FHWA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TO SHE
3	MD.	SEE TITLE SHEET		

Intersection Operation

The existing cabinet and controller are to be utilized. The phasing is to be modified to include concurrent pedestrian movements with the MD 355 through movements, across the east and west legs of the intersection. An actuated pedestrian movement is to be included across the north leg of the intersection and operate with the shopping center movement.

Construction Details

A. Use existing handhole.

B. Install 1 in. liquid tight, non–metallic conduit for loop detector sleeve.

C. Install 6 ft. x 30 ft. quadrupole type vehicle loop detector (2–4–2 turns).

D. Install 6 ft. x 6 ft. vehicle loop detector (3 turns).

E. Use existing conduit.

F. Use existing strain pole. Install pedestrian signal head and pedestrian sign.

G. Use existing strain pole. Install pedestrian signal heads, pedestrian pushbutton, and pedestrian signs.

H. Use existing span wire.

J. Use existing span wire, relocate existing signal heads as shown. Install signs as shown.

K. Install 12 in. preformed white pavement marking for pedestrian crossing.

L. Install 24 in. preformed white pavement marking for stop line.

M. Existing cabinet/controller are to be utilized.

N. Use existing handhole and splice new loopwire to existing 2–conductor aluminum shielded cable.

O. Use existing loop detector sleeve.

P. Use existing span wire, install sign as shown.

Equipment List "A"

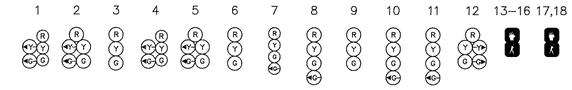
Equipment to be supplied by SHA.

Quantity	Unit	Description
2	EA	12 in., two–way, two section (Symbolic WK,DW) adjustable pedestrian signal head – pole mount.
2	EA	12 in., one–way, two section (Symbolic WK,DW) adjustable pedestrian signal head – pole mount.
2	EA	Pedestrian pushbutton assembly
63.3	SF	Sheet aluminum signing. [To consist of six 9 in. x 12 in. R10–3C signs for pole mounting, and four 16 in. x Var. D3–2 and one 16 in. x Var. (Dual Faced) D3–2 signs for span wire mounting.]

Equipment List "B"

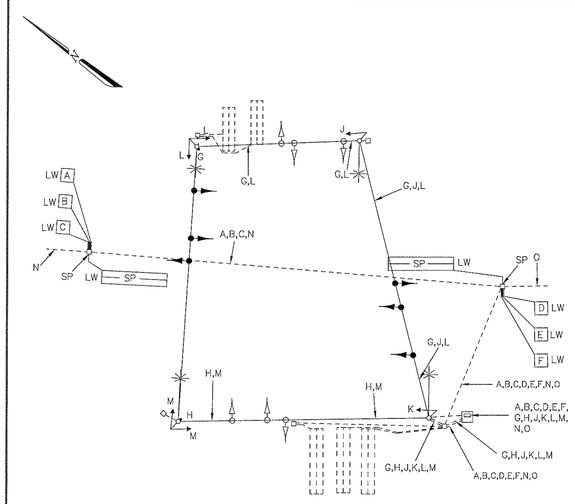
Equipment to be furnished and/or installed by the Contractor.

Quantity	Unit	Description
800	LF	12 in. preformed white pavement marking for pedestrian crossing.
100	LF	24 in. preformed white pavement marking for stop line.
525	LF	Sawcut for signal loop detector.
1375	LF	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
40	LF	1 in. liquid tight, flexible, non–metallic conduit for loop detector sleeve.
1150	LF	2–conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
525	LF	2–conductor electrical cable (No. 14 A.W.G.).
275	LF	3–conductor electrical cable (No. 14 A.W.G.).
550	LF	5–conductor electrical cable (No. 14 A.W.G.)
4	EA	Relocate existing traffic signal head – span wire mount.
2	EA	Loop detector splice.
58.8	SF	Install sheet aluminum signing – overhead mount.
4.5	SF	Install sheet aluminum signing – pole mount.
6	EA	Install pedestrian signal head – pole mount.
2	EA	Install pedestrian pushbutton.



	1	2	3	4	5	6	7	8	9	10	11	12	13–16	17,18
Phase 1 & 5	R ← G —	R ← G —	R	R ← G —	R ← G —	R	R	R	R	R	R	R — G →	DW	DW
1 & 5 Change To Phase 1 & 6 or Phase 2 & 5														
Phase 1 & 6	G ← G —	G ← G —	G	R	R	R	R	R	R	R	R	R — G →	DW	DW
1 Change	G ← Y —	G ← Y —	G	R	R	R	R	R	R	R	R	R — Y →	DW	DW
Phase 2 & 5	R	R	R	G ← G —	G ← G —	G	R	R	R	R	R	R	DW	DW
5 Change	R	R	R	G ← Y —	G ← Y —	G	R	R	R	R	R	R	DW	DW
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	WK	DW
Ped Clearance	G	G	G	G	G	G	R	R	R	R	R	R	FL/DW	DW
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW
Phase 3	R	R	R	R	R	R	G ← G —	G ← G —	G	R	R	R	DW	DW
3 Change	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW
Phase Alt. 3	R	R	R	R	R	R	G ← G —	G ← G —	G	R	R	R	DW	WK
Ped Clearance	R	R	R	R	R	R	G ← G —	G ← G —	G	R	R	R	DW	FL/DW
Alt. 3 Change	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW
Phase 4	R	R	R	R	R	R	R	R	R	G ← G —	G ← G —	G	DW	DW
4 Change	R	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

Phase Chart



Wiring Diagram

Ultimate Traffic Control Signal

Sheet 20 of 5

Revision 'A'

A/E GROUP, INC.
CONSULTING ENGINEERS • PLANNERS
11409 CRONHILL DRIVE
OWINGS MILLS, MD. 21117
(410) 363–1908
A/E JOB NO: 94–284

REVISIONS

(A) November 6, 1995
Rebuild to new geometrics.
S.H.A. No.: M 611–501–371

APPROVALS

CHIEF, SIGNAL DESIGN SECTION

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, OFFICE OF TRAFFIC & SAFETY

ORIGINAL ON FILE

MDOT – STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

SIGNAL # 15035516.65

DRAWN BY: C. Buitrago
DES. BY: D. Renshaw
CHK. BY: D. Doda

MD 355 at Professional Drive

COUNTY: MONTGOMERY

DATE: October 13, 1988
SCALE: N/A

F.A.P. NO. N/A
S.H.A. NO. BW–357–802–312

TS/STD. NO. 2517A-GI

SHEET NO. ____ OF ____