





**SIGNAL LEGEND**

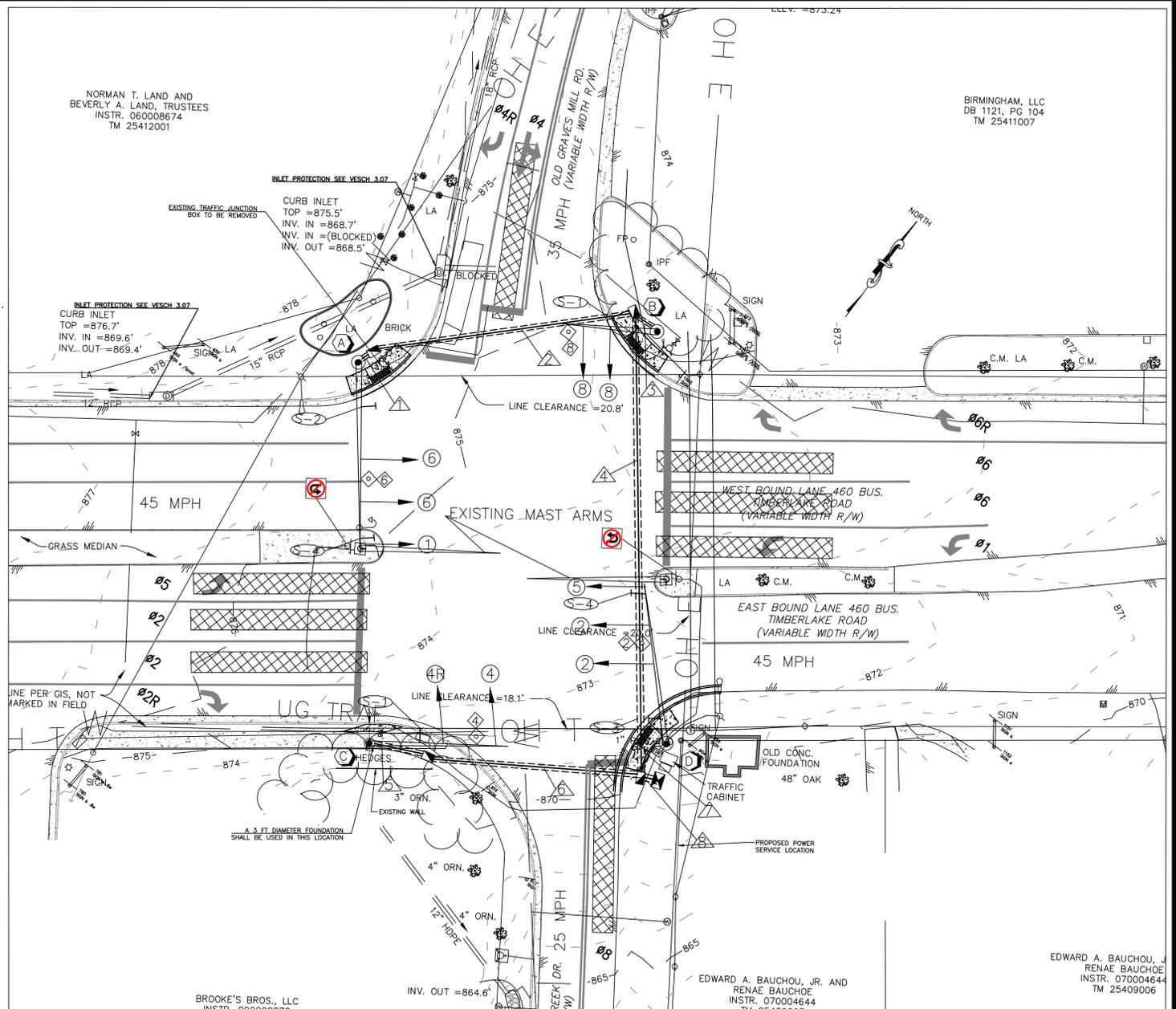
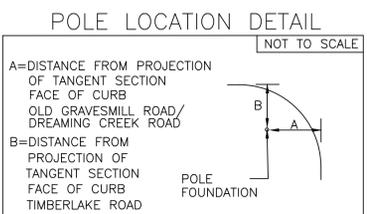
- CONDUIT
- NOTES
- SIGNAL POLE IDENTIFIER
- PROPOSED MAST ARM MOUNTED SIGNS
- PROPOSED CONTROLLER CABINET (Provided by City)
- EXISTING JUNCTION BOX
- PROPOSED CONDUIT
- PROPOSED SIGNAL HEAD
- PROPOSED MAST ARM AND FOUNDATION
- PROPOSED EMERGENCY VEHICLE PRE-EMPTION DEVICE
- PROPOSED VIDEO DETECTION CAMERA (ALDIS)
- DETECTION ZONE
- EXISTING SIGNAL POLE

**CONSTRUCTION NOTES:**

- 1 MULTIPLE CONFLICTS BETWEEN PROPOSED CONDUITS AND EXISTING UTILITIES MAY EXIST. CONTACT "MISS UTILITY" PRIOR TO EXCAVATION.
- 2 TRAFFIC SIGNAL HEADS, VISORS, LUMINAIRES AND HOUSINGS SHALL BE SEMI-GLOSS BLACK. BACKPLATES AND INSIDE OF VISORS SHALL BE SEMI-GLOSS BLACK. ALL SIGNAL HEADS SHALL BE POLYCARBONATE & HAVE POLYCARBONATE BACKPLATES. ALL POLES SHALL BE SEMI-GLOSS BLACK.
- 3 CAMERA LOCATION FOR VIDEO DETECTION SHALL BE DECIDED AND DRILLED IN THE FIELD.
- 4 THE ARM FOR POLE D WILL BE CLOSE TO BEING IN CONFLICT WITH THE EXISTING ARM AND HEADS FOR MOVEMENT 2. EXTRA CARE SHALL BE TAKEN TO AVOID A CONFLICT AND TO PHASE CONSTRUCTION ACCORDINGLY. THIS MAY REQUIRE PLACING THE NEW ARM AND HEADS INTO SERVICE IMMEDIATELY UPON STANDING POLE D. ALSO NOTE THAT POLE D WILL REQUIRE ADDITIONAL HEIGHT DUE TO THE APPROXIMATE THREE FEET OF ELEVATION DIFFERENCE BETWEEN THE FOUNDATION LOCATION AND CROWN OF THE ROAD. THE LOCATION OF POLE D MAY NEED TO BE SHIFTED SLIGHTLY TO AVOID UNDERGROUND UTILITY CONFLICTS.
- 5 POLE C WILL REQUIRE A 3 FT DIAMETER FOUNDATION DUE TO R/W CONSTRAINTS AT BACK OF SIDEWALK AND TO MAINTAIN A 4 FT PASSAGE IN FRONT OF POLE.
- 6 THE FOUNDATION FOR POLE B MAY NEED TO BE 3' (VERSUS 4') IN DIAMETER DUE TO ADJACENT UNDERGROUND UTILITY CONFLICTS.

NO.	POLE SCHEDULE											
	STANDARD TYPE	POLE HEIGHT	MASTARM LENGTH	SIGNAL MOUNTING DISTANCE FROM POLE			CAMERA DISTANCE FROM POLE	EVP DISTANCE FROM POLE	TRAFFIC SIGN MOUNTING DISTANCE FROM POLE		POLE LOCATION A* B*	
A	MP-1	20'	55'	27.6'	40.4'	52.7'	48.2'	34.0'	13.4'	51.3'	20.3'	10.8'
B	MP-1	20'	28'	14.0'	21.7'	-	-	26.4'	7.3'	-	18.2'	19.1'
C	MP-1	20'	40'	21.8'	37.5'	-	-	31.8'	14.8'	-	50.0'	5.7'
D	MP-1	23'	48'	23.6'	34.9'	46.2'	-	29.5'	7.3'	44.1'	13.1'	14.8'

(MP-1) = VDOT STANDARD MAST ARM POLE  
\* SEE POLE LOCATION DETAIL



**CONDUCTOR SCHEDULE**

CONDUIT	RUN NO.									
	1	2	3	4	5	6	7	8	9	10
SIZE	3"	2-3"	3"	2-3"	3"	2-3"	3"	2-4"		
TYPE	P	H	P	H	P	H	P	P		
#14 AWG	2C Future Push Button	2	2	2	4	2	2	2	8	
	4C Future Ped Head	2	2	2	4	2	2	2	8	
	5C	2	2	1	3	-	-	-	2	5
	7C	1	1	1	2	2	2	1	5	
POWER/VIDEO CABLE**	1	1	-	1	-	-	-	1		
EVP CABLE & 3C (CONFIRMATION LIGHT)	1	1	1	2	1	1	1	4		
#6 AWG (ECG)	1	1	1	2	1	1	1	4		

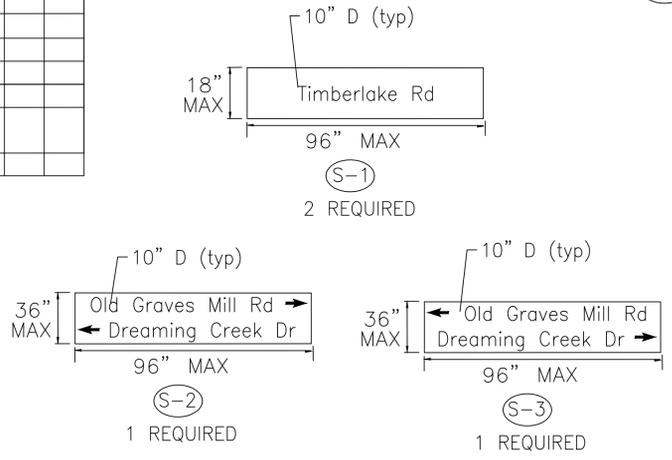
(H) = HIGH DENSITY POLYETHYLENE (DIRECTIONAL BORE)  
(P) = PVC  
EVP = EMERGENCY VEHICLE PRE-EMPTION CABLE (Includes cables for confirmation lights)  
(M) = METAL CONDUIT  
(\*\*) = AS REQUIRED FOR ALDIS CAMERA



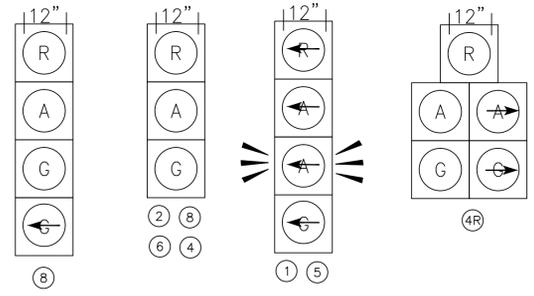
R3-4  
2 REQUIRED



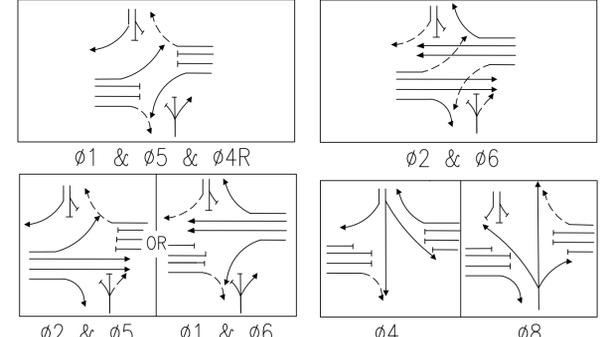
R10-12M  
2 REQUIRED  
(S-4)



**PROPOSED SIGNAL HEADS**



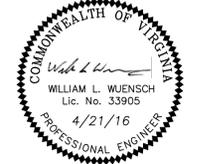
**PHASING DIAGRAM**



BROKEN LINE DEPICTS MOVEMENT MUST YIELD

NO.	DESCRIPTION	DATE	APP

CONTRACTOR SHALL CONTACT MISS UTILITY @ 1-800-552-7001 FOR LOCATION OF ALL UTILITIES, AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

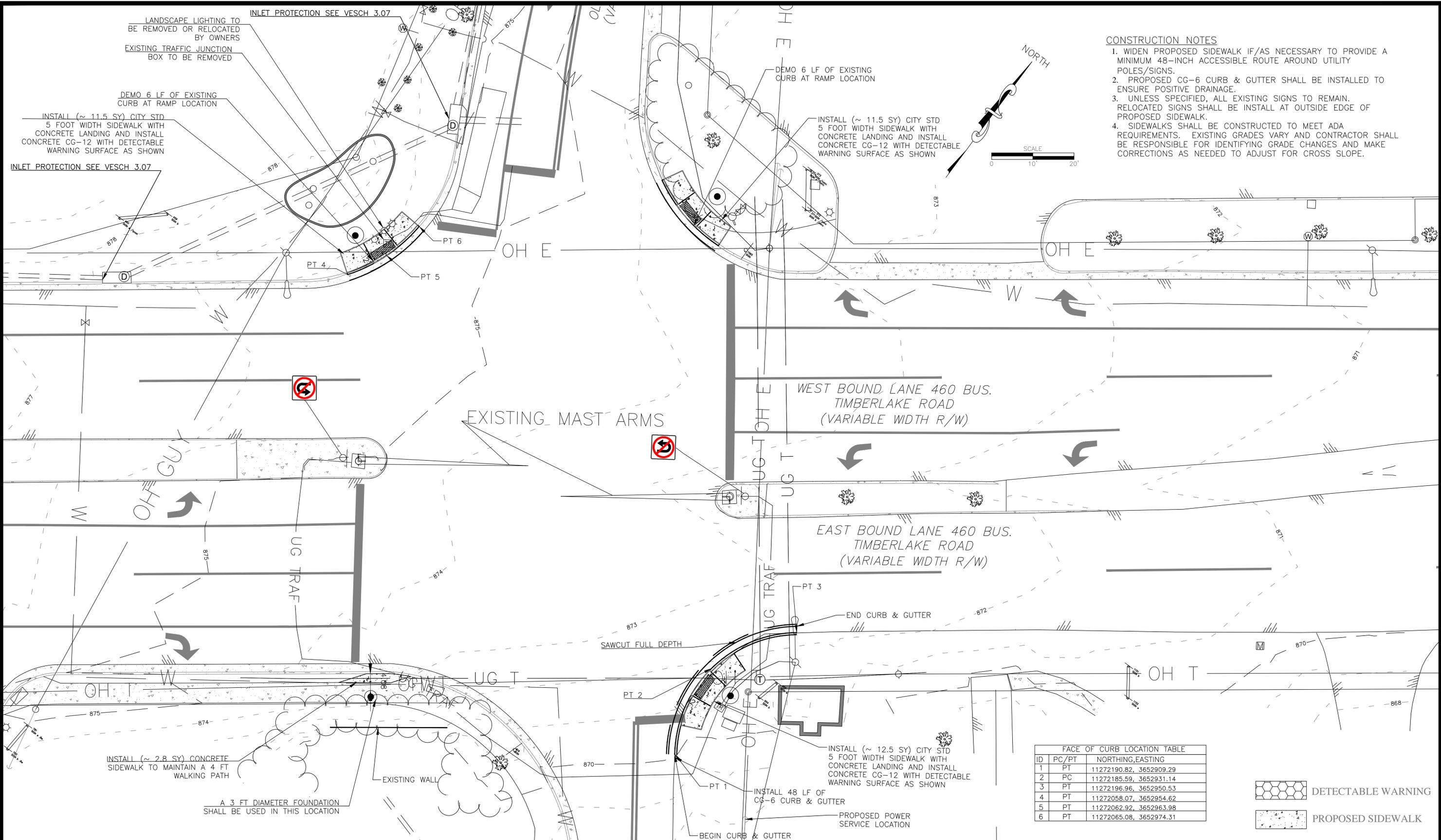


JOB NO.:	15-035
DATE:	04-21-2016
SCALE:	AS SHOWN
DRAWN BY:	LLW
DESIGNED BY:	LLW
CHECKED BY:	WLW

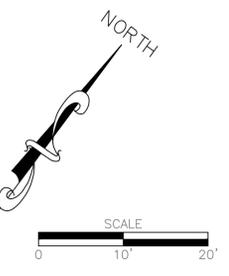
SIGNAL DESIGN PLANS FOR  
OLD GRAVES MILL RD/TIMBERLAKE  
DREAMING CREEK  
LYNCHBURG, VIRGINIA

**INTERSECTION PLAN SHEET**

SHEET NO. S3  
SHEET 3 OF 5

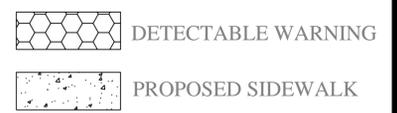


- CONSTRUCTION NOTES**
1. WIDEN PROPOSED SIDEWALK IF/AS NECESSARY TO PROVIDE A MINIMUM 48-INCH ACCESSIBLE ROUTE AROUND UTILITY POLES/SIGNS.
  2. PROPOSED CG-6 CURB & GUTTER SHALL BE INSTALLED TO ENSURE POSITIVE DRAINAGE.
  3. UNLESS SPECIFIED, ALL EXISTING SIGNS TO REMAIN. RELOCATED SIGNS SHALL BE INSTALL AT OUTSIDE EDGE OF PROPOSED SIDEWALK.
  4. SIDEWALKS SHALL BE CONSTRUCTED TO MEET ADA REQUIREMENTS. EXISTING GRADES VARY AND CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING GRADE CHANGES AND MAKE CORRECTIONS AS NEEDED TO ADJUST FOR CROSS SLOPE.



FACE OF CURB LOCATION TABLE

ID	PC/PT	NORTHING,EASTING
1	PT	11272190.82, 3652909.29
2	PC	11272185.59, 3652931.14
3	PT	11272196.96, 3652950.53
4	PT	11272058.07, 3652954.62
5	PT	11272062.92, 3652963.98
6	PT	11272065.08, 3652974.31



NO.	DESCRIPTION	DATE	APP

  
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 WILLIAM L. WUENSCH  
 Lic. No. 33905  
 4/21/16  
 PROFESSIONAL ENGINEER

**EPRPC**  
 Traffic • Transportation • Stormwater • Civil  
 637 BERKMAR CIRCLE  
 Charlottesville • Virginia  
 22901 • (434) 202-5082

JOB NO.: 15-035  
 DATE: 04-21-2016  
 SCALE: AS SHOWN  
 DRAWN BY: LLW  
 DESIGNED BY: LLW  
 CHECKED BY: WLW

SIGNAL DESIGN PLANS FOR  
 OLD GRAVES MILL RD/TIMBERLAKE  
 DREAMING CREEK  
 LYNCHBURG, VIRGINIA  
**CURB & PEDESTRIAN RAMP PLAN SHEET**

SHEET NO.  
 S4  
 SHEET 4 OF 5

CG-12

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.

TYPE B PARALLEL APPLICATION		
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	6	12
5	10	15
6	14	15

VDOT ROAD AND BRIDGE STANDARDS  
SHEET 3 OF 5 REVISION DATE 7/11  
2015.07

CG-12 DETECTABLE WARNING SURFACE  
TYPE B (PARALLEL) APPLICATION  
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE  
105  
502

25.04A - STANDARD CITY COMBINED 6" CURB & GUTTER

NOTES:  
THIS CURB AND GUTTER DETAIL SHALL BE USED FOR THE REPLACEMENT OF EXISTING LIKE CURB AND GUTTER. EXTENSIONS OF THIS CURB AND GUTTER SHALL BE APPROVED BY THE CITY ENGINEER.  
THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBBASE COURSES PROVIDED A MINIMUM DEPTH OF 7" IS MAINTAINED.  
6" THICK AGGREGATE BASE  
VDOT No. 21A

25.04B - STANDARD VDOT COMBINATION 6" CURB & GUTTER (CG-6)\*

NOTES:  
THIS CURB TO BE USED ON ALL ROADWAYS UNLESS DESIGN SPEED EXCEEDS 45 MPH. IF THE DESIGN SPEED IS EXCEEDED, VDOT STANDARD CG-7 IS REQUIRED. (SEE SHEET 2 OF 2 FOR CG-7 MOUNTABLE CURB DETAIL).  
THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBBASE COURSES PROVIDED A MINIMUM DEPTH OF 7" IS MAINTAINED.  
6" THICK AGGREGATE BASE  
VDOT No. 21A  
THIS AREA MAY BE CONCRETE AT THE OPTION OF THE CONTRACTOR.  
\* PER 2001 VDOT ROAD AND BRIDGE STANDARDS OR LATEST REVISION

THE CITY OF LYNCHBURG  
CURB & GUTTER DETAILS  
SCALE: NOT TO SCALE  
DATE: 12-14-2013  
ETL# 25.04  
HEET 1 OF 5

25.04F - STANDARD VDOT 6" CURB (CG-2)\*

NOTES:  
1. THIS CURB MAY ONLY BE USED WITH THE APPROVAL OF CITY ENGINEER.  
2. CONCRETE TO BE AS CAST IN PLACE. 4000 PSI IF PRECAST.  
3. THE DEPTH OF CURB MAY BE REDUCED AS MUCH AS 3" (15" DEPTH) OR INCREASED AS MUCH AS 3" (21" DEPTH) IN ORDER THAT THE BOTTOM OF THE CURB WILL CONDUCE WITH THE TOP COURSE OF THE PAVEMENT SUBSTRUCTURE. OTHERWISE THE DEPTH IS TO BE "AS SHOWN".  
4. THIS CURB IS TO BE USED WHEN DESIGN SPEED IS 45 MPH OR LESS IN DEVELOPED URBAN AND SUBURBAN AREAS.

ALTERNATE 25.04F - STANDARD VDOT 6" CURB (CG-2)\*  
\* PER 2001 VDOT ROAD AND BRIDGE STANDARDS OR LATEST REVISION

THE CITY OF LYNCHBURG  
CURB & GUTTER DETAILS  
SCALE: NOT TO SCALE  
DATE: 12-14-2013  
ETL# 25.04  
HEET 1 OF 5

TYPICAL SIDEWALK without PARKWAY

TYPICAL SIDEWALK with PARKWAY

NOTES:  
1. PROVIDE 3/4" DEEP TOOLED SCORE AT 5'-0" O.C.  
2. EXPANSION JOINTS TO BE PLACED 30'-0" O.C. LONGITUDINALLY, ADJACENT TO CURBS, AND WHEN BUTTING EXISTING STRUCTURES, CONCRETE, OR BUILDINGS.

THE CITY OF LYNCHBURG  
STANDARD SIDEWALK DETAIL  
SCALE: NOT TO SCALE  
DATE: 12-14-2013  
ETL# 25.05  
HEET 1 OF 1

PATCH DESIGN FOR ASPHALT STREETS

TYPE STREET	ARTERIAL	INDUSTRIAL	COLLECTOR	RESIDENTIAL
TYPE PATCH	TYPE A	TYPE B	TYPE C	TYPE D
①	2" SM-12.50	2" SM-12.50	2" SM-12.54	2" SM-12.54
②	8" BM25	6" BM25	4" BM25	4" BM25
③	7" VDOT NO.21A	4" VDOT NO.21A	4" VDOT NO.21A	4" VDOT NO.21A
PATCH DEPTH	TOTAL = 17"	TOTAL = 12"	TOTAL = 10"	TOTAL = 10"

NOTES:  
1. PAVEMENT SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED.

THE CITY OF LYNCHBURG  
TRENCH PATCH ASPHALT STREETS - TYPE A, B, & C  
SCALE: NOT TO SCALE  
DATE: 12-14-2013  
ETL# 25.16  
HEET 1 OF 1

SECTION A-A

THE CITY OF LYNCHBURG  
TYPE 1 - HANDICAP RAMP FOR TEE INTERSECTION WITH GRASS STRIP  
SCALE: NOT TO SCALE  
DATE: 12-14-2013  
ETL# 26.13  
HEET 1 OF 2

GRAVEL CURB INLET SEDIMENT FILTER

SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

\* GRAVEL SHALL BE VDOT #3, #357 OR 5 COARSE AGGREGATE.

SOURCE: VA. DSWC  
PLATE 3.07-6

NO.	DESCRIPTION	DATE	APP

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COMMONWEALTH OF VIRGINIA  
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SIGNAL DESIGN PLANS FOR  
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LYNCHBURG, VIRGINIA  
CONSTRUCTION DETAILS

SHEET NO.  
S5  
SHEET 5 OF 5