

ITEM 900.620 SPECIAL PROVISION (VEHICLE SIGNAL HEADS, LED)(MS 829)		
QUANTITY	UNIT	DESCRIPTION
7	EA	ONE-WAY THREE-SECTION LED SIGNAL HEADS
1	EA	ONE-WAY FOUR-SECTION LED SIGNAL HEAD
8	EA	MOUNTING BRACKETS
8	EA	LOUVERED BACKPLATES WITH RETROREFLECTIVE BORDER
1000	LF	SIGNAL WIRING (EST. QUANTITY ONLY)

ITEM 900.620 SPECIAL PROVISION (REMOVE AND REPLACE TRAFFIC SIGNAL CONTROLLER)(MS 829)		
QUANTITY	UNIT	DESCRIPTION
1	EA	TRAFFIC SIGNAL CONTROLLER (ECONOLITE COBALT TS2 TYPE 2 WITH TELEMETRY MODULE)
1	EA	SMART MALFUNCTION MONITOR UNIT (MMU)
1	EA	MODIFY EXISTING CABINET FOR FLASHING YELLOW ARROW

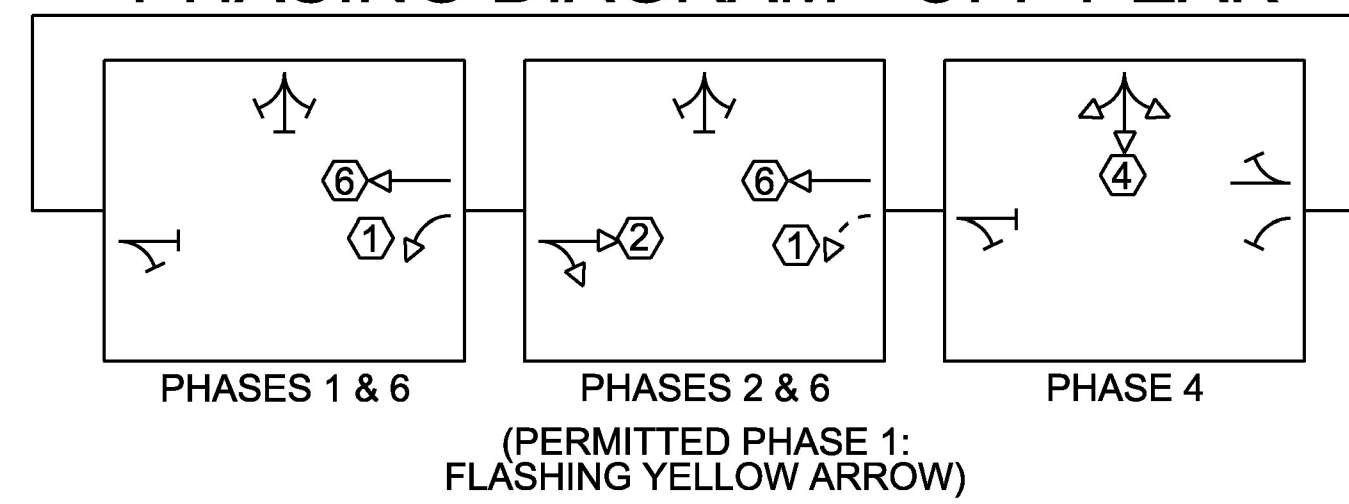
TRAFFIC SIGNAL NOTES

- ITEM 900.620 SPECIAL PROVISION (VEHICLE SIGNAL HEADS, LED)(MS 829) AND ITEM 900.620 SPECIAL PROVISION (REMOVE AND REPLACE TRAFFIC SIGNAL CONTROLLER)(MS 829) IS BE USED AT THE MAST ARMS LOCATED THE INTERSECTION OF US ROUTE 2, I-89 EXIT 17 - RAMP A AND I-89 EXIT 17 - RAMP B.
- THIS PLAN SHEET IS NOT TO SCALE AND SHOULD ONLY BE USED AS A GUIDE FOR THE PLACEMENT OF THE HARDWARE LISTED. THE CONTRACTOR SHALL CONFIRM ALL LOCATIONS IN THE FIELD WITH THE ENGINEER PRIOR TO INSTALLATION. LOCATIONS MAY BE REVISED AS A RESULT OF THIS SITE SURVEY.
- EXISTING VIDEO DETECTION EQUIPMENT TO BE RETAINED.
- ALL SALVAGABLE EQUIPMENT REMOVED TO REMAIN THE PROPERTY OF THE STATE. SALVAGED EQUIPMENT SHALL BE RETURNED TO COLCHESTER DISTRICT 5 OFFICE. CONTACT STEVE GUYETTE: 802-655-1580
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE AN ECONOLITE COBALT TS-2 TYPE 2, WITH TELEMETRY MODULE.
- EXISTING CONTROLLER TIMING AND COORDINATION TO BE DUPLICATED EXCEPT AS NOTED. FOR ADDITIONAL INFORMATION REGARDING EXISTING CONTROLLER PROGRAMMING CONTACT SIGNAL OPERATIONS ENGINEER DEREK LYMAN AT 802-249-5079.
- PERMISSIVE FLASHING YELLOW ARROW PHASE TO BE OMITTED DURING AM AND PM PEAK PERIODS. PHASE 1 SHOULD OPERATE AS A PROTECTED-ONLY MOVEMENT DURING THOSE TIME PERIODS.
- MAST ARM MOUNTED SIGNAL HEADS SHALL BE INSTALLED CENTERED ON THE MAST ARM, PROVIDED THIS DOES NOT RESULT IN MINIMUM CLEARANCE OF LESS THAN 17' OR EXCEEDING THE MAXIMUM HEIGHT ALLOWED BY THE MUTCD. CONTACT VTRANS SIGNAL TECH STEVE GUYETTE AT 802-655-1580 FOR MORE INFORMATION ABOUT MOUNTING HEIGHTS. SIGNAL HEADS SHALL BE REPLACED IN THE SAME HORIZONTAL LOCATION AS EXISTING HEADS.
- NEW MAST-ARM POLE MOUNTED SUPPLEMENTAL SIGNAL HEAD SHALL BE INSTALLED SUCH THAT THE BOTTOM OF THE BACKPLATE IS 12' ABOVE THE ADACENT MAINLINE EDGE OF PAVEMENT
- PAYMENT FOR REMOVING EXISTING SIGN AND INSTALLING NEW "LEFT TURN YIELD ON FLASHING YELLOW ARROW" SIGN SHALL BE CONSIDERED INCIDENTAL TO ITEM 900.620 SPECIAL PROVISION (VEHICLE SIGNAL HEADS, LED)(MS 829).
- REMOVE EXISTING STOP BAR AND LEFT TURN ARROW AT LEFT TURN LANE. INSTALL NEW STOP BAR AND LEFT TURN ARROW 10 FEET BACK FROM ITS CURRENT LOCATION. REMOVAL OF EXISTING STOP BAR AND EXISTING LEFT TURN ARROW WILL BE PAID FOR UNDER CONTRACT ITEM 646.85 - REMOVAL OF EXISTING TRAFFIC MARKINGS.

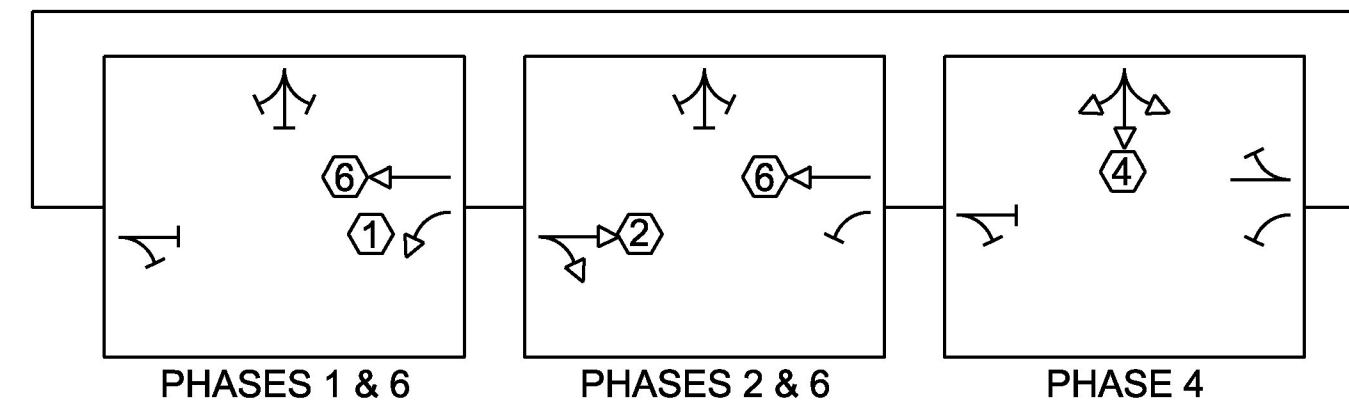
CONTROLLER TIMING CHART

PHASE	1	2	3	4	5	6	7	8	9
IN USE	X	X		X		X			
TRAFFIC MOVEMENT	WBL	EB		SB		WB			
MIN. GREEN	5	5		5		5			
MAX 1 - GREEN (OFF)	22	14		8		40			
MAX 2 - GREEN (AM)	10	36		10		50			
MAX 3 - GREEN (PM)	15	16		13		35			
YELLOW CLEARANCE	4	4		4		4			
ALL RED CLEARANCE	2	2		2		2			
VEHICLE EXTENSION	1.5	3		3		3			
RECALL MODE	NONE	VEH		NONE		VEH			

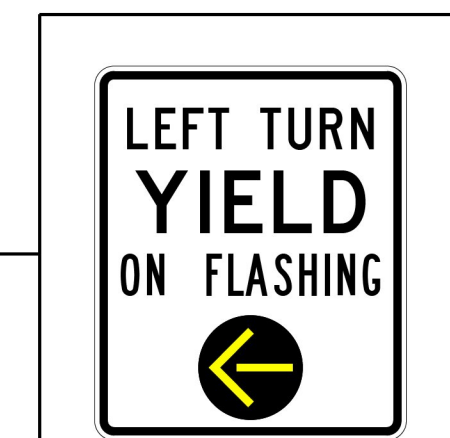
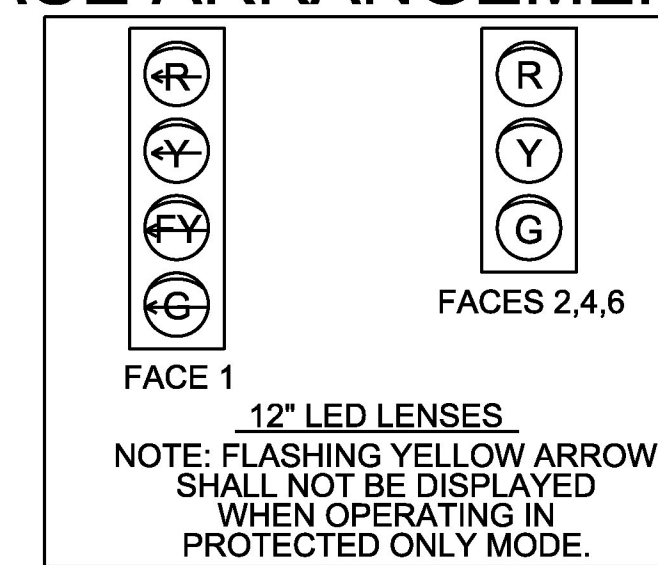
PHASING DIAGRAM - OFF PEAK



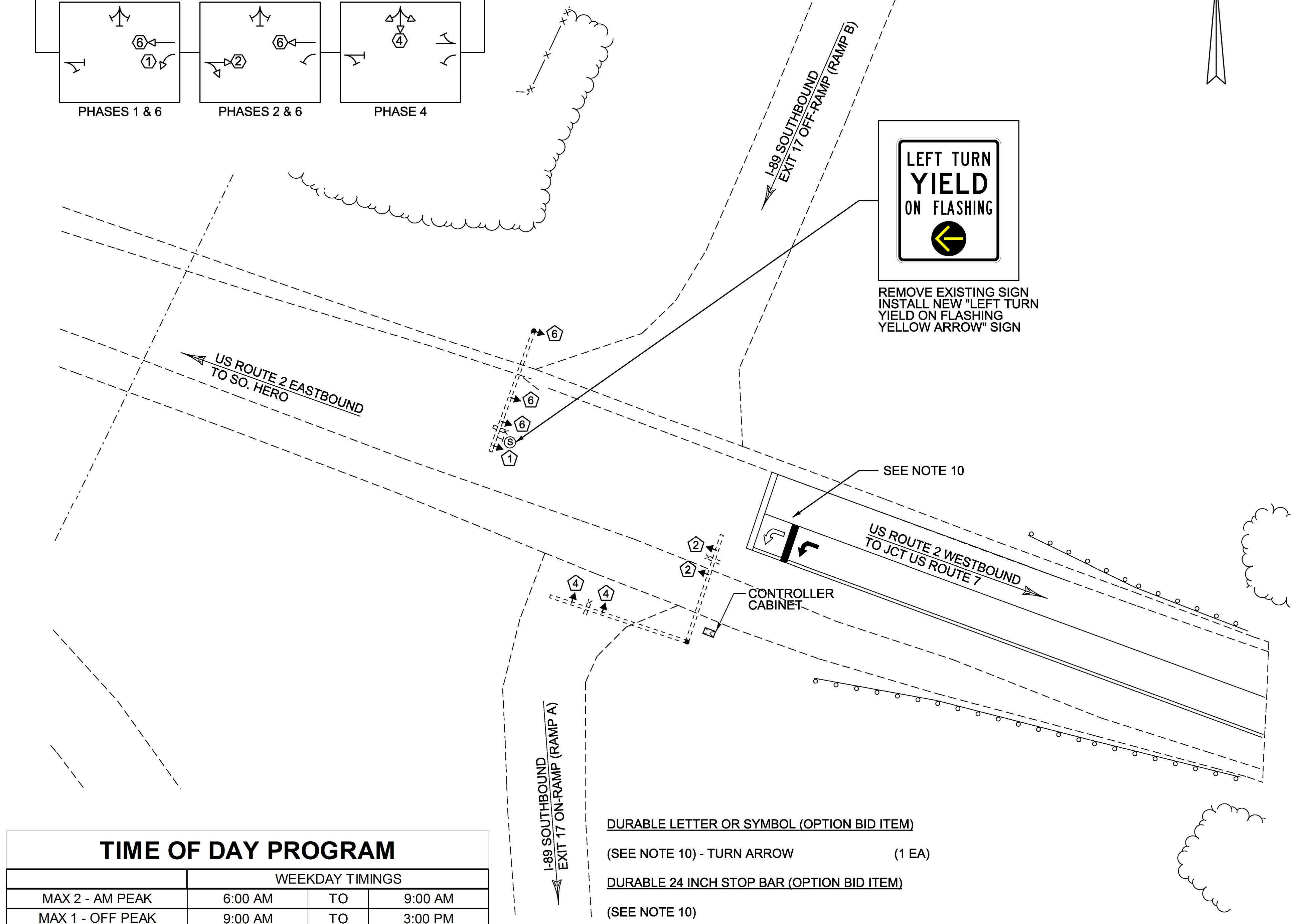
PHASING DIAGRAM - AM AND PM PEAKS



PROPOSED SIGNAL FACE ARRANGEMENTS



REMOVE EXISTING SIGN
INSTALL NEW "LEFT TURN
YIELD ON FLASHING
YELLOW ARROW" SIGN



TIME OF DAY PROGRAM

	WEEKDAY TIMINGS			
MAX 2 - AM PEAK	6:00 AM	TO	9:00 AM	
MAX 1 - OFF PEAK	9:00 AM	TO	3:00 PM	
MAX 3 - PM PEAK	3:00 PM	TO	7:00 PM	
MAX 1 - OFF PEAK	7:00 PM	TO	11:00 PM	
FREE	11:00 PM	TO	6:00 AM	
	WEEKEND TIMINGS			
MAX 1 - OFF PEAK	6:00 AM	TO	11:00 PM	
FREE	11:00 PM	TO	6:00 AM	

DURABLE LETTER OR SYMBOL (OPTION BID ITEM)

(SEE NOTE 10) - TURN ARROW (1 EA)

DURABLE 24 INCH STOP BAR (OPTION BID ITEM)

(SEE NOTE 10)

PROJECT NAME: COLCHESTER-SWANTON
PROJECT NUMBER: IM SURF(56)

FILE NAME: +16v071sig01.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: I. DEGUTIS
TRAFFIC SIGNAL SHEET 1

PLOT DATE: 22-DEC-2016
DRAWN BY: I. DEGUTIS
CHECKED BY: M. LACROIX
SHEET 42 OF 54