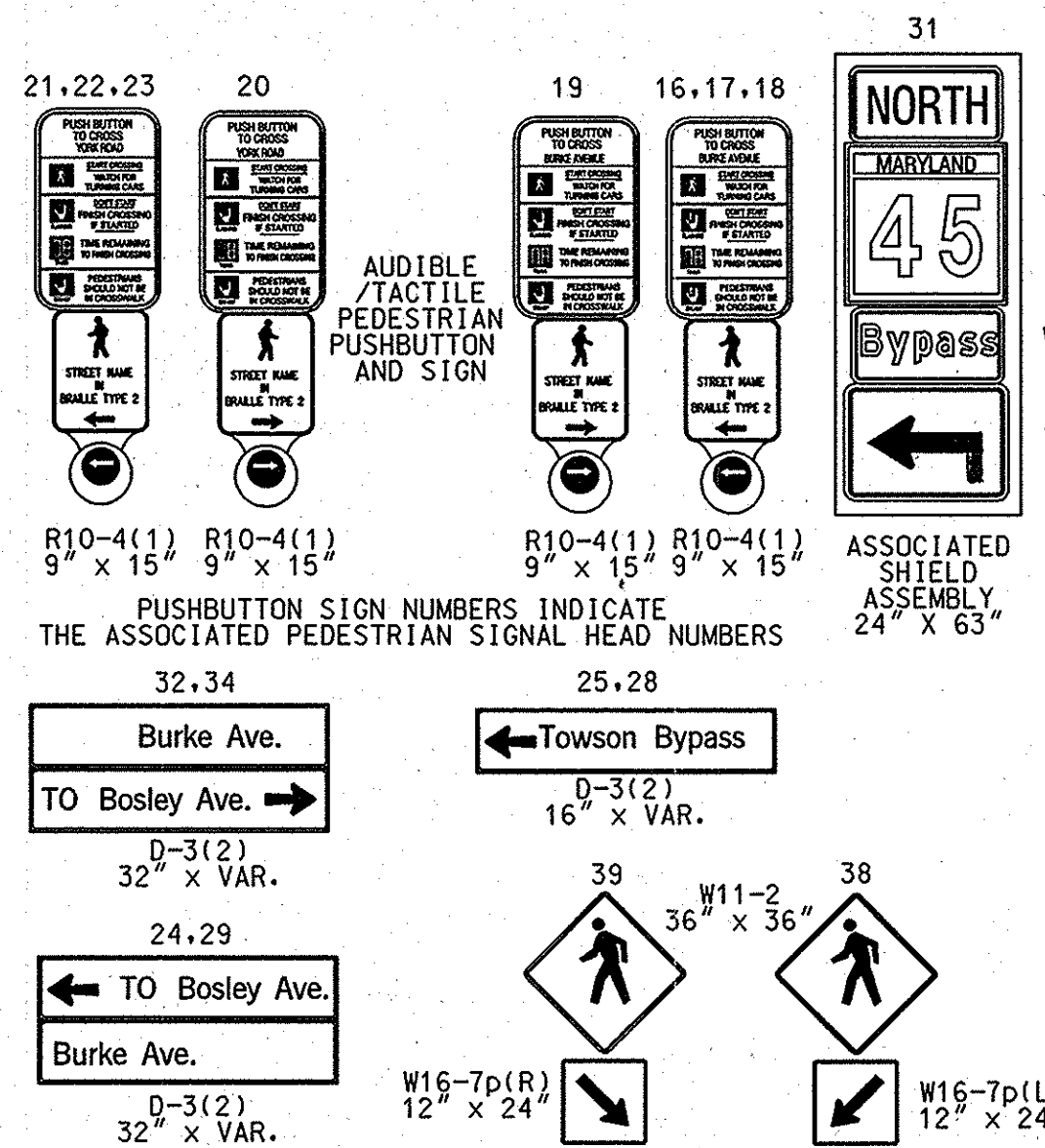


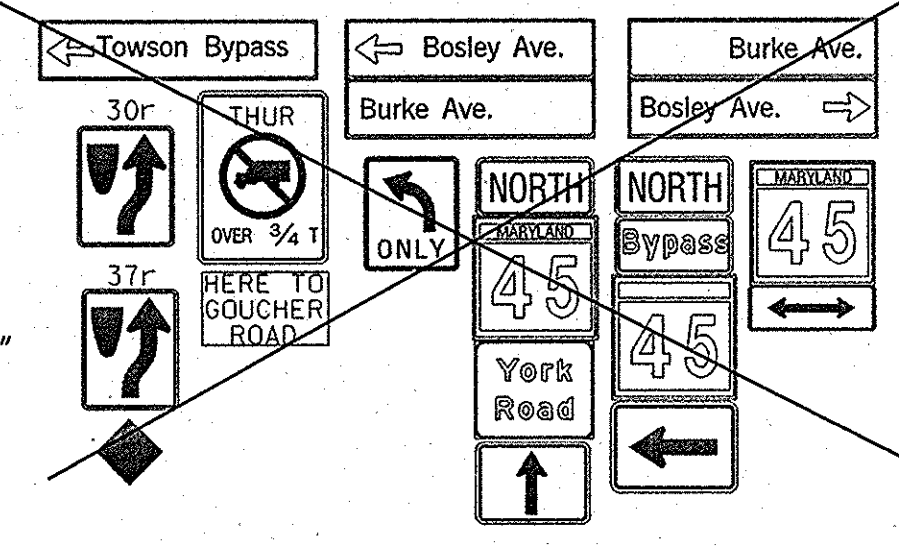
MD 45 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

PROPOSED SIGNS

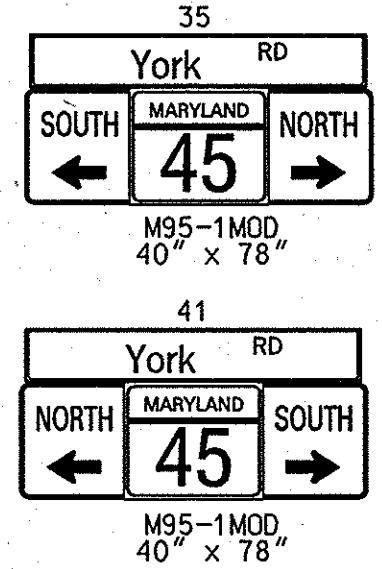


TOD NO:AT912-16
SHA NO:BA633ASC/BSC
MD45@BURKE AVE.

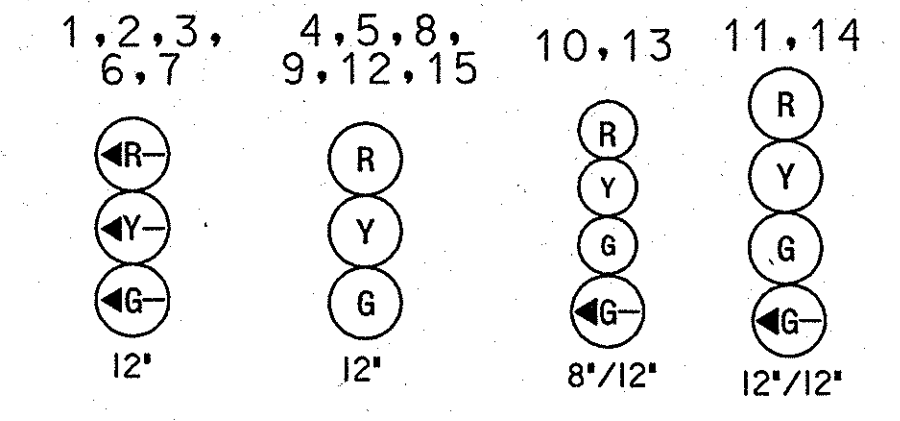
EXISTING SIGNS TO BE REMOVED



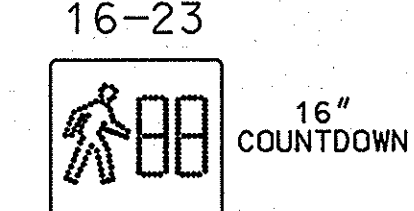
EXISTING SIGNS



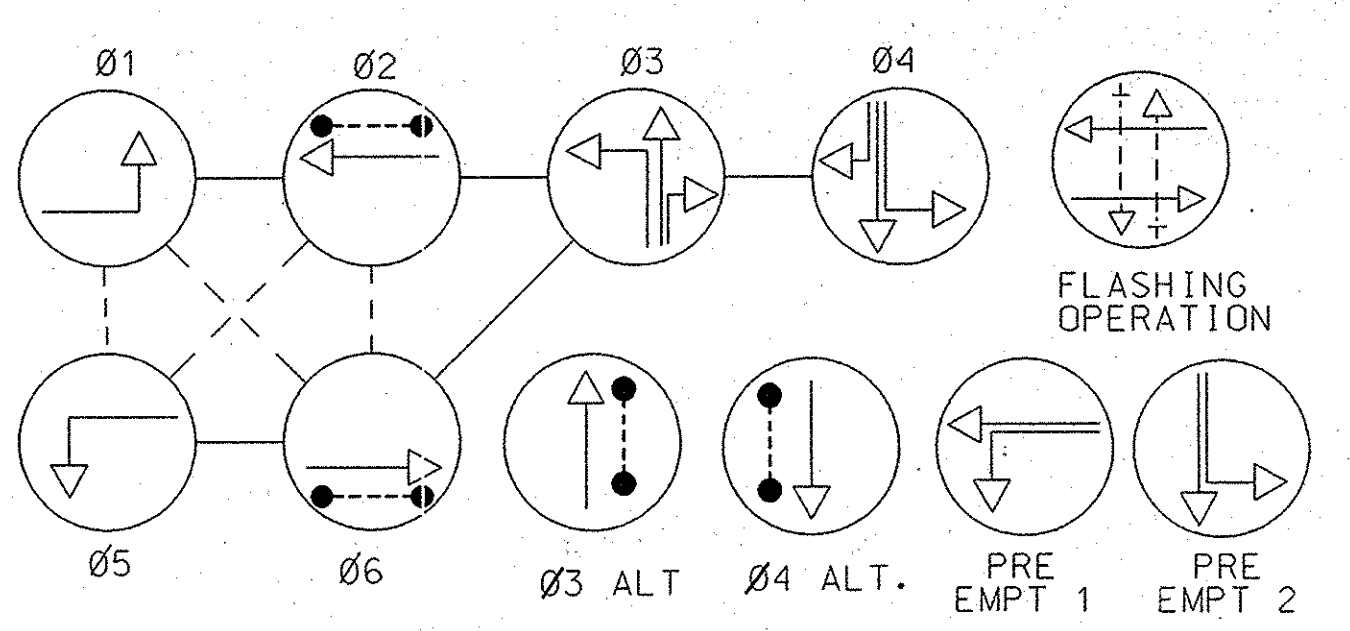
PROPOSED LED SIGNAL HEADS



PROPOSED LED PEDESTRIAN HEADS



NEMA PHASING



NEMA NOTES:

1. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

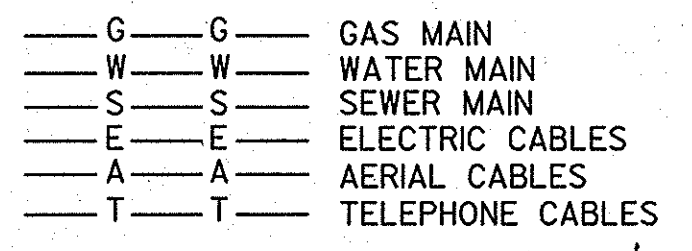
GENERAL NOTES

1. THE CONSTRUCTOR 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. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTION, 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 PROPOSED SIGNAL EQUIPMENT.
3. PUSHBUTTONS ARE TO BE SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60" x 60" LEVEL LANDING AREA. A LEVEL LANDING AREA IS A AREA WITH A CROSS SLOPE OF LESS THEN OR EQUAL TO 2%.
4. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON 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.
5. PROPOSED SIGNAL EQUIPMENT SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF THE SIDEWALK, AND PEDESTRIAN RAMPS, AND THE INSTALLATION OF THE DETECTABLE WARNING SURFACE.
6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE UNUSED CABLES FROM THE EXISTING HANDHOLES AND CONDUIT UTILIZED FOR REVISION 'B'.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
8. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
9. THE CONTRACTOR SHALL CONTACT MR. ROBERT SNYDER, TOD AT 410-787-7631, TO ARRANGE FOR THE TELEPHONE DROP. THE CONTRACTOR SHALL NOTIFY MR. SNYDER THREE (3) DAYS IN ADVANCE OF THE PROJECT COMPLETION AND PROVIDE THE NEAREST ADDRESS.
10. 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".
11. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
12. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
13. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
14. FOR FINAL PAVEMENT MARKINGS REFER TO THE PAVEMENT MARKING PLAN, OTHER THAN THOSE DETAILED ON THE PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MD SHA STANDARDS.
15. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
16. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.

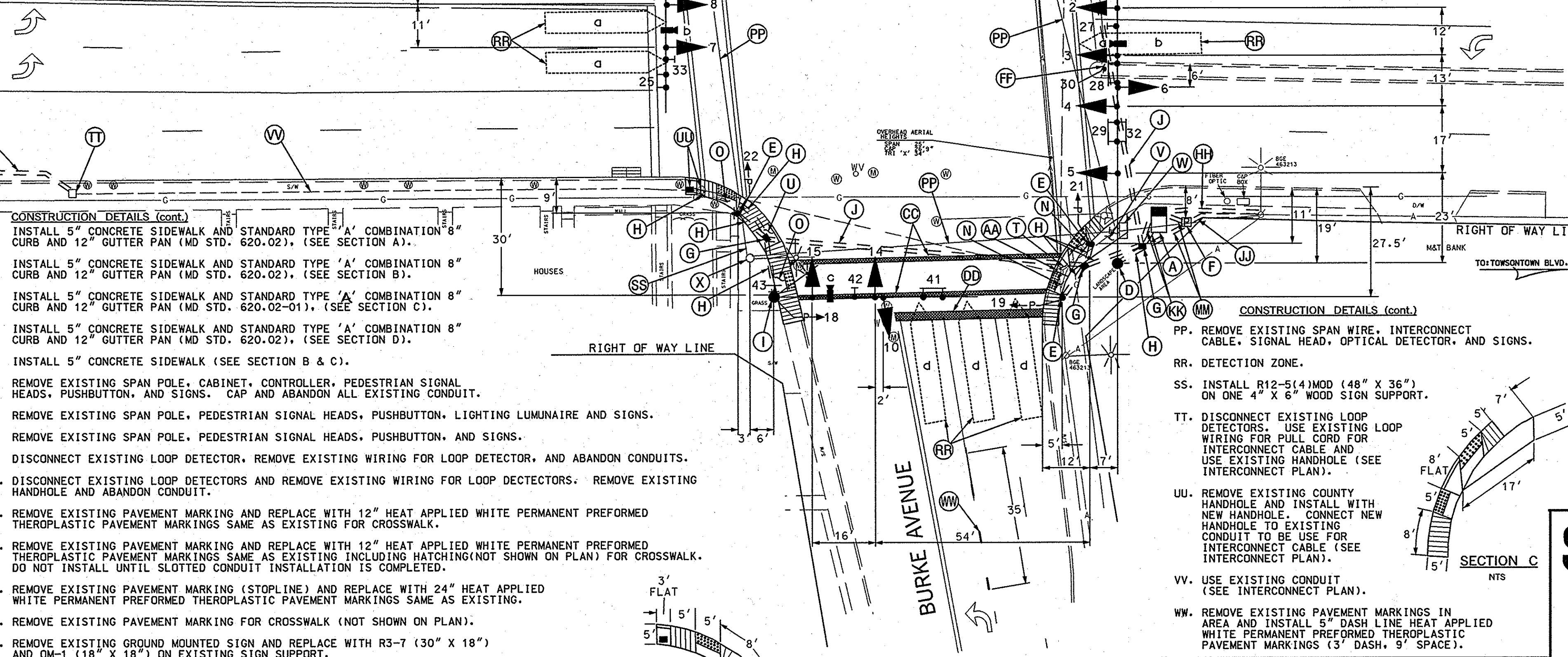
CONSTRUCTION DETAILS

- A. INSTALL NEMA 6 BASE-MOUNTED CABINET AND CONTROLLER WITH NECESSARY EQUIPMENT.
- B. INSTALL 27' STEEL POLE ON 3' x 15' BASE WITH TWIN MAST ARMS (50' AND 70') WITH TRAFFIC SIGNAL HEADS, COUNTDOWN PEDESTRIAN SIGNAL HEADS, AUDIO/PEDESTRIAN PUSHBUTTON SIGNS, OPTICOM DETECTORS, VIDEO DETECTION CAMERAS, 10' LIGHTING ARM AND 250 WATT HPS LUMINAIRE, AND 3" WEATHERHEAD (NOTE: 1-3", 90° PVC SCH. 80 BEND).
- C. INSTALL 27' STEEL POLE WITH 70' MAST ARMS WITH TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS, 10' LIGHTING ARM AND 250 WATT HPS LUMINAIRE, AND 3" WEATHERHEAD (NOTE: 1-3", 90° PVC SCH. 80 BEND).
- D. INSTALL 27' STEEL POLE WITH 70' MAST ARMS WITH TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS, AND 3" WEATHERHEAD (NOTE: 1-3", 90° PVC SCH. 80 BEND).
- E. INSTALL 10' PEDESTAL POLE ON 3' x 18" BASE WITH COUNTDOWN PEDESTRIAN SIGNAL HEADS, AUDIO/PEDESTRIAN PUSHBUTTON AND SIGNS, NOTE: 1-3" 90° PVC BEND).
- F. INSTALL METERED SERVICE PEDESTAL FOR ELECTRICAL SERVICE.
- G. INSTALL HANDHOLE.
- H. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- I. INSTALL 27' STEEL POLE WITH 50' MAST ARMS WITH TRAFFIC SIGNAL HEADS, COUNTDOWN PEDESTRIAN SIGNAL HEADS, AUDIO/PEDESTRIAN PUSHBUTTON SIGNS, VIDEO DETECTION CAMERAS, 10' LIGHTING ARM AND 250 WATT HPS LUMINAIRE, AND 3" WEATHERHEAD (NOTE: 1-3", 90° PVC SCH. 80 BEND).
- J. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.
- K. CONDUCT CLASS II EXCAVATION IN CONCRETE ISLAND FOR SIDEWALK CUT THROUGH, PROPOSED CONDUIT RUNS, AND ISLAND RECONSTRUCTION. ALL CONDUIT AND HANDHOLE WORK SHALL BE DONE AFTER EXCAVATION AND PRIOR TO RECONSTRUCTING CONCRETE ISLAND.
- L. INSTALL STANDARD ISLAND PEDESTRIAN CUT THROUGH (MD STD. 655.21) WITH STANDARD TYPE 'A' CURB (MD STD. 620.02) AND DETECTABLE WARNING SURFACES (MD STD. 655.40) INSTALLED THE LENGTH OF THE OPENING. RECONSTRUCT CONCRETE ISLAND WITH ISLAND BEING EXTENDED 2' FROM EXISTING CURB TO ALIGN WITH ROADWAY. (SEE SECTION A).
- M. INSTALL STANDARD PEDESTRIAN RAMP (MD STD. TYPE 655.12) WITH A DETECTABLE WARNING SURFACE (MD STD 655.40) INSTALLED THE LENGTH OF THE RAMP OPENING (SEE SECTION B).
- N. INSTALL STANDARD PEDESTRIAN RAMP (MD STD. TYPE 655.12) WITH A DETECTABLE WARNING SURFACE (MD STA 655.40) INSTALLED THE LENGTH OF THE RAMP OPENING (SEE SECTION C).
- O. INSTALL STANDARD PEDESTRIAN RAMP (MD STD TYPE 655.12) WITH A DETECTABLE WARNING SURFACE (MD STD. 655.40) INSTALLED THE LENGTH OF THE RAMP OPENING (SEE SECTION D).
- P. INSTALL STANDARD PEDESTRIAN RAMP (MD STD TYPE 655.12) WITH A DETECTABLE WARNING SURFACE (MD STD. 655.40) INSTALLED THE LENGTH OF THE RAMP OPENING.

UTILITY LEGEND



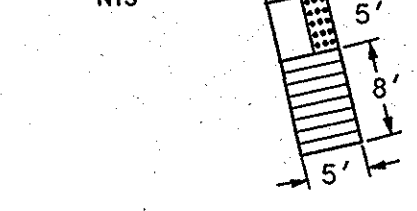
MD 45 (YORK ROAD)



CONSTRUCTION DETAILS (cont.)

- R. INSTALL 5" CONCRETE SIDEWALK AND STANDARD TYPE 'A' COMBINATION 8" CURB AND 12" GUTTER PAN (MD STD. 620.02). (SEE SECTION A).
- S. INSTALL 5" CONCRETE SIDEWALK AND STANDARD TYPE 'A' COMBINATION 8" CURB AND 12" GUTTER PAN (MD STD. 620.02). (SEE SECTION B).
- T. INSTALL 5" CONCRETE SIDEWALK AND STANDARD TYPE 'A' COMBINATION 8" CURB AND 12" GUTTER PAN (MD STD. 620.02-01). (SEE SECTION C).
- U. INSTALL 5" CONCRETE SIDEWALK AND STANDARD TYPE 'A' COMBINATION 8" CURB AND 12" GUTTER PAN (MD STD. 620.02). (SEE SECTION D).
- V. INSTALL 5" CONCRETE SIDEWALK (SEE SECTION B & C).
- W. REMOVE EXISTING SPAN POLE, CABINET, CONTROLLER, PEDESTRIAN SIGNAL HEADS, PUSHBUTTON, AND SIGNS. CAP AND ABANDON ALL EXISTING CONDUIT.
- X. REMOVE EXISTING SPAN POLE, PEDESTRIAN SIGNAL HEADS, PUSHBUTTON, LIGHTING LUMINAIRE AND SIGNS.
- Y. REMOVE EXISTING SPAN POLE, PEDESTRIAN SIGNAL HEADS, PUSHBUTTON, AND SIGNS.
- Z. DISCONNECT EXISTING LOOP DETECTOR. REMOVE EXISTING WIRING FOR LOOP DETECTOR, AND ABANDON CONDUITS.
- AA. DISCONNECT EXISTING LOOP DETECTORS AND REMOVE EXISTING WIRING FOR LOOP DETECTORS. REMOVE EXISTING HANDHOLE AND ABANDON CONDUIT.
- BB. REMOVE EXISTING PAVEMENT MARKING AND REPLACE WITH 12" HEAT APPLIED WHITE PERMANENT PREFORMED THEROPLASTIC PAVEMENT MARKINGS SAME AS EXISTING FOR CROSSWALK.
- CC. REMOVE EXISTING PAVEMENT MARKING AND REPLACE WITH 12" HEAT APPLIED WHITE PERMANENT PREFORMED THEROPLASTIC PAVEMENT MARKINGS SAME AS EXISTING INCLUDING HATCHING(NOT SHOWN ON PLAN) FOR CROSSWALK. DO NOT INSTALL UNTIL SLOTTED CONDUIT INSTALLATION IS COMPLETED.
- DD. REMOVE EXISTING PAVEMENT MARKING (STOPLINE) AND REPLACE WITH 24" HEAT APPLIED WHITE PERMANENT PREFORMED THEROPLASTIC PAVEMENT MARKINGS SAME AS EXISTING.
- EE. REMOVE EXISTING PAVEMENT MARKING FOR CROSSWALK (NOT SHOWN ON PLAN).
- FF. REMOVE EXISTING GROUND MOUNTED SIGN AND REPLACE WITH R3-7 (30" x 18") AND OM-1 (18" x 18") ON EXISTING SIGN SUPPORT.
- GG. INSTALL W11-2 (36" x 36") AND W16-7p(L) (12" x 24") ON ONE 4" x 6" WOOD SIGN SUPPORT. INSTALLATION OF SIGNS AFTER PROPOSED CONDUIT RUN IS INSTALLED.
- HH. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT FOR COMMUNICATION SERVICE - TRENCHED.
- JJ. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT FOR ELECTRICAL SERVICE - TRENCHED.
- KK. INSTALL 2 - 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- LL. SEE INTERCONNECT PLAN.
- MM. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- NN. CONDUCT CLASS II EXCAVATION FOR PROPOSED CONDUIT RUNS AND HANDHOLE. ALL CONDUIT AND HANDHOLE WORK SHALL BE DONE AFTER EXCAVATION AND PRIOR TO RECONSTRUCTING PEDESTRIAN RAMP AND SIDEWALK.

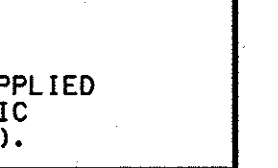
SECTION D



CONSTRUCTION DETAILS (cont.)

- PP. REMOVE EXISTING SPAN WIRE, INTERCONNECT CABLE, SIGNAL HAND, OPTICAL DETECTOR, AND SIGNS.
- RR. DETECTION ZONE.
- SS. INSTALL R12-5(4)MOD (48" x 36") ON ONE 4" x 6" WOOD SIGN SUPPORT.
- TT. DISCONNECT EXISTING LOOP DETECTORS. USE EXISTING LOOP WIRING FOR PULL CORD FOR INTERCONNECT CABLE AND USE EXISTING HANDHOLE (SEE INTERCONNECT PLAN).
- UU. REMOVE EXISTING COUNTY HANDHOLE AND INSTALL WITH NEW HANDHOLE. CONNECT NEW HANDHOLE TO EXISTING CONDUIT TO BE USED FOR INTERCONNECT CABLE (SEE INTERCONNECT PLAN).
- VV. USE EXISTING CONDUIT (SEE INTERCONNECT PLAN).
- WW. REMOVE EXISTING PAVEMENT MARKINGS IN AREA AND INSTALL 5" DASH LINE HEAT APPLIED WHITE PERMANENT PREFORMED THEROPLASTIC PAVEMENT MARKINGS (3" DASH, 9" SPACE).

SECTION C



MT CENTURY
ENGINEERING
CONSULTING ENGINEERS - PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031

APPROVALS		REVISIONS	
TEAM LEADER ASST. DIV. CHIEF DIVISION CHIEF	ORIGINAL PLAN ON FILE	01	RECON. WITH VIDEO DETECTION, 3/2008 OPS, APS, AND NEW INTERCONNECT SHA NO.: AT9125185
		02	CHNG. DISPLAY FOR MD 45 EXCLUSIVE SIGNAL HEADS ENB 03/2005
		03	CHNG. ALL SIG HEADS TO BLK FACED SHA NO.: AT3575185
		04	

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 45 (YORK ROAD) AT BURKE AVENUE
IN TOWSON, MD

TRAFFIC SIGNAL PLAN			
SCALE	1"=20'	DATE	4/21/81
CONTRACT NO.	S-87B	DESIGNED BY	W.R.S.
COUNTY	BALTIMORE	DRAWN BY	EH/CRM
LOGMILE	03004501.60	CHECKED BY	T.I.M.S. NO. H 803
TOD NO.		F.A.P. NO.	
DRAWING NO.	TS-4270C	SG-1 OF	2
SHEET NO.	1 OF	3	