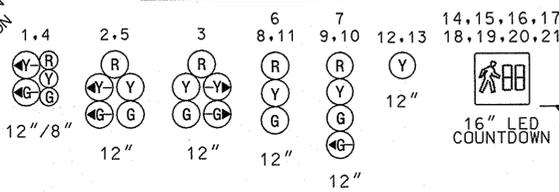
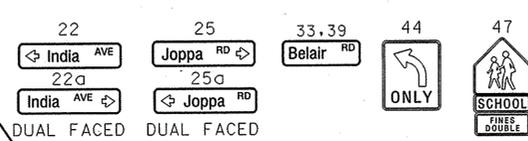


NOTE: US 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

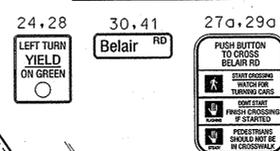
PROPOSED LED SIGNALS



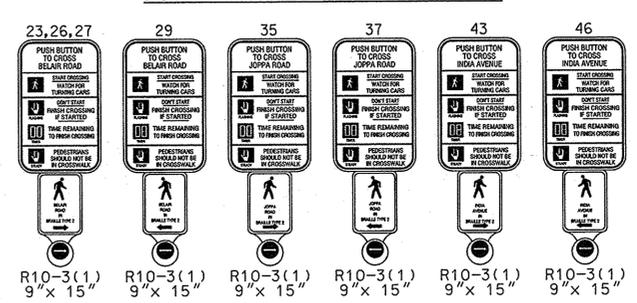
EXISTING SIGNS TO REMAIN



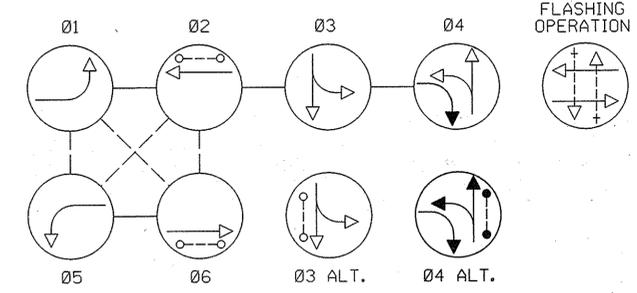
EXISTING SIGNS TO BE REMOVED



PROPOSED AUDIBLE/TACTILE PUSHBUTTON STATION AND SIGNS

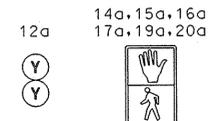


NEMA PHASING

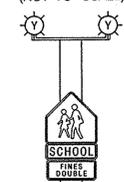


NOTE: PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

EXISTING SIGNALS TO BE REMOVED



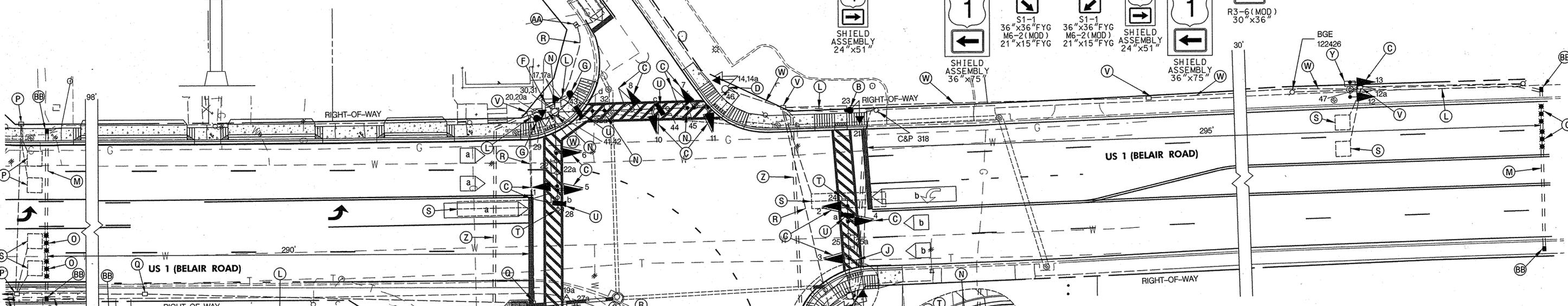
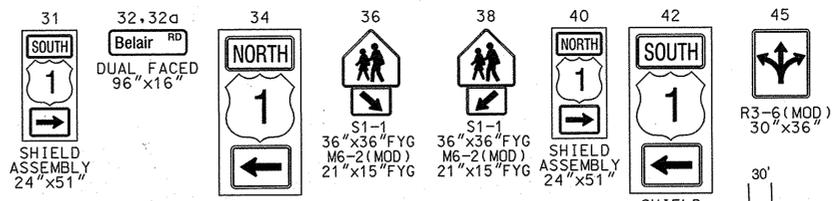
MODIFIED HIB (NOT TO SCALE)



PROPOSED VIDEO DETECTION CAMERA



PROPOSED SIGNS



CONSTRUCTION DETAILS

- A. INSTALL 14 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION, LED TRAFFIC SIGNAL HEAD, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD (MOUNTED AT 10' ABOVE GRADE), AUDIBLE/TACTILE PUSHBUTTON STATION AND SIGN, AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS JOPPA ROAD." (NOTE: 1-3 INCH PVC 90 DEGREE BEND).
- B. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PUSHBUTTON STATION AND SIGN, AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS BELAIR ROAD." (NOTE: 1-3 INCH PVC 90 DEGREE BEND).
- C. REMOVE EXISTING VEHICULAR TRAFFIC SIGNAL HEAD AND INSTALL LED TRAFFIC SIGNAL HEAD.
- D. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD, R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS INDIA AVENUE", AND AUDIBLE/TACTILE PUSHBUTTON STATION AND SIGN ON EXISTING PEDESTAL POLE.
- E. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD, R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS BELAIR ROAD", AND AUDIBLE/TACTILE PUSHBUTTON STATION AND SIGN ON EXISTING SIGNAL POLE.
- F. REMOVE EXISTING PEDESTRIAN SIGNAL HEADS, PUSHBUTTON, AND SIGN, AND INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS ON EXISTING SIGNAL POLE.
- G. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE (CUT TO 5 FT.) WITH SHA STD. MD 801.01 18 IN. FOUNDATION, AUDIBLE/TACTILE PUSHBUTTON STATION AND SIGN, AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS JOPPA ROAD, INDIA AVENUE, OR BELAIR ROAD". CUT, CLEAN, GALVANIZE AND CAP PEDESTAL POLE (NOTE: 1-3 INCH PVC 90 DEGREE BEND).
- H. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION, AUDIBLE/TACTILE PUSHBUTTON STATION AND SIGN, R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS BELAIR ROAD", AND SCHOOL SIGNS. (NOTE: 1-3 INCH PVC 90 DEGREE BEND).
- J. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR PROPOSED UNDERGROUND POWER SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS.
- K. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS. SLOT CONDUIT WHEN CROSSING ROAD.
- L. INSTALL 3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED)
- M. INSTALL 3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED)
- N. INSTALL OVERHEAD SIGN.
- O. INSTALL NON-INVASIVE MICROLOOP PROBE SET.
- P. SEE US 1 AT JOPPA ROAD/EBENEZER ROAD TRAFFIC SIGNALIZATION PLAN.
- Q. REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL EQUIPMENT.
- R. ABANDON EXISTING CONDUIT; CAP AT NEAREST HANDHOLE(S).
- S. ABANDON EXISTING LOOP DETECTOR.
- T. REMOVE OVERHEAD SIGN.
- U. INSTALL VIDEO DETECTION CAMERA ON EXISTING MAST ARM.
- V. USE EXISTING HANDHOLE.
- W. USE EXISTING CONDUIT.
- X. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER. INSTALL 1-4 INCH PVC 90 DEGREE BEND.
- Y. USE EXISTING POLE MOUNTED CABINET AND CONTROLLER.
- Z. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED). TRENCH CONDUIT WHEN SLOTTING IS NOT NECESSARY.
- AA. REMOVE EXISTING ELECTRICAL HANDHOLE.
- BB. INSTALL ELECTRICAL HANDHOLE.

CONSTRUCTION DETAILS CONT.

- CC. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED). USE EXISTING 2 IN. PVC 90 DEGREE BEND IN BASE MOUNTED CABINET.
- DD. INSTALL METERED SERVICE PEDESTAL (NOTE: 2-2 INCH AND 1-4 INCH CONDUIT BENDS).
- EE. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
- FF. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).

GENERAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
2. 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.
3. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
4. 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.
5. THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES.

GENERAL NOTES CONTINUED

6. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
7. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATION.
8. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATION(S) PRIOR TO INSTALLATION.
9. SEE GENERAL INFORMATION SHEET FOR SIGNAL POLE, VIDEO DETECTION CAMERA, CROSSWALK, STOP LINE, SIGN AND SIGNAL HEAD LAYOUTS.
10. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
11. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
12. THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTION TO AVOID THE GAS LINES IN THE SOUTHWEST AND SOUTHEAST CORNERS.
13. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
14. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 IN.
15. 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.
16. 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. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN 0.02.
17. ALL AUDIBLE/TACTILE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7650 TO COORDINATE.
18. THE CONTRACTOR SHALL ENSURE THE EXISTING HAZARD IDENTIFICATION BEACON REMAINS OPERATIONAL UNTIL THE RECONSTRUCTED HAZARD IDENTIFICATION BEACON IS OPERATIONAL. (SEE TRAFFIC CONTROL PLANS FOR DETAILS ON MAINTENANCE OF TRAFFIC.)
19. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E, 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 THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
20. THE SHA SIGNAL SHOP SHALL PROGRAM VIDEO DETECTION CAMERAS (a) AND (b) FOR BOTH PRESENCE AND SAMPLING DETECTION AND VIDEO DETECTION CAMERA (d) FOR BOTH PRESENCE AND SETBACK DETECTION.
21. THE CONTRACTOR SHALL INSTALL ALL HANDHOLES, FOUNDATIONS, AND CONDUIT PRIOR TO PROPOSED SIDEWALK, RAMP, AND FINAL ROADWAY SURFACE.
22. STOP LINES AND CROSSWALKS TO BE INSTALLED BY SIGNING AND PAVEMENT MARKING CONTRACTOR.

STV Incorporated
engineers / architects / planners / construction managers
7125 Ambassador Road Baltimore, MD 21244-2712 (410) 944-9112

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

APPROVALS	REVISIONS
TEAM LEADER	1. INSTALL LED VEHICULAR & CPS HEADS, APS PROBES & NORTH LEG CROSSING
ASST. DIV. CHIEF	2. REVISIONS DUE TO GEOMETRIC IMPROVEMENTS
DIVISION CHIEF	3. REVISIONS DUE TO MOT PLANS
OFFICE DIRECTOR	

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 1 (BELAIR ROAD) AT
INDIA AVENUE / JOPPA ROAD

TRAFFIC SIGNALIZATION PLAN			
SCALE 1" = 20'	DATE 6/16/87	CONTRACT NO. B 115-501-476	
DESIGNED BY	K.B.B.	COUNTY	BALTIMORE
DRAWN BY		LOGMILE	03000119.83
CHECKED BY		TIMS NO.	1425
FAP NO.	SEE TITLE SHEET	TOD NO.	
TS NO. 563C	DRAWING SG - 5 OF 6	SHEET NO. 26 OF 38	

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