MD 150 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

## EXISTING SIGNS

9 — R3-7R (MOD) (36"x42"): RIGHT LANE MUST TURN RIGHT 700 FEET

10 — R10-12 (36"x42"): LEFT TURN YIELD ON GREEN

## EXISTING SIGNALS

1 — 12"/8"; 2,4 — 8"; 3,5,6 — 8"

## PROPOSED SIGNALS

7,8 — 12"

## NEMA PHASING

Ø1, Ø2, Ø4, Ø 4 ALT., Ø 6, FLASHING OPERATION

### PHASING NOTES:

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.

### WIRING DIAGRAM

A,B = 3 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
EC = EXISTING CABLE

A, A,EC, B, A,B,EC

NOTE: UNLESS OTHERWISE NOTED, ALL EXISTING WIRING WILL BE USED

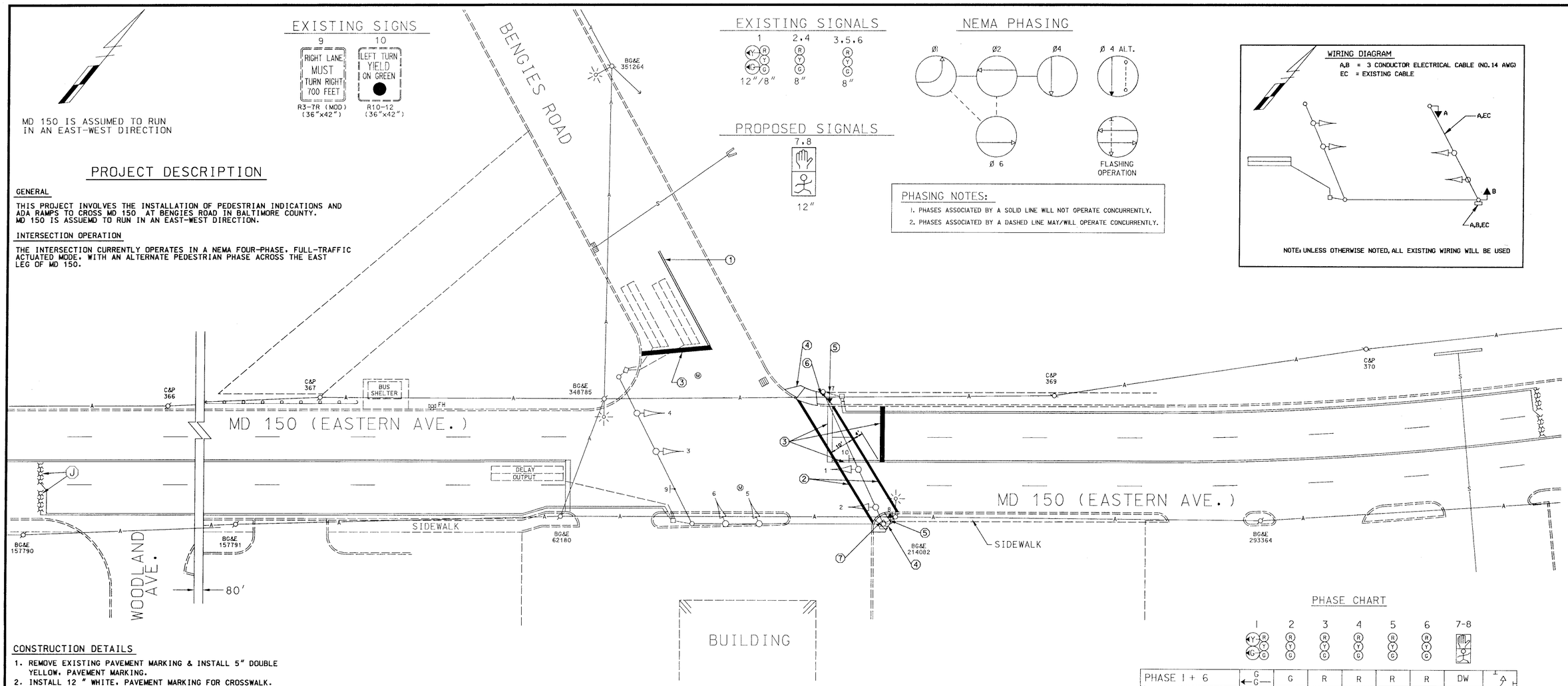
## PROJECT DESCRIPTION

**GENERAL**

THIS PROJECT INVOLVES THE INSTALLATION OF PEDESTRIAN INDICATIONS AND ADA RAMPS TO CROSS MD 150 AT BENGIES ROAD IN BALTIMORE COUNTY. MD 150 IS ASSUEMD TO RUN IN AN EAST-WEST DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION CURRENTLY OPERATES IN A NEMA FOUR-PHASE, FULL-TRAFFIC ACTUATED MODE, WITH AN ALTERNATE PEDESTRIAN PHASE ACROSS THE EAST LEG OF MD 150.




## CONSTRUCTION DETAILS

1. REMOVE EXISTING PAVEMENT MARKING & INSTALL 5" DOUBLE YELLOW, PAVEMENT MARKING.
2. INSTALL 12 " WHITE, PAVEMENT MARKING FOR CROSSWALK.
3. REMOVE EXISTING PAVEMENT MARKING & INSTALL 24" WHITE, PAVEMENT MARKING (STOP LINE).
4. INSTALL DEPRESSED CURB, GUTTER AND SIDEWALK FOR ADA RAMP.
5. INSTALL 12" PEDESTRIAN SIGNAL HEAD ON EXISTING POLE.
6. REMOVE EXISTING PUSHBUTTON SIGN & INSTALL R10-4(1) SIGN ON EXISTING POLE.
7. INSTALL R10-4(1) SIGN ON EXISTING POLE.

## PHASE CHART

| | 1 | 2 | 3 | 4 | 5 | 6 | 7-8 |
|---|---|---|---|---|---|---|---|
| PHASE 1 + 6 | G G | G | R | R | R | R | DW |
| 1 + 6 CHANGE | G Y | G | R | R | R | R | DW |
| PHASE 2 + 6 | G | G | G | G | R | R | DW |
| 2 + 6 CHANGE | Y | Y | Y | Y | R | R | DW |
| PHASE 4 | R | R | R | R | G | G | DW |
| 4 CHANGE | R | R | R | R | Y | Y | DW |
| PHASE 4 ALT. | R | R | R | R | G | G | WK |
| PED CLEAR | R | R | R | R | G | G | FL/DW |
| 4 ALT. CHANGE | R | R | R | R | Y | Y | DW |
| FLASHING OPERATION | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | DARK |

## EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

| QUANTITY | DESCRIPTION |
|---|---|
| 2 EA | 12 IN. SYMBOLIC PEDESTRIAN SIGNAL HEAD SECTION, POLE MOUNTED |
| 1.5 SF | R10-4(1) PEDESTRIAN SIGN. SIGN TO READ "PUSHBUTTON TO CROSS EASTERN BLVD" |

## EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

| ITEM NO. | QUANTITY | DESCRIPTION |
|---|---|---|
| 1001 | 1 EA | MAINTENANCE OF TRAFFIC |
| 2004 | 3 CY | CLASS 2 EXCAVATION |
| 5001 | 90 LF | 5 IN. YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS |
| 5003 | 125 LF | 12 IN., WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS |
| 5004 | 65 LF | 24 IN., WHITE PERMANENT PEFORMED THERMOPLASTIC PAVEMENT MARKINGS |
| 5007 | 180 LF | REMOVE EXISTING PAVEMENT MARKINGS-ANY WIDTH |
| 6001 | 200 SF | 4 IN. CONCRETE SIDEWALK |
| 6009 | 20 LF | FURNISH AND INSTALL DEPRESSED CURB AND GUTTER |
| 8011 | 2 EA | INSTALL SIGNAL HEAD (PEDESTRIAN SIGNAL HEAD SECTION) |
| 8043 | 120 LF | FURNISH AND INSTALL ELECTRICAL CABLE-3 CONDUCTOR (NO. 14 AWG) |
| 8052 | 1.5 SF | INSTALL GROUND MOUNTED SIGN |

### 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 |

### REVISIONS

E — ADD PEDESTRIAN SIGNALS AND ADA RAMPS FOR MD 150. 4-14-99
D — ASBUILT 4-29-97
SHA NO. AW 103-501-485
RRZ
C — ASBUILT AND ADDED E.P. LEFT TURN PHASE FOR EASTBOUND MD 150. 1-23-97
TZ
B — PEDESTRIAN PUSHBUTTONS/SIGNS INSTALLED ON EAST LEG OF MD 150. 1-30-91
MSC DAZ ETP ETP TH

### APPROVALS

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

OR. SIGNATURE ON FILE

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

# MD 150 AND BENGIES ROAD

| | | | |
|---|---|---|---|
| DRAWN BY: RICHARDSON | F.A.P. NO. BA95BA56/B56 | TS NO. TS-1487E | SHEET NO. |
| CHECKED BY: KIKLIAN/ZAFIRIS | S.H.A. NO. | T.I.M.S. NO. D-437 | 1 OF 1 |
| SCALE: 1" = 20' | COUNTY: BALTIMORE | | |
| DATE: 2-3-77 | LOG MILE: | | |