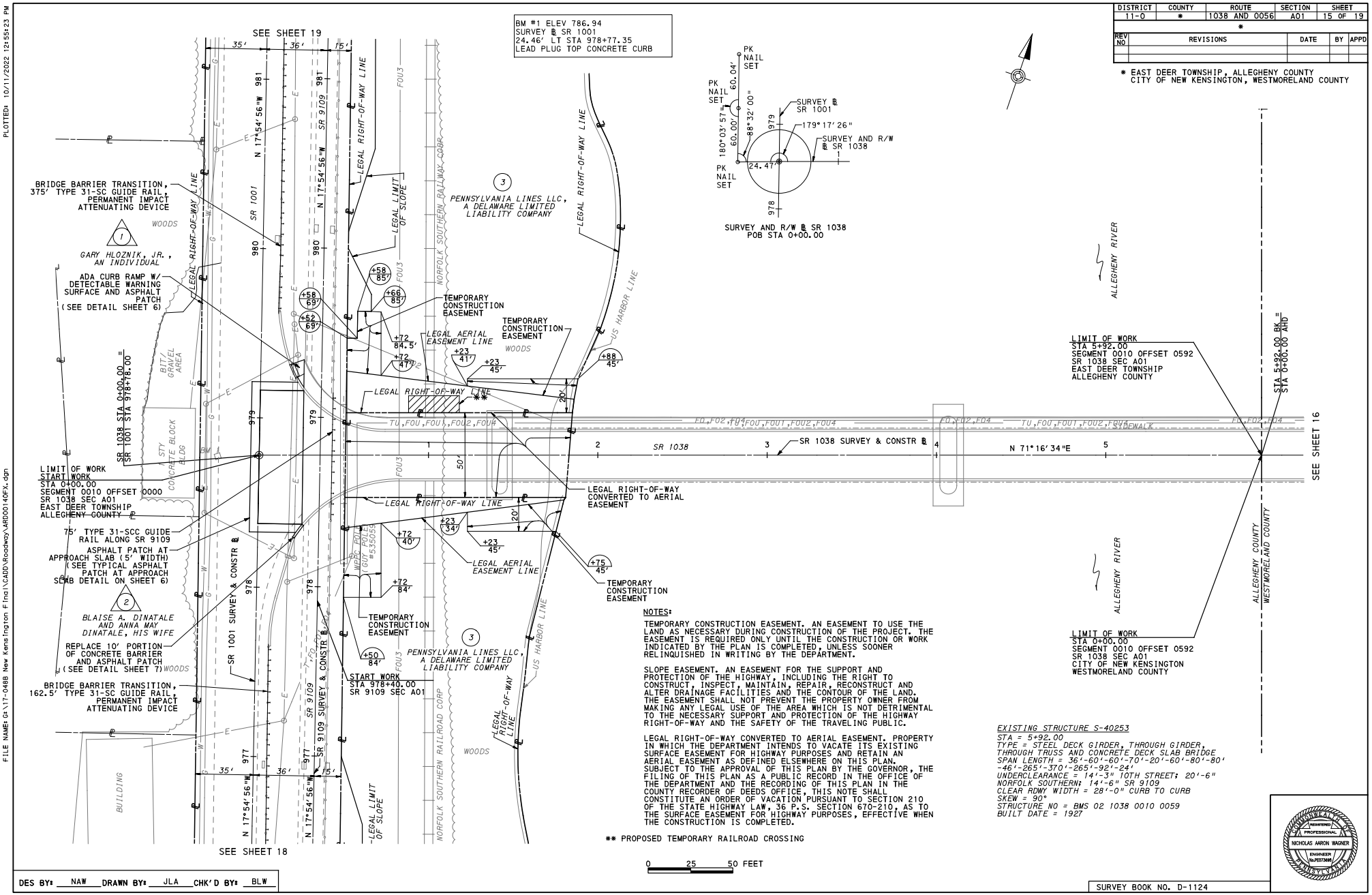
TABULATION OF QUANTITIES
EROSION AND SEDIMENT POLLUTION CONTROL

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY & WESTMORELAND	1038 & 0056	A01	14 OF 19
				EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON				

0204 0001 CLASS 2 EXCAVATION CY	0205 0264 SELECTED BORROW EXCAVATION ROCK, CLASS R-4 CY	0212 0014 GEOTEXTILE, CLASS 4, TYPE A SY	0626 0030 CORROSION RESISTANT GABIONS, TYPE B CY	0703 0025 NO. 57 COARSE AGGREGATE CY	0811 0003 TEMPORARY PROTECTIVE FENCE LF	0850 0031 ROCK, CLASS R-3 CY	0856 0001 REMOVAL SEDIMENT AND ROCK BARRIER EACH	0860 0000 INLET FILTER BAG FOR TYPE M INLET EACH	0860 0002 INLET FILTER BAG FOR TYPE C INLET EACH	0867 0012 COMPOST FILTER SOCK, 12" DIAMETER LF	ITEM NUMBER UNIT REMARKS	SIDE	STATIONS
											SR 1001 SECTION A01		
									1			RT	974+02.00
										47	AT CURB REPLACEMENT	RT	975+28.00 to 984+11.00
									1			RT	976+95.00
									1			RT	980+06.00
									1			RT	982+49.00
								1				RT	984+12.00
											SR 9109 SECTION A01		
									1	20	FOR DISCHARGE OF HYDRO DEMOLITION WATER	RT	980+06.00
									1			LT	980+11.00
									1			LT	983+73.00
											SR 1038 SECTION A01 (WESTMORELAND COUNTY)		
333	203		6								DRAINAGE DITCH	LT	4+56.00 to 7+47.00
		8		1		2	1				ROCK BARRIER	LT	4+60.00
					800						PROTECTIVE FENCE	LT	4+69.00 to 8+01.00
									1	20	FOR DISCHARGE OF HYDRO DEMOLITION WATER	LT	9+65.00
333	203	8	6	1	800	2	1	1	8	87	TOTALS		

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — NICHOLAS AARON WAGNER — ENGINEER — PE037369

PROJECT ID: 4316 MPMS: 63515 ECMS: 63515 10/11/2022 9:06:44 AM



NOTES:

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

SLOPE EASEMENT. AN EASEMENT FOR THE SUPPORT AND PROTECTION OF THE HIGHWAY, INCLUDING THE RIGHT TO CONSTRUCT, INSPECT, MAINTAIN, REPAIR, RECONSTRUCT AND ALTER DRAINAGE FACILITIES AND THE CONTOUR OF THE LAND. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY SUPPORT AND PROTECTION OF THE HIGHWAY RIGHT-OF-WAY AND THE SAFETY OF THE TRAVELING PUBLIC.

LEGAL RIGHT-OF-WAY CONVERTED TO AERIAL EASEMENT. PROPERTY IN WHICH THE DEPARTMENT INTENDS TO VACATE ITS EXISTING SURFACE EASEMENT FOR HIGHWAY PURPOSES AND RETAIN AN AERIAL EASEMENT AS DEFINED ELSEWHERE ON THIS PLAN, SUBJECT TO THE APPROVAL OF THIS PLAN BY THE GOVERNOR, THE FILING OF THIS PLAN AS A PUBLIC RECORD IN THE OFFICE OF THE DEPARTMENT AND THE RECORDING OF THIS PLAN IN THE COUNTY RECORDER OF DEEDS OFFICE, THIS NOTE SHALL CONSTITUTE AN ORDER OF VACATION PURSUANT TO SECTION 210 OF THE STATE HIGHWAY LAW, 36 P.S. SECTION 670-210, AS TO THE SURFACE EASEMENT FOR HIGHWAY PURPOSES, EFFECTIVE WHEN THE CONSTRUCTION IS COMPLETED.

** PROPOSED TEMPORARY RAILROAD CROSSING

EXISTING STRUCTURE S-40253
STA = 5+92.00
TYPE = STEEL DECK GIRDER, THROUGH GIRDER, THROUGH TRUSS AND CONCRETE DECK SLAB BRIDGE
SPAN LENGTH = 36'-60'-60'-70'-20'-60'-80'-80' -46'-265'-370'-265'-92'-24'
UNDERCLEARANCE = 14'-3" 10TH STREET; 20'-6" NORFOLK SOUTHERN; 14'-6" SR 9109
CLEAR RDWY WIDTH = 28'-0" CURB TO CURB
SKEW = 90°
STRUCTURE NO = BMS 02 1038 0010 0059
BUILT DATE = 1927

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	15 OF 19

REV NO	REVISIONS	DATE	BY	APPD

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

SURVEY BOOK NO. D-1124

NICHOLAS AARON WAGNER
ENGINEER
PROFESSIONAL
PE073688

PLOTTED: 10/11/2022 12:55:23 PM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000140FX.dgn

PLOTTED: 10/11/2022 12:55:23 PM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000150FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	16 OF 19

*

REV NO	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

LEGEND

PF —— TEMPORARY PROTECTIVE FENCE

PK NAIL SET
180° 00' 00"
60.00'
60.02'
PK NAIL SET
PK NAIL SET
90° 00' 00"
59.99'
SURVEY AND R/W ℄ SR 1038
4
5

SURVEY AND R/W ℄ SR 1038
PI STA 4+72.00

SEE SHEET 15

TU,FOU,FOU1,FOU2,FOU4 — FO,FO2,FO4

SR 1038 SURVEY & CONSTR ℄

1 — 2 — N 71° 16' 34"E — 3 — NEW KENSINGTON BRIDGE — 4

SR 1038

ALLEGHENY RIVER

LEGAL RIGHT-OF-WAY LINE

+63 206'

TEMPORARY CONSTRUCTION EASEMENT

+20 201'

PF

WALL

CONC AREA

4
REDEVELOPMENT AUTHORITY OF THE CITY OF NEW KENSINGTON, WESTMORELAND COUNTY, PENNSYLVANIA

GRASS AREA

RAILROAD TRACKS (BURIED)

6
ALLEGHENY VALLEY RAILROAD COMPANY, A CORPORATION OF THE COMMONWEALTH OF PENNSYLVANIA

+67 28'

+20 38'

WALL GATE

+38 80'

+38 38'

CONC AREA (PARKING AREA)

TEMPORARY CONSTRUCTION EASEMENT

FENCE

LEGAL RIGHT-OF-WAY LINE

DOUBLE GATE

TU,FOU,FOU1,FOU2,FOU4

N 80°40' 34"E

SIDEWALK

SW

NEW KENSINGTON BRIDGE

SR 1038

SEE SHEET 17

DRAINAGE DITCH ℄

+62 22'

+83 32'

+62 32'

TEMPORARY CONSTRUCTION EASEMENT

PROPOSED DRAINAGE DITCH (SEE DETAILS ON SHEET 8)

US HARBOR LINE

LEGAL RIGHT-OF-WAY LINE

+12 22'

+12 32'

5
PAUL RIGGLE & SONS LEASING, INC., A DELAWARE CORPORATION

EXISTING STRUCTURE S-40253
STA = 5+92.00
TYPE = STEEL DECK GIRDER, THROUGH GIRDER, THROUGH TRUSS AND CONCRETE DECK SLAB BRIDGE
SPAN LENGTH = 36'-60'-60'-70'-20'-60'-80'-80'-46'-265'-370'-265'-92'-24'
UNDERCLEARANCE = 14'-3" 10TH STREET; 20'-6"
NORFOLK SOUTHERN; 14'-6" SR 9109
CLEAR RDWY WIDTH = 28'-0" CURB TO CURB
SKEW = 90°
STRUCTURE NO = BMS 02 1038 0010 0059
BUILT DATE = 1927

NOTES:

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

0 25 50 FEET

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

SURVEY BOOK NO. D-1124

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

PLOTTED: 10/11/2022 12:55:24 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000160FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	17 OF 19

*

REV NO.	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

BM #2 ELEV 770.33
SURVEY AND R/W ℄ SR 0056
60.00' RT STA 11+40.00
PK SET CONCRETE ISLAND

SURVEY AND R/W ℄ SR 0056

11
61°56'05"
118°04'50"
67.99'
96.08'
79.39'
PK NAIL SET
PK NAIL SET
PK NAIL SET
180°00'24" SET

SURVEY AND R/W ℄ SR 0056
POT STA 11+72.00

JAMES J. ZICCARELLI

REDEVELOPMENT AUTHORITY OF THE CITY OF NEW KENSINGTON, WESTMORELAND COUNTY, PENNSYLVANIA

WILLIAM L. KABAZIE AND ALLISON KABAZIE, HUSBAND AND WIFE

CITY OF NEW KENSINGTON, A PENNSYLVANIA MUNICIPAL CORPORATION

BUILDING

LEGAL RIGHT-OF-WAY LINE FOR CITY STREET

LEGAL RIGHT-OF-WAY LINE

ASPHALT PATCH AT APPROACH SLAB (SEE DETAIL SHEET 6)

REMOVE 20.5' PORTION OF CONCRETE BARRIER AND REPLACE WITH BARRIER END SECTION (SEE DETAIL SHEET 7)

+80 121'

TEMPORARY CONSTRUCTION EASEMENT

+69 88'

TYPE 31-STRONG POST IN-LINE ANCHOR

TYPE 31 STRONG POST ANCHOR TERMINAL
75' TYPE 31-S GUIDE RAIL,
TYPE 31 STRONG POST ANCHOR TERMINAL

STA 10+10.00 SURVEY & CONSTR ℄ SR 1038 =
STA 10+10.00 SURVEY & CONSTR ℄ SR 0056

SR 1038 SURVEY & CONSTR ℄

LIMIT OF WORK
STA 11+30.00
SEGMENT 0004 OFFSET 0120
SR 0056 SEC A01
CITY OF NEW KENSINGTON
WESTMORELAND COUNTY

STOP WORK
STA 10+80.00
SEGMENT 0004 OFFSET 0070
SR 0056 SEC A01

REMOVE 34.5' PORTION OF CONCRETE BARRIER

BRIDGE BARRIER TRANSITION,
50' TYPE 31-SC GUIDE RAIL,
TYPE 31 STRONG POST ANCHOR TERMINAL

12.5' OF CAST-IN-PLACE CONCRETE BARRIER REPLACEMENT (SEE DETAIL SHEET 7)

REMOVE/REPLACE STRUCTURE MOUNTED FENCE (SEE DETAIL SHEET 7)

TEMPORARY CONSTRUCTION EASEMENT

+03 80'

+03 28'

+13 22'

+13 90'

+59 90'

N 80°43'34"E

SEE SHEET 16

GAS METER #13133605

STRUCTURE MOUNTED OVERHEAD DIRECTION SIGN

GRASS AREA

BM 2

10TH STREET

2ND AVENUE

SR 0056 9TH STREET

SR 0056 INDUSTRIAL BLVD

6"W 60 PSI MP

TU,FOU,FOU 100'

LEGEND

PF —— TEMPORARY PROTECTIVE FENCE

NOTES:

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

EXISTING STRUCTURE S-40253
STA = 5+92.00
TYPE = STEEL DECK GIRDER, THROUGH GIRDER, THROUGH TRUSS AND CONCRETE DECK SLAB BRIDGE
SPAN LENGTH = 36'-60'-60'-70'-20'-60'-80'-80'-46'-265'-370'-265'-92'-24'
UNDERCLEARANCE = 14'-3" 10TH STREET; 20'-6" NORFOLK SOUTHERN; 14'-6" SR 9109
CLEAR RDWY WIDTH = 28'-0" CURB TO CURB
SKEW = 90°
STRUCTURE NO = BMS 02 1038 0010 0059
BUILT DATE = 1927

0 25 50 FEET

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL NICHOLAS AARON WAGNER ENGINEER No.PE073688

SURVEY BOOK NO. D-1124

PLOTTED: 10/11/2022 12:55:25 PM

FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\AR000170FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	18 OF 19

*

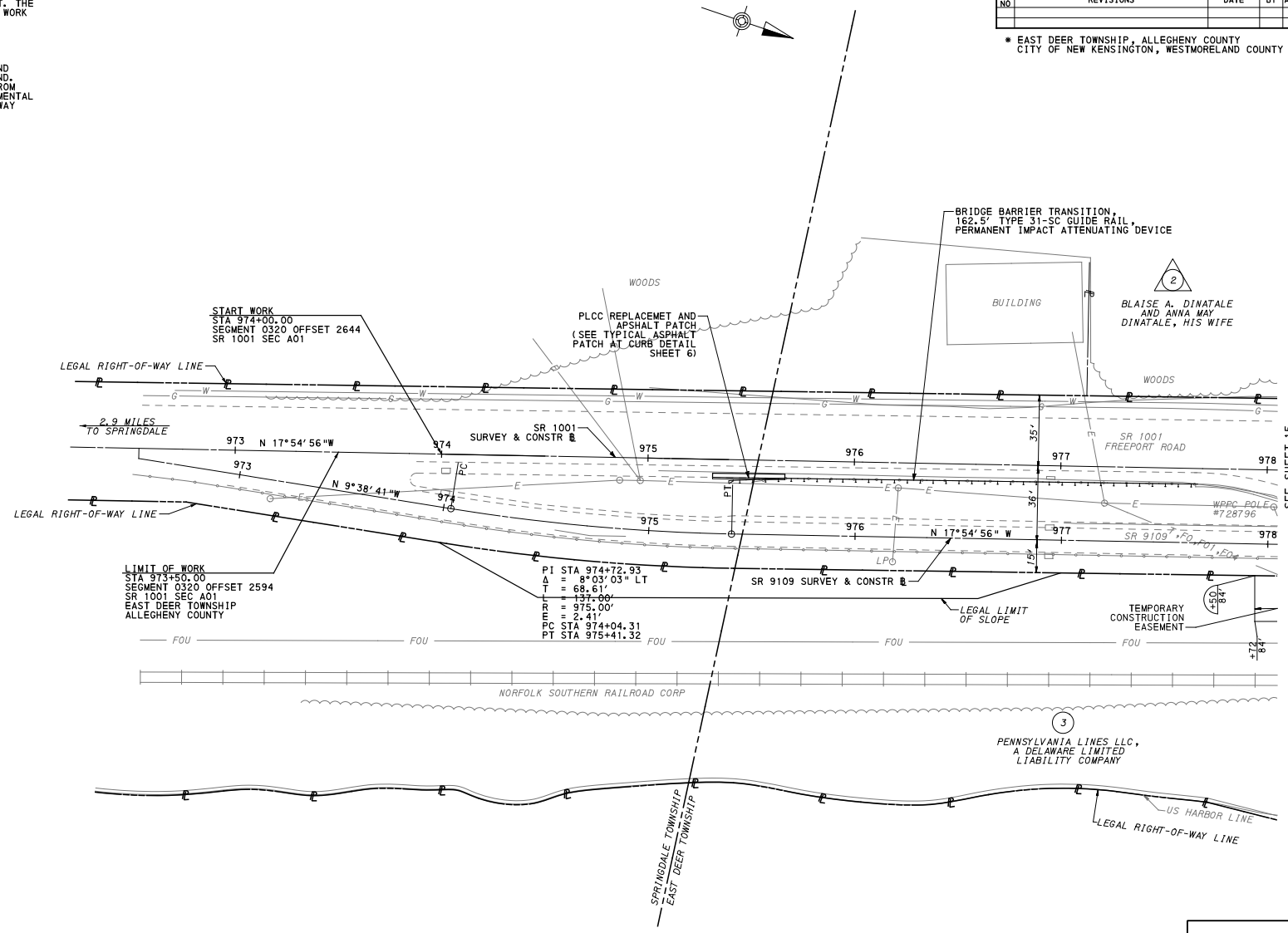
REV NO.	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

NOTES:

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

SLOPE EASEMENT. AN EASEMENT FOR THE SUPPORT AND PROTECTION OF THE HIGHWAY, INCLUDING THE RIGHT TO CONSTRUCT, INSPECT, MAINTAIN, REPAIR, RECONSTRUCT AND ALTER DRAINAGE FACILITIES AND THE CONTOUR OF THE LAND. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY SUPPORT AND PROTECTION OF THE HIGHWAY RIGHT-OF-WAY AND THE SAFETY OF THE TRAVELING PUBLIC.



0 25 50 FEET

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

SURVEY BOOK NO. D-1124

NICHOLAS AARON WAGNER
ENGINEER
PROFESSIONAL

PLOTTED: 10/11/2022 12:55:25 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000180FX.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	*	1038 AND 0056	A01	19 OF 19
	*			

REV NO.	REVISIONS	DATE	BY	APPD

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

BM #1 ELEV 786.94
SURVEY ℄ SR 1001
24.46' LT STA 978+77.35
LEAD PLUG TOP CONCRETE CURB

PK NAIL SET
180°03'57"
60.00'
60.04'
88°32'00"
24.47'
978
979
SURVEY ℄ SR 1001
179°17'26"
SURVEY AND R/W ℄ SR 1038

SURVEY AND R/W ℄ SR 1038
POB STA 0+00.00

LIMIT OF WORK
START WORK
STA 0+00.00
SEGMENT 0010 OFFSET 0000
SR 1038 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

SR 1038 STA 0+00.00 =
SR 1001 STA 978+78.00

GARY HLOZNIK, JR., AN INDIVIDUAL

ADA CURB RAMP W/ DETECTABLE WARNING SURFACE (SEE DETAIL SHEET 6)

BRIDGE BARRIER TRANSITION, 375' TYPE 31-SC GUIDE RAIL, PERMANENT IMPACT ATTENUATING DEVICE

PLCC REPLACEMET AND APSHALT PATCH (SEE TYPICAL ASPHALT PATCH AT CURB DETAIL SHEET 6)

LIMIT OF WORK
STA 984+67.00
SEGMENT 0330 OFFSET 0589
SR 1001 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

WOODS
1 STY CONCRETE BLOCK BLDG
BIT./ GRAVEL AREA
LEGAL RIGHT-OF-WAY LINE
FREEPORT ROAD SR 1001
SR 1001 SURVEY & CONSTR ℄
1.3 MILES TO CREIGHTON
SEE SHEET 18
75' TYPE 31-SCC GUIDE RAIL ALONG SR 9109
N 17°54'56"W
N 17°41'45"W
SR 9109
SR 9109 SURVEY & CONSTR ℄
LEGAL RIGHT-OF-WAY LINE
LEGAL LIMIT OF SLOPE
TEMPORARY CONSTRUCTION EASEMENT
LEGAL AERIAL EASEMENT LINE
LEGAL RIGHT-OF-WAY LINE
NORFOLK SOUTHERN RAILWAY CORP
FOU
WPPC POLE #535055
GUY POLE

START WORK
STA 978+40.00
SR 9109 SEC A01

TEMPORARY CONSTRUCTION EASEMENT

PI STA 982+68.78
Δ = 5°27'23" LT
T = 47.65'
L = 95.23'
R = 1000.00'
E = 1.13'
PC STA 982+21.13
PT STA 983+16.36

STOP WORK
STA 983+90.70
SR 9109 SEC A01

STOP WORK
STA 984+17.00
SEGMENT 0330 OFFSET 0539
SR 1001 SEC A01

BURIED-IN-BACKSLOPE TERMINAL, SINGLE PANEL, 62.5' TYPE 31-S GUIDE RAIL, TYPE 31 STRONG POST ANCHOR TERMINAL

50'
20'
SODOM
SEE SHEET 15

PENNSYLVANIA LINES LLC, A DELAWARE LIMITED LIABILITY COMPANY

TEMPORARY CONSTRUCTION EASEMENT
LEGAL RIGHT-OF-WAY CONVERTED TO AERIAL EASEMENT

** PROPOSED TEMPORARY RAILROAD CROSSING

0 25 50 FEET

NOTES:

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

SLOPE EASEMENT. AN EASEMENT FOR THE SUPPORT AND PROTECTION OF THE HIGHWAY, INCLUDING THE RIGHT TO CONSTRUCT, INSPECT, MAINTAIN, REPAIR, RECONSTRUCT AND ALTER DRAINAGE FACILITIES AND THE CONTOUR OF THE LAND. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY SUPPORT AND PROTECTION OF THE HIGHWAY RIGHT-OF-WAY AND THE SAFETY OF THE TRAVELING PUBLIC.

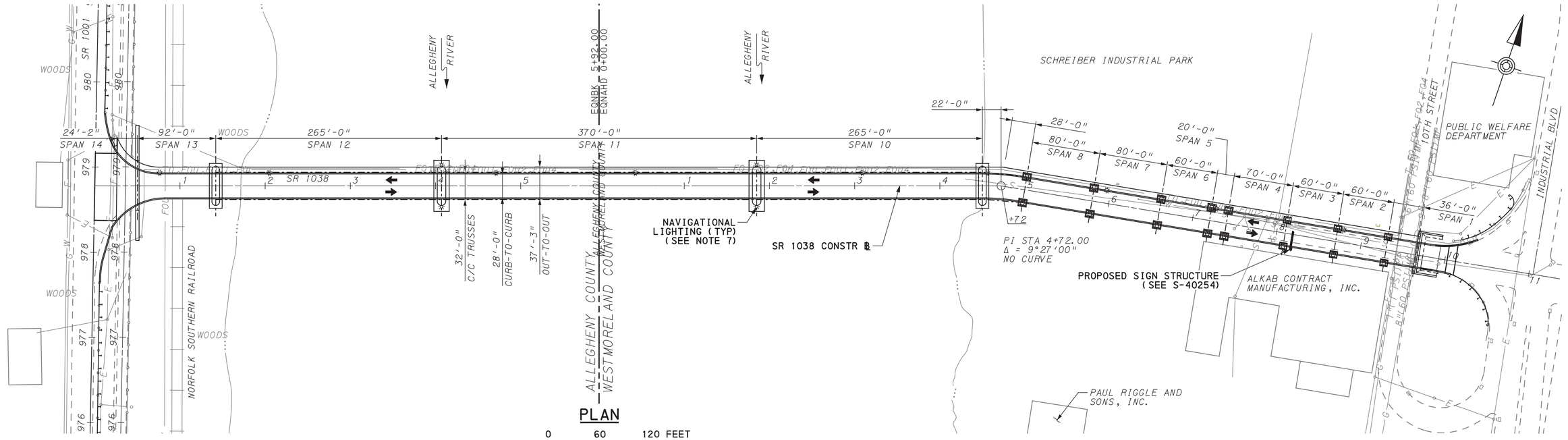
LEGAL RIGHT-OF-WAY CONVERTED TO AERIAL EASEMENT. PROPERTY IN WHICH THE DEPARTMENT INTENDS TO VACATE ITS EXISTING SURFACE EASEMENT FOR HIGHWAY PURPOSES AND RETAIN AN AERIAL EASEMENT AS DEFINED ELSEWHERE ON THIS PLAN. SUBJECT TO THE APPROVAL OF THIS PLAN BY THE GOVERNOR, THE FILING OF THIS PLAN AS A PUBLIC RECORD IN THE OFFICE OF THE DEPARTMENT AND THE RECORDING OF THIS PLAN IN THE COUNTY RECORDER OF DEEDS OFFICE, THIS NOTE SHALL CONSTITUTE AN ORDER OF VACATION PURSUANT TO SECTION 210 OF THE STATE HIGHWAY LAW, 36 P.S. SECTION 670-210, AS TO THE SURFACE EASEMENT FOR HIGHWAY PURPOSES, EFFECTIVE WHEN THE CONSTRUCTION IS COMPLETED.

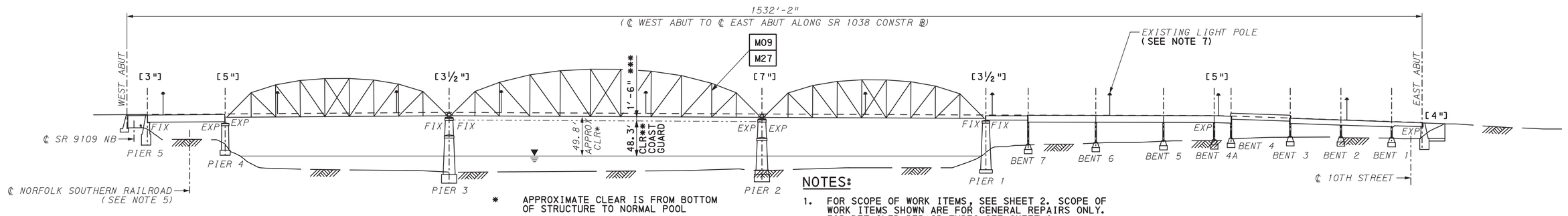
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

SURVEY BOOK NO. D-1124

PLOTTED: 10/26/2022 7:52:26 AM





* APPROXIMATE CLEAR IS FROM BOTTOM OF STRUCTURE TO NORMAL POOL

** MINIMUM CLEAR REQUIRED BY COAST GUARD

*** BOTTOM OF TEMPORARY SHIELDING/STAGING PLATFORM TO EXTEND MAXIMUM OF 1'-6" BELOW BOTTOM OF STEEL

LEGEND:

➔ DIRECTION OF TRAFFIC

EXISTING GROUND LINE

[XX] EXPANSION DAM MOVEMENT CLASSIFICATION

NOTES:

1. FOR SCOPE OF WORK ITEMS, SEE SHEET 2. SCOPE OF WORK ITEMS SHOWN ARE FOR GENERAL REPAIRS ONLY. FOR DETAILED REPAIR TYPES SEE SHEET 6.
2. FOR TYPICAL SECTIONS, SEE SHEET 2.
3. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
4. FOR SUMMARY OF BRIDGE RATINGS, SEE SHEET 5.
5. FOR EXISTING AND PROPOSED VERTICAL AND HORIZONTAL CLEARANCE REQUIREMENTS AT NORFOLK SOUTHERN, SEE SHEET 11.
6. FOR ADDITIONAL INFORMATION REGARDING RESTRICTION WITHIN RIVER CHANNEL, SEE AIDS TO NAVIGATION PLAN.
7. FOR NEW LIGHT POLE DETAILS AND NAVIGATION LIGHTING DETAILS, SEE LIGHTING PLANS.

STRUCTURE DESCRIPTION	
SPAN	DESCRIPTION
1 - 3, 5 - 9, 13	SIMPLE, RIVETED STEEL BUILT-UP DECK GIRDER
4	SIMPLE, RIVETED STEEL THROUGH GIRDER
10, 11, 12	SIMPLE, RIVETED STEEL BUILT-UP, PIN CONNECTED THROUGH TRUSS
14	SIMPLE REINFORCED CONCRETE DECK SLAB
SUBSTRUCTURE UNIT	DESCRIPTION
EAST ABUTMENT	RC CANTILEVER ABUTMENT ON SPREAD FOOTING
WEST ABUTMENT	RC CANTILEVER ABUTMENT ON SPREAD FOOTING
BENTS 1 - 7	RIVETED STEEL BUILT-UP BENT ON SPREAD FOOTING
PIERS 1 - 5	RC SOLID SHAFT PIER ON SPREAD FOOTING

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

SUPPLEMENTAL DRAWINGS		
DESCRIPTION	DWG NO.	APP DATE
PROTECTIVE FENCE	BC-701M	2/19/21
TEMPORARY CONCRETE BARRIER, STRUCTURE MOUNTED	BC-719M	1/31/19
ELECTRICAL DETAILS	BC-721M	2/19/21
LIGHTING POLE ANCHORAGE	BC-722M	2/19/21
ANCHOR SYSTEMS	BC-734M	2/19/21
WALL CONSTR & EXP JOINT DETAILS	BC-735M	9/30/16
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	1/31/19
BRIDGE DRAINAGE	BC-751M	1/31/19
CONCRETE DECK SLAB DETAILS	BC-752M	2/19/21
STEEL GIRDER DETAILS	BC-753M	1/31/19
TOOTH EXPANSION DAM FOR PRESTRESSED CONCRETE & STEEL BEAM BRIDGES	BC-762M	1/31/19
NEOPRENE STRIP SEAL DAM FOR PRESTRESSED CONCRETE & STEEL I-BEAM BRIDGES	BC-767M	2/19/21
REINFORCED CONCRETE REPAIR	BC-783M	1/31/19
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	1/31/19

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
GENERAL PLAN AND ELEVATION

RECOMMENDED

Digitally signed by Shane Szalankiewicz, P.E.
Date: 2022.10.26 20:32:31-04'00'

DISTRICT BRIDGE ENGINEER

SHEET 1 OF 124
+SUPPLEMENTAL DRAWINGS

S - 40253

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

SIGNATURE

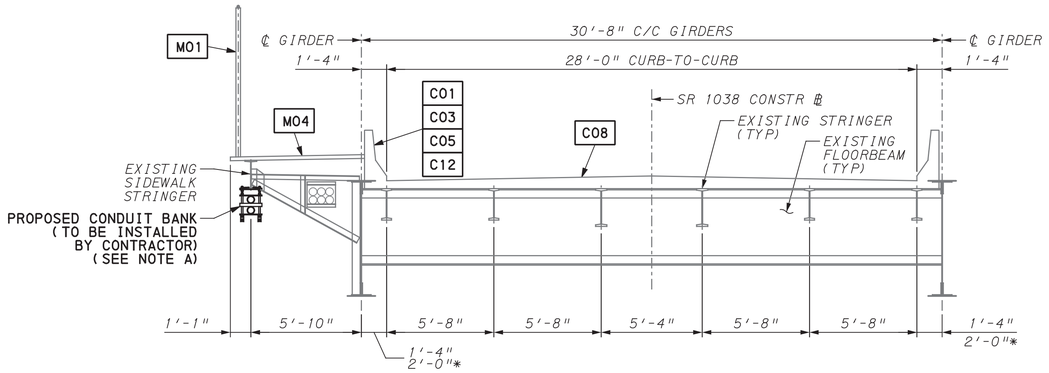
10/26/2022
DATE

Prepared by:
MARKOSKY
3689 Route 711
Ligonier, PA 15658

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_GPE.dgn

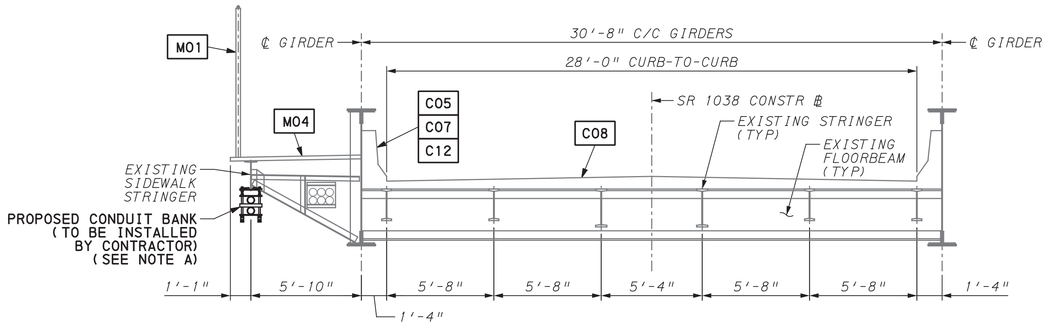
PLOTTED: 10/26/2022 7:52:31 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_TYP SECT.dgn



EXISTING TYPICAL SECTION - SPANS 1-3, 5-8, 13

(LOOKING AHEAD STATION)

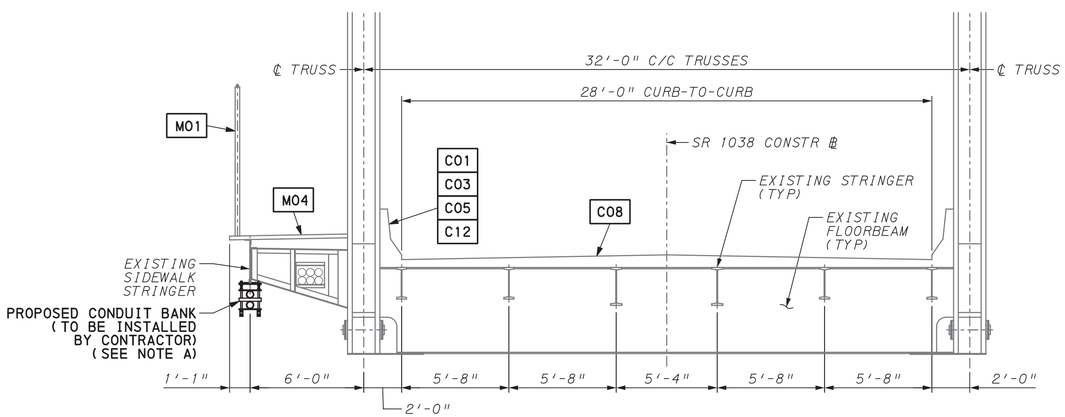
0 2 4 6 FEET



EXISTING TYPICAL SECTION - SPAN 4

(LOOKING AHEAD STATION)

0 2 4 6 FEET



EXISTING TYPICAL SECTION - SPANS 10-12

(LOOKING AHEAD STATION)

0 2 4 6 FEET

SCOPE OF WORK:

SUBSTRUCTURE REPAIRS:

REPAIR DETERIORATED CONCRETE, SUBSTRUCTURE

EPOXY INJECTION CRACK SEAL, SUBSTRUCTURE

APPLY CONCRETE SURFACE TREATMENT, SUBSTRUCTURE

CLEAN AND FLUSH ABUTMENT WEEPHOLES; INSTALL WEEPHOLE FILTERS

CLEAN AND PAINT STRUCTURAL STEEL

MISCELLANEOUS STRUCTURAL STEEL REPAIR

DECK REPAIRS:

CONCRETE BRIDGE BARRIER REPAIR, TYPE 2

EPOXY INJECTION CRACK SEAL, BARRIERS

INSTALL NEW EPOXY OVERLAY ON SIDEWALK

INSTALL NEW PROTECTIVE FENCE

REPLACE EXISTING EXPANSION DAM WITH NEOPRENE STRIP SEAL EXPANSION DAM

REPLACE EXISTING EXPANSION DAM WITH TOOTH EXPANSION DAM

PLACE 1¼" LATEX MODIFIED CONCRETE OVERLAY INCLUDING VARIABLE DEPTH LMC, SCARIFICATION, HYDRO-DEMOLITION, AND TEXTURING

REPLACE CONCRETE BARRIERS THAT ARE REMOVED IN PROCESS OF STRUCTURAL STEEL REPAIRS

APPLY CONCRETE SURFACE TREATMENT, BARRIERS

REPLACE SCUPPER

REMOVE SCUPPER AND REPAIR DECK

CONSTRUCT NEW SCUPPER

REPLACE BARRIERS AND PROVIDE NEW LIGHT POLE ANCHORS AND JUNCTION BOX

SUPERSTRUCTURE REPAIRS:

CLEAN AND PAINT STRUCTURAL STEEL

MISCELLANEOUS STRUCTURAL STEEL REPAIR

RECONSTRUCT DECK JOINT SUPPORT STRUCTURE

REMOVE CLAMP AND REPLACE PIN RETAINING ROD

APPLY CONCRETE SURFACE TREATMENT, SUPERSTRUCTURE

REPLACE PIN SPACER TUBES

CLEAN BEAM SEAT; LUBRICATE BEARINGS

CLEAN BEAM SEAT; REPLACE BEARINGS

INSTALL NEW STIFFENERS

MISCELLANEOUS REPAIRS:

REMOVE VEGETATION

INSTALL SPLASH BLOCKS

REPLACE DETERIORATED UTILITY CONDUIT

INSTALL ROCK LINED DRAINAGE (ROADWAY ITEM)

REMOVE AND REPLACE DOWNSPOUTING

CONSTRUCT NEW HORIZONTAL DOWNSPOUT RUN

INSTALL FLASHING BEHIND BARRIER

INSTALL NEW ADA CURB RAMP (ROADWAY ITEM)

REPLACE MERCURY VAPOR LIGHT FIXTURE WITH LED LIGHT FIXTURE (ROADWAY ITEM)

INSTALL NEW APPROACH SLAB

CONSTRUCT NEW SIGN STRUCTURE (SEE S-40254)

REMOVE EXISTING UTILITIES AND INSTALL CONDUIT AND SUPPORTS (MATERIALS BY OTHERS)

NOTES:

1. FOR GENERAL PLAN AND ELEVATION, SEE SHEET 1.

NOTE:

A. NEW CONDUIT BANK TO BE INSTALLED BY CONTRACTOR. SEE SPECIAL PROVISIONS FOR ITEMS 9000-0212 AND 9000-0213. FOR DETAILS OF EXISTING UTILITY REMOVAL AND CONDUIT BANK INSTALLATION, REFER TO SHEETS 7 AND 9, AND COMCAST PLANS.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TYPICAL SECTIONS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 2 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

PLOTTED: 10/26/2022 7:52:33 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Gen Notes.dgn

DESIGN SPECIFICATIONS

AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION, 2002, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019.

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 8TH EDITION, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019 WHERE NOTED ON THE PLANS.

LIVE LOAD DISTRIBUTION TO STRINGERS IS BASED UPON MODIFIED DISTRIBUTION FACTORS CALCULATED USING A GRID ANALYSIS METHOD. LIVE LOAD DISTRIBUTION TO FLOORBEAMS, GIRDERS AND TRUSS MEMBERS ARE BASED ON DM-4 DISTRIBUTION FACTORS AND METHOD.

DESIGN IS IN ACCORDANCE WITH THE LFD METHOD EXCEPT WHERE NOTED. LOAD RATINGS ARE CALCULATED IN ACCORDANCE WITH PENNDOT PUBLICATION 238.

NEW ELEMENTS INCLUDING BEARINGS ARE DESIGNED IN ACCORDANCE WITH THE LRFD METHOD.

DESIGN LIVE LOADS

HS-20, H-20, ML-80, AND TK527.

FATIGUE DESIGN IS BASED ON THE FOLLOWING:

STEEL STRUCTURES:

ADTT 1,110 (2024, ANTICIPATED DATE FOR COMPLETION OF REHABILITATION)

FATIGUE DESIGN IS BASED ON INFINITE LIFE FOR NEW BEARINGS.

DEAD LOADS

INCLUDES SURFACE AREA DENSITY OF 0.030 KSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB. NOTE THAT THE SURFACE AREA DENSITY OF THE LMC OVERLAY IS CONSIDERED AS PART OF THE ORIGINAL DECK.

INCLUDES A SURFACE AREA DENSITY OF 15.4 PSF FOR BUCKLE PLATES FOR THE ROADWAY FLOOR SYSTEM.

INCLUDES AN EQUIVALENT SURFACE AREA DENSITY OF 47 PSF FOR SIDEWALK FLOORING AND SUPPORTS ON THE NORTH TRUSS.

GENERAL

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.

PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270/M270M (ASTM A709/A709M), EXCEPT WHEN NOTED OTHERWISE.

STATIONS AND ELEVATIONS ARE GIVEN IN FEET UNLESS OTHERWISE NOTED.

PROVIDE 2 INCHES CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.

USE ACCELERATED STRUCTURAL CONCRETE (ASC) FOR BRIDGE DECK.

USE CLASS AA ACCELERATED CEMENT CONCRETE IN SIDEWALK, BACKWALLS, CURBS, APPROACH SLAB, SLEEPER SLAB, CORBEL AND BARRIERS.

FOR CONCRETE BARRIER REPAIRS UNDER ITEM 1040-0210, PROVIDE TYPE 2 REPAIRS USING ASC, EXCEPT USE NO. 8 COARSE AGGREGATE. USE CLASS AA CEMENT CONCRETE IN ALL OTHER CONCRETE REPAIRS, EXCEPT USE NO. 8 COARSE AGGREGATE.

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.

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 BARS UNLESS SPECIFIED. GRADE 40 REINFORCING 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 DECK SLAB, BRIDGE PIERS, ABUTMENTS, BARRIERS OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.

USE EPOXY-COATED REINFORCEMENT BARS IN THE DECK SLAB, BARRIERS, SIDEWALK, ABUTMENT BACKWALLS, APPROACH SLAB, SLEEPER SLAB, CORBELS, AND CONCRETE REPAIRS.

GALVANIZED REINFORCING STEEL BARS MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCING STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.

RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.

VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.

GENERAL (CONT'D)

CONSTRUCT DECK SLAB TRANSVERSE CONSTRUCTION JOINTS PARALLEL TO BRIDGE CENTERLINE OF BEARINGS.

CHAMFER EXPOSED CONCRETE EDGES 1 INCH BY 1 INCH, EXCEPT AS NOTED.

ALL DIMENSIONS ARE HORIZONTAL EXCEPT AS NOTED.

DECK SLAB THICKNESS INCLUDES A ½ INCH INTEGRAL WEARING SURFACE.

USE EITHER PERMANENT METAL FORMS TO MATCH EXISTING FORMS OR REMOVABLE FORMS TO CONSTRUCT THE DECK SLAB.

SUPERSTRUCTURE DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 68 DEGREES F.

PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STANDARD DRAWING BC-736M, UNLESS OTHERWISE INDICATED.

PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(k)9.

PREPARE EXISTING CONCRETE SURFACES AGAINST WHICH NEW CONCRETE WILL BE PLACED AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(m) (INCIDENTAL TO NEW CONCRETE).

BRIDGE IS NOT WEIGHT RESTRICTED. SEE PUBLICATION 408 SECTION 105.17 FOR CONSTRUCTION LOADING LIMITS.

DO NOT USE FORM SUPPORT SYSTEMS THAT WILL CAUSE UNACCEPTABLE OVERSTRESS OR DEFORMATION TO PERMANENT BRIDGE MEMBERS.

DESIGN THE TEMPORARY OVERHANG OR DECK SLAB SUPPORT SYSTEM FOR THE APPROPRIATE LOADING AND HAVE IT SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA. SUBMIT IT FOR REVIEW AND APPROVAL.

BRIDGE REHABILITATION NOTES

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.

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.

ORIGINAL DESIGN PLANS

DEPARTMENT OF PUBLIC WORKS, ALLEGHENY COUNTY
BUREAU OF BRIDGES
NEW KENSINGTON BRIDGE
NO. 10 ALLEGHENY RIVER
JULY 1927
NO S- NUMBER FOR PLAN SET

REHABILITATION PLANS

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN
ALLEGHENY COUNTY
L.R. 188 STA 7+54
NEW KENSINGTON BRIDGE
DECK REPLACEMENT
S-11350
(APPROVED SEPTEMBER 20, 1972)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN
ALLEGHENY COUNTY
L.R. 188 SEC. 5M
L.R. 188 STA. 5+97 NEW KENSINGTON BRIDGE
OVER ALLEGHENY RIVER
BRIDGE REHABILITATION
S-13211
(APPROVED JANUARY 5, 1978)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
ALLEGHENY AND WESTMORELAND COUNTIES
S.R. 1038 SECTION 007
S.R. 1038 STATION 5+97 OVER ALLEGHENY RIVER & CONRAIL TRACKS
REHABILITATION
S-16125
(APPROVED APRIL 21, 1988)

FIELD-VERIFY INFORMATION PRESENTED. THE DATA SHOWN HEREIN IS NOT A PART OF THE PLANS, PROPOSAL, OR CONTRACT, AND IS NOT TO BE CONSIDERED AS A BASIS FOR COMPUTATION OF FOR ANY PURPOSE.

REHABILITATION PLANS (CONT'D)

EXERCISE CARE DURING THE DEMOLITION OF THE EXISTING STRUCTURE TO AVOID DAMAGE TO ANY PORTION DESIGNATED TO BE REUSED OR TO REMAIN. REPAIR ANY DAMAGED MATERIALS TO THE SATISFACTION OF THE REPRESENTATIVE AT NO ADDITIONAL COST TO THE DEPARTMENT.

DETERMINE THE QUANTITIES FOR DETERIORATED CONCRETE REPAIR FROM MEASUREMENTS OF THE VOLUMES OF THE RESPECTIVE PATCHES TAKEN BY THE REPRESENTATIVE AND CHECKED BY THE CONTRACTOR BEFORE THE PATCHES ARE FILLED WITH NEW CONCRETE.

PRIOR TO PERFORMING CONCRETE SPALL REPAIR TO AREAS NOT DELINEATED ON THE CONTRACT DRAWINGS (I.E. ADDITIONAL AREAS OF DETERIORATED CONCRETE REPAIR) THE DISTRICT'S BRIDGE DESIGN UNIT IS TO BE NOTIFIED AND APPROVAL GRANTED PRIOR TO PERFORMING THE REPAIR. REPAIRS PERFORMED WITHOUT WRITTEN PERMISSION WILL NOT BE PAID FOR.

SHOP DRAWINGS MUST INDICATE THAT EXISTING DIMENSIONS THAT RELATE TO THE AFFECTED WORK HAVE BEEN VERIFIED FOR PROPER FIT IN THE FIELD BY THE CONTRACTOR PRIOR TO SHOP DRAWINGS BEING APPROVED BY THE DEPARTMENT.

STRUCTURAL STEEL

REAM SUBDRILLED OR SUBPUNCHED HOLES FOR FIELD CONNECTIONS IN THE FABRICATION SHOP.

ALL FASTENERS ARE 7/8 INCH DIAMETER HS BOLTS, EXCEPT AS NOTED

DO NOT WELD ANY ATTACHMENT TO STRINGERS OR FLOORBEAM FLANGES IN TENSION AREAS; TO BOTTOM TRUSS CHORD MEMBERS, OR TO TRUSS DIAGONALS.

WELDING OF REINFORCEMENT BARS DURING FABRICATION OR CONSTRUCTION IS NOT PERMITTED UNLESS SPECIFIED.

FABRICATE ALL MEMBERS OR MEMBER COMPONENTS DESIGNATED AS FRACTURE CRITICAL MEMBERS (FCM) TO CONFORM TO THE REQUIREMENTS OF DESIGN MANUAL, PART 4, SECTION 6, ARTICLE D6.6.2, AND AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 6.6.2, AND PUBLICATION 408, SECTIONS 1105.02(a)5 AND 1105.03(m)9. MEET THE BASE METAL CHARPY V-NOTCH (CVN) REQUIREMENTS FOR ZONE 2.

STABILITY OF ALL STRUCTURAL MEMBERS DURING REPAIRS IS TO BE MAINTAINED BY THE CONTRACTOR DURING ERECTION UNTIL ALL REPAIR MEMBERS ARE PROPERLY INSTALLED. ERECTION LOADS, INCLUDING SELF-WEIGHT OF THE STEEL MEMBERS, WIND LOADING AND CONSTRUCTION LIVE LOAD EFFECTS, ARE TO BE EVALUATED BY THE CONTRACTOR FOR STABILITY, STRESSES AND DEFLECTIONS ON THE STEEL REPAIR MEMBERS DURING ANY STAGE OF ERECTION.

FASTENERS

FIELD REAM EXISTING HOLES, AS REQUIRED WHERE EXISTING RIVETS OR BOLTS ARE BEING REPLACED WITH NEW HIGH STRENGTH BOLTS.

USE NEW HIGH STRENGTH BOLTS FOR ALL WORK REQUIRING BOLTED CONNECTIONS. RE-USE OF EXISTING FASTENERS IS NOT PERMITTED.

FOR EXISTING FASTENERS DESIGNATED FOR REPLACEMENT, REPLACE EXISTING FASTENERS WITH NEW MECHANICALLY GALVANIZED, ASTM A325 HIGH STRENGTH BOLTS OF THE SAME DIAMETER AS THE EXISTING FASTENER, UNLESS OTHERWISE INDICATED.

FIELD CONDITIONS MAY DIFFER FROM THOSE INDICATED BY THE DESIGNATIONS FOR EXISTING RIVETS AND BOLTS SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF STEEL, AS INDICATED OR SPECIFIED, REGARDLESS OF FASTENER TYPE. REMOVAL OF EXISTING FASTENERS IS INCIDENTAL TO OR INCLUDED IN THE ITEMS OF WORK.

ALL HIGH STRENGTH FASTENERS MAY BE PROVIDED WITH THREADS INCLUDED IN THE SHEAR PLANES.

WELDING NOTES

WELDING SPECIFICATIONS: AASHTO/AWS/D1.5M/D1.5-2015 BRIDGE WELDING CODE CONSISTENT WITH PUBLICATION 408 1105.03(M) AND THE CONTRACT SPECIAL PROVISIONS. DO NOT FIELD WELD ON ANY PART OF THE EXISTING BRIDGE, EXCEPT WHERE SHOWN ON THE DRAWINGS, WITHOUT PRIOR APPROVAL OF THE REPRESENTATIVE.

WELDING OF EXISTING STRUCTURAL STEEL: USE THE SHIELDED METAL ARC PROCESS AND LOW HYDROGEN ELECTRODES WHICH ARE COMPATIBLE WITH THE BASE METAL AS SPECIFIED AND IN ACCORDANCE WITH AN APPROVED WELD PROCEDURE SPECIFICATION.

MAKE TACK WELDS WITH THE SAME TYPE OF ELECTRODE AND INCORPORATE IN THE FINAL WELD. NO OTHER TACK WELDING WILL BE PERMITTED.

DO NOT WELD WHEN SURFACES TO BE WELDED ARE MOIST OR EXPOSED TO RAIN, SNOW, OR WIND, OR WHEN WELDERS ARE EXPOSED TO INCLEMENT CONDITIONS THAT WILL ADVERSELY AFFECT THE QUALITY OF THE WORK.

DO NOT WELD OR BURN WHEN THE TEMPERATURE IS BELOW 0 DEGREES F. PREHEAT AND MAINTAIN THE TEMPERATURE OF THE METAL TO AT LEAST 70 DEGREES F WHEN THE TEMPERATURE OF THE METAL IS BETWEEN 0 DEGREES F AND 32 DEGREES F DURING WELDING OR BURNING.

PREHEAT THE STEEL TO THE SPECIFIED MINIMUM TEMPERATURE FOR A DISTANCE EQUAL TO THE THICKNESS OF THE PART BEING WELDED, BUT NOT LESS THAN 3 INCHES IN ALL DIRECTIONS FROM THE POINT OF WELDING.

REMOVE BY APPLICATION OF HEAT ANY MOISTURE PRESENT AT POINT OF WELD. PROVIDE WINDBREAKS FOR PROTECTION FROM DIRECT WIND.

PRIOR TO PLACING THE WELD, THOROUGHLY CLEAN ALL PORTIONS OF NEW AND
EXISTING SURFACES TO RECEIVE WELDS OF ALL FOREIGN MATTER, INCLUDING PAINT FILM, FOR A DISTANCE OF 2 INCHES FROM EACH SIDE OF THE OUTSIDE LINES OF THE WELD.

TEST COMPLETED WELDS USING VISUAL AND NONDESTRUCTIVE METHODS IN ACCORDANCE WITH AASHTO/AWS D1.5M/D1.5 BRIDGE WELDING CODE CHAPTER 6.

NOTES:

1. WORK THIS SHEET WITH SHEET 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
GENERAL NOTES

RECOMMENDED
OCTOBER 26, 2022

SHEET 3 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 12:04:02 PM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Gen Notes2 & Dwg Index.dgn

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.

PRIOR TO ANY EXCAVATION OR DEMOLITION WORK, CONTACT THE PA ONE CALL SYSTEM, INC. AT 1-800-242-1776 AND COMPLY WITH THE PROVISIONS OF PA ACT 287 OF 1994 AS AMENDED BY ACT 187 OF 1996. IDENTIFY ALL OVERHEAD LINES AND NOTIFY AND COMPLY WITH THE APPLICABLE UTILITY OWNER'S CLEARANCE REQUIREMENTS.

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 FULL RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION. PENNDOT OR FHWA DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISIONS OR LIABILITY FOR ACCURACY OF TYPE, SIZE, AND LOCATION OF ANY UTILITY.

RAILROAD NOTES

COMPLY WITH NORFOLK SOUTHERN RAILROAD SPECIAL PROVISIONS.

SEE SPAN 13 CONSTRUCTION CLEARANCES SHEET AND SPECIAL PROVISIONS FOR REQUIREMENTS OF TEMPORARY CLEARANCE ENVELOPES FOR NORFOLK SOUTHERN.

THE CONTRACTOR SHALL PROVIDE OPEN ACCESS ALONG NORFOLK SOUTHERN MAINTENANCE WAY THROUGHOUT CONSTRUCTION.

PROVIDE THE FOLLOWING RAILROAD CONSTRUCTION CLEARANCES:
HORIZONTAL: 15'-0" MINIMUM FROM CENTERLINE OF TRACKS
VERTICAL: 20'-6" MINIMUM EXISTING VERTICAL CLEARANCE TO SPAN 13 EXCEPT DURING THE 21 CALENDAR DAY WORK WINDOW NOTED ON THE PLANS AND SPECIAL PROVISIONS WHEN THE VERTICAL CLEARANCE MAY BE REDUCED TO 19'-0".

NO EQUIPMENT WILL BE PERMITTED TO BE STORED ON NORFOLK SOUTHERN PROPERTY WITHOUT PERMISSION FROM THE NORFOLK SOUTHERN RAILROAD ENGINEER IN ACCORDANCE WITH SECTION E.5.K.1 OF THE NORFOLK SOUTHERN SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS, JANUARY 1, 2022.

CONTACT THE FOLLOWING RAILROAD COMPANY REPRESENTATIVE TO REQUEST PROTECTIVE SERVICES REQUIRED BY THE SPECIAL PROVISIONS ENTITIED "MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC":

NORFOLK SOUTHERN
JOE SPADONE, NORFOLK SOUTHERN DIVISION ENGINEER
218 NORTH ENOLA ROAD
ENOLA, PA 17025
JOSEPH.SPADONE@NSCORP.COM
(717) 856-8188 (CELL)

NORFOLK SOUTHERN
D. SHAWN STARLING, P.E.
SENIOR ENGINEER, PUBLIC IMPROVEMENTS
650 WEST PEACHTREE STREET NW - BOX 45
ATLANTA, GA 30308
PHONE: (470) 463-6721
EMAIL: DOUGLAS.STARLING@NSCORP.COM

BRIDGE PAINT

THE EXISTING BRIDGE STRUCTURAL MEMBERS CONTAIN LEAD PAINT AND OTHER TOXIC MATERIALS SUCH AS CHROMIUM AND CADMIUM BASED ON LABORATORY TESTING.

LABORATORY TESTS INDICATED THE FOLLOWING LEVELS OF TOXIC METALS:

LEAD: 79,300 PPM
CADMIUM: 70 MG/KG
CHROMIUM: 726 MG/KG

PAINT STRUCTURAL STEEL AS SPECIFIED IN PUBLICATION 408, SECTION 1070. FINISH COAT COLOR TO BE AMS-STD-595A COLOR NO. 25109. IF THE COLOR NUMBER INDICATES A FINISH OTHER THAN SEMI-GLOSS, PROVIDE A SEMI-GLOSS FINISHCOAT. DO NOT OBTAIN FINISH COAT MATERIAL UNTIL ACCEPTANCE OF THE COLOR AND GLOSS LEVEL.

PERFORM HIGH PRESSURE CLEANING OF PACK RUST AREAS OF EYE BARS IN ACCORDANCE WITH THE SPECIAL PROVISIONS AT THE LOCATIONS INDICATED PRIOR TO PAINTING.

COORDINATE ALL WORK FOR THE PAINTING OF THE STRUCTURE WITH THE PROPOSED COMCAST CONDUIT REMOVAL AND INSTALLATION.

PROTECT ALL UTILITIES TO REMAIN DURING ALL CLEANING AND PAINTING OPERATIONS. THE CONTRACTOR IS RESPONSIBLE TO CONTACT AND COORDINATE THE REMOVAL OF ANY UTILITIES WHICH WOULD INTERFERE WITH CLEANING OR PAINTING OPERATIONS PRIOR TO THE START OF ABRASIVE CLEANING. THE CONTRACTOR IS ALSO RESPONSIBLE TO NOTIFY THE UTILITY OWNER UPON COMPLETION OF ALL PAINTING WORK SO THAT UTILITIES CAN BE REINSTALLED IF REQUIRED.

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

INDEX OF DRAWINGS

SHEET NO.	TITLE
1	GENERAL PLAN AND ELEVATION
2	TYPICAL SECTIONS
3	GENERAL NOTES
4	GENERAL NOTES & INDEX OF DRAWINGS
5	SUMMARY OF BRIDGE RATINGS
6	BRIDGE REPAIR CODES
7	SUMMARY OF QUANTITIES 1
8	SUMMARY OF QUANTITIES 2
9	SUMMARY OF QUANTITIES 3
10	TRAFFIC CONTROL PHASING
11	SPAN 13 CONSTRUCTION CLEARANCES
12	EAST ABUTMENT ELEVATION & REPAIRS
13	PIER 1 ELEVATION & REPAIRS
14	PIER 2 ELEVATION & REPAIRS
15	PIER 3 ELEVATION & REPAIRS
16	PIER 4 ELEVATION & REPAIRS
17	PIER 5 ELEVATION & REPAIRS
18	PIER 5 WALL ELEVATIONS AND REPAIRS
19	WEST ABUTMENT ELEVATION & REPAIRS
20	CONCRETE REPAIR DETAILS
21	EAST APPROACH OVERALL PLAN AND ELEVATION
22	BENT 1 ELEVATION AND REPAIRS
23	BENT 2 ELEVATION AND REPAIRS
24	BENT 3 ELEVATION AND REPAIRS
25	BENT 4 & 4A ELEVATION AND REPAIRS
26	BENT 4-4A BRACING ELEVATIONS AND REPAIRS
27	BENT 5 ELEVATION AND REPAIRS
28	BENT 6 ELEVATION AND REPAIRS
29	BENT 7 ELEVATION AND REPAIRS
30	FRAMING PLAN SPANS 1 TO 2
31	FRAMING PLAN SPAN 3
32	FRAMING PLAN SPAN 4
33	FRAMING PLAN SPANS 5 TO 6
34	FRAMING PLAN SPAN 7
35	FRAMING PLAN SPAN 8
36	FRAMING PLAN SPAN 9
37	SPAN 10 FRAMING & BRACING PLAN
38	SPAN 10 NORTH TRUSS ELEVATION
39	SPAN 10 SOUTH TRUSS ELEVATION
40	SPAN 11 FRAMING & BRACING PLAN
41	SPAN 11 NORTH TRUSS ELEVATION
42	SPAN 11 SOUTH TRUSS ELEVATION
43	SPAN 12 FRAMING & BRACING PLAN

SHEET NO.	TITLE
44	SPAN 12 NORTH TRUSS ELEVATION
45	SPAN 12 SOUTH TRUSS ELEVATION
46	SP 13 FRAMING & SP 14 SLAB PLAN
47	REPAIR TM01 - SEAT & BEAM PIER 4
48	REPAIR TM01 DETAILS
49	REPAIR TM02 - SEAT & BEAM PIER 2
50	TYPICAL LACING BAR REPAIRS
51	TYPICAL BATTEN PLATE REPAIRS
52	TYPICAL ANGLE COVER PLATE REPAIRS
53	TYPICAL WEB COVER PLATE REPAIRS 1
54	TYPICAL WEB COVER PLATE REPAIRS 2
55	TYPICAL WEB COVER PLATE REPAIRS 3
56	TYPICAL FLANGE COVER PLATE REPAIRS
57	TYPICAL WEB STIFFENER REPAIRS 1
58	TYPICAL WEB STIFFENER REPAIRS 2
59	END PORTAL BRACING REPAIRS
60	SWAY BRACE ANGLE REPAIRS
61	BOTTOM FLANGE CONNECTION REPAIR
62	FLOORBEAM CONNECTION PLATE AND ANGLE REPAIR
63	CLIP ANGLE REPAIRS
64	STRINGER CLIP ANGLE REPAIR
65	TYPICAL RIVET REPLACEMENT AND BOLT REPAIRS
66	TYPICAL PACK RUST REPAIRS 1
67	TYPICAL PACK RUST REPAIRS 2
68	TYPICAL PIN ROD AND TOP CHORD PLATE REPAIRS
69	SIDEWALK STRUCTURE REPAIRS
70	BENT REPAIR DETAILS 1
71	BENT REPAIR DETAILS 2
72	SIDEWALK STRINGER REPAIR DETAILS
73	MISCELLANEOUS STEEL REPAIRS
74	BEARING REPLACEMENT EAST ABUTMENT
75	BEARING DETAILS
76	DECK AND SIDEWALK PLAN, SP 1 - 3
77	DECK AND SIDEWALK PLAN, SP 4 - 9
78	DECK AND SIDEWALK PLAN, SP 10 & 11
79	DECK AND SIDEWALK PLAN, SP 12 - 14
80	BARRIER DETAILS SPAN 4
81	SCUPPER DETAILS 1
82	SCUPPER DETAILS 2
83	EXPANSION DAM EAST ABUTMENT
84	EXPANSION DAM BENT 4A
85	EXPANSION DAM PIER 1
86	EXPANSION DAM PIER 3

SHEET NO.	TITLE
87	TOOTH EXPANSION JOINT PIER 2
88	TOOTH JOINT DETAILS 1
89	TOOTH JOINT DETAILS 2
90	EXPANSION DAM PIER 4
91	EXPANSION DAM PIER 5
92	STRIP SEAL DAM DETAILS 1
93	STRIP SEAL DAM DETAILS 2
94	STRIP SEAL DAM DETAILS 3
95	STRIP SEAL DAM DETAILS 4
96	STRIP SEAL DAM DETAILS 5
97	APPROACH SLAB PLAN
98	APPROACH SLAB SECTIONS AND DETAILS
99	SLEEPER SLAB PLAN
100	APPROACH SLAB REINFORCEMENT SCHEDULE
101	STRUCTURE MOUNTED FENCE DETAILS 1
102	STRUCTURE MOUNTED FENCE DETAILS 2
103	BENTS 1 & 2 DRAINAGE DETAILS 1
104	BENTS 1 & 2 DRAINAGE DETAILS 2
105	BENTS 3 & 4A DRAINAGE DETAILS
106	BENTS 5 & 6 DRAINAGE DETAILS
107	BENT 7 DRAINAGE DETAILS
108	PIERS 1 & 2 DRAINAGE DETAILS
109	PIERS 4 & 5 DRAINAGE DETAILS
110	DOWNSPOUT SUPPORT DETAILS
111	LIGHT POLE BARRIER DETAILS - LP1
112	LIGHT POLE BARRIER DETAILS - LP2
113	LIGHT POLE BARRIER DETAILS - LP3
114	LIGHT POLE BARRIER DETAILS - LP4
115	LIGHT POLE BARRIER DETAILS - LP5
116	LIGHT POLE BARRIER DETAILS - LP7
117	LIGHT POLE BARRIER DETAILS - LP8
118	LIGHT POLE BARRIER DETAILS - LP9
119	LIGHT POLE BARRIER DETAILS - LP10
120	LIGHT POLE BARRIER DETAILS - LP11
121	LIGHT POLE BARRIER SECTIONS
122	BARRIER DETAIL - REPAIR C13
123	LIGHT POLE BARRIER REINFORCEMENT SCHEDULE
124	EXP DAM & SCUPPER REINFORCEMENT SCHEDULE

BRIDGE PAINT (CONT'D)

COORDINATE ALL PAINTING OPERATIONS WITH THE REQUIREMENTS FOR TRACK CLEARANCE AND ACCESS FOR SPAN 13 OVER NORFOLK SOUTHERN. SEE PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.

SURFACE PREPARATION AND PRIMING OF THE TOP SURFACE OF THE BUCKLE PLATES IN AREAS OF DECK REPLACEMENT IS INCLUDED UNDER ITEM 1070-0325. SURFACE PREPARATION, PRIMING, INTERMEDIATE COATS AND PAINTING OF THE EXPOSED SURFACES OF THE BUCKLE PLATES IS INCLUDED IN ITEM 1070-0200. CONTAINMENT, WASTE MANAGEMENT, AND WORKER HEALTH AND SAFETY REQUIREMENTS IN ITEMS 1072-0100, 1072-0200, AND 1072-0300 ARE ALSO APPLICABLE TO ALL OPERATIONS INVOLVING THE BUCKLE PLATES.

PRIOR TO BEGINNING ANY BLASTING OR PAINTING OPERATIONS, OBTAIN AN ABRASIVE BLASTING PERMIT FROM THE ALLEGHENY COUNTY HEALTH DEPARTMENT.

ALL FAYING SURFACES ARE CONSIDERED SLIP-CRITICAL UNLESS OTHERWISE INDICATED. STEEL REPAIRS THAT ARE NOTED AS NON-SLIP-CRITICAL REQUIRE THE PRIMER TO DRY TO TOUCH BEFORE MATING THE STEEL AND DO NOT REQUIRE FULL CURE OF THE PRIMER. SEE SHEET 6 OF 124 FOR SLIP-CRITICAL AND NON-SLIP-CRITICAL STEEL REPAIRS.

NOTES:

1. WORK THIS SHEET WITH SHEET 3.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

GENERAL NOTES & INDEX OF DRAWINGS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 4 OF 124

S - 40253

PLOTTED: 10/26/2022 7:52:36 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_TS&L Ratings.dgn

CONTROLLING GIRDER (SPANS 1-9, 13)

		WITHOUT FUTURE WEARING SURFACE				WITH FUTURE WEARING SURFACE			
		H20	HS20	TK-527	ML-80	H20	HS20	TK-527	ML-80
INVENTORY RATING (IR)	SPAN(S)	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8
	LOCATION (FT)	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
	RATING FACTOR	1.27 (V)	1.03 (V)	0.91 (V)	0.95 (V)	1.13 (V)	0.92 (V)	0.81 (V)	0.84 (V)
OPERATING RATING (OR)	SPAN(S)	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8
	LOCATION (FT)	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
	RATING FACTOR	2.12 (V)	1.72 (V)	1.52 (V)	1.58 (V)	1.88 (V)	1.53 (V)	1.35 (V)	1.40 (V)

CONTROLLING FLOORBEAM (SPANS 1-9, 13)

		WITHOUT FUTURE WEARING SURFACE				WITH FUTURE WEARING SURFACE			
		H20	HS20	TK-527	ML-80	H20	HS20	TK-527	ML-80
INVENTORY RATING (IR)	SPAN(S)	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8
	LOCATION (FT)	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33
	RATING FACTOR	1.64 (M)	1.45 (M)	1.19 (M)	1.10 (M)	1.56 (M)	1.38 (M)	1.13 (M)	1.05 (M)
OPERATING RATING (OR)	SPAN	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8	7 & 8
	LOCATION (FT)	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33
	RATING FACTOR	2.73 (M)	2.41 (M)	1.98 (M)	1.84 (M)	2.61 (M)	2.30 (M)	1.89 (M)	1.75 (M)

CONTROLLING STRINGER (SPANS 1-9, 13)

		WITHOUT FUTURE WEARING SURFACE				WITH FUTURE WEARING SURFACE			
		H20	HS20	TK-527	ML-80	H20	HS20	TK-527	ML-80
INVENTORY RATING (IR)	STRINGER	2ND INT	2ND INT	2ND INT	2ND INT	2ND INT	2ND INT	2ND INT	2ND INT
	SPAN(S)	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3
	LOCATION (FT)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	RATING FACTOR	1.43 (M)	1.43 (M)	1.15 (M)	1.01 (M)	1.39 (M)	1.39 (M)	1.13 (M)	0.98 (M)
OPERATING RATING (OR)	STRINGER	2ND INT	2ND INT	2ND INT	2ND INT	2ND INT	2ND INT	2ND INT	2ND INT
	SPAN(S)	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3	2 & 3
	LOCATION (FT)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	RATING FACTOR	2.38 (M)	2.38 (M)	1.92 (M)	1.68 (M)	2.32 (M)	2.32 (M)	1.88 (M)	1.64 (M)

CONTROLLING TRUSS MEMBERS (SPANS 10-12)

		WITHOUT FUTURE WEARING SURFACE				WITH FUTURE WEARING SURFACE			
		H20	HS20	TK-527	ML-80	H20	HS20	TK-527	ML-80
INVENTORY RATING (IR)	SPAN(S)	10	11	11	11	10	11	11	11
	MEMBER	L8-L9	L1-U1	L1-U1	L1-U1	L8-L9	L1-U1	L1-U1	L1-U1
	RATING FACTOR	1.23	1.15	1.01	0.96	1.23	1.15	1.01	0.96
OPERATING RATING (OR)	SPAN(S)	10	11	11	11	10	11	11	11
	MEMBER	U5-U6	L1-U1	L1-U1	L1-U1	U5-U6	L1-U1	L1-U1	L1-U1
	RATING FACTOR	2.24	2.00	1.76	1.67	2.24	2.00	1.76	1.67

CONTROLLING FLOORBEAM (SPANS 10-12)

		WITHOUT FUTURE WEARING SURFACE				WITH FUTURE WEARING SURFACE			
		H20	HS20	TK-527	ML-80	H20	HS20	TK-527	ML-80
INVENTORY RATING (IR)	SPAN(S)	12	12	12	12	12	12	12	12
	LOCATION (FT)	16.00	11.00	11.00	11.00	0.00	0.00	0.00	0.00
	RATING FACTOR	1.68 (M)	1.36 (V)	1.20 (V)	1.14 (V)	1.55 (V)	1.31 (V)	1.15 (V)	1.10 (V)
OPERATING RATING (OR)	SPAN	12	12	12	12	12	12	12	12
	LOCATION (FT)	16.00	11.00	11.00	11.00	0.00	0.00	0.00	0.00
	RATING FACTOR	2.80 (M)	2.27 (V)	2.00 (V)	1.90 (V)	2.59 (V)	2.19 (V)	1.92 (V)	1.83 (V)

CONTROLLING STRINGER (SPANS 10-12)

		WITHOUT FUTURE WEARING SURFACE				WITH FUTURE WEARING SURFACE			
		H20	HS20	TK-527	ML-80	H20	HS20	TK-527	ML-80
INVENTORY RATING (IR)	STRINGER	1ST INT	1ST INT	1ST INT	1ST INT	1ST INT	1ST INT	1ST INT	1ST INT
	SPAN(S)	10	10	10	10	10	10	10	10
	LOCATION (FT)	14.52	17.42	14.52	14.52	14.52	17.42	14.52	14.52
	RATING FACTOR	1.43 (M)	1.27 (M)	0.99 (M)	0.90 (M)	1.34 (M)	1.20 (M)	0.93 (M)	0.85 (M)
OPERATING RATING (OR)	STRINGER	1ST INT	1ST INT	1ST INT	1ST INT	1ST INT	1ST INT	1ST INT	1ST INT
	SPAN(S)	10	10	10	10	10	10	10	10
	LOCATION (FT)	14.52	17.42	14.52	14.52	14.52	17.42	14.52	14.52
	RATING FACTOR	2.38 (M)	2.12 (M)	1.65 (M)	1.51 (M)	2.24 (M)	2.00 (M)	1.55 (M)	1.42 (M)

REINFORCED CONCRETE SLAB (SPAN 14)

		WITHOUT FUTURE WEARING SURFACE				WITH FUTURE WEARING SURFACE			
		H20	HS20	TK-527	ML-80	H20	HS20	TK-527	ML-80
INVENTORY RATING (IR)	LOCATION (FT)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	RATING FACTOR	1.26 (V)	1.01 (V)	0.89 (V)	0.83 (V)	1.21 (V)	0.97 (V)	0.86 (V)	0.80 (V)
OPERATING RATING (OR)	LOCATION (FT)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	RATING FACTOR	2.10 (V)	1.68 (V)	1.48 (V)	1.38 (V)	2.02 (V)	1.62 (V)	1.43 (V)	1.33 (V)

RATING NOTES:

1. RATINGS INCLUDE FUTURE WEARING SURFACE OF 30 PSF WHERE INDICATED.
2. RATINGS OBTAINED FROM PENNDOT'S BRIDGE ANALYSIS AND RATING PROGRAM, BAR7, VERSION 7.15.0.0, DATED FEBRUARY 2018. LOAD RATINGS FOR THE STRINGERS ARE BASED ON MODIFIED DISTRIBUTION FACTORS DERIVED FROM A FINITE ELEMENT ANALYSIS OF THE FLOOR SYSTEM.
3. RATINGS FOR GIRDERS, FLOORBEAMS, STRINGERS, AND THE REINFORCED CONCRETE SLAB ARE LOAD FACTOR DESIGN (LFD) RATINGS.
4. RATINGS FOR THE TRUSS ARE ALLOWABLE STRESS DESIGN (ASD) RATINGS.
5. (M) DENOTES RATING CONTROLLED BY MOMENT.
6. (V) DENOTES RATING CONTROLLED BY SHEAR.

NOTES:

1. FOR GENERAL PLAN AND ELEVATION, SEE SHEET 1.
2. FOR TYPICAL SECTIONS, SEE SHEET 2.
3. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SUMMARY OF BRIDGE RATINGS

RECOMMENDED
OCTOBER 26, 2022

SHEET 5 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

PLOTTED: 10/26/2022 7:52:37 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_TS&L Repair Codes.dgn

SUPERSTRUCTURE REPAIRS

CODE	DESCRIPTION		UNIT	ITEM NUMBER	DETAIL SHEETS
S01	WEB COVER PLATE, STRINGER	SC	EA	1050-0201	53
S02	FLANGE COVER PLATE, STRINGER	SC	EA	1050-0202	56
S03	STIFFENER REPAIR, STRINGER	NSC	EA	1050-0203	57
S04	ARREST HOLE WITH WEB COVER PLATE, STRINGER		EA	1050-0204	54
S05	REPLACE SIDEWALK STRINGER	SC	LB	1050-0110	72
S06	REPLACE SIDEWALK STRINGER EXPANSION ASSEMBLY	SC	EA	1050-0205	72
S07	REPLACE STRINGER STOOL ANGLE AND CLIP PLATE	SC	EA	1050-0206	31
S08	REPLACE STRINGER SEAT ANGLE AND SHIM STACK	SC	EA	1050-0207	31
S09	REPLACE STRINGER CLIP ANGLE	NSC	EA	1050-0267	64
F01	WEB COVER PLATE, FLOORBEAM	SC	EA	1050-0208	55
F02	FLANGE COVER PLATE, FLOORBEAM	SC	LB	1050-0111	56
F03	NOT USED		-	-	-
F04	BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM	SC	EA	1050-0210	61
F05	STIFFENER REPAIR, FLOORBEAM	NSC	EA	1050-0211	57
F06	STIFFENER RETROFIT, FLOORBEAM	NSC	EA	1050-0212	58
F07	BEARING SEAT STIFFENER REPAIR, FLOORBEAM	SC	EA	1050-0213	58
F08	FLOORBEAM WEB PATCH PLATE	SC	EA	1050-0214	30
F09	REPLACE RIVET, FLOORBEAM		EA	1050-0215	65
F10	REPAIR ENDS OF SPAN 9 LATTICE STRUT	SC	EA	1050-0216	36
G01	BOTTOM FLANGE COVER PLATE, GIRDER	NSC	LB	1050-0112	56
G02	TOP FLANGE COVER PLATE, GIRDER	NSC	LB	1050-0113	56
G03	WEB COVER PLATE, GIRDER	NSC	EA	1050-0217	53
G04	STIFFENER REPAIR, GIRDER	NSC	EA	1050-0218	57
G05	STIFFENER ADDITION, GIRDER	NSC	EA	1050-0219	58
G06	REPLACE GIRDER PIN SPACER TUBE		EA	1050-0220	70
G07	REPLACE GIRDER SEAT	NSC	EA	1050-0221	31
G08	REPLACE RIVET, GIRDER		EA	1050-0222	65
G09	REMOVE DETERIORATED GIRDER COVER PLATE		LB	1050-0114	30
T01	LACING BAR REPAIR TYPE 1, TRUSS	NSC	EA	1050-0223	50
T02	LACING BAR REPAIR TYPE 2, TRUSS	NSC	EA	1050-0224	50
T03	BATTEN PLATE REPAIR TYPE 1, TRUSS	NSC	EA	1050-0225	51
T04	BATTEN PLATE REPAIR TYPE 2, TRUSS	NSC	EA	1050-0226	51
T05	REPLACE RIVET, TRUSS		EA	1050-0227	65
T06	INSTALL HIGH STRENGTH BOLT, TRUSS		EA	1050-0228	51
T07	ANGLE COVER PLATE, TRUSS	NSC	LB	1050-0115	52
T08	CONNECTION ANGLE REPAIR, TRUSS	SC	EA	1050-0229	61
T09	FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS	SC	EA	1050-0230	62
T10	FLOORBEAM CONNECTION PLATE REPAIR, TRUSS	SC	EA	1050-0231	62
T11	REPLACE CLIP ANGLE	SC	EA	1050-0232	63
T12	REPLACE CLIP ANGLE AND GUSSET PLATE	SC	EA	1050-0233	63
TC01	LACING BAR REPAIR, CHORD	NSC	EA	1050-0234	50
TC02	BATTEN PLATE REPAIR, CHORD	NSC	EA	1050-0235	51
TC03	REPLACE RIVET, CHORD		EA	1050-0236	65
TC04	ANGLE COVER PLATE, CHORD	NSC	LB	1050-0116	52
TC05	REPLACE PIN ROD		EA	1050-0237	68
TC06	REPAIR TOP CHORD PIN PLATE		EA	1050-0238	68
TB01	LACING BAR REPAIR, END PORTAL	NSC	EA	1050-0239	59
TB02	BATTEN PLATE REPAIR, BRACING	NSC	EA	1050-0240	51
TB03	REPLACE RIVET, BRACING		EA	1050-0241	65
TB04	END SWAY BRACING ANGLE REPLACEMENT	NSC	EA	1050-0242	60
TB05	MID SWAY BRACING ANGLE REPLACEMENT	NSC	EA	1050-0243	60
TB06	END PORTAL STRUT REPAIR	NSC	EA	1050-0244	59
TB07	SWAY BRACING ANGLE REPLACEMENT	NSC	EA	1050-0245	60
TM01	REPLACE SEAT AND BEAM	SC	LB	1050-0117	47
TM02	REPLACE EXP DAM SEAT	SC	LB	1050-0118	49
TM03	SIDEWALK GUSSET PLATE REPAIR	SC	EA	1050-0246	69
TM04	SIDEWALK ANGLE BRACING REPAIR	SC	EA	1050-0247	69
PR01	PACK RUST REPAIR, GIRDER OR FLOORBEAM		LF	1070-0350	66
PR02	PACK RUST REPAIR, TRUSS MEMBER		LF	1070-0350	66
PR03	PACK RUST REPAIR, EYE BARS		EA	9000-0201	67
PR04	PACK RUST REPAIR, JOINT OR CHORD		EA	9000-0202	67
PR05	PACK RUST REPAIR, STRINGER BEARING SEAT		EA	1070-0350	66
PR06	PACK RUST REPAIR, BENT		LF	1070-0350	66
PR07	PACK RUST REPAIR, TRUSS END PORTAL		LF	1070-0350	66
BR01	REPLACE EXPANSION BEARING		EA	(1)	74
BR02	CLEAN AND LUBRICATE BEARING		EA	9000-0204	75
BR03	CLEAN AND FLUSH BEAM SEATS		EA	9000-0205	N/A
BR04	SEAL BEARING		EA	9000-0214	16

DECK & MISCELLANEOUS REPAIRS

CODE	DESCRIPTION	UNIT	ITEM NUMBER	DETAIL SHEETS
M01	REPLACE SIDEWALK FENCE	LF	5016-0103	101
M02	REPLACE BARRIER FENCE	LF	5016-0006	102
M03	REPLACE APPROACH FENCE	LF	RDWY ITEM	101
M04	REPLACE SIDEWALK OVERLAY	SF	(2)	N/A
M05	INSTALL BARRIER FLASHING	LF	9000-0207	30
M06	REPLACE DOWNSPOUTING	LF	5051-0000	103 TO 110
M07	REPLACE DOWNSPOUTING SUPPORT	EA	5051-0000	109
M08	REMOVE EXISTING TAB PLATE	EA	1050-0260	73
M09	INSTALL LIGHT MAST AND FIXTURE	EA	RWDY ITEM	73
M10	REPLACE PIER WALKWAY RAILING	EA	1050-0261	14
M11	REPLACE SCUPPER	EA	9000-0216	81
M12	INSTALL NEW SCUPPER	EA	9000-0215	81
M13	REMOVE EXISTING SCUPPER AND REPAIR DECK	EA	9000-0217	81
M14	INSTALL NEW DOWNSPOUT RUN	LF	5051-0000	103
M15	REMOVE KICKER BEAM	EA	1050-0262	73
M16	INSTALL BOLTS OPEN HOLES	EA	1050-0263	46
M17	INSTALL NEW LIGHT POLE AND FIXTURE	EA	RDWY ITEM	N/A
M18	REMOVE VEGETATION	LS	9000-0208	16
M19	INSTALL SPLASH BLOCK	EA	9000-0209	109
M20	REPLACE CONDUIT	LF	9000-0210	12
M21	CORE WEEPHOLES AND INSTALL WEEPHOLE FILTER	EA	9000-0211	19
M22	REMOVE ABANDONED UTILITY BRACKET OR CONNECTION	EA	1050-0264	27
M23	REPAIR BUCKLE PLATE BLOWOUT	EA	1050-0265	32
M24	REMOVE ABANDONED UTILITY BOX FROM GIRDER WEB	EA	1050-0266	34
M25	REMOVE EXISTING UTILITY LINES AND CONDUIT	LS	9000-0212	9
M26	INSTALL COMCAST CONDUIT	LS	9000-0213	SEE NOTE 4
M27	REPLACE LIGHT MAST PLATE	EA	1050-0268	73

CONCRETE & SUBSTRUCTURE REPAIRS

CODE	DESCRIPTION	UNIT	ITEM NUMBER	DETAIL SHEETS
C01	BARRIER SPALL REPAIR	CF	(3)	20
C02	SUBSTRUCTURE SPALL REPAIR	CF	9000-9002	20
C03	EPOXY INJECTION CRACK SEAL	LF	1091-0331	N/A
C04	REPLACE WALL EXPANSION JOINT MATERIAL	LF	9000-0206	N/A
C05	PROTECTIVE COATING, PENETRATING SEALER	SF	(4)	N/A
C06	TYPE 2 DECK REPAIR, SIDEWALK	SF	1040-0120	N/A
C07	REPLACE EXISTING BARRIER	LF	(5)	80
C08	PLACE LMC OVERLAY	SF	(6)	N/A
C09	REPLACE STRIP SEAL EXPANSION DAM	LF	(7)	83 TO 86
C10	REPLACE TOOTH EXPANSION DAM	LS	5020-0002	87 TO 89
C11	CONSTRUCT APPROACH SLAB	LS	(8)	97 TO 100
C12	REPLACE BARRIERS AND LIGHT POLE ANCHORAGE	EA	(9)	111 TO 121
C13	REPLACE BARRIER AND JUNCTION BOX	EA	(10)	122
B01	REMOVE ABANDONED DOWNSPOUT BRACKET	EA	1050-0248	22
B02	REPLACE RIVET, BENT	EA	1050-0249	65
B03	LACING BAR REPAIR TYPE 1, BENT NSC	EA	1050-0250	50
B04	LACING BAR REPAIR TYPE 2, BENT NSC	EA	1050-0251	50
B05	REPLACE BATTEN PLATE, TYPE 1, BENT NSC	EA	1050-0252	51
B06	REPLACE BATTEN PLATE, TYPE 2, BENT NSC	EA	1050-0253	51
B07	COLUMN STAY PLATE REPAIR, BENT SC	EA	1050-0254	24
B08	REPLACE SWAY BRACE ANGLE NSC	EA	1050-0255	70
B09	INSTALL COLUMN COVER PLATE SC	EA	1050-0256	71
B10	INSTALL GUSSET COVER PLATE SC	EA	1050-0257	23
B11	REPLACE BENT 4-4A BRACING GUSSET PLATE, TYPE 1 SC	EA	1050-0258	26
B12	REPLACE BENT 4-4A BRACING GUSSET PLATE, TYPE 2 SC	EA	1050-0259	71
B13	REPLACE CONNECTION ANGLE (L4x4x1/2) SC	LB	1050-0119	71

NOTES: UNITS INDICATED MAY NOT CORRESPOND TO ACTUAL PAY QUANTITY UNITS.

REPAIR [F03], ITEM NUMBER 1050-0209, IS NOT USED.

THE FOLLOWING ITEM NUMBERS ARE APPLICABLE TO THE NOTED REPAIRS:

(1) 1018-0050; 1050-0020; 1050-0085; 9000-0203
(2) 1018-0050; 1046-0010
(3) 1040-0210;
(4) 1019-0040; 1019-0050
(5) 1018-0050; 1001-1100; 1002-0052
(6) 1039-0010; 1041-0020; 1042-0030; 1042-0070; 1001-0970
(7) 1090-1014; 1050-0089; 5090-1015; 5090-1016; 9000-0218
(8) 1001-1100; 1002-0052; 1001-0970; 1018-0050
(9) 1001-1100; 1002-0052; 0910-5255; 1001-0500; 0910-0006
(10) 1001-1100; 1002-0052; 0910-5255; 0910-0006

SC DENOTES SLIP-CRITICAL REPAIR
NSC DENOTES NON-SLIP-CRITICAL REPAIR

NOTES:

1. FOR GENERAL PLAN AND ELEVATION, SEE SHEET 1.
2. FOR TYPICAL SECTIONS, SEE SHEET 2.
3. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
4. FOR DETAILS OF THE COMCAST CONDUIT BANK, SEE SHEET 7 AND COMCAST PLANS.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BRIDGE REPAIR CODES

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 6 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:53:00 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Quantities 1.dgn

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

ITEM NO.	DESCRIPTION - S-40253 NEW KENSINGTON BRIDGE	UNIT	EAST ABUTMENT	EAST APPROACH BENTS	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	WEST ABUTMENT	EAST APPROACH SUPER-STRUCTURE	SPANS 10 THRU 12 SUPER-STRUCTURE	SPANS 13 AND 14 SUPER-STRUCTURE	EAST APPROACH SLAB	WEST APPROACH SLAB	TOTAL
0910-0006	JUNCTION BOXES J.B.-25	EACH									5	5	2			12
0910-5255	2" CONDUIT IN STRUCTURE	LF									52	61	14			127
1001-0500	LIGHTING POLE, ANCHORAGE	EACH									4	5	1			10
1001-0970	MECHANICAL TEXTURING WITH TRANSVERSE SAWED GROOVES	SY									1605	2800	361	82		4849
1001-1100	CLASS AA CEMENT CONCRETE, ACCELERATED (2)	CY									25	9	2		125	160
1002-0052	REINFORCEMENT BARS, EPOXY COATED (2)	LB									3800	1450	350		26800	32400
1003-0005	DOWEL HOLES, 12" DEPTH	EACH								160						160
5016-0006	BARRIER PROTECTIVE FENCE, VINYL-COATED STEEL, REMOVE AND REPLACE (1)	LF											92			92
5016-0103	SIDEWALK PROTECTIVE FENCE VINYL-COATED STEEL, REMOVE AND REPLACE (1)	LF									516	900	130			1546
1018-0050	REMOVAL OF PORTION OF EXISTING BRIDGE (1)	LS														X
1019-0040	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES)	SY	222		511	578	567	444	446	456						3223
1019-0050	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE)	SY									190	326	43	10		569
5020-0002	TOOTH EXPANSION DAM WITH DRAINAGE TROUGH, REMOVE AND REPLACE (1)	LB										8600				8600
1039-0010	CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION	SY									1605	2800	361	82		4849
1040-0120	CONCRETE BRIDGE DECK REPAIR ACCELERATED, TYPE 2 USING ASC	SF									31	54	7			92
1040-0210	CONCRETE BRIDGE BARRIER REPAIR ACCELERATED, TYPE 2 USING ASC	SF									8	14	6			28
1041-0020	SCARIFICATION, 1/2" DEPTH	SY									3211	5600	723	165		9698
1042-0030	3 HOUR ACCELERATED LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/4" DEPTH	SY									1605	2800	361	82		4849
1042-0070	3 HOUR ACCELERATED LATEX MODIFIED CONCRETE, VARIABLE DEPTH	CY									56	97	13	3		168
1046-0010	EPOXY OVERLAY	SY									344	600	77			1021
1050-0020	FABRICATED STRUCTURAL STEEL (4)	LB									815					815
1050-0085	LAMINATED NEOPRENE BEARING PAD	EACH	2													2
1050-0089	SHEAR CONNECTORS	EACH										36				36
9000-0215	SCUPPER, TYPE 1, NEW INSTALLATION (1)	EACH										6				6
9000-0216	SCUPPER, TYPE 1, REPLACEMENT INSTALLATION (1)	EACH									6					6
9000-0217	SCUPPER REMOVAL (1)	EACH									2		2			4

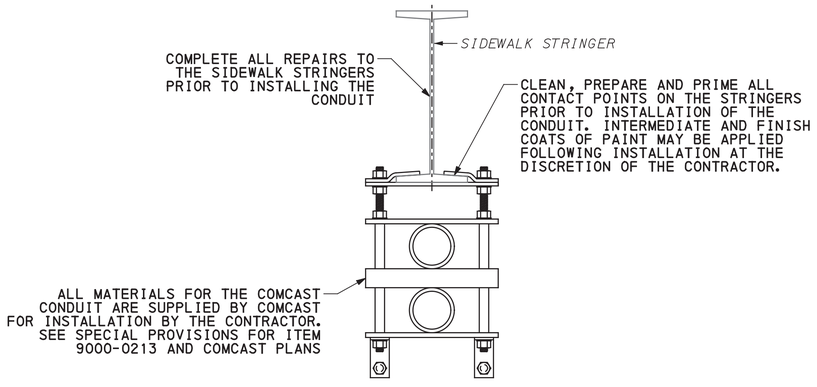
QUANTITY NOTES:

(1) SEE CONTRACT SPECIAL PROVISIONS

(2) INCLUDES CONCRETE AND REINFORCEMENT IN APPROACH SLAB, BARRIER REPLACEMENT IN SPAN 4, AND BARRIER REPLACEMENTS AT LIGHT POLES AND JUNCTION BOXES

(3) SEE STRUCTURE REPAIR MASTER LIST FOR CROSS REFERENCES OF REPAIR TYPES TO ITEM NUMBERS

(4) FABRICATED STRUCTURAL STEEL INCLUDED WITH THIS ITEM AS
BEARING PLATES AT EAST ABUTMENT = 715 LB
ANCHOR BOLTS AT EAST ABUTMENT = 100 LB



PROPOSED COMCAST CONDUIT

NOT TO SCALE

EXISTING UTILITY BANK

REPRESENTATIVE PHOTO

NOTES:

1. WORK THIS SHEET WITH SHEETS 8 AND 9.
2. FOR STRUCTURE REPAIR MASTER LIST SEE SHEET 6.
3. FOR ADDITIONAL DETAILS OF CONDUIT, SEE COMCAST PLANS.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

SUMMARY OF QUANTITIES 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 7 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 7:53:30 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038_Quantities 2.dgn

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

ITEM NO.	DESCRIPTION - S-40253 NEW KENSINGTON BRIDGE	UNIT	PIER 2	EAST APPROACH SUPER-STRUCTURE	SPANS 10 THRU 12 SUPER-STRUCTURE	SPANS 13 AND 14 SUPER-STRUCTURE	TOTAL
1050-0100	UNFORESEEN FABRICATED STRUCTURAL STEEL REPAIRS	DOLLAR					500000
1050-0110	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB		3738			3738
1050-0111	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB			447		447
1050-0112	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB		1803			1803
1050-0113	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB		1072			1072
1050-0114	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB		145			145
1050-0115	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB			443		443
1050-0116	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB			20		20
1050-0117	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB			2111		2111
1050-0118	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB			525		525
1050-0119	FABRICATED STRUCTURAL STEEL REPAIR (3)	LB		35			35
1050-0201	FABRICATED STRUCTURAL STEEL REPAIR 1 (3)	EACH		4	22		26
1050-0202	FABRICATED STRUCTURAL STEEL REPAIR 2 (3)	EACH		2		1	3
1050-0203	FABRICATED STRUCTURAL STEEL REPAIR 3 (3)	EACH			23		23
1050-0204	FABRICATED STRUCTURAL STEEL REPAIR 4 (3)	EACH			4		4
1050-0205	FABRICATED STRUCTURAL STEEL REPAIR 5 (3)	EACH		1			1
1050-0206	FABRICATED STRUCTURAL STEEL REPAIR 6 (3)	EACH		2			2
1050-0207	FABRICATED STRUCTURAL STEEL REPAIR 7 (3)	EACH		4			4
1050-0208	FABRICATED STRUCTURAL STEEL REPAIR 8 (3)	EACH			2		2
1050-0209	NOT USED, SEE NOTE 4						
1050-0210	FABRICATED STRUCTURAL STEEL REPAIR 10 (3)	EACH			14		14
1050-0211	FABRICATED STRUCTURAL STEEL REPAIR 11 (3)	EACH		2		1	3
1050-0212	FABRICATED STRUCTURAL STEEL REPAIR 12 (3)	EACH			8	2	10
1050-0213	FABRICATED STRUCTURAL STEEL REPAIR 13 (3)	EACH			15		15
1050-0214	FABRICATED STRUCTURAL STEEL REPAIR 14 (3)	EACH		2			2
1050-0215	FABRICATED STRUCTURAL STEEL REPAIR 15 (3)	EACH		23			23
1050-0216	FABRICATED STRUCTURAL STEEL REPAIR 16 (3)	EACH		2			2
1050-0217	FABRICATED STRUCTURAL STEEL REPAIR 17 (3)	EACH		14			14
1050-0218	FABRICATED STRUCTURAL STEEL REPAIR 18 (3)	EACH		81		5	86
1050-0219	FABRICATED STRUCTURAL STEEL REPAIR 19 (3)	EACH		9			9
1050-0220	FABRICATED STRUCTURAL STEEL REPAIR 20 (3)	EACH		7			7
1050-0221	FABRICATED STRUCTURAL STEEL REPAIR 21 (3)	EACH		9			9
1050-0222	FABRICATED STRUCTURAL STEEL REPAIR 22 (3)	EACH		1445			1445
1050-0223	FABRICATED STRUCTURAL STEEL REPAIR 23 (3)	EACH			47		47
1050-0224	FABRICATED STRUCTURAL STEEL REPAIR 24 (3)	EACH			249		249
1050-0225	FABRICATED STRUCTURAL STEEL REPAIR 25 (3)	EACH			29		29
1050-0226	FABRICATED STRUCTURAL STEEL REPAIR 26 (3)	EACH			23		23
1050-0227	FABRICATED STRUCTURAL STEEL REPAIR 27 (3)	EACH			1299		1299
1050-0228	FABRICATED STRUCTURAL STEEL REPAIR 28 (3)	EACH			1247		1247
1050-0229	FABRICATED STRUCTURAL STEEL REPAIR 29 (3)	EACH			28		28
1050-0230	FABRICATED STRUCTURAL STEEL REPAIR 30 (3)	EACH			20		20
1050-0231	FABRICATED STRUCTURAL STEEL REPAIR 31 (3)	EACH			9		9
1050-0232	FABRICATED STRUCTURAL STEEL REPAIR 32 (3)	EACH			1		1
1050-0233	FABRICATED STRUCTURAL STEEL REPAIR 33 (3)	EACH			1		1
1050-0234	FABRICATED STRUCTURAL STEEL REPAIR 34 (3)	EACH			480		480
1050-0235	FABRICATED STRUCTURAL STEEL REPAIR 35 (3)	EACH			24		24
1050-0236	FABRICATED STRUCTURAL STEEL REPAIR 36 (3)	EACH			330		330
1050-0237	FABRICATED STRUCTURAL STEEL REPAIR 37 (3)	EACH			11		11
1050-0238	FABRICATED STRUCTURAL STEEL REPAIR 38 (3)	EACH			9		9
1050-0239	FABRICATED STRUCTURAL STEEL REPAIR 39 (3)	EACH			13		13
1050-0240	FABRICATED STRUCTURAL STEEL REPAIR 40 (3)	EACH			5		5
1050-0241	FABRICATED STRUCTURAL STEEL REPAIR 41 (3)	EACH			294		294
1050-0242	FABRICATED STRUCTURAL STEEL REPAIR 42 (3)	EACH			14		14
1050-0243	FABRICATED STRUCTURAL STEEL REPAIR 43 (3)	EACH			2		2
1050-0244	FABRICATED STRUCTURAL STEEL REPAIR 44 (3)	EACH			12		12
1050-0245	FABRICATED STRUCTURAL STEEL REPAIR 45 (3)	EACH			1		1
1050-0246	FABRICATED STRUCTURAL STEEL REPAIR 46 (3)	EACH			20		20
1050-0247	FABRICATED STRUCTURAL STEEL REPAIR 47 (3)	EACH			11		11

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

ITEM NO.	DESCRIPTION - S-40253 NEW KENSINGTON BRIDGE	UNIT	PIER 2	EAST APPROACH SUPER-STRUCTURE	SPANS 10 THRU 12 SUPER-STRUCTURE	SPANS 13 AND 14 SUPER-STRUCTURE	TOTAL
1050-0248	FABRICATED STRUCTURAL STEEL REPAIR 48 (3)	EACH		7			7
1050-0249	FABRICATED STRUCTURAL STEEL REPAIR 49 (3)	EACH		629			629
1050-0250	FABRICATED STRUCTURAL STEEL REPAIR 50 (3)	EACH		32			32
1050-0251	FABRICATED STRUCTURAL STEEL REPAIR 51 (3)	EACH		75			75
1050-0252	FABRICATED STRUCTURAL STEEL REPAIR 52 (3)	EACH		6			6
1050-0253	FABRICATED STRUCTURAL STEEL REPAIR 53 (3)	EACH		10			10
1050-0254	FABRICATED STRUCTURAL STEEL REPAIR 54 (3)	EACH		9			9
1050-0255	FABRICATED STRUCTURAL STEEL REPAIR 55 (3)	EACH		3			3
1050-0256	FABRICATED STRUCTURAL STEEL REPAIR 56 (3)	EACH		1			1
1050-0257	FABRICATED STRUCTURAL STEEL REPAIR 57 (3)	EACH		1			1
1050-0258	FABRICATED STRUCTURAL STEEL REPAIR 58 (3)	EACH		4			4
1050-0259	FABRICATED STRUCTURAL STEEL REPAIR 59 (3)	EACH		2			2
1050-0260	FABRICATED STRUCTURAL STEEL REPAIR 60 (3)	EACH			28		28
1050-0261	FABRICATED STRUCTURAL STEEL REPAIR 61 (3)	EACH	2				2
1050-0262	FABRICATED STRUCTURAL STEEL REPAIR 62 (3)	EACH				1	1
1050-0263	FABRICATED STRUCTURAL STEEL REPAIR 63 (3)	EACH		6		664	670
1050-0264	FABRICATED STRUCTURAL STEEL REPAIR 64 (3)	EACH		62			62
1050-0265	FABRICATED STRUCTURAL STEEL REPAIR 65 (3)	EACH		11			11
1050-0266	FABRICATED STRUCTURAL STEEL REPAIR 66 (3)	EACH		1			1
1050-0267	FABRICATED STRUCTURAL STEEL REPAIR 67 (3)	EACH		6			6
1050-0268	FABRICATED STRUCTURAL STEEL REPAIR 68 (3)	EACH			1		1

QUANTITY NOTES:

(1) SEE CONTRACT SPECIAL PROVISIONS

(2) INCLUDES CONCRETE AND REINFORCEMENT IN APPROACH SLAB, BARRIER REPLACEMENT IN SPAN 4, AND BARRIER REPLACEMENTS AT LIGHT POLES AND JUNCTION BOXES

(3) SEE STRUCTURE REPAIR MASTER LIST FOR CROSS REFERENCES OF REPAIR TYPES TO ITEM NUMBERS

NOTES:

1. WORK THIS SHEET WITH SHEETS 7 AND 9.
2. FOR STRUCTURE REPAIR MASTER LIST SEE SHEET 6.
3. FOR THIS SHEET ONLY, COLUMNS WHERE REPAIRS DO NOT OCCUR HAVE BEEN OMITTED FOR CLARITY.
4. ITEM 1050-0209 HAS BEEN OMITTED.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SUMMARY OF QUANTITIES 2

RECOMMENDED
OCTOBER 26, 2022

SHEET 8 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:54:23 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Quantities 3.dgn

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

ITEM NO.	DESCRIPTION - S-40253 NEW KENSINGTON BRIDGE	UNIT	EAST ABUTMENT	EAST APPROACH BENTS	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	WEST ABUTMENT	EAST APPROACH SUPER-STRUCTURE	SPANS 10 THRU 12 SUPER-STRUCTURE	SPANS 13 AND 14 SUPER-STRUCTURE	EAST APPROACH SLAB	WEST APPROACH SLAB	TOTAL
5051-0000	DOWNSPOUTING, GALVANIZED, REMOVE AND REPLACE (1)	LF		490	94	106		80	30							800
1070-0200	PAINTING EXISTING STRUCTURAL STEEL	LS														
1070-0325	PRIMING TOP FLANGES	LS														
1070-0350	PENETRATING SEALER AND CAULKING APPLICATION (3)	DOLLAR									100000	110000	10000			220000
1072-0100	CONTAINMENT	LS														
1072-0200	WASTE MANAGEMENT	LS														
1072-0300	WORKER HEALTH AND SAFETY	LS														
1090-1014	ACCELERATED EXPANSION DAM REPLACEMENT, 3" MOVEMENT	LF											31			31
5090-1015	ACCELERATED EXPANSION DAM REPLACEMENT, 3 1/2" MOVEMENT, NON-STANDARD RETAINER (1)	LF										62				62
5090-1016	ACCELERATED EXPANSION DAM REPLACEMENT, 4" MOVEMENT, NON-STANDARD RETAINER (1)	LF									31					31
9000-0218	ACCELERATED EXPANSION DAM REPLACEMENT, 5" MOVEMENT, NON-STANDARD RETAINER (1)	LF									31	31				62
1091-0331	EPOXY INJECTION CRACK SEAL	LF	4			35	34	18	39	73						203
9000-0201	PACK RUST REPAIRS, EYE BARS (1)	EACH										28				28
9000-0202	PACK RUST REPAIR, JOINT OR CHORD (1)	EACH										57				57
9000-0203	JACKING BRIDGE SUPERSTRUCTURE (1)	LS														
9000-0204	CLEAN AND LUBRICATE BEARING (1)	EACH				4		4								8
9000-0205	CLEAN AND FLUSH BRIDGE SEATS (1)	EACH	1					1								2
9000-0206	REPLACE WALL EXPANSION JOINT MATERIAL (1)	LF								90						90
9000-0207	INSTALL BARRIER FLASHING (1)	LF									444		80			524
9000-0208	REMOVE VEGETATION (1)	LS														
9000-0209	INSTALL SPLASH BLOCK (1)	EACH		12					2							14
9000-0210	REPLACE CONDUIT (1)	LF	90													90
9000-0211	CORE NEW WEEPHOLE AND INSTALL WEEPHOLE FILTER (1)	EACH								38						38
9000-0212	REMOVE EXISTING UTILITY LINES AND CONDUIT (1)	LS														
9000-0213	INSTALL COMCAST CONDUIT (1)	LS														
9000-0214	SEAL BEARING (1)	EACH						1								1
9000-9002	REPAIR DETERIORATED CONCRETE (1)	CF	5		321	604	312	231	235	185						1893

QUANTITY NOTES:

(1) SEE CONTRACT SPECIAL PROVISIONS

(2) INCLUDES CONCRETE AND REINFORCEMENT IN APPROACH SLAB, BARRIER REPLACEMENT IN SPAN 4, AND BARRIER REPLACEMENTS AT LIGHT POLES AND JUNCTION BOXES

(3) SEE STRUCTURE REPAIR MASTER LIST FOR CROSS REFERENCES OF REPAIR TYPES TO ITEM NUMBERS

REPAIR M25

ITEM 9000-0212
REMOVAL IN APPROACH SPANS
REPAIR M25 - REMOVE EXISTING
UTILITY LINES AND CONDUIT

REPAIR M25

ITEM 9000-0212
REMOVAL IN SPAN 10 AT TRUSS END DIAGONAL
REPAIR M25 - REMOVE EXISTING
UTILITY LINES AND CONDUIT

REPAIR M25

ITEM 9000-0212
REMOVAL IN TRUSS SPANS, SPAN 13 SIMILAR
REPAIR M25 - REMOVE EXISTING
UTILITY LINES AND CONDUIT

NOTES:

1. WORK THIS SHEET WITH SHEETS 7 AND 8.
2. FOR STRUCTURE REPAIR MASTER LIST SEE SHEET 6.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SUMMARY OF QUANTITIES 3

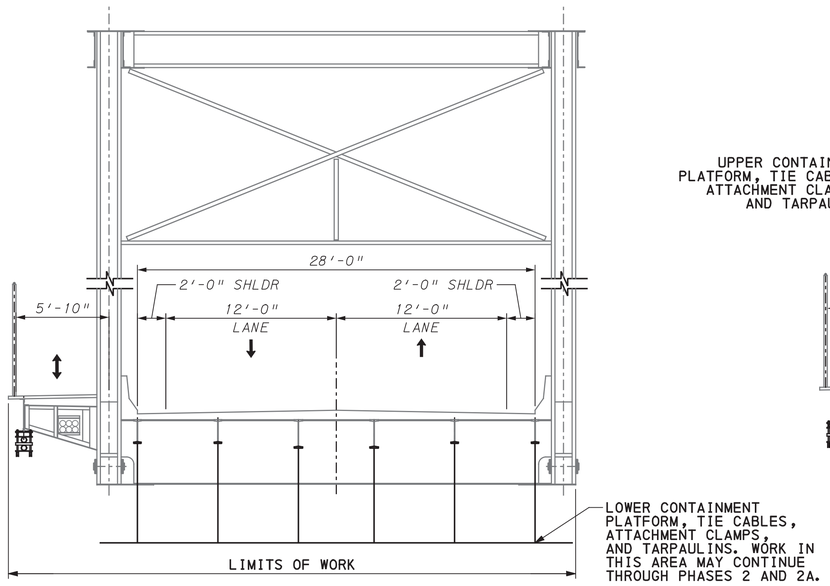
RECOMMENDED
OCTOBER 26, 2022

SHEET 9 OF 124

S - 40253

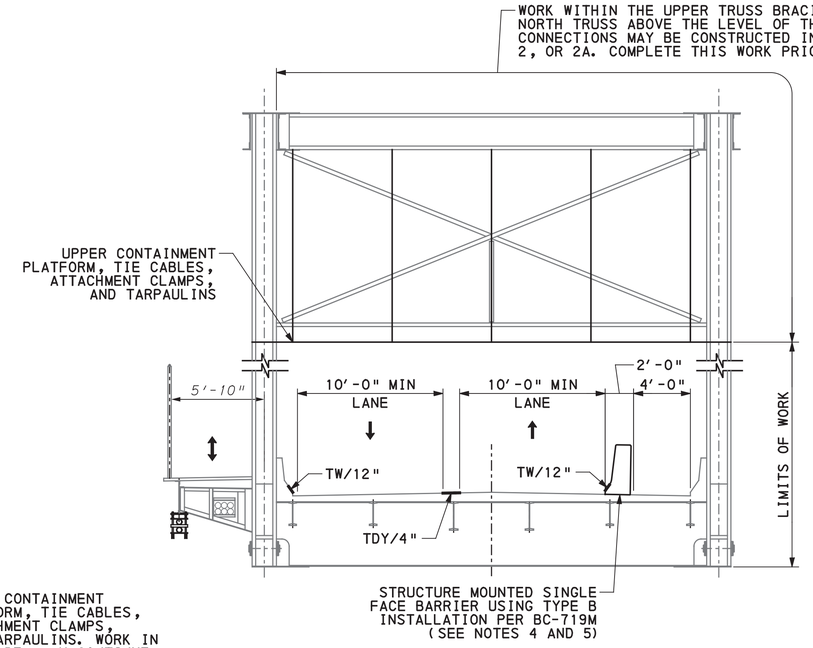
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:54:34 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Phasing.dgn



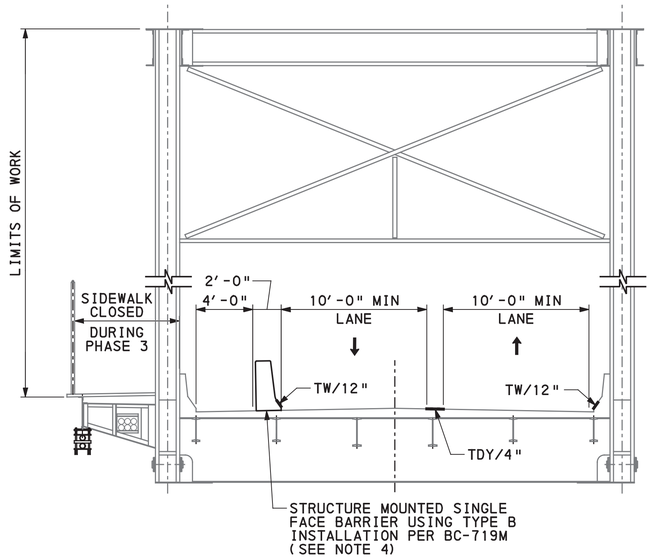
PHASE 1 - TRAFFIC CONTROL

TRUSS SPAN SHOWN; APPROACH SPANS SIMILAR
(LOOKING AHEAD STATION)
0 5 10 FEET



PHASE 2 - TRAFFIC CONTROL

TRUSS SPAN SHOWN; APPROACH SPANS SIMILAR
(LOOKING AHEAD STATION)
0 5 10 FEET



PHASE 3 - TRAFFIC CONTROL

TRUSS SPAN SHOWN; APPROACH SPANS SIMILAR
(LOOKING AHEAD STATION)
0 5 10 FEET

CONSTRUCTION PHASING NOTES:

1. FOR FURTHER DETAILS OF TRAFFIC CONTROL PHASING, SEE TRAFFIC CONTROL PLANS.
2. PHASE 1 CONSTRUCTION INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING AREAS OF THE PROJECT:
   - ALL STRUCTURAL STEEL REPAIRS AND PAINTING INCLUDING THE BENTS OF SPANS 1 THROUGH 9.
   - ALL STRUCTURAL STEEL REPAIRS AND PAINTING OF THE AREAS FROM THE TOP OF THE REAR FACE OF THE BARRIER ON THE NORTH SIDE OF THE BRIDGE TO THE EDGE OF THE UNDERSIDE OF THE SIDEWALK AS SHOWN. THIS AREA INCLUDES ALL TRUSS ELEMENTS AND FLOOR SYSTEM.
   - ALL STEEL AND OTHER REPAIRS IN SPAN 13.
   - MODIFICATIONS TO AND RECONSTRUCTION OF ALL DOWNSPOUTING INCLUDING SUPPORTS, EXCEPT WHERE NEW SCUPPERS ARE INDICATED.
   - CONSTRUCTION OF THE COMCAST CONDUIT HANGER SUPPORTS AND DUCTS (MATERIAL SUPPLIED BY OTHERS).
   - BEARING REPLACEMENT IN SPAN 1.
   - REPAIRS TO THE EAST ABUTMENT, THE WEST ABUTMENT AND THE ROADWAY FACE OF PIER 5.
   - REMOVAL OF EXISTING COMCAST UTILITIES AND CONSTRUCTION OF NEW CONDUIT DUCT BANK
   - PHASE 1 WORK MAY EXTEND INTO PHASE 2. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING MILESTONE DATES.
3. OVERHEAD TRUSS WORK MAY COMMENCE IN PHASE 1 AND CONTINUE THROUGH PHASE 2A.
   - THE SWAY AND OTHER BRACING, INCLUDING THE PORTAL BRACING, ABOVE THE ROADWAY.
   - PROVIDE A MINIMUM OF 14'-6" VERTICAL CLEARANCE FOR ALL WORK PLATFORMS AND PAINT CONTAINMENT OVER THE ROADWAY.
4. PHASE 2 CONSTRUCTION INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING AREAS OF THE PROJECT:
   - STEEL REPAIRS AND PAINTING ON ALL REMAINING PORTIONS OF THE SOUTH TRUSS NOT COMPLETED IN PHASE 1.
   - STEEL REPAIRS AND PAINTING OF THE THROUGH GIRDER IN SPAN 4 ON THE SOUTH SIDE OF THE BRIDGE MAY BE CONDUCTED DURING THIS PHASE. REPLACEMENT OF THE BARRIER ALONG THE SOUTH GIRDER MAY ALSO BE CONDUCTED IN THIS PHASE.
   - CONSTRUCTION OF THE BARRIER FLASHING.
   - CONSTRUCTION OF BARRIER PROTECTIVE FENCE IN SPAN 13. NOTE THAT ANY WORK IN SPAN 13 OVER THE RAILROAD MUST COMPLY WITH APPROPRIATE NORFOLK SOUTHERN REQUIREMENTS.
5. PHASE 2A CONSTRUCTION WILL BE CONDUCTED UNDER A FULL BRIDGE CLOSURE AND INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING AREAS OF THE PROJECT:
   - ALL REPAIRS TO SPAN 14 INCLUDING TEMPORARY SHORING AND CONSTRUCTION OF THE JOINT REPLACEMENT AT PIER 5.
   - CONSTRUCTION OF THE WEST APPROACH SLAB.
   - ALL WORK ON THE BRIDGE DECK INCLUDING BUT NOT LIMITED TO EXPANSION JOINT REPLACEMENTS, LMC OVERLAY CONSTRUCTION, AND MODIFICATIONS TO THE DECK DRAINAGE SYSTEM.
   - REMOVAL OF EXISTING HIGHWAY LIGHTING (RDWY ITEM).
   - RECONSTRUCTION OF BARRIERS AT LIGHT POLES INCLUDING LIGHT POLE ANCHORS AND JUNCTION BOXES.
   - STRUCTURAL REPAIRS AT NEW EXPANSION JOINTS AT PIERS 2 AND 4.
6. PHASE 3 CONSTRUCTION INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING AREAS OF THE PROJECT:
   - STEEL REPAIRS AND PAINTING ON ALL REMAINING PORTIONS OF THE NORTH TRUSS NOT COMPLETED IN PREVIOUS PHASES.
   - STEEL REPAIRS AND PAINTING OF THE THROUGH GIRDER IN SPAN 4 ON THE NORTH SIDE OF THE BRIDGE MAY BE CONDUCTED DURING THIS PHASE. REPLACEMENT OF THE BARRIER ALONG THE NORTH GIRDER MAY ALSO BE CONDUCTED IN THIS PHASE.
   - REMOVAL OF THE SIDEWALK PROTECTIVE FENCE AND INSTALLATION OF NEW FENCE.
   - REMOVAL OF THE SIDEWALK OVERLAY AND PLACEMENT OF THE NEW OVERLAY.
   - COORDINATE AND CONDUCT ANY WORK REQUIRED FOR THE BRIDGE LIGHTING WITH THIS PHASE OF CONSTRUCTION.
   - COORDINATE AND CONDUCT ANY WORK REQUIRED FOR THE BRIDGE LIGHTING WITH THIS PHASE OF CONSTRUCTION.
7. OTHER WORK REQUIRED FOR PIERS 1, 2, 3 AND 4, AND FOR THE RAILROAD FACE OF PIER 5, MAY BE CONDUCTED DURING ANY PHASE OF THE PROJECT AT THE CONTRACTOR'S DISCRETION. WORK SHALL BE COORDINATED WITH OTHER WORK SPECIFICALLY BEING PERFORMED IN NOTED PHASES.

NOTES:

1. FOR GENERAL PLAN AND ELEVATION, SEE SHEET 1.
2. TRUSS SPANS SHOWN; APPROACH SPANS SIMILAR.
3. FOR ADDITIONAL REQUIREMENTS OF WORK IN SPAN 13 OVER RAILROAD, SEE SPECIAL PROVISIONS.
4. PROVIDE ADHESIVE ANCHORS FOR TEMPORARY BARRIER SIMILAR TO THE DETAILS SHOWN FOR ADHESIVE ANCHORS ON COMPOSITE ADJACENT BOX BEAMS ON BC-719M SHEET 3 OF 9.
5. COMPLETE ALL WORK FOR PHASE 2 PRIOR TO BEGINNING PHASE 2A. PHASE 2 TRAFFIC CONTROL MAY NOT BE RE-IMPLEMENTED FOLLOWING PHASE 2A.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TRAFFIC CONTROL PHASING

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

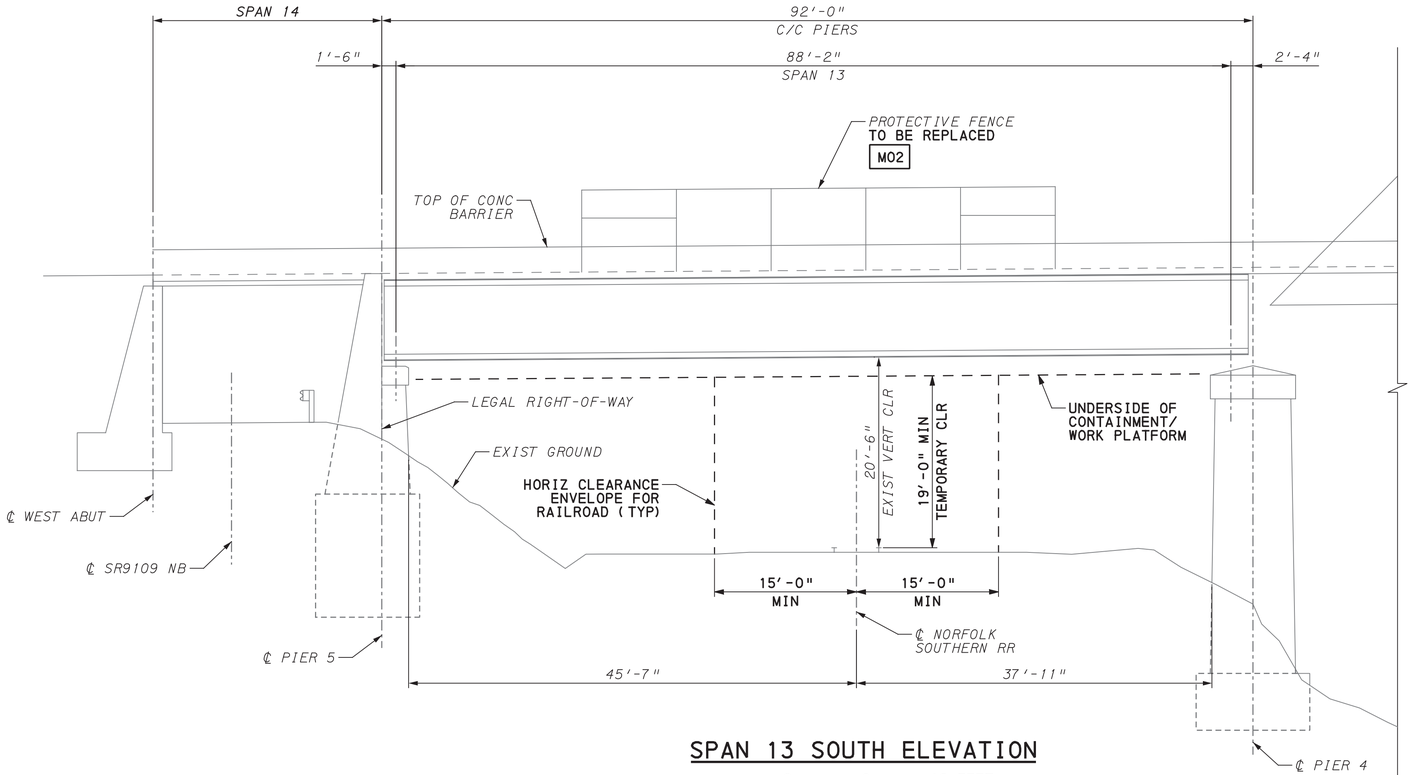
RECOMMENDED
OCTOBER 26, 2022

SHEET 10 OF 124

S - 40253

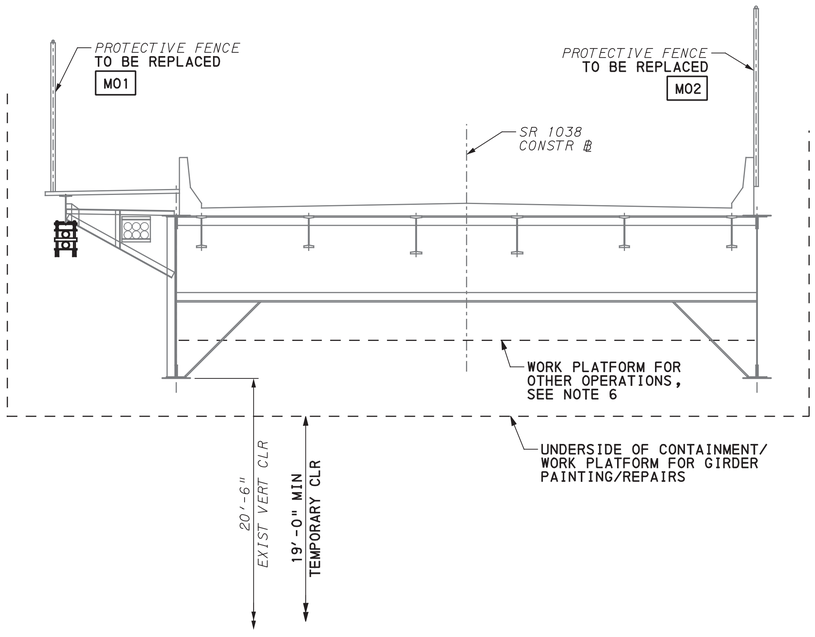
DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

PLOTTED: 10/26/2022 7:54:35 AM



SPAN 13 SOUTH ELEVATION

0 8 16 FEET



SPAN 13 TYPICAL SECTION

0 2 4 6 FEET

NOTES:

1. CONDUCT ALL WORK IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND NORFOLK SOUTHERN PUBLIC PROJECTS MANUAL, JANUARY 1, 2022.
2. DO NOT PLACE ANY MATERIALS, EQUIPMENT, SHORING OR OTHER ITEMS WITHIN THE DESIGNATED HORIZONTAL CLEARANCE ENVELOPE.
3. DO NOT STORE ANY HAZARDOUS OR FLAMMABLE MATERIALS UNDER THE BRIDGE OR WITHIN RAILROAD RIGHT OF WAY.
4. CONSTRUCTION AND PAINTING OPERATIONS UNDER THE STRUCTURE, INCLUDING OPERATIONS WITHIN THE CONTAINMENT OR THE WORK PLATFORM, MAY ONLY BE CONDUCTED UNDER FLAGGING OPERATIONS.
5. COMPLETE ALL WORK WHICH REQUIRES THE USE OF THE WORK PLATFORM AND CONTAINMENT IN SPAN 13 WITHIN TWENTY-ONE (21) CALENDAR DAYS. WORK INCLUDES PLACEMENT AND REMOVAL OF THE PLATFORM, STEEL REPAIRS, BLASTING AND PAINTING OPERATIONS. THIS WORK MUST OCCUR BETWEEN SEPTEMBER 10, 2023 AND SEPTEMBER 30, 2023 UNLESS OTHERWISE APPROVED BY NORFOLK SOUTHERN.
6. UNDERDECK SHIELDING OR OTHER FALL PROTECTION REQUIRED FOR OTHER CONSTRUCTION OPERATIONS NOT PERFORMED WITHIN THE 21 DAY TIME FRAME SHALL BE PLACED ABOVE THE TOP OF THE BOTTOM FLANGE OF THE EXISTING GIRDER SO TO NOT REDUCE THE EXISTING VERTICAL CLEARANCE.
7. THE CONTRACTOR IS TO RESUBMIT A REQUEST FOR A REDUCED TEMPORARY CLEARANCE FOR REVIEW AND APPROVAL BY NORFOLK SOUTHERN A MINIMUM OF 60 DAYS IN ADVANCE OF THE WORK.
8. 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 NS PIPE AND WIRE FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: HTTP://WWW.NSCORP.COM/CONTENT/NSCORP/EN/REAL-ESTATE/NORFOLK-SOUTHERN-SERVICES/WIRE-PIPELINE-FIBER-OPTIC-PROJECTS.HTML. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR QUANTITIES AND LIMITS OF REPAIRS, SEE FRAMING, SUBSTRUCTURE AND DECK PLANS.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 13 CONSTRUCTION CLEARANCES

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 11 OF 124

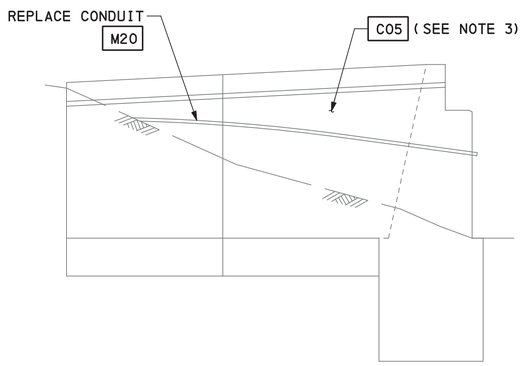
S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 13 Elevation.dgn

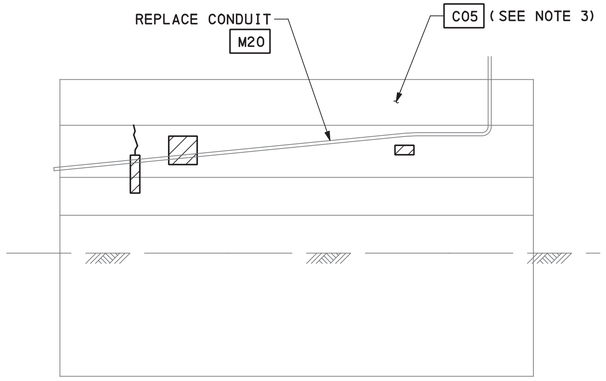
PLOTTED: 10/26/2022 7:54:37 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\East Abutment.dgn



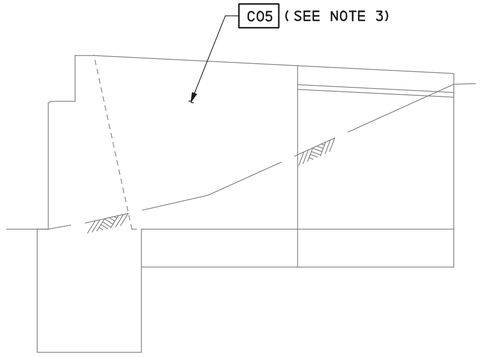
NORTHEAST WINGWALL ELEVATION

0 8 16 FEET



EAST ABUTMENT ELEVATION

0 8 16 FEET



SOUTHEAST WINGWALL ELEVATION

0 8 16 FEET

LEGEND:

C00 DENOTES REPAIR

EPOXY INJECTION CRACK SEAL (C03)

REPAIR DETERIORATED CONCRETE (C02)

REPAIR DESCRIPTION AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C02	SUBSTRUCTURE SPALL REPAIR	20	CF	5
C03	EPOXY INJECTION CRACK SEAL	N/A	LF	4
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	2000
M20	REPLACE CONDUIT	12	LF	90

REPAIR M20

ITEM 9000-0210
REPAIR M20 - REPLACE CONDUIT

REPAIR M20

ITEM 9000-0210
REPAIR M20 - REPLACE CONDUIT

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE ABUTMENT, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

EAST ABUTMENT ELEVATION & REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

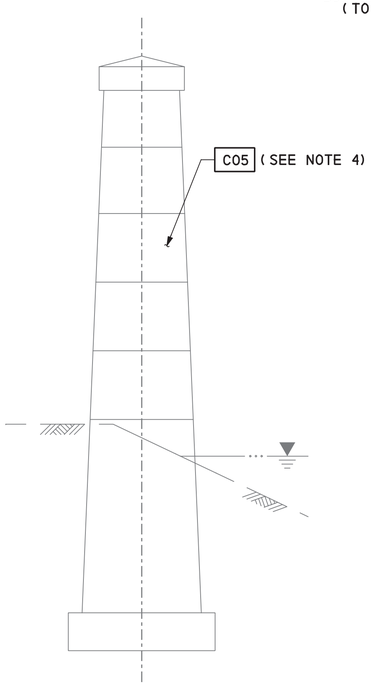
SHEET 12 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

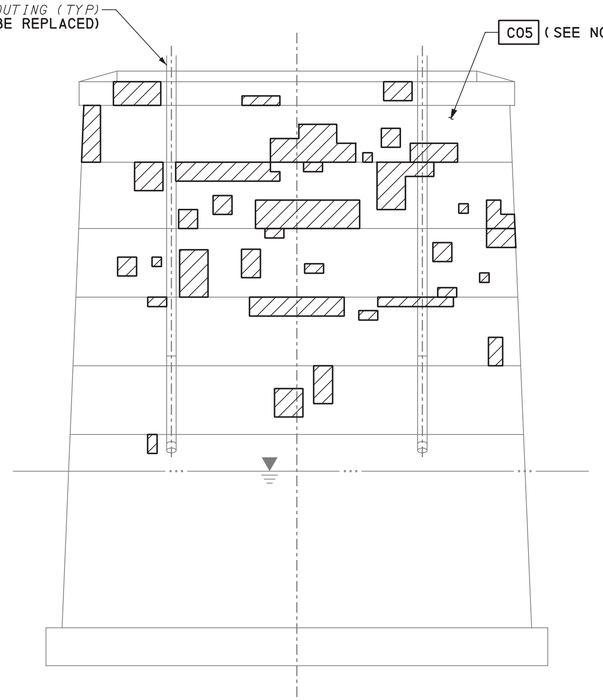
PLOTTED: 10/26/2022 7:54:43 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Pier 1.dgn



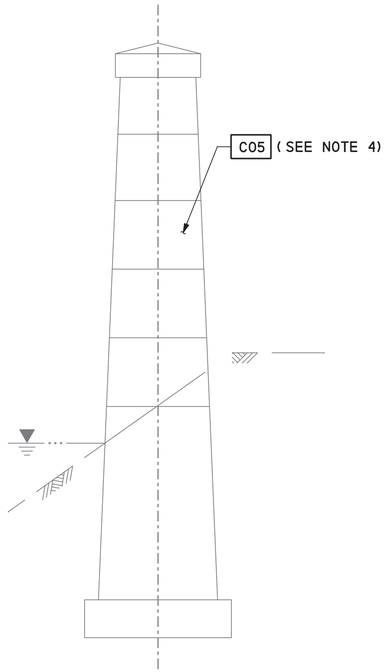
PIER 1 - NORTH FACE

0 8 16 FEET



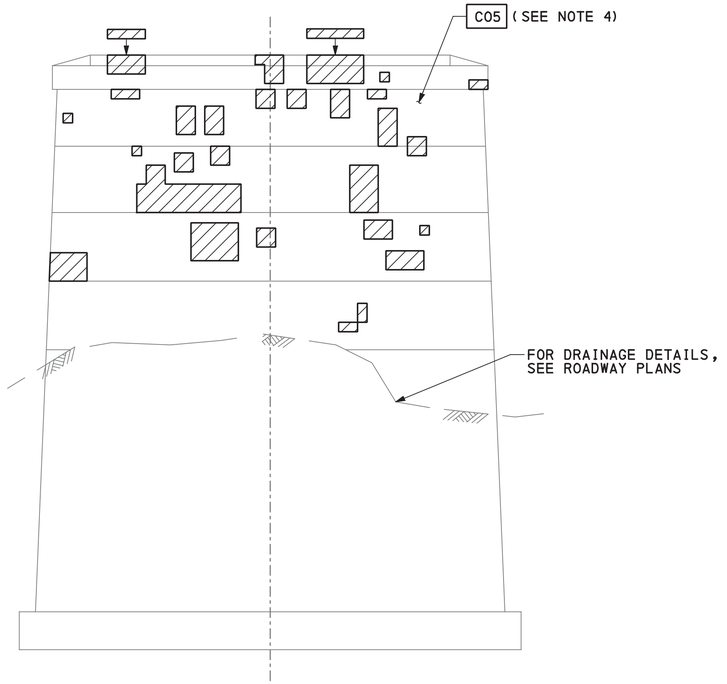
PIER 1 - WEST FACE

0 8 16 FEET



PIER 1 - SOUTH FACE

0 8 16 FEET



PIER 1 - EAST FACE

0 8 16 FEET

LEGEND:

- C00 — DENOTES REPAIR
- EPOXY INJECTION CRACK SEAL (C03)
- REPAIR DETERIORATED CONCRETE (C02)

REPAIR DESCRIPTION AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C02	SUBSTRUCTURE SPALL REPAIR	20	CF	321
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	4600

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEET 108.
4. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE AND APPROXIMATELY ONE FOOT ABOVE NORMAL POOL ELEVATION.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

PIER 1 ELEVATION & REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

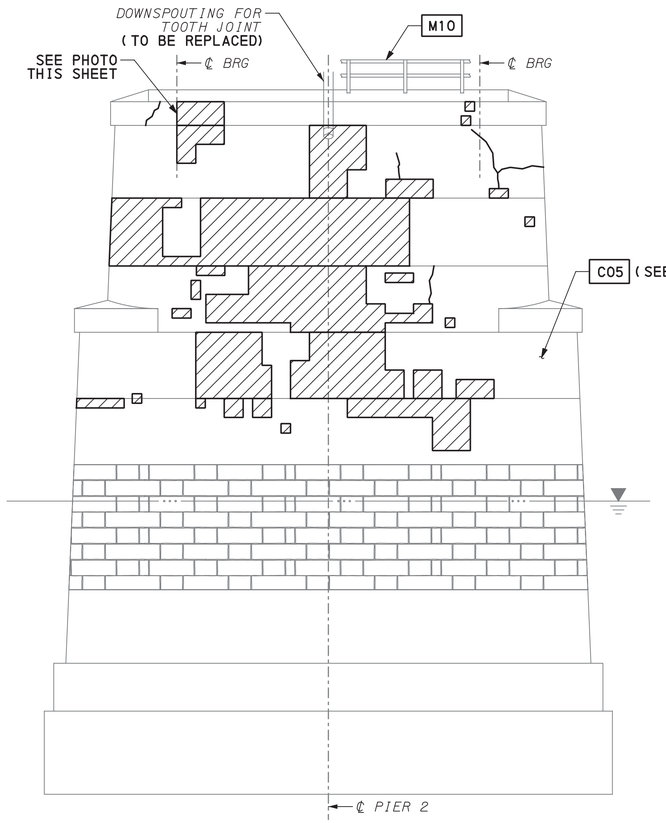
RECOMMENDED
OCTOBER 26, 2022

SHEET 13 OF 124

S - 40253

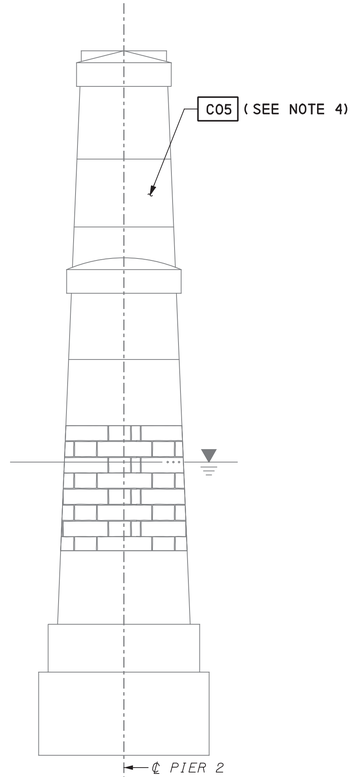
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:54:46 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structures\Pier 2.dgn



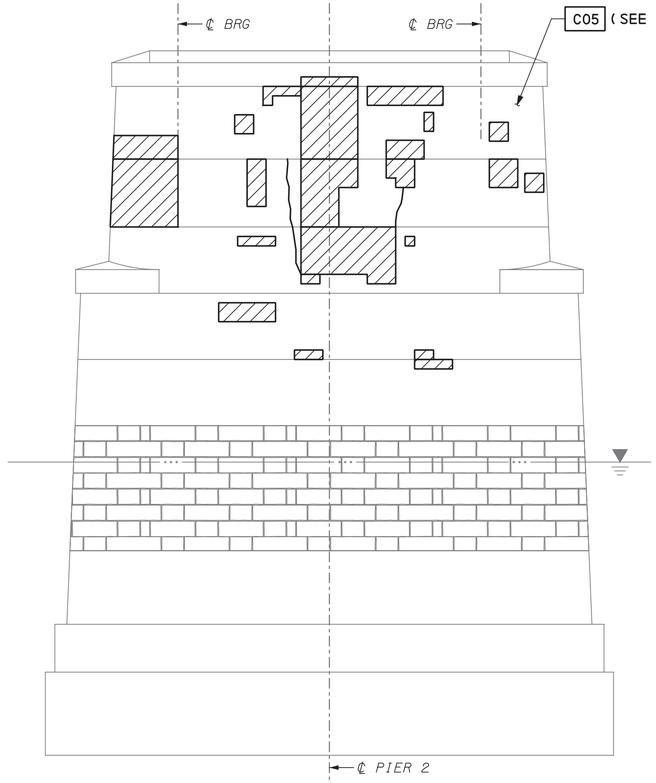
PIER 2 - WEST FACE

0 8 16 FEET



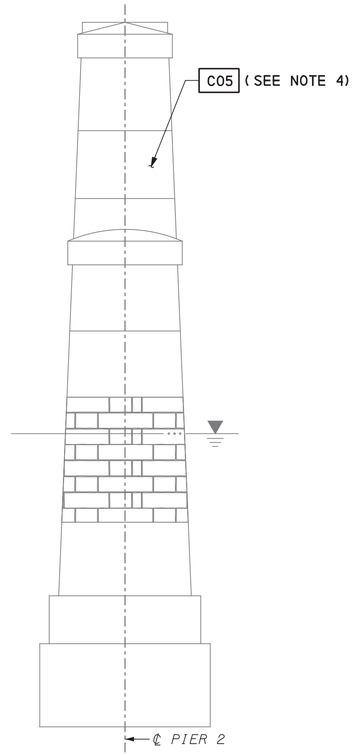
PIER 2 - SOUTH FACE

0 8 16 FEET



PIER 2 - EAST FACE

0 8 16 FEET

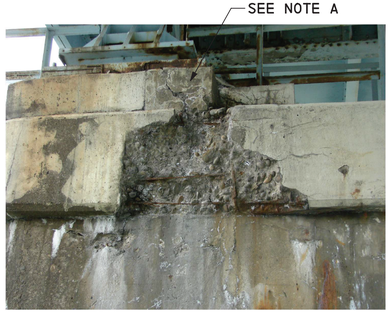


PIER 2 - NORTH FACE

0 8 16 FEET

LEGEND:

C00	DENOTES REPAIR
~	EPOXY INJECTION CRACK SEAL (C03)
▨	REPAIR DETERIORATED CONCRETE (C02)



REPAIR C02

PIER 2 WEST FACE NEAR NORTH TRUSS BEARING

REPAIR M10

ITEM 1050-0261
REPAIR M10 - REPLACE PIER WALKWAY RAILING

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEET 108.
4. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO APPROXIMATELY ONE FOOT ABOVE NORMAL POOL ELEVATION.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C02	SUBSTRUCTURE SPALL REPAIR	20	CF	604
C03	EPOXY INJECTION CRACK SEAL	N/A	LF	35
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	5200
M10	REPLACE PIER WALKWAY RAILING	14	EA	2

NOTE:

A. VERIFY SOUNDNESS OF CONCRETE AT BEARING PEDESTAL. REPORT FINDINGS TO THE REPRESENTATIVE.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

PIER 2 ELEVATION & REPAIRS

RECOMMENDED

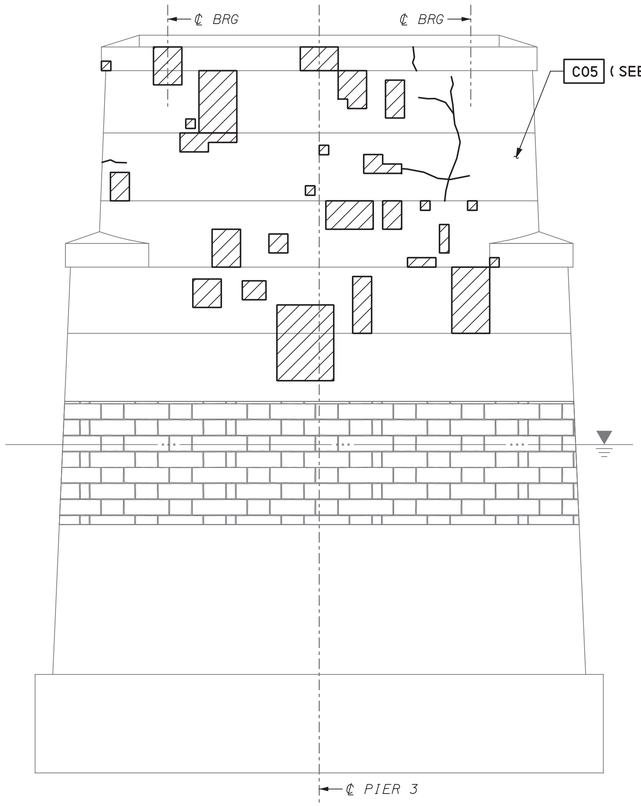
OCTOBER 26, 2022

SHEET 14 OF 124

S - 40253

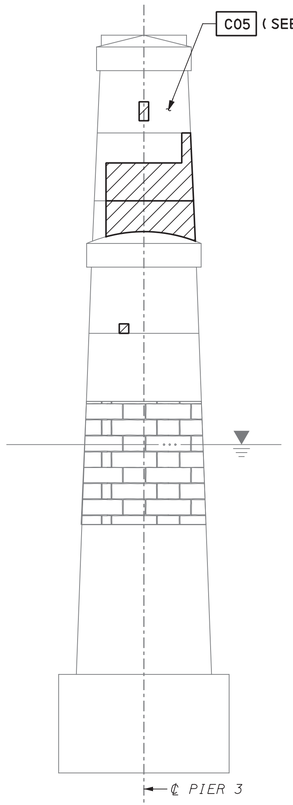
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:54:54 AM



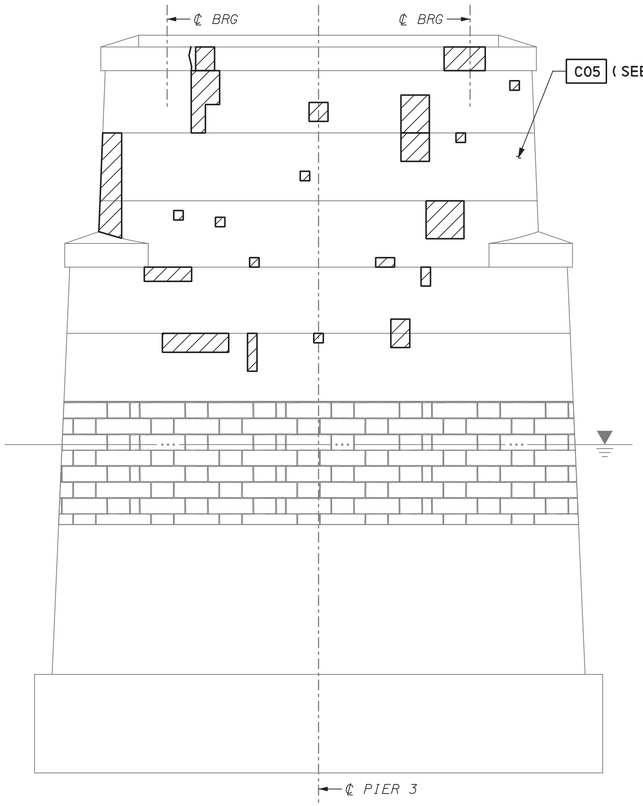
PIER 3 - WEST FACE

0 8 16 FEET



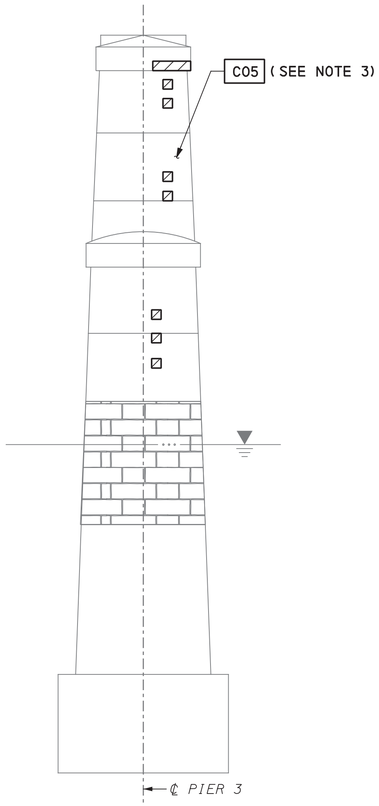
PIER 3 - SOUTH FACE

0 8 16 FEET



PIER 3 - EAST FACE

0 8 16 FEET



PIER 3 - NORTH FACE

0 8 16 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO APPROXIMATELY ONE FOOT ABOVE NORMAL POOL ELEVATION.

LEGEND:

- C00 — DENOTES REPAIR
- EPOXY INJECTION CRACK SEAL (C03)
- REPAIR DETERIORATED CONCRETE (C02)

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C02	SUBSTRUCTURE SPALL REPAIR	20	CF	312
C03	EPOXY INJECTION CRACK SEAL	N/A	LF	34
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	5100

REPAIR C02

PIER 3 WEST FACE

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

PIER 3 ELEVATION & REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

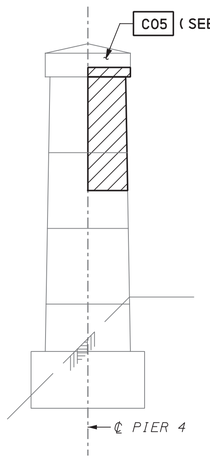
SHEET 15 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

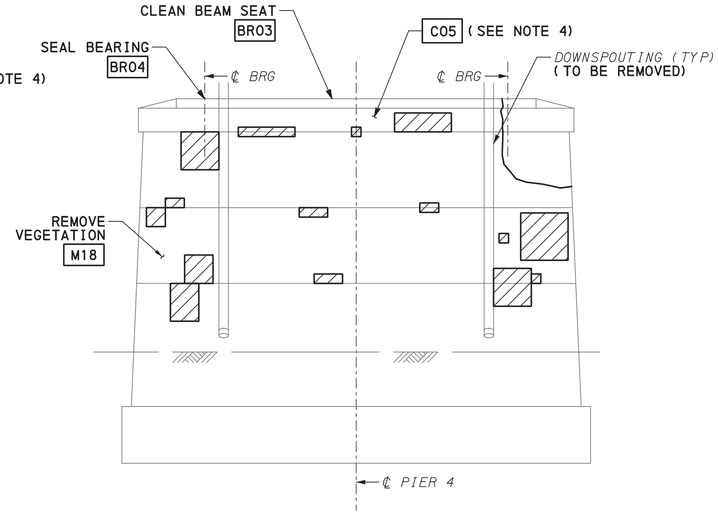
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\Pier 3.dgn

PLOTTED: 10/26/2022 7:54:58 AM



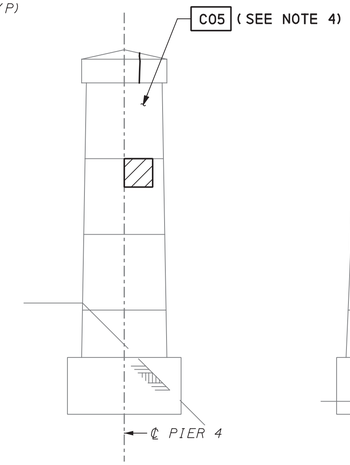
PIER 4 - NORTH FACE

0 8 16 FEET



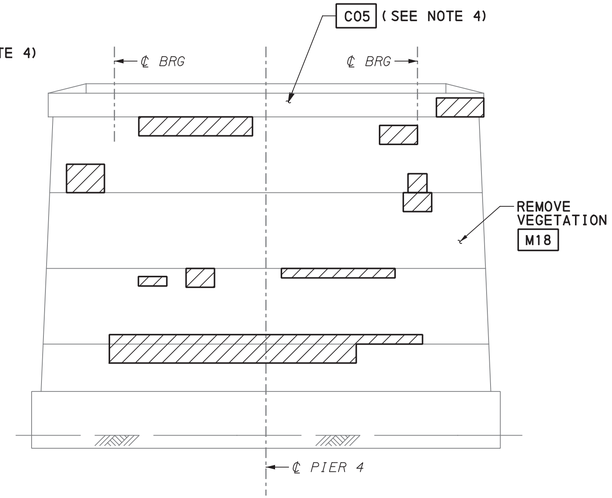
PIER 4 - WEST FACE

0 8 16 FEET



PIER 4 - SOUTH FACE

0 8 16 FEET



PIER 4 - EAST FACE

0 8 16 FEET

DURING VEGETATION REMOVAL ON THE WEST FACE OF PIER 4, DO NOT DISTURB EXISTING GROUND LINE OR IMPACT DRAINAGE ON RAILROAD PROPERTY. REMOVE VEGETATION AT GROUND LEVEL.

LEGEND:

C00 DENOTES REPAIR

EPOXY INJECTION CRACK SEAL (C03)

REPAIR DETERIORATED CONCRETE (C02)

REPAIR M18

ITEM 9000-0208
REPAIR M18 - REMOVE VEGETATION
SEE SPECIAL PROVISIONS

REPAIR BR04

ITEM 9000-0214
REPAIR BR04 - SEAL BEARING
SEE SPECIAL PROVISIONS

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEET 109.
4. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE AND APPROXIMATELY ONE FOOT ABOVE NORMAL POOL ELEVATION.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
BR03	CLEAN BEAM SEAT	N/A	EA	1
BR04	SEAL BEARING	N/A	EA	1
C02	SUBSTRUCTURE SPALL REPAIR	20	CF	231
C03	EPOXY INJECTION CRACK SEAL	N/A	LF	18
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	4000
M18	REMOVE VEGETATION	N/A	LS	

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

PIER 4 ELEVATION & REPAIRS

RECOMMENDED

OCTOBER 26, 2022

SHEET 16 OF 124

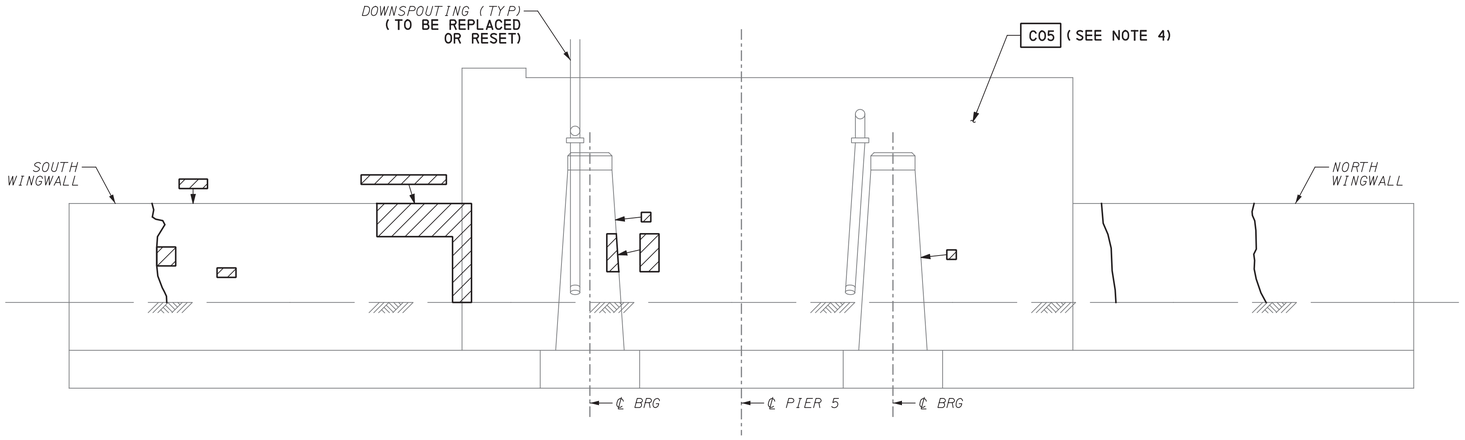
S - 40253

DES: EAL | CKD: TSA | DWG: EAL | CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Pier 4.dgn

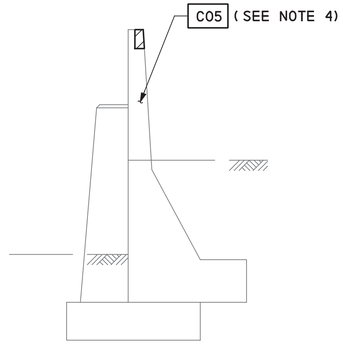
PLOTTED: 10/26/2022 7:55:04 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Pier 5.dgn



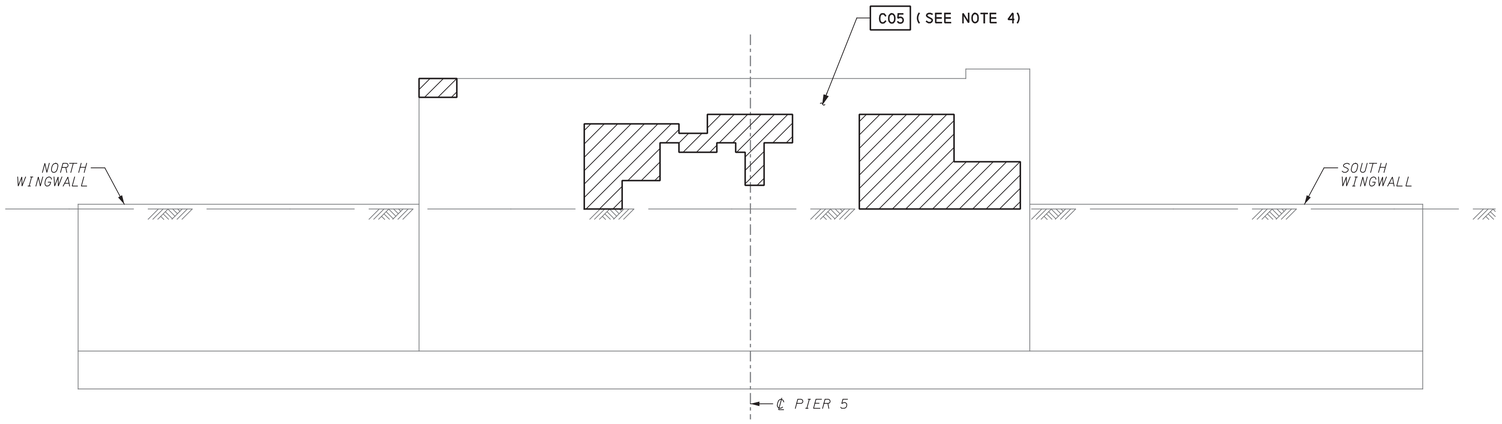
PIER 5 - EAST FACE

0 8 16 FEET



PIER 5 - NORTH FACE

0 8 16 FEET



PIER 5 - WEST FACE

0 8 16 FEET

REPAIR DESCRIPTION AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C02	SUBSTRUCTURE SPALL REPAIR	20	CF	223
C03	EPOXY INJECTION CRACK SEAL	N/A	LF	34
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	3750

LEGEND:

- C00 — DENOTES REPAIR
- ~~~ — EPOXY INJECTION CRACK SEAL (C03)
- ▨ — REPAIR DETERIORATED CONCRETE (C02)

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEET 109.
4. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
PIER 5 ELEVATION & REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER
NO.
PE-052090-E

RECOMMENDED

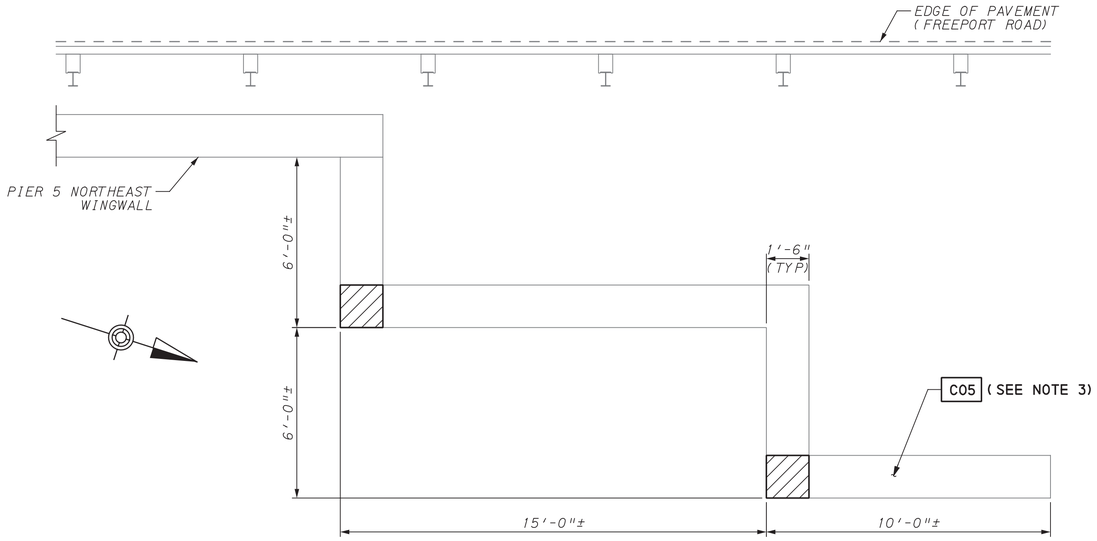
OCTOBER 26, 2022

SHEET 17 OF 124

S - 40253

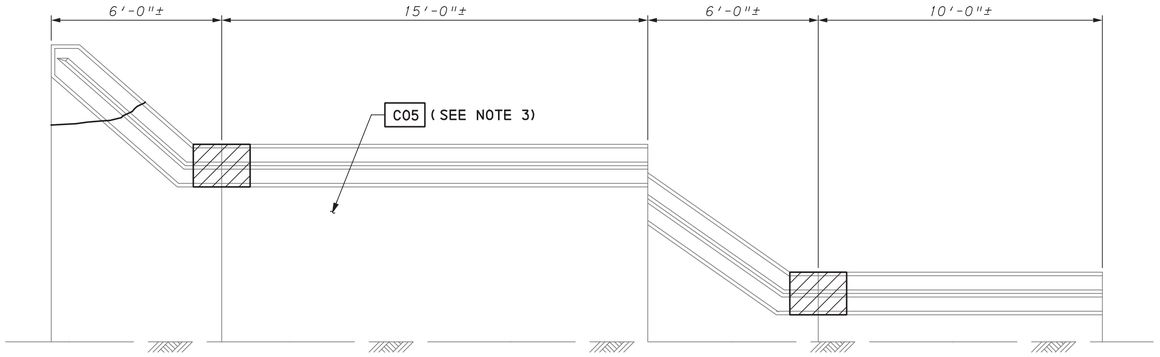
DES: EAL	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:55:05 AM



PIER 5 WALL - PLAN

0 2 4 FEET



PIER 5 WALL - DEVELOPED EAST AND NORTH FACE

0 2 4 FEET

REPAIR DESCRIPTION AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C02	SUBSTRUCTURE SPALL REPAIR	20	CF	12
C03	EPOXY INJECTION CRACK SEAL	N/A	LF	5
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	260

LEGEND:

- C00 — DENOTES REPAIR
- EPOXY INJECTION CRACK SEAL (C03)
- REPAIR DETERIORATED CONCRETE (C02)

REPAIR C02, C03 AT PIER 5 WALL

ITEM 9000-9002 REPAIR DETERIORATED CONCRETE
ITEM 1091-0331 EPOXY INJECTION CRACK SEAL

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE WALL. APPLY COATING TO THE GROUND LINE.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
PIER 5 WALL ELEVATIONS AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 18 OF 124

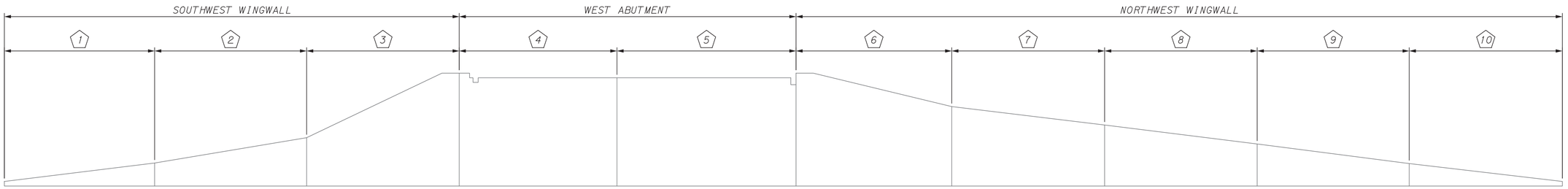
S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Pier 5 Walls.dgn

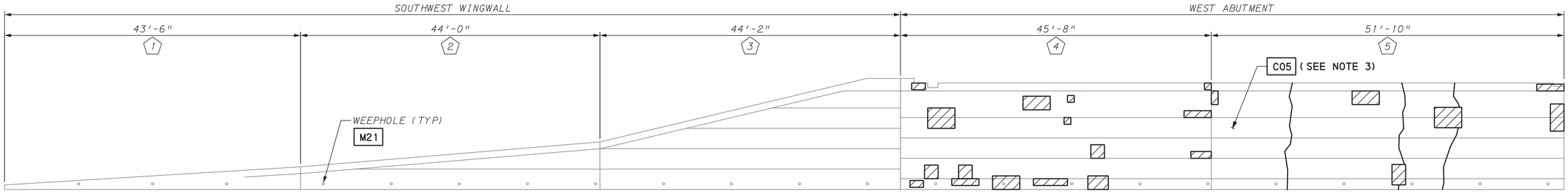
PLOTTED: 10/26/2022 7:55:13 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\West Abutment.dgn



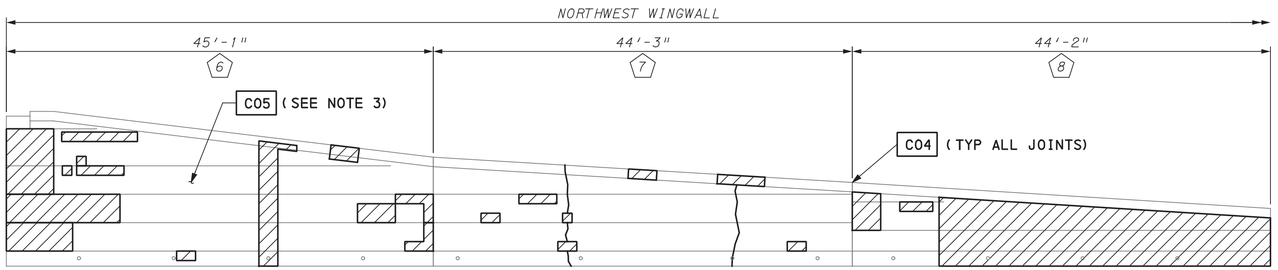
WEST ABUTMENT & WINGWALL SCHEMATIC

NOT TO SCALE



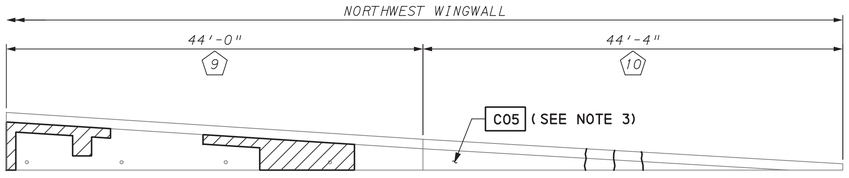
WEST ABUTMENT & WINGWALL ELEVATION

0 8 16 FEET



WEST ABUTMENT & WINGWALL ELEVATION

0 8 16 FEET



WEST ABUTMENT & WINGWALL ELEVATION

0 8 16 FEET

REPAIR M21

ITEM 9000-0211
REPAIR M21 - CORE WEEPHOLES AND INSTALL WEEPHOLE FILTER
REPRESENTATIVE CONDITIONS

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C02	SUBSTRUCTURE SPALL REPAIR	20	CF	185
C03	EPOXY INJECTION CRACK SEAL	N/A	LF	73
C04	REPLACE WALL EXPANSION JOINT MATERIAL	N/A	LF	90
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	4100
M21	CORE WEEPHOLES AND INSTALL WEEPHOLE FILTER	19	EA	38

LEGEND:

- C00 — DENOTES REPAIR
- EPOXY INJECTION CRACK SEAL (C03)
- REPAIR DETERIORATED CONCRETE (C02)
- 5 — WINGWALL PANEL NUMBER

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE ABUTMENT, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

WEST ABUTMENT ELEVATION & REPAIRS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 19 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 7:55:17 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\Concrete Repair Details.dgn

CONSTRUCTION PROCEDURE

REMOVAL, REPAIR AREA PREPARATION, AND REINFORCEMENT INSTALLATION.

- PROVIDE SATISFACTORY PROTECTIVE SHIELDING BELOW REPAIR AREAS.
- PROVIDE MEANS TO COLLECT CONCRETE AND DEBRIS FROM REMOVAL OPERATIONS AND ABRASIVE BLAST MEDIA USED TO CLEAN THE REPAIR AREAS.
- SOUND AND DETERMINE EXTENT OF REPAIR AREAS IN THE PRESENCE OF A REPRESENTATIVE.
- OUTLINE EDGE OF THE DESIGNATED REPAIR AREAS WITH A 1" MAXIMUM DEPTH SAWCUT.
- WITHIN THE OUTLINED REPAIR AREAS, REMOVE DETERIORATED CONCRETE TO A DEPTH OF ¾-INCH BEHIND THE FIRST MAT OF REINFORCEMENT BARS TO SOUND CONCRETE. ALLOW UNCOVERED OR EXPOSED REINFORCEMENT BARS TO HAVE A ¾-INCH CLEARANCE ALL AROUND. IF CONCRETE IS UNSOUND AT A DEPTH OF ¾-INCH BEHIND REINFORCEMENT BARS, DO NOT REMOVE ADDITIONAL CONCRETE WITHOUT APPROVAL OF THE STRUCTURE CONTROL ENGINEER.
- SQUARE-OUT/BEVEL EDGE OF REPAIR AREAS TO KEY IN CONSTRUCTION. USE HAND TOOLS FOR REMOVING DETERIORATED CONCRETE. USE PNEUMATIC HAMMERS, IF REQUIRED, NOT EXCEEDING AN IMPACT RATING OF 30 FOOT POUNDS. IF DETERIORATED CONCRETE EXTENDS BEYOND THE INITIALLY OUTLINED REPAIR AREA, ENLARGE AREA AS DIRECTED BY THE REPRESENTATIVE.
- AFTER REMOVAL OPERATIONS ARE COMPLETE, REMOVE DEBRIS AND LOOSE MATERIALS. IMMEDIATELY BEFORE WET ABRASIVE BLASTING (WAB), WET REPAIR AREAS WITH LOW PRESSURE WATER. CLEAN REPAIR AREAS, PREPARED SUBSTRATE AND REINFORCEMENT BARS, BY WAB. WAB EXPOSED REINFORCEMENT BARS TO NEAR-WHITE METAL ACCORDING TO SSPC-SP 10 (WAB). ONCE WAB IS COMPLETE, FLUSH REPAIR AREAS WITH WATER TO REMOVE ANY REMAINING ABRASIVE BLAST MEDIA. ENSURE REPAIR AREAS ARE DRY AND FREE OF SPENT ABRASIVE, THEN EPOXY COAT EXPOSED REINFORCEMENT BARS WITHIN THE SAME WORKDAY AS WAB. REBLAST REINFORCEMENT THAT ARE NOT EPOXY COATED WITHIN THE SAME WORKDAY OR DO NOT MEET SSPC-SP 10 (WAB). SPLICE DAMAGED OR HEAVILY CORRODED REINFORCEMENT BARS AT 50% OR MORE SECTION LOSS AS SHOWN ON STANDARD DRAWING BC-736M. IF ENOUGH SPLICE LENGTH IN NOT AVAILABLE, DRILL NEW DOWEL HOLES AND PLACE DOWEL BARS AS DIRECTED.
- PLACE EPOXY COATED NO. 4 BENT "L" REINFORCEMENT BARS IN A 1'-0" CENTER-TO-CENTER MAXIMUM SPACED GRID. ANCHOR INTO SOUND CONCRETE WITH EPOXY ANCHORING SYSTEM.
- ATTACH WWF TO THE BENT "L" REINFORCEMENT BARS WITH ANNEALED IRON WIRE AT A MAXIMUM SPACING OF 1'-0" IN EACH DIRECTION. IF USING 6X6 WWF, PLACE A SECOND LAYER OF 6X6 WWF AND STAGGER TO ACHIEVE A 3X3 GRID SPACING.
- REPAIR CONCRETE DAMAGED DURING REPAIR OPERATIONS TO THE SATISFACTION OF THE REPRESENTATIVE AT NO ADDITIONAL COST TO THE DEPARTMENT.
- PROPERLY DISPOSE COLLECTED CONCRETE, DEBRIS, AND ABRASIVE BLAST MEDIA.

CONCRETE PLACEMENT

▲ : CONVENTIONAL METHOD

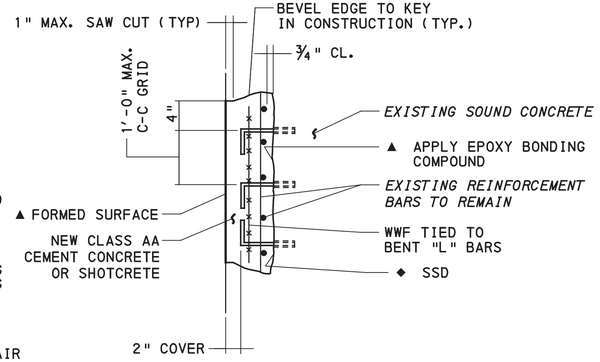
- SET FORMS TO PROVIDE MINIMUM CONCRETE COVER OF 2 INCHES. IF ENOUGH CONCRETE COVER ON EXISTING REINFORCEMENT BARS IS NOT AVAILABLE, HAUNCH REPAIR OUTWARD.
- MAINTAIN EXISTING CHAMFERS.
- AIR-BLAST REPAIR AREAS WITH OIL-FREE COMPRESSED AIR TO REMOVE ANY REMAINING CONTAMINANTS DETRIMENTAL TO THE BOND OF NEW CONCRETE. APPLY EPOXY BONDING COMPOUND TO REPAIR AREAS WHILE EPOXY BONDING COMPOUND IS STILL TACKY, PLACE CLASS AA CEMENT CONCRETE WITH NO. 8 COARSE AGGREGATE. DO NOT PLACE CONCRETE IF COMPOUND IS NO LONGER TACKY OR HAS HARDENED. RECOAT COMPOUND THAT IS NO LONGER TACKY. WIRE BRUSH HARDENED COMPOUND AND RECOAT REPAIR AREA.
- WATER CURE REPAIR AREAS.

◆ : SHOTCRETE METHOD

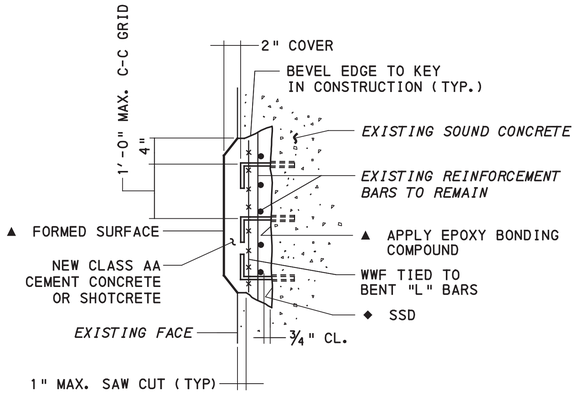
- PROVIDE MINIMUM CONCRETE COVER OF 2 INCHES. IF ENOUGH CONCRETE COVER ON EXISTING REINFORCEMENT BARS IS NOT AVAILABLE, HAUNCH REPAIR OUTWARD.
- MAINTAIN EXISTING CHAMFERS.
- AIR-BLAST REPAIR AREAS WITH OIL-FREE COMPRESSED AIR TO REMOVE ANY REMAINING CONTAMINANTS DETRIMENTAL TO THE BOND OF NEW CONCRETE.
- SATURATE PREPARED CONCRETE SUBSTRATE WITH CLEAN WATER THE DAY BEFORE SHOTCRETE APPLICATION. BRING WETTED SURFACES TO A SATURATED SURFACE DRY (SSD) CONDITION BEFORE APPLICATION OF SHOTCRETE. DO NOT APPLY SHOTCRETE TO A DRY SURFACE, OR TO A SURFACE WITH FREE SURFACE WATER.
- WATER CURE REPAIR AREAS. LIQUID MEMBRANE CURING COMPOUND MAY BE USED ONLY WHEN ACCEPTED BY THE REPRESENTATIVE.

ITEM 9000-9002 REPAIR DETERIORATED CONCRETE (FOR INFORMATION ONLY)	
(THIS ITEM INCLUDES PAYMENT FOR THE FOLLOWING MATERIALS AND THEIR INSTALLATIONS)	
DOWEL HOLES	SECTION 1003, DIAMETER IN ACCORDANCE WITH MANUFACTURES'S RECOMMENDATIONS
REINFORCEMENT BARS (EPOXY COATED)	SECTION 709.1
EPOXY ANCHORING SYSTEM	BULLETIN 15 AND MANUFACTURER'S RECOMMENDATIONS
WELDED WIRE FABRIC (WWF) EPOXY OR GALVANIZED	ASTM A185 3x3, 4x4, OR 6x6 WWF MADE OF 8, 10, OR 11 GAUGE WIRE
ANNEALED IRON WIRE	ASTM A684
▲ FORMS	SECTION 1001.2(h)
▲ EPOXY BONDING COMPOUND	ASTM C881 TYPE II, GRADE 2
▲ CLASS AA CEMENT CONCRETE	SECTION 704 EXCEPT USE NO. 8 COARSE AGGREGATE
◆ SHOTCRETE	SECTION 1043.2(a)

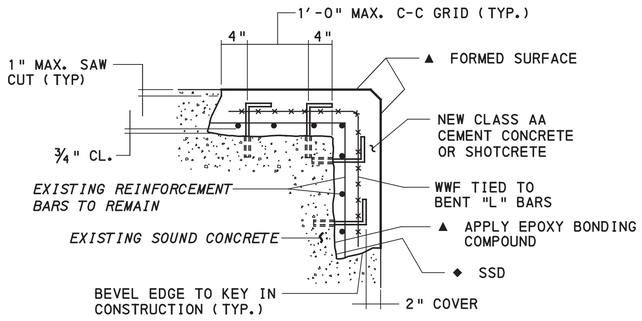
NOTE: ANY ADDITIONAL REINFORCING STEEL IS INCIDENTAL TO ITEM 9000-9002.



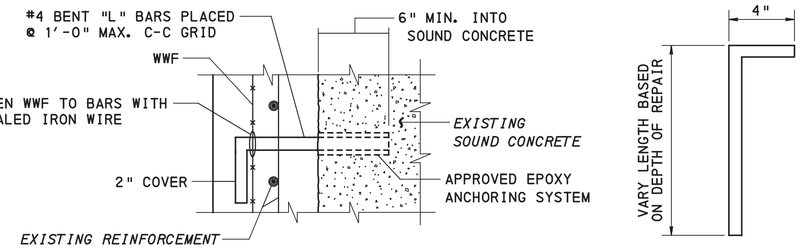
TYPICAL REPAIR DETAIL
(NOT TO SCALE)



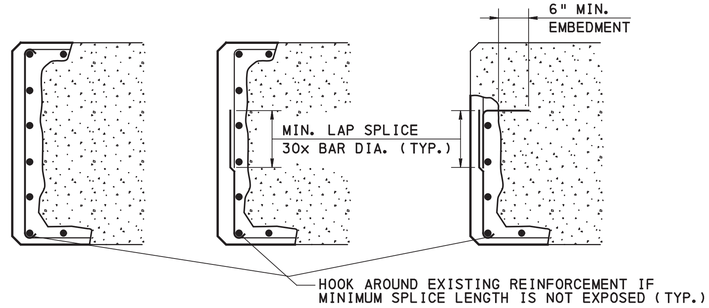
REPAIR FOR LESS THAN 2" COVER
(NOT TO SCALE)



TYPICAL CORNER REPAIR DETAIL
(NOT TO SCALE)



TYPICAL "L" BAR DETAILS
(NOT TO SCALE)



SPLICE DETAILS FOR PIER CAP STIRRUPS WITH ≥ 50% SECTION LOSS
(NOT TO SCALE)

LEGEND

▲ : CONVENTIONAL METHOD (FORM AND PLACE) ONLY
◆ : SHOTCRETE METHOD ONLY
SSD : SATURATED SURFACE DRY
WWF : WELDED WIRE FABRIC

NOTES

USE A PACHOMETER TO LOCATE EXISTING REINFORCEMENT WHEN DRILLING DOWEL HOLES TO AVOID DRILLING THRU EXISTING BARS.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
DETERIORATED CONCRETE REPAIR DETAILS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

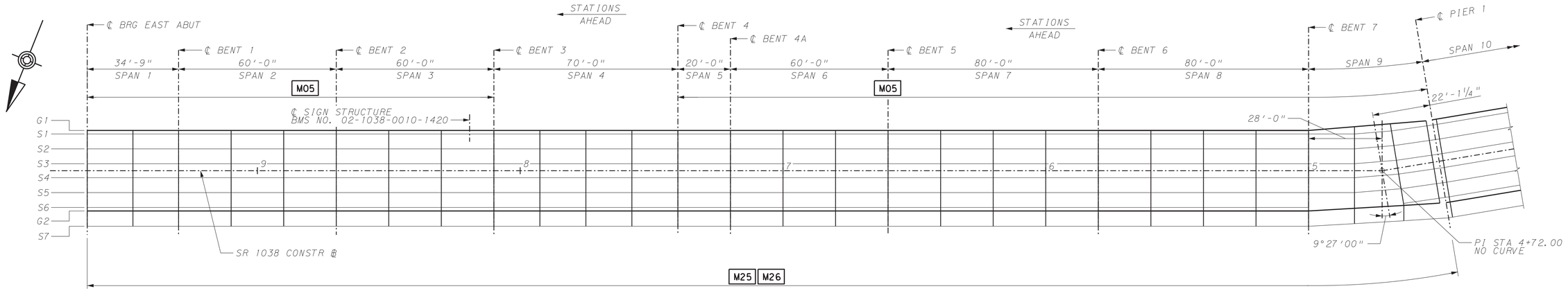
RECOMMENDED
OCTOBER 26, 2022

SHEET 20 OF 124

S - 40253

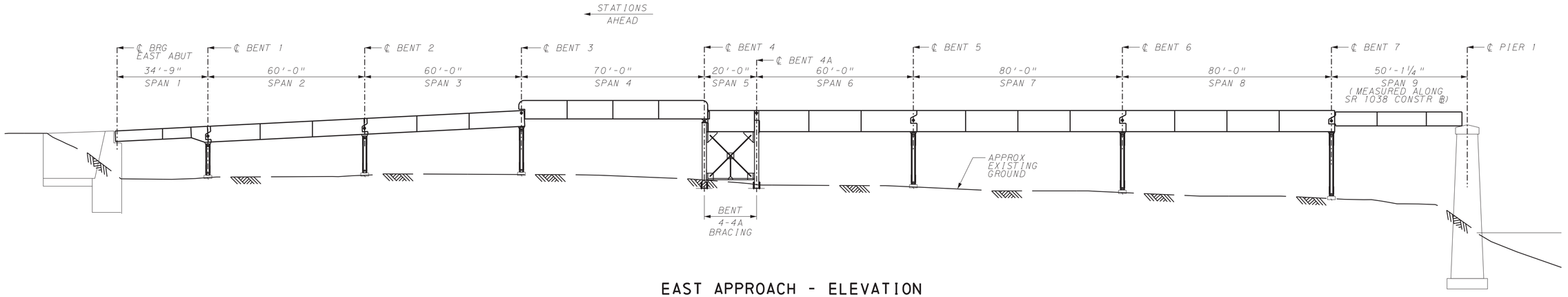
DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

PLOTTED: 10/25/2022 10:04:54 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\Newken_fr_plan_elev.dgn



EAST APPROACH - PLAN

0 20 40 FEET



EAST APPROACH - ELEVATION

0 20 40 FEET

REPAIR DESCRIPTIONS AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
M05	INSTALL BARRIER FLASHING	30	LF	444
M25	REMOVE EXISTING UTILITY LINES AND CONDUIT	9	LS	
M26	INSTALL COMCAST CONDUIT	7	LS	

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR BENT ELEVATIONS AND REPAIRS, SEE SHEETS 22 - 29.
3. FOR APPROACH SPAN FRAMING PLANS AND REPAIRS, SEE SHEETS 30 - 36.
4. FOR REPAIR TYPE [M05] DETAILS, SEE SHEET 30.
5. FOR REPAIR TYPE [M25] & [M26] DETAILS, SEE SHEETS 7 & 9.

LEGEND:

[M05] DENOTES REPAIR

DES: ABC	CKD: KTS	DWG: ABC	CKD: KTS

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
EAST APPROACH OVERALL PLAN AND ELEVATION

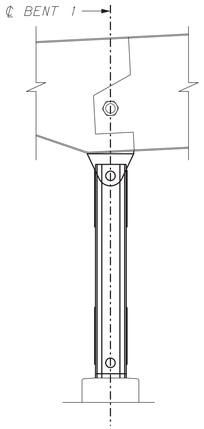
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

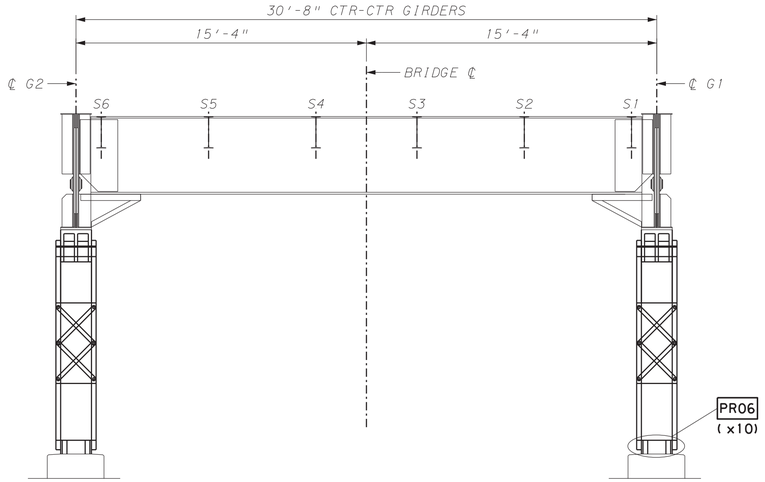
SHEET 21 OF 124

S - 40253

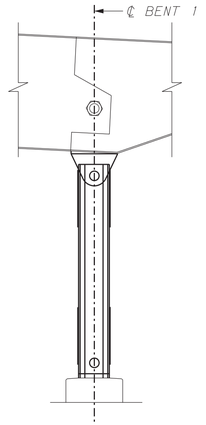
PLOTTED: 10/25/2022 10:05:18 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\Newken_ben1_01.dgn



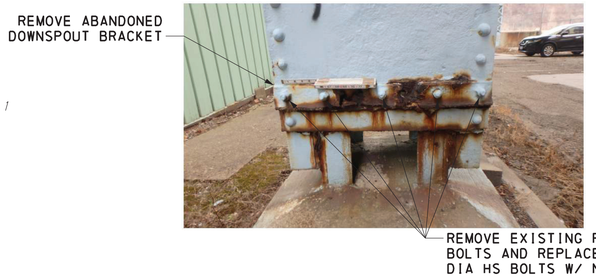
END VIEW
NORTH FACE LOOKING SOUTH



ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET



END VIEW
SOUTH FACE LOOKING NORTH

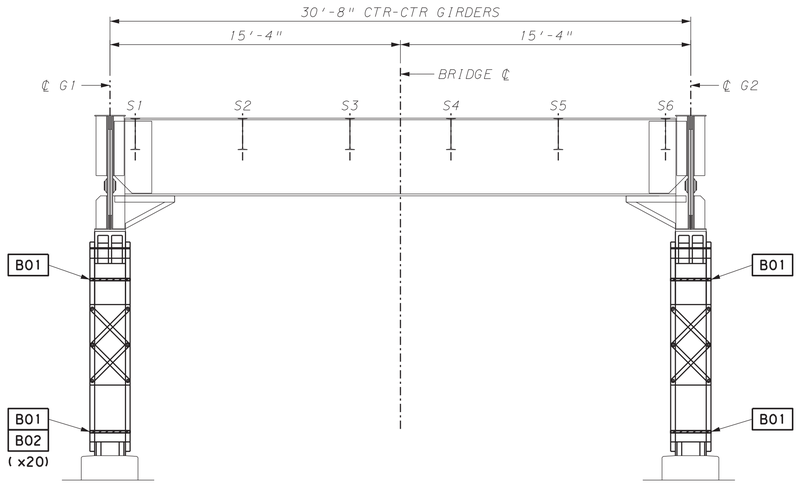


REPAIR B01

ITEM 1050-0248
REMOVE ABANDONED DOWNSPOUT BRACKET
REPRESENTATIVE PHOTO

REPAIR B01 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS OR BOLTS ATTACHING THE EXISTING ABANDONED DOWNSPOUT BRACKET TO THE BENT COLUMN.
2. REMOVE BRACKET ANGLE OR PLATE AND DISCARD.
3. REAM HOLES AS REQUIRED, USING HOLE IN OUTER-MOST PLY AS A TEMPLATE. INSTALL NEW ⅞"Ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES.



ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET

REPAIR DESCRIPTIONS AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
B01	REMOVE ABANDONED DOWNSPOUT BRACKET	22	EA	4
B02	REPLACE RIVET, BENT	65	EA	20
PR06	PACK RUST REPAIR, BENT	66	LF	10

LEGEND:
F00 DENOTES REPAIR

NOTES:
1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103- 110.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 1 ELEVATION AND REPAIRS

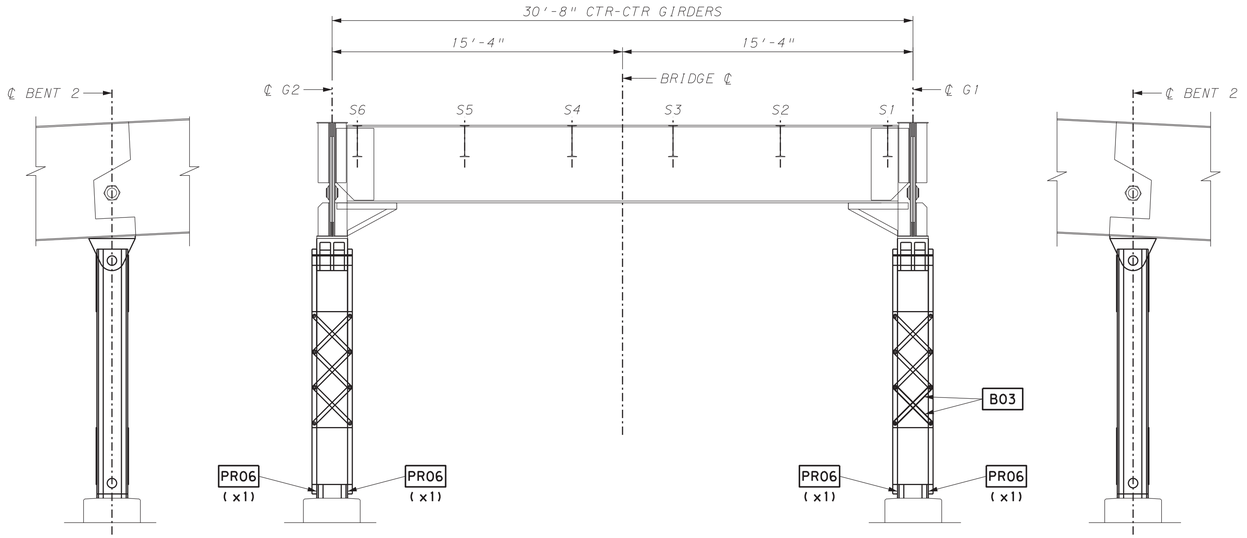
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 22 OF 124
S - 40253

DES: ABC	CKD: KTS	DWG: ABC	CKD: KTS

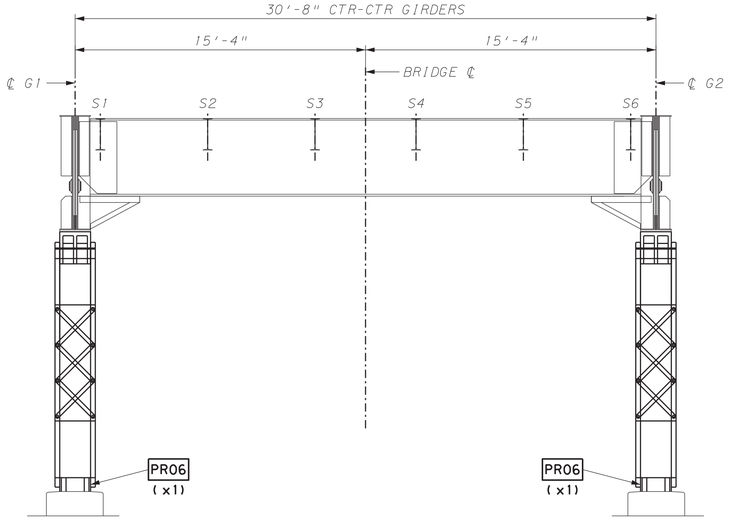
PLOTTED: 10/25/2022 10:05:46 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\NewKen_bent_02.dgn



END VIEW
NORTH FACE LOOKING SOUTH

ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET

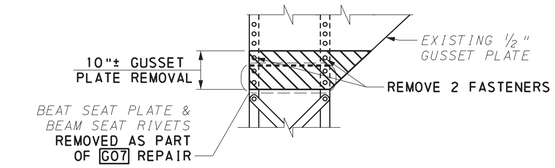
END VIEW
SOUTH FACE LOOKING NORTH



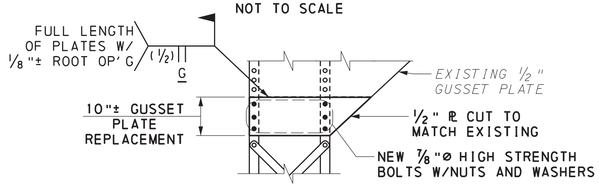
ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET

REPAIR DESCRIPTIONS AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
B03	LACING BAR REPAIR TYPE 1, BENT	50	EA	2
PR06	PACK RUST REPAIR, BENT	66	LF	6

REPAIR B10
ITEM 1050-0257
REPAIR GUSSET PLATE
REPRESENTATIVE PHOTO



GUSSET PLATE REMOVAL
NOT TO SCALE



GUSSET PLATE REPLACEMENT
NOT TO SCALE

REPAIR B10 - PROCEDURE AND NOTES

1. REMOVE GIRDER SEAT PLATE AND ASSOCIATED RIVETS AS PART OF REPAIR G07.
2. REMOVE EXISTING ½" GUSSET PLATE AS INDICATED OR AS DIRECTED BY THE REPRESENTATIVE AFTER ABRASIVE BLASTING OPERATIONS HAVE BEEN COMPLETED.
3. CUT NEW ½" GUSSET PLATE TO MATCH EXISTING GUSSET PLATE SHAPE. INSTALL GUSSET PLATE USING NEW ⅞"Ø HIGH STRENGTH BOLTS W/NUTS AND WASHERS. REAM HOLES AS REQUIRED USING OUTERMOST PLY AS A TEMPLATE.
4. WELD SEAM BETWEEN EXISTING AND NEW GUSSET PLATES AS INDICATED. WELDING MAY BE PERFORMED FROM EITHER SIDE OF GUSSET PLATE.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

LEGEND:

F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 2 ELEVATION AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL AARON BRUCE COLORITO ENGINEER PE083280

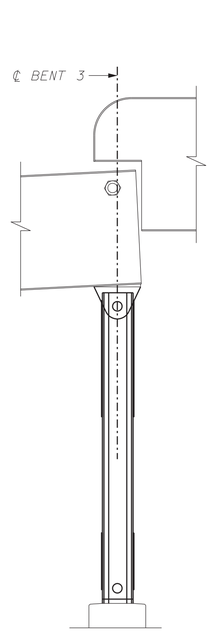
RECOMMENDED
OCTOBER 26, 2022

SHEET 23 OF 124

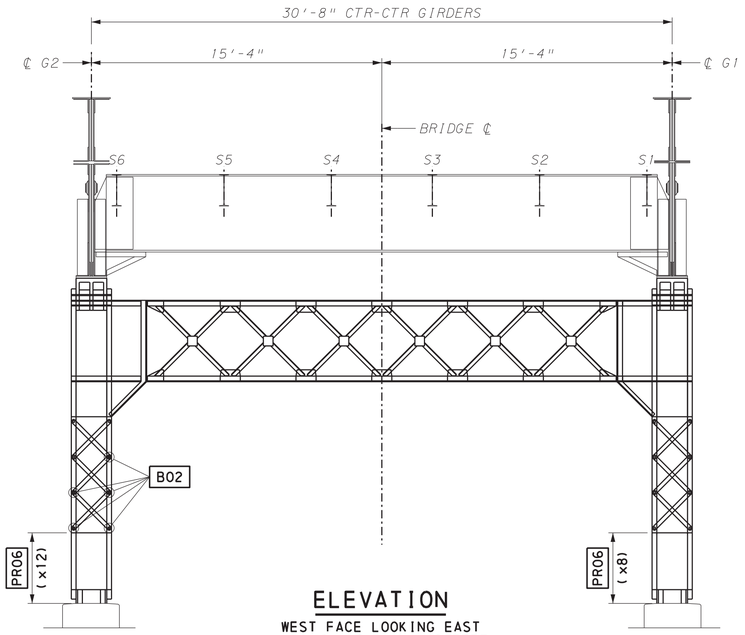
S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

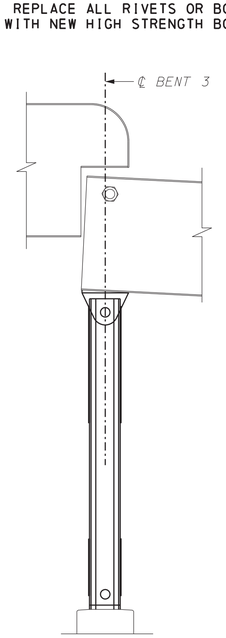
PLOTTED: 10/25/2022 10:06:11 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\designs\structures\Final\plots\Newken_bent_03.dgn



END VIEW
NORTH FACE LOOKING SOUTH



ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET



END VIEW
SOUTH FACE LOOKING NORTH

REPLACE ALL RIVETS OR BOLTS WITH NEW HIGH STRENGTH BOLTS

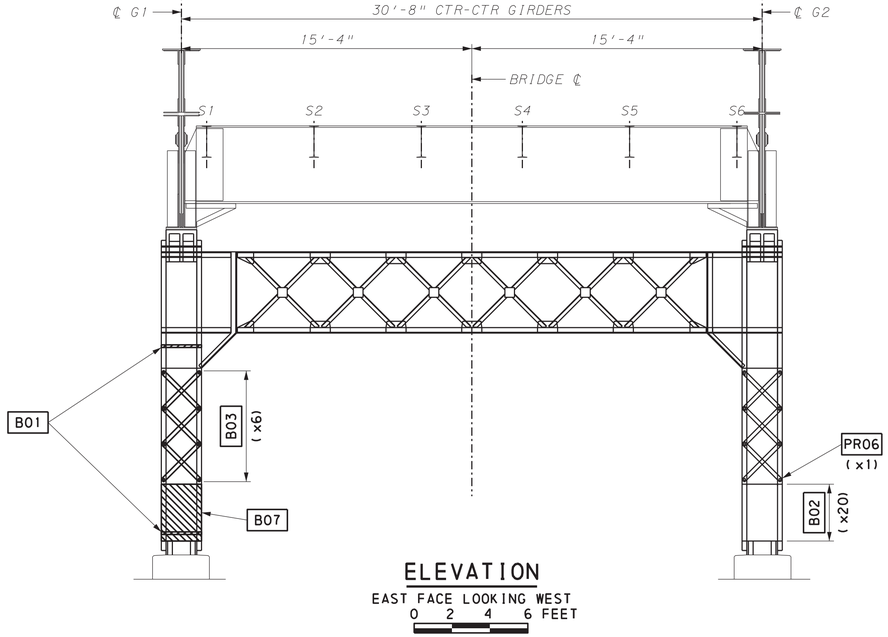
REMOVE DETERIORATED COLUMN STAY PLATE

REPAIR B07

ITEM 1050-0254
COLUMN STAY PLATE REPAIR, BENT
REPRESENTATIVE PHOTO

REPAIR B07 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS OR BOLTS ATTACHING THE EXISTING COLUMN STAY PLATE(S) TO THE COLUMN.
2. REMOVE STAY PLATE AND DISCARD.
3. REAM HOLES AS REQUIRED, USING HOLE IN OUTER-MOST PLY AS A TEMPLATE.
4. INSTALL NEW STAY PLATE. INSTALL NEW 7/8"ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES.



ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

LEGEND:

F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
B01	REMOVE ABANDONED DOWNSPOUT BRACKET	22	EA	2
B02	REPLACE RIVET, BENT	65	EA	25
B03	LACING BAR REPAIR TYPE 1, BENT	50	EA	6
B07	COLUMN STAY PLATE REPAIR, BENT	24	EA	1
PR06	PACK RUST REPAIR, BENT	66	LF	21

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

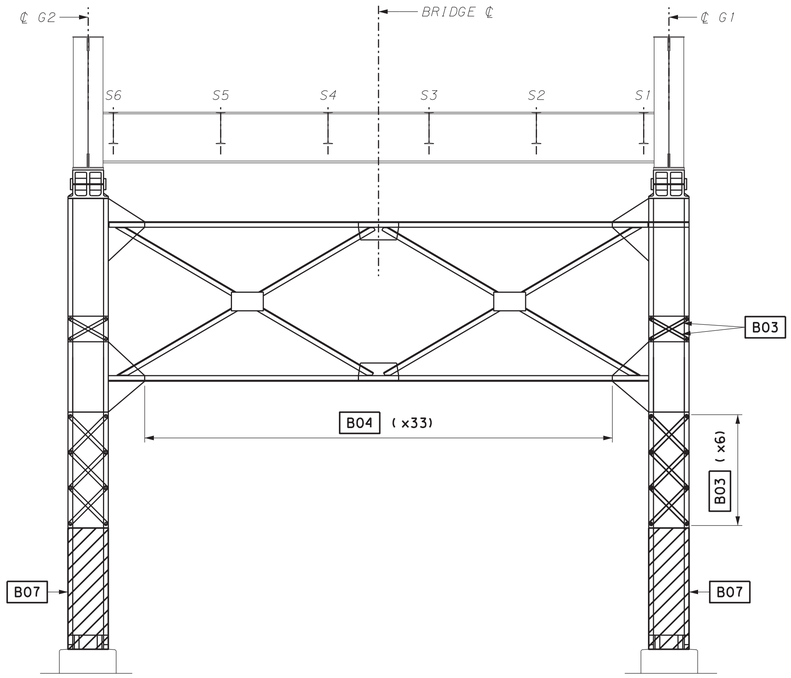
ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 3 ELEVATION AND REPAIRS

RECOMMENDED
OCTOBER 26, 2022

SHEET 24 OF 124
S - 40253

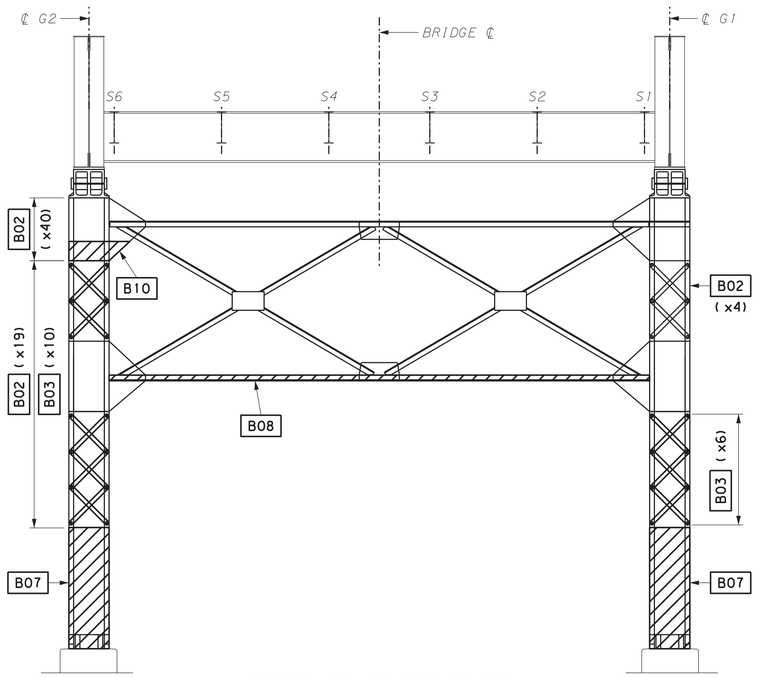
DES: ABC	CKD: KTS	DWG: ABC	CKD: KTS

PLOTTED: 10/25/2022 10:06:34 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\NewKen_bent_04_04A.dgn



BENT 4 ELEVATION

WEST FACE LOOKING EAST
0 2 4 6 FEET



BENT 4A ELEVATION

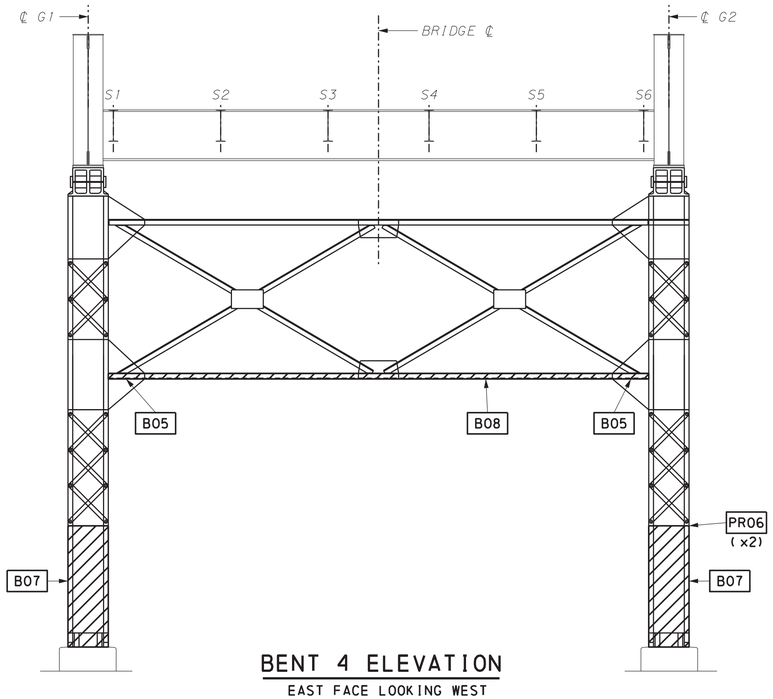
WEST FACE LOOKING EAST
0 2 4 6 FEET

BENT 4 REPAIR DESCRIPTION AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
B03	LACING BAR REPAIR TYPE 1, BENT	50	EA	8
B04	LACING BAR REPAIR TYPE 2, BENT	50	EA	33
B05	REPLACE BATTEN PLATE, TYPE 1, BENT	51	EA	2
B07	COLUMN STAY PLATE REPAIR, BENT	24	EA	4
B08	REPLACE SWAY BRACE ANGLE	70	EA	1
PR06	PACK RUST REPAIR, BENT	66	LF	2

BENT 4A REPAIR DESCRIPTION AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
B02	REPLACE RIVET, BENT	65	EA	70
B03	LACING BAR REPAIR TYPE 1, BENT	50	EA	16
B04	LACING BAR REPAIR TYPE 2, BENT	50	EA	42
B05	REPLACE BATTEN PLATE, TYPE 1, BENT	51	EA	4
B06	REPLACE BATTEN PLATE, TYPE 2, BENT	51	EA	8
B07	COLUMN STAY PLATE REPAIR, BENT	24	EA	4
B08	REPLACE SWAY BRACE ANGLE	70	EA	2
B10	REPAIR GUSSET PLATE	23	EA	1
M22	REMOVE ABANDONED UTILITY BRACKET OR CONNECTION	27	EA	1
PR06	PACK RUST REPAIR, BENT	66	LF	7

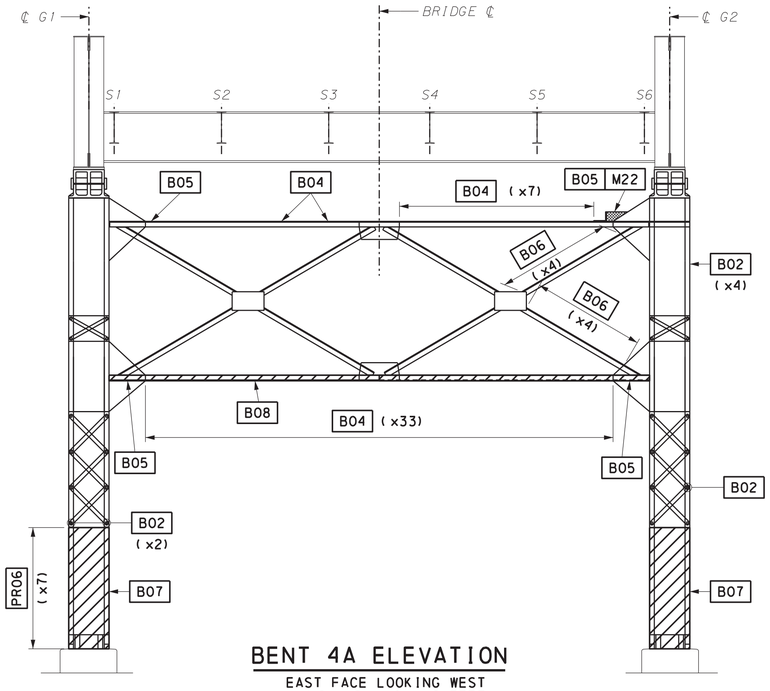
NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.
3. SEE SHEET 26 FOR BENT 4-BENT 4A BRACING ELEVATIONS AND REPAIRS.
4. THE BENT COLUMN BASES AT BENTS 4 & 4A HAVE BEEN FILLED WITH CONCRETE. REMOVE CONCRETE FILL AT ONE BENT COLUMN AT A TIME TO FACILITATE INSPECTION OF THE BENT COLUMNS AT THESE LOCATIONS. REMOVAL OF EXISTING CONCRETE INCLUDED IN ITEM 1018-0050 REMOVAL OF PORTION OF EXISTING BRIDGE.



BENT 4 ELEVATION

EAST FACE LOOKING WEST
0 2 4 6 FEET



BENT 4A ELEVATION

EAST FACE LOOKING WEST
0 2 4 6 FEET

LEGEND:

F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

BENTS 4 & 4A ELEVATIONS AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

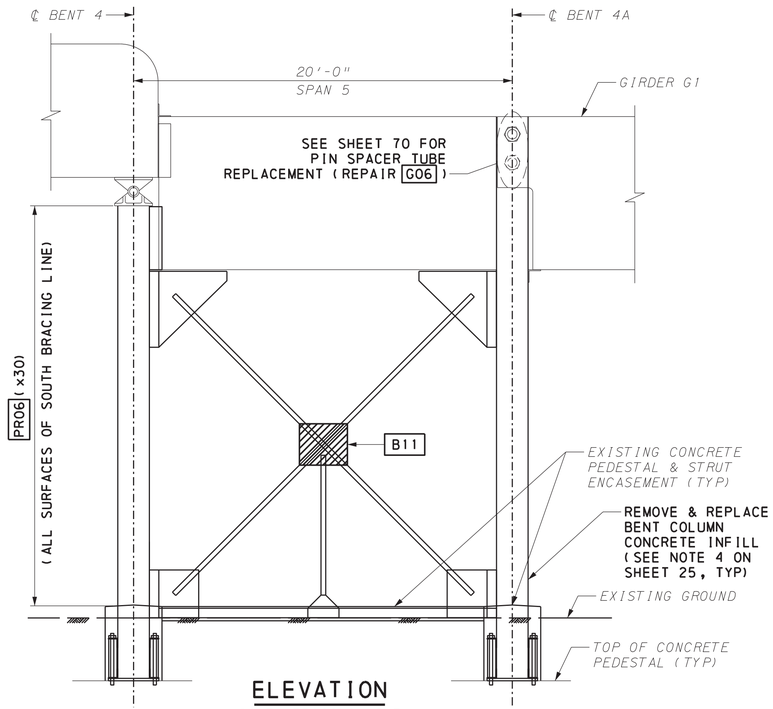
RECOMMENDED
OCTOBER 26, 2022

SHEET 25 OF 124

S - 40253

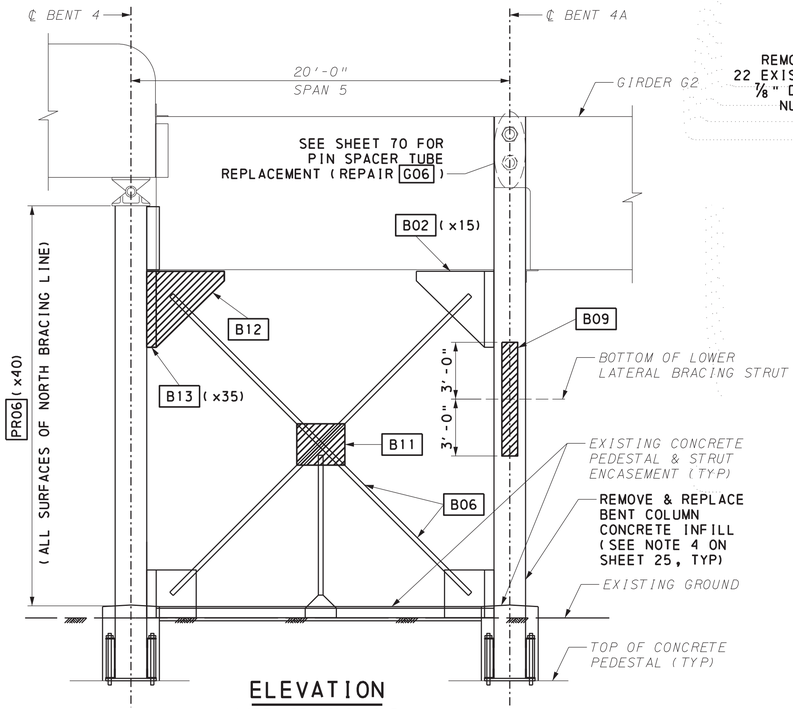
DES: ABC	CKD: KTS	DWG: ABC	CKD: KTS

PLOTTED: 10/25/2022 10:06:59 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\Newken_bent_04_04A_bracing.dgn



ELEVATION

SOUTH BRACING LINE
NORTH FACE LOOKING SOUTH
0 2 4 6 FEET



ELEVATION

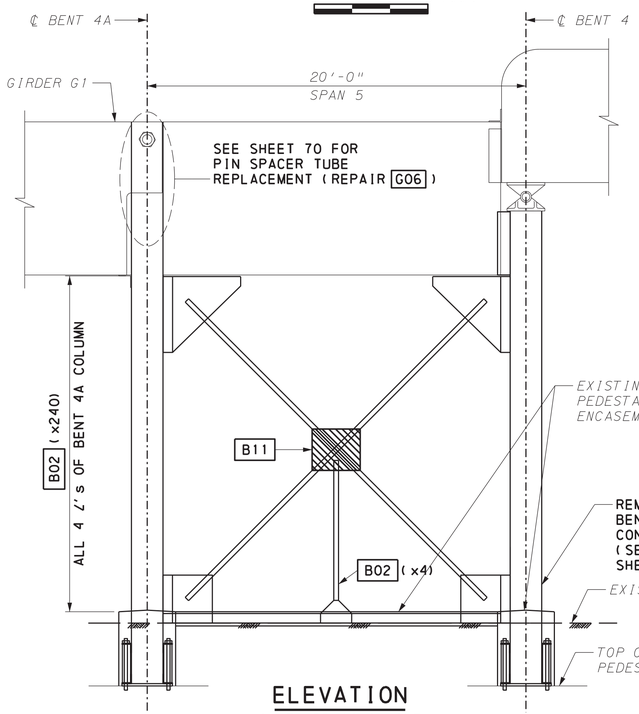
NORTH BRACING LINE
NORTH FACE LOOKING SOUTH
0 2 4 6 FEET

REPAIR B11

ITEM 1050-0258
REPLACE BENT4-4A BRACING GUSSET PLATE, TYPE 1
REPRESENTATIVE PHOTO

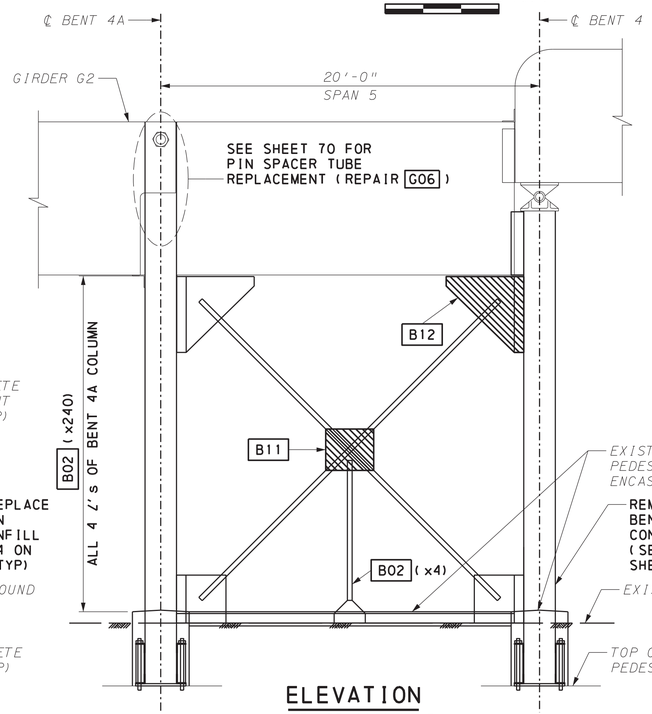
REPAIR B11 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS ATTACHING THE EXISTING GUSSET PLATE TO THE BENT 4-4A BRACING.
2. REMOVE GUSSET PLATE AND DISCARD. REMOVE AND REPLACE GUSSET PLATES ONE AT A TIME.
3. REAM HOLES AS REQUIRED. HOLES MAY BE DRILLED IN THE GUSSET PLATE USING THE EXISTING HOLES IN THE BRACING MEMBERS AS A TEMPLATE.
4. INSTALL NEW ⅞" DIA HS BOLTS W/ NUTS AND WASHERS IN ALL OPEN HOLES.



ELEVATION

SOUTH BRACING LINE
SOUTH FACE LOOKING NORTH
0 2 4 6 FEET



ELEVATION

NORTH BRACING LINE
SOUTH FACE LOOKING NORTH
0 2 4 6 FEET

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
B02	REPLACE RIVET, BENT	65	EA	503
B06	REPLACE BATTEN PLATE TYPE 1, BENT	51	EA	2
B09	INSTALL COLUMN COVER PLATE	71	EA	1
B11	REPLACE BENT 4-4A BRACING GUSSET PLATE, TYPE 1	26	EA	4
B12	REPLACE BENT 4-4A BRACING GUSSET PLATE, TYPE 2	71	EA	2
B13	REPLACE CONNECTION ANGLES (L4x4x1/2)	71	LB	35
G06	REPLACE GIRDER PIN SPACER TUBE	70	EA	7
PR06	PACK RUST REPAIR, BENT	66	LF	70

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR BENT 4 & BENT 4A ELEVATIONS, SEE SHEET 25.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

LEGEND:

F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 4-4A BRACING ELEVATIONS AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

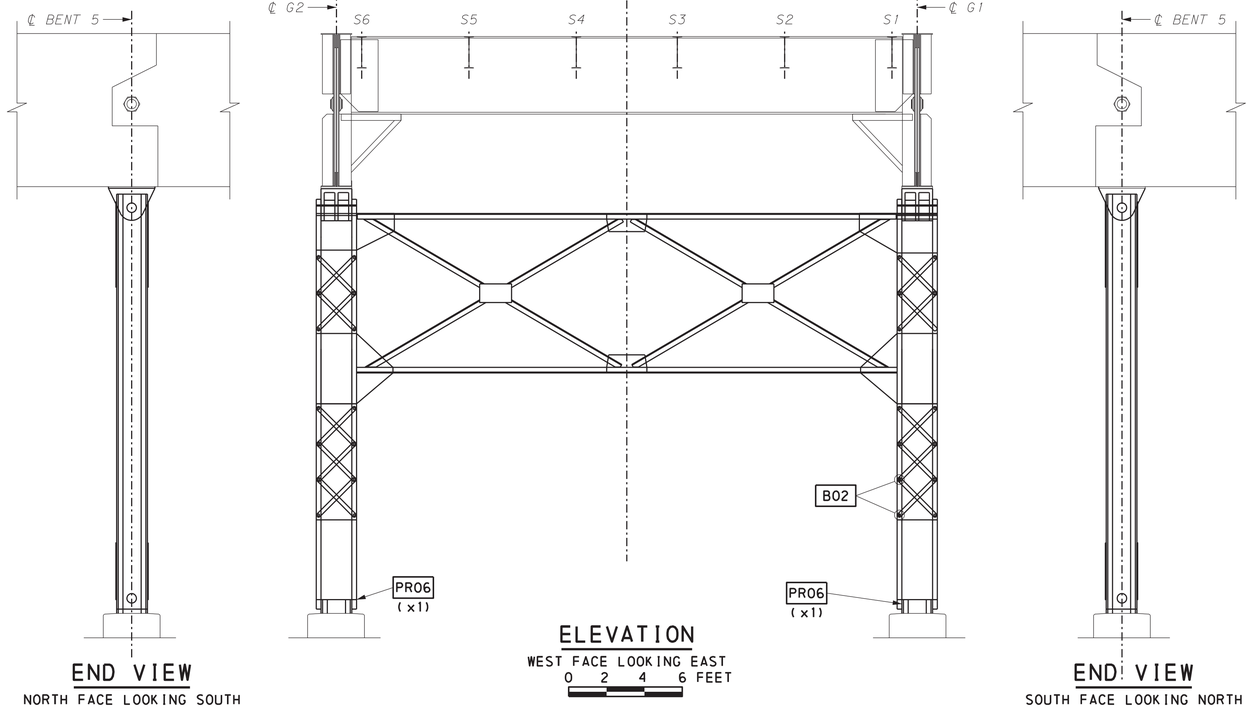
RECOMMENDED
OCTOBER 26, 2022

SHEET 26 OF 124

S - 40253

DES: ABC	CKD: KTS	DWG: ABC	CKD: KTS

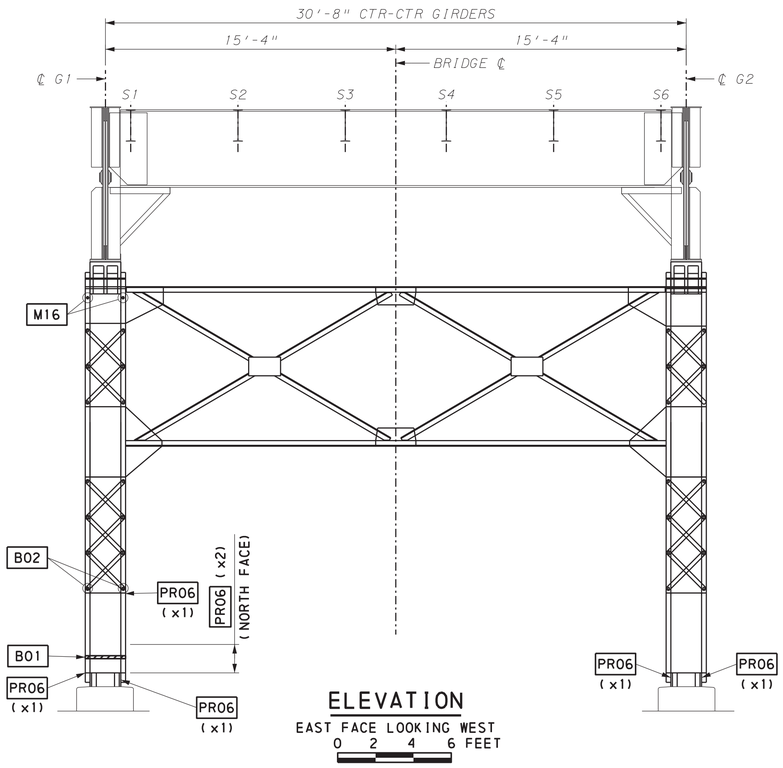
PLOTTED: 10/25/2022 10:07:25 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\designs\structures\Final\plots\Newken_bent_05.dgn



END VIEW
NORTH FACE LOOKING SOUTH

ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET

END VIEW
SOUTH FACE LOOKING NORTH



ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET

REMOVE ABANDONED UTILITY BRACKETS

REMOVE ABANDONED UTILITY BRACKET

REPAIR M22

ITEM 1050-0264
REMOVE ABANDONED UTILITY BRACKET OR CONNECTION
REPRESENTATIVE PHOTOS

REPAIR M22 - PROCEDURE AND NOTES

1. REMOVE ABANDONED UTILITY BRACKET OR CONNECTION MATERIAL BY UNBOLTING OR BY GRINDING OUT EXISTING WELDS. GRIND WELDS IN THE DIRECTION OF PRIMARY STRESS IN THE SUPPORTING MEMBER. CONFIRM THE DIRECTION OF PRIMARY STRESS WITH THE REPRESENTATIVE BEFORE PERFORMING GRINDING.
2. REAM UNUSED HOLES TO $^{15}/_{16}$" DIA FOR $^{7}/_{8}$" DIA HS BOLTS.
3. INSTALL $^{7}/_{8}$" DIA HS BOLTS W/NUTS AND WASHERS IN ALL UNUSED HOLES.
4. EXERCISE EXTREME CARE TO AVOID NICKING OR GOUGING EXISTING STEEL DURING UTILTY BRACKET REMOVAL. IF NICKS OR GOUGES OCCUR, THE ENGINEER MAY SUSPEND ACTIVITIES UNTIL APPROPRIATE ADJUSTMENTS TO THE PROCEDURE ARE MADE TO PREVENT RE-OCCURRENCE.
5. ABANDONED UTILITY BRACKETS AND CONNECTIONS ARE LOCATED THROUGHOUT THE APPROACH SPANS (SPANS 1 - 9). REFER TO FRAMING PLAN SHEETS AND BENT DETAIL SHEETS FOR LOCATIONS OF ABANDONED UTILITY BRACKETS OR CONNECTIONS TO BE REMOVED.

REPAIR DESCRIPTIONS AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
B01	REMOVE ABANDONED DOWNSPOUT BRACKET	22	EA	1
B02	REPLACE RIVET, BENT	65	EA	4
M16	INSTALL BOLTS OPEN HOLES	46	EA	2
PR06	PACK RUST REPAIR, BENT	66	LF	9

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

LEGEND:

F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 5 ELEVATION AND REPAIRS

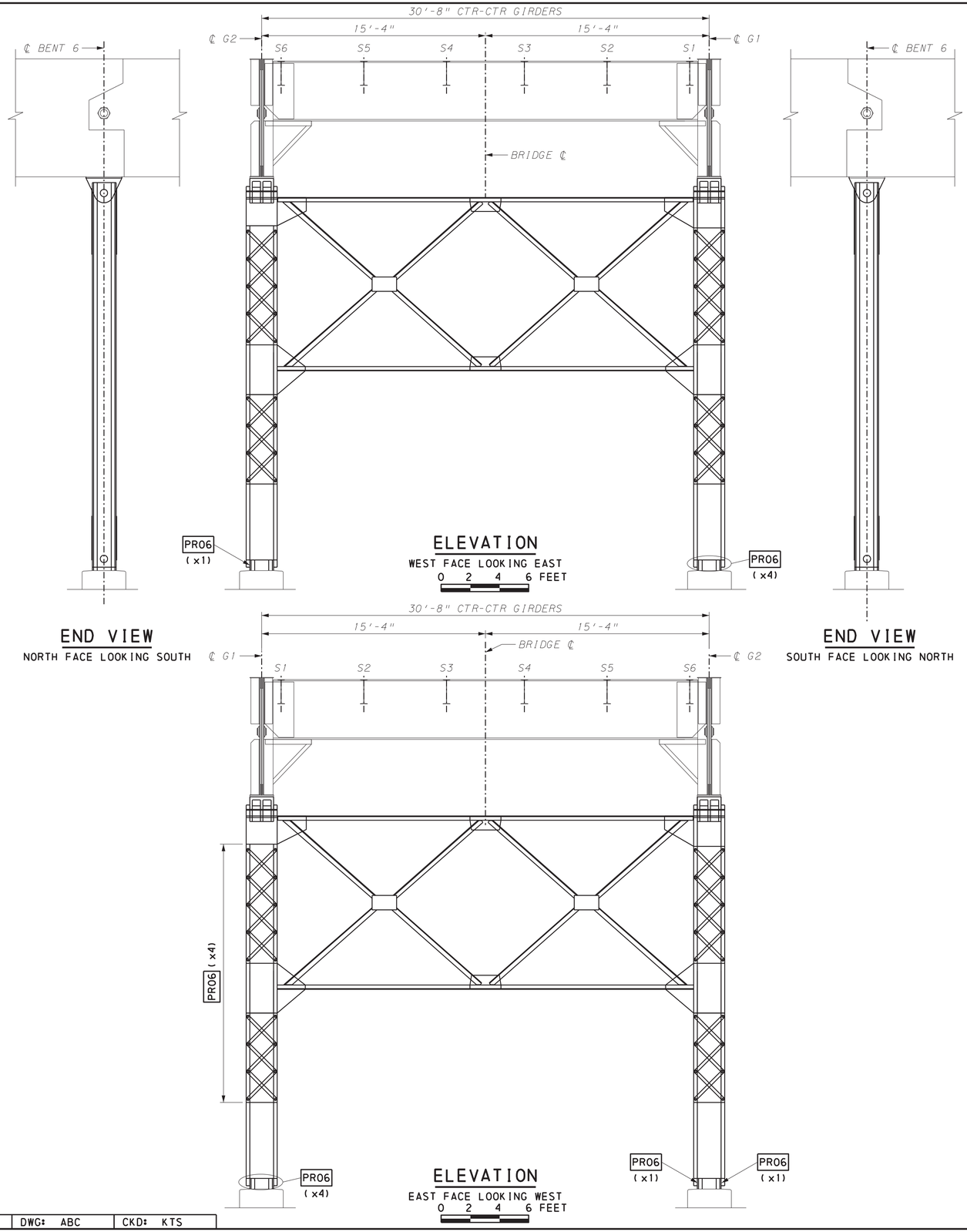
RECOMMENDED
OCTOBER 26, 2022

SHEET 27 OF 124

S - 40253

DES: ABC	CKD: KTS	DWG: ABC	CKD: KTS

PLOTTED: 10/25/2022 10:07:50 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\Newken_bent_06.dgn



REPAIR DESCRIPTIONS AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
PR06	PACK RUST REPAIR, BENT	66	LF	15

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

LEGEND:

F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 6 ELEVATION AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

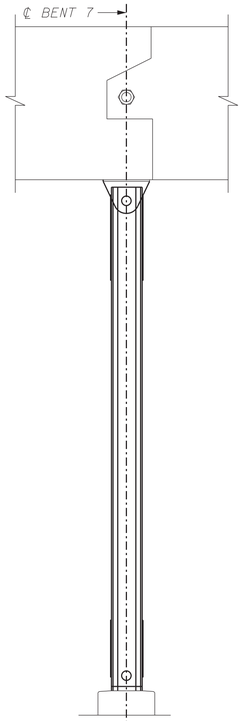
RECOMMENDED
OCTOBER 26, 2022

SHEET 28 OF 124

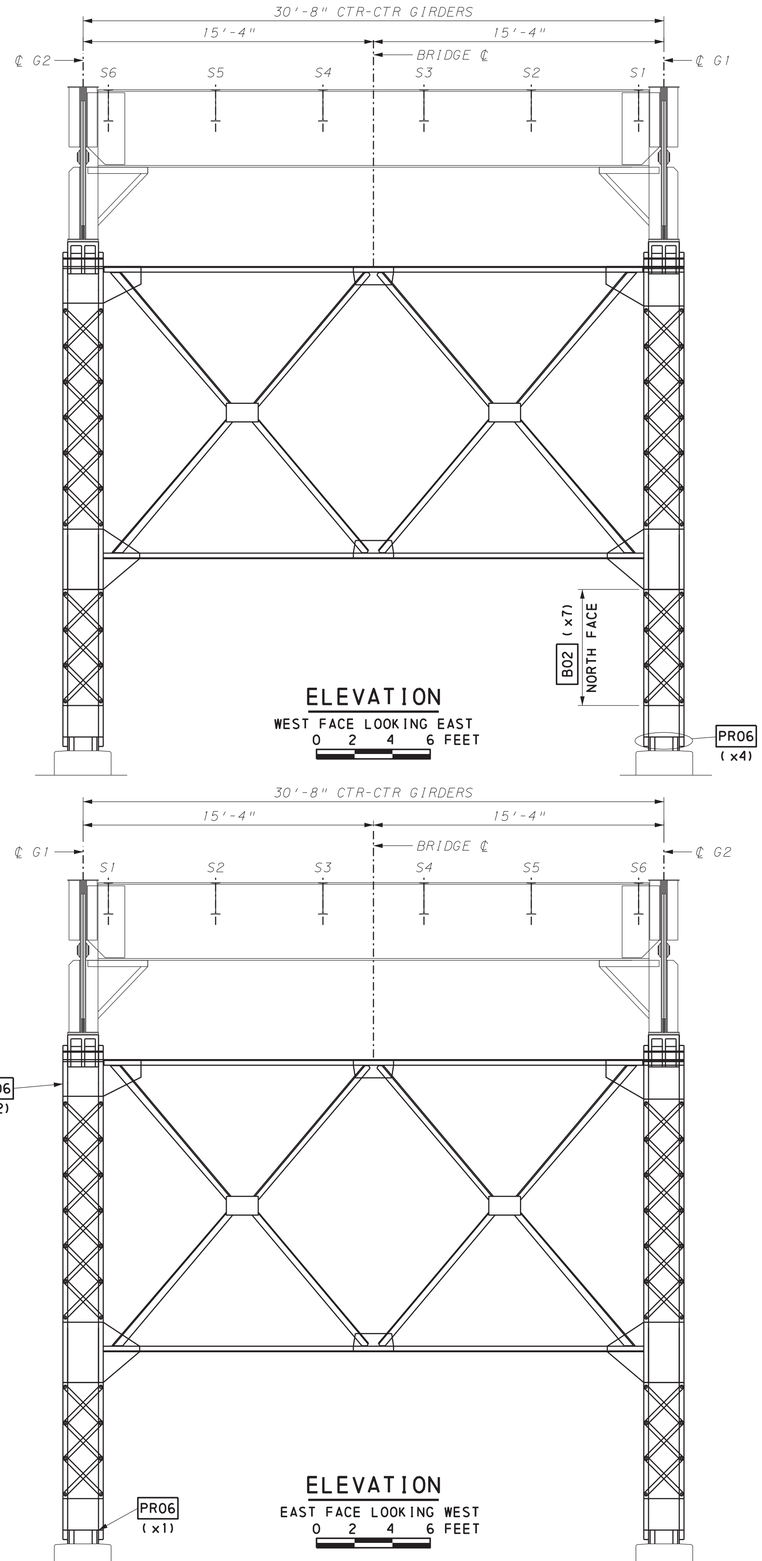
S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

PLOTTED: 10/25/2022 10:08:14 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\Newken_bent_07.dgn

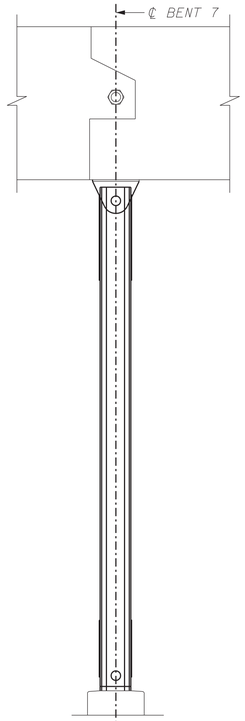


END VIEW
NORTH FACE LOOKING SOUTH



ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET

ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET



END VIEW
SOUTH FACE LOOKING NORTH

REPAIR DESCRIPTIONS AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
B02	REPLACE RIVET, BENT	65	EA	7
PR06	PACK RUST REPAIR, BENT	66	LF	7

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

LEGEND:

F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 7 ELEVATION AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

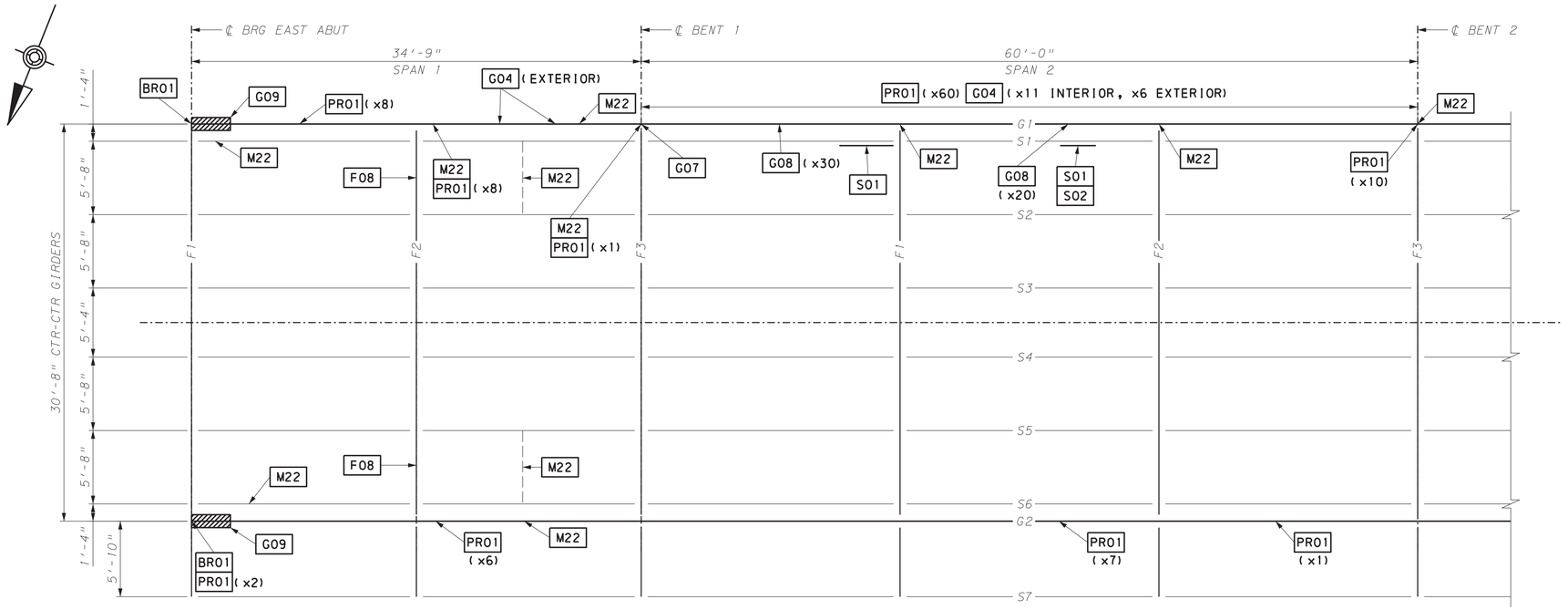
RECOMMENDED
OCTOBER 26, 2022

SHEET 29 OF 124

S - 40253

DES: ABC	CKD: KTS	DWG: ABC	CKD: KTS

PLOTTED: 10/25/2022 10:08:43 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\Newken_fr plan_01_02.dgn



PARTIAL FRAMING PLAN - SPANS 1 & 2

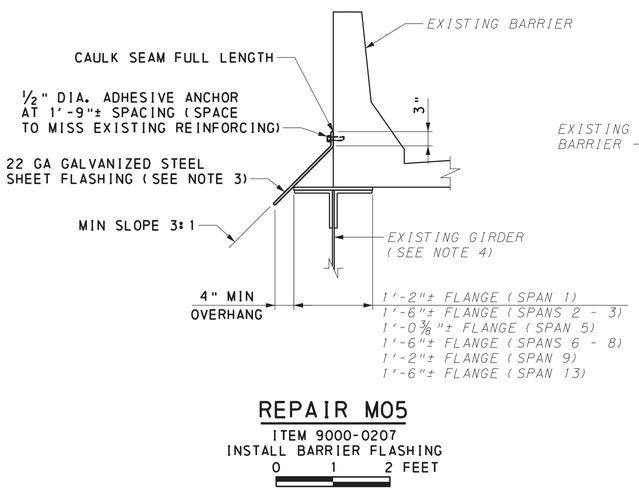
0 5 10 FEET

REPAIR G09

ITEM 1050-0105
REMOVE DETERIORATED GIRDER COVER PLATE
REPRESENTATIVE PHOTO

REPAIR G09 - PROCEDURE AND NOTES

1. REMOVAL OF THE POT BEARING AND TEMPORARILY SUPPORTING THE GIRDER ARE INCLUDED IN OTHER ITEMS.
2. REMOVE BOTTOM FLANGE RIVETS WITHIN THE AREA OF BOTTOM FLANGE REMOVAL. THE REPRESENTATIVE WILL DELINEATE THE FINAL REMOVAL LIMITS IN THE FIELD.
3. SAWCUT THE BOTTOM FLANGE COVER PLATE TO A DEPTH NOT EXCEEDING ⅔ OF THE FLANGE COVER PLATE THICKNESS. COMPLETE REMOVAL OF THE PLATE USING HAND TOOLS ONLY.
4. DO NOT DAMAGE THE BOTTOM FLANGE ANGLES TO REMAIN. ANY DAMAGE TO THE FLANGE ANGLES RESULTING FROM THE REMOVAL OPERATIONS SHALL BE REPAIRED TO THE SATISFACTION OF THE REPRESENTATIVE, AT NO COST TO THE DEPARTMENT.

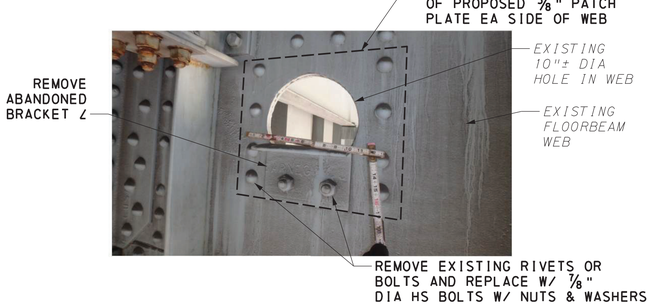


REPAIR M05

ITEM 9000-0207
INSTALL BARRIER FLASHING
0 1 2 FEET

REPAIR M05

ITEM 9000-0207
INSTALL BARRIER FLASHING
REPRESENTATIVE PHOTO



REPAIR F08

ITEM 1050-0214
REMOVE ABANDONED DOWNSPOUT BRACKET
REPRESENTATIVE PHOTO

REPAIR F08 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS SURROUNDING THE OPEN HOLE, REMOVE ABANDONED BRACKETS AND DISCARD.
2. PROVIDE A ⅜" PATCH PLATE ON EACH SIDE OF THE FLOORBEAM WEB. MAINTAIN AASHTO MINIMUM EDGE SPACING FOR FASTENERS.
3. REAM HOLES AS REQUIRED, USING HOLE IN OUTER-MOST PLY AS A TEMPLATE. INSTALL NEW ⅞"Ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES.

REPAIR DESCRIPTIONS AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
BR01	REPLACE EXPANSION BEARING	74	EA	2
F08	FLOORBEAM WEB PATCH PLATE	30	EA	2
G04	STIFFENER REPAIR, GIRDER	57	EA	19
G07	REPLACE GIRDER SEAT	31	EA	1
G08	REPLACE RIVET, GIRDER	65	EA	50
G09	REMOVE DETERIORATED GIRDER COVER PLATE	30	LB	145
M22	REMOVE ABANDONED UTILITY BRACKET OR CONNECTION	27	EA	11
PR01	PACK RUST REPAIR, GIRDER OR FLOORBEAM	66	LF	103
S01	WEB COVER PLATE, STRINGER	53	EA	2
S02	FLANGE COVER PLATE, STRINGER	56	EA	1

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPANS 3 - 9 FRAMING PLANS, SEE SHEETS 31 - 36.
3. PROVIDE GALVANIZED STEEL SHEET FLASHING CONFORMING TO ASTM A653, CS TYPE A, WITH MINIMUM G40 COATING.
4. GIRDER G9B FLARES OUT FROM UNDER BRIDGE DECK IN SPAN 9. EXTEND FLASHING OVER GIRDER TO MAINTAIN MINIMUM 4" OVERHANG OVER GIRDER FLANGE EDGE.

LEGEND:

—G1— GIRDER
—F1— FLOORBEAM
—S1— STRINGER
F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

FRAMING PLAN SPANS 1 TO 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL AARON BRUCE COLORITO ENGINEER PE083280

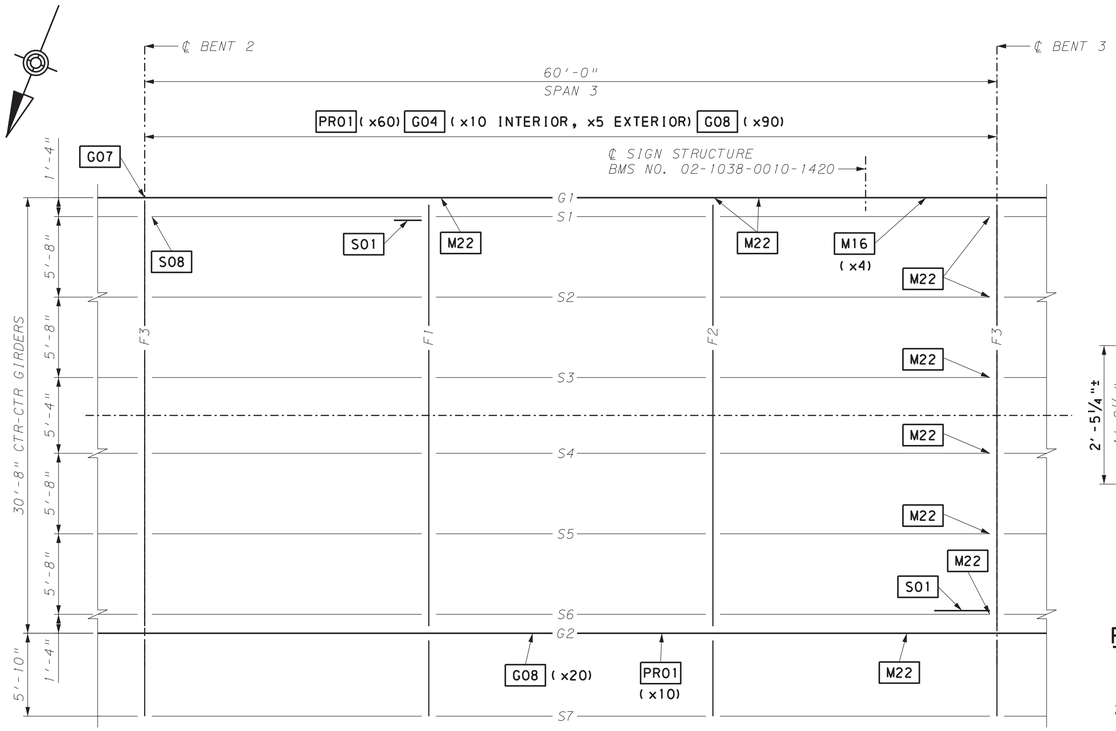
RECOMMENDED
OCTOBER 26, 2022

SHEET 30 OF 124

S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

PLOTTED: 10/25/2022 10:09:15 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\NewKen_fr plan_03.dgn



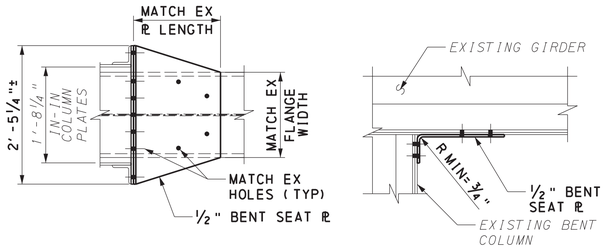
PARTIAL FRAMING PLAN - SPAN 3

0 5 10 FEET

REPAIR DESCRIPTIONS AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
G04	STIFFENER REPAIR, GIRDER	57	EA	15
G07	REPLACE GIRDER SEAT	31	EA	1
G08	REPLACE RIVET, GIRDER	65	EA	110
M16	INSTALL BOLTS OPEN HOLES	46	EA	4
M22	REMOVE ABANDONED UTILITY BRACKET OR CONNECTION	27	EA	10
PR01	PACK RUST REPAIR, GIRDER OR FLOORBEAM	66	LF	70
S01	WEB COVER PLATE, STRINGER	53	EA	2
S08	REPLACE STRINGER SEAT ANGLE AND SHIM STACK	31	EA	1

REPAIR G07

ITEM 1050-0221
REPLACE GIRDER SEAT
REPRESENTATIVE PHOTO



PLAN LOOKING UP
0 1 2 FEET

ELEVATION
0 1 2 FEET

REPAIR G07 - PROCEDURE AND NOTES

1. FABRICATE NEW 1/2" BENT SEAT PLATE TO MATCH EXISTING SEAT PLATE.
2. REMOVE EXISTING RIVETS ATTACHING THE GIRDER SEAT PLATE TO THE GIRDER BOTTOM FLANGE AND BENT COLUMN, REMOVE BENT SEAT PLATE AND DISCARD.
3. INSTALL NEW 1/2" BENT SEAT PLATE.
4. REAM HOLES AS REQUIRED, USING HOLE IN OUTERMOST PLY AS A TEMPLATE. INSTALL NEW 7/8"Ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES.

REPAIR S07

ITEM 1050-0206
REPLACE STRINGER STOOL ANGLE AND CLIP PLATE
REPRESENTATIVE PHOTO

REPAIR S08

ITEM 1050-0207
REPLACE STRINGER SEAT ANGLE AND SHIM STACK
REPRESENTATIVE PHOTO

REPAIR S07, S08 - PROCEDURE AND NOTES

1. FABRICATE NEW MATERIAL TO MATCH EXISTING AS INDICATED AND AS DIRECTED. PROVIDE LONG-SLOTTED HOLES IN BENT CLIP PLATES ON STRINGER FACE OF PLATES (REPAIR S07 ONLY).
2. REMOVE EXISTING RIVETS OR BOLTS AND REMOVE MATERIAL AS INDICATED AND AS DIRECTED AND DISCARD.
3. REAM HOLES AS REQUIRED, USING HOLE IN OUTERMOST PLY AS A TEMPLATE. INSTALL NEW 7/8"Ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES. INSTALL BOLTS IN SLOTTED HOLES USING WASHERS UNDER THE HEAD END AND HEX NUT END OF EACH BOLT. TIGHTEN NUTS FINGER-TIGHT, BACK OFF 1/4 TURN AND BURR THREADS AT NUT.
4. PROVIDE SHIMS THAT MATCH STRINGER BOTTOM FLANGE WIDTH. PROVIDE SHIMS IN SUFFICIENT QUANTITIES TO ENSURE FULL BEARING BETWEEN THE STRINGER AND SEAT ANGLE.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS FOR SPANS 1 - 2, SEE SHEET 30.
3. FOR FRAMING PLANS FOR SPANS 4 - 9, SEE SHEETS 32 - 36.

LEGEND:

—G1— GIRDER
—F1— FLOORBEAM
—S1— STRINGER
F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 3

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

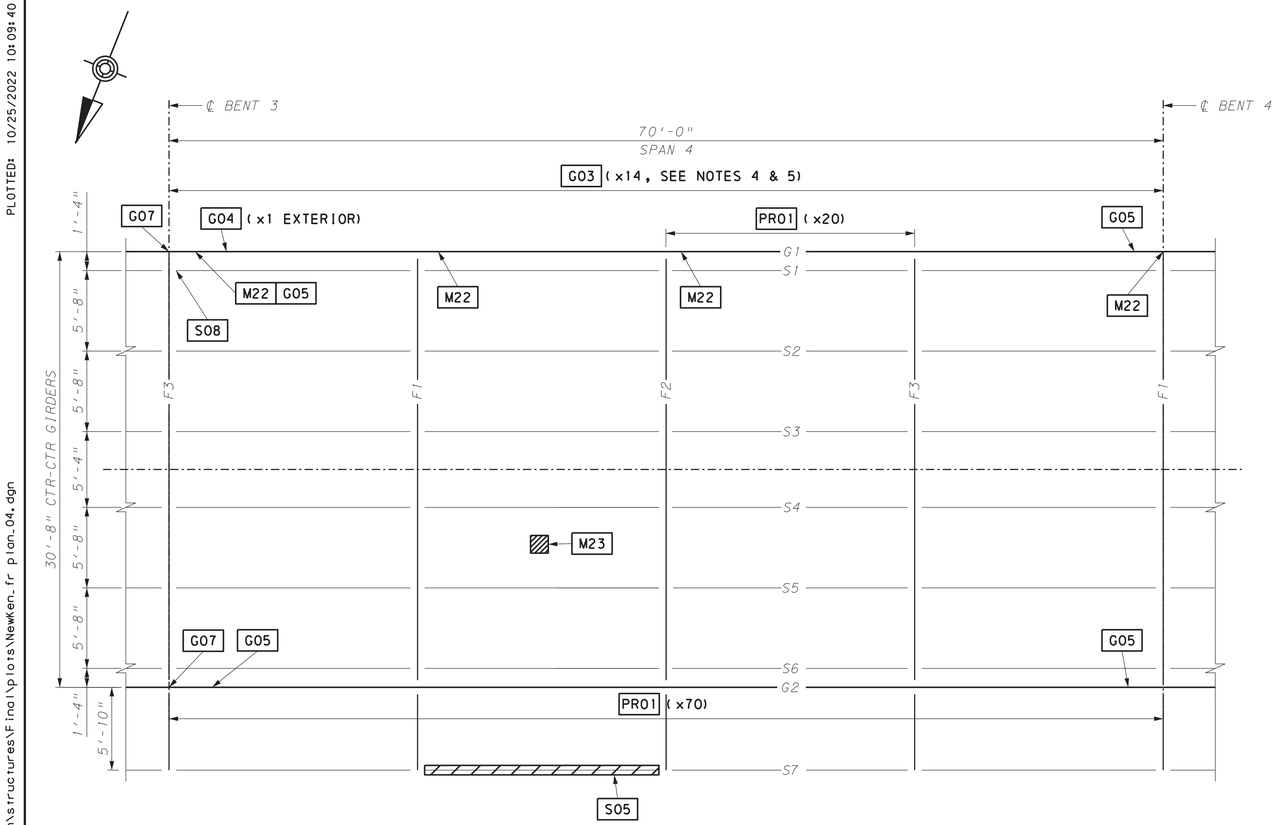
RECOMMENDED
OCTOBER 26, 2022

SHEET 31 OF 124

S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

PLOTTED: 10/25/2022 10:09:40 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\Newken_fr plan_04.dgn



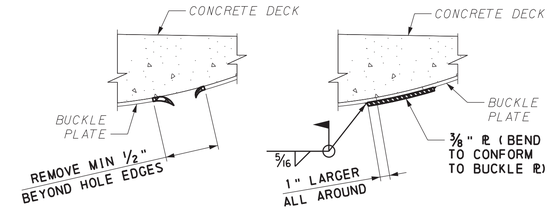
PARTIAL FRAMING PLAN - SPAN 4

0 5 10 FEET

REPAIR DESCRIPTION AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
G03	WEB COVER PLATE, GIRDER	53	EA	14
G04	STIFFENER REPAIR, GIRDER	57	EA	1
G05	STIFFENER ADDITION, GIRDER	58	EA	4
G07	REPLACE GIRDER SEAT	31	EA	2
M22	REMOVE ABANDONED UTILITY BRACKET OR CONNECTION	27	EA	4
M23	REPAIR BUCKLE PLATE BLOWOUT	32	EA	1
PR01	PACK RUST REPAIR, GIRDER OR FLOORBEAM	66	LF	90
S05	REPLACE SIDEWALK STRINGER	72	LB	1138
S08	REPLACE STRINGER SEAT ANGLE AND SHIM STACK	31	EA	1

REPAIR M23

ITEM 1050-0265
REPAIR BUCKLE PLATE BLOWOUT
REPRESENTATIVE PHOTO



REMOVAL
NOT TO SCALE

REPAIR
NOT TO SCALE

REPAIR M23 - PROCEDURE AND NOTES

1. REMOVE DAMAGED BUCKLE PLATE MATERIAL 1/2" MINIMUM BEYOND EDGES OF THE EXISTING HOLE.
2. CUT 3/8" REPAIR PLATE MINIMUM 1" LARGER THAN REMOVAL AREA IN ALL DIRECTIONS.
3. BEND REPAIR PLATE TO CONFORM TO EXISTING BUCKLE PLATE SURFACE. FILLET WELD ALL AROUND AS INDICATED.
4. DO NOT DAMAGE BUCKLE PLATE MATERIAL TO REMAIN. ENLARGE REMOVAL AREA TO ENCOMPASS ANY DAMAGED MATERIAL AT NO ADDITIONAL COST TO THE DEPARTMENT.
5. REPAIR PLATE TO CONFORM TO AASHTO M270 GRADE 36, MINIMUM.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS FOR SPANS 1 - 3, SEE SHEETS 30 - 31.
3. FOR FRAMING PLANS FOR SPANS 5 - 9, SEE SHEETS 33 - 36.
4. WEB COVER PLATE REPAIR REGIONS FOR GIRDER G1 ARE ASSUMED BASED ON EXISTING VISIBLE DETERIORATION. THE CONTRACTOR SHALL CONTACT THE ENGINEER AFTER EXISTING CONCRETE BARRIER IS REMOVED AND ABRASIVE BLASTING OPERATIONS ARE COMPLETED ALONG GIRDER G1 TO IDENTIFY ANY ADDITIONAL AREAS REQUIRING REPAIR AND REPAIR LIMITS.
5. PROPOSED GIRDER WEB REPAIR PLATES (REPAIR TYPE G03) MAY REQUIRE THE REMOVAL AND REPLACEMENT OF GIRDER STIFFENERS, CONNECTION ANGLES OR OTHER MATERIAL AS REQUIRED TO INSTALL REPAIR MATERIAL. FINAL CONFIGURATIONS OF MATERIAL TO BE DETERMINED IN THE FIELD.

LEGEND:

—G1— GIRDER
—F1— FLOORBEAM
—S1— STRINGER
F00 DENOTES REPAIR

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 4

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

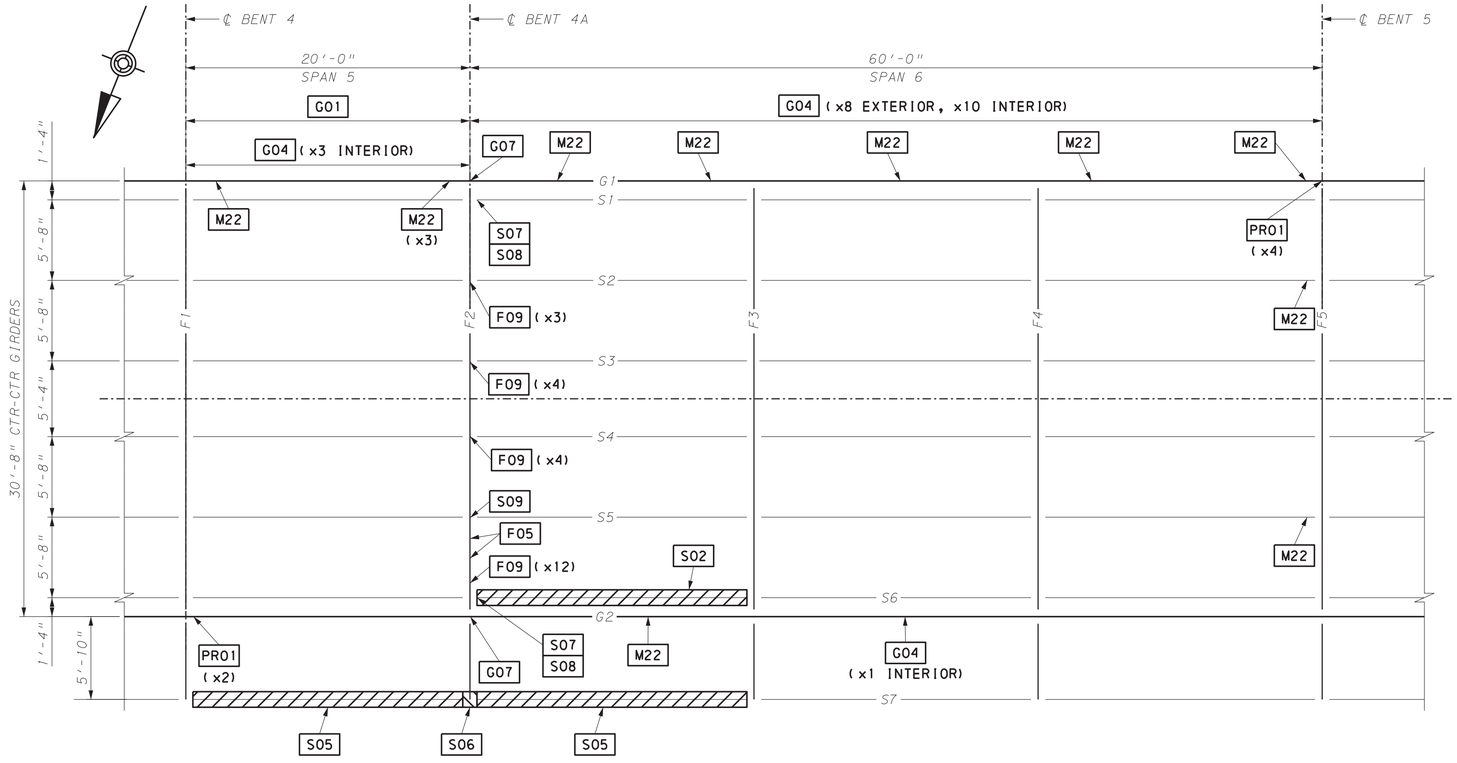
RECOMMENDED
OCTOBER 26, 2022

SHEET 32 OF 124

S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

PLOTTED: 10/25/2022 10:10:04 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\NewKen_fr plan_05_06.dgn



PARTIAL FRAMING PLAN - SPANS 5 & 6

0 5 10 FEET

REPAIR DESCRIPTIONS AND QUANTITIES				
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
F05	STIFFENER REPAIR, FLOORBEAM	57	EA	2
F09	REPLACE RIVET, FLOORBEAM	65	EA	23
G01	BOTTOM FLANGE COVER PLATE, GIRDER	56	LB	455
G04	STIFFENER REPAIR, GIRDER	57	EA	22
G07	REPLACE GIRDER SEAT	31	EA	2
S02	FLANGE COVER PLATE, STRINGER	56	EA	1
S05	REPLACE SIDEWALK STRINGER	72	LB	2600
S06	REPLACE SIDEWALK STRINGER EXPANSION ASSEMBLY	72	EA	1
S07	REPLACE STRINGER STOOL ANGLE AND CLIP PLATE	31	EA	2
S08	REPLACE STRINGER SEAT ANGLE AND SHIM STACK	31	EA	2
S09	REPLACE STRINGER CLIP ANGLE	64	EA	1
M22	REMOVE ABANDONED UTILITY BRACKET OR CONNECTION	27	EA	12
PR01	PACK RUST REPAIR, GIRDER OR FLOORBEAM	66	LF	6

LEGEND:

- G1 — GIRDER
- F1 — FLOORBEAM
- S1 — STRINGER
- F00 DENOTES REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS FOR SPANS 1 - 4, SEE SHEETS 30 - 32.
3. FOR FRAMING PLANS FOR SPANS 7 - 9, SEE SHEETS 34 - 36.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPANS 5 TO 6

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL AARON BRUCE COLORITO ENGINEER PE083280

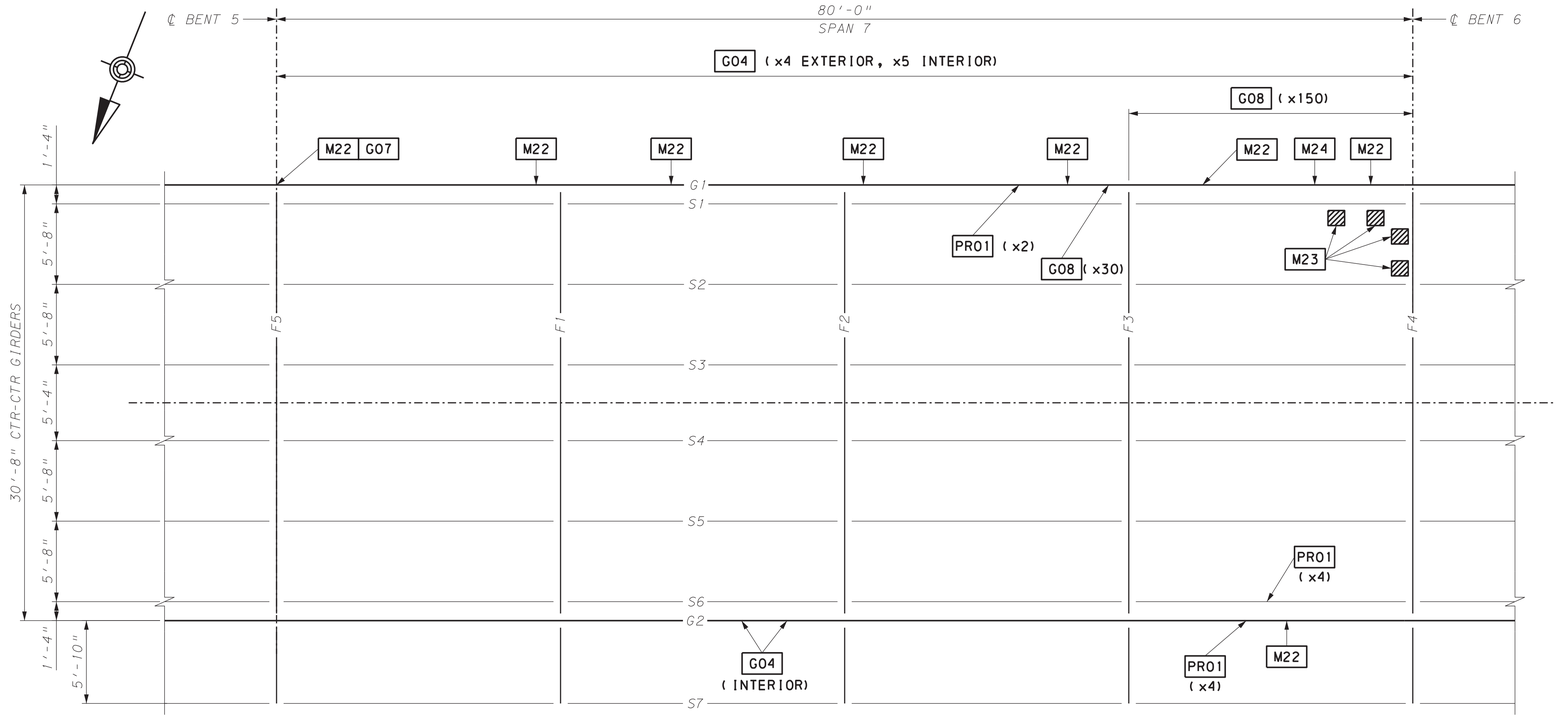
RECOMMENDED
OCTOBER 26, 2022

SHEET 33 OF 124

S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

PLOTTED: 10/25/2022 10:10:29 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\designs\structures\Final\plots\NewKen_fr plan_07.dgn



PARTIAL FRAMING PLAN - SPAN 7

0 5 10 FEET

REPAIR M24

ITEM 1050-0266
REMOVE ABANDONED UTILITY BOX FROM GIRDER WEB

REPAIR M24 - PROCEDURE AND NOTES

1. OPEN EXISTING UTILTY BOX AND DETERMINE LIMITS OF UTILITY BOX ATTACHEMENT TO GIRDER WEB.
2. COMPLETELY REMOVE EXISTING UTILITY BOX FROM GIRDER WEB.
3. GRIND REMAINING WELDS ON THE GIRDER WEB SMOOTH WITH GIRDER WEB FACE. EXERCISE EXTREME CAUTION TO AVOID NICKING OR DAMAGING THE GIRDER WEB. WHERE NICKS OR GOUGES OCCUR, FAIR OUT THE DAMAGE BY GRINDING IN THE DIRECTION OF PRIMARY STRESS, AT A MAXIMUM SLOPE OF 1:10, TO THE SATISFACTION OF THE REPRESENTATIVE AT NO ADDITIONAL COST TO THE DEPARTMENT.

REPAIR DESCRIPTIONS AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
G04	STIFFENER REPAIR, GIRDER	57	EA	11
G07	REPLACE GIRDER SEAT	31	EA	1
G08	REPLACE RIVET, GIRDER	65	EA	180
M22	REMOVE ABANDONED UTILITY BRACKET OR CONNECTION	27	EA	8
M23	REPAIR BUCKLE PLATE BLOWOUT	32	EA	4
M24	REMOVE ABANDONED UTILITY BOX FROM GIRDER WEB	34	EA	1
PR01	PACK RUST REPAIR, GIRDER OR FLOORBEAM	66	LF	10

LEGEND:

—G1— GIRDER
—F1— FLOORBEAM
—S1— STRINGER
F00 DENOTES REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS OF SPANS 1 - 6, SEE SHEETS 30 - 33.
3. FOR FRAMING PLANS OF SPANS 8 - 9, SEE SHEETS 35 - 36.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

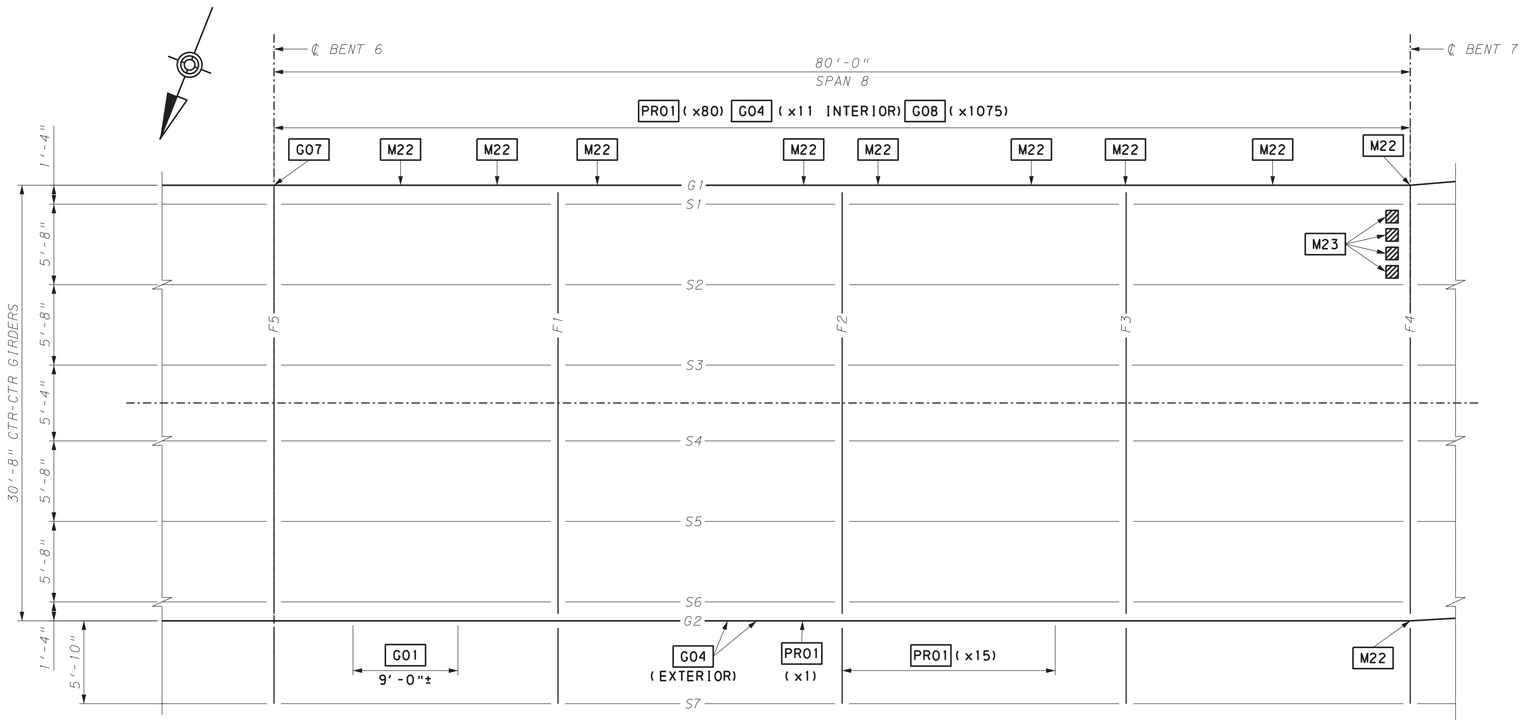
ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 7

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 34 OF 124
S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS



PARTIAL FRAMING PLAN - SPAN 8

0 5 10 FEET

REPAIR DESCRIPTIONS AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
G01	BOTTOM FLANGE COVER PLATE, GIRDER	56	LB	276
G04	STIFFENER REPAIR, GIRDER	57	EA	13
G07	REPLACE GIRDER SEAT	31	EA	1
G08	REPLACE RIVET, GIRDER	65	EA	1075
M22	REMOVE ABANDONED UTILITY BRACKET OR CONNECTION	27	EA	10
M23	REPAIR BUCKLE PLATE BLOWOUT	32	EA	4
PR01	PACK RUST REPAIR, GIRDER OR FLOORBEAM	66	LF	96

LEGEND:

—G1— GIRDER

—F1— FLOORBEAM

—S1— STRINGER

F00 DENOTES REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS OF SPANS 1 - 7, SEE SHEETS 30 - 34.
3. FOR FRAMING PLAN OF SPAN 9, SEE SHEET 36.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 8

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED

OCTOBER 26, 2022

SHEET 35 OF 124

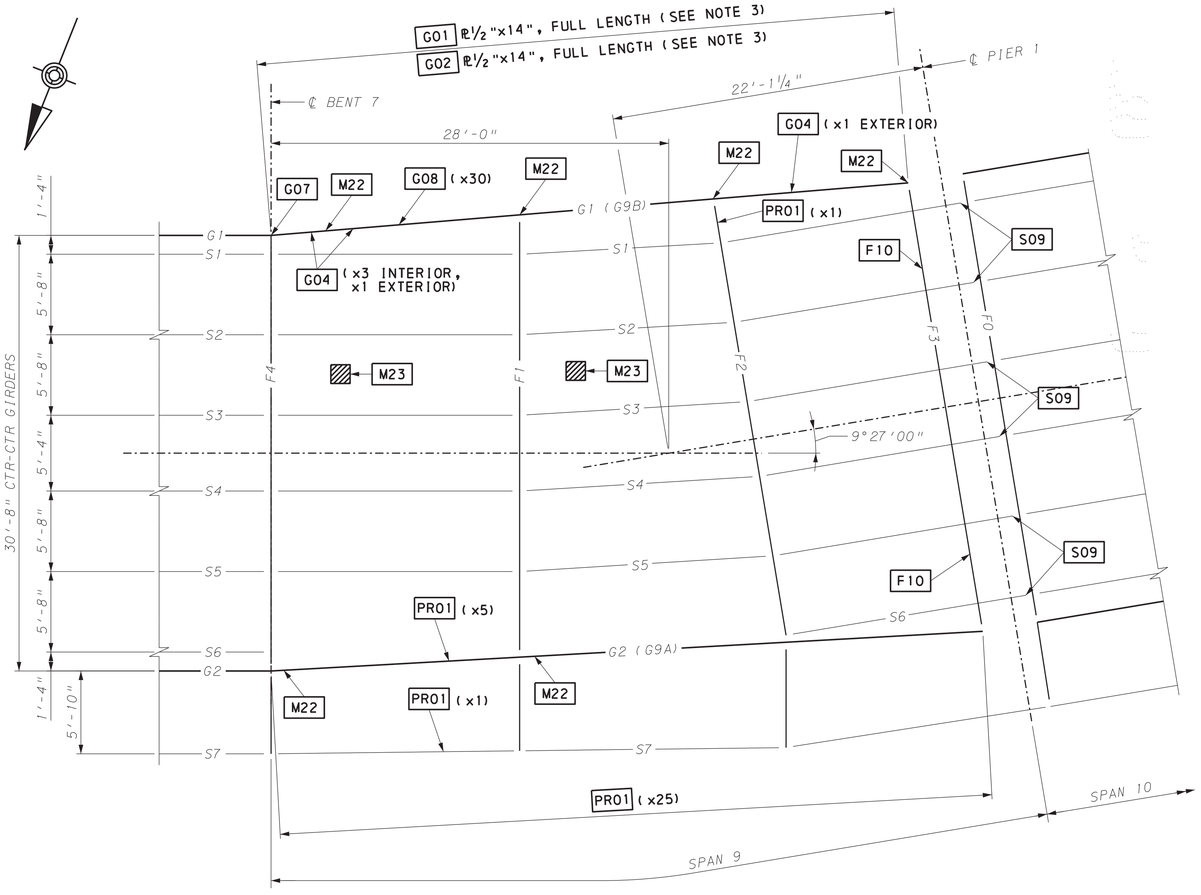
S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

PLOTTED: 10/25/2022 10:10:51 PM

FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\NewKen_fr plan_08.dgn

PLOTTED: 10/25/2022 10:11:18 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\designs\structures\Final\plots\Newken_fr plan_09.dgn



PARTIAL FRAMING PLAN - SPAN 9

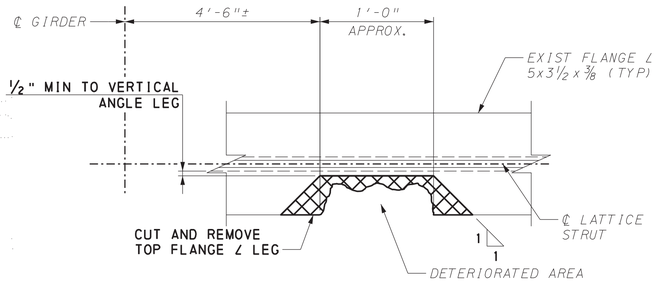
0 5 10 FEET

REPAIR F10

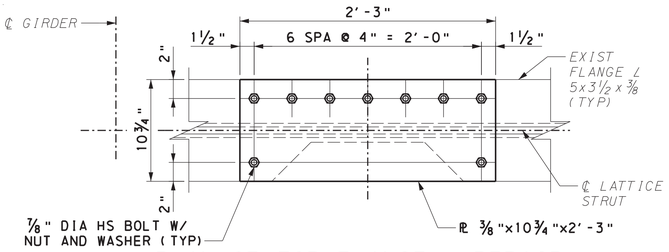
ITEM 1050-0216
REPAIR ENDS OF
SPAN 9 LATTICE STRUT

REPAIR F10 - PROCEDURE AND NOTES

1. THE REPRESENTATIVE WILL DELINEATE THE EXTENTS OF REMOVAL IN THE FIELD.
2. REMOVE THE DETERIORATED FLANGE AREA AS INDICATED AND AS DIRECTED.
3. INSTALL REPAIR PLATE CENTERED ON THE REMOVAL AREA. DRILL HOLES IN THE EXISTING FLANGE ANGLES USING THE REPAIR PLATE AS A TEMPLATE.
4. DO NOT DAMAGE MATERIAL THAT IS TO REMAIN. DAMAGED MATERIAL SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.



PLAN OF TOP FLANGE - REMOVAL



PLAN OF TOP FLANGE - REPAIR

REPAIR F10

ITEM 1050-0216
REPAIR ENDS OF
SPAN 9 LATTICE STRUT

0 6 1 FOOT

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS OF SPANS 1 - 8, SEE SHEETS 30 - 35.
3. REMOVE EXISTING TOP AND BOTTOM FLANGE COVER PLATES ½"x14"x25'-0". REPLACE WITH FULL LENGTH COVER PLATES OF SIZES INDICATED FOR TOP AND BOTTOM FLANGES. MATCH EXISTING RIVET HOLES. SEE SHEET 56 FOR ADDITIONAL REPAIR INFORMATION.

LEGEND:

—G1— GIRDER
—F1— FLOORBEAM
—S1— STRINGER
F00 DENOTES REPAIR

REPAIR DESCRIPTIONS AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
F10	REPAIR ENDS OF SPAN 9 LATTICE STRUT	36	EA	2
G01	BOTTOM FLANGE COVER PLATE, GIRDER	56	LB	1072
G02	TOP FLANGE COVER PLATE, GIRDER	56	LB	1072
G04	STIFFENER REPAIR, GIRDER	57	EA	5
G07	REPLACE GIRDER SEAT	31	EA	1
G08	REPLACE RIVET, GIRDER	65	EA	30
M22	REMOVE ABANDONED UTILITY BRACKET OR CONNECTION	27	EA	6
M23	REPAIR BUCKLE PLATE BLOWOUT	32	EA	2
PR01	PACK RUST REPAIR, GIRDER OR FLOORBEAM	66	LF	32
S09	REPLACE STRINGER CLIP ANGLE	64	EA	6

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 9

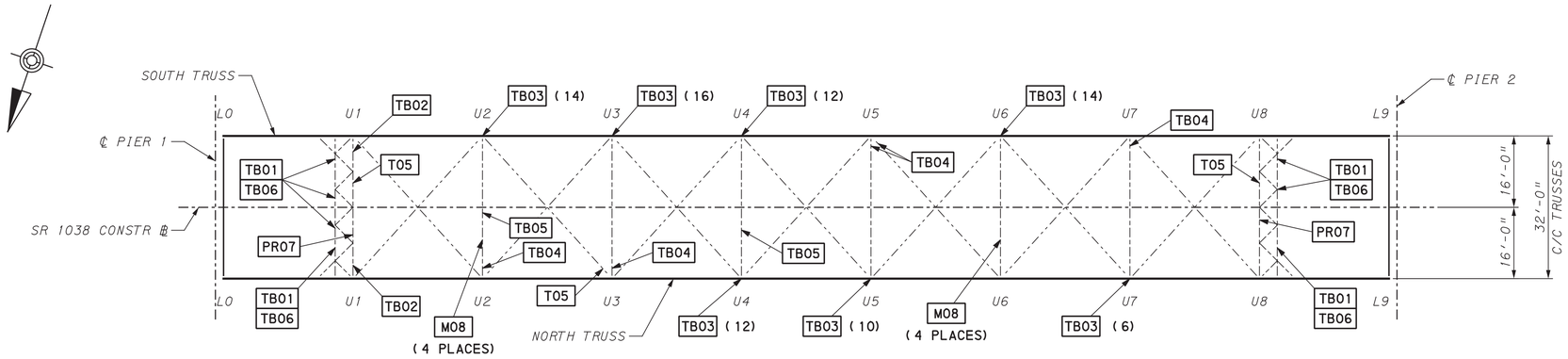
RECOMMENDED
OCTOBER 26, 2022

SHEET 36 OF 124

S - 40253

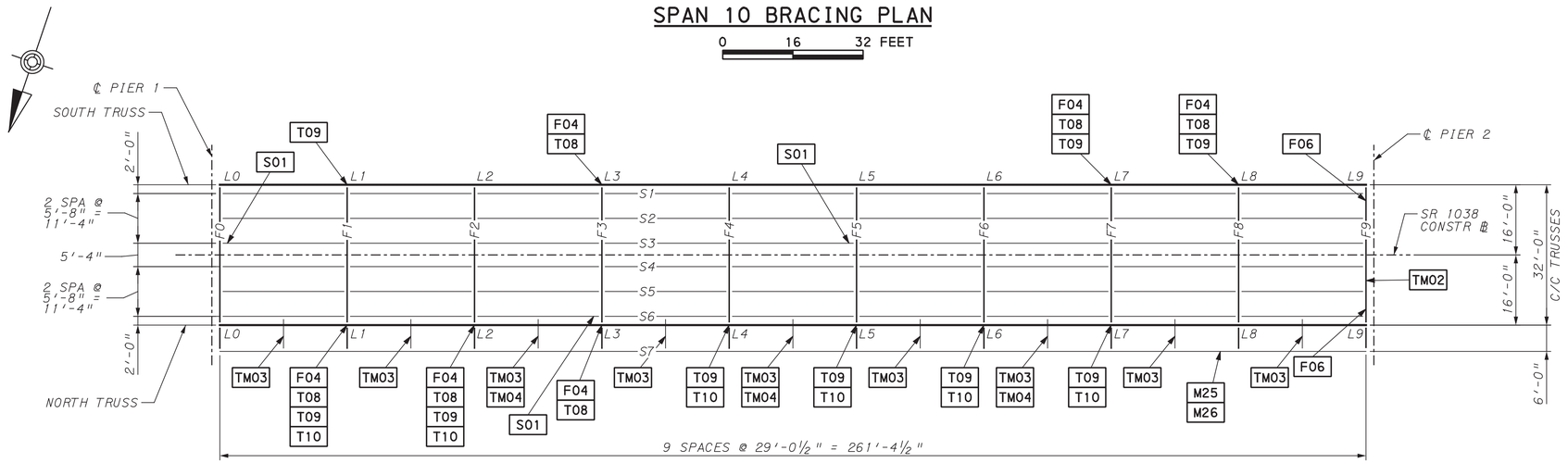
DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

PLOTTED: 10/26/2022 7:55:18 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\Sp 10 Framing-Bracing.dgn



SPAN 10 BRACING PLAN

0 16 32 FEET



SPAN 10 FRAMING PLAN

0 16 32 FEET

SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 10 FLOOR SYSTEM & BRACING

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
F04	BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM	61	EA	6
F06	STIFFENER RETROFIT, FLOORBEAM	58	EA	2
S01	WEB COVER PLATE, STRINGER	53	SF	3
T05	REPLACE RIVET, TRUSS	65	EA	68
T08	CONNECTION ANGLE REPAIR, TRUSS	61	EA	12
T09	FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS	62	EA	9
T10	FLOORBEAM CONNECTION PLATE REPAIR, TRUSS	62	EA	6
TB01	LACING BAR REPAIR, END PORTAL	59	EA	4
TB02	BATTEN PLATE REPAIR, BRACING	51	EA	2
TB03	REPLACE RIVET, BRACING	65	EA	84
TB04	END SWAY BRACE ANGLE REPLACEMENT	60	EA	5
TB05	MID SWAY BRACE ANGLE REPLACEMENT	60	EA	2
TB06	END PORTAL STRUT REPAIR	59	EA	4
TM02	REPLACE EXP DAM SEAT	49	LB	525
TM03	SIDEWALK GUSSET PLATE REPAIR	69	EA	9
TM04	SIDEWALK ANGLE BRACING REPAIR	69	EA	3
M08	REMOVE EXISTING TAB PLATE	73	EA	8
M25	REMOVE EXISTING UTILITY LINES AND CONDUIT	9	LS	
M26	INSTALL COMCAST CONDUIT	7	LS	
PR07	PACK RUST REPAIR, TRUSS END PORTAL	66	LF	64

LEGEND:

- TRUSS - TOP & BOTTOM CHORD MEMBER
- F5 FLOORBEAM
- S2 STRINGER
- SWAY BRACING
- LATERAL BRACING
- F00 DENOTES REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 10 NORTH TRUSS ELEVATION, SEE SHEET 38.
3. FOR SPAN 10 SOUTH TRUSS ELEVATION, SEE SHEET 39.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

SPAN 10 FRAMING & BRACING PLAN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 37 OF 124

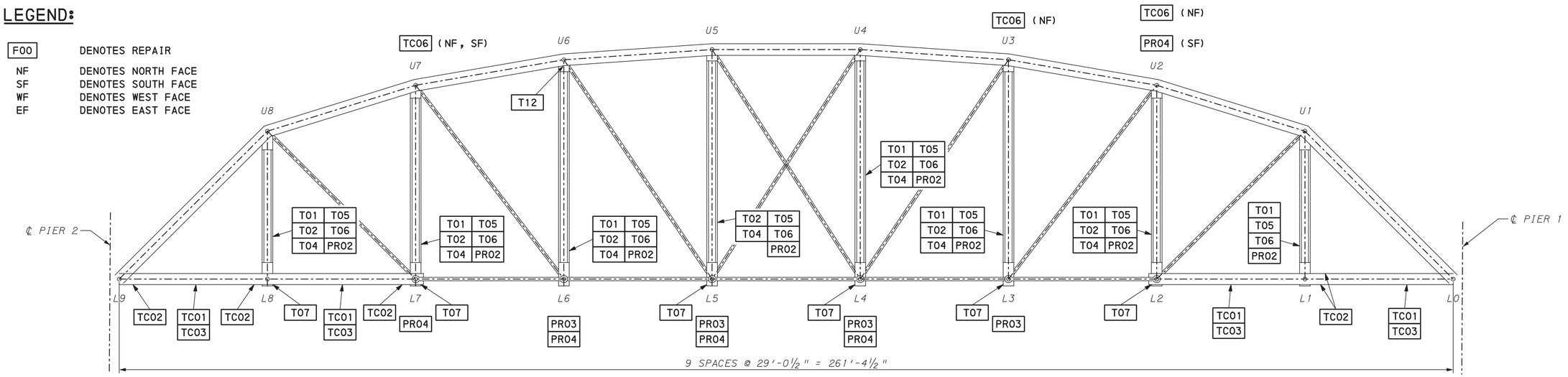
S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:55:20 AM

LEGEND:

F00	DENOTES REPAIR
NF	DENOTES NORTH FACE
SF	DENOTES SOUTH FACE
WF	DENOTES WEST FACE
EF	DENOTES EAST FACE



SPAN 10 NORTH TRUSS ELEVATION

(SOUTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 10, NORTH TRUSS

TRUSS VERTICALS	LOCATION	REPAIR TYPE PR02 (LF)	T01 (EA)	T02 (EA)	T04 (EA)	T05 (EA)	T06 (EA)	T07 (LF)
L1U1	NF	4	3			27		
	SF						16	
	WF			4				
	EF			1			14	
L2U2	NF	14	3			45		
	SF		3				16	
	WF			5				4
	EF			7	1			4
L3U3	NF	4	3			31		
	SF						16	
	WF			4				4
	EF			4	1		11	
L4U4	NF	4				23	18	
	SF		3				10	
	WF			2			5	2
	EF			6	1		11	1
L5U5	NF	4				5	10	
	SF						10	
	WF						10	
	EF			4	1		8	4
L6U6	NF	4				30		
	SF		3				10	
	WF			4				
	EF			5	1		14	
L7U7	NF	4				21	10	
	SF		3				16	
	WF						10	4
	EF			8	1			4
L8U8	NF	4				34		
	SF		4				10	
	WF							2
	EF			6	1			2
TOTAL		42	25	60	7	216	225	31

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 10, NORTH TRUSS

TRUSS CHORDS	REPAIR TYPE TC01 (EA)	TC02 (EA)	TC03 (EA)	T04 (EA)	T05 (EA)	T06 (EA)
L0L1	8	2	6			
L1L2	4		4			
L7L8	4	2	15			
L8L9	8	2	10			
L0U1						
U1U2						
U2U3						
U3U4						
U4U5						
U5U6						
U6U7						
U7U8						
U8L9						
TOTAL	24	6	35	0	0	0

SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 10, NORTH TRUSS

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
T01	LACING BAR REPAIR TYPE 1, TRUSS	50	EA	25
T02	LACING BAR REPAIR TYPE 2, TRUSS	50	EA	60
T04	BATTEN PLATE REPAIR TYPE 2, TRUSS	51	EA	7
T05	REPLACE RIVET, TRUSS	65	EA	216
T06	INSTALL HIGH STRENGTH BOLT, TRUSS	51	EA	225
T07	ANGLE COVER PLATE, TRUSS	52	LF	31
T12	REPLACE CLIP ANGLE AND GUSSET PLATE	63	EA	1
TC01	LACING BAR REPAIR, CHORD	50	EA	24
TC02	BATTEN PLATE REPAIR, CHORD	51	EA	6
TC03	REPLACE RIVET, CHORD	65	EA	35
TC06	REPAIR TOP CHORD PIN PLATE	68	EA	4
PR02	PACK RUST REPAIR, TRUSS VERTICAL	66	LF	42
PR03	PACK RUST REPAIR, EYE BARS	67	EA	4
PR04	PACK RUST REPAIR, JOINT OR CHORD	67	EA	5

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 10 FRAMING & BRACING PLAN, SEE SHEET 37.
3. FOR SPAN 10 SOUTH TRUSS ELEVATION, SEE SHEET 39.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 10 NORTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

SHEET 38 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

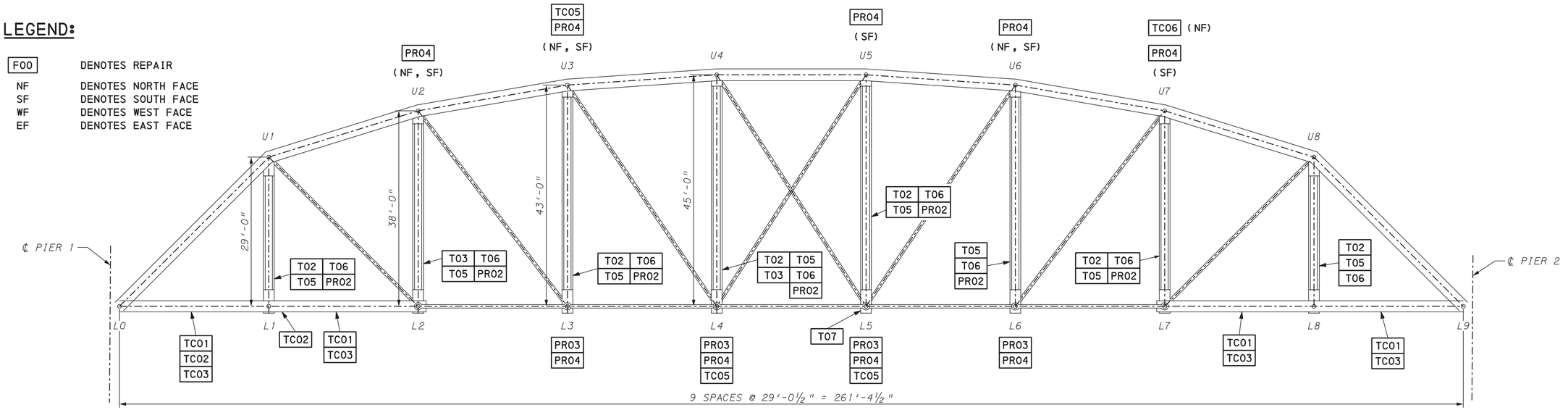
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\Sp 10 North Truss.dgn

PLOTTED: 10/26/2022 7:55:22 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 10 South Truss.dgn

LEGEND:

F00	DENOTES REPAIR
NF	DENOTES NORTH FACE
SF	DENOTES SOUTH FACE
WF	DENOTES WEST FACE
EF	DENOTES EAST FACE



SPAN 10 SOUTH TRUSS ELEVATION

(NORTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 10, SOUTH TRUSS

TRUSS VERTICALS	LOCATION	REPAIR TYPE PR02 (LF)	TO1 (EA)	TO2 (EA)	TO3 (EA)	TO5 (EA)	TO6 (EA)	TO7 (LF)
L1U1	NF	2				39	10	
	SF							
	WF			5			2	
	EF						10	
L2U2	NF	8				20	10	
	SF							
	WF				1		6	
	EF						6	
L3U3	NF	4				12	8	
	SF							
	WF			2	1		10	
	EF			6			5	
L4U4	NF	6				10	12	
	SF							
	WF			2	1		14	
	EF						8	
L5U5	NF	6				23	12	
	SF							
	WF			1			21	
	EF			3			10	1
L6U6	NF	4				12	10	
	SF							
	WF						15	
	EF						15	
L7U7	NF	10				15	12	
	SF							
	WF			3			12	
	EF							
L8U8	NF	7		3		17	8	
	SF							
	WF			7			8	
	EF							
TOTAL		47	0	32	3	148	224	1

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 10, SOUTH TRUSS

TRUSS CHORDS	REPAIR TYPE TC01 (EA)	TC02 (EA)	TC03 (EA)	TO4 (EA)	TO5 (EA)	TO6 (EA)
L0L1	32	1	20			
L1L2	40	1	10			
L7L8	40		15			
L8L9	32		10			
L0U1						
U1U2						
U2U3						
U3U4						
U4U5						
U5U6						
U6U7						
U7U8						
U8L9						
TOTAL	144	2	55	0	0	0

SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 10, SOUTH TRUSS

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
TO2	REPLACE LACING BAR TYPE 2, TRUSS	50	EA	32
TO3	REPLACE BATTEN PLATE TYPE 1, TRUSS	51	EA	3
TO5	REPLACE RIVET, TRUSS	65	EA	148
TO6	INSTALL HIGH STRENGTH BOLT, TRUSS	51	EA	224
TO7	ANGLE COVER PLATE, TRUSS	52	LF	1
TC01	LACING BAR REPAIR, CHORD	50	EA	144
TC02	BATTEN PLATE REPAIR, CHORD	51	EA	2
TC03	REPLACE RIVET, TRUSS CHORD	65	EA	55
TC05	REPLACE PIN ROD	68	EA	3
TC06	REPAIR TOP CHORD PIN PLATE	68	EA	1
PR02	PACK RUST REPAIR, TRUSS VERTICAL	66	LF	47
PR03	PACK RUST REPAIR, EYE BARS	67	EA	4
PR04	PACK RUST REPAIR, JOINT OR CHORD	67	EA	12

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 10 FRAMING & BRACING PLAN, SEE SHEET 37.
3. FOR SPAN 10 NORTH TRUSS ELEVATION, SEE SHEET 38.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

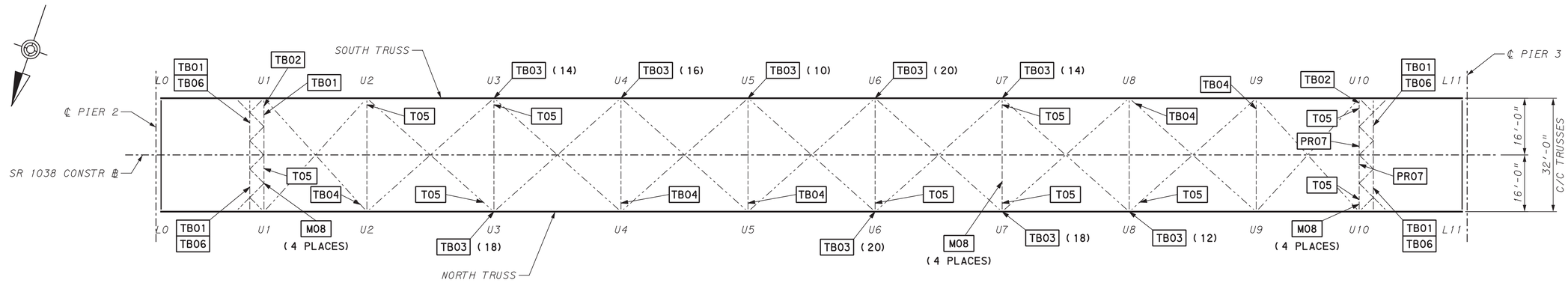
ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 10 SOUTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

SHEET 39 OF 124

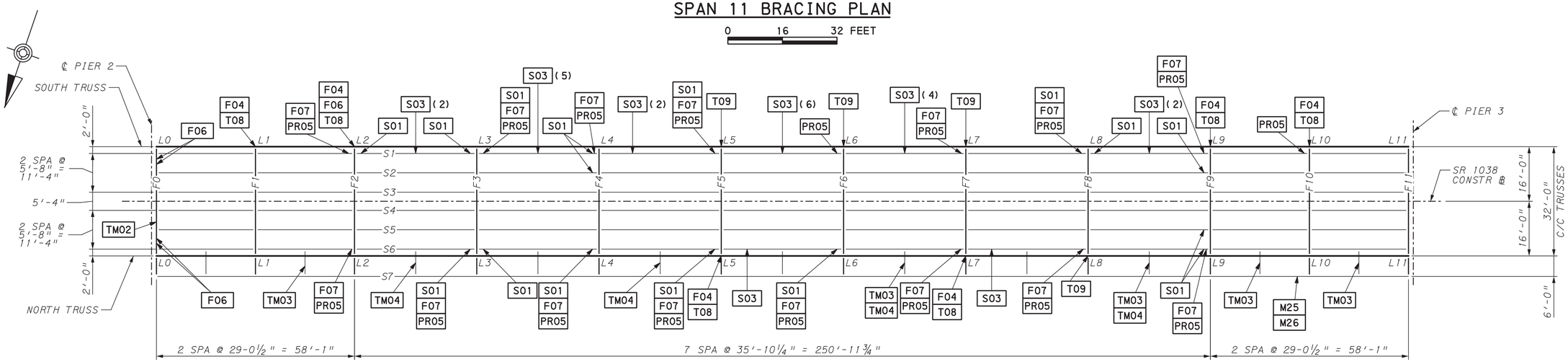
S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA



SPAN 11 BRACING PLAN

0 16 32 FEET



SPAN 11 FRAMING PLAN

0 16 32 FEET

SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 11 FLOOR SYSTEM & BRACING

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
F04	BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM	61	EA	6
F06	STIFFENER RETROFIT, FLOORBEAM	58	EA	4
F07	BEARING SEAT STIFFENER REPAIR, FLOORBEAM	58	EA	15
S01	WEB COVER PLATE, STRINGER	53	EA	16
S03	STIFFENER REPAIR, STRINGER	57	EA	23
T05	REPLACE RIVET, TRUSS	65	EA	80
T08	CONNECTION ANGLE REPAIR, TRUSS	61	EA	12
T09	FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS	62	EA	4
TB01	LACING BAR REPAIR, END PORTAL	59	EA	5
TB02	BATTEN PLATE REPAIR, BRACING	51	EA	2
TB03	REPLACE RIVET, BRACING	65	EA	142
TB04	END SWAY BRACING ANGLE REPLACEMENT	60	EA	5
TB06	END PORTAL STRUT REPAIR	59	EA	4
TM03	REPAIR GUSSET PLATE, SIDEWALK SUPPORT	69	EA	4
TM04	REPAIR ANGLE BRACING, SIDEWALK SUPPORT	69	EA	4
M08	REMOVE EXISTING TAB PLATE	73	EA	12
M25	REMOVE EXISTING UTILITY LINES AND CONDUIT	9	LS	
M26	INSTALL COMCAST CONDUIT	7	LS	
PR05	PACK RUST REPAIR, STRINGER BEARING SEAT	66	EA	17
PR07	PACK RUST REPAIR, TRUSS END PORTAL	66	LF	64

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 11 NORTH TRUSS ELEVATION, SEE SHEET 41.
3. FOR SPAN 11 SOUTH TRUSS ELEVATION, SEE SHEET 42.
4. FOR REPAIR [TM02] QUANTITY, SEE SHEET 37.

LEGEND:

- TRUSS - TOP & BOTTOM CHORD MEMBER
- F5 FLOORBEAM
- S2 STRINGER
- SWAY BRACING
- LATERAL BRACING
- [F00] DENOTES REPAIR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 11 FRAMING & BRACING PLAN

RECOMMENDED
OCTOBER 26, 2022

SHEET 40 OF 124
S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

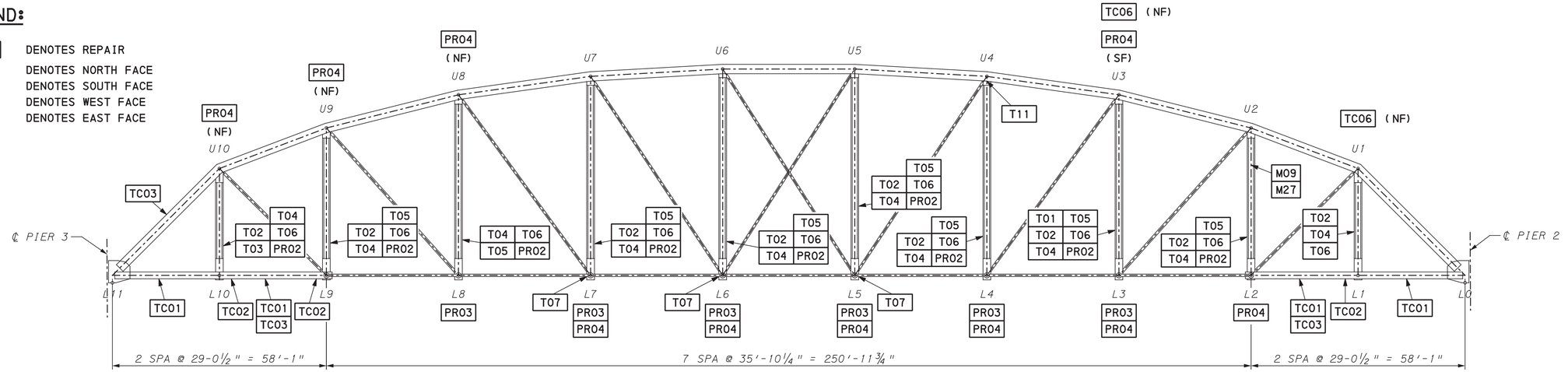
PLOTTED: 10/26/2022 7:55:25 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 11 Framing-Bracing.dgn

PLOTTED: 10/26/2022 7:55:27 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 11 North Truss.dgn

LEGEND:

F00	DENOTES REPAIR
NF	DENOTES NORTH FACE
SF	DENOTES SOUTH FACE
WF	DENOTES WEST FACE
EF	DENOTES EAST FACE



SPAN 11 NORTH TRUSS ELEVATION

(SOUTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 11, NORTH TRUSS

TRUSS VERTICALS	LOCATION	REPAIR TYPE PR02 (LF)	T01 (EA)	T02 (EA)	T03 (EA)	T04 (EA)	T05 (EA)	T06 (EA)	T07 (LF)
L1U1	NF								
	SF							16	
	WF								
	EF			5		1		5	
L2U2	NF							12	
	SF	4					31	10	
	WF							8	
	EF			4		1			
L3U3	NF		3						
	SF	4					38	10	
	WF			6					
	EF			8		1			
L4U4	NF							12	
	SF	4					34	10	
	WF							6	
	EF			3		1		12	
L5U5	NF							14	
	SF	4					22	10	
	WF			2					
	EF			8		1			1
L6U6	NF							14	
	SF	4					15	10	
	WF							8	2
	EF			6		1			
L7U7	NF							18	
	SF	4					12	10	
	WF							11	1
	EF			6		1		5	1
L8U8	NF							12	
	SF	8					11	16	
	WF							8	
	EF					1		11	
L9U9	NF							12	
	SF	9					9	10	
	WF							6	
	EF			8		1			
L10U10	NF								
	SF	4						10	
	WF								
	EF			7	1	1			
TOTAL		45	3	63	1	10	172	286	5

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 11, NORTH TRUSS

TRUSS CHORDS	REPAIR TYPE TC01 (EA)	TC02 (EA)	TC03 (EA)	T04 (EA)	T05 (EA)	T06 (EA)
L0L1	2					
L1L2	10	3	20			
L9L10	4	2	12			
L10L11	8					
L0U1						
U1U2						
U2U3						
U3U4						
U4U5						
U5U6						
U6U7						
U7U8						
U8U9						
U9U10						
U10L11			30			
TOTAL	24	5	62	0	0	0

SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 11, NORTH TRUSS

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
T01	LACING BAR REPAIR TYPE 1, TRUSS	50	EA	3
T02	LACING BAR REPAIR TYPE 2, TRUSS	50	EA	63
T03	BATTEN PLATE REPAIR TYPE 1, TRUSS	51	EA	1
T04	BATTEN PLATE REPAIR TYPE 2, TRUSS	51	EA	10
T05	REPLACE RIVET, TRUSS	65	EA	172
T06	INSTALL HIGH STRENGTH BOLT, TRUSS	51	EA	286
T07	ANGLE COVER PLATE, TRUSS	52	LF	5
T11	REPLACE CLIP ANGLE	63	EA	1
TC01	LACING BAR REPAIR, CHORD	50	EA	24
TC02	BATTEN PLATE REPAIR, CHORD	51	EA	5
TC03	REPLACE RIVET, CHORD	65	EA	62
TC06	REPAIR TOP CHORD PIN PLATE	68	EA	2
PR02	PACK RUST REPAIR, TRUSS VERTICAL	66	LF	45
PR03	PACK RUST REPAIR, EYE BARS	67	EA	6
PR04	PACK RUST REPAIR, JOINT OR CHORD	67	EA	10
M09	INSTALL LIGHT MAST AND FIXTURE	73	EA	1
M27	REPLACE LIGHT MAST PLATE	73	EA	1

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 11 FRAMING & BRACING PLAN, SEE SHEET 40.
3. FOR SPAN 11 SOUTH TRUSS ELEVATION, SEE SHEET 42.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 11 NORTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

SHEET 41 OF 124

S - 40253

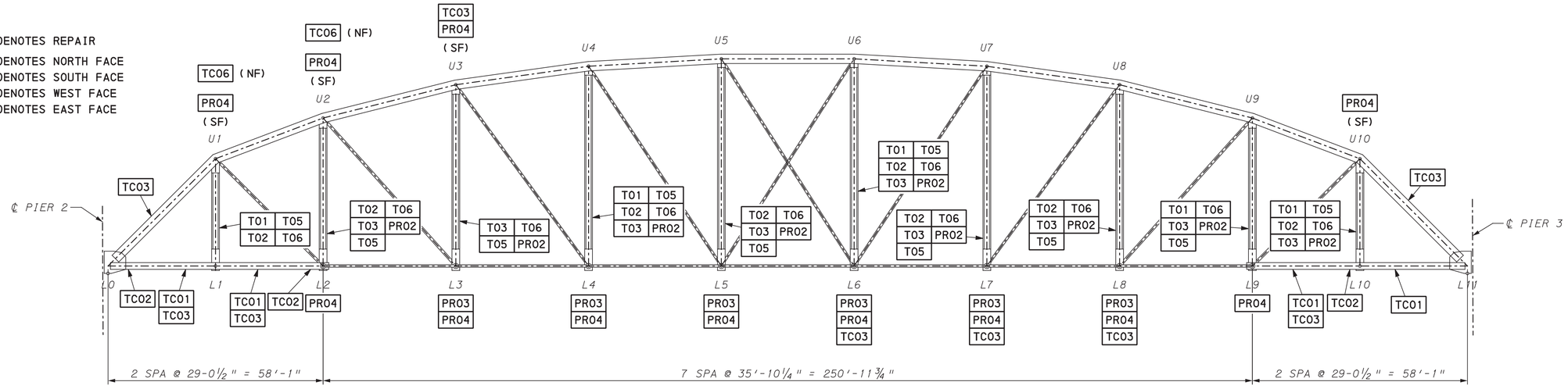
DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 7:55:29 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 11 South Truss.dgn

LEGEND:

F00	DENOTES REPAIR
NF	DENOTES NORTH FACE
SF	DENOTES SOUTH FACE
WF	DENOTES WEST FACE
EF	DENOTES EAST FACE



SPAN 11 SOUTH TRUSS ELEVATION

(NORTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 11, SOUTH TRUSS

TRUSS VERTICALS	LOCATION	REPAIR TYPE							
		PR02 (LF)	T01 (EA)	T02 (EA)	T03 (EA)	T04 (EA)	T05 (EA)	T06 (EA)	T07 (LF)
L1U1	NF						22	4	
	SF								
	WF			7				2	
	EF								
L2U2	NF	8					76	4	
	SF								
	WF			4	1				
	EF			2					
L3U3	NF	4					44	4	
	SF								
	WF				1			16	
	EF				1			5	
L4U4	NF	4					14	4	
	SF		2						
	WF			4	1			11	
	EF								
L5U5	NF	4					20	4	
	SF								
	WF			3	1			14	
	EF								
L6U6	NF	4	3				21	8	
	SF								
	WF			5	1			8	
	EF								
L7U7	NF	6			1		23	4	
	SF								
	WF			5	1			8	
	EF							14	
L8U8	NF	14			1		85	4	
	SF								
	WF			3	1			8	
	EF			3				8	
L9U9	NF	8					8	4	
	SF		2						
	WF				1			8	
	EF				1			5	
L10U10	NF	10	3				12	10	
	SF								
	WF			7	2				
	EF								
TOTAL		62	10	43	14	0	325	157	0

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 11, SOUTH TRUSS

TRUSS CHORDS	REPAIR TYPE					
	TC01 (EA)	TC02 (EA)	TC03 (EA)	T04 (EA)	T05 (EA)	T06 (EA)
L0L1	28	4	10			
L1L2	36	2	30			
L9L10	36	1	30			
L10L11	28					
L0U1			40			
U1U2						
U2U3						
U3U4						
U4U5						
U5U6						
U6U7						
U7U8						
U8U9						
U9U10						
U10L11			13			
TOTAL	128	7	123	0	0	0

SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 11, SOUTH TRUSS

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
T01	LACING BAR REPAIR TYPE 1, TRUSS	50	EA	10
T02	LACING BAR REPAIR TYPE 2, TRUSS	50	EA	43
T03	BATTEN PLATE REPAIR TYPE 1, TRUSS	51	EA	14
T05	REPLACE RIVET, TRUSS	65	EA	325
T06	INSTALL HIGH STRENGTH BOLT, TRUSS	51	EA	157
TC01	LACING BAR REPAIR, CHORD	50	EA	128
TC02	BATTEN PLATE REPAIR, CHORD	51	EA	7
TC03	REPLACE RIVET, CHORD	65	EA	123
TC06	REPAIR TOP CHORD PIN PLATE	68	EA	2
TC05	REPLACE PIN ROD	68	EA	4
PR02	PACK RUST REPAIR, TRUSS VERTICAL	66	LF	62
PR03	PACK RUST REPAIR, EYE BARS	67	EA	6
PR04	PACK RUST REPAIR, JOINT OR CHORD	67	EA	12

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 11 FRAMING & BRACING PLAN, SEE SHEET 40.
3. FOR SPAN 11 NORTH TRUSS ELEVATION, SEE SHEET 41.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 11 SOUTH TRUSS ELEVATION

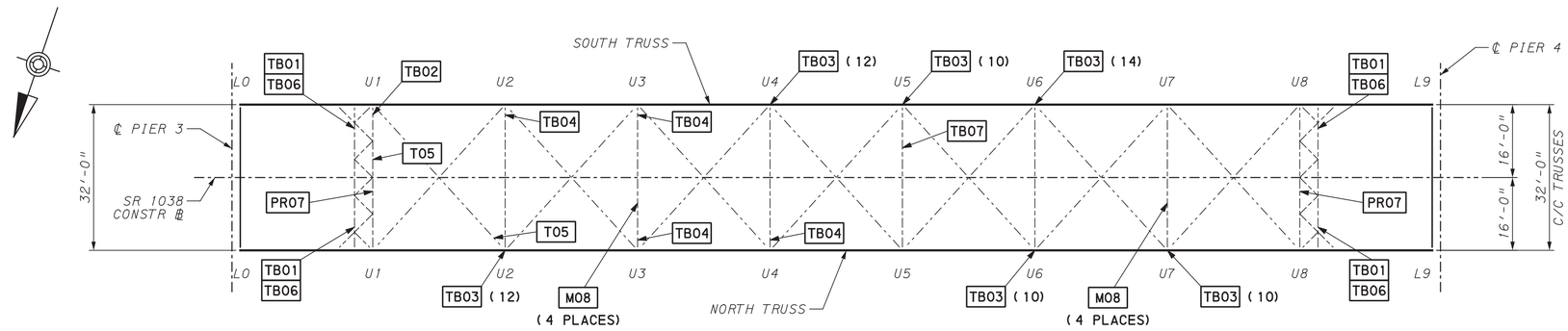
RECOMMENDED
OCTOBER 26, 2022

SHEET 42 OF 124

S - 40253

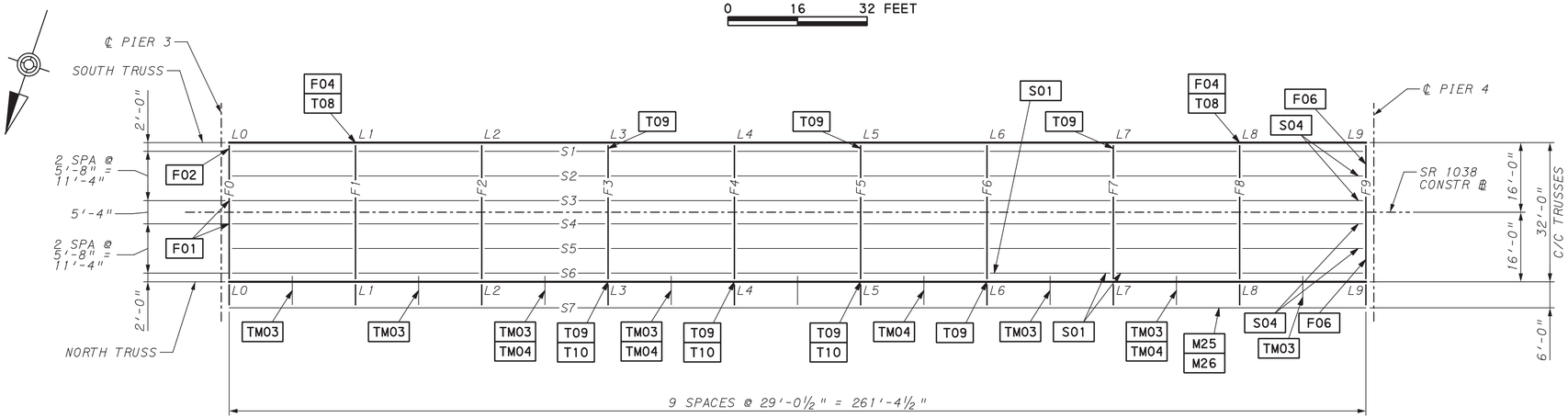
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:55:30 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 12 Framing-Bracing.dgn



SPAN 12 BRACING PLAN

0 16 32 FEET



SPAN 12 FRAMING PLAN

0 16 32 FEET

LEGEND:

- TRUSS - TOP & BOTTOM CHORD MEMBER
- F5 FLOORBEAM
- S2 STRINGER
- SWAY BRACING
- LATERAL BRACING
- F00 DENOTES REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 12 NORTH TRUSS ELEVATION, SEE SHEET 44.
3. FOR SPAN 12 SOUTH TRUSS ELEVATION, SEE SHEET 45.

SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 12 FLOOR SYSTEM & BRACING

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
F01	WEB COVER PLATE, FLOORBEAM	55	EA	2
F02	FLANGE COVER PLATE, FLOORBEAM	56	LF	3
F04	BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM	61	EA	2
F06	STIFFENER RETROFIT, FLOORBEAM	58	EA	2
S01	WEB COVER PLATE, STRINGER	53	EA	3
S04	ARREST HOLE WITH WEB COVER PLATE, STRINGER	54	EA	4
T05	REPLACE RIVET, TRUSS	65	EA	75
T08	CONNECTION ANGLE REPAIR, TRUSS	61	EA	4
T09	FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS	62	EA	7
T10	FLOORBEAM CONNECTION PLATE REPAIR, TRUSS	62	EA	3
TM03	REPAIR GUSSET PLATE, SIDEWALK SUPPORT	69	EA	7
TM04	REPAIR ANGLE BRACING, SIDEWALK SUPPORT	69	EA	4
M08	REMOVE EXISTING TAB PLATE	73	EA	8
M25	REMOVE EXISTING UTILITY LINES AND CONDUIT	9	LS	
M26	INSTALL COMCAST CONDUIT	7	LS	
TB01	LACING BAR REPAIR, END PORTAL	59	EA	4
TB02	BATTEN PLATE REPAIR, BRACING	51	EA	1
TB03	REPLACE RIVET, BRACING	65	EA	68
TB04	END SWAY BRACING ANGLE REPLACEMENT	60	EA	4
TB06	END PORTAL STRUT REPAIR	59	EA	4
TB07	SWAY BRACING ANGLE REPLACEMENT	60	EA	1
PR07	PACK RUST REPAIR, TRUSS END PORTAL	66	LF	64

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

SPAN 12 FRAMING & BRACING PLAN

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 43 OF 124

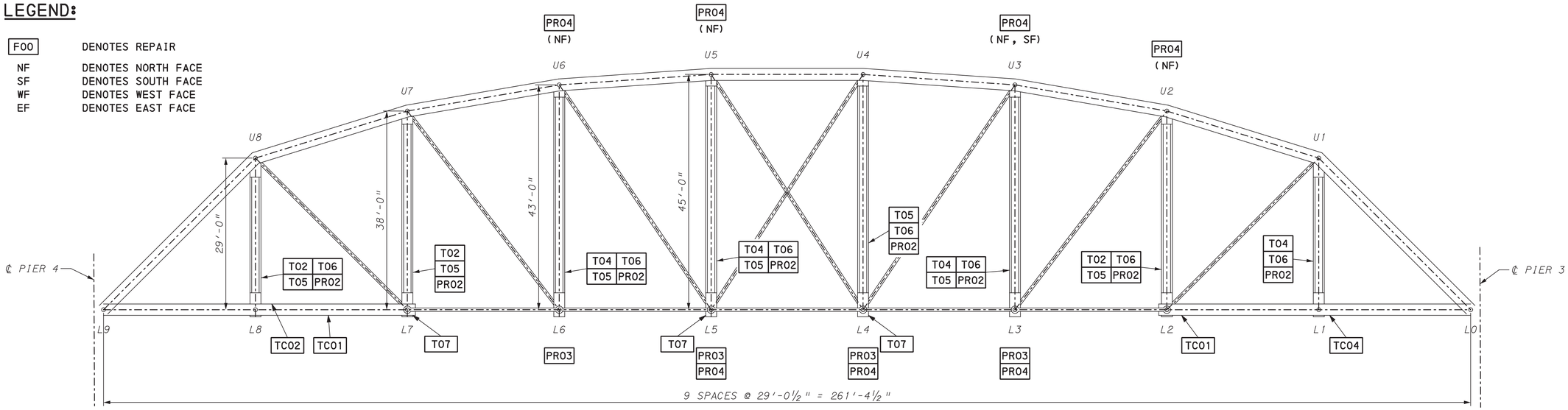
S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:55:31 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 12 North Truss.dgn

LEGEND:

F00	DENOTES REPAIR
NF	DENOTES NORTH FACE
SF	DENOTES SOUTH FACE
WF	DENOTES WEST FACE
EF	DENOTES EAST FACE



SPAN 12 NORTH TRUSS ELEVATION

(SOUTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 12, NORTH TRUSS

TRUSS VERTICALS	LOCATION	REPAIR TYPE PR02 (LF)	T01 (EA)	T02 (EA)	T04 (EA)	T05 (EA)	T06 (EA)	T07 (LF)
L1U1	NF	12						
	SF						4	
	WF						6	
	EF				1		18	
L2U2	NF	8				9	18	
	SF						10	
	WF			3			10	
	EF						8	
L3U3	NF	4				10	18	
	SF						10	
	WF				1		14	
	EF				1		8	
L4U4	NF	4				15	8	
	SF						16	
	WF						2	2
	EF						8	
L5U5	NF	4					12	
	SF						12	
	WF				1		11	2
	EF				1		5	2
L6U6	NF	4				10		
	SF						4	
	WF						8	
	EF				1		11	
L7U7	NF	12				5		
	SF							
	WF							2
	EF			5				
L8U8	NF	2				6		
	SF						4	
	WF							
	EF			6			5	
TOTAL		50	0	14	6	55	230	8

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 12, NORTH TRUSS

TRUSS CHORDS	REPAIR TYPE TC01 (EA)	TC02 (EA)	TC03 (EA)	TC04 (LB)	T04 (EA)	T05 (EA)	T06 (EA)
L0L1				20			
L1L2	4						
L7L8	8	1					
L8L9							
L0U1							
U1U2							
U2U3							
U3U4							
U4U5							
U5U6							
U6U7							
U7U8							
U8L9							
TOTAL	12	1	0	20	0	0	0

SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 12, NORTH TRUSS

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
T02	LACING BAR REPAIR TYPE 2, TRUSS	50	EA	14
T04	BATTEN PLATE REPAIR TYPE 2, TRUSS	51	EA	6
T05	REPLACE RIVET, TRUSS	65	EA	55
T06	INSTALL HIGH STRENGTH BOLT, TRUSS	51	EA	230
T07	ANGLE COVER PLATE, TRUSS	52	LF	8
TC01	LACING BAR REPAIR, CHORD	50	EA	12
TC02	BATTEN PLATE REPAIR, CHORD	51	EA	1
TC04	ANGLE COVER PLATE, CHORD	52	LB	20
PR02	PACK RUST REPAIR, TRUSS VERTICAL	66	LF	50
PR03	PACK RUST REPAIR, EYE BARS	67	EA	4
PR04	PACK RUST REPAIR, JOINT OR CHORD	67	EA	9

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 12 FRAMING & BRACING PLAN, SEE SHEET 43.
3. FOR SPAN 12 SOUTH TRUSS ELEVATION, SEE SHEET 45.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 12 NORTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

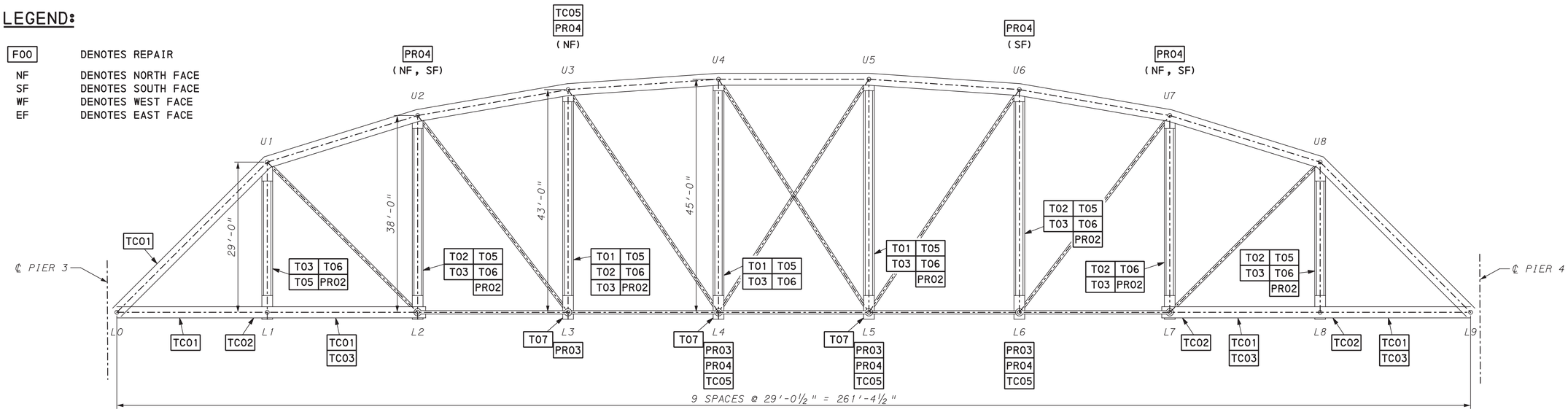
SHEET 44 OF 124
S - 40253

DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 7:55:33 AM

LEGEND:

F00	DENOTES REPAIR
NF	DENOTES NORTH FACE
SF	DENOTES SOUTH FACE
WF	DENOTES WEST FACE
EF	DENOTES EAST FACE



SPAN 12 SOUTH TRUSS ELEVATION

(NORTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 12, SOUTH TRUSS

TRUSS VERTICALS	LOCATION	REPAIR TYPE						
		PR02 (LF)	T01 (EA)	T02 (EA)	T03 (EA)	T05 (EA)	T06 (EA)	T07 (LF)
L1U1	NF	10				20	14	
	SF							
	WF				1		9	
	EF							
L2U2	NF	6			1	20	10	
	SF							
	WF			5	1		12	
	EF			7				
L3U3	NF	7				29	4	
	SF		4					
	WF				1		11	1
	EF			7				1
L4U4	NF					18	4	
	SF		2					
	WF				1		20	2
	EF			3				1
L5U5	NF	4			1	28	4	
	SF		3					
	WF				1		8	1
	EF				1			1
L6U6	NF	8				30	4	
	SF							
	WF			4	1		6	
	EF						2	
L7U7	NF	6					4	
	SF							
	WF				1		9	
	EF			4				
L8U8	NF	2				15	4	
	SF							
	WF			7	1			
	EF							
TOTAL		43	9	37	11	160	125	7

REPAIR DESCRIPTION & QTY BY MEMBER SPAN 12, SOUTH TRUSS

TRUSS CHORDS	REPAIR TYPE					
	TC01 (EA)	TC02 (EA)	TC03 (EA)	T04 (EA)	T05 (EA)	T06 (EA)
L0L1	32	1				
L1L2	40		8			
L7L8	40	1	26			
L8L9	32	1	21			
L0U1	4					
U1U2						
U2U3						
U3U4						
U4U5						
U5U6						
U6U7						
U7U8						
U8L9						
TOTAL	148	3	55	0	0	0

SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 12, SOUTH TRUSS

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
T01	LACING BAR REPAIR TYPE 1, TRUSS	50	EA	9
T02	LACING BAR REPAIR TYPE 2, TRUSS	50	EA	37
T03	BATTEN PLATE REPAIR TYPE 1, TRUSS	51	EA	11
T05	REPLACE RIVET, TRUSS	65	EA	160
T06	INSTALL HIGH STRENGTH BOLT, TRUSS	51	EA	125
T07	ANGLE COVER PLATE, TRUSS	52	LF	7
TC01	LACING BAR REPAIR, CHORD	50	EA	148
TC02	BATTEN PLATE REPAIR, CHORD	51	EA	3
TC03	REPLACE RIVET, CHORD	65	EA	55
TC05	REPLACE PIN ROD	68	EA	4
PR02	PACK RUST REPAIR, TRUSS VERTICAL	66	LF	43
PR03	PACK RUST REPAIR, EYE BARS	67	EA	4
PR04	PACK RUST REPAIR, JOINT OR CHORD	67	EA	9

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 12 FRAMING & BRACING PLAN, SEE SHEET 43.
3. FOR SPAN 12 NORTH TRUSS ELEVATION, SEE SHEET 44.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

SPAN 12 SOUTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

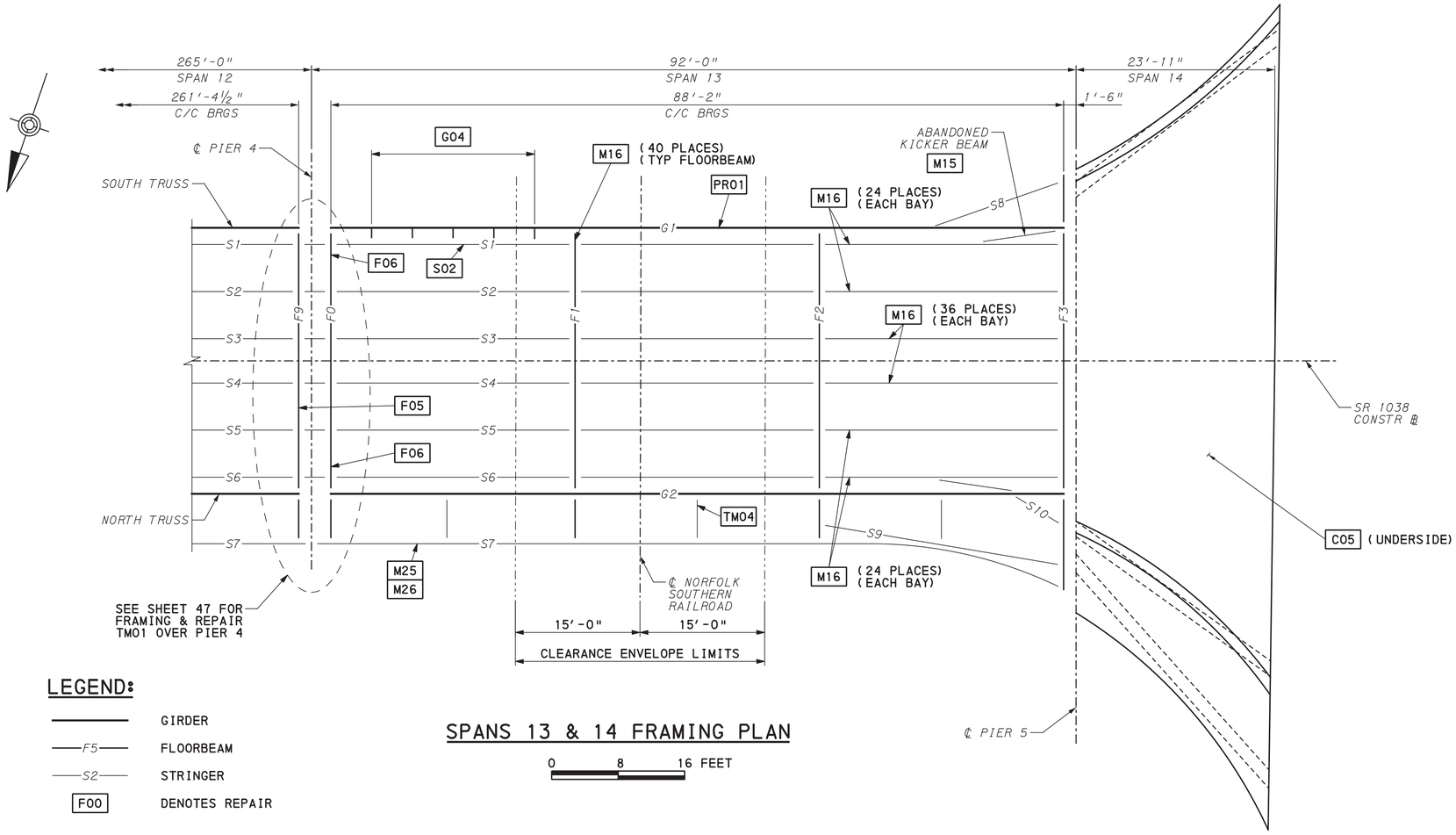
SHEET 45 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 12 South Truss.dgn

PLOTTED: 10/26/2022 9:07:24 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 13-14 Framing.dgn



SPANS 13 & 14 FRAMING PLAN

0 8 16 FEET

LEGEND:

- GIRDER
- F5 FLOORBEAM
- S2 STRINGER
- F00 DENOTES REPAIR

REPAIR M16

ITEM 1050-0263
REPAIR M16 - INSTALL BOLTS OPEN HOLES
REPRESENTATIVE CONDITIONS

REPAIR M16 - PROCEDURE

1. VISUALLY INSPECT EXISTING HOLES FOR ANY EVIDENCE OF CRACKS. REPORT FINDINGS TO THE REPRESENTATIVE.
2. CLEAN AND PREPARE STEEL SURFACES ADJACENT TO THE OPEN HOLES IN ACCORDANCE WITH THE SPECIFICATIONS AND THE SPECIAL PROVISIONS AND APPLY ONE COAT OF PRIMER. ALLOW PRIMER TO CURE.
3. REAM HOLES TO 13/16" DIAMETER.
4. INSTALL 3/4" DIAMETER HIGH STRENGTH BOLT, WITH NUT AND WASHER. PROVIDE OVERSIZED WASHER IF REQUIRED. TIGHTEN SNUG TIGHT.

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	1700
F05	STIFFENER REPAIR, FLOORBEAM	57	EA	1
F06	STIFFENER RETROFIT, FLOORBEAM	58	EA	2
G04	STIFFENER REPAIR, GIRDER	57	EA	5
TM04	SIDEWALK ANGLE BRACING REPAIR	69	EA	1
M15	REMOVE KICKER BEAM	73	EA	1
M16	INSTALL BOLTS OPEN HOLES	46	EA	664
M25	REMOVE EXISTING UTILITY LINES AND CONDUIT	9	LS	
M26	INSTALL COMCAST CONDUIT	7	LS	
PR01	PACK RUST REPAIR, GIRDER OR FLOORBEAM	66	LF	30

REPAIR C05

REPAIR C05 - PROTECTIVE COATING, PENETRATING SEALER

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

SP 13 FRAMING & SP 14 SLAB PLAN

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

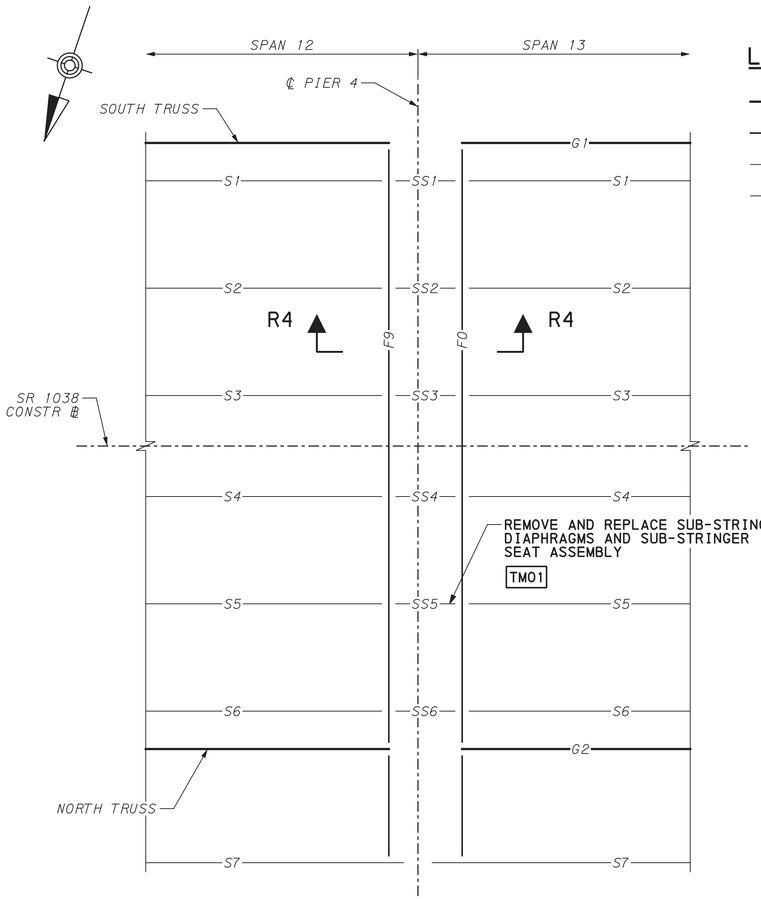
RECOMMENDED
OCTOBER 26, 2022

SHEET 46 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 7:56:52 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_TM01 - seat & bm.dgn



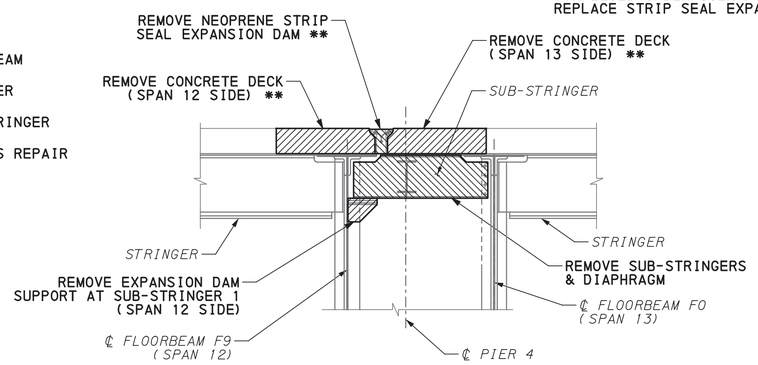
PARTIAL FRAMING PLAN - REPAIR TM01

0 2 4 6 FEET

LEGEND:

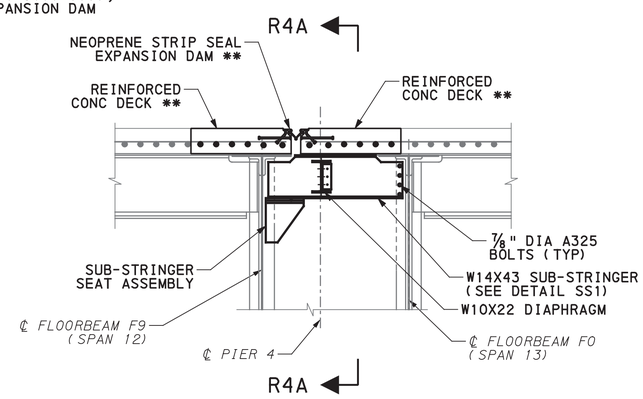
G2	GIRDER
F5	FLOORBEAM
S2	STRINGER
SS3	SUB-STRINGER
F00	DENOTES REPAIR

** REMOVAL AND REPLACEMENT OF CONCRETE DECK AND NEOPRENE STRIP SEAL EXPANSION DAM ARE TO BE COMPLETED UNDER ITEM NO 5090-1019, REPLACE STRIP SEAL EXPANSION DAM



SECTION R4-R4 (REMOVAL)

0 2 4 FEET

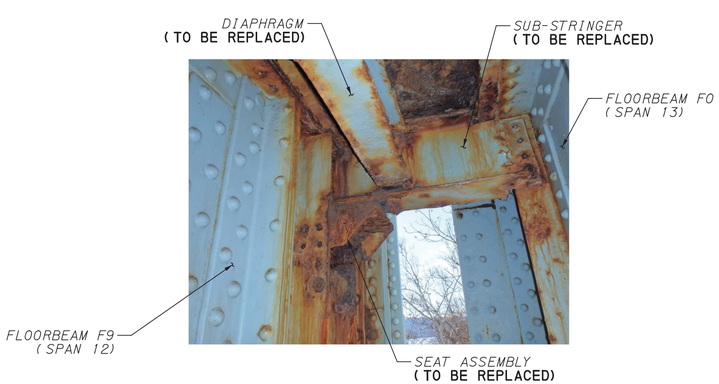


SECTION R4-R4 (PROPOSED)

0 2 4 FEET

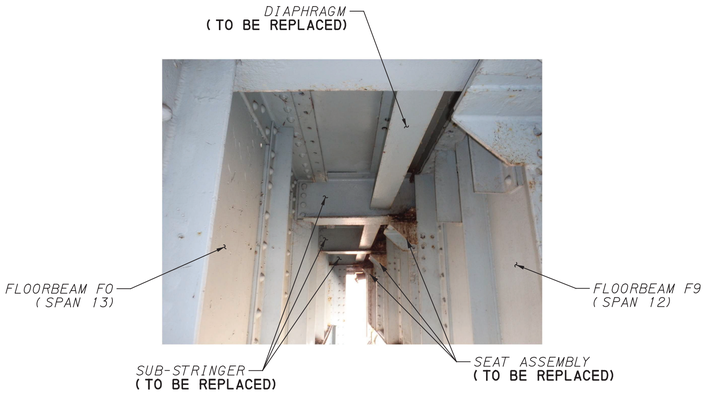
REPAIR TM01 - PROCEDURE

1. COORDINATE ALL WORK ASSOCIATED WITH THIS REPAIR WITH THE REPLACEMENT OF THE EXPANSION JOINT AT PIER 4.
2. REMOVE THE EXISTING DIAPHRAGM BEAMS. REMOVE THE EXISTING SUB-STRINGERS AND SEAT ASSEMBLIES FROM THE SPAN 12 FLOORBEAM.
3. BLAST CLEAN AND PREPARE THE FAYING SURFACES OF THE CONNECTING ELEMENTS OF THE PROPOSED REPLACEMENT COMPONENTS IN ACCORDANCE WITH THE SPECIFICATIONS. IF EXCESSIVE DETERIORATION (GREATER THAN 33% SECTION LOSS) OF ANY CONNECTING ELEMENT TO REMAIN IN FOUND, IMMEDIATELY CONTACT THE ENGINEER.
4. PREPARE THE CONNECTING ELEMENTS BY DRILLING AND / OR REAMING HOLES FOR BOLTED CONNECTIONS. THE NEW SUB-STRINGERS MAY BE MATCH DRILLED IN THE FIELD.
5. INSTALL THE NEW SEAT ASSEMBLIES. FIELD WELD TO EXISTING STIFFENERS AS SHOWN. INSTALL THE BRONZE PLATE AND PTFE SLIDING SURFACE ON THE NEW SEAT ASSEMBLIES AND INSTALL THE NEW SUB-STRINGERS. INSTALL THE NEW DIAPHRAGM BEAMS. COMPLETE ANY SPOT ZONE PAINTING REQUIRED TO COMPLETE THE REPAIR. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.
6. COMPLETE THE REPLACEMENT OF THE EXPANSION JOINT.



REPAIR TM01

ITEM 1050-0117
REPAIR TM01 - REPLACE SEAT AND BEAM
REPRESENTATIVE CONDITIONS



REPAIR TM01

ITEM 1050-0117
REPAIR TM01 - REPLACE SEAT AND BEAM
REPRESENTATIVE CONDITIONS

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SECTION R4A-R4A, DETAIL DC1, SUB-STRINGER SEAT ASSEMBLY, AND DETAIL SS1 SEE SHEET 48.
3. FOR DETAILS OF EXPANSION JOINT REPLACEMENT, SEE SHEET 90.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

REPAIR TM01 - SEAT & BEAM PIER 4

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

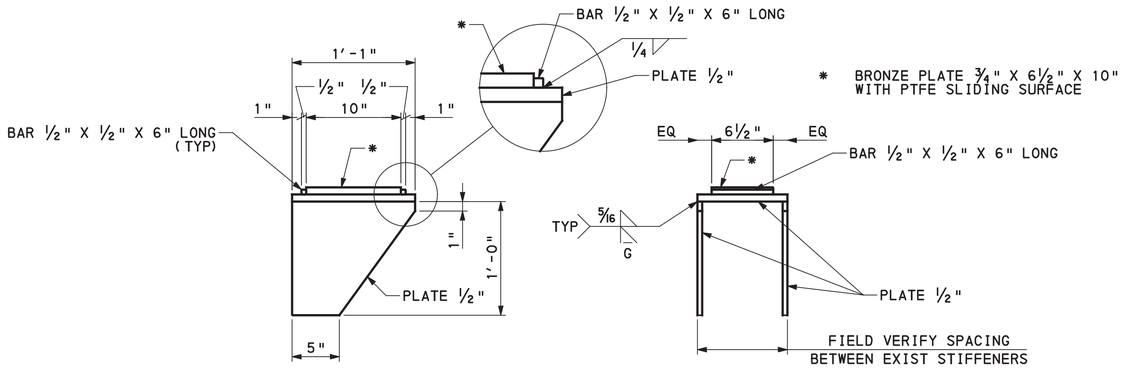
RECOMMENDED
OCTOBER 26, 2022

SHEET 47 OF 124

S - 40253

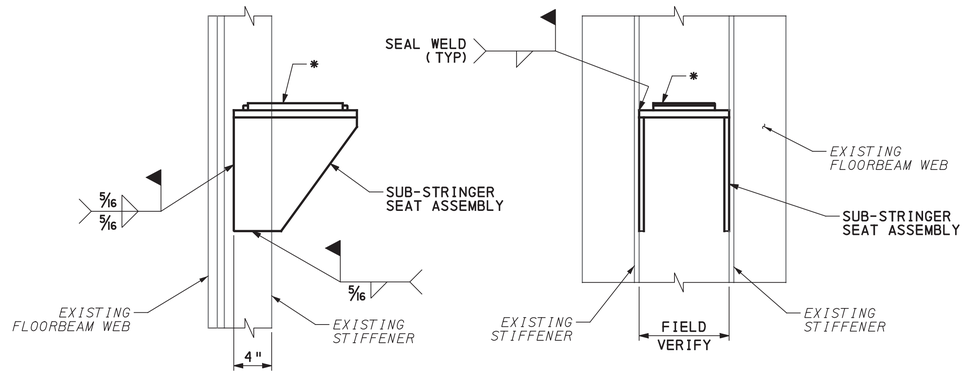
DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 7:56:57 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_TM01 - details.dgn



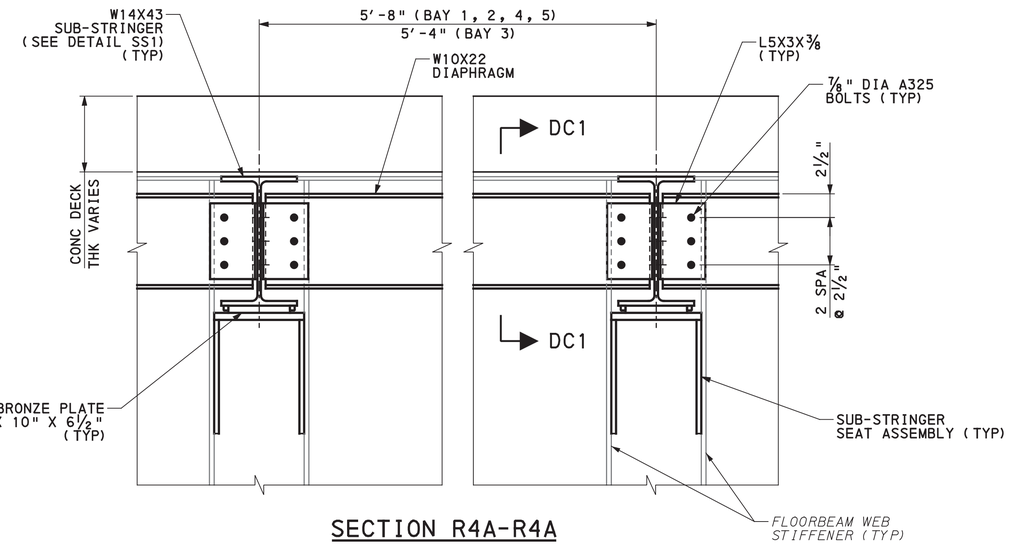
SUB-STRINGER SEAT ASSEMBLY

0 6 1 FOOT



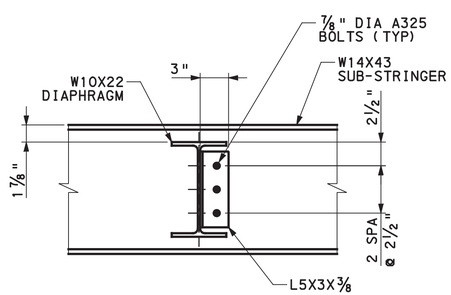
SUB-STRINGER SEAT ASSEMBLY - ERECTION

0 6 1 FOOT



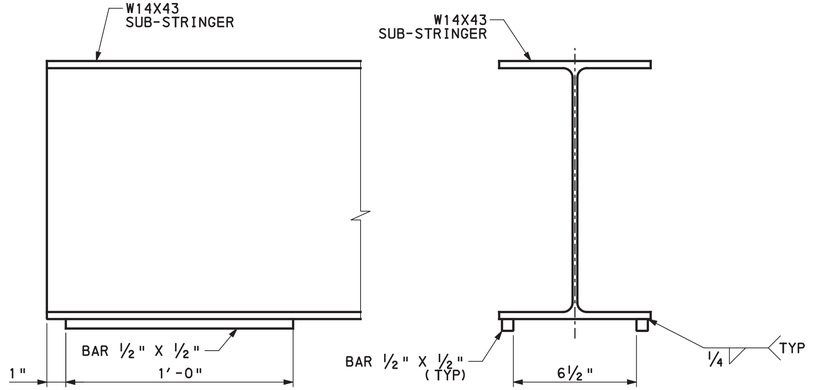
SECTION R4A-R4A

0 6 1 FOOT



SECTION DC1-DC1

0 6 1 FOOT



DETAIL SS1

0 3 6 9 1 FOOT

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 47.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
REPAIR TM01 DETAILS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

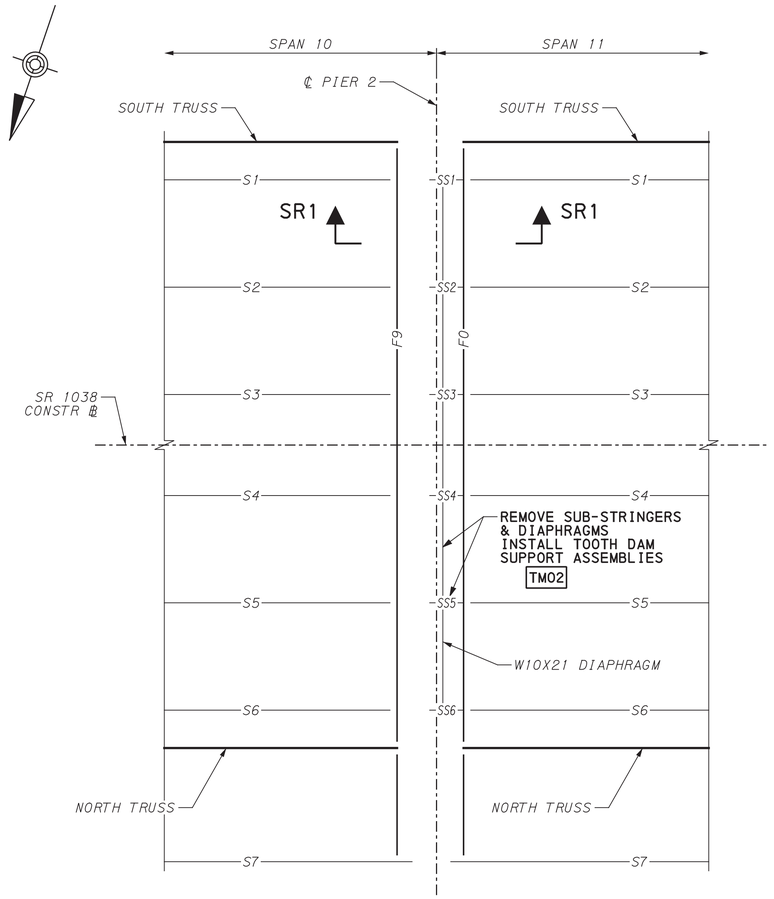
RECOMMENDED
OCTOBER 26, 2022

SHEET 48 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 7:56:59 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_TM02 - exp dam supports.dgn



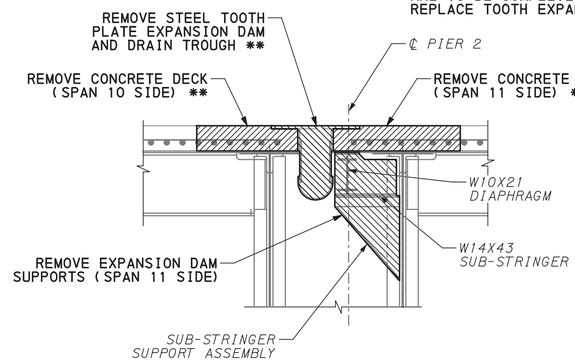
PARTIAL FRAMING PLAN - REPAIR TM02

0 2 4 6 FEET

LEGEND:

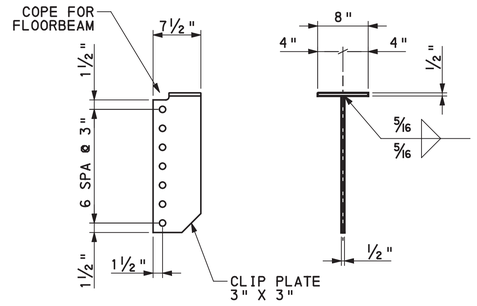
G2	GIRDER
F5	FLOORBEAM
S2	STRINGER
SS3	SUB-STRINGER
F00	DENOTES REPAIR

** REMOVAL AND REPLACEMENT OF CONCRETE DECK AND STEEL TOOTH PLATE EXPANSION DAM & DRAIN TROUGH ARE TO BE COMPLETED UNDER ITEM NO 5020-0002, REPLACE TOOTH EXPANSION DAM



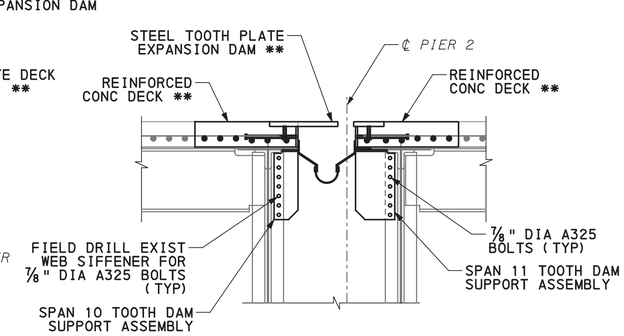
SECTION SR1-SR1 (REMOVAL)

0 2 4 FEET



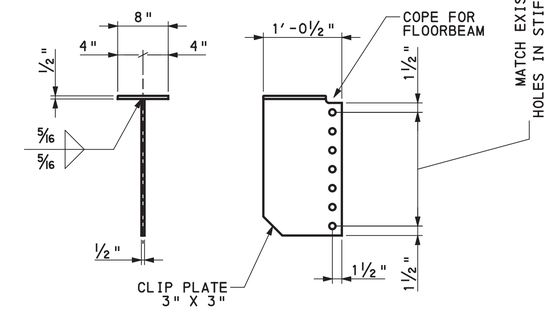
SPAN 10 TOOTH DAM SUPPPORT ASSEMBLY

0 1 2 FEET



SECTION SR1-SR1 (PROPOSED)

0 2 4 FEET



SPAN 11 TOOTH DAM SUPPPORT ASSEMBLY

0 1 2 FEET

REPAIR TM02

ITEM 1050-0118
REPAIR TM02 - REPLACE SEAT AND BEAM
REPRESENTATIVE CONDITIONS

REPAIR TM02 - PROCEDURE

1. COORDINATE ALL WORK ASSOCIATED WITH THIS REPAIR WITH THE REPLACEMENT OF THE EXPANSION JOINT AT PIER 2.
2. REMOVE THE EXISTING DIAPHRAGM BEAMS. REMOVE THE EXISTING SUB-STRINGERS.
3. BLAST CLEAN AND PREPARE THE FAYING SURFACES OF THE CONNECTING ELEMENTS OF THE PROPOSED REPLACEMENT COMPONENTS IN ACCORDANCE WITH THE SPECIFICATIONS. IF EXCESSIVE DETERIORATION (GREATER THAN 33% SECTION LOSS) OF ANY CONNECTING ELEMENT TO REMAIN IS FOUND, IMMEDIATELY CONTACT THE ENGINEER.
4. PREPARE THE CONNECTING ELEMENTS BY DRILLING AND / OR REAMING HOLES FOR NEW CONNECTIONS. THE TOOTH DAM SUPPORT ASSEMBLIES MAY BE MATCH DRILLED IN THE FIELD.
5. INSTALL THE NEW TOOTH DAM SUPPORT ASSEMBLIES. COMPLETE ANY SPOT ZONE PAINTING REQUIRED TO COMPLETE THE REPAIR. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.
6. COMPLETE THE REPLACEMENT OF THE EXPANSION JOINT.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETAILS OF EXPANSION DAM REPLACEMENT, SEE SHEET 87.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
REPAIR TM02 - SEAT & BEAM PIER 2

RECOMMENDED
OCTOBER 26, 2022

SHEET 49 OF 124
S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:57:08 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Lattice Bar Repair.dgn

REPAIR TC01

ITEM 1050-0234
REPAIR TC01 - LACING BAR REPAIR, CHORD
REPRESENTATIVE CONDITIONS

REPAIR T01

ITEM 1050-0223
REPAIR T01 - LACING BAR REPAIR TYPE 1, TRUSS
REPRESENTATIVE CONDITIONS

REPAIR T02

ITEM 1050-0224
REPAIR T02 - LACING BAR REPAIR TYPE 2, TRUSS
REPRESENTATIVE CONDITIONS

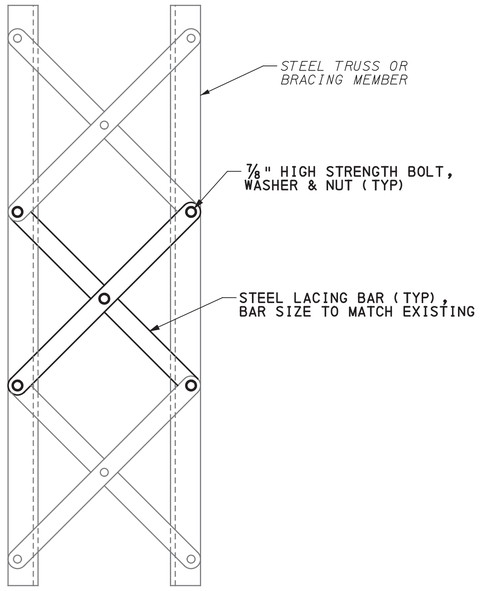
* DETERIORATION IS DEFINED AS SECTION LOSS GREATER THAN 25% OF THE CROSS SECTIONAL AREA IN THE LACING BAR.

REPAIR B03

ITEM 1050-0250
REPAIR B03 - LACING BAR REPAIR TYPE 1, BENT
REPRESENTATIVE CONDITIONS

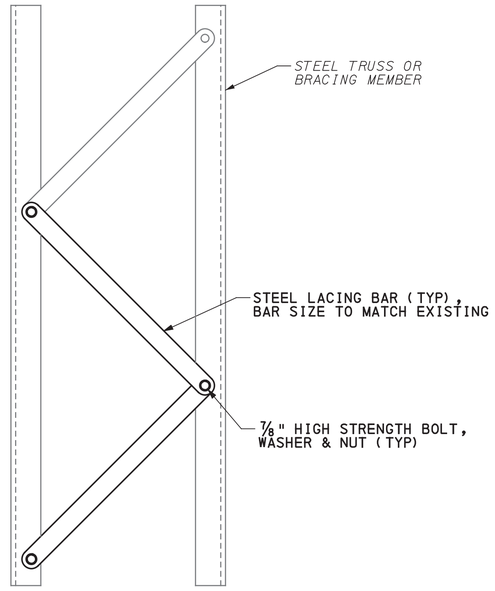
REPAIR B04

ITEM 1050-0251
REPAIR B04 - LACING BAR REPAIR TYPE 2, BENT
REPRESENTATIVE CONDITIONS



REPAIR TC01, T02, B03 LACING BAR REPLACEMENT

NOT TO SCALE



REPAIR T01, B04 LACING BAR REPLACEMENT

NOT TO SCALE

REPAIR T01, T02, TC01, TB01, B03 & B04 - PROCEDURE & NOTES

1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, AND LACING BAR DIMENSIONS PRIOR TO FABRICATION.
2. PROVIDE TEMPORARY SUPPORT AND BRACING OF ANY MAIN MEMBER IN ANY LOCATION OR DIRECTION WHEN MORE THAN THREE (3) CONSECUTIVE LACING BARS ARE REMOVED. DO NOT REMOVE LACING BARS IN MORE THAN ONE PLANE OR FACE OF ANY MEMBER AT ONE TIME.
3. REMOVE DETERIORATED LACING BARS AND RIVETS WITHOUT DAMAGING CONNECTED MEMBERS. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PERFORM ANY REPAIRS TO CONNECTED MATERIAL PRIOR TO INSTALLING NEW LACING BARS. EVALUATE THE CONDITION OF THE CONNECTED MATERIAL WITH THE REPRESENTATIVE TO DETERMINE IF REPAIRS ARE REQUIRED.
5. INSTALL NEW LACING BARS. REAM HOLES FOR NEW BOLTS AS REQUIRED. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL LACING BAR REPAIR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

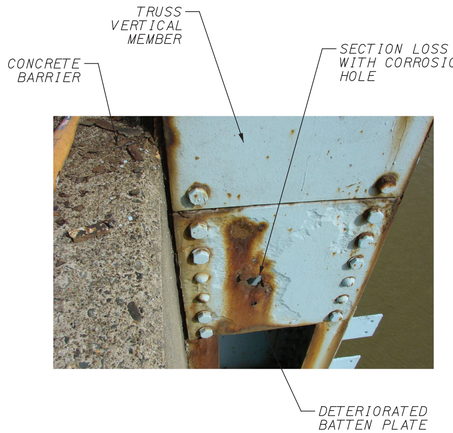
RECOMMENDED
OCTOBER 26, 2022

SHEET 50 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:57:31 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Batten Plate Repair.dgn



REPAIR T03

ITEM 1050-0225
REPAIR T03 - BATTEN PLATE REPAIR
TYPE 1, TRUSS
REPRESENTATIVE CONDITIONS

REPAIR T04

ITEM 1050-0226
REPAIR T04 - BATTEN PLATE REPAIR
TYPE 2, TRUSS
REPRESENTATIVE CONDITIONS

REPAIR TC02

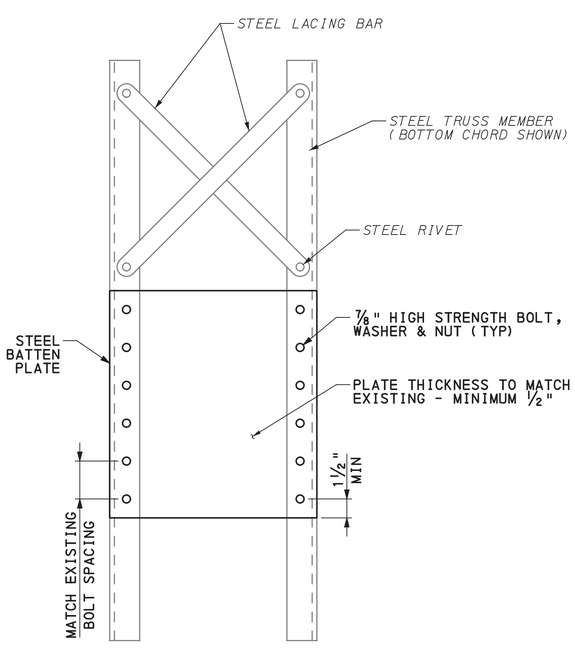
ITEM 1050-0235
REPAIR TC02 - BATTEN PLATE REPAIR, CHORD
REPRESENTATIVE CONDITIONS

REPAIR B05

ITEM 1050-0252
REPAIR B05 - REPLACE BATTEN PLATE, TYPE 1, BENT
REPRESENTATIVE CONDITIONS

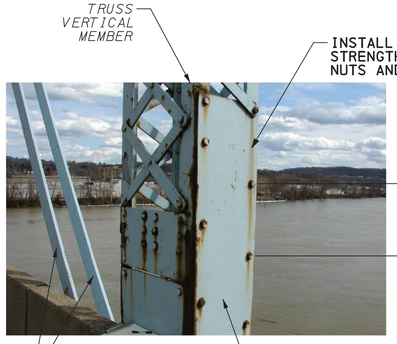
REPAIR B06

ITEM 1050-0253
REPAIR B06 - REPLACE BATTEN PLATE, TYPE 2, BENT
REPRESENTATIVE CONDITIONS



TYPICAL BATTEN PLATE REPLACEMENT

NOT TO SCALE



REPAIR T06

ITEM 1050-0228
REPAIR T06 - INSTALL HIGH STRENGTH BOLT, TRUSS
REPRESENTATIVE CONDITIONS

REPAIR TB02

ITEM 1050-0240
REPAIR TB02 - BATTEN PLATE REPAIR, BRACING
REPRESENTATIVE CONDITIONS

REPAIRS T03, T04, TC02, TB02, B05, B06 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, AND BATTEN PLATE DIMENSIONS PRIOR TO FABRICATION.
2. REMOVE EXISTING BATTEN PLATE. REMOVAL OF THE BATTEN PLATE MAY BE PERFORMED IN CONJUNCTION WITH THE REPLACEMENT OF LACING BAR WHICH OVERLAPS THE PLATE, HOWEVER, IF ADJACENT LACING BARS DO NOT OVERLAP THE PLATE, THE REPAIRS MUST NOT BE PERFORMED SIMULTANEOUSLY.
3. REMOVE DETERIORATED BATTEN PLATE AND RIVETS WITHOUT DAMAGING CONNECTED MEMBERS. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PERFORM ANY REPAIRS TO CONNECTED MATERIAL PRIOR TO INSTALLING NEW BATTEN PLATE. EVALUATE THE CONDITION OF THE CONNECTED MATERIAL WITH THE REPRESENTATIVE TO DETERMINE IF REPAIRS ARE REQUIRED.
5. INSTALL NEW BATTEN PLATE. MATCH BOLT PATTERNS TO THE EXISTING BOLT PATTERN WHERE FEASIBLE. REAM HOLES FOR NEW BOLTS AS REQUIRED. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

CRTERIA FOR BATTEN PLATE REPLACEMENT AS FOLLOWS:

- REPLACE PLATES AT ALL LOCATIONS INDICATED AS A MINIMUM
- PLATES WITH AREAS OF 100% SECTION LOSS
- PLATES WITH AREAS OF MINIMUM 50% PLATE THICKNESS LOSS GREATER THAN 4 IN² IN AREA
- PLATES WITH AREAS OF MINIMUM 25% PLATE THICKNESS LOSS GREATER THAN 12 IN² OR ONE QUARTER THE SURFACE AREA OF THE PLATE, WHICHEVER IS SMALLER

REPAIR T06 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING RIVET OR BOLT SPACING ALONG EACH FASTENER LINE..
2. PRIOR TO COMPLETING REPAIR, PERFORM ANY CLEANING REQUIRED FOR PACK RUST CONDITIONS AT THE INTERFACE OF THE PLATE TO THE MEMBER ANGLE.
3. DETERMINE SPACING OF NEW BOLTS. BOLTS SHALL BE SPACED AT A MAXIMUM OF 5" SPACING BETWEEN EXISTING FASTENERS IN ANY FASTENER LINE.
4. DRILL AND REAM HOLES IN EXISTING MEMBERS FOR THE PROPOSED FASTENERS IN ACCORDANCE WITH THE SPECIFICATIONS. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL BATTEN PLATE REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

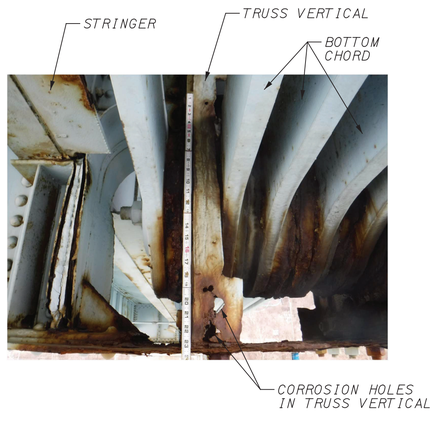
RECOMMENDED
OCTOBER 26, 2022

SHEET 51 OF 124

S - 40253

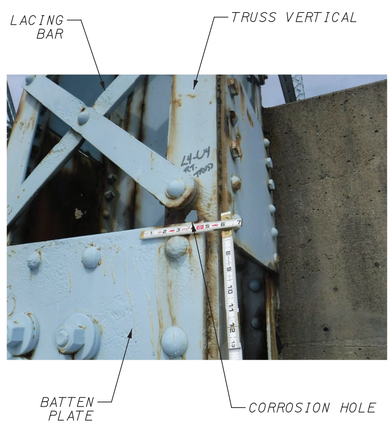
DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 7:57:55 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Angle Cover Plate.dgn



REPAIR T07

ITEM 1050-0115
REPAIR T07 - ANGLE COVER PLATE, TRUSS
REPRESENTATIVE CONDITIONS



REPAIR T07

ITEM 1050-0115
REPAIR T07 - ANGLE COVER PLATE, TRUSS
REPRESENTATIVE CONDITIONS

REPAIR TC04

ITEM 1050-0116
REPAIR TC04 - ANGLE COVER PLATE, CHORD
REPRESENTATIVE CONDITIONS

REPAIR T07 - PROCEDURE AND NOTES

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE ANGLE LEG. EXTEND THE LIMITS OF THE REPAIR A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION ALONG THE LENGTH OF THE MEMBER WHERE POSSIBLE.
2. WHEN FABRICATING COVER PLATES, ENSURE THAT PROPER EDGE DISTANCES FOR BOLTS AT THE ENDS OF THE PLATES ARE ACHIEVED. FABRICATE PLATES FOR BOTH THE EXTERIOR AND INTERIOR SIDES OF THE DETERIORATED ANGLE LEG.
3. REMOVE AND REPLACE EFFECTED LACING BARS WITHIN LIMITS OF THE REPAIR. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. REAM EXISTING RIVET HOLES AS REQUIRED FOR INSTALLATION. INSTALL THE COVER PLATE WITH NEW HIGH STRENGTH BOLTS. FIELD DRILL THE EXISTING ANGLE LEG USING THE COVER PLATE AS A TEMPLATE.
5. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

REPAIR TC04 - PROCEDURE AND NOTES

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE ANGLE LEG. EXTEND THE LIMITS OF THE REPAIR A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION ALONG THE LENGTH OF THE MEMBER WHERE POSSIBLE.
2. WHEN FABRICATING COVER PLATES, ENSURE THAT PROPER EDGE DISTANCES FOR BOLTS AT THE ENDS OF THE PLATES ARE ACHIEVED. FABRICATE PLATES FOR BOTH THE EXTERIOR AND INTERIOR SIDES OF THE DETERIORATED ANGLE LEG.
3. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. REAM EXISTING RIVET HOLES AS REQUIRED FOR INSTALLATION. INSTALL THE COVER PLATE WITH NEW HIGH STRENGTH BOLTS. FIELD DRILL THE EXISTING ANGLE LEG USING THE COVER PLATE AS A TEMPLATE.
5. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL ANGLE COVER PLATE REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

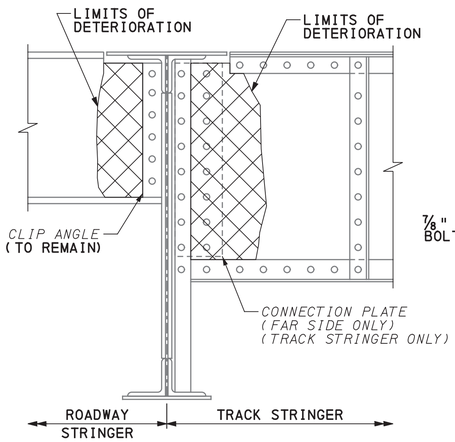
RECOMMENDED
OCTOBER 26, 2022

SHEET 52 OF 124

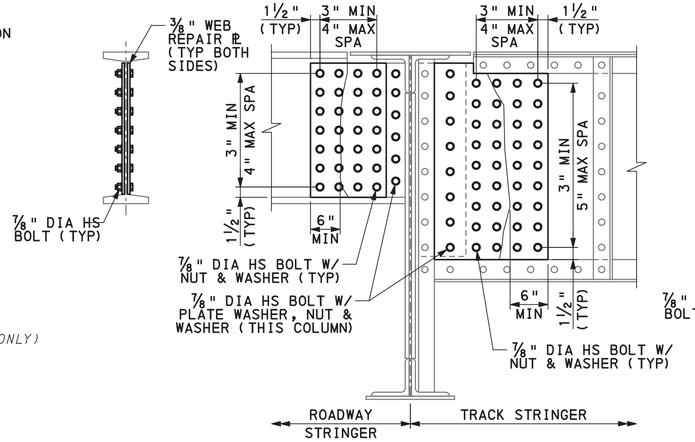
S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

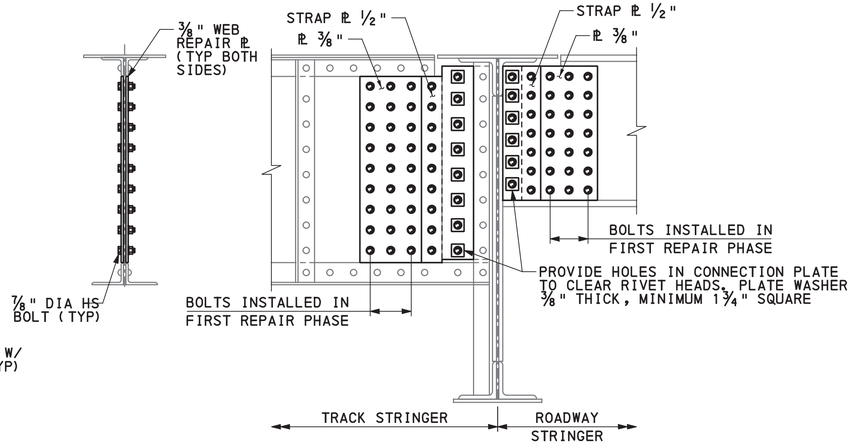
PLOTTED: 10/26/2022 7:58:11 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Web Cover Plate 1.dgn



EXISTING CONDITION



PROPOSED NEAR SIDE

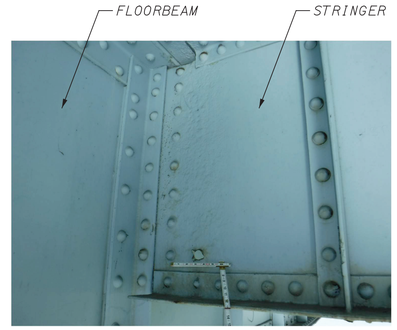


PROPOSED FAR SIDE

REPAIR S01

STRINGERS WITHOUT SEAT ANGLES SHOWN; STRINGERS WITH SEAT ANGLES SIMILAR

0 1 2 FEET

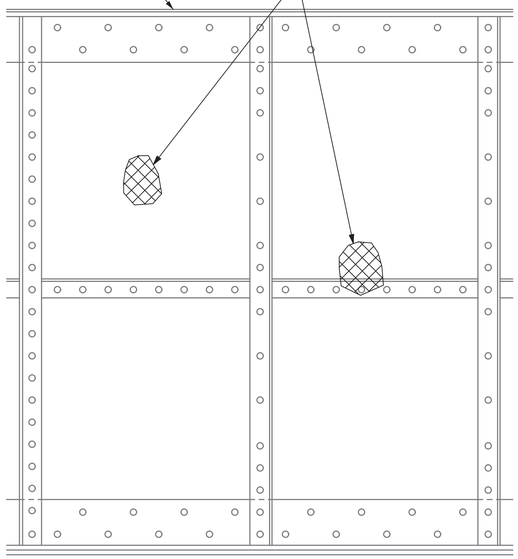


REPAIR S01

ITEM 1050-0201
REPAIR S01 - WEB COVER PLATE, STRINGER
REPRESENTATIVE CONDITIONS

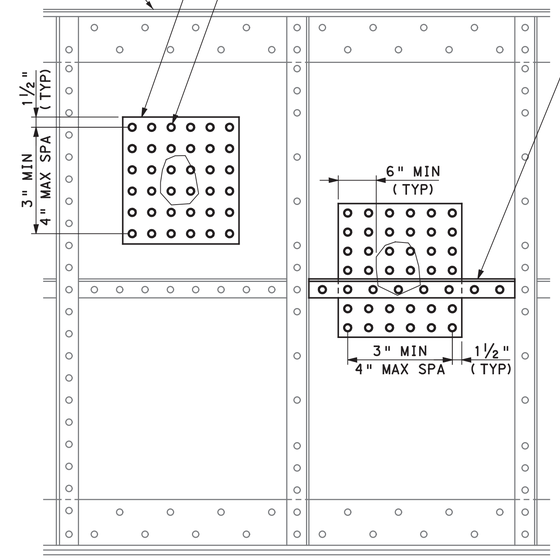
REPAIR G03

ITEM 1050-0217
REPAIR G03 - WEB COVER PLATE, GIRDER
REPRESENTATIVE CONDITIONS



EXISTING CONDITION

REPAIRS WITH AND WITHOUT STIFFENER REPLACEMENT SHOWN



PROPOSED

REPAIRS WITH AND WITHOUT STIFFENER REPLACEMENT SHOWN

REPAIR G03

0 1 2 FEET

REPAIR S01, G03 - PROCEDURE

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE WEB. EXTEND THE WEB COVER PLATE A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION HORIZONTALLY. ALSO FIELD VERIFY THE EXISTING CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES FOR USE IN DETAILING THE STRAP PLATE.
2. FABRICATE THE STRAP PLATE TO ENGAGE THE CONNECTION PLATE OR ANGLE WITH HOLES OF ADEQUATE SIZE TO FIT OVER THE EXISTING RIVETS IN THE CONNECTION.
3. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. INSTALL THE WEB COVER PLATES. FIELD DRILL HOLES IN THE EXISTING WEB USING THE COVER PLATE AS A TEMPLATE. INSTALL BOLTS IN ALL HOLES EXCEPT FOR THE BOLTS TO ATTACH THE STRAP PLATE TO THE COVER PLATE.
5. INSTALL THE STRAP PLATE TO THE WEB COVER PLATE ONLY. BEGIN REMOVAL OF THE RIVETS ATTACHING THE MEMBER TO THE CONNECTION ANGLE OR PLATE ONE AT A TIME. AS RIVETS ARE REMOVED, REAM HOLES AS NEEDED AND INSTALL NEW HIGH STRENGTH BOLTS WITH PLATE WASHERS AT THE STRAP PLATE.
6. COMPLETE THE INSTALLATION OF THE STRAP PLATE. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL WEB COVER PLATE REPAIR 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

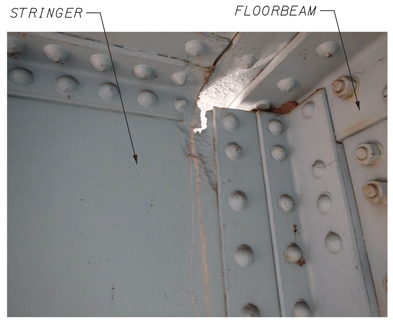
RECOMMENDED
OCTOBER 26, 2022

SHEET 53 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

PLOTTED: 10/26/2022 7:58:22 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Web Cover Plate 2.dgn

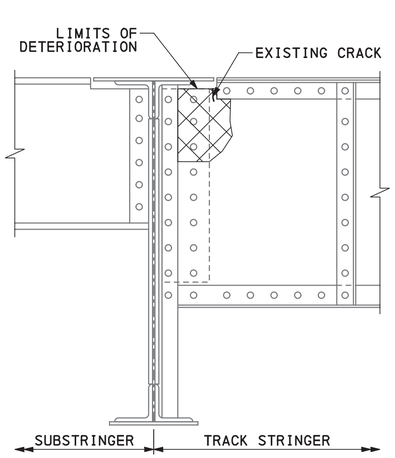


REPAIR S04

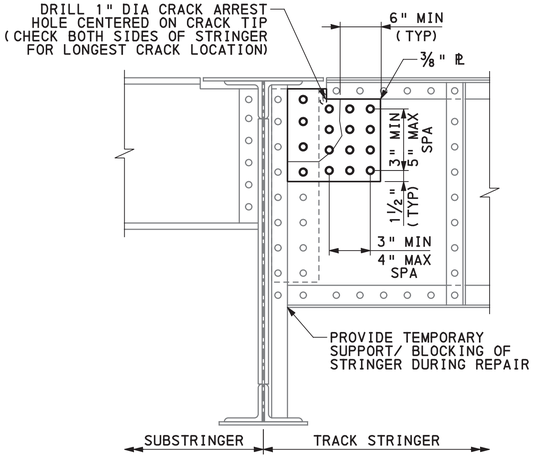
ITEM 1050-0204
REPAIR S04 - ARREST HOLE WITH WEB COVER PLATE, STRINGER REPRESENTATIVE CONDITIONS

REPAIR S04 - PROCEDURE

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE WEB. EXTEND THE WEB COVER PLATE A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION HORIZONTALLY. ALSO FIELD VERIFY THE EXISTING CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES.
2. VERIFY EXISTING CRACK LIMIT. PROVIDE ULTRASONIC OR SIMILAR TESTING TO CONFIRM CRACK LIMITS AND COORDINATE TESTING RESULTS WITH THE REPRESENTATIVE AND ENGINEER. DRILL 1" DIAMETER CRACK ARREST HOLE CENTERED ON THE CRACK TIP.
3. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PROVIDE TEMPORARY SUPPORT OR BLOCKING OF STRINGER DURING REPAIR. PERFORM REPAIR INSTALLATION ON ONLY ONE STRINGER AT A TIME IN THE CROSS SECTION. REMOVE RIVETS FOLLOWING INSTALLATION OF TEMPORARY SUPPORT.
5. INSTALL THE WEB COVER PLATES AND FILL PLATE. FIELD DRILL HOLES IN THE EXISTING WEB USING THE COVER PLATE AS A TEMPLATE. INSTALL BOLTS IN ALL HOLES.
6. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. FOLLOWING COMPLETION OF THE BOLT INSTALLATION, REMOVE THE TEMPORARY SUPPORT.



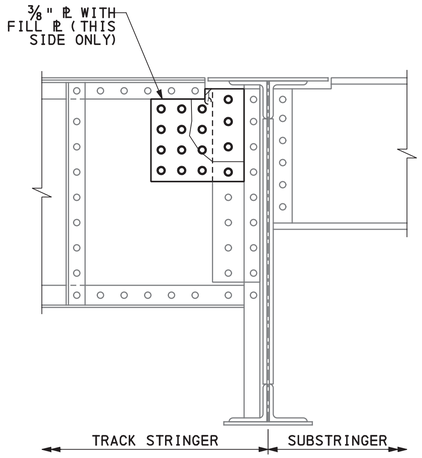
EXISTING CONDITION



PROPOSED NEAR SIDE

REPAIR S04

0 1 2 FEET



PROPOSED FAR SIDE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL WEB COVER PLATE REPAIR 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 54 OF 124

S - 40253

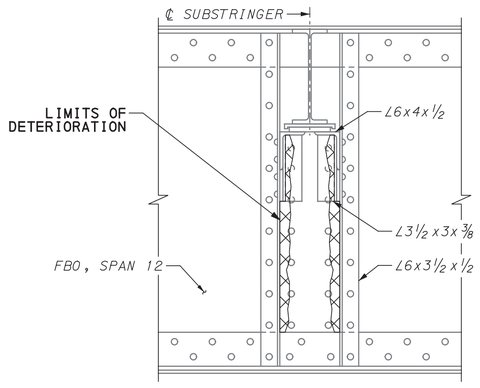
DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

REPAIR F01

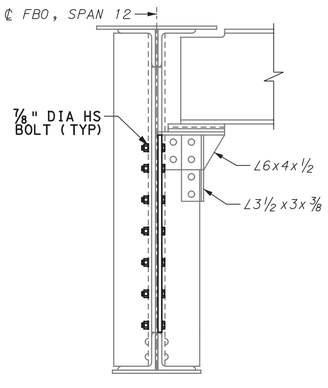
ITEM 1050-0208
REPAIR F01 - WEB COVER PLATE, FLOORBEAM
REPRESENTATIVE CONDITIONS

REPAIR F01 - PROCEDURE

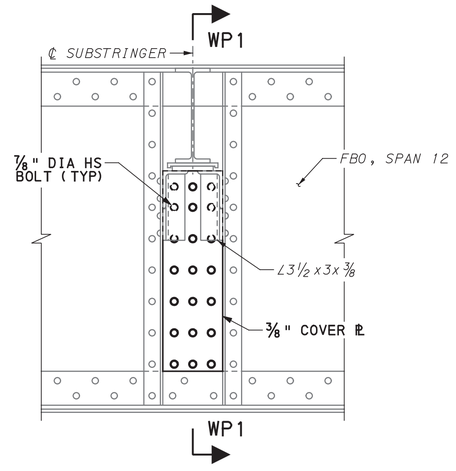
1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE WEB. EXTEND THE COVER PLATE THE ENTIRE AREA BETWEEN THE EXISTING STIFFENERS. ALSO FIELD VERIFY THE EXISTING CONNECTION RIVET SPACING AND SIZE. VERIFY ATTACHMENT OF ANY COMPONENTS ON THE FAR SIDE OF THE FLOORBEAM AND PROVIDE TEMPORARY BRACING / SUPPORT IF NEEDED.
2. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
3. REMOVE EXISTING RIVETS. INSTALL THE WEB COVER PLATE. FIELD DRILL HOLES IN THE EXISTING WEB USING THE COVER PLATE AS A TEMPLATE WHERE RIVETS ARE NOT PRESENT.
4. REAM EXISTING RIVET HOLES AS REQUIRED FOR INSTALLATION. INSTALL THE COVER PLATE WITH NEW HIGH STRENGTH BOLTS. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.



EXISTING CONDITION



SECTION WP1-WP1



REPAIR ELEVATION

REPAIR F01

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL WEB COVER PLATE REPAIR 3

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 55 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

PLOTTED: 10/26/2022 7:58:25 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038 RPR_Web Cover Plate 3.dgn

PLOTTED: 10/26/2022 7:58:32 AM

SECTION LOSS TO BOTTOM FLANGE OF STRINGER

REPAIR S02

ITEM 1050-0202
REPAIR S02 - FLANGE COVER PLATE, STRINGER
REPRESENTATIVE CONDITIONS

SECTION LOSS TO BOTTOM FLANGE OF FLOORBEAM

REPAIR F02

ITEM 1050-0111
REPAIR F02 - FLANGE COVER PLATE, FLOORBEAM
REPRESENTATIVE CONDITIONS

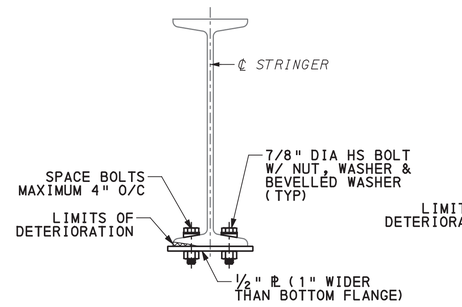
SECTION LOSS TO BOTTOM FLANGE OF GIRDER

REPAIR G01

ITEM 1050-0112
REPAIR G01 - BOTTOM FLANGE COVER PLATE, GIRDER
REPRESENTATIVE CONDITIONS

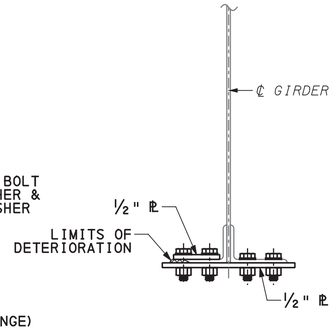
REPAIR G02

ITEM 1050-0113
REPAIR G02 - TOP FLANGE COVER PLATE, GIRDER
REPRESENTATIVE CONDITIONS



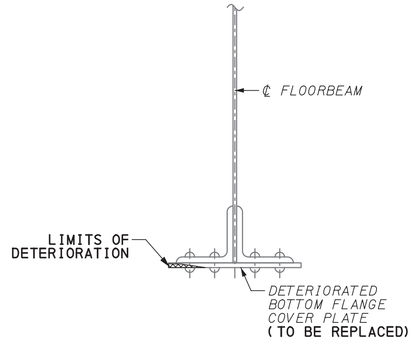
REPAIR S02

0 6 1 FOOT



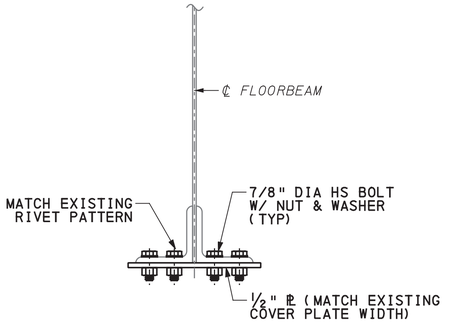
REPAIR G01

0 6 1 FOOT



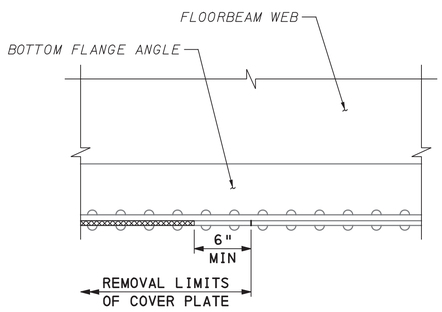
EXISTING CONDITION

0 6 1 FOOT



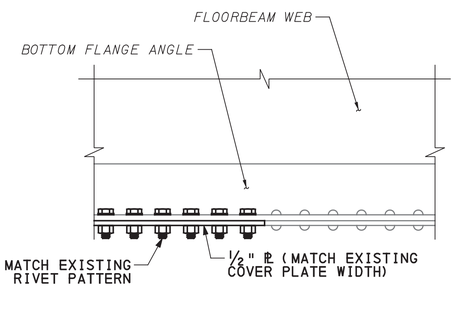
PROPOSED REPAIR

0 6 1 FOOT



EXISTING CONDITION

0 6 1 FOOT



PROPOSED REPAIR

0 6 1 FOOT

REPAIR F02 ELEVATION

0 6 1 FOOT

REPAIR S02, F02, G01, G02 - PROCEDURE

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE FLANGE. EXTEND THE LIMITS OF THE REPAIR A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION ALONG THE LENGTH OF THE MEMBER. FIELD VERIFY EXISTING PLATE THICKNESS AND WIDTH, IF PRESENT.
2. WHEN FABRICATING COVER PLATES, ENSURE THAT PROPER EDGE DISTANCES FOR BOLTS AT THE ENDS OF THE PLATES ARE ACHIEVED.
3. REMOVE THE EXISTING RIVETS AND COVER PLATE TO THE LIMIT OF THE REPLACEMENT IF PRESENT. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN
4. REAM EXISTING RIVET HOLES AS REQUIRED FOR INSTALLATION. INSTALL THE COVER PLATE WITH NEW HIGH STRENGTH BOLTS. FOR INSTALLATIONS WHERE NO EXISTING COVER PLATE IS PRESENT, FIELD DRILL THE EXISTING FLANGE USING THE COVER PLATE AS A TEMPLATE.
5. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL FLANGE COVER PLATE REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

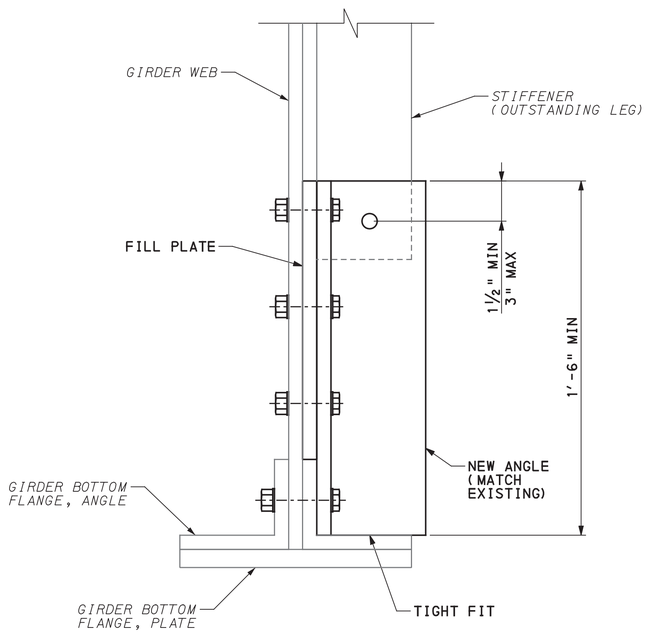
SHEET 56 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Flange Cover Plate.dgn

PLOTTED: 10/26/2022 7:58:50 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Web Stiffener 1.dgn

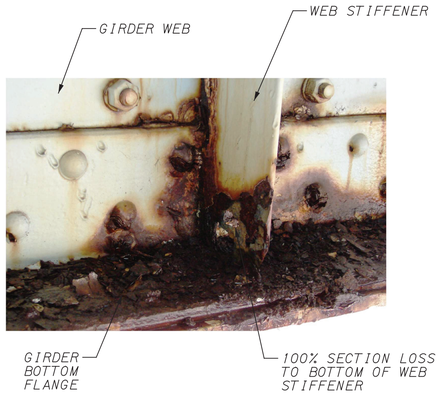


SECTION WS1-WS1

NOT TO SCALE

REPAIR S03

ITEM 1050-0203
REPAIR S03 - STIFFENER REPAIR, STRINGER
REPRESENTATIVE CONDITIONS

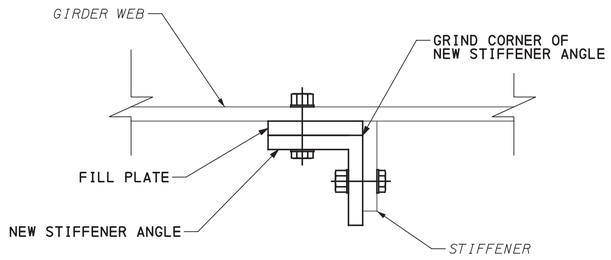


REPAIR G04

ITEM 1050-0218
REPAIR G04 - STIFFENER REPAIR, GIRDER
REPRESENTATIVE CONDITIONS

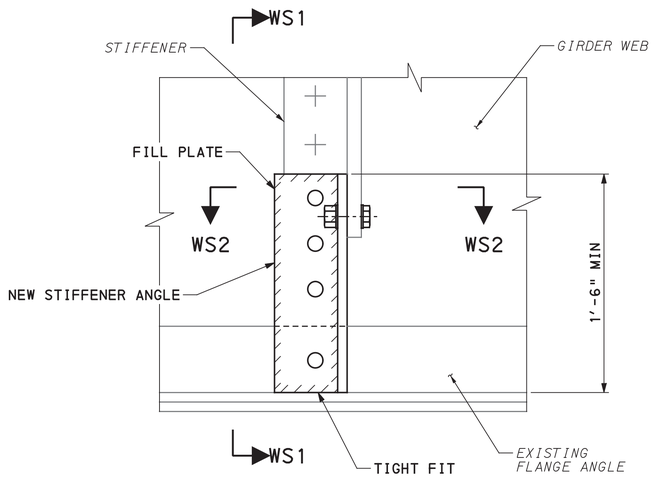
REPAIR F05

ITEM 1050-0211
REPAIR F05 - STIFFENER REPAIR, FLOORBEAM
REPRESENTATIVE CONDITIONS



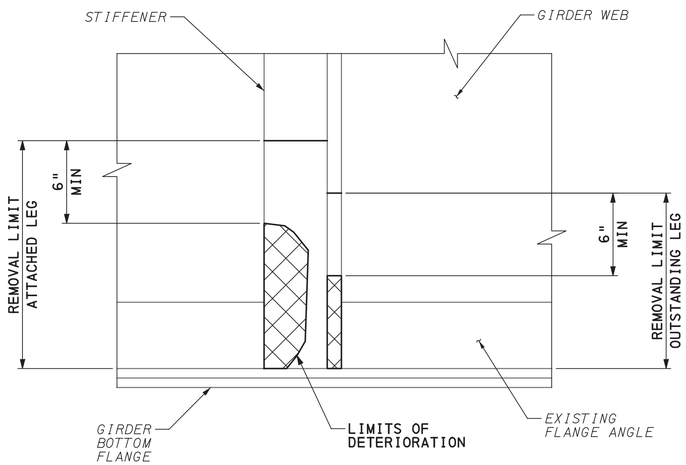
SECTION WS2-WS2

NOT TO SCALE



ELEVATION

NOT TO SCALE



REMOVAL LIMITS

NOT TO SCALE

REPAIR S03, F05 & G04

NOT TO SCALE

REPAIR S03, F05, G04 - PROCEDURE

1. FIELD VERIFY EXISTING MEMBER SIZES, MEMBER GEOMETRY AND RIVET PATTERN. PROVIDE STIFFENER ANGLES TO MATCH EXISTING STIFFENERS AND FILL PLATES AS REQUIRED TO COMPLETE THE WORK.
2. DRILL HOLES IN NEW MEMBERS TO MATCH EXISTING RIVET PATTERNS. NEW MEMBERS MAY BE MATCH DRILLED IN THE FIELD. DRILL HOLE IN THE OUTSTANDING LEG OF THE EXISTING STIFFENER TO AVOID INTERFERENCE WITH OTHER BOLTS. GRIND THE HEEL OF THE NEW ANGLE AND THE CONTACT POINT OF THE NEW ANGLE TO THE INSIDE OF THE FLANGE ANGLE AS REQUIRE TO AVOID INTERFERENCE WITH THE EXISTING MEMBERS AND
3. REMOVE PORTION OF THE OUTSTANDING LEG OF THE STIFFENER 6" BEYOND THE LIMIT OF THE DETERIORATION. REMOVE PORTION OF THE ATTACHED LEG OF THE STIFFENER FOR TWO FULL EXISTING RIVET SPACES BEYOND THE LIMIT OF THE DETERIORATION, OR TO PERMIT A MINIMUM OF 3 BOLTS TO BE INSTALLED TO THE WEB OF THE MEMBER, WHICHEVER IS GREATER.
4. PERFORM PACK RUST OR OTHER REPAIRS AS SPECIFIED OR AS DIRECTED BY THE DEPARTMENT REPRESENTATIVE.
5. BLAST CLEAN AND PREPARE ALL FAYING SURFACES IN ACCORDANCE WITH THE SPECIFICATIONS AND SPECIAL PROVISIONS.
6. INSTALL NEW PORTION OF STIFFENER ANGLE WITH 7/8" DIAMETER HIGH STRENGTH BOLTS WITH NUTS AND WASHERS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL WEB STIFFENER REPAIRS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

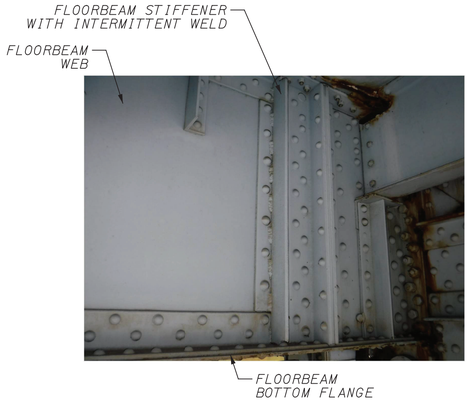
RECOMMENDED
OCTOBER 26, 2022

SHEET 57 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 7:59:02 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Web Stiffener 2.dgn

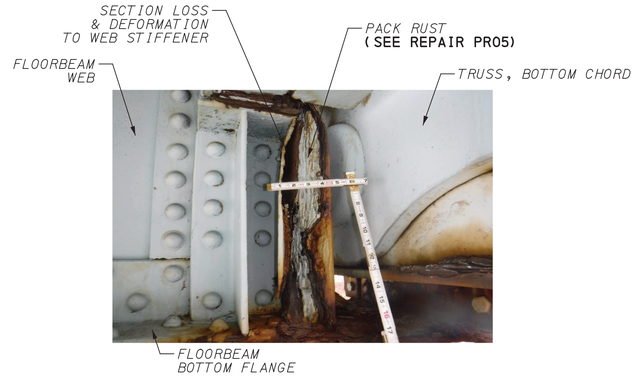


REPAIR F06

ITEM 1050-0212
REPAIR F06 - STIFFENER RETROFIT, FLOORBEAM
REPRESENTATIVE CONDITIONS

REPAIR F06 - PROCEDURE AND NOTES

1. PRIOR TO REPAIR, VISUALLY INSPECT ALL EXISTING WELDS FOR CRACKS. REPORT ANY CRACKS TO THE REPRESENTATIVE AND THE ENGINEER FOR FURTHER EVALUATION.
2. GRIND EXISTING TACK WELDS TO BASE METAL. RE-WELD THE STIFFENER TO BASE METAL USING A CONTINUOUS FILLET WELD. MINIMUM WELD SIZE SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPLICABLE AWS D1.5 STANDARDS.
3. GRIND AND RE-WELD ONE SIDE OF THE STIFFENER AT A TIME. COMPLETE THE REPAIR ON ONE SIDE PRIOR TO STARTING THE OTHER SIDE OF THE STIFFENER.
4. PROVIDE NON-DESTRUCTIVE, MAGNETIC PARTICLE TESTING OF THE NEW WELDS IN ACCORDANCE WITH THE SPECIFICATIONS. REPAIR ANY DEFECTIVE WELDS.



REPAIR F07

ITEM 1050-0213
REPAIR F07 - BEARING SEAT STIFFENER REPAIR, FLOORBEAM
REPRESENTATIVE CONDITIONS

REPAIR F07 - PROCEDURE AND NOTES

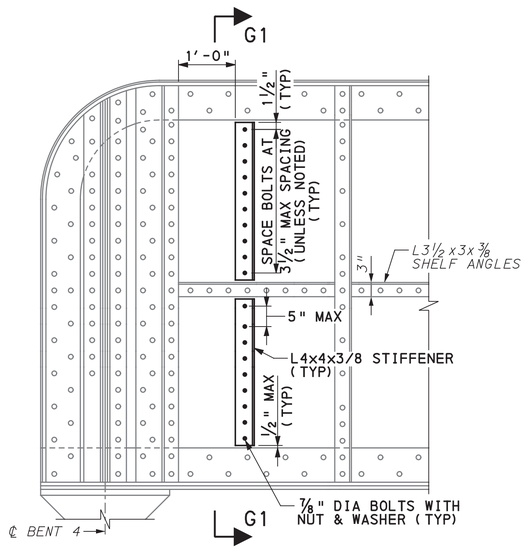
1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, AND ANGLE DIMENSIONS PRIOR TO FABRICATION.
2. CONDUCT THIS REPAIR DURING A FULL STRUCTURE SHUTDOWN DURING PHASE 1. CONSTRUCTION LIVE LOAD MAY BE PRESENT ON THE BRIDGE.
3. REMOVE EXISTING RIVETS AND STIFFENERS. PERFORM ANY REMOVAL OF PACK RUST AS PART OF REPAIR PR05 BETWEEN THE EXISTING STIFFENER AND THE REMAINING ANGLE MEMBER . PREPARE FAYING SURFACES IN ACCORDANCE WITH THE SPECIFICATIONS.
4. NOTE THAT THIS REPAIR INCLUDES THE REPLACEMENT OF THE STIFFENERS ON BOTH SIDES OF THE FLOORBEAM REGARDLESS OF CONDITION OF THE FAR STIFFENER. BOTH STIFFENERS SHALL BE REPLACED AT ALL REPAIR LOCATIONS INDICATED.
5. INSTALL NEW STIFFENERS AND FILL PLATES IF REQUIRED. DRILL AND REAM HOLES IN ACCORDANCE WITH THE SPECIFICATIONS. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

REPAIR G05

ITEM 1050-0219
REPAIR G05 - STIFFENER ADDITION, GIRDER
REPRESENTATIVE CONDITIONS

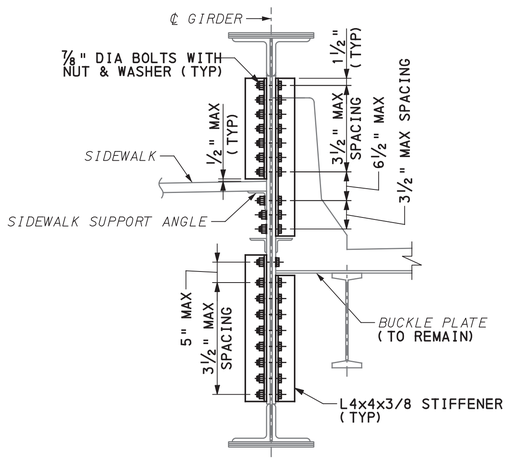
REPAIR G05 - PROCEDURE AND NOTES

1. FIELD VERIFY THE PROPOSED LOCATION OF THE NEW STIFFENER TO ENSURE NO EXISTING COMPONENTS WILL INTERFERE WITH THE INSTALLATION. ALSO FIELD VERIFY MEASUREMENTS OF THE STIFFENER LENGTH RELATIVE TO THE UNDERSIDE OF THE DECK OF THE SIDEWALK. SEE DETAILS.
2. COORDINATE THIS REPAIR WITH REPAIR C07. ON THE NORTH GIRDER OF SPAN 4, THE STIFFENER ON THE SIDEWALK FACE OF THE GIRDER MAY BE INSTALLED DURING CONSTRUCTION PHASE 3 OR DURING PHASE 1 WHILE ENSURING PEDESTRIAN TRAFFIC REMAINS UNOBSTRUCTED.
3. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. INSTALL THE NEW STIFFENER. FIELD DRILL HOLES IN THE EXISTING WEB USING THE STIFFENER ANGLES AS A TEMPLATE. INSTALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.



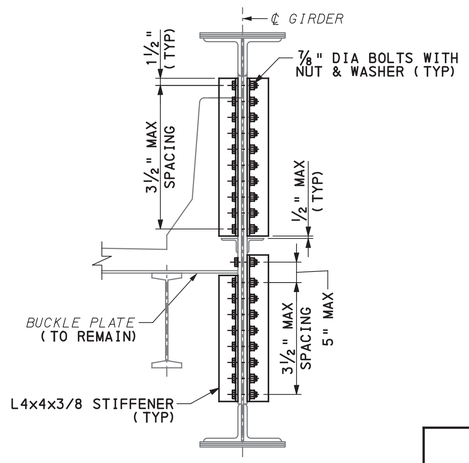
REPAIR G05 DETAIL

SOUTH GIRDER, SPAN 4 END AT BENT 4 SHOWN;
END AT BENT 3 SIMILAR
0 1 2 FEET



SECTION G1-G1

NORTH GIRDER
0 1 2 FEET



SECTION G1-G1

SOUTH GIRDER
0 1 2 FEET

NOTE: BARRIER REPLACEMENT NOT SHOWN FOR CLARITY

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR BARRIER REPLACEMENT IN SPAN 4, REPAIR C07, SEE SHEET 80.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TYPICAL WEB STIFFENER REPAIRS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

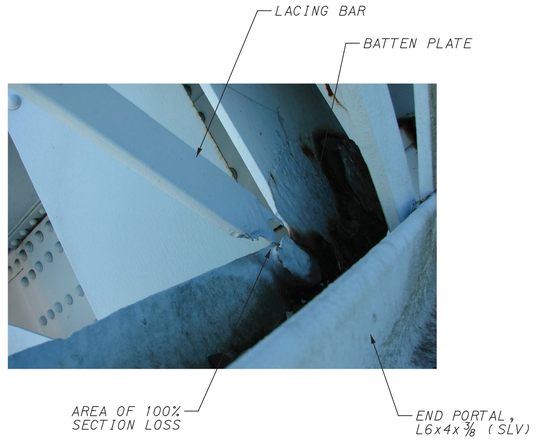
RECOMMENDED
OCTOBER 26, 2022

SHEET 58 OF 124

S - 40253

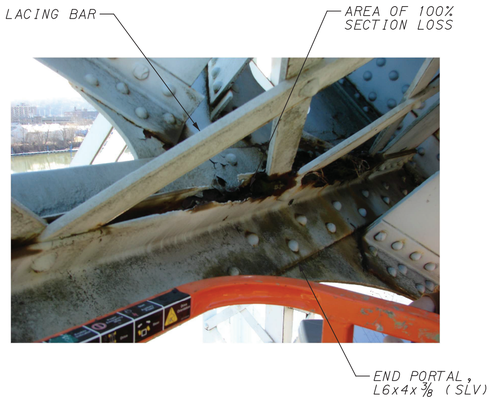
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 7:59:15 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_End Portal Repair.dgn



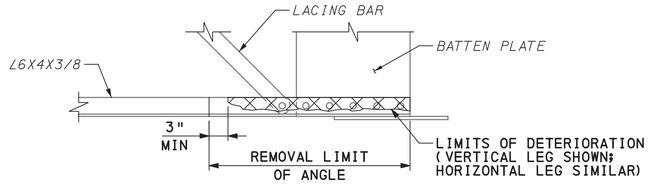
REPAIR TB01

ITEM 1050-0239
REPAIR TB01 - LACING BAR REPAIR, END PORTAL
REPRESENTATIVE CONDITIONS



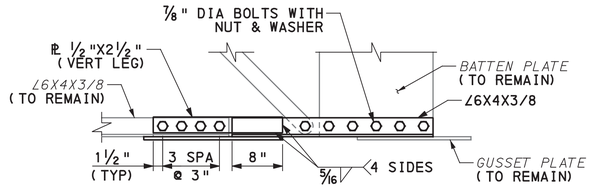
REPAIR TB06

ITEM 1050-0244
REPAIR TB06 - END PORTAL STRUT REPAIR
REPRESENTATIVE CONDITIONS



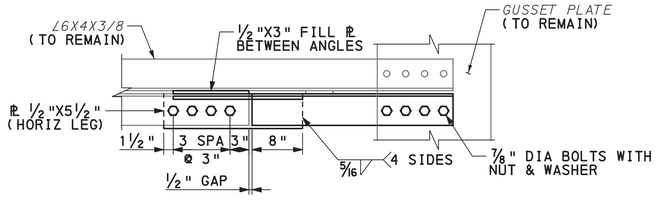
REMOVAL LIMITS

NOT TO SCALE



ELEVATION

NOT TO SCALE



PLAN

NOT TO SCALE

REPAIR TB06

NOT TO SCALE

REPAIR TB01 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, AND LACING BAR DIMENSIONS PRIOR TO FABRICATION.
2. PROVIDE TEMPORARY SUPPORT AND BRACING OF ANY MAIN MEMBER IN ANY LOCATION OR DIRECTION WHEN MORE THAN THREE (3) CONSECUTIVE LACING BARS ARE REMOVED. DO NOT REMOVE LACING BARS IN MORE THAN ONE PLANE OR FACE OF ANY MEMBER AT ONE TIME.
3. REMOVE DETERIORATED LACING BARS AND RIVETS WITHOUT DAMAGING CONNECTED MEMBERS. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PERFORM ANY REPAIRS TO CONNECTED MATERIAL PRIOR TO INSTALLING NEW LACING BARS. EVALUATE THE CONDITION OF THE CONNECTED MATERIAL WITH THE REPRESENTATIVE TO DETERMINE IF REPAIRS ARE REQUIRED.
5. INSTALL NEW LACING BARS. REAM HOLES FOR NEW BOLTS AS REQUIRED. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

REPAIR TB06 - PROCEDURE AND NOTES

1. COORDINATE THIS REPAIR WITH REPAIR TB01.
2. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, DETERIORATION LIMITS AND STRUT ANGLE DIMENSIONS PRIOR TO FABRICATION.
3. REMOVE EXISTING RIVETS AND CUT AND REMOVE THE DETERIORATED ANGLE LEG TO THE LIMITS SHOWN IN THE DETAILS. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN. GRIND SHARP EDGES TO REMAIN.
4. REMOVE ANY DETERIORATED LACING BARS FOR REPAIR TB01. PROTECT ANY LACING BARS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
5. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. NEW PLATE MAY BE MATCH DRILLED IN THE FIELD.
6. INSTALL NEW PLATE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR GENERAL DETAILS OF LACING BAR REPLACEMENT, SEE SHEET 50.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
END PORTAL BRACING REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

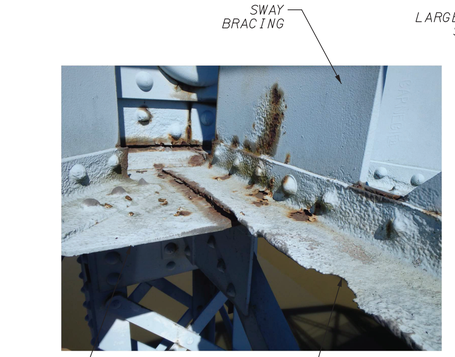
RECOMMENDED
OCTOBER 26, 2022

SHEET 59 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 7:59:25 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Sway Bracing Repair.dgn



REPAIR TB04

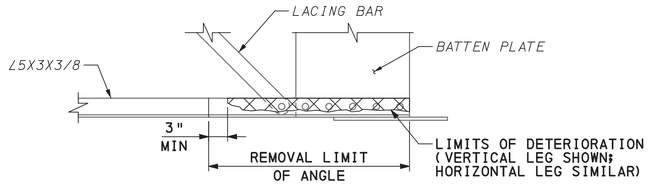
ITEM 1050-0242
REPAIR TB04 - END SWAY BRACE ANGLE REPLACEMENT
REPRESENTATIVE CONDITIONS

REPAIR TB05

ITEM 1050-0243
REPAIR TB05 - MID SWAY BRACE ANGLE REPLACEMENT
REPRESENTATIVE CONDITIONS

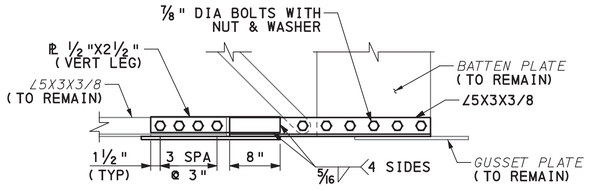
REPAIR TB07

ITEM 1050-0245
REPAIR TB07 - SWAY BRACING STRUT REPLACEMENT
REPRESENTATIVE CONDITIONS



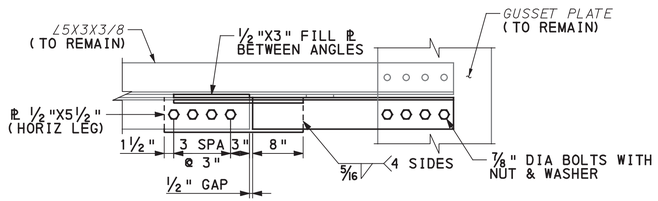
REMOVAL LIMITS

NOT TO SCALE



ELEVATION

NOT TO SCALE



PLAN

NOT TO SCALE

REPAIR TB04 (TB05 SIMILAR)

NOT TO SCALE

REPAIR TB04 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, DETERIORATION LIMITS AND STRUT ANGLE DIMENSIONS PRIOR TO FABRICATION.
2. REMOVE EXISTING RIVETS AND CUT AND REMOVE THE DETERIORATED ANGLE TO THE LIMITS SHOWN IN THE DETAILS. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN.
3. PROTECT ANY LACING BARS, BATTEN PLATES OR GUSSET PLATES TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. NEW ANGLE MAY BE MATCH DRILLED IN THE FIELD. WELDS OF CONNECTION PLATES TO THE NEW SECTION OF ANGLE SHALL BE PERFORMED IN THE SHOP IN ACCORDANCE WITH THE SPECIFICATIONS.
5. INSTALL NEW ANGLE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. PROVIDE FILL PLATE BETWEEN THE EXISTING ANGLES OF THE STRUT TO ENSURE FULL CAPACITY OF THE BOLTS CAN BE DEVELOPED.

REPAIR TB05 - PROCEDURE AND NOTES

1. FIELD VERIFY STRUT ANGLE SIZE AND DETERIORATION LIMITS PRIOR TO FABRICATION. IF REPAIR OCCURS IN PROXIMITY TO THE VERTICAL BRACE MEMBER, VERIFY RIVET SIZE AND PATTERN.
2. REMOVE EXISTING RIVETS IF PRESENT AND REMOVE THE DETERIORATED ANGLE TO THE LIMITS SHOWN IN THE DETAILS. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN.
3. CLEAN AND PREPARE THE FAYING SURFACES OF ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. CONNECTION PLATES FOR NEW ANGLE MAY BE MATCH DRILLED IN THE FIELD. WELDS OF CONNECTION PLATES TO THE NEW SECTION OF ANGLE SHALL BE PERFORMED IN THE SHOP IN ACCORDANCE WITH THE SPECIFICATIONS.
5. INSTALL NEW ANGLE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. PROVIDE FILL PLATE BETWEEN THE EXISTING ANGLES OF THE STRUT TO ENSURE FULL CAPACITY OF THE BOLTS CAN BE DEVELOPED.

REPAIR TB07 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE FULL LENGTH REPLACEMENT OF THE BOTTOM STRUT ANGLES IN THE LOCATIONS INDICATED. FOR ALL REPAIR LOCATIONS, REPLACE BOTH ANGLE MEMBERS.
2. FIELD VERIFY STRUT ANGLE SIZE. VERIFY RIVET SIZE AND PATTERN AT ALL CONNECTIONS. VERIFY THAT THE CONNECTIONS AND ADJOINING MEMBERS ARE NOT DAMAGED OR DISTORTED. REPORT ANY INDICATIONS OF DAMAGE TO THE REPRESENTATIVE.
3. REMOVE EXISTING RIVETS AND REMOVE THE EXISTING ANGLES. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES OF ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. HOLES FOR NEW ANGLES MAY BE MATCH DRILLED IN THE FIELD.
5. INSTALL NEW ANGLE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SWAY BRACE ANGLE REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

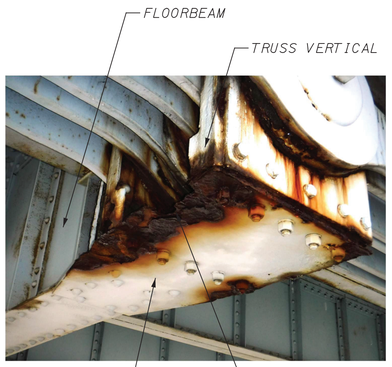
RECOMMENDED
OCTOBER 26, 2022

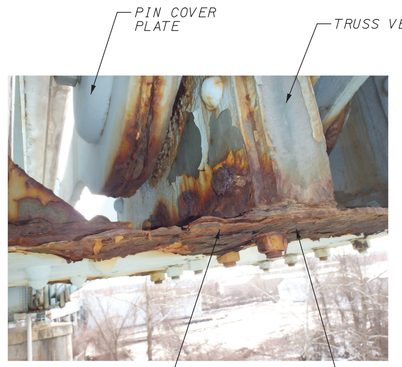
SHEET 60 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

PLOTTED: 10/26/2022 7:59:36 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Btm Flange Connection.dgn





WORK LIMIT NOTES:

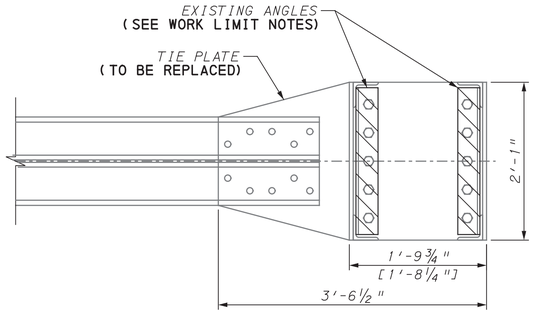
1. ALL LOCATIONS INDICATED ON THE PLANS ARE ASSUMED TO REQUIRE THE USE OF BOTH F04 AND T08. VERIFY EXISTING CONDITIONS AND REPORT DISCREPANCIES TO THE REPRESENTATIVE.
2. T08 REPAIR INCLUDES THE CONNECTION ANGLES BETWEEN THE TIE PLATE AND THE TRUSS VERTICAL AND THE FASTENERS TO THE TRUSS VERTICAL.
3. F04 REPAIR INCLUDES THE TIE PLATE AND THE FASTENERS TO THE FLOORBEAM AND THE CONNECTION ANGLES.
4. REPAIR F04 MAY BE CONDUCTED WITHOUT REPAIR T08 IF CONDITIONS WARRANT. HOWEVER, CONDUCT REPAIR F04 IN ALL LOCATIONS WHERE REPAIR T08 IS REQUIRED.

REPAIR F04, T08 - PROCEDURE AND NOTES

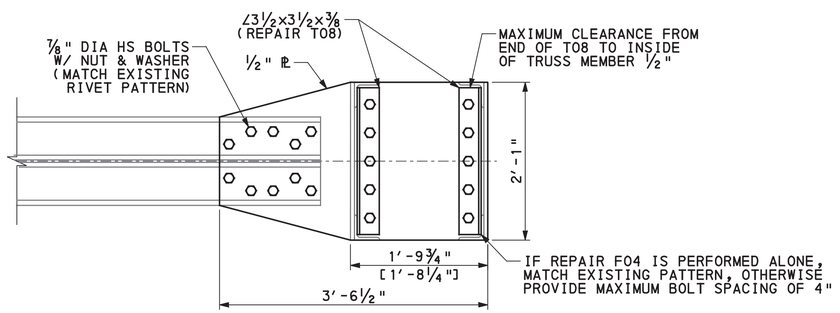
1. FIELD VERIFY EXISTING MEMBER SIZES, MEMBER GEOMETRY AND RIVET PATTERNS.
2. CONDUCT THIS REPAIR UNDER A FULL BRIDGE CLOSURE UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER. CONDUCT THIS REPAIR FOLLOWING ALL ADJACENT REPAIRS TO OTHER MEMBERS INCLUDING PACK RUST CLEANING AT THE EYE BARS.
3. REMOVE EXISTING PLATE AND CONNECTION ANGLES. REAM EXISTING HOLES FOR NEW BOLTS. NEW MEMBERS MAY BE MATCH DRILLED IN THE FIELD.
4. BLAST CLEAN AND PREPARE THE FAYING SURFACES OF THE CONNECTING ELEMENTS OF THE PROPOSED REPLACEMENT COMPONENTS IN ACCORDANCE WITH THE SPECIFICATIONS. IF EXCESSIVE DETERIORATION (GREATER THAN 33% SECTION LOSS) OF ANY CONNECTING ELEMENT TO REMAIN IN FOUND, IMMEDIATELY CONTACT THE ENGINEER.
5. INSTALL NEW CONNECTION ANGLES INCLUDING INSTALLATION OF BOLTS TO THE TRUSS VERTICAL IN ACCORDANCE WITH THE SPECIFICATIONS. INSTALL NEW BOTTOM PLATE. ENSURE THAT THE BOTTOM PLATE IS FULLY IN CONTACT WITH THE BOTTOM FLANGE OF THE FLOORBEAM AND PROVIDE FILL PLATES IF NEEDED.

REPAIR F04 & T08

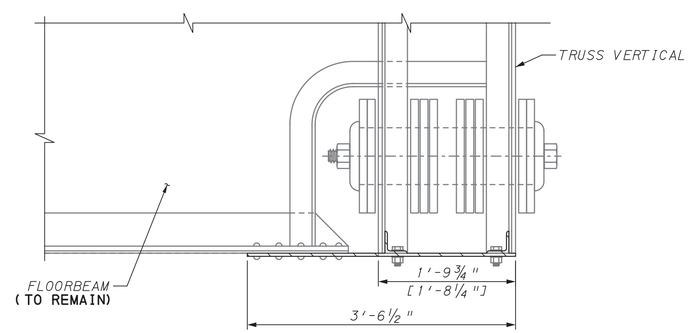
ITEM 1050-0210
REPAIR F04 - BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM
ITEM 1050-0229
REPAIR T08 - CONNECTION ANGLE REPAIR, TRUSS
REPRESENTATIVE CONDITIONS



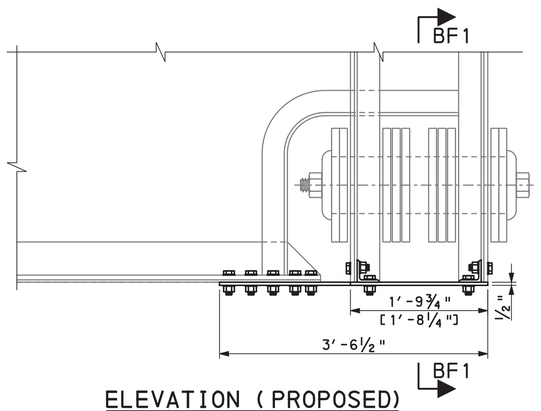
PLAN (REMOVAL)
0 1 2 FEET



PLAN (PROPOSED)
0 1 2 FEET

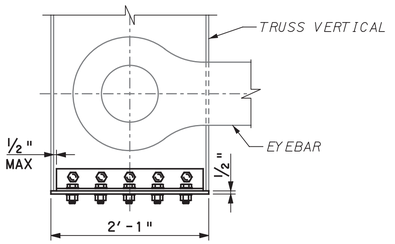


ELEVATION (REMOVAL)
0 1 2 FEET



ELEVATION (PROPOSED)
0 1 2 FEET

NOTE: DIMENSIONS IN BRACKETS SPECIFIC TO 29'-0½" PANELS



SECTION BF1-BF1
0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BOTTOM FLANGE CONNECTION REPAIR

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

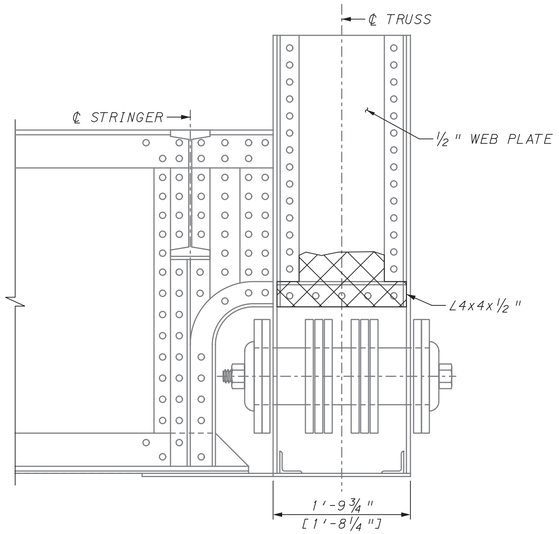
RECOMMENDED
OCTOBER 26, 2022

SHEET 61 OF 124

S - 40253

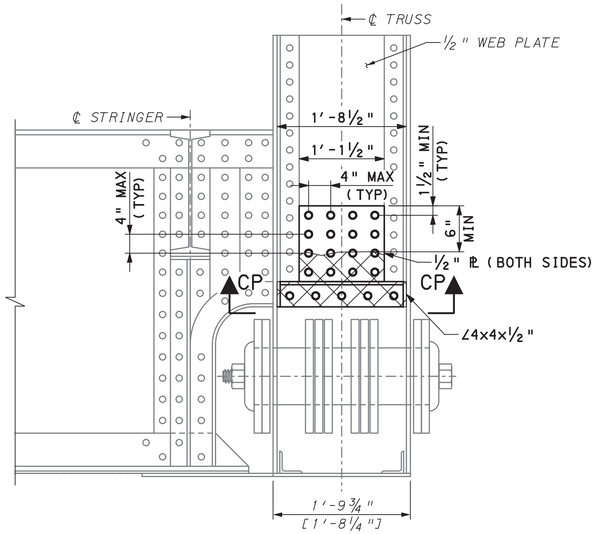
DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

PLOTTED: 10/26/2022 7:59:44 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_FB Connection Plate.dgn



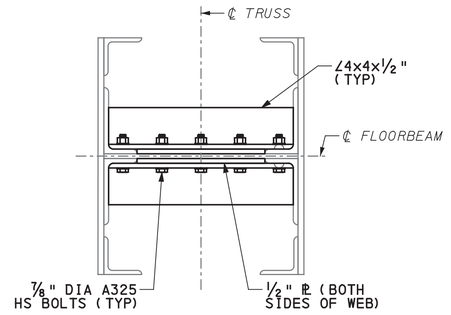
EXISTING

0 1 2 FEET



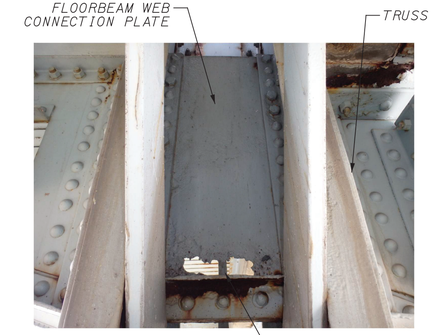
PROPOSED REPAIRS

0 1 2 FEET



SECTION CP-CP

0 1 2 FEET



REPAIRS T09 & T10

ITEM 1050-0230
REPAIR T09 - FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS
ITEM 1050-0231
REPAIR T10 - FLOORBEAM CONNECTION PLATE REPAIR, TRUSS

REPAIRS T09 & T10

REPAIR T09 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE REPLACEMENT OF THE ANGLES AT THE TRUSS VERTICAL BRACE IN THE LOCATIONS INDICATED. FOR ALL REPAIR LOCATIONS, REPLACE BOTH ANGLE MEMBERS REGARDLESS OF CONDITION.
2. THIS REPAIR MAY OR MAY NOT OCCUR IN CONJUNCTION WITH REPAIR T10. NOTE THAT IN ALL REPAIR T10 LOCATIONS, THIS REPAIR WILL ALSO OCCUR.
3. DO NOT CONDUCT THIS REPAIR UNTIL THE CLEANING FOR REPAIR PR03 HAS OCCURRED. CONDUCT THIS REPAIR PRIOR TO CONDUCTING REPAIR F04 AT ANY LOCATIONS WHERE BOTH REPAIRS OCCUR AT THE SAME TRUSS JOINT.
4. FIELD VERIFY ANGLE SIZE AND RIVET SIZE AND PATTERN.
5. REMOVE THE EXISTING ANGLES AND FILL PLATES IF PRESENT. VERIFY THE CONDITION OF THE WEB PLATE TO ASSESS IF REPAIR T10 IS REQUIRED AND REPORT FINDINGS TO THE REPRESENTATIVE. CLEAN AND PREPARE THE FAYING SURFACES OF ALL MATERIAL TO REMAIN.
6. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. HOLES FOR NEW ANGLES MAY BE MATCH DRILLED IN THE FIELD.
7. INSTALL NEW ANGLE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. FOR LOCATIONS WHERE REPAIR T10 IS NOT REQUIRED, PROVIDE A 3/8" X 4" FILL PLATE AS INDICATED. WHERE REPAIR T10 IS ALSO PERFORMED, THE FILL PLATE MAY BE OMITTED.

REPAIR T10 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE PLACEMENT OF WEB COVER PLATES AT THE TRUSS VERTICAL BRACE IN THE LOCATIONS INDICATED. FOR ALL REPAIR LOCATIONS, REPAIR T09 IS ALSO REQUIRED. NOTE THAT COVER PLATES ARE REQUIRED ON BOTH SIDES OF THE EXISTING WEB PLATE.
2. DO NOT CONDUCT THIS REPAIR UNTIL THE CLEANING FOR REPAIR PR03 HAS OCCURRED. CONDUCT THIS REPAIR PRIOR TO CONDUCTING REPAIR F04 AT ANY LOCATIONS WHERE BOTH REPAIRS OCCUR AT THE SAME
3. FIELD VERIFY DETERIORATION LIMITS AND DETERMINE THE EXTENT OF THE COVER PLATES REQUIRED. PERFORM FIELD VERIFICATION OF INFORMATION FOR REPAIR T09.
4. REMOVE THE EXISTING ANGLES AND FILL PLATES, IF PRESENT, FOR REPAIR T09.
5. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS FOR THE COVER PLATES. HOLES FOR COVER PLATES MAY BE MATCH DRILLED IN THE FIELD.
6. INSTALL NEW COVER PLATES. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. COMPLETE REPAIR T09 FOLLOWING INSTALLATION OF THE COVER PLATES.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FLOORBEAM CONNECTION PLATE AND ANGLE REPAIR

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 62 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

PLOTTED: 10/26/2022 7:59:50 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_T11-12 Clip Angle.dgn

REPAIR T11

ITEM 1050-0232
REPAIR T11 - REPLACE CLIP ANGLE
NORTH TRUSS, SPAN 11, JOINT U4
REPRESENTATIVE CONDITIONS

REPAIR T11

ITEM 1050-0232
REPAIR T11 - REPLACE CLIP ANGLE
NORTH TRUSS, SPAN 11, JOINT U4
REPRESENTATIVE CONDITIONS

REPAIR T12

ITEM 1050-0233
REPAIR T12 - REPLACE CLIP ANGLE & GUSSET PLATE
NORTH TRUSS, SPAN 10, JOINT U6
REPRESENTATIVE CONDITIONS

REPAIR T12

ITEM 1050-0233
REPAIR T12 - REPLACE CLIP ANGLE & GUSSET PLATE
NORTH TRUSS, SPAN 10, JOINT U6
REPRESENTATIVE CONDITIONS

REPAIR T11 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING CONNECTION PLATE / ANGLE SIZE, CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES. THE CONNECTION ANGLES MAY BE REPLACED WITH EITHER BENT PLATES OR STRUCTURAL ANGLES.
2. PROVIDE TEMPORARY SUPPORT OF SWAY BRACING DURING THE REPAIR. VERIFY THE CONDITION OF THE CONNECTION ANGLES OF THE VERTICAL GUSSET PLATE TO THE TRUSS VERTICAL MEMBER. REPORT ANY NOTED DEFECTS OR DETERIORATION TO THE REPRESENTATIVE.
3. REMOVE EXISTING CONNECTION ANGLES. PROVIDE ULTRASONIC OR SIMILAR TESTING TO VERIFY THAT NO CRACKS EXIST IN THE GUSSET PLATE. COORDINATE TESTING RESULTS WITH THE REPRESENTATIVE AND ENGINEER. IF CRACKS IN THE GUSSET PLATE ARE DISCOVERED, REPAIR T12 MAY BE REQUIRED.
4. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
5. INSTALL THE NEW CONNECTION PLATES / ANGLES. USE 7/8" DIA HS BOLTS WITH NUTS AND WASHERS IN THE CONNECTIONS. REAM EXISTING HOLES IF REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS.
6. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. FOLLOWING COMPLETION OF THE BOLT INSTALLATION, REMOVE ANY TEMPORARY SUPPORT.

REPAIR T12 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING CONNECTION PLATE / ANGLE SIZE, GUSSET PLATE SIZE, CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES. THE CONNECTION ANGLES MAY BE REPLACED WITH EITHER BENT PLATES OR STRUCTURAL ANGLES. REPLACE THE GUSSET PLATE WITH A PLATE THICKNESS MATCHING EXISTING.
2. PROVIDE TEMPORARY SUPPORT OF SWAY BRACING AND ALL HORIZONTAL BRACING MEMBERS DURING THE REPAIR. VERIFY THE CONDITION OF THE CONNECTION ANGLES OF THE VERTICAL GUSSET PLATE TO THE TRUSS VERTICAL MEMBER AS WELL AS THE UPPER GUSSET PLATE. REPORT ANY NOTED DEFECTS OR DETERIORATION TO THE
3. REMOVE EXISTING CONNECTION ANGLES AND GUSSET PLATE. INSPECTION ALL HORIZONTAL BRACING MEMBERS TO VERIFY THAT CRACKS DID NOT PROPAGATE INTO THE BRACING. PERFORM DYE PENETRANT OR SIMILAR TESTING ON BRACING MEMBERS. IF CRACKS ARE SUSPECTED IN ANY MEMBER TO REMAIN, PROVIDE ULTRASONIC OR SIMILAR TESTING. COORDINATE TESTING RESULTS WITH THE REPRESENTATIVE AND ENGINEER.
4. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
5. INSTALL THE NEW CONNECTION PLATES / ANGLES AND GUSSET PLATE. USE 7/8" DIA HS BOLTS WITH NUTS AND WASHERS IN THE CONNECTIONS. REAM EXISTING HOLES IF REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS.
6. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. FOLLOWING COMPLETION OF THE BOLT INSTALLATION, REMOVE ANY TEMPORARY SUPPORT.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
CLIP ANGLE REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 63 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

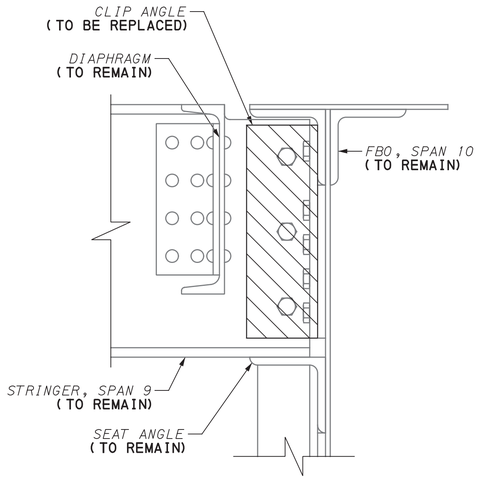
PLOTTED: 10/26/2022 8:00:05 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Stringer Clip Angle.dgn

REPAIR S09

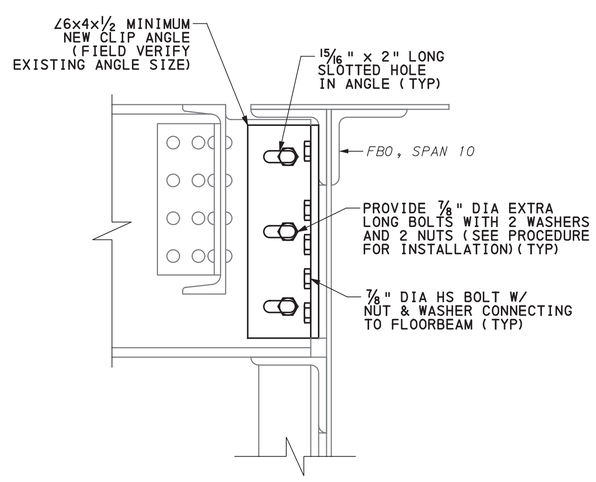
ITEM 1050-0267
REPAIR S09 - REPLACE STRINGER CLIP ANGLE
REPRESENTATIVE CONDITIONS

REPAIR S09 - PROCEDURE

1. FIELD VERIFY EXISTING CONNECTION ANGLE SIZE, CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES. THE PROPOSED CONNECTION ANGLES SHALL BE A MINIMUM OF AN L6X4X1/2, HOWEVER VERIFY CLEARANCES AND PROPOSED CONNECTION LAYOUT PRIOR TO FABRICATION.
2. COORDINATE REPLACEMENT OF THE EXISTING CONNECTION ANGLES WITH THE REPLACEMENT OF THE EXPANSION JOINT AT PIER 1.
3. REMOVE EXISTING CONNECTION ANGLES. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. INSTALL THE NEW CONNECTION ANGLES. USE 7/8" DIA HS BOLTS WITH NUTS AND WASHERS IN THE CONNECTIONS TO THE TRUSS FLOORBEAM. REAM EXISTING HOLES IF REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS. INSTALL THE BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.
5. FOR THE CONNECTION TO THE SPAN 9 STRINGERS, REAM THE EXISTING HOLES IN THE STRINGERS IF REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS. PROVIDE ADDITIONAL LENGTH BOLTS FOR 2 NUTS. INSTALL THE HS BOLTS WITH WASHERS UNDER BOTH THE BOLT HEAD AND NUT, AND TIGHTEN THE NUT SNUG TIGHT. BACK THE NUT OFF APPROXIMATELY 1/4 TURN AND INSTALL THE SECOND JAM NUT SNUG TIGHT TO THE FIRST NUT.



EXISTING
NOT TO SCALE



PROPOSED
NOT TO SCALE

REPAIR S09
NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
STRINGER CLIP ANGLE REPAIR

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 64 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

PLOTTED: 10/26/2022 8:00:11 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Rivet - Bolt Replacement.dgn

REPAIR F09

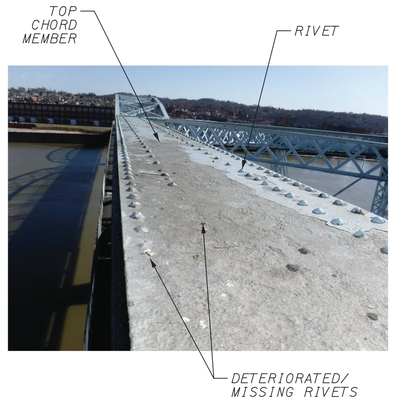
ITEM 1050-0215
REPAIR F09 - REPLACE RIVET, FLOORBEAM
REPRESENTATIVE CONDITIONS

REPAIR G08

ITEM 1050-0222
REPAIR G08 - REPLACE RIVET, GIRDER
REPRESENTATIVE CONDITIONS

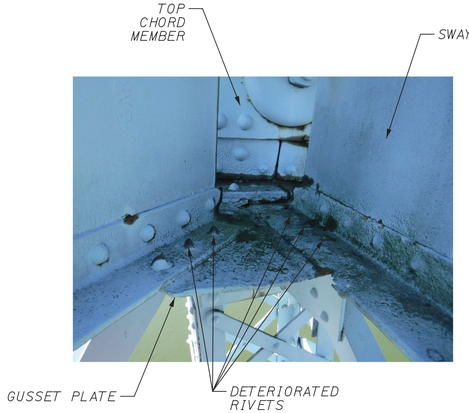
REPAIR T05

ITEM 1050-0227
REPAIR T05 - REPLACE RIVET, TRUSS
REPRESENTATIVE CONDITIONS



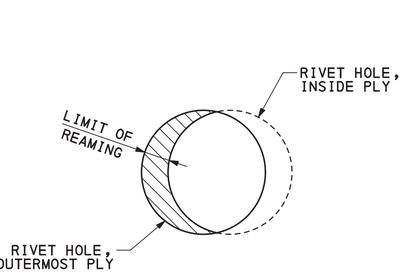
REPAIR TC03

ITEM 1050-0236
REPAIR TC03 - REPLACE RIVET, CHORD
REPRESENTATIVE CONDITIONS
(TOP CHORD SHOWN; BOTTOM CHORD SIMILAR)

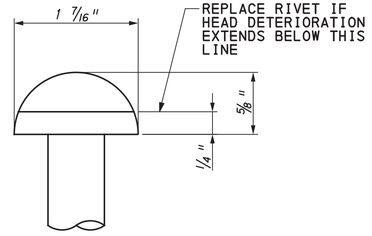


REPAIR TB03

ITEM 1050-0241
REPAIR TB03 - REPLACE RIVET, BRACING
REPRESENTATIVE CONDITIONS



DETAIL 1



DETAIL 2

REPAIR F09, G08, T05, TC03, TB03, B02

NOT TO SCALE

REPAIR B02

ITEM 1050-0249
REPAIR B02 - REPLACE RIVET, BENT
REPRESENTATIVE CONDITIONS

REPAIR F09, G08, T05, TC03, TB03, B02 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE REPLACEMENT OF RIVETS OR BOLTS WITH NEW HIGH STRENGTH BOLTS ONLY WHERE NEW STEEL IS NOT REQUIRED. BOLT INSTALLATION FOR ALL STEEL REPAIRS WHERE NEW BOLTS ARE REQUIRED TO COMPLETE THE REPAIR ARE INCLUDED WITH THE REPRESENTATIVE REPAIR. HOWEVER, PROCEDURES NOTED IN THIS REPAIR ARE APPLICABLE TO ALL LOCATIONS
2. USE A PNEUMATIC RIVET BREAKER AND A PNEUMATIC PUNCH FOR RIVET REMOVAL. RIGHT ANGLE PORTABLE DRILLS OPERATED BY ELECTRICITY OR COMPRESSED AIR MAY BE USED TO REMOVE RIVETS AT LOCATIONS WHERE INSUFFICIENT CLEARANCE FOR USE OF OTHER
3. DO NOT USE A TORCH OR OTHER BURNING METHODS FOR REMOVAL.
4. REAM EXISTING HOLES AS NEEDED FOR NEW HIGH STRENGTH BOLTS. INSTALL NEW BOLTS WITH NUT AND WASHER IN ACCORDANCE WITH THE SPECIFICATIONS.
5. IN AREAS WHERE MULTIPLE ADJACENT RIVETS ARE BEING REPLACED, REMOVE AND REPLACE ONE AT A TIME.
6. PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE WORKER HEALTH AND SAFETY REQUIREMENTS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TYPICAL RIVET REPLACEMENT AND BOLT REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 65 OF 124
S - 40253

DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

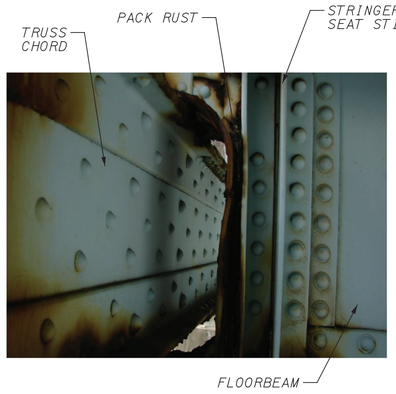
PLOTTED: 10/26/2022 8:00:34 AM

REPAIR PR01

ITEM 1070-0350
REPAIR PR01 - PACK RUST REPAIR,
GIRDER OR FLOORBEAM
REPRESENTATIVE CONDITIONS

REPAIR PR02

ITEM 1070-0350
REPAIR PR02 - PACK RUST REPAIR,
TRUSS MEMBER
REPRESENTATIVE CONDITIONS



REPAIR PR05

ITEM 1070-0350
REPAIR PR05 - PACK RUST REPAIR,
STRINGER BEARING SEAT
REPRESENTATIVE CONDITIONS

REPAIR PR06

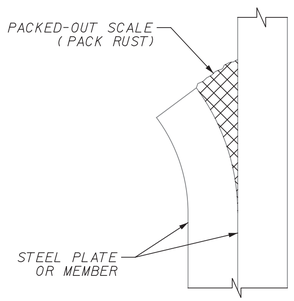
ITEM 1070-0350
REPAIR PR06 - PACK RUST REPAIR,
BENT
REPRESENTATIVE CONDITIONS

REPAIR PR07

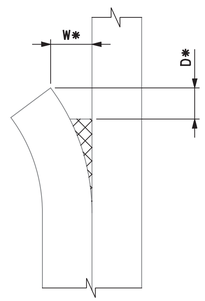
ITEM 1070-0350
REPAIR PR07 - PACK RUST REPAIR,
TRUSS END PORTAL
REPRESENTATIVE CONDITIONS

REPAIR PR01, PR02, PR05, PR06, PR07 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE CLEANING AND TREATMENT OF PACK RUST AREAS AS SHOW ON THE PLANS OR AS DEFINED BY THE REPRESENTATIVE.
2. PRIOR TO BLAST CLEANING, REMOVE ALL RUST SCALE AND REMOVE PACK RUST AS DEFINED IN THE PLANS FROM ALL CREVICES USING MANUALLY OPERATED OR POWER OPERATED DESCALING TOOLS.
3. FOLLOWING BLAST CLEANING AND PRIMER APPLICATION, FLOOD THE PACK RUS AREA WITH A PENETRATING SEALER AS RECOMMENDED BY THE MANUFACTURER SO THAT THE MATERIAL FLOWS AND WICKS INTO THE CREVICE AREAS. WIPE EXCESS MATERIAL FROM THE SURFACE FOLLOWING APPLICATION. FOLLOWING DRYING AND CURING OF THE PENETRATING SEALER, APPLY THE
4. APPLY CAULKING TO THE PACK RUST AREA IN ACCORDANCE WITH THE SPECIFICATIONS.
5. CLEANING OF THE PACK RUST AREAS IS INCIDENTAL TO THE BLAST CLEANING AND PAINTING OF THE STRUCTURE. PENETRATING SEALER AND CAULKING APPLICATION IS INCLUDED IN THE APPROPRIATE ITEM NUMBERS.



EXISTING CONDITION



REPAIR

PACK RUST REMOVAL LIMIT	
W	D (MIN)
> 1/4"	1"
≤ 1/4"	1/2"

REPAIR PR01, PR02, PR04 & PR06

NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL PACK RUST REPAIRS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

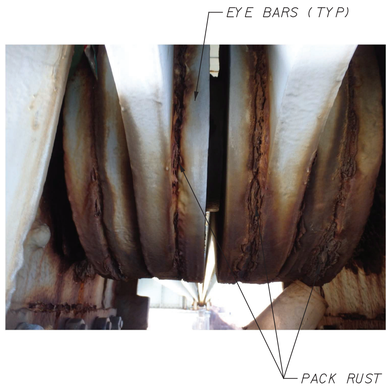
SHEET 66 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

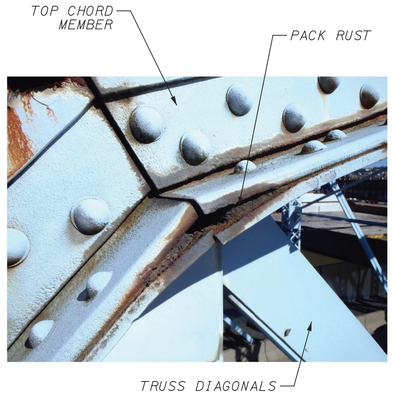
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038 RPR_Pack Rust 1.dgn

PLOTTED: 10/26/2022 8:00:53 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Pack Rust 2.dgn



REPAIR PR03

ITEM 9000-0201
REPAIR PR03 - PACK RUST REPAIR,
EYE BARS
REPRESENTATIVE CONDITIONS



REPAIR PR04

ITEM 9000-0202
REPAIR PR04 - PACK RUST REPAIR,
JOINT OR CHORD
REPRESENTATIVE CONDITIONS

REPAIR PR03 - PROCEDURE AND NOTES

1. SEE THE SPECIAL PROVISION FOR ITEM 9000-0201.
2. THIS REPAIR SHALL BE USED IN ANY LOCATION WHERE EXTENSIVE PACK RUST EXISTS BETWEEN THE HEADS OF EYE BARS AT BOTTOM CHORD JOINT LOCATIONS. LOCATIONS ARE DESIGNATED ON THE PLANS. ANY ADDITIONAL LOCATIONS PROPOSED FOR THE REPAIR SHALL BE COORDINATED WITH THE REPRESENTATIVE AND THE ENGINEER.
3. COORDINATE ALL CLEANING OPERATIONS WITH OTHER REPAIRS INCLUDING F04 / T08, T09 AND T10 REPAIRS. IF ANY OF THESE REPAIRS OCCUR IN THE SAME JOINT AS PR03, IT IS RECOMMENDED TO COMPLETE THOSE REPAIRS PRIOR TO CONDUCTING PR03. ALSO COORDINATE THIS REPAIR WITH OPERATIONS TO PLACE PAINT CONTAINMENT.
4. PROVIDE PROTECTION TO ALL ELEMENTS TO REMAIN. PROVIDE PROTECTION TO TRAFFIC AND PEDESTRIANS AS REQUIRED.
5. CONDUCT ULTRA-HIGH-PRESSURE WATER JETTING AT A MINIMUM OF 30,000 PSI TO REMOVE PACK RUST FROM AREAS BETWEEN THE EYE BARS AT THE JOINTS. EXERCISE EXTREME CAUTION TO AVOID DAMAGING OR GOUGING THE EYE BARS OR PINS. IF WATER JETTING IS PERFORMED PRIOR TO BLAST CLEANING OF OTHER ELEMENTS, FLUSH AND CLEAN THE AREAS BETWEEN THE EYE BARS USING HIGH PRESSURE WATER AS REQUIRED TO ENSURE THE REMOVAL OF ALL BLASTING MATERIALS.
6. FOLLOWING PRIMER APPLICATION, FLOOD THE AREA BETWEEN THE EYE BARS WITH A PENETRATING SEALER AS RECOMMENDED BY THE MANUFACTURER. APPLY INTERMEDIATE PAINT COAT AFTER CURING OF THE PENETRATING SEALER.
7. FOLLOWING APPLICATION OF THE TOP COAT, APPLY CAULKING TO ALL SEAMS OF THE EYEBARS AT THE TOP OF THE CONNECTIONS. EXTEND THE CAULKING DOWN THE SIDES OF THE EYEBARS TO PREVENT WATER INTRUSION FROM ABOVE. DO NOT CAULK THE UNDERSIDE OF THE EYEBARS TO ENSURE DRAINAGE.

REPAIR PR04 - PROCEDURE AND NOTES

1. SEE THE SPECIAL PROVISION FOR ITEM 9000-0202.
2. THIS REPAIR SHALL BE USED IN ANY PACK RUST LOCATION WHERE THE CONNECTED ELEMENT OF A TRUSS CHORD HAS EXHIBITED SIGNIFICANT (GREATER THAN 1/4") DEFORMATION DUE TO THE PRESCENCE OF PACK RUST EXCEPT FOR LOCATIONS WHERE A TOP CHORD COVER PLATE IS INVOLVED (SEE REPAIR TC06).
3. SATURATE THE PACK RUST AREA USING MINIMUM 3000 PSI WATER BLASTING. IMMEDIATELY FOLLOWING THE SATURATION OF THE PACK RUST, HEAT THE SURFACE OF THE BASE METAL ELEMENT TO A TEMPERATURE OF BETWEEN 250 AND 400 DEGREES FAHRENHEIT.
4. REMOVE PACK RUST USING MECHANICAL METHODS. PACK RUST MAY BE REMOVED USING HAND CHISELS, HAMMERS, PRYING, OR SMALL MECHANICAL TOOLS IN ACCORDANCE WITH THE SPECIFICATIONS. USE EXTREME CARE TO AVOID DAMAGING UNDERLYING MATERIAL.
5. THOROUGHLY DRY THE AREA AND FLOOD THE AREA WITH A PENETRATING SEALER. PROTECT THE BASE METAL ELEMENT WITH A SACRIFICIAL STEEL PLATE A MINIMUM OF 1" THICK AND DRIVE THE DEFORMED BASE METAL INTO ITS ORIGINAL POSITION USING A PNEUMATIC HAMMER.
6. CAULK THE AREA WHERE THE REPAIR OCCURRED IN ACCORDANCE WITH THE SPECIFICATIONS FOR PACK RUST REPAIRS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TYPICAL PACK RUST REPAIRS 2

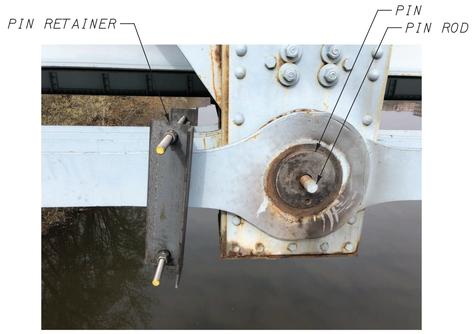
RECOMMENDED
OCTOBER 26, 2022

SHEET 67 OF 124

S - 40253

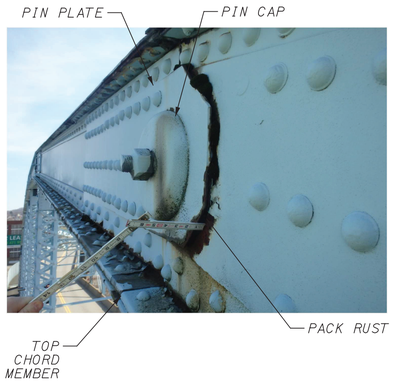
DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

PLOTTED: 10/26/2022 8:01:04 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038 RPR_TC06 Pin Plate.dgn



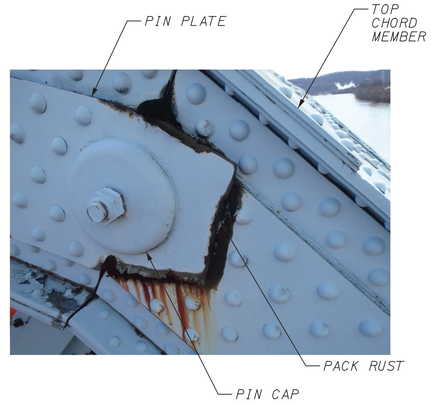
REPAIR TC05

ITEM 1050-0237
REPAIR TC05 - REPLACE PIN ROD
REPRESENTATIVE CONDITIONS



REPAIR TC06

ITEM 1050-0238
REPAIR TC06 - REPAIR TOP CHORD PIN PLATE
REPRESENTATIVE CONDITIONS

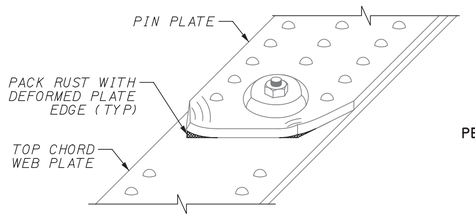


REPAIR TC06

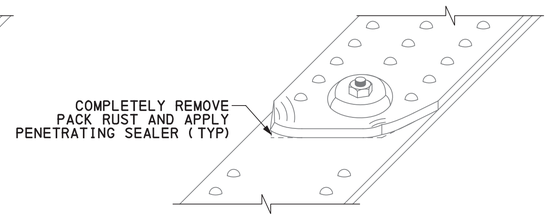
ITEM 1050-0238
REPAIR TC06 - REPAIR TOP CHORD PIN PLATE
REPRESENTATIVE CONDITIONS

REPAIR TC05 - PROCEDURE AND NOTES

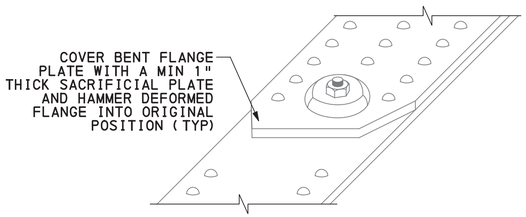
1. COORDINATE THIS WORK WITH REPAIR PR03 IF REQUIRED. PR03 MAY BE CONDUCTED PRIOR TO THIS REPAIR, HOWEVER STEPS 2 THROUGH 4 MUST BE COMPLETED PRIOR TO PR03.
2. CONDUCT THIS WORK DURING A FULL BRIDGE CLOSURE. CONSTRUCTION LIVE LOAD MAY BE PRESENT DURING THE OPERATION.
3. FIELD VERIFY THE DIMENSIONS OF THE EXISTING COVER PLATE ROD. PROVIDE A NEW COVER PLATE ROD OF EQUIVALENT DIMENSIONS.
4. VERIFY THE PLACEMENT AND CONDITION OF THE EXISTING CLAMP MECHANISM. BOLTS SHOULD BE SNUG TIGHT WITH JAM BOLTS IN PLACE. IF ANY EVIDENCE OF DAMAGE OR EXCESSIVE DETERIORATION IS DETECTED, NOTIFY THE REPRESENTATIVE PRIOR TO PROCEEDING WITH THE WORK.
5. REMOVE THE EXISTING COVER PLATE ROD AND COVER PLATES. POWER TOOL CLEAN THE ENDS OF THE PINS AND THE INTERIOR SURFACES OF THE COVER PLATES, AND APPLY A COAT OF PRIMER. DISPOSE OF THE EXISTING COVER PLATE ROD IN ACCORDANCE WITH THE SPECIFICATIONS.
6. INSTALL NEW COVER PLATE ROD AND RE-INSTALL COVER PLATES. PROVIDE STANDARD WASHERS FOR THE COVER PLATE ROD, AND INSTALL THE NUTS TO A SNUG TIGHT FIT.
7. REMOVE AND DISPOSE OF THE CLAMP MECHANISM IN ACCORDANCE WITH THE SPECIFICATIONS.



EXISTING



REMOVAL



PROPOSED

REPAIR TC06

NOT TO SCALE

REPAIR TC06 - PROCEDURE AND NOTES

1. THIS REPAIR SHALL BE USED IN TOP CHORD CONNECTION PLATES WHERE THE PIN PLATE HAS EXHIBITED SIGNIFICANT (GREATER THAN 1/4") DEFORMATION DUE TO THE PRESCENCE OF PACK RUST.
2. SATURATE THE PACK RUST AREA USING MINIMUM 3000 PSI WATER BLASTING. IMMEDIATELY FOLLOWING THE SATURATION OF THE PACK RUST, HEAT THE SURFACE OF THE COVER PLATE TO A TEMPERATURE OF BETWEEN 250 AND 400 DEGREES FAHRENHEIT.
3. REMOVE PACK RUST USING MECHANICAL METHODS. PACK RUST MAY BE REMOVED USING HAND CHISELS, HAMMERS, PRYING, OR SMALL MECHANICAL TOOLS IN ACCORDANCE WITH THE SPECIFICATIONS. USE EXTREME CARE TO AVOID DAMAGING UNDERLYING MATERIAL.
4. THOROUGHLY DRY THE AREA AND FLOOD THE AREA WITH A PENETRATING SEALER. PROTECT THE PIN PLATE WITH A SACRIFICIAL STEEL PLATE A MINIMUM OF 1" THICK AND DRIVE THE DEFORMED PIN PLATE INTO ITS ORIGINAL POSITION USING A PNEUMATIC HAMMER.
5. TIGHTEN THE EXISTING COVER PLATE ROD AS NEEDED TO RE-SEAT THE PIN COVER TO THE PLATE IF NECESSARY. ENSURE A TIGHT FIT BETWEEN THE PIN COVER AND THE PLATE.
6. CAULK THE AREA WHERE THE REPAIR OCCURRED IN ACCORDANCE WITH THE SPECIFICATIONS FOR PACK RUST REPAIRS.

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TYPICAL PIN ROD AND TOP CHORD PLATE REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

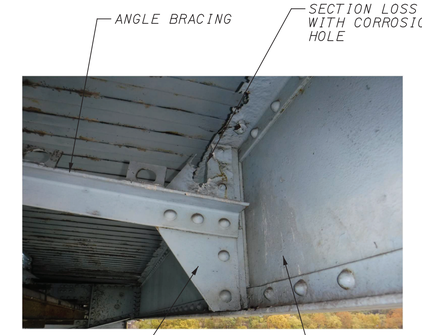
RECOMMENDED
OCTOBER 26, 2022

SHEET 68 OF 124

S - 40253

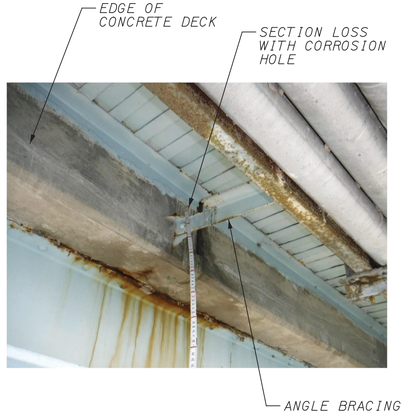
PLOTTED: 10/26/2022 8:01:15 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Sidewalk Support.dgn



REPAIR TM03

ITEM 1050-0246
REPAIR TM03 - SIDEWALK GUSSET PLATE REPAIR
REPRESENTATIVE CONDITIONS



REPAIR TM04

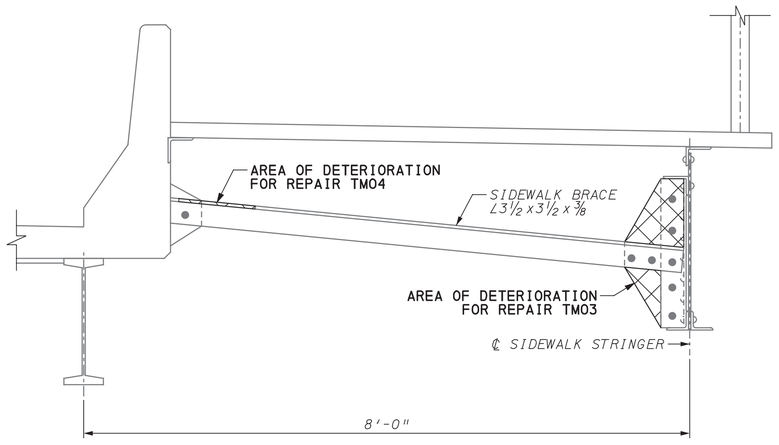
ITEM 1050-0247
REPAIR TM04 - SIDEWALK ANGLE BRACING REPAIR
REPRESENTATIVE CONDITIONS

REPAIR TM03 - PROCEDURE

1. FIELD VERIFY EXISTING PLATE SIZE, RIVET SIZE, AND RIVET SPACING PRIOR TO FABRICATION. ALSO VERIFY THE CONDITION OF THE CONNECTION ANGLE AND THE BRACE ANGLE PRIOR TO FABRICATION. REPORT ANY DETERIORATION TO THE REPRESENTATIVE.
2. REMOVE EXISTING RIVETS AND REMOVE THE DETERIORATED PLATE. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN. DO NOT SIMULTANEOUSLY PERFORM THIS REPAIR ON ADJACENT SIDEWALK BRACES.
3. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS. REAM EXISTING HOLES FOR NEW BOLTS.
4. INSTALL NEW PLATE. INSTALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

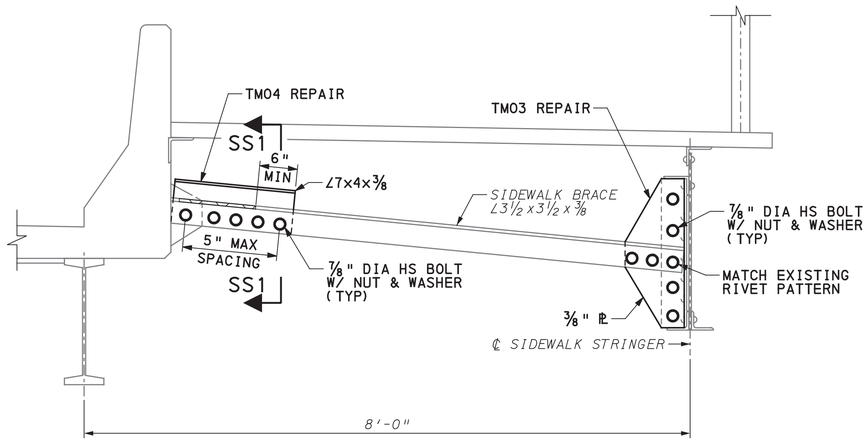
REPAIR TM04 - PROCEDURE

1. FIELD VERIFY EXISTING ANGLE SIZE, RIVET SIZE, AND RIVET SPACING PRIOR TO FABRICATION. VERIFY THE LIMIT OF DETERIORATION OF THE ANGLE AND EXTEND THE REPAIR ANGLE A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION.
2. DRILL NEW HOLES IN THE EXISTING BRACE FOR THE REPAIR ANGLE AND FILL PLATE. REMOVE THE EXISTING RIVET.
3. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS. REAM EXISTING HOLES FOR NEW BOLTS.
4. INSTALL NEW ANGLE AND FILL PLATE. INSTALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.



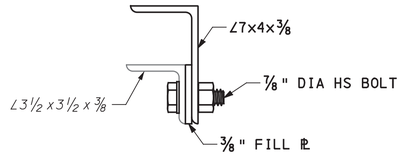
SIDEWALK BRACE (EXISTING)

0 1 2 FEET



SIDEWALK BRACE (PROPOSED REPAIRS)

0 1 2 FEET



SECTION SS1-SS1

NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SIDEWALK STRUCTURE REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

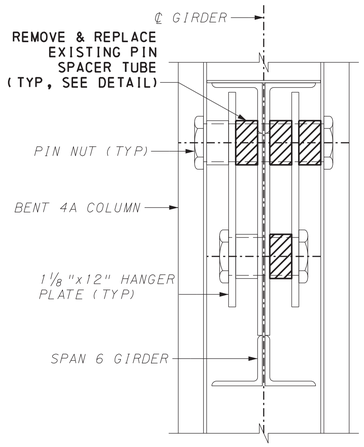
OCTOBER 26, 2022

SHEET 69 OF 124

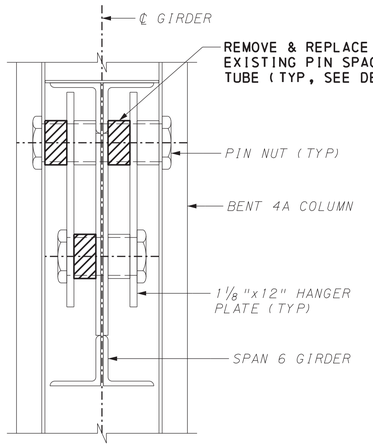
S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

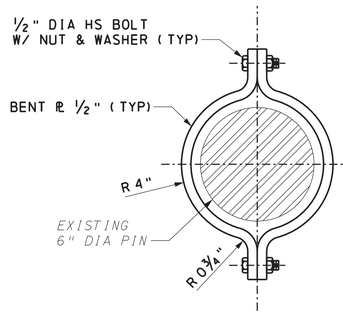
PLOTTED: 10/25/2022 10:11:44 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\NewKen_benrrepairs_01.dgn



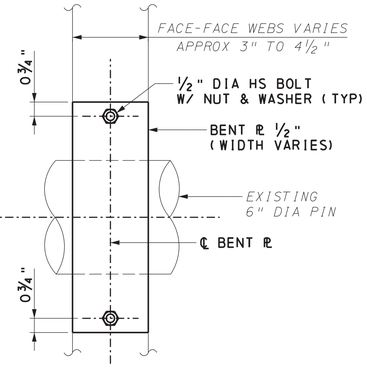
GIRDER G2
(LOOKING TOWARD SPAN 5)
NOT TO SCALE



GIRDER G1
(LOOKING TOWARD SPAN 5)
NOT TO SCALE



SECTION



ELEVATION

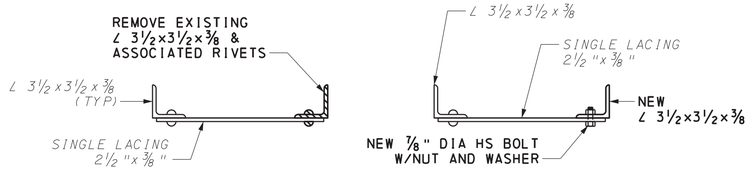
PIN SPACER TUBE DETAIL
0 3 6 9 1 FOOT

REPAIR G06 - PROCEDURE AND NOTES

1. REMOVE EXISTING GIRDER PIN SPACER TUBES AS INDICATED. USE EXISTING PIN SPACER TUBE DIMENSIONS TO FABRICATE NEW GIRDER PIN SPACER TUBES USING DETAILS ON THIS SHEET.
2. REMOVE LOOSE DEBRIS AND PRIME STEEL AREAS THAT WILL BE IN CONTACT AFTER INSTALLATION OF NEW GIRDER PIN SPACER TUBES.
3. INSTALL NEW GIRDER PIN SPACER TUBES AS INDICATED. INSTALL NEW BOLTS SNUG-TIGHT.

REPAIR TYPE G06

ITEM 1050-0220
REPLACE GIRDER PIN SPACER TUBE



REMOVAL REPLACEMENT

REPAIR B08

ITEM 1050-0255
REPLACE SWAY BRACE ANGLE
0 6 1 FOOT

LEGEND:

PIN SPACER TUBE TO BE REPLACED (REPAIR G06)

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4 .

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT REPAIR DETAILS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

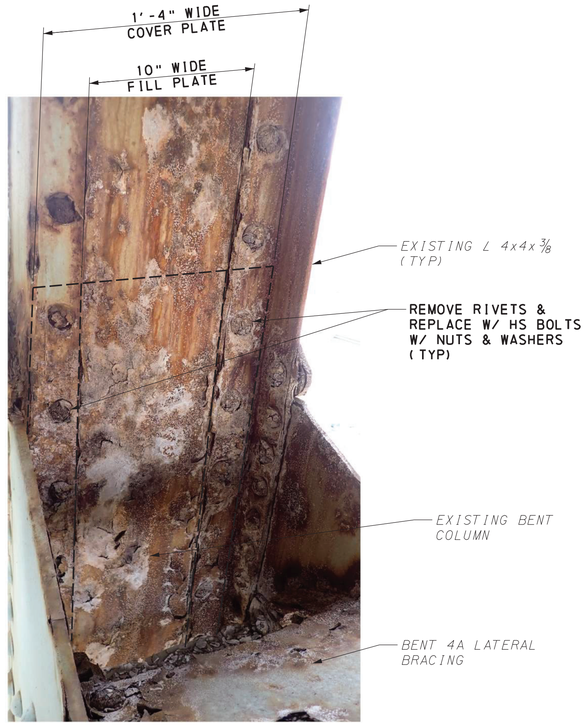
RECOMMENDED
OCTOBER 26, 2022

SHEET 70 OF 124

S - 40253

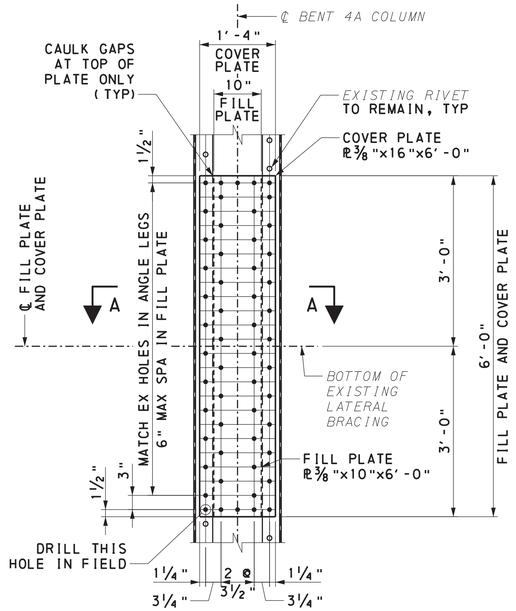
DES: ABC	CKD: KTS	DWG: ABC	CKD: KTS

PLOTTED: 10/25/2022 10:12:13 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\design\structures\Final\plots\Newken_benrrepairs_02.dgn



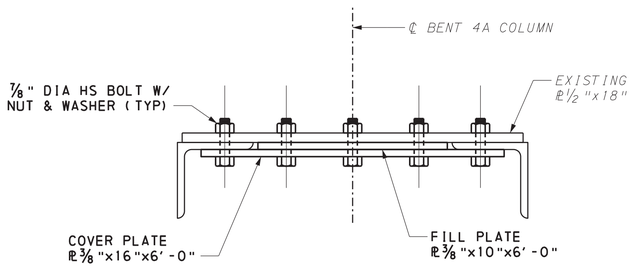
REPAIR B09

ITEM 1050-0256
INSTALL COLUMN COVER PLATE
REPRESENTATIVE PHOTO



REPAIR B09 - ELEVATION

0 1 2 FEET



PART SECTION A-A

LACING AND RIVETS NOT SHOWN
0 3 6 9 1 FOOT

REPAIR B09 - PROCEDURE AND NOTES

1. AFTER ABRASIVE BLASTING, THE REPRESENTATIVE WILL DELINEATE THE FINAL DIMENSIONS OF THE FILL AND COVER PLATES.
2. DRILL HOLES FOR NEW BOLTS AS REQUIRED, USING REPAIR AND FILL PLATES AS A TEMPLATE.
3. REMOVE RIVETS AS REQUIRED. REAM HOLES FOR ⅞" DIA HS BOLTS USING THE OUTERMOST PLY AS THE TEMPLATE.
4. INSTALL FILL AND COVER PLATES.
5. INSTALL NEW ⅞" DIA HS BOLTS W/ NUTS AND WASHERS IN ALL OPEN HOLES.

REPAIR B13

ITEM 1050-0119
REPLACE CONNECTION ANGLE
(∠ 4x4x½)
REPRESENTATIVE PHOTO

REPAIR B12

ITEM 1050-0259
REPLACE BENT4-4A BRACING
GUSSET PLATE, TYPE 2
REPRESENTATIVE PHOTO

REPAIR B12, B13 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS ATTACHING THE EXISTING GUSSET PLATE TO THE BENT 4-4A BRACING.
2. REMOVE GUSSET PLATE AND/OR CONNECTION PLATE AND DISCARD.
3. REAM HOLES AS REQUIRED. HOLES MAY BE DRILLED IN THE GUSSET PLATE USING THE EXISTING HOLES IN THE BRACING MEMBERS AS A TEMPLATE.
4. INSTALL NEW ⅞" DIA HS BOLTS W/ NUTS AND WASHERS IN ALL OPEN HOLES.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT REPAIR DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

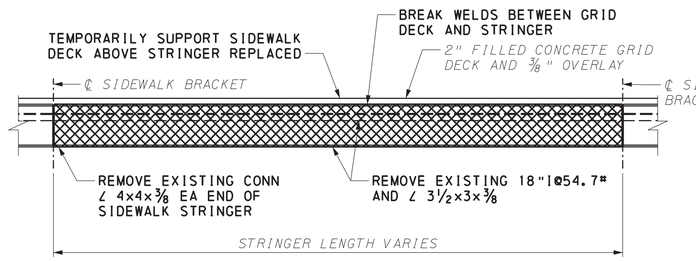
RECOMMENDED
OCTOBER 26, 2022

SHEET 71 OF 124

S - 40253

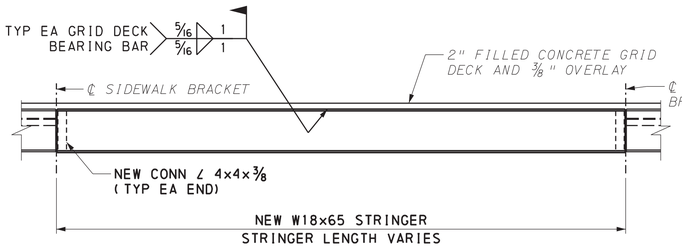
DES: ABC	CKD: KTS	DWG: ABC	CKD: KTS

PLOTTED: 10/25/2022 10:12:39 PM
FILE NAME: N:\NEW KENSINGTON BRIDGE PRESERVATION\deliverables\designs\structures\Final\plots\NewKen_benrepairs_03.dgn



REMOVAL ELEVATION

0 2 4 FEET



REPLACEMENT ELEVATION

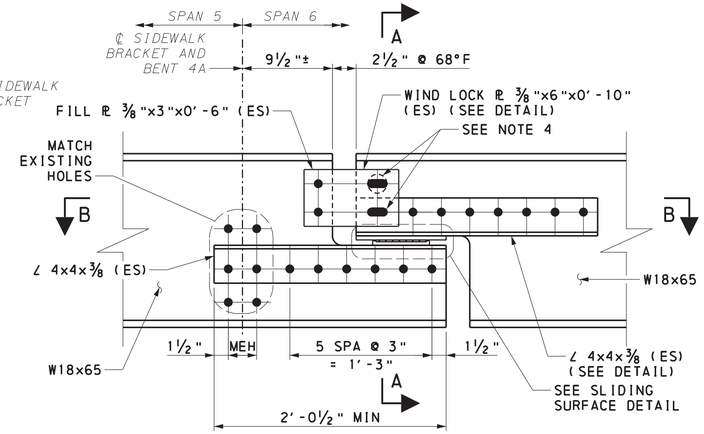
0 2 4 FEET

REPAIR S05

ITEM 1050-0110
REPLACE SIDEWALK STRINGER
REPRESENTATIVE PHOTO

REPAIR S05 - PROCEDURE AND NOTES

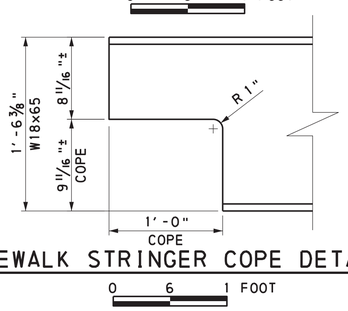
1. PAYMENT FOR SIDEWALK STRINGER EXPANSION ASSEMBLY IS NOT INCLUDED IN THIS ITEM. PAYMENT FOR SIDEWALK STRINGER EXPANSION ASSEMBLY IS INCLUDED IN ITEM 1050-0205, REPAIR S06, REPLACE SIDEWALK STRINGER EXPANSION ASSEMBLY.
2. TEMPORARILY SUPPORT THE AFFECTED SIDEWALK DECK AS REQUIRED TO REPLACE THE INDICATED STRINGER(S).
3. REMOVE EXISTING STRINGER AND DISCARD. NOTE THAT THE SIDEWALK STRINGER TOP FLANGE IS WELDED TO EACH TRANSVERSE BEARING BAR OF THE STEEL SIDEWALK GRID DECK. SUBMIT A PROCEDURE FOR SIDEWALK STRINGER REMOVAL FOR APPROVAL.
4. REMOVE EXISTING ∠ 4x4x3/8 CONNECTION ANGLES AT EACH END OF THE REMOVED STRINGER AND DISCARD. REAM EXISTING HOLES AS REQUIRED.
5. INSTALL NEW STRINGER AND CONNECTION ANGLES. INSTALL 7/8"ø HS BOLTS W/ NUTS AND WASHERS IN ALL OPEN HOLES.
6. WELD NEW STRINGER TO EACH TRANSVERSE BEARING BAR OF THE STEEL SIDEWALK GRID DECK AS INDICATED. USE GRADE E60XX ELECTRODES.



SIDEWALK STRINGER EXPANSION ASSEMBLY ELEVATION

SIDEWALK AND EXPANSION DAM COVER PLATE NOT SHOWN

0 6 1 FOOT



SIDEWALK STRINGER COPE DETAIL

0 6 1 FOOT

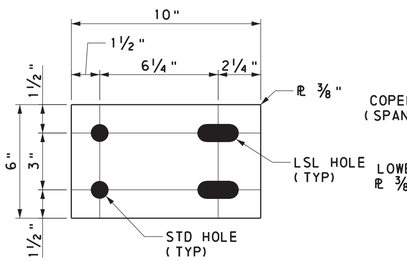
REMOVE EXISTING EXPANSION ASSEMBLY

REPAIR S06

ITEM 1050-0205
REPLACE SIDEWALK STRINGER
EXPANSION ASSEMBLY
REPRESENTATIVE PHOTO

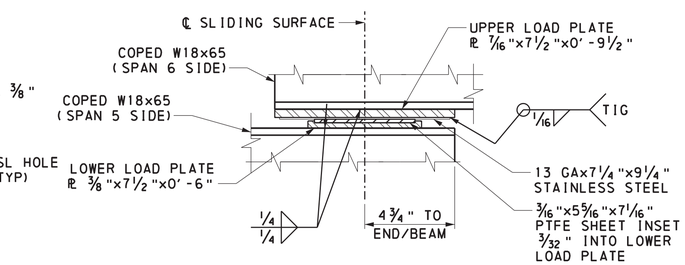
REPAIR S06 - PROCEDURE AND NOTES

1. SIDEWALK STRINGER REMOVAL AND REPLACEMENT IS NOT INCLUDED IN THIS ITEM. SIDEWALK STRINGER REMOVAL AND REPLACEMENT IS PAID UNDER ITEM 1050-0110, REPAIR S05, REPLACE SIDEWALK STRINGER.
2. TEMPORARILY SUPPORT THE AFFECTED SIDEWALK STRINGERS AND SIDEWALK DECK AS REQUIRED TO INSTALL THE SIDEWALK STRINGER EXPANSION ASSEMBLY. REMOVE EXISTING EXPANSION ASSEMBLY MATERIAL AND DISCARD.
3. INSTALL STAINLESS STEEL AND TEFLON SLIDING SURFACES AS INDICATED. ADJUST THE DIMENSIONS OF THE SIDEWALK STRINGER COPES AS REQUIRED TO ACCOMMODATE THE SLIDING SURFACES.
4. INSTALL 7/8" DIAMETER HS BOLTS IN LONG-SLOTTED HOLES WITH A WASHER UNDER THE BOLT HEAD AND THE NUT. TIGHTEN THE NUTS HAND-TIGHT, BACK OFF ONE-QUARTER TURN, AND PEEN BOLT THREADS.



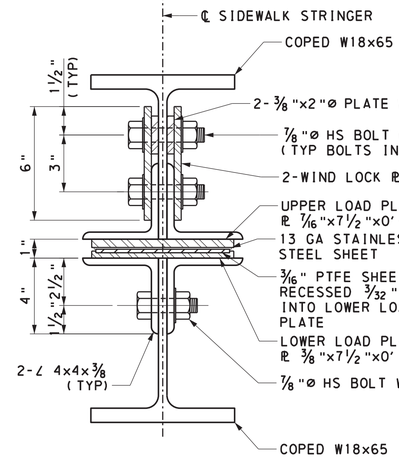
WIND LOCK ℞ DETAIL

0 3 6 9 1 FOOT



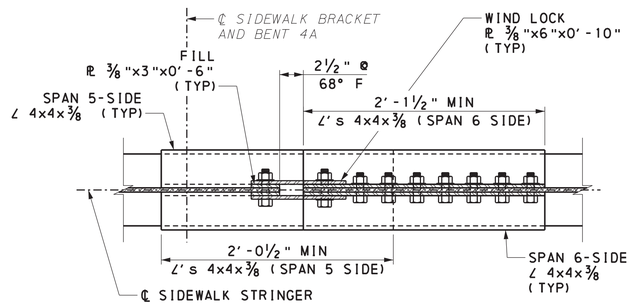
SLIDING SURFACE DETAIL

0 3 6 9 1 FOOT



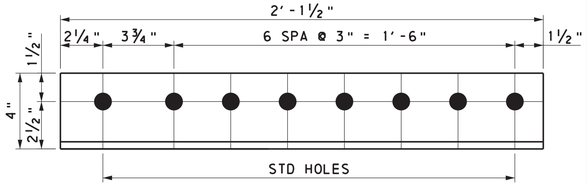
SECTION A-A

0 3 6 9 1 FOOT



SECTION B-B

0 6 1 FOOT



SPAN 6-SIDE ∠ 4x4x3/8 DETAIL

0 3 6 9 1 FOOT

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. PROVIDE STAINLESS STEEL CONFORMING TO ASTM A240, GRADE 30, TYPE 304 WITH AN ANSI 0.02 MIL OR LESS SURFACE FINISH.
3. PROVIDE PTFE SHEET MADE FROM VIRGIN TFE RESIN PER ASTM D4894. PTFE SHEET SHALL BE UNFILLED, DIMPLED AND LUBRICATED. DIMPLES SHALL HAVE A MINIMUM 1/2" EDGE DISTANCE AND CONFORM TO AASHTO LRFD BDS, 1998 EDITION, SECTION 14.7.2.
4. PROVIDE STANDARD HOLES FOR 7/8"ø HS BOLTS IN COPED W18x65 BEAM AND ∠ 4x4x3/8 ANGLES. PROVIDE LONG-SLOTTED (LSL) HOLES IN THE 3/8" WIND LOCK PLATES.

LEGEND:

ES	EACH SIDE
LSL	LONG-SLOTTED
MEH	MATCH EXISTING HOLES
MIN	MINIMUM
STD	STANDARD

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280
PENNSYLVANIA

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

SIDEWALK STRINGER REPAIR DETAILS

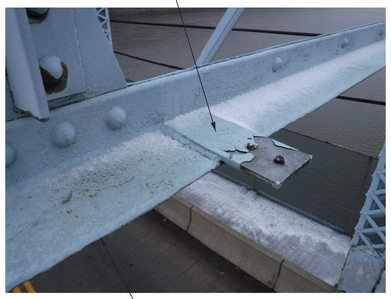
RECOMMENDED
OCTOBER 26, 2022

SHEET 72 OF 124

S - 40253

DES: ABC	CKD: MJB	DWG: ABC	CKD: MJB

PLOTTED: 10/26/2022 8:01:25 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Miscellaneous Steel Repairs.dgn



REPAIR M08

ITEM 1050-0260
REPAIR M08 - REMOVE EXISTING TAB PLATE
REPRESENTATIVE CONDITIONS

REPAIR M08

ITEM 1050-0260
REPAIR M08 - REMOVE EXISTING TAB PLATE
REPRESENTATIVE CONDITIONS

REPAIR M08

ITEM 1050-0260
REPAIR M08 - REMOVE EXISTING TAB PLATE
REPRESENTATIVE CONDITIONS

REPAIR M08 - PROCEDURE

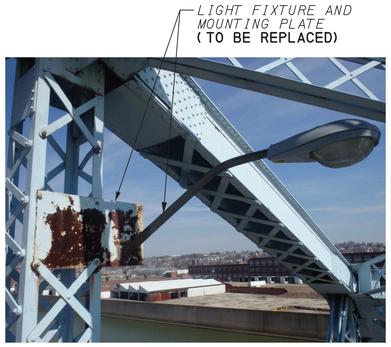
1. GRIND TAB PLATE WELDS FLUSH TO EXISTING STRUCTURAL MEMBER. EXERCISE CARE TO AVOID NICKING OR GOUGING THE STEEL DURING TAB PLATE REMOVAL OPERATIONS.
2. IF WELD CANNOT BE REMOVED WITHOUT IMPACTING EXISTING RIVETS, REMOVE RIVETS PRIOR TO GRINDING. REPLACE RIVETS WITH HIGH STRENGTH BOLTS AFTER COMPLETION OF TAB PLATE REMOVAL.
3. INSPECT STRUCTURAL MEMBER FOLLOWING TAB PLATE REMOVAL FOR DETERIORATION OR CRACKS. REPORT ANY FINDINGS TO THE REPRESENTATIVE.

REPAIR M15

ITEM 1050-0262
REPAIR M15 - REMOVE KICKER BEAM
REPRESENTATIVE CONDITIONS

REPAIR M15 - PROCEDURE

1. REMOVE EXISTING RIVETS CONNECTING KICKER BEAM TO GIRDER AND BUCKLE PLATE.
2. IF CUTTING IS REQUIRED TO REMOVE THE KICKER BEAM, EXERCISE CARE TO AVOID NICKING OR GOUGING ANY MEMBERS TO REMAIN.
3. REMOVE KICKER BEAM AND ANY MOUNTING HARDWARE.

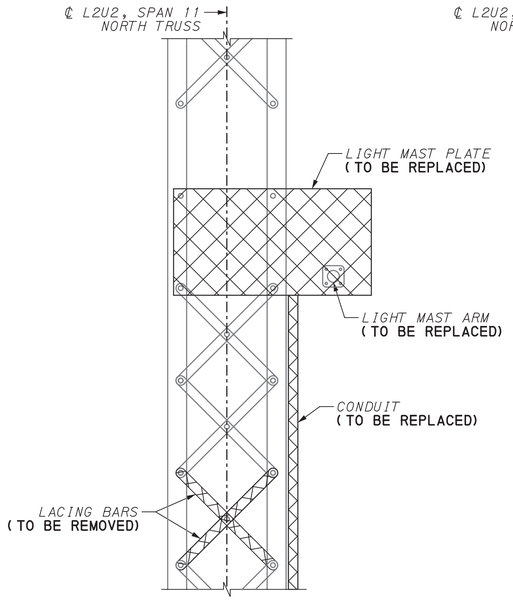


REPAIR M09 & M27

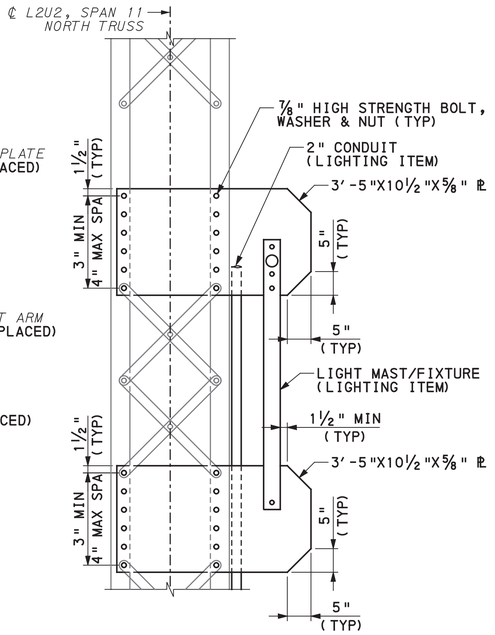
REPAIR M09 - INSTALL LIGHT MAST AND FIXTURE
REPAIR M27 - REPLACE LIGHT MAST PLATE
REPRESENTATIVE CONDITIONS

REPAIR M09 & M27 - PROCEDURE

1. DISCONNECT ANY ELECTRICAL CONNECTIONS TO THE LIGHT FIXTURE.
2. REMOVE BOLTS CONNECTING FIXTURE MOUNTING PLATE TO THE TRUSS ANGLES. REMOVE LACING BARS AS NEEDED FOR LOWER MOUNTING PLATE. REMOVE CONDUIT ATTACHED TO TRUSS VERTICAL.
3. INSPECT TRUSS ANGLES FOLLOWING MOUNTING PLATE AND LACING BAR REMOVAL FOR DETERIORATION OR CRACKS. REPORT ANY FINDINGS TO THE REPRESENTATIVE.
4. IF NO DEFECTS ARE PRESENT, INSTALL PROPOSED MOUNTING PLATES WITH HIGH STRENGTH BOLTS. PLACE PLATES FLUSH AGAINST THE FACE OF THE TRUSS VERTICAL. REINSTALL EXISTING LACING BARS.
5. INSTALL LIGHT MAST/FIXTURE (LIGHTING ITEM) TO MOUNTING PLATES.
6. INSTALL STRUCTURE MOUNTED CONDUIT (LIGHTING ITEM) ALONG TRUSS VERTICAL FOR CONNECTION TO LIGHT FIXTURE.



EXISTING
NOT TO SCALE



PROPOSED
NOT TO SCALE

REPAIRS M09 & M27

NOTE: REFER TO LIGHTING PLANS FOR DETAILS OF LIGHT MAST/FIXTURE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
MISCELLANEOUS STEEL REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

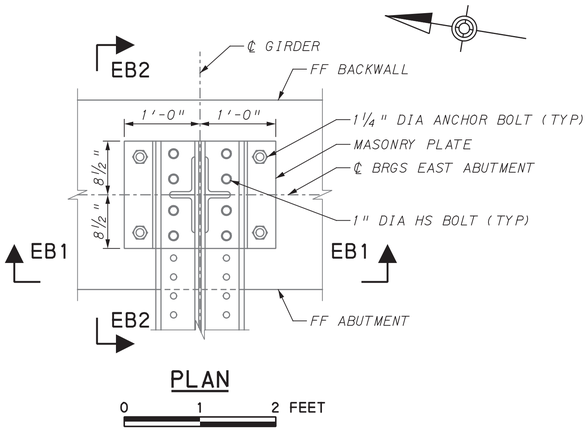
RECOMMENDED
OCTOBER 26, 2022

SHEET 73 OF 124

S - 40253

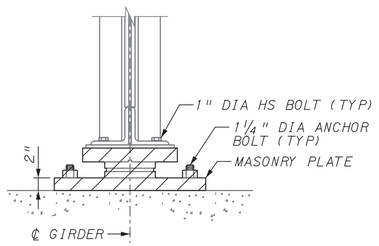
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 8:01:43 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Bearing Replacement.dgn



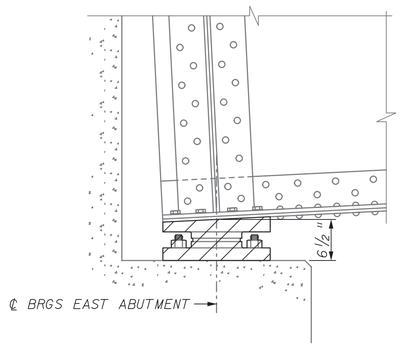
PLAN

0 1 2 FEET



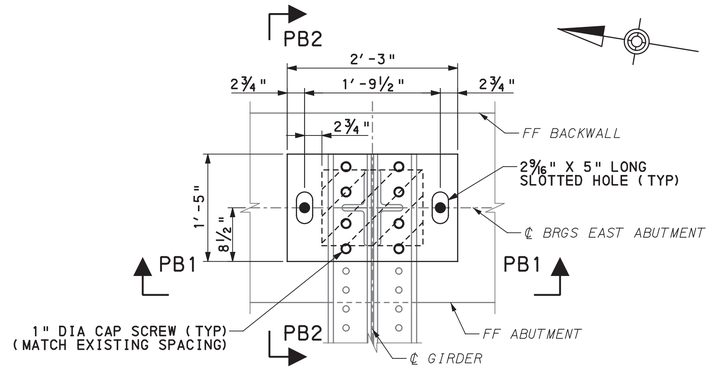
SECTION EB1-EB1

0 1 2 FEET



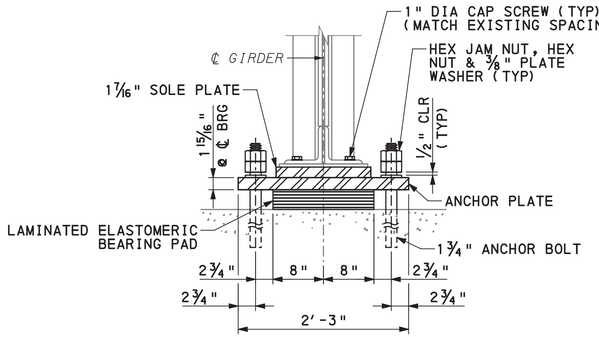
SECTION EB2-EB2

0 1 2 FEET



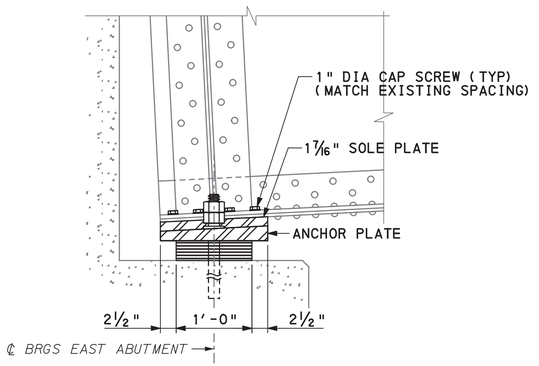
PLAN

0 1 2 FEET



SECTION PB1-PB1

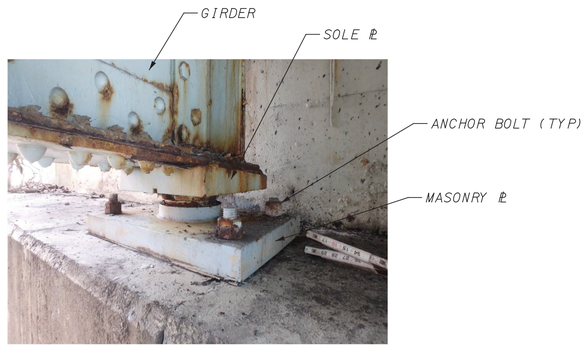
0 1 2 FEET



SECTION PB2-PB2

0 1 2 FEET

EAST ABUTMENT POT BEARING REMOVAL LIMITS



REPLACE EXPANSION BEARING (BR01)

ITEM 1018-0050 REMOVAL OF PORTION OF EXISTING BRIDGE
ITEM 1050-0020 FABRICATED STRUCTURAL STEEL
ITEM 1050-0085 LAMINATED NEOPRENE BEARING PAD
ITEM 9000-0203 JACKING BRIDGE SUPERSTRUCTURE

REPAIR BR01 - PROCEDURE AND NOTES

1. JACKING/TEMPORARY SUPPORT OF SPAN 1 AT EAST ABUTMENT FOR REPLACEMENT OF EXPANSION BEARINGS IS INCLUDED WITH ITEM 9000-0203.
2. COORDINATE WORK WITH THE TRAFFIC CONTROL PLANS AND THE PLANNED CLOSURE OF THE STRUCTURE IN PHASE 1.
3. INCLUDE CONSTRUCTION LIVE LOAD IN THE DESIGN OF THE JACKING/TEMPORARY SUPPORT SYSTEM. ALL SUPPORT DETAILS TO BE DESIGNED BY THE CONTRACTOR. ALTERNATE DETAILS MAY BE PROPOSED BY THE CONTRACTOR. ALL DESIGNS SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW.
4. CUT OFF EXISTING ANCHOR BOLTS DURING REMOVAL OF EXISTING POT BEARINGS.
5. CLEAN AND REPAIR BEAM SEAT AS NEEDED TO PROVIDE A SMOOTH, LEVEL SURFACE FOR THE ELASTOMERIC BEARING PAD. DRILL HOLES TO INSTALL NEW ANCHOR BOLTS.
6. COMPLETE INSTALLATION OF NEW BEARING ASSEMBLY, INCLUDING ELASTOMERIC BEARING PAD, ANCHOR PLATE AND SOLE PLATE.

PROPOSED EAST ABUTMENT ELASTOMERIC BEARING

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 75.

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BEARING REPLACEMENT EAST ABUTMENT

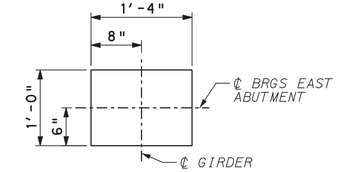
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

RECOMMENDED
OCTOBER 26, 2022

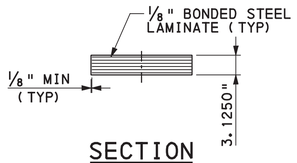
SHEET 74 OF 124

S - 40253

PLOTTED: 10/26/2022 8:01:48 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Bearing Details.dgn



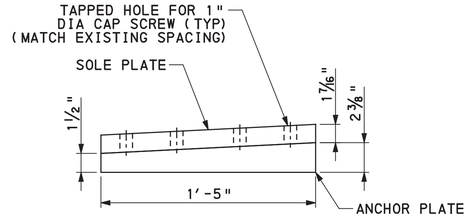
PLAN



SECTION

LAMINATED ELASTOMERIC BEARING PAD

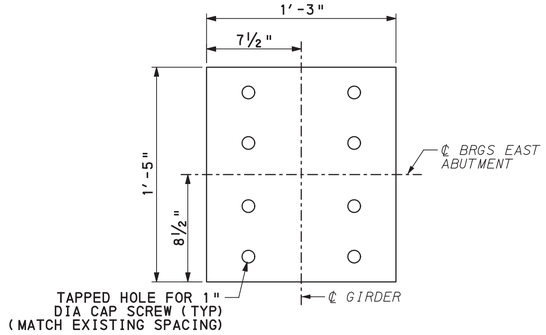
0 1 2 FEET



NOTE: PROVIDE FLATNESS TOLERANCE IN ACCORDANCE WITH PUB 408, SECTION 1105.03(g). PROVIDE SOLE PLATE IN ACCORDANCE WITH DESIGN MANUAL PART 4, SECTION D14.7.6.3.8P

SOLE PLATE DETAIL WITH ANCHOR PLATE

0 2 4 FEET



SOLE PLATE PLAN VIEW

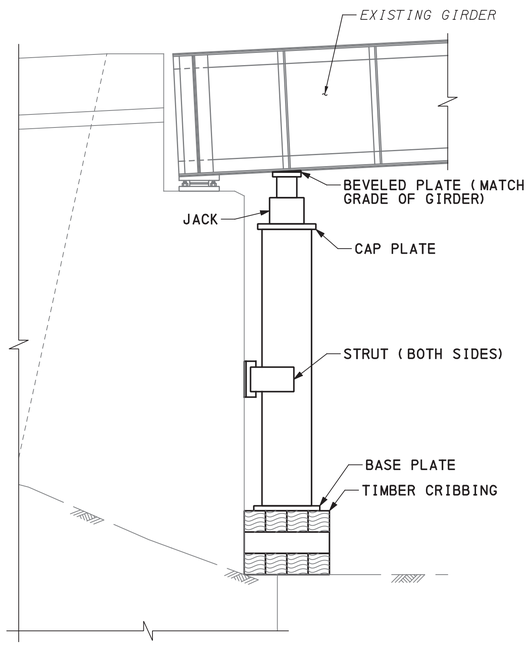
0 2 4 FEET

BEARING PAD AND ANCHOR NOTES:

1. THE FABRICATOR MAY USE CONTRACT DRAWINGS TO FABRICATE THE ELASTOMERIC PADS.
2. FOR ADDITIONAL DETAILS AND NOTES NOT SHOWN, SEE PENNDOT STANDARD DRAWING BC-755M.
3. FIELD VERIFY EXISTING DIMENSIONS PRIOR TO FABRICATING BEARING PLATES.
4. PROVIDE PLATE WASHERS OF SUFFICIENT SIZE TO COVER THE ROUND HOLE OR SLOT FOR EXTREMES OF MOVEMENT OF THE BEARINGS. WASHERS MAY BE CLIPPED IF REQUIRED.
5. UNLESS OTHERWISE NOTED, VERTICAL DIMENSIONS ARE MEASURED AT ℄ BEARINGS.
6. MARK THICKER END OF BEVELED SOLE PLATES TO IDENTIFY THICKER END IN THE FIELD.
7. PAINT ALL STEEL SURFACES IN ACCORDANCE WITH PUB 408, SECTION 1060.
8. PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270, GRADE 50 (ASTM A709, GRADE 50).
9. FABRICATE ANCHOR BOLTS FROM STEEL CONFORMING TO ASTM F1554, GRADE 55.
10. HOT DIP GALVANIZE BOLTS, NUTS AND WASHERS.

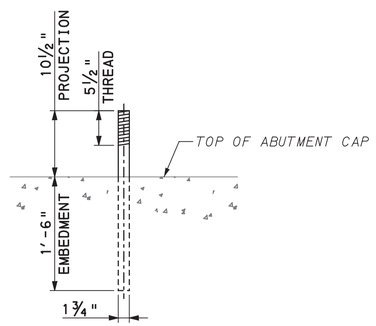
ELASTOMERIC BEARING PAD DATA

LOCATION	BEARING TYPE	SIZE		INT LAYER THK	COVER LAYER THICKNESS	NUMBER OF ELASTOMER LAYERS	OVERALL THICKNESS	QUANTITY
		LENGTH	WIDTH					
EAST ABUTMENT	EXP	12"	16"	3/8"	1/4"	7	3.1250"	2



CONCEPTUAL JACKING PLAN

NOT TO SCALE



ANCHOR BOLT DETAIL

0 2 4 FEET

JACKING LOAD TABLE		
LOCATION	DL (K)	LL (K)
EAST ABUTMENT	71.7	84.3

JACKING LOADS ARE SERVICE LOADS (UNFACTORED)

LL BASED ON MAXIMUM PHL-93 LL REACTION

PROVIDED LOADS ARE APPROXIMATE AND TO BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING JACKING PLANS

JACKING LOADS ARE MAXIMUM REACTIONS AT THE BEARING CENTERLINE. LOADS WILL VARY BASED ON JACKING LOCATION.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR PROPOSED BEARING PLAN AND SECTIONS, SEE SHEET 74.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BEARING DETAILS

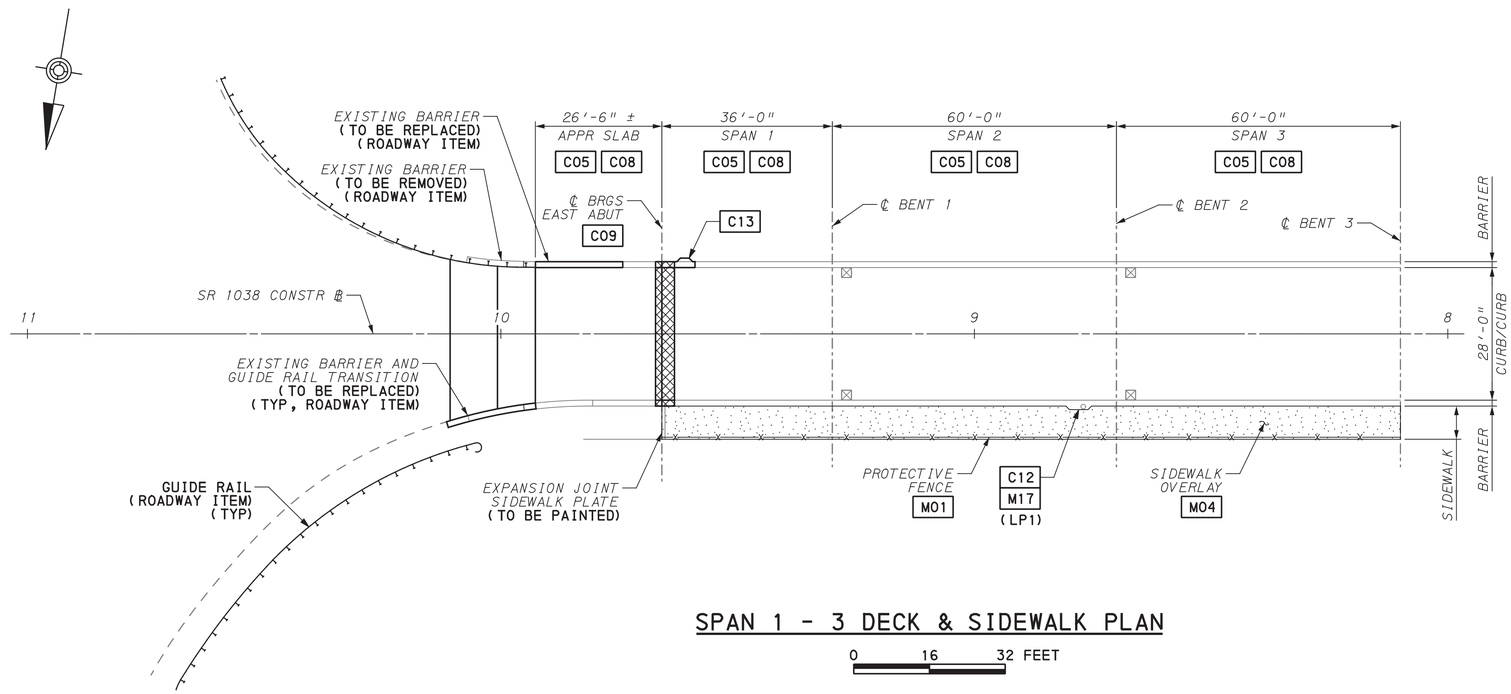
RECOMMENDED
OCTOBER 26, 2022

SHEET 75 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

PLOTTED: 10/26/2022 8:01:57 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Deck - Sp 1 - 3.dgn



SPAN 1 - 3 DECK & SIDEWALK PLAN

0 16 32 FEET

LEGEND:

- ⊠ SCUPPER (TO REMAIN UNLESS NOTED)
- PROTECTIVE FENCE
- BLOCKOUT FOR EXPANSION DAM REPLACEMENT
- NEW EPOXY OVERLAY
- C00 DENOTES REPAIR

BARRIER PENETRATING SEALER (C05)

ITEM 1019-0050 PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALER, BRIDGE SUPERSTRUCTURE)

REPLACE PROTECTIVE FENCE (M01)

ITEM 5016-0103 SIDEWALK PROTECTIVE FENCE, VINYL-COATED STEEL, REMOVE AND REPLACE

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C01	BARRIER SPALL REPAIR	20	CF	1
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	600
C08	PLACE LMC OVERLAY	N/A	SF	5110
C09	REPLACE STRIP SEAL EXPANSION DAM	83 TO 86	LF	31
C12	REPLACE BARRIERS AND LIGHT POLE ANCHORAGE	111 TO 121	EA	1
C13	REPLACE BARRIER AND JUNCTION BOX	122	EA	1
M01	REPLACE SIDEWALK FENCE	101	LF	156
M04	REPLACE SIDEWALK OVERLAY	N/A	SF	1092
M17	INSTALL NEW LIGHT POLE AND FIXTURE	N/A	EA	1

LATEX MODIFIED CONCRETE OVERLAY (C08)

ITEM 1039-0010 CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION
ITEM 1041-0020 SCARIFICATION, 1/2" DEPTH
ITEM 1042-0030 3 HOUR ACCELERATED LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/4" DEPTH
ITEM 1042-0070 3 HOUR ACCELERATED LATEX MODIFIED CONCRETE, VARIABLE DEPTH
ITEM 1001-0970 MECHANICAL TEXTURING WITH TRANSVERSE SAWED GROOVES

REPLACE SIDEWALK OVERLAY (M04)

ITEM 1018-0050 REMOVAL OF PORTION OF EXISTING BRIDGE
ITEM 1046-0010 EPOXY OVERLAY

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 77, 78, AND 79.
3. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.
4. FOR REPAIR C13 DETAILS, SEE SHEET 122.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
DECK AND SIDEWALK PLAN, SP 1 - 3

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

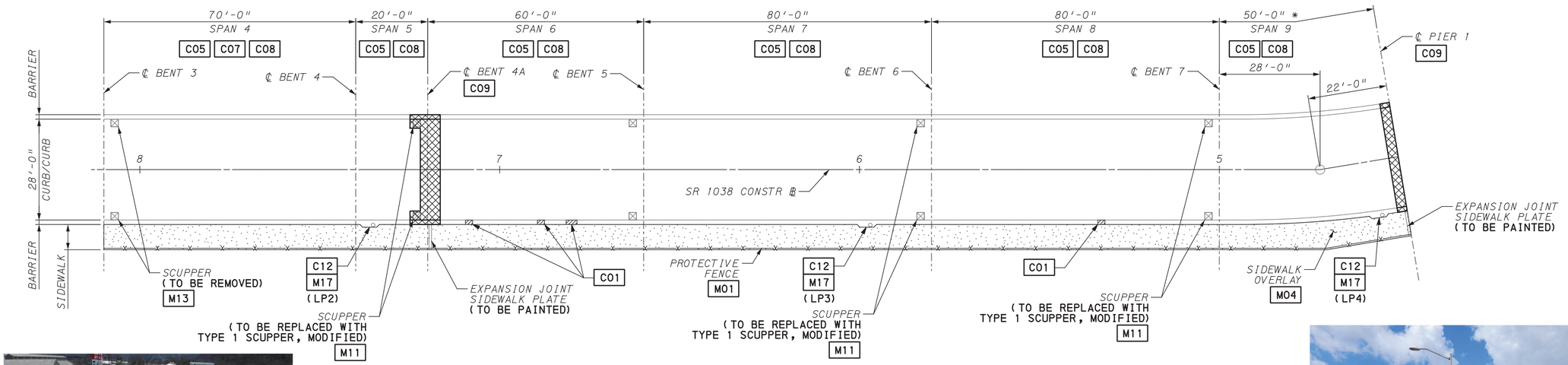
SHEET 76 OF 124
S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

PLOTTED: 10/26/2022 8:02:19 AM

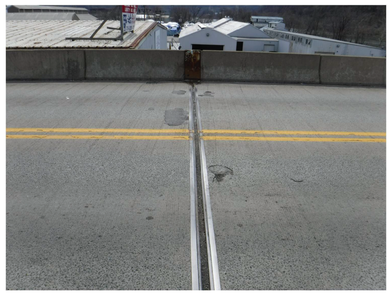
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Deck - Sp 4 - 9.dgn

* MEASURED ALONG ℄ BRIDGE



SPAN 4 - 9 DECK & SIDEWALK PLAN

0 16 32 FEET



REPLACE STRIP SEAL EXPANSION DAM (C09)

ITEM 1090-1014 ACCELERATED EXPANSION DAM REPLACEMENT, 3" MOVEMENT
ITEM 5090-1015 ACCELERATED EXPANSION DAM REPLACEMENT, 3½" MOVEMENT, NON-STANDARD RETAINER
ITEM 5090-1016 ACCELERATED EXPANSION DAM REPLACEMENT, 4" MOVEMENT, NON-STANDARD RETAINER
ITEM 9000-0218 ACCELERATED EXPANSION DAM REPLACEMENT, 5" MOVEMENT, NON-STANDARD RETAINER

LEGEND:

- ⊠ SCUPPER (TO REMAIN UNLESS NOTED)
- PROTECTIVE FENCE
- ⊠ BLOCKOUT FOR EXPANSION DAM REPLACEMENT
- NEW EPOXY OVERLAY
- C00 DENOTES REPAIR

REPLACE EXISTING BARRIER (C07)

ITEM 1018-0050 REMOVAL OF PORTION OF EXISTING BRIDGE
ITEM 1001-1100 CLASS AA CEMENT CONCRETE, ACCELERATED
ITEM 1002-0052 REINFORCEMENT BARS, EPOXY COATED

BARRIER SPALL REPAIR (C01)

ITEM 1040-0210 CONCRETE BRIDGE BARRIER REPAIR ACCELERATED, TYPE 2 USING ASC

INSTALL NEW LIGHT POLE AND FIXTURE (M17)

ROADWAY ITEM

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C01	BARRIER SPALL REPAIR	20	CF	3
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	1200
C07	REPLACE EXISTING BARRIER	80	LF	140
C08	PLACE LMC OVERLAY	N/A	SF	10080
C09	REPLACE STRIP SEAL EXPANSION DAM	83 TO 86	LF	62
C12	REPLACE BARRIERS AND LIGHT POLE ANCHORAGE	111 TO 121	EA	3
M01	REPLACE SIDEWALK FENCE	101	LF	364
M04	REPLACE SIDEWALK OVERLAY	N/A	SF	2548
M11	REPLACE SCUPPER	81	EA	6
M13	REMOVE EXISTING SCUPPER AND REPAIR DECK	81	EA	2
M17	INSTALL NEW LIGHT POLE AND FIXTURE	N/A	EA	3

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 76, 78, AND 79.
3. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
DECK AND SIDEWALK PLAN, SP 4 - 9

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

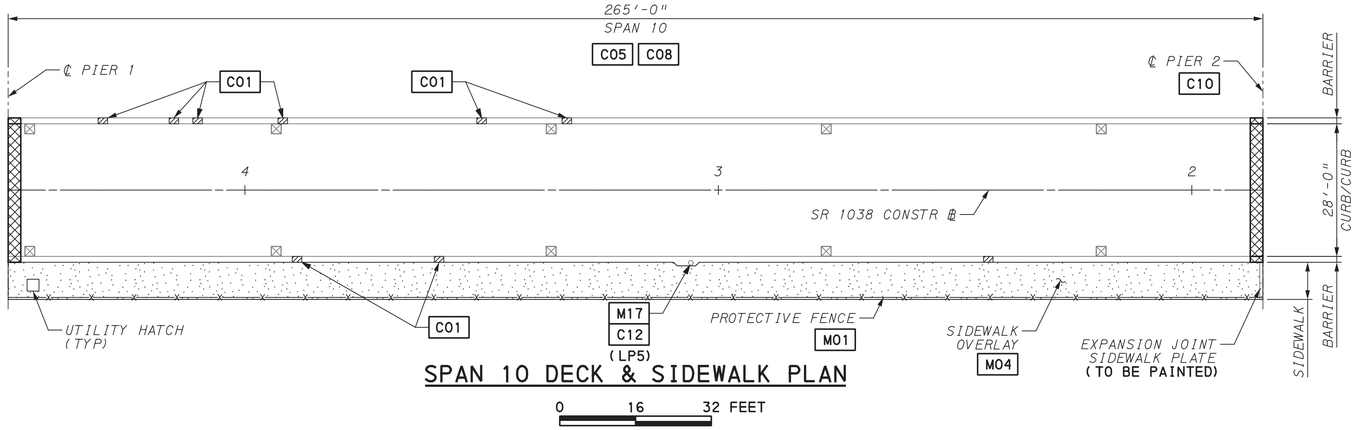
RECOMMENDED
OCTOBER 26, 2022

SHEET 77 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

PLOTTED: 10/26/2022 8:02:35 AM



SPAN 10 DECK & SIDEWALK PLAN

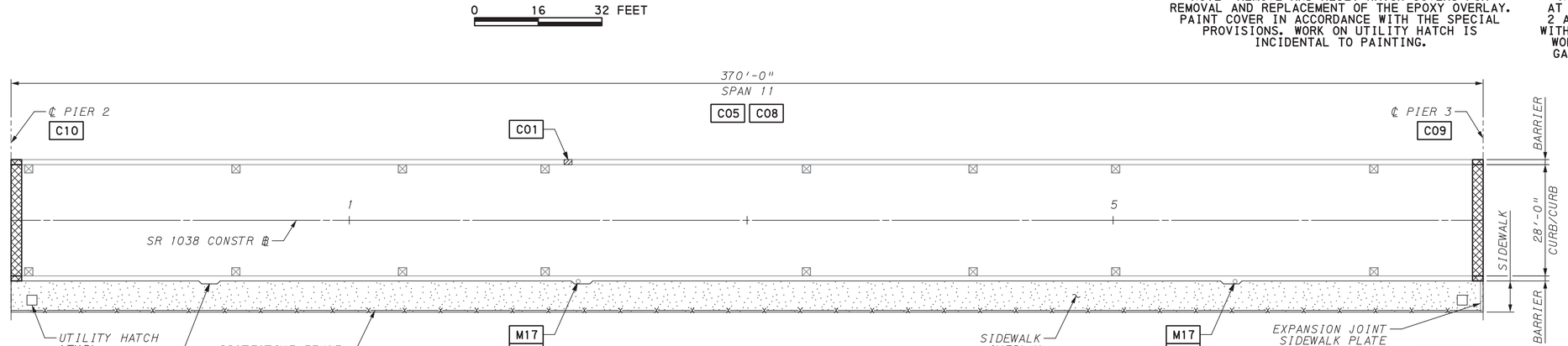
0 16 32 FEET

TYPICAL UTILITY HATCH

NOTE: REMOVE AND RESET HATCH COVERS FOR REMOVAL AND REPLACEMENT OF THE EPOXY OVERLAY. PAINT COVER IN ACCORDANCE WITH THE SPECIAL PROVISIONS. WORK ON UTILITY HATCH IS INCIDENTAL TO PAINTING.

FENCE GATE

NOTE: PROVIDE GATES WITH APPROPRIATE LOCKS AT THE NAVIGATION LIGHTING LOCATIONS AT PIERS 2 AND 3. COORDINATE SIGNING AND OTHER DETAILS WITH THE REPRESENTATIVE. GATE, LOCKS, AND OTHER WORK ASSOCIATED WITH THE CONSTRUCTION OF THE GATES IS INCIDENTAL TO THE PROTECTIVE FENCE.



SPAN 11 DECK & SIDEWALK PLAN

0 16 32 FEET

NOTES:

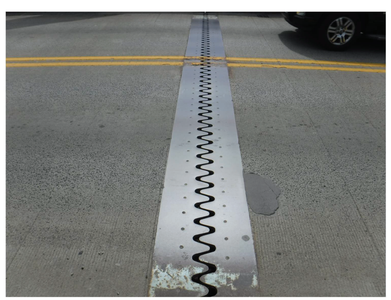
1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 76, 77, AND 79.
3. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.

LEGEND:

- ⊠ SCUPPER (TO REMAIN UNLESS NOTED)
- —x— PROTECTIVE FENCE
- ⊠ BLOCKOUT FOR EXPANSION DAM REPLACEMENT
- NEW EPOXY OVERLAY
- C00 DENOTES REPAIR

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C01	BARRIER SPALL REPAIR	20	CF	7
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	2071
C08	PLACE LMC OVERLAY	N/A	SF	17780
C09	REPLACE STRIP SEAL EXPANSION DAM	83 TO 86	LF	31
C10	REPLACE TOOTH EXPANSION DAM	87 TO 89	LB	8600
C12	REPLACE BARRIERS AND LIGHT POLE ANCHORAGE	111 TO 121	EA	3
M01	REPLACE SIDEWALK FENCE	101	LF	635
M04	REPLACE SIDEWALK OVERLAY	N/A	SF	4445
M17	INSTALL NEW LIGHT POLE AND FIXTURE	N/A	EA	3



REPLACE TOOTH EXPANSION DAM (C10)

ITEM 5020-0002 TOOTH EXPANSION DAM
WITH DRAIN TROUGH, REMOVE AND REPLACE

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

DECK AND SIDEWALK PLAN, SP 10 & 11

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

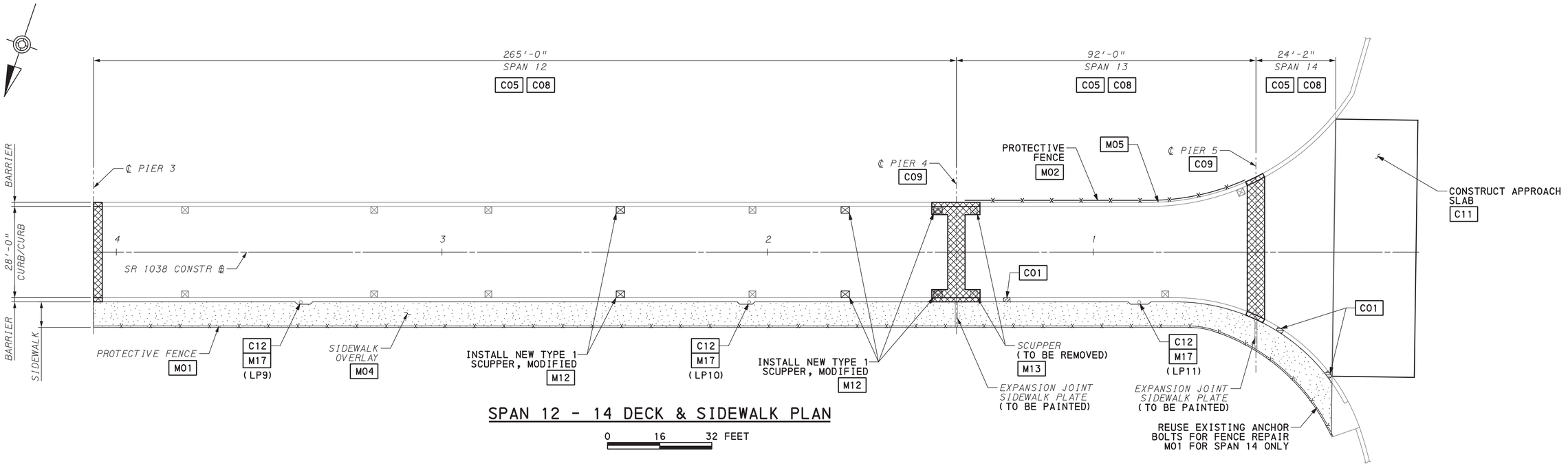
SHEET 78 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Deck - Sp 10 & 11.dgn

PLOTTED: 10/26/2022 8:02:49 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Deck - Sp 12 - 14.dgn



SPAN 12 - 14 DECK & SIDEWALK PLAN

0 16 32 FEET

LEGEND:

- ⊠ SCUPPER (TO REMAIN UNLESS NOTED)
- PROTECTIVE FENCE
- BLOCKOUT FOR EXPANSION DAM REPLACEMENT
- NEW EPOXY OVERLAY
- C00 DENOTES REPAIR

REPLACE BARRIER FENCE (M02)

ITEM 5016-0006 BARRIER PROTECTIVE FENCE, VINYL-COATED STEEL, REMOVE AND REPLACE

EXPANSION JOINT SIDEWALK PLATE

NOTE: EXISTING PLATE TO REMAIN. PAINT EXPANSION JOINT PLATE IN ACCORDANCE WITH THE SPECIAL PROVISIONS. WORK ON EXPANSION JOINT PLATE IS INCIDENTAL TO PAINTING.

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
C01	BARRIER SPALL REPAIR	20	CF	3
C05	PROTECTIVE COATING, PENETRATING SEALER	N/A	SF	1251
C08	PLACE LMC OVERLAY	N/A	SF	10673
C09	REPLACE STRIP SEAL EXPANSION DAM	83 TO 86	LF	75
C11	CONSTRUCT APPROACH SLAB	97 TO 100	LS	
C12	REPLACE BARRIERS AND LIGHT POLE ANCHORAGE	111 TO 121	EA	3
M01	REPLACE SIDEWALK FENCE	101	LF	382
M02	REPLACE BARRIER FENCE	102	LF	90
M04	REPLACE SIDEWALK OVERLAY	N/A	SF	2669
M05	INSTALL BARRIER FLASHING	30	LF	80
M12	INSTALL NEW SCUPPER	81	EA	6
M13	REMOVE EXISTING SCUPPER AND REPAIR DECK	81	EA	2
M17	INSTALL NEW LIGHT POLE AND FIXTURE	N/A	EA	3

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 76, 77, AND 78.
3. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
DECK AND SIDEWALK PLAN, SP 12 - 14

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

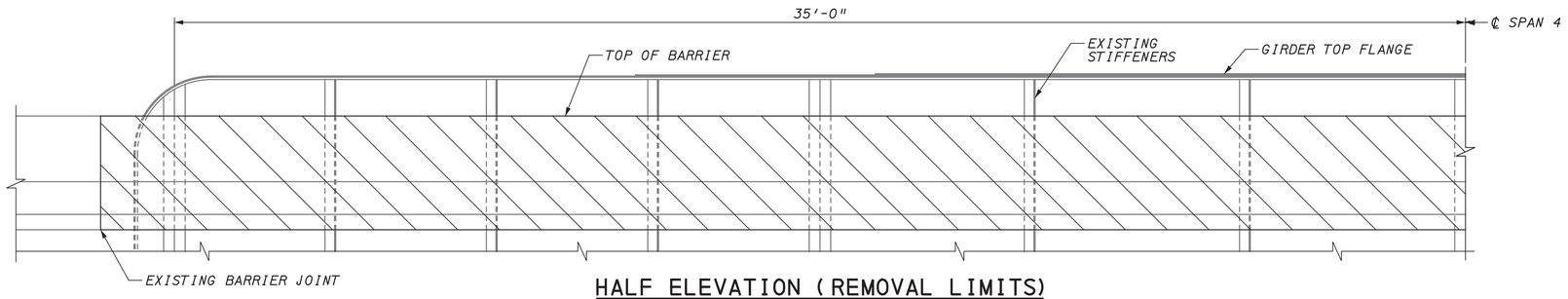
RECOMMENDED
OCTOBER 26, 2022

SHEET 79 OF 124

S - 40253

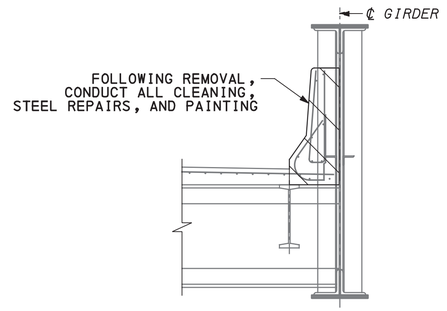
DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

PLOTTED: 10/26/2022 8:06:51 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_SP 4 barrier details.dgn



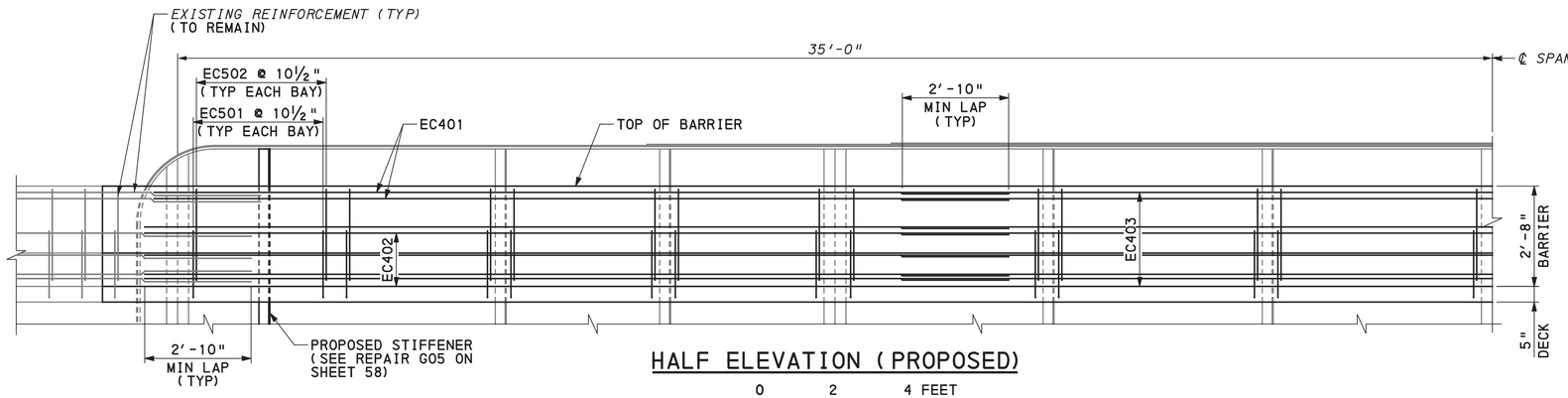
HALF ELEVATION (REMOVAL LIMITS)

0 2 4 FEET



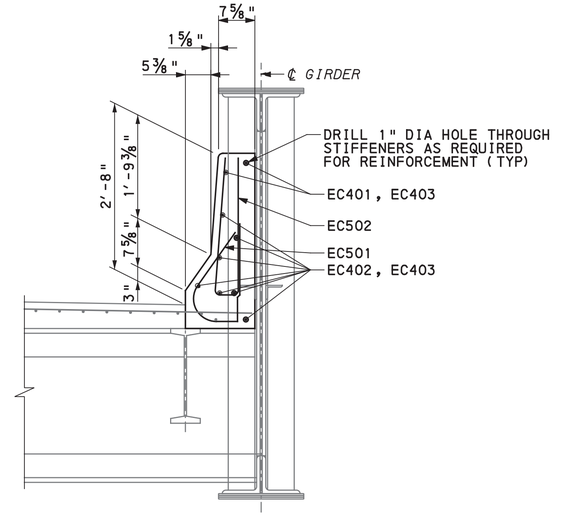
SECTION (REMOVAL LIMITS)

0 2 4 FEET



HALF ELEVATION (PROPOSED)

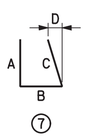
0 2 4 FEET

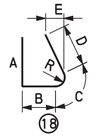


SECTION (PROPOSED)

0 1 2 FEET

REINFORCEMENT BAR SCHEDULE											
MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
EC401	4	8	22'-9"	STR							
EC402	4	28	23'-0"	STR							
EC403	4	18	32'-5"	STR							
EC501	5	164	4'-2 3/4"	18	1'-8 5/8"	4 1/2"	10 1/2"	1'-4 5/8"	10 1/2"	4 3/4"	
EC502	5	164	5'-2 3/4"	7	2'-3 7/8"	4 7/8"	2'-3 7/8"	2 1/8"			





NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DECK AND SIDEWALK PLAN, SP 4-9, SEE SHEET 77.
3. FOR WEB COVER PLATE REPAIR DETAILS, SEE SHEET 53.
4. FOR WEB STIFFENER REPAIR DETAILS, SEE SHEET 58.
5. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
6. E - INDICATES EPOXY COATED REBAR.
7. FOR ALL BAR TYPES SHOWN, DIMENSIONS 1-E AND LENGTH ARE MEASURED ALONG OUTSIDE OF THE BAR. R IS MEASURED ALONG INSIDE OF BAR.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

BARRIER DETAILS SPAN 4

RECOMMENDED

OCTOBER 26, 2022

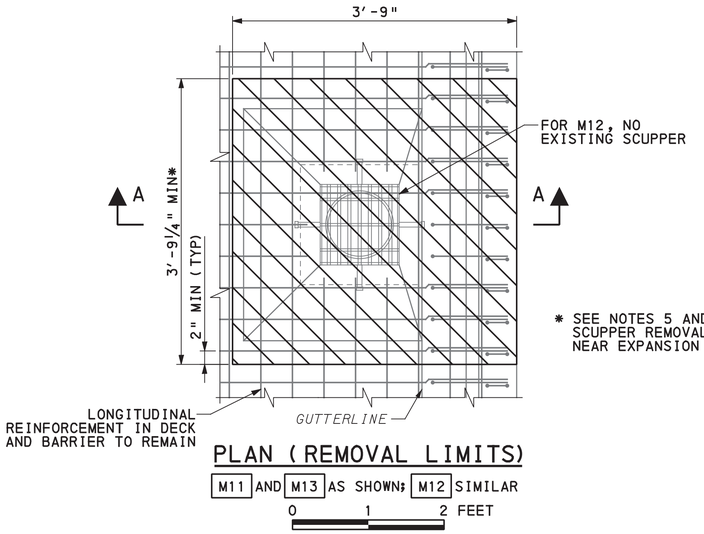
SHEET 80 OF 124

S - 40253

DES: TJH CKD: TSA DWG: TJH CKD: TSA

PLOTTED: 10/26/2022 8:06:54 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Scupper Details 1.dgn

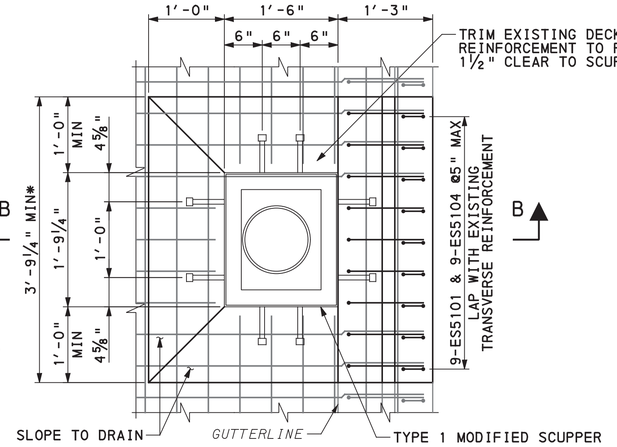


* SEE NOTES 5 AND 6 FOR SCUPPER REMOVAL LIMITS NEAR EXPANSION DAMS.

PLAN (REMOVAL LIMITS)

M11 AND M13 AS SHOWN; M12 SIMILAR

0 1 2 FEET



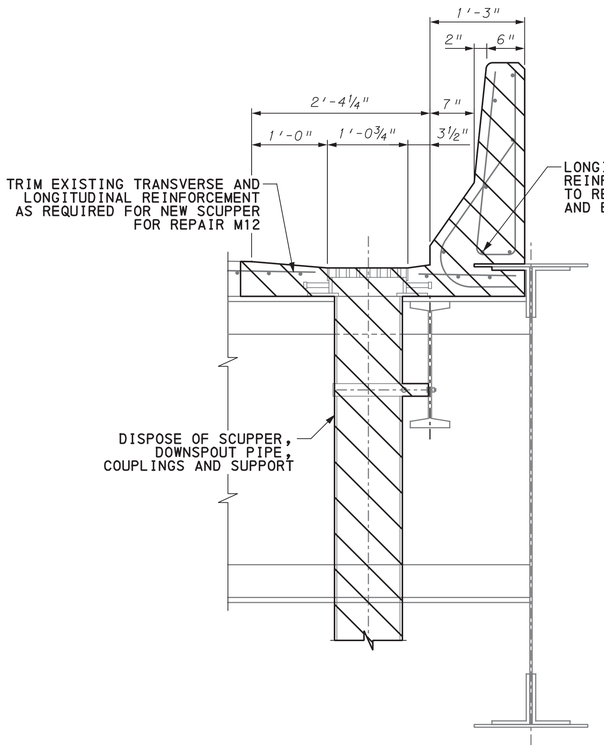
PLAN (REPLACE SCUPPER)

M11

0 1 2 FEET

REPAIR M11

ITEM 9000-0216 SCUPPER, TYPE 1, REPLACEMENT INSTALLATION

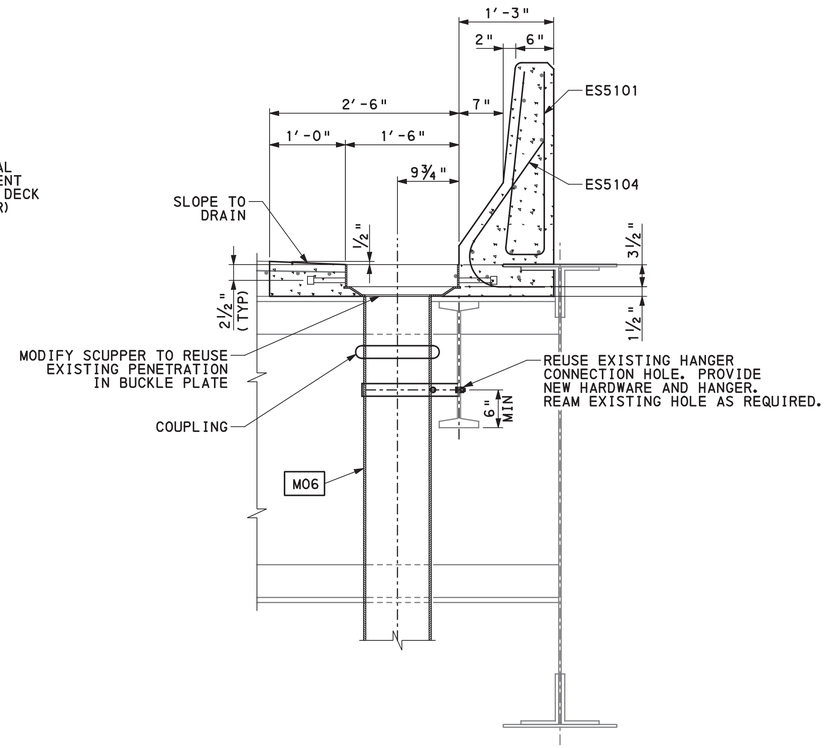


SECTION A-A

M11 AND M13 AS SHOWN; M12 SIMILAR

GIRDER SPAN SHOWN; TRUSS SPAN SIMILAR

0 1 2 FEET



SECTION B-B

M11

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DECK AND SIDEWALK PLANS, SEE SHEETS 76 TO 79.
3. FOR DOWNSPOUTING DETAILS, SEE SHEETS 103 TO 108.
4. REMOVAL OF DECK AND BARRIER CONCRETE, NEW REINFORCEMENT, CONCRETE PLACEMENT, AND OTHER WORK REQUIRED TO COMPLETE REPAIRS ARE INCIDENTAL TO ITEMS 9000-0215, 9000-0216 OR 9000-0217.
5. FOR REMOVAL LIMITS OF REPAIR M11 NEAR BENT 4A EXPANSION DAM, SEE SHEET 84.
6. FOR REMOVAL LIMITS OF REPAIRS M12 AND M13 NEAR PIER 4 EXPANSION DAM, SEE SHEET 90.
7. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
8. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

SCUPPER DETAILS 1

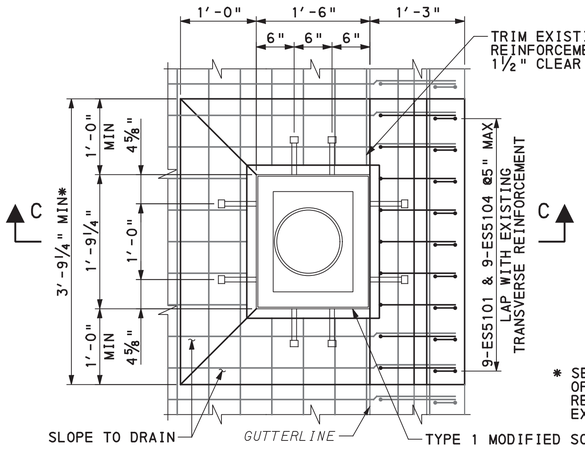
RECOMMENDED

OCTOBER 26, 2022

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

PLOTTED: 10/26/2022 8:06:59 AM

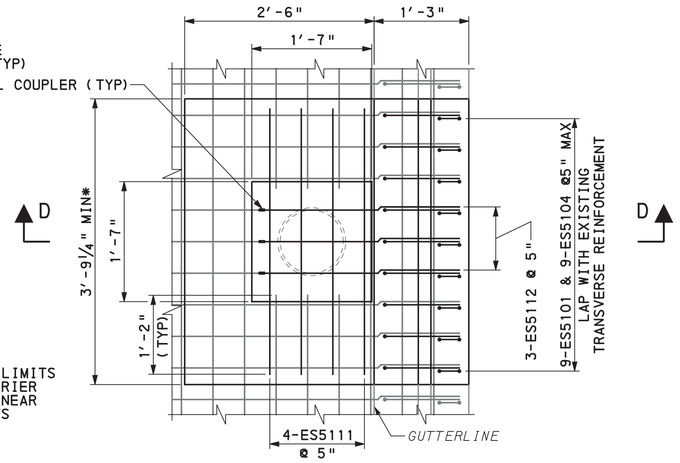


* SEE NOTE 6 FOR LIMITS OF DECK AND BARRIER RECONSTRUCTION NEAR EXPANSION JOINTS

PLAN (INSTALL NEW SCUPPER)

M12

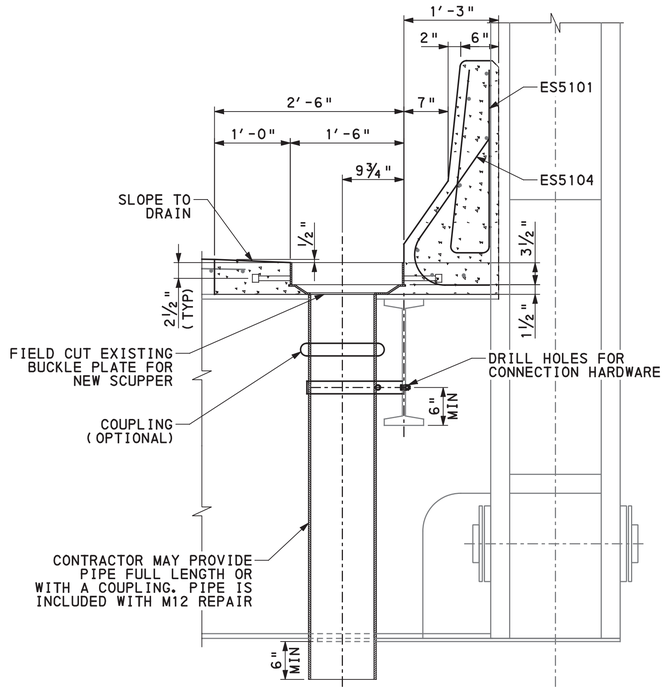
0 1 2 FEET



PLAN (REMOVE SCUPPER)

M13

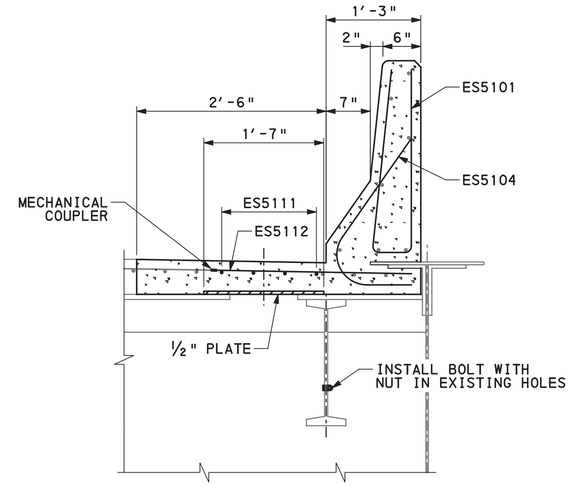
0 1 2 FEET



SECTION C-C

M12

0 1 2 FEET



SECTION D-D

M13

0 1 2 FEET

REPAIRS M12 AND M13

ITEM 9000-0215 SCUPPER, TYPE 1, NEW INSTALLATION (REPAIR M12)
ITEM 9000-0217 SCUPPER REMOVAL (REPAIR M13)

NOTES:

1. WORK THIS SHEET WITH SHEET 81.
2. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
3. FOR DECK AND SIDEWALK PLANS, SEE SHEETS 76 TO 79.
4. FOR DOWNSPOUTING DETAILS, SEE SHEETS 103 TO 108.
5. REINFORCEMENT BAR COUPLERS FOR REPAIR M13 ARE INCIDENTAL TO THAT REPAIR.
6. FOR RECONSTRUCTION LIMITS OF REPAIRS M12 AND M13 NEAR PIER 4 EXPANSION DAM, SEE SHEET 90.
7. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
8. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SCUPPER DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

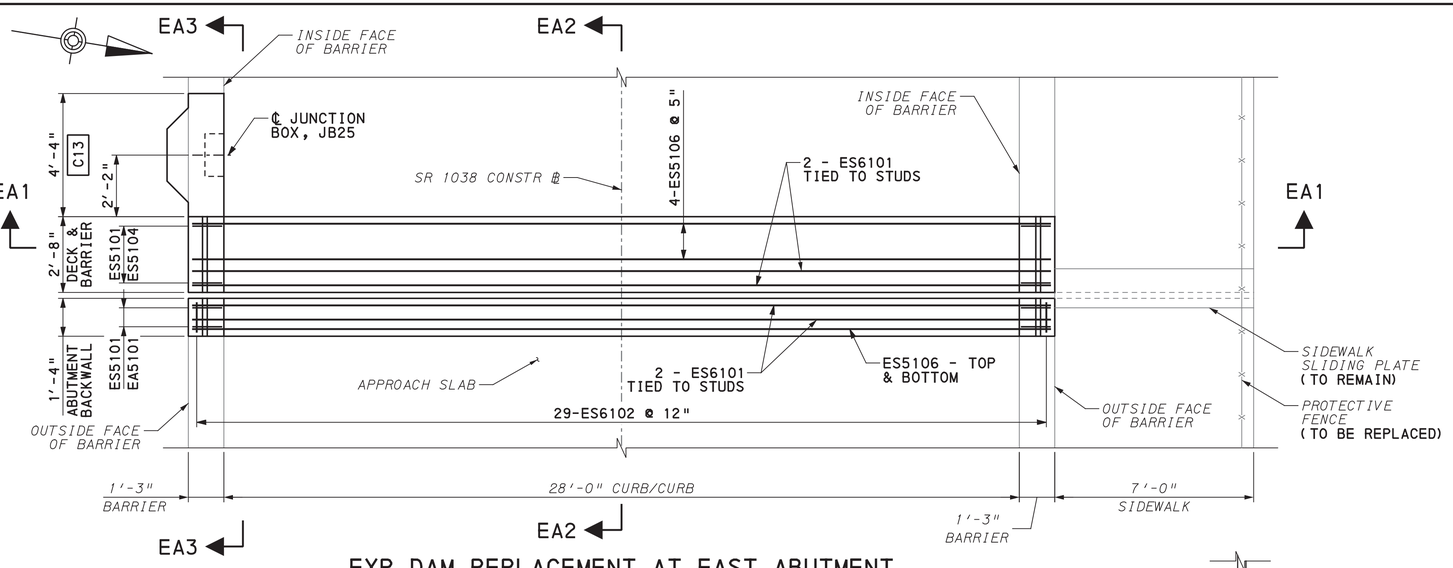
SHEET 82 OF 124

S - 40253

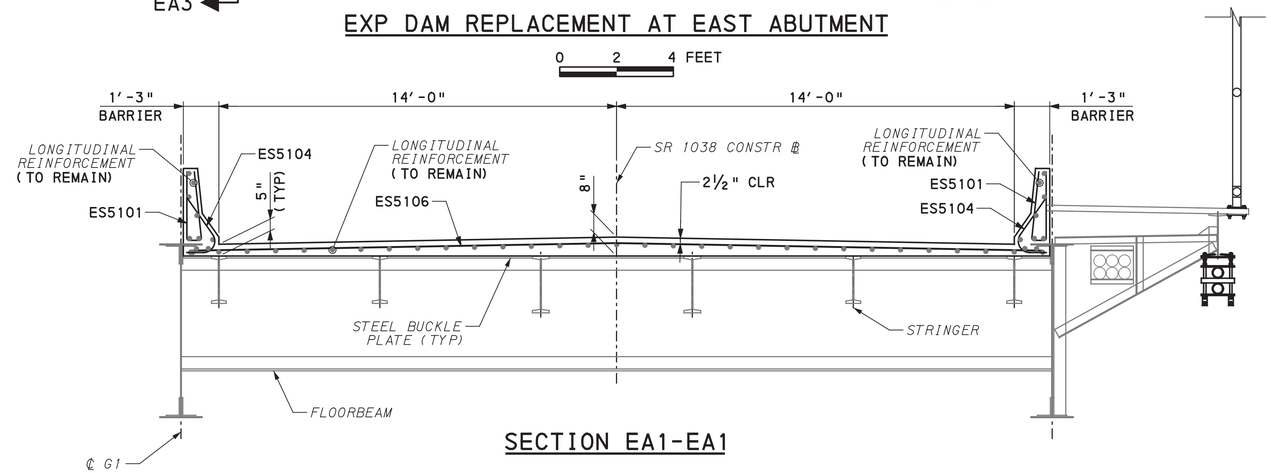
DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\Scupper Details 2.dgn

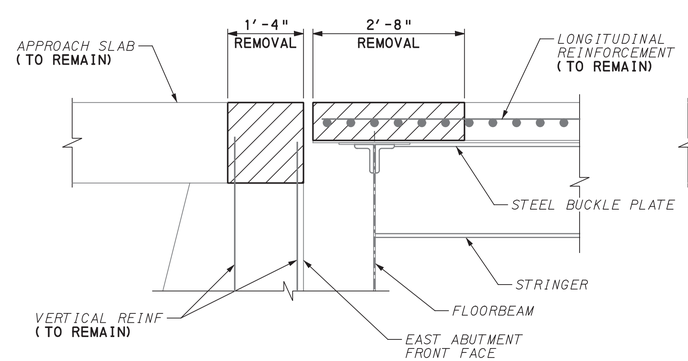
PLOTTED: 10/26/2022 8:07:07 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Exp Dam Repl - East Abut.dgn



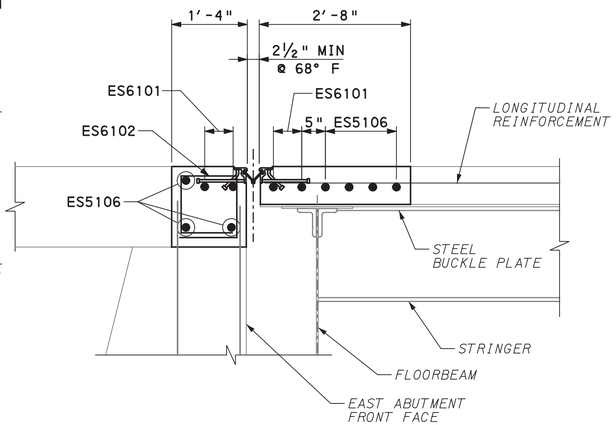
EXP DAM REPLACEMENT AT EAST ABUTMENT



SECTION EA1-EA1



SECTION EA2-EA2 (REMOVAL)



SECTION EA2-EA2 (PROPOSED)

EXPANSION DAM NOTES:

1. PROVIDE UNDERDECK PROTECTIVE SHIELDING IN ACCORDANCE WITH THE SPECIFICATIONS (INCIDENTAL TO EXPANSION DAM REPLACEMENT).
2. SAWCUT, REMOVE AND DISCARD PORTIONS OF BARRIER AND DECK CONCRETE. REMOVE AND DISCARD EXISTING VERTICAL REINFORCEMENT IN BARRIERS AND EXISTING TRANSVERSE REINFORCEMENT IN DECK AS INDICATED ON PLANS. REMOVE AND DISCARD EXISTING EXPANSION DAM ASSEMBLY.
3. CONTRACTOR TO EXERCISE CAUTION DURING REMOVAL OF EXISTING CONCRETE, TRANSVERSE REINFORCEMENT IN DECK AND VERTICAL REINFORCEMENT IN BARRIERS. DO NOT DAMAGE EXISTING LONGITUDINAL REINFORCEMENT IN DECK AND BARRIERS. ANY DAMAGE SUSTAINED TO THE PORTION OF BARRIERS, DECK AND REINFORCEMENT DESIGNATED TO REMAIN SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE DISTRICT REPRESENTATIVE AT NO ADDITIONAL COST TO THE DEPARTMENT.
4. PRIOR TO PLACEMENT OF NEW CONCRETE, CONTRACTOR TO CLEAN EXISTING REINFORCEMENT AND PAINT WITH EPOXY PAINT. PLACE NEW TRANSVERSE REINFORCEMENT IN THE DECK AND VERTICAL REINFORCEMENT IN THE BARRIERS. INSTALL NEW NEOPRENE STRIP SEAL DAM.
5. THE EXPOSED FACES OF EXISTING DECK, BARRIERS AND ABUTMENT BACKWALL TO BE CLEANED. APPLY AN APPROVED EPOXY BONDING COMPOUND TO THE SURFACES.
6. CONTRACTOR IS REQUIRED TO FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION OF EXTRUSIONS AND HOOD PLATE.
7. CONTRACTOR TO VERIFY THAT THE BAR BENDING DIMENSIONS GIVEN ON THIS DRAWING WILL FIT WITH THE PROPOSED CONSTRUCTION PRIOR TO FABRICATING THESE BARS.
8. ALL NEW REINFORCEMENT SHOWN IS TO BE EPOXY COATED.
9. FOR NEOPRENE STRIP SEAL DETAILS NOT SHOWN, SEE BC-767M.
10. FOR ALTERNATE STRIP SEAL EXTRUSION, SEE DETAIL ON SHEET 92.
11. SHOP DRAWINGS FOR NEW NEOPRENE STRIP SEAL TO BE SUBMITTED TO THE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 94.
3. VERTICAL LEG OF BAR C1 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
4. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
5. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
EXPANSION DAM EAST ABUTMENT

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

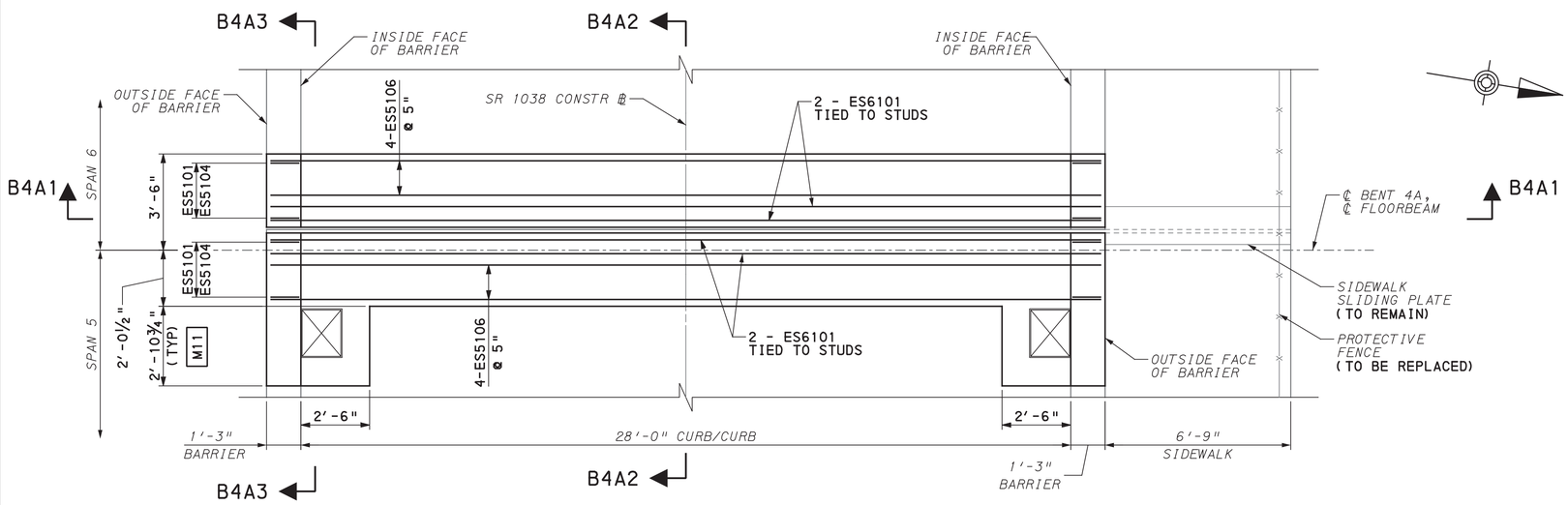
RECOMMENDED
OCTOBER 26, 2022

SHEET 83 OF 124

S - 40253

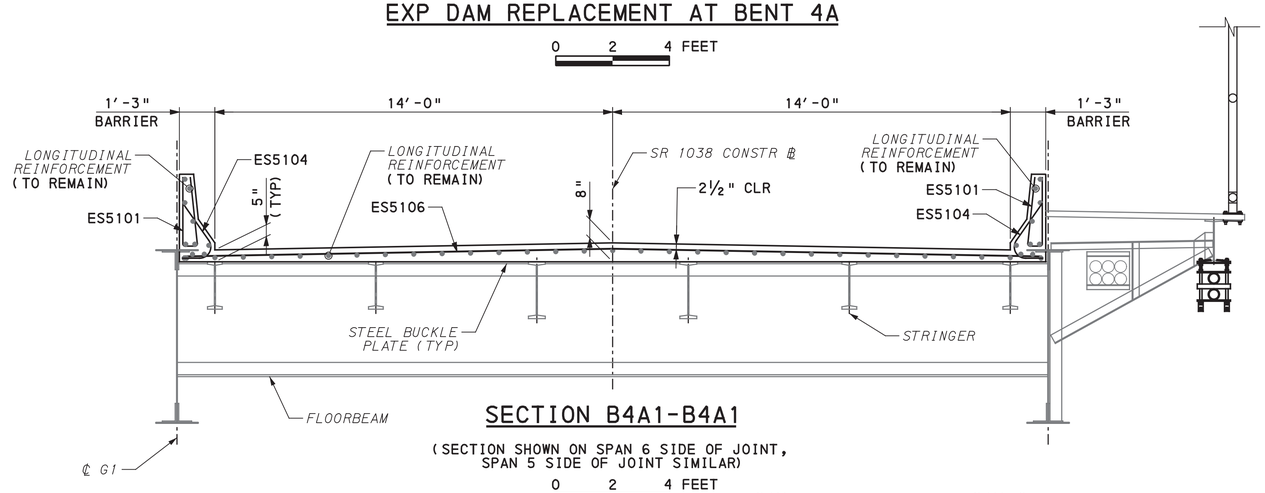
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 8:07:11 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Exp Dam Repl - Bent 4A.dgn



EXP DAM REPLACEMENT AT BENT 4A

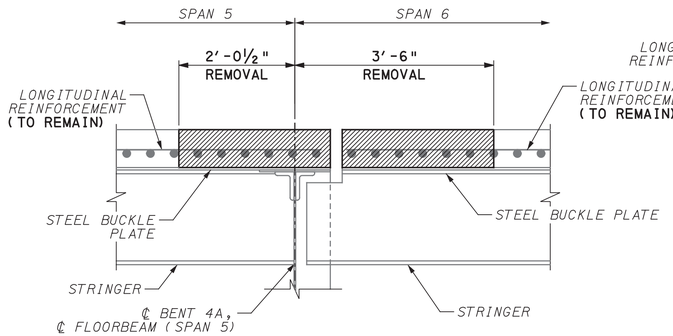
0 2 4 FEET



SECTION B4A1-B4A1

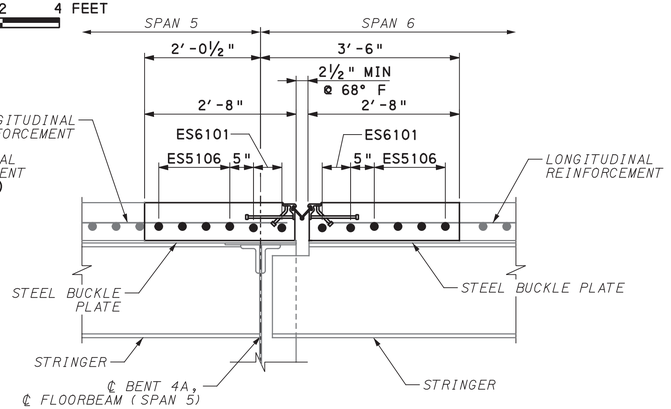
(SECTION SHOWN ON SPAN 6 SIDE OF JOINT, SPAN 5 SIDE OF JOINT SIMILAR)

0 2 4 FEET



SECTION B4A2-B4A2 (REMOVAL)

0 1 2 FEET



SECTION B4A2-B4A2 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 94.
4. EXTEND THE LIMITS OF REPAIR M11 AS SHOWN, INCIDENTAL TO REPAIR M11.
5. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
6. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

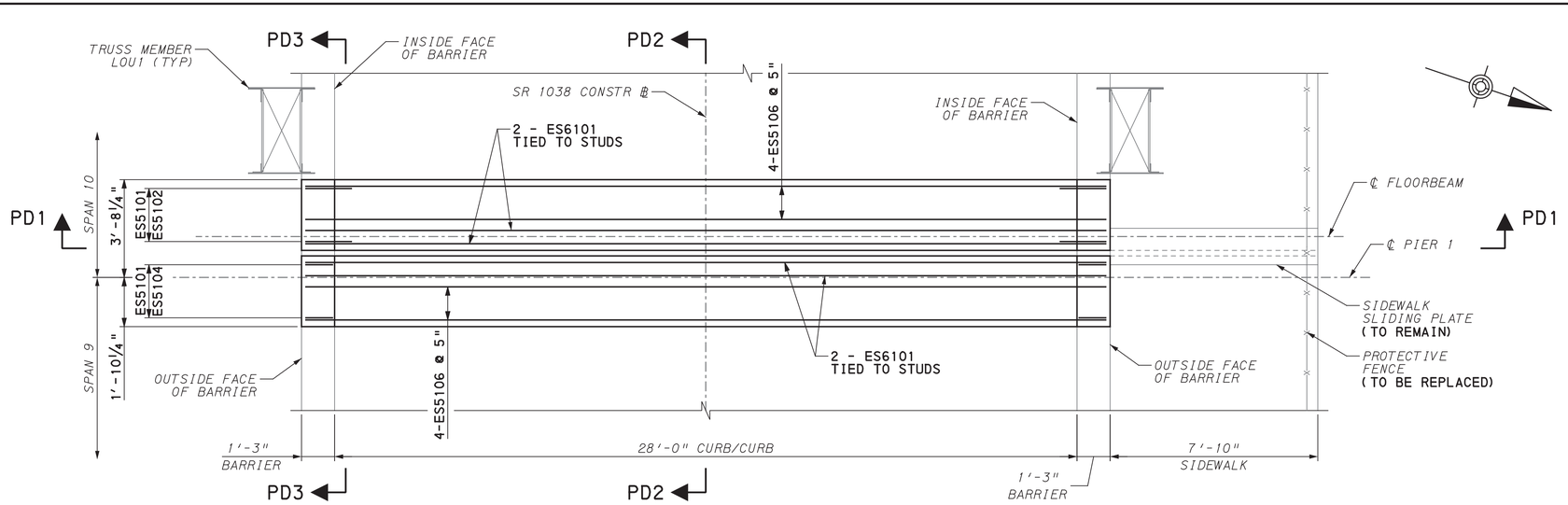
ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
EXPANSION DAM BENT 4A

RECOMMENDED
OCTOBER 26, 2022

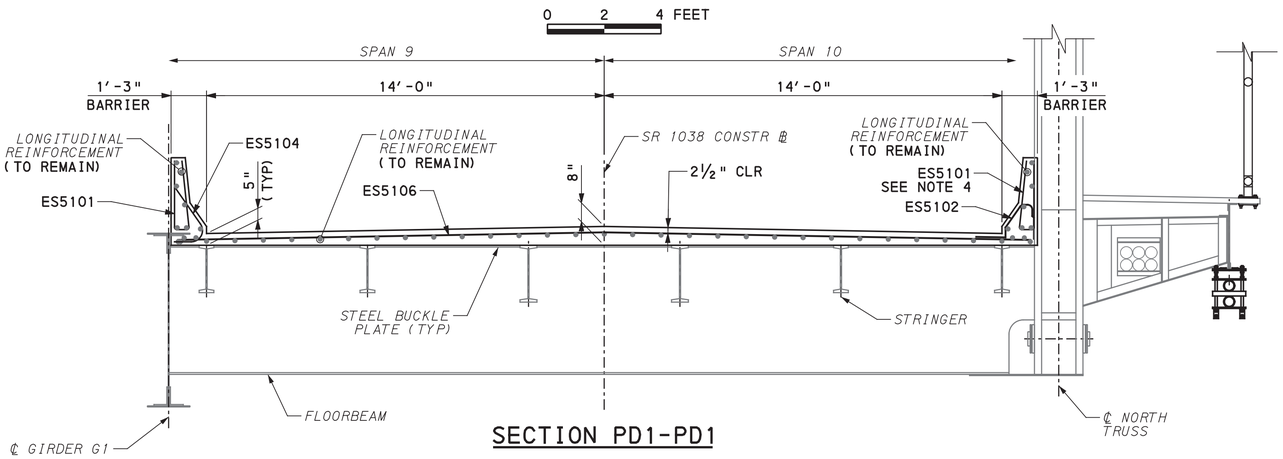
SHEET 84 OF 124
S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

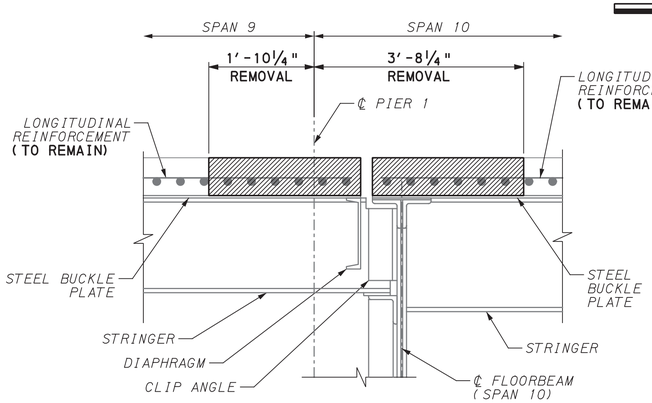
PLOTTED: 10/26/2022 8:07:14 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038_Exp Dam Repl - Pier 1.dgn



EXP DAM REPLACEMENT AT PIER 1

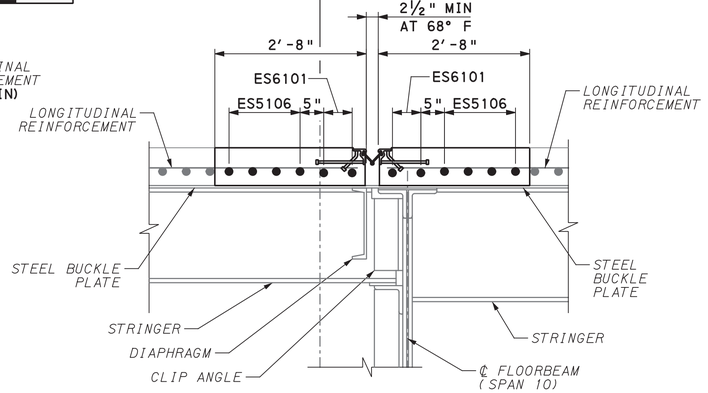


SECTION PD1-PD1



SECTION PD2-PD2 (REMOVAL)

0 1 2 FEET



SECTION PD2-PD2 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 95.
4. VERTICAL LEG OF BAR ES5101 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
5. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
6. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
EXPANSION DAM PIER 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

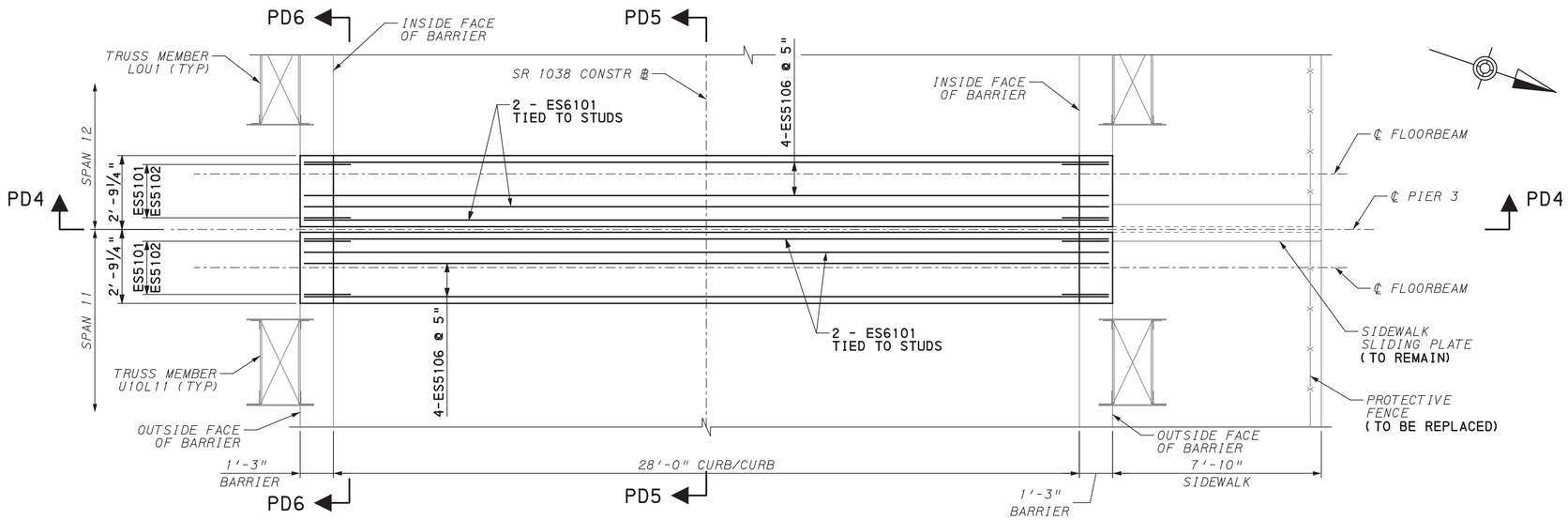
RECOMMENDED
OCTOBER 26, 2022

SHEET 85 OF 124

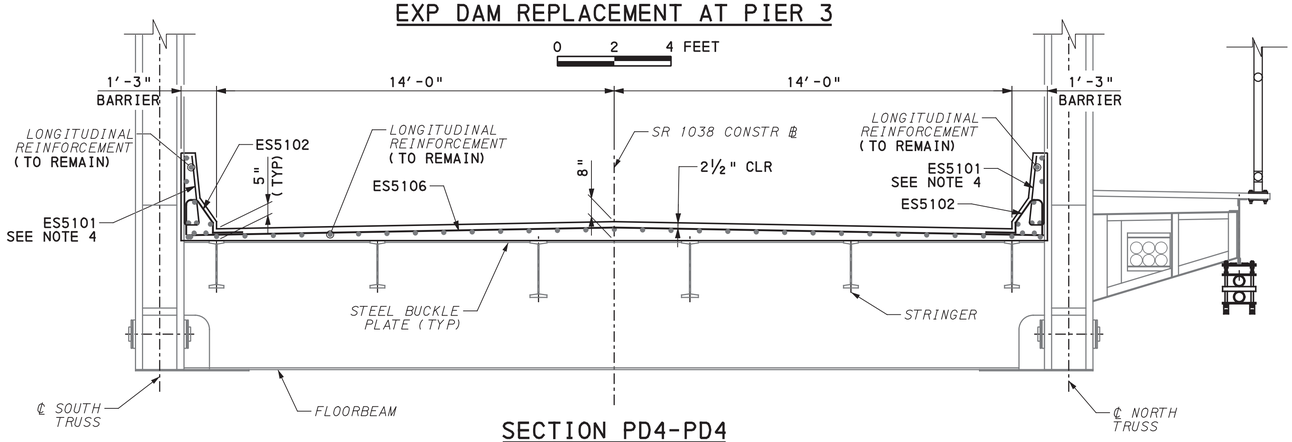
S - 40253

DES: EAL	CKD: TSA	DWG: EAL	CKD: TSA

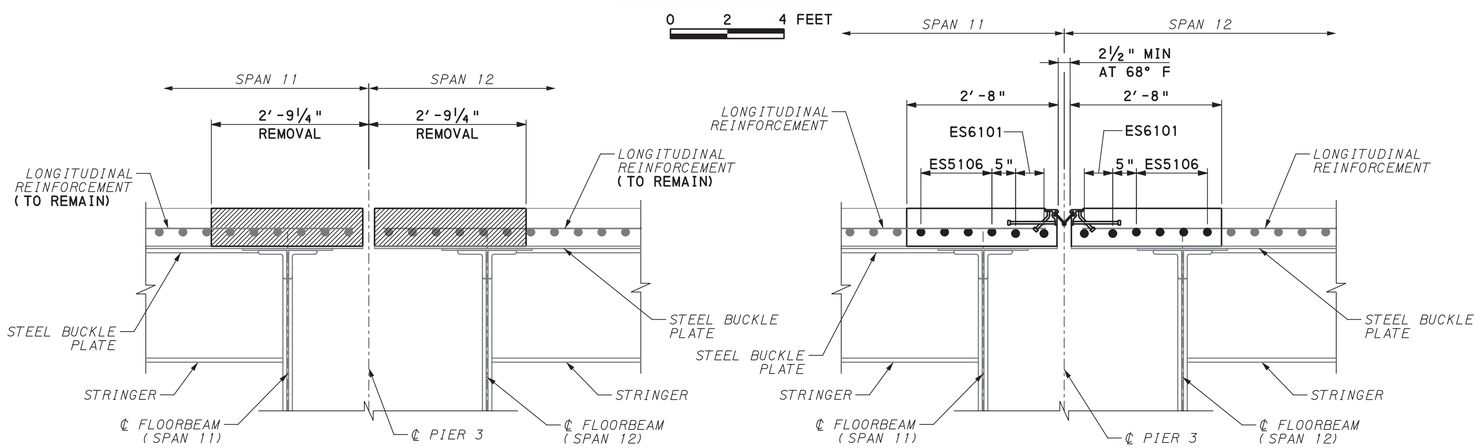
PLOTTED: 10/26/2022 8:07:17 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Exp Dam Repl - Pier 1-3.dgn



EXP DAM REPLACEMENT AT PIER 3



SECTION PD4-PD4



SECTION PD5-PD5 (REMOVAL)

0 1 2 FEET

SECTION PD5-PD5 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 94.
4. VERTICAL LEG OF BAR ES5101 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
5. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
6. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
EXPANSION DAM PIER 3

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

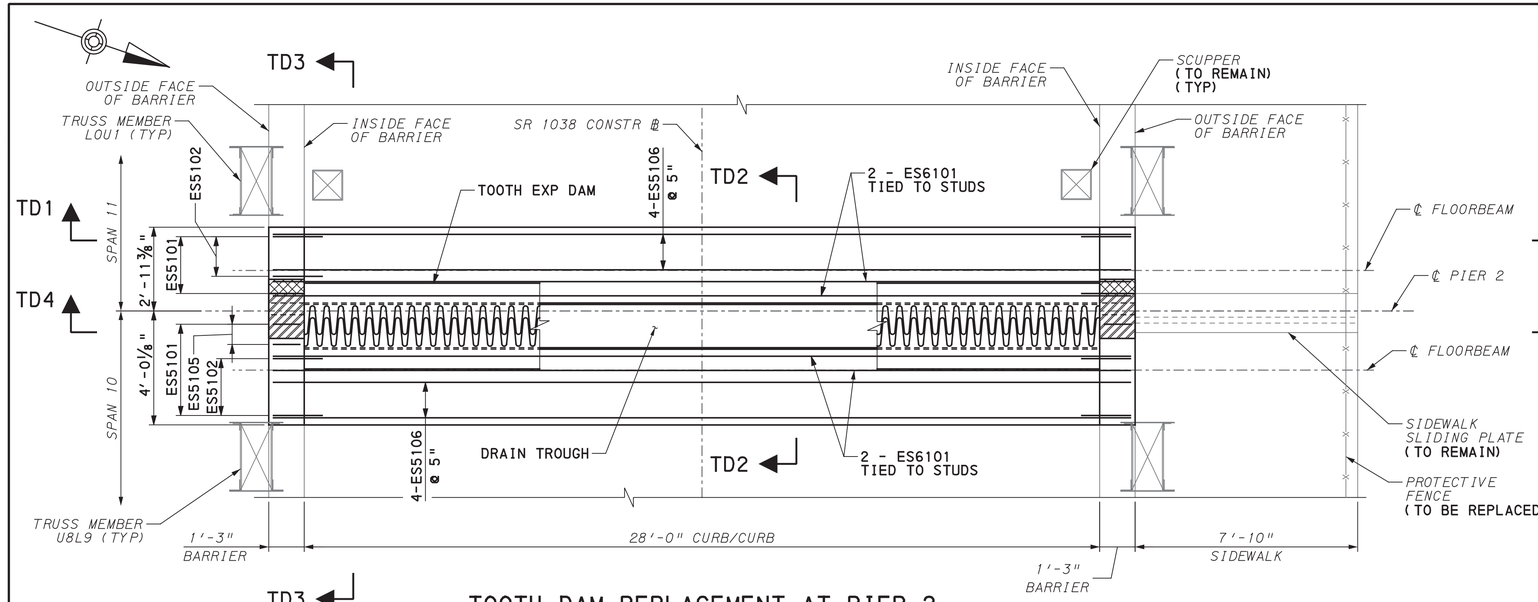
RECOMMENDED
OCTOBER 26, 2022

SHEET 86 OF 124

S - 40253

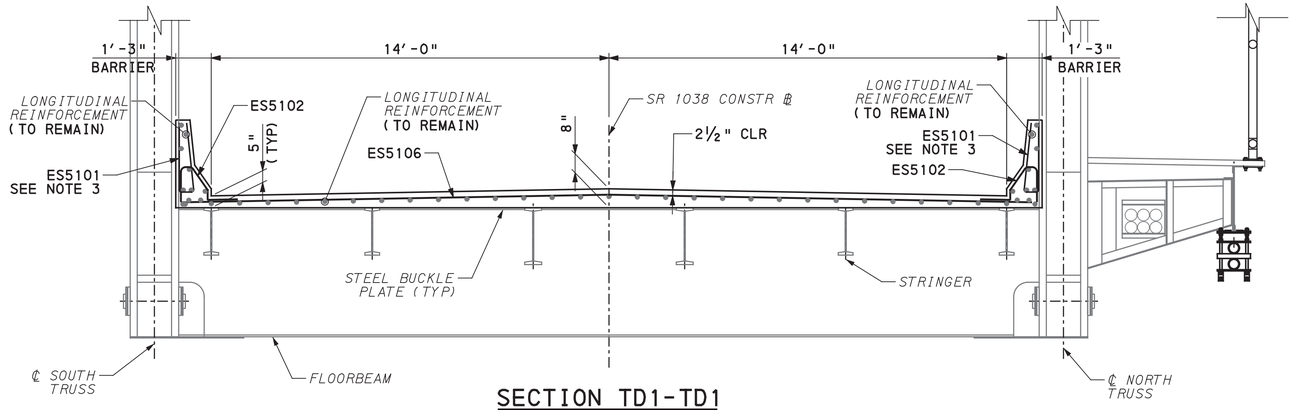
DES:	EAL	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 8:07:19 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Exp Dam Repl - Pier 2.dgn



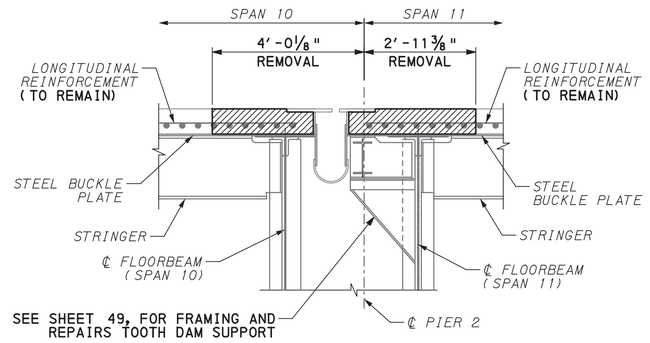
TOOTH DAM REPLACEMENT AT PIER 2

0 2 4 FEET



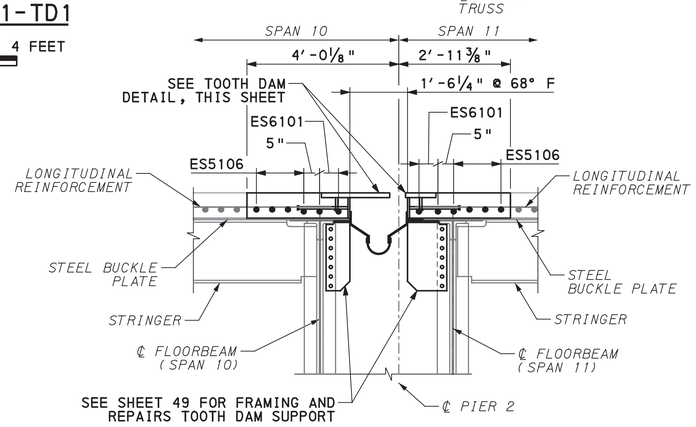
SECTION TD1-TD1

0 2 4 FEET



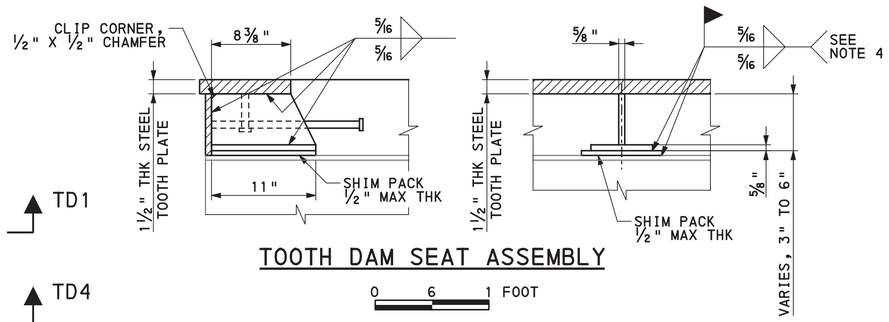
SECTION TD2-TD2 (REMOVAL)

0 2 4 FEET



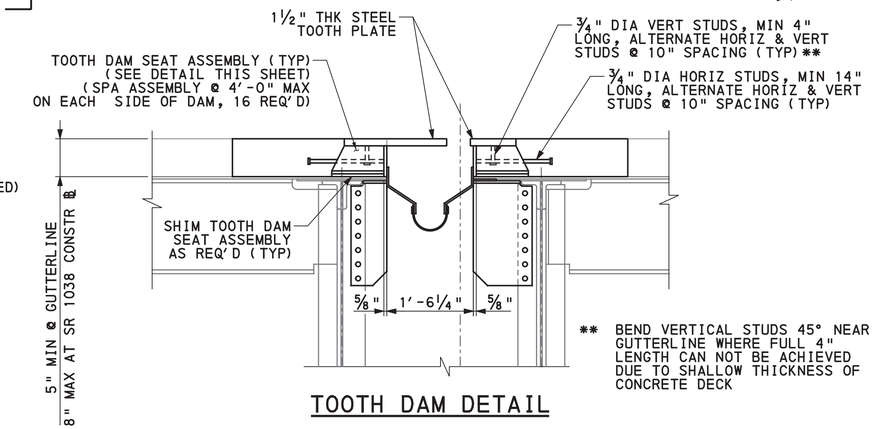
SECTION TD2-TD2 (PROPOSED)

0 1 2 FEET



TOOTH DAM SEAT ASSEMBLY

0 6 1 FOOT



TOOTH DAM DETAIL

0 1 2 FEET

** BEND VERTICAL STUDS 45° NEAR GUTTERLINE WHERE FULL 4" LENGTH CAN NOT BE ACHIEVED DUE TO SHALLOW THICKNESS OF CONCRETE DECK

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SECTION TD3-TD3 AND ADDITIONAL DETAILS, SEE SHEETS 88 AND 89.
3. VERTICAL LEG OF BAR ES5101 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
4. FIELD WELD SHIM PACK TO BUCKLE PLATE AND SEAT ASSEMBLY TO SHIM PACK. SHIM PACK MAY BE OMITTED AT THE DISCRETION OF THE CONTRACTOR.
5. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
6. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TOOTH EXPANSION JOINT PIER 2

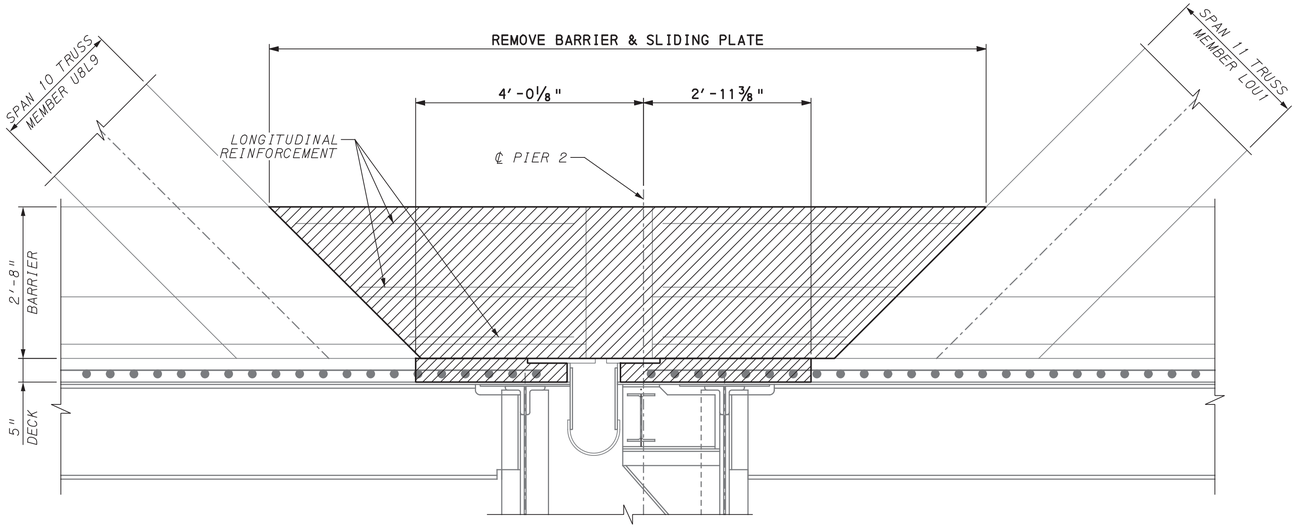
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 87 OF 124
S - 40253

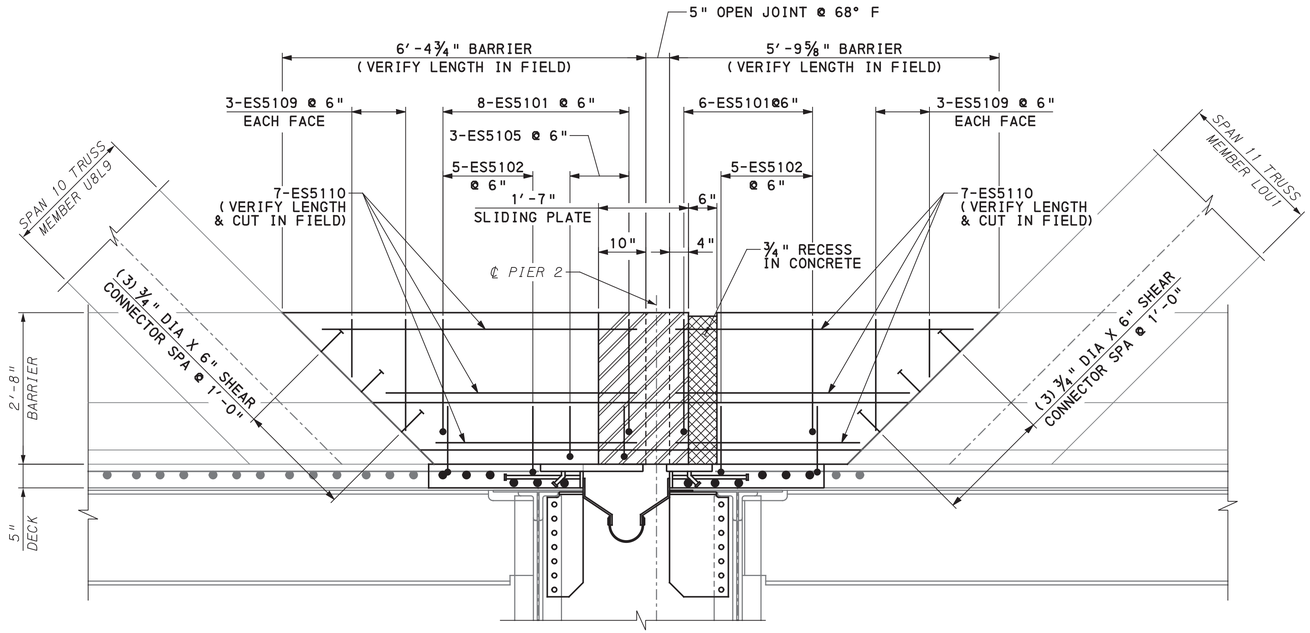
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 8:07:24 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038_Tooth Jt Detls 1.dgn



SECTION TD3-TD3 (REMOVAL)

0 1 2 FEET



SECTION TD3-TD3 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 87.
3. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TOOTH JOINT DETAILS 1

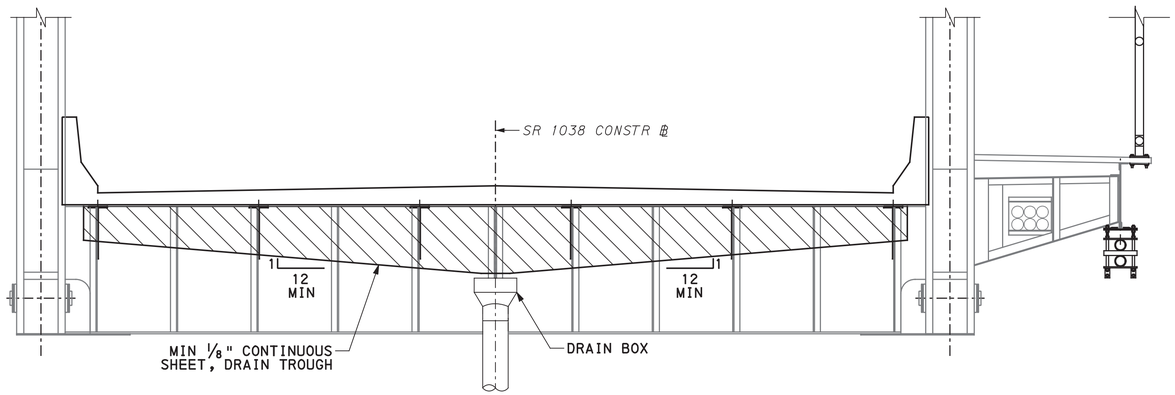
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 88 OF 124

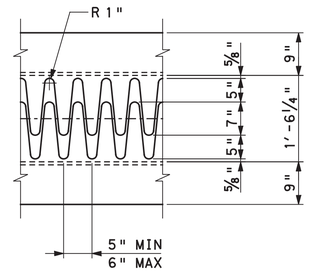
S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA



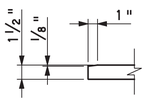
SECTION TD4-TD4

0 2 4 FEET



TOOTH PLATE DETAIL

0 1 2 FEET



TOOTH PLATE SECTION

0 2 4 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 87.
3. FOR ADDITIONAL DRAINAGE DETAILS AT PIER 2, SEE SHEET 108.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TOOTH JOINT DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 89 OF 124

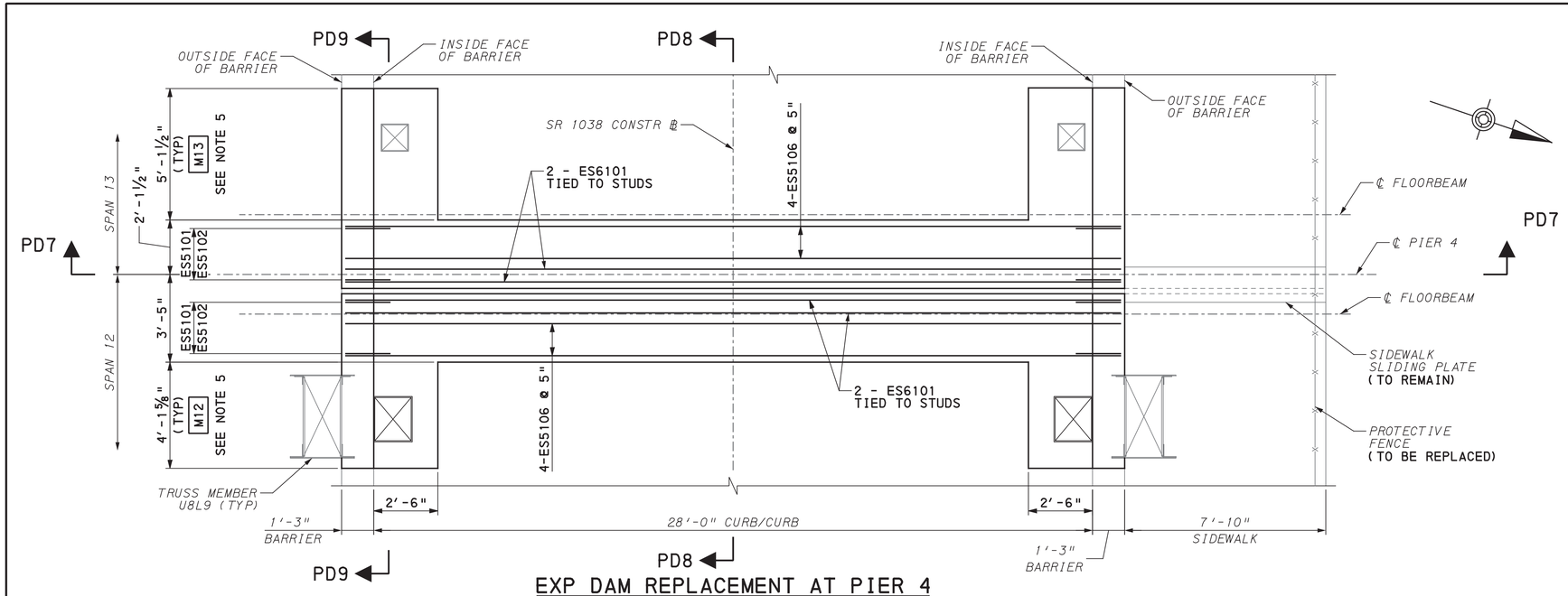
S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

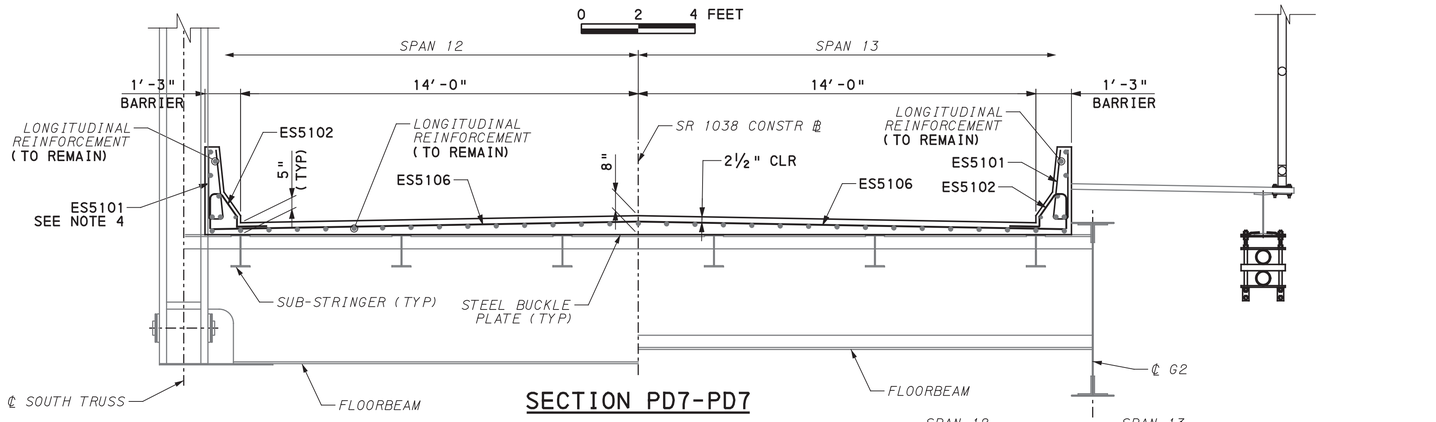
PLOTTED: 10/26/2022 8:07:26 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Tooth Jt Details 2.dgn

PLOTTED: 10/26/2022 8:07:27 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Exp Dam Repl - Pier 4.dgn

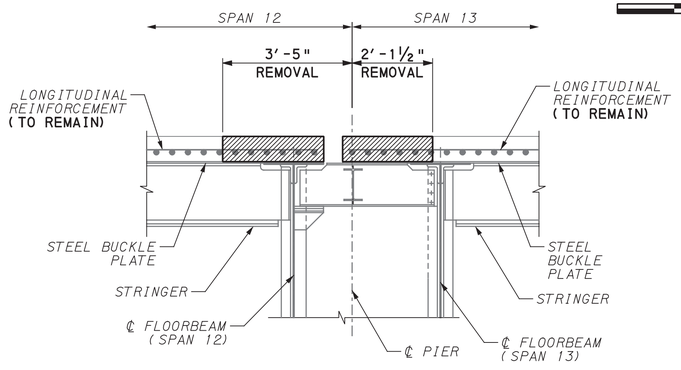


EXP DAM REPLACEMENT AT PIER 4



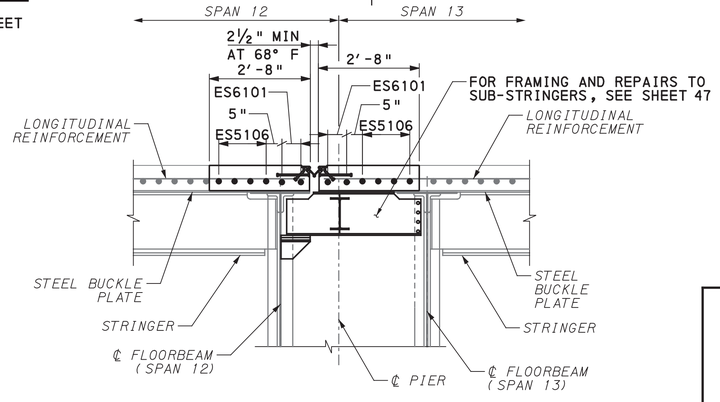
SECTION PD7-PD7

0 2 4 FEET



SECTION PD8-PD8 (REMOVAL)

0 2 4 FEET



SECTION PD8-PD8 (PROPOSED)

0 2 4 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 96.
4. VERTICAL LEG OF BAR ES5101 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
5. EXTEND THE LIMITS OF REPAIRS M12 AND M13 AS SHOWN. INCIDENTAL TO REPAIRS M12 AND M13.
6. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
7. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Rec'm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
EXPANSION DAM PIER 4

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

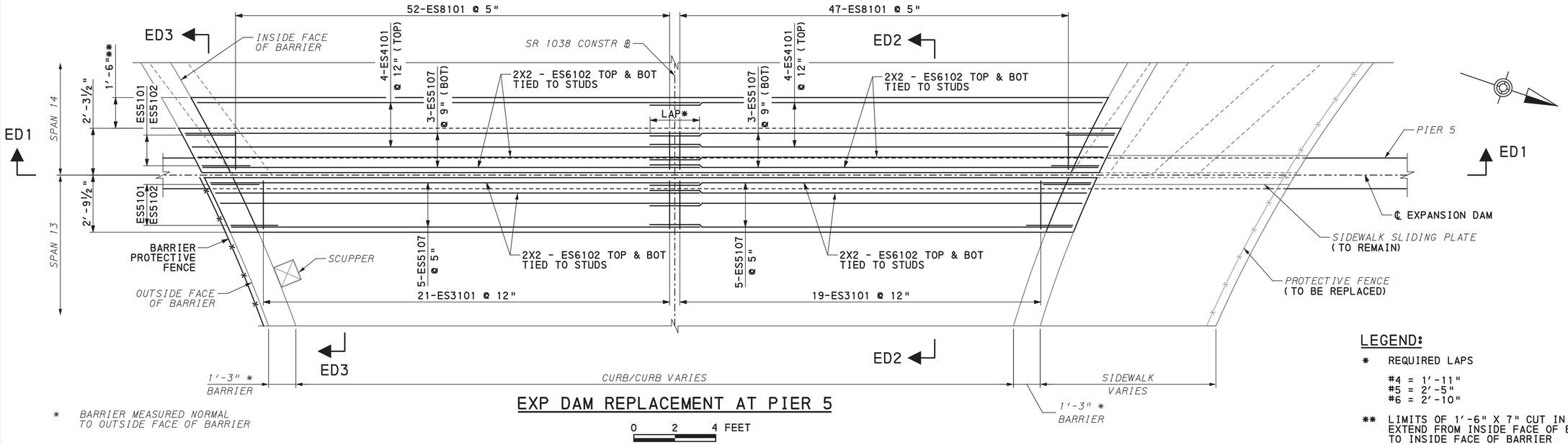
RECOMMENDED
OCTOBER 26, 2022

SHEET 90 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 8:07:29 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Exp Dam Repl - Pier 5.dgn



* BARRIER MEASURED NORMAL TO OUTSIDE FACE OF BARRIER

EXP DAM REPLACEMENT AT PIER 5

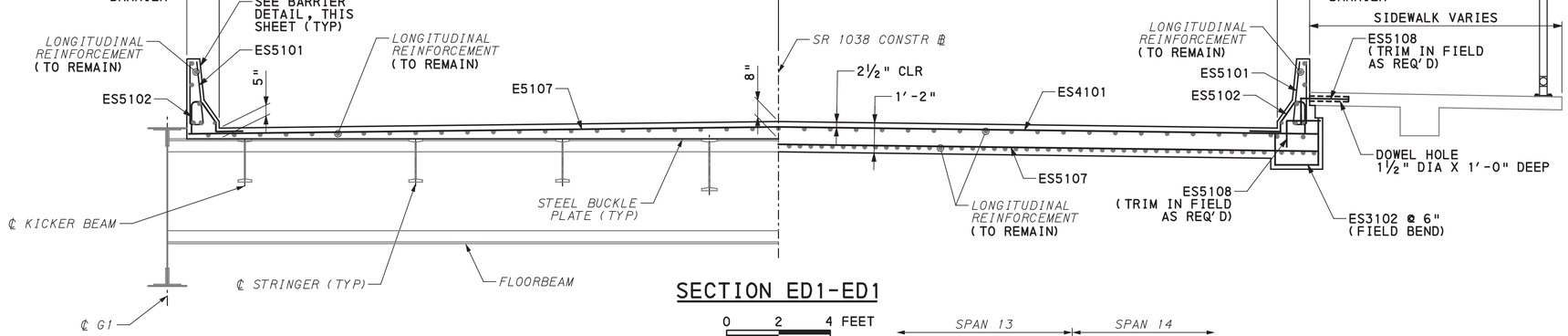
0 2 4 FEET

LEGEND:

* REQUIRED LAPS

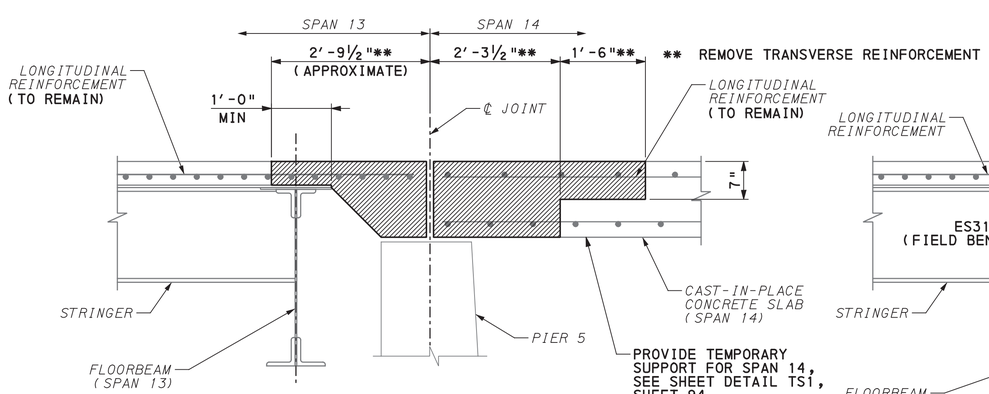
#4 = 1'-11"
#5 = 2'-5"
#6 = 2'-10"

** LIMITS OF 1'-6" X 7" CUT IN SLAB EXTEND FROM INSIDE FACE OF BARRIER TO INSIDE FACE OF BARRIER



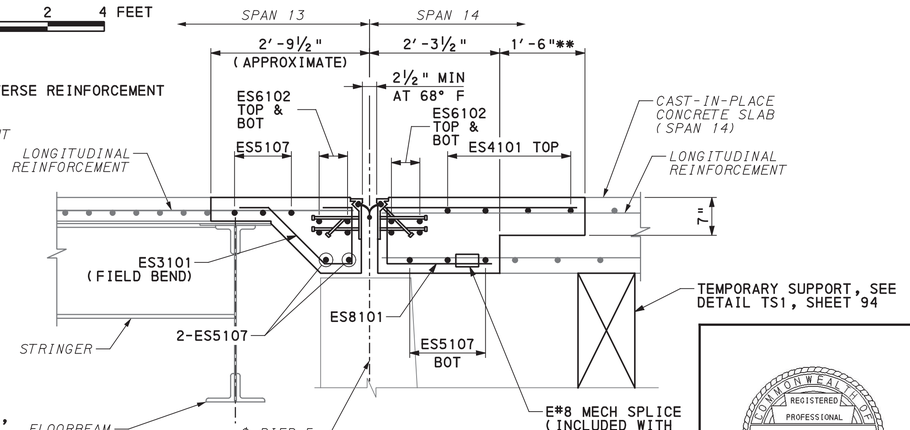
SECTION ED1-ED1

0 2 4 FEET



SECTION ED2-ED2 (REMOVAL)

0 1 2 FEET



SECTION ED2-ED2 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 94.
4. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
EXPANSION DAM PIER 5

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

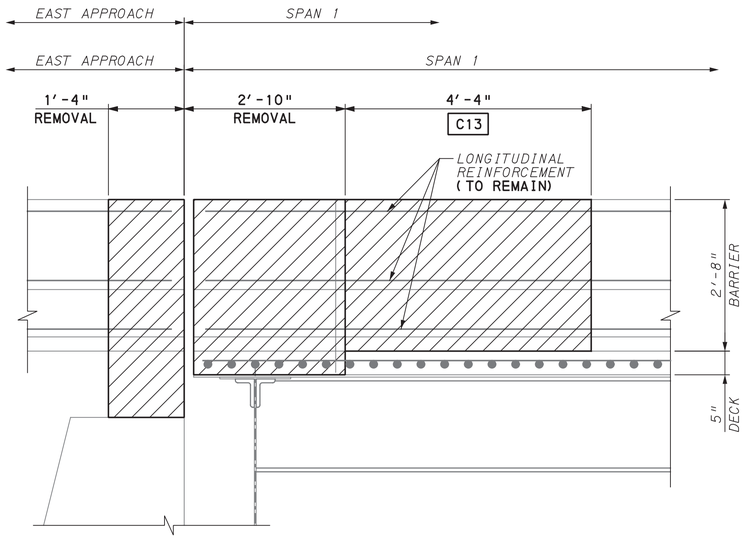
RECOMMENDED
OCTOBER 26, 2022

SHEET 91 OF 124

S - 40253

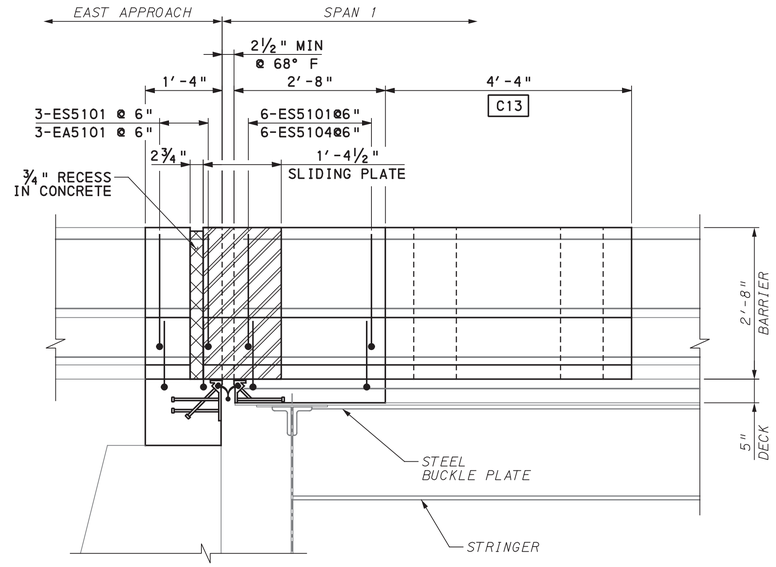
DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 8:07:31 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_strip seal details 1.dgn



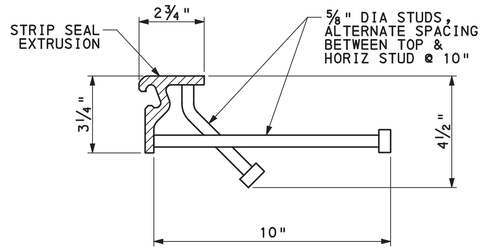
SECTION EA3-EA3 (REMOVAL)

0 1 2 FEET



SECTION EA3-EA3 (PROPOSED)

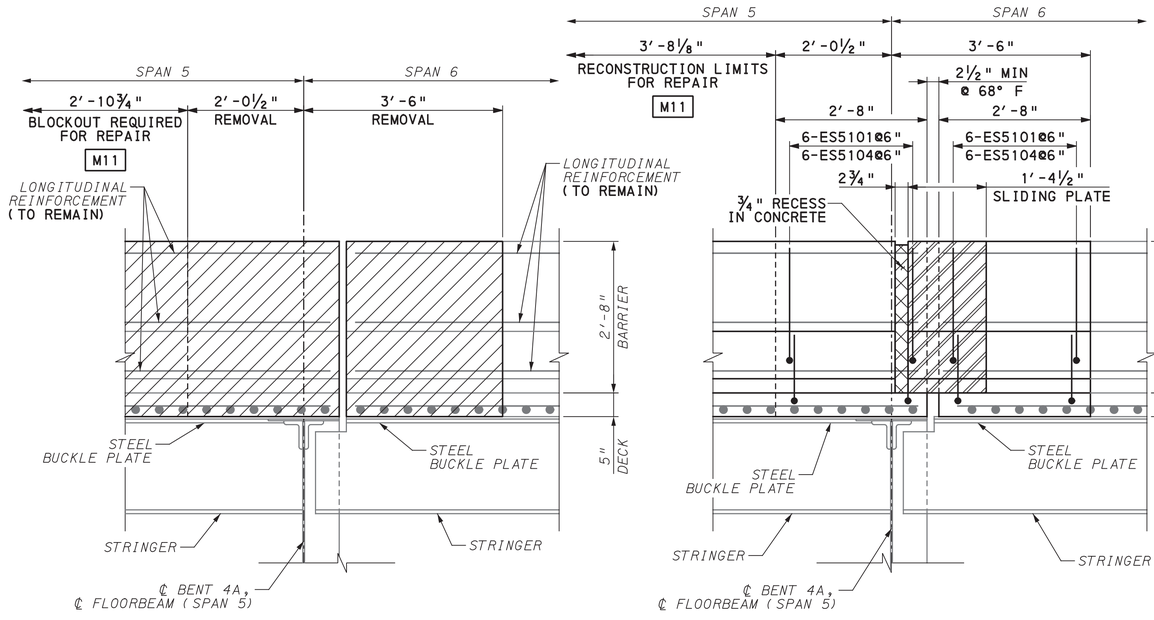
0 1 2 FEET



ALTERNATE STRIP SEAL EXTRUSION

NOT TO SCALE

ALTERNATE STRIP SEAL EXTRUSION
REQUIRED FOR ITEMS 5090-1015,
5090-1016 AND 5090-1019
AT ALL STRIP SEAL LOCATIONS EXCEPT PIER 5



SECTION B4A3-B4A3 (REMOVAL)

0 1 2 FEET

SECTION B4A3-B4A3 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 83 - 86 AND 90.
3. FOR DETAILS OF REPAIR M11, SEE SHEET 81.
4. FOR TYPICAL BARRIER SECTION, SEE SHEET 93.
5. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
STRIP SEAL DAM DETAILS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER
NO.
PE-052090-E

RECOMMENDED

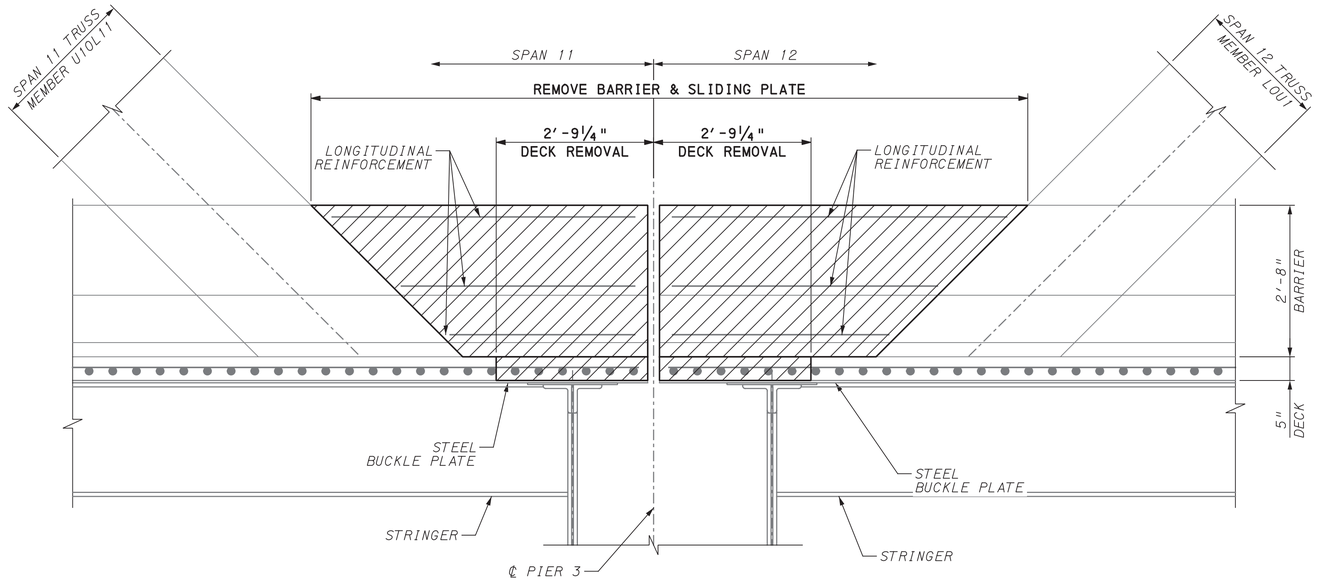
OCTOBER 26, 2022

SHEET 92 OF 124

S - 40253

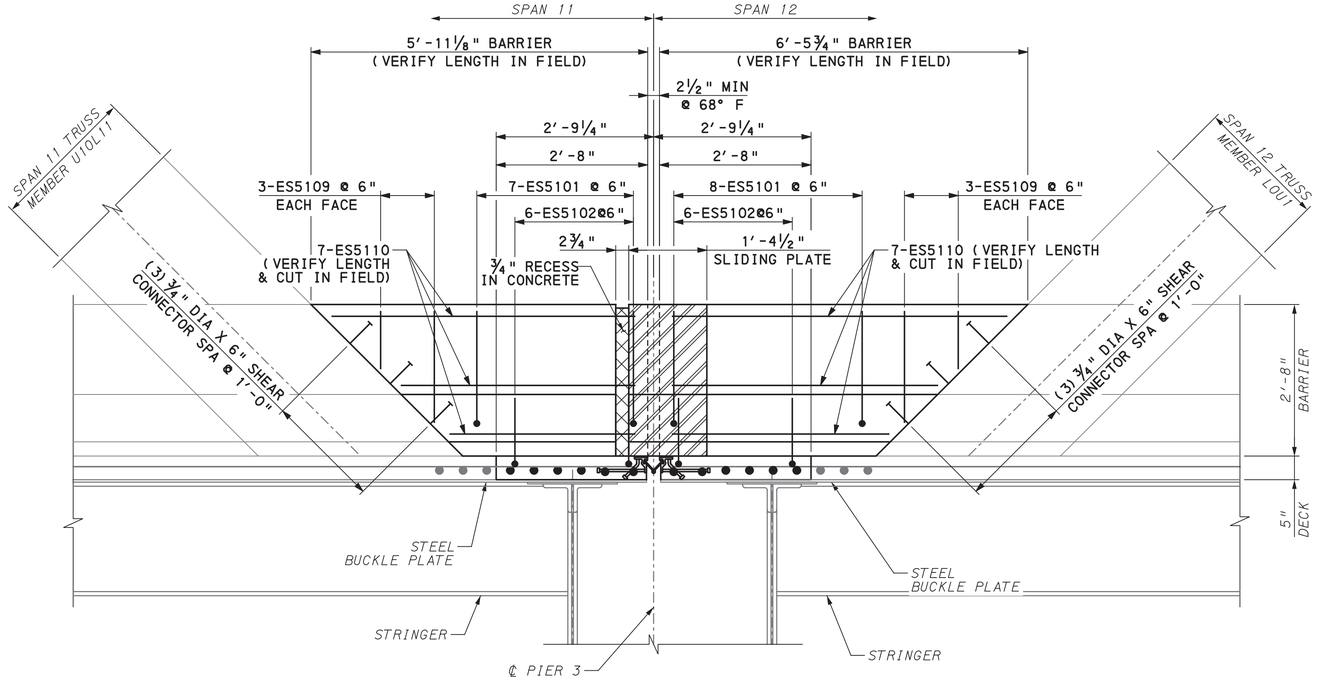
DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 8:07:33 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_strip seal details 2.dgn



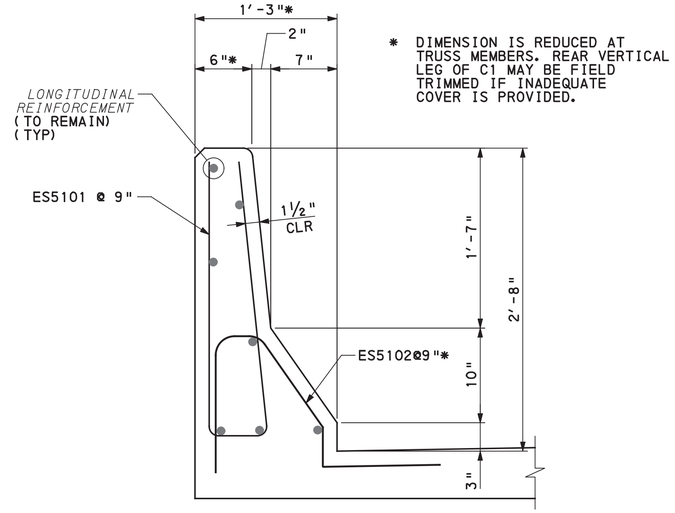
SECTION PD6-PD6 (REMOVAL)

0 1 2 FEET



SECTION PD6-PD6 (PROPOSED)

0 1 2 FEET



* DIMENSION IS REDUCED AT TRUSS MEMBERS. REAR VERTICAL LEG OF C1 MAY BE FIELD TRIMMED IF INADEQUATE COVER IS PROVIDED.

TYPICAL BARRIER SECTION

SECTION AT BRIDGE DECK SHOWN;
SECTION AT ABUTMENT OR PIER WALL SIMILAR

0 6 1 FOOT

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 86.
3. FOR DETAILS OF REPAIR M12 & M13, SEE SHEETS 81 AND 82.
4. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
5. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

STRIP SEAL DAM DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

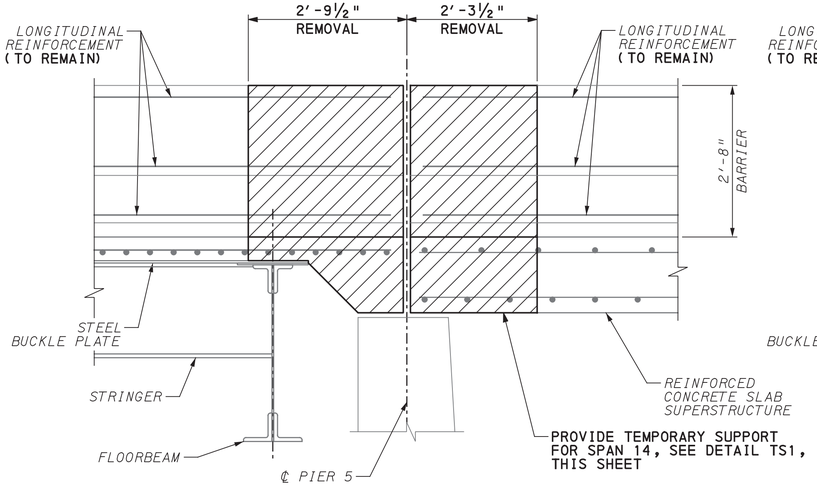
OCTOBER 26, 2022

SHEET 93 OF 124

S - 40253

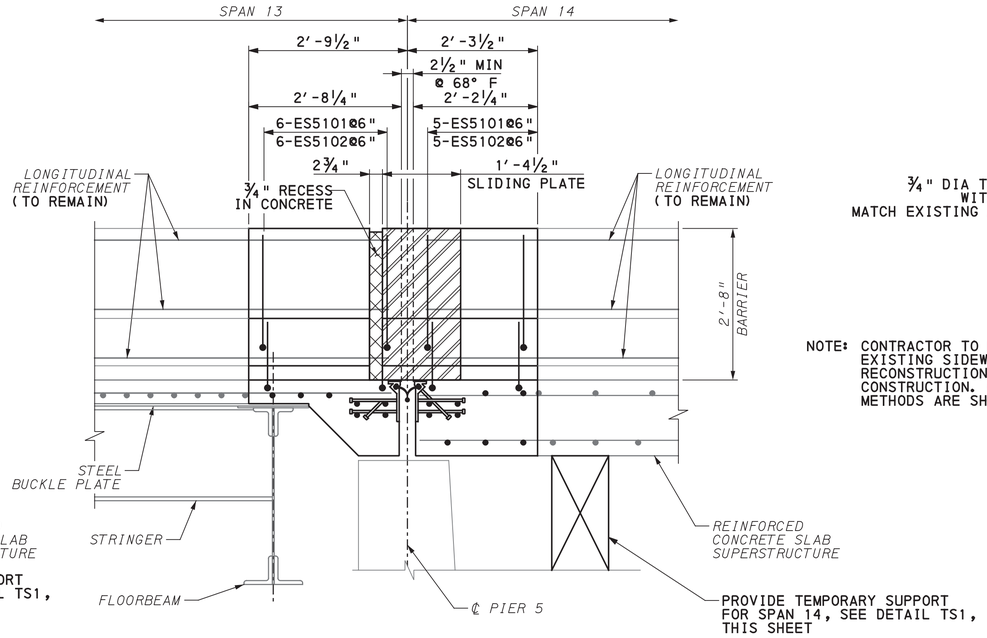
DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 8:07:36 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_strip seal details 3.dgn



SECTION ED3-ED3 (REMOVAL)

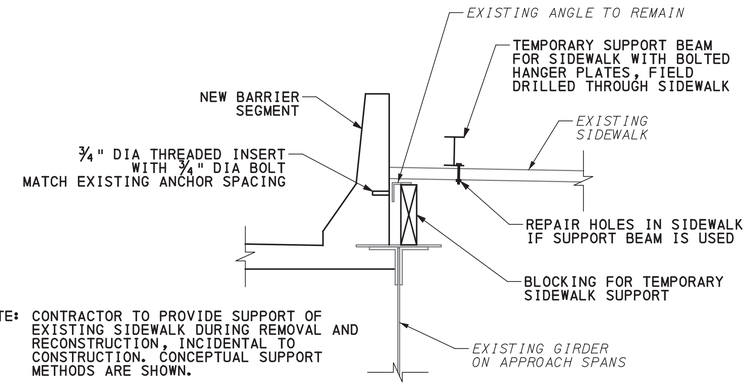
0 1 2 FEET



SECTION ED3-ED3 (PROPOSED)

0 1 2 FEET

NOTE: LIMITS OF 1′-6" X 7" CUT IN SLAB IN SPAN 14 EXTEND FROM INSIDE FACE OF BARRIER TO INSIDE FACE OF BARRIER

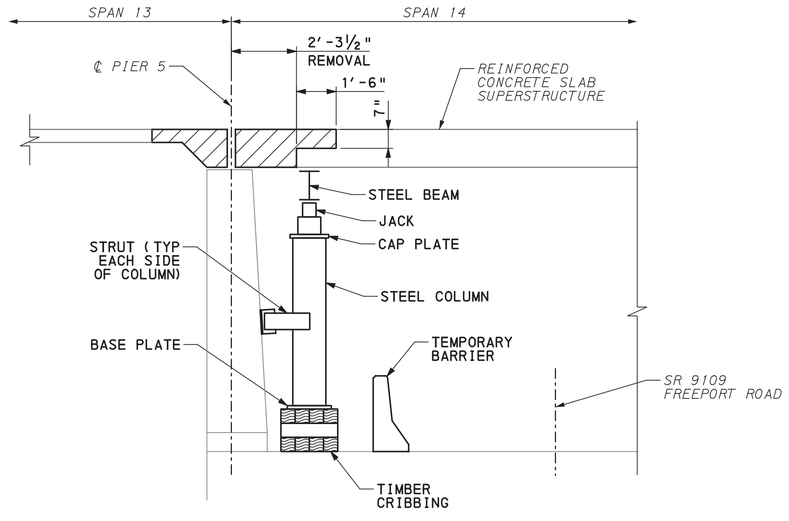


NOTE: CONTRACTOR TO PROVIDE SUPPORT OF EXISTING SIDEWALK DURING REMOVAL AND RECONSTRUCTION, INCIDENTAL TO CONSTRUCTION. CONCEPTUAL SUPPORT METHODS ARE SHOWN.

SIDEWALK SUPPORT AT BARRIER

PROVIDE NEW THREADED INSERT AND NEW BOLT INCIDENTAL TO NEW CONSTRUCTION

NOT TO SCALE



DETAIL TS1

CONCEPTUAL JACKING OF SPAN 14
NOT TO SCALE

JACKING/TEMPORARY SUPPORT NOTES:

1. JACKING/TEMPORARY SUPPORT OF SPAN 14 FOR REPLACEMENT OF PIER 5 EXPANSION DAM IS INCLUDED IN ITEM 9000-0203.
2. COORDINATE WORK WITH THE TRAFFIC CONTROL PLANS AND THE PLANNED CLOSURE OF THE STRUCTURE IN PHASE 2A.
3. INCLUDE CONSTRUCTION LIVE LOAD IN THE DESIGN OF THE JACKING/TEMPORARY SUPPORT SYSTEM.
4. CONCEPTUAL SUPPORT DETAILS IS SHOWN. ALL SUPPORT DETAILS TO BE DESIGNED BY THE CONTRACTOR. ALTERNATE DESIGNS MAY BE PROPOSED BY THE CONTRACTOR. ALL DESIGNS SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW.
5. PROVIDE JACKING UNDER SPAN 14 BEAMS AND SPAN 14 SIDEWALK UNDER LIMITS OF REMOVAL.

JACKING LOAD TABLE		
LOCATION	DL (K/FT)	LL (K/FT)
PIER 5	2.5	5.4

JACKING LOADS ARE SERVICE LOADS (UNFACTORED)

LL BASED ON MAXIMUM HS20 LL REACTION

PROVIDED LOADS ARE APPROXIMATE AND TO BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING JACKING PLANS

JACKING LOADS ARE MAXIMUM REACTIONS AT THE BEARING CENTERLINE. LOADS WILL VARY BASED ON JACKING LOCATION.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 91.
3. FOR TYPICAL BARRIER SECTION, SEE SHEET 93.
4. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
STRIP SEAL DAM DETAILS 3

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

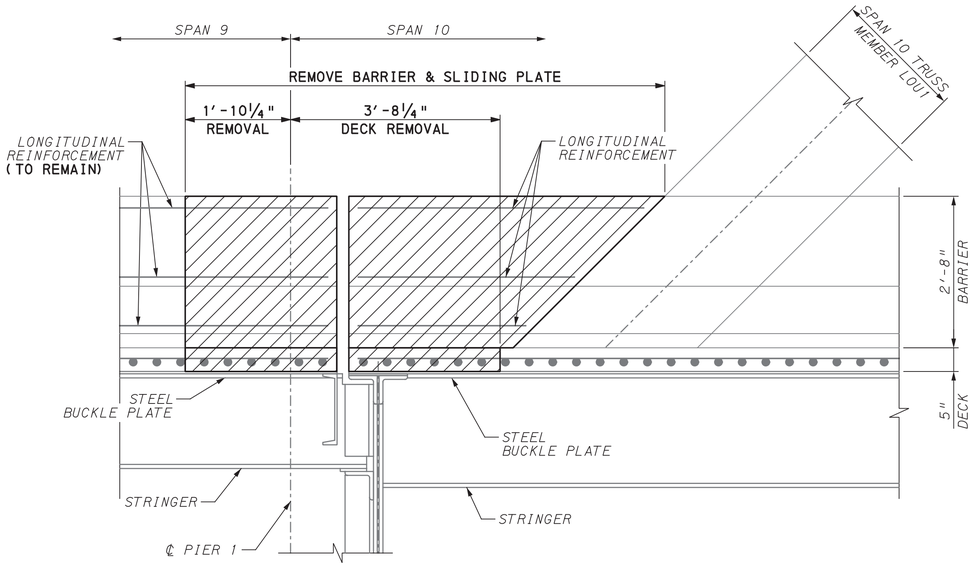
RECOMMENDED
OCTOBER 26, 2022

SHEET 94 OF 124

S - 40253

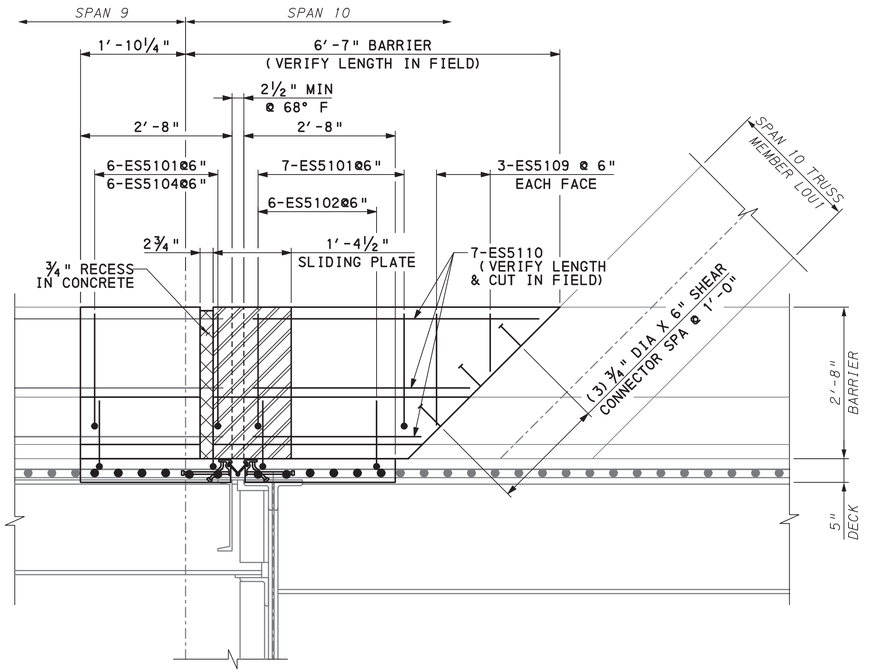
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 8:07:39 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_strip seal details 4.dgn



SECTION PD3-PD3 (REMOVAL)

0 1 2 FEET



SECTION PD3-PD3 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 85.
3. FOR TYPICAL BARRIER SECTION, SEE SHEET 93.
4. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
STRIP SEAL DAM DETAILS 4

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

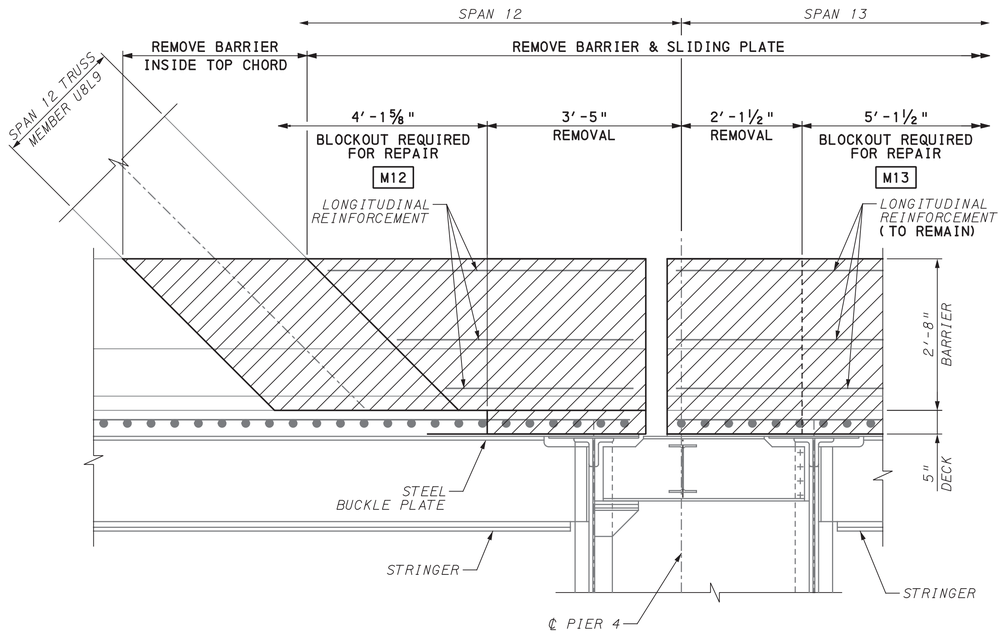
RECOMMENDED
OCTOBER 26, 2022

SHEET 95 OF 124

S - 40253

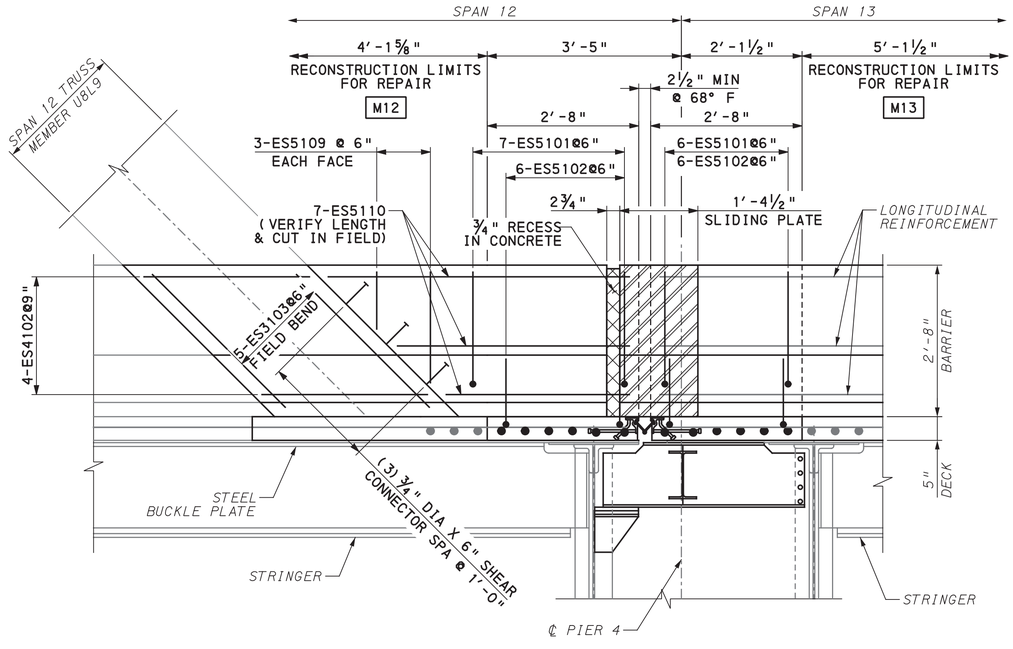
DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 8:07:41 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_strip seal details 5.dgn



SECTION PD9-PD9 (REMOVAL)

0 1 2 FEET



SECTION PD9-PD9 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 90.
3. FOR DETAILS OF REPAIR M12 & M13, SEE SHEETS 81 AND 82.
4. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
5. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
STRIP SEAL DAM DETAILS 5

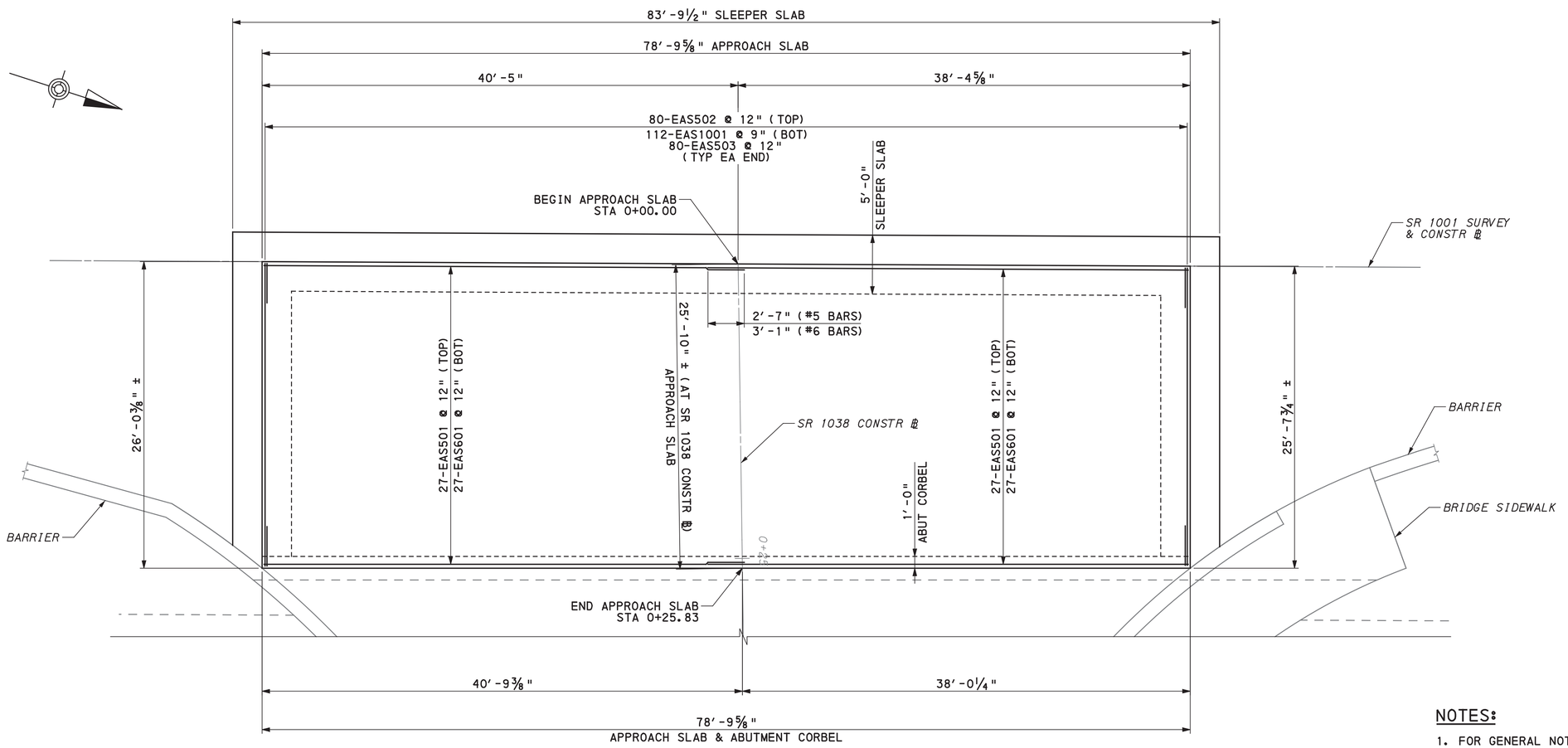
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 96 OF 124
S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 8:07:43 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038_appr slb plan.dgn



APPROACH SLAB PLAN

0 5 10 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR APPROACH SLAB SECTIONS AND DETAILS, SEE SHEET 98.
3. FOR SLEEPER SLAB PLAN, SEE SHEET 99.
4. FOR REINFORCEMENT BAR SCHEDULE, SEE SHEET 100.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
APPROACH SLAB PLAN

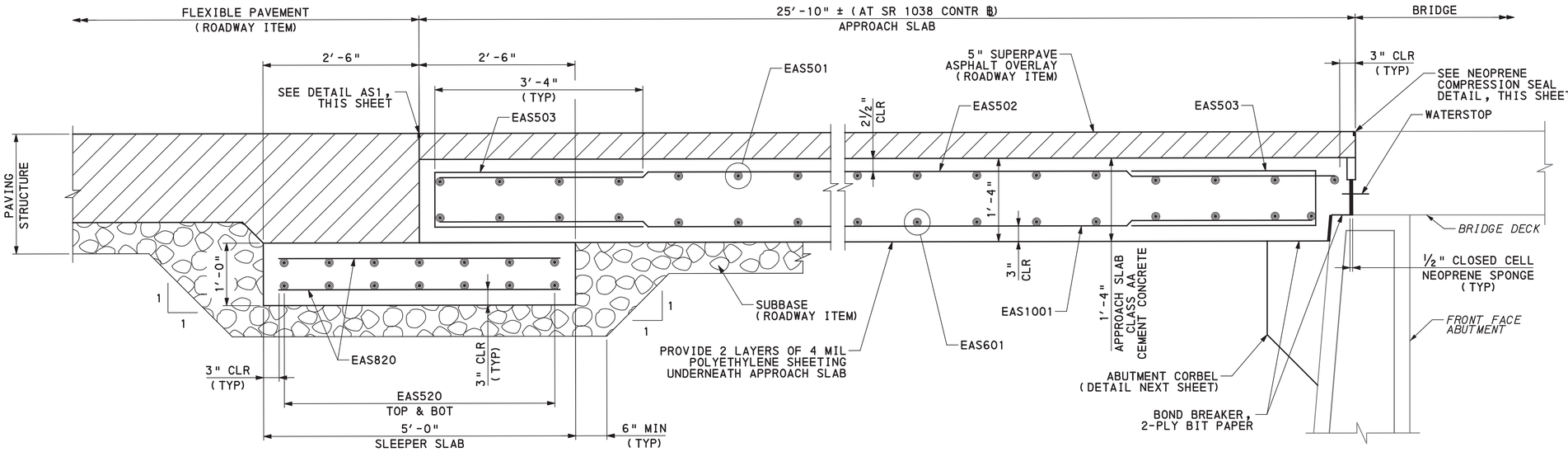
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 97 OF 124
S - 40253

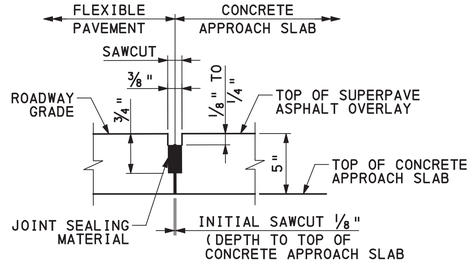
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 9:44:28 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_appr slb dtls.dgn



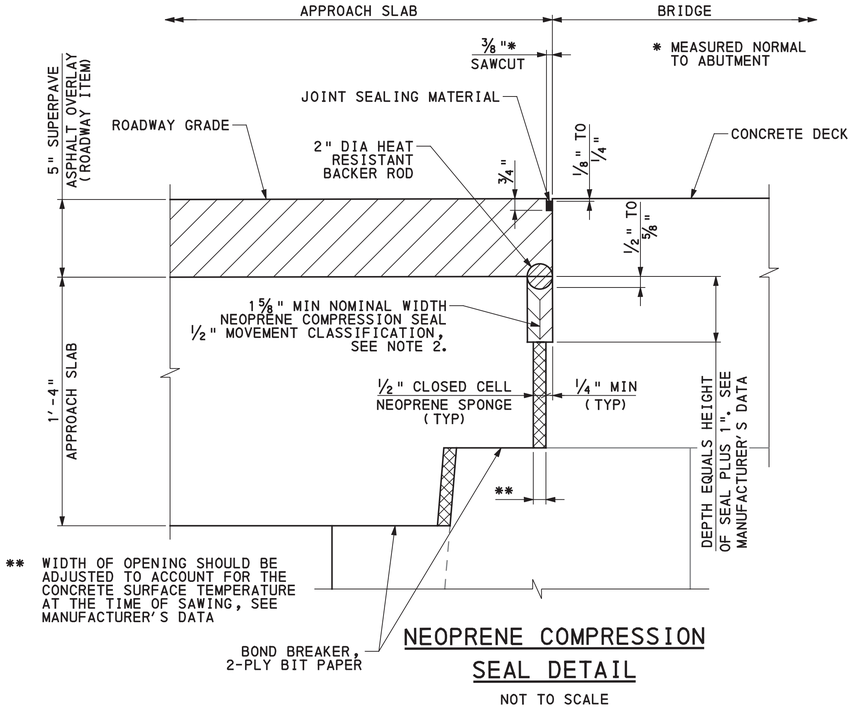
TYPICAL LONGITUDINAL SECTION THROUGH APPROACH SLAB

0 3 6 9 1' 2'



DETAIL AS1

NOT TO SCALE



NEOPRENE COMPRESSION SEAL DETAIL

NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR APPROACH SLAB PLAN, SEE SHEET 97.
3. FOR SLEEPER SLAB PLAN AND CORBEL DETAILS, SEE SHEET 99.
4. FOR REINFORCEMENT BAR SCHEDULE, SEE SHEET 100.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

APPROACH SLAB SECTIONS AND DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

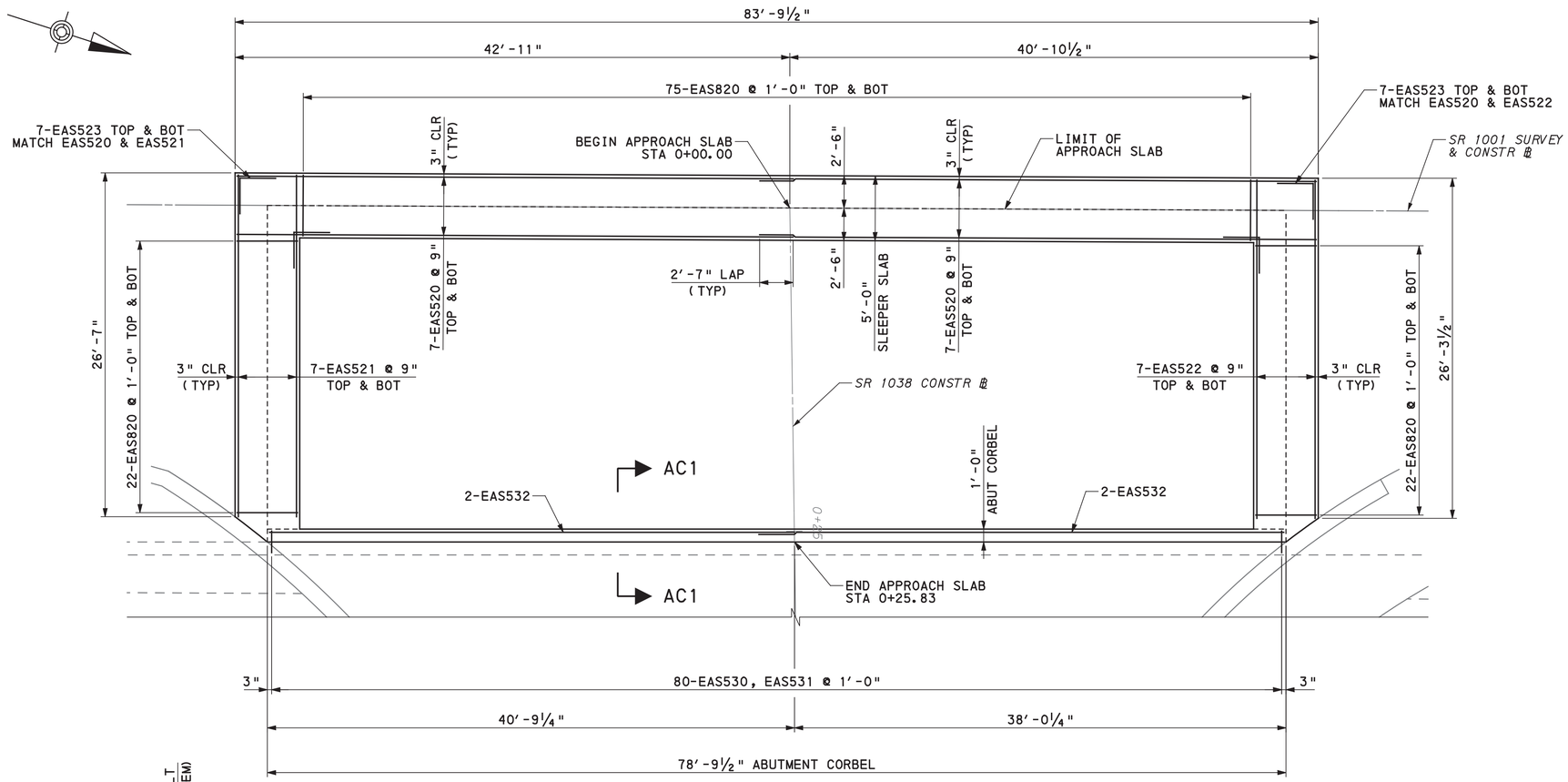
RECOMMENDED

OCTOBER 26, 2022

SHEET 98 OF 124

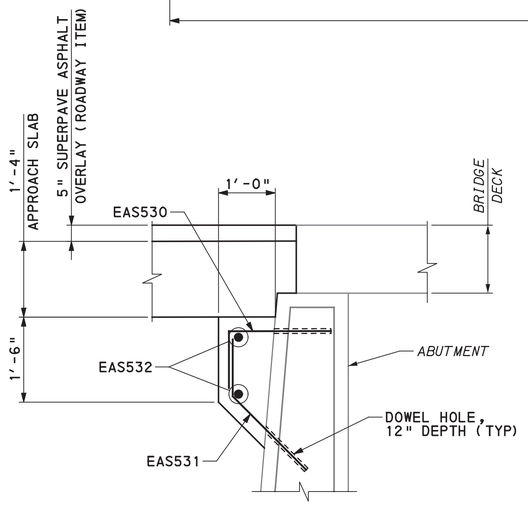
S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA



SLEEPER SLAB PLAN

0 5 10 FEET



SECTION AC1-AC1

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR APPROACH SLAB PLAN, SEE SHEET 97.
3. FOR APPROACH SLAB SECTIONS AND DETAILS, SEE SHEET 98.
4. FOR REINFORCEMENT BAR SCHEDULE, SEE SHEET 100.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SLEEPER SLAB PLAN

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 99 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 8:07:47 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038_slpr slb plan & aps rebar.dgn

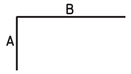
PLOTTED: 10/26/2022 8:07:49 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Reinforcement Bar Schedule.dgn

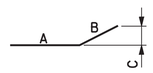
REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
APPROACH SLAB											
EAS501	5	54	40'-8"	STR							
EAS502	5	80	25'-3" TO 25'-8"	STR							VARY 8 EA BAR BY 1/2"
EAS503	5	160	7'-7 1/2"	4	3'-4"	11 1/2"	3'-4"				VARY EA BAR BY 2'-0"
EAS601	6	54	41'-0"	STR							
EAS1001	10	112	24'-9" TO 25'-2"	STR							VARY 8 EA BY 3/8"
SLEEPER SLAB											
EAS520	5	28	41'-2"	STR							
EAS521	5	14	26'-4"	STR							
EAS522	5	14	26'-1"	STR							
EAS523	5	28	5'-6"	10	2'-9"	2'-9"					
EAS820	8	238	4'-8"	STR							
ABUTMENT CORBEL											
EAS530	5	80	2'-9"	10	1'-9"	1'-0"					
EAS531	5	80	2'-10"	11	1'-10"	1'-0"	8 1/2"				
EAS532	5	4	40'-8"	STR							

(4)



(10)



(11)

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
3. E - INDICATES EPOXY COATED REBAR.
4. FOR ALL BAR TYPES SHOWN, DIMENSIONS A - E AND LENGTH ARE MEASURED ALONG OUTSIDE OF BAR. R IS MEASURED ALONG INSIDE OF BAR.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
APPROACH SLAB REINFORCEMENT SCHEDULE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

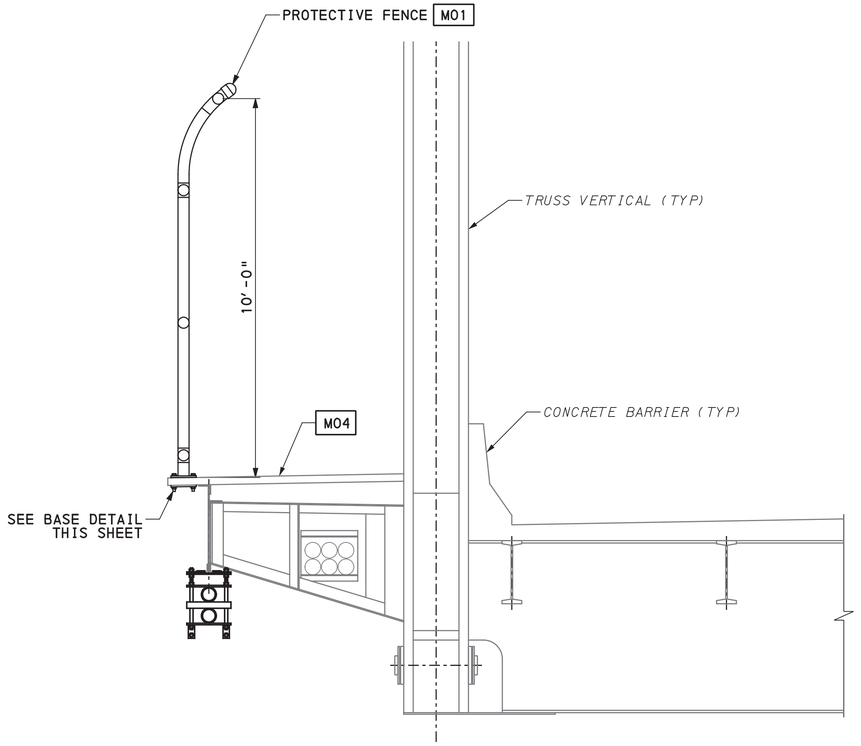
RECOMMENDED
OCTOBER 26, 2022

SHEET 100 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

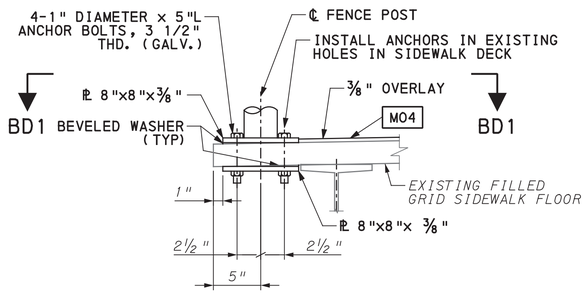
PLOTTED: 10/26/2022 8:07:52 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\fencing details 1.dgn



TYPICAL FENCE SECTION

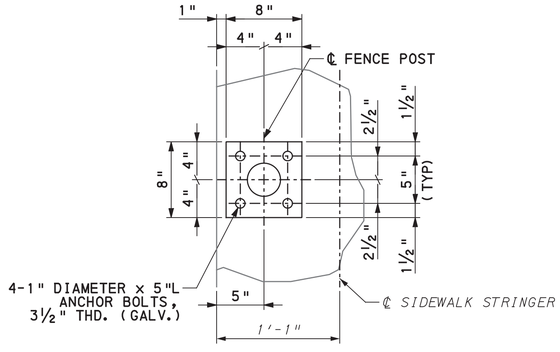
(TRUSS SPANS SHOWN; APPROACH SPANS SIMILAR, EXCEPT SPAN 14)

0 2 4 FEET



BASE DETAIL

0 6 1 FOOT



SECTION BD1-BD1

0 6 1 FOOT

EXISTING FENCE BASE PLATE

EXISTING FENCE BASE PLATE UNDERSIDE

TYPICAL EXCEPT SPAN 14

EXISTING FENCE ANCHORAGE

REUSE EXISTING ANCHOR BOLTS, SPAN 14 ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DECK AND SIDEWALK PLANS, SEE SHEETS 76 TO 79.
3. FOR FENCE DETAILS NOT SHOWN, SEE BC-701M.
4. FOR NOTES REGARDING GATE DETAILS AND LOCATIONS IN FENCE, SEE SHEET 78.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

STRUCTURE MOUNTED FENCE DETAILS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

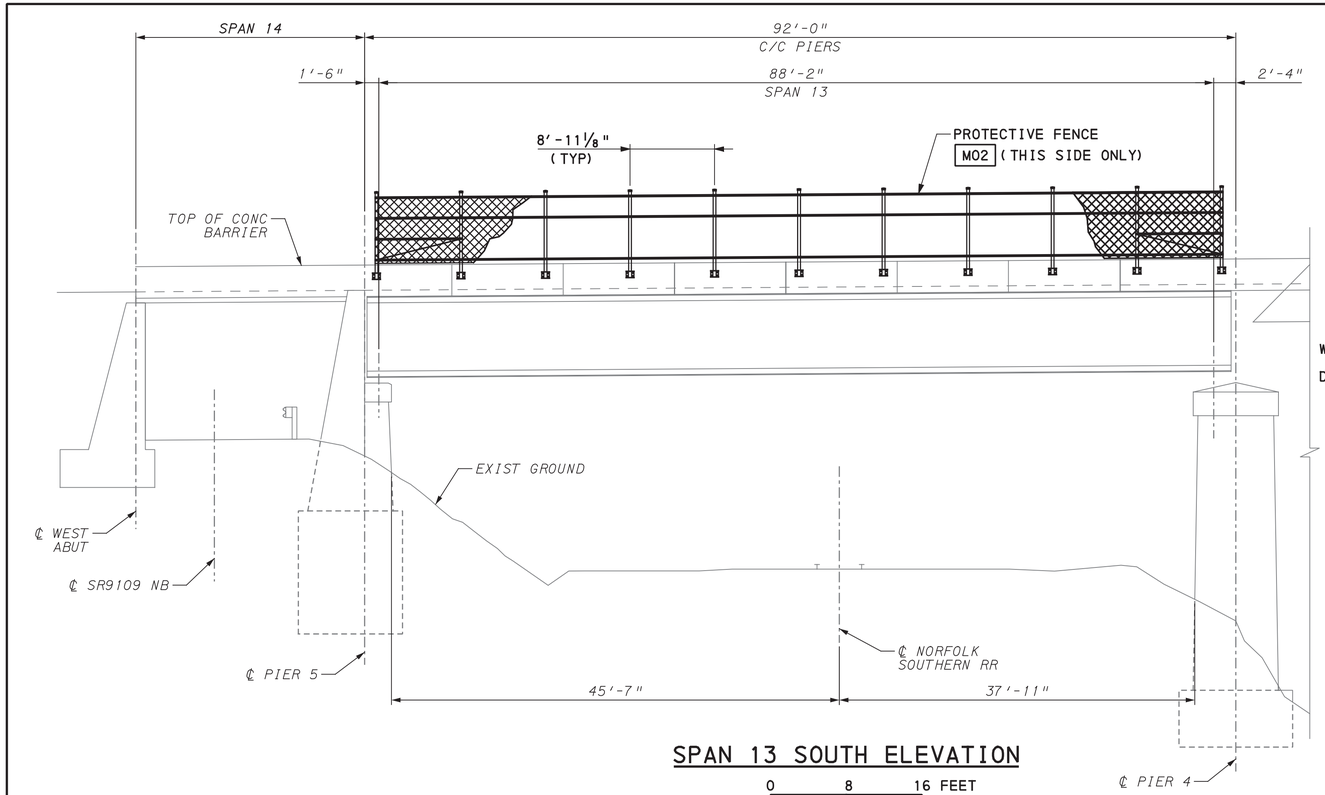
RECOMMENDED

OCTOBER 26, 2022

SHEET 101 OF 124

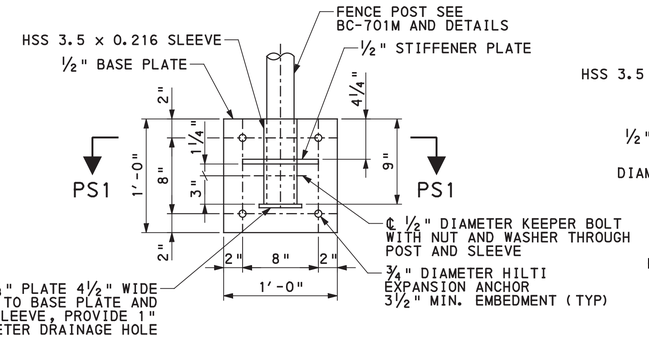
S - 40253

DES: TJH	CKD: TSA	DWG: EDS	CKD: TSA



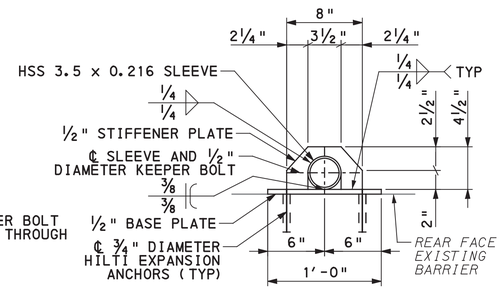
SPAN 13 SOUTH ELEVATION

0 8 16 FEET



PIPE SLEEVE CONNECTION DETAIL

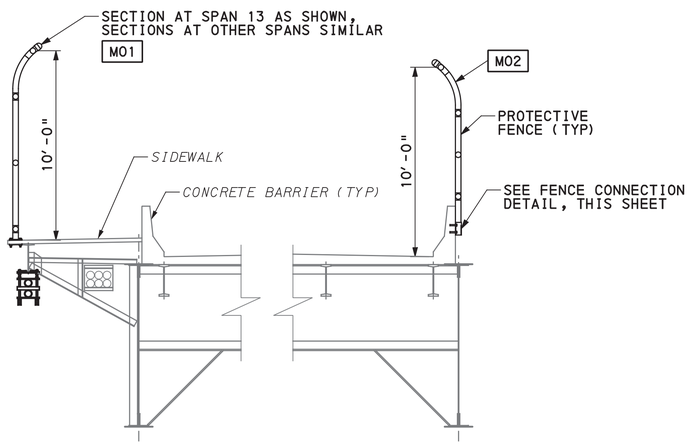
0 6 1 FOOT



SECTION PS1-PS1

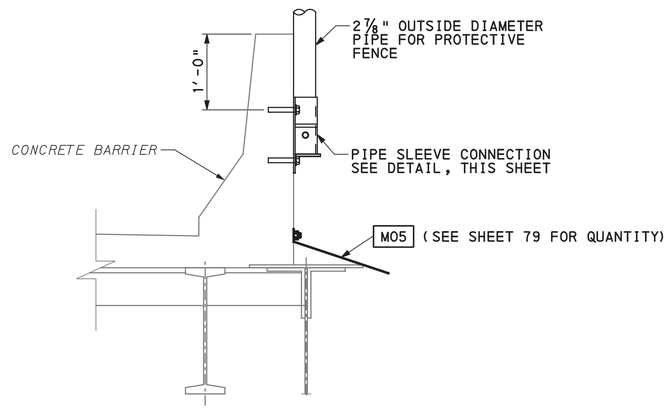
0 6 1 FOOT

EXISTING FENCE CONNECTION



SPAN 13 TYPICAL SECTION

0 2 4 6 FEET



FENCE CONNECTION DETAIL

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DECK AND SIDEWALK PLAN SP 12-14, SEE SHEET 79.
3. FOR DETAILS OF BARRIER FLASHING, SEE SHEET 30.
4. FOR DETAILS OF SIDEWALK FENCE, SEE SHEET 101.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

STRUCTURE MOUNTED FENCE DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 102 OF 124

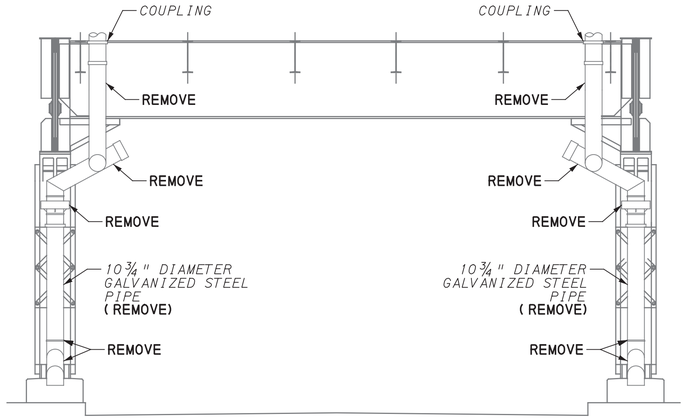
S - 40253

DES: TJH	CKD: TSA	DWG: EDS	CKD: TSA

PLOTTED: 10/26/2022 8:08:08 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\fencing details 2.dgn

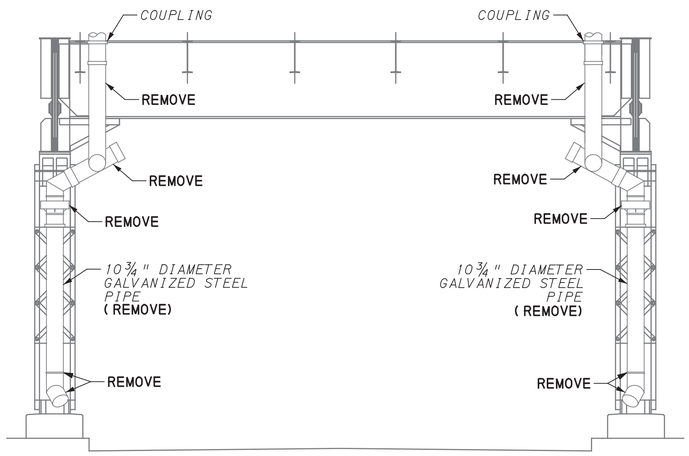
PLOTTED: 10/26/2022 8:08:15 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\drainage - bents 1 & 2.dgn



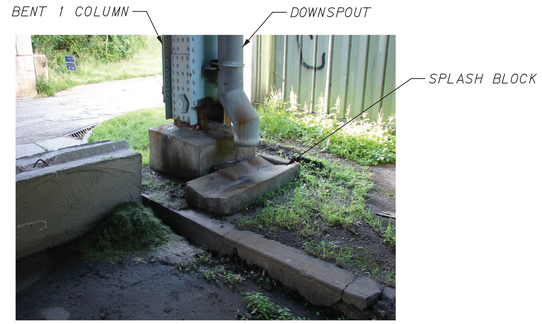
BENT 1 ELEVATION (REMOVAL)

WEST FACE LOOKING EAST



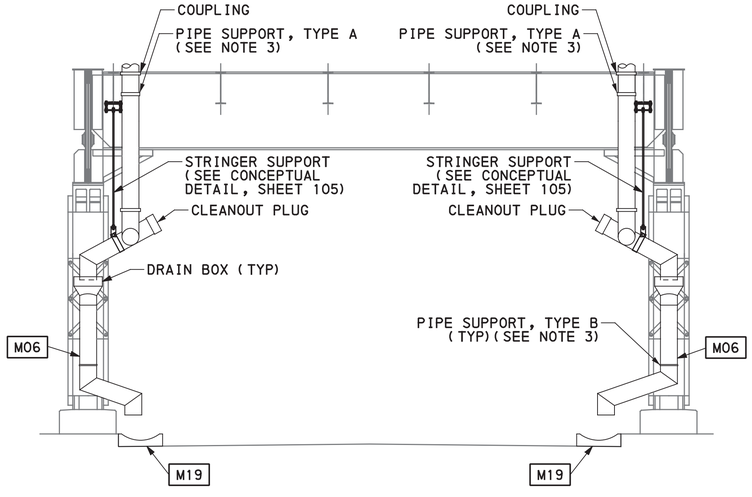
BENT 2 - ELEVATION (REMOVAL)

WEST FACE LOOKING EAST



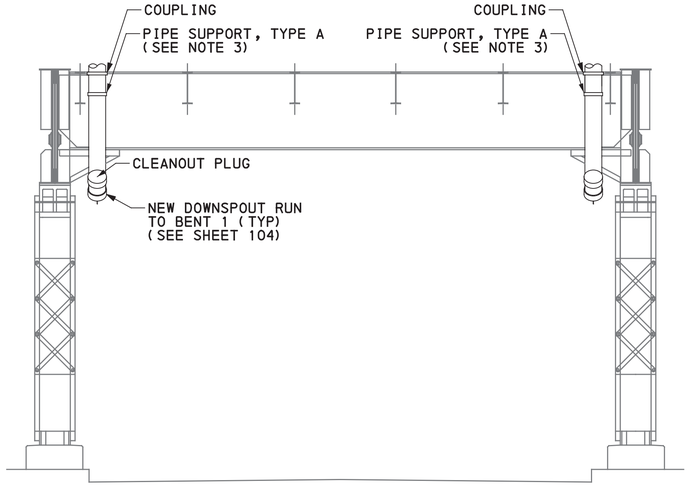
BENT 1 DOWNSPOUT DISCHARGE

SOUTH COLUMN SHOWN; NORTH COLUMN SIMILAR
REPRESENTATIVE CONDITIONS



BENT 1 ELEVATION (PROPOSED)

WEST FACE LOOKING EAST



BENT 2 - ELEVATION (PROPOSED)

WEST FACE LOOKING EAST

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
M06	REPLACE DOWNSPOUTING	N/A	LF	30
M14	INSTALL NEW DOWNSPOUT RUN	N/A	LF	150
M19	INSTALL SPLASH BLOCK	107	EA	2

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

BENTS 1 & 2 DRAINAGE DETAILS 1

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

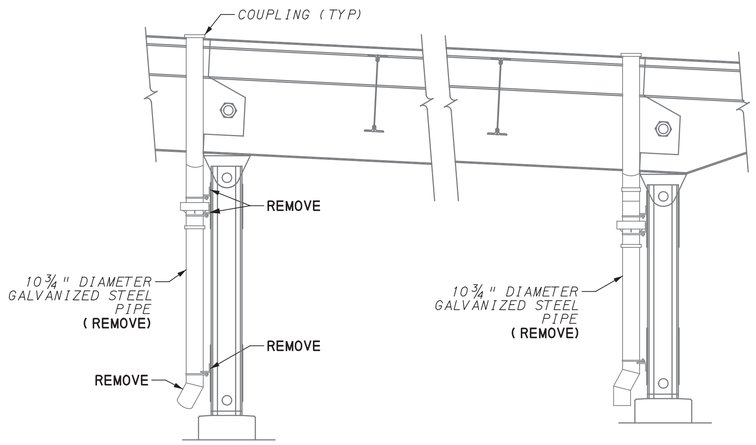
RECOMMENDED

OCTOBER 26, 2022

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

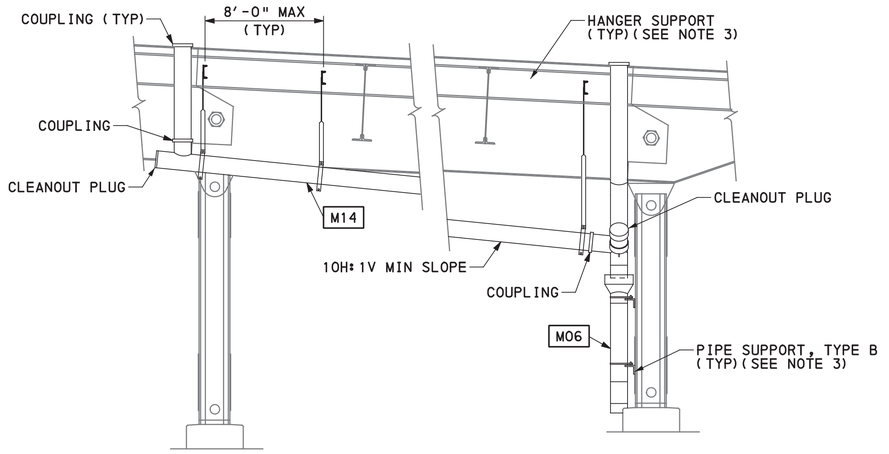
PLOTTED: 10/26/2022 8:08:24 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\drainage - bents 1 & 2 (2).dgn



BENT 2 - END VIEW
SOUTH FACE LOOKING NORTH

BENT 1 - END VIEW
SOUTH FACE LOOKING NORTH

REMOVAL
NORTH GIRDER SHOWN; SOUTH GIRDER OPPOSITE HAND



BENT 2 - END VIEW
SOUTH FACE LOOKING NORTH

BENT 1 - END VIEW
SOUTH FACE LOOKING NORTH

PROPOSED
NORTH GIRDER SHOWN; SOUTH GIRDER OPPOSITE HAND

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

BENTS 1 & 2 DRAINAGE DETAILS 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

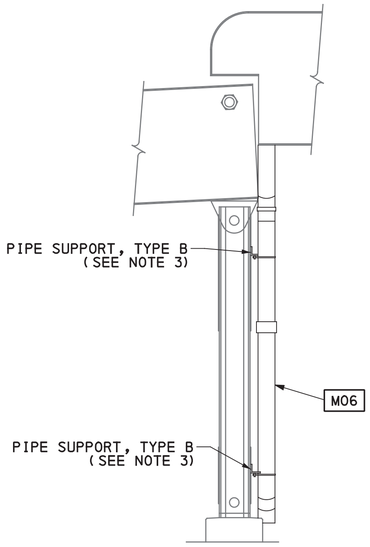
RECOMMENDED
OCTOBER 26, 2022

SHEET 104 OF 124

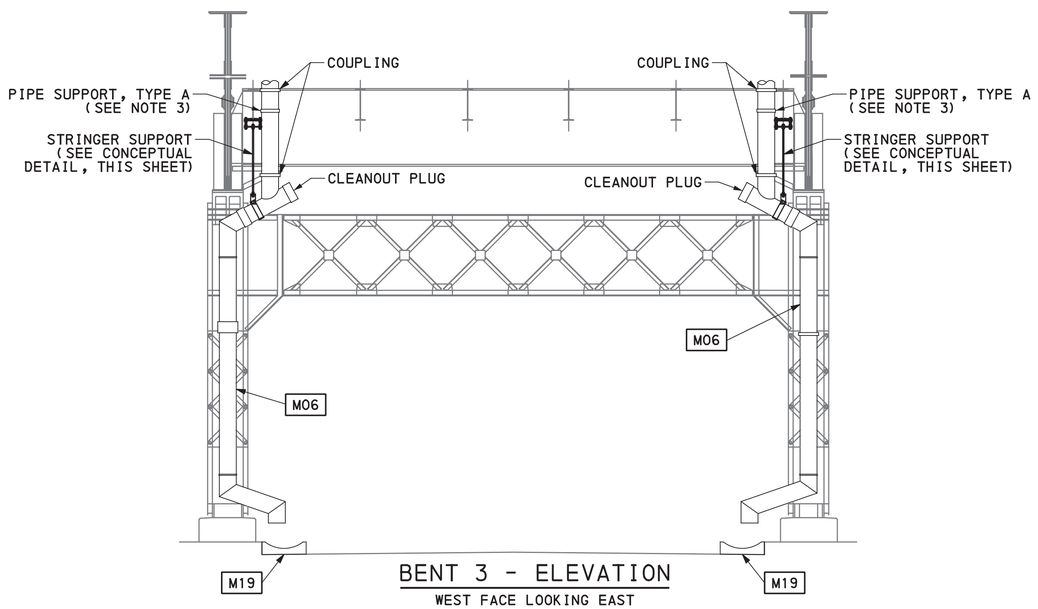
S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

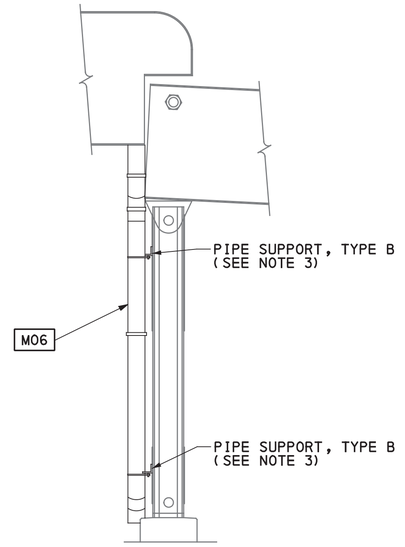
PLOTTED: 10/26/2022 8:08:26 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\drainage - bents 3 & 4A.dgn



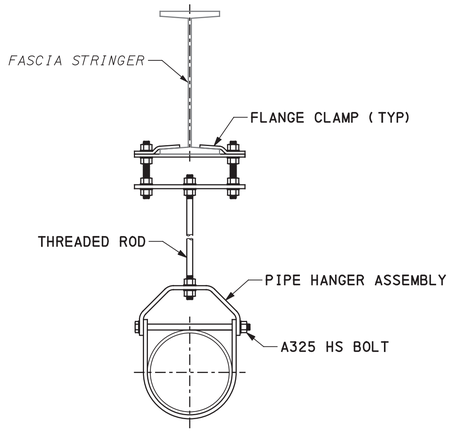
BENT 3 - END VIEW
NORTH FACE LOOKING SOUTH



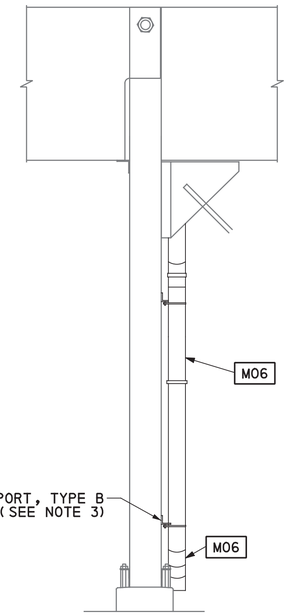
BENT 3 - ELEVATION
WEST FACE LOOKING EAST



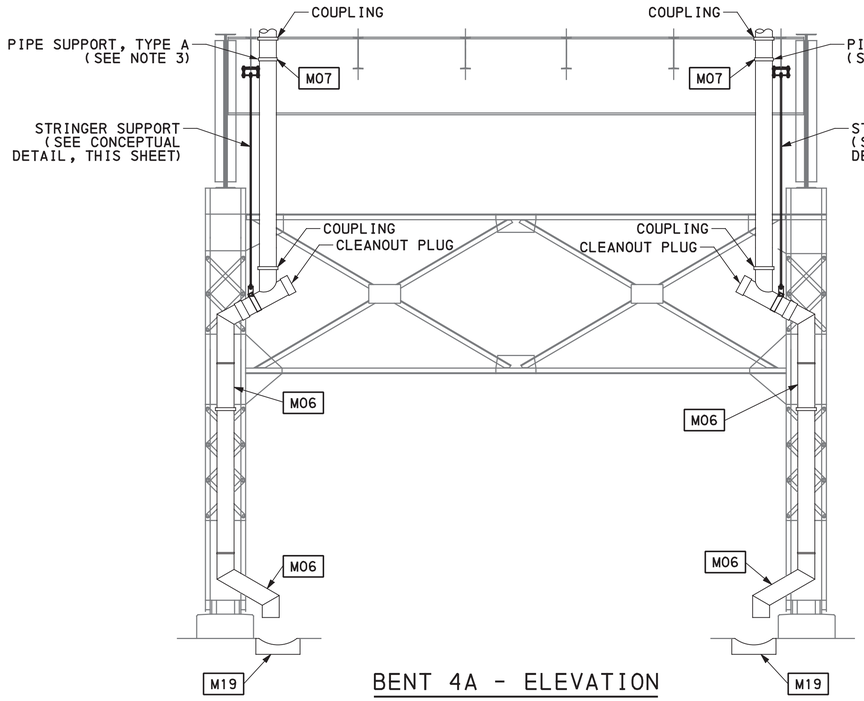
BENT 3 - END VIEW
SOUTH FACE LOOKING NORTH



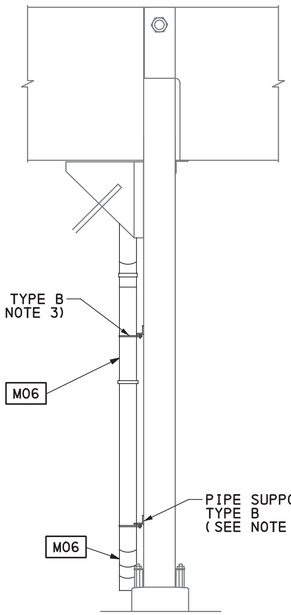
CONCEPTUAL STRINGER SUPPORT DETAIL
NOT TO SCALE



BENT 4A - END VIEW
SOUTH FACE LOOKING NORTH



BENT 4A - ELEVATION
EAST FACE LOOKING WEST



BENT 4A - END VIEW
NORTH FACE LOOKING SOUTH

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
M06	REPLACE DOWNSPOUTING	N/A	LF	120
M19	INSTALL SPLASH BLOCK	107	EA	4

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENTS 3 & 4A DRAINAGE DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

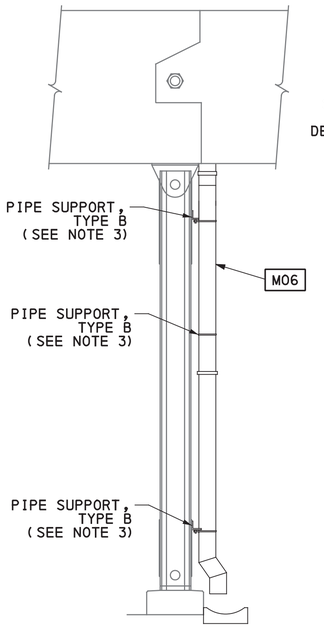
RECOMMENDED
OCTOBER 26, 2022

SHEET 105 OF 124

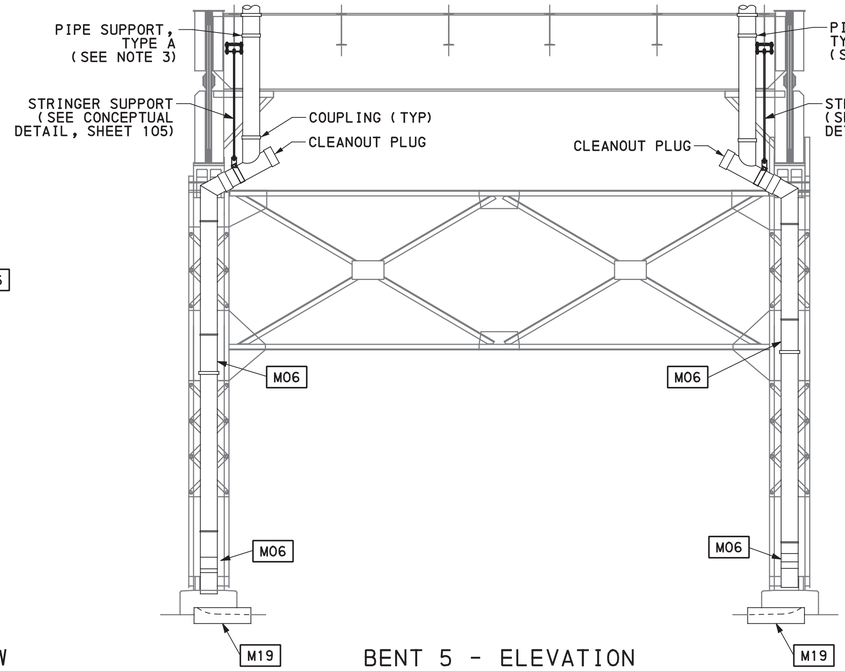
S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

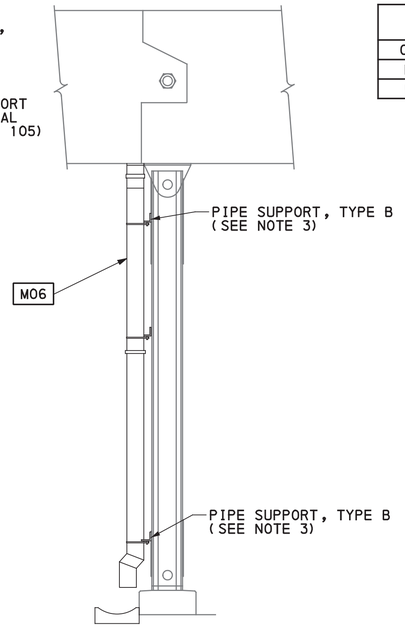
PLOTTED: 10/26/2022 8:08:29 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\drainage - bents 5 & 6.dgn



BENT 5 - END VIEW
SOUTH FACE LOOKING NORTH



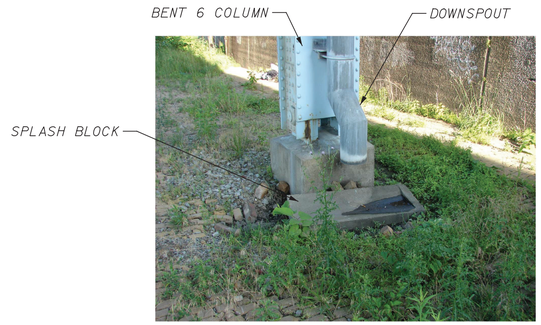
BENT 5 - ELEVATION
EAST FACE LOOKING WEST



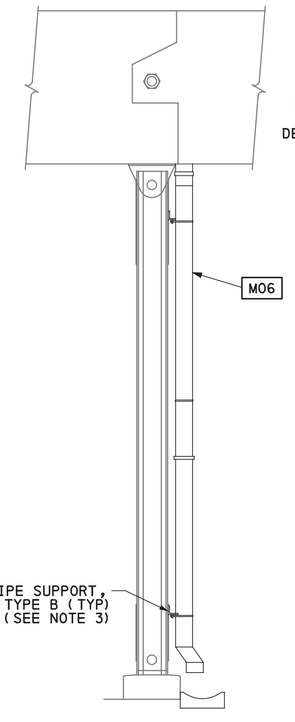
BENT 5 - END VIEW
NORTH FACE LOOKING SOUTH

REPAIR DESCRIPTION AND QUANTITIES

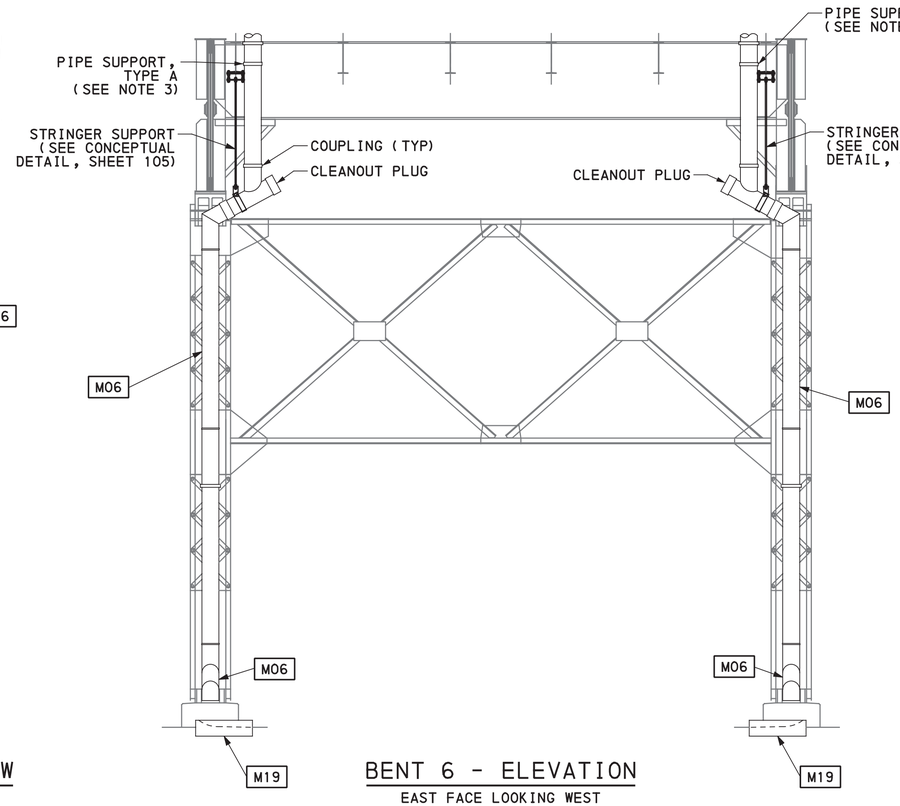
CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
M06	REPLACE DOWNSPOUTING	N/A	LF	120
M19	INSTALL SPLASH BLOCK	107	EA	4



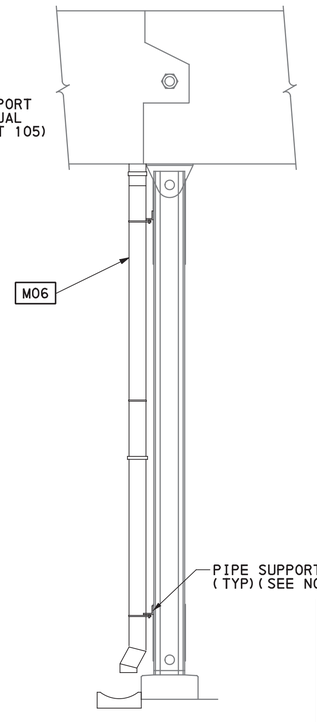
BENT 6 DOWNSPOUT DISCHARGE
NORTH COLUMN SHOWN; SOUTH COLUMN SIMILAR REPRESENTATIVE CONDITIONS



BENT 6 - END VIEW
SOUTH FACE LOOKING SOUTH



BENT 6 - ELEVATION
EAST FACE LOOKING WEST



BENT 6 - END VIEW
NORTH FACE LOOKING NORTH

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.
4. FOR PLAN VIEW OF SPLASH BLOCK, SEE SHEET 107.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

BENTS 5 & 6 DRAINAGE DETAILS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

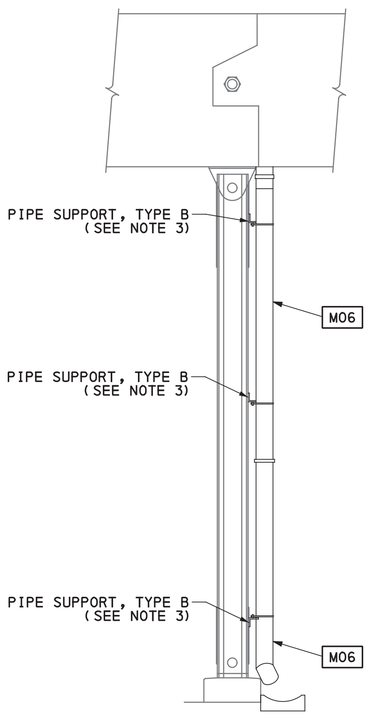
RECOMMENDED
OCTOBER 26, 2022

SHEET 106 OF 124

S - 40253

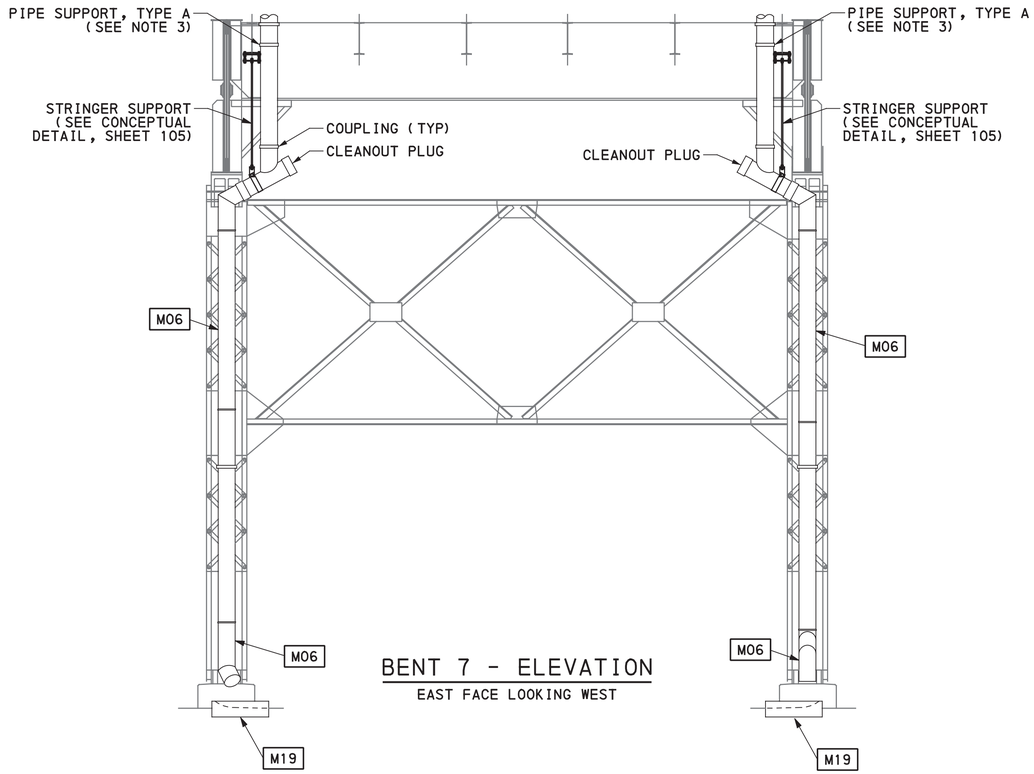
DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

PLOTTED: 10/26/2022 8:08:33 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\drainage - bent 7.dgn



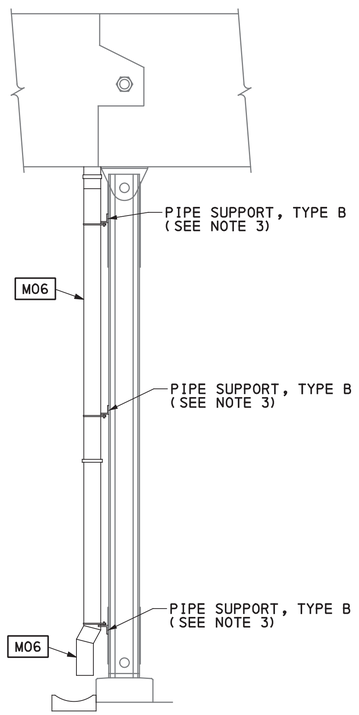
BENT 7 - END VIEW

SOUTH FACE LOOKING SOUTH



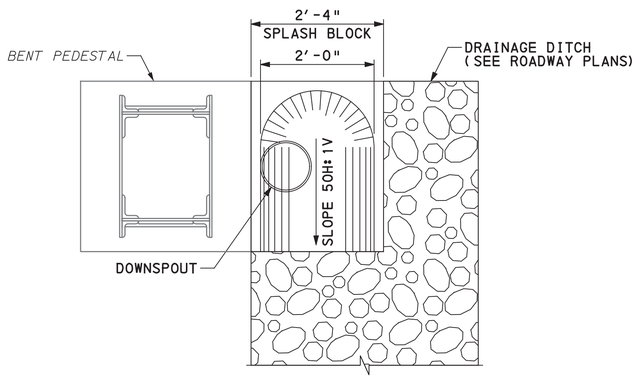
BENT 7 - ELEVATION

EAST FACE LOOKING WEST



BENT 7 - END VIEW

NORTH FACE LOOKING NORTH



SPLASH BLOCK PLAN VIEW

0 1 2 FEET

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
M06	REPLACE DOWNSPOUTING	N/A	LF	70
M19	INSTALL SPLASH BLOCK	107	EA	2

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

BENT 7 DRAINAGE DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

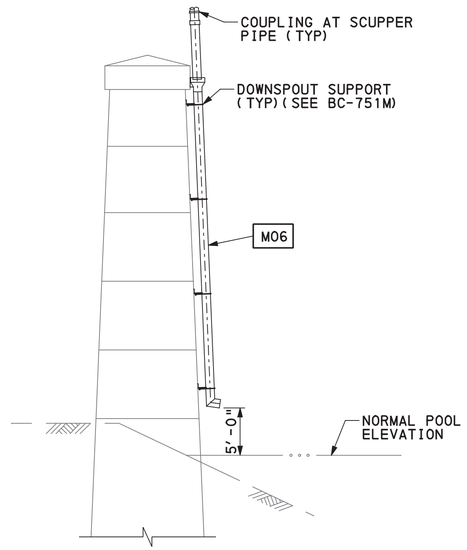
OCTOBER 26, 2022

SHEET 107 OF 124

S - 40253

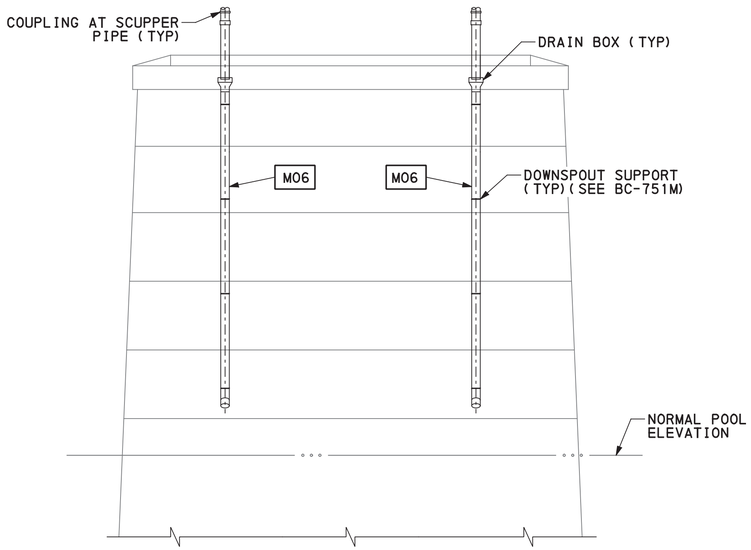
DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

PLOTTED: 10/26/2022 8:08:36 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\drainage - piers 1 & 2.dgn



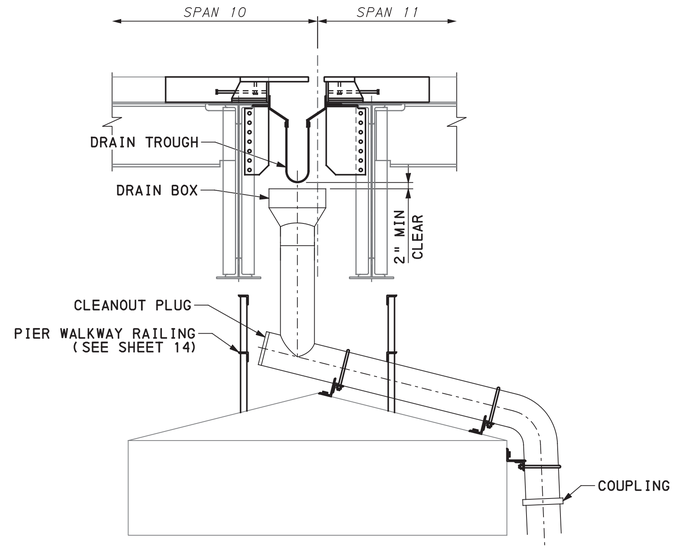
PIER 1 - NORTH FACE

NOT TO SCALE



PIER 1 - WEST FACE

NOT TO SCALE



DETAIL 1

NOT TO SCALE

PIER 2 - NORTH FACE

NOT TO SCALE

PIER 2 - WEST FACE

NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING PIPE SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR PIER REPAIR DETAILS, SEE SHEETS 13 AND 14.
4. FOR TOOTH JOINT DETAILS AT PIER 2, SEE SHEETS 87 TO 88.
5. FOR DRAINAGE TROUGH DETAILS, SEE SHEET 88.
6. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
M06	REPLACE DOWNSPOUTING	N/A	LF	200

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
PIERS 1 & 2 DRAINAGE DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

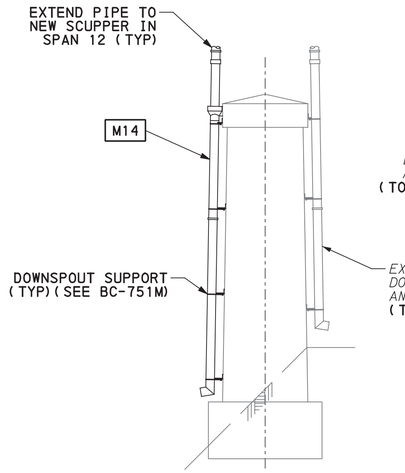
OCTOBER 26, 2022

SHEET 108 OF 124

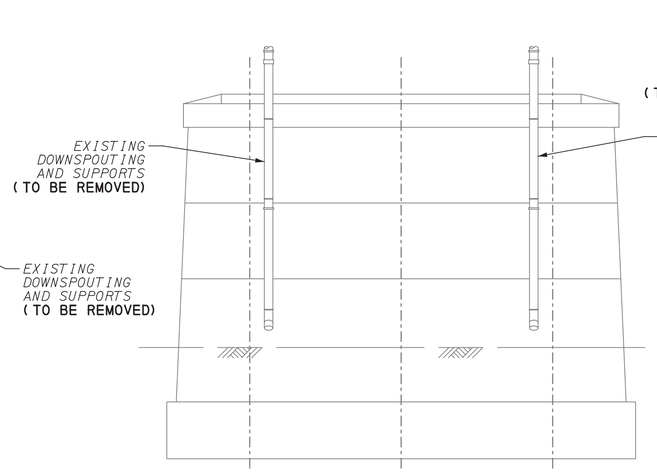
S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

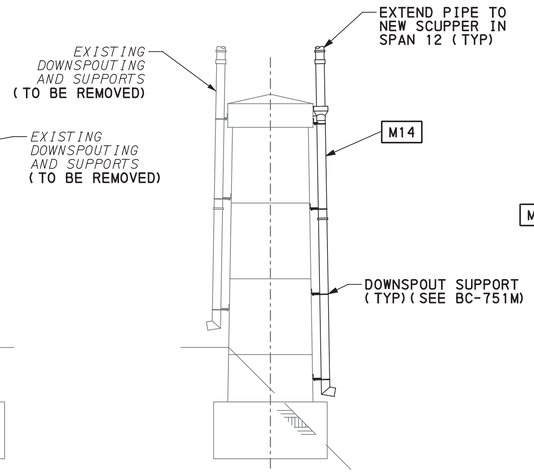
PLOTTED: 10/26/2022 8:08:41 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\drainage - piers 4 & 5.dgn



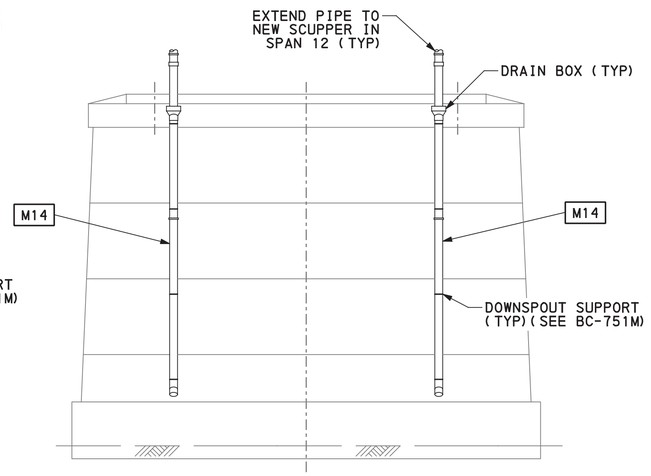
PIER 4 - NORTH FACE
NOT TO SCALE



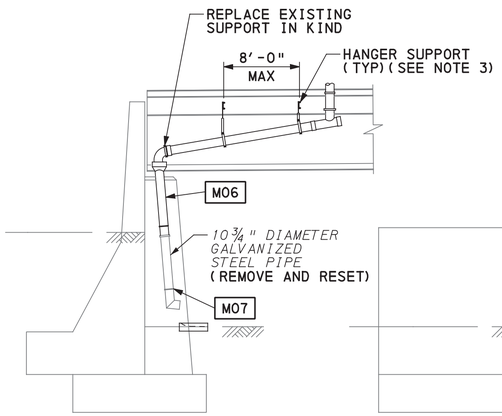
PIER 4 - WEST FACE
NOT TO SCALE



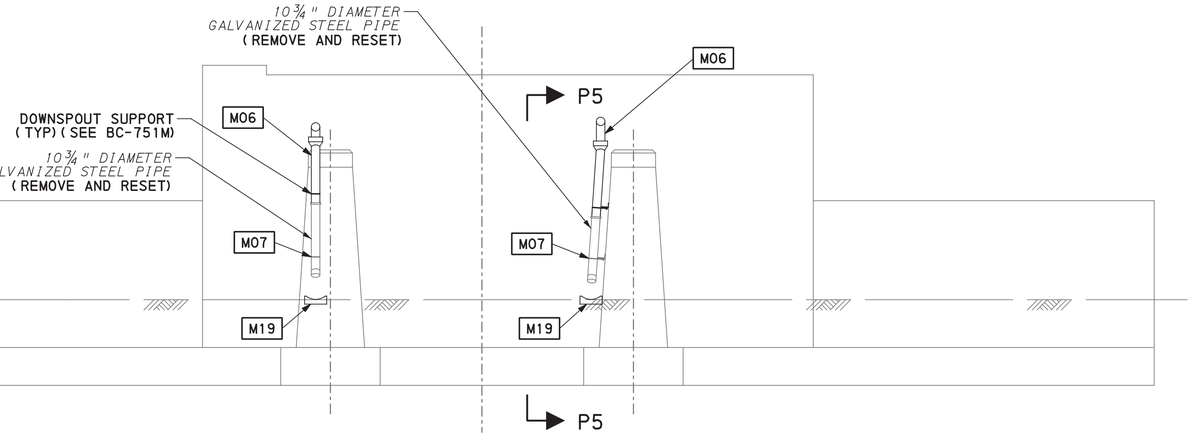
PIER 4 - SOUTH FACE
NOT TO SCALE



PIER 4 - EAST FACE
NOT TO SCALE



SECTION P5-P5
NOT TO SCALE



PIER 5 - EAST FACE
NOT TO SCALE

REPAIR DESCRIPTION AND QUANTITIES

CODE	DESCRIPTION	SHEET	UNIT	QUANTITY
M06	REPLACE DOWNSPOUTING	N/A	LF	30
M07	REPLACE DOWNSPOUTING SUPPORT	N/A	EA	2
M14	INSTALL NEW DOWNSPOUT RUN	N/A	LF	80
M19	INSTALL Ssplash BLOCK	107	EA	2

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR PIER REPAIR DETAILS, SEE SHEETS 16 AND 17.
3. FOR DOWNSPOUT HANGER SUPPORT DETAILS, SEE SHEET 110.
4. REMOVAL OF EXISTING DOWNSPOUTING FROM WEST FACE OF PIER 4 IS INCIDENTAL TO REPAIR M14.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
PIERS 4 & 5 DRAINAGE DETAILS

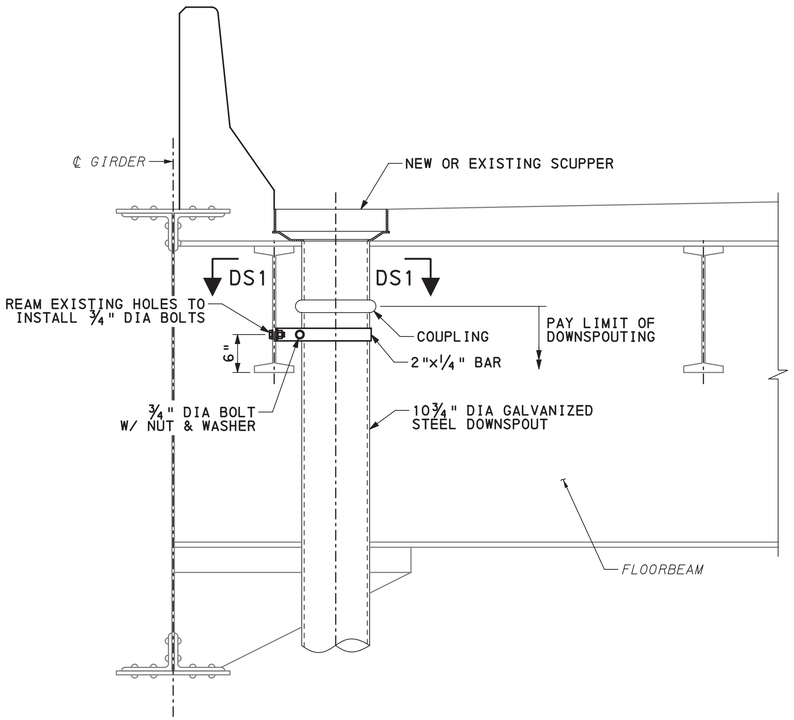
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 109 OF 124
S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

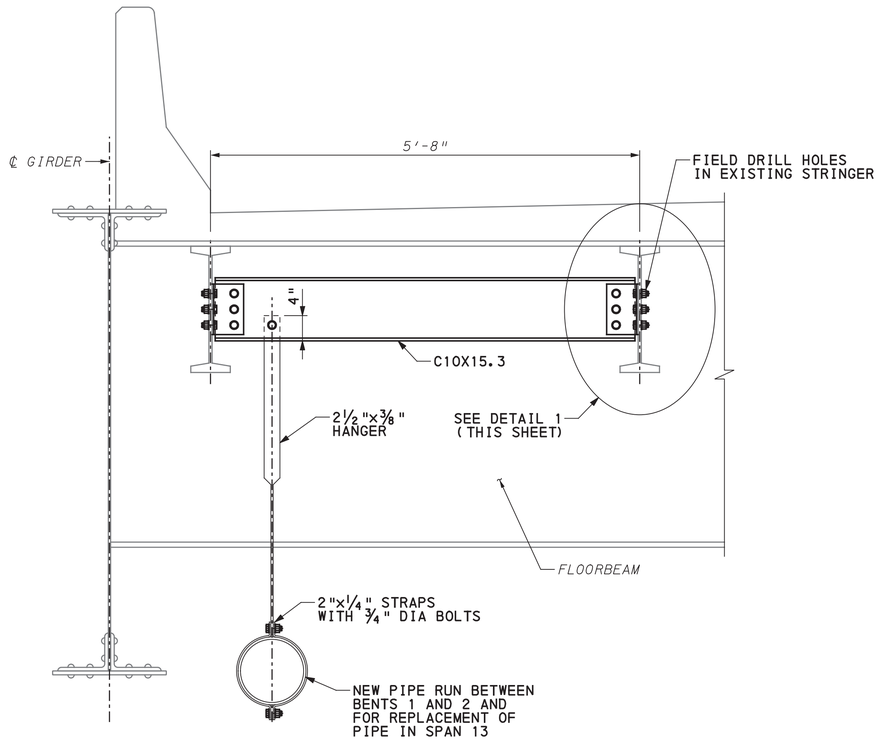
PLOTTED: 10/26/2022 8:08:43 AM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\drainage - support details 1.dgn



DOWNSPOUT SUPPORT, TYPE A

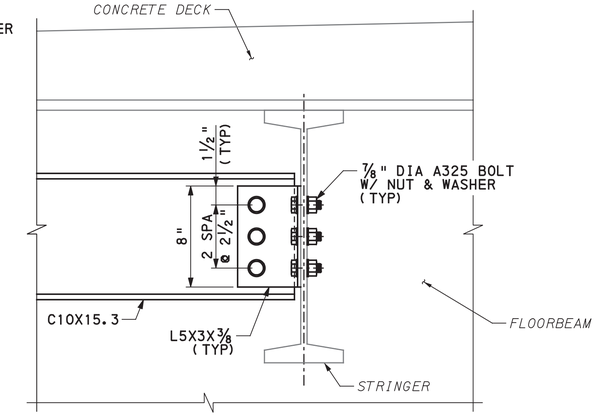
GIRDER SECTION SHOWN; TRUSS SECTION SIMILAR

0 1 2 FEET



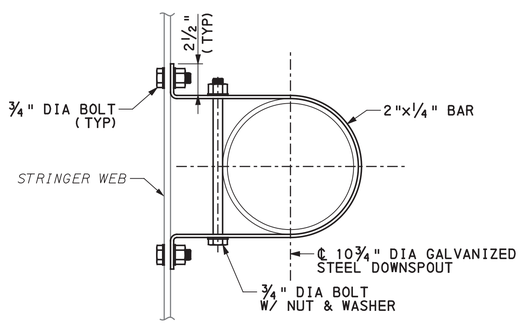
DOWNSPOUT HANGER SUPPORT

0 1 2 FEET



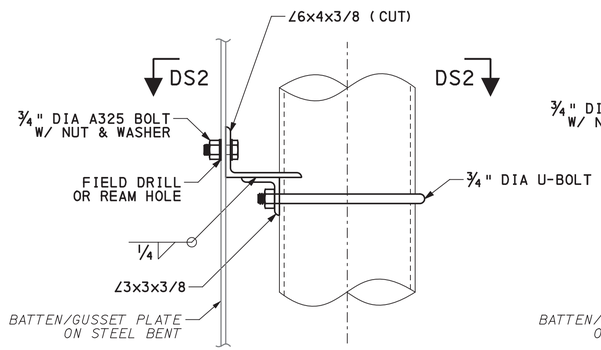
DETAIL 1

0 6 1 FOOT



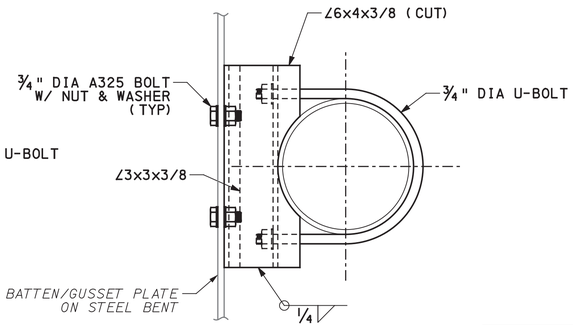
SECTION DS1-DS1

NOT TO SCALE



DOWNSPOUT SUPPORT, TYPE B

NOT TO SCALE



SECTION DS2-DS2

NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR ADDITIONAL DOWNSPOUT DETAILS NOT SHOWN, SEE BC-751M.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

DOWNSPOUT SUPPORT DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

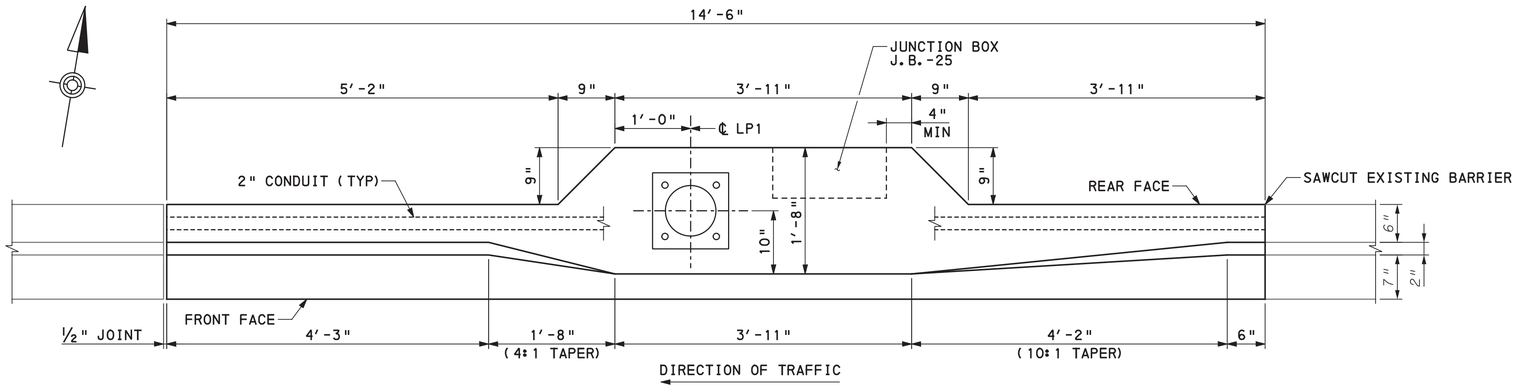
RECOMMENDED
OCTOBER 26, 2022

SHEET 110 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

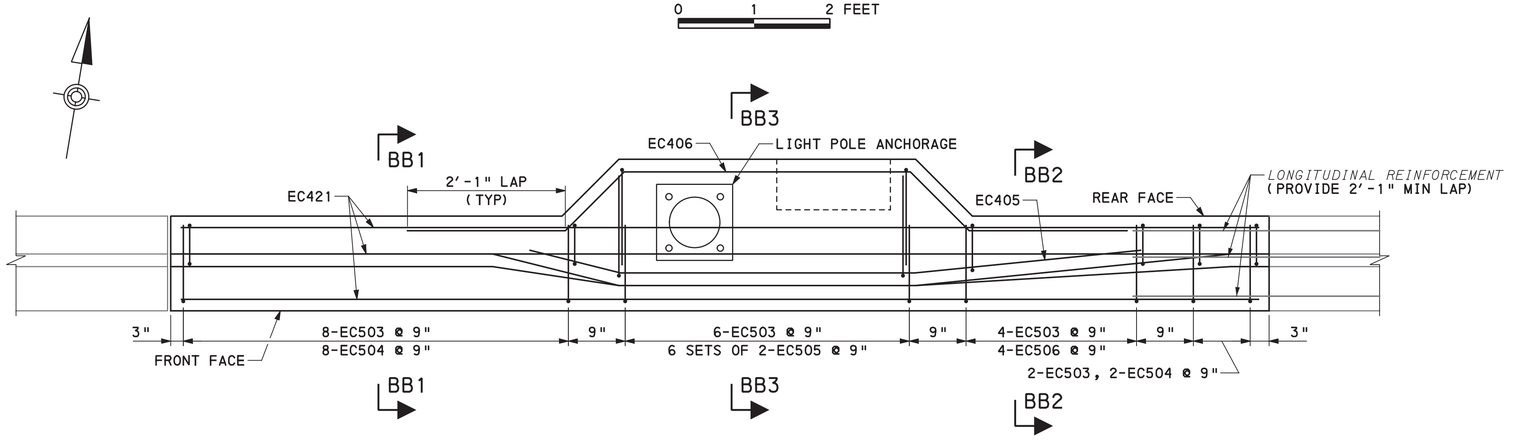
PLOTTED: 10/26/2022 8:08:45 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP1.dgn



LP1 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

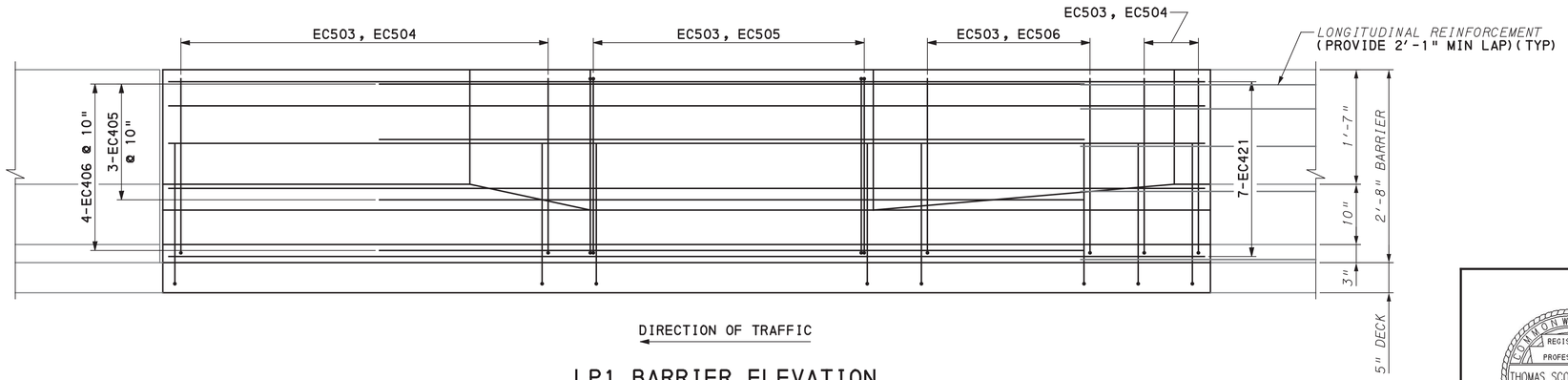
0 1 2 FEET



LP1 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP1 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

LIGHT POLE BLISTER - LP1

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

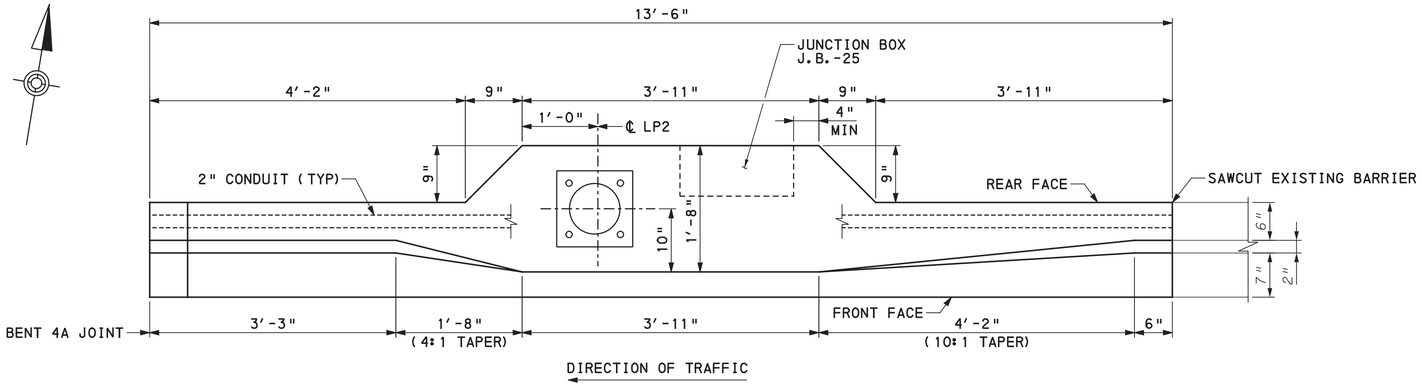
OCTOBER 26, 2022

SHEET 111 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

PLOTTED: 10/26/2022 8:08:49 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP2.dgn



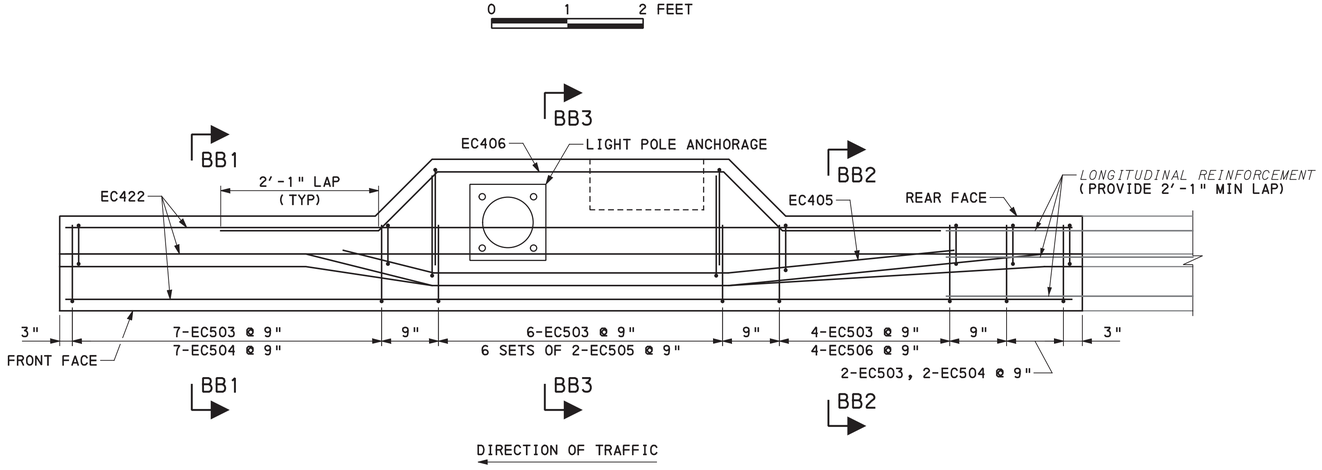
LP2 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

0 1 2 FEET

LIGHT POLE BLISTER - LP2

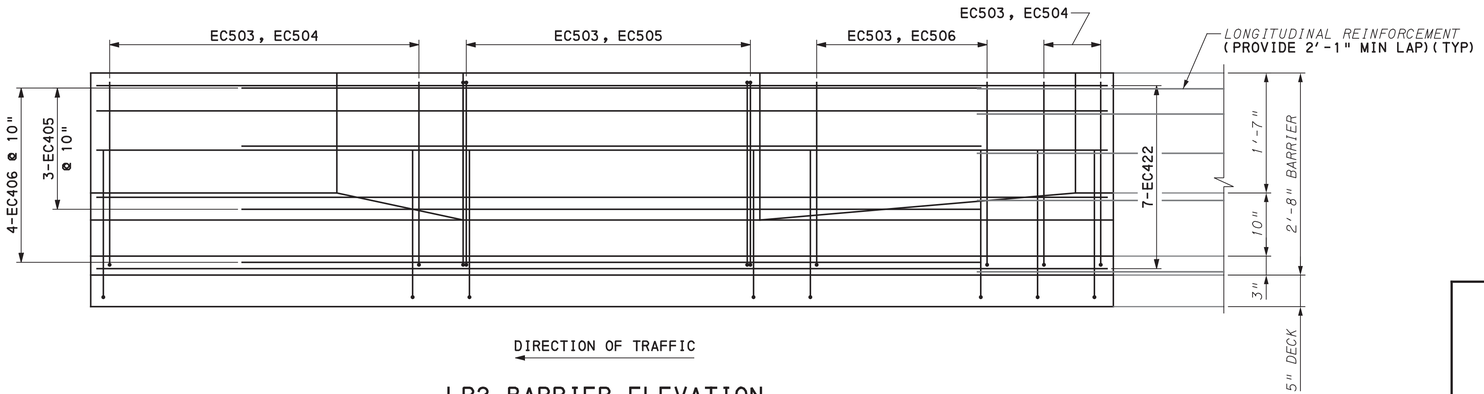
REPRESENTATIVE PHOTO



LP2 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP2 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

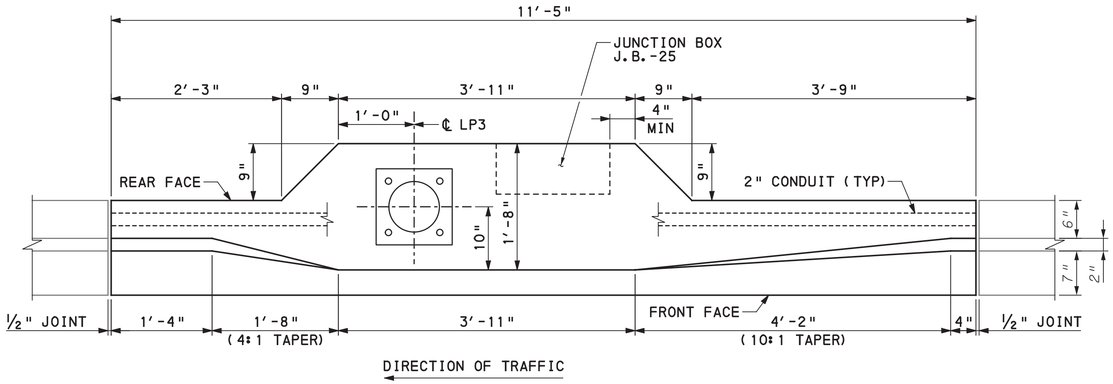
OCTOBER 26, 2022

SHEET 112 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

PLOTTED: 10/26/2022 8:08:57 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP3.dgn



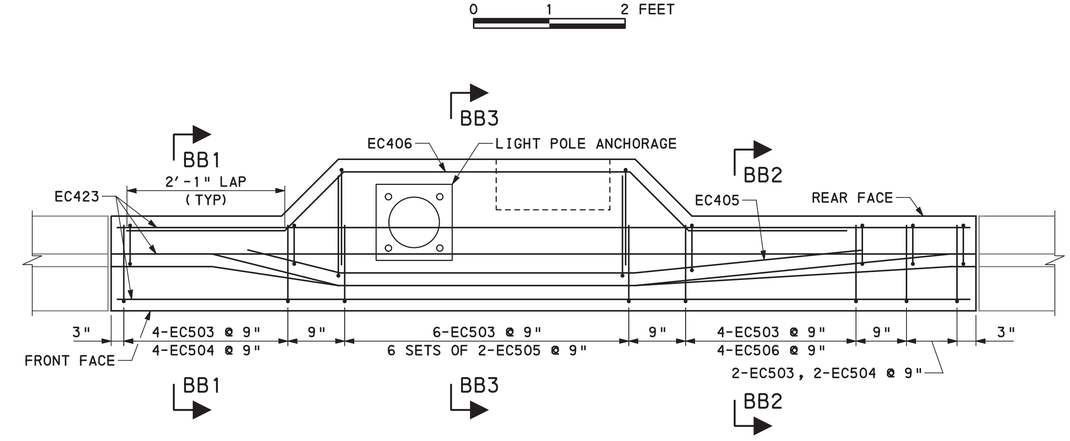
LP3 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

0 1 2 FEET

LIGHT POLE BLISTER - LP3

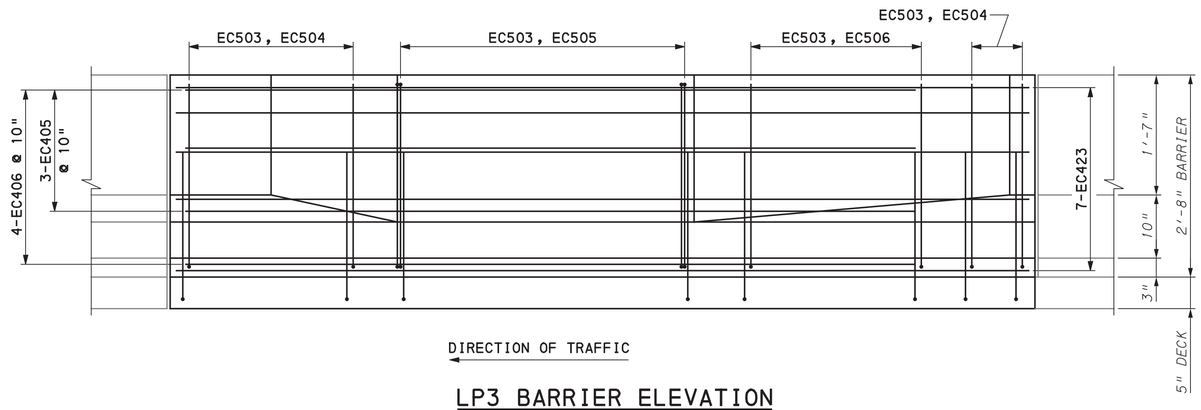
REPRESENTATIVE PHOTO



LP3 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP3 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP3

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

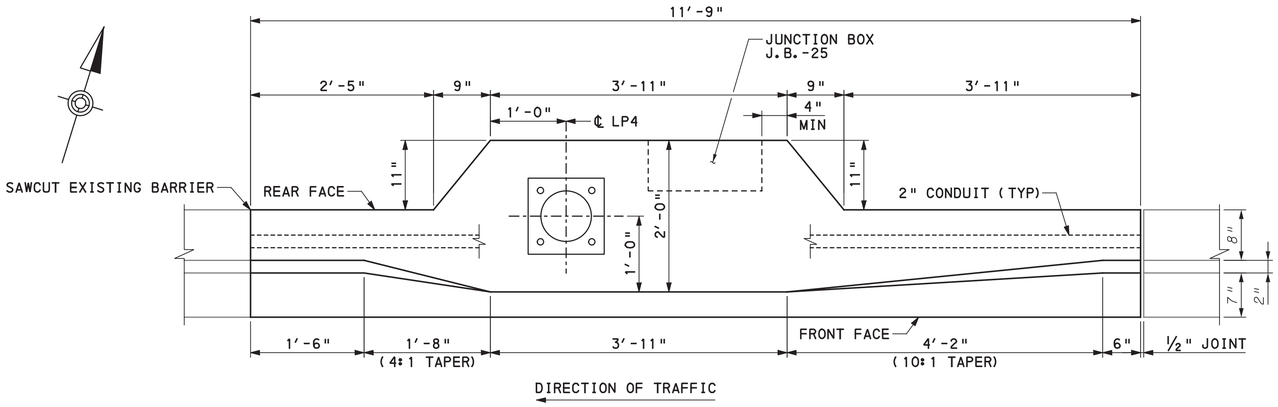
OCTOBER 26, 2022

SHEET 113 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

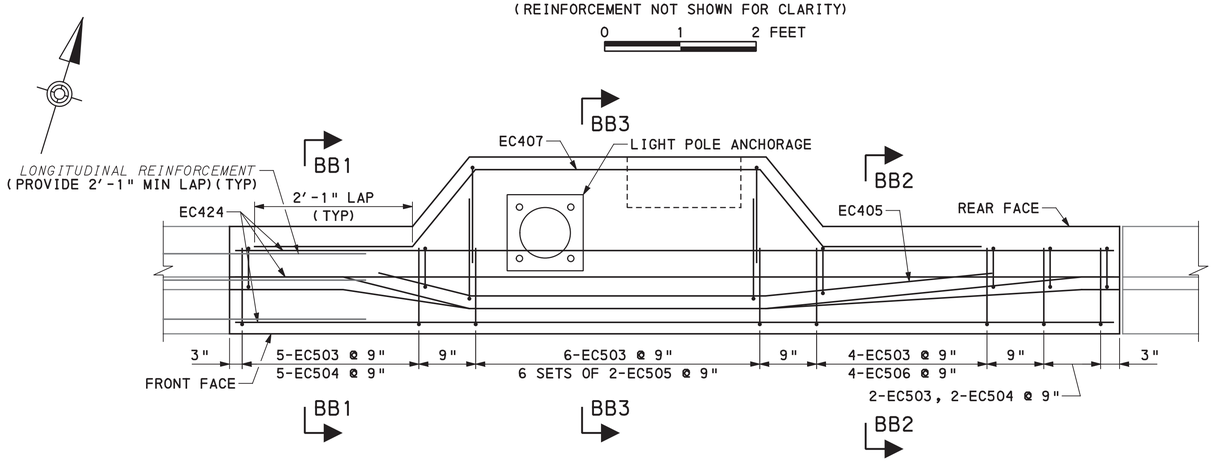
PLOTTED: 10/26/2022 8:09:05 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP4.dgn



LP4 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

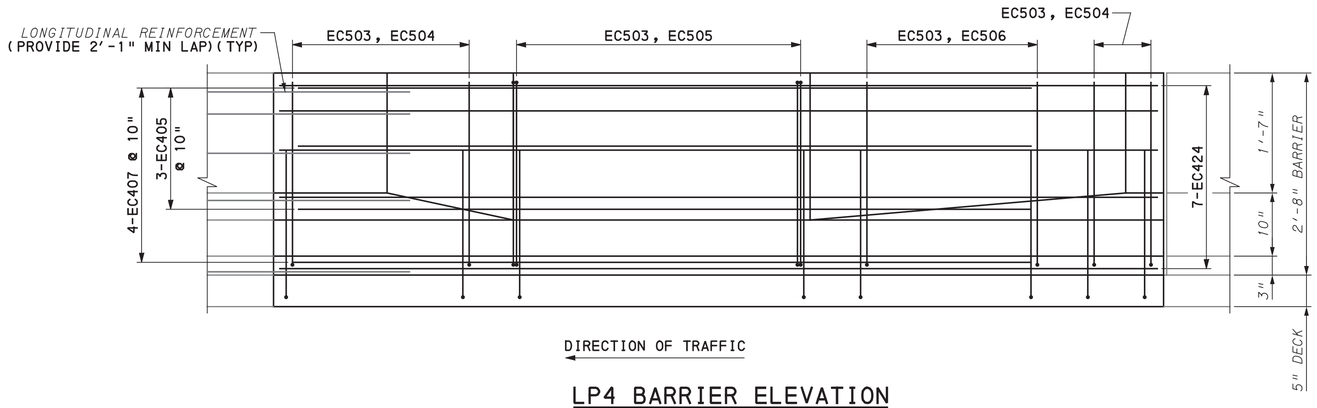
0 1 2 FEET



LP4 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP4 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

LIGHT POLE BLISTER - LP4

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP4

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

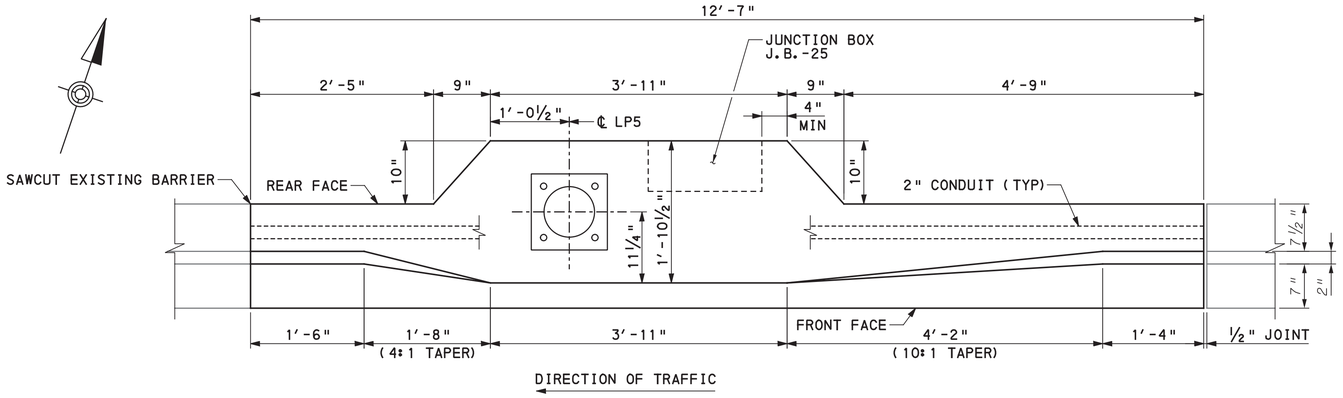
OCTOBER 26, 2022

SHEET 114 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

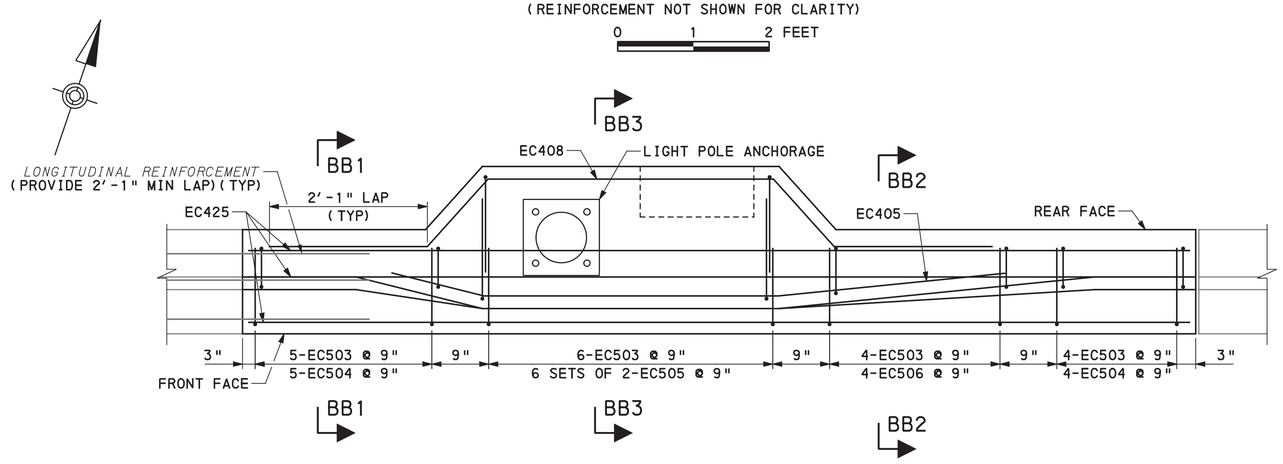
PLOTTED: 10/26/2022 8:09:12 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP5.dgn



LP5 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

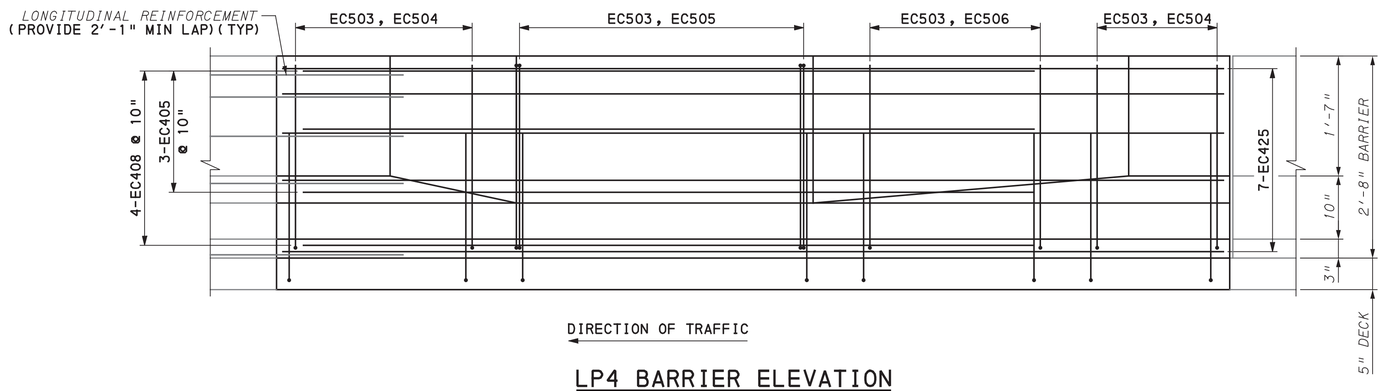
0 1 2 FEET



LP5 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP4 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

LIGHT POLE BLISTER - LP5

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP5

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

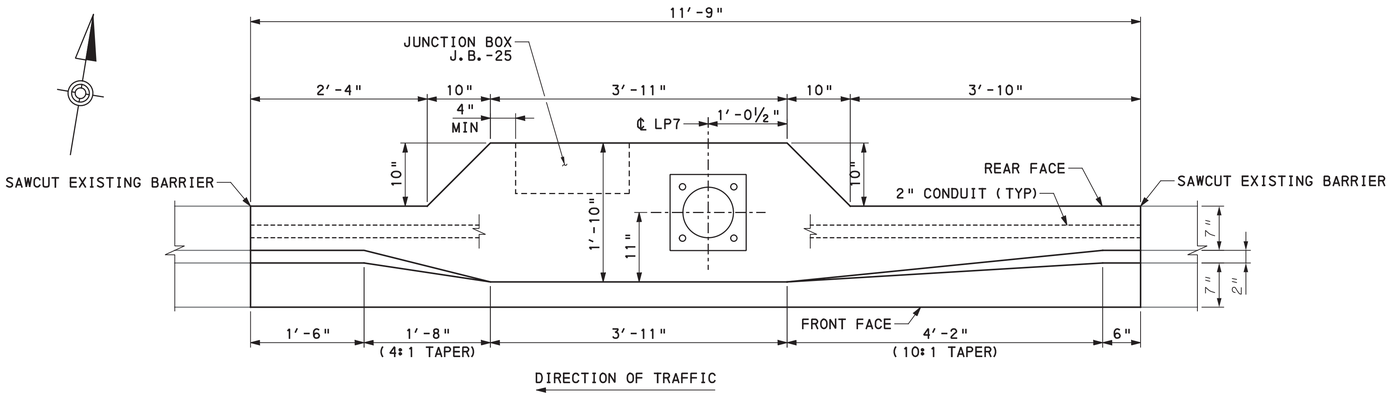
OCTOBER 26, 2022

SHEET 115 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

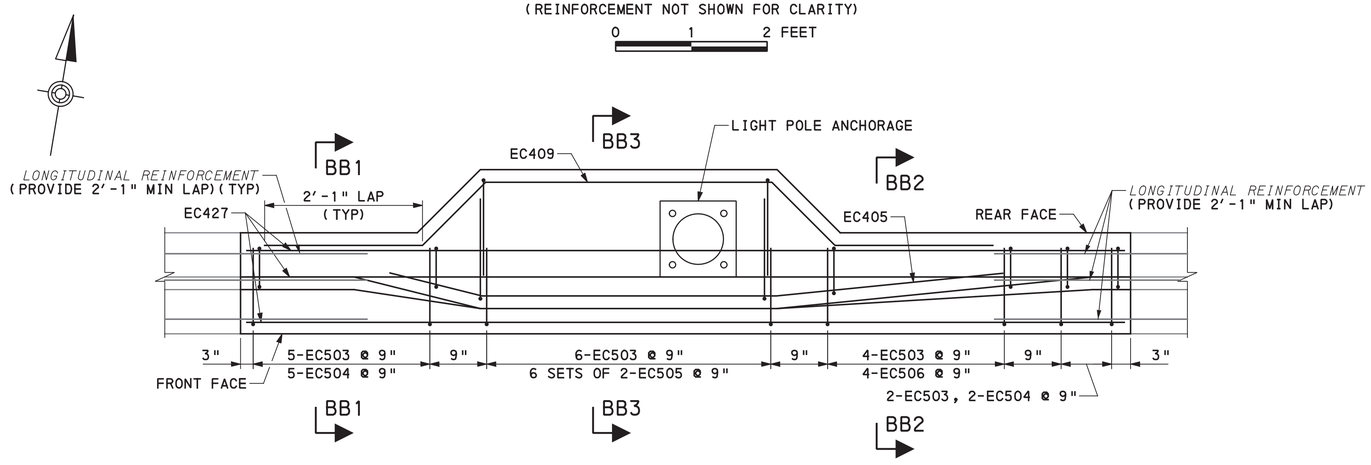
PLOTTED: 10/26/2022 8:09:17 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP7.dgn



LP7 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

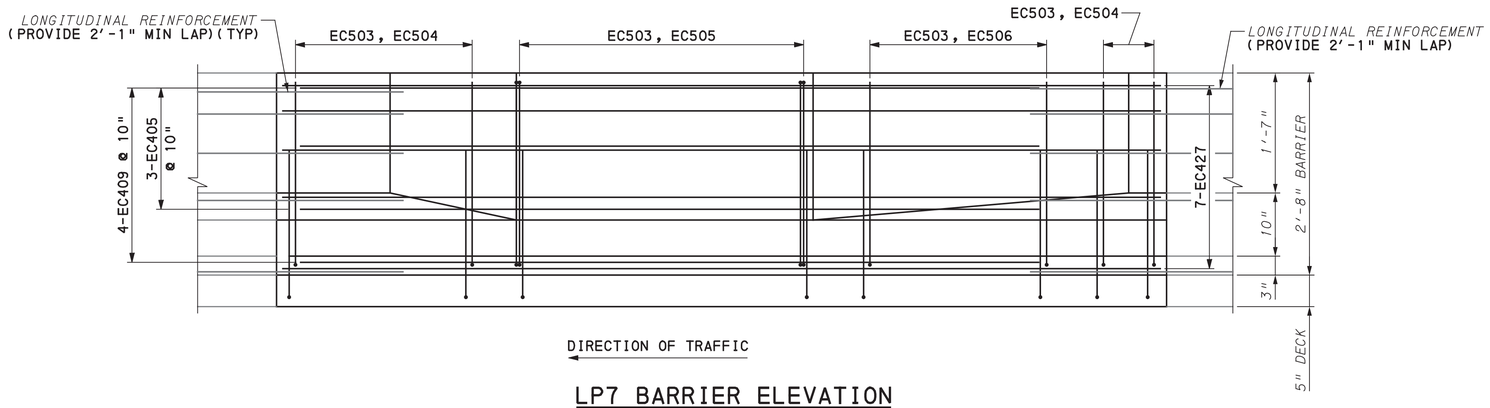
0 1 2 FEET



LP7 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP7 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

LIGHT POLE BLISTER - LP7

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP7

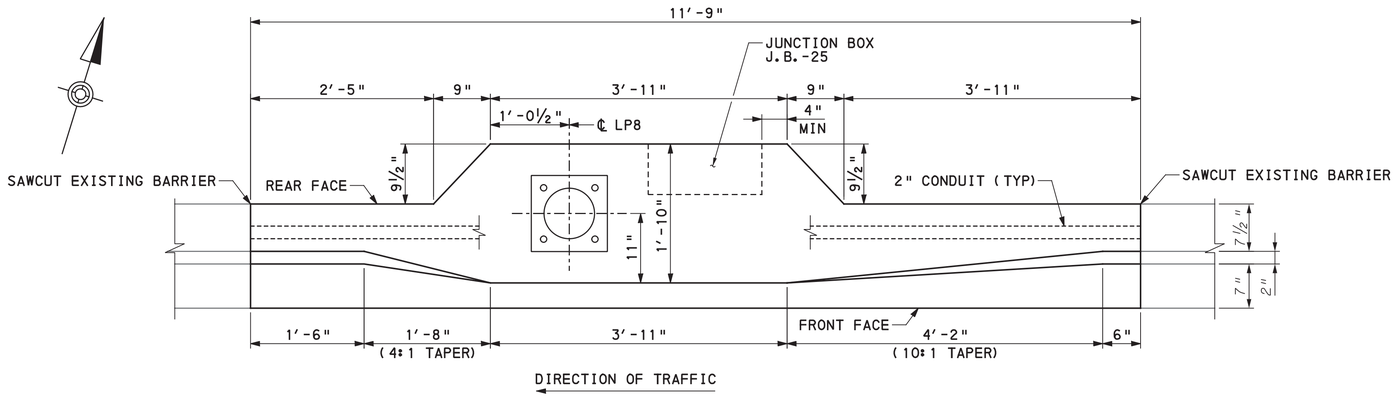
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

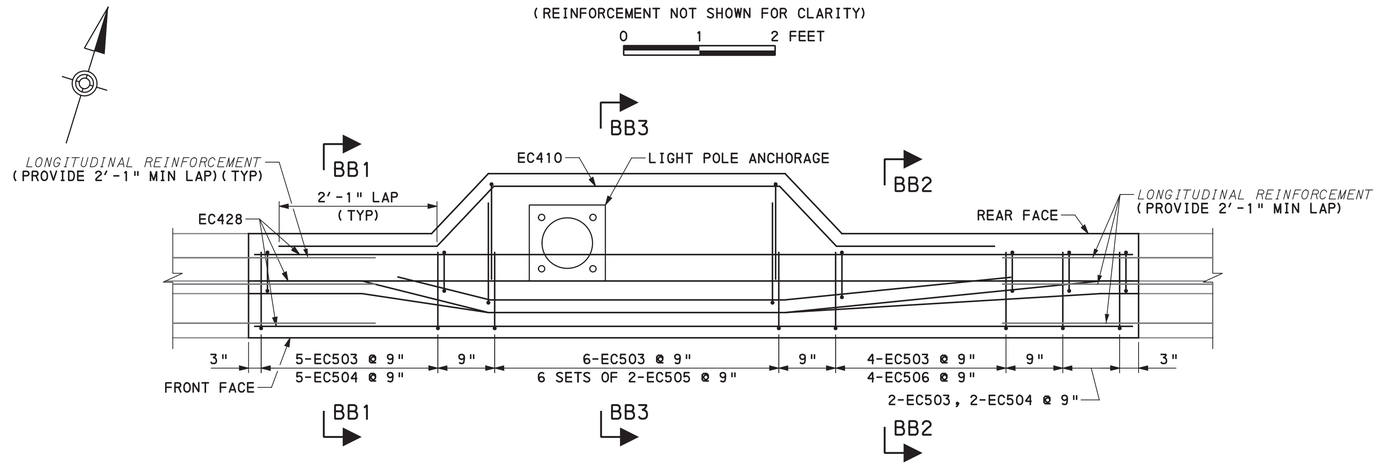
PLOTTED: 10/26/2022 8:09:21 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP8.dgn



LP8 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

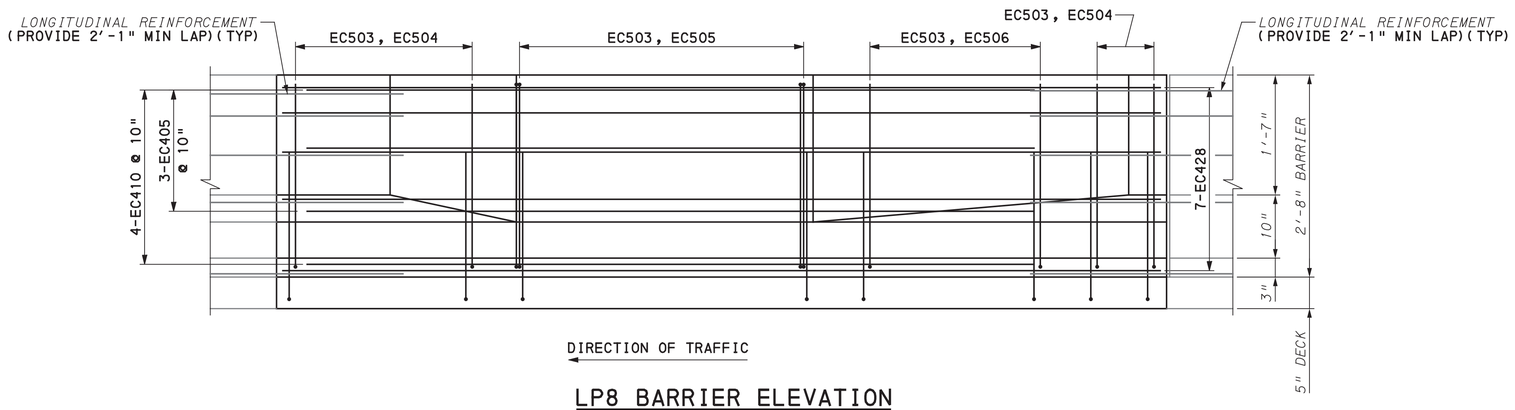
0 1 2 FEET



LP8 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP8 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

LIGHT POLE BLISTER - LP8

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP8

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

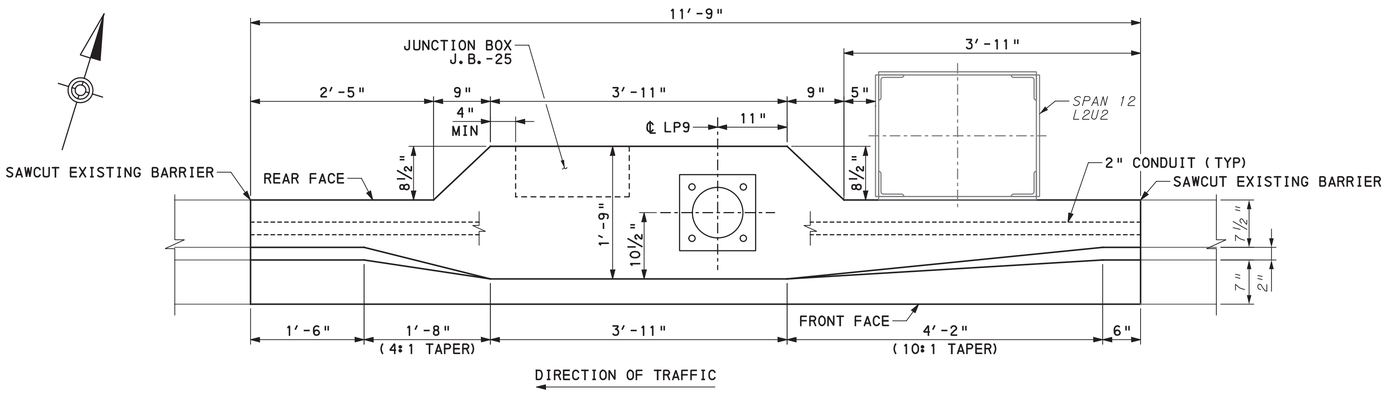
OCTOBER 26, 2022

SHEET 117 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

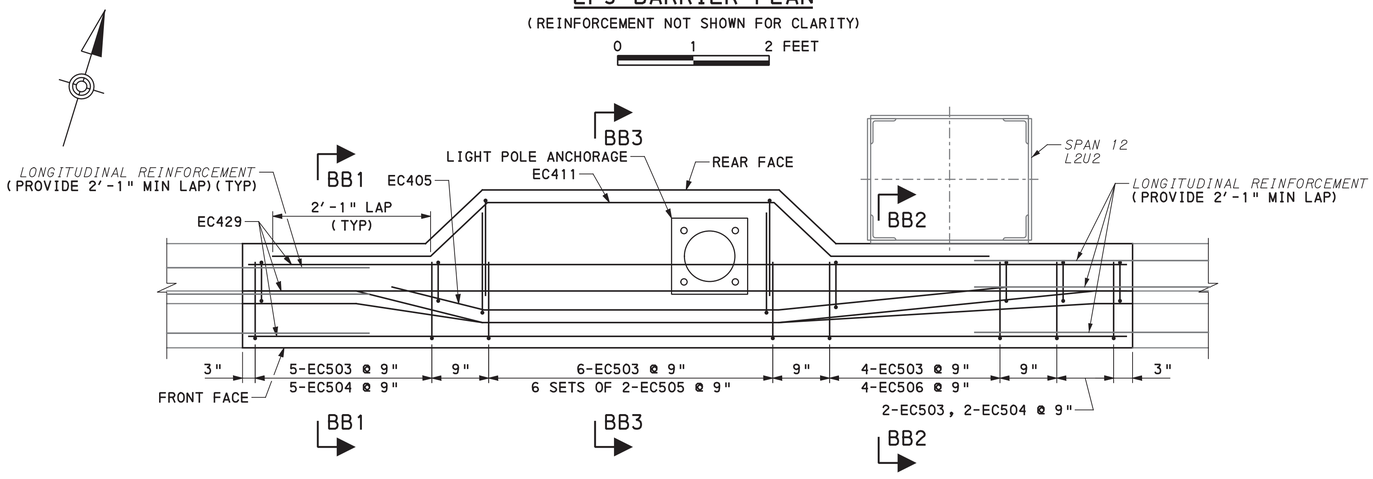
PLOTTED: 10/26/2022 8:09:28 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP9.dgn



LP9 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

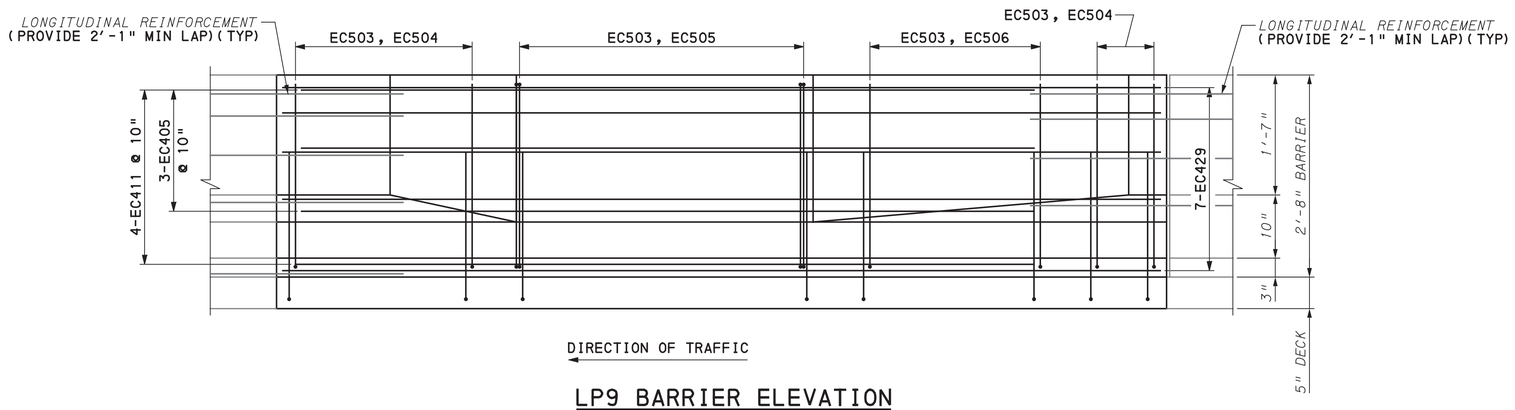
0 1 2 FEET



LP9 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP9 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

LIGHT POLE BLISTER - LP9

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP9

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

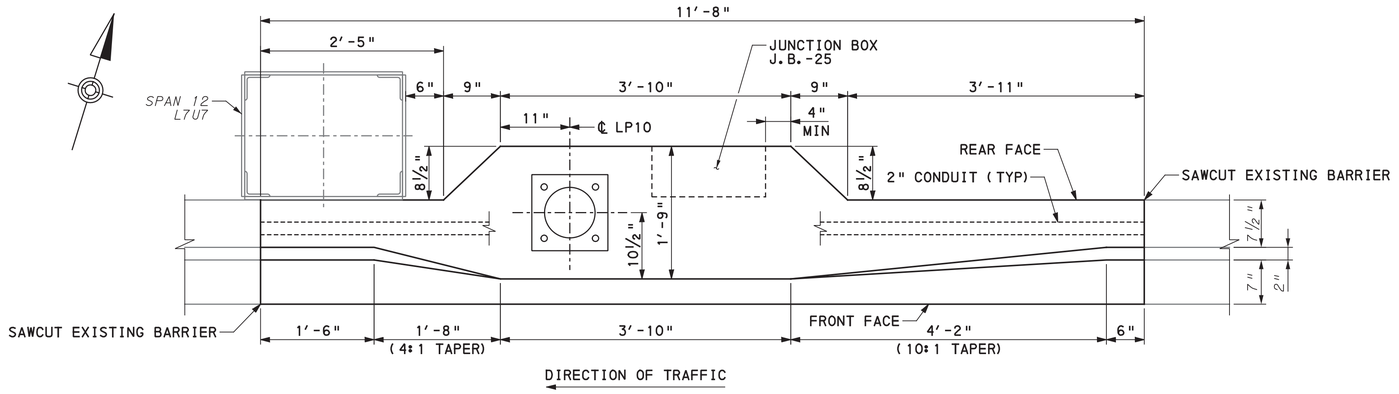
OCTOBER 26, 2022

SHEET 118 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

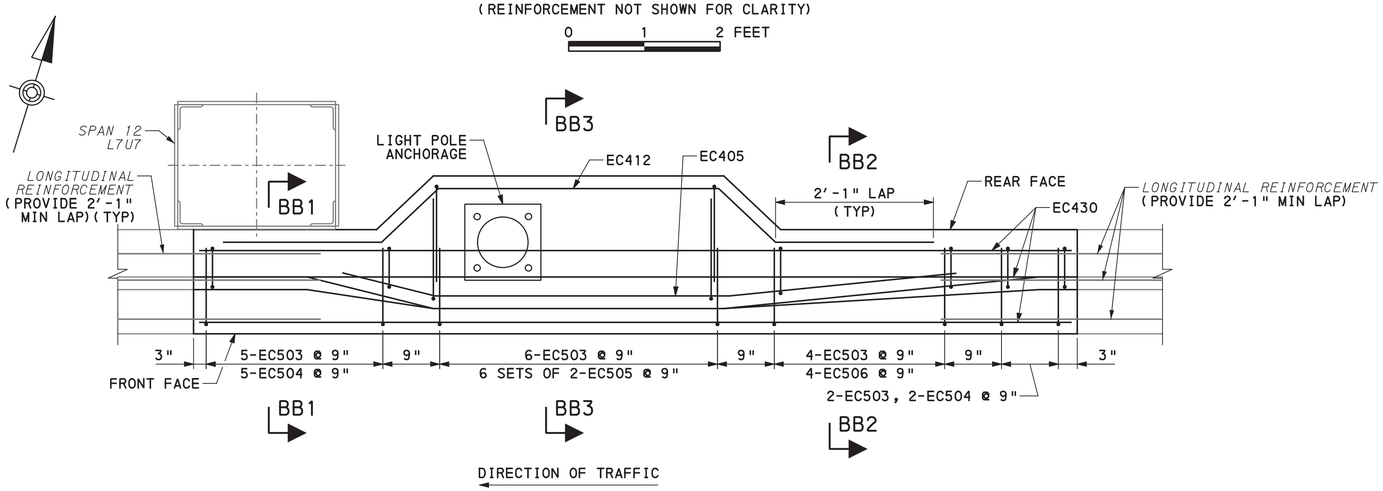
PLOTTED: 10/26/2022 8:09:32 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP10.dgn



LP10 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

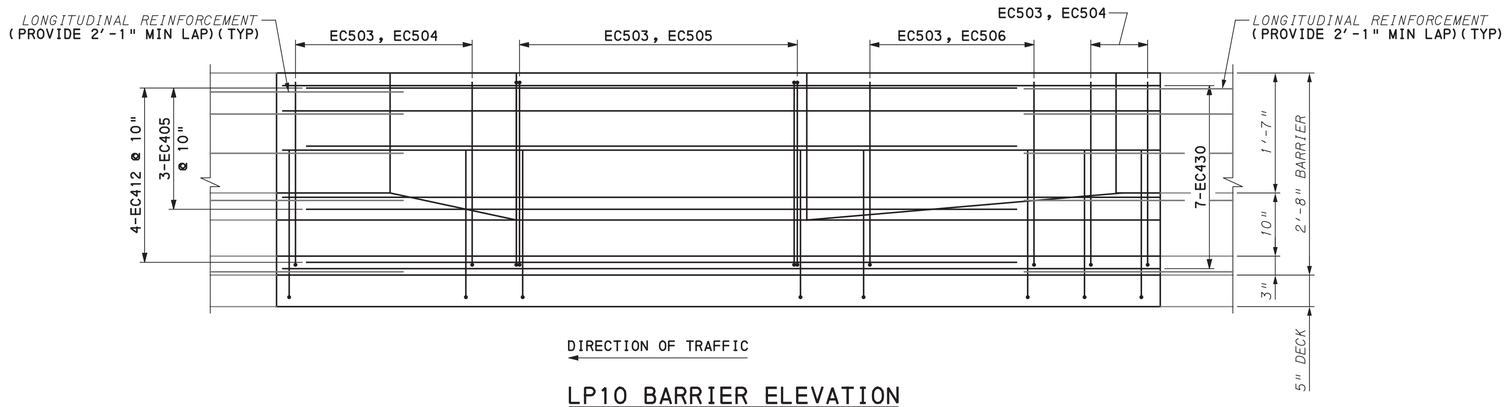
0 1 2 FEET



LP10 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP10 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

LIGHT POLE BLISTER - LP10

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP10

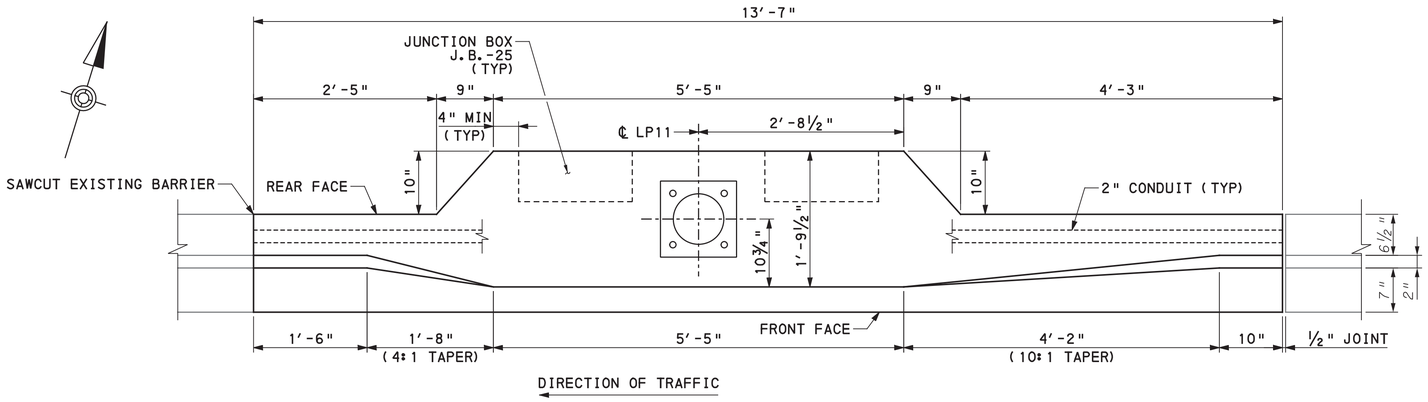
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 119 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA



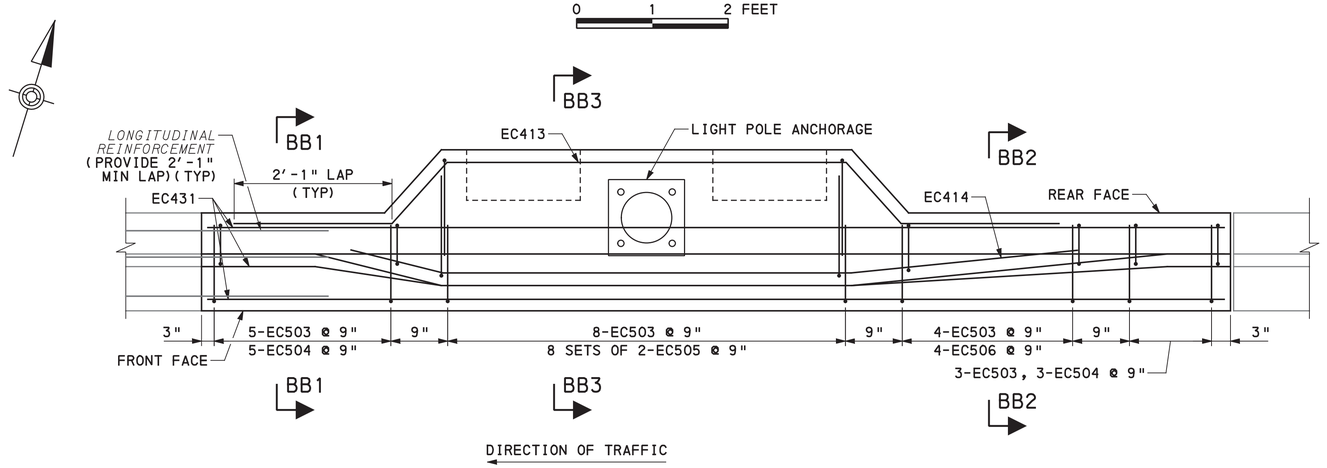
LP11 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

0 1 2 FEET

LIGHT POLE BLISTER - LP11

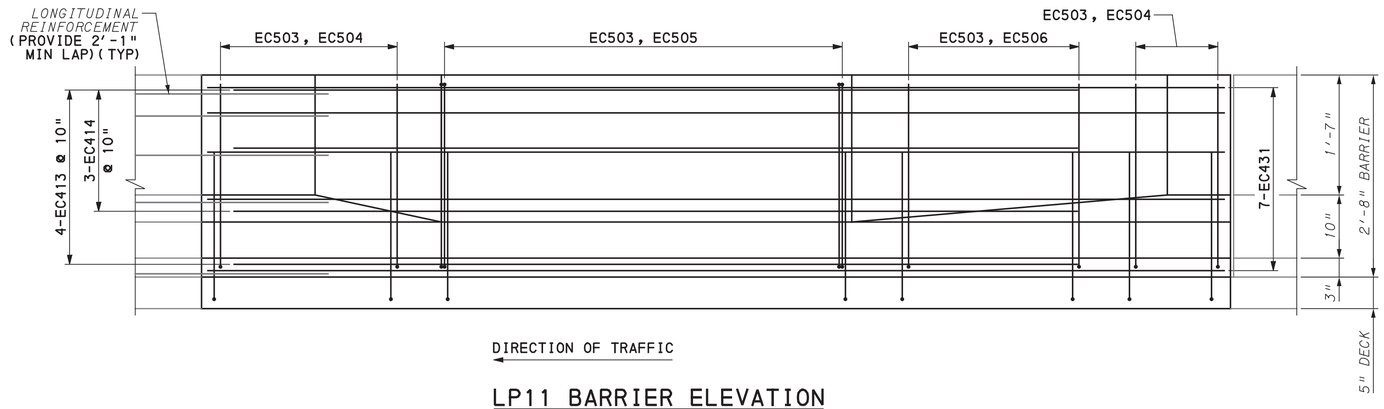
REPRESENTATIVE PHOTO



LP11 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



LP11 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER DETAILS - LP11

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 120 OF 124

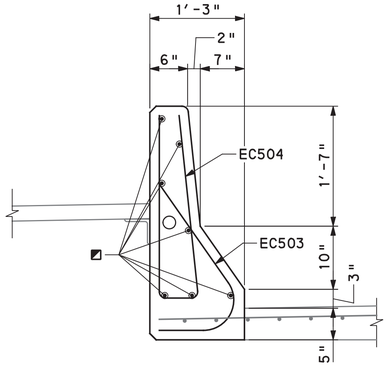
S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

PLOTTED: 10/26/2022 8:10:06 AM

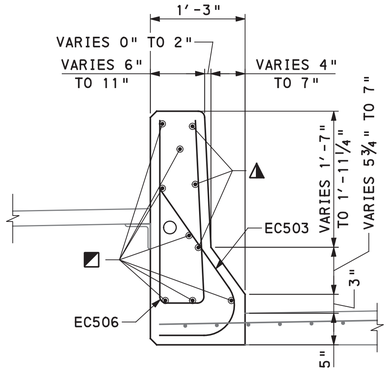
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP11.dgn

PLOTTED: 10/26/2022 8:10:15 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Sections.dgn



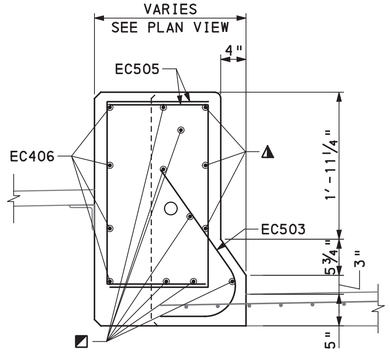
SECTION BB1-BB1

0 1 2 FEET



SECTION BB2-BB2

0 1 2 FEET



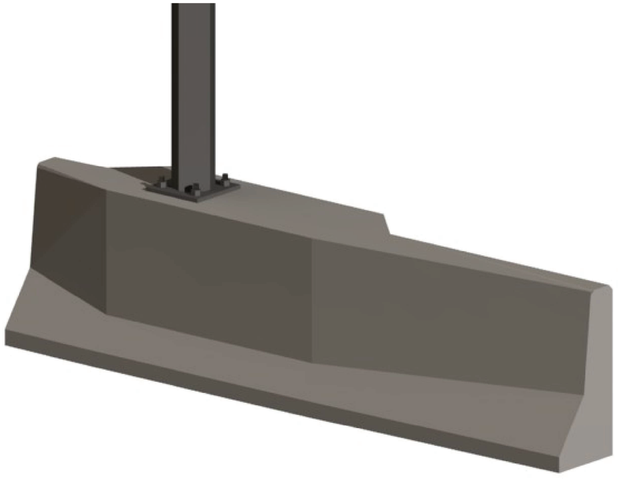
NOTE: TRIM EC505 BAR ALONG REAR FACE AS NEEDED FOR JUNCTION BOX PLACEMENT

SECTION BB3-BB3

0 1 2 FEET

SYMBOL ◩	
LOCATION	BAR MARK
LP1	EC421
LP2	EC422
LP3	EC423
LP4	EC424
LP5	EC425
LP7	EC427
LP8	EC428
LP9	EC429
LP10	EC430
LP11	EC431

SYMBOL ◭	
LOCATION	BAR MARK
LP1	EC405
LP2	EC405
LP3	EC405
LP4	EC405
LP5	EC405
LP7	EC405
LP8	EC405
LP9	EC405
LP10	EC405
LP11	EC414



LIGHT POLE BARRIER ISOMETRIC VIEW

NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER SECTIONS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

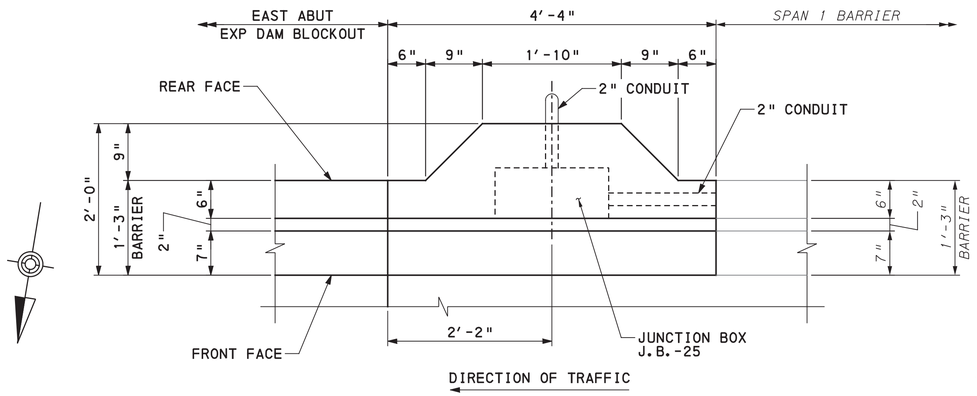
OCTOBER 26, 2022

SHEET 121 OF 124

S - 40253

DES: TJH	CKD: TSA	DWG: TJH	CKD: TSA

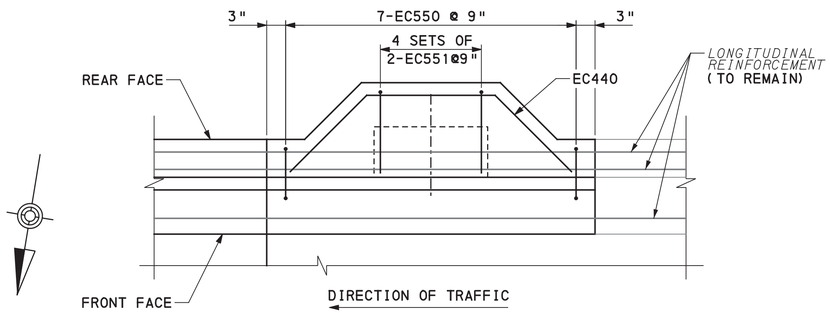
PLOTTED: 10/26/2022 8:10:20 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_JB Blister at E Abut.dgn



REPAIR C13 - BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

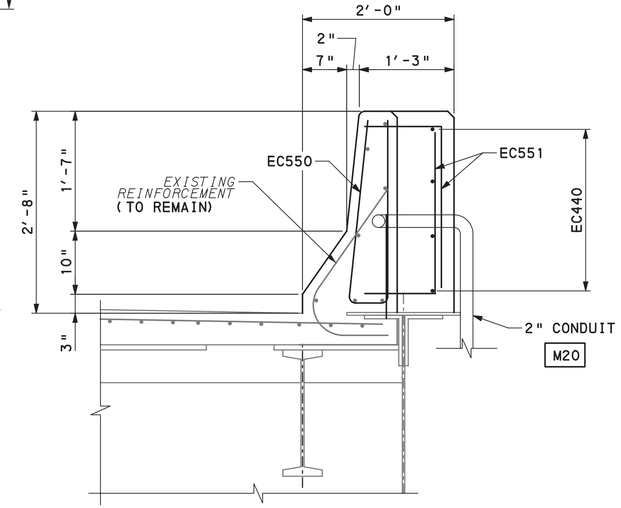
0 1 2 FEET



REPAIR C13 - BARRIER REINFORCEMENT PLAN

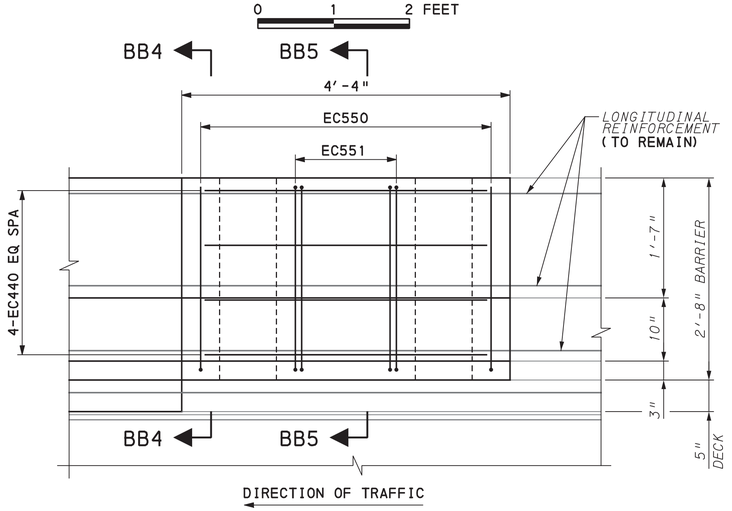
(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET



SECTION BB5-BB5

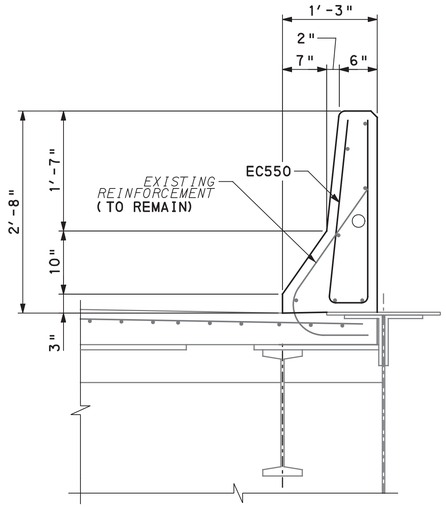
0 1 2 FEET



REPAIR C13 - BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET



SECTION BB4-BB4

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EAST ABUTMENT EXPANSION DAM, SEE SHEET 83.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.
4. FOR REPAIR M20, SEE SHEET 12.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

BARRIER DETAIL - REPAIR C13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 122 OF 124

S - 40253

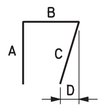
DES:	TJH	CKD:	TSA	DWG:	EAL	CKD:	TSA

PLOTTED: 10/26/2022 8:10:22 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Reinforcement Schedule.dgn

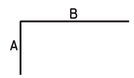
REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
LIGHT POLE BARRIER BLISTERS											
EC405	4	27	8′-1 1/2"	54	1′-3"	3′-10 1/2"	3′-0"	3 5/8"	3 5/8"		ALL LOCATIONS, EXCEPT LP11
EC406	4	12	10′-1 5/8"	23	3′-9 3/8"	1′-1 1/8"	9 3/8"	2′-1"			LP1, LP2, LP3
EC407	4	4	10′-6 5/8"	23	3′-9 1/8"	1′-3 3/4"	10"	2′-1"			LP4
EC408	4	4	10′-4"	23	3′-9 1/4"	1′-2 3/8"	9 5/8"	2′-1"			LP5
EC409	4	4	10′-3 5/8"	23	3′-9 3/8"	1′-2 1/8"	10"	2′-1"			LP7
EC410	4	4	10′-1 1/2"	23	3′-9 1/4"	1′-1 1/8"	9"	2′-1"			LP8
EC411	4	4	10′-0 1/8"	23	3′-9 3/8"	1′-0 3/8"	9"	2′-1"			LP9
EC412	4	4	9′-11 1/8"	23	3′-8 3/8"	1′-0 3/8"	9"	2′-1"			LP10
EC413	4	4	11′-7 1/4"	23	5′-3 1/4"	1′-1"	8 3/4"	2′-1"			LP11
EC414	4	3	9′-7 5/8"	54	1′-3"	5′-4 5/8"	3′-0"	3 5/8"	3 5/8"		LP11
EC421	4	7	14′-2"	STR							LP1
EC422	4	7	13′-2"	STR							LP2
EC423	4	7	11′-1"	STR							LP3
EC424	4	7	11′-5"	STR							LP4
EC425	4	7	12′-3"	STR							LP5
EC427	4	7	11′-5"	STR							LP7
EC428	4	7	11′-5"	STR							LP8
EC429	4	7	11′-5"	STR							LP9
EC430	4	7	11′-4"	STR							LP10
EC431	4	7	13′-3"	STR							LP11
EC503	5	180	3′-0 1/2"	21	7"	10 1/2"	1′-7"	1′-0"		4 3/4"	ALL LOCATIONS
EC504	5	78	5′-4 1/8"	7	2′-4 7/8"	6 1/4"	2′-5"	3"			ALL LOCATIONS
EC505	5	124	5′-0 7/8"	4	1′-4"	2′-4 7/8"	1′-4"				ALL LOCATIONS
EC506	5	40	5′-4 7/8"	7	2′-4 7/8"	7"	2′-5"	1" TO 3"			ALL LOCATIONS; VARY 'D' DIMENSION, 4 EA, FROM 1" TO 3"
JUNCTION BOX BARRIER BLISTER											
EC440	4	4	4′-4"	54	1′-4"	1′-8"	1′-4"	11 3/8"	11 3/8"		
EC550	5	7	5′-4 1/8"	7	2′-4 7/8"	6 1/4"	2′-5"	3"			
EC551	5	8	3′-2"	10	1′-0"	2′-2"					

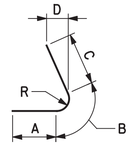
④



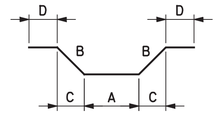
⑦



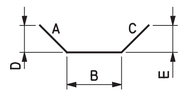
⑩



㉑



㉓



㊹

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.
3. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
4. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
5. E - INDICATES EPOXY COATED REBAR.
6. FOR ALL BAR TYPES SHOWN, DIMENSIONS A-E AND LENGTH ARE MEASURED ALONG OUTSIDE OF BAR. R IS MEASURED ALONG INSIDE OF BAR.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
LIGHT POLE BARRIER REINFORCEMENT SCHEDULE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 123 OF 124

S - 40253

DES:	TJH	CKD:	TSA	DWG:	TJH	CKD:	TSA

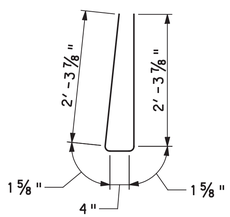
PLOTTED: 10/26/2022 8:10:23 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Exp Dam Reinforcement Schedule.dgn

EXP DAM REINFORCEMENT BAR SCHEDULE - FOR INFORMATION ONLY

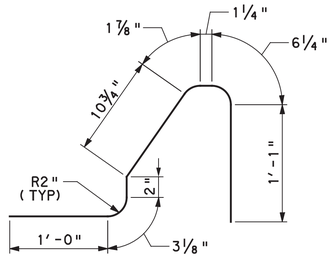
MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
EXPANSION DAM EAST ABUTMENT											
EA5101	5	6	4′-6 1/8"	S2							
ES5101	5	18	5′-3"	C1							
ES5104	5	12	3′-0 1/2"	S3							
ES5106	5	7	27′-8"	STR							
ES6101	6	4	27′-8"	STR							
ES6102	6	29	5′-0"	S5							
EXPANSION DAM BENT 4A											
ES5101	5	24	5′-3"	C1							
ES5104	5	24	3′-0 1/2"	S3							
ES5106	5	8	27′-8"	STR							
ES6101	6	4	27′-8"	STR							
EXPANSION DAM PIER 1											
ES5101	5	26	5′-3"	C1							
ES5102	5	12	4′-2 1/4"	S1							
ES5104	5	12	3′-0 1/2"	S3							
ES5106	5	8	27′-8"	STR							
ES5109	5	12	1′-10"	STR							TRIM IN FIELD AS REQUIRED
ES5110	5	14	5′-10"	STR							TRIM IN FIELD AS REQUIRED
ES6101	6	4	27′-8"	STR							
EXPANSION DAM PIER 3											
ES5101	5	30	5′-3"	C1							
ES5102	5	24	4′-2 1/4"	S1							
ES5106	5	8	27′-8"	STR							
ES5109	5	24	1′-10"	STR							TRIM IN FIELD AS REQUIRED
ES5110	5	28	5′-10"	STR							TRIM IN FIELD AS REQUIRED
ES6101	6	4	27′-8"	STR							
TOOTH EXPANSION JOINT PIER 2											
ES5101	5	28	5′-3"	C1							
ES5102	5	20	4′-2 1/4"	S1							
ES5105	5	6	2′-5"	S4							
ES5106	5	8	27′-8"	STR							
ES5109	5	24	1′-10"	STR							TRIM IN FIELD AS REQUIRED
ES5110	5	28	5′-10"	STR							TRIM IN FIELD AS REQUIRED
ES6101	6	4	27′-8"	STR							
EXPANSION DAM PIER 4											
ES3103	3	10	3′-4"	STR							BEND IN FIELD
ES4102	4	8	2′-10"	STR							
ES5101	5	26	5′-3"	C1							
ES5102	5	24	4′-2 1/4"	S1							
ES5106	5	8	27′-8"	STR							
ES5109	5	12	1′-10"	STR							TRIM IN FIELD AS REQUIRED
ES5110	5	14	5′-10"	STR							TRIM IN FIELD AS REQUIRED
ES6101	6	4	27′-8"	STR							
EXPANSION DAM PIER 5											
ES3101	3	40	4′-0"	STR							BEND IN FIELD
ES3102	3	11	4′-8"	STR							BEND IN FIELD
ES4101	4	8	46′-5"	STR							
ES5101	5	22	5′-3"	C1							
ES5102	5	22	4′-2 1/4"	S1							
ES5107	5	16	46′-8"	STR							
ES5108	5	22	3′-6"	S6							
ES6102	6	8	47′-0"	STR							
ES8101	8	99	5′-11 1/2"	S7							

SCUPPER REINFORCEMENT BAR SCHEDULE - FOR INFORMATION ONLY

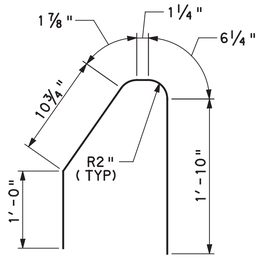
MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	R	REMARKS
SCUPPER REPAIR - M11 (6 LOCATIONS - REBAR QUANTITY GIVEN FOR EACH LOCATION)											
ES5101	5	9	5′-3"	C1							
ES5104	5	9	3′-0 1/2"	S3							
SCUPPER REPAIR - M12 (6 LOCATIONS - REBAR QUANTITY GIVEN FOR EACH LOCATION)											
ES5101	5	9	5′-3"	C1							
ES5104	5	9	3′-0 1/2"	S3							
SCUPPER REPAIR - M13 (4 LOCATIONS - REBAR QUANTITY GIVEN FOR EACH LOCATION)											
ES5101	5	9	5′-3"	C1							
ES5104	5	9	3′-0 1/2"	S3							
ES5111	5	4	3′-7"	STR							
ES5112	5	3	2′-8"	STR							



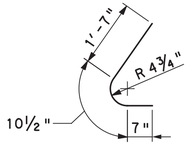
C1



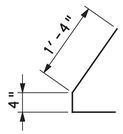
S1



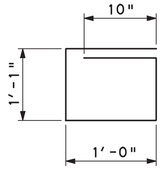
S2



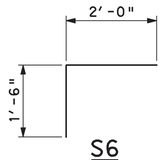
S3



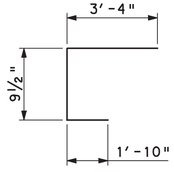
S4



S5



S6



S7

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SCUPPER DETAILS, SEE SHEETS 81 TO 82.
3. FOR EXPANSION DAM DETAILS, SEE SHEETS 83 TO 96.
4. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
5. E - INDICATES EPOXY COATED REBAR.
6. FOR ALL BAR TYPES SHOWN, DIMENSIONS A-E AND LENGTH ARE MEASURED ALONG OUTSIDE OF BAR. R IS MEASURED ALONG INSIDE OF BAR.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

EXP DAM & SCUPPER REINFORCEMENT SCHEDULE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 124 OF 124

S - 40253

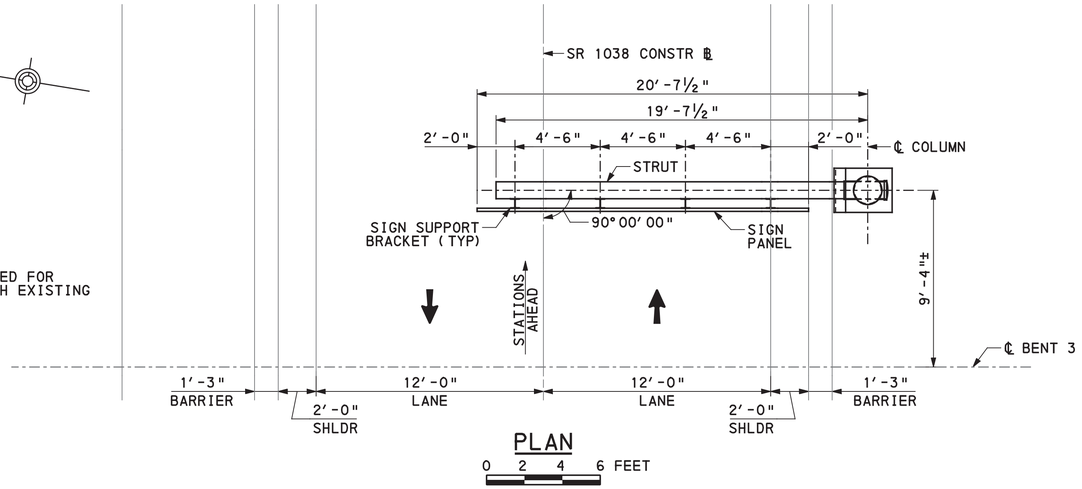
DES: TJH	CKD: TSA	DWG: EAL	CKD: TSA

PLOTTED: 10/26/2022 8:53:42 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Sign Structure\General Plan and Elevation.dgn

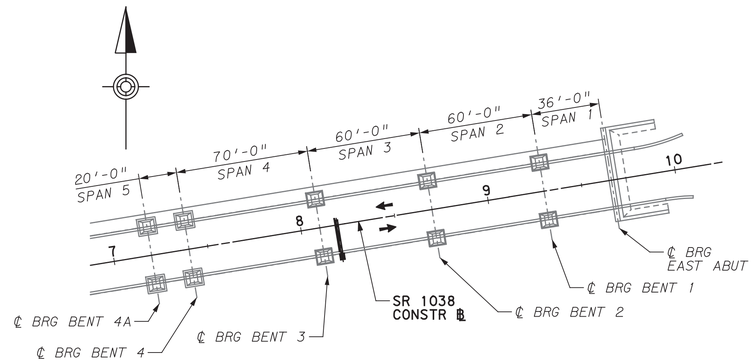
DESIGN CRITERIA
DESIGN SIGN AREA = 227.5 SF
DESIGN LENGTH = 19.63 FT
DESIGN HEIGHT = 27.33 FT
FATIGUE CATEGORY = II

NOTE: NON-STANDARD POST SIZE WAS USED FOR THIS STRUCTURE TO MORE CLOSELY MATCH EXISTING POST AND BRACKET DETAILS.



PLAN

0 2 4 6 FEET

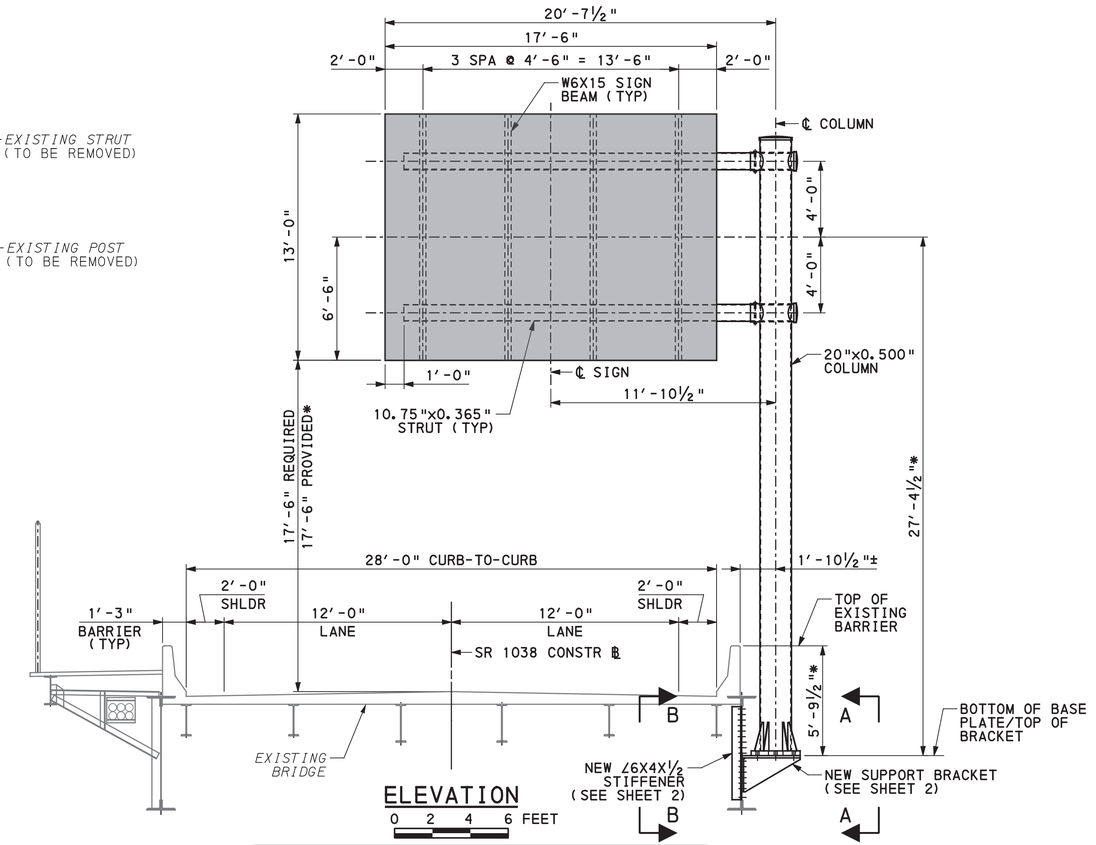


LOCATION MAP

0 40 80 FEET

EXISTING SIGN STRUCTURE

REMOVAL AND DISPOSAL OF EXISTING SIGN STRUCTURE INCLUDED UNDER ITEM 1018-0051



ELEVATION

0 2 4 6 FEET

* FIELD VERIFY BASED ON LOCATION OF EXISTING BOLTS IN GIRDER

INDEX OF DRAWINGS	
SHEET NO.	TITLE
1	GENERAL PLAN AND ELEVATION
2	GENERAL NOTES
3	CONNECTION DETAILS

SCOPE OF WORK

REMOVE EXISTING SIGN STRUCTURE, SIGN PANEL AND SUPPORT BRACKET

INSTALL PROPOSED SUPPORT BRACKET TO FASCIA GIRDER

INSTALL PROPOSED CANTILEVER SIGN STRUCTURE

INSTALL PROPOSED SIGN PANEL

NOTES:

1. FOR ADDITIONAL NOTES AND FABRICATION DETAILS, SEE BC-741M.
2. DESIGN IS FOR ACTUAL SIGN AREA.
3. FOR VIEWS A-A AND B-B, SEE SHEET 2.
4. COORDINATE ALL WORK FOR THE REMOVAL AND REPLACEMENT OF THE SIGN STRUCTURE WITH THE TRAFFIC CONTROL PLANS AND WORK FOR S-40253.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-1420 ECMS/MPMS NO: 63515 BRKEY: 1476

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 1420
SR 1038-A01 STA 8+18.00
OVER THE ALLEGHENY RIVER
DOUBLE STRUT CANTILEVER SIGN STRUCTURE
GENERAL PLAN AND ELEVATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

Prepared by:
MARKOSKY
3689 Route 711
Ligonier, PA 15658

SIGNATURE

10/26/2022
DATE

RECOMMENDED

Digitally signed by Shane Szalankiewicz, P.E.
Date: 2022.10.26 20:29:28-04'00'

DISTRICT BRIDGE ENGINEER

SHEET 1 OF 3
+SUPPLEMENTAL DRAWINGS

S - 40254

DES: RKP	CKD: TSA	DWG: TJH	CKD: TSA

OVERHEAD SIGN STRUCTURES - CANTILEVER & CENTER-MOUNT STRUCTURES STRUT LENGTHS UP TO 40′	BC-741M	8/4/17
DESCRIPTION	DWG NO.	REC. DATE
SUPPLEMENTAL DRAWINGS		

PLOTTED: 10/26/2022 8:53:49 AM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Sign Structure\General Notes.dgn

DESIGN SPECIFICATIONS

AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, FIRST EDITION, 2015.

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 8" EDITION, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019, INCLUDING LATEST REVISIONS.

DESIGN LOADS

THE DESIGN WIND VELOCITY IS 80 MPH WITH A GUST FACTOR OF 30%.

THE DESIGN ICE LOAD IS 3.0 PSF.

GENERAL

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.

PROVIDE STRUCTURAL STEEL CONFORMING TO THE FOLLOWING:

COLUMNS AND PIPE STRUTS: SEE PUBLICATION 408, SECTION 948.2.

OVERHEAD SIGN ANGLES, SHAPES, AND PLATES:
AASHTO M270, GRADE 36
ASTM A709, GRADE 36

BRACKET ANGLES, SHAPES, AND PLATES:
ASTM A572, GRADE 50

ANCHOR BOLTS: ASTM F1554, GRADE 55 PER PUBLICATION 408, SECTION 1105.02(c)3.

BOLTS: AASHTO M164, (ASTM A325) H.S. BOLTS EXCEPT AS NOTED.

U-BOLT INSTALLATION: PER FHWA PUB GUIDELINES FOR THE INSTALLATION, INSPECTION, MAINTENANCE, AND REPAIR OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS (2005).

GALVANIZE ALL STRUCTURAL STEEL, BOLTS, NUTS AND WASHERS FOR THE OVERHEAD SIGN STRUCTURE IN ACCORDANCE WITH PUBLICATION 408, UNLESS STAINLESS STEEL OR OTHERWISE INDICATED.

VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.

ALL DIMENSIONS ARE HORIZONTAL, EXCEPT AS NOTED.

DIMENSIONS ARE BASED ON A NORMAL TEMPERATURE OF 68 DEGREES F.

STRUCTURAL STEEL

PAINT BRACKET STRUCTURAL STEEL IN ACCORDANCE WITH PUBLICATION 408, SECTION 1070. FOR ADDITIONAL PAINTING NOTES AND REQUIREMENTS, SEE PLANS FOR S-40253.

REAM SUBDRILLED OR SUBPUNCHED HOLES FOR FIELD CONNECTIONS IN THE FABRICATION SHOP.

ALL FASTENERS ARE 7/8 INCH DIAMETER HS BOLTS, EXCEPT AS NOTED.

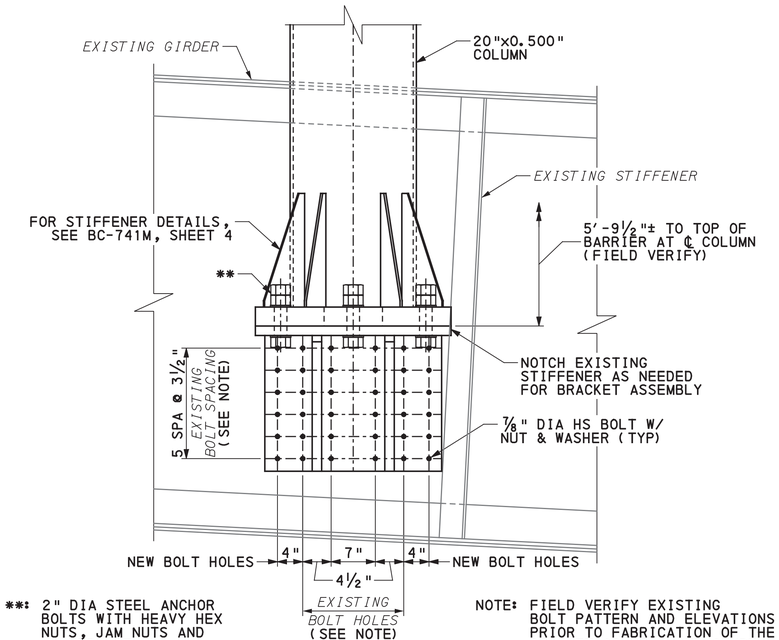
FASTENERS

FIELD REAM EXISTING HOLES, AS REQUIRED WHERE EXISTING RIVETS OR BOLTS ARE BEING REPLACED WITH NEW HIGH STRENGTH BOLTS.

USE NEW HIGH STRENGTH BOLTS FOR ALL WORK REQUIRING BOLTED CONNECTIONS. RE-USE OF EXISTING FASTENERS IS NOT PERMITTED.

WELDING NOTES

WELDING SPECIFICATIONS: AASHTO/AWS/D1.5M/D1.5-2015 BRIDGE WELDING CODE CONSISTENT WITH PUBLICATION 408 1105.03(M) AND THE CONTRACT SPECIAL PROVISIONS. DO NOT FIELD WELD ON ANY PART OF THE EXISTING BRIDGE WITHOUT PRIOR APPROVAL OF THE REPRESENTATIVE.

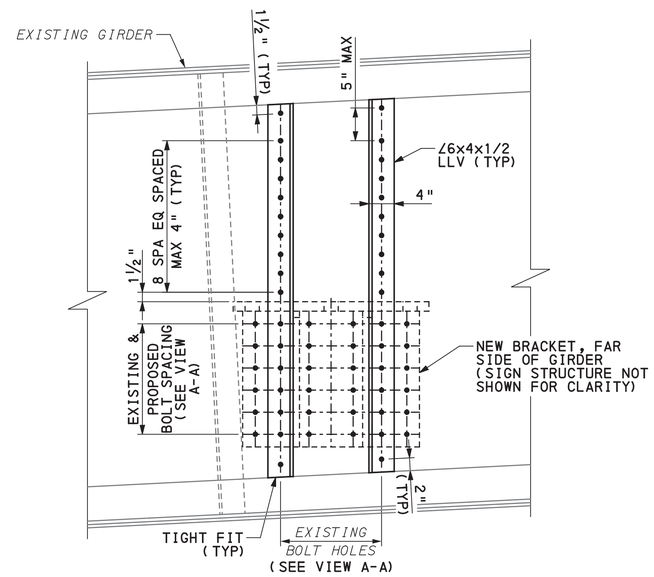


**: 2" DIA STEEL ANCHOR BOLTS WITH HEAVY HEX NUTS, JAM NUTS AND WASHERS (TYP)

NOTE: FIELD VERIFY EXISTING BOLT PATTERN AND ELEVATIONS PRIOR TO FABRICATION OF THE BRACKET OR SIGN STRUCTURE

VIEW A-A

0 1 2 FEET



VIEW B-B

0 1 2 FEET

EXISTING SIGN BRACKET

REMOVAL AND DISPOSAL OF EXISTING SIGN BRACKET INCLUDED UNDER ITEM 1018-0051

APPROXIMATE QUANTITIES - STEEL SIGN STRUCTURE - CANTILEVER, AS DESIGNED

ITEM NO.	DESCRIPTION		UNIT	TOTAL
4948-0300	STEEL SIGN STRUCTURE - CANTILEVER, AS DESIGNED, S-40254	(1)(2)	LS	
1050-0021	FABRICATED STRUCTURAL STEEL		LB	780
1018-0051	REMOVAL OF PORTION OF EXISTING BRIDGE	(2)	LS	

(1) APPROXIMATELY 7,220 LBS OF STRUCTURAL STEEL, GALVANIZED, INCLUDED IN LUMP SUM ITEM 4948-0300. FOR INFORMATION ONLY.

(2) SEE SPECIAL PROVISIONS

NOTES:

1. FOR BRACKET DETAILS, SEE SHEET 3.
2. FOR BASE PLATE AND ANCHOR DETAILS, SEE SHEET 3.

Mark	Description	By	Chk'd.	Recm'd.	Date
	REVISIONS				

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-1420 ECMS/MPMS NO: 63515 BRKEY: 1476

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 1420
SR 1038-A01 STA 8+18.00
OVER THE ALLEGHENY RIVER
DOUBLE STRUT CANTILEVER SIGN STRUCTURE
GENERAL NOTES

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

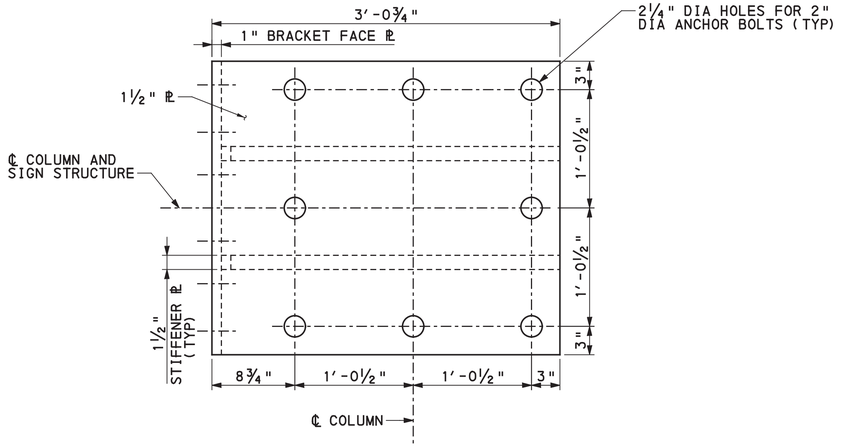
RECOMMENDED
OCTOBER 26, 2022

SHEET 2 OF 3

S - 40254

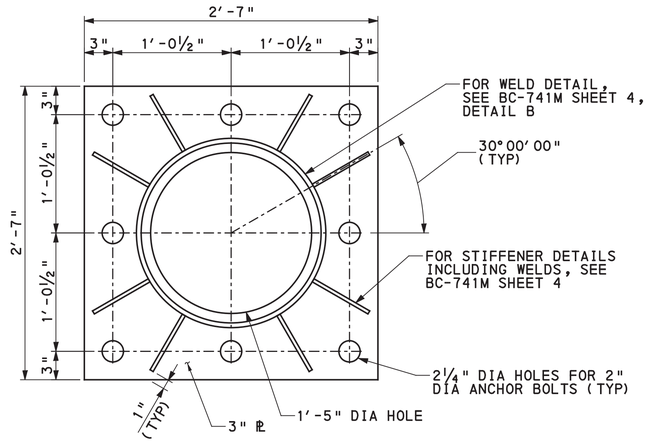
DES: RKP	CKD: TSA	DWG: TJH/RKP	CKD: TSA

PLOTTED: 10/26/2022 8:53:53 AM



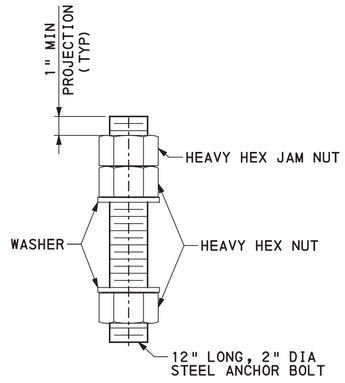
VIEW D-D

0 6 1 FOOT



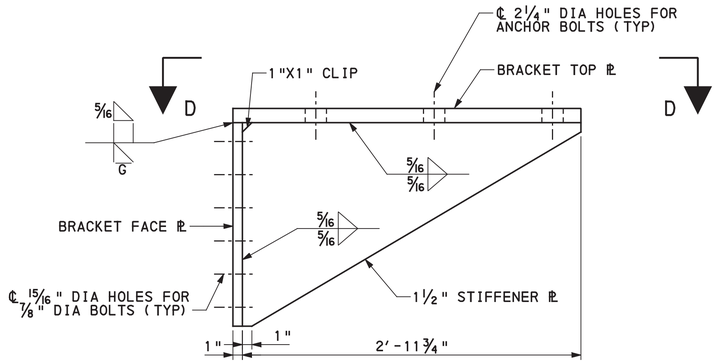
BASE PLATE DETAIL

0 6 1 FOOT



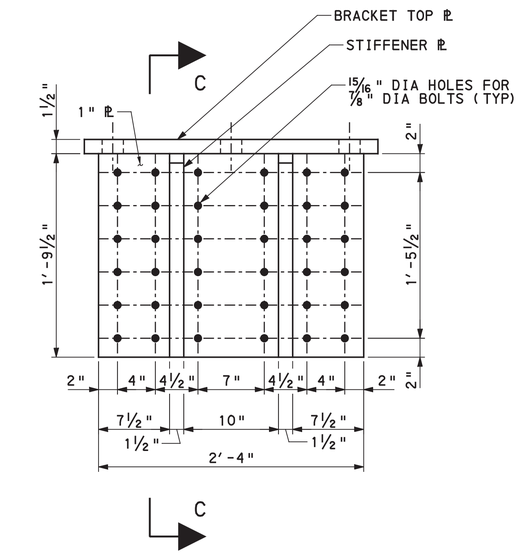
ANCHOR BOLT ASSEMBLY

0 3 6 9 1 FOOT



SECTION C-C

0 6 1 FOOT



BRACKET ASSEMBLY - FRONT VIEW

0 6 1 FOOT

NOTES:

1. FOR ALL SIGN STRUCTURE DETAILS NOT SHOWN, REFER TO BC-741M.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-1420 ECMS/MPMS NO: 63515 BRKEY: 1476

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 1420
SR 1038-A01 STA 8+18.00
OVER THE ALLEGHENY RIVER
DOUBLE STRUT CANTILEVER SIGN STRUCTURE
CONNECTION DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 3 OF 3

S - 40254

DES: RKP	CKD: TSA	DWG: TJH/RKP	CKD: TSA

FILE NAME: G:\17-0488 New Kensington Final\CADD\Sign Structure\Connection Details.dgn