OS-600 (10-08)

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

January 13, 2016

Washington County
North Strabane, South Strabane and Somerset Township
SR 136, SECTION G10
DOT # 145 579 B
PUC No. A-2013-2355229
ECMS # 30749

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

Dear Secretary Chiavetta:

In accordance with ordering paragraph number 2 of PUC Docket No. A-2013-2355229 entered on January 12, 2016, please find attached for your approval one half-size copy of the final signed Drawings for Construction of State Route 136, Section G10 in Washington County, consisting of sheets 1 through 11, 22 through 26 of 26. Also attached to the set of construction drawings are the following half-size "Also" plans.

1. Traffic Control Plan consisting of sheets 1, 3 through 21 of 22.
2. Signing and Pavement Marking Plan consisting of sheet 1 through 3 of 3.
3. Cross Sections consisting of sheets 10, 20, 21 of 21.
4. Situation Plan of sheets 1, 2, of 2.

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

Mr. James Street
Allegheny Valley Railroad Company
519 Cedar Way
Suite 100, Building # 1
Oakmont, PA 15139

Mr. Matt Anderson
Allegheny Valley Railroad Company
519 Cedar Way
Suite 100, Building # 1
Oakmont, PA 15139

Mr. Derek Mihaly
Project Manager, Public Projects
CSX Transportation, Inc.
2000 Cabot Blvd, Suite 130
Langhorne, PA 19047

Mr. James L. Shircliff
Highway Projects Specialist
CSX Transportation, Inc.
6737 Southpoint Dr. South (J-915)
Jacksonville, FL 32216

Ms. Mary E. Helicke
Washington County Commissioners
100 West Beau Street, Suite 702
Washington, PA 15301

Mr. Michael Silvestri
Peters Township
610 East McMurray Road
Canonsburg, PA 15317

Ms. Emilie Gadd
Nottingham Township
909 Sugar Run Road
Eighty Four, PA 15314

Ms. Debra Nigon
Union Township
3904 Finleyville-Elrama Road
Finleyville, PA 15332

Mr. Phil Bartolotti
West Penn Power Company
401 Coyle Curtain Road
Monongahela, PA 15063

Mr. Keith Fowler
Verizon of Pennsylvania, Inc.
15 East Montgomery Avenue
Pittsburgh, PA 15212

Mr. Craig Tacy
Comcast Cable Communication, Inc.
460 Washington Road
Washington, PA 15301

Mr. Herman Rossi
Pennsylvania American Water Co.
560 Horning Road
Bethel Park, PA 15102

Mr. Rick Kovach
Peters Creek Sanitary Authority
3502 Lincoln Avenue, P.O. Box 3
Finleyville, PA 15332

Mr. Jason Stanton
Peters Creek Sanitary Authority, Eng.
846 Fourth Avenue
Coraopolis, PA 15108

Mr. Dominic Tarella
Columbia Gas of Pennsylvania, Inc.
4000 Energy Drive
Bridgeville, PA 15017

Mr. Jeremy Cheatwood
Equitable Gas
225 North Shore Drive
Pittsburgh, PA 15212

We respectfully request the approval of these plans and the subsequent issuance of a PUC Order. Should you have any questions or concerns, please feel free to contact me at (724) 439 - 7190.

Sincerely,

Thomas A. Ryczek Jr.
District Grade Crossing Administrator
Engineering District 12-0
Department of Transportation

Attachments

cc: Parties of Record
Chief, Utilities and Right-of-Way Section, 7th Floor, CKB
Gina D'Alfonso, Office of Chief Counsel, 9th Floor, CKB
Manager, Rail Safety division, PUC, 3rd Floor, CKB

PLOTTED: 11/4/2015 8:34:38 AM

PLAN PREPARATION
PENNDOT DESIGN PROJECT MANAGER: BRIAN C. SVESNIK
CONSULTANT DESIGN PROJECT MANAGER: MATTHEW J. MACEY, P.E.

BND	DISTRICT	COUNTY	TOWNSHIP	BOROUGH	ROUTE	SECTION	TOTAL SHEETS
	12-0	WASHINGTON	NORTH STRABANE	———	0136	G10	17
			SOUTH STRABANE				
			SOMERSET				

SR 0136 PREVIOUSLY KNOWN AS LEGISLATIVE ROUTE 181 ECMS: 30749

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

DRAWINGS
FOR
CONSTRUCTION
OF

STATE ROUTE 0136 **SECTION** G10

IN WASHINGTON **COUNTY**

FROM STA 333+75.00 TO STA 346+00.00 LENGTH = 1130.00 FT 0.214 MI

FROM SEG 0140 OFF 1981 TO SEG 0150 OFF 0170

PUC APPLICATION DOCKET NUMBER: A-2013-2355229

ALSO INCLUDED:

TRAFFIC CONTROL PLAN	6 SHEETS
SIGNING AND PAVEMENT MARKING PLAN	5 SHEETS
EROSION AND SEDIMENT POLLUTION CONTROL PLAN	10 SHEETS
TRAFFIC SIGNAL PLAN	3 SHEETS
STRUCTURE PLANS	
S-36050	49 SHEETS
CROSS SECTIONS	13 SHEETS
EXISTING STRUCTURE PLANS	5 SHEETS

RECEIVED
2016 JAN 15 AM 9:47
PA.P.U.C.
SECRETARY'S BUREAU

SCALE
HORIZONTAL 0 25 50 FEET
VERTICAL 0 5 10 FEET

DESIGN DESIGNATION

ROADWAY TYPOLOGY	- COMMUNITY ARTERIAL (RURAL)
HIGHWAY CLASSIFICATION	- RURAL MINOR ARTERIAL
DESIGN SPEED	- 45 MPH
PAVEMENT WIDTH	- (3) - 11' LANES
SHOULDER WIDTH	- 5'-0"
SIDEWALK WIDTH	- N/A

TRAFFIC DATA

CURRENT ADT	- 4948 (2016)
DESIGN YEAR ADT	- 5644 (2036)
DHV	- 62)
D	- 55%
T	- 4%

PLANS PREPARED BY
CDR MAGUIRE
DL CLARK BUILDING, SUITE 601, 503 MARTINDALE STREET, PITTSBURGH, PA 15212

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHEW J. MACEY ENGINEER

11/4/15
MATTHEW J. MACEY, P.E. DATE
REGISTERED PROFESSIONAL ENGINEER

RECOMMENDED DATE: 11-16-15
Joseph J. Lacque
DISTRICT EXECUTIVE

RECOMMENDED DATE: 11/15/15
Scott Christa
DEPUTY SECRETARY

APPROVED DATE: 11/15/15
SECRETARY OF TRANSPORTATION
(ON BEHALF OF THE GOVERNOR AS WELL AS HERSELF)

OPERATOR: Adam.Nicastro
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10.PE\USTNXH\WYXPlans\SR0136-TITLE.dgn

PLOTTED: 11/4/2015 8:34:40 AM

SHEET INDEX BLOCK	
DESCRIPTION	SHEET
TITLE SHEET	1
INDEX MAP	2
LOCATION MAP AND GENERAL NOTES	3
TYPICAL SECTIONS	4
DETAILS	5-6
SUMMARY OF QUANTITIES	7-8
TABULATION OF QUANTITIES	9-13
PLAN SHEETS	14-15
PROFILE SHEETS	16-17

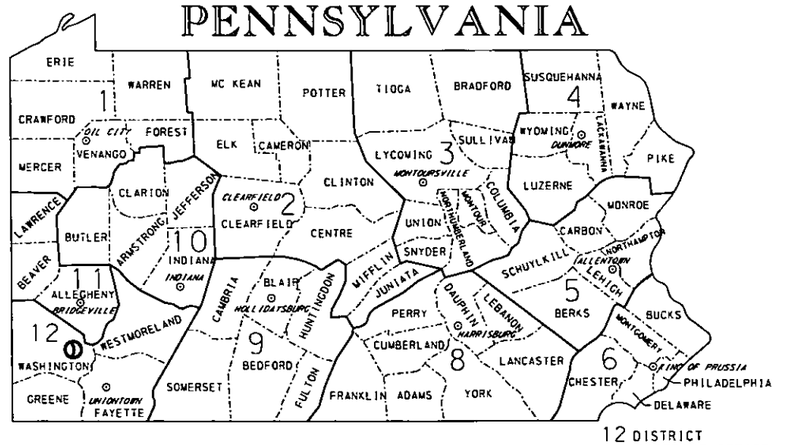
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	2 OF 17
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

RECORD OF EXISTING ROAD TYPES

LIMIT OF WORK ADJACENT TO STA 333+75.00	1.50" SPAVE, HMA WEARING, PG 64-22, 9.5MM, SRL-H 2.00" SPAVE, HMA BINDER LEVEL, PG 64-22, 19MM 0.50" SPAVE, HMA WEARING LEVEL, PG 64-22, 9.5MM, SRL-H 1.50" BITUMINOUS WEARING COURSE, ID-2 0.50" SCRATCH BITUMINOUS WEARING COURSE, ID-2 1.00" BITUMINOUS WEARING COURSE, ID-2 8.00" REINFORCED CEMENT CONCRETE PAVEMENT
STA 333+75.00 TO STA 338+28.00	SAME AS ABOVE
STA 338+28.00 TO STA 340+56.00	8.00" BITUMINOUS
STA 340+56.00 TO STA 346+00.00	1.50" SPAVE, HMA WEARING, PG 64-22, 9.5MM, SRL-H 2.00" SPAVE, HMA BINDER LEVEL, PG 64-22, 19MM 0.50" SPAVE, HMA WEARING LEVEL, PG 64-22, 9.5MM, SRL-H 1.50" BITUMINOUS WEARING COURSE, ID-2 0.50" SCRATCH BITUMINOUS WEARING COURSE, ID-2 1.00" BITUMINOUS WEARING COURSE, ID-2 8.00" REINFORCED CEMENT CONCRETE PAVEMENT
LIMIT OF WORK ADJACENT TO 346+00.00	SAME AS ABOVE

NOTE:
THE DEPTHS OF MATERIAL SHOWN ARE FOR DESIGN PURPOSES ONLY. ANY RISK OF UNANTICIPATED COSTS ASSOCIATED WITH DIFFERENCES BETWEEN THE LISTED DEPTHS AND THE ACTUAL DEPTHS SHALL BE ACCEPTED BY THE CONTRACTOR.



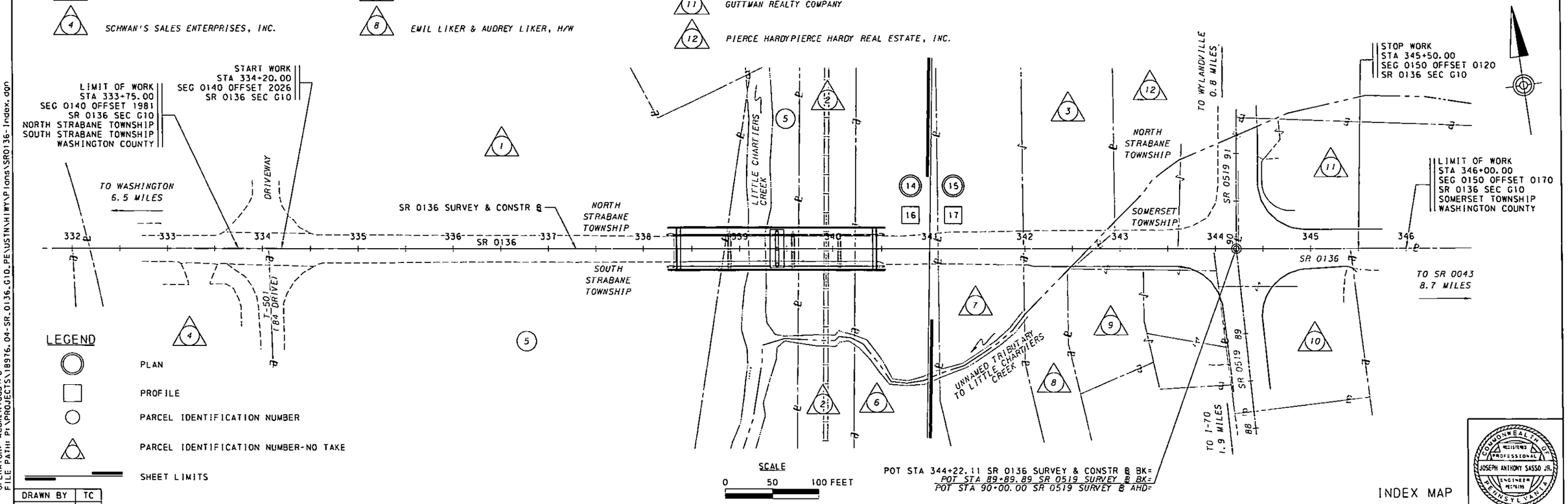
12 DISTRICT
⊙ DISTRICT OFFICE
◐ PROJECT LOCATION

TABULATION OF SEGMENT EQUALITIES

STA 333+75.00 = SEG 0140 OFF 1981 = LIMIT OF WORK
STA 344+29.63 = SEG 0150 OFF 0000
STA 346+00.00 = SEG 0150 OFF 0170 = LIMIT OF WORK

PROPERTY OWNERS

1. GOLDEN EAGLE CONSTRUCTION COMPANY
2. CSX TRANSPORTATION, INC., SUCCESSOR THROUGH MERGER WITH NEW YORK LINES, LLC
3. 84SLB2, LLC
4. SCHWAN'S SALES ENTERPRISES, INC.
5. DARRELL DEEMS & MARY JANE DEEMS, H/W
6. EARL HATFIELD & MICHELLE M. HATFIELD, H/W
7. JOSEPH M. WERNERT & ELLEN S. WERNERT, H/W
8. EMIL LIKER & AUDREY LIKER, H/W
9. FRANKLIN S. GREGG INC.
10. UNITED REFINING COMPANY OF PENNSYLVANIA
11. GUTTMAN REALTY COMPANY
12. PIERCE HARDYPIERCE HARDY REAL ESTATE, INC.



LEGEND

- PLAN
- PROFILE
- PARCEL IDENTIFICATION NUMBER
- PARCEL IDENTIFICATION NUMBER-NO TAKE
- SHEET LIMITS

SCALE
0 50 100 FEET

POT STA 344+22.11 SR 0136 SURVEY & CONSTR ℄ BK=
POT STA 89+89.89 SR 0519 SURVEY ℄ BK=
POT STA 90+00.00 SR 0519 SURVEY ℄ AHD=

INDEX MAP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH ANTHONY SASSO JR. ENGINEER

DRAWN BY	TC
CHECKED BY	JAS

OPERATOR: Adam.Nicastro
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10_PE\USTN\MWP\Plans\SR0136-Index.dgn

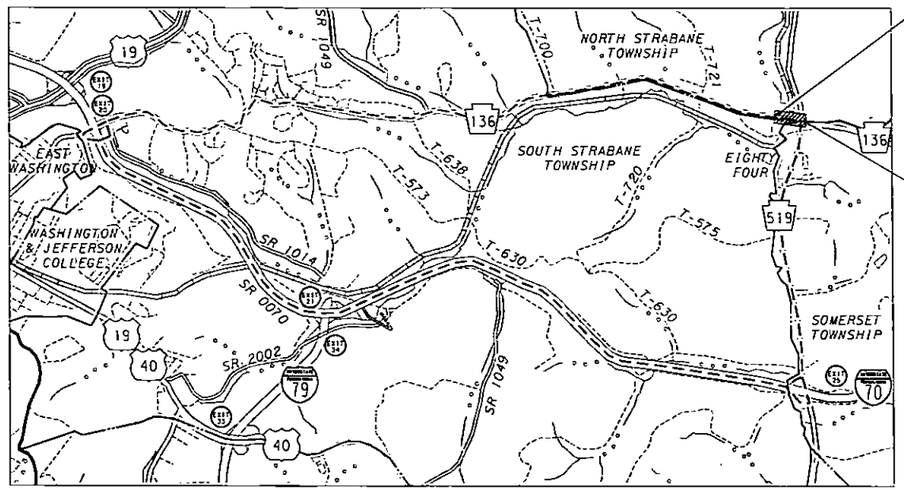
PLOTTED: 12/4/2015 2:31:52 PM

UTILITY CONTACT LIST

CTV	COMPANY ADDRESS	COMCAST CABLE COMMUNICATIONS, INC. 460 WASHINGTON ROAD WASHINGTON, PA 15301	ATTENTION: MARK VELTMAN PHONE: 412-875-1707 ATTENTION: CRAIG TACY PHONE: 724-250-4703 EMAIL: craig_tacy@cable.comcast.com
E	COMPANY ADDRESS	WEWST PENN POWER COMPANY 365 WASHINGTON ROAD WASHINGTON, PA 15301	ATTENTION: REGE GELLER PHONE: 724-942-5249 EMAIL: lgeller@firstenergycorp.com
G	COMPANY ADDRESS	COLUMBIA GAS OF PENNSYLVANIA 251 W. MAIDEN STREET WASHINGTON, PA 15301	ATTENTION: KEVIN LEWIS PHONE: 724-350-1137 EMAIL: klewis@nisource.com
G	COMPANY ADDRESS	COLUMBIA GAS TRANSMISSION, LLC 4115 CORK BOCKTOWN ROAD CLINTON, PA 15206	ATTENTION: MIKE TOLAND PHONE: 724-705-3519 EMAIL: mtoland@nisource.com
T	COMPANY ADDRESS	VERIZON PENNSYLVANIA INC. 141 SETON HILL GREENSBURG, PA 15601	ATTENTION: KEITH A. FOWLER PHONE: 724-747-6914 EMAIL: keith.a.fowler@verizon.com
W	COMPANY ADDRESS	PENNSYLVANIA AMERICA WATER. 1909 OAKLAND AVE. INDIANA, PA 15701	ATTENTION: JERRY E. HANKEY PHONE: 724-463-8706 EMAIL: jerry.hankey@amwater.com
F10	COMPANY ADDRESS	DQE COMMUNICATIONS SOUTHSIDE WORKS 424 SOUTH 27TH STREET, SUITE 220 PITTSBURGH, PA 15203	ATTENTION: THOMAS NEUGEBAUER PHONE: 412-393-1022 EMAIL: tneugebauer@dqe.com
F10	COMPANY ADDRESS	PEG BANDWIDTH 5904 STONE CREEK DRIVE SUITE 130 THE COLONY, TX 75056	ATTENTION: BILL FIALA PHONE: 330-416-9749 EMAIL: bfiala@PEGbandwidth.com

THE PA ONE-CALL (1-800-242-1776) SERIAL NUMBER 20143500305 NORTH STRABANE TOWNSHIP
20143500306 SOMERSET TOWNSHIP
20143500307 SOUTH STRABANE TOWNSHIP

LOCATION MAP



LIMIT OF WORK
STA 333+75.00
SEG 0140 OFFSET 1981
SR 0136 SECTION G10
NORTH STRABANE TOWNSHIP
SOUTH STRABANE TOWNSHIP
WASHINGTON COUNTY

LIMIT OF WORK
STA 346+00.00
SEG 0150 OFFSET 0170
SR 0136 SECTION G10
SOMERSET TOWNSHIP
WASHINGTON COUNTY

SCALE IN MILES
0 0.5 1.0

LEGEND

- PROJECT LOCATION
- TOWNSHIP ROAD
- STATE HIGHWAY
- STREAM
- RAIL ROAD
- TOWNSHIP LINE
- DETOUR ROUTE (12.8 MILES)

GENERAL NOTES-CONT'D.

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

RC-10M	JUNE 1, 2010	TC-8600	JUNE 13, 2013
RC-11M	JUNE 1, 2010	TC-8604	JUNE 13, 2013
RC-12M	JUNE 1, 2010	TC-8700C	JUNE 13, 2013
RC-13M	JUNE 1, 2010	TC-8702B	JUNE 13, 2013
RC-23M	JUNE 1, 2010	TC-8702C	JUNE 13, 2013
RC-25M	JUNE 1, 2010	TC-8716	JUNE 13, 2013
RC-28M	JUNE 10, 2013	TC-8717	JUNE 13, 2013
RC-30M	JUNE 1, 2010	TC-8802	DECEMBER 12, 2011
RC-31M	JUNE 1, 2010	TC-8803	DECEMBER 12, 2011
RC-45M	JUNE 1, 2010	TC-8804	DECEMBER 12, 2011
RC-46M	JUNE 1, 2010	TC-8805	DECEMBER 12, 2011
RC-50M	JUNE 1, 2010	TC-8806	DECEMBER 12, 2011
RC-52M	JUNE 1, 2010	BC-701M	NOVEMBER 21, 2014
RC-64M	JUNE 1, 2010	BC-708M	NOVEMBER 26, 2013
RC-70M	JUNE 1, 2010	BC-709M	NOVEMBER 21, 2014
RC-72M	JUNE 1, 2010	BC-734M	OCTOBER 26, 2010
RC-73M	JUNE 1, 2010	BC-735M	OCTOBER 26, 2010
RC-75M	JUNE 1, 2010	BC-736M	MAY 18, 2012
RC-77M	JUNE 1, 2010	BC-751M	NOVEMBER 21, 2014
		BC-752M	NOVEMBER 21, 2014
		BC-753M	NOVEMBER 26, 2013
		BC-754M	OCTOBER 26, 2010
		BC-755M	NOVEMBER 26, 2013
		BC-757M	NOVEMBER 26, 2013
		BC-767M	NOVEMBER 26, 2013
		BC-775M	NOVEMBER 26, 2013
		BC-788M	NOVEMBER 21, 2014

TABULATION OF OVERALL LENGTH

STA 333+75.00 TO STA 346+00.00 = 1225.00 FT = 0.232 MI

TABULATION OF CONSTRUCTION LENGTH

STA 334+20.00 TO STA 345+50.00 = 1130.00 FT = 0.214 MI

LISTING OF EQUALITIES

NONE

SUMMARY OF PROJECT COORDINATES

BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (NAD 83)
(PA-SOUTH ZONE) COMBINED FACTOR = 0.99992660

ROUTE	STATION	POINT	COORDINATES NORTH	COORDINATES EAST	BEARING
SR 0136 SURVEY & CONSTR ℄	332+00.00	POT	318536.5579	1301536.7718	S81°48'10"E
	346+00.00	POT	318336.9446	1302922.4682	
SR 0519 SURVEY ℄	88+00.00	POT	318172.5966	1302738.1558	N2°29'20"E
	89+89.89 BK	PI	318362.3074	1302746.4019	
	90+00.00 AHD	PI	318362.3074	1302746.4019	N8°34'20"E
	91+50.00	PC	318510.6318	1302768.7603	

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

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 CLASS 1	CUBIC YARDS OF EXCAVATION CLASS 3 ▲	CUBIC YARDS OF COMPLETED EMBANKMENT •	CUBIC YARDS OF SELECTED BORROW EXCAVATION	CUBIC YARDS OF SELECTED BORROW EXCAVATION, COARSE AGGREGATE NO. 1	CUBIC YARDS OF SELECTED BORROW EXCAVATION, COARSE AGGREGATE NO. 57	CUBIC YARDS OF SELECTED BORROW EXCAVATION ROCK, CLASS R-3	CUBIC YARDS OF SELECTED BORROW EXCAVATION ROCK, CLASS R-4	CUBIC YARDS OF SELECTED BORROW EXCAVATION ROCK, CLASS R-8 ▲	CUBIC YARDS OF SELECTED BORROW EXCAVATION, STRUCTURE BACKFILL ▲
9947	1227	15492	4778	2093	397	1131	320	5794	208
					18▲		636▲		

• INCLUDES ALL BORROW ITEMS

▲ INCIDENTAL TO LUMP SUM STRUCTURE ITEM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	3 OF 17
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

GENERAL NOTES

THE LEGAL RIGHT-OF-WAY ON SR 0136, FORMERLY ROUTE NO. 181 FROM STATION 333+75.00 TO 344+75.00 IS 80 FEET, BASED ON PLAN OF ROUTE NO. 181, SECTION R-2, SIGNED ON MAY 26, 1941.

THE LEGAL RIGHT-OF-WAY ON T-501 IS 50 FEET , BASED ON PLAN OF ROUTE NO. 181, SECTION R-2, SIGNED ON MAY 26, 1941.

THE LEGAL RIGHT-OF-WAY ON SR 0519, FORMERLY ROUTE NO. 62173 NORTH OF SR 0136 IS 80 FEET, BASED ON PLAN OF ROUTE NO. 62173, SECTION S1, SIGNED ON MAY 4, 1959, AND RECORDED ON JUNE 19, 1959, IN THE WASHINGTON COUNTY RECORDERS OFFICE IN RIGHT-OF-WAY BOOK VOL 7, PAGE 26.

CONSTRUCT PROJECT IN ACCORDANCE WITH PUBLICATION 408 SPECIFICATIONS, DATED 2011.

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

THREE WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR MUST CONTACT THE PA ONE CALL SYSTEM, INC., PHONE 1-800-242-1776, SERIAL NO. ----------, ----------, & ---------- FOR NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS, WASHINGTON COUNTY.

HORIZONTAL CONTROL IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (NAD 83), PA-SOUTH ZONE. GPS DERIVED. COMBINED FACTOR = 0.99992660.

VERTICAL CONTROL IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). FEMA RM-20.

THE DEPARTMENT DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS OF THE EXISTING SUBSURFACE UTILITY STRUCTURES SHOWN ON THE PLAN, NOR DOES THE DEPARTMENT GUARANTEE THAT ALL SUBSURFACE STRUCTURES ARE SHOWN.

SR 0136 PREVIOUSLY KNOWN AS LR 181.

ANY MAIL BOXES THAT ARE DISTURBED ARE TO BE RESET AND KEPT OPERATIONAL AT ALL TIMES DURING CONSTRUCTION.

THERE ARE NO NAVIGABLE STREAMS ON THIS PROJECT.

THE FOLLOWING SYMBOLS ARE USED TO DEPICT SLOPE LIMITS:

C ---- F
CUT | FILL

THE HALF CIRCLED NUMBER INDICATES A SCALED DIMENSION. +50 / 80'

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.

CHANNEL EASEMENT. AN EASEMENT FOR THE CONSTRUCTION, INSPECTION, MAINTENANCE, REPAIR, RECONSTRUCTION AND ALTERATION OF THE COURSE OF THE CHANNEL. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY FLOW OF WATER.

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.

SEEDING:

SEEDING AND SOIL SUPPLIMENTS - FORMULA D
FOR SLOPES FLATTER THAN 3:1

SEEDING AND SOIL SUPPLIMENTS - FORMULA L
FOR SLOPES STEEPER THAN 3:1

TEMPORARY SEEDING - FORMULA E
PLACE IN TEMPORARY SEEDING AREAS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH ANTHONY SASSO JR. ENGINEER SEAL

GENERAL NOTES

DRAWN BY	TC
CHECKED BY	JAS

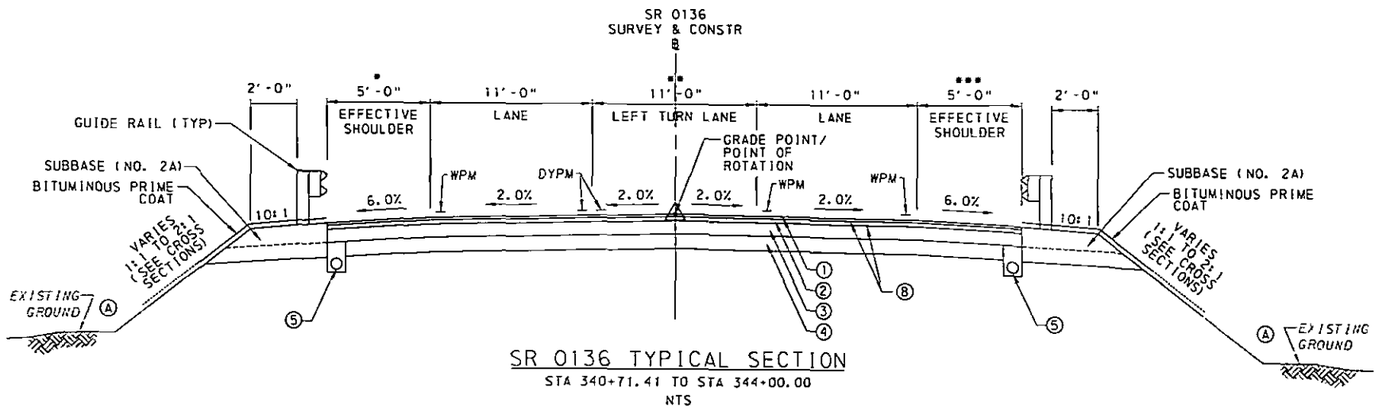
OPERATOR: Adam.Nicastro
FILE PATH: P:\PROJECTS\18976.04-SR_0136_G10_PE\USTNH\WYPlans\SR0136-general notes.dgn

PLOTTED: 11/5/2015
11:39:57 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	4 OF 17
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

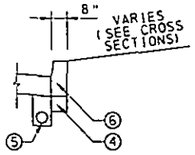
REVISION NUMBER	REVISIONS	DATE	BY

- * VARIES 6'-3" TO 5'-0"
  STA 340+69.26 TO STA 341+43.76
  VARIES 5'-0" TO 0'-0"
  STA 343+48.28 TO STA 344+00.00
- ** VARIES 9'-9" TO 11'-0"
  STA 340+69.26 TO STA 341+43.76
- *** VARIES 5'-0" TO 2'-0"
  STA 342+15.24 TO STA 342+45.19
  VARIES 2'-0" TO 0'-0"
  STA 343+53.39 TO STA 344+00.00



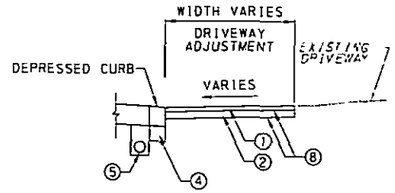
SR 0136 TYPICAL SECTION

STA 340+71.41 TO STA 344+00.00
NTS



PARTIAL TYPICAL - CURB SECTION

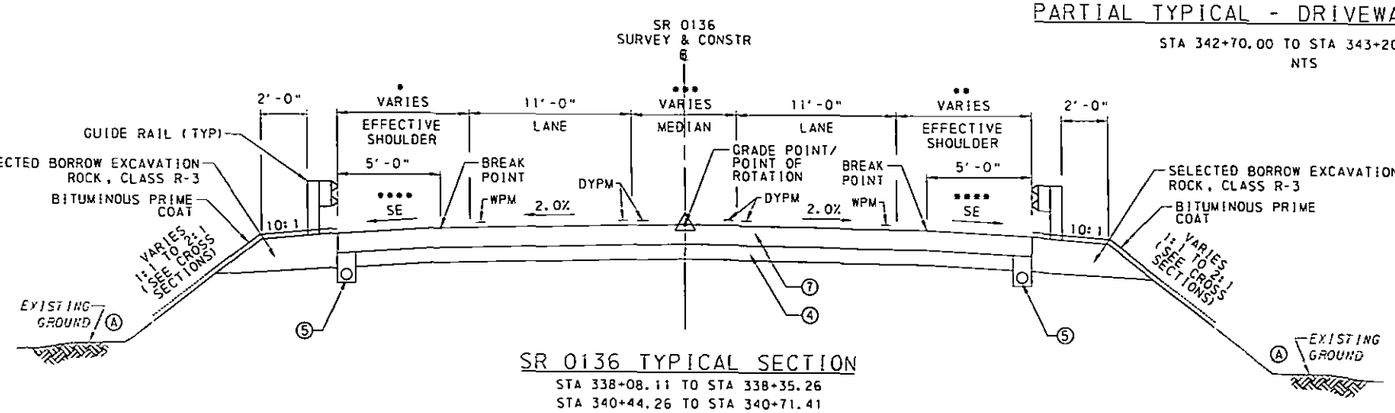
STA 342+15.24 TO STA 342+70.00 RT
STA 343+20.00 TO STA 344+00.00 RT
NTS



PARTIAL TYPICAL - DRIVEWAY ADJUSTMENT

STA 342+70.00 TO STA 343+20.00 RT
NTS

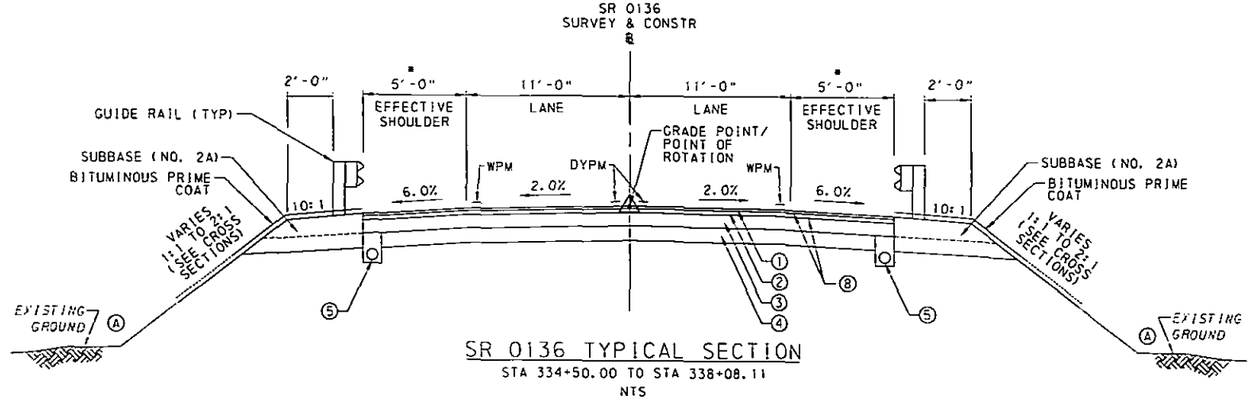
- * VARIES 10'-6" TO 10'-1"
  STA 338+10.26 TO STA 338+35.26
  VARIES 6'-8" TO 6'-3"
  STA 340+44.26 TO STA 340+69.26
- ** VARIES 10'-6" TO 9'-11"
  STA 338+10.26 TO STA 338+35.26
  VARIES 5'-4" TO 5'-0"
  STA 340+44.26 TO STA 340+57.64
- *** VARIES 0'-0" TO 1'-0"
  STA 338+10.26 TO STA 338+35.26
  VARIES 9'-0" TO 9'-9"
  STA 340+44.26 TO STA 340+69.26
- **** VARIES 6.0% TO 4.0%
  STA 338+10.26 TO STA 338+35.26
  VARIES 4.0% TO 6.0%
  STA 340+44.26 TO STA 340+69.26



SR 0136 TYPICAL SECTION

STA 338+08.11 TO STA 338+35.26
STA 340+44.26 TO STA 340+71.41
NTS

- * VARIES 5'-0" TO 10'-6"
  STA 337+52.56 TO STA 338+08.01



SR 0136 TYPICAL SECTION

STA 334+50.00 TO STA 338+08.11
NTS

NOTES

1. SUPERPAVE ASPHALT MIXTURE DESIGN, WMA WEARING COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H
2. SUPERPAVE ASPHALT MIXTURE DESIGN, WMA BINDER COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH
3. SUPERPAVE ASPHALT MIXTURE DESIGN, WMA BASE COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 8" DEPTH
4. SUBBASE 6" DEPTH (NO. 2A)
5. 6" PAVEMENT BASE DRAIN
6. PLAIN CEMENT CONCRETE CURB
7. BRIDGE APPROACH SLAB
8. BITUMINOUS TACK COAT

LEGEND

.....	SEEDING AND SOIL SUPPLEMENTS FORMULA D, E OR L
WPM	WHITE PERMANENT PAVEMENT MARKINGS
DYPM	DOUBLE YELLOW PERMANENT PAVEMENT MARKINGS
(A)	ROUNDING OF CUT OR FILL SLOPES IN ACCORDANCE WITH RC-10M

SEEDING:

SEEDING AND SOIL SUPPLEMENTS - FORMULA E
PLACE IN TEMPORARY SEEDING AREAS

SEEDING AND SOIL SUPPLEMENTS - FORMULA D
FOR SLOPES FLATTER THAN 3:1

SEEDING AND SOIL SUPPLEMENTS - FORMULA L
FOR SLOPES STEEPER THAN 3:1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOSEPH ANTHONY SASSO JR.
ENGINEER

TYPICAL SECTIONS

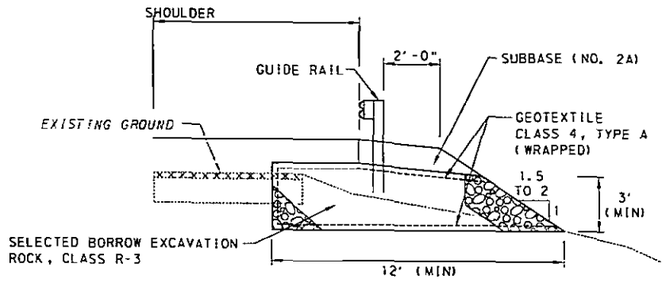
DRAWN BY	TC
CHECKED BY	JAS

OPERATOR: Adam.Nicastro
FILE PATH: P:\PROJECTS\18976.04-SR_0136_G10_PE\USTN\HIWY\Plans\SR0136-Typicals.dgn

PLOTTED: 12/11/2015
9:43:11 AM

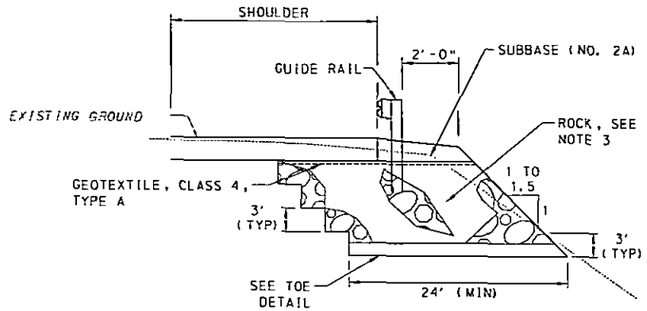
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	6 OF 17
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY



1.5:1 TO 2:1 FILL EMBANKMENTS

NTS



1:1 TO 1.5:1 SLOPE DETAIL

NTS

1. FOR NEW EMBANKMENTS OF ROCK CLASS, FILL BENCHES SHOULD BE CUT FROM TOP DOWN BEFORE PLACING ROCK CLASS.

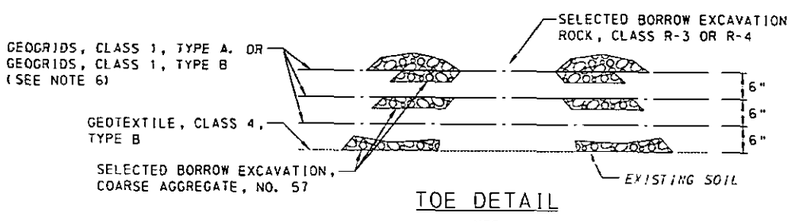
2. LEAVE NO MORE THAN 25 FEET OF FULL DEPTH EXCAVATION OPEN BEFORE BACKFILLING WITH ROCK CLASS. BACKFILL EXCAVATION WITH SELECTED BORROW EXCAVATION ROCK, CLASS R-3 OR SELECTED BORROW EXCAVATION ROCK, CLASS R-4 UPON COMPLETION OF THE EXCAVATION. DO NOT LEAVE *EXCAVATION OVERNIGHT, OVER THE WEEKEND OR HOLIDAYS.*

3. BACKFILL TO WITHIN THREE (3) FEET OF SUBGRADE ELEVATION WITH SELECTED BORROW EXCAVATION ROCK, CLASS R-4. BACKFILL THE REMAINDER OF THE EXCAVATION WITH SELECTED BORROW EXCAVATION ROCK, CLASS R-3 TO SUBGRADE ELEVATION.

4. PROVIDE FILL BENCH CONFIGURATIONS AND NOMINAL SLOPES ON THE ACTUAL CROSS SECTIONS.

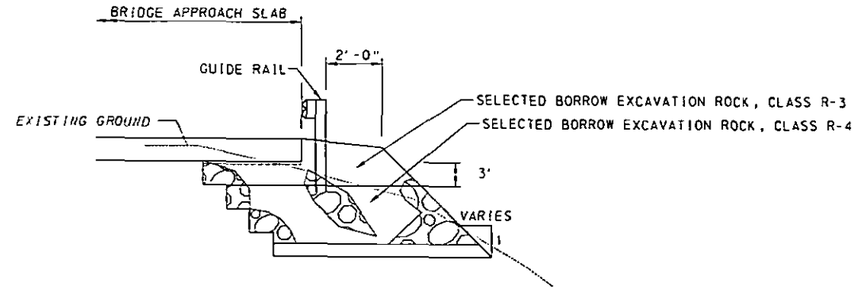
5. PROVIDE A LAYER OF GEOTEXTILE, CLASS 4, TYPE A BETWEEN THE SUBBASE AND SELECTED BORROW EXCAVATION ROCK, CLASS R-3.

6. INSTALL GEOGRIDS, CLASS 1, TYPE A. OR GEOGRIDS, CLASS 1, TYPE B.



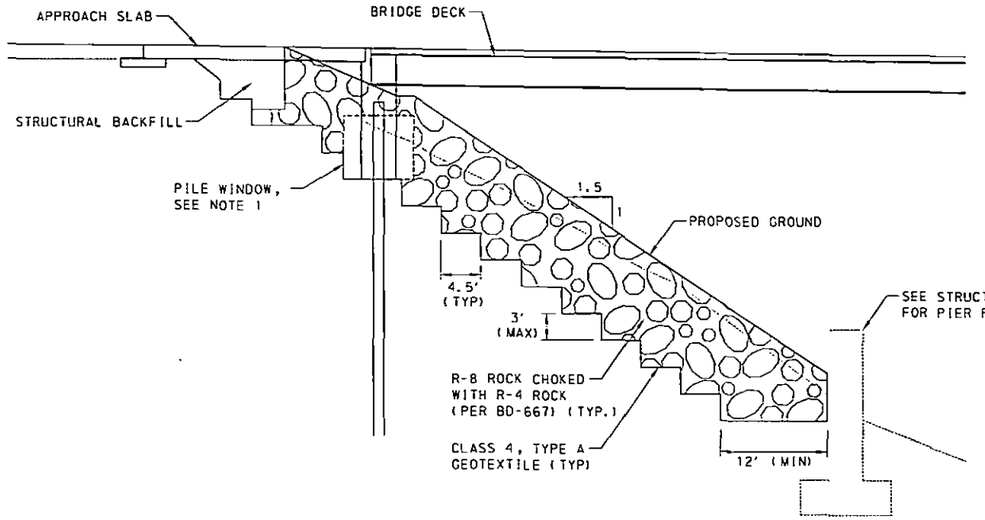
TOE DETAIL

NTS



METHOD OF PLACING SHOULDER BACKUP
ON STEEP SLOPES NEAR BRIDGE APPROACH SLABS

NTS



ROCK BUTTRESS DETAIL

NTS

1. CONSTRUCT PILE WINDOW UTILIZING EMBANKMENT MATERIAL IN ACCORDANCE WITH PUBLICATION 408 / 2011, SECTION 206.2(a) 1.b GRANULAR MATERIAL.

OPERATOR: Adam Nicastro
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10_PE\USTNH\PWYP lans\SR0136-Typicals.dgn

DRAWN BY	TC
CHECKED BY	JAS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOSEPH ANTHONY SASSO JR.
ENGINEER
NO. 76136

DETAILS

PLOTTED: 12/3/2015 7:06:30 AM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	14 OF 17
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

180°00'00" / 270°00'00" / 75.00' / 99.99' / IP W/CAP / IP W/CAP / IP W/CAP / 40.00' / MAG NAIL / SR 0136 SURVEY & CONSTR ℄ / P.O.T. 341+50.00 / 270°00'00"

BM #2 ELEV. 1030.37
SR 0136 SURVEY & CONSTR ℄
STA. 334+43, 26' LT.
SPIKE NAIL IN UTILITY POLE
W.P.P.CO. #728238

SR 0136 SURVEY & CONSTR ℄ P.O.T. STA 333+00.00

LIMIT OF WORK
STA 333+75.00
SEG 0140 OFFSET 1981
SR 0136 SEC G10
NORTH STRABANE TOWNSHIP
SOUTH STRABANE TOWNSHIP
WASHINGTON COUNTY

START WORK
STA 334+20.00
SEG 0140 OFFSET 2026
SR 0136 SEC G10

TERMINAL SECTION, SINGLE
TYPE 2-S GUIDE RAIL
R=25'
R=44.5'
W.P.P.CO. #728238
W.P.P.CO. #728237
W.P.P.CO. #728235
LOW WIRE EL.=1056.0'
LOW WIRE EL.=1048'
LOW WIRE EL.=1041'
NORTH STRABANE TOWNSHIP
SOUTH STRABANE TOWNSHIP
S. R. 0136
SR 0136 SURVEY & CONSTR ℄
S81°48'10"E
334 335 336 337 338 339 340 341
80'
11' 5' 16.5'
LEGAL RIGHT-OF-WAY LINE
LEGAL SLOPE EASEMENT LINE
PROPOSED OVERHEAD UTILITIES (TO BE INSTALLED BY OTHERS)
THRIE-BEAM TO PA TYPE 10M BRIDGE BARRIER TRANSITION WITHOUT INLET PLACEMENT (TYP.)
GAS VENT PIPE
BEGIN STRUCTURE STA 338+35.26
END STRUCTURE STA 340+44.26
TEMPORARY CONSTRUCTION EASEMENT
GAS LINE MARKER
LEGAL CHANNEL EASEMENT
LITTLE CHARTIERS CREEK
CSX RAILROAD TRACK
CSX TRANSPORTATION, INC., SUCCESSOR THROUGH MERGER WITH NEW YORK LINES, LLC
UNNAMED TRIBUTARY TO LITTLE CHARTIERS CREEK
SOMERSET TOWNSHIP
LEGAL RIGHT-OF-WAY LINE FOR TOWNSHIP ROAD
T-501
150'

1 GOLDEN EAGLE CONSTRUCTION COMPANY
2 CSX TRANSPORTATION, INC., SUCCESSOR THROUGH MERGER WITH NEW YORK LINES, LLC
3 84SLB2, LLC
4 SCHWAN'S SALES ENTERPRISES, INC.
5 DARRELL DEEMS & MARY JANE DEEMS, H/W
6 EARL HATFIELD & MICHELLE M. HATFIELD, H/W
7 JOSEPH M. WERNERT & ELLEN S. WERNERT, H/W
8 EMIL LIKER & AUDREY LIKER, H/W

MATCH TO SHEET 15

HYDRAULIC DATA

DRAINAGE AREA = 23.1 MI^2

25-YEAR FLOOD (DESIGN STORM)
DISCHARGE = 3,006 CFS
WATER SURFACE ELEVATION = 990.63'
CHANNEL VELOCITY = 6.16 FT/S

100-YEAR FLOOD
DISCHARGE = 4,310 CFS
WATER SURFACE ELEVATION = 992.17'
CHANNEL VELOCITY = 7.42 FT/S

ROADWAY OVERTOPPING FREQUENCY (PROPOSED) = N/A
ROADWAY OVERTOPPING FREQUENCY (EXISTING) = N/A

SCOUR INFORMATION

TOTAL SCOUR AT PIER = 7.94'

STRUCTURE DATA

EXISTING
STATION: 339+40
TYPE: STEEL PLATE GIRDER
NORMAL CLEAR SPAN: 52'-6" (SPAN 1), 64'-6" (SPAN 2), 46'-6" (SPAN 3), 34'-6" (SPAN 4)
MINIMUM UNDERCLEARANCE: 22'-0" (OVER CSX RR)
SKEW: 90°
ROADWAY WIDTH: 26'-0"
MINIMUM HYDRAULIC OPENING: 4,661.41 SF
STRUCTURE LENGTH: 210'-0" C/C BRG.

PROPOSED
STATION: 339+39.76
TYPE: 2 SPAN PREFABRICATED SUPERSTR. BRIDGE UNITS USING STEEL PLATE GIRDERS
NORMAL CLEAR SPAN: SPAN 1 = 99'-3", SPAN 2 = 99'-3"
MINIMUM UNDERCLEARANCE: 23'-3" (AT RAILROAD)
SKEW: 90°
ROADWAY WIDTH: 43'-0" (CURB-TO-CURB)
MINIMUM HYDRAULIC OPENING: 4,957.30 SF
STRUCTURE LENGTH: 206'-0"
STRUCTURE: S-36050

NOTE: THE EXISTING STRUCTURAL MEMBERS ARE ASSUMED TO CONTAIN LEAD PAINT AND OTHER TOXIC METALS.

SCALE
0 25 50 FEET

FOR PROFILE SEE SHEET 15

DRAWN BY	TC
CHECKED BY	JAS

ROADWAY PLAN

SURVEY BOOK NO. 29645 & 29646

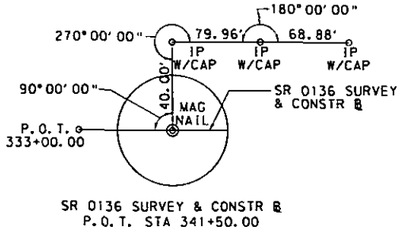
COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — JOSEPH ANTHONY SASSO JR.

OPERATOR: Adam.Niccolo
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10.PE\USTN\11WYXPlans\SR0136-Plan01.dgn

PLOTTED: 12/3/2015 7:06:40 AM

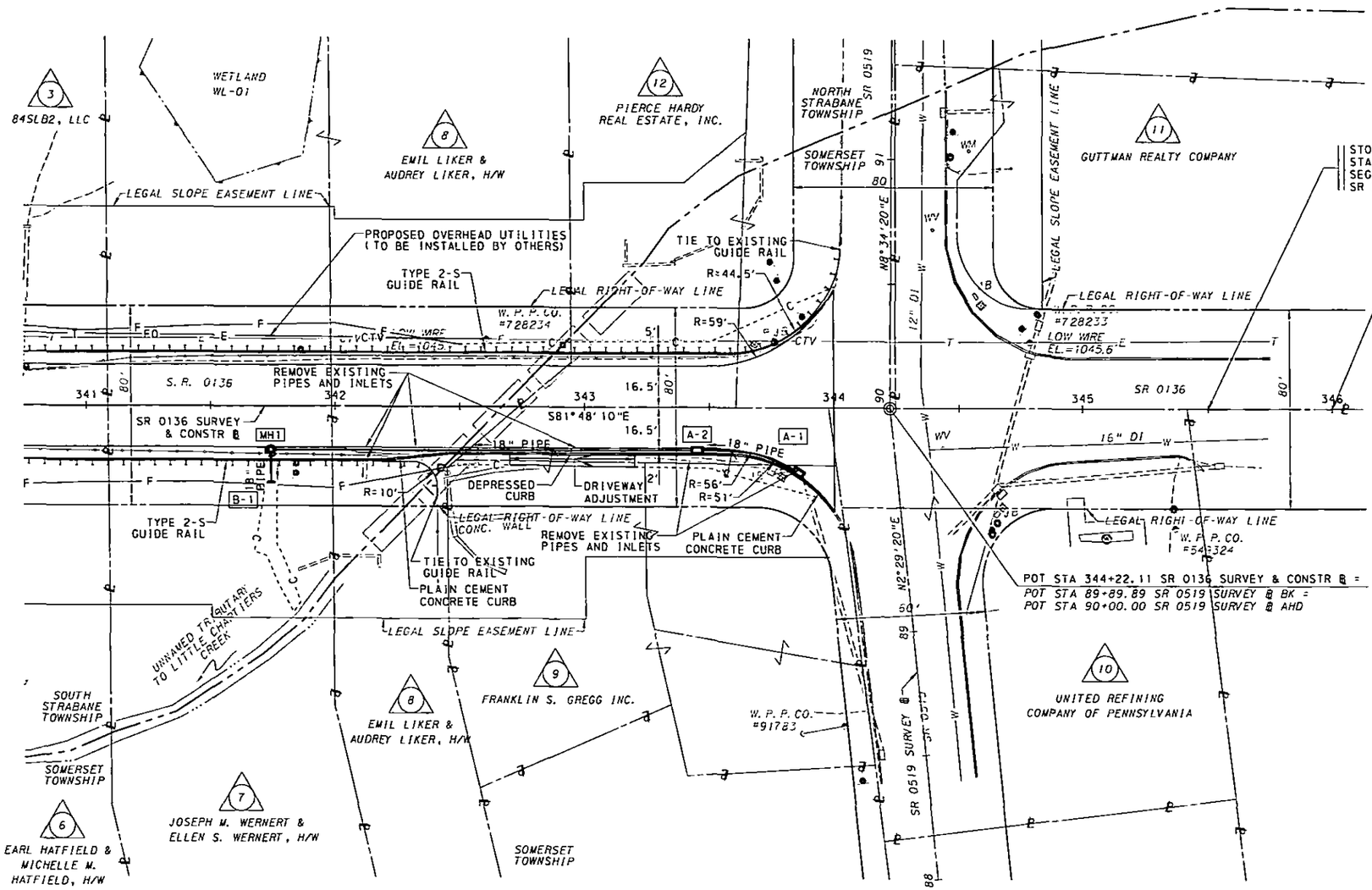
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	15 OF 17
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY



SR 0136 SURVEY & CONSTR ℄
P.O.T. STA 341+50.00

BM #1 ELEV. 1021.51
SR 0136 SURVEY & CONSTR ℄
STA. 343+79, 28' RT.
SQUARE CUT ON NORTH MOST CORNER OF CONC. TRAFFIC SIGNAL BASE @ SW CORNER OF SR 0136 AND SR 0519 INTERSECTION



STOP WORK
STA 345+50.00
SEG 0150 OFFSET 0120
SR 0136 SEC G10

LIMIT OF WORK
STA 346+00.00
SEG 0150 OFFSET 0170
SR 0136 SEC G10
SOMERSET TOWNSHIP
WASHINGTON COUNTY

A-1

STA 343+85.31, 26.88' RT
SR 0136
TYPE C CONCRETE TOP UNIT AND BICYCLE SAFE GRATE
STANDARD INLET BOX, HEIGHT </= 10'
TG=1020.21
INV IN(S)=1017.17 (FROM EXISTING)
INV OUT(W)=1016.90

A-2

STA 343+45.00, 18.5' RT
SR 0136
TYPE C CONCRETE TOP UNIT AND BICYCLE SAFE GRATE
STANDARD INLET BOX, HEIGHT </= 10'
TG=1020.14
INV IN(E)=1016.50
INV OUT(W)=1016.30

MH1

STA 341+74.10, 17.5' RT
SR 0136
MANHOLE
TG=1022.11
INV IN(E)=1014.30
INV OUT(S)=1014.10

B-1

STA 341+74.10, 30.9' RT
SR 0136
TYPE D ENDWALL
INV OUT(S) =1013.75

SCALE
0 25 50 FEET

FOR PROFILE SEE SHEET 16

ROADWAY PLAN

SURVEY BOOK NO. 29645 & 29646

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH ANTHONY SASSO JR. ENGINEER

DRAWN BY	TC
CHECKED BY	JAS

MATCH TO SHEET 14

OPERATOR: Adam.Nicastro
FILE PATH: P:\PROJECTS\18976.04-SR_0136_G10_PENNSTNH\WYP lans\SR0136-Plan02.dgn

PLOTTED: 12/3/2015 7:06:49 AM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	16 OF 17
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

LIMIT OF WORK
STA 333+75.00
SEG 0140 OFFSET 1981
SR 0136 SEC G10
NORTH STRABANE TOWNSHIP
SOUTH STRABANE TOWNSHIP
WASHINGTON COUNTY

START WORK
STA 334+20.00
SEG 0140 OFFSET 2026
SR 0136 SEC G10

GRAPHIC GRADE

EXISTING GROUND

-0.75%

BEGIN STRUCTURE
STA 338+35.26

PVI STA 340+40.00
ELEV 1025.80
VC 110.00'
MO -0.24
SSD 671'

PVC

-0.75%

-2.50%

PVT

END STRUCTURE
STA 340+44.26

23'-0" REQUIRED
23'-3" PROVIDED

EXISTING GROUND

LITTLE CHARTIERS CREEK

100-YEAR WSE 992.17'

25-YEAR WSE 990.63'

CSX RAILROAD

18" RCP

EXISTING LITTLE CHARTIERS CREEK PROFILE

+0.01%

TEMPORARY SHEET PILES FOR PIER CONSTRUCTION

MATCH TO SHEET 17

	1031.3	1030.8	1030.2	1029.8	1029.5	1028.9	1028.5	1027.9	1027.4	1026.8	1026.3	1026.1	1026.0	1025.8	1011.9	982.3	995.1	996.4	997.5	1023.4	1023.0	1022.7	1022.7
			G-1030.18	G-1029.94	G-1029.79	G-1029.66	G-1029.47	G-1029.10	G-1028.72	G-1028.35	G-1027.97	G-1027.78	G-1027.60	G-1027.41	G-1027.22	G-1026.85	G-1026.47	G-1026.21	G-1026.08	G-1025.39	G-1024.89	G-1024.42	G-1024.30
DATUM 960																							
	+50	334	+50	+75	335	+25	+50	336	+50	337	+50	+75	338	+25	+50	339	+50	+85.00	340	+50	+75	+95.00	341

SCALE
HORIZONTAL 0 25 50 FEET
VERTICAL 0 5 10 FEET

PROFILE SR 0136

STA 333+75.00 TO STA 341+00.00

ROADWAY PROFILE

FOR PLAN SEE SHEET 13

SURVEY BOOK NO. 29645 & 29646

DRAWN BY TC
CHECKED BY JAS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH ANTHONY SASSO JR. ENGINEER

OPERATOR: Adam.Nicosiro
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10.PE\USTNWH\WYPlans\SR0136-Prof11a01.dgn

PLOTTED: 12/3/2015 7:06:58 AM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	17 OF 17
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

PVI STA 340+40.00
ELEV 1025.80
VC 110.00'
MO -0.24
SSD 672'

PVI STA 342+65.00
ELEV 1020.17
VC 240.00'
MO 0.90
HLSD 448'

INLET
RIM EL.=1020.83'
INV EL.=1015.83' IN
INV EL.=1015.73' OUT

INLET
RIM EL.=1020.87'
INV EL.=1017.17' IN
INV EL.=1017.12' OUT

INLET
RIM EL.=1020.83'
INV EL.=1016.58' IN
INV EL.=1016.63' OUT

PVT
PVC
PVT
-2.50%
-2.50%
+0.50%
+0.50%
18" CPP
18" CPP
1.03%
1.20%
18" PIPE
18" PIPE
MH1
A-2
A-1
REMOVE EXISTING PIPES AND INLETS
LOW POINT STA 343+45.00
G-1020.67
EXISTING GROUND
EXISTING CULVERT
UNNAMED TRIBUTARY TO LITTLE CHARTIERS CREEK
-0.01%

STOP WORK
STA 345+50.00
SEG 0150 OFFSET 0120
SR 0136 SEC G10

LIMIT OF WORK
STA 346+00.00
SEG 0150 OFFSET 0170
SR 0136 SEC G10
SOMERSET TOWNSHIP
WASHINGTON COUNTY

	1023.0	1022.7	1022.7	1021.8	1021.8	1021.2	1020.9	1021.0	1021.0	1020.8	1020.8	1021.3	1021.7	1022.1	1022.9
	G-1024.89	G-1024.42	G-1024.30	G-1023.17	G-1023.05	G-1021.99	G-1021.24	G-1020.80	G-1020.67	G-1020.77	G-1020.85				
DATUM 960	+75	+95.00 341		+45.00 +50		342	+50	343	+50	+85.00 344		+50	+75	345	+50	346

A-1

STA 343+85.31, 26.88' RT
SR 0136
TYPE C CONCRETE TOP UNIT AND BICYCLE SAFE GRATE
STANDARD INLET BOX, HEIGHT </= 10'
TG=1020.21
INV IN(S)=1017.17 (FROM EXISTING)
INV OUT(W)=1016.90

A-2

STA 343+45.00, 18.5' RT
SR 0136
TYPE C CONCRETE TOP UNIT AND BICYCLE SAFE GRATE
STANDARD INLET BOX, HEIGHT </= 10'
TG=1020.14
INV IN(E)=1016.50
INV OUT(W)=1016.30

MH1

STA 341+74.10, 17.5' RT
SR 0136
MANHOLE
TG=1022.11
INV IN(E)=1014.30
INV OUT(S)=1014.10

B-1

STA 341+74.10, 30.9' RT
SR 0136
TYPE D ENDWALL
INV OUT(S) =1013.75

SCALE
HORIZONTAL 0 25 50 FEET
VERTICAL 0 5 10 FEET

PROFILE SR 0136

STA 341+00.00 TO STA 344+75.00

POT STA 344+22.11 SR 0136 SURVEY & CONSTR @ =
POT STA 89+89.89 SR 0519 SURVEY @ BK =
POT STA 90+00.00 SR 0519 SURVEY @ AHD

ROADWAY PROFILE

SURVEY BOOK NO. 29645 & 29646

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH ANTHONY SASSO JR. ENGINEER

DRAWN BY TC
CHECKED BY JAS

MATCH TO SHEET 16

FOR PLAN SEE SHEET 14

OPERATOR: Adam.Nicastro
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10_PE\USTN\HIWY\Plans\SR0136-Profile02.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	1 OF 6
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				
REVISION NUMBER	REVISIONS		DATE	BY

GENERAL NOTES

THIS WORK CONSISTS OF MAINTENANCE AND THE PROTECTION OF *THE TRAVELING PUBLIC APPROACHING* THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF THE CONSTRUCTION AND ON APPROVED DETOURS.

FURNISH, ERECT, PLACE AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES AND MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS INDICATED ON THESE DRAWINGS, AND,

1. THE SPECIAL PROVISIONS OF THE CONTRACT.
2. PDT PUBLICATION NO. 212, OFFICIAL TRAFFIC CONTROL DEVICES.
3. PDT PUBLICATION NO. 213, TEMPORARY TRAFFIC CONTROL GUIDELINES.
4. PDT PUBLICATION NO. 35, APPROVED CONSTRUCTION MATERIALS (BULLETIN 15).
5. PDT PUBLICATION NO. 408/2011, SPECIFICATIONS.
6. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
7. PDT PUBLICATION NO. 236M, HANDBOOK OF APPROVED SIGNS.
8. PDT PUBLICATION NO. 111M, TRAFFIC CONTROL PAVEMENT MARKINGS AND SIGNING STANDARDS.
9. PDT PUBLICATION NO. 46M, TRAFFIC ENGINEERING MANUAL.

IMMEDIATELY UPON COMPLETION OF THE WORK, REMOVE AND RETAIN THE DEVICES UNLESS OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS. PENNDOT WILL REMOVE ANY TRAFFIC CONTROL DEVICES ERECTED BY THE DEPARTMENT FORCES.

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PENNSYLVANIA ONE CALL SYSTEM, INC. AT 1-800-242-1776 AT LEAST 3-FULL WORKING DAYS BEFORE DIGGING. PA ONE CALL SHALL BE CONTACTED BEFORE ANY SIGN POST ANCHOR IS DRIVEN INTO THE GROUND FOR *TEMPORARY AND PERMANENT SIGNING.*

ALL TRAFFIC CONTROL DEVICES SHALL BE IN PLACE AND INSPECTED BY THE PROJECT INSPECTOR DAILY PRIOR TO THE START OF WORK.

ALL TRAFFIC CONTROL DEVICES SHALL BE IN PLACE AND INSPECTED BY THE PROJECT INSPECTOR DAILY PRIOR TO THE END OF WORK.

NOTIFY THE DISTRICT TRAFFIC ENGINEER IN WRITING TWO WEEKS PRIOR TO MAKING ANY TRAFFIC PATTERN CHANGES AND WHEN PROJECT IS COMPLETE.

NO ROADWAY IS PERMITTED TO HAVE A LANE CLOSURE OR ROAD CLOSURE STARTING NOVEMBER 01, AND ENDING APRIL 01, WITHOUT AN APPROVED REVISED TRAFFIC CONTROL PLAN ADDRESSING WINTER OPERATIONS.

INSPECTOR-IN-CHARGE SHALL REPORT ALL TRAFFIC *INCIDENTS TO THE DISTRICT TRAFFIC ENGINEER* BY COPY OF THE TRAFFIC ACCIDENT REPORT FORM FROM THE PENNSYLVANIA STATE POLICE.

ALL SIGNS NOT IN USE SHALL BE EITHER COVERED OR *REMOVED FROM SIGHT.* THE CONTRACTOR IS TO REINSTALL ALL SIGNS THAT WERE REMOVED FOR THE CONSTRUCTION PROJECT. DO NOT PLACE ANY ADHESIVE ON THE FACE OF THE SIGN.

ALL EXISTING SIGNAGE WITH CONFLICTING MESSAGES SHALL BE COVERED OR REMOVED AND REINSTALLED WHEN PROJECT IS COMPLETE.

ALL SIGNS AND DEVICES ARE TO BE NEW AT THE BEGINNING OF THE PROJECT AND ARE TO BE MAINTAINED TO PENNDOT'S SATISFACTION THROUGHOUT THE PROJECT DURATION.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF PEDESTRIANS *WITHIN THE WORK* AREA, PRINCIPALLY ADJACENT TO THE EXCAVATION AREAS.

REMOVE ALL CONFLICTING PAVEMENT MARKINGS.

REINSTALL ALL TEMPORARY PAVEMENT MARKINGS AS DIRECTED DURING CONSTRUCTION. PAVEMENT MARKINGS SHALL MEET PENNDOT'S SATISFACTION. EPOXY PAVEMENT MARKINGS SHALL BE USED FOR WINTER SHUTDOWN.

ALL SIGNS SHALL BE REFLECTORIZED WITH MATERIAL THAT MEETS PENNDOT SPECIFICATIONS FOR SHEET REFLECTIVE MATERIAL, TYPE III OR TYPE VII FLUORESCENT.

ALL CHANNELIZING DEVICES MUST HAVE A REFLECTIVE SHEETING A MINIMUM OF 150 SQUARE INCHES FOR SHORT TERM OPERATIONS AND 270 SQUARE INCHES FOR LONG TERM OPERATIONS.

THE REFLECTIVE MATERIAL FOR CHANNELIZING DEVICES *SHALL BE A MATERIAL THAT MEETS PENNDOT CURRENT* SPECIFICATIONS FOR SHEET REFLECTIVE MATERIAL, BARRICADE RAILS AND VERTICAL PANELS WHICH WILL REQUIRE TYPE III OR TYPE VII.

THIS TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY AS SPECIFIED IN SECTION 901.3 OF PUBLICATION NO. 408.

ADJUST ALL DISTANCES SLIGHTLY TO FIT FIELD CONDITIONS.

DO NOT PARK, STOP OR STORE ANY EQUIPMENT WHICH IS NOT BEING USED FOR THE CURRENT WORK OPERATION, ADJACENT TO AN ACTIVE TRAVEL LANE. STORE ALL EQUIPMENT OUTSIDE OF THE WORK AREA IN A CLEAR ZONE SUITABLY PROTECTED STAGING AREA.

THE TRAFFIC CONTROL DEVICES SHOWN DO NOT NECESSARILY DEPICT THE ACTUAL NUMBER OF DEVICES REQUIRED.

MOUNT ALL SIGNS ON TYPE III BARRICADES (SEE PUB 213 PATA SIGN LAYOUT AND TC-8716 & TC-8717) UNLESS OTHERWISE SHOWN OR DIRECTED.

ERECT ALL POST MOUNTED SIGNS IN ACCORDANCE WITH TC-8716 & TC-8717 AND MOST CURRENT TC STANDARD JUNE 13, 2013 (TRAFFIC CONTROL SIGNING STANDARDS).

ATTACH TYPE C LIGHTS TO ALL DRUMS OR CHANNELIZING DEVICES USED TO PROTECT OPEN EXCAVATIONS ADJACENT TO ROADWAY.

ATTACH TYPE C LIGHT ON EVERY THIRD DEVICE IN THE LONGITUDINAL AND EVERY DEVICE IN TAPER.

PROVIDE NEW REFLECTIVE SHEETING FOR ALL SIGNS AND DEVICES, I.E. SUPPORTS, SIGN BLANKS, DRUMS, *VERTICAL PANELS, ETC. SHALL BE CLEAN AND FREE FROM* ALL DEFECTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS TO ALL BUSINESSES AND DWELLINGS DURING ALL *PHASES OF CONSTRUCTION.*

PROVIDE ADEQUATE NUMBER OF TYPE III BARRICADES AND CHANNELIZING DEVICES AT ROAD CLOSURE LOCATIONS TO COMPLETELY CLOSE THE ROADWAY.

CONTRACTOR SHALL NOTIFY LOCAL EMERGENCY AUTHORITIES (E.G. POLICE, FIRE, MEDICAL), AFFECTED POST OFFICE(S), BUSINESSES, SCHOOL DISTRICT(S).

CONTRACTOR *IS TO NOTIFY THE ASSISTANT CONSTRUCTION* ENGINEER. HE SHALL NOTIFY THE APRAS COORDINATOR AT LEAST FOURTEEN DAYS, PRIOR TO ANY SIGNIFICANT TRAFFIC IMPACTS (E.G. LATERAL WIDTH RESTRICTIONS LESS THAN 12 FEET).

TWO WEEKS PRIOR TO CLOSING THE CONTRACTOR MUST INSTALL THE CHANGEABLE MESSAGE BOARDS TO ADVISE THE PUBLIC OF THE START OF WORK. MESSAGE TO BE DETERMINED BY TRAFFIC UNIT WORK ZONE MANAGER.

TWO WEEKS PRIOR TO CLOSING THE CONTRACTOR MUST INSTALL THE THIS BRIDGE TO BE CLOSED FOR CONSTRUCTION SIGN W23-1 AT THE POINT OF CLOSURE.

TWO WEEKS PRIOR TO STARTING WORK THE DETOUR (M series) SIGNS ARE TO BE INSTALLED. CONTACT WORK ZONE MANAGER AT (724) 439-7244 FOR INSPECTION.

THE M6-3 SERIES DETOUR SIGNS SHOULD NOT BE SPACED FURTHER THAN ONE (1) MILE APART AND PLACED AT EVERY HIGH VOLUME STATE SIDE ROAD.

THE M5-1L OR M5-1R ADVANCE DETOUR TURN SIGN. THIS SIGN SHOULD BE PLACED 250 FEET (MIN.) TO 750 FEET (MAX.) IN ADVANCE OF THE TURN, BUT NOT IN ADVANCE OF ANOTHER SIDE ROAD ON THE SAME SIDE.

CONTROL TRAFFIC IN WORK AREAS IN ACCORDANCE WITH PUB. 213 FOR STATIONARY SHORT TERM OPERATION. FOR LONG TERM *OPERATIONS FOLLOW TRAFFIC CONTROL PLAN (TCP).*

FLAG PERSONS ARE TO BE IN RADIO COMMUNICATIONS AT ALL TIMES DURING WORK HOURS.

FOR SHORT TERM OPERATIONS - AND FOR INGRESS, EGRESS OF CONSTRUCTION DELIVERIES AND EMPLOYEES: USE PATA 10a OR PATA 10b AND DURING HOURS OF DARKNESS, ALL SIGNS SHALL BE REFLECTORIZED OR ILLUMINATED, AND EACH ADVANCE WARNING SIGN SHALL HAVE A TYPE B LIGHT MOUNTED ON TOP.

ALL SHORT TERM OPERATION LEAD IN SIGNS SHOULD BE MOUNTED ON PORTABLE SIGN STANDS ONLY AS STATED IN BULLETIN 15.

ALL CHANGES TO THIS TRAFFIC CONTROL PLAN MUST BE APPROVED, SIGNED AND DATED BY THE TRAFFIC UNIT.

FABRICATED SIGNS

THE ORANGE BACKGROUND SHALL BE CONSTRUCTED OF PENNDOT *APPROVED FLUORESCENT ORANGE RETROREFLECTIVE MATERIAL.*

SIGNS TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

TC-8700 JUNE 13, 2013

ALL FABRICATED SIGNS TO HAVE AN APPROPRIATE SIZED BLACK BORDER, CORNER RADII, AND ORANGE MARGIN.

SUGGESTED CONSTRUCTION SEQUENCE

REPLACEMENT OF THE BRIDGE CARRYING SR 0136 OVER LITTLE *CHARTIERS CREEK AND CSX RAILROAD IN NORTH STRABANE AND* SOUTH STRABANE TOWNSHIP, WASHINGTON COUNTY, AND ASSOCIATED ROADWAY RECONSTRUCTION WILL REQUIRE COMPLETE CLOSURE OF THE STRUCTURE. A DETOUR FOR SR 0136 WILL BE UTILIZED DURING THE CONSTRUCTION PROCESS. A BRIEF DESCRIPTION OF CONSTRUCTION ACTIVITIES, AS WELL AS MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION ARE PROVIDED BELOW.

IN ACCORDANCE WITH PUBLICATION 213, FIGURE PATA 109, INSTALL TEMPORARY ACCESS ROAD (STA 334+20 RT TO STA 338+25 RT). SEE EROSION AND SEDIMENT POLLUTION CONTROL PLAN.

REMOVE EXISTING GUIDE RAIL AND INSTALL IMPACT ATTENUATING DEVICE (STA 334+25 RT TO STA 335+00 RT).

INSTALL ALL EROSION AND SEDIMENT POLLUTION CONTROL DEVICES.

CONSTRUCTION OF PIER.

ERECT ALL ADVANCE WARNING AND DETOUR SIGNS.

IMPLEMENT DETOUR.

CLOSE EXISTING STRUCTURE ON SR 0136.

DEMOLISH EXISTING STRUCTURE.

CONSTRUCT NEW STRUCTURE AND APPROACH ROADWAY.

PERFORM GRADING WORK.

COMPLETE PAVING OPERATIONS.

INSTALL GUIDE RAIL IN ACCORDANCE WITH PUBLICATION 213, FIGURE PATA 109.

INSTALL SIGNING, AND MISCELLANEOUS WORK.

REMOVE DETOUR AND ALL TRAFFIC CONTROL SIGNS AND DEVICES.

OPEN SR 0136 TO TRAFFIC.

SHEET INDEX

TABULATION OF TRAFFIC CONTROL DEVICES

(FOR INFORMATION ONLY INCLUDED IN ITEM 0901-0001)

STD. NO.	SIZE	DESCRIPTION	TOTAL
M1-5 (136)	45"X36"	PA ROUTE MARKER (136)	17
M1-5 (136)	30"X24"	*PA ROUTE MARKER (136)*	33
M3-2	30"X15"	EAST MARKER	9
M3-2	24"X12"	EAST MARKER	18
M3-4	30"X15"	WEST MARKER	8
M3-4	24"X12"	WEST MARKER	15
M4-8	30"X15"	DETOUR MARKER	17
M4-8	24"X12"	DETOUR MARKER	31
M4-8A	24"X18"	END DETOUR SIGN	2
M4-10L	48"X18"	DETOUR ARROW SIGN, LEFT	1
M5-1L	21"X15"	ADVANCE 90° LEFT TURN MARKER	6
M5-1R	21"X15"	ADVANCE 90° RIGHT TURN MARKER	3
M5-2R	30"X18"	*ADVANCE 45° RIGHT TURN MARKER*	2
M5-2R	21"X15"	ADVANCE 45° RIGHT TURN MARKER	2
M6-1	21"X15"	90° TURN MARKER	9
M6-2R	30"X18"	45° RIGHT TURN MARKER	2
M6-2R	21"X15"	45° RIGHT TURN MARKER	2
M6-3	30"X18"	STRAIGHT THROUGH MARKER	13
M6-3	21"X15"	STRAIGHT THROUGH MARKER	9
R11-2	48"X30"	*ROAD CLOSED SIGN*	5
R11-3A	60"X30"	ROAD CLOSED - LOCAL TRAFFIC ONLY SIGN (2½ MILES)	1
R11-3A	60"X30"	ROAD CLOSED - LOCAL TRAFFIC ONLY SIGN (5 MILES)	1
W3-4	36"X36"	BE PREPARED TO STOP SIGN	2
W20-1	36"X36"	ROAD WORK SIGN	3
W20-2	36"X36"	ADVANCE DETOUR SIGN	23
W20-3	36"X36"	ROAD CLOSED SIGN	5
W20-4	36"X36"	ONE LANE ROAD SIGN	1
W20-7	36"X36"	FLAGGER SYMBOL SIGN	3
W23-1	96"X48"	THIS BRIDGE TO BE CLOSED FOR CONSTUCTION SIGN	2
W30-1-1	20"X6"	DISTANCE PANEL (500 FEET)	5
W30-1-2	20"X6"	DISTANCE PANEL (1000 FEET)	6
W30-1-3	20"X6"	DISTANCE PANEL (1500 FEET)	6
W30-1-4	20"X6"	DISTANCE PANEL (1/2 MILE)	5
W30-1-5	20"X6"	DISTANCE PANEL (1 MILE)	5
W30-1-6	20"X6"	DISTANCE PANEL (AHEAD)	5
		CHANNELIZING DEVICES	▲
		TYPE B LIGHTS	23
		TYPE C LIGHTS	▲
		TYPE III BARRICADE	46

THE SIZES SHOWN ARE MINIMUM REQUIREMENTS ▲ - AS REQUIRED

TABULATION OF TRAFFIC CONTROL PAYABLE ITEMS

PERMANENT IMPACT ATTENUATING DEVICE, 3 TYPE II, (TEST LEVEL 3 (EAT, TANGENT)) 0619 0470 EACH	REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY) 0620 0503 LF	ADDITIONAL WARNING LIGHTS, TYPE B 0901 0231 DAY	ADDITIONAL TRAFFIC CONTROL SIGNS 0901 0240 SF	3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS 0901 0450 EACH	TEMPORARY TRAFFIC SIGNAL 9901 0725 EACH	REPAIR OF DETOUR ROUTE 9600 1125 DOLLA ITEM NUMBER UNIT	REMARKS	SIDE	STATIONS
		50	125	2	LS	25000	AS DIRECTED		ENTIRE PROJECT
1	88							RT	334+25.00 TO 335+00.00
1	88	50	125	2	LS	25000	TOTAL		

SR 0136
TRAFFIC CONTROL PLAN

RECOMMENDED 11/10 2015

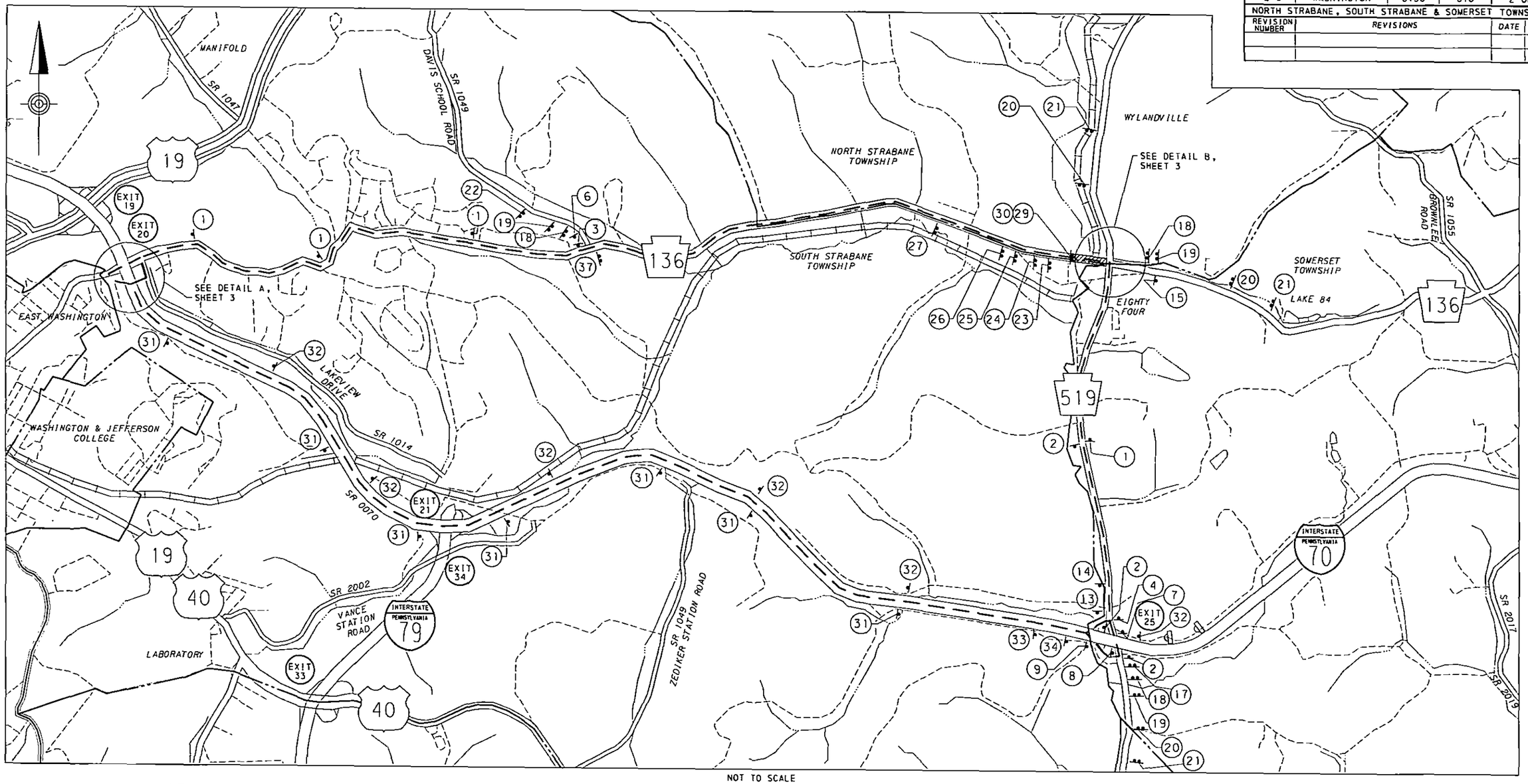
DISTRICT TRAFFIC ENGINEER

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH ANTHONY SASSO, JR. ENGINEER 062815 11-4-15

DRAWN BY	TC
CHECKED BY	JAS

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	2 OF 6
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY



NOT TO SCALE

LEGEND

- TOWNSHIP ROAD
- STATE HIGHWAY
- STREAM
- RAILROAD
- TOWNSHIP LINE
- DETOUR ROUTE (12.8 MILES)
- TYPE B BREAKAWAY POST
- TYPE III BARRICADE
- WORK AREA
- CHANGEABLE MESSAGE BOARD

NOTES:

1. DETOUR LENGTH IS 12.8 MILES.
2. DISTANCE PANELS ON SIGNS INDICATE THE APPROXIMATE DISTANCE FOR PLACEMENT OF THESE SIGNS FROM THE START OF THE DETOUR OR ROAD CLOSURE.
3. CONTRACTOR IS TO FIELD VERIFY THE DISTANCE PLACED ON THE SIGN PRIOR TO FABRICATION BASED ON THE LOCATION OF THE SIGN THAT BEST FITS THE FIELD CONDITIONS.
4. USE CHANNELIZING DEVICES TO BLOCK OFF EXISTING SR 0519 LEFT TURN LANE (SEE DETAIL B, SHEET 3).
5. FOR SIGN DETAILS, SEE SHEET 4.
6. WHEN BRIDGE IS CLOSED, REPLACE SIGN (30) WITH SIGN (28) & (29), SEE PLAN.
7. USE LARGER SIGNS (31) - (36) ON INTERSTATE 70.

DRAWN BY	TC
CHECKED BY	JAS

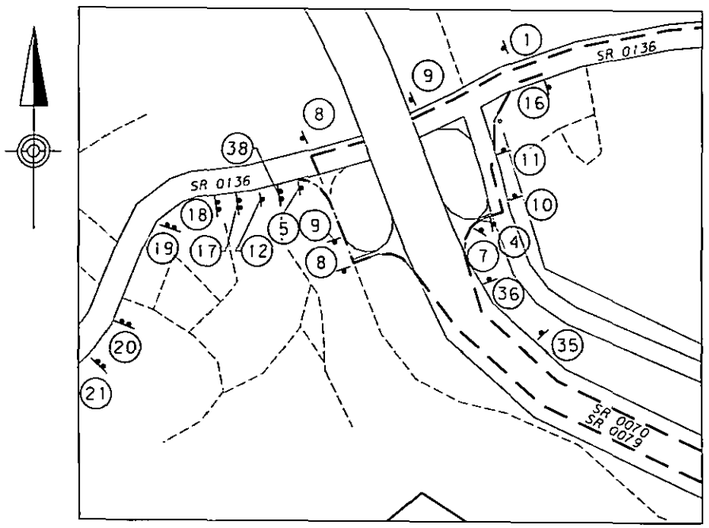
SR 0136 DETOUR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH ANTHONY SASSO JR. ENGINEER

PLOTTED: 11/4/2015
8:34:47 AM

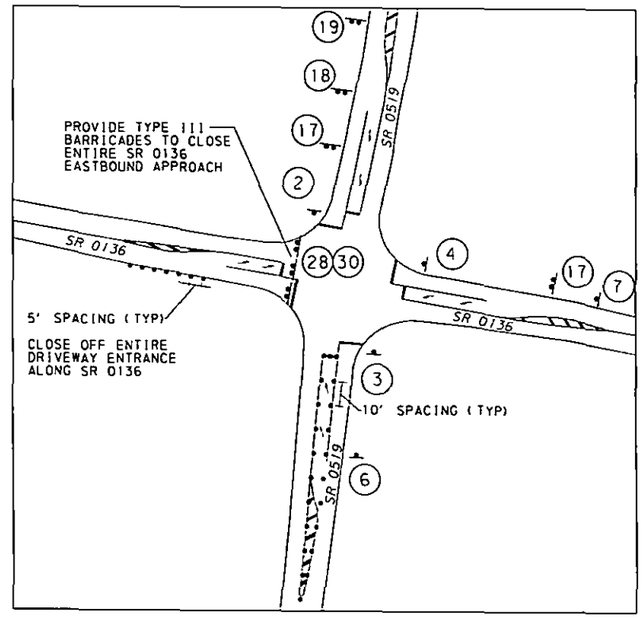
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	3 OF 6
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY



DETAIL A

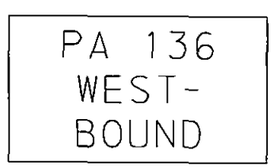
SR 0136/I-70 INTERCHANGE
NOT TO SCALE



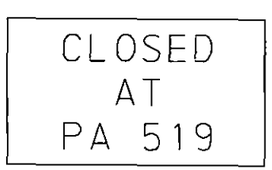
DETAIL B

SR 0136/SR 0519 INTERSECTION
NOT TO SCALE

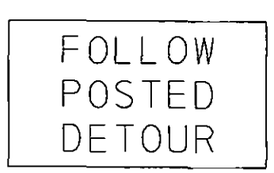
CHANGEABLE MESSAGE BOARD SCREENS



SCREEN 1



SCREEN 2



SCREEN 3

LEGEND

- TYPE B BREAKAWAY POST
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- TYPE B LIGHT

DRAWN BY	TC
CHECKED BY	JAS

OPERATOR: Adam.Nicastro
FILE PATH: P:\PROJECTS\18976.04-SR.0136_G10_PE\USTN\HIWY\Plans\WPTSSR0136-mpt.dgn

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOSEPH ANTHONY SASSO JR.
ENGINEER
PE039780

SR 0136 DETOUR

EROSION AND SEDIMENTATION CONTROLS GENERAL NOTES

IN ADDITION TO THE SPECIFIC PROCEDURES FOR EROSION AND SEDIMENTATION CONTROL OUTLINED IN SUBSEQUENT SECTIONS OF THIS NARRATIVE, THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING GENERAL REQUIREMENTS:

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS, SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED E&S REPORT AND DRAWINGS (STAMPED, SIGNED, AND DATED BY THE REVIEWING AGENCIES) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

2. AT LEAST 7-DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARES, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.

3. AT LEAST 3-DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEP PRIOR TO IMPLEMENTATION.

5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.

6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING, AND TOPSOIL STRIPPING, MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.

7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND/OR FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.

8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) AS DETERMINED BY THE CONTRACTOR IN THE AMOUNT NECESSARY TO COMPLETE THE FINISHED GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLANS. STOCKPILE HEIGHTS MUST NOT EXCEED 35-FEET. STOCKPILE SLOPES MUST BE 2H:1V OR FLATTER.

9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMMEDIATELY IMPLEMENT APPROPRIATE REPLACEMENT BMPS, OR MAKE APPROVED MODIFICATIONS OF THOSE INSTALLED, TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEP.

10. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

11. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ANY OFF-SITE BORROW, WASTE, OR STAGING AREAS, INDICATING AREAS TO BE DISTURBED. THE CONTRACTOR WILL BE RESPONSIBLE FOR IDENTIFYING ANY WETLANDS, WATERCOURSES, FLOOD PLAINS, AND FLOODWAYS WITHIN 50-FEET OF THE AREA OF DISTURBANCE. NO DISTURBANCE TO WETLANDS, WATERCOURSES, OR PERMANENT FILL IN THE FLOOD PLAINS OR WATERWAYS SHALL OCCUR AND ANY WETLANDS IN PROXIMITY TO THE AREA TO BE DISTURBED SHALL BE CLEARLY MARKED AND PROTECTED FROM DISTURBANCE. UPON WRITTEN CONCURRENCE BY PENNDOT'S CONSTRUCTION PROJECT MANAGER AND THE DISTRICT ENVIRONMENTAL MANAGER, THE CONTRACTOR SHALL DEVELOP AN EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH OFF-SITE BORROW, WASTE, OR STAGING AREA IN ACCORDANCE WITH CHAPTER 102 REGULATIONS AND PADEPS EROSION AND SEDIMENT POLLUTION CONTROL MANUAL AND SUBMIT THEM TO THE LOCAL COUNTY *CONSERVATION DISTRICT FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. PROVIDE A* COPY OF THE APPROVAL FROM THE LOCAL COUNTY CONSERVATION DISTRICT TO THE PENNDOT CONSTRUCTION PROJECT MANAGER PRIOR TO STARTING WORK.

12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING. REFER TO THE SECTION TITLED "CLEAN FILL/ENVIRONMENTAL DUE DILIGENCE".

13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, INTO PUMPED WATER FILTER BAGS AND OVER UNDISTURBED VEGETATED AREAS AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL BE REQUIRED TO HAVE PUMPING EQUIPMENT AVAILABLE ON SITE AT ALL TIMES TO INSURE NO PONDING OF WATER IN ANY AREAS DURING CONSTRUCTION, INCLUDING IN THOSE AREAS WHERE CONSTRUCTING PIPE RUNS.

14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER NOR EXIT DIRECTLY FROM THE DISTURBED CONSTRUCTION AREA ONTO ANY ADJACENT ROADS NOT PROTECTED BY AN APPROVED ROCK CONSTRUCTION ENTRANCE.

15. UNTIL THE SITE IS STABILIZED, ALL E&S BMPS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL E&S BMPS IMMEDIATELY AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS TO DETECT AND CORRECT ANY IMPAIRMENT. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY UPON OBSERVATION. IF E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR APPROVED MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

16. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED, AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED, SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.

17. *SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE* CONSTRUCTION SITE IMMEDIATELY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.

18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED IN THE PLAN DRAWINGS.

19. AREAS WHICH ARE TO BE TOP SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3- TO 5-INCHES, 6- TO 12-INCHES ON COMPACTED SOILS, PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM OF 4-INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL SLOPES SHALL HAVE A MINIMUM OF 2-INCHES OF TOPSOIL.

20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH THE LOCAL REQUIREMENTS, CODES, AND PROJECT SPECIFICATIONS.

21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8-INCHES IN THICKNESS.

22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.

23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.

24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50-FEET OF SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLANS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.

27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1-YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1-YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.

28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES *SHALL BE CAPABLE OF* RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.

29. E&S BMPS MUST REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR DEP.

30. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY E&S BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT PCSM BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS MUST BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS SHALL BE DONE ONLY DURING THE GERMINATING SEASON.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	1 OF 10
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

31. FAILURE TO CORRECTLY INSTALL E&S BMPS, *FAILURE TO PREVENT SEDIMENT-LADEN* RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEP AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

32. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLANS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

33. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.

34. UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.

35. CHANNELS HAVING RIPRAP, RENO MATTRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.

36. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER, WITHIN 50-FEET OF SURFACE WATER, AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLANS AND/OR DETAIL SHEETS.

37. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE PROJECTS SPECIFICATIONS.

38. THE CONTRACTOR SHALL ABIDE BY A DUST CONTROL PLAN THAT WILL INCLUDE SURFACE WETTING TO MINIMIZE DUST GENERATION. IF SURFACE WETTING IS NOT SUFFICIENT, OR WHERE DUST IS IMPACTING TRAFFIC AND/OR ADJACENT PROPERTIES, MODIFICATIONS TO THE MATERIALS AND/OR METHODS SHALL BE REQUIRED AND APPROVED BY THE ENGINEER.

39. IF PRESENT, GROUNDWATER CANNOT BE USED FOR CONSTRUCTION ACTIVITIES, INCLUDING THE USE AS POTABLE WATER.

40. STOCKPILES AND TEMPORARY STORAGE TANKS, INCLUDING THOSE FOR FUEL, SHALL BE LOCATED OUTSIDE OF THE LIMITS OF THE 100-YEAR FLOODPLAIN, AT LEAST 50-FEET FROM STREAM BANKS, WETLANDS, AND/OR AQUATIC RESOURCES, AND PROTECTED BY THE APPROPRIATE BMPS AS DIRECTED IN THE E&SPC PROGRAM MANUAL, CURRENT EDITION.

41. MACHINERY WILL NOT BE PERMITTED TO ENTER FLOWING WATER. AS A REQUIREMENT, BMPS FOR STREAM AND/OR WETLAND CROSSINGS WILL BE IMPLEMENTED AS SHOWN ON THE PLANS TO CONTROL DISTURBANCES FOR WORK IN AQUATIC AREAS.

42. THE CONTRACTOR SHALL ENSURE THAT FINAL GRADING AND EMBANKMENT CONSTRUCTION ACTIVITIES WILL NOT CREATE DITCHES OR PONDING AREAS THAT ARE NOT SPECIFIED ON THE PLANS. SLOPE ROUNDING SHALL BE PERFORMED TO ELIMINATE LOW POINTS OR PONDING AREAS AT THE TOP AND TOE OF SLOPES. SLOPE ROUNDING AT THE TOP AND TOE OF SLOPES SHALL CONFORM TO PENNDOT RC-STANDARDS.

43. CONSTRUCT ALL PIPES FROM LOW POINT TO HIGH POINT AND PLACE PIPE/TRENCH PLUGS AT THE HIGH POINT OF THE PIPE, IF NOT PLACED IN ITS ENTIRETY, AT THE END OF EACH DAY TO PREVENT SEDIMENT FROM ENTERING THE SYSTEM OR ERODING THE TRENCH. PLACE INLET AND/OR OUTLET PROTECTION ONCE THE INLETS AND/OR END WALLS/END SECTIONS ARE IN PLACE. IF SEDIMENT ENTERS THE PIPES AT ANY TIME DURING THE PROJECT, FLUSHING WILL NOT BE PERMITTED. THE SEDIMENT SHALL BE REMOVED FROM THE PIPES OR INLETS MANUALLY.

44. LITTLE CHARTIERS CREEK IS CLASSIFIED AS A HIGH-QUAILITY WARM WATER FISHES (HQ-WWF) IN ACCORDANCE WITH PENNSYLVANIA CODE, TITLE 25, CHAPTER 93. LITTLE CHARTIERS CREEK IS ALSO LISTED BY THE PAFBC AS TROUT STOCKED BUT IT IS NOT STOCKED WITHIN THE SUBJECT PROJECT AREA.

45. PENNDOT WILL ACCEPT THE PROJECT AFTER COMPLETION AND WILL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE, INCLUDING THE MAINTENANCE OF PERMANENT EROSION CONTROL MEASURES.

DRAWN BY	RHB
CHECKED BY	TCC

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PROFESSIONAL JOSEPH ANTHONY BASSO, JR. ENGINEER REGISTRY 11-23-15

EROSION AND SEDIMENT POLLUTION CONTROL PLAN NOTE SHEET

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	2 OF 10
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

AGENCIES

THE CONTRACTOR IS ADVISED THAT THEY ARE TO CONDUCT WORK IN COMPLIANCE WITH THE REQUIREMENTS OF THIS PLAN AND THE RULES AND REGULATIONS OF THE FOLLOWING:

A. PA DEPARTMENT OF ENVIRONMENTAL PROTECTION
B. WASHINGTON COUNTY CONSERVATION DISTRICT
C. U.S. ENVIRONMENTAL PROTECTION AGENCY
D. U.S. FISH AND WILDLIFE SERVICE
E. PA FISH AND BOAT COMMISSION
F. U.S. DEPARTMENT OF THE ARMY CORPS OF ENGINEERS
G. PA DEPARTMENT OF TRANSPORTATION
H. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION AND CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONSTRUCTION, MAINTENANCE, AND INSPECTION OF THE APPROVED EROSION AND SEDIMENT POLLUTION CONTROL PLAN.

EROSION AND SEDIMENTATION CONTROLS CONSTRUCTION SEQUENCE

THE FOLLOWING STAGES ARE SUGGESTED AS A METHOD FOR CONSTRUCTION ACTIVITIES AND A SEQUENCE OF EROSION AND SEDIMENTATION POLLUTION CONTROL BEST MANAGEMENT PRACTICES (BMP) PLACEMENT. THE CONTRACTOR WILL SUBMIT FOR ACCEPTANCE A SCHEDULE FOR ACCOMPLISHMENT OF THE EROSION AND SEDIMENTATION CONTROLS AT THE PRE-CONSTRUCTION CONFERENCE. NOTE THAT IN NO CASE SHALL AN AREA EXCEEDING 15,000-SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED.

A. DELINEATE ALL WORK AREAS AND PROJECT BOUNDARIES. INITIATE PA-ONE-CALL, VERIFY AND LOCATE ALL UTILITIES IN THE PROJECT AREA, AND PROTECT AS NECESSARY. IMPLEMENT THE APPROVED TRAFFIC CONTROL PLAN DURING EACH PHASE.

B. CONSTRUCT THE ROCK CONSTRUCTION ENTRANCES AT THE CONTRACTORS STAGING AND STOCKPILING AREA (TO BE DETERMINED BY THE CONTRACTOR). SURROUND THE DOWN-SLOPE SIDES OF THE STAGING AND STOCKPILING AREA WITH THE APPROPRIATE BMPS NECESSARY TO PROTECT THE AREA FROM EROSION PER THE PADEP E&S BMP MANUAL. TEMPORARY STOCKPILES SHALL NOT BE LOCATED WITHIN FLOODPLAINS, WETLANDS, OR OTHER AQUATIC RESOURCES AS SPECIFIED IN THE GENERAL NOTES. THE CONTRACTOR SHALL DETERMINE THE BEST LOCATION OF THE STAGING AND STOCKPILING AREA FOR THE PROJECT. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MODIFY ANY PERMITS AND/OR APPROVALS PRIOR TO CONSTRUCTING THE STAGING AND STOCKPILING AREA AND PROVIDE PROOF OF AUTHORIZATION FROM THE CONSERVATION DISTRICT TO PENNDOT. THESE REQUIREMENTS ALSO APPLY TO BORROW AND/OR WASTE AREAS. REFER TO THE E&S CONTROLS PLAN GENERAL NOTES FOR ADDITIONAL INFORMATION.

C. *PRIOR TO ANY EARTH DISTURBANCE ACTIVITY, THE CONTRACTOR WILL INSURE THAT* THE AREA IS PROTECTED BY THE APPROPRIATE E&S BMP TO PROTECT THE SITE FROM EROSION.

D. SEED AND MULCH DISTURBED AREAS, AT A MAXIMUM OF 15-FOOT VERTICAL INCREMENTS, IMMEDIATELY AFTER FINAL GRADES ARE ACHIEVED, INCLUDING IN AREAS OF PAVEMENT REMOVAL.

E. THE CONTRACTOR WILL BE REQUIRED TO UTILIZE THE FOLLOWING SEQUENCE OF CONSTRUCTION ACTIVITIES PRIOR TO ANY CLEARING AND GRUBBING OPERATIONS. HOWEVER, CLEARING AND GRUBBING FOR THE INSTALLATION OF THE BMPS MUST OCCUR PRIOR TO THEIR INSTALLATION.

PROJECT CONSTRUCTION SEQUENCE

1. IMPLEMENT THE TRAFFIC CONTROL PLAN.

2. CLEAR AND GRUB AREAS NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS FOR THE TEMPORARY ACCESS ROAD AND CONSTRUCTION OF THE CENTER PIER. PLACE PROTECTIVE FENCE 10 FEET FROM THE RAILROAD TRACKS ACCORDING TO THE PLAN SHEETS.

3. PLACE ROCK CONSTRUCTION ENTRANCE WITH WASH RACKS FOR THE TEMPORARY ACCESS ROAD. CONSTRUCT THE TEMPORARY ACCESS ROAD WITH ROCK PLACED ON GEOTEXTILE.

4. INSTALL THE TEMPORARY BRIDGE, TEMPORARY EXCAVATION SUPPORT SYSTEM AND PUMP AND FILTER BAG FOR CENTER PIER CONSTRUCTION. CONSTRUCT CENTER PIER TO THE ELEVATION GIVEN ON THE STRUCTURE PLAN SHEETS.

5. REMOVE THE TEMPORARY BRIDGE AND TEMPORARY EXCAVATION SUPPORT SYSTEM.

6. CLEAR AND GRUB AREAS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS FOR THE REMAINDER OF THE PROJECT AREA. INSTALL COMPOST FILTER SOCK, INLET PROTECTION AND TEMPORARY PROTECTIVE FENCING AT THE LOCATIONS SHOWN ON THE PLAN SHEET.

7. REMOVE EXISTING ROADWAY PAVEMENT, BEGIN DEMOLITION OF THE SUPER STRUCTURE, AND ABUTMENTS. REMOVE PIERS TO HEIGHT GIVEN ON THE PLAN SHEETS.

8. PLACE CONCRETE WASHOUTS NEAR THE ABUTMENTS WHERE NEEDED IN ACCORDANCE WITH THE PLAN DETAIL.

9. BEGIN APPROACH FILL WORK, SUPERSTRUCTURE, AND ABUTMENT CONSTRUCTION.

10. ONCE DRAINAGE PIPE AND CHANNEL IS INSTALLED AT 342+26 RT, PLACE ROCK FILTER WHERE SHOWN ON THE PLAN SHEET AND INSTALL ROCK OUTFALL PROTECTION.

11. GRADE TO DRAIN THEN SEED AND MULCH ANY DISTURBED AREAS AS SOON AS FINAL GRADES ARE ACHIEVED.

12. ONCE THE NEW ABUTMENT, PIER, AND SUPERSTRUCTURE IS COMPLETE AND THE AREA IS PERMANENTLY STABILIZED, REMOVE ALL E&S BMPS. SEED AND MULCH ALL AREAS DISTURBED AS A RESULT OF BMP REMOVAL.

13. REMOVE TEMPORARY TRAFFIC CONTROLS.

ALL EARTH DISTURBANCES SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. THE REVIEWING AGENCY SHALL BE NOTIFIED PRIOR TO ANY CHANGES TO THE APPROVED PLAN PRIOR TO THE IMPLEMENTATION OF THOSE CHANGES. IT SHOULD BE NOTED, ANY CHANGES TO THE APPROVED PLAN COULD MAKE THE CONTRACTOR REAPPLY FOR PERMITS.

ADDITIONALLY:

F. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.

G. MINIMIZE AREAS OF HEAVY EQUIPMENT USE TO LIMIT COMPACTION OF ADJACENT SITE SOILS TO PROMOTE STORMWATER INFILTRATION.

H. GRADE ANY REMAINING DISTURBED AREAS TO DRAIN. PLACE STOCKPILED TOPSOIL, PERMANENT SEED, AND MULCH ON ALL AREAS THAT MAY STILL BE DISTURBED.

I. ONCE THE DISTURBED AREAS HAVE ACHIEVED PERMANENT STABILIZATION, REMOVE ALL TEMPORARY BMPS. SEED AND MULCH ALL AREAS DISTURBED AS A RESULT OF THE BMP REMOVAL.

J. THE CONTRACTORS STAGING, STOCKPILING, BORROW AND/OR WASTE AREAS SHALL BE RETURNED TO THE PRE-CONSTRUCTION CONDITIONS, AT A MINIMUM. BMP REMOVALS, REGRADING, RESEEDING, AND REMULCHING SHALL BE PREFORMED WHERE NECESSARY.

REMOVAL OF TEMPORARY E&S CONTROLS

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS MUST BE MAINTAINED PROPERLY. REMOVAL OF THE TEMPORARY E&S CONTROLS MAY ONLY BE PERFORMED WHEN FINAL STABILIZATION IS ACHIEVED. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. THE REMOVAL SHALL INCLUDE ALL OF THE TEMPORARY E&S CONTROLS AND ANY OTHER UNFORESEEN TEMPORARY BMP'S THAT MAY HAVE BEEN REQUIRED TO PREVENT EROSION AND WERE INSTALLED DURING CONSTRUCTION.

MAINTENANCE PROGRAM

AN INSPECTION AND MAINTENANCE PROGRAM SHALL BE IMPLEMENTED DURING AND AFTER CONSTRUCTION TO INSURE THAT EROSION AND SEDIMENTATION MEASURES ARE MAINTAINED.

ALL EROSION AND SEDIMENTATION CONTROL FACILITIES WILL BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT UNLESS OTHERWISE NOTED. REPAIRS AND MAINTENANCE, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, AND REMULCHING, WILL BE PERFORMED BY THE CONTRACTOR TO MAINTAIN THE INTEGRITY OF THE BMP MEASURES AND FACILITIES. ANY DEFICIENCIES MUST BE CORRECTED IMMEDIATELY UPON *IDENTIFICATION. SPECIFIC MAINTENANCE PROGRAMS ARE DESCRIBED BELOW.*

THE CONTRACTOR WILL PERFORM VARIOUS ROUTINE STANDARD DAILY OPERATIONS TO MINIMIZE EROSION AND PREVENT OTHER TYPES OF POLLUTION. EXAMPLES WOULD BE KEEPING THE SITE CLEAN BY LITTER CONTROL AND GARBAGE COLLECTION, DAILY INSPECTION AND MAINTENANCE PROCEDURES, INFORMING CREWS TO NOT DISTURB AREAS OUTSIDE OF THOSE NECESSARY TO DO WORK, ETC.

AT THE END OF EACH DAY, EQUIPMENT OPERATORS SHALL PERFORM TEMPORARY GRADING OPERATIONS TO SAFELY CONVEY RUNOFF TO INSTALLED BMPS, OTHER THAN TOWARDS SILT FENCING AND/OR COMPOST FILTER SOCKS, TO INSURE THAT POTENTIAL STORMWATER RUNOFF WILL NOT DAMAGE SLOPES OR OTHER GRADED AREAS.

REFER TO THE DETAILS FOR ROCK CONSTRUCTION ENTRANCE WITH WASH RACKS, COMPOST FILTER SOCK, PUMPED WATER FILTER BAGS, CHANNEL INSTALLATION, SLOPE PROTECTION, ROCK BARRIERS (ROCK FILTER), CONCRETE WASHOUT, INLET PROTECTION, TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM, AND TEMPORARY IN-STREAM DIVERSION DIKE MAINTENANCE NOTES.

SITE STABILIZATION

THE SITE SHALL BE INSPECTED DAILY AND AFTER EACH RUNOFF EVENT. IF ANY OF THE SLOPES FAIL OR SHOWS SIGNS OF RUTTING FROM RAINFALL CHANNELING, THESE AREAS SHALL BE REPAIRED ACCORDING TO PENNDOT 408 STANDARD SPECIFICATIONS AND REGRADED. AS SOON AS SLOPES AND DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED, *WHICH SHALL INCLUDE SEEDING AND MULCHING. ALSO, UPON COMPLETION OR TEMPORARY* CESSATION OF THE EARTH DISTURBANCE ACTIVITY, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED.

SURFACE ROUGHENING SHALL BE PERFORMED ON ALL SLOPES GREATER THAN 3:1 TO PROVIDE THE SOIL SURFACE WITH HORIZONTAL DEPRESSIONS FOR THE PURPOSE OF REDUCING RUNOFF VELOCITY, INCREASING INFILTRATION, AIDING THE ESTABLISHMENT OF VEGETATION, AND REDUCING EROSION. ROUGHENINING SHALL BE ACHIEVED BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE, LEAVING TREAD MARKS PARALLEL TO THE CONTOUR AND PERPENDICULAR TO THE SLOPE. IF A DOZER IS USED, THE BLADE SHALL BE UP.

VEGETATIVE COVER AND EROSION CONTROL MATS/BLANKETS

VEGETATIVE COVER AND EROSION CONTROL MATS/BLANKETS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT. WHERE IT APPEARS THAT SEEDLINGS HAVE BEEN WASHED OUT OR GROWTH HAS BEEN RETARDED FOR ANY REASON, THE AREAS SHALL AGAIN BE SEEDED AND MULCHED. THE EROSION CONTROL MAT/BLANKET SHALL ALSO BE INSPECTED FOR TEARING OF FAILURE. MATS AND/OR BLANKETS THAT HAVE FAILED FOR ANY REASON SHALL BE REPAIRED OR REPLACED PER MANUFACTURES RECOMMENDATIONS. SLOPE INTERRUPTION DEVICES OR WATER DIVERSION TECHNIQUES ARE TO BE UTILIZED WHEN SLOPED EXCEED 100 FEET.

IF DIFFICULTY IS ENCOUNTERED IN ESTABLISHING VEGETATION IN AN AREA, A SOIL TEST MAY BE REQUIRED TO DETERMINE IF ANY ADDITIONAL SOIL SUPPLEMENTS ARE NEEDED.

SEDIMENT DISPOSAL

ALL SEDIMENT TAKEN FROM THE EROSION CONTROL FACILITIES WILL BE PLACED IN THE SOIL STOCKPILE OR SPREAD AND GRADED INTO THE PROJECT SITE.

DESCRIPTION OF THE LOCATION AND TYPE OF PERIMETER AND ON-SITE BEST MANAGEMENT PRACTICES (BMPS) USED BEFORE, DURING, AND AFTER THE EARTH DISTRUBANCE ACTIVITY

A. TEMPORARY CONTROL MEASURES AND FACILITIES DURING EARTHMOVING

CURRENTLY, THERE ARE NO BMPS IN USE IN THE PROJECT AREA. DURING THE CONSTRUCTION PHASE, TEMPORARY MEASURES TO CONTROL EROSION AND SEDIMENT POLLUTION WILL INCLUDE THOSE LISTED BELOW.

ANY TEMPORARY EROSION CONTROL THAT CAUSES PONDING OF WATER ON ACTIVE ROADWAYS WILL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR MODIFICATIONS.

GENERAL INFORMATION REGARDING THE USE OF THESE TEMPORARY CONTROL MEASURES AND FACILITIES DURING EARTH MOVING OPERATIONS ARE LISTED BELOW:

COMPOST FILTER SOCK

COMPOST FILTER SOCKS WILL BE INSTALLED TO PREVENT SEDIMENT FROM LEAVING THE SITE VIA OVERLAND FLOW AND SHALL BE REMOVED ONLY AFTER STABILIZATION HAS BEEN ACHIEVED. IF APPROVED BY THE CONSERVATION DISTRICT, THE FILTER SOCK MAY BE LEFT IN PLACE AND VEGETATED. IN THIS CASE, THE MESH SHALL BE *CUT OPEN AND THE INTERNAL MULCH SPREAD AS A SOIL SUPPLEMENT BEFORE SEEDING.*

TEMPORARY PROTECTIVE FENCE

THE CONTRACTOR SHALL PLACE TEMPORARY PROTECTIVE FENCE, SUCH AS ORANGE CONSTRUCTION FENCE, 10 FEET FROM THE RAILROAD TRACKS TO PROTECT WORKERS AS SHOWN ON THE PLAN SHEETS. PROTECTIVE FENCE IS USED TO ENSURE WORKERS AND EQUIPMENT DO NOT IMPACT THE AREA.

ROCK CONSTRUCTION ENTRANCE WITH WASH RACK

ROCK CONSTRUCTION ENTRANCES WITH WASH RACKS WILL BE INSTALLED TO PREVENT SEDIMENT FROM LEAVING THE SITE ON TRUCK WHEELS. AFTER THE CONTRACTOR DETERMINES THE LOCATION FOR BORROW, WASTE, STAGING AREAS, AND/OR ADDITIONAL ENTRANCES, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP AND SUBMIT AN EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR APPROVAL BY THE CONSERVATION DISTRICT. CONSTRUCTION MAY NOT PROCEED UNTIL WRITTEN APPROVAL IS RECEIVED BY THE CONTRACTOR FROM THE CONSERVATION DISTRICT. AT PROJECT COMPLETION, ROCK CONSTRUCTION ENTRANCES, UNSUITABLE MATERIAL, AND THE CONTRACTORS STAGING AND STOCKPILING AREAS, INCLUDING WASTE AND BORROW SITES, WILL BE REMOVED AND THE AREA WILL BE GRADED TO DRAIN AND PERMANENTLY SEEDED AND MULCHED.

EROSION CONTROL MAT/BLANKET

EROSION CONTROL MATS/BLANKETS WILL BE PLACED IN TEMPORARY AND PERMANENT *VEGETATED CHANNELS AND ON SLOPES STEEPER THAN 3:1 TO PROTECT FROM EROSION UNTIL* FINAL STABILIZATION IS ACHIEVED.

CONCRETE WASHOUT

A CONCRETE WASHOUT WILL BE PROVIDED FOR THE CLEANING OF CONCRETE DELIVERY VEHICLES. PLACE WASHOUT FACILITIES IN AREAS WHERE SLOPES ARE 2% OR LESS. WASHOUT FACILITIES SHALL NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS. WASHOUT FACILITIES ARE NOT ALWAYS SHOWN ON DRAWINGS, THEY SHALL BE USED WHERE NECESSARY TO MEET THE REQUIREMENTS AS STATED ABOVE AND AS DIRECTED BY THE ENGINEER.

PUMPED WATER FILTER BAGS

PUMPED WATER FILTER BAGS WILL BE USED TO FILTER WATER PUMPED FROM DISTURBED AREAS, SUCH AS PONDING THAT MAY ACCUMULATE IN OPEN TRENCHES OR DEPRESSIONS DURING CONSTRUCTION, PRIOR TO DISCHARGING INTO THE WATERS OF THE COMMONWEALTH. BAGS SHALL BE LOCATED IN A WELL-VEGETATED (GRASSY) AREA AND DISCHARGED ONTO STABLE, EROSION RESISTANT AREAS. IF THIS TYPE OF AREA IS NOT AVAILABLE DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE A GEOTEXTILE FLOW PATH TO THE *DISCHARGE POINT. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN FIVE-PERCENT* (5%). PUMPED WATER FILTER BAGS WILL BE IN USE DURING THE ENTIRE LENGTH OF CONSTRUCTION, DUE TO POTENTIAL ON-SITE PONDING, UNTIL FINAL GRADES ARE ACHIEVED. BAG LOCATIONS ARE NOT ALWAYS SHOWN ON THE DRAWINGS AS ALL POSSIBLE LOCATIONS NECESSARY DURING CONSTRUCTION CANNOT BE ACCOUNTED FOR. THEY SHALL BE USED WHERE NECESSARY TO MEET THE REQUIREMENTS AS STATED ABOVE OR AS DIRECTED BY THE ENGINEER.

DRAWN BY	RHB
CHECKED BY	TCC

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOSEPH ANTHONY SASSO JR. — ENGINEER — 057695

EROSION AND SEDIMENT POLLUTION CONTROL PLAN NOTE SHEET

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	3 OF 10
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

INLET PROTECTION

INLET PROTECTION SHALL BE PLACED ON ALL INLETS THAT ARE LOCATED WITHIN THE PROJECT DRAINAGE AREA. THOSE THAT ARE NOT LOCATED ON ROADWAYS WILL REMAIN IN PLACE UNTIL FINAL STABILIZATION IS ACHIEVED. INLET PROTECTION WILL ALSO BE PLACED ON ALL ROADWAY INLETS IN AREAS OF CONSTRUCTION AND WILL BE INSPECTED DURING RAINFALL EVENTS TO INSURE THERE IS NO PONDING ON THE ACTIVE ROADWAY. IF PONDING IS A SAFETY ISSUE, VERIFY WITH THE ENGINEER FOR A SUITABLE REPLACEMENT. PLACEMENT OF INLET PROTECTION SHALL INCLUDE THE CONSTRUCTION OF THE NECESSARY BERM AS SHOWN ON THE DETAIL. ALL INLETS SHALL BE PROTECTED AND IN PLACE PRIOR TO ANY EARTHWORK OR GRADING OPERATIONS OR AS SOON AS THE INLET STRUCTURE IS PLACED.

TEMPORARY COVER

IF ANY GRASS AREAS ARE DISTURBED DURING CONSTRUCTION, SEEDING AND MULCHING SHALL BE APPLIED TO REPAIR DAMAGED AREAS. MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. MULCH SHALL BE STRAW AND APPLIED WITH THE SEEDING AND SOIL SUPPLEMENTS ACCORDING TO THE SPECIFICATIONS. FOR ADDITIONAL LIME, FERTILIZER, *OR ADDITIONAL REQUIREMENTS, REFER TO THE TEMPORARY AND PERMANENT STABILIZATION* SPECIFICATIONS INCLUDED ON THE PLANS.

IF THERE IS A TEMPORARY STOPPAGE OF WORK, AND THE AREA WILL REMAIN INACTIVE FOR 4-DAYS, THE DISTURBED AREAS SHALL BE TEMPORARILY SEEDED AND MULCHED. PENNDOT FORMULA E SEED MAY BE USED FOR TEMPORARY SEEDING CONDITIONS. WHERE FINAL GRADES ARE ACHIEVED, THE CONTRACTOR WILL HAVE 4-DAYS TO PLACE THE PERMANANT SEED AND MULCH.

ROCK BARRIER (ROCK FILTER)

ROCK BARRIERS (ROCK FILTERS) WILL BE INSTALLED IN SWALES AND CHANNELS TO PREVENT SEDIMENT FROM LEAVING THE SITE. ROCK BARRIERS WILL BE REMOVED ONCE PERMANENT STABILIZATION WITHIN THE SWALE/CHANNEL IS ACHIEVED. ROCK BARRIERS MAY NOT BE USED IN LIEU OF TEMPORARY PROTECTIVE LINERS AS TEMPORARY LINERS ARE *STILL NECESSARY.*

TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM

A TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM SHALL BE PLACED IN STREAMS AND/OR WATERCOURSES WHERE WORK IS REQUIRED WITHIN AN EXISTING STREAM, TO RECONSTRUCT STREAM BANKS, OR WHERE WATER FROM THE CHANNEL IS REQUIRED TO TEMPORARILY BYPASS AN AREA OF WORK TO PROTECT THE DOWNSTREAM WATERCOURSE FROM DEBRIS CAUSED FROM RECONSTRUCTION WITHIN THE WATERCOURSE. WORK SHOULD BE SCHEDULED FOR LOW-FLOW SEASONS. THE DURATION OF THE DISTURBANCE SHALL BE MINIMIZED. PLACEMENT WILL INCLUDE AN EXCAVATION SUPPORT AND PROTECTION SYSTEM AND A PUMPING SYSTEM TO A PUMPED WATER FILTER BAG TO KEEP THE IMMEDIATE AREA DEWATERED AS REQUIRED FOR THE WORK. THE COMPONENTS WILL BE REMOVED ONLY AFTER *CONSTRUCTION IS COMPLETE AND THE AREA IS PERMANENTLY STABILIZED.*

B. PERMANENT CONTROL MEASURES AND FACILITIES DURING EARTHMOVING

THE PERMANENT CONTROL MEASURES FOR THE PROJECT WILL BE THE PAVEMENT AND OTHER PROTECTION AS NOTED IN THIS SECTION. SEEDING AND SOIL SUPPLEMENTS, INCLUDING MULCHING, SHALL BE PERFORMED AS SOON AS FINAL GRADES ARE ACHIEVED.

SWALES AND CHANNELS

TEMPORARY AND PERMANENT SWALES AND CHANNELS WILL BE LINED WITH THE APPROPRIATE MATERIAL TO INSURE THAT THE CHANNEL BEDS AND SIDE SLOPES WILL BE STABLE AND HAVE THE CAPACITY TO SAFELY CONVEY THE DESIGN FLOWS TO THE POINTS OF DISCHARGE.

SLOPE EROSION PROTECTION

SLOPE EROSION PROTECTION, WHICH COULD INCLUDE THE PLACEMENT OF EROSION CONTROL MATS AND/OR BLANKETS, SHALL REQUIRE SURFACE ROUGHENING TO BE PERFORMED ON ALL SLOPES 3:1 AND STEEPER TO PROVIDE THE SOIL SURFACE WITH HORIZONTAL DEPRESSIONS FOR THE PURPOSE OF REDUCING RUNOFF VELOCITY, INCREASING INFILTRATION, AIDING THE ESTABLISHMENT OF VEGETATION, AND REDUCING EROSION. ROUGHENING SHALL BE ACHIEVED BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE, LEAVING TREAD MARKS PARALLEL TO THE CONTOUR AND PERPENDICULAR TO THE SLOPE. IF A DOZER IS USED, THE BLADE SHALL BE UP.

IN CRITICAL AREAS (E.G. ADJACENT TO OR WITHIN 50-FEET OF STREAMS, PONDS, WETLANDS, AND/OR SLOPES 3:1 AND STEEPER) EROSION CONTROL MATS AND/OR BLANKETS SHALL BE PROVIDED FOR ALL SEEDED AREAS.

OUTLET PROTECTION AND ROCK BASINS

OUTLET PROTECTION OR ROCK BASINS WILL BE INSTALLED AT PIPE OUTFALLS TO PROTECT THE DOWNSTREAM SLOPE OF CHANNEL FROM EROSION.

SEEDING AND SOIL SUPPLEMENTS

THE MATERIAL USED FOR SEEDING AND SOIL SUPPLEMENTS SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408 (SPECIFICALLY FORMULAS D, L, AND E) AND SHALL BE APPLIED WHEN FINAL GRADES ARE ACHIEVED. MULCH WILL BE APPLIED WITH THE SEEDING AND SOIL SUPPLEMENTS.

FILL SLOPES SHALL BE SEEDED AND MULCHED AT REGULAR VERTICAL INCREMENTS (15 TO 25-FT MAX) AS THE FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROGRESS TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER PORTION, MAKING FINAL STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME *VEGETATIVE BUFFERING AT THE BOTTOM OF THE SLOPE.*

IF SEED AND MULCH ARE APPLIED BY HYDROSEEDING METHODS, THE SEED AND MULCH SHALL BE APPLIED IN SEPARATE APPLICATIONS WITH THE SEED BEING APPLIED FIRST AND THE MULCH SPRAYED ON TOP OF THE SEED. THIS IS TO INSURE THAT THE SEED MAKES CONTACT WITH THE UNDERLYING SOIL. SOIL PREPARATION MUST BE COMPLETED PRIOR TO ADDING SEED TO THE HYDROSEEDING EQUIPMENT. RUNNING SEED THROUGH THE PUMPING SYSTEM CAN RESULT IN EXCESSIVE ABRASION OF THE SEED AND REDUCE THE PERCENTAGE OF PURE LIVE SEED IN THE APPLICATION. THEREFORE, ALL SITE PREPARATION SHOULD BE COMPLETED PRIOR TO THE ARRIVAL OF THE HYDROSEEDER.

REFER TO THE TEMPORARY AND PERMANENT STABILIZATION SPECIFICATIONS TABLE INCLUDED IN THE DRAWING DETAILS FOR APPLICATIONS, TYPES, RATES, AND ADDITIONAL STABILIZATION INFO.

MEASURES FOR THE RECYCLING AND DISPOSAL OF CONSTRUCTION MATERIALS.

EXCAVATED MATERIAL WILL BE RE-USED ON-SITE WHERE APPLICABLE.

THE CONTRACTOR WILL CONTACT THE MUNICIPALITY IN REGARDS TO WHICH LOCAL RECYCLING FACILITIES OR WASTE MANAGEMENT PRACTICES ARE TO BE USED FOR PROJECT CONSTRUCTION WASTES. CONSTRUCTION WASTES COULD INCLUDE TEMPORARY MATERIALS REQUIRED FOR CONSTRUCTION AND POTENTIAL EXCESS CONSTRUCTION MATERIALS. ALSO INCLUDED IN CONSTRUCTION WASTES WILL BE TEMPORARY EROSION AND SEDIMENTATION CONTROL BMPS.

CLEAN FILL/ENVIRONMENTAL DUE DILIGENCE

THE E&S PLAN COVERS THE "MOVING, DEPOSITING, STOCKPILING, OR STORING OF SOIL, ROCK, OR EARTH MATERIALS". IF THE SITE WILL NEED TO HAVE FILL *IMPORTED FROM AN OFF-SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING* ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL WILL RESIDE WITH THE CONTRACTOR. IF THE SITE WILL HAVE EXCESS FILL THAT WILL NEED TO BE EXPORTED TO AN OFF SITE LOCATION, THE RESPONSIBILITY OF CLEAN FILL DETERMINATION AND ENVIRONMENTAL DUE DILIGENCE RESTS ON PENNDOT AND THE CONTRACTOR. IF ALL CUT AND FILL MATERIALS WILL BE USED ON THE SITE, A CLEAN FILL DETERMINATION IS NOT REQUIRED BY THE CONTRACTOR UNLESS THERE IS A BELIEF THAT A SPILL OR RELEASE OF A REGULATED SUBSTANCE OCCURRED ON THE SITE. THE APPLICANTS AND/OR THE CONTRACTOR MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. A COPY OF THIS POLICY IS AVAILABLE ONLINE AT WWW.DEPWEB.STATE.PA.US.

CLEAN FILL IS DEFINED AS UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK, OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).

FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPS POLICY TITLED "MANAGEMENT OF FILL".

ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS INVESTIGATIVE TECHNIQUES, INCLUDING BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS, AND/OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPS POLICY "MANAGEMENT OF FILL".

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPS MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287-RESIDUAL WASTE MANAGEMENT OR 271-MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE

GENERAL SOIL INFORMATION

FOR ADDITIONAL INFORMATION REGARDING PROJECT SOILS, REFER TO THE E&S REPORT APPENDICES FOR THE SITE SPECIFIC SOILS REPORT.

PROJECT AREA SOIL CLASSIFICATIONS AND CHARACTERISTICS

SYMBOL	NAME	SLOPE %	EROSION HAZARD	DEPTH TO WATER	SHALLOW EXCAVATION LIMITATIONS	pH
CoD	CULLEOKA SILT LOAM	15-25	SEVERE	>80"	DEPTH TO BEDROCK, SLOPE, CUT BANKS	5.1-7.3
GdB	GLENFORD SILT LOAM	3-8	MODERATE	24"-42"	CUT BANKS, DEPTH TO SAT. ZONE	4.5-7.8
Nw	NEWARK SILT LOAM	0-2	SLIGHT	6"-18"	DEPTH TO SAT. FLOODING, CUTBANKS	5.6-7.8
UdB	UDORTHENTS	0-8	SLIGHT	>80"	CUTBANKS	4.5-8.4
UdF	UDORTHENTS	25-35	SEVERE	>80"	SLOPE, CUTBANKS	4.5-8.4

RESOLUTIONS TO THE SOIL LIMITATIONS INCLUDE PROPERLY INSTALLING AND MAINTAINING EROSION CONTROL BMPS TO MINIMIZE EROSION; LIMITING THE AMOUNT OF AREA DISTURBED TO ONLY THAT NECESSARY FOR CONSTRUCTION; PLACING EROSION CONTROL BLANKETS ON SLOPES 3:1 AND STEEPER AND WITHIN 50-FEET OF WATERCOURSES; STABILIZING IMMEDIATELY *AFTER REACHING FINAL GRADE, AND MAXIMIZING CUT/FILL SLOPES AT 2:1-BENCHED* AND COMPACTED TO MAINTAIN STABILITY; INSTALLATION OF ROCK OUTLET PROTECTION AND DESIGNING OUTFALL LININGS TO PROTECT FROM EXCESSIVE VELOCITY AND SHEAR STRESS; PLACING PIPES WITH GRAVEL BASE PER PENNDOT RC-STANDARDS AND THE USE OF TRENCH PLUGS DURING CONSTRUCTION; PUMPING WATER ENCOUNTERED DURING EXCAVATION ACTIVITIES THROUGH A NON-WOVEN GEOTEXTILE FILTER BAG PRIOR TO DISCHARGING INTO A RECEIVING WATERCOURSE; PERFORMING GRADING OPERATIONS DURING LOW FLOW AND DRY PERIODS TO THE EXTENT PRACTICABLE; AND APPLYING SOIL SUPPLEMENTS, SUCH AS FERTILIZER, LIME, AND MULCH (POOR TOPSOIL).

TEMPORARY AND PERMANENT STABILIZATION SPECIFICATIONS

(TEMPORARY)	SPECIES:	ANNUAL RYEGRASS (PENNDOT FORMULA E)
	% PURE LIVE SEED	100%
	APPLICATION RATE:	10 LB./1000 SY
	FERTILIZER TYPE:	NOT REQUIRED
	FERTILIZER APPL. RATE:	NOT REQUIRED
	LIMING RATE:	NOT REQUIRED
	MULCH TYPE:	STRAW
	MULCHING RATE:	1200 LB/1000 SY
	SEEDING SEASON DATES:	3/15-10/15
(ROADSIDE-SHALLOW SLOPES)	SPECIES:	TALL FESCUE AND CREEPING RED FESCUE (PENNDOT FORMULA D)
	% PURE LIVE SEED:	100%
	APPLICATION RATE:	21 LB/1000 SY
	FERTILIZER TYPE:	10-20-20
	FERTILIZER RATE:	140 LB/1000 SY
	LIMING RATE:	800 LB/1000 SY
	MULCH TYPE:	STRAW
	MULCHING RATE:	1200 LB/1000 SY
	ANCHOR MATERIAL:	NOT REQUIRED
	ANCHORING METHOD:	NOT REQUIRED
	RATE OF ANCHOR MATERIAL APPL.:	NOT REQUIRED
	SEEDING SEASON DATES:	3/15-6/1 OR 8/1-10/15
(ROADSIDE-STEEP SLOPES)	SPECIES:	HARD FESCUE MIX, CREEPING RED FESCUE, AND ANNUAL RYEGRASS (PENNDOT FORMULA L)
	% PURE LIVE SEED:	100%
	APPLICATION RATE:	24 LB/1000 SY
	FERTILIZER TYPE:	10-20-20
	FERTILIZER RATE:	140 LB/1000 SY
	LIMING RATE:	800 LB/1000 SY
	MULCH TYPE:	STRAW
	MULCHING RATE:	1200 LB/1000 SY
	ANCHOR MATERIAL:	NOT REQUIRED
	ANCHORING METHOD:	NOT REQUIRED
	RATE OF ANCHOR MATERIAL APPL.:	NOT REQUIRED
	SEEDING SEASON DATES:	3/15-6/1 OR 8/1-10/15

NOTE:
SEEDING AND SOIL SUPPLEMENT DATA IS BASED ON THE PENNDOT 408 SPECIFICATIONS.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE-STOP CALL
Pennsylvania One Call System, Inc.
1-800-242-1776

DESIGN SERIAL NO.
20143500305
20143500306
20143500307

DRAWN BY	RHB
CHECKED BY	TCC

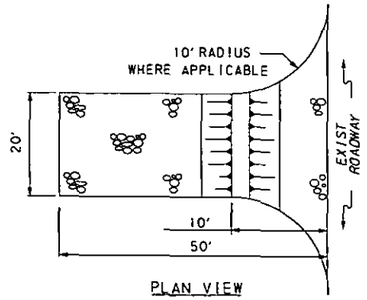
COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOSEPH ANTHONY SASSO JR. — ENGINEER — 401199

EROSION AND SEDIMENT
POLLUTION CONTROL PLAN
NOTE SHEET

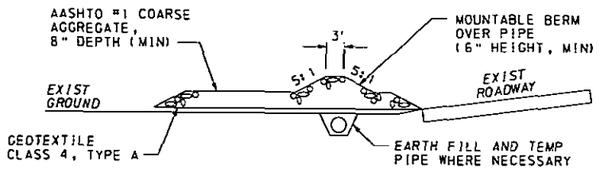
PLOTTED: 11/23/2015

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	4 OF 10
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY



PLAN VIEW



PROFILE VIEW

ROCK CONSTRUCTION ENTRANCE NOTES:

1. BECAUSE LITTLE CHARTIERS CREEK IS A HIGH QUALITY STREAM, WASH RACKS WILL BE REQUIRED FOR ALL ROCK CONSTRUCTION ENTRANCES.

2. TOPSOIL SHOULD BE REMOVED PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE.

3. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE. PROVIDE GEOTEXTILE MATERIAL MEETING THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 735. FURNISH AND INSTALL IN ACCORDANCE WITH SECTION 212. PROVIDE GEOTEXTILE MATERIAL ALONG ALL GROUND CONTACT INTERFACE AREAS.

4. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING THE ROCK CONSTRUCTION ENTRANCE.

5. MOUNTABLE BERM SHOULD BE INSTALLED WHEREVER OPTIONAL CULVERTS PIPE IS USED AND A 6-INCH MINIMUM COVER CANNOT BE PROVIDED. PIPE TO BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

6. ADDITIONAL ROCK CONSTRUCTION ENTRANCES WILL BE REQUIRED WHERE STAGING, STOCKPILING, WASTE, AND/OR BORROW AREAS ARE NEEDED, AS DETERMINED BY THE CONTRACTOR. THESE LOCATION(S) SHALL BE INCLUDED WHEN THESE ADDITIONAL AREAS E&S CONTROLS ARE SUBMITTED BY THE CONTRACTOR TO, AND APPROVED BY, THE CONSERVATION DISTRICT PRIOR TO EARTH DISTURBANCE ACTIVITY.

7. CONSTRUCT ROCK CONSTRUCTION ENTRANCES WITHIN THE RIGHT-OF-WAY OR CONSTRUCTION EASEMENT AREAS. THE ENTRANCES MAY BE CONSTRUCTED ON A SKEW IF ADEQUATE PULL-OUT SIGHT DISTANCE IS AVAILABLE.

ROCK CONSTRUCTION ENTRANCE MAINTENANCE NOTES:

A. THE ROCK CONSTRUCTION ENTRANCES, INCLUDING AT THE CONTRACTORS STAGING, STOCKPILING, WASTE, AND/OR BORROW AREAS, SHALL BE INSPECTED DAILY AND THEIR THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIALS SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE.

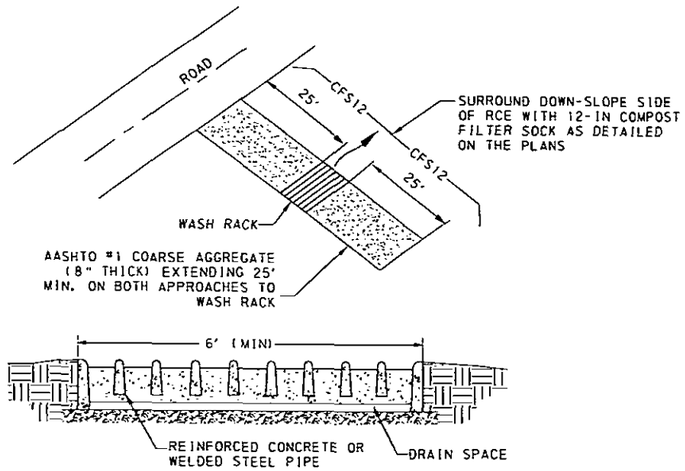
B. ANY SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ADJACENT ROADWAYS, EXTEND THE LENGTH OF THE ROCK CONSTRUCTION ENTRANCE BY 50-FT INCREMENTS UNTIL THE CONDITION IS ALLEVIATED.

C. WASHING OF THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWER, CULVERTS, OR OTHER DRAINAGEWAYS IS NOT ACCEPTABLE. ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.

D. SATISFACTORILY REMOVE MATERIALS AS PER PENNDOT 408 SPECIFICATION, SECTION 849, WHEN ROCK CONSTRUCTION ENTRANCE IS NO LONGER NEEDED.

ROCK CONSTRUCTION ENTRANCE WITH WASH RACK

(ITEM 4849-0001)



WASH RACK NOTES:

1. WASH RACK SHALL BE 20-FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.

2. WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.

3. A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.

WASH RACK MAINTENANCE NOTES:

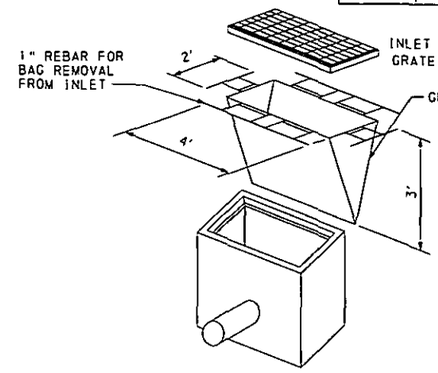
1. ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE.

2. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK.

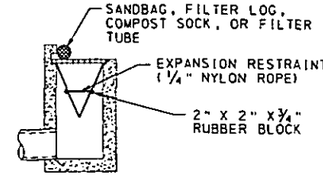
3. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

WASH RACK

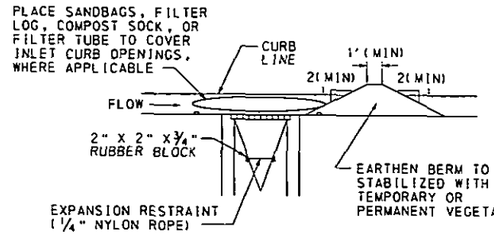
(INCIDENTAL TO ITEM 4849-0001)



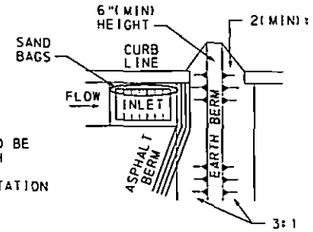
INLET FILTER BAG
ISOMETRIC VIEW



INLET FILTER BAG
INSTALLATION DETAIL



INLET FILTER BAG
ELEVATION VIEW



INLET FILTER BAG
PLAN VIEW

INLET FILTER BAG NOTES:

1. MAXIMUM DRAINAGE AREA FOR FILTER BAGS ARE ONE-HALF ACRE.

2. ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX-INCH MIN HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.

3. INLET PROTECTION SHALL NOT BE USED ON ACTIVE ROADWAYS THAT ARE OPEN TO TRAFFIC.

INLET FILTER BAG MAINTENANCE NOTES

A. INLET PROTECTION SHALL BE INSPECTED WEEKLY AND DURING AND AFTER EACH RUNOFF EVENT. INSPECTIONS DURING EACH RUNOFF EVENT WILL INSURE THERE IS NO PONDING OF WATER ON ACTIVE ROADWAYS. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY AFTER THE INSPECTION. A SUPPLY OF REPLACEMENT MATERIALS SHALL BE MAINTAINED ON SITE FOR REPAIRS AND/OR REPLACEMENTS.

B. DISPOSE OF ACCUMULATED SEDIMENT ACCORDING TO THE SEDIMENT DISPOSAL NOTES IN THE MAINTENANCE PROGRAM SECTION. DISPOSE OF USED FILTER MATERIALS, OTHER THAN SEDIMENT, ACCORDING TO THE NOTES IN THE MEASURES FOR THE RECYCLING AND DISPOSAL OF CONSTRUCTION MATERIALS SECTION.

C. FOR INLET FILTER BAGS, EMPTY AND RINSE OR REPLACE WHEN THE BAG IS HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING AND/OR BYPASSING OF THE INLET.

INLET FILTER BAG

(ITEM 0860-0002 TYPE C)

DRAWN BY	RHB
CHECKED BY	TCC

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOSEPH ANTHONY SASSO JR. — ENGINEER

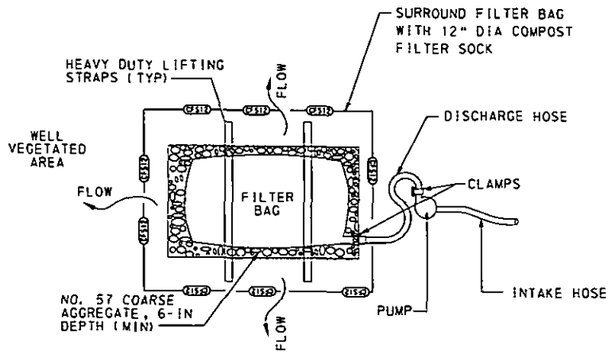
EROSION AND SEDIMENT POLLUTION CONTROL PLAN DETAIL SHEET

OPERATOR: robert.billick
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10.PE\USTNHIWY\PlansVE&S\SR0136-E&S Details.dgn

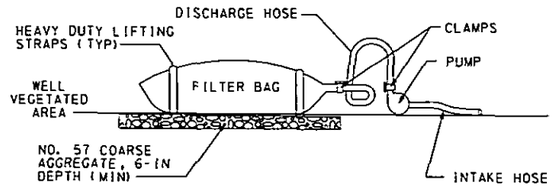
PLOTTED: 11/23/2015

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	5 OF 10
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY



PLAN VIEW



PROFILE VIEW

PUMPED WATER FILTER BAG NOTES:

1. BECAUSE LITTLE CHARTIERS CREEK IS A HIGH QUALITY STREAM, 12-INCH COMPOST FILTER SOCK WILL BE REQUIRED TO BE SURROUNDING PUMPED WATER FILTER BAGS

2. FILTER BAGS SHALL MEET PENNDOT CRITERIA AS STATED IN 408 SPECIFICATION 855.

3. LOCATE BAG IN LEVEL AREAS (LESS THAN 5% GRADE). WHEN LEVEL AREAS ARE NOT AVAILABLE, PLACE AASHTO NO. 57 COARSE AGGREGATE, 6-IN DEPTH (MIN), TO LEVEL THE BAG.

4. LOCATE THE BAG IN A WELL VEGETATED AREA. DISCHARGE ONTO A STABLE, EROSION RESISTANT AREA. WHEN VEGETATED AREA IS NOT AVAILABLE, PROVIDE A GEOTEXTILE (CLASS 4, TYPE A) LINED FLOW PATH TO A STABLE EROSION RESISTANT RECEIVING WATER COURSE.

5. DO NOT INSERT MORE THAN ONE HOSE INTO A BAG. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED.

6. THE PUMPING RATE SHALL BE NO GREATER THAN 750-GPM OR HALF THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

7. DO NOT PERMIT DISCHARGE FROM THE BAG TO DRAIN BACK INTO WORK OR ACCESS AREAS OF THE PROJECT.

PUMPED WATER FILTER BAG MAINTENANCE NOTES

A. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY MUST BE PROVIDED FOR DISPOSAL PURPOSES. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME HALF FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE AT CAPACITY. THE BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL.

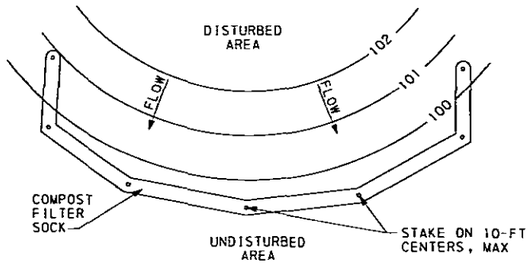
B. REMOVE AND PROPERLY DISPOSE OF THE PUMPED WATER FILTER BAGS. RESTORE AREA IN ACCORDANCE WITH THE SPECIFICATIONS IN PUBLICATION 408. DO NOT CUT THE FILTER BAG AND LEAVE THE SEDIMENT IN PLACE. THE SEDIMENT SHOULD BE EVENLY SPREAD ACROSS THE DISTURBED AREAS, SEEDED, AND MULCHED.

C. PUMPED WATER FILTER BAGS SHALL BE INSPECTED DAILY, AND *DURING AND AFTER EACH USE.* IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED AND APPROVED BY THE ENGINEER.

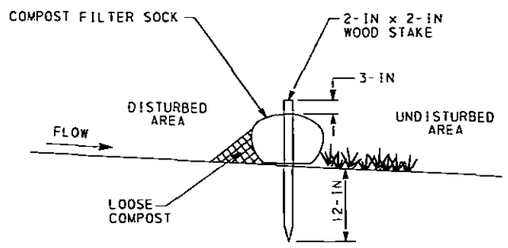
D. IF THE BAG IS CLOGGED, TORN, OR MALFUNCTIONING, IMMEDIATELY CEASE USING THE BAG AND REPLACE WITH A NEW ONE. PUMP INTAKES SHOULD BE FLOATING AND SCREENED. UPON COMPLETION OF THE WORK ASSOCIATED WITH THE PUMPED WATER FILTER BAGS, THEY SHALL BE PROPERLY DISPOSED OF AND THE AREAS RESTORED TO ORIGINAL CONDITIONS.

PUMPED WATER FILTER BAG

(ITEM 0855-0003)



PLAN VIEW



SECTION VIEW

COMPOST FILTER SOCK NOTES:

1. PLACE COMPOST FILTER SOCK ON LEVEL GRADE. EXTEND BOTH ENDS OF THE COMPOST FILTER SOCK AT LEAST 8-FT UPSLOPE AT 45-DEGREES TO THE MAIN ALIGNMENT.

2. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

3. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, THE STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

COMPOST FILTER SOCK MAINTENANCE NOTES:

1. REMOVE DEPOSITS WHEN SEDIMENT ACCUMULATION IS ONE-HALF OF THE EXPOSED COMPOST FILTER SOCK.

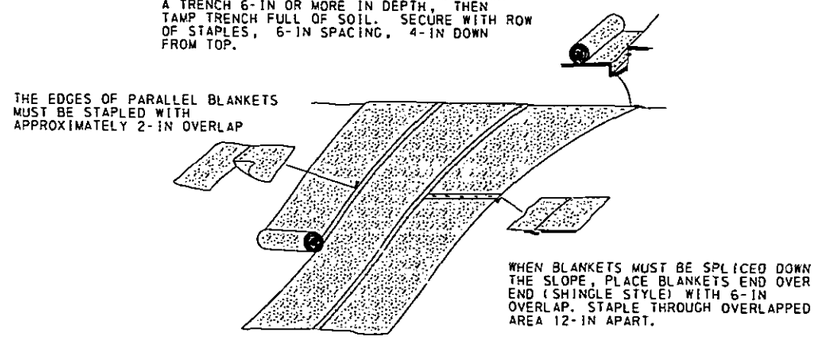
2. REPLACE BIODEGRADABLE FILTER SOCK AFTER 6-MONTHS, PHOTODEGRADABLE AFTER 12-MONTHS.

3. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURERS SPECIFICATIONS OR REPLACED WITHIN 24-HOURS OF INSPECTION.

4. IN AREAS WHERE THERE IS EXCESSIVE PONDING OR ACCUMULATED *SEDIMENT AGAINST FILTER SOCKS, AN ADDITIONAL FILTER SOCK SHOULD* BE ADDED TO THE TOP OR IN FRONT OF THE EXISTING FILTER SOCK. ANY SECTION OF COMPOST FILTER SOCK THAT IS OVERTOPPED OR UNDERMINED SHALL BE REPLACED WITHIN 24-HOURS AND CONSIDERATION SHALL BE GIVEN TO INCORPORATE ADDITIONAL COMPOST FILTER SOCKS IN FRONT OF OR ON TOP OF THE ORIGINAL COMPOST FILTER SOCK DESIGN. CONSIDERATION SHOULD ALSO BE GIVEN TO USE ADDITIONAL BMPS, SUCH AS EROSION CONTROL BLANKET, IN CONJUNCTION WITH THE FILTER SOCK IN THOSE AREAS.

COMPOST FILTER SOCK

(ITEM 0867-0012)
(ITEM 0867-0018)
(ITEM 0867-0032)



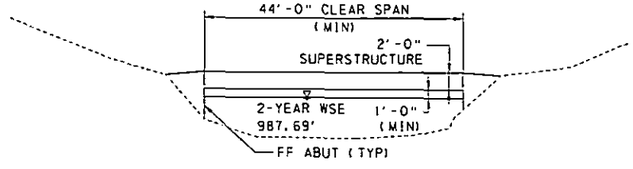
ISOMETRIC VIEW

SLOPE EROSION PROTECTION MAINTENANCE NOTES:

INSPECT EROSION CONTROL MATS AND/OR BLANKETS FOR TEARS AND DISLODGING WEEKLY AND AFTER EVERY RUNOFF EVENT. THE AREA SHALL BE REPAIRED, RESEEDED, AND EROSION CONTROL MATTING SHALL BE REINSTALLED TO THE SLOPE PER THE MANUFACTURERS RECOMMENDATIONS. SLOPE INTERUPTION DEVICES OR WATER DIVERSION TECHNIQUES ARE TO BE UTILIZED WHEN SLOPES EXCEED 100 FEET.

EROSION CONTROL MAT

(ITEM 0806-0050)



NOTES:

1. TEMPORARY BRIDGE IS TO BE REMOVED ONCE CENTER PIER CONSTRUCTION IS COMPLETE.

TEMPORARY BRIDGE DETAIL

NTS

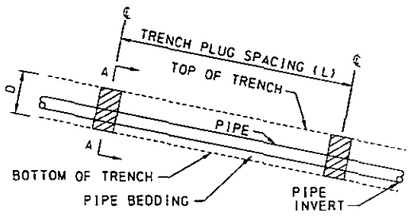
(ITEM 9000-0375)

DRAWN BY	RHB
CHECKED BY	TCC

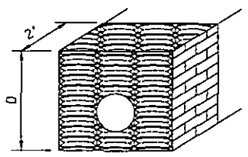
COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOSEPH ANTHONY SASSO JR. — ENGINEER

EROSION AND SEDIMENT POLLUTION CONTROL PLAN
DETAIL SHEET

OPERATOR: robert.billick
FILE PATH: P:\PROJECTS\16976.04-SR.0136.G10.PE\STN\WIP\cms\E&S\SR0136-E&S Details.dgn



ELEVATION



SECTION A-A

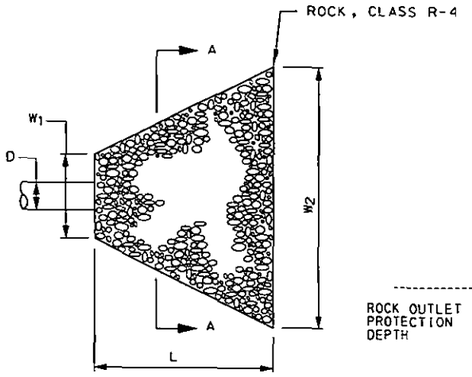
REQUIRED SPACING AND MATERIALS FOR TRENCH PLUGS		
TRENCH SLOPE (%)	SPACING (FT)	PLUG MATERIAL
<5	*	*
5-15	500	** EARTH FILLED SACKS (CLAY)
15-25	300	** EARTH FILLED SACKS (CLAY)
25-35	200	** EARTH FILLED SACKS (CLAY)
35-100	100	** EARTH FILLED SACKS (CLAY)
>100	50	CEMENT FILLED BAGS (WETTED) OR MORTERED STONE

NOTES:

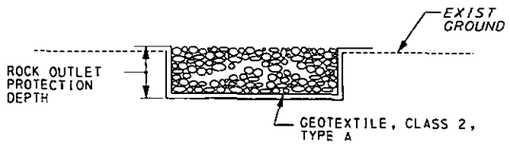
- * TRENCH PLUGS ARE NOT REQUIRED.
- ** TOPSOIL MAY NOT BE USED TO FILL SACKS.

PIPE/TRENCH PLUG

(INCIDENTAL TO PIPE PLACEMENT)



ROCK OUTLET PLAN VIEW



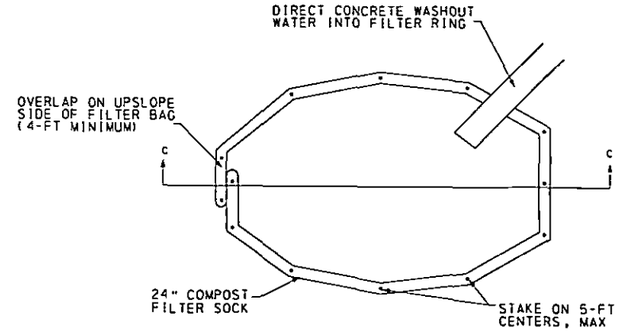
ROCK OUTLET PROTECTION
SECTION A-A

OUTLET STRUCTURE NO	PIPE DIA (D)	OUTLET PROTECTION LENGTH	OUTLET PROTECTION WIDTH		ROCK OUTLET PROTECTION	
			(W_1)	(W_2)	SIZE	DEPTH
1	18"	16'	4.5'	15'	R-4	18"

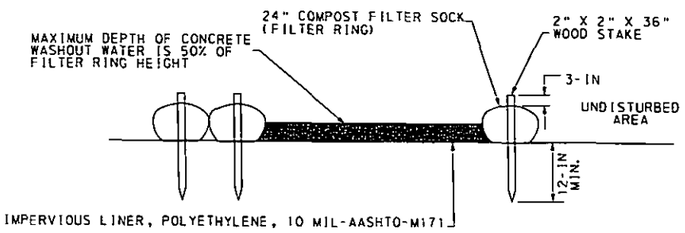
ROCK OUTLET PROTECTION MAINTENANCE NOTES:

1. CONSTRUCT ALL APRONS TO THE DIMENSIONS SHOWN. ADJUST TERMINAL WIDTHS AS NECESSARY TO MEET RECEIVING CHANNELS.
2. INSPECT ALL OUTFALLS WEEKLY AND AFTER EACH RUNOFF EVENT. IF THE OUTLET PROTECTION SHOWS SIGNS OF FAILURE OR EROSION AROUND THE OUTFALL, REPAIRS SHALL BE MADE IMMEDIATELY AND THE ENGINEER SHALL BE NOTIFIED TO DETERMINE THE SUITABLE REPLACEMENT OUTFALL PROTECTION TO BE INSTALLED, IF APPLICABLE.
3. REPLACE DISPLACED ROCK WITHIN THE APRON IMMEDIATELY UPON DISCOVERY.
4. CONSTRUCT IN ACCORDANCE WITH PENNDOT PUBLICATION 408/2011 SECTION 851.

ROCK OUTLET PROTECTION



PLAN VIEW



SECTION C-C

CONCRETE WASHOUT NOTES:

1. *18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT*
2. PLACE ON FLAT GRADE AND PROVIDE GEOMEMBRANE LINER ALONG ALL INTERFACE AREAS WITH GROUND CONTACT PRIOR TO INSTALLING SOCKS.

CONCRETE WASHOUT MAINTENANCE NOTES:

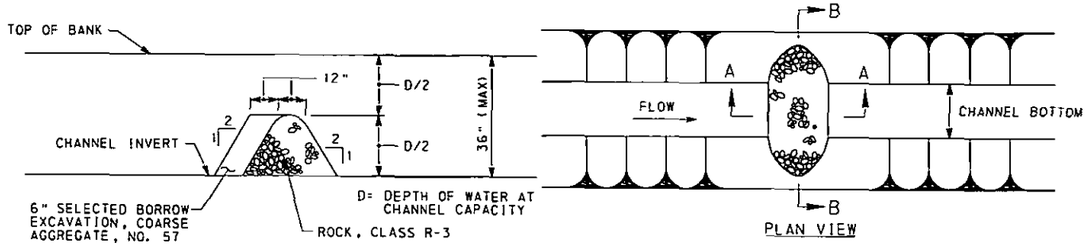
A. MAXIMUM DEPTH OF CONCRETE WASH WATER IS 50% OF FILTER RING HEIGHT.

B. ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY AND AFTER EACH USE. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVIATED AND REPAIRED OR REPLACED IMMEDIATELY.

C. *ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.* LINERS SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

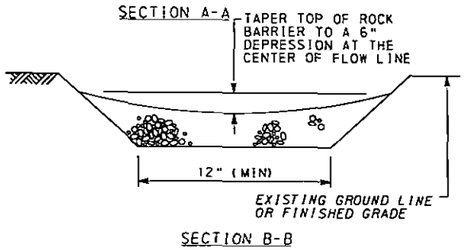
CONCRETE WASHOUT

(ITEM 9000-0002)



SECTION A-A

PLAN VIEW



SECTION B-B

ROCK BARRIER NOTES:

1. PROVIDE GEOTEXTILE MATERIAL ALONG ALL INTERFACE AREAS WITH GROUND CONTACT.

ROCK BARRIER MAINTENANCE NOTES:

1. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES ONE-HALF THE HEIGHT OF THE ROCK BARRIER. REPLACE CLOGGED FILTER STONE. REMOVE AND DISPOSE OF SEDIMENT IN AN APPROVED MANNER.
2. ROCK FILTERS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INPSECTION.

ROCK BARRIER (ROCK FILTER)

(ITEM 0205-0285)
(ITEM 0850-0031)

DRAWN BY	RHB
CHECKED BY	TCC

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOSEPH ANTHONY SASSO JR. — ENGINEER

EROSION AND SEDIMENT POLLUTION CONTROL PLAN
DETAIL SHEET

PLOTTED: 11/23/2015

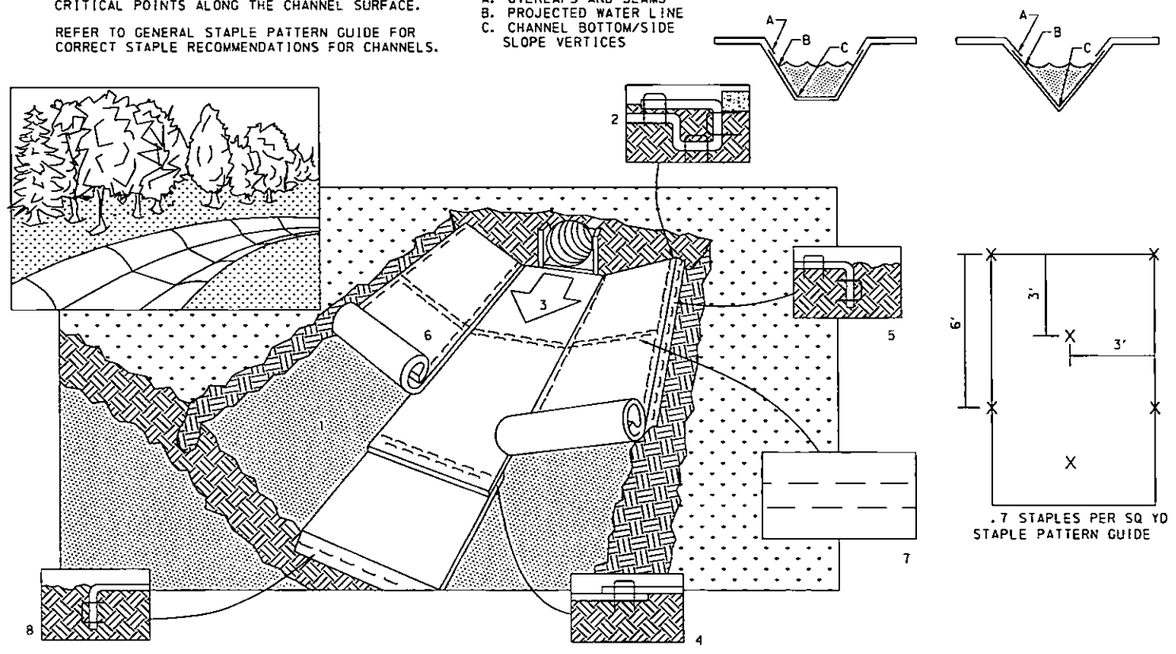
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	7 OF 10
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

NOTE: HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE RECOMMENDATIONS FOR CHANNELS.

CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES



.7 STAPLES PER SQ YD
STAPLE PATTERN GUIDE

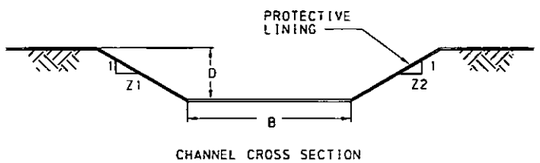
EROSION CONTROL MAT CHANNEL INSTALLATION NOTES

1. PREPARE SOIL BEFORE INSTALLING MATS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. DO NOT APPLY FERTILIZER ALONG STREAM BANKS OR IN WETLANDS.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE MAT IN A 6-IN DEEP X 6-IN WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL CENTER MAT IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.
4. PLACE MATS END OVER END (SHINGLE STYLE) WITH A 6-IN OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4-FT APART TO SECURE MATS.
5. FULL LENGTH EDGE OF MATS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN 6-IN DEEP X 6-IN WIDE TRENCH. BACKFILL & COMPACT THE TRENCH AFTER STAPLING.
6. MATS ON SIDE SLOPES MUST BE OVERLAPPED 4-IN OVER THE CENTER MATS AND STAPLED (2-FT FOR C350 MATTING).
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40-FOOT INTERVALS. USE A ROW OF STAPLES 4-FT APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4-IN BELOW THE FIRST ROW IN A STAGGERED PATTERN.
8. THE TERMINAL END OF THE MATS MUST BE ANCHORED IN A 6-IN DEEP X 6-IN WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

CHANNEL	STATION	BASELINE	BOTTOM WIDTH (B)	DEPTH (D)	Z1	Z2	CHANNEL TYPE	PROTECTIVE LINING
CHANNEL-1	341+74 RT	SR136	2'	2'	2	2	GRASS	ECM

ECM = EROSION CONTROL MAT (ITEM 0806-0050)

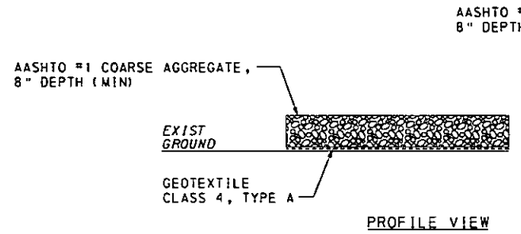
CHANNEL INSTALLATION



CHANNEL CROSS SECTION

VEGETATED CHANNEL MAINTENANCE NOTES:

1. ANCHOR TRENCHES SHALL BE INSTALLED AND MAINTAINED AT BEGINNING AND END OF CHANNELS IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
2. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24-HOURS OF DISCOVERY.
3. DAMAGED LININGS SHALL BE REPAIRED OR REPLACED WITHIN 48-HOURS OF DISCOVERY.
4. CHANNELS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. ALSO REFER TO THE VEGETATIVE COVER MAINENANCE SECTION. IF THE CHANNEL SHOWS SIGNS OF EROSION DUE TO FAILURE OF THE LINING, REPAIRS SHALL BE MADE IMMEDIATELY AND THE ENGINEER SHALL BE NOTIFIED TO DETERMINE THE SUITABLE REPLACEMENT LINING TO BE INSTALLED, IF APPLICABLE. CHANNELS SHALL BE CONSTANTLY MAINTAINED TO INSURE THAT THE SPECIFIED DESIGN DIMENSIONS AND PROTECTIVE LINIGS ARE AVAILABLE AT ALL TIMES.



PROFILE VIEW

PLAN VIEW

TEMPORARY ACCESS ROAD NOTES:

1. DO NOT EXCAVATE ANY SOILS TO INSTALL TEMPORARY ACCESS ROAD. TEMPORARY ACCESS ROAD IS TO BE BUILT ON TOP OF EXISTING GROUND.
2. EXTEND ROCK OVER FULL WIDTH OF TEMPORARY ACCESS ROAD. PROVIDE GEOTEXTILE MATERIAL MEETING THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 735. FURNISH AND INSTALL IN ACCORDANCE WITH SECTION 212. PROVIDE GEOTEXTILE MATERIAL ALONG ALL GROUND CONTACT INTERFACE AREAS.
3. CONSTRUCT ACCESS ROAD WITHIN THE TEMPORARY CONSTRUCTION EASEMENT.

TEMPORARY ACCESS ROAD MAINTENANCE NOTES:

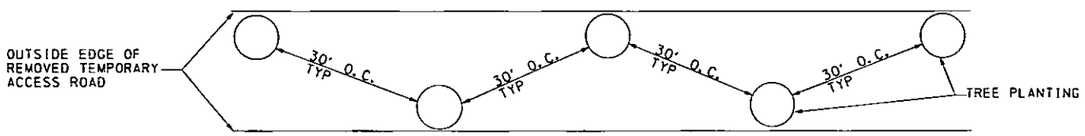
A. THE TEMPORARY ACCESS ROAD SHALL BE INSPECTED DAILY AND ITS THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIALS SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE.

B. SATISFACTORILY REMOVE MATERIALS AS PER PENNDOT 408 SPECIFICATION, SECTION 849, WHEN TEMPORARY ACCESS ROAD IS NO LONGER NEEDED.

C. REPLANT TEMPORARY ACCESS ROAD WITH NATIVE SPECIES TREES LISTED BELOW.

TEMPORARY ACCESS ROAD
(ITEM 0205-0200)
(ITEM 0212-0014)
(ITEM 0703-0020)

ITEM NO.	COMMON NAME	SCIENTIFIC NAME	SPACING
0808-3253	TULIP TREE - 2 1/2" CAL B&B	LIRIODENDRON TULIPFERA	30' O.C.
0808-3074	RED MAPLE - 2 1/2" CAL B&B	ACER RUBRUM	30' O.C.
0808-3304	RED OAK - 2 1/2" CAL B&B	QUERCUS RUBRA	30' O.C.



PLAN VIEW

TREE PLANTING NOTES:

1. ALL PLANT LOCATIONS MUST BE APPROVED BY THE RESIDENT ENGINEER PRIOR TO PLANTING.
2. ALL PLANTINGS WILL BE DONE IN ACCORDANCE WITH PENNDOT PUBLICATION 408.

TREE PLANTINGS

NTS

DRAWN BY	RHB
CHECKED BY	TCC

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH ANTHONY SASSO JR. ENGINEER 062135

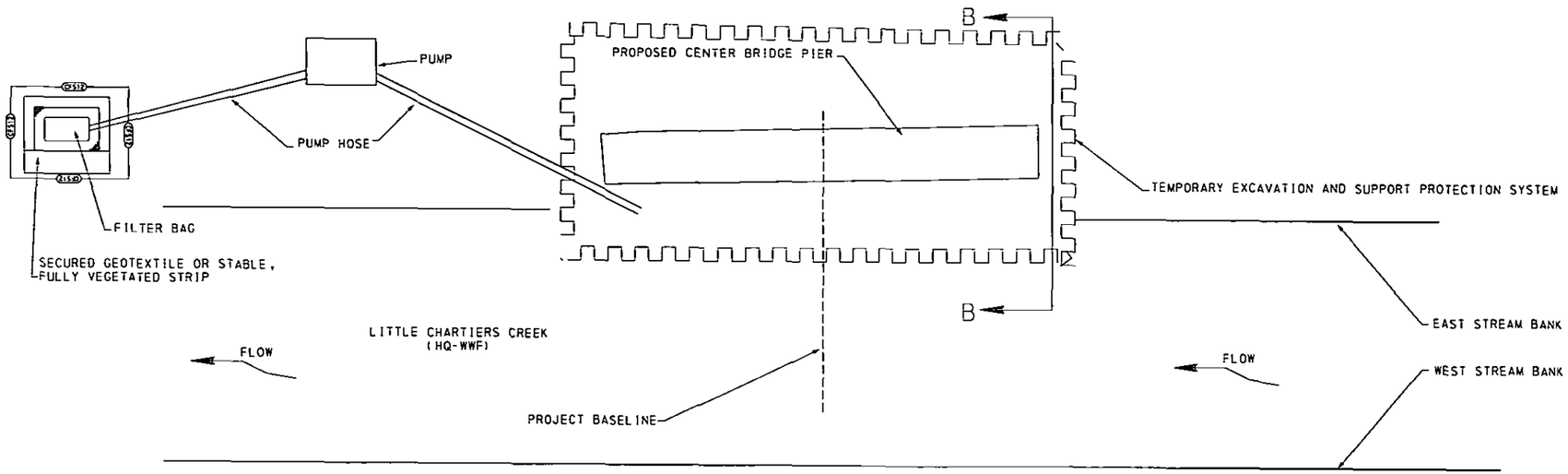
EROSION AND SEDIMENT POLLUTION CONTROL PLAN DETAIL SHEET

OPERATOR: robert.billick
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10_PE\USTNH\WYP\plans\E&S\SR0136-E&S Details.dgn

PLOTTED: 11/23/2015

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	8 OF 10
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

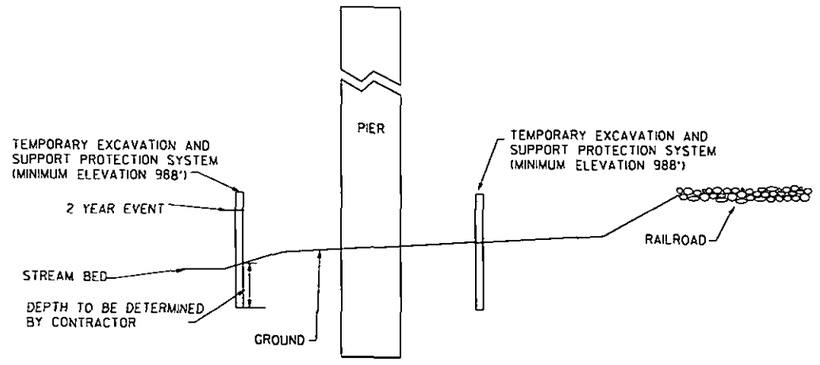
REVISION NUMBER	REVISIONS	DATE	BY



PLAN
NTS

NOTES:

1. TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM IS PLACED WITHIN THE CHANNEL TO DIVERT THE FLOW OF THE STREAM AWAY FROM, AND ISOLATE, THE WORK AREA. NO EXCAVATION OR EQUIPMENT IS PERMITTED WITHIN THE FLOW OF THE WATERCOURSE.
2. SEDIMENT-LADEN WATER IS PUMPED OUT OF THE WORK AREA INTO A NON-WOVEN GEOTEXTILE FILTER BAG SURROUNDED BY 12-INCH COMPOST FILTER SOCK. THE WATER IS THEN FILTERED AS IT SEEPS OUT OF THE BAG AND FLOWS ACROSS A VEGETATED OR GEOTEXTILE COVERED AREA BEFORE REENTERING THE WATERCOURSE BELOW THE WORK AREA.
3. DO NOT EXCAVATE A SUMP AREA WITHIN THE NATURAL STREAM CHANNEL FOR THE PUMP INTAKE.
4. BYPASSES SHALL BE INSPECTED DAILY AND DURING AND AFTER EVERY RUNOFF EVENT.
5. WORK SHOULD BE SCHEDULED FOR LOW FLOW SEASONS WHENEVER POSSIBLE.
6. REMOVE ALL CONTROLS FROM PROJECT AREA AFTER COMPLETION OF WORK AND AREA IS STABILIZED.
7. BYPASSES MUST BE COMPLETED AND STABILIZED PRIOR TO DIVERTING FLOW. ALL DISTURBED AREAS WITHIN THE CHANNEL MUST BE STABILIZED PRIOR TO RETURNING BASE FLOW TO THE PORTION OF THE CHANNEL AFFECTED BY THE EARTHWORK.
8. SEED AND MULCH TO ESTABLISH VEGETATIVE COVER AS PER STABILIZATION SPECIFICATION.



SECTION B-B

TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM

NTS

(ITEM 9203-2101)

DRAWN BY	RHB
CHECKED BY	TCC

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOSEPH ANTHONY SASSO JR. — ENGINEER

EROSION AND SEDIMENT POLLUTION CONTROL PLAN DETAIL SHEET

OPERATOR: robert.billick
FILE PATH: P:\PROJECTS\189766.04-SR.0136.G10_PE\USTNWIWY\Plans\E&S\SR0136-E&S Details.dgn

PLOTTED: 11/23/2015

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	9 OF 10
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY

LIMIT WORK
STA 333+75.00
SEG 0140 OFFSET 1981
SR 0136 SEC G10
NORTH STRABANE TOWNSHIP
SOUTH STRABANE TOWNSHIP
WASHINGTON COUNTY

START WORK
STA 334-20.00
SEG 0140 OFFSET 2026
SR 0136 SEC G10

100-YEAR FLOOD LIMITS

GOLDEN EAGLE CONSTRUCTION COMPANY

STP-A1

STP-A4

LEGAL SLOPE EASEMENT LINE

PROPOSED OVERHEAD UTILITIES (TO BE INSTALLED BY OTHERS)

LEGAL RIGHT-OF-WAY LINE

W. P. P. CO.

LOW WIRE EL. 1056.0'

NORTH STRABANE TOWNSHIP

SOUTH STRABANE TOWNSHIP

S. R. 0136

SR 0136 SURVEY & CONSTR ℄

S81°48'10"E

334 335 336 337 338 339 340 341

LEGAL CHANNEL EASEMENT

LITTLE CHARTIERS CREEK

CSX TRANSPORTATION, INC., SUCCESSOR THROUGH MERGER WITH NEW YORK LINES, LLC

CFS-12 SURROUNDING FILTER BAG

84SLB2, LLC

LEGAL SLOPE EASEMENT LINE

TEMP BRIDGE

FF ABUT

GAS LINE MARKER

TEMPORARY CONSTRUCTION EASEMENT

TEMPORARY ACCESS ROAD

LEGAL RIGHT-OF-WAY LINE FOR TOWNSHIP ROAD T-501

150'

TEMPORARY CONSTRUCTION EASEMENT

SCHWAN'S SALES ENTERPRISES, INC.

100-YEAR FLOOD LIMITS

DARRELL DEEMS & MARY JANE DEEMS, H/W

LEGAL SLOPE EASEMENT LINE

SOUTH STRABANE TOWNSHIP

SOMERSET TOWNSHIP

EARL HATFIELD & MICHELLE M. HATFIELD, H/W

LEGAL SIDEWALK EASEMENT

LEGAL CHANNEL EASEMENT

CSX TRANSPORTATION, INC., SUCCESSOR THROUGH MERGER WITH NEW YORK LINES, LLC

100-YEAR FLOOD LIMITS

MATCH TO SHEET 10

LEGEND

- —LOD— LIMITS OF DISTURBANCE (LOD)
- --1070-- EXISTING CONTOURS
- —1060— PROPOSED CONTOURS
- (Ha) SOIL TYPES
- ———— SOIL BOUNDARIES
- ---C--- LIMIT OF CUT
- —F— LIMIT OF FILL
- (CFSxx) COMPOST FILTER SOCK
- —PF— TEMPORARY PROTECTIVE FENCE
- EXCAVATION SUPPORT AND PROTECTION SYSTEM
- (P)—(FB) WATER PUMP/FILTER BAG
- ROCK CONSTRUCTION ENTRANCE
- EROSION CONTROL MAT/BLANKET
- IP INLET PROTECTION
- ROCK OUTLET PROTECTION
- —·····— WATERCOURSE
- —·-·-·— 100-YEAR FLOOD PLAIN
- (RFx) ROCK FILTER

SCALE
0 25 50 FEET

DRAWN BY	RHB
CHECKED BY	TCC

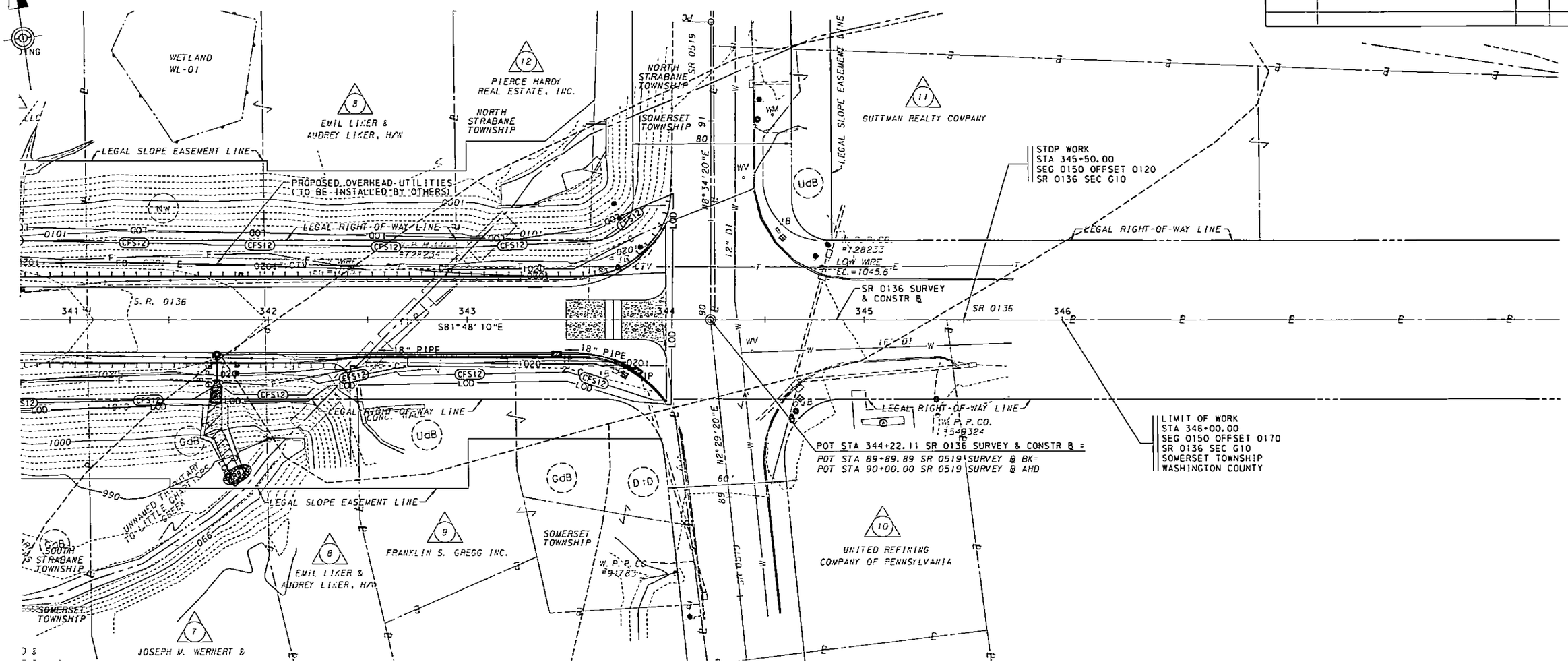
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOSEPH ANTHONY SASSO JR.
ENGINEER

EROSION AND SEDIMENT POLLUTION CONTROL PLAN

OPERATOR: robert.billick
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10.PE\US7N\HWY\Plans\E&S\SR0136-E&S Plan01.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0136	G10	10 OF 10
NORTH STRABANE, SOUTH STRABANE & SOMERSET TOWNSHIPS				

REVISION NUMBER	REVISIONS	DATE	BY



LEGEND

- —LOD— LIMITS OF DISTURBANCE (LOD)
- --1070-- EXISTING CONTOURS
- —1060— PROPOSED CONTOURS
- (RaG) SOIL TYPES
- ---- SOIL BOUNDARIES
- --C--- LIMIT OF CUT
- —F— LIMIT OF FILL
- (CFSxx) COMPOST FILTER SOCK
- —PF— TEMPORARY PROTECTIVE FENCE
- TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM
- (P)—(FB) WATER PUMP/FILTER BAG
- ROCK CONSTRUCTION ENTRANCE
- EROSION CONTROL MAT/BLANKET
- IP INLET PROTECTION
- ROCK OUTLET PROTECTION
- —·—·— WATERCOURSE
- ·—·—·— 100-YEAR FLOOD PLAIN
- (RF) ROCK FILTER

SCALE
0 25 50 FEET

DRAWN BY	RHB
CHECKED BY	TCC

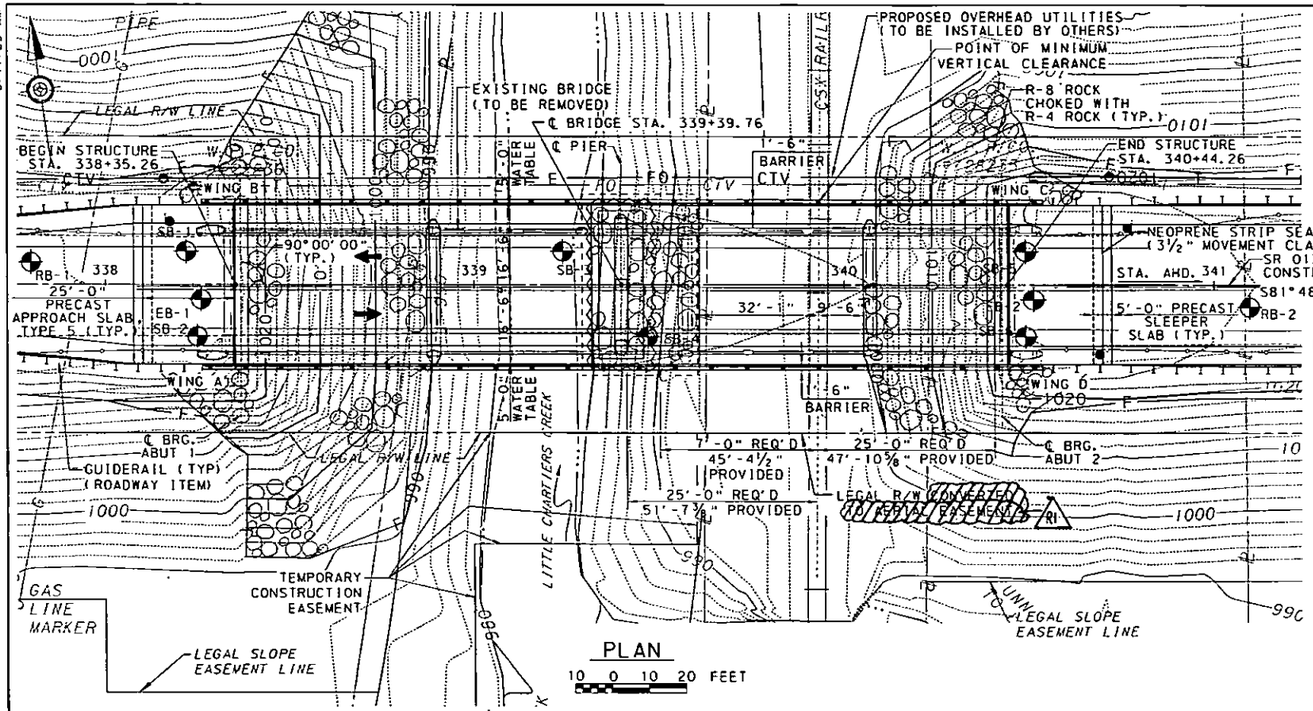
COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOSEPH ANTHONY SASSO JR. — ENGINEER — PE076195

EROSION AND SEDIMENT POLLUTION CONTROL PLAN

PLOTTED: 11/23/2015

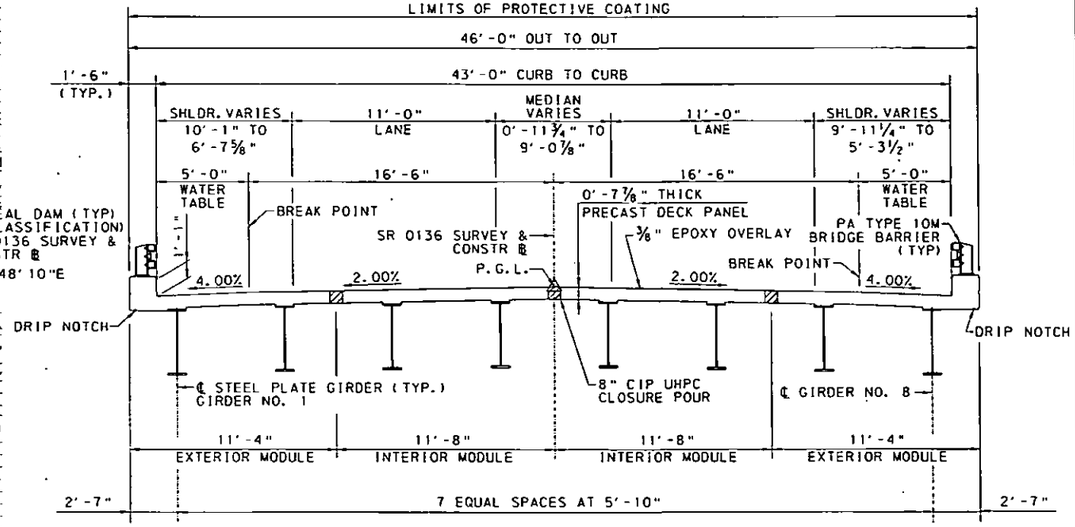
OPERATOR: roberl.billick
FILE PATH: P:\PROJECTS\18976.04-SR.0136_G10.PE\US\NHIWY\Plans\E&S\SR0136-E&S Plan02.dgn

PLOTTED: 12/14/2015 8:17:23 AM



PLAN

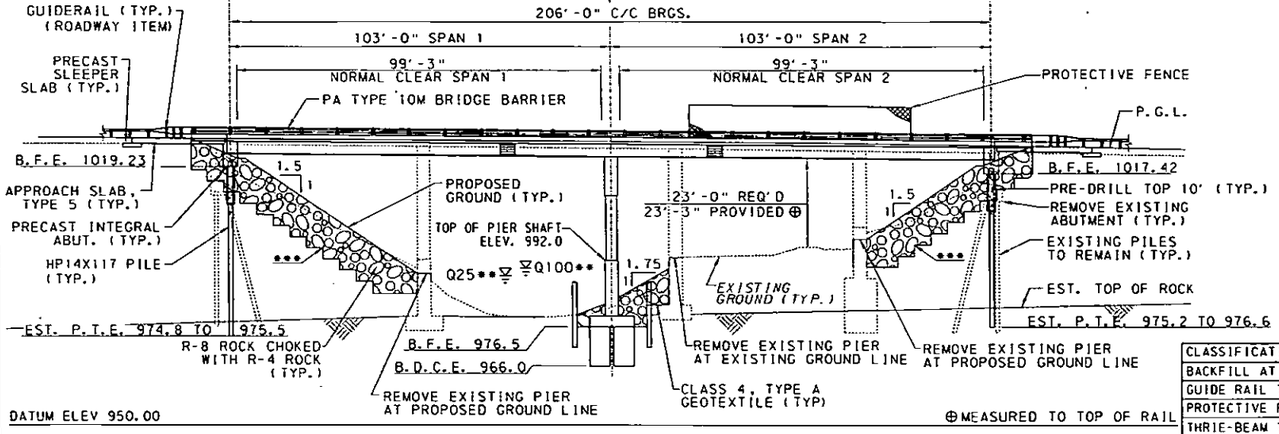
10 0 10 20 FEET



TYPICAL SECTION

(LOOKING AHEAD STATIONS)

2 0 2 4 FEET



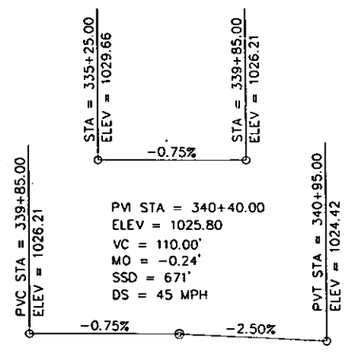
ELEVATION

10 0 10 20 FEET

TRAFFIC DATA

CURRENT YEAR ADT - 4,948 (2016)
DESIGN YEAR ADT - 5,644 (2036)
DHV = 621 (2036)
D = 55%
T = 4%

VERTICAL CURVE DATA



AS-DRILLED BORING LOCATIONS

BORING	STATION	OFFSET
SB-1	338+22.00	9' LT
SB-2	338+25.00	14' RT
SB-3	339+24.00	9' LT
SB-4	339+47.00	14' RT
SB-5	340+49.00	9' LT
SB-6	340+49.00	14' RT
EB-1	338+26.00	4' RT
EB-2	340+51.00	4' RT
RB-1	337+80.00	6' LT
RB-2	341+10.00	6' RT

NOTES:

1. FOR GENERAL NOTES, SEE SHT 2 AND 3
2. FOR BRIDGE LOAD RATINGS, SEE SHEET 7

LEGEND

- AS-DRILLED BORING LOCATION
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- PROPOSED 2' CONTOUR
- 90 PROPOSED 10' CONTOUR
- B.F.E. BOTTOM OF FOOTING ELEVATION
- B.D.C.E. BOTTOM OF DRILLED CAISSON ELEV.
- P.T.E. ESTIMATED PILE TIP ELEVATION
- INDICATES TRAFFIC DIRECTION
- TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM
- —E— OVERHEAD ELECTRIC LINE
- —T— OVERHEAD TELEPHONE LINE
- —G— GAS LINE

**HYDRAULIC DATA

DRAINAGE AREA = 23.1 MI²

25-YEAR FLOOD (DESIGN STORM)
DISCHARGE = 3,006 CFS
WATER SURFACE ELEVATION = 990.63'
CHANNEL VELOCITY = 6.16 FT/S

100-YEAR FLOOD
DISCHARGE = 4,310 CFS
WATER SURFACE ELEVATION = 992.17'
CHANNEL VELOCITY = 7.42 FT/S

ROADWAY OVERTOPPING FREQUENCY (PROPOSED) = N/A
ROADWAY OVERTOPPING FREQUENCY (EXISTING) = N/A

*** FOR ROCK BUTTRESS DETAILS NOT SHOWN, SEE ROADWAY DETAILS

SCOUR INFORMATION

TOTAL SCOUR AT PIER = 7.94'
R-8 RIPRAP CHOKED WITH R-4 REQUIRED

WINGWALL DATA

WINGWALL	LENGTH
A	8'-6"
B	8'-6"
C	8'-6"
D	8'-6"

DES: RTE | DRA: RTE | CHK: WES

CDR MAGUIRE INC.
D.L. CLARK BUILDING
SUITE 610
503 MARTINDALE STREET
PITTSBURGH, PA 15212

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT T. ELLIOTT, JR. ENGINEER NO. 055773E

ROBERT T. ELLIOTT, JR., P.E. NO. PE055773E

12-14-15
DATE

Mark	Description	By	Chk'd.	Recm'd.	Date
R1	REMOVED TEXT	JMH 1-7-16	JMH	DWH	1/7/16

REVISIONS

SR 0136 PREVIOUSLY KNOWN AS LEGISLATIVE ROUTE 181

DESCRIPTION	DWG. NO.	APP. DATE
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	06-01-10
BACKFILL AT STRUCTURES	RC-12M	06-01-10
GUIDE RAIL TRANSITION AT END OF STRUCTURE	RC-50M	06-01-10
PROTECTIVE FENCE	BC-701M	11-21-14
THRIE-BEAM TO PA TYPE 10M BRIDGE BARRIER TRANSITION CONNECTION	BC-708M	11-26-13
PA TYPE 10M BRIDGE BARRIER	BC-709M	11-21-14
ANCHOR SYSTEMS	BC-734M	10-26-10
WALL CONSTRUCTION & EXPANSION JOINT DETAILS	BC-735M	10-26-10
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	5-18-12
BRIDGE DRAINAGE	BC-751M	11-21-14
CONCRETE DECK SLAB DETAILS	BC-752M	11-21-14
STEEL GIRDER DETAILS	BC-753M	11-26-13
STEEL DIAPHRAGMS FOR STEEL BM / GIRDER STRUCTURES	BC-754M	10-26-10
BEARINGS	BC-755M	11-26-13
STEEL PILE TIP REINFORCEMENTS & SPLICES	BC-757M	11-26-13
NEOPRENE STRIP SEAL DAM FOR PRESTRESSED CONCRETE & STEEL I-BEAM BRIDGES	BC-767M	11-26-13
MISCELLANEOUS PRESTRESS DETAILS	BC-775M	11-26-13
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	11-21-14

SUPPLEMENTAL DRAWINGS

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WASHINGTON COUNTY
SR 0136 SECTION G10

SEGMENT 0140 OFFSET 2434
SR 0136 STA. 339+39.76
OVER LITTLE CHARTIERS CREEK & CSX RAILROAD
2-SP STEEL PLATE GIRDER (PBU) BRIDGE
GENERAL PLAN & ELEVATION

Recommended
Thomas P. Macioce 12/24/2015
CHIEF BRIDGE ENGINEER

SHEET 1 OF 51
+SUPPLEMENTAL DRWGS
S - 36050

OPERATOR: Adam.Nicastro
FILE PATH: P:\PROJECTS\18976.04-SR.0136.G10.PE\USTN\BRDG\Final Design\SR0136F01.dgn

CMS 12/23/2015

GENERAL NOTES

DESIGN SPECIFICATIONS:

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, 2014, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, APRIL 2015 EDITION.

LIVE LOAD DISTRIBUTION TO GIRDERS IS BASED UPON DM-4 DISTRIBUTION FACTOR METHOD.

DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.

DESIGN LIVE LOADS:

PHL-93, ML-80, TK527 OR P-82 (204 Kip PERMIT LOAD)

FATIGUE DESIGN IS BASED ON THE FOLLOWING:

STEEL STRUCTURES: ADTT 125 (2036)
(ONE DIRECTIONAL)

DEAD LOADS:

INCLUDES A SURFACE AREA DENSITY OF 30 LB/SF FOR FUTURE WEARING SURFACE ON THE DECK SLAB.

INCLUDES A SURFACE AREA DENSITY OF 3.6 PSF FOR AN EPOXY OVERLAY.

INCLUDES A 30 PLF LOAD FOR PEDESTRIAN FENCE.

INCLUDES A SURFACE AREA DENSITY OF 5 PSF FOR LIGHTWEIGHT PERMANENT METAL DECK FORMS.

GENERAL:

PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS PUBLICATION 408/2011-9, ANSI/AASHTO/AWS/D1.5-2008 BRIDGE WELDING CODE 2008, AND THE CONTRACT SPECIAL PROVISIONS.

PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M 270, GRADE 50W (ASTM A709, GRADE 50W) DESIGNATION, EXCEPT WHEN NOTED OTHERWISE.

STATIONS AND ELEVATIONS ARE GIVEN IN FEET UNLESS OTHERWISE NOTED.

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

FOR INTEGRAL ABUTMENTS (i.e. ABUTMENT PILE CAP, END DIAPHRAGM, AND WINGWALLS): PROVIDE 3" CONCRETE COVER ON REINFORCEMENT BARS.

USE CEMENT CONCRETE WITH A MINIMUM 28 DAY DESIGN COMPRESSIVE STRENGTH OF 5000 PSI IN PRECAST CONCRETE UNLESS OTHERWISE NOTED.

USE LIGHTWEIGHT CLASS AAAP CEMENT CONCRETE IN DECK SLAB.

USE CLASS AAAP CEMENT CONCRETE IN APPROACH SLABS.

USE CLASS AAA CEMENT CONCRETE, ACCELERATED IN CLOSURE POUR AT THE INTEGRAL ABUTMENTS (CONCRETE END DIAPHRAGMS) AND IN THE BARRIERS AT THE TRANSVERSE CLOSURE POURS.

USE LIGHTWEIGHT CLASS AA CEMENT CONCRETE IN PRECAST BARRIERS ON DECK.

USE CLASS A CEMENT CONCRETE IN PIER FOOTING, PIER SHAFT AND PIER DRILLED CAISSONS.

USE CLASS C CEMENT CONCRETE BELOW THE BOTTOM OF FOOTINGS WHEN SPECIFIED.

A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT.

PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A 615, A 996, OR A 706. DO NOT WELD GRADE 60 REINFORCING STEEL BARS UNLESS SPECIFIED. GRADE 40 REINFORCING STEEL BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS-SECTIONAL AREA, IF APPROVED BY THE CHIEF BRIDGE ENGINEER. DO NOT USE RAIL STEEL A 996 REINFORCEMENT BARS IN BRIDGE PIERS, ABUTMENTS, SHEAR BLOCKS, FOOTINGS, BARRIERS OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.

ALL REINFORCING BARS ARE TO BE EPOXY-COATED

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

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

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

SITE CLASS IS NOT CLASS E.

PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408/2011-9, SECTION 1001.3(K)9.

SEISMIC FORCES WERE CONSIDERED FOR ACCELERATION COEFFICIENT OF 0.05.

USE RETARDER ADMIXTURE CONFORMING TO PUBLICATION 408/2011-9 IN THE CONCRETE DECK SLAB.

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

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

ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.

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

DECK SLAB THICKNESS INCLUDES A ⅜" EPOXY OVERLAY.

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

LIGHTWEIGHT PERMANENT METAL DECK FORMS CONFORMING TO THE DEAD LOAD CRITERIA INDICATED ON THIS SHEET MAY BE USED BETWEEN GIRDERS G1-G2, G3-G4, G5-G6, & G7-G8.

CONTRACTOR IS SOLELY RESPONSIBLE FOR THE STABILITY OF ALL EXCAVATED SLOPES AND THE DESIGN OF ANY TEMPORARY SHORING AND BRACING THAT MAY BE USED. PERFORM ALL EXCAVATIONS IN ACCORDANCE WITH OSHA REQUIREMENTS.

DIRECT ALL SURFACE RUNOFF AWAY FROM EXCAVATIONS.

NOTIFY THE REGIONAL HEADQUARTERS OF THE FISH COMMISSION PRIOR TO CONSTRUCTION AND COOPERATE WITH THE FISH COMMISSION DURING CONSTRUCTION.

SOUTHWEST REGION
236 LAKE ROAD, SOMERSET, PA 15501
814-445-8974

APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES) ON ALL EXPOSED SUBSTRUCTURE FACES EXCEPT THE PIER BEAM SEATS, TO A MINIMUM 1 FOOT BELOW PROPOSED FINISH GRADE.

CONSTRUCTION NOTES:

DETERMINE AND PROVIDE ADEQUATE SUPPORT OF PRECAST WALL PANELS THROUGHOUT CONSTRUCTION. STRAPPING AND GALVANIZED ANGLES ON FOOTING ARE FOR ALIGNMENT PURPOSES AND NOT DESIGNED TO SUPPORT PRECAST PANELS.

CONTRACTOR TO PROVIDE TEMPORARY BRACING FOR ALL ELEMENTS UNTIL CONNECTIONS HAVE ACHIEVED ADEQUATE STRENGTH. SUBMIT THE WORKING DRAWINGS IN ACCORDANCE WITH PUBLICATION 408, SECTION 105.02(C).

SHOW LIFTING LOCATIONS FOR ALL COMPONENTS. CONTRACTOR TO DESIGN THE LIFTING HARDWARE.

THE CONTRACTOR MAY SUBSTITUTE ALTERNATE LEVELING DEVICES PROVIDED THEY CAN PRODUCE A STRUCTURE WITHIN THE SPECIFIED ERECTION TOLERANCES.

USE A TROWEL FINISH ON THE TOP SURFACES OF ALL PRECAST ELEMENTS.

PLACE PILES WITHIN A HORIZONTAL TOLERANCE OF 3" IN PLAN.

NOTES FOR STEEL BEAMS:

SET ANCHOR BOLTS TO TEMPLATE OR IN PREFORMED HOLES. DO NOT DRILL UNLESS SPECIFICALLY INDICATED ON THE PLANS. FILL THE PREFORMED HOLES WITH NON-SHRINK GROUT. FILL THE CLEARANCE BETWEEN ANCHOR BOLTS AND HOLES IN MASONRY PLATES WITH APPROVED NON-HARDENING CAULKING COMPOUND CONFORMING TO PUBLICATION 408, SECTION 705.8

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

THE STEEL SUPERSTRUCTURE SHALL BE DETAILED AND FABRICATED FOR TOTAL DEAD LOAD FIT (TDLF). GIRDER WEBS SHALL BE PLUMB UNDER THE FULL DEAD LOAD EXISTING AT THE END OF CONSTRUCTION.

IF GIRDERS CAN BE FABRICATED IN LENGTHS LONGER THAN THE SECTIONS SHOWN ON THE PLANS BY ELIMINATING FIELD SPLICES, FIELD SPLICE(S) MAY BE OMITTED AT THE REQUEST OF THE CONTRACTOR. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR SECURING A HAULING PERMIT. APPROVAL FOR ELIMINATION OF A FIELD SPLICE AT THE SHOP-DRAWING STAGE DOES NOT OBLIGATE THE DEPARTMENT TO ISSUE A HAULING PERMIT.

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

ALL FASTENERS ARE 7/8" DIAMETER, ASTM A325, TYPE 3, HS BOLTS, EXCEPT AS NOTED.

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

DO NOT MAKE WELDS BY MANUAL SHIELDED METAL ARC PROCESS FOR PRIMARY GIRDER WELDS, SUCH AS FLANGE-TO-WEB WELDS OR FOR SHOP SPLICES OF WEBS AND FLANGES.

PROVIDE WELDED STUD SHEAR CONNECTORS MANUFACTURED FROM STEEL CONFORMING TO ASTM A 108.

PROVIDE DRIP BARS IN ACCORDANCE WITH STD. DWG BC-753M AND AS SHOWN IN THE CONSTRUCTION PLANS.

STABILITY OF PARTIAL GIRDERS AND COMPLETE GIRDERS IS TO BE MAINTAINED BY THE CONTRACTOR DURING ERECTION, UNTIL ALL GIRDERS AND DIAPHRAGMS ARE IN-PLACE AND ALL BOLTS 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 MEMBERS DURING ANY STAGE OF ERECTION.

BRACE STEEL FRAMEWORK IN LONGITUDINAL AND LATERAL DIRECTIONS UNTIL MEMBERS ARE IN STABLE (FINAL BRACED) CONDITION.

SUPPORT DECK SLAB OVERHANG FORMS FROM THE BOTTOM FLANGE OF THE FASCIA GIRDER, UNLESS THE GIRDER WEB IS ADEQUATELY SUPPORTED TO PREVENT BUCKLING DUE TO LOADS FROM WEB-BEARING FORM SUPPORTS.

BLAST CLEAN THE FAYING SURFACES OF SPLICES AND CONNECTIONS OF ALL STRUCTURAL ELEMENTS IN ACCORDANCE WITH SECTION 1060.3(b)3. REBLAST UNPAINTED ELEMENTS THAT REMAIN UNASSEMBLED FOR A PERIOD OF 12 MONTHS OR MORE FOLLOWING THE INITIAL CLEANING.

UTILITY NOTES:

COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408/2011-9, SECTIONS 105.06 AND 107.12.

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WASHINGTON COUNTY
SR 0136 SECTION G10

SEGMENT 0140 OFFSET 2434
SR 0136 STA. 339+39.76
OVER LITTLE CHARTIERS CREEK & CSX RAILROAD

2-SP STEEL PLATE GIRDER (PBU) BRIDGE

GENERAL NOTES - 1

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGISTERED PROFESSIONAL ROBERT T. ELLIOTT, JR. ENGINEER

Recommended _____

_____

SHEET 2 OF 51

S - 36050

DES: MJM | DRA: TC | CHK: RTE

EXISTING STRUCTURE:

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

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 QUANTITES OF WORK TO BE PERFORMED MAY DIFFER FROM THOSE INDICATED.

EXISTING DRAWINGS:

S-1242	GENERAL PLAN	(APPROVED NOV. 22, 1940)
S-1242	SUPERSTRUCTURE	(APPROVED NOV. 22, 1940)
S-1242	RAILING	(APPROVED NOV. 22, 1940)
S-1242	ABUTMENTS	(APPROVED NOV. 22, 1940)
S-1242	PIERS	(APPROVED NOV. 22, 1940)

THE EXISTING BRIDGE STRUCTURAL MEMBERS ARE ASSUMED TO CONTAIN LEAD PAINT AND OTHER TOXIC METALS (SUCH AS CADMIUM, CHROMIUM, ARSENIC, ETC.).

NO ASBESTOS CONTAINING MATERIALS ARE PRESENT ON THE EXISTING BRIDGE BASED ON FIELD SAMPLING AND LABORATORY TESTING RESULTS.

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

WELDING NOTES:

WELDING SPECIFICATIONS: AASHTO/AWS D1.5M/D1.5 BRIDGE WELDING CODE (2008) CONSISTENT WITH PUB 408 1105.03(M), AND THE CONTRACT SPECIAL PROVISIONS. DO NOT FIELD-WELD ON ANY PART OF THE 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°F. PREHEAT AND MAINTAIN THE TEMPERATURE OF THE METAL TO AT LEAST 70°F WHEN THE TEMPERATURE OF THE METAL IS BETWEEN 0°F AND 32°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 IN. 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 IN. 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.

FOUNDATION NOTES:

COMPLETE CONSTRUCTION IN ACCORDANCE WITH PENNDOT SPECIFICATIONS PUBLICATION 408/2011-9.

PLACE STRUCTURE BACKFILL IN ACCORDANCE WITH PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION RC-12M BACKFILL AT STRUCTURES.

PRE-AUGER THE TOP TEN (10) FEET OF THE PILES AND BACKFILL WITH LOOSE SAND OR PEA GRAVEL IN ACCORDANCE WITH CONSTRUCTION DRAWINGS AND SPECIAL PROVISION PRE-AUGERING FOR INTEGRAL ABUTMENT.

IF THE EXISTING CONCRETE PILES OR OTHER OBSTRUCTIONS ARE ENCOUNTERED DURING PILE DRIVING, PRE-DRILL IN ACCORDANCE WITH STANDARD SPECIAL PROVISION PRE-DRILLING FOR UNFORESEEN OBSTRUCTIONS, EARTH DRILLING.

DRIVE PILES TO CASE 1 ABSOLUTE REFUSAL IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PENNDOT) PUBLICATION 408/2011-9, SECTION 1005.3(b)4. CONTROL PILE DRIVING IN ACCORDANCE WITH PENNDOT DM-4 (2015), SECTION 1.7.5.1(a), METHOD A.

ORIENT THE H-PILES WITH THEIR WEAK AXIS PERPENDICULAR TO THE LONGITUDINAL AXIS OF THE GIRDER OF THE END SPAN.

PROVIDE HP14X117 PILES WITH NORMAL DUTY PILE TIP REINFORCEMENT IN ACCORDANCE WITH STANDARD DRAWING BC-757M AND PUBLICATION 408/2011-9, SECTION 1005.2(c).

ORDER PILE LENGTHS A MINIMUM OF 15 FEET BEYOND THE ESTIMATED PILE TIP ELEVATION TO AVOID SPLICING.

RE-DRIVE TEST PILES TO ABSOLUTE REFUSAL AT LEAST 72 HOURS AFTER INITIAL DRIVING TO EVALUATE PILE RELAXATION. BASED ON THE RESULTS OF THE TEST PILE RE-DRIVING, THE REPRESENTATIVE WILL DETERMINE THE NEED FOR RE-DRIVING BEARING PILES. IF ANALYSIS OF THE FIRST RE-STRIKE INDICATES THAT THE PILE TIP RESISTANCE IS STILL GREATER THAN DESIGN LOADS, NO RE-DRIVING OF BEARING PILES WILL BE REQUIRED. IF DIRECTED, PERFORM RE-DRIVING OF BEARING PILES TO TERMINATION CRITERIA PROVIDED.

BEFORE RE-DRIVING TEST PILES, WARM UP THE HAMMER BY STRIKING A MINIMUM OF 20 BLOWS OF THE HAMMER AT FULL STROKE ON A PRODUCTION PILE WITHIN THE SUBSTRUCTURE UNIT.

DRIVE (1) TEST PILE AT EACH ABUTMENT PRIOR TO THE DRIVING OF BEARING PILES.

FOUNDATION EXCAVATIONS ARE TO BE INSPECTED AND APPROVED BY THE DISTRICT GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE OR REBAR. PROVIDE A MINIMUM OF 48 HOURS NOTICE TO THE DISTRICT GEOTECHNICAL ENGINEER FOR FOUNDATION INSPECTION.

TEMPORARY SHORING AND/OR STREAM DIVERSION BARRIERS ALONG WITH DEWATERING TECHNIQUES WILL BE REQUIRED FOR CONSTRUCTION OF THE PIER FOUNDATION. PROVIDE SUFFICIENT DEWATERING SO THAT THE EXCAVATIONS ARE DRY ENOUGH TO BE INSPECTED BY THE DISTRICT GEOTECHNICAL ENGINEER.

PROVIDE TEMPORARY EXCAVATION SUPPORT AND PROTECTION IN ACCORDANCE WITH STANDARD SPECIAL PROVISION TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM.

CONSTRUCT DRILLED SHAFTS BENEATH THE PIER FOOTING IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND PUB. 408, SECTION 1006.

DO NOT ALLOW MORE THAN TWO (2) SHAFT EXCAVATIONS TO REMAIN OPEN AT A TIME.

PROVIDE PERMANENT CASING FOR THE DRILLED SHAFTS.

BLASTING IS NOT PERMITTED FOR FOOTING EXCAVATION. FOOTING CONCRETE IS TO BE PLACED DIRECTLY AGAINST THE VERTICAL CUT SURFACE.

SPREAD FOOTINGS MAY BE ORDERED BY THE ENGINEER TO BE AT ANY ELEVATION OR OF ANY DIMENSIONS NECESSARY TO PROVIDE A PROPER FOUNDATION.

PROVIDE R-8 ROCK CHOKED WITH R-4 ROCK FOR SCOUR PROTECTION IN ACCORDANCE WITH THE ROCK BUTTRESS DETAIL (SEE ROADWAY PLANS).

THE FOLLOWING TABLE IS TO BE COMPLETED FOR THE TEST PILES AFTER INSTALLATION ON THE "AS-BUILT" PLANS.

SUBSTRUCTURE UNIT	PILE TYPE	PILE TIP (NONE/NORMAL/HEAVY DUTY)	PILE TIP ELEVATION	FACTORED DESIGN LOAD (KIPS)	ULTIMATE PILE CAPACITY AT END OF DRIVING (KIPS)	WEAP OR PDA

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

DES: MJM | DRA: TC | CHK: RTE

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WASHINGTON COUNTY
SR 0136 SECTION G10

SEGMENT 0140 OFFSET 2434
SR 0136 STA. 339+39.76
OVER LITTLE CHARTIERS CREEK & CSX RAILROAD

2-SP STEEL PLATE GIRDER (PBU) BRIDGE

GENERAL NOTES - 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT T. ELLIOTT, JR. ENGINEER PENNSYLVANIA

Recommended _____

SHEET 3 OF 51

S - 36050

PLOTTED: 12/14/2015 11:40:00 PM

ALTERNATE STRUCTURE ITEMS

ITEM NO.	ITEM	UNIT	TOTAL
8030-0001	BRIDGE STRUCTURE, AS DESIGNED, S-36050	LS	LUMP SUM
8000-0001	PRESTRESSED CONCRETE BRIDGE STRUCTURE	LS	LUMP SUM

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE DESIGNED

ITEM NO.	ITEM	UNIT	ABUT. 1	PIER	ABUT. 2	SUPER.	APPR. SL-1	APPR. SL-2	TOTAL
8030-0001	BRIDGE STRUCTURE, AS DESIGNED, S-36050	LS							
(1)	CLASS 3 EXCAVATION	CY	555	154	518				1,227
(1)	MEMBRANE WATERPROOFING	SY	32		32				64
(1)	CLASS AAA CEMENT CONCRETE, ACCELERATED (2)♦	CY	32		32	1	11	11	87
(1)	CLASS A CEMENT CONCRETE	CY		114					114
(1)	SELECTED BORROW EXCAVATION, STRUCTURE BACKFILL	CY	65		65		39	39	208
(1)	PA TYPE 10M BRIDGE BARRIER	LF	25		25	404			454
(1)	FABRICATED STRUCTURAL STEEL (9)	LB	2,992		2,992	334,191			340,175
(1)	SELECTED BORROW EXCAVATION ROCK, CLASS R-8	CY	3,355	437	2,002				5,794
(1)	SELECTED BORROW EXCAVATION ROCK, CLASS R-4	CY	375	48	213				636
(1)	GROUT (3)♦	CY		1			4	4	9
(1)	ULTRA HIGH PERFORMANCE CONCRETE ♦	CY				16	2	2	20
(1)	EPOXY BASED SURFACE TREATMENT FOR BRIDGE DECKS ♦	SY				999	120	120	1,239
(1)	DIAMOND GRINDING OF CONCRETE BRIDGE DECK ♦	SY				999	119	119	1,237
(1)	SHEAR CONNECTORS	EA	96		96	510			702
(1)	NEOPRENE STRIP SEAL DAM, (3 1/2" MOVEMENT)	LF					43	43	86
(1)	*PROTECTIVE COATING FOR REINFORCED CONCRETE* SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES)	SY	48	243	48				339
(1)	PRECAST CONCRETE INTEGRAL ABUTMENT PILE CAP ♦	EA	1		1				2
(1)	PRECAST APPROACH SLAB PANEL WITHOUT CURB ♦	EA					4	4	8
(1)	PRECAST SLEEPER SLAB ♦	EA					1	1	2
(1)	PRECAST WINGWALL WITH BARRIER ♦	EA	2		2				4
(1)	PRECAST BACKWALL ♦	EA	1		1				2
(1)	PRECAST CHEEKWALL ♦	EA	2		2				4
(1)	PRECAST PIER COLUMN BENT ♦	EA		3					3
(1)	PRECAST PIER CAP ♦	EA		1					1
(1)	PRECAST PIER CAP PEDESTALS ♦	EA		8					8
(1)	PRECAST DECK MODULE, 70' ♦	EA				4			4
(1)	PRECAST DECK MODULE, 52' ♦	EA				2			2
(1)	PRECAST DECK MODULE, 2'-8" ♦	EA				4			4
(1)	PRECAST DECK MODULE WITH 10M BARRIER, 70' ♦	EA				4			4
(1)	PRECAST DECK MODULE WITH 10M BARRIER, 52' ♦	EA				2			2
(1)	PRECAST DECK MODULE WITH 10M BARRIER, 2'-8" ♦	EA				4			4
(1)	6" STRUCTURE FOUNDATION DRAIN	LF	55		55				110
(1)	6" PVC PIPE (SCHEDULE 40)	LF	54		54				108
(1)	NO. 57 COARSE AGGREGATE (4)	CY	9		9				18
(1)	GEOTEXTILE, CLASS 4, TYPE A (5)	SY	1,335	122	765				2,222
(1)	PLAIN NEOPRENE BEARING PAD (8)	EA				17			17
(1)	LAMINATED ELASTOMERIC BEARING PAD (8)	EA				9			9
(1)	PROTECTIVE FENCE	LF				140			140
(1)	STEEL BEAM TEST PILES, HP 14X117	LS	(1046)		(1044)				

INDEX OF DRAWINGS

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE DESIGNED

ITEM NO.	ITEM	UNIT	ABUT. 1	PIER	ABUT. 2	SUPER.	APPR. SL-1	APPR. SL-2	TOTAL
AND									
1002-0053	REINFORCEMENT BARS, EPOXY COATED (6)	LB		17,464		6,252	1,231	1,231	26,178
AND									
1005-1108	STEEL BEAM BEARING PILES, HP 14X117 (6)	LF	323		305				628
AND									
1005-1216	STEEL BEAM (NORMAL DUTY) PILE TIP REINFORCEMENT, HP 14X117 (6)	EA	7		7				14
AND									
1006-0112	66" DIAMETER DRILLED CAISSONS, SHAFT SECTION IN ROCK (6)	LF		126					126
AND									
1006-0412	66" DIAMETER SHELLS FOR DRILLED CAISSONS (6)	LF		126					126
AND									
9000-0001	PRE-AUGERING FOR INTEGRAL ABUTMENT (6)♦	LF	80		80				160
AND									
9000-0004	RE-DRIVING OF PILES (6)♦	LS	1						1
AND									
9005-0007	DYNAMIC PILE LOAD MONITORING (6)♦	EA	1		1				2
1018-0001	REMOVAL OF EXISTING BRIDGE (6)♦	LS							LS
1019-0050	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE) (7)	SY	24		24	1,082	119	119	1,368
9000-2700	MOBILIZATION FOR PREDRILLING FOR UNFORESEEN OBSTRUCTIONS ♦	DOLLA							2000
9005-0600	PRE-DRILLING FOR UNFORESEEN OBSTRUCTIONS, EARTH DRILLING ♦	LF	75		75				150
9005-0610	PRE-DRILLING FOR UNFORESEEN OBSTRUCTIONS, OBSTRUCTION DRILLING ♦	LF	40		40				80
9005-0620	PILE EXTRACTION AND RE-DRIVING ♦	DOLLA							3000
9005-5100	VIBRATION MONITORING AND CONTROL ♦	LS							LS
9203-2101	TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM ♦	LS							LS

(1) ITEMS IN BRIDGE STRUCTURE LUMP SUM ITEM 8030-0001 - GIVEN FOR INFORMATION ONLY.

(2) INCLUDES CLASS AAA CEMENT CONCRETE, ACCELERATED IN THE CONCRETE DIAPHRAGM CLOSURE POUR, THE BARRIER CLOSURE POUR BETWEEN THE DECK MODULES AND THE WINGWALLS, THE CURB CLOSURE POUR @ THE 2'-8" DECK MODULES, THE CLOSURE POUR AT THE STRIP SEALS, BELOW THE PRECAST ABUTMENT PILE CAPS, PRECAST APPROACH SLABS, AND IN THE CORRUGATED METAL PIPES IN THE ABUTMENT PILE CAPS.

(3) INCLUDES GROUT BELOW THE PRECAST SLEEPER SLABS, AT THE PRECAST COLUMN BENTS, AND AT THE PRECAST PIER CAP PEDESTALS.

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

(5) QUANTITY IS FOR THE GEOTEXTILE PLACED UNDER THE R-8 AND R-4 ROCK.

(6) FOR AS DESIGNED STRUCTURE, INCLUDED IN BRIDGE BID ITEMS. FOR ALTERNATE DESIGNS, INCLUDED IN BRIDGE STRUCTURE LUMP SUM BID ITEM.

(7) ONLY APPLY PROTECTIVE COATING IF CONCRETE IS POURED BETWEEN SEPTEMBER 1 AND MARCH 1 PER PUBLICATION 408M, SECTION 1001.3(K)6.

(8) INCLUDES ONE ADDITIONAL BEARING PAD FOR TESTING.

(9) INCLUDES ABUTMENT PILE CAP SUPPORT ANGLES.

♦ SEE SPECIAL PROVISIONS

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WASHINGTON COUNTY
SR 0136 SECTION G10

SEGMENT 0140 OFFSET 2434
SR 0136 STA. 339+39.76
OVER LITTLE CHARTIERS CREEK & CSX RAILROAD

2-SP STEEL PLATE GIRDER (PBU) BRIDGE

QUANTITIES & INDEX OF DRAWINGS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT T. ELLIOTT, JR. ENGINEER PENNSYLVANIA

Recommended _____

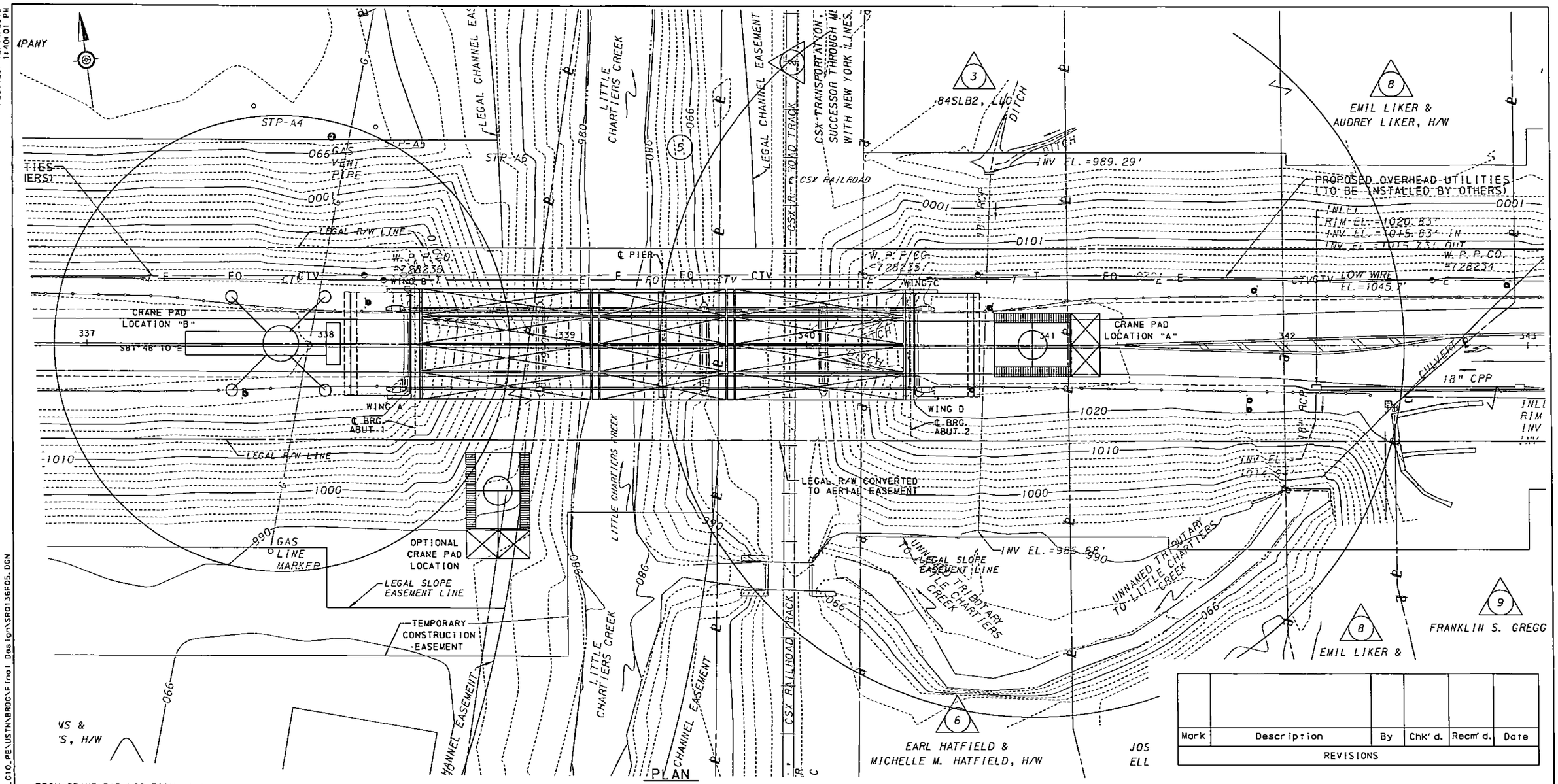
SHEET 4 OF 51

S - 36050

DES: MJM | DRA: DRL | CHK: RTE

OPERATOR: robert.elliott
FILE PATH: P:\PROJECTS\18976.04-SR_0136_G10_PE\USTN\BRDGVFinal Design\SR0136FG04.DGN

PLOTTED: 12/14/2015 11:40:01 PM



PLAN

10 0 10 20 FEET

FROM CRANE PAD LOCATION "A":
- ERECT PRECAST PIER COLUMNS AND CAP (MAX PICK WEIGHT=99 KIPS AT 154FT REACH)
- ERECT PRECAST INTEGRAL ABUTMENT 2 PILE CAP (MAX PICK WEIGHT=76 KIPS)
- ERECT PRECAST DECK MODULES 5, 6, 7, 8. SUPPORT AND STABILIZE FROM EXISTING PIER (MAX PICK WEIGHT=83 KIPS AT 155FT REACH)
- ERECT PRECAST DECK MODULES 9, 10, 11, 12 (MAX PICK WEIGHT=108 KIPS AT 91FT REACH)
- ERECT PRECAST DECK MODULES 17, 18, 19, 20
- ERECT PRECAST INTEGRAL ABUTMENT 2 BACKWALL, WINGWALLS, AND CHEEKWALLS (MAX PICK WEIGHT=17 KIPS)
- ERECT PRECAST APPROACH SLAB 2 SLEEPER SLAB (MAX PICK WEIGHT=33 KIPS)
- ERECT PRECAST APPROACH SLAB 2 (MAX PICK WEIGHT=56 KIPS)

FROM CRANE PAD LOCATION "B":
- ERECT PRECAST INTEGRAL ABUTMENT 1 PILE CAP MAX PICK WEIGHT=76 KIPS)
- ERECT PRECAST DECK MODULES 1, 2, 3, 4 (MAX PICK WEIGHT=108 KIPS AT 95FT REACH)
- ERECT PRECAST DECK MODULES 13, 14, 15, 16
- ERECT PRECAST INTEGRAL ABUTMENT 1 BACKWALL, WINGWALLS, AND CHEEKWALLS (MAX PICK WEIGHT=17 KIPS)
- ERECT PRECAST APPROACH SLAB 1 SLEEPER SLAB (MAX PICK WEIGHT=33 KIPS)
- ERECT PRECAST APPROACH SLAB 1 (MAX PICK WEIGHT=56 KIPS)

NOTE:
PICK WEIGHTS SHOWN DO NOT INCLUDE THE 150% SAFETY FACTOR REQUIRED FOR LIFTS OVER OR NEAR THE RAILROAD RIGHT-OF-WAY

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WASHINGTON COUNTY
SR 0136 SECTION G10

SEGMENT 0140 OFFSET 2434
SR 0136 STA. 339+39.76
OVER LITTLE CHARTIERS CREEK & CSX RAILROAD

2-SP STEEL PLATE GIRDER (PBU) BRIDGE
CONCEPTUAL ERECTION PLAN

COMMONWEALTH OF PENNSYLVANIA — PROFESSIONAL ENGINEER — ROBERT T. ELLIOTT, JR.

Recommended _____

SHEET 5 OF 51

S - 36050

DES: RTE | DRA: RTE | CHK: WES

OPERATOR: robert.elliott
FILE PATH: P:\PROJECTS\18976.04-SR_0136_G10_PEN\STN\BRDG\Final Design\SR0136F05.DGN

ENOS-738A (4-09)

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

PA DEPT. OF TRANSPORTATION
Dist. 12-0 P.O. Box 459
825 N. Gallatin Ave. Ext.
Uniontown, PA 15401

DISTRICT 12
PO BOX 459
UNIONTOWN PA 15401

neopost
01/13/2016
US POSTAGE

FIRST-CLASS MAIL
$02.96⁰

ZIP 15401
041L11237848

FIRST CLASS MAIL

Ms. Rosemary Chiavetta, Secretary
Public Utility Commission
2nd Floor North, Keystone Building
Harrisburg, PA 17120