MD 103 IS ASSUMED TO RUN IN A EAST/ WEST DIRECTION

PROPOSED SIGN

18,19 — W11-2 (36"x36") FL/Y; W16-7P (24"x30") FL/Y

21 — R3-5(L) (30"x36") FL/Y

EXISTING SIGNS

12 — S. Haven Drive ⇦

12A — S. Haven Drive ⇨

13 — Waterloo Road ⇨

13A — ⇦ Waterloo Road

14 — ONLY

15

16 — EAST MARYLAND 103

17 — SOUTH MARYLAND 104

20 — EAST MARYLAND 103

EXISTING SIGNS TO BE REMOVED

ACROSS RAMP

LEFT TURN YIELD ON GREEN

EXISTING SIGNALS

1,2,5,7,9 — R Y G

3 — R Y G

4 — R Y G

6,8 — R Y G

PROPOSED SIGNALS

10,11 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

11A — R10-4(1) (12"X 9")

10A — R10-4(1) (12"X 9")

PUSH BUTTON TO CROSS MONTGOMERY ROAD — START CROSSING WATCH FOR TURNING CARS — DON'T START FINISH CROSSING IF STARTED — PEDESTRIANS SIGNALS MUST BE IN CROSSWALK

STREET NAME IN BRAILLE TYPE 2

PROPOSED VIDEO DETECTION

a

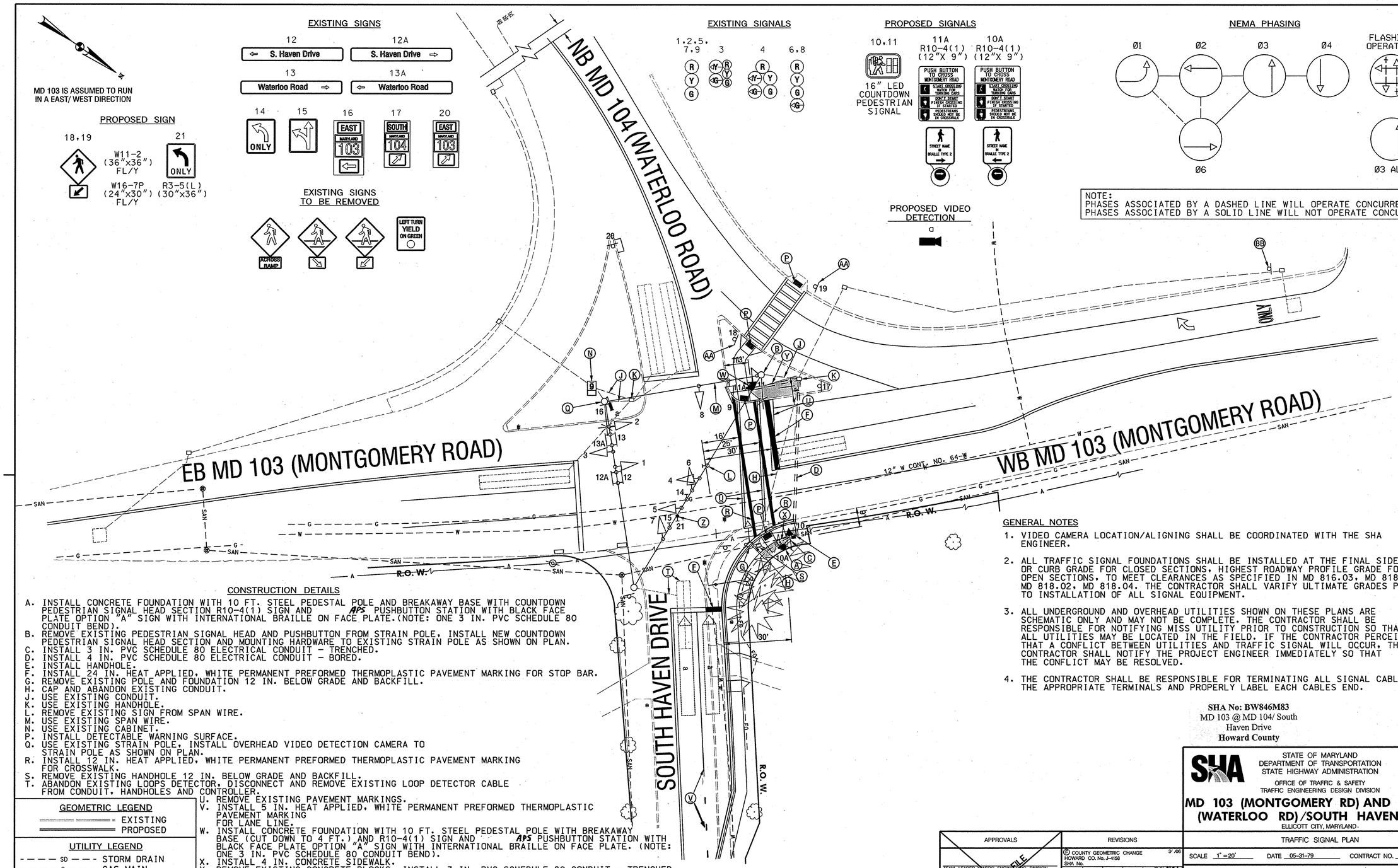
NEMA PHASING

Ø1 Ø2 Ø3 Ø4 Ø6

FLASHING OPERATION

Ø3 ALT.

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



CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE AND BREAKAWAY BASE WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION R10-4(1) SIGN AND APS PUSHBUTTON STATION WITH BLACK FACE PLATE OPTION "A" SIGN WITH INTERNATIONAL BRAILLE ON FACE PLATE.(NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
B. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON FROM STRAIN POLE. INSTALL NEW COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION AND MOUNTING HARDWARE TO EXISTING STRAIN POLE AS SHOWN ON PLAN.
C. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
D. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
E. INSTALL HANDHOLE.
F. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP BAR.
G. REMOVE EXISTING POLE AND FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
H. CAP AND ABANDON EXISTING CONDUIT.
J. USE EXISTING CONDUIT.
K. USE EXISTING HANDHOLE.
L. REMOVE EXISTING SIGN FROM SPAN WIRE.
M. USE EXISTING SPAN WIRE.
N. USE EXISTING CABINET.
P. INSTALL DETECTABLE WARNING SURFACE.
Q. USE EXISTING STRAIN POLE, INSTALL OVERHEAD VIDEO DETECTION CAMERA TO STRAIN POLE AS SHOWN ON PLAN.
R. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALK.
S. REMOVE EXISTING HANDHOLE 12 IN. BELOW GRADE AND BACKFILL.
T. ABANDON EXISTING LOOPS DETECTOR. DISCONNECT AND REMOVE EXISTING LOOP DETECTOR CABLE FROM CONDUIT, HANDHOLES AND CONTROLLER.
U. REMOVE EXISTING PAVEMENT MARKINGS.
V. INSTALL 5 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR LANE LINE.
W. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE (CUT DOWN TO 4 FT.) AND R10-4(1) SIGN AND APS PUSHBUTTON STATION WITH BLACK FACE PLATE OPTION "A" SIGN WITH INTERNATIONAL BRAILLE ON FACE PLATE. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
X. INSTALL 4 IN. CONCRETE SIDEWALK.
Y. REMOVE EXISTING CONCRETE BLOCKS, INSTALL 3 IN. PVC SCHEDULE 80 CONDUIT - TRENCHED, THEN REPLACE CONCRETE.
Z. USE EXISTING SPAN WIRE AND INSTALL R3-5(L) SIGN AS SHOWN.
AA. REMOVE EXISTING SIGNS FROM POST AND REPLACE WITH NEW W11-2 AND W16-7P SIGNS AS SHOWN ON PLAN.
BB. REMOVE EXISTING SIGN AND SIGN POST COMPLETELY.

GENERAL NOTES

1. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
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, MD 818.04. THE CONTRACTOR SHALL VARIFY ULTIMATE GRADES PRIOR TO INSTALLATION OF ALL SIGNAL EQUIPMENT.
3. 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 CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLES END.

SHA No: BW846M83
MD 103 @ MD 104/ South
Haven Drive
Howard County

GEOMETRIC LEGEND

EXISTING
PROPOSED

UTILITY LEGEND

SD — STORM DRAIN
G — GAS MAIN
W — WATER MAIN
SAN — SEWER MAIN
E — ELECTRIC CABLES
A — AERIAL CABLES
T — TELEPHONE CABLES
FO — FIBER-OPTIC

BY:CSTRAIN

SABRA, WANG & ASSOCIATES, INC.
1604 JOH AVENUE
SUITE 160
BALTIMORE, MD 21227
(410) 737-6564
WWW.SABRA-WANG.COM

APPROVALS
TEAM LEADER, TRAFFIC ENGINEERING DIVISION
ASST. CHIEF TRAFFIC ENGINEERING DIVISION
CHIEF TRAFFIC ENGINEERING DIVISION
DIRECTOR, OFFICE OF TRAFFIC & SAFETY
ORIGINAL ON FILE

REVISIONS
P COUNTY GEOMETRIC CHANGE HOWARD CO. No. J-4158 SHA No. — 3/06
SWA CTS — 4-00
E AS BUILT: INSTALL PEDESTRIAN SIGNALS ON WEST LEG OF MD 103 SHA NO. OT-1999-1
WM | DJD | DAZ | BRK
D INSTALL WB BP LEFT TURN PHASE — 9-90
BT | SR | DAZ | TK

PLOTTED: Wednesday, March 22, 2006 at 1:20:57 PM
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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 103 (MONTGOMERY RD) AND MD 104 (WATERLOO RD)/SOUTH HAVEN DRIVE

ELLICOTT CITY, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' | DATE 05-31-79 | CONTRACT NO. 23855T2508333

DESIGNED BY | COUNTY HOWARD
DRAWN BY B. THOMPSON | LOGMILE 13010304.26
CHECKED BY T. HANNAN | T.I.M.S. NO. F601
F.A.P. NO. | TOD NO.

TS NO. 1520F | DRAWING PSG OF N001 | SHEET NO. 1 OF 2