EQUIPMENT SCHEDULE

NO.	SIGNAL STANDARD TYPE	H'GHT	M.A.	LUMINAIRE L.A.	H.P.S.V.	S.N.S. LEGEND	SIGNAL MOUNTINGS VEHICLE	PEDESTRIAN	PPB PHASE	REMARKS
(A)	Type 26 (E)	30'(E)	40'(E)	15'(E)	250W(E)	HOWARD AV 4300 (E)	MAS(N)			ROTATE PEDESTRIAN SIGNAL AS SHOWN.
							MAS(E)			
							SV-1-T(N)	SP-1-T(E)	4(N)	
(B)	Type 1 (E)	10'(E)					TV-1-T(N)	SP-1-T(E)	6(N)	ROTATE PEDESTRIAN SIGNAL AS SHOWN.
(C)	Type 17 (E)	30'(E)	18'(E)	15'(E)	200W(E)	FOURTEENTH ST 2900 (E)	MAS(E)			
							SV-1-T(N)	SP-1-T(E)	6(N)	ROTATE PEDESTRIAN SIGNAL AS SHOWN.
(D)	Type 1 (R)	10'(R)					TV-2-T(N)	SP-1-T(E)	8(N)	ROTATE PEDESTRIAN SIGNAL AS SHOWN.
(E)	Type 19 (E)	30'(E)	30'(E)	15'(E)	250W(E)	HOWARD AV 4400 (E)	MAS(N)			
							MAS(E)			
							SV-1-T(N)	SP-1-T(E)	8(N)	ROTATE PEDESTRIAN SIGNAL AS SHOWN.
(F)	Type 1 (E)	10'(E)					TV-1-T(N)	SP-1-T(E)	2(N)	ROTATE PEDESTRIAN SIGNAL AS SHOWN.
(G)	17-2-80(N)	30'(N)	20'(N)	15'(N)	200W(N)	FOURTEENTH ST 3000 (R)	MAS(N)			REMOVE AND SALVAGE EXIST. POLE AND EQUIP.,
							SV-1-T(N)	SP-1-T(N)	2(N)	RELOCATE S.N.S. TO NEW POLE.
(H)	Type 15 (E)	30'(E)		15'(E)	250W(E)		TV-2-T(N)	SP-1-T(E)	4(N)	ROTATE PEDESTRIAN SIGNAL AS SHOWN.

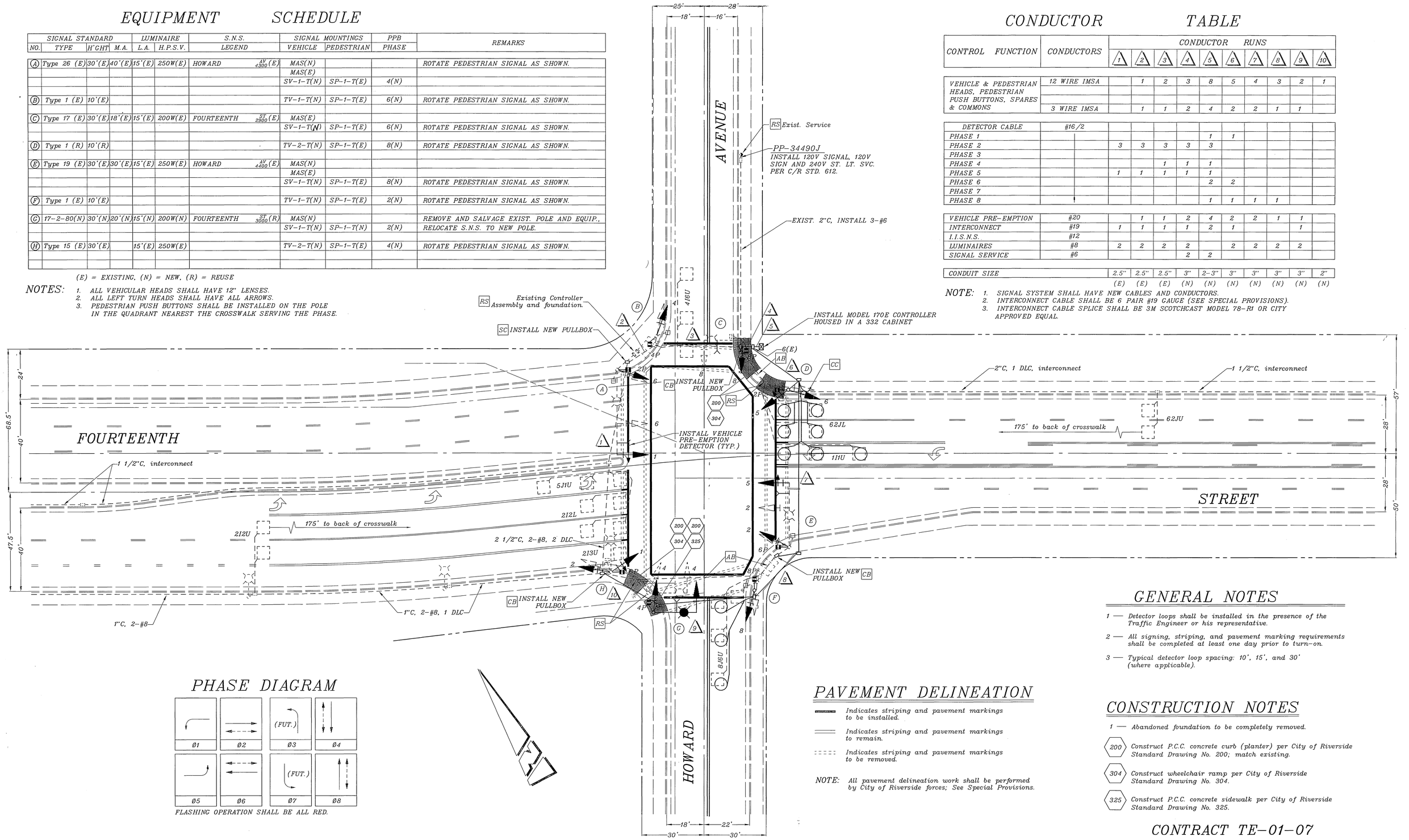
(E) = EXISTING, (N) = NEW, (R) = REUSE

NOTES:
1. ALL VEHICULAR HEADS SHALL HAVE 12" LENSES.
2. ALL LEFT TURN HEADS SHALL HAVE ALL ARROWS.
3. PEDESTRIAN PUSH BUTTONS SHALL BE INSTALLED ON THE POLE IN THE QUADRANT NEAREST THE CROSSWALK SERVING THE PHASE.

CONDUCTOR TABLE

CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS 1	2	3	4	5	6	7	8	9	10
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA		1	2	3	8	5	4	3	2	1
	3 WIRE IMSA		1	1	2	4	2	2	1	1	
DETECTOR CABLE	#16/2					1	1				
PHASE 1											
PHASE 2		3	3	3	3	3					
PHASE 3											
PHASE 4				1	1	1					
PHASE 5		1	1	1	1	1					
PHASE 6						2	2				
PHASE 7											
PHASE 8						1	1	1	1		
VEHICLE PRE-EMPTION	#20		1	1	2	4	2	2	1	1	
INTERCONNECT	#19	1	1	1	1	2	1			1	
I.I.S.N.S.	#12										
LUMINAIRES	#8	2	2	2	2		2	2	2	2	
SIGNAL SERVICE	#6				2	2					
CONDUIT SIZE		2.5" (E)	2.5" (E)	2.5" (E)	3" (N)	2-3" (N)	3" (N)	3" (N)	3" (N)	3" (N)	2" (N)

NOTE:
1. SIGNAL SYSTEM SHALL HAVE NEW CABLES AND CONDUCTORS.
2. INTERCONNECT CABLE SHALL BE 6 PAIR #19 GAUGE (SEE SPECIAL PROVISIONS).
3. INTERCONNECT CABLE SPLICE SHALL BE 3M SCOTCHCAST MODEL 78-R1 OR CITY APPROVED EQUAL.



PHASE DIAGRAM

FLASHING OPERATION SHALL BE ALL RED.

PAVEMENT DELINEATION

Indicates striping and pavement markings to be installed.

Indicates striping and pavement markings to remain.

Indicates striping and pavement markings to be removed.

NOTE: All pavement delineation work shall be performed by City of Riverside forces; See Special Provisions.

GENERAL NOTES

1 — Detector loops shall be installed in the presence of the Traffic Engineer or his representative.

2 — All signing, striping, and pavement marking requirements shall be completed at least one day prior to turn-on.

3 — Typical detector loop spacing: 10', 15', and 30' (where applicable).

CONSTRUCTION NOTES

1 — Abandoned foundation to be completely removed.

(200) Construct P.C.C. concrete curb (planter) per City of Riverside Standard Drawing No. 200; match existing.

(304) Construct wheelchair ramp per City of Riverside Standard Drawing No. 304.

(325) Construct P.C.C. concrete sidewalk per City of Riverside Standard Drawing No. 325.

CONTRACT TE-01-07

IMPORTANT NOTICE
Section 4216/4217 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call
CALL TOLL FREE
TWO WORKING DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

ENGINEER IN RESPONSIBLE CHARGE
THOMAS JOHN BOYD
R.C.E. No. 36170 expires 6/30/04
DATE 2/12/04

REGISTERED PROFESSIONAL ENGINEER
THOMAS JOHN BOYD
No. 36170
Exp. 06-30-2004
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY MAC DRAWN BY MAC CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
DEPUTY P.W. DIR./ENG.		
PRINCIPAL ENGINEER		5/11/04
P.W. INSPECTION		
TRAFFIC DIVISION		2/14/2
PUBLIC UTILITIES		2/4/2

APPROVED BY DIRECTOR OF PUBLIC WORKS
DATE 2/12/04

TRAFFIC SIGNAL MODIFICATION
FOURTEENTH ST. AND HOWARD AVE.
SCALE: 1" = 20'

ACCT. NO. 9743832204-44030400
X-100A
SHEET 1 OF 1
FILE NAME: X100A.DWG

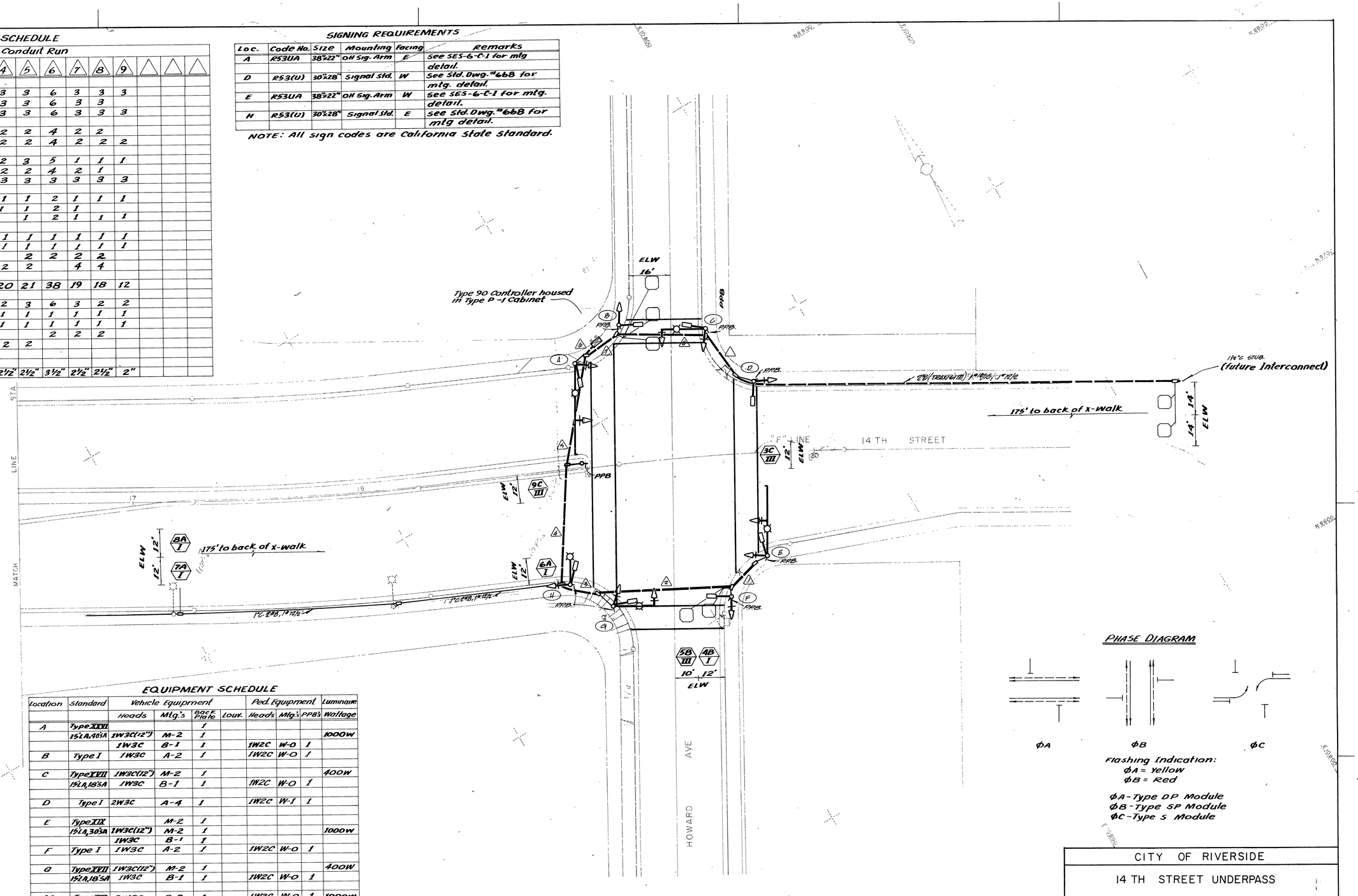
CONDUCTOR SCHEDULE

Control Function	Conductors Size	Conductors Insulation	Conduit Run 1	2	3	4	5	6	7	8	9	△	△	△
Vehicle Heads	#14	T.W.												
ϕA			3	3	3	3	3	6	3	3	3			
ϕB				3	3	3	3	6	3	3				
ϕC			3	3	3	3	3	6	3	3	3			
Pedestrian Heads														
ϕAw				2	2	2	2	4	2	2				
ϕBw			2	2	2	2	2	4	2	2	2			
Ped. Push Button														
ϕAw			1	1	1	2	3	5	1	1	1			
ϕBw			1	2	2	2	2	4	2	1				
Spares			3	3	3	3	3	3	3	3	3			
Detector Cable	#12½	P.E.												
ϕA						1	1	2	1	1	1			
ϕB				1	1	1	1	2	1					
ϕC							1	2	1	1	1			
Interconnect														
12V Common	#12	T.W.	1	1	1	1	1	1	1	1	1			
120V Common	#10		1	1	1	1	1	1	1	1	1			
Signal Service	#8						2	2	2	2				
Luminaires		T.H.W.	2	2	2	2	2		4	4				
Totals	#14	P.E.	13	19	19	20	21	38	19	18	12			
	#12½			1	1	2	3	6	3	2	2			
	#12	T.W.	1	1	1	1	1	1	1	1	1			
	#10		1	1	1	1	1	1	1	1	1			
	#8							2	2	2				
		T.H.W.	2	2	2	2	2							
Conduit Size			2"	2"	2"	2½"	2½"	3½"	2½"	2½"	2"			

SIGNING REQUIREMENTS

Loc.	Code No.	Size	Mounting	Facing	Remarks
A	R53UA	36"x22"	OH Sig. Arm	E	see SES-6-C-1 for mtg detail.
D	R53(U)	30"x28"	Signal Std.	W	See Std. Dwg. #668 for mtg. detail.
E	R53UA	36"x22"	OH Sig. Arm	W	see SES-6-C-1 for mtg. detail.
H	R53(U)	30"x28"	Signal Std.	E	see Std. Dwg. #668 for mtg detail.

NOTE: All sign codes are California State Standard.



EQUIPMENT SCHEDULE

Location	Standard	Vehicle Equipment Heads	Mtg.'s	Back Plate	Louv.	Ped. Equipment Heads	Mtg.'s	PPB's	Luminaire Wattage
A	Type XXVI			1					
	15'LA, 40'SA	1W3C(12")	M-2	1					1000W
		1W3C	B-1	1		1W2C	W-O	1	
B	Type I	1W3C	A-2	1		1W2C	W-O	1	
C	Type XVII	1W3C(12")	M-2	1					400W
	15'LA, 18'SA	1W3C	B-1	1		1W2C	W-O	1	
D	Type I	2W3C	A-4	1		1W2C	W-1	1	
E	Type XIX		M-2	1					
	15'LA, 30'SA	1W3C(12")	M-2	1					1000W
		1W3C	B-1	1					
F	Type I	1W3C	A-2	1		1W2C	W-O	1	
G	Type XVII	1W3C(12")	M-2	1					400W
	15'LA, 18'SA	1W3C	B-1	1		1W2C	W-O	1	
H	Type XV	2W3C	B-2	1		1W2C	W-O	1	1000W
	15'LA								
I	Ped Post							1	

PHASE DIAGRAM

Flashing Indication:
ϕA = Yellow
ϕB = Red

ϕA - Type DP Module
ϕB - Type SP Module
ϕC - Type S Module

REV.	DESCRIPTION	DATE	BY

CITY OF RIVERSIDE

14 TH STREET UNDERPASS

STA. 16+50 TO EAST OF HOWARD AVE.

DE LEUW, CATHER & COMPANY
CONSULTING ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE 1" = 20'

DESIGNED ____ CHECKED ____
DRAWN ____ APPROVED ____

DATE

SHEET NO. X-100

PROJ. NO. 2023-01

CONDUCTOR SCHEDULE

Control Function	Conductors Size	Conductors Insulation	Conduit Run 1	2	3	4	5	6	7	8	9			
Vehicle Heads	#14	T.W.												
ØA			3	3	3	3	3	6	3	3	3			
ØB				3	3	3	3	6	3	3				
ØC			3	3	3	3	3	6	3	3	3			
Pedestrian Heads														
ØAw				2	2	2	2	4	2	2				
ØBw			2	2	2	2	2	4	2	2	2			
Ped Push Button														
ØAw			1	1	1	2	3	5	1	1	1			
ØBw			1	2	2	2	2	4	2	1				
Spares			3	3	3	3	3	3	3	3	3			
Detector Cable	#12 2/c	P.E.												
ØA						1	1	2	1	1	1			
ØB				1	1	1	1	2	1					
ØC							1	2	1	1	1			
Interconnect														
12V Common	#12	T.W.	1	1	1	1	1	1	1	1	1			
120V Common	#10		1	1	1	1	1	1	1	1	1			
Signal Service	#8						2	2	2	2				
Luminaires		T.H.W.	2	2	2	2	2		4	4				
Totals	#14	P.E.	13	19	19	20	21	38	19	18	12			
	#12 2/c			1	1	2	3	6	3	2	2			
	#12	T.W.	1	1	1	1	1	1	1	1	1			
	#10		1	1	1	1	1	1	1	1	1			
	#8							2	2	2				
		T.H.W.	2	2	2	2	2							
Conduit Size			2"	2"	2"	2½"	2½"	3½"	2½"	2½"	2"			

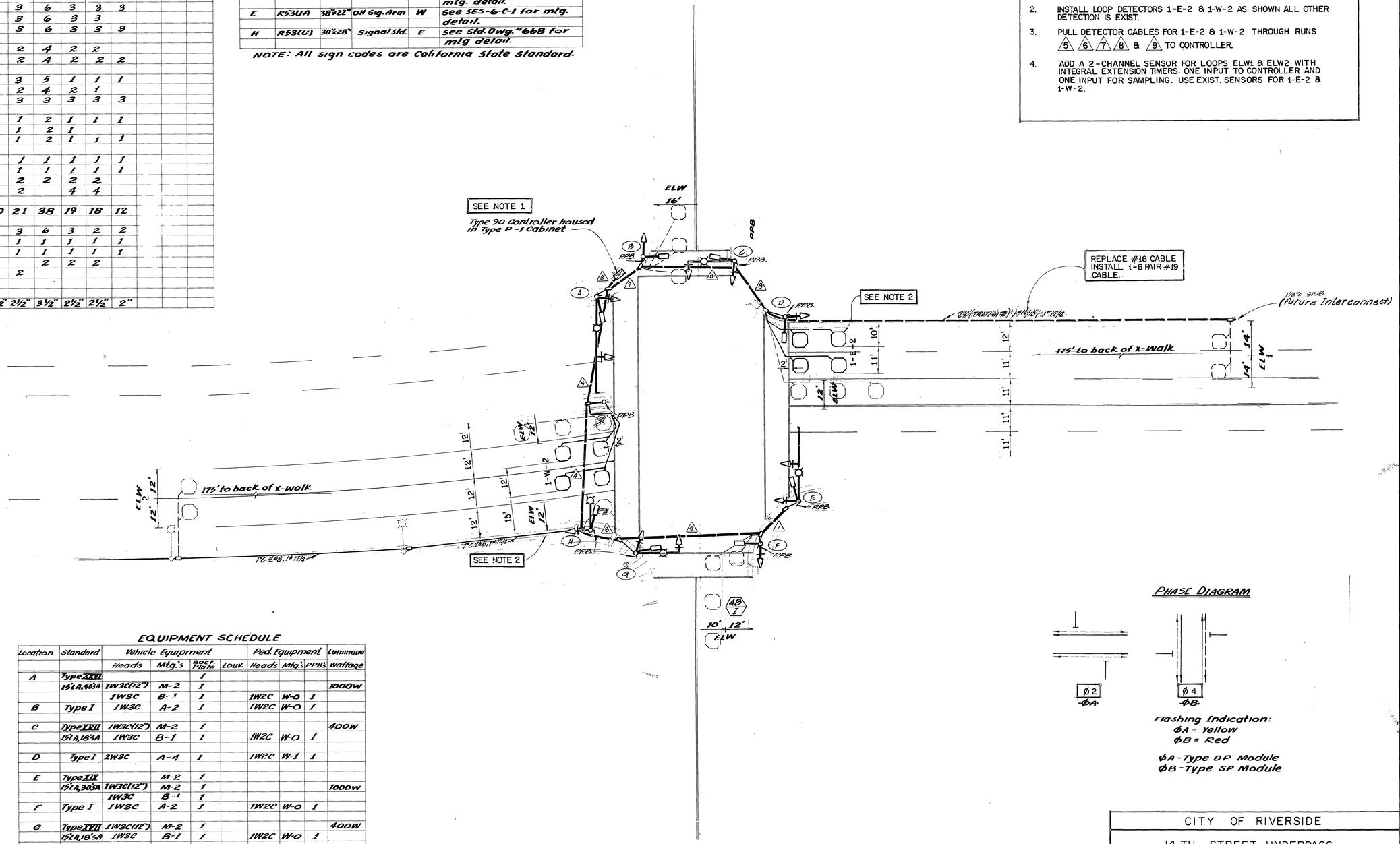
EXIST. SIGNING REQUIREMENTS

Loc.	Code No.	Size	Mounting	Facing	Remarks
A	R53UA	36"x22"	OH Sig. Arm	E	See SES-6-C-1 for mtg detail.
D	R53(U)	30"x28"	Signal Std.	W	See Std. Dwg. #66B for mtg. detail.
E	R53UA	36"x22"	OH Sig. Arm	W	See SES-6-C-1 for mtg. detail.
H	R53(U)	30"x28"	Signal Std.	E	See Std. Dwg. #66B for mtg detail.

NOTE: All sign codes are California State Standard.

NOTES – MODIFICATIONS

1. ADD 2-LOOP DETECTOR SENSORS AND WIRING TO EXIST. CONTROLLER CABINET. INSTALL AND WIRE INTERCONNECT INTERFACE. CONNECT CONTROLLER. SEE NOTE 4
2. INSTALL LOOP DETECTORS 1-E-2 & 1-W-2 AS SHOWN ALL OTHER DETECTION IS EXIST.
3. PULL DETECTOR CABLES FOR 1-E-2 & 1-W-2 THROUGH RUNS 5 6 7 8 & 9 TO CONTROLLER.
4. ADD A 2-CHANNEL SENSOR FOR LOOPS ELW1 & ELW2 WITH INTEGRAL EXTENSION TIMERS. ONE INPUT TO CONTROLLER AND ONE INPUT FOR SAMPLING. USE EXIST. SENSORS FOR 1-E-2 & 1-W-2.



EQUIPMENT SCHEDULE

Location	Standard	Vehicle Equipment: Heads	Mtg.'s	Back Plate	Louv.	Ped. Equipment: Heads	Mtg.'s	PPB's	Luminaire: Wattage
A	Type XXVI			1					
	15'LA, 90°SA	1W3C(12")	M-2	1					1000W
		1W3C	B-1	1		1W2C	W-0	1	
B	Type I	1W3C	A-2	1		1W2C	W-0	1	
C	Type XVII	1W3C(12")	M-2	1					400W
	15'LA, 180°SA	1W3C	B-1	1		1W2C	W-0	1	
D	Type I	2W3C	A-4	1		1W2C	W-1	1	
E	Type XIX		M-2	1					
	15'LA, 30°SA	1W3C(12")	M-2	1					1000W
		1W3C	B-1	1					
F	Type I	1W3C	A-2	1		1W2C	W-0	1	
G	Type XVII	1W3C(12")	M-2	1					400W
	15'LA, 180°SA	1W3C	B-1	1		1W2C	W-0	1	
H	Type XV 15'LA	2W3C	B-2	1		1W2C	W-0	1	1000W
I	Ped Rest							1	

PHASE DIAGRAM

Flashing Indication:
ØA = Yellow
ØB = Red

ØA - Type DP Module
ØB - Type SP Module

PREPARED BY:
MOHLE, PERRY & ASSOC.
R. H. Mohle Oct. 9, 1986
DESIGN ENGR. R.C.E. 10692 DATE

REV.	DESCRIPTION	DATE	BY

CITY OF RIVERSIDE

14 TH STREET UNDERPASS AT HOWARD AVENUE

STA. 16+50 TO EAST OF HOWARD AVE.

DE LEUW, CATHER & COMPANY
CONSULTING ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE 1" = 20'

DESIGNED ____ CHECKED ____
DRAWN ____ APPROVED ____

DATE

SHEET NO. 44 of 50

X-100

PROJ. NO. 2023-01

CONDUCTOR SCHEDULE

Control Function	Conductors Size	Conductors Insulation	Conduit Run 1	2	3	4	5	6	7	8	9			
Vehicle Heads	#14	T.W.												
ØA			3	3	3	3	3	6	3	3	3			
ØB				3	3	3	3	6	3	3				
ØC			3	3	3	3	3	6	3	3	3			
Pedestrian Heads														
ØAw				2	2	2	2	4	2	2				
ØBw			2	2	2	2	2	4	2	2	2			
Ped. Push Button														
ØAw			1	1	1	2	3	5	1	1	1			
ØBw			1	2	2	2	2	4	2	1				
Spares			3	3	3	3	3	3	3	3	3			
Detector Cable	#12/2	P.E.												
ØA						1	1	2	1	1	1			
ØB				1	1	1	1	2	1					
ØC							1	2	1	1	1			
Interconnect														
12V Common	#12	T.W.	1	1	1	1	1	1	1	1	1			
120V Common	#10		1	1	1	1	1	1	1	1	1			
Signal Service	#8						2	2	2	2				
Luminaires		T.H.W.	2	2	2	2	2		4	4				
Totals	#14	P.E.	13	19	19	20	21	38	19	18	12			
	#12/2			1	1	2	3	6	3	2	2			
	#12	T.W.	1	1	1	1	1	1	1	1	1			
	#10		1	1	1	1	1	1	1	1	1			
	#8							2	2	2				
		T.H.W.	2	2	2	2	2							
Conduit Size	#14	P.E.	2"	2"	2"	2½"	2½"	3½"	2½"	2½"	2"			

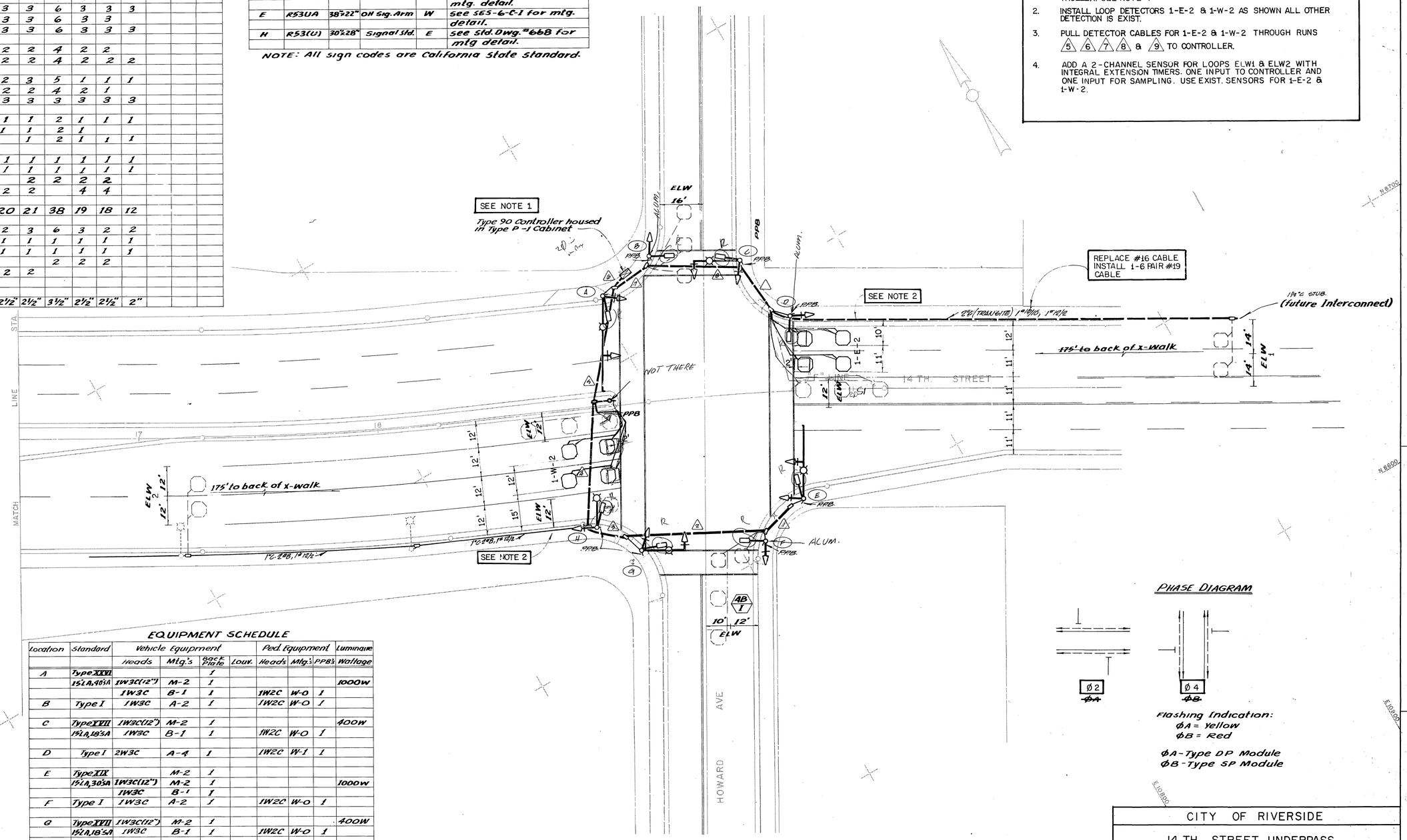
EXIST. SIGNING REQUIREMENTS

Loc.	Code No.	Size	Mounting	Facing	Remarks
A	R53UA	38"x22"	OH Sig. Arm	E	See SES-6-C-1 for mtg detail.
D	R53(U)	30"x28"	Signal Std.	W	See Std. Dwg. #66B for mtg. detail.
E	R53UA	38"x22"	OH Sig. Arm	W	See SES-6-C-1 for mtg. detail.
H	R53(U)	30"x28"	Signal Std.	E	See Std. Dwg. #66B for mtg detail.

NOTE: All sign codes are California State Standard.

NOTES - MODIFICATIONS

1. ADD 2-LOOP DETECTOR SENSORS AND WIRING TO EXIST. CONTROLLER CABINET. INSTALL AND WIRE INTERCONNECT INTERFACE. CONNECT CONTROLLER. SEE NOTE 4
2. INSTALL LOOP DETECTORS 1-E-2 & 1-W-2 AS SHOWN ALL OTHER DETECTION IS EXIST.
3. PULL DETECTOR CABLES FOR 1-E-2 & 1-W-2 THROUGH RUNS 5 6 7 8 & 9 TO CONTROLLER.
4. ADD A 2-CHANNEL SENSOR FOR LOOPS ELW1 & ELW2 WITH INTEGRAL EXTENSION TIMERS. ONE INPUT TO CONTROLLER AND ONE INPUT FOR SAMPLING. USE EXIST. SENSORS FOR 1-E-2 & 1-W-2.



EQUIPMENT SCHEDULE

Location	Standard	Vehicle Equipment Heads	Mtg.'s	Back Plate	Louv.	Ped. Equipment Heads	Mtg.'s	PPB's	Luminaire Wattage
A	Type XXVI			1					
	15'LA, 40'SA	1W3C(12")	M-2	1					1000W
		1W3C	B-1	1		1W2C	W-O	1	
B	Type I	1W3C	A-2	1		1W2C	W-O	1	
C	Type XVIII	1W3C(12")	M-2	1					400W
	15'LA, 18'SA	1W3C	B-1	1		1W2C	W-O	1	
D	Type I	2W3C	A-4	1		1W2C	W-1	1	
E	Type XIX		M-2	1					
	15'LA, 30'SA	1W3C(12")	M-2	1					1000W
		1W3C	B-1	1					
F	Type I	1W3C	A-2	1		1W2C	W-O	1	
G	Type XVIII	1W3C(12")	M-2	1					400W
	15'LA, 18'SA	1W3C	B-1	1		1W2C	W-O	1	
H	Type XV	2W3C	B-2	1		1W2C	W-O	1	1000W
	15'LA								
I	Ped Post							1	

PHASE DIAGRAM

Flashing Indication:
ØA = Yellow
ØB = Red

ØA - Type DP Module
ØB - Type SP Module

CITY OF RIVERSIDE

14 TH STREET UNDERPASS AT HOWARD AVENUE

STA. 16+50 TO EAST OF HOWARD AVE.

DE LEUW, CATHER & COMPANY
CONSULTING ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE 1" = 20'

DESIGNED ____ CHECKED ____

DRAWN ____ APPROVED ____

DATE ____

SHEET NO. 44 of 50

PREPARED BY:
R. H. Mohle Oct. 2, 1992
MOHLE, PERRY & ASSOC. DESIGN. ENGR. R.C.E. 10692 DATE

REV.	DESCRIPTION	DATE	BY

PROJ. NO. 2023-01

X-100