

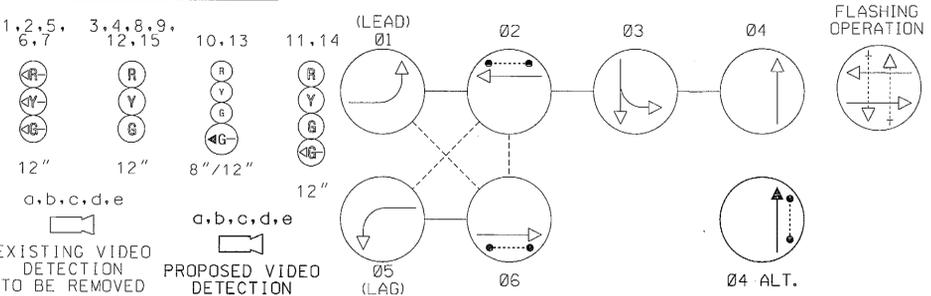
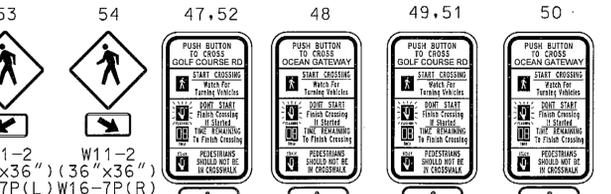
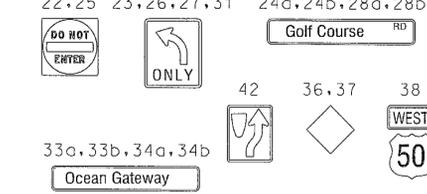
**EXISTING SIGNS**

**PROPOSED SIGNS**

**EXISTING LED SIGNALS**

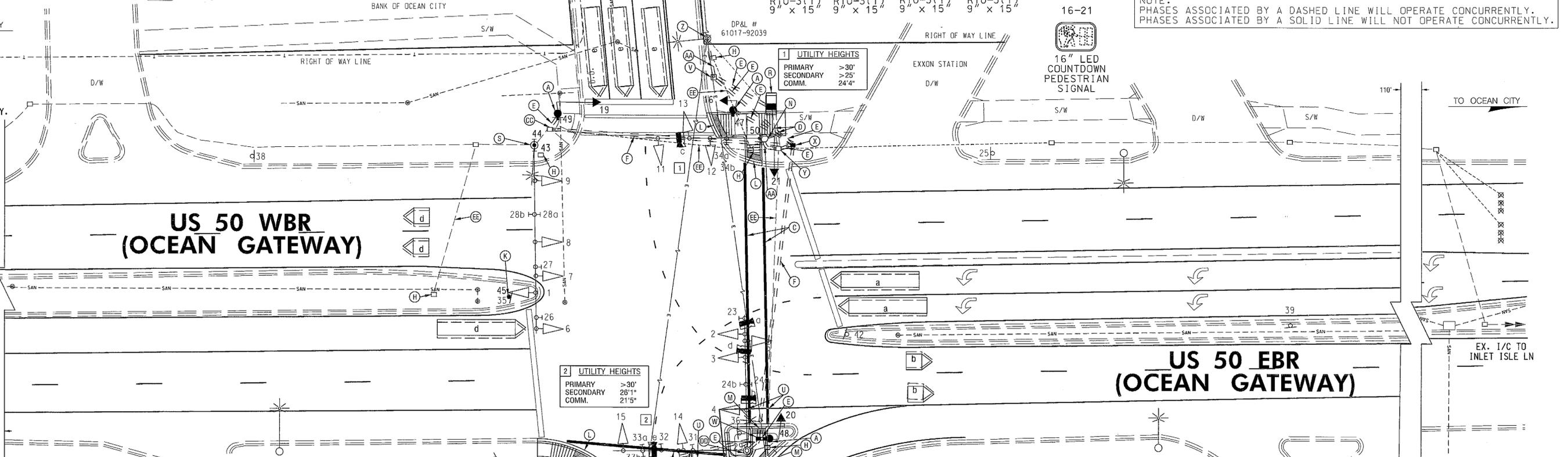
**NEMA PHASING**

**FLASHING OPERATION**



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

**EXISTING SIGNS (TO BE REMOVED)**



**CONSTRUCTION DETAILS**

**CONSTRUCTION DETAILS (CONT'D)**

**CONSTRUCTION DETAILS (CONT'D)**

- A. INSTALL 10 FT. PEDESTAL POLE ON MODIFIED BASE WITH BREAKAWAY COUPLINGS (MD 801.01-01), COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN (NOTE: INSTALL 1-2 IN. 90° PVC SCHEDULE 80 CONDUIT BEND), INCORPORATE CONCRETE FOUNDATION INTO CURB. USE EXISTING HANDHOLE.
- B. INSTALL 12 IN. WHITE HEAT APPLIED PREFORMED THERMOPLASTIC PAVEMENT MARKING (FOR CROSSWALK). USE EXISTING CONDUIT.
- C. INSTALL 12 IN. WHITE HEAT APPLIED PREFORMED THERMOPLASTIC PAVEMENT MARKING (FOR CROSSWALK). USE EXISTING CONDUIT.
- D. USE EXISTING CONDUIT.
- E. INSTALL 2 IN. SCHEDULE 80 PVC CONDUIT - TRENCHED.
- F. INSTALL 4 IN. SCHEDULE 80 PVC CONDUIT - BORED.
- G. REMOVE EXISTING HANDHOLE. CAP AND ABANDON EXISTING CONDUIT.
- H. REMOVE EXISTING HANDHOLE. PULL BACK AND RE-ROUTE CABLES.
- I. INSTALL PROPOSED GROUND MOUNTED SIGN ON ONE 4 IN. X 4 IN. WOOD POST IN SAME LOCATION AS EXISTING SIGN.
- J. INSTALL RAMP PER DETAIL SHEET.
- K. INSTALL CUT-THROUGH PER DETAIL SHEET.
- L. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN ON EXISTING SIGNAL POLE. REWIRE EXISTING SIGNAL HEADS USING PROPOSED CABLE. REPLACE EXISTING VIDEO DETECTION CAMERA WITH PROPOSED VIDEO DETECTION CAMERA IN SAME LOCATION.
- M. ABANDON EXISTING LOOP DETECTORS AND ALL ASSOCIATED CABLE.
- N. REMOVE EXISTING GROUND MOUNT SIGN AND REPLACE IN PROPOSED LOCATION ON 4"x4" WOOD POST.
- O. INSTALL A NEMA SIZE 'S' BASE MOUNTED CABINET ON EXTENDED BASE WITH ALL NECESSARY EQUIPMENT. EXCAVATE BELOW GRADE AND USE EXISTING CONDUIT BEND FOR PROPOSED 2 IN. CONDUIT TO PROPOSED METERED SERVICE Z. PEDESTAL.
- P. REWIRE EXISTING SIGNAL HEADS. INSTALL POLE MOUNTED SIGNS.
- Q. INSTALL 24 IN. WHITE HEAT APPLIED PREFORMED THERMOPLASTIC PAVEMENT MARKING (FOR STOP LINE).
- R. REMOVE EXISTING PAVEMENT MARKING.
- S. INSTALL EMBEDDED METERED SERVICE PEDESTAL (NOTE: INSTALL 1-2 IN. AND 1-3 IN. 90° PVC CONDUIT BEND).
- T. INSTALL ELECTRICAL HANDHOLE. COIL PROPOSED CABLE FOR SIGNAL HEADS UNTIL DAY OF TURN ON AND UTILIZE EXISTING CONDUIT BEND IN POLE FOUNDATION.
- U. INSTALL ELECTRICAL HANDHOLE.
- V. USE EXISTING HANDHOLE. COIL PROPOSED CABLE FOR SIGNAL HEADS UNTIL DAY OF TURN ON AND UTILIZE EXISTING CONDUIT BEND IN POLE FOUNDATION.
- W. USE EXISTING HANDHOLE. COIL PROPOSED CABLE FOR SIGNAL HEADS UNTIL DAY OF TURN ON AND UTILIZE EXISTING CONDUIT BEND IN POLE FOUNDATION.
- X. USE EXISTING HANDHOLE. COIL PROPOSED CABLE FOR SIGNAL HEADS UNTIL DAY OF TURN ON AND UTILIZE EXISTING CONDUIT BEND IN POLE FOUNDATION.
- Y. USE EXISTING HANDHOLE. COIL PROPOSED CABLE FOR SIGNAL HEADS UNTIL DAY OF TURN ON AND UTILIZE EXISTING CONDUIT BEND IN POLE FOUNDATION.
- Z. CAP AND ABANDON EXISTING CONDUIT.
- AA. INSTALL 3 IN. SCHEDULE 80 PVC CONDUIT - TRENCHED.
- BB. INSTALL GROUND MOUNTED SIGN ON 4"x6" WOOD POST.
- CC. USE EXISTING HANDHOLE. COIL PROPOSED CABLE FOR SIGNAL HEADS UNTIL DAY OF TURN ON. PULL BACK AND RE-ROUTE EXISTING MICROLOOP PROBE LEAD-IN CABLE AND EXISTING INTERCONNECT.
- DD. REWIRE EXISTING SIGNAL HEADS USING PROPOSED CABLE. REPLACE EXISTING VIDEO DETECTION CAMERAS WITH PROPOSED VIDEO DETECTION CAMERAS IN SAME LOCATION.
- EE. CAP AND ABANDON EXISTING CONDUIT.

**GENERAL NOTES**

1. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
2. THE CONTRACTOR SHALL MAINTAIN THE CONTINUOUS OPERATION OF ALL INTERCONNECT, VEHICULAR, PEDESTRIAN DETECTORS, AND LIGHTING DEVICES. IF ANY DEVICE IS DAMAGED BY THE CONTRACTOR, IT SHALL BE REPAIRED WITHIN 72 HOURS BY THE CONTRACTOR AT NO COST TO THE SHA AFTER NOTIFICATION BY THE ENGINEER.
3. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18 IN. FROM A 60 IN. X 60 IN. LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%. THE 10' MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
4. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
5. 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 LOCATION UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

**GENERAL NOTES (CONT'D)**

7. 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 THE APPROPRIATE 800 SERIES STANDARD PLATES. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
8. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINAL AND LABELING EACH CABLE. ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY SHA FORCES.

**GEOMETRIC LEGEND**

---	EXISTING
---	PROPOSED

**UTILITY LEGEND**

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

**PARSONS BRINCKERHOFF**

100 S. Charles Street  
Tower 1, 10th Floor  
Baltimore, MD 21201  
(Ph) 410-787-5050  
(Fax) 410-721-4609  
<http://www.pbworld.com>

TOD NO: XX661-43  
SHA NO: W020985C  
US 50 @ Golf Course Road

**APPROVALS**

TEAM LEADER

ASST. DIR. CHIEF

DIVISION CHIEF

OFFICE DIRECTOR

**REVISIONS**

1	ADD ARCS ON NORTH LEG CROSSWALK ON EAST LEG	1/12/2013
2	UPDATE SIGNAL HEADS TO LED	1/12/2013
3	RECONSTRUCT TRAFFIC SIGNAL DUE TO GEOMETRIC CHANGES	1/12/2013

**SIGNALIZATION PLAN SHEET**

SCALE 1" = 20' DATE \_\_\_\_\_ CONTRACT NO. \_\_\_\_\_

DESIGNED BY W. BUDNICHUK, JR. COUNTY WORCESTER

DRAWN BY \_\_\_\_\_ LOGMILE 23005013.31

CHECKED BY W. RICHARDSON TIMS NO. \_\_\_\_\_

F.A.P. NO. \_\_\_\_\_ TOD NO. \_\_\_\_\_

TS NO. 401H DRAWING **SG-01** OF 03 SHEET NO. 01 OF 03