PROJECT DESCRIPTION
GENERAL
This project involves the modification of the existing traffic signal at the intersection of MD 60 (Leitersburg Pike) at Cortland Dr./Meadow View Dr. in Washington County.

INTERSECTION OPERATION
The intersection operates in a fully actuated mode using 6 NEMA phases.
There is an exclusive/permissive left turn phase for the north and southbound movements of MD 60. The MD 60 through movements operate concurrently with an actuated audible pedestrian movement across the north leg of the intersection.
Cortland Dr./Meadow View Dr. through movements operate concurrently with an actuated audible pedestrian movement across the east leg of the intersection.

The existing cabinet/controller shall be utilized. Telemetry interface and audible pedestrian control equipment shall be installed at this location.

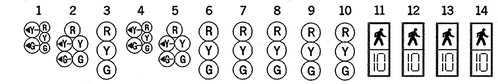
SPECIAL NOTES
PROJECT CONTACTS:
1. The following contact persons for this project are as follows:
   George Small, Assistant District Engineer - Traffic
   Phone: (301) 729-8486
   John True, Assistant District Engineer - Construction
   Phone: (301)729-8411
   Anthony Crawford, Assistant District Engineer - Maintenance
   Phone: (301)729-8457
   Robert Rowan, Utility Engineer
   Phone: 301(729-8472)
   Edward Rodenhizer, Signal Operations
   Phone: (410)-787-7652

EQUIPMENT LIST
A. Equipment to be supplied by the administration.
None.

B. Equipment to be furnished and/or installed by the contractor.

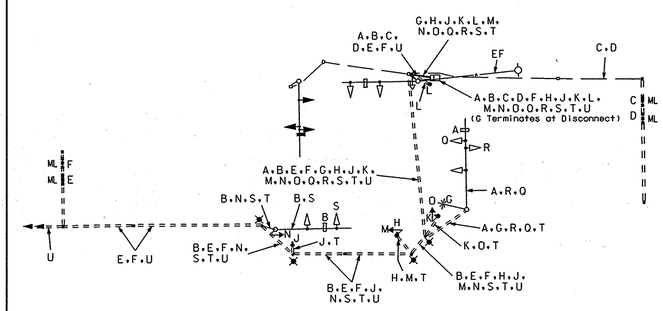
Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
2	EA	818	4 ft. steel pedestal pole with break away transformer base.
2	EA	818	10 ft. steel pedestal pole with break away transformer base.
1	EA	---	Telemetry interface equipment.
1	EA	---	Video Detection cable. (1 - 400 LF)
4	EA	813	9 in. x 15 in. R10-3(II) pedestrian education sign with pole mounting hardware.
1	EA	813	42 in. x 30 in. W 9-2(4) sign with mast arm mounting hardware.
1	EA	817	Central Control Unit for audible pedestrian pushbutton.
4	EA	817	Audible pedestrian pushbutton assembly with pedestrian education sign.
2	EA	---	Non-invasive probe (set of 3) with (500 ft.) lead-in cable.
2	EA	---	Non-invasive probe (set of 3) with (1000 ft.) lead-in cable.
9	EA	811	Handhole.
640	LF	810	2-conductor electrical cable (No. 14 A.W.G.).
685	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
335	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
280	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
20	LF	805	2 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
310	LF	805	3 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
140	LF	805	3 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
110	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - slotted.
85	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
3	CY	801	Concrete foundation for traffic signal equipment.
4	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
3	EA	---	Relocate existing pedestrian signal head.
3	EA	---	Relocate existing traffic signal head.
3	EA	---	Realign video detection zone.
Lump Sum	LS	---	Relocate existing wire (Approx.- 1250 LF).
Lump Sum	LS	---	Remove existing signal equipment.

Phase Chart



	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 AND 5	←R/G	←R/G	R	←R/G	←R/G	R	R	R	R	R	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6														
PHASE 1 AND 6	←G/G	←G/G	G	R	R	R	R	R	R	R	DW	DW	DW	DW
1 AND 6 CHANGE	←Y/G	←Y/G	G	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 AND 5	R	R	R	←G/G	←G/G	G	R	R	R	R	DW	DW	DW	DW
2 AND 5 CHANGE	R	R	R	←Y/G	←Y/G	G	R	R	R	R	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	FL/DW	FL/DW	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 AND ALT 8	R	R	R	R	R	R	G	G	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	DW	DW	FL/DW	FL/DW
4 AND ALT 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

Wiring Diagram



KEY
- A — Existing Video Detector Cable
- B — Video Detector Cable
- C E, D F — Non-Invasive Micro-loop Detector Lead-in Cable
- G — 2-Conductor Tray Cable (Existing)
- H K, J L — 2-Conductor Electrical Cable (No. 14 A.W.G.)
- M, N, D — 5-Conductor Electrical Cable (No. 14 A.W.G.)
- Q, R — 7-Conductor Electrical Cable (Existing)
- S — 7-Conductor Electrical Cable (No. 14 A.W.G.)
- T — Bare Copper Ground Wire (No. 6 A.W.G.)
- U — 12-Pair Voice Grade Telemetry Interconnect Cable (No. 19 A.W.G.) (Stone House Way - Meadow View Dr./ Cortland Ave. Run)
- EF — Existing Overhead Electrical Service By Allegheney Power
- ✱ — Proposed Grounding Rod
- ML — Micro-loop Detector (Non-Invasive)

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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

Stone House Square
MD 60 at Cortland Dr/Meadow View Dr.

GENERAL INFORMATION PLAN

SCALE N/A DATE May 4, 2007 CONTRACT NO. BW996M82

DESIGNED BY J. Storck COUNTY Washington
DRAWN BY J. Storck LOGMILE 21006000.37
CHECKED BY TIMS NO. 1456
FAP NO. N/A TOD NO.

TS NO. 4345A-GI | DRAWING – OF | SHEET NO. 2 OF 5

PLOTTED: Sunday, May 06, 2007 AT 10:58 AM
FILE: F:\2005\2005-0418\des\Signal\PSG-IN002-md60_Cortland.dgn

BY: FBrownley