DRILL HOLES

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MD 150 IS ASSUMED TO RUN IN A EAST–WEST DIRECTION

EXISTING SIGNS TO BE RELOCATED

19,22 — 18,20

EXISTING SIGNS TO BE REMOVED

ONLY

SHARE THE ROAD

PROPOSED SIGNS

13b: Mace AVE → (13a) — D–3(1) DUAL FACE SIGN VAR.x16"

15: ONLY — R3–5L 30"x36"

16a: Riverside DR → (16b: ← Riverside DR) — D–3(1) DUAL FACE SIGN VAR.x16"

12a, 11a: PUSH BUTTON FOR WALK SIGNAL — R10–3(1) (15" x 9") OPTION A SIGN

14,17: R3–4 24"x24"

21: R4–7 18"x30" (@15 DEGREES)

23: Eastern BLVD — EAST MARYLAND 150 WEST — M95–1(MOD) 72"x40"

24: Eastern BLVD — WEST MARYLAND 150 EAST — M95–1(MOD) 72"x40"

PROPOSED SIGNAL HEADS

1,2 — 12"

3,4,5,6,10 — 12"

7 — 12"

9 — 12"

8 — 12"

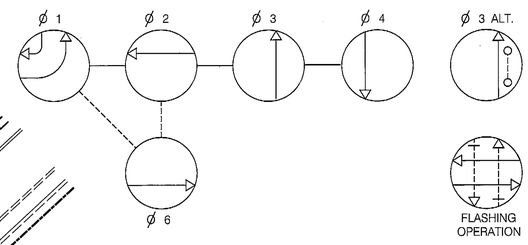
11,12 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD

SIGNAL NUMBERS 7 & 8 SHALL BE OPTICALLY PROGRAMMED

PROPOSED VIDEO DETECTION CAMERA

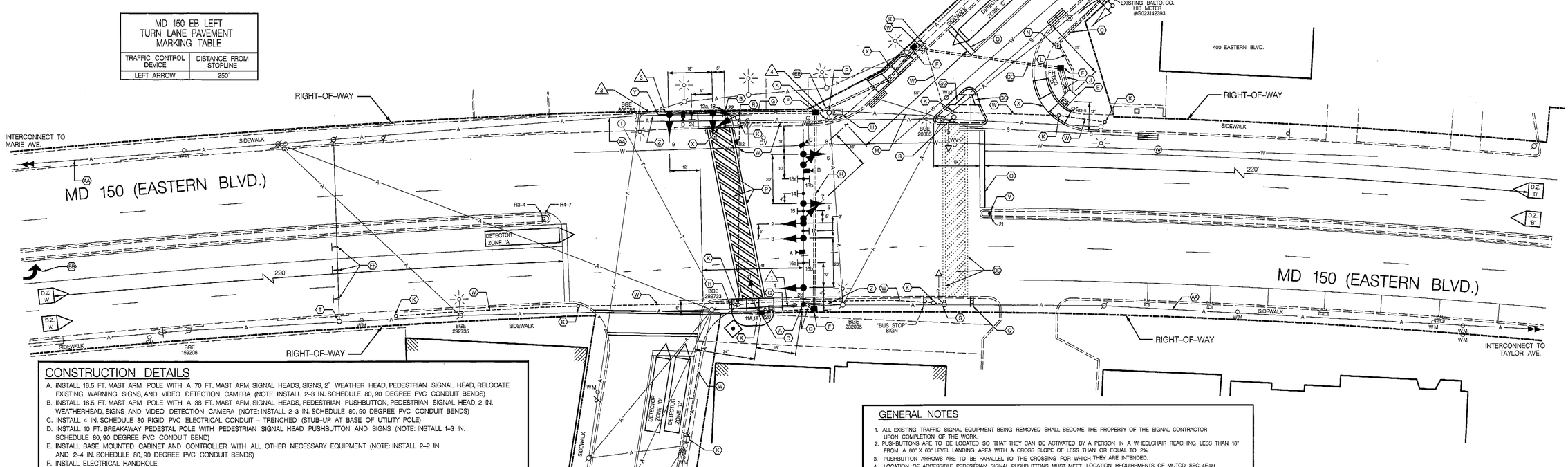
A–D

NEMA PHASING



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

MD 150 EB LEFT TURN LANE PAVEMENT MARKING TABLE	
TRAFFIC CONTROL DEVICE	DISTANCE FROM STOPLINE
LEFT ARROW	250'



CONSTRUCTION DETAILS

A. INSTALL 16.5 FT. MAST ARM POLE WITH A 70 FT. MAST ARM, SIGNAL HEADS, SIGNS, 2" WEATHER HEAD, PEDESTRIAN SIGNAL HEAD, RELOCATE EXISTING WARNING SIGNS, AND VIDEO DETECTION CAMERA (NOTE: INSTALL 2–3 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS)
B. INSTALL 16.5 FT. MAST ARM POLE WITH A 38 FT. MAST ARM, SIGNAL HEADS, PEDESTRIAN PUSHBUTTON, PEDESTRIAN SIGNAL HEAD, 2 IN. WEATHERHEAD, SIGNS AND VIDEO DETECTION CAMERA (NOTE: INSTALL 2–3 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS)
C. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT – TRENCHED (STUB–UP AT BASE OF UTILITY POLE)
D. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEAD PUSHBUTTON AND SIGNS (NOTE: INSTALL 1–3 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BEND)
E. INSTALL BASE MOUNTED CABINET AND CONTROLLER WITH ALL OTHER NECESSARY EQUIPMENT (NOTE: INSTALL 2–2 IN. AND 2–4 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS)
F. INSTALL ELECTRICAL HANDHOLE
G. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT – TRENCHED (REMOVE AND REPLACE CONRETE SIDEWALK)
H. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT – SLOTTED
J. INSTALL 2–4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUITS – TRENCHED
K. REMOVE EXISTING HANDHOLE (FRAME & COVER)
L. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT – TRENCHED
M. EXISTING OVERHEAD ELECTRICAL SERVICE TO BE REMOVED BY OTHERS (BGE)
N. INSTALL METER SERVICE PEDESTAL – EMBEDDED
O. INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
P. INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (24 IN. SPACING @ 45 DEGREES)
Q. REMOVE EXISTING GROUND MOUNTED SIGNS & SUPPORT, RELOCATE S1–1 SIGNS TO NEW LOCATION ON PEDESTAL POLE
R. REMOVE EXISTING POLE, MAST ARM, SIGN AND ASSOCIATED EQUIPMENT
S. REMOVE EXISTING PEDESTAL POLE AND ALL ASSOCIATED EQUIPMENT ATTACHED
T. REMOVE EXISTING STEEL POLE, SPAN WIRE AND SIGNS
U. REMOVE EXISTING BASE MOUNTED CABINET AND CONTROLLER
V. INSTALL GROUND MOUNTED R4–7 (18" X 30") SIGN ON 4 IN. X 4 IN. WOOD SUPPORT
W. CAP AND ABANDON EXISTING CONDUIT
X. INSTALL SIDEWALK RAMP WITH BRICK DETECTABLE WARNING SURFACE (SEE GI SHEET)
Y. CUT, CLEAN, GALVANIZE AND CAP MAST ARM
Z. INSTALL OVERHEAD INTERCONNECT CABLE FROM UTILITY POLE TO PROPOSED MAST ARM WITH 2 IN. WEATHERHEAD
AA. REMOVE EXISTING & REPLACE WITH NEW 12–PAIR INTERCONNECT CABLE ON UTILITY POLE (SEE WIRING DIAGRAM)
BB. INSTALL "ARROW" PAVEMENT MARKING (SEE DISTANCE TABLE – THIS SHEET)
CC. INSTALL TWO (2) 4 INCH SCHEDULE 80 RIGID ELECTRICAL CONDUIT – SLOTTED
DD. REMOVE (GRIND) EXISTING CROSSWALK MARKINGS
EE. INSTALL TWO (2) 4 INCH SCHEDULE 80 RIGID ELECTRICAL CONDUIT – TRENCHED (REMOVE AND REPLACE CONCRETE SIDEWALK
FF. REMOVE EXISTING SIGN
GG. INSTALL BRICK DETECTABLE WARNING SURFACE

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	S
WATER	W
CABLE TV	TV

UTILITY HEIGHTS

1	CABLE	26'–0"
	SECONDARY	36'–10"
	SECONDARY	37'–10"
	PRIMARY	40'–0"
	PRIMARY	40' +
2	SECONDARY	30'–3"
3	GUY WIRE	23'–6"
	GUY WIRE	24'–6"
	INTERCONNECT	25'–0"
	GUY WIRE	33'–5"
4	CABLE	19'–7"
	INTERCONNECT	21'–5"
	GUY WIRE	24'–11"
	GUY WIRE	26'–8"

GENERAL NOTES

1. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT BEING REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE WORK.
2. 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%.
3. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
4. 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 LOCATION UNTIL A DESIGN WAIVER IS OBTAINED. APPPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
5. ALL ACCESSIBLE PEDESTRIAN EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410–787–7650 TO COORDINATE.
6. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALL AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSE SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCE 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.
7. ALL INTERNAL CABINET WIRING TO BE PERFORMED BY THE SIGNAL SHOP. THE CONTRACTOR SHAL DELIVER THE APS CENTRAL CONTROL UNIT TO THE SHOP FOR TESTING AND PROGRAMING.
8. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
9. ALL DETECTABLE WARNING SURFACES SHALL BE "BRICK".
10. REMOVE ALL EXISTING HANDHOLES AND CAP AND ABANDON UNUSED CONDUIT.
11. THE CONTRACTOR SHALL TEST PIT ALL FOUNDATIONS PRIOR TO FULL DEPTH EXCAVATIONS
12. THE CONTRACTOR SHALL DRILL A HOLE WITH A MAG DRILL AND INSTALL 2 IN WEATHER HEAD. CONTRACTOR TO CONTACT BRUCE ABERNATHY (OFFICE OF MAINTENANCE AND TRAFFIC) AT (443) 572–5278 FOR PROCEDURE AND APPROVAL FOR THIS FIELD WORK PRIOR TO COMMENCE THE WORK.

TOD NO:XX446-07
SHA NO:BA864A55/B55
MD 150 @ MACE AVE/RIVERSIDE DR

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923–7101
FAX: (410) 923–6473
TRAFFIC@TRAFFIC–CONCEPTS.COM

APPROVALS

TEAM LEADER

ASST. DIV. CHIEF

DIVISION CHIEF

OFFICE DIRECTOR

ORIGINAL ON FILE

REVISIONS

C — RECONSTRUCT SIGNAL WITH APS/ADA RAMPS — 12–19–08 — TIMS # J–536, SHA NO XX446/B55

TMZ — B — SPLIT SIDE STREET PHASING. — 9–30–05

NML — A — CHANGE TO LOOP DETECTORS RELOCATE E/B HEADS — 7–29–87

NEW

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

TRAFFIC SIGNAL PLAN

MD 150 (EASTERN BLVD.) AT MACE AVENUE / RIVERSIDE DRIVE (ESSEX, MD)

SCALE 1" = 20' — DATE 5–1–70 — CONTRACT NO.

DESIGNED BY — COUNTY BALTIMORE

DRAWN BY — LOGMILE 03015003.02

CHECKED BY — T.I.M.S. NO. J–536

F.A.P. NO. N/A — TOD NO.

DRAWING NO. TS–4678 C — SHEET NO. 1 OF 2

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DATE: Friday, January 09, 2009 AT 10:37 AM