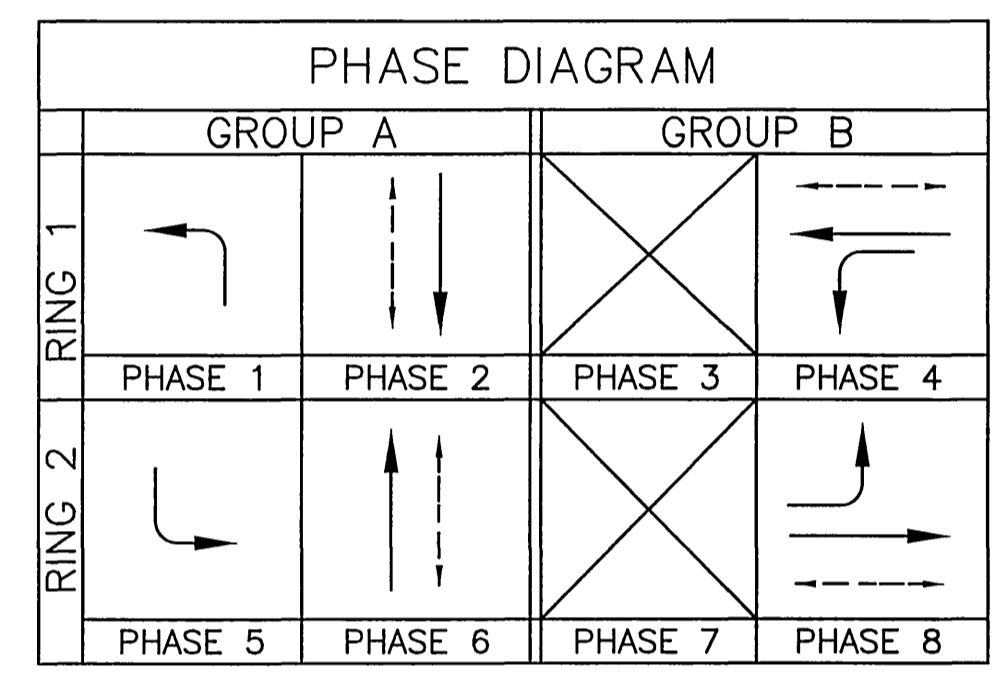


POLE AND EQUIPMENT SCHEDULE

| No. | Type | STANDARDS | | VEH. SIG. MTG. | | PED. SIG. MTG. | P.P.B. | H.P.S. | STANDARD SHAFT MOUNTED I.I.S.N.S. (SEE SPECIAL PROVISIONS) | REMARKS | | |
|-----|--------------|-----------|-----------|----------------|----------|----------------|-----------|--------|------------------------------------------------------------|---------|--------------|------------------------------|
| | | HEIGHT | Sig. M.A. | Lum. M.A. | MAST ARM | | | | | | POLE | |
| A | 24-4-129 (E) | 30' | 35'(E) | 15' | 1-MAS(E) | SV-1-T(E) | SP-1-T(E) | 2(E) | E | 200W | "Pierce"(E) | EXISTING EQUIPMENT TO REMAIN |
| B | 1A (E) | 10' | - | - | - | TV-1-T(E) | SP-1-T(E) | 4(E) | S | - | - | EXISTING EQUIPMENT TO REMAIN |
| C | 24-4-80 (E) | 30' | 35'(E) | 15' | 2-MAS(E) | SV-1-T(E) | SP-1-T(E) | 4(E) | S | 200W | "Collett"(E) | EXISTING EQUIPMENT TO REMAIN |
| D | 1A (E) | 10' | - | - | - | TV-2-T(E) | SP-1-T(N) | 6(E) | W | - | - | EXISTING EQUIPMENT TO REMAIN |
| E | 19-4-100 (N) | 30' | 30'(N) | 15' | MAS(N) | SV-1-T(N) | SP-1-T(N) | 6(N) | W | 250W | "Pierce"(R) | NEW SIGNAL EQUIPMENT |
| F | 1A (N) | 10' | - | - | - | TV-1-T(N) | SP-1-T(N) | 8(N) | N | - | - | NEW SIGNAL EQUIPMENT |
| G | 19-4-80 (E) | 30' | 25'(E) | 15' | 2-MAS(E) | SV-1-T(E) | SP-1-T(E) | 8(N) | N | 200W | "Collett"(E) | EXISTING EQUIPMENT TO REMAIN |
| H | 1A (E) | 10' | - | - | - | TV-1-T(E) | SP-1-T(N) | 2(E) | E | - | - | EXISTING EQUIPMENT TO REMAIN |

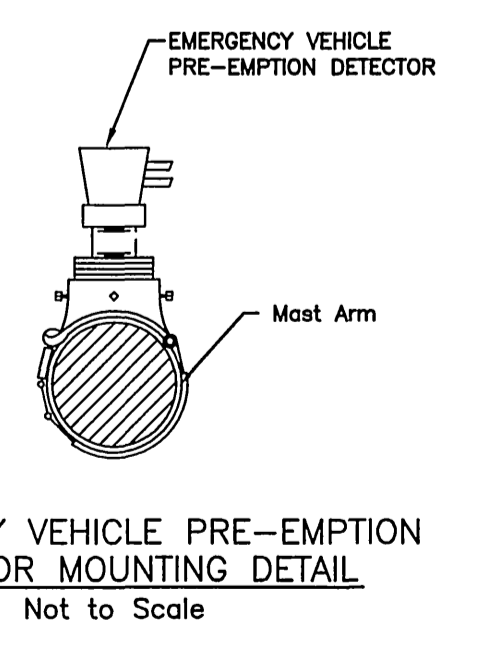
CONSTRUCTION NOTES:
 IISNS - INTERNALLY ILLUMINATED STREET NAME SIGN.
 P.P.B. - PEDESTRIAN PUSH BUTTON
 N = NEW
 E = EXISTING
 M = MODIFY
 R = RELOCATE

EXACT POLE LOCATIONS DETERMINED BY ENGINEER IN THE FIELD. POTHOLE POLE FOUNDATIONS PRIOR TO ORDERING POLES AND MAST ARM.

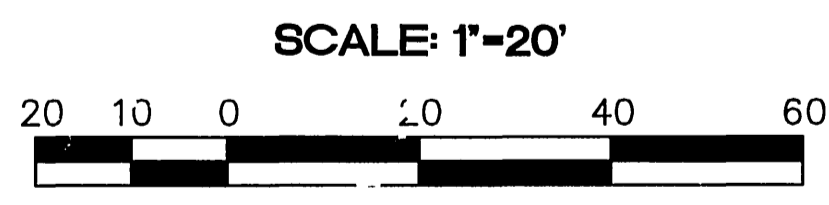


| AWG SIZE OR CABLE TYPE | | POLE OR CIRCUIT | E= EXISTING | | | | N= NEW | | | | | |
|------------------------|----------------|-----------------|-------------|----|----|------|--------|----|----|----|---|---|
| | | | E | E | E | E | N | N | N | N | | |
| 12 COND. | POLE - A | | | | | | | | | | | |
| | B | | | | | | | | | | | |
| | C | | | | | | | | | | | |
| | D | | | | | | | | | | | |
| | E | | | | | | | | | | | |
| 3 COND. | F | | | | | | | | | | | |
| | G | | | | | | | | | | | |
| | H | | | | | | | | | | | |
| | - | | | | | | | | | | | |
| | TOTAL | | 1 | 2 | 3 | 3 | 8 | 4 | 4 | 3 | 3 | 2 |
| 12 | IISNS | | - | 2 | 2 | - | 2 | 2 | 2 | 2 | 2 | 2 |
| | TOTAL | | - | 2 | 2 | - | 2 | 2 | 2 | 2 | 2 | 2 |
| 10 | LUMINAIRES | | - | 2 | 2 | - | 2 | 2 | 2 | 2 | 2 | 2 |
| | TOTAL | | - | 2 | 2 | - | 2 | 2 | 2 | 2 | 2 | 2 |
| 6 | SIGNAL SERVICE | | - | - | - | 2 | - | - | - | - | - | - |
| | TOTAL | | - | - | - | 2 | - | - | - | - | - | - |
| TYPE 'B' DLC | Ø1 | | - | - | - | 1 | 1 | - | - | - | - | - |
| | Ø2 | | - | - | - | 2 | 2 | 2 | 2 | - | - | - |
| | Ø4 | | - | - | - | 3 | 3 | 3 | 3 | - | - | - |
| | Ø5 | | - | - | - | 1 | 1 | 1 | 1 | - | - | - |
| | Ø6 | | - | - | - | 2 | 2 | - | - | - | - | - |
| TOTAL | | 3 | 3 | 5 | 11 | 6 | 3 | 3 | - | - | - | |
| OPTICOM CABLE | | | - | 1 | 1 | 4 | 2 | 2 | 1 | 1 | | |
| CONDUIT SIZE (INCHES) | | | 2" | 3" | 4" | 2-4" | 4" | 3" | 3" | 2" | | |

- CONSTRUCTION NOTES: (THIS SHEET)
- 1. 1/4"
 - 2. 1/2" TALL 3M MODEL 722 OR 711 OPTICOM DETECTOR, 3M MODEL 138 DETECTOR CABLE AND 3M MODEL 782 RACK MOUNTED PHASE SELECTOR EQUIPMENT. SEE DETECTOR MOUNTING DETAIL THIS SHEET.
 - 3. INSTALL R73-3(CA) SIGN ON MAST ARM.
 - 4. CONTRACTOR SHALL FINISH & INSTALL CLARY BATTERY BACK UP SYSTEM MODEL "SP 1250-R/N PLUS". BATTERY SHALL BE HOUSED IN AN EXTERNAL CABINET.
 - 5. 2"Ø, SIG(6 PR#19) TO CONTROLLER N/W CORNER OF RIVERWALK & COLLETT #6 F. @ 400' INTERVALS WITH 45° MAXIMUM CONDUIT SWEEPS.
 - 6. EXISTING EMERGENCY VEHICAL OPTICAL DETECTOR ON MAST ARM PER DETAIL SHOWN.
 - BC BOX TO CONDUIT.
 - CB CONDUIT TO BOX.
 - AB ABANDON.
 - RC REMOVE COMPLETE.
 - RS REMOVE AND SALVAGE EQUIPMENT.
 - SC SPLICE NEW TO EXISTING CONDUCTORS.



EX. 120v SIGNAL, 120v SIGN AND 240v STREET LIGHT SERVICE PER STD. DWG. NO. 612
 EX. 2"Ø, 2#6(SVC), 2#8(LTG) & 2#12(IISNS)
 EX. MODEL 332 CABINET FOUNDATION
 EX. MODEL 170 CONTROLLER UNIT AND EX. MODEL 332 CABINET



DIGALERT
 DIAL BEFORE YOU DIG
 TWO WORKING DAYS BEFORE YOU DIG
 TOLL FREE 1-800-227-2600
 A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

NOTE: WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

| DATE | BY | MARK | REVISIONS | APPR. | DATE |
|------|----|------|-----------|-------|------|
| | | | | | |

| DATE | BY | MARK | REVISIONS | APPR. | DATE |
|------|----|------|-----------|-------|------|
| | | | | | |

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY: [Signature] DATE: 12/31/08
 CONS. CONTROLLER ADMIN. CITY ENGINEER
 TRAFFIC DIVISION

SEAL
 REGISTERED PROFESSIONAL ENGINEER
 CARLETON WATERS
 No. 52916
 Exp. 12/31/08
 CIVIL
 STATE OF CALIFORNIA

URBAN
 5411 Avenida Encinas
 Suite 100
 Carlsbad, CA 92008
 Phone: (760) 931-0664
 Fax: (760) 931-1741

CARLETON WATERS R.C.E. No. 52916
 Exp. DATE 12/31/08 FILE NO. _____

PREPARED BY: [Signature] R.C.E. NO. 52916
 DATE 12/12/07

SCALE: _____
 H: _____ V: _____

CITY OF RIVERSIDE
TRAFFIC SIGNAL MODIFICATION PLAN
PIERCE STREET AT COLLETT AVENUE

FOR: _____ W.O. 03986 CITY OF RIVERSIDE FILE NO. _____

X-465C
2 OF 2 SHTS

THESE TYPICAL PLANS ARE INTENDED TO BE USED AS GUIDELINES FOR ACTUAL TRAFFIC CONTROL PURPOSES. CONTRACTOR SHALL FOLLOW ANY TRAFFIC CONTROL MODIFICATIONS DEEMED NECESSARY BY THE COUNTY OF RIVERSIDE'S INSPECTION OR ENGINEERING AGENTS AT NO EXTRA COST OR DELAY.

03986 - AC&G/PIERCE/REVISION C/SH/BC/DWG - 12/06/07 - BR

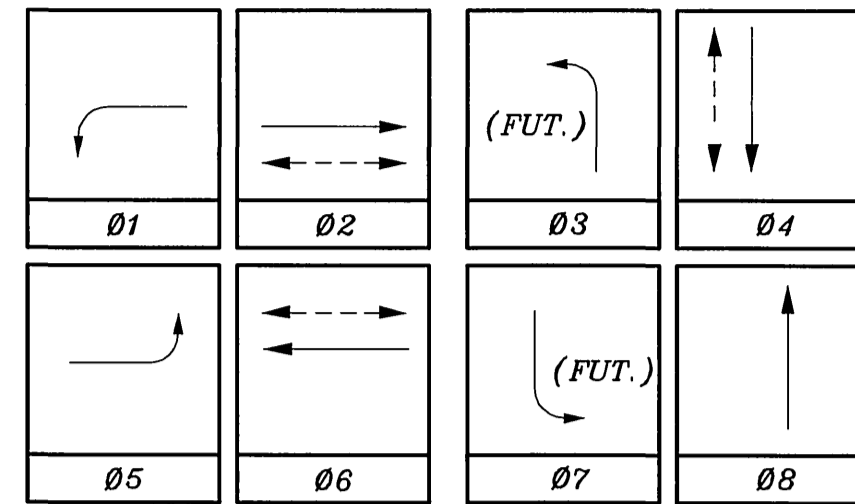
EQUIPMENT SCHEDULE

| NO. | SIGNAL STANDARD | | | LUMINAIRE | | I.I.S.N.S. | | SIGNAL MOUNTINGS | | | PPB PHASE |
|-----|-----------------|--------|--------|-----------|----------|------------|---------------|------------------|------------|---------|-----------|
| | TYPE | H'GHT | M.A. | L.A. | H.P.S.V. | LEGEND | | VEHICLE | PEDESTRIAN | AUDIBLE | |
| (A) | 24-4-80(E) | 30'(E) | 35'(E) | 12'(E) | 250W(E) | COLLETT(E) | AY 11800(E)10 | MAS(E) | | | |
| | | | | | | | | MAS(E) | | | |
| | | | | | | | | SV-1-T(E) | SP-1-T(E) | | 4 |
| (B) | 1A(E) | 10'(E) | | | | | | TV-2-T(E) | SP-1-T(E) | | 6 |
| (C) | 19-2-129(E) | 30'(E) | 25'(E) | 12'(E) | 200W(E) | PIERCE(E) | ST 4200 | MAS(E) | | | |
| | | | | | | | | SV-1-T(E) | | | 6 |
| (D) | 1A(E) | 10'(E) | | | | | | TV-1-T(E) | SP-1-T(E) | | |
| (E) | 26-4-80(E) | 30'(E) | 40'(E) | 12'(E) | 250W(E) | COLLETT(E) | AY 11800 | MAS(E) | | | |
| | | | | | | | | MAS(E) | | | |
| | | | | | | | | SV-1-T(E) | SP-1-T(E) | | |
| (F) | 1A(E) | 10'(E) | | | | | | TV-1-T(E) | | | 2 |
| (G) | 24-4-129(N) | 30'(N) | 35'(N) | 12'(N) | 200W(R) | PIERCE(R) | ST 4200 | MAS(R) | | | |
| | | | | | | | | SV-1-T(R) | SP-1-T(R) | | 2 |
| (H) | 1A(R) | 10'(R) | | | | | | TV-1-T(R) | SP-1-T(R) | | 4 |

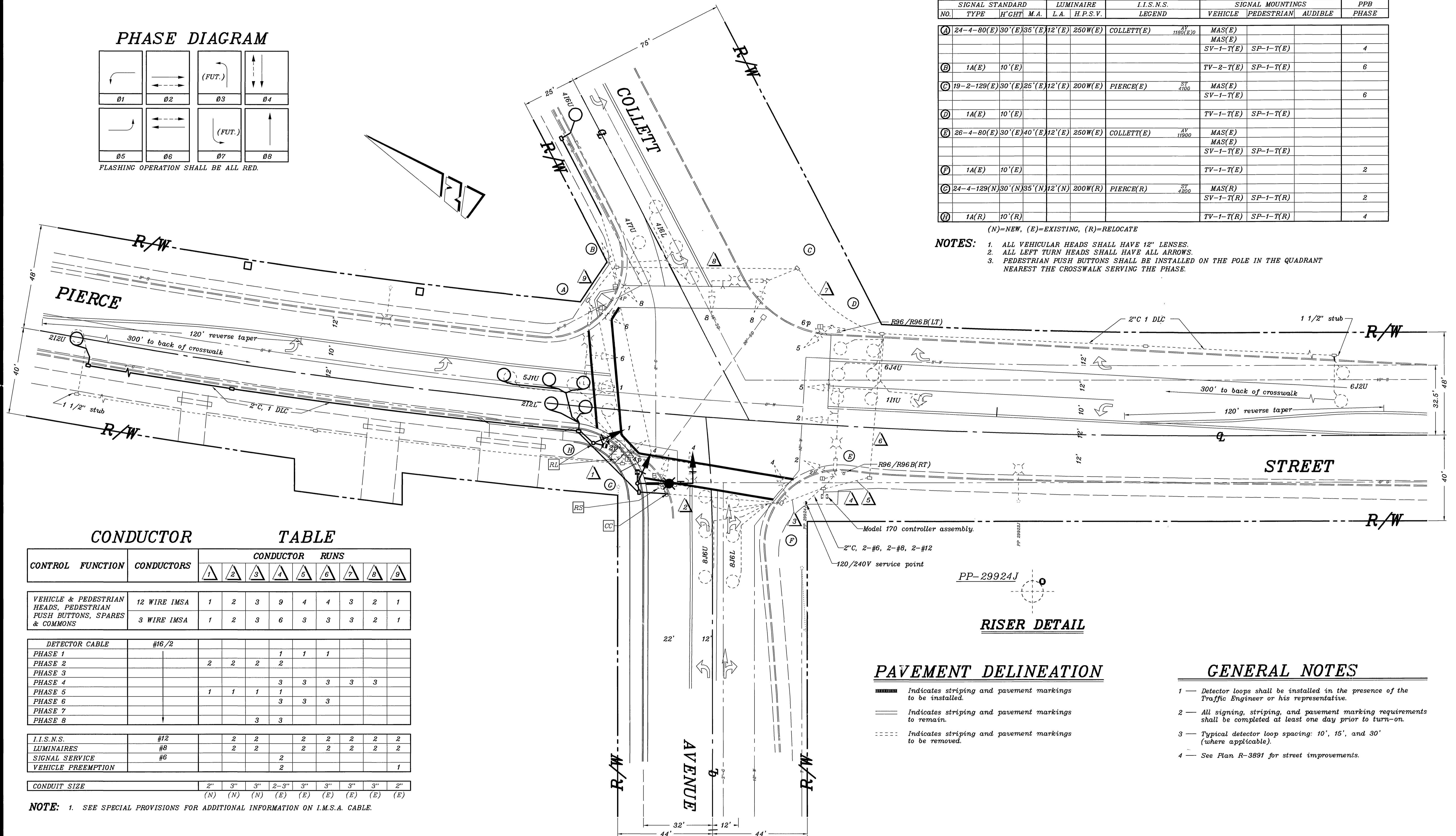
(N)=NEW, (E)=EXISTING, (R)=RELOCATE

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

PHASE DIAGRAM



FLASHING OPERATION SHALL BE ALL RED.



CONDUCTOR TABLE

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

NOTE: 1. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON I.M.S.A. CABLE.

RISER DETAIL

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.

GENERAL NOTES

- Detector loops shall be installed in the presence of the Traffic Engineer or his representative.
- All signing, striping, and pavement marking requirements shall be completed at least one day prior to turn-on.
- Typical detector loop spacing: 10', 15', and 30' (where applicable).
- See Plan R-3891 for street improvements.

IMPORTANT NOTICE
Section 149C/149F of the Government Code requires a Dig Alert Identification Number to be issued before a "shovel to dig" permit will be issued. For your Dig Alert I.B. Member call 1-800-227-2600
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 6/30/06
DATE 1/19/06

REGISTERED PROFESSIONAL ENGINEER
No. 36170
Exp. 06-30-2006
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 [Signature] DATE 10/10/05
PRINCIPAL ENGINEER
TRAFFIC DIVISION
APPROVED BY [Signature] DATE 10/31/05
CITY ENGINEER

TRAFFIC SIGNAL
COLLETT AVENUE AND PIERCE STREET
SCALE: 1" = 20'

ACCT. NO. X-465B
SHEET 1 OF 1
FILE NAME: X465B.DWG

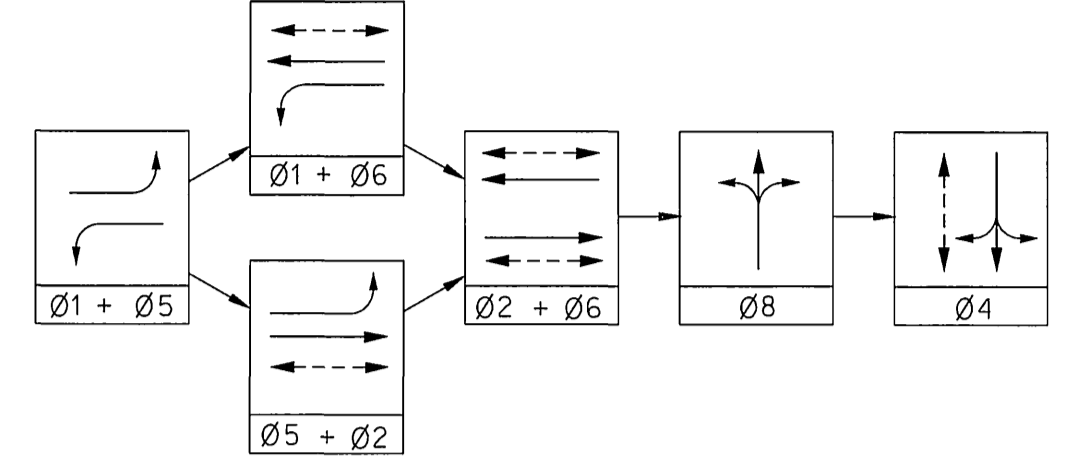
INDEXED 4-28-06 FH
FILE W/R-3891

LEGEND (THIS SHEET):

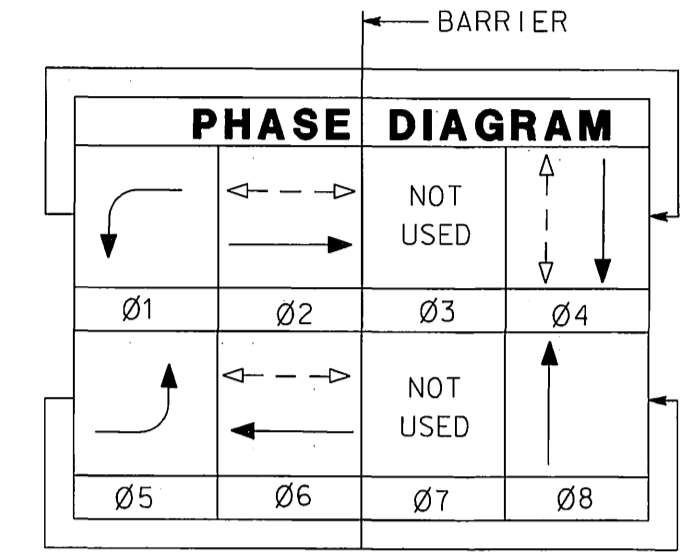
- P** — PROTECT IN PLACE.
- RS** — REMOVE AND SALVAGE TO CITY OF RIVERSIDE.
- PM** — TYPE OF TRAFFIC STRIPING MATERIAL
T = THERMOPLASTIC, P = PAINT (2 COATS)
INSTALL PAVEMENT MARKING (AS SHOWN) PER PAGES A24A THRU A24E OF THE STANDARD PLANS, CALTRANS
TYPE NUMBER OF PAVEMENT MARKING. W = WHITE
- SB** — REMOVE, BY WET SANDBLASTING, ALL CONFLICTING STRIPING AND PAVEMENT LEGENDS.

- XX** — SIGN TYPE
- IS** — MOUNT SIGN AS INDICATED
- XX** — SP = MOUNT ON SIGNAL POLE.
MA = MOUNT ON MAST-ARM.
TP = MOUNT ON TELESPAR POST.

PHASE SEQUENCE DIAGRAM



FLASHING OPERATION SHALL BE ALL RED.
NOTE: 02 AND 06 MUST ALWAYS TERMINATE SIMULTANEOUSLY



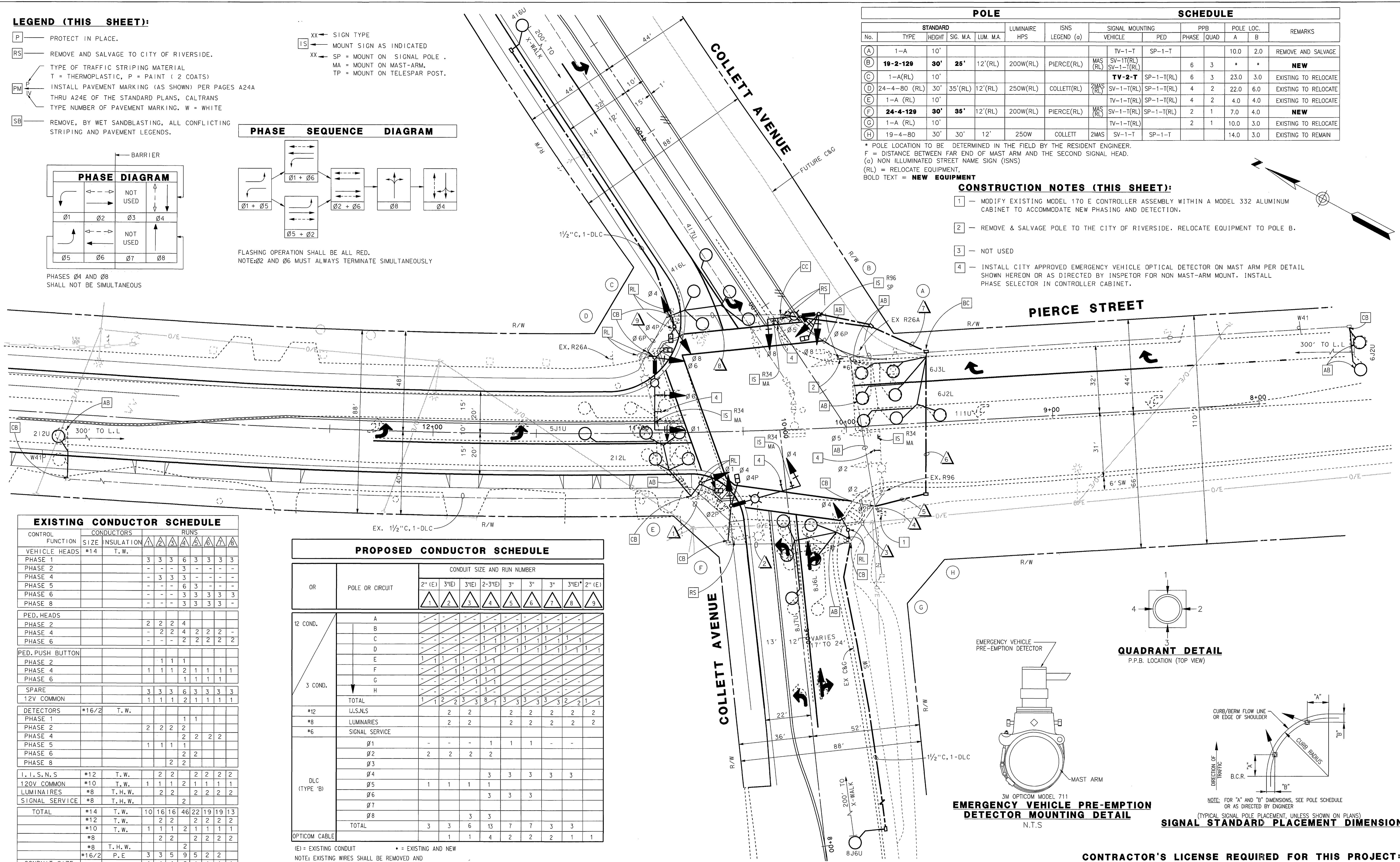
PHASES 04 AND 08 SHALL NOT BE SIMULTANEOUS

| POLE | | | | | | | | | | SCHEDULE | | REMARKS | | | |
|----------|-----------------|------------|------------|-----------|---------------|-----------------|-----------------|------------|--------------------------|------------|------|---------|----------------------|------------|----------------------|
| STANDARD | TYPE | HEIGHT | SIG. M.A. | LUM. M.A. | LUMINAIRE HPS | ISNS LEGEND (a) | SIGNAL MOUNTING | | PPB | POLE LOC. | | | | | |
| No. | | | | | | | VEHICLE | PED | PHASE | QUAD | A | B | | | |
| (A) | 1-A | 10' | | | | | TV-1-T | SP-1-T | | | 10.0 | 2.0 | REMOVE AND SALVAGE | | |
| (B) | 19-2-129 | 30' | 25' | 12'(RL) | | 200W(RL) | PIERCE(RL) | MAS (RL) | SV-1-T(RL) SV-1-T(RL) | 6 | 3 | * | * | NEW | |
| (C) | 1-A(RL) | 10' | | | | | TV-2-T | SP-1-T(RL) | 6 | 3 | 23.0 | 3.0 | EXISTING TO RELOCATE | | |
| (D) | 24-4-80 (RL) | 30' | 35'(RL) | 12'(RL) | | 250W(RL) | COLLETT(RL) | 2MAS (RL) | SV-1-T(RL) | SP-1-T(RL) | 4 | 2 | 22.0 | 6.0 | EXISTING TO RELOCATE |
| (E) | 1-A (RL) | 10' | | | | | TV-1-T(RL) | SP-1-T(RL) | 4 | 2 | 4.0 | 4.0 | EXISTING TO RELOCATE | | |
| (F) | 24-4-129 | 30' | 35' | 12'(RL) | | 200W(RL) | PIERCE(RL) | MAS (RL) | SV-1-T(RL) | SP-1-T(RL) | 2 | 1 | 7.0 | 4.0 | NEW |
| (G) | 1-A (RL) | 10' | | | | | TV-1-T(RL) | SP-1-T(RL) | 2 | 1 | 10.0 | 3.0 | EXISTING TO RELOCATE | | |
| (H) | 19-4-80 | 30' | 30' | 12' | | 250W | COLLETT | 2MAS | SV-1-T | SP-1-T | | | 14.0 | 3.0 | EXISTING TO REMAIN |

* POLE LOCATION TO BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.
F = DISTANCE BETWEEN FAR END OF MAST ARM AND THE SECOND SIGNAL HEAD.
(a) NON ILLUMINATED STREET NAME SIGN (ISNS)
(RL) = RELOCATE EQUIPMENT,
BOLD TEXT = NEW EQUIPMENT

CONSTRUCTION NOTES (THIS SHEET):

- 1 — MODIFY EXISTING MODEL 170 E CONTROLLER ASSEMBLY WITHIN A MODEL 332 ALUMINUM CABINET TO ACCOMMODATE NEW PHASING AND DETECTION.
- 2 — REMOVE & SALVAGE POLE TO THE CITY OF RIVERSIDE. RELOCATE EQUIPMENT TO POLE B.
- 3 — NOT USED
- 4 — INSTALL CITY APPROVED EMERGENCY VEHICLE OPTICAL DETECTOR ON MAST ARM PER DETAIL SHOWN HEREON OR AS DIRECTED BY INSPECTOR FOR NON MAST-ARM MOUNT. INSTALL PHASE SELECTOR IN CONTROLLER CABINET.



| EXISTING CONDUCTOR SCHEDULE | | CONDUCTORS | | RUNS | | | | | | | | | |
|-----------------------------|------|------------|--|------|---|---|---|---|---|---|---|---|----|
| CONTROL FUNCTION | SIZE | INSULATION | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| VEHICLE HEADS | #14 | T.W. | | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | 3 | 3 |
| PHASE 1 | | | | - | - | 3 | - | - | - | - | - | - | - |
| PHASE 2 | | | | - | 3 | 3 | 3 | - | - | - | - | - | - |
| PHASE 4 | | | | - | - | - | 6 | 3 | - | - | - | - | - |
| PHASE 5 | | | | - | - | - | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| PHASE 6 | | | | - | - | - | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| PHASE 8 | | | | - | - | - | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| PED. HEADS | | | | 2 | 2 | 2 | 4 | | | | | | |
| PHASE 2 | | | | - | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 |
| PHASE 4 | | | | - | - | - | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| PHASE 6 | | | | - | - | - | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| PED. PUSH BUTTON | | | | 1 | 1 | 1 | 1 | | | | | | |
| PHASE 2 | | | | 1 | 1 | 1 | 1 | | | | | | |
| PHASE 4 | | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| PHASE 6 | | | | 1 | 1 | 1 | 1 | | | | | | |
| SPARE | | | | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | 3 | 3 |
| 12V COMMON | | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |

PROPOSED CONDUCTOR SCHEDULE

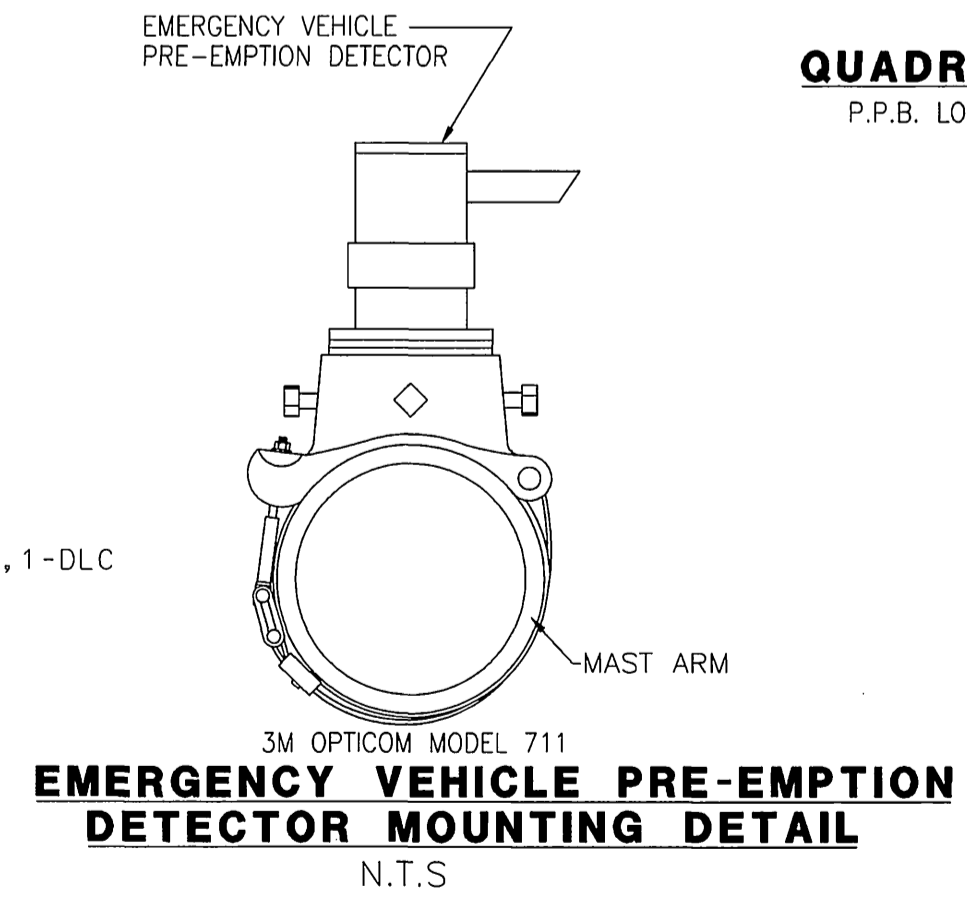
| OR | POLE OR CIRCUIT | CONDUIT SIZE AND RUN NUMBER | | | | | | | | | | | |
|----------------|-----------------|-----------------------------|--------|--------|----------|----|----|----|--------|--------|----|----|----|
| | | 2" (E) | 3" (E) | 3" (E) | 2-3" (E) | 3" | 3" | 3" | 3" (E) | 2" (E) | | | |
| 12 COND. | A | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | B | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | C | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | D | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | E | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | F | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | G | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | H | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL | | 1 | 1 | 2 | 2 | 3 | 3 | 8 | 7 | 3 | 3 | 3 | 3 |
| 3 COND. | A | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | B | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | C | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | D | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | E | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | F | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | G | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | H | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL | | 1 | 1 | 2 | 2 | 3 | 3 | 8 | 7 | 3 | 3 | 3 | 3 |
| DLC (TYPE 'B') | A | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | B | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | C | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | D | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | E | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | F | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | G | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | H | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL | | 3 | 3 | 6 | 6 | 13 | 13 | 26 | 26 | 13 | 13 | 13 | 13 |
| OPTICOM CABLE | | 1 | 1 | 1 | 1 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 |

(E) = EXISTING CONDUIT * = EXISTING AND NEW
NOTE: EXISTING WIRES SHALL BE REMOVED AND REPLACED PER PROPOSED CONDUCTOR SCHEDULE.

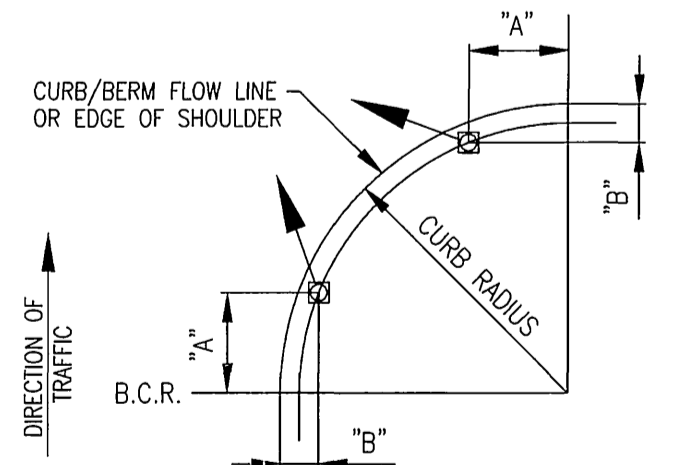
NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

QUADRANT DETAIL

P.P.B. LOCATION (TOP VIEW)



EMERGENCY VEHICLE PRE-EMPTION DETECTOR MOUNTING DETAIL
N.T.S.



NOTE: FOR "A" AND "B" DIMENSIONS, SEE POLE SCHEDULE OR AS DIRECTED BY ENGINEER
(TYPICAL SIGNAL POLE PLACEMENT, UNLESS SHOWN ON PLANS)
SIGNAL STANDARD PLACEMENT DIMENSIONS

CONTRACTOR'S LICENSE REQUIRED FOR THIS PROJECT: CLASS A OR C-10

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DIG ALERT
CALL BEFORE YOU DIG!
1-800-227-2600
UNDERGROUND SERVICE ALERT
Call at least 2 working days prior to excavating.

PRIVATE ENGINEERING NOTE
CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT.
INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

SEAL
REGISTERED PROFESSIONAL ENGINEER
BARRY J. COWAN
No. 46568
Exp. 6-30-07
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED UNDER SUPERVISION OF
Barry J. Cowan
Date: 6/17/04 R.C.E. 46568 (EXP. 6-30-07)
BENCH MARK

RICK ENGINEERING COMPANY
San Diego Riverside Orange Phoenix Tucson
ONE CITY BLVD. WEST SUITE 2100 ORANGE, CA 92668-7021 (714) 999-1449 FAX: (714) 999-1441 www.rickeng.com

MARK REVISIONS APPR. DATE
DESIGNED BY IS DRAWN BY AN/RL CHECKED BY C.S.

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: [Signature] DATE: 6/25/04
TRAFFIC DIVISION: [Signature] DATE: 6/25/04

CITY OF RIVERSIDE
TRAFFIC SIGNAL MODIFICATION PLAN
FOR
COLLETT AVENUE AND
PIERCE STREET

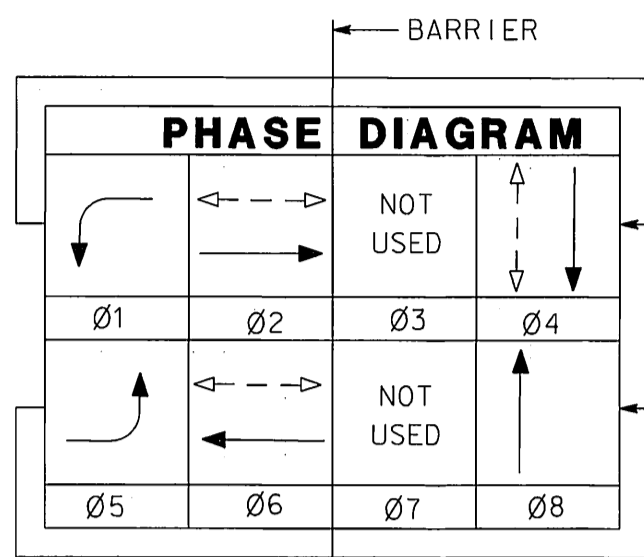
JOB NO. X-465A
SHEET 2 OF 4

LEGEND (THIS SHEET):

- P — PROTECT IN PLACE.
- RS — REMOVE AND SALVAGE TO CITY OF RIVERSIDE.
- PM — TYPE OF TRAFFIC STRIPING MATERIAL
T = THERMOPLASTIC, P = PAINT (2 COATS)
INSTALL PAVEMENT MARKING (AS SHOWN) PER PAGES A24A THRU A24E OF THE STANDARD PLANS, CALTRANS
- SB — REMOVE, BY WET SANDBLASTING, ALL CONFLICTING STRIPING AND PAVEMENT LEGENDS.

- XX — SIGN TYPE
- IS — MOUNT SIGN AS INDICATED
- XX — SP = MOUNT ON SIGNAL POLE.
MA = MOUNT ON MAST-ARM.
TP = MOUNT ON TELESPAR POST.

PHASE SEQUENCE DIAGRAM



FLASHING OPERATION SHALL BE ALL RED.
NOTE: Ø2 AND Ø6 MUST ALWAYS TERMINATE SIMULTANEOUSLY

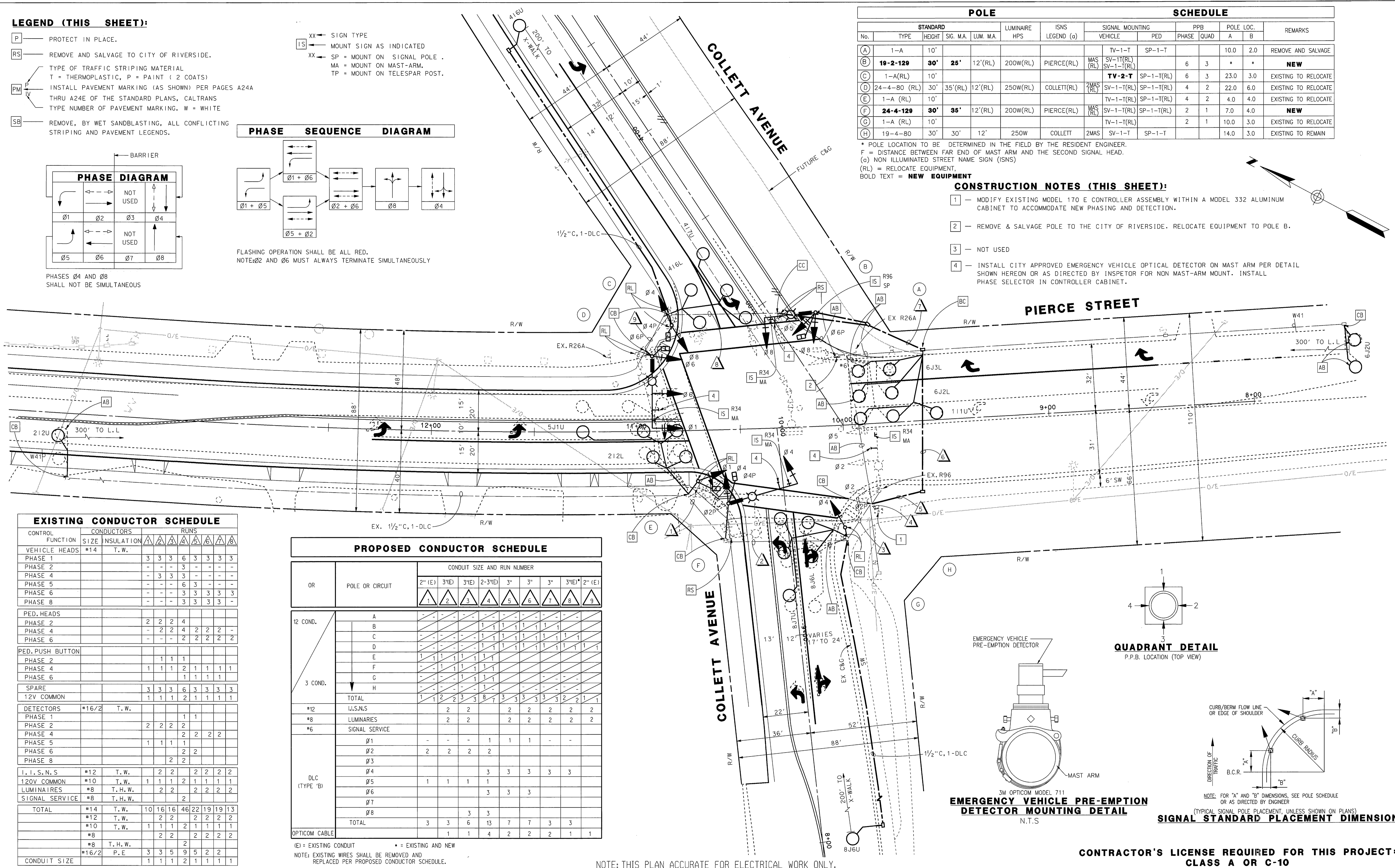
PHASES Ø4 AND Ø8 SHALL NOT BE SIMULTANEOUS

| POLE | | | | | | | | | | SCHEDULE | | |
|------|-----------------|------------|------------|----------|---------------|-----------------|-----------------|--------------------------|----------------|-----------|-----|----------------------|
| No. | TYPE | HEIGHT | SIG. MA. | LUM. MA. | LUMINAIRE HPS | ISNS LEGEND (a) | SIGNAL MOUNTING | | PPB PHASE QUAD | POLE LOC. | | REMARKS |
| | | | | | | | VEHICLE | PED | | A | B | |
| (A) | 1-A | 10' | | | | | TV-1-T | SP-1-T | | 10.0 | 2.0 | REMOVE AND SALVAGE |
| (B) | 19-2-129 | 30' | 25' | 12'(RL) | 200W(RL) | PIERCE(RL) | MAS (RL) | SV-1-T(RL) SV-1-T(RL) | 6 3 | * | * | NEW |
| (C) | 1-A(RL) | 10' | | | | | TV-2-T | SP-1-T(RL) | 6 3 | 23.0 | 3.0 | EXISTING TO RELOCATE |
| (D) | 24-4-80 (RL) | 30' | 35'(RL) | 12'(RL) | 250W(RL) | COLLETT(RL) | 2MAS (RL) | SV-1-T(RL) | 4 2 | 22.0 | 6.0 | EXISTING TO RELOCATE |
| (E) | 1-A (RL) | 10' | | | | | TV-1-T(RL) | SP-1-T(RL) | 4 2 | 4.0 | 4.0 | EXISTING TO RELOCATE |
| (F) | 24-4-129 | 30' | 35' | 12'(RL) | 200W(RL) | PIERCE(RL) | MAS (RL) | SV-1-T(RL) | 2 1 | 7.0 | 4.0 | NEW |
| (G) | 1-A (RL) | 10' | | | | | TV-1-T(RL) | SP-1-T(RL) | 2 1 | 10.0 | 3.0 | EXISTING TO RELOCATE |
| (H) | 19-4-80 | 30' | 30' | 12' | 250W | COLLETT | 2MAS | SV-1-T | | 14.0 | 3.0 | EXISTING TO REMAIN |

* POLE LOCATION TO BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.
F = DISTANCE BETWEEN FAR END OF MAST ARM AND THE SECOND SIGNAL HEAD.
(a) NON ILLUMINATED STREET NAME SIGN (ISNS)
(RL) = RELOCATE EQUIPMENT.
BOLD TEXT = NEW EQUIPMENT

CONSTRUCTION NOTES (THIS SHEET):

- 1 — MODIFY EXISTING MODEL 170 E CONTROLLER ASSEMBLY WITHIN A MODEL 332 ALUMINUM CABINET TO ACCOMMODATE NEW PHASING AND DETECTION.
- 2 — REMOVE & SALVAGE POLE TO THE CITY OF RIVERSIDE. RELOCATE EQUIPMENT TO POLE B.
- 3 — NOT USED
- 4 — INSTALL CITY APPROVED EMERGENCY VEHICLE OPTICAL DETECTOR ON MAST ARM PER DETAIL SHOWN HEREON OR AS DIRECTED BY INSPECTOR FOR NON MAST-ARM MOUNT. INSTALL PHASE SELECTOR IN CONTROLLER CABINET.



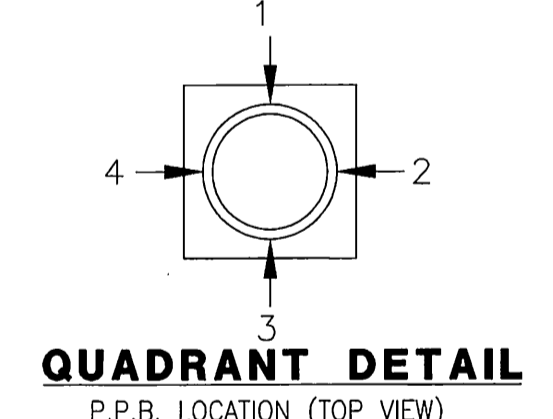
EXISTING CONDUCTOR SCHEDULE

| CONTROL FUNCTION | CONDUCTORS SIZE | INSULATION | RUNS | | | | | | | |
|------------------|-----------------|------------|------|----|----|----|----|----|----|----|
| VEHICLE HEADS | #14 | T.W. | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 |
| PHASE 1 | | | - | - | - | - | - | - | - | - |
| PHASE 2 | | | - | - | - | - | - | - | - | - |
| PHASE 4 | | | - | - | - | - | - | - | - | - |
| PHASE 5 | | | - | - | - | - | - | - | - | - |
| PHASE 6 | | | - | - | - | - | - | - | - | - |
| PHASE 8 | | | - | - | - | - | - | - | - | - |
| PED. HEADS | | | | | | | | | | |
| PHASE 2 | | | 2 | 2 | 2 | 4 | | | | |
| PHASE 4 | | | - | - | - | - | - | - | - | - |
| PHASE 6 | | | - | - | - | - | - | - | - | - |
| PED. PUSH BUTTON | | | | | | | | | | |
| PHASE 2 | | | 1 | 1 | 1 | | | | | |
| PHASE 4 | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| PHASE 6 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| SPARE | | | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 |
| 12V COMMON | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| DETECTORS | #16/2 | T.W. | | | | | | | | |
| PHASE 1 | | | | | | 1 | 1 | | | |
| PHASE 2 | | | 2 | 2 | 2 | 2 | | | | |
| PHASE 4 | | | 2 | 2 | 2 | 2 | 2 | 2 | | |
| PHASE 5 | | | 1 | 1 | 1 | 1 | | | | |
| PHASE 6 | | | 2 | 2 | 2 | 2 | | | | |
| PHASE 8 | | | 2 | 2 | | | | | | |
| I, I, S, N, S | #12 | T.W. | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |
| 120V COMMON | #10 | T.W. | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| LUMINAIRES | #8 | T.H.W. | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |
| SIGNAL SERVICE | #8 | T.H.W. | | | | 2 | | | | |
| TOTAL | #14 | T.W. | 10 | 16 | 16 | 46 | 22 | 19 | 19 | 13 |
| | #12 | T.W. | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |
| | #10 | T.W. | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| | #8 | T.H.W. | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |
| | #8 | T.H.W. | | | | 2 | | | | |
| | #8 | T.H.W. | 3 | 3 | 5 | 9 | 5 | 2 | 2 | 2 |
| CONDUIT SIZE | #16/2 | P.E. | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |

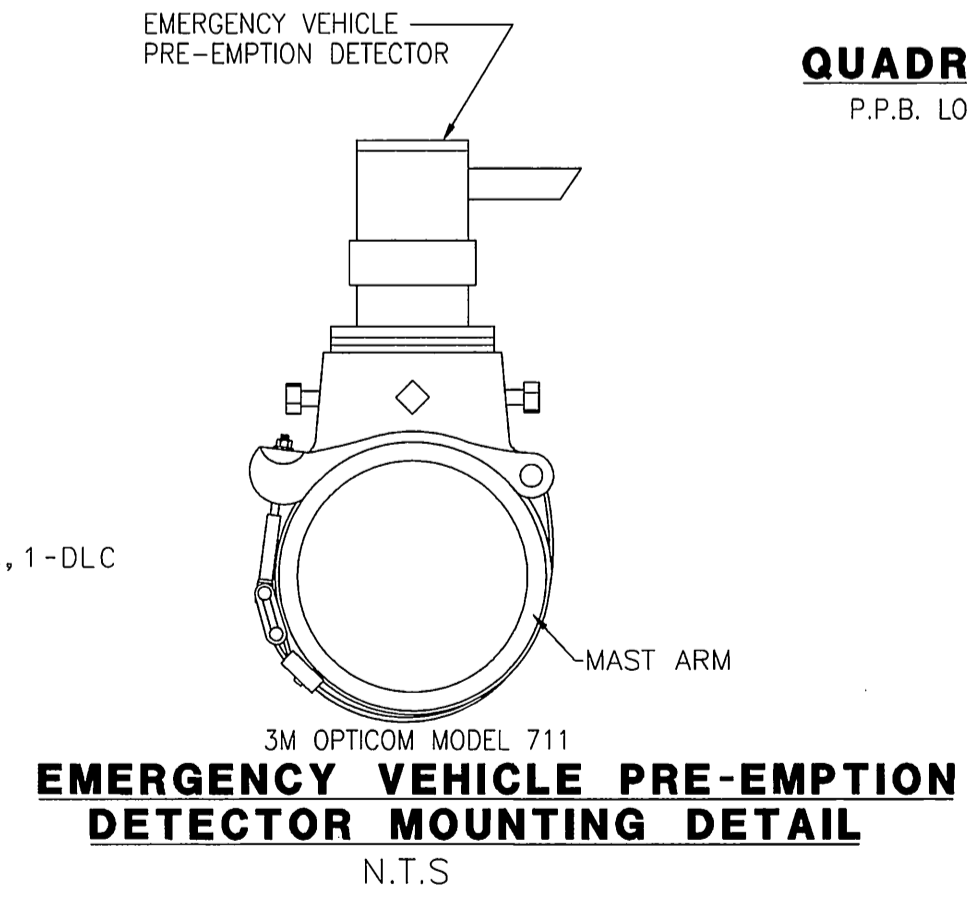
PROPOSED CONDUCTOR SCHEDULE

| OR | POLE OR CIRCUIT | CONDUIT SIZE AND RUN NUMBER | | | | | | | | |
|----------------|-------------------|-----------------------------|--------|--------|----------|----|----|----|--------|--------|
| | | 2" (E) | 3" (E) | 3" (E) | 2-3" (E) | 3" | 3" | 3" | 3" (E) | 2" (E) |
| 12 COND. | A | - | - | - | - | - | - | - | - | - |
| | B | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 |
| | C | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 |
| | D | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 |
| | E | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | F | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 |
| | G | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 |
| | H | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 COND. | TOTAL | 1 | 2 | 2 | 3 | 3 | 8 | 7 | 3 | 3 |
| DLC (TYPE 'B') | #12 U.S.N.S | | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |
| | #8 LUMINAIRES | | 2 | 2 | | 2 | 2 | 2 | 2 | 2 |
| | #6 SIGNAL SERVICE | | | | | | | | | |
| | Ø1 | | - | - | - | 1 | 1 | 1 | - | - |
| | Ø2 | | 2 | 2 | 2 | 2 | | | | |
| | Ø3 | | | | | | | | | |
| | Ø4 | | | | | 3 | 3 | 3 | 3 | 3 |
| | Ø5 | | 1 | 1 | 1 | 1 | | | | |
| | Ø8 | | | | | 3 | 3 | 3 | | |
| TOTAL | | 3 | 3 | 6 | 13 | 7 | 7 | 3 | 3 | |
| OPTICOM CABLE | | 1 | 1 | 4 | 2 | 2 | 2 | 1 | 1 | |

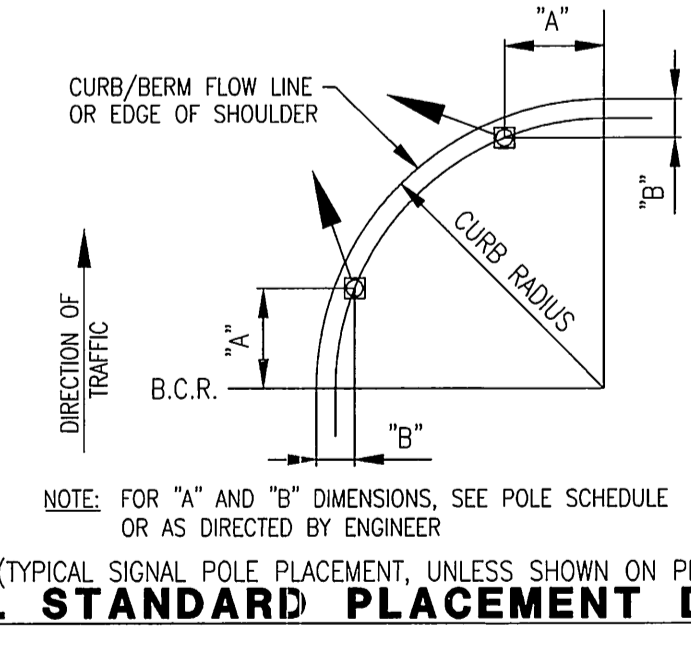
(E) = EXISTING CONDUIT * = EXISTING AND NEW
NOTE: EXISTING WIRES SHALL BE REMOVED AND REPLACED PER PROPOSED CONDUCTOR SCHEDULE.



QUADRANT DETAIL
P.P.B. LOCATION (TOP VIEW)



EMERGENCY VEHICLE PRE-EMPTION DETECTOR MOUNTING DETAIL
N.T.S.



SIGNAL STANDARD PLACEMENT DIMENSIONS
NOTE: FOR "a" AND "b" DIMENSIONS, SEE POLE SCHEDULE OR AS DIRECTED BY ENGINEER.
(TYPICAL SIGNAL POLE PLACEMENT, UNLESS SHOWN ON PLANS)

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

**CONTRACTOR'S LICENSE REQUIRED FOR THIS PROJECT:
CLASS A OR C-10**

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16-JUN-2004 08:43

DIG ALERT
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1-800-227-2600
UNDERGROUND SERVICE ALERT
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SEAL
BARRY J. COWAN
No. 46568
Exp. 6-30-07
STATE OF CALIFORNIA

PLANS PREPARED UNDER SUPERVISION OF
Barry J. Cowan
Date: 6/17/04 P.C.E. 46568 (EXP. 6-30-07)
BENCH MARK:

RICK ENGINEERING COMPANY
San Diego Riverside Orange Phoenix Tucson
ONE CITY BLVD. 1187 SOUTH-2288 ORANGE, CA 92668-1140 (714)899-9440 FAX: (714)899-9141 www.rickeng.com

REVISIONS
MARK REVISIONS APPR. DATE
DESIGNED BY IS DRAWN BY AN/RL CHECKED BY CS

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: DATE: 6/25/04
PRINCIPAL ENGINEER
TRAFFIC DIVISION
DATE: 6/25/04

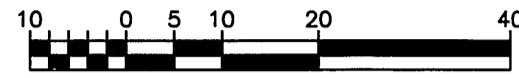
CITY OF RIVERSIDE
TRAFFIC SIGNAL MODIFICATION PLAN
FOR COLLETT AVENUE AND PIERCE STREET

JOB NO. X-465A
SHEET 2 OF 4

CONSTRUCTION NOTES

- 1 - Remove existing crosswalk stripe by wet sandblasting.
- 2 - Install thermoplastic crosswalk stripe per City Standard.
- 3 - Abandon existing #8 loop detectors. Install new TYPE E loop detectors for #8. (6 total). Loop detector spacing shall be 10' and 15'.

SCALE 1"=20'



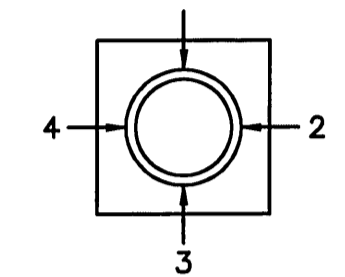
POLE AND EQUIPMENT SCHEDULE

| POLE NO. | DESCRIPTION | SIGNAL STANDARD | | | SIGNAL MOUNTING | | | PED PUSH BUTTONS | | HPSV LUMINAIRE | I.I.S.N.S. LEGEND | REMARKS |
|----------|-------------|-----------------|-----------------|--------------------|------------------|--------------|-----------------|------------------|------|----------------|-------------------|----------------------------------------------------------------|
| | | POLE HEIGHT | SIGNAL MAST ARM | LUMINAIRE MAST ARM | MAST ARM VEHICLE | POLE VEHICLE | POLE PEDESTRIAN | Ø | QUAD | | | |
| (A) | 1-A | 10' | - | - | - | TV-1-T | SP-1-T | - | - | - | - | |
| (B) | 17-2-80 | 30' | 15' | 12' | 1-MAS | SV-1-T | - | 6 | 3 | 200W | Pierce #400 | |
| (C) | 1-A | 10' | - | - | - | TV-1-T | SP-1-T | 6 | 3 | - | - | |
| (D) | 24-4-80 | 30' | 35' | 12' | 2-MAS | SV-1-T | SP-1-T | 4 | 2 | 200W | Collett #1000 | |
| (E) | 1-A | 10' | - | - | - | TV-1-T | SP-1-T | 4 | 2 | - | - | |
| (F) | 17-2-80 | 30' | 15' | 12' | 1-MAS | SV-1-T | SP-1-T | 2 | 1 | 200W | Pierce #400 | |
| (G) | 1-A | 10' | - | - | - | TV-1-T | SP-1-T | 2 | 1 | - | - | Existing pole to be relocated. |
| (H) | 26-4-80 | 30' | 40' | 12' | 2-MAS | SV-1-T | SP-1-T | - | - | 200W | Collett #11000 | New pole with new vehicle mast arm and new luminaire mast arm. |

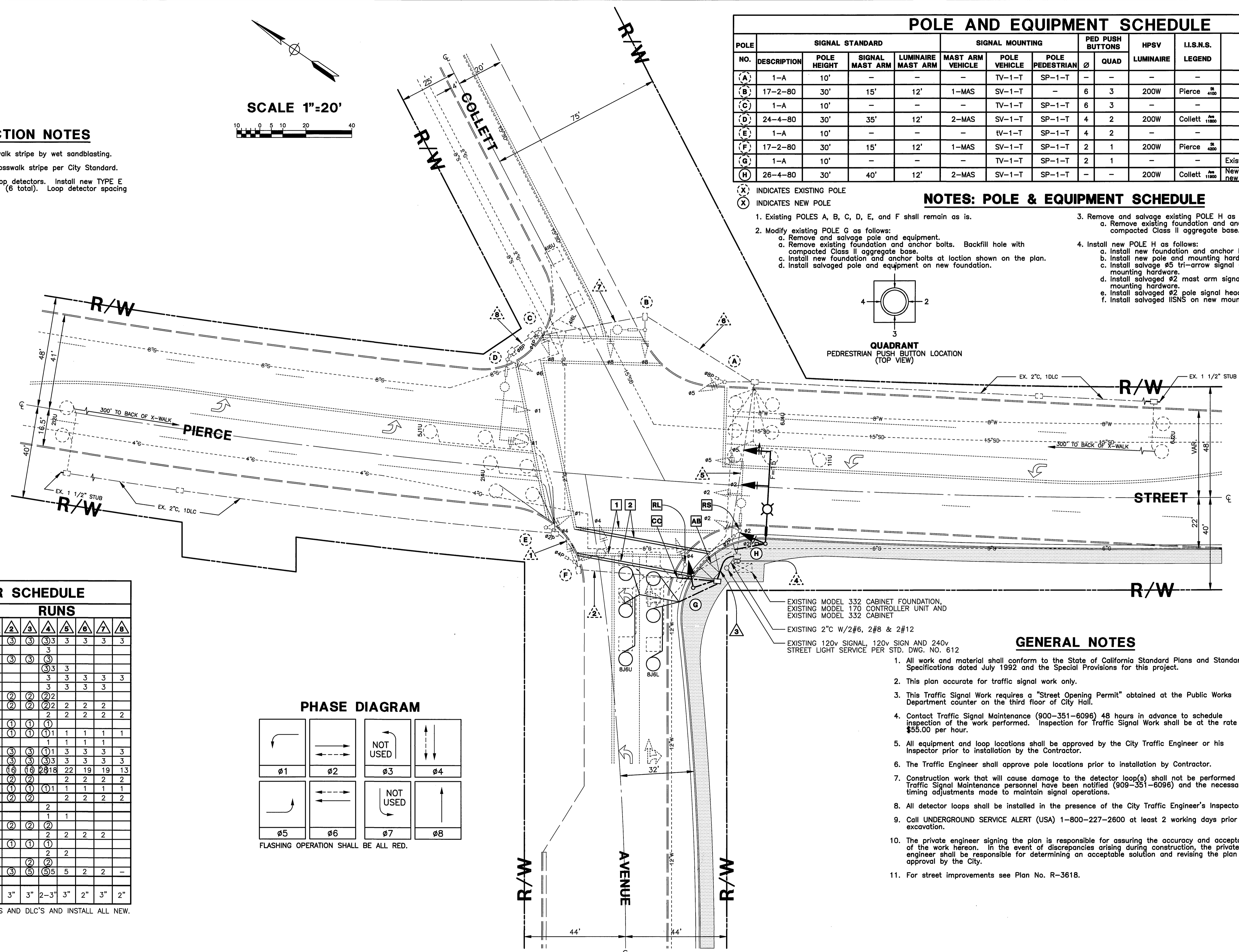
- (X) INDICATES EXISTING POLE
- (X) INDICATES NEW POLE

NOTES: POLE & EQUIPMENT SCHEDULE

1. Existing POLES A, B, C, D, E, and F shall remain as is.
2. Modify existing POLE G as follows:
 - a. Remove and salvage pole and equipment.
 - b. Remove existing foundation and anchor bolts. Backfill hole with compacted Class II aggregate base.
 - c. Install new foundation and anchor bolts at location shown on the plan.
 - d. Install salvaged pole and equipment on new foundation.
3. Remove and salvage existing POLE H as follows:
 - a. Remove existing foundation and anchor bolts. Backfill hole with compacted Class II aggregate base.
4. Install new POLE H as follows:
 - a. Install new foundation and anchor bolts at location shown on the plan.
 - b. Install new pole and mounting hardware on new foundation.
 - c. Install salvaged #5 tri-arrow signal head on end tenon with new mounting hardware.
 - d. Install salvaged #2 mast arm signal head on mid tenon with new mounting hardware.
 - e. Install salvaged #2 pole signal head on new mounting hardware.
 - f. Install salvaged IISNS on new mounting hardware.



QUADRANT PEDESTRIAN PUSH BUTTON LOCATION (TOP VIEW)

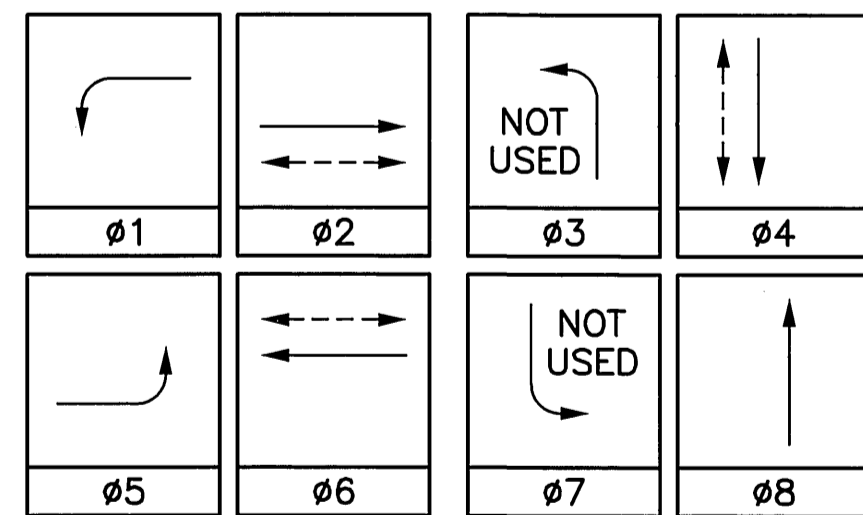


CONDUCTOR SCHEDULE

| A.W.G. OR D.L.C. | CIRCUIT | RUNS | | | | | | | |
|------------------|---------------|------|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| #14 | #1 VEHICLE | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | #2 VEHICLE | | | | | | | | |
| | #4 VEHICLE | | 3 | 3 | | | | | |
| | #5 VEHICLE | | | 3 | 3 | | | | |
| | #6 VEHICLE | | | | 3 | 3 | 3 | 3 | 3 |
| | #8 VEHICLE | | | | | 3 | 3 | 3 | 3 |
| | #2 PEDESTRIAN | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | #4 PEDESTRIAN | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | #6 PEDESTRIAN | | | | 2 | 2 | 2 | 2 | 2 |
| | #2 P.P.B. | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | #4 P.P.B. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | #6 P.P.B. | | | | | | | | |
| | P.P.B. COMMON | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 |
| | SPARES | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | TOTAL #14 | 10 | 16 | 16 | 28 | 18 | 22 | 19 | 13 |
| #12 | I.I.S.N.S. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| #10 | SIGNAL COMMON | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| #8 | LUMINAIRE | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| #6 | SERVICE | | | 2 | | | | | |
| | #1 DETECTOR | | | | 1 | 1 | | | |
| | #2 DETECTOR | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | #4 DETECTOR | | | | 2 | 2 | 2 | 2 | 2 |
| | #5 DETECTOR | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | #6 DETECTOR | | | | 2 | 2 | | | |
| | #8 DETECTOR | | | 2 | 2 | | | | |
| | TOTAL D.L.C. | 3 | 3 | 5 | 5 | 5 | 2 | 2 | - |

⊗ = REMOVE EXISTING CONDUCTORS AND DLC'S AND INSTALL ALL NEW.

PHASE DIAGRAM



FLASHING OPERATION SHALL BE ALL RED.

GENERAL NOTES

1. All work and material shall conform to the State of California Standard Plans and Standard Specifications dated July 1992 and the Special Provisions for this project.
2. This plan accurate for traffic signal work only.
3. This Traffic Signal Work requires a "Street Opening Permit" obtained at the Public Works Department counter on the third floor of City Hall.
4. Contact Traffic Signal Maintenance (900-351-6096) 48 hours in advance to schedule inspection of the work performed. Inspection for Traffic Signal Work shall be at the rate of \$55.00 per hour.
5. All equipment and loop locations shall be approved by the City Traffic Engineer or his Inspector prior to installation by the Contractor.
6. The Traffic Engineer shall approve pole locations prior to installation by Contractor.
7. Construction work that will cause damage to the detector loop(s) shall not be performed until Traffic Signal Maintenance personnel have been notified (909-351-6096) and the necessary timing adjustments made to maintain signal operations.
8. All detector loops shall be installed in the presence of the City Traffic Engineer's Inspector.
9. Call UNDERGROUND SERVICE ALERT (USA) 1-800-227-2600 at least 2 working days prior to excavation.
10. The private engineer signing the plan is responsible for assuring the accuracy and acceptability of the work hereon. In the event of discrepancies arising during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plan for approval by the City.
11. For street improvements see Plan No. R-3618.

IMPORTANT NOTICE:
Section 4216.2 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid.
CALL TOLL FREE
TWO WORKING DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

PRIVATE ENGINEERING NOTE
CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

ENGINEER IN RESPONSIBLE CHARGE:
Lawrence S. Eisenhart
LAWRENCE S. EISENHART RCE NO. 13493
EXPIRATION DATE: 3-31-05 DATE: 6/14/04

LAWRENCE S. EISENHART
CONSULTING ENGINEER
2070 Locust Court
San Bernardino, California 92404
Tel: (909) 864-5406 Fax: (909) 864-5047

SCALE: AS SHOWN
DATE: JUNE 2001

MARK REVISIONS APPR. DATE
DESIGNED BY: L.S.E. DRAWN BY: L.S.E. CHECKED BY:

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: [Signature] BY: [Signature] DATE: 6/21/01
PRINCIPLE ENGINEER
P.W. INSPECTION
TRAFFIC DIVISION
CHIEF P.W. ENGINEER

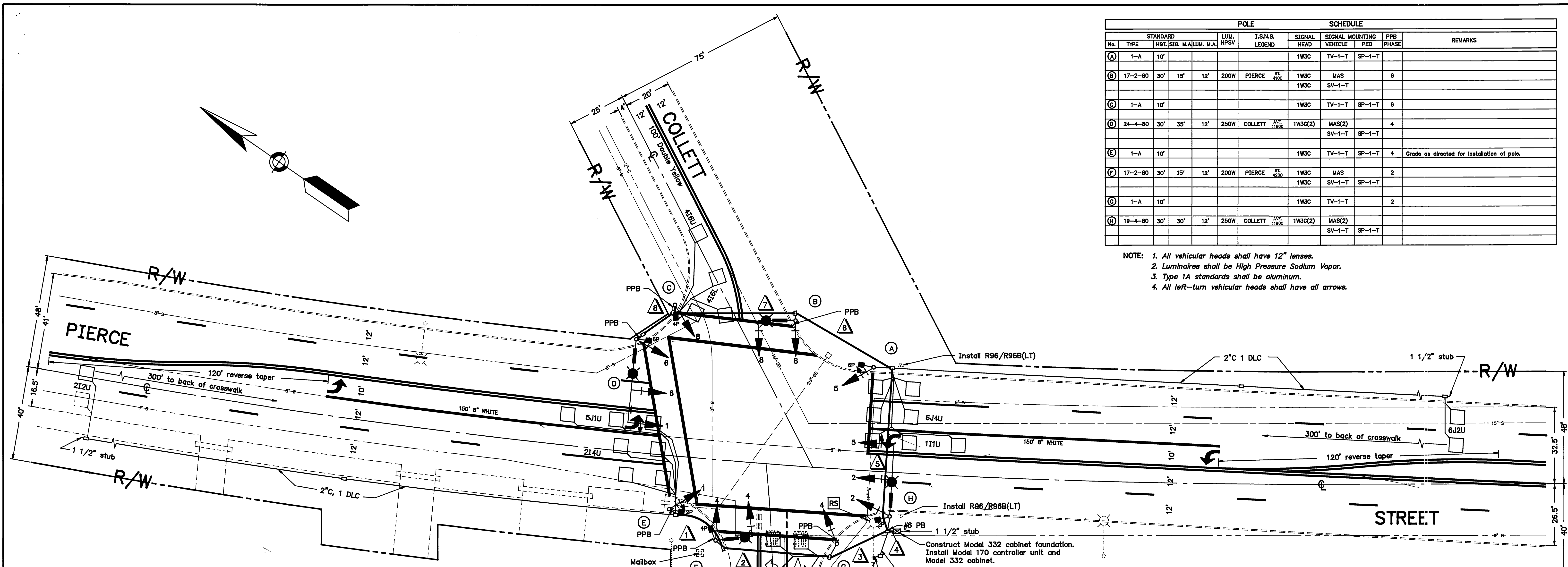
APPROVED BY: [Signature] BY: [Signature] DATE: 6/21/01
DIRECTOR OF PUBLIC WORKS

TRAFFIC SIGNAL MODIFICATION PLAN
PIERCE STREET and COLLETT AVENUE
SCALE: 1"=20'

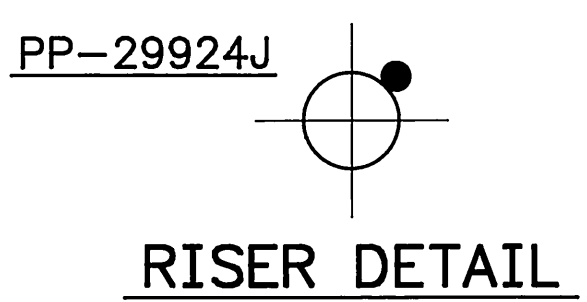
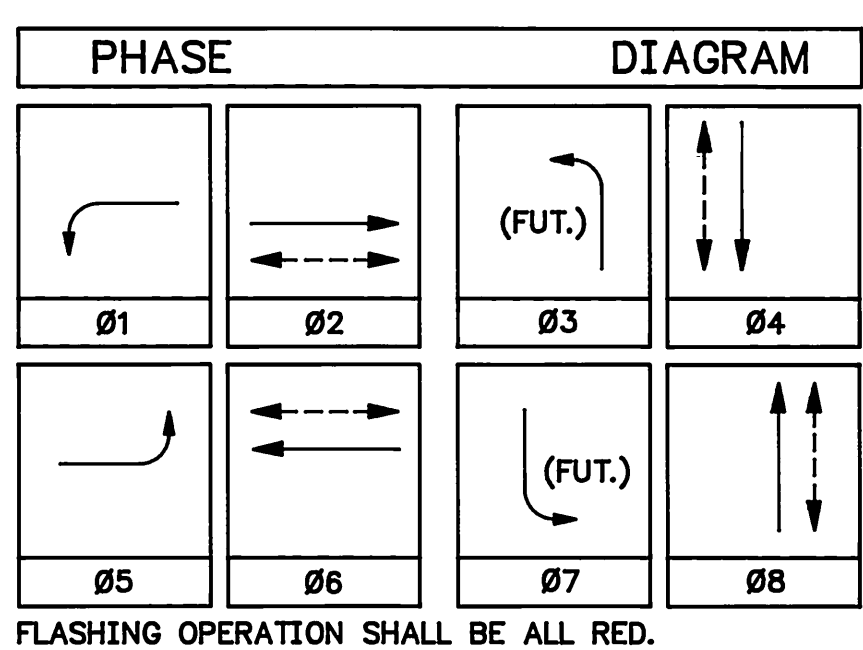
PROJECT NO: X-465A
SHEET 1 OF 1
FILE NAME: X465A.DWG

| STANDARD | | SCHEDULE | | POLE | | SCHEDULE | | REMARKS | | |
|----------|---------|----------|---------|---------|-----------|-----------|-------------------|-------------|-------------------------|-----------|
| No. | TYPE | HGT. | SIG. M. | LUM. M. | LUM. M.A. | LUM. HPSV | I.S.N.S. LEGEND | SIGNAL HEAD | SIGNAL MOUNTING VEHICLE | PPB PHASE |
| (A) | 1-A | 10' | | | | | | 1W3C | TV-1-T | SP-1-T |
| (B) | 17-2-80 | 30' | 15' | 12' | 200W | | PIERCE ST. 4100 | 1W3C | MAS | 6 |
| (C) | 1-A | 10' | | | | | | 1W3C | TV-1-T | SP-1-T |
| (D) | 24-4-80 | 30' | 35' | 12' | 250W | | COLLETT AVE. 1950 | 1W3C(2) | MAS(2) | 4 |
| (E) | 1-A | 10' | | | | | | 1W3C | TV-1-T | SP-1-T |
| (F) | 17-2-80 | 30' | 15' | 12' | 200W | | PIERCE ST. 4200 | 1W3C | MAS | 2 |
| (G) | 1-A | 10' | | | | | | 1W3C | TV-1-T | 2 |
| (H) | 19-4-80 | 30' | 30' | 12' | 250W | | COLLETT AVE. 1950 | 1W3C(2) | MAS(2) | 4 |

NOTE: 1. All vehicular heads shall have 12" lenses.
 2. Luminaires shall be High Pressure Sodium Vapor.
 3. Type 1A standards shall be aluminum.
 4. All left-turn vehicular heads shall have all arrows.



| CONDUCTOR | | SCHEDULE | | | | | | | | | | | | |
|------------------|------------|------------|------|------|------|------|------|------|------|------|---|---|---|---|
| CONTROL FUNCTION | CONDUCTORS | RUNS | | | | | | | | | | | | |
| | SIZE | INSULATION | A | B | C | D | E | F | G | H | I | J | K | L |
| VEHICLE HEADS | #4 | T.W. | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | | | | |
| PHASE 1 | | | | | | 3 | | | | | | | | |
| PHASE 2 | | | | | | | 3 | | | | | | | |
| PHASE 4 | | | | | | | | 3 | | | | | | |
| PHASE 5 | | | | | | | | | 6 | 3 | | | | |
| PHASE 6 | | | | | | | | | | | 3 | 3 | 3 | 3 |
| PHASE 8 | | | | | | | | | | | | 3 | 3 | 3 |
| PED. HEADS | | | | | | | | | | | | | | |
| PHASE 2 | | | 2 | 2 | 2 | 4 | | | | | | | | |
| PHASE 4 | | | 2 | 2 | 2 | 4 | | | | | | | | |
| PHASE 6 | | | | | | | 2 | 2 | 2 | 2 | | | | |
| PED. PUSH BUTTON | | | | | | | | | | | | | | |
| PHASE 2 | | | | 1 | 1 | 1 | | | | | | | | |
| PHASE 4 | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | |
| PHASE 6 | | | | | | | 1 | 1 | 1 | 1 | | | | |
| SPARES | | | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | | | | |
| 12V COMMON | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | |
| DETECTORS | #16/2 | P.E. | | | | | | | | | | | | |
| PHASE 1 | | | | | | | 1 | 1 | | | | | | |
| PHASE 2 | | | 2 | 2 | 2 | 2 | | | | | | | | |
| PHASE 4 | | | | | | | 2 | 2 | 2 | 2 | | | | |
| PHASE 5 | | | 1 | 1 | 1 | 1 | | | | | | | | |
| PHASE 6 | | | | | | | | | | | 2 | 2 | | |
| PHASE 8 | | | | | | | | | | | | 2 | 2 | |
| I.S.N.S. | #12 | T.W. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |
| 120V COMMON | #10 | T.W. | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | |
| LUMINAIRES | #8 | T.H.W. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |
| SIGNAL SERVICE | #8 | T.H.W. | | | | | | | | | | | | |
| TOTAL | #4 | T.W. | 10 | 16 | 16 | 46 | 22 | 19 | 19 | 13 | | | | |
| | #12 | T.W. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |
| | #10 | T.W. | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | |
| | #8 | T.H.W. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |
| | #8 | T.H.W. | | | | | | | | | | | | |
| #16/2 | P.E. | | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | | | | |
| #16/2 | P.E. | | 20.5 | 33.5 | 39.5 | 82 | 45.5 | 33.5 | 36.5 | 21.5 | | | | |
| CONDUIT SIZE | | | 2" | 3" | 3" | 2.5" | 3" | 2" | 3" | 2" | | | | |



- ### GENERAL NOTES
- Detector loops shall be installed in the presence of the Traffic Engineer or his representative.
 - All pavement delineation requirements shall be completed at least one day prior to turn-on.
 - Typical detector loop spacing: 10' and 15'.
 - Luminaires shown for removal will be done by City forces.
 - This plan for electrical work only. For street improvements see plan R-3216.
 - Pavement delineation on this plan shall be performed by City forces and is shown for reference only.
- ### CONSTRUCTION NOTES
- Remove and salvage W9 sign (not shown on plan) for north and southbound Pierce Street and install W41 on existing posts.
 - Erect W41 sign and post for westbound Collett Avenue at approx. 350' from back of crosswalk, to be located in the field.
 - Erect W41 sign for eastbound Collett Avenue on St. Lt. standard at approx. 350' from back of crosswalk, to be located in the field.



48 HOURS BEFORE YOU DIG CALL
 UNDERGROUND SERVICE ALERT
 1-800-422-4133

ENGINEER IN RESPONSIBLE CHARGE
 Richard D. McGrath
 R.C.E. No. 31952 expires 12-31-92
 DATE 6-28-91

CITY OF RIVERSIDE, CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS

APPROVED BY: [Signature]
 PRINCIPAL ENGINEER
 P.W. INSPECTION: [Signature]
 TRAFFIC DIVISION: [Signature]
 CHIEF P.W. ENGR.: [Signature]
 PUBLIC UTILITIES: [Signature]

DATE: 6/28/91

TRAFFIC SIGNALS
 COLLETT AVENUE AND
 PIERCE STREET

Acct. No. 430-541600-02
 X-465
 SHEET 1 OF 1
 FILE NO.

HORIZ. SCALE: 1" = 20'