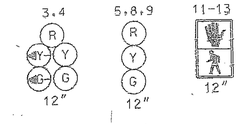
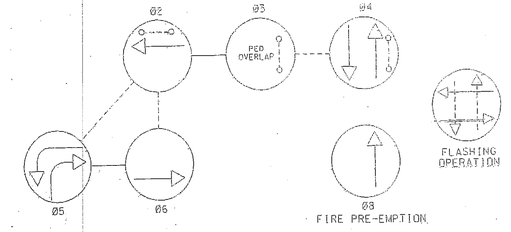
NOTE: MD 450 IS CONSIDERED TO RUN IN AN EAST-WEST DIRECTION.

PROPOSED VIDEO DETECTION CAMERAS A & B

EXISTING SIGNALS

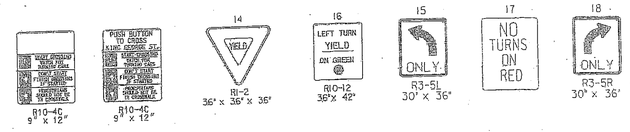


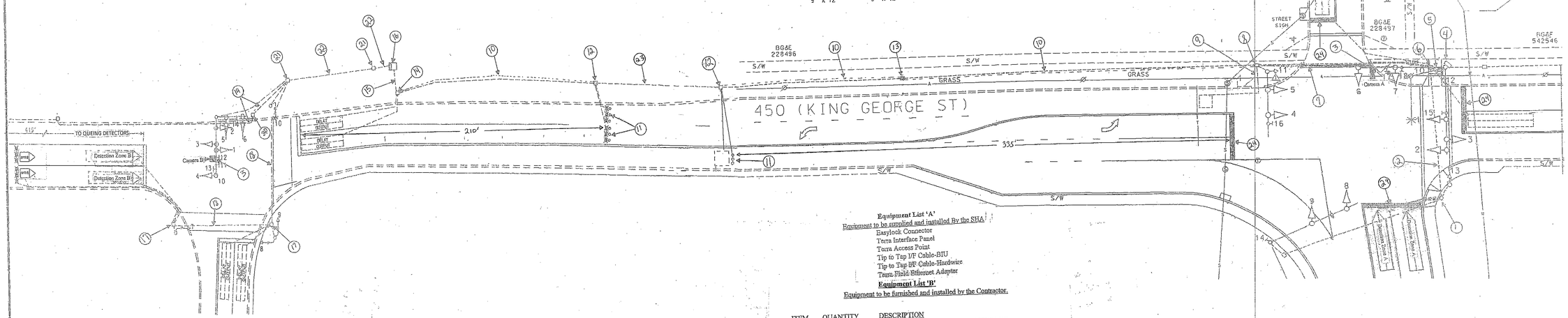
NEMA PHASING



PHASING NOTES:
1.) PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY
2.) PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY

EXISTING SIGNS





Equipment List 'A'

Equipment to be supplied and installed By the SHA

Easylink Connector
Terra Interface Panel
Terra Access Point
Tip to Tap I/F Cable-BIU
Tip to Tap I/F Cable-Hardwire
Terra Field Ethernet Adaptor

Equipment List 'B'

Equipment to be furnished and installed by the Contractor.

ITEM	QUANTITY		DESCRIPTION
1002	1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
2002	10	CY	TEST PIT EXCAVATION
5003	75	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS ANY WIDTH
5004	75	LF	24 INCH WHITE PREFORMED THERMOPLASTICPAVEMENT MARKING LINES
8019	2	EA	F & I VIDEO DETECTION CAMERA W/ 3 WIRE
8020	1	EA	REBUILD HANDHOLE - NEW FRAME & COVER
8021	1	EA	REMOVE & DISPOSE OF EQUIPMENT
8025	10	LF	1 IN. ELECTRICAL CONDUIT- GALVANIZED SLEEVE
8029	695	LF	F & I 12- PAIR COMMUNICATION CABLE JELLY UNDERGROUND
8033	485	LF	UP TO 4 IN. SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
8045	3	EA	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
8059	40	LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)

Equipment List 'C'

Removed and Salvaged Items

NONE

Construction Details

1. Use existing handhole. Remove existing loop detection lead-in cables.
2. Use existing conduit. Remove existing loop detection lead-in cables.
3. Use existing mast arm and upright. Install proposed video detection camera and video detection lead-in cable.
4. Use existing controller cabinet. Remove existing I/C and loop detection lead-in cables for phases 4 & 6. Install proposed I/C, video detection and triple micro loop probe lead-in cables. TOD personnel will install and program video detection interface equipment and re-tune amplifiers after completion of proposed work.
5. Use existing conduit. Remove existing I/C and loop detection lead-in cables for phases 4 & 6. Install proposed I/C and triple micro loop probe lead-in cables.
6. Use existing handhole. Remove existing I/C and loop detection lead-in cables for phases 4 & 6. Install proposed I/C and triple micro loop probe lead-in cables.
7. Use existing conduit. Remove existing I/C and loop detection lead-in cable for phase 6. Install proposed I/C and triple micro loop probe lead-in cables.
8. Use existing handhole. Remove existing I/C and loop detection lead-in cable for phase 6. Install proposed I/C and triple micro loop probe lead-in cables.
9. Test pit this area to avoid damaging existing sample detector.
10. Install 3" schedule 80 polyvinyl chloride electrical conduit (trenched). Install proposed I/C and triple micro loop probe lead-in cables.
11. Install proposed triple micro loop probe set(s).
12. Use existing handhole. Install proposed detector sleeve, I/C and triple micro loop probe lead-in cables.
13. Rebuild existing handhole with new frame and cover. Remove existing I/C and loop detection lead-in cable for phase 6. Install proposed I/C and triple micro loop probe lead-in cables.
14. Use existing handhole. Remove existing I/C cable and triple micro loop probe lead-in cables. Install proposed I/C cable and triple micro loop probe lead-in cables.
15. Use existing conduit. Remove existing I/C cable and triple micro loop probe lead-in cables. Install proposed I/C cable and triple micro loop probe lead-in cables.
16. Use existing controller cabinet. Remove existing loop detection and triple micro loop probe lead-in cables for phase 6. Remove existing triple micro loop probe lead-in cables for phase 2. Install proposed I/C, video detection and triple micro loop probe lead-in cables for phase 2. TOD personnel will install and program video detection interface equipment and re-tune amplifiers upon completion of proposed work.
17. Use existing handhole. Remove existing loop detection and triple micro loop probe lead-in cables for phase 6.
18. Use existing conduit. Remove existing loop detection and triple micro loop probe lead-in cables for phase 6.
19. Use existing conduit. Install proposed video detection lead-in cable.
20. Use existing handhole. Install proposed video detection lead-in cable.
21. Use existing handhole. Remove existing loop detection and triple micro loop probe lead-in cables for phase 6. Install proposed video detection lead-in cables.
22. Use existing conduit. Remove existing loop detection and triple micro loop probe lead-in cables for phase 6. Install proposed video detection lead-in cables.
23. Use existing conduit. Remove existing I/C cable and install proposed I/C cable.
24. Remove existing stopline and re-install in accordance to SHA Standards

PLEASE NOTE: PLAN NOT TO SCALE

TRAFFIC SIGNAL SYMBOLS

PROPOSED		EXISTING
	HANDHOLE	
	LOOP DETECTOR(4X16)	
	LOOP DETECTOR(1X6)	
	CONDUIT	
	MICRO LOOP PROBE SET	
	ZOOM LENS IMAGE SENSOR	

GEOMETRIC LEGEND

PROPOSED
EXISTING

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE — A — A —
ELECTRIC — E — E —
TELEPHONE — T — T —
GAS — G — G —
SEWER — S — S —
WATER — W — W —
CABLE TV — TV — TV —

REVISIONS

A	5/17/13	Installation of video detection. Repair of damaged I/C cable & Conduit OT 2010-05/2013	M059

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 450 AND U.S.N.A. GATE 8 (BOWYER ROAD) / PERRY CIRCLE

DRAWN BY:	J. GORDON	F.A.P. NO.		TS NO.	SHEET NO.
CHECKED BY:		S.H.A. NO.	AA 928X-000-585		1 OF 1
SCALE:		COUNTY:	ANNE ARUNDEL	T.I.M.S. NO.	
DATE:	4/9/14	LOG MILE:	02045013.55	M059	