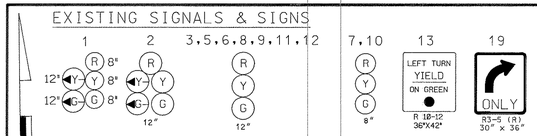
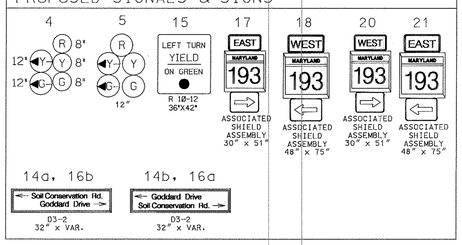
F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD		1	1

EXISTING SIGNALS & SIGNS

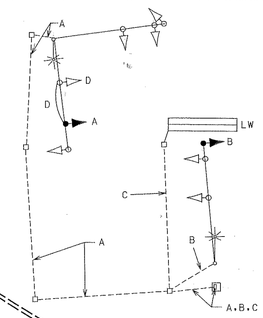


PROPOSED SIGNALS & SIGNS

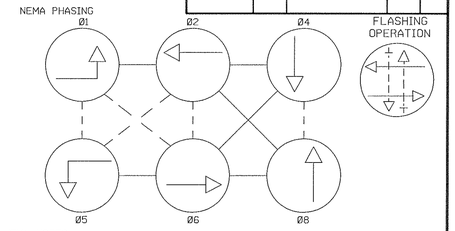


WIRING DIAGRAM

A-B = 7 CONDUCTOR CABLE (NO. 14 AWG)
C = 2 CONDUCTOR (ALUMINUM SHIELDED) CABLE
D = 5 CONDUCTOR CABLE (NO. 14 AWG)
LW = LOOP WIRE



NEMA PHASING



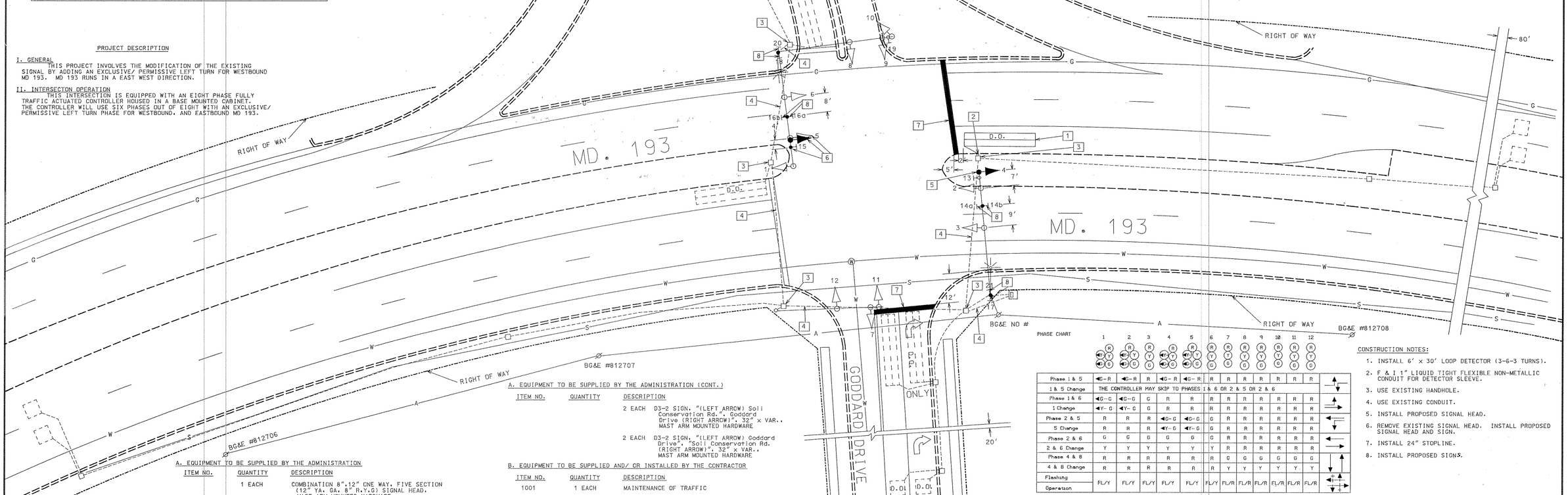
NEMA NOTES
1. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

GENERAL NOTES:
1. "D.O." DENOTES A DELAY OUTPUT LOOP DETECTOR.
2. REVISION "B" IS A MODIFICATION TO WORK COMPLETED WITHIN THE DATE OF 4-25-88.
3. THE ORIGINAL TS-2445 IS ON FILE.

PROJECT DESCRIPTION

I. GENERAL
THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING SIGNAL BY ADDING AN EXCLUSIVE/ PERMISSIVE LEFT TURN FOR WESTBOUND MD 193. MD 193 RUNS IN A EAST WEST DIRECTION.

II. INTERSECTION OPERATION
THIS INTERSECTION IS EQUIPPED WITH AN EIGHT PHASE FULLY TRAFFIC ACTUATED CONTROLLER HOUSED IN A BASE MOUNTED CABINET. THE CONTROLLER WILL USE SIX PHASES OUT OF EIGHT WITH AN EXCLUSIVE/ PERMISSIVE LEFT TURN PHASE FOR WESTBOUND. AND EASTBOUND MD 193.



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 & 5	G-R	G-R	R	G-R	G-R	R	R	R	R	R	R	R
1 & 5 Change	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6											
Phase 1 & 6	G-G	G-G	G	R	R	R	R	R	R	R	R	R
1 Change	Y-G	Y-G	G	R	R	R	R	R	R	R	R	R
Phase 2 & 5	R	R	R	G-G	G-G	G	R	R	R	R	R	R
5 Change	R	R	R	Y-G	Y-G	G	R	R	R	R	R	R
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
Phase 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G
4 & 8 Change	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y
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

CONSTRUCTION NOTES:

1. INSTALL 6' x 30' LOOP DETECTOR (3-6-3 TURNS).
2. F & I 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE.
3. USE EXISTING HANDHOLE.
4. USE EXISTING CONDUIT.
5. INSTALL PROPOSED SIGNAL HEAD.
6. REMOVE EXISTING SIGNAL HEAD. INSTALL PROPOSED SIGNAL HEAD AND SIGN.
7. INSTALL 24" STOPLINE.
8. INSTALL PROPOSED SIGNS.

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

ITEM NO.	QUANTITY	DESCRIPTION
	1 EACH	COMBINATION 8",12" ONE WAY, FIVE SECTION (12" YA, GA, 8" R,Y,G) SIGNAL HEAD, MAST ARM MOUNTED HARDWARE
	1 EACH	12" ONE WAY, FIVE SECTION (YA, GA, R,Y,G) SIGNAL HEAD, MAST ARM MOUNTED HARDWARE
	166.9 S.F.	1 EACH R10-12 SIGN, "LEFT TURN YIELD ON GREEN (BALL)", 36" x 42", MAST ARM MOUNTED HARDWARE
		1 EACH ASSOCIATED SHIELD ASSEMBLY SIGN, "WEST, MARYLAND 193, (RIGHT ARROW)", 30" x 51", MAST ARM MOUNTED HARDWARE
		1 EACH ASSOCIATED SHIELD ASSEMBLY SIGN, "EAST, MARYLAND 193, (LEFT ARROW)", 48" x 75", MAST ARM MOUNTED HARDWARE
		1 EACH ASSOCIATED SHIELD ASSEMBLY SIGN, "EAST, MARYLAND 193, (RIGHT ARROW)", 30" x 51", MAST ARM MOUNTED HARDWARE
		1 EACH ASSOCIATED SHIELD ASSEMBLY SIGN, "WEST, MARYLAND 193, (LEFT ARROW)", 48" x 75", MAST ARM MOUNTED HARDWARE

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION (CONT.)

ITEM NO.	QUANTITY	DESCRIPTION
	2 EACH	D3-2 SIGN, "(LEFT ARROW) Soil Conservation Rd.", Goddard Drive (RIGHT ARROW)", 32" x VAR., MAST ARM MOUNTED HARDWARE
	2 EACH	D3-2 SIGN, "(LEFT ARROW) Goddard Drive", "Soil Conservation Rd. (RIGHT ARROW)", 32" x VAR., MAST ARM MOUNTED HARDWARE

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
5005	90 L.F.	24" PERMANENT PAVEMENT PREFORMED MARKING TAPE, WHITE
8011	2 EACH	INSTALL SIGNAL HEAD
8022	120 L.F.	F & I SAW CUT FOR SIGNAL (LOOP DETECTOR)
8024	10 L.F.	F & I 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8043	420 L.F.	F & I LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
8044	125 L.F.	F & I ELECTRICAL CABLE - 2-CONDUCTOR (ALUMINUM SHIELDED)
8047	30 L.F.	F & I ELECTRICAL CABLE - 5-CONDUCTOR (NO. 14 AWG)
8048	520 L.F.	F & I ELECTRICAL CABLE - 7-CONDUCTOR (NO. 14 AWG)
8056	71.2 S.F.	INSTALL GROUND MOUNTED SIGN
8057	95.7 S.F.	INSTALL OVERHEAD SIGN

UTILITY LEGEND

G — G	GAS MAIN
W — W	WATER MAIN
S — S	SEWER MAIN
E — E	ELECTRIC CABLES
A — A	AERIAL CABLES
T — T	TELEPHONE CABLES

REVISIONS

A. REVISED TO SHOW NEW PROPOSED CONTROLLER LOCATION 8-6-88 — E.J.W.

B. 06/96 - AS BUILT: INSTALLED E/P L.T. FOR W/B MD. 193 SHA # AW/EG/GR 501-385 — GRS

APPROVALS

ASST. DIVISION CHIEF, TGDD — ORIGINAL

ASST. DISTRICT ENGINEER, TRAFFIC — OK

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION — FILE

DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD. 193 (GREENBELT RD.) & SOIL CONSERVATION RD/ GODDARD DRIVE

SIGNAL NO. 16019309.04 — DATE 4-25-88

DRAWN BY: K.P.H. GREENHORNE & O'MARA, INC.	F.A.P. NO.	PLAN SHEET NO.:	SHEET NO.
DES. BY: E.J.W. GREENHORNE & O'MARA, INC.	S.H.A. NO.		
CHECK BY: J.C.K. GREENHORNE & O'MARA, INC. 01/2004	COUNTY: PRINCE GEORGE'S	TS-2445 B	1 OF 1
SCALE: 1" = 20'			

Log Mile: 16019309.04