

LIST OF MAJOR EQUIPMENT		
EQUIPMENT ITEMS 678.15 TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION	QUANTITY	REMARKS
STEEL MAST ARM SIGNAL POLE (FLAT BLACK)	1	
STEEL MAST ARM (FLAT BLACK)	1	40'
PEDESTRIAN PEDESTAL POSTS AND FOUNDATIONS	1	FLAT BLACK
POWER STANCHION WITH DISCONNECTS	1	
TRAFFIC SIGNAL CONTROLLER (NEMA TS-2, TYPE 2)	1	ECONOLITE COBALT
NEW 12-INCH LED SIGNAL HEADS (ONE-WAY 3-SECTION, VISORS, DISCONNECT HANGERS, 5 INCH LOUVERED BACKPLATES WITH 2 INCH RETRO-REFLECTIVE BORDER AND MOUNTING HARDWARE (FLAT BLACK))	6	
NEW 12-INCH LED SIGNAL HEADS (ONE-WAY 4-SECTION, VISORS, DISCONNECT HANGERS, 5 INCH LOUVERED BACKPLATES WITH 2 INCH RETRO-REFLECTIVE BORDER AND MOUNTING HARDWARE (FLAT BLACK))	1	
NEW 12-INCH LED SIGNAL HEAD (ONE-WAY 5-SECTION, VISORS, DISCONNECT HANGERS, 5 INCH LOUVERED BACKPLATES WITH 2 INCH RETRO-REFLECTIVE BORDER AND MOUNTING HARDWARE (FLAT BLACK))	1	
SIGNAL HEAD BRACKETS AND ANCILLARY EQUIPMENT	8	
ACCESSIBLE PEDESTRIAN PUSH BUTTON ASSEMBLIES POLE MOUNTED WITH LOCATOR TONE, R10-3e SIGN, FLAT BLACK HOUSING	2	
ACCESSIBLE PEDESTRIAN SIGNAL HEAD COUNTDOWN STYLE, FLAT BLACK HOUSING	2	
NEMA P44 BASE-MOUNTED CONTROLLER CABINET WITH 15-INCH EXTENDED BASE ON A CONCRETE FOUNDATION	1	PAINTED FLAT BLACK WITH ANCILLARY EQUIPMENT, FACING AWAY FROM TRAFFIC
SMART MALFUNCTION MONITORING UNIT (MMU) BIU-64	1	ECONOLITE MMU2-I6E SMART MONITOR
DETECTOR BRACKET FOR MAST ARM OR POLE	5	
STOP BAR DETECTOR ASSEMBLY	3	WAVETRONIX SMARTSENSOR MATRIX
ADVANCED DETECTOR ASSEMBLY	2	WAVETRONIX SMARTSENSOR ADVANCE
DETECTION PROCESSOR	2	WAVETRONIX CLICK 650
DETECTION CABINET RACK	2	
HARDENED NETWORK SWITCH	1	CISCO IE 2000
CONTROLLER IDENTIFICATION PLAQUE	1	SEE TRAFFIC SIGNAL SYSTEM NOTES
BI-DIRECTIONAL WIRELESS INTERCONNECT ANTENNA	1	
WIRELESS INTERCONNECT PROCESSOR CARD	1	
GPS CLOCK	1	

PVC SCHEDULE 80 CONDUIT SCHEDULE				
DESCRIPTION	WIRED CONDUIT (ITEM 678.23)		ELECTRICAL CONDUIT (ITEM 678.21)	
	2"	4"	2"	4"
POWER TO STANCHION	10'			
STANCHION TO CONTROLLER	10'			
CONTROLLER TO MAP-1	35'			
CONTROLLER TO MAP-1	35'			
CONTROLLER TO MAP-1			35'	
CONTROLLER TO JB-1	15'			
CONTROLLER TO JB-1	15'			
CONTROLLER TO JB-1			15'	
JB-1 TO JB-2	60'			
JB-1 TO JB-2	60'			
JB-1 TO JB-2			60'	
JB-1 TO PPI	6'			
JB-1 TO PPI			6'	
JB-2 TO PH2	6'			
JB-2 TO PH2			6'	
SUBTOTAL	352'		122'	
ROUNDING	6'		3'	
TOTALS	360'		125'	

CONTROLLER TIMING CHART VT ROUTE 14 SOUTH									
PHASE	1	2	3	4	5	6	7	8	9
IN USE	X	X		X		X			
TRAFFIC MOVEMENT	←	→		←	→	←			
MIN. GREEN	6	8		6		8			
MAX 2 - GREEN (AM)	15	20		10		30			
MAX 1 - GREEN (OFF)	10	25		10		25			
MAX 3 - GREEN (PM)	15	30		10		30			
YELLOW CLEARANCE	4	5		4		5			
ALL RED CLEARANCE	2	2		2		2			
VEHICLE EXTENSION	1	1		1		1			
DELAY GREEN									
WALK									7
PEDESTRIAN CLEAR									10
RECALL MODE		SOFT				SOFT			

SCHEDULE PLAN			
SCHEDULE NO.	DAY PLAN	DAYS	DATES
1	1	MON, TUE, WED, THU, FRI	1-31
1	2	SAT, SUN	1-31

DAY PLAN			
PLAN NO.	EVENT	ACTION PLAN	START TIME
1	1	254	12:00 AM
1	2	2	6:00 AM
1	3	1	9:00 AM
1	4	3	3:00 PM
1	5	1	6:00 PM
1	6	254	8:00 PM
2	1	254	12:00 AM
2	2	1	6:00 AM
2	3	254	8:00 PM

ACTION PLAN			
PLAN NO.	PATTERN	FLASH	REFERENCE
1	1	NO	MAX 1
2	2	NO	MAX 2
3	3	NO	MAX 3
4	254-FREE	NO	MAX 1

WEEKDAY PEAKS			
	HOURS		
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	6:00 PM	TO	8:00 PM
FREE	8:00 PM	TO	6:00 AM

ITEM 678.24 ELECTRICAL WIRING		
	LENGTH	DESCRIPTION
MAP-1 TO LUMINAIRE BRACKET ARM	102'	LIGHTING (3 WIRES)
BRACKET ARM TO LUMINAIRE	18'	LIGHTING (3 WIRES)
SUBTOTAL	120'	
ROUNDING	0	
TOTAL	120'	(PAID FOR AS ITEM 678.24)

ELECTRICAL WIRING FOR TRAFFIC SIGNAL SYSTEM		
	LENGTH	DESCRIPTION
MAP-1 TO MA-1	15'	SIGNAL HEAD
MAP-1 TO MA-1	20'	DETECTION
MAP-1 TO MA-1	20'	DETECTION
MAP-1 TO MA-1	20'	SIGNAL HEAD
MAP-1 TO MA-1	20'	SIGNAL HEAD
MAP-1 TO MA-1	20'	SIGNAL HEAD
MAP-1 TO MA-1	20'	SIGNAL HEAD
MAP-1 TO MA-1	20'	SIGNAL HEAD
MAP-1 TO MA-1	20'	SIGNAL HEAD
MAP-1 TO MA-1	20'	SIGNAL HEAD
MAP-1 TO MA-1	20'	SIGNAL HEAD
MA-1 TO DETECTOR	60'	MAINLINE NB ADVANCE
MA-1 TO DETECTOR	60'	MAINLINE SB ADVANCE
MA-1 TO SIGNAL HEAD	40'	4A
MA-1 TO SIGNAL HEAD	40'	PHASE 2 (OUTER)
MA-1 TO SIGNAL HEAD	40'	PHASE 2 (INNER)
MA-1 TO SIGNAL HEAD	40'	PHASE 1
MA-1 TO SIGNAL HEAD	40'	PHASE 4
MA-1 TO SIGNAL HEAD	40'	PHASE 6
MA-1 TO SIGNAL HEAD	40'	PHASE 6
PPI TO PEDESTRIAN HEAD	8'	U.S. ROUTE 2 CROSSING
PPI TO PEDESTRIAN PUSH BUTTON	8'	U.S. ROUTE 2 CROSSING
PPI TO PEDESTRIAN HEAD	8'	U.S. ROUTE 2 CROSSING
PPI TO PEDESTRIAN PUSH BUTTON	8'	U.S. ROUTE 2 CROSSING
SUBTOTAL	627'	
ROUNDING	23'	
TOTAL	650'	(SEE NOTES BELOW)

NOTES:

1. TOTAL QUANTITY OF ELECTRICAL WIRING SHOWN ABOVE IS APPROXIMATED FOR INFORMATIONAL PURPOSES. THE ACTUAL AMOUNT OF ELECTRICAL WIRING MAY VARY DUE TO FIELD CONDITIONS.

2. ELECTRICAL WIRING FOR THE TRAFFIC SIGNAL SYSTEM IS SHOWN IN THE TABLE ABOVE AND SHALL BE PAID UNDER ITEM 678.15 TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION. ELECTRICAL WIRING FOR THE STREET LIGHT MOUNTED ON THE SIGNAL POLE IS SHOWN ON A SEPARATE TABLE ON THIS SHEET AND IS PAID UNDER ITEM 678.24 ELECTRICAL WIRING.



PROJECT NAME:	EAST MONTPELIER
PROJECT NUMBER:	BRF 037-1(17)
FILE NAME: 26a1-Traff Sig & PH1.dgn	PLOT DATE: 2/17/2017
PROJECT LEADER: T. KNIGHT	DRAWN BY: G. BARRETT
DESIGNED BY: D. DEBAIE	CHECKED BY: K. RICHARDSON
TRAFFIC SIGNAL & PHASING PLAN-TSP 2	SHEET 57 OF 158