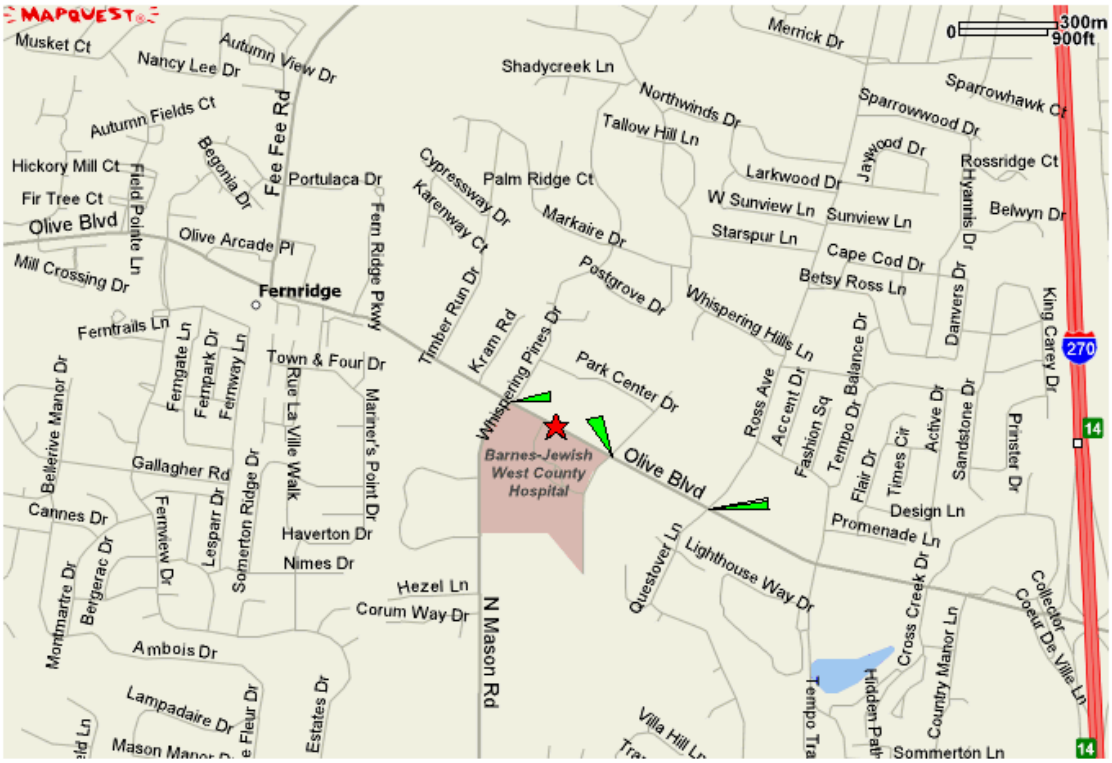
Map of Flashing Yellow Arrow Signal Work



ROUTE	STATE	DISTRICT	SHEET NO.
340	MO	6	1

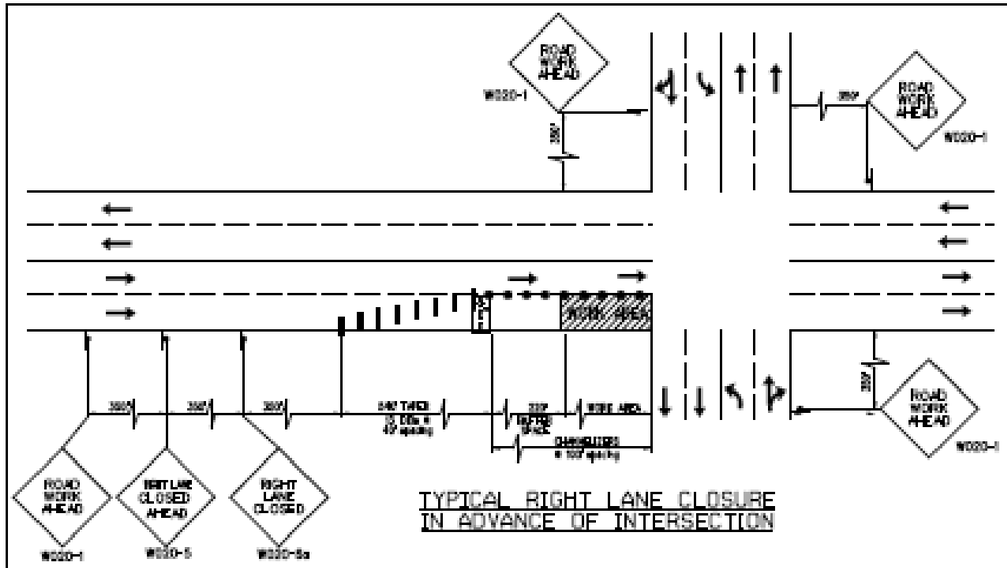
JOB NO.

CONTRACT ID.

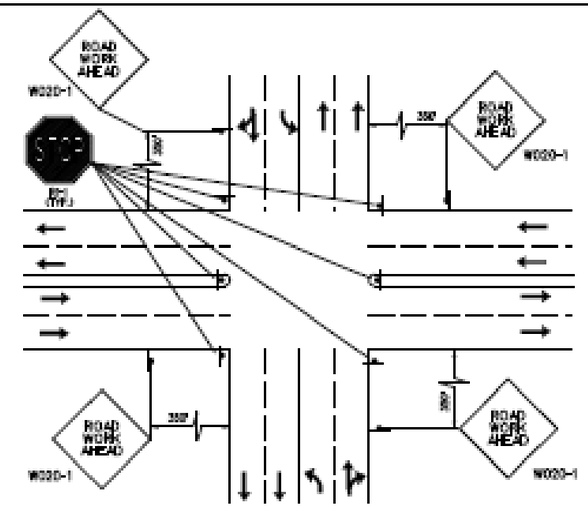
PROJECT NO.

COUNTY ST. LOUIS

DATE_____



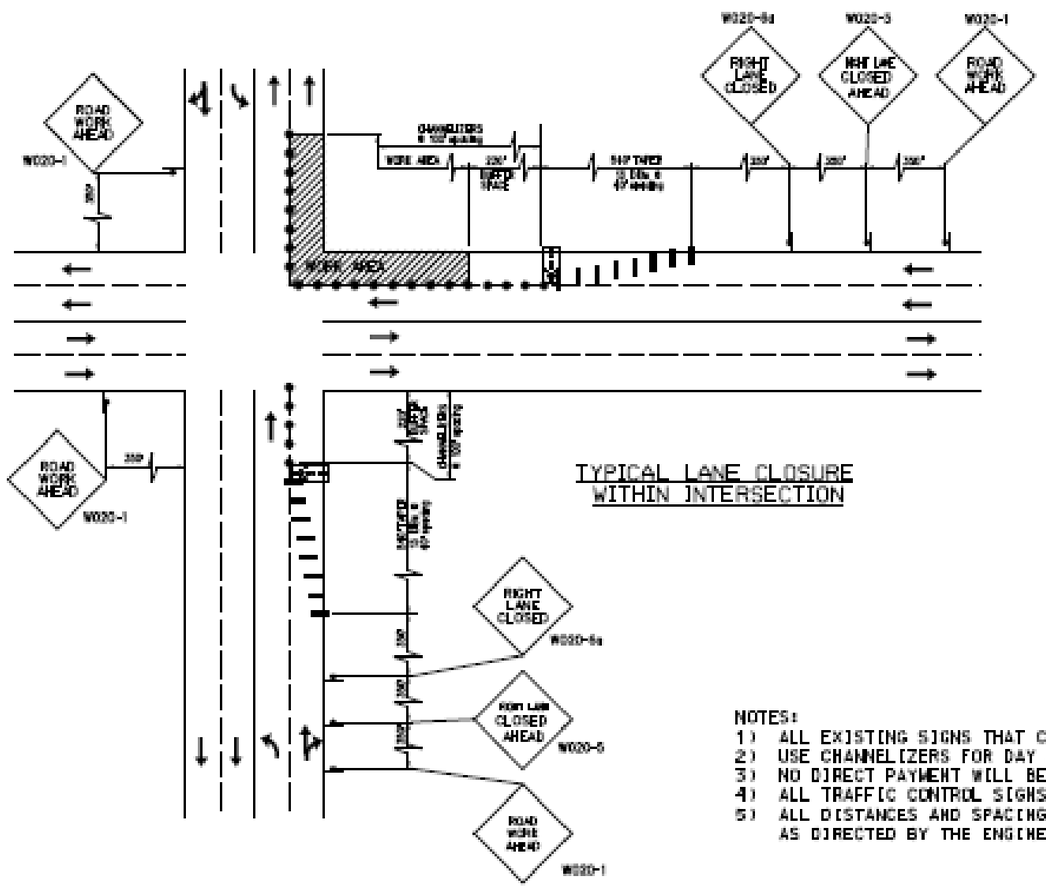
TYPICAL RIGHT LANE CLOSURE
IN ADVANCE OF INTERSECTION



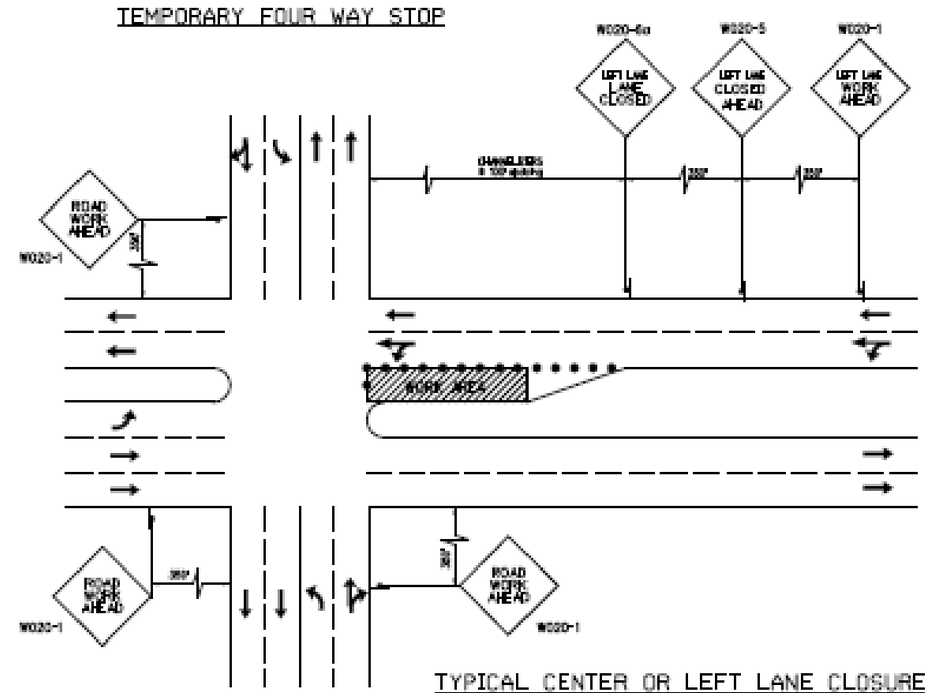
TEMPORARY FOUR WAY STOP

LEGEND

- CONSTRUCTION SIGN
- FLASHING ARROW PANEL
- CHANNELIZER DRUM
- DIRECTIONAL INDICATOR BARRICADE WITH LIGHT



TYPICAL LANE CLOSURE
WITHIN INTERSECTION



TYPICAL CENTER OR LEFT LANE CLOSURE
IN ADVANCE OF INTERSECTION

NOTES:
1) ALL EXISTING SIGNS THAT CONFLICT WITH PROPOSED TCP SHALL BE COVERED. NO DIRECT PAY.
2) USE CHANNELIZERS FOR DAY AND NIGHT TIME OPERATION.
3) NO DIRECT PAYMENT WILL BE MADE FOR RELOCATING SIGNS, CHANNELIZERS OR ARROW PANELS.
4) ALL TRAFFIC CONTROL SIGNS SHALL BE PORTABLE.
5) ALL DISTANCES AND SPACING OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE, AND MAY BE REVISED, AS DIRECTED BY THE ENGINEER, TO FIT FIELD CONDITIONS.

NOT TO SCALE

TRAFFIC CONTROL PLAN

SHEET 1 OF 1

REV. FEB. 02, 00

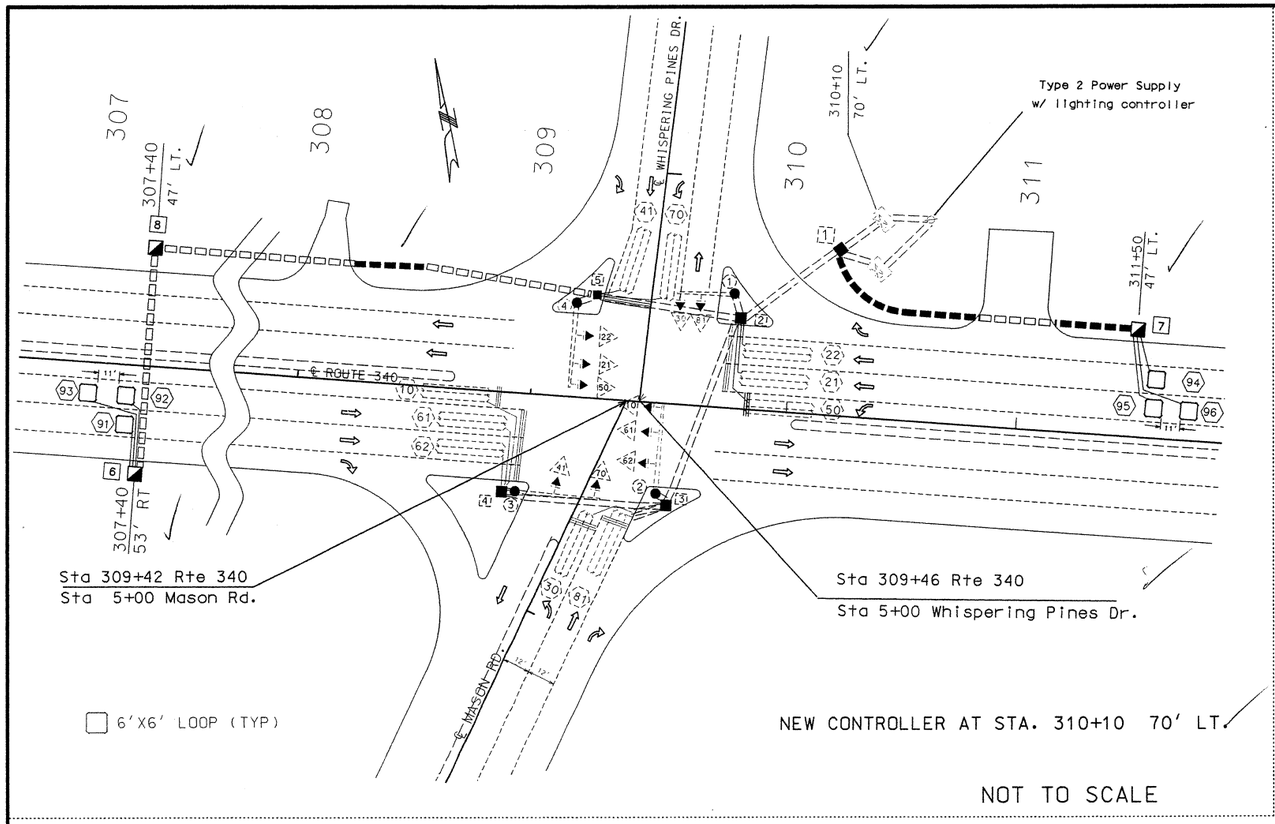
ROUTE	STATE	DISTRICT	SHEET NO.
340	MO	6	8

JOB NO. J6S1370 (981202-16-PLP)

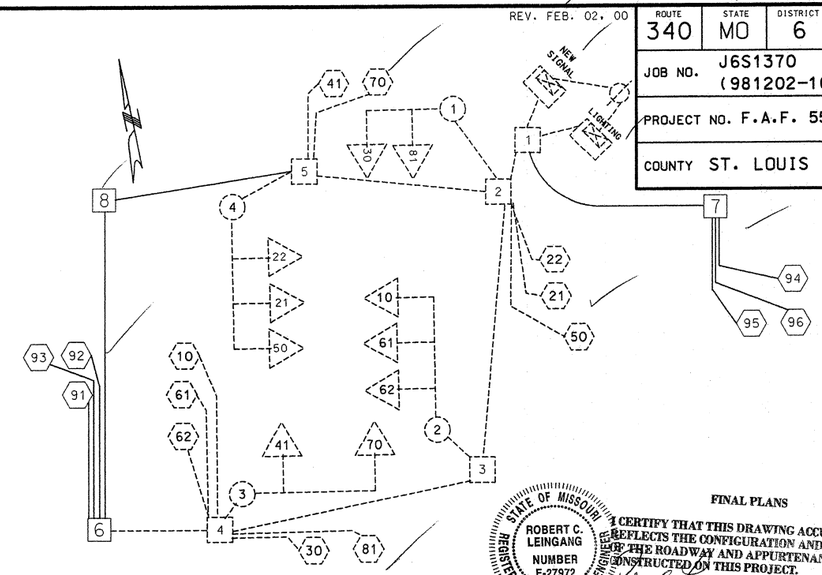
PROJECT NO. F.A.F. 5526(622)

COUNTY ST. LOUIS

DATE



NOT TO SCALE



WIRING DIAGRAM

STATE OF MISSOURI
ROBERT C. LEINGANG
NUMBER E-27972
REGISTERED PROFESSIONAL ENGINEER

FINAL PLANS

I CERTIFY THAT THIS DRAWING ACCURATELY REFLECTS THE CONFIGURATION AND LOCATION OF THE ROADWAY AND APPURTENANCES AS CONSTRUCTED ON THIS PROJECT.

SIGNATURE

3-28-00
DATE

FINAL PLANS

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		SOLID STATE PRE-TIMED TYPE			ON-OFF SWITCH TYPE		COORDINATION INTERFACE*					TONE UNIT*		TIME CLOCK*	170 CABINET TYPE*		170 SOFTWARE*	
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	S-M	S-S	S-N	I	II	12C/7C HARDWIRE OR TONE (1) MASTER	12C/7C HARDWIRE OR TONE (1) LOCAL	TIME BASE	CLOSED LOOP NEMA	CLOSED LOOP 170	TRANS-MITTER (MASTER)	RECEIVER (LOCAL)		332A	336S	BITRAN	WAPITI
ROUTE 340	310+10	70' LT.			1								X					X					

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE: PUSH BUTTON	INDUCTION LOOP (2) STANDARD	INDUCTION LOOP (2) DELAY/EXTEND*	INDUCTION LOOP (2) CALL UNIT*	MAGNETOMETER (2) STANDARD	MAGNETOMETER (2) DELAY/EXTEND*
91, 92 & 93	EB 340		3				
94, 95 & 96	WB 340		3				
TOTAL			6				

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*						LIGHTING CONTROL* (ON POWER SUPPLY)		SERVICE POLE	
					CONTROLLER		POWER SUPPLY DISCONNECT							
							MAIN BREAKER							
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	SIGNALS	LIGHTING	120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
RTE. 340	EXISTING	LT.	Type U.I.P.		15 Amps	Amps	Amps	Amps	EXISTING	Amps	CL. Ft.	
			Type		Amps	Amps	Amps	Amps		Amps	Cl. Ft.	

(1) MHTD "D" PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS WITH 7C HARDWIRE OR TONE INTERCONNECT.

*ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

NEMA DETECTOR ASSIGNMENT

		CARD POSITION 1	2	3	4	5	6	7	8
CHANNEL	1	91	92	94	95				
	2		93		96				

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = 4 (2)

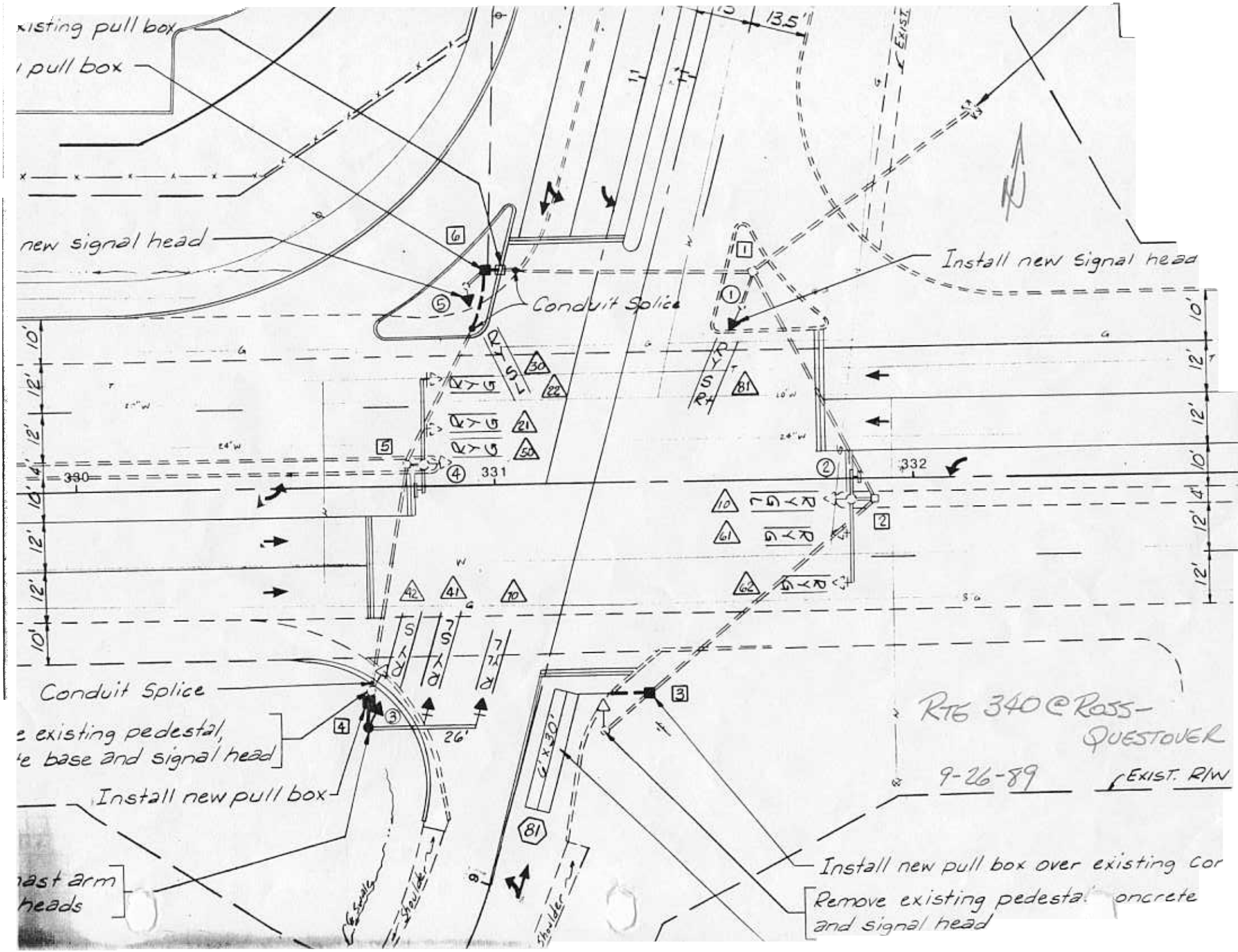
(2) IF 2-CHANNEL DETECTORS ARE USED, PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12

ROUTE 340 @ MASON & WHISPERING PINES

INTERSECTION


existing pull box
pull box
new signal head
Conduit Splice
Install new signal head
Conduit Splice
existing pedestal,
base and signal head
Install new pull box
mast arm
heads
Install new pull box over existing Con
Remove existing pedestal concrete
and signal head
RTE 340 @ ROSS-
QUESTOVER
9-26-89
EXIST. R/W
EXIST.
13.5'
330
331
332
26'
6'x30'
Shoulder
Shoulder

Mason @ 340 EB

Change existing protected only 3-section head to a protected/permissive 4-section flashing yellow arrowhead assembly. Wire blank-out sign to display when protected-only phasing is in effect.
Install blank-out sign to right of 4 section head and relocate existing "Left Turn Signal" sign to right of blank-out sign. Configure blank-out sign individually to operate off of aux.1 output from D plug.

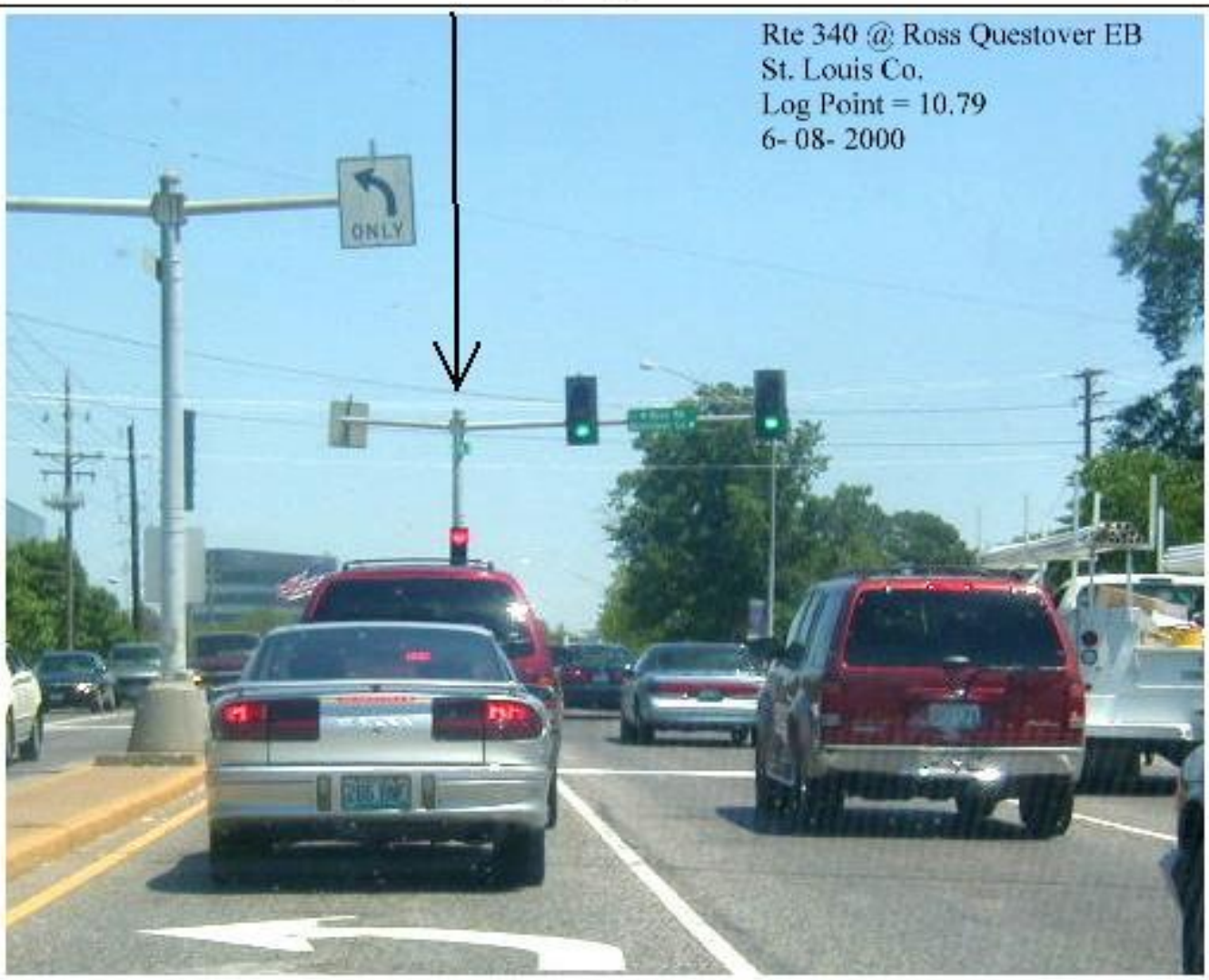
Mason @ 340 WB

Change existing protected only 3-section head to a protected/permissive 4-section flashing yellow arrowhead assembly. Wire blank-out sign to display when protected-only phasing is in effect.
Install blank-out sign to right of 4 section head and relocate existing "Left Turn Signal" sign to right of blank-out sign. Configure blank-out sign individually to operate off of aux.1 output from D plug.

Ross @ EB Route 340

Change existing protected only 3-section head to a protected/permissive 4-section flashing yellow arrowhead assembly. Wire blank-out sign to display when protected-only phasing is in effect.

Install blank-out sign above the four-section head and keep existing "Left Turn Signal" sign in place. Configure the blank-out sign individually to operate off of aux. 1output from D plug.



Ross @ WB Route 340

Change existing protected only 3-section head to a protected/permissive 4-section flashing yellow arrowhead assembly. Wire blank-out sign to display when protected-only phasing is in effect.

Install blank-out sign above the four-section head and keep existing "Left Turn Signal" sign in place. Configure the blank-out sign individually to operate off of aux. 1output from D plug.

SSM6LE-FYA SSM12LE-FYA

SSMLE-FYA SERIES

Enhanced NEMA Signal Monitor Units For Protected/Permissive Signal Displays Utilizing Flashing Yellow Arrows

For over 25 years, EDI continues to set the industry standard and provide traffic signal professionals with reliable, high quality mission critical component products that improve the performance and lifecycle of traffic control systems.

The SSMLE-FYA series signal monitors provide the highest level of fault monitoring for agencies utilizing the four section FYA movement outlined by the NCHRP Research Project 3-54 on Protective/Permissive signal displays with Flashing Yellow Arrows.

The SSMLE-FYA series signal monitor includes both six channel (SSM6LE-FYA) and twelve channel (SSM12LE-FYA) configurations.

SSMLE-FYA Standard NEMA TS-1 Features

NEMA TS1 Standard: The SSMLE-FYA series meets all specifications of NEMA Standard TS-1 1989 R2000, Part 6. Basic fault coverage includes Conflict, Red Fail, CVM, 24V-I and 24V-II. Dual Indication Monitoring detects simultaneous active signals on a channel. Clearance Monitoring assures proper sequencing of signals and a minimum yellow clearance interval. AC Line Monitoring responds to low AC Line voltages as well as interruptions.

Flashing Yellow Arrow: The SSM-12LE-FYA unit configures the odd numbered channels 1, 3, 5, and 7 to monitor the Protected Green Arrow phase, and channels 9, 10, 11, and 12 to monitor the associated Red, Yellow, and Flashing Yellow Overlap phases.

The SSM-6LE-FYA unit configures the odd numbered channels 1 and 3 to monitor the Protected Green Arrow phase, and channels 5 and 6 to monitor the associated Red, Yellow, and Flashing Yellow Overlap phases.

Channel pairs are enabled for the Flashing Yellow Arrow monitoring function by front panel switches. If the FYA function is not enabled for a channel pair, the associated channels operate normally.

SSMLE-FYA Enhanced Features

Full Intersection Display: High contrast, large area Liquid Crystal Displays (LCD) show full intersection status with an active Red, Yellow, Green, and Walk indicator for each channel. Separate indicators identify channels involved in the fault.

Event Logging: The SSMLE series maintains a nonvolatile event log recording the complete intersection status as well as previous fault events, AC Line events, configuration changes, monitor resets, cabinet temperature and true RMS voltages for all AC inputs. A real time clock time stamps each log event with time and date.

Signal Sequence: The Signal Sequence History Log stored in nonvolatile memory graphically displays up to 30 seconds of signal status prior to the fault trigger event with 50ms resolution to ease diagnosing of intermittent and transient faults.

EDI RMS-ENGINE: A DSP coprocessor converts ac input measurements to True RMS voltages, virtually eliminating false sensing due to changes in frequency, phase, or sine wave distortion.

Configuration Options: Front panel options include GY Dual indication, +24V and CVM Latching, Red Fail Walk Disable, External Watchdog input, and CVM Log Disable.

ECcom PC Software: Access by a computer is provided by EDI ECcom Windows based software for status, event log review and archival, using the standard EIA-232 front panel port.

EBERLE DESIGN INC.

3819 East La Salle Street
Phoenix, AZ 85040 USA
www.EDItraffic.com

Tel (480) 968-6407
Fax (602) 437-1996

EB Rte 340 at Barnes West

Change existing 5 section signal head to a protected-permissive 4-section flashing yellow arrow head assembly. Remove the "Left Turn Yield on Ball Green" sign and replace it with a "Left Turn Signal" sign.

WB Route 340 @ Barnes West

Change existing 5 section head signal to a protected/permissive four-section flashing yellow arrowhead assembly. Remove the existing "Left Turn Yield on Ball Green" sign and replace it with "Left Turn Signal" sign.