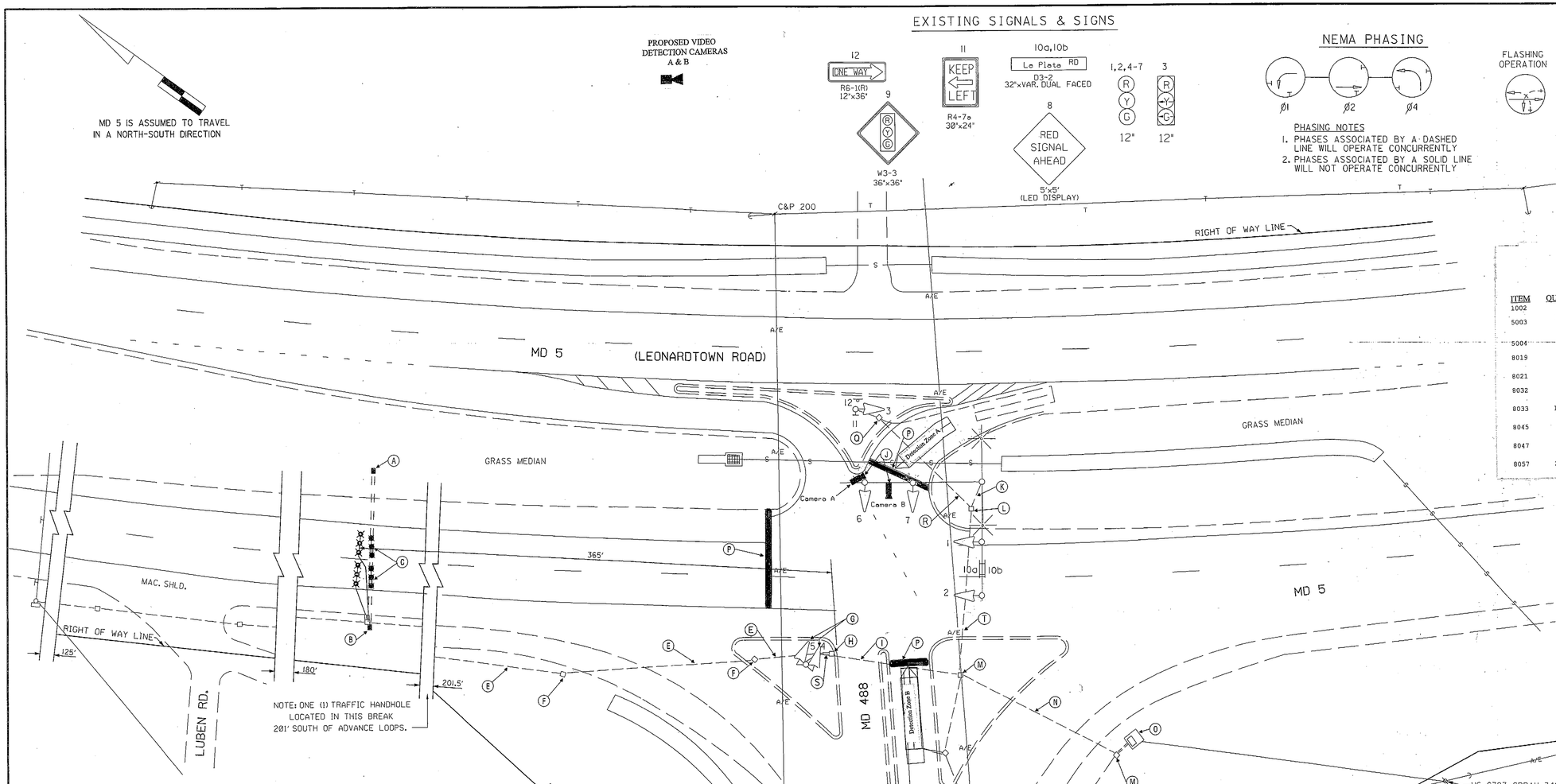
F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

EXISTING SIGNALS & SIGNS



NEMA PHASING

PHASING NOTES

1. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY
2. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY

FLASHING OPERATION

Equipment List 'B'
Equipment to be furnished and installed by the Contractor.

ITEM	QUANTITY		DESCRIPTION
1002	1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
5003	75	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS ANY WIDTH
5004	75	LF	24 INCH WHITE PREFORMED THERMOPLASTICPAVEMENT MARKING LINES
8019	2	EA	F & I VIDEO DETECTION CAMERA W/ 3 WIRE
8021	1	EA	REMOVE & DISPOSE OF EQUIPMENT
8032	90	LF	UP TO '4 IN. SCHEDULE 80 RIGID PVC CONDUIT- SLOTTED
8033	135	LF	UP TO 4 IN. SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
8045	3	EA	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
8047	4	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8057	235	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)

Equipment List 'A'
Equipment to be supplied and installed By the SHA

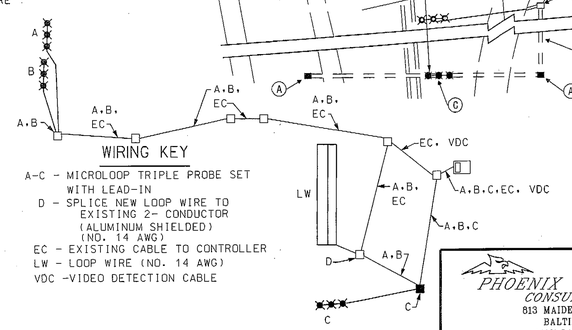
Easylock Connector
Terra Interface Panel
Terra Access Point
Tip to Tap I/F Cable-BIU
Tip to Tap I/F Cable-Hardwire
Terra Field Ethernet Adapter

Equipment List 'C'
Removed and Salvaged Items

NONE

A. INSTALL HANDHOLE ALIGNED TO ACCOMODATE NON-INVASIVE PROBE SETS.
B. REPLACE EXISTING HANDHOLE. INSTALL PROPOSED TRIPLE MICRO LOOP PROBE LEAD-IN CABLES.
C. INSTALL PROPOSED NON-INVASIVE TRIPLE MICRO LOOP PROBE SET(S) IN 3 INCH SCHEDULE 80 PVC (SLOTTED IN ROAD).
D. INSTALL 3 INCH SCHEDULE 80 PVC (TRENCHED). INSTALL PROPOSED TRIPLE MICRO LOOP PROBE LEAD-IN CABLES.
E. USE EXISTING CONDUIT. REMOVE EXISTING TRIPLE MICRO LOOP PROBE LEAD-IN CABLES AND INSTALL PROPOSED TRIPLE MICRO LOOP PROBE LEAD-IN CABLES.
F. USE EXISTING HANDHOLE. REMOVE EXISTING TRIPLE MOCRO LOOP PROBE LEAD-IN CABLES AND INSTALL PROPOSED TRIPLE MICRO LOOP PROBE LEAD-IN CABLES.
G. USE EXISTING SIGNAL HEADS. REMOVE EXISTING FIELD WIRES AND INSTALL PROPOSED FIELD WIRES. RE-WIRE SIGNAL HEAD.
H. USE EXISTING HANDHOLE. REMOVE EXISTING FIELD WIRES AND TRIPLE MICRO LOOP PROBE LEAD-IN CABLES. INSTALL PROPOSED FIELD WIRES AND TRIPLE MICRO LOOP PROBE LEAD-IN CABLES.
I. USE EXISTING CONDUIT. REMOVE EXISTING FIELD WIRES AND TRIPLE MICRO LOOP PROBE LEAD-IN CABLES. INSTALL PROPOSED FIELD WIRES AND TRIPLE MICRO LOOP PROBE LEAD-IN CABLES.
J. USE EXISTING MAST ARM AND UPRIGHT. INSTALL PROPOSED VIDEO DETECTIION CAMERA AND VIDEO DETECTION LEAD-IN CABLES.
K. USE EXISTING CONDUIT. INSTALL PROPOSED VIDEO DETECTION LEAD-IN CABLES.
L. USE EXISTING HANDHOLE. REMOVE EXISTING IMSA CABLE. INSTALL PROPOSED VIDEO DETECTION LEAD-IN CABLES.
M. USE EXISTING HANDHOLE. REMOVE EXISTING FIELD WIRES, IMSA CABLE AND TRIPLE MICRO LOOP PROBE LEAD-IN CABLES. INSTALL PROPOSED FIELD WIRES TRIPLE MICRO LOOP PROBE AND VIDEO DETECTION LEAD-IN CABLES.
N. USE EXISTING CONDUIT. REMOVE EXISTING FIELD WIRES, IMSA AND TRIPLE MICRO LOOP PROBE LEAD-IN CABLES. INSTALL PROPOSED FIELD WIRES, TRIPLE MICRO LOOP PROBE AND VIDEO DETECTION LEAD-IN CABLES.
O. USE EXISTING CONTROLLER CABINET. REMOVE EXISTING FIELD WIRES, LOOP DETECTION AND TRIPLE MICRO LOOP PROBE LEAD-IN CABLES. INSTALL PROPOSED FIELD WIRES, VIDEO DETECTION AND TRIPLE MICRO LOOP PROBE LEAD-IN CABLES. TOD PERSONNEL WILL INSTALL AND PROGRAM VIDEO DETECTION INTERFACE EQUIPMENT AND RETUNE AMPLIFIERS AFTER COMPLETION OF PROPOSED WORK.
P. REMOVE EXISTING STOP LINE AND REINSTALL IN ACCORDANCE TO SHA STANDARDS.
Q. USE EXISTING HANDHOLE. REMOVE EXISTING IMSA CABLES.
R. USE EXISTING CONDUIT. REMOVE EXISTING IMSA CABLES.
S. USE EXISTING CONDUIT. REMOVE EXISTING FIELD AND INSTALL PROPOSED FIELD WIRES.
T. USE EXISTING CONDUIT. REMOVE EXISTING IMSA CABLE AND INSTALL PROPOSED VIDEO DETECTION LEAD-IN CABLES.

UTILITY LEGEND		
T	T	TELEPHONE CABLES
G	G	GAS MAIN
W	W	WATER MAIN
S	S	SEWER MAIN
E	E	ELECTRIC CABLES
A	A	AERIAL CABLES
BC		BURIED CABLE
SD		STORM DRAIN
GEOMETRIC LEGEND		
		EXISTING GEOMETRICS
		PROPOSED GEOMETRICS



WIRING KEY

A-C - MICROLOOP TRIPLE PROBE SET WITH LEAD-IN
D - SPLICE NEW LOOP WIRE TO EXISTING 2- CONDUCTOR (ALUMINUM SHIELDED) (NO. 14 AWG)
EC - EXISTING CABLE TO CONTROLLER
LW - LOOP WIRE (NO. 14 AWG)
VDC -VIDEO DETECTION CABLE

WIRING DIAGRAM

PHOENIX ENGINEERING, INC.
CONSULTING ENGINEERS
813 MAIDEN CHOICE LANE, SUITE 300
BALTIMORE, MARYLAND 21228
(410) 247-8833 FAX 247-9397

APPROVALS	REVISIONS
ORIGINAL ON FILE	B. 1/98 REPLACE DETECTION DUE TO RESURFACING CH-6085177
ASST. DIVISION CHIEF, TEDD	EM / GP
ASST. DISTRICT ENGINEER, TRAFFIC	A. AS-BUILT CH-599-501-585
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	STS
DIRECTOR, OFFICE OF TRAFFIC & SAFETY	C INSTALLATION OF VIDEO DETECTION 01/2013 LM

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNALIZATION PLAN
MD. 5 & MD. 488
SIGNAL NO.: 08000506.78

DRAWN BY: ALLEN / PETERS	F.A.P. NO.		PLAN SHEET NO.:	SHEET NO.
CHECK BY: CARLSON	S.H.A. NO.	CH-447X-575	TS-3475	1 OF 1
SCALE: 1"=20'	COUNTY	CHARLES		