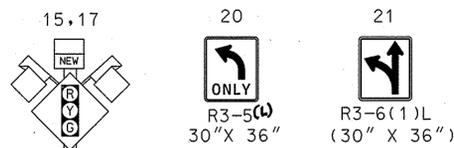
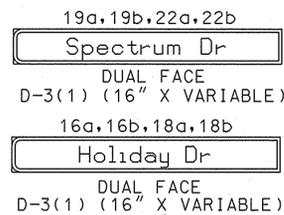


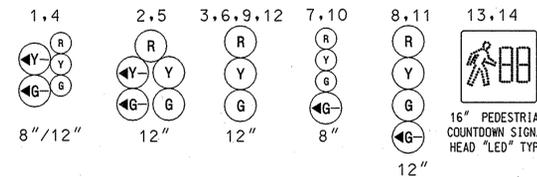
**PROPOSED SIGNS**



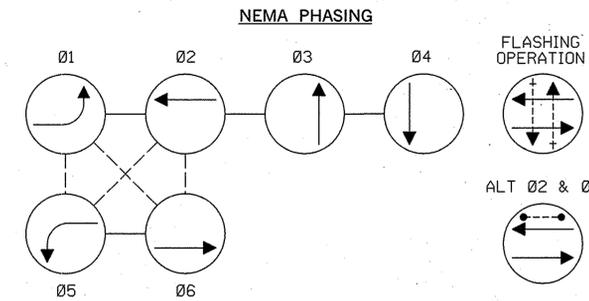
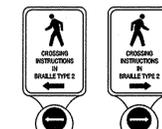
**PROPOSED PEDESTRIAN SIGNS**



**PROPOSED SIGNALS (BLACKFACED)**



**PROPOSED AUDIBLE SIGNS**



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

SPECTRUM DRIVE IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION AT HOLIDAY DRIVE

SEE INTERCONNECT PLANS FOR CONDUIT AND HANDBOXES

SEE INTERCONNECT PLANS FOR CONDUIT AND HANDBOXES

**CONSTRUCTION DETAILS**

- A. INSTALL 27' STEEL POLE WITH TWIN 50' & 50' MAST ARMS, TRAFFIC SIGNAL HEADS, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON STATION (SIGN TO READ "PUSHBUTTON TO CROSS HOLIDAY DR."), SIGNS, 15 FT. LIGHTING ARM, AND 250 WATT HPS LAMP AND LUMINAIRE AS SHOWN (NOTE: 1-3 IN. PVC SCHEDULE 80 CONDUIT BEND). USE 5 CY OF CONCRETE FOR FOUNDATION.
- B. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD AND AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON STATION (SIGN TO READ "PUSHBUTTON TO CROSS HOLIDAY DR.") (NOTE: 1-3 IN. PVC SCHEDULE 80 CONDUIT BEND).
- C. INSTALL 1" LIQUID-TIGHT, FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT FOR A DETECTOR WIRE SLEEVE
- D. INSTALL 4" PVC SCHEDULE 80 CONDUIT - SLOTTED
- E. INSTALL 4" PVC SCHEDULE 80 CONDUIT - TRENCHED.
- F. INSTALL 12" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALK.
- G. INSTALL GROUND MOUNTED SIGN.
- H. INSTALL A BASE MOUNTED CABINET WITH ALL THE NECESSARY EQUIPMENT FOR AN UNDERGROUND POWER FEED AND A PHONE DROP UNDERGROUND (NOTE: 2-4", 1-3" AND 1-2" PVC SCHEDULE 80 CONDUIT BENDS)
- I. INSTALL 24" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOPLINE.
- J. INSTALL 6' x 30' LOOP DETECTOR WIRE ENCASED IN FLEXIBLE TUBING QUADRUPOLE TYPE 3-6-3 TURNS WINDING.
- K. INSTALL 3" PVC SCHEDULE 80 ELECTRICAL CONDUIT FOR PROPOSED UNDERGROUND SERVICE BY ALLEGHENY POWER COMPANY AND INSTALL 2" PVC SCHEDULE 80 ELECTRICAL CONDUIT FOR PROPOSED TELEPHONE DROP.
- L. INSTALL HANDBOX.
- M. INSTALL 2" PVC SCHEDULE 80 CONDUIT - TRENCHED.
- N. INSTALL NON-INVASIVE PROBE.
- O. INSTALL 27' STEEL POLE WITH TWIN 50' & 60' MAST ARMS, SIGNAL HEADS, SIGNS, 10' LIGHTING ARM W/ PEDESTRIAN HEAD, 250 WATT HPS LAMP AND LUMINAIRE AS SHOWN. (NOTE: 1-3" PVC SCHEDULE 80 CONDUIT BEND; USE 5 CY OF CONCRETE FOR FOUNDATION).
- P. INSTALL 3" PVC SCHEDULE 80 CONDUIT - SLOTTED
- Q. INSTALL 3" PVC SCHEDULE 80 CONDUIT - TRENCHED.
- R. INSTALL ELECTRICAL METERED SERVICE PEDESTAL EQUIPMENT - UNDERGROUND.
- S. INSTALL 6' x 6' LOOP DETECTOR WIRE ENCASED IN FLEXIBLE TUBING QUADRUPOLE TYPE 4 TURNS WINDING.

**GENERAL NOTES:**

1. PAVEMENT MARKINGS DETAILED ARE PROPOSED AND TO BE INSTALLED BY THE SIGNAL CONTRACTOR.
2. LOOP DETECTORS AND CONDUITS ARE TO BE INSTALLED PRIOR TO INSTALLATION OF THE FINAL ASPHALT SURFACE COURSE.
3. DETECTION SHALL BE ONE (1) FOOT BEHIND THE STOP LINE.
4. ALL PROPOSED TRAFFIC SIGNAL EQUIPMENT SHALL BE INSTALLED TO FINAL GRADE.
5. 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 CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT 410-787-7635 AT 72 HOURS PRIOR TO ANY CONSTRUCTION SO THAT THE CONFLICT MAY BE RESOLVED.
6. STOP SIGNS SHALL BE REMOVED WHEN THE SIGNAL IS TURNED ON.

**BAI** BRUDIS & ASSOCIATES, INC.  
CONSULTING ENGINEERS  
9220 RUMSEY ROAD, SUITE 110  
COLUMBIA, MARYLAND 21045  
(410)-884-3607

APPROVALS	
<i>Michael R. ...</i>	2-1-06 TEAM LEADER
<i>Michael R. ...</i>	2-1-06 ASST. DIV. CHIEF
<i>Wanda ...</i>	2/1/06 DIVISION CHIEF
<i>Michael R. ...</i>	3/1 OFFICE DIRECTOR

FREDERICK COUNTY DIVISION OF PUBLIC WORKS			
APPROVED:	PUBLIC WORKS DIRECTOR	DATE	
APPROVED:	DEVELOPMENT REVIEW CHIEF	DATE	
APPROVED:	STORMWATER MANAGEMENT	DATE	

APPROVAL IS VALID FOR TWO (2) [ONE YEAR IF THE COUNTY WATER AND SEWER IS INVOLVED] YEARS AFTER LAST DATE SHOWN ABOVE. THE PROJECT MUST BE UNDER CONSTRUCTION BEFORE SAID DATE TO BE CONSIDERED ACTIVE. OTHERWISE, RESUBMITTAL OF PLANS MUST BE MADE TO DEVELOPMENT REVIEW FOR REAPPROVAL. REVIEW FEES NECESSARY FOR REAPPROVAL SHALL ACCOMPANY RESUBMITTAL. FEES CANNOT BE WAIVED.

REV #	DATE	REVISION DESCRIPTION	CONSULTANT DATE AND INITIAL	DEV. REV. DATE AND INITIAL

FREDERICK COUNTY, MARYLAND  
DIVISION OF PUBLIC WORKS  
DEPARTMENT OF HIGHWAYS AND TRANSPORTATION  
OFFICE OF TRANSPORTATION ENGINEERING  
FREDERICK COUNTY, MARYLAND

**SPECTRUM DRIVE IMPROVEMENTS  
SPECTRUM AND HOLIDAY DRIVE  
TRAFFIC AND SIGNAL PLANS**

DATE: 1/23/06 SCALE: 1" = 2'

PROJECT NO: 14-9899-C28385 DWG. 50 OF 62