MD 70 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

N

EXISTING SIGNALS TO BE REMOVED

3,4,7, 1,2, 5,6 — 12″
8,10,11, 13,14 — 12″
9,12 — 8″
15,16 — 12″

PROPOSED LED SIGNALS

3a,4a, 7a,8a, 11a,14a — 12″
1a,2a, 5a,6a — 12″
9a,12a 10a,13a — 12″
15a,16a — 16″ COUNTDOWN

EXISTING SIGNS TO REMAIN

17,21 — 17a,21a
18 — Tidewater Colony Dr →
18a — ← Tidewater Colony Dr
19 — SOUTH MARYLAND 70
20 — DO NOT ENTER
22 — N. Bestgate Rd →
22a — ← N. Bestgate Rd
23 — TO MARYLAND 436 →
24,25a — ONE WAY
24a,25 — ONE WAY
27 — RIGHT LANE MUST TURN RIGHT
28 — SPEED LIMIT 25
29,39 — ONLY
30,38

EXISTING SIGNS TO BE REMOVED

26,31

PROPOSED SIGNS

34 — NORTH MARYLAND 70 → — SHIELD ASSEMBLY (24″x51″)
35 — NORTH MARYLAND 70 ← — SHIELD ASSEMBLY (36″x75″)
36 — SOUTH MARYLAND 70 → — SHIELD ASSEMBLY (24″x51″)
37 — SOUTH MARYLAND 70 ← — SHIELD ASSEMBLY (36″x75″)
40,41 — ← Bestgate RD / Rowe BLVD → — D-3(1) (VAR.x32″)
40a,41a — ← Rowe BLVD. / Bestgate RD → — D-3(1) (VAR.x32″)

PROPOSED VIDEO DETECTION

a, b, c, d

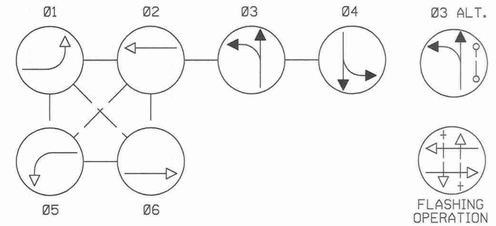
PROPOSED ACCESSIBLE PUSHBUTTON AND SIGN

32,33

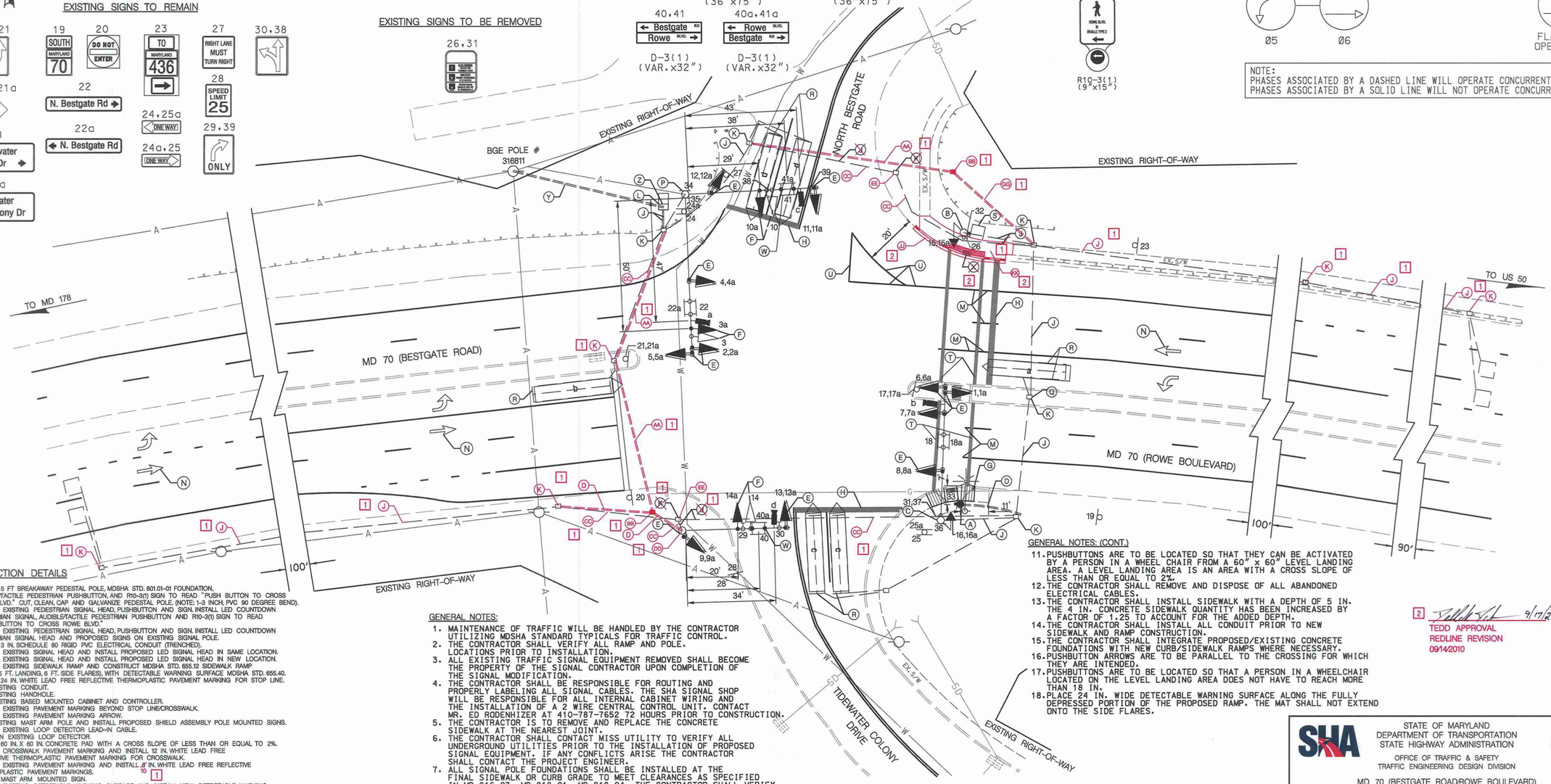
PUSH BUTTON TO CROSS ROWE BLVD.
STAY ENGAGING WATCH FOR TURNING CARS
DON'T START WHEN CROSSING IS STARTED
TIME REMAINING TO FINISH CROSSING
PEDESTRIANS SHOULD NOT BE IN CROSSWALK
ROWE BLVD. IN SMALL TYPE 2

R10-3(1) (9″x15″)

NEMA PHASING



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



CONSTRUCTION DETAILS

A. INSTALL 5 FT BREAKAWAY PEDESTAL POLE, MDSHA STD. 801.01-01 FOUNDATION, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON, AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS ROWE BLVD." CUT, CLEAN, CAP AND GALVANIZE PEDESTAL POLE. (NOTE: 1-3 INCH, PVC 90 DEGREE BEND).
B. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND SIGN. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS ROWE BLVD."
C. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND SIGN. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL HEAD AND PROPOSED SIGNS ON EXISTING SIGNAL POLE.
D. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
E. REMOVE EXISTING SIGNAL HEAD AND INSTALL PROPOSED LED SIGNAL HEAD IN SAME LOCATION.
F. REMOVE EXISTING SIGNAL HEAD AND INSTALL PROPOSED LED SIGNAL HEAD IN NEW LOCATION.
G. REMOVE EXISTING SIDEWALK RAMP AND CONSTRUCT MDSHA STD. 655.12 SIDEWALK RAMP (5 FT. x 5 FT. LANDING, 6 FT. SIDE FLARES), WITH DETECTABLE WARNING SURFACE MDSHA STD. 655.40.
H. INSTALL 24 IN. WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
J. USE EXISTING CONDUIT.
K. USE EXISTING HANDHOLE.
L. USE EXISTING BASED MOUNTED CABINET AND CONTROLLER.
M. REMOVE EXISTING PAVEMENT MARKING BEYOND STOP LINE/CROSSWALK.
N. REMOVE EXISTING PAVEMENT MARKING ARROW.
P. USE EXISTING MAST ARM POLE AND INSTALL PROPOSED SHIELD ASSEMBLY POLE MOUNTED SIGNS.
Q. REMOVE EXISTING LOOP DETECTOR LEAD-IN CABLE.
R. ABANDON EXISTING LOOP DETECTOR.
S. INSTALL 60 IN. X 60 IN. CONCRETE PAD WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
T. REMOVE CROSSWALK PAVEMENT MARKING AND INSTALL 12 IN. WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALK.
U. REMOVE EXISTING PAVEMENT MARKING AND INSTALL 6 IN. WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS. 10 1
W. INSTALL MAST ARM MOUNTED SIGN.
X. REMOVE EXISTING DETECTABLE WARNING SURFACE AND INSTALL NEW DETECTABLE WARNING SURFACE MD STD. 655.40.
Y. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED PHONE DROP. THE CONTRACTOR SHALL CAP, MARK AND LEAVE A 1 FT. STUB WITH PULL STRING AT BASE OF UTILITY POLE FOR USE BY OTHERS.
Z. INSTALL 2 IN. CONDUIT BEND IN EXISTING CONTROLLER CABINET FOUNDATION.
1 AA. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED).
BB. INSTALL ELECTRICAL HANDHOLE.
CC. CAP AND ABANDON EXISTING CONDUIT.
1 DD. INSTALL 3 IN. CONDUIT BEND IN EXISTING FOUNDATION.
1 EE. ABANDON EXISTING HANDHOLE.
1 GG. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED)

GENERAL NOTES:

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL VERIFY ALL RAMP AND POLE LOCATIONS PRIOR TO INSTALLATION.
3. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES. THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING AND THE INSTALLATION OF A 2 WIRE CENTRAL CONTROL UNIT. CONTACT MR. ED RODENHIZER AT 410-787-7652 72 HOURS PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR IS TO REMOVE AND REPLACE THE CONCRETE SIDEWALK AT THE NEAREST JOINT.
6. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
7. ALL SIGNAL POLE FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
8. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
9. 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 OF THE OFFICE OF TRAFFIC AND SAFETY.
10. THE 10 FT. SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.

GENERAL NOTES: (CONT.)

11. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEEL CHAIR FROM A 60″ x 60″ LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
12. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
13. CONTRACTOR SHALL INSTALL SIDEWALK WITH A DEPTH OF 5 IN. THE 4 IN. CONCRETE SIDEWALK QUANTITY HAS BEEN INCREASED BY A FACTOR OF 1.25 TO ACCOUNT FOR THE ADDED DEPTH.
14. THE CONTRACTOR SHALL INSTALL ALL CONDUIT PRIOR TO NEW SIDEWALK AND RAMP CONSTRUCTION.
15. THE CONTRACTOR SHALL INTEGRATE PROPOSED/EXISTING CONCRETE FOUNDATIONS WITH NEW CURB/SIDEWALK RAMPS WHERE NECESSARY.
16. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
17. PUSHBUTTONS ARE TO BE LOCATED SO THAT A PERSON IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 IN.
18. PLACE 24 IN. WIDE DETECTABLE WARNING SURFACE ALONG THE FULLY DEPRESSED PORTION OF THE PROPOSED RAMP. THE MAT SHALL NOT EXTEND ONTO THE SIDE FLARES.

CONSTRUCTION DETAILS (CONT'D)

2 JJ. INSTALL TYPE-A FULL HEIGHT CURB AND GUTTER AND SLOPE DOWN 3:1 SLOPE TO GRADE AT RAMP OPENING AND ENDS.
KK. INSTALL 4 IN CONCRETE SIDEWALK AT EXISTING GRADE AND INSTALL DETECTABLE WARNING SURFACE MDSHA STD. 655.40.

UTILITY LEGEND

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

BY: mfukui

2 TEDD APPROVAL 9/17/2010
REDLINE REVISION
09/14/2010

RJM ENGINEERING, INC.
CONSULTING ENGINEERS
COLUMBIA, MARYLAND

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

REVISIONS
(E) SIDE STREET PHASING MODIFIED TO SPLIT PHASE. APS/CPS ADA MODS
CONTRACT # AT9365185 308
PFW
D PEDESTRIAN SIGNALS 11/03
SHA NO. AA6165171
MP
C AS-BUILT SEPT. 11, 1996
SHA NO. 855-25057063
FJH

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 70 (BESTGATE ROAD/ROWE BOULEVARD)
AT NORTH BESTGATE ROAD/TIDEWATER COLONY DRIVE

TRAFFIC SIGNALIZATION PLAN

SCALE 1″ = 20′ ADVERTISED DATE OCTOBER, 1993 CONTRACT NO.

DESIGNED BY WKS — COUNTY ANNE ARUNDEL
DRAWN BY WKS — LOGMILE 02007002.06
CHECKED BY — TIMS NO. 1439
F.A.P. NO. N/A — TOD NO. N/A

TS NO. 3396E | DRAWING SG-01 OF 02 | SHEET NO. 1 OF 2

PLOTTED: Tuesday, September 14, 2010 AT 05:19 PM
FILE: J:\DATA\1439\Redline 2\CAD\pSG-P000_MD70.dgn