MD 146 IS ASSUMED TO RUN
IN A NORTH–SOUTH DIRECTION

PHASING DIAGRAM

	7	8	9	10
PHASE 2+5	R	R	G	G
5 CHANGE	R	R	C Y	G
PHASE 2+6	G	G	G	G
2+6 CHANGE	Y	Y	G	G
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y

SIGNS

11,25 — ONLY — R3–5L 30"x36"
12 — ONLY — R3–5R 30"x36"
13 — R3–1 30"x30"
14,18 — ONE WAY — R6–1(L) 36"x12"
15,19 — ONE WAY — R6–1(R) 36"x12"
16,20 — DO NOT ENTER — R5–1 30"x30"
17,21 — WRONG WAY — R5–9 36"x24"
22 — LEFT TURN YIELD ON GREEN — R10–12 30"x36"

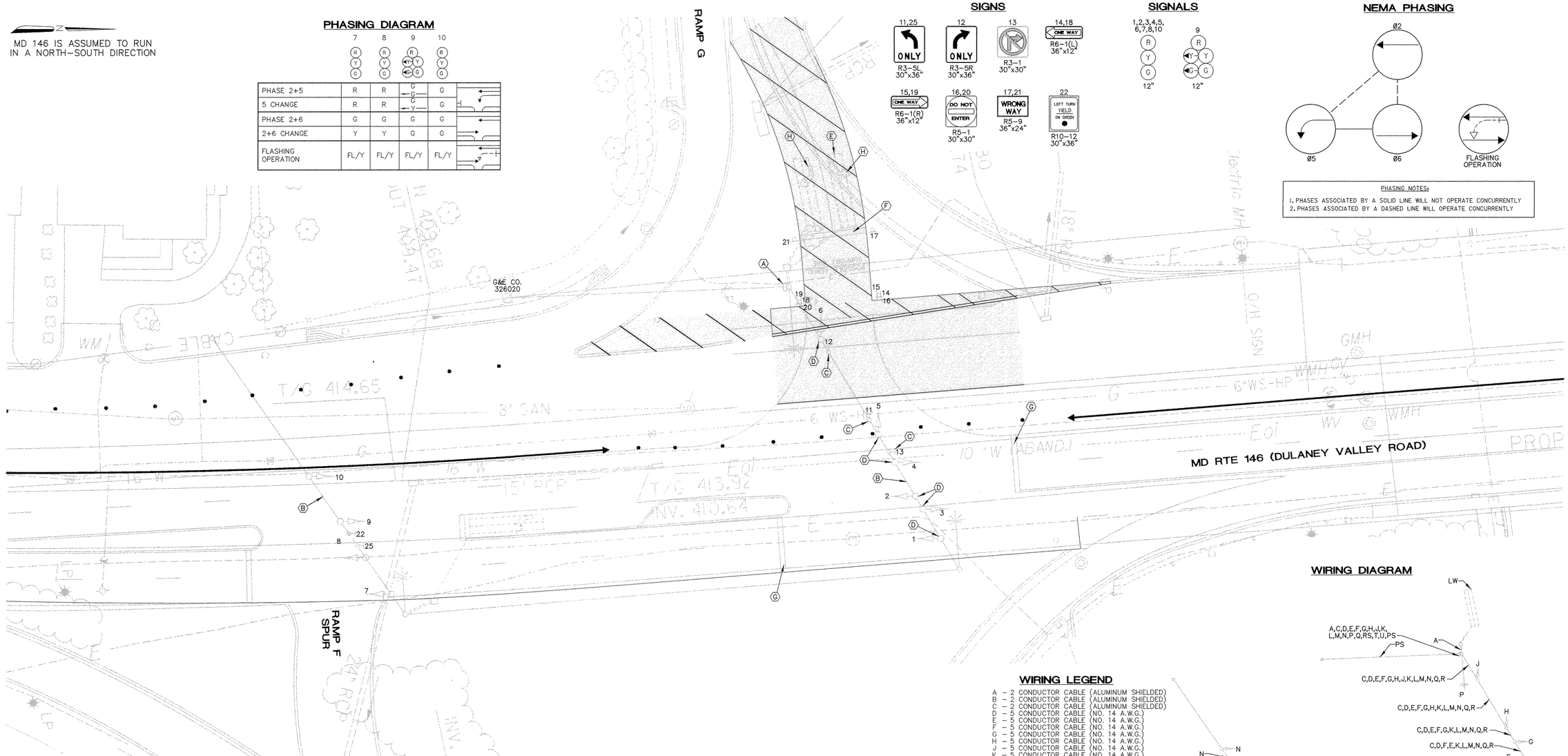
SIGNALS

1,2,3,4,5, 6,7,8,10 — 12"
9 — 12"

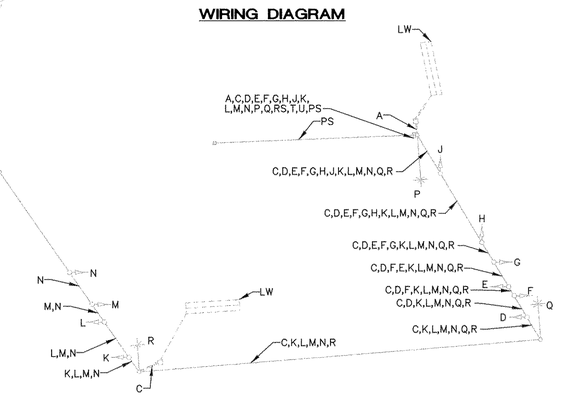
NEMA PHASING

FLASHING OPERATION

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



WIRING DIAGRAM



WIRING LEGEND

A – 2 CONDUCTOR CABLE (ALUMINUM SHIELDED)
B – 2 CONDUCTOR CABLE (ALUMINUM SHIELDED)
C – 2 CONDUCTOR CABLE (ALUMINUM SHIELDED)
D – 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
E – 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
F – 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
G – 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
H – 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
J – 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
K – 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
L – 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
M – 7 CONDUCTOR CABLE (NO. 14 A.W.G.)
N – 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
P – 2 CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
Q – 2 CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
R – 2 CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
S – 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
T – 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
U – 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
PS – PROPOSED ELECTRICAL SERVICE
LW – LOOP WIRE

CONSTRUCTION DETAILS

(A) EXISTING POLE MOUNTED CONTROLLER TO BE UTILIZED.
(B) USE EXISTING SPAN WIRE, SIGNS, AND SIGNAL HEADS.
(C) COVER EXISTING SIGN.
(D) COVER EXISTING SIGNAL.
(E) ABANDON EXISTING LOOP DETECTOR AND LEAD–IN CABLE.
(F) REMOVE PART OF EXISTING STOP BAR.
(G) REMOVE EXISTING STOP BAR.
(H) REMOVE EXISTING PAVEMENT MARKING ARROW.

UTILITY LEGEND

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

NOTES:

1. CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL PROPOSED GEOMETRICS PRIOR TO INSTALLING THE TRAFFIC SIGNAL EQUIPMENT.
2. PAVEMENT MARKINGS ARE NOT TO BE INSTALLED UNTIL LOOP DETECTORS AND CONDUIT INSTALLATIONS ARE COMPLETE.
3. SEE SHEET 4 FOR PROJECT DESCRIPTION AND EQUIPMENT LIST PROVIDE SUFFICIENT CABLE FOR ALL SIGNALS FOR RELOCATION FOR ALL OTHER PHASES.
4. 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 PERSONEL PRIOR TO CONSTRUCTION TO AVOID POTENTIAL CONFLICTS SO THAT FIELD ADJUSTMENTS CAN BE MADE.
5. ALL SIGNALS MUST HAVE A VERTICAL CLEARANCE OF 17 FEET (MIN.) FROM PROPOSED GRADE.

BOARD OF PROFESSIONAL ENGINEERS 22878 STEVEN REN. CHIN STATE OF MARYLAND
11-03-98

A/E GROUP, INC.
ENGINEERS • PLANNERS
181 E. Main Street
Westminster, Maryland 21157
A/E Job No. 93–253–002

REVISIONS	APPROVALS
	CHIEF, SIGNAL DESIGN SECTION 11/10/98
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION 11/17/98
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY

SS-20

TRAFFIC CONTROL STAGE IC

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

DRAWN BY: M.J.G.
DES. BY: R.W.P.
CHK. BY: C.S.C M. Rush

MD RTE 146 (DULANEY VALLEY RD.) AT SPUR TO EASTBOUND I-695

COUNTY: BALTIMORE

DATE: 09–30–98
SCALE: 1" = 20'
F.A.P. NO.
S.H.A. NO. BA9775372
TS/STD. NO. 3774X2
SHEET NO. 123 OF 155