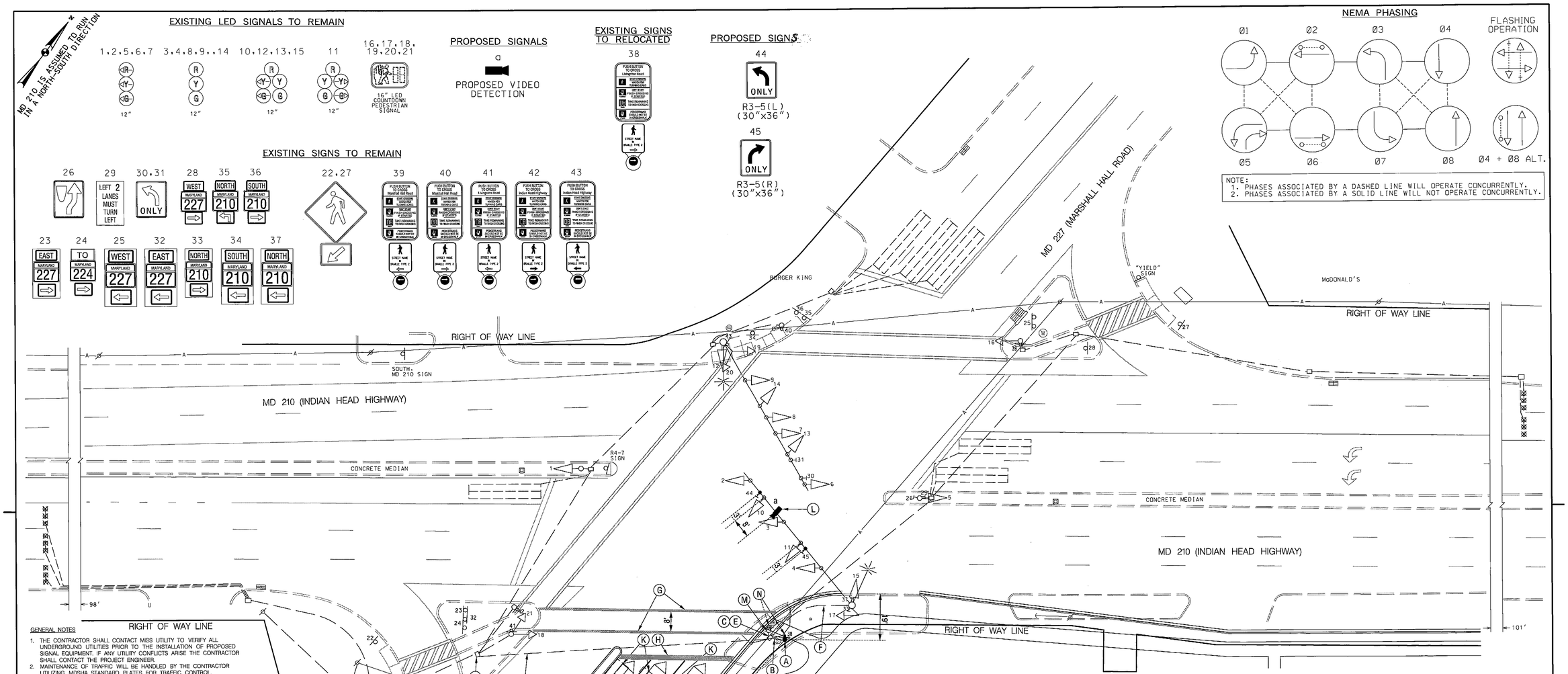

GENERAL NOTES

1. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MOSHA STANDARD PLATES FOR TRAFFIC CONTROL.
3. THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING AND VIDEO PROGRAMMING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES.
4. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
5. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MOSHA STANDARDS.
6. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
7. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
8. PROPOSED GEOMETRIC MODIFICATIONS (ROADWAY WIDENING, MEDIAN CONSTRUCTION, PEDESTRIAN RAMPS, AND DETECTABLE WARNING SURFACES) WILL BE CONSTRUCTED BY THE ROADWAY CONTRACTOR. THE TRAFFIC SIGNAL CONTRACTOR SHALL COORDINATE WITH THE ROADWAY CONTRACTOR AS NECESSARY.
9. THE CONTRACTOR SHALL REMOVE ALL ABANDONED ELECTRICAL CABLE.
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 THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
11. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. x 60 IN. LEVEL LANDING AREA AND DOES NOT HAVE TO REACH MORE THAN 18 IN. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
12. THE 10 FT. MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
13. PUSHBUTTON ARROWS ARE TO BE TURNED PARALLEL TO THE CROSSWALK FOR WHICH THEY ARE INTENDED.

LENHART TRAFFIC CONSULTING
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING
331 Redwood Grove Court Millersville, Maryland 21108
Tel: (410) 987-3888 Fax: (443) 782-2288

GENERAL NOTES (CONT.)

14. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK INSTALLATION.
15. THE CONTRACTOR SHALL REMOVE AND REPLACE CONCRETE SIDEWALK AT THE NEAREST JOINT.
16. THE CONTRACTOR SHALL INTEGRATE PROPOSED CONCRETE FOUNDATIONS WITH NEW SIDEWALK /RAMPS WHERE NECESSARY. THE FOUNDATIONS SHALL BE FLUSH WITH AND PART OF THE FINAL CURB OR SIDEWALK GRADE TO INCREASE ACCESSIBILITY OF PUSHBUTTONS. THE CONTRACTOR SHALL INSTALL ALL CONDUIT PRIOR TO SIDEWALK AND RAMP IMPROVEMENTS.
17. THE CONTRACTOR SHALL MAINTAIN THE EXISTING TRAFFIC SIGNAL OPERATIONS WHILE THE MODIFICATIONS TO THE NORTHEAST QUADRANT ARE BEING CONSTRUCTED.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A PEDESTRIAN DETOUR AS DIRECTED BY THE ENGINEER.
19. THE CONTRACTOR SHALL CENTER THE CROSSWALK ON THE EXISTING OR NEWLY CONSTRUCTED SIDEWALK RAMPS.
20. VIDEO CAMERA "a" SHALL BE PROGRAMMED FOR BOTH PRESENCE AND SETBACK DETECTION.

CONSTRUCTION DETAILS

A. INSTALL 10 FOOT BREAKAWAY PEDESTAL POLE (CUT TO 5 FEET) WITH FOUNDATION SHA STD. MD 801.01-01, BREAKAWAY COUPLINGS, RELOCATED ACCESSIBLE PUSHBUTTON (ARROW RIGHT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS LIVINGSTON ROAD" (NOTE: 1-3 INCH PVC 90 DEGREE BEND)
B. INSTALL 3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED)
C. ADJUST HANDHOLE FRAME TO SIDEWALK GRADE
D. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER
E. USE EXISTING HANDHOLE
F. USE EXISTING CONDUIT
G. INSTALL 12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES (FOR CROSSWALK)
H. INSTALL 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES (FOR STOPLINE)
J. EXISTING EQUIPMENT TO BE REMOVED AS PART OF ROADWAY EXCAVATION OR ABANDONED
K. EXISTING LOOP OR MICROLOOP PROBE TO BE REMOVED BY GRIND OR ABANDONED
L. INSTALL VIDEO DETECTION CAMERA ON EXISTING TRAFFIC SIGNAL STRUCTURE (INSTALL CONTROL CABLE) (SEE NOTE 20)
M. REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (CAP ANY ABANDONED CONDUIT)
N. RELOCATE EXISTING PUSHBUTTON AND SIGN TO NEW PEDESTAL POLE.

NOTE:

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (1) YEAR. SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME, THESE PLANS SHALL BE NULL AND VOID WITH A RE-REVIEW REQUIRED FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

EAPD PERMIT 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

REVISIONS

D SIGNAL MODIFICATION DUE TO WIDENING OF SOUTH LEG AND APS EAST LEG BW996M82 TIMS K928 7/2011
CTC GML 12/07 TIMS K928
G . 04/01/2010 - UPGRADE TO A.P...
SHA. NO. XX4851851 TIMS K093
TRAFFIC ENGR. 12/05 WJB 3/12
F . 05/2001 - REBUILT SIGNAL & CHANGED PAVEMENT MARKINGS ON S/B MD 210 AND E/B & W/B MD 227.
SHA NO. XX1005851 TIMS NO. E126
WJB MAR 3/12 BRK 3/14

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 210 (INDIAN HEAD HIGHWAY) AT
MD 227 (LIVINGSTON ROAD/MARSHALL HALL ROAD)

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' DATE 02/02/1972 CONTRACT NO. AW-628-501-585

DESIGNED BY W. Richardson COUNTY Charles
DRAWN BY W. Richardson LOGMILE 080210005.33
CHECKED BY W. Fitch TIMS NO.
F.A.P. NO. TOD NO.

TS NO. TS-1 H | DRAWING TS-1 OF 2 | SHEET NO. 1 OF 2