EXISTING TRAFFIC SIGNS

22
30"x 36"

23
30"x 36"

24

24A,24B

25
R10-11b
24"x 24"

26,27,28,30
R10-3c
9"x 12"

THIS NUMBER
IS NOT USED
31

32
R2-1
24"x 30"

35
D3-2
DUAL FACED

36
D3-2
DUAL FACED

37
D3-2
DUAL FACED

PROPOSED TRAFFIC SIGNS

33
30"x 36"

34
30"x 36"

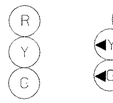
29
R10-3c
9"x 12"

38
D3-2
DUAL FACED

39
D3-2
DUAL FACED

EXISTING SIGNALS

1,2,8,
9,10,11



12"

3

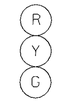
12"

12,13,14,16,
17,19,20,21

12"

PROPOSED SIGNALS

5,6,7



12"

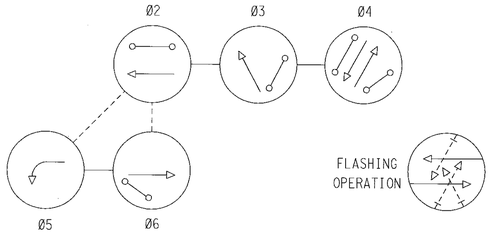
4

12"

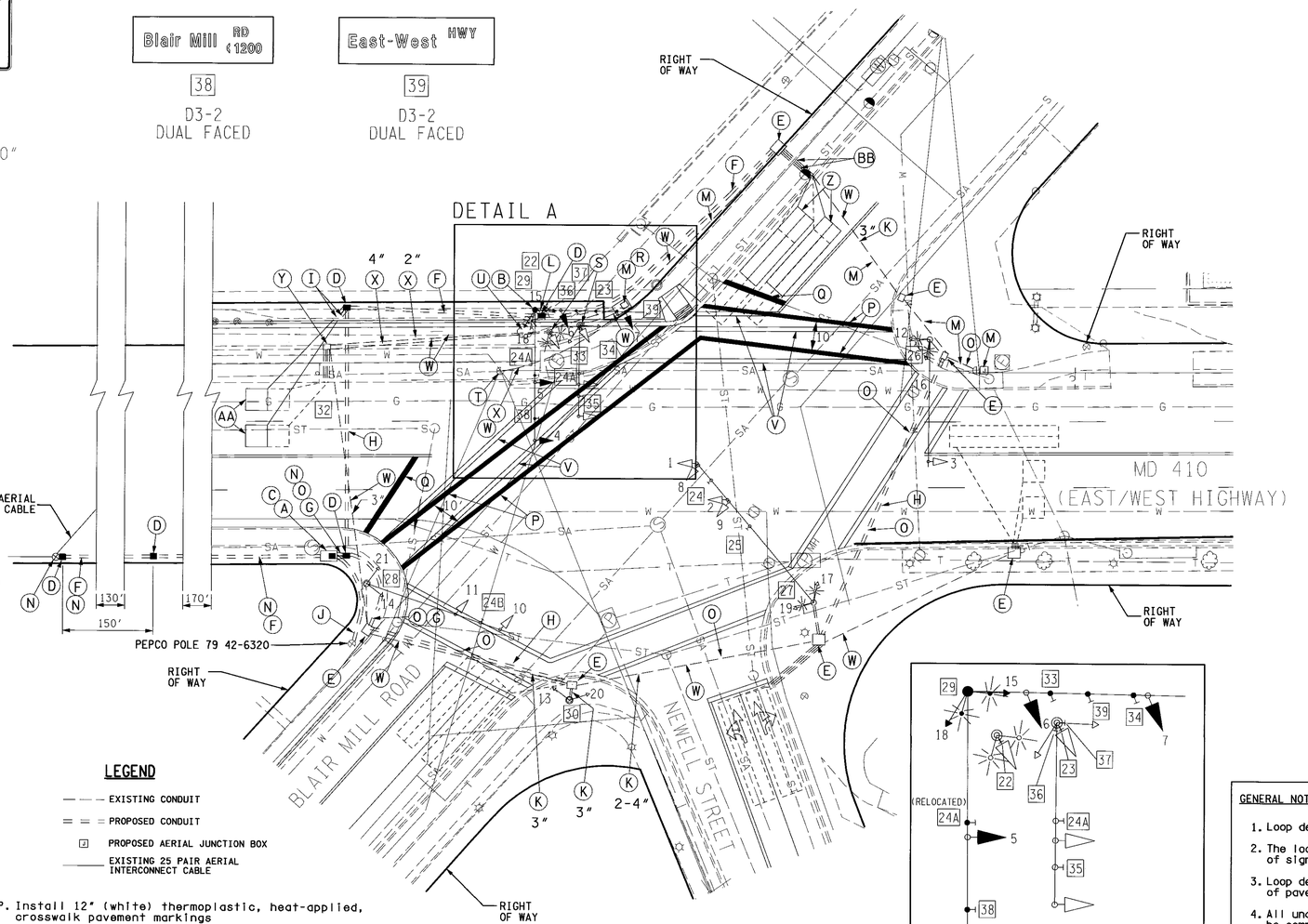
15,18

12"

PHASING

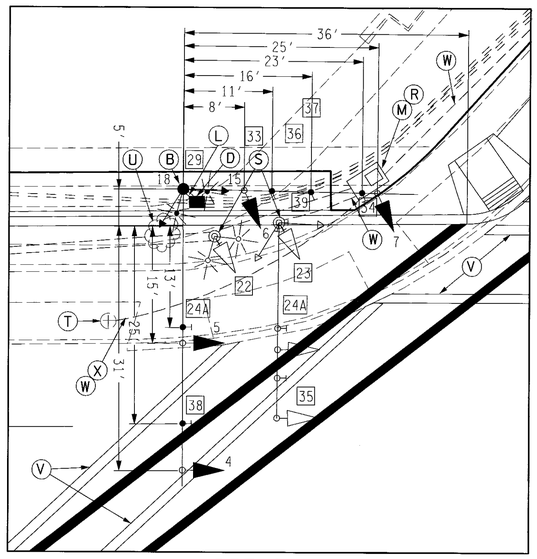


PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

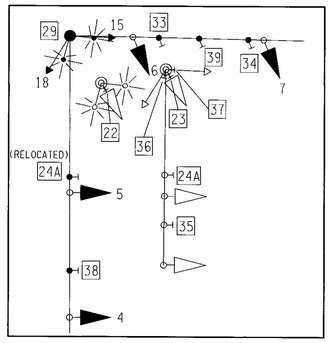


MD 410 IS ASSUMED TO RUN IN A EAST/WEST DIRECTION.

SCALE 1"=20'



DETAIL A
SCALE 1"=10'



DETAIL B
SCALE 1"=10'

CONSTRUCTION DETAILS

A. Install NEMA size "6" base-mounted cabinet and controller with control and distribution for underground power feed and all necessary equipment as shown. Pull all proposed electrical cables into the controller cabinet and properly tag/label each cable. All internal wiring shall be conducted by Montgomery County forces. (Note: 2-4", 1-3", 1-2" PVC 90° Elbows.)

B. Install a 27' steel pole with twin 50' and 50' mast arms, signal heads, signs, and relocated shoebox luminaires. The pole and mast arm finish shall be bronze to match existing poles. The mast arm parallel to MD 410 may be trimmed to 30'. The mast arm perpindicular to MD 410 may be trimmed to 40'. (Note: 1-4" PVC 90° Elbow.)

C. Furnish and install new meter and disconnect. Coordinate with the power company for new service drop to service pole.

D. Install handhole.

E. Use existing handhole.

F. Install 3" schedule 80 PVC conduit (trenched).

G. Install two 4" schedule 80 PVC conduit (trenched).

H. Install 4" schedule 80 PVC conduit (bored).

I. Install 1" liquid tight flexible non-metallic electrical conduit (detector wire sleeve).

J. Install 4" Schedule 80 rigid electrical PVC conduit-trenched with 90 degree bend at base of utility pole and 10' riser. Install 3-1 conductor #4 AWG electrical cables and coil 35' at pole for PEPCO to install.

K. Use existing conduit.

L. Install 4" Schedule 80 PVC conduit (trenched).

M. Install an aerial junction box for 25-pair interconnect cable on the utility pole on the northeast corner. At the appropriate time remove the existing 25-pair interconnect cable from the existing controller cabinet. Pull back the east segment of the cable from the conduits back to the top of the pole on the northeast corner of the intersection. Cut it off to leave a drip loop and terminate it in the newly installed aerial junction box.

N. Pull back existing west segment of interconnect from existing controller cabinet and conduit, and aerial connections approximately 300' west of this intersection. Furnish and install 2" GRS riser on utility pole and 2" GRS conduit to new handhole adjacent to the pole. Run existing interconnect from pole, through riser and new conduit to the new cabinet and terminate in cabinet.

O. Install a new segment of matching 25-pair interconnect cable from the new aerial junction box on the northeast corner through the existing riser on the pole, through the existing hand hole on that corner, and route it through the new conduit from the northeast to southeast corner and to the new controller cabinet in accord with the routing on the plan, appropriately terminating it in the cabinet and placing it into proper operation.

P. Install 12" (white) thermoplastic, heat-applied, crosswalk pavement markings

Q. Install 24" (white) thermoplastic, heat-applied, stopline pavement markings

R. Remove and dispose existing base-mounted cabinet and controller.

S. Remove existing traffic signal poles, mast arm signal heads, and associated wiring. (Existing shoebox luminaires to be relocated to new pole.)

T. Remove existing electrical service.

U. Remove tree (owned by project developer).

V. Remove existing pavement markings.

W. Remove existing signal cable from existing conduits.

X. Cap and abandon existing conduit.

Y. Remove existing handhole. (Cap and abandon attached conduit.)

Z. Install 6' x 30' loop detector.

AA. Install 6' x 6' loop detector.

BB. Install 1" Electrical conduit rigid galvanized sleeve.

LEGEND

- EXISTING CONDUIT
- PROPOSED CONDUIT
- PROPOSED AERIAL JUNCTION BOX
- EXISTING 25 PAIR AERIAL INTERCONNECT CABLE

UTILITY LEGEND

G — G	GAS MAIN
W — W	WATER MAIN
S — S	SEWER MAIN
E — E	ELECTRIC CABLES
A — A	AERIAL CABLES
T — T	TELEPHONE CABLES

GENERAL NOTES:

1. Loop detectors shall be installed 1' behind the stopline.
2. The location of proposed geometrics must be confirmed prior to the installation of signal equipment.
3. Loop detectors and conduit shall be installed prior to the installation of pavement markings.
4. 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.
5. 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, MD 818.04. The contractor shall verify ultimate grades prior to the installation of all signal equipment.

Kimley-Horn and Associates, Inc.
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NOTE: BASE MAPPING PROVIDED BY VIKA

REVISIONS					
B 6/04 Rev. due to new geom. SHA No: BW #996M82					
KWF					
A 6/95 Rev. due to new geom. SHA No: BW #795-802-312					
AA	BT	SR	BRK		TH

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY

ORIGINAL ON FILE

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 410 (EAST/WEST HIGHWAY) AND BLAIR MILL ROAD/NEWELL STREET

DRAWN BY: MVR	F.A.P. NO.		TS NO. 3538B	SHEET NO.
CHECKED BY: WSW	S.H.A. NO.			
SCALE: 1"=20'	COUNTY: MONTGOMERY		T.I.M.S. NO. F910	1 OF 2
DATE: MAY 4, 1977	LOG MILE: 15041004.02			