

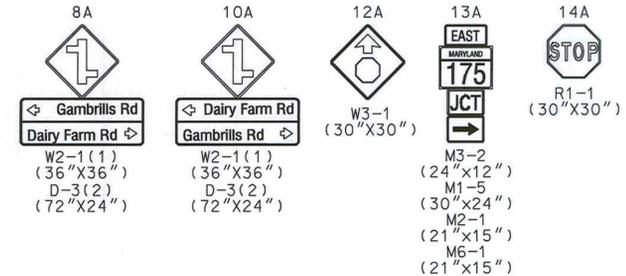
BORDER REV. DATE: JULY 1, 2005



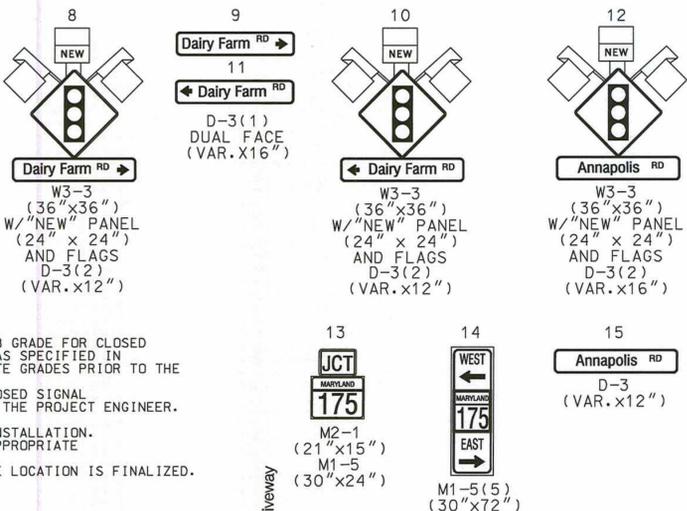
**WR&A**  
**WHITMAN, REQUARDT & ASSOCIATES, LLP**  
 801 South Caroline Street, Baltimore, Maryland 21201

BY: \$USERNAMES\$

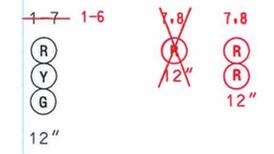
**EXISTING SIGNS TO BE REMOVED**



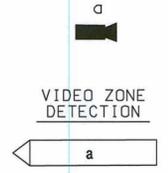
**PROPOSED SIGNS**



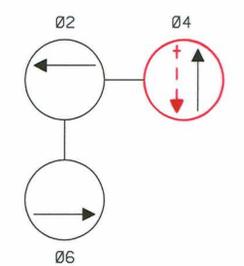
**PROPOSED SIGNALS**



**PROPOSED VIDEO DETECTION CAMERA**



**NEMA PHASING**



**FLASHING OPERATION**

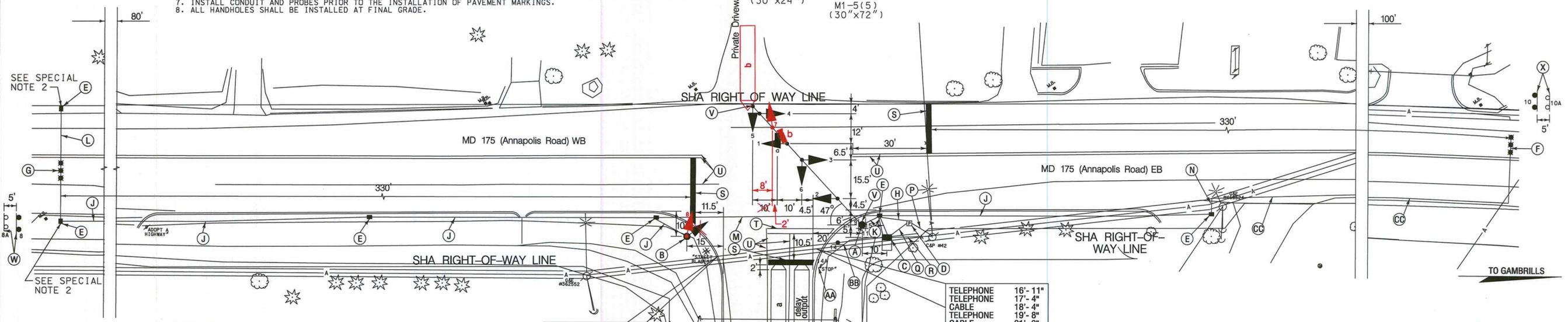


**GENERAL NOTES**

1. 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.
2. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
4. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
6. THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON SIGNALS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
7. INSTALL CONDUIT AND PROBES PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
8. ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.

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

**TO ODENTON**



**CONSTRUCTION DETAILS**

- A. INSTALL CONCRETE FOUNDATION WITH A 27 FT. (CUT TO 21 FT.) STEEL POLE WITH A 70 FT. (CUT TO 65 FT.) MAST ARM. TRAFFIC SIGNAL HEADS, SIGNS, AND VIDEO DETECTION CAMERA MOUNTED ON MAST ARM. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
- B. INSTALL CONCRETE FOUNDATION WITH 14 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE AND TRAFFIC SIGNAL HEAD. (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- C. INSTALL NEMA SIZE 6" BASE MOUNTED CABINET AND CONTROLLER WITH CONCRETE PAD. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE.)
- D. INSTALL EMBEDDED METERED SERVICE PEDESTAL WITH 2-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS IN PEDESTAL BASE.
- E. INSTALL HANDHOLE.
- F. INSTALL MICROLOOP PROBE SET WITH 500 FT. LEAD-IN (TO BE PLACED IN THRU LANE ONLY).
- G. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.
- H. INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- I. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- J. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- K. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- L. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
- M. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
- N. INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT. (FOR DETECTOR WIRE SLEEVE)
- P. INSTALL 4 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE FOR USE BY BGE FORCES.
- Q. INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
- R. INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE FOR USE BY VERIZON FORCES.
- S. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
- T. REMOVE EXISTING STOP LINE.
- U. REMOVE EXISTING PAVEMENT MARKINGS BEYOND PROPOSED STOP LINE.
- V. CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
- W. REMOVE EXISTING "W2-1(1)" SIGN, "D-3(2)" SIGN AND WOOD POSTS. INSTALL W3-3 "SIGNAL AHEAD" SIGN (36 IN. x 36 IN.) AND D-3(2) SIGN (VAR. x 12 IN.) WITH "NEW" PANEL AND FLAGS ON TWO 4 IN. x 6 IN. TREATED WOOD POSTS 5' BEHIND EXISTING SIGNS TO BE REMOVED AS SHOWN ON EASTBOUND MD 175.
- X. REMOVE EXISTING "W2-1(1)" SIGN, "D-3(2)" SIGN AND WOOD POSTS. INSTALL W3-3 "SIGNAL AHEAD" SIGN (36 IN. x 36 IN.) AND D-3(2) SIGN (VAR. x 12 IN.) WITH "NEW" PANEL AND FLAGS ON TWO 4 IN. x 6 IN. TREATED WOOD POSTS 5' BEHIND EXISTING SIGNS TO BE REMOVED AS SHOWN ON WESTBOUND MD 175.
- Y. REMOVE EXISTING "W3-1" SIGN AND WOOD POST. INSTALL W3-3 "SIGNAL AHEAD" SIGN (36 IN. x 36 IN.) AND D-3(2) SIGN (VAR. x 16 IN.) WITH "NEW" PANEL AND FLAGS ON TWO 4 IN. x 6 IN. TREATED WOOD POSTS 5' BEHIND EXISTING SIGN TO BE REMOVED AS SHOWN ON NORTHBOUND DAIRY FARM ROAD.
- Z. REMOVE EXISTING ROUTE MARKER ASSEMBLY AND WOOD POST. INSTALL M2-1 (21"x15") AND M1-5 (30"x24") SIGNS ON ONE 4 IN. x 6 IN. TREATED WOOD POST 5' BEHIND EXISTING SIGN TO BE REMOVED AS SHOWN ON NORTHBOUND DAIRY FARM ROAD.
- AA. REMOVE EXISTING "R1-1" SIGN AND WOOD POST.
- BB. INSTALL M1-5(5) (30 IN. x 72 IN.) SIGN ON ONE 4 IN. x 6 IN. TREATED WOOD POST AS SHOWN ON NORTHBOUND DAIRY FARM ROAD.
- CC. SAW CUT TO INSTALL MICROLOOP PROBE.

TELEPHONE	15'-10"
TELEPHONE	16'-5"
CABLE	17'-11"
TELEPHONE	18'-11"
CABLE	20'-8"
CABLE	21'-8"
GUY	24'-10"
SECONDARY	26'-4"
PRIMARY RACK	31'-8"
PRIMARY	33'-9"

TELEPHONE	16'-11"
TELEPHONE	17'-4"
CABLE	18'-4"
TELEPHONE	19'-8"
CABLE	21'-3"
CABLE	21'-10"
GUY	25'-0"
SECONDARY	26'-7"
PRIMARY RACK	31'-8.5"
PRIMARY	33'-9"

**SPECIAL NOTES:**

1. CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.
2. INSTALL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO TRAVEL WAY FOR INSTALLATION OF NON-INVASIVE PROBES. EXTEND CONDUIT A MINIMUM OF 2 IN. AND MAXIMUM OF 3 IN. INTO HANDHOLE.

REDLINE 2 APPROVED 4/10/12: *THH* 4/11/12

THOMAS HICKS  
DIRECTOR OFFICE OF TRAFFIC AND SAFETY

**GEOMETRIC LEGEND**

— EXISTING  
 — PROPOSED

**UTILITY LEGEND**

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

**APPROVALS**

TEAM LEADER: \_\_\_\_\_  
 ASST. DIV. CHIEF: \_\_\_\_\_  
 DIVISION CHIEF: \_\_\_\_\_  
 OFFICE DIRECTOR: \_\_\_\_\_

**REVISIONS**

NO.	DESCRIPTION	DATE

**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION  
 MD 175 (ANNAPOLIS ROAD) @ DAIRY FARM ROAD  
 GAMBRIILLS, MARYLAND

**TRAFFIC SIGNALIZATION PLAN**

SCALE: 1" = 20' ADVERTISED DATE: 08/25/2011 CONTRACT NO.: XX3475185

DESIGNED BY: LWAESCHE COUNTY: ANNE ARUNDEL  
 DRAWN BY: LWAESCHE LOGMILE: 02017501.26  
 CHECKED BY: NLEARY TMS NO.: K266  
 F.A.P. NO.: \_\_\_\_\_ TOD NO.: \_\_\_\_\_

TS NO. 4790 DRAWING TSP-1 OF 2 SHEET NO. 1 OF 2

PLOTTED: SOMETIMES  
FILE: \$FILES