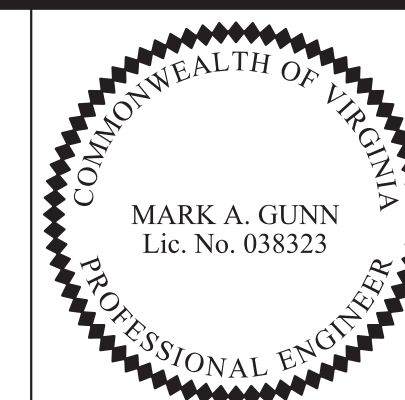


PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889  
SURVEYED BY Rinker Design Assoc., P.C. (703) 368-7373  
DESIGN SUPERVISED BY Mark Gunn, P.E., Rinker Design Assoc., P.C. (703) 368-7373  
DESIGNED BY Adam D. Welschenbach, P.E., Rinker Design Assoc., P.C. (703) 368-7373

# Geometric Data Sheet

## Sta. 30+00 to 36+67.71



Mark A. Gunn  
2014.08.21 07:50:36 -04'00'  
Rinker Design Associates, P.C.  
Manassas, Virginia  
PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID PROJECT OWNER	ROUTE	STATE PROJECT	SHEET NO.
08-23-13 11-21-13 02-26-14	VA.	STP-540(675) RSTP-540(178)	29	0029-151-108 RW-201, C-501	9B

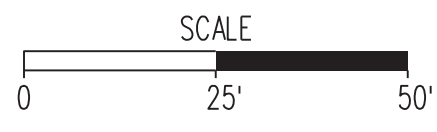
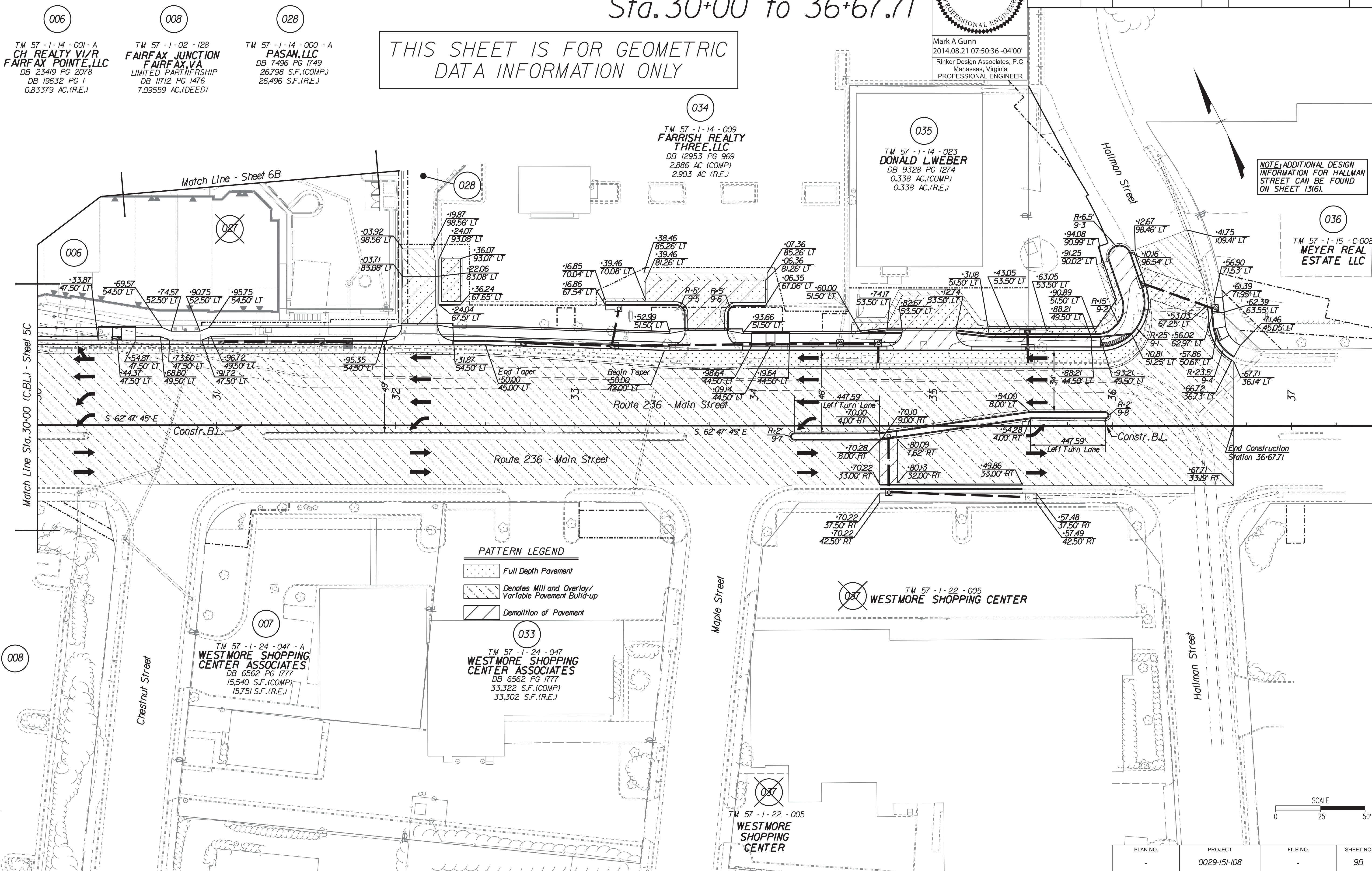
THIS SHEET IS FOR GEOMETRIC DATA INFORMATION ONLY

NOTE: ADDITIONAL DESIGN INFORMATION FOR HALLMAN STREET CAN BE FOUND ON SHEET 13161.

Rinker Design Associates, P.C.  
Civil Engineering  
Transportation - Environmental  
Right of Way Services

NORTHERN VIRGINIA DISTRICT

8/20/2014



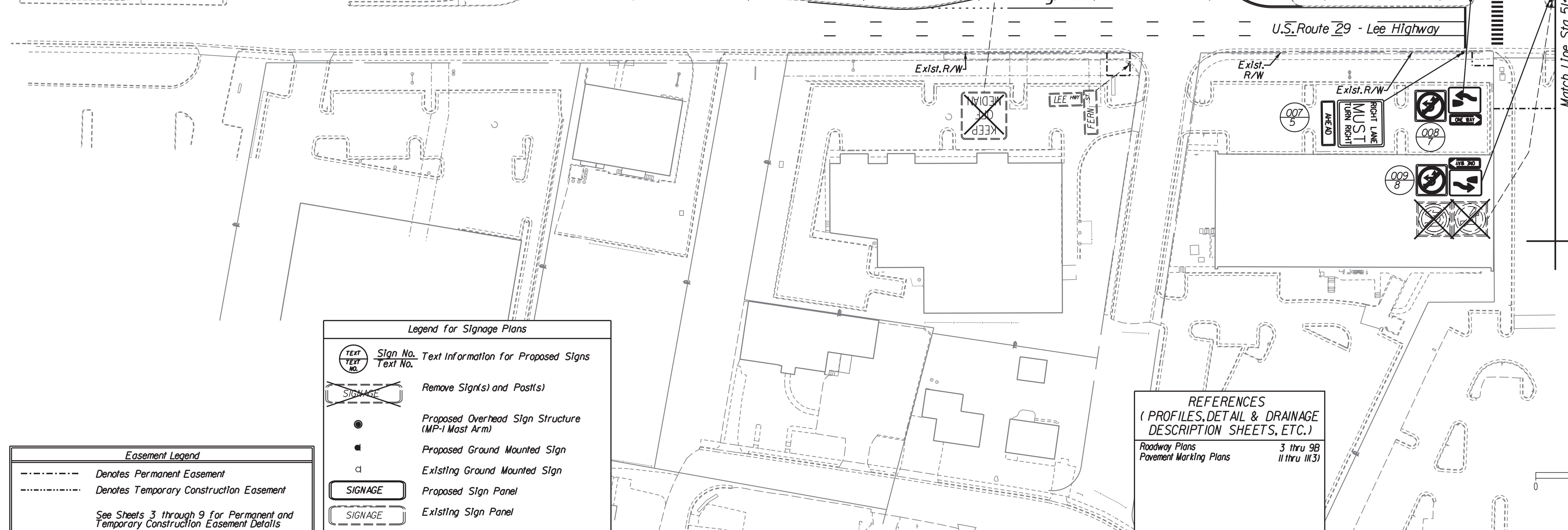
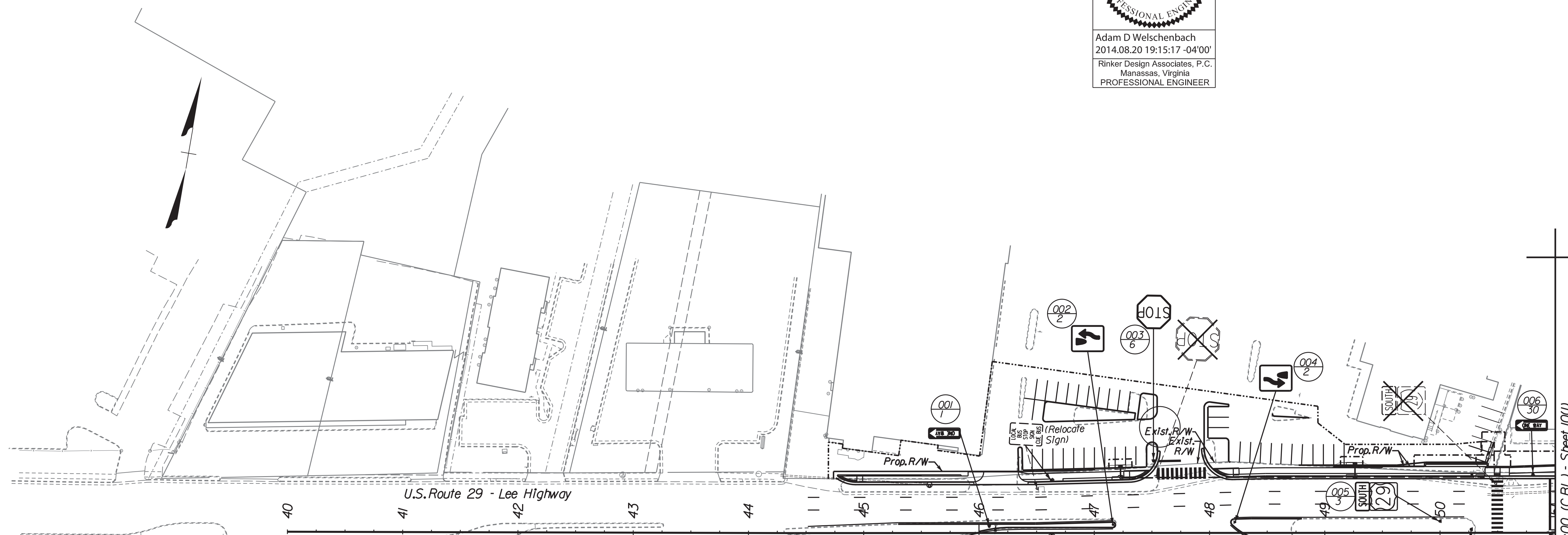
PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0029-151-108		9B

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889  
 SURVEYED BY Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGN SUPERVISED BY Mark Gunn, P.E., Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGNED BY Adam D. Welschenbach, P.E., Rinker Design Assoc., P.C. (703) 368-7373

# SIGNAGE PLANS

Adam D. Welschenbach  
 2014.08.20 19:15:17 -04'00'  
 Rinker Design Associates, P.C.  
 Manassas, Virginia  
 PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
08-23-13	VA.	STP-540(675) RSTP-540(178)	29	0029-151-108 RW-201, C-501	10



**Easement Legend**

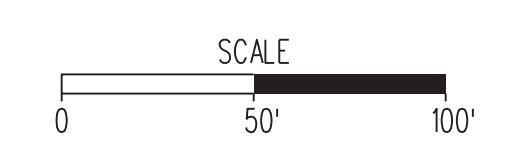
	Denotes Permanent Easement
	Denotes Temporary Construction Easement

See Sheets 3 through 9 for Permanent and Temporary Construction Easement Details

**Legend for Signage Plans**

	Sign No. Text Information for Proposed Signs
	Text No.
	Remove Sign(s) and Post(s)
	Proposed Overhead Sign Structure (MP-1 Mast Arm)
	Proposed Ground Mounted Sign
	Existing Ground Mounted Sign
	Proposed Sign Panel
	Existing Sign Panel

**REFERENCES**  
 (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)  
 Roadway Plans 3 thru 9B  
 Pavement Marking Plans 11 thru 1131



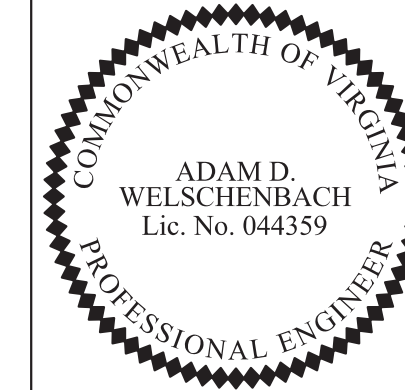
PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	10

Rinker Design Associates, P.C.  
 Civil Engineers  
 Transportation - Environment  
 Right of Way Services  
 Manassas, VA 20108  
 Phone: (703) 368-7373  
 Fax: (703) 368-7373  
 www.rinker.com

NORTHERN VIRGINIA DISTRICT

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889  
 SURVEYED BY Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGN SUPERVISED BY Mark Gunn, P.E., Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGNED BY Adam D. Welschenbach, P.E., Rinker Design Assoc., P.C. (703) 368-7373

# SIGNAGE PLANS



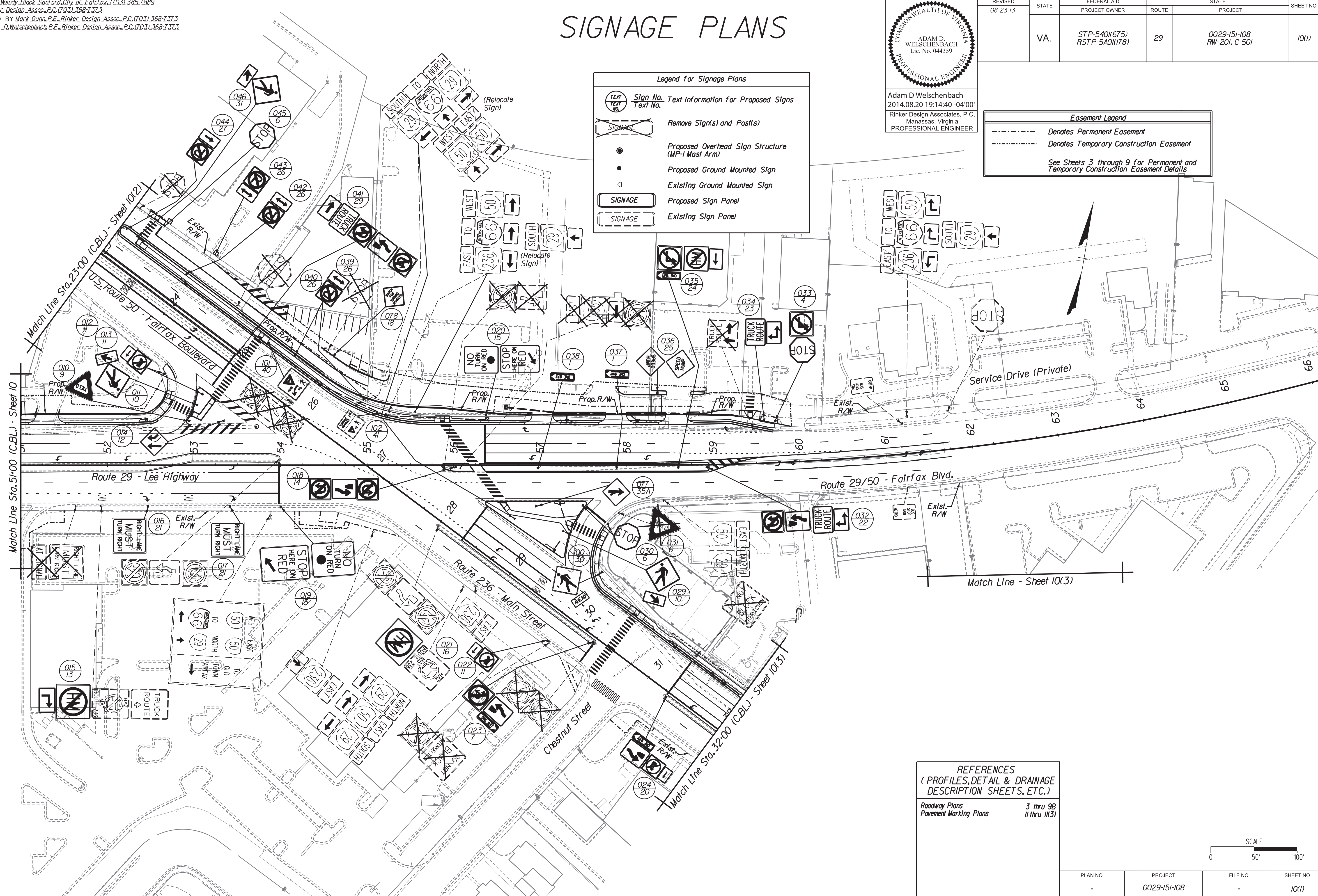
Adam D. Welschenbach  
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 Rinker Design Associates, P.C.  
 Manassas, Virginia  
 PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID PROJECT OWNER	ROUTE	STATE PROJECT	SHEET NO.
08-23-13	VA.	STP-540(675) RSTP-540(178)	29	0029-151-108 RW-201, C-501	10(1)

Easement Legend	
	Denotes Permanent Easement
	Denotes Temporary Construction Easement
See Sheets 3 through 9 for Permanent and Temporary Construction Easement Details	

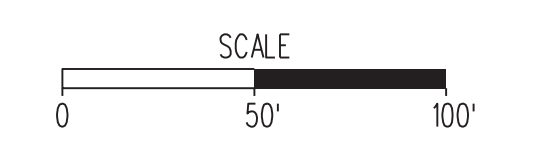
**Legend for Signage Plans**

- Text No.** Text information for Proposed Signs
- Remove Sign(s) and Post(s)
- Proposed Overhead Sign Structure (MP-1 Mast Arm)
- Proposed Ground Mounted Sign
- Existing Ground Mounted Sign
- Proposed Sign Panel
- Existing Sign Panel



**REFERENCES**  
 (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Roadway Plans 3 thru 9B  
 Pavement Marking Plans 11 thru 11(3)



PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	10(1)

Rinker Design Associates, P.C.  
 Civil Engineering, Transportation, Environmental  
 Right of Way Services

NORTHERN VIRGINIA DISTRICT

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889  
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# SIGNAGE PLANS

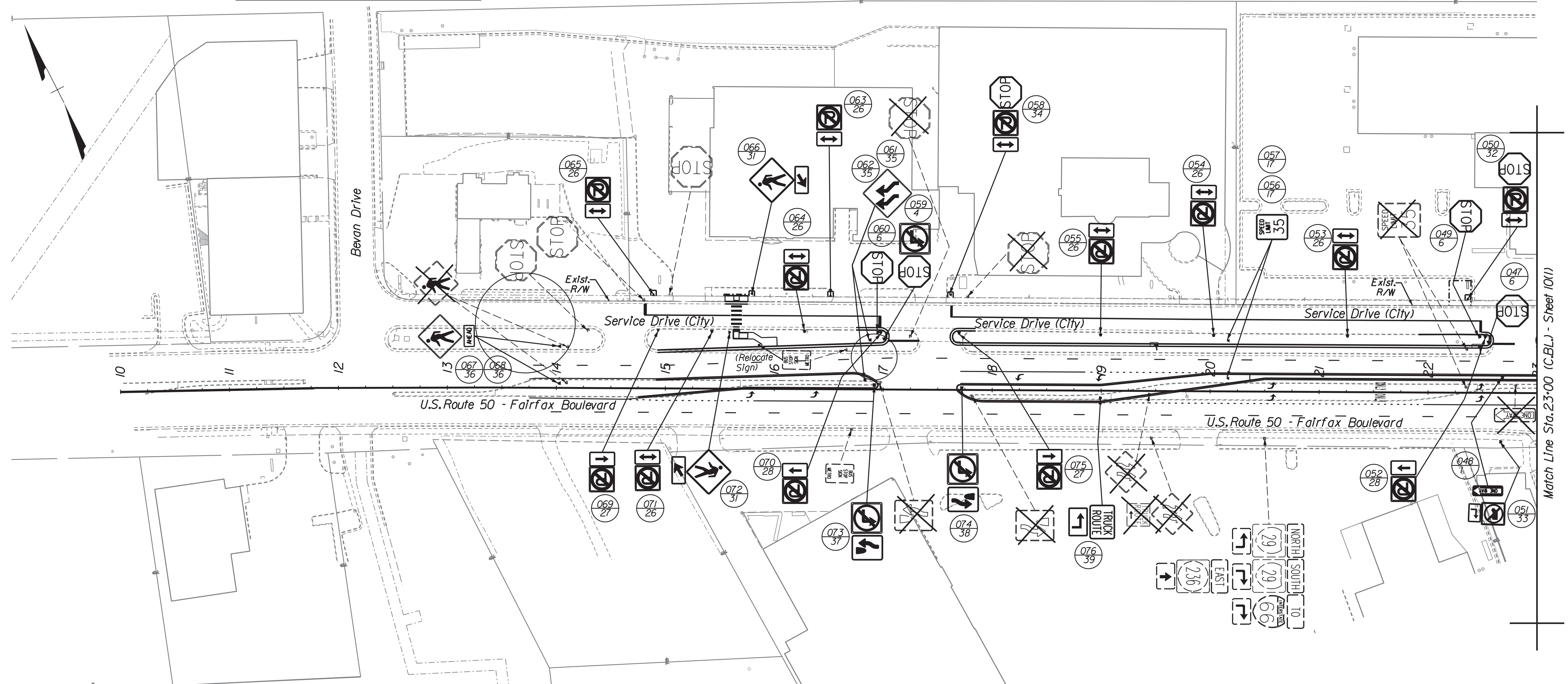
Adam D. Welschenbach  
 2014.08.20 19:13:47 -04'00'  
 Rinker Design Associates, P.C.  
 Manassas, Virginia  
 PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
08-23-13	VA.	PROJECT OWNER		PROJECT	
		STP-540(675) RSTP-5A01(178)	29	0029-151-108 RW-201, C-501	10(2)

**2 HOUR PARKING ANY TIME**

**Note To Contractor:**  
 All Existing 2 Hour Parking Signs On Service Drive shall be removed. The Service Drive is not of sufficient width to permit two-way traffic and parallel parking.

All 6 signs/posts shall be removed/dispensed and existing ground restored.



**Legend for Signage Plans**

**TEXT** Sign No. Text Information for Proposed Signs  
 Text No.

**SIGNAGE** Remove Sign(s) and Post(s)

● Proposed Overhead Sign Structure (MP-1 Mast Arm)

■ Proposed Ground Mounted Sign

□ Existing Ground Mounted Sign

**SIGNAGE** Proposed Sign Panel

**SIGNAGE** Existing Sign Panel

**Easement Legend**

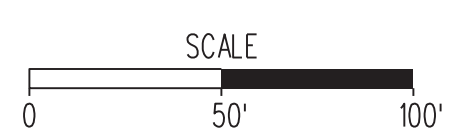
--- Denotes Permanent Easement

- - - - - Denotes Temporary Construction Easement

See Sheets 3 through 9 for Permanent and Temporary Construction Easement Details

**REFERENCES**  
 (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Roadway Plans 3 thru 9B  
 Pavement Marking Plans 11 thru 11(3)



PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0029-151-108		10(2)

Office Locations  
 Manassas, VA  
 Fairfax, VA  
 Falls Church, VA  
 Herndon, VA  
 Reston, VA  
 Springfield, VA  
 Vienna, VA  
 Woodbridge, VA

**Rinker**  
 Design Associates, P.C.  
 Civil Engineers  
 Surveyors  
 Transportation - Environmental  
 Right-of-Way Services

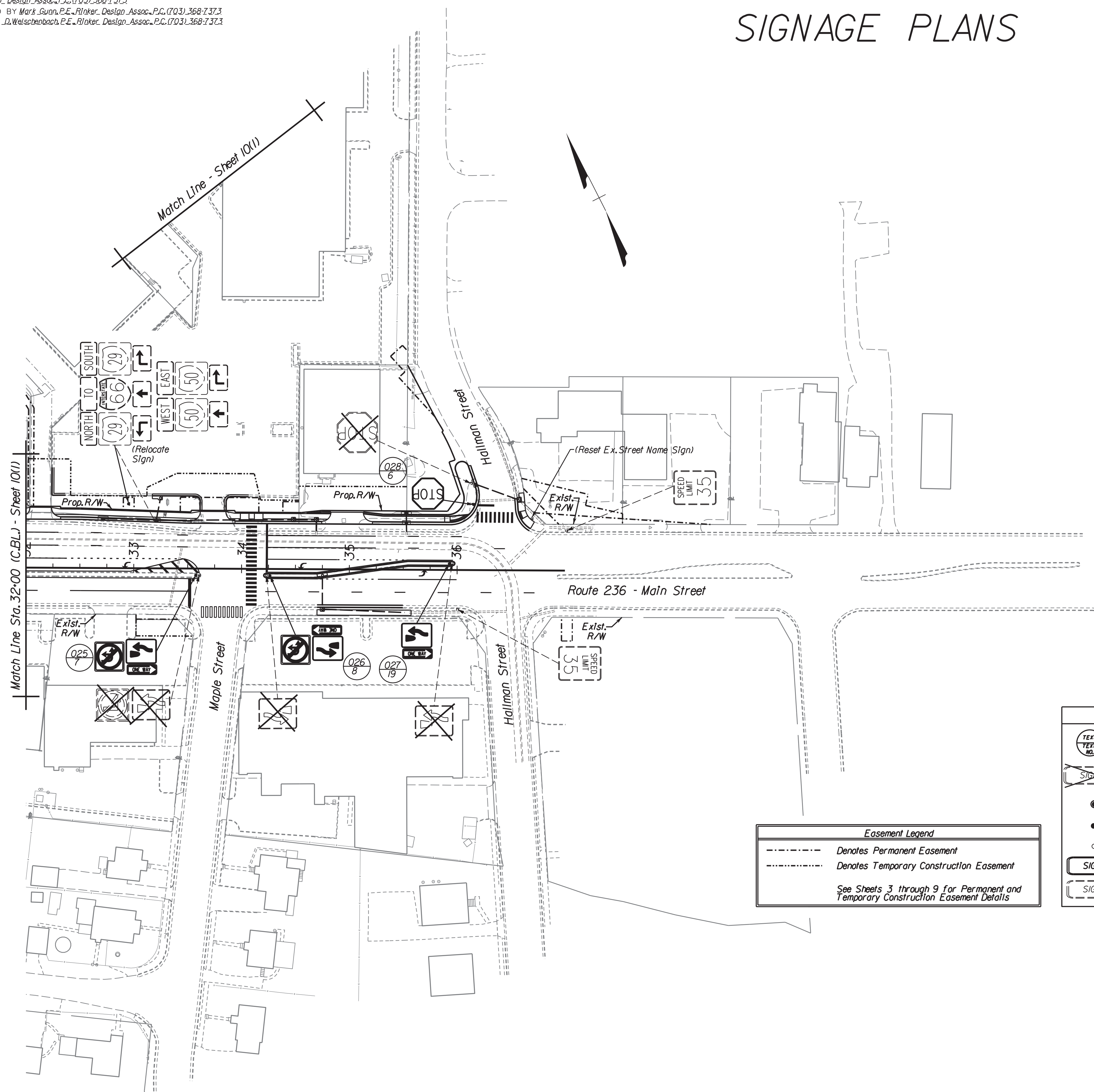
NORTHERN VIRGINIA DISTRICT

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889  
 SURVEYED BY Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGN SUPERVISED BY Mark Gunn, P.E., Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGNED BY Adam D. Welschenbach, P.E., Rinker Design Assoc., P.C. (703) 368-7373

# SIGNAGE PLANS

Adam D. Welschenbach  
 2014.08.20 19:13:13 -04'00'  
 Rinker Design Associates, P.C.  
 Manassas, Virginia  
 PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
08-23-13	VA.	PROJECT OWNER		PROJECT	
		STP-540(675) RSTP-5A01(178)	29	0029-151-108 RW-201, C-501	10(3)



**Easement Legend**

- Denotes Permanent Easement
- - - - Denotes Temporary Construction Easement

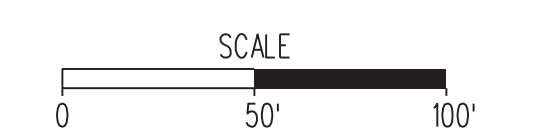
See Sheets 3 through 9 for Permanent and Temporary Construction Easement Details

**Legend for Signage Plans**

- Text No. Text Information for Proposed Signs
- Remove Sign(s) and Post(s)
- Proposed Overhead Sign Structure (MP-1 Mast Arm)
- Proposed Ground Mounted Sign
- Existing Ground Mounted Sign
- Proposed Sign Panel
- Existing Sign Panel

**REFERENCES**  
 (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Roadway Plans 3 thru 9B  
 Pavement Marking Plans 11 thru 11(3)



PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	10(3)

Rinker Design Associates, P.C.  
 Civil Engineers  
 Transportation - Environmental  
 Right of Way Services

NORTHERN VIRGINIA DISTRICT

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889  
 SURVEYED BY Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGN SUPERVISED BY Mark Gunn, Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGNED BY Adam D. Welschenbach, P.E., Rinker Design Assoc., P.C. (703) 368-7373

# Permanent Signage Schedule

Adam D. Welschenbach  
 2014.08.20 19:12:42 -04'00'  
 Rinker Design Associates, P.C.  
 Manassas, Virginia  
 PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID PROJECT OWNER	ROUTE	STATE PROJECT	SHEET NO.
	VA.	STP-540(675) RSTP-540(178)	29	0029-151-108 RW-201, C-501	10(4)

TEXT NO.	TEXT	SIGN NO.	SIGN STRUCT. STD.	PANEL SIZE		LETTER TYPE	COLOR COMB.	SIGN AREA SQ.FT.	STD. NO.	REMARKS
				WIDTH INCHES	HEIGHT INCHES					
1		001,037,038,048	STP-1, 2 1/2" 10 GA. Single Post	36	12	L-1	C-16	3	R6-1(R)	
2		002,004	STP-1, 2 1/2" 10 GA. Single Post	24	30	L-1	C-1	5	R4-7	
3		005	STP-1, 2 1/2" 10 GA. Single Post	24	12	L-1	C-1	2	M3-3	
				24	24	L-1	C-1	4	M1-4	
4		033,059	STP-1, 2 1/2" 10 GA. Single Post	30	30	L-1	C-10	6.25	R1-1	
				24	24	L-1	C-21	4	R3-2	
5		007	STP-1, 2 1/2" 10 GA. Single Post	30	30	L-1	C-1	6.25	R3-7(R)	
				30	18	L-1	C-1	3.75	W16-9P	
6		003,028,030,031,045, 047,049,060	STP-1, 2 1/2" 10 GA. Single Post	30	30	L-1	C-10	6.25	R1-1	
7		008,023,025	STP-1, 2 1/2" 10 GA. Single Post	24	24	L-1	C-21	4	R3-1B	
				24	30	L-1	C-1	5	R4-7	
				36	12	L-1	C-16	3	R6-1(R)	
8		009,026	STP-1, 2 1/2" 10 GA. Single Post	24	24	L-1	C-21	4	R3-1B	
				24	30	L-1	C-1	5	R4-7	
				36	12	L-1	C-16	3	R6-1(R)	
9		010	STP-1, 2 1/2" 10 GA. Single Post	See Remarks	See Remarks	L-1	C-20	4.5	R1-2	Sign is 36"x36"x36"
10		011,029	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	36	36	L-1	C-8	9	W11-2	Inner post shall be no less than 6 feet in length.
				24	12	L-1	C-8	2	W16-7P(R)	
11		012,013,022	STP-1, 2 1/2" 10 GA. Single Post	24	24	L-1	C-21	4	R5-2	
				24	18	L-1	C-1	3	W16-5P	

TEXT NO.	TEXT	SIGN NO.	SIGN STRUCT. STD.	PANEL SIZE		LETTER TYPE	COLOR COMB.	SIGN AREA SQ.FT.	STD. NO.	REMARKS
				WIDTH INCHES	HEIGHT INCHES					
12		014	STP-1, 2 1/2" 10 GA. Single Post	36	36	L-1	C-8	9	W4-3	
13		015	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	Exist. 24	Exist. 24	-- L-1	-- C-21	-- 4	Exist. R14-3	Existing sign panels shall be relocated to new STP-1 post. Sign Panel Type C (Std SPD-5)
				24	18	L-1	C-1	3	W16-6P	Inner post shall be no less than 6 feet in length.
14		018	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	24	24	L-1	C-21	4	R3-4	Inner post shall be no less than 6 feet in length.
				24	30	L-1	C-1	5	R4-7	
				24	24	L-1	C-21	4	R3-4	
15		019,020	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	24	30	L-1	C-1	5	R10-11	Inner post shall be no less than 6 feet in length.
				24	36	L-1	C-1	6	R10-6	
16		021	STP-1, 2 1/2" 10 GA. Single Post	Exist. 24	Exist. 24	-- L-1	-- C-21	-- 4	Exist. R14-3	Existing sign panel shall be relocated to new STP-1 post. Sign Panel Type B (Std SPD-5)
17		056,057	STP-1, 2 1/2" 10 GA. Single Post	30	36	L-1	C-1	7.5	R2-1	
18		078	STP-1, 2 1/2" 10 GA. Single Post	36	36	L-1	C-8	9	W11-3	The City is not responsible for this sign after installation
19		027	STP-1, 2 1/2" 10 GA. Single Post	24	30	L-1	C-1	5	R4-7	
				36	12	L-1	C-16	3	R6-1(R)	

Orientation of sign(s) shall follow plan and shall be installed per the the direction of the City Traffic Engineer

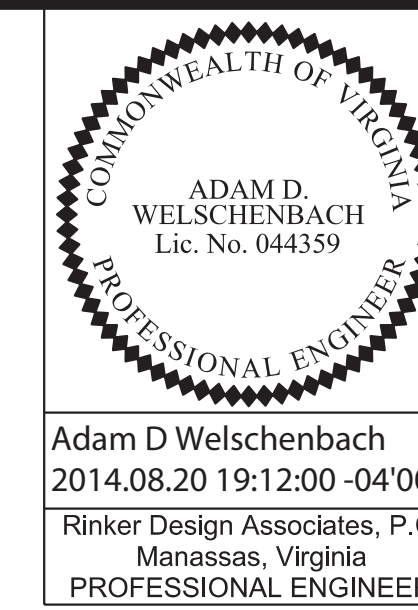
Office Locations: Manassas, VA, Arlington, VA, Fairfax, VA, Falls Church, VA, Herndon, VA, Reston, VA, Vienna, VA, Washington, DC  
 Rinker Design Associates, P.C.  
 Civil Engineers, Surveyors, Environmental Engineers, Transportation Engineers, Right-of-Way Services  
 www.rinker.com

NORTHERN VIRGINIA DISTRICT

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	10(4)

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889  
 SURVEYED BY Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGN SUPERVISED BY Mark Gunn, P.E., Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGNED BY Adam D. Welschenbach, P.E., Rinker Design Assoc., P.C. (703) 368-7373

# Permanent Signage Schedule Cont.



Adam D Welschenbach  
 2014.08.20 19:12:00 -04'00'  
 Rinker Design Associates, P.C.  
 Manassas, Virginia  
 PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID PROJECT OWNER	ROUTE	STATE PROJECT	SHEET NO.
	VA.	STP-540(675) RSTP-5A01(178)	29	0029-151-108 RW-201, C-501	10(5)

TEXT NO.	TEXT	SIGN NO.	SIGN STRUCT. STD.	PANEL SIZE		LETTER TYPE	COLOR COMB.	SIGN AREA SQ.FT.	STD. NO.	REMARKS
				WIDTH INCHES	HEIGHT INCHES					
20		024	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	36 24 24 24	12 30 24 18	L-1 L-1 L-1 L-1	C-16 C-1 C-21 C-1	2 5 4 3	R6-1(R) R4-7 R5-2 W16-5P	Inner post shall be no less than 6 feet in length.
21		016,017	STP-1, 2 1/2" 10 GA. Single Post	30	30	L-1	C-1	6.25	R3-7R	
22		032	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	24 24 24 21	24 30 18 15	L-1 L-1 L-1 L-1	C-21 C-1 C-1 C-1	4 5 3 2.18	R3-4 R4-7 R14-1 M6-6	Inner post shall be no less than 6 feet in length.
23		034	STP-1, 2 1/2" 10 GA. Single Post	24 21	18 15	L-1 L-1	C-1 C-1	3 2.18	R14-1 M6-6	
24		035	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	24 36 24 24	24 12 24 18	L-1 L-1 L-1 L-1	C-21 C-16 C-21 C-1	4 3 4 3	R3-2 R6-1(I) R14-3 W16-5P	Inner post shall be no less than 6 feet in length.
25		036	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	30 30	30 30	L-1 L-1	C-21 C-21	6.25 6.25	W17-1 W17-1	Inner post shall be no less than 6 feet in length. The City is not responsible for these signs after installation
26		039,040,042,043,053,054,055,063,064,065,071	STP-1, 2 1/2" 10 GA. Single Post	24 21	24 15	L-1 L-1	C-21 C-1	4 2.18	R8-3 M6-4	
27		044,069,075	STP-1, 2 1/2" 10 GA. Single Post	24 24	24 18	L-1 L-1	C-21 C-1	4 3	R8-3 W16-5P	
28		052,070	STP-1, 2 1/2" 10 GA. Single Post	24 24	24 18	L-1 L-1	C-21 C-1	4 3	R8-3 W16-5P(R)	
29		041	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	24 24 24 24 24	18 18 24 30 24	L-1 L-1 L-1 L-1 L-1	C-1 C-1 C-21 C-1 C-21	3 3 4 5 4	R14-1 W16-5P R3-4 R4-7 R3-4	Inner post shall be no less than 6 feet in length.

TEXT NO.	TEXT	SIGN NO.	SIGN STRUCT. STD.	PANEL SIZE		LETTER TYPE	COLOR COMB.	SIGN AREA SQ.FT.	STD. NO.	REMARKS
				WIDTH INCHES	HEIGHT INCHES					
30		006	STP-1, 2' 12" GA. Single Post	36	12	L-1	C-16	3	R6-1L	
31		046,066,072	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	36 24	36 12	L-1 L-1	C-8 C-8	9 2	W11-2 W16-7P(R)	Inner post shall be no less than 6 feet in length.
32		050	STP-1, 2 1/2" 10 GA. Single Post	30 24 21	30 24 15	L-1 L-1 L-1	C-10 C-21 C-1	6.25 4 2.18	R1-1 R8-3 M6-4	
33		051	STP-1, 2 1/2" 10 GA. Single Post	24 24	24 18	L-1 L-1	C-21 C-1	4 3	R5-2 W16-6P(R)	
34		058	STP-1, 2 1/2" 10 GA. Single Post	30 24 21	30 24 15	L-1 L-1 L-1	C-10 C-21 C-1	6.25 4 2.18	R1-1 R8-3 M6-4	
35		061,062	STP-1, 2 1/2" 10 GA. Single Post	36	36	L-1	C-8	9	W1-4b	
35A		077	STP-1, 2 1/2" 10 GA. Single Post	36	36	L-1	C-8	9	W4-1	

Orientation of sign(s) shall follow plan and shall be installed per the the direction of the City Traffic Engineer

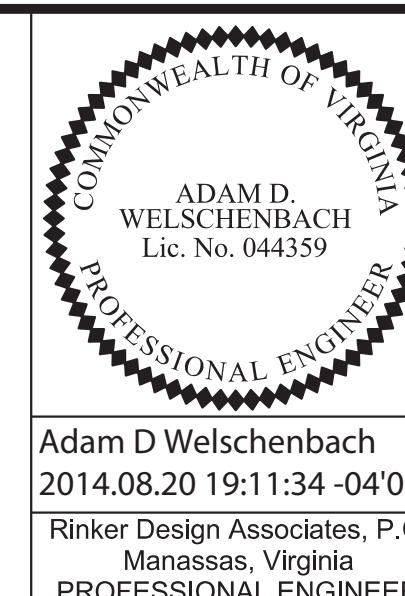
Rinker Design Associates, P.C.  
 Civil Engineers, Surveyors, Environmental Planners, Transportation Engineers, Right-of-Way Services  
 11000 Lee Highway, Suite 1000, Manassas, VA 20108  
 Phone: (703) 368-7373 Fax: (703) 368-7374  
 www.rinker.com

NORTHERN VIRGINIA DISTRICT

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	10(5)

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889  
 SURVEYED BY Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGN SUPERVISED BY Mark Gunn, P.E., Rinker Design Assoc., P.C. (703) 368-7373  
 DESIGNED BY Adam D. Welschenbach, P.E., Rinker Design Assoc., P.C. (703) 368-7373

# Permanent Signage Schedule Cont.



Adam D Welschenbach  
 2014.08.20 19:11:34 -04'00'  
 Rinker Design Associates, P.C.  
 Manassas, Virginia  
 PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID PROJECT OWNER	ROUTE	STATE PROJECT	SHEET NO.
	VA.	STP-540(675) RSTP-540(178)	29	0029-151-108 RW-201, C-501	10(6)

- SIGNAGE GENERAL NOTES:**
- Unless otherwise specified, the Contractor shall have the option of refurbishing framing members on existing sign panels, or furnishing new sign panels with corresponding sign message for mounting on new breakaway post.
  - Unless otherwise approved by the Engineer, existing traffic signs, which are to be removed, shall remain in place until the new sign structure and critical message are in place.
  - The Contractor shall notify the Engineer at least five days prior to the proposed delivery date. Salvaged materials shall be delivered to the City during normal work hours and days and properly stored as directed by the Engineer.
  - All sign panels, framing members and miscellaneous hardware shall be salvaged by the Contractor for the City delivered intact to: City of Fairfax Signal/Sign Shop
  - A majority of the sign structures shall be located within 3' of the sign's proposed location or proposed relocation as shown on the plans. All signs shown to be placed within a proposed sign easement or signage easement, shall be placed within the easement and the proposed location shall not be altered. If installation of a proposed sign or proposed relocation of sign within a proposed signage easement will conflict with a utility service, the Contractor shall notify City 120 days prior to installation of the sign to coordinate a new location.
  - Proposed signs and sign structures shall not impact underground existing utilities. Contractor is responsible for any disruption in Utility Service due to digging for signage structure. If Proposed signage location will cause impact to existing Utility Service, sign location shall be relocated at the approval of the City Traffic Engineer at no additional cost.
  - All signs, as necessary or directed by the Engineer shall be installed in accordance with S'd STP-1, with new breakaway metal posts. All signs, as necessary or directed by the Engineer, designated to be relocated shall be re-installed in such a manner that the relocated sign complies with S'd STP-1.
  - For all sign post foundations (when utilizing STP-1's) Contractor shall follow VDOT S'd STP-1.
  - All additional framing materials required for SP-5 panels (Types L, P, & U) shall be included with the price per square foot of panels.
  - The back of all new sign panels shall be fabricated black in color and all S'd STP-1 Posts shall be fabricated to be black in color.

Orientation of sign(s) shall follow plan and shall be installed per the the direction of the City Traffic Engineer

TEXT NO.	TEXT	SIGN NO.	SIGN STRUCT. STD.	PANEL SIZE		LETTER TYPE	COLOR COMB.	SIGN AREA SQ.FT.	STD. NO.	REMARKS
				WIDTH INCHES	HEIGHT INCHES					
36		067.068.100	STP-1, 2 3/16" & 2 1/2" 10 GA. Single Post	36 24	36 12	L-1 L-1	C-8 C-8	9 2	W11-2 W16-9P	Inner post shall be no less than 6 feet in length.
37		073	STP-1, 2 1/2" 10 GA. Single Post	24 24	24 30	L-1 L-1	C-2I C-1	4 5	R3-2 R4-7	
38		074	STP-1, 2 1/2" 10 GA. Single Post	24 24	24 30	L-1 L-1	C-2I C-1	4 5	R3-2 R4-7	
39		076	STP-1, 2 1/2" 10 GA. Single Post	24 24	18 18	L-1 L-1	C-1 C-1	3 3	R14-1 W16-6P	
40		101	STP-1, 2 1/2" 10 GA. Single Post	36	36	L-1	C-1	9	R1-5	
41		102	STP-1, 2 1/2" 10 GA. Single Post	30	30	L-1	C-1	6.25	R10-15	Flourescent yellow/green background required for top half of sign

**Definition of Propose Text Symbol**

	TEXT = The Top Section Indicates the Sign Number as Referenced on This Sheet
	TEXT NO. = The Bottom Section Indicates the Text Number as Referenced on This Sheet

Some existing signs are shown for clarity and it is intended that they will remain. Existing signs in the field not shown on the plans are intended to remain or are not the property of the City of Fairfax.

**MEASUREMENT & PAYMENT ITEMS**

Note: Measurement and payment items not applicable to the project have been removed from sheet.

- Remove Sign as crossed out on Signage Plan Sheets:
- A REMOVE AND DISPOSE SIGN STRUCTURE**  
 Will be measured in units of each and paid for at the contract unit price per each, which shall be full compensation for the removal and disposal of sign panels, posts and foundations to at least 2 feet below existing ground line, backfilling and restoration (top soiling, and seeding), and for all materials, labor, tools, equipment and incidentals necessary to complete the work.
  - B RELOCATE EXISTING SIGN PANEL, TYPE (SP-5)\*\***  
 Will be measured in units of each and paid for at the contract unit price per each, which shall be full compensation for removing existing sign panel, refurbishing framing members, furnishing and installing necessary back panels, erecting existing sign panels to new breakaway posts in conformance with S'd STP-1 and for all materials (including Concrete Class A1 for S'd STP-1 Foundation), labor, tools, equipment and necessary incidentals to complete the work.  
 This pay item shall also include the cost to dispose the existing post, and the purchase of a new breakaway post in conformance with S'd STP-1.  
 This pay item shall also include the cost to remove and dispose the existing post's foundation to at least 2 feet below existing ground line, backfilling and restoration (top soiling and seeding).
- \*\*Only the sign posts containing multiple route number signs can be relocated "in-kind" with a new wood post matching the existing sign post size. Contractor to field verify sign post size prior to installation. There are only three (3) of these structures to be relocated. ALL other signs/posts designated relocated, shall be relocated onto a new S'd STP-1 with a S'd STP-1 Conc. Foundation.

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DESIGNED BY Adam D. Welschenbach, P.E., Rinker Design Assoc., P.C. (703) 368-7373

# PAVEMENT MARKING PLANS

COMMONWEALTH OF VIRGINIA  
 ADAM D. WELSCHENBACH  
 Lic. No. 044359  
 PROFESSIONAL ENGINEER

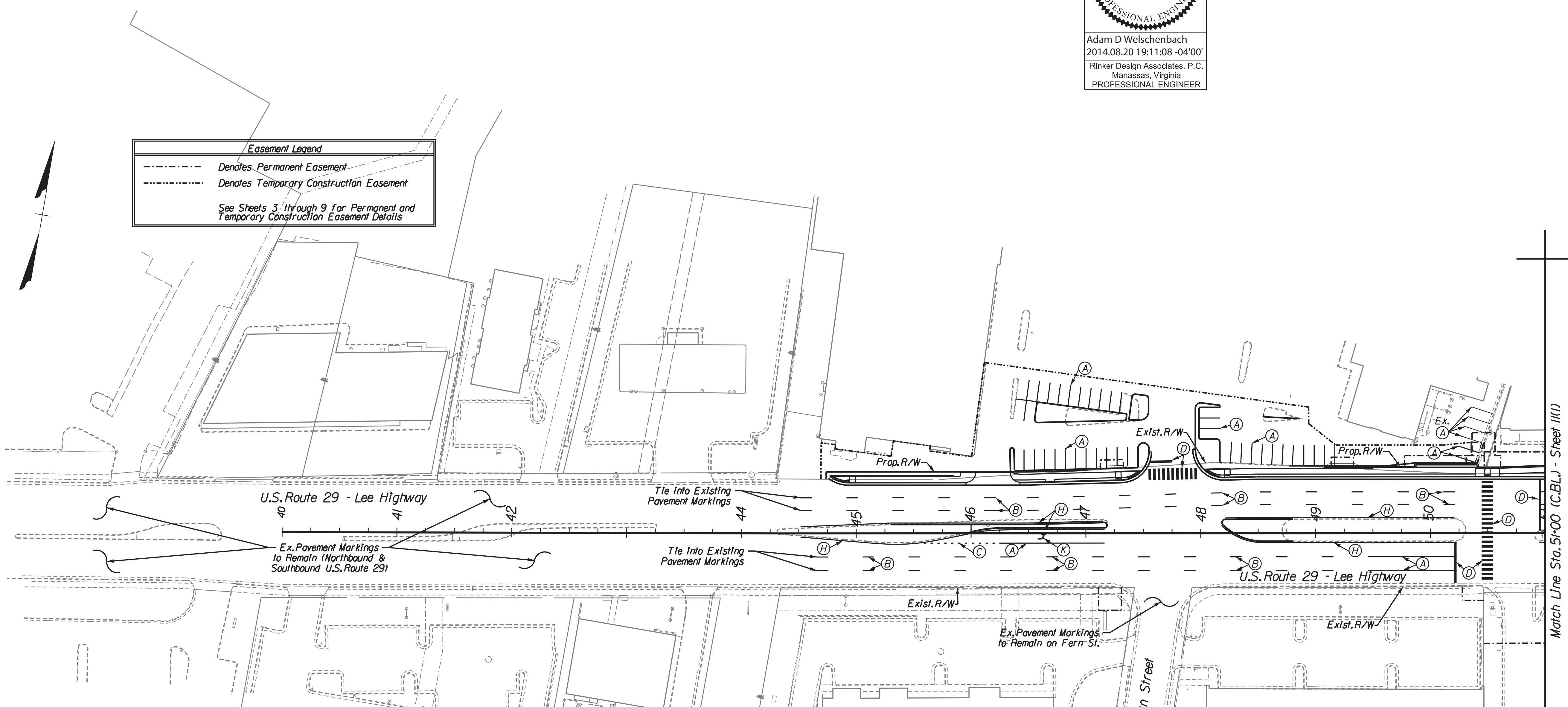
Adam D Welschenbach  
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 Rinker Design Associates, P.C.  
 Manassas, Virginia  
 PROFESSIONAL ENGINEER

REVISED 08-23-13	STATE VA.	FEDERAL AID PROJECT OWNER STP-540(675) RSTP-5A01(178)	ROUTE 29	STATE PROJECT 0029-151-108 RW-201, C-501	SHEET NO. 11
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**Easement Legend**

--- Denotes Permanent Easement  
 - - - - Denotes Temporary Construction Easement

See Sheets 3 through 9 for Permanent and Temporary Construction Easement Details



**\*\* Pavement Marking Legend \*\***

- A Type B, Class I, White, 4" Width
- B Type B, Class I, White, 4" Width, 10' Long, 30' Space
- C Type B, Class I, White, 4" Width, 2' Long, 4' Space
- D Type B, Class I, White, 24" Width
- E Type B, Class I, White, 24" Width, 20' Spacing @ 45'
- F Type B, Class I, White, 8" Width, 3' Long, 9' Space
- G Type B, Class I, White, 8" Width
- H Type B, Class I, Yellow, 4" Width
- I Type B, Class I, Yellow, 24" Width, 20' Spacing @ 45'
- J Type B, Class I, Yellow, 4" Width, Double Line, 4' Space
- K Type B, Class I, White, Turn Lane Use Arrow
- L Type B, Class I, White, "Only" Pavement Marking
- M REMOVED

Ex. (X) Existing pavement marking matches proposed plan. Do not eradicate, replace or remove unless directed by the City Traffic Engineer.

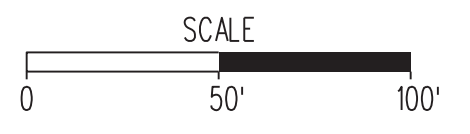
Note: Any existing condition that does not reflect the pavement marking plan as shown on this sheet shall be completely eradicated per VDOT Standards.

### Pavement Marking General Notes

1. All proposed pavement markings shall be in accordance with the most current edition of each of the following and any revision thereof:
  - A. Manual on Uniform Traffic Control Devices (MUTCD)
  - B. The Virginia Supplement to the Manual on Uniform Traffic Control Devices
  - C. The Virginia Department of Transportation Road and Bridge Specifications
  - D. The Virginia Department of Transportation Road and Bridge Standards
  - E. City of Fairfax Standard Specifications, Parking Stall Layout, Detail 403.03
2. Any existing pavement markings which will conflict with the proposed pavement markings as shown, shall be completely eradicated.
3. Limits shown on proposed pavement markings are approximate and shall be modified in the field to ensure that proposed pavement markings continue until existing pavement markings can be matched.
4. Any changes to the Pavement Marking plans as shown, shall be approved by the City Traffic Engineer.
5. Snowplowable Raised Markers are not to be installed.

**REFERENCES**  
 (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Roadway Plans 3 thru 9B



PLAN NO.	PROJECT 0029-151-108	FILE NO.	SHEET NO. 11
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# PAVEMENT MARKING PLANS

COMMONWEALTH OF VIRGINIA  
 ADAM D. WELSCHENBACH  
 Lic. No. 044359  
 PROFESSIONAL ENGINEER

Adam D Welschenbach  
 2014.08.20 19:10:44 -04'00'  
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 Manassas, Virginia  
 PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
08-23-13	VA.	PROJECT OWNER		PROJECT	
		STP-540(675) RSTP-540(178)	29	0029-151-108 RW-201, C-501	11(1)

### \*\* Pavement Marking Legend \*\*

- A Type B, Class I, White, 4" Width
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- D Type B, Class I, White, 24" Width
- E Type B, Class I, White, 24" Width, 20' Spacing @ 45'
- F Type B, Class I, White, 8" Width, 3' Long, 9' Space
- G Type B, Class I, White, 8" Width
- H Type B, Class I, Yellow, 4" Width
- I Type B, Class I, Yellow, 24" Width, 20' Spacing @ 45'
- J Type B, Class I, Yellow, 4" Width, Double Line, 4' Space
- K Type B, Class I, White, Turn Lane Use Arrow
- L Type B, Class I, White, "Only" Pavement Marking
- M REMOVED
- N Type B, Class I, Yellow, 4" Width, Two Lines, 4' Space

Ex. (1) Inside Line, 4" Width, 10' Long, 30' Space  
 (2) Outside Line, 4" Width, Continuous  
 (X) Existing pavement marking matches proposed plan. Do not eradicate, replace or remove unless directed by the City Traffic Engineer.  
 Note: Any existing condition that does not reflect the pavement marking plan as shown on this sheet, shall be completely eradicated per VDOT Standards.

**Easement Legend**

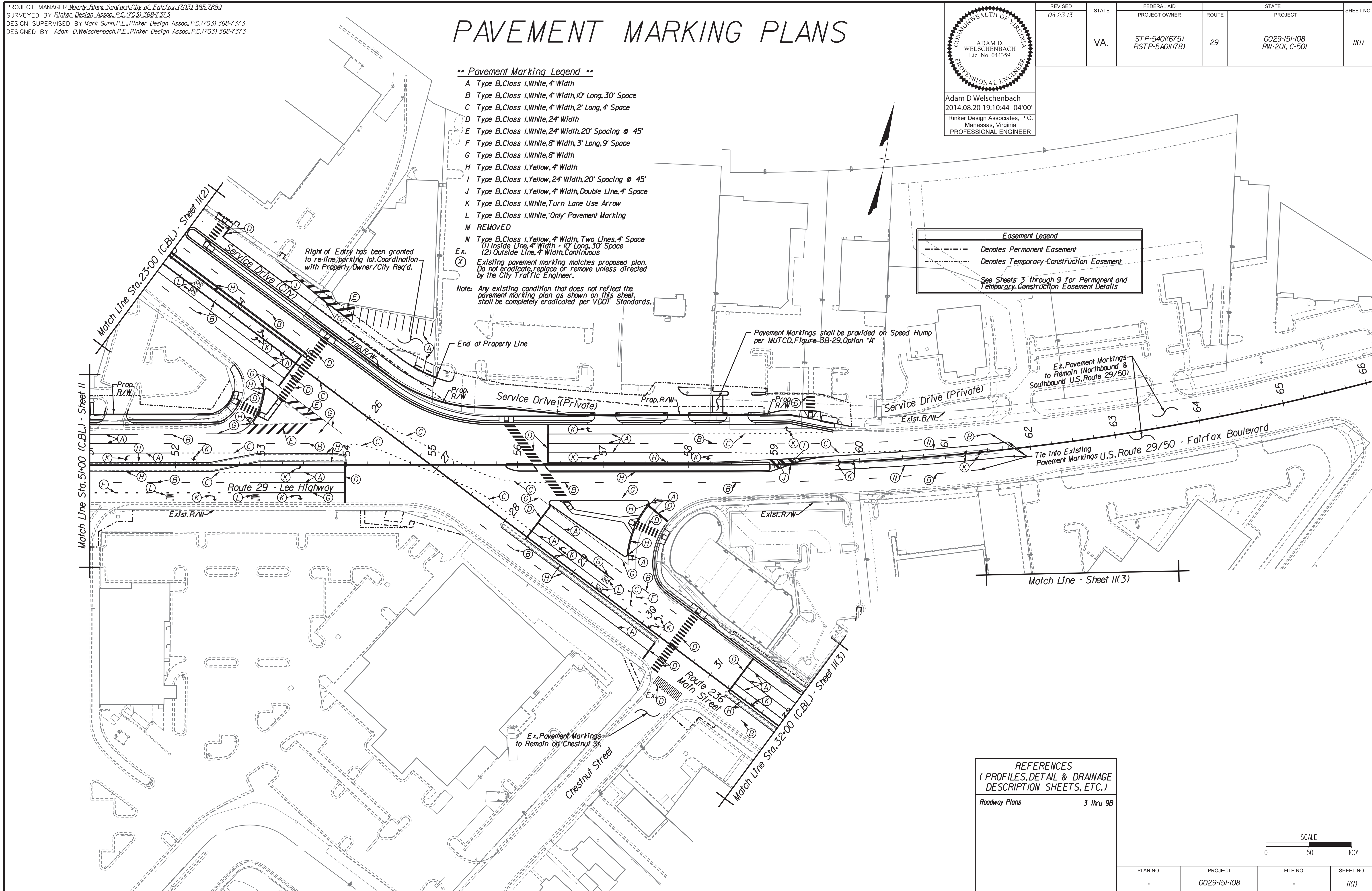
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See Sheets 3 through 9 for Permanent and Temporary Construction Easement Details

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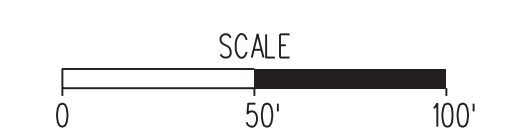
NORTHERN VIRGINIA DISTRICT

8/20/2014



**REFERENCES**  
 (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Roadway Plans	3 thru 9B
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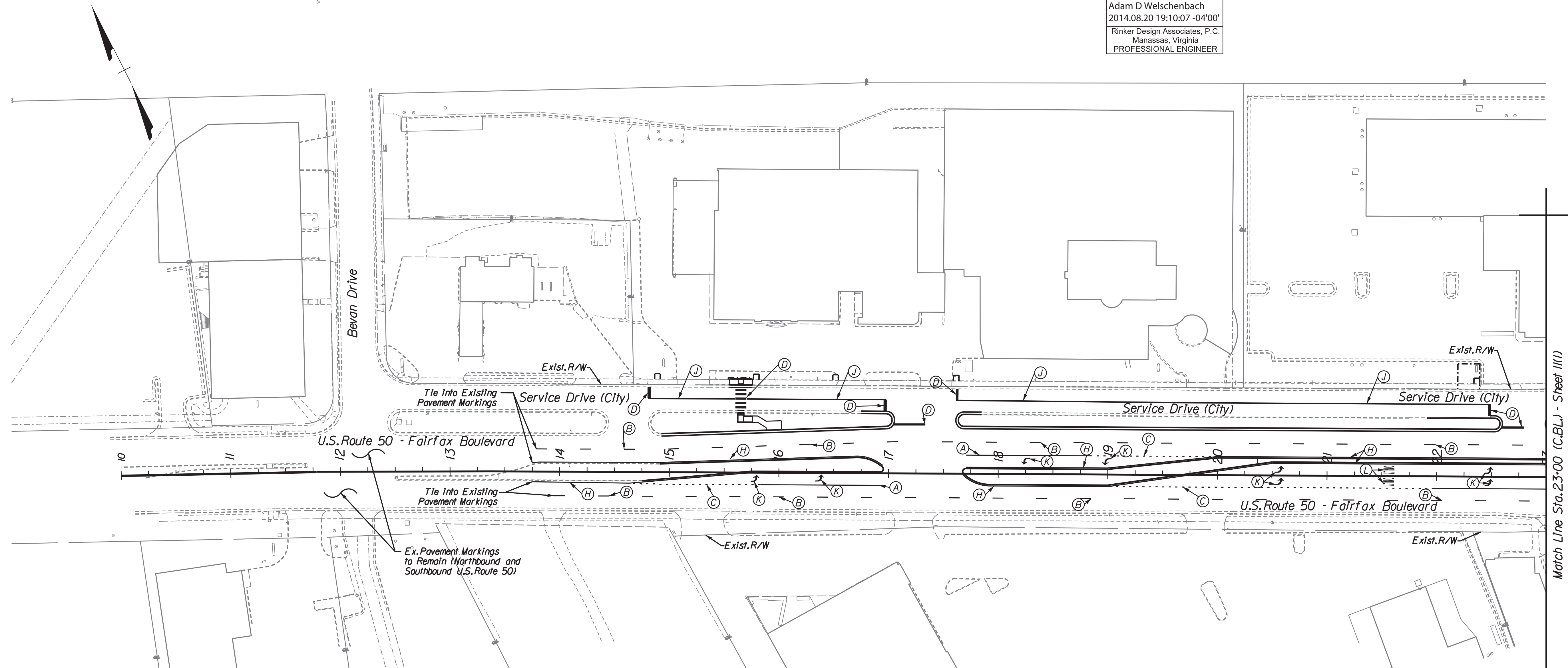
PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0029-151-108		11(1)

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# PAVEMENT MARKING PLANS

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 2014.08.20 19:10:07 -04'00'  
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 PROFESSIONAL ENGINEER

REVISED	STATE	FEDERAL AID PROJECT OWNER	ROUTE	STATE PROJECT	SHEET NO.
08-23-13	VA.	STP-540(675) RSTP-540(178)	29	0029-151-108 RW-201, C-501	III(2)



- \*\* Pavement Marking Legend \*\***
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**Easement Legend**

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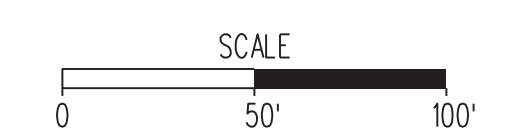
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**REFERENCES**  
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Roadway Plans 3 thru 9B



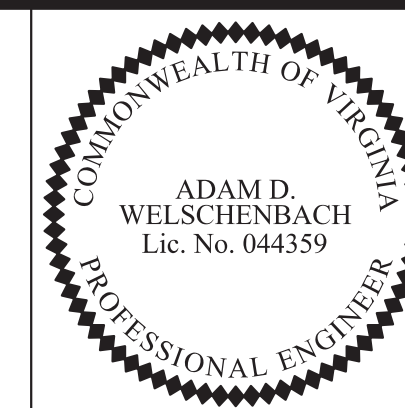
PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	III(2)

**Rinker**  
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 Civil Engineers  
 Transportation - Environment  
 Right of Way Services

NORTHERN VIRGINIA DISTRICT

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# PAVEMENT MARKING PLANS



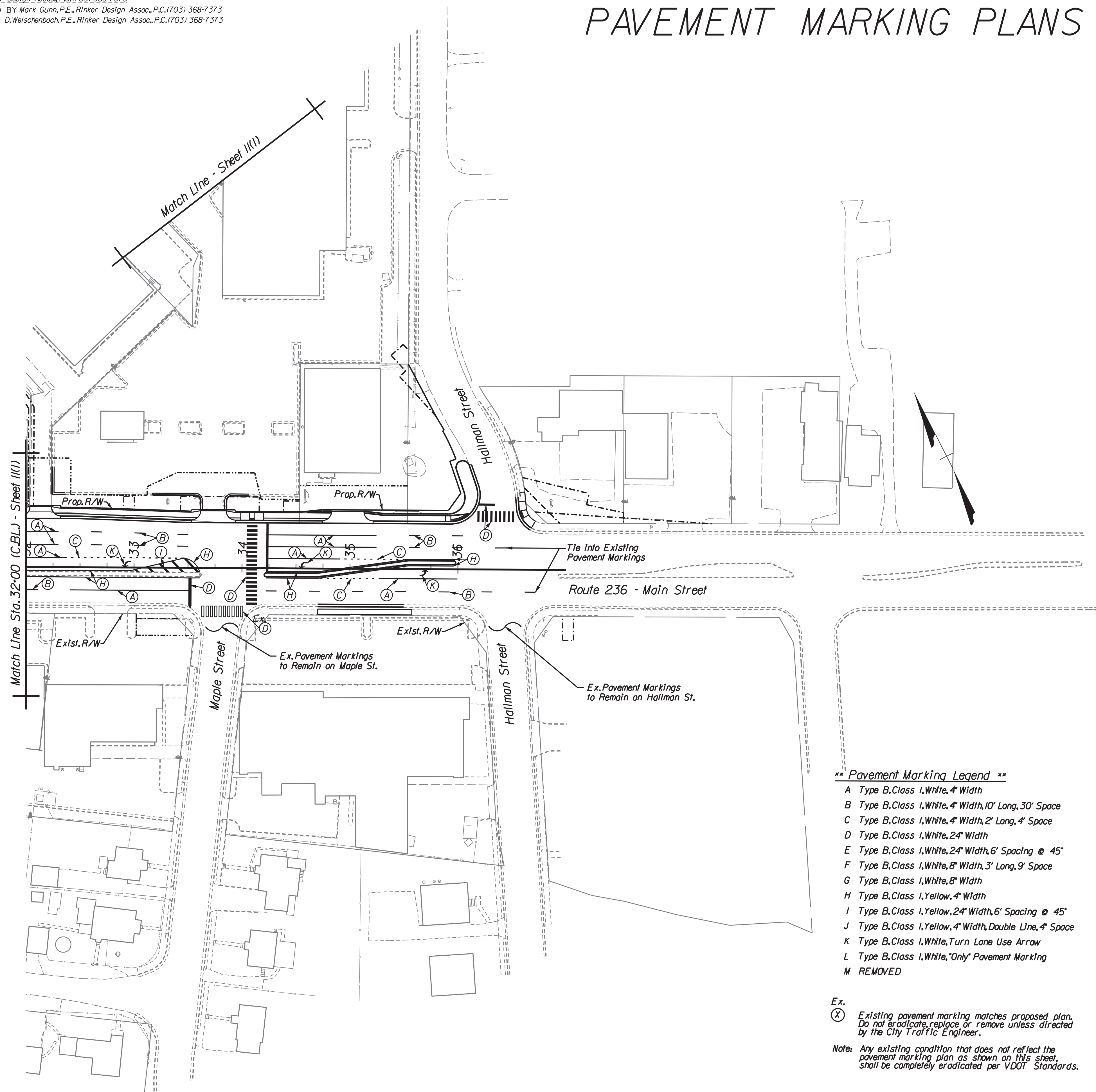
Adam D Welschenbach  
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Rinker Design Associates, P.C.  
Manassas, Virginia  
PROFESSIONAL ENGINEER

REVISED 08-23-13	STATE VA.	FEDERAL AID PROJECT OWNER STP-540(675) RSTP-540(178)	ROUTE 29	STATE PROJECT 0029-151-108 RW-201, C-501	SHEET NO. 11(3)
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NORTHERN VIRGINIA DISTRICT

8/20/2014



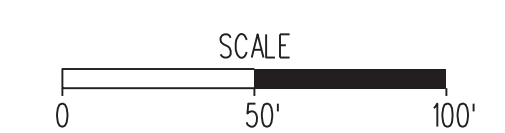
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**REFERENCES**  
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Roadway Plans	3 thru 9B
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PLAN NO.	PROJECT 0029-151-108	FILE NO.	SHEET NO. 11(3)
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 "Turning Challenges into Opportunities"

# GENERAL NOTES

- A. TRAFFIC CONTROL**  
 1. WHEN WORKING WITHIN ANY CITY OR VDOT SYSTEM ROAD OR HIGHWAY, CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST REVISION (MUTCD) AS WELL AS THE VDOT ROAD AND BRIDGE SPECIFICATIONS.
- 2. TRAFFIC MAINTENANCE SHALL COMPLY WITH THE LATEST REVISION OF THE VDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, SECTION 701, TRAFFIC SIGNS AND SECTION 512, MAINTAINING TRAFFIC, AS WELL AS OTHER APPLICABLE SECTIONS.**
- 3. WHEN TRAFFIC SIGNALS OR THEIR APPURTENANCES ARE LIKELY TO BE DAMAGED OR INTERFERE AS A RESULT OF THE CONSTRUCTION, COORDINATE TEMPORARY OPERATION WITH THE VDOT OR PUBLIC WORKS DIRECTOR. PROVIDE 48 HOURS NOTICE PRIOR TO ANTICIPATED DISTURBANCE OR INTERRUPTION. CONTACT JAMES DODSON AT (703) 385-7987.**
- 4. TRAFFIC SIGNAL OPERATION TO BE RESTORED IN A TIMELY FASHION AS DIRECTED BY THE PUBLIC WORKS DIRECTOR.**
- B. GENERAL**  
 5. SIGNALS AND TRAFFIC MANAGEMENT SYSTEMS SHALL MEET THESE SPECIFICATIONS AND THE APPLICABLE REQUIREMENTS OF SECTION 703, TRAFFIC SIGNALS OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.
- 6. THE LENGTHS OF CONDUIT SHOWN ON THE PLANS ARE APPROXIMATE LENGTHS, THE CONTRACTOR SHALL DETERMINE THE EXACT LENGTHS OF CONDUIT IN THE FIELD.**
- 7. THE CONDUIT SHALL BE INSTALLED IN REASONABLY CLOSE CONFORMITY WITH THE LINES SHOWN ON THE PLANS. CONDUIT RUNS MAY BE CHANGED TO AVOID OBSTRUCTIONS WITH THE APPROVAL OF THE PUBLIC WORKS DIRECTOR.**
- 8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL STORM DRAINS, WATER LINES, SANITARY SEWERS, AND EXISTING TRAFFIC SIGNAL EQUIPMENT AND TO TAKE ALL PRECAUTIONS TO PROTECT THESE FACILITIES. THE CONTRACTOR, AT THIS EXPENSE, SHALL REPAIR ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATION.**
- 9. IN THE CASE OF CONFLICT ARISING BETWEEN PROPOSED LOCATIONS OF TRAFFIC SIGNAL EQUIPMENT AND EXISTING UTILITIES, THE CONTRACTOR SHALL RELOCATE THE TRAFFIC SIGNAL EQUIPMENT SUBJECT TO THE APPROVAL OF THE PUBLIC WORKS DIRECTOR.**
- C. TRENCHING**  
 10. ALL CONDUIT INSTALLATION ACROSS ROADWAYS SHALL BE PERFORMED USING A BORING OPERATION UNLESS OTHERWISE DIRECTED BY THE PUBLIC WORKS DIRECTOR.
- 11. UNLESS OTHERWISE SHOWN OR APPROVAL BY THE PUBLIC WORKS DIRECTOR, CONDUITS SHALL BE PLACED AT A MINIMUM DEPTH OF 24 INCHES AND A MAXIMUM DEPTH OF 36 INCHES IN THE CITY OF FAIRFAX RIGHT-OF-WAYS, WITHIN VDOT RIGHT-OF-WAYS, IN ACCORDANCE WITH VDOT REGULATIONS. ALL CONDUITS SHALL BE BURIED WITH A MINIMUM COVER OF 36 INCHES.**
- 12. ALL TRENCHING SHALL CONFORM TO THE CITY OF FAIRFAX, PUBLIC FACILITIES MANUAL SECTION 02275 - TRENCHING, BACKFILLING, AND COMPACTION OF UTILITIES FOR STRUCTURES AND PIPELINES AND FOR ROADWAY RESTORATION.**
- 13. OPEN TRENCHING OPERATION BACKFILL SHALL BE FREE OF CINDERS, BROKEN CONCRETE, OR OTHER HARD ABRASIVE MATERIALS PRIOR TO CONDUIT PLACEMENT.**
- D. CONDUIT INSTALLATION**  
 14. ALL CONDUITS SHALL BE SCHEDULE 40 PVC OR EQUIVALENT UNLESS OTHERWISE SPECIFIED BY THE PUBLIC WORKS DIRECTOR. THE SIZE OF THE CONDUIT SHALL BE SPECIFIED ON THE PLAN.
- 15. CONDUITS CROSSING ROADWAY SHALL BE INSTALLED BY DIRECT BORING. CONDUITS INSTALLED UNDERNEATH THE SIDEWALK SHALL BE INSTALLED BY OPEN TRENCH. WHERE MORE THAN ONE CONDUIT IS INSTALLED, THE CONDUIT MAY BE LAID SIDE-BY-SIDE OR ON TOP OF ANOTHER CONDUIT WITH A 1-INCH SEPARATION BETWEEN THE CONDUITS. SEPARATION OF CONDUITS SHALL BE PERFORMED BY USE OF MANUFACTURED PREFABRICATED CONDUIT SPACING UNITS.**
- 16. CHANGE IN DIRECTION OF CONDUITS SHALL BE ACCOMPLISHED BY THE USE OF STANDARD BENDS.**
- 17. THE SUM OF THE BEND ANGLES IN A SINGLE RUN OF CONDUIT SHALL NOT EXCEED 360 DEGREES.**
- 18. PUBLIC WORKS DIRECTOR OR HIS/HER REPRESENTATIVE MUST INSPECT ALL OPEN TRENCH CONDUIT RUNS PRIOR TO BACKFILL.**
- 19. CONDUIT RISERS SHALL BE INSTALLED ON WOOD POLES OR TRAFFIC SIGNAL POLES. CONDUITS SHALL BE ATTACHED TO POLES WITH CONDUIT CLAMPS OR BANDING. LENGTH OF RISER SHALL BE DETERMINED BY PUBLIC WORKS DIRECTOR. A RAIN TIGHT ENTRANCE CAP WITH PLASTIC WIRE ENTRY KNOCKOUTS SHALL BE INSTALLED AT THE TOP OF EACH RISER.**
- 20. PULL LINE SHALL BE INSTALLED IN ALL CONDUITS.**
- 21. ALL EMPTY CONDUITS SHALL BE PLUGGED WITH DUCT SEAL OR APPROVED CONDUIT END CAP INSIDE OF JUNCTION BOXES AND FOUNDATIONS.**
- E. JUNCTION BOXES**  
 22. TRAFFIC SIGNAL JUNCTION BOX MATERIALS AND INSTALLATIONS SHALL MEET THE REQUIREMENTS OF SECTION 238, ELECTRICAL AND SIGNAL COMPONENTS AND SECTION 703, TRAFFIC SIGNALS OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.
- F. FOUNDATIONS**  
 23. THE FOUNDATION OF THE TYPE SPECIFIED SHALL BE INSTALLED AS SHOWN ON THE FOUNDATION DETAILS.
- 24. CONCRETE SHALL BE MIXED AND POURED IN ACCORDANCE WITH SECTION 404, HYDRAULIC CONCRETE CEMENT OPERATIONS OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.**
- 25. THE ANCHOR BOLT PATTERN SHALL BE ACCURATELY SET AND SHALL BE LEFT IN PLACE UNTIL THE FORMS CAN BE REMOVED. THE ANCHOR BOLTS SHALL EXTEND ABOVE THE FINISHED TOP OF THE FOUNDATION FOR THE LENGTHS SPECIFIED IN THE FOUNDATION DETAILS.**
- 26. ALL FOUNDATIONS SHALL BE HAND FLOATED UNTIL THE TOP IS SMOOTH AND LEVEL.**
- 27. THE GROUND ROD SHALL BE INSTALLED IN THE JUNCTION BOX LOCATED NEXT TO THE FOUNDATION, UNLESS OTHERWISE DIRECTED BY THE PUBLIC WORKS DIRECTOR. IF GROUND ROD IS SELECTED TO BE INSTALLED IN UNDISTURBED EARTH, THERE SHALL BE A 2' MINIMUM COVERAGE. GROUND WIRE SHALL BE ATTACHED TO THE GROUND ROD WITH A GROUNDING CLAMP AND SHALL BE CONTINUOUS AND UNSPLICED FROM THE GROUND ROD TO GROUND LUGS. THREE FEET OF LEAD WIRE SHALL BE LEFT IN ALL POLE AND CABINET FOUNDATIONS.**
- 28. THE CONTRACTOR SHALL INSTALL THE TRAFFIC POLE ON CURED FOUNDATIONS AS DIRECTED BY THE PUBLIC WORKS DIRECTOR.**
- 29. A MINIMUM OF TWO 2" CONDUITS AND ONE 1" CONDUIT FOR THE GROUND WIRE WILL BE REQUIRED IN ALL POLE FOUNDATIONS.**
- 30. FOR CONTROLLER CABINETS, THE OPEN ENDS OF CONDUITS SHALL BE PLACED WITHIN THE ANCHOR BOLT PATTERN AND SHALL BE MINIMUM OF 6 INCHES FROM THE WORK PAD AND 12 INCHES FROM THE BACK EDGE OF THE FOUNDATION.**

- 31. THE CONCRETE WORK PAD SHALL BE PLACED ON A 2 TO 4 INCH BED OF VDOT #57 STONE, RAKED LEVEL AND CONSOLIDATED BEFORE PLACEMENT OF CONCRETE**
- 32. THE CONCRETE WORK PAD SHALL HAVE A BROOM FINISH. THE FOUNDATION SHALL BE HAND FLOATED UNTIL SMOOTH AND LEVEL AND SHALL HAVE CHAMFERED EDGES.**
- 33. CONCRETE POLE FOUNDATIONS MUST CURE 2 WEEKS BEFORE TRAFFIC POLES CAN BE SET UNLESS HIGH EARLY STRENGTH CONCRETE (CLASS A4.5 MINIMUM) IS USED.**
- 34. SIGNAL MAST ARM POLE AND FOUNDATION SHALL BE DESIGNED TO ACCOMMODATE AN ADDITIONAL 5-SECTION HEAD FOUR FEET FROM THE TIP (FREE END) OF THE ARM AND AN ADDITIONAL MUTCD SIGN R10-12 (30" X 36") SIGN ONE FOOT FROM THE TIP OF THE ARM.**
- G. LOCATING CONDUIT**  
 35. A 1/3/4 INCH WIDE YELLOW PLASTIC LOCATOR TAPE SHALL BE PLACED DIRECTLY OVER THE CONDUIT LINE DURING BACKFILL OPERATION AT A DEPTH OF 12 INCHES BELOW THE FINISHED SURFACE IN ALL OPEN TRENCH INSTALLATION LOCATIONS.
- 35. WHERE CONDUIT PASSES UNDER A CURB, AN "X" SHALL BE CUT INTO THE CURB OVER THE CONDUIT.**
- H. SENSYS WIRELESS DETECTOR**  
 37. ALL EXISTING LOOP DETECTORS SHALL BE ABANDONED OR REMOVED.
- 36. ALL PROPOSED SENSYS WIRELESS DETECTORS SHALL BE INSTALLED SO THEY ARE FLUSH MOUNTED AFTER FINAL SURFACE COURSE. COORDINATION WITH CITY OF FAIRFAX ENGINEER IS REQUIRED FOR FINAL LOCATION OF DETECTORS. CITY APPROVAL OF LOCATIONS IS REQUIRED PRIOR TO INSTALLATION.**
- I. INTERCONNECT**  
 37. THE CONTRACTOR SHALL DISCONNECT SIGNAL INTERCONNECT CABLE(S) FROM POLE AND RE-ROUTE / SPLICE EXISTING OVERHEAD INTERCONNECT TO UNDERGROUND CONDUITS AS PROPOSED. COORDINATION WITH CITY TRAFFIC ENGINEER IS REQUIRED PRIOR TO START OF ANY WORK.
- 38. ALL INTERCONNECT SPLICE BOXES SHALL BE RATED TO IP-66 WEATHERPROOF AND HOLD 25 FEET OF SLACK LINE INSIDE THE BOX.**
- J. CCTV**  
 39. CCTV CANDY CANE BRACKET SHALL BE PER CITY OF FAIRFAX SPECIFICATIONS.
- 40. CCTV CAMERA SHALL BE PER CITY OF FAIRFAX SPECIFICATIONS. CONTACT CITY OF FAIRFAX TRAFFIC ENGINEER FOR SPECIFICATIONS PRIOR TO ORDERING EQUIPMENT. CONTACT JAMES DODSON AT (703) 385-7987.**
- K. RESTORATION**  
 41. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY HIS OPERATION TO CONDITIONS EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- L. CLEANUP**  
 42. DISPOSAL: REMOVE SURPLUS MATERIALS, UNSUITABLE SOIL, TRASH, AND DEBRIS AND LEGALLY DISPOSE OF OFF-SITE.
- M. PRE-EMPTION**  
 43. EMERGENCY PRE-EMPTION (EVP) EQUIPMENT SHALL BE GTT (FORMERLY 3M) OPTICOM EMERGENCY PRE-EMPTION 1700 SERIES WITH GREEN SENSE AND 2 CONFIRMATION LIGHTS FOR EACH APPROACH. 721 DETECTORS. DETECTOR LOCATIONS TO BE AS DIRECTED BY CITY OF FAIRFAX TRAFFIC ENGINEERING FIELD PERSONNEL.

REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
	VA.	-	29	0029-151-108 RW-201, C-501	12(10)

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

## TRAFFIC SIGNAL & UTILITIES LEGEND

		EXISTING	
ELECTRIC	— E —	UTILITY POLE AND OVERHEAD UTILITIES	—■—
TELEPHONE	— T/Tg —	GRATE DROP INLET	□
GAS	— G —		
SEWER	— S —		
WATER	— W —		
CABLE TV	— CATV —		
FIRE HYDRANT	⊙		
GAS VALVE	⊙		
WATER VALVE	⊙		
		EXISTING	
		ONE WAY SIGNAL HEAD	⊙
		TWO WAY SIGNAL HEAD	⊙
		BASE MOUNTED LOCAL CONTROL CABINET	⊙
		PEDESTAL POLE-METAL	⊙
		JUNCTION BOX	⊙
		LOOP DETECTOR	⊙
		QUADRUPLE LOOP DETECTOR	⊙
		SERVICE DISCONNECT SWITCH BOX	⊙
		METER BOX	⊙
		CONDUIT W/CABLE	⊙
		PEDESTRIAN PUSH BUTTON	⊙
		SIGNAL POLE	⊙
		TRAFFIC SIGNAL POLE LABEL	⊙
		SENSYS WIRELESS ACCESS POINT	⊙
		SENSYS WIRELESS REPEATER	⊙
		CCTV CAMERA	⊙
		INTERCONNECT SPLICE CABINET	⊙
		SENSYS WIRELESS DETECTOR	⊙
		LIGHTING POLE	⊙

### GENERAL NOTES AND LEGEND TRAFFIC SIGNAL MODIFICATION DESIGN PLANS FAIRFAX COUNTY

Drawn: LEB	SCALE 0 25' 50'
Designed: LEB	
Checked: SJW	

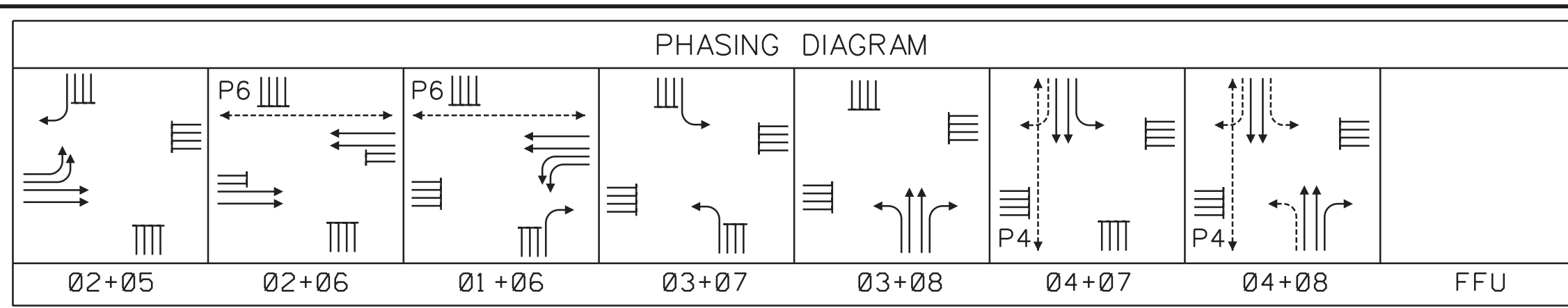
PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	12(10)



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 Engineering - Surveying - Land Planning - Transportation - Environmental Services  
 10340 DEMOCRACY LN  
 FAIRFAX, VA 22030  
 PHONE: 703-586-5861  
 WWW.RINKERDESIGN.COM

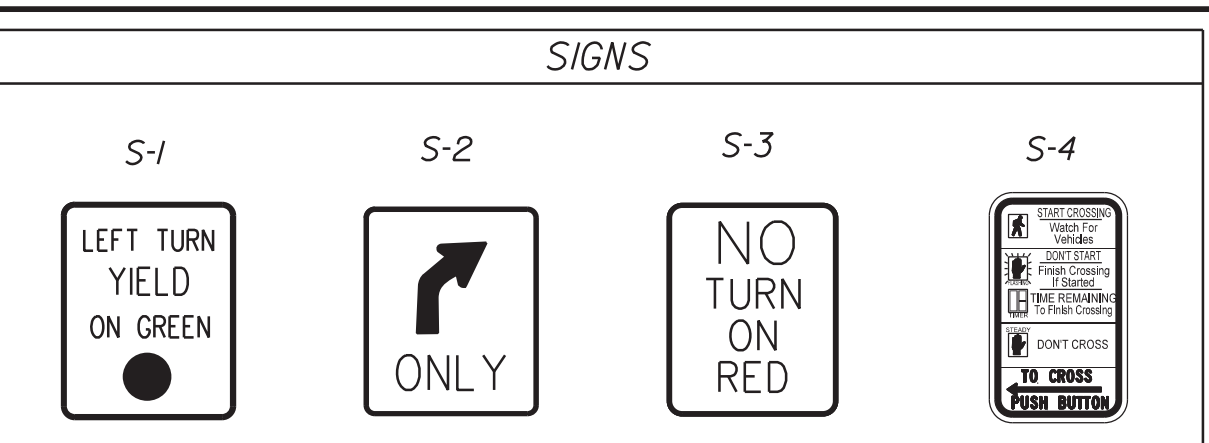


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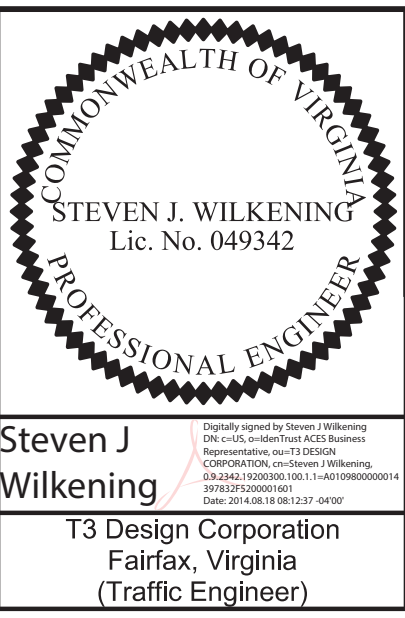


COLOR SEQUENCE CHART																
PHASE	1	2	3	4	5	6	7	8	1+6	2+5	2+6	3+7	3+8	4+7	4+8	FLASH
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	
1	⊕								⊕							R
2		G								G	G					A
3			⊕/R					G				⊕/R	⊕/G		G	R
4				G										G	G	R
4A				G	R/⊕				R/⊕					G	G	R
5					⊕				⊕							R
6						G				G						A
7				G			⊕/R				⊕/R	⊕/G	G	G	R	R
8							G						G	G	R	R
8A	R/⊕						G	R/⊕						G	G	R
P4				WALK										WALK	WALK	BLANK
P6									WALK	WALK	WALK					BLANK

NOTE: BLANK SPACES REPRESENT A RED DISPLAY.  
 \* WALK INDICATION DISPLAYED AFTER PEDESTRIAN CALL IS SERVICED; OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.



NOTES CONT'D  
 4. CONTINUE TO \*G034 (INTERCEPT ON POLE) ST'D JB-S2 REQ'D AT POLE.  
 5. CONTINUE TO \*DP42 (INTERCEPT ON POLE) ST'D JB-S2 REQ'D AT POLE.  
 6. EX.O/H SIGNAL INTERCONNECT CABLES/COPPER BETWEEN POLE \*F032 AND POLE \*G034 SHALL BE REMOVED.  
 7. EX.O/H SIGNAL INTERCONNECT CABLES/COPPER BETWEEN RTE 29 AND POLE \*DP42 SHALL BE REMOVED.

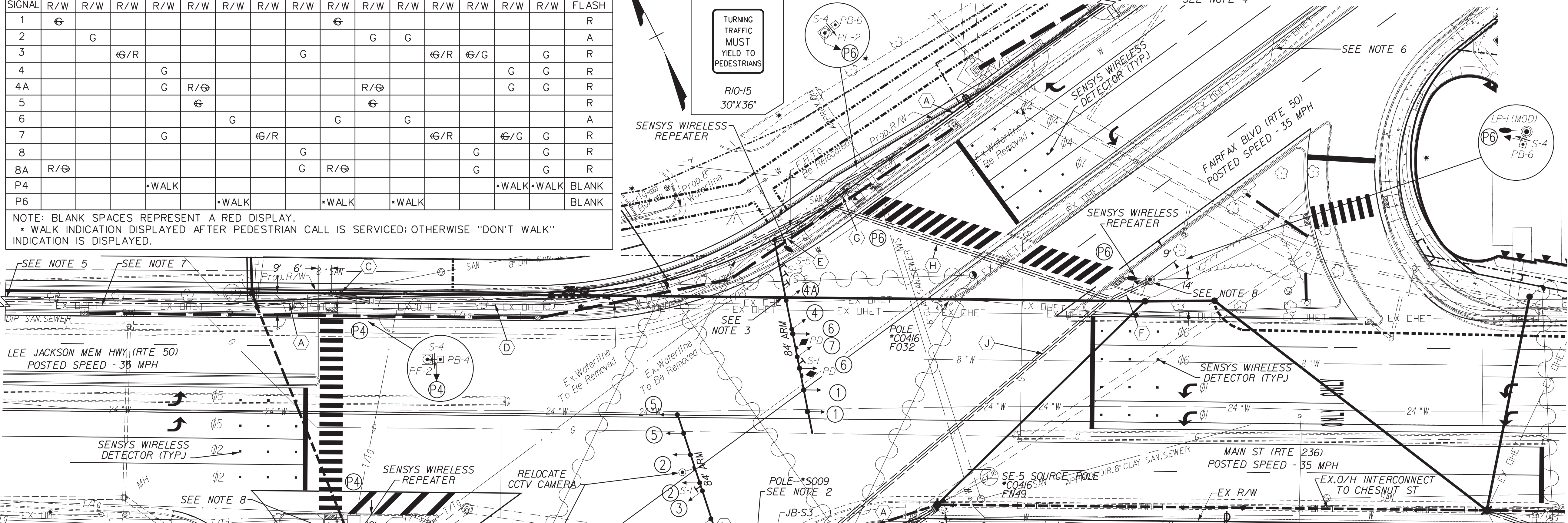
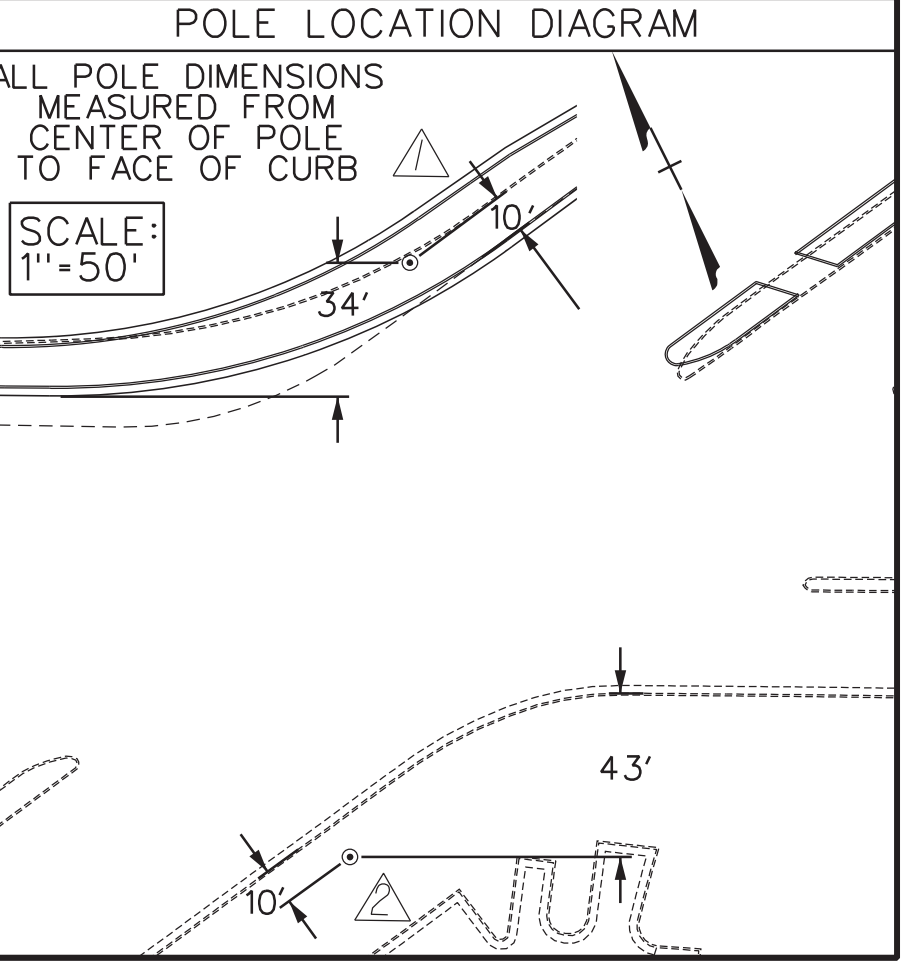
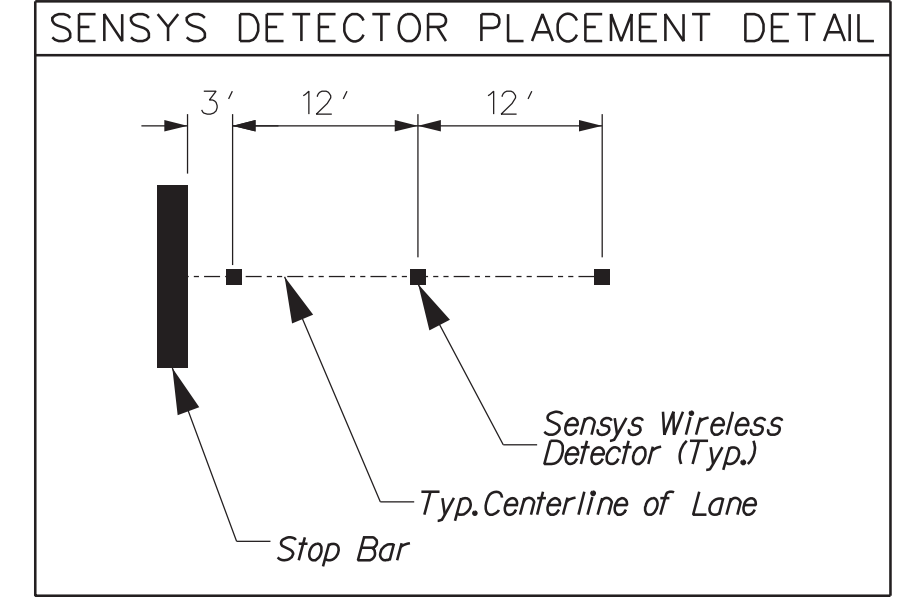


REVISED	STATE	FEDERAL AID	ROUTE	STATE	PROJECT	SHEET NO.
	VA.		29	0029151-108	RW-201,C-501	12(1)

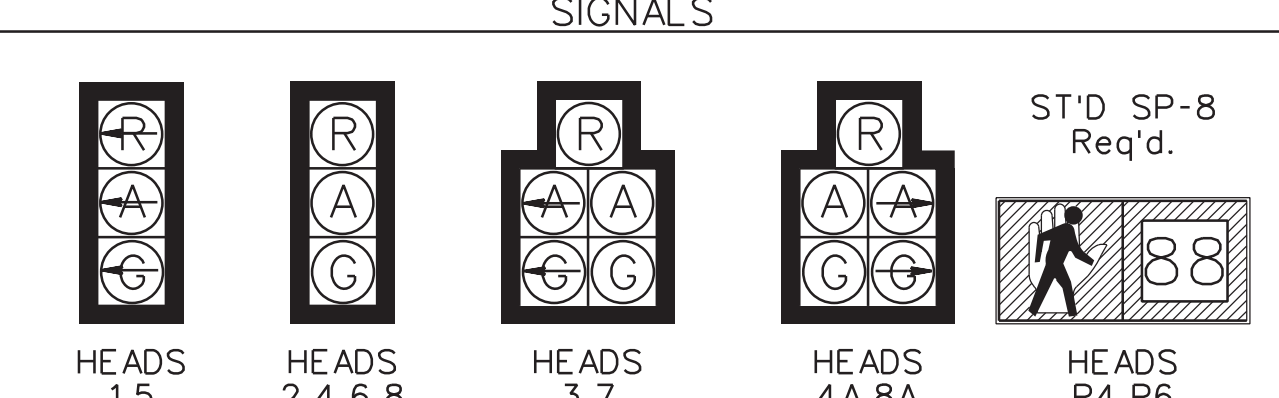
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

PREEMPTION SENSORS PROPOSED  
 Police & Fire Dept.  
 Emergency Preemption Sensors

Emergency Vehicle Pre-emption (EVP) Notes:  
 See General Notes on Sheet 12(0) for Details and Contact Information about EVP System. City of Fairfax will Maintain EVP System.



CLEARANCE CHART			
R/W	1	2	NEXT PHASE
G	A	R	R
G	G	G	G
⊕	⊕	⊕	⊕
⊕/G	⊕/G	⊕/G	⊕/G
⊕/G	⊕/A	⊕/R	⊕/R
⊕/G	⊕/G	G	G
⊕/G	⊕/A	R	R
⊕/R	⊕/R	R	G
⊕/R	⊕/R	R	R
⊕/R	⊕/R	⊕/G	⊕/G
G	A	R	R/⊕
R/⊕	R/⊕	R	R
R/⊕	R/⊕	R	G
R/⊕	R/⊕	R/⊕	R/⊕
WALK	FDW	DW	DW
WALK	WALK	WALK	WALK



ALL SIGNAL HEADS SHALL BE LED. ALL TRAFFIC SIGNALS SHALL BE EQUIPPED WITH POLYCARBONATE BACKPLATES AND TUNNEL VISORS. ALL PED. HEADS SHALL BE SP-8 WITH COUNTDOWN.

NOTES CONT'D  
 8. INSTALL MODIFIED 20 FOOT LP-1 LIGHT POLE WITHOUT LIGHTING ARM. INSTALL SENSYS WIRELESS REPEATER ON THE TOP OF THE POLE AND LED COUNTDOWN PEDESTRIAN HEAD AND PUSHBUTTON AS PER VDOT STANDARD PA-2. INSTALL FOUNDATION AS PER VDOT STANDARD LF-1.

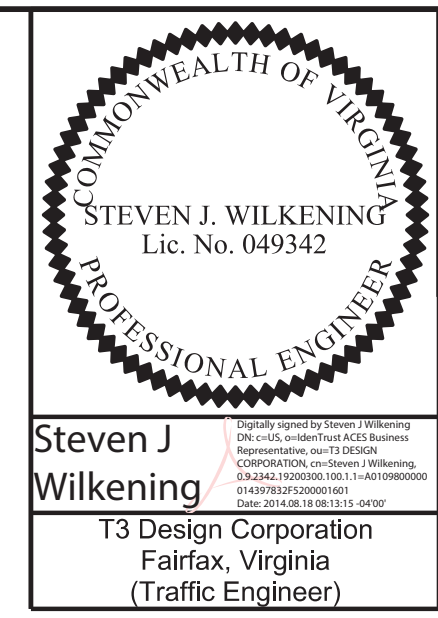
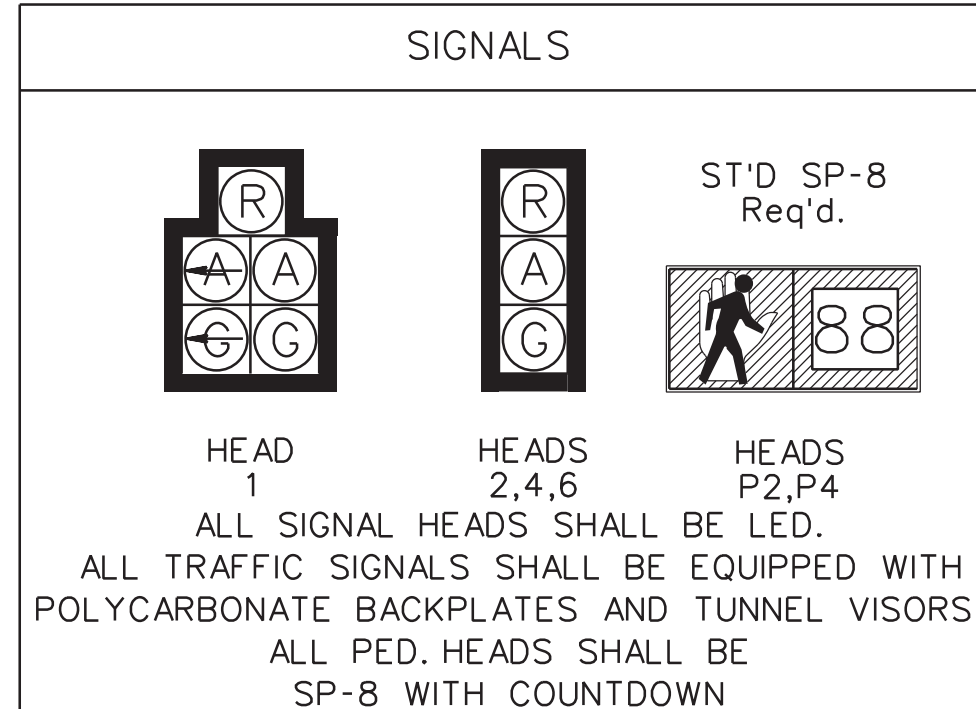
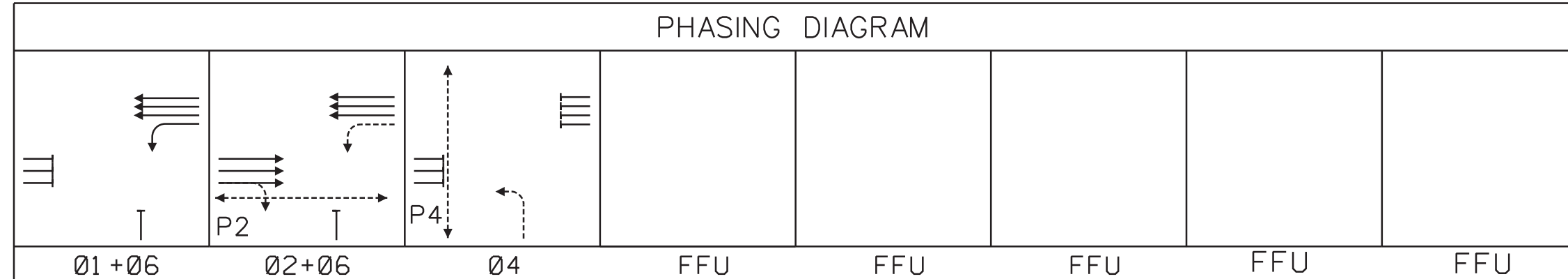
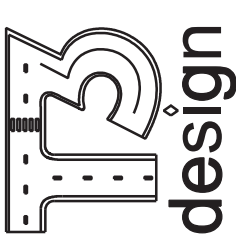
CONDUIT & CABLE RUNS			
(A) 1-3" CONDUIT 1-12 SINGLE MODE FIBER ODUG 1-6 AWG (EGC)	(H) 1-4" BORED CONDUIT 2-14/2C FOR PED PB 7-14/7C FOR HEADS 1,4,4A,6,7,P4,P6 1-24/8C FOR CAT 5 FOR SENSYS RPT 2-EMER.PRE-EMPTION CABLE 2-14/2C FOR CONF.LIGHT 1-6 AWG (EGC)	(M) 2-4" CONDUITS 4-14/2C FOR PED PB 14-14/7C FOR HEADS 1,2,3,4,4A,5,6,7,8,8A,P4,P6 1-24/8C FOR CAT 5 FOR SENSYS ACP 3-24/8C FOR CAT 5 FOR SENSYS RPT 2-EMER.PRE-EMPTION CABLE 2-14/2C FOR CONF.LIGHT 1-CCTV CABLE [CAT 6] 2-6 AWG (EGC)	(N) 1-1/4" CONDUIT (M) 3-6 AWG FOR ELEC.SERVICE
(B) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR HEAD P4 1-24/8C FOR CAT 5 FOR SENSYS RPT 1-6 AWG (EGC)	(J) 1-4" BORED CONDUIT 3-14/2C FOR PED PB 8-14/7C FOR HEADS 1,4,4A,6,7,P4,P6 2-24/8C FOR CAT 5 FOR SENSYS RPT 2-EMER.PRE-EMPTION CABLE 2-14/2C FOR CONF.LIGHT 1-6 AWG (EGC)	(O) 1-3" CONDUIT 4-12 SINGLE MODE FIBER ODUG  1-3" CONDUIT (SPARE) 1-6 AWG (EGC) (FOR SPARE)	(P) 1-1" CONDUIT 1-6 AWG FOR ELEC.GROUNDING
(C) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR HEAD P4 1-6 AWG (EGC)	(K) 1-4" BORED CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR HEAD P4 1-24/8C FOR CAT 5 FOR SENSYS RPT 1-6 AWG (EGC)	(R) 1-2" CONDUIT FOR ELEC.SERVICE 1100 LB PULL ROPE  (M) DENOTES METAL CONDUIT (EGC) DENOTES EQUIPMENT GROUNDING CONDUCTOR ACP DENOTES ACCESS POINT (SENSYS) RPT DENOTES REPEATER (SENSYS)	
(D) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR HEAD P4 1-12 SINGLE MODE FIBER ODUG 1-6 AWG (EGC)	(L) 1-3" CONDUIT 5-14/7C FOR HEADS 2,3,5,8,8A 1-24/8C FOR CAT 5 FOR SENSYS ACP 1-CCTV CABLE [CAT 6] 1-6 AWG (EGC)	NOTES 1. INSTALL SPLICE CABINET ON POLE *FN49. SPLICE EXISTING OVERHEAD INTERCONNECT FROM CHESNUT ST. RUN THROUGH PROPOSED CONDUIT SYSTEM TO PROPOSED CABINET. 2. PULL BACK EXISTING INTERCONNECT TO POLE *S009 AND RE-ROUTE THROUGH PROPOSED CONDUIT SYSTEM TO THE PROPOSED CABINET. 3. RELOCATED OVERHEAD UTILITY LINES NEED TO BE INSTALLED A MINIMUM OF 1' FOR COMM, 2.5' FOR SECONDARY, AND 10' FOR PRIMARY ABOVE THE PROPOSED MASTARM.	
(E) 1-3" CONDUIT 5-14/7C FOR HEADS 1,4,4A,6,7 1-24/8C FOR CAT 5 FOR SENSYS RPT 2-EMER.PRE-EMPTION CABLE 2-14/2C FOR CONF.LIGHT 1-6 AWG (EGC)			
(F) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR HEAD P6 1-24/8C FOR CAT 5 FOR SENSYS RPT 1-6 AWG (EGC)			
(G) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR HEAD P6 1-6 AWG (EGC)			

TRAFFIC SIGNAL MODIFICATION DESIGN PLAN LEE HWY/FAIRFAX BLVD (RTE 29) AT FAIRFAX BLVD (RTE 50)/MAIN ST (RTE 236) CITY OF FAIRFAX			
Drawn: LEB	SCALE		
Designed: LEB	0 25' 50'		
Checked: SJW			
PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0029151-108		12(1)



Rinker Design Associates, P.C.  
 Engineering - Surveying - Land Planning - Transportation - Environmental Services  
 10340 DEMOCRACY LN  
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 PHONE: 703.586.5861  
 www.rdaonline.com

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 10340 DEMOCRACY LN  
 FAIRFAX, VA 22030  
 PHONE: 703.586.5861  
 www.t3design.com

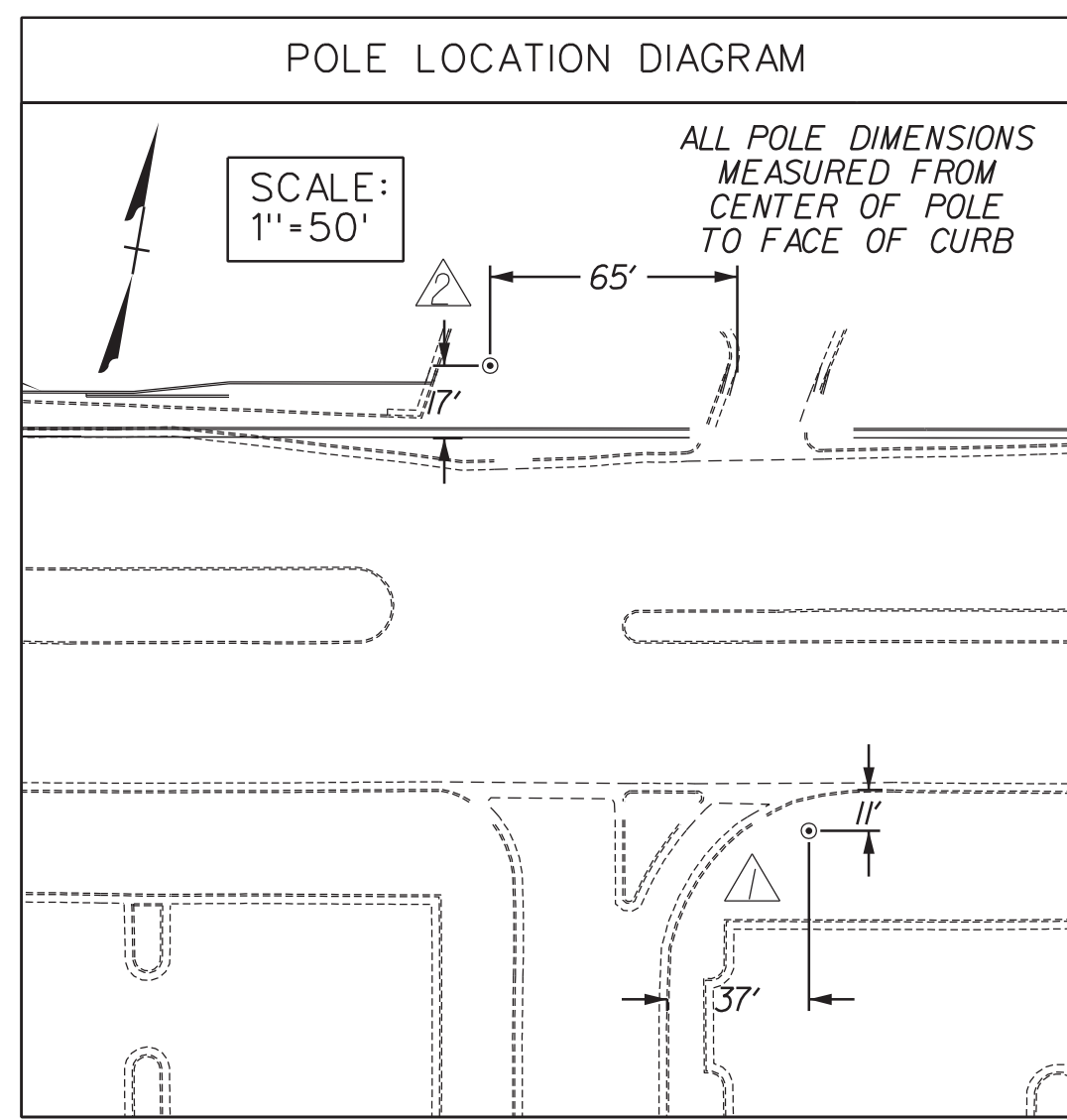
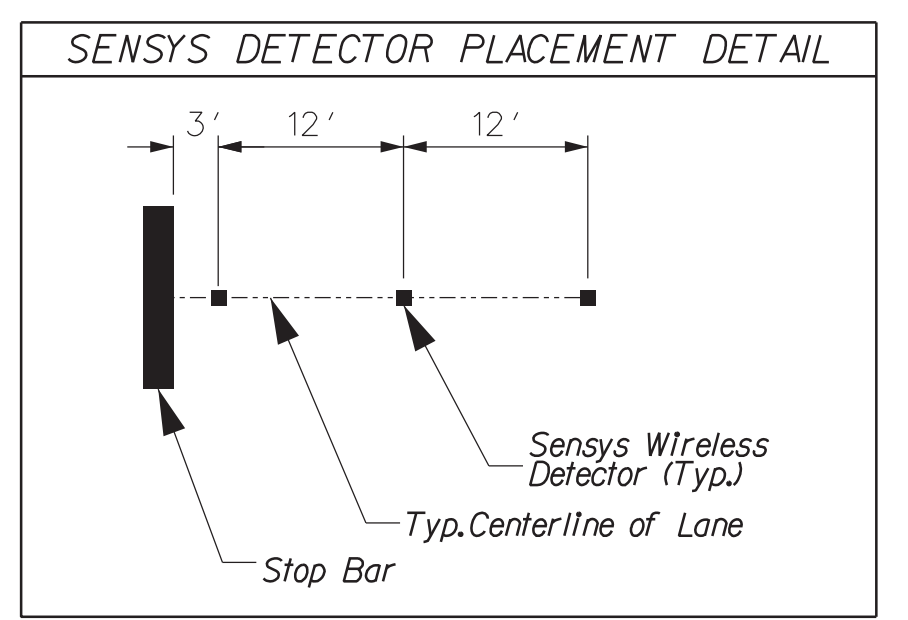
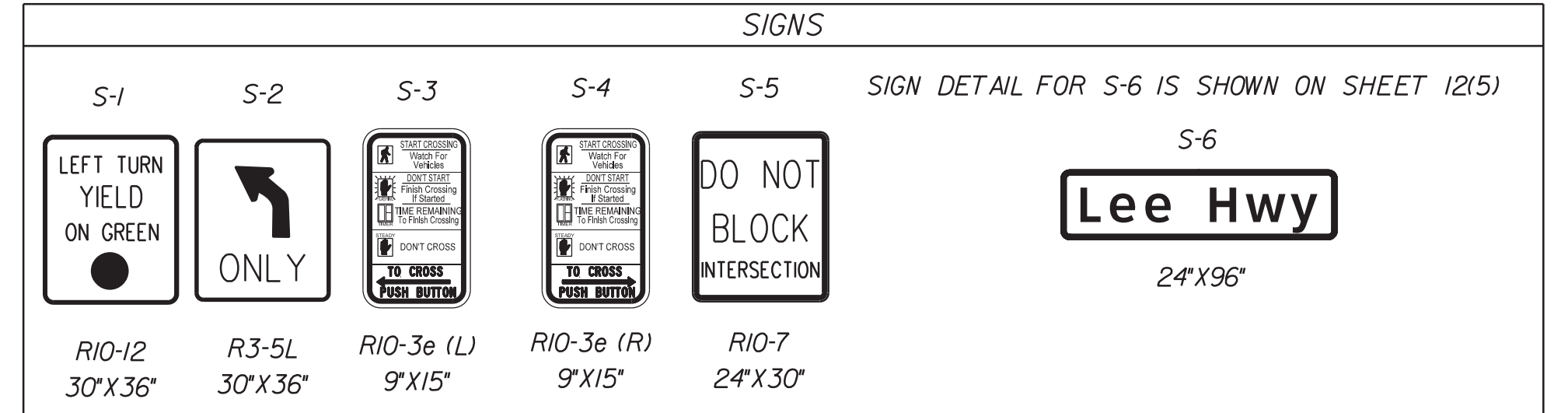
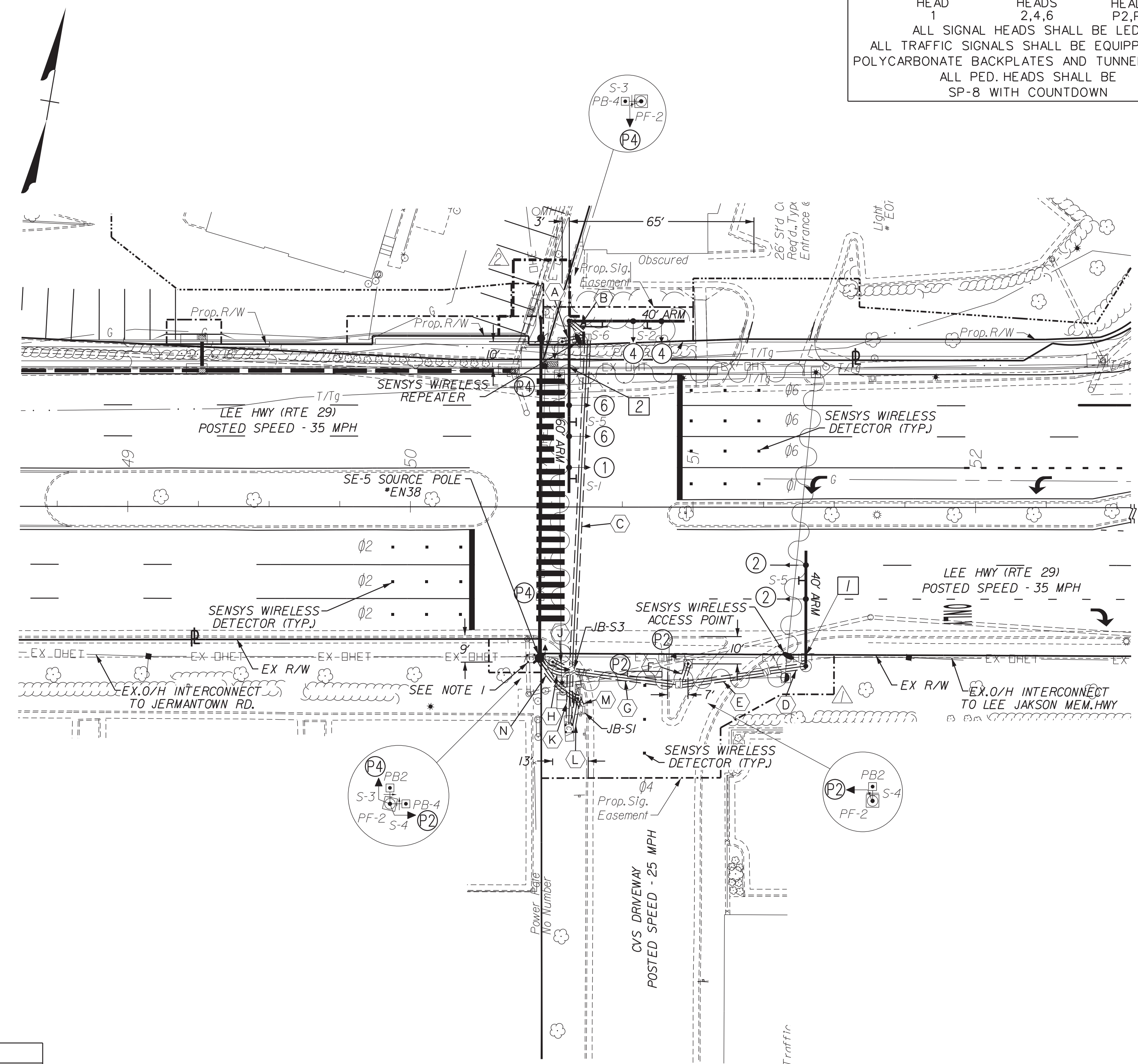


REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
	VA.	-	29	0029-151-108 RW-201,C-501	12(2)

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

CONDUIT & CABLE RUNS

- (A) 1-3" CONDUIT  
1-14/2C FOR PED PB  
1-14/7C FOR HEAD P4  
1-#6 AWG (EGC)
  - (B) 1-3" CONDUIT  
3-14/7C FOR HEADS 1,4,6  
1-24/8C FOR CAT5 FOR SENSYS RPT  
1-#6 AWG (EGC)
  - (C) 1-4" BORED CONDUIT  
1-14/2C FOR PED PB  
4-14/7C FOR HEADS 1,4,6,P4  
1-24/8C FOR CAT5 FOR SENSYS RPT  
1-#6 AWG (EGC)
  - (D) 1-3" CONDUIT  
1-14/7C FOR HEADS 2  
1-24/8C FOR CAT5 FOR SENSYS ACP  
1-#6 AWG (EGC)
  - (E) 1-4" BORED CONDUIT  
1-14/7C FOR HEADS 2  
1-24/8C FOR CAT5 FOR SENSYS ACP  
1-#6 AWG (EGC)
  - (F) 1-3" CONDUIT  
1-14/2C FOR PED PB  
1-14/7C FOR HEAD P2  
1-#6 AWG (EGC)
  - (G) 1-4" BORED CONDUIT  
1-14/2C FOR PED PB  
2-14/7C FOR HEADS 2,P2  
1-24/8C FOR CAT5 FOR SENSYS ACP  
1-#6 AWG (EGC)
  - (H) 1-3" CONDUIT  
2-12 SINGLE MODE FIBER ODUG  
1-#6 AWG (EGC)
  - (J) 1-3" CONDUIT  
2-14/2C FOR PED PB  
2-14/7C FOR HEAD P2,P4  
1-#6 AWG (EGC)
  - (K) 2-4" CONDUITS  
4-14/2C FOR PED PB  
8-14/7C FOR HEAD 1,2,4,6,P2,P4  
1-24/8C FOR CAT5 FOR SENSYS ACP  
1-24/8C FOR CAT5 FOR SENSYS RPT  
2-#6 AWG (EGC)
  - 1-3" CONDUIT  
2-12 SINGLE MODE FIBER ODUG
  - 1-3" CONDUIT (SPARE)  
1-#6 AWG (EGC) (FOR SPARE)
  - (L) 1-1/4" CONDUIT (M)  
3-#6 AWG FOR ELEC.SERVICE
  - (M) 1" CONDUIT  
1-#6 AWG FOR ELEC.GROUNDING
  - (N) 1-2" CONDUIT FOR ELEC.SERVICE  
1100 LB PULL ROPE
- (M) DENOTES METAL CONDUIT  
 (EGC) DENOTES EQUIPMENT GROUNDING CONNECTOR  
 ACP DENOTES ACCESS POINT (SENSYS)  
 RPT DENOTES REPEATER (SENSYS)



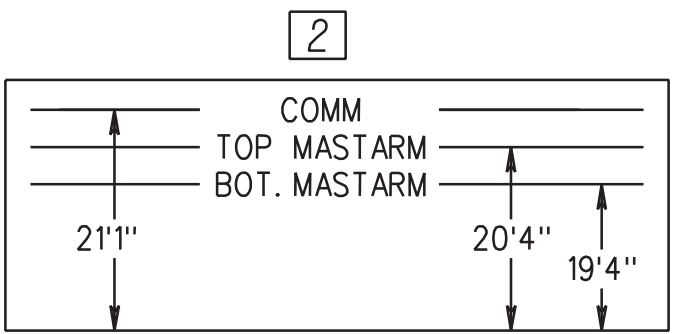
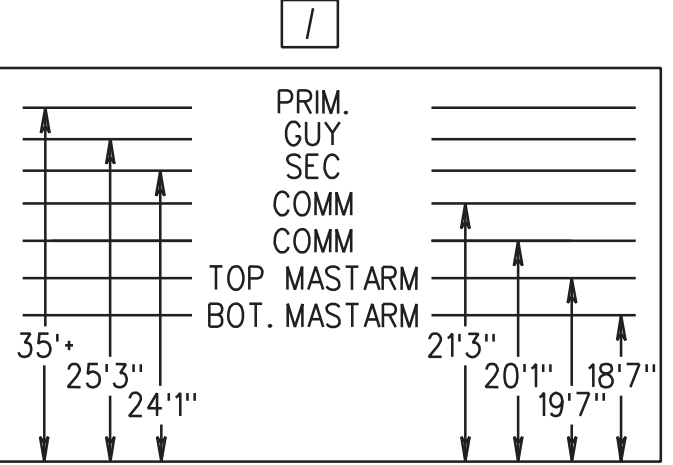
COLOR SEQUENCE CHART

PHASE	1	2	4	6	1+6	2+6	FLASH
1	⊕/R			G	⊕/G	G	A
2		G				G	A
4			G				R
6				G	G	G	A
P2		+WALK				+WALK	BLANK
P4			+WALK				BLANK

NOTE: BLANK SPACES REPRESENT A RED DISPLAY.  
 \* WALK INDICATION DISPLAYED AFTER PEDESTRIAN CALL IS SERVICED; OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

CLEARANCE CHART

R/W	CLEARANCE	NEXT PHASE
G	A	R
G	G	G
⊕/G	⊕/G	⊕/R
⊕/G	⊕/A	G
⊕/C	⊕/A	R
⊕/R	⊕/R	R
⊕/R	⊕/R	G
⊕/R	⊕/R	⊕/G
G	A	⊕/R
WALK	FDW	DW



NOTES  
 1. INSTALL SPLICE CABINET ON POLE \*EN38. SPLICE EXISTING OVERHEAD INTERCONNECT FROM JERMANTOWN RD AND LEE JACKSON MEM.HWY. RUN THROUGH PROPOSED CONDUIT SYSTEM TO THE PROPOSED CABINET.

TRAFFIC SIGNAL MODIFICATION DESIGN PLAN  
 LEE HWY (RTE 29) AT  
 CVS DRIVEWAY  
 CITY OF FAIRFAX

Drawn: LEB  
 Designed: LEB  
 Checked: SJW

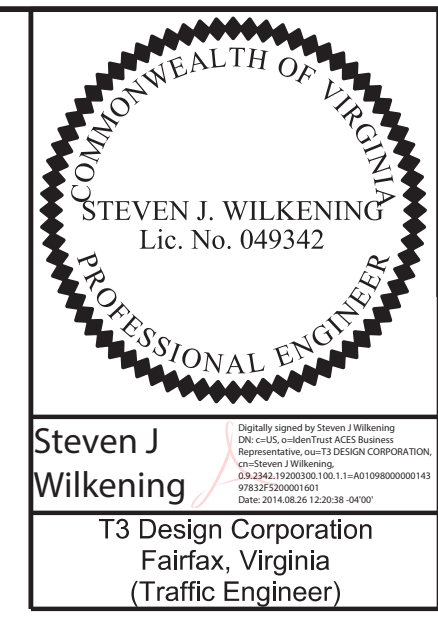
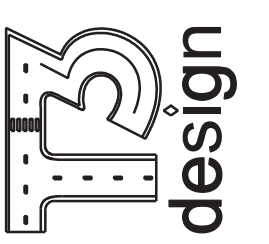
SCALE  
 0 25' 50'

PLAN NO. PROJECT FILE NO. SHEET NO.  
 - 0029-151-108 - 12(2)



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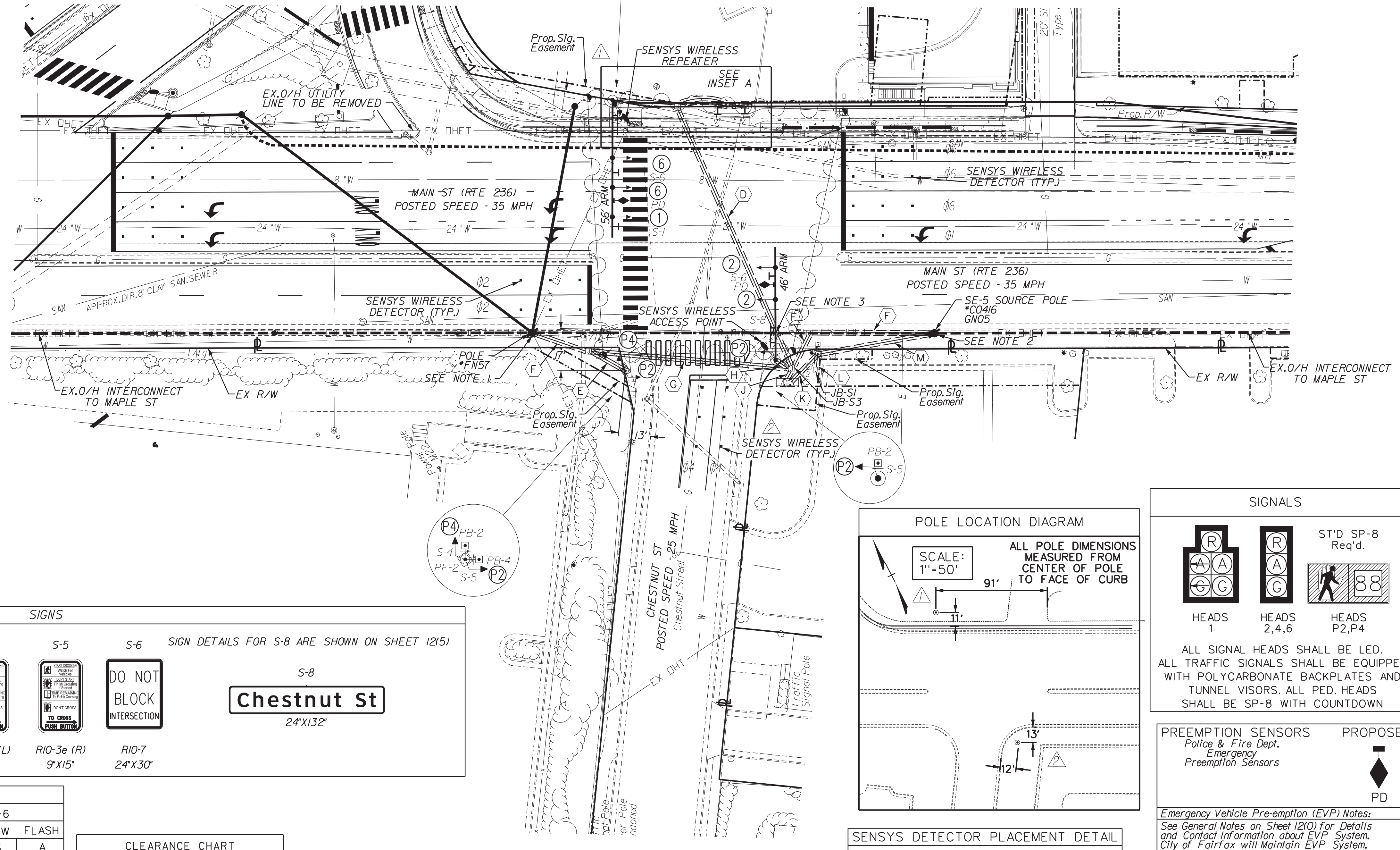
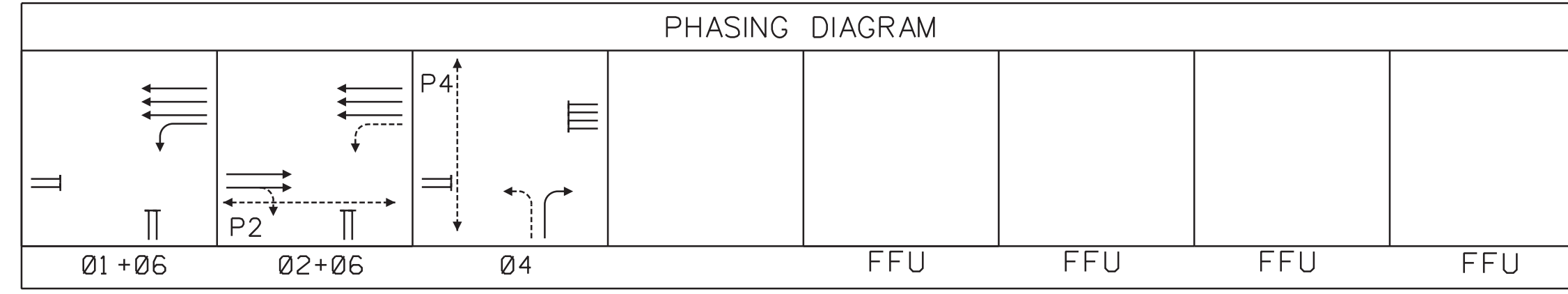
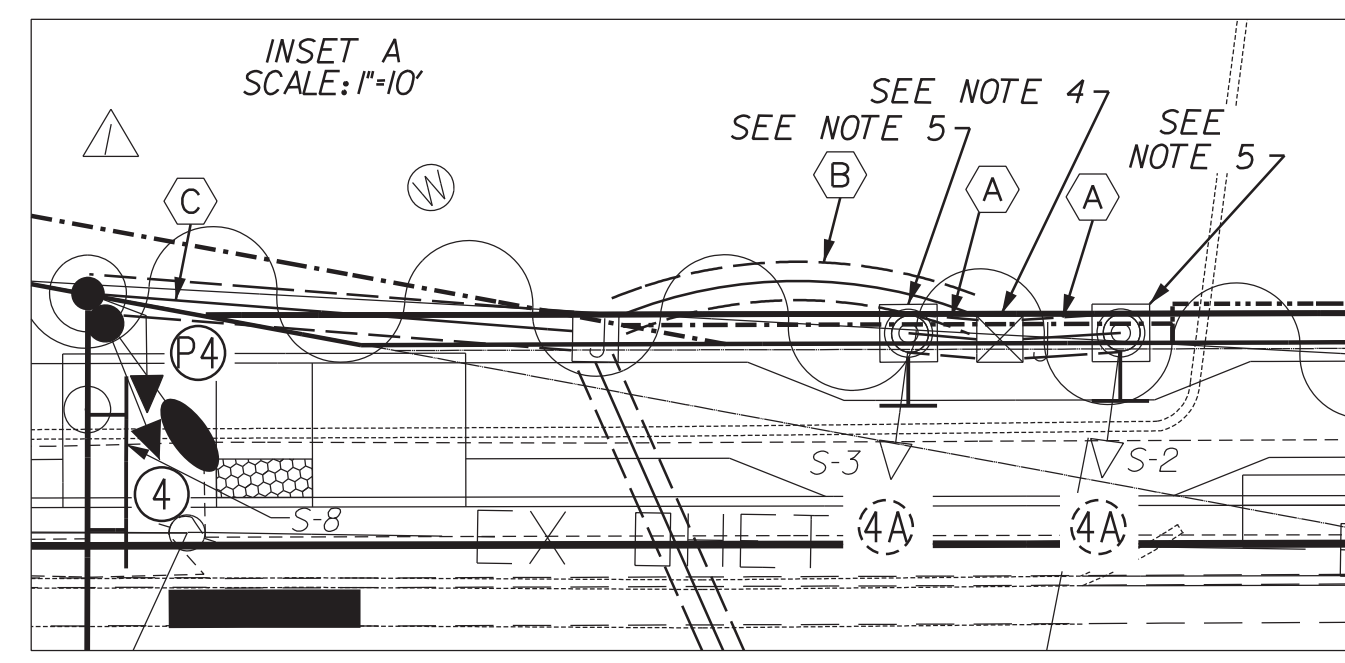
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Steven J. Wilkening  
 T3 Design Corporation  
 Fairfax, Virginia  
 (Traffic Engineer)

REVISED	STATE	FEDERAL AID	ROUTE	STATE	PROJECT	SHEET NO.
	VA.	-	29	0029-151-108	RW-201,C-501	12(3)

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



- ### CONDUIT & CABLE RUNS
- (A) 1-3" CONDUIT (EX)  
1-14/7C FOR HEAD 4A  
1-6 AWG (EGC)
  - (B) 1-3" CONDUIT  
2-14/7C FOR HEADS 4A  
1-6 AWG (EGC)
  - (C) 1-3" CONDUIT  
1-14/2C FOR PED PB  
4-14/7C FOR HEADS 1,4,6,P4  
1-EMER.PRE-EMPTION CABLE  
1-14/2C FOR CONF.LIGHT  
1-24/8C FOR CAT5 FOR SENSYS RPT  
1-6 AWG (EGC)
  - (D) 1-4" BORED CONDUIT  
1-14/2C FOR PED PB  
6-14/7C FOR HEADS 1,4,4A,6,P4  
1-EMER.PRE-EMPTION CABLE  
1-14/2C FOR CONF.LIGHT  
1-24/8C FOR CAT5 FOR SENSYS RPT  
1-6 AWG (EGC)
  - (E) 1-3" CONDUIT  
2-14/2C FOR PED PB  
2-14/7C FOR HEADS P2,P4  
1-6 AWG (EGC)
  - (F) 1-3" CONDUIT  
1-12 SINGLE MODE FIBER ODUG (EX)  
1-6 AWG (EGC)
  - (G) 1-4" BORED CONDUIT  
2-14/2C FOR PED PB  
2-14/7C FOR HEADS P2,P4  
1-12 SINGLE MODE FIBER ODUG (EX)  
1-6 AWG (EGC)
  - (H) 1-3" CONDUIT  
1-14/2C FOR PED PB  
2-14/7C FOR HEADS 2,P2  
1-EMER.PRE-EMPTION CABLE  
1-14/2C FOR CONF.LIGHT  
1-24/8C FOR CAT5 FOR SENSYS ACP  
1-6 AWG (EGC)
  - (J) 2-4" CONDUITS  
4-14/2C FOR PED PB  
10-14/7C FOR HEADS 1,2,4,4A,6,P2,P4  
2-EMER.PRE-EMPTION CABLE  
2-14/2C FOR CONF.LIGHTS  
1-24/8C FOR CAT5 FOR SENSYS ACP  
1-24/8C FOR CAT5 FOR SENSYS RPT  
2-6 AWG (EGC)
  - (K) 1-1/4" CONDUIT (M)  
3-6 AWG FOR ELEC.SERVICE
  - (L) 1-1" CONDUIT  
1-6 AWG FOR ELEC.GROUNDING
  - (M) 1-2" CONDUIT FOR ELEC.SERVICE  
1100 LB PULL ROPE
- (M) DENOTES METAL CONDUIT  
 (EGC) DENOTES EQUIPMENT GROUNDING CONDUCTOR  
 ACP DENOTES ACCESS POINT (SENSYS)  
 RPT DENOTES REPEATER (SENSYS)

### SIGNS

SIGN DETAILS FOR S-8 ARE SHOWN ON SHEET 12(5)

S-1	S-2	S-3	S-4	S-5	S-6	S-8
R10-12 30"X36"	R3-5R 30"X36"	R3-5L 30"X36"	R10-3e (L) 9"X15"	R10-3e (R) 9"X15"	R10-7 24"X30"	24"X132"

### COLOR SEQUENCE CHART

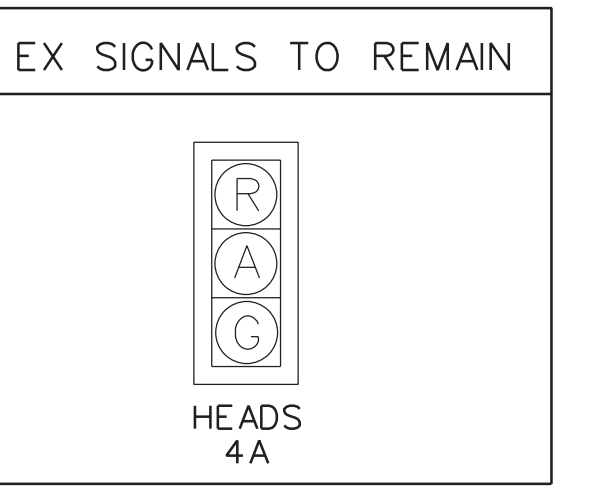
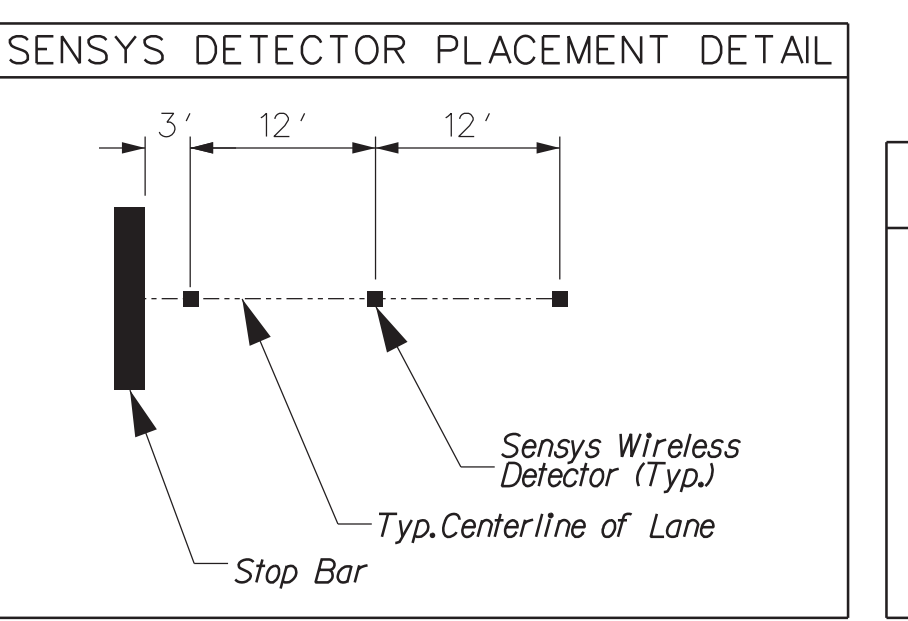
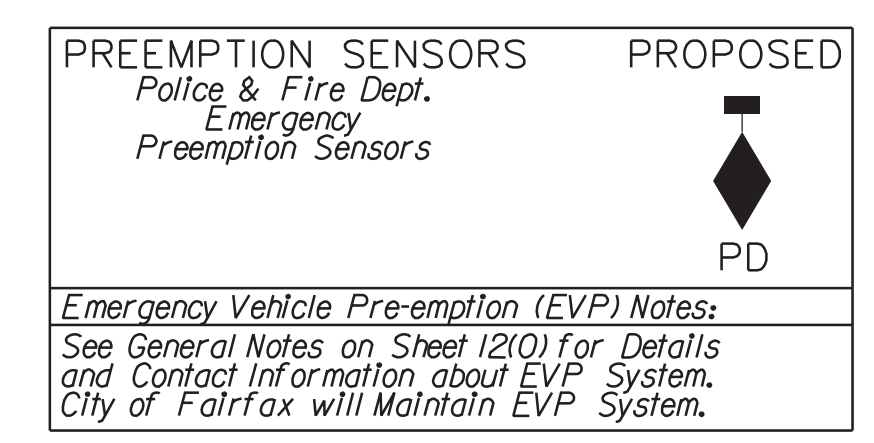
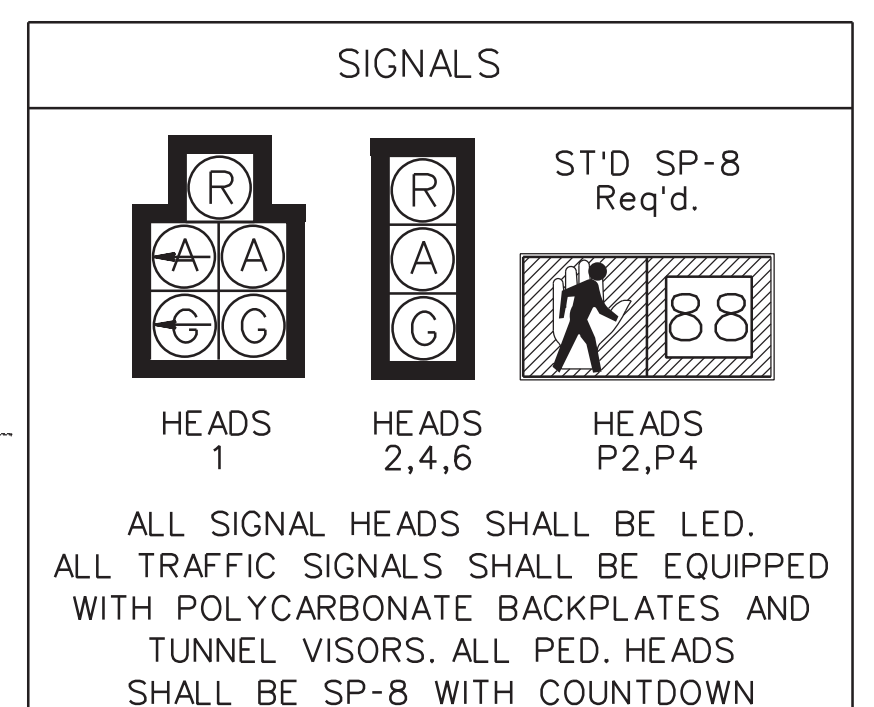
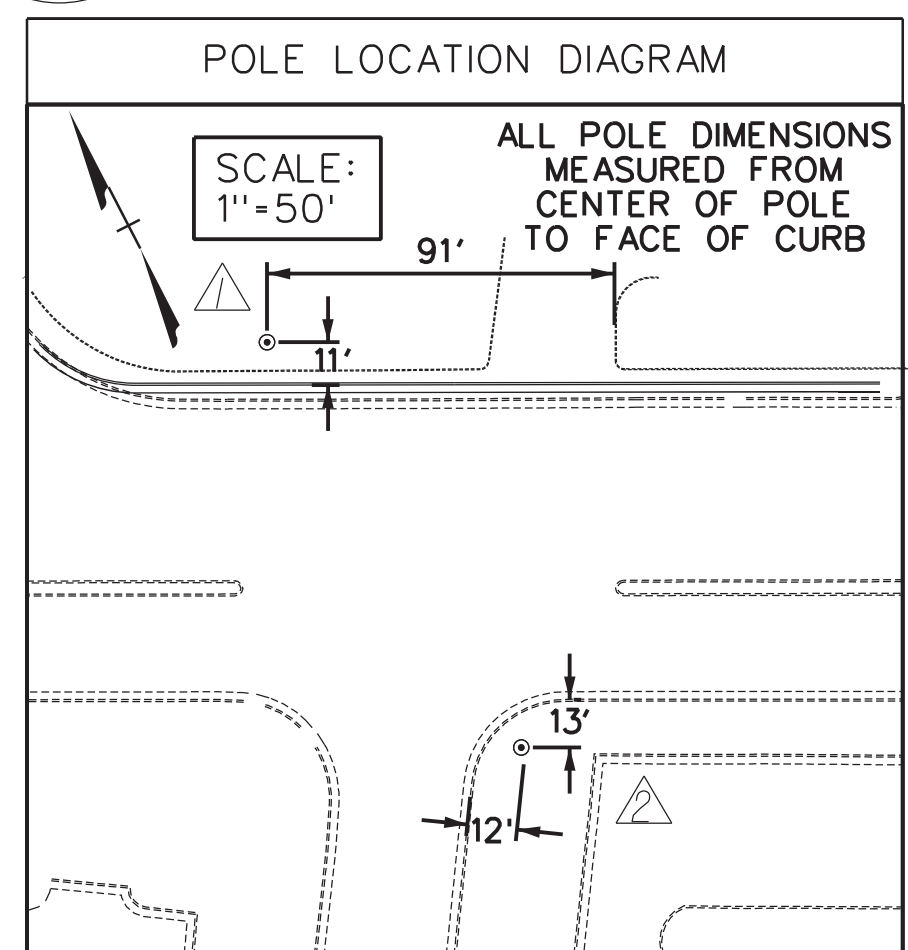
PHASE	1	2	4	6	1+6	2+6	FLASH
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
1	⊘/R			G	⊘/G	G	A
2		G				G	A
4			G				R
4A			G				R
6				G	G	G	A
P2		*WALK				*WALK	BLANK
P4		*WALK					BLANK

NOTE: BLANK SPACES REPRESENT A RED DISPLAY.  
 \* WALK INDICATION DISPLAYED AFTER PEDESTRIAN CALL IS SERVICED; OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

### CLEARANCE CHART

R/W	CLEARANCE		NEXT PHASE
	1	2	
G	A	R	R
G	G	G	G
⊘/G	⊘/G	⊘/R	⊘/G
⊘/G	⊘/A	⊘/R	⊘/R
⊘/G	⊘/G	G	G
⊘/G	⊘/A	R	R
⊘/R	⊘/R	R	G
⊘/R	⊘/R	R	R
⊘/R	⊘/R	⊘/R	⊘/G
G	A	R	⊘/R
WALK	FDW	DW	DW

- ### NOTES
- PULL BACK EXISTING INTERCONNECT TO POLE \*FN57 AND RE-ROUTE THROUGH PROPOSED CONDUIT SYSTEM TO THE PROPOSED CABINET.
  - PULL BACK EXISTING INTERCONNECT TO POLE \*GN05 AND RE-ROUTE THROUGH PROPOSED CONDUIT SYSTEM TO THE PROPOSED CABINET.
  - RELOCATED OVERHEAD UTILITY LINES NEED TO BE INSTALLED A MINIMUM OF 1' FOR COMM, 2.5' FOR SECONDARY, AND 10' FOR PRIMARY ABOVE THE PROPOSED MASTARM.
  - EXISTING JUNCTION BOX TO REMAIN.
  - EXISTING PEDESTAL POLE AND SIGNAL HEAD TO REMAIN. REMOVE EXISTING WIRING. INSTALL PROPOSED SIGN ON PEDESTAL POLE.



### TRAFFIC SIGNAL INSTALLATION DESIGN PLAN

MAIN ST (RTE 236) AT CHESTNUT ST  
 CITY OF FAIRFAX

Drawn: LEB	SCALE
Designed: LEB	0 25' 50'
Checked: SJW	

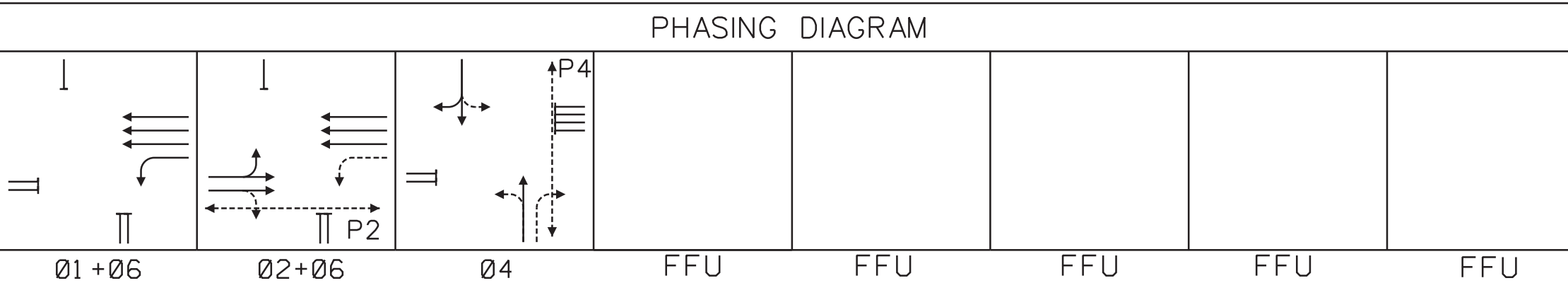
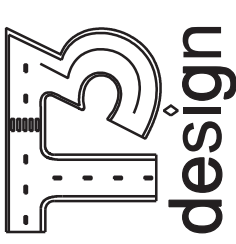
PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0029-151-108		12(3)





Rinker Design Associates, P.C.  
 Engineering - Surveying - Land Planning - Transportation - Environmental Services  
 10340 DEMOCRACY LN  
 FAIRFAX, VA 22030  
 PHONE: 703-588-5881  
 www.rdaonline.com

T3 DESIGN, CORP.  
 10340 DEMOCRACY LN  
 FAIRFAX, VA 22030  
 PHONE: 703-588-5881  
 www.t3design.com



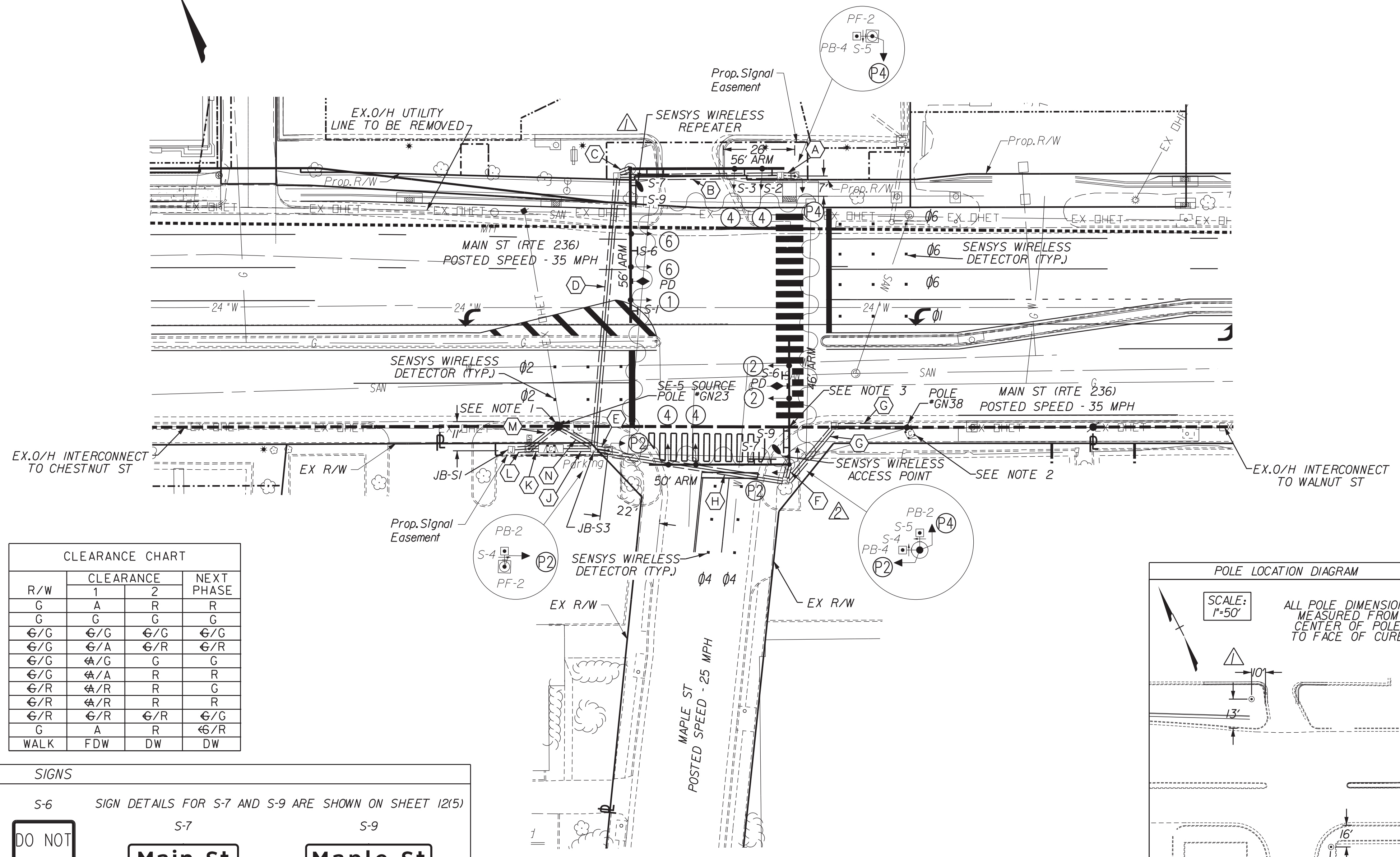
COMMONWEALTH OF VIRGINIA  
 STEVEN J. WILKENING  
 Lic. No. 049342  
 Steven J. Wilkening  
 T3 Design Corporation  
 Fairfax, Virginia  
 (Traffic Engineer)

REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
	VA.	-	29	0029-151-108 RW-201,C-501	12(4)

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

CONDUIT & CABLE RUNS

- (A) 1-3" CONDUIT  
1-1/4" FOR PED PB  
1-1/4" FOR HEADS P4  
1-6 AWG (EGC)
- (B) 1-4" BORED CONDUIT  
1-1/4" FOR PED PB  
1-1/4" FOR HEADS P4  
1-6 AWG (EGC)
- (C) 1-3" CONDUIT  
3-1/4" FOR HEADS 1,4,6  
1-EMER.PRE-EMPTION CABLE  
1-1/4" FOR CONF.LIGHT  
1-24/8C FOR CAT5 FOR SENSYS RPT  
1-6 AWG (EGC)
- (D) 1-4" BORED CONDUIT  
1-1/4" FOR PED PB  
4-1/4" FOR HEADS 1,4,6,P4  
1-EMER.PRE-EMPTION CABLE  
1-1/4" FOR CONF.LIGHT  
1-24/8C FOR CAT5 FOR SENSYS RPT  
1-6 AWG (EGC)
- (E) 1-3" CONDUIT  
1-1/4" FOR PED PB  
1-1/4" FOR HEADS P2  
1-6 AWG (EGC)
- (F) 1-3" CONDUIT  
2-1/4" FOR PED PB  
4-1/4" FOR HEADS 2,4,P2,P4  
1-EMER.PRE-EMPTION CABLE  
1-1/4" FOR CONF.LIGHT  
1-24/8C FOR CAT5 FOR SENSYS ACP  
1-6 AWG (EGC)
- (G) 1-3" CONDUIT  
1-2 SINGLE MODE FIBER ODUG
- (H) 1-4" BORED CONDUIT  
2-1/4" FOR PED PB  
4-1/4" FOR HEADS 2,4,P2,P4  
1-EMER.PRE-EMPTION CABLE  
1-1/4" FOR CONF.LIGHT  
1-24/8C FOR CAT5 FOR SENSYS ACP  
1-6 AWG (EGC)
- (I) 1-4" BORED CONDUIT  
1-2 SINGLE MODE FIBER ODUG
- (J) 2-4" CONDUITS  
4-1/4" FOR PED PB  
9-1/4" FOR HEADS 1,2,4,6,P2,P4  
2-EMER.PRE-EMPTION CABLE  
2-1/4" FOR CONF.LIGHTS  
1-24/8C FOR CAT5 FOR SENSYS ACP  
1-24/8C FOR CAT5 FOR SENSYS RPT  
1-6 AWG (EGC)
- (K) 1-3" CONDUIT (SPARE)  
1-2 SINGLE MODE FIBER ODUG (FOR SPARE)
- (L) 1-1/4" CONDUIT (M)  
3-6 AWG FOR ELEC.SERVICE
- (M) 1-1" CONDUIT  
1-6 AWG FOR ELEC.GROUNDING
- (N) 1-2" CONDUIT FOR ELEC.SERVICE  
1100 LB PULL ROPE
- (O) 1-3" CONDUIT  
1-2 SINGLE MODE FIBER ODUG (EX)



SIGNALS

ST'D SP-8 Req'd.

ALL SIGNAL HEADS SHALL BE LED.  
 ALL TRAFFIC SIGNALS SHALL BE EQUIPPED WITH POLYCARBONATE BACKPLATES AND TUNNEL VISORS.  
 ALL PED. HEADS SHALL BE SP-8 WITH COUNTDOWN

CLEARANCE CHART

R/W	CLEARANCE 1	2	NEXT PHASE
G	A	R	R
G	G	G	G
6/G	6/G	6/G	6/G
6/G	6/A	6/R	6/R
6/G	6/G	G	G
6/G	6/A	R	R
6/R	6/R	R	G
6/R	6/R	R	R
6/R	6/R	6/R	6/G
G	A	R	6/R
WALK	FDW	DW	DW

SIGNS

SIGN DETAILS FOR S-7 AND S-9 ARE SHOWN ON SHEET 12(5)

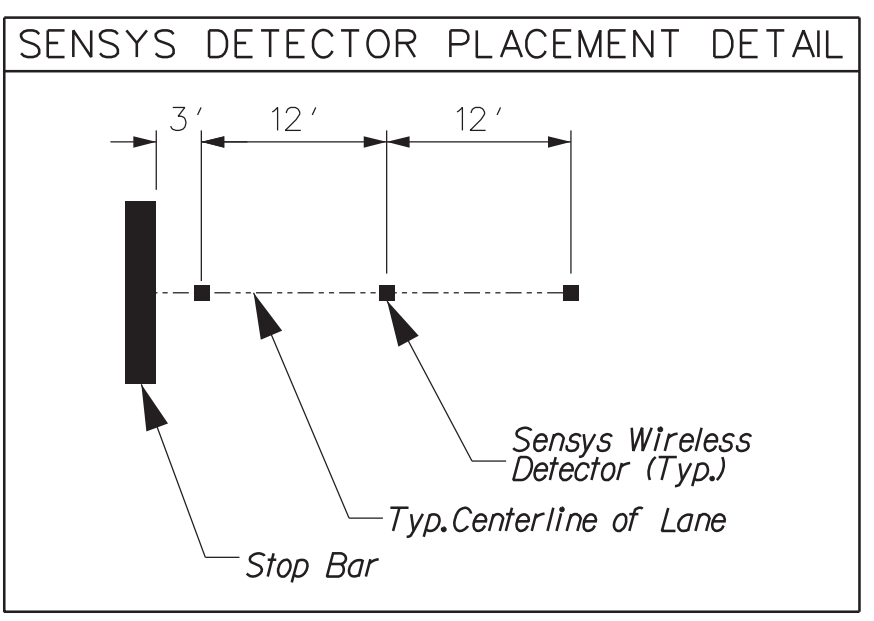
S-7: Main St 24'x84'

S-9: Maple St 24'x96'

COLOR SEQUENCE CHART

PHASE	1	2	4	6	1+6	2+6	FLASH
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	
1	6/R			G	6/G	G	A
2		G				G	A
4			G				R
6				G	G	G	A
P2		+WALK			+WALK		BLANK
P4		+WALK					BLANK

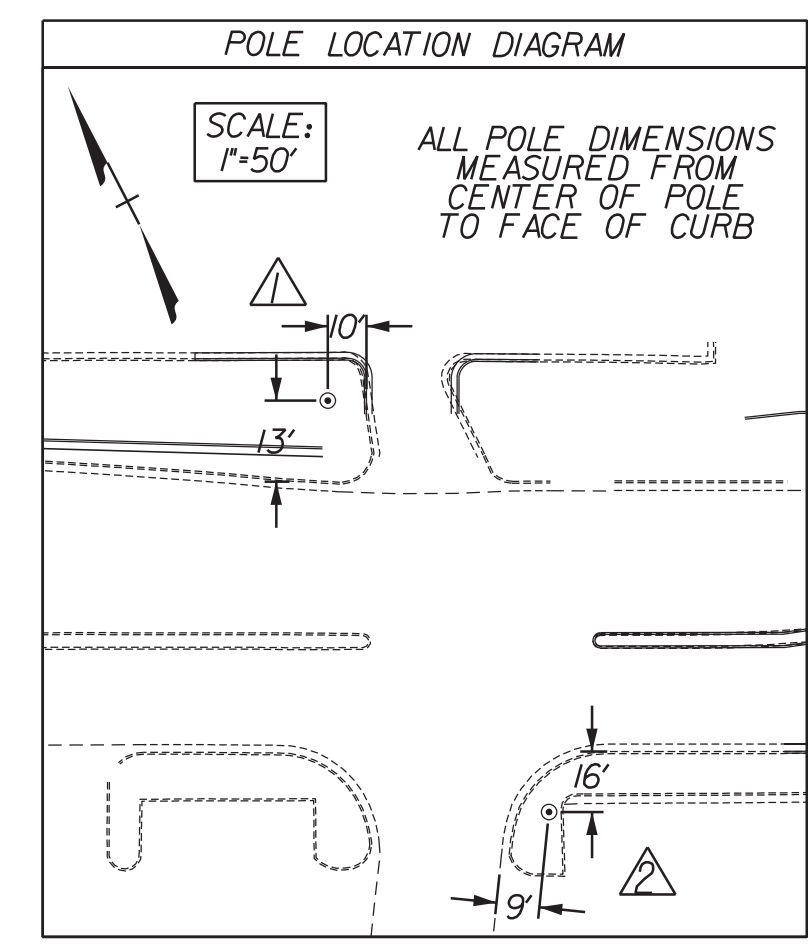
NOTE: BLANK SPACES REPRESENT A RED DISPLAY.  
 \* WALK INDICATION DISPLAYED AFTER PEDESTRIAN CALL IS SERVICED; OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.



PREEMPTION SENSORS PROPOSED

Police & Fire Dept. Emergency Preemption Sensors

Emergency Vehicle Pre-emption (EVP) Notes:  
 See General Notes on Sheet 12(10) for Details and Contact Information about EVP System. City of Fairfax will Maintain EVP System.



- NOTES
- PULL BACK EXISTING INTERCONNECT TO POLE \*GN23 AND RE-ROUTE THROUGH PROPOSED CONDUIT SYSTEM TO THE PROPOSED CABINET.
  - INSTALL SPLICE CABINET ON POLE \*GN38. SPLICE EXISTING OVERHEAD INTERCONNECT FROM WALNUT ST. RUN THROUGH PROPOSED CONDUIT SYSTEM TO THE PROPOSED CABINET.
  - RELOCATED OVERHEAD UTILITY LINES NEED TO BE INSTALLED A MINIMUM OF 1' FOR COMM, 2.5' FOR SECONDARY, AND 10' FOR PRIMARY ABOVE THE PROPOSED MAST ARM.

(M) DENOTES METAL CONDUIT (EGC) DENOTES EQUIPMENT GROUNDING CONDUCTOR  
 ACP DENOTES ACCESS POINT (SENSYS)  
 RPT DENOTES REPEATER (SENSYS)

TRAFFIC SIGNAL MODIFICATION DESIGN PLAN  
 MAIN ST (RTE 236) AT  
 MAPLE ST  
 CITY OF FAIRFAX

Drawn: LEB  
 Designed: LEB  
 Checked: SJW

SCALE: 0 25' 50'

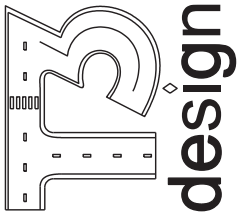
PLAN NO. PROJECT FILE NO. SHEET NO.  
 - 0029-151-108 - 12(4)





**Rinker Design Associates, P.C.**  
Engineering - Surveying - Landscaping - Transportation - Environmental Services  
4339 West Broad Street, Suite 300, Fairfax, VA 22030  
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\*Turning Challenges into Opportunities\*

**T3 DESIGN, CORP.**  
10340 DEMOCRACY LN  
FARFAX, VA 22030  
PHONE: 703-885-5881  
WWW.T3DESIGN.US



# SUMMARY OF QUANTITIES

REVISED	STATE				SHEET NO.
	PROJECT	ROUTE	PROJECT	PROJECT	
	VA.	-	29	0029-151-108 RW-201, C-501	12(6)

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

SHEET NO.	INTERSECTION	UNIT	24704	50108	51000	51160	51170	51184	51198	51212	51234	51240	51245	51327	51333	51344	51425	51425	51425	51425	51600	51607	51614	51614	51614	51614	51838	51840	51840	51840	51951	51960	51960	51963	52000	52000	52001	52001	52002	52002	52002	52002	52002	52002	52002	52002	52002	52002	52002	52403	55060					
LS	SF	TEC	EA	EA	EA	EA	EA	EA	EA	CY	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
12(1)	LEE HWY/FAIRFAX BLVD AT FAIRFAX BLVD/MAIN ST		1	52	1	11	1	50	4	2	13	2	1	0	0	0	0	0	0	0	2	2445	4760	955	30	2555	18	10	4	11	11	1	1	1	1	1	120	840	50	3	1	1	1	1	0	0	1	8	1	5	1	4	45			
12(2)	LEE HWY AT CVS DRIVEWAY		1	45	1	6	1	23	4	3	13	3	1	1	0	0	1	0	0	0	355	3270	190	140	80	10	6	1	10	9	1	1	1	1	0	0	0	0	24	1	1	0	0	0	1	6	1	1	1	4	40					
12(3)	MAIN ST AT CHESTNUT ST		1	81	1	8	1	20	4	1	13	1	1	0	1	1	0	0	0	0	650	1650	185	40	90	3	5	1	13	11	1	1	1	1	0	0	330	24	1	1	0	0	1	2	1	6	1	3	0	4	95					
12(4)	MAIN ST AT MAPLE ST		1	88	1	7	1	29	4	2	13	2	1	0	0	0	1	1	0	0	595	1445	150	115	160	12	8	1	16	12	1	1	1	1	0	375	24	1	1	0	0	1	6	1	4	1	4	65								
<b>TOTAL</b>			<b>4</b>	<b>266</b>	<b>4</b>	<b>32</b>	<b>4</b>	<b>122</b>	<b>16</b>	<b>8</b>	<b>52</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>4045</b>	<b>9125</b>	<b>1480</b>	<b>325</b>	<b>2885</b>	<b>43</b>	<b>29</b>	<b>7</b>	<b>50</b>	<b>43</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>120</b>	<b>1545</b>	<b>122</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>26</b>	<b>4</b>	<b>13</b>	<b>3</b>	<b>16</b>	<b>245</b>				

## SUMMARY NOTES:

- 1 ELECTRICAL SERVICE SHALL BE INSTALLED IN ACCORDANCE WITH STD'S SE-3 OR SE-5 AS SHOWN ON THE PLANS AND SECTION 238.02(M). THE COST SHALL INCLUDE TWO 60 AMP BREAKERS. ELECTRIC SERVICE SHALL BE METERED.
- 2 THE COST OF THE 1" METAL CONDUIT TO JB-S1 FOR THE SYSTEM GROUNDING IS INCLUDED IN THE COST OF ELECTRIC SERVICE SE-5.
- 3 TRAFFIC SIGNAL HEAD SECTIONS SHALL BE CAST ALUMINIUM.
- 4 ALL SIGNAL HEADS SHALL HAVE POLYCARBONATE BACKPLATES. BACKPLATE HARDWARE SHALL BE STAINLESS STEEL.
- 5 PEDESTRIAN SIGNAL HEAD SECTIONS SHALL BE CAST ALUMINIUM.
- 6 HANGER ASSEMBLY BRACKETS FOR ANGLED TRAFFIC SIGNAL HEADS SHALL BE SUCH THAT BACKPLATES CAN BE INSTALLED WITHOUT ALTERATION OR MODIFICATION.
- 7 CONTROLLER CABINET FOUNDATIONS SHALL BE STD CF-3 AND THE COST OF THE FOUNDATION SHALL INCLUDE TWO 4" CONDUITS, ONE 3" CONDUIT, AND A SPARE 3" CONDUIT, ONE 1-1/4" CONDUIT TIED TO THE JB-S3 AND THE PHONE COMPANY ACCESS COMPARTMENT CC-2.
- 8 ALL SIGNAL HEADS SHALL BE LED TYPE.
- 9 ALL MAST ARMS ARE TO BE FIELD DRILLED.
- 10 THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DETECTION ON ALL APPROACHES TO THE INTERSECTION AT ALL TIMES AND THROUGHOUT ALL PHASES OF CONSTRUCTION.
- 11 THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING COMMUNICATION TO THE CONTROLLER AT ALL TIMES.
- 12 THE COST OF PROVIDING COMMUNICATION TO THE TRAFFIC SIGNAL IS INCLUDED IN THE COST OF INSTALL CONTROLLER.
- 13 THE OPERATION OF THE EXISTING CONTROLLER SHALL BE MODIFIED TO PROVIDE THE OPERATION SHOWN ON THE PLANS.
- 14 MAINTENANCE AND REPAIR OF THE TRAFFIC SIGNAL, ONCE MODIFICATIONS ARE STARTED, IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE LOCATION IS 100% COMPLETE. THIS INCLUDES PAVEMENT MARKINGS AND SIGNS.
- 15 NO JUNCTION BOX SHALL BE INSTALLED IN PAVED SHOULDER, SIDEWALK OR MULTIPURPOSE TRAIL.
- 16 JUNCTION BOX COVERS SHALL HAVE THE LETTERS 'TRAF' CAST IN THE TOP SURFACE DEPRESSION FOR ALL TRAFFIC SIGNAL RELATED JUNCTION BOXES CONTAINING CABLE WITH LESS THAN 50 VOLTS. ALL OTHER JUNCTION BOX COVERS SHALL HAVE 'ELEC' CAST IN THE TOP SURFACE DEPRESSION.
- 17 THIS IS NOT A PAY ITEM, INCLUDED FOR INFORMATION ONLY. SEE CONTRACT SPECIAL PROVISIONS FOR TMP/SOC (MOT) FOR PROJECT.

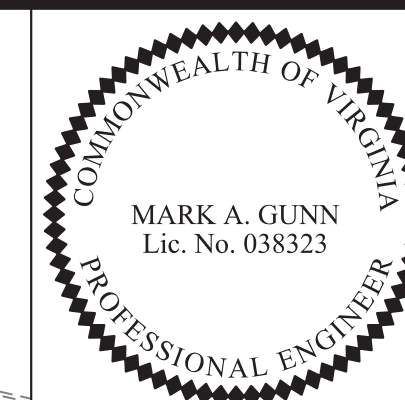
SHEET NO.	INTERSECTION	UNIT	55140	55165	55586	55587	55588	56020	56026	56030	56034	56038	56052	56200	56205
EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
12(1)	LEE HWY/FAIRFAX BLVD AT FAIRFAX BLVD/MAIN ST		2	2	1	18	1	15	15	50	1800	25	1080	1845	2
12(2)	LEE HWY AT CVS DRIVEWAY		0	0	1	3	1	10	15	30	125	45	210	145	2
12(3)	MAIN ST AT CHESTNUT ST		0	0	1	3	1	15	30	25	165	15	215	220	2
12(4)	MAIN ST AT MAPLE ST		0	0	1	4	1	15	20	10	120	25	330	140	2
<b>TOTAL</b>			<b>2</b>	<b>2</b>	<b>4</b>	<b>28</b>	<b>4</b>	<b>55</b>	<b>80</b>	<b>115</b>	<b>2210</b>	<b>110</b>	<b>1835</b>	<b>2350</b>	<b>8</b>

SUMMARY OF QUANTITIES FOR TRAFFIC SIGNAL MODIFICATION PLANS  
CITY OF FAIRFAX

Drawn: LEB	SCALE
Designed: LEB	0 25' 50'
Checked: SJW	
PLAN NO. -	PROJECT 0029-151-108
FILE NO. -	SHEET NO. 12(6)

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889  
SURVEYED BY Rinker Design Assoc., P.C. (703) 368-7373  
DESIGN SUPERVISED BY Mark Gunn, P.E., Rinker Design Assoc., P.C. (703) 368-7373  
DESIGNED BY Adam D. Welschenbach, P.E., Rinker Design Assoc., P.C. (703) 368-7373

# Underdrain and Grading Plan

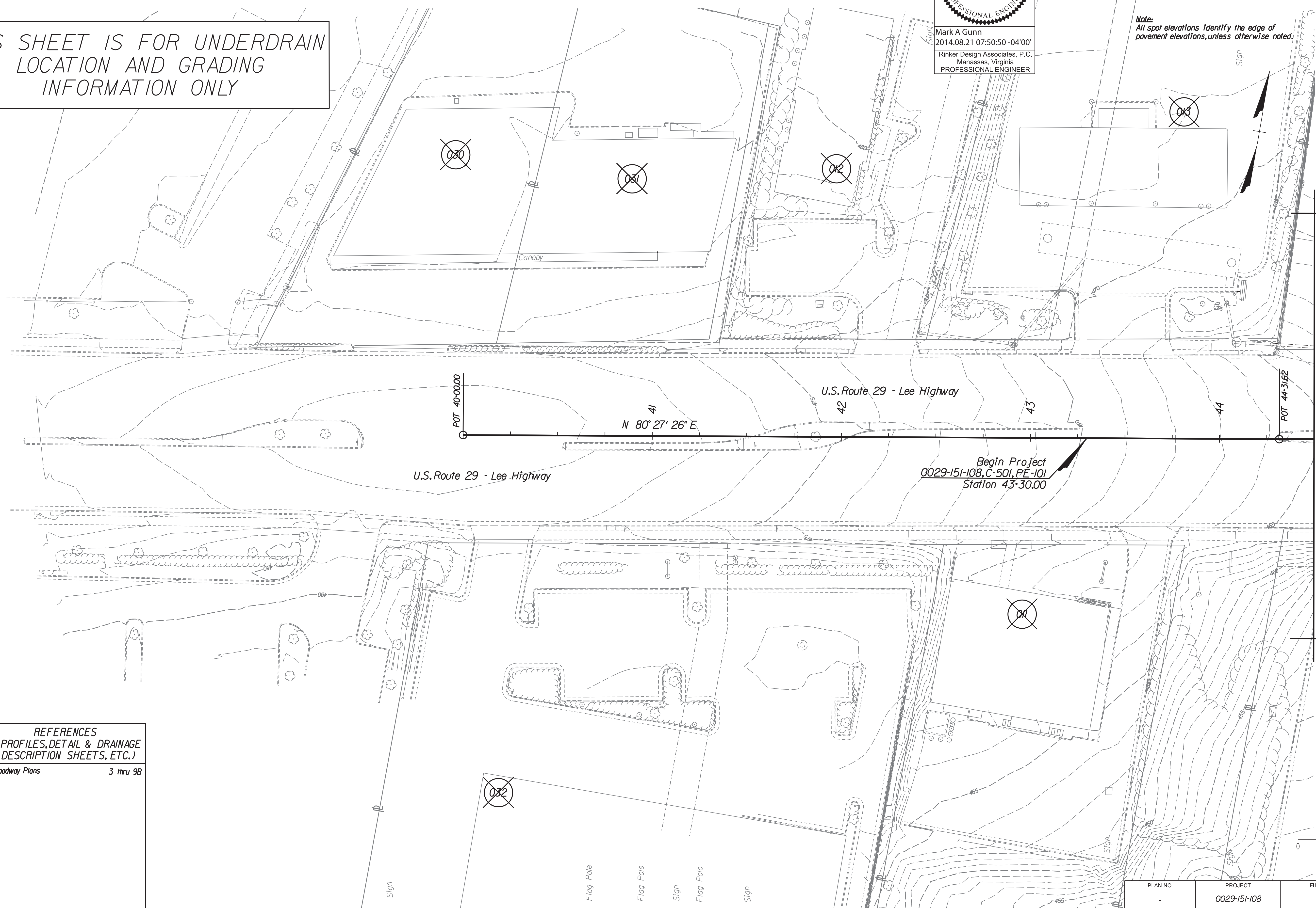


Mark A Gunn  
2014.08.21 07:50:50 -04'00'  
Rinker Design Associates, P.C.  
Manassas, Virginia  
PROFESSIONAL ENGINEER

REVISED 08-23-13	STATE VA.	FEDERAL AID PROJECT OWNER STP-540(675) RSTP-540(178)	ROUTE 29	STATE PROJECT 0029-151-108 RW-201, C-501	SHEET NO. 13
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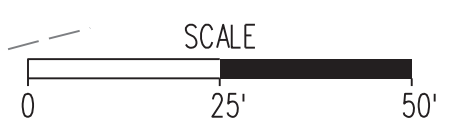
Note:  
All spot elevations identify the edge of pavement elevations, unless otherwise noted.

THIS SHEET IS FOR UNDERDRAIN LOCATION AND GRADING INFORMATION ONLY



### REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Roadway Plans 3 thru 9B



PLAN NO.	PROJECT 0029-151-108	FILE NO.	SHEET NO. 13
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Rinker Design Associates, P.C.  
Civil Engineers  
Transportation - Environmental  
Right of Way Services

NORTHERN VIRGINIA DISTRICT

8/20/2014

Match Line Sta. 44+50 (C.B.L.) - Sheet 13(1)