THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).

GEOPAK Computer Identification No. 104294

FOR MAINTENANCE MAP SEE SHEET 1A

FOR INDEX OF SHEETS SEE SHEET 1B

FHWA 534 DATA 44028

COMMONWEALTH OF VIRGINIA

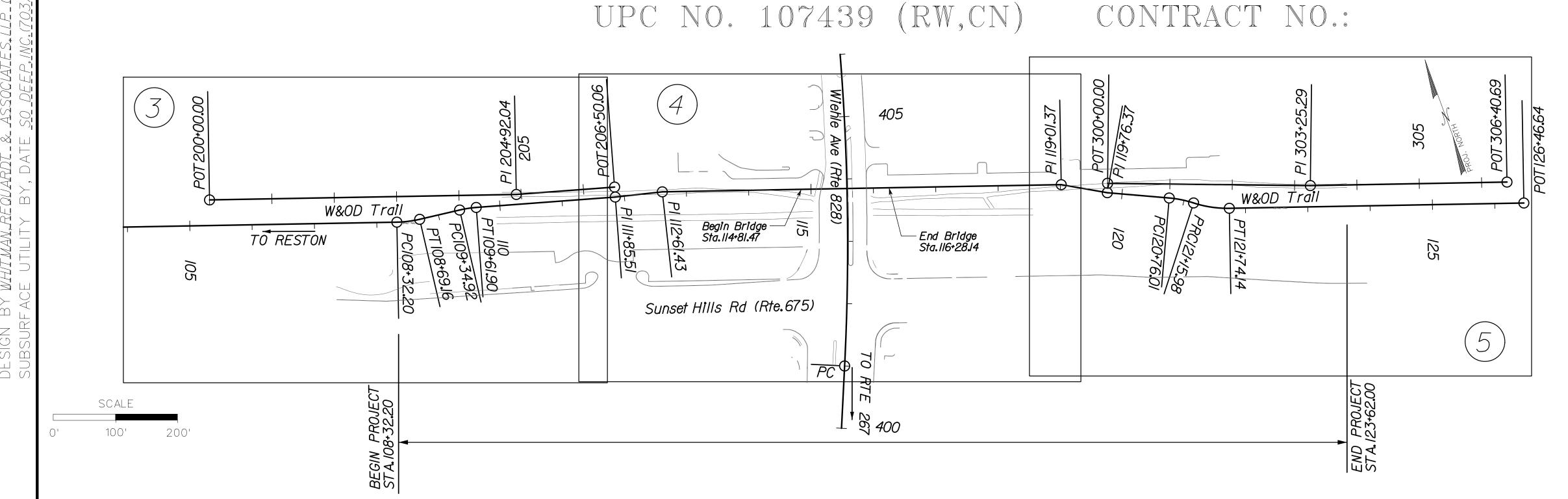


FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS
AND ENVIRONMENTAL SERVICES
PROJECT NO.: 1400102-2013

UPC NO. 140294 (PE)

FUND: 500-C5000 CONTRACT NO:

> DESCRIPTION REFERENCE: CENTERLINE OF WIEHLE AVE (RTE 828) STA. 115+57.68



DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S:

- * ROAD AND BRIDGE SPECIFICATIONS, DATED 2016 * ROAD AND BRIDGE STANDARDS, DATED JULY, 2016
- * VIRGINIA WORK AREA PROTECTION MANUAL, DATED 2011 AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY
- * MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), DATED, 2009
- * VIRGINIA SUPPLEMENT TO THE 2009 MUTCD, DATED 2011 ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD TC-5.11(ULS) EXCEPT WHERE OTHERWISE NOTED.

CENSUS DATA: 2016(YEAR) 1.131.886

	<u>CENSUS DATA: 2016 (YEAR) 1,131,886</u>										
	STATE PROJECT	SECTION	SECTION FEDERAL AID		TYPE UPC CODE NO.	LENGTH INCLUDING BRIDGE(S)		GLENGTH EXCLUDING BRIDGE(S)		TYPE PROJECT	PROJECT DESCRIPTION
NO.	NO.		PROJECT NO.	CODE	110.	FEET	MILES	FEET	MILES		
יקדי	CN)	P101	RSTP-5A01(500)	PENG	104294	1530.80	0.290	1384.13	0.262	PREL. ENGR.	FROM: 0.101 MI E. OF
Έ	(PE)										ISAAC NEWTON SQ
	() 8	R201		ROWA	107439	1530.80	0.290	1384.13	0.262	RIGHT OF WAY	TO: 0.035 MI W. OF
,	-09 -24										MICHAEL FARADAY CT
)29.	C501		CENG	107439	1530.80	0.290	1384.13	0.262	CONSTRUCTION	
)-6(
	280										

WIEHLE AVENUE AT W&OD TRAIL

	federal aid		SHEET	
STATE	PROJECT	ROUTE	PROJECT	NO.
VA.	RSTP-5AOI()	828	9999-029-098 (PE) 0828-029-248 (RW,CN)	/
	SEE TABULATION BELOW FOR SECTION NUMBERS		SEE TABULATION BELOW FOR SECTION NUMBERS	
	STATE VA.	PROJECT RSTP-5AOI() SEE TABULATION BELOW	PROJECT ROUTE VA. RSTP-5AOI() SEE TABULATION BELOW	PROJECT ROUTE PROJECT A. RSTP-5AOI() SEE TABULATION BELOW ROUTE PROJECT SEE TABULATION BELOW SEE TABULATION BELOW

	FUNCTIONAL CLASSIFICATION
	WIEHLE AVE (RTE 828)
STREET CLASS	URBAN MINOR ARTERIAL (GS-6)
AADT (2017)	26000
DHV	2,340
D (%)	66
T (%)	3
DESIGN V (mph)	40
POSTED V (mph	35

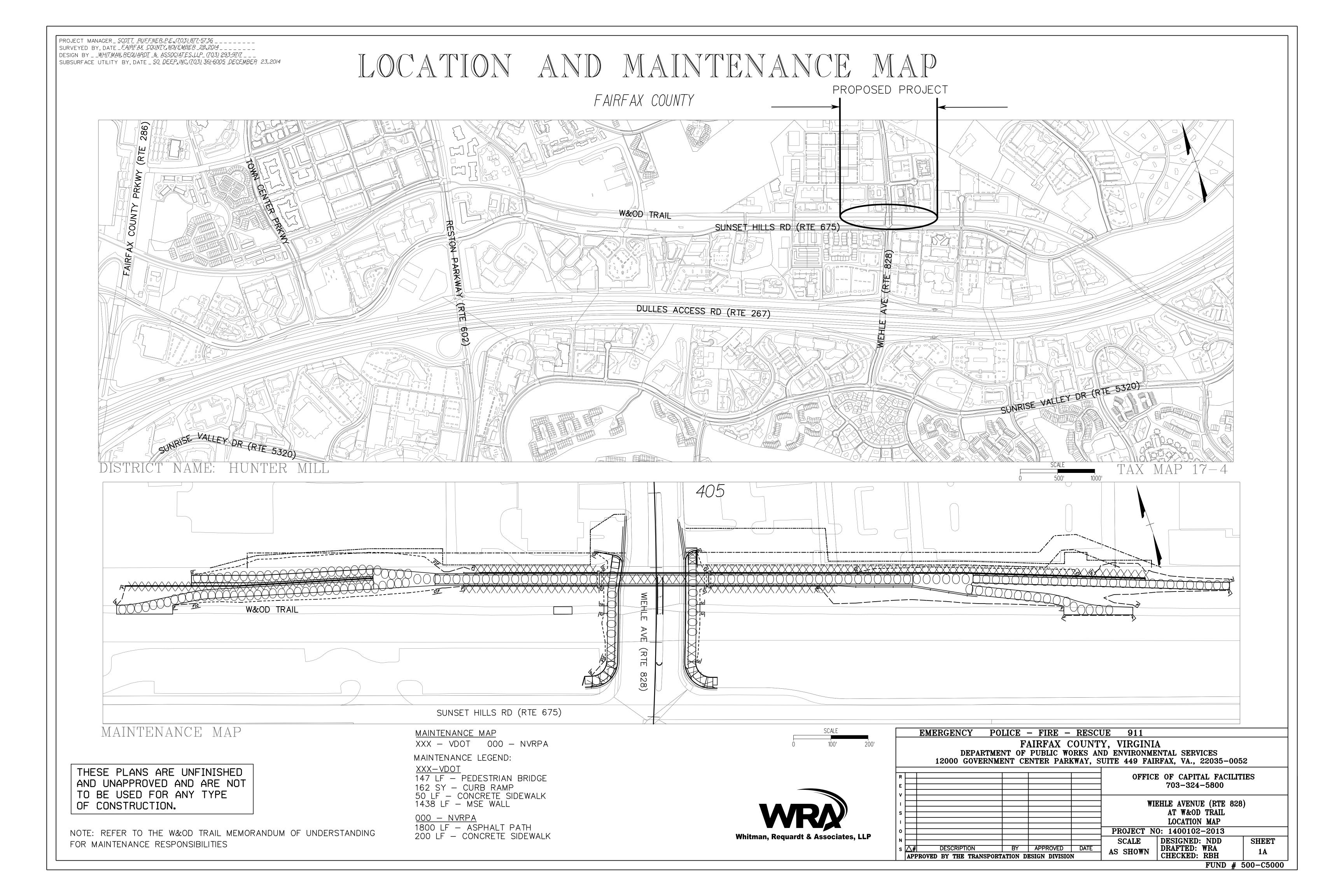
PREFINAL PLANS MAY 2018

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.



	RECOMMENDED FOR APPROVAL
	FOR RIGHT OF WAY ACQUISITION
DATE:	DISTRICT PLANNING AND INVESTMENT MANAGER
DATE:	DISTRICT PROJECT DEVELOPMENT ENGINEER
A	PPROVED FOR RIGHT OF WAY ACQUISITION
DATE:	DISTRICT ADMINISTRATOR
	RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
DATE:	DISTRICT PLANNING AND INVESTMENT MANAGER
D. A. M.D.	
DATE:	APPROVED FOR CONSTRUCTION
DATE:	DISTRICT ADMINISTRATOR
FINA	L PLANS AUTHORIZED FOR ROW ACQUISITION
DATE:	CHIEF, TRANSPORTATION DESIGN DIVISION, DOT
FIN	VAL PLANS AUTHORIZED FOR CONSTRUCTION PER DPWES/DOT DELEGATION MATRIX
DATE:	CHIEF, STORM WATER & TRANSPORTATION CONSTRUCTION BRANCH
DATE:	CHIEF, TRANSPORTATION DESIGN DIVISION

Copyright 2018 , Commonwealth of Virginia



PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u>

SURVEYED BY, DATE <u>FAIRFAX COUNTY, NOVEMBER 28, 2014</u>

DESIGN BY <u>WHITMAN, REQUARDT</u> <u>ASSOCIATES, LLP</u> (703) 293-9717 ___

SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 DECEMBER</u> 23, 2014

INDEX OF SHEETS

	SHEET NO.	DESCRIPTION	STATIONS	
	1	TITLE SHEET		
	IA	LOCATION AND MAINTENANCE MAP		
	IB	INDEX OF SHEETS		
	IC	RIGHT OF WAY DATA SHEET		
	ID	NOT USED		
	IE	SURVEY ALIGNMENT DATA SHEET		
	IF(I)-IF(2)	CONSTRUCTION ALIGNMENT DATA SHEETS		
	IG	UNDERGROUND UTILITY TEST HOLE INFORMATION		
	IH(I)-IH(IO)	SEQUENCE OF CONSTRUCTION / TRANSPORTATION MANAGEM	ENT PLAN	
×	2	GENERAL NOTES		
*	2A	GENERAL NOTES - UTILITIES		
	2B-2C	TYPICAL SECTIONS		
	2D(I)-2D(2)	CURB RAMP DETAIL SHEETS		
	2E	INSERTABLE SHEETS		
	2F	PROJECT DATA SHEET		
×	2G	AFFIDAVIT OF PHOSPHORUS CREDIT SALE		
	2H(I)-2H(2)	STORM SEWER PROFILES AND DRAINAGE DESCRIPTIONS		
	3	PLAN SHEET	104+25.00 to 112+00.00	200+00.00 to 206+50.06
	3A(1)	W&OD TRAIL PROFILE SHEETS	107+33.38 to 112+00.00	
	3A(2)	GRAVEL TRAIL A PROFILE SHEET	202+00.00 to 206+50.06	
	<i>3B</i>	EROSION AND SEDIMENT CONTROL PLANS	104+25.00 to 112+00.00	200+00.00 to 206+50.06
	4	PLAN SHEET	112+00.00 to 118+75.00	401+25.00 to 406+00.00
	4A(I)	W&OD TRAIL PROFILE SHEET	112+00.00 to 118+75.00	
	4A(2)	WIEHLE AVE (RTE 828) PROFILE SHEET	401+25.00 to 406+00.00	
	4B	EROSION AND SEDIMENT CONTROL PLANS	112+00.00 to 118+75.00	401+25.00 to 406+00.00
	5	PLAN SHEET	118+75.00 to 126+46.64	300+00.00 to 306+40.69
	5A(I)	W&OD TRAIL PROFILE SHEET	118+75.00 to 126+63.00	
	5A(2)	GRAVEL TRAIL B PROFILE SHEET	300+00.00 to 303+75.00	
	5B	EROSION AND SEDIMENT CONTROL PLANS	118+75.00 to 126+46.64	300+00.00 to 306+40.69
	6(1)-6(29)	BRIDGE PLANS, B-6XX, PLAN NO.XXX-XX (29 SHEETS) W&OD TRAIL OVER WIEHLE AVE.(RTE.828)		
	7(1)-7(5)	SIGNING AND MARKING PLANS		
	8(1)-8(2)	SIGNAL PLAN		
	9(1)-9(3)	UTILITY PLANS		
	10(1)-10(6)	SOLDIER PILE RETAINING WALL DETAIL SHEETS		
	100-107	FAIRFAX WATER ADJUSTMENTS		
	TOTAL CROSS SECTION S	SHEETS <u>24</u>		

* NOT INCLUDED AT THIS STAGE OF PLAN DEVELOPMENT

XS(2)-XS(20)

XS(21)-XS(24)

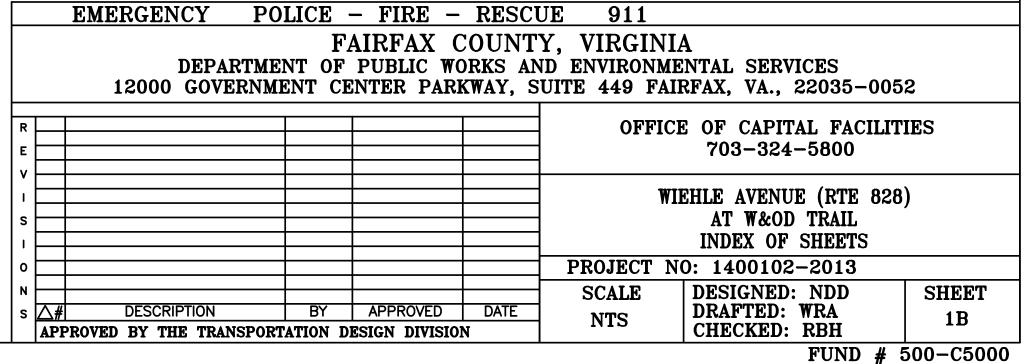
INDEX OF CROSS SECTION SHEET

W&OD TRAIL CROSS SECTIONS

RTE.828 CROSS SECTIONS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.





PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u>

SURVEYED BY, DATE <u>FAIRFAX COUNTY, NOVEMBER 28, 2014</u>

DESIGN BY <u>WHITMAN, REQUARDT</u> & ASSOCIATES, LLP (703) 293-9717

SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 DECEMBER</u> 23, 2014

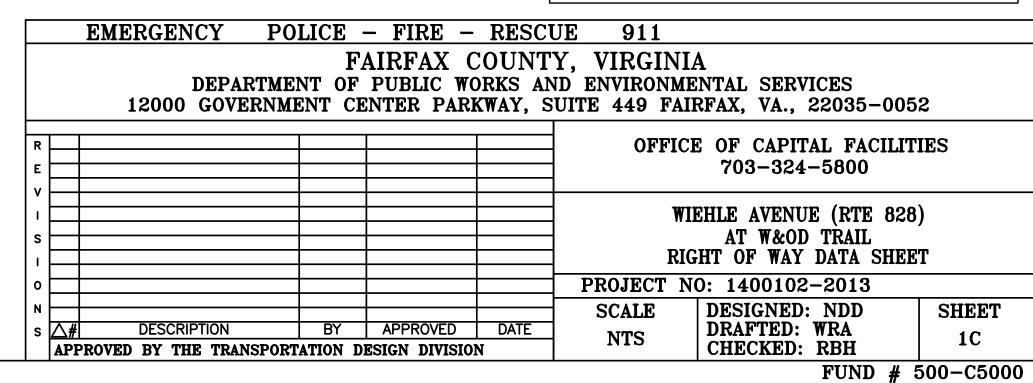
RIGHT OF WAY DATA SHEET

City/County: FAIRFAX COUNTY

			AREA (Areas greater than or equal to 1 acre will be shown in acres to 3 decimal places (x.xxx). Areas less than 1 acre will be shown to square						n to square f	feet (x,xxx).)				
PARCEL NO.	LANDOWNER	TAX MAP NO.	SHEET NO.				PRESCI	RIPTIVE		EASEMENTS				
110.		140.	110.	TOTAL	FEE	TAKING	R/V	V	FEE REMAINDER	PERMANENT	UTILITY	TEMP	ORARY	PROFFERS
				ACRES OR SQUARE FEET	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET SQ. METERS		ACRES OR SQ. FEET SQ. METERS		HECTARES/ OR SQ. METERS	YES / NO
1	NORTHERN VIRGINIA REGIONAL PARK AUTHORITY	28-3 ((1)) 51	3/4/5	104.215 AC										
2	COMMONWEALTH OF VIRGINIA	17-4 ((1)) 32	3/4	2.079 AC										
3	APA PROPERTIES NO 6 LP	17-4 ((5)) 6S4	3/4	3.586 AC							5,234 SF	6,229 SF		NO
4	FAIRFAX COUNTY BOARD OF SUPERVISORS	17-4 ((5)) 5	4	1.000 AC							4,865 SF	3,785 SF		NO
6	SPIRIT MASTER FUNDING III, LLC	17-4 ((15)) (5) 3A	. 4	26,428 SF	370 SF				26,058 SF	569 SF	3,795 SF	8,911 SF		NO
7	MCDONALDS CORP.	17-4 ((15)) (5) A	4	10,152 SF						72 SF	449 SF	113 SF		NO
8	DAVID W TR BALILES	17-4 ((15)) (5) 4	4/5	37,859 SF						322 SF	2,008 SF	502 SF		NO
9	COMMONWEALTH OF VIRGINIA	17-4 ((1)) 17	4/5	1.506 AC										
10	LEIDOS REALTY, LLC	17-4 ((15)) 4	5	2.734 AC						365 SF	5,513 SF	1,927 SF		NO
11	PCM PROPERTIES LLC	18-3 ((5)) 6	5	2.314 AC							1,180 SF	463 SF		NO

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PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE *FAIRFAX COUNTY, NOVEMBER 28,2014* DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 _ _ _ SUBSURFACE UTILITY BY, DATE _ SO DEEP, INC. (703) 361-6005 DECEMBER 23,2014

SURVEY ALIGNMENT DATA SHEET

COLOR CODES:	LEGEND	SYMBOL:
— W— — — — — — — — — — — — — — — — — —	WATER GAS TELEPHONE CATV TRAFFIC CONTROL ELECTRIC SANITARY/SFM UNKNOWN STORM PETROLEUM	MANHOLE DROP INLET/CATCH BASIN MARKER POST VALVE FIRE HYDRANT HANDHOLE/BOX SPRINKLER HEAD PED/TRANSFORMER METER FURNISHED SURVEY CONTROL LIGHT POLE
	(QL-C) DR (QL-D)	TRAFFIC CONTROL POLE POLE

ALL UTILITY INFORMATION HEREON IS DEPICTED TO QUALITY LEVEL "B" (QL-B) UNLESS OTHERWISE NOTED. QL-B INFORMATION IS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO IDENTIFY THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES. QL-B DATA ARE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES AND REDUCED ONTO PLAN DOCUMENTS.

SIZE INFORMATION SHOWN HEREON IS TAKEN FROM AVAILABLE UTILITY RECORDS. ABBREVIATIONS:

FIBER OPTIC (F.🗆.)

DEPICTED ACCORDING TO RECORD INFORMATION AND EXISTING ASSOCIATED UTILITY STRUCTURES. NO ELECTRONIC INFORMATION WAS DBTAINED.

DEPICTED ACCORDING TO RECORD INFORMATION. NO ELECTRONIC INFORMATION WAS OBTAINED.

(AATUR) ABANDONED ACCORDING TO UTILITY RECORDS

ABANDONED ACCORDING TO FIELD INSPECTION

ABANDONED ACCORDING TO FIELD INSPECTION (EATFI) EMPTY ACCORDING TO FIELD INSPECTION

EDI END OF ELECTRONIC DESIGNATING INFORMATION

EORI END OF RECORD INFORMATION

NO ASSOCIATED PIPING FOUND FROM STRUCTURE

NO ASSOCIATED CABLES FOUND FROM STRUCTURE

POST INDICATOR VALVE E UTILITY END POINT

UNLESS OTHERWISE NOTED, UTILITY LINE LIMITS DEPICTED REPRESENT

FIELD DESIGNATING LIMITS AND NOT ENDPOINTS OF UTILITIES.

JTILITY INFORMATION THAT IS LABELED "QL-C" OR "QL-D" IS DERIVED FROM FURNISHED RECORDS. SUCH INFORMATION MAY NOT BE ACCURATE OR RELIABLE. SO-DEEP EXPRESSLY DISCLAIMS RESPONSIBILITY FOR THE ACCURACY OR RELIABILITY OF UTILITY INFORMATION THAT IS DEPICTED ACCORDING TO

W	— Water Line
	— Water Line Duct
•	Water Valve
8	Water Meter
(W) 	Water Manhole
ф ОАТ! (Fire Hydrant
	— Underground Television Cable
——————————————————————————————————————	— Underground Television Cable Duct
—— — CAFO — —	— Fiber Optic Cable Television
lacktriangledown	Television Hand Hole
V	Television Pedestal
⊙v	TV Manhole
	— Underground Telephone Cable
	— Underground Telephone Cable Duct
TF0	— Telephone Fiber Optic
——••— FO —••—	— Underground Fiber Optic
	— Underground Fiber Optic Duct
0	Fiber Optic Marker
T	Telephone Pedestal
<u> </u>	Telephone Manhole
•	Telephone Pole
	Telephone Hand Hole
	— Underground Traffic Control
• TC Duct •	— Underground Traffic Control Duct
——• — TCFO —•—	— Traffic Control Fiber Optic
TG	Traffic Control Hand Hole
(included a second and a second a secon	Traffic Control Manhole
6 -	Traffic Signal Pole
——•— <u> </u>	— Underground Power Cable
	— Underground Power Cable Duct
	Power Pole
E)	Electric Box Electric Manhole
(E)	
- ¥-	Combination Pole
<i>*</i> ₹	Light Pole
⊠ ©	Electric Meter Electric Hand Hole
	— Gas Line — Gas Line Duct
© (C)	Gas Manhole
·	Gas Valve
⊠	Gas Meter
©	Gas Well
SFM	Sanitary Force Main
	– Gravity Sewer
S	Sanitary Manhole
×	Sewer Clean Out
\circ	Storm Manhole
	Rail Road Signal / Gate
$\overline{\bullet}$	Rail Road Telephone Pole
E	Utility End Point
	-Vacuum Sewer
	Fuel Line (above or below ground)
CHEM	-Chemical Line (above or below ground)
— — — Unk— — —	- Unknown Utility Line
<u>(DATUR)</u>	Depicted According To Utility Records
(AATFI)	_ Abandoned According To Utility Records _ Abandoned According To Field Inspection
	a sing i o i lord mopositori

Utility Designation Notes

General Notes:

This File Is A Compilation Of Previous Projects And The Utility Line Work Depicted Herein Was Prepared For Various Clients Or Projects. The Utility Line Work Has Not Been Field Verified Or Updated To Current Conditions Except For Specific Utilities And Locations Requested In The Scope Of Work Prepared By Whitman Requardt & Associates For The Walney Road Bridge Replacement And Road Widening Project And Provided To Accumark, Inc. Accumark, Inc. Performed An Underground Utility Designation Within The Limits Specified By Whitman Requardt & Associates And Is Depicted Herein. The Utility Designation Was Performed In Accordance With Quality Level B (Location Shown According To Electronic Information) Unless Otherwise Noted As Quality Level C (Location Shown According To Utility Records, Verbal Information, And Surface Features).

Accumark, Inc. Performed The Most Recent Field Inspection And Location Of A Level 3 Fiber Optic Line On 07/16/2014.

The Utility Sizes Shown Are Based On Information Provided By The Utility Owner, Either By Written Record or Verbal Information.

Quality Control / Quality Assurance Review Performed By Frank R. Richardson II, L.S.

Utility Notes:

Water:

(WI) 8" Water Inside 50' Steel Casing Pipe

Gas Note:

(GI) Survey File Shows Water Meter, Field Located Gas Valve At This Location.

82	7031210.984	11813922.254	381.66
83	7031259.058	11814128.026	382.32
84	7031125.040	11814157.369	377.57

TRAVERSE POINT LOCATION TABLE

81 | 7031243.274 | 11813511.350 | 402.31

EASTING

POINT # | NORTHING

TOPOGRAPHIC SURVEY LEGEND

ட் HANDICAP HV−AC ← GUY ANCHOR IRON PIPE FOUND MANHOLE BARREL ☑ IRRIGATION CONTROL BOX
■ STORM GRATE CTV CABLE TV BOX △ CONTROL POINT 🌣 LIGHT POLE E ELECTRIC BOX ☆ GROUND LIGHT EM ELECTRIC METER MAILBOX (E) ELECTRIC MANHOLE NAIL FOUND ♥ FLAG POLE UTILITY POLE (FO) FIBER OPTIC MANHOLE | POST FIBER OPTIC MARKER RAILROAD SIGNAL SANITARY CLEAN OUT / TREE STUMP -() GUY POLE (G) GAS MARKER (S) SANITARY MANHOLE GM GAS METER (AT) SATELLITE DISH G GAS VENT CONIF. SHRUB (GV) GAS VALVE DECID. SHRUB ORNAMENTAL GRAS EVERGREEN SHRUB GUARD RAIL TT/Ig — TT/Ig — TELEPHONE LINE OVERHEAD TREE LINE

(T) TELEPHONE MANHOLE TELEPHONE MARKER TRASH RECEPTICLE DECID. TREE * CONIF. TREE W HYDRANT WM WATER METER (WV) WATER VALVE WATER WELL ₩ STANDPIPE UTILITY OVERHEAD

ELEVATION

→ SIGN

(SM) STEAM MANHOLE

T TELEPHONE BOX

TELEPHONE CABINET

Utility Owners

As Of 06/25/2012 Fairfax County, VA

Water & Sewer:

County of Fairfax - Sewer Wastewater Management 12000 Government Center Pkwy. Fairfax, VA 22035 Ned Langdon, GIS 703-324-5002

Fairfax Water Authority Tech Service Department 8570 Executive Park Ave Fairfax, VA 22031 Michael Jenkins 703-698-5600 Ext. 6358 mjenkins@fairfaxwater.org

Power:

Dominion Virginia Power 701 E. Cary St. Richmond, VA 23219 Andrew Brooks Underground Damage Prevention Manager Dominion Emergency Preparedness Center 804-771-3655 Andrew.Brooks@dom.com

Telephone:

Verizon Field Contact: Dean Rasmussen 434-942-8192

Cable TV:

Cox Communications 3080 Centreville Road Herndon, VA 20171 Bill Henry 703-480-7823 Bill.Henry@cox.com

Fiber Optic:

AT&T Corp. 4800 Winchester Blvd Frederick, MD 21703 Gary Wigfield 301-874-1180 gwigfield@att.com

Verizon Business 2400 N. Glenville Dr. Richardson, TX 75082 Attn: Investigations 800-624-9675 972-729-6240 Fax Investigations@Verizon.com

TW Telecom 12343 Sunrise Valley Drive

Reston, VA 22191 Judy Heward-Pascale 248-390-8240 Judy.Heward-Pascale@twtelecom.com

FiberLight,LLC 3655 Brookside Parkway, Suite 550 Alpharetta, GA 30022 Chris Russell 703-650-8465

DESCRIPTION

APPROVED BY THE TRANSPORTATION DESIGN DIVISION

Level (3) Communications, LLC 1025 Eldorado Blvd., 33A-516 Broomfield, CO 80021 Megan Sturdevant 720-888-3860 Megan.Sturdevant@Level3.com

Washington Gas 6801 Industrial Road Springfield, VA 22151 703-750-1000

EMERGENCY POLICE – FIRE – RESCUE 911 FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL SURVEY ALIGNMENT DATA SHEET

BY APPROVED DATE

FUND # 500-C5000

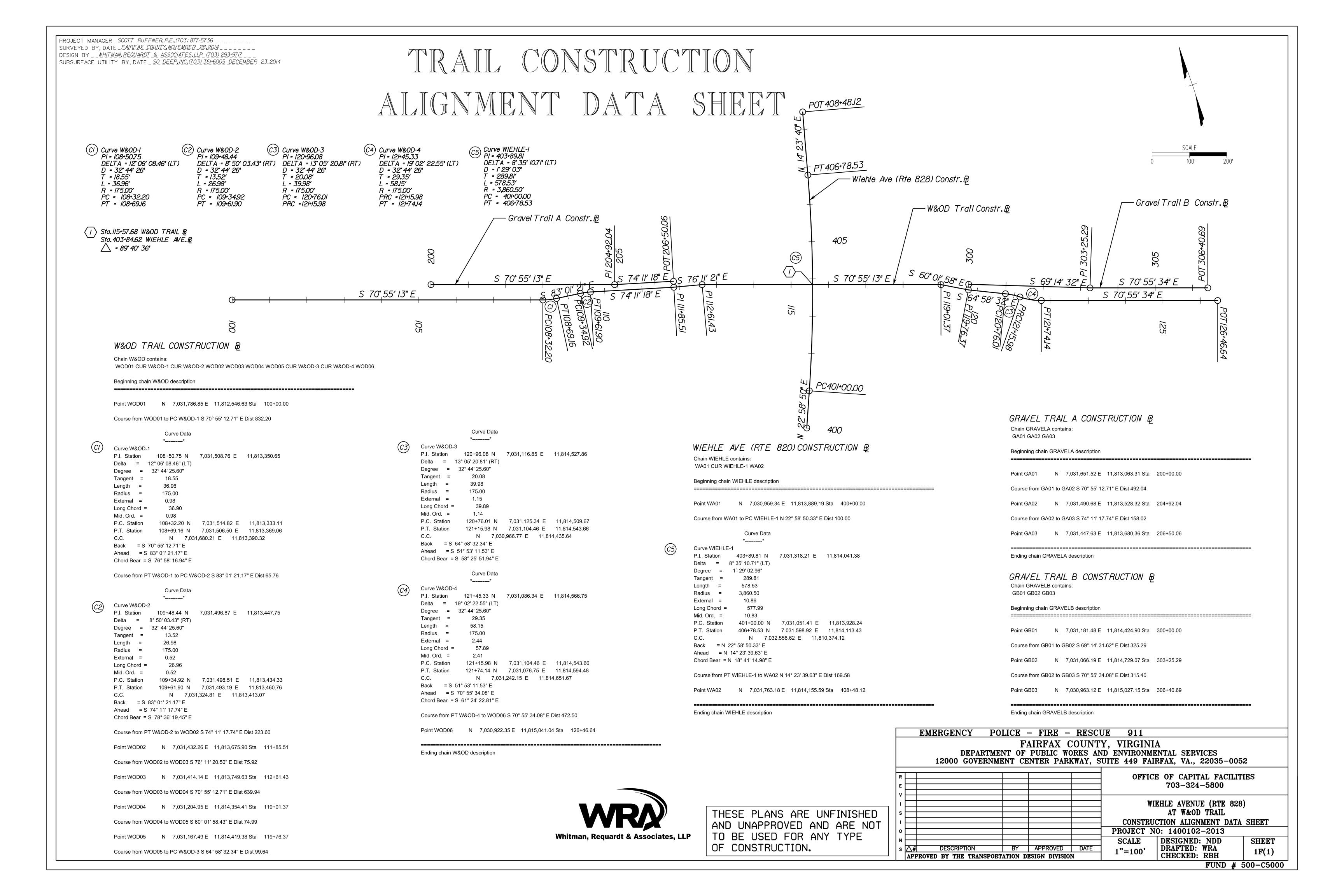
SHEET

PROJECT NO: 1400102-2013

SCALE

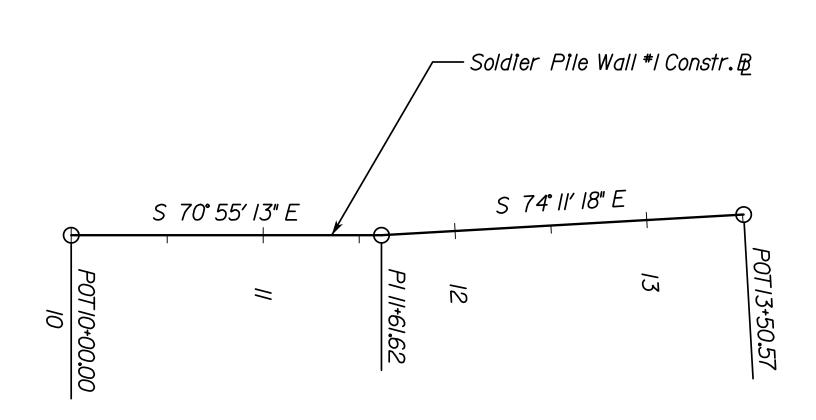
DESIGNED: NDD

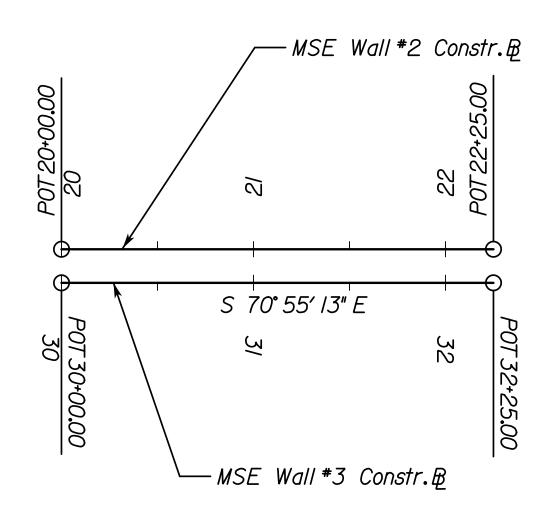
DRAFTED: WRA CHECKED: RBH

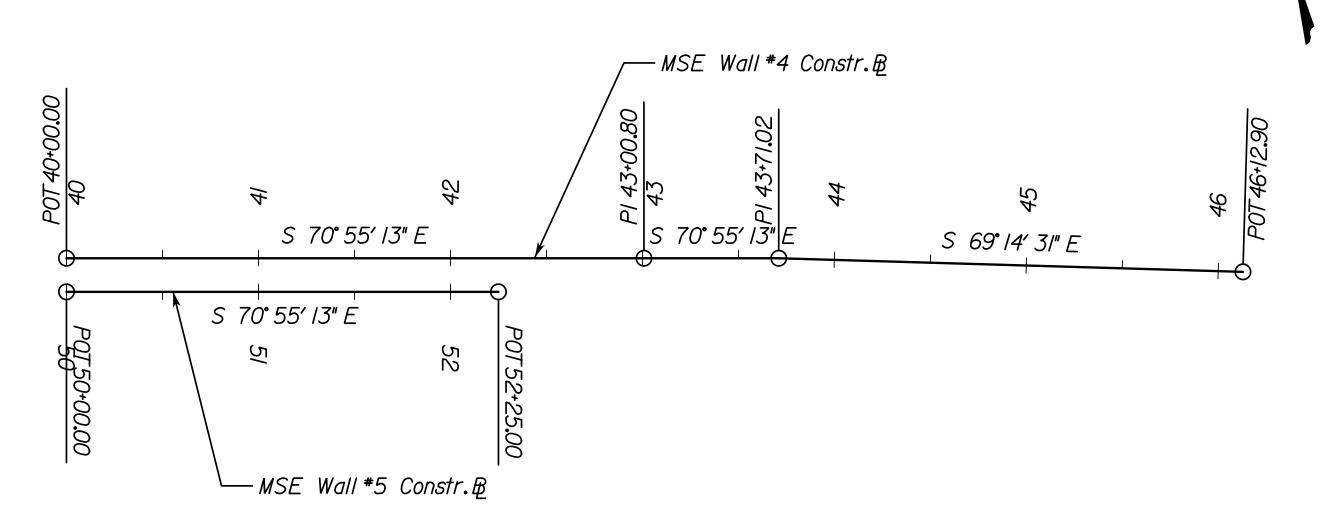


PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE <u>FAIRFAX COUNTY, NOVEMBER 28, 2014</u> DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE _ SO DEEP, INC. (703) 361-6005 DECEMBER 23,2014

RETAINING WALL CONSTRUCTION ALIGNMENT DATA SHEET







Soldier Pile Wall #I Constr. #

Chain RW-1 contains: RW10 RW11 RW12

Beginning chain RW-1 description

Point RW10 N 7,031,544.25 E 11,813,343.64 Sta 10+00.00

Course from RW10 to RW11 S 70° 55' 12.71" E Dist 161.62

Point RW11 N 7,031,491.41 E 11,813,496.39 Sta 11+61.62

Course from RW11 to RW12 S 74° 11' 17.74" E Dist 188.94

Point RW12 N 7,031,439.93 E 11,813,678.18 Sta 13+50.57

______ Ending chain RW-1 description

MSE Wall #2 Constr. B

Chain RW-2 contains: RW20 RW21

Beginning chain RW-2 description

Point RW20 N 7,031,417.73 E 11,813,765.23 Sta 20+00.00

Course from RW20 to RW21 S 70° 55' 12.71" E Dist 225.00

Point RW21 N 7,031,344.19 E 11,813,977.87 Sta 22+25.00

Ending chain RW-2 description

MSE Wall #3 Constr.B Chain RW-3 contains: RW30 RW31

N 7,031,401.20 E 11,813,759.51 Sta 30+00.00

Course from RW30 to RW31 S 70° 55' 12.71" E Dist 225.00

Point RW31 N 7,031,327.65 E 11,813,972.15 Sta 32+25.00

Ending chain RW-3 description

MSE Wall #4 Constr.B Chain RW-4 contains: RW40 RW41 RW42 RW43

Point RW40 N 7,031,311.50 E 11,814,072.38 Sta 40+00.00

Course from RW40 to RW41 S 70° 55' 12.70" E Dist 300.80

Point RW41 N 7,031,213.17 E 11,814,356.66 Sta 43+00.80

Course from RW41 to RW42 S 70° 55' 12.72" E Dist 70.21

Course from RW42 to RW43 S 69° 14' 31.42" E Dist 241.88

Ending chain RW-4 description

MSE Wall #5 Constr.B Chain RW-5 contains: RW50 RW51

N 7,031,294.96 E 11,814,066.66 Sta 50+00.00

Course from RW50 to RW51 S 70° 55' 12.71" E Dist 225.00

Point RW51 N 7,031,221.41 E 11,814,279.30 Sta 52+25.00

Ending chain RW-5 description

Beginning chain RW-4 description

Point RW42 N 7,031,190.22 E 11,814,423.01 Sta 43+71.02

Point RW43 N 7,031,104.49 E 11,814,649.19 Sta 46+12.90

EMERGENCY POLICE - FIRE - RESCUE 911 FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

BY APPROVED DATE DESCRIPTION APPROVED BY THE TRANSPORTATION DESIGN DIVISION

OFFICE OF CAPITAL FACILITIES 703-324-5800

WIEHLE AVENUE (RTE 828) AT W&OD TRAIL WALL ALIGNMENT DATA SHEET PROJECT NO: 1400102-2013

DESIGNED: NDD

DRAFTED: WRA

SCALE

1"=50'

1F(2) CHECKED: RBH FUND # 500-C5000

SHEET

NOTES

I. FOR SOLDIER PILE WALL BEGIN AND END STATIONS, SEE SHEET 10(2). 2. FOR MSE WALL BEGIN AND END STATIONS, SEE SHEETS 6(24) - 6(25).



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UNDERGROUND UTILITY TEST HOLE INFORMATION

PLAN SHEET	TEST HOLE	OFFSET (FT)	STATION	OWNER	TYPE OF FACILITY	ELEV.
3	1	25.85 LT	110+06.04	PCCP	30" WATER LINE	388.18'
3	2	7.99 LT	110+67.11	LEVEL 3	(3) 13/4" FO CONDUIT	389.18'
3	3	4.25 RT	113+22.75	LEVEL 3	(3) 13/4" FO CONDUIT	385.03'
4	4	39.83 LT	404+12.71		3" CATV CONDUIT	379.65'
4	5	38.40 LT	404+11.33	LEVEL 3	(4) 2" FO CONDUIT	371.50'
4	6	35.01 LT	404+08.96	LEVEL 3	(2) 2" PLASTIC CONDUIT	378.47'
4	7	39.62 RT	404+09.67	COX	(2) 2 1/2" CONDUIT	380.49'
				LEVEL 3	(2) 2" CONDUIT	
					2.16' RPC DUCT	
					4 1/2" TELEPHONE CONDUIT	
4	10	7.11 RT	404+10.59		12 3/4" D.I. WATER LINE	372.42'
4	11	33.69 RT	404+07.31	VERIZON BUSINESS	(4) 1 1/2" FO CONDUIT	379.34'
4	12	26.11 RT	404+10.02		8 1/2" PLASTIC GAS LINE	374.46'
4	13	45.49 RT	404+09.61		(3) 2" ELECTRIC CABLE	381.12'
4	14	57.78 RT	404+09.55		(3) 2 1/4" ELECTRIC CABLE	377.68'
4	15	61.42 LT	403+84.53	COMCAST	(3) 1 3/4" FO CONDUIT	378.80'
4	16	38.08 RT	114+25.53		(3) 2" ELECTRIC CABLE	375.92'
4	17	48.78 RT	114+39.48	AT&T	4/12" FO CONDUIT	376.16'
4	18	49.24 LT	402+90.64	LEVEL 3	(4) 2" FO CONDUIT	373.02'
4	19	51.70 LT	402+90.87		1/2" CATV	377.55'
				NOT IDENTIFIED	(3) 3/4" CATV	
					(3) 1" CATV	
					(2) CATV	
4	20	53.08 LT	402+90.87	LEVEL 3	(7+) FO CONDUIT	376.79'
4	21	56.58 LT	402+90.81	COX	(2) 2 1/2" FO CONDUIT	379.00'
				TRAFFIC CONTROL	3 1/2" CONDUIT	
				COMCAST	(3) 13/4" CONDUIT	
				LEVEL 3	(2) 2" FO CONDUIT	
4	22	57.90 LT	402+87.68	LEVEL 3	4 1/2" FO CONDUIT	379.68'
4	23	73.59 LT	402+56.32		2 1/4" ELECTRIC CONDUIT	380.54'
				COX	2 1/2" FO CONDUIT	
4	24	23.43 RT	402+88.24		8 1/2" PLASTIC GAS LINE	375.46'
4	25	38.52 RT	402+88.72	LEVEL 3	(8) 2" FO CONDUIT	377.54'
				ZAYO	(4) 2" FO CONDUIT	
4	26	41.18 RT	402+89.06		1.62' RPC DUCT	377.33'
					(2) TELEPHONE CONDUIT	
4	27	43.01 RT	402+88.71	VERIZON BUSINESS	(4) 11/2" FO CONDUIT	376.96'
				COX	2 1/2" FO CONDUIT	
4	28	45.37 RT	402+78.83	CENTURYLINK	HAND HOLE	378.40'
				COX	2 1/2" FO CONDUIT	
4	29	58.97 RT	402+73.31	COMCAST	(3) 13/4" FO CONDUIT	376.14'
					4 1/2" PLASTIC CONDUIT	
5	30	8.03 RT	119+12.33	LEVEL 3	(3) 13/4" FO CONDUIT	368.12'
5	31	29.95 LT	119+07.25	VERIZON	4 1/2" FO CONDUIT	371.82'
				VERIZON	2 1/4" CABLE	
5	32	73.70 LT	121+68.10	VERIZON	4 1/2" FO CONDUIT	358.85'
				VERIZON	2 1/4" CABLE	
5	33	51.04 LT	123+79.55	PCCP	30" WATER LINE	365.17'
4	34	35.80 RT	404+09.66	ZAYO	(4) 2" FO CONDUIT	378.53'



THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL UNDERGROUND UTILITY TEST HOLE INFORMATION PROJECT NO: 1400102-2013 SCALE APPROVED BY THE TRANSPORTATION DESIGN DIVISION SAME DESCRIPTION BY APPROVED DATE APPROVED BY THE TRANSPORTATION DESIGN DIVISION TENDENCY OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL UNDERGROUND UTILITY TEST HOLE INFORMATION PROJECT NO: 1400102-2013 SCALE DESIGNED: NDD DRAFTED: WRA CHECKED: RBH

PROJECT MANAGER_SCOTT_RUFFNER, P.E., (703) 877-5736

SURVEYED BY, DATE_FAIRFAX_COUNTY, NOVEMBER_28, 2014

DESIGN BY__WHITMAN, REQUARDT_& ASSOCIATES, LLP_(703) 293-9717

SUBSURFACE_UTILITY_BY, DATE_SO_DEEP, INC. (703) 361-6005_DECEMBER_23, 2014

SEQUENCE OF CONSTRUCTION

REGINA BRIGHT HERR Lic. No. 028548

Whitman Requardt & Associate Fairfax, Virginia ROADWAY ENGINEER

PROJECT DESCRIPTION

THIS TASK CONSISTS OF THE CONSTRUCTION OF IMPROVEMENTS TO THE W&OD TRAIL (BOTH ASPHALT AND GRAVEL PATHS) AND A BRIDGE OVER WIEHLE AVENUE. THE PROPOSED IMPROVEMENTS INCLUDE CONSTRUCTING A 12 FOOT WIDE ASPHALT TRAIL AND BRIDGE OVER WIEHLE AVENUE, NEW MSE WALLS, INSTALLING CURB RAMPS, NEW SIDEWALK, DRAINAGE IMPROVEMENTS AND CONSTRUCTING CURB AND GUTTER. THE PROJECT ALSO INCORPORATES RELOCATION OF AN EXISTING WATER MAIN AND UPGRADE TO THE EXISTING SIGNAL AT THE INTERSECTION OF WIEHLE AVENUE AND SUNSET HILLS ROAD.

WITHIN THE PROJECT LIMITS THE W&OD TRAIL WILL TRAVEL THROUGH NVRPA PROPERTY. AS THE PHYSICAL IMPROVEMENTS ARE LIMITED TO THE PATH AND SIDEWALK WORK, IMPACTS TO THE ROADWAYS WILL BE LIMITED TO WIEHLE AVENUE

ALLOWABLE HOURS FOR CLOSURES

THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MAINTAIN THE EXISTING TRAVEL LANES OPEN TO TRAFFIC AT ALL TIMES. LANE CLOSURES HOURS ARE IN ACCORDANCE WITH LANE CLOSURES IN NOVA DISTRICT MEMORDANDUM DATED 9/29/2016. LANE CLOSURES HOURS FOR CONSTRUCTION SHALL BE PERMITTED DURING THE FOLLOWING HOURS:

WIEHLE AVENUE (RTE.828) & SUNSET HILLS ROAD (RTE 675) URBAN MINOR ARTERIAL (GS-6)						
	SINGLE LANE CLOSURES OR SHOULDER					
MONDAY TO THURSDAY	9:00AM TO 3:30PM					
MONDAL TO THOUSDAL	9:00PM TO 5:00AM					
FRIDAY	9:00AM TO 2:00PM					
FRIDAY TO SATURDAY	10:00PM TO 9:00AM					
SATURDAY TO SUNDAY	9:00PM TO 9:00AM					
SUNDAY TO MONDAY	10:00РМ ТО 5:00AM					

W&OD TRAIL					
	TRAIL CLOSURE				
MONDAY TO THURSDAY	9:00PM TO 5:00AM				
FRIDAY	9:00PM TO 5:00AM				
FRIDAY TO SATURDAY	9:00PM TO 5:00AM				
SATURDAY TO SUNDAY	9:00PM TO 5:00AM				
SUNDAY TO MONDAY	9:00PM TO 5:00AM				

• SINGLE-LANE CLOSURES ARE ONLY PERMITTED FOR MULTIPLE-LANE ROADWAYS.

EXCEPT AS NECESSARY TO MAINTAIN TRAFFIC, WORK SHALL NOT BE PERFORMED ON THE FOLLOWING HOLIDAYS WITHOUT THE APPROVAL OF THE ENGINEER:

NEW YEAR'S DAY, MARTIN LUTHER KING, JR. DAY, PRESIDENTS DAY, MEMORIAL DAY,
INDEPENDENCE DAY, LABOR DAY, COLUMBUS DAY, VETERANS DAY, THANKSGIVING DAY, AND
CHRISTMAS DAY. LANE CLOSURES WILL NOT BE PERMITTED FROM NOON THE DAY
BEFORE A HOLIDAY UNTIL NOON THE DAY AFTER A HOLIDAY UNLESS OTHERWISE
APPROVED BY THE ENGINEER. WHEN A HOLIDAY FALLS ON A FRIDAY, LANE CLOSURES
ARE NOT PERMITTED FROM NOON THURSDAY UNTIL NOON ON MONDAY. WHEN THE
HOLIDAY FALLS ON MONDAY, LANE CLOSURES ARE NOT PERMITTED FROM NOON FRIDAY
UNTIL NOON ON TUESDAY. ADDITIONAL STATE HOLIDAYS MAY BE ADDED TO THIS LIST
AT THE DIRECTION OF THE ENGINEER.

TOTAL CLOSURE OF WIEHLE AVENUE SHALL NOT EXCEED 20 MINUTES IN ACCORDANCE WITH TTC-50.0. CONTRACTOR SHALL USE A DETOUR IF WORK CAN NOT BE PERFORMED WITHIN THE ALLOWABLE CLOSURE TIMEFRAME.

PUBLIC COMMUNICATIONS PLAN

THE CONTRACTOR SHALL SUBMIT A REQUEST FOR ALL LANE CLOSURES TO VDOT IO DAYS IN ADVANCE OF THE CLOSURE. THE ENGINEER WILL COMMUNICATE WITH THE VDOT NORTHERN VIRGINIA PUBLIC AFFAIRS SECTION, FAIRFAX COUNTY SUPERVISORS, FEDERAL AGENCIES AND SCHOOLS IN CLOSE PROXIMITY, RADIO AND TELEVISION, EMERGENCY SERVICES, VDOT, AND THE TRAFFIC OPERATIONS CENTER, AS DETERMINED APPROPRIATE.



GENERAL NOTES

- I. THE TMP FOR THIS PROJECT IS CATEGORIZED AS TYPE B, CATEGORY III.
- 2. UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL PLAN AND PROSECUTE THE WORK IN ACCORDANCE WITH THIS TRANSPORTATION MANAGEMENT PLAN.
- 3. THE TRANSPORTATION MANAGEMENT PLAN (TMP) IS INTENDED AS A GUIDE.IT IS NOT INTENDED TO ENUMERATE EVERY DETAIL WHICH MUST BE CONSIDERED IN THE CONSTRUCTION OF THIS PROJECT, BUT ONLY TO SHOW THE GENERAL HANDLING OF EXISTING TRAFFIC.IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESENT A FORMAL TMP/MAINTENANCE OF TRAFFIC (MOT) PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO ANY CONSTRUCTION THAT MAY AFFECT THE EXISTING TRAFFIC, INCLUDING THE MODIFICATION OF EXISTING TRAFFIC SIGNALS.
- 4. ALL TRAFFIC MAINTENANCE SHALL CONFORM WITH THE FOLLOWING AND THE LATEST REVISIONS THERETO:
 - A. 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (REV.2) B. 2011 VIRGINIA SUPPLEMENT TO THE 2009 MUTCD (REV.1)
 - C. 2011 VIRGINIA WORK AREA PROTECTION MANUAL (REV.1)
 - D. 2016 VDOT ROAD AND BRIDGE STANDARDS (LATEST REVISION)
 - E. 2016 VDOT ROAD AND BRIDGE SPECIFICATIONS (LATEST REVISION)
- 5. THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO VDOT FOR APPROVAL.THE CONTRACTOR SHOULD REFER TO VIRGINIA WORK AREA PROTECTION MANUAL, SPECIFICALLY THE FOLLOWING STANDARDS

TTC-27.J - LANE CLOSURE OPERATION - FAR SIDE OF AN INTERSECTION

TTC-29, - TURN LANE CLOSURE OPERATION

TTC-35.0 - SIDEWALK CLOSURE AND BYPASS SIDEWALK OPERATION

TTC-36,1 - CROSSWALK CLOSURE AND PEDESTRIAN DETOUR OPERATION

TTC-50.0 - DISRUPTION OPERATION ON A MULTI-LANE ROADWAY.

TTC-53.0 - SIGNING FOR PROJECT LIMITS.

- 6. FOR DETAILS OF PERMANENT CONSTRUCTION, REFER TO THE CONSTRUCTION PLANS (SHEETS 3-5).
- 7. TEMPORARY LANE WIDTHS SHALL NOT BE LESS THAN II FT.
- 8. AT THE CONCLUSION OF EACH WORKDAY, EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN THE ESTABLISHED 11.5'
 CLEAR ZONE AND/OR DEFLECTION ZONE OF PHYSICAL BARRIERS IN ACCORDANCE WITH THE WORK AREA PROTECTION MANUAL.
 ANY AREAS EXCAVATED BELOW THE EXISTING PAVEMENT SURFACE AND WITHIN THE CLEAR ZONE, SHALL BE BACK FILLED WITH
 APPROVED MATERIAL TO FORM AN APPROXIMATE 6: WEDGE AGAINST THE EXISTING PAVEMENT SURFACE FOR THE SAFETY
 AND PROTECTION OF VEHICULAR TRAFFIC.ALL COST FOR PLACING, MAINTAINING, AND REMOVING THE 6: WEDGE SHALL BE
 INCLUDED IN THE PRICE BID FOR OTHER ITEMS IN THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 9. IF UTILIZED,TRAFFIC BARRIER SERVICE SHALL BE INSTALLED AND REMOVED SO AS NOT TO PRESENT ANY BLUNT END OR HAZARD TO THE MOTORING PUBLIC.THE PLACEMENT AND REMOVAL OF THE TRAFFIC BARRIER SERVICE AND BARRICADES ARE TO BE COORDINATED BY THE PROJECT SAFETY OFFICER.
- 10. THE EXISTING POSTED SPEED LIMITS SHALL BE MAINTAINED DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- II. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAY ENTRANCES DURING CONSTRUCTION.
- 12. TEMPORARY CLOSURE AFFECTING EGRESS TO ADJACENT PROPERTIES SHALL BE COORDINATED WITH AFFECTED PARTIES.
- 13. CONTRACTOR SHALL MAINTAIN SAFE PASSAGE FOR PEDESTRIANS AND BICYCLISTS DURING CONSTRUCTION WHERE EXISTING FACILITIES ARE PRESENT.
- 14. THE CONTRACTOR SHALL MAINTAIN ALL SIGNAGE WITHIN THE LIMITS OF CONSTRUCTION, SHOWN OR OTHERWISE, UNLESS DIRECTED BY THE ENGINEER. IF REMOVAL IS ALLOWED, CONTRACTOR SHALL STORE THE SIGNS PER VDOT STANDARDS, AND IF DIRECTED, REPLACE THEM AT THE COMPLETION OF THE PROJECT.
- 15. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FOR THE DURATION OF THE PROJECT.ADDITIONAL TEMPORARY MEASURES MAY BE NEEDED TO FACILITATE PROPER POSITIVE DRAINAGE.
- 16. THE CONTRACTOR SHALL SCHEDULE ALL PHASES OF CONSTRUCTION IN SUCH MANNER THAT WATER, SEWER, CABLE, POWER, AND ANY OVERHANGING OR UNDERGROUND UTILITY SERVICES WILL NOT BE INTERRUPTED. THE COST OF ANY TEMPORARY CONNECTION, IN PART OR WHOLE, SHALL BE INCIDENTAL TO THE UTILITY RELOCATION/CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THEIR UTILITY ADJUSTMENTS/RELOCATION ACTIVITIES WITH THE OWNER OF THE UTILITY.
- 17. ALL EROSION AND SEDIMENT CONTROL MEASURES AND TEMPORARY DRAINAGE SHALL BE IN PLACE PRIOR TO THE BEGINNING OF CONSTRUCTION.
- 18. ALL PAVEMENT MARKINGS AND TRAFFIC FLOW ARROWS ARE SCHEMATIC ONLY. THE ACTUALLY LOCATION AND APPLICATION OF PAVEMENT MARKINGS SHALL BE INSTALLED PER THE SIGNING AND PAVEMENT MARKINGS PLANS AND IN ACCORDANCE WITH SECTION 704 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS; THE MUTCD 2009 EDITION; THE 2016 ROAD AND BRIDGE STANDARDS; OR AS DIRECTED BY THE ENGINEER.
- 19. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING A MINIMUM OF 10 WORKING DAYS PRIOR TO IMPLEMENTATION OF ANY WORK REQUIRING LANE SHIFTS, LANE CLOSURES, AND/OR PHASE CHANGES.
- 20. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONSTRUCTION, SIGNING, AND TRAFFIC MANAGEMENT PLAN WITH OTHER ADJACENT PROJECTS UNDER CONSTRUCTION.
- 21. DISPOSAL SITE AND STAGING AREA LOCATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.NO WORK SHALL BE PERFORMED UNTIL SUCH SITES HAVE BEEN ACCEPTED BY THE ENGINEER.
- 22. WHEN POLICE PRESENCE IS REQUIRED FOR A LANE CLOSURE OPERATION, THE ENGINEER SHALL CONTACT THE VIRGINIA STATE POLICE DIVISION SEVEN HEADQUARTERS, 4977 ALLIANCE DRIVE, FAIRFAX, VIRGINIA, 22030 TELEPHONE 703-803-2660, OR THE FAIRFAX COUNTY POLICE DEPARTMENT, 12099 GOVERNMENT CENTER PARKWAY FAIRFAX, VA 22035, TELEPHONE 703-691-2131 TO REQUEST POLICE SUPPORT AND GIVE THE POLICE A MINIMUM OF 5 DAYS ADVANCE NOTICE. THE ENGINEER SHALL NOTIFY THE POLICE OF ANY CANCELLATION AT LEAST 24 HOURS VIN ADVANCE TO AVOID ADDITIONAL CHARGES. THE COST OF POLICE SUPPORT SHALL BE INCLUDED IN THE COST OF PROJECT MOBILIZATION.

SEQUENCE OF CONSTRUCTION

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY.

CONTRACTOR SHALL INSTALL 6' CONSTRUCTION SAFETY FENCE AROUND WORK AREAS AS NEEDED TO ENSURE PUBLIC SAFETY. FENCE SHALL BE A MINIMUM OF 3' FROM THE EDGE OF PAVEMENT ON THE ACTIVE TRAIL.

PEDESTRIAN DETOURS SHALL BE INSTALLED ALONG WIEHLE AVENUE FOR CONSTRUCTION OF BRIDGE ABUTMENTS AND SIDEWALK IMPROVEMENTS AS SHOWN ON PLANS AND IN ACCORDANCE WITH FIGURE TTC-35.0 OF THE VWAPM.

CONTRACTOR SHALL MAINTAIN ACCESS TO ENTRANCES AND SAFE PASSAGE FOR PEDESTRIANS/BICYCLISTS DURING CONSTRUCTION WHERE EXISTING FACILITIES ARE PRESENT UNLESS OTHERWISE SHOWN, ACCESS TO THE W&OD TRAIL LOCATED WITHIN THE PROJECT LIMITS SHALL BE MAINTED DURING ALL PHASES OF CONSTRUCTION.

INSTALLATION OF SIGNING FOR THE PROJECT LIMITS SHALL BE IN ACCORDANCE WITH FIGURE TTC-53.0 OF THE VWAPM.

CONSTRUCTION ACTIVITIES SHALL NOT BE PERFORMED ON BOTH SIDES OF THE W&OD TRAIL UNLESS OTHERWISE APPROVED BY THE ENGINEER.

PHASE I:

STAGE I-CONSTRUCT OPEN-CUT WATER LINE RELOCATION ACROSS WIEHLE AVENUE USING SIMILAR METHODS TO PHASE 4.CONTRACTOR SHALL MAINTAIN A MIN IMUM OF AT LEAST I LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES, UTILIZING TTC-27.1, 29.1, AND 36.1.

STAGE 2 - CONTRACTOR SHALL CLOSE THE GRAVEL TRAIL BETWEEN ISAAC NEWTON SQUARE AND MICHAEL FARADAY COURT AND INSTALL PEDESTRIAN DETOUR SIGNING PER FIGURE ION SHEET IH(2). CONSTRUCT BRIDGE ABUTMENTS, MSE WALLS, AND TRAIL IMPROVEMENTS AS SHOWN ON THE PLANS.

STAGE 3 - CONSTRUCT THE TIE IN TO THE EXISTING W&OD TRAIL AND DRAINAGE IMPROVEMENTS AFFECTING THE ACTIVE TRAIL DURING OFF HOURS.

PHASE 2:

STAGE I-CONSTRUCT THE DRAINAGE IMPROVEMENTS AS SHOWN ON THE PLANS. BUILD BRIDGE ABUTMENTS, MSE WALLS, AND TRAIL IMPROVEMENTS AS SHOWN ON THE PLANS

STAGE 2 - CONSTRUCT THE TIE IN TO THE EXISTING W&OD TRAIL DURING OFF HOURS.

PHASE 3:

THE CONTRACTOR SHALL SET UP A NIGHTTIME CLOSURE OF WHIELE AVENUE BETWEEN SUNSET HILLS AND ROGER BACON DRIVE IN ACCORDANCE WITH FIGURE TTC-50.0 OF THE VA WAPM. INSTALL PREFRABRICATED BRIDGE. THE CONTRACTOR SHALL COORDINATE THE ROAD CLOSURE WITH FAIRFAX COUNTY FIRE STATION 25 (703-437-7575).

PHASE 4:

STAGE I-CLOSE THE RIGHT TURN LANE ON SOUTHBOUND WIEHLE AVENUE IN ACCORDANCE WITH FIGURE TTC-29,1 OF THE VA WAPM AS NEEDED, CONSTRUCT THE NEW PAVEMENT, CURB AND GUTTER, SIDEWALK AND CURB RAMPS ON THE WEST SIDE OF WIEHLE AVENUE.

STAGE 2 - CLOSE THE OUTSIDE LANE ON NORTHBOUND WIEHLE AVENUE IN ACCORDANCE WITH FIGURE TTC-27.1 OF THE VA WAPM AS NEEDED.CONSTRUCT THE NEW PAVEMENT, CURB AND GUTTER, SIDEWALK AND CURB RAMPS ON THE EAST SIDE OF WIEHLE AVENUE.

STAGE 3 - CLOSE THE INSIDE LANE ON NORTHBOUND WIEHLE AVENUE IN ACCORDANCE WITH FIGURE TTC-27.1 OF THE VA WAPM. CLOSE THE LEFT TURN LANE ON SOUTHBOUTH WIEHLE AVENUE IN ACCORDANCE WITH FIGURE TTC-29.1 OF THE VA WAPM.CONSTRUCT THE NEW CURB AS SHOWN ON THE PLANS. INSTALL FINAL ROADWAY MARKINGS.



		EMERGENCY PO	LICE	<u> </u>	RESCU	UE 911						
	FAIRFAX COUNTY, VIRGINIA											
	DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052											
	12000 GOVERNMENT CENTER FARRWAT, SUITE 449 FAIRFAX, VA., 22055-0052											
R					OFFICE OF CAPITAL FACILITIES							
Ε						703-324-5800						
٧	\vdash											
ı						WIEHLE AVENUE (RTE 828)						
S							AT W&OD TRAIL					
ı							UENCE OF CONSTRUCTION	<u>N</u>				
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N						SCALE	DESIGNED: NDD	SHEET				
s	<u>—"</u>	DESCRIPTION PROVED BY THE TRANSPORT	BY BY	APPROVED	DATE	NTS	DRAFTED: WRA CHECKED: RBH	1H(1)				

PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u>

SURVEYED BY, DATE <u>FAIRFAX COUNTY, NOVEMBER 28, 2014</u>

DESIGN BY <u>WHITMAN, REQUARDT</u> <u>ASSOCIATES, LLP (703) 293-9717</u>

SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 DECEMBER</u> 23, 2014

Page 6H-60 April 2015

Typical Traffic Control

Lane Closure Operation – Far Side of an Intersection

(Figure TTC-27.1)

<u>NOTES</u>

1. Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph.

2. On divided highways having a median wider than 8', right and left sign assemblies shall be required.

3. Taper length (L) and channelizing device spacing shall be:

Taper Length (L)									
Speed Limit	Lane Width (Feet)								
(mph)	9	10	11	12					
25	95	105	115	125					
30	135	150	165	180					
35	185	205	225	245					
40	240	270	295	320					
45	405	450	495	540					
50	450	500	550	600					
55	495	550	605	660					
60	540	600	660	720					
65	585	650	715	780					
70	630	700	770	840					
•	Minimum taper lengths for Limited Access highways shall be 1000 feet.								
Shoulde	r Tanor	- 1/ I N	linimum						

Channelizing Device Spacing

Location

Speed Limit (mph)
0 - 35 | 36 +

Transition Spacing 20' 40'

Travelway Spacing 40' 80'

On roadways with paved shoulders having a

On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

Guidance:

4. If room permits, a shadow vehicle with at least one amber¹ rotating, oscillating, or high intensity flashing¹ light should be parked 80'-120' in advance of the first work crew.

Standard:

5. If the posted speed limit is 45 mph or greater, the shadow vehicle shall have a truck-mounted attenuator.

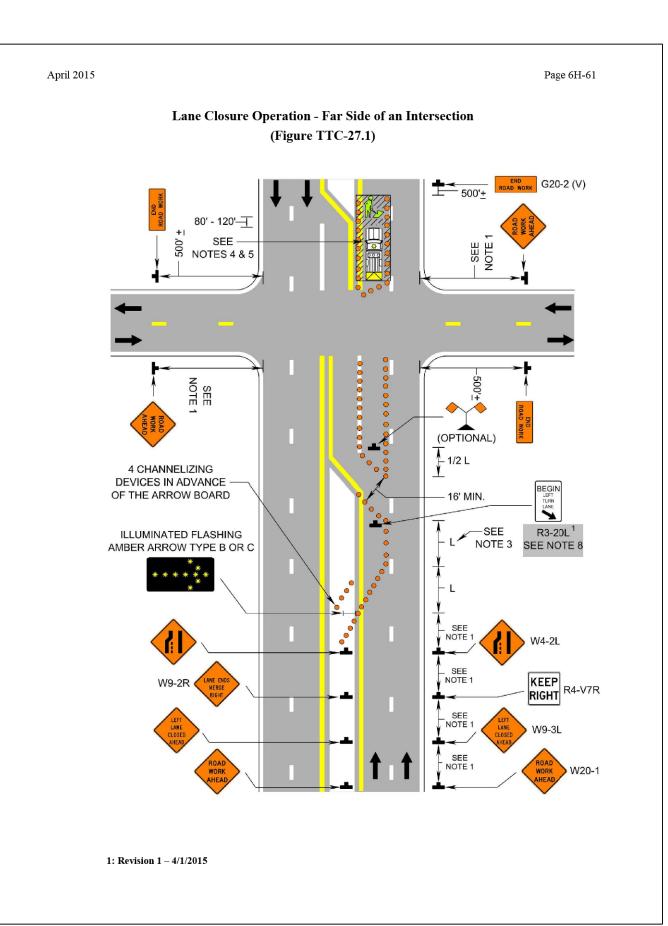
6. For emergency situations (any non-planned operation) of 30 minutes or less duration, two rotating amber lights or high intensity amber flashing or oscillating lights mounted on the vehicle and visible for 360° shall be required in addition to the channelizing devices shown around the vehicle. Also, vehicle hazard warning signals shall be used.

7. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TTC-36.

Standard:
8. If the left turn lane is closed a NO LEFT TURN (Symbol) (R3-2) shall be used.

1

1: Revision 1 – 4/1/2015



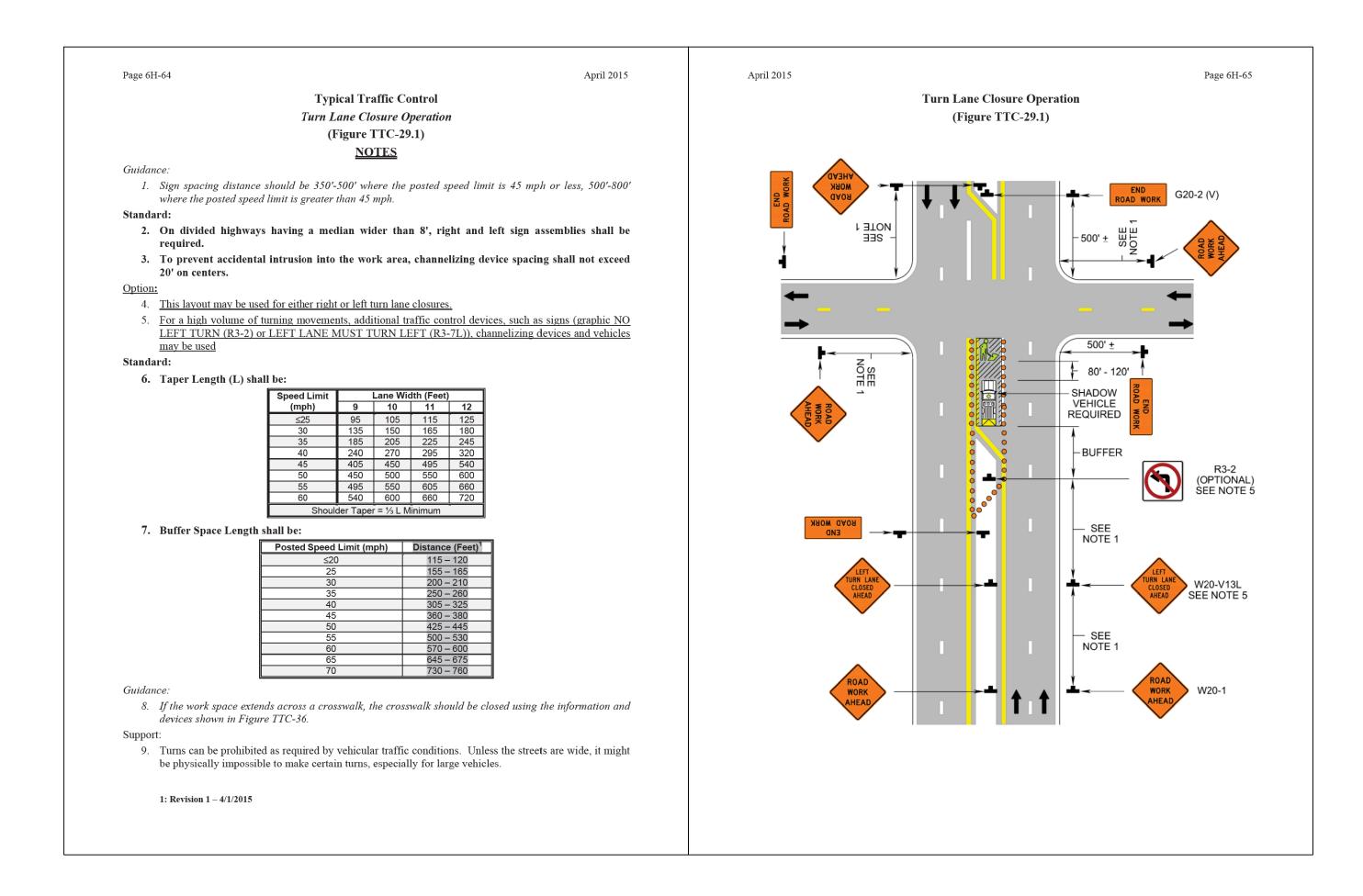


FIGURE I

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Typical Traffic Control

Sidewalk Closure and Bypass Sidewalk Operation

(Figure TTC-35.0)

NOTES

tandard:

1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.

2. Where high speeds are anticipated, a temporary traffic barrier and, if necessary, a crash cushion should be used to separate the temporary sidewalks from vehicular traffic.

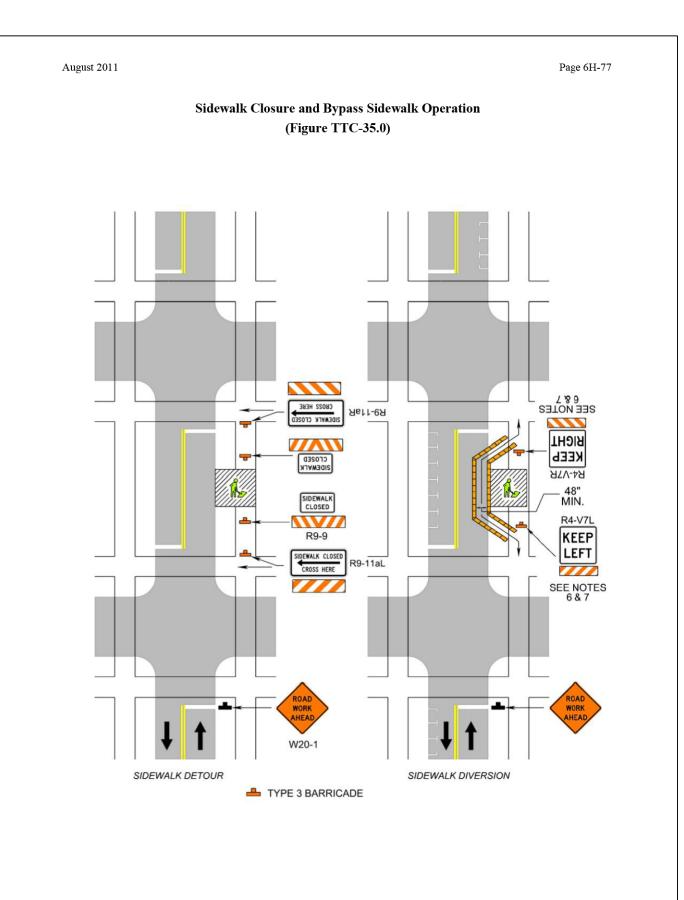
3. Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.
4. Temporary markings should be considered for operations exceeding three days in duration.

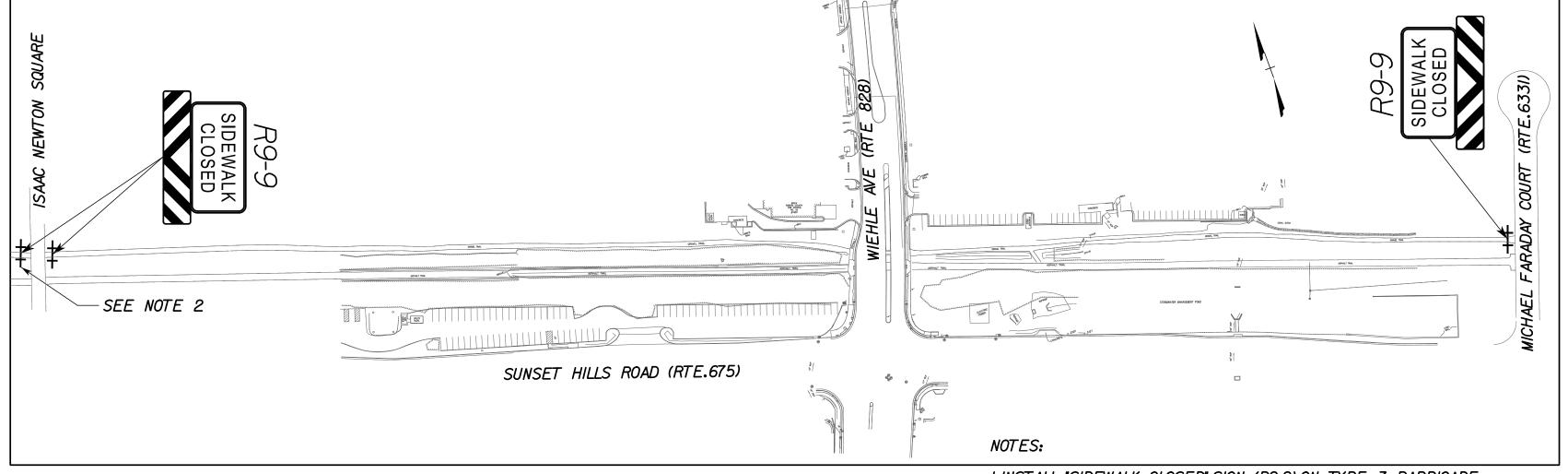
Option:

Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS (W5-1) signs, may be used to control vehicular traffic.
 For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs

and close sidewalks.
Signs, such as KEEP RIGHT (R4-V7R) and KEEP LEFT (R4-V7L), may be placed along a temporary sidewalk to guide or direct pedestrians.

Standard:
8. All sidewalk closures shall be closed with Type 3 Barricades.





I.INSTALL "SIDEWALK CLOSED" SIGN (R9-9) ON TYPE 3 BARRICADE AT THE GRAVEL TRAIL ENTRANCE ON THE EAST SIDE OF ISAAC NEWTON SQUARE AND THE EAST SIDE OF MICHAEL FARADAY COURT AS SHOWN ON PLAN.

2.ADDITIONAL "SIDEWALK CLOSED" SIGN (R9-9) TO BE INSTALLED AT THE EB GRAVEL TRAIL ENTRANCE AT 11480 SUNSET HILLS ROAD TO PREVENT UNSAFE PEDESTRIAN CROSSINGS AT ISAAC NEWTON SQUARE.



POLICE - FIRE - RESCUE **EMERGENCY** 911 FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL SEQUENCE OF CONSTRUCTION PROJECT NO: 1400102-2013 SCALE DESIGNED: NDD SHEET DRAFTED: WRA DESCRIPTION 1H(2) CHECKED: RBH APPROVED BY THE TRANSPORTATION DESIGN DIVISION

PROJECT MANAGER_SCOTT_RUFFNER,P.E.,(703)877-5736_____ SURVEYED BY, DATE *FAIRFAX COUNTY, NOVEMBER 28,2014* DESIGN BY __WHITMAN, REQUARDT _& ASSOCIATES, LLP_ (703) 293-9717 ____ SUBSURFACE UTILITY BY, DATE _ SO DEEP, INC. (703) 361-6005 DECEMBER 23,2014

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April 2015

August 2011

Crosswalk Closure and Pedestrian Detour Operation (Figure TTC-36.1)

Typical Traffic Control

1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.

2. Curb parking shall be prohibited for at least 50 feet in advance of the midblock crosswalk.

3. Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.

4. Pedestrian traffic signal displays controlling closed crosswalks should be covered or deactivated. 5. Temporary markings should be considered for operations exceeding three days in duration.

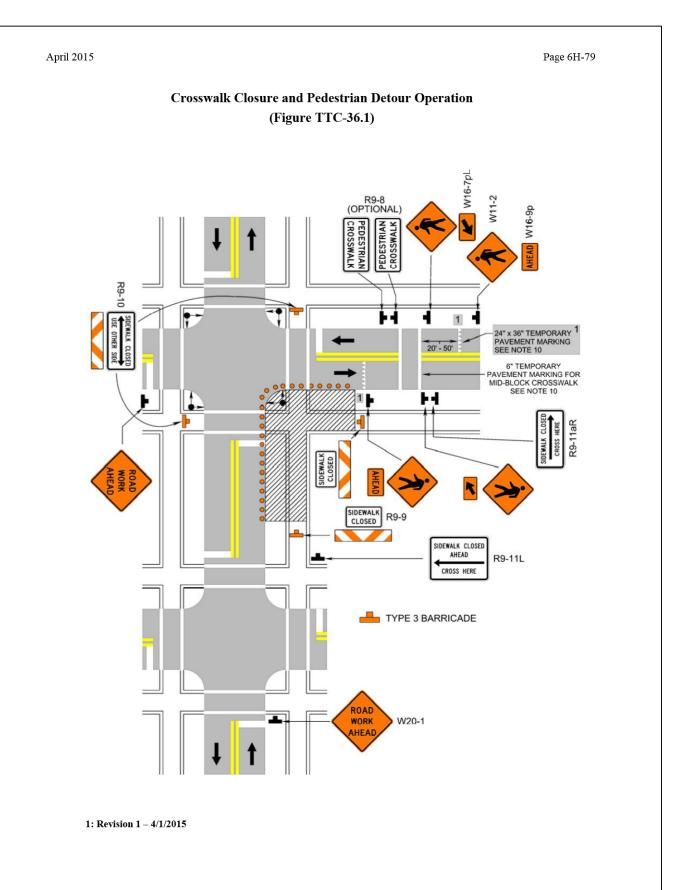
6. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS (W5-1) signs, may be used to control vehicular traffic. 7. For nighttime closures, Type A Flashing warning lights may be used on barricades supporting signs and

8. In order to maintain the systematic use of the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs in a jurisdiction, the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs may be used in TTC zones.

9. All sidewalk closures shall be closed with Type 3 Barricades.

10. Refer to Sections 3B-16 through 3B-18 of the 2009 MUTCD and the Virginia Supplement to the MUTCD¹ for crosswalk¹ lines, yield lines and other related TTC devices that may be used to control vehicular traffic at midblock crosswalks.

1: Revision 1 – 4/1/2015



Page 6H-106

Typical Traffic Control Disruption Operation on a Multi-Lane Roadway (Figure TTC-50.0)

1. Conditions represented are a planned closure not exceeding 20 minutes during the daytime.

2. On Limited Access highways, the sign spacing distance and flagger distance should be 1300'- 1500'. For all other roadways, the distance between the advance warning signs and between the flagger should be 500'-800' where the posted speed limit is 45 mph or less.

3. Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. For Limited Access highways a minimum of 1000' is desired. 4. The buffer space length should be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.

Standard:

5. On divided highways having a median wider than 8', right and left sign assemblies shall be

6. Flagging stations shall be located far enough in advance of the operation to permit approaching traffic to reduce speed and/or stop before passing into the operation.

7. All flaggers shall be state certified and have their certification card in their possession when performing flagging duties and shall follow the procedures noted in Sections 6E.04 and 6E.05.

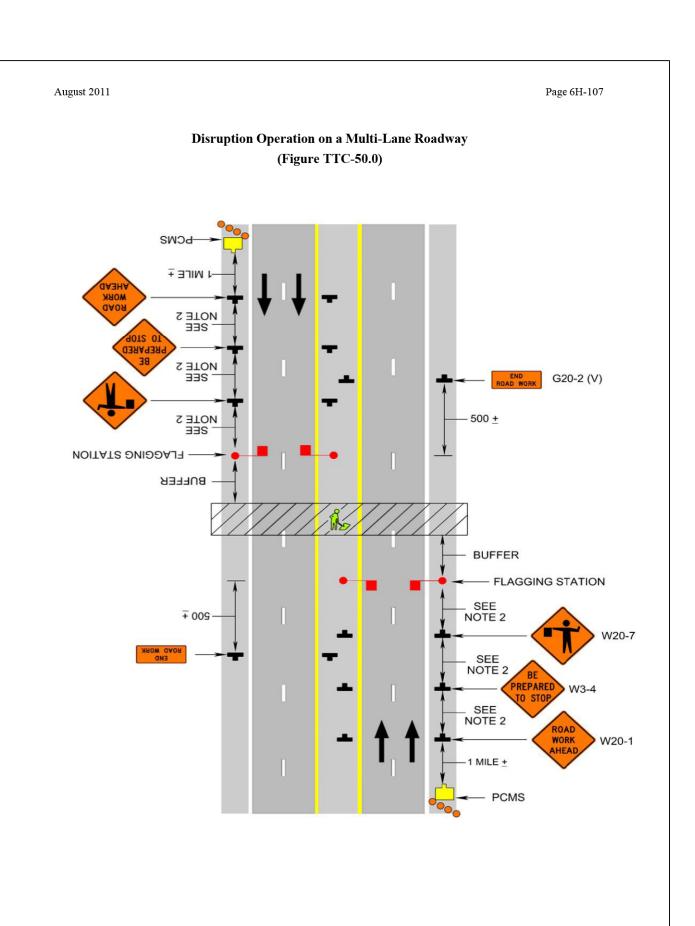
8. A minimum of four (4) drum channelizing devices shall be placed on the shoulder in advance of the PCMS in a taper for delineation (see Figure 6F-6).

9. A Portable Changeable Message Sign (PCMS) should be used on Limited Access highways and placed a minimum of one mile in advance of the warning signs warning of the operation ahead (UTILITY WORK AHEAD) and advising of the action required (BE PREPARED TO STOP).

10. Disruptions to traffic should be coordinated with all entities involved in advance and performed during off-peak hours to minimize the impact on the motoring public. On Limited Access highways, State Police should assist with the stoppage of traffic.

11. A uniformed law enforcement officer may be used for this application in place of the flagger.

12. The ROAD WORK AHEAD (W20-1) sign may be replaced with other appropriate signs such as UTILITY WORK AHEAD (W21-7).



Page 6H-112 August 2011 **Typical Traffic Control** Signing for Project Limits

1. This layout depicts signing requirements for notifying motorist when they are entering and exiting a potential construction/maintenance area with a duration equal to or greater than 60 days.

(Figure TTC-53.0)

2. The ROAD WORK AHEAD (W20-1) sign or the ROAD WORK NEXT XX MILES (G20-1 (V)) sign shall be placed far enough in advance of the project limits so that other warning signs in a

series may be adequately placed prior to the condition they are warning about. 3. The ROAD WORK NEXT XX MILES sign shall be used for projects with activity areas greater than 2 miles in length, or when multiple work activities (such as pavement patching, guardrail

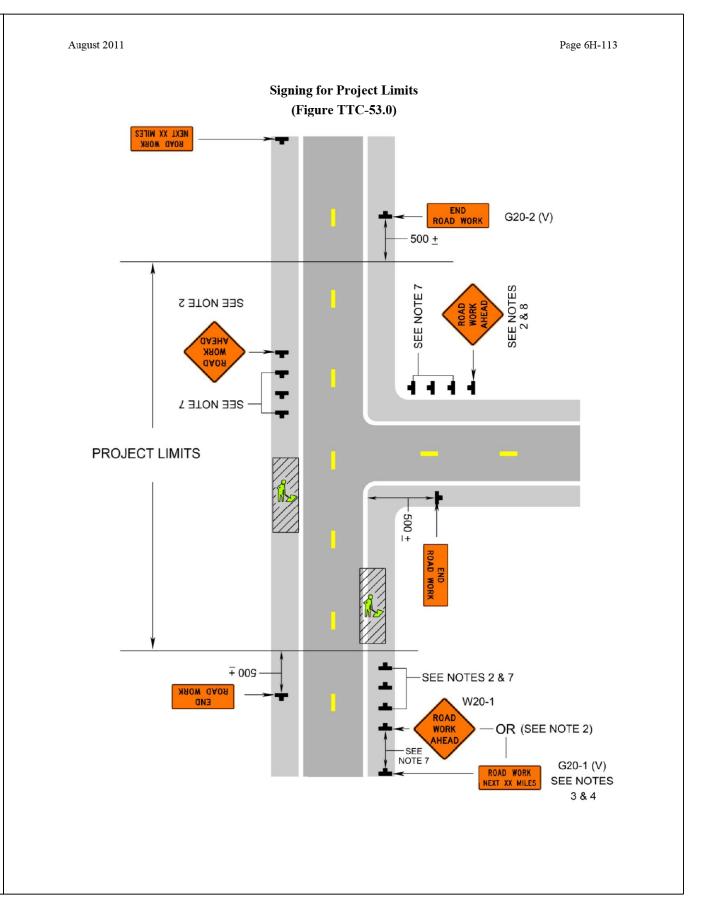
installations, shoulder restoration, etc.) occur along a highway. 4. The distance displayed on the ROAD WORK NEXT XX MILES sign shall be stated to the nearest whole mile from the point of installation to the END ROAD WORK (G20-2 (V)) sign.

5. On divided highways having a median wider than 8', right and left sign assemblies shall be

Guidance: 6. For projects with activity areas 2 miles or less in length, the ROAD WORK AHEAD sign should be the

7. Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.

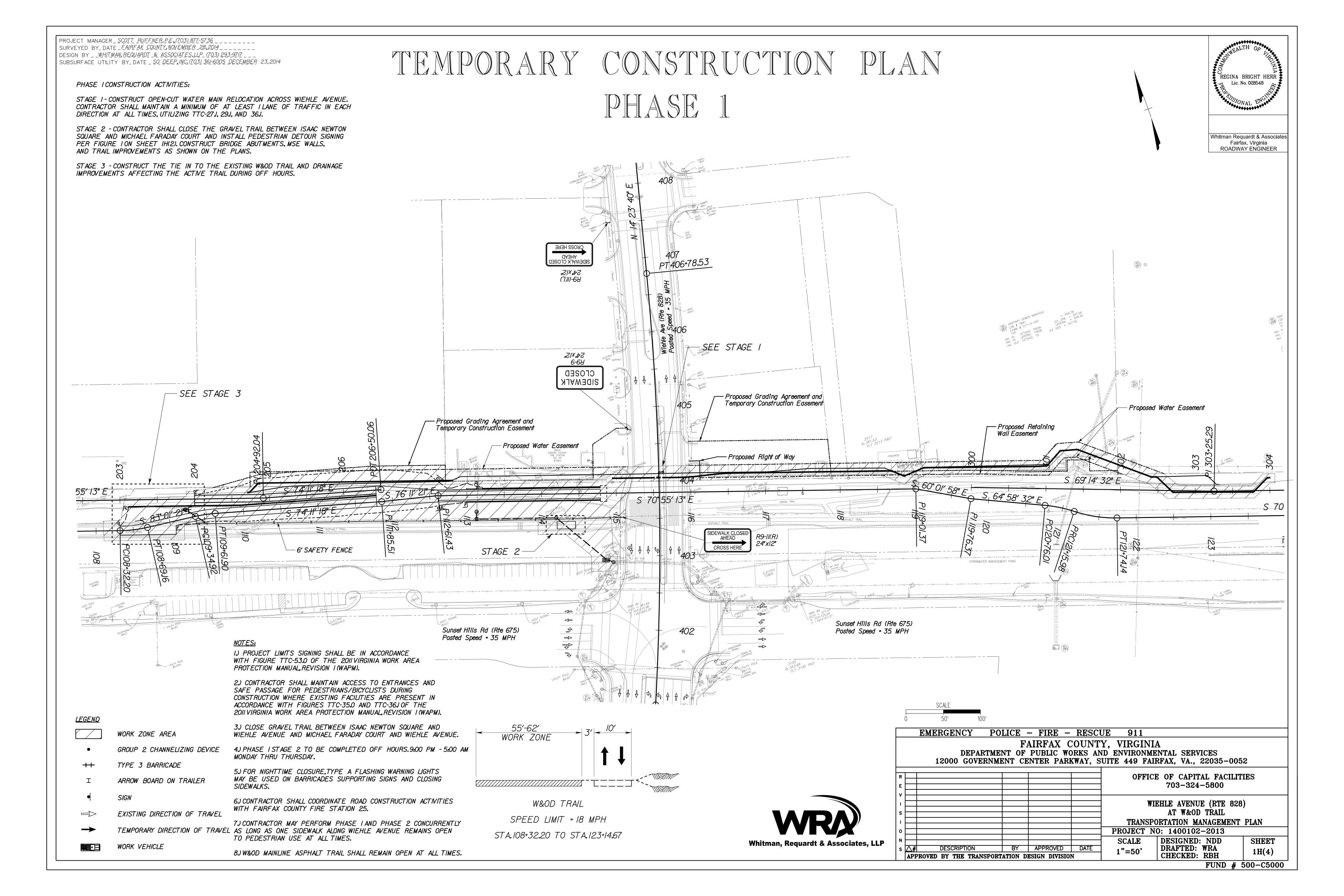
8. All connections within the project limits should be identified with signs indicating to motorist they are entering or exiting a potential construction/maintenance area.

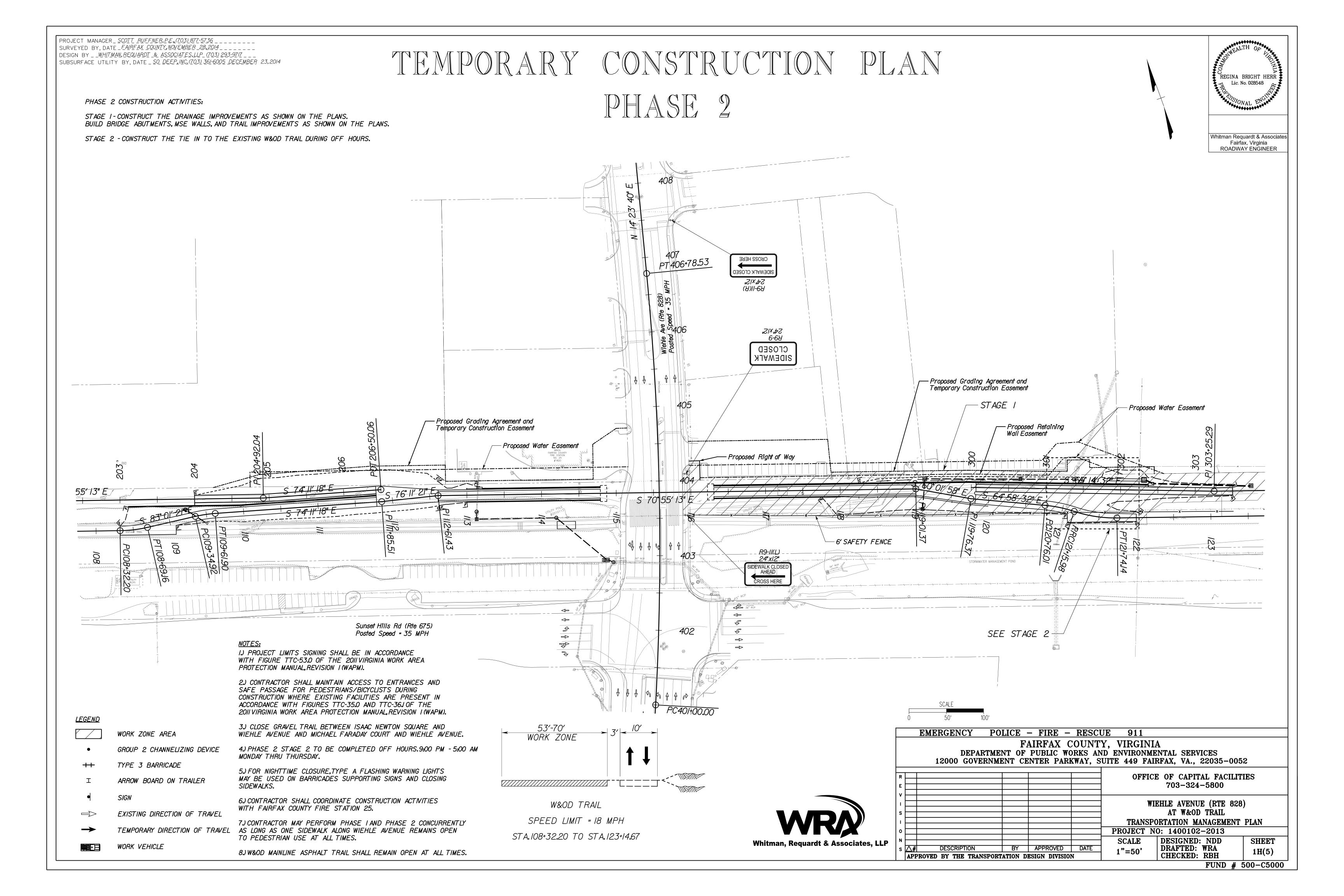


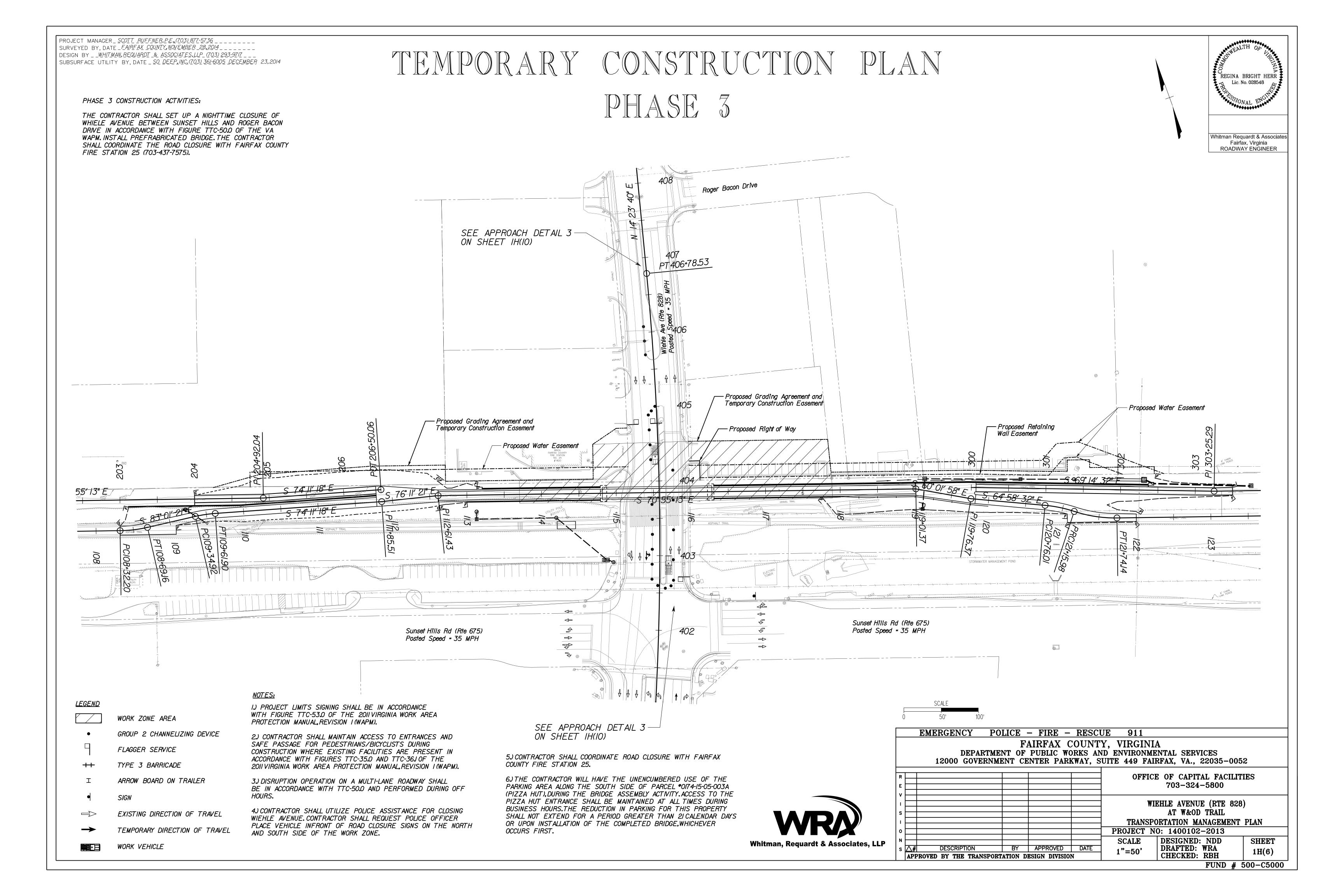
Whitman, Requardt & Associates, LLP

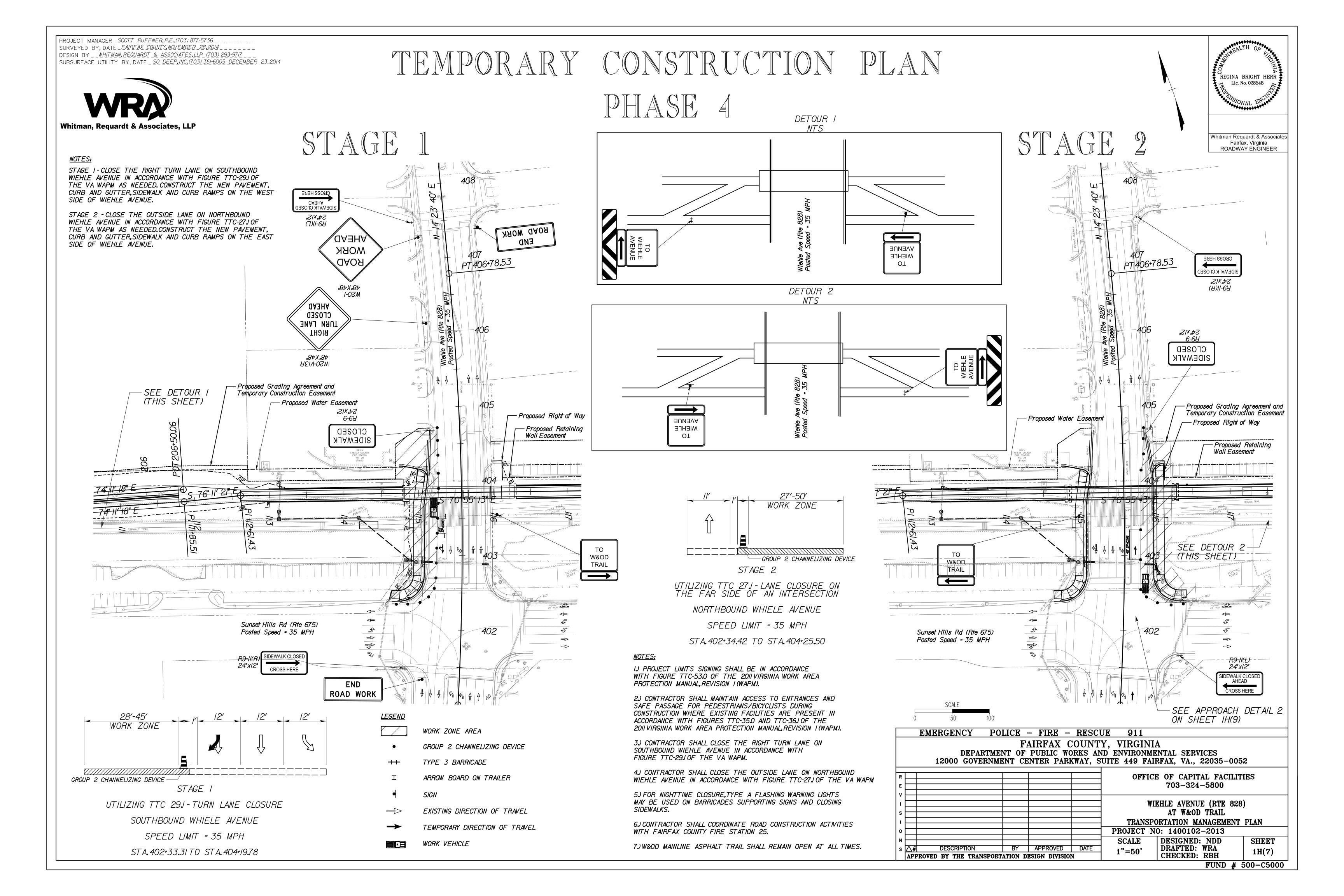
POLICE - FIRE - RESCUE **EMERGENCY** FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL SEQUENCE OF CONSTRUCTION PROJECT NO: 1400102-2013 SCALE DESIGNED: NDD SHEET DESCRIPTION DRAFTED: WRA 1H(3) CHECKED: RBH

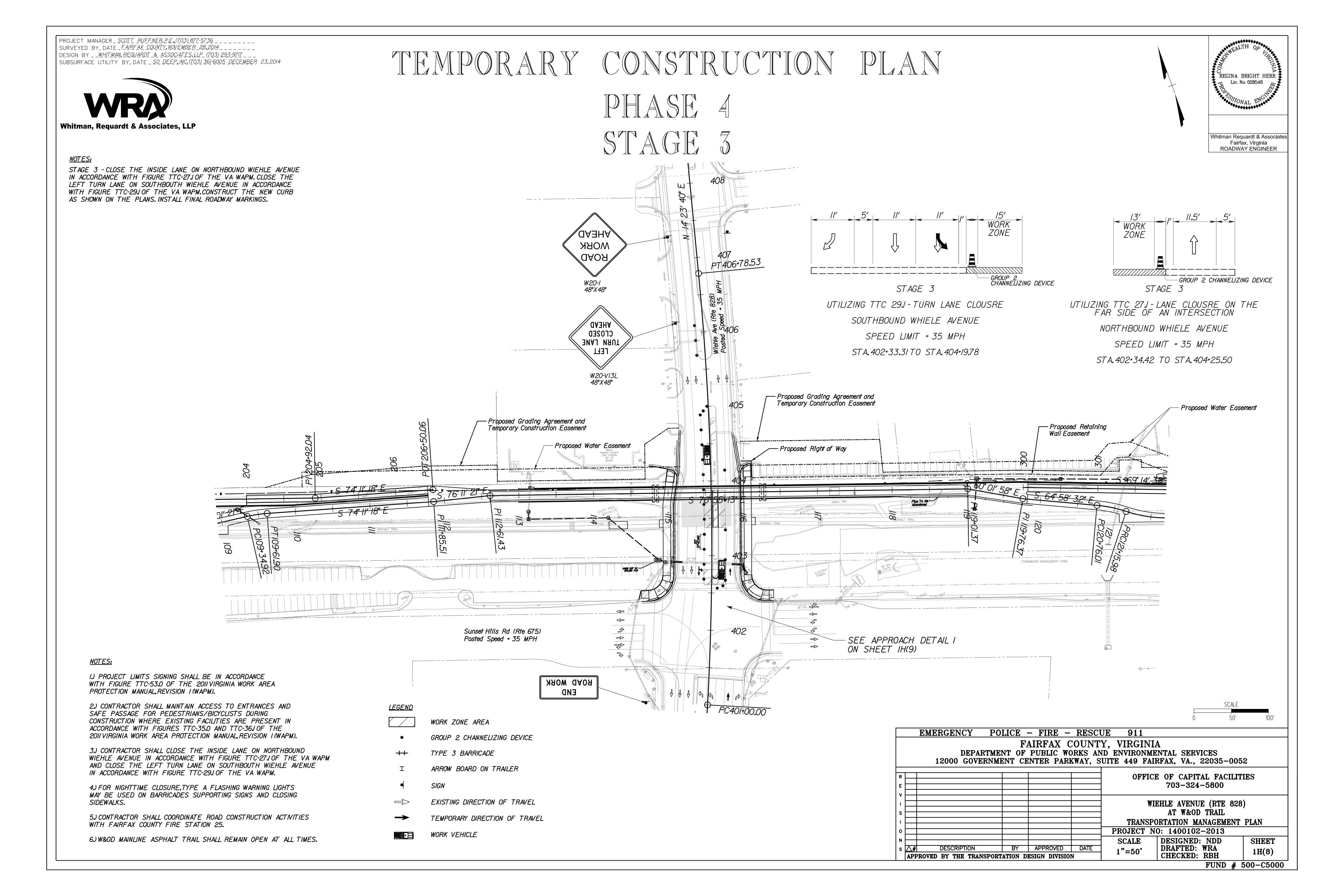
APPROVED BY THE TRANSPORTATION DESIGN DIVISION

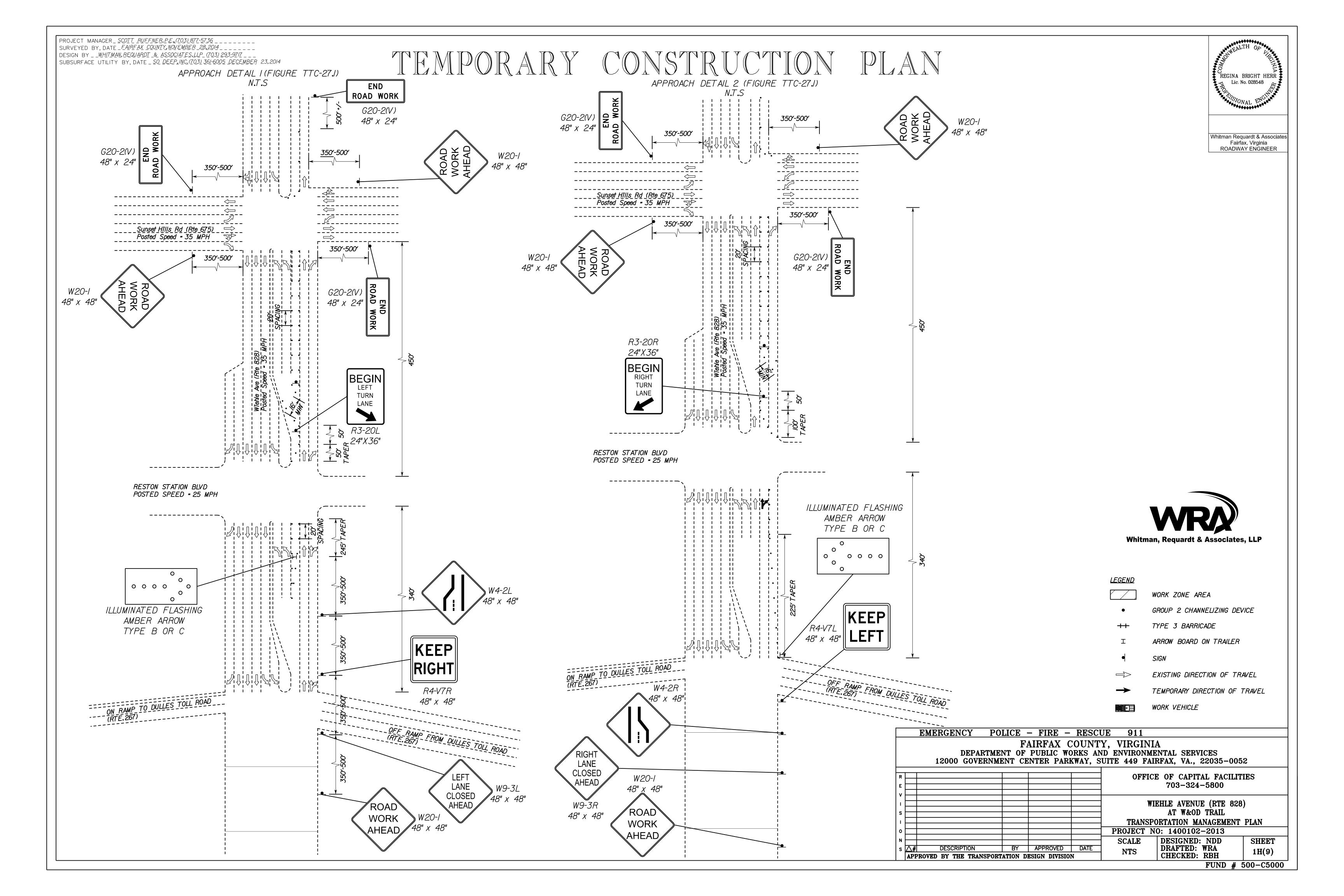


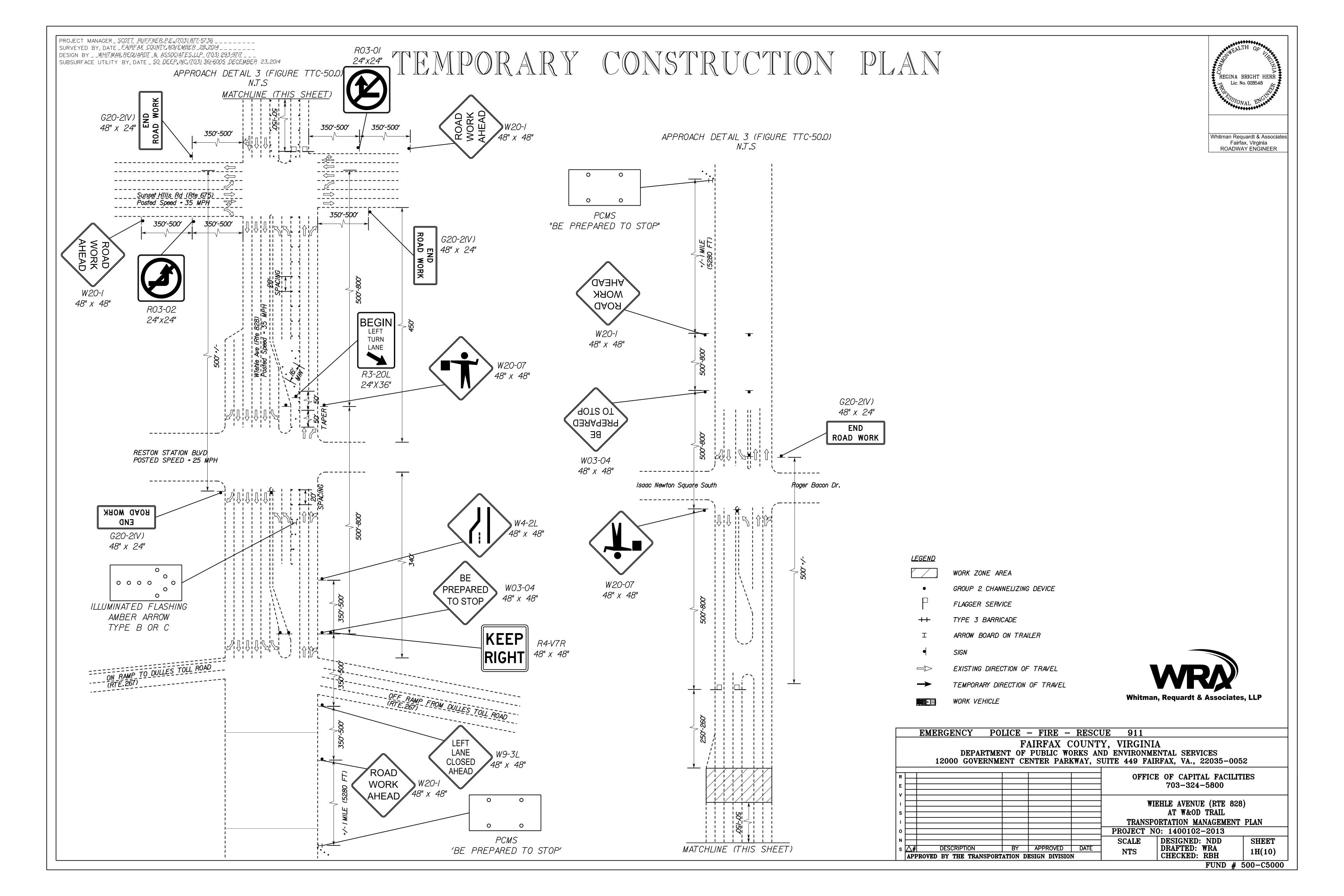


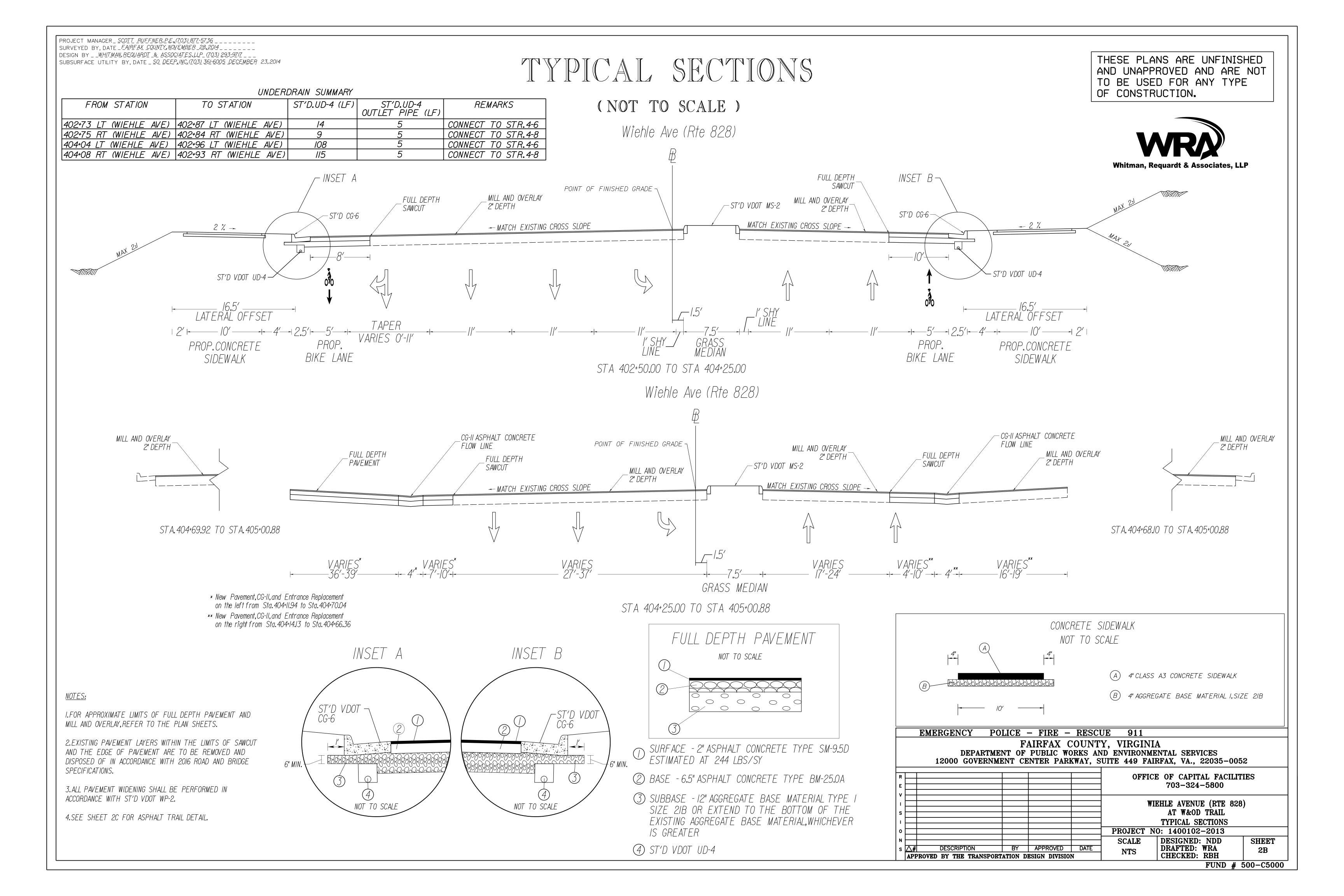








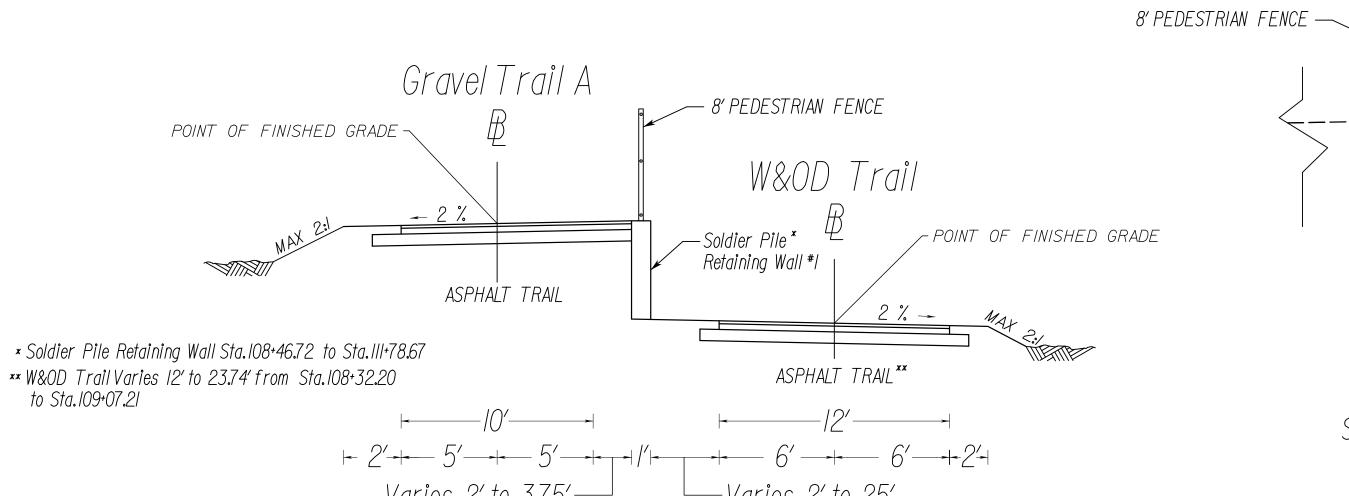




PROJECT MANAGER_SCOTT_RUFFNER,P.E.,(703)877-5736_______ SURVEYED BY, DATE_FAIRFAX_COUNTY,NOVEMBER_28,2014______ DESIGN BY__WHITMAN,REQUARDT_&_ASSOCIATES,LLP_(703)293-9717____ SUBSURFACE UTILITY BY, DATE SO DEEP, INC. (703) 361-6005 DECEMBER 23, 2014

TYPICAL SECTIONS

(NOT TO SCALE)



_ Soldier Pile* retaining Wall#I Depth = 0.7'_ -3'-+2'-

STA. 108+50.00 TO STA. 109+25.00

8' PEDESTRIAN FENCE — ST'D VDOT CG-2 — — 8' PEDESTRIAN FENCE MSE Wall #2** -MSE Wall #3*** ASPHALT TRAIL*

W&OD T

STA 111+85.51 TO STA 114+81.47

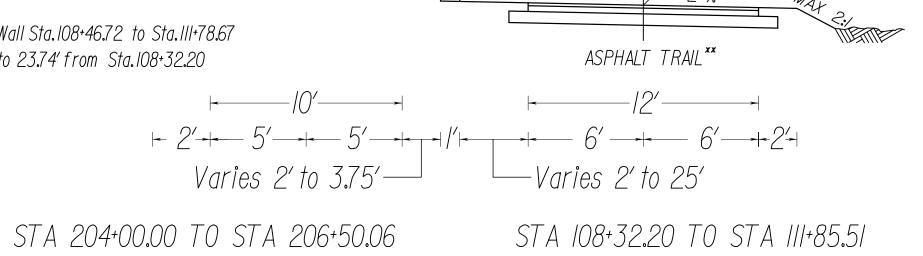
* Asphalt Trail width varies from 27' to 16'

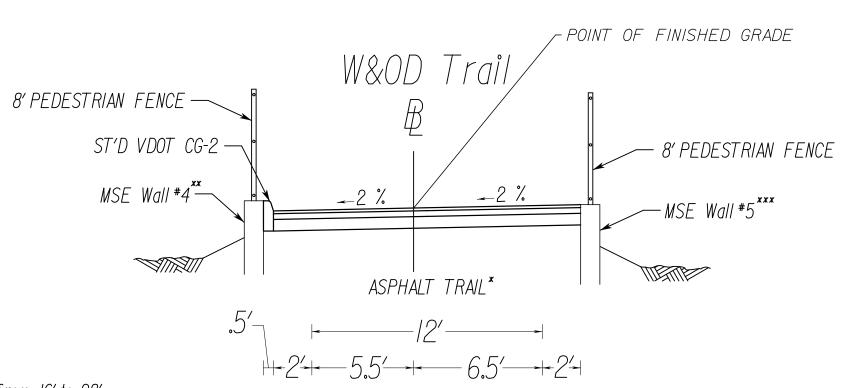
from Sta. III+78.67 to II2+61.43

POINT OF FINISHED GRADE

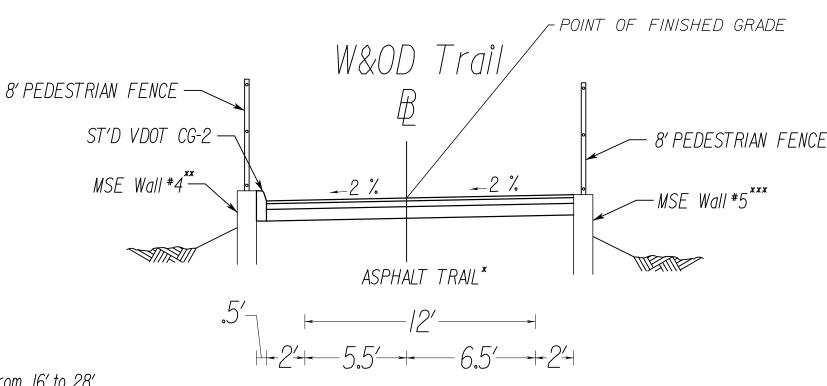
** MSE Wall #2 Sta. 1/3+20.76 to Sta. 1/4+78.72 left. Pedestrian fence and additional I' shoulder extends beyond MSE wall from Sta. 113+00.00 to 113+20.76 left

*** MSE Wall #3 Sta. 113+00.00 to Sta. 114+78.72 right

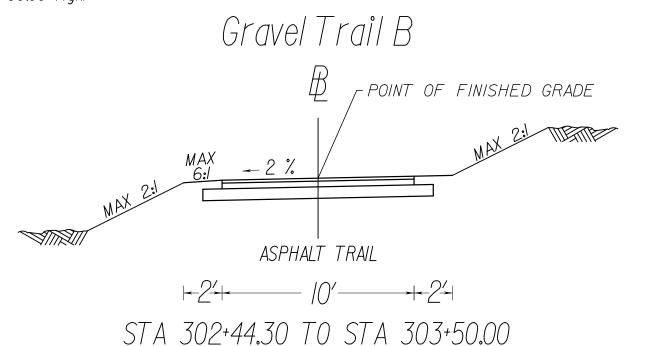


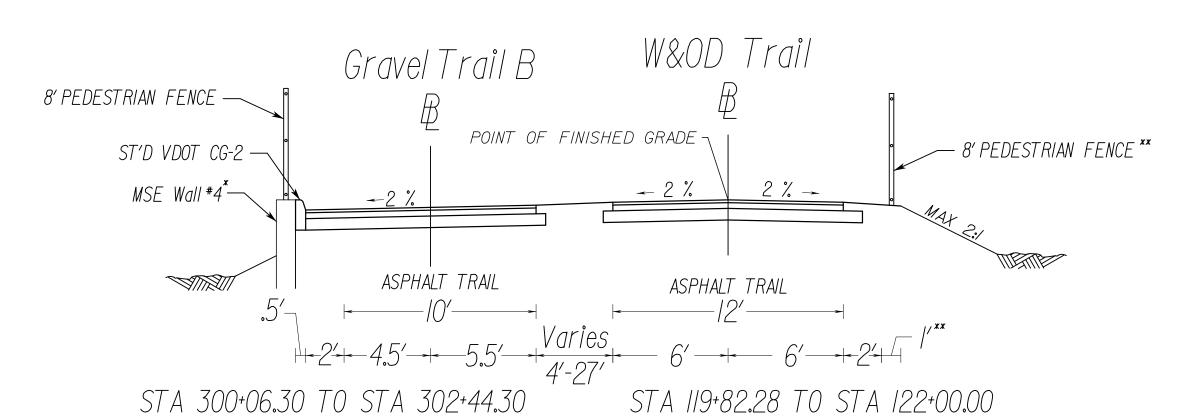


- * Asphalt Trail width varies from 16' to 28' from Sta. 119+01.37 to 119+82.28
- ** MSE Wall #4 Sta. II6+30.89 to Sta. II9+82.28 left
- *** MSE Wall #5 Sta. 116+30.89 to Sta. 118+00.00 right. Pedestrian fence and additional I' shoulder extends beyond MSE wallfrom Sta. 118+00.00 to 119+90.00 right

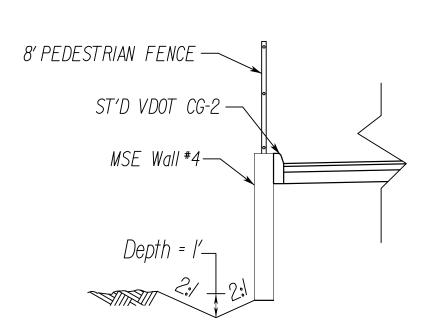


STA 116+30.89 TO STA 119+82.28





*MSE Wall #4 Sta. 300+06.30 to Sta. 302+37.02 left **Pedestrian fence and additional I' shoulder extends beyond MSE wall from Sta. 118+00.00 to 119+90.00 right



STA 118+48.83 TO STA 120+25.00 STA 300+06.30 TO STA 300+49.95



THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

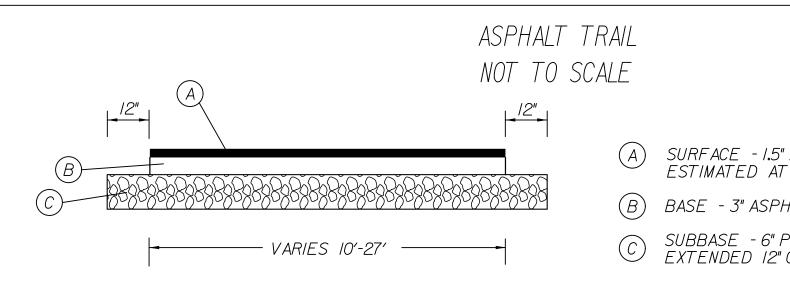
FUND # 500-C5000

<u>NOTE:</u>

I.FOR SUPERELEVATION AND TRANSITIONS INFORMATION REFER TO PROFILE SHEETS.

2.FOR MSE WALL DETAILS SEE SHEETS 6(23) - 6(29).

3.FOR SOLDIER PILE WALL DETAILS SEE SHEETS 10(1) - 10(4).

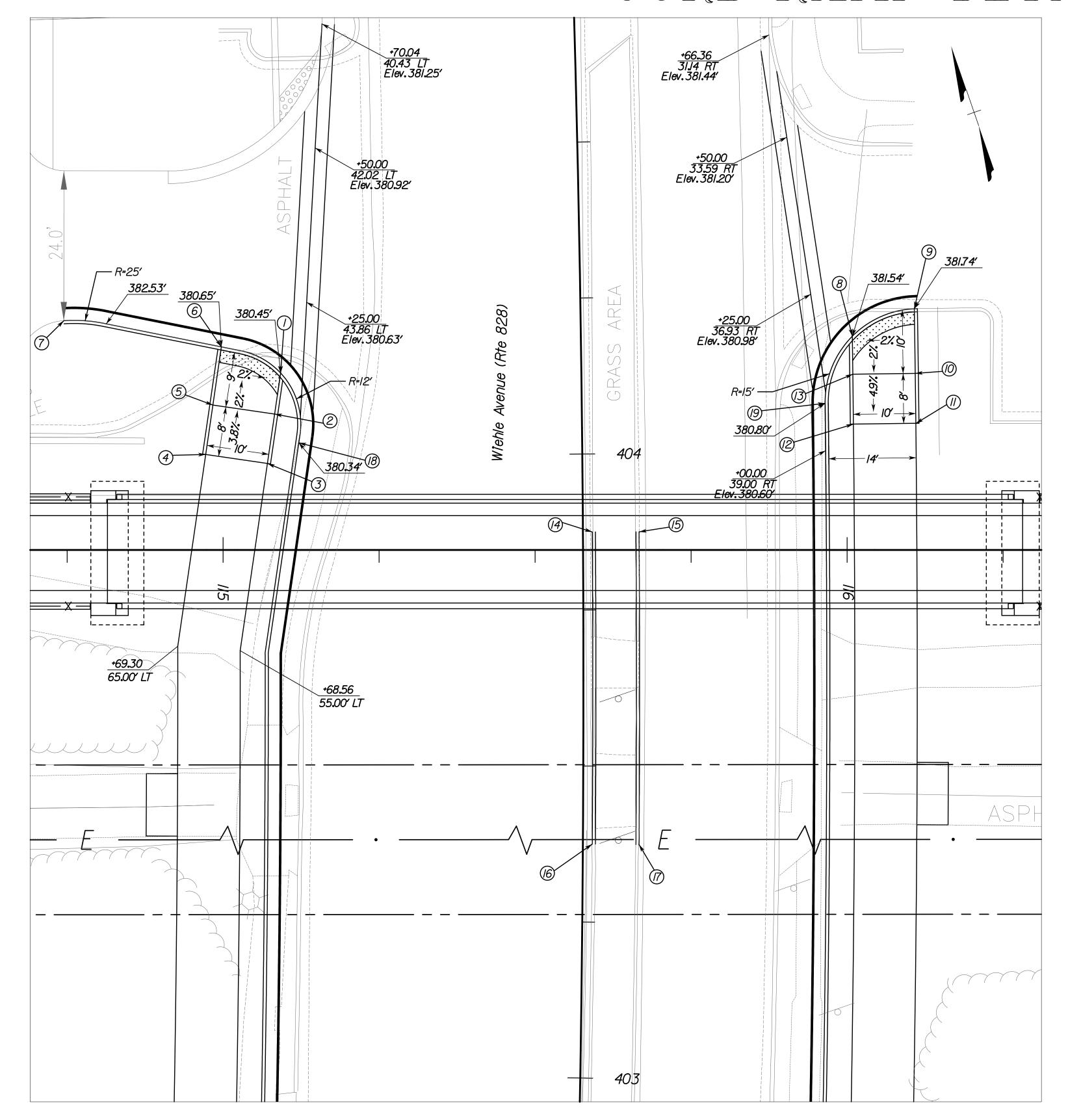


- A SURFACE 1.5" ASPHALT CONCRETE, TYPE SM-9.5A ESTIMATED AT 182 LBS/SY
- (B) BASE 3" ASPHALT CONCRETE, TYPE BM-25.0A
- SUBBASE 6" PLAIN AGGREGATE, TYPE I, SIZE NO. 2IB EXTENDED 12" ON EITHER SIDE OF THE BASE

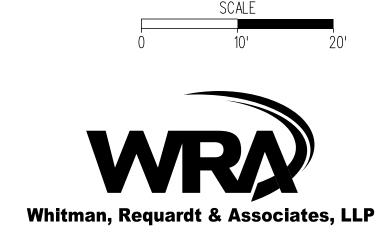
POLICE - FIRE - RESCUE **EMERGENCY** FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL TYPICAL SECTIONS PROJECT NO: 1400102-2013 DESIGNED: NDD DRAFTED: WRA CHECKED: RBH SCALE SHEET BY APPROVED DATE APPROVED BY THE TRANSPORTATION DESIGN DIVISION

PROJECT MANAGER_SCOTT_RUFFNER, P.E., (703) 877-5736_
SURVEYED BY, DATE_FAIRFAX_COUNTY, NOVEMBER_28, 2014_
DESIGN BY_WHITMAN, REQUARDT_& ASSOCIATES, LLP_(703) 293-9717_
SUBSURFACE_UTILITY_BY, DATE_SO_DEEP, INC. (703) 361-6005_DECEMBER_23, 2014

CURB RAMP DETAIL SHEET



POINT	FACE OF CURB	TOP OF CURB	LANDING	BACK OF RAMP	STATION	OFFSET	COMMENTS
1		380.95	380.45		404+13.62	48.20′ LT	NOSE DOWN
2	380.57	381.07	——-		404+06.97	49.24′ LT	
3		——-	——-	380.87	403+98.96	50 .4 7′ LT	
4	———	——-	——-	381.07	404+00.52	60.35′ LT	
5	380.77	381.37	——-		404+08.54	59.JI′ LT	
6		381.15	380.65	——–	404+18.00	57.63′ LT	NOSE DOWN
7	383.17	383.67	———	———	404+22.65	82.81′ LT	MATCH EXIST.
8	———	382.04	381.54	———	404+18 . 26	43.50′ RT	NOSE DOWN
9	———	382.24	381.74	———	404+22.46	53.50′ RT	CURVE PT NOSE DOWN
10	381.86	382.36	——-	———	404+12.24	53.50° RT	
//	———	— — –	———	381.47	404+04.33	53.50′ RT	
12		——–		381.27	404+04.33	43.50′ RT	
13	381.66	382.16	———	— — –	404+12.24	43.50′ RT	
14	381.72	382.22	——-	———	403+87.49	1.50° RT	MATCH EXIST.
<i>1</i> 5	381.47	<i>381.9</i> 7		———	403+87.47	9.00′ RT	MATCH EXIST.
16	381.22	381.72		——-	403+37.49	1.50′ RT	MATCH EXIST.
17	380.65	381.15		——–	403+37.47	9.00′ RT	MATCH EXIST.
18	380.34	380.84		— — –	404+02.27	45.41′ LT	CURVE PC
19	381.08	381.58			404+07,68	39.00° RT	CURVE PC



THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

POLICE - FIRE - RESCUE **EMERGENCY** 911 FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL CURB RAMP DETAIL SHEET PROJECT NO: 1400102-2013 DESIGNED: NDD DRAFTED: WRA CHECKED: RBH SCALE SHEET S APPROVED BY THE TRANSPORTATION DESIGN DIVISION BY APPROVED DATE 1"=10' 2D(1)

PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u>

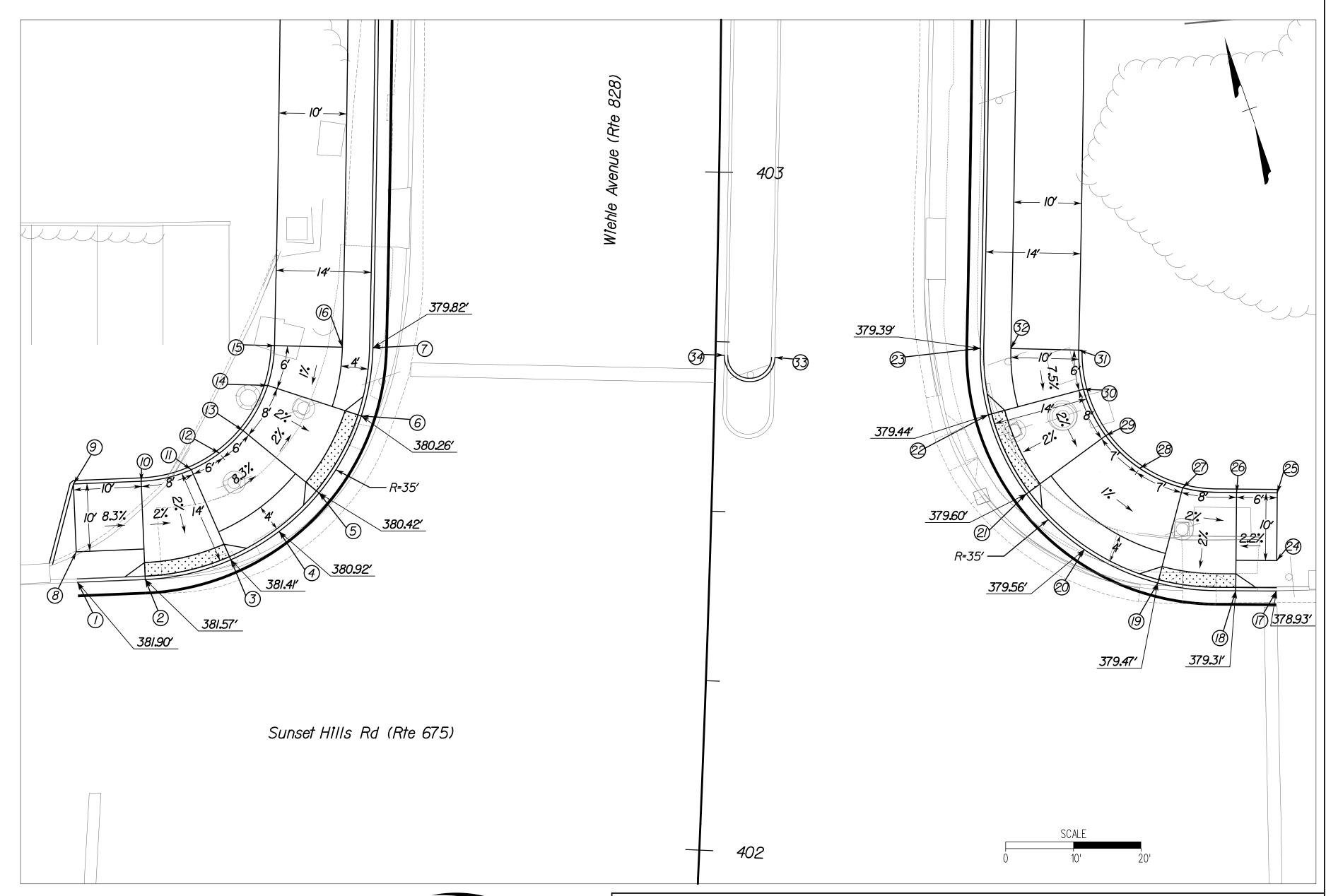
SURVEYED BY, DATE <u>FAIRFAX COUNTY, NOVEMBER 28, 2014</u>

DESIGN BY <u>WHITMAN, REQUARDT</u> <u>ASSOCIATES, LLP</u> (703) 293-9717 ___

SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 DECEMBER</u> 23, 2014

CURB RAMP DETAIL SHEET

POINT	FACE OF CURB	TOP OF CURB	LANDING	BACK OF RAMP	STATION	0FFSET	COMMENTS
1	381.90	382.40			402+36.46	93.06′ LT	MATCH EXIST
2			381.70		402+37.22	83.09′ LT	CURVE PC
3			38I .4 I		402+40.60	70 . 58′ LT	
4	380.92	381.42			402+45.08	63.60′ LT	
5			380.56		402+51.01	57.88′ LT	
6	——-		380.32		402+62.69	51.97′ LT	
7	379.82	380.32			402+72.91	50.50′ LT	
8		<i>382.</i> 48			402+41.06	93.39′ LT	CURVE PT
9				382.68	402+51.29	94J0′ LT	
10		382.35		381.85	402+52.00	84J3′ LT	
//		382.19		381.69	402+53.96	76.79° LT	
12				381.20	402+56.56	72.71' LT	
/3		381.20		380.70	402+60.04	69.34′ LT	
14		381.04		380.54	402+66.91	65.86′ LT	
<i>1</i> 5				380.60	402+72.90	65.00′ LT	
16		380.40			402+72.91	55.00′ LT	
17	378.93	379.43			402+40.85	83.60′ RT	MATCH EXIST
18			379.31		402+40.71	77.60′ RT	CURVE PC
19			379.47		402+41.49	66.09′ RT	
20	379.56	380.06			402+46.00	55 , ′ RT	
21			379.60		402+53.86	46.34′ RT	
22			379.44		402+65.25	40.42′ RT	
23	379.39	379.89			402+74.91	39.00′ RT	CURVE PT
24		379.51			402+45.25	83.50′ RT	
25		— — –		379.71	402+55.04	83,29′ RT	
26		380.08		379.58	402+54.92	77 . 29′ RT	
27		380.25		379.75	402+55,38	69.33′ RT	
28				379.81	402+58.04	62.9ľ RT	
29		380.38		379.88	402+62,64	57.78′ RT	
30		380.22		379.72	402+69.30	54.33′ RT	
3/				380.17	402+74.98	53.50′ RT	
32		379.97			402+74.98	43.50′ RT	
33	380.J2				402+72,88	08.77′ RT	MATCH EXIST
34	380.80						MATCH EXIST



Whitman, Requardt & Associates, LLP

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA

DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

OFFICE OF CAPITAL FACILITIES
703-324-5800

WIEHLE AVENUE (RTE 828)
AT W&OD TRAIL

WIEHLE AVENUE (RTE 828)
AT W&OD TRAIL
CURB RAMP DETAIL SHEET

PROJECT NO: 1400102-2013

PROJECT NO: 1400102-2013

SCALE
APPROVED BY THE TRANSPORTATION DESIGN DIVISION

WIEHLE AVENUE (RTE 828)
AT W&OD TRAIL
CURB RAMP DETAIL SHEET

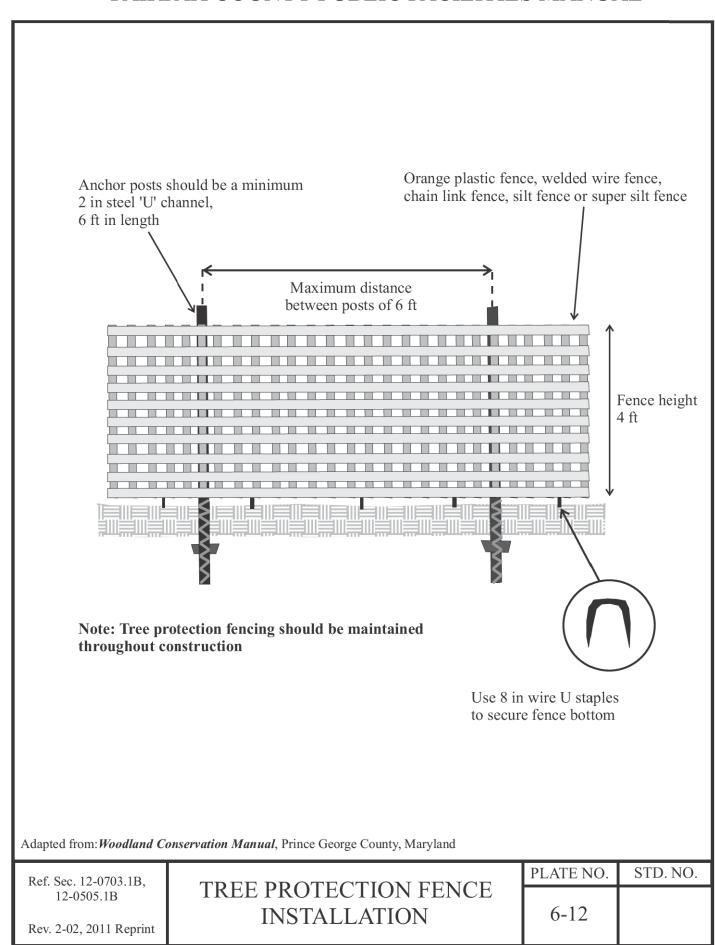
PROJECT NO: 1400102-2013

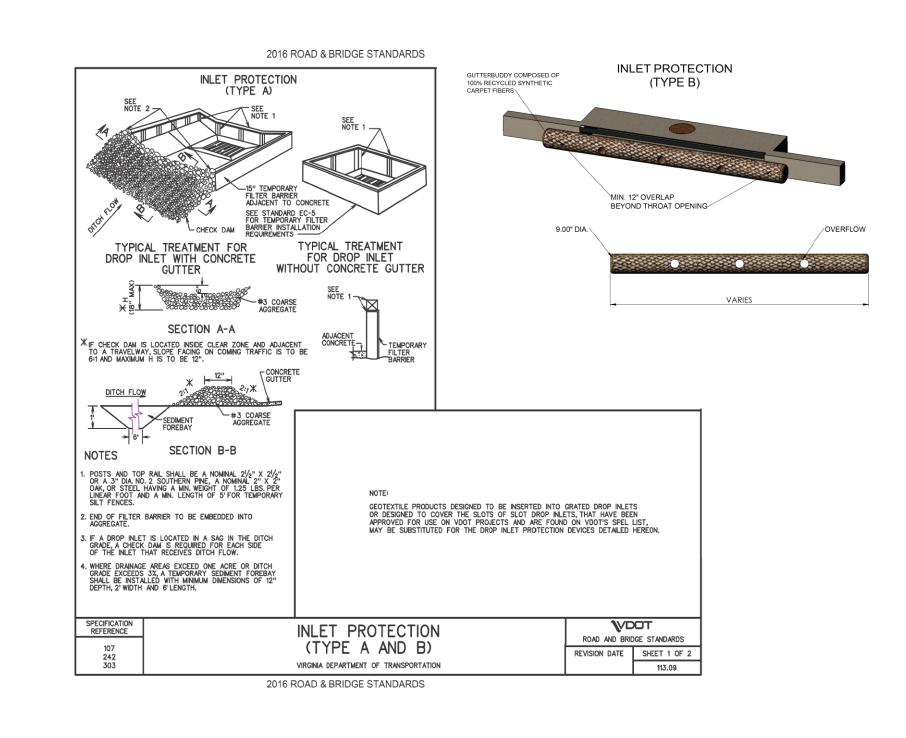
SCALE
DESIGNED: NDD
DRAFTED: WRA
CHECKED: RBH

2D(2)

INSERTABLE SHEETS

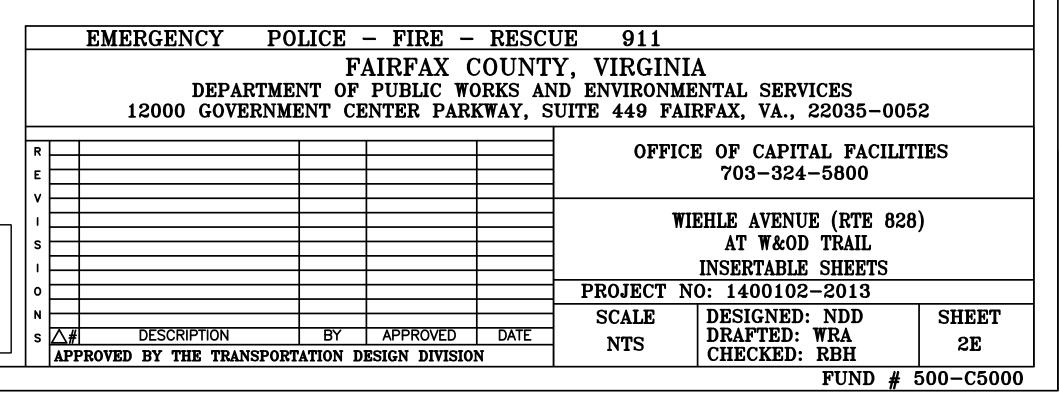
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL







THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.



PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE <u>FAIRFAX COUNTY, NOVEMBER 28, 2014</u> DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE _ SO DEEP, INC. (703) 361-6005 DECEMBER 23,2014

PROJECT	INFORMATION										
PROJECT INFORMATION											
PROJECT NAME	W&OD TRAIL AT WIEHLE AVE										
COUNTY PROJECT NUMBER	1400102-2013										
VDOT UPC NUMBER (IF APPLICABLE)	PE - 140294 RW - 107439 CN - 107439										
PROJECT LIMITS / LENGTH	1,800 L.F. PAVED TRAIL AND 147 L.F. PED. BRIDGES										
FUNDING SOURCE	FEDERAL REGIONAL SURFACE TRANSPORTATION PROGRAM & CONGESTION MITIGATION AIR QUALITY IMPROVEMENTS PROGRAM										
DATE OF FUNDING OBLIGATION	OCTOBER 24, 2014										
LATITUDE/ LONGITUDE	LAT 38.9505 LONG -77.3358										
6TH ORDER HUC	PL22										
TYPE OF DEVELOPMENT:											
NEW DEVELOPMENT REDEVELOPMENT											
STORMWATER MANAGEMENT TECHNICAL CRITERIA USED:											
VSMP TECHNICAL CRITERIA IIB / FFX CO STORMWATER MANAGEMENT ORDINANCE ARTICLE 4											
VSMP TECHNICAL CRITERIA IIC / FFX CO STORMWATER MANAGEMENT ORDINANCE ARTICLE 5											
SWM WAIVER/EXCEPTION(S) REQUIRED: YES NO APPROVAL DATE:											
TYPE(S):	LDS NUMBER:										
A) IS PROJECT LOCATED WITHIN THE WATER SUPPROTECTION OVERLAY DISTRICT (WSPOD)?	PLY YES NO										
B) IS PROJECT A PUBLIC IMPROVEMENT (PI) PLAI SUBJECT TO FULL LDS REVIEW/APPROVAL?	YES NO										
C) IS PROJECT A LINEAR PROJECT SUBJECT TO REVIEW/APPROVAL AND VDOT LUP PROCESS?	VDOT YES NO										
	. IF ANSWER TO BOTH A & C IS YES, SEE NOTE (3.1).										
CONSTRUCTION SITE AREAS											
TOTAL SITE AREA	3.08 (AC) 134,200 (SF										
TOTAL DISTURBED AREA	3.08 (AC) 134,200 (SF										
TOTAL SITE IMPERVIOUS AREA	PRE 1.14 (AC) POST 1.55 (AC										
VPDES PERMIT REQUIREMENTS (CHECK ONE):											
DISTURBED AREA < 1 (AC); VPDES PERMIT	NOT REQUIRED.										
☐ DISTURBED AREA ≥ 1 (AC); VPDES PERMIT	IS REQUIRED.										
RECEIVING WATERS											
WATERSHED NAME: POTOMAC RIVER— DIFFICULT RUN—COLVIN RUN	RECEIVING STREAM: COLVIN RUN										
IS THERE A LOCAL TMDL RESTRICTION WITHIN THE	PROJECT WATERSHED AREA YES NO										
IF YES PROVIDE DESCRIPTION OF IMPAIRED WATERS + TMDL TYPE											

NOTE:

- (1) FOR ADDITIONAL DETAILS SEE THE LATEST REVISION OF THE DRAINAGE/SWM REPORT AND EROSION AND SEDIMENT CONTROL PLAN SHEET 3B-6B.
- (2) THIS IS A COUNTY ADMINISTERED PROJECT AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS PREPARED BY FAIRFAX COUNTY. WHEN APPLICABLE, IT WILL BE INCLUDED WITH THE CONSTRUCTION PACKAGE.
- (3) PURCHASE OF NUTRIENT CREDITS MAY NOT BE USED TO SATISFY DEQ'S WATER QUALITY REQUIREMENTS ON THIS PROJECT.
- (3.1) PURCHASE OF NUTRIENT CREDITS MAY BE USED TO SATISFY DEQ'S WATER QUALITY REQUIREMENTS ON THIS PROJECT.

STORMWATER INFORMATION TABLE

			THE	PLAN MEET	S: TIME LIMITS	ON APPLICABILITY OF A	PPROVED DESIGN (CRITERIA	\boxtimes		
SWM FA	CILITIES (PROPOSED OI	NLY)				THE PLAN MEETS TH	IE GRANDFATHERIN	IG CRITERIA			
FACILITY ID NO.	FACILITY TYPE	PURPOSE	AREA TREATED (ACRES)	LATITUDE (DECIMAL DEGREE)	LONGITUDE (DECIMAL DEGREE)	WATERSHED	RECEIVING WATERS	MAINTENANCE AGREEMENT Y/N	VAHU6 CODE	LENGTH/ AREA OF FACILITY	NO. OF BLE SERVED (FO ROOFTOF DISCONNEC
	Purchased Credits	Water Quality	N/A	38.9505	-77.3358	Potomac-Difficult Run	Colvin Run	N	PL22	N/A	N/A
				WWW.PERFECT.							

DISTURBED AREA (DA) WITHIN WATERSHED(S): WATERSHED 1 Potomac-Difficult Run- Colvin R DA= 3.08 (ACRES) WATERSHED 2 _____ DA=____ (ACRES) TOTAL DISTURBED AREA= 3.08 (ACRES)

PROJECT DATA SHEET

(FEDERAL/STATE FUNDED PROJECT)

TABLE 1.

WATER QUALITY ANALYSIS PER VSMP TECHNICAL CRITERIA IIB / FFX CO STORMWATER MANAGEMENT ORDINANCE ARTICLE 4

RECEIVING WATERS	OUTFALL		TOTAL DISTURBED AREA		PRE DEVELOPMENT LAND USE			POST DEVELOPMENT LAND USE				PHOSPHORUS REMOVAL REQUIRED	ON-SITE PHOSPHORUS REMOVAL PROVIDED	IS PROJECT LOCATED WITHIN WSPOD	
	ID	LOCATION	(AC)	(SF)	FORESTED (AC)	TURF (AC)	IMPERVIOUS AREA (AC)	OTHER (AC)	FORESTED (AC)	TURF (AC)	IMPERVIOUS AREA (AC)	OTHER (AC)	(LB/YR)	(LB/YR)	YES NO (3)(3.1) (4)
COLVIN RUN	COLVIN RUN		3.08	134200	,	1.94	1.14			1.53	1.55		1.39	0.0	X .

(4.) PHOSPHORUS REMOVAL TO BE PROVIDED BY THE PURCHASE OF OFFSITE NUTRIENT CREDITS.

PLEASE SEE TABLE 2 BELOW FOR MORE INFORMATION.

TABLE 2.

OFFSITE COMPLIANCE FOR WATER QUALITY (NUTRIENT CREDITS)

NUTRIENT CREDIT BANK NAME	4TH ORDER HUC	NUTRIENT CREDIT TO BE ACQUIRED (LB/YR)	PURCHASE LETTER (MM/DD/YY) (5)
NAME TO BE PROVIDED UPON PURCHASE	02070008	1.39	MM/DD/YY

NOTE:

(5.) THE "AFFIDAVIT OF PHOSPHOROUS CREDIT SALE" WILL BE PROVIDED ON SHEET 2G UPON COMPLETION OF PURCHASE BY VDOT.

(6.) UPON APPROVAL OF SWM MEASURES BY FAIRFAX COUNTY LDS AND VDOT DRAINAGE AND SUBSEQUENT TO RECEIVING CLEARANCE FROM VDOT NOVA HYDRAULIC ENGINEER, A REQUEST FOR PURCHASE OF NUTRIENT CREDITS INCLUDING THE LATEST REVISION OF VDOT LD-453 FORM AND OTHER REQUIRED DRAINAGE DOCUMENTS WILL BE SUBMITTED BY FAIRFAX COUNTY DOT TO VDOT NOVA HYDRAULIC ENGINEER. UPON REVIEW/APPROVAL, THE REQUEST WILL BE FORWARDED TO VDOT CENTRAL OFFICE BY NOVA HYDRAULIC ENGINEER.

SITE DEVELOPMENT AND INSPECTIONS DIVISION APPROVAL STAMP



OWNER/REPRESENTATIVE CONTACT INFORMATION

NAME:

WAYNE KOTTER, CHIEF,

STORMWATER & TRANSPORTATION

CONSTRUCTION BRANCH

PHONE NUMBER: 703-324-5111

EMAIL ADDRESS: WAYNE.KOTTER@FAIRFAXCOUNTY.GOV

ADDRESS:

UTILITIES DESIGN AND

CONSTRUCTION DIVISION

12000 GOVERNMENT CENTER PKWY

SUITE 463

FAIRFAX, VA 22035

CONSULTANT CERTIFIED E&S CONSULTANT STORMWATER MANAGEMENT PLAN PLAN REVIEWER OR PE REVIEWER

KRISTEN MICHELLE ESTOCSIN

Lic. No. /6402059192 -

5-29-2018

KRISTEN MICHELLE ESTOCSIN Lic. No. 0492059192

SWPR 0297

5-29-2018

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL PROJECT DATA SHEET PROJECT NO: 1400102-2013 **SCALE** DESIGNED: NDD SHEET BY APPROVED DATE DESCRIPTION DRAFTED: WRA NTS 2F CHECKED: RBH APPROVED BY THE TRANSPORTATION DESIGN DIVISION

FUND # 500-C5000

REVISED: APRIL 2018

PROJECT MANAGER_<u>SCOTT_RUFFNER,P.E.,(703)877-5736</u>_____ STORM SEWER PROFILES SURVEYED BY, DATE _*FAIRFAX_COUNTY,NOVEMBER_28,2014______* DESIGN BY __WHITMAN, REQUARDT _& ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE _ SO DEEP, INC. (703) 361-6005 DECEMBER 23,2014 Whitman, Requardt & Associates, LLP THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION. SCALE — PROPOSIED GROUND (5-IA) IST'D. DI-I REQ'D INV. = 372.00', TOP = \$78.20' — Existing ground l (5-1A) - (5-1) 37' - 15" STORM SEWER PIPE REQ'D. (3' COVER) SILT TIGHT JOINT TYPE REQ'D. INV. (IN) 372.00'. (OUT) 367.60' 390 (4-1) IST'D. DI-3BB REQ'D. LENGTH = 6' 5-1 | ST'D. DI-7 REQ'D GRATE A TYPE | REQ'D | INV. = 367.50', TOP = 372.50' | ST'D | IS-I REQ'D | ("DOGHOUSE" INST.TO EXIST 15" PIPE REQ'D) 4-2 | ST'D MH | OR 2 REQ'D 5-2 IST'D. DI-I REQ'D INV. - 361.20', TOP - 363.5' BACK-UP BERM REQ'D 1GL - 1.0% - HGL - HGL (CONNECT TO EXIST 15" PIPE, REMOVE EXIST HEADWALL)

INV. = 377.50', TOP = 382.00'

ST'D. IS-I REQ'D ST'D IS-I REQ'D 5-1 5-2 109' - 15" STORM SEWER PIPE REQ'D. (3' COVER) 380 4-2 4-3 7'- 15" STORM SEWER PIPE REQ'D. (2' COVER)

SILT TIGHT JOINT TYPE REQ'D.

INV. (IN) 377.50, (OUT) 376.60' /NV. (IN) 367.50', (OUT) 361.50' 5-3 / ST'D MH-1 OR 2 REQ'D / ST'D MH-1 FRAME AND GRATE REQ'D (DOGHOUSE INST. TO EXIST 24" PIPE REQ'D) INV. = 357.56', TOP = 362.00' 4-3 | ST'D. DI-I REQ'D. (LESS THAN ST'D "H" REQ'D) INV. = 376.50', TOP = 378.50' ST'D IS-I REQ'D 375 5-2 5-3 84' - 15" STORM SEWER PIPE REQ'D. (2' COVER) /NV. (/N) 36/, 20′, (OUT) 357.70′ 370 -PROPOSED GROUND 10+00.00 (5-/A) (4-3) IST'D. DI-IREQ'D. (LESS THAN ST'D "H" REQ'D) INV. = 376.50', TOP = 378.50' EXISTING GROUND ST'D IS-| REQ|D 4-3 4-4 104' - 15" STORM SEWER PIPE REQ'D. (2' COVER) INV, (IN) 376.50', (OUT) 375.40' (4-4) 1 ST'D MH-1 OR 2 REQ'D | IST'D MH-I FRAME AND COVER REQ'D | INV. = 375.30', TOP = 379.00' | ST'D. IS-! REQ'D | 5-2 365 4-4 4-5) 85' - 15" STORM SEWER PIPE REQ'D. (8' COVER) SILT TIGHT JOINT TYPE REQ'D. INV. (IN) 375.30', (OUT) 374.30' (5-3) (4-5) IST'D. DI-7 REQ'D GRATE A TYPE I REQ'D 390 360 INV. = 374.20' TOP = 379.5' ST'D. IS-I REQ'D 15 PIPE EXISTING 24" RCP (4-3) 355 (4-4) 45 EXISTING GROUND -380 375 STA. 1/3+1/1 (32* LT) 1/W. (1/W) = 376.60 1/W. (0UT) = 376.50 15" PIPE 12+00.00 10+00.00 //+00**.**00 370 POLICE - FIRE - RESCUE **EMERGENCY** FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 360 OFFICE OF CAPITAL FACILITIES 703-324-5800 10+00.00 //+00**.**00 12+00.00 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL STORM SEWER PROFILES & DRAINAGE DESCRIPTIONS NOTE: PROJECT NO: 1400102-2013 I.POST-CONSTRUCTION PIPE INSTALLATION INSPECTION SHALL BE PROVIDED DESIGNED: NDD SCALE SHEET AS REQUIRED PER SECTION 302.03(D) OF THE VDOT 2016 SUPPLEMENTAL BY APPROVED DATE DESCRIPTION DRAFTED: WRA 2H(1) ROAD & BRIDGE SPECIFICATIONS. CHECKED: RBH APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000 PROJECT MANAGER_SCOTT_RUFFNER, P.E., (703) 877-5736_____ STORM SEWER PROFILES SURVEYED BY, DATE _*FAIRFAX_COUNTY,NOVEMBER_28,2014_____* DESIGN BY __WHITMAN, REQUARDT _&_ASSOCIATES, LLP_(703) 293-9717 _ _ _ SUBSURFACE UTILITY BY, DATE SO DEEP, INC. (703) 361-6005 DECEMBER 23, 2014 THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION. EXISTING GROUND SCALE PROPOSED GROUND 4-5) I ST'D. DI-7 REQ'D GRATE A TYPE I REQ'D
INV. - 374.20', TOP - 379.5'
ST'D. IS I REQ'D 380 4-5 4-6 6' - 15" STORM SEWER PIPE REQ'D. (5' COVER) INV. (IN) 374.20', (QUT) 374.00' (3-1) 27' 15" PIPE REQ'D (6" COVER) (4-6) CONVERT EXIST DITO MH IST'D MH-IFRAME AND COVER REQ'D INV.(IN) = 375.70', (OUT) = 375.30' (COUNTERSINK 6" TO ACHIEVE ADEQUATE COVER) 2 ES I OR 2 REQ'D MODIFY INLET TO ACCEPT 15" STORM SEWER FROM STRUCT. 4-5 2 SY EC 3B REQ'D 370 4-7 | ST'D. DI-3C REQ'D. L=12' (DOGHOUSE INST.TO EXIST 30" PIPE REQ'D) INV. = 373.30', TOP = 380.05' ST D IS | REQ'D (4-8) | ST'D. DI-3C REQ'D. L=12' | INV. = 371.18', TOP = 380.13' STID IS I REQID (4-7A) REMOVE EXIST DI AND 30" PIPE TO JOINT CONNECT NEW 30" RCP TO STRUCT.4-4
12' 30" CONC STORM SEWER PIPE REQ'D 10+00.00 (4-8A) REMOVE EXIST DI AND 30" PIPE TO JOINT REMOVE EXIST 36" PIPE TO PROP. STRUCT 4-8 CONNECT NEW 30" RCP TO STRUCT. 4-7 12' 30" CONC STORM SEWER PIPE REQ' 4-9 IST'D. NH-IOR 2 REU U.

IST'D MH-I FRAME AND COVER REQ'D

(DOGHOUSE INST. TO EXIST 36" PIPE REQ'D)

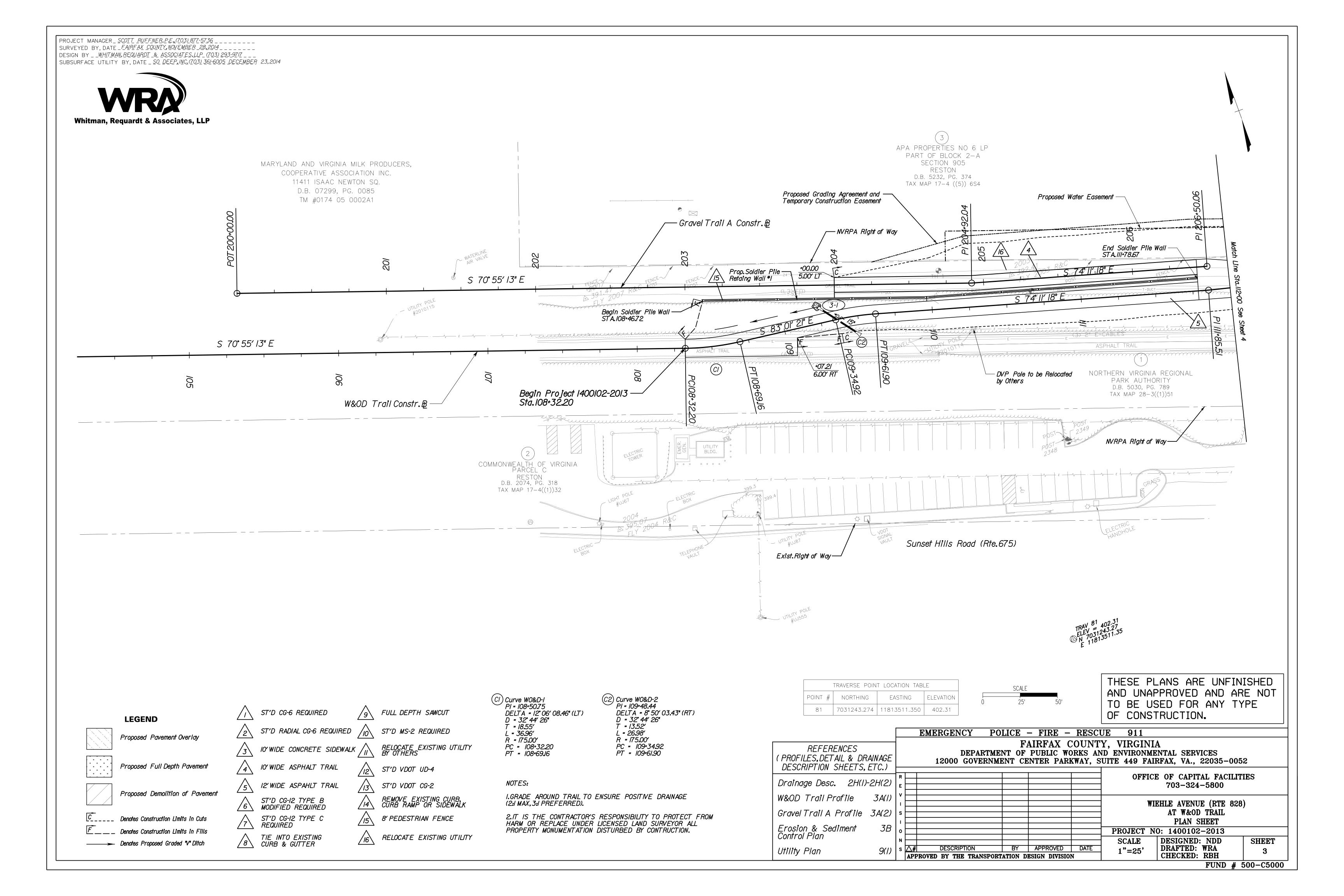
INV. = 370.90', TOP = 380.2' 5-4 | ST'D. DI-3B REG'D. LENGTH = 6' INV. = 366.00', TOP = 374.10' ST'D IS-I REQ'D 5-6 | ST'D. DI-5 W/ ST'D PG2A TYPE E COVER REQ'D 4-8 4-9 9' - 36" STORM SEWER PIPE REQ'D. (7' COVER)
SILT TIGHT JOINT TYPE REQ'D.
INV. (IN) 371.18', (OUT) 370.90 5-6 5-4 130' - 24" STORM SEWER PIRE REQ'D. (3' COVER) INV. (IN) 367, 50', (OUT) 366. 10' 5-4 5-5 10' - 24" STORM SEWER PIPE REQ'D. (8' COVER)

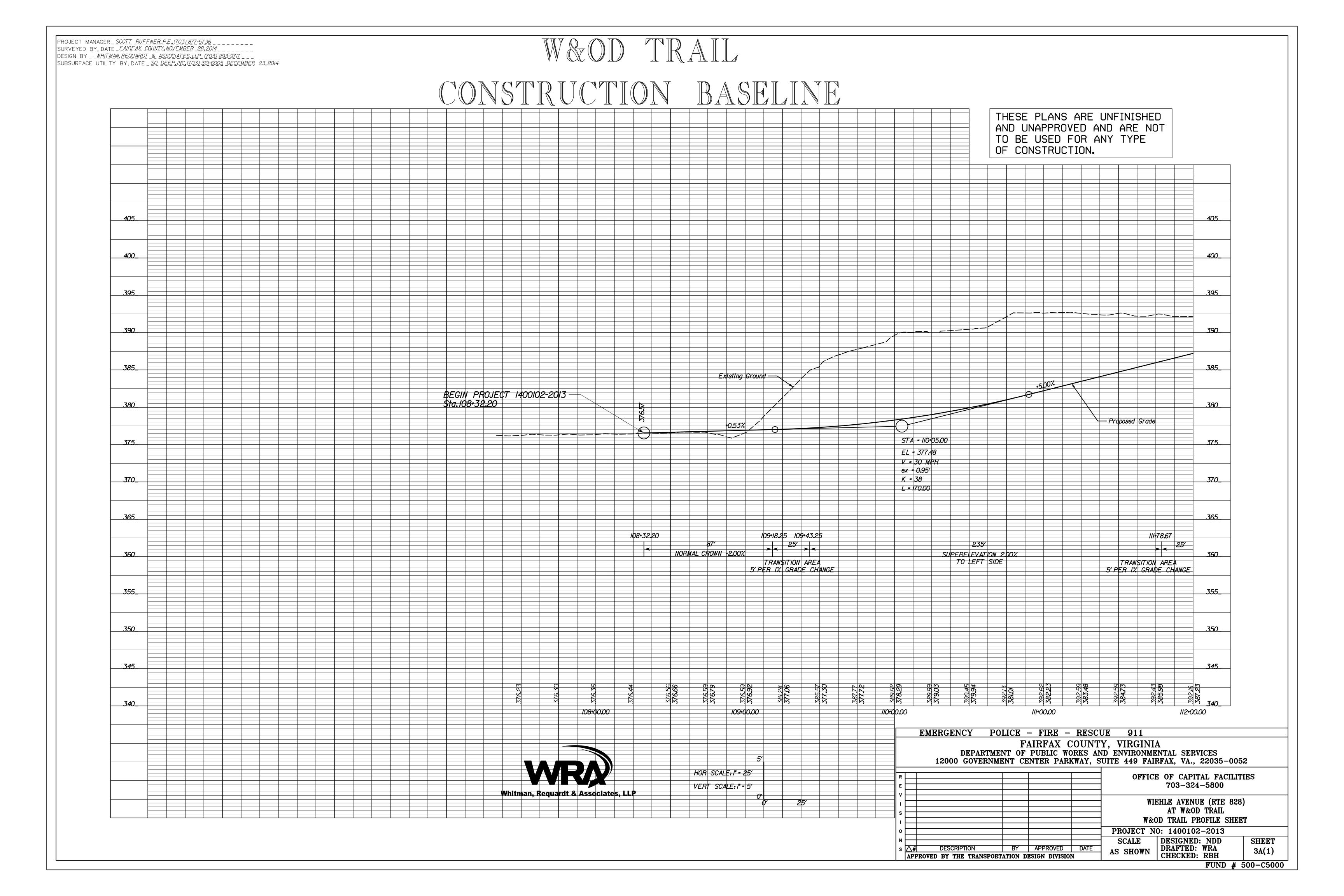
SILT TIGHT JOINT TYPE REQ'D.

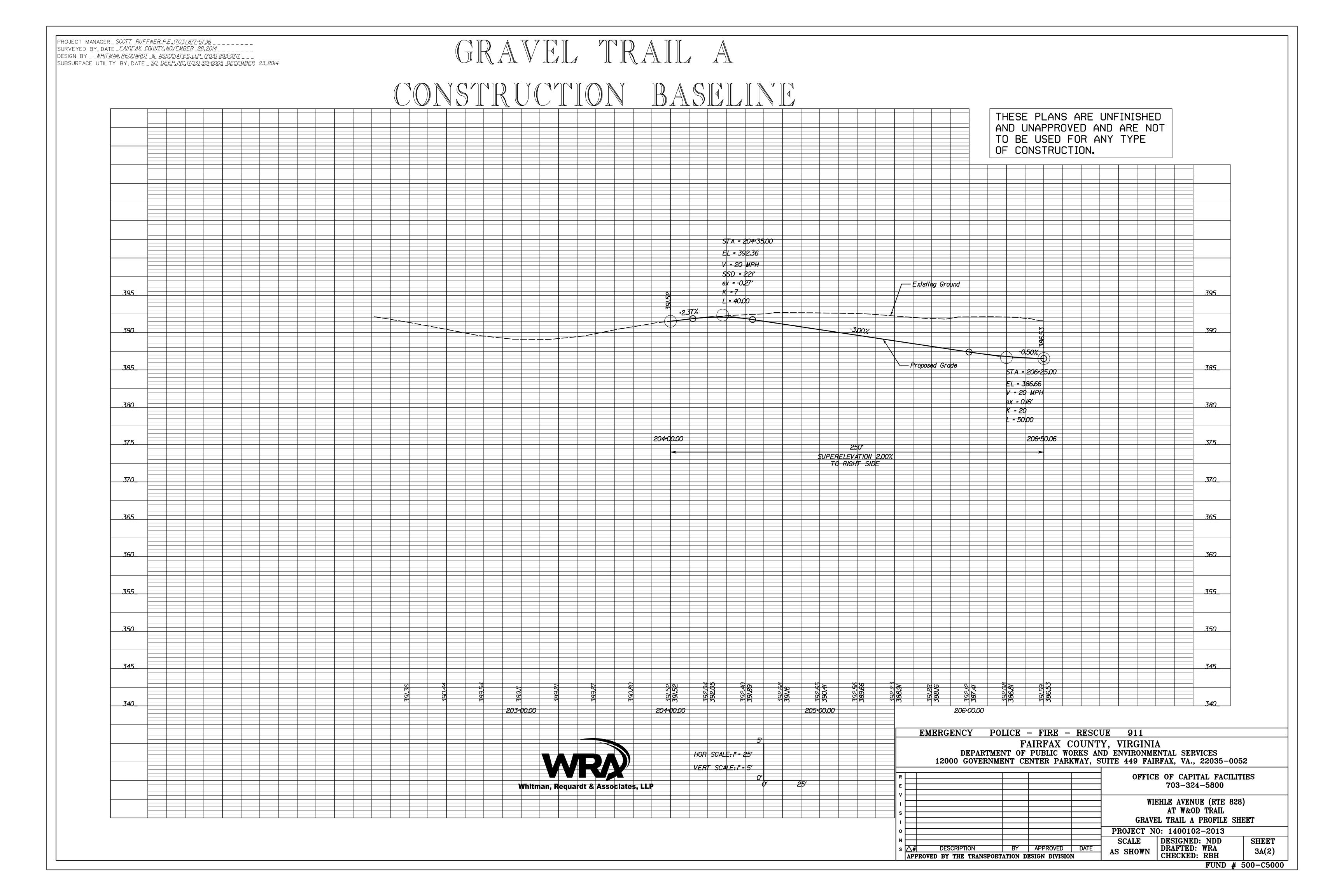
INV. (IN) 366, 00', (OUT) 365. 50'

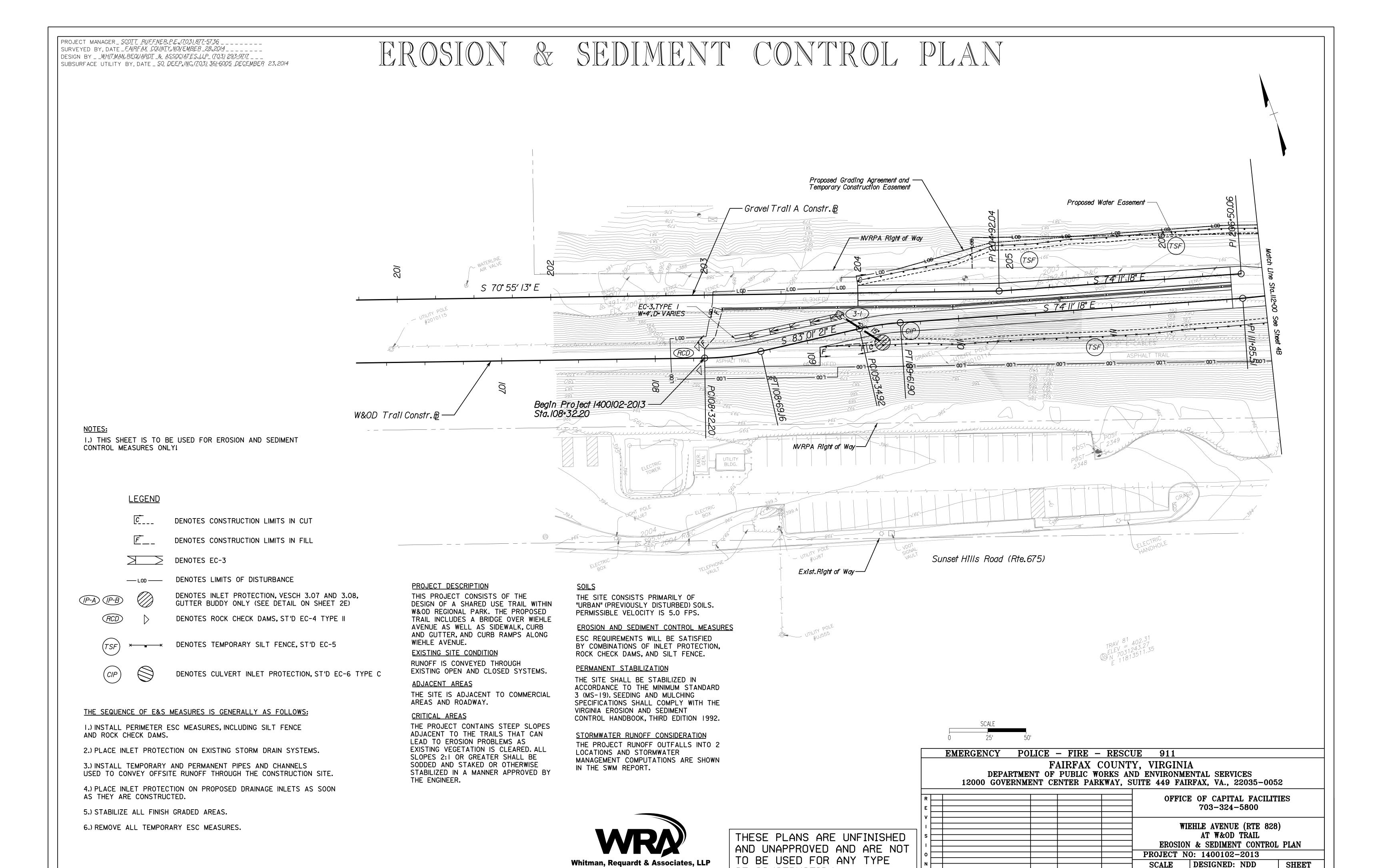
8.3 TONS ST'D PG-3 RIPRAP SLOPE PROTECTION REQ'D

CLASS 2 (T-36"): CONFORM TO PROPOSED GRADING 2 | 9 | 390 -PROPOSED GROUND 370 4-8 5-5 4-5 24" PIPE — EXISTING 36" RCP 350_ 10+00.00 POLICE - FIRE - RESCUE FAIRFAX COUNTY, VIRGINIA 10+00.00 //+00.00 DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL
STORM SEWER PROFILES & DRAINAGE
DESCRIPTIONS NOTE: PROJECT NO: 1400102-2013 I.POST-CONSTRUCTION PIPE INSTALLATION INSPECTION SHALL BE PROVIDED DESIGNED: NDD SHEET AS REQUIRED PER SECTION 302.03(D) OF THE VDOT 2016 SUPPLEMENTAL BY APPROVED DATE DRAFTED: WRA DESCRIPTION 2H(2) ROAD & BRIDGE SPECIFICATIONS. CHECKED: RBH APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000









OF CONSTRUCTION.

DESCRIPTION

APPROVED BY THE TRANSPORTATION DESIGN DIVISION

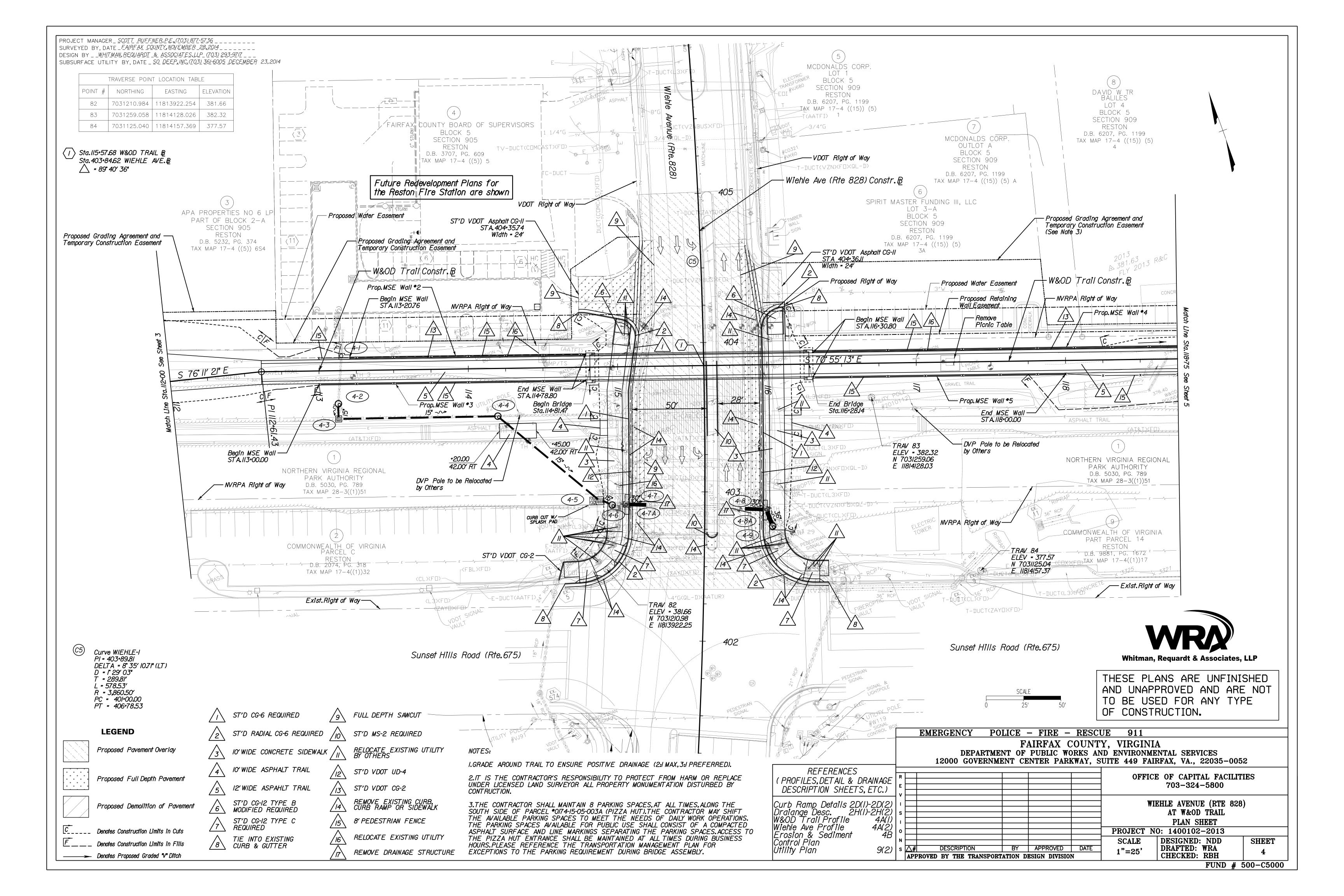
BY APPROVED DATE

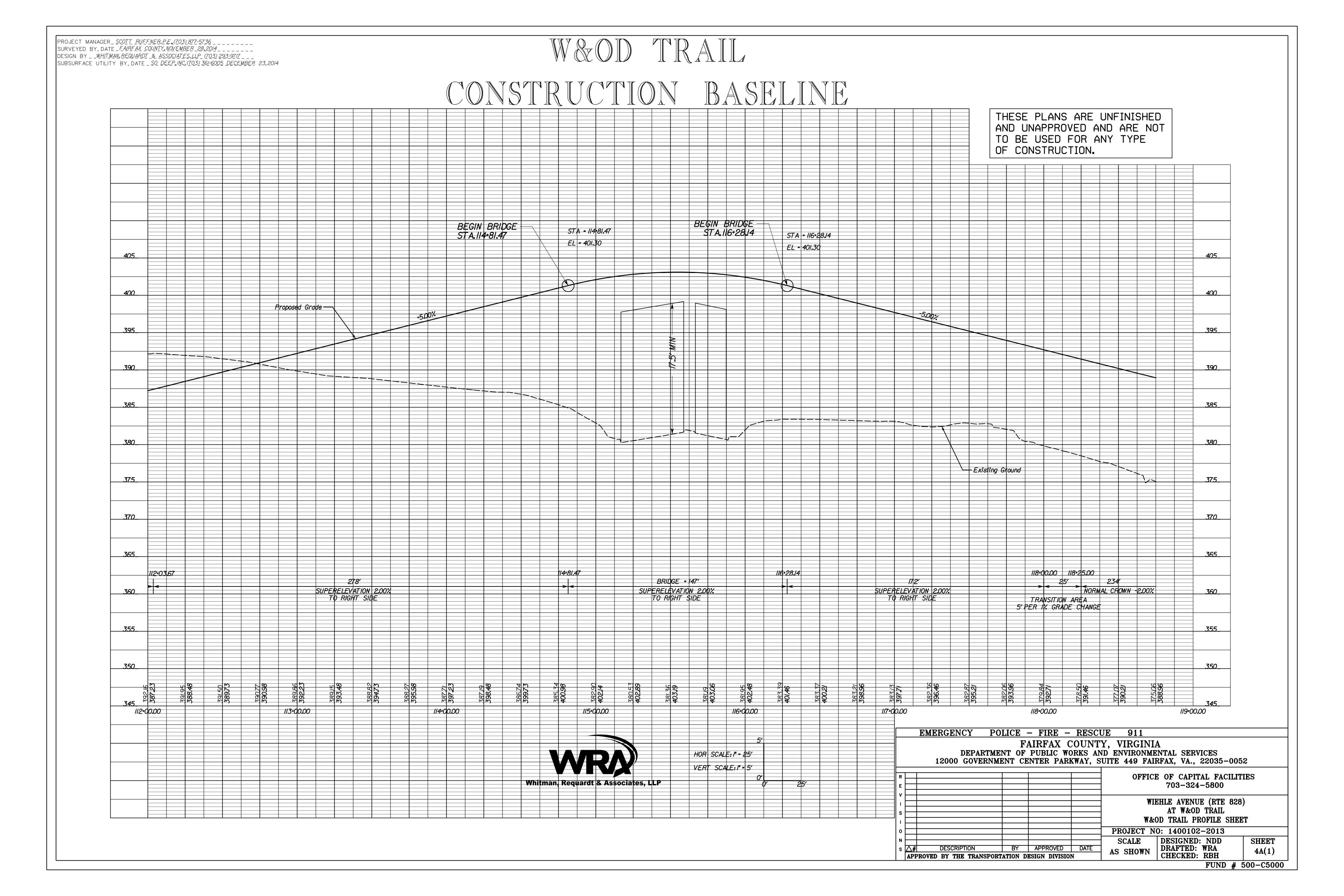
DRAFTED: WRA

CHECKED: RBH

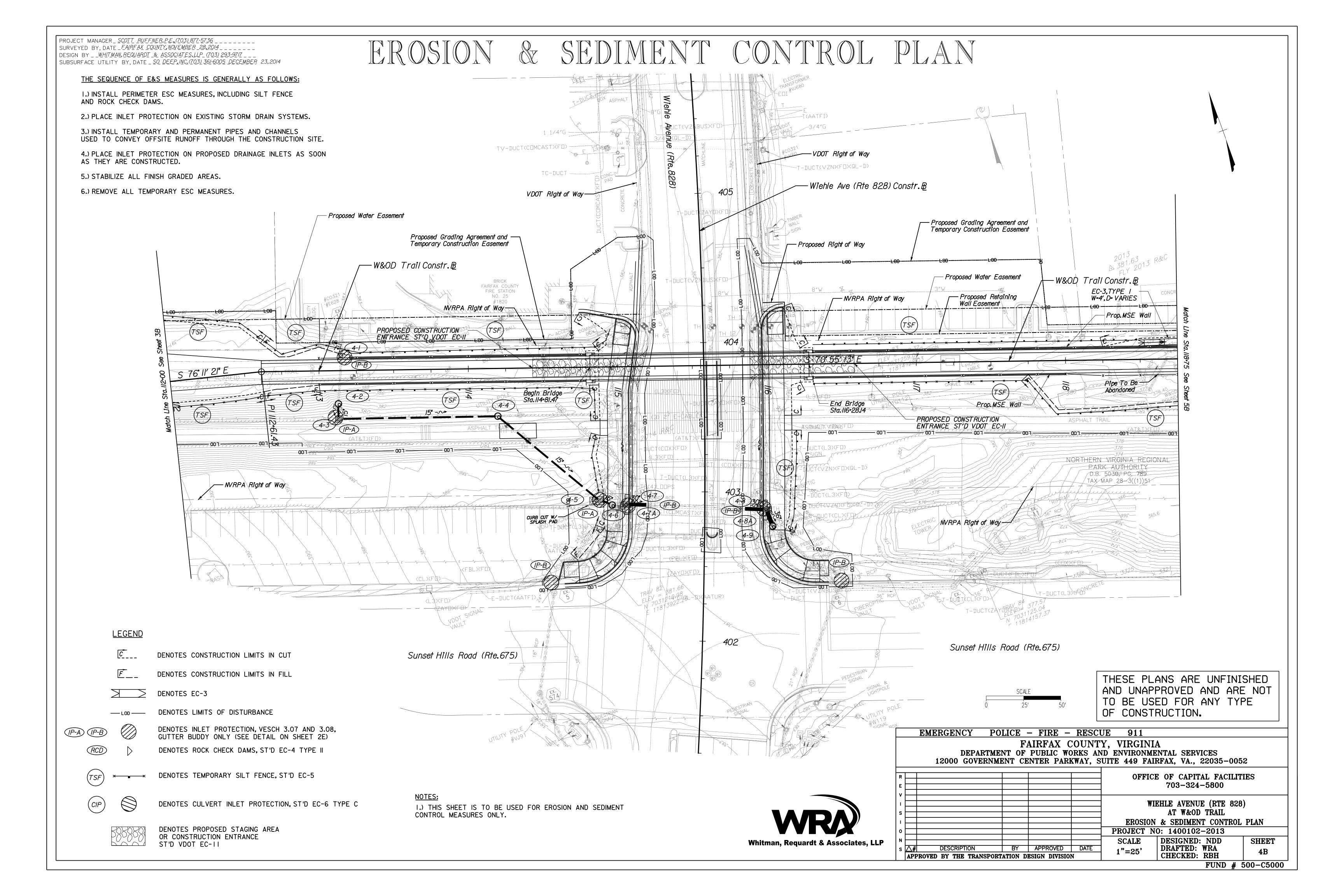
FUND # 500-C5000

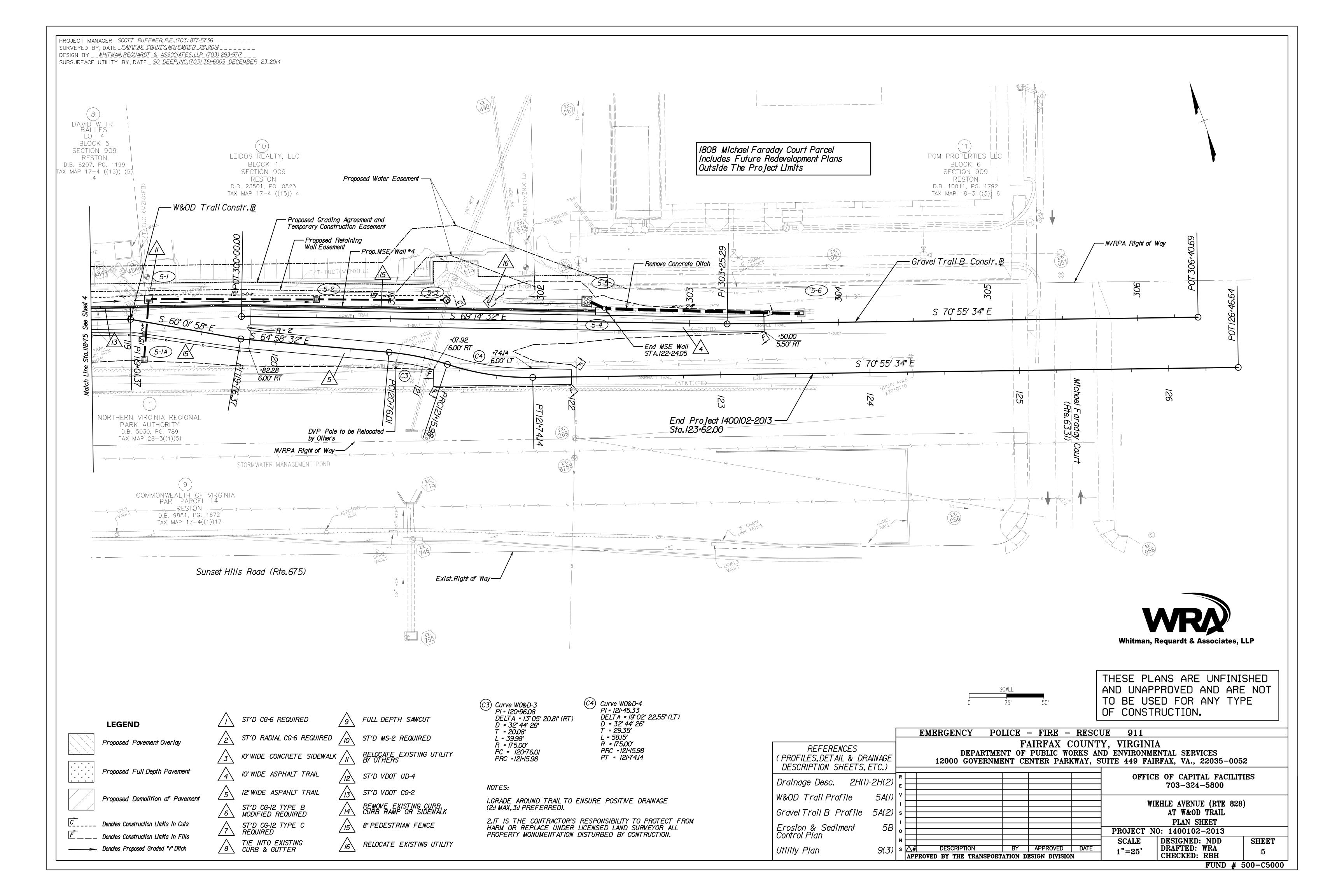
1"=25'

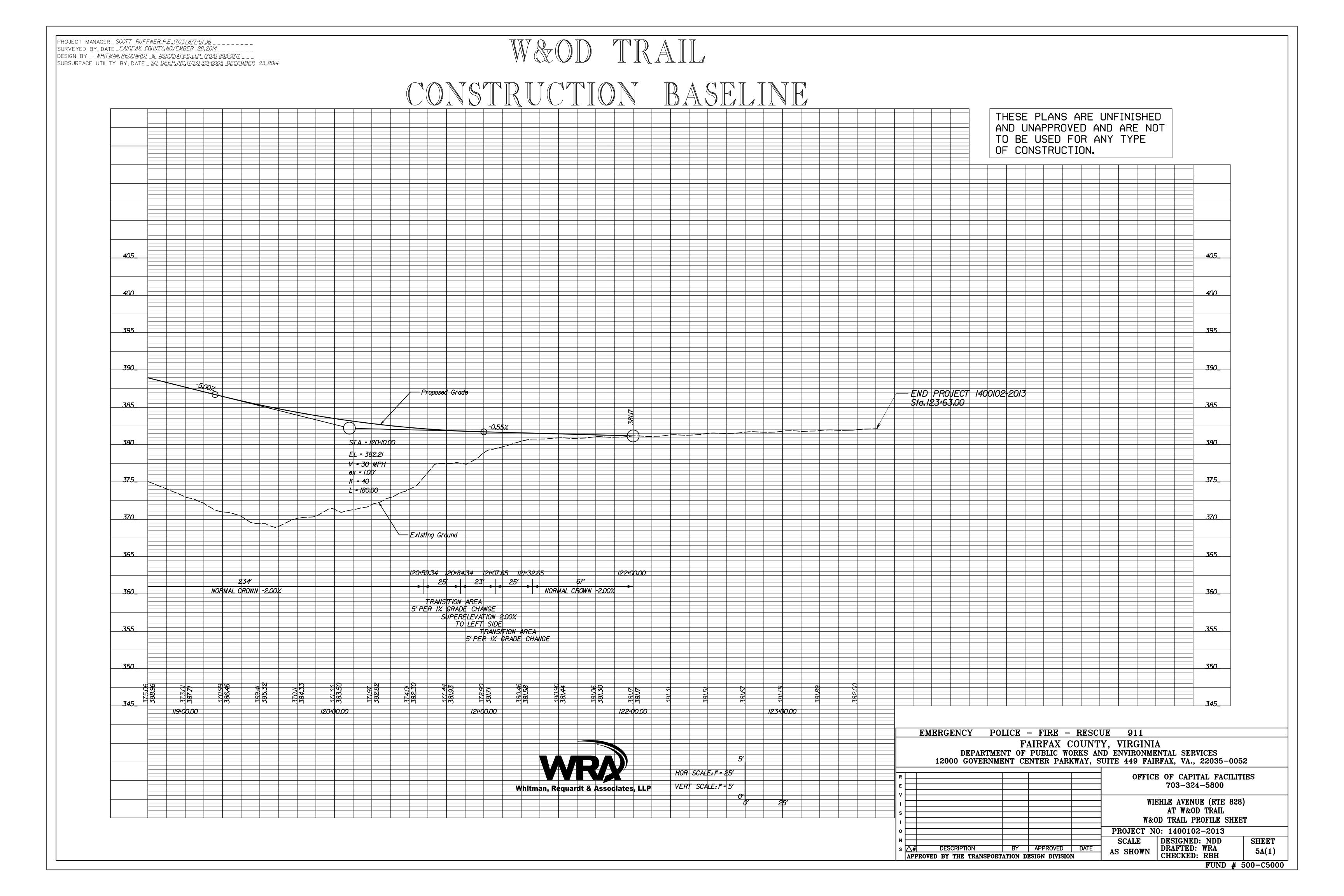


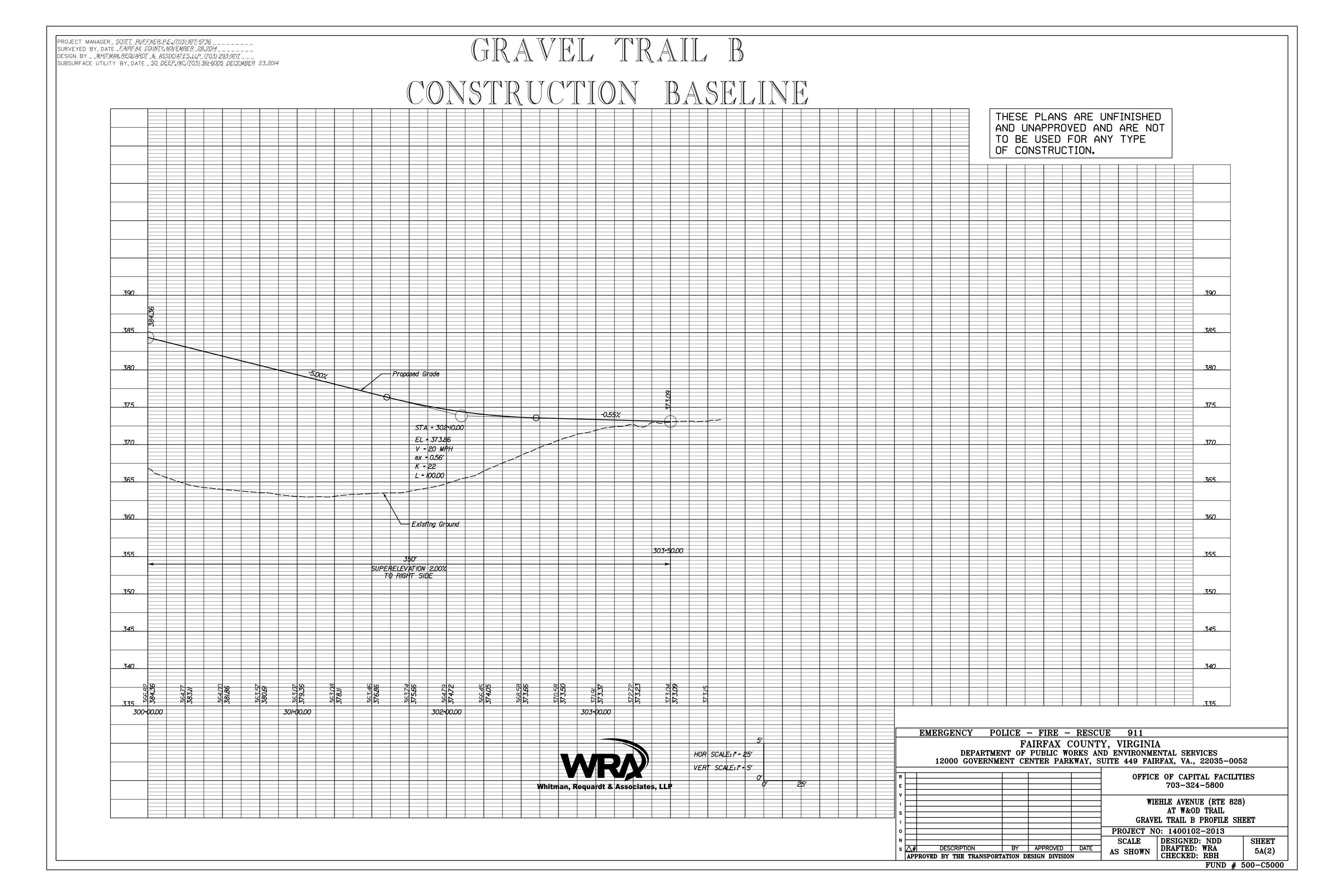


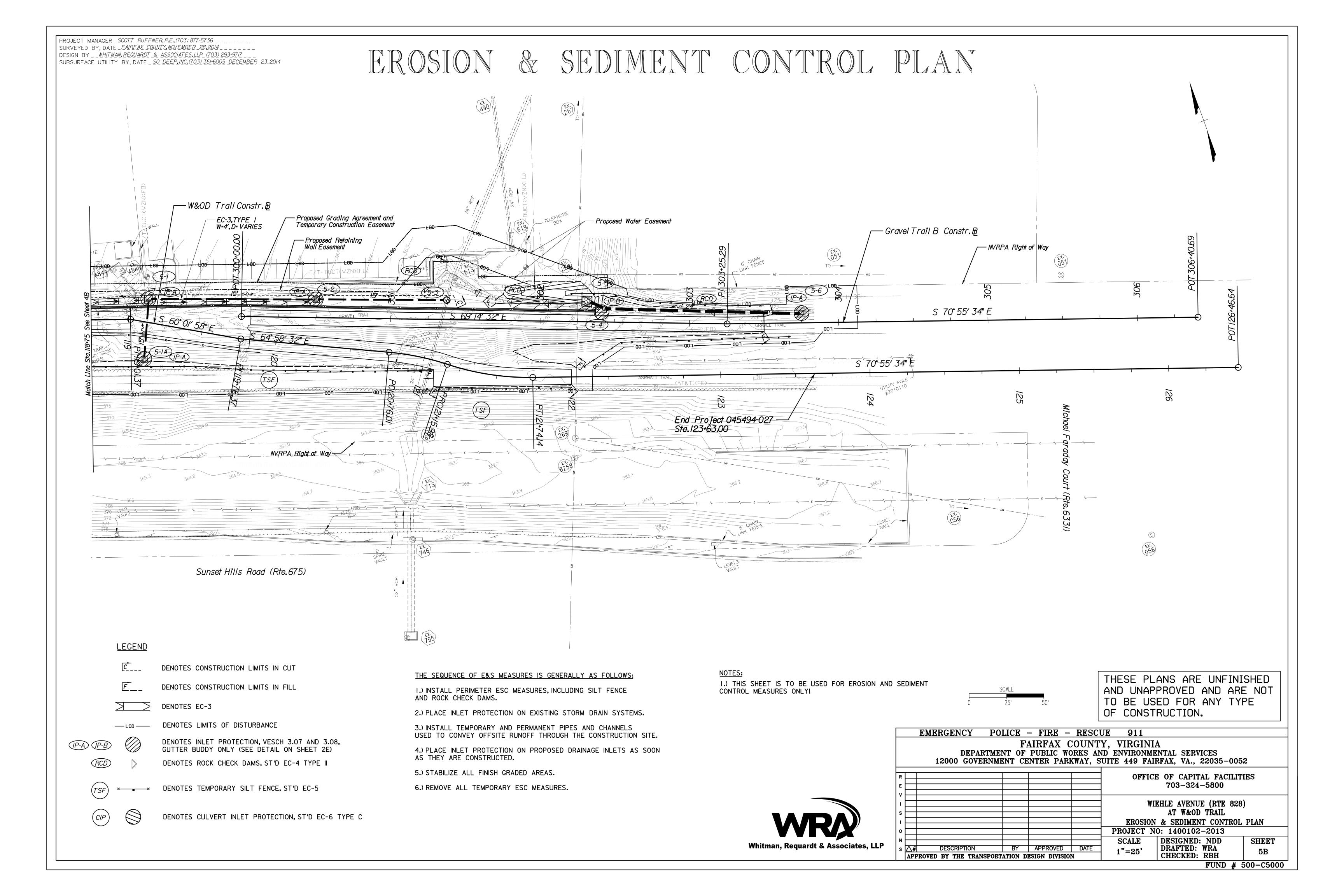
WIEHLE AVE (RTE 828) PROJECT MANAGER_<u>SCOTT_RUFFNER,P.E.,(703)877-5736</u> SURVEYED BY, DATE_<u>FAIRFAX_COUNTY,NOVEMBER_28,2014</u> DESIGN BY __WHITMAN, REQUARDT _& ASSOCIATES, LLP_(703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE _ SO DEEP, INC. (703) 361-6005 DECEMBER 23, 2014 CONSTRUCTION BASELINE THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE 415 OF CONSTRUCTION. W&OD Trall Constr.B 410 Proposed Bridge 405 *4*05 400 *400 395 395* 77.5' MIN 390 *390 385 385 380 380* Existing Ground *3*75 *3*75 *3*70 *370 365 365 360 360 355*_ *350 350 34*5 *34*5 340 *340* 401+00.00 402+00.00 403+00.00 404+00.00 405+00.00 *406+00.00* POLICE - FIRE - RESCUE **EMERGENCY** *335* FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES HOR SCALE: 1" = 25' 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 VERT SCALE: I" = 5' OFFICE OF CAPITAL FACILITIES 330 Whitman, Requardt & Associates, LLP 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL *32*5 WIEHLE AVE (RTE 828) PROFILE SHEET PROJECT NO: 1400102-2013 DESIGNED: NDD SCALE SHEET DRAFTED: WRA CHECKED: RBH BY APPROVED DATE DESCRIPTION 4A(2) APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000

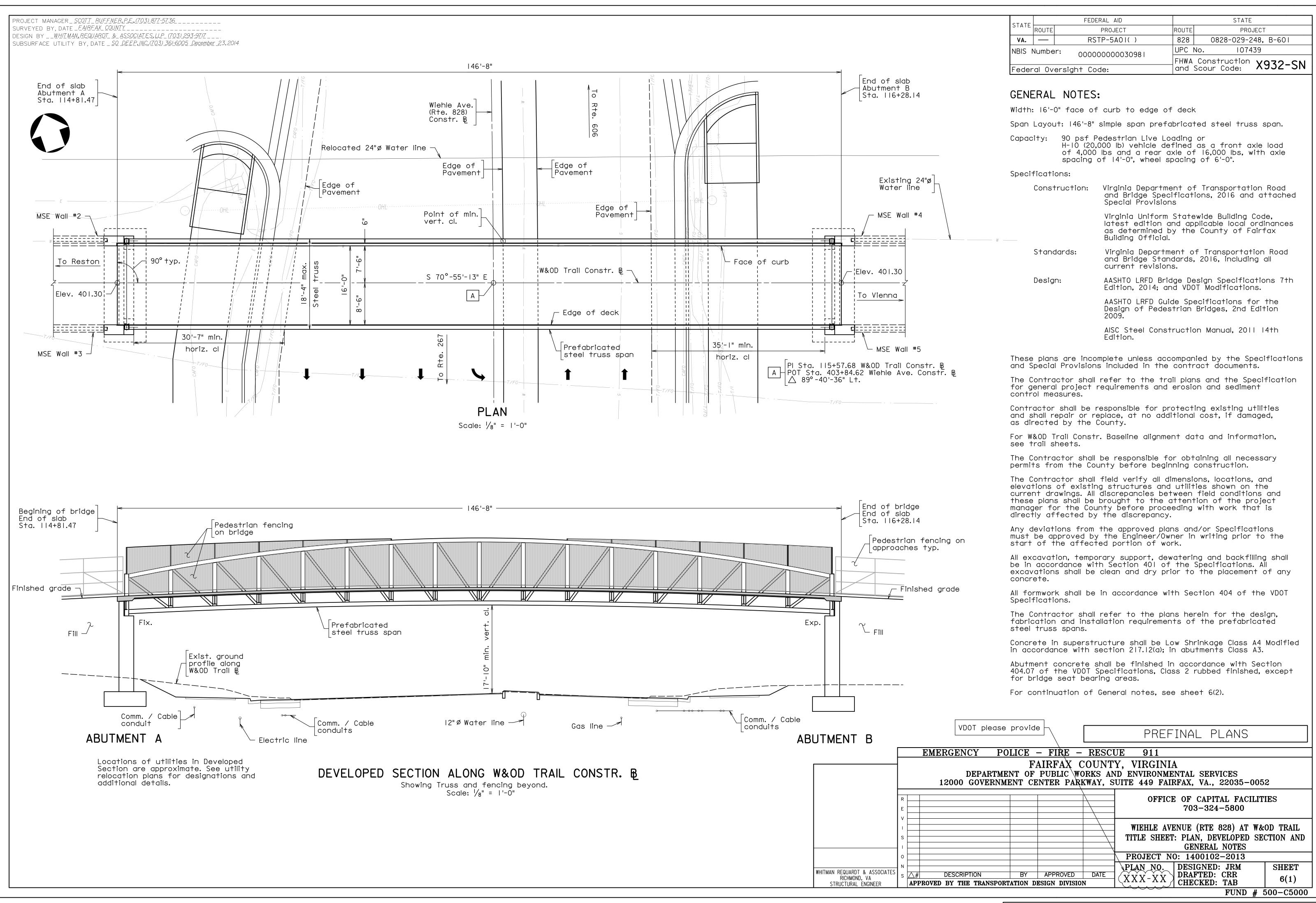












PROJECT MANAGER_SCOTT_RUFFNER,P.E.,(703) 877-5736

SURVEYED BY, DATE FAIRFAX_COUNTY

DESIGN BY __WHITMAN,REQUARDT & ASSOCIATES,LLP_(703) 293-9717

SUBSURFACE UTILITY BY, DATE _SO_DEEP,INC.(703) 361-6005 December 23,2014

EST	IMATE	QUANT	TITIES -	SUBSTRU	CTURE	ONLY			
		Concrete Class A3	Corrosion Resistant Reinf. Steel, Class I	Reinforcing Steel	Struct. Excav.	Retaining Structure	Geo- composite Wall Drain	Pipe Underdrain 6"	Pedestrian Fence 8'
		CY	LB	LB	cy⊗	SF	SY	LF	LF
	Neat	43.4	4,000			3,872	27	25	499
Abutment A	Footing	21.6		1,800	67				
Abutment B	Neat	48.1	4,200			12,019	28	25	751
ADGTINOTT	Footing	21.6		1,800	61				
Totals		134.7	8,200	3,600	128	15,891	55	50	1,250

igotimes Denotes items to be paid for on the basis of plan quantities in accordance with current VDOT Road and Bridge Specifications.

LUMP SUM BID ITEMS	>
Mobilization	LS
Construction Surveying	LS
Procure Prefabricated Steel Truss	LS
Install Prefabricated Steel Truss	LS
Architectural Treatment	LS

ESTIMATED QUANTITIES - SUPER	RSTRL	JCTURE ONLY
ltem	Units	Quantity
Concrete Low shrinkage Class A4 Mod.	CY	63.0
Corrosion Resistant Reinf. Steel,⊗ Class I	LB	9,500

igotimes Denotes items to be paid for on the basis of plan quantities in accordance with current VDOT Road and Bridge Specifications.

GENERAL NOTES CONTINUED:

Bridge seat bearing areas shall be installed level in areas of bearing according to dimensions provided by bridge manufacturer or the plans herein with the remainder of the seat installed with a $\frac{1}{2}$ " wash according to details herein, see Section 404.06 of the VDOT Specifications for additional requirements.

All exposed concrete edges shall be chamfered $\frac{3}{4}$ " unless otherwise noted.

Deformed reinforcing bars shall conform to ASTM A615, Grade 60. All reinforcing bar dimensions on the detailed drawings are to centers of bars except where otherwise noted and are subject to fabrication and construction tolerances.

All reinforcing steel shall be deformed and shall conform to ASTM A615, Grade 60 except for reinforcing steels noted as CRR (corrosion resistant reinforcing) which shall conform to Section 223 of the Specifications. All reinforcing bar dimensions on the detailed drawings are to centers of bars except where otherwise noted and are subject to fabrication and construction tolerances.

Corrosion resistant reinforcing (CRR) steels shall conform to one or more of the three Classes listed in Section 223 of the Specifications. The Class(es) of CRR steel(s) required on this project is/are noted on the plan sheets and in the reinforcing steel schedule. Corrosion Resistant Reinforcing Steel, Class II may be substituted for Class I. Corrosion Resistant Reinforcing Steel, Class III, may be substituted for Class II.

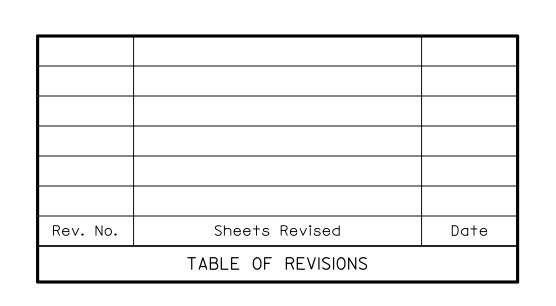
Footings for abutments shall bear on firm material. For bearing requirements, see the Spread Footing Data Table on sheet 6(3).

The Geotechnical Engineer of Record shall inspect all footing subgrades and certify that the exposed bearing material meets design requirements. If unsuitable material is encountered, Contractor shall overexcavate as directed by the Geotechnical Engineer and replace with unreinforced Class Cl concrete.

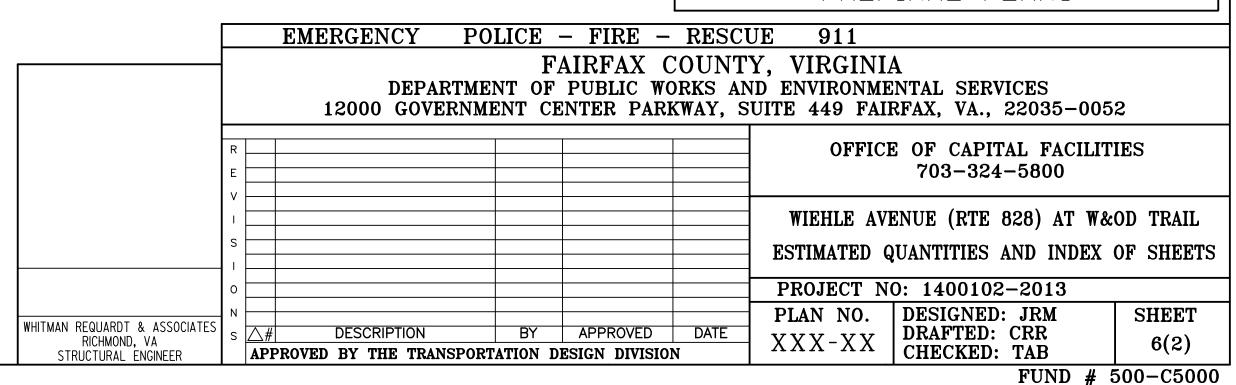
B.M.:

STATE	-	FEDERAL AID		STATE
STATE	ROUTE	PROJECT	ROUTE	PROJECT
VA.		RSTP-5AOI()	828	0828-029-248, B-601

Sheet No. 6(1) Title Sheet: Plan, Developed Section and General Notes 6(2) Estimated Quantites and Index of Sheets 6(3) Substructure Layout 6(4) Abutment A Plan and Elevation 6(5) Abutment A Footing Plan and Details 6(6) Abutment B Plan and Elevation 6(7) Abutment B Footing Plan and Details 6(8) Transverse Section 6(9) Framing Plan 6(10) Prefabricated Steel Truss Details 6(11) Deck Slab Elevations 6(12) Deck Slab Plan and Details 6(13) Pedestrian Fence Details - 8 ft. fence 6(14) Wire Mesh Fence Panel Details on Superstructure 6(15) Architectural Treatment Details 6(16) Reinforcing Steel Schedule - Abutments 6(17) Engineering Geology (1 of 6) 6(18) Engineering Geology (2 of 6) 6(19) Engineering Geology (3 of 6) 6(20) Engineering Geology (5 of 6) 6(21) Engineering Geology (6 of 6) 6(22) Engineering Geology (6 of 6) 6(23) MSE Walls General Notes and Details 6(24) MSE Wall Layout (1 of 2) 6(25) MSE Wall Elevations Walls 2 and 3 6(27) MSE Wall Elevation Wall 5	Shoot No	INDEX OF SHEETS
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	6(27)	MSE Wall Elevation Wall 4
	6(28)	MSE Wall Elevation Wall 5
6(29) MSE Wall Architectural Treatment Details	6(29)	MSE Wall Architectural Treatment Details



PREFINAL PLANS



PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u>
SURVEYED BY, DATE <u>FAIRFAX COUNTY</u> DESIGN BY __WHITMAN, REQUARDT_&_ASSOCIATES, LLP_(703)_293-9717____ SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December 23, 2014</u> End of slab Abutment A Sta. 114+81.47 End of slab 146'-8" Abutment B Span a Sta. 116+28.14 ∕ Detail B typ. Detail B typ. – → Boring #06/07 - W&OD Trail Constr. B Boring #09/10 └ Detail A typ. Detail A typ. 5'-10" 8'-6" SUBSTRUCTURE LAYOUT Scale: 1/8" = 1'-0" Corner of footing Notch in footing full depth Notch in footing full depth Corner of / footing DETAIL B DETAIL A Abut. A shown, Abut. B opposite hand Abut. A shown, Abut. B opposite hand Scale: $\frac{3}{4}$ " = 1'-0" Scale: 3/4" = 1'-0"

CTATE		FEDERAL AID		STATE
STATE	ROUTE	PROJECT	ROUTE	PROJECT
VA.			828	0828-029-248, B-601

Notes:

This substructure layout is to be used only for the purpose of locating the footings of the abutments.

For abutment details, see sheets 6(4) through 6(7).

For Engineering Geology, see sheets 6(17) through 6(22).

For MSE walls, see sheets 6(23) through 6(29).

Legend:

Indicates boring location

SPREAD FOOTING DATA TABLE												
	SER	VICE	STRENGTH									
Substructure Unit	Nominal Bearing Resistance (tsf)	Tolerable Settlement (inches)	Nominal Bearing Resistance (tsf)	Factored Bearing Resistance (tsf)								
Abutment A	3.0	1.0	8.3	3.7								
Abutment B	3.0	1.0	8.3	3.7								

The Service Limit State controls the footing design.

PREFINAL PLANS

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

OFFICE OF CAPITAL FACILITIES
703-324-5800

WIEHLE AVENUE (RTE 828) AT W&OD TRAIL
SUBSTRUCTURE LAYOUT
PROJECT NO: 1400102-2013

WHITMAN REQUARDT & ASSOCIATES RICHMOND, VA STRUCTURAL ENGINEER

DESCRIPTION

APPROVED BY THE TRANSPORTATION DESIGN DIVISION

BY APPROVED DATE

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

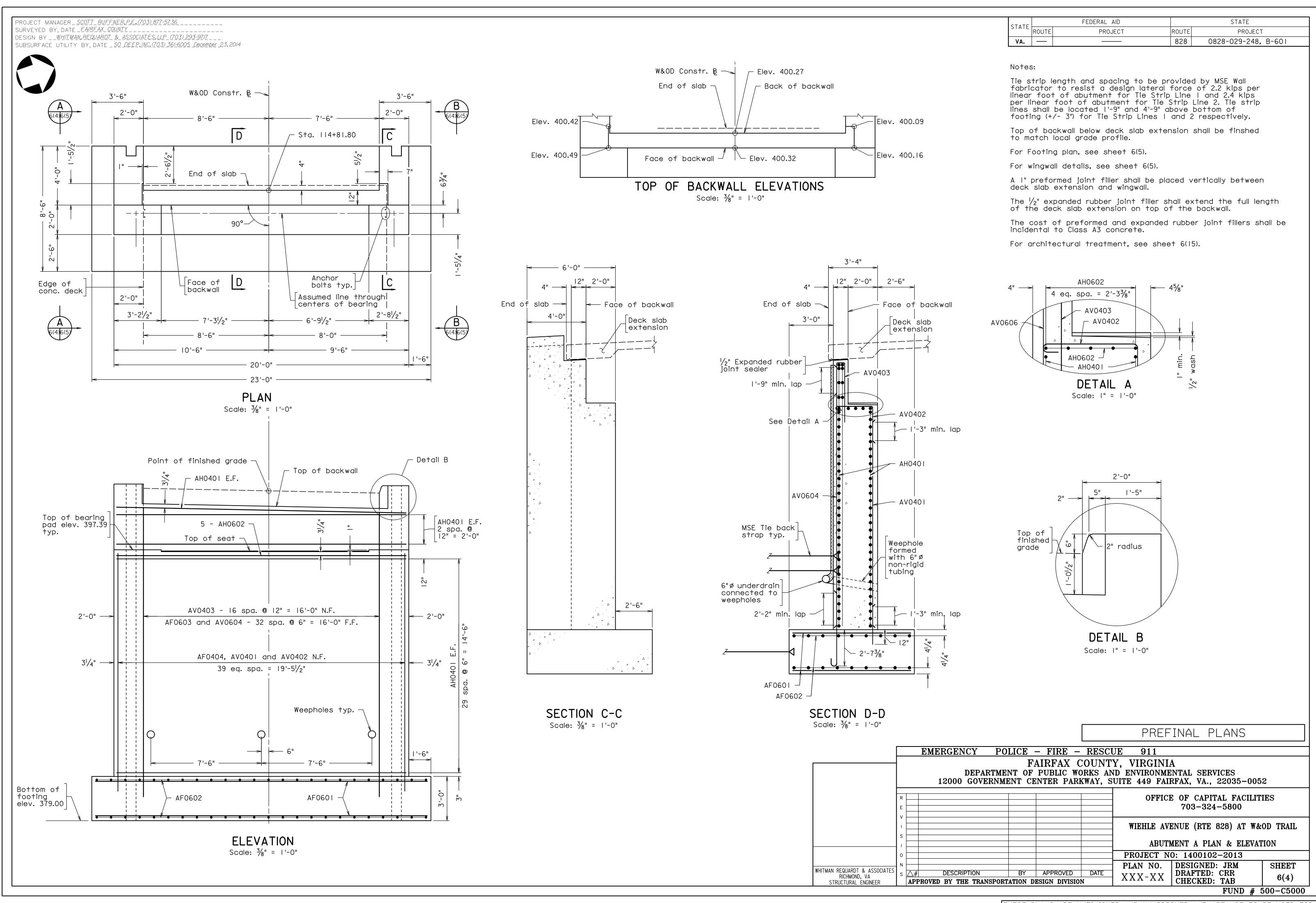
PLAN NO.

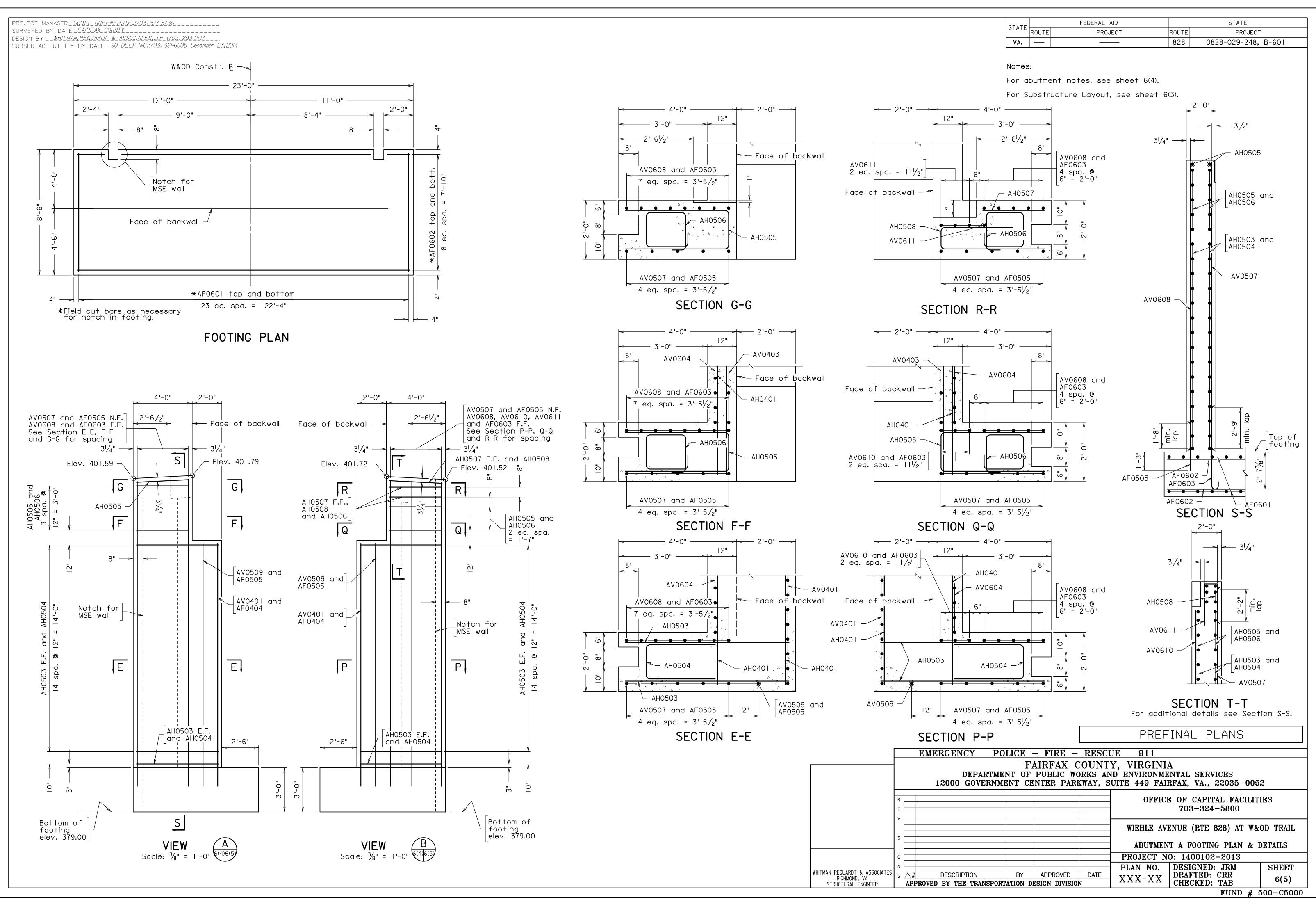
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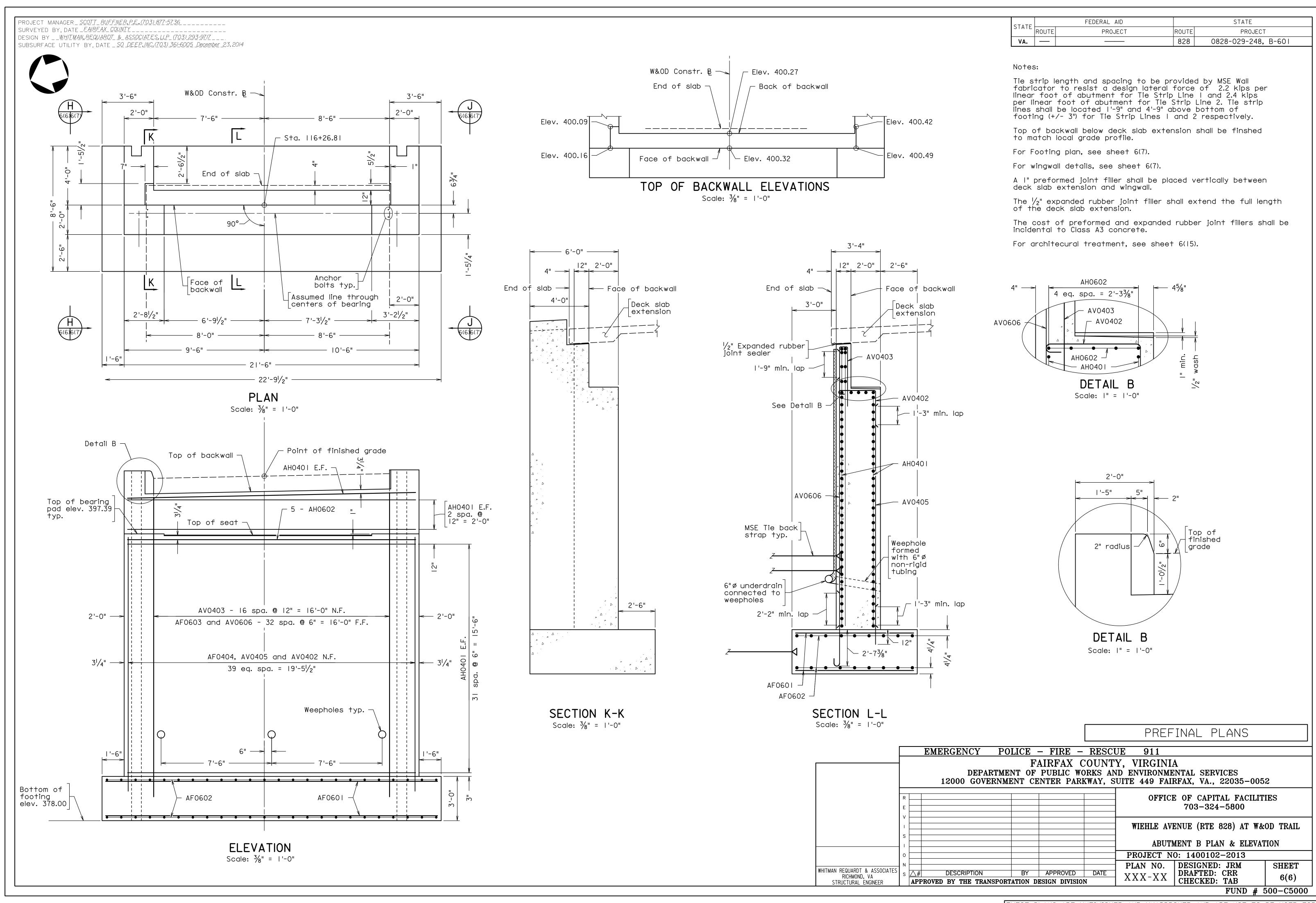
DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB

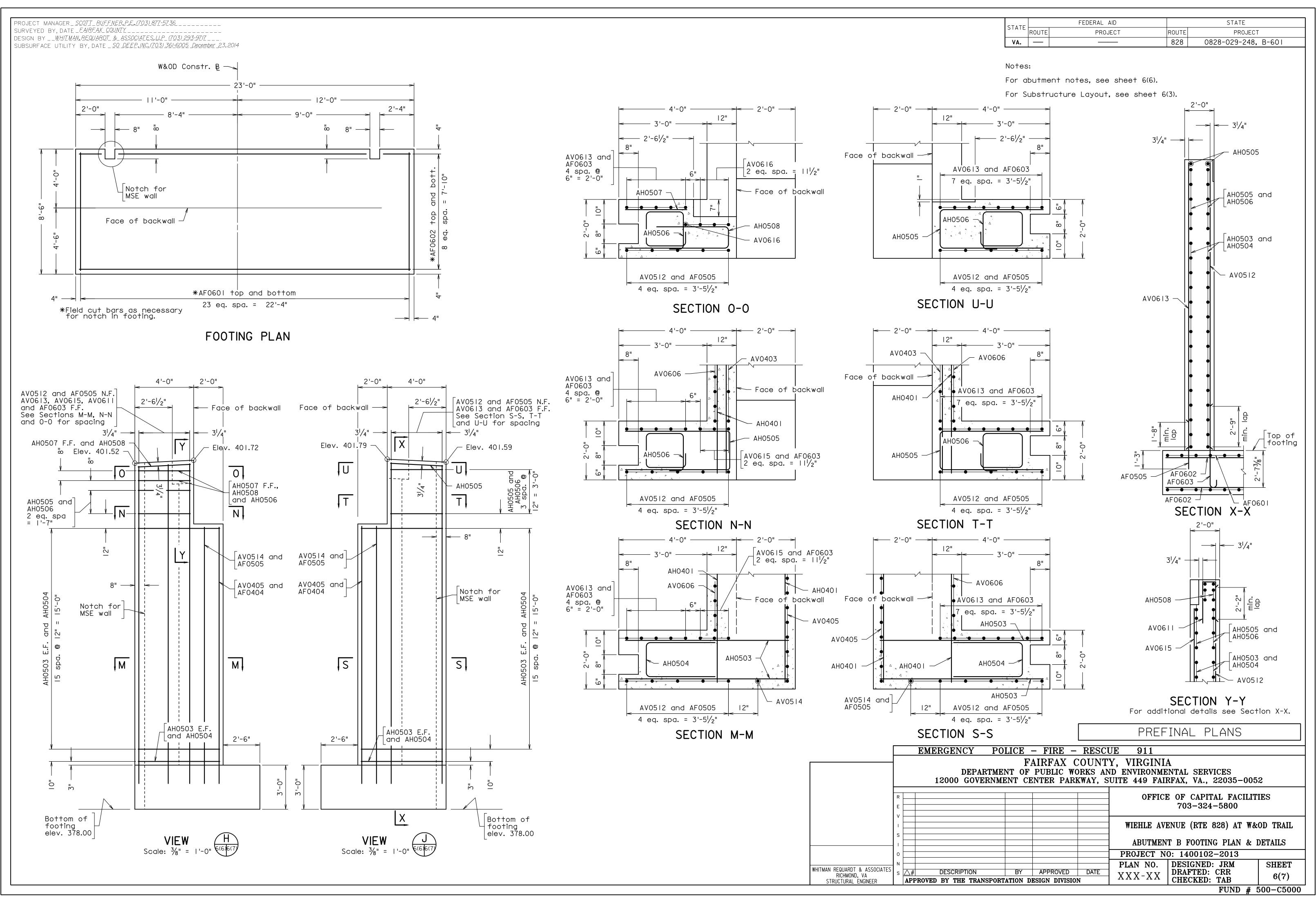
SHEET

6(3)









PROJECT MANAGER_SCOTT_RUFFNER,P.E.,(703)877-5736______ FEDERAL AID STATE STATE ROUTE SURVEYED BY, DATE _*FAIRFAX_COUNTY*______ PROJECT ROUTE PROJECT DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ VA. — 828 0828-029-248, B-601 SUBSURFACE UTILITY BY, DATE _ SO DEEP, INC. (703) 361-6005 December 23,2014 ·Maximum structure width = 18'-4" — Notes: Deck reinforcing steel to be designed by prefabricated steel truss fabricator. € Truss — √ € Truss For Truss Details, see sheets 6(10) For Deck Elevations, see sheet 6(11) Top chord For Deck Slab Plan and Details, see sheet 6(12) For wire mesh fence panel details. see sheet 6(14). Wire fence mesh fabricated Wire fence mesh fabricated to fit in truss panel to fit in truss panel Truss Vertical Truss Vertical — Offset truss | W&OD Trail diagonal │Constr. 凡 Galvanized steel Top of C.I.P. conc. deck end dam Galvanized steel end dam See curb detail typ. __Point of finished grade 2% slope Fence panel Truss vertical /- Top of deck — Floor beam Reinforcing steel to be designed by fabricator Offset truss diagonal Bottom of masonry plate elev. 397.39 └ Bottom chord TYPICAL SECTION

Scale: 3/4" = 1'-0" Edge of deck ─ Floor beam CURB DETAIL Scale: 3" = 1'-0" PREFINAL PLANS POLICE - FIRE - RESCUE **EMERGENCY** 911 FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL TRANSVERSE SECTION PROJECT NO: 1400102-2013 PLAN NO.

XXX-XX

DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB SHEET WHITMAN REQUARDT & ASSOCIATES DESCRIPTION BY APPROVED DATE 6(8) RICHMOND, VA STRUCTURAL ENGINEER APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000

PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> FEDERAL AID STATE | STATE | ROUTE SURVEYED BY, DATE _FAIRFAX_COUNTY_____ ROUTE PROJECT PROJECT DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ 828 0828-029-248, B-601 VA. — SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December</u> 23,2014 Face of backwall Face of backwall Abutment A Abutment B 142'-101/2" Floor beam spacing to be determined by the Truss fabricator |'-4" ->| Assumed line through Assumed line through - Truss centers of bearing centers of bearing G Truss End of slab -_ Floor beam $\int_{-\infty}^{\infty} End of \frac{1}{\infty}$ typ. W&OD Trail Constr. B - @ Truss Diagonal braces as - Truss determined by the Truss fabricator, typ. FRAMING PLAN Scale: $\frac{3}{16}$ " = 1'-0" Face of backwall Abutment B 144'-0" Face of backwall Abutment A 72'-0" ∕-£ Truss Top of slab at B CONCEPTUAL TRUSS ELEVATION Scale: $\frac{3}{16}$ " = 1'-0" Dimensions shown include the additional camber rise of 1.25% of bridge length Notes: Truss fabricator shall provide necessary details and drawings for the superstructure. These details shall include camber diagram and dead load deflection diagram. Other details included shall be those that require any necessary modifications to the PREFINAL PLANS substructure. The bridge shall have a vertical camber dimension at mid-span equal to 100% of the full dead load deflection including the cast-in-place concrete deck plus 1.25% of the full length of the EMERGENCY POLICE - FIRE - RESCUE FAIRFAX COUNTY, VIRGINIA bridge from end of slab to end of slab. DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES Framing Plan shown is for concept only and used to layout and design the abutments. Truss Elevation shown is to provide the general proportions desired for aesthetics. Contractor shall coordinate any changes with the Engineer and Owner. 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 For transverse section, see sheet 6(8). WIEHLE AVENUE (RTE 828) AT W&OD TRAIL For additional details and requirements for the prefabricated steel truss, see sheet 6(10) and the special provisions. FRAMING PLAN PROJECT NO: 1400102-2013 PLAN NO.

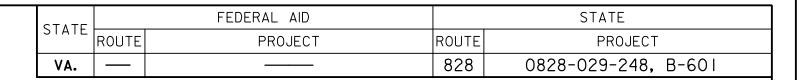
XXX-XX

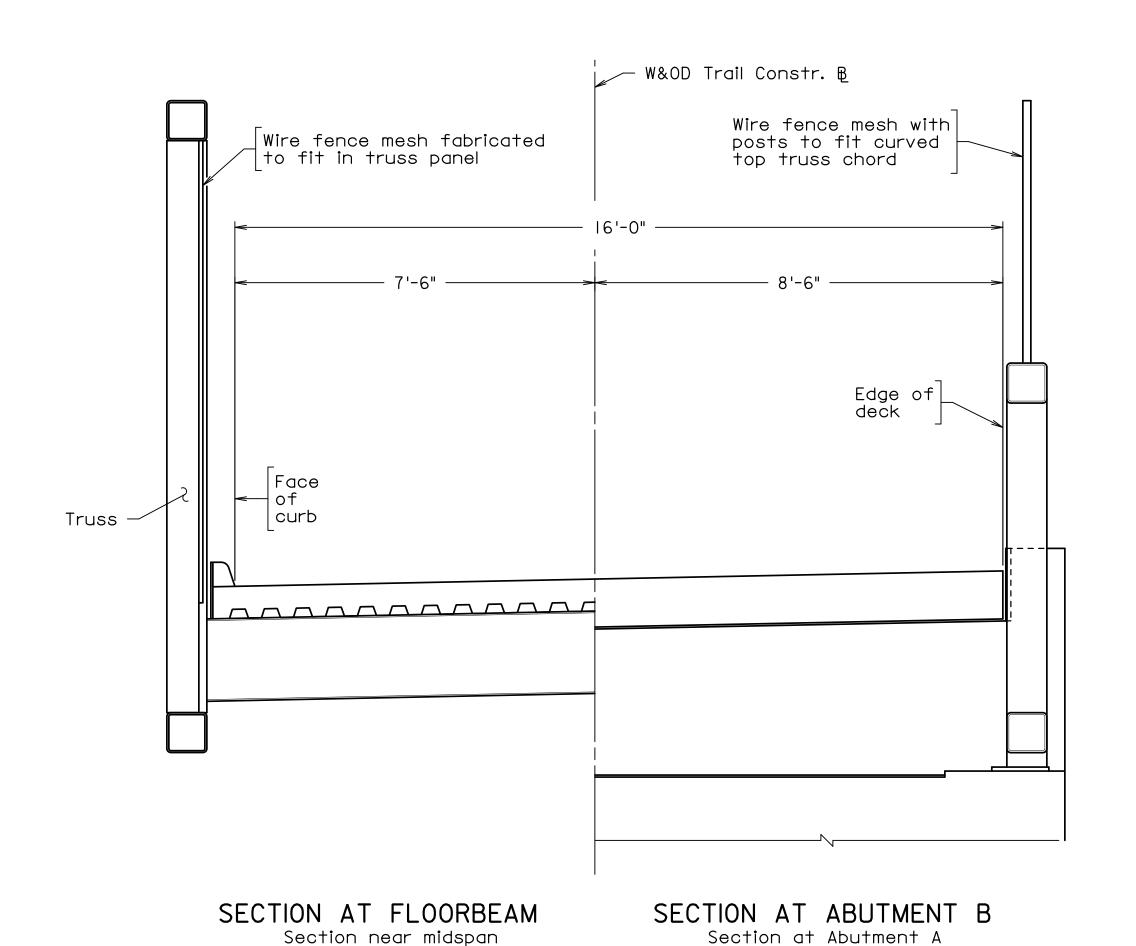
DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB SHEET WHITMAN REQUARDT & ASSOCIATES BY APPROVED DATE DESCRIPTION RICHMOND, VA STRUCTURAL ENGINEER 6(9)

FUND # 500-C5000

APPROVED BY THE TRANSPORTATION DESIGN DIVISION

PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE _FAIRFAX COUNTY ______ DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC.(703) 361-6005 December 2</u>3,2014





TRANSVERSE SECTION

Scale: $\frac{1}{2}$ " = 1'-0"

View is looking upstation. Deck reinforcing not shown

similar, opposite hand.

STEEL SUPERSTRUCTURE:

These plans and associated Special Provisions are for a fully engineered clear span steel superstructure and shall be regarded as the minimum standards for design and construction.

The prefabricated steel truss superstructure shall be a welded/bolted weathering steel truss bridge and shall be designed by the Contractor. Floor beam and stringer connections shall be bolted. Welding of lateral bracing to the flooring system shall not be permitted. Lower chord members shall allow for free drainage and be configured as to not capture debris.

The superstructure shall be designed for 90 psf pedestrian loading and H-10 vehicle loading in accordance with AASHTO LRFD Bridge Design Specification, 7th Edition, 2014; and VDOT modifications; and AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges, 2nd Edition, 2009. All design calculations shall be according to Load and Resistance Factor Design. Design loading allowances for construction tolerances are given in VDOT Modifications to AASHTO (IIM-S&B-80.5).

Superstructure design calculations, shop fabrication drawings and detailed field erection and installation procedures shall be approved by the Engineer prior to fabrication and erection. Design calculations, shop drawings and field erection and installation procedures shall be accomplished under the hand and seal of a Professional Engineer registered to practice in the Commonwealth of Virginia.

The Contractor is advised that substructure details shown in these plans are based on an assumed superstructure. The Contractor shall be responsible for determining the substructure modifications (both structural and geometric) required for the superstructure they propose. Plans reflecting any additional modifications shall be sealed by a Professional Engineer holding a valid license to practice engineering in the Commonwealth of Virginia and shall be submitted to the Engineer for approval prior to commencement of work at no additional cost to the County.

A low chord elevation based on Transverse Section, this sheet, was used in the vertical clearance calculations. The calculations were based on the assumed superstructure and any modifications to the low chord elevation shall be submitted to the Engineer for review and approval.

TRUSS SUPERSTRUCTURE REQUIREMENTS:

One simple span, 142'-10!/2" (measured from centerline of bearing to centerline of bearing), 146'-8" (measured from end of slab to end of slab), with a clear trail width of 16'-0" face of curb to edge of deck.

Price bid shall include design, fabrication, delivery, construction and all materials, labor, tools, equipment and incidentals necessary to complete the work.

The Contractor shall arrange to have a representative of the prefabricated truss superstructure supplier at the bridge site during erection to provide technical assistance in planning and erecting the superstructure. Cost of the representative shall be included in the bid price for Prefabricated Steel Truss Superstructure.

STRUCTURAL STEEL:

The shop drawings shall note the material specification and grade for all structural steel and hardware.

All truss members, including gusset and splice plates, floor beams, stringers and any other components designated as main load carrying members subject to calculated tension or stress reversal shall meet the Zone 2 Charpy V Notch Impact strength requirements as specified in Section 226 of the Specifications. Design/Shop drawings shall clearly define those members or components requiring CVN testina.

Design/Shop drawings shall clearly define those members or components considered fracture critical by the AASHTO Guide Specifications for Fracture Critical Non-Redundant Steel Bridge Members.

Manufacturer shall design all connections for welded tubular steel members in accordance with Chapter K of the Specifications and Commentary of the AISC Steel Construction Manual, 13th Edition (with latest revisions) and all other applicable codes and standards.

Field splices of the truss and floor beam connections shall be made using high strength bolts and shall be designed as a slip-critical connection with a Class B surface. Splice design shall be designed for oversized holes but be detailed for standard holes in accordance with VDOT IIM-S&B-80.5.

All fasteners, unless otherwise noted, shall be $\frac{7}{8}$ " diameter high strength bolts, ASTM A325 galvanized with ASTM A563 Grade DH nut and one ASTM F436 washer per bolt and manufactured in accordance with Section 226 of the Specifications.

Fasteners shall be installed and tightened in accordance with the VDOT Specifications. Immediately prior to erection, all faying surfaces of high strength bolted connections shall be roughened by hand wire brushing. Power wire brushing is not allowed.

Steel trusses shall be fabricated in such a way as to provide a low chord profile that follows the profile grade line when subjected to final dead loads.

Design shop drawings shall provide complete details and dimensions of the bearing assembly to ensure proper size and elevation of bearing seats have been established.

PAINTING AND SURFACE PREPARATION:

All structural steel within 5'-0" of face of backwall shall be painted to match weathering steel color. Bearing plates and hardware shall be galvanized.

Finish paint color shall be brown, 595-20059.

Paint mainterial shall be in accordance with VDOT Specifications Section 231. Painting shall be in accordance with VDOT Specifications Section 411. Any damage prior to delivery to the bridge site shall be replaced or repaired at the fabricator's expense and at no additional cost to the Department.

The fabricator shall submit an original and two copies of the coating applicator's notarized Certificate of Compliance that the prepared painted coating surfaces meets or exceeds the requirements for successful painting of the surface.

All paint that has been chipped or damaged during handling or welding shall be power brushed and painted with two coats of paint meeting the requirements of Section 411 of the Specifications. Spray cans shall not be used.

WELDING AND NON-DESTRUCTIVE TESTING:

All fabrication, welding, non-destructive testing and visual inspection shall be in accordance with the requirements of the ANSI/AASHTO/AWS Bridge Welding Code D1.5. Welding shall be accomplished using electrodes and procedures acceptable to the Engineer. Field welds will not be permitted without prior approval from the Engineer.

WHITMAN REQUARDT & ASSOCIATES

RICHMOND, VA

STRUCTURAL ENGINEER

DESCRIPTION

APPROVED BY THE TRANSPORTATION DESIGN DIVISION

BRIDGE DECK:

Bridge deck shall be 6" min. concrete. Permanent stay-in-place forms and edge dams may be used. The end of the deck slab extension at Abutments A and B shall incorporate a drip groove detail as shown on sheet 6(12).

Brdiae deck shall be finished to a Class 7, Sidewalk Finish, in accordance with the VDOT specifications.

Deck reinforcing design, including curb and slab extension, shall be the responsibility of the Contractor and shall be in accordance with AASHTO LRFD Bridge Design Specification, 7th Edition, 2014; VDOT Modifications; and IIM-S&B-80.5.
Contractor shall submit deck slab design calculations and shop drawings for approval prior to construction. It is the Contractor's responsibility to coordinate curb and deck reinforcement, and curb reinforcement shall be included in deck reinforcing shop drawings. Reinforcing bars shall be Corrosion Resistant Reinforcing (CRR) Class I.

Control and expansion joints shall be designed and detailed by the Contractor to meet the requirements of the VDOT Structure and Bridge Design Manual and the VDOT specifications.

The Contractor shall sumbit design calculations and shop drawings for a proposed stay-in-place form system for deck slab extensions at each end of the truss.

For additional deck details, see sheet 6(12).

PEDESTRIAN FENCE:

For wire mesh fence panel details, see sheets 6(14).

ANCHOR BOLTS:

Contractor shall be responsible for the design of bearing anchor bolts in accordance with AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT modifications for the bridge superstructure and bearings supplied. Contractor shall submit anchor bolt design calculations and shop drawings for approval prior to construction.

Anchor bolts shall conform to ASTM F1554 Grade 55, and be galvanized.

Superstructure related loads used to design the substructure elements are shown in the table below. The loads shown are unfactored.

UNFACTORED DESIGN LOADS	Max. Truss Bearing Shoe Reaction
	Kip
Dead load (DC) *	97
Future Wearing Surface - 20 psf (DW)	12
Pedestrian Live - 90 psf (PL)	53
HIO Vehicle Live (LL)	20
Wind on structure (WS) - Vertical	± 26
Wind on structure - Overturning 20 psf (WS) - Vertical	-41
Wind on structure (WS) - Lateral	17
Friction Longitudinal - Thermal, etc. (FR)	17

Positive values for vertical loads are downward. Lateral and longitundal loads are reversible.

* Includes truss, concrete deck, concrete curb, construction load (20 psf), and pedestrian fence.

BY APPROVED DATE

POLICE - FIRE - RESCUE 911 **EMERGENCY** FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL PREFABRICATED STEEL TRUSS DETAILS PROJECT NO: 1400102-2013 PLAN NO. | DESIGNED: JRM SHEET

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

PREFINAL PLANS

DRAFTED: CRR

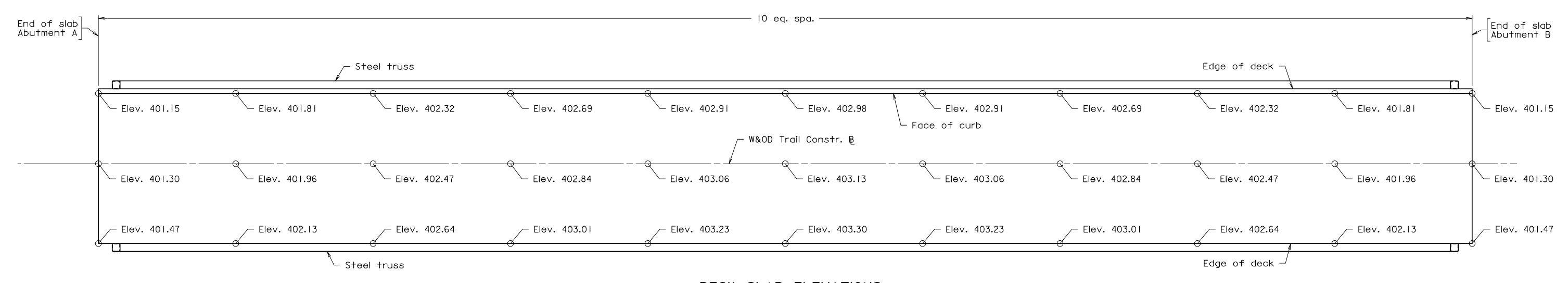
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6(10)

Notes:

Deck slab elevations are on finished grade at face of curb and edge of deck. Those shown on W&OD Trail Constr. Be are at point of finished grade denoted on Transverse section.

Points along the face of curb and edge of deck are aligned perpendicular to W&OD Trail Constr. Bunless otherwise shown. Straight line interpolations for intermediate elevations on top of finished roadway may be made in any direction between any two adjacent points.



DECK SLAB ELEVATIONS

Scale: 3/6" = 1'-0"

PREFINAL PLANS EMERGENCY POLICE - FIRE - RESCUE FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL DECK SLAB ELEVATIONS PROJECT NO: 1400102-2013 PLAN NO.

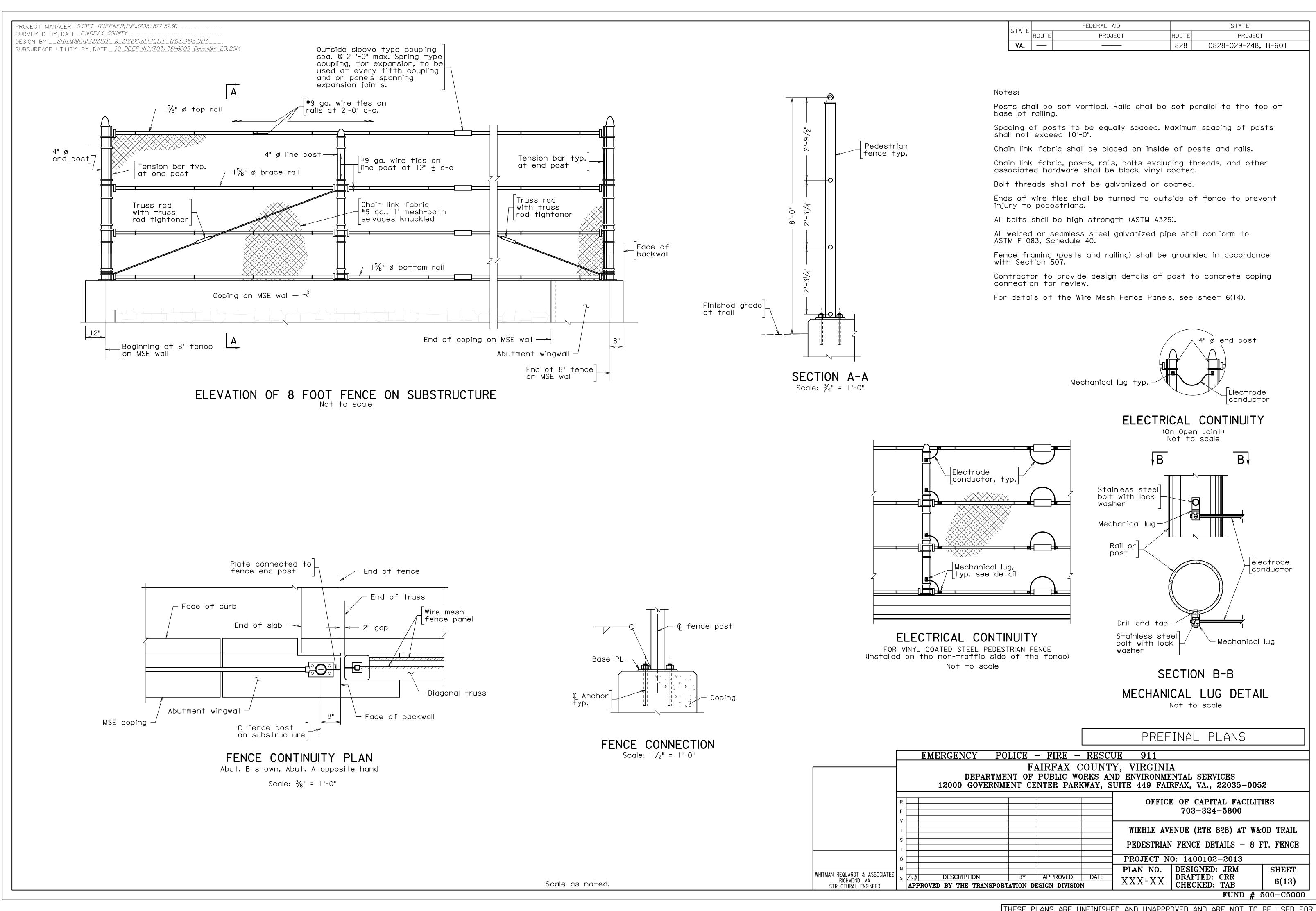
XXX-XX

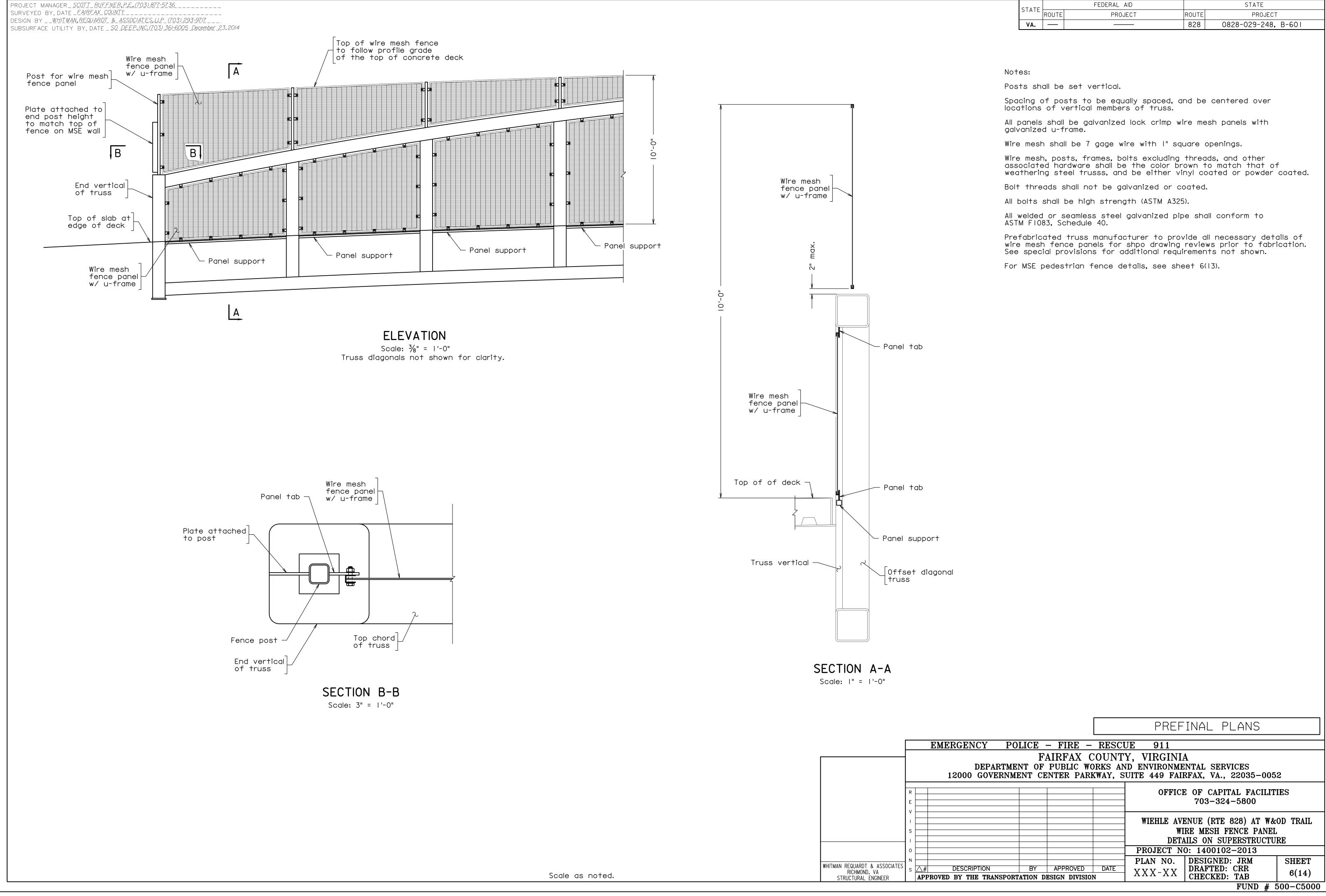
DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB SHEET WHITMAN REQUARDT & ASSOCIATES DESCRIPTION BY APPROVED DATE 6(11) RICHMOND, VA STRUCTURAL ENGINEER APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000

PROJECT MANAGER_SCOTT_RUFFNER,P.E.,(703)877-5736______ FEDERAL AID STATE STATE ROUTE SURVEYED BY, DATE *FAIRFAX COUNTY* PROJECT ROUTE PROJECT DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ 828 0828-029-248, B-601 VA. — SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December 23, 2014</u> Notes: For prefabricated truss details and cast-in-place deck slab design requirements, see sheet 6(10). Deck reinforcing to be designed by prefabricated steel truss fabricator. Deck slab concrete placement schedule shall be provided by prefabricated steel truss fabricator and submitted for review by the engineer. If the deck is cast in one pour, the concrete shall be maintained in a plastic state throughout the entire placement operation. End of slab End of slab Abutment A Abutment B Edge of deck \neg Α └ Face of curb - W&OD Trail Constr. 🛭 Edge of deck -DECK SLAB PLAN Scale: 3/6" = 1'-0" End of truss √2" expanded rubber joint filler - Top of deck slab ___ End of slab Reinforcing steel to be designed by fabricator - See Drip Detail PREFINAL PLANS EMERGENCY POLICE - FIRE - RESCUE FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES DRIP DETAIL 703-324-5800 Not to scale WIEHLE AVENUE (RTE 828) AT W&OD TRAIL SECTION A-A DECK SLAB PLAN AND DETAILS Scale: |" = |'-0" PROJECT NO: 1400102-2013 PLAN NO.

XXX-XX

DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB SHEET WHITMAN REQUARDT & ASSOCIATES DESCRIPTION BY APPROVED DATE 6(12) RICHMOND, VA STRUCTURAL ENGINEER APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000





FEDERAL AID

STATE

PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE *FAIRFAX COUNTY* DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December 23, 2014</u> Wire fence mesh with posts to fit curved top truss chord 8' pedestrian fence √W&OD Trail Constr. Point of finished grade Plain concrete coping ----Plain concrete concrete 2' x 3' block pattern. See 2' x 3' block pattern. Typical See Typical Rustication Rústication Detail. Detail. Drystack architectural tratment typ. Limits of color stain coating applies to elements shown ELEVATION VIEW OF ABUTMENT Showing architectural treatments
Scale: 3/6" = 1'-0" PART ELEVATION OF APPROACH WALL AND TRUSS Showing architectural treatments Scale: $\frac{3}{16}$ " = 1'-0" Black vinyl PVC coated fence Finished grade — TYPICAL RUSTICATION DETAIL Scale: 3" = 1'-0" Proposed finished grade

SECTION A-A

Scale: $\frac{3}{8}$ " = 1'-0"

Notes:

Architectural treatment for the MSE walls shall simulate drystack texture, similar to the pattern detailed on sheet 6(29).

This sheet is for layout and designation of aesthetic treatment only. For abutment and wing haunch details, see sheets 6(4) - 6(7).

Concrete formliner pattern shall be drystack similar to the pattern detailed on this sheet. Maximum relief shall be 2" for MSE walls.

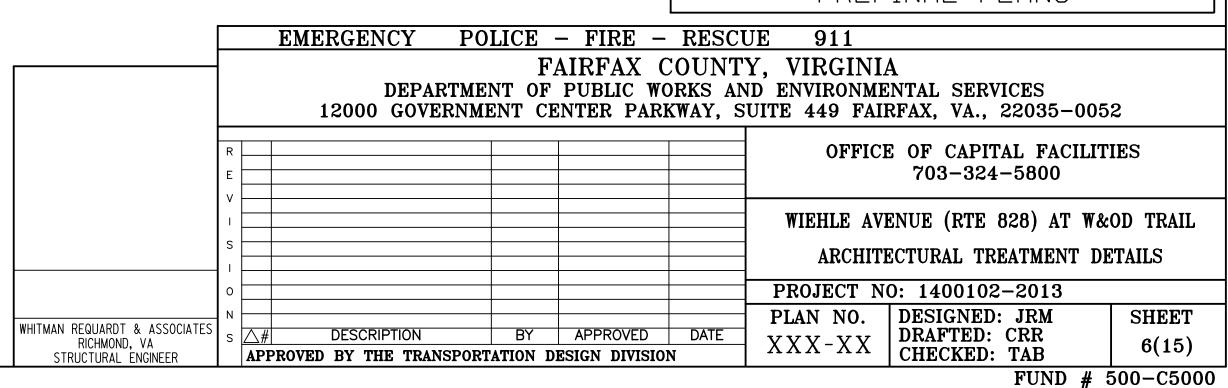
Limits of concrete stain color coating are indicated for both superstructure and substructure elements.

Color stain coating shall be applied prior to installation of 8' pedestrian fence.

All concrete designated as plain concrete on this sheet shall be white (Federal color no. 595C-XXXXX. All 2' x 3' block pattern shall be grey (Federal color no. 595C-XXXXX). All Drystack pattern shall be a combination of the white and grey colors used for the other defined elements.

For additional details and requirements not shown, see special provisions.

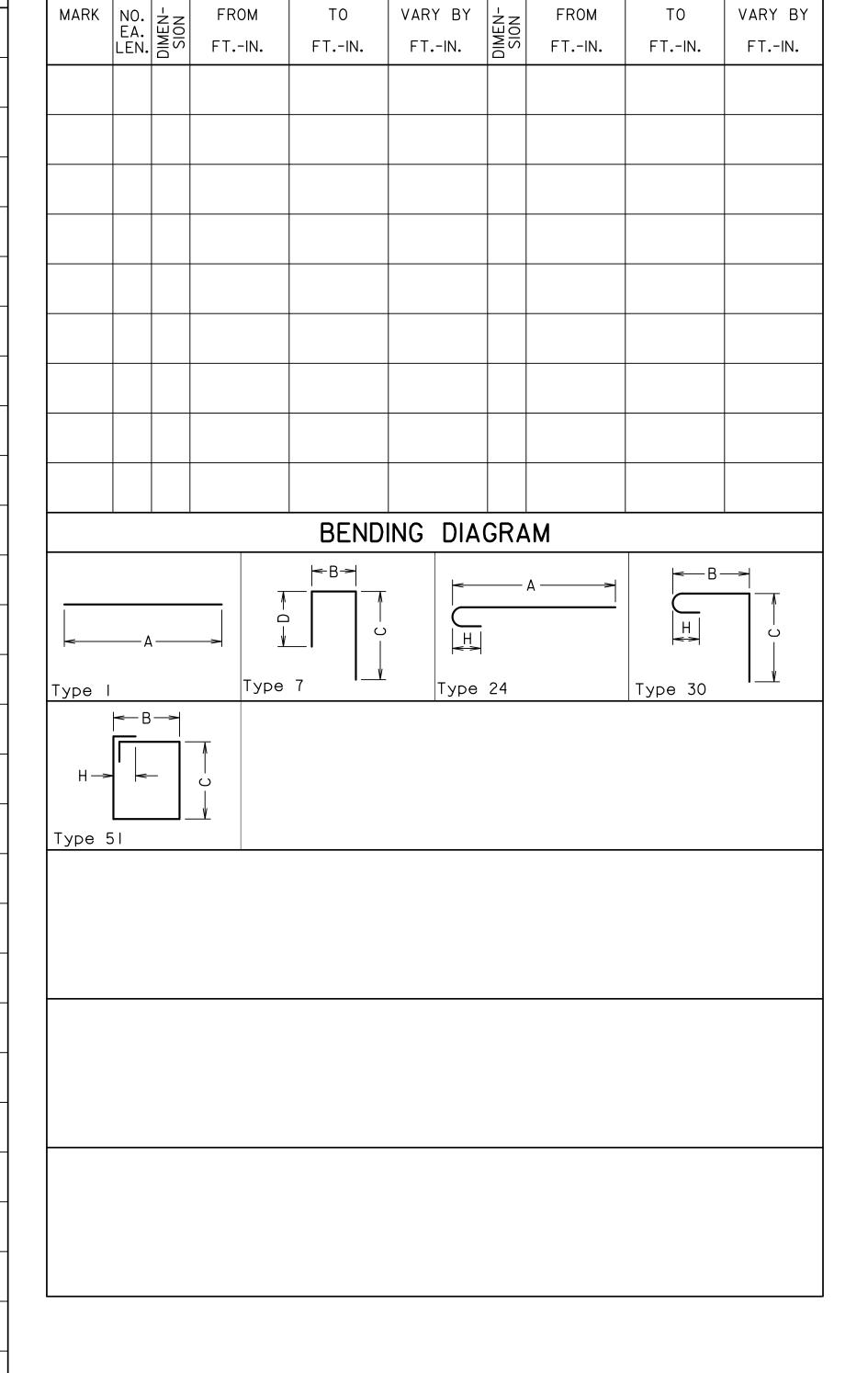
PREFINAL PLANS



PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE <u>FAIRFAX COUNTY</u> DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ____ SUBSURFACE UTILITY BY, DATE _ SO DEEP, INC. (703) 361-6005 December 23, 2014

STATE		FEDERAL AID		STATE
STATE	ROUTE	PROJECT	ROUTE	PROJECT
VA.			828	0828-029-248, B-601

			REINFORCING STEEL S	SCHEDU	LE							[DIMENS	ION T	ABLE						
MARK	NO.	BAR SIZE	PIN DIA. LENGTH	WEIGHT	LOCATION	MARK	TYPE		В	С	D	E P	F Q	G R	Н	l S	J T	K U	L	V	N
			FTIN. FTIN. FTIN.	(LBS.)				FTIN.	FTIN.	FTIN.	FTIN.	FTIN.	FTIN.	FTIN.	FTIN.	FTIN.	FTIN.	FTIN.	FTIN.	FTIN.	FTIN.
			A DI ITA (CA IT A																		
			ABUTMENT A FOOTING - BLACK REINFORCING ST	TEEL																	
AF0601 AF0602	48 18	06 06	8-0 22-6	576 608	FOOTING FOOTING	AF0601 AF0602		8-0 22-6													
AF0603 AF0404	40	06	0-4 1/2 6-8 1/4 3-0	492 80	FOOTING FOOTING	AF0603 AF0404	24 I	6-0 3-0							0-6						
AF0505	12	05 TOTA	3-5 L WEIGHT IN PRECEDING GROUP OF BARS	1799	FOOTING	AF0505		3-5													
			ABUTMENT A NEAT - CORROSION RESISTANT REINF. STE	EEL CLASS I																	
AH0401 AH0602	5	04 06	19-7 1/2 19-7 1/2	891 147	STEM / BACKWALL SEAT	AH0401 AH0602		19-7 1/2 19-7 1/2													
AH0503 AH0504		05 05	5-7 1/2 0-2 1/2 6-0 1/8	375 201	WINGWALL WINGWALL	AH0503 AH0504	7	5-7 1/2	1-4 3/4	2-5	2-5										
AH0505 AH0506	8	05 05	0-2 1/2 8-4 1/8 0-2 1/2 6-2	70 58	WINGWALL WINGWALL	AH0505 AH0506	7 51		I-4 3/4 I-6 I/2	3-7 1-4 3/4	3-7				0-5						
AH0507 AH0508	3	05 05	2-2 0-2 1/2 7-3 1/8	7 23	WINGWALL WINGWALL	AH0507 AH0508	1	2-2	0-9 3/4		3-0										
AV0401	40	04	14-11	399	STEM	AV0401		4-													
AV0402 AV0403	40	04	0-2 0-2 0-2 6-11 7/8	118 79	SEAT BACKWALL	AV0402 AV0403			2-6 1/2	1-6 4-3 1/2	2-4				0-4 1/2						
AV0604	33	06	17-9	879	BACKWALL	AV0604	1	17-9	0-6 1/2	4-3 1/2	2-4										
AV0507 AV0608	13	05 06	19-2 19-2	200 374	WINGWALL WINGWALL	AV0507 AV0608		19-2 19-2													
AV0509 AV0610		05 06		3 I 80	WINGWALL WINGWALL	AV0509 AV0610		14-11 17-9													
AV0611	4	06	0-3 3/4 9-4 1/4	56	WINGWALL	AV0611	7		0-11 1/8	6-3 1/2	2-5										
		TOTA	L WEIGHT IN PRECEDING GROUP OF BARS	3988																	
			ABUTMENT B																		
AF0601		06	FOOTING - BLACK REINFORCING ST	576	FOOTING	AF0601		8-0													
AF0602 AF0603	49	06 06	22-6 0-4 1/2 6-8 1/4	608 492	FOOTING FOOTING	AF0602 AF0603		22-6 6-0							0-6						
AF0404 AF0505		04 05	3-0 3-5	80 43	FOOTING FOOTING	AF0404 AF0505		3-0 3-5													
		TOTA	L WEIGHT IN PRECEDING GROUP OF BARS	1799																	
			ABUTMENT B																		
A110.40.1	70		NEAT - CORROSION RESISTANT REINF. STE		CTEM / DAOVIMALL	A110.401	ļ .	10.7.1.0													
AH0401 AH0602	5	04 06	19-7 1/2 19-7 1/2	944 147	STEM / BACKWALL SEAT	AH0401 AH0602	II .	19-7 1/2 19-7 1/2													
AH0503 AH0504		05 05	5-7 1/2 0-2 1/2 6-0 1/8	399 213	WINGWALL WINGWALL	AH0503 AH0504		5-7 1/2	1-4 3/4	2-5	2-5										
AH0505 AH0506		05 05	0-2 1/2 8-4 1/8 0-2 1/2 6-2	70 58	WINGWALL WINGWALL	AH0505 AH0506	II .		I-4 3/4 I-6 I/2	3-7 1-4 3/4	3-7				0-5						
AH0507 AH0508	3	05 05	2-2 0-2 1/2 7-3 1/8	7 23	WINGWALL WINGWALL	AH0507 AH0508	1	2-2	0-9 3/4		3-0										
AV0402			0-2 4-4 7/8	118	SEAT	AV0402			2-6 1/2						0-4 1/2						
AV0403 AV0405	17	04	0-2 6-II 7/8 I5-II	79 425	BACKWALL STEM	AV0403 AV0405	7	15-11		4-3 1/2	2-4										
AV0606 AV0611	33	06 06	0-3 3/4 1/4	929 56	BACKWALL WINGWALL	AV0606 AV0611	1	18-9	0-11 1/8	6-3 1/2	2-5										
AV0512 AV0613	10	05 06	20-2 20-2	210 394	WINGWALL WINGWALL	AV0512 AV0613		20-2 20-2													
AV0514 AV0615	2	05 06		33 84	WINGWALL WINGWALL	AV0514 AV0615	1	15-11 18-9													
		ТОТА	L WEIGHT IN PRECEDING GROUP OF BARS	4189																	
																	_				
																					<u> </u>



DIMENSION VARIATION TABLE

NOTES:

Dimensions in Bending Diagram are out-to-out of bars.

Weights in schedule are based on density of 490 lb/ft.

If fabrication of deck slab bar is not possible for length detailed and multiple bars are required, bars shall have the least number of Class B splices possible. Splices shall be located approximately at points of contraflexure and splices in alternate bars shall be located in different bays.

Straight bars (top and bottom) may be substituted for truss bars (SB series) in the deck superstructure at no extra cost to the State.

WHITMAN REQUARDT & ASSOCIATES RICHMOND, VA STRUCTURAL ENGINEER APPROVED BY THE TRANSPORTATION DESIGN DIVISION

FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

EMERGENCY POLICE - FIRE - RESCUE

OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL REINFORCING STEEL SCHEDULE PROJECT NO: 1400102-2013 PLAN NO.

XXX-XX

DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB SHEET BY APPROVED DATE DESCRIPTION 6(16)

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

PREFINAL PLANS

PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE *FAIRFAX COUNTY* DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE _SO DEEP.INC.(703) 361-6005 December 23,2014

FEDERAL AID STATE STATE ROUTE PROJECT ROUTE PROJECT 828 0828-029-248, B-601 VA. —

B-06/07

FIGURE 10 DESCRIPTION OF STRATA LL PI - 385 - 385 - 4 4 89 - 4 - 5 4 4 89 - 4 - 7 13 16 - 370 - 370 - 370 - 370 - 370 - 370 - 381 - 7 7 13 16 - 370	4	1	\ /		1					PROJECT #: 45494-027 LOCATION: W&OD Trail over Wiehle Avenue			-0 4	
SOIL ROCK DIP SO Management Soil Rock DIP Color Soil Color	•		_					_		STATION: 11303.06 OFFSET: 1 NORTHING: 7031410.79 ft Easting: 11	0.13 813	ft L 790.	.T 28 ft	
Section Sect			F	IELD [DAT	4				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ļ	LAB	DAT	Ά
2 385 6 14 7 89 1.5 2.5 8.5 9 4 4 89 9 5 6.5 8.5 9 6.5 8.5 9 6.5 9	DEPTH (ft)	ELEVATION (ft)			SAMPLE INTERVAL		T	P°	STRATA LEGEND	SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: G Koepping GROUND WATER			MOISTURE CONTENT (%)	FINES CONTENT #200 (%)
2.5.7 383.5 Orange/forown, SILT with mica, dry ML 18.3 70 3.7 7 11 78 100 15 15 10 10 15 15 10 10 1	2 -	385	14	7 89						0.0 / 386.0 Brown/orange, Clayey SILT with little Quartz gravel, dry ML				
8	4 +		4	4 89	4								18.3	70.7
The state of the s	6 +	380												
2	0 +	375	7 7 1	78										
EMARKS: Rig Type: CME-45C-2 Truck Rig.	12 -			100	13.5									
EMARKS: Rig Type: CME-45C-2 Truck Rig.	6 +	370	1	6	15									
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17.02101	SEW	ARKS	S: Ria Tvr	De. CME	-45C	-2 Truck	Rig					<u> </u> ۸ ه		7 E 4
	· — 141		o. Ng Ty	JO. OIVIE	. - 50-	Z TIUUK	ı vıy.							

4									PROJECT #: 45494-027 LOCATION: W&OD Trail over Wiehle Avenue	B-	05	
		V							STRUCTURE: TRAIL PA	GE)F ′
		Virginia	a Depar	tment	of Tran	sporta	ation		STATION: 11400.00 OFFSET: 11.00 OFFSET: 11.0	22.6°	1 ft	rth
			ELD I	DAT	_				Date(s) Drilled: 10/24/2016 - 10/24/2016	LA	B DA	4 T <i>A</i>
DEPTH (T)	ELEVATION (ft)	STANDARD PENETRATION TEST HAMMER BLOWS	SOIL RECOVERY (%) SAMPLE LEGEND	SAMPLE INTERVAL	CORE RECOVERY (%) ROCK QUALITY)IP°	STRATA LEGEND	Drilling Method(s): HSA SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: G Koepping GROUND WATER	LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)
+		5		/	0				FIELD DESCRIPTION OF STRATA 0.0 / 383.0	LL	PI	
2 +	-	8 7	67	1.5					Orange, brown, Clayey SILT with some mica, dry ML			
 - -	380 -	7 5 7	67	4					2.5 / 380.5 Orange, SILT, dry ML			
3	- -	6 6 9	33	6.5								
\ +	375	6 7	100	8.5					8.5 / 374.5			
0 +	-	1	1 1/1	10					Red/pink, Orange, layered SILT, dry ML			
2	370	6	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	13.5								
4 + 6 +	-	8 1	100	15								
8 +	365											
0 +		10 13 17	100	18.5					18.5 / 364.5 Tan with brown, orange, red, black layers, SILT, dry ML			
EM	1ARKS	3: Rig Typ	e: CMF	-45C-	-2 Truc	k Ria	1.		DA	GE	1.0)F
				50			, - 			B-		

LOCATION: W&OD Trail over Wiehle Avenue STRUCTURE: BRIDGE ABUTMENT PAGE 1 OF 2 STATION: 11493.65 OFFSET: 7.47 ft LT NORTHING: 7031345.63 ft Easting: 11813922.61 ft SURFACE ELEVATION: 380.0 ft COORD. DATUM: VA North Date(s) Drilled: 10/28/2016 - 10/28/2016 LAB DATA **FIELD DATA** Drilling Method(s): HSA SOIL ROCK SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: B Grass **GROUND WATER** FIELD DESCRIPTION OF STRATA LL PI 0.0 / 380.0 Brown, Sandy SILT, dry ML 5.0 / 375.0 100 Brown SILT with trace Sand, dry ML 100 10 370 15 72 15.3 75.9 20 360 18 | 100 | | PAGE 1 OF 2 **REMARKS**: Rig Type: CME-45C-2 Truck Rig. B-06/07 Copyright 2017, Commonwealth of Virginia

PROJECT #: 45494-027

The subsurface information shown on the boring logs in these plans was obtained with reasonable care and recorded in good faith solely for use by the County in establishing design controls for the project. The County has no reason to suspect that such information is not reasonably accurate as an approximate indication of the subsurface conditions at the sites where the borings were taken. The County does not in any way warrant or guarantee that such data can be projected as indicative of conditions beyond the limits of the borings shown; and any such projections by bidders are purely interpretive and altogether speculative. Further, the County does not in any way guarantee, either expressly or by implication, the sufficiency of the information for bid purposes.

A copy of the

original signed geotechnical submittal is on file with

the County.

The boring logs are made available to bidders in order that they may have access to subsurface data identical to that which is possessed by the County, and are not intended as a substitute for personal investigation, interpretation and judgment by the bidders.

							PREF	INAL PLANS	
		EM	ERGENCY PO	LICE	– FIRE –	RESCI	UE 911		
				NT OF	PUBLIC WO	RKS AN		A ENTAL SERVICES RFAX, VA., 22035-00	52
	R E						OFFICI	E OF CAPITAL FACILI 703-324-5800	TIES
	V I S							ENUE (RTE 828) AT WENGINEERING GEOLOGY	
	0						PROJECT N	0: 1400102-2013	
WHITMAN REQUARDT & ASSOCIATES RICHMOND, VA	N S	△ #	DESCRIPTION	BY	APPROVED	DATE	PLAN NO. XXX-XX	DESIGNED: JRM DRAFTED: CRR	SHEET
STRUCTURAL ENGINEER		APPROV	ED BY THE TRANSPORT	CATION D	ESIGN DIVISION	•	$ \Lambda \Lambda \Lambda \Lambda \Lambda$	CHECKED: TAB	6(17)

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u>

SURVEYED BY, DATE <u>FAIRFAX COUNTY</u>

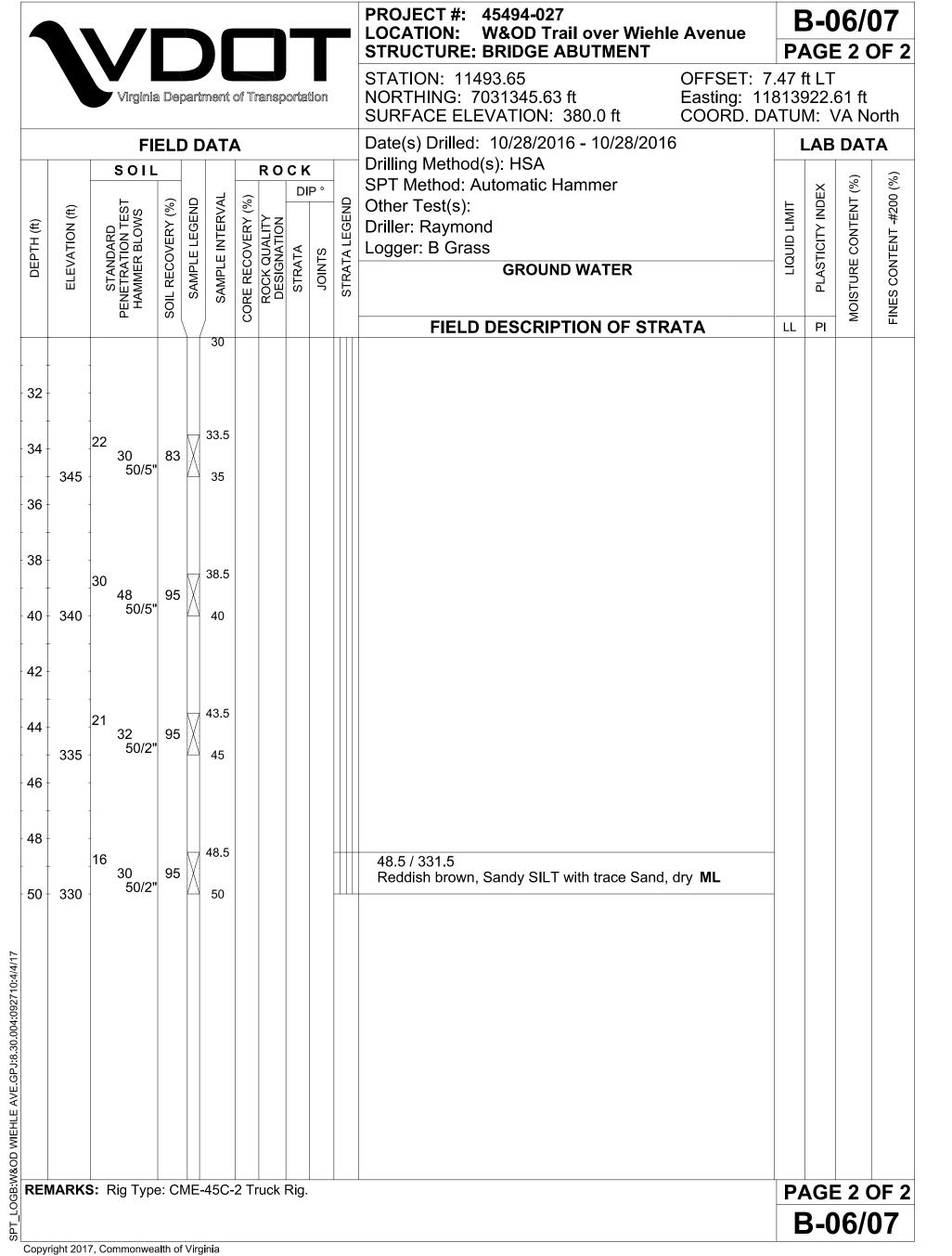
DESIGN BY <u>WHITMAN, REQUARDT</u> & ASSOCIATES, LLP (703) 293-9717

SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December 23, 2014</u>

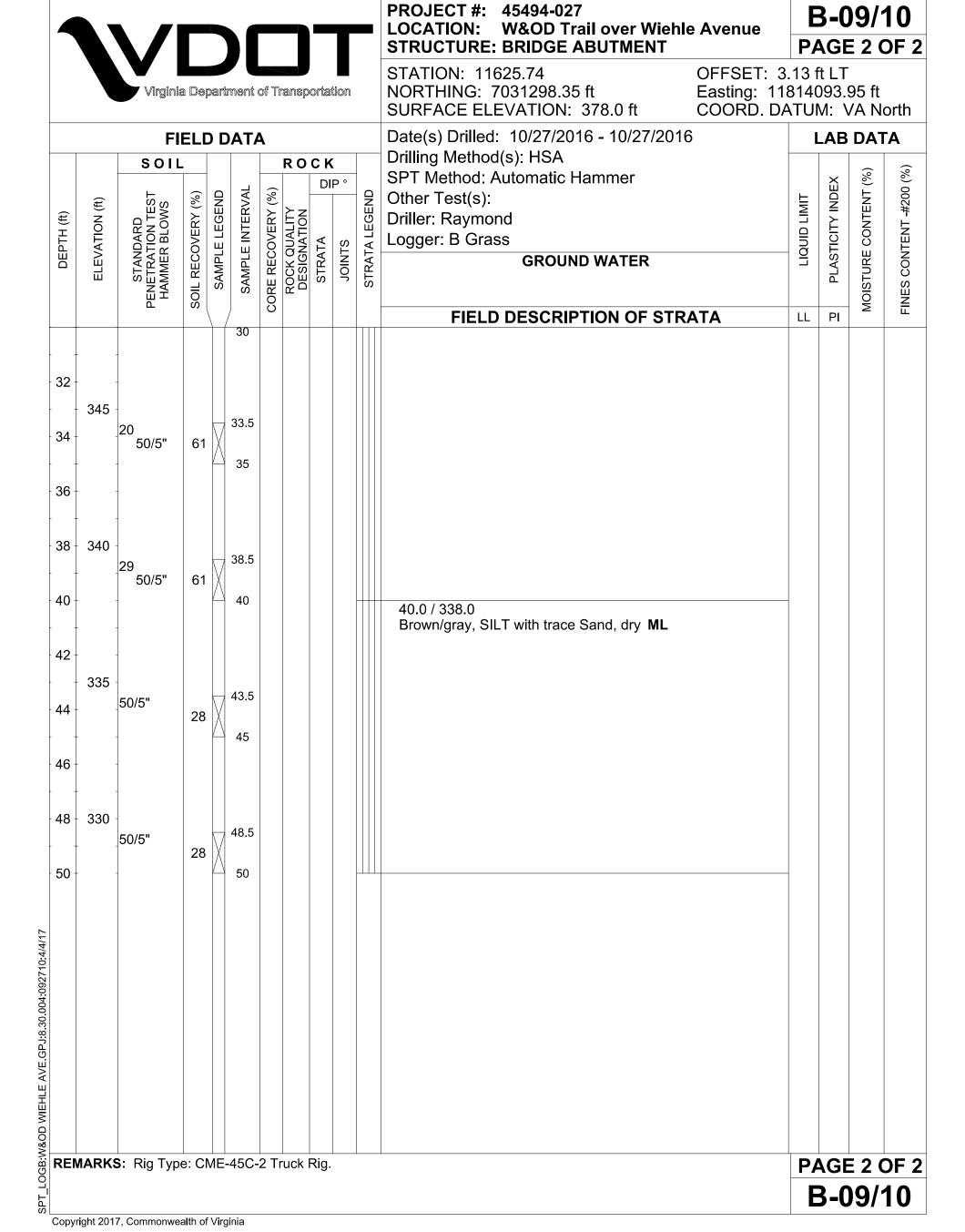
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 VA.
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 828
 0828-029-248, B-601



4	•						_			PROJECT #: 45494-027 LOCATION: W&OD Trail over Wiehle Avenue)9/ [^]					
7		V								STRUCTURE: BRIDGE ABUTMENT			E 1 (OF 2				
		Virginia	a Dep	artme	ent of	Tran	sport	ation		STATION: 11625.74 OFFSET: 3 NORTHING: 7031298.35 ft Easting: 11 SURFACE ELEVATION: 378.0 ft COORD. DA	8140	093.	95 ft	orth				
			ELD	DA	TA					Date(s) Drilled: 10/27/2016 - 10/27/2016 Drilling Method(s): HSA	LAB DATA							
DEPTH (ft)	ELEVATION (ft)	STANDARD PENETRATION TEST HAMMER BLOWS		SAMPLE LEGEND	SAMPLE INTERVAL	(%)	DESIGNATION O	DIP °	STRATA LEGEND	SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: B Grass GROUND WATER	LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)	FINES CONTENT -#200 (%)				
	ш	PENE HAN	SOILF	SA	SAI	CORE	DE) ¬	S	FIELD DESCRIPTION OF STRATA	LL	PI	MOIST	FINES				
+		3 5	67		_					0.0 / 378.0 Brown, Sandy SILT, dry ML								
2	075	25			.5 2.5													
4	375	10 12	78	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4													
		10 13	100	;	5													
6 +		15		6	5.5													
8	370	13		8	5.5													
10		17 17 14	100	I/: \1	10													
12 -		_																
+	365	8		 13	3.5													
14 +		6 6	100	1	15													
16		_																
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		16 19 15	100	X	8.5								13.8	63.1				
20 +				2	20													
22	OEF.																	
24	355	17 34	78	23	3.5													
26		34 50/5'	•	2	25													
26 -																		
28	350	_ 		N /	8.5													
30 -		27 35		/· \														
REM	IARKS	S: Rig Typ	e: CM	1E-45	5C-2	Truc	k Riç] .			P	AGE	E 1 (OF 2				



The subsurface information shown on the boring logs in these plans was obtained with reasonable care and recorded in good faith solely for use by the County in establishing design controls for the project. The County has no reason to suspect that such information is not reasonably accurate as an approximate indication of the subsurface conditions at the sites where the borings were taken. The County does not in any way warrant or guarantee that such data can be projected as indicative of conditions beyond the limits of the borings shown; and any such projections by bidders are purely interpretive and altogether speculative. Further, the County does not in any way guarantee, either expressly or by implication, the sufficiency of the information for bid purposes.

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original signed

geotechnical submittal is on file with

the County.

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							PREF	INAL PLANS	
			EMERGENCY POI	LICE	– FIRE –	RESCU	JE 911		
				T OF	PUBLIC WOR	KS AN		A NTAL SERVICES RFAX, VA., 22035-005	52
	R						OFFICE	OF CAPITAL FACILIT 703-324-5800	TIES
	V I S							ENUE (RTE 828) AT W& ENGINEERING GEOLOGY 2 OF 6	OD TRAIL
	0						PROJECT NO	0: 1400102-2013	
WHITMAN REQUARDT & ASSOCIATES RICHMOND, VA	N S	<u>_</u> #	DESCRIPTION	BY	APPROVED	DATE	PLAN NO. XXX-XX	DESIGNED: JRM DRAFTED: CRR	SHEET 6(18)
STRUCTURAL ENGINEER		APP:	ROVED BY THE TRANSPORTA	ATION D	ESIGN DIVISION		$\Lambda\Lambda\Lambda$ $\Lambda\Lambda$	CHECKED: TAB	0(10)

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE _FAIRFAX_COUNTY_____ DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE _SO DEEP, INC. (703) 361-6005 December 23, 2014

FEDERAL AID STATE STATE PROJECT ROUTE PROJECT 828 0828-029-248, B-601 VA. —

							PROJECT #: 45494-027 LOCATION: W&OD Trail over Wiehle Avenue	B-11				
	VI						STRUCTURE: TRAIL PA		1 OF 2			
	Virginia	a Depa	rtment	of Transporta	ation		STATION: 11725.00 OFFSET: 12.00 NORTHING: 7031273.94 ft Easting: 118147 SURFACE ELEVATION: 379.0 ft COORD. DATU	91.6	5 ft			
	FII	ELD	DAT				Date(s) Drilled: 10/26/2016 - 10/26/2016	LA	BDATA			
DEPTH (II) ELEVATION (ft)	STANDARD PENETRATION TEST HAMMER BLOWS	SOIL RECOVERY (%)	SAMPLE INTERVAL	CORE RECOVERY (%) ROCK QUALITY DESIGNATION OSTRATA OD STRATA	IP°	STRATA LEGEND	Drilling Method(s): HSA SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: B Grass GROUND WATER	LIQUID LIMIT	PLASTICITY INDEX MOISTURE CONTENT (%)			
	P P P P P P P P P P P P P P P P P P P		N S	CORI			FIELD DESCRIPTION OF STRATA	LL	PI SIOW			
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nvright 20	017, Commonwea	alth of \/i	irainia					D.	1 1			

4	1										LOCATION: VV&OD Trail over vvienie Avenue		$\frac{11}{200}$	
		Virgini			ment		ransp	ortai	tion		STRUCTURE: TRAIL PAGE STATION: 11725.00 OFFSET: 12.00 ft NORTHING: 7031273.94 ft Easting: 1181419 SURFACE ELEVATION: 379.0 ft COORD. DATUM Date(s) Drilled: 10/26/2016 - 10/26/2016	t LT 91.69	5 ft	rth
DEPTH (ft)	ELEVATION (ft)	STANDARD PENETRATION TEST HAMMER BLOWS	SOIL RECOVERY (%)	SAMPLE LEGEND		(%	ROCK QUALITY DESIGNATION O	DI	STNIOL	STRATA LEGEND	Drilling Method(s): HSA SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: B Grass GROUND WATER FIELD DESCRIPTION OF STRATA	T LIQUID LIMIT	□ PLASTICITY INDEX	MOISTI IRE CONTENT (%)
32 -					30									
34 +	345	22 50/1"	33		33.5 35									
38 +	340	50/1"	5		38.5									
42 - - 44 -	335	50/2"	11		43.5 45									
46 -	330	50/3"	17		48.5									
REM	IARK:	S : Rig Typ	e: Cl	ME-	-45C-	-2 Tı	ruck	Rig.			PAG		2 O 11	

STRUCTURE: TRAIL PAGE 1 OF 2 STATION: 11900.00 OFFSET: 12.00 ft LT NORTHING: 7031216.74 ft Easting: 11814357.04 ft SURFACE ELEVATION: 363.0 ft COORD. DATUM: VA North Date(s) Drilled: 10/27/2016 - 10/27/2016 **FIELD DATA** LAB DATA Drilling Method(s): HSA SOIL ROCK SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: B Grass **GROUND WATER** FIELD DESCRIPTION OF STRATA LL PI 0.0 / 363.0 Brown, SILT with trace Sand, dry ML ↓ 360 30 8 355 350 1 28 335 · **REMARKS**: Rig Type: CME-45C-2 Truck Rig. PAGE 1 OF 2 **B-12** Copyright 2017, Commonwealth of Virginia

PROJECT #: 45494-027

LOCATION: W&OD Trail over Wiehle Avenue

The subsurface information shown on the boring logs in these plans was obtained with reasonable care and recorded in good faith solely for use by the County in establishing design controls for the project. The County has no reason to suspect that such information is not reasonably accurate as an approximate indication of the subsurface conditions at the sites where the borings were taken. The County does not in any way warrant or guarantee that such data can be projected as indicative of conditions beyond the limits of the borings shown; and any such projections by bidders are purely interpretive and altogether speculative. Further, the County does not in any way guarantee, either expressly or by implication, the sufficiency of the information for bid purposes.

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EMERGENCY POLICE - FIRE - RESCUE 911															
FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052	·														
OFFICE OF CAPITAL FACILITIES 703-324-5800	ES														
WIEHLE AVENUE (RTE 828) AT W&C S ENGINEERING GEOLOGY 3 OF 6	DD TRAIL														
PROJECT NO: 1400102-2013															
WHITMAN REQUARDT & ASSOCIATES RICHMOND, VA STRUCTURAL ENGINEER N S DESCRIPTION BY APPROVED DATE XXX-XX APPROVED BY THE TRANSPORTATION DESIGN DIVISION PLAN NO. XXX-XX DESIGNED: JRM DRAFTED: CRR CHECKED: TAB	SHEET 6(19)														

PROJECT MANAGER_SCOTT_RUFFNER,P.E.,(703)877-5736______ SURVEYED BY, DATE _*FAIRFAX_COUNTY* ______ DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December 23, 2014</u>

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submittal
is on file with

the County.

| STATE | ROUTE FEDERAL AID STATE PROJECT PROJECT VA. — 828 0828-029-248, B-601

LOCATION LOCATION	#: 45494-027 N: W&OD Trail over Wiehle Avenue		-12
Virginia Department of Transportation STATION: NORTHING	RE: TRAIL 11900.00 OFFSET: 7 G: 7031216.74 ft Easting: 11 ELEVATION: 363.0 ft COORD. D.	12.00 ft L [.] 1814357.0	04 ft
	illed: 10/27/2016 - 10/27/2016	L	AB DATA
	ymond	LIMIT GINOIT	PL/
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40 40	5 y, SILT with some rock fragments, dry ML		
42 - 320 44 - 40 50/5" 61 43.5 46 - 45			
48 - 315 37 50/4" 55			
REMARKS: Rig Type: CME-45C-2 Truck Rig.			2 OF 2

4	NDOT							PROJECT #: 45494-027 LOCATION: W&OD Trail over Wiehle Avenue	B-13						
•	Z	\ /									STRUCTURE: TRAIL	P	AGI	E 1	OF 1
	1	Virginia				-			fion		STATION: 12050.00 OFFSET: 3 NORTHING: 7031167.13 ft Easting: 11				
		vii gii ile	i DE	וו ווסען		الا تاپ	1 (21) 13 (2)	vu të	ا لاپىي		NORTHING: 7031167.13 ft Easting: 11 SURFACE ELEVATION: 355.0 ft COORD. DA	4TU	M \	40 II /A N	orth
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(¥) +) NOI	RD NO TELOW	ERY (EGE	TER	ERY	FIS			EGE	Driller: Raymond		<u> </u>	ONTE	# LN
DEРΙΗ (π)	ELEVATION (ft)	NDA ATIO ER BI	COVI	SAMPLE LEGEND	LEIN	000	GNA.	STRATA	JOINTS	STRATA LEGEND	Logger: B Grass GROUND WATER	LIQUID LIMIT	STIC	ZE CC	NTE
_	E	STANDARD PENETRATION TEST HAMMER BLOWS	SOIL RECOVERY (%)	SAMI	SAMPLE INTERVAL	CORE RECOVERY (%)	ROCK QUALITY DESIGNATION	STR	ᅙ	STR/	OKOOND WATEK		PLA	MOISTURE CONTENT (%)	SSCC
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													В	-13	3

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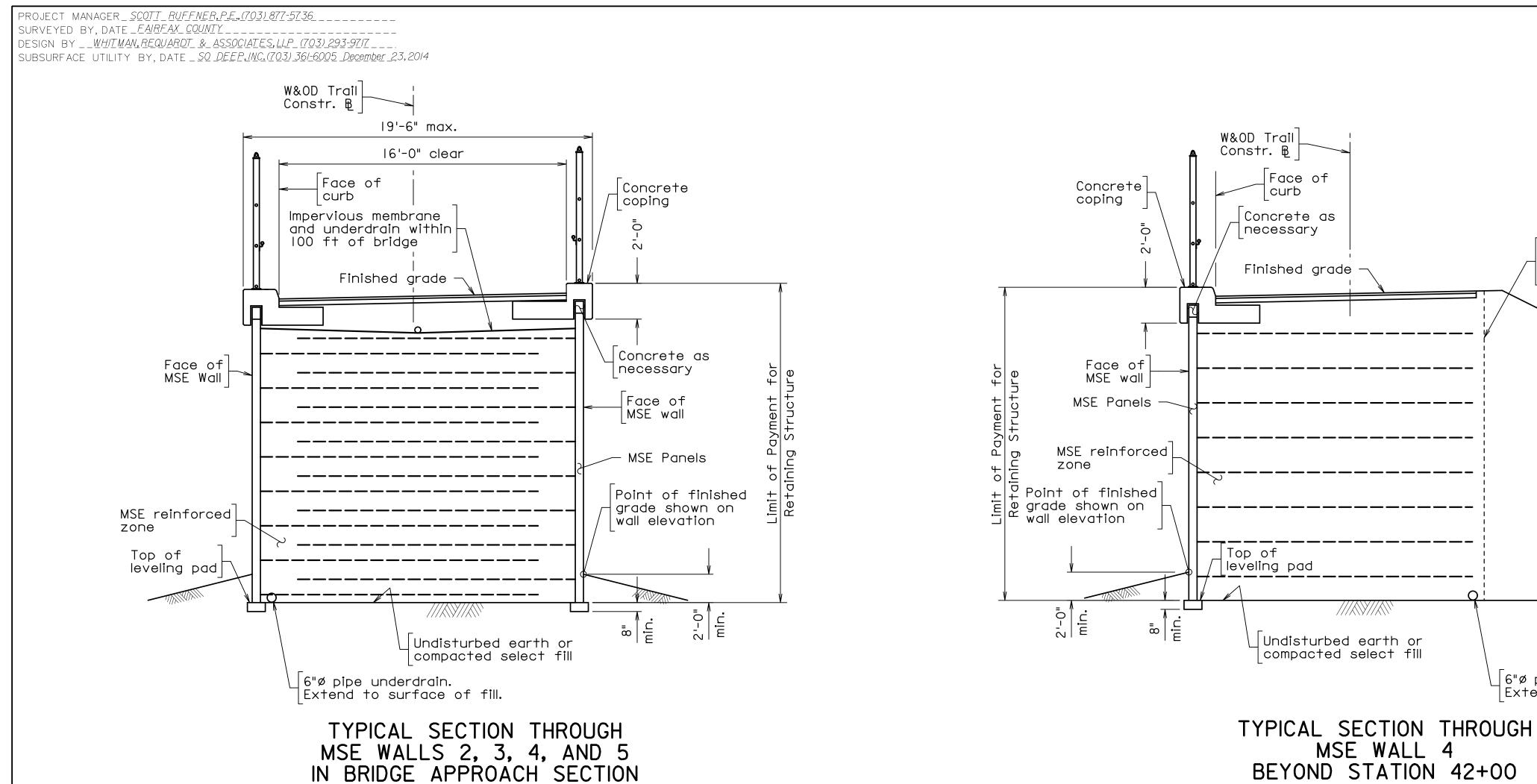
PREFINAL PLANS EMERGENCY POLICE - FIRE - RESCUE FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL ENGINEERING GEOLOGY 4 OF 6 PROJECT NO: 1400102-2013 PLAN NO.
XXX-XX

DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB SHEET WHITMAN REQUARDT & ASSOCIATES RICHMOND, VA STRUCTURAL ENGINEER DESCRIPTION BY APPROVED DATE 6(20)APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.



PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> FEDERAL AID STATE | STATE | ROUTE SURVEYED BY, DATE *FAIRFAX COUNTY* PROJECT PROJECT DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ 828 0828-029-248, B-601 VA. | ---SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December 23, 2014</u> **B-11** B-09/10 375 B-12 **B-13** 355 50/5" 24 350 21 345 50/5" 16 50/5" 340 340 50/5"| 19 63 50/5"| 330 50/5" 50/5" 50/5" 🛚 320 320 50/5"| 50/4" 🕅 310 11725.00 12.00 ft LT 11625.74 3.13 ft LT 12050.00 11900.00 12.00 ft LT 33.97 ft RT PREFINAL PLANS POLICE - FIRE - RESCUE **EMERGENCY** The subsurface information shown on the boring logs in these plans was obtained with reasonable care and recorded in good faith solely for use by the County in establishing design controls for the project. The County has no reason to suspect that such information is not reasonably accurate as an approximate indication of the subsurface conditions at the sites where the borings were taken. The County does not in any way warrant or guarantee that such data can be projected as indicative of conditions beyond the limits of the borings shown; and any such projections by bidders are purely interpretive and altogether speculative. Further, the County does not FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES See borehole logs for complete data See Material and Sample Symbols List 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL A copy of the pretive and altogether speculative. Further, the County does not in any way guarantee, either expressly or by implication, the suffioriginal signed **ENGINEERING GEOLOGY** geotechnical submittal is on file with 6 OF 6 ciency of the information for bid purposes. PROJECT NO: 1400102-2013 The boring logs are made available to bidders in order that they may have access to subsurface data identical to that which is possessed the County. PLAN NO. DESIGNED: JRM DRAFTED: CRR CHECKED: TAB SHEET WHITMAN REQUARDT & ASSOCIATES by the County, and are not intended as a substitute for personal investigation, interpretation and judgment by the bidders. DESCRIPTION BY APPROVED DATE RICHMOND, VA STRUCTURAL ENGINEER 6(22)APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000



STATE
ROUTE PROJECT ROUTE PROJECT

VA. — 828 0828-029-248, B-601

MSE WALL GENERAL NOTES:

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2016.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions.

The minimum design life of MSE wall shall be 100-year for walls within 100 feet from edge of a bridge abutment and 75-year there after.

The anticipated MSE wall total settlement and estimated settlement waiting periods are shown on this sheet.

For bearing requirements, see the MSE Walls Design Data Table on this

Prior to wall construction, the foundation shall be compacted with a smooth wheel vibratory roller. The drums of the roller should be ballasted and each pass of the roller should overlap one half the width of the previous pass. The roller shall make at least ten passes over the proposed wall foundation zone. No density test will be required. Any foundation soils found to be unsuitable shall be removed and replaced with select material Type I minimum CBR of 30.

Minimum panel design thickness is 5.5 inches. Thickness of concrete must increase to accommodate any architectural surface finish that may be specified. Maximum panel dimensions shall not exceed 5 ft.x10 ft.

A geotextile shall be used as a separator between the mechanically stabilized earth mass, retained fill, and the subbase. A geotextfile is not necessary separating the mechanically stablized earth mass and subbase if a minimum of 6 inches of compacted No. 21B stone is placed on top of the subgrade.

Corrosion resistant reinforcing steel Class I shall be used in all copings.

Coping shall not be placed until wall completion and waiting periods are complete.

All coping designated herein shall be cast-in-place or precast concrete to the dimensions shown.

The selected wall supplier will submit a detailed design and shop drawings for approval.

Provide drainage details such as perforated pipe underdrain and/or drainage blanket based upon field conditions.

All panel types and other related elements shall be detailed on shop drawings.

Wall shall be designed to resist forces from retained fill with the following parameters:

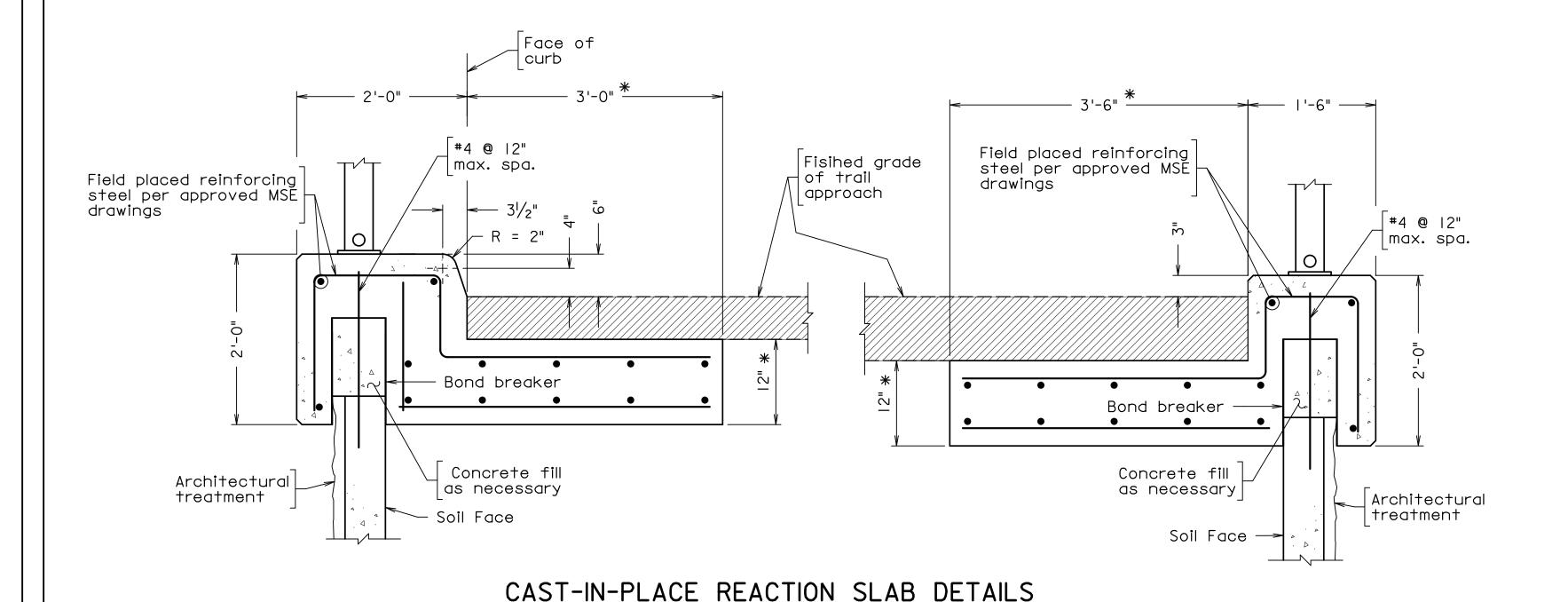
Soil Friction angle Ø = 34 degrees Unit Weight = 125 lb/cf Traffic Surcharge = 90 lb/sf

Handrail Lateral Force = 120 lb/ft

Ka = 0.283

Contractor shall coordinate with all trades performing work within MSE wall limits.

Wall supplier shall include all details for the MSE coping and reaction slabs.



* Approximate dimension. Reaction slab details

as determined by the MSE manufacturer.

MSE WALLS DESIGN DATA TABLE									
	Minimum	Estimated	Estimated	Service Limit State	Strength Limit State				
Wall	Strap Length (ft)	Settlement (in)	Settlement Waiting Period (weeks)	Applied Base Pressure (Ksf)	Maximum Factored Bearing Resistance (ksf)				
2	0.7H/6 ft.	< x I.O inch	None	5.9	8.0				
3	0.7H/6 ft.	< x I.O inch	None	5.9	8.0				
4	0.7H/6 ft.	< x 1.0 inch	None	5.9	8.5				
5	0.7H/6 ft.	< x 1.0 inch	None	5.9	8.0				

* Minimum strap length shall be the greater of 6'-0" or 0.7H, where "H" is the height measured from the bottom of leveling pad to the top of the roadway.

Geotextile Separator

6"ø pipe underdrain.

Extend to surface of fill.

Fabric

PREFINAL PLANS

FUND # 500-C5000

POLICE - FIRE - RESCUE **EMERGENCY** 911 FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL MSE WALLS GENERAL NOTES AND DETAILS PROJECT NO: 1400102-2013 PLAN NO. DESIGNED: JRM SHEET WHITMAN REQUARDT & ASSOCIATES DRAFTED: CRR DESCRIPTION BY APPROVED DATE 6(23)RICHMOND, VA CHECKED: TAB APPROVED BY THE TRANSPORTATION DESIGN DIVISION STRUCTURAL ENGINEER

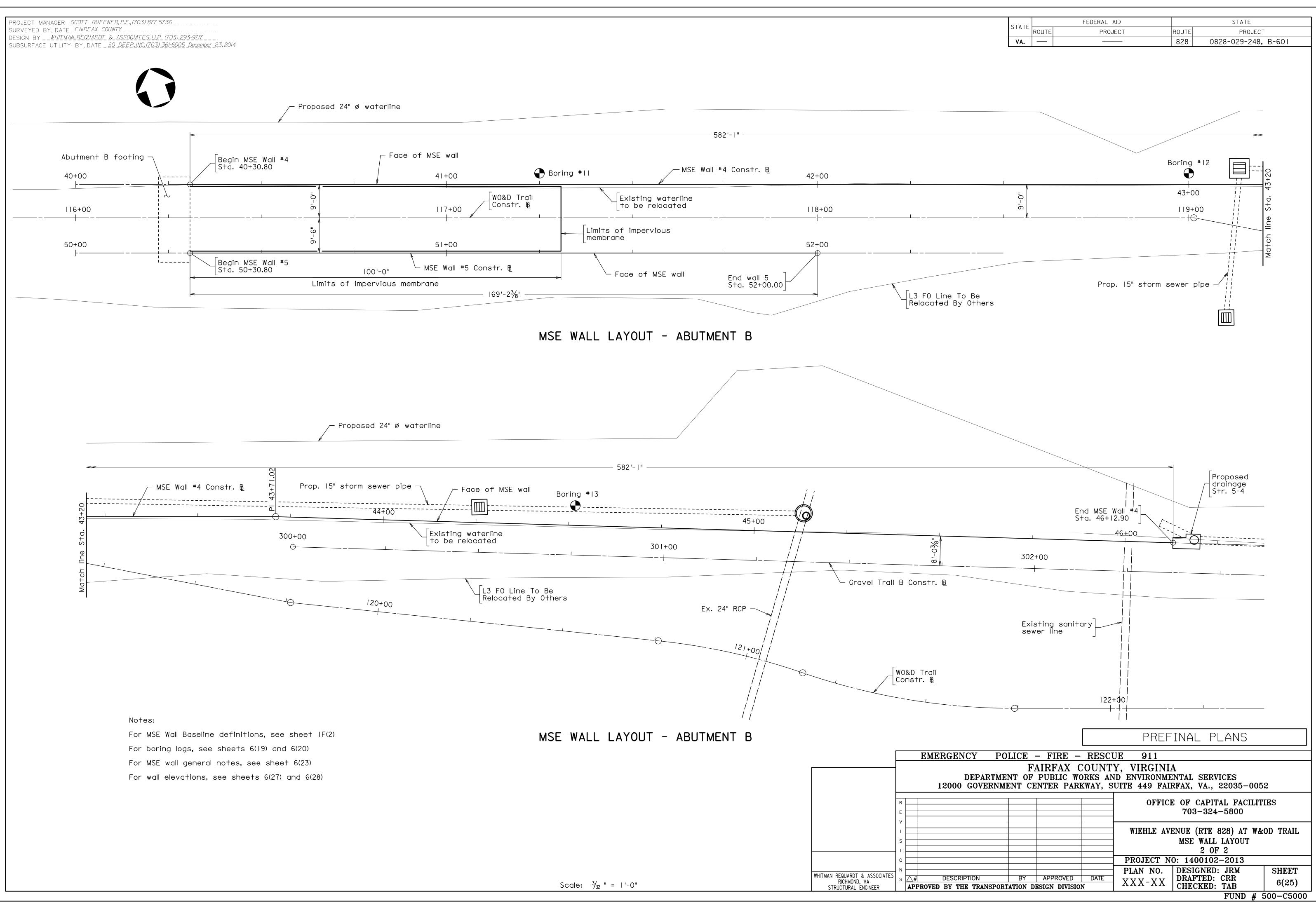
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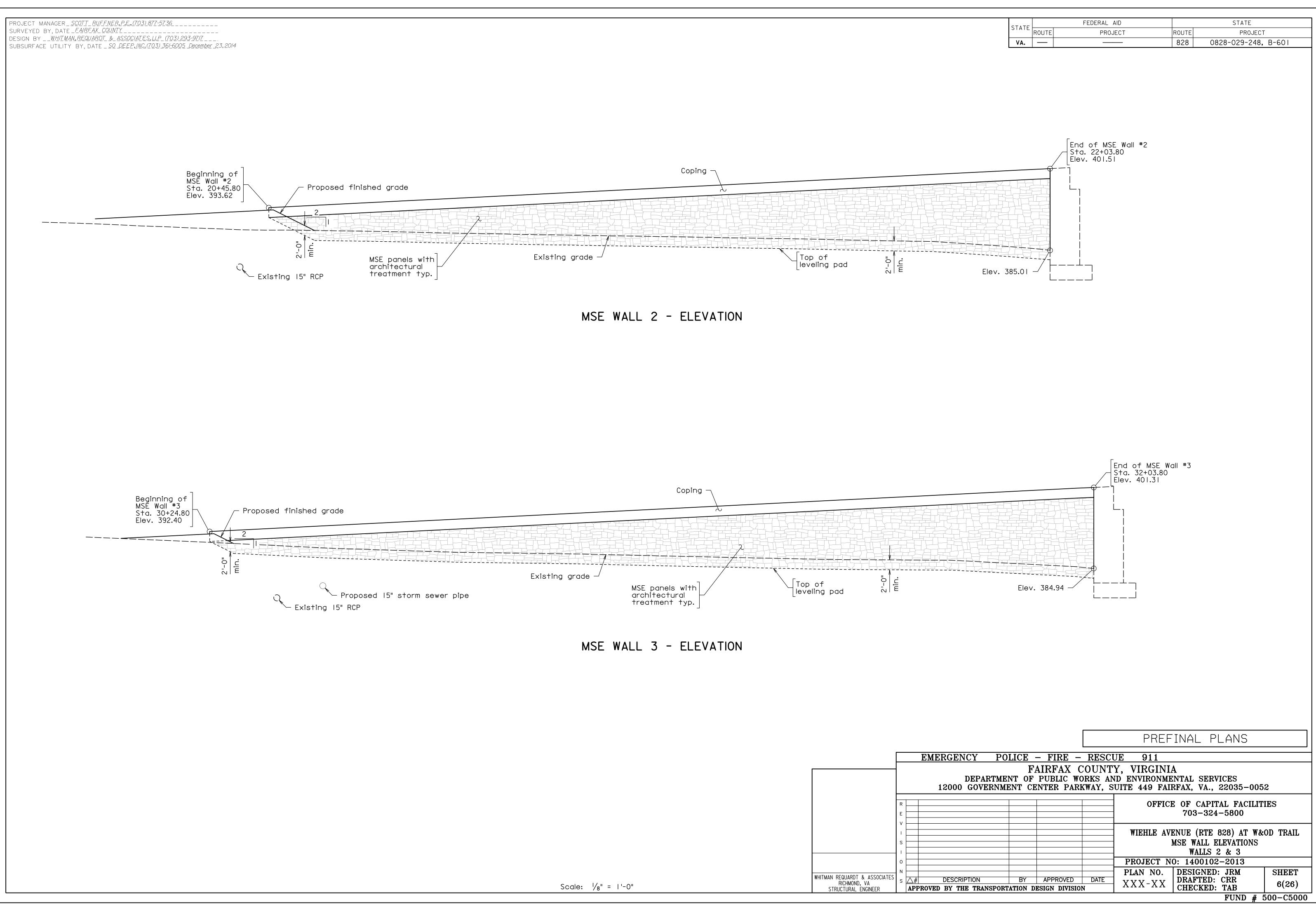
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

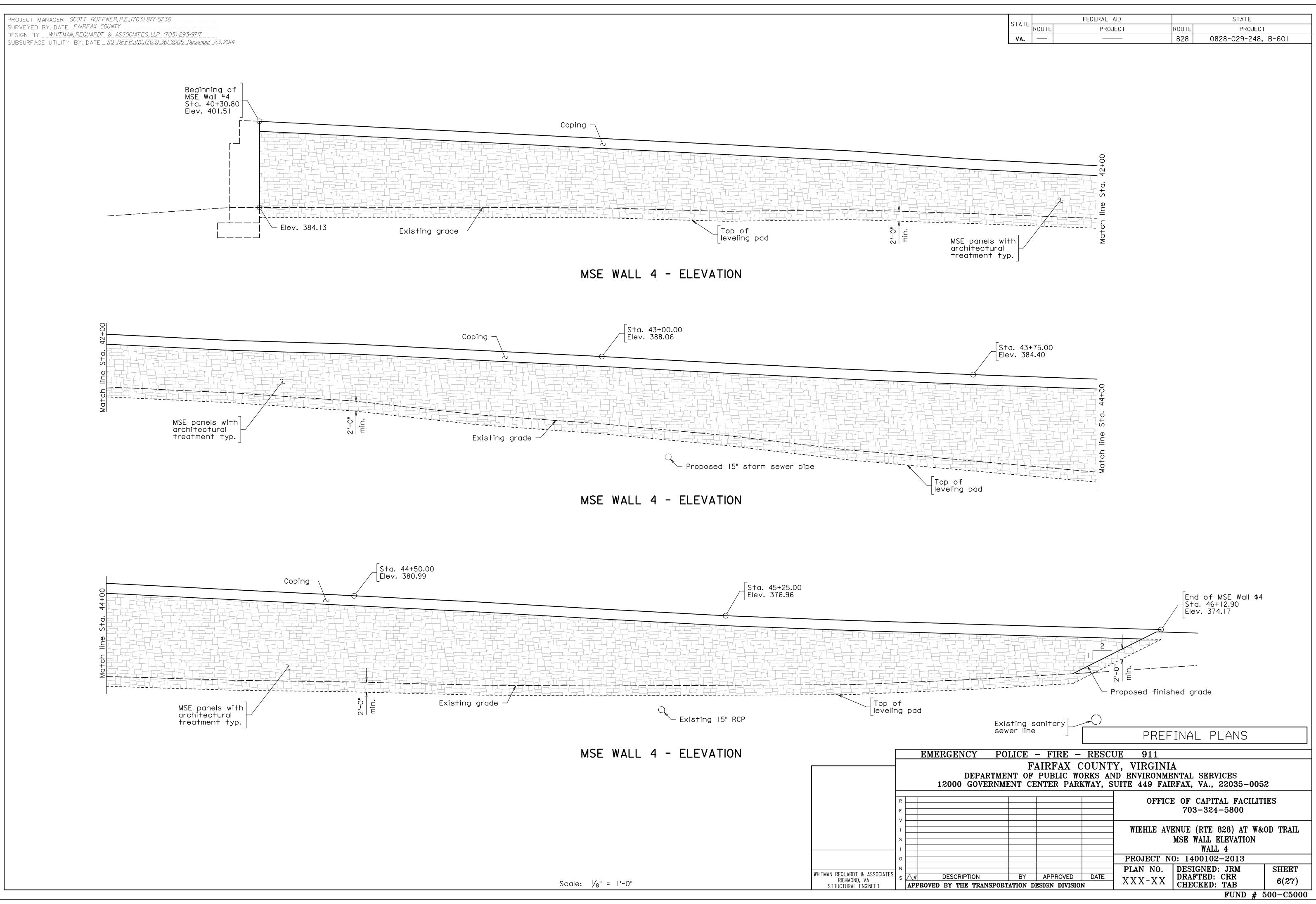
PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE <u>FAIRFAX COUNTY</u> STATE ROUTE STATE FEDERAL AID ROUTE PROJECT PROJECT DESIGN BY __WHITMAN, REQUARDT_&_ASSOCIATES, LLP_(703)_293-9717____ 828 0828-029-248, B-601 VA. — SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December 23, 2014</u> Notes: For MSE Wall Baseline definitions, see sheet IF(2) For boring logs, see sheet 6(17) For MSE wall general notes, see sheet 6(23) For wall elevations, see sheet 6(26) Proposed 24"ø waterline Begin MSE Wall #2 Sta. 20+45.80 158'-0" Proposed End MSE Wall #2 Sta. 22+03.80 drainage Str. 4-2 Face of MSE wall — MSE Wall #2 Constr. ₽ /- Abutment A footing Boring #05 21+00 20+00 22+00 -----Boring #04 Ex. 15" RCP — Existing waterline to be relocated √WO&D Trail Constr. B 114+00 115+00 113+00 Limits of impervious L3 F0 Line To Be membrane Relocated By Others 32+00 30+00 31+00 End MSE Wall #3 _____ Sta. 32+03.80 Begin MSE Wall #3 Sta. 30+24.80 Limits of impervious membrane — 179'-0" — | | MSE WALL LAYOUT - ABUTMENT A PREFINAL PLANS EMERGENCY POLICE - FIRE - RESCUE FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL MSE WALL LAYOUT 1 OF 2 PROJECT NO: 1400102-2013 PLAN NO.

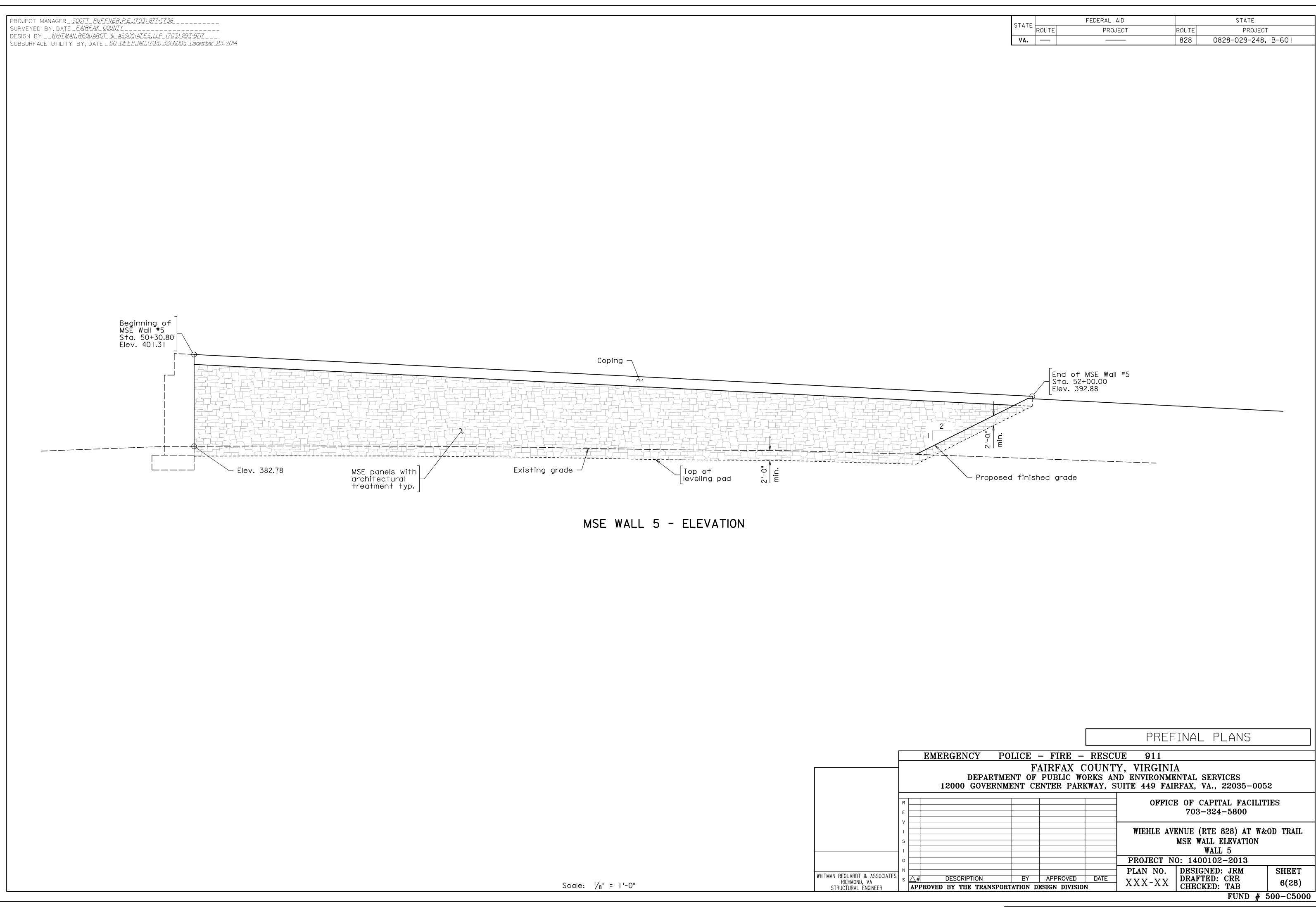
XXX-XX

DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB SHEET WHITMAN REQUARDT & ASSOCIATES RICHMOND, VA STRUCTURAL ENGINEER DESCRIPTION BY APPROVED DATE 6(24)Scale: $\frac{1}{8}$ " = 1'-0" APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000









PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u>

SURVEYED BY, DATE <u>FAIRFAX COUNTY</u>

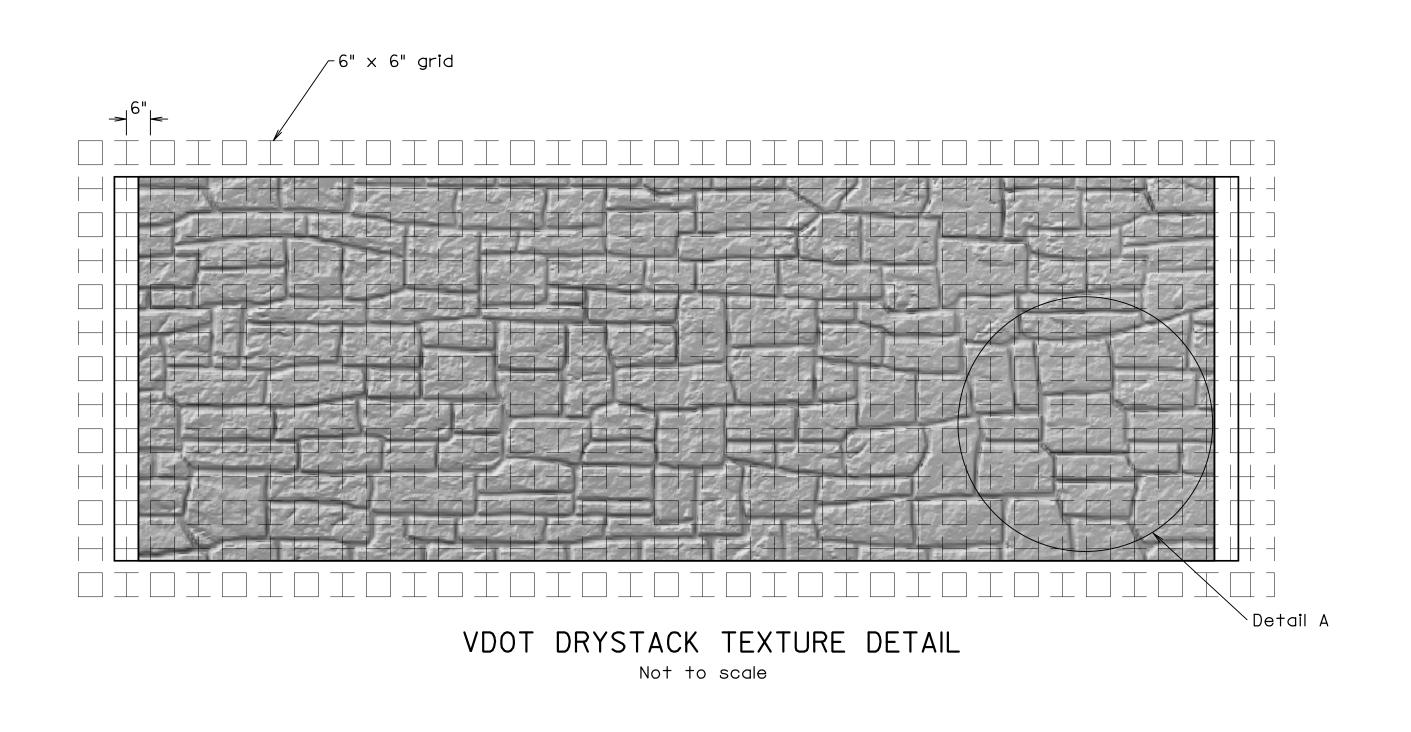
DESIGN BY <u>WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717</u>

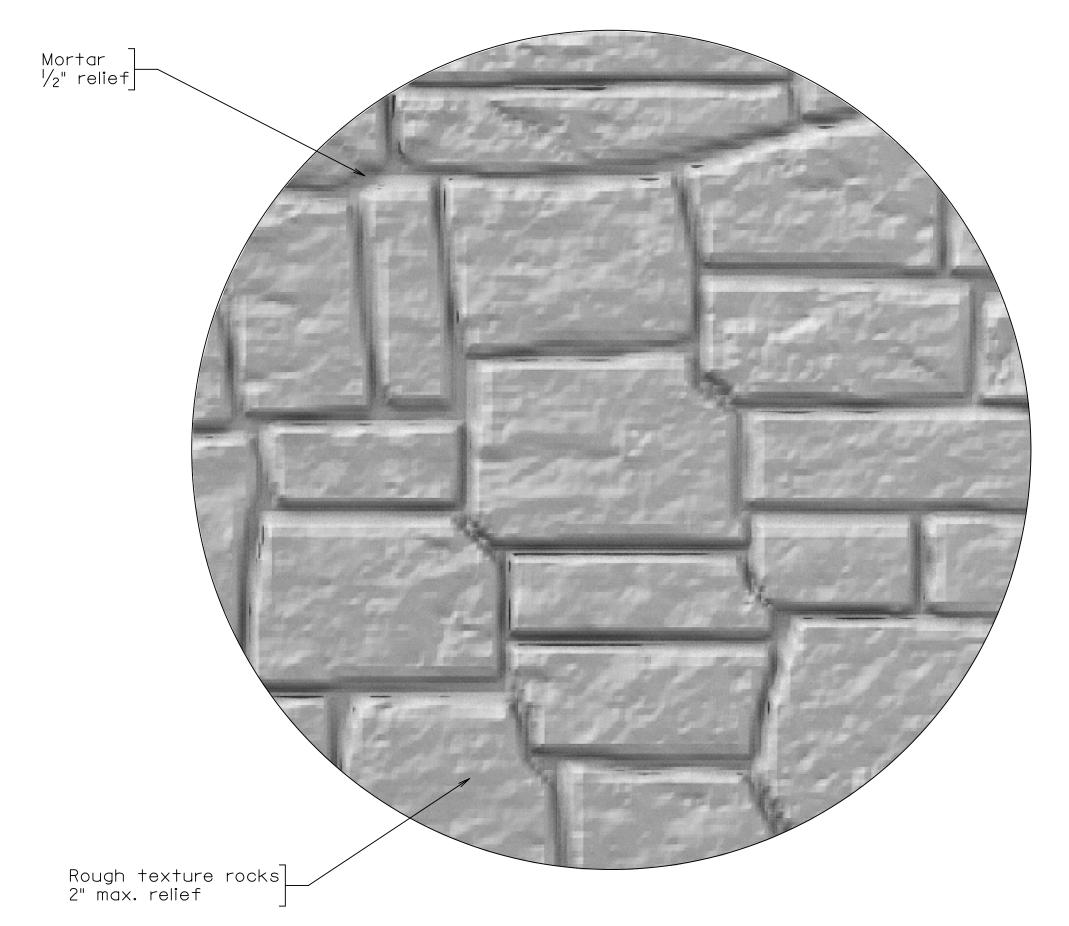
SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December 23, 2014</u>

СТАТГ		FEDERAL AID		STATE
STATE	ROUTE	PROJECT	ROUTE	PROJECT
VA.			828	0828-029-248, B-601

Notes:

For additional details, see Sheets 6(23) through 6(28)



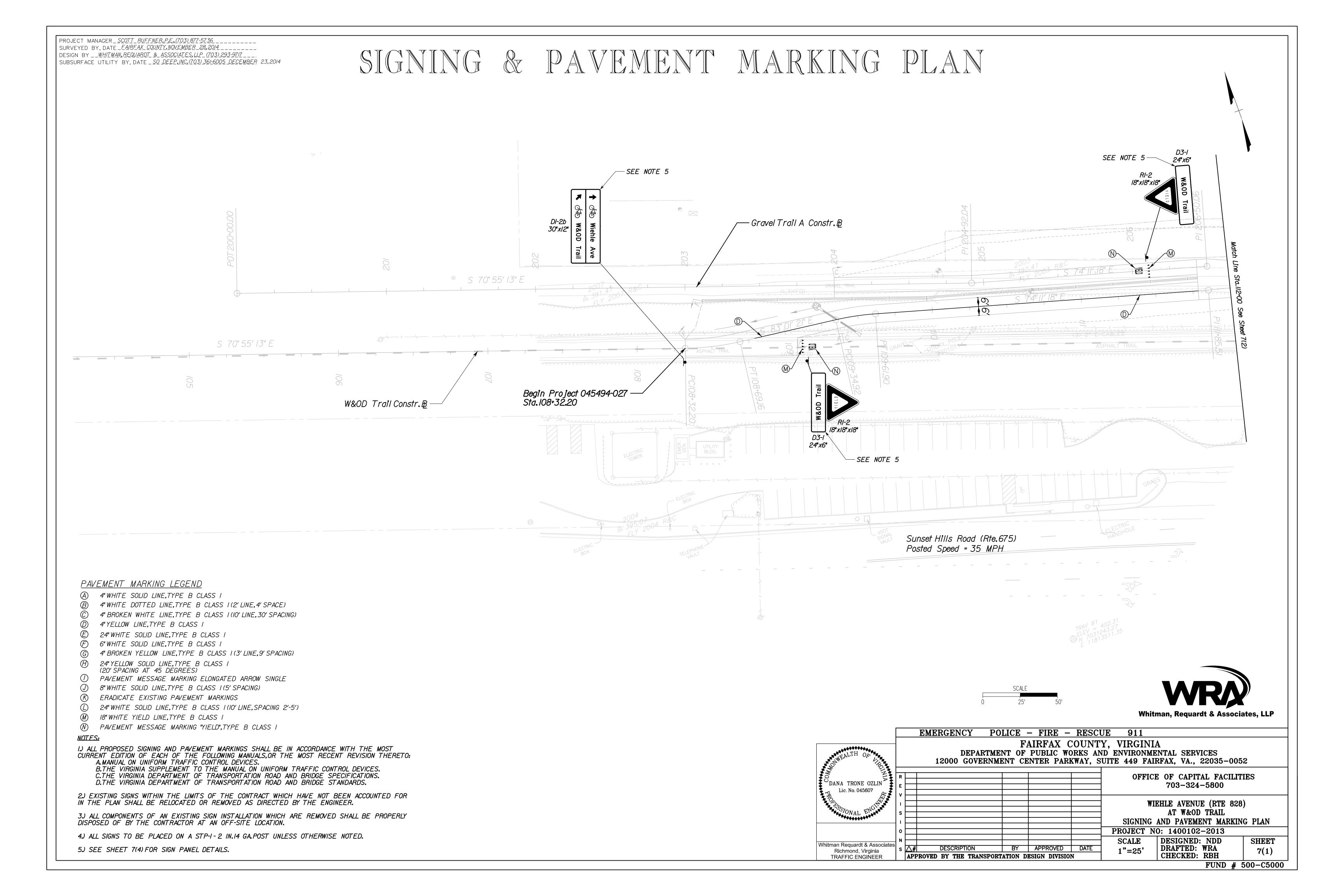


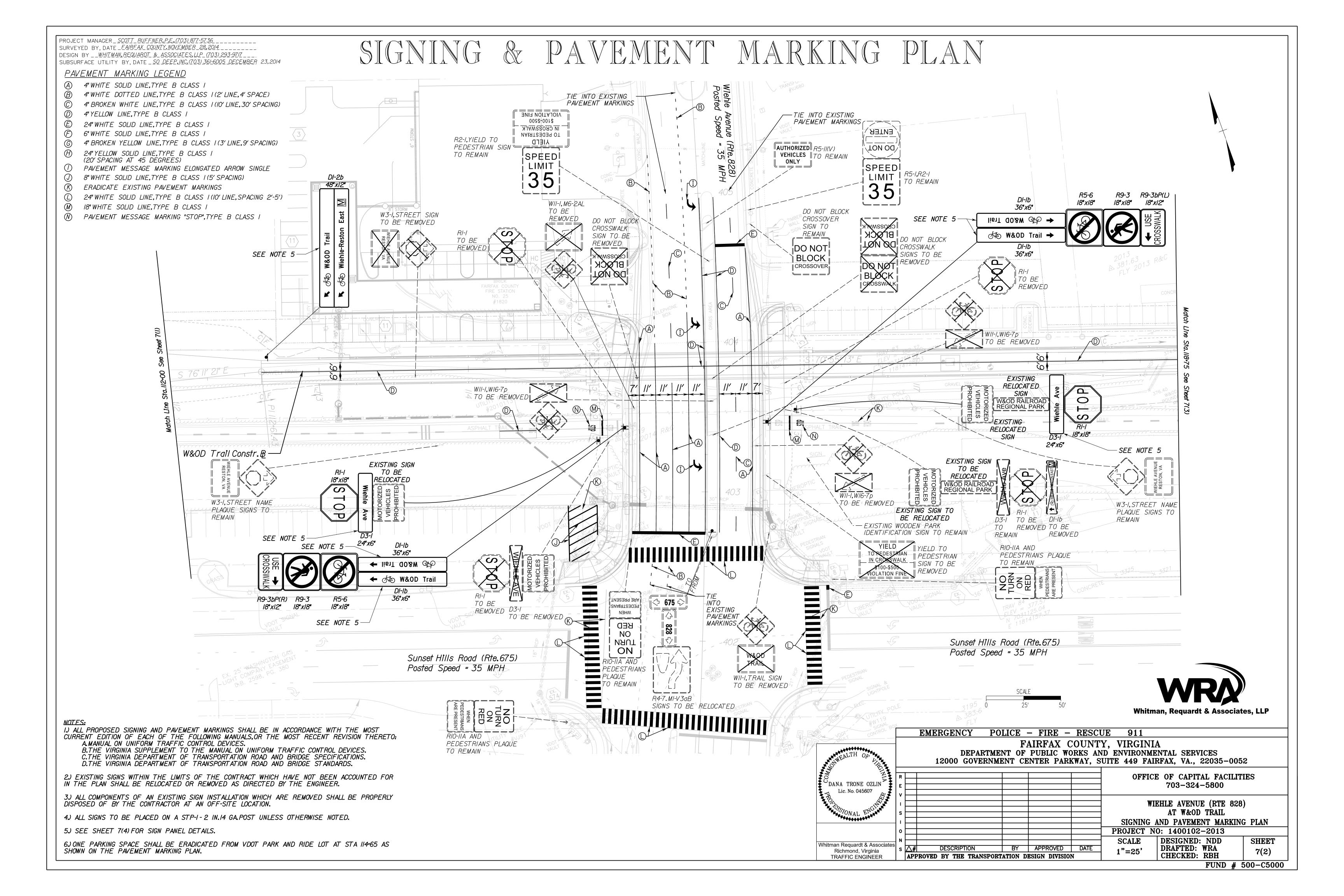
DETAIL A
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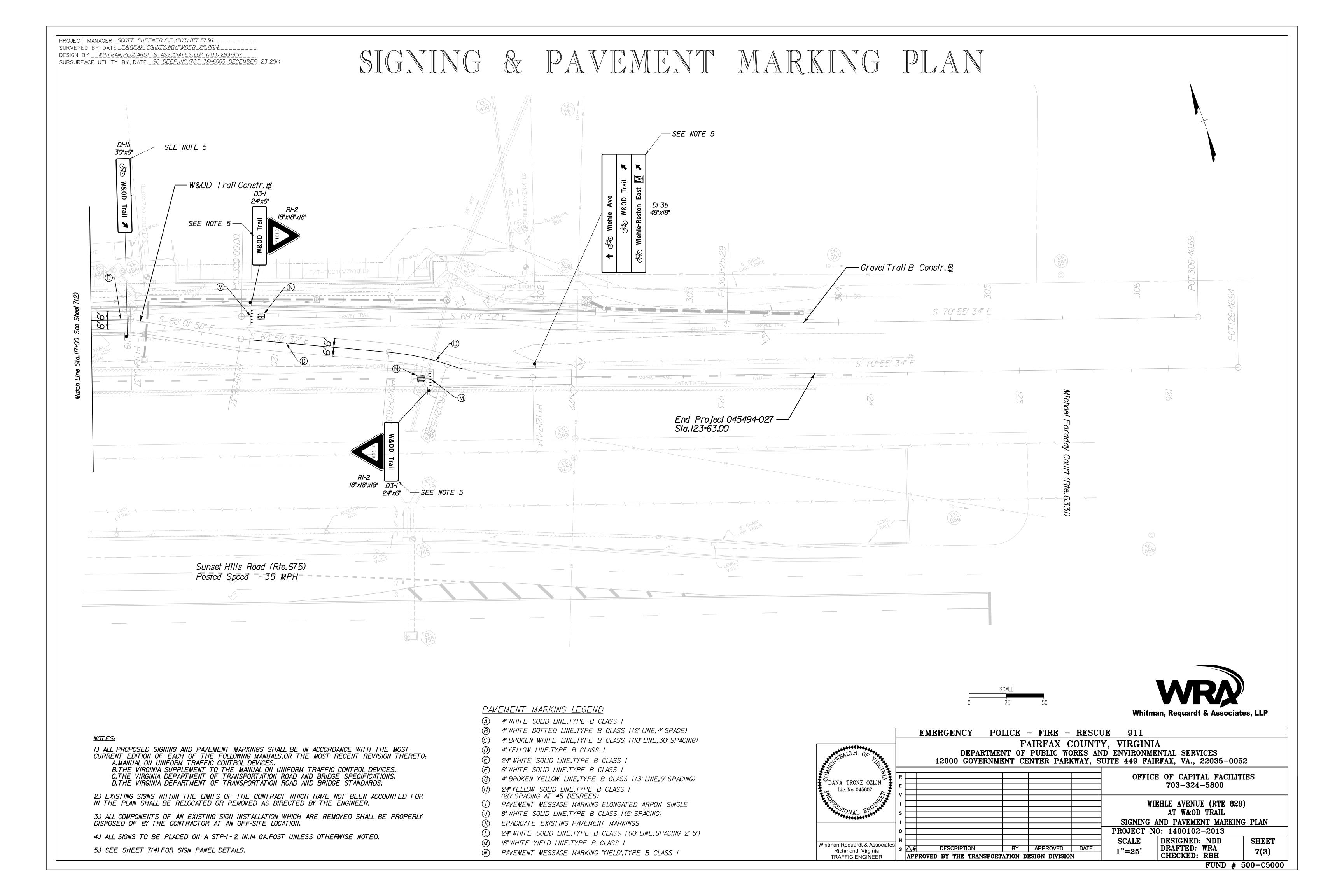
PREFINAL PLANS EMERGENCY POLICE - FIRE - RESCUE FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL MSE WALL ARCHITECTURAL TREATMENT DETAILS PROJECT NO: 1400102-2013 PLAN NO.

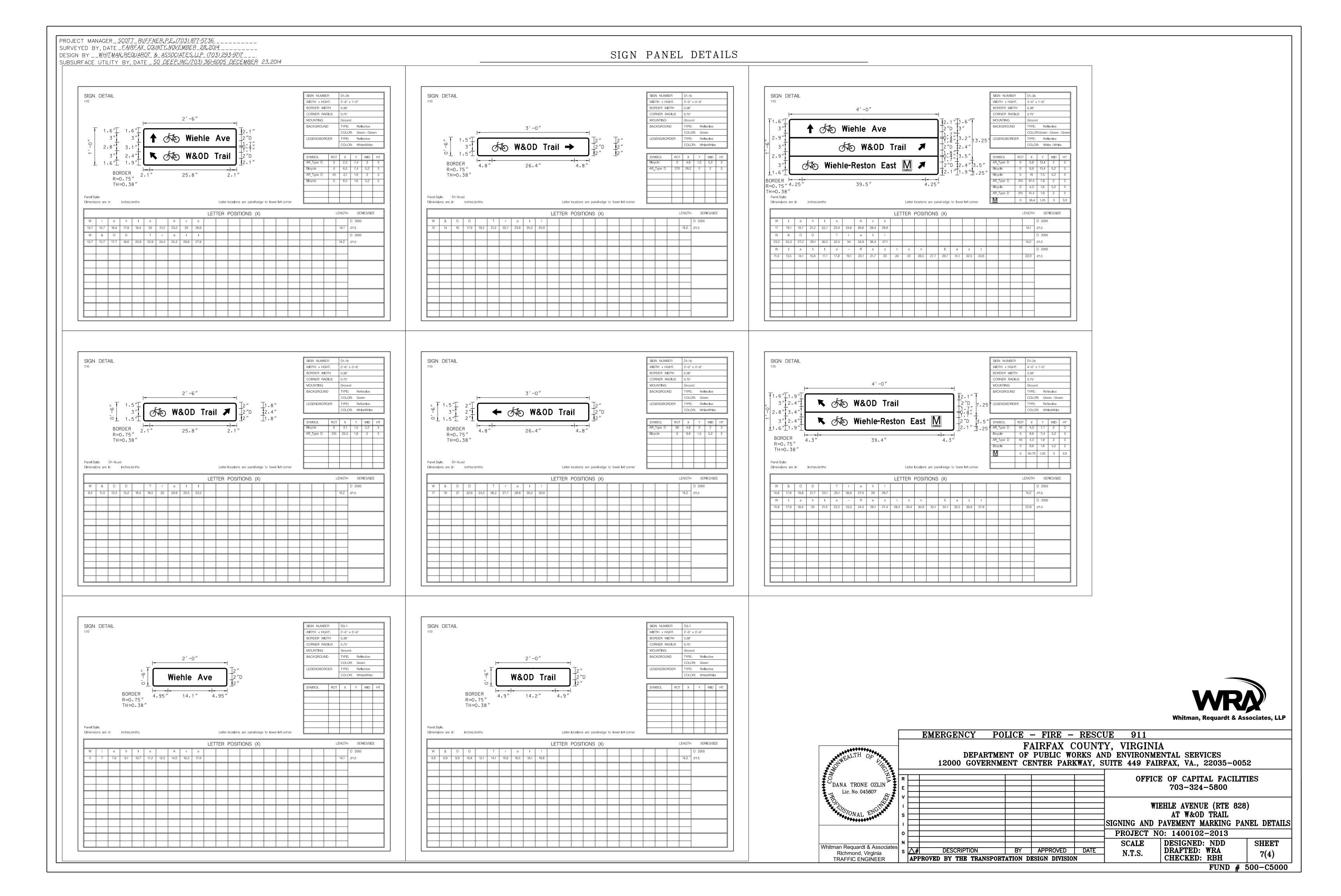
XXX-XX

DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB SHEET WHITMAN REQUARDT & ASSOCIATES RICHMOND, VA STRUCTURAL ENGINEER BY APPROVED DATE DESCRIPTION 6(29)APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000









PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE *FAIRFAX COUNTY, NOVEMBER 28, 2014* DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 DECEMBER</u> 23,2014

GENERAL NOTES - SIGNAL

- ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE CURRENT EDITION OF THE VIRGINIA SUPPLEMENT TO THE MUTCD, THE CURRENT EDITION OF THE VDOT ROAD AND BRIDGE STANDARDS, THE CURRENT EDITION OF VDOT ROAD AND BRIDGE SPECIFICATIONS, AND SPECIAL PROVISIONS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MISS UTILITY AND VDOT FOR SCHEDULING THE LOCATION OF UNDERGROUND UTILITIES.ALL UTILITIES MUST BE MARKED PRIOR TO INITIATION OF ANY CONSTRUCTION.
- 3. PRIOR TO BEGINNING ANY SIGNALIZATION WORK, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING FIVE WORKING DAYS PRIOR TO COMMENCING ANY WORK AT AN EXISTING SIGNAL, AND PROVIDE THE FOLLOWING:
- a.CONTRACTOR DAYTIME AND EMERGENCY TELEPHONE NUMBERS. b.LOCATION OF INTERSECTION WHERE WORK IS TAKING PLACE.
- 4. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING TRAFFIC SIGNAL EQUIPMENT (INCLUDING POWER AND COMMUNICATIONS) UNLESS OTHERWISE NOTED ON THE PLANS, INSTALLATION OF EQUIPMENT SHALL NOT DISRUPT OPERATION OF EXISTING SIGNAL UNLESS APPROVED BY THE ENGINEER.
- 5. ALL PROPOSED SIGNAL EQUIPMENT SHALL BE INSTALLED PRIOR TO DEACTIVATION OF EXISTING SIGNAL FOR WIRING SWITCH OVER. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO HAVE VDOT'S NROIC PERSONNEL PRESENT DURING SWITCHOVER (703-334-0882.BETWEEN 5:00 AM AND 7:00 PM.MONDAY-FRIDAY). A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED. THE CONTRACTOR SHALL HAVE HIS QUALIFIED REPRESENTATIVE PRESENT TO MONITOR TRAFFIC FLOW AND ADJUST TIMINGS AS NECESSARY, OR AS DIRECTED BY THE ENGINEER.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DETECTION ON ALL APPROACHES TO THE INTERSECTION AT ALL TIMES AND THROUGHOUT ALL PHASES OF CONSTRUCTION, COORDINATED SIGNAL OPERATIONS SHALL BE MAINTAINED AT ALL TIMES, ONCE MODIFICATIONS ARE STARTED, IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE TRAFFIC SIGNAL IS ACCEPTED INTO THE VDOT SIGNAL SYSTEM.
- 7. THE PROJECT SHALL BE RESPONSIBLE FOR MAINTAINING COMMUNICATION TO THE TRAFFIC SIGNAL CONTROLLER AT ALL TIMES.THE PROJECT IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH MAINTAINING COMMUNICATION TO THE TRAFFIC SIGNAL.THE PROJECT SHALL CONTACT VDOT'S NORTHERN REGION OPERATIONS COMMUNICATIONS GROUP at NOVATFOCOMM@VDOT.VIRGINIA.GOV NINETY (90) DAYS PRIOR TO THE START OF THE TRAFFIC SIGNAL CONSTRUCTION TO IDENTIFY THE DESIGNATED COMMUNICATION PROVIDER AND TO INITIATE THE BROADBAND CIRCUIT ORDERING PROCESS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ALL MOT ASSOCIATED WITH THE INSTALLATION OF THE PROPOSED TRAFFIC SIGNAL EQUIPMENT.
- 9. EXISTING CCTV SHALL REMAIN OPERATIONAL AND FULLY FUNCTIONAL WITHOUT INTERRUPTION FOR THE DURATION OF CONSTRUCTION.

TRAFFIC SIGNAL MODIFICATION PLAN

SIGNAL NOTES

I. MAST ARM LENGTHS ARE TO BE INSTALLED AS SHOWN ON PLAN AND ALL

- MAST ARMS ARE TO BE FIELD DRILLED ONLY. MAST ARM LENGTH IS SHOWN NEXT TO EACH MAST ARM IN THE PLAN VIEW.
- 2. SIGNAL POLES TO BE INSTALLED WITH EIGHT BOLT BASE FLANGES ON EIGHT BOLT CONCRETE FOUNDATIONS.
- 3. ALL BREAKAWAY POLES SHALL HAVE BREAKAWAY FUSES.
- 4. ALL PEDESTAL POLES, ST'D PF-2, FOR PEDESTRIAN EQUIPMENT, SHALL BE 12 FT.
- 5. ALL PROPOSED MAST ARMS.MAST ARM POLES, AND PEDESTAL POLES SHALL BE PAINTED TO MATCH EXISTING POLES,

B.CONTROLLER AND FOUNDATION

A. POLES AND FOUNDATIONS

- I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING POWER TO THE CONTROLLER AT ALL TIMES. THE CONTRACTOR IS RESPONSIBLE FOR ANY COSTS RELATED TO MAINTAINING POWER TO THE TRAFFIC SIGNAL.
- 2. THE FINAL SIGNAL TIMING PLAN INCLUDES EIGHT (8) TIME-OF-DAY TIMING PLANS TO REFLECT CYCLE LENGTHS NECESSARY TO ACCOMMODATE CHANGES IN TRAFFIC PATTERNS FOR WEEKDAYS AND WEEKENDS, THE EIGHT TIMING PLANS CONSIST OF FOUR TIMING PLANS FOR WEEKDAYS (AM, MID, PM, OFF-PEAK) AND FOUR TIMING PLANS 6. ALL UNDERGROUND CONDUITS SHALL BE INSTALLED IN ACCORDANCE WITH ST'D. FOR WEEKENDS (SATURDAY PEAK, SUNDAY PEAK, WEEKEND BEFORE PEAK, AND WEEKEND AFTER PEAK). THESE TIMING PLANS SHALL BE FIRST SUBMITTED TO THE VDOT PERMITS SECTION. THE PERMIT SECTION WILL THEN NOTIFY THE NRO TRAFFIC SIGNAL OPERATIONS SECTION FOR REVIEW AND APPROVAL NO MORE THAN SIX (6) MONTHS PRIOR TO PROJECT COMPLETION AND NO LESS THAN SIXTY (60) DAYS PRIOR TO THE ACTIVATION OF THE TRAFFIC SIGNAL.

C.TRAFFIC SIGNAL HEADS

- I. ALL TRAFFIC SIGNAL HEADS SHALL BE CAST ALUMINUM.
- 2. ALL SIGNAL HEADS SHALL HAVE POLYCARBONATE BACKPLATES. BACKPLATE HARDWARE SHALL BE STAINLESS STEEL.
- 3. PEDESTRIAN SIGNAL HEADS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SMB-3.
- 4. PEDESTRIAN PUSHBUTTONS SHALL BE ACCESSIBLE PEDESTRIAN SYSTEM (APS) EQUIPMENT MEETING ALL OF THE REQUIREMENTS OF THE MUTCD, VIRGINIA SUPPLEMENT TO THE MUTCD, ADA, AND THE CONTRACT SPECIAL PROVISIONS. PEDESTRIAN PUSHBUTTONS SHALL BE INSTALLED IN ACCORDANCE WITH PA-2 OR PA-4 AS SPECIFIED AND SHALL BE IN ACCORDANCE WITH MUTCD, ADA, AND VDOT SPECIFICATIONS.

D.DETECTORS

SIGN PANEL DETAILS

- I. 6'X40' LOOP DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH ST'D. TD-IC AND SHALL BE PLACED 5' IN FRONT OF THE STOP BAR. 6'X6' LOOP DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH VDOT ST'D TD-IB AND SHALL BE PLACED 40' BEHIND THE STOP BAR (UNLESS OTHERWISE DIMENSIONED ON THE PLAN).
- 2. 14/1 ENCLOSED CONDUCTOR CABLE LEAD IN REQUIRES A 5/8" SAW CUT.
- 3. LOOP DETECTOR AMPLIFIERS SHALL BE ONE FOR EACH LOOP EXCEPT THAT WHEN THERE ARE SETS OF 6'X 6'LOOPS.ONLY THE SET FARTHEST FROM THE STOP BAR SHALL HAVE SEPARATE AMPLIFIER UNITS, ALL OTHER 6' X6' SETS SHALL BE SPLICES IN SERIES.

E.CONDUIT.CONDUCTORS, AND ELECTRICAL

- I. THE PROJECT SHALL BE RESPONSIBLE FOR MAINTAINING ELECTRICAL SERVICE TO THE CONTROLLER AT ALL TIMES.THE PROJECT SHALL BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH MAINTAINING ELECTRICAL SERVICE TO THE TRAFFIC SIGNAL.THE NOVA SPEC. SE-5 ELECTRICAL SERVICE SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SE-5 SHOWN ON THE PLAN AND SECTION 238.02(H) OF THE VDOT ROADS AND BRIDGES SPECIFICATIONS. ELECTRICAL SERVICE SHALL BE METERED.
- 2. JUNCTION BOX COVERS SHALL HAVE THE LETTERS "TRAF" CAST IN THE TOP SURFACE DEPRESSION FOR ALL THE SIGNAL RELATED JUNCTION BOXES CONTAINING CABLE WITH LESS THAN 50 VOLTS, ALL OTHER JUNCTION BOX COVERS SHALL HAVE THE LETTERS "ELEC" CAST IN THE TOP SURFACE DEPRESSION.
- 3. ALL JUNCTION BOXES SHALL BE INSTALLED IN ACCORDANCE WITH ST'D JB-S2 UNLESS OTHERWISE NOTED.
- 4. NO JB-SI,S2,OR S3 SHALL BE INSTALLED IN A PAVED SHOULDER,SIDEWALK,OR MULTI-PURPOSE TRAIL.
- (S) DENOTES SHIELDED CABLE. (M) DENOTES METAL CONDUIT. (EGC) DENOTES EQUIPMENT GROUNDING CONDUCTOR. (E) DENOTES EXISTING)
- ECI-I.
- FOR INSTALLATION OF CONDUIT.NO OPEN CUT WILL BE ALLOWED IN ROADWAY
- 8. ALL EXISTING CONDUIT NOT SHOWN FOR REUSE SHALL BE CAPPED AND ABANDONED.
- 9. ALL EXISTING WIRING NOT SHOWN FOR REUSE SHALL BE COMPLETELY REMOVED.
- 10. ALL PULL ROPE SHALL BE RATED AT 1100 LBS.
- II. THE TRAFFIC SIGNAL WIRING AND ROADWAY LIGHTING WIRING SHALL USE SEPARATE CONDUITS AND JUNCTION BOXES, CONDUITS MAY SHARE COMMON TRENCHES AND BORE AS SHOWN ON THE PLAN.

F.SIGNS AND PAVEMENT MARKINGS

- . ALL MAST ARM MOUNTED SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH ST'D.
- 2. PAVEMENT MARKINGS SHALL BE MODIFIED TO REFLECT THE MARKINGS SHOWN ON THE PLAN WHEN THE SIGNAL IS INSTALLED.
- 3. ANY EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH PROPOSED PAVEMENT MARKINGS SHALL BE COMPLETELY ERADICATED.
- 4. LIMITS SHOWN ON PROPOSED MARKING ARE APPROXIMATE AND SHALL BE MODIFIED IN THE FIELD TO ENSURE THAT PROPOSED PAVEMENT MARKINGS CONTINUE UNTIL EXISTING PAVEMENT MARKINGS CAN BE MATCHED

MOT NOTES

- I. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND SHALL BE REMOVED OR RELOCATED AS THE WORK IS COMPLETED OR WORK CONDITIONS CHANGE. THE CONTRACTOR SHALL ENSURE THAT ALL TEMPORARY TRAFFIC CONTROL DEVICES REMAIN IN PLACE AND OPERATING AT ALL TIMES.
- 2, THE CONTRACTOR SHALL VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
- 3. ALL JUNCTION BOXES SHALL BE INSTALLED AT FINAL GRADE.
- 4. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF THE SIGNAL EQUIPMENT.
- 5. ALL EXISTING SIGNS NOT RELOCATED OR REMOVED SHALL REMAIN UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 6. THE CONTRACTOR SHALL INSTALL CONDUIT AT SUFFICIENT DEPTH TO AVOID DISTURBANCE DURING ROADWAY CONSTRUCTION.CONDUIT SHALL BE INSTALLED PRIOR TO BEGINNING ROADWAY CONSTRUCTION.
- 7. NEW TRAFFIC SIGNAL HEADS AND OVERHEAD TRAFFIC SIGNAL SIGNAGE SHALL BE COVERED WITH DURABLE NON-TRANSPARENT COVER UPON INSTALLATION. THE CONTRACTOR SHALL MAINTAIN THE COVERS UNTIL THE NEW TRAFFIC SIGNAL SYSTEM IS OPERATIONAL.
- 8. THE CONTRACTOR SHALL NOT BLOCK THE VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF THE MAST ARMS.

PLAN ITEM

- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DETECTION ON ALL APPROACHES OF THE INTERSECTION AT ALL TIMES, AND THROUGHOUT ALL PHASES OF CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS.
- 10. MAINTENANCE AND REPAIR OF THE TRAFFIC SIGNAL AND ANY NECCESARY MODIFICATIONS DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

/ <u> </u>	<i>PROPOSED</i>	EXISTING
Metal Signal Pole & Foundation and Mast Arm (As noted in Signal Pole Legend)	<u> </u>	<u> </u>
Pedestal Pole and Foundation (St'd.PF-2)		
Pedestal Pole and Foundation (St'd.PA-3)	•	©
Traffic Signal Head w/ Backplate w/o Backplate	+ +►	0 + >
Pedestrian Signal Head	→	→>
Pedestrian Pushbutton & Sign	–⊡ <i>P.B</i> .	–® <i>P.B.</i>
Traffic Signal Sign Mast Arm or Span Wire Mt'd. Pole Mounted	→ →	Ο - ε
Video Detection Camera		
Emergency Vehicle Pre-emption (EVP) Sensor		
w/ Conf.Light w/o Conf.Light	•••	≪
Controller Cabinet & Foundation (Std.CF-3) Junction Box (St'd.as noted on plans)		
Signal Luminaire (250 W) and Arm	*	<u> </u>
Signal Luminaire (400 W) and Arm	*	*
Loop Detector (Size as noted on plans)	6' x 40'	<u> </u>
Video Detection Zone (Size as noted on plans)	VĎŽ 6' x. 40'	% % % % % % % % % % % % % % % % % % %
Conduit	====	======

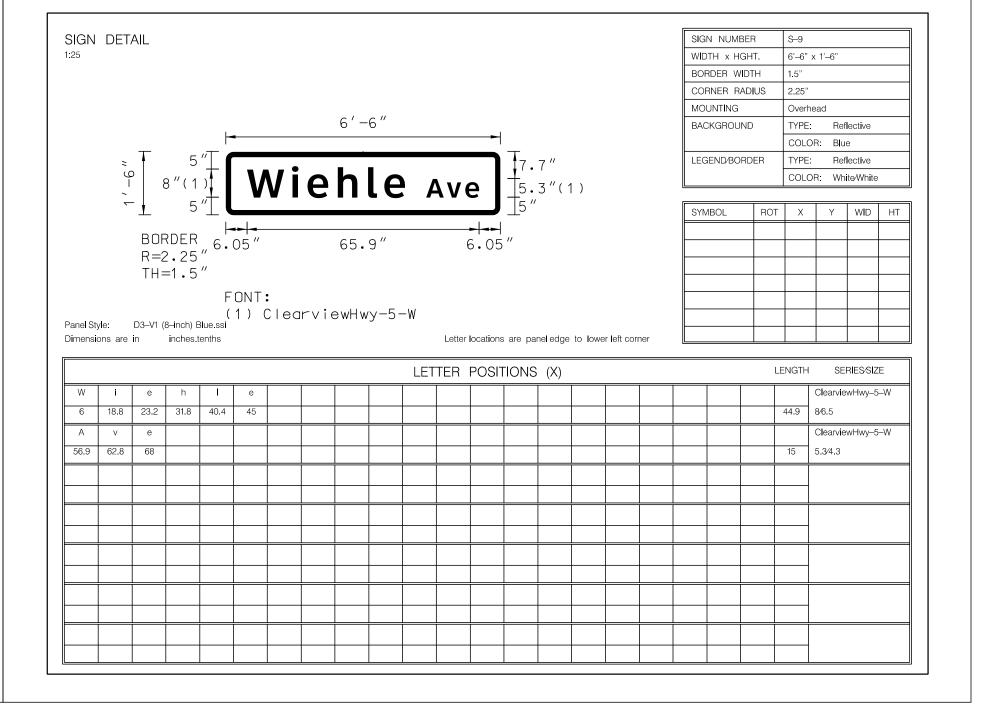


PLAN SYMBOL

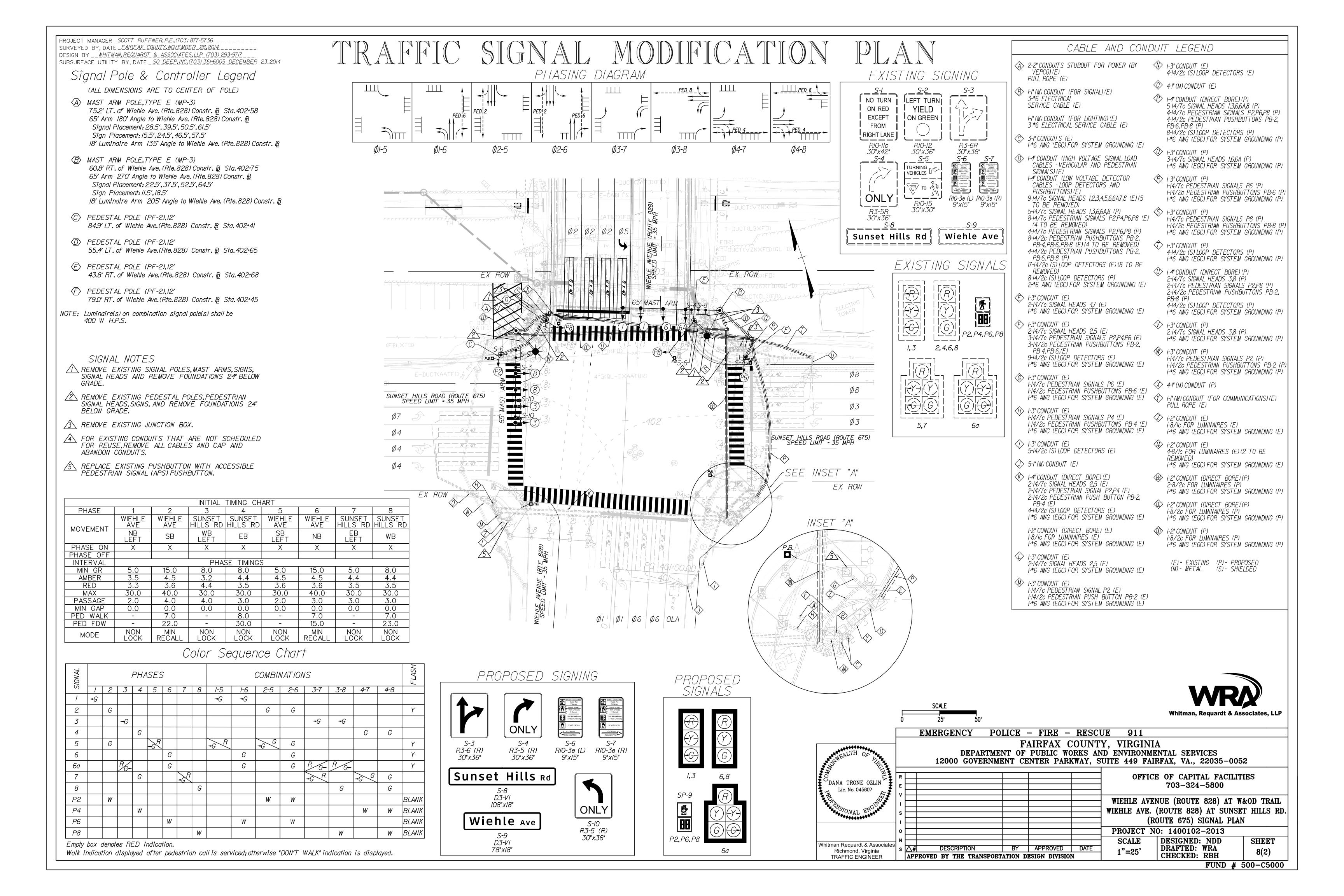
LABELS Proposed Signal Head Existing Signal Head Proposed Pedestrian Signal Head Existing Pedestrian Signal Head $\langle A \rangle$ Signal Pole or Controller Cable and Conduit Construction Notes Signal Phasing Sign

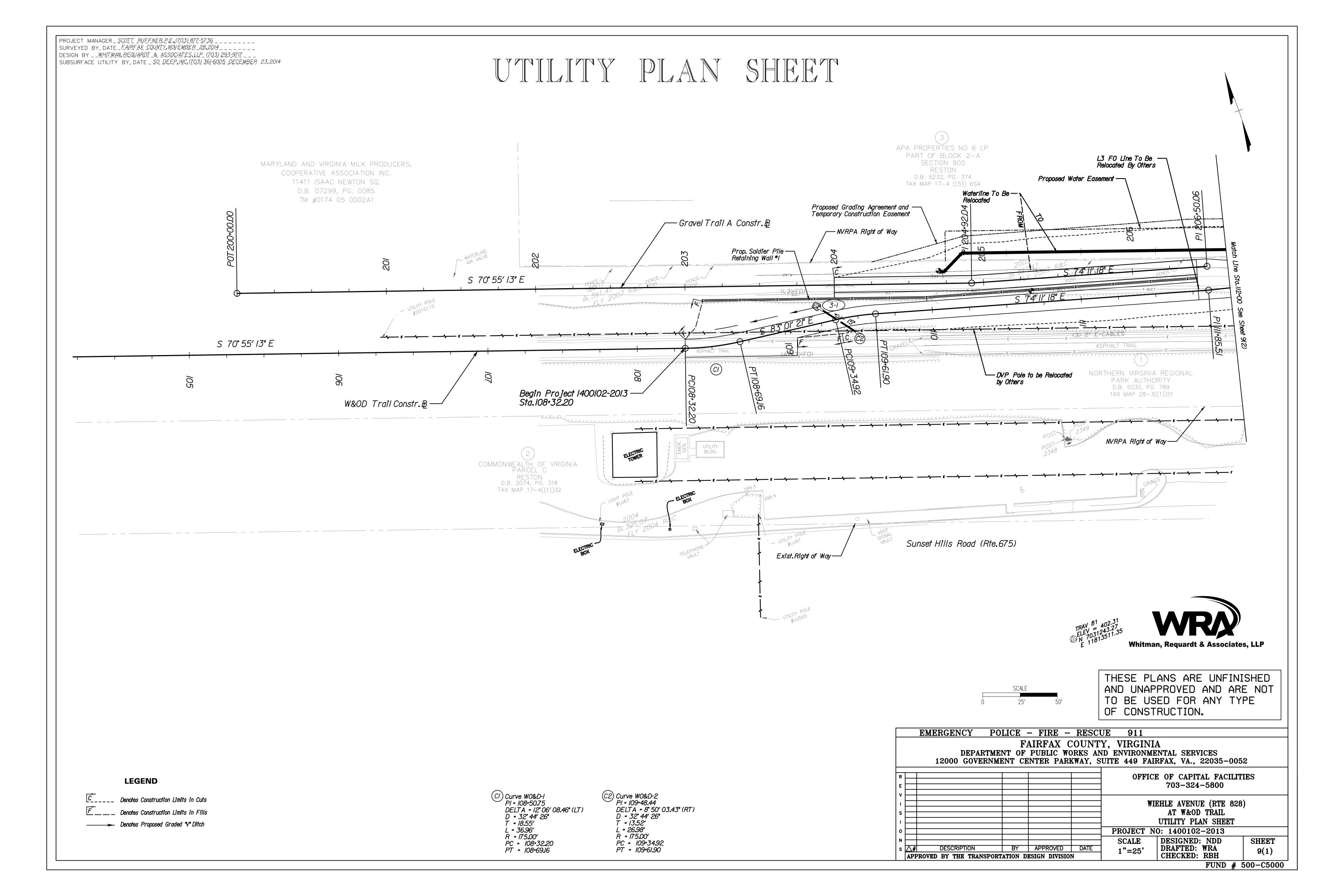
TRAFFIC ENGINEER | APPROVED BY THE TRANSPORTATION DESIGN DIVISION

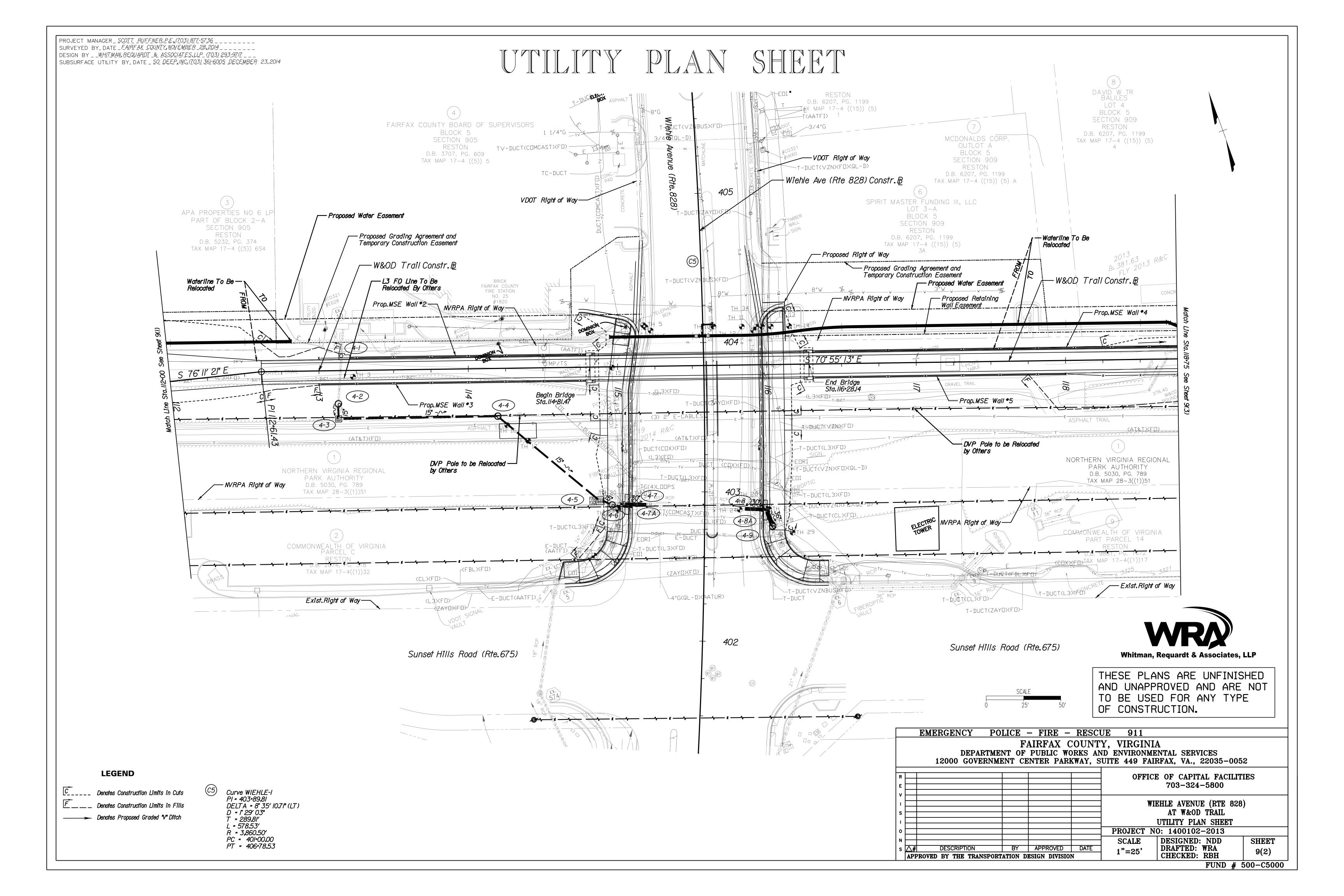
SIGN DETAIL IGN NUMBER MIDTH x HGHT. 9'-0" x 1'-6" ORNER RADIUS 10UNTING 9'-0" COLOR: Blue EGEND/BORDER TYPE: Reflective Sunset Hills Rd COLOR: White/White YMBOL ROT X Y WID 96.4" R=2.25''TH=1.5'(1) ClearviewHwy-5-W Panel Style: D3-V1 (8-inch) Blue.s Dimensions are in inches tenths Letter locations are panel edge to lower left corner LETTER POSITIONS (X)

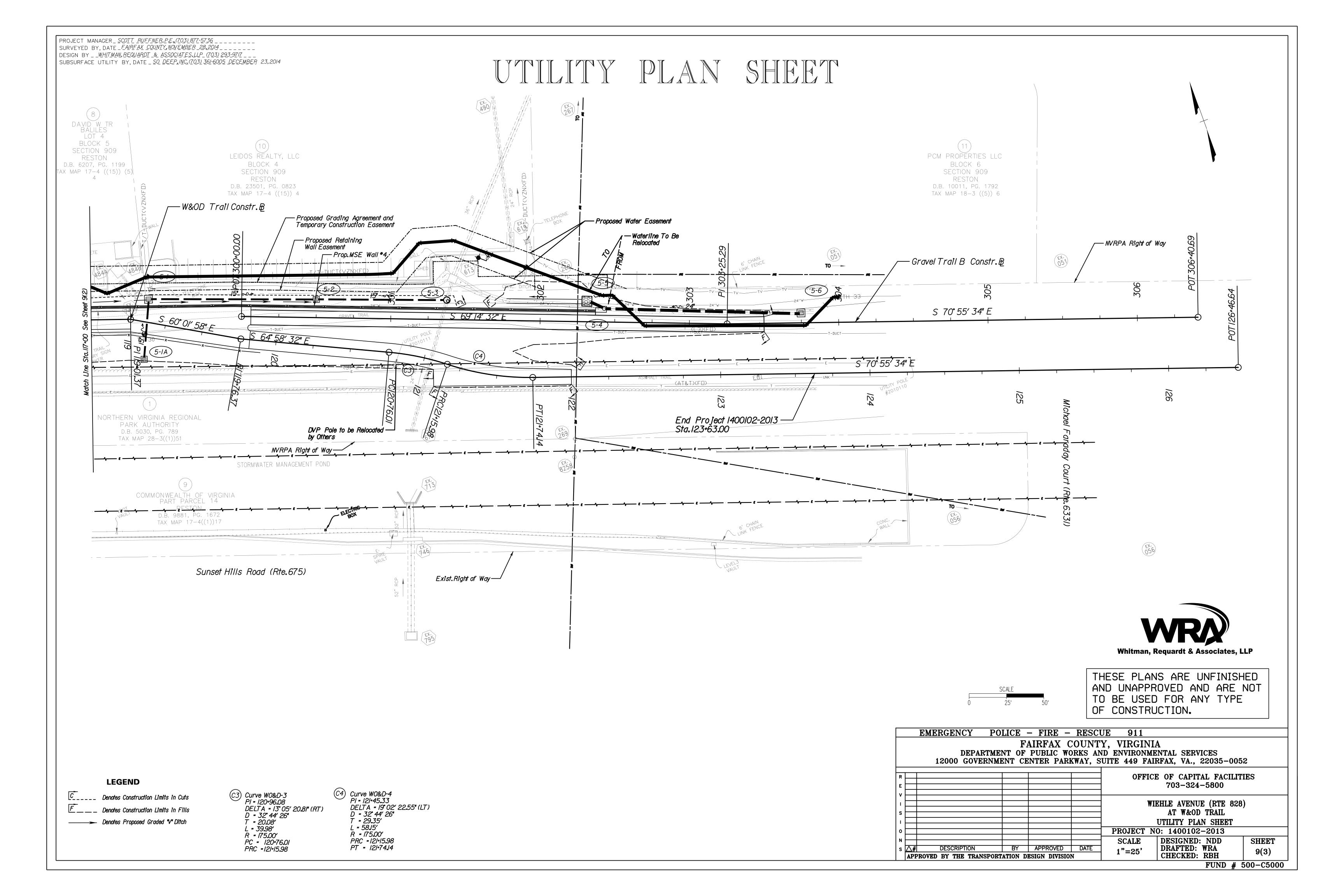


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							Whitman, Requardt & Associates, L	,LP								
			EMERGENCY PO	LICE	– FIRE –	RESC	UE 911									
DANA TRONE OZIJIN		FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052														
MOS	R						OFFICE OF CAPITAL FACILITIES									
Lic. No. 045607	E						703-324-5800									
Po Line	V						WIEHLE AVENUE (ROUTE 828) AT W&OD TRAI	 IT.								
EUSTONAL ENGIN	'						WIEHLE AVE. (ROUTE 828) AT SUNSET HILLS I									
**********	,						(ROUTE 675) SIGNAL PLAN									
	0						PROJECT NO: 1400102-2013									
Whitman Requardt & Associates	N						SCALE DESIGNED: NDD SHEET									
Richmond, Virginia TRAFFIC ENGINEER	s		DESCRIPTION PROVED BY THE TRANSPORT	BY TATION D	APPROVED ESIGN DIVISIO	DATE N	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									

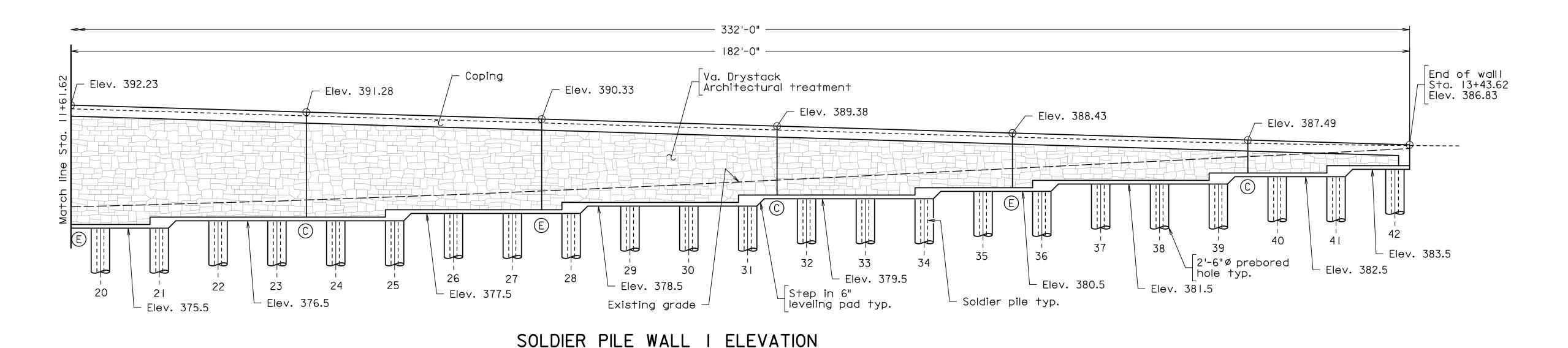








PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE _*FAIRFAX_COUNTY* _______ DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 __ SUBSURFACE UTILITY BY, DATE <u>SO DEEP,INC.(703) 361-6005 December 23,2014</u> Va. Drystack - Elev. 392.70 Beginning of walll Sta. 10+11.62 Architectural treatment Elev. 392.04 Coping Elev. 391.10 -Elev. 390.16 -Elev. 389.52 Elev. 384.5 Elev. 381.5 Step in 6" leveling pad typ. - Elev. 378.5 └ Elev. 376.5 - Elev. 375.5 - Existing grade Elev. 380.5 [→] Soldier pile typ. 2'-6"ø prebored SOLDIER PILE WALL I ELEVATION hole typ. Scale: $\frac{1}{8}$ " = 1'-0"



WALL I GENERAL NOTES:

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2016.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

All structural steel shall be ASTM A709 Grade 50 and shall be galvanized.

Concrete for leveling pad and wall facing shall be Class A4.

All reinforcing steel shall be deformed and shall conform to ASTM A615, Grade 60. All reinforcing bar dimensions on the detailed drawings are to centers of bars except where otherwise noted and are subject to fabrication and construction tolerances.

Stations shown along wall are referencing Wall I Construction B.

Chamfer exposed edges of concrete facing $\frac{3}{4}$ " x $\frac{3}{4}$ " unless otherwise noted.

Contractor shall coordinate wall construction with other elements of work as decribed on the plans here-in.

Contractor shall notify owner/engineer of any conflicts with the construction of this wall with existing structures to remain or existing or proposed utilities. Contractor shall not proceed with the affected portion of work until the conflict has been resolved by all affected parties.

Timber lagging shall be pressure treated for ground contact in accordance with section 236 of the Specifications.

For plan location of Wall I, see sheet 10(2).

Scale: $\frac{1}{8}$ " = 1'-0"

The Contractor shall submit the means of horizontally locating and installing the piles, such that the piles can be installed to a tolerance which enables the wall to be constructed as shown. Piles shall be installed within I inch of their horizontal location, within 25 degrees of their planned axis, and shall not be out of plumb more than 0.75 inches in 10 feet. If the Contractor chooses to prebore, the holes shall be backfilled with T-3 concrete. Cost of preboring and T-3 concrete backfill shall be incidental to other pay items.

LEGEND:

- © Denotes location of Expansion joint.
- © Denotes location of Contraction joint.

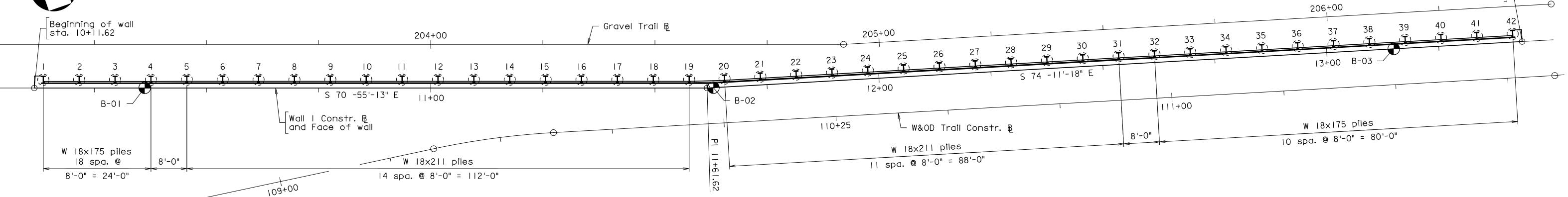
PREFINAL PLANS POLICE - FIRE - RESCUE **EMERGENCY** 911 FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL SOLDIER PILE WALL 1 **ELEVATION** PROJECT NO: 1400102-2013 PLAN NO. DESIGNED: WRA SHEET XXX-XX DRAFTED: WRA CHECKED: WRA WHITMAN REQUARDT & ASSOCIATES BY APPROVED DATE 10(1) RICHMOND, VA STRUCTURAL ENGINEER APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000 PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u>

SURVEYED BY, DATE <u>FAIRFAX COUNTY</u>

DESIGN BY <u>WHITMAN, REQUARDT</u> & ASSOCIATES, LLP (703) 293-9717

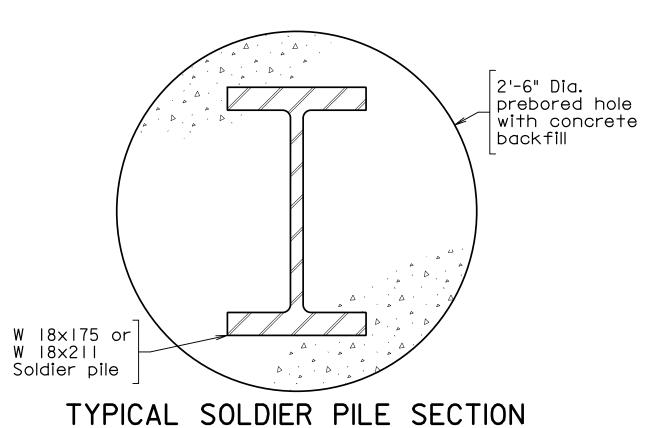
SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December</u> 23, 2014





SOLDIER PILE WALL PLAN

Scale: $\frac{3}{32}$ "=1'-0"



Not to scale

WALL I SUGGESTED SEQUENCE OF CONSTRUCTION AND GENERAL REQUIREMENTS:

- I. Clear and grub the area for the wall construction, taking care not to extend beyond established limits of disturbance or designated save areas
- 2. Place all erosion and sediment perimeter controls in accordance with the approved erosion and sediment control plan. These controls shall remain in place and be continuously maintained during all construction.
- 3. Grade a bench along the proposed wall alignment wide enough to accommodate the drilling equipment required to install the prebored 13. If necessary, the top of the soldier piles shall be cut off to holes and soldier piles for the retaining wall.

 proper elevation prior to the placing of form work for the wa
- 4. Once the area has been prepared for the drilling of the prebored holes the Contractor may proceed with the drilling operation.
- 5. The prebored holes shall be drilled as indicated in the plans. The hole may require a temporary casing to keep it open until the hole is poured. If used, casing shall be removed during the pouring operation.
- 6. Once the prebored hole is drilled, the Contractor shall place the pile inside the prebored hole and prepare the hole for pouring of the concrete. Particular attention must be given to the placement of the pile to insure that the alignment of the proposed wall is maintained.
- 7. The concrete and flowable backfill shall be placed in one continuous operation in accordance with the plans and Specifications. Concrete shall be placed to the bottom of 6" leveling pads and flowable backfill placed above that elevation.
- 8. Once the prebored hole and soldier pile is placed, the Contractor shall exercise extreme care so as not to damage the pile or prebored hole. Any damage shall be repaired to the satisfaction of the Engineer at the sole expense of the Contractor.
- 9. The flowable fill placed around piles shall be excavated as needed to accommodate the permanent wood lagging boards.

- 10. The wall shall be constructed in a top down manner to continually support the earth and roadway adjacent to the wall. For no reason shall an open unsupported excavation face be left unprotected.
- II. Fill any voids behind the timber lagging with #68 stone backfill.
- 12. All excavation material shall be removed to an approved stockpile or disposal site.
- 13. If necessary, the top of the soldier piles shall be cut off to proper elevation prior to the placing of form work for the wall facing. Any piles damaged by the Contractor during the operation shall be repaired and/or replaced to the satisfaction of the Engineer at the Contractor's expense.
- 14. Prior to placing the cast-in-place wall facing, the leveling pad shall be installed to provide a level working surface for the support of the form work and wall facing.
- 15. Weld 6" studs to front of soldier piles if not already in place.
- 16. Install geocomposite wall drain and reinforcing steel for cast-in-place wall facing.
- 17. The cast-in-place wall facing shall be placed in one vertical pour from the top of concrete leveling pad to the bottom of the concrete coping. No horizontal joints will be allowed. The only vertical construction joints allowed along the length of the wall will be those located at the expansion or contraction joints. No other vertical joints will be allowed. Aestetic treatment of wall face shall be in accordance with special provisions and approved patterns, materials, and procedures.
- 18. The Contractor may cast the wall coping seperately to the finished line and grade shown.
- 19. Complete final grading in front of and behind wall. Extreme care shall be taken so not ot damage the concrete wall construction.

	SOLDIER PILE LOCATION DATA										
Soldier Pile No.	Station	Offset	Bottom Tip Elev.	Soldier Pile No.	Station	Offset	Bottom Tip Elev.				
I	10+13.62	1.84 L+.	371.5	22	11+81.62	1.86 Lt.	358.5				
2	10+21.62	1.84 L+.	370.0	23	11+89.62	1.86 Lt.	358.5				
3	10+29.62	1.84 L†.	368.5	24	11+97.62	1.86 L†.	358.5				
4	10+37.62	1.84 L†.	367.5	25	12+05.62	1.86 L†.	358.5				
5	10+45.62	1.86 Lt.	359.0	26	12+13.62	1.86 Lt.	359.5				
6	10+53.62	1.86 Lt.	359.0	27	12+21.62	1.86 Lt.	359.5				
7	10+61.62	1.86 Lt.	357.0	28	12+29.62	1.86 Lt.	359.5				
8	10+69.62	1.86 Lt.	357.0	29	12+37.62	1.86 Lt.	360.5				
9	10+77.62	1.86 Lt.	357.0	30	12+45.62	1.86 Lt.	360.5				
10	10+85.62	1.86 Lt.	356.0	31	12+53.62	1.86 Lt.	360.5				
	10+93.62	1.86 L†.	356.0	32	12+61.62	1.84 L+.	366.5				
12	11+01.62	1.86 L†.	356.0	33	12+69.62	1.84 L+.	366.5				
13	11+09.62	1.86 Lt.	356.0	34	12+77.62	1.84 L+.	366.5				
14	11+17.62	1.86 Lt.	356.0	35	12+85.62	1.84 Lt.	367.5				
15	11+25.62	1.86 Lt.	356.0	36	12+93.62	1.84 L+.	367.5				
16	11+33.62	1.86 Lt.	356.0	37	13+01.62	1.84 Lt.	368.5				
17	11+41.62	1.86 Lt.	356.0	38	13+09.62	1.84 Lt.	368.5				
18	11+49.62	1.86 Lt.	356.0	39	13+17.62	1.84 Lt.	368.5				
19	11+57.62	1.86 Lt.	356.0	40	13+25.62	1.84 Lt.	369.5				
20	11+65.62	1.86 Lt.	356.0	41	13+33.62	1.84 Lt.	369.5				
21	11+73.62	1.86 Lt.	358.5	42	13+41.62	1.84 L+.	370.5				

End of wall sta. 13+43.62

Notes:

For boring log, see sheets 10(5) and 10(6). Boring locations are approximate.

For geometric details of wall and trial baselines, see sheet IF(2).

For details of nearby drainage elements, see sheet 3.

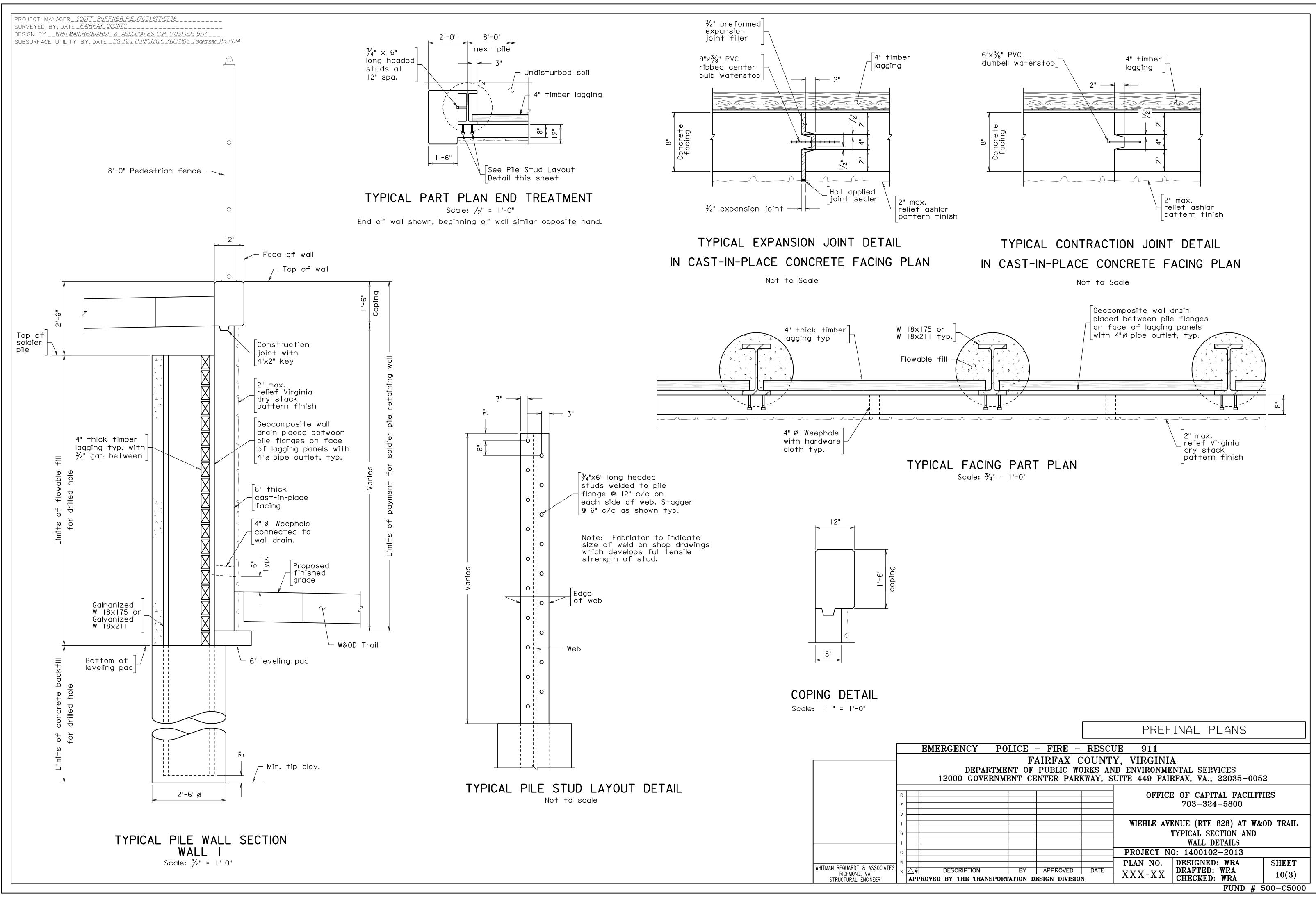
For soldier pile wall typical sections and details, see sheet 10(3).

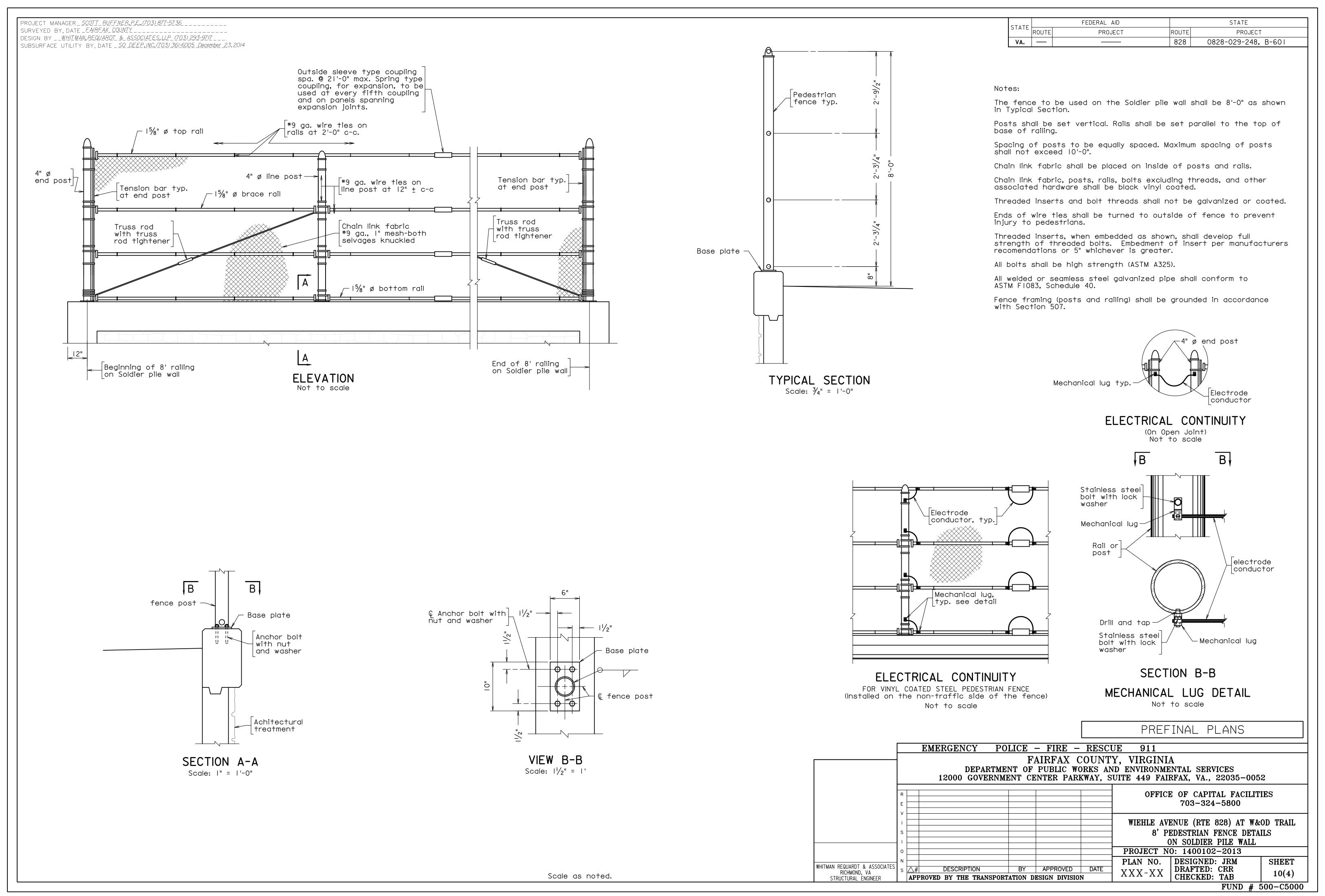
LEGEND:

Indicates approximate location of boring.

PREFINAL PLANS EMERGENCY POLICE - FIRE - RESCUE FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL SOLDIER PILE WALL PLAN AND SUGGESTED SEQUENCE OF CONSTRUCTION PROJECT NO: 1400102-2013 PLAN NO. | DESIGNED: WRA SHEET WHITMAN REQUARDT & ASSOCIATES XXX-XX DRAFTED: WRA CHECKED: WRA DESCRIPTION BY APPROVED DATE 10(2) RICHMOND, VA STRUCTURAL ENGINEER APPROVED BY THE TRANSPORTATION DESIGN DIVISION

FUND # 500-C5000





PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> SURVEYED BY, DATE *FAIRFAX COUNTY* DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ SUBSURFACE UTILITY BY, DATE SO DEEP, INC. (703) 361-6005 December 23, 2014

FEDERAL AID STATE STATE ROUTE PROJECT ROUTE PROJECT 828 0828-029-248, B-601 VA. —

4	1		Ì							PROJECT #: 45494-027 LOCATION: W&OD Trail over Wiehle Avenue		01	
1		V									AGE)F 1
		Virginia	a Depa	artment	of Tr	ansp	ortat	tion		STATION: 10874.79 OFFSET: 26.82 NORTHING: 7031532.44 ft Easting: 11813 SURFACE ELEVATION: 386.0 ft COORD. DATU	377.9	1 ft	rth
		FII	ELD	DAT	A					Date(s) Drilled: 10/24/2016 - 10/24/2016	LA	B D	ΔТА
DEPTH (ft)	ELEVATION (ft)	STANDARD PENETRATION TEST HAMMER BLOWS		SAMPLE LEGEND SAMPLE INTERVAL		ROCK QUALITY B DESIGNATION O			STRATA LEGEND	Drilling Method(s): HSA SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: G Koepping GROUND WATER	- LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)
\dashv		4		\/						FIELD DESCRIPTION OF STRATA 0.0 / 386.0	LL	PI	
2 +	385	14 16 6 5 6	78	1.5 2.5						Gray, fine to course SAND with Silt, dry SM 1.5 / 384.5 Orange, Clayey SILT with mica, dry ML			
6	380	7 7 6	67	6.5						5.0 / 381.0 Light orange, foliated, SILT with little fine Sand, dry ML			
10 -	375	5 4 7	67	8.5									
12 - 14 - 16 -	370	20 50/4"	55	13.5 15						13.5 / 372.5 Gray/brown, mottled, Clayey SILT, dry ML			
18 -		16 23 22	100	18.5									
REN	1ARKS	S : Rig Type	e: CM	IE-45C-	-2 Tr	ruck I	Rig.			P	AGE	1 C)F 1
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4	7										PROJECT #: 45494-027 LOCATION: W&OD Trail over Wiehle Avenue STRUCTURE: TRAIL	D		-02 ≣ 1 (
		Virgini		part	lment		ransp	orta	tion		STATION: 10996.96 OFFSET: NORTHING: 7031491.33 ft Easting: 1 SURFACE ELEVATION: 389.0 ft COORD. D	3.00 1813 ATU	ft LT 496.0 M: \	67 ft /A N	orth
				D [DAT						Date(s) Drilled: 10/24/2016 - 10/24/2016 Drilling Method(s): HSA		LAB	DAT	Α
DEPTH (ft)	ELEVATION (ft)	STANDARD PENETRATION TEST HAMMER BLOWS	SOIL RECOVERY (%)	SAMPLE LEGEND	SAMPLE INTERVAL		ROCK QUALITY DESIGNATION	1	° SINIOC	STRATA LEGEND	SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: G Koepping GROUND WATER FIELD DESCRIPTION OF STRATA	T LIQUID LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)	FINES CONTENT -#200 (%)
		5 6	78	3	1.5						0.0 / 389.0 Orange/brown, Silty CLAY, dry CL-ML				
2 +		15 7	78	3	2.5						2.5 / 386.5 Tan, SILT with mica, dry ML				
4	385	5	9	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4 5										
6		6	89	9 X	6.5										
8 +	380	12 8 12	78	3	8.5						8.5 / 380.5 Gray, brown, layered, Clayey SILT, dry ML			7.3	62.
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14	375	5 12 20	67	7	13.5										
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		3 71						J						-	

LOCATION: W&OD Trail over Wiehle Avenue STRUCTURE: TRAIL PAGE 1 OF 1 STATION: 11150.00 OFFSET: 8.00 ft LT NORTHING: 7031449.63 ft Easting: 11813643.92 ft COORD. DATUM: VA North SURFACE ELEVATION: 388.0 ft Date(s) Drilled: 10/24/2016 - 10/24/2016 **FIELD DATA** LAB DATA Drilling Method(s): HSA SOIL ROCK SPT Method: Automatic Hammer Other Test(s): Driller: Raymond Logger: G Koepping **GROUND WATER** FIELD DESCRIPTION OF STRATA LL PI 0.0 / 388.0 Brown/orange, Clayey SILT with some Gravel, dry ML Orange with white deposits, SILT with some Clay, dry ML 5.0 / 383.0 White/red, SILT with decomposing rock and latge Quartz gravel, dry ML 19 | 78 | 12 375 13.5 / 374.5 100 Orange, brown, SILT with Quartz rock fragments, dry ML **REMARKS**: Rig Type: CME-45C-2 Truck Rig. PAGE 1 OF 1 **B-03** Copyright 2017, Commonwealth of Virginia

PROJECT #: 45494-027

The subsurface information shown on the boring logs in these plans was obtained with reasonable care and recorded in good faith solely for use by the County in establishing design controls for the project. The County has no reason to suspect that such information is not reasonably accurate as an approximate indication of the subsurface conditions at the sites where the borings were taken. The County does not in any way warrant or guarantee that such data can be projected as indicative of conditions beyond the limits of the borings shown; and any such projections by bidders are purely interpretive and altogether speculative. Further, the County does not pretive and altogether speculative. Further, the County does not in any way guarantee, either expressly or by implication, the sufficiency of the information for bid purposes.

A copy of the

original signed geotechnical submittal is on file with

the County.

The boring logs are made available to bidders in order that they may have access to subsurface data identical to that which is possessed

							PREF	INAL PLANS			
		EM	ERGENCY	POLICE	– FIRE –	RESCU	UE 911				
				MENT OF	PUBLIC WO	RKS AN		A ENTAL SERVICES RFAX, VA., 22035-00)52		
	OFFICE OF CAPITAL FACILITIES 703-324-5800										
	V I S						WIEHLE AVENUE (RTE 828) AT W&OD TENGINEERING GEOLOGY				
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WHITMAN REQUARDT & ASSOCIATES RICHMOND, VA STRUCTURAL ENGINEER	N S	△# APPROVE	DESCRIPTION ED BY THE TRANSPO	BY ORTATION D	APPROVED DESIGN DIVISION	DATE N	PLAN NO. XXX-XX	DESIGNED: JRM DRAFTED: CRR CHECKED: TAB	SHEET 10(5)		

by the County, and are not intended as a substitute for personal investigation, interpretation and judgment by the bidders.

FUND # 500-C5000

PROJECT MANAGER <u>SCOTT RUFFNER, P.E., (703) 877-5736</u> FEDERAL AID STATE STATE ROUTE SURVEYED BY, DATE _FAIRFAX_COUNTY_____ PROJECT PROJECT DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___ 828 0828-029-248, B-601 VA. | ---SUBSURFACE UTILITY BY, DATE <u>SO DEEP, INC. (703) 361-6005 December 23, 2014</u> **B-02 B-03** CL-ML **B-01** 59 ML 376 50/4" ML 370 368 10874.79 10996.96 11150.00 26.82 ft LT 8.00 ft LT 8.00 ft LT PREFINAL PLANS POLICE - FIRE - RESCUE **EMERGENCY** FAIRFAX COUNTY, VIRGINIA The subsurface information shown on the boring logs in these plans was obtained with reasonable care and recorded in good faith solely for use by the County in establishing design controls for the project. The County has no reason to suspect that such information is not reasonably accurate as an approximate indication of the subsurface conditions at the sites where the borings were taken. The County does not in any way warrant or guarantee that such data can be projected as indicative of conditions beyond the limits of the borings shown; and any such projections by bidders are purely inter-DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES Notes: See borehole logs for complete data See Material and Sample Symbols List 12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 borings shown; and any such projections by bidders are purely inter-WIEHLE AVENUE (RTE 828) AT W&OD TRAIL A copy of the pretive and altogether speculative. Further, the County does not in any way guarantee, either expressly or by implication, the suffioriginal signed **ENGINEERING GEOLOGY** geotechnical submittal is on file with 2 OF 2 ciency of the information for bid purposes. PROJECT NO: 1400102-2013 The boring logs are made available to bidders in order that they may have access to subsurface data identical to that which is possessed the County. PLAN NO. DESIGNED: JRM
DRAFTED: CRR
CHECKED: TAB SHEET WHITMAN REQUARDT & ASSOCIATES by the County, and are not intended as a substitute for personal investigation, interpretation and judgment by the bidders. DESCRIPTION BY APPROVED DATE RICHMOND, VA STRUCTURAL ENGINEER 10(6) APPROVED BY THE TRANSPORTATION DESIGN DIVISION FUND # 500-C5000

1. AT LEAST 2 WEEKS IN ADVANCE TO BEGINNING ANY WATER MAIN CONSTRUCTION, THE WATER MAIN INSTALLATION CONTRACTOR SHALL SUBMIT TO FAIRFAX WATER, FOR REVIEW AND APPROVAL THE FOLLOWING:

- A. EVIDENCE OF SATISFACTORY COMPLETION OF AT LEAST FIVE WATER MAIN INSTALLATION CONTRACTS SIMILAR IN QUANTITY AND COMPLEXITY, INCLUDING FOREMAN'S EXPERIENCE IN INSTALLING THE PIPE MATERIAL AND JOINT TYPES TO BE USED, PROJECT TITLES, PIPE DIAMETER AND LENGTH, LOCATIONS, REFERENCE CONTACTS, AND TELEPHONE NUMBERS. THE FOREMAN SHALL HAVE AT LEAST 5 YEARS EXPERIENCE IN THE INSTALLATION OF WATER MAINS, AND SHALL HAVE BEEN IN CHARGE OF INSTALLING AT LEAST 5,000 LINEAR FEET OF DUCTILE PIPE.
- B. DATA SHALL BE SUPPLIED TO SHOW THAT STAFFING SCHEDULED FOR THE PROJECT POSSESS THE REQUIRED EXPERIENCE. SUCH DATA SHALL CONSIST OF A HISTORY OF THE EMPLOYMENT EXPERIENCE OF THE JOB FOREMAN, WHO WILL BE IN CHARGE OF THE WATER MAIN INSTALLATION WORK ON THE CONSTRUCTION SITE, TOGETHER WITH A DESCRIPTION OF ANY PARTICULAR CERTIFICATIONS OR SPECIAL CREDENTIALS HE MAY POSSESS.
- 2. DURING THE CONSTRUCTION OF THE WATER MAIN, FAIRFAX WATER, UPON NOTICE TO THE CONTRACTOR, AND IN FAIRFAX WATER'S SOLE DISCRETION, WILL HAVE THE RIGHT TO DIRECT THE CONTRACTOR TO REMOVE AN EMPLOYEE PERMANENTLY FROM THE SITE FOR ANY REASON. IN ADDITION, IF ANY OF THE CONTRACTOR'S PERSONNEL ARE NOT SATISFACTORY TO FAIRFAX WATER THE CONTRACTOR SHALL REPLACE SAME WITH SATISFACTORY PERSONNEL.
- 3. NOTICE OR COMMUNICATION TO THE FOREMAN SHALL BE EQUIVALENT TO NOTICE OR COMMUNICATION TO THE CONTRACTOR. THE FOREMAN SHALL FOLLOW WITHOUT DELAY ALL INSTRUCTIONS OF FAIRFAX WATER IN THE CONSTRUCTION AND COMPLETION OF THE WATER MAIN OR ANY WORK ASSOCIATED WITH OR IMPACTING FAIRFAX WATER INFRASTRUCTURE.
- 4. FAIRFAX WATER SHALL HAVE THE RIGHT TO SUSPEND ANY PART OF THE WATER MAIN INSTALLATION WHENEVER IN THEIR JUDGMENT, SUCH SUSPENSION IS REQUIRED IN THE BEST INTEREST OF FAIRFAX WATER; OR TO TAKE OVER, USE, OCCUPY, OR OPERATE ANY PART OF THE COMPLETED OR PARTLY COMPLETED WATER MAIN INSTALLATION IF, BEFORE THE FINAL ACCEPTANCE OF THE WATER MAIN INSTALLATION, FAIRFAX WATER DEEMS IT NECESSARY.
- 5. THE EXISTING UTILITIES, STRUCTURES, PROPERTY LINES, AND EASEMENTS SHOWN ARE BASED ON DATA AND CONSTRUCTION PLANS PROVIDED BY FAIRFAX COUNTY. THE WATER MAIN DESIGN HAS BEEN BASED ON THIS PROVIDED INFORMATION. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION AND SHALL DIG TEST PITS AS CALLED FOR IN THE CONSTRUCTION NOTES OR AS DEEMED NECESSARY BY THE ENGINEER.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR ENFORCING THE REQUIREMENTS OF CHAPTER 6-B, FAIRFAX COUNTY CODE-EXCAVATION AND UTILITY LINE INSTALLATION. IN PARTICULAR, THE CONTRACTOR IS DIRECTED TO SECTION 10, DEMOLITION OR EXCAVATION-PRIOR NOTICE OF THE AFORESAID CODE. THE CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 1-800-257-7777 SUFFICIENTLY IN ADVANCE OF THE START OF CONSTRUCTION TO COMPLY WITH THIS REQUIREMENT.
- 7. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AND UTILITY OWNER AT 24. NO EXPENSE TO FAIRFAX COUNTY.
- 8. ALL PIPE ELEVATIONS SHOWN ARE TOP OF PIPE UNLESS OTHERWISE SPECIFIED ON THE
- 9. THE CONTRACTOR IS REFERRED TO THE FAIRFAX COUNTY DRAWINGS AND STANDARDS FOR THE LATEST ROAD AND DRAINAGE DESIGN INFORMATION.
- 10. NOTIFICATION OF PENDING WATER MAIN PRESSURE TESTS, DISINFECTION AND/OR CONNECTIONS; THE DESIRE TO HAVE AN EXISTING WATER SYSTEM VALVE OPENED OR CLOSED; AN EMERGENCY; ETC. SHALL BE DIRECTED TO:
- A. 8:00 A.M. TO 4:00 P.M. MONDAY THROUGH FRIDAY MR. DAVE LAMBERT, SUPERVISOR, ENGINEERING INSPECTION 8560 ARLINGTON BOULEVARD FAIRFAX, VA 22031 TELEPHONE NO. (703) 289-6399 CELL PHONE NO. (571) 722-7643
- B. NIGHT, WEEKENDS AND HOLIDAYS
 DISPATCHER
 TELEPHONE NO. (703) 289-6395 OR (703) 289-6323
- 11. THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY EXISTING WATER SYSTEM VALVES WITHOUT A FAIRFAX WATER INSPECTOR OVERSEEING THE WORK.
- 12. THE WORKING PRESSURE OF THE EXISTING WATER SYSTEM IS APPROXIMATELY XX PSI.
- 13. FAIRFAX WATER INSPECTOR WILL RECORD "AS BUILT" CONDITIONS FOR THE GENERAL
- 14. FAIRFAX WATER PUBLISHES AN "APPROVED PRODUCTS LIST" WHICH LISTS, BY CATEGORY, MANUFACTURER'S PRODUCTS APPROVED FOR USE IN FAIRFAX WATER'S SYSTEM. MANUFACTURER'S PRODUCTS COVERED BY THE CATEGORIES INCLUDED IN THIS DOCUMENT WHICH ARE NOT SPECIFICALLY LISTED ARE NOT APPROVED FOR USE. COPIES OF THIS DOCUMENT ARE AVAILABLE AT WWW.FAIRFAXWATER.ORG.
- 15. ALL WATER MAIN INSTALLATION SHALL BE IN CONFORMANCE WITH FAIRFAX WATER'S STANDARD DETAILS, INCLUDED HEREIN, AND CONSTRUCTION PRACTICE MANUAL. BOTH DOCUMENTS CAN BE FOUND AT FAIRFAX WATER'S WEBSITE AT WWW.FAIRFAXWATER.ORG.
- 16. FAIRFAX WATER WILL REVIEW AND APPROVE WATER MAIN LAYING SCHEDULES (FOR 24—INCH AND GREATER) AND WATER MAIN RELATED SHOP DRAWINGS FOR THIS PROJECT AS TRANSMITTED TO FAIRFAX WATER BY THE CONTRACTOR. SUBMITTALS TO FAIRFAX WATER SHALL CONSIST OF CATALOG CUTS, SUPPLIER CERTIFICATIONS AND ANY OTHER INFORMATION PERTINENT TO THE MATERIAL ITEM. ALL SUBMITTALS SHALL BE OF CLEAR AND READABLE QUALITY AND THE ITEM BEING SUBMITTED FOR REVIEW SHALL BE CLEARLY HIGHLIGHTED OR DEFINED SO THAT THE REVIEWER CAN READILY IDENTIFY IT. FAIRFAX WATER REQUIRES A MINIMUM OF FOUR (4) SETS OF SUBMITTALS FOR IN—HOUSE DISTRIBUTION. ADDITIONAL SETS OF SUBMITTALS TO BE RETURNED TO THE CONTRACTOR SHOULD BE PROVIDED AT THIS TIME. THE SUBMITTALS WILL BE PROVIDED TO FAIRFAX WATER WITH A TRANSMITTAL LETTER CLEARLY IDENTIFYING THE CONTENTS OF THE DOCUMENTS AND FAIRFAX WATER PROJECT NUMBER. SUBMITTALS SHALL BE REVIEWED AND RETURNED WITHIN TWENTY (20) WORKING DAYS OF THE DATE THE SUBMITTALS ARE RECEIVED BY FAIRFAX WATER. INFORMATION THAT IS MAILED OR DELIVERED BY COURIER SHOULD BE DIRECTED TO:

FAIRFAX WATER
8560 ARLINGTON BOULEVARD
FAIRFAX, VIRGINIA 22031
MR. JERRY SCOTT, P.E., CCM
CHIEF CONSTRUCTION ENGINEER

WATER MAIN CONSTRUCTION.

WATER MAIN CONSTRUCTION NOTES:

- 17. THE CONTRACTOR SHALL NOT BE RELEASED FROM THE PROJECT UNTIL THE WATER MAIN INSTALLATION WORK AND FINAL WATER MAIN INSPECTION ARE COMPLETED TO THE SATISFACTION OF FAIRFAX WATER. A FAIRFAX WATER REPRESENTATIVE SHALL PROVIDE WRITTEN APPROVAL VERIFYING THAT THE WATER MAIN INSTALLATION WORK IS COMPLETE.
- 18. AT EACH LOCATION WHERE A NEW WATER MAIN IS TO BE CONNECTED TO THE EXISTING WATER MAIN, THE CONTRACTOR SHALL NOT ORDER MATERIAL FOR THE CONNECTION UNTIL HE HAS DUG A TEST PIT AND VERIFIED THE EXACT LOCATION, SIZE, OUTSIDE DIAMETER, ROUNDNESS, ELEVATION, MATERIAL, JOINT LOCATION, AND TYPE AND DIRECTION OF THE EXISTING WATER MAIN. DIG TEST PITS ONLY IN THE PRESENCE OF AN AUTHORIZED REPRESENTATIVE OF FAIRFAX WATER.
- 19. IF TEST PIT DATA OR FIELD CONDITIONS SHOW THERE IS A CONFLICT WITH AN EXISTING UTILITY OR THE WATER MAIN DESIGN HAS TO BE MODIFIED, SUBMIT THE TEST PIT DATA OR FIELD INFORMATION TO FAIRFAX WATER. FAIRFAX WATER WILL REVIEW AND MODIFY THE DRAWINGS AS REQUIRED.
- 20. INSTALL EACH REPLACEMENT WATER MAIN UP TO BUT EXCLUDING THE CONNECTION(S) TO THE EXISTING WATER MAIN(S) TO THE LINES AND GRADES SHOWN ON THE DRAWINGS, INSTALL TEMPORARY PLUGS OR CAPS, AND SUCCESSFULLY PRESSURE TEST AND DISINFECT THE WATER MAIN. LEAKAGE LOSS (L) AS MEASURED IN GALLONS/HOUR, SHALL NOT EXCEED SD(P)^{0.5}/148,000 FOR TWO HOURS WHERE "S" IS THE LENGTH IN FEET OF WATER MAIN TESTED, "D" IS THE NOMINAL INSIDE DIAMETER OF THE PIPE IN INCHES, AND "P" IS THE TEST PRESSURE OF 150 PSI OR 125% (PIPE LESS THAN 20") 150% (PIPE EQUAL TO OR GREATER THAN 20") OF THE MAXIMUM EXPECTED WORKING PRESSURE, WHICHEVER IS GREATER, AT THE HIGH POINT OF THE WATER MAIN UNLESS OTHERWISE SHOWN OR DIRECTED BY FAIRFAX WATER. PRESSURE TESTS SHALL BE LIMITED TO 2,500 FEET FOR ANY INDIVIDUAL TEST. NO ADDITIONAL PAYMENT FOR TEMPORARY BLOW OFFS OR AIR RELEASES.
- 21. AT LEAST SEVEN WORKING DAYS PRIOR TO THE DATE THE CONTRACTOR ANTICIPATES INSTALLING THE CONNECTION(S) TO THE EXISTING WATER SYSTEM, THE CONTRACTOR SHALL MEET WITH A FAIRFAX WATER REPRESENTATIVE AND REVIEW HIS PROPOSED SCHEDULING AND CONSTRUCTION PROCEDURES FOR THE CONNECTION(S). SYSTEM DEMANDS AND OPERATING CONDITIONS AT THE TIME CONNECTION(S) ARE SCHEDULED MAY REQUIRE A NIGHT (9:00 P.M. TO 6:00 A.M.) CONNECTION TIME. NO ADDITIONAL PAYMENT WILL BE MADE TO THE CONTRACTOR FOR WORK WHICH MUST BE PERFORMED AT NIGHT. APPROVAL OF THE CONTRACTOR'S CONNECTION(S) SCHEDULE AND CONSTRUCTION PROCEDURES BY FAIRFAX WATER DOES NOT RELIEVE THE CONTRACTOR OF HIS TOTAL RESPONSIBILITY TO SEE THAT THE CONNECTION IS SUCCESSFULLY COMPLETED WITHIN THE DESIGNATED TIME FRAME.
- 22. BASED ON THE APPROVED CONSTRUCTION SCHEDULE, FAIRFAX WATER WILL GIVE AT LEAST 48 HOURS WRITTEN NOTICE TO AFFECTED CUSTOMERS FOR WATER MAIN CONSTRUCTION THAT WILL REQUIRE THE INTERRUPTION OF WATER SERVICE TO THESE CUSTOMERS.
- 23. PRIOR TO THE COMMENCEMENT OF ANY CONNECTION WORK, THE FAIRFAX WATER INSPECTOR WILL CONFIRM THAT THE CONTRACTOR HAS ALL NECESSARY MATERIALS, TOOLS AND EQUIPMENT AT THE WORK SITE. PIPE, FITTINGS AND VALVES SHALL BE PREASSEMBLED AS MUCH AS POSSIBLE TO REDUCE THE TIME OF WATER SERVICE INTERRUPTION. WORK WILL NOT COMMENCE UNTIL THIS IS CONFIRMED. ALSO, THE GEOMETRY OF THE CONNECTION SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO STARTING THE CONNECTION.
- 24. THE CONTRACTOR SHALL WORK CONTINUOUSLY AND EXPEDITIOUSLY AROUND THE CLOCK USING MULTIPLE CREWS UNTIL THE CONNECTIONS ARE SUCCESSFULLY INSTALLED AND WATER SERVICE IS RESTORED. WHERE THE NEW WATER MAIN IS TO BE CONNECTED AT MORE THAN ONE POINT TO THE EXISTING WATER SYSTEM, CONNECTIONS SHALL PROCEED SIMULTANEOUSLY. ALL CONNECTION WORK MUST BE SUCCESSFULLY COMPLETED WITHIN TEN HOURS UNLESS NOTED DIFFERENTLY IN WRITING BY THE ENGINEER OR FAIRFAX WATER. THE CONTRACTOR SHALL COMMIT THE NECESSARY PERSONNEL AND EQUIPMENT REQUIRED TO PERFORM THE SIMULTANEOUS CONNECTIONS WITHIN THE ABOVE TIME CONSTRAINTS.
- 25. ONLY NON-TOXIC LUBRICANTS RECOMMENDED BY THE PIPE MANUFACTURER AND APPROVED BY THE VIRGINIA DEPARTMENT OF HEALTH SHALL BE USED ON GASKETS. A SOAP SOLUTION WILL NOT BE ALLOWED.
- 26. ANY WATER MAIN TO BE INSTALLED IN A FILL AREA SHALL HAVE THE FILL PLACED AND COMPACTED TO A MINIMUM OF 2 FEET ABOVE THE TOP OF THE PROPOSED PIPE PRIOR TO EXCAVATION FOR AND INSTALLATION OF THE PIPE.
- 27. FIELD APPLIED PETROLATUM TAPE TO BE APPLIED TO:
 - A. BURIED MECHANICAL JOINTS, BOLTS, NUTS, COUPLINGS, HARNESS TIE RODS, SADDLES, IRON AND STEEL ANCHORS, AND OTHER BURIED CONNECTING HARDWARE.
 B. PIPE EMBEDDED IN CONCRETE ANCHOR BLOCKS OR OTHERWISE IN CONTACT WITH CONCRETE, EXTENDING THROUGH CONCRETE AND ADJACENT 6 INCHES IN BOTH
 - DIRECTIONS.

 C. SERVICE CLAMPS, NON-MOVING PARTS OF CORPORATION STOPS, AND OTHER TRANSITION FITTINGS BETWEEN COPPER SERVICES AND DUCTILE IRON PIPE.
- 28. NO BLASTING SHALL OCCUR WITHIN 25 FEET OF EXISTING WATER MAINS. A MAXIMUM PARTICLE VELOCITY OF 1 1/2 INCHES PER SECOND AT THE CLOSEST POINT TO THE WATER MAIN FOR ANY BLASTING THAT OCCURS BEYOND THE 25 FEET LIMIT SHALL BE ADHERED TO.
- 29. ANY SOUND BARRIER CONSTRUCTION, INCLUDING FOOTINGS, WITHIN 15 FEET OF THE EXISTING OR PROPOSED WATER MAINS SHALL BE REVIEWED FOR APPROVAL BY FAIRFAX WATER.
- 30. INSTALL IDENTIFICATION TAPE DURING BACKFILL OPERATIONS ONE FOOT ABOVE WATER MAIN PIPING FOR ALL RESTRAINED PIPE JOINTS.
- 31. WATER METERS WITHIN PROJECT LIMITS SHALL BE RELOCATED BY THE CONTRACTOR TO A LOCATION BEHIND THE PROPOSED CURB AND GUTTER. ALL WATER SERVICE RELOCATIONS AND RETAPS SHALL BE INSTALLED BY THE CONTRACTOR. ALL EXISTING SERVICES SHALL BE RECONNECTED BY THE CONTRACTOR AFTER ALL APPROVALS HAVE BEEN OBTAINED. WATER METER ASSEMBLIES SHALL INCLUDE ALL MATERIALS AS SHOWN IN FAIRFAX WATER'S STANDARD DETAILS.
- 32. PROPOSED WATER MAINS AND SERVICES MUST BE IN SERVICE BEFORE EXISTING WATER MAINS AND SERVICES ARE ABANDONED.
- 33. UPON COMPLETION OF PROJECT, INSPECTOR WILL CHECK THAT ALL METER BOXES ARE SET TO GRADE AND IN CORRECT LOCATIONS BEFORE THE CONTRACTOR MOVES OFF JOBSITE.
- 34. IN INSTANCES WHERE FAIRFAX COUNTY AND FAIRFAX WATER SPECIFICATIONS OVERLAP OR ADDRESS THE SAME ISSUES, THE MORE STRINGENT SPECIFICATIONS SHALL BE ADHERED TO.
- 35. ALL ABANDONED VALVES AND APPURTENANCES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSAL/REMOVAL OF SUCH SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 36. IF THE PROJECT REQUIRES CUTTING OF ASBESTOS CEMENT PIPE (ACP) WATER MAINS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE, FEDERAL AND LOCAL REGULATIONS INCLUDING, BUT NOT LIMITED TO, OSHA REQUIREMENTS, AND VIRGINIA DEPARTMENT OF WASTE MANAGEMENT REGULATIONS IN WORKING WITH AND DISPOSAL OF ASBESTOS CEMENT PIPE.

FAIRFAX WATER WATER SYSTEM ADJUSTMENTS FAIRFAX WATER PROJECT 2592 DIVISION 2

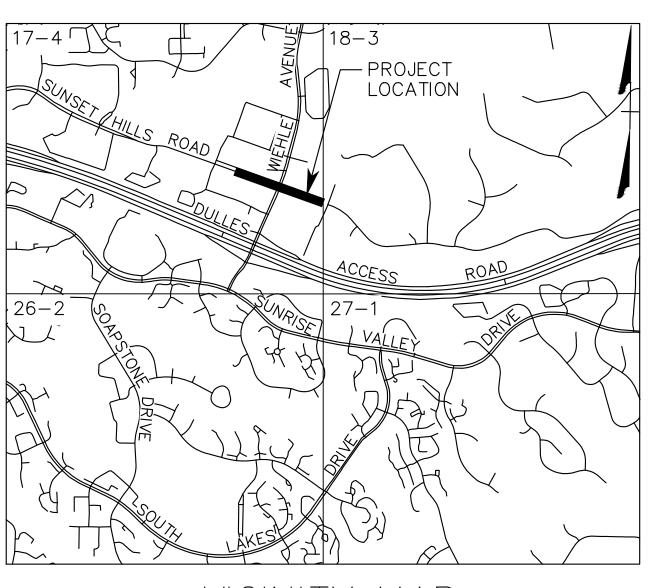
- 37. THE CONTRACTOR SHALL INSTALL 1 LAYER OF 8-MIL V-BIO POLYETHYLENE ENCASEMENT FOR ALL WATER MAINS, AS SHOWN ON THE DRAWINGS AND STANDARD DETAILS.
- 38. ALL EXISTING AND NEW VALVE BOXES MUST BE FULLY ADJUSTED TO CONFORM TO FINAL ASPHALT GRADE. NO PAVING ADJUSTERS WILL BE PERMITTED.
- 39. IN AREAS WHERE PETROLEUM-CONTAMINATED SOILS ARE ENCOUNTERED ALONG THE PROPOSED WATER MAIN ALIGNMENT, THE CONTRACTOR, AS DIRECTED BY FAIRFAX WATER, SHALL REMOVE AND DISPOSE OF ALL CONTAMINATED SOILS WITHIN THE PIPELINE TRENCH WHERE THE TOTAL PETROLEUM HYDROCARBON (TPH) CONCENTRATION EXCEEDS 50 MG/KG. THE CONTRACTOR SHALL REMOVE THE SUBJECT SOILS AS DIRECTED BY FAIRFAX WATER IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ), THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND INDUSTRY-RECOGNIZED REMOVAL PROCEDURES. THE CONTAMINATED SOILS SHALL BE DISPOSED OF AT A CERTIFIED LANDFILL SITE FOR THE CONCENTRATION LEVELS ENCOUNTERED. THE CONTRACTOR SHALL INSTALL FKM (VITON) GASKETS IN ACCORDANCE WITH THE PIPELINE MANUFACTURER'S INSTALLATION REQUIREMENTS IN ALL AREAS WHERE EXCAVATED SOILS EXCEED 10 MG/KG TPH OR TO THE EXTENT DIRECTED BY FAIRFAX WATER. SUITABLE CLEAN FILL MATERIAL WILL BE PUT IN PLACE ABOVE THE NEWLY INSTALLED WATER MAIN, IF NON-PAVED AREA, IN ACCORDANCE WITH FAIRFAX WATER'S STANDARD TRENCH DETAILS.
- 40. THE CONTRACTOR SHALL NOT INSTALL ANY EARTHWORK OVER EXISTING OR PROPOSED FAIRFAX WATER UTILITIES BEYOND THAT WHICH IS SHOWN IN THE APPROVED FAIRFAX COUNTY DRAWINGS WITHOUT THE APPROVAL OF FAIRFAX WATER.

LEGEND

	EXISTING	PROPOSED
WATER MAIN 2" AIR RELEASE VALVE & BOX		S
2" BLOW OFF VALVE & BOX		\ 88
WATER VALVE & BOX	\otimes	⊗
REDUCER		\triangleright
WATER METER & BOX		М
FIRE HYDRANT	\(\rightarrow	
C.I.P.	CAST IRON PIPE	
D.I.P.	DUCTILE IRON PIPE	
P.C.C.P.	PRESTRESSED CONCRETE CYLINDE	ER PIPE
EXISTING WATER MAIN TO BE ABANDONED OR REMOVED	//////////////	+
CAP/PLUG EXISTING WATER MAIN	— v — v — — —	
FAIRFAX WATER EASEMENT		

INDEX OF SHEETS

· · · · · · · · · · · · · · · · · · ·	FAIRFAX COUNTY	OFNEDAL DECODEDINA
SHEET NO.	SHEET NO.	GENERAL DESCRIPTION
100	_	WATER MAIN CONSTRUCTION NOTES, LEGEND, VICINITY MAP & INDEX OF SHEETS
101	_	SUMMARY OF QUANTITIES, MEASUREMENT AND PAYMENT
102	3	WATER MAIN RELOCATION PLAN
103	4	WATER MAIN RELOCATION PLAN
104	5	WATER MAIN RELOCATION PLAN
105	-	WATER MAIN RELOCATION PROFILES
106	-	WATER MAIN RELOCATION PROFILES
107	_	MISCELLANEOUS DETAILS



SCALE: 1"=2000'

FAIRFAX WATER ADJUSTMENTS

WIEHLE AVENUE (RTE. 828) AT W&OD TRAIL

WATER SYSTEM ADJUSTMENTS

FAIRFAX WATER PROJECT 2592, DIVISION 1

FAIRFAX COUNTY PROJECT NO. 1400102-2013

TAX MAP 17-4
FAIRFAX COUNTY, VIRGINIA

PREPARED BY
FAIRFAX WATER

8560 ARLINGTON BOULEVARD FAIRFAX, VIRGINIA 22031 OFFICE (703) 289-6300 FAX (703) 289-6398

DATE: MARCH 2018

50% PLANS

	SUMMARY OF QUANTITIES													
SHEET NUMBER		DUCTILE IRON WATER MAIN		P.C.C.P. TIE-IN	LONG SOLID SLEEVE	BUTTERFLY VALVE & BOX	GATE &	VALVE BOX	BR/	ANCH	BEND	AIR RELEASE ASSEMBLY	FIRE HYDRANT	SHEET NUMBER
SIZE	6"	12"	24"	24"	24"	24"	6"	12"	24"x6"	24"x12"	24"	2"	N/A	SIZE
UNIT	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	UNIT
102	_	-	197	1	_	_	_	_	_	-	2	_	_	102
103	_	15	465	_	2	2	_	1	_	1	1	_	_	103
104	10	_	749	1	_	_	1	_	1	-	10	_	1	104
TOTAL	10	15	1411	2	2	2	1	1	1	1	13	_	1	TOTAL

MEASUREMENT AND PAYMENT

- 1. MEASUREMENT AND PAYMENT FOR ITEMS LISTED IN THE WATER MAIN SUMMARY SHALL BE AS DEFINED IN THE LATEST EDITION OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS OR AS OTHERWISE DENOTED HEREON. PAYMENT SHALL INCLUDE FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION IN ACCORDANCE WITH THE APPLICABLE FAIRFAX WATER STANDARD DETAILS AND THOSE IN THE PLANS.
- 2. DUCTILE IRON WATER MAIN: FAIRFAX WATER'S WATER MAINS, APPURTENANCES, AND OTHER ASSOCIATED WORK WILL BE MEASURED IN UNITS OF LINEAR FEET, COMPLETE, AND PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR THE RESPECTIVE SIZE OF THE WATER MAIN. THIS PRICE SHALL INCLUDE EXCAVATION, SHEETING AND SHORING, BEDDING, BACKFILL, COMPACTION, CONNECTIONS TO THE EXISTING WATER MAINS, TESTING, DEWATERING, AND THE FOLLOWING, BASED ON THE RESPECTIVE SIZE OF THE WATER MAIN:
 - BRANCHES, BENDS, REDUCERS, CAPS, AND PLUGS (12" AND LESS), INCLUDING CONCRETE THRUST RESTRAINTS, AND ASSOCIATED FITTINGS
 - LONG SOLID SLEEVES
 - RESTRAINED JOINT PIPE, PIPE RESTRAINT, AND IDENTIFICATION TAPE
 - POLYETHYLENE ENCASEMENT

EXCAVATION SUPPORT SYSTEMS AND PIPE SUPPORT SYSTEMS WILL NOT BE MEASURED FOR SEPARATE PAYMENT, BUT SHALL BE INCLUDED IN THE COST OF THE WATER MAIN.

ABANDONMENT OR REMOVAL OF EXISTING WATER MAINS WILL INCLUDE, BUT WILL NOT BE LIMITED TO, CLOSING ALL VALVES; REMOVING VALVE BOXES, WATERLINE MARKERS, FIRE HYDRANTS, BOLLARDS, AND TEST STATIONS; CUTTING AND PLUGGING EXISTING WATER MAINS; REMOVING EXISTING WATER MAINS (AS REQUIRED); CRIMPING COPPER SERVICE LINES; COMPACTING; BACKFILLING WITH SUITABLE MATERIAL; DELIVERY OF SALVAGE MATERIALS TO FAIRFAX WATER'S STORAGE YARDS; AND OTHER ASSOCIATED WORK, WHERE INDICATED ON THE PLANS AND WHERE DIRECTED BY FAIRFAX WATER AND WILL NOT BE MEASURED FOR SEPARATE PAYMENT, BUT SHALL BE INCLUDED IN THE COST OF THE WATER MAIN.

IF THE CONTRACTOR IS REQUIRED TO INSTALL VITON GASKETS AS A RESULT OF ENCOUNTERING PETROLEUM CONTAMINATED SOILS (REFER TO WATER MAIN CONSTRUCTION NOTE 39, SHEET 100), THE CONTRACTOR WILL BE COMPENSATED FOR THE VITON GASKETS BASED ON ACTUAL INVOICED PRICE MINUS THE COST FOR THE STANDARD GASKET, PLUS APPROVED MARK-UP PER THE CONTRACT REQUIREMENTS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR THE INSTALLATION OF THE VITON GASKETS.

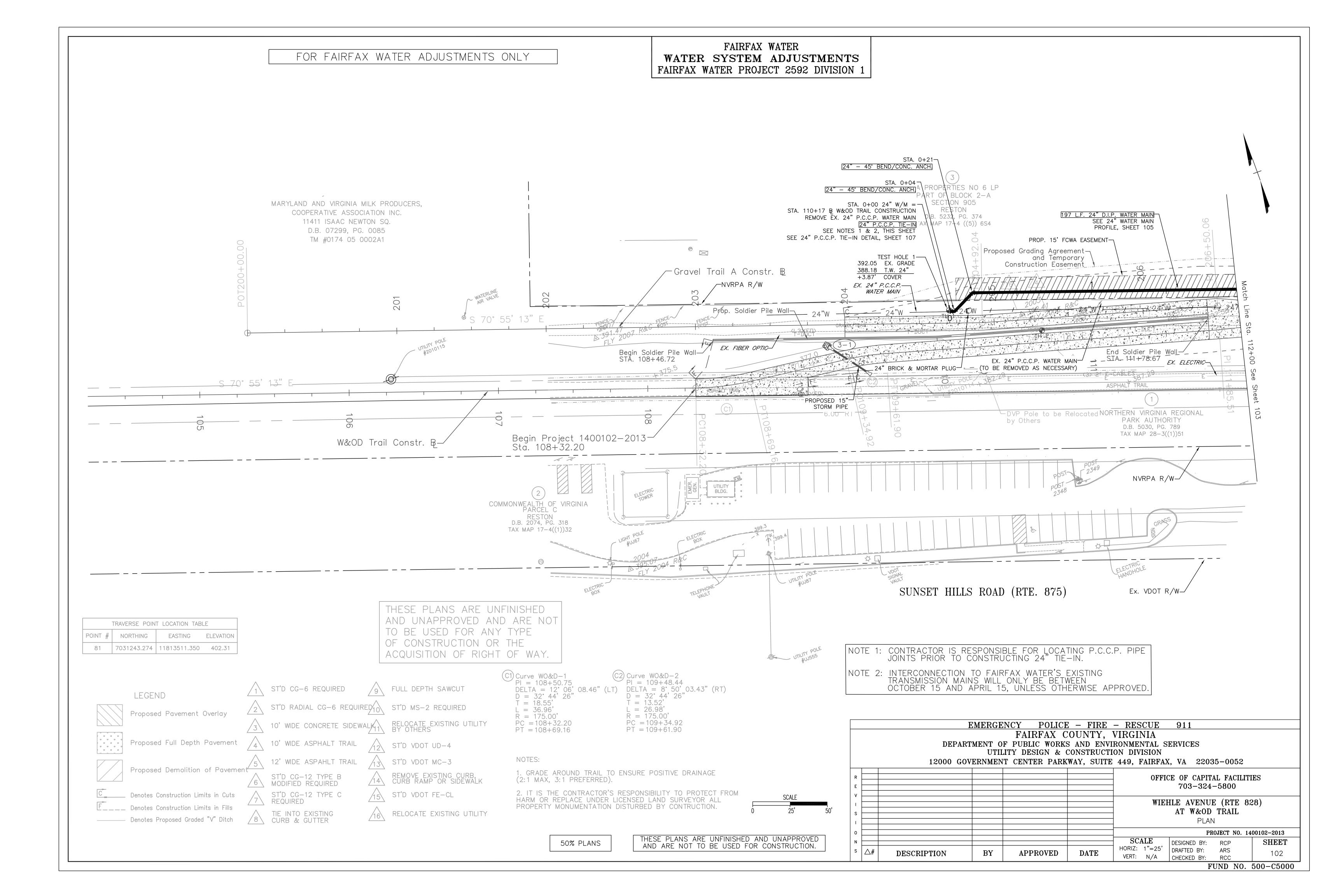
- 3. PRESTRESSED CONCRETE CYLINDER PIPE TIE—IN WILL BE MEASURED IN UNITS OF EACH, COMPLETE IN PLACE, AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, WHICH PRICE SHALL INCLUDE CONNECTION TO THE WATER MAIN; AND ALL MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, AS INDICATED ON THE P.C.C.P. TIE—IN DETAIL ON SHEET 107.
- 4. VALVES AND BOXES WILL BE MEASURED IN UNITS OF EACH, COMPLETE IN PLACE, AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH BASED ON ITS RESPECTIVE SIZE AND TYPE. THIS PRICE SHALL INCLUDE FULL COMPENSATION FOR FURNISHING AND INSTALLING THE GATE VALVE, FOR MAINS UP TO 14—INCHES, OR THE BUTTERFLY VALVE, FOR MAINS 16—INCHES AND LARGER; VALVE BOXES; CONNECTION TO THE WATER MAIN; AND ALL MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, INCLUDING EXCAVATION, BEDDING, BACKFILL, AND COMPACTION.
- 5. AIR RELEASE ASSEMBLY WILL BE MEASURED IN UNITS OF EACH, COMPLETE IN PLACE, AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, WHICH PRICE SHALL BE FULL FURNISHING AND INSTALLING THE GATE VALVE; PIPE AND FITTINGS; VALVE BOXES; CONNECTION TO THE WATER MAIN; AND ALL MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, AS INDICATED ON THE TWO—INCH AIR RELEASE ASSEMBLY DETAIL ON SHEET 107.
- FIRE HYDRANT WILL BE MEASURED IN UNITS OF EACH, COMPLETE IN PLACE, AND PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH, WHICH PRICE SHALL INCLUDE FULL COMPENSATION FOR THE HYDRANT; CONNECTION TO HYDRANT LEG PIPING; FITTINGS; CONCRETE THRUST RESTRAINT; AND ALL OTHER MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, AS INDICATED IN THE HYDRANT DETAIL ON SHEET 107.

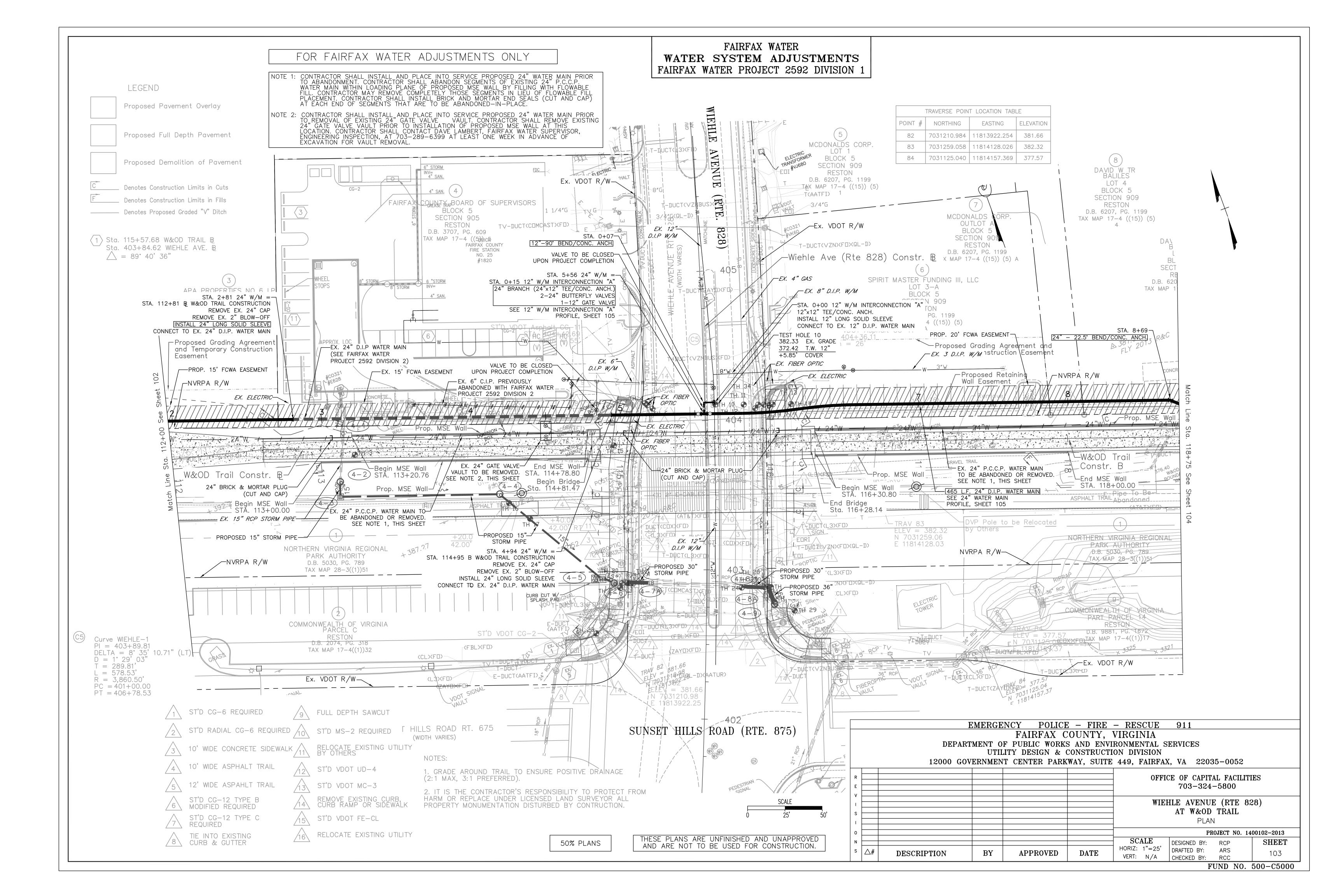
EMERGENCY POLICE - FIRE - RESCUE 911 FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES UTILITY DESIGN & CONSTRUCTION DIVISION 12000 GOVERNMENT CENTER PARKWAY, SUITE 449, FAIRFAX, VA 22035-0052 OFFICE OF CAPITAL FACILITIES 703-324-5800 WIEHLE AVENUE (RTE 828) AT W&OD TRAIL PAY ITEM NOTES & SUMMARY OF QUANTITIES PROJECT NO. 1400102-2013 SHEET DESIGNED BY: RCP HORIZ: VERT: N/A ARS DRAFTED BY: APPROVED DATE DESCRIPTION CHECKED BY: RCC

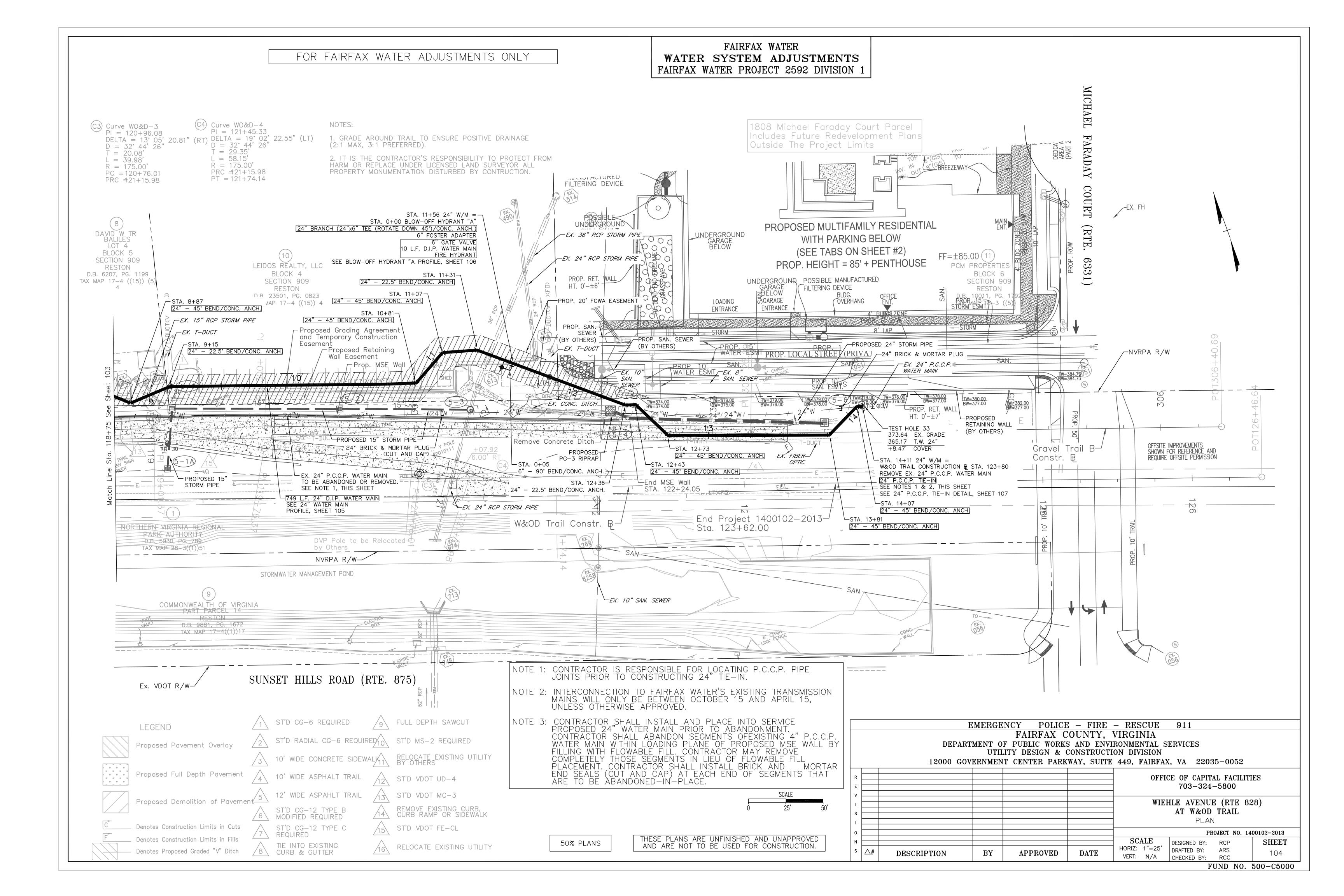
FUND NO. 500-C5000

50% PLANS

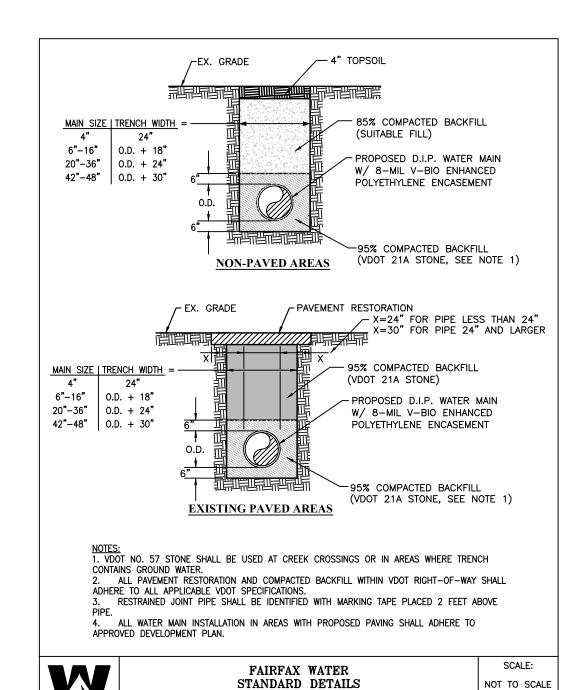
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR CONSTRUCTION.





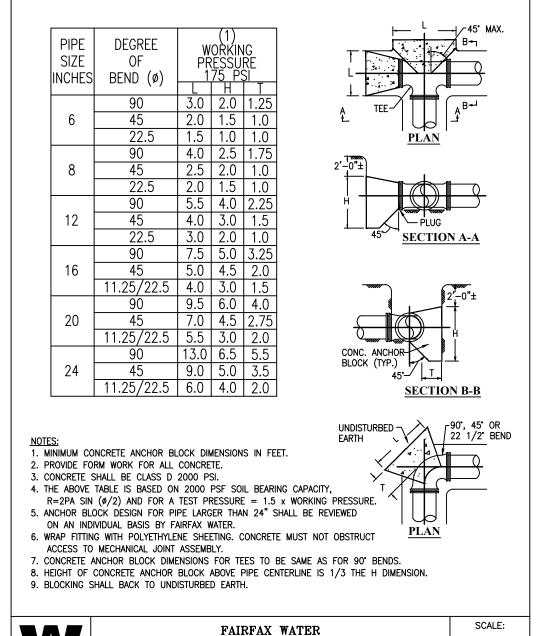


FAIRFAX WATER WATER SYSTEM ADJUSTMENTS FAIRFAX WATER PROJECT 2592 DIVISION 1



DRAWING NO .:

12



STANDARD DETAILS

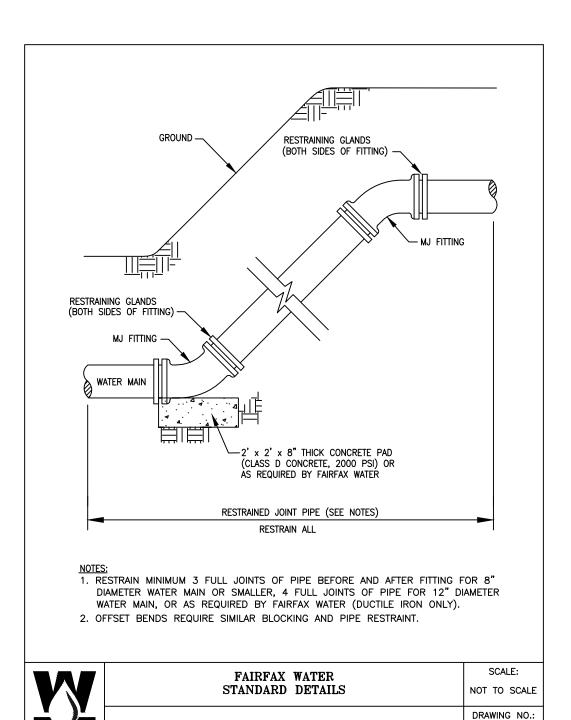
CONCRETE THRUST ANCHORS

NOT TO SCALE

DRAWING NO.:

23

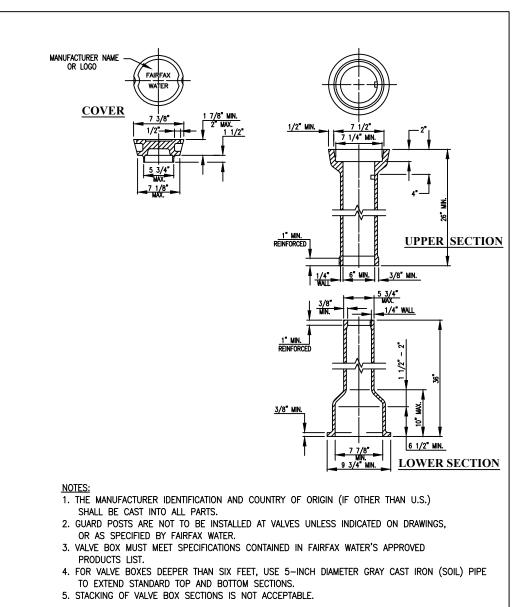
DATE: 7/17



CONCRETE VERTICAL BLOCKING

WATER MAINS LESS THAN OR EQUAL TO 12"

24



FAIRFAX WATER

STANDARD DETAILS

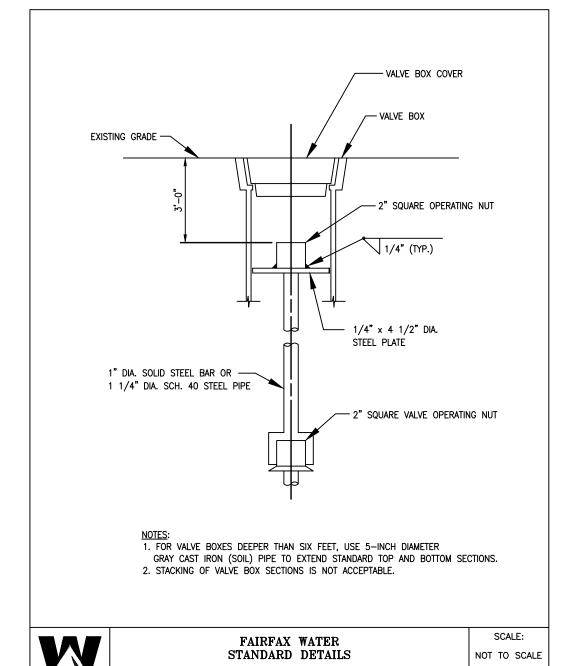
VALVE BOX

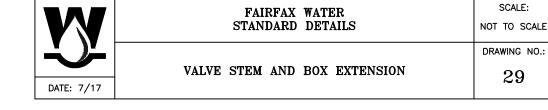
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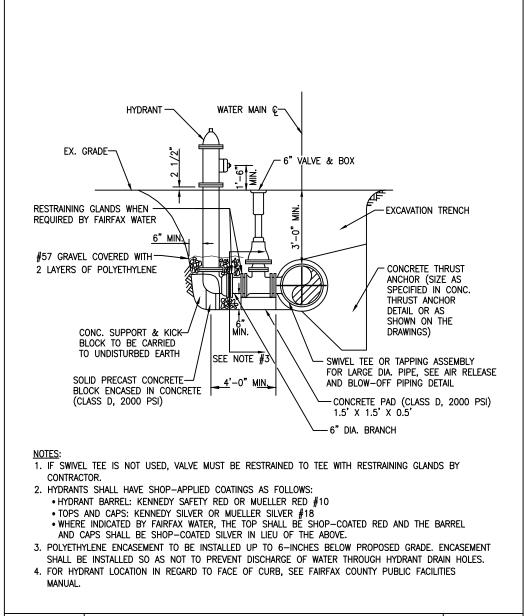
NOT TO SCALE

DRAWING NO.:

27

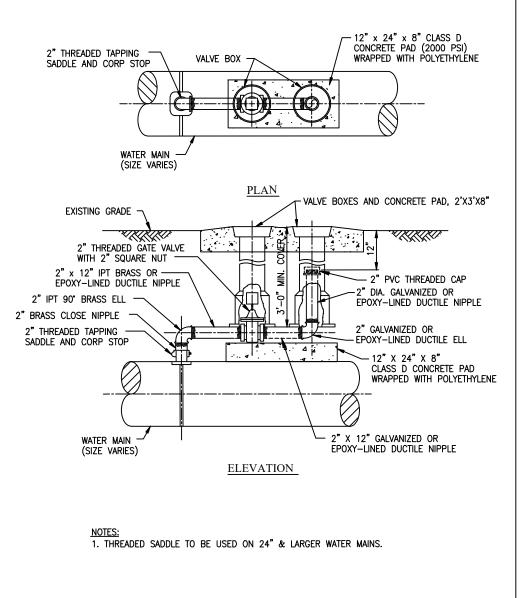




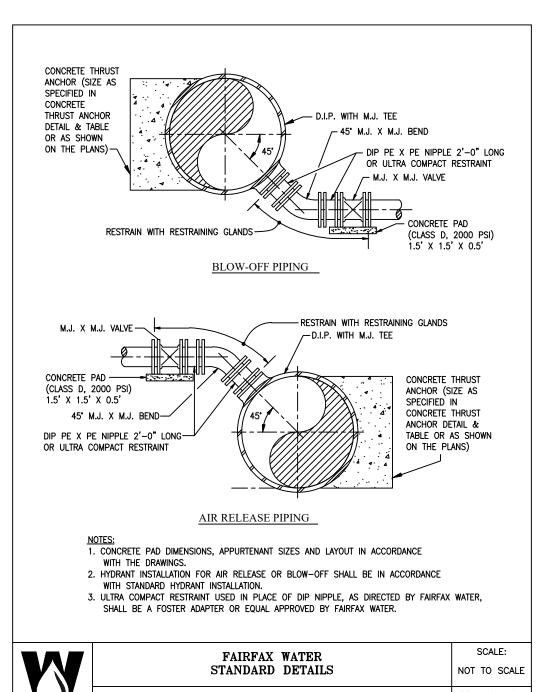


TRENCH - DUCTILE IRON PIPE

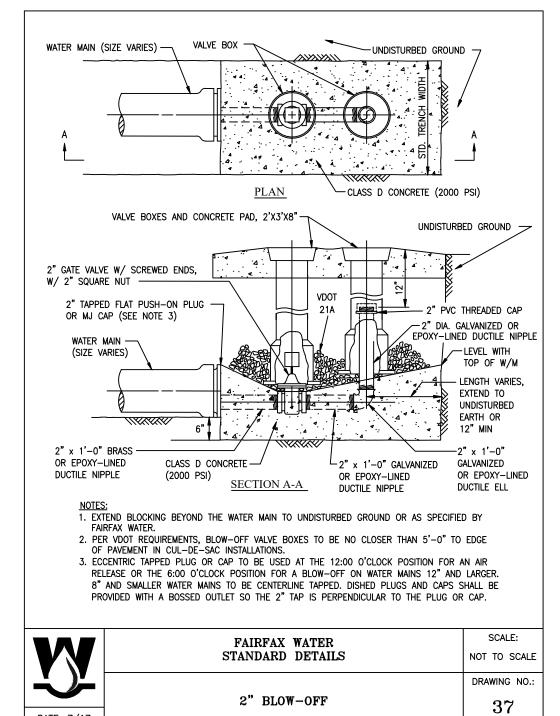
	FAIRFAX WATER	SCALE:
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<u> </u>		DRAWING NO.:
	STANDARD HYDRANT INSTALLATION	30
DATE: 7/17		



W	FAIRFAX WATER STANDARD DETAILS	SCALE: NOT TO SCALE
	2" AIR RELEASE	DRAWING NO.:
DATE: 7/17		35



	FAIRFAX WATER	SCALE:
	STANDARD DETAILS	NOT TO SCALE
	AIR RELEASE AND BLOW-OFF PIPING	DRAWING NO.:
	DUCTILE IRON PIPE 12" & LARGER	36
DATE: 7/17		50



		E	EMERGE	ENCY POLICE	E – FIRE	- RESCUE	911				
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		DESCRIPTION	101	AFFROVED	DAIL	VERT:	CHECKED BY: RCC	107			

50% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR CONSTRUCTION.

PROJECT MANAGER_SCOTT RUFFNER, P.E., (703) 877-5736 _______
SURVEYED BY, DATE _FAIRFAX COUNTY, NOVEMBER _28, 2014 _____
DESIGN BY __WHITMAN, REQUARDT & ASSOCIATES, LLP (703) 293-9717 ___
SUBSURFACE UTILITY BY, DATE _SO DEEP, INC. (703) 361-6005 DECEMBER 23, 2014

INDEX OF SHEETS - CROSS SECTIONS

SHEET NO.

DESCRIPTION

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XS-2 THRU XS-20 CRO XS-2|THRU XS-24 CRO

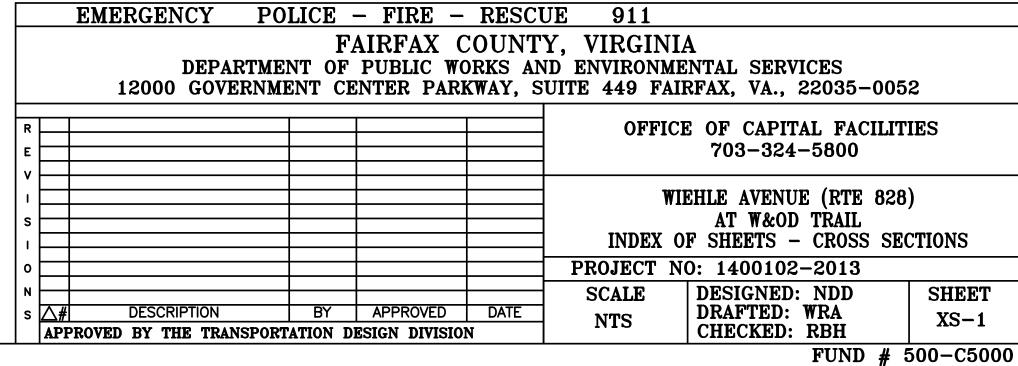
CROSS SECTIONS W&OD TRAIL
CROSS SECTIONS WIEHLE AVENUE (RTE.828)

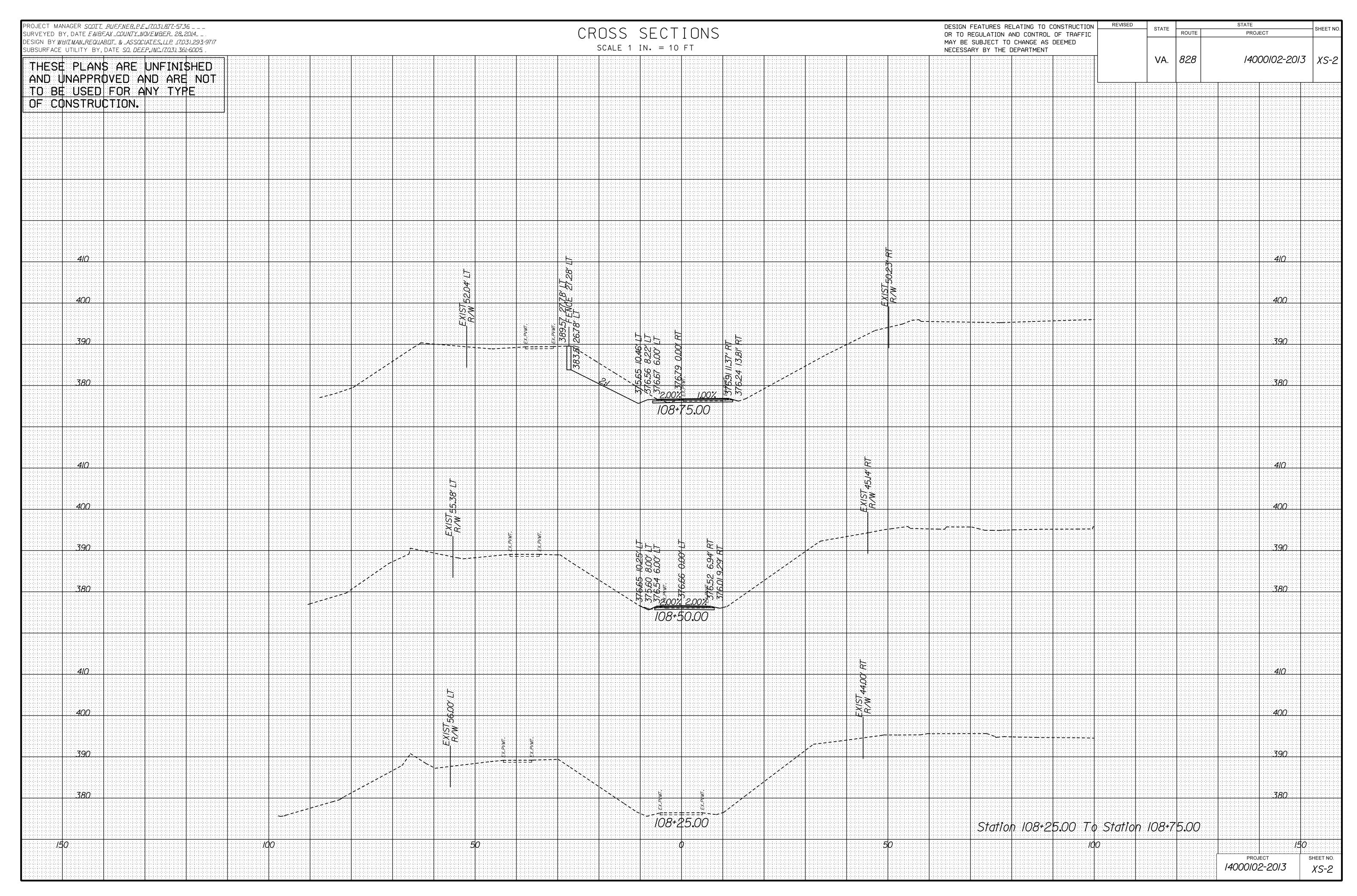
INDEX OF SHEETS - CROSS SECTIONS

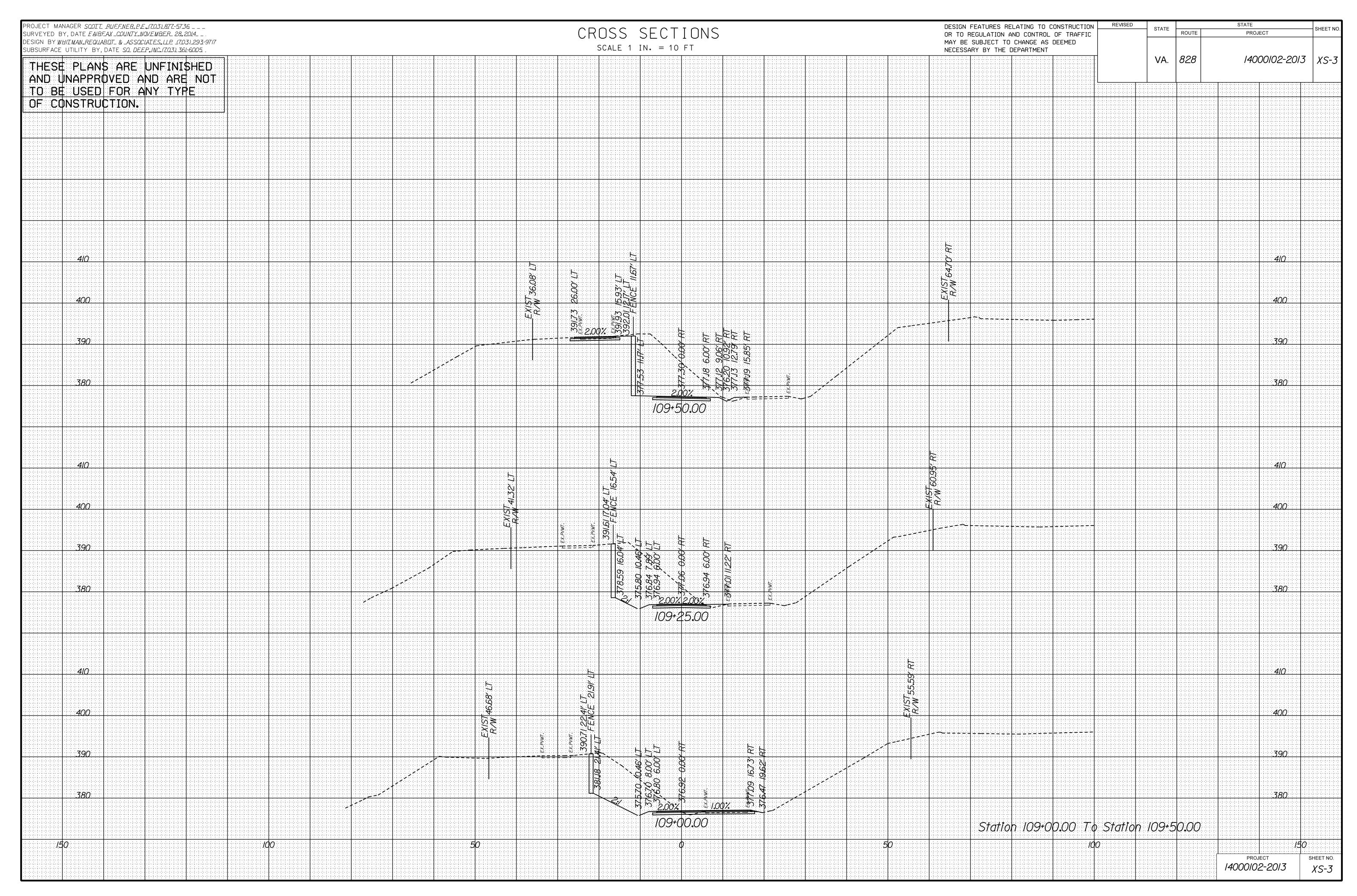
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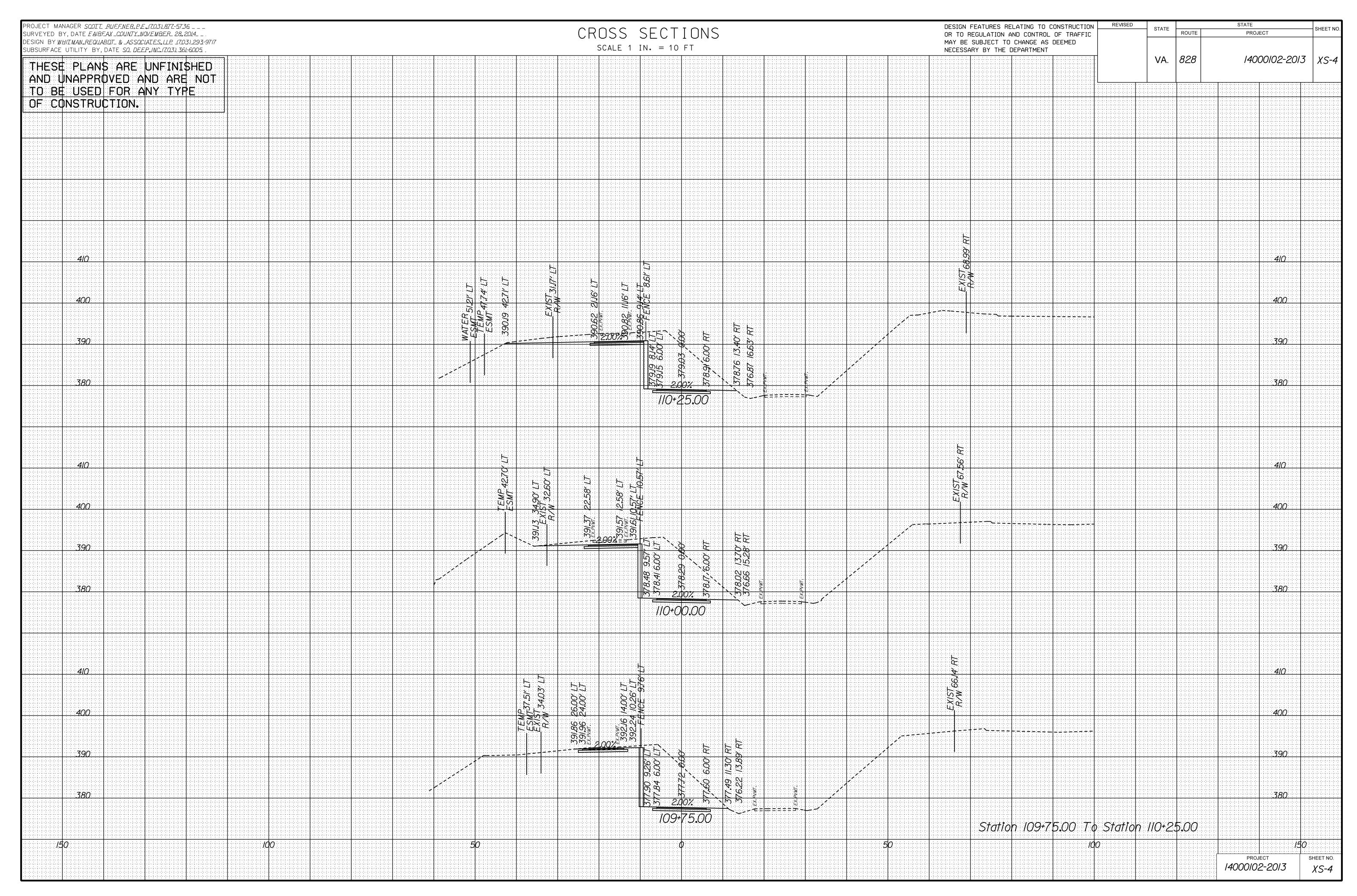
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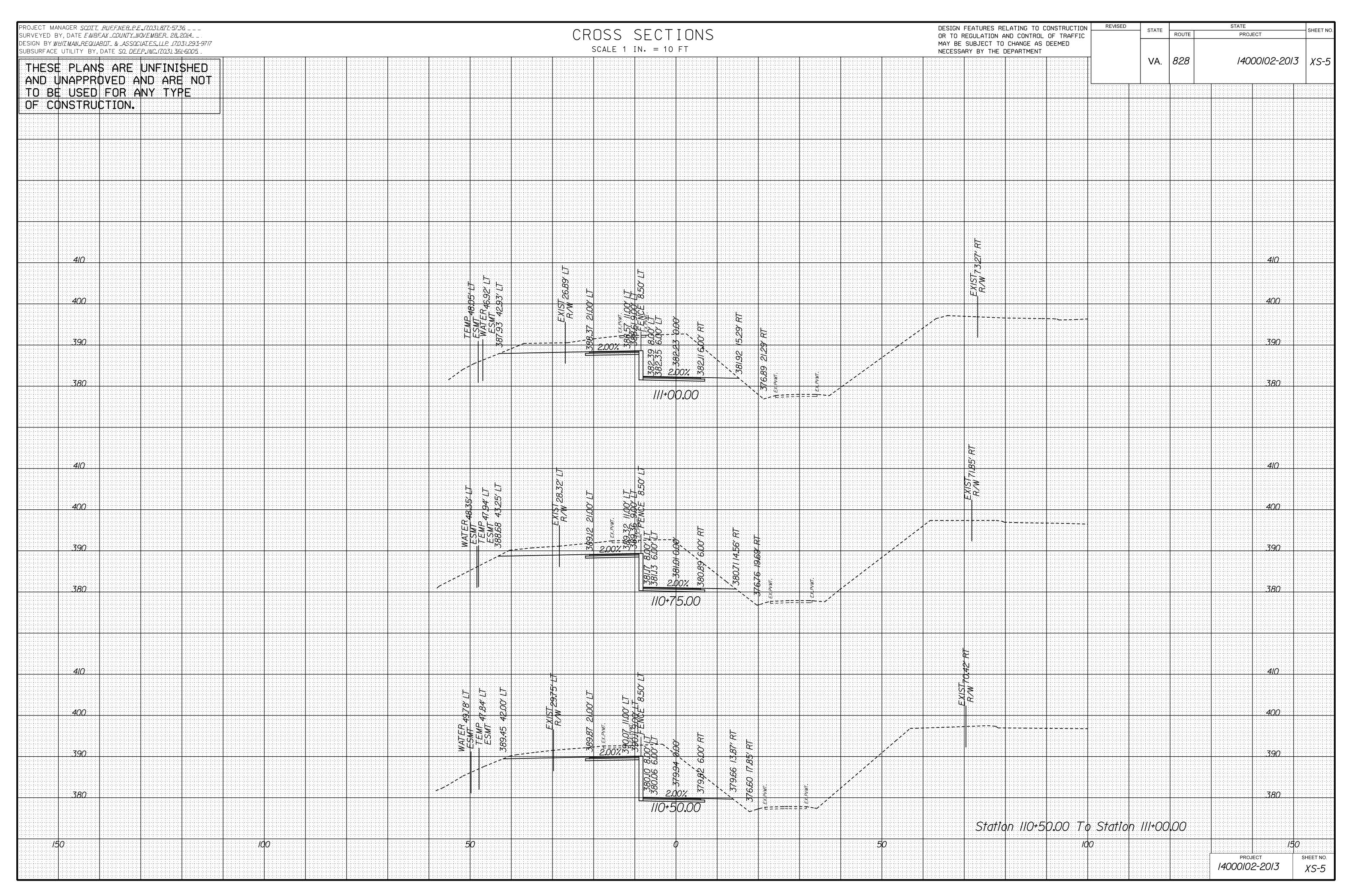


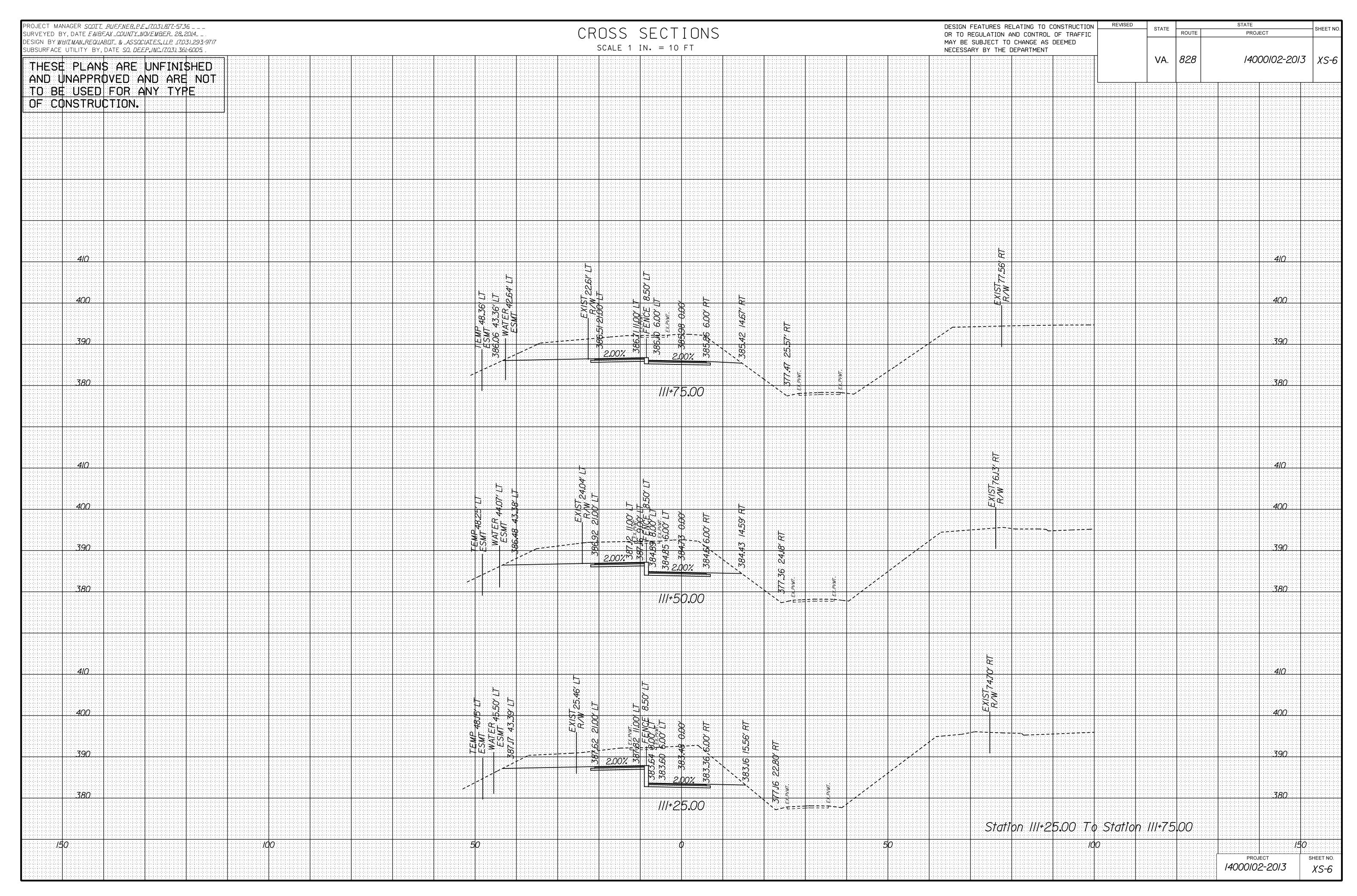


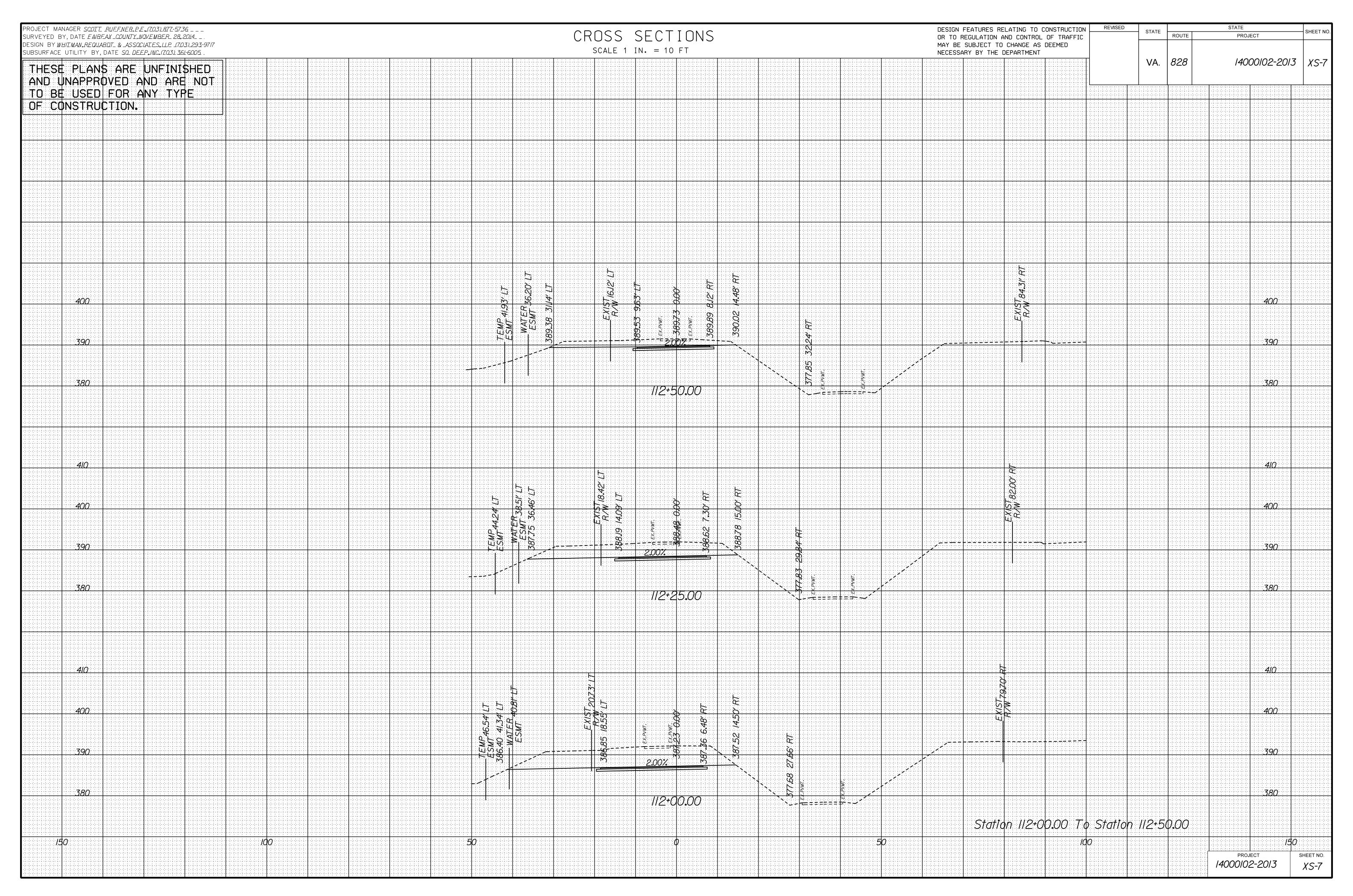




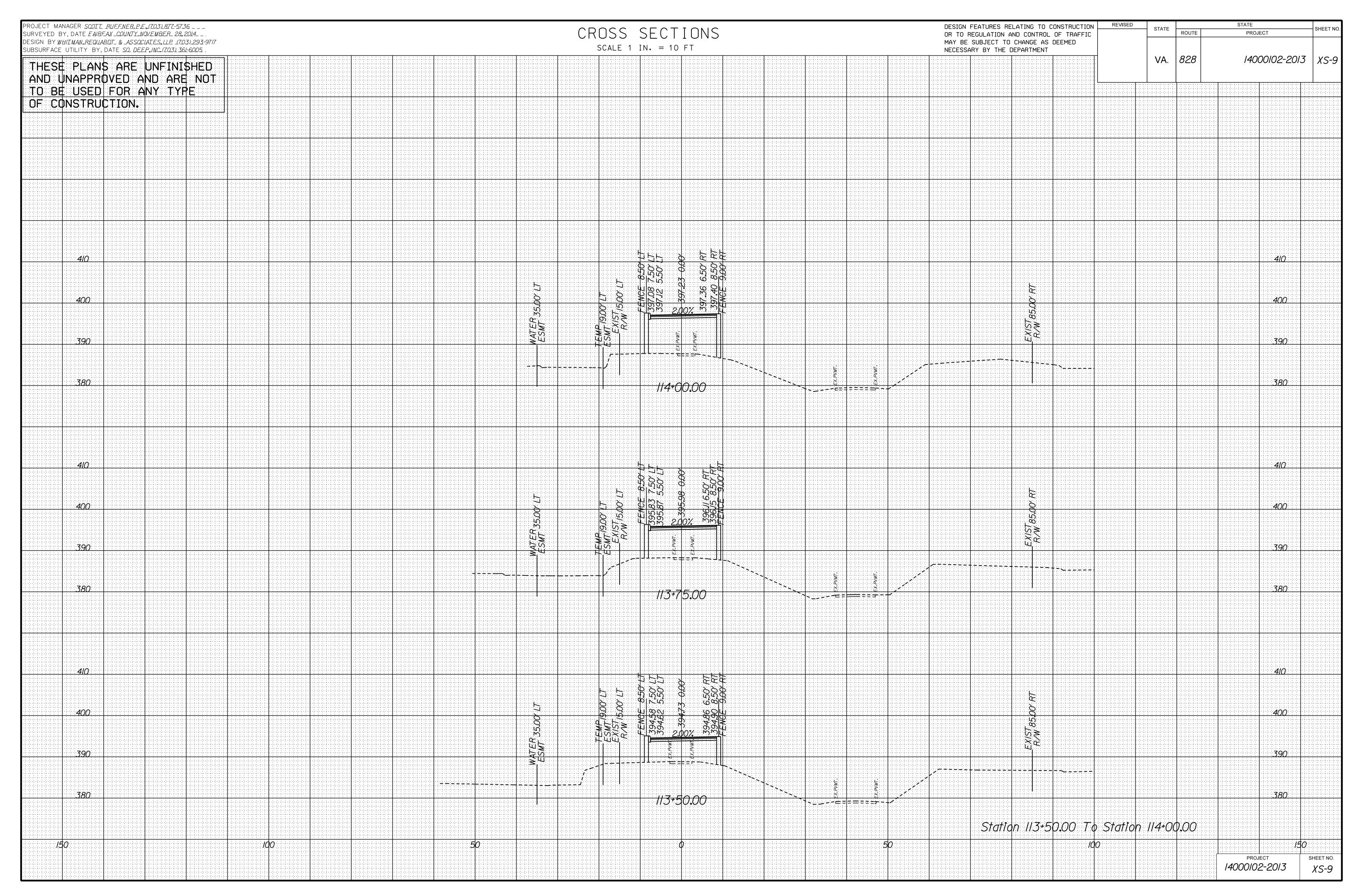








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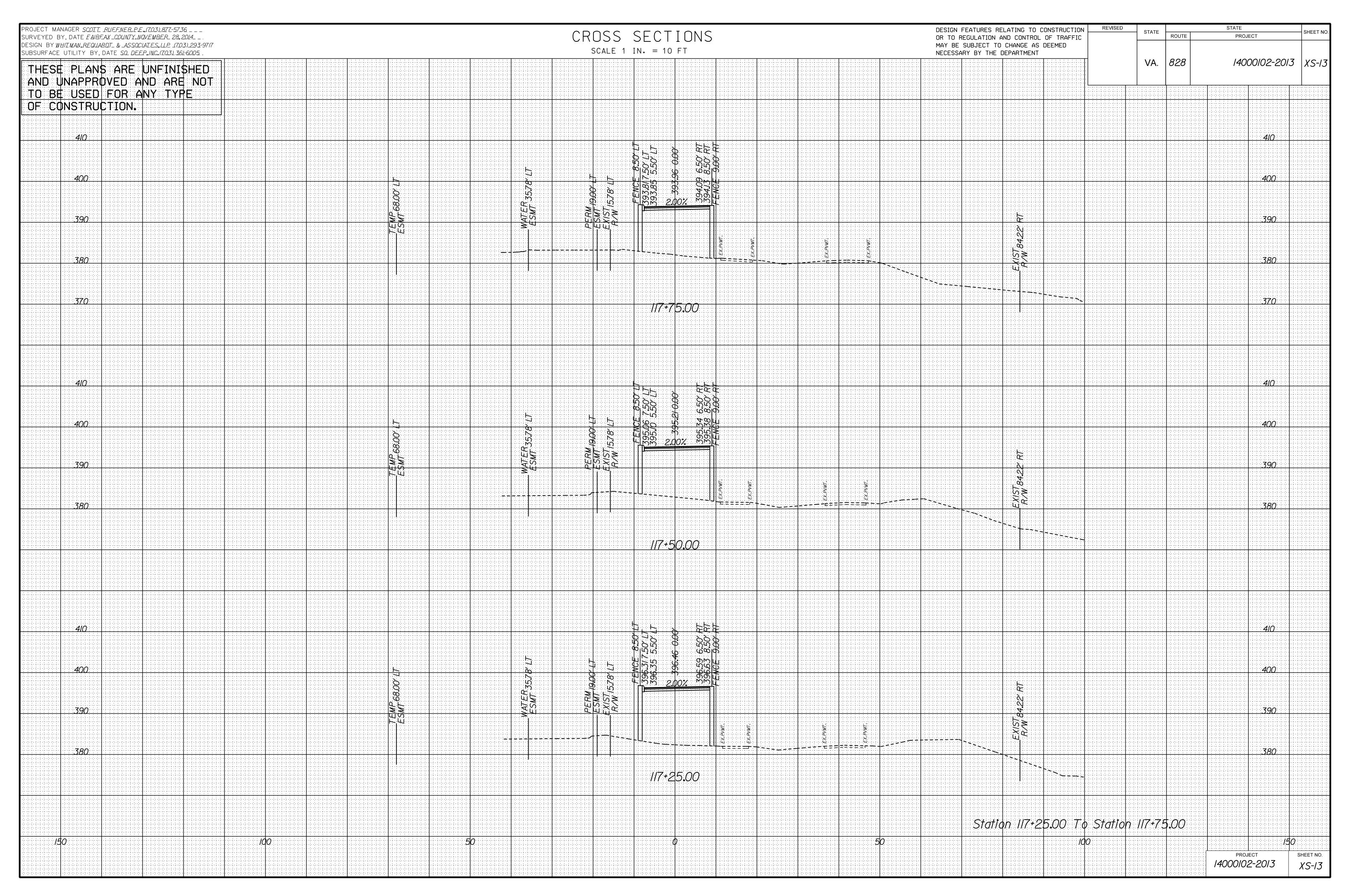


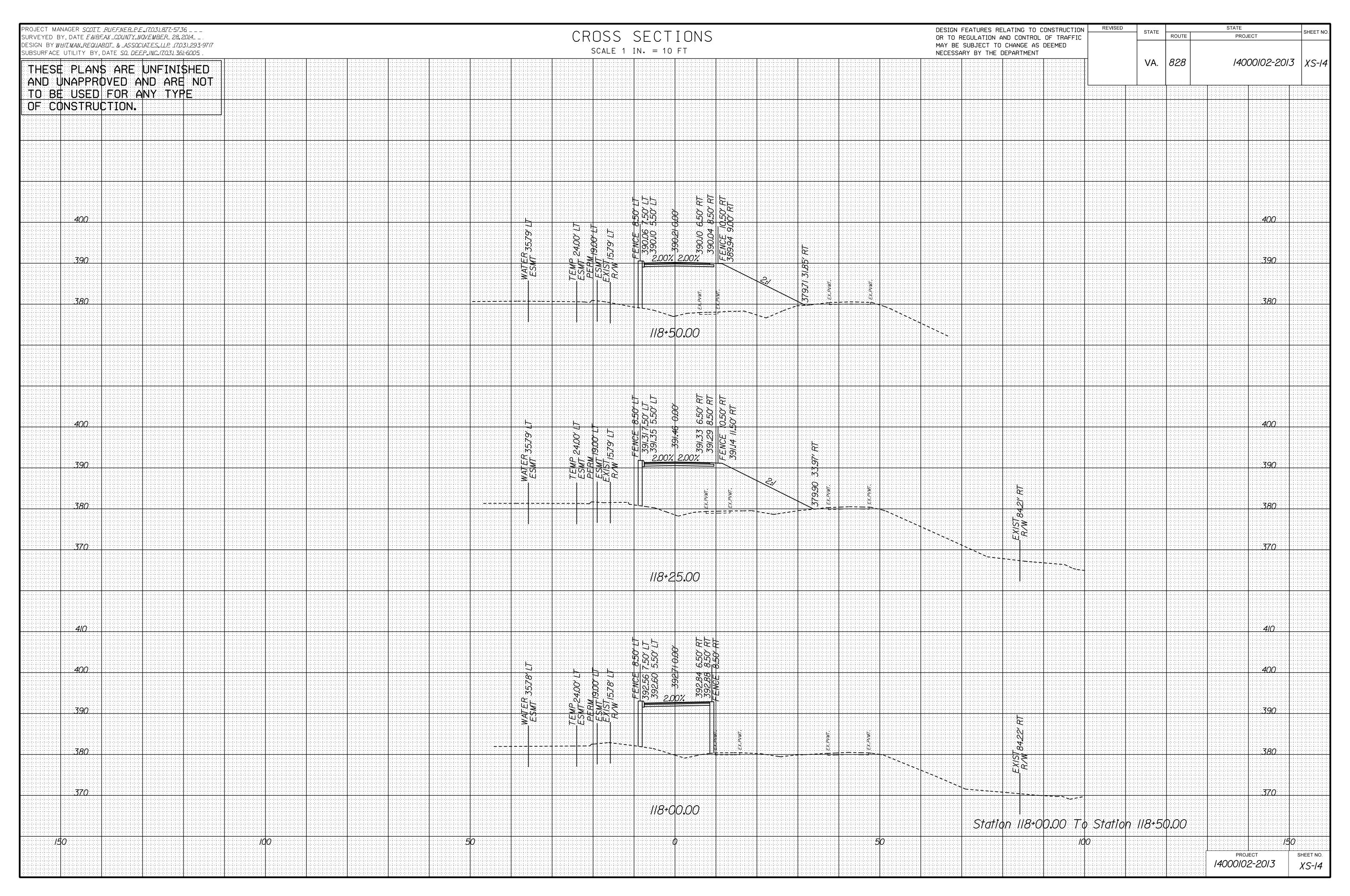
PROJECT MANAGER <i>SCOTT_RUFFNER,P.E.,(703)_877-5736</i> SURVEYED BY, DATE <i>FAIRFAX_COUNTY,NOVEMBER_28,2014</i> DESIGN BY <i>WHITMAN,REQUARDT_&_ASSOCIATES,LLP_(703)_293-9717</i>	CROSS SECTI		DESIGN FEATURES RELATING TO CONSTRUCTION REVISE OR TO REGULATION AND CONTROL OF TRAFFIC	STATE ROUTE	STATE SHEET NO
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PROJECT MANAGER SCOTT RUFFNER, P.E., (703) 877-5736 SURVEYED BY, DATE FAIRFAX _COUNTY, NOVEMBER_ 28, 2014 DESIGN BY WHITMAN, REQUARDT_ & _ASSOCIATES, ILP _(703) 293-9717 SUBSURFACE UTILITY BY, DATE SQ_DEEP, INC. (703) 361-6005 .	CROSS SECTIONS SCALE 1 IN. = 10 FT	DESIGN FEATURES RELATING TO CONSTRUCTION REVISED STATE OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT
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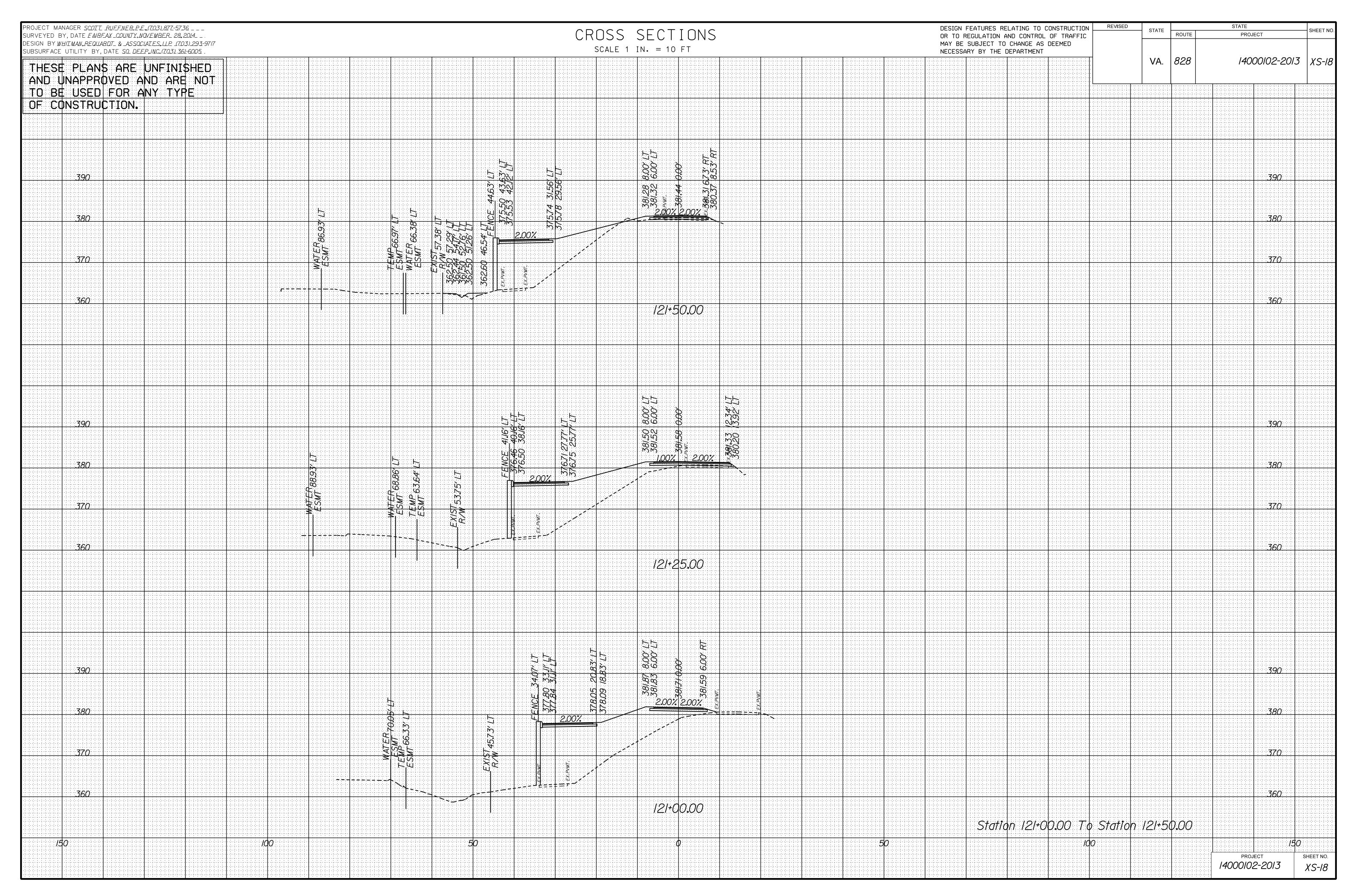




PROJECT MANAGER SCOTT RUFFNER, P.F., (703) 877-5736 SURVEYED BY, DATE FAIRFAX _COUNTY, NOVEMBER_ 28, 2014 DESIGN BY WHITMAN, REQUARDT_ & _ASSOCIATES, LLP_(703) 293-9717	CROSS SECTIONS SCALE 1 IN. = 10 FT	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED REVISED STATE ROUTE PROJECT SHEET NO
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PROJECT MANAGER SCOTT RUFFNER, P.E., (703) 877-5736 SURVEYED BY, DATE FAIRFAX _COUNTY, NOVEMBER_ 28, 2014 DESIGN BY WHITMAN, REQUARDT_ & _ASSOCIATES, ILP _(703) 293-9717 SUBSURFACE UTILITY BY, DATE SO_DEEP, INC. (703) 361-6005 _	CROSS SECTIONS SCALE 1 IN. = 10 FT	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT	ROUTE	STATE SHEET NO.
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380	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			380
370	7. 64 5. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.			370
360				360
	120+75.00			
390	2			3.90
380	3.00.7.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3			380
370	WWATER ESMIT 43.6			370
360				360
390	25 26 23 LT			390
380	17 17 17 17 17 17 17 17 17 17 17 17 17 1			380
370	EX.Pum.			370
360	120+25.00			360
150	50	Station 120+25.00 To	0 STOTTON 12U+15.UU	PROJECT SHEET NO. 14000102-2013 XS-17

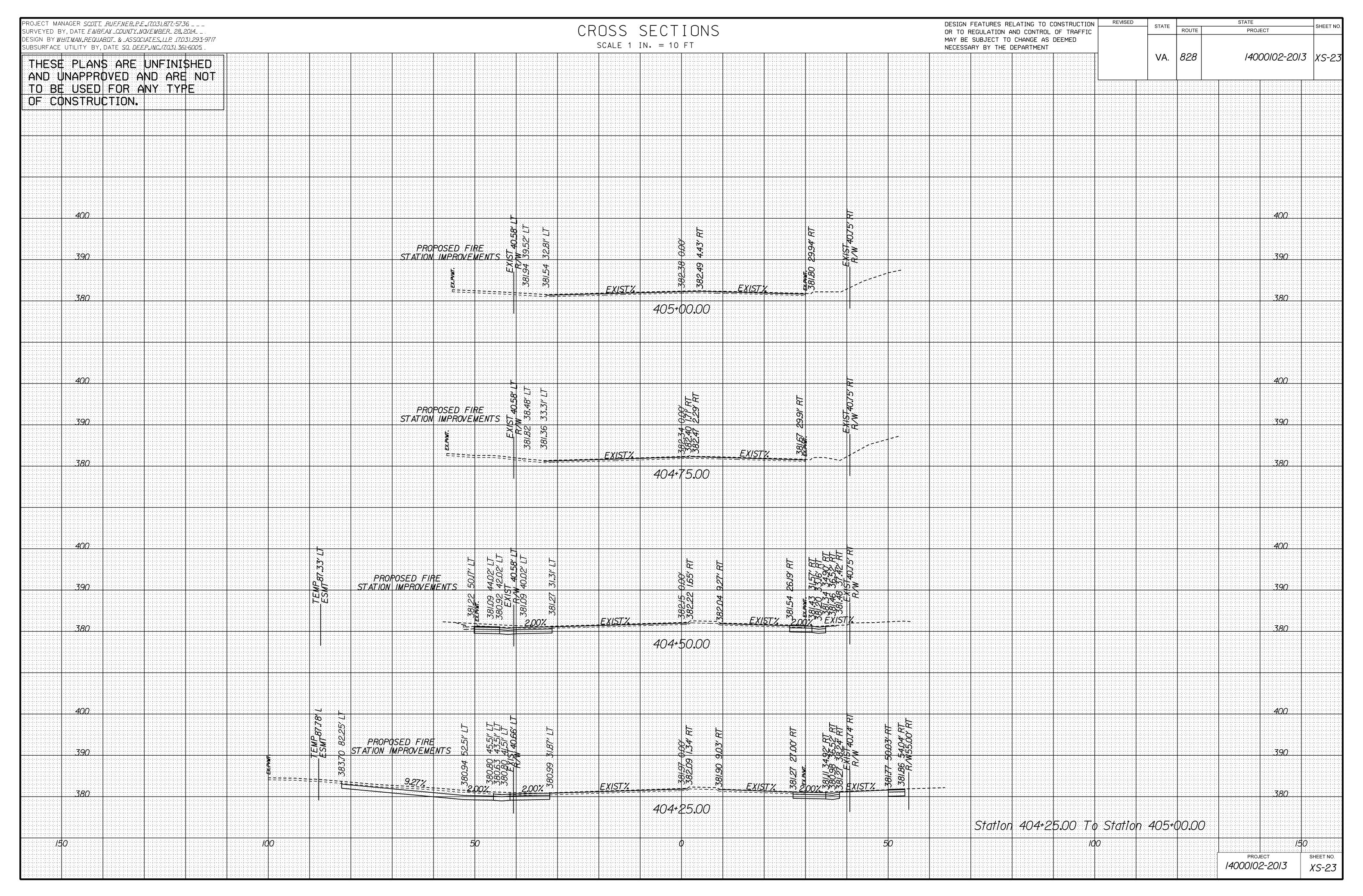


PROJECT MANAGER <u>scott ruffner, p.e.,(703) 877-5736</u> Surveyed by, date <u>fairfax_county, november</u> 28,2014 Design by <u>whitman, requardt</u> & <u>associates, ilp</u> (703) 293-9717 Subsurface utility by, date <u>sq deep, nc.,(703) 361-6005</u> .	CROSS SECTIONS SCALE 1 IN. = 10 FT	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT	REVISED STATE ROUTE	STATE SHEET NO.
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.			VA. 828	14000102-2013 XS-19
				390
3.90	EX.PVMT. 25.82 (17 42.61 (17 43.61 (17 4			380
370				370
390				3.90
380	## 68.00 LT ## 68.00 LT ## 68.50 LT ## 68.50 LT ## 93' L			380
	ESW WATE 370.4 5W 373.94 373.94 373.94 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			370
390				390
380	7. LT 7. LT 7. LT 7. LT 7. LT 8. LT 8. LT 8. LT 7. S. 380.65 8. LT 8. S. 380.65 8. S. 380.			380
370	## 55.63.5 58.00 \$ 55.63.5 58.00 \$ 55.50.5 5.50 \$ 55.75			370
360				360
3.90	7 2 32 72 72 32 65.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 2			3.90
380	77 74 74 74 74 75 77 77 77 77 77 77 77 77 77 77 77 77			380
370 ES	2.38 64.37 3.4855 58 64.37 3.4855 59 64.37 3.4855 59 64.37 3.4855 59 64.37 3.7855 59 64.37 3.7855 59 68 68 68 68 68 68 68 68 68 68 68 68 68			370
360				360
150	50 50	Station 121+75.00 To	o Station 122+50.00	150
				PROJECT SHEET NO. 14000102-2013 XS-19

PROJECT MANAGER SCOTT RUFFNER, P.E., (703) 877-5736 SURVEYED BY, DATE FAIRFAX _COUNTY, NOVEMBER_ 28, 2014 DESIGN BY WHITMAN, REQUARDT_ & _ASSOCIATES, ILP (703) 293-9717 SUBSURFACE UTILITY BY, DATE SO. DEEP, INC. (703) 361-6005 .	CROSS SECTIONS SCALE 1 IN. = 10 FT	DESIGN FEATURES RELATING TO CONSTRUCTION REVISED OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT	TATE STATE SHEET NO.
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.			/A. 828 14000102-2013 XS-20
OF CONSTRUCTION.			
390			390
380	372.92 41.00 LT 372.92 41.00 LT 373.02 39.00 LT 1 Ex.PMT.		380
	123+25.00		
390			3.90
380	37.1.81.43.637.1. 37.3.3.6 41.44.1. 37.3.3.6 29.14.1. 3.1.3.3.6 29.14.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1		380
	123+00.00		
390			3.90
380	37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.5.69 37.59 3		380
	122+75.00		
150	50	Station 122+75.00 To Station 12	3+25.00 150 PROJECT SHEET NO. 14000102-2013 XS-20

PROJECT MANAGER SCOTT RUFFNER, P.E., (703) 877-5736 SURVEYED BY, DATE FAIRFAX _COUNTY, NOVEMBER_ 28, 2014 DESIGN BY WHITMAN, REQUARDT_ & _ASSOCIATES, LLP _(703) 293-9717 SUBSURFACE UTILITY BY, DATE SO. DEEP, INC. (703) 361-6005 _	CROSS SECTIONS SCALE 1 IN. = 10 FT	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT	ROUTE	STATE SHEET NO.
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.			VA. 828	14000102-2013 XS-21
OF CONSTRUCTION.				
390	68.00' LT 67.00' LT 85.00' LT 85.00' LT 700' RT 700' RT 83.50' RT 43.50' RT 43.50' RT	55.50 57.50 7.50 87. 87. 87. 87.		
380	98.088	27.08 20.18 20.18		380
	403+00.00			
390	380.99 66.86 LT 380.54 65.00 LT 380.54 65.00 LT 380.54 65.00 LT EXIST 55.00 LT 539.95 48.50 LT 380.12 8.75 RT 380.12 8.75 RT 380.12 8.75 RT 379.56 27.00 RT 579.56 37.00 RT EXIST 80.12 8.75 RT 379.56 37.00 RT 579.56 37.00 RT 579.56 37.00 RT 579.56 37.00 RT	380.17 53.50. RT 380.27 55.50. RT 380.72 56.52 RT		390
380	6.95.5.	17.1. 0.000 0.000 M.M.M.		380
	402+75.00			
390 7.78.58 7.78.47 7.78.50 7.	70 56.67 LT XIST 59.17 LT XIST 52.67 LT 37.89 RT 47.89 RT	56.87 RT 69.15' RT 95.38' RT		390
380 200%	30%	379.76 379.63 379.63 379.63		380
	402+50.00			
400				400
390				390
380				380
150	402+25.00 50 5	Station 402+25.00 To	Station 403+00.00	/50
				PROJECT SHEET NO. 14000102-2013 XS-21

PROJECT MANAGER SCOTT RUFFNER, P.E., (703) 877-5736 SURVEYED BY, DATE FAIRFAX COUNTY, NOVEMBER 28, 2014 DESIGN BY WHITMAN, REQUARDT & ASSOCIATES, ILP (703) 293-9717 SUBSURFACE UTILITY BY, DATE SO DEEP, INC. (703) 361-6005 .	CROSS SECTIONS SCALE 1 IN. = 10 FT	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT	ROUTE	STATE PROJECT SHEET NO.
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.			VA. 828	14000102-2013 XS-22
OF CONSTRUCTION.				
400				400
PROPOSED FIRE STATION IMPROVEMENTS	84 66.19' LT 60.38' LT 60.36' LT 750.26' LT 7500' RT 35.76' LT 35.76' LT 43.76' RT 43.50' RT	53.50′ RT R/W55.00′ F 55.50′ RT 65 61.96′ RT		39n
		38/.42		380
	404+00.00			
400				400
390	26 69.54 LT 83 64.66 LT 83 64.66 LT 25 54.05 LT 7 27.00 RT 1 9.00 RT 1 39.50 LT 1 39.50 RT 2 88 43.50 RT	3.50° RT 55.50° RT 58.34° RT		390
380	10 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	38/18 53.50 38/22 55.50 382.65 58.34		380
	403+75.00			
400				400
390	24 68.3// LT 558 65.00 LT 558 65.00 LT X/S/500 LT 56 75.00 LT 57 48.50 LT 57 40.50 RT 57 40.50 RT 57 40.50 RT 57 40.50 RT	53.50′ RT 55.50′ RT		390
380	380.24 6831/ 380.24 6831/ 380.24 6831/ 380.24 6831/ 380.25 80.27 6.00/ 380.29 27.00 RT 380.29 27.00 RT 380.29 27.00 RT 380.29 27.00 RT 380.29 27.00 RT 380.29 27.00 RT 380.20 37.00 RT 380.20 42 339.50 RT 380.20 42 82 82 RT 380.20 RT	380.70 382.39 382.39		380
	403+50.00			
390	55.00° LT 40.50° LT 40.50° LT 40.50° LT 40.50° LT 40.50° LT 40.50° LT 40.50° LT 40.50° LT	53.50' RT 55.50' RT 58.53' RT		390
380	67.5	1.380.32 1.380.36 1.380.36		380
	403+25.00	Station 403+25.00 To Statio	on 404+00.00	
/SO // // // // // // // // // // // // //	50)		PROJECT SHEET NO. 14000102-2013 XS-22



PROJECT MANAGER SCOTT RUFFNER, P.E., (703) 877-5736 SURVEYED BY, DATE FAIRFAX _COUNTY, NOVEMBER_ 28, 2014 DESIGN BY WHITMAN, REQUARDT_ & _ASSOCIATES, LLP_ (7.03) 293-9717 SUBSURFACE UTILITY BY, DATE SQ_DEEP, INC. (7.03) 361-6005_	CROSS SECTIONS SCALE 1 IN. = 10 FT	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT	ROUTE	STATE SHEET NO.
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE			VA. 828	14000102-2013 XS-24
OF CONSTRUCTION.				
400				400
390				390
380	405+25.00			380
150	50	50 Station 405+25.00 T	o Station 405+25.00 o	/50
				PROJECT SHEET NO. 14000102-2013 XS-24