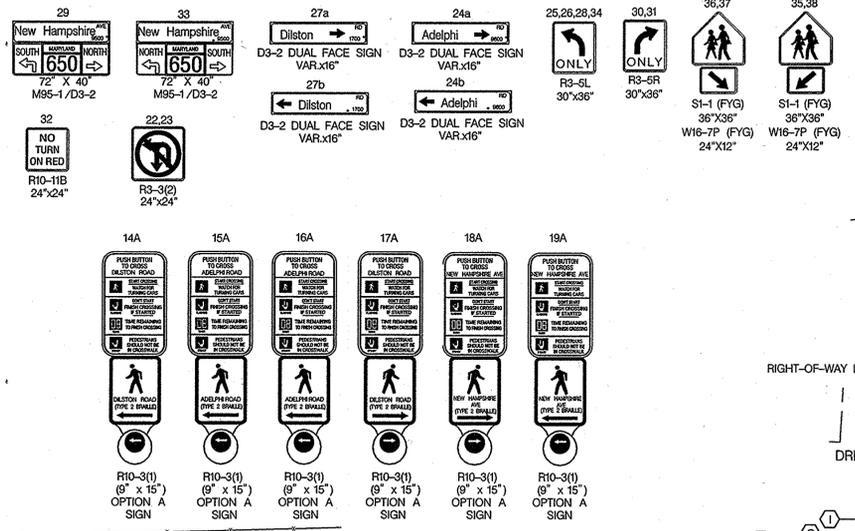


MD 650 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

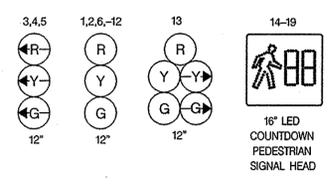
UTILITY HEIGHTS

TELEPHONE	= 18' - 10"
TELEPHONE	= 20' - 6"
TELEPHONE	= 22' - 3"
SECONDARY	= 29' - 0"
PRIMARY	> 35' - 0"

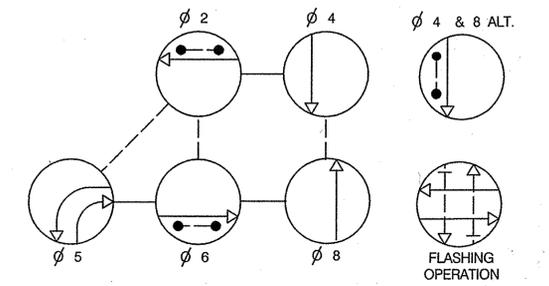
PROPOSED SIGNS



PROPOSED L.E.D. SIGNALS

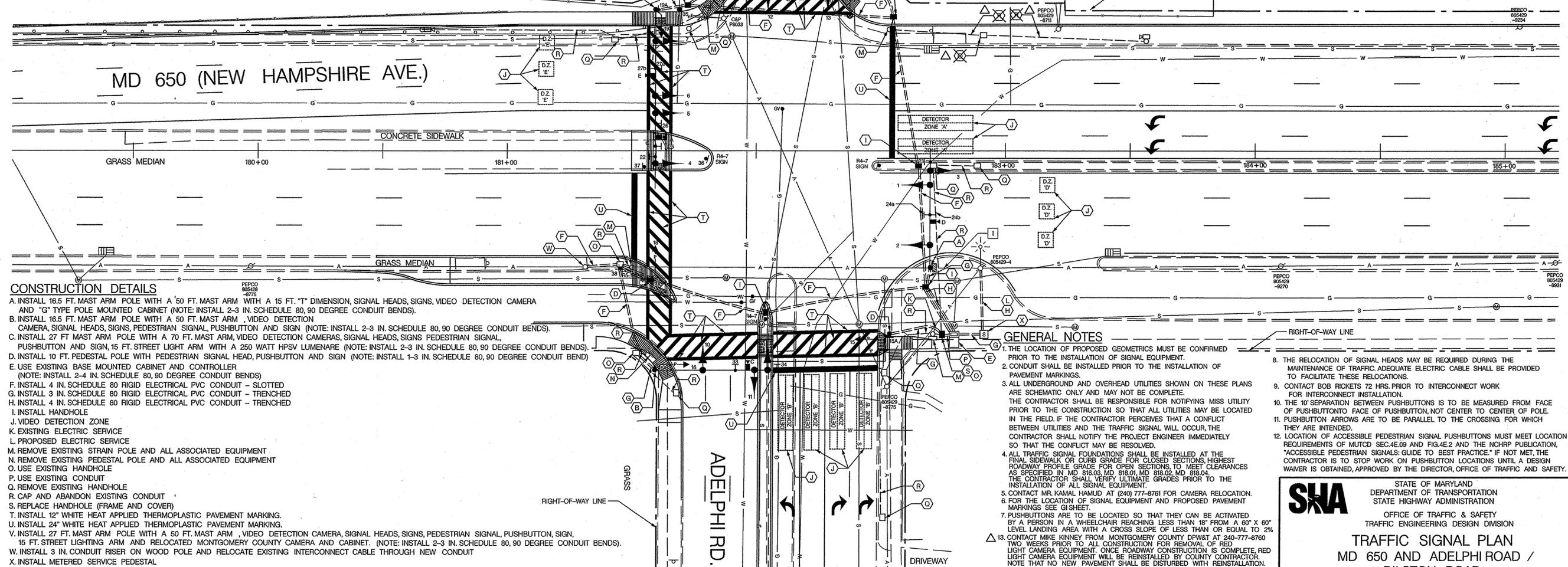


NEMA PHASING



PHASING NOTES:
 1.) PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
 2.) PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.

PROPOSED VIDEO DETECTION CAMERAS



CONSTRUCTION DETAILS

- INSTALL 16.5 FT. MAST ARM POLE WITH A 50 FT. MAST ARM WITH A 15 FT. "T" DIMENSION, SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA AND "G" TYPE POLE MOUNTED CABINET (NOTE: INSTALL 2-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS).
- INSTALL 16.5 FT. MAST ARM POLE WITH A 50 FT. MAST ARM, VIDEO DETECTION CAMERA, SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL, PUSHBUTTON AND SIGN (NOTE: INSTALL 2-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS).
- INSTALL 27 FT. MAST ARM POLE WITH A 70 FT. MAST ARM, VIDEO DETECTION CAMERAS, SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL, PUSHBUTTON AND SIGN, 15 FT. STREET LIGHT ARM WITH A 250 WATT HPSV LUMENARE (NOTE: INSTALL 2-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS).
- INSTALL 10 FT. PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND SIGN (NOTE: INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BEND).
- USE EXISTING BASE MOUNTED CABINET AND CONTROLLER (NOTE: INSTALL 2-4 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS).
- INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - SLOTTED
- INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
- INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
- INSTALL HANDHOLE
- VIDEO DETECTION ZONE
- EXISTING ELECTRIC SERVICE
- PROPOSED ELECTRIC SERVICE
- REMOVE EXISTING STRAIN POLE AND ALL ASSOCIATED EQUIPMENT
- REMOVE EXISTING PEDESTAL POLE AND ALL ASSOCIATED EQUIPMENT
- USE EXISTING HANDHOLE
- USE EXISTING CONDUIT
- REMOVE EXISTING HANDHOLE
- CAP AND ABANDON EXISTING CONDUIT
- REPLACE HANDHOLE (FRAME AND COVER)
- INSTALL 12" WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING.
- INSTALL 24" WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING.
- INSTALL 27 FT. MAST ARM POLE WITH A 50 FT. MAST ARM, VIDEO DETECTION CAMERA, SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL, PUSHBUTTON, SIGN, 15 FT. STREET LIGHTING ARM AND RELOCATED MONTGOMERY COUNTY CAMERA AND CABINET. (NOTE: INSTALL 2-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS).
- INSTALL 3 IN. CONDUIT RISER ON WOOD POLE AND RELOCATE EXISTING INTERCONNECT CABLE THROUGH NEW CONDUIT
- INSTALL METERED SERVICE PEDESTAL

GENERAL NOTES

- THE LOCATION OF PROPOSED GEOMETRICS MUST BE CONFIRMED PRIOR TO THE INSTALLATION OF SIGNAL EQUIPMENT.
- CONDUIT SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 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 818.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- CONTACT MR. KAMAL HAMUD AT (240) 777-8761 FOR CAMERA RELOCATION.
- FOR THE LOCATION OF SIGNAL EQUIPMENT AND PROPOSED PAVEMENT MARKINGS SEE G1 SHEET.
- 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%.
- CONTACT MIKE KINNEY FROM MONTGOMERY COUNTY DPW&T AT 240-777-8760 TWO WEEKS PRIOR TO ALL CONSTRUCTION FOR REMOVAL OF RED LIGHT CAMERA EQUIPMENT. ONCE ROADWAY CONSTRUCTION IS COMPLETE, RED LIGHT CAMERA EQUIPMENT WILL BE REINSTALLED BY COUNTY CONTRACTOR. NOTE THAT NO NEW PAVEMENT SHALL BE DISTURBED WITH REINSTALLATION.
- THE RELOCATION OF SIGNAL HEADS MAY BE REQUIRED DURING THE MAINTENANCE OF TRAFFIC. ADEQUATE ELECTRIC CABLE SHALL BE PROVIDED TO FACILITATE THESE RELOCATIONS.
- CONTACT BOB RICKETS 72 HRS. PRIOR TO INTERCONNECT WORK FOR INTERCONNECT INSTALLATION.
- THE 10" SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- 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.

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

TRAFFIC SIGNAL PLAN
 MD 650 AND ADELPHI ROAD /
 DILSTON ROAD

SCALE	1"=20'	DATE	5-10-09	CONTRACT NO.	M-771X-375
DESIGNED BY	R. GORDON	COUNTY	MONTGOMERY		
DRAWN BY	J. SPENCE	LOGMILE	15065000.33		
CHECKED BY		T.I.M.S. NO.	H413		
F.A.P. NO.	NA	TOD NO.			
DRAWING NO.	TS 19 D	SHEET NO.		OF	

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	S
WATER	W
CABLE TV	TV

TRAFFIC CONCEPTS, INC.
 325 Gambrills Road
 Suite E
 Gambrills, MD 21054
 (410) 923-7101
 FAX (410) 923-6473
 EMAIL TRAFFIC.CONCEPTS@COMCAST.NET

APPROVALS	REVISIONS
TEAM LEADER	
ASST. DIV. CHIEF	
DIVISION	
OFFICE DIRECTOR	

DRILL HOLES

DRILL HOLES