

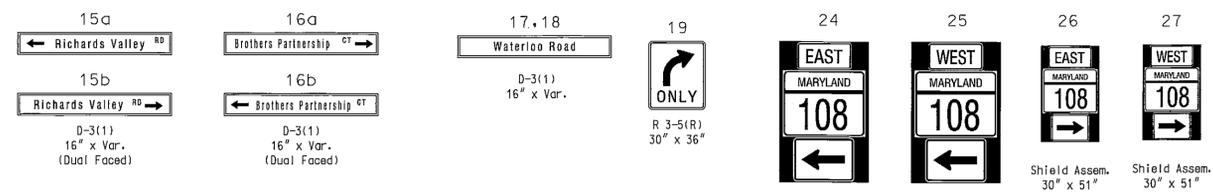
BORDER REV. DATE: June 1, 2004

DRILL HOLES

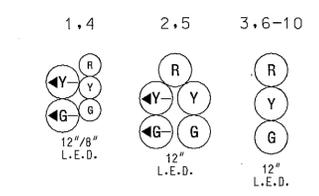
DRILL HOLES

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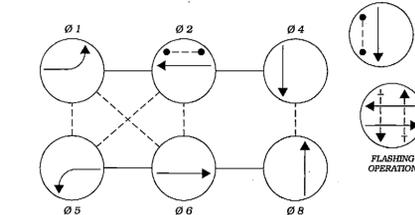
PROPOSED SIGNS



PROPOSED SIGNALS



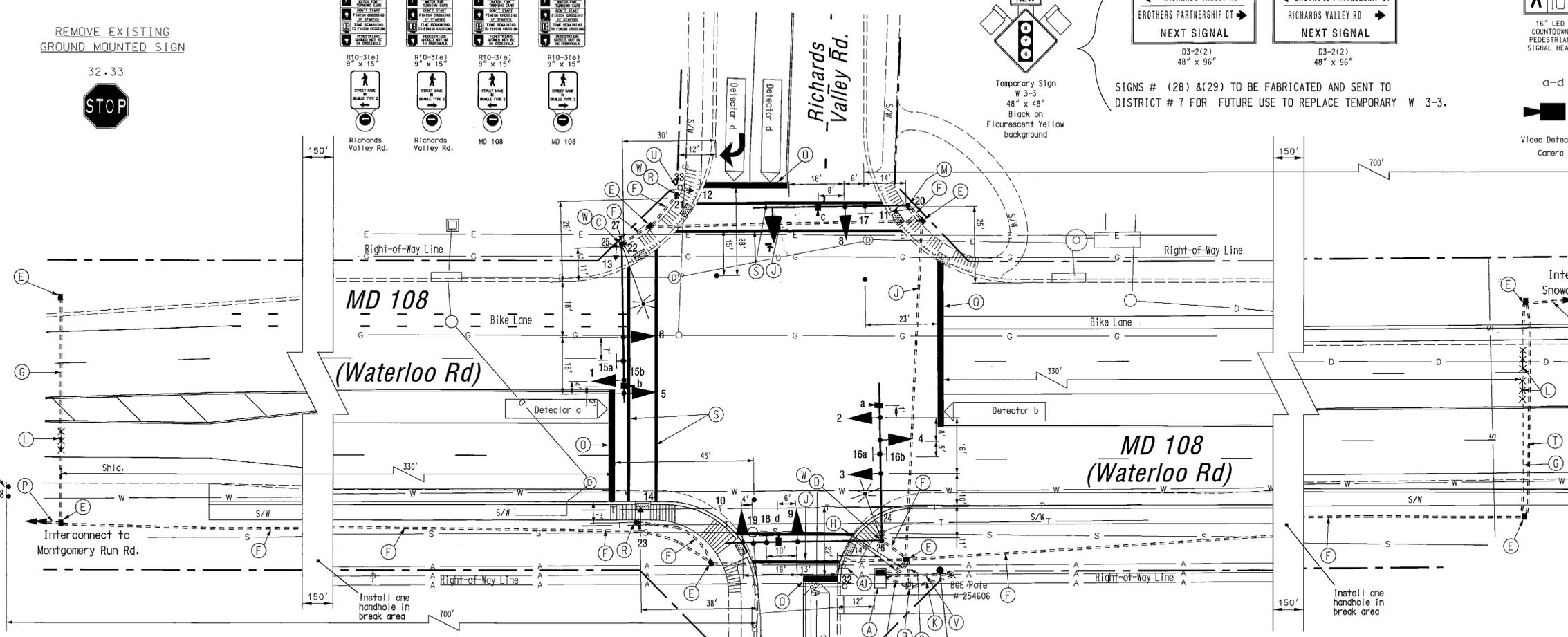
PROPOSED NEMA PHASING



NEMA notes: Phases associated by a dashed line will operate concurrently. Phases associated by a solid line will not operate concurrently.

REMOVE EXISTING GROUND MOUNTED SIGN

32.33



Signs # (28) & (29) to be fabricated and sent to District # 7 for future use to replace temporary W 3-3.



NOTES

- 1. Video camera location/aligning shall be coordinated with the SHA Engineer.
2. The contractor shall verify all proposed pole and cabinet locations prior to installation.
3. Pavement markings are proposed and are to be installed by others in accordance with MD-SHA standards...
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...
5. Pushbuttons are to be located so that they can be activated by a person in a wheelchair from a 60 in. x 60 in. leveling area...
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 Practice".
7. 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...
8. Pushbuttons are to be located so that a pedestrian in a wheelchair located on the leveling 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 Practice", if not met, the Contractor is to stop work on pushbutton location until a design waiver is obtained, 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 pole.
11. The Contractor shall be responsible for delivering APS equipment for programming to MD_SHA Signal Shop.
12. Unused cable shall be removed.

CONSTRUCTION DETAILS

- A. Install base mounted NEMA six controller/cabinet (Note: two-4 in. and two-2 in. PVC schedule 80 conduit bends).
B. Install metered service pedestal for underground electrical service per MD-SHA Typical 807.04-01.
C. Install 27 ft. steel mast arm pole with a 50 ft. mast arm, video detection camera, vehicle signal heads, sign, countdown pedestrian signal head, APS pedestrian pushbutton station, pedestrian education pushbutton sign, 20 ft. luminaire arm, and 250 watt HPS luminaire (Note: one 3 in. PVC conduit bend).
D. Install 27 ft. steel twin mast arm pole with two 50 ft. mast arms, video detection cameras, vehicle signal heads, signs, 15 ft. luminaire arm, and 250 watt HPS luminaire (Note: one 3 in. PVC conduit bend).
E. Install handhole.
F. Install 3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
G. Install 3 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
H. Install 4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
I. Install 4 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
J. Proposed 4 in. conduit with pull string for an underground electrical service by BGE.
L. Install non-invasive micro-loop probe (set of 3).
M. Install 27 ft. steel mast arm pole with a 50 ft. mast arm, video detection camera, vehicle signal heads, countdown, pedestrian signal head, APS pedestrian pushbutton, pedestrian education sign, and sign (Note: one 3 in PVC conduit bend).
N. Install ground mounted sign.
O. 24 in. wide pavement marking - white for stop line.
P. Installed as part of Interconnect Plan.
Q. Install 2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
R. Install 10 ft. steel pedestal pole on break away base with countdown pedestrian signal head, APS pedestrian pushbutton station, and pedestrian education pushbutton sign (Notes: one 2 in. PVC conduit bend).
S. 12 in. wide pavement marking - white for crosswalk.
T. Install 4 in polyvinyl chloride [Schedule 80] electrical conduit - bored for interconnect cable.
U. Remove existing ground mounted sign when signal is placed into operation.
V. Install 2 in polyvinyl chloride [Schedule 80] electrical conduit - trenched for phone drop.
W. Hand dig foundations until utilities are located.

Overhead Utilities table: Telephone - 21 ft., Telephone - 22.2 ft., CATV - 23 ft., Neutral - 34.5 ft., High Voltage - 40.5 ft.

The Traffic Group, Inc. logo and contact information: Suite II, 9900 Franklin Square Drive, Baltimore, Maryland 21236, 410-931-6600, 1-800-583-8411, Fax 410-931-6601

GEOMETRIC LEGEND table: Dashed line for EXISTING GEOMETRICS, Solid line for PROPOSED GEOMETRICS

UTILITY LEGEND table: G - GAS MAIN, W - WATER MAIN, S - SEWER MAIN, E - ELECTRIC CABLES, D - STORM DRAIN, A - AERIAL CABLES, T - TELEPHONE CABLES

NOTE: These plans are approved for construction for a period of one (1) year from the date of approval. Should construction not begin within this time frame these plans shall be null and void without a re-review from the Traffic Engineering design Division.

APPROVALS and REVISIONS table with signatures and dates.

SHA logo and project information: STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION MD 108 @ RICHARDS VALLEY ROAD/ BROTHERS PARTNERSHIP CT

TRAFFIC SIGNAL PLAN table: SCALE 1" = 20', DATE Dec 7, 2009, CONTRACT NO. BW996MB2, DESIGNED BY J. DIRNDORFER, COUNTY HOWARD, DRAWN BY J. DIRNDORFER/FJH, LOGMILE 13010813.70, CHECKED BY CSW, T.I.M.S. NO. I-633, F.A.P. NO. N/A, TOD NO., DRAWING NO. TS - 4681, SHEET NO. 1 OF 6

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