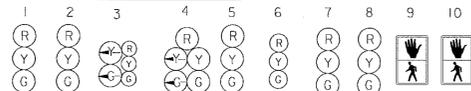
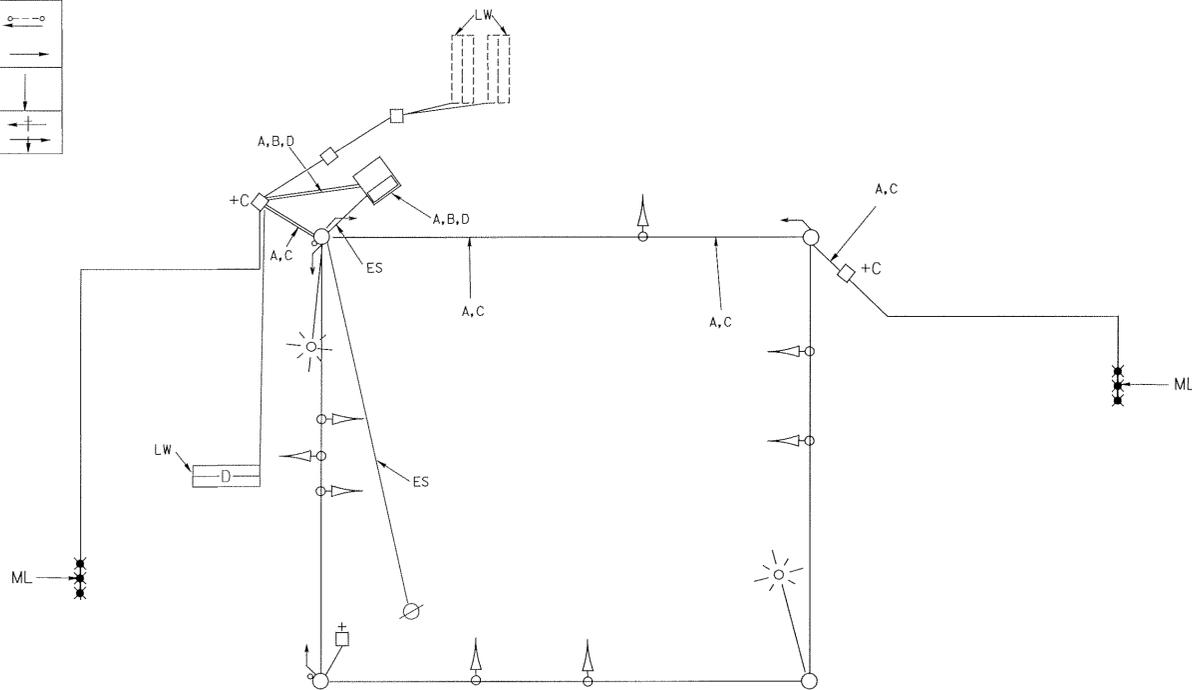


PHASE CHART



PHASE 1+6	R	R	G	G	G	R	R	R	DW	DW	
1+6 CHANGE	R	R	G	G	G	R	R	R	DW	DW	↔
PHASE 2 + 6	G	G	G	G	G	R	R	R	WK	WK	
PED CLEARANCE	G	G	G	G	G	R	R	R	FL/DW	FL/DW	↔
2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	DW	DW	↔
PHASE 4	R	R	R	R	R	G	G	G	DW	DW	
4 CHANGE	R	R	R	R	R	Y	Y	Y	DW	DW	↔
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	↔

WIRING DIAGRAM



WIRING KEY

- A,B } MICRO-LOOP PROBE SET
- C } STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
- LW - LOOP WIRE (NO. 14 A.W.G.)
- ES - EXISTING SERVICE
- + - 3/4" x 10' GROUND ROD
- ML - MICRO-LOOP PROBE SET

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

SPEC. SECTION	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
104	120500	L.S.	MAINTENANCE OF TRAFFIC
805	805011	75 L.F.	FURNISH AND INSTALL 1" GALVANIZED ELECTRICAL CONDUIT FOR DETECTOR SLEEVE
815	862102	830 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
---	860265	4 EACH	RELOCATE EXISTING SIGNAL HEAD
---	800000	35 S.F.	RELOCATE SIGN ON SPAN WIRE OR MAST ARM
---	114245	67 L.F.	FURNISH AND INSTALL 24" WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE (STOP LINE)
810	800000	1 EACH	MICRO-LOOP PROBE SET WITH 500 FT. LEAD-IN
810	800000	1 EACH	MICRO-LOOP PROBE SET WITH 1,000 FT. LEAD-IN
---	800000	2 EACH	UNCOVER SIGNAL HEAD
810	862101	500 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN 1/4" FLEXIBLE TUBING (NO. 14 AWG)
810	861104	15 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR ALUMINUM SHIELDED
---	100000	65 L.F.	FURNISH AND INSTALL 5" WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE

CONSTRUCTION DETAILS

STAGE 3

- A. USE EXISTING CONDUIT.
- B. INSTALL 1" GALVANIZED STEEL ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
- C. USE EXISTING HANDHOLE.
- D. FURNISH AND INSTALL 5" WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE
- E. ABANDON LOOP DETECTOR
- F. RELOCATE SIGNS AND SIGNAL HEADS AS DIRECTED BY THE ENGINEER.
- G. FURNISH AND INSTALL 24" WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE (STOPLINE).
- H. INSTALL MICRO-LOOP PROBE SET WITH 1,000 FT. LEAD-IN.
- I. INSTALL 6' x 30' LOOP DETECTOR ENCASED IN 1/2" FLEXIBLE TUBING (3-6-3 TURNS) QUADRUPOLE TYPE.
- J. DISCONNECT MICRO-LOOP PROBE SET.
- K. INSTALL MICRO-LOOP PROBE SET WITH 500 FT. LEAD-IN.
- L. UNCOVER SIGNAL HEAD.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

- MR. CHARLIE WATKINS
DISTRICT ENGINEER
PHONE: (301) 513-7311
- MR. MAJID SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358
- MR. JOE GECKLE
UTILITY ENGINEER
PHONE: (301) 513-7350
- MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

THE POWER COMPANY REPRESENTATIVE IS:
BALTIMORE GAS AND ELECTRIC COMPANY
MR. JOSEPH G. BUNCH
SUPERVISOR
INDUSTRIAL/COMMERCIAL SERVICES
NEW BUSINESS CONSTRUCTION
PHONE: (410) 859-9030

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC SIGNAL AT MD 197 AND SOUTH LAUREL DRIVE IN PRINCE GEORGE'S COUNTY, MD 197 IS ASSUMED TO RUN IN A NORTH SOUTH DIRECTION.

INTERSECTION OPERATION

I. NORMAL OPERATION

DURING TRAFFIC CONTROL STAGE 3 THE INTERSECTION WILL OPERATE IN A NEMA (4) FOUR-PHASE FULL-TRAFFIC-ACTUATED MODE WITH SOUTHBOUND AND NORTHBOUND MARYLAND 197 APPROACHES OPERATING CONCURRENTLY. THE SOUTH LAUREL DRIVE APPROACH WILL OPERATE ALONE.

MAINTENANCE OF TRAFFIC

THE TRAFFIC CONTROL NUMBERS SHALL BE REFERENCED FOR THE PROJECT

- STANDARD NO. MD-105.00
- STANDARD NO. MD-105.01
- STANDARD NO. MD-105.02
- STANDARD NO. MD-105.101 (FLAGGING OPERATION)
- STANDARD NO. MD-105.103 (INTERSECTION FLAGGING OPERATION)
- STANDARD NO. MD-105.105 (SHOULDER WORK)
- STANDARD NO. MD-105.107 (LANE SHIFT)
- STANDARD NO. MD-105.109 (LANE SHIFT)
- NOTE: STANDARDS TO BE MODIFIED BY REPLACING W21-5 SIGN WITH A W29-1 SIGN (ROAD WORK AHEAD).

ADDENDUM

STAGE 3
TEMPORARY TRAFFIC SIGNALS

SS-7

MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION LOG MILE # 16019711.61

DRAWN BY: SMH
DES. BY: SMH/DLA
CHK. BY: BJH

MD 197 AT SOUTH LAUREL DRIVE
SIGNAL PLAN

COUNTY: PRINCE GEORGE'S

DATE: FEBRUARY, 1999 F.A.P. NO. SEE TITLE SHEET TS/STD. NO.: SHEET NO.
SCALE: N/A S.H.A. NO. N/A 1728B-X3-G11 125D OF 367

RK & K
RUMMEL, KLEPPER & KAHL, LLP
CONSULTING ENGINEERS

81 MOSHER STREET
BALTIMORE, MARYLAND 21217
TEL: (410) 728-2900 FAX: (410) 383-3270

REVISIONS:	APPROVALS:
	CHIEF SIGNAL DESIGN SECTION
	ASST. DISTRICT ENGINEER-TRAFFIC
	CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR OFFICE OF TRAFFIC & SAFETY

February, 1999
Reconstruct Due To New Geometrics. SHA No. N/A