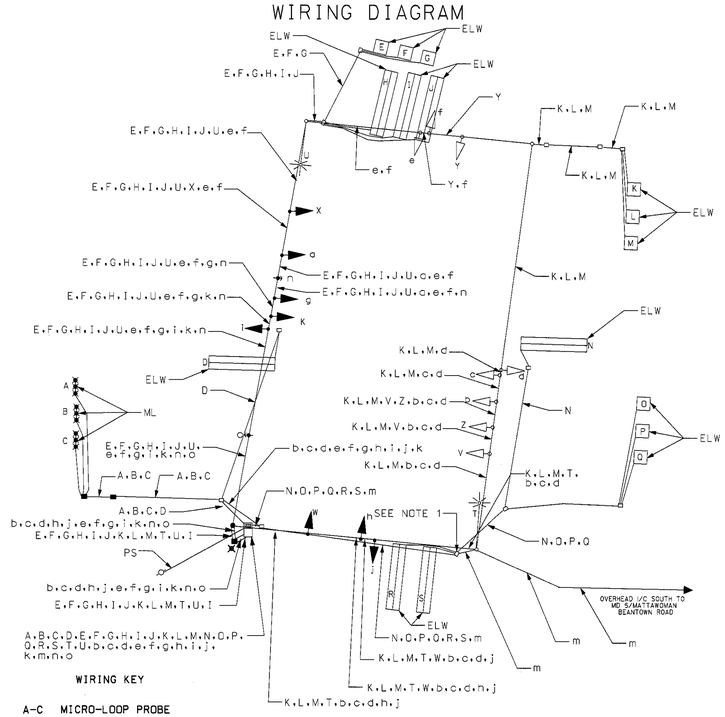
PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 301 AND CEDARVILLE RD./MCKENDREE RD. IN PRINCE GEORGE'S COUNTY. MD 301 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

CONTROLLER OPERATION

THE EXISTING EIGHT-PHASE, FULLY ACTUATED NEMA CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED. THE CONTROLLER CURRENTLY OPERATES AS A SIX PHASE FULL-TRAFFIC-ACTUATED CONTROLLER WITH EXCLUSIVE LEFT TURN PHASE ON NORTHBOUND AND SOUTHBOUND US 301. THE CONTROLLER OPERATION WILL NOT CHANGE.

WIRING DIAGRAM



WIRING KEY

A-C	MICRO-LOOP PROBE
D	EXISTING 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
E-S	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
T-U	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
V-a	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
b-k	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
I	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
m	INTERCONNECT CABLE
n,o	4-CONDUCTOR OPTICOM DETECTOR CABLE
p	1-CONDUCTOR ELECTRICAL CABLE (8 A.W.G.)-THHN/THWN
ELW	EXISTING LOOP WIRE (NO. 14 A.W.G.)
PS	PROPOSED ELECTRIC SERVICE
ML	MICRO-LOOP PROBE
⊗	GROUND ROD

NOTE 1. DISCONNECT DETECTORS N,O,P,Q,R,S AND INTERCONNECT m, REMOVE TO THIS HANDHOLE, AND RE-INSTALL THROUGH NEW CONDUIT TO CONTROLLER.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 1 & 5	◁G–	◁G–	R	R	R	◁G–	◁G–	R	R	R	R	R	R	R	R	R
1 & 5 CHANGE	PHASE 1 & 5 CHANGE MAY CHANGE TO PHASE 1 & 6, 2 & 5 OR 2 & 6															
PHASE 1 & 6	◁R–	◁R–	R	R	R	◁G–	◁G–	G	G	G	R	R	R	R	R	R
1 & 6 CHANGE	◁R–	◁R–	R	R	R	◁Y–	◁Y–	G	G	G	R	R	R	R	R	R
PHASE 2 & 5	◁G–	◁G–	G	G	G	◁R–	◁R–	R	R	R	R	R	R	R	R	R
2 & 5 CHANGE	◁Y–	◁Y–	G	G	G	◁R–	◁R–	R	R	R	R	R	R	R	R	R
PHASE 2 & 6	◁R–	◁R–	G	G	G	◁R–	◁R–	G	G	G	R	R	R	R	R	R
2 & 6 CHANGE	◁R–	◁R–	Y	Y	Y	◁R–	◁R–	Y	Y	Y	R	R	R	R	R	R
PHASE 4 & 8	◁R–	◁R–	R	R	R	◁R–	◁R–	R	R	R	G	G	G	G	G	G
4 & 8 CHANGE	◁R–	◁R–	R	R	R	◁R–	◁R–	R	R	R	Y	Y	Y	Y	Y	Y
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

EQUIPMENT LIST "A"

A. APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. CHARLIE WATKINS
DISTRICT ENGINEER
(301) 513-7300

MR. JOE GECKLE
ASSISTANT DISTRICT ENGINEER - UTILITIES
(301) 513-7350

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

MR. RANDY BROWN
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 513-7304

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

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

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MR. DAVID SCHWARTZ
SUPPLY OFFICE IV (SIGNAL SHOP WAREHOUSE)
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO OOTS FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 LS	MAINTENANCE OF TRAFFIC
2001	1 CY	TEST PIT EXCAVATION
5004	50 LF	FURNISH AND INSTALL 24 IN. HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
8001	5 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8002	2 EA	ADJUST EXISTING ELECTRICAL HANDHOLE TO GRADE
8005	1 EA	FURNISH AND INSTALL 14 IN. X 32 FT. STRAIN POLE
8009	350 LF	FURNISH AND INSTALL STEEL SPAN WIRE 3/8 IN. DIAMETER
8010	220 LF	FURNISH AND INSTALL STEEL SPAN WIRE 1/4 IN. DIAMETER
8017	3 EA	FURNISH AND INSTALL MICRO-LOOP PROBE WITH 1000 FT. LEAD-IN
8021	125 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8023	25 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8024	120 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED
8026	90 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT- BORED
8027	60 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED
8029	90 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-BORED
8033	3 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	1 EA	FURNISH AND INSTALL GROUND ROD - 3/4" X 10'
8037	360 LF	FURNISH AND INSTALL 4-CONDUCTOR OPTICOM DETECTOR CABLE
8041	5640 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2-CONDUCTOR (ALUMINIUM SHIELDED)
8044	120 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5-CONDUCTOR (NO. 14 A.W.G.)
8045	2350 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7-CONDUCTOR (NO. 14 A.W.G.)
8046	500 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2-CONDUCTOR (NO. 12 A.W.G.)
8048	10 LF	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8049	50 LF	FURNISH AND INSTALL 1-CONDUCTOR (NO. 4 A.W.G.) THHN/THWN
8060	1 LS	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
8061	2 EA	INSTALL CONDUIT BEND IN EXISTING BASE
8066	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240V, 1 PHASE 3 WIRE SYSTEM)
8084	21 EA	FURNISH AND INSTALL 12 IN., VEHICLE TRAFFIC SIGNAL HEAD SECTION (BLACK FACED)
8085	3 EA	FURNISH AND INSTALL 8 IN., VEHICLE TRAFFIC SIGNAL HEAD SECTION (BLACK FACED)
---	2 EA	RELOCATE 3-M OPTICOM DETECTOR EYE
---	3 EA	RELOCATE OVERHEAD SIGN
---	590 LF	REMOVE AND RE-INSTALL EXISTING CABLE
---	2 EA	INSTALL TEMPORARY "BACK-GUY"
---	1 EA	INSTALL NEW FOUNDATION AND RELOCATE EXISTING BASE MOUNTED CABINET AND CONTROLLER

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

TRAFFIC CONCEPTS, INC.
Brightview Business Center
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 301 AT CEDARVILLE RD./MCKENDREE RD.

DRAWN BY: T.M.Z	F.A.P. NO.		TS NO. 2543F GI	SHEET NO. 2 OF 2
CHECKED BY: K.W.S	S.H.A. NO.			
SCALE: NONE	COUNTY:	PRINCE GEORGE'S	T.I.M.S. NO.	
DATE: 2-25-02	LOG MILE:	16030100.41		

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