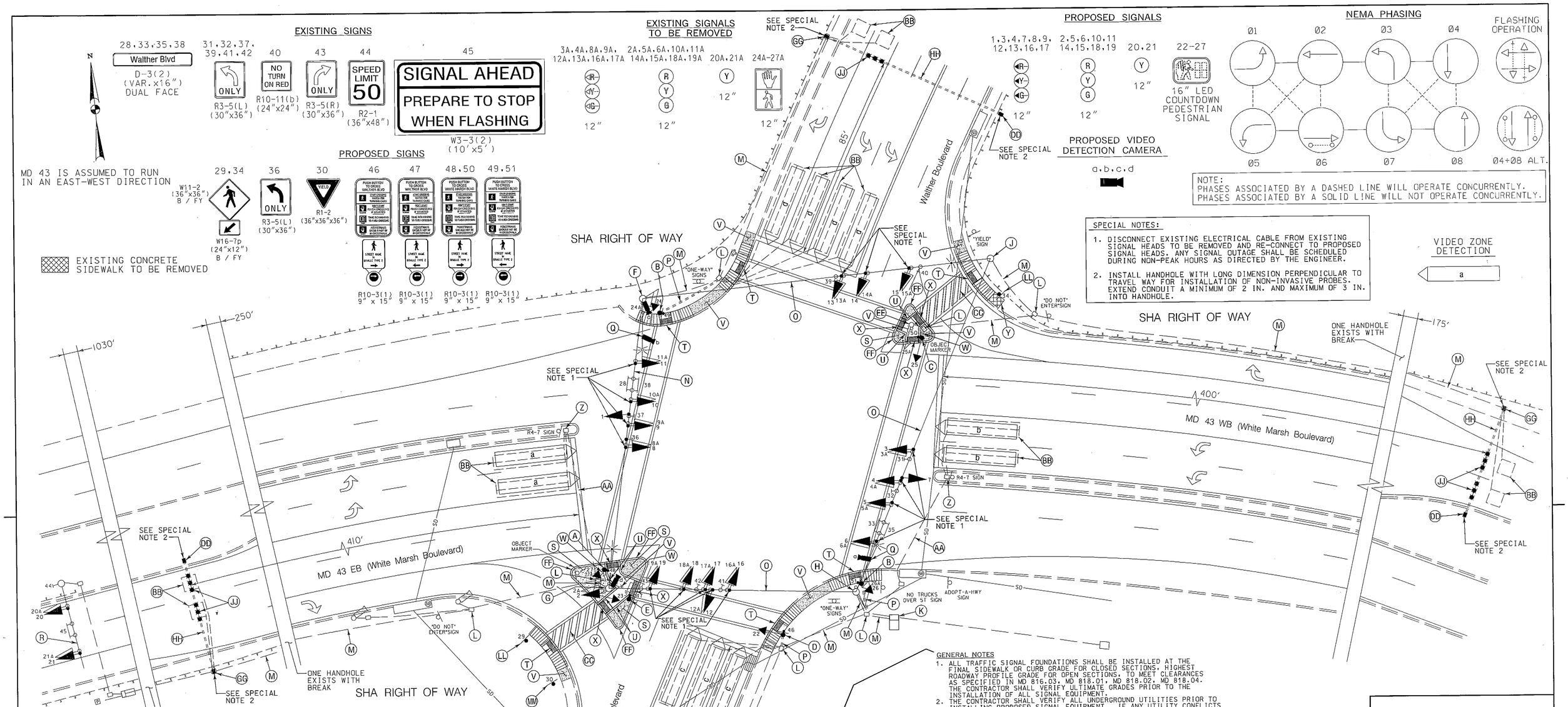

NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

SPECIAL NOTES:

1. DISCONNECT EXISTING ELECTRICAL CABLE FROM EXISTING SIGNAL HEADS TO BE REMOVED AND RE-CONNECT TO PROPOSED SIGNAL HEADS. ANY SIGNAL OUTAGE SHALL BE SCHEDULED DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
2. 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.

CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE 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 WHITE MARSH BLVD"). (INSTALL 1-3 IN. SCHEDULE 80. 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
B. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE 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 WHITE MARSH BLVD"). (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 WHITE MARSH BLVD"). (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 RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WALTHER BLVD"). (INSTALL 1-3 IN. SCHEDULE 80. 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
E. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE 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 WALTHER BLVD"). (INSTALL 1-3 IN. SCHEDULE 80. 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
F. USE EXISTING STRAIN POLE AND INSTALL VIDEO DETECTION CAMERA MOUNTED WITHIN 3 FT. OF TOP OF STRAIN POLE. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD. PUSHBUTTON AND R10-4 SIGN FROM STRAIN POLE AND INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD. CLEAN EXISTING DRILLED HOLES WITH BRUSH AND SPRAY COLD GALVANIZING COMPOUND ON THE AFFECTED AREAS.
G. USE EXISTING STRAIN POLE. INSTALL 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE AND VIDEO DETECTION CAMERA MOUNTED WITHIN 3 FT. OF TOP OF STRAIN POLE. REMOVE EXISTING SIGNAL HEAD. PEDESTRIAN SIGNAL HEADS. PUSHBUTTON AND R10-4 SIGN. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS AND LED SIGNAL HEAD. CLEAN EXISTING DRILLED HOLES WITH BRUSH AND SPRAY COLD GALVANIZING COMPOUND ON THE AFFECTED AREAS.
H. USE EXISTING STRAIN POLE. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD. PUSHBUTTON AND R10-4 SIGN AND INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD. CLEAN EXISTING DRILLED HOLES WITH BRUSH AND SPRAY COLD GALVANIZING COMPOUND ON THE AFFECTED AREAS.
J. USE EXISTING STRAIN POLE AND INSTALL 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE.
K. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER. INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT. (NOTE: SHA FORCES SHALL RETROFIT CONTROLLER EQUIPMENT TO OPERATE VIDEO DETECTION EQUIPMENT).
L. USE EXISTING HANDHOLE.
M. USE EXISTING CONDUIT.
N. USE EXISTING SPAN WIRE AND REMOVE EXISTING SIGNAL HEADS AND INSTALL NEW L.E.D. SIGNAL HEADS AND SIGN AS SHOWN.
O. USE EXISTING SPAN WIRE AND REMOVE EXISTING SIGNAL HEADS AND INSTALL NEW L.E.D. SIGNAL HEADS AS SHOWN.
P. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
Q. INSTALL VIDEO DETECTION ARM ON EXISTING LIGHTING BRACKET ARM AS SHOWN.
R. REMOVE EXISTING SIGNAL HEADS AND INSTALL NEW L.E.D. SIGNAL HEADS ON MAST ARM AS SHOWN.
S. REMOVE EXISTING SIDEWALK AND INSTALL 5 IN. CONCRETE SIDEWALK.
T. REMOVE EXISTING SIDEWALK RAMP AND INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.12) AND DETECTABLE WARNING SURFACE CLAY BRICK PAVERS WITH THE PLACEMENT IN ACCORDANCE WITH STANDARD NO. MD 655.40.
U. REMOVE EXISTING CONCRETE RAMP AND SIDEWALK AND INSTALL MEDIAN CUT-THROUGH AND STANDARD TYPE A COMBINATION CURB AND GUTTER PAN.
V. INSTALL 5 INCH CONCRETE SIDEWALK.
W. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. PRIOR TO POURING THE NEW SIDEWALK.
X. INSTALL DETECTABLE WARNING SURFACE CLAY BRICK PAVERS WITH THE PLACEMENT IN ACCORDANCE WITH STANDARD NO. MD 655.40.
Y. REMOVE EXISTING CONCRETE SIDEWALK. BACKFILL. SEED AND MULCH.
Z. REMOVE EXISTING HANDHOLE.
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. INSTALL 12 IN. HEAT APPLIED. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
DD. INSTALL HANDHOLE.
EE. REMOVE EXISTING PESTRIAN SIGNAL POLE. REMOVE AND DISPOSE OF EXISTING FOUNDATION 12 IN. BELOW GRADE.
FF. REMOVE EXISTING AND INSTALL COMBINATION CONCRETE CURB AND GUTTER (STANDARD NO. MD 620.02 TYPE 'A').
GG. REMOVE EXISTING HANDHOLE AND RE-INSTALL IN-KIND ROTATING HANDHOLE 90 DEGREES TO ROADWAY ON TOP OF EXISTING CONDUIT LEAVING 6 IN. PROTRUDING INTO HANDHOLE.
HH. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
JJ. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.
KK. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 500 FT. LEAD-IN IN PROPOSED 3 IN. CONDUIT.
LL. INSTALL W11-2 (36"x36") B/FY AND W16-7p (24"x12") B/FY SIGNS ON ONE 4 IN. X 6 IN. TREATED WOOD SUPPORT (L=17') AS SHOWN.
MM. INSTALL R2-1 (36"x36"x36") SIGN ON ONE 4 IN. X 6 IN. TREATED WOOD SUPPORT (L=17') AS SHOWN.

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. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
7. THE CONTRACTOR SHALL CONTACT SHA TO SCHEDULE RETROFITTING OF THE CONTROLLER EQUIPMENT IN ORDER TO OPERATE VIDEO DETECTION EQUIPMENT.
8. 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%.
9. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON. NOT CENTER TO CENTER OF POLE.
10. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
11. 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.
12. ALL SIDEWALK RAMPS SHALL BE INSTALLED AS PER STANDARDS MD 655.11 AND MD 655.12.
13. REFER TO SHEET X FOR DIMENSIONS OF SIGNAL EQUIPMENT WITHIN INTERSECTION.
14. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE FROM EXISTING CONDUITS. HANHDOLES AND CONTROLLER CABINET.

TOD NO: XX347-05
SHA NO: BA952A51/B51
MD 43; I-695 to Honeygo Boulevard

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

ORIGINAL ON FILE

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

REVISIONS

D UPGRADE SIGNAL TO APS, CPS AND LED SIGNAL HEADS CONTRACT SHA NO. XX347S185 12/10/2010
SRS NML
C ASBUILT FOR RED LIGHT CAMERA INSTALLATION 3/31/2000
RRZ
B REBUILT MD 43 EB H.I.B. SHA NO. AW2785185 5/1999
WM DJD DAZ BAK TH

PLOTTED: 01-10-2011
FILE: N:\31669-080\CADD\pSG-P001_Wallner.dgn

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

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

MD 43 (White Marsh Boulevard) and Walther Boulevard
White Marsh, MD

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 21989 CONTRACT NO. B-818-502-471

DESIGNED BY A.G.S./P.J.M. COUNTY Baltimore
DRAWN BY A.G.S./P.J.M. LOGMILE 03004300.00
CHECKED BY D.B.S. TIMS NO. K348
F.A.P. NO. TOD NO.

TS NO. 2516 D | DRAWING TSP-1 | OF 4 | SHEET NO. 1 OF 4

BY: sbloss