

FOR INDEX OF SHEETS SEE SHEET 1B

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).
GEOPAK Computer Identification No. 71614



MARCH 2015



COMMONWEALTH OF VIRGINIA

CITY OF FAIRFAX

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

THE CITY OF FAIRFAX, KAMP WASHINGTON INTERSECTION IMPROVEMENTS

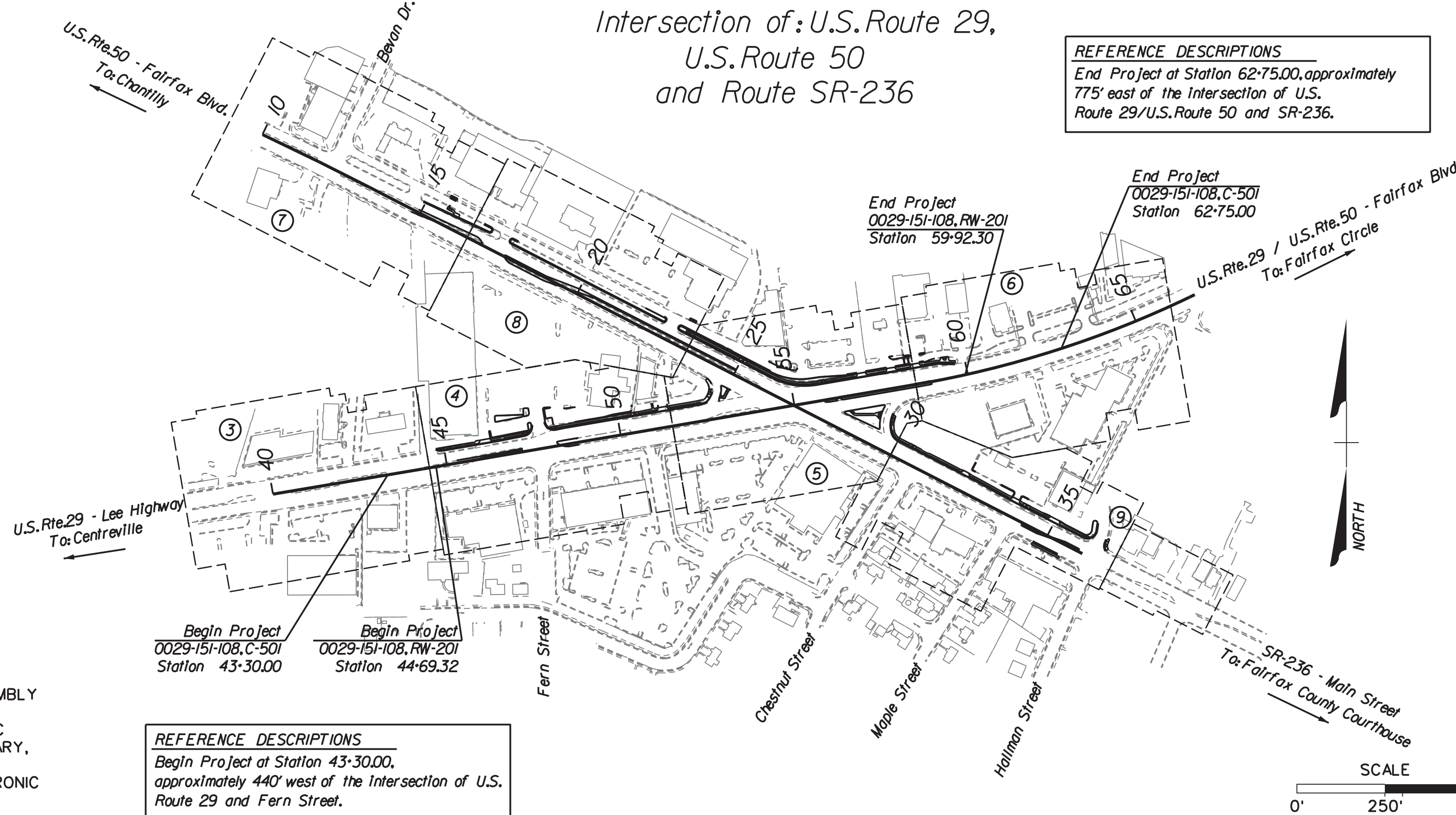
Intersection of: U.S. Route 29,
U.S. Route 50
and Route SR-236

REFERENCE DESCRIPTIONS
End Project at Station 62+75.00, approximately 775' east of the Intersection of U.S. Route 29/U.S. Route 50 and SR-236.

CONVENTIONAL SIGNS

STATE LINE	.....
COUNTY LINE	.....
CITY, TOWN OR VILLAGE	.....
RIGHT OF WAY LINE	.....
FENCE LINE	.....
UNFENCED PROPERTY LINE	.....
FENCED PROPERTY LINE	.....
WATER LINE	.....
SANITARY SEWER LINE	.....
GAS LINE	.....
ELECTRIC UNDERGROUND CABLE	.....
TRAVELED WAY	.....
GUARD RAIL	.....
RETAINING WALL	.....
RAILROADS	.....
BASE OR SURVEY LINE	.....

LEVEE OR EMBANKMENT	.....
BRIDGES	.....
CULVERTS	.....
DROP INLET	.....
HEDGE	.....
TREES	.....
HEAVY WOODS	.....
GROUND ELEVATION	.....
GRADE ELEVATION	.....



REFERENCE DESCRIPTIONS
Begin Project at Station 43+30.00, approximately 440' west of the Intersection of U.S. Route 29 and Fern Street.

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	EQUALITIES		LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		TYPE PROJECT	DESCRIPTION
					FEET	NONE	FEET	MILES	FEET	MILES		
0029-151-108	RW-201	RSTP-5A01(178)	ROWA	71614	FEET	NONE	1522.98	0.29	1522.98	0.29	Right of Way	Lee Highway / Fairfax Blvd. (U.S. Route 29 & U.S. Route 50)
	PE-101	STP-5401(675)	PENG	71614	FEET	NONE	1945.00	0.37	1945.00	0.37	Prelim. Eng.	Lee Highway / Fairfax Blvd. (U.S. Route 29 & U.S. Route 50)
	C-501	STP-5A01(589)	F000	71614	FEET	NONE	1945.00	0.37	1945.00	0.37	Construction	Lee Highway / Fairfax Blvd. (U.S. Route 29 & U.S. Route 50)

NOTE: Length of Project is based upon the Construction Baseline for U.S. Route 29 (Lee Highway) and U.S. Route 29/50 (Fairfax Boulevard).

REVISED 08-23-13 03-26-15	STATE	FEDERAL AID PROJECT OWNER	ROUTE	STATE PROJECT	SHEET NO.
	VA.	STP-5401(675) RSTP-5A01(178) STP-5A01(589)	29	(INFO) 0029-151-108 RW-201, C-501 See Tabulation Below For Section Numbers	1

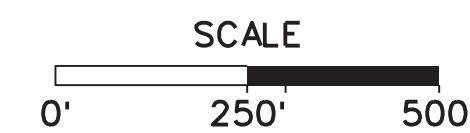
FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA				
URBAN PRINCIPAL ARTERIAL (GS-5) - ROLLING - 40 MPH DESIGN SPEED (MINIMUM)				
	U.S. RTE. 29 / U.S. RTE. 50		U.S. RTE. 50 / SR-236	
	Fr: Chain Bridge Rd. To: Main St (Rte 236)	Fr: Jermantown Rd. To: Main St (Rte 236)	Fr: Fairfax Co. Line To: U.S. 29	Fr: U.S. 50 To: West St.
ADT (2008)	38000	41000	61000	42000
ADT (2014)	44000	47000	70000	48000
ADT (2034)	72000	77000	115000	79000
DHV (2034)	5780	6180	9190	6300
ADT (2044)	92300	98500	146800	100700
DHV (2044)	7380	7880	11750	8000
D (%) (Design Hour) [2044]	60%	60%	60%	60%
T (%) (Design Hour) [2044]	1%	1%	2%	2%
V (MPH)	**	**	**	**

** See Plan and Profile Sheets for Horizontal and Vertical Curve Design Speeds.

TIER 1 PROJECT

LOCALLY ADMINISTERED PROJECTS	
CITY OF FAIRFAX, VA NAME OF LOCALITY	
Alexis Verzosa ALEXIS VERZOSA RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION 10/13/11 DIRECTOR OF TRANSPORTATION (CITY OF FAIRFAX) DATE TITLE OF POSITION	
David Summers DAVID SUMMERS RECOMMENDED FOR APPROVAL FOR CONSTRUCTION 3/27/15 DIRECTOR OF PUBLIC WORKS (CITY OF FAIRFAX) DATE TITLE OF POSITION	
RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION	
10/18/11	Rene'e N. Hamilton DISTRICT PLANNING AND INVESTMENT MANAGER
10/21/11	William C. Cutter DISTRICT PROJECT DEVELOPMENT ENGINEER
APPROVED FOR RIGHT OF WAY ACQUISITION	
10/21/11	Garrett Moore DISTRICT ADMINISTRATOR
RECOMMENDED FOR APPROVAL FOR CONSTRUCTION	
6/2/15	Marla J. Sinner DISTRICT PLANNING AND INVESTMENT MANAGER
6/2/15	Nicholas J. Roper DISTRICT PROJECT DEVELOPMENT ENGINEER
APPROVED FOR CONSTRUCTION	
6/3/15	Helen L. Cuervo DISTRICT ADMINISTRATOR

REVISED
08-23-13
03-26-15



PROJECT MANAGER: Wendy Block, Sanford, City of Fairfax, (703) 385-7889
SURVEYED BY: Rinker Design Assoc., P.C. (703) 368-7373 (2007)
DESIGNED BY: Mack A. Gunn, P.E., Rinker Design Assoc., P.C. (703) 368-7373
SUBSURFACE UTILITY PROVIDED BY: Cardno, I.B.E. (2007)

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

NORTHERN VIRGINIA DISTRICT

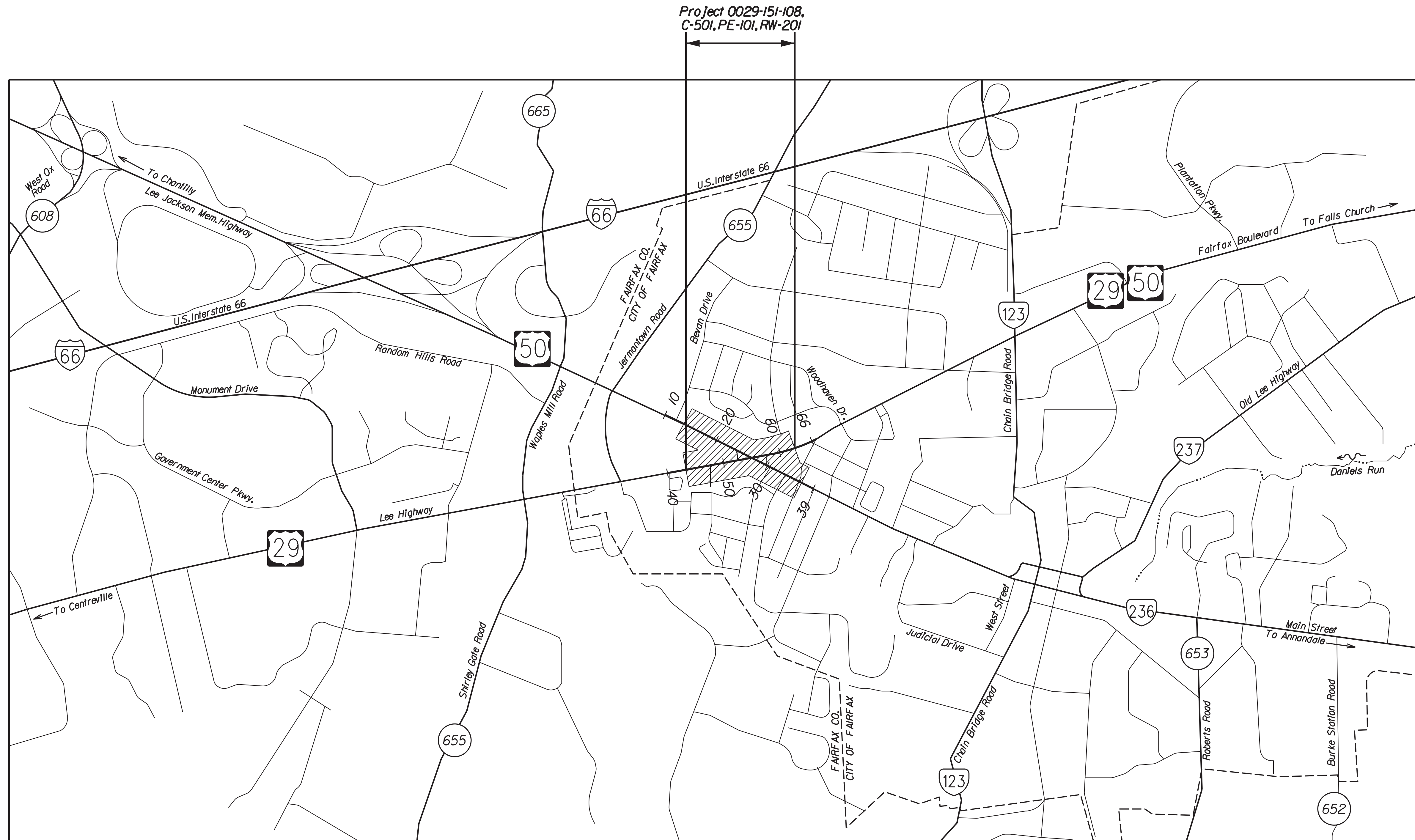
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PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1

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

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

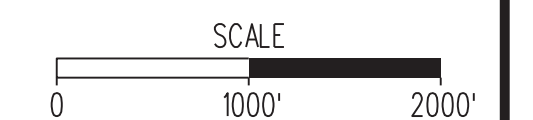
PROJECT LOCATION MAP



CITY OF FAIRFAX, KAMP WASHINGTON INTERSECTION IMPROVEMENTS - PROJECT LOCATION MAP

CITY OF FAIRFAX, VIRGINIA 1" = 1000' SCALE

- - - - - CITY LIMITS
- PROJECT LOCATION



PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1A

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*

PROJECT INDEX OF SHEETS

REVISED	STATE	FEDERAL AID		STATE		SHEET NO.
		PROJECT OWNER	ROUTE	PROJECT		
08-23-11 08-23-13	VA.	STP-540(675) RSTP-5A01(178)	29	0029-151-108 RW-201, C-501		1B

INDEX OF SHEETS State Project * 0029-151-108

Sheet No. I	Title Sheet for The City of Fairfax, Kamp Washington Intersection Improvements
Sheet No. IA	Project Location Map
Sheet No. IB	Project Index of Sheets
Sheet No. IC	Revision Data Sheet
Sheet No. ID	Right of Way Data Sheet
Sheet No. IF	Survey Control Data Sheet
Sheet No. IF(1)	Survey Control Data Sheet
Sheet No. IG	Construction Alignment Data Sheet
Sheet No. IH thru IH(14)	Insertable Sheets
Sheet No. IJ	TMP/SOC: General Notes
Sheet No. IJ(1)	TMP/SOC: Suggested Sequence of Construction
Sheet No. IJ(2)	TMP/SOC: Typical Sections
Sheet No. IK thru IK(3)	TMP/SOC: Phase I
Sheet No. IL thru IL(3)	TMP/SOC: Phase II
Sheet No. IN	Erosion and Sediment Control Plan - Notes and Details
Sheet No. IN(1)	Erosion and Sediment Control Plan - Notes and Details
Sheet No. IN(2)	Soils Map & Table
Sheet No. IP	Erosion and Sediment Control Plans: Phase I
Sheet No. IP(1)	Erosion and Sediment Control Plans: Phase I
Sheet No. IP(2)	Erosion and Sediment Control Plans: Phase I
Sheet No. IP(3)	Erosion and Sediment Control Plans: Phase I
Sheet No. IP(4)	Erosion and Sediment Control Plans: Phase I
Sheet No. IP(5)	Erosion and Sediment Control Plans: Phase I
Sheet No. IP(6)	Erosion and Sediment Control Plans: Phase I
Sheet No. IO	Erosion and Sediment Control Plans: Phase 2
Sheet No. IO(1)	Erosion and Sediment Control Plans: Phase 2
Sheet No. IO(2)	Erosion and Sediment Control Plans: Phase 2
Sheet No. IO(3)	Erosion and Sediment Control Plans: Phase 2
Sheet No. IO(4)	Erosion and Sediment Control Plans: Phase 2
Sheet No. IO(5)	Erosion and Sediment Control Plans: Phase 2
Sheet No. IO(6)	Erosion and Sediment Control Plans: Phase 2
Sheet No. 2	Project General Notes & Legend
Sheet No. 2A	Typical Sections
Sheet No. 2A(1)	Typical Sections
Sheet No. 2A(2)	Typical Sections
Sheet No. 2A(3)	Typical Sections
Sheet No. 2A(4)	Typical Section Details
Sheet No. 2A(5)	Typical Section Details
Sheet No. 2B	Pavement Summary
Sheet No. 2B(1)	Incidental Summary Soil Preparation, Seeding & Erosion Control Summary
Sheet No. 2B(2)	Maintenance of Traffic, Signage, Pavement Marking, and Utilities Summaries
Sheet No. 2B(3)	Grading Summary
Sheet No. 2D	Intersection Sight Distance Details
Sheet No. 2D(1)	SHEET REMOVED
Sheet No. 2D(2)	Intersection Sight Distance Details
Sheet No. 2D(3)	Intersection Sight Distance Details
Sheet No. 2E	Radial Offset and Bullet Nose Data Sheet
Sheet No. 2E(1)	Curb Return Details
Sheet No. 2F	Modified CG-9D Entrance Details & Modified MB-13 Barrier Details
Sheet No. 2F(1)	Service Road Details
Sheet No. 2G	Stormwater Pollution Prevention Plan (SWPPP)
Sheet No. 2G(1)	Stormwater Pollution Prevention Plan (SWPPP)
Sheet No. 2G(2)	Stormwater Pollution Prevention Plan (SWPPP)
Sheet No. 2K	Existing Drainage Descriptions & Existing Sanitary Descriptions
Sheet No. 2K(1)	Drainage Descriptions
Sheet No. 2K(2)	Structure Detail, Allowable Pipe Chart & Underdrain Tabulation
Sheet No. 2K(3)	Drainage Summary
Sheet No. 2K(4)	Drainage Summary
Sheet No. 2K(5)	Drainage Summary
Sheet No. 2L	Underground Utility Test Hole Information
Sheet No. 3	Plan Sheet Lee Highway (U.S. Route 29) Station 40+00 to 44+50
Sheet No. 3A	Profile Lee Highway (U.S. Route 29) Station 40+00 to 44+50
Sheet No. 4	Plan Sheet Lee Highway (U.S. Route 29) Station 44+50 to 51+50
Sheet No. 4A	Profile Lee Highway (U.S. Route 29) Station 44+50 to 51+50
Sheet No. 4B	Geometric Data Sheet Lee Highway (U.S. Route 29) Station 44+50 to 51+50
Sheet No. 5	Plan Sheet Lee Highway (U.S. Route 29)/Fairfax Boulevard (U.S. Routes 29/50) Station 51+50 to 58+50/ Main Street (Route 236) Station 23+50 to 30+00
Sheet No. 5A	Profile Lee Highway (U.S. Route 29)/Fairfax Boulevard (U.S. Routes 29/50) Station 51+50 to 58+50
Sheet No. 5B	Profile Fairfax Boulevard (U.S. Route 50)/Main Street (Route 236) Station 23+50 to 30+00
Sheet No. 5C	Geometric Data Sheet Lee Highway (U.S. Route 29)/Fairfax Boulevard (U.S. Routes 29/50) Station 51+50 to 58+50/ Main Street (Route 236) Station 23+50 to 30+00

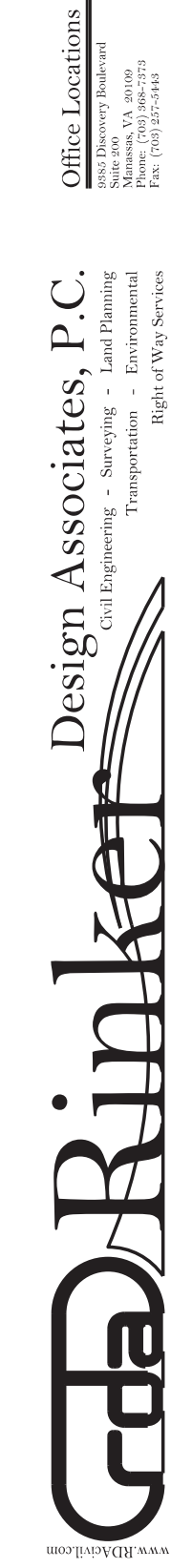
Sheet No. 6	Plan Sheet Fairfax Boulevard (U.S. Routes 29/50) Station 58+50 to 62+75
Sheet No. 6A	Profile Fairfax Boulevard (U.S. Routes 29/50) Station 58+50 to 62+75
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Sheet No. 7A	Profile Fairfax Boulevard (U.S. Route 50) Station 10+00 to 16+50
Sheet No. 7B	Geometric Data Sheet Fairfax Boulevard (U.S. Route 50) Station 10+00 to 16+50
Sheet No. 8	Plan Sheet Fairfax Boulevard (U.S. Route 50) Station 16+50 to 23+50
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Sheet No. 8B	Geometric Data Sheet Fairfax Boulevard (U.S. Route 50) Station 16+50 to 23+50
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Sheet No. 9A	Profile Main Street (Route 236) Station 30+00 to 36+67.1
Sheet No. 9B	Geometric Data Sheet Main Street (Route 236) Station 30+00 to 36+67.1
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Sheet No. 10(2)	Signage Plans
Sheet No. 10(3)	Signage Plans
Sheet No. 10(4)	Permanent Signage Schedule
Sheet No. 10(5)	Permanent Signage Schedule Cont.
Sheet No. 10(6)	Permanent Signage Schedule Cont.
Sheet No. 11	Pavement Marking Plans
Sheet No. 11(1)	Pavement Marking Plans
Sheet No. 11(2)	Pavement Marking Plans
Sheet No. 11(3)	Pavement Marking Plans
Sheet No. 12(1)	General Notes and Legend, Traffic Signal Modification Design Plans, Fairfax County
Sheet No. 12(1)	Traffic Signal Modification Design Plan, Lee Hwy/Fairfax Blvd (Rte 29) at Fairfax Blvd (Rte 50)/Main St (Rte 236) City of Fairfax
Sheet No. 12(2)	Traffic Signal Modification Design Plan, Lee Hwy (Rte 29) at CVS Driveway, City of Fairfax
Sheet No. 12(3)	Traffic Signal Installation Design Plan, Main St (Rte 236) at Chestnut St, City of Fairfax
Sheet No. 12(4)	Traffic Signal Modification Design Plan, Main St (Rte 236) at Maple St, City of Fairfax
Sheet No. 12(5)	Sign Detail Charts for Traffic Signal Modification Plans, City of Fairfax
Sheet No. 12(6)	Summary of Quantities for Traffic Signal Modification Plans, City of Fairfax
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Sheet No. 13(1)	Underdrain and Grading Plan
Sheet No. 13(1A)	Grading Plan Detail
Sheet No. 13(2)	Underdrain and Grading Plan
Sheet No. 13(2A)	Grading Plan Detail
Sheet No. 13(3)	Underdrain and Grading Plan
Sheet No. 13(4)	Underdrain and Grading Plan
Sheet No. 13(5)	Underdrain and Grading Plan
Sheet No. 13(6)	Underdrain and Grading Plan
Sheet No. 14	Waterline and Sanitary Sewer Plan
Sheet No. 14(1)	Waterline and Sanitary Sewer Plan
Sheet No. 14(2)	Waterline and Sanitary Sewer Plan
Sheet No. 14(3)	Waterline and Sanitary Sewer Plan
Sheet No. 14(4)	Proposed Sanitary Sewer Profiles
Sheet No. 14(5)	Proposed Waterline and Sanitary Sewer Profiles
Sheet No. 14(6)	Proposed Waterline Details
Sheet No. 15	Communication Duct Bank Encasement Plan and Detail
Sheet No. 15(1)	Main Street Utility Duct Bank Design
Sheet No. 15(2)	Main Street Utility Duct Bank Design

Cross Sections

Sheet No. 1	Index of Project Cross Sections
Sheet No. 5 thru 19	Lee Highway (U.S. Route 29)
Sheet No. 20 thru 25	Fairfax Blvd. (U.S. Route 29/50)
Sheet No. 42 thru 60	Fairfax Blvd. (U.S. Route 50)
Sheet No. 61 thru 76	Main Street (Route 236)

Index Notes
57 total cross section sheets.

GEOPAK COMPUTER IDENTIFICATION NO. 71614



NORTHERN VIRGINIA DISTRICT

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1B

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

REVISION DATA SHEET

REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
	PROJECT OWNER	PROJECT	PROJECT	PROJECT	
08-23-11 08-23-13 11-21-13 01-23-2014 02-26-2014	VA.	STP-5401(675) RSTP-5401(178)	29	0029-151-108 RW-201, C-501	IC

State Project: 0029-151-108, RW-201, PE-101, C-501
Federal Project: RSTP-5401(178), STP-5401(675)
From: Approx. 440' west of Intersection of U.S. Rte. 29 and Fern St.
To: Approx. 775' east of Intersection of U.S. Rte. 29/U.S. Rte. 50 and SR-236
UPC Number: 71614

ABBREVIATION LEGEND
TCE - Denotes Temporary Construction Easement
PDE - Denotes Permanent Drainage Easement

08-23-2011 R/W Revision
The following revisions were made by Hoangnam V. Nguyen and Drew J. Chartrand on August 23, 2011. The revisions completed are as follows:
Sht. 1B -- Updated Index of Sheets to Include the "Revision Data Sheet" and "Right of Way Data Sheet".
Sht. 1C -- Added "Revision Data Sheet" to accommodate addition of Right of Way Data sheet ID.
Sht. 1D -- Added "Right of Way Data Sheet" depicting proposed right of way and easement acquisitions for the Project.

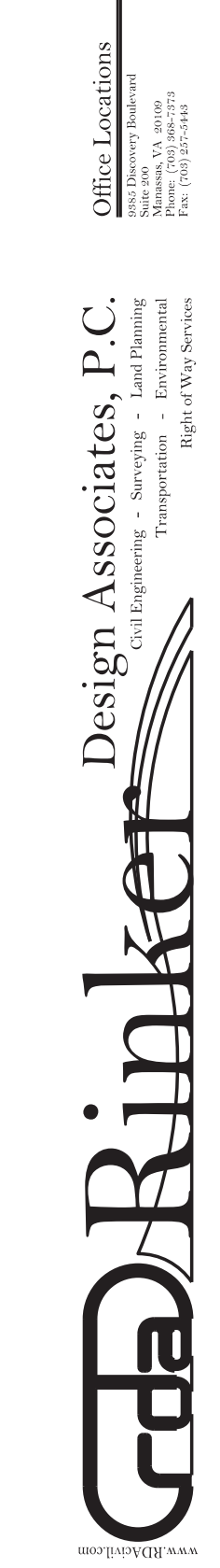
Sht. 6B -- R/W, Easement, and Design Revisions per Sheet 6, geometry modified to the sidewalk before entrance near Sta. 60+00, seal block added.
Sht. 7 -- Revised property information for Parcel 022.
Sht. 8 -- Added Prop. Dominion and Cox easements as detailed on Sheet 1D. Seal block added.
Sht. 8B -- R/W and Easement Revisions per Sheet 8, seal block added.
Sht. 9 -- Added Prop. Dominion, Verizon, & Cox easements, replaced all proposed R/W and some easements along Parcel 006/027 with existing land rights, adjusted the Temporary Construction Easement in front of Parcels 006/027, ceded R/W between Parcel 035 & Hallman Street, and added Parcel 40 (as detailed on Sheet 1D). Also modified existing property lines for Parcels 006 & 027. Revised property information for Parcel 006. Parcel 023 was combined with Parcel 006 and removed. Seal block added.
Sht. 9B -- R/W and Easement Revisions per Sheet 9, Seal block added.
10 Series -- R/W and Easement Revisions per Plan Sheets 3-9, Prop. Seal block added
Sht. 10(1) -- Left turn prohibition sign removed at entrance near Sta. 60+00. Revised design shown.
Sht. 10(4) -- Left turn prohibition sign no. 101 removed from schedule.
11 Series -- Proposed and existing R/W shown. Seal block added.
Sht. 11(1) -- Limits of proposed striping revised. Adjusted striping for shortened turn lane. Revised design shown.
13 Series -- Seal block added. Irrelevant design labels removed.
Sht. 13(1), 13(2), 13(3), 13(5), 13(6) -- R/W and Easement Revisions per Plan Sheets
Sht. 13, 13(3), 13(4), 13(6) -- Crossed out parcel numbers for unaffected properties
Sht. 13(2) -- UD-3 revised at north corner of intersection under revised sidewalk location.
Sht. 13(2A) & 13(3) -- Revised per shortened design near Sta. 60+00.
14 Series -- Seal block added.
14 thru 14(3) -- R/W and Easement Revisions per Plan Sheets.
Sht. 14 -- Easement labels added.

08-23-2013 R/W Revision
The following revisions were made by Adam Welschenbach on August 23, 2013. The revisions completed are as follows:
Sht. 1 -- Revised RW Project limits and length.
Sht. 1A, 1F, 1G -- Seal block added, minor sheet rearrangement
Sht. 1B -- Updated Index of Sheets to show Sheet 1D(1) as removed.
Sht. 1D -- Parcels with no acquisition have now been struck out
Parcel 001 - Total area and fee remainder adjusted to match plats, private utility esmt updated to include Cox Cable
Parcel 002 - Private utility easement updated to include Cox Cable
Parcel 004 - R/W fee taking and fee remainder updated, TCE updated, public utility easement adjusted to match plats
Parcel 005 - R/W fee taking and fee remainder updated, TCE and perm. signage easements updated, sight distance and Dominion Power easements removed
Parcel 006 - Landowner updated, total area and fee remainder added, Verizon easement added, TCE transferred from Parcel 027
Parcel 008 - TCE adjusted to match plats, private utility easement updated to include Cox Cable
Parcel 010 - Private utility easement updated to include Cox Cable
Parcel 014 - Total area, fee remainder, SDE and TCE adjusted to match plats, private utility easement updated to include Cox Cable and Verizon
Parcel 015 - Total area, fee taking, fee remainder, and TCE adjusted to match plats, private utility easement updated to include Cox Cable and Verizon
Parcel 022 - Landowner updated, private utility easement updated to include Cox Cable
Parcel 023 - Removed sight distance easement and Dominion Power easement from parcels.
there is no longer any acquisition on these two lots
Parcel 027 - TCE transferred to Parcel 027, this parcel no longer exists
Parcel 028 - Adjusted total area and fee remainder to match plats, Verizon esmt added
Parcel 033 - TCE adjusted to match plats
Parcel 034 - Total area, fee remainder, and TCE adjusted to match plats, added Verizon easement and Dominion Power/Cox Cable/Verizon easement
Parcel 035 - Adjusted fee taking to match plats, added Dominion Power/Cox Cable/Verizon easement
Parcel 036 - Private utility easement updated to include Cox Cable and Verizon
Parcel 037 - Removed Dominion Power easement, there is no longer any acquisition on this Parcel
Parcel 038, 039 - Landowner updated to match plats
Parcel 040 - Private utility easement updated to include Cox Cable and adjusted to match plats
Sht. 1G(1) -- Design changes as shown on Sheets 5 & 6, seal block added
Sht. 1J -- Sheet Title Revision, seal block added
Sht. 1J(1) & 1J(2) -- Seal block added
1K, 1L Series -- R/W and Easement Revisions per Plan Sheets 3-9, seal block added
Sht. 1K(1) -- Limits of Construction Revised per design changes
Sht. 1K(3) -- Limits of Construction Revised
Sht. 1L(1) -- Revised per design changes
1N, 1P, 1Q Series -- Seal block added
Sht. 1P(1), 1P(2), 1P(3), 1P(5), 1P(6) -- R/W and Easement Revisions per Plan Sheets 3-9
Sht. 1P(3) -- Limits of Construction Revised
Sht. 1Q(1), 1Q(2), 1Q(3), 1Q(5), 1Q(6) -- R/W and Easement Revisions per Plan Sheets 3-9
Sht. 1Q(2) -- Revised per design changes
Sht. 1Q(3) -- Limits of Construction Revised per design changes
2A Series -- Seal block added, minor sheet rearrangement
Sht. 2A(2) -- Stationing revised per design changes on Route 29/50
2D Series -- Seal block added
Sht. 2D(1) -- Sheet removed
Sht. 2D(2) & 2D(3) -- R/W and Easement Revisions
Sht. 2E -- Seal block added, sheet rearranged
Sht. 2E(1) -- Revised per sidewalk modification, seal block added
Sht. 2F -- Seal block added
Sht. 2F(1) -- Sidewalk construction moved back at end, no impact to entrance near Sta. 60+00, seal block added
2G, 2K, 2L Series -- Seal block added, minor sheet rearrangement
Sht. 2G(2) -- Design modified in location map per plans
Sht. 2K(2) -- Updated underdrain tabulation per design revisions
Sht. 3, 3A, 4A, 5A, 5B, 7, 7A, 7B, 8A, 9A -- Seal block added, minor sheet rearrangement
Sht. 3, 6, 6A, 7, 7A, 9, 9A -- Crossed out parcel numbers for unaffected properties
Sht. 4 -- Added Prop. Dominion, Cox, & Verizon Easements, as detailed on Sheet 1D, seal block added, Revised property information for parcel 010.
Sht. 4B -- R/W and Easement Revisions per Sheet 4, seal block added.
Sht. 5 -- Modified sidewalk at the north end of the intersection to follow at a regular offset from the curb (2' buffer), added Prop. Dominion and Cox easements and replaced proposed R/W along Parcel 006 with existing R/W (as detailed on Sheet 1D), and modified existing property lines for Parcels 006 & 027. Revised property information for Parcels 006 & 027. Seal block added.
Sht. 5C -- R/W, Easement, and Design Revisions per Sheet 5, seal block added.
Sht. 6 -- Removed Impacts to Parcel 023 by filling in sidewalk before the entrance near Sta. 60+00, RW Project Limits and Construction Limits modified accordingly, added Prop. Verizon easement and replaced proposed R/W along Parcel 027 with existing R/W (as detailed on Sheet 1D), and modified existing property lines for Parcels 004, 005, 006, 023, & 027. Revised property information for Parcels 006 & 023. Parcel 023 was combined with Parcel 006 and removed. Seal block added.
Sht. 6A -- End of construction moved, seal block added.

11-21-2013 R/W Revision
The following revisions were made by Adam D. Welschenbach on November 21, 2013. The revisions completed are as follows:
Sht. 1C -- Revised Revision Data Sheet
Sht. 1D -- Revised Ownership of Parcel 028 per Chris Calamos request.
Sht. 6 -- Revised Ownership of Parcel 028 per Chris Calamos request.
Sht. 6B -- Revised Ownership of Parcel 028 per Chris Calamos request.
Sht. 9 -- Revised Ownership of Parcel 028 per Chris Calamos request.
Sht. 9B -- Revised Ownership of Parcel 028 per Chris Calamos request.

01-23-2014 R/W Revision
The following revisions were made by Adam D. Welschenbach on January 23, 2014. The revisions completed are as follows:
Sht. 1C -- Revised Revision Data Sheet
Sht. 1D -- Revised Ownership of Parcel 005 per AJ Barq request.
Sht. 6 -- Revised Ownership of Parcel 005 per AJ Barq request.
Sht. 6B -- Revised Ownership of Parcel 005 per AJ Barq request.

02-26-2014 R/W Revision
The following revisions were made by Adam D. Welschenbach on February 26, 2014. The revisions completed are as follows:
Sht. 1C -- Revised Revision Data Sheet
Sht. 1D -- Revised Ownership of Parcel 004 & 006 per AJ Barq request.
Sht. 1D -- Revised Utility Easement on Parcel 040 per Ron Davis request.
Sht. 5 -- Revised Ownership of Parcel 004 & 006 per AJ Barq request.
Sht. 5C -- Revised Ownership of Parcel 004 & 006 per AJ Barq request.
Sht. 6 -- Revised Ownership of Parcel 004 & 005 per AJ Barq request.
Sht. 6B -- Revised Ownership of Parcel 005 per AJ Barq request.
Sht. 9 -- Revised Ownership of Parcel 006 per AJ Barq request.
Sht. 9 -- Revised Utility Easement on Parcel 040 per Ron Davis request.
Sht. 9B -- Revised Ownership of Parcel 006 per AJ Barq request.



NORTHERN VIRGINIA DISTRICT

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

PROJECT MANAGER Wendy Black 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

RIGHT OF WAY DATA SHEET

ROUTE:	29/50/236	PROJECT:	0029-151-108	REVISED BY:	-	DATE:	-
COUNTY/CITY:	City of Fairfax	PPMS NO.:	71614	REVISED BY:	-	DATE:	-
COMPILED BY:	Mark A. Gunn, P.E., Adam D. Welschenbach, P.E.	DATE:	December 20, 2010	REVISED BY:	-	DATE:	-
REVISED BY:	Mark A. Gunn, P.E., Adam D. Welschenbach, P.E.	DATE:	August 23, 2011	REVISED BY:	-	DATE:	-
REVISED BY:	Mark A. Gunn, P.E., Adam D. Welschenbach, P.E.	DATE:	June 21, 2013	REVISED BY:	-	DATE:	-
REVISED BY:	Mark A. Gunn, P.E., Adam D. Welschenbach, P.E.	DATE:	August 23, 2013	REVISED BY:	-	DATE:	-
REVISED BY:	Adam D. Welschenbach, P.E.	DATE:	November 21, 2013	REVISED BY:	-	DATE:	-
REVISED BY:	Adam D. Welschenbach, P.E.	DATE:	January 23, 2014	REVISED BY:	-	DATE:	-
REVISED BY:	Adam D. Welschenbach, P.E.	DATE:	February 26, 2014	REVISED BY:	-	DATE:	-

REVISED 08-23-11 08-23-13 11-21-13 01-23-2014 02-26-2014	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

PARCEL NO.	LANDOWNER	SHEET NO.	AREA														City/County: City of Fairfax				
			TOTAL ACRES OR SQUARE FEET	FEE TAKING SQ. FEET	PRESCRIPTIVE R/W SQ. FEET	FEE REMAINDER SQ. FEET OR ACRES	EASEMENTS											VERIZON SQ. FEET	PROFFERS YES / NO	REMARKS	
							STORM DRAINAGE SQ. FEET	STREET PURPOSES SQ. FEET	SIGNAL SQ. FEET	SIGNAGE SQ. FEET	SIGHT DISTANCE SQ. FEET	SIDEWALK SQ. FEET	PUBLIC UTILITY SQ. FEET	TEMPORARY SQ. FEET	DOMINION VA. POWER SQ. FEET	COX CABLE SQ. FEET					
001	FAIRFAX CROSSROADS COMPANY, LLC	5	27,389 sq.ft.	398	-	26,991	-	-	-	-	-	-	-	-	3,159	5,825	2,560	2,560	-	NO	Revised 8/23/13
002	FAIRFAX ASSOCIATES LLC	5	102,083 sq.ft.	1,401	-	100,682	2,412	-	-	-	-	-	-	-	3,401	7,775	89	89	-	NO	Revised 8/23/13
003	RESUB OF PARCEL D	5.6																		NO	No acquisition
004	ODW, LP, & DOLA, LLC	5.6	30,386 sq.ft.	1,519	-	28,867	628	-	-	-	-	-	-	79	2,610	-	-	-	NO	Revised 8/23/13 & 2/26/14	
005	DWB, LLC	6	29,827 sq.ft.	403	-	29,424	-	-	-	130	399	-	-	-	1,525	362	-	-	NO	Revised 8/23/13 & 01/23/2014	
006	CH REALTY VI/R FAIRFAX POINTE, LLC	56.9	36,320 sq.ft.	-	-	36,320	-	-	-	-	-	-	-	-	324	-	-	230	NO	Revised 8/23/13 & 02/26/14	
007	WESTMORE SHOPPING CENTER ASSOCIATES	9	15,540 sq.ft.	-	-	15,540	-	-	544	-	-	-	-	-	-	-	-	-	NO		
008	FAIRFAX JUNCTION FAIRFAX, VA	45.9	7,09559 Ac.	-	-	7,09559	-	-	4,940	-	-	-	-	-	1,952	256	256	-	NO	Revised 8/23/13	
009	11011 LEE HIGHWAY LLC	4	104,151 sq.ft.	-	-	104,151	-	-	219	-	-	-	-	-	-	-	-	-	NO		
010	LEE HIGHWAY LIMITED PARTNERSHIP	3.4	74,562 sq.ft.	-	-	74,562	-	-	-	-	-	-	-	-	-	400	400	-	NO	Revised 8/23/13	
011	YOGI P. & DAISY DUMERA	3	43,400 sq.ft.	-	-	43,400	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
012	FAIR OAKS SQUARE CONDOMINIUM	3																	NO	No acquisition	
013	GLOVERDALE LIMITED PARTNERSHIP	3.4	41,648 sq.ft.	-	-	41,648	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
014	USRP I	3,47.8	5,9000 Ac.	1,644	-	5,8623	457	529	-	-	-	-	-	-	25,591	520	520	520	NO	Revised 8/23/13	
015	O.J.B./AJRE JV, L.C.	45.8	24,599 sq.ft.	1,329	-	23,270	-	-	631	-	-	-	-	-	3,003	149	149	149	NO	Revised 8/23/13	
016	MJC PROPERTY, INC.	7	31,655 sq.ft.	-	-	31,655	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
017	50 JERMANTOWN LIMITED PARTNERSHIP	7	104,069 sq.ft.	-	-	104,069	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
018	GUARDIAN MAIN STREET, LLC	7	38,091 sq.ft.	-	-	38,091	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
019	H & I SERVICES, INC.	7	33,611 sq.ft.	-	-	33,611	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
020	JERMANTOWN CEMETERY	7	32,670 sq.ft.	-	-	32,670	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
021	GEORGE C. ANDRES, TRUSTEE & URSULA ANDREAS, TRUSTEE	7.8	4,15037 Ac.	-	-	4,15037	-	-	-	100	-	41	-	-	-	-	-	-	NO		
022	MOUNTAINEER SCHULING T., INC	5.8	2,77298 Ac.	-	-	2,77298	-	-	-	75	-	31	-	-	-	460	460	-	NO	Revised 8/23/13	
023	MATHAI REAL ESTATE HOLDINGS, LLC	6																	NO	No acquisition, rev. 8/23/13	
023	MATHAI REAL ESTATE HOLDINGS, LLC	6																	NO	No acquisition, rev. 8/23/13	
024	MGB PROPERTIES III, LLC	7	35,954 sq.ft.	-	-	35,954	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
025	MGB PROPERTIES III, LLC	7	7,5040 Ac.	-	-	7,5040	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
026	RESUB OF THE PROPERTY OF AMERICAN MEDICAL LABORATORIES, INC.	3.7	7,32795 Ac.	-	-	7,32795	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
027		6.9																	NO	Part of 006, rev. 8/23/13	
028	PASAN, LLC	6.9	26,496 sq.ft.	113	-	26,383	-	-	-	-	-	-	-	-	881	-	-	341	NO	Revised 8/23/13, 11/21/13	
029	SUSAN SANDELMAN, TRUSTEE	6	8,463 sq.ft.	-	-	8,463	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
030	SOL SUSLOWICH	3	0,4647 Ac.	-	-	0,4647	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
031	SOL SUSLOWICH	3	0,441 Ac.	-	-	0,441	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
032	11123 LEE HIGHWAY ASSOCIATES	3	83,413 sq.ft.	-	-	83,413	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
033	WESTMORE SHOPPING CENTER ASSOCIATES	9	33,322 sq.ft.	-	-	33,322	-	-	160	-	-	-	-	-	874	-	-	-	NO	Revised 8/23/13	
034	FARRISH REALTY THREE, LLC	6.9	2,8866 Ac.	1,937	-	2,8421	-	-	929	115	-	-	-	-	5,531	192	192	341	NO	Revised 8/23/13	
035	DONALD L. WEBER	9	0,338 Ac.	1,185	-	0,311	-	-	-	-	-	-	-	-	2,272	97	97	97	NO	Lots 23-24 total, rev. 8/23/13	
036	MEYER REAL ESTATE LLC	9	-	-	-	-	322	-	-	-	-	590	-	-	-	2,300	2,300	2,300	NO	Revised 8/23/13	
037	WESTMORE SHOPPING CENTER	9																	NO	No acquisition	
038	DORIS E BLACK, TRUSTEE	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NO	Total of Lot 6 & 7, rev. 8/23/13	
039	DORIS E BLACK, TRUSTEE	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NO	No acquisition	
040	COMMON ELEMENTS PROFESSIONAL CENTER OF FAIRFAX CONDOMINIUM	9	-	-	-	-	-	-	-	-	-	-	-	-	-	220	220	-	NO	Revised 2/26/14	

Northern Virginia District
Cda Rinker
Civil Engineering
Surveying
Transportation
Right of Way Services

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

SURVEY CONTROL DATA SHEET

REVISED 08-23-13	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	1F

Route : 29, 50, 236, 29/50
 Project : 0029-151-108
 District : NOVA
 County : City of Fairfax
 Horizontal Datum Based On NAD 1983
 Vertical Datum Based On NGS Mean Sea Level
 Survey By : Stanley Thomas, L.S., Rinker Design Associates, P.C.
 Operator : Lory Griffith, Field Coordinator
 Date : 2008
 Scale : 1" = 250'

Note: To Convert Va. State Plane Coordinates NAD 83 Metric Values to Va. D. O. T. Project Coordinates.

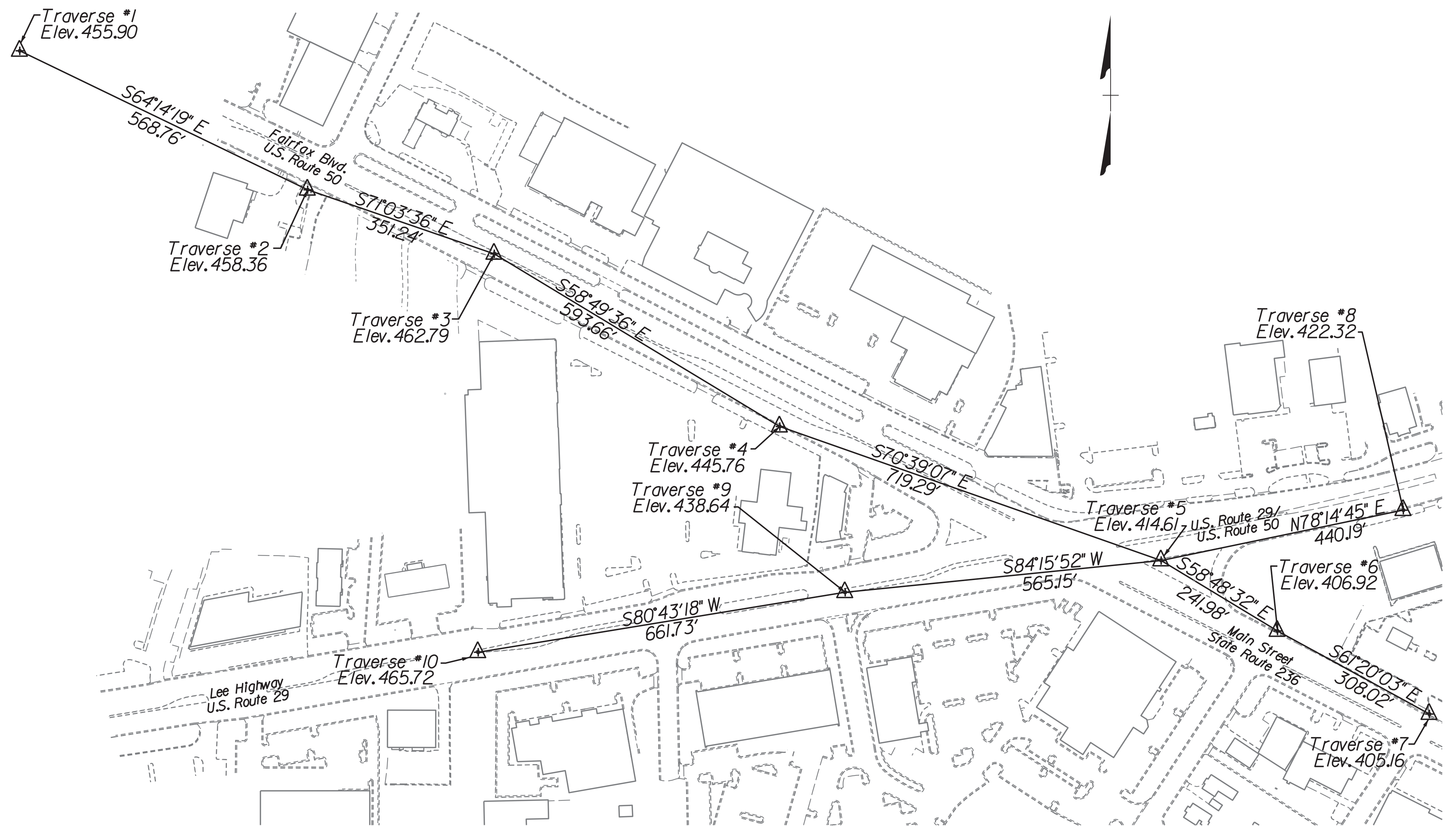
1. Reduce the Eastings 2.5 Million Meters and the South and North Zone Northings by 1 and 2 Million Respectively.
2. Multiply by the U. S. Survey Foot (3,28083333333).
3. Multiply These Values by the Combined Scale and Elevation Factor (1.000016) for this County.

A Reverse of this Procedure will Transform VDOT Project Coordinates to NAD 83 Values.

Note: This map was compiled to meet the Commonwealth of Virginia Standard for Class I map accuracy as of 2004.

Traverse Tabulation By RDA

Traverse Numbers	Bearing	Distance	Project Coordinates			Description
			Northing	Easting	Elevation	
1			6996631.691	11815975.798	455.90	Iron Rod with Cap
	S64°14'19"E	568.76'				
2			6996384.493	11816488.033	458.36	Iron Rod with Cap
	S71°03'36"E	351.24'				
3			6996270.490	11816820.252	462.79	Iron Rod with Cap
	S58°49'36"E	593.66'				
4			6995963.193	11817328.194	445.76	Iron Rod with Cap
	S70°39'07"E	719.29'				
5			6995724.887	11818006.863	414.61	Iron Rod with Cap
	S58°48'32"E	241.98'				
6			6995599.566	11818213.865	406.92	Iron Rod with Cap
	S61°20'03"E	308.02'				
7			6995451.811	11818484.128	405.16	Iron Rod with Cap
5			6995724.887	11818006.863	414.61	Iron Rod with Cap
	N78°14'45"E	440.19'				
8			6995814.558	11818437.818	422.32	Iron Rod with Cap
5			6995724.887	11818006.863	414.61	Iron Rod with Cap
	S84°15'52"W	565.15'				
9			6995668.406	11817444.539	438.64	Iron Rod with Cap
	S80°43'18"W	661.73'				
10			6995561.715	11816791.467	465.72	Iron Rod with Cap



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

NORTHERN VIRGINIA DISTRICT

8/20/2014

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1F

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

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	1F(1)

SURVEY CONTROL DATA SHEET

8/20/2014
 NORTHERN VIRGINIA DISTRICT
 Rinker Design Associates, P.C.
 10000 Old Dominion Blvd., Suite 100
 Fairfax, VA 22030
 Phone: (703) 368-7373
 Fax: (703) 368-7373
 www.rinker.com

LD-200 (REV. 8/2000)
Virginia Department of Transportation Horizontal Control
 Control Station I.D.: 6358 Project: 0029-151-108 V. D. O. T. Project Coordinates
 Route: 50 City/County: City of Fairfax Date: 03-20-2008
 Established By: Rinker Design Assoc., P.C.
 Vertical Datum Based On: NAD 83
 Horizontal Datum Based On: NAD 83
 Azimuth to Station: _____
 Latitude: _____ N (5 decimal places)
 Longitude: _____ W (5 decimal places)
 Geoid Separation (NI): _____
 Ellipsoid Height (H): _____ (WGS 84)
 Control Based on: Station (name or PID) _____ or
 Project (monument no.) _____ Order: _____
 Virginia State Plane Coordinates - NAD 83 Metric Values
 East (X) _____ m
 North (Y) _____ m
 Ortho. Elevation _____ m

To convert state plane metric units to VDOT project values, use the following formula:
 1. Reduce the Easting Metric Values By 2.5 Million Meters. The South and North Zone Northing Metric Values By 1 and 2 Million Respectively.
 2. Multiply These Values by the U.S. Survey Foot (3,280.833333)
 3. Multiply These Values by Combined Scale and Elevation Factor (1.00006) For the County.
 Reverse This Procedure to Transform VDOT Project Coordinates to NAD 83 Metric Plane Coordinates
 • Sketch and Detailed Description on Other Side •

LD-200 (REV. 8/2000)
Virginia Department of Transportation Horizontal Control
 Control Station I.D.: 6358 Project: 0029-151-108 V. D. O. T. Project Coordinates
 Route: 236 City/County: City of Fairfax Date: 03-20-2008
 Established By: Rinker Design Assoc., P.C.
 Vertical Datum Based On: NAD 83
 Horizontal Datum Based On: NAD 83
 Azimuth to Station: _____
 Latitude: _____ N (5 decimal places)
 Longitude: _____ W (5 decimal places)
 Geoid Separation (NI): _____
 Ellipsoid Height (H): _____ (WGS 84)
 Control Based on: Station (name or PID) _____ or
 Project (monument no.) _____ Order: _____
 Virginia State Plane Coordinates - NAD 83 Metric Values
 East (X) _____ m
 North (Y) _____ m
 Ortho. Elevation _____ m

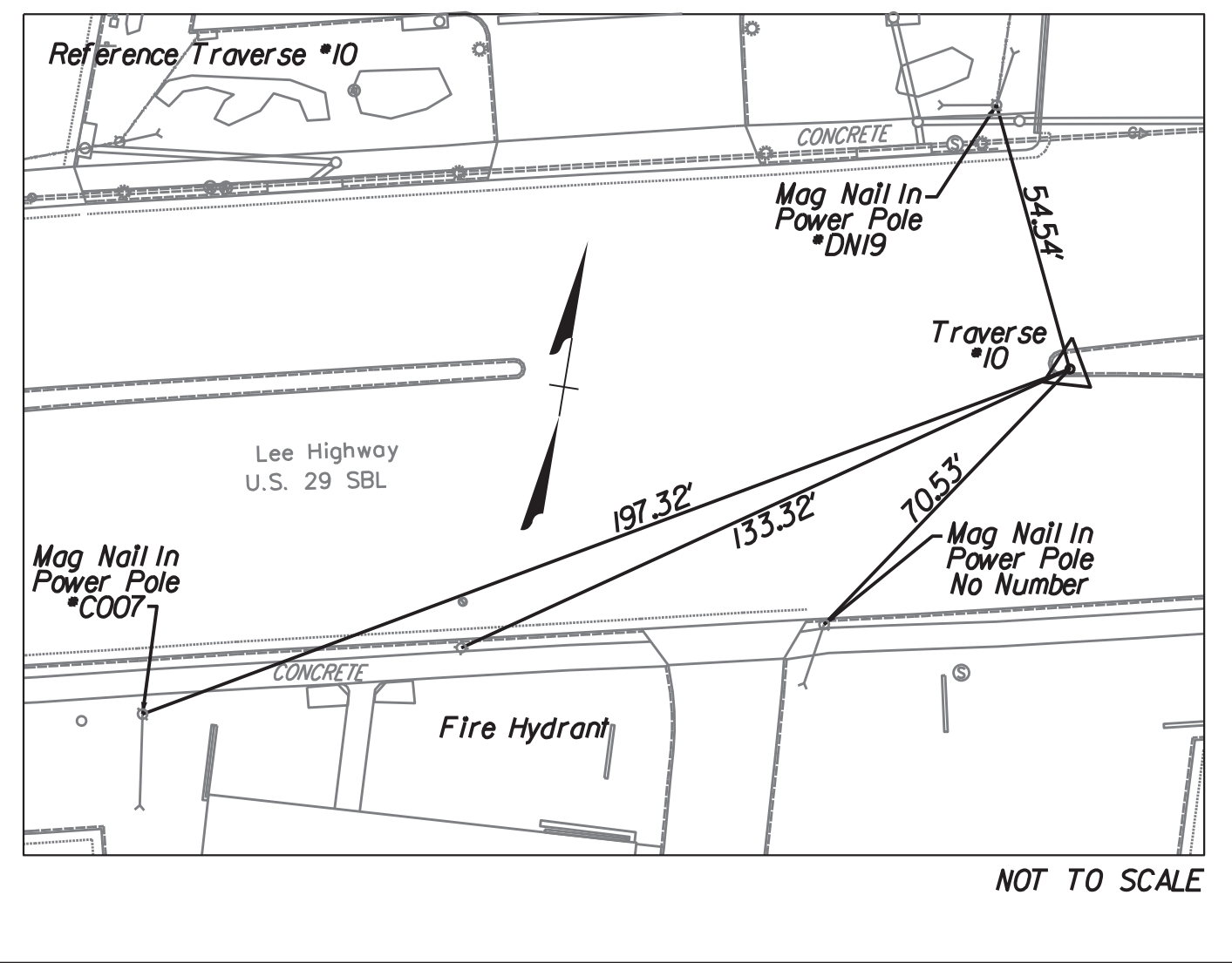
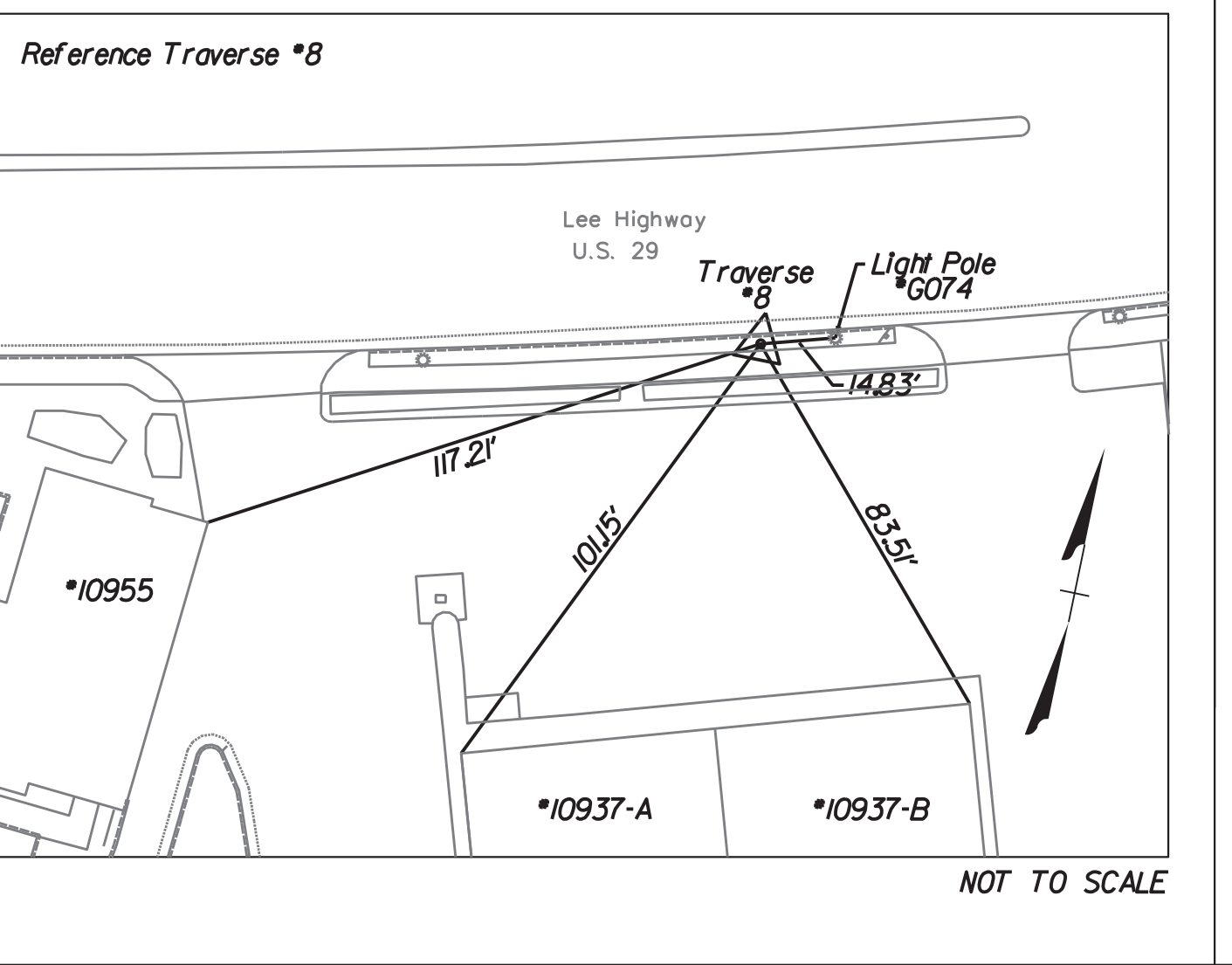
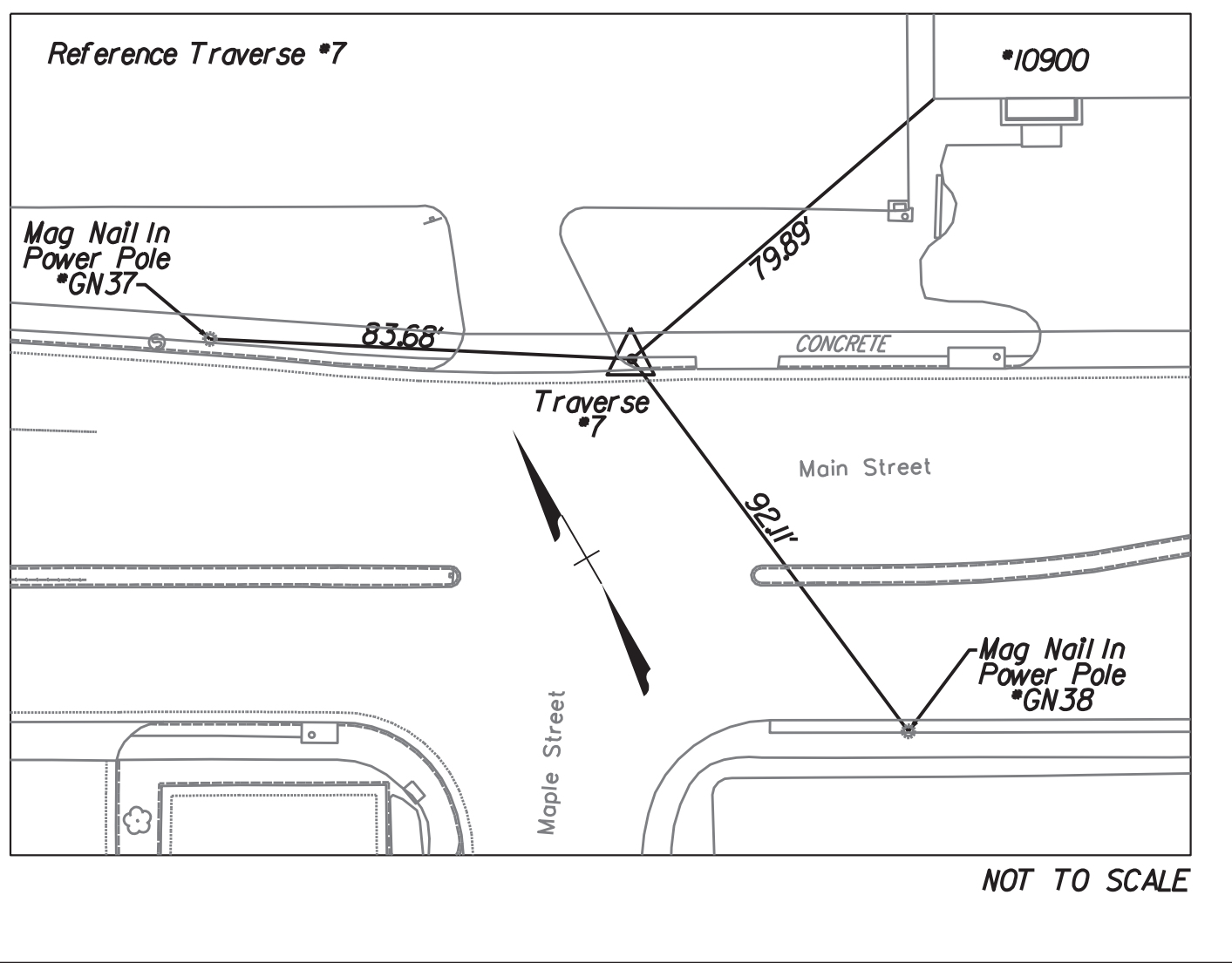
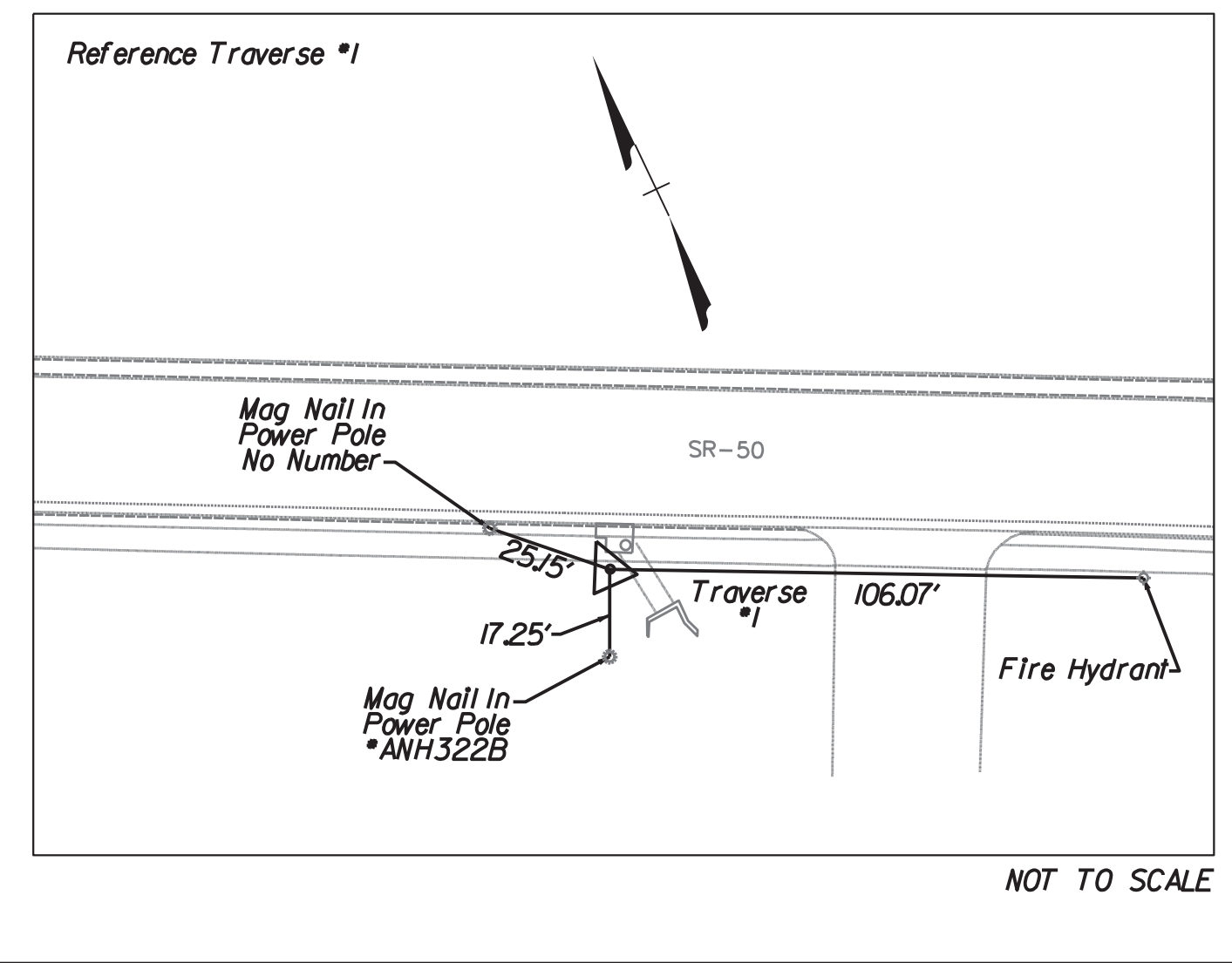
To convert state plane metric units to VDOT project values, use the following formula:
 1. Reduce the Easting Metric Values By 2.5 Million Meters. The South and North Zone Northing Metric Values By 1 and 2 Million Respectively.
 2. Multiply These Values by the U.S. Survey Foot (3,280.833333)
 3. Multiply These Values by Combined Scale and Elevation Factor (1.00006) For the County.
 Reverse This Procedure to Transform VDOT Project Coordinates to NAD 83 Metric Plane Coordinates
 • Sketch and Detailed Description on Other Side •

LD-200 (REV. 8/2000)
Virginia Department of Transportation Horizontal Control
 Control Station I.D.: 6358 Project: 0029-151-108 V. D. O. T. Project Coordinates
 Route: 29 City/County: City of Fairfax Date: 03-20-2008
 Established By: Rinker Design Assoc., P.C.
 Vertical Datum Based On: NAD 83
 Horizontal Datum Based On: NAD 83
 Azimuth to Station: _____
 Latitude: _____ N (5 decimal places)
 Longitude: _____ W (5 decimal places)
 Geoid Separation (NI): _____
 Ellipsoid Height (H): _____ (WGS 84)
 Control Based on: Station (name or PID) _____ or
 Project (monument no.) _____ Order: _____
 Virginia State Plane Coordinates - NAD 83 Metric Values
 East (X) _____ m
 North (Y) _____ m
 Ortho. Elevation _____ m

To convert state plane metric units to VDOT project values, use the following formula:
 1. Reduce the Easting Metric Values By 2.5 Million Meters. The South and North Zone Northing Metric Values By 1 and 2 Million Respectively.
 2. Multiply These Values by the U.S. Survey Foot (3,280.833333)
 3. Multiply These Values by Combined Scale and Elevation Factor (1.00006) For the County.
 Reverse This Procedure to Transform VDOT Project Coordinates to NAD 83 Metric Plane Coordinates
 • Sketch and Detailed Description on Other Side •

LD-200 (REV. 8/2000)
Virginia Department of Transportation Horizontal Control
 Control Station I.D.: 6358 Project: 0029-151-108 V. D. O. T. Project Coordinates
 Route: 29 City/County: City of Fairfax Date: 03-20-2008
 Established By: Rinker Design Assoc., P.C.
 Vertical Datum Based On: NAD 83
 Horizontal Datum Based On: NAD 83
 Azimuth to Station: _____
 Latitude: _____ N (5 decimal places)
 Longitude: _____ W (5 decimal places)
 Geoid Separation (NI): _____
 Ellipsoid Height (H): _____ (WGS 84)
 Control Based on: Station (name or PID) _____ or
 Project (monument no.) _____ Order: _____
 Virginia State Plane Coordinates - NAD 83 Metric Values
 East (X) _____ m
 North (Y) _____ m
 Ortho. Elevation _____ m

To convert state plane metric units to VDOT project values, use the following formula:
 1. Reduce the Easting Metric Values By 2.5 Million Meters. The South and North Zone Northing Metric Values By 1 and 2 Million Respectively.
 2. Multiply These Values by the U.S. Survey Foot (3,280.833333)
 3. Multiply These Values by Combined Scale and Elevation Factor (1.00006) For the County.
 Reverse This Procedure to Transform VDOT Project Coordinates to NAD 83 Metric Plane Coordinates
 • Sketch and Detailed Description on Other Side •



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

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

CONSTRUCTION ALIGNMENT DATA SHEET



Table with columns: REVISION, STATE, FEDERAL AID, ROUTE, STATE, PROJECT, SHEET NO. Includes project details like STP-540(675) and RW-201, C-501.

Mark A Gunn
2014.08.21 07:40:00 -04'00'
Rinker Design Associates, P.C.
Manassas, Virginia
PROFESSIONAL ENGINEER

FAIRFAX BOULEVARD (U.S. ROUTE 50)/
MAIN STREET (ROUTE 236)

Chain LJMHWY contains:
LJ01 LJ02 LJ03 LJ04 LJ05 LJ06

Beginning chain LJMHWY description

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points LJ01 through LJ06 and their respective coordinates and distances.

Ending chain LJMHWY description

FAIRFAX BOULEVARD (U.S. ROUTE 29/50)/
LEE HIGHWAY (U.S. ROUTE 29)

Chain RTE29 contains:
LH01 LH02 CUR CLH01 LH04

Beginning chain RTE29 description

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points LH01 through LH02 and their respective coordinates and distances.

Table with columns: Curve, P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, Chord Bear. Lists curve data for CLH01.

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points LH04 and their respective coordinates and distances.

CURB RETURN 100
(See Sheet 2E(1) For Location)

Chain CURBRET100 contains:
CURBRET101 CUR CURBRET102

Beginning chain CURBRET100 description

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points CURBRET101 and their respective coordinates and distances.

Table with columns: Curve, P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, Chord Bear. Lists curve data for CURBRET101.

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points CURBRET102 and their respective coordinates and distances.

CURB RETURN 200
(See Sheet 2E(1) For Location)

Chain CURBRETURN_200 contains:
CR201 CR202 CUR CURBRET200_1 CUR CURBRET200_2 CUR CURBRET200_3 CUR CURBRET200_4

Beginning chain CURBRETURN_200 description

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points CR201 through CR202 and their respective coordinates and distances.

Table with columns: Curve, P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, Chord Bear. Lists curve data for CURBRET200_1.

Table with columns: Curve, P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, Chord Bear. Lists curve data for CURBRET200_2.

Table with columns: Curve, P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, Chord Bear. Lists curve data for CURBRET200_3.

Table with columns: Curve, P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, Chord Bear. Lists curve data for CURBRET200_4.

Ending chain CURBRETURN_200 description

CURB RETURN 300
(See Sheet 2E(1) For Location)

Chain CURBRET300 contains:
CURBRET301 CUR CCURBRET301 CUR CCURBRET302 CURBRET304

Beginning chain CURBRET300 description

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points CURBRET301 and their respective coordinates and distances.

Table with columns: Curve, P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, Chord Bear. Lists curve data for CURBRET301.

Table with columns: Curve, P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, Chord Bear. Lists curve data for CCURBRET302.

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points CURBRET304 and their respective coordinates and distances.

Ending chain CURBRET300 description

MEDIAN BARRIER 200
(See Sheet 2F For Location)

Chain RW200 contains:
RW201 RW202

Beginning chain RW200 description

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points RW201 and their respective coordinates and distances.

Table with columns: Point, Stationing, N, E, S, W, Dist. Lists points RW202 and their respective coordinates and distances.

Ending chain RW200 description



NORTHERN VIRGINIA DISTRICT

Table with columns: PLAN NO., PROJECT, FILE NO., SHEET NO. Values: -, 0029-151-108, -, 1G

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889
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INSERTABLE SHEETS ST'D. PB-1 & PC-1

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	1H

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NORTHERN VIRGINIA DISTRICT

8/19/2014

PB-1

NO PROJECTION OF PIPE ABOVE GROUND LINE

NORMAL EARTH FOUNDATION

ROCK FOUNDATION

FOUNDATION SOFT, YIELDING, OR OTHERWISE UNSUITABLE MATERIAL

PB-1

PIPE PROJECTION ABOVE GROUND LINE

NORMAL EARTH FOUNDATION

ROCK FOUNDATION

FOUNDATION SOFT, YIELDING, OR OTHERWISE UNSUITABLE MATERIAL

LEGEND:

- BEDDING MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.
- CLASS I BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.
- FOR PLASTIC PIPE CLASS I BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.
- FOR ALL OTHER PIPE REGULAR BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.
- EMBANKMENT
- REGULAR BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.

NOTES:

FOR GENERAL NOTES ON PIPE BEDDING, SEE INSTALLATION OF PIPE CULVERTS AND STORM SEWERS GENERAL NOTES ON SHEET 107.00.

CRUSHED GLASS CONFORMING TO THE SIZE REQUIREMENTS FOR CRUSHER RUN AGGREGATE SIZE 25 AND 26 MAY BE USED IN PLACE OF CLASS I BACKFILL.

VDOT
ROAD AND BRIDGE STANDARDS

SHEET 1 OF 4
107.01

**INSTALL. OF PIPE CULVERTS AND STORM SEWERS
CIRC. PIPE BEDDING AND BACKFILL - METHOD "A"**

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

302
303

PC-1

TABLE A - ALLOWABLE TYPE OF PIPE CULVERT
FOR ROADWAYS THAT ARE CONSTRUCTED, FUNDED OR WILL ULTIMATELY BE MAINTAINED BY VDOT

FUNCTIONAL CLASSIFICATION OF ROADS SYSTEM UNDER WHICH PIPE IS TO BE INSTALLED

ALLOWABLE PIPE CULVERTS NOTES 1 & 2	HIGHER FUNCTIONAL CLASS - HFC		LOWER FUNCTIONAL CLASS - LFC		ENTRANCE PIPE
	STATEWIDE EXCEPT LOCATIONS SHOWN IN TABLE B	LOCATION SHOWN IN TABLE B	STATEWIDE EXCEPT LOCATIONS SHOWN IN TABLE B	LOCATION SHOWN IN TABLE B	
CONCRETE	✓	✓	✓	✓	✓
ALUMINUM COATED TYPE 2 CORRUGATED STEEL	✓		✓		✓
NOTE 3 POLYMER COATED (10/10) CORRUGATED STEEL	✓	✓	✓	✓	✓
NOTE 3 UNCOATED GALVANIZED CORRUGATED STEEL					✓
NOTE 3 & 4 GALVANIZED STEEL STRUCTURAL PLATE			✓		✓
NOTE 3 GALVANIZED STEEL STRUCTURAL PLATE WITH CONCRETE INVERT	✓		✓	✓	✓
NOTE 3 CORRUGATED ALUMINUM ALLOY	✓	✓	✓	✓	✓
NOTE 3 CORRUGATED ALUMINUM ALLOY STRUCTURAL PLATE	✓	✓	✓	✓	✓
NOTE 3 POLYVINYLCHLORIDE (PVC) RIBBED PIPE (SMOOTH INTERIOR)	✓	✓	✓	✓	✓
POLYETHYLENE (PE) CORRUGATED TYPE C	✓	✓	✓	✓	✓
POLYETHYLENE (PE) CORRUGATED TYPE S	✓	✓	✓	✓	✓
POLYPROPYLENE (PP) TYPE D OR S	✓	✓	✓	✓	✓

NOTES:

- ALLOWABLE TYPES OF PIPES FOR A SPECIFIC AREA ARE TO CONFORM TO THE CRITERIA SHOWN IN TABLES A, B, AND C. ANY DEVIATION MUST BE APPROVED BY THE STATE LOCATION AND DESIGN ENGINEER AND THE DISTRICT MATERIALS ENGINEER.
- SEE HEIGHT OF COVER TABLES FOR MINIMUM AND MAXIMUM COVER LIMITATIONS FOR EACH TYPE OF PIPE.
- SEE TABLE C FOR MINIMUM AND MAXIMUM pH, RESISTIVITY, AND VELOCITY LIMITATIONS FOR METAL PIPES.
- USE ONLY UNDER ENTRANCES WHERE THE PIPE SIZE IS LESS THAN OR EQUAL TO 30" DIAMETER (OR EQUIVALENT) AND THE HEIGHT OF COVER IS LESS THAN OR EQUAL TO 15' AND AS AN OUTLET PIPE FOR STANDARD DI-13 SHOULDER SLOT INLETS.

VDOT
ROAD AND BRIDGE STANDARDS

SHEET 17 OF 18
107.21

A COPY OF THE ORIGINAL SEALED AND SIGNED STANDARD DRAWING IS ON FILE IN THE CENTRAL OFFICE

**ALLOWABLE PIPE CRITERIA FOR
CULVERT AND STORM SEWERS**

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

232
302

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H

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INSERTABLE SHEETS

ST'D. PC-1 & CG-12

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	1H(1)

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TABLE A1 - ALLOWABLE TYPE OF STORM SEWER PIPE FOR ROADWAYS THAT ARE CONSTRUCTED, FUNDED OR WILL ULTIMATELY BE MAINTAINED BY VDOT			
FUNCTIONAL CLASSIFICATION OF ROADS SYSTEM UNDER WHICH PIPE IS TO BE INSTALLED			
HIGHER FUNCTIONAL CLASS - HFC		LOWER FUNCTIONAL CLASS - LFC	
RURAL PRINCIPAL ARTERIAL, URBAN PRINCIPAL ARTERIAL, RURAL MINOR ARTERIAL, URBAN MINOR ARTERIAL, RURAL COLLECTOR ROADS, URBAN COLLECTOR STREETS, SUBDIVISION STREETS WITH AN ADT LESS THAN OR EQUAL TO 4000		RURAL LOCAL ROADS, URBAN LOCAL STREETS, SUBDIVISION STREETS WITH AN ADT LESS THAN OR EQUAL TO 4000	
ALLOWABLE PIPE CULVERTS	STATEWIDE	EXCEPT LOCATIONS SHOWN IN TABLE B	LOCATION SHOWN IN TABLE B
CONCRETE NOTES 1 & 2	✓	✓	✓
CORRUGATED STEEL ALUMINUM COATED TYPE 2 FULLY CONCRETE LINED		✓	
NOTE 3			
ALUMINUM COATED TYPE 2 STEEL SPIRAL RIB		✓	
NOTE 3			
POLYMER COATED (10/10) CORRUGATED STEEL SPIRAL RIB		✓	✓
NOTE 3			
POLYMER COATED (10/10) CORRUGATED STEEL DOUBLE WALL (SMOOTH INTERIOR)	✓	✓	✓
NOTE 3			
ALUMINUM SPIRAL RIB		✓	✓
NOTE 3			
POLYVINYLCHLORIDE (PVC) RIBBED PIPE (SMOOTH INTERIOR)	✓	✓	✓
POLYETHYLENE (PE) CORRUGATED TYPE S	✓	✓	✓
POLYPROPYLENE (PP) TYPE D OR S	✓	✓	✓

TABLE B EXCEPTIONS TO STATEWIDE APPLICATIONS		
COUNTIES (INCLUDING TOWNS)	CITIES	
ARLINGTON - EAST OF AND INCLUDING RTES. 95 & 395	SURRY - EAST OF AND INCLUDING RTE. 10	SUFFOLK - EAST OF AND INCLUDING RTE. 32
FAIRFAX - EAST OF AND INCLUDING RTES. 95 & 395	ISLE OF WIGHT - EAST OF AND INCLUDING RTE. 10	CHESAPEAKE WILLIAMSBURG
PRINCE WILLIAM - EAST OF AND INCLUDING RTES. 95 & 395		VIRGINIA BEACH POQUOSON
WESTMORELAND JAMES CITY	ESSEX NORTHAMPTON	HAMPTON PORTSMOUTH
LANCASTER ACCOMACK	MIDDLESEX STAFFORD	NEWPORT NEWS
MATTHEWS SPOTSYLVANIA	YORK KING GEORGE	NORFOLK
GLOUCESTER NORTHUMBERLAND RICHMOND		ALEXANDRIA
		FREDERICKSBURG

SPECIFICATION REFERENCE	A COPY OF THE ORIGINAL SEALED AND SIGNED STANDARD DRAWING IS ON FILE IN THE CENTRAL OFFICE
232 302	ALLOWABLE PIPE CRITERIA FOR CULVERT AND STORM SEWERS VIRGINIA DEPARTMENT OF TRANSPORTATION

TABLE C					
PIPE TYPE	ALLOWABLE pH RANGE (SEE NOTE 6)		ALLOWABLE RESISTIVITY RANGE (Ohms-cm)		ALLOWABLE VELOCITY (FPS) (SEE NOTE 5)
	MIN.	MAX.	MIN.	MAX.	MAXIMUM
ALUMINUM COATED TYPE 2 CORRUGATED STEEL	5.0	9.0	1500	-	5
GALVANIZED STEEL STRUCTURAL PLATE WITH CONCRETE INVERT	6.0	9.0	2000	10000	15
GALVANIZED STEEL STRUCTURAL PLATE	6.0	9.0	2000	10000	5
POLYMER COATED (10/10) CORRUGATED STEEL	4.0	9.0	750	-	15
UNCOATED GALVANIZED CORRUGATED STEEL	6.0	10.0	2000	10000	5
CORRUGATED ALUMINUM ALLOY	4.0	9.0	500	-	5
CORRUGATED ALUMINUM ALLOY STRUCTURAL PLATE	4.0	9.0	500	-	5
ALUMINUM SPIRAL RIB	4.0	9.0	500	-	5
ALUMINUM COATED TYPE 2 SPIRAL RIB	5.0	9.0	1500	-	5
CORRUGATED STEEL ALUMINUM COATED TYPE 2 FULLY CONCRETE LINED	5.0	9.0	1500	-	15
POLYMER COATED CORRUGATED STEEL SPIRAL RIB	4.0	9.0	750	-	15
POLYMER COATED CORRUGATED STEEL DOUBLE WALL	4.0	9.0	750	-	15

- NOTES:**
- ALLOWABLE TYPES OF PIPES FOR A SPECIFIC AREA ARE TO CONFORM TO THE CRITERIA SHOWN IN TABLES A, A1, B, AND C. ANY DEVIATION MUST BE APPROVED BY THE STATE LOCATION AND DESIGN ENGINEER AND THE DISTRICT MATERIALS ENGINEER.
 - SEE HEIGHT OF COVER TABLES FOR MINIMUM AND MAXIMUM COVER LIMITATIONS FOR EACH TYPE OF PIPE.
 - SEE TABLE C FOR MINIMUM AND MAXIMUM pH, RESISTIVITY, AND VELOCITY LIMITATIONS FOR METAL PIPES.
 - USE ONLY UNDER ENTRANCES WHERE THE PIPE SIZE IS LESS THAN OR EQUAL TO 30" DIAMETER (OR EQUIVALENT) AND THE HEIGHT OF COVER IS LESS THAN OR EQUAL TO 15' AND AS AN OUTLET PIPE FOR STANDARD DI-13 SHOULDER SLOT INLETS.
 - ALLOWABLE VELOCITY WHERE ABRASIVE BEDLOAD IS PRESENT OR ANTICIPATED. MAXIMUM VELOCITY BASED ON 10 YEAR DESIGN DISCHARGE (Q).
 - pH VALUES APPLY TO BOTH THE SOIL AND WATER.

CG-12
<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> THE DETECTABLE WARNING SHALL BE PROVIDED BY TRUNCATED DOMES. DETECTABLE WARNING TO BE CLASS A-3 CONCRETE (CLASS A-4 IF PRECAST) WITH SLIP RESISTANT INTEGRAL SURFACE COVERING THE FULL WIDTH OF THE RAMP FLOOR BY 2 FOOT IN LENGTH IN THE DIRECTION OF PEDESTRIAN TRAVEL. OTHER TYPES OF MATERIAL WITH THE TRUNCATED DOMES DETECTABLE WARNING MAY BE USED WITH THE APPROVAL OF THE ENGINEER. SLOPING SIDES OF CURB RAMP MAY BE POURED MONOLITHICALLY WITH RAMP FLOOR OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS. IF RAMP FLOOR IS PRECAST HOLES MUST BE PROVIDED FOR DOWEL BARS SO THAT ADJOINING FLARED SIDES CAN BE CAST IN PLACE AFTER PLACEMENT OF PRECAST RAMP FLOOR. PRECAST CONCRETE SHALL BE CLASS A-4. REQUIRED BARS ARE TO BE NO. 5 X 8" PLACED 1' CENTER TO CENTER ALONG BOTH SIDES OF THE RAMP FLOOR, MID-DEPTH OF RAMP FLOOR. MINIMUM CONCRETE COVER 1/2". CURB / CURB AND GUTTER SLOPE TRANSITIONS ADJACENT TO CURB RAMPS ARE INCLUDED IN PAYMENT FOR CURB / CURB AND GUTTER. CURB RAMPS ARE TO BE LOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THEY ARE TO BE PROVIDED AT INTERSECTIONS WHEREVER AN ACCESSIBLE ROUTE WITHIN THE RIGHT OF WAY OF A HIGHWAY FACILITY CROSSES A CURB REGARDLESS OF WHETHER SIDEWALK IS EXISTING, PROPOSED, OR NONEXISTENT. THEY MUST BE LOCATED WITHIN PEDESTRIAN CROSSWALKS AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER, AND SHOULD NOT BE LOCATED BEHIND VEHICLE STOP LINES, EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. ACCESSIBLE ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS. RAMPS MAY BE PLACED ON RADIAL OR TANGENTIAL SECTIONS PROVIDED THAT THE CURB OPENING IS PLACED WITHIN THE LIMITS OF THE CROSSWALK AND THAT THE SLOPE AT THE CONNECTION OF THE CURB OPENING IS PERPENDICULAR TO THE CURB. TYPICAL CONCRETE SIDEWALK IS 4" THICK. WHEN THE ENTRANCE RADIUS CANNOT ACCOMMODATE THE TURNING REQUIREMENTS OF ANTICIPATED HEAVY TRUCK TRAFFIC, REFER TO STANDARD CG-13, COMMERCIAL ENTRANCE (HEAVY TRUCK TRAFFIC) FOR CONCRETE DEPTH. WHEN CURB RAMPS ARE USED IN CONJUNCTION WITH A SHARED USE PATH, THE MINIMUM WIDTH SHALL BE THE WIDTH OF THE SHARED USE PATH. WHEN ONLY ONE CURB RAMP IS PROVIDED FOR TWO CROSSINGS (DIAGONAL), A 4' x 4' LANDING AREA SHALL BE PROVIDED TO MANEUVER A WHEELCHAIR INTO THE CROSSWALK WITHOUT GOING INTO THE TRAVELWAY. THIS 4' x 4' LANDING AREA MAY INCLUDE THE GUTTER PAN. ALL CASES WHERE CURB RAMPS INTERSECT A RADIAL SECTION OF CURB AT ENTRANCES OR STREET CONNECTIONS THE DETECTABLE WARNING SURFACE SHALL HAVE A FACTORY RADIUS OR BE FIELD -MODIFIED AS RECOMMENDED BY THE MANUFACTURER TO MATCH THE BACK OF CURB.
<p>VDOT ROAD AND BRIDGE STANDARDS</p> <p>SHEET 1 OF 5 REVISION DATE 7/11</p> <p>203.05</p>
<p>CG-12 DETECTABLE WARNING SURFACE (GENERAL NOTES) VIRGINIA DEPARTMENT OF TRANSPORTATION</p>
<p>SPECIFICATION REFERENCE</p> <p>105 502</p>

NORTHERN VIRGINIA DISTRICT

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

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INSERTABLE SHEETS

ST'D.CG-12

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	1H(2)

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NORTHERN VIRGINIA DISTRICT

8/19/2014

CG-12

PERMISSIBLE CONSTRUCTION JOINT
 #5 DOWEL, 8" LONG @ 12" C-C
 48:1 MAX
 12:1 MAX
 10:1 MAX
 4" MIN
 5"
 5"
 12" MIN
 TRUNCATE DOME
 SEE SHEET 1 OF 5
 FOR DETAILS
 8'-0" Min. 4'-0" Min.
 BACK OF CURB
 20:1
 2' MIN.
 SECTION A-A
 PERMISSIBLE CONSTRUCTION JOINT
 CURB
 SECTION B-B

TYPICAL DESIGN

TYPE A WITH BUFFER STRIP

NOTES:
 FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.
 THIS DESIGN TO BE USED FOR CONSTRUCTION THAT INCORPORATES WIDER SIDEWALK. LANDING (4' WIDE) REQUIRED AT TOP OF CURB RAMP. MINIMUM CURB RAMP LENGTH 8 FEET FOR NEW CONSTRUCTION, 6 FEET FOR ALTERATIONS.

A 4' SQUARE LANDING AREA OUTSIDE OF TRAVELWAY SHALL BE PROVIDED WITHIN THE MARKED CROSSWALK AREA.

A 4' SQUARE LANDING AREA OUTSIDE OF TRAVELWAY SHALL BE PROVIDED WITHIN THE MARKED CROSSWALK AREA.

TYPICAL PLACEMENT AT INTERSECTION WITHIN CROSSWALK

TYPICAL PLACEMENT AT INTERSECTION WITHIN CROSSWALK (WITH BUFFER STRIP)

CROSSWALK DIAGONAL PLACEMENT

CROSSWALK DIAGONAL PLACEMENT WITH BUFFER STRIP

SPECIFICATION REFERENCE	CG-12 DETECTABLE WARNING SURFACE	VDOT ROAD AND BRIDGE STANDARDS
105 502	TYPE A (PERPENDICULAR) APPLICATION	REVISION DATE SHEET 2 OF 5
	VIRGINIA DEPARTMENT OF TRANSPORTATION	7/11 203.06

CG-12

#5 DOWELS, 8" LONG AT 12" C-C
 5' MIN.
 PERMISSIBLE CONSTRUCTION JOINT
 12:1 MAX
 48:1 MAX
 12:1 MAX
 5' MIN
 RAMP (SEE TABLE)
 RAMP (SEE TABLE)
 TRUNCATED DOMES
 SEE SHEET 1 OF 5 FOR DETAILS
 5'-0" MIN
 SHAPE TO MATCH FACE OF ROADWAY CURB
 48 : 1 MAX.
 2' MIN.
 SECTION A-A
 PERMISSIBLE CONSTRUCTION JOINT
 CURB
 SECTION B-B

WITH BUFFER STRIP

WITH BUFFER STRIP

WITHOUT BUFFER STRIP

TYPICAL PLACEMENT AT INTERSECTION WITHIN CROSSWALK

WITH BUFFER STRIP

WITHOUT BUFFER STRIP

DIAGONAL PLACEMENT

NOTES:
 FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.
 THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.

ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET	
	4" CURB	6" CURB
0	4	6
1	5	7
2	5	8
3	6	9
4	8	12
5	10	15
6	14	15

A 4' SQUARE LANDING AREA OUTSIDE OF TRAVELWAY SHALL BE PROVIDED FOR PERPENDICULAR CROSSWALK WITHIN THE MARKED CROSSWALK AREA.

A 4' SQUARE LANDING AREA OUTSIDE OF TRAVELWAY SHALL BE PROVIDED FOR PERPENDICULAR CROSSWALK WITHIN THE MARKED CROSSWALK AREA.

SPECIFICATION REFERENCE	CG-12 DETECTABLE WARNING SURFACE	VDOT ROAD AND BRIDGE STANDARDS
105 502	TYPE B (PARALLEL) APPLICATION	REVISION DATE SHEET 3 OF 5
	VIRGINIA DEPARTMENT OF TRANSPORTATION	203.07 7/11

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H(2)

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889
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INSERTABLE SHEETS

ST'D.CG-12

REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
08-23-13	VA.	STP-540(675) RSTP-5A01(178)	29	0029-151-108 RW-201, C-501	1H(3)

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NORTHERN VIRGINIA DISTRICT

8/19/2014

TANGENT PLAN

SECTION A-A

TYPICAL PLACEMENT AT INTERSECTION WITH BUFFER STRIP

ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET	
	4" CURB	6" CURB
0	2	4
1	2	5
2	3	5
3	3	6
4	4	8
5	5	10
6	7	14
7	13	15
8	15	15

NOTES: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.
THE SELECTION OF CURB TYPE AND THE CONFIGURATION OF THE BUFFER STRIP MAY VARY TO MEET EXISTING FIELD CONDITIONS AND ROADWAY GEOMETRICS PROVIDING THE DIMENSIONS AND SLOPES ARE AS NOTED.
THIS COMBINED (PARALLEL & PERPENDICULAR) DESIGN CAN BE USED WITH ADJOINING BUFFER STRIP. LANDING AT BOTTOM OF TWO SLOPING SIDES WITH 5' X 5' MIN. DIMENSIONS. THE SHORT PERPENDICULAR RUN TO THE STREET CAN BE PROTECTED BY A LANDSCAPED SETBACK OR CONNECTED TO THE SIDEWALK WITH A WARPED SURFACE.

CG-12 DETECTABLE WARNING SURFACE
TYPE C (PARALLEL & PERPENDICULAR) APPLICATION
VIRGINIA DEPARTMENT OF TRANSPORTATION

MEDIAN WITH CUT-THROUGH TYPE M2

MEDIAN WITH RAMP TYPE M1

REFUGE ISLAND WITH RAMPS TYPE R11

REFUGE ISLAND CUT - THROUGH TYPE R12

NOTES:
1. FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.
2. CURB SHALL BE SHAPED TO MATCH THE FACE OF ROADWAY CURB.
3. SEE ROADWAY PLANS FOR MEDIAN AND REFUGE ISLAND DIMENSIONS.
4. RAMPS AND CUT THROUGH'S SHALL BE ALIGNED WITH CROSSWALKS.
5. THE RAMPS AND CUT THROUGH'S SHALL BE INSTALLED AND PAID FOR AS 4" HYDRAULIC CEMENT CONCRETE SIDEWALK IN ACCORDANCE WITH SECTION 504 OF THE ROAD & BRIDGE SPECIFICATIONS. EXCAVATION OF MATERIAL FOR THE INSTALLATION OF THE SIDEWALK SHALL BE INCLUDED IN THE PRICE BID FOR 4" HYDRAULIC CEMENT CONCRETE SIDEWALK.
6. CUT THROUGH'S LESS THAN 6' IN WIDTH SHALL NOT HAVE DETECTABLE WARNINGS INSTALLED.

CG-12 DETECTABLE WARNING SURFACE
MEDIAN AND REFUGE ISLAND APPLICATIONS
VIRGINIA DEPARTMENT OF TRANSPORTATION

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H(3)

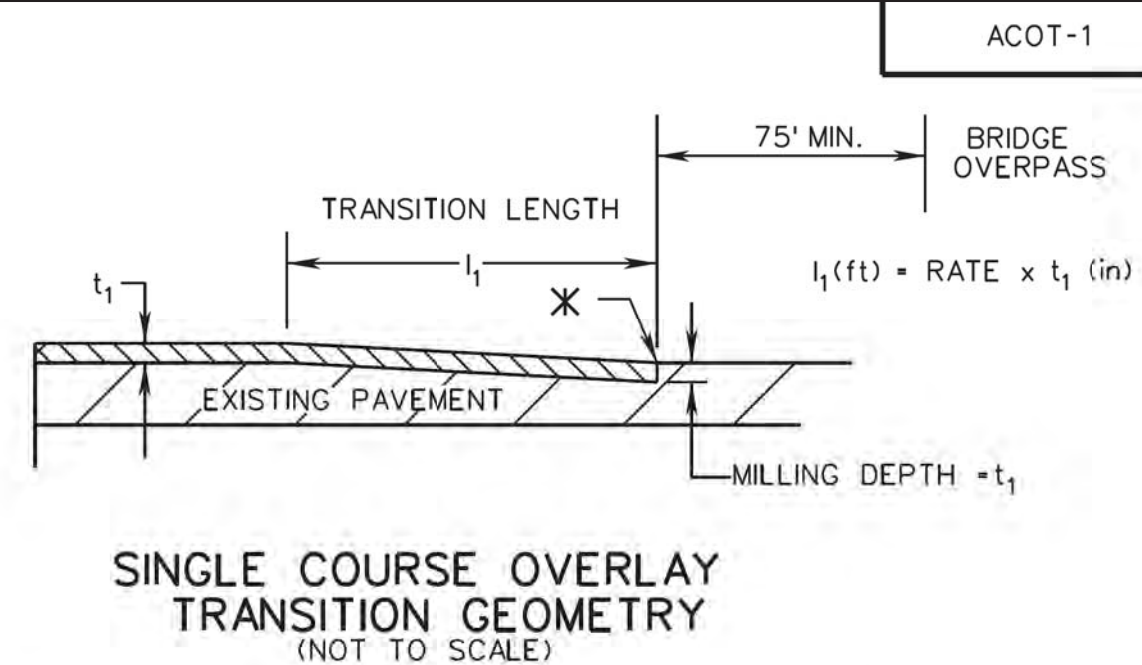
PROJECT MANAGER Wendy Block, Sanford, City of Fairfax, (703) 385-7889
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INSERTABLE SHEETS ST'D. ACOT-1 & HR-1

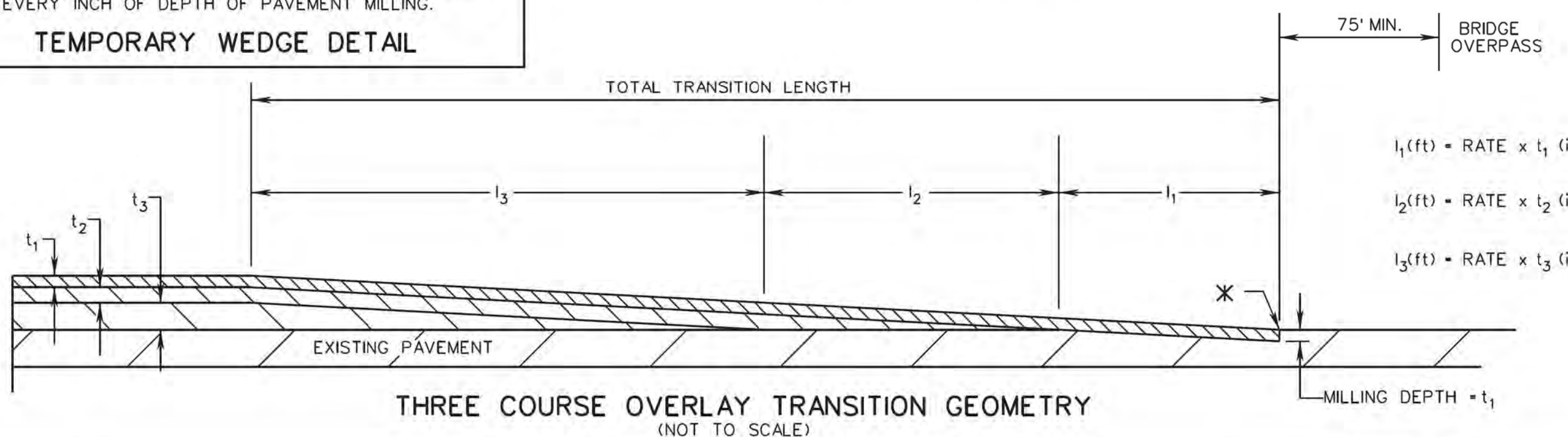
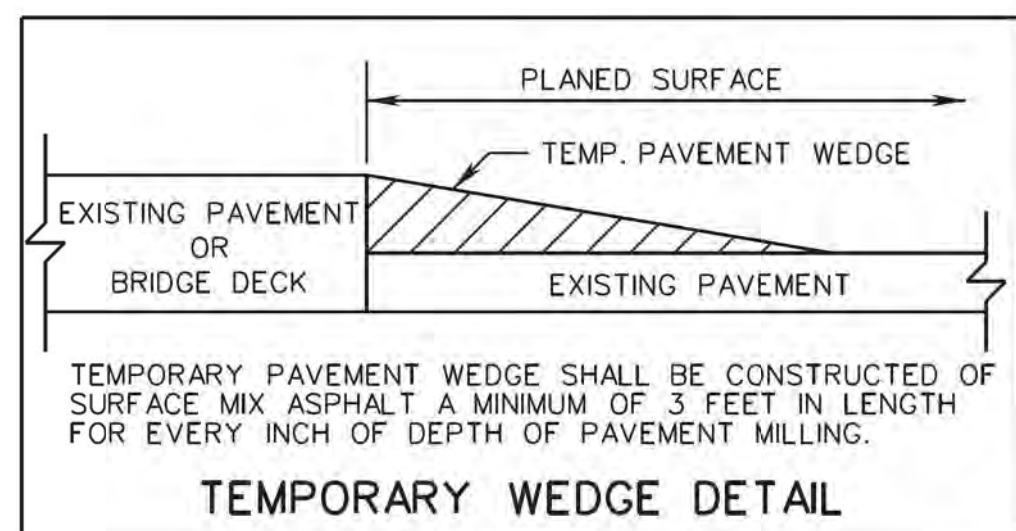
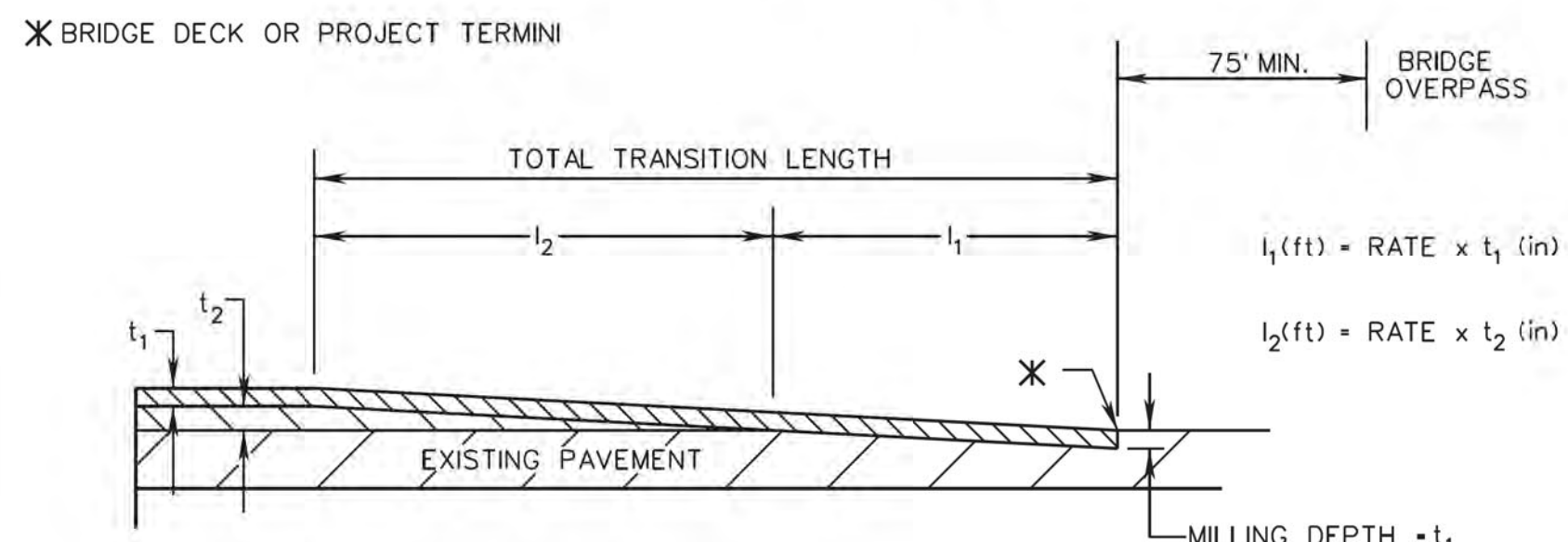
REVISED	STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
08-23-13	VA.	STP-540(675) RSTP-540(178)	29	0029-151-108 RW-201, C-501	1H(4)

NOTES

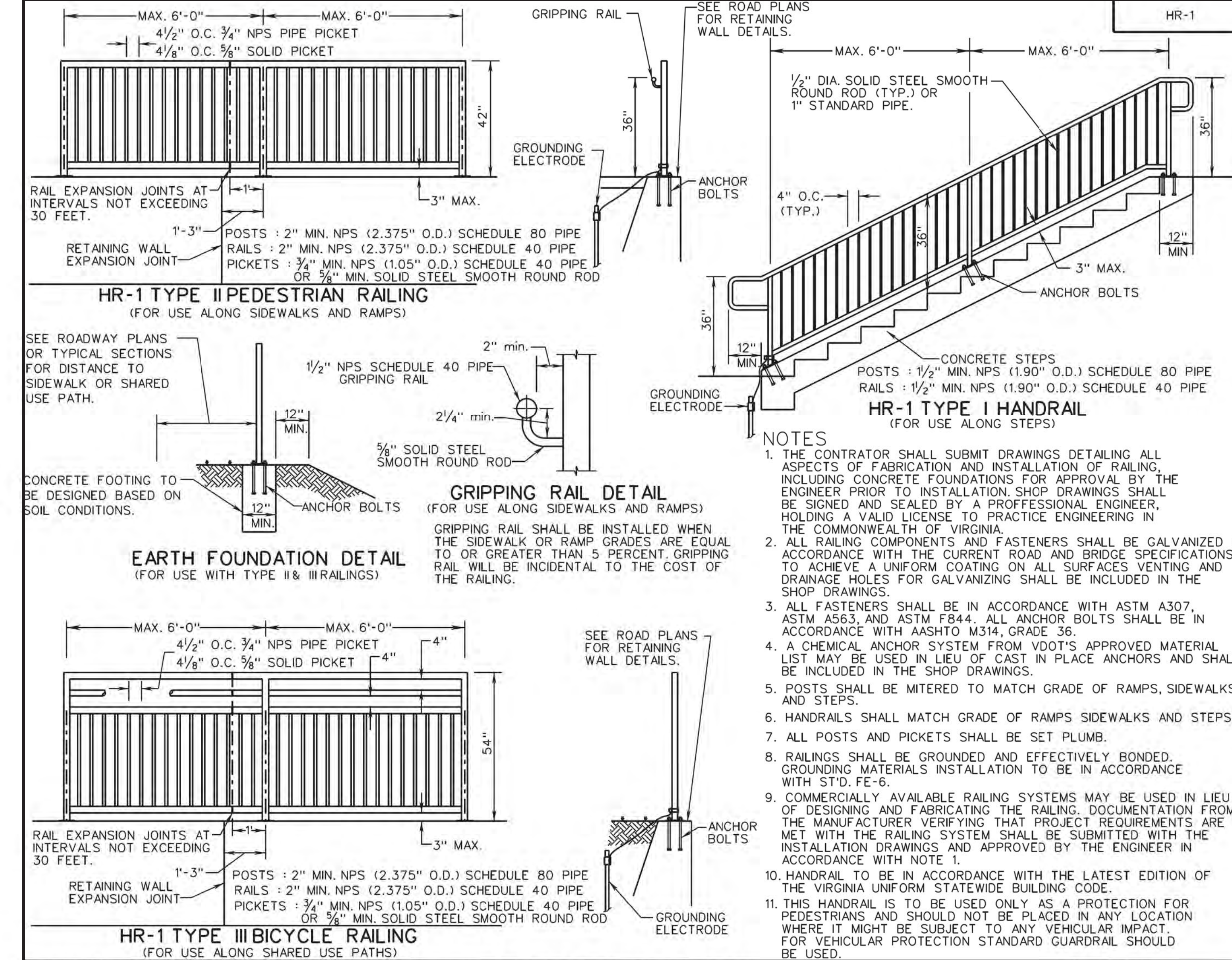
- TIE-IN REQUIREMENTS TO INTERSECTING ROADS OR STREETS SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AT THE DIRECTION OF THE ENGINEER.
- EXISTING PAVEMENT SURFACE SHALL BE PLANED TO TRANSITION THE TOP COURSE OF THE ASPHALT CONCRETE OVERLAY. ANY SUB-COURSE TERMINATION MAY BE NOTCHED INTO THE EXISTING PAVEMENT OR BLENDED WITH THE NEXT COURSE OF PAVEMENT.
- WHEN THERE IS A SPECIAL PROVISION FOR RIDEABILITY INCLUDED IN THE CONTRACT, A DISTANCE OF 105 FEET (0.02 OF A MILE), MEASURED FROM THE LINE OF THE TIE-IN WILL BE EXEMPTED FROM PAY ADJUSTMENT.
- TRANSITION SHALL BEGIN/END AT THE PROJECT LIMITS, AT BRIDGE APPROACH SLAB/ABUTMENT (OR AN INTERMEDIATE POINT DETERMINED BY THE ENGINEER), AND A MINIMUM OF 75 FEET FROM A VERTICAL PLANE OF THE NEAREST OUTER FACE OF THE BRIDGE OVERPASS.
- NO OVERLAY OR MILLING SHALL BE PERMITTED ON THE BRIDGE DECK WITHOUT THE PRIOR WRITTEN APPROVAL OF THE DISTRICT BRIDGE ENGINEER.



TRANSITION RATE		POSTED SPEED MPH					
		25	35	45	55	65	70
RATE (FT/INCH)		20	25	35	40	45	50



SPECIFICATION REFERENCE	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.	VDOT ROAD AND BRIDGE STANDARDS	
210	ASPHALT CONCRETE OVERLAY TRANSITIONS	REVISION DATE	SHEET 1 OF 1
315		7/12	305.01
515		VIRGINIA DEPARTMENT OF TRANSPORTATION	



SPECIFICATION REFERENCE	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.	VDOT ROAD AND BRIDGE STANDARDS	
105	STANDARD HANDRAIL METHOD OF LOCATING AND ERECTING	REVISION DATE	SHEET 1 OF 1
238		7/11	601.05
504		VIRGINIA DEPARTMENT OF TRANSPORTATION	

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 Right of Way Services

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H(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*

INSERTABLE SHEETS

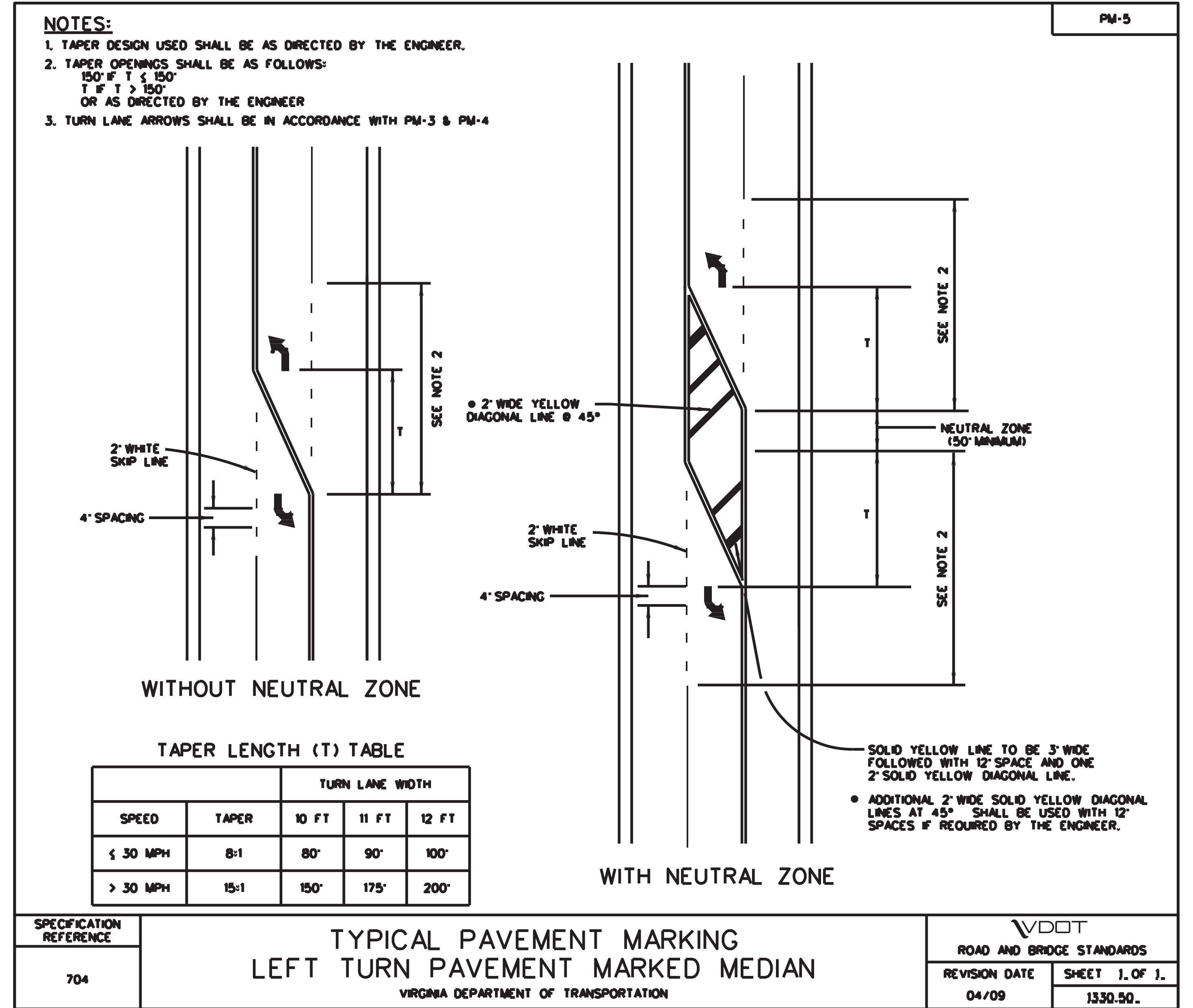
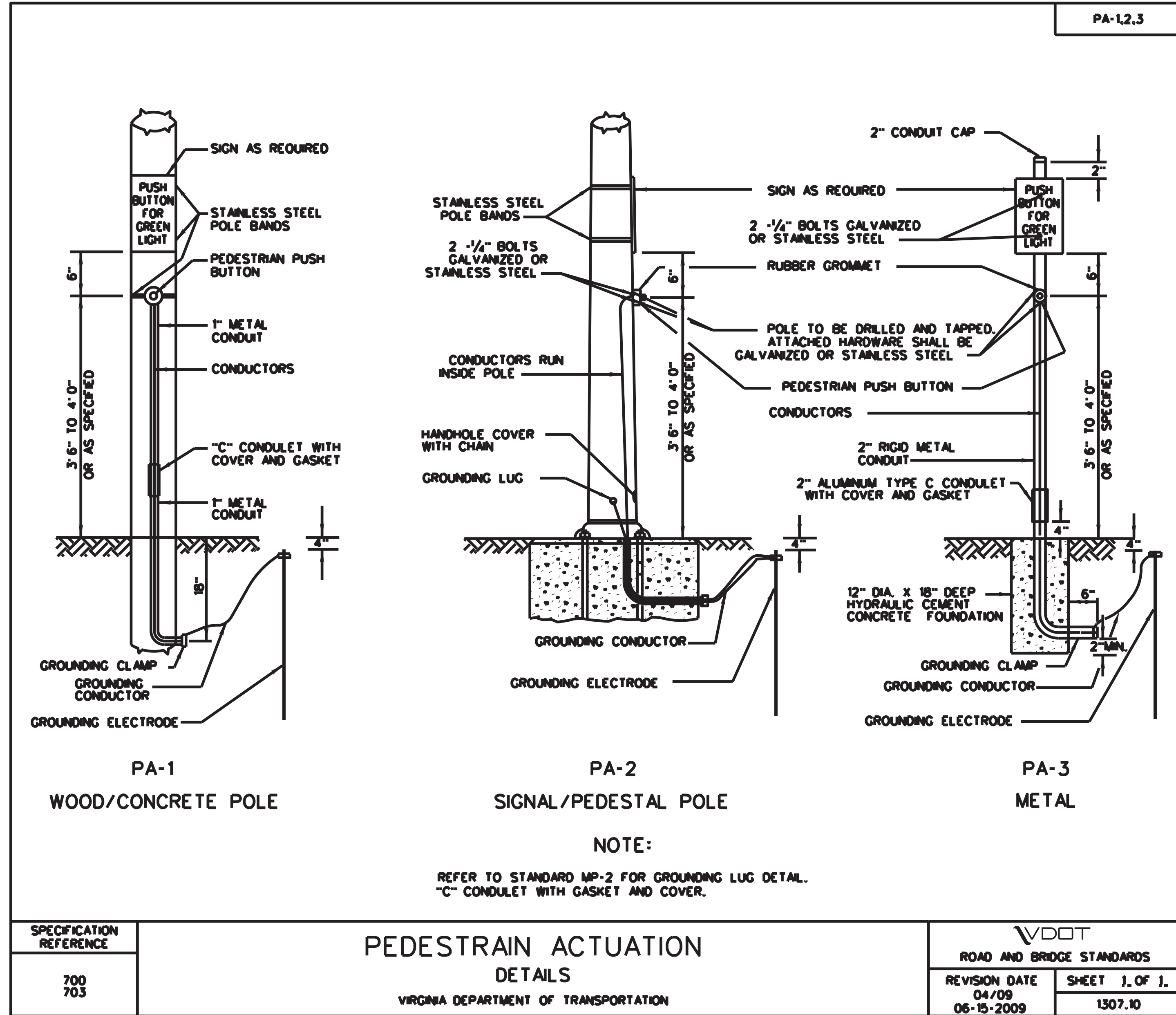
ST'D. PA-1,2,3 & PM-5

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	1H(5)

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NORTHERN VIRGINIA DISTRICT

8/19/2014



PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H(5)

PROJECT MANAGER *Wendy Block Sanford, City of Fairfax, (703) 385-7889*
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INSERTABLE SHEETS

ST'D.CF-2 & MP-1

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	1H(6)

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NORTHERN VIRGINIA DISTRICT

8/19/2014

CF-2

TOP VIEW

1-2" CONDUIT REQUIRED FOR FUTURE USE SHALL BE STUBBED OUT AND CAPPED. NOTE THAT ADDITIONAL SPARE CONDUITS MAY BE REQUIRED BY THE PLANS.

1-1" CONDUIT REQUIRED FOR GROUNDING CONDUCTOR

SIZE AND NUMBER AS REQUIRED BY PLANS

CONCRETE PAD (SLOPED TO DRAIN)

CONCRETE PAD SHALL BE LOCATED IN FRONT OF CABINET DOORS

FRONT VIEW

4" REQUIRED ABOVE FINISHED SURFACE

BACKFILL WITH NO. 25 OR 26 AGGR.

HYDRAULIC CEMENT CONCRETE

SIDE VIEW

THE ANCHOR BOLTS SHALL EXTEND 1/4" TO 3/4" ABOVE THE TOP OF THE NUT AFTER INSTALLATION OF THE NUTS, WASHERS AND CABINET.

1/2" ANCHOR BOLT MIN. 8" LONG WITH 1 1/2" L BEND.

SLOPED TO DRAIN

FINISHED SURFACE

GROUNDING ELECTRODE

GROUNDING ELECTRODE

NOTES:

IN ADDITION TO ELECTRICAL SERVICE GROUNDING ELECTRODE SYSTEM, EACH STRUCTURE SHALL UTILIZE ITS OWN GROUNDING ELECTRODE.

ALL EXPOSED CONCRETE SURFACE EDGES SHALL BE CHAMFERED 3/4".

FOUNDATION LENGTH AND WIDTH SHALL BE AS REQUIRED TO PROJECT NO LESS THAN A MINIMUM 4" BEYOND ALL SIDES OF THE CABINET.

ANCHOR BOLTS AND BOLT CIRCLE TEMPLATE SHALL BE FURNISHED WITH CABINET.

CABINET SHALL BE CENTERED ON FOUNDATION.

EACH FOUNDATION SHALL BE PERMANENTLY MARKED TO INDICATE ALL SIDES FROM WHICH CONDUITS PASS. THIS MARK SHALL BE MADE WITH A TROWEL WHEN FINISHING THE CONCRETE AND SHALL BE 1/4" DEEP AND 4" TO 6" LONG.

THE CONTROL CENTER CABINET AT THE INSIDE AND OUTSIDE FOUNDATION JOINTS SHALL BE SEALED WITH A SILICONE SEALANT.

BELL ENDS SHALL BE INSTALLED ON EACH END OF PVC CONDUITS.

EMPTY CONDUITS SHALL BE PLUGGED TO PREVENT MOISTURE AND RODENT ENTRY.

GROUNDING BUSHINGS SHALL BE INSTALLED ON EACH END OF METAL CONDUITS.

TWO - 1/2" DIAMETER WEEPHOLES SHALL BE PROVIDED IN THE FOUNDATION AND LOCATED 2" INSIDE THE BACK OR SIDE EDGES OF THE CONTROLLER CABINET. WEEPHOLES SHALL BE SLOPED TO ALLOW OUTLET TO BE 3" BELOW THE TOP OF THE FOUNDATION. TWO INCHES OF THE OUTLET END SHALL BE FIBER FILLED.

OPEN ENDS OF CONDUITS WITH CONDUCTORS INSTALLED SHALL BE SEALED WITH AN APPROVED SOFT, PLIABLE, AND EASILY REMOVABLE WATERPROOF SEALANT. THE SEALANT SHALL NOT HAVE A DELETERIOUS EFFECT ON CABLE COVERINGS.

VDOT ROAD AND BRIDGE STANDARDS	CONTROL CENTER CABINET FOUNDATION CABINET PLACEMENT DETAILS VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE 700
SHEET 1 OF 1 1301.20	REVISION DATE 06-15-2009	

MP-1

ARM AND SIGNAL ATTACHMENT

FLANGE PLATE

HIGH STRENGTH STUDS

HIGH STRENGTH NUTS AND WASHERS

ARM CAP WITH 3 CAP SCREWS

1" I.D. RUBBER GROMMET FOR SIGNAL WIRING*

J HOOK WIRE SUPPORT

GUSSET PLATES

4" WIRING HOLE

SIDE PLATES

CONTINUOUS WELD INSIDE AND OUT

NOTES:

END OF ARM SHALL NOT DEFLECT BELOW THE HORIZONTAL PLANE NOR EXCEED A 3% RISE AFTER LOADS ARE APPLIED.

BACKPLATES WHEN REQUIRED

RUBBER GROMMET

MINIMUM 15' CLEARANCE FROM HIGHEST POINT OF THE PAVEMENT SURFACE TO LOWEST POINT OF SIGNAL HEAD ASSEMBLY INCLUDING BACKPLATE.

THE ALIGNMENT OF THE LUMINAIRE ARM SHALL BE AS SHOWN ON THE PLANS.

REFER TO STANDARD MP-2 FOR GROUNDING LUG DETAIL.

CAST POLE COVER WITH 3 CAP SCREWS

LUMINAIRE ARM AS SPECIFIED

ATTACHMENT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION

ARM CAP WITH 3 CAP SCREWS
8" DRIP LOOP BEHIND HEAD

12"

HANDHOLE COVER WITH CHAIN

HANDHOLE COVER WITH CHAIN

GROUNDING LUG

NUT COVER (WHEN REQUIRED)

SQUARE OR HEX LEVELING NUTS

NOTES:

(A) POLE SHAFT LENGTH AND MAST ARM MOUNTING HEIGHT SHALL BE AS REQUIRED TO OBTAIN SPECIFIED MOUNTING HEIGHT OF TRAFFIC SIGNAL HEADS AND LUMINAIRES

(B) AS REQUIRED BY PLANS (HEIGHT INCLUDES TRANSFORMER BASE WHEN REQUIRED).

(C) AS REQUIRED BY PLANS.

VDOT ROAD AND BRIDGE STANDARDS	SIGNAL POLE DETAILS MAST ARM AND COMBINATION LUMINAIRE MAST ARM POLE VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE 700
SHEET 1 OF 1 1302.10	REVISION DATE 06-15-2009	

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H(6)

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889
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INSERTABLE SHEETS

ST'D. PF-2 & SMB-1,2,3

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	1H(7)

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 www.rinker.com

NORTHERN VIRGINIA DISTRICT

8/19/2014

PF-2

NOTES:

EACH FOUNDATION SHALL BE PERMANENTLY MARKED TO INDICATE ALL SIDES FROM WHICH CONDUITS PASS. THIS MARK SHALL BE MADE WITH A TROWEL WHEN FINISHING THE CONCRETE AND SHALL BE 1/4" DEEP AND 4" TO 6" LONG.

WHEN FOUNDATION EXTENDS 2" ABOVE FINISHED GRADE, ALL EDGES SHALL BE CHAMFERED 3/4".

GROUNDING BUSHINGS SHALL BE INSTALLED ON EACH END OF METAL CONDUITS.

EMPTY CONDUITS SHALL BE PLUGGED TO PREVENT MOISTURE AND RODENT ENTRY.

BELL ENDS SHALL BE INSTALLED ON EACH END OF PVC CONDUITS.

PEDESTAL POLE SHALL HAVE A BREAKAWAY BASE, EITHER SLIP BASE OR FRANGIBLE TRANSFORMER TYPE, 3" X 5" MINIMUM CURVED HANDHOLE WITH FRAME AND COVER REQUIRED IN POLE WHEN SLIP BASE SUPPLIED.

DISTANCE FROM BOTTOM OF POLE TO CENTER OF HANDHOLE SHALL BE 12".

FOUNDATION TO EXTEND 2" ABOVE GROUND WHEN IN EARTH AND SHALL BE FLUSH WITH SURFACE WHEN IN SIDEWALK.

REFER TO STANDARD MP-2 FOR GROUNDING LUG DETAIL.

OPEN ENDS OF CONDUITS WITH CONDUCTORS INSTALLED SHALL BE SEALED WITH AN APPROVED SOFT, PLIABLE, AND EASILY REMOVABLE WATERPROOF SEALANT. THE SEALANT SHALL NOT HAVE A DELETERIOUS EFFECT ON CABLE COVERINGS.

MOUNTING HEIGHT 8' TO 15'
AS SPECIFIED

SPECIFICATION REFERENCE
700

VDOT ROAD AND BRIDGE STANDARDS		PEDESTAL POLE AND FOUNDATION DETAILS		SPECIFICATION REFERENCE 700
SHEET 1 OF 1	REVISION DATE	VIRGINIA DEPARTMENT OF TRANSPORTATION		
1302.30	06-15-2009			

SMB-1,2 OR 3

POLE TOP MOUNTING CAST ALUMINUM SIGNAL HEADS ONLY

POLE TOP MOUNTING CAST ALUMINUM OR POLYCARBONATE SIGNAL HEADS

POLE BRACKET MOUNTING CAST ALUMINUM OR POLYCARBONATE SIGNAL HEADS

* SET SCREWS SHALL BE STAINLESS STEEL

NOTES:

IF PEDESTRIAN SIGNALS ARE BEING INSTALLED, THE MOUNTING ATTACHMENTS (SMB-1,2,3) SHALL BE A TYPE SPECIFICALLY MANUFACTURED FOR THAT PURPOSE.

SMB-1,2 AND 3 SHOWN ARE TYPICAL AND FOR ONE-WAY SIGNAL DISPLAY. OTHER DESIGNS MAY BE SUBMITTED FOR APPROVAL BY THE ENGINEER. MULTI-WAY ASSEMBLIES, WHEN REQUIRED, SHALL BE OF SIMILAR APPROPRIATE DESIGN.

SMB-3 BRACKETS MAY BE MOUNTED TO POLE WITH STAINLESS STEEL BANDS

STEEL POLE SHALL BE DRILLED AND TAPPED AND MOUNTING ACCOMPLISHED UTILIZING 1/2" STAINLESS STEEL BOLTS.

SPECIFICATION REFERENCE
703

VDOT ROAD AND BRIDGE STANDARDS		SIGNAL HEAD MOUNTING DETAILS POLE TOP AND BRACKET		SPECIFICATION REFERENCE 703
SHEET 1 OF 1	REVISION DATE	VIRGINIA DEPARTMENT OF TRANSPORTATION		
1303.40	06-15-2009			

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H(7)

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INSERTABLE SHEETS

ST'D. SMD-1,2 & PF-1

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	1H(8)

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NORTHERN VIRGINIA DISTRICT

8/19/2014

SMD-1.2

SPAN WIRE INSTALLATION

EXTENSION SHALL BE USED WITH THE HANGER AND TETHER ASSEMBLY TO CENTER THE SIGN WITH THE SIGNAL HEADS.

SMD-1

MAST ARM INSTALLATION

SMD-2

NOTES:

NUTS AND BOLTS USED FOR ATTACHMENT OF SIGN PANEL SHALL BE STAINLESS STEEL AND 3/4" IN DIAMETER.

A 1 1/4" NYLON AND STAINLESS STEEL FENDER WASHER SHALL BE USED ON THE FRONT OF SIGN PANEL WHERE BOLT PASSES THROUGH SIGN PANEL.

ALL NUTS, BOLTS AND WASHERS SHALL BE STAINLESS STEEL OR GALVANIZED STEEL UNLESS OTHERWISE INDICATED.

SPACERS SHALL BE INSTALLED BETWEEN THE EYELET OF THE SIGN HANGAR AND THE SPAN WIRE CLAMP TO ELIMINATE ANY GAP.

VDOT	
ROAD AND BRIDGE STANDARDS	
SHEET 1 OF 1	REVISION DATE
1305.10	06-15-2009

SIGN MOUNTING DETAILS	
VIRGINIA DEPARTMENT OF TRANSPORTATION	
SPECIFICATION REFERENCE	703

PF-1

TOP VIEW

SIDE VIEW

CIRCULAR FOUNDATION

NOTES:

ANCHOR BOLTS AND BOLT PATTERN SHALL BE FURNISHED WITH POLE. POLE SHALL BE CENTERED ON FOUNDATION.

EACH FOUNDATION SHALL BE PERMANENTLY MARKED TO INDICATE ALL SIDES FROM WHICH CONDUITS PASS. THIS MARK SHALL BE MADE WITH A TROWEL WHEN FINISHING THE CONCRETE AND SHALL BE 1/4" DEEP AND 4" TO 6" LONG. LOCATIONS OF EMPTY CONDUITS SHALL HAVE AN ADDITIONAL 2" LONG MARK MADE PERPENDICULAR TO AND CENTERED ON THIS MARKING.

WHEN FOUNDATION EXTENDS 4" ABOVE FINISHED GRADE ALL EDGES SHALL BE CHAMFERED 3/4" AND FOR SIDEWALKS SHALL BE FLUSH.

GROUNDING BUSHINGS SHALL BE INSTALLED ON EACH END OF METAL CONDUITS.

EMPTY CONDUITS SHALL BE PLUGGED TO PREVENT MOISTURE AND RODENT ENTRY. BELL ENDS SHALL BE INSTALLED ON EACH END OF PVC CONDUITS.

OPEN ENDS OF CONDUITS WITH CONDUCTORS INSTALLED SHALL BE SEALED WITH AN APPROVED SOFT, PLIABLE, AND EASILY REMOVABLE WATERPROOF SEALANT. THE SEALANT SHALL NOT HAVE A DELETERIOUS EFFECT ON CABLE COVERINGS.

NO MORTAR, GROUT, OR CONCRETE SHALL BE PLACED BETWEEN BOTTOM OF BASE PLATE AND TOP OF FOUNDATION.

HEIGHT, WIDTH, AND DEPTH OF FOUNDATION SHALL BE AS REQUIRED BY FOUNDATION DESIGNER.

VDOT	
ROAD AND BRIDGE STANDARDS	
SHEET 1 OF 1	REVISION DATE
1310.10	06-15-2009

SIGNAL POLE FOUNDATION	
INSTALLATION DETAILS	
VIRGINIA DEPARTMENT OF TRANSPORTATION	
SPECIFICATION REFERENCE	700

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H(8)

PROJECT MANAGER Wendy Block Sanford, City of Fairfax, (703) 385-7889
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INSERTABLE SHEETS ST'D. SE-5 & JB-R1,R2

REVISED 08-23-13	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	1H(9)

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 Civil Engineers
 Environmental
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 Right of Way Services

SE-5

NOTES:

NO OTHER CONDUCTORS SHALL BE RUN IN THE SAME CONDUIT WITH ELECTRICAL SERVICE CABLE.

LOCAL POWER UTILITY COMPANY WILL INSTALL SERVICE POWER UTILITY CABLE FROM THEIR POWER SOURCE TO THE JUNCTION BOX AND MAKE REQUIRED SPLICES TO THE SERVICE CABLE COILED IN THE JUNCTION BOX.

FOUNDATION SHALL BE CLASS A3 CONCRETE, 18" DIAMETER X 18" DEEP, AND COST OF FOUNDATION SHALL BE INCLUDED WITH THE PAY ITEM FOR ELECTRICAL SERVICE.

ANCHOR BOLTS AND BOLT CIRCLE TEMPLATE SHALL BE FURNISHED BY POLE MANUFACTURER.

THIS STANDARD IS APPLICABLE FOR ALL ELECTRICAL SERVICES OTHER THAN 480Y/277.

GROUNDING BUSHINGS SHALL BE INSTALLED ON EACH END OF METAL CONDUITS. EMPTY CONDUITS SHALL BE PLUGGED TO PREVENT MOISTURE AND RODENT ENTRY.

OPEN ENDS OF CONDUITS WITH CONDUCTORS INSTALLED SHALL BE SEALED WITH AN APPROVED SOFT, PLIABLE, AND EASILY REMOVABLE WATERPROOF SEALANT. THE SEALANT SHALL NOT HAVE A DELETERIOUS EFFECT ON CABLE COVERINGS.

BELL ENDS SHALL BE INSTALLED ON EACH END OF PVC CONDUITS.

STAINLESS STEEL BANDS REQUIRED FOR METER BASE AND SAFETY SWITCH/BREAKER BOX REFER TO STANDARD MP-2 FOR GROUNDING LUG DETAILS.

ELECTRICAL SERVICE
INSTALLATION DETAILS
VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS		ELECTRICAL SERVICE INSTALLATION DETAILS VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE 700
SHEET 1 OF 1	REVISION DATE 06-15-2009		
1312.50			

JB-R1 & R2

NOTES:

J-HOOK WIRE SUPPORTS SHALL BE SECURELY ATTACHED TO THE JUNCTION BOX WITH A BOLT AND NUT WITH A NEOPRENE WASHER OR AN EXPANSION FITTING.

CONDUIT ENTRANCES SHALL BE LOCATED AS SHOWN ON THE PLANS. CONDUITS SHALL EXTEND 2" MIN. TO 3" MAX. INTO THE INSIDE WALL OF THE JUNCTION BOX.

BELL ENDS SHALL BE INSTALLED ON THE ENDS OF PVC CONDUITS. GROUNDING BUSHINGS SHALL BE INSTALLED ON THE ENDS OF METAL CONDUITS.

CONDUITS AND BUSHINGS SHALL BE PLUGGED TO PREVENT MOISTURE & RODENT ENTRY.

* DEPTH OF CONDUIT ENTRANCES FOR MAGNETIC DETECTORS SHALL BE IN ACCORDANCE WITH THE PLANS.

ALL REINFORCING STEEL SHALL HAVE A MINIMUM 1/2" CONCRETE COVER. ANY REINFORCING STEEL IN CONFLICT WITH CONDUIT SHALL BE CUT A MINIMUM OF 1/2" FROM CONDUIT.

THE JUNCTION BOX MAY BE PRECAST OR CAST IN PLACE CONCRETE.

Δ A MINIMUM 2" DIAMETER CONDUIT ENTRANCE IS REQUIRED UNLESS OTHERWISE SPECIFIED ON PLANS.

A CONCRETE COLLAR IS REQUIRED ONLY WHEN JUNCTION BOX IS INSTALLED IN EARTH AREAS.

HIGH STRENGTH GROUT CONFORMING TO THE ROAD & BRIDGE SPECIFICATIONS SHALL BE USED TO SECURE THE FRAME TO THE JUNCTION BOX.

ALL JUNCTION BOXES SHALL BE INSTALLED WITH A GROUNDING ELECTRODE

VOIDS RESULTING FROM ENTRANCE OF CONDUITS INTO JUNCTION BOX SHALL BE COMPLETELY FILLED WITH HYDRAULIC CEMENT GROUT CONFORMING TO THE ROAD & BRIDGE SPECIFICATIONS.

JUNCTION BOX
FOR TRAFFIC USE
VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS		JUNCTION BOX FOR TRAFFIC USE VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE 700
SHEET 1 OF 2	REVISION DATE 06-15-2009		
1317.10			

NORTHERN VIRGINIA DISTRICT

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H(9)

PROJECT MANAGER *Wendy Block Sanford, City of Fairfax, (703) 385-7889*
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INSERTABLE SHEETS

ST'D. JB-R1, R2 & JB-S1, S2, S3

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	1H(10)

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NORTHERN VIRGINIA DISTRICT

8/19/2014

JB-R1 & R2

STANDARD	DIMENSIONS												
	A	B	C	D	E	F	G	H	I	J	K	M	N
JB-R1	18"	18"	19"	19"	20"	20"	21"	21"	24"	24"	4"	5/8"	1"
JB-R2	24"	24"	26"	26"	27"	27"	28"	28"	33"	33"	4"	5/8"	1"

NOTES:

THE COVER SHALL HAVE A NON-SKID SURFACE WITH LETTERS CAST IN THE DEPRESSION ON TOP. THE LETTERS "VDOT ELEC", "VDOT TRAFF", "VDOT COMM" OR "UTILITY" AS APPLICABLE ARE TO BE ONE (1) INCH WIDE AND RAISED 1/4" HIGH. COVERS USED FOR JUNCTION BOXES INSTALLED WITHIN MUNICIPALITIES AND NOT MAINTAINED BY VDOT SHALL NOT REQUIRE THE VDOT REFERENCE.

FOUR RECESSED 3/8" HEX BOLTS ARE REQUIRED FOR EACH COVER.

CASTINGS SHALL MEET ALL REQUIREMENTS OF AASHTO M306 AND AASHTO M105

VDOT
ROAD AND BRIDGE STANDARDS
SHEET 2 OF 2
REVISION DATE
1317.11
06-15-2009

JUNCTION BOX
FOR TRAFFIC USE

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE
700

JB-S1, S2, S3

STANDARD	DIMENSIONS	
	A	B
JB-S1	13"	24"
JB-S2	17"	30"
JB-S3	24"	36"

NOTES:

JUNCTION BOXES MAY BE STRAIGHT OR FLARED WALL IN DESIGN. MATERIALS SHALL CONFORM TO SECTION 238 OF THE ROAD & BRIDGE SPECIFICATIONS.

BELL ENDS SHALL BE INSTALLED ON THE ENDS OF PVC CONDUITS.

GROUNDING BUSHINGS SHALL BE INSTALLED ON THE ENDS OF METAL CONDUITS.

BELL ENDS AND BUSHINGS SHALL BE PLUGGED TO PREVENT MOISTURE AND RODENT ENTRY.

*DEPTH OF CONDUIT ENTRANCE FOR USE OF MAGNETIC DETECTORS SHALL BE IN ACCORDANCE WITH STANDARD TD-2.

CONDUIT ENTRANCES SHALL BE LOCATED AS SHOWN ON THE PLANS.

THE COVER SHALL HAVE A NON-SKID SURFACE WITH LETTERS CAST IN THE DEPRESSION ON TOP. THE LETTERS "VDOT ELEC", "VDOT TRAF", "VDOT COMM" OR UTILITY AS APPLICABLE ARE TO BE 1" WIDE. COVERS USED FOR JUNCTION BOXES INSTALLED WITHIN MUNICIPALITIES AND NOT MAINTAINED BY VDOT SHALL NOT REQUIRE THE VDOT REFERENCE.

ALL JUNCTION BOXES SHALL BE INSTALLED WITH A GROUNDING ELECTRODE

TWO RECESSED 3/8" S.S. HEX HEAD BOLTS ARE REQUIRED FOR EACH COVER.

▲ A MINIMUM 2" DIAMETER CONDUIT ENTRANCE IS REQUIRED, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

J-HOOK WIRE SUPPORTS SHALL BE SECURELY ATTACHED TO THE JUNCTION BOX WITH A BOLT AND NUT WITH A NEOPRENE WASHER OR AN EXPANSION FITTING.

CONDUITS SHALL EXTEND 2" TO 3" MAX. INTO THE INSIDE WALL OF THE JUNCTION BOX.

THE JUNCTION BOX MAY BE A TWO PIECE DESIGN WITH THE TOP SECTION NO LESS THAN 17" IN DEPTH.

VOIDS RESULTING FROM ENTRANCE OF CONDUITS INTO JUNCTION BOXES SHALL BE COMPLETELY FILLED WITH AN APPROVED MATERIAL.

VDOT
ROAD AND BRIDGE STANDARDS
REVISION DATE
6-15-09
SHEET 1 OF 1
1317.20

JUNCTION BOX
FOR NON-DELIBERATE TRAFFIC USE

VIRGINIA DEPARTMENT OF TRANSPORTATION

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

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

INSERTABLE SHEETS

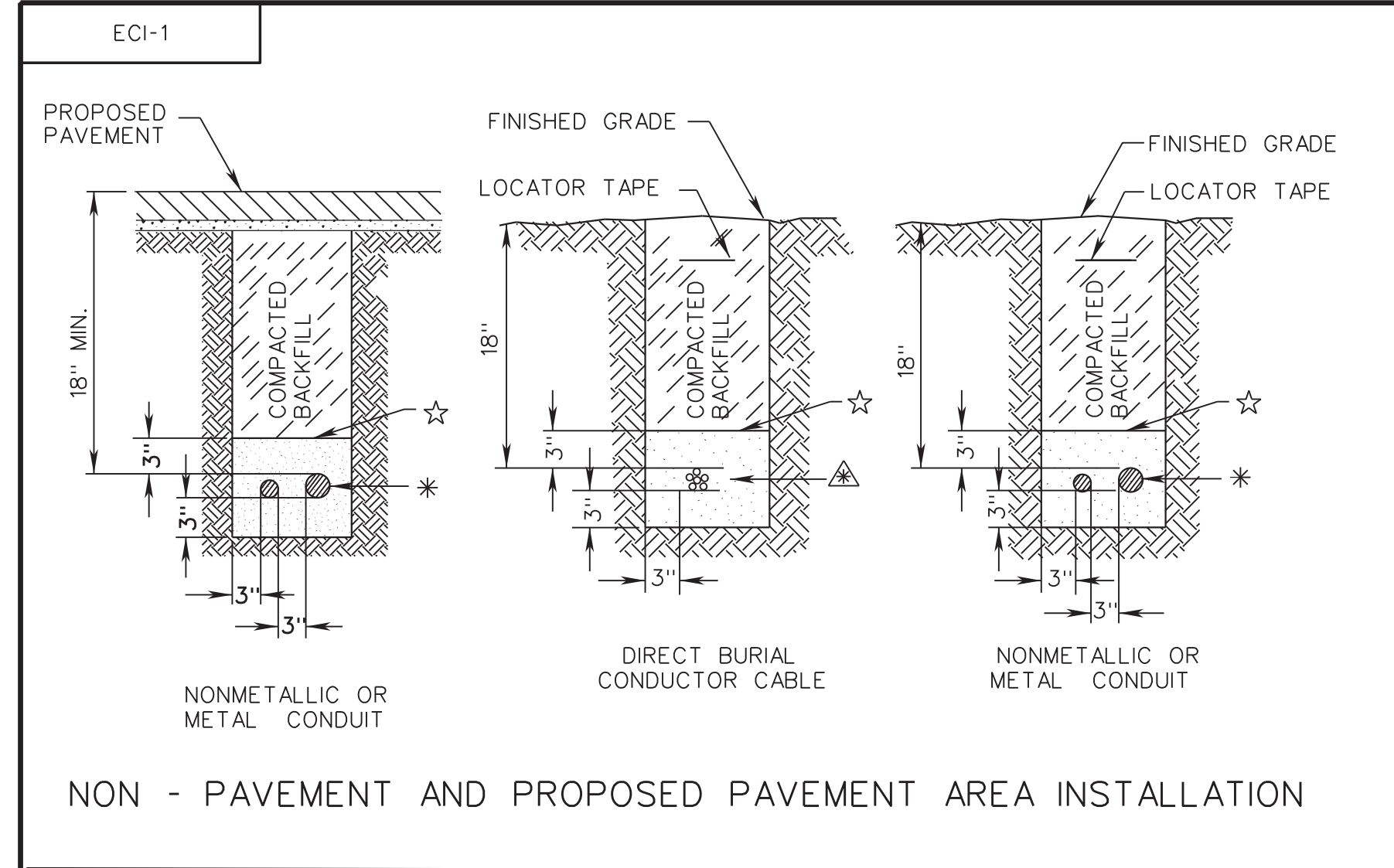
ST'D.ECI-1 & STP-1

REVISED 08-23-13	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	1H(11)

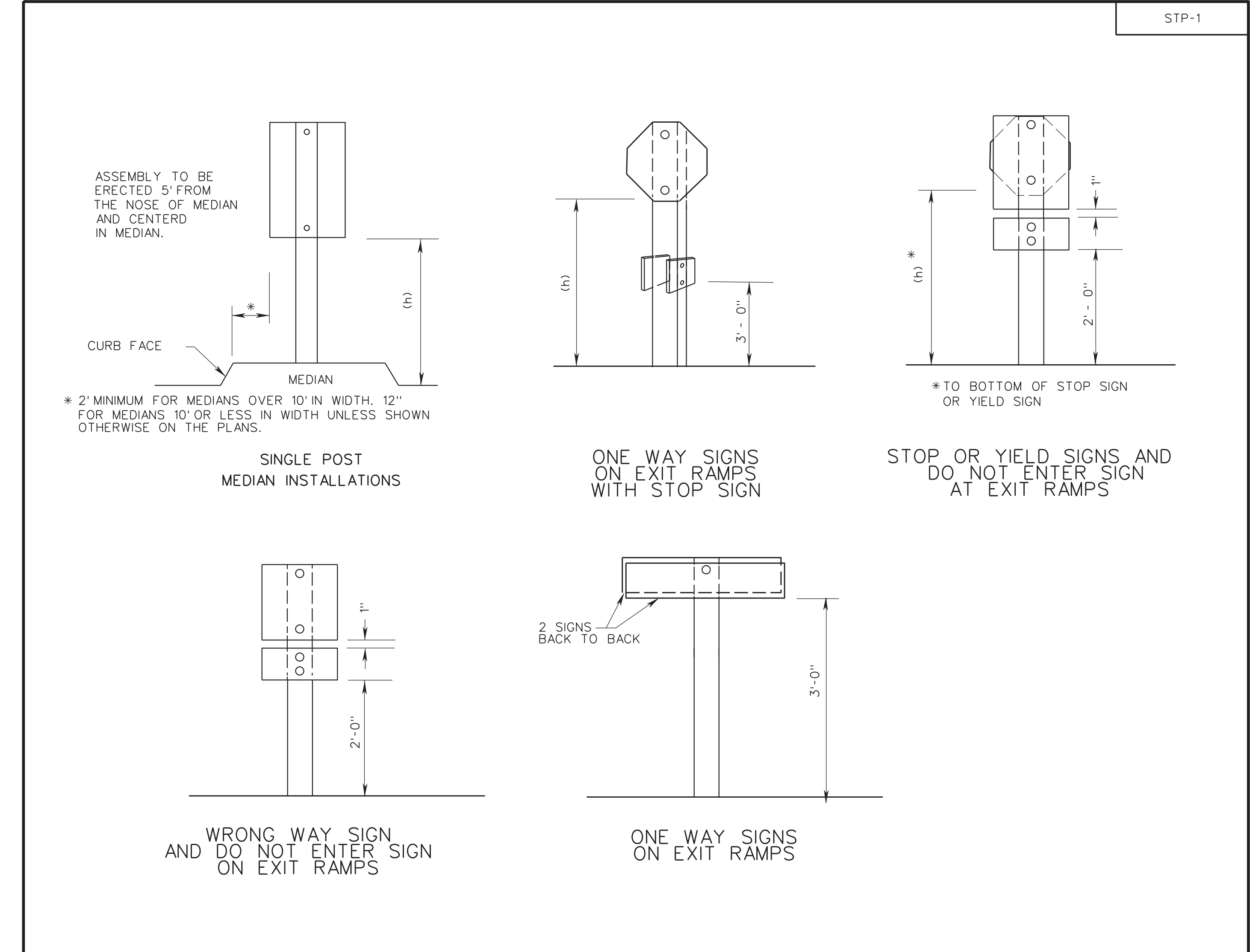
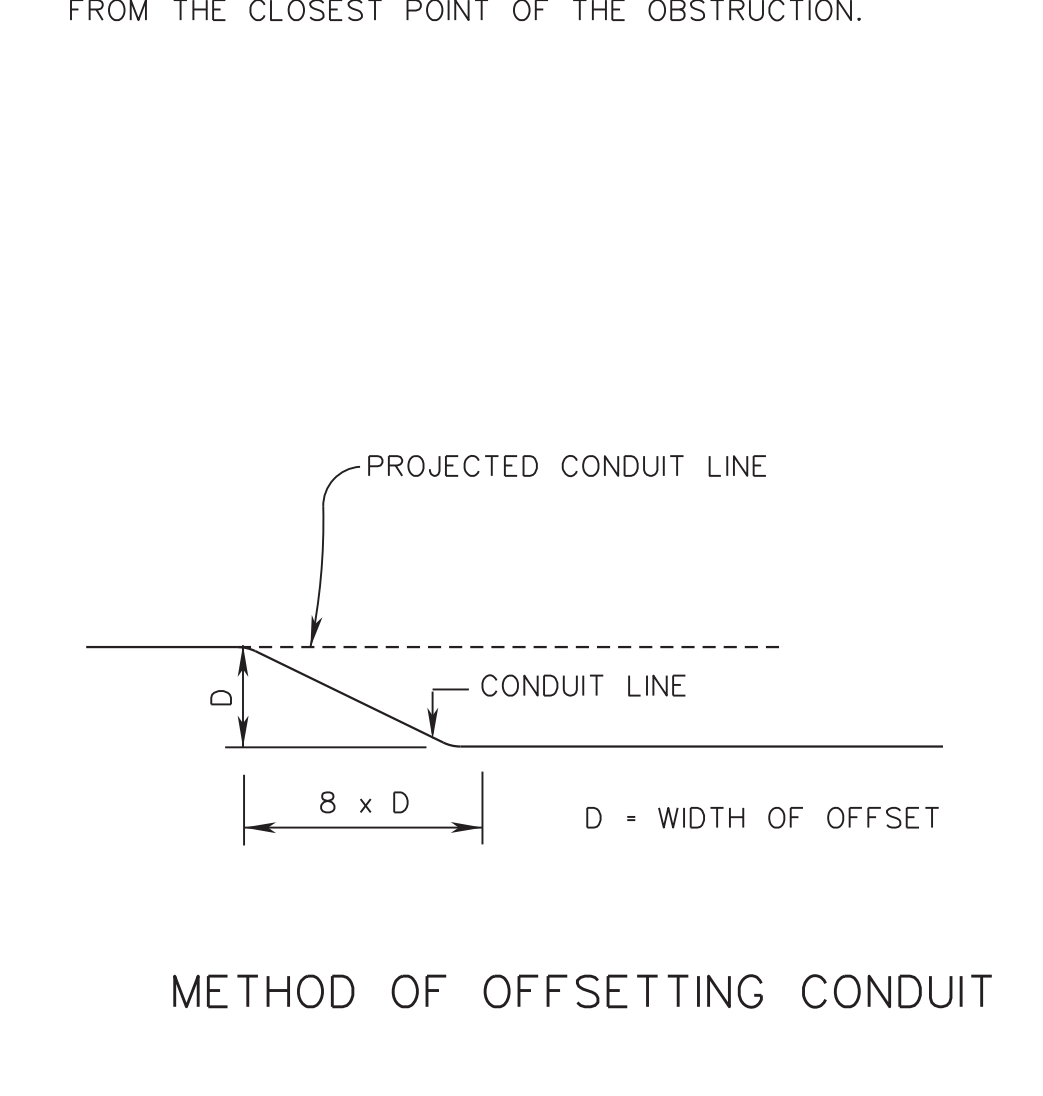
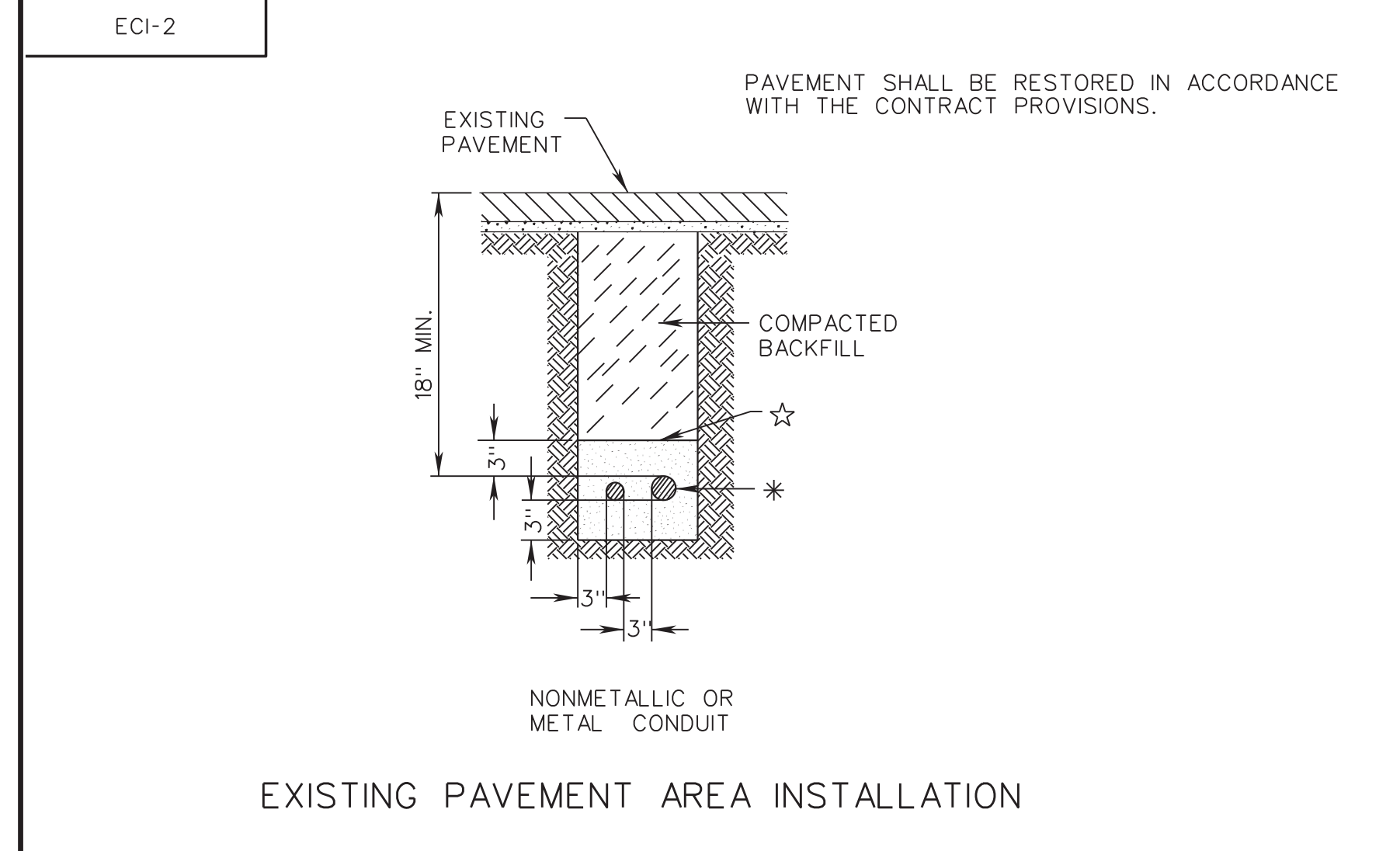
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NORTHERN VIRGINIA DISTRICT

8/19/2014



NOTES:
 CONTRACTOR SHALL INSTALL A 4" MINIMUM TO 6" MAXIMUM WIDE RED PLASTIC LOCATOR TAPE 6" TO 8" BELOW FINISHED GRADE AND DIRECTLY ABOVE BURIED CONDUIT OR CONDUCTOR CABLES, EXCEPT UNDER PAVEMENT.
 CONDUIT INSTALLED UNDER EXISTING OR PROPOSED ROADWAYS FOR DIRECT BURIED CABLES SHALL EXTEND 24" BEYOND THE PAVED SURFACE AND/OR SIDEWALK.
 WHERE CONDUIT FOR POWER AND CONDUIT FOR COMMUNICATION ARE TO BE INSTALLED IN CLOSE PROXIMITY TO EACH OTHER, CONDUITS SHALL BE PLACED PARALLEL IN A COMMON TRENCH WITH NO LESS THAN 6" OF SEPARATION BETWEEN CONDUIT SYSTEMS.
 ☆ BACKFILL MATERIAL BELOW THIS LEVEL SHALL BE SANDY FILL (FREE OF ANY STONES, CINDERS, WOOD, ROOTS, DEBRIS, ETC.)
 * ONE OR MORE CONDUITS AS REQUIRED.
 ▲ ONE OR MORE CONDUCTOR CABLES AS REQUIRED.
 OFFSETTING OF CONDUIT MAY BE USED FOR TIEING INTO EXISTING CONDUIT SYSTEMS OR BYPASSING OBSTRUCTIONS AS DIRECTED BY THE ENGINEER.
 WHEN OFFSETTING CONDUIT TO BYPASS AN OBSTRUCTION, THE CONDUIT SHALL MAINTAIN A MINIMUM CLEARANCE OF 12" FROM THE CLOSEST POINT OF THE OBSTRUCTION.



ROAD AND BRIDGE STANDARDS		ELECTRICAL CONDUIT AND CONDUCTOR CABLE UNDERGROUND INSTALLATION VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE 700
SHEET 1 OF 1 1318.10	REVISION DATE 06-15-2009		

SPECIFICATION REFERENCE 700	SQUARE TUBE SIGN POST VIRGINIA DEPARTMENT OF TRANSPORTATION	ROAD AND BRIDGE STANDARDS REVISION DATE 6-15-09 SHEET 3 OF 3 1321.12
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PLAN NO.	PROJECT	FILE NO.	SHEET NO.
-	0029-151-108	-	1H(11)