

INSTALL 2-PAIR #19 CABLE TO CONTROLLER

REPLACE Type PR-402 Controller in Type M Cabinet WITH SOLID STATE PRE-TIMED CONTROLLER AND INTERFACE UNIT IN A NEW TYPE M CABINET ON EXIST. BASE. USE EXIST. CONDUCTORS.

NOTE: RUN 2 HAS 2#8 120V SIGNAL SERVICE LINE SIDE UNFUSED.

INSTALL 2" C. & PB. INSTALL 3#14, 1#10

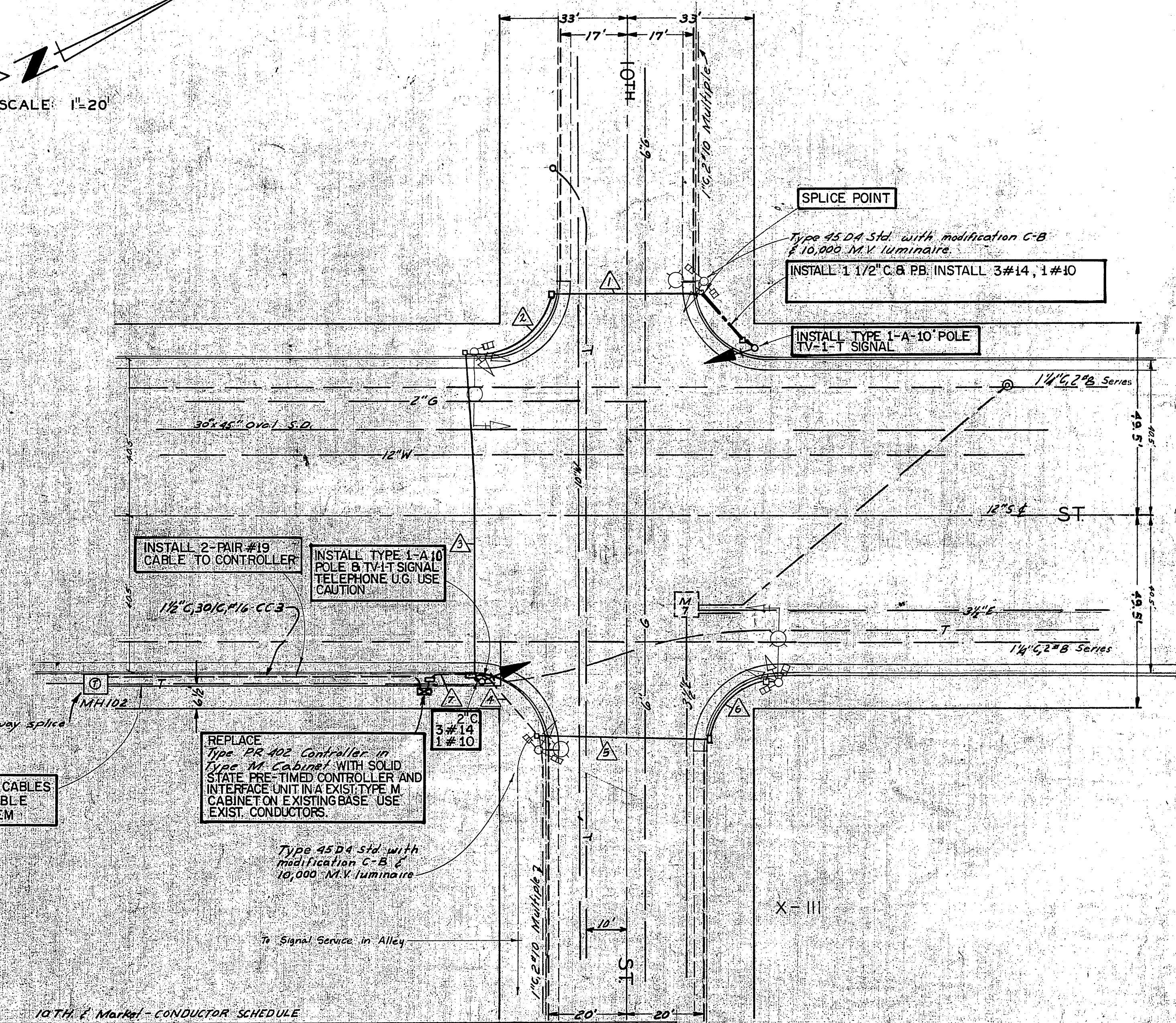
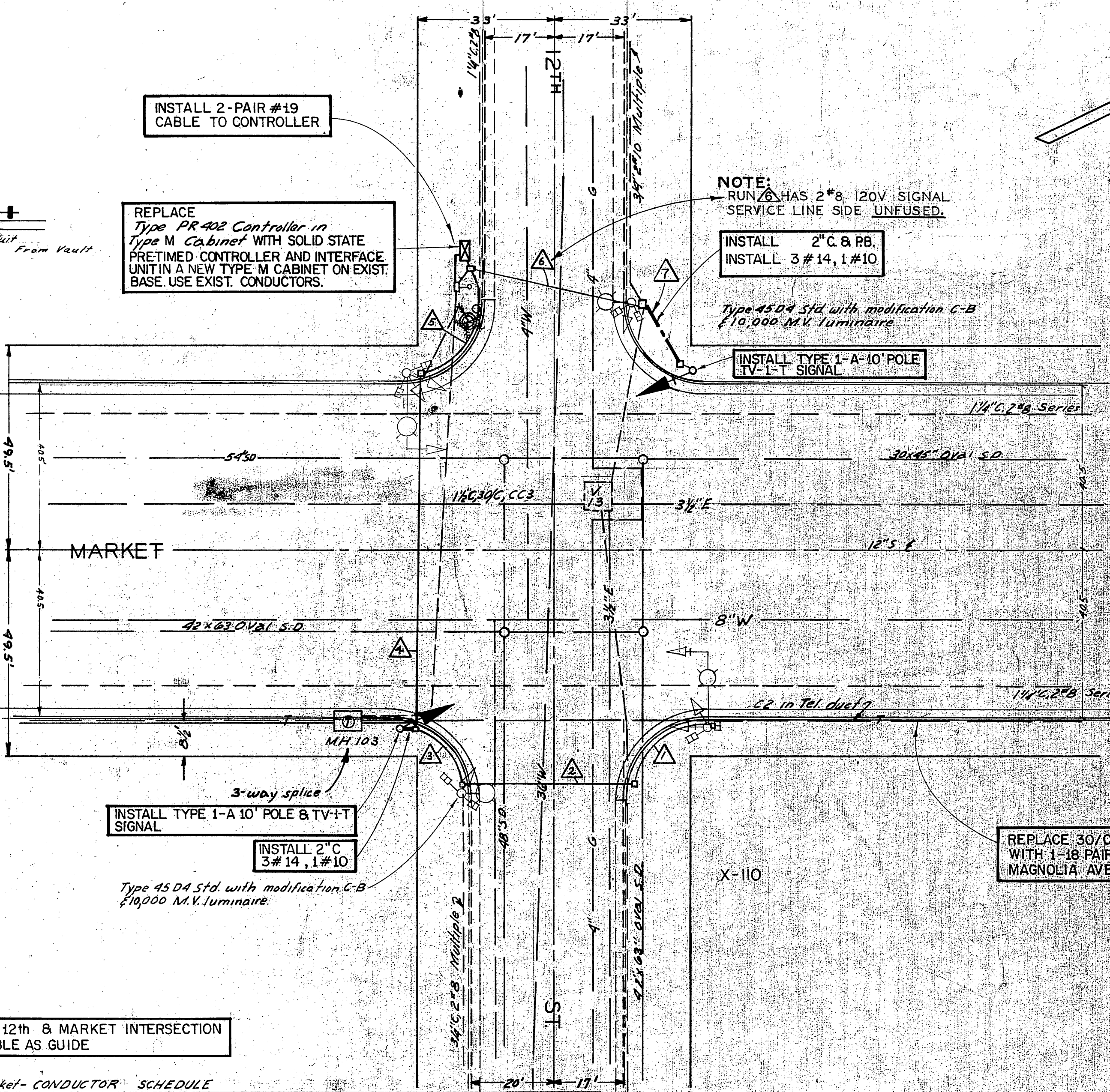
Type 45 D4 Std. with modification C-B #10,000 M.V. luminaire

INSTALL TYPE 1-A-10' POLE TV-T SIGNAL

SPLICE POINT

Type 45 D4 Std. with modification C-B #10,000 M.V. luminaire. INSTALL 1 1/2" C. & PB. INSTALL 3#14, 1#10

INSTALL TYPE 1-A-10' POLE TV-T SIGNAL



REWIRE 12th & MARKET INTERSECTION USE TABLE AS GUIDE

12TH & MARKET - CONDUCTOR SCHEDULE

CONDUCTOR RUN	A				B				C				D			
CONDUCTORS	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14
ØA			3				3				3				3	
ØB			3				3				3				3	
ØA W-DW			2				2				2				2	
ØB W-DW			2				2				2				2	
Spares			3				3				3				3	
120V Neutral			1				1				1				1	
Luminaires			2				2				2				2	
TOTAL CONDUCTORS	2	1	13		2	1	13		2	1	13		2	1	13	
CONDUIT SIZE	1 1/2"		1 1/2"		1 1/2"		1 1/2"		2"		2"		2"		2"	

10TH & MARKET - CONDUCTOR SCHEDULE

CONDUCTOR RUN	A				B				C				D			
CONDUCTORS	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14
ØA																
ØB																
ØA W-DW																
ØB W-DW																
Spares																
120V Neutral																
Luminaires																
TOTAL CONDUCTORS	2	1	10		2	1	10		2	1	10		2	1	10	
CONDUIT SIZE	1 1/2"		1 1/2"		1 1/2"		1 1/2"		2"		2"		2"		2"	

REVISIONS			CITY OF RIVERSIDE CALIFORNIA DEPARTMENT OF PUBLIC WORKS	
MARK	DATE	DESCRIPTION		
	1/19/62	Interconnect As Built	TRAFFIC SIGNALS MARKET STREET 10TH & 12TH STREETS	
	2/13/63	Signal Revisions & Lighting As Built		
	7-15-66	As Built: Manages Building		
DESIGNED BY	ADD	CHECKED BY	APPROVED BY	X-110
DRAWN BY	ADD		DIRECTOR OF PUBLIC WORKS	X-111
RECOMMENDED BY		ASSISTANT CITY ENGINEER	DATE	SHEET 37 OF 50

CONDUCTOR		TABLE							
AWG	CIRCUIT	RUNS							
		1	2	3	4	5	6	7	8
3	CONDUCTOR CABLE	1	1	4	3	2	1	1	1
5	CONDUCTOR CABLE	-	-	2	2	1	1	1	1
9	CONDUCTOR CABLE	1	1	3	2	2	1	-	-
12	CONDUCTOR CABLE	-	-	3	3	2	2	1	1
TYPE B	#4 DETECTOR	-	-	2	1	1	1	1	-
DLC	TOTAL	-	-	2	1	1	1	1	-
#8	LUMINAIRE	-	2	-	2	2	2	2	2
CONDUIT SIZE		(E) 1.5"	2"	2-3"	3"	3"	2.5"	2.5"	2"

ALL CONDUIT AND CONDUCTORS ARE NEW EXCEPT WHERE SHOWN AS EXISTING (E). REUSE SERVICE CONDUCTORS

POLE		SCHEDULE								
No.	TYPE	STANDARD				LUMINAIRE HPS	SIGNAL MOUNTING		PPB PHASE	
		HGT.	SIG. M.A.	LUM. M.A.	VEHICLE		VEHICLE	PED		
1	MARBELITE	30'	18'	8'	-	-	MAS	SV-2-T	SP-2-T	#4(N)
2	MARBELITE	30'	-	4'	-	-	SV-1-T	SP-2-T	-	-
3	1-A	10'	-	-	-	-	TV-1-T	-	-	#4(N)
4	MARBELITE	30'	18'	8'	-	-	MAS	SV-2-T	SP-2-T	#4(N)
5	MARBELITE	30'	-	4'	-	-	SV-1-T	SP-2-T	-	-
6	1-A	10'	-	-	-	-	TV-1-T	-	-	#4(N)

ALL EQUIPMENT IS EXISTING EXCEPT WHERE SHOWN AS NEW (N).

CONDUCTOR		TABLE								
AWG	CIRCUIT	RUNS								
		1	2	3	4	5	6	7	8	9
3	CONDUCTOR CABLE	1	1	1	2	4	2	1	1	1
5	CONDUCTOR CABLE	-	-	-	1	2	1	1	1	1
9	CONDUCTOR CABLE	1	2	2	2	4	2	1	-	-
12	CONDUCTOR CABLE	-	-	-	1	2	1	1	1	1
TYPE B	#4 DETECTOR	-	-	1	1	2	1	1	1	-
DLC	TOTAL	-	-	1	1	2	1	1	1	-
#8	LUMINAIRE	-	2	2	2	-	2	2	2	2
#8	SIGNAL SERVICE	-	-	-	-	2	2	2	-	-
CONDUIT SIZE		(E) 1.5"	2"	2.5"	3"	2-3"	3"	2.5"	2.5"	2"

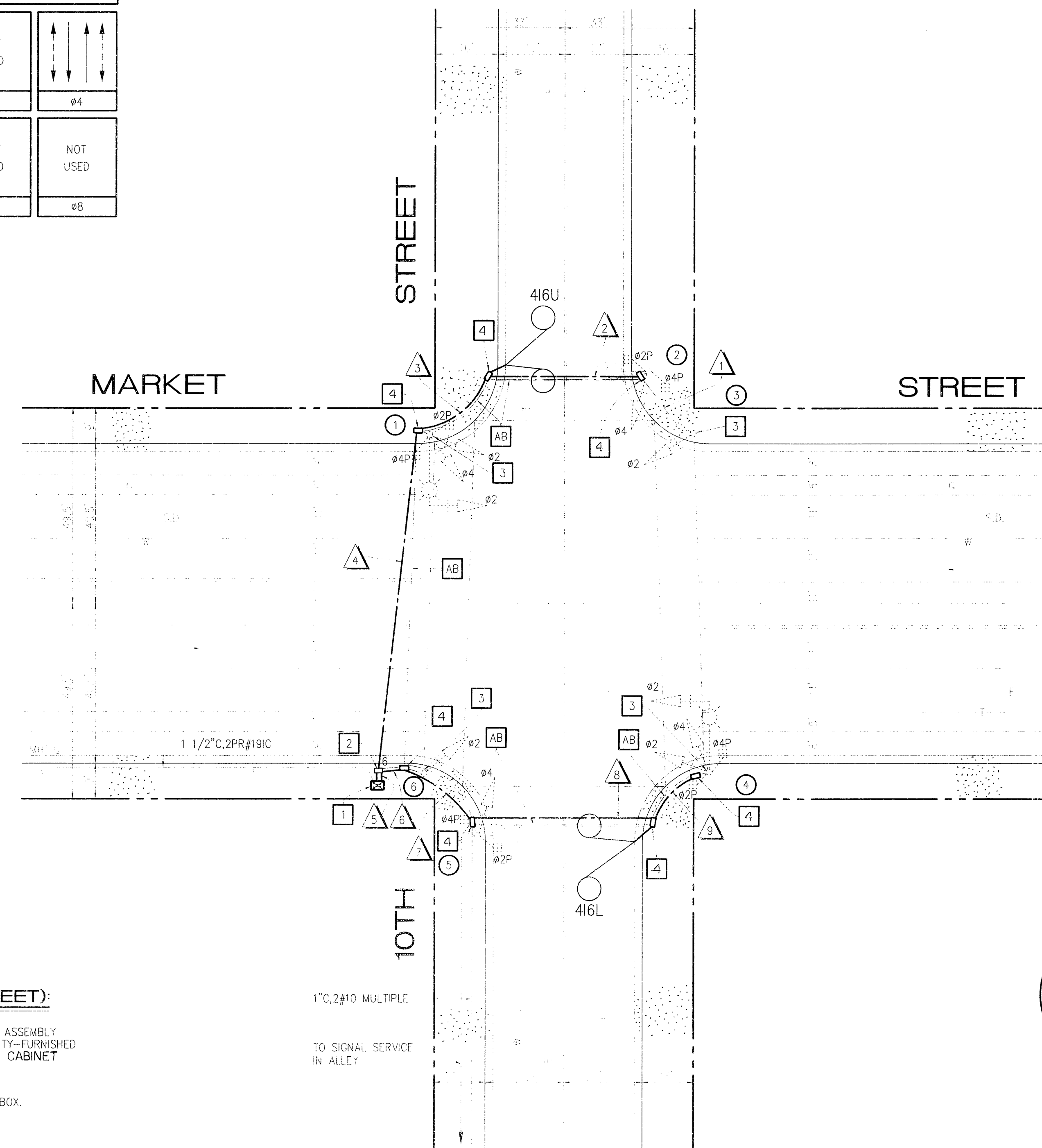
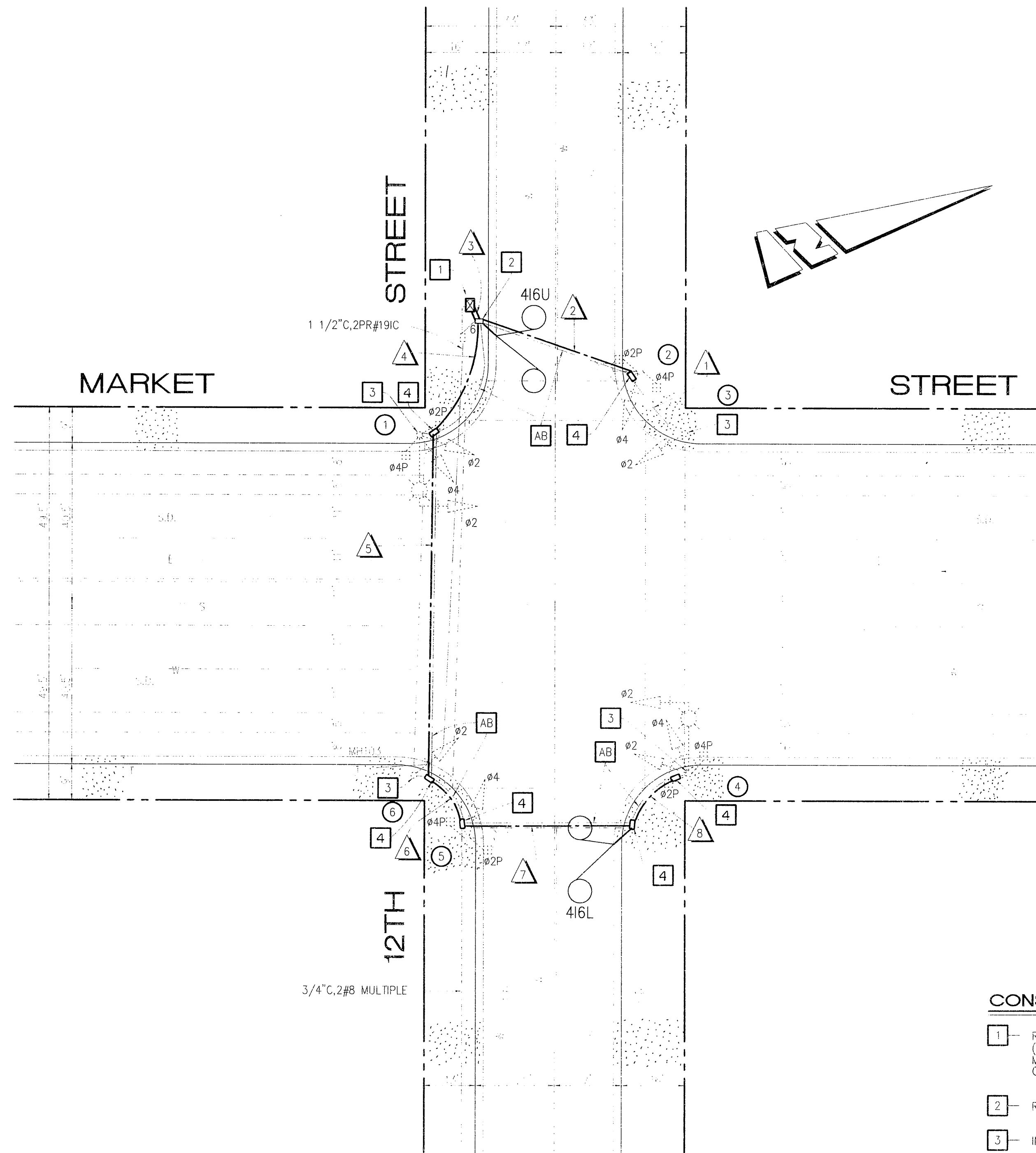
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POLE		SCHEDULE								
No.	TYPE	STANDARD				LUMINAIRE HPS	SIGNAL MOUNTING		PPB PHASE	
		HGT.	SIG. M.A.	LUM. M.A.	VEHICLE		VEHICLE	PED		
1	MARBELITE	30'	18'	8'	-	-	MAS	SV-2-T	SP-2-T	#4(N)
2	MARBELITE	30'	-	4'	-	-	SV-1-T	SP-2-T	-	-
3	1-A	10'	-	-	-	-	TV-1-T	-	-	#4(N)
4	MARBELITE	30'	18'	8'	-	-	MAS	SV-2-T	SP-2-T	#4(N)
5	MARBELITE	30'	-	4'	-	-	SV-1-T	SP-2-T	-	-
6	1-A	10'	-	-	-	-	TV-1-T	-	-	#4(N)

ALL EQUIPMENT IS EXISTING EXCEPT WHERE SHOWN AS NEW (N).

(BOTH LOCATIONS)

PHASE		DIAGRAM	
NOT USED		NOT USED	
01		03	
NOT USED		NOT USED	
05		07	



**CONSTRUCTION NOTES (THIS SHEET):**

- 1 - REMOVE AND SALVAGE EXISTING TYPE 90 CONTROLLER ASSEMBLY (TYPE M CABINET). ~~INSTALL TYPE 90 CONTROLLER ASSEMBLY WITH MODEL 170 CONTROLLER ASSEMBLY WITH MODEL 336S CABINET ON EXISTING FOUNDATION.~~
- 2 - REPLACE EXISTING NO. 5 PULL BOX WITH NO. 6 PULL BOX.
- 3 - INSTALL PEDESTRIAN PUSH BUTTON ON EXISTING POLE.
- 4 - REPLACE PULLBOX



TRAFFIC No. 1575  
 DATE: 5-13-96  
 AEA Job No.: 134-001  
 AEA File Name: 10-10MAP  
 Start Date: 5-10-96  
 Last Revision: 8/9/96

**CONTRACT TE-96-5**  
**FEDERAL AID PROJECT NO. CMLN-5058(20)**  
 AN "A" OR "C-10" LICENSE IS REQUIRED.

**CITY OF RIVERSIDE**  
**PUBLIC WORKS DEPARTMENT**

APPROVED BY	DATE	BY
INSPECTOR	5/22/96	[Signature]
TRAFFIC DIVISION	5/23/96	[Signature]
CHIEF P.W. ENGINEER	5/23/96	[Signature]
PUBLIC UTILITIES	5/24/96	[Signature]

TRAFFIC SIGNAL PLAN  
**MARKET STREET**  
**AT**  
**10TH & 12TH STREETS**  
 HORIZ. SCALE: 1"= 20' VERT. SCALE: 1"= -

ACCOUNT NO.  
**X-110A**  
 SHEET 2 OF 2

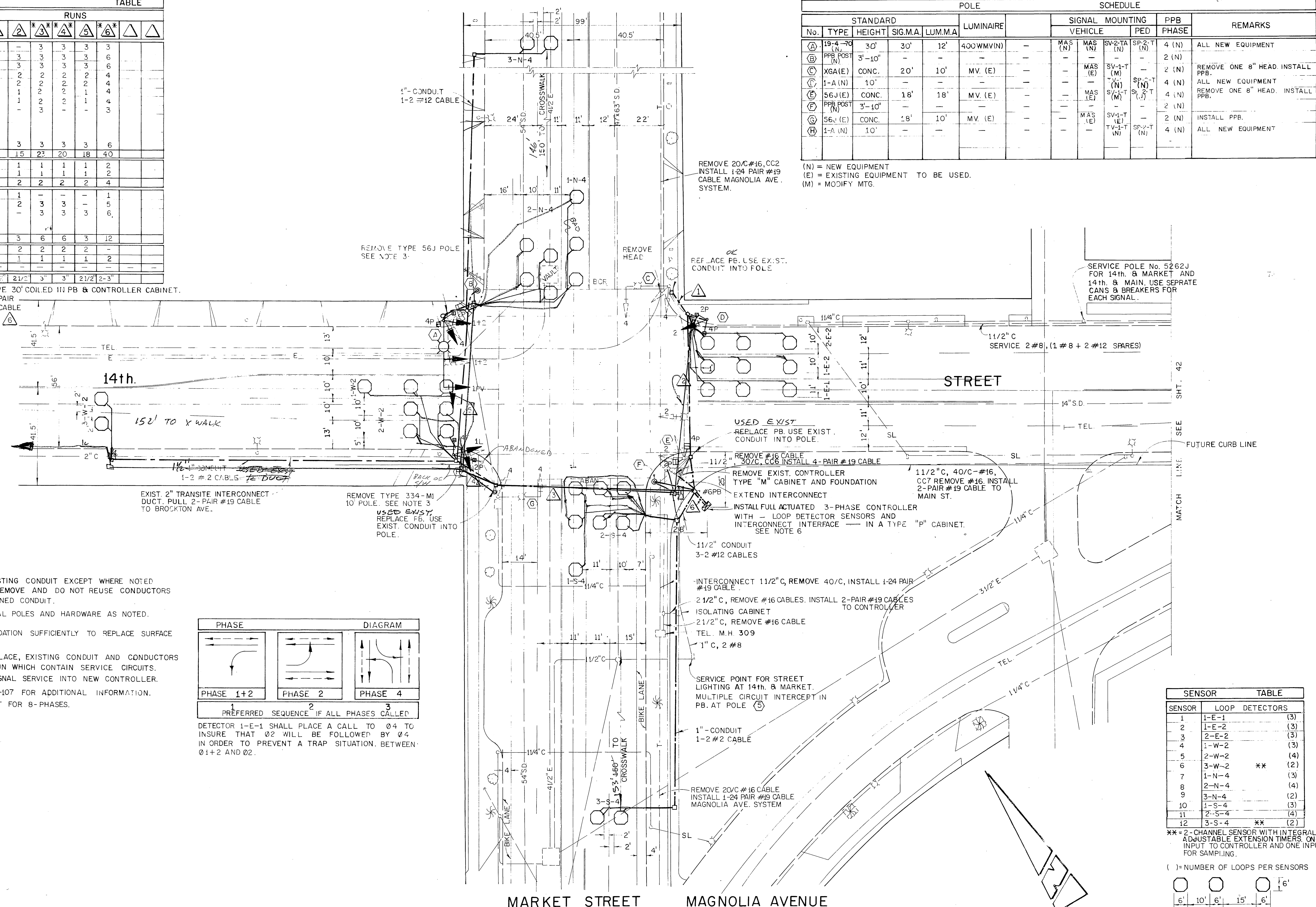
Underground Service Alert  
 Call TOLL FREE  
 1-800  
 227-2600  
 TWO WORKING DAYS BEFORE YOU DIG

CONDUCTOR		TABLE							
AWG	CIRCUIT	RUNS							
		1	2	3*	4*	5	6*	7	8
Ø1				3	3	3	3		
Ø2			3	3	3	3	3		6
Ø4		3	3	3	3	3	3		6
Ø2	PED		2	2	2	2	2		4
Ø4	PED		2	2	2	2	2		4
Ø2	PPB	1	1	2	2	1	1		4
Ø4	PPB	1	1	2	2	1	1		4
Ø7*				3					3
SPARES		3	3	3	3	3	3		6
TOTAL		7	15	23	20	18	40		
#	PPB COMMON	1	1	1	1	1	1		2
#	SPARES	1	1	1	1	1	1		2
TOTAL		2	2	2	2	2	4		
Ø1	DETECTOR		1						1
Ø2	"		2						5
Ø4	"		3						6
#	TOTAL CABLES		3	6	6	3	12		
#	LUMINAIRE	2	2	2	2	2			
#	SIGNAL COMMON	1	1	1	1	1			2
CONDUIT SIZE		1 1/2"	2 1/2"	3"	3"	2 1/2"	2-3"		

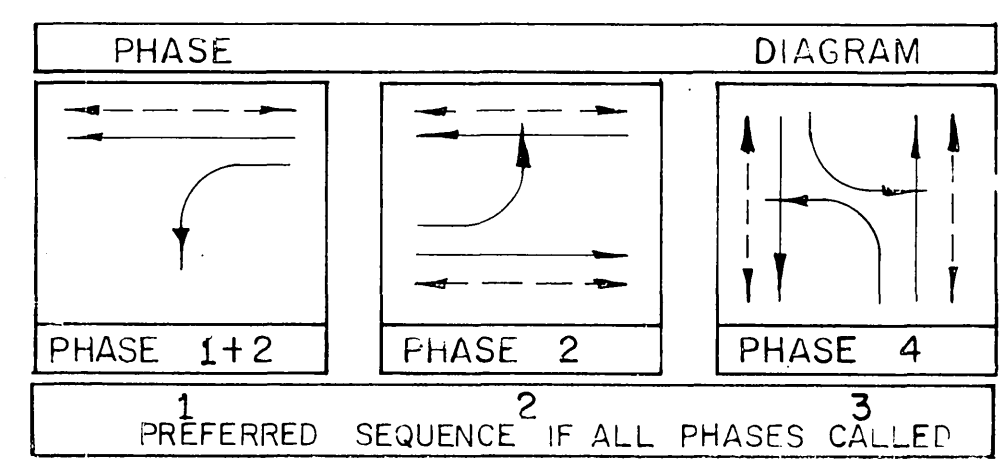
\* WIRE FOR FUT. USE. LEAVE 30' COILED IN PB & CONTROLLER CABINET.  
 \*\* INTERCONNECT - PULL 2-PAIR #19 SHIELDED TWISTED CABLE THRU RUNS 3, 4 & 6

STANDARD					SCHEDULE				REMARKS
No.	TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	SIGNAL VEHICLE	MOUNTING PED	PPB PHASE		
(A)	19-4-70	30'	30'	12'	400WV(N)	MAS (N)	SP-2-T (N)	4 (N)	ALL NEW EQUIPMENT
(B)	PPB POST (N)	3'-10"				MAS (N)		2 (N)	
(C)	XGA(E)	CONC.	20'	10'	MV. (E)	MAS (E)	SV-1-T (M)	2 (N)	REMOVE ONE 8" HEAD. INSTALL PPB.
(D)	1-A (N)	10'				MAS (N)	SP-2-T (N)	4 (N)	ALL NEW EQUIPMENT
(E)	56J(E)	CONC.	18'	18'	MV. (E)	MAS (E)	SV-1-T (M)	4 (N)	REMOVE ONE 8" HEAD. INSTALL PPB.
(F)	PPB POST (N)	3'-10"				MAS (N)		2 (N)	
(G)	56J(E)	CONC.	18'	10'	MV. (E)	MAS (E)	SV-1-T (M)	2 (N)	INSTALL PPB.
(H)	1-A (N)	10'				MAS (N)	TV-1-T (N)	4 (N)	ALL NEW EQUIPMENT

(N) = NEW EQUIPMENT  
 (E) = EXISTING EQUIPMENT TO BE USED.  
 (M) = MODIFY MTG.



- NOTES**
1. ABANDON EXISTING CONDUIT EXCEPT WHERE NOTED OTHERWISE. REMOVE AND DO NOT REUSE CONDUCTORS FROM ABANDONED CONDUIT.
  2. REMOVE SIGNAL POLES AND HARDWARE AS NOTED.
  3. REMOVE FOUNDATION SUFFICIENTLY TO REPLACE SURFACE MATERIAL.
  4. PROTECT IN PLACE, EXISTING CONDUIT AND CONDUCTORS IN THOSE RUN WHICH CONTAIN SERVICE CIRCUITS. INTERCEPT SIGNAL SERVICE INTO NEW CONTROLLER.
  5. SEE PLAN X-107 FOR ADDITIONAL INFORMATION.
  6. WIRE CABINET FOR 8-PHASES.

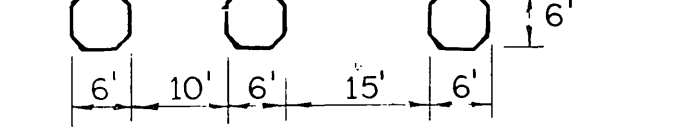


DETECTOR 1-E-1 SHALL PLACE A CALL TO Ø4 TO INSURE THAT Ø2 WILL BE FOLLOWED BY Ø4 IN ORDER TO PREVENT A TRAP SITUATION BETWEEN Ø1+2 AND Ø2.

SENSOR TABLE	
SENSOR	LOOP DETECTORS
1	1-E-1 (3)
2	1-E-2 (3)
3	2-E-2 (3)
4	1-W-2 (3)
5	2-W-2 (4)
6	3-W-2 ** (2)
7	1-N-4 (3)
8	2-N-4 (4)
9	3-N-4 (2)
10	1-S-4 (3)
11	2-S-4 (4)
12	3-S-4 ** (2)

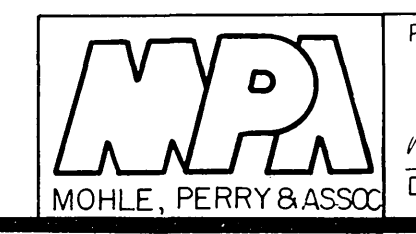
\*\* = 2-CHANNEL SENSOR WITH INTEGRAL ADJUSTABLE EXTENSION TIMERS. ONE INPUT TO CONTROLLER AND ONE INPUT FOR SAMPLING.

( ) = NUMBER OF LOOPS PER SENSORS



DETECTOR PLACEMENT

MARKET STREET MAGNOLIA AVENUE



PREPARED BY: R. H. Mohle  
 DESIGN ENGR. R.C.E. 10692  
 DATE: 5/12/85

CITY OF RIVERSIDE, CALIFORNIA  
 DEPARTMENT OF PUBLIC WORKS

APPROVED BY: [Signature]  
 DATE: 5/12/85  
 DIRECTOR OF PUBLIC WORKS

TRAFFIC SIGNAL PLAN  
 14th STREET AT  
 MARKET STREET

PROJECT NO. \_\_\_\_\_  
 SHEET 41 OF 50  
 FILE NO. \_\_\_\_\_

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

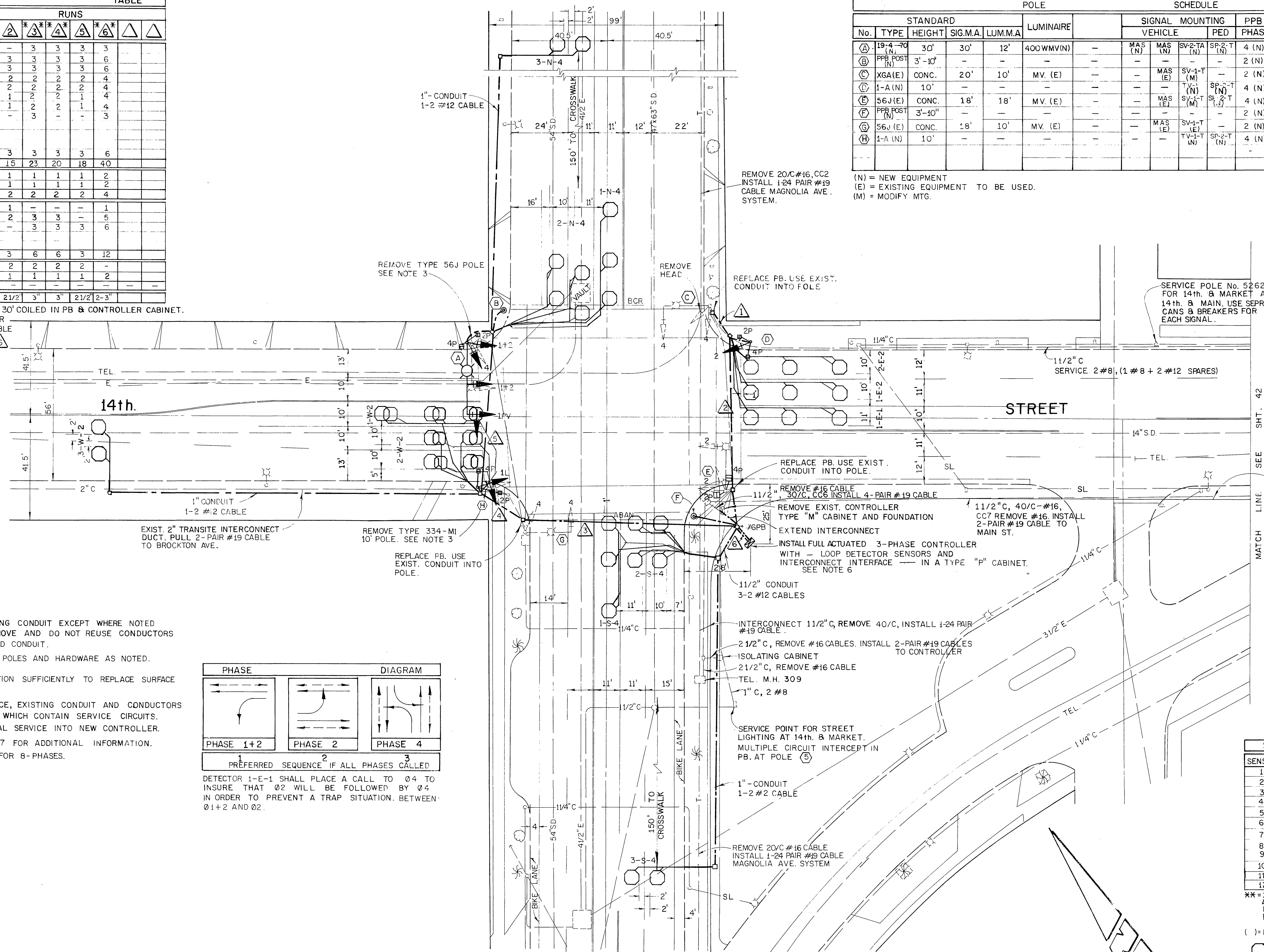
AS BUILT 5-14-85

CONDUCTOR		TABLE					
AWG	CIRCUIT	△	△	△	△	△	△
Ø1			3	3	3	3	3
Ø2		3	3	3	3	3	6
Ø4			2	2	2	2	4
Ø2	PED		2	2	2	2	4
Ø4	PED		1	1	1	1	4
Ø2	PPB		1	1	1	1	4
Ø4	PPB		1	1	1	1	4
Ø7	*		3	3	3	3	3
SPARES		3	3	3	3	3	6
TOTAL		7	15	23	20	18	40
#12							
PPB COMMON		1	1	1	1	1	2
SPARES		1	1	1	1	1	2
TOTAL		2	2	2	2	2	4
2-#12							
Ø1 DETECTOR			1				1
Ø2 "			2	3	3		5
Ø4 "			3	3	3	6	
TOTAL CABLES			3	6	6	3	12
#8 LUMINAIRE		2	2	2	2	2	
#10 SIGNAL COMMON		1	1	1	1	1	2
CONDUIT SIZE		1 1/2"	2 1/2"	3"	3"	2 1/2"	2-3"

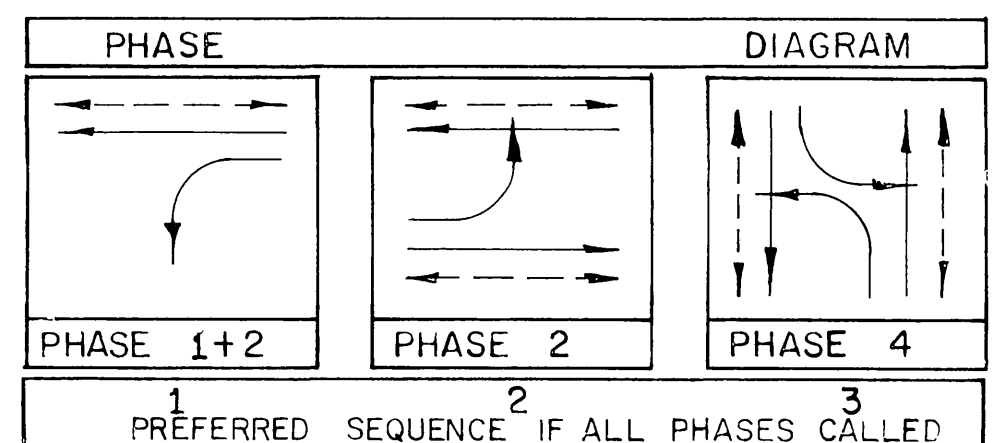
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 \*\* INTERCONNECT - PULL 2-PAIR #19 SHIELDED TWISTED CABLE THRU RUNS △, △ & △

STANDARD				SCHEDULE				
No.	TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE	SIGNAL MOUNTING VEHICLE	PPB PHASE	REMARKS
(A)	19-4-70 (N)	30'	30'	12'	400WMV(N)	MAS (N)	SP-2-T (N)	4 (N) ALL NEW EQUIPMENT
(B)	PPB POST (N)	3'-10"						2 (N)
(C)	XGA(E)	CONC.	20'	10'	MV. (E)	MAS (E)	SV-1-T (N)	2 (N) REMOVE ONE 8" HEAD INSTALL PPB.
(D)	1-A (N)	10'					SP-2-T (N)	4 (N) ALL NEW EQUIPMENT
(E)	56J(E)	CONC.	18'	18'	MV. (E)	MAS (E)	SV-1-T (N)	4 (N) REMOVE ONE 8" HEAD. INSTALL PPB.
(F)	PPB POST (N)	3'-10"						2 (N)
(G)	56J(E)	CONC.	18'	10'	MV. (E)	MAS (E)	SV-1-T (N)	2 (N) INSTALL PPB.
(H)	1-A (N)	10'					SP-2-T (N)	4 (N) ALL NEW EQUIPMENT

(N) = NEW EQUIPMENT  
 (E) = EXISTING EQUIPMENT TO BE USED.  
 (M) = MODIFY MTG.



- NOTES
- ABANDON EXISTING CONDUIT EXCEPT WHERE NOTED OTHERWISE. REMOVE AND DO NOT REUSE CONDUCTORS FROM ABANDONED CONDUIT.
  - REMOVE SIGNAL POLES AND HARDWARE AS NOTED.
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  - PROTECT IN PLACE, EXISTING CONDUIT AND CONDUCTORS IN THOSE RUN WHICH CONTAIN SERVICE CIRCUITS. INTERCEPT SIGNAL SERVICE INTO NEW CONTROLLER.
  - SEE PLAN X-107 FOR ADDITIONAL INFORMATION.
  - WIRE CABINET FOR 8-PHASES.

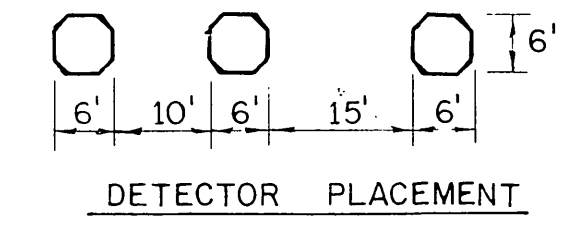


DETECTOR 1-E-1 SHALL PLACE A CALL TO Ø4 TO INSURE THAT Ø2 WILL BE FOLLOWED BY Ø4 IN ORDER TO PREVENT A TRAP SITUATION BETWEEN Ø1+2 AND Ø2.

SENSOR	LOOP	DETECTORS
1	1-E-1	(3)
2	1-E-2	(3)
3	2-E-2	(3)
4	1-W-2	(3)
5	2-W-2	(4)
6	3-W-2	** (2)
7	1-N-4	(3)
8	2-N-4	(4)
9	3-N-4	(2)
10	1-S-4	(3)
11	2-S-4	(4)
12	3-S-4	** (2)

\*\* = 2-CHANNEL SENSOR WITH INTEGRAL ADJUSTABLE EXTENSION TIMERS. ONE INPUT TO CONTROLLER AND ONE INPUT FOR SAMPLING.

( ) = NUMBER OF LOOPS PER SENSORS



MARKET STREET      MAGNOLIA AVENUE

PREPARED BY: *R.H. Mohle*  
 DESIGN ENGR. R.C.E. 10692 DATE: 12/18/90

CITY OF RIVERSIDE, CALIFORNIA  
 DEPARTMENT OF PUBLIC WORKS

APPROVED BY: *[Signature]*  
 DIRECTOR OF PUBLIC WORKS

DATE: 12/18/90

TRAFFIC SIGNAL PLAN  
 14th STREET AT  
 MARKET STREET

PROJECT NO. \_\_\_\_\_  
 SHEET 41 OF 50  
 FILE NO. \_\_\_\_\_

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