

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF U.S. 40 AND MD 222 IN CECIL COUNTY BY ADDING AN ADDITIONAL LEFT TURN LANE ON U.S. 40 EB AND MODIFYING THE ISLAND IN THE NE CORNER. U.S. 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE OPERATION WITH THE U.S. 40 APPROACHES OPERATING CONCURRENTLY AND THE MD 222 APPROACHES OPERATING SPLIT.

A LEAD EXCLUSIVE DUAL LEFT-TURN PHASE WILL BE PROVIDED FOR THE EASTBOUND U.S. 40 APPROACH AND A LAG EXCLUSIVE SINGLE LEFT-TURN PHASE WILL BE PROVIDED FOR THE WESTBOUND U.S. 40 APPROACH.

ALTERNATE PEDESTRIAN PHASES ARE PROVIDED ACROSS THE WEST LEG OF U.S. 40, AND PEDESTRIAN INDICATIONS ARE PROVIDED ACROSS BOTH LEGS OF MD 222.

CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH FOUR(4) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, VIDEO DETECTION INTERFACE EQUIPMENT, OPTICOM EMITTER SYSTEM 700 SERIES, VISIBLE LIGHT FILTER AND HARDWARE, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET WILL BE MAINTAINED.

SPECIAL NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND SHALL PROPERLY LABEL EACH CABLE.

CONTACT MR. CLAY GOTTLIEB AT MDTA (410-537-7885) WHEN CURB AND GUTTER WORK IS COMPLETE.

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RICHARD LINDSAY
DISTRICT ENGINEER
PHONE: (410) 810-3210

MR. ROBERT KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 810-3240

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

MR. BARRY CLOTHIER
DISTRICT UTILITIES ENGINEER
PHONE: (410) 810-3060

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

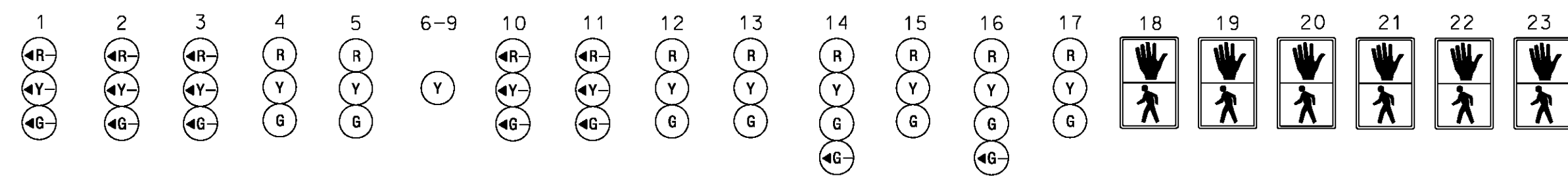
MR. ED RODENHIZER
SIGNAL SHOP SUPERVISOR
PHONE: (410) 787-7652

THE CONTACT PERSON FOR MDTA IS AS FOLLOWS:

MS. ROXANE MIKAI
TRAFFIC MANAGER
PHONE: (410) 537-7848

MR. CLAY GOTTLIEB
AREA ENGINEER, CONSTRUCTION SECTION
PHONE: (410) 537-7885

PHASE CHART



PHASE	1	2	3	4	5	6-9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PHASE 1 + 6	←G	←G	←G	G	G	FL/Y	←R	←R	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW
1 + 6 CHANGE	←Y	←Y	←Y	G	G	FL/Y	←R	←R	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW
PHASE 2 + 6	←R	←R	←R	G	G	FL/Y	←R	←R	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW
PED CLEARANCE	←R	←R	←R	G	G	FL/Y	←R	←R	G	G	R	R	R	R	WK	FL/DW	FL/DW	WK	DW	DW
2 + 6 CHANGE	←R	←R	←R	Y	Y	FL/Y	←R	←R	G	G	R	R	R	R	WK	DW	DW	WK	DW	DW
PHASE 2 + 5	←R	←R	←R	R	R	FL/Y	←G	←G	G	G	R	R	R	R	WK	DW	DW	WK	DW	DW
PED CLEARANCE	←R	←R	←R	R	R	FL/Y	←G	←G	G	G	R	R	R	R	FW/DW	DW	DW	FL/DW	DW	DW
2 + 5 CHANGE	←R	←R	←R	R	R	FL/Y	←Y	←Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	←R	←R	←R	R	R	FL/Y	←R	←R	R	R	←G	G	R	R	DW	DW	DW	DW	DW	DW
3 CHANGE	←R	←R	←R	R	R	FL/Y	←R	←R	R	R	←G	G	R	R	DW	DW	DW	DW	DW	DW
PHASE 4	←R	←R	←R	R	R	FL/Y	←R	←R	R	R	R	R	←G	G	DW	DW	DW	DW	DW	DW
4 CHANGE	←R	←R	←R	R	R	FL/Y	←R	←R	R	R	R	R	←G	G	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	←R	←R	←R	R	R	FL/Y	←R	←R	R	R	R	R	←G	G	DW	DW	DW	DW	WK	WK
PED CLEARANCE	←R	←R	←R	R	R	FL/Y	←R	←R	R	R	R	R	←G	G	DW	DW	DW	DW	FL/DW	FL/DW
4 ALT CHANGE	←R	←R	←R	R	R	FL/Y	←R	←R	R	R	R	R	←G	G	DW	DW	DW	DW	DW	DW
EMERGENCY OPERATION	←R	←R	←R	R	R	FL/Y	←R	←R	R	R	←G	G	R	R	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	←FL/R	←FL/R	←FL/R	FL/Y	FL/Y	FL/Y	←FL/R	←FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA/MDTA

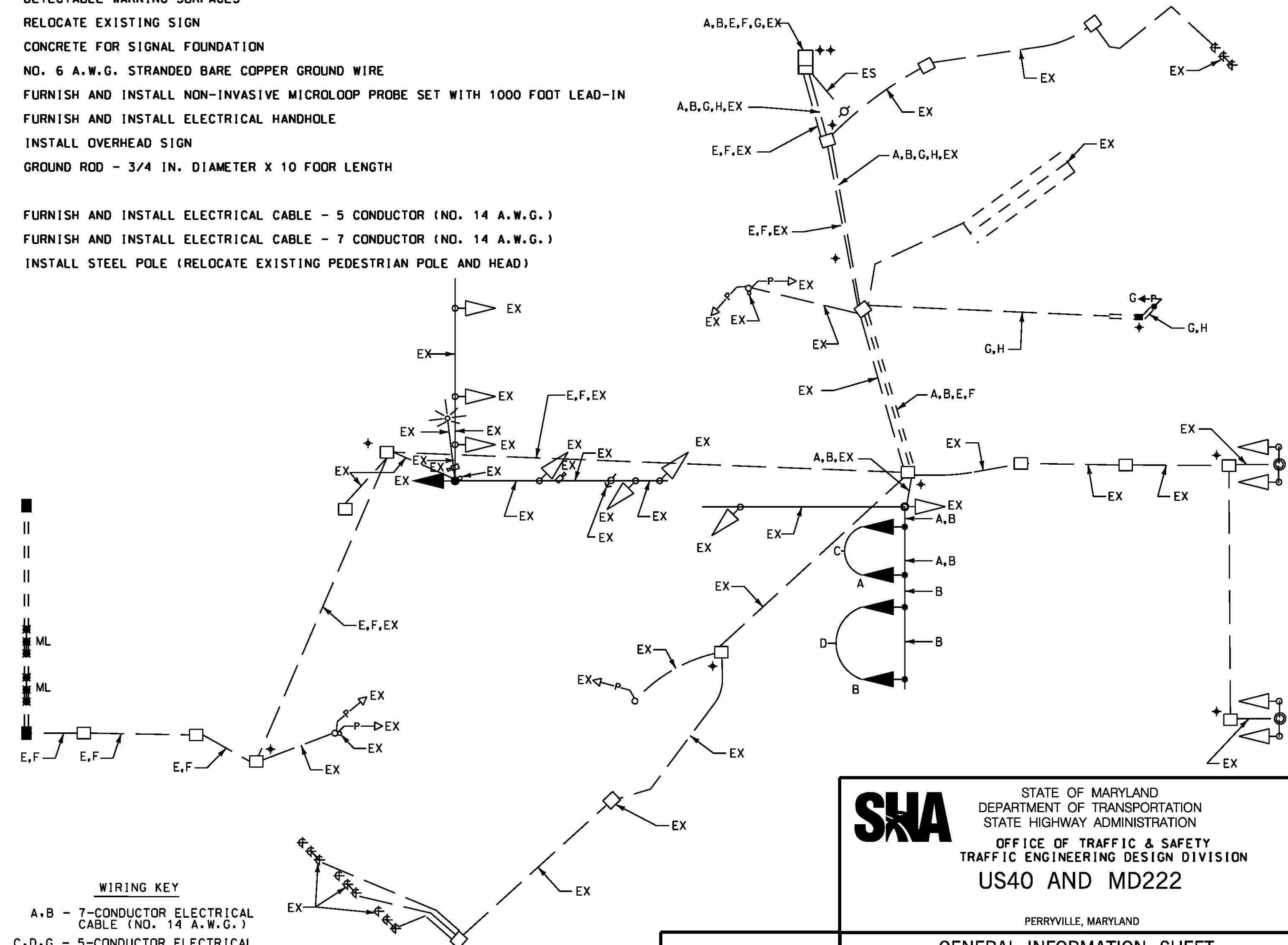
ITEM NO.	QUANTITY	DESCRIPTION
9571	7.5 SF	FURNISH R3-5L "LEFT TURN ONLY" SIGN (30"x36") MAST ARM MOUNTED

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR. AN ALLOWANCE HAS BEEN ESTABLISHED IN THE CONTRACT FOR THE INTERSECTION MODIFICATION WORK. PAYMENT WILL BE ON THE BASIS OF APPROVED PRICE PROPOSALS OR FORCE ACCOUNT FOR ALL LABOR, MATERIAL AND EQUIPMENT.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	16.5 CY	CLASS 2 EXCAVATION
2002	0.5 CY	TEST PIT EXCAVATION
5004	60 LF	24 IN SOLID WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS (STOPLINE)
6001	34 LF	DEPRESSED CURB AND GUTTER
6002	56 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 IN GUTTER PAN 8 IN DEPTH
6003	360 SF	4 IN. CONCRETE SIDEWALK
8001	15 EA	FURNISH AND INSTALL 12 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8017	1 EA	REMOVE AND DISPOSE OF EQUIPMENT PER ASSIGNMENT
8019	1 EA	REMOVE FOUNDATION 12 INCH DEPTH
8024	135 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8026	15 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8027	16 SF	DETECTABLE WARNING SURFACES
8028	8 SF	RELOCATE EXISTING SIGN
8030	0.7 CY	CONCRETE FOR SIGNAL FOUNDATION
8033	150 LF	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8043	2 EA	FURNISH AND INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1000 FOOT LEAD-IN
8044	3 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8046	7.5 SF	INSTALL OVERHEAD SIGN
8052	1 EA	GROUND ROD - 3/4 IN. DIAMETER X 10 FOOT LENGTH
8060	205 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8061	420 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
8064	1 EA	INSTALL STEEL POLE (RELOCATE EXISTING PEDESTRIAN POLE AND HEAD)

WIRING DIAGRAM



- WIRING KEY**
- A, B - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - C, D, G - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - E, F - MICROLOOP PROBE LEAD-IN (1000FT)
 - H - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
 - ML - NON-INVASIVE MICROLOOP PROBE SET
 - ES - EXISTING UNDERGROUND ELECTRICAL AND TELEPHONE SERVICE
 - EX - EXISTING SIGNAL CABLE
 - + - PROPOSED 3/4 IN. X 10 FT. GROUND ROD
 - ⊕ - EXISTING 3/4 IN. X 10 FT. GROUND ROD



SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US40 AND MD222

PERRYVILLE, MARYLAND

GENERAL INFORMATION SHEET	
SCALE 1" = 20'	DATE 08/01/07 CONTRACT NO.
DESIGNED BY KMP	COUNTY CECIL
DRAWN BY KMP	LOGMILE 07004001.16
CHECKED BY DSM	T.I.M.S. NO. 1620
F.A.P. NO.	TOD NO.
TS NO. 290-1 GI	DRAWING NO. 2 OF 2 SHEET NO. 2 OF 2

BY: \$USERNAME\$