

DRILL HOLES

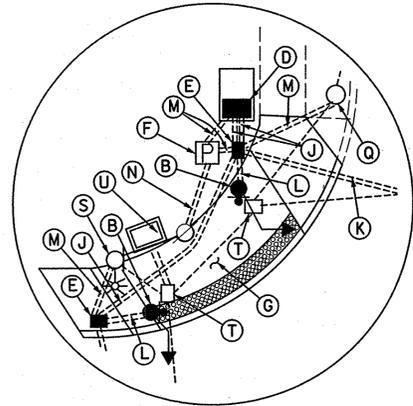
DRILL HOLES

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BORDER REV. DATE: JUNE 1, 2004

MD 410 IS CONSIDERED TO RUN IN AN EAST-WEST DIRECTION

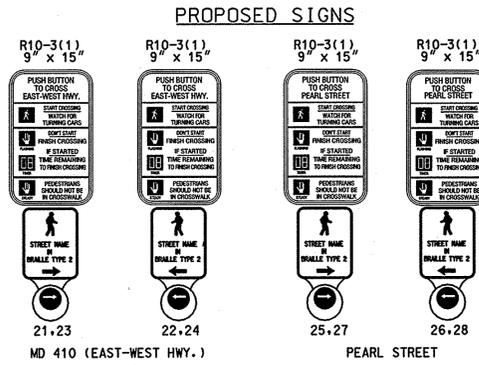
INSET "A" SCALE: 1" = 10'



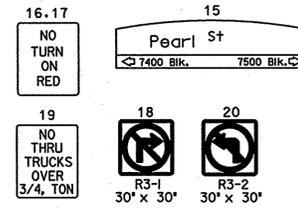
CONSTRUCTION DETAILS

- A. Install 16' steel pole with a special 15' "T" dimension with 70' diagonal mast arm, traffic signal heads, signs and video detection cameras as shown. (Note: 1-4" 90° polyvinyl chloride (Schedule 80) bend.) (Note: Contractor shall paint all signal structures Brown.)
- B. Install 10' breakaway pedestal pole with countdown pedestrian signal head and APS pushbutton with pedestrian education sign. (Note: 1-3" 90° polyvinyl chloride (Schedule 80) bend.) (Note: Contractor shall paint all signal structures Brown.)
- C. Remove existing signal head and pedestrian signal head and install Countdown Pedestrian signal head, APS Pushbutton with Pedestrian Education sign on existing pedestal pole as shown.
- D. Install NEMA size "6" base-mounted cabinet and controller with video interface, 2-wire Control unit and all necessary equipment as shown.
- E. Install handhole.
- F. Install metered pedestal.
- G. Install proposed parallel handicap ramp with 20' flat area (STD. No. MD 655.12) with detectable warning surface (STD. No. MD 655.40) as shown.
- H. Install detectable warning surfaces (STD. No. MD 655.40) at existing depression as shown.
- J. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- K. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (slotted).
- L. Install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- M. Install 2" polyvinyl chloride electrical conduit (Schedule 80) (trenched)
- N. Install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched) with 50' of 3-wire 1 conductor (No. 250 KCMIL) for proposed underground electrical power service by PEPCO to base of utility pole.
- O. Install 12" white heat applied preformed thermoplastic pavement marking. (Crosswalk) (Note: Contractor shall remove any existing marking.)
- P. Install 24" white heat applied preformed thermoplastic pavement marking. (Stopline). (Note: Contractor shall remove any existing marking.)
- Q. Remove existing signal heads and pedestrian signal head from existing lighting pole and rewire existing shoe box luminaire with new 2 conductor tray cable to proposed metered pedestal.
- R. Remove existing signal heads and pedestrian signal head from existing lighting poles and rewire existing shoe box luminaire with new 2 conductor tray cable to proposed metered pedestal. (Note: Contractor shall return existing video cameras to SHA Signal Shop.)
- S. Remove existing mast arm, meter, disconnect switch, traffic signal heads from existing mast arm along with mast arm and rewire existing shoe box luminaire with new 2 conductor tray cable to proposed metered pedestal. (Note: Contractor shall return existing video cameras to SHA Signal Shop.)
- T. Remove existing handhole and cap existing conduit.
- U. Remove existing base mounted cabinet and foundation. (Note: Montgomery County shall remove controller and auxiliary equipment).
- V. Remove existing steel pole, foundation 12' below grade and all attached equipment.
- W. Remove existing ground mounted sign and wood post.
- X. Use existing conduit and /or handhole.
- Y. Rewire existing shoe box light to metered Pedestal.
- Z. Install detectable warning surfaces (Std. No. MD 655.40) as shown.
- aa. Install proposed parallel handicap ramp with 16' flat area (STD. No. MD 655.12) with detectable warning surface (STD. No. MD 655.40) as shown.

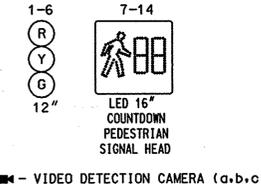
GEOMETRIC LEGEND	
PROPOSED	---
EXISTING	---
LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES	
AERIAL CABLE	—A—A—
ELECTRIC	—E—E—
TELEPHONE	—T—T—
GAS	—G—G—
SEWER	—S—S—
WATER	—W—W—
CABLE TV	—TV—TV—



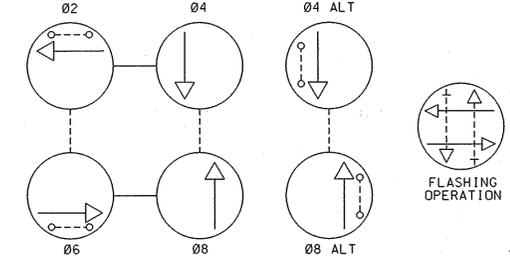
PROPOSED SIGNS



PROPOSED SIGNALS

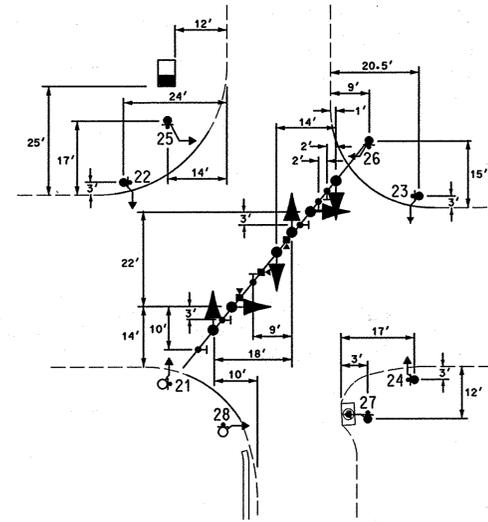


NEMA PHASING



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

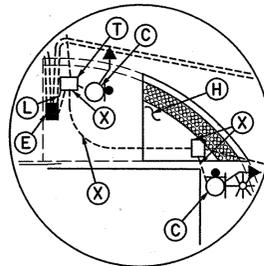
SIGNAL EQUIPMENT DIMENSIONS AND PEDESTRIAN SIGN NUMBERING



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. Poles are to be located so that they can be activated by a person in a wheelchair from a 60"x60" 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. The 10' separation between pushbuttons is to be measured from face of pushbutton to face of pushbutton.
8. The contractor shall remove all unused wiring.

INSET "B" SCALE: 1" = 10'



ADDENDUM 1: DATE: 10-16-07

REVISION "B"

 STREET TRAFFIC STUDIES, LTD.
 400 Crain Hwy, NW
 Glen Burnie, MD 21061
 Ph (410) 550-5500
 Fax (410) 550-6637

APPROVALS	REVISIONS
TEAM LEADER ASST. DIV. CHIEF DIVISION CHIEF	RECONSTRUCT EXISTING TRAFFIC SIGNAL WITH APS & CPS SHA NO. 1A71175185 JWA 6/2005 VIDEO LOOP DETECTION WITH VIDEO CAMERAS SHA NO. 1A71175185 TMS NO. 16592 JWA

TRAFFIC SIGNAL PLAN	
SCALE 1" = 20'	DATE _____ CONTRACT NO. _____
DESIGNED BY SHA	COUNTY MONTGOMERY
DRAWN BY SHA	LOGMILE 15W41000.17
CHECKED BY SHA	TMS NO. H162
F. A. P. NO. AC-STPG-000A-(241)E	TOD NO. _____
TS NO. 4415B	DRAWING NO. 1 OF 3 SHEET NO. 14 OF 42

SHA STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 MD 410 (EAST-WEST HWY)
 AND PEARL STREET
 BETHESDA, MD

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