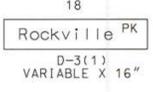
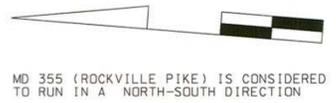


DRILL HOLES

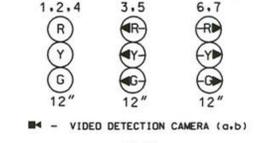
DRILL HOLES

DRILL HOLES

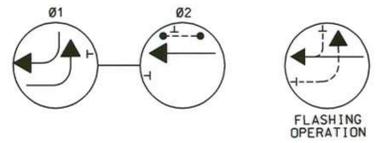
BORDER REV. DATE: June 1, 2004



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

CONSTRUCTION DETAILS

- A. Install 27' steel pole with a standard MD 818-10 with triple flanges and a 60' mast arm, LED traffic signal heads, fiber-optic blank-out signs, static signs and video detection cameras with a 15' lighting arm with 250 Watt HPSV luminaire as shown. (Notes: 1-3", 90° polyvinyl chloride (Schedule 80) bend. See sketch on this sheet.)
- B. Install 16.5' steel pole with a special 15' "T" dimension, 70' mast arm, LED traffic signal heads and signs as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend (The arm is 70' long because it will be reused when MD 355 is widened as part of a future BRAC project.)
- C. Install 14' breakaway pedestal pole with a LED traffic signal head, countdown pedestrian signal head with audible pedestrian pushbutton and pedestrian education sign as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.)
- D. Install 10' pedestal pole with breakaway couplings Standard No. MD 801.01-01, countdown pedestrian signal head with audible pedestrian pushbutton and pedestrian education sign as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.)
- E. Install NEMA size "6" base-mounted cabinet and controller with video interface and 2-wire control unit and all necessary equipment. (Note: 2-2", 90° polyvinyl chloride (Schedule 80) bends, and 2-4", 90° polyvinyl chloride (Schedule 80) bends.)
- F. Install handhole.
- G. Install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- H. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (bored).
- J. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- K. Install 4" polyvinyl chloride electrical conduit (Schedule 80) with 4" bend at PEPCO pole base. Coil 50' of 3 wire, 1-conductor cable (No. 250 KCMIL) at base. (trenched for electrical service.)
- L. Install 100 amp metered service pedestal.
- M. Install 2" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
- N. Cut existing interconnect cable at PEPCO Pole No. 722426-3323. Pull back I/C cable to PEPCO Pole No. 722426-2938 and route underground to handhole and into base mounted cabinet. I/C cable South to Wilson Lane is to be discarded and replaced in kind from the cabinet at Wilson Lane to the proposed cabinet at Northwood Road. Note: There are two cables lashed to the overhead I/C cable, the Canoga cable (for the loop in the SB L/T lane of North Wood Road) is to be discarded. The County fiber optic cable must be detached and temporarily supported until it can be re-lashed to the proposed I/C cable. The contractor must contact Mr. Kamal Hamud of Montgomery County at 240-777-8761 prior to performing work.

- O. Existing overhead I/C to remain.
- P. Disconnect existing loop wire, remove handhole and 2-conductor cable and cap and abandon existing conduit.
- Q. Cap and abandon existing conduit.
- R. Remove existing 2-conductor cable and riser on PEPCO Pole.
- S. Existing overhead interconnect cable to be rerouted into cabinet (See Construction Detail "N").
- T. Proposed overhead interconnect cable.
- U. Install 12" white heat applied permanent preformed thermoplastic pavement marking (crosswalk).
- V. Install 24" white heat applied permanent preformed thermoplastic pavement marking (stopline).
- W. Remove existing overhead interconnect cable and replace in kind.
- X. Use existing traffic signal equipment, remove existing interconnect cable and 2-conductor from the north and replace the interconnect cable in kind.
- Y. Remove existing pavement marking as shown.
- Z. Use existing Reversible Lane System handhole.
- aa. Install new W3-3 sign on 2-4"x6" wood posts 420' from the proposed stopline on Northbound MD 355.
- bb. Install new W3-3 sign on 2-4"x6" wood posts 360' from the proposed stopline in the left turn lane on Southbound MD 355.
- cc. Install proposed R4-7 sign on a 4"x4" wood post in median.
- dd. Remove existing R4-7 sign in median.
- ee. Proposed median nose to be installed by NAVFAC site contractor.
- ff. Install 3" riser and weatherhead on PEPCO pole #722426-2938 for interconnect cable with a 3" bend at the base of the pole.
- gg. Install 40' of Quick curb with flex post spaced every 4'.
- hh. Install Type III Lane line extension markings (3'stripe, 3'space) as shown.
- jj. Install 5" yellow (edgeline) thermoplastic pavement marking from the stopline to the south end of the median widening and tie into the existing edgeline.

- GENERAL NOTES:**
- 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.
  - 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.
  - All pavement markings detailed are proposed and are to be installed in accordance with SHA standards. All crosswalks shall be centered on handicap ramps.
  - Pushbuttons 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%.
  - 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.
  - 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".
  - Pushbutton arrows are to be parallel to the crossing for which they are intended.
  - All proposed geometrics shall be installed by NAVFAC's site contractor.
  - Location of accessible pedestrian signal pushbuttons must meet location requirements of MUTCD Sec. 4E.09 and 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 locations until the conflict has been resolved. If needed, a design waiver shall be obtained, approved by the Director, Office of Traffic and Safety.

Redline Revision  
 Dated April 28, 2011  
**SHA** MDOT - SHA  
 O.O.T.S.  
 S.H.A. Approval Date  
 T.S. # 4755 T.I.M.S. # K837



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

**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 MD 355 (ROCKVILLE PIKE)  
 AND NORTH WOOD ROAD  
 BETHESDA, MD

TRAFFIC SIGNAL PLAN

SCALE 1"= 20' DATE 3-15-11 CONTRACT NO. BW996M82

DESIGNED BY R R ZACHERL	COUNTY MONTGOMERY
DRAWN BY W J NIES	LOGMILE 15035503.15
CHECKED BY	TMS NO. K837
F.A.P. NO.	TOD NO.

TS NO. 4755 DRAWING NO. 1 OF 2 SHEET NO. OF

PLOTTED: 04/27/2011  
 FILE: #FILES