



February 4, 2016

Washington County
South Strabane Township
SR 70, SECTION T10
DOT # 145 584 X
PUC No. A-2013-2391115
ECMS # 73514

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

RECEIVED
2016 FEB - 8 AM 11:01
P.A.P.U.C.
SECRETARY'S BUREAU

Dear Secretary Chiavetta:

In accordance with ordering paragraph number three (3) of the PUC Secretarial Letter/Order at Docket No. A-2013-239115 dated August 27, 2015, please find attached for your approval one half-size copy of the final signed Drawings for Construction of State Route 0070, Section T10 in Washington County, consisting of sheets 1 through 6, 16, 28 through 30, 35, 163, 165, 183 of 212 for a total of 14 sheets. Also attached to the set of construction drawings are the following half-size "Also" plans.

1. Signing and Pavement Marking Plan consisting of sheets 1, 48, 47 of 62 for a total of 3 sheets.
2. Erosion & Sediment Pollution Control Plan consisting of sheets 1 through 9, 11, 17, 20, 21, 47, 49 of 87 for a total of 15 sheet.
3. Structure Plan - S-35884 consisting of sheet 1, 4, of 57 for a total of 2 sheets.

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, P.E.
Project Manager – Public Projects
CSX Transportation, Inc.
4 Neshaminy Interplex Suite 205
Trevose, PA. 19053

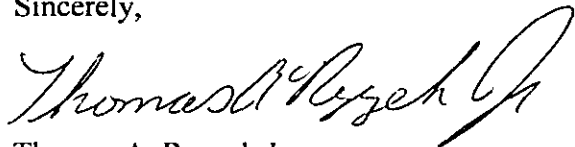
Mr. John J. Stickle
South Strabane Township
550 Washington Road
Washington, PA 15301

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

Mr. Jeff Winkle
Columbia Gas Transmission
4115 Cork-Bocktown Road
Clinton, PA 15026

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,

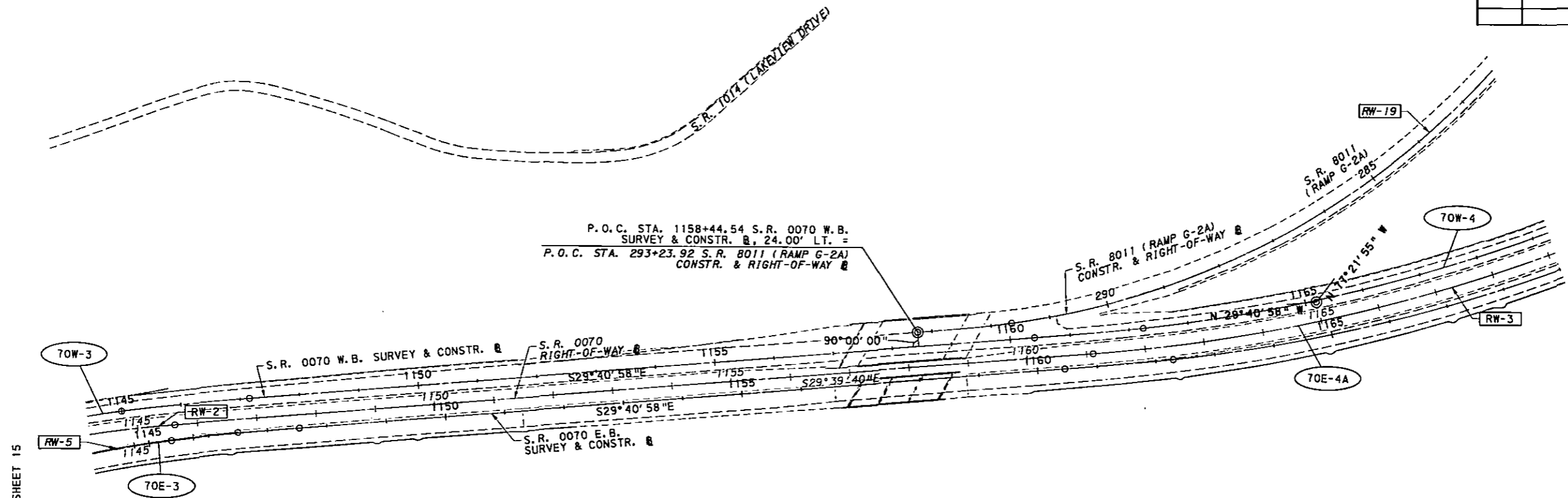


Thomas A. Ryczek Jr.
Engineering District 12-0
Department of Transportation

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

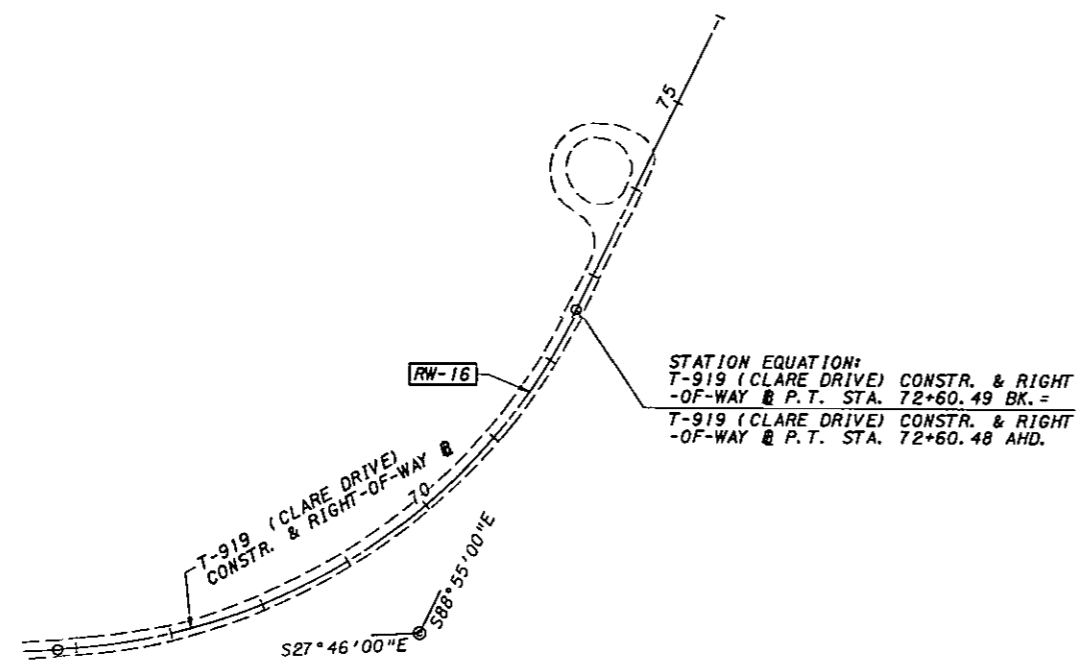
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	16 OF 212
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	



P.O.C. STA. 1158+44.54 S.R. 0070 W.B. SURVEY & CONSTR. @ 24.00' LT. =
P.O.C. STA. 293+23.92 S.R. 8011 (RAMP G-2A) CONST. & RIGHT-OF-WAY @

SEE SHEET 15

SEE SHEET 17

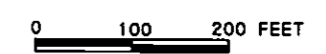


STATION EQUATION:
T-919 (CLARE DRIVE) CONST. & RIGHT-OF-WAY @ P.T. STA. 72+60.49 BK. =
T-919 (CLARE DRIVE) CONST. & RIGHT-OF-WAY @ P.T. STA. 72+60.48 AHD.

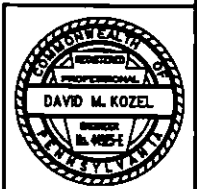
LEGEND

- 70E-2 CURVE DATA REFERENCE
- RW-1 RIGHT-OF-WAY CURVE DATA REFERENCE

GEOMETRY PLAN



FOR PROJECT COORDINATES SEE SHEETS 7 & 8
FOR CURVE DATA TABULATION SEE SHEETS 18 - 20



181
FILES \\FD\01\ACAD\DWG\048833-1-TOWNSHIP-170110-R01-Geom\16r06.dgn
DATE: 1/26/2016 11:11:00 AM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	28 OF 212
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS			DATE BY

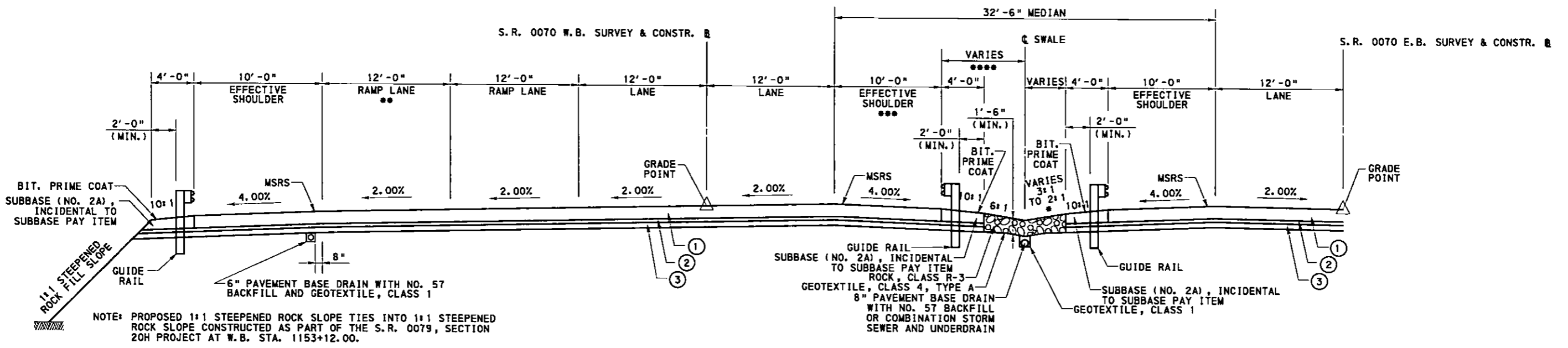
S. R. 0070

****RAMP LANE WIDTH**
 S.R. 0070 W.B. STA. 1145+44.56 TO STA. 1148+44.54
 -RAMP LANE VARIES 2'-0" TO 12'-0"
 S.R. 0070 W.B. STA. 1148+44.54 TO STA. 1157+23.71
 -RAMP LANE 12'-0"

*****W.B. SHOULDER, RT. WIDTH**
 S.R. 0070 W.B. STA. 1147+95.74 TO STA. 1156+07.73
 -W.B. SHOULDER, RT. 10'-0"
 S.R. 0070 W.B. STA. 1156+07.73 TO STA. 1157+07.73
 -W.B. SHOULDER, RT. VARIES 10'-0" TO 12'-0" AT BRIDGE

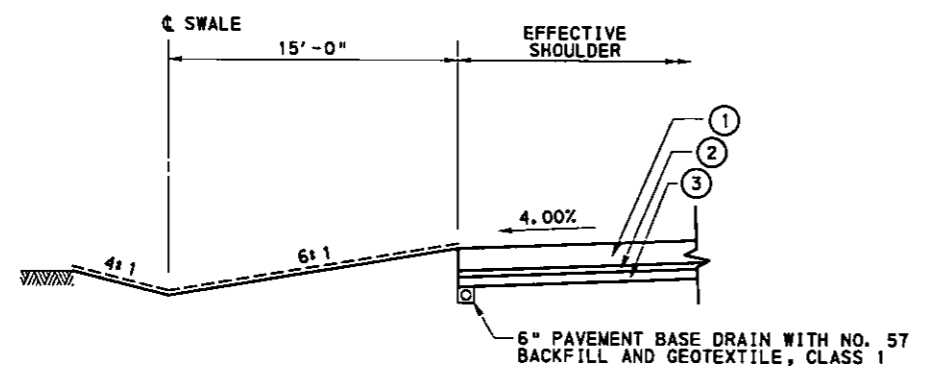
***SLOPE VARIES (REFER TO CROSS SECTIONS)**
******WIDTH VARIES (REFER TO CROSS SECTIONS)**
 S.R. 0070 W.B. STA. 1147+95.74 TO STA. 1153+75.00
 -WIDTH 6'-0"
 S.R. 0070 W.B. STA. 1153+75.00 TO STA. 1157+23.71
 -WIDTH VARIES (REFER TO CROSS SECTIONS)

- LEGEND**
- ① PLAIN CEMENT CONCRETE PAVEMENT, RPS, 14" DEPTH
 - ② CEMENT OR ASPHALT TREATED PERMEABLE BASE COURSE, 4" DEPTH
 - ③ SUBBASE 6" DEPTH (NO. 2A)
 - MSRS SHOULDER RUMBLE STRIPS
 - FORMULA B - ROADSIDE AREAS (10:1 AND FLATTER)
 - FORMULA D - WITH FORMULA E SEEDING - SLOPES 3:1 AND FLATTER
 - FORMULA L - SLOPES STEEPER THAN 3:1

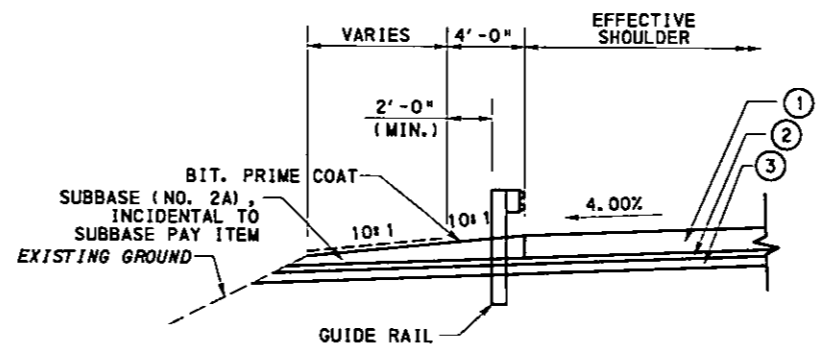


NOTE: FOR S.R. 0070 E.B. TYPICAL SECTION, REFER TO SHEET 29 OF 212.

S. R. 0070 W.B. TYPICAL TANGENT SECTION
 S. R. 0070 W.B. STA. 1147+95.74 TO STA. 1157+23.71

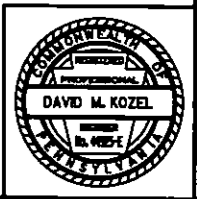


S. R. 0070 W.B. DETAIL - SWALE
 S. R. 0070 W.B. STA. 1149+54.00 TO STA. 1150+60.00



S. R. 0070 W.B. DETAIL - GUIDE RAIL AT EXISTING SLOPE
 S. R. 0070 W.B. STA. 1150+60.00 TO STA. 1151+53.00

TYPICAL SECTIONS



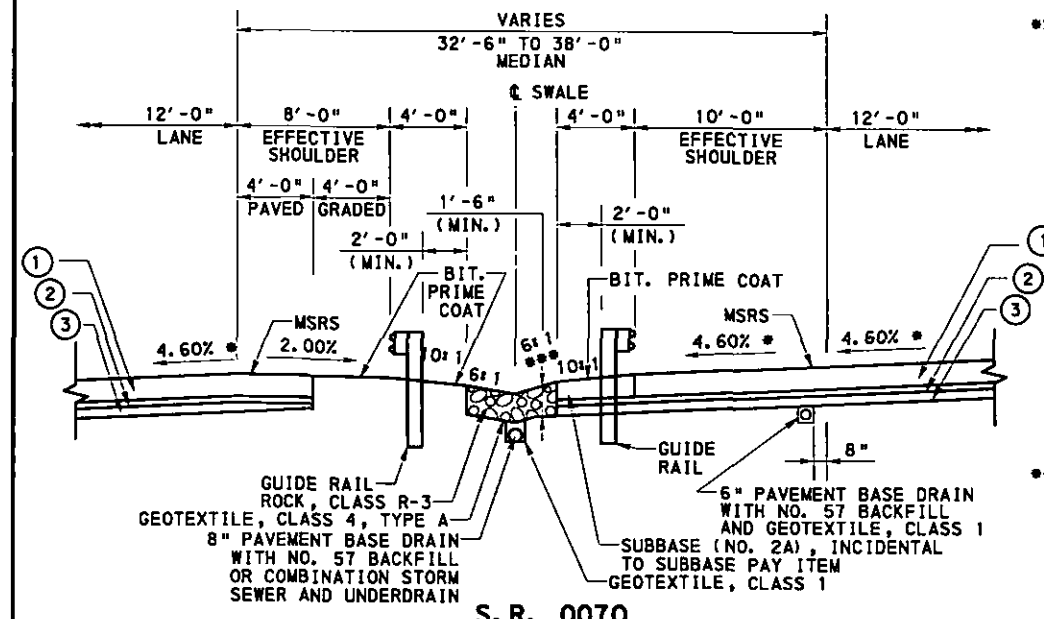
FILED: \\p1101\cadd\040883-1-70\RD5\p. PRJ WRK\G. CAD\HWY\T0710-1\p08 FD.dgn
 DATE: 1/26/2016 TIME: 11:00:54 AM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	30 OF 212
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	

S. R. 0070

LEGEND

- ① PLAIN CEMENT CONCRETE PAVEMENT, RPS, 14" DEPTH
- ② CEMENT OR ASPHALT TREATED PERMEABLE BASE COURSE, 4" DEPTH
- ③ SUBBASE 6" DEPTH (NO. 2A)
- MSRS SHOULDER RUMBLE STRIPS
- FORMULA B - ROADSIDE AREAS (10:1 AND FLATTER)
- FORMULA D - WITH FORMULA E SEEDING - SLOPES 3:1 AND FLATTER
- FORMULA L - SLOPES STEEPER THAN 3:1



***SUPERELEVATION TRANSITION CROSS SLOPES:**

STA. 1159+65.27 TO STA. 1160+45.27 E.B.
 -LANES, E.B. VARY 2.00% TO LEVEL
 -SHOULDER, LT. 4.00%
 -SHOULDER, RT. 4.00%

STA. 1160+45.27 TO STA. 1162+29.27 E.B.
 -LANES, E.B. VARIES LEVEL TO 4.60%
 -SHOULDER, LT. VARIES 4.00% TO 4.60%
 -SHOULDER, RT. VARIES 4.00% TO 2.00%

STA. 1160+40.48 TO STA. 1162+24.48 W.B.
 -LANES, W.B. VARIES 2.00% TO 4.60%
 -SHOULDER, LT. VARIES 4.00% TO 4.60%
 -SHOULDER, RT. 2.00%

****WIDTH VARIES**

S.R. 0070 E.B. STA. 1158+83.27 TO STA. 1172+42.21
 -WIDTH 10'-0"

S.R. 0070 E.B. STA. 1172+42.21 TO STA. 1174+42.21
 -WIDTH 12'-0"

S.R. 0070 E.B. STA. 1174+42.21 TO STA. 1175+36.85
 -WIDTH VARIES 12'-0" TO 10'-0"

S.R. 0070 E.B. STA. 1175+36.85 TO STA. 1182+43.31
 -WIDTH 10'-0"

S.R. 0070 W.B. STA. 1159+24.87 TO STA. 1160+44.87
 -WIDTH VARIES 12'-0" TO 4'-0" PAVED AND 0'-0" TO 4'-0" GRADED (VARIES 12'-0" TO 8'-0" TOTAL WIDTH)

S.R. 0070 W.B. STA. 1160+44.87 TO STA. 1174+53.86
 -WIDTH 4'-0" PAVED AND 4'-0" GRADED (8'-0" TOTAL WIDTH)

S.R. 0070 W.B. STA. 1174+53.86 TO STA. 1175+44.13
 -WIDTH 4'-0" PAVED AND 4'-0" GRADED BECOMES 4'-0" PAVED AND 8'-0" ASPHALT PAVEMENT FOR CROSSOVER (12'-0" TOTAL WIDTH)
 -FOR ADDITIONAL DETAIL FOR MAINTENANCE CROSSOVER SEE DETAIL ON SHEET 45.

S.R. 0070 W.B. STA. 1175+44.13 TO STA. 1177+44.13
 -4'-0" PAVED AND 8'-0" ASPHALT PAVEMENT FOR CROSSOVER (12'-0" TOTAL WIDTH)

S.R. 0070 W.B. STA. 1177+44.13 TO STA. 1190+36.56
 -8'-0" ASPHALT PAVEMENT FOR CROSSOVER ENDS AT STA. 1177+44.13 AND BECOMES 4'-0" GRADED
 -WIDTH 4'-0" PAVED AND 4'-0" GRADED (8'-0" TOTAL WIDTH)

*****SLOPE (REFER TO CROSS SECTIONS)**

S.R. 0070 E.B. STA. 1162+00.00 TO STA. 1172+00.00
 -SLOPE IS 6:1

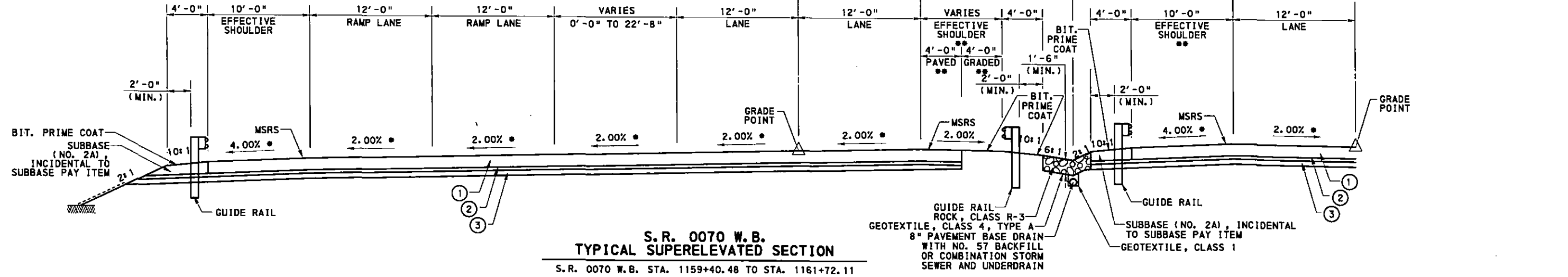
S.R. 0070 E.B. STA. 1172+50.00 TO STA. 1174+50.00
 -SLOPE IS 10:1

S.R. 0070 E.B. STA. 1175+25.00 TO STA. 1177+40.00
 -SLOPE IS 6:1

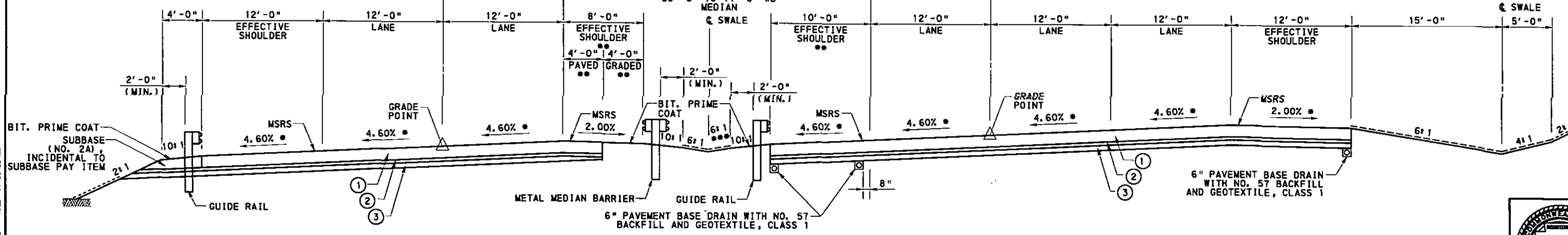
S.R. 0070 E.B. STA. 1177+65.00 TO STA. 1190+36.56
 -SLOPE IS 10:1

S.R. 0070 E.B. STA. 1159+00.61 TO STA. 1164+98.84
 S.R. 0070 W.B. STA. 1159+24.20 TO STA. 1165+32.22

S.R. 0070 W.B. SURVEY & CONSTR. B



S.R. 0070 W.B. SURVEY & CONSTR. B



S.R. 0070 E.B. AND W.B. TYPICAL SUPERELEVATED SECTION

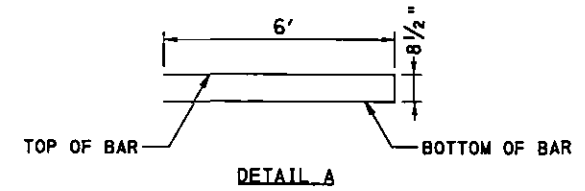
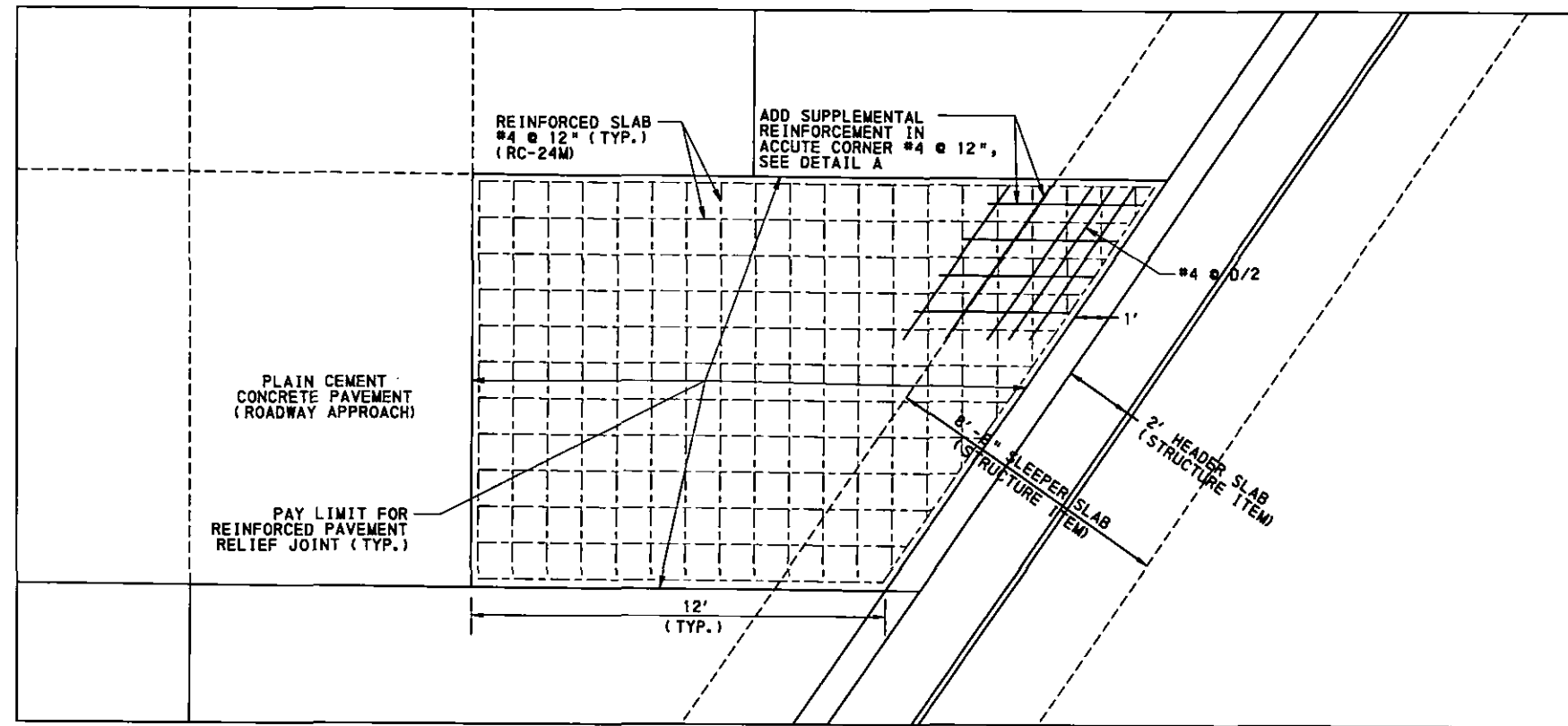
S.R. 0070 E.B. STA. 1158+83.27 TO STA. 1182+43.31
 S.R. 0070 W.B. STA. 1161+72.11 TO STA. 1190+36.56

TYPICAL SECTIONS

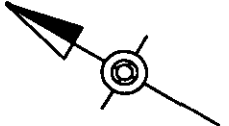


FILED: \S\01101\CAD\04885-1-TOWNSHIP-11-00155-AM
 DATE: 1/26/2016
 CAD: Hwy11010 - ypl04, FD.dgn

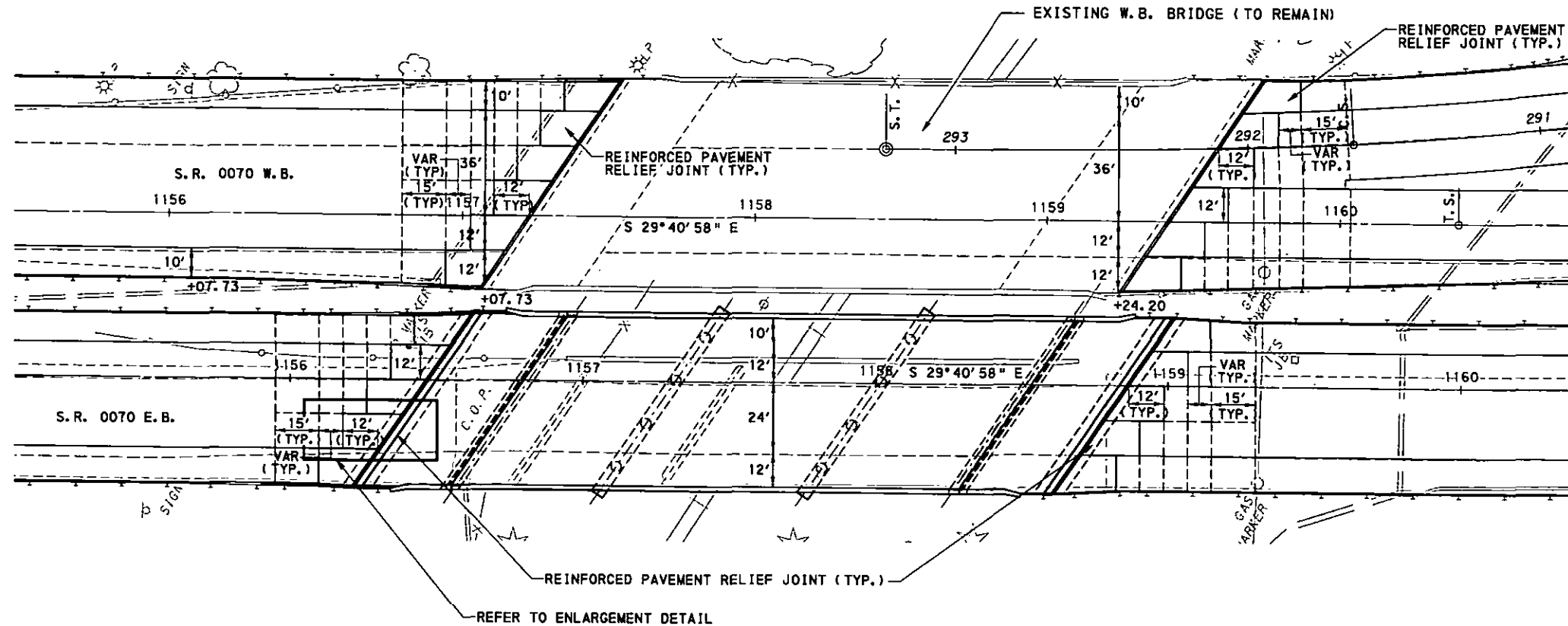
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	35 OF 212
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS			DATE BY



NOTE: PROVIDE 2 1/2" OF COVER TO TOP AND BOTTOM OF CONCRETE SLAB.



ENLARGEMENT DETAIL



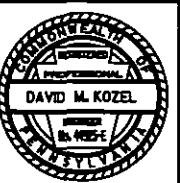
--- PLAIN CEMENT CONCRETE PAVEMENT JOINT
(REFER TO RC-24M, SHEET 1 OF 3, SECTION A-A)

DETAIL - PAVEMENT RELIEF JOINT, REINFORCED
(ITEM NO. 9000-0007)

NOT TO SCALE

SPECIAL DETAILS
REINFORCED PAVEMENT RELIEF JOINT

0 25 50 FEET



FILE: \\P:\1\01\ACAD\048863-1-70\RD5A-PRJ\WRK\G. CADD\HWY170110-06-02.dgn
 DATE: 1/26/2016 TIME: 11:00:56 AM

BM #11 ELEV. 1174.61
46.5' LT. STA. 1157+40
S.R. 0070 W.B.
MAG NAIL IN CONC CURB

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	165 OF 212
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	

PROPOSED STRUCTURE DATA
N/A

EXISTING STRUCTURE DATA

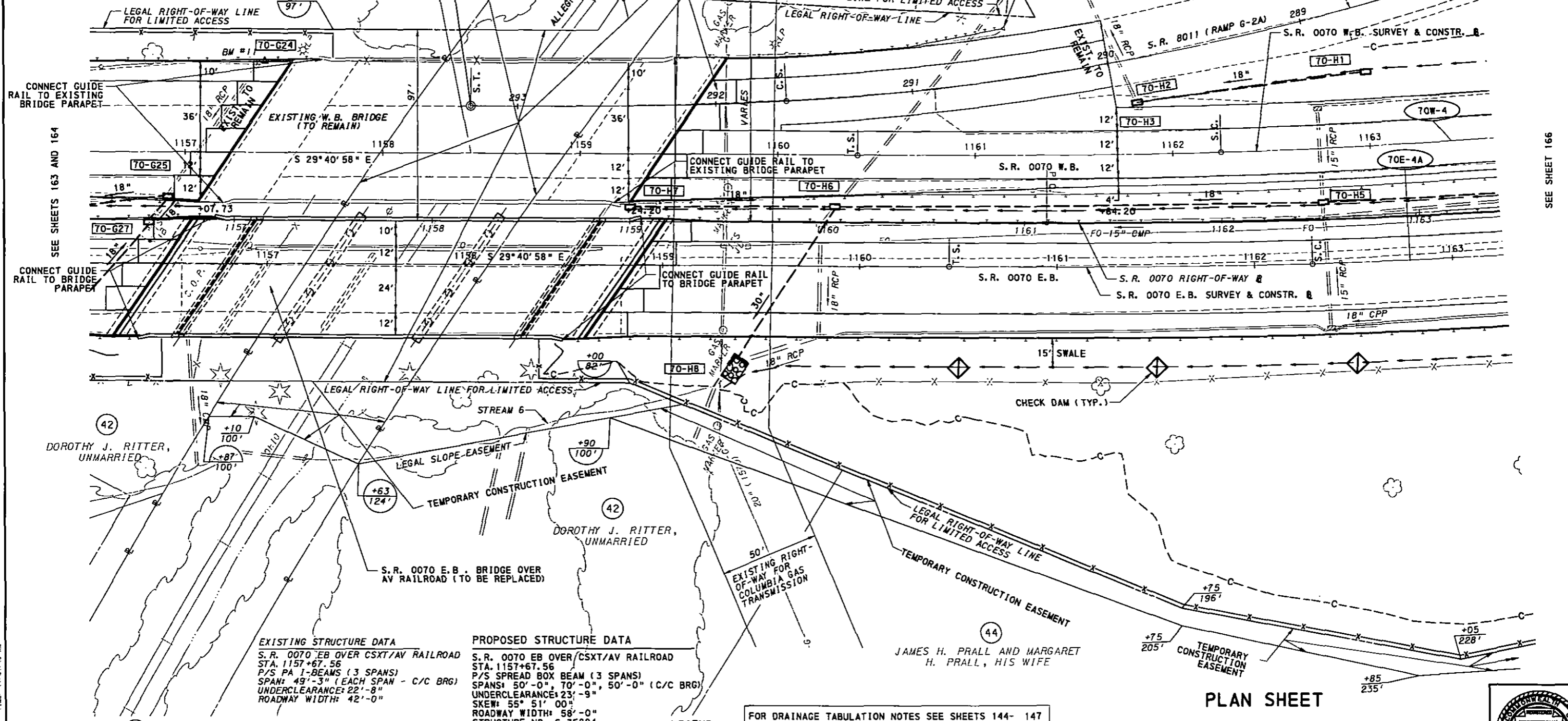
S.R. 0070 WB OVER CSXT/AV RAILROAD
STA. 1158+47.66
P/S CONCRETE BULB-TEE (2 SPANS)
SPANS: 53'-0" & 90'-0" (C/C BRG)
UNDERCLEARANCE: 23'-8" (MIN.)
SKEW: 55° 51' 00"
ROADWAY WIDTH: 70'-0" MIN.
(TO REMAIN)

STOP WORK
STA. 293+23.92
SEG. XXXX OFFSET XXXX
S.R. 8011 (RAMP G-2A)

P.O.C. STA. 1158+44.54 S.R. 0070 W.B. SURVEY & CONSTR. R. 24' LT. =
P.O.C. STA. 293+23.92 S.R. 8011 (RAMP G-2A) CONSTR. & RIGHT-OF-WAY

SEE SHEETS 163 AND 164

SEE SHEET 166



EXISTING STRUCTURE DATA
S.R. 0070 EB OVER CSXT/AV RAILROAD
STA. 1157+67.56
P/S PA 1-BEAMS (3 SPANS)
SPAN: 49'-3" (EACH SPAN - C/C BRG)
UNDERCLEARANCE: 22'-8"
ROADWAY WIDTH: 42'-0"

PROPOSED STRUCTURE DATA
S.R. 0070 EB OVER CSXT/AV RAILROAD
STA. 1157+67.56
P/S SPREAD BOX BEAM (3 SPANS)
SPANS: 50'-0", 70'-0", 50'-0" (C/C BRG)
UNDERCLEARANCE: 23'-9"
SKEW: 55° 51' 00"
ROADWAY WIDTH: 58'-0"
STRUCTURE NO. S-35884
RECOMMENDED:

LEGEND

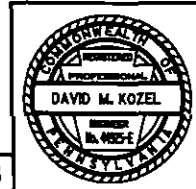
- CURVE DATA (SEE SHEET 18)
- R/W CURVE DATA (SEE SHEET 20)

FOR DRAINAGE TABULATION NOTES SEE SHEETS 144- 147
FOR S.R. 0070 W.B. PROFILE SEE SHEET 201
FOR S.R. 0070 E.B. PROFILE SEE SHEET 183
FOR REFERENCE CIRCLES, SEE SHEETS 9 - 12

PLAN SHEET



SURVEY BOOK #29549, #29612, #29613



FILE: \\C:\Users\jcooper\OneDrive\Documents\170705\170705.dwg, PROJ: BRK Vg, CADD: Vg\170710-com1.d, FD: 400, DATE: 1/26/2016, TIME: 11:01:49 AM

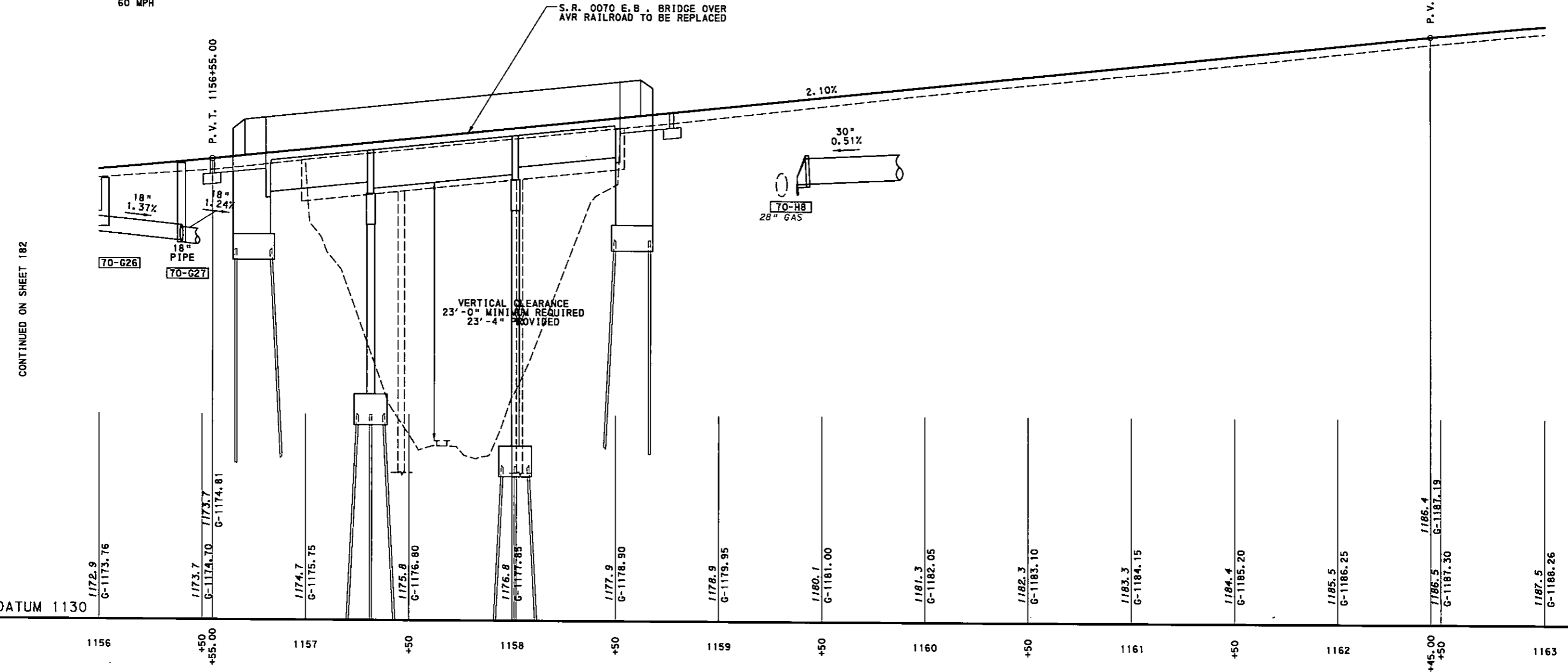
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	183 OF 212
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS			DATE BY

I-70 E.B.

P. V. I. STA. 1167+75.00
 ELEV. 1198.32
 V. C. = 1060.00'
 M. O. = -7.74'
 S. S. D. = 625.75'
 60 MPH

P. V. I. STA. 1152+92.50
 ELEV. 1167.20
 V. C. = 725.00'
 M. O. = 4.83'
 H. L. S. D. = 571.77'
 60 MPH

S. R. 0070 E. B. BRIDGE OVER
 AVR RAILROAD TO BE REPLACED



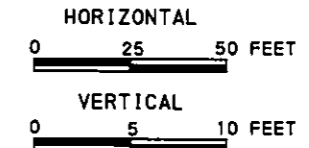
CONTINUED ON SHEET 182

CONTINUED ON SHEET 184

DATUM 1130

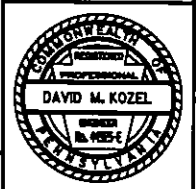
1172.9 G-1173.76	1173.7 G-1174.10	1174.7 G-1175.75	1175.8 G-1176.80	1176.8 G-1177.85	1177.9 G-1178.90	1178.9 G-1179.95	1180.1 G-1181.00	1181.3 G-1182.05	1182.3 G-1183.10	1183.3 G-1184.15	1184.4 G-1185.20	1185.5 G-1186.25	1186.4 G-1187.19	1187.5 G-1188.26
1156	+50	1157	+50	1158	+50	1159	+50	1160	+50	1161	+50	1162	+45.00	1163

PROFILE



FOR DRAINAGE TABULATION NOTES SEE SHEETS 144- 147
 FOR PLAN SEE SHEET 165

SURVEY BOOK #29549, #29612, #29613



FILE: \\g:\p10\cadd\4863_1-70\65\va. PRJ BRK\g. CADD\HW\17010-EBprf13.FD.dgn
 DATE: 1/26/2016 11:02:00 AM

INDEX OF DRAWINGS	
DESCRIPTION	SHEET NO.
INDEX MAP/GENERAL NOTES	1
DETAILS	2
TABULATION OF QUANTITIES	3-9
SIGN FABRICATION DETAILS	10-14
REMOVAL DETAIL SHEETS	15-25
DETAIL PLAN SHEETS	26-55
SIGN STRUCTURE DRAWING	56-61
SIGN LIGHTING DETAILS AND TABULATION	62

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	1 OF 62
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	

GENERAL NOTES

INSTALL SIGNS, PAVEMENT MARKINGS AND DELINEATION IN ACCORDANCE WITH THE MOST CURRENT PENNDOT PUBLICATION 111 TRAFFIC CONTROL, TC-8600 AND TC-8700 SERIES INCLUDING CHANGE 1, 2 AND 3, PENNDOT PUBLICATION 46, THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PUB. 212, OFFICIAL TRAFFIC CONTROL DEVICES, OR AS DIRECTED BY THE PENNDOT DISTRICT 12-0 REPRESENTATIVE.

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

TC-8600	13 SHEETS	JUNE 13, 2013
TC-8602	4 SHEETS	JUNE 13, 2013
TC-8604	4 SHEETS	JUNE 13, 2013
TC-8700C	12 SHEETS	JUNE 13, 2013
TC-8701A	13 SHEETS	JUNE 13, 2013
TC-8701D	13 SHEETS	JUNE 13, 2013
TC-8701E	2 SHEETS	JUNE 13, 2013
TC-8701S	4 SHEETS	JUNE 13, 2013
TC-8702A	8 SHEETS	JUNE 13, 2013
TC-8702B	9 SHEETS	JUNE 13, 2013
TC-8702C	2 SHEETS	JUNE 13, 2013
TC-8702E	5 SHEETS	JUNE 13, 2013
TC-8710	1 SHEET	JUNE 13, 2013
TC-8715	4 SHEETS	JUNE 13, 2013
BC-736M	3 SHEETS	MAY 18, 2012
BC-745M	10 SHEETS	NOV 26, 2013
BC-747M	6 SHEETS	NOV 26, 2013

ANY LEGAL OR PRIVATE SIGN THAT IS TO BE REMOVED FOR CONSTRUCTION THAT IS WITHIN THE PROJECT LIMITS BUT IS NOT INCLUDED IN THE PROJECTS SIGN TABULATIONS SHALL BE REINSTALLED AT OR NEAREST ITS ORIGINAL LOCATION. IF SIGN IS DETERMINED UNNECESSARY, IT SHALL BE RETURNED TO ITS OWNER.

ANY SIGN THAT IS TO REMAIN OR BE REINSTALLED, THAT BECOMES DAMAGED IN ANY WAY DURING CONSTRUCTION OR DURING REMOVAL, STORAGE, OR REINSTALLATION, SHALL BE REPLACED IN KIND WITH A NEW SIGN AT NO ADDITIONAL COST TO THE DEPARTMENT.

PLACE ALL SIGNS ENTIRELY WITHIN THE LEGAL RIGHT-OF-WAY.

FOR FABRICATION OF ALL STANDARD SIGNS, REFER TO PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 236M.

DO NOT REMOVE EXISTING SIGNS UNTIL THE NEW SIGNS ARE INSTALLED. IF EXISTING SIGNS CONFLICT WITH CONSTRUCTION, INSTALL TEMPORARY SIGNS AS DIRECTED BY A PENNDOT DISTRICT 12-0 REPRESENTATIVE. DO NOT REMOVE THE TEMPORARY SIGNS UNTIL THE NEW SIGNS ARE INSTALLED.

APPLY AN INSTALLATION DATE PERMANENTLY TO THE BACK SIDE OF EACH SIGN INSTALLED WITHIN THE PROJECTS LIMITS OF WORK.

CONTRACTOR SHALL CALL PA ONE CALL SYSTEM, INC. AT 1-800-242-1776 PRIOR TO DIGGING FOR ALL SIGNS.

APPLY PAVEMENT MARKINGS AT THE WIDTH INDICATED.

USE WATERBORNE PAINT FOR ALL LONGITUDINAL LINES. ON THE FINAL BITUMINOUS WEARING COURSE OR CONCRETE SURFACE, APPLY TWO APPLICATIONS OF PAINT. APPLY THE SECOND APPLICATION AFTER THE FIRST IS DRY, WITHIN 24 HOURS.

FOR ALL TRANSVERSE APPLICATIONS, USE EPOXY (ON CONCRETE) AND HOT THERMOPLASTIC (ON ASPHALT).

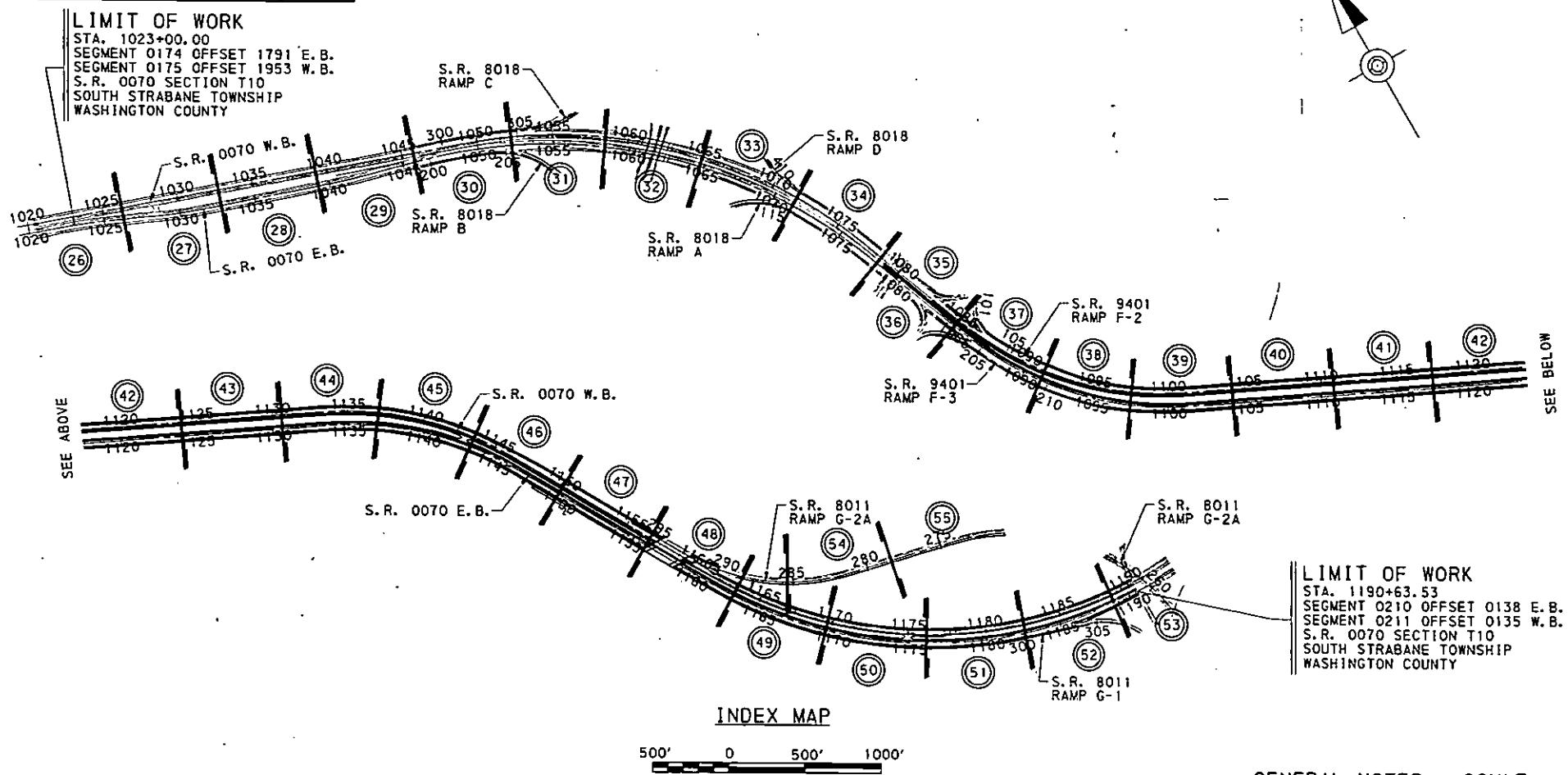
APPLY ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

THE CONTRACTOR SHALL REAPPLY ANY PAVEMENT MARKING THAT IS DAMAGED BEYOND THE START/STOP OF WORK DUE TO CONSTRUCTION ACTIVITY AT NO ADDITIONAL COST TO THE DEPARTMENT.

INSTALL RAISED PAVEMENT MARKERS IN ACCORDANCE WITH PENNDOT PUBLICATION 111 TRAFFIC CONTROL.

INSTALL NON-PLOWABLE RAISED PAVEMENT MARKERS TO ALL NEWLY INSTALLED/EXISTING CONCRETE MOUNTABLE CURBING AND/OR CONCRETE BARRIER WITHIN PLAN LIMITS, IN ACCORDANCE WITH THE PLAN DETAIL DRAWING.

INSTALL GUIDE RAIL DELINEATORS AS PER TC-8604, OR AS DIRECTED BY PENNSYLVANIA DEPARTMENT OF TRANSPORTATION.



LIMIT OF WORK
 STA. 1190+63.53
 SEGMENT 0210 OFFSET 0138 E.B.
 SEGMENT 0211 OFFSET 0135 W.B.
 S.R. 0070 SECTION T10
 SOUTH STRABANE TOWNSHIP
 WASHINGTON COUNTY

GENERAL NOTES - CON'T.

CONTRACTOR WILL NEED TO STORE AND PROTECT EXISTING SERVICE SIGNS AND REINSTALL UPON COMPLETION OF THE PROJECT.

ALL CONTRACTOR SUPPLIED MATERIALS MUST BE DEPARTMENT APPROVED AND USED ONLY UNDER THE CONDITIONS FOR WHICH THE MATERIALS WERE APPROVED AS PER BULLETIN 15 (PUB. 35), NOTE THAT ALL MARKING MATERIALS SHALL ONLY BE USED FOR THE TYPE OF MARKING, TYPE OF PAVEMENT SURFACE AND LIGHTED/UNLIGHTED CONDITION FOR WHICH THE MATERIAL WAS APPROVED.

RECORD EXISTING LOCATION OF AND RESET AND S.R./SEGMENT MARKERS AS NEEDED. PAYMENT IS INCIDENTAL TO MAINTENANCE AND PROTECTION OF TRAFFIC ITEM.

DO NOT INSTALL REFLECTIVE PAVEMENT MARKERS (RPM'S) ACROSS CONCRETE BRIDGE DECKS.

SATISFACTORILY DISPOSE OF ALL EXISTING SIGNS, POST AND HARDWARE UPON REPLACEMENT UNLESS OTHERWISE DIRECTED.

PROVIDE MATERIALS AND WORKMANSHIP AND CONSTRUCT IN ACCORDANCE WITH PENNDOT PUBLICATION 408/2016 SPECIFICATIONS AND CONTRACT SPECIAL PROVISIONS.

PLACE MARKERS (RPM'S) ALONG A LANE LINE (BROKEN LINE) MIDWAY BETWEEN THE PAINTED PORTIONS.

PLACE MARKERS (RPM'S) ALONG AN EDGE OR CONCRETE LINE WITH NEAR EDGE OF MARKER CASTING 4" FROM NEAR EDGE OF PAINTED LINE, WHEN CONCRETE MEDIAN BARRIER OR GUIDE RAIL IS WITHIN 6' OF TRAVEL LANE.

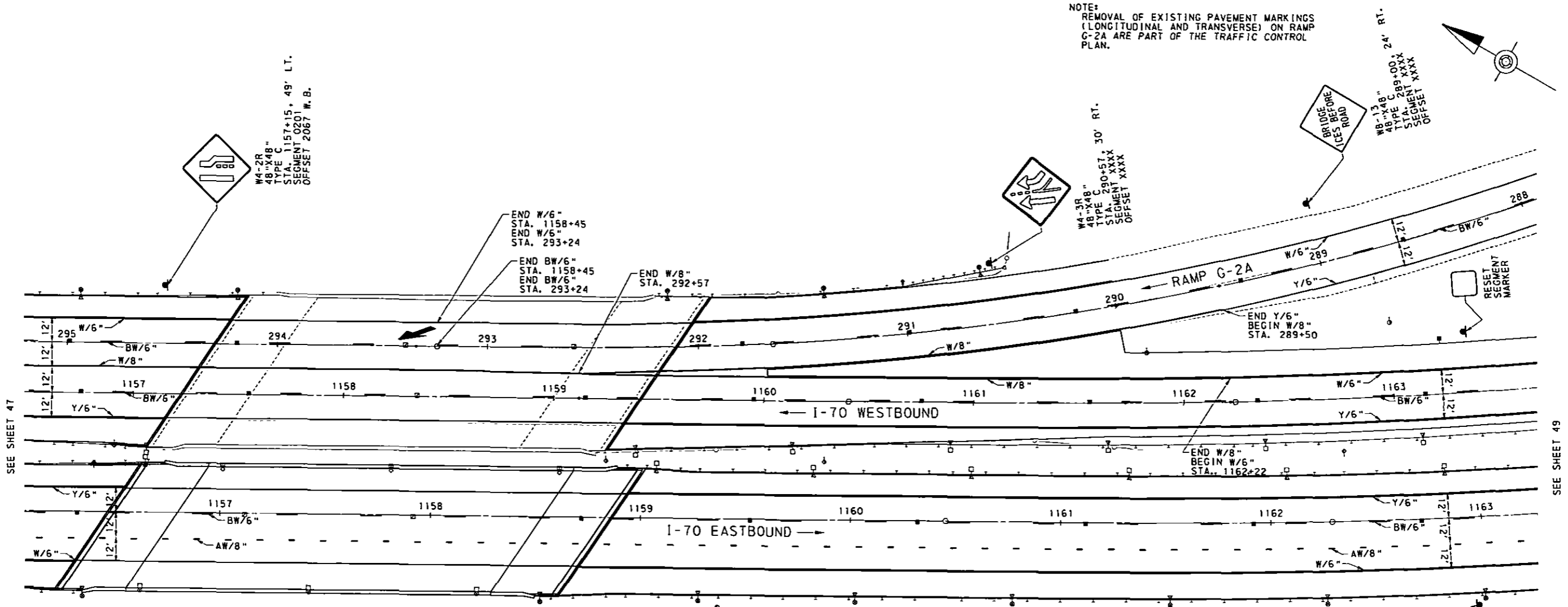
INSTALL MARKERS (RPM'S) 4" MINIMUM FROM ANY PAVEMENT SEAM, JOINT OR EDGE.

LEGEND

- PROPOSED POST MOUNTED SIGN
- EXISTING SIGN
- W/6" - SOLID WHITE LINE/WIDTH
- Y/4" - SOLID YELLOW LINE/WIDTH
- DY/4" - SOLID DOUBLE YELLOW LINE/WIDTH
- DW/6" - DOTTED EXTENSION LINE/WIDTH
- BW/6" - BROKEN WHITE LINE/WIDTH
- AW/8" - AUXILIARY WHITE LINE/WIDTH
- (3) - PLAN SHEET NUMBER
- GUIDE RAIL
- - SNOWPLOWABLE RAISED PAVEMENT MARKER (TWO WAY W/R)
- ◆ - SNOWPLOWABLE RAISED PAVEMENT MARKER (TWO WAY Y/R)
- ◻ - SNOWPLOWABLE RAISED PAVEMENT MARKER TWO-WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/R)
- ◇ - NONPLOWABLE RAISED PAVEMENT MARKERS (TWO WAY Y/R)
- - NONPLOWABLE RAISED PAVEMENT MARKERS (TWO WAY W/R)
- ▲ - GUIDE RAIL MOUNTED DELINEATOR, TYPE D (W/R)
- △ - GUIDE RAIL MOUNTED DELINEATOR, TYPE D (Y/R)
- ⊙ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (W/B)
- ⊕ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (Y/Y)
- ⊠ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (Y/B)
- ⊡ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (Y/R)
- ⊢ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (W/R)
- ⊣ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/W)
- ⊤ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊥ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊦ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊧ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/W)
- ⊨ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊩ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊪ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊫ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊬ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊭ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊮ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊯ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊰ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊱ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊲ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊳ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊴ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊵ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊶ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊷ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊸ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊹ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊺ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊻ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊼ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊽ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊾ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/B)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/Y)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (R/R)
- ⊿ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (B/B)
-

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	48 OF 62
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	

NOTE:
REMOVAL OF EXISTING PAVEMENT MARKINGS (LONGITUDINAL AND TRANSVERSE) ON RAMP G-2A ARE PART OF THE TRAFFIC CONTROL PLAN.



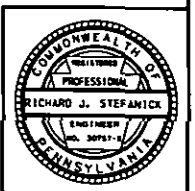
SEE SHEET 47

SEE SHEET 49

LEGEND

- PROPOSED POST MOUNTED SIGN
- EXISTING SIGN
- W/6" - SOLID WHITE LINE/WIDTH
- Y/4" - SOLID YELLOW LINE/WIDTH
- DY/4" - SOLID DOUBLE YELLOW LINE/WIDTH
- BW/6" - BROKEN WHITE LINE/WIDTH
- AW/8" - AUXILIARY WHITE LINE/WIDTH
- GUIDE RAIL
- SNOWPLOWABLE RAISED PAVEMENT MARKER (TWO WAY W/R)
- SNOWPLOWABLE RAISED PAVEMENT MARKER (TWO WAY Y/R)
- SNOWPLOWABLE RAISED PAVEMENT MARKER TWO-WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/R)
- NONPLOWABLE RAISED PAVEMENT MARKERS (TWO WAY Y/R)
- NONPLOWABLE RAISED PAVEMENT MARKERS (TWO WAY W/R)
- GUIDE RAIL MOUNTED DELINEATOR, TYPE D (W/R)
- GUIDE RAIL MOUNTED DELINEATOR, TYPE D (Y/R)
- BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (W/B)
- BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (Y/Y)
- BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (Y/B)
- FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, YELLOW POST WITH YELLOW/YELLOW SHEETING
- FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, YELLOW POST WITH YELLOW/RED SHEETING
- FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, WHITE POST WITH WHITE/RED SHEETING
- GUIDE RAIL MOUNTED DELINEATOR TYPE B, (Y/R)
- GUIDE RAIL MOUNTED DELINEATOR TYPE B, (W/R)
- FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, RED POST WITH WHITE/BLANK SHEETING
- FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, RED POST WITH YELLOW/BLANK SHEETING

SIGNING AND PAVEMENT MARKING PLAN

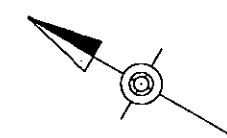


FILE# F:\BCH\0716 S.R.0070\Signing & Pavement Marking Plan\T10\T10-48p22.dgn DATE: 1/21/2016

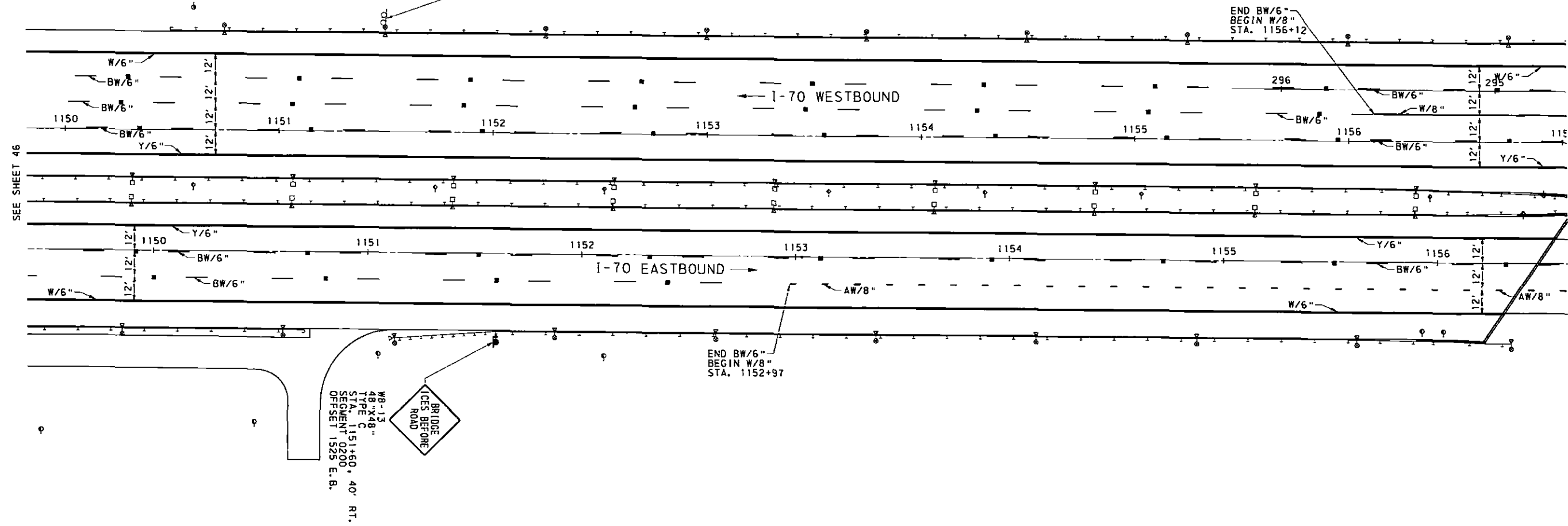
LEGEND

- ◻ PROPOSED POST MOUNTED SIGN
- ◻ EXISTING SIGN
- W/6" - SOLID WHITE LINE/WIDTH
- Y/4" - SOLID YELLOW LINE/WIDTH
- DY/4" - SOLID DOUBLE YELLOW LINE/WIDTH
- BW/6" - BROKEN WHITE LINE/WIDTH
- AW/8" - AUXILIARY WHITE LINE/WIDTH
- GUIDE RAIL
- - SNOWPLOWABLE RAISED PAVEMENT MARKER (TWO WAY W/R)
- ◆ - SNOWPLOWABLE RAISED PAVEMENT MARKER (TWO WAY Y/R)
- ◻ - SNOWPLOWABLE RAISED PAVEMENT MARKER TWO-WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/R)
- ◇ - NONPLOWABLE RAISED PAVEMENT MARKERS (TWO WAY Y/R)
- - NONPLOWABLE RAISED PAVEMENT MARKERS (TWO WAY W/R)
- ▲ - GUIDE RAIL MOUNTED DELINEATOR, TYPE D (W/R)
- ▲ - GUIDE RAIL MOUNTED DELINEATOR, TYPE D (Y/R)
- ⊙ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (W/B)
- ⊙ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (Y/Y)
- ⊙ - BARRIER MOUNTED DELINEATOR, TOP-MOUNT, TYPE S (Y/B)
- ◆ - FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, YELLOW POST WITH YELLOW/YELLOW SHEETING
- ◇ - FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, YELLOW POST WITH YELLOW/RED SHEETING
- - FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, WHITE POST WITH WHITE/RED SHEETING
- - GUIDE RAIL MOUNTED DELINEATOR TYPE B, (Y/R)
- ⊙ - GUIDE RAIL MOUNTED DELINEATOR TYPE B, (W/R)
- ⊙ - FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, RED POST WITH WHITE/BLANK SHEETING
- ⊙ - FLEXIBLE DELINEATOR POST, GROUND MOUNT, TYPE GM-2, RED POST WITH YELLOW/BLANK SHEETING

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	47 OF 62
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	



THREAT IS ADVISORY WHEN FLASHING
 HIGHWAY INFOR TIME RADIO TO 1:30 AM
 EXISTING ADVISORY SIGN TO BE RESET. REFER TO ITS RELOCATION PLANS.



SEE SHEET 46

SEE SHEET 48

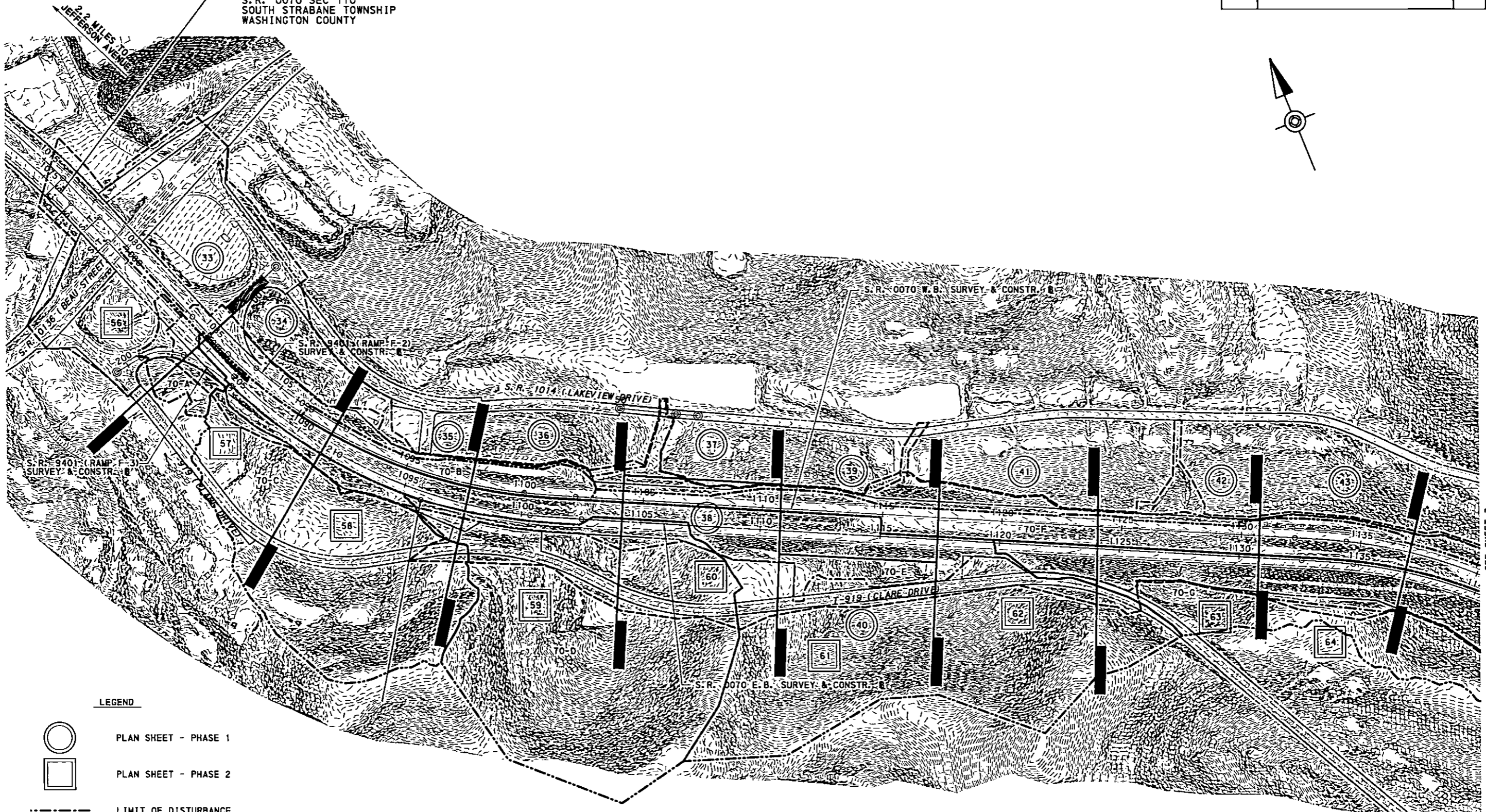
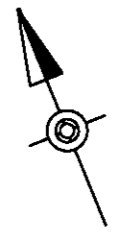
FILE: F:\DMD\116 S.R.0070\Signing & Pavement-Marking Plan-T10-T0110-47.dgn
 DATE: 1/21/2016

SIGNING AND PAVEMENT MARKING PLAN











DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	2 OF 87
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	

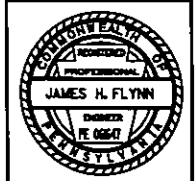
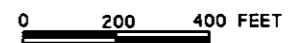
LIMIT OF WORK
 STA. 1023+00.00
 SEG. 0174 OFFSET 1791 E.B.
 SEG. 0175 OFFSET 1953 W.B.
 S.R. 0070 SEC T10
 SOUTH STRABANE TOWNSHIP
 WASHINGTON COUNTY



LEGEND

-  PLAN SHEET - PHASE 1
-  PLAN SHEET - PHASE 2
-  LIMIT OF DISTURBANCE
-  NPDES BOUNDARY
-  DRAINAGE BOUNDARY
-  LEGAL RIGHT-OF-WAY LINE
-  REQUIRED RIGHT-OF-WAY LINE
-  TEMPORARY CONSTRUCTION EASEMENT

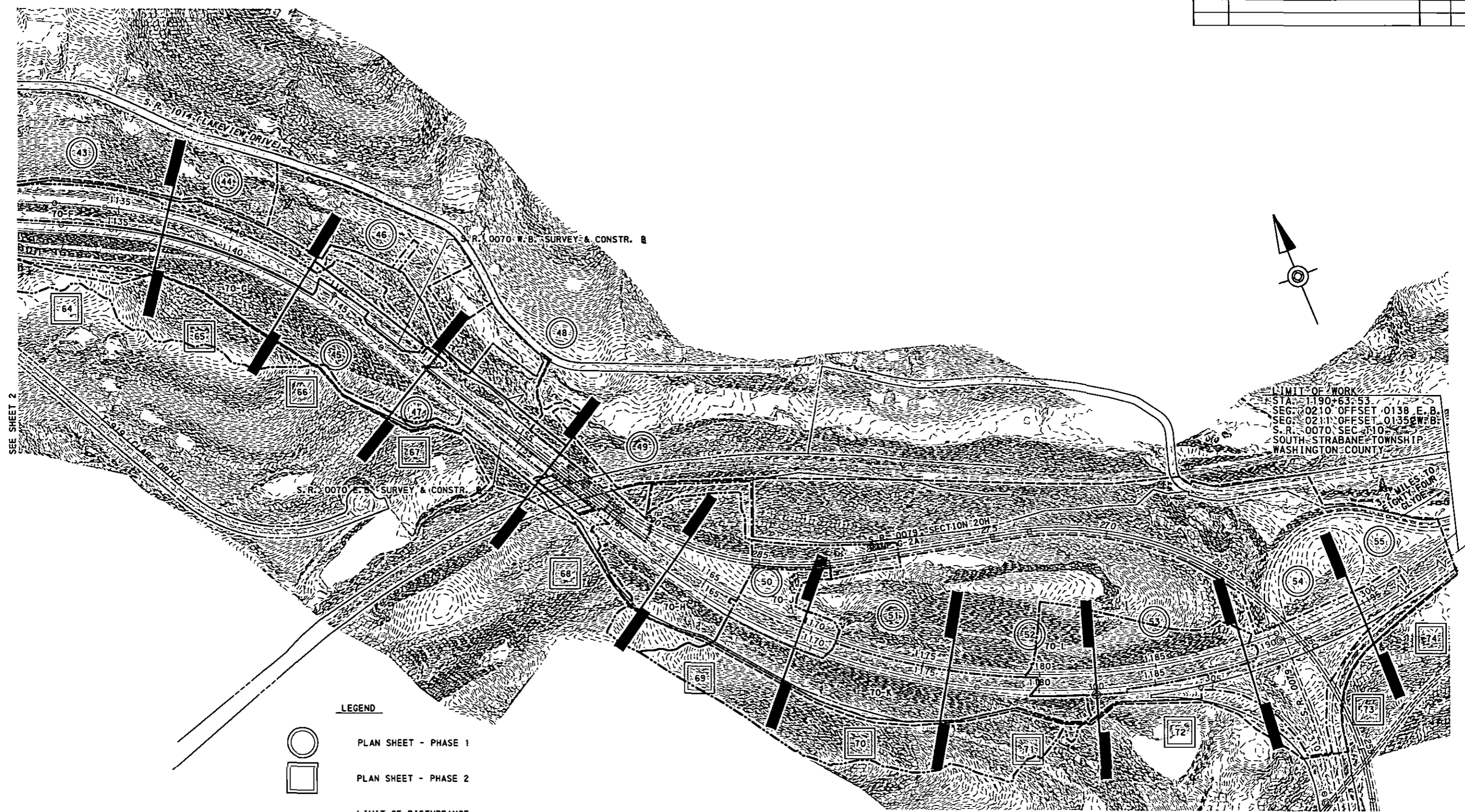
INDEX MAP



FILE: \\s01a\cadd\cadd\12-0070\12-0070-T10-EST\12-0070-T10-EST.dwg
 DATE: 1/25/2018 11:58:14 AM
 PRJ: WKS: CADD\EST\12-0070-T10-EST.dwg

SEE SHEET 3




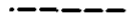




DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
12-0	WASHINGTON	0070	T10	3 OF 87	
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON					
REVISION NUMBER	REVISIONS			DATE	BY



SEE SHEET 2

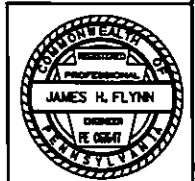
LIMIT OF WORK
 STA. 1190+63.53
 SEG. 0210 OFFSET 0138 E.B.
 SEG. 0211 OFFSET 0135 W.B.
 S.R. 0070 SEC 210
 SOUTH STRABANE TOWNSHIP
 WASHINGTON COUNTY

LEGEND

-  PLAN SHEET - PHASE 1
-  PLAN SHEET - PHASE 2
-  LIMIT OF DISTURBANCE
-  NPDES BOUNDARY
-  DRAINAGE BOUNDARY
-  LEGAL RIGHT-OF-WAY LINE
-  REQUIRED RIGHT-OF-WAY LINE
-  TEMPORARY CONSTRUCTION EASEMENT

INDEX MAP

0 200 400 FEET



FILE: \\910101\cadd\008885\1-70\03\va\proj\wrk\va_cadd\es170710-Ea\index03_Ed.dgn
 DATE: 1/23/2010 TIME: 12:07:49 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	4 OF 87
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	

ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CONSTRUCTION SEQUENCE. EACH STEP SHALL BE COMPLETED BEFORE A SUBSEQUENT STEP IS INITIATED. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED.

PRE-CONSTRUCTION

1. THE CONTRACTOR SHALL CONTACT THE WASHINGTON COUNTY CONSERVATION DISTRICT TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE.
2. PA-1 CALL MUST BE NOTIFIED PRIOR TO ANY EARTHMOVING ACTIVITY.
3. ALL APPLICABLE PERMITS AND APPROVALS REQUIRED FOR THIS PROJECT SHALL BE SECURED PRIOR TO THE START OF CONSTRUCTION. COPIES OF PERMITS, PLANS AND APPROVALS SHALL BE KEPT ON-SITE AT ALL TIMES.
4. ALTERNATIVES TO THE STAGING OR SPECIFICATIONS AS PROVIDED IN THE APPROVED PLAN MUST FIRST BE APPROVED BY THE WASHINGTON COUNTY CONSERVATION DISTRICT PRIOR TO IMPLEMENTATION. IT IS THE RESPONSIBILITY OF THE SELECTED CONTRACTOR TO HAVE ALL PROPOSED CHANGES TO THE E&S PLAN DOCUMENTED AND COORDINATED WITH THE WASHINGTON COUNTY CONSERVATION DISTRICT.
5. DUE TO THE EXISTING SITE CONDITION AND CONSTRUCTION SEQUENCE, THE SELECTED CONTRACTOR IS RESPONSIBLE TO FIND AN OFF SITE AREA FOR TOPSOIL STOCK PILES.
6. THE SELECTED CONTRACTOR IS RESPONSIBLE FOR HAVING AN APPROVED EROSION AND SEDIMENTATION CONTROL PLAN FOR ALL OFF-SITE WASTE/BORROW AND TOP SOIL STOCK PILE SITES PRIOR TO ANY EARTHMOVING ACTIVITY.
7. ALL CHANNELS MUST BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM.
8. CONSTRUCTION OF CROSS PIPES AND PIPE RUNS MUST BE CONSTRUCTED FROM DOWNSLOPE TO UPSLOPE. CONSTRUCT TEMPORARY CONNECTIONS BETWEEN THE NEWLY CONSTRUCTED INLETS AND EXISTING CROSS PIPES AS REQUIRED. MAINTAIN POSITIVE FLOW AT ALL TIMES FOR BOTH EXISTING AND PROPOSED PIPE RUNS. PLACE INLET FILTER PROTECTION ON NEW INLETS WHEN CONSTRUCTED AS INDICATED ON THE PLANS.
9. INSTALL CONCRETE WASHOUT AS IDENTIFIED ON THE PLANS AT THE BEGINNING OF EACH PHASE. THE WASHOUT AREAS ARE TO REMAIN FUNCTIONAL FOR THE DURATION OF EACH PHASE.

PHASE 1 (SUMMER 2016 THRU FALL 2017)

PHASE 1 INCLUDES RECONSTRUCTION OF I-70 TEMPORARY SHOULDERS, MILLING AND OVERLAY OF WESTBOUND LANES FROM STA. 1084+00 TO STA. 1157+00, MEDIAN GRADING, RELOCATION OF STREAM 7, DETENTION BASIN 2, DETENTION BASIN 3, DETENTION BASIN 4, SHOULDER SWALE EXCAVATION FROM STA. 1159+00 TO STA. 1184+00, AND S.R.0070 WESTBOUND FROM STA. 1084+00 TO STA. 1190+00,

STAGE 1A (SUMMER 2017 THRU FALL 2017)

RECONSTRUCTION OF I-70 TEMPORARY SHOULDERS, EMBANKMENT EXCAVATION FROM STA. 1137+00 TO STA. 1149+50, LT, AND BASIN 4.

1. MOBILIZE EQUIPMENT AND MATERIALS.
2. INSTALL ROCK CONSTRUCTION ENTRANCES RC-P1-1, RC-P1-2, RC-P1-3, AND RC-P1-4.
3. INSTALL INLET FILTER PROTECTION ON INLET 70-EX58 AS PER DETAIL SHEETS 12-14 OF 87.
4. REMOVE EXISTING INLET TOPS AND PLATE EXISTING INLETS 70-EX53 AND 70-EX56.
5. EXCAVATE INSIDE SHOULDER FOR TEMPORARY PAVEMENT AND DIVERT WATER TO EXISTING INLET 70-EX-58.
6. INSTALL COMPOST FILTER SOCK CFS-70WB5.
7. CLEAR THE RIGHT-OF-WAY FOR CONSTRUCTION ACTIVITIES FOR THE BASIN NO. 4. THIS WORK INCLUDES REMOVAL OF TREES, VEGETATION, BRUSH, AND PAVEMENT REMOVAL ABOVE THE SURFACE OF THE GROUND.
8. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EARTHWORK OPERATIONS FOR THE BASIN NO. 4. PUMP ANY WATER THAT ACCUMULATES IN AN EXCAVATED AREA TO A PUMPED WATER FILTER BAG. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FOOT VERTICAL INCREMENT OF EXCAVATION IS COMPLETE. THIS IS A CRITICAL STAGE OF THE PCSM PLAN. THIS CONSTRUCTION MUST BE OBSERVED BY ENGINEER RESPONSIBLE FOR SEALING THE PCSM PLAN.
9. INSTALL ROCK BARRIER RB-70WB1.
10. INSTALL OUTLET PROTECTION AND PIPE 70-F41 TO 70-F40 AND 70-F40 TO 70-F39. COVER THE OUTLET OF THE BASIN OUTLET STRUCTURE UNTIL 70% OF PERENNIAL VEGETATIVE COVER ACROSS THE DISTURBED AREAS OF BASIN NO. 4 HAS BEEN ACHIEVED.
11. INSTALL ROCK BARRIER RB-70WB2.
12. INSTALL OUTLET PROTECTION AND PIPE 70-F38 TO 70-F37 AND 70-F37 TO 70-F36.
13. EXCAVATE BORE AND RECEIVING PITS FOR PIPE 70-F36 TO 70-F35. PUMP ANY WATER THAT ACCUMULATES IN THE BORE PITS TO A PUMPED WATER FILTER BAG PWF8-1. BORE PIPE 70-F36 TO 70-F35.
14. INSTALL TEMPORARY PIPE TP-70-WB1 FROM INLET 70-F35 TO 70-EX58. PLUG THE OUTFALL OF THE TEMPORARY PIPE.
15. INSTALL DRAINAGE 70-F35 TO 70-F34, AND 70-F34 TO 70-F33. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 13 AND 14 OF 87.
16. INSTALL TEMPORARY PIPE TP-70-WB2 FROM INLET 70-F33 TO EXISTING PIPE.
17. ONCE 70% OF PERENNIAL VEGETATIVE COVER ACROSS DETENTION BASIN NO. 4 REMOVE THE PLUGS FOR THE DETENTION BASIN IN THE OUTLET STRUCTURE AND TEMPORARY PIPE TP-70-WB1 IN INLET 70-F35. DIRECT THE WATER FROM THE TEMPORARY MEDIAN SWALE INTO INLET 70-F35.
18. PLUG EXISTING OUTFALL PIPES IN INLETS 70-EX56 AND 70-EX58.

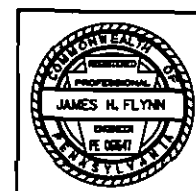
STAGE 1B (FALL 2016 THRU SPRING 2017)

EXCAVATION OF MEDIAN STA. 1084+00 TO STA. 1157+00, STREAM 7, BASIN 3, EXCAVATION FOR EB SHOULDER SWALE FROM STA. 1159+00 TO STA. 1184+00, AND MEDIAN DRAINAGE FROM STA. STA. 1084+00 TO STA. 1157+00.

1. CLEAR THE RIGHT-OF-WAY FOR CONSTRUCTION ACTIVITIES FOR THE EMBANKMENT OPERATIONS FROM STA. 1137+00 TO STA. 1149+50, LT.. THIS WORK INCLUDES REMOVAL OF TREES, VEGETATION, BRUSH, AND PAVEMENT REMOVAL ABOVE THE SURFACE OF THE GROUND.
2. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EARTHWORK OPERATIONS FOR THE EMBANKMENT OPERATIONS FROM STA. 1137+00 TO STA. 1149+50, LT.. PUMP ANY WATER THAT ACCUMULATES IN AN EXCAVATED AREA TO A PUMPED WATER FILTER BAG PWF8-2. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FOOT VERTICAL INCREMENT OF EXCAVATION IS COMPLETE.
3. ONCE 70% OF PERENNIAL VEGETATIVE COVER ACROSS THE EMBANKMENT OPERATIONS FROM STA. 1137+00 TO STA. 1149+50, LT.. HAS BEEN ACHIEVED, REMOVE COMPOST FILTER SOCK CFS-70WB5.
4. INSTALL SEDIMENT TRAP ST-70WB1. SEED AND MULCH EMBANKMENT BERMS AND ANY DISTURBED AREAS FROM CONSTRUCTION OF THE TRAP. SEE SHEET 23 OF 87 FOR THE CONSTRUCTION DETAIL OF SEDIMENT TRAP ST-70WB1.
5. INSTALL SEDIMENT TRAP ST-70WB2. SEED AND MULCH EMBANKMENT BERMS AND ANY DISTURBED AREAS FROM CONSTRUCTION OF THE TRAP. SEE SHEET 24 OF 87 FOR THE CONSTRUCTION DETAIL OF SEDIMENT TRAP ST-70WB2.
6. CLEAR THE RIGHT-OF-WAY FOR CONSTRUCTION ACTIVITIES FOR FROM STA. 1115+00 TO STA. 1144+50, RT.. THIS WORK INCLUDES REMOVAL OF TREES, VEGETATION, BRUSH, AND PAVEMENT REMOVAL ABOVE THE SURFACE OF THE GROUND.
7. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EXCAVATION OPERATIONS FOR THE MEDIAN FROM STA. 1115+00 TO STA. 1144+00, RT.. DURING EXCAVATION ACTIVITIES MAINTAIN POSITIVE DRAINAGE TO SEDIMENT TRAPS ST-70WB1, AND ST-70WB2 WITH DIVERSION DITCHES OR WATERBARS. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FOOT VERTICAL INCREMENT OF EXCAVATION IS COMPLETE.
8. INSTALL ROCK CONSTRUCTION ENTRANCES RC-P1-5 AND RC-P1-6.
9. INSTALL COMPOST FILTER SOCK CFS-70EB4.
10. INSTALL TEMPORARY PIPES TP-70-EB1 AND TP-70-EB2.
11. CLEAR THE RIGHT-OF-WAY FOR CONSTRUCTION ACTIVITIES FOR BASIN NO. 3 AND BORED CROSS PIPE FOR FROM STA. 1110+80 TO STA. 1116+20, RT.. THIS WORK INCLUDES REMOVAL OF TREES, VEGETATION, BRUSH, AND PAVEMENT REMOVAL ABOVE THE SURFACE OF THE GROUND.
12. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EXCAVATION OPERATIONS FOR BASIN NO. 3 AND BORED CROSS PIPE FOR THE FROM STA. 1110+80 TO STA. 1116+20, RT.. PUMP ANY WATER THAT ACCUMULATES IN AN EXCAVATED AREA TO A PUMPED WATER FILTER BAG PWF8-3. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FOOT VERTICAL INCREMENT OF EXCAVATION IS COMPLETE.
13. CONSTRUCT DETENTION BASIN NO. 3 ACCESS ROAD.
14. INSTALL COMPOST FILTER SOCK CFS-70WB6.
15. INSTALL TEMPORARY PIPE TP-70-WB3 ON THE DOWN STREAM END OF THE PIPE.
16. BORE NEW 42" CROSS PIPE 70-E21 TO 70-E20.
17. INSTALL OUTLET PROTECTION FOR 70-E20. INSTALL DETENTION BASIN NO. 3 OUTLET STRUCTURE. PLUG ALL ORIFICES FOR THE DETENTION BASIN. INSTALL PIPES 70-E20 TO 70-E19 AND 70-E19 TO 70-E18.
18. GROUT EXISTING 42" CROSS PIPE. REMOVE TEMPORARY PIPE ON THE DOWN STREAM END AND TEMPORARY SLOPE PIPE TP-70EB2. REMOVE COMPOST FILTER SOCK CFS-70WB6.
19. CONSTRUCT DETENTION BASIN NO. 3. PUMP ANY WATER THAT ACCUMULATES IN THE BASIN TO A PUMPED WATER FILTER BAG PWF8-3. THIS IS A CRITICAL STAGE OF THE PCSM PLAN. THIS CONSTRUCTION MUST BE OBSERVED BY ENGINEER RESPONSIBLE FOR SEALING THE PCSM PLAN.
19. BORE NEW PIPE TO 70-E17 TO 70-E16. PLATE THE TOP OF THE INLET OF PLUG THE OUTLET PIPE ON INLET 70-E16.
20. INSTALL OUTLET PROTECTION FOR 70-E17.
21. ONCE 70% OF PERENNIAL VEGETATIVE COVER ACROSS DETENTION BASIN NO. 3, REMOVE THE PLUGS FOR THE DETENTION BASIN IN THE OUTLET STRUCTURE. REMOVE TEMPORARY PIPES TP-70-EB1 AND TP-70-EB2.
22. INSTALL SEDIMENT TRAP ST-70WB3. SEED AND MULCH EMBANKMENT BERMS AND ANY DISTURBED AREAS FROM CONSTRUCTION OF THE TRAP. SEE SHEET 25 OF 87 FOR THE CONSTRUCTION DETAIL OF SEDIMENT TRAP ST-70WB3.
23. INSTALL INLET FILTER PROTECTION B3-EX1, 70-EX2, AND 70-EX4.
24. CLEAR THE RIGHT-OF-WAY FOR CONSTRUCTION ACTIVITIES FOR FROM STA. 1084+00 TO STA. 1115+00, RT.. THIS WORK INCLUDES REMOVAL OF TREES, VEGETATION, BRUSH, AND PAVEMENT REMOVAL ABOVE THE SURFACE OF THE GROUND.
25. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EXCAVATION OPERATIONS FOR THE MEDIAN FROM STA. 1084+00 TO STA. 1115+00, RT.. DURING EXCAVATION ACTIVITIES MAINTAIN POSITIVE DRAINAGE TO THE EXISTING INLETS AND SEDIMENT TRAP ST-70WB3 WITH DIVERSION DITCHES OR WATERBARS. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FOOT VERTICAL INCREMENT OF EXCAVATION IS COMPLETE.
26. INSTALL ROCK ENTRANCES RC-P1-7, RC-P1-8, AND RC-P1-9.
27. INSTALL TEMPORARY STREAM DIVERSION STA. 1105+00 TO STA. 1105+75, LT. AS PER THE DETAIL ON SHEET 21 OF 87.

FILED: N:\651\PROJECTS\CONTRACTS\12-70WB5.dgn PRJ: WBA\c. CADDESIGN\1010-00-000000.dgn DATE: 1/25/2016 TIME: 11:01:52 PM

EROSION AND SEDIMENTATION CONTROL CONSTRUCTION SEQUENCE



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	5 OF 87
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	

28. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EARTHWORK OPERATIONS FOR THE STREAM RELOCATION. DURING EXCAVATION ACTIVITIES PUMP ANY WATER THAT ACCUMULATES IN THE LOW END TO A PUMPED WATER FILTER BAG PWFB-4. SEED AND MULCH AS STREAM RELOCATION.

29. INSTALL OUTLET PROTECTION FOR 70-D7 (RB-70-D8). MAINTAIN ONE EXISTING PIPE OR PUMP WATER AROUND PIPE INSTALLATION. INSTALL PIPE 70-D7 TO 70-D6.

30. CONNECT TEMPORARY DIVERSION TO NEW END SECTION 70-D6. REMOVE EXISTING PIPES.

31. ONCE 70% OF PERENNIAL VEGETATIVE COVER ACROSS STREAM RELOCATION, REMOVE TEMPORARY STREAM DIVERSION PIPE. SEED AND MULCH DISTURBED AREA FROM THE TEMPORARY STREAM DIVERSION PIPE.

32. INSTALL STREAM DIVERSION AT THE END OF THE EXISTING 42" CROSS PIPE. PUMP WATER AROUND WORK AREA OF BORED PIPE AND OUTLET PROTECTION.

33. BORE PIPE 70-D5 TO 70-D4.

34. WHEN THE BORED PIPE GETS WITHIN 50' OF THE RECEIVING PIT, INSTALL STREAM DIVERSION AT THE UP STREAM END OF THE EXISTING 42" CROSS PIPE. PUMP WATER AROUND WORK AREA RECEIVING PIT.

35. INSTALL OUTLET PROTECTION FOR 70-D5 (RED-70-D5).

36. CONSTRUCT STREAM RELOCATION AT THE UPSTREAM END OF THE NEW BORED CROSS PIPE.

37. ONCE 70% OF PERENNIAL VEGETATIVE COVER ACROSS THE UPSTREAM STREAM RELOCATION, REMOVE TEMPORARY STREAM DIVERSIONS.

38. GROUT EXISTING 42" CROSS PIPE.

39. REMOVE ROCK CONSTRUCTION ENTRANCES RC-P1-7, RC-P1-8.

40. ONCE 70% OF PERENNIAL VEGETATIVE COVER IS ACHIEVED IN THE MEDIAN FROM 1115+00 TO STA. 1144+00, REMOVE SEDIMENT TRAPS ST-70WB1 AND ST-70WB2.

41. INSTALL DRAINAGE 70-F33 TO 70-F32, 70-F32 TO 70-F31, 70-F31 TO 70-F30, 70-F30 TO 70-F29, AND 70-F29 TO 70-F28. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87.

42. CONNECT THE EXISTING CROSS PIPE FROM EXISTING INLET 70-EX38 INTO INLET 70-F28 WITH A TEMPORARY PIPE TP-70-WB4.

43. INSTALL DRAINAGE 70-F28 TO 70-F27, 70-F27 TO 70-F26, 70-F26 TO 70-F25, 70-F25 TO 70-F24, AND 70-F24 TO 70-F23. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87.

44. SEED AND MULCH MEDIAN SWALE FROM STA. 1115+00 TO 1144+00.

45. ONCE 70% OF PERENNIAL VEGETATIVE COVER IS ACHIEVED IN THE MEDIAN FROM 1084+00 TO STA. 1115+00, REMOVE SEDIMENT TRAPS ST-70WB3.

46. INSTALL DRAINAGE 70-E16 TO 70-E15, 70-E15 TO 70-E14, 70-E14 TO 70-E13, 70-E13 TO 70-E12, 70-E12 TO 70-E11, 70-E11 TO 70-E10, 70-E10 TO 70-E9, 70-E9 TO 70-E8, 70-E8 TO 70-E7, 70-E7 TO 70-E6, 70-E6 TO 70-E5, 70-E5 TO 70-E4, 70-E4 TO 70-E3, 70-E3 TO 70-E2, AND 70-E2 TO 70-E1. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87. INSTALL BRANCH STUB PIPES IN INLETS 70-E9, 70-E10 AND 70-E11 FOR PIPES 70-E9 TO 70-D1, 70-E10 TO 70-D2 AND 70-E11 TO 70-D3 RESPECTIVELY.

47. SEED AND MULCH MEDIAN SWALE FROM STA. 1084+00 TO 1115+00.

48. INSTALL ROCK CONSTRUCTION ENTRANCE RC-P1-10.

49. INSTALL TEMPORARY STREAM CROSSING AS PER THE DETAIL ON SHEET 15 OF 87.

50. INSTALL COMPOST FILTER SOCK CFS-70WB7.

51. INSTALL PUMPED WATER FILTER BAG PWFB-5.

52. INSTALL OUTLET PROTECTION FOR 70-G31.

53. INSTALL DRAINAGE 70-G31 TO 70-G30.

54. BORE NEW 36" CROSS PIPE 70-G30 TO 70-G29. PUMP ANY WATER THAT ACCUMULATES IN THE BORE PIT TO PUMPED WATER FILTER BAG PWFB-5. INSTALL INLET FILTER PROTECTION AS PER DETAIL SHEETS 12 - 14 OF 87.

55. REMOVE EXISTING INLET 70-EX70. GROUT EXISTING CROSS PIPE AND REMOVE EXISTING END SECTION.

56. BORE NEW 18" CROSS PIPE 70-G23 TO 70-G18. CAP THE HIGH END OF THE NEW CROSS PIPE.

57. INSTALL DRAINAGE 70-G29 TO 70-G29A, 70-G29A TO 70-G23, AND 70-G23 TO 70-G22. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE PROPOSED INLETS AND EXISTING INLET 70-EX67 AS PER DETAIL SHEETS 12 - 14 OF 87. THIS IS A CRITICAL STAGE OF THE PCSM PLAN. THIS CONSTRUCTION MUST BE OBSERVED BY ENGINEER RESPONSIBLE FOR SEALING THE PCSM PLAN.

58. INSTALL TEMPORARY PIPE TP-70-WB5 BETWEEN EXISTING INLET 70-EX67 AND PROPOSED INLET 70-G22.

59. BORE NEW 18" CROSS PIPE 70-G21 TO 70-G19. PLUG OR CAP OUTSIDE SHOULDER END OF THE PROPOSED PIPE. PUMP ANY WATER THAT ACCUMULATES IN THE BORE PIT TO PUMPED WATER FILTER BAG PWFB-6. INSTALL INLET FILTER PROTECTION AS PER DETAIL SHEETS 12 - 14 OF 87.

60. INSTALL DRAINAGE 70-G22 TO 70-G21, AND 70-G21 TO 70-G20. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87. THIS IS A CRITICAL STAGE OF THE PCSM PLAN. THIS CONSTRUCTION MUST BE OBSERVED BY ENGINEER RESPONSIBLE FOR SEALING THE PCSM PLAN.

61. INSTALL TEMPORARY PIPE TP-70-WB6 TO CONNECT EXISTING CROSS PIPE TO INLET 70-G20.

62. CAP EXISTING INLET 70-EX63 AND CONNECT TEMPORARY PIPE TP-70-WB7 TO INLET 70-G20.

63. SEED AND MULCH MEDIAN SWALE FROM STA. 1149+00 TO 1154+00.

64. INSTALL DRAINAGE 70-G29 TO 70-G28A, 70-G28A TO 70-G28, 70-G28 TO 70-G25, AND 70-G25 TO 70-G27. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87.

65. SEED AND MULCH MEDIAN SWALE FROM STA. 1154+30 TO 1157+00.

66. INSTALL ROCK CONSTRUCTION ENTRANCES RC-P1-11, RC-P1-12, AND RC-P1-13.

67. INSTALL DRAINAGE 70-L8 TO 70-L7.

68. BORE 18" PIPE 70-L7 TO 70-L6.

69. INSTALL DRAINAGE 70-L6 TO 70-L5. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87.

70. CONNECT EXISTING CROSS PIPE FROM 70-L2 TO INLET 70-L5 WITH TEMPORARY PIPE TP-70-WB8.

71. INSTALL DRAINAGE 70-L5 TO 70-L4. AS CONSTRUCTION OF THE INLET IS COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87.

72. CONNECT EXISTING CROSS PIPE FROM 70-L1 TO INLET 70-L4 WITH TEMPORARY PIPE TP-70-WB9.

73. INSTALL TEMPORARY DIVERSION PIPE TP-70-EB3.

74. INSTALL COMPOST FILTER SOCK CFS-70EB5.

75. INSTALL PUMPED WATER FILTER BAG PWFB-7.

76. INSTALL TEMPORARY SLOPE PIPES TP-70-EB4, TP-70-EB5, TP-70-EB6, AND TP-70-EB7. THE TEMPORARY SLOPE PIPES WILL DIVERT THE CLEAN OFFSITE WATER AROUND THE WORK AREA. CONNECT THE TEMPORARY PIPE TP-70-EB7 TO TEMPORARY PIPE TP-70-EB3.

77. CONSTRUCT TEMPORARY DIVERSION DITCHES DD-70-EB8 AND DD-70-EB9. INSTALL LINING FOR DITCHES AND SEED AND MULCH ANY DISTURBED AREAS. THE DIVERSION DITCHES WILL DIVERT THE CLEAN OFFSITE WATER AROUND THE WORK AREA.

78. INSTALL SEDIMENT TRAP ST-70EB1 AND TEMPORARY PIPE TP-70-EB8. CONNECT THE OUTLET PIPE OF THE SEDIMENT TRAP TO TEMPORARY PIPE TP-70-EB3. SEED AND MULCH EMBANKMENT BERMS AND ANY DISTURBED AREAS FROM CONSTRUCTION OF THE TRAP. SEE SHEET 29 OF 87 FOR THE CONSTRUCTION DETAIL OF SEDIMENT TRAP ST-70EB1.

79. CONSTRUCT TEMPORARY DIVERSION DITCH DD-70-EB10. INSTALL LINING FOR DITCHES AND SEED AND MULCH ANY DISTURBED AREAS. THE DIVERSION DITCHES WILL DIVERT THE CLEAN OFFSITE WATER AROUND THE WORK AREA.

80. CONSTRUCT TEMPORARY DIVERSION DITCHES DD-70-EB11 AND DD-70-EB12. INSTALL LINING FOR DITCHES AND SEED AND MULCH ANY DISTURBED AREAS. THE DIVERSION DITCHES WILL DIVERT THE CLEAN OFFSITE WATER AROUND THE WORK AREA.

81. INSTALL SEDIMENT TRAP ST-70EB2 AND TEMPORARY PIPE TP-70-EB9. CONNECT THE OUTLET PIPE OF THE SEDIMENT TRAP TO EXISTING INLET 70-EX74. SEED AND MULCH EMBANKMENT BERMS AND ANY DISTURBED AREAS FROM CONSTRUCTION OF THE TRAP. SEE SHEET 30 OF 87 FOR THE CONSTRUCTION DETAIL OF SEDIMENT TRAP ST-70EB2.

82. CLEAR THE RIGHT-OF-WAY FOR CONSTRUCTION ACTIVITIES FOR FROM STA. 1159+50 TO STA. 1184+00, RT.. THIS WORK INCLUDES REMOVAL OF TREES, VEGETATION, BRUSH, AND PAVEMENT REMOVAL ABOVE THE SURFACE OF THE GROUND.

83. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EXCAVATION OPERATIONS FOR THE SHOULDER SWALE FROM STA. 1159+50 TO STA. 1178+00, RT.. DURING EXCAVATION ACTIVITIES MAINTAIN POSITIVE DRAINAGE SEDIMENT TRAPS ST-70EB1 AND ST-70EB2 WITH DIVERSION DITCHES OR WATERBARS. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FOOT VERTICAL INCREMENT OF EXCAVATION IS COMPLETE.

84. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EXCAVATION OPERATIONS FOR THE EMBANKMENT ACTIVITIES FROM STA. 1178+00 TO STA. 1182+50, RT.. DURING TOE BENCH AND EMBANKMENT ACTIVITIES MAINTAIN POSITIVE DRAINAGE SEDIMENT TO THE LOW SPOT ADJACENT TO COMPOST FILTER SOCK CFS-70EB5. PUMP ANY WATER THAT ACCUMULATES IN THE LOW SPOT TO THE PUMPED WATER FILTER BAG. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FOOT VERTICAL INCREMENT OF EMBANKMENT IS COMPLETE.

85. INSTALL OUTLET PROTECTION FOR 70-K5.

86. BORE 18" PIPE 70-K5 TO 70-K4. PLUG OR CAP MEDIAN END OF THE PROPOSED PIPE.

87. ONCE 70% OF PERENNIAL VEGETATIVE COVER IS ACHIEVED ON THE EMBANKMENT SLOPE FROM STA. 1178+00 TO STA. 1082+50, INSTALL ROCK BARRIER TORB-EB1.

88. CONSTRUCT INFILTRATION SWALE D-70-K FROM STA. 1178+00 TO STA. 1182+00, RT.. THIS IS A CRITICAL STAGE OF THE PCSM PLAN. THIS CONSTRUCTION MUST BE OBSERVED BY ENGINEER RESPONSIBLE FOR SEALING THE PCSM PLAN.

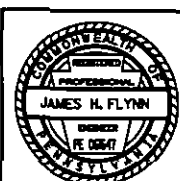
89. ONCE 70% OF PERENNIAL VEGETATIVE COVER IS ACHIEVED ON THE INFILTRATION SWALE FROM STA. 1178+00 TO STA. 1082+00, RT.. REMOVE ROCK BARRIER TORB-EB1 AND TEMPORARY PIPE TP-70-EB3.

90. ONCE 70% OF PERENNIAL VEGETATIVE COVER IS ACHIEVED FOR THE EXCAVATION OF THE SHOULDER SWALE FROM 1159+50 TO STA. 1178+00, REMOVE SEDIMENT TRAPS ST-70EB1 AND ST-70EB2 AND TEMPORARY PIPES TP-70-EB8 AND TP-70-EB9.

91. INSTALL ROCK BARRIERS TORB-EB2 AND TORB-EB3.

92. REMOVE TEMPORARY DIVERSION DITCHES DD-70-EB8, DD-70-EB9, DD-70-EB10, DD-70-EB11 AND DD-70-EB12. REMOVE TEMPORARY PIPES TP-70-EB4, TP-70-EB5, TP-70-EB6 AND TP-70-EB7.

EROSION AND SEDIMENTATION CONTROL CONSTRUCTION SEQUENCE



FILE: \\S:\1\0\1\ACAD\DWG\1-17\1085.dwg, PLOT: \\S:\1\0\1\ACAD\DWG\1-17\1085.dwg, DATE: 1/22/2016, TIME: 12:01:52 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	7 OF 87
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	

53. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN STEEPENED ROCK SLOPE FROM STA. 1171+00 TO STA. 1179+00, LT..

54. INSTALL INLET 70-K4. UNPLUG PIPE 70-K5 TO 70-K4 AND CONNECT TO INLET.

55. INSTALL PIPE 70-K4 TO 70-K3 AND 70-K3 TO 70-K2. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87.

56. SEED AND MULCH SHOULDER MEDIAN FROM STA. 1174+00 TO 1180+00.

57. INSTALL SEDIMENT TRAP ST-70WB8. SEED AND MULCH EXCAVATION AND ANY DISTURBED AREAS FROM CONSTRUCTION OF THE TRAP. SEE SHEETS 28 OF 87 FOR THE CONSTRUCTION DETAIL OF SEDIMENT TRAP ST-70WB8.

58. CONSTRUCT TEMPORARY DIVERSION DITCHES DD-70-WB3 AND DD-70-WB4. INSTALL LINING FOR DITCHES AND SEED AND MULCH ANY DISTURBED AREAS. THE DIVERSION DITCHES WILL DIVERT THE CLEAN OFFSITE WATER AROUND THE WORK AREA.

59. INSTALL TEMPORARY PIPE TP-70-WB14.

60. CLEAR THE RIGHT-OF-WAY FOR CONSTRUCTION ACTIVITIES FOR FROM STA. 1179+00 TO STA. 1189+50, LT.. THIS WORK INCLUDES REMOVAL OF TREES, VEGETATION, BRUSH, AND PAVEMENT REMOVAL ABOVE THE SURFACE OF THE GROUND.

61. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EXCAVATION OPERATIONS FOR THE SHOULDER SWALE FROM STA. 1179+00 TO STA. 1189+50, LT.. DURING EXCAVATION ACTIVITIES MAINTAIN POSITIVE DRAINAGE TO SEDIMENT TRAP ST-70WB8 WITH DIVERSION DITCHES OR WATERBARS.

62. INSTALL PIPE 70-L4 TO 70-L1, 70-L5 TO 70-L2 AND 70-L6 TO 70-L3. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87.

63. ONCE 70% OF PERENNIAL VEGETATIVE COVER IS ACHIEVED IN THE SHOULDER SWALE FROM STA. 1179+00 TO STA. 1189+50, LT., REMOVE SEDIMENT TRAP ST-70WB8.

64. BEGIN EXCAVATION OPERATIONS FOR WB LANES AND SHOULDERS FROM STA. 1159+20 TO STA. 1190+00. PUMP ANY WATER THAT ACCUMULATES IN LOW AREAS TO A PUMPED WATER FILTER BAG.

65. REMOVE TEMPORARY DIVERSION DITCHES DD-70-WB1, DD-70-WB2, DD-70WB3, AND DD-70-WB4. REMOVE TEMPORARY PIPES TP-70-WB12, TP-70-WB13 AND TP-70-WB14.

66. CONSTRUCT PARCEL 40 LANDSLIDE REMEDIATION. SEE PARCEL 40 LANDSLIDE REMEDIATION DETAIL SHEET 85 OF 87.

STAGE 1E

CONSTRUCT WB OUTSIDE LANES, SHOULDER AND RAMP F-2 FROM STA. 1084+00 TO STA. 1092+00, WB INSIDE LANES AND SHOULDER FROM STA. 1147+00 TO STA. 1157+00, AND WB INSIDE LANE, SHOULDER, AND TEMPORARY PAVEMENT FROM STA. 1159+00 TO STA. 1165+00.

1. CONSTRUCT TEMPORARY CROSSOVER WB TRAVEL LANE STA. 1168+00 TO STA. 1173+00. SEE TEMPORARY CROSSOVER DETAIL SHEET 78 OF 87.

2. INSTALL INLET 70-H6. CONNECT INLET 70-H6 TO EXISTING INLET 70-EX75 WITH TEMPORARY PIPE TP-70-EB14.

3. INSTALL DRAINAGE 70-H6 TO 70-H5, AND 70-H5 TO 70-H4. AS CONSTRUCTION OF THE INLETS ARE COMPLETED, INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87.

4. INSTALL DRAINAGE 70-H6 TO 70-H7. INSTALL INLET FILTER PROTECTION ON THE INLET AS PER DETAIL SHEETS 12 - 14 OF 87.

5. BEGIN EXCAVATION OPERATIONS FOR THE PAVEMENT FROM STA. 1159+20 TO STA. 1165+00, RT.. DIVERT THE WATER TO INLETS 70-H6 AND 70-H7 USING WATERBARS AND DIVERSION DITCHES.

6. INSTALL INLET FILTER PROTECTION ON INLETS 70-G20, 70-G21, 70-G22, 70-G23, 70-G25, 70-G27, 70-G28 AND 70-G29 AS PER DETAIL SHEETS 12 - 14 OF 87.

7. BEGIN EXCAVATION OPERATIONS FOR THE WB LANES AND INSIDE SHOULDER PAVEMENT FROM STA. 1147+00 TO STA. 1157+00. DIRECT WATER THAT ACCUMULATES TO THE MEDIAN INLETS 70-G20, 70-G21, 70-G22, 70-G23, 70-G25, 70-G27, 70-G28 AND 70-G29 USING DIVERSION DITCHES AND WATERBARS.

8. INSTALL COMPOST FILTER SOCK CFS-70-WB10.

9. INSTALL PUMPED WATER FILTER BAG PWFB-13.

10. BEGIN EXCAVATION OPERATIONS FOR THE WB INSIDE LANE AND SHOULDER PAVEMENT FROM STA. 1084+00 TO STA. 1092+00, LT.. PUMP ANY WATER THAT ACCUMULATES AT THE LOW END OF THE PAVEMENT EXCAVATION TO THE PUMPED WATER FILTER BAG.

11. ONCE 70% OF PERENNIAL VEGETATIVE COVER IS ACHIEVED ON ALL PHASE 1 DISTURBED AREAS REMOVE ALL REMAINING PHASE 1 BMP'S.

PHASE 2 (SUMMER 2017 THRU FALL 2018)

PHASE 2 INCLUDES CONSTRUCTION OF DETENTION BASIN 5, STRUCTURE OVER AVR RAILROAD AND S.R.0070 EASTBOUND FROM STA. 1084+00 TO STA. 1188+00.

STAGE 2A (SUMMER 2017 THRU SPRING 2018)

CONSTRUCTION BASIN 4 AND SHOULDER SWALE FROM STA. 1120+00 TO 1149+00.

1. MOBILIZE EQUIPMENT AND MATERIALS.

2. INSTALL ROCK CONSTRUCTION ENTRANCES RC-P2-1, AND RC-P2-2.

3. UNCAP CROSS PIPE FROM 70-G23 TO 70-G18. INSTALL INLET 70-G18.

4. INSTALL SEDIMENT TRAP ST-70EB3. CONNECT THE OUTLET PIPE OF THE SEDIMENT TRAP TO INLET 70-G18. SEED AND MULCH EMBANKMENT BERMS AND ANY DISTURBED AREAS FROM CONSTRUCTION OF THE TRAP. SEE SHEET 31 OF 87 FOR THE CONSTRUCTION DETAIL OF SEDIMENT TRAP ST-70EB3.

5. CONSTRUCT TEMPORARY DIVERSION DITCHES DD-70-EB1 AND DD-70-EB2. INSTALL LINING FOR DITCHES AND SEED AND MULCH ANY DISTURBED AREAS. THE DIVERSION DITCHES WILL DIVERT THE CLEAN OFFSITE WATER AROUND THE WORK AREA.

6. INSTALL TEMPORARY SLOPE PIPE TP-70-EB10. THE TEMPORARY SLOPE PIPE WILL DIVERT OFFSITE ROADWAY DRAINAGE AROUND THE WORK AREA.

7. CONSTRUCT TEMPORARY DIVERSION DITCHES DD-70-EB3 AND DD-70-EB4. INSTALL LINING FOR DITCHES AND SEED AND MULCH ANY DISTURBED AREAS. THE DIVERSION DITCHES WILL DIVERT THE CLEAN OFFSITE WATER AROUND THE WORK AREA.

8. INSTALL TEMPORARY SLOPE PIPE TP-70-EB11. THE TEMPORARY SLOPE PIPE WILL DIVERT OFFSITE ROADWAY DRAINAGE AROUND THE WORK AREA.

9. CONSTRUCT TEMPORARY DIVERSION DITCHES DD-70-EB5 AND DD-70-EB6. INSTALL LINING FOR DITCHES AND SEED AND MULCH ANY DISTURBED AREAS. THE DIVERSION DITCHES WILL DIVERT THE CLEAN OFFSITE WATER AROUND THE WORK AREA.

10. INSTALL TEMPORARY SLOPE PIPE TP-70-EB12. THE TEMPORARY SLOPE PIPE WILL DIVERT OFFSITE ROADWAY DRAINAGE AROUND THE WORK AREA.

11. CONSTRUCT TEMPORARY DIVERSION DITCH DD-70-EB7. INSTALL LINING FOR DITCH AND SEED AND MULCH ANY DISTURBED AREAS. THE DIVERSION DITCH WILL DIVERT THE CLEAN OFFSITE WATER AROUND THE WORK AREA.

12. INSTALL TEMPORARY SLOPE PIPE TP-70-EB13. THE TEMPORARY SLOPE PIPE WILL DIVERT OFFSITE ROADWAY DRAINAGE AROUND THE WORK AREA.

13. INSTALL INLET FILTER PROTECTION ON THE EXISTING INLETS 70-EX29, 70-EX33, 70-EX38, 70-EX40, 70-EX44, 70-EX48, 70-EX52, 70-EX55, AND 70-EX57. INSTALL INLET FILTER PROTECTION ON THE INLETS AS PER DETAIL SHEETS 12 - 14 OF 87.

14. CLEAR THE RIGHT-OF-WAY FOR CONSTRUCTION ACTIVITIES FOR THE SHOULDER SWALE FROM STA. 1121+00, RT. TO STA. 1143+60, RT.. THIS WORK INCLUDES REMOVAL OF TREES, VEGETATION, BRUSH, AND PAVEMENT REMOVAL ABOVE THE SURFACE OF THE GROUND.

15. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EXCAVATION OPERATIONS FOR THE SHOULDER SWALE FROM STA. 1121+00 TO STA. 1143+60, RT. AS PER SHOULDER EXCAVATION DETAIL 21 OF 87. DURING EXCAVATION ACTIVITIES MAINTAIN POSITIVE DRAINAGE TO THE EXISTING INLETS. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FOOT VERTICAL INCREMENT OF EXCAVATION IS COMPLETE.

16. CLEAR THE RIGHT-OF-WAY FOR CONSTRUCTION ACTIVITIES FOR THE SHOULDER SWALE AND DETENTION BASIN NO. 5 FROM STA. 1143+60, RT. TO STA. 1152+00, RT.. THIS WORK INCLUDES REMOVAL OF TREES, VEGETATION, BRUSH, AND PAVEMENT REMOVAL ABOVE THE SURFACE OF THE GROUND.

17. REMOVE AND STORE ANY EXCAVATED TOP SOIL AND BEGIN EXCAVATION OPERATIONS FOR THE SHOULDER SWALE FROM STA. 1143+60 TO STA. 1152+00, RT.. DURING EXCAVATION ACTIVITIES MAINTAIN POSITIVE DRAINAGE TO SEDIMENT TRAP ST70EB3. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FT VERTICAL INCREMENT OF EXCAVATION IS COMPLETE.

18. INSTALL TEMPORARY MULCH IF 70% OF PERENNIAL VEGETATIVE COVER ACROSS ALL DISTURBED AREAS IS NOT ACHIEVED BY NOVEMBER 15 OF THE CONSTRUCTION YEAR.

STAGE 2B (SPRING 2018 THRU FALL 2018)

COMPLETE CONSTRUCTION OF BASIN 5, TEMPORARY CROSSOVERS, DRAINAGE, STRUCTURE OVER AVR RAILROAD, S.R.0070 EASTBOUND FROM STA. 1084+00 TO STA. 1188+00, AND S.R. 8011 (RAMP G-1).

1. INSTALL TEMPORARY CROSSOVER FOR S.R. 9401 (RAMP F-3) FROM STA. 1088+00 TO 1094+00. SEE DETAIL SHEET 79 OF 87.

2. INSTALL EMERGENCY PULL OFFS FOR ALL OF PHASE 2. SEE DETAIL SHEET 82 TO 84.

3. INSTALL TEMPORARY CROSSOVERS EB LANES AND S.R. 8011 (RAMP G-1) FROM STA. 1179+00 TO STA. 1192+00. SEE DETAIL SHEETS 80 AND 81 OF 87.

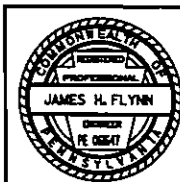
4. INSTALL ROCK CONSTRUCTION ENTRANCES RC-P2-3 AND RC-P2-4.

5. INSTALL COMPOST FILTER SOCK CFS-70EB3 AND CFS-70EB8.

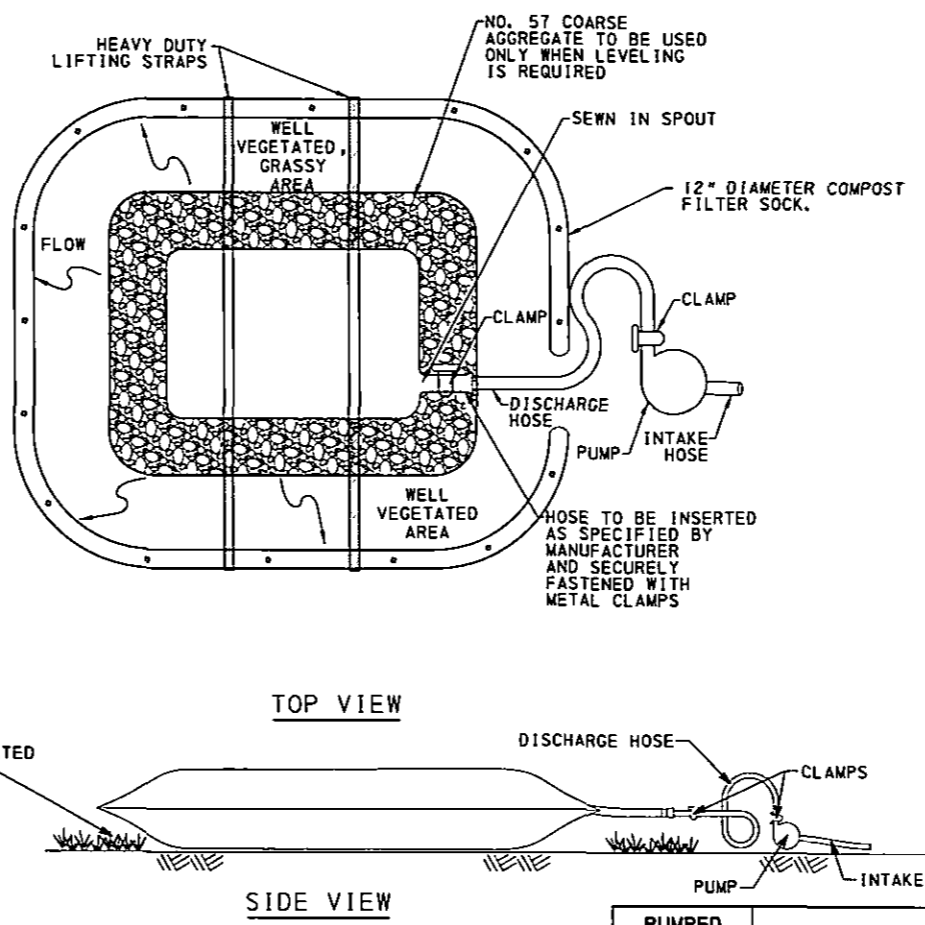
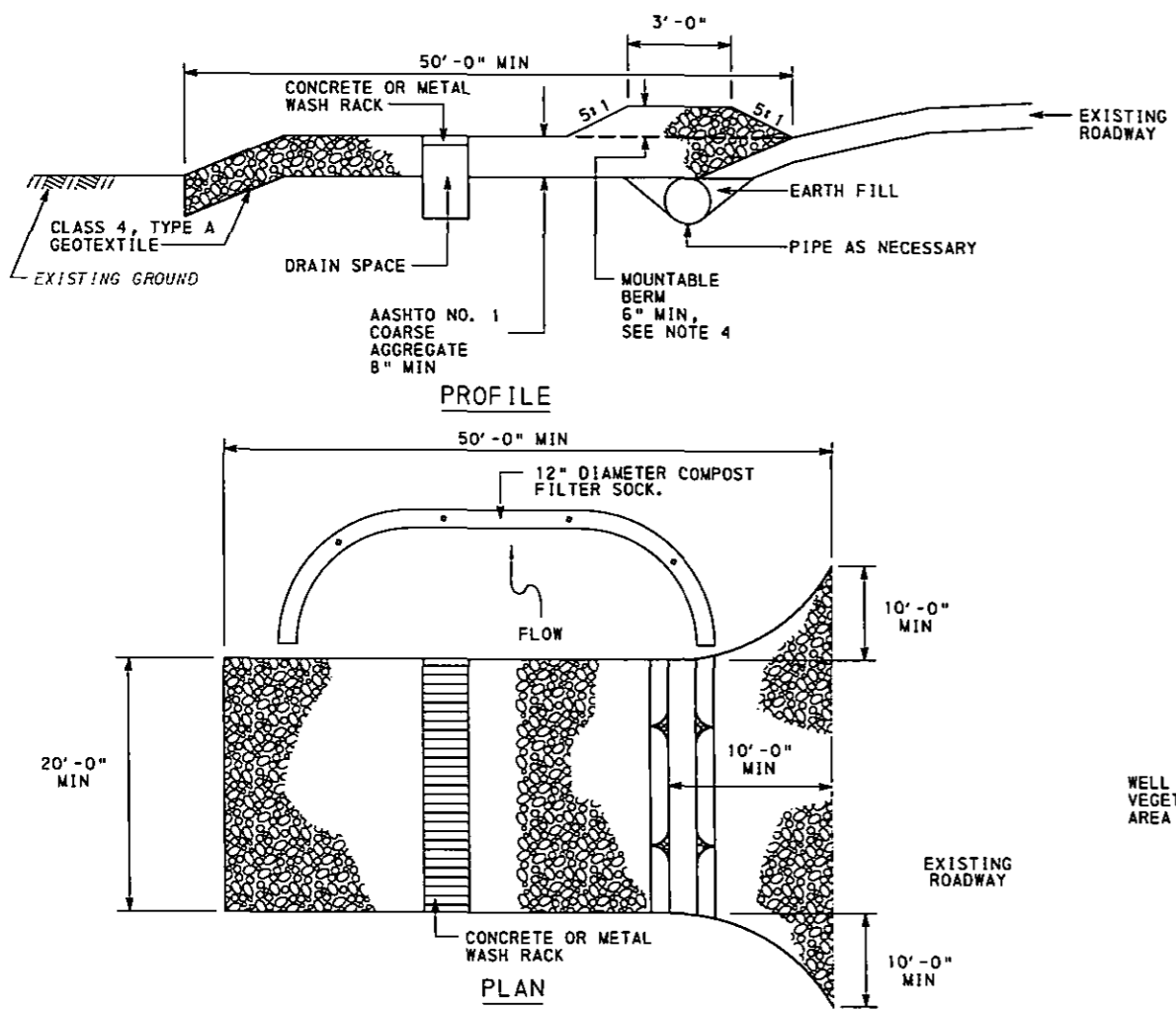
6. COMPLETE CONSTRUCTION OF SEDIMENT BASIN NO. 5. PUMP ANY WATER THAT ACCUMULATES IN DETENTION BASIN NO. 5 TO THE PUMPED WATER FILTER BAG PWFB-10. PLACE EROSION CONTROL MULCH BLANKET AND SEED AND MULCH AS EACH 15 FOOT VERTICAL INCREMENT OF EMBANKMENT IS COMPLETE.

FILE: \\s1101\cadd\11011010-ar-Connegp\F0.dgn DATE: 1/25/2018 TIME: 12:07:33 PM PRJ: WRK: CADD\11011010-ar-Connegp\F0.dgn

EROSION AND SEDIMENTATION CONTROL CONSTRUCTION SEQUENCE



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	11 OF 87
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS			DATE BY



- PUMPED WATER FILTER BAG NOTES:**
1. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH-STRENGTH, DOUBLE STITCHED 'J' TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
 2. LOCATE BAG IN LEVEL AREAS (LESS THAN 5% GRADE). WHEN LEVEL AREAS ARE NOT AVAILABLE, PLACE NO. 57 COARSE AGGREGATE TO LEVEL THE BAG.
 3. LOCATE 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 COARSE OR A WELL VEGETATED AREA.
 4. LOCATE BAG IN AN AREA ACCESSIBLE BY EQUIPMENT FOR MAINTENANCE AND REMOVAL PURPOSES.
 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. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
 6. DO NOT PERMIT DISCHARGE FROM THE BAG TO DRAIN BACK INTO WORK OR ACCESS AREAS OF THE PROJECT.
 7. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATION. COMPOST BERM OR COMPOST FILTER SOCK SHOULD BE INSTALLED BELOW BAGS LOCATED WITHIN 50 FEET OF RECEIVING STREAM OR WHERE A GRASSY AREA IS NOT AVAILABLE. A COMPOST BERM OR COMPOST FILTER SOCK SHALL BE PLACED BELOW ANY BAG DISCHARGING TO A SPECIAL PROTECTION SURFACE WATER.
 8. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

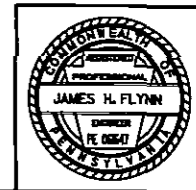
RCE NO.	BASELINE	LOCATION	STAGE
RC-P1-1	SR 0070 WB	1137+10, LT	PHASE 1A
RC-P1-2	SR 0070 WB	1149+60, LT	PHASE 1A
RC-P1-3	SR 0070 EB	1087+50, LT	PHASE 1A
RC-P1-4	SR 0070 EB	1143+00, LT	PHASE 1A
RC-P1-5	SR 0070 EB	1111+80, RT	PHASE 1B
RC-P1-6	SR 0070 WB	1122+40, LT	PHASE 1B
RC-P1-7	SR 0070 WB	1105+58, LT	PHASE 1B
RC-P1-8	SR 0070 WB	1105+92, LT	PHASE 1B
RC-P1-9	SR 0070 EB	1107+30, RT	PHASE 1B
RC-P1-10	SR 0070 WB	1153+88, LT	PHASE 1B
RC-P1-11	SR 8011 (Ramp G-1)	307+50, LT	PHASE 1B
RC-P1-12	SR 0070 EB	1158+80, RT	PHASE 1B
RC-P1-13	SR 0070 EB	1183+30, RT	PHASE 1B
RC-P1-14	SR 0070 WB	1084+00, RT	PHASE 1C
RC-P1-15	SR 0070 WB	1146+90, RT	PHASE 1C
RC-P1-16	SR 0070 WB	1086+50, LT	PHASE 1D
RC-P1-17	SR 0070 WB	1157+25, LT	PHASE 1D
RC-P1-18	SR 0070 WB	1163+35, LT	PHASE 1D
RC-P1-19	SR 0070 WB	1189+25, LT	PHASE 1D
RC-P1-20	SR 0070 EB	1090+75, RT	PHASE 1D
RC-P1-21	S.R. 1014 (LAKEVIEW DRIVE)	STREAM 4 BRIDGE REMOVAL	PHASE 1C
RC-P2-1	SR 0070 EB	1121+50, RT	PHASE 2A
RC-P2-2	SR 0070 EB	1152+30, RT	PHASE 2A
RC-P2-3	SR 0070 EB	1090+20, RT	PHASE 2
RC-P2-4	SR 8011 (Ramp G-1)	304+00, LT	PHASE 2

- NOTES**
1. INSPECT THE ENTRANCE DAILY. REMOVE ALL SEDIMENT DEPOSITED ON THE PUBLIC ROADWAYS AND RETURN TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WILL NOT BE PERMITTED.
 2. MAINTAIN THE SPECIFIED ROCK CONSTRUCTION ENTRANCE THICKNESS. PLACE ADDITIONAL ROCK WHENEVER ROCK BECOMES CLOGGED WITH SEDIMENT.
 3. MAINTAIN STOCKPILE OF AASHTO NO.1 COARSE AGGREGATE.
 4. CONSTRUCT A MOUNTABLE BERM ONLY WHEN 150 (6") MIN COVER CANNOT BE PROVIDED OVER THE PIPE.
 5. SATISFACTORILY REMOVE MATERIALS AS PER SPECIFICATION IN SECTION 849 WHEN ROCK CONSTRUCTION ENTRANCE IS NO LONGER NEEDED.
 6. PROVIDE GEOTEXTILE MATERIAL MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 735. FURNISH AND INSTALL IN ACCORDANCE WITH SECTION 212. PROVIDE GEOTEXTILE ALONG ALL INTERFACE AREAS WITH GROUND CONTACT.
 7. CONSTRUCT ROCK CONSTRUCTION ENTRANCE WITHIN THE RIGHT-OF-WAY OR EASEMENT AREAS. ENTRANCE MAY BE CONSTRUCTED ON A SKEW IF ADEQUATE PULL OUT SIGHT DISTANCE IS AVAILABLE.
 8. WASH RACK SHALL BE DESIGNED OR CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.
 9. WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
 10. DISCHARGE DRAIN SPACE TO INLET WITH FILTER PROTECTION OR SEDIMENT TRAP. IF THE DRAIN SPACE CAN'T BE DRAINED, PUMP SEDIMENT LADEN WATER TO A PUMPED WATER FILTER BAG.

PUMPED WATER FILTER BAG	BASELINE	STATION	DESCRIPTION
PWFB-1	SR 0070 WB	1144+75, RT	STAGE 1A
PWFB-2	SR 0070 WB	1140+00, LT	STAGE 1B
PWFB-3	SR 0070 EB	1116+00, RT	STAGE 1B
PWFB-4	SR 0070 WB	1105+55, LT	STAGE 1B
PWFB-5	SR 0070 WB	1154+05, LT	STAGE 1B
PWFB-6	SR 0070 WB	1150+75, RT	STAGE 1B
PWFB-7	SR 0070 WB	1182+15, RT	STAGE 1B
PWFB-8	SR 0070 WB	1092+80, LT	STAGE 1D
PWFB-9	SR 0070 EB	1092+65, RT	STAGE 1D
PWFB-13	SR 0070 WB	1091+95, LT	STAGE 1E
PWFB-10	SR 0070 EB	1150+50, RT	STAGE 2B
PWFB-11	SR 0070 EB	1157+05, RT	STAGE 2B
PWFB-12	SR 0070 EB	1092+65, RT	STAGE 2B
PWFB-14	SR 0070 EB	1186+86, RT	STAGE 2B
PWFB-15	SR 0070 WB		CAISSONS (AS DIRECTED)

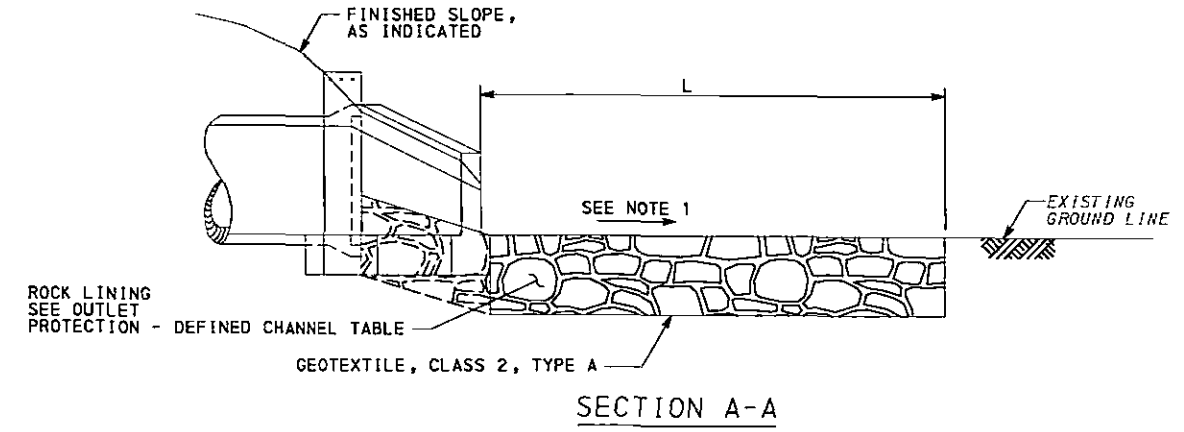
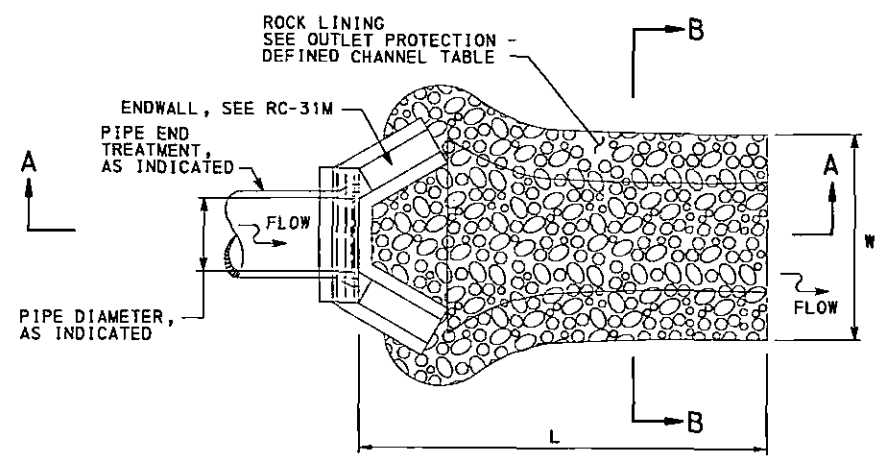
ROCK CONSTRUCTION ENTRANCE WITH WASH RACK

**PUMPED WATER FILTER BAG
EROSION AND SEDIMENTATION
CONTROL DETAILS**



FILE: \\p101a\cadd\004863 1-20\W05.vp PRJ: WRA.vp CADWES\17010-00015\11FD.dgn DATE: 1/25/2016 TIME: 12:01:55 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	17 OF 87
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS			DATE BY

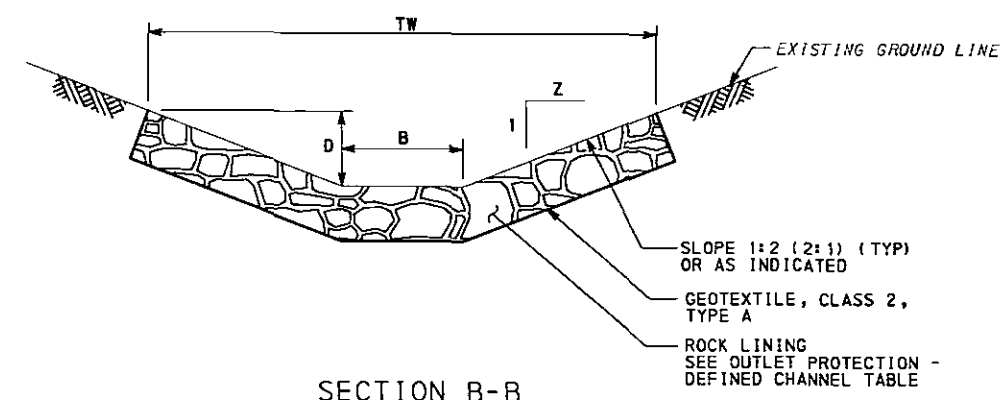


OUTLET PROTECTION - DEFINED CHANNEL TABLE

END SECTION	BASELINE	STATION		SIDE	VEL. (FPS)	Z1	Z2	DEPTH D (FT)	BOT. WIDTH B (FT)	TOP WIDTH TW (FT)	LENGTH L (FT)	RIPRAP		
		FROM	TO									ROCK CLASS	THICK (IN)	ALL-VEL (FPS)
70-B8	SR 0070, WB	1102+89.01	1103+04.43	LT	9.42	2	2	1.50	2.00	8.00	8.00	R-5	24	11.50
70-E21	SR 0070, WB	1115+72.12	1115+87.12	LT	25.34	2	2	3.00	3.00	15.00	20.00	R-8	48	17.00
70-F41	SR 0070, WB	1146+35.32	1146+44.72	LT	6.44	2	2	1.50	4.00	10.00	13.00	R-4	18	9.00
70-J5	SR 0070, WB	1171+19.45	1171+29.54	LT	10.18	2	2	2.00	4.00	12.00	15.00	R-5	24	11.50

NOTE:
 * OUTLET OF STORM WATER BASIN WHICH CONTROLS FLOW AND REDUCES VELOCITY

OUTLET PROTECTION - DEFINED CHANNEL
 NOT TO SCALE



SECTION B-B

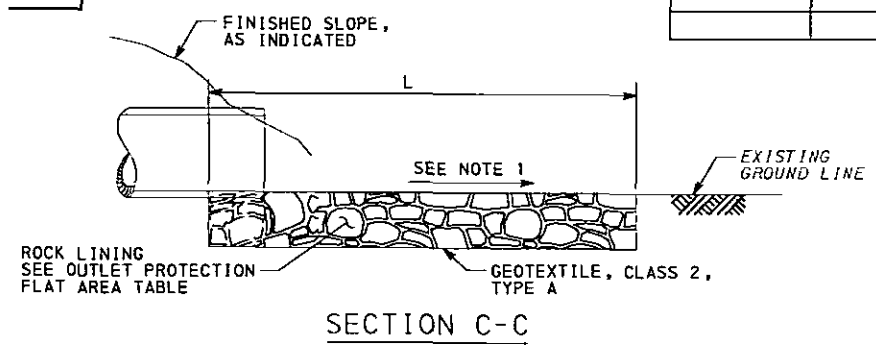
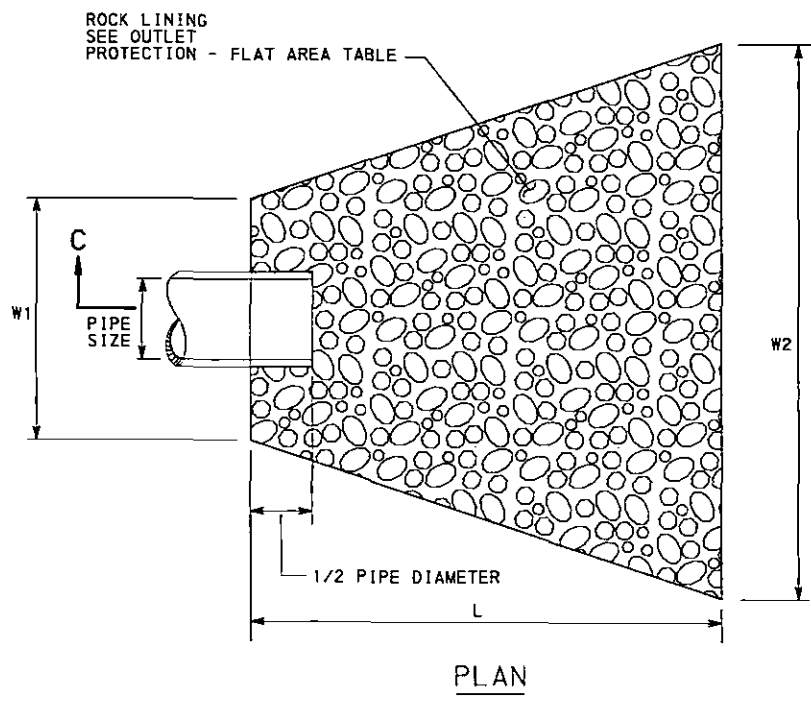
OUTLET PROTECTION - FLAT AREA TABLE

END SECTION	BASELINE	STATION		SIDE	PIPE SIZE (IN)	VEL. (FPS)	INV. WIDTH W1 (FT)	TER. WIDTH. W2 (FT)	LENGTH L (FT)	RIPRAP		
		FROM	TO							ROCK CLASS	THICK (IN)	ALL-VEL (FPS)
70-E17	SR 0070, EB	1114+82.19	1115+18.75	RT	36	11.93	9.00	37.50	28.50	R-6	30.00	13.00
70-G13	SR 0070, EB	1147+77.41	1148+18.65	RT	36	12.93	9.00	39.00	30.00	R-6	30.00	13.00
70-G15	SR 0070, EB	1149+59.20	1149+59.20	RT	18	4.55	4.50	12.50	8.00	R-4	18.00	9.00
70-H8	SR 0070, EB	1159+29.74	1159+43.56	RT	30	6.38	7.5	12.30	12.00	R-3	12.00	6.50
70-K5	SR 0070, EB	1179+92.69	1180+07.31	RT	18	6.78	4.50	15.00	10.50	R-4	18.00	9.00
70-B6	SR 0070, WB	1101+50.64	1101+50.64	LT	18	4.63	4.50	12.50	8.00	R-4	18.00	9.00
70-F38	SR 0070, WB	1144+19.61	1144+52.13	LT	36	11.49	9.00	37.00	28.00	R-6	30.00	13.00
70-G31	SR 0070, WB	1154+30.00	1154+78.67	LT	36	8.83	9.00	31.00	22.00	R-5	30.00	13.00

NOTES

1. SLOPE SHOULD BE LEVEL OR AS CLOSE TO LEVEL AS REASONABLY POSSIBLE BASED ON SITE CONDITIONS.

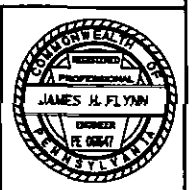
EROSION AND SEDIMENTATION CONTROL DETAILS



SECTION C-C

OUTLET PROTECTION - FLAT AREA
 NOT TO SCALE

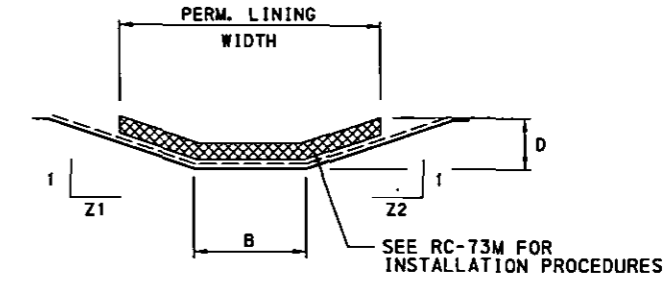
FILE: \\p10101\cadd\04863 1-70\050.vg PRJ: RRALG_CADD\ES\17010-000\05-11\F00.dgn
 DATE: 1/25/2016 TIME: 12:08:00 PM



DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
12-0	WASHINGTON	0070	T10	20 OF 87	
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON					
REVISION NUMBER	REVISIONS			DATE	BY

PERMANENT DITCHES

SWALE NO.	BASELINE	STATION		SIDE	B (FT)	Z1	Z2	DES. Q (CFS)	MIN. D (FT)	TEMP. LINING TYPE	PERM. LINING TYPE	ACTUAL SHEAR (LB/FT ²)	ALLOWABLE SHEAR (LB/FT ²)
		FROM	TO										
D-70-D1	SR 0070 EB	1104+50	1104+50	RT	2	2	2	55.30	1.47	TRM	TRM	9.67	10.00
D-70-K1	SR 0070 EB	1178+68	1182+00	RT	2	2	2	58.95	1.55	ECRM-B	ECRM-B	7.98	8.00
D-70-B1	SR 0070 WB	1102+90	1104+12	LT	2	2	2	17.59	1.05	ECRM-B	ECRM-B	6.97	8.00
D-70-B2	SR 0070 WB	1104+12	1105+23	LT	2	2	2	17.59	1.13	ECRM-B	ECRM-B	4.44	8.00
D-70-C1	SR 0070 WB	1093+00	1093+00	LT	2	2	2	41.00	1.68	ECRM-A	ECRM-A	2.57	6.00
D-70-D2	SR 0070 WB	1105+00	1105+00	LT	2	2	2	55.30	1.73	ECRM-A	ECRM-A	4.00	6.00
D-70-E1	SR 0070 WB	1116+00	1116+00	LT	2	2	2	50.70	1.80	ECRM-A	ECRM-A	2.68	6.00

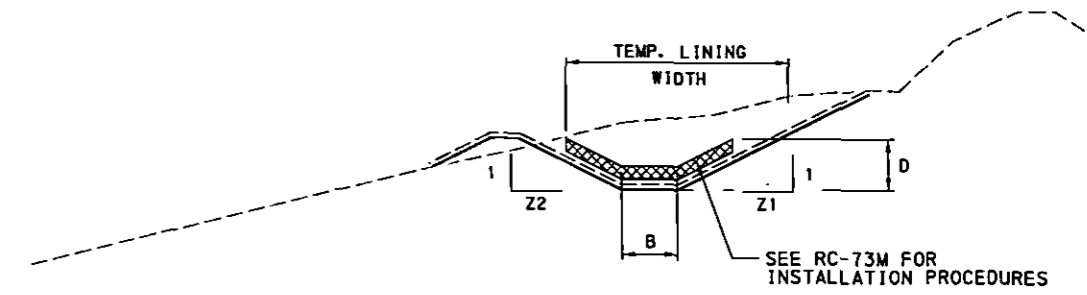


--- SEEDING AND SOIL SUPPLEMENTS - FORMULA D MODIFIED

PERMANENT DITCHES

TEMPORARY DIVERSION DITCHES

SWALE NO.	BASELINE	STATION		SIDE	B (FT)	Z1	Z2	MIN. D (FT)	SLOPE (FT/FT)	FLOW Q (CFS)	V (FPS)	TEMP. LINING TYPE	ACTUAL SHEAR (LB/FT ²)	ALLOWABLE SHEAR (LB/FT ²)
		FROM	TO											
DD-EB1A	SR 0070 EB	1125+32.00	1127+54.00	RT	0	2	1.5	0.99	0.100	2.02	4.89	ECRM-A	3.03	6.00
DD-EB1B	SR 0070 EB	1125+32.00	1127+54.00	RT	0	2	1.5	0.92	0.224	2.02	6.62	ECRM-A	5.84	6.00
DD-EB2A	SR 0070 EB	1131+52.00	1127+54.00	RT	0	2	1.5	1.53	0.016	6.93	3.77	ECRM-B	1.04	8.00
DD-EB2B	SR 0070 EB	1131+52.00	1127+54.00	RT	0	2	1.5	1.17	0.184	6.93	8.74	ECRM-B	7.75	8.00
DD-EB3A	SR 0070 EB	1131+52.00	1135+96.00	RT	0	2	1.5	1.32	0.016	3.50	3.00	ECRM-A	0.81	6.00
DD-EB3B	SR 0070 EB	1131+52.00	1135+96.00	RT	0	2	1.5	1.03	0.179	3.50	6.98	ECRM-A	5.98	6.00
DD-EB4A	SR 0070 EB	1137+26.00	1135+96.00	RT	0	2	1.5	1.08	0.023	1.61	2.71	ECRM-A	0.83	6.00
DD-EB4B	SR 0070 EB	1137+26.00	1135+96.00	RT	0	2	1.5	0.97	0.080	1.61	4.25	ECRM-A	2.32	6.00
DD-EB5A	SR 0070 EB	1137+26.00	1139+16.00	RT	0	2	1.5	1.39	0.023	5.46	3.93	ECRM-B	1.27	8.00
DD-EB5B	SR 0070 EB	1137+26.00	1139+16.00	RT	0	2	1.5	1.13	0.168	5.46	7.78	ECRM-B	6.63	8.00
DD-EB6A	SR 0070 EB	1143+93.00	1139+16.00	RT	0	2	1.5	1.42	0.022	5.88	3.94	ECRM-A	1.26	6.00
DD-EB6B	SR 0070 EB	1143+93.00	1139+16.00	RT	0	2	1.5	1.25	0.072	5.88	5.85	ECRM-A	3.35	6.00
DD-EB7A	SR 0070 EB	1143+93.00	1152+26.00	RT	0	2	1.5	1.05	0.035	1.72	3.26	ECRM-A	1.22	6.00
DD-EB7B	SR 0070 EB	1143+93.00	1152+26.00	RT	0	2	1.5	0.91	0.179	1.72	5.84	ECRM-A	4.58	6.00
DD-EB8A	SR 0070 EB	1162+74.00	1159+37.00	RT	0	2	2	0.99	0.010	0.76	1.60	ECRM-A	0.31	6.00
DD-EB8B	SR 0070 EB	1162+74.00	1159+37.00	RT	0	2	2	0.76	0.291	0.76	5.61	ECRM-A	4.72	6.00
DD-EB9A	SR 0070 EB	1162+74.00	1167+10.00	RT	0	2	2	1.94	0.021	26.16	6.33	ECRM-B	1.92	8.00
DD-EB9B	SR 0070 EB	1162+74.00	1167+10.00	RT	0	2	2	1.60	0.110	26.16	10.81	ECRM-B	7.55	8.00
DD-EB10A	SR 0070 EB	1171+19.00	1167+10.00	RT	0	2	2	1.73	0.017	14.57	4.81	ECRM-A	1.34	6.00
DD-EB10B	SR 0070 EB	1171+19.00	1167+10.00	RT	0	2	2	1.46	0.076	14.57	7.92	ECRM-A	4.52	6.00
DD-EB11A	SR 0070 EB	1171+19.00	1174+59.00	RT	0	2	2	1.55	0.007	5.81	2.62	ECRM-B	0.45	8.00
DD-EB11B	SR 0070 EB	1171+19.00	1174+59.00	RT	0	2	2	1.12	0.155	5.81	7.54	ECRM-B	6.02	8.00
DD-EB12A	SR 0070 EB	1174+59.00	1178+84.00	RT	0	2	2	1.16	0.037	3.31	3.94	ECRM-A	1.53	6.00
DD-EB12B	SR 0070 EB	1174+59.00	1178+84.00	RT	0	2	2	0.99	0.196	3.31	6.99	ECRM-A	5.94	6.00
DD-WB1A	SR 0070 WB	1163+50.00	1169+00.00	LT	0	2	2	1.44	0.005	3.47	1.95	ECRM-A	0.29	6.00
DD-WB1B	SR 0070 WB	1163+50.00	1169+00.00	LT	0	2	2	1.01	0.173	3.47	6.76	ECRM-A	5.48	6.00
DD-WB2	SR 0070 WB	1169+00.00	1169+50.00	LT	0	2	2	0.92	0.064	1.32	3.66	ECRM-A	1.70	6.00
DD-WB3A	SR 0070 WB	1184+00.00	1179+00.00	LT	0	2	2	1.28	0.057	6.92	5.65	ECRM-A	2.78	6.00
DD-WB3B	SR 0070 WB	1184+00.00	1179+00.00	LT	0	2	2	1.14	0.187	6.92	8.44	ECRM-B	7.48	8.00
DD-WB4A	SR 0070 WB	1184+00.00	1190+00.00	LT	0	2	2	1.24	0.020	3.40	3.12	ECRM-A	0.92	6.00
DD-WB4B	SR 0070 WB	1184+00.00	1190+00.00	LT	0	2	2	0.97	0.239	3.40	7.59	ECRM-B	7.07	8.00

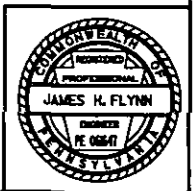


CUT

--- SEEDING - FORMULA E

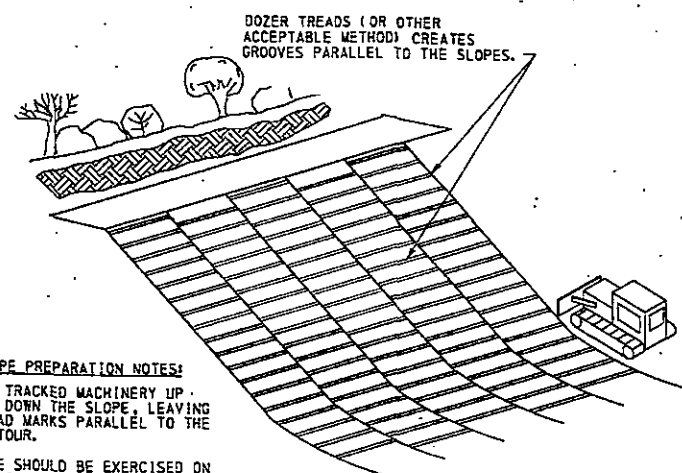
DIVERSION DITCH

EROSION AND SEDIMENTATION CONTROL DETAILS



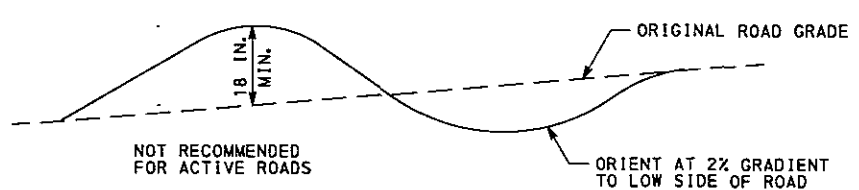
FILE: \\F:\GIS\ACAD\PROJECTS\1-TOWNSHIP\12-0-0070\12-0-0070.dgn
DATE: 12/27/2016 TIME: 12:08:01 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	21 OF 87
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS	DATE	BY	



- SLOPE PREPARATION NOTES:**
1. RUN TRACKED MACHINERY UP AND DOWN THE SLOPE, LEAVING TREAD MARKS PARALLEL TO THE CONTOUR.
 2. CARE SHOULD BE EXERCISED ON SOILS HAVING A HIGH CLAY CONTENT TO AVOID OVER-COMPACTION.

ISOMETRIC VIEW
SLOPE PREPARATION
NTS



SECTION VIEW

NOTES:

WATERBARS SHALL DISCHARGE TO A STABLE AREA.

WATERBARS SHALL BE INSPECTED WEEKLY (DAILY ON ACTIVE ROADS) AND AFTER EACH RUNOFF EVENT. DAMAGED OR ERODED WATERBARS SHALL BE RESTORED TO ORIGINAL DIMENSIONS WITHIN 24 HOURS OF INSPECTION.

MAINTENANCE OF WATERBARS SHALL BE PROVIDED UNTIL ROADWAY, SKIDTRAIL, OR RIGHT-OF-WAY HAS ACHIEVED PERMANENT STABILIZATION.

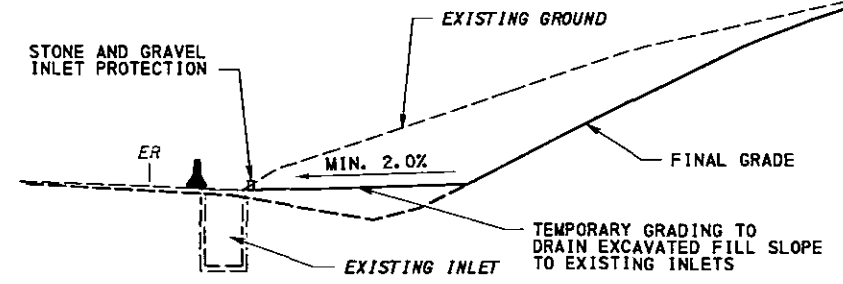
WATERBARS ON RETIRED ROADWAYS, SKIDTRAILS, AND RIGHT-OF-WAYS SHALL BE LEFT IN PLACE AFTER PERMANENT STABILIZATION HAS BEEN ACHIEVED.

SEE PA DEP EROSION CONTROL MANUAL TABLE 3.1 FOR WATERBAR SPACING.

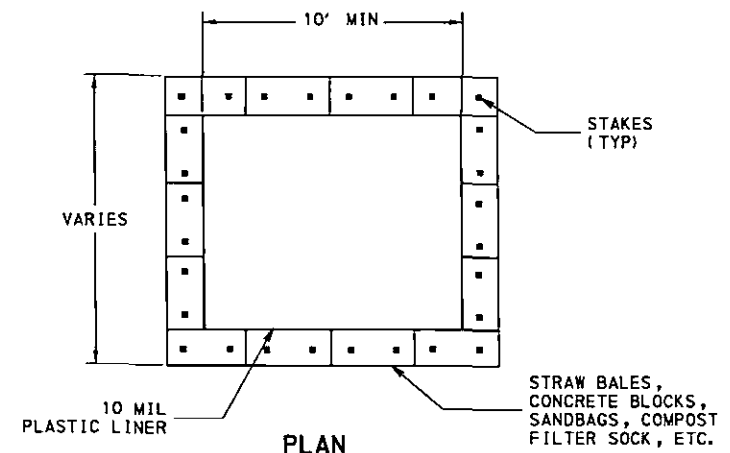
GRADE AND MAINTAIN AS REQUIRED TO DIRECT SEDIMENT LADEN WATER TO BMP. WATERBARS ARE TO BE CONSIDERED INCIDENTAL TO THE EARTHWORK OPERATIONS.

LOCATE WATERBARS ON EXISTING GROUND AND GRADE TO PROVIDED POSITIVE DRAINAGE TO A BMP. WATERBARS WILL BE REMOVED AND REINSTALLED THROUGHOUT THE DURATION OF THE PROJECT AS THE CUT/FILL OPERATIONS PROGRESS. THE WATERBARS MAY BE REMOVED WITH THE CUT/FILL OPERATIONS, HOWEVER, THE WATERBARS ARE REQUIRED TO BE REINSTALLED AT THE END OF EACH WORKDAY AND PRIOR TO EACH PRECIPITATION EVENT.

WATERBAR
NOT TO SCALE

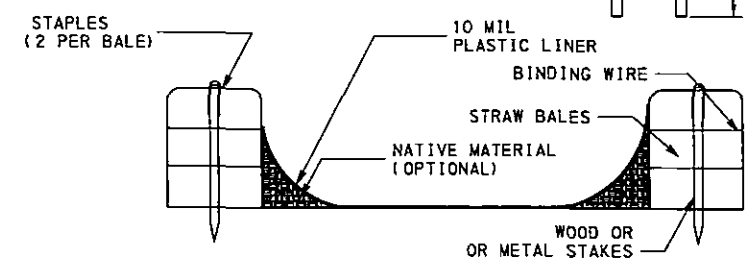


PHASE 2 SHOULDER SWALE DETAIL
NOT TO SCALE



PLAN
NTS

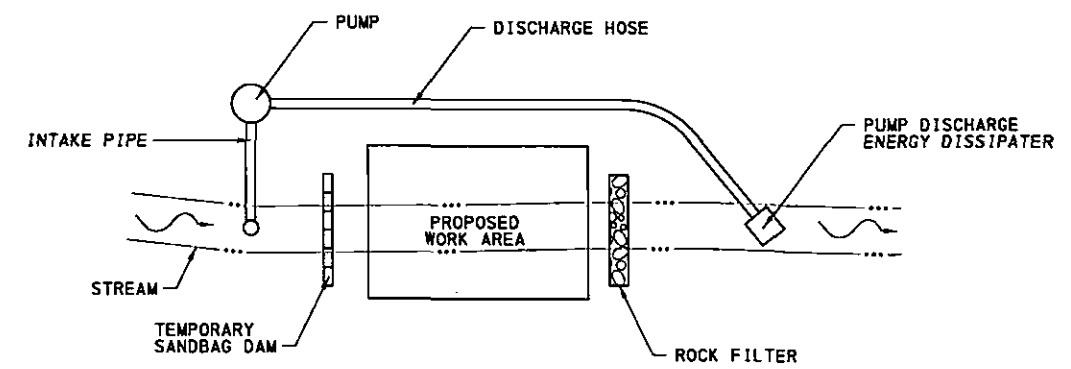
- NOTES:**
1. ACTUAL LAYOUT DETERMINED IN FIELD
 2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY



SECTION
NTS

CONCRETE WASHOUT (ITEM NO. 9000-0300)

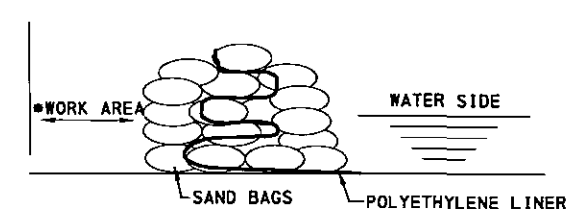
- NOTES:**
1. ACTUAL LAYOUT DETERMINED IN FIELD.
 2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
 3. INSTALL CONCRETE WASHOUT ON FLAT GRADE FOR OPTIMUM PERFORMANCE.



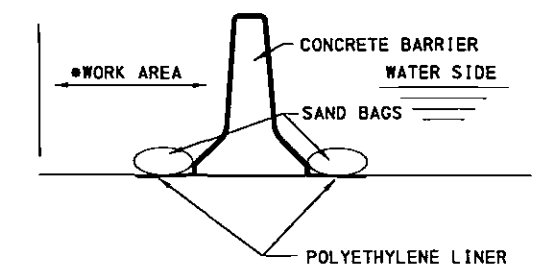
ITEM 9000-0302 TEMPORARY PUMP BYPASS STREAM DIVERSION
NOT TO SCALE

*WORK AREA IS TO BE KEPT WATERTIGHT AND ANY WATER THAT IS FOUND IN WORK AREA MUST BE PUMPED THROUGH A FILTER BAG AND PROPERLY FILTERED PRIOR TO DISCHARGE

BASELINE	LOCATION
SR 0070, WB	STREAM 7 STREAM MITIGATION, PLANTINGS AND PIPE REPLACEMENT
SR 0070, WB	STREAM 9 STREAM MITIGATION AND PLANTINGS
SR 0070, WB	STREAM 4 BRIDGE REMOVAL AND PLANTINGS



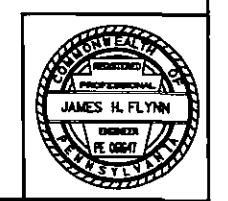
SAND BAG ALTERNATE
N. T. S.



CONCRETE BARRIER ALTERNATE
N. T. S.

ITEM NO. 9000-0301 WATER DIVERSION DEVICE
NOT TO SCALE

EROSION AND SEDIMENTATION CONTROL DETAILS



FILE: \\s1\proj\sc\projects\1-20\0301.dwg, PRJ: MRN, CAD: VES\110110-0301.dwg, DATE: 1/26/2010, TIME: 12:08:02 PM

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
12-0	WASHINGTON	0070	T10	47 OF 87	
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON					
REVISION NUMBER	REVISIONS			DATE	BY

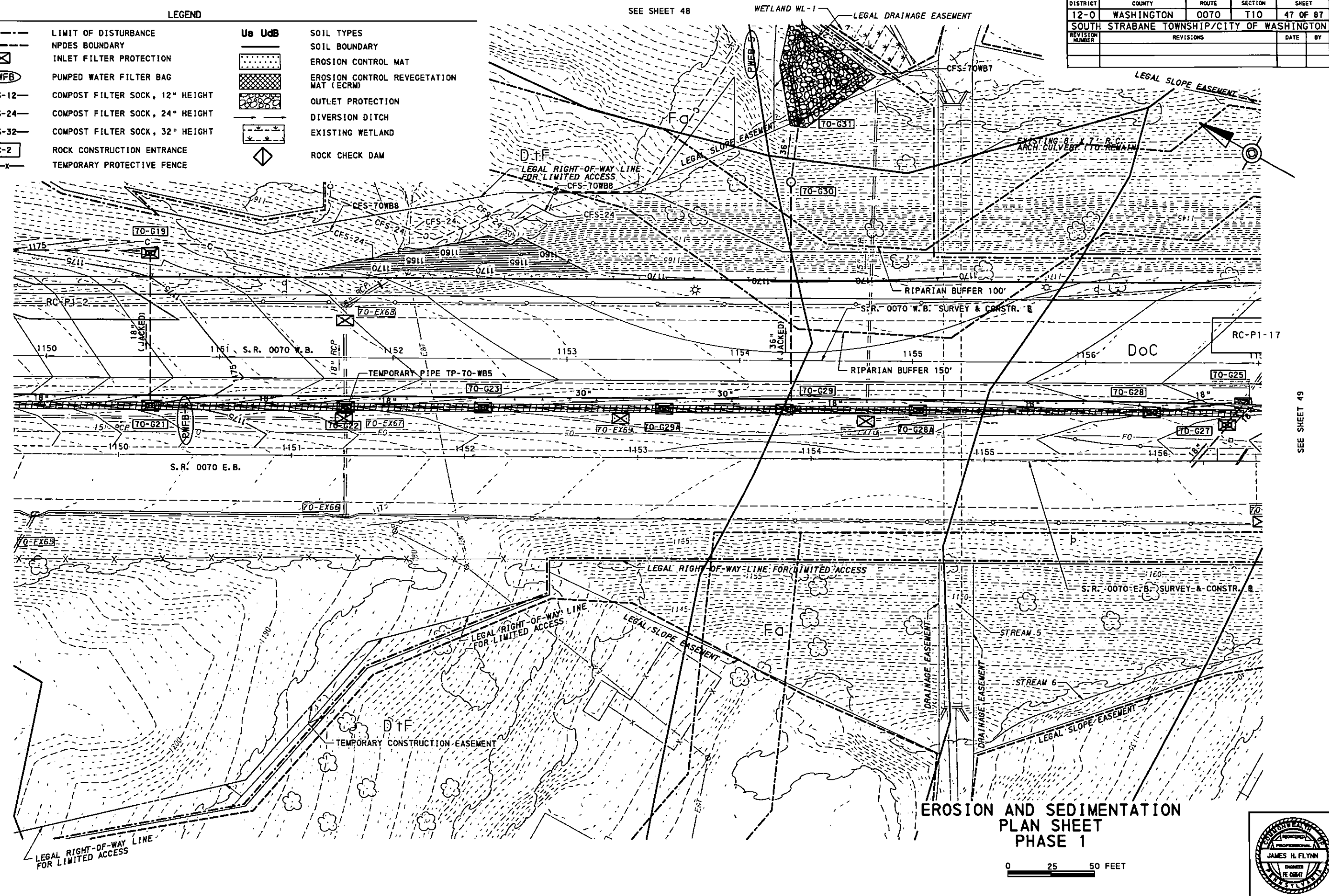
LEGEND

- | | | | |
|--|---------------------------------|--|---|
| | LIMIT OF DISTURBANCE | | SOIL TYPES |
| | NPDES BOUNDARY | | SOIL BOUNDARY |
| | INLET FILTER PROTECTION | | EROSION CONTROL MAT |
| | PUMPED WATER FILTER BAG | | EROSION CONTROL REVEGETATION MAT (ECRM) |
| | COMPOST FILTER SOCK, 12" HEIGHT | | OUTLET PROTECTION |
| | COMPOST FILTER SOCK, 24" HEIGHT | | DIVERSION DITCH |
| | COMPOST FILTER SOCK, 32" HEIGHT | | EXISTING WETLAND |
| | ROCK CONSTRUCTION ENTRANCE | | ROCK CHECK DAM |
| | TEMPORARY PROTECTIVE FENCE | | |

SEE SHEET 48

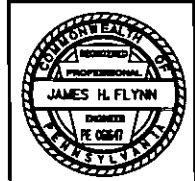
SEE SHEETS 45

SEE SHEET 49



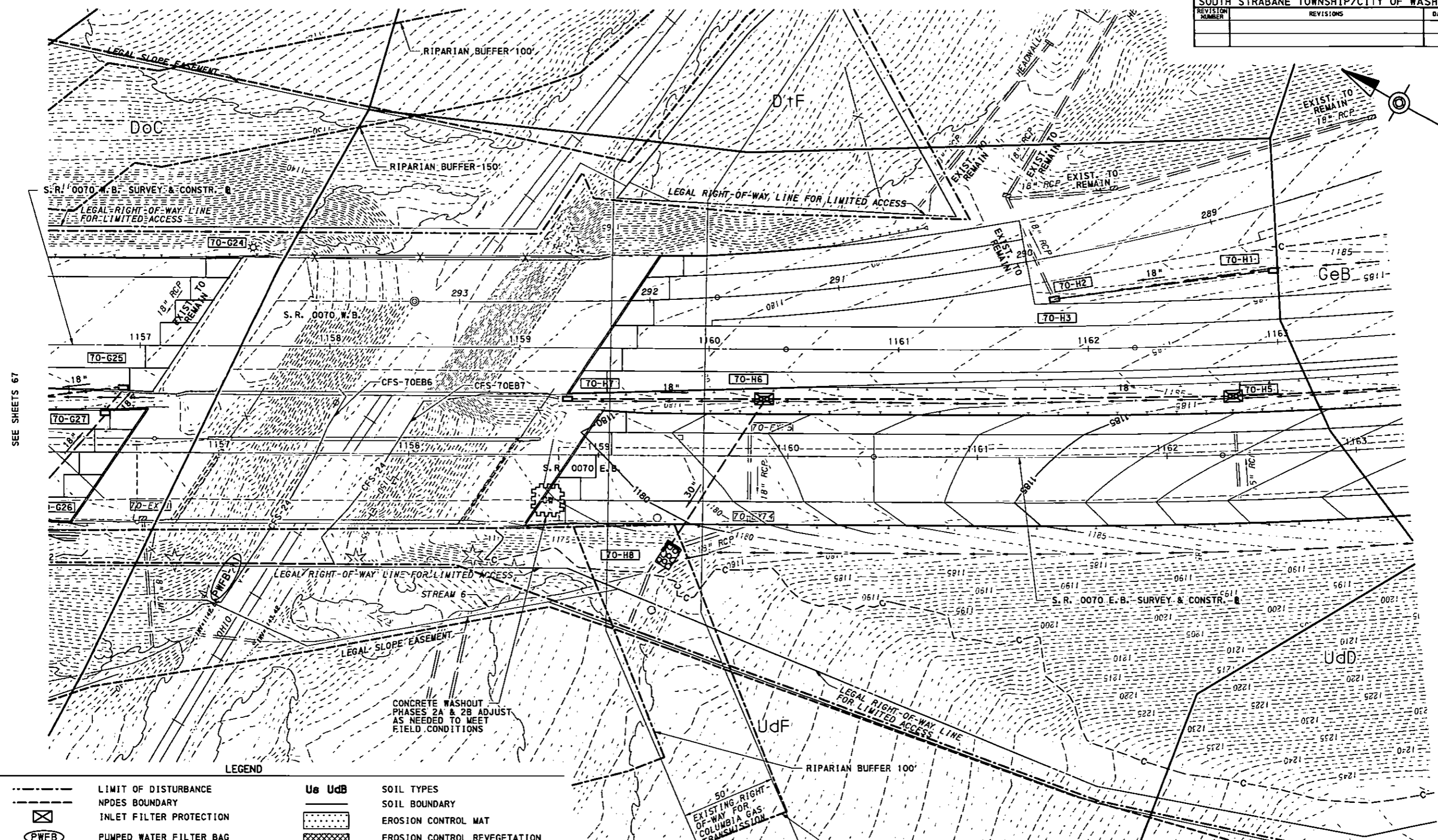
**EROSION AND SEDIMENTATION
PLAN SHEET
PHASE 1**

0 25 50 FEET



FILE: \\05101\CAD\00865_1-10\0505.vc PRJ: 0070 W.B. SURVEY & CONSTR. B. CAD: 12/08/2010 12:08:30 PM DATE: 12/25/2010

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
12-0	WASHINGTON	0070	T10	68 OF 87
SOUTH STRABANE TOWNSHIP/CITY OF WASHINGTON				
REVISION NUMBER	REVISIONS			DATE BY



LEGEND

	LIMIT OF DISTURBANCE		SOIL TYPES
	NPDES BOUNDARY		SOIL BOUNDARY
	INLET FILTER PROTECTION		EROSION CONTROL MAT
	PUMPED WATER FILTER BAG		EROSION CONTROL REVEGETATION MAT (ECRM)
	COMPOST FILTER SOCK, 12" HEIGHT		OUTLET PROTECTION
	COMPOST FILTER SOCK, 24" HEIGHT		DIVERSION DITCH
	COMPOST FILTER SOCK, 32" HEIGHT		EXISTING WETLAND
	ROCK CONSTRUCTION ENTRANCE		EXISTING WETLAND
	TEMPORARY PROTECTIVE FENCE		ROCK CHECK DAM

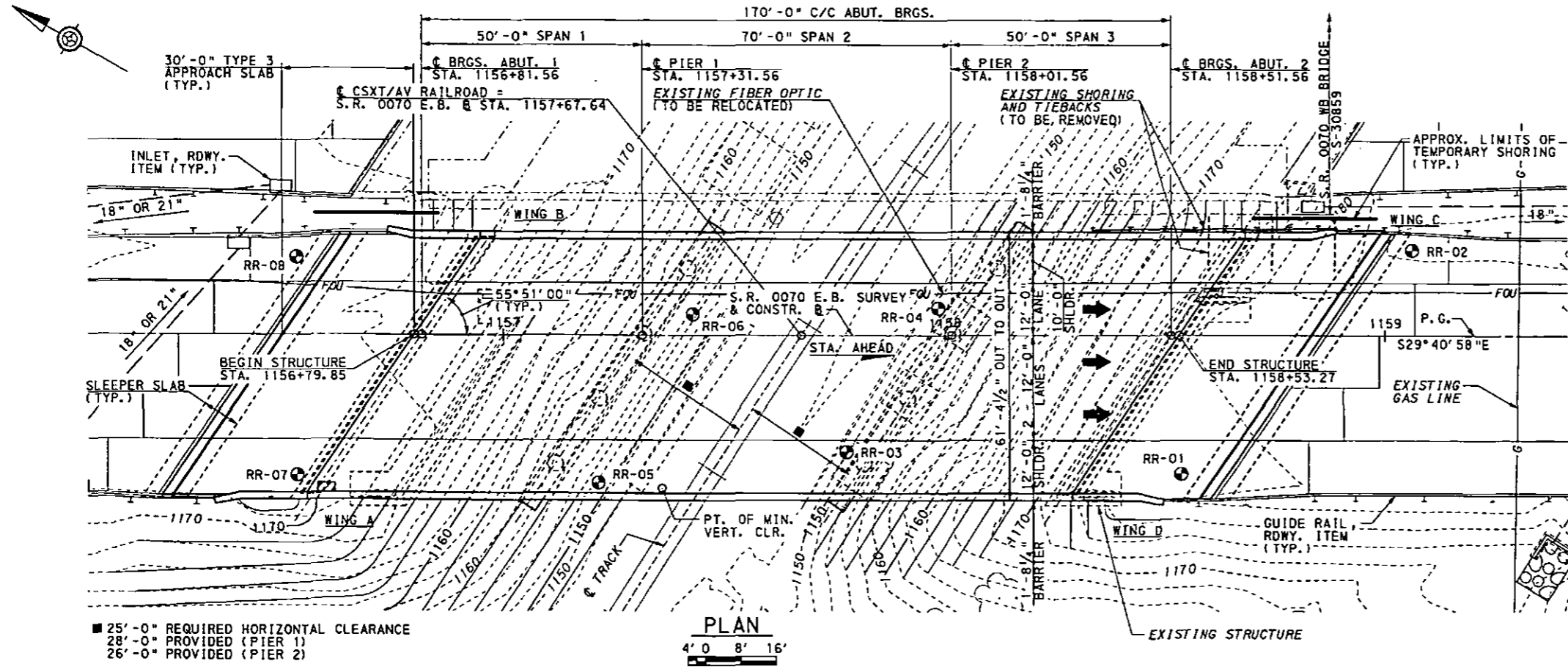
**EROSION AND SEDIMENTATION
PLAN SHEET
PHASE 2**



FILE: \\P0101\CAD\008863_1-70\005.vg PROJ: W.R.K.G. CAD\DESIGN\1010-0A-Fig. 62.dwg DATE: 1/25/2016 11:01:12 AM

SEE SHEETS 67

SEE SHEET 69



SUPPLEMENTAL DRAWINGS		
DESCRIPTION	DWG. NO.	APP. DATE
PROTECTIVE FENCE	BC-701M	11/21/14
PERMANENT METAL DECK FORMS	BC-732M	10/26/10
ANCHOR SYSTEMS	BC-734M	10/26/10
WALL CONSTR. & EXP. JOINT DETAILS	BC-735M	10/26/10
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	5/18/12
BRIDGE BARRIER TO GUIDE RAIL TRANSITION	BC-739M	5/18/12
BRIDGE DRAINAGE	BC-751M	11/21/14
CONCRETE DECK SLAB DETAILS	BC-752M	11/21/14
BEARINGS	BC-755M	11/26/13
STEEL PILE TIP REINFORCEMENTS & SPLICES	BC-757M	11/26/13
PREFORMED NEOPRENE COMPRESSION SEAL JOINT FOR PRESTRESSED APPROACH SLABS	BC-766M	10/26/10
NEOPRENE STRIP SEAL DAM FOR PRESTRESSED CONCRETE & STEEL I-BEAM BRIDGES	BC-767M	11/26/13
PRESTRESSED CONCRETE BEAM BRACING	BC-772M	10/26/10
MISCELLANEOUS PRESTRESS DETAILS	BC-775M	11/26/13
RANDOM STONE SLOPE WALL	BC-781M	5/18/12
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	11/21/14
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	6/1/10
BACKFILL AT STRUCTURES	RC-12M	6/1/10
GUIDE RAIL TO BRIDGE BARRIER TRANSITIONS	RC-50M	6/1/10

STRUCTURE BORINGS		
BORING	STATION	OFFSET
RR-01	1158+53.70	31.60' RT
RR-02	1159+06.20	19.50' LT
RR-03	1157+77.70	26.70' RT
RR-04	1157+98.60	6.20' LT
RR-05	1157+21.40	33.70' RT
RR-06	1157+43.00	4.80' LT
RR-07	1156+53.20	32.00' RT
RR-08	1156+53.10	17.80' LT

LEGEND:

- STRUCTURE BORING
- ➔ DIRECTION OF TRAFFIC
- 1170--- EXISTING CONTOUR
- 1170— PROPOSED CONTOUR
- BFE BOTTOM OF FOOTING ELEVATION
- EPT E ESTIMATED PILE TIP ELEVATION

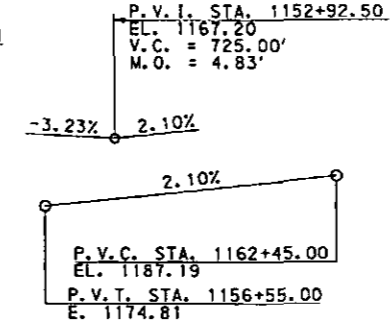
NOTES:

FOR TYPICAL SECTION, LOAD RATINGS, AND INDEX OF DRAWINGS, SEE SHEET 2.

REMOVAL OF PORTION OF EXISTING SHORING AND TIE BACKS IS INCIDENTAL TO EXISTING BRIDGE REMOVAL.

HORIZONTAL CURVE DATA
TANGENT ALIGNMENT

VERTICAL CURVE DATA



Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

S.R. 0070 PREVIOUSLY KNOWN AS L.R. 798

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

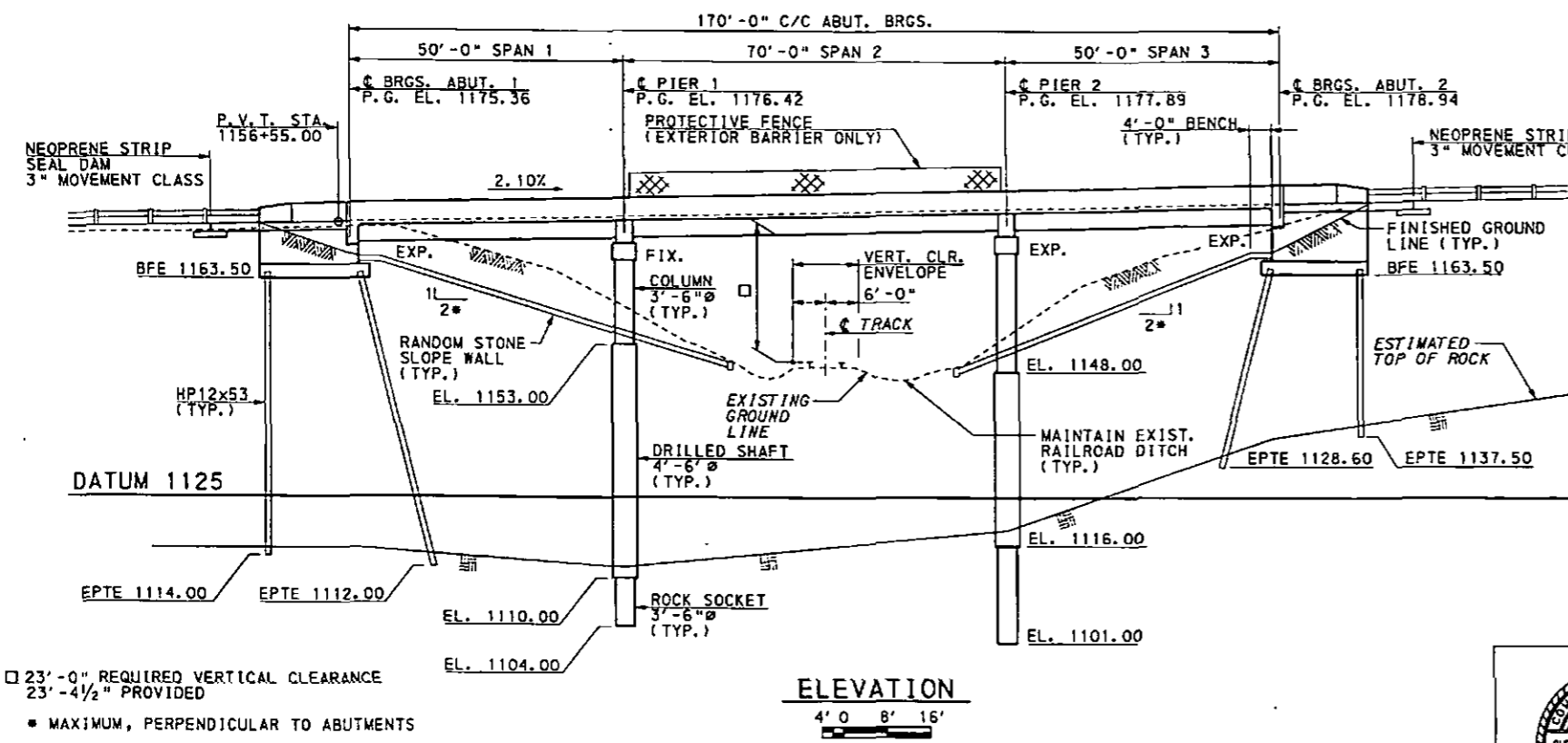
WASHINGTON COUNTY
S.R. 0070 SECTION T10
SEGMENT 0200 OFFSET 2030
S.R. 0070 E.B. STA. 1157+66.56
OVER CSXT/ALLEGHENY VALLEY RAILROAD
3-SPAN P/S CONC. PA BULB-TEE BEAM BRIDGE
GENERAL PLAN & ELEVATION

RECOMMENDED FEBRUARY 2, 2016
[Signature]
DISTRICT BRIDGE ENGINEER

SHEET 1 OF 57
+SUPPLEMENTAL DRAWINGS
S-35884

PREPARED BY:
GANNETT FLEMING, INC.
FOSTER PLAZA 8, SUITE 400
730 HOLIDAY DRIVE
PITTSBURGH, PA 15220

[Signature] 2-1-16



\\p0101\cadd\048663 1-70\W056 PRJ WRK\cadd\struct\br\ldge\sh\101.gpe.dgn
 2/1/2016 11:19:20 PM

GENERAL NOTES:

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

PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M 270/M 270M GRADE 50 (ASTM A709/A 709M GRADE 50) DESIGNATION, EXCEPT WHEN NOTED OTHERWISE.

ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.

SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68°F.

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

ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

STATIONS AND ELEVATIONS ARE GIVEN IN FEET UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF ALL EXCAVATED SLOPES. DIRECT SURFACE RUNOFF AWAY FROM THE EXCAVATION. PERFORM ALL EXCAVATIONS IN ACCORDANCE WITH OSHA REQUIREMENTS.

DESIGN SPECIFICATIONS:

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

LIVE LOAD DISTRIBUTION TO GIRDERS IS BASED UPON DM-4 DISTRIBUTION FACTOR METHOD. DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.

SEISMIC FORCES WERE CONSIDERED WITH A SEISMIC COEFFICIENT OF 0.05.

DESIGN LIVE LOADS:

PHL-93 OR P-82 (204 KIP PERMIT LOAD).

FATIGUE DESIGN IS BASED ON THE FOLLOWING:
 PRESTRESSED CONCRETE: ADTT 3,644 (2038) (ONE-DIRECTIONAL)
 MAXIMUM ALLOWABLE TENSILE STRESS IN PRECOMPRESSED TENSILE ZONE: 0.0948 * SQUARE ROOT (f'c)

DEAD LOADS:

INCLUDES A SURFACE AREA DENSITY OF 0.030 KSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB.

INCLUDES A SURFACE AREA DENSITY OF 0.015 KSF FOR PERMANENT METAL DECK FORMS WHICH TAKES INTO ACCOUNT THE WEIGHT OF THE FORM, PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS.

CONCRETE:

USE CLASS AAAP CEMENT CONCRETE IN DECK SLAB AND APPROACH SLABS.

USE CLASS AA CEMENT CONCRETE IN CURBS, BARRIERS, DIAPHRAGMS, ABUTMENT BACKWALLS, CHECK WALLS, SHEAR BLOCKS, AND SLEEPER SLABS.

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

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

PROVIDE TYPE II SULFATE RESISTANT CEMENT FOR ALL CLASS A CEMENT CONCRETE.

PROVIDE AIR ENTRAINMENT AND LIMIT THE WATER TO CEMENT RATIO TO 0.45 (BY WEIGHT) FOR ALL CONCRETE.

CONCRETE ADDITIVES THAT CONTAIN CHLORIDES ARE NOT PERMITTED.

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

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

ALL REINFORCING BARS ARE TO BE EPOXY-COATED.

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.

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

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

ABUTMENT BACKWALLS MAY BE PLACED UP TO A CONSTRUCTION JOINT BELOW THE LEVEL OF THE BOTTOM OF DECK SLAB PRIOR TO CONSTRUCTION OF THE DECK.

PLACE CHEEKWALLS, CONCRETE SHEAR BLOCKS, AND BACKWALL CONCRETE AFTER BEAMS ARE SET IN POSITION.

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

USE EITHER PERMANENT METAL FORMS OR REMOVABLE FORMS TO CONSTRUCT THE DECK SLAB. DECK SLAB THICKNESS INCLUDES A 1/2" INTEGRAL WEARING SURFACE.

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

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

DO NOT START TO CAST THE CONTINUITY DIAPHRAGM PRIOR TO NINETY (90) DAYS FROM THE TIME OF BEAM CASTING.

APPLY MEMBRANE WATERPROOFING OVER ALL CONSTRUCTION JOINTS IN ABUTMENTS AND WINGWALL STEMS. MEMBRANE WATERPROOFING IS INCIDENTAL TO CLASS A CEMENT CONCRETE.

APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALER) IN ACCORDANCE WITH THE SPECIAL PROVISIONS TO THE EXPOSED CONCRETE ROADWAY SURFACES OF THE DECK, APPROACH SLABS, BARRIERS ON DECK AND APPROACH SLABS.

UTILITIES:

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

FOUNDATIONS:

THE FOOTING EXCAVATIONS ARE TO BE INSPECTED AND APPROVED BY THE DISTRICT GEOTECHNICAL ENGINEER.

CONSTRUCT STRUCTURE BACKFILL USING PADOT STANDARDS FOR ROADWAY CONSTRUCTION RC-12M: BACKFILL AT STRUCTURES.

BLASTING IS NOT PERMITTED TO EXCAVATE ROCK FOR THE FOOTING.

COMPLETELY REMOVE THE EXISTING FOUNDATIONS WHEREVER THEY INTERFERE WITH THE NEW SUBSTRUCTURE. BACKFILL OVEREXCAVATED AREAS BELOW THE BOTTOM OF THE PROPOSED FOOTINGS WITH CLASS C CEMENT CONCRETE.

DESIGN AND CONSTRUCT TEMPORARY SHORING IN ACCORDANCE WITH SPECIAL PROVISION FOR ITEM 9203-2101, "TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM".

PILES:

USE HP 12X53 STEEL BEAM BEARING H-PILES CONFORMING TO AASHTO M270 (ASTM A709), GRADE 50. PROVIDE HEAVY DUTY PILE TIP REINFORCEMENTS IN ACCORDANCE WITH BC-757M.

FURNISH AND DRIVE PILES IN ACCORDANCE WITH PUBLICATION 408/2011, SECTION 1005, AND THE SPECIAL PROVISIONS. PILES WILL BE DRIVEN TO CASE 2 ABSOLUTE REFUSAL AS DEFINED IN PUBLICATION 408, SECTION 1005.3(B) 4 DRIVING METHOD A, AS PER DM-4, ARTICLE PP1.7.5 (WAVE EQUATION).

SUBMIT PILE HAMMER INFORMATION TO THE DISTRICT GEOTECHNICAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO STARTING THE PILE DRIVING OPERATION.

OBTAIN WRITTEN PERMISSION FROM THE DISTRICT GEOTECHNICAL ENGINEER OR STRUCTURAL CONTROL ENGINEER PRIOR TO CUTTING OR SPLICING PILES. PROVIDE SUFFICIENT LENGTH FOR EACH PILE TO BE IN ONE PIECE WITHOUT SPICES CONSIDER THAT THE PILES MAY SET IN BEDROCK SEVERAL FEET FURTHER THAN THE ESTIMATED TIP ELEVATIONS DUE TO RESTRIKE.

DO NOT CUT PILE WEB, FLANGES OR FOOTING REINFORCEMENT BARS TO ACCOMMODATE REINFORCEMENT BAR REPLACEMENT, UNLESS DIRECTED BY THE REPRESENTATIVE.

PRE-DRILL PILES IF OBSTRUCTIONS ARE ENCOUNTERED IN ACCORDANCE WITH SPECIAL PROVISION PRE-DRILLING FOR UNFORESEEN OBSTRUCTIONS.

DRIVE TWO (2) TEST PILE TO ABSOLUTE REFUSAL AT EACH ABUTMENT (4 TOTAL) PRIOR TO DRIVING OF REPRESENTATIVE BEARING PILES, UNLESS OTHERWISE DIRECTED BY THE REPRESENTATIVE. THE DISTRICT GEOTECHNICAL ENGINEER SHALL VERIFY, FROM THE TEST PILE DRIVING RESULTS, THE CAPABILITY OF THE PILE HAMMER SELECTED BY THE CONTRACTOR. DRIVE BEARING PILES TO A TIP ELEVATION AND A DRIVING RESISTANCE PREDETERMINED BY THE REPRESENTATIVE FROM A WAVE EQUATION ANALYSIS OF THE TEST PILES. THE REPRESENTATIVE SHALL DETERMINE THE ACCEPTABILITY OF THE BEARING PILES WHICH ATTAIN ABSOLUTE REFUSAL ABOVE THE PREDETERMINED TIP ELEVATION. CONTROL PILE DRIVING IN ACCORDANCE WITH METHOD A AS SPECIFIED IN DM-4, ARTICLE PP1.7.5.

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.

RE-DRIVE TEST PILES TO ABSOLUTE REFUSAL AT LEAST 72 HOURS AFTER INITIAL DRIVING TO EVALUATE PILE RELAXATION. RE-DRIVE TEST PILE TO ABSOLUTE REFUSAL. 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 INDICATE PILE TIP RESISTANCE IS STILL GREATER THAN DESIGN LOADS, NO RE-DRIVING OF BEARING PILES WILL BE REQUIRED. IF ANALYSIS OF THE FIRST RE-STRIKE SHOWS UNACCEPTABLE LOSS OF RESISTANCE, REDRIVING TERMINATION CRITERIA WILL BE DETERMINED FROM THE SUPPLEMENTAL DYNAMIC PILE TESTING REPORTS. IF DIRECTED, PERFORM RE-DRIVING OF BEARING PILES TO TERMINATION CRITERIA PROVIDED.

ALL PILES TO BE EQUIPPED WITH HEAVY DUTY TIP REINFORCEMENT IN ACCORDANCE WITH PADOT BC-757M AND PUBLICATION 408/2011, SECTION 1005.2(C).

DRIVE EACH PILE WITH THE BUTT WITHIN 2" OF THE LOCATION INDICATED AND THE AXIS WITHIN 15 DEGREES OF VERTICAL.

BEARING PILES SUPPORTING WING B HAVE BEEN DESIGNED TO MAXIMIZE CLEARANCE FROM THE EXISTING BATTERED PILES DRIVEN TO SUPPORT THE ADJACENT WESTBOUND BRIDGE ABUTMENT NO.1 AS PER THE AVAILABLE EXISTING FOUNDATION INFORMATION. IF A BEARING PILE SUPPORTING WING B CANNOT BE ADVANCED TO THE PREDETERMINED PILE TIP ELEVATION DUE TO AN APPARENT OBSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY. THE PILE SHALL BE EXTRACTED AND REDRIVEN THROUGH A PREDRILLED HOLE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS FOR UNFORESEEN OBSTRUCTIONS. THE ENGINEER MAY MODIFY THE PILE LOCATION AND/OR BATTER PRIOR TO PREDRILLING AND REDRIVING.

CAISSONS:

INSPECT THE BOTTOM OF ALL PRODUCTION SHAFTS USING A MINATURE DRILLED SHAFT INSPECTION DEVICE IN ACCORDANCE WITH THE SPECIAL PROVISIONS. PROVIDE FOR BOTTOM CLEANLINESS INSPECTION IN ACCORDANCE WITH SECTION 1006.31(e) BY THE DEPARTMENT'S REPRESENTATIVE, BY MEANS OF AN UNDERWATER VIDEO CAMERA (MINI-SID) INCLUDING RECORDING VIDEO FOR LATER REVIEW.

PROVIDE FOUR (4) CROSSHOLE SONIC LOGGING TUBES PER DRILLED CAISSON FOR NONDESTRUCTIVE TESTING AND PERFORM THE TESTING, IN ACCORDANCE WITH THE SPECIAL PROVISIONS. VERIFICATION OF THE INTEGRITY OF THE DRILLED CAISSONS IS REQUIRED BY MEANS OF CROSSHOLE SONIC LOGGING.

TEST HOLES, IN ACCORDANCE WITH THE SPECIAL PROVISION, ARE REQUIRED AT EACH DRILLED CAISSON. THE REPRESENTATIVE MUST APPROVE THE LOGS PRIOR TO COMMENCEMENT OF THE DRILLED CAISSON CONSTRUCTION.

UTILIZE TEMPORARY CASING, AS NECESSARY, TO MAINTAIN AN OPEN HOLE FOR CAISSON SHAFT CONSTRUCTION. TEMPORARY CASING NEED NOT BE LEFT IN PLACE. TEMPORARY CASING IS INCIDENTAL TO THE 54" DIAMETER DRILLED CAISSON, SHAFT SECTION.

EXISTING STRUCTURE:

DO NOT CONSIDER ANY OF THE DATA FOR THE EXISTING STRUCTURE SUPPLIED IN THE ORIGINAL DESIGN DRAWINGS, REHABILITATION 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 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 TO ASSUME THE POSSIBILITY THAT CONDITIONS AFFECTING THE COST AND/OR QUANTITIES OF WORK TO BE PERFORMED MAY DIFFER FROM THOSE INDICATED.

THE FOLLOWING EXISTING DRAWINGS ARE INCLUDED FOR REFERENCE ONLY:

- S-3657 ORIGINAL DESIGN DRAWINGS, APRIL 28, 1959
- S-16310 REHABILITATION DRAWINGS, JANUARY 21, 1986
- S-28243 REHABILITATION DRAWINGS, JUNE 24, 2008
- S-31473 REHABILITATION DRAWINGS, JUNE 27, 2011

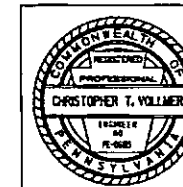
PILE INSTALLATION INFORMATION NOTES:

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 (KIP)	ULTIMATE PILE CAPACITY AT END OF DRIVING (KIP)	WEAP OR PDA
ABUT. 1, PILE 1	HP12X53			173		
ABUT. 1, PILE 2	HP12X53			173		
ABUT. 2, PILE 1	HP12X53			144		
ABUT. 2, PILE 2	HP12X53			144		

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

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
WASHINGTON COUNTY
S.R. 0070 SECTION T10
 SEGMENT 0200 OFFSET 2030
 S.R. 0070 E.B. STA. 1157+67.56
 OVER CSXT/ALLEGHENY VALLEY RAILROAD
3-SPAN P/S CONC. PA BULB-TEE BEAM BRIDGE
GENERAL NOTES



RECOMMENDED 2-2-16 SHEET 4 OF 57

S-35884

\\gfp101a\CADD\048863_1-70\WOS\6_PRR_WRK\g. CADD\SRUC1\Bridges\SH104_GENERAL NOTES.dgn 2/1/2016 11:19:24 PM



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

Engineering District 12-0
P.O. Box 459
825 North Gallatin Avenue Ext.
Uniontown, PA 15401-6406

DISTRICT 12

PO BOX 459

UNIONTOWN PA 15401

neopost[®]
02/05/2016

US POSTAGE

FIRST-CLASS MAIL

\$03.62⁰



ZIP 15401
041L11237848

FIRST CLASS MAIL

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