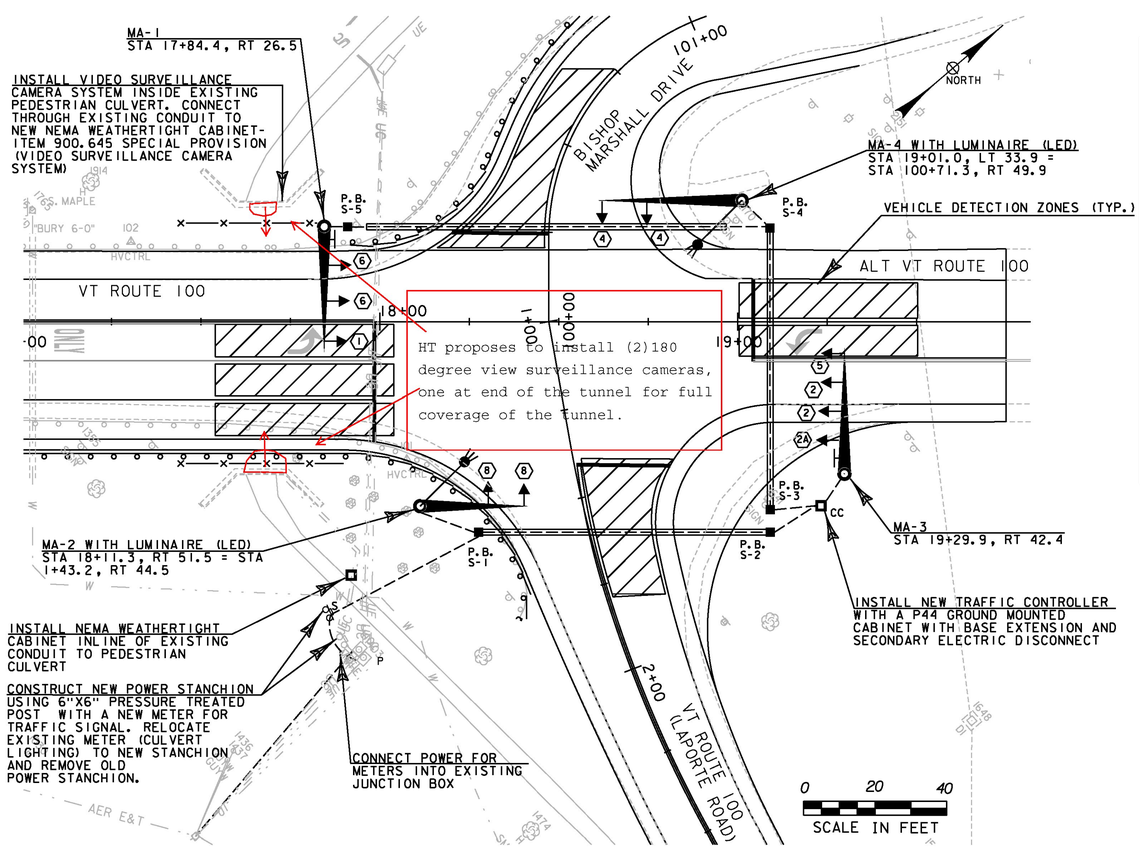
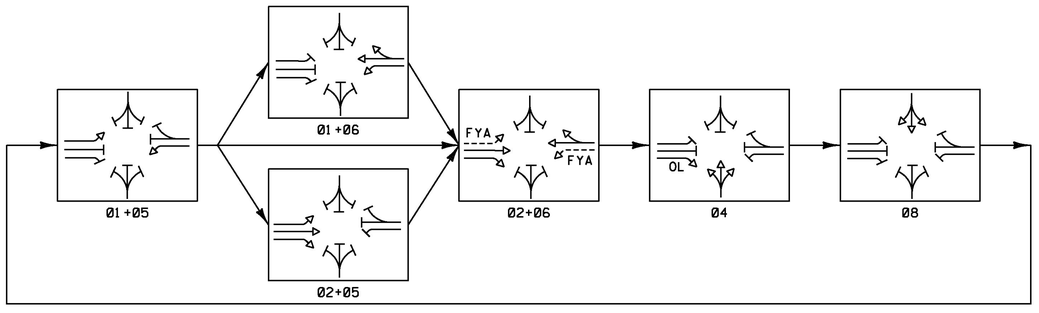


VT ROUTE 100, ALT VT ROUTE 100, AND BISHOP MARSHALL DRIVE



----- = PERMISSIVE MOVEMENT OL = OVERLAP FYA = FLASHING YELLOW ARROW

TABLE OF CHANGE SEQUENCE

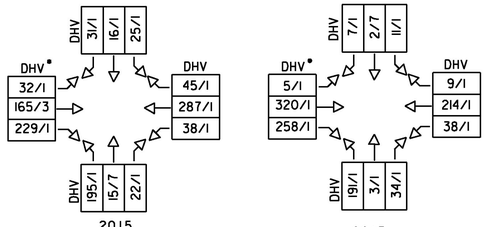
FACE	01 & 05 CLEAR TO R/W	01 & 05 CLEAR TO ALL OTHERS		01 & 06 CLEAR TO R/W	01 & 06 CLEAR TO ALL OTHERS		02 & 05 CLEAR TO R/W	02 & 05 CLEAR TO ALL OTHERS		02 & 06 CLEAR TO R/W	02 & 06 CLEAR TO ALL OTHERS		04 CLEAR TO R/W	04 CLEAR TO ALL OTHERS		08 CLEAR TO R/W	08 CLEAR TO ALL OTHERS		FLASHING OPERATION
1	~~G~~	~~Y~~	~~R~~	~~G~~	~~Y~~	~~R~~	~~R~~	~~R~~	~~R~~	FYA	~~Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	FR
2	R	R	R	R	R	R	G	Y	R	G	Y	R	R	R	R	R	R	R	FY
2a	R	R	R	R	R	R	G/Gb	Y/Yb	R	G/Gb	Y/Yb	R	G/Gb	Y/Yb	R	R	R	R	FY
4	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	FR
5	~~G~~	~~Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~G~~	~~Y~~	~~R~~	FYA	~~Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	FR
6	R	R	R	G	Y	R	R	R	R	G	Y	R	R	R	R	R	R	R	FY
8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	FR

LIST OF MAJOR EQUIPMENT

EQUIPMENT ITEM 678.15	QUANTITY
12-PHASE TS-2 TYPE 1 TRAFFIC SIGNAL CONTROLLER IN P44 CABINET WITH EXTENSION BASE/ FOUNDATION AND SECONDARY POWER DISCONNECT	1
SIGNAL POLE WITH 35' MAST ARM (MA-1)	1
SIGNAL POLE WITH 30' MAST ARM (MA-2)	1
SIGNAL POLE WITH 35' MAST ARM (MA-3)	1
SIGNAL POLE WITH 40' MAST ARM (MA-4)	1
NEW 12" POLYCARBONATE, 3-SECTION LED SIGNAL HEAD (ONE WAY) W/TUNNEL VISORS, LOUVERED BACKPLATES, AND MOUNTING HARDWARE	8
NEW 12" POLYCARBONATE, 4-SECTION LED SIGNAL HEAD (ONE WAY) W/TUNNEL VISORS, LOUVERED BACKPLATES, AND MOUNTING HARDWARE	2
NEW 12" POLYCARBONATE, 5-SECTION LED SIGNAL HEAD (ONE WAY) W/TUNNEL VISORS, LOUVERED BACKPLATES, AND MOUNTING HARDWARE	1
CAMERA ASSEMBLY (VIDEO MONITORING)	1
VIDEO CAMERA CARD AND RACK	1
ADVANCED VEHICLE DETECTION (EA)	2
VEHICLE STOP BAR DETECTION (EA)	4
POWER METER ON STANCHION	1

ALL OTHER WIRING AND INCIDENTALS REQUIRED TO PROVIDE A FULLY FUNCTIONAL TRAFFIC SIGNAL SYSTEM WILL BE CONSIDERED INCIDENTAL TO ITEM 678.15.

EXISTING	NEW	LEGEND
		UTILITY POLE
		LUMINAIRE
		LIGHT OR WOOD POLE
		STRAIN POLE
		CONTROLLER CABINET
		PULLBOX/JUNCTION BOX
		SIGNAL HEAD
EX		CONDUIT
		VEHICLE LOOPS
		PEDESTAL POST
		STANCHION
	S	SWEEP
		STREET NAME SIGN
		VEHICLE DETECTION ZONE

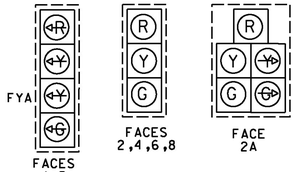


2015 A.M. DESIGN HOUR VOLUME TRAFFIC

2015 P.M. DESIGN HOUR VOLUME TRAFFIC

*DESIGN HOUR VOLUME / % TRUCK

SIGNAL FACE ARRANGEMENT (12" LENSES)



FYA = FLASHING YELLOW ARROW

CONTROLLER TIMING CHART									
LOCAL PROGRAMMING	PHASES								
	1	2	3	4	5	6	7	8	9
MINIMUM GREEN	5	8	--	5	5	8	--	5	--
EXTENSION	3	3	--	3	3	3	--	3	--
YELLOW CLEARANCE	4	4	--	4	4	4	--	4	--
ALL RED CLEARANCE	2	2	--	2	2	2	--	2	--
DHV	--	--	--	--	--	--	--	--	--
MAX GREEN I 6:00-9:00 AM	10	30	--	16	10	30	--	10	--
MAX GREEN II 3:00-6:00 PM	10	33	--	13	10	33	--	10	--
MAX GREEN 10:00AM-3:00PM	10	25	--	15	10	25	--	10	--
FLASH MODE 10:00PM-6:00AM	FR	FY	--	FR	FR	FY	--	FR	--
WALK	--	--	--	--	--	--	--	--	--
FLASHING DON'T WALK	--	--	--	--	--	--	--	--	--
RECALL	OFF	MIN	--	OFF	OFF	MIN	--	OFF	--

SIGNAL CONDUIT & SLEEVE LENGTHS

FROM	TO	2" WIRED CONDUIT SIGNAL	2" CONDUIT SIGNAL (SPARE)	2" CONDUIT POWER	12" SLEEVE
EX. POLE	EX. JB		2 x 81 FT		
P	S		2 x 22 FT	2 x 22 FT	
S	PB S-1	1 x 54 FT	1 x 54 FT	1 x 54 FT	
PB S-1	MA-2	3 x 22 FT	1 x 22 FT		
PB S-1	PB S-2	4 x 87 FT	1 x 87 FT	1 x 87 FT	1 x 79 FT
PB S-2	CC	4 x 20 FT	1 x 20 FT	1 x 20 FT	
CC	MA-3	2 x 15 FT	1 x 15 FT		
CC	PB S-3	4 x 18 FT	1 x 18 FT		
PB S-3	PB S-4	4 x 84 FT	1 x 84 FT		1 x 76 FT
PB S-4	MA-4	2 x 16 FT	1 x 16 FT		
PB S-4	PB S-5	3 x 124 FT	1 x 124 FT		1 x 101 FT
PB S-5	MA-1	3 x 12 FT	1 x 12 FT		

NOTES:

1. ALL EQUIPMENT NECESSARY TO PROVIDE A FULLY FUNCTIONAL VEHICLE STOP BAR DETECTION SYSTEM AND ADVANCED VEHICLE DETECTION WILL BE PAID FOR UNDER ITEM 678.15 TRAFFIC CONTROL SIGNALS.
2. ALL PULLBOXES SHOWN ON THE PLANS SHALL BE ITEM 678.27 PULLBOX, DOUBLE.
3. ALL TRAFFIC SIGNAL CONDUIT PROPOSED IN THE ROADWAY WILL BE INSTALLED IN THE SAME SLEEVE AS THE LIGHTING CONDUIT.
4. PHASE 1 AND PHASE 5 WILL CONSIST OF A PROTECTED GREEN ARROW INDICATION, FLASHING YELLOW ARROW CONDITION SHALL OPERATE DURING PHASE 2 AND PHASE 6 AND SHALL TERMINATE CONCURRENT WITH PHASE 2 AND PHASE 6 OPERATION IN CONFORMANCE WITH THE CURRENT MUTCD MANUAL.
5. CONTRACTOR SHALL INSTALL ADVANCED VEHICLE DETECTION ON THE MAINLINE APPROACHES AS DIRECTED IN THE TRAFFIC SIGNAL SYSTEM NOTES.
6. THE CONTRACTOR SHALL USE CAUTION TO PROTECT ALL UNDERGROUND UTILITIES FROM DAMAGE DURING THE INSTALLATION OF ELECTRIC CONDUIT. ANY DAMAGE TO THE EXISTING UNDERGROUND UTILITIES WILL BE REPAIRED AT THE COST OF THE CONTRACTOR, AT NO COST TO THE STATE OR THE UTILITY OWNER. SEE UTILITY SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
7. THE CONTRACTOR SHALL MODIFY THE EXISTING PEDESTRIAN CULVERT LIGHTING SYSTEM TO INCLUDE MOTION SENSORS AT EACH END OF THE CULVERT UNDER ITEM 900.645 SPECIAL PROVISION (MODIFYING EXISTING PEDESTRIAN CULVERT LIGHTING).
8. SEE SHEET 45 AND 46 FOR ADDITIONAL SIGNAL NOTES.

McFarland Johnson

PROJECT NAME: MORRISTOWN
PROJECT NUMBER: STPG SGNL(47)

FILE NAME: zl5t047sig01.dgn
PROJECT LEADER: J. SANTACRUCE
DESIGNED BY: R. LUCHINI
TRAFFIC SIGNAL LAYOUT SHEET 1

PLOT DATE: 5/17/2016
DRAWN BY: R. LUCHINI
CHECKED BY: B. COLBURN