

CONDUCTOR		TABLE									
AWG	CIRCUIT	RUNS									
		1	2	3	4	5	6	7	8	9	10
#1		-	-	-	-	3	3	3	-	3	-
#2		-	-	3	-	3	-	-	-	-	-
#3		3	3	3	-	6	3	3	-	3	3
#4		-	-	-	-	3,3(N)	3,3(N)	-	3(N)	3(N)	3(N)
OLA		-	-	-	-	2(N)	2(N)	-	2(N)	2(N)	2(N)
#5		-	3	3	-	3	3	3	-	3	-
#6		-	-	-	-	3	3	3	-	3	-
#7		-	-	-	-	3	3	3	-	3	-
#8		3	3	3	-	6	3	-	-	-	-
#2 PED		-	-	2	-	4	2	2	-	-	-
#4 PED		-	-	-	-	2	2	2	-	2	2
#6 PED		-	2	2	-	4	2	2	-	2	-
#8 PED		2	2	2	-	4	-	-	-	-	-
#2 PPB		-	-	-	-	2	1	-	-	-	-
#4 PPB		-	-	-	-	1	1	1	-	1	-
#6 PPB		1	1	1	-	2	1	1	-	1	1
#8 PPB		-	1	1	-	1	-	-	-	-	-
PPB COMMON		1	1	-	1	2	1	-	1	1	1
SPARES		3	3	-	3	6	3	-	3	3	3
TOTAL		13	19	20	4	63	36	17	9	24	15

TYPE B DLC											
	1	2	3	4	5	6	7	8	9	10	
#1 DETECTOR	-	1	1	1	1	-	-	-	-	-	-
#2 DETECTOR	-	-	-	-	1	1	1	-	-	-	-
#3 DETECTOR	-	-	-	-	1	-	-	-	-	-	-
#4 DETECTOR	-	-	-	-	2	2	2	2	2	2	2
#5 DETECTOR	-	-	-	-	1	1	1	1	-	-	-
#6 DETECTOR	-	1	1	1	1	-	-	-	-	-	-
#7 DETECTOR	-	-	-	-	1	1	1	1	1	1	1
#8 DETECTOR	-	-	-	-	1	-	-	-	-	-	-
TOTAL	-	2	2	2	9	5	5	3	3	3	3

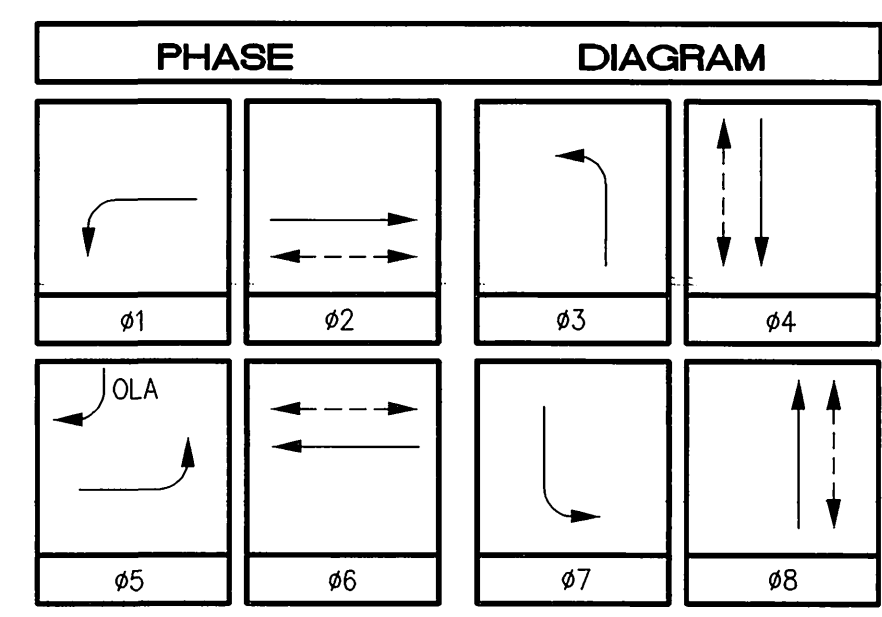
#10	LUMINAIRE	SIGNAL COMMON	TOTAL
	2	2	2
	1	1	1
	3	3	3

#12	IISNS
	2

#8	SIGNAL SERVICE
	2

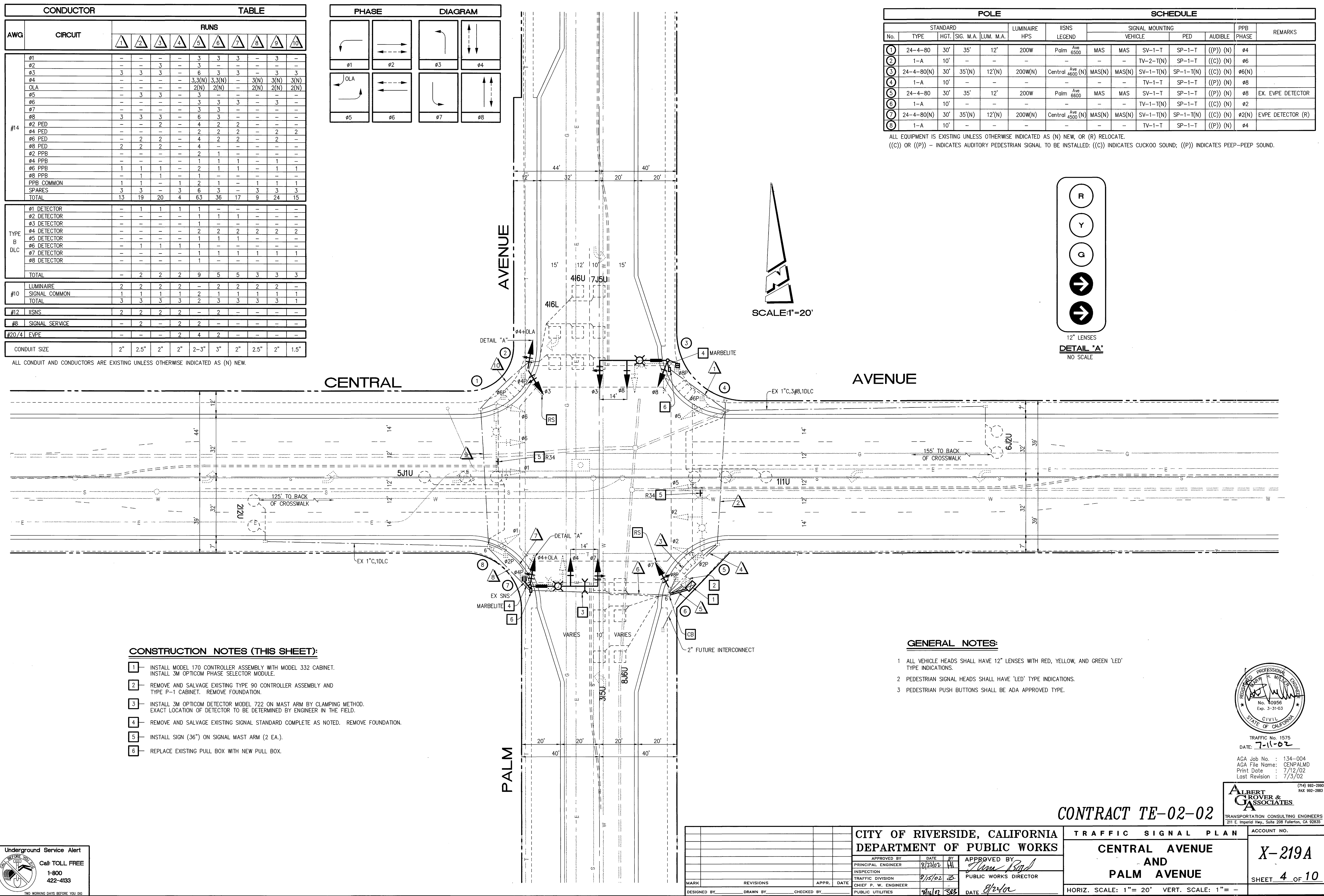
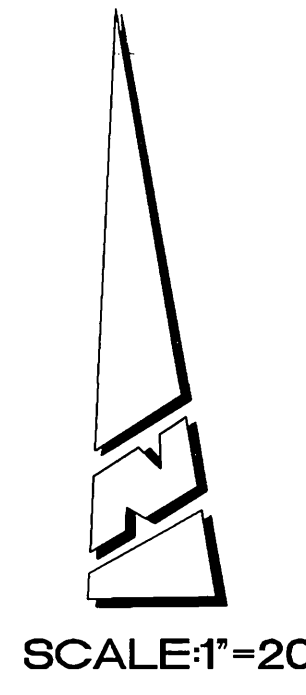
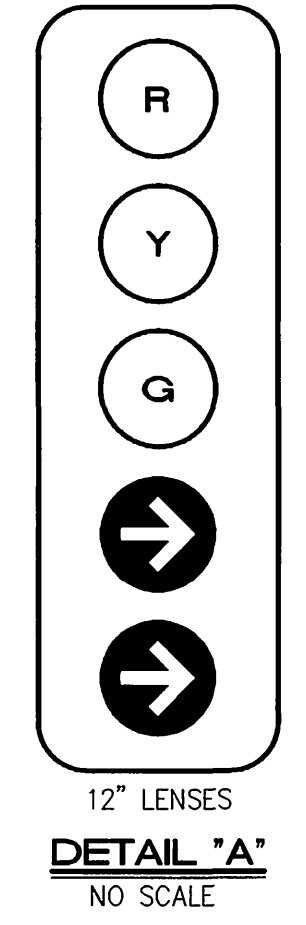
#20/41	EVPE
	2

CONDUIT SIZE	2"	2.5"	2"	2"	2-3"	3"	2"	2.5"	2"	1.5"



No.	TYPE	STANDARD				LUMINAIRE HPS	IISNS LEGEND	SCHEDULE				PPB PHASE	REMARKS
		HGT.	SIG. M.A.	LUM. M.A.	SIGNAL MOUNTING								
		VEHICLE	PED	AUDIBLE	VEHICLE			PED					
1	24-4-80	30'	35'	12'	200W	Palm Ave 6500	MAS	MAS	SV-1-T	SP-1-T	((P)) (N)	Ø4	
2	1-A	10'	-	-	-	-	-	-	TV-2-T(N)	SP-1-T	((C)) (N)	Ø6	
3	24-4-80(N)	30'	35'(N)	12'(N)	200W(N)	Central Ave 4600 (N)	MAS(N)	MAS(N)	SV-1-T(N)	SP-1-T(N)	((C)) (N)	Ø6(N)	
4	1-A	10'	-	-	-	-	-	-	TV-1-T	SP-1-T	((P)) (N)	Ø8	
5	24-4-80	30'	35'	12'	200W	Palm Ave 6600	MAS	MAS	SV-1-T	SP-1-T	((P)) (N)	Ø8	EX. EVPE DETECTOR
6	1-A	10'	-	-	-	-	-	-	TV-1-T(N)	SP-1-T	((C)) (N)	Ø2	
7	24-4-80(N)	30'	35'(N)	12'(N)	200W(N)	Central Ave 4600 (N)	MAS(N)	MAS(N)	SV-1-T(N)	SP-1-T(N)	((C)) (N)	Ø2(N)	EVPE DETECTOR (R)
8	1-A	10'	-	-	-	-	-	-	TV-1-T	SP-1-T	((P)) (N)	Ø4	

ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE INDICATED AS (N) NEW, OR (R) RELOCATE.
 ((C)) OR ((P)) - INDICATES AUDITORY PEDESTRIAN SIGNAL TO BE INSTALLED; ((C)) INDICATES CUCKOO SOUND; ((P)) INDICATES PEEP-PEEP SOUND.



CONSTRUCTION NOTES (THIS SHEET):

- INSTALL MODEL 170 CONTROLLER ASSEMBLY WITH MODEL 332 CABINET. INSTALL 3M OPTICOM PHASE SELECTOR MODULE.
- REMOVE AND SALVAGE EXISTING TYPE 90 CONTROLLER ASSEMBLY AND TYPE P-1 CABINET. REMOVE FOUNDATION.
- INSTALL 3M OPTICOM DETECTOR MODEL 722 ON MAST ARM BY CLAMPING METHOD. EXACT LOCATION OF DETECTOR TO BE DETERMINED BY ENGINEER IN THE FIELD.
- REMOVE AND SALVAGE EXISTING SIGNAL STANDARD COMPLETE AS NOTED. REMOVE FOUNDATION.
- INSTALL SIGN (36") ON SIGNAL MAST ARM (2 EA.).
- REPLACE EXISTING PULL BOX WITH NEW PULL BOX.

GENERAL NOTES:

- ALL VEHICLE HEADS SHALL HAVE 12" LENSES WITH RED, YELLOW, AND GREEN 'LED' TYPE INDICATIONS.
- PEDESTRIAN SIGNAL HEADS SHALL HAVE 'LED' TYPE INDICATIONS.
- PEDESTRIAN PUSH BUTTONS SHALL BE ADA APPROVED TYPE.

Underground Service Alert
 Call: TOLL FREE
 1-800
 422-4133
 TWO WORKING DAYS BEFORE YOU DIG

CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS				TRAFFIC SIGNAL PLAN		ACCOUNT NO.
APPROVED BY		DATE	BY	APPROVED BY		X-219A
PRINCIPAL ENGINEER		8/22/02	JA	PUBLIC WORKS DIRECTOR		
INSPECTION		DATE	BY	CHIEF P. W. ENGINEER		SHEET 4 OF 10
TRAFFIC DIVISION		8/15/02	Z	PUBLIC UTILITIES		
MARK	REVISIONS	APPR.	DATE	DATE		
DESIGNED BY	DRAWN BY	CHECKED BY		DATE		

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = -



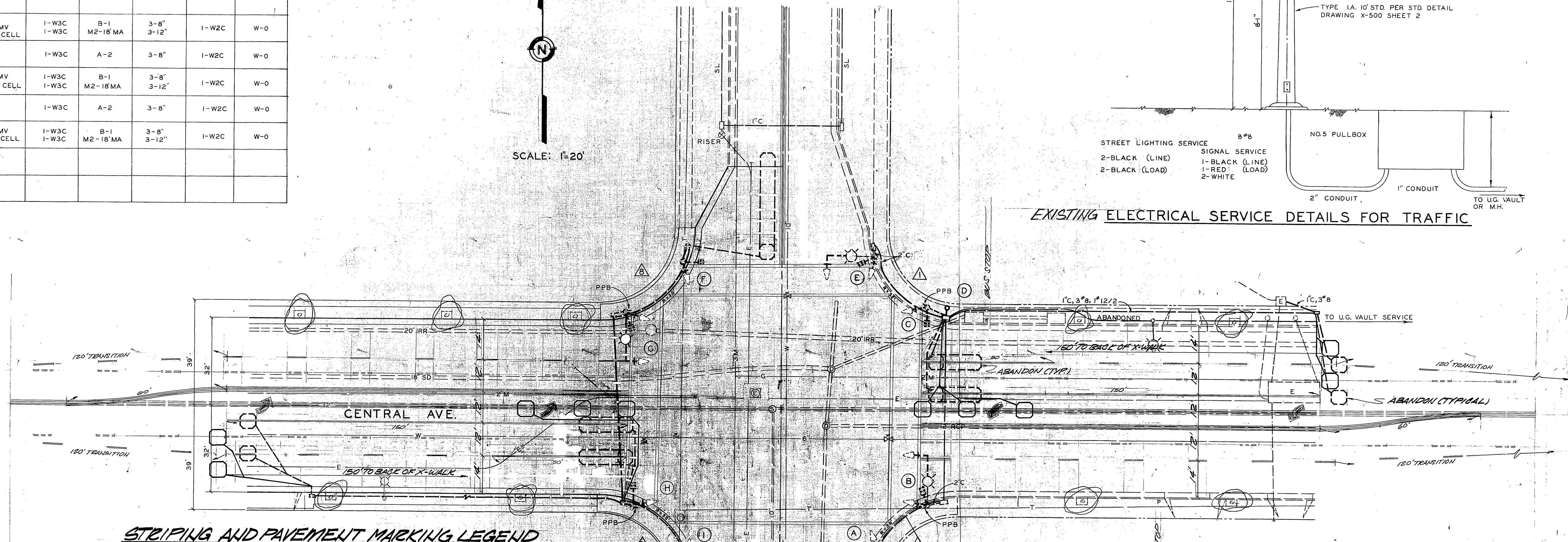
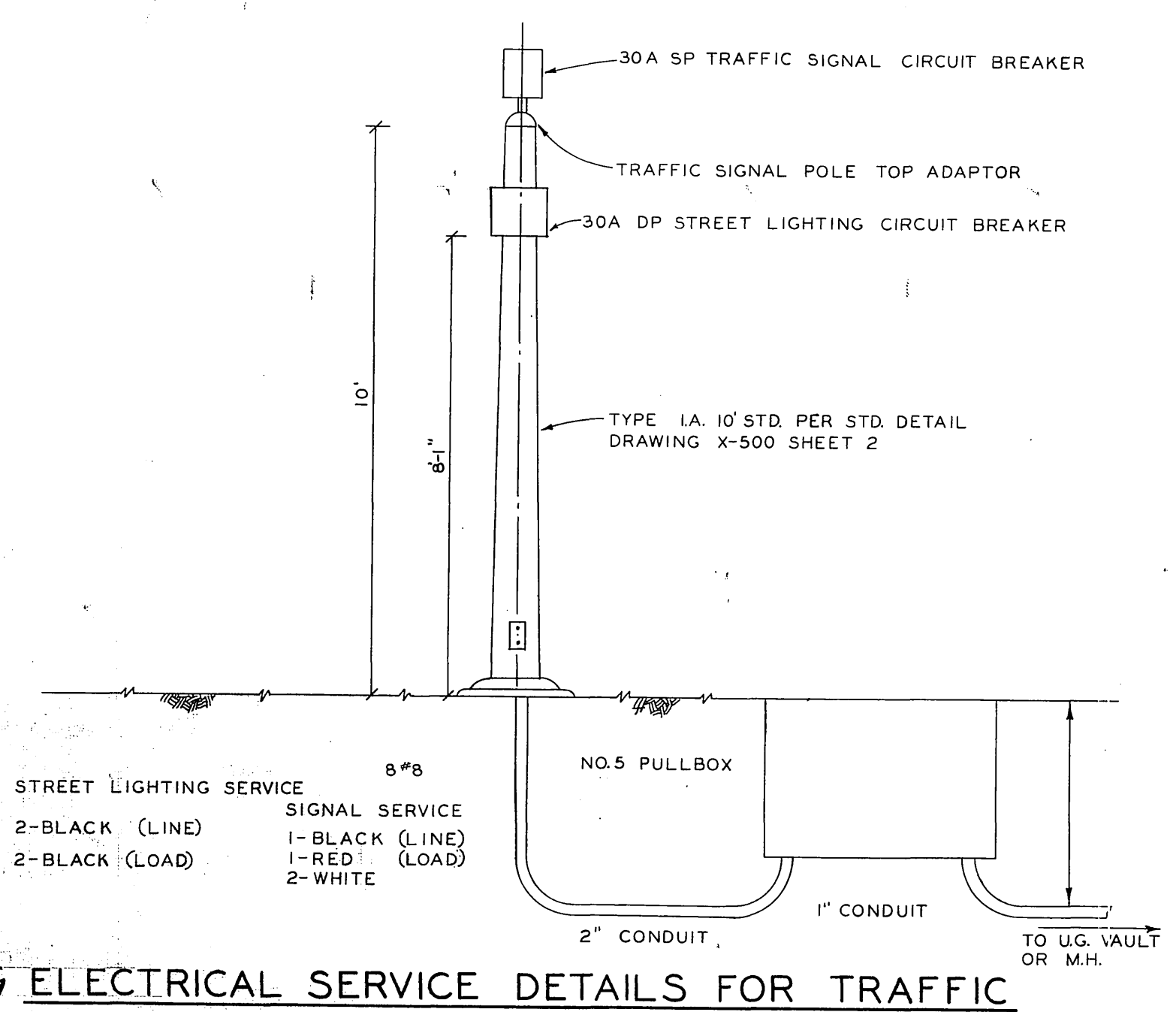
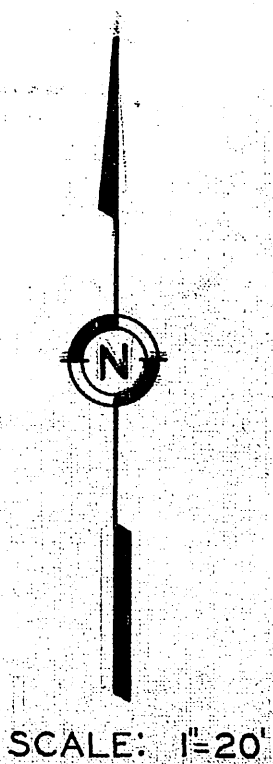
TRAFFIC No. 1575
 DATE: 7-11-02
 AGA Job No. : 134-004
 AGA File Name: CENPALMD
 Print Date : 7/12/02
 Last Revision : 7/3/02

ALBERT CROVER & ASSOCIATES
 TRANSPORTATION CONSULTING ENGINEERS
 211 E. Imperial Hwy., Suite 208 Fullerton, CA 92635
 (714) 992-2999
 FAX 992-2883

CONTRACT TE-02-02

EXISTING POLE AND SIGNAL SCHEDULE

LOCATION	STANDARD	LUMINAIRE	SIGNALS			WALK-DON'T WALK	
			TYPE	MTG	LENS SIZE	TYPE	MTG
A	CITY FURNISHED TYPE I		I-W3C	A-2	3-8"	I-W2C	W-0
B	EXIST 68J10	EXIST 20000 MV W/PHOTO CELL	I-W3C I-W3C	B-1 M2-18" MA	3-8" 3-12"	I-W2C	W-0
C	CITY FURNISHED TYPE I		I-W3C	A-2	3-8"	I-W2C	W-0
D	CITY FURNISHED TYPE I		I-W3C	A-2	3-8"	I-W2C	W-0
E	EXIST 68J10	EXIST 20000 MV W/PHOTO CELL	I-W3C I-W3C	B-1 M2-18" MA	3-8" 3-12"	I-W2C	W-0
F	CITY FURNISHED TYPE I		I-W3C	A-2	3-8"	I-W2C	W-0
G	68J10G18	20000 MV W/PHOTO CELL	I-W3C I-W3C	B-1 M2-18" MA	3-8" 3-12"	I-W2C	W-0
H	CITY FURNISHED TYPE I		I-W3C	A-2	3-8"	I-W2C	W-0
I	68J10G18	20000 MV W/PHOTO CELL	I-W3C I-W3C	B-1 M2-18" MA	3-8" 3-12"	I-W2C	W-0



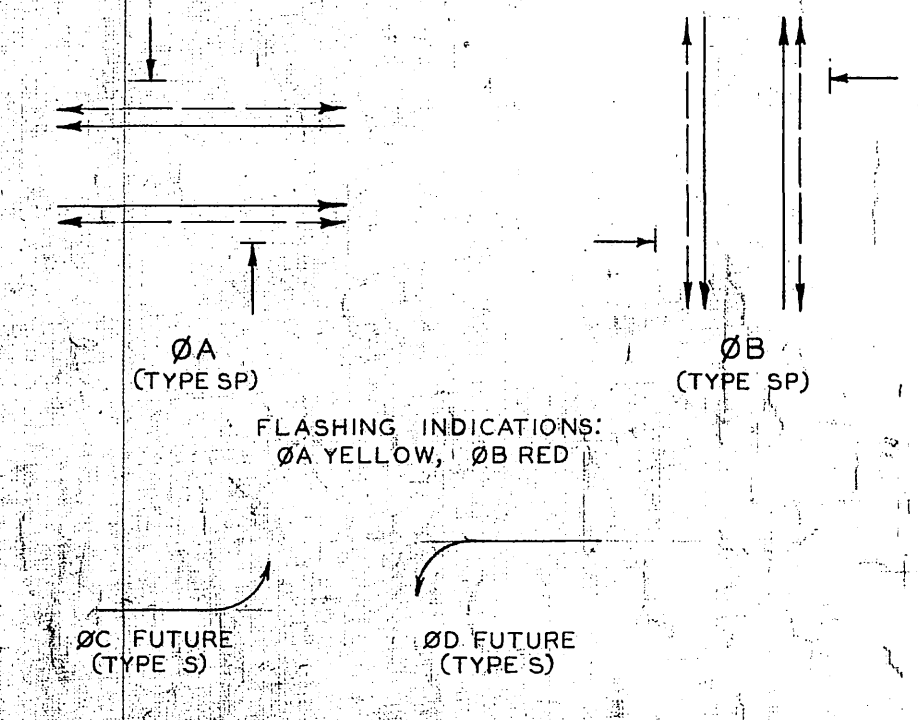
STRIPING AND PAVEMENT MARKING LEGEND

- NEW INSTALLATION
 - REMOVALS
 - TO REMAIN
- QUANTITIES**
- DOUBLE YELLOW CENTERLINE 480 L.F.
 - 8" SOLID WHITE 300 L.F.
 - 4" DASH WHITE 384 L.F.
 - PAVEMENT MARKINGS (ARROWS) 64 S.F.
 - REMOVALS 394 S.F.

EXISTING CONDUCTOR SCHEDULE

CONDUCTOR RUN	A		B		C		D		E		F		G		H		I			
CONDUCTORS	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14
ØA				3				3				6				3				3
ØB			3				3				3				3				3	
ØA W-DW			2				2				4				2				2	
ØB W-DW				2			2				4				2				2	
ØB PPB								4			2				2				1	
ØB DETECTOR								2			2 1/2				2 1/2				2 1/2	
SPARES			2				2				2				2				2	
120V NEUTRAL																				
12V NEUTRAL																				
SIGNAL SERVICE			2				2				2				2				2	
LUMINAIRES	2				2				2				2				2			
INTERCONNECT																				
ØA DETECTOR				2 1/2			2 1/2				4	2 1/2			2 1/2				2 1/2	
ØA PPB			1				1				4				2				1	
TOTAL CONDUCTORS	2	1	8	4	1	6	13	4	1	7	13	2	1	17	26	2	1	9	13	2
CONDUIT SIZE			2"				2 1/2"				2"				2"				3"	

EXISTING PHASE DIAGRAM



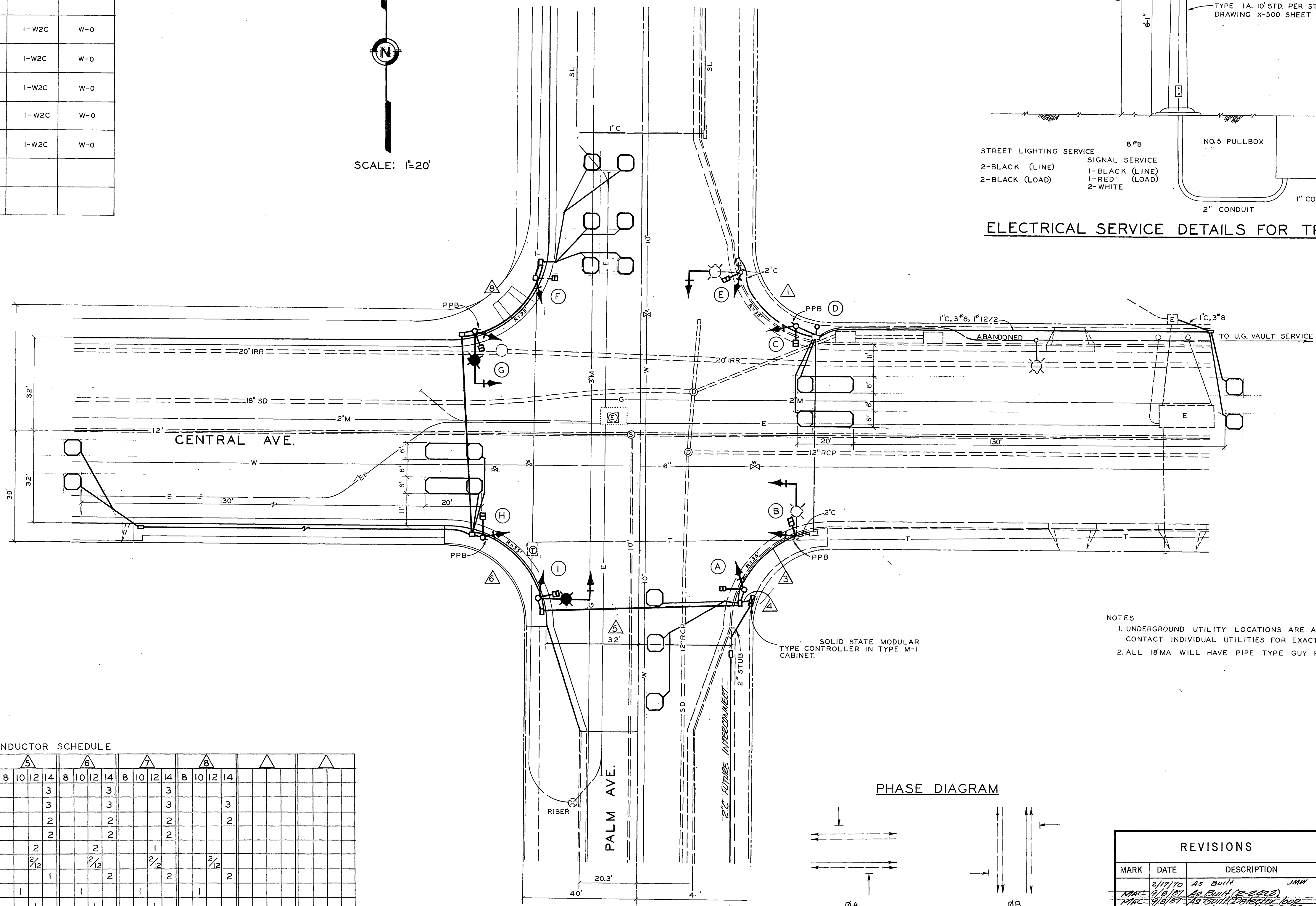
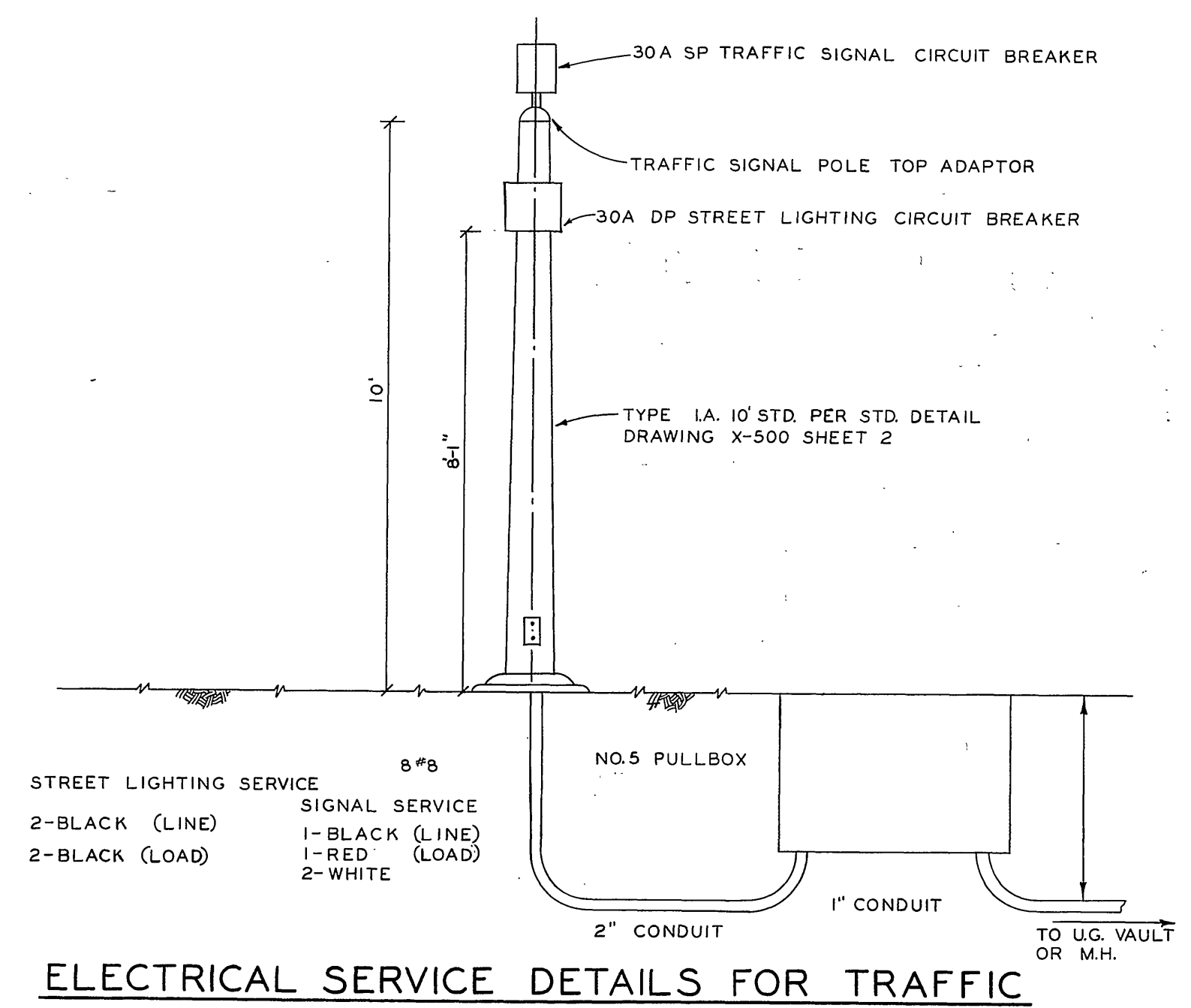
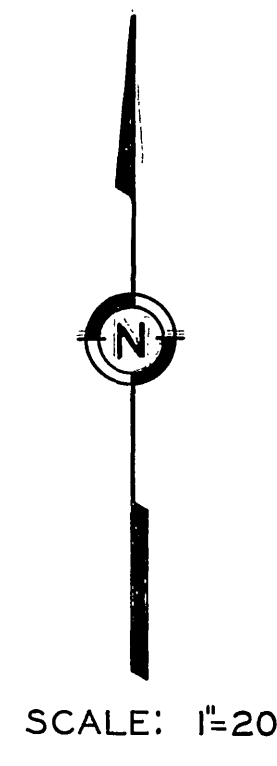
SIGNING REQUIREMENTS

- PROVIDE AND INSTALL 1228'S (12" X 18") AS DIRECTED BY THE ENGINEER; QUANTITIES ARE AS FOLLOWS:
- 4 EA. 1228
 - 4 EA. 1228
 - 3 EA. 1228
 - 3 EA. STEEL CHANNEL POST
- INSTALLATION NOTES:**
- STRAP (Ø) 1228'S TO EXISTING STREET LIGHT AND TRAFFIC SIGNAL STD.
 - BUILT (Ø) 1228'S TO NEW 9/8" POSTS; INSTALL POST IN TREEWELL.
 - INSTALL ALL 1228'S 45° TOWARD TRAVELED WAY.
- EQUIPMENT REQUIREMENTS:**
- CONTRACTOR SHALL PROVIDE AND INSTALL ONE ADDITIONAL DETECTOR; REAR MOUNTING NOT REQUIRED.
- R.U.D. - 4-4-83 - W

REVISIONS			CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	
MARK	DATE	DESCRIPTION		
			CENTRAL AVENUE & PALM AVENUE TRAFFIC SIGNALS	
DESIGNED BY	SUBMITTED BY	APPROVED BY	PROJ. NO. 20-576-340-07	
DRAWN BY	PARK DEPT.	TRAFFIC DIV.	X-219	
CHECKED BY	RECOMMENDED BY	DATE	SHEET 3 OF 3	

POLE AND SIGNAL SCHEDULE

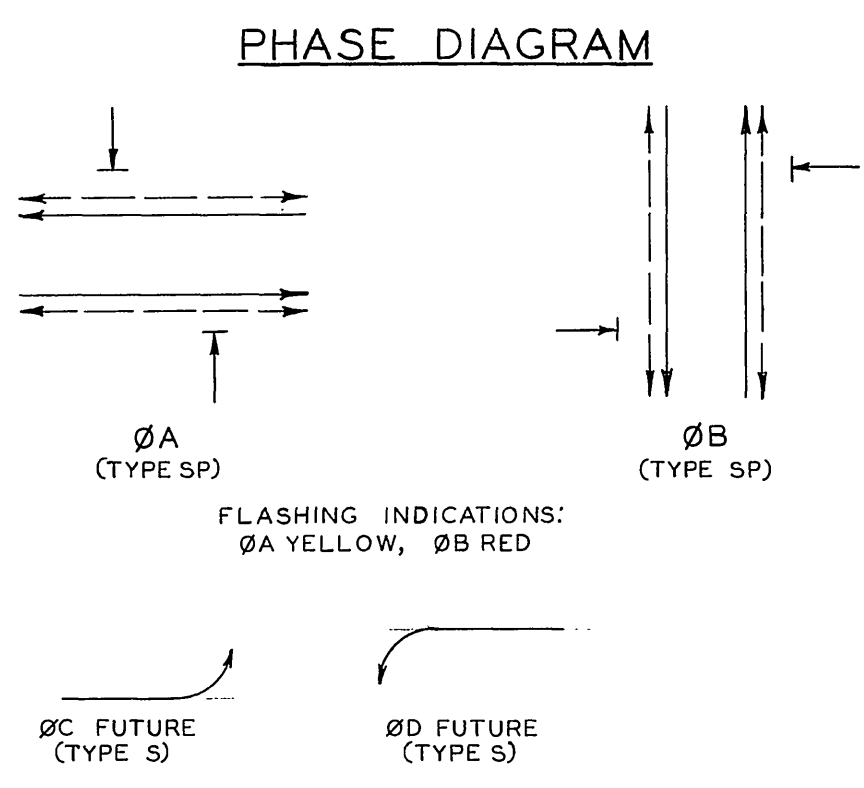
LOCATION	STANDARD	LUMINAIRE	SIGNALS			WALK-DON'T WALK	
			TYPE	MTG	LENS SIZE	TYPE	WTG
(A)	CITY FURNISHED TYPE I		I-W3C	A-2	3-8"	I-W2C	W-0
(B)	EXIST. 68J10	EXIST. 20000 MV W/PHOTO CELL	I-W3C I-W3C	B-1 M2-18"MA	3-8" 3-12"	I-W2C	W-0
(C)	CITY FURNISHED TYPE I		I-W3C	A-2	3-8"	I-W2C	W-0
(D)	CITY FURNISHED TYPE I						
(E)	EXIST. 68J10	EXIST. 20000 MV W/PHOTO CELL	I-W3C I-W3C	B-1 M2-18"MA	3-8" 3-12"	I-W2C	W-0
(F)	CITY FURNISHED TYPE I		I-W3C	A-2	3-8"	I-W2C	W-0
(G)	68J10G18	20000 MV W/PHOTO CELL	I-W3C I-W3C	B-1 M2-18"MA	3-8" 3-12"	I-W2C	W-0
(H)	CITY FURNISHED TYPE I		I-W3C	A-2	3-8"	I-W2C	W-0
(I)	68J10G18	20000 MV W/PHOTO CELL	I-W3C I-W3C	B-1 M2-18"MA	3-8" 3-12"	I-W2C	W-0



- NOTES
- UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. CONTACT INDIVIDUAL UTILITIES FOR EXACT LOCATIONS.
 - ALL 18"MA WILL HAVE PIPE TYPE GUY RODS.

CONDUCTOR SCHEDULE

CONDUCTOR RUN	A				B				C				D				E				F				G				H				I							
CONDUCTORS	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14
ØA																																								
ØB																																								
ØA W-DW																																								
ØB W-DW																																								
ØB PPB																																								
ØB DETECTOR																																								
SPARES																																								
120V NEUTRAL																																								
12V NEUTRAL																																								
SIGNAL SERVICE																																								
LUMINAIRES																																								
INTERCONNECT																																								
ØA DETECTOR																																								
ØA PPB																																								
TOTAL CONDUCTORS	2	1	8	4	1	6	13	4	1	7	13	2	1	7	13	2	1	7	13	2	1	7	13	2	1	7	13	2	1	7	13	2	1	7	13	2	1	7	13	2
CONDUIT SIZE	2"				2 1/2"				2"				2"				2"				2"				2"				2"				2"				2"			



REVISIONS			CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	
MARK	DATE	DESCRIPTION		
	2/17/70	AS BUILT	JMW	
	1/18/87	AS BUILT (2-2222)	JMW	
	9/18/87	As Built Detector box replacement 10-27-88	JMW	

DESIGNED BY	SUBMITTED BY	APPROVED BY	PROJ. NO.
DRAWN BY JMW	PARK DEPT. TRAFFIC DIV.	DIRECTOR OF PUBLIC WORKS	X-219
CHECKED BY	RECOMMENDED BY ASSISTANT CITY ENGINEER	DATE	SHEET OF