MD 586 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

PROPOSED LED SIGNALS

1 1a,1,2,3,4,5 6,7,8,9,10

R Y G

12"

11,12

16" LED COUNTDOWN PEDESTRIAN SIGNAL

PROPOSED SIGNS

13,13a ← Robindale DR (12700)

14,14a Robindale DR (12700) →

D-3(1) (VAR.x16") DUAL FACED

15 R3-6(L) (30"x36")

16 Veirs Mill Rd WEST 586 EAST M1-5(4) (78"x36")

18 Veirs Mill Rd EAST 586 WEST M1-5(4) (78"x36")

17 ONLY R3-5(R) (30"x36")

19,20 R4-7 (24"x30") @15°

PROPOSED ACCESSIBLE PUSHBUTTON AND SIGN

21 22

PUSH BUTTON TO CROSS VEIRS MILL RD
A START CROSSING WATCH FOR TURNING CARS
B DON'T START! FINISH CROSSING IF STARTED
C TIME REMAINING TO FINISH CROSSING
D PEDESTRIANS SHOULD NOT BE IN CROSSWALK
STREET NAME IN BRAILLE TYPE 2

R10-3(1) (9"x15") R10-3(1) (9"x15")

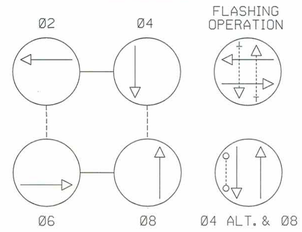
EXISTING SIGNS TO REMAIN

23,24 F.Y.G.

EXISTING SIGNS TO BE REMOVED

25a 25b

NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

PROPOSED VIDEO DETECTION

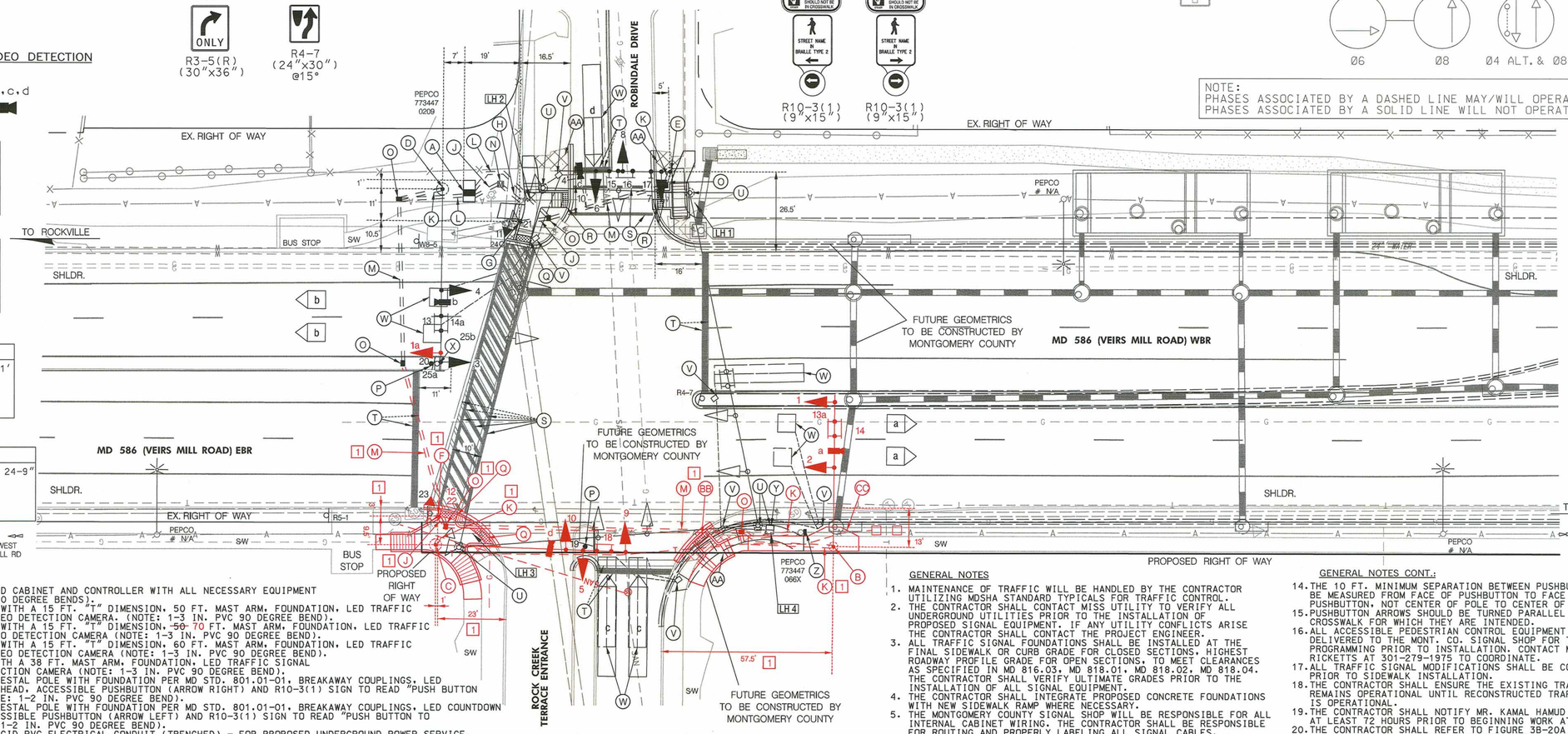
a,b,c,d

LINE HEIGHTS (LH) 1	
COMM. CABLE	- 19'-4"
COMM. CABLE	- 22'-6"
SPAN WIRE (NORTH LEG)	- 21'-10"
SPAN WIRE (WEST LEG)	- 25'-3"
PRIMARY	- 35' +

LINE HEIGHTS (LH) 2	
COMM. CABLE	- 21-3"
COMM. CABLE	- 21'-7"
COMM. CABLE	- 23'-2"
SPAN WIRE (WEST LEG)	- 24'-6"
PRIMARY	- 35' +

LINE HEIGHTS (LH) 3	
COMM. CABLES (4)	- 14' TO 21'
SPAN WIRE (WEST LEG)	- 21'-11"
SPAN WIRE (SOUTH LEG)	- 24'-4"
SECONDARY	- 23'-11"
PRIMARY	- 30' +

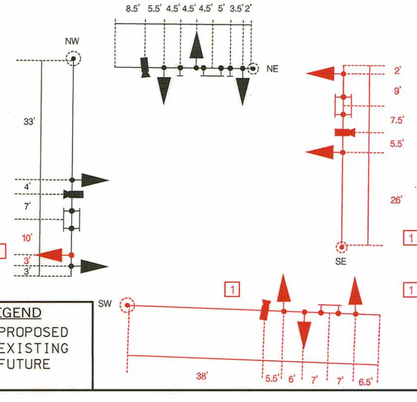
LINE HEIGHTS (LH) 4	
COMM. CABLES (4)	- 21'-6" TO 24-9"
SPAN WIRE (SOUTH LEG)	- 24'-2"
SPAN WIRE (EAST LEG)	- 24'-7"
SECONDARY	- 25'-10"
PRIMARY	- 30' +



CONSTRUCTION DETAILS

A. INSTALL SIZE "S" BASE MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT (NOTE: 2-2 IN. AND 2-4 IN. 90 DEGREE BENDS).
B. INSTALL 16.5 FT. STEEL POLE WITH A 15 FT. "T" DIMENSION. 50 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGNS, AND VIDEO DETECTION CAMERA. (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
1 C. INSTALL 16.5 FT. STEEL POLE WITH A 15 FT. "T" DIMENSION. ~~50~~ 70 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGN, AND VIDEO DETECTION CAMERA (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
D. INSTALL 16.5 FT. STEEL POLE WITH A 15 FT. "T" DIMENSION, 60 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGNS, AND VIDEO DETECTION CAMERA (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
E. INSTALL 27 FT. STEEL POLE WITH A 38 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGNS, AND VIDEO DETECTION CAMERA (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
F. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION PER MD STD. 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PUSHBUTTON (ARROW RIGHT) AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS VEIRS MILL RD" (NOTE: 1-2 IN. PVC 90 DEGREE BEND).
G. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION PER MD STD. 801.01-01, BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PUSHBUTTON (ARROW LEFT) AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS VEIRS MILL RD" (NOTE: 1-2 IN. PVC 90 DEGREE BEND).
H. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR PROPOSED UNDERGROUND POWER SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS.
J. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
K. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
L. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
M. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED).
N. INSTALL METERED SERVICE PEDESTAL (NOTE: 1-4 IN. AND 2-2 IN. PVC 90 DEGREE BENDS WITH 3/4 IN. CONDUIT FOR GROUND WIRE.)
O. INSTALL ELECTRICAL HANDHOLE.
P. INSTALL GROUND MOUNTED SIGN ON ONE 4 IN. X 4 IN. WOOD POST.
Q. REMOVE EXISTING SIDEWALK RAMP AND CONSTRUCT NEW SIDEWALK RAMP WITH DETECTABLE WARNING SURFACE PER MD STD. 655.40. (SEE GI SHEET FOR DETAILS).
R. CONSTRUCT NEW SIDEWALK RAMP WITH DETECTABLE WARNING SURFACE PER MD STD. 655.40 (SEE GI SHEET FOR DETAILS).
S. REMOVE EXISTING PAVEMENT MARKINGS (WHERE NECESSARY) AND INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR CROSSWALK.
T. REMOVE EXISTING PAVEMENT MARKINGS (WHERE NECESSARY) AND INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR STOPLINE.
U. REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT. THE CONTRACTOR SHALL CONTACT PEPCO TO PERFORM A "WORK WITH" TO DISCONNECT THE EXISTING POWER FEED. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. CAP AND ABANDON EXISTING CONDUIT.
V. REMOVE EXISTING HANDHOLE AND BACKFILL. CAP AND ABANDON EXISTING CONDUIT.
W. ABANDON EXISTING LOOP DETECTOR.
X. REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORT.
Y. PULL BACK AND RE-ROUTE EXISTING INTERCONNECT CABLE (NOTE: SEE WIRING DIAGRAM ON GI SHEET FOR DETAILS).
Z. INSTALL 3 IN. ELECTRICAL CONDUIT RISER, 3 IN. WEATHER HEAD AND INTERCONNECT SPLICE CABINET ON EXISTING UTILITY POLE (NOTE: 1-3 IN. 90 DEGREE PVC BEND).
AA. REMOVE EXISTING SIDEWALK RAMP. (SEE GI SHEET FOR DETAILS).
1 BB. CONSTRUCT ~~SHA STD. MD 655.12~~ SIDEWALK RAMP ~~(5 FT. x 5 FT. LANDING 8 FT. SIDE FLARES)~~(SEE GI SHEET FOR DETAILS).
1 CC. INSTALL 5 IN. ~~CONCRETE~~ SIDEWALK PER SHA STD. MD 655.02 (SEE GI SHEET FOR DETAILS).

MAST ARM DETAIL



GENERAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
4. THE CONTRACTOR SHALL INTEGRATE PROPOSED CONCRETE FOUNDATIONS WITH NEW SIDEWALK RAMP WHERE NECESSARY.
5. THE MONTGOMERY COUNTY SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES.
6. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
7. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL RECONSTRUCTION.
8. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE AND CABINET LOCATION(S) PRIOR TO INSTALLATION.
9. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALKS ON NEWLY CONSTRUCTED RAMPS.
10. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSHA STANDARDS.
11. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2; AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
12. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 IN.
13. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. x 60 IN. LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.

GENERAL NOTES CONT.:

14. THE 10 FT. MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
15. PUSHBUTTON ARROWS SHOULD BE TURNED PARALLEL TO THE CROSSWALK FOR WHICH THEY ARE INTENDED.
16. ALL ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE MONT. CO. SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. BOB RICKETTS AT 301-279-1975 TO COORDINATE.
17. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK INSTALLATION.
18. THE CONTRACTOR SHALL ENSURE THE EXISTING TRAFFIC SIGNAL REMAINS OPERATIONAL UNTIL RECONSTRUCTED TRAFFIC SIGNAL IS OPERATIONAL.
19. THE CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD (240-777-8761) AT LEAST 72 HOURS PRIOR TO BEGINNING WORK AT THE INTERSECTION.
20. THE CONTRACTOR SHALL REFER TO FIGURE 3B-20A OF THE 2011 MARYLAND M.U.T.C.D. FOR CROSSWALK PAVEMENT MARKING DETAIL.
21. FUTURE GEOMETRIC WORK ALONG THE EAST SIDE OF THE INTERSECTION INCLUDING THE SE CORNER S/W RAMP AND SOUTH LEG MEDIAN RECONSTRUCTION IS TO BE CONSTRUCTED BY MONTGOMERY COUNTY UNDER PROJECT NO. 500717. THE PROJECT IS SCHEDULED TO BEGIN CONSTRUCTION IN FISCAL YEAR 2018.

1 REDLINE REVISION NO.1
TEDD APPROVAL
FEBRUARY 2013
SHA NO. XY2245185

UTILITY LEGEND

E — E	ELECTRIC CABLES	SD — SD	STORM DRAIN
A — A	AERIAL CABLES	G — G	GAS MAIN
T — T	TELEPHONE CABLES	W — W	WATER MAIN
F — F	FIBER-OPTIC	S — S	SEWER MAIN

GEOMETRIC LEGEND

PROPOSED
EXISTING
FUTURE

STV Incorporated
7125 Ambassador Road, Suite 200
Baltimore, MD 21244
www.stvinc.com

BY: tarnovk -

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 586 (VEIRS MILL ROAD)
AND ROBINDALE DRIVE
ROCKVILLE, MD

APPROVALS
TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR
ORIGINAL ON FILE

REVISIONS
B FULL SIGNAL RECONSTRUCTION
SHA NO. XY2245185 KS37 9/2012
BY: EMP | MF | DBD | RDB | MLP | CJW
A MODIFIED CONTROLLER AND DETECTION
AW-680-501-085 3/1984

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 2/25/1984 CONTRACT NO. A-M-4774-70

DESIGNED BY
DRAWN BY BRUCE THOMPSON
CHECKED BY
F.A.P. NO.
COUNTY MONTGOMERY
LOGMILE 15058602.66
TIMS NO.
TOD NO.

TS NO. 450B | DRAWING SG-1 OF 2 | SHEET NO. 01 OF 02

PLOTTED: Monday, February 25, 2013 AT 01:40 PM
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