US 1 BUSINESS IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

EXISTING SIGNS TO REMAIN

19,20 ATWOOD RD

21 ONLY | 22 | 23 ONLY

EXISTING SIGNS TO BE REMOVED

24A,25A,26A,27A

PUSH BUTTON TO CROSS BALTIMORE PIKE
START CROSSING WATCH FOR TURNING CARS
DON'T START FINISH CROSSING IF STARTED
TIME REMAINING TO FINISH CROSSING
PEDESTRIANS SHOULD NOT BE IN CROSSWALK
STREET NAME IN BRAILLE TYPE 2

EXISTING SIGNALS TO BE REMOVED

15A–18A

12"

PROPOSED SIGNALS

11–18

16" LED COUNTDOWN PEDESTRIAN SIGNAL

EXISTING SIGNALS

1,4 — 12"/8" | 2,5 — 12" | 3,6 — 12" | 7,9 — 8"/12" | 8 — 8" | 10 — 8"/12"

PROPOSED VIDEO DETECTION CAMERAS

a,b,c,d

VIDEO ZONE DETECTION

a

EXISTING VIDEO DETECTION CAMERAS TO BE REMOVED

e,f

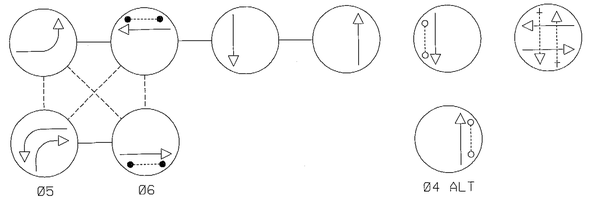
PROPOSED SIGNS

24,26 | 25,27 | 28,30 | 29,31

PUSH BUTTON TO CROSS BALTIMORE PIKE / PUSH BUTTON TO CROSS ATWOOD ROAD
START CROSSING WATCH FOR TURNING CARS
DON'T START FINISH CROSSING IF STARTED
TIME REMAINING TO FINISH CROSSING
PEDESTRIANS SHOULD NOT BE IN CROSSWALK
STREET NAME IN BRAILLE TYPE 2

R10-3(1) 9" x 15"

NEMA PHASING



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

SPECIAL NOTE:

CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.

EXISTING CONCRETE SIDEWALK TO BE REMOVED

CONSTRUCTION DETAILS

A. USE EXISTING STEEL POLE. REMOVE EXSITING VIDEO DETECTION CAMERA, PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON. INSTALL VIDEO DETECTION CAMERAS AND COUNTDOWN PEDESTRIAN SIGNAL HEAD AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS BALTIMORE PIKE"). CLEAN EXISTING DRILLED HOLES WITH BRUSH AND SPRAY COLD GALVANIZING COMPOUND ON THE AFFECTED AREAS.

B. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS BALTIMORE PIKE"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).

C. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS ATWOOD ROAD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).

D. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS ATWOOD ROAD"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).

E. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS BALITMORE PIKE"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).

F. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.

G. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER. INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT.

H. USE EXISTING STEEL POLE. REMOVE EXISTING VIDEO DETECTION CAMERA, PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON. INSTALL VIDEO DETECTION CAMERAS MOUNTED ON MAST ARMS AS SHOWN. CLEAN EXISTING DRILLED HOLES WITH BRUSH AND SPRAY COLD GALVANIZING COMPOUND ON THE AFFECTED AREAS.

J. USE EXISTING HANDHOLE.

K. USE EXISTING CONDUIT.

L. CAP AND ABANDON EXISTING CONDUIT.

M. INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.12) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40). (SEE SHEET 2 FOR SIDEWALK RAMP DETAILS).

N. REMOVE EXISTING SIDEWALK AND INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. REPLACE 5 INCH CONCRETE SIDEWALK.

O. REMOVE EXISTING STEEL PEDESTAL POLE, PEDESTRIAN SIGNAL HEADS, PUSHBUTTON, AND SIGNS. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.

P. USE EXISTING HANDHOLE. ADJUST TO FINAL GRADE.

Q. ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.

R. REMOVE EXISTING SIDEWALK RAMP. BACKFILL, SEED AND MULCH. INSTALL STANDARD TYPE A COMBINATION CURB AND GUTTER.

S. REMOVE EXISTING SIDEWALK. BACKFILL, SEED AND MULCH.

T. INSTALL SIDEWALK RAMP (STANDARDS NO. MD 655.12 AND MD 655.21) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40). (SEE SHEET 2 FOR SIDEWALK RAMP DETAILS).

GENERAL NOTES

1. 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.
2. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
4. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
6. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
7. 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%.
8. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
9. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
10. 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, OFFICE OF TRAFFIC AND SAFETY.
11. ALL SIDEWALK RAMPS SHALL BE INSTALLED AS PER STANDARDS MD 655.11 AND MD 655.12.
12. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
13. REFER TO SHEET TSP-2 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND SIDEWALK RAMPS WITHIN INTERSECTION.

GEOMETRIC LEGEND
EXISTING
PROPOSED

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

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BY: bdonoway

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 1 BUSINESS @ ATWOOD ROAD

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

REVISIONS
(E) UPGRADE TO APS/CPS SHA. CONTRACT NO. XX4275185 TIMS #K235 BIRD NM
(A) INSTALL VIDEO DETECTION SHA. CONTRACT NO. 0T 2005 TIMS #H394 11/05 EC LM
(C) INSTALL R.T. OVERLAP & SIDE STREET SPLIT PHASE FOR ATWOOD RD EM SK

PLOTTED: 08-10-2010
FILE: N:\j\9669-067\(CADD)\pSG-P001_K235.dgn

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 092002 CONTRACT NO. AT9155185

DESIGNED BY _____ COUNTY HARFORD
DRAWN BY DAVE ANDREWS LOGMILE 12000102.15
CHECKED BY _____ TIMS NO. K235
F.A.P. NO. _____ TOD NO. _____

TS NO. 1962 | DRAWING TSP-1 OF 3 | SHEET NO. 1 OF 3