

CONSTRUCTION NOTES

1 INSTALL MODEL 170 CONTROLLER UNIT HOUSED IN 332 CABINET.

GENERAL NOTES

- DETECTOR LOOPS SHALL BE INSTALLED IN THE PRESENCE OF THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE.
- TYPICAL DETECTOR LOOP SPACING: 10', 15', AND 30' (WHERE APPLICABLE).
- PAVEMENT DELINEATION SHOWN HEREON IS FOR REFERENCE ONLY. SEE PLAN XL-341 FOR REMOVAL AND INSTALLATION.
- ALL SIGNING, STRIPING AND PAVEMENT MARKING REQUIREMENTS, SHALL BE COMPLETED AT LEAST ONE DAY PRIOR TO TURN-ON.
- SEE PLAN R-3271 FOR STREET IMPROVEMENT.
- SEE PLAN XL-341 FOR INTERCONNECT INSTALLATION NOT SHOWN HEREON.
- SEE PLAN L5-1082 FOR STREET LIGHTING.

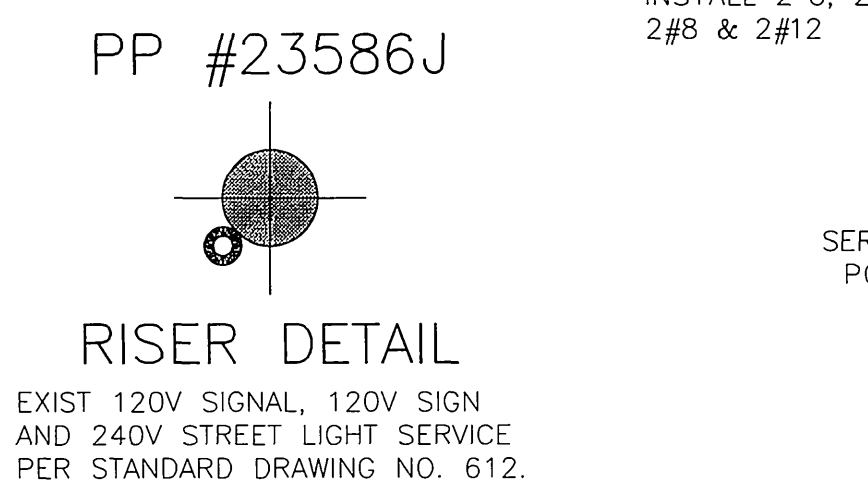
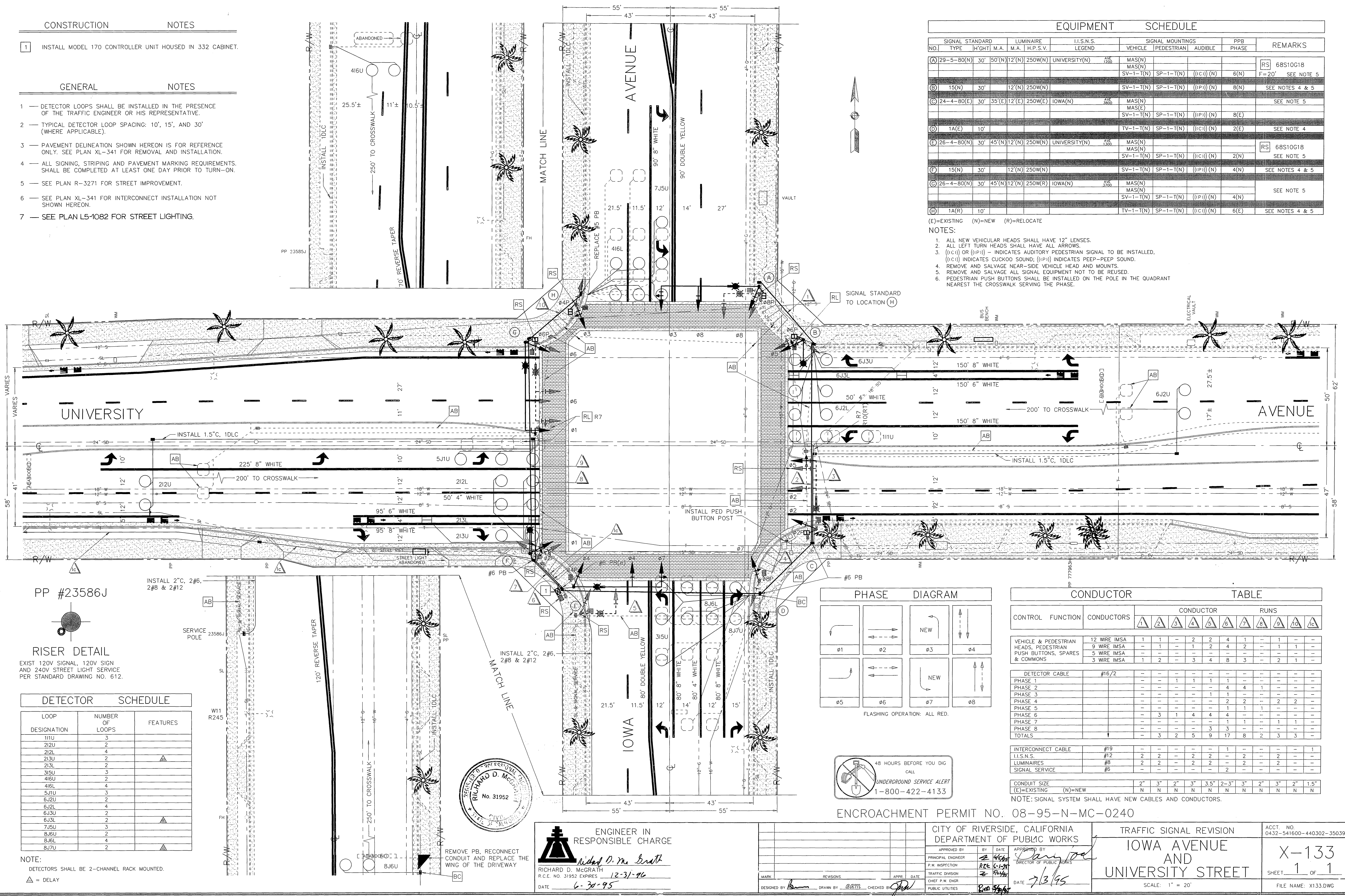
EQUIPMENT SCHEDULE

| SIGNAL NO. | STANDARD TYPE | HEIGHT | M.A. | LUMINAIRE M.A. | H.P.S.V. | I.I.S.N.S. LEGEND | SIGNAL MOUNTINGS | | | PPB PHASE | REMARKS |
|------------|---------------|--------|--------|----------------|----------|-------------------|------------------|------------|------------|-----------|---------------------------------|
| | | | | | | | VEHICLE | PEDESTRIAN | AUDIBLE | | |
| (A) | 29-5-80(N) | 30' | 50'(N) | 12'(N) | 250W(N) | UNIVERSITY(N) | MAS(N) | SV-1-T(N) | ((IC)) (N) | 6(N) | RS 68S10G18 F=20' SEE NOTE 5 |
| (B) | 15(N) | 30' | 12'(N) | 250W(N) | | | MAS(N) | SV-1-T(N) | ((IP)) (N) | 8(N) | SEE NOTES 4 & 5 |
| (C) | 24-4-80(E) | 30' | 35'(E) | 12'(E) | 250W(E) | IOWA(N) | MAS(N) | SV-1-T(N) | ((IP)) (N) | 8(E) | SEE NOTE 5 |
| (D) | 1A(E) | 10' | | | | | MAS(E) | SP-1-T(N) | ((IC)) (N) | 2(E) | SEE NOTE 4 |
| (E) | 26-4-80(N) | 30' | 45'(N) | 12'(N) | 250W(N) | UNIVERSITY(N) | MAS(N) | SV-1-T(N) | ((IC)) (N) | 2(N) | RS 68S10G18 SEE NOTE 5 |
| (F) | 15(N) | 30' | 12'(N) | 250W(N) | | | MAS(N) | SV-1-T(N) | ((IP)) (N) | 4(N) | SEE NOTES 4 & 5 |
| (G) | 26-4-80(N) | 30' | 45'(N) | 12'(N) | 250W(R) | IOWA(N) | MAS(N) | SV-1-T(N) | ((IP)) (N) | 4(N) | SEE NOTE 5 |
| (H) | 1A(R) | 10' | | | | | MAS(N) | SP-1-T(N) | ((IC)) (N) | 6(E) | SEE NOTES 4 & 5 |

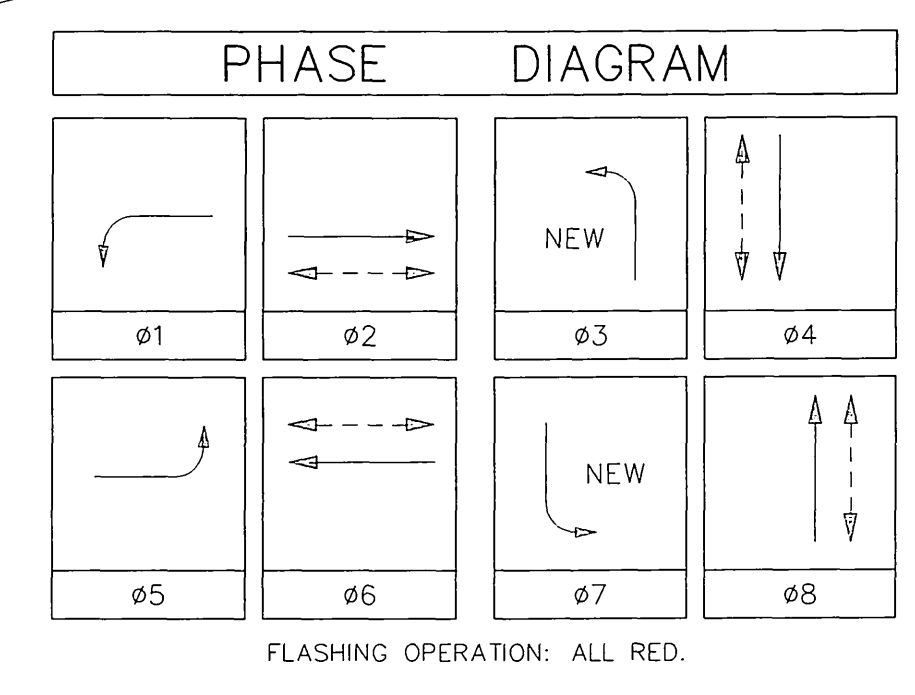
(E)=EXISTING (N)=NEW (R)=RELOCATE

NOTES:

- ALL NEW VEHICULAR HEADS SHALL HAVE 12" LENSES.
- ALL LEFT TURN HEADS SHALL HAVE ALL ARROWS.
- ((IC)) OR ((IP)) - INDICATES AUDITORY PEDESTRIAN SIGNAL TO BE INSTALLED. ((IC)) INDICATES CUCKOO SOUND; ((IP)) INDICATES PEEP-PEEP SOUND.
- REMOVE AND SALVAGE NEAR-SIDE VEHICLE HEAD AND MOUNTS.
- REMOVE AND SALVAGE ALL SIGNAL EQUIPMENT NOT TO BE REUSED.
- PEDESTRIAN PUSH BUTTONS SHALL BE INSTALLED ON THE POLE IN THE QUADRANT NEAREST THE CROSSWALK SERVING THE PHASE.



| LOOP DESIGNATION | NUMBER OF LOOPS | FEATURES |
|------------------|-----------------|----------|
| 111U | 3 | |
| 212U | 2 | |
| 212L | 4 | |
| 213U | 2 | |
| 213L | 2 | |
| 315U | 3 | |
| 416U | 2 | |
| 416L | 4 | |
| 511U | 3 | |
| 6J2U | 2 | |
| 6J2L | 4 | |
| 6J3U | 2 | |
| 6J3L | 2 | |
| 7J5U | 3 | |
| 8J6U | 2 | |
| 8J6L | 4 | |
| 8J7U | 2 | |



| 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 | 1 | - | 2 | 2 | 4 | 1 | - | 1 | - | - | - | - | - |
| | 9 WIRE IMSA | - | 1 | - | 1 | 2 | 4 | 2 | - | - | 1 | 1 | - | - | - |
| | 5 WIRE IMSA | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 WIRE IMSA | 1 | 2 | - | 3 | 4 | 8 | 3 | - | 2 | 1 | - | - | - | - |
| DETECTOR CABLE | #16/2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| PHASE 1 | | - | - | - | 1 | 1 | 1 | 1 | - | - | - | - | - | - | - |
| PHASE 2 | | - | - | - | - | - | 4 | 4 | 1 | - | - | - | - | - | - |
| PHASE 3 | | - | - | - | - | - | 1 | 1 | - | - | - | - | - | - | - |
| PHASE 4 | | - | - | - | - | - | 2 | 2 | - | 2 | 2 | - | - | - | - |
| PHASE 5 | | - | - | - | - | - | - | 1 | 1 | 1 | - | - | - | - | - |
| PHASE 6 | | - | 3 | 1 | 4 | 4 | 4 | 4 | - | - | - | - | - | - | - |
| PHASE 7 | | - | - | - | - | - | 3 | 3 | - | 1 | 1 | - | - | - | - |
| PHASE 8 | | - | - | - | - | - | - | - | 3 | 3 | - | - | - | - | - |
| TOTALS | | - | 3 | 2 | 5 | 9 | 17 | 8 | 2 | 3 | 3 | - | - | - | - |
| INTERCONNECT CABLE | #19 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 |
| I.I.S.N.S. | #12 | 2 | 2 | - | 2 | 2 | - | 2 | - | 2 | - | - | - | - | - |
| LUMINAIRES | #8 | 2 | 2 | - | 2 | 2 | - | 2 | - | 2 | - | - | - | - | - |
| SIGNAL SERVICE | #6 | - | - | - | - | - | - | 2 | - | - | - | - | - | - | - |
| CONDUIT SIZE | | 2" | 3" | 2" | 3" | 3.5" | 2-3" | 3" | 2" | 3" | 2" | 1.5" | - | - | - |
| | | N | N | N | N | N | N | N | N | N | N | N | - | - | - |

NOTE: SIGNAL SYSTEM SHALL HAVE NEW CABLES AND CONDUCTORS.



ENGINEER IN RESPONSIBLE CHARGE
 RICHARD D. MCGRATH
 R.C.E. NO. 31952 EXPIRES 12-31-96
 DATE 6-30-95



ENCROACHMENT PERMIT NO. 08-95-N-MC-0240

| | | | | |
|---|-------------------|---|-----------------------------------|---------------------------------------|
| CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS | | TRAFFIC SIGNAL REVISION | | ACCT. NO. 0432-541600-440302-35039 |
| APPROVED BY PRINCIPAL ENGINEER | BY DATE 4/6/95 | APPROVED BY DIRECTOR OF PUBLIC WORKS | IOWA AVENUE AND UNIVERSITY STREET | |
| P.W. INSPECTION TRAFFIC DIVISION | DATE 7/3/95 | X-133 | | SHEET 1 OF 1 |
| CHEF P.W. ENGR. PUBLIC UTILITIES | DATE 7/3/95 | SCALE: 1" = 20' | | FILE NAME: X133.DWG |

EQUIPMENT SCHEDULE

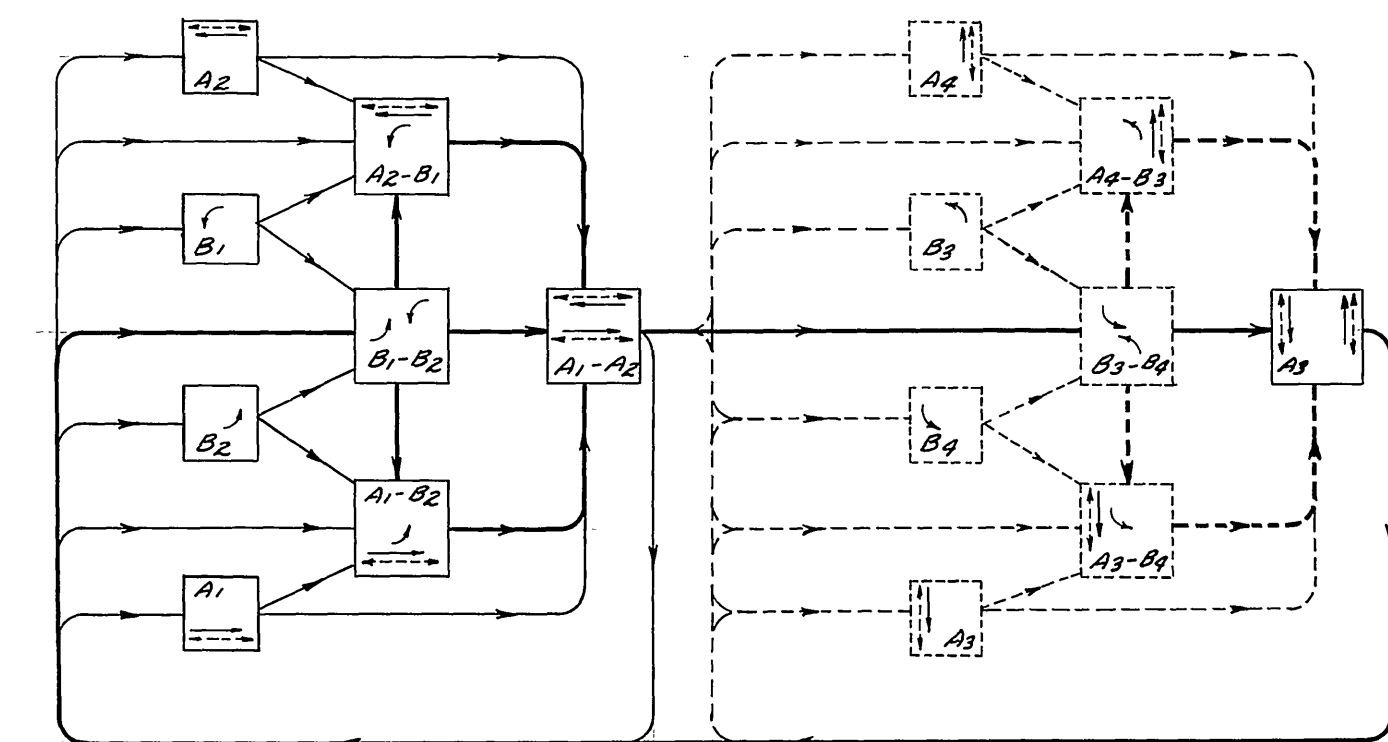
| Location | Standard | Vehicle Equipment | | | | Ped. Equipment | | | Luminaires | Remarks |
|----------|-----------|-------------------|--------|-----------|--------|----------------|--------|-------|------------|---------|
| | | Heads | Mfg.'s | Qty./Pole | Louver | Heads | Mfg.'s | RRB's | | |
| A | Type 2G | 1W3C* | MAB | 1 | | | | | 400W | |
| | | 1W3C(12") | MAB | 1 | | | | | | |
| | | 1W3C | SV-1-T | 1 | | 1W2C | SP-1-T | 1 | | |
| B | Type I | 2W3C | TV-2-T | 2 | | | | | | |
| C | 6B1001B | 1W3C(12") | MAB | 1 | | | | 400W | | |
| | | 1W3C | SV-1-T | 1 | | 1W2C | SP-1-T | | 1 | |
| | | | | | | | | | | |
| D | Type I | 2W3C | TV-2-T | 2 | | | | | | |
| E | Type 2G-S | 1W3C* | MAB | 1 | | | | 400W | | |
| | | 1W3C(12") | MAB | 1 | | | | | | |
| | | 1W3C | SV-1-T | 1 | | 1W2C | SP-1-T | | 1 | |
| F | TYPE I | 2W3C | TV-2-T | 2 | | | | | | |
| G | 6B1001B | 1W3C(12") | MAB | 1 | | | | 400W | | |
| | | 1W3C | SV-1-T | 1 | | 1W2C | SP-1-T | | 1 | |
| H | TYPE I | 2W3C | TV-2-T | 2 | | | | | | |
| | | 1W3C(12") | | | | | | | | |
| | | 1W3C | | | | | | | | |

* Programmed Visibility Signal Head.

SIGNING REQUIREMENTS

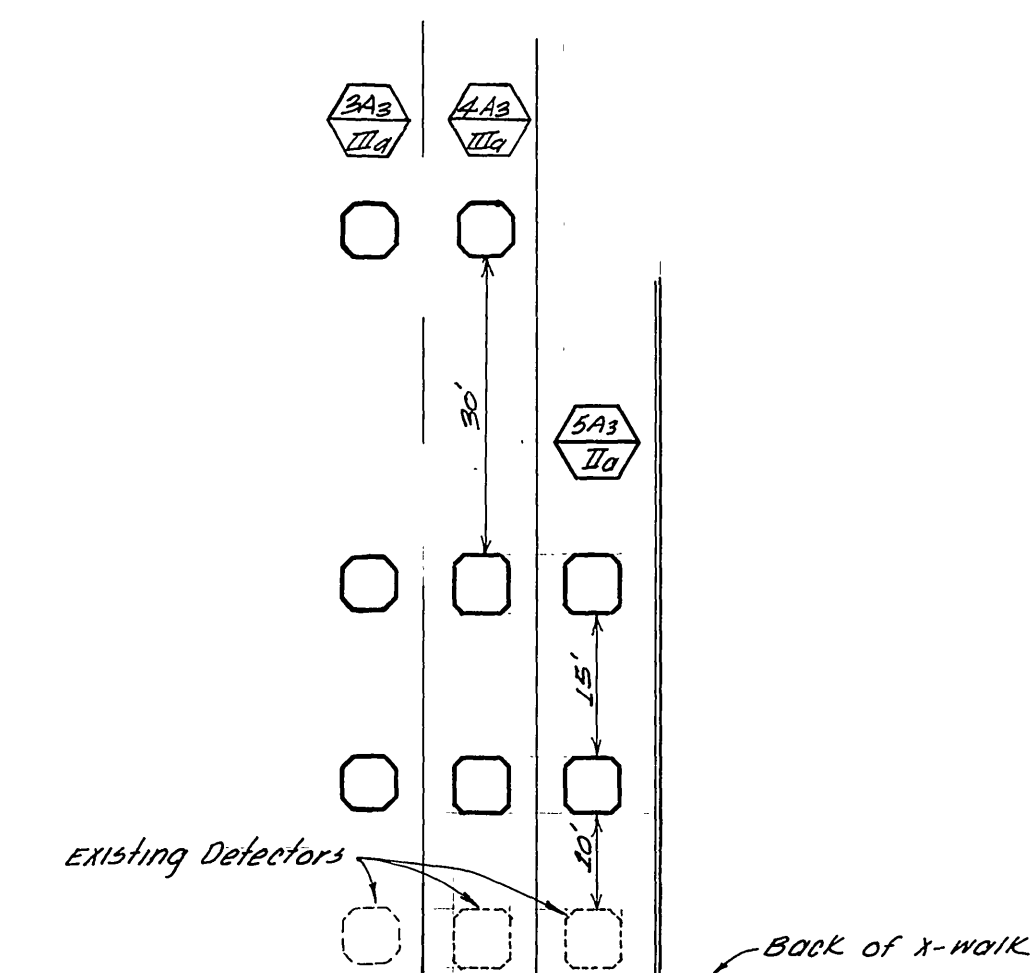
| LOC. | COPE No. | SIZE | MOUNTING | Facing | REMARKS |
|------|----------|-----------|---------------|--------|---------|
| A | R73A(U) | 30" x 34" | OH. SIG. STP. | E | |
| P | R73(U) | 30" x 34" | SIGNAL STP. | W | |
| E | R73A(U) | 30" x 34" | OH. SIG. STP. | W | |
| H | R73(U) | 30" x 34" | SIGNAL STP. | E | |
| X#Y | R73(U) | 30" x 34" | SIGNAL STP. | N/S | |

PHASE DIAGRAM



CONDUCTOR SCHEDULE

| Control Function | Conductors | | Conduit Run | | | | | | | | | | | | | |
|----------------------|------------|------------|-------------|--------|----|----|----|---|---|--------|----|----|----|----|----|--------|
| | Size | Insulation | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Vehicle Heads | #14 | U.F. | | | | | | | | | | | | | | |
| phi A1 | | | | | | | | | 3 | 3 | 3 | 3 | | | | |
| phi A2 | | | | 3 | | | | | | | | 3 | 3 | 3 | | |
| phi A3 | | | 3 | | 3 | 3 | 3 | | | 3 | 3 | 3 | 3 | 3 | | |
| phi A4 (future) | | | | | | | | | | | | | | | | |
| phi B1 | | | | | | | | | | | | 3 | 3 | 3 | | |
| phi B2 | | | | | | 3 | 3 | | | 3 | 3 | 3 | 3 | 3 | | |
| phi B3 (future) | | | 3 | | 3 | 3 | 3 | | | 3 | 3 | 3 | 3 | 3 | | |
| phi B4 (future) | | | | | | | | | | | | | | | | |
| Pedestrian Heads | | | | | | | | | | 2 | 2 | | | | | |
| phi A1W | | | | 4 | 2 | 2 | | | | | | 2 | 2 | 2 | | |
| phi A2W | | | | | | | 2 | 2 | | | 2 | 2 | 2 | 2 | | |
| phi A3W | | | | | | | | | 2 | 2 | 2 | 2 | 4 | 3 | 2 | |
| phi A4W (future) | | | | | | | | | | | | | | | | |
| Ped. Push Button | | | | | | | | | | | 1 | 2 | | | | |
| phi A1W | | | | 1 | 1 | 1 | | | | | | 2 | 2 | 2 | | |
| phi A2W | | | | | 1 | | | 1 | | | 2 | 2 | 2 | 4 | 3 | 2 |
| phi A3W (future) | | | | | | | | | | | | | | | | |
| Spares | | | 3 | 3 | 3 | 3 | 6 | | | 3 | 3 | 3 | 3 | 3 | 3 | |
| Detector cable | #12 | PE | | | | | | | | | | | | | | |
| phi A1 | | | | | | | | | | | | | 2 | 2 | | |
| phi A2 | | | | | | | | | | | | | 2 | 2 | | |
| phi A3 | | | 3 | | | | | | | | | | 3 | 3 | 3 | 3 |
| phi A4 (future) | | | | | | | | | | | | | | | | |
| phi B1 | | | | | | | | | | 1 | 1 | 1 | 1 | | | |
| phi B2 | | | | | | | | | | | | | | 1 | 1 | |
| phi B3 (future) | | | | | | | | | | | | | | | | |
| phi B4 (future) | | | | | | | | | | | | | | | | |
| INT. ILLUM. ST. SIGN | #12 | U.F. | | 2 | 4 | 2 | 2 | | | 2 | | | | | | |
| 12V Common | #14 | U.F. | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 120V Common | #10 | U.F. | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Signal Service | #8 | | | | | | | | | | | 2 | | | | |
| Luminaires | T.H.W. | | | | 2 | 2 | 2 | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Totals | #14 U.F. | | 15 | 11 | 13 | 14 | 19 | | | 20 | 26 | 27 | 29 | 25 | 24 | |
| | #12 P.E. | | 3 | | | | | | | 2 | 2 | 6 | 4 | 4 | 3 | |
| | #12 U.F. | | | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| | #10 U.F. | | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| | #8 | | | 2 | | | | | | | | 2 | | | | |
| Conduit Size | T.H.W. | | 2" | 1 1/2" | 2" | 2" | 2" | | | 2 1/2" | 3" | 3" | 3" | 3" | 3" | 2 1/2" |

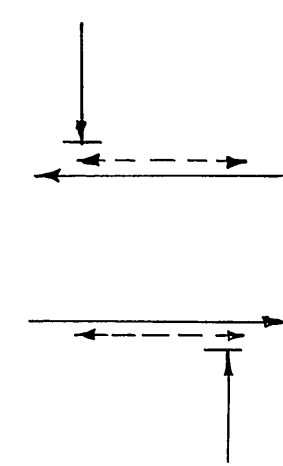


LOOP CONFIGURATION FOR TWO OUTSIDE LANES OF SOUTHBOUND APPROACH

| | | | | | | | |
|----------------------------|--|---|--|------------------------------------|--|---|--|
| As Built Per Cont. 72-75-1 | | CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS | | TRAFFIC SIGNALS | | PROJECT NO. | |
| | | APPROVED BY | | UNIVERSITY AVENUE AND AVENUE | | X-133 | |
| | | OFFICE ENGINEER | | DIRECTOR OF PUBLIC WORKS | | SHEET _____ OF _____ | |
| | | PARK DEPARTMENT | | DATE | | FILE NO. | |
| | | TRAFFIC DIVISION | | | | | |
| | | ASSISTANT CITY ENG. | | | | | |
| DESIGNED BY | | DRAWN BY | | CHECKED BY | | HORIZ. SCALE: 1" = NONE VERT. SCALE: 1" = | |

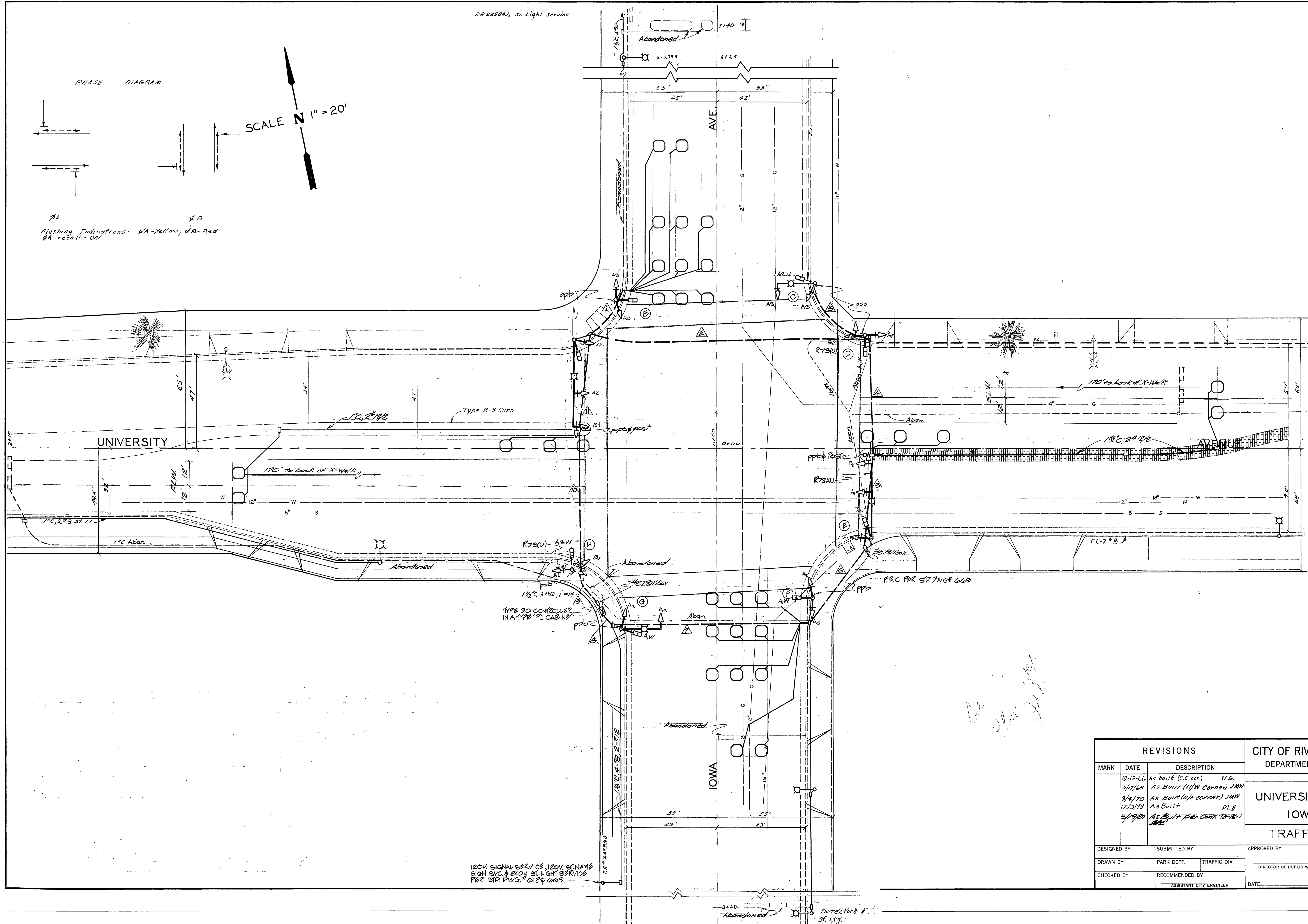
PP 23584J, St. Light Service

PHASE DIAGRAM



SCALE N 1" = 20'

Flashing Indications: ϕA -Yellow, ϕB -Red
 ϕA recall - ON



120V. SIGNAL SERVICE 120V. OF NAME
 SIGN SVC. & 240V. ST. LIGHT SERVICE
 PER ST. PWG. # 0128 009.

| REVISIONS | | | CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS | |
|-------------|----------|-----------------------------|---|-----------|
| MARK | DATE | DESCRIPTION | | |
| | 10-19-66 | As built (S.E. cor.) M.G. | | |
| | 5/17/68 | As Built (N/W Corner) JMW | | |
| | 3/4/70 | As Built (N/E corner) JMW | | |
| | 12/13/73 | As Built DLB | | |
| | 5/1/80 | As Built, Per Cont. 72-28-1 | | |
| DESIGNED BY | | SUBMITTED BY | APPROVED BY | PROJ. NO. |
| DRAWN BY | | PARK DEPT. TRAFFIC DIV. | DIRECTOR OF PUBLIC WORKS | X-133 |
| CHECKED BY | | RECOMMENDED BY | DATE | SHEET OF |
| | | ASSISTANT CITY ENGINEER | | |

(Being done by others)

(Being done by others)

(Being done by others)

(Being done by others)

(Being done by others)

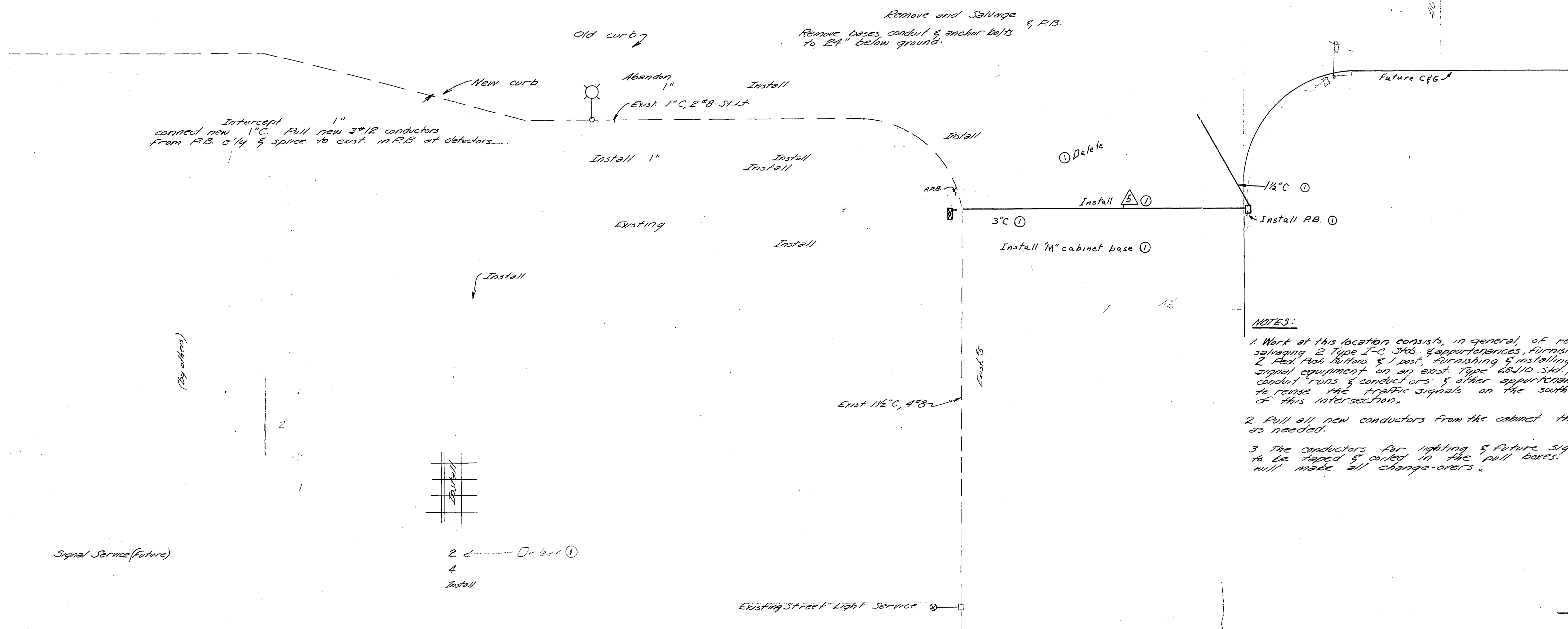
(Being done by others)

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(Being done by others)



NOTES:

1. Work at this location consists, in general, of removing & salvaging 2 Type I-C Stds. & appurtenances, furnishing & installing 2 Red Ash Buttons & 1 post, furnishing & installing various traffic signal equipment on an exist. Type 68J10 Std., installing various conduit runs & conductors & other appurtenances work required to raise the traffic signals on the southwest corner of this intersection.
2. Pull all new conductors from the cabinet through run Δ as needed.
3. The conductors for lighting & future signal service are to be taped & coiled in the pull boxes. City forces will make all change-overs.

10/16/64 Signal Per SW corner J.Hy
 ① 3/17/68 Revised as shown

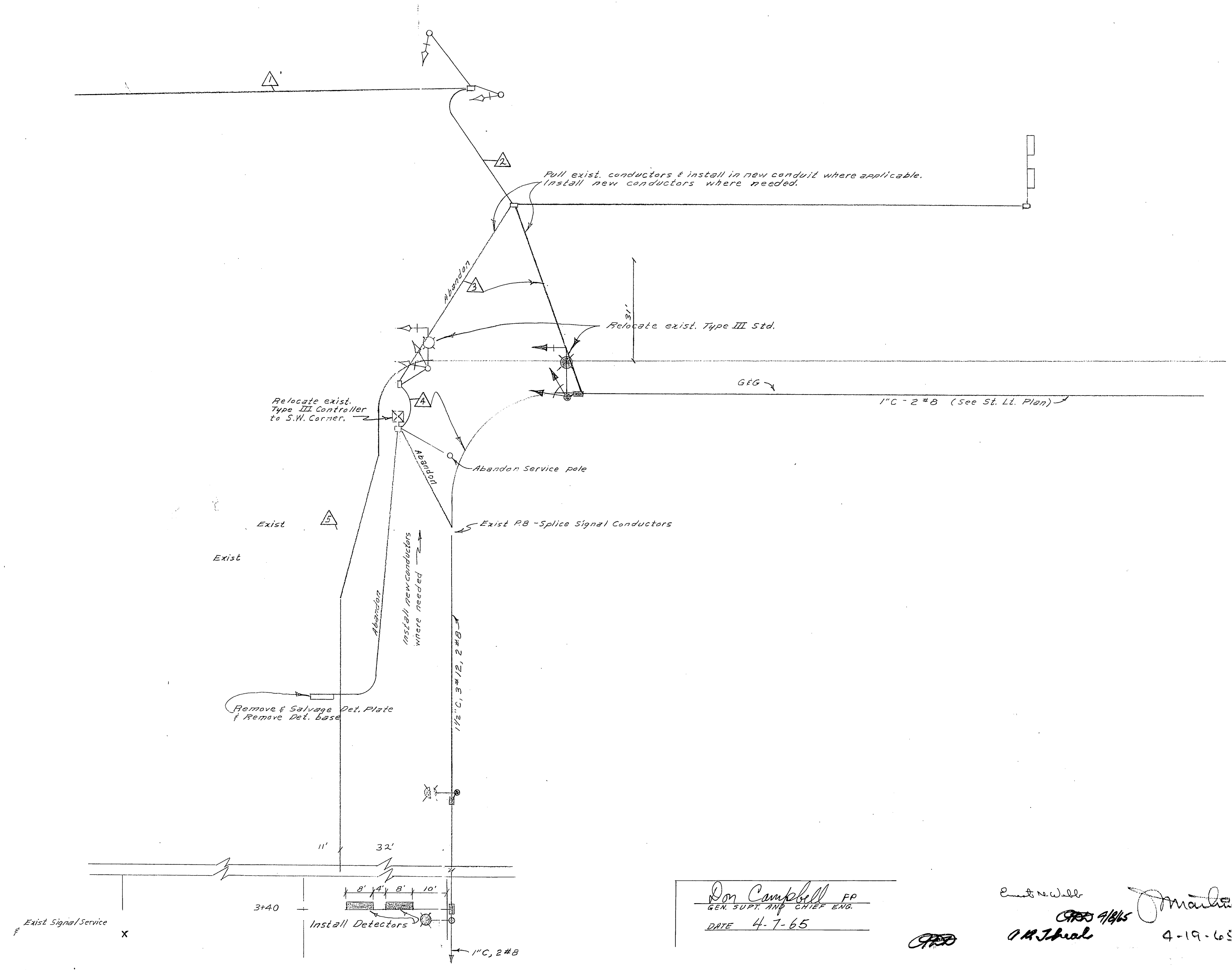
[Signature]
 10-19-64

NOTES:

1. Work at this location consists in general, of relocating existing Type III Std. t appurtenances, relocating existing control cabinet, installing various conduit runs & conductors, furnishing & installing detectors & other appurtenances work required to revise the traffic signal system on the Southeast corner of 8th St. and Iowa Ave.
2. All work to be done in accordance with the applicable portions of Section 86 of the California State Standard Specifications, dated, July 64.
3. Signals may be taken out of operation for short periods of time between 8:30 A.M. and 4:30 P.M. Stop signs may be utilized for temporary traffic control during these times.
4. Before doing any work on the existing facilities, the Contractor shall contact the Traffic Engineer Division. (Phone 7877366)
5. Pull boxes are to be located in the field.
6. The Traffic Engineering Division, 3870 Mulberry Street, Riverside, will pay \$1,800 toward the cost of this project to the DEVELOPER upon completion of the work and receipt of a statement from the developer.
7. ——— indicates pullbox No 6 Brooks Products Inc., or equal per City of Riverside Traffic Division, Drawing No. 606.
8. See sheet 1 of R-1016 for street lighting details.

| (Exist) | (Exist) | (Install) | (Install) | (Install) |
|----------|----------|-----------|-----------|-----------|
| 3 | 3 | 3 | 3 | 3 |
| 3 | 3 | 3 | 3 | 3 |
| 3 | 2 | 3 | 3 | 3 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 4 |
| 2 | 2 | 2 | 2 | 2 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 4 | 2 |
| 2 | 1.5 | 10 | 2 | 3 |
| 1 1/2" C | 1 1/2" C | 2" C | 2 1/2" C | 2" C |

Exist.



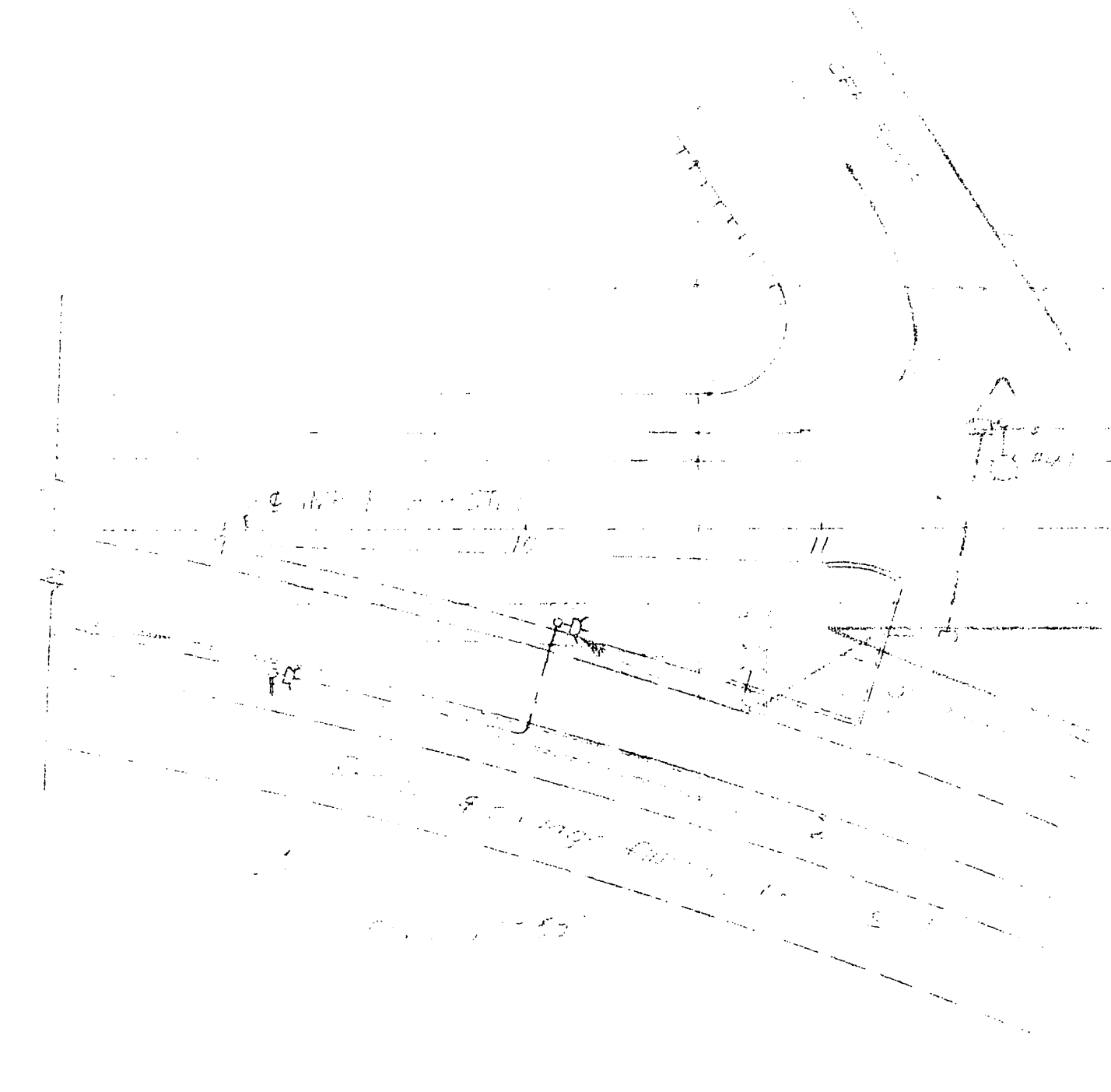
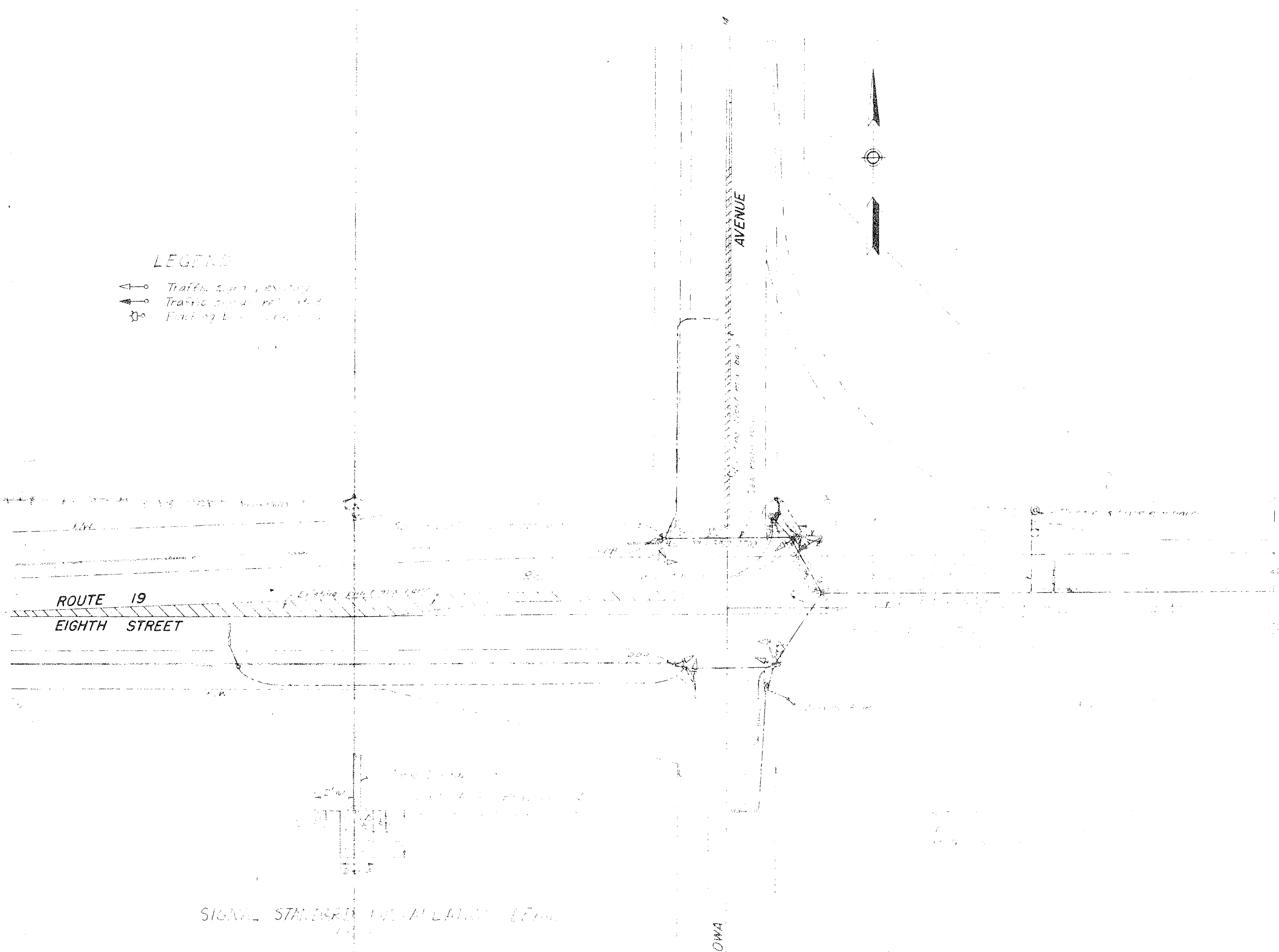
Don Campbell PP
 GEN. SUPT. AND CHIEF ENG.
 DATE 4-7-65

Handwritten signatures and notes: "C. J. ...", "M. ...", "4-19-65", "1 1", "L5-13036".

| | | |
|----|----|----|
| VI | 19 | 19 |
| | | |
| | | |
| | | |

LEGEND

- ↔ Traffic sign existing
- ↔ Traffic sign proposed
- ⊙ Finding by survey



SIGNAL STANDARD INSTALLATION (E.T.M.)

CCD No 51
SHEET No 2
VIII - RIV - 19 - RIV B
61-8V13C7-F

DESIGNED BY
CHECKED BY
DATE
IOWA AVE. & THE UNIVERSITY OF IOWA

| Project Engineer | Date | Design Engineer | Date | Approval Recommended By | Date |
|------------------|------|-----------------|------|-------------------------|------|
| | | | | | |

X-133

| | | | | | |
|--------------|--------|---------------------|-------------|-----------|--------------|
| PRA DIV. No. | STATE | FEDERAL PROJECT No. | FISCAL YEAR | SHEET No. | TOTAL SHEETS |
| | CALIF. | | | | |

| | | | | | |
|-------|--------|-------|---------|-----------|--------------|
| DIST. | COUNTY | ROUTE | SECTION | SHEET No. | TOTAL SHEETS |
| VIII | RIV | 19 | B | 1 | 4 |

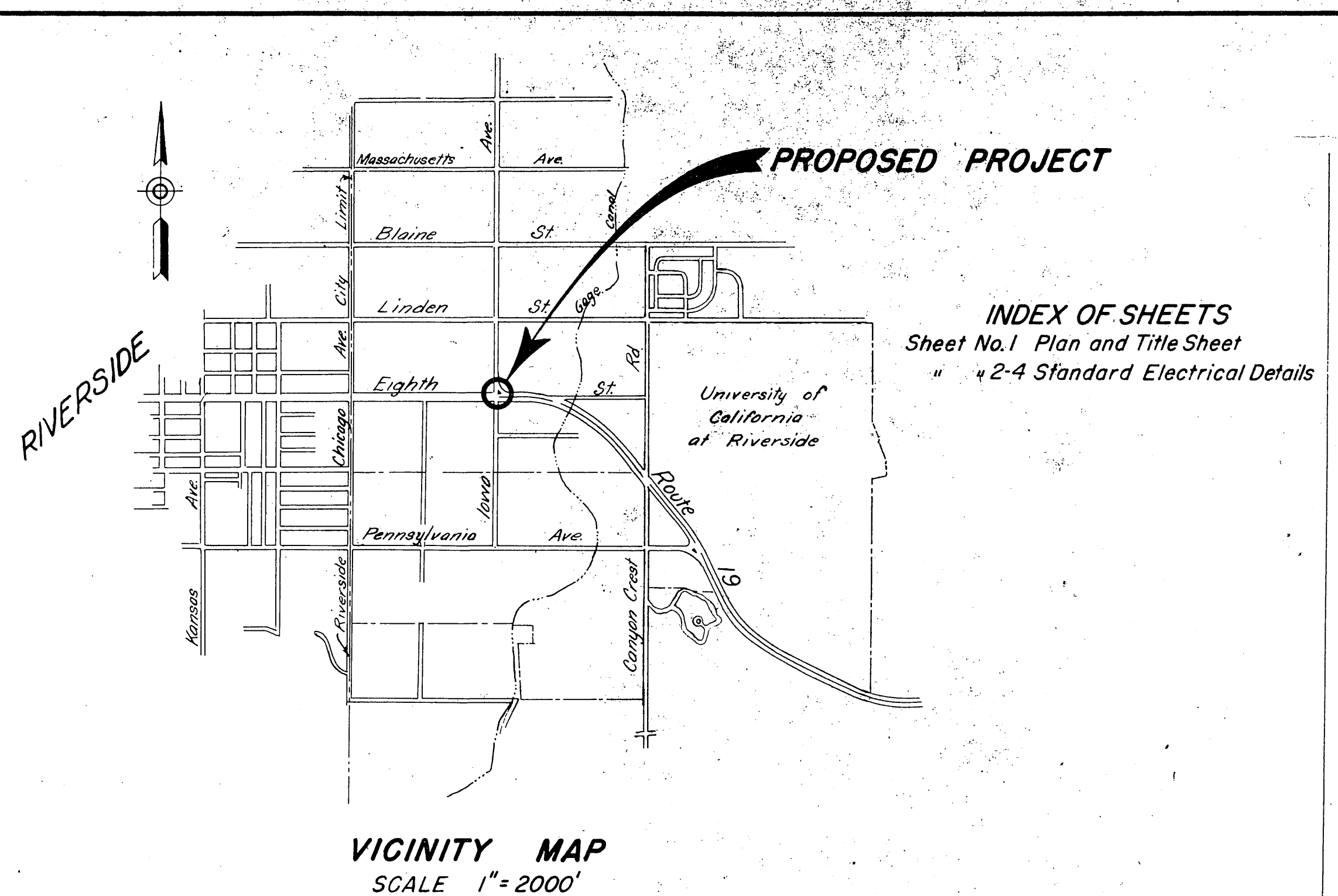
W. L. G. ...
DISTRICT ENGINEER

G. M. Webb
APPROVED

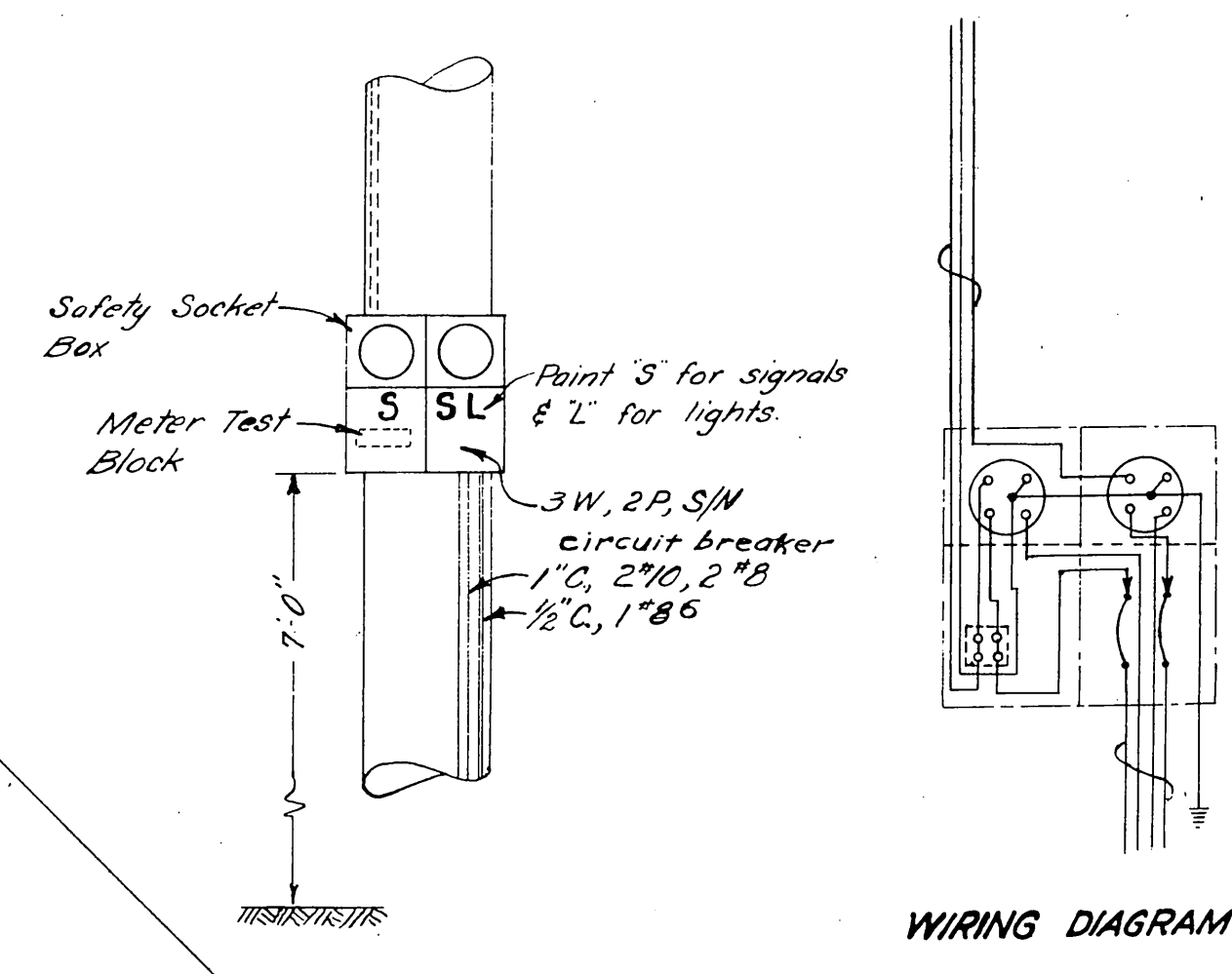
November 9, 1953
G. T. McCoy
State Highway Engineer

By *J. M. Fuller*
Deputy State Highway Engineer
Civil Engineer License No. 3933

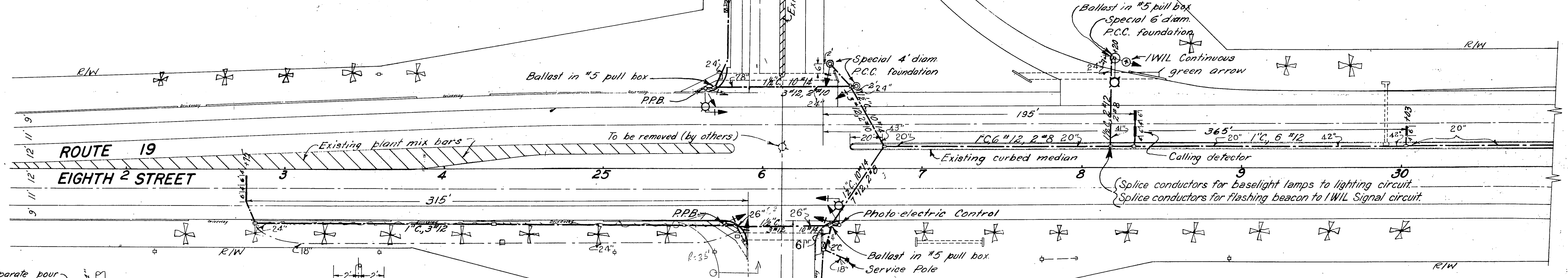
Breaker Rating
Lights - 20 Amp.
Signals - 15 Amp.



INDEX OF SHEETS
Sheet No. 1 Plan and Title Sheet
" 2-4 Standard Electrical Details

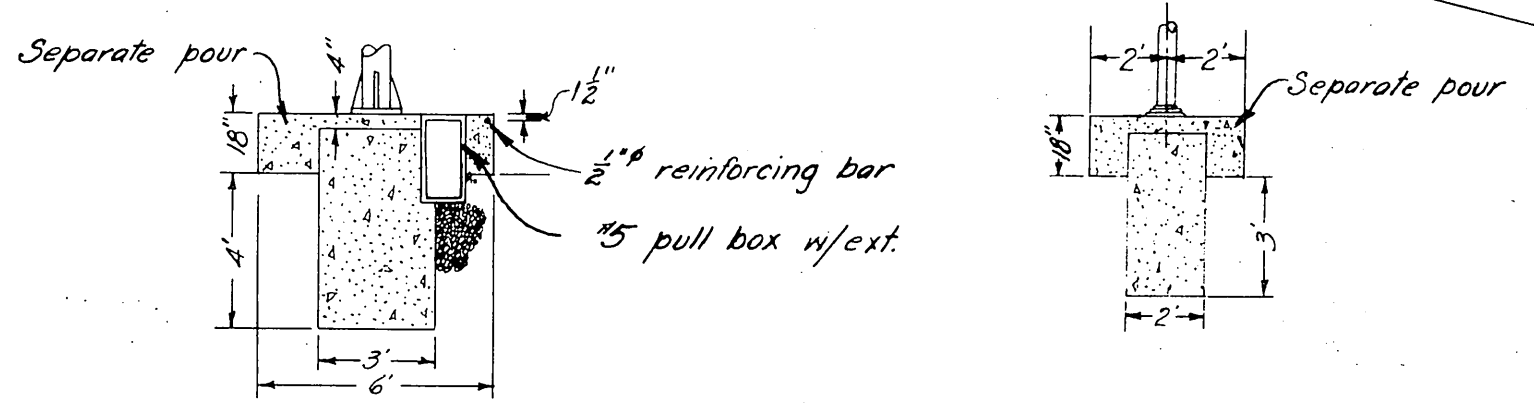


WIRING DIAGRAM



SERVICE DETAILS

Dashed lines indicate installation by Utility
NOT TO SCALE



DETAILS OF SPECIAL FOUNDATIONS
Scale 1" = 5'

Note: Install separate hot lead (#12 AWG) for IWIL Signal and Flasher circuit.

Note: Arrowed figures denote depth of Conduit

AS BUILT

CORRECTIONS BY *Red Hart*
DATE *6-2-54*

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
TRAFFIC SIGNALS & HIGHWAY LIGHTING
IN RIVERSIDE COUNTY
EIGHTH STREET AT IOWA AVENUE
SCALE 1" = 40' AUGUST, 1953

Install 2 flashing beacons, one in median strip and one 36' left of median curb at Sts. 36+15

13

8-53
17E
8-53

2418

X-133