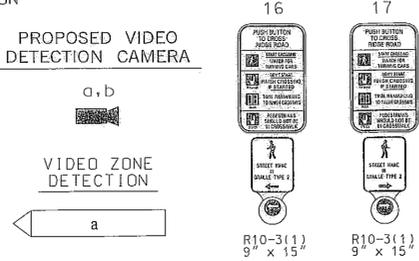


NOTE: PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

GENERAL NOTES

- 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.
- 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.
- VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- THE CONTRACTOR SHALL CONTACT SHA TO SCHEDULE RETROFITTING OF THE CONTROLLER EQUIPMENT IN ORDER TO OPERATE VIDEO DETECTION EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- 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 A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- FOR FINAL PAVEMENT MARKINGS REFER TO DRAWING NO. SN-2.01. OTHER THAN THOSE DETAILED ON THE PLAN, ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
- INSTALL CONDUIT AND LOOP DETECTORS PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS. REFER TO SIGNING AND PAVEMENT MARKING PLANS FOR ADDITIONAL DETAILS.
- VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
- ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
- THE SIGNAL CONTRACTOR SHALL DETERMINE IF ANY WORK BY OTHER CONTRACTORS CAN NOT BE COMPLETED UNTIL INSTALLATION OF SIGNAL EQUIPMENT IS COMPLETE. THE SIGNAL CONTRACTOR SHALL NOTIFY OTHER CONTRACTORS OF THIS WORK.
- REFER TO DRAWING NO. TSP-02 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.
- CALL MONTGOMERY COUNTY TRANSPORTATION MANAGEMENT CENTER (TMC) 72 HOURS PRIOR TO ANY DIGGING TO MARK THE EXISTING TRAFFIC SIGNAL EQUIPMENT.

PROPOSED SIGNS



CONSTRUCTION DETAILS

- INSTALL 1.5' x 3' CONCRETE PEDESTAL FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN (SIGN TO READ "PUSH BUTTON TO CROSS RIDGE ROAD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT, R10-3(1) SIGN (SIGN TO READ "PUSH BUTTON TO CROSS RIDGE ROAD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
- USE EXISTING POLE MOUNTED CABINET AND CONTROLLER. INSTALL ONE 2 INCH BLIND COUPLING IN BOTTOM OF POLE MOUNTED CABINET BY FIELD DRILLING HOLE INTO EXISTING MAST ARM POLE A MINIMUM OF 12 INCHES FROM EXISTING BLIND COUPLING. (NOTE: SHA FORCES SHALL RETROFIT CONTROLLER EQUIPMENT TO OPERATE VIDEO DETECTION EQUIPMENT).
- USE EXISTING STEEL POLE. REMOVE EXISTING TRAFFIC SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD, PUSHBUTTON, SIGN, AND INSTALL LED TRAFFIC SIGNAL HEADS. SPRAY COLD GALVANIZING COMPOUND ON AFFECTED AREAS.
- USE EXISTING HANDHOLE AND ADJUST TO FINAL GRADE.
- USE EXISTING CONDUIT.
- CAP AND ABANDON EXISTING CONDUIT.
- INSTALL OVERHEAD VIDEO DETECTION CAMERAS ON EXISTING MAST ARM AS SHOWN.
- REMOVE EXISTING STEEL POLE, PEDESTRIAN SIGNAL HEAD, AND PEDESTRIAN PUSHBUTTON SIGN. RELOCATE EXISTING "LOIS P. ROCKWELL ELEMENTARY SCHOOL" SIGNS ON ONE 4 IN. x 4 IN. WOOD POST AS SHOWN ON THE PLAN. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
- INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
- INSTALL HANDHOLE.
- REMOVE EXISTING HANDHOLE.
- INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (FOR DETECTOR WIRE SLEEVE).
- INSTALL MICROLOOP PROBE SET WITH 500 FT. LEAD-IN (TO BE PLACED IN THRU LANE ONLY).
- INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- USE EXISTING HANDHOLE.
- ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
- INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).

- SPECIAL NOTES:**
- 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.
 - DISCONNECT EXISTING ELECTRICAL CABLE FROM EXISTING SIGNAL HEADS TO BE REMOVED AND RE-CONNECT TO PROPOSED SIGNAL HEADS. ANY SIGNAL OUTAGE SHALL BE SCHEDULED DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.

UTILITY LEGEND

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

WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

APPROVALS	REVISIONS
TEAM LEADER	1. REPLACED EXISTING SIGNAL HEADS WITH LED SIGNAL HEADS AND ADDED APS/OPS
ASST. DIR. CHIEF	2. CORRECTED DIMENSIONS FOR LOOP PLACEMENT
DIVISION CHIEF	
OFFICE DIRECTOR	

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 27 (RIDGE ROAD) AT SWEEPSTAKES ROAD/MARLBORO DRIVE

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' DATE JANUARY 2011 CONTRACT NO. MC0955187

DESIGNED BY DONALD DISTANCE	COUNTY MONTGOMERY
DRAWN BY DCD AEH	LOGMILE 04.420
CHECKED BY STEVE RENZI	TMS NO. JS20
F.A.P. NO. SEE TITLE SHEET	TOD NO.

TS NO. TS-2087B DRAWING TSP-01 OF 2 SHEET NO. OF

MD 1-14-11