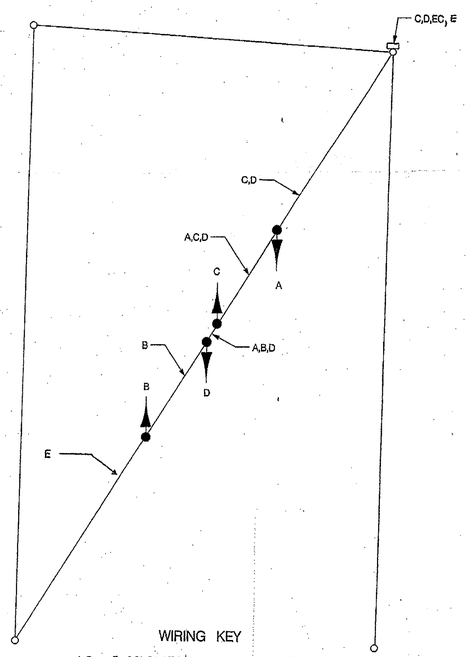
PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 & 5	<G-	<G-	R	R	<G-	<G-	R	R	R	R	R	R
1 & 5 CHANGE	PHASE 1 & 5 CHANGE MAY CHANGE TO PHASE 1 & 6, 2 & 5 OR 2 & 6											
PHASE 1 & 6	<G-	<G-	G	G	<R-	<R-	R	R	R	R	R	R
1 & 6 CHANGE	<Y-	<Y-	Y	Y	<R-	<R-	R	R	R	R	R	R
PHASE 2 & 5	<R-	<R-	R	R	<G-	<G-	G	G	R	R	R	R
2 & 5 CHANGE	<R-	<R-	R	R	<Y-	<Y-	G	G	R	R	R	R
PHASE 2 & 6	<R-	<R-	G	G	<R-	<R-	G	G	R	R	R	R
2 & 6 CHANGE	<R-	<R-	Y	Y	<R-	<R-	Y	Y	R	R	R	R
PHASE 3	<R-	<R-	Y	Y	<R-	<R-	R	R	R	R	G	G
3 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	R	R	Y	Y
PHASE 4	<R-	<R-	R	R	<R-	<R-	R	R	R	G	R	R
4 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	Y	Y	R	R
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



WIRING KEY

A-B	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
C-D	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
EC	EXISTING CABLE
E	VIDEO DETECTION LEAD-IN CABLE

Equipment List 'A'

Equipment to be supplied and installed by SHA.

Communication Panel
TS-2 Mini-Hub
TS-2 Mini-Hub Cables
Industrial 56k Modem
SDLC Cables

Equipment List 'B'

Equipment to be furnished and installed by the Contractor.

ITEM	QUANTITY		DESCRIPTION
1002	1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
5001	235	LF	FURNISH AND INSTALL 24 INCH WHITE PREFORMED THERMOPLASTICPAVEMENT MARKING LINES
5002	235	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS ANY WIDTH
8007	1	EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT
8008	2	EA	VIDEO DETECTION CAMERA & CABLE
8010	10	LF	1 INCH DETECTOR SLEEVE GALVANIZED OR FLEXIBLE LIQUID TIGHT
8014	130	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH SLOTTED
8015	175	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH TRENCHED
8017	4	EA	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE
8018	4	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8020	890	LF	LOOP WIRE ENCASED IN FLEXABLE TUBING (NO. 14 AWG)
8021	225	LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)

Equipment List 'C'

Removed and Salvaged Items

NONE

Construction Details

1. Install proposed handholes aligned to accommodate non-invasive probe sets, 3 inch pvc conduit (slotted in road) and triple micro loop probe sets.
2. Remove existing handhole and install proposed handhole aligned to accommodate non-invasive probe sets.
3. Use existing conduit. Remove existing loop detection lead-in cables and install proposed triple micro loop probe lead-in cables.
4. Install proposed 6'x 30' loop detector (3-6-3 turns).
5. Use existing handhole. Cap and abandon existing detector sleeve and install proposed detector sleeve. Install proposed loop wires and splice to existing loop detection led-in cables.
6. Use existing handhole. Remove existing loop detection lead-in cable and install proposed triple micro loop probe lead-in cables.
7. Use existing strain pole. Remove existing loop detection lead-in cables and install proposed triple micro loop probe lead-in cables.
8. Use existing luminaire arm. Install proposed video detection cameras and video detection lead-in cables. Remove existing video camera and video detection lead-in cable.
9. Use existing span wire. Remove existing loop and video detection lead-in cables. Install proposed video detection and triple micro loop probe lead-in cables.
10. Install 3" schedule 80 polyvinyl chloride electrical conduit (trenched). Install proposed triple micro loop probe lead-in cables.
11. Use existing handhole. Cap and abandon existing detector sleeves and remove existing loop detection lead-in cables.
12. Use existing conduit. Remove existing loop detection lead-in cables.
13. Use existing strain pole. Remove existing loop detection lead-in cable.
14. Use existing span wire. Remove existing loop detection lead-in cable.
15. Use existing luminaire arm. Install proposed video camera and video detection lead-in cable.
16. Use existing handhole. Cap and abandon existing detector sleeve and install proposed detector sleeve. Remove existing loop detection lead-in cables for advanced detection and install proposed triple micro loop probe lead-in cables. Splice proposed loop wires to existing loop detection lead-in cables
17. Use existing controller cabinet. Remove existing loop detection lead-in cables and install proposed triple micro loop probe and video detection lead-in cables. TOD personnel will install and program video detection interface equipment and re-tune amplifiers after completion of proposed detector work.
18. Remove existing stop bar and re-install in accordance to SHA Standards.

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101
FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION
MD 279 AND BELLE HILL ROAD

DRAWN BY: M.HOWELL	F.A.P. NO.		TS NO. 2163-E	SHEET NO. 2 OF 2
CHECKED BY:	S.H.A. NO.	XX1065185		
SCALE: NONE	COUNTY:	CECIL	T.I.M.S. NO.	
DATE: 05/2004	LOG MILE:	07027903.39		

m:\800\01-832\54 md 279 @ bell hll May. 18, 2004 15:21:08