

ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY

SANTA ANA, CALIFORNIA
HIGOSBORNE, DIRECTOR

PLANS FOR CONSTRUCTION OF
AND/OR MODIFICATION OF

TRAFFIC SIGNALS

ON

SEVENTEENTH STREET

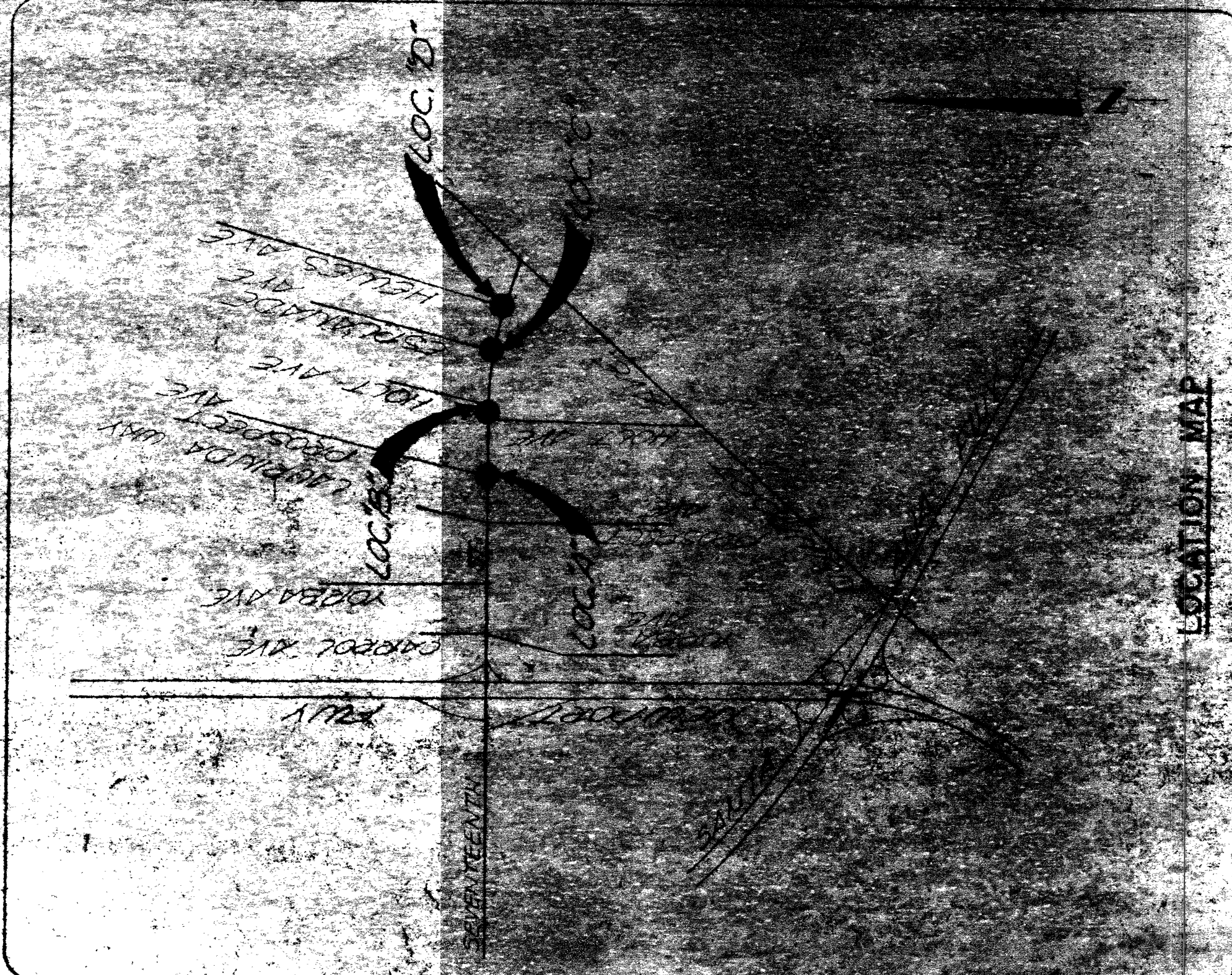
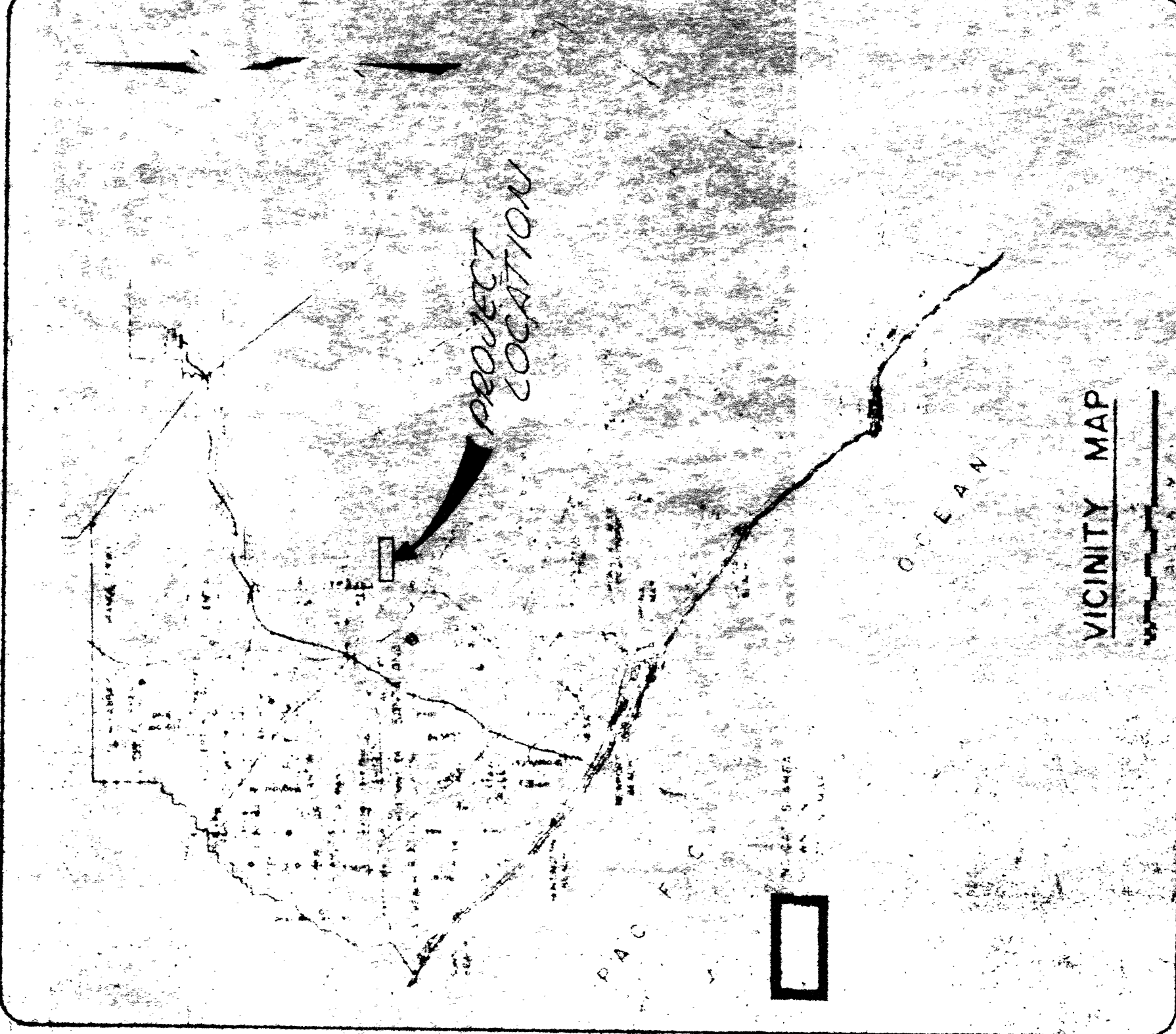
AT

LOC "A" - PROSPECT AVENUE

LOC "B" - HOLT AVENUE

LOC "C" - ESPLANADE AVENUE

LOC "D" - HEWES AVENUE



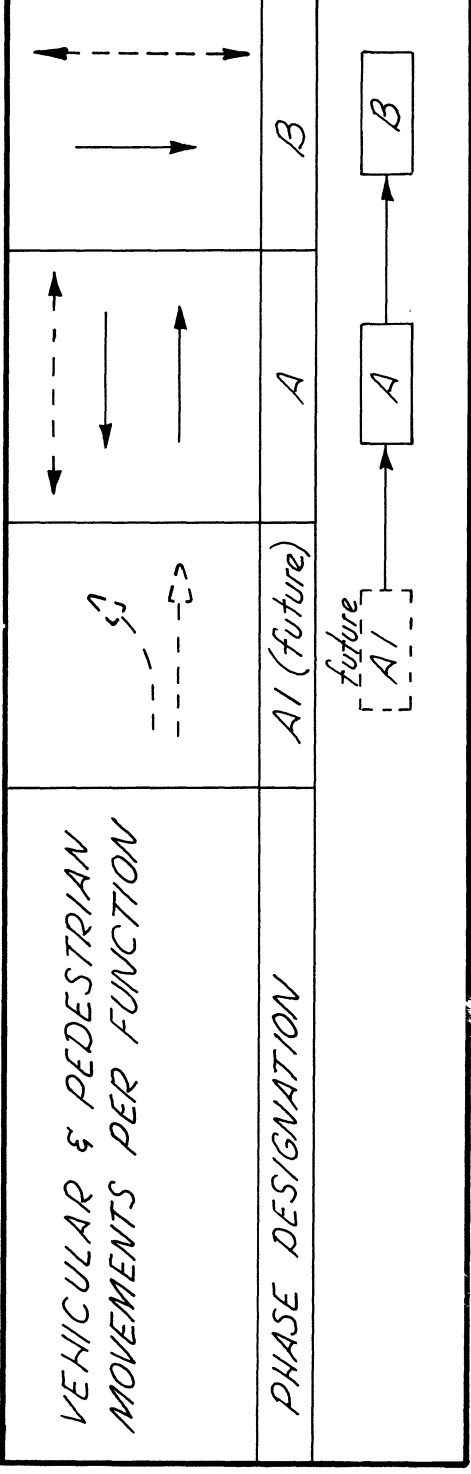
SHEET	INDEX OF SHEETS	DESCRIPTION
1	Title Sheet	
2	Traffic Signal Modification Plan (Location "A")	
3	Traffic Signal Modification Plan (Location "B")	
4	Traffic Signal Plan (Location "C")	
5	Traffic Signal Plan (Location "D")	
6	Special Detail Sheet - Signals	

UTILITY	PHONE NO.
SO. CAL. EDISON CO.	JOHN MILLER 835-3533
PACIFIC TELEPHONE	DOLORES REED 557-1152
TUSTIN WATER WORKS	EARL BOWENHORST 554-4370
SO. CAL. GAS CO.	LEE WRIGHT 554-0211
O.C. SANITATION DIST.	NICK DI BENEDETTO 540-2910
U.S. NAVY FUEL DEPT.	JERRY FAIR 11-225-6694
SAN DIEGO PIPELINE	WAYNE PERKINS 539-5201

BENCH MARK	BASIS OF BEARING
DATE	APPROVED
DWG. NO.	SHEET 1 OF 6

DR.#17 (12456)

*PHASE - FUNCTION - SEQUENCE
DIAGRAM*



POLE TYPE	LENGTH	SIGNAL M. A.	H. P. SQ. VAR. M. A.	WATTS M. A.	SIGNAL MOUNTING VEH.	M. A.	PED.	PED. PUSH BUTTON PHASE	POLE QUAD.	E	B	C	N	* POLE LOCATION	ILLUMINATED SIGN MESSAGE (obj face)
③ 1A	10'	—	—	—	TV-2-T	—	—	—	—	—	—	5'	—	—	—
② 1T	28'-6"	20'	12'	250	SP-2-T	MAS	SP-2-T	B	West	—	—	5'	—	—	E splanade
① 1A	10'	—	—	—	TV-1	—	SP-2-T	B	West	—	—	15'	25'	—	—
④ 19	30'-0"	25'	12'	250	SV-1-T	MAS	SP-1-T	—	—	—	15'	—	25'	—	E splanade

+ /INSTALL R49 SIGN

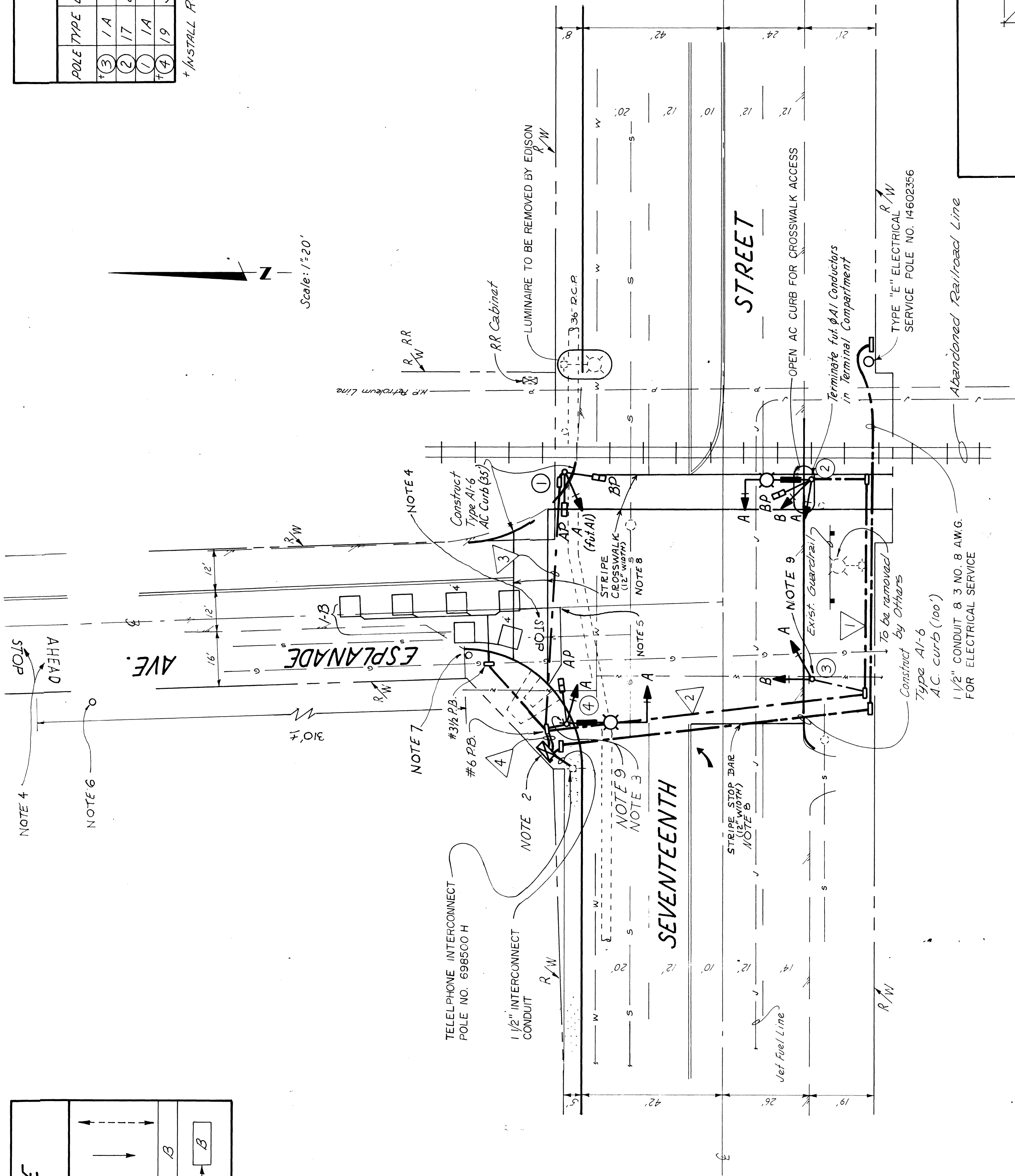
- * See Detail, Sheet 6 of 6
- See Detail #1, Sheet 6 of 6

INDUCTIVE LOOP DETECTOR SCHEDULE

SENSOR UNIT	CHANNEL	DETECTOR
# 1	1	1-B

CONDUCTOR SCHEDULE

AWG	CIRCUIT				
#14	A	3	3	—	3
	B	3	3	—	3
	A (Fast ALI)	3	3	3	3
	A Ped.	—	—	2	3
	B Ped.	2	2	2	4
	B P.P.B.	1	1	1	2
	Illum. St. Sign	1	1	—	1
	Spare	3	3	3	6
	TOTAL	16	16	11	24
	Signal & Sign Comm.	1	1	1	2
#10	Luminaire	2	2	—	2
	TOTAL	3	3	1	4
	I-B	—	—	—	1
	TOTAL	—	—	—	1
Loop Det. Cable 2 # 12					
Conduit Size		2"	2"	2"	2 3/4"

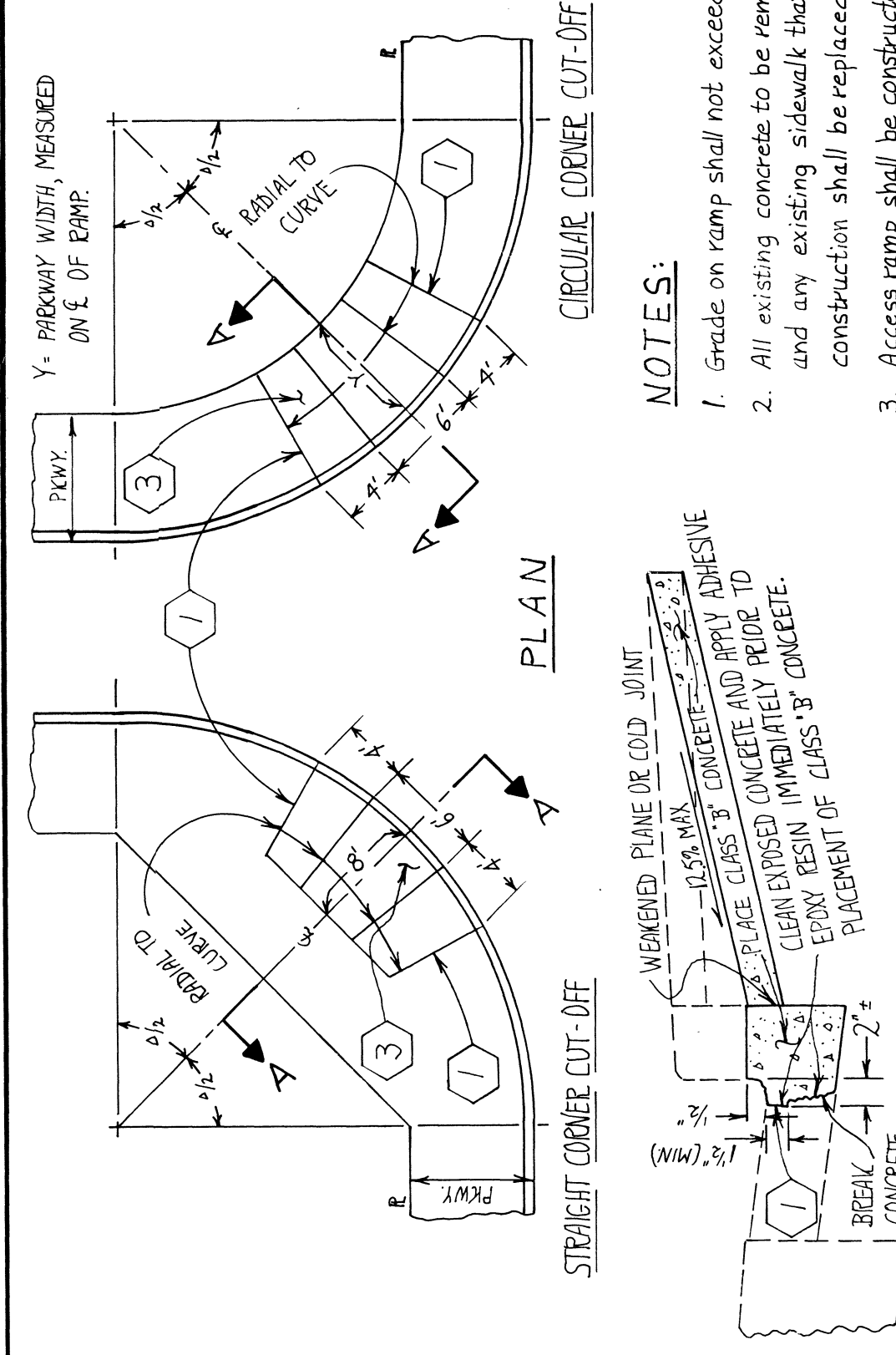


NOTES THIS SHEET:

1. FOR GENERAL NOTES SEE SHEET 6 OF 6.
2. INSTALL A COUNTY FURNISHED TYPE 26 CONTROLLER & CABINET OR EQUIVALENT. CIRCUITRY SHALL BE PROVIDED FOR ACTUATED Ø8 VEHICLES & PEDESTRIANS.
INSTALL A COUNTY FURNISHED RADIO RECEIVER. (SEE SPECIAL PROVISIONS).
3. INSTALL RG-9/U MOTOROLA RADIO ANTENNA CABLE, OR EQUIVALENT, AND COUNTY FURNISHED ANTENNA.
4. REMOVE PAINTED STENCIL
5. REMOVE PAINTED TRAFFIC STRIPE - 12" STRIPE STOP BAR (30xL.F.) AND 4" STRIPE 6 (55±L.F.)
6. REMOVE ROADSIDE SIGN - STOP AHEAD SIGN (W/IT)
7. REMOVE ROADSIDE SIGN - STOP SIGN (R1)
8. PAINT TRAFFIC STRIPE
9. INSTALL ROADSIDE SIGN - R49

LOCATION "C"

ACCESS RAMP DETAIL



SECTION A-A
NO SCALE

NOTES:

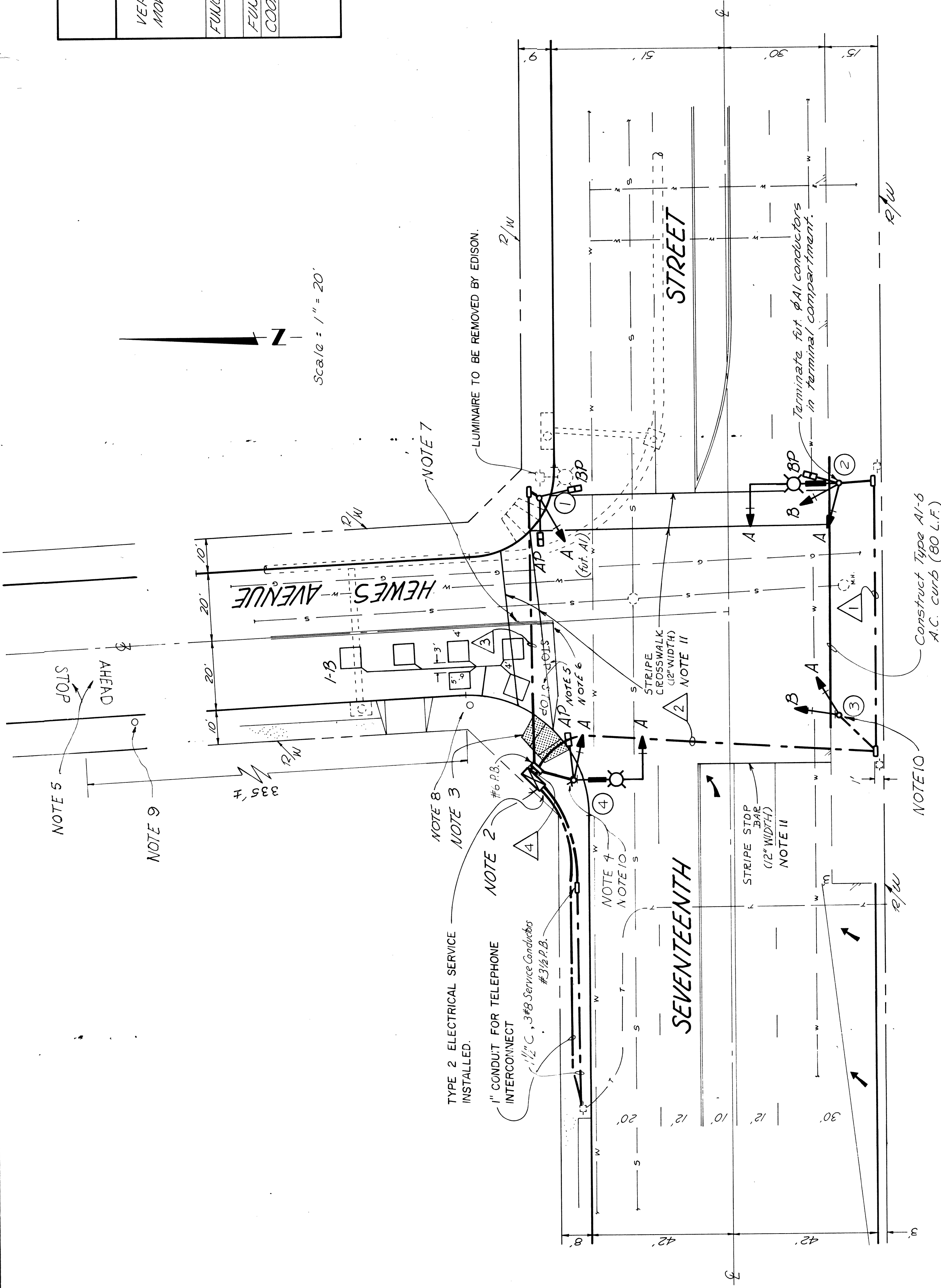
1. Grade on ramp shall not exceed 12.5% at cantline.
2. All existing concrete to be removed shall be sawcut as directed and any existing sidewalk that is damaged or removed during construction shall be replaced with 4" thick class "B" P.C.C.
3. Access ramp shall be constructed with 4" thick P.C.C.
4. Ramps located other than shown above shall be approved by the engineer.
5. See Std. Plan 111 for sidewalk return details.
6. Sawcuts shall not be made at flowline.

PREPARED UNDER THE SUPERVISION OF
Richard Wilbur Redburn DATE *1-4-77*
HILBERT WILLIAM DICKSON R.C.E. No. 19417

 **Herman Kimmel and Associates, Inc.**
TRAFFIC ENGINEERING CONSULTANTS
4252 CANNON DRIVE, SUITE 200, SAN RAFAEL, CALIF. 94903
(714) 245-2814

APPROVED	TRAFFIC SIGNAL PLAN
<i>Robert W. Fisher</i>	
RCE 18169	
DATE 1-24-77	SEVENTEENTH ST. @ ESPLANADE AVE.
DESIGNED <i>W.S.</i>	ORANGE COUNTY
DRAWN <i>W.S.</i>	EM. A.
CHECKED <i>W.S.</i>	
DATE <i>Mar '76</i>	SHEET 4 OF 6

CONDUCTOR SCHEDULE				
AWG	CIRCUIT	1	2	3
#14	A	3	3	6
	B	3	3	3
	AI (future)	3	3	6
	A Ped.	—	2	2
	B Ped.	2	2	4
	B P.P.B.	1	1	1
	P.P.B. Common	—	1	1
	Illuminated Sign	1	1	2
	Spares	3	3	3
	TOTAL	16	17	29
#10	Luminaires	2	2	4
	Signal & Sign Comm	1	1	2
	TOTAL	3	3	6
LOOP DET.	I-B	—	—	1
CABLE	Conduit Size	2"	2"	2" 2'3"



Scale: 1" = 20'

PHASE - FUNCTION - SEQUENCE
DIAGRAM

VEHICULAR & PEDESTRIAN MOVEMENTS PER FUNCTION	PHASE	SEQUENCE
VEHICULAR & PEDESTRIAN MOVEMENTS PER FUNCTION	AI (future)	A
FUNCTION PHASE DESIGNATION	AI (future)	A
FUNCTION TYPE	FIXED	ACT-FIXED
COORDINATED FUNCTION	FIXED	ACT-FIXED

INDUCTIVE LOOP
DETECTOR SCHEDULE

SENSOR UNIT	CHANNEL	DETECTOR
#1	1	I-B

NOTES THIS SHEET :

- FOR GENERAL NOTES SEE SHEET 6 OF 6.
- INSTALL A COUNTY FURNISHED TYPE 26 CONTROLLER AND CABINET OR EQUIVALENT. CIRCUITRY SHALL BE PROVIDED FOR ACTUATED PB VEHICLES AND PEDESTRIANS. INSTALL COUNTY FURNISHED MOTOROLA RADIO RECEIVER. (SEE SPECIAL PROVISIONS).
- CONSTRUCT SIDEWALK ACCESS RAMP PER ORANGE COUNTY STANDARD PLAN # III AND ACCESS RAMP DETAIL ON SHEET 4.
- INSTALL RG-9/U MOTOROLA RADIO ANTENNA CABLE, OR EQUIVALENT, AND COUNTY FURNISHED ANTENNA.
- REMOVE PAINTED STENCIL
- REMOVE PAINTED TRAFFIC STRIPE - 12" STRIPE STOP BAR (35±LF)
- REMOVE PAINTED TRAFFIC STRIPE - 4" STRIPE 4' (15±LF)
- REMOVE ROADSIDE SIGN - STOP SIGN (R1)
- REMOVE ROADSIDE SIGN - STOP AHEAD SIGN (WH-17)
- INSTALL ROADSIDE SIGN - R49
- PAINT TRAFFIC STRIPE

POLE SCHEDULE

POLE TYPE		LENGTH	SIGNAL		H.P. S.D. MAP		SIGNAL MOUNTING		REQ. PUSH BUTTON		POLE LOCATION				ILLUMINATED SIGN	
			M. A.	M. A.	WATTS		VEH.	M. A.	PED.	PHASE	POLE QUAD	E	B	C	N	MESSAGE (dial face)
③	1-A	10'	—	—	—	—	TV-2-T	—	—	—	—	—	—	—	5'	—
②	1-A	30'	25'	12'	250	SP-2-T	MAS	SP-1-T	B	West	B	—	—	—	5'	Hewes
①	1-A	10'	—	—	—	—	TV-1-T	SP-2-T	B	West	B	—	—	—	10'	2.5'
④	17	28' 6"	20'	12'	250	SP-1-T	MAS	SP-1-T	—	—	—	10'	—	—	2.5'	Hewes

* INSTALL R49 SIGN

* See Detail #4, Sheet 6 of 6
Exact Location by Engineer
in the Field.

* See Detail #1, Sheet 6 of 6

PREPARED UNDER THE SUPERVISION OF
HILBERT WILLIAM DICKSON R.C.E. No. 19412

DATE 1-4-77

TRAFFIC ENGINEERING
CONSULTANTS

Herman Kimmel and Associates, Inc.

4242 CAMPUS DRIVE SUITE 100 NEWPORT BEACH, CALIF 92660

(714) 546-9814

LOCATION "D"

TRAFFIC SIGNAL PLAN

APPROVED

Robert W. G. G. G.

R.C.E. 12169

DATE 1-24-77

DESIGNED

DATE

CHECKED

DATE

REVISIONS

DATE

BY

DESCRIPTION

REVISIONS

DATE

BY

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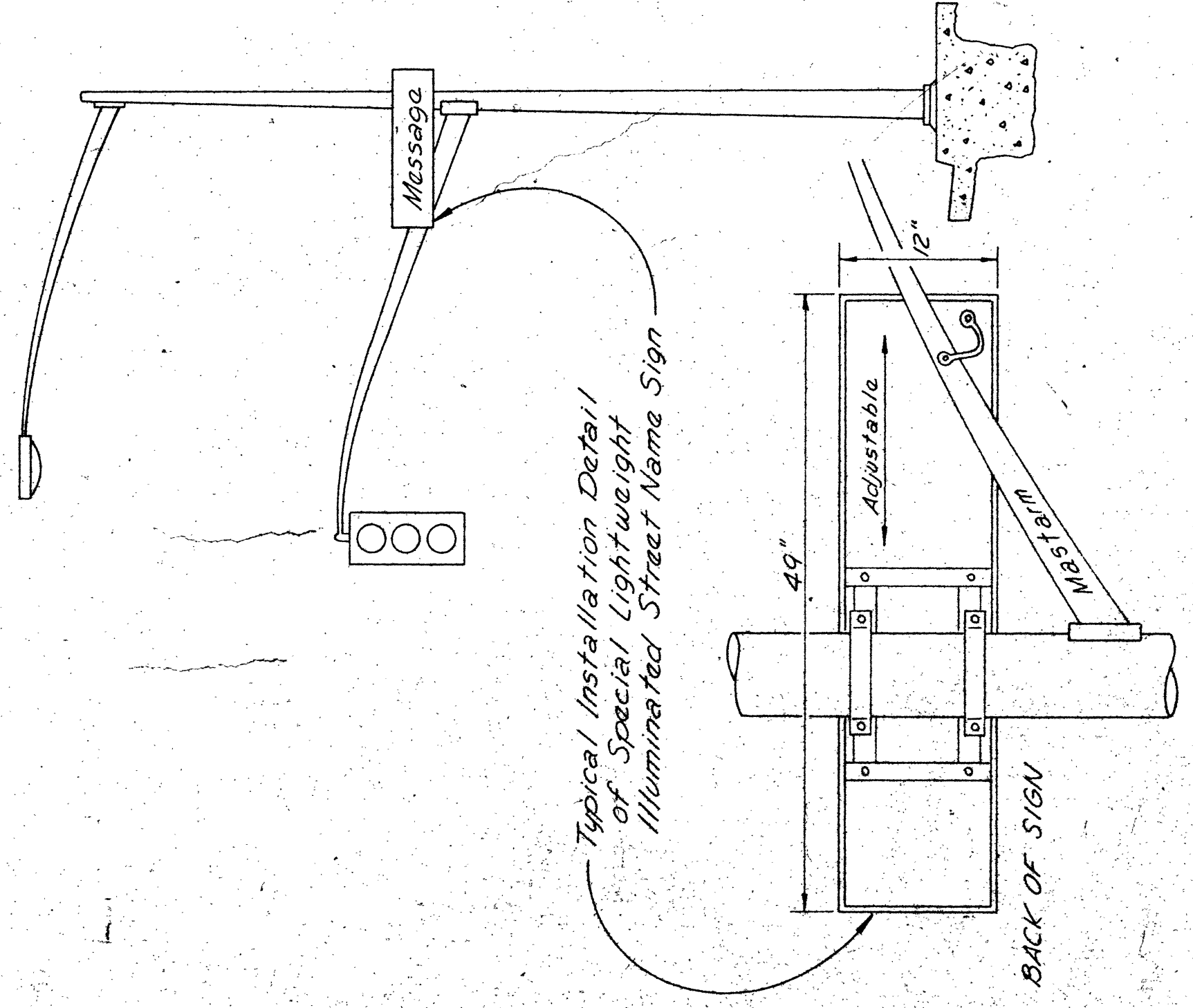
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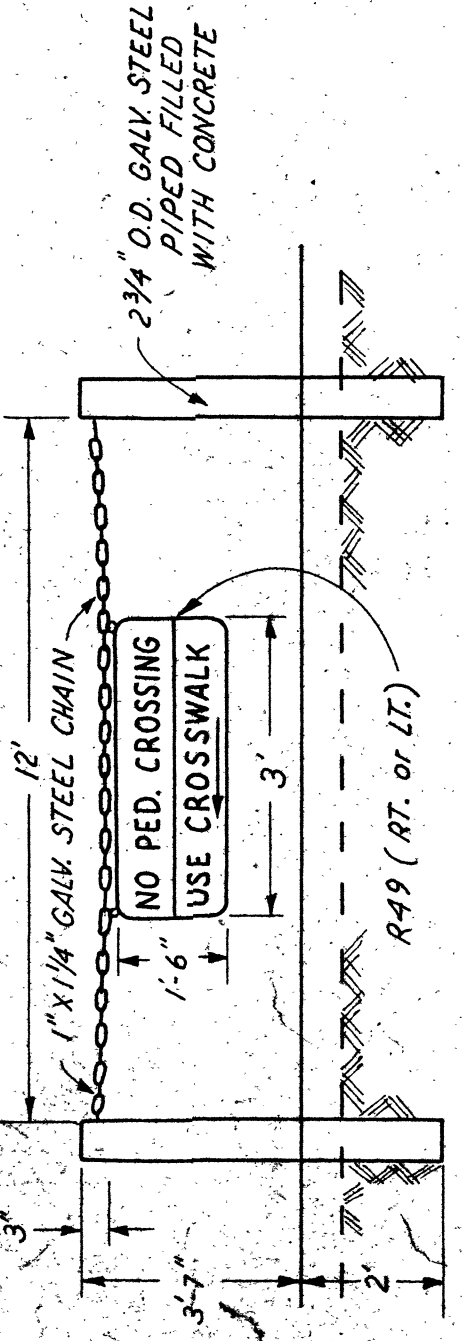
DESCRIPTION

REVISIONS

DETAIL #5



DETAIL #6

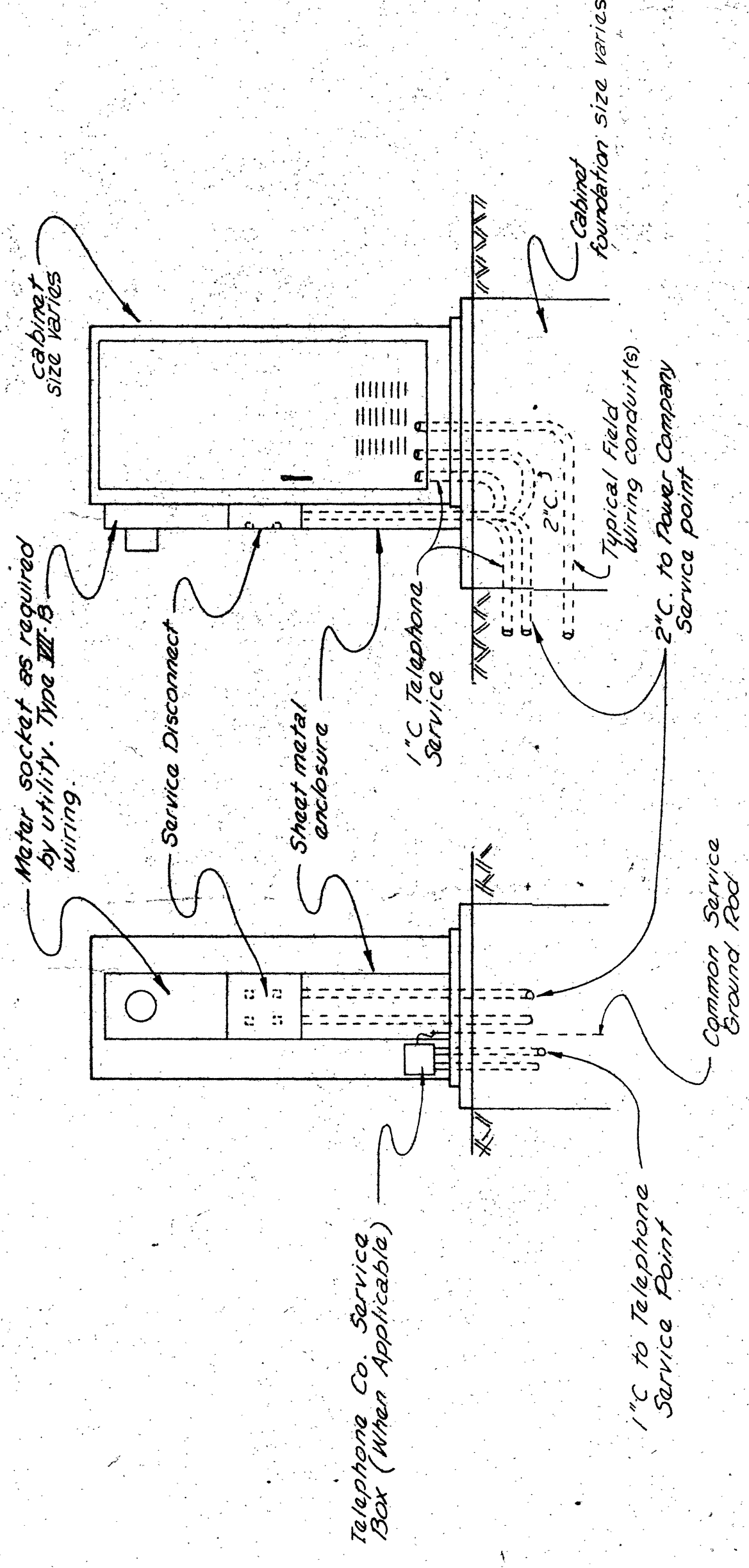


PEDESTRIAN FENCE DETAIL

GENERAL NOTES:

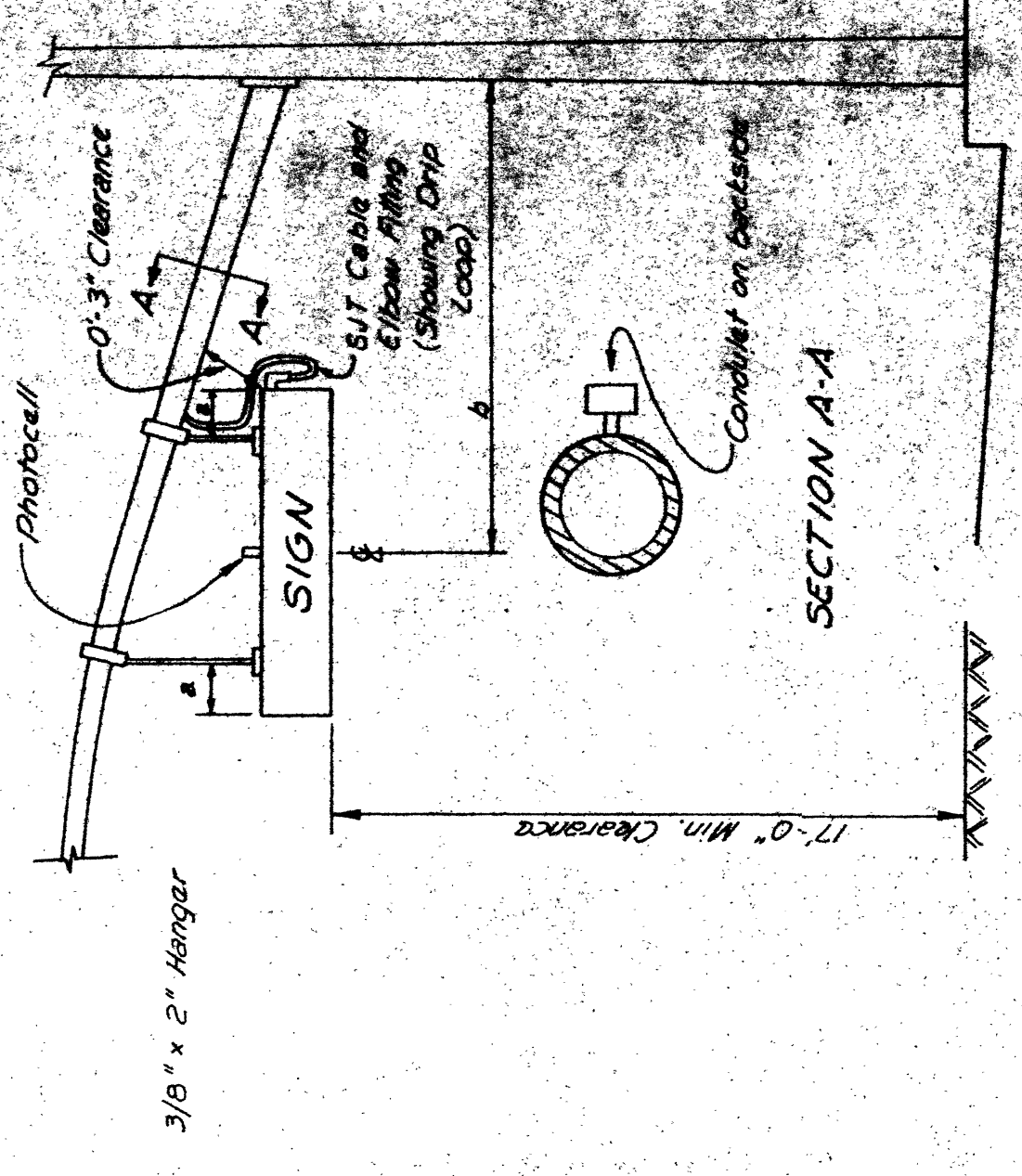
- a. ALL WORK SHALL CONFORM TO STATE OF CALIFORNIA STANDARD SPECIFICATIONS AND STANDARD PLANS DATED JAN, 1975 & THE SPECIAL PROVISIONS.
- b. DETECTOR LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- c. CONDUCTOR & POLE SCHEDULES ARE FURNISHED AS INSTALLATION GUIDELINES ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE THE CORRECT EQUIPMENT REQUIRED FOR INTENDED OPERATION.
- d. ALL CONDUIT SHALL BE 2" UNLESS SHOWN OTHERWISE.
- e. INDUCTIVE LOOPS SHALL BE 6"x6" WITH 10' SPACING IN THE DIRECTION OF TRAVEL UNLESS SHOWN OTHERWISE.
- f. ALL PULLBOXES SHALL BE 45" UNLESS SHOWN OTHERWISE.
- g. ALL STRIPING BY CONTRACTOR.
- h. PEDESTRIAN INDICATIONS SHALL BE TYPE "C" (SEE SPECIAL PROVISIONS).
- i. CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES.
- j. ALL SALVAGED EQUIPMENT & HARDWARE, INCLUDING CONDUCTORS, SHALL BE DELIVERED TO THE ORANGE-COUNTY YARD.
- k. AVOID DAMAGING EXISTING SPRINKLER SYSTEMS. WHERE REQUIRED, RELOCATE SPRINKLER SYSTEMS AS DIRECTED BY THE ENGINEER.

DETAIL #3



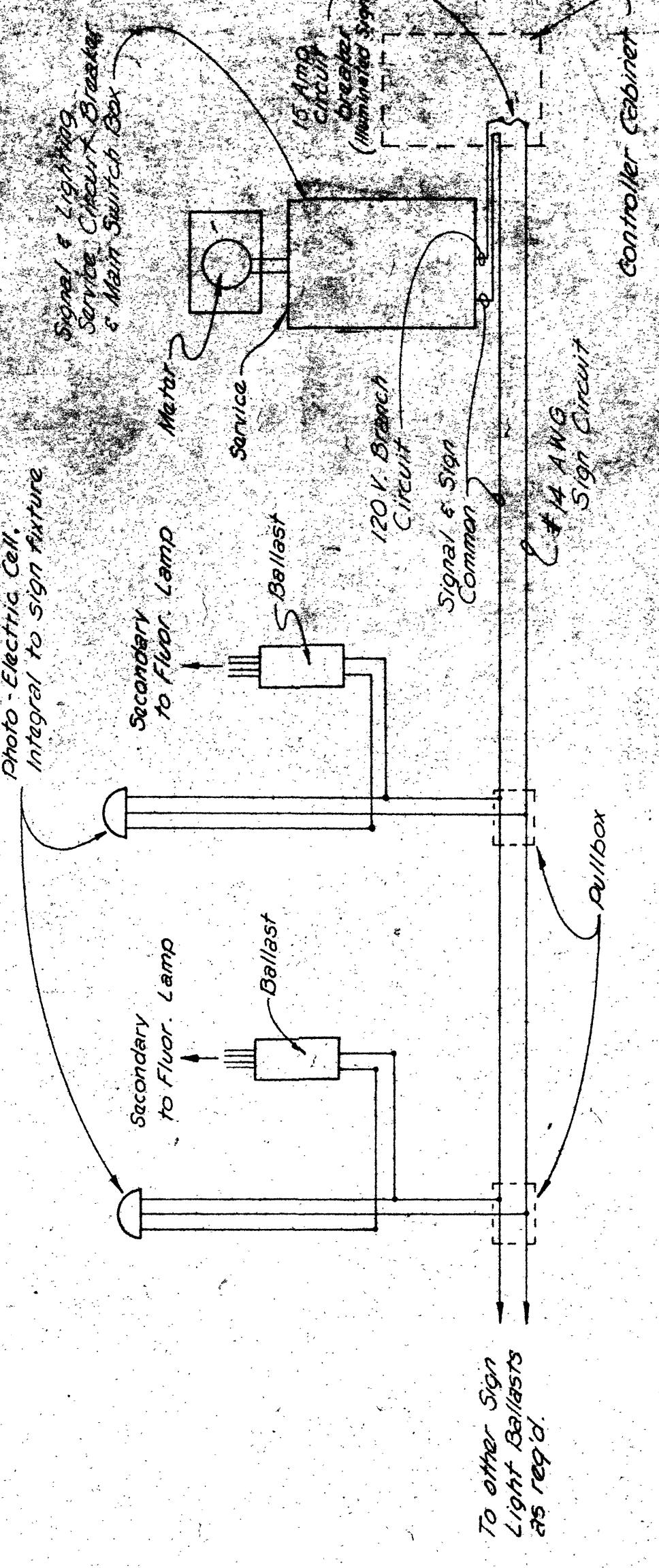
DETAIL # 1

a = 1'-6" Minimum
b = 10'-6" centerline of sign to face of pole

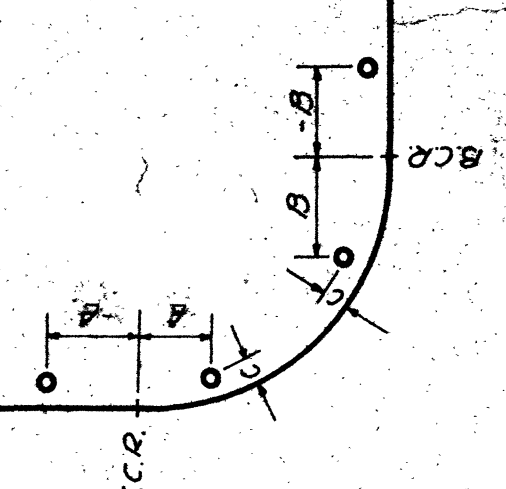


DETAIL #2

ASSEMBLY OF SIGN COMPONENTS
(For Street Name Signs)



DETAIL #4



POLE LOCATION CODE
(Exact location by Engineer in Field)

(Exact location by Engineer in Field.)

WIRING DIAGRAM FOR ILLUMINATED MAST ARM SIGN


Herman Kimmel and Associates, Inc.
 4742 CLAYTON DRIVE, SUITE 100, BOSTON, MASSACHUSETTS 02116
 TEL. 617-552-1100

HILBERT WILLIAM DICKSON N.C.E. No. 19417

Herman Consultants
 MECHANICAL ENGINEERING
Kimmel and Associates

Kimmel and Associates, Inc.
4242 CAMPUS DRIVE, SUITE 276 NEWPORT BEACH, CALIF 92646
(714) 335-7614

SEVEN/SEVEN/17 01/KEE/1771/10

SPECIAL DETAIL

SWEET - SIGNAL

BRIDGE COUNTY
E. W. A. V.