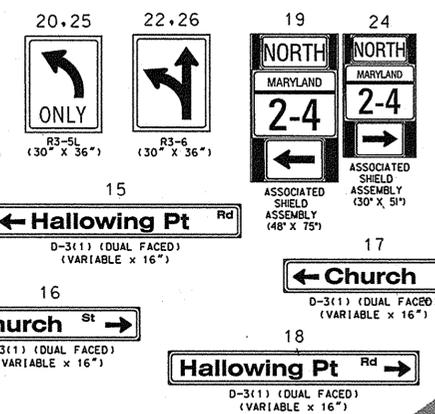
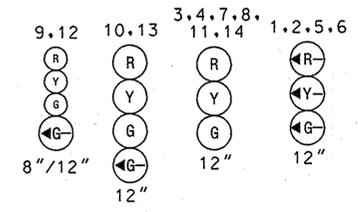


**SIGNS**

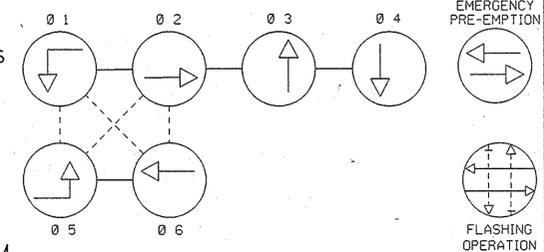


- SPECIAL NOTES:**
1. THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF MAST ARM. IF NEW MAST ARM CANNOT BE INSTALLED DUE TO CONFLICT WITH EXISTING SIGNAL INDICATIONS OR SPAN WIRES, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
  2. THE CONTRACTOR SHALL INSTALL SUFFICIENT LENGTHS OF ELECTRICAL CABLE TO SIGNAL HEADS TO ACCOMMODATE THE RELOCATION OF SIGNAL HEADS DURING CONSTRUCTION.
  3. EXISTING TRAFFIC SIGNAL SHALL NOT BE REMOVED AND SHALL REMAIN OPERATIONAL UNTIL PROPOSED TRAFFIC SIGNAL IS OPERATIONAL.
  4. CONTRACTOR SHALL INSTALL CONDUIT AT SUFFICIENT DEPTH TO AVOID DISTURBANCE DURING ROADWAY CONSTRUCTION. CONDUIT SHALL BE INSTALLED PRIOR TO BEGINNING ROADWAY CONSTRUCTION.

**SIGNAL HEADS**

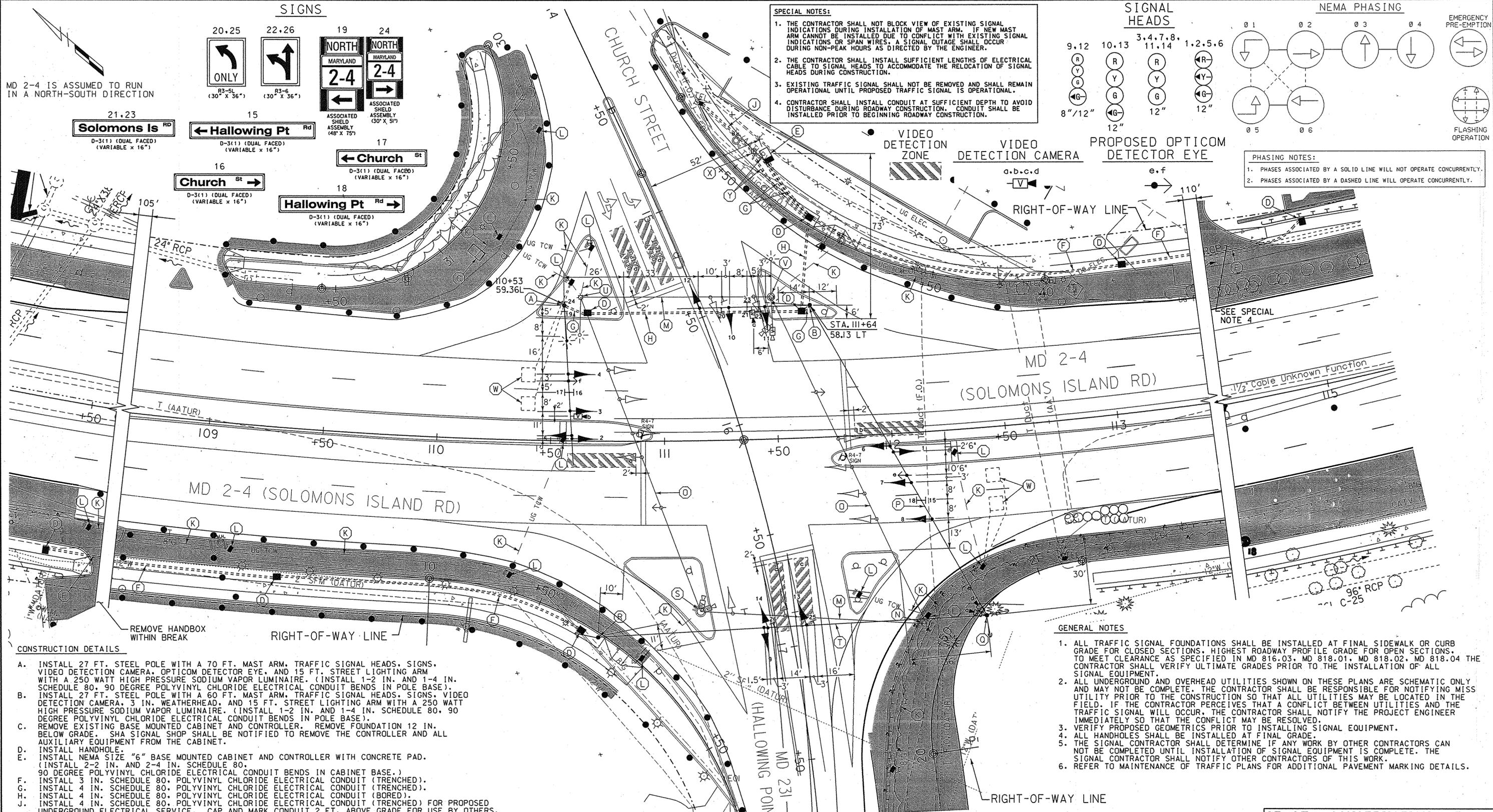


**NEMA PHASING**



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

MD 2-4 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION



**CONSTRUCTION DETAILS**

- INSTALL 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, OPTICOM DETECTOR EYE, AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL 27 FT. STEEL POLE WITH A 60 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, 3 IN. WEATHERHEAD, AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
- REMOVE EXISTING BASE MOUNTED CABINET AND CONTROLLER. REMOVE FOUNDATION 12 IN. BELOW GRADE. SHA SIGNAL SHOP SHALL BE NOTIFIED TO REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CABINET.
- INSTALL HANDHOLE.
- INSTALL NEMA SIZE "6" BASE MOUNTED CABINET AND CONTROLLER WITH CONCRETE PAD. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN CABINET BASE.)
- INSTALL 3 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (BORED).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE FOR USE BY OTHERS.
- CAP AND ABANDON EXISTING CONDUIT.
- REMOVE EXISTING HANDHOLE.
- REMOVE EXISTING SPAN WIRE, SIGNAL HEADS AND SIGNS.
- REMOVE EXISTING STEEL STRAIN POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE.
- REMOVE EXISTING SPAN WIRE, AND SIGNAL HEADS AND OPTICOM DETECTOR EYE.
- INSTALL 3/8 IN. STEEL SPAN WIRE, SIGNAL HEADS, OPTICOM DETECTOR EYE AND SIGNS.
- INSTALL 40 FT. CLASS II WOOD POLE WITH BACK GUYS AND VIDEO DETECTION CAMERAS.
- INSTALL 40 FT. CLASS II WOOD POLE WITH BACK GUYS.
- REMOVE EXISTING STEEL STRAIN POLE AND VIDEO DETECTION CAMERAS. REMOVE FOUNDATION 12 IN. BELOW GRADE.
- INSTALL 3/8 IN. STEEL SPAN WIRE, SIGNAL HEADS AND SIGNS.
- REMOVE EXISTING STEEL STRAIN POLE AND LIGHTING BRACKET. REMOVE FOUNDATION 12 IN. BELOW GRADE.
- REMOVE EXISTING STEEL STRAIN POLE AND LIGHTING BRACKET WITH VIDEO DETECTION CAMERAS. REMOVE FOUNDATION 12 IN. BELOW GRADE.
- ABANDON EXISTING LOOP DETECTOR.
- INSTALL METEDED SERVICE PEDESTAL. (INSTALL 2-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE.)
- INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).

**LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES**

AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	SS
STORM DRAIN	SD
WATER	W
CABLE TV	TV

**GENERAL NOTES**

1. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCE 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. 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.
3. VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
4. ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
5. 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.
6. REFER TO MAINTENANCE OF TRAFFIC PLANS FOR ADDITIONAL PAVEMENT MARKING DETAILS.

**STAGE 1 CONSTRUCTION - TSP-1**

**WR&A**  
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(410) 235-3450

REVISIONS	APPROVALS
RECYT SB LT LOOP DETECTOR 04/92	TEAM LEADER - TRAFFIC ENGINEERING DESIGN DIVISION
CHANGE MD 2 / 4 E/P LTS TO EXCLUSIVE LTS 07/19/96	ASST. TRAFFIC ENGINEERING DESIGN DIVISION
INSTALL VIDEO DETECTION SHA NO. AT3085185 03/ /04	CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
RECONSTRUCT TRAFFIC SIGNAL CONTRACT NO. CA338170	DIRECTOR, TRAFFIC & SAFETY

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
TRAFFIC SIGNALIZATION PLAN  
MD 2-4 AND MD 231 (HALLOWING POINT RD)  
(PRINCE FREDERICK, MD)

DRAWN BY: CHG	F.A.P. NO.	TS NO.
CHECKED BY:	S.H.A. NO.	TS-1256-F
SCALE: 1" = 20'	COUNTY: CALVERT	T.I.M.S. NO.
DATE: 4/88	LOG MILE: 04000219.88	SHEET NO. OF