PHASE CHART

MD 450 IS ASSUMED TO RUN IN AN EAST WEST DIRECTION

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 1 & 5	◄G-	◄G-	R	R	◄G-	◄G-	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 & 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6																	
PHASE 1 & 6	◄G-	◄G-	G	G	◄R-	◄R-	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 & 6 CHANGE	◄Y-	◄Y-	G	G	◄R-	◄R-	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 5	◄R-	◄R-	R	R	◄G-	◄G-	G	G	R	R	R	R	R	R	DW	DW	DW	DW
5 CHANGE	◄R-	◄R-	R	R	◄Y-	◄Y-	G	G	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	◄R-	◄R-	G	G	◄R-	◄R-	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEAR	◄R-	◄R-	G	G	◄R-	◄R-	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	◄R-	◄R-	Y	Y	◄R-	◄R-	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	◄R-	◄R-	R	R	◄R-	◄R-	R	R	G ◄G-	G ◄G-	G	R	R	R	DW	DW	DW	DW
3 CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	R	G ◄G-	G ◄G-	G	DW	DW	DW	DW
4 CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	R	G ◄G-	G ◄G-	G	DW	DW	WK	WK
PED CLEAR	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	R	G ◄G-	G ◄G-	G	DW	DW	FL/DW	FL/DW
4 ALT CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT MD 450 AND RIVERDALE ROAD IN PRINCE GEORGE'S COUNTY. MD 450 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

INTERSECTION OPERATION

PRESENTLY, THE INTERSECTION OPERATES IN A NEMA SIX (6) PHASE FULL-TRAFFIC-ACTUATED MODE. THERE ARE EXCLUSIVE LEFT TURNS FOR BOTH EASTBOUND AND WESTBOUND MD 450. THE MD 450 THROUGH MOVEMENTS OPERATE CONCURRENTLY. THE RIVERDALE ROAD APPROACHES OPERATE AS A SIDE STREET SPLIT. THERE IS AN EXISTING NON-ACTUATED PEDESTRIAN CROSSING AT THE NORTH LEG OF THE INERSECTION AND PUSH BUTTON ACTUATED PEDESTRIAN CROSSING AT THE EAST LEG OF THE INTERSECTION.

THE INTERSECTION IS TO BE MODIFIED TO A NEMA SIX (6) PHASE FULL-TRAFFIC-ACTUATED MODE. AUTOSCOPE WILL BE PROVIDED FOR ALL APPROACHES. THERE WILL BE PEDESTRIAN CROSSINGS PROVIDED FOR THE WEST LEG OF THE INTERSECTION AND THE PEDESTRIAN CROSSING ON THE EAST LEG SHALL BE REMOVED.

THE EXISTING CONTROLLER AND LOOP DETECTOR AMPLIFIERS WILL BE UTILIZED.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

MR. MAJID SHAKIB
ASSISTANT DISTRICT
ENGINEER - TRAFFIC
PHONE: (301) 513-7358

MR. AUGIE REBISH
UTILITY ENGINEER
PHONE: (301) 513-7350

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR.RALEIGH MEDLEY
ASSISTANT DISTRICT
ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF -
TRAFFIC OPERATIONS
(410) 787-7630

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7650

MR DAVE SCHWARTZ
SUPPLY OFFICER IV
(SIGNAL SHOP WAREHOUSE)
(410) 787-7668

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA

	SPEC. SECTION.	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
*	---	900000	1 EACH	VIDEO INTERFACE EQUIPMENT
	813	973023	33.75 S.F.	SHEET ALUMINUM SIGNS - 2 EACH M6-2L (21"X15") "SIGN" "DIRECTIONAL ARROW - DIAGONAL" - 2 EACH M6-2R (21"X15") "SIGN" "DIRECTIONAL ARROW - DIAGONAL" - 4 EACH W11A-2 (30"X30") "SIGN" "PEDESTRIAN CROSSING (SYMBOL)"

* TO BE INSTALLED BY SHA SIGNAL SHOP

EQUIPMENT LIST "B"

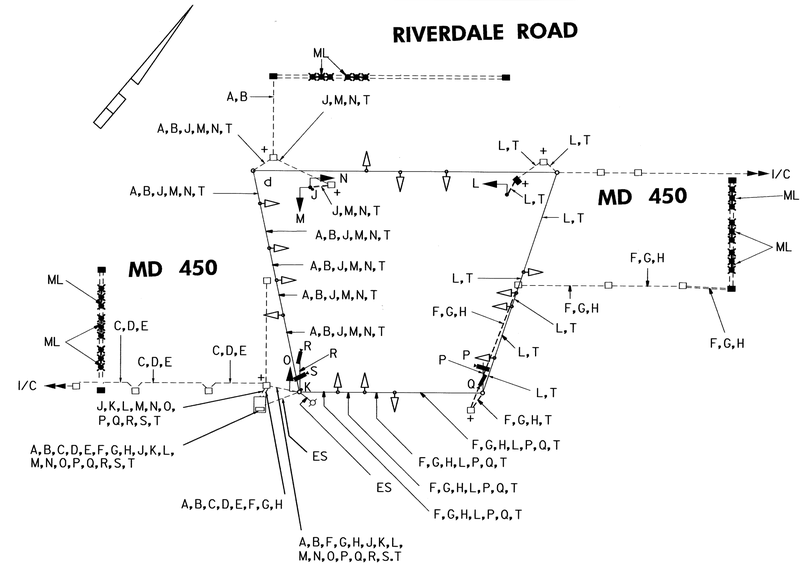
B. EQUIPMENT TO BE SUPPLIED AND/OR INSTALLED BY THE CONTRACTOR:

SPEC. SECTION.	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
104	120500	L.S.	MAINTENANCE OF TRAFFIC
205	203030	2 C.Y.	TEST PIT EXCAVATION
556	585405	30 L.F.	FURNISH AND INSTALL 5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
556	585622	350 L.F.	FURNISH AND INSTALL 12" WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (CROSSWALK)
556	585624	140 L.F.	FURNISH AND INSTALL 24" WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOPWALK)
801	801004	2 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
804	837001	6 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
805	805125	30 L.F.	FURNISH AND INSTALL 2 IN SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805	805105	28 L.F.	FURNISH AND INSTALL 2 IN SCHEDULE 80 RIGID PVC CONDUIT-BORED
805	805135	70 L.F.	FURNISH AND INSTALL 3 IN SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805	805115	175 L.F.	FURNISH AND INSTALL 3 IN SCHEDULE 80 RIGID PVC CONDUIT-BORED
805	805140	20 L.F.	FURNISH AND INSTALL 4 IN SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
810	800000	5 EACH	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET 500' LEAD-IN
810	800000	3 EACH	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET 1000' LEAD-IN
810	800000	L.S.	REROUTE EXISTING INTERCONNECT CABLE
810	802501	640 L.F.	FURNISH AND INSTALL NO. 6 STRANDED BARE COPPER GROUND WIRE
810	861105	185 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE-2-CONDUCTOR (NO. 14 AWG)
810	861106	1450 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE-3-CONDUCTOR (NO. 14 AWG)
811	811011	8 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
812	801106	64 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4" x 6"
813	813014	33.75 S.F.	INSTALL GROUND MOUNTED SIGN
814	800000	8 EACH	FURNISH AND INSTALL 12 INCH PEDESTRIAN SIGNAL HEAD SECTION BLACK FACE
817	800000	2 EACH	FURNISH AND INSTALL PUSHBUTTON AND SIGN (SIGN: PUSHBUTTON TO CROSS ANNAPOLIS ROAD)
818	818004	2 EACH	FURNISH AND INSTALL 10 FT BREAKAWAY PEDESTAL POLE
818	866104	2 EACH	FURNISH AND INSTALL 20 FT LIGHTING ARM ON SIGNAL STRUCTURE
---	800000	L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
---	816011	4 EACH	FURNISH AND INSTALL VIDEO DETECTION CAMERA
---	816005	4 EACH	FURNISH AND INSTALL 250 FT. CABLE PRE-MANUFACTURED CAMERA TO CONTROL CABINET
---	800000	2 EACH	REMOVE AND DISPOSE EXISTING FOUNDATION 12" BELOW GRADE

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7941 CONNELLEY DRIVE, HANOVER, MARYLAND 21076.

NOTE: 1. ALL EQUIPMENT TO BE REMOVED AND NOT LISTED ABOVE SHALL BECOME THE PROPERTY OF THE CONTRACTOR

WIRING DIAGRAM



TOYS R US

WIRING KEY

A,B,C,D,E } - NON-INVASIVE MICRO-LOOP PROBE SET WITH 500' LEAD IN

F,G,H } - NON-INVASIVE MICRO-LOOP PROBE SET WITH 1,000' LEAD IN

J,K } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

L,M,N,O } 3-CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)

T } - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

P,Q,R,S} - 250' CABLE FOR PRE-MANUFACTURED CAMERA TO CONTROL CABINET

ML - NON-INVASIVE MICRO-LOOP PROBE SET

ES - EXISTING OVERHEAD ELECTRICAL SERVICE

+ - 3/4 IN. x 10 FT. GROUND ROD

I/C - EXISTING INTERCONNECT

SS-2

HARRIS
Frederic R. Harris, Inc.
HR HURST-ROSCHE ENGINEERS, INC.
A JOINT VENTURE
5611AM450.06N

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

MD 450 AND RIVERDALE ROAD
NEW CARROLLTON, MARYLAND

DRAWN BY: D. R.	F.A.P. NO.: SEE TITLE SHEET	TS NO. 122E-GI	SHEET NO.
CHECKED BY: D.L.A.	S.H.A. NO.: PG 3265184		
SCALE: NOT TO SCALE	COUNTY: PRINCE GEORGE'S	T.I.M.S. NO. E107	OF
DATE: 2/2002	LOG MILE: 16045004.22		