MD 5 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

EXISTING SIGNS TO REMAIN

22,24,29 — R3-5(L) (30"x36")

34,35 — R3-5(R) (30"x36")

23 — R3-4 (30"x30")

36 — R10-11b (30"x30")

26,27 — D-3(1) (VAR.x16") DUAL FACED

EXISTING SIGNS TO BE REMOVED

31A — SHIELD ASSEMBLY (30"x51")

32A — R10-11b (30"x30")

48 — W3-3 (48"x48")

33,39 — R3-6(L) (30"x36")

40 — R3-6(R) (30"x36")

21,30 — D-3(1) (VAR.x16") DUAL FACED

45 — M4-5 30"X15" M1-5(6) SHIELD ASSEMBLY (30"x51")

47A — W3-3 (48"X48") D-3(2) (VAR"x12")

45A — D-3 (VAR.x12")

TO US 301

SPECIAL NOTES:

1. INSTALL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO TRAVEL WAY FOR INSTALLATION OF NON-INVASIVE PROBES. EXTEND CONDUIT A MINIMUM OF 2 IN. AND MAXIMUM OF 3 IN. INTO HANDHOLE.
2. THE CONTRACTOR SHALL COORDINATE WITH SHA TRAFFIC OPERATION DIVISION TO CONTACT LOCAL POWER COMPANY TO SET-UP WORK WITH TO DISCONNECT THE EXISTING ELECTRICAL SERVICE AND HAVE THE NEW SERVICE ENERGIZED.
3. THE CONTRACTOR SHALL REMOVE EXISTING SIGNAL CABLES IN ORDER TO INSTALL PROPOSED SIGNAL CABLES IN EXISTING HANDHOLE AND REFEED INTO EXISTING CABINET FOUNDATION.
4. THE CONTRACTOR SHALL INSTALL SIDEWALK RAMP TO ENSURE EXISTING HANDHOLE WILL BE FULLY WITHIN SLOPE SECTION OR FLAT LANDING AREA OF SIDEWALK.

MD 5 US 301 SIGNS

EXISTING SIGNALS TO REMAIN

1,2,6 — 12"

3,4,7,8, 11,16 — 12"

9,14 — 8"/12"

12,13 — 12"

10,15 — 12"

17-19 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

EXISTING SIGNAL TO BE REMOVED

20A — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

EXISTING SIGNAL TO BE RELOCATED (SHOWN IN FINAL LOCATION)

5 — 12"

PROPOSED SIGNALS

20 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

PROPOSED SIGNS

41, 42, 43, 44 — R10-3(1) 9" x 15"

25,28 — R4-7 @15° (24"X30")

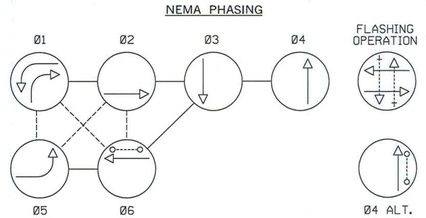
32 — NORTH MARYLAND 5 ⇐ M1-5(6) SHIELD ASSEMBLY (36"x72")

37 — NORTH MARYLAND 5 ⇒ M1-5(6) SHIELD ASSEMBLY (24"x48")

38 — SOUTH MARYLAND 5 ⇐ M1-5(6) SHIELD ASSEMBLY (36"x72")

31 — SOUTH MARYLAND 5 ⇒ M1-5(6) SHIELD ASSEMBLY (24"x48")

NEMA PHASING



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

PROPOSED VIDEO DETECTION CAMERAS — a,b,c,d

VIDEO ZONE DETECTION — a

SHA RIGHT OF WAY

LANE ENDS MERGE LEFT SIGN

365'

SEE SPECIAL NOTE 1

SEE SPECIAL NOTE 4

SEE SPECIAL NOTE 3

NO OUTLET SIGN

STOP SIGN

RAILROAD XING SIGN

R6-7 SIGN

R5-1 SIGN

MD 5 SIGN

Nike Drive

Mattawoman Drive

EXISTING INTERCONNECT TO US 301

EXISTING INTERCONNECT TO PINEFIELD

TO PINEFIELD ROAD

MD 5 (Mattawoman Beantown Road)

CONSTRUCTION DETAILS

A. USE EXISTING STEEL MAST ARM POLE. CLEAN AND REPAINT EXISTING SIGNAL POLE, MAST ARM AND LIGHTING ARM USING (FEDERAL BROWN NUMBER 595a-20040)AND INSTALL SIGNS AND VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AS SHOWN.

1 B. INSTALL CONCRETE FOUNDATION WITH ~~10 FT.~~ 14 FT. STEEL PEDESTAL POLE (PAINTED USING FEDERAL BROWN NUMBER 595a-20040) ~~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 MATTAWOMAN BEANTOWN ROAD"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).

C. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE (PAINTED USING FEDERAL BROWN NUMBER 595a-20040) WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS MATTAWOMAN BEANTOWN ROAD"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).

D. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE (PAINTED USING FEDERAL BROWN NUMBER 595a-20040)WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS NIKE DRIVE"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).

1 E. ~~INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE (PAINTED USING FEDERAL BROWN NUMBER 595a-20040) WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01. AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS NIKE DRIVE"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).~~

1 F. USE EXISTING CABINET FOUNDATION. DISCONNECT AND REMOVE METER AND SERVICE EQUIPMENT. REMOVE EXISTING CABINET AND INSTALL NEMA SIZE "S" BASE MOUNTED CABINET AND CONTROLLER WITH BATTERY BACKUP SYSTEM WITH SIZE "S" FOUNDATION. (INSTALL ADDITIONAL CONCRETE PAD PER STANDARD NO. MD 816.07.)

G. INSTALL EMBEDDED METERED SERVICE PEDESTAL WITH 2-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS IN PEDESTAL BASE.

H. INSTALL HANDHOLE.

J. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1.000 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.

K. INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.

1 L. USE EXISTING MAST ARM POLE. CLEAN AND REPAINT EXISTING SIGNAL POLE, AND MAST ARM USING (FEDERAL BROWN NUMBER 595a-20040). REMOVE EXISTING PEDESTRIAN PUSHBUTTON. INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS NIKE DRIVE" VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AS SHOWN.

M. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.

N. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.

O. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.

P. INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT UTILITY POLE FOR USE BY OTHERS.

Q. INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.

R. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.

S. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.

T. USE EXISTING MAST ARM POLE. REMOVE EXISTING M1-5(6) SIGN. CLEAN AND REPAINT EXISTING SIGNAL POLE, MAST ARM, AND LIGHTING USING (FEDERAL BROWN NUMBER 595a-20040). INSTALL SIGNS AND VIDEO DETECTION CAMERAS MOUNTED ON MAST ARMS AS SHOWN.

U. USE EXISTING HANDHOLE.

V. USE EXISTING CONDUIT.

W. INSTALL STANDARD TYPE A CONCRETE CURB.

X. REMOVE EXISTING SIDEWALK RAMP AND INSTALL SIDEWALK RAMP (SEE SHEET TSP-3 FOR DETAILS) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40).

Y. REMOVE EXISTING HANDHOLE.

Z. REMOVE EXISTING HANDHOLE AND R4-7 SIGN AND SUPPORT. CUT BACK EXISTING CONCRETE MEDIAN NOSE AND INSTALL 5 IN. CONCRETE SIDEWALK FLUSH WITH ROADWAY SURFACE.

AA. CAP AND ABANDON EXISTING CONDUIT.

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

CC. REMOVE EXISTING PEDESTAL POLE, PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON AND SIGN. REMOVE FOUNDATION 12 INCHES BELOW GRADE AND BACKFILL.

DD. INSTALL R4-7 SIGN MOUNTED ON ONE 4 IN. X 4 IN. TREATED WOOD SIGN SUPPORT. (L1=15 LF.)

EE. REMOVE EXISTING STOPLINE.

FF. REMOVE EXISTING CROSSWALK LINE.

GG. REMOVE EXISTING CONCRETE SIDEWALK AND INSTALL 5 IN. CONCRETE SIDEWALK.

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

JJ. INSTALL STANDARD TYPE 'A' COMBINATION CURB AND GUTTER.

KK. REMOVE EXISTING D3-3 SIGN AND SUPPORT.

LL. REMOVE EXISTING CONCRETE SIDEWALK RAMP. BACKFILL. SEED. AND MULCH.

MM. REMOVE EXISTING PAVEMENT MARKING ARROW.

NN. INSTALL M1-5(6) SIGN ON ONE 4 IN. X 6 IN. WOOD SIGN SUPPORT. (L1=16)

OO. RELOCATE EXISTING TRAFFIC SIGNAL HEAD. (SHOWN IN FINAL LOCATION)

PP. REMOVE EXISTING W3-3 SIGN, D-3(2) SIGN AND SUPPORTS. INSTALL PROPOSED W3-3 (48 IN. X 48 IN.) AND D-3(2) (VAR. X 16") SIGNS ON TWO 4 IN X 6 IN. WOOD SIGN SUPPORTS.(L1,L2= 12 FT

QQ. INSTALL PROPOSED W3-3 (48 IN.X 48 IN.) AND D-3(2) (VAR. X 16 IN.) SIGNS ON TWO 4 IN. X 6 IN. TREATED WOOD POSTS APPROXIMATELY 800 FT. IN ADVANCE OF INTERSECTION (IN GRASS MEDIAN) ON SOUTHBOUND MD 5.(L1,L2=12 FT.)

1 RR. USE EXISTING HANDHOLE. ADJUST HANDHOLE TO FINAL GRADE.

GENERAL NOTES CONT.

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 AND AS SHOWN ON TSP-2.
12. INSTALL CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS. REFER TO SIGNING AND PAVEMENT MARKING PLANS FOR ADDITIONAL DETAILS.
13. VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
14. ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
15. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
16. REFER TO SHEET 2 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

GENERAL NOTES

1. 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.
2. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
3. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET 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 10" 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.

PROPOSED SIGNS

47 — W3-3 (48"x48") and D-3(2) (VAR. X 16")

46 — W3-3 (48"x48") and D-3(2) (VAR. X 16")

Mattawoman DR →

← Nike DR

Utility No.

GEOMETRIC LEGEND
- EXISTING
- PROPOSED

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

APPROVALS

TEAM LEADER

ASST. DIV. CHIEF

DIVISION CHIEF

OFFICE DIRECTOR

ORIGINAL ON FILE

REVISIONS

1 REDLINE NO. 1
REVISE SE ADA RAMP
SHA CONTRACT XX2245185 8/21/2012
BRD NM

© INSTALLATION OF APS/CPS AND REPAINTING OF SIGNAL EQUIPMENT
TIMS L334---XY 2245185 5/29/12
BRD NM

B ADDED PED PHASE FOR SOUTH AND EAST LEGS
TIMS E118 11/2000
RRZ

WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

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

MD 5 at Nike Drive /Mattawoman Drive

Waldorf, Maryland

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' DATE 9/95 CONTRACT NO. CH 566-502-571

DESIGNED BY
DRAWN BY R.C./MGK
CHECKED BY RJM
F.A.P. NO. SEE TITLE SHEET

COUNTY CHARLES
LOGMILE 08000513.37
TIMS NO.
TOD NO.

TS NO. 3558 C | DRAWING TSP-1 OF 3 | SHEET NO. 1 OF 3

PLOTTED: August 27, 2012
FILE: N:\31669-222\CADD\pSG-P001_L334.dgn

BY: bdonoway