

12" LED UNITS WITH YELLOW POLYCARBONATE HOUSING AND CUTAWAY VISORS, AND BLACK BACKPLATES AS PER CMS 732.22

1 TO 6

PROPOSED VEHICULAR SIGNAL HEAD

MAS #1 STA. 772+80.00, 45.0' LT
CONST. SR 94 (RIDGE RD.)
W /POWER SERVICE

CNT STA. 772+77.00, 52.0' LT
CONST. SR 94 (RIDGE RD.)
CONTROLLER AND UPS
CABINET WITH WORK PAD

PB #1 STA. 772+76.00, 45.0' LT
CONST. SR 94 (RIDGE RD.)
PROPOSED PULLBOX, 24",
AS PER PLAN

NOTES: 1.) **ITEM 606 - GUARDRAIL REMOVED FOR REUSE, AS PER PLAN**

25 FEET OF GUARDRAIL REMOVED FOR REUSE, AS PER PLAN HAS BEEN PROVIDED FOR EACH LOCATION SHOWN TO BE USED AS APPROVED BY THE ENGINEER FOR CONTRACTOR CONSTRUCTION ACCESS TO THE PROPOSED FOUNDATION LOCATIONS. THIS ITEM SHALL CONFORM TO CMS 606 WITH THE EXCEPTION THAT THE CONTRACTOR SHALL REPLACE ANY DAMAGED ITEMS WITH NEW MATERIALS INCLUDING POSTS, BLOCKOUTS, RAIL, HARDWARE, AND GUARDRAIL INCIDENTALS. THE CONTRACTOR SHALL PROTECT ALL LOCATIONS WHERE GUARDRAIL HAS BEEN REMOVED AS APPROVED BY THE ENGINEER UNTIL THE GUARDRAIL HAS BEEN RE-ERECTED. PAYMENT FOR THIS ITEM SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO REMOVE, STORE AND RE-ERECT THE EXISTING GUARDRAIL, REPLACE OF DEFECTIVE MATERIALS, PROTECT LOCATIONS WHERE GUARDRAIL IS REMOVED, AND RESTORE THE SITE TO EXISTING CONDITIONS IN THE COST PER FOOT FOR ITEM 606- GUARDRAIL REMOVED FOR REUSE, AS PER PLAN. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 606 - GUARDRAIL REMOVED FOR REUSE, AS PER PLAN 50 FT.

B.M. #1: STA. 774+63.77, 24.22' LT.
5/8"x40" REBAR WITH BM CAP SET,
WEST SIDE OF SR 94 (RIDGE RD.)
ELEV. = 1180.49

OVERHEAD ELEC.
OVERHEAD FO
(DO NOT DISTURB)

B.M. #1

CONST.
SR 94 (RIDGE RD.)

B.M. #2

OVERHEAD TELE.
OVERHEAD FO
(DO NOT DISTURB)

PB #2 STA. 772+77.00, 35.5' RT
CONST. SR 94 (RIDGE RD.)
PROPOSED PULLBOX, 18",
AS PER PLAN

MAS #2 STA. 773+71.00, 35.0' RT
CONST. SR 94 (RIDGE RD.)

PB #3 STA. 773+66.00, 35.5' RT
CONST. SR 94 (RIDGE RD.)
PROPOSED PULLBOX, 18",
AS PER PLAN

B.M. #2: STA. 771+75.68, 18.59' RT.
5/8"x40" REBAR WITH BM CAP SET,
EAST SIDE OF SR 94 (RIDGE RD.)
ELEV. = 1180.76

LEGEND

- MAS #1 PROPOSED MAST ARM SIGNAL SUPPORT
- PROPOSED CONDUIT, BY SIZE, 725.04
- PB #1 PROPOSED PULLBOX, BY SIZE, 725.08, AS PER PLAN
- 2 PROPOSED VEHICULAR SIGNAL HEAD
- CNT PROPOSED CONTROLLER AND UPS CABINETS WITH WORK PAD
- D-1 PROPOSED RADAR DETECTION UNIT
- DZ PROPOSED DETECTION ZONE (SEE SHEET 18 FOR ADDITIONAL DETECTION ZONES)
- PROPOSED POWER SERVICE

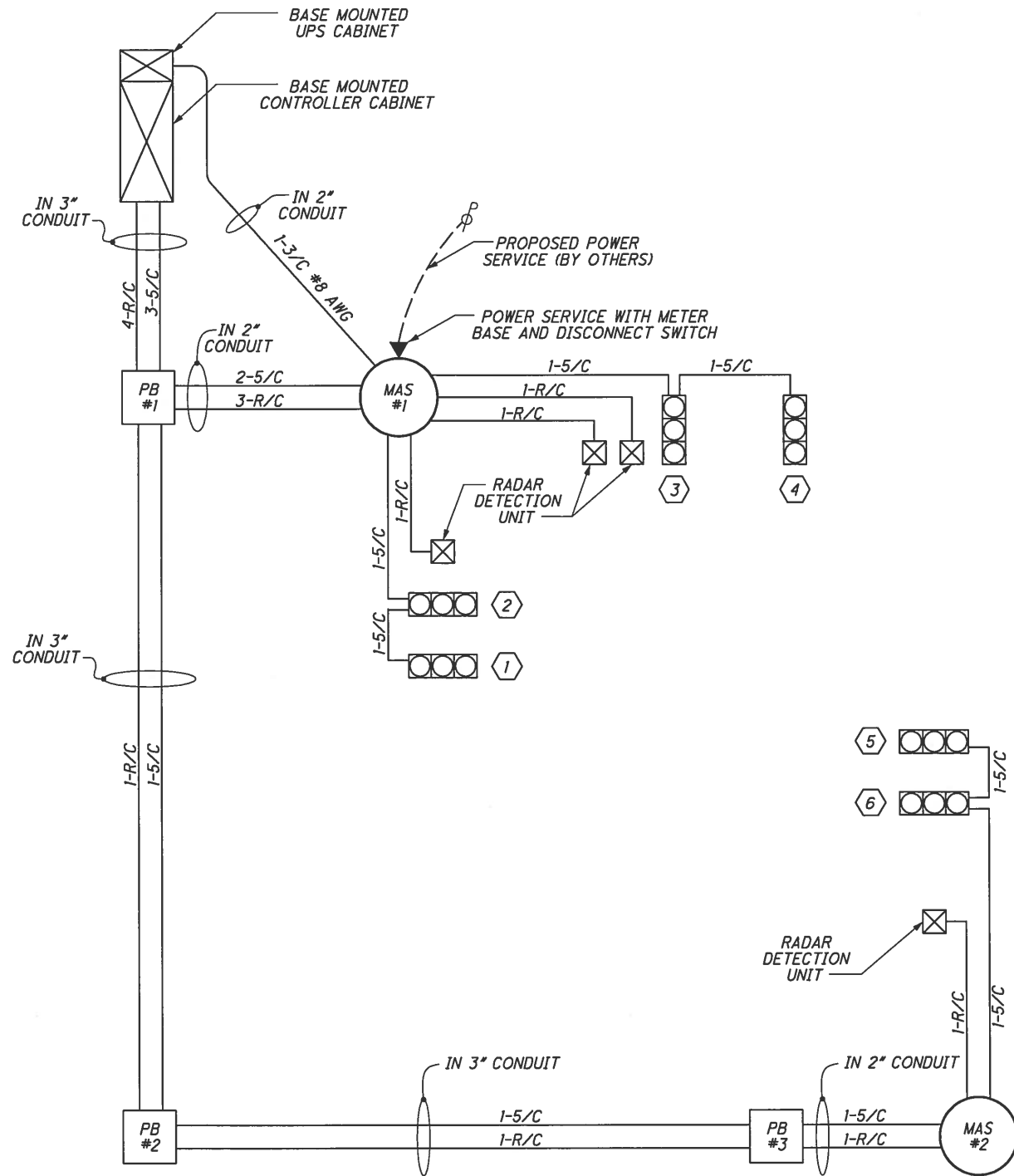
SIGNAL PLAN
SR 94 AT SOUTHBOUND RAMP

MED-94-14.61

16
21

CALCULATED JDL
CHECKED PRS
HORIZONTAL SCALE IN FEET
0 5 10 20

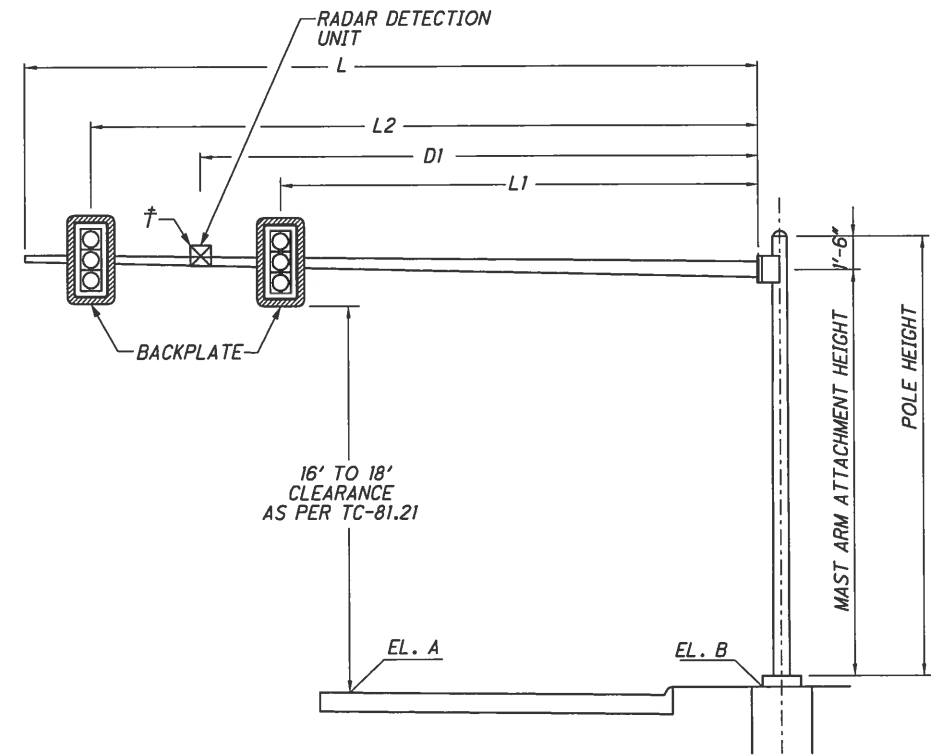
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WIRING DIAGRAM

5/C - 5 CONDUCTOR WIRE, #14 AWG
R/C - RADAR DETECTION CABLE

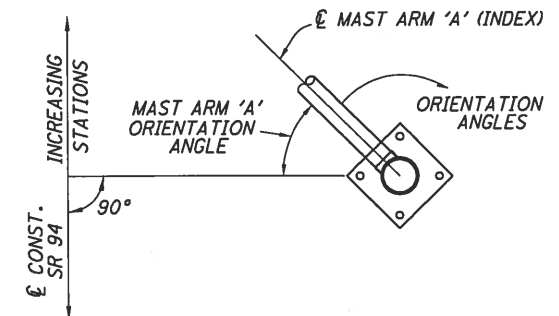
† PROPER RADAR DETECTION PLACEMENT SHALL BE AS PER MANUFACTURER.



MAST ARM SIGNAL SUPPORT DETAIL TYPE TC-81.21

NOTES:

1. ALL ANGLES MEASURED CLOCKWISE
2. BASE PLATE IS ORIENTED SQUARE TO MAST ARM 'A' EVEN IF SUPPORT HAS TWO MAST ARMS



SIGNAL SUPPORT TYPE TC-81.21													ORIENTATION ANGLES (DEG.) FROM MAST ARM A			
SUPPORT NO.	POLE DESIGN NO.	POLE HEIGHT (FT.)	ARM DESIGNATION	TC-81.21 ARM DESIGN NO.	ARM ATTACHMENT HEIGHT *	L (FT.)	L1 (FT.)	L2 (FT.)	D1 (FT.)	D2 (FT.)	*ELEVATION "A"	*ELEVATION "B"	MAST ARM A ANGLE (DEG.)	MAST ARM B	POWER SERVICE	HANDHOLE
MAS #1	TC-12.30 #6	23.5'	A	12	22'	48	35	45	39	41	1181.00	1179.20	270°	90°	270°	180°
			B	11	22'	45	34	42	44		1181.50	1179.20				
MAS #2	TC-81.21 #3	23.5'	A	3	22'	38	27	35	37		1181.95	1179.50	0°			90°

* ELEVATIONS TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING OF POLES. MAST ARM ATTACHMENT HEIGHT AND POLE HEIGHT MAY NEED TO BE ADJUSTED AS NECESSARY AS APPROVED BY THE ENGINEER FOR CLEARANCE OVER PAVEMENT AND CLEARANCE FROM EXISTING OVERHEAD UTILITIES.

CALCULATED
JDL
CHECKED
PRS

SIGNAL DETAILS
SR 94 AT SOUTHBOUND RAMPS

MED-94-14.61

17
21

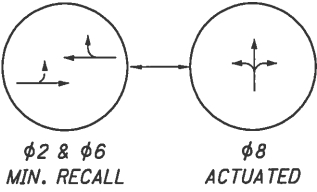
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SIGNAL TIMING										
START - UP				DUAL ENTRY ●						
START IN: Y/R FLASH ● ; ALL RED ○				REST IN RED: RING 1 ○ ; RING 2 ○						
TIME FOR FLASH OR ALL RED <u>10</u>				OVERLAP:		A	B	C	D	
FIRST PHASE (S) <u>2</u> & <u>6</u>				PHASES						
COLOR DISPLAYED: GREEN ● ; YELLOW ○										
INTERVAL OR FEATURE				PHASE NO.						
				1	2	3	4	5	6	7
INTERSECTION MOVEMENT					NB				SB	WB
MIN. INITIAL GREEN (SEC.)					24				24	12
PASSAGE TIME (SEC.)					3.0				3.0	3.0
MAX GREEN (SEC.)					50				50	35
YELLOW CHANGE (SEC.)					4.3				4.3	3.0
ALL RED CLEARANCE (SEC.)					1.4				1.4	2.0
WALK (SEC.)					-				-	-
PEDESTRIAN CLEARANCE (SEC.)					-				-	-
RECALL PHASE	MAXIMUM (ON/OFF)			OFF				OFF		OFF
	MINIMUM (ON/OFF)			ON				ON		OFF
	PEDESTRIAN (ON/OFF)			OFF				OFF		OFF
MEMORY (ON/OFF)				ON				ON		OFF
CALL TO NON-ACTUATED	NO. 1									
	NO. 2									

DETECTION ZONE CHART					
RADAR UNIT	DETECTION ZONE	LANE	LOCATION/ MODE	CONTROLLER PHASE	DELAY (SEC.)
D-1	DZ-1	NB	300' IN ADVANCE OF STOP BAR/EXTENSION	φ2	
D-2	DZ-3	WB LT	STOP BAR/PRESENCE	φ8	3
	DZ-4	WB RT	STOP BAR/PRESENCE	φ8	10
D-3	DZ-5	WB	200' IN ADVANCE OF STOP BAR/EXTENSION	φ8	
D-4	DZ-2	SB	300' IN ADVANCE OF STOP BAR/EXTENSION	φ6	

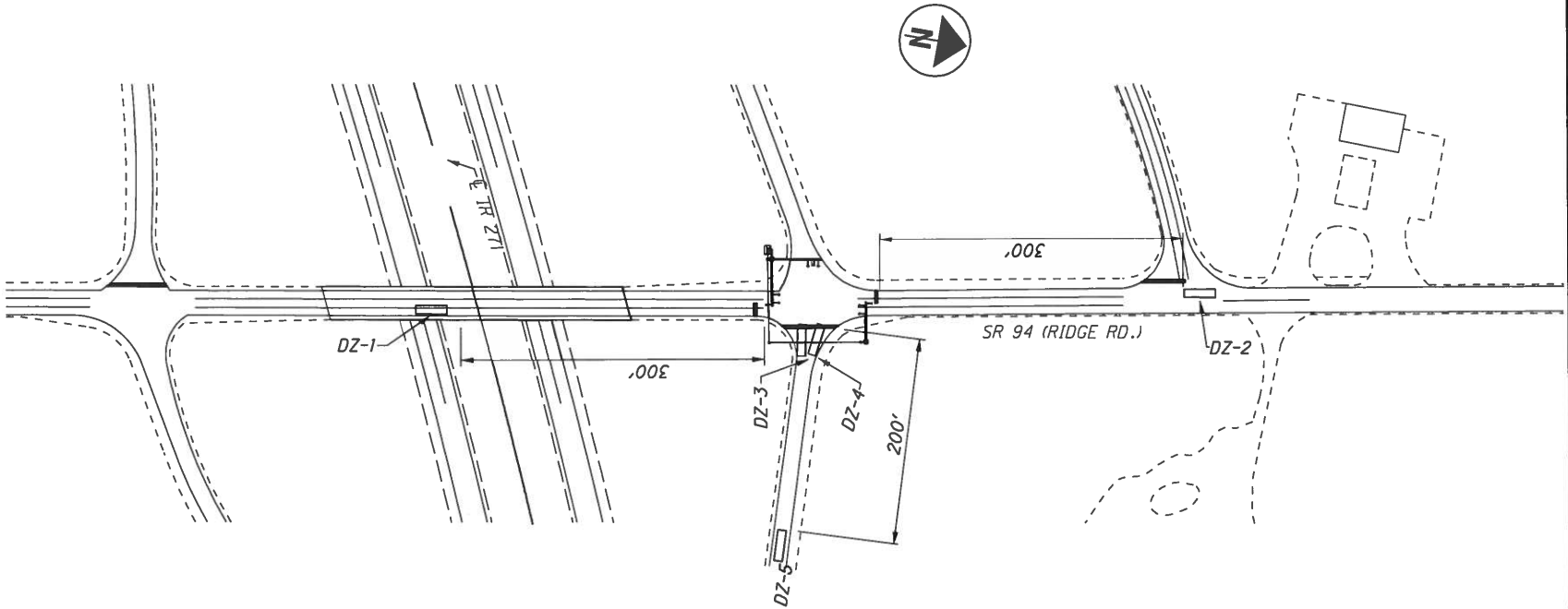
* INHIBIT DELAY DURING ASSOCIATED CONTROLLER PHASE

PHASING IDENTIFICATION			
1 FUTURE USE	2 N.B. SR 94 →	3 FUTURE USE	4 FUTURE USE
5 FUTURE USE	6 S.B. SR 94 ←	7 FUTURE USE	8 W.B. RAMP ↕



SIGNAL PHASING

FIELD WIRING HOOK-UP CHART			
SIGNAL HEAD #	INDICATION	FIELD TERMINAL	FLASH
1 (S.B. SR 94)	R	φ6 R	Y
	Y	φ6 Y	
	G	φ6 G	
2 (S.B. SR 94)	R	φ6 R	Y
	Y	φ6 Y	
	G	φ6 G	
3 (W.B. RAMP)	R	φ8 R	R
	Y	φ8 Y	
	G	φ8 G	
4 (W.B. RAMP)	R	φ8 R	R
	Y	φ8 Y	
	G	φ8 G	
5 (N.B. SR 94)	R	φ2 R	Y
	Y	φ2 Y	
	G	φ2 G	
6 (N.B. SR 94)	R	φ2 R	Y
	Y	φ2 Y	
	G	φ2 G	
OLA = LS 9 OLB = LS 10		OLC = LS 11 OLD = LS 12	



DETECTION ZONE SCHEMATIC PLAN

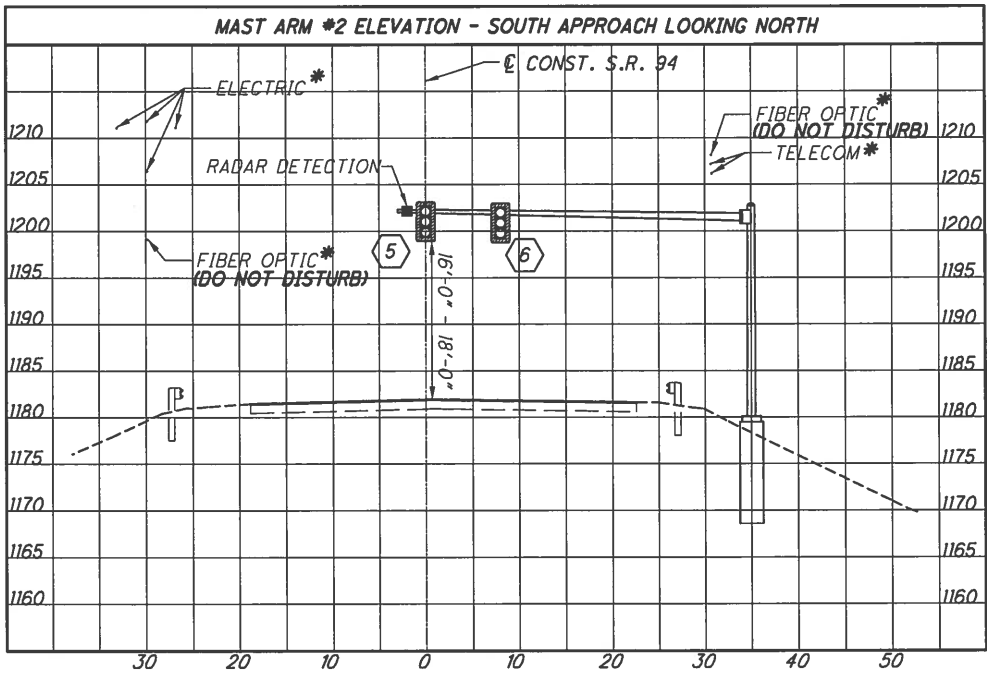
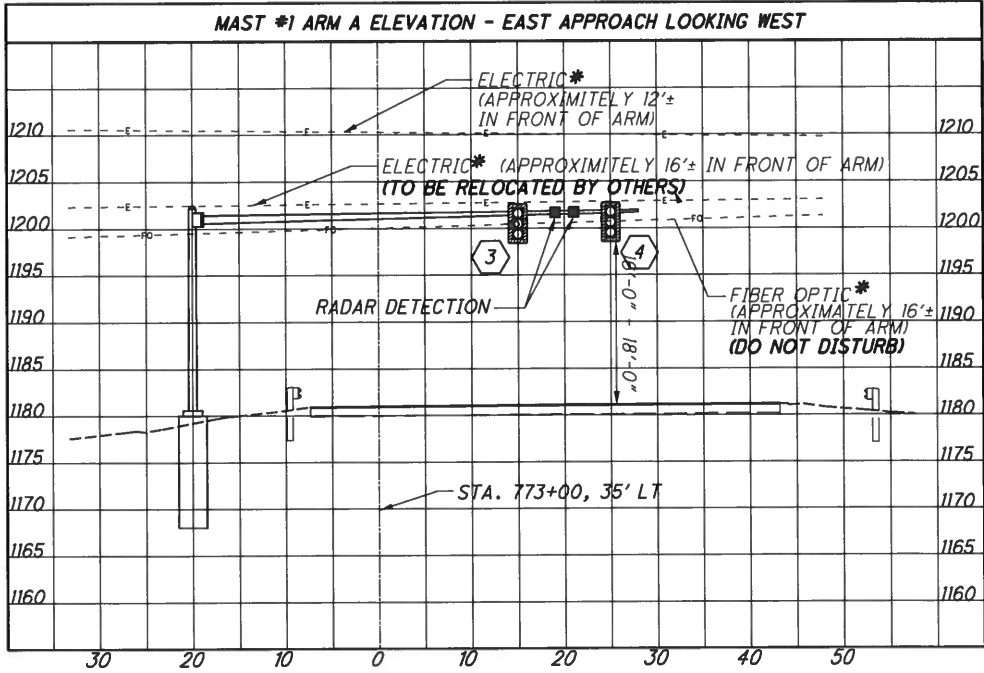
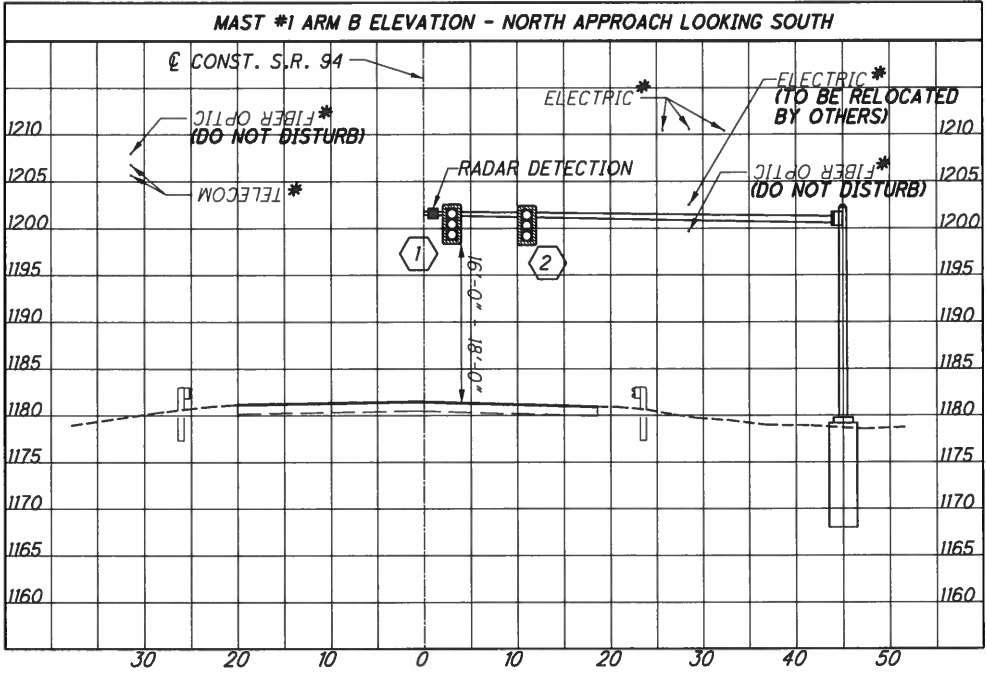
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SIGNAL DETAILS
SR 94 AT SOUTHBOUND RAMPS

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*NOTE: UTILITY LOCATIONS AND ELEVATIONS SHOWN ARE APPROXIMATE.

SUBSUMMARY

[illegible]