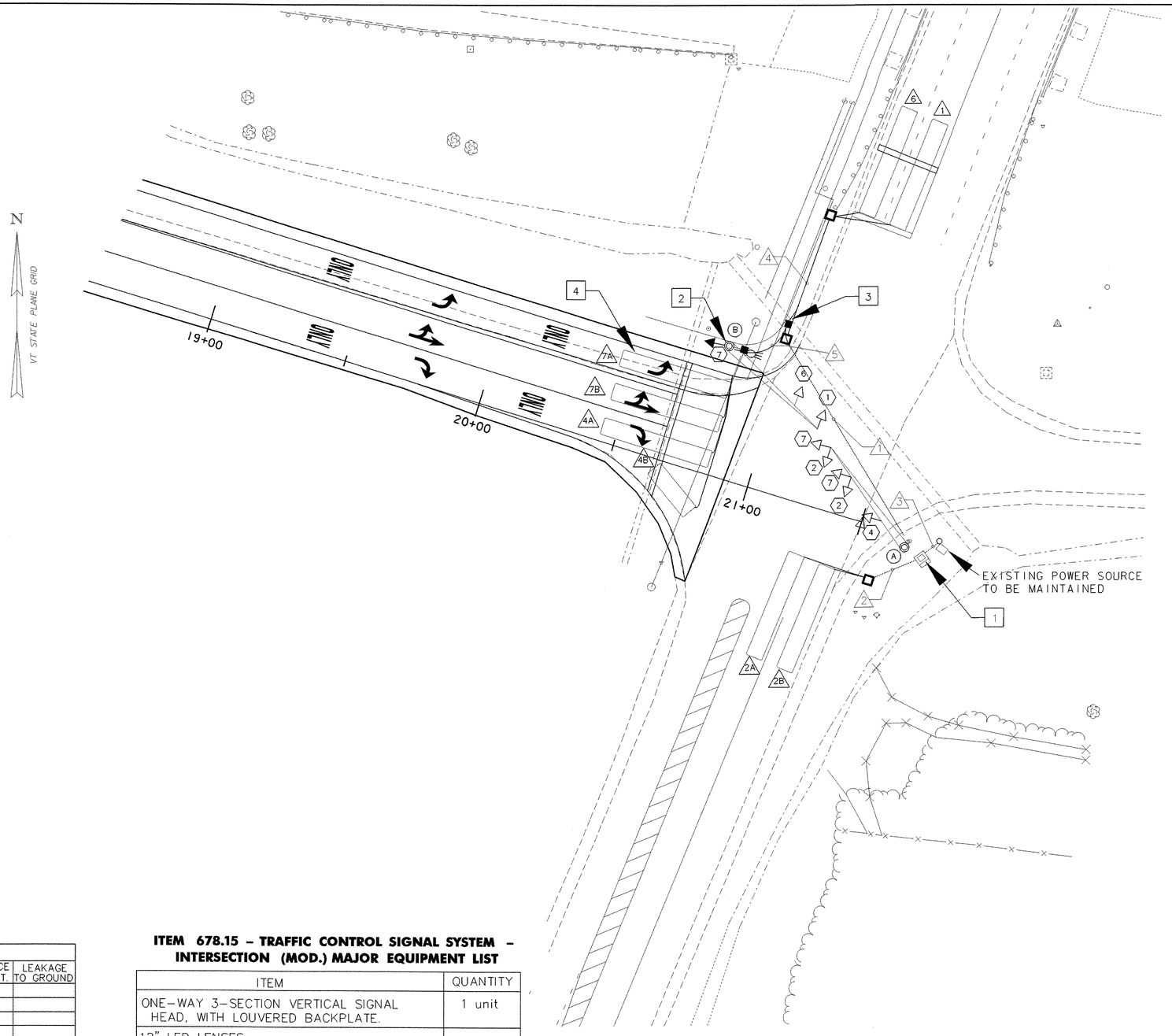
GENERAL NOTES

1. LOCATIONS OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS AND VERIFY ALL CONDITIONS ON THE JOB SITE.
2. ALL POLES, CONDUITS, JUNCTION BOXES, STRIPING, AND LOOP DETECTOR LOCATIONS SHOWN ON PLANS ARE APPROXIMATE. ACTUAL LOCATIONS SHALL BE DETERMINED BY FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND AS DIRECTED BY THE RESIDENT ENGINEER OR TOWN OF WILLISTON.
3. THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY LOCAL PERMITS AND MAKE ALL NECESSARY ARRANGEMENTS PRIOR TO THE COMMENCEMENT OF WORK.
4. ALL TRAFFIC SIGNAL CONDUIT SHALL BE 2" PVC UNLESS OTHERWISE SPECIFIED.
5. JUNCTION BOXES SHALL COMPLY WITH VTRANS STANDARD E-173. MINIMUM BOX SIZE SHALL BE 18" X 12" X 12".
6. THE LOGO ON JUNCTION BOXES SHALL BE "SIGNAL".
7. VEHICLE DETECTOR LOOPS SHALL COMPLY WITH VTRANS STANDARD E-172.
8. EXISTING TIMINGS WILL BE USED. NECESSARY ADJUSTMENTS TO TIMINGS WILL BE MADE AFTER COMPLETION OF THE PROJECT.
9. SIGNAL OPERATION:
   SWITCH-OVER FROM EXISTING TO REPLACEMENT SIGNALS SHALL NOT BE DONE DURING PEAK TRAFFIC PERIODS. UNIFORMED TRAFFIC OFFICERS SHALL CONTROL TRAFFIC DURING SWITCH-OVER.
   THE VT 2A PHASE SHALL BE USED FOR THE START-UP PHASE FOLLOWING FLASHING OPERATION.
10. WORK IMPROVEMENTS CONSISTING OF THOSE SHOWN ON PLANS SHALL BE PERFORMED ACCORDING TO SPECIFICATIONS AND STANDARD DRAWINGS OF VERMONT AGENCY OF TRANSPORTATION.
11. INSTALLATION OF THE SIGNAL HEAD TO THE EXISTING POLE SHALL BE PAID FOR UNDER ITEM 678.15, "TRAFFIC CONTROL SIGNAL SYSTEM - INTERSECTION (MOD.)". INSTALLATION PROCEDURE FOR ATTACHING THE NEW SIGNAL HEAD TO THE EXISTING POLE AND WIRING OF THE NEW SIGNAL HEAD SHALL BE APPROVED BY VTRANS PRIOR TO INSTALLATION. THE CONTRACTOR SHALL COORDINATE WITH VTRANS ON SUCH PROCEDURES. ONCE INSTALLATION OF THE NEW SIGNAL HEAD AND WIRINGIS COMPLETE, THE EXISTING POLE AND NEW SIGNAL HEAD SHALL BE INSPECTED AND FOUND SATISFACTORY BY THE RESIDENT ENGINEER.



CONSTRUCTION NOTES:

1. RETAIN EXISTING CONTROLLER IN EXISTING CABINET. INSTALL LOOP DETECTOR.
2. NEW CONDUIT AND SWEEPS INTO EXISTING CONDUIT RUN. EXISTING CONDUCTORS SHALL BE USED. INSTALL NEW SIGNAL HEAD ON POST OF EXISTING MAST ARM. RETAIN ALL CONDUCTORS AND SIGNAL HEADS. CONDUIT RUNS AND SIGNAL HEAD LOCATION SHALL COMPLY WITH VTRANS STANDARDS E-170, E-171A, E-171B, AND E-171C.
3. RELOCATE EXISTING JUNCTION BOX INTO EXISTING CONDUIT RUN. INSTALLATION SHOULD FOLLOW VTRANS STANDARD DRAWING E-173. NEW SWEEPS FROM EXISTING CONDUIT RUN INTO PULL BOX.
4. INSTALL DETECTOR LOOP PER VTRANS STANDARD DRAWING E-172. LOOP SHALL BE IN CENTER OF LANE.

EXISTING	NEW	LEGEND
		UTILITY POLE
		LUMINAIRE
		LIGHT OR WOOD POLE
		STRAIN POLE
		CONTROLLER CABINET
		JUNCTION BOX
		SIGNAL HEAD
		CONDUIT
		VEHICLE LOOPS
		PEDESTAL POST
		STANCHION
		SWEEP

VEHICLE DETECTOR LOOPS

LOOP NO.	LANE	CALL Ø	SIZE	TYPE & NO. TURNS	DELAY OR PRESENCE	INDUCTANCE CALC.	INDUCTANCE ACT.	RESISTANCE CALC.	RESISTANCE ACT.	LEAKAGE TO GROUND
1	SB LT	1&6	6x40	QUAD 2	PRESENCE	395		1.30		
2A	NB TH	2&6	6x40	QUAD 2	PRESENCE	351		0.73		
2B	NB THRT	2&6	6x40	QUAD 2	PRESENCE	348		0.69		
4A	EB RT	4&7	6x40	QUAD 2	5 SEC. DELAY	388		1.21		
4B	EB RT	4&7	6x20	QUAD 2	5 SEC. DELAY	234		1.02		
6	SB TH	2&6	6x40	QUAD 2	PRESENCE	392		1.26		
7A	EB LT	4&7	6x40	QUAD 3	PRESENCE	323		0.376		
7B	EB LT	4&7	6x40	QUAD 2	PRESENCE	384		1.15		

DATUM
VERTICAL N/A
HORIZONTAL N/A

ITEM 678.15 – TRAFFIC CONTROL SIGNAL SYSTEM – INTERSECTION (MOD.) MAJOR EQUIPMENT LIST

ITEM	QUANTITY
ONE-WAY 3-SECTION VERTICAL SIGNAL HEAD, WITH LOUVERED BACKPLATE.	1 unit
12" LED LENSES	
1-GREEN ARROW	1 unit
1-YELLOW ARROW	1 unit
1-RED ARROW	1 unit

SCALE 1" = 20'-0
20 0 20

PROJECT NAME: WILLISTON
PROJECT NUMBER: IM 089-2(35)

FILE NAME: 618800F4RSGTS.dgn
PROJECT LEADER: EPD
DESIGNED BY: JDA
TRAFFIC SIGNAL PLAN SHEET

PLOT DATE: 17-MAY-2005
DRAWN BY: JLS
CHECKED BY: RMC
SHEET 55 OF 76