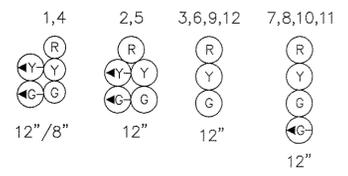
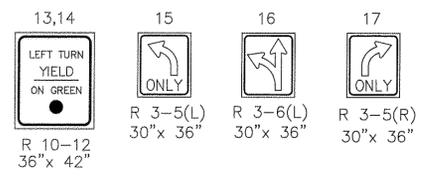


FHWA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
3	MD.	SEE TITLE SHEET		

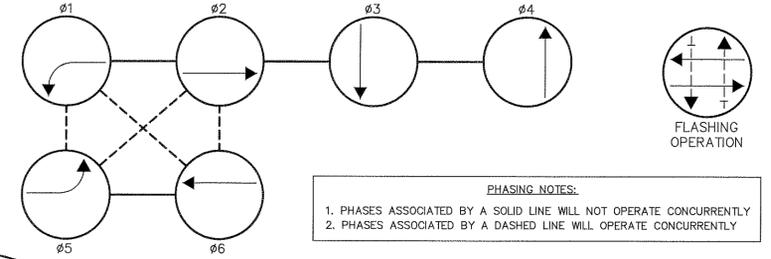
SIGNALS



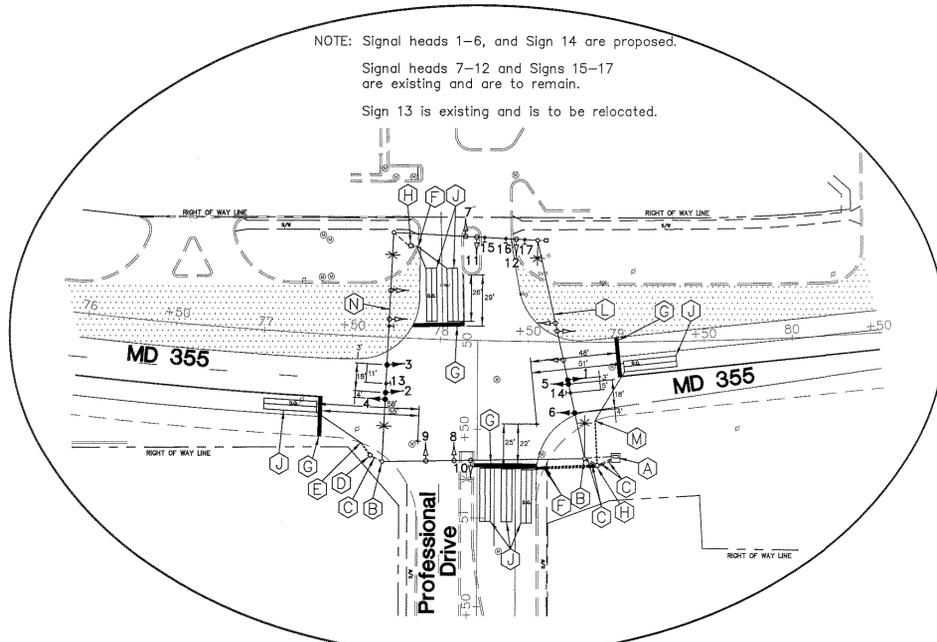
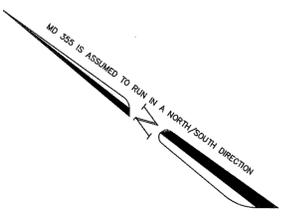
SIGNS



NEMA PHASING

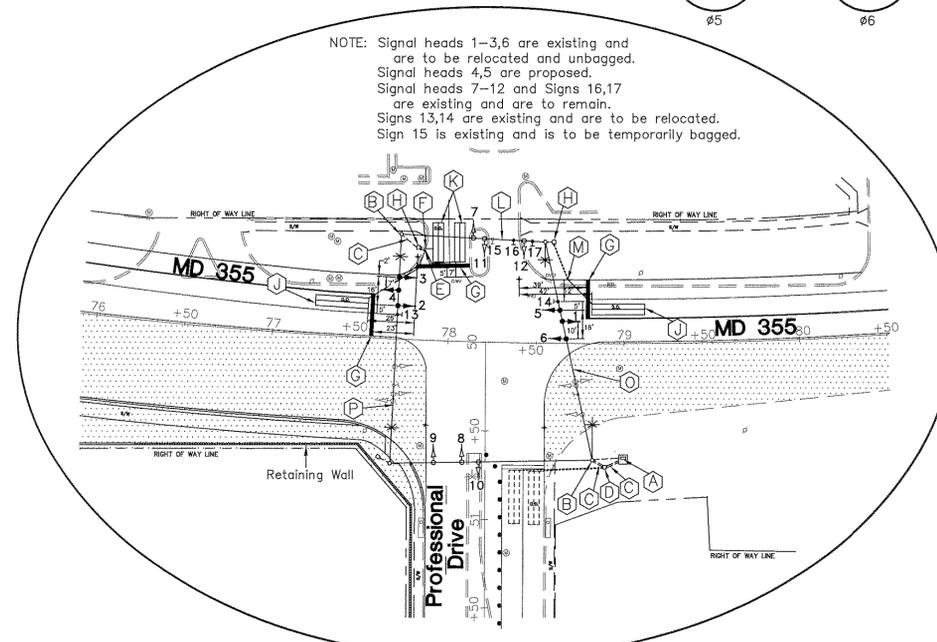


PHASING NOTES:
 1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY
 2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY



NOTE: Signal heads 1-6, and Sign 14 are proposed.
 Signal heads 7-12 and Signs 15-17 are existing and are to remain.
 Sign 13 is existing and is to be relocated.

Maintenance of Traffic Phase 1, Stage 2



NOTE: Signal heads 1-3,6 are existing and are to be relocated and unbagged.
 Signal heads 4,5 are proposed.
 Signal heads 7-12 and Signs 16,17 are existing and are to remain.
 Signs 13,14 are existing and are to be relocated.
 Sign 15 is existing and is to be temporarily bagged.

Maintenance of Traffic Phase 1, Stage 3

1 2 3 4 5 6 7 8 9 10 11 12

Phase 1 & 5	R	R	R	R	R	R	R	R	R	R	R	R	R
1 & 5 Change To Phase 1 & 6 or Phase 2 & 5	G	G	G	G	G	G	G	G	G	G	G	G	G
Phase 1 & 6	G	G	G	R	R	R	R	R	R	R	R	R	R
1 Change	G	G	G	R	R	R	R	R	R	R	R	R	R
Phase 2 & 5	R	R	R	G	G	G	G	G	G	G	G	G	G
5 Change	R	R	R	G	G	G	G	G	G	G	G	G	G
Phase 2 & 6	G	G	G	G	R	R	R	R	R	R	R	R	R
2 & 6 Change	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Phase 3	R	R	R	R	R	R	R	R	R	R	R	R	R
3 Change	R	R	R	R	R	R	R	R	R	R	R	R	R
Phase 4	R	R	R	R	R	R	R	R	R	R	R	R	R
4 Change	R	R	R	R	R	R	R	R	R	R	R	R	R
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R							

Phase Chart

Intersection Operation
 The existing cabinet and controller are to be utilized. The phasing is to be modified to include an exclusive/permissive left turn for the southbound movement of MD 355.

Construction Details

A. Existing cabinet/controller are to be utilized.
 B. Use existing strain pole.
 C. Use existing conduit.
 D. Use existing handhole.
 E. Install 1 in. liquid tight, non-metallic conduit for loop detector sleeve.
 F. Use existing loop detector sleeve.
 G. Install 24 in. preformed white pavement marking for stop line.
 H. Use existing handhole and splice new loopwire to existing 2-conductor aluminum shielded cable.
 J. Install 6 ft. x 30 ft. quadrupole type vehicle loop detector (2-4-2 turns).
 K. Install 6 ft. x 22 ft. quadrupole type vehicle loop detector (2-4-2 turns).
 L. Use existing span wire. Install traffic signal heads, and signs. Temporarily bag existing signal heads.
 M. Install 1 in. galvanized steel conduit for loop detector sleeve.
 N. Use existing span wire. Install polycarbonate signal heads. Relocate existing sign as shown. Temporarily bag existing signal heads.
 O. Use existing span wire. Unbag polycarbonate signal heads. Temporarily bag existing signal heads. Relocate existing sign.
 P. Use existing span wire. Unbag signal heads. Temporarily bag polycarbonate signal heads. Relocate existing sign.

Equipment List "A"

Equipment to be supplied by the SHA.

Quantity	Unit	Description
1	EA	8 in./12 in., one-way, five section (8 in. R,Y,G/12 in. YA,GA) polycarbonate adjustable vehicle signal head - span wire mount.
2	EA	8 in./12 in., one-way, five section (8 in. R,Y,G/12 in. YA,GA) adjustable vehicle signal head - span wire mount.
1	EA	12 in., one-way, three section (R,Y,G) polycarbonate adjustable vehicle signal head - span wire mount.
1	EA	12 in., one-way, three section (R,Y,G) adjustable vehicle signal head - span wire mount.
1	EA	12 in., one-way, five section (R,Y,YA,G,GA) polycarbonate adjustable vehicle signal head - span wire mount.
2	EA	12 in., one-way, five section (R,Y,YA,G,GA) adjustable vehicle signal head - span wire mount.
10.5	SF	Sheet aluminum signing. [To consist of one 30 in. x 36 in. R10-12 sign for span wire mountings.]

Equipment List "B"

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

Quantity	Unit	Description
180	LF	24 in. preformed white pavement marking for stop line.
1300	LF	Sawcut for signal loop detector.
3575	LF	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
50	LF	1 in. galvanized steel conduit for loop detector sleeve.
20	LF	1 in. liquid tight, flexible, non-metallic conduit for loop detector sleeve.
550	LF	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
4	EA	Relocate existing traffic signal head - span wire mount.
8	EA	Loop detector splice.
8	EA	Install traffic signal head - span wire mount.
10.5	SF	Install sheet aluminum signing - overhead mount.
31.5	SF	Relocate existing sheet aluminum signing - overhead mount.
11	EA	Temporarily bag existing signal head.
1	EA	Temporarily bag existing overhead sign.
1	LS	Removal of existing traffic signal equipment.

Equipment List "C"

Equipment to be removed by the contractor and delivered to the MCDOT Systems Technical Center, 1283 Seven Locks Road, Building "C", Rockville MD 20852. A twenty-four (24) hour notice is required prior to delivery. Contact Mr. Emil Wolanin at (301) 217-2208.

Quantity	Unit	Description
1	EA	Traffic signal head.

GEOMETRIC LEGEND

==== EXISTING GEOMETRICS
 ===== PROPOSED GEOMETRICS

UTILITY LEGEND

— G — G — GAS MAIN
 — W — W — WATER MAIN
 — S — S — SEWER MAIN
 — D — D — STORM DRAIN
 — E — E — ELECTRIC CABLES
 — A — A — AERIAL CABLES
 — T — T — TELEPHONE CABLES
 — C — C — CABLE TELEVISION

- NOTES**
- 1."D.O." indicates delay output loop detector.
 2. Proposed geometrics shall be confirmed prior to the installation of signal equipment.
 3. Loop detectors and conduit shall be installed prior to the installation of pavement markings.
 4. Pavement markings detailed are proposed and are to be installed by the contractor in accordance with S.H.A. standards. All other pavement markings not detailed will be installed as part of the highway contract.
 5. Revision 'A' is a revision to the traffic signal built in October, 1988 under Contract S.H.A. No.: BW-357-802-312.
 6. All utilities are shown in their approximate location and are not to be considered as complete. The Contractor shall be responsible for contacting Miss Utility to verify the locations of all utilities. The Contractor shall contact the appropriate personnel prior to construction to avoid potential conflicts so that field adjustments can be made.
 7. Interconnect shall be maintained at all times.



Revision 'A'

11409 CRONHILL DRIVE
 OWINGS MILLS, MD. 21117
 (410) 363-1908
 A/E JOB NO: 94-264

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

November 6, 1995
 Rebuild to new geometrics.
 S.H.A. No.: W 611-501-371

Sheet 14 of 52

MDOT - STATE HIGHWAY ADMINISTRATION
 Office of Traffic & Safety
 TRAFFIC ENGINEERING DESIGN DIVISION SIGNAL # 15035516.65

MD 355 at Professional Drive

COUNTY: MONTGOMERY

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

DATE: October 13, 1988 F.A.P. NO. N/A
 SCALE: 1" = 50' S.H.A. NO. BW-357-802-312

TS/STD. NO. 2517A-X2-P SHEET NO. OF