DRILL HOLES

BORDER REV. DATE- JUNE 1, 2004

MD 144 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

EXISTING SIGNS
(TO BE REMOVED)

26,29 — LEFT TURN YIELD ON GREEN — R10-12 36"X42"

EXISTING SIGNS

25a,28a — S. Rolling Rd. — D3-2 16" x Var. – Dual Faced

25b,28b — S. Rolling Rd. →

27,30, 33,34 — NO TURN ON RED — R10-11a 30" x 36"

32a,32b — Frederick Road — D3-2 16" x Var. – Dual Faced

49 — WEST 144 / EAST 144 — ← ELLICOTT CY

35,36,42 — SCHOOL — S1-1a 30" x 30"

41 — WEST 144 — SNOW EMERGENCY ROUTE

43 — SOUTH 166

48 — SOUTH 166 — SNOW EMERGENCY ROUTE

37,39, 45,46 — S2-1 30" x 30" FYG — M5-2 21" x 15" FYG

38,40, 44,47 — S2-1 30" x 30" FYG — M6-2 21" x 15" FYG

PROPOSED SIGNALS

6a — R Y G — 12"

6b — R Y G — 12"

PROPOSED SIGNS

31 — NO TURN ON RED ARROW — R10-11 (MOD) 24"X36"

31a — ONLY — R3-5R 30"X36"

EXISTING SIGNALS

17-24 — 12"

1,4 — R Y G 6 — 12'6"

2,5 — R Y G — 12"

3,8,10 — R Y G — 12"

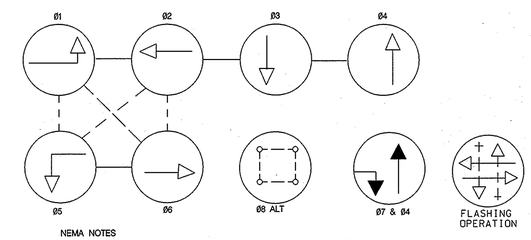
7,9 — R Y G 6 — 12'6"

11-16 — Y — 12"

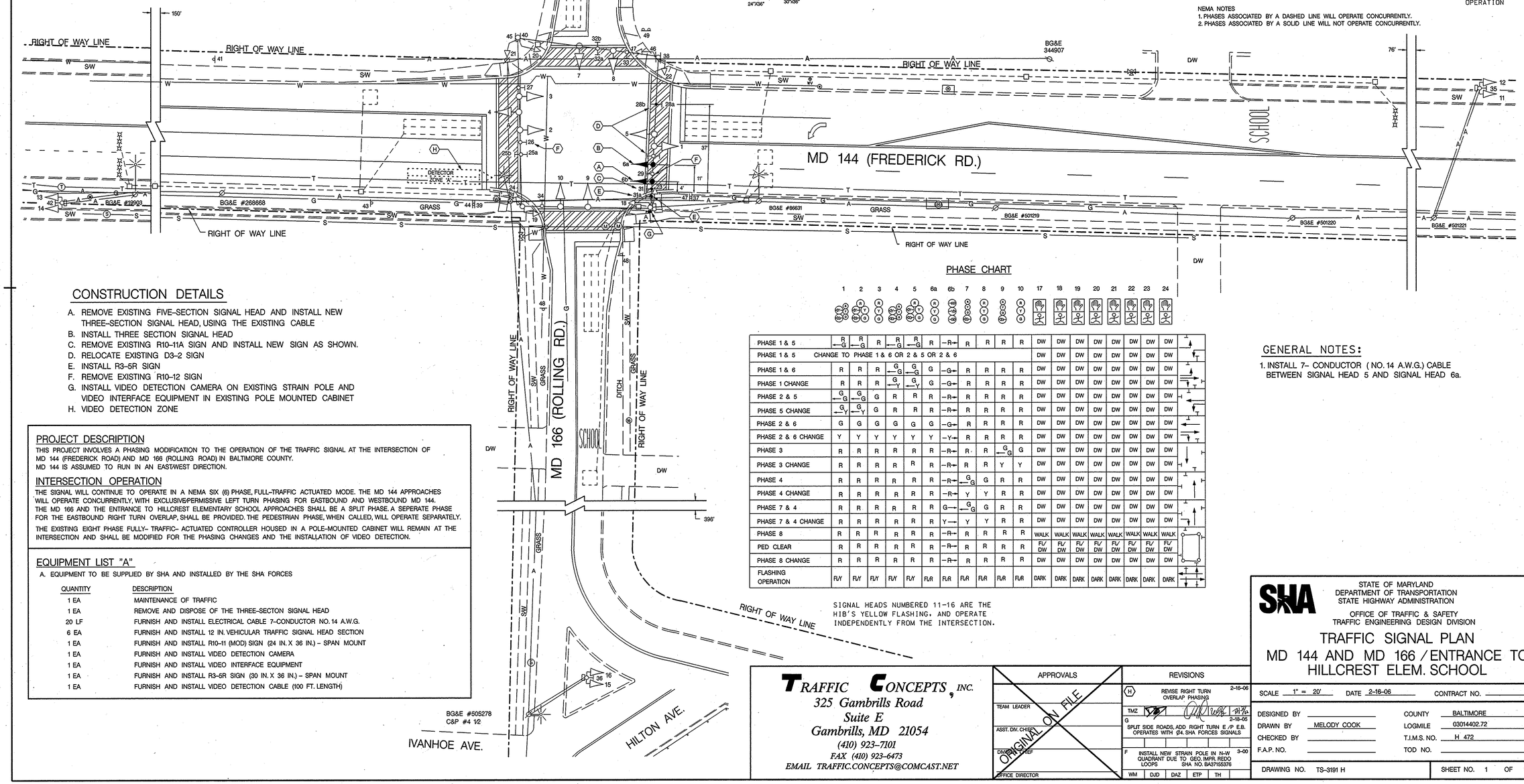
PROPOSED VIDEO DETECTION CAMERA

A

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.



CONSTRUCTION DETAILS

A. REMOVE EXISTING FIVE-SECTION SIGNAL HEAD AND INSTALL NEW THREE-SECTION SIGNAL HEAD, USING THE EXISTING CABLE
B. INSTALL THREE SECTION SIGNAL HEAD
C. REMOVE EXISTING R10-11A SIGN AND INSTALL NEW SIGN AS SHOWN.
D. RELOCATE EXISTING D3-2 SIGN
E. INSTALL R3-5R SIGN
F. REMOVE EXISTING R10-12 SIGN
G. INSTALL VIDEO DETECTION CAMERA ON EXISTING STRAIN POLE AND VIDEO INTERFACE EQUIPMENT IN EXISTING POLE MOUNTED CABINET
H. VIDEO DETECTION ZONE

PHASE CHART

	1	2	3	4	5	6a	6b	7	8	9	10	17	18	19	20	21	22	23	24
PHASE 1 & 5	R G	R G	R	R G	R G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 & 5 CHANGE TO PHASE 1 & 6 OR 2 & 5 OR 2 & 6												DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 & 6	R	R	R	G G	G G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 CHANGE	R	R	R	G Y	G Y	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	G G	G G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 5 CHANGE	G Y	G Y	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	R	R	R	G G	G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	G G	G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 CHANGE	R	R	R	R	R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 7 & 4	R	R	R	R	R	R	G	G G	G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 7 & 4 CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 8	R	R	R	R	R	R	R	R	R	R	R	WALK	WALK	WALK	WALK	WALK	WALK	WALK	WALK
PED CLEAR	R	R	R	R	R	R	R	R	R	R	R	FL/ DW	FL/ DW	FL/ DW	FL/ DW	FL/ DW	FL/ DW	FL/ DW	FL/ DW
PHASE 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

SIGNAL HEADS NUMBERED 11-16 ARE THE HIB'S YELLOW FLASHING, AND OPERATE INDEPENDENTLY FROM THE INTERSECTION.

GENERAL NOTES:

1. INSTALL 7- CONDUCTOR (NO. 14 A.W.G.) CABLE BETWEEN SIGNAL HEAD 5 AND SIGNAL HEAD 6a.

PROJECT DESCRIPTION

THIS PROJECT INVOLVES A PHASING MODIFICATION TO THE OPERATION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 144 (FREDERICK ROAD) AND MD 166 (ROLLING ROAD) IN BALTIMORE COUNTY.
MD 144 IS ASSUMED TO RUN IN AN EASTWEST DIRECTION.

INTERSECTION OPERATION

THE SIGNAL WILL CONTINUE TO OPERATE IN A NEMA SIX (6) PHASE, FULL-TRAFFIC ACTUATED MODE. THE MD 144 APPROACHES WILL OPERATE CONCURRENTLY, WITH EXCLUSIVE/PERMISSIVE LEFT TURN PHASING FOR EASTBOUND AND WESTBOUND MD 144. THE MD 166 AND THE ENTRANCE TO HILLCREST ELEMENTARY SCHOOL APPROACHES SHALL BE A SPLIT PHASE. A SEPERATE PHASE FOR THE EASTBOUND RIGHT TURN OVERLAP, SHALL BE PROVIDED. THE PEDESTRIAN PHASE, WHEN CALLED, WILL OPERATE SEPARATELY.

THE EXISTING EIGHT PHASE FULLY- TRAFFIC- ACTUATED CONTROLLER HOUSED IN A POLE-MOUNTED CABINET WILL REMAIN AT THE INTERSECTION AND SHALL BE MODIFIED FOR THE PHASING CHANGES AND THE INSTALLATION OF VIDEO DETECTION.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE SHA FORCES

QUANTITY	DESCRIPTION
1 EA	MAINTENANCE OF TRAFFIC
1 EA	REMOVE AND DISPOSE OF THE THREE-SECTON SIGNAL HEAD
20 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR NO. 14 A.W.G.
6 EA	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
1 EA	FURNISH AND INSTALL R10-11 (MOD) SIGN (24 IN. X 36 IN.) - SPAN MOUNT
1 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
1 EA	FURNISH AND INSTALL VIDEO INTERFACE EQUIPMENT
1 EA	FURNISH AND INSTALL R3-5R SIGN (30 IN. X 36 IN.) - SPAN MOUNT
1 EA	FURNISH AND INSTALL VIDEO DETECTION CABLE (100 FT. LENGTH)

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101
FAX (410) 923-6473
EMAIL TRAFFIC.CONCEPTS@COMCAST.NET

APPROVALS

TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

ORIGINAL ON FILE

REVISIONS

H — REVISE RIGHT TURN OVERLAP PHASING — 2-16-06 — TMZ
G — SPLIT SIDE ROADS, ADD RIGHT TURN E./P. E.B. OPERATES WITH Ø4. SHA FORCES SIGNALS — 2-16-05
F — INSTALL NEW STRAIN POLE IN N-W QUADRANT DUE TO GEO. IMPR. REDO LOOPS SHA NO. BA37165376 — 3-00 — WM DJD DAZ ETP TH

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

TRAFFIC SIGNAL PLAN
MD 144 AND MD 166 / ENTRANCE TO HILLCREST ELEM. SCHOOL

SCALE 1" = 20' DATE 2-16-06 CONTRACT NO.

DESIGNED BY
DRAWN BY MELODY COOK
CHECKED BY
F.A.P. NO.

COUNTY BALTIMORE
LOGMILE 03014402.72
T.I.M.S. NO. H 472
TOD NO.

DRAWING NO. TS-3191 H

SHEET NO. 1 OF 1