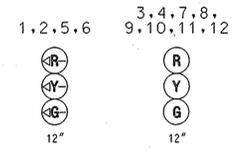
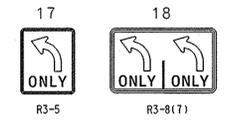


MD 146 is considered to run in a North/South direction.

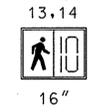
EXISTING SIGNALS



EXISTING SIGNS



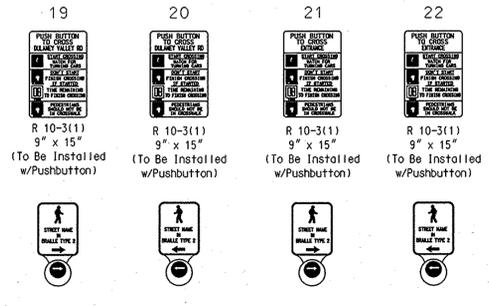
PROPOSED SIGNALS



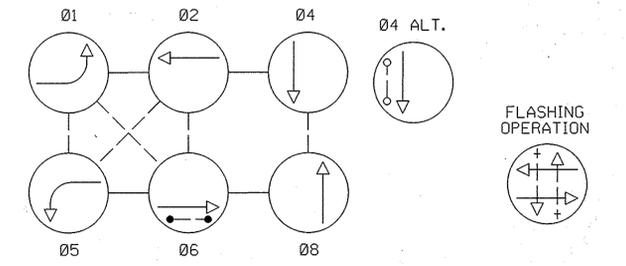
REMOVE AND REPLACE EXISTING SIGNALS



PROPOSED SIGNS

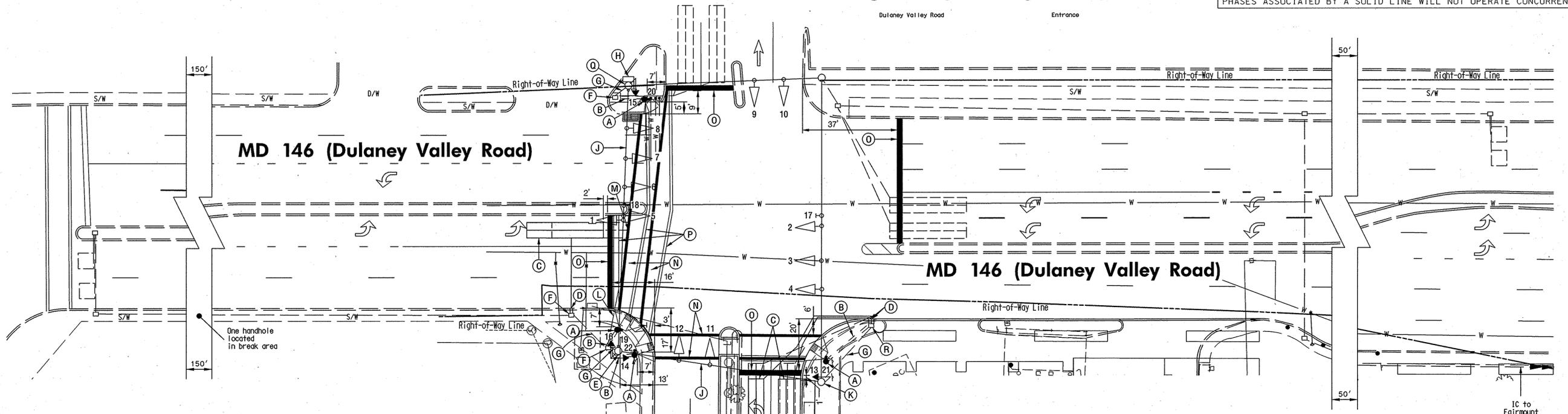


PROPOSED NEMA PHASING



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

Dulaney Plaza Shopping Center



MD 146 (Dulaney Valley Road)

MD 146 (Dulaney Valley Road)

CONSTRUCTION DETAILS

- A. Install 5 ft. steel pedestal pole on break away base with APS pedestrian pushbutton, and pedestrian education sign (Note: one 2 in. PVC conduit bend).
- B. Install 2 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
- C. Install 6 ft. x 30 ft. quadrupole type vehicle loop detector (3-6-3 turns).
- D. Install 1 in. liquid tight flexible conduit for loop detector lead-in.
- E. Remove existing pedestrian signal head, pushbutton and pushbutton sign, install countdown signal heads as shown.
- F. Use existing handhole.
- G. Use existing conduit.
- H. Use existing cabinet/controller, install APS central control unit.
- J. Use existing span wire.
- K. Use existing steel strain pole, install countdown signal head, APS pedestrian pushbutton, and pedestrian education sign as shown.
- L. Cap and abandon existing conduit.
- M. Abandon existing vehicle loop detection.
- N. Install 12 in. wide pavement marking - white for crosswalk.
- O. Install 24 in. wide pavement marking - white for stop line.
- P. Remove existing pavement marking by grinding.
- Q. Remove existing pedestrian signal head, pushbutton and pushbutton sign, install countdown signal head as shown.
- R. Use existing handhole, splice new loop wire to existing 2-conductor aluminum shielded cable.

NOTES

- 1. Loop detectors and conduit shall be installed prior to the installation of pavement markings.
- 2. The contractor shall verify all proposed pole locations prior to installation.
- 3. Pavement markings detailed are proposed and are to be installed by the Contractor in accordance with MD-SHA standards. All other pavement markings are to be considered as existing.
- 4. Geometrics shall be confirmed prior to the installation of signal equipment. 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 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.
- 5. All underground and overhead utilities shown on these plans are schematic and are not to be considered complete. The Contractor shall be responsible for notifying all utility companies 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 equipment will occur, the Contractor shall notify the appropriate Project Engineer immediately.
- 6. Location of Pedestrian Signal Pushbutton must meet location requirements of MUTCD Sec. 4E.09 & Fig. 4E-2 and the NCHRP publication, "Accessible Pedestrian Signals: Guide to Best Practices".
- 7. Pushbuttons are to be located so that they can be activated by a person in a wheelchair from a 60 in. x 60 in. level landing area. A level landing area is an area with a cross slope of less than or equal to 2%.
- 8. Pushbuttons are to be located so that a pedestrian in a wheelchair located on the level landing area, does not have to reach more than 18".
- 9. If the location of the pedestrian signal pushbutton must be changed, the Contractor shall notify the project engineer to obtain approval for the new location to ensure MUTCD sec. 4E.09 & Fig 4E-2 and the NCHRP publication, "Accessible Pedestrian Signals: Guide to Best Practices". If not met, the contractor is to stop work on pushbutton location until a design waiver is obtained, and approved by the director, Office of Traffic and Safety.
- 10. The 10 ft. separation between pushbuttons is to be measured from face of pushbutton to face of pushbutton, not center to center of poles.
- 11. The Contractor shall be responsible for delivering APS equipment for programing to MD-SHA Signal Shop.
- 12. All unused cable shall be removed.

Towsontown Center North Entrance

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 146 (Dulaney Valley Road) @ Dulaney Plaza
and Towsontown Center North Entrance

The Traffic Group, Inc.
Suite H
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Baltimore, Maryland 21236
410-931-6600
1-800-583-8411
Fax 410-931-6601

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

These plans are approved for construction for a period 1 year from the date of approval. Should construction not begin within this time frame these plans shall be null and void without a review from the Traffic Engineering Design Division.

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

TRAFFIC SIGNAL PLAN			
SCALE 1" = 20'	DATE Feb. 23, 1972	CONTRACT NO.	
DESIGNED BY Balto. Co.	COUNTY Baltimore		
DRAWN BY Balto. Co.	LOGMILE 03014600.25		
CHECKED BY	TIMS NO. 1533		
FAP NO. N/A	TOD NO.		
TS NO. 4574A	DRAWING - OF	SHEET NO. 3 OF 4	

PLOTTED: Friday, June 08, 2007 AT 05:04 PM
FILE: C:\temp\psp-p002_md146-ent.dgn