DRAWING NUMBER
OSO @ ALTURA
1 OF 4

DRAWING NUMBER
030.1

DRAWING NUMBER

DRAWING NUMBER

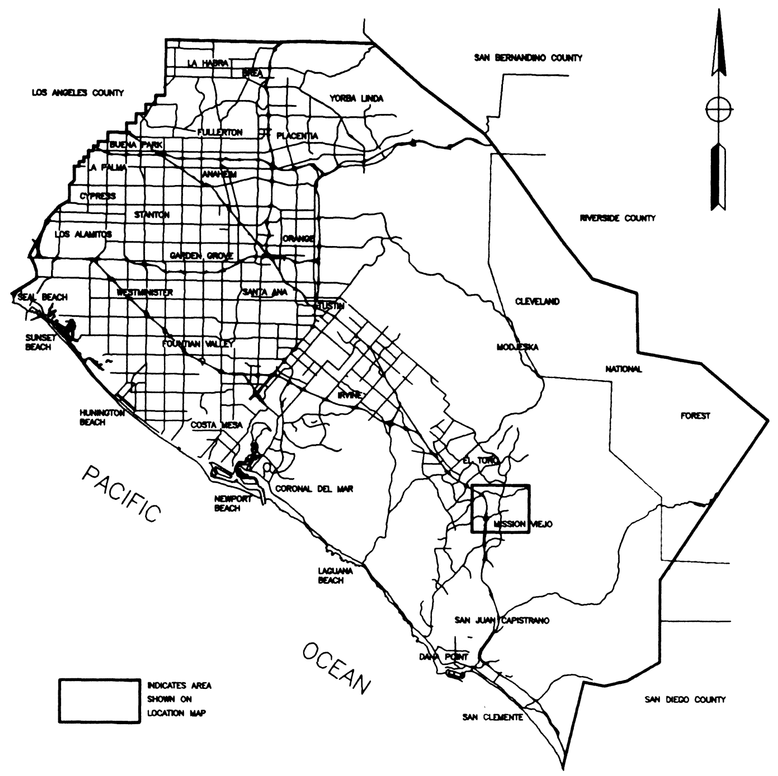
# ORANGE COUNTY
# ENVIRONMENTAL MANAGEMENT AGENCY

SANTA ANA, CALIFORNIA

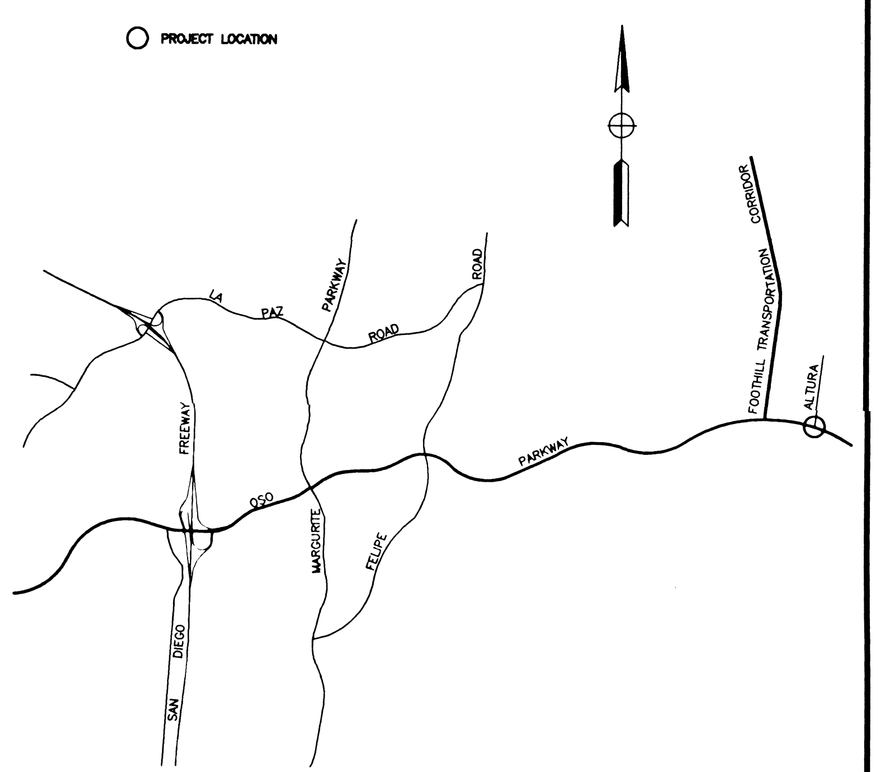
M. RUANE, DIRECTOR

BLOCK NO. 5258 5259 MODULE: 19&29 10&11

## PLANS FOR CONSTRUCTION OF A TRAFFIC SIGNAL AT OSO PARKWAY & ALTURA




**VICINITY MAP**




**LOCATION MAP**

## INDEX OF SHEETS


| SHEET | DESCRIPTION |
|---|---|
| 1 | TITLE SHEET |
| 2 | OSO PARKWAY AT ALTURA SIGNAL PLAN |
| 3 | DETAIL SHEET |
| 4 | OSO PARKWAY SIGNING & STRIPING PLAN |


| UTILITY OWNER | CONTACT | PHONE NO. |
|---|---|---|
| Pacific Bell | Bill Carpenter | (714) 259-4455 |
| The Gas Company | Charlie Gilbert | (714) 634-3215 |
| Southern California Edison Co. | Gary Bullard | (714) 458-4419 |
| Santa Margarita Water District | Dia Badir | (714) 582-2330 |
| Dimension Cable | Mickey Miller | (714) 240-8828 |
| USA | | 1(800) 422-4133 |

**BENCH MARK:**

**BASIS OF BEARING:**

[redacted]

| NO. | DESCRIPTION | SHT. | APPROVED | DATE |
|---|---|---|---|---|
| 1 | REPLACED WITH NEW SHEET 2 & 4. ADDED INTERIM STAGE FOR TRAFFIC SIGNAL AND SIGNING AND STRIPING PLAN | 2 & 4 | P. Stanton | 12/20/95 |

**REVISIONS**

**PREPARED FOR**

COTO DE CAZA, LTD.
23333 AVENIDA LA CAZA
COTO DE CAZA, CA. 92679

**COUNTY OF ORANGE**
**E.M.A./TRAFFIC ENGINEERING DIVISION**

THIS PLAN IS SIGNED BY E.M.A./T.E.D. FOR CONCEPT AND ADHERENCE TO COUNTY TRAFFIC SIGNAL, SIGNING AND STRIPING STANDARDS AND REQUIRMENTS ONLY. E.M.A./T.E.D. IS NOT RESPONSIBLE FOR DESIGN, ASSUMPTIONS OR ACCURACY.

APPROVED _____ R.C.E. _____ DATE 6/30/95

**COUNTY OF ORANGE**
**E.M.A. REGULATION**

THIS PLAN IS SIGNED BY O.C.E.M.A. REGULATION FOR CONCEPT AND ADHERENCE TO COUNTY STANDARDS AND REQUIRMENTS ONLY. O.C.E.M.A. REGULATION IS NOT RESPONSIBLE FOR DESIGN, ASSUPMTIONS AND ACCURACY.

APPROVED P. Stanton R.C.E. _____ DATE 6/30/95

**ENCROACHMENT PERMIT NO.** 94-13418RC
94-13419RU

EMA APPROVED PLANS DO NOT RELIEVE CONTRACTOR/DEVELOPER FROM REPSONSIBILITY TO OBTAIN PUBLIC PROPERTY PERMIT WHICH SHALL BE AVAILABLE ON THE JOB AT ALL TIMES WORK IS BEING ACCOMPLISHED IN PUBLIC RIGHT OF WAY.

**PREPARED BY**

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 CORPORATE DRIVE, SUITE 122
COSTA MESA, CA 92626
TEL: (714) 641-1587

REGISTERED PROFESSIONAL ENGINEER — YU CHU — No. 048921 — Exp. 09/30/96 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF:
Yu Chu 06/28/95
NAME RCE No DATE
EXP. DATE 09/30/96 048921

REGISTERED PROFESSIONAL ENGINEER — Yu Chu — 9/30/96 — STATE OF CALIFORNIA

W.O. NO. _____

SHEET 1 OF 4

DR 14 (15975)

DRAWING NUMBER
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR
DRAWING NUMBER
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR
DRAWING NUMBER
030.2
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR
DRAWING NUMBER
ALTURA
4
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR

## △ CONDUCTOR SCHEDULE

| PHASE | CIRCUIT | CONDUIT SIZE AND RUN △1 | △2 | △3 | △4 | △5 | △6 | △7 | △8 |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | | | | | | | | |
| | #12 | | | | | | | | |
| 1 | VEH SIGNAL | | | | 3 | | | | 3 |
| 2 | VEH SIGNAL | 3 | 3 | 3 | 3 | | | | 3 |
| 3 | VEH SIGNAL | | | | | | | | |
| 4 | VEH SIGNAL | 3 | 3 | 3 | 3 | | | | 3 |
| 5 | VEH SIGNAL | | | | | | | | |
| 6 | VEH SIGNAL | 3 | 3 | 3 | 3 | | | | 3 |
| 7 | VEH SIGNAL | | | | | | | | |
| 8 | VEH SIGNAL | | | | 3 | | | | 3 |
| 2 | PED SIGNAL | 2 | 2 | 2 | 2 | | | | 2 |
| 4 | PED SIGNAL | | | | 2 | | | | 2 |
| 6 | PED SIGNAL | | | | | 2 | 2 | 2 | 4 |
| 8 | PED SIGNAL | 2 | 2 | 2 | 2 | | | | 4 |
| 2 | PPB | 1 | 1 | 1 | 1 | | | | 1 |
| 4 | PPB | | | | 1 | | | | 1 |
| 6 | PPB | | | | | 1 | 1 | 1 | 2 |
| 8 | PPB | | | | | 1 | 1 | 1 | 2 |
| | PPB COMMON | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | SPARES | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 |
| | TOTAL #14 | 13 | 19 | 21 | 25 | 10 | 16 | 18 | 48 |
| | ISNS | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 6 |
| | LUMINAIRES | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 6 |
| | PHOTOCELL | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 6 |
| | SIGNAL COM | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | TOTAL #10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 12 |
| | SERVICE | | | | | | | | 2 |
| #8 | LOOP | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | LOOP | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 6 |
| | LOOP | 3 | 3 | 3 | 3 | | | | |
| | LOOP | 4 | 4 | 4 | 4 | 1 | 2 | 2 | 4 |
| | LOOP | 5 | 5 | 5 | 5 | | | | |
| | LOOP | 6 | 6 | 6 | 6 | 2 | 2 | 1 | 3 |
| | LOOP | 7 | 7 | 7 | 7 | | | | |
| | LOOP | 8 | 8 | 8 | 8 | 3 | 3 | 3 | 6 |
| | TOTAL DLC | | | | | | | | |
| | EVP | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| | CONDUIT SIZE | 2" | 2" | 2" | 3" | 2" | 3" | 2" 12-3" | 2" |

## ⊠ INDUCTIVE LOOP DETECTOR SCHEDULE

| SENSOR UNIT | CHANNEL | DETECTOR |
|---|---|---|
| #1 | 1 [1] | 1–Ø5 |
| | 2 (1) [2] | 1–Ø2 |
| #2 | 1 (2) [3] | 2–Ø2 |
| | 2 | 3–Ø2 |
| #3 | 1 [4] | 1–Ø1 |
| | 2 (3) [5] | 1–Ø6 |
| #4 | 1 (4) [6] | 2–Ø6 |
| | 2 | 3–Ø6 |
| #5 | 1 (5) [7] | 1–Ø4 |
| | 2 (6) [8] | 2–Ø4 |
| #6 | 1 (7) [9] | 1–Ø8 |
| | 2 (8) [10] | 2–Ø8 |
| #7 | 1 | FUTURE EVP |
| | 2 | FUTURE EVP |

⊠ DETECTOR LOOP LOCATIONS SHALL BE APPROVED BY ENGINEER IN FIELD PRIOR TO INSTALLATION. ALL DETECTOR UNITS SHALL BE RACK MOUNTED. DUAL CHANNEL DUAL OUTPUT PER CHANNEL WITH INTERVAL COLORGATED EXTENSION AND DELAY CAPABILITY. OUTPUT "A" SHALL BE TIMED. OUTPUT "B" SHALL BE PRESENCE MODE FOR SYSTEM SAMPLING ONLY.

(#) SYSTEM SAMPLER NUMBER.

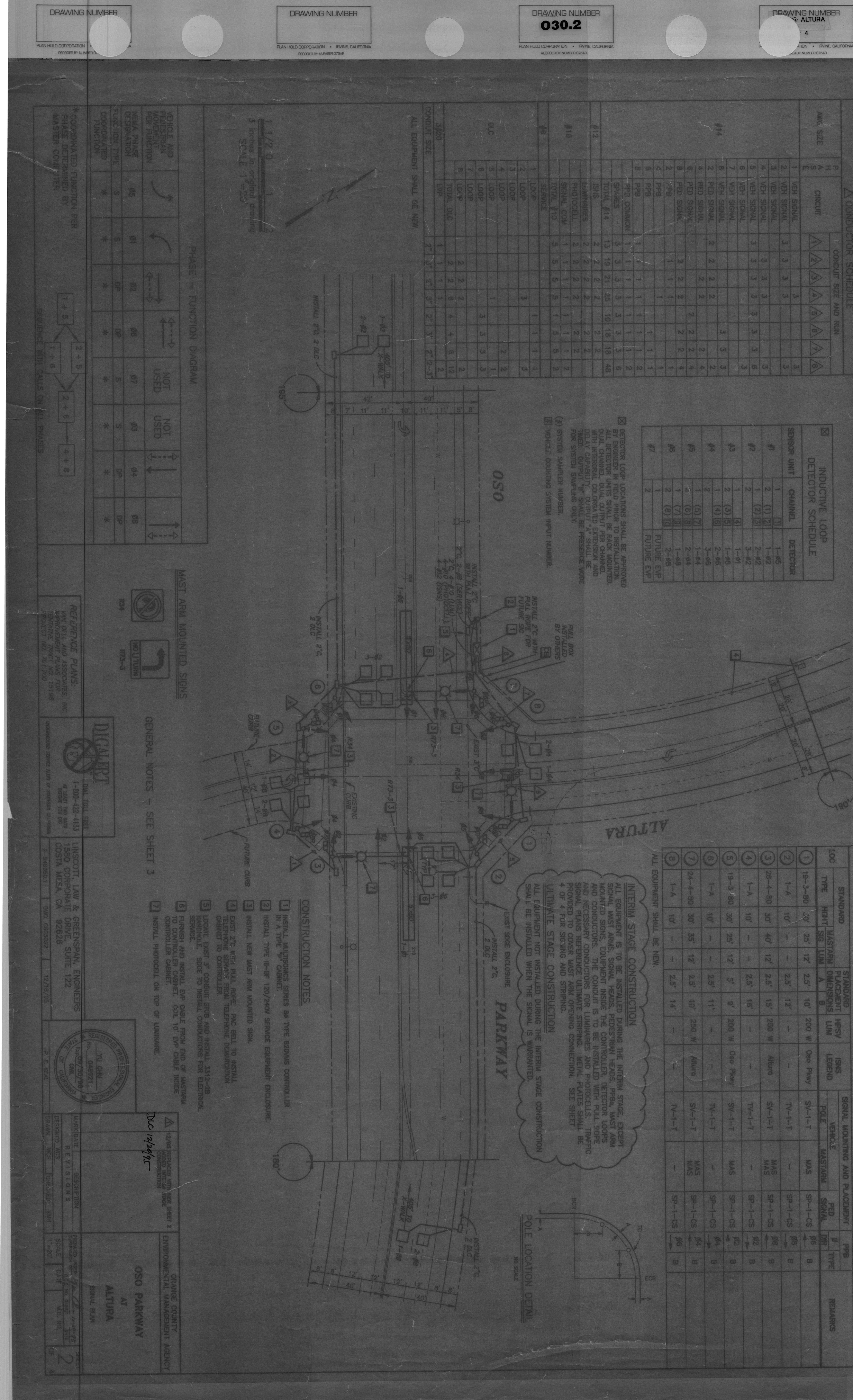
[#] VEHICLE COUNTING SYSTEM INPUT NUMBER.

ALL EQUIPMENT SHALL BE NEW.

## ○ EQUIPMENT SCHEDULE

| LOC | STANDARD TYPE | STANDARD HIGHT | MASTARM SIG | MASTARM LUM | STANDARD PLACEMENT DIMENSIONS A | STANDARD PLACEMENT DIMENSIONS B | HPSV LUM | ISNS LEGEND | SIGNAL MOUNTING AND PLACEMENT VEHICLE POLE | SIGNAL MOUNTING AND PLACEMENT VEHICLE MASTARM | SIGNAL MOUNTING AND PLACEMENT PED SIGNAL | PPB Ø DIR | PPB TYPE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ① | 19–3–80 | 30' | 25' | 12' | 2.5' | 10' | 200 W | Oso Pkwy | SV–1–T | MAS | SP–1–CS | Ø6 ← | B | |
| ② | 1–A | 10' | – | – | 2.5' | 12' | – | – | TV–1–T | – | SP–1–CS | Ø6 ↓ | B | |
| ③ | 26–4–80 | 30' | 40' | 12' | 2.5' | 15' | 250 W | Alturo | SV–1–T | MAS MAS | SP–1–CS | Ø8 ← | B | |
| ④ | 1–A | 10' | – | – | 2.5' | 16' | – | – | TV–1–T | – | SP–1–CS | Ø2 ↓ | B | |
| ⑤ | 19–3–80 | 30' | 25' | 12' | 5' | 9' | 200 W | Oso Pkwy | SV–1–T | MAS | SP–1–CS | Ø2 ↑ | B | |
| ⑥ | 1–A | 10' | – | – | 2.5' | 11' | – | – | TV–1–T | – | SP–1–CS | Ø4 → | B | |
| ⑦ | 24–4–80 | 30' | 35' | 12' | 2.5' | 10' | 250 W | Alturo | SV–1–T | MAS MAS | SP–1–CS | Ø4 ↑ | B | |
| ⑧ | 1–A | 10' | – | – | 2.5' | 14' | – | – | TV–1–T | – | SP–1–CS | Ø6 ↓ | B | |

ALL EQUIPMENT SHALL BE NEW.




## INTERIM STAGE CONSTRUCTION

ALL EQUIPMENT IS TO BE INSTALLED DURING THE INTERIM STAGE, EXCEPT SIGNAL MAST ARMS, SIGNAL HEADS, PEDESTRIAN HEADS, PPBs, MAST ARM MOUNTED SIGNS, EQUIPMENT INSIDE THE CONTROLLER, DETECTOR LOOPS AND CONDUCTORS. THE CONDUIT IS TO BE INSTALLED WITH PULL ROPE AND NECESSARY CONDUCTORS FOR LUMINAIRES AND PHOTOCELLS. TRAFFIC SIGNAL PLANS REFERENCE ULTIMATE STRIPING. METAL PLATES SHALL BE PROVIDED TO COVER MAST ARM OPENING CONNECTION. SEE SHEET 4 OF 4 FOR SIGNING AND STRIPING.

## ULTIMATE STAGE CONSTRUCTION

ALL EQUIPMENT NOT INSTALLED DURING THE INTERIM STAGE, EXCEPT SIGNAL MAST ARMS, SIGNAL HEADS, PEDESTRIAN HEADS, PPBs, MAST ARM MOUNTED SIGNS, EQUIPMENT INSIDE THE CONTROLLER, DETECTOR LOOPS AND CONDUCTORS SHALL BE INSTALLED WITH PULL ROPE AND NECESSARY CONDUCTORS FOR LUMINAIRES AND PHOTOCELLS. TRAFFIC SHALL BE INSTALLED WHEN THE SIGNAL IS WARRANTED. METAL PLATES SHALL BE PROVIDED TO COVER MAST ARM OPENING CONNECTION. SEE SHEET 4 OF 4 FOR SIGNING AND STRIPING.

## PARKWAY

## POLE LOCATION DETAIL

NO SCALE




## PHASE – FUNCTION DIAGRAM

| VEHICLE AND PEDESTRIAN MOVEMENT PER FUNCTION | | | | | |
|---|---|---|---|---|---|
| NEMA PHASE DESIGNATION | Ø5 | Ø1 | Ø2 | Ø6 | NOT USED |
| FUNCTION TYPE | S | S | DP | DP | NOT USED |
| COORDINATED FUNCTION | * | * | * | * | * |
| | Ø7 | Ø3 | Ø4 | Ø8 | |
| | S | S | DP | DP | |
| | * | * | * | * | |

* COORDINATED FUNCTION PER PHASE DETERMINED BY MASTER CONTROLLER

SEQUENCE WITH CALLS ON ALL PHASES

1 + 5 | 2 + 5 | 1 + 6 | 2 + 6 | 4 + 8

## MAST ARM MOUNTED SIGNS




## GENERAL NOTES – SEE SHEET 3

## CONSTRUCTION NOTES

1. INSTALL MULTISONICS SERIES 8Ø TYPE 820VMS CONTROLLER IN A TYPE "P" CABINET.
2. INSTALL TYPE III–BF 120/240V SERVICE EQUIPMENT ENCLOSURE.
3. INSTALL NEW MAST ARM MOUNTED SIGN.
4. EXIST 2"C WITH PULL ROPE. PAC BELL TO INSTALL TELEPHONE SERVICE FROM TELEPHONE DEMARCATION CABINET TO CONTROLLER.
5. LOCATE EXIST 3" CONDUIT STUB AND INSTALL 3312–2B HANDHOLE. SDGE TO INSTALL CONDUCTORS FOR ELECTRICAL SERVICE.
6. FURNISH AND INSTALL EVP CABLE FROM END OF MASTARM TO CONTROLLER CABINET. COIL 10' EVP CABLE INSIDE CONTROLLER CABINET.
7. INSTALL PHOTOCELL ON TOP OF LUMINAIRE.

DIG ALERT
DIAL TOLL FREE
1–800–422–4133
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REFERENCE PLANS:
VAN DELL AND ASSOCIATES, INC.
IMPROVEMENT PLANS FOR
TENTATIVE TRACT NO. 13198
PROJECT NO. TO1,700

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 CORPORATE DRIVE, SUITE 122
COSTA MESA, CA 92626
2–940050.1 | DWG. C9305S2 | 12/18/95

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
YU CHU
No. 048921
CIVIL
Exp 09/30/96

| MARK | DATE | DESCRIPTION |
|---|---|---|
| △ | 12/95 | REVISED WITH NEW SHEET 2 ADDED INTERIM CONSTRUCTION STAGE |

DJC 12/20/95

DESIGNED WCS | DRAWN WCS | CHECKED KMH

PREPARED UNDER SUPERVISION OF [illegible] RCE NO. 048921 | 12-20-95 DATE

SCALE 1"=20' | DATE | W.O. NO.

ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY

OSO PARKWAY AT ALTURA

SIGNAL PLAN

SHEET 2 OF 4

DRAWING NUMBER

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR

DRAWING NUMBER

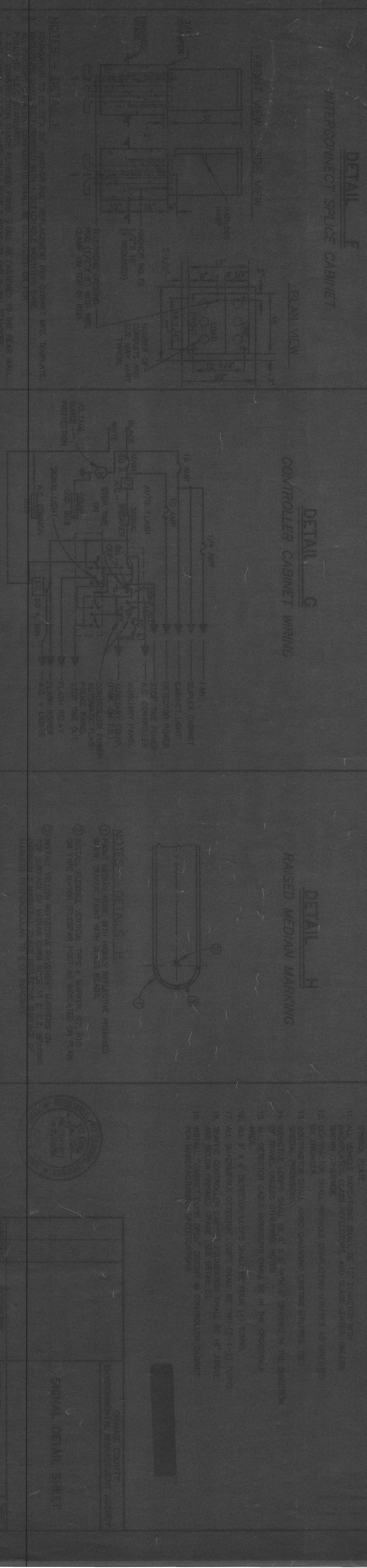
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR

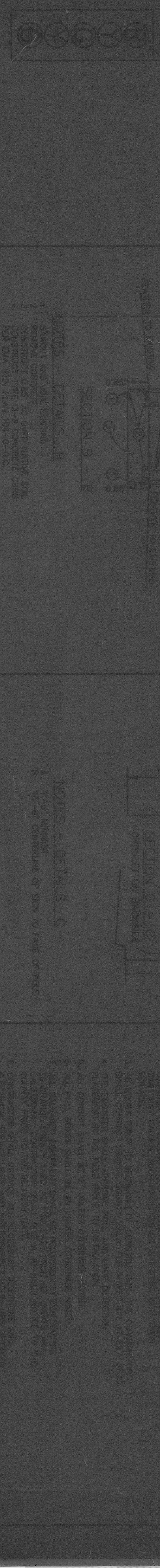
DRAWING NUMBER
**030.3**

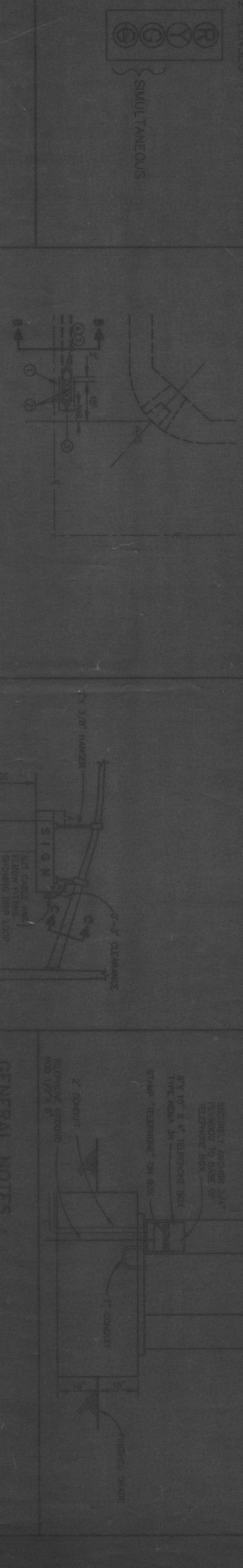
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR

DRAWING NUMBER
SO @ ALTURA
OF 4

RATION • IRVINE, CALIFORNIA
DER BY NUMBER 075AR



DRAWING NUMBER
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR

DRAWING NUMBER
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR

DRAWING NUMBER
030.4
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR

DRAWING NUMBER
@ ALTURA
F 4
RATION • IRVINE, CALIFORNIA
ORDER BY NUMBER 075AR

## CONSTRUCTION NOTES

1. INSTALL 12" SOLID WHITE CROSSWALK OR LIMIT LINE.
2. INSTALL DOUBLE YELLOW LINE PER CALTRANS DETAIL 22.
3. INSTALL CHANNELIZATION LINE PER CALTRANS DETAIL 38.
4. INSTALL TYPE IV (L) ARROW PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24A.
5. INSTALL PAVEMENT MARKING (AS SHOWN) PER CALTRANS STANDARD PLAN A24A AND A24D.
6. REMOVE SIGN PANEL AND POST.
7. REMOVE CONFLICTING STRIPING, BY SANDBLASTING.
8. REMOVE CONFLICTING MARKING, BY SANDBLASTING.
9. INSTALL 50' OF 4" SOLID WHITE LANE LINE.
10. INSTALL SIGN PANEL AND POST AS INDICATED PER OCEMA STD. PLAN NO. 1409.
11. INSTALL SIGN PANEL AS INDICATED PER OCEMA STD. PLAN NO. 1409.
12. INSTALL SIGN PANEL AS INDICATED ON EXISTING STREET LIGHT POLE.
13. DESIGN PER OCEMA STD. PLAN NO. 1408.
14. INSTALL STREET NAME SIGN AS INDICATED. DESIGN PER OCEMA STD. PLAN NO. 1407.

15 ALL STRIPING AND PAVEMENT TEXT/MARKING SHALL BE 2-COAT PAINT.

## NEW SIGNS ON THIS SHEET

R81-5.1 W7A (L) W41 W56

## DETAIL "A"

BIKE LANE — INTERSECTION LINE
TYPICAL 6" WHITE STRIPES 4' IN LENGTH WITH 8' SPACE

INTERSECTION — 8' — 4' — 20' — 6" WHITE LINE

MATCHLINE ABOVE RIGHT

MATCHLINE BELOW LEFT

OSO PARKWAY

ALTURA

SOLANO

EXISTING R81 R26

EXISTING R1

EXISTING R81-5.1

EXISTING SNS "Oso Pkwy" "Altura"

EXISTING "Solano" SIGN

EXISTING "Altura" SIGN

[12] W7A (L) STA 198+00 TO BE INSTALLED DURING INTERIM STAGE

[10] W7A (R) STA 204+40 TO BE INSTALLED DURING INTERIM STAGE

[11] [13] "Solano" SIGN

[10] W56 STA 200+80 TO BE INSTALLED DURING INTERIM STAGE

[5] "SIGNAL"

[5] "AHEAD"

[10] W41 STA 213+49

[11] [13] "Altura" SIGN TO BE INSTALLED DURING INTERIM STAGE

[5] "BIKE LANE"

INSTALL 6" WHITE "A" DASHED PER DETAIL

STOP

"TAKE LANE"

R1

60' OPENING

52' OPENING

100'

50'

STOP

## ULTIMATE SIGNING AND STRIPING

ULTIMATE SIGNING AND STRIPING TO BE INSTALLED WHEN THE TRAFFIC SIGNAL IS WARRANTED.

## INTERIM SIGNING AND STRIPING

INTERIM SIGNING AND STRIPING TO BE INSTALLED WHEN THE SOUTH LEG OF ALTURA IS COMPLETED.

1 1/2 0 1 2
3 inches in original drawing
SCALE 1"=40'

DIGALERT — DIAL TOLL FREE 1-800-422-4133 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REFERENCE PLANS:
VAN DELL AND ASSOCIATES, INC.
IMPROVEMENT PLANS FOR
TENTATIVE TRACT NO. 15198
PROJECT NO. 701.700

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 CORPORATE DRIVE, SUITE 122
COSTA MESA, CA 92626

2-940050.1 | DWG. C60502 | 12/19/95

REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA
No. 048921 — CIVIL — EXP. 06/30/96
YU CHU
P. E. SEAL

| MARK | DATE | DESCRIPTION |
|---|---|---|
| | | REVISIONS |
| 1 | 12/95 | REVISED WITH NEW STREET NAME SIGNS AND INTERIM STRIPING |

DESIGNED REB
DRAWN JMD
CHECKED YC

ORANGE COUNTY
ENVIRONMENTAL MANAGEMENT AGENCY

OSO PARKWAY
STA. 193+45
TO
STA. 213+64
SIGNING AND STRIPING PLAN

SCALE 1"=40' | DATE | THE RECORD WHERE SHOWN HEREON | 2-94-95 DATE | W.O. NO. | JOB NO.

SHEET 4 OF 4