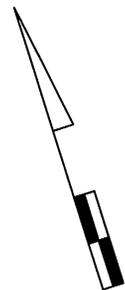


DRILL HOLES

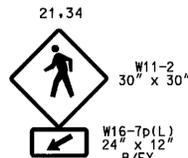
DRILL HOLES

DRILL HOLES

BORDER REV. DATE: June 11, 2004



NOTE: MD 28 IS CONSIDERED TO RUN IN AN EAST-WEST DIRECTION.



CONSTRUCTION DETAILS

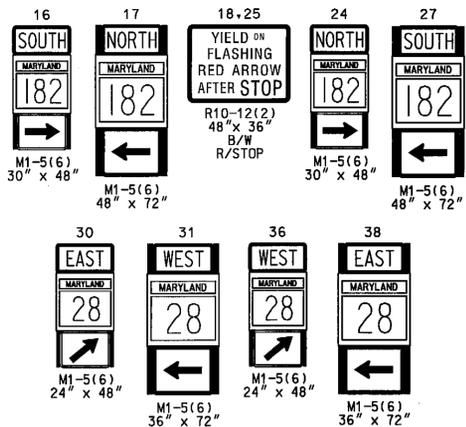
- A. Remove existing signal head and replace with LED signal head in same location.
- B. Install LED signal head as shown.
- C. Install 10' pedestal pole (with breakaway coupling system, modified foundation STD No. 801.01-01), Countdown pedestrian signal head, and audible pushbutton with pedestrian education sign as shown. (Note: 1-2", 90° polyvinyl chloride (Schedule 80) bend.
- D. Install 2" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- E. Remove existing pavement marking and install 24" white, heat applied permanent preformed thermoplastic pavement marking (stopline) in same location.
- F. Install overhead sign as shown (R10-12(2)).
- G. Remove existing pavement marking and install 12" white, heat applied permanent preformed thermoplastic pavement marking (crosswalk) in same location.
- H. Use existing handhole.
- J. Use existing conduit.
- K. Use existing base mounted cabinet and controller. (Note: Montgomery County Forces shall install 2-wire Control Unit into the cabinet).
- L. Install Guide Shield Assembly signs on signal pole as shown.
- M. Remove existing pedestrian signal head, pushbutton and pedestrian education sign. Plug pushbutton hole. Install Guide Shield Assembly signs on signal pole as shown.
- N. Remove existing overhead sign (R10-12).
- O. Existing overhead electrical service to be maintained by PEPCO.
- P. Remove existing signal head as shown.

GEOMETRIC LEGEND	
PROPOSED	---
EXISTING	---

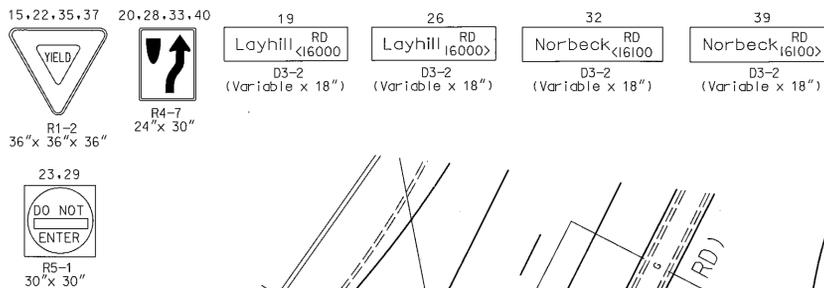
  

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES	
AERIAL CABLE	---
ELECTRIC	---
TELEPHONE	---
GAS	---
SEWER	---
WATER	---
CABLE TV	---

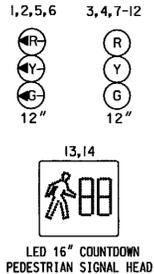
PROPOSED SIGNS



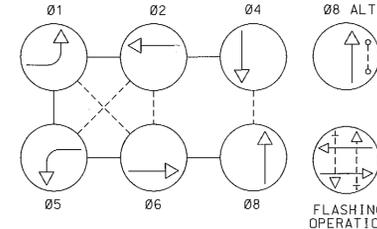
EXISTING SIGNS



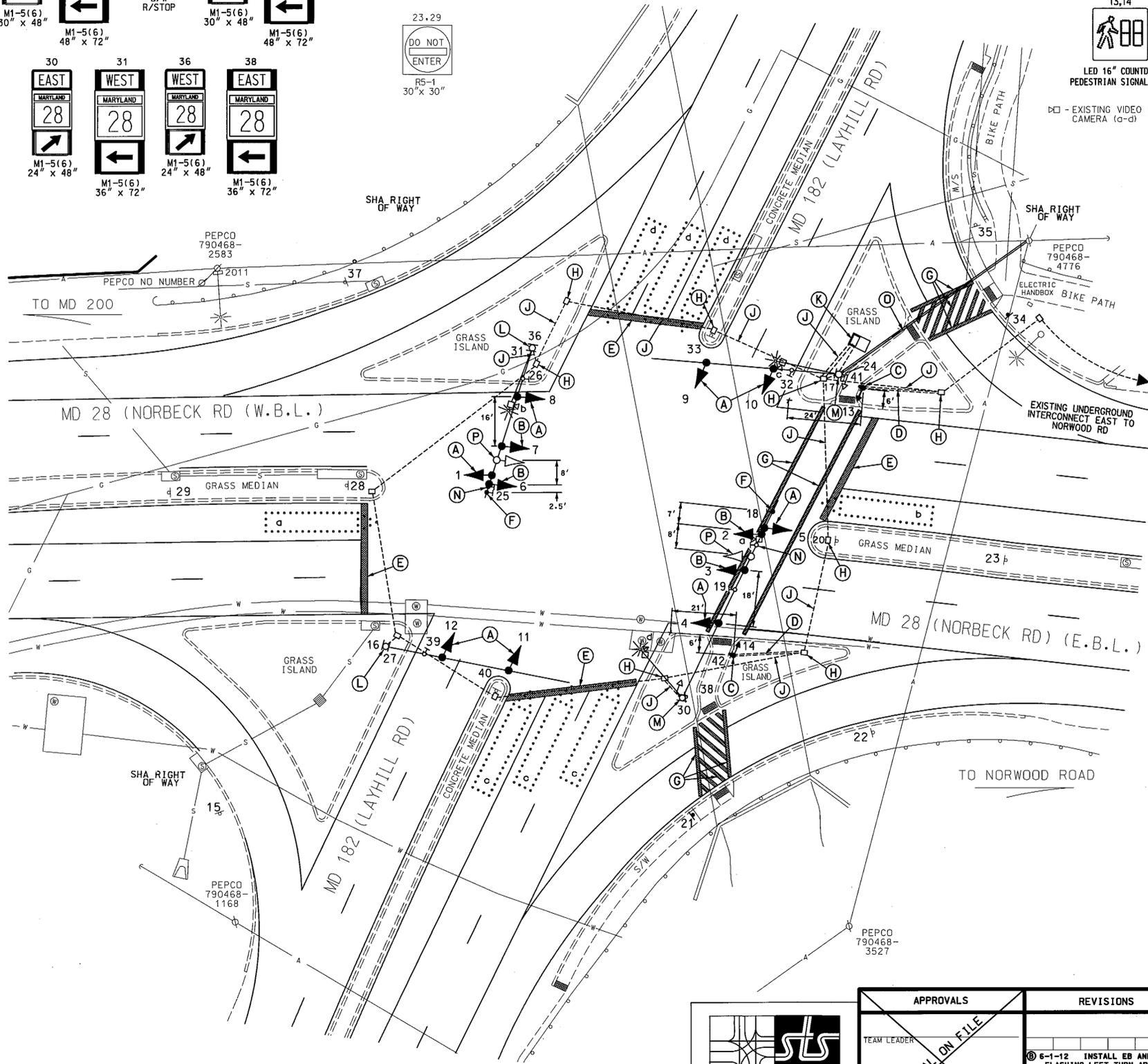
PROPOSED LED SIGNALS



NEMA PHASING



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



- GENERAL NOTES:**
1. All underground 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 immediately so that the conflict may be resolved.
  2. 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, and MD 818.04. The contractor shall verify ultimate grades prior to the installation of all signal equipment.
  3. All pavement markings detailed are proposed and are to be installed in accordance with SHA standards. All crosswalks shall be centered on handicap ramps or median cut throughs.
  4. Pushbuttons are to be located so that they can be activated by a person in a wheelchair from a 60"x 60" level landing area. A level landing area is an area with a cross slope of less than or equal to 2%.
  5. If the location of Accessible Pedestrian Signal Pushbuttons must be changed the contractor shall notify the Project Engineer to get approval for new location to ensure proper requirements of the MUTCD are still met. All work must be halted until the Project Engineer has obtained an approved location or if necessary a design waiver is obtained.
  6. Pushbutton is to be located so that a pedestrian in a wheelchair located on the level landing area, does not have to reach more than 18".
  7. Pushbutton arrows are to be parallel to the crossing for which they are intended.
  8. The contractor shall remove all unused wiring.

TOD NO: XX439-19  
SHA NO: MO242B5A  
MD 28 @ MD 182

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION

**MD 28 (NORBECK ROAD)  
AND MD 182 (LAYHILL RD.)**  
COLESVILLE, MARYLAND

**ST**  
STREET TRAFFIC STUDIES, LTD.  
400 Crain Hwy., N.W.  
Glen Burnie, MD 21061  
Ph (410) 590-5500  
Fax (410) 590-6637  
6073-dgn T-105

APPROVALS
TEAM LEADER
ASST. DIV.
DIVISION CHIEF
OFFICE DIRECTOR

REVISIONS
6-1-12 INSTALL EB AND WB FLASHING LEFT TURN ARROWS SHA NO: XX439-19B TMS NO: L239 RRZ [Signature]
8-9-1000 Reconstruct signal due to new geometry RRZ [Signature]

TRAFFIC SIGNAL PLAN		
SCALE 1"=20'	DATE 4-13-90	CONTRACT NO.
DESIGNED BY R.R.ZACHERL	COUNTY MONTGOMERY	
DRAWN BY D.A.NIES	LOGMILE 15002829.88	
CHECKED BY	TMS NO.	
F.A.P. NO.	TOD NO.	
TS NO. 2642B	DRAWING NO. 1 OF 2	SHEET NO. OF

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