PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the existing traffic control signal at the intersection of MD 214 and Summerfield Blvd./Ritchie Rd. in Prince George's County, Maryland. MD 214 is considered to run in an east/west direction.

II. INTERSECTION OPERATION

The intersection operates in a NEMA six (6) phase, full-traffic-actuated mode. Currently there is an exclusive/permissive left turn phase for the westbound and an exclusive left turn phase for the eastbound movement of MD 214. The westbound left turn phase of MD 214 is to be modified to an exclusive left turn phase. The MD 214 through movements operate concurrently with a concurrent pedestrian movement across both the north and southbound legs of the intersection. The Summerfield Blvd./Ritchie Rd. movements operate as a side street split phase with an actuated pedestrian movement across the east leg of the intersection.

The existing cabinet/controller will be utilized. The existing 2-channel loop detector amplifers are to be replaced with 4-channel rack mounted detectors.

EQUIPMENT LIST

A. Equipment to be furnished by MD-SHA and installed by the Contractor.

Item No.	Quantity	Units	Description
9000	1	EA ★	Detector rack retrofit kit.
9002	7	EA ★	Detector amplifer 4 channel rack mounted.
9004	2	EA ★	Detector rack power supply.
9089	7.5	SF	Flat sheet aluminum sign - silver. [1 each - 30 in. x 36 in. R 3-5(L)
9098	1	EA	Sign hardware - 30 in. form tube.

★ To be installed by MD-SHA Signal Shop.

B. Equipment to be furnished and/or installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Item No.	Quantity	Units	Description
1001	2	EA	Maintenance of traffic per assignment.
2001	2	CY	Test pit excavation.
2002	220	CY	Class 1 excavation.
5002	25	LF	5 in. white HAPPTPM.
6008	330	LF	Monolithic concrete median 4 ft. type A-1.
8021	335	LF	Sawcut for signal loop detector.
8023	5	LF	1 in. liquid tight flexible non-metalic conduit - sleeve.
8026	230	LF	2 in. [schedule 80] PVC electrical conduit -bored.
8033	2	EA	Electrical handhole.
8040	410	LF	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
8041	915	LF	Electrical cable - 2 conductor (aluminium shielded).
8045	255	LF	Electrical cable - 7 conductor (14 AWG).
8053	7.5	SF	Install overhead sign.
8060	1	EA	Remove and dispose of existing material/equipment.
8084	17	EA	12 in. black faced vehicle signal head section - mast.
Neg.	11	TON	2 in. bituminous concrete (asphalt) - Final course.
Neg.	20	TON	4 in. bituminous concrete (asphalt) - base course.
Neg.	810	SY	8 in. crusher run aggregate.

CONTACT LIST

The contact persons for District #3 are as follows:

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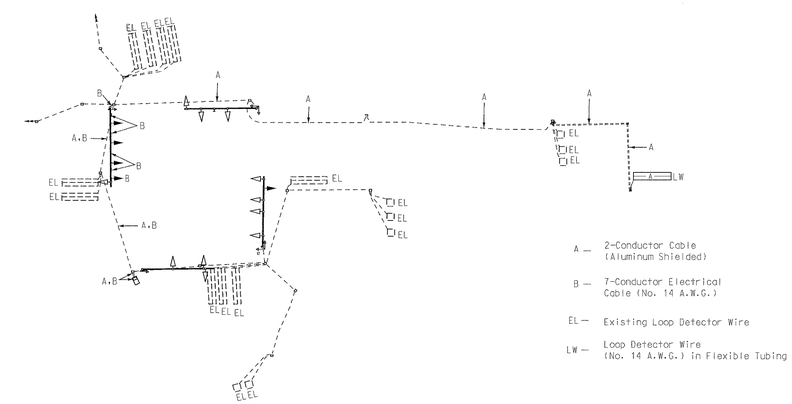
Phase Chart

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20	21,22
Phase 1 & 5	G	G	G	R	R	G	G	R	R	R	R	R	R	R	R	R	DW	DW
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6																		
Phase 1 & 6	G	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW
1 Change	Y	Y	Y	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW
Phase 2 & 5	R	R	R	R	R	G	G	G	G	G	R	R	R	R	R	R	DW	DW
5 Change	R	R	R	R	R	Y	Y	G	G	G	R	R	R	R	R	R	DW	DW
Phase 2 & 6	R	R	R	G	G	R	R	G	G	G	R	R	R	R	R	R	WK	DW
Ped Clearance	R	R	R	G	G	R	R	G	G	G	R	R	R	R	R	R	FL/DW	DW
2 & 6 Change	R	R	R	Y	Y	R	R	Y	Y	Y	R	R	R	R	R	R	DW	DW
Phase 3	R	R	R	R	R	R	R	R	R	R G R Y	R	R	R	G G	G G	G	DW	DW
3 Change	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW
Phase 4	R	R	R	R	R	R	R	R	R	R	G G	G G	G	R	R	R	DW	DW
4 Change	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW
Phase Alt 4	R	R	R	R	R	R	R	R	R	R	G G	G G	G	R	R	R	DW	WK
Ped Clearance	R	R	R	R	R	R	R	R	R	R	G G	G G	G	R	R	R	DW	FL/DW
Alt 4 Change	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW
Flashing Operation	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

Wiring Diagram



Revision " F"

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APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)

MD 214 at Summerfield Blvd./Ritchie Road

DRAWN BY: Frank Hoeckel	F.A.P. NO. N/A	TS NO. 399F-GI	SHEET NO.
CHECKED BY:	S.H.A. NO. ~~D930-651A/B&H~~		
SCALE: N/A	COUNTY: Prince George's	T.I.M.S. NO. D934	2 OF 2
DATE: October 10, 2000	LOG MILE: 16021402.76		

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