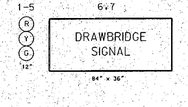
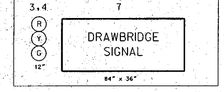
MD 33 RUNS IN A EAST-WEST DIRECTION.

EXISTING SIGNALS & SIGNS



PROPOSED SIGNALS & SIGNS



CONSTRUCTION DETAILS

A. INSTALL THE PROPOSED 27' STEEL POLE WITH 34' MAST ARM (CUT DOWN FROM 70'), 3" PVC SCHEDULE 80 CONDUIT BEND, SIGNAL HEADS (2), CONCRETE PAD, SIGN, AND CONCRETE FOUNDATION (SEE ATTACHED DRAWING - "ALTERNATE FOUNDATION FOR 70 FEET MAST ARM STRUCTURE").
B. INSTALL THE PROPOSED 3" PVC SCHEDULE 80 CONDUIT - TRENCHED.
C. INSTALL THE PROPOSED HANDHOLE.
D. USE THE EXISTING CONDUIT.
E. USE THE EXISTING HANDHOLE.
F. REMOVE THE EXISTING SIGNAL POLE W/ MAST ARM AND ALL ATTACHED EQUIPMENT.
G. CAP AND ABANDON THE EXISTING CONDUIT.
H. REMOVE THE EXISTING HANDHOLE.

EQUIPMENT LISTS

A. EQUIPMENT TO BE FURNISHED BY THE SHA

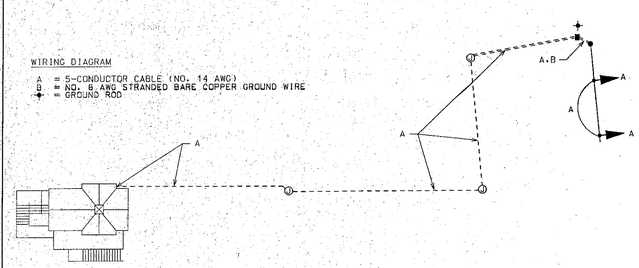
ITEM NO.	QUANTITY	DESCRIPTION
	20 S.F.	1 EACH GM-1 SIGN, "DRAWBRIDGE SIGNAL", 48" x 60", MAST ARM MOUNTED HARDWARE

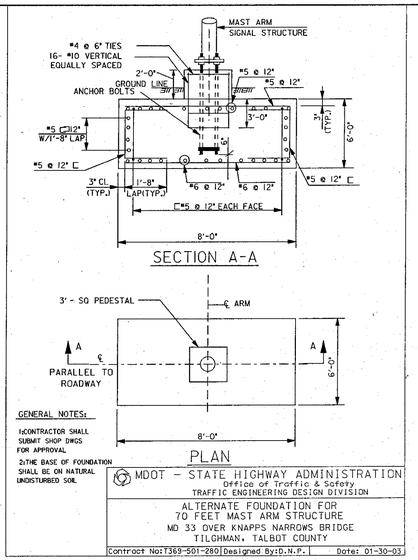
B. EQUIPMENT TO BE FURNISHED AND/ OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	1 C.Y.	TEST PIT EXCAVATION
6001	24 S.F.	F & I 4" CONCRETE SIDEWALK
8001	1 EACH	CUT, CLEAN, AND CAP TRAFFIC SIGNAL STRUCTURE
8002	6 EACH	F & I 12" VECHICULAR SIGNAL HEAD SECTION
8003	1 EACH	F & I BROWN 27' MAST ARM POLE & 70' MAST ARM
8004	1 EACH	REMOVE AND DISPOSE OF EXISTING FOUNDATION 12" BELOW GRADE
8005	1 EACH	REMOVE AND DISPOSE OF MATERIAL AND EQUIPMENT PER ASSIGNMENT
8006	55 L.F.	F & I 3" PVC SCHEDULE 80 CONDUIT - TRENCHED
8007	10.7 C.Y.	F & I CONCRETE FOR SIGNAL FOUNDATION
8008	10 L.F.	F & I NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8009	20 S.F.	INSTALL OVERHEAD MOUNTED SIGN
8010	1 EACH	F & I GROUND ROD - ¾" x 10'
8011	550 L.F.	F & I ELECTRICAL CABLE - 5-CONDUCTOR (NO. 14 AWG)
8012	1 EACH	F & I ELECTRICAL HANDHOLE
8013	1 EACH	PAINT STRUCTURE BROWN

WIRING DIAGRAM

A = 5-CONDUCTOR CABLE (NO. 14 AWG)
B = NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
⏚ = GROUND ROD





GENERAL NOTES:

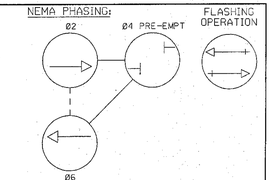
1. CONTRACTOR SHALL SUBMIT SHOP DWGS FOR APPROVAL
2. THE BASE OF FOUNDATION SHALL BE ON NATURAL UNDISTURBED SOIL

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

ALTERNATE FOUNDATION FOR
70 FEET MAST ARM STRUCTURE
MD 33 OVER KNAPPS NARROWS BRIDGE
TILGHMAN, TALBOT COUNTY

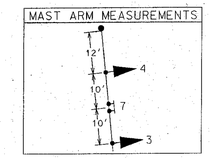
Contract No: T369-501-280 | Designed By: D.N.P. | Date: 01-30-03

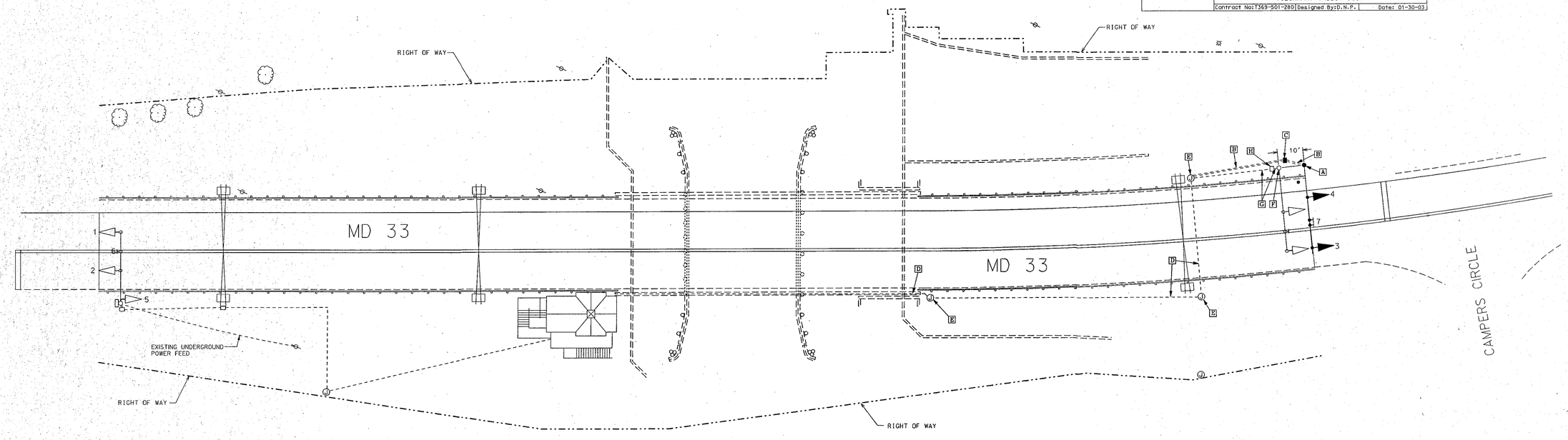
NEMA PHASING:



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

MAST ARM MEASUREMENTS





NOTES TO THE CONTRACTOR:

1. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PROJECT ENGINEER IMMEDIATELY.
2. THE CONTRACTOR SHALL USE THE DRAWING ABOVE (ALTERNATE FOUNDATION FOR 70' MAST ARM STRUCTURE) FOR THE PROPOSED CONCRETE FOUNDATION FOR THE INSTALLATION OF THE NEW SIGNAL POLE.
3. UPON RECEIPT OF THIS PROJECT, THE CONTRACTOR SHALL CONTACT MR. CARL SENOS OF LANDSCAPE OPERATIONS - DISTRICT 1 - (410-221-1635) FOR THE REMOVAL, AND THE REPLACEMENT OF THE LANDSCAPING AT THIS LOCATION.
4. ALL UNUSED CABLES SHALL BE REMOVED FROM THE EXISTING CONDUITS, AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DISPOSE OF THESE EXISTING CABLES.

UTILITY LEGEND

G — G	GAS MAIN
W — W	WATER MAIN
S — S	SEWER MAIN
E — E	ELECTRIC CABLES
A — A	AERIAL CABLES
T — T	TELEPHONE CABLES
D — D	STORM DRAIN

PROJECT CONTACTS

THE PROJECT CONTACTS ARE AS FOLLOWS:

MR. ROBERT KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 810-3450

MR. TERRY O. WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 810-3250

MR. BARRY CLOTHIER
ASSISTANT DISTRICT ENGINEER - UTILITIES
PHONE: (410) 810-3275

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

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

MR. EDWARD RODENHIZER
CHIEF, SIGNAL OPERATIONS SECTION
PHONE: (410) 787-7652

REVISIONS

B - 02/2003 - REBUILT THE EXISTING MAST ARM & POLE - MD 33 WESTBOUND (INSURANCE CLAIM)
SHA NO. 23863T2000
A - 07/1995 - RECONSTRUCT SIGNAL FOR NEW DRAWBRIDGE CONSTRUCTION
SHA NO.

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, OFFICE OF TRAFFIC & SAFETY

ORIGINAL PLAN ON FILE

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

MD 33 OVER KNAPPS NARROWS BRIDGE
(BASCULE BRIDGE NO. 20001)
TILGHMAN ISLAND, MARYLAND

DRAWN BY: S.J.R.	F.A.P. NO.	T.S. NO. TS-48 B	SHEET NO.
CHECKED BY: M. Rucker	S.H.A. NO. T 369-501-280		
SCALE: 1" = 20'	COUNTY TALBOT	T.I.M.S. NO. F667	1 OF 1
DATE: 07/ 1995	LOG MILE 20003300.88		