DRILL HOLES

BORDER REV: DATE: June 1, 2004

DRILL HOLES

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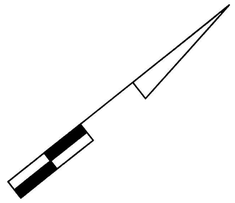


NOTE: MD 189 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

PROPOSED SIGNS

17 — R1-2(MOD) 30"x 40" — YIELD / TO BIKES/PEDS IN CROSSWALK

10,21 — W11-1(2) 30"x 30" / W16-7p 24" x 12"

11,14 — R1-2 18"x 18" — YIELD

12,15 — R9-5(MOD) (12"x18") — USE PED SIGNAL

13,18 — D3-2 (VARIABLE X 16") (DUAL FACED) — Montrose Rd

23 — D3-2 (VARIABLE X 16") — Falls Rd (2306)

16 — M4-5a (24"x12") / M1-1 (30"x24") / M6-1 (21"x15") — TO INTERSTATE 270

20 — ASSOCIATED SHIELD ASSEMBLY 30" x 51" — M3-1 24" x 12" / NORTH / MARYLAND 189 / M1-5 30" x 24" / M6-2 21" x 15"

22 — ASSOCIATED SHIELD ASSEMBLY 48" x 75" — M3-3 30" x 15" / SOUTH / MARYLAND 189 / M1-5 48" x 36" / M6-1 30" x 24"

26 — R10-3(1) 9" x 15" — PUSH BUTTON TO CROSS MONTROSE ROAD / START CROSSING WATCH FOR TURNING CARS / DON'T START FINISH CROSSING / IF STARTED TIME REMAINING TO FINISH CROSSING / PEDESTRIANS SHOULD NOT BE IN CROSSWALK / STREET NAME IN BRAILLE TYPE 2

27 — R10-3(1) 9" x 15" — PUSH BUTTON TO CROSS MONTROSE ROAD / START CROSSING WATCH FOR TURNING CARS / DON'T START FINISH CROSSING / IF STARTED TIME REMAINING TO FINISH CROSSING / PEDESTRIANS SHOULD NOT BE IN CROSSWALK / STREET NAME IN BRAILLE TYPE 2

MONTROSE ROAD

RELOCATED SIGNS

24 — TRAVELERS ADVISORY TUNE TO 590 AM

25 — YIELD

PROPOSED LED SIGNALS

1,2,5, 6,7 — R / Y / G — 12"

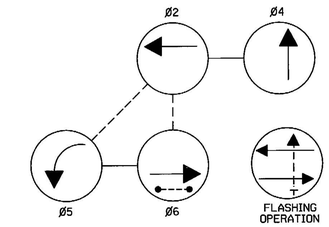
3,4 — R / Y / G — 12"

8,9 — LED 16" COUNTDOWN PEDESTRIAN SIGNAL HEAD

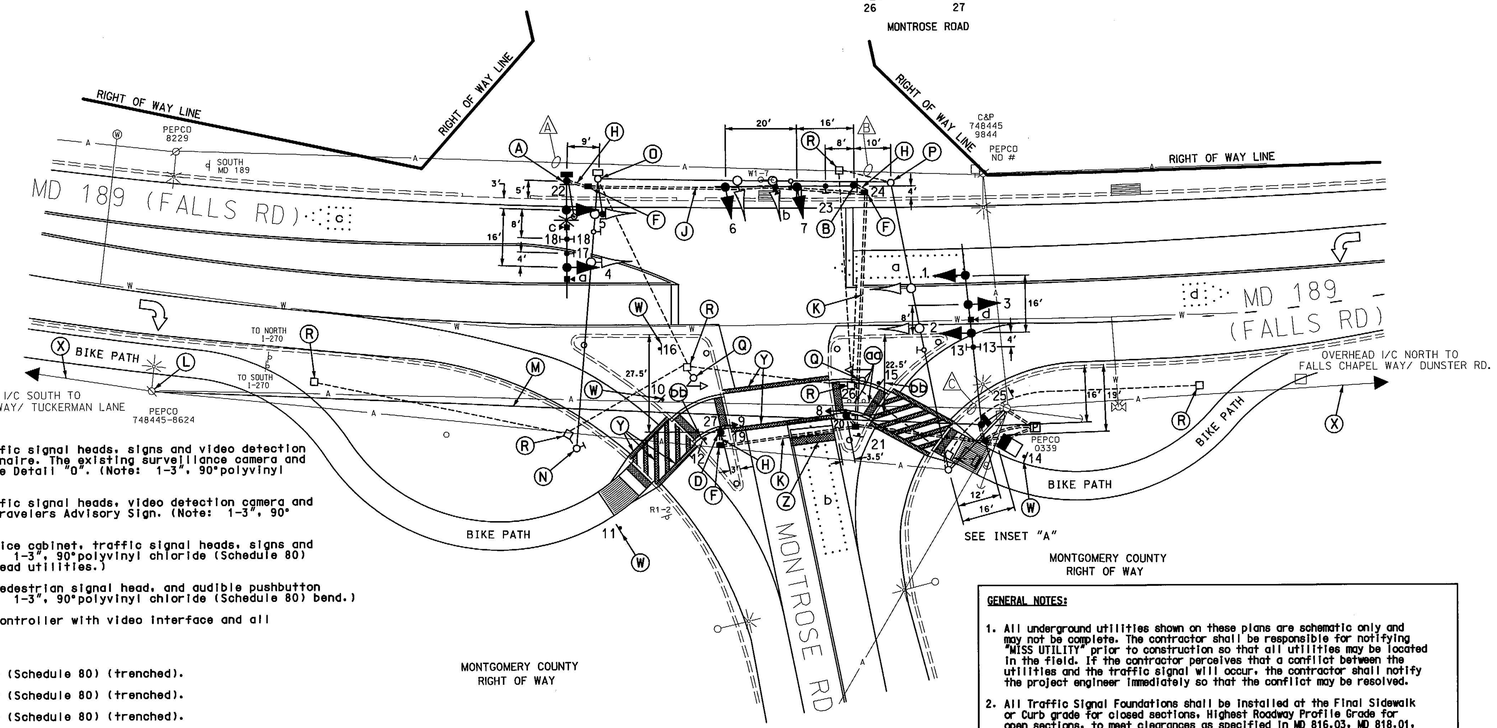
■ - VIDEO DETECTION CAMERA (a-d)

⊙ - SURVEILLANCE CAMERA

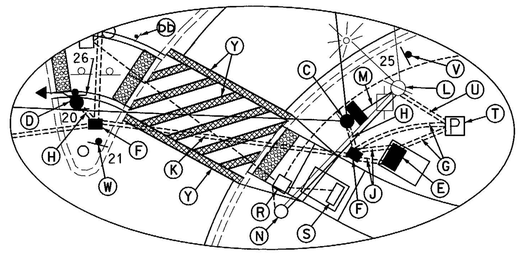
NEMA PHASING



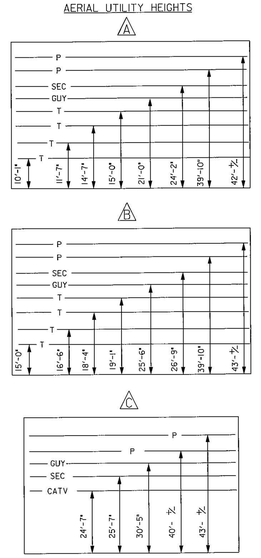
PHASING NOTES:
1.) PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY
2.) PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY



INSET "A"
SCALE: 1"= 10'



AERIAL UTILITY HEIGHTS



CONSTRUCTION DETAILS

A. Install 27' steel pole with a 32' mast arm, traffic signal heads, signs and video detection cameras and 10' lighting arm with a 250HPSV luminaire. The existing surveillance camera and cabinet are to be relocated by County forces. See Detail "a". (Note: 1-3", 90°polyvinyl chloride (Schedule 80) bend.)

B. Install 21' steel pole with a 38' mast arm, traffic signal heads, video detection camera and signs including the relocation of the existing Travelers Advisory Sign. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.)

C. Install 21' steel pole with a 50') mast arm, splice cabinet, traffic signal heads, signs and video detector camera and 3" weatherhead. (Note: 1-3", 90°polyvinyl chloride (Schedule 80) bend. (NOTE: Arm is to be angled away from overhead utilities.)

D. Install 10' breakaway pedestal pole, Countdown pedestrian signal head, and audible pushbutton with 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 all necessary equipment shown.

F. Install handhole.

G. Install 2" polyvinyl chloride electrical conduit (Schedule 80) (trenched).

H. Install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).

J. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (trenched).

K. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (bored).

L. Disconnect existing overhead interconnect cable from existing base mounted cabinet and pull back to this utility pole. Reroute interconnect cable to proposed mast arm pole "C" and into proposed splice cabinet.

M. Rerouted overhead interconnect cable.

N. Remove existing strain pole and all attached signal equipment. Cap and abandon existing conduit.

O. Remove existing strain pole and all attached signal equipment. Cap and abandon existing conduit. (Note: Contact Mr. Mike Kinney at (240) 777-8760 seventy-two hours in advance of intended work for relocation of traffic surveillance camera).

P. Remove existing strain pole and all attached signal equipment. Cap and abandon existing conduit. (Note: Existing pole mounted sign shall be relocated to proposed mast arm pole as shown).

Q. Remove existing pedestal pole and all attached equipment. Cap and abandon existng conduit.

R. Remove existing handhole. Cap and abandon existing conduit.

S. Remove existing base mounted cabinet and controller and foundation 12" below grade. (Note: Controller shall be delivered to the Montgomery County Signal shop).

T. Install meter pedestal for electrical service.

U. Install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched) with 35' of 3 wire 1 conductor (No. 250 KCMIL) and pull string for power service to base of utility pole for proposed underground electrical service by PEPCO.

V. Relocate "Yield" sign 15' to the north as shown (sign #16).

W. Install ground mounted sign as shown.

X. Existing overhead 12 pair interconnect cable.

Y. Install 12" white, heat applied permanent preformed thermoplastic pavement marking (crosswalk).

Z. Install 24" white, heat applied permanent preformed thermoplastic pavement marking (stopline).

aa. Remove ground mounted sign.

bb. Install ground mounted R9-5(mod) sign as shown.

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 reaching less than 18" from a 60"x 60" level landing area with a cross slope of less than or equal to 2%.
5. The 10' separation between pushbuttons is to be measured from face of pushbutton to face of pushbutton, not center to center of pole.
6. Pushbutton arrows are to be parallel to the crossing for which they are intended.
7. 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 Practice. If not met, the Contractor is to stop work on pushbutton locations until a design Waiver is obtained, approved by the Director, Office of Traffic and Safety.
8. The contractor shall remove all unused wiring.

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 —

REVISION "c" ASBUILT

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APPROVALS

TEAM LEADER — ORIGINAL ON FILE
ASST. DIV.
DIVISION CHIEF
OFFICE DIRECTOR

REVISIONS

c 1-30-09 — REBUILD SIGNAL DUE TO NEW BIKE PATH SHA NO.: BW9964B2 — RRZ
B 1-20-99 — ASBUILT SHA NO.: MO5715176 — RRZ
A 6-96 — REPLACE CONDUIT, LOOPS SHA NO.: MO5715176 — BLOSS

PLOTTED: @DATETIME@
FILE: @FILE@

SHA — STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 189 (FALLS ROAD) AND MONTROSE ROAD

ROCKVILLE, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1"= 20' DATE _____ CONTRACT NO. _____

DESIGNED BY _____ COUNTY MONTGOMERY
DRAWN BY _____ LOGMILE 15018905.31
CHECKED BY _____ 11/09 TIMS NO. 1807
F.A.P. NO. _____ TOD NO. _____

TS NO. 4867C | DRAWING NO. 1 OF 2 | SHEET NO. OF

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