PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 713 (RIDGE ROAD) AND TEAGUE ROAD IN ANNE ARUNDEL COUNTY. MD 713 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE, FULLY-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR N.B. AND S.B. MD 713, AN ALTERNATE PEDESTRIAN PHASE ACROSS THE NORTH LEG OF THE INTERSECTION AND A CONCURRENT PEDESTRIAN PHASE ACROSS THE WEST LEG OF THE INTERSECTION. THE MD 713 PHASING WILL BE CHANGED FROM EXCLUSIVE-PERMISSIVE TO EXCLUSIVE.

PROJECT CONSTRUCTION

WORK WILL CONSIST OF REPLACING SIGNAL EQUIPMENT AFFECTED BY THE WIDENING OF MD 713 AND TEAGUE ROAD.

APS NOTES

TO CROSS RIDGE ROAD (MD 713) — NORTH LEG

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS RIDGE ROAD AT TEAGUE, WAIT."

B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE

TO CROSS TEAGUE ROAD — WEST LEG

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS TEAGUE ROAD AT RIDGE, WAIT."

B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION

NONE

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
5 CY	TEST PIT EXCAVATION
675 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS – ANY WIDTH
3 EA	REMOVAL OF EXISTING PAVEMENT MARKING ARROW
1965 LF	5 IN. HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
95 LF	10 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKING
210 LF	12 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKING
145 LF	24 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKING
2 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING 'ONLY'
10 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW
1 EA	VIDEO INTERFACE EQUIPMENT
39 EA	12 IN. LED SIGNAL HEAD SECTION
6 EA	8 IN. LED SIGNAL HEAD SECTION
4 EA	L.E.D. 16 IN. COUNTDOWN PEDESTRIAN
4 EA	AUDIBLE /TACTILE PEDESTRIAN PUSHBUTTON AND SIGN
13 CY	CONCRETE FOUNDATION FOR SIGNAL
(2) → 4 ~~3~~ EA	10 FT. BREAKAWAY PEDESTAL POLE
2 EA	27 FT. MAST ARM POLE & 60 FT. MAST ARM
2 EA	15 FT. LIGHTING ARM WITH 250 WATT HPSV LUMINAIRE
3 EA	CUT, CLEAN, GALVANIZE, AND CAP TRAFFIC SIGNAL STRUCTURE
7 EA	ELECTRICAL HANDHOLE
(2) → 70 ~~50~~ LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT – TRENCHED
40 LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT– SLOTTED
[1] → 100 ~~65~~ LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT– BORED
660 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT – TRENCHED
50 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT– SLOTTED
265 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT– BORED
LS	REMOVE AND DISPOSE OF MATERIAL AND EQUIPMENT
4 EA	VIDEO DETECTION CAMERA AND CABLE
620 LF	ELECTRICAL CABLE 2 – CONDUCTOR (NO. 14 A.W.G.)
400 LF	ELECTRICAL CABLE 5 – CONDUCTOR (NO. 14 A.W.G.)
1560 LF	ELECTRICAL CABLE 7 – CONDUCTOR (NO. 14 A.W.G.)
[1] → 700 ~~660~~ LF	ELECTRICAL CABLE 2 – CONDUCTOR (NO. 12 A.W.G.)
[1] → 700 ~~450~~ LF	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
1065 LF	12-PAIR VOICE GRADE INTERCONNECT CABLE
[1] → 8 ~~5~~ EA	3/4 IN. X 10 FT. GROUND ROD
5 EA	NON-INVASIVE MICRO-LOOP PROBE
2 EA	D-3(1) (VAR X 16") DUAL FACE SIGN – MAST ARM MOUNT
1 EA	R3-5L (30" X 36") SIGN – MAST ARM MOUNT
1 EA	R3-5R (30" X 36") SIGN – MAST ARM MOUNT
4 EA	RELOCATE EXISTING GROUND MOUNTED SIGN AND SUPPORTS
1 EA	REMOVE EXISTING STEEL POLE WITH STREET LIGHT
1 EA	R4-7R (24" X 30") SIGN – GROUND MOUNT
1 EA	R3-8A MOD. (60" X 30") SIGN – GROUND MOUNT
1 EA	R1-2 (36" X 36") SIGN – GROUND MOUNT
60 LF	4 IN. X 4 IN. WOOD SIGN SUPPORTS
[1] → 1 EA	METERED SERVICE PEDESTAL – EMBEDED
[1] → 200 LF	2-CONDUCTOR DUCT CABLE (NO. 4 A.W.G.)
[1] → 1 EA	RELOCATE EXISTING STREET LIGHT POLE
[1] → 3 CY	CONCRETE FOR STREET LIGHTING FOUNDATION
[1] → 2 EA	TYPE II CONNECTOR KITS
[1] → 4 EA	TYPE IV CONNECTOR KITS

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MRS. KIM TRAN
ASSISTANT DISTRICT ENGINEER – TRAFFIC
(410) 841-1019

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER – MAINTENANCE
(410) 841-1013

MR. MIKE HUBER
UTILITY ENGINEER
(410) 841-1039

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. MIKE STOCKER
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7696

MR. ED RODENHIZER
CHIEF – SIGNAL OPERATIONS SECTION
(410) 787-7652

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

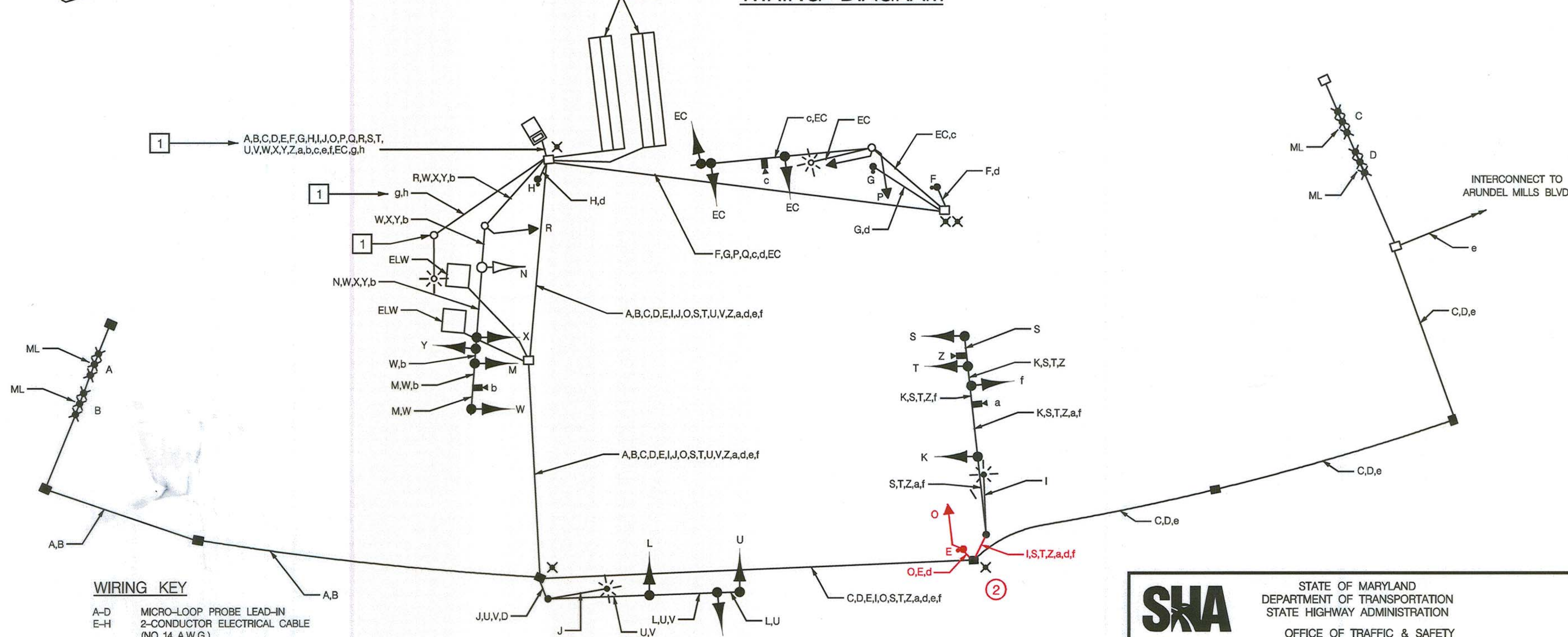
NONE

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
PHASE 1 & 5	◄G—	◄G—	R	R	◄G—	◄G—	◄G—	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 & 5 CHANGE	PHASE 1 & 5 MAY CHANGE TO PHASE 1 & 6, 2 & 6, OR 2 & 5																		
PHASE 1 & 6	◄G—	◄G—	G	G	◄R—	◄R—	◄R—	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 & 6 CHANGE	◄Y—	◄Y—	Y	Y	◄R—	◄R—	◄R—	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	◄R—	◄R—	G	G	◄R—	◄R—	◄R—	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEAR	◄R—	◄R—	G	G	◄R—	◄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—	◄R—	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 5	◄R—	◄R—	R	R	◄G—	◄G—	◄G—	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEAR	◄R—	◄R—	R	R	◄G—	◄G—	◄G—	G	G	R	R	R	R	R	R	FL-DW	FL-DW	DW	DW
2 & 5 CHANGE	◄R—	◄R—	R	R	◄Y—	◄Y—	◄Y—	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 & 8	◄R—	◄R—	R	R	◄R—	◄R—	◄R—	R	R	G	G	G	G	G	G	DW	DW	DW	DW
4 & 8 CHANGE	◄R—	◄R—	R	R	◄R—	◄R—	◄R—	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 & 8 ALT.	◄R—	◄R—	R	R	◄R—	◄R—	◄R—	R	R	G	G	G	G	G	G	DW	DW	WK	WK
PED CLEAR	◄R—	◄R—	R	R	◄R—	◄R—	◄R—	R	R	G	G	G	G	G	G	DW	DW	FL-DW	FL-DW
4 & 8 ALT. CHANGE	◄R—	◄R—	R	R	◄R—	◄R—	◄R—	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FLR	FLR	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR	FLR	FLR	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A-D	MICRO-LOOP PROBE LEAD-IN
E-H	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
I-J	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) TRAY CABLE
K-O	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
P-R	EXISTING 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
S-Y,f	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
Z-c	VIDEO DETECTION CABLE
d	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
e	12-PAIR VOICE GRADE INTERCONNECT CABLE
ML	MICRO-LOOP PROBE
ELW	EXISTING LOOP WIRE (NO. 14 A.W.G.)
⌧	GROUND ROD
[1] g	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) TRAY CABLE
[1] h	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

RED LINE REVISION NO. (2)
January 18, 2012
Relocate Equipment in NE Corner Due to Utilities
TEDD Approval: [signature] 1-25-12

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite B
Gambrills, MD 21054
(410) 923-7101
FAX: (410) 923-6473
EMAIL: TRAFFIC@TRAFFIC-CONCEPTS.COM

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 713 (RIDGE ROAD) AND TEAGUE ROAD /ARUNDEL MILLS H-BLOCK

GENERAL INFORMATION PLAN

SCALE NONE | DATE 10-17-11 | CONTRACT NO. BW-996M82

DESIGNED BY	T.ZAYDEL	COUNTY	ANNE ARUNDEL
DRAWN BY	J.K. SCHMID	LOGMILE	Q2B71300.06
CHECKED BY	K. SCHMID	T.I.M.S. NO.	K-970
F.A.P. NO.	N/A	TOD NO.	

DRAWING NO. TS-42408GI 3 | SHEET NO. 4 OF 4

FILE PATH: Z:\2400\2475\Signals\MD 713@Teague Rd\red-line-11-14-11.dgn
DATE: Wednesday, January 18, 2012 AT 03:57 PM