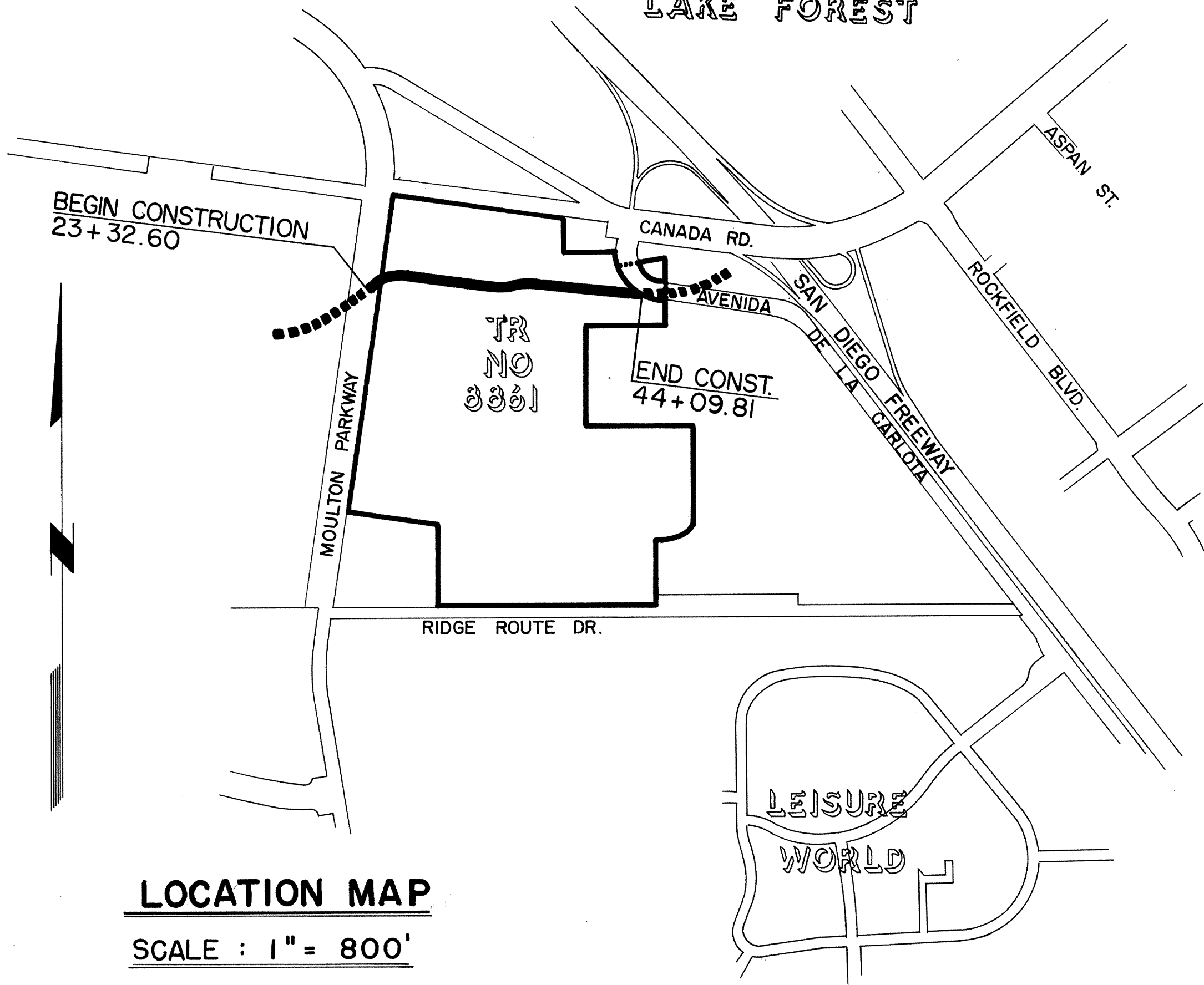


CONSTRUCTION NOTES & ESTIMATE OF QUANTITIES

ITEM	QUANTITY	ITEM	QUANTITY
ACCESS ROAD			
1 6" CURB & GUTTER	1,598.64 LF.	17 18" R.C.P.	96.00 LF.
2 6" TO 8" CURB & GUTTER	212.49 LF.	18 27" R.C.P. (1250 D)	17.00 LF.
3 8" CURB & GUTTER	51.19 LF.	19 36" R.C.P. (1500 D)	8.00 LF.
4 6" CURB ONLY	241.27 LF.	20 42" R.C.P. (1500 D)	4.00 LF.
5 6" TO 0" CURB ONLY	5.00 LF.	21 42" R.C.P. (1100 D)	48.00 LF.
6 4" THICK R.C.C. SIDEWALK	10,174.74 S.F.	22 54" R.C.P. (1500 D)	4.00 LF.
7 SPECIAL CONC. WALL @ BACK OF SIDEWALK	60.07 LF.	23 4" P.V.C. SUBDRAIN	39.00 LF.
8 7" A.C. OVER 6" A.B.	40,651.89 S.F.	24 LATERAL CONNECTIONS	0 EA.
		25 SPECIAL INLET STRUCTURE	1 EA.
		26 SPECIAL WROUGHT IRON FENCE - GREENBELT CHANNEL	457.29 LF.
		27	1,690.00 LF.

CHANNEL	QUANTITY	ITEM	QUANTITY
11 10' x 6' R.C.B.	107.44 LF.	28 INLET & OUTLET BOTTOM SLAB	4,168.75 S.F.
12 10' x 6' TO 10' x 10' R.C.B. TRANSITION	15.00 LF.	29 WING WALLS & TRANSITION WALLS	1,988.75 S.F.
13 DOUBLE 10' x 4.5' R.C.B.	98.68 LF.	30 CUT-OFF WALLS	68.00 S.F.
14 DOUBLE 8' x 5.5' R.C.B.	31.00 LF.	31 HEAD WALLS	72.00 LF.
15 18" A.C.P.	700.00 LF.		
16 18" PERFORATED A.C.P.	29.00 LF.		

LAKE FOREST



LOCATION MAP

SCALE : 1" = 800'

17. A "PRIME COAT" SHALL BE APPLIED TO THE SURFACE OF THE UNTREATED AGGREGATE BASE AT A RATE OF 0.25 GAL/YD². THE PRIME COAT SHALL BE AN MC-70, SC-70 OR MC-250 LIQUID ASPHALT.
18. A "TACK COAT" (PAINT BINDER) SHALL BE APPLIED BETWEEN PAVEMENT LAYERS AND ON EXISTING PAVEMENT TO BE RESURFACED AT A RATE OF 0.10 GAL/YD². THE TACK COAT SHALL BE A TYPE 881 ASPHALTIC EMULSION.
19. A "SEAL COAT" SHALL BE APPLIED TO THE FINISHED SURFACE AT THE RATE OF 0.10 GAL/YD². THE SEAL COAT SHALL BE A TYPE 881 ASPHALTIC EMULSION WITH A 60-70 GRADE LIQUID ASPHALT.
20. THE ASPHALT CONCRETE FOR PARKING LOTS SHALL BE TYPE B WITH AGGREGATE GRADING SPECIFICATIONS OF 1/2" MAX. MEDIUM, AS SPECIFIED IN THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS (SEC. 703) CURRENTLY BEING USED BY THE ORANGE COUNTY ROAD DEPARTMENT.
21. CURING OF CONCRETE SHALL BE DONE IN ACCORDANCE WITH ORANGE COUNTY FLOOD CONTROL DISTRICT STD. SPECIFICATIONS 5-11 CLEAR CURING COMPOUND, THAT COMPLIES WITH A.S.T.M. C 309-59, TYPE I- CLEAR SHALL BE USED ON ALL CONCRETE THAT WILL BE EXPOSED AFTER CONSTRUCTION.

WILLIAMSON & SCHMID

CIVIL ENGINEERS

1535 EAST FIRST STREET
SANTA ANA, CALIFORNIA 92701

(714) 547-3986

APPROVED BY:

Jack R. Charchol
R.C.E. 22627

DATE

2/13/75

INDEX OF DRAWINGS

SHEET NO.

TITLE

1. LOCATION MAP
2. PLAN AND PROFILE STA. 23+32.50 TO STA. 34+70.46
3. PLAN AND PROFILE STA. 34+70.45 TO STA. 44+09.81
4. MOULTON PARKWAY CROSSING
5. DEL LAGO DRIVE CROSSING
6. AVENIDA DE LA CARLOTA OUTLET STRUCTURE
7. REINFORCED CONCRETE BOX DETAILS, WING WALL DETAILS, LATERAL INLET DETAILS.
8. TYPICAL SECTION, ACCESS ROAD CROSS SECTION, SPECIAL CURBS & GUTTERS, SPECIAL CURBS ONLY, SPECIAL OUTLET STRUCTURE
9. TRANSITION WALL, WING WALL & HEAD WALL REINFORCING DETAILS.
10. CHANNEL LANDSCAPING.

GENERAL NOTES

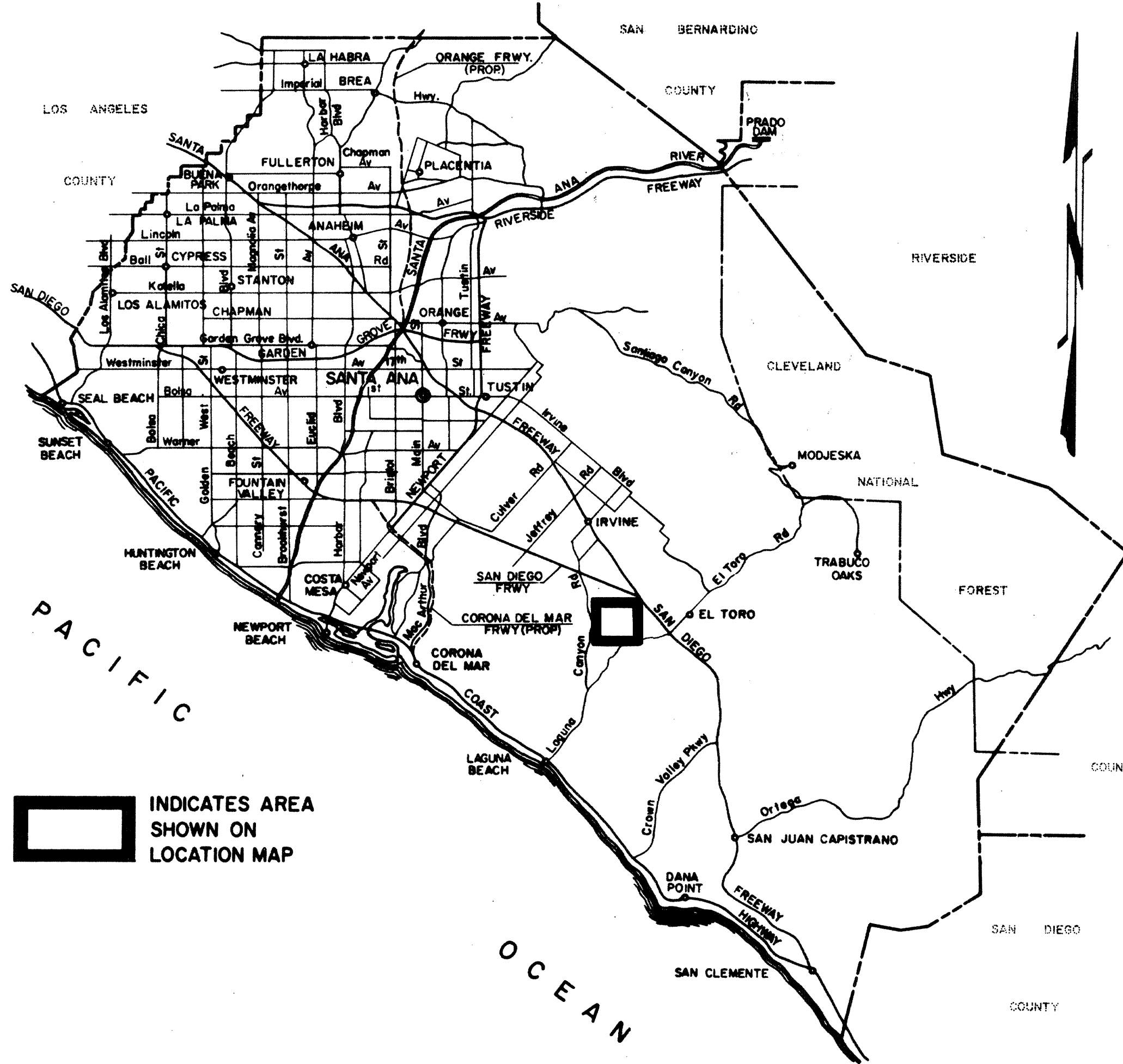
1. ALL WORK TO BE DEDICATED TO THE O.C.F.C.D. MUST BE IN CONFORMANCE WITH THE DISTRICT'S STANDARD SPECIFICATIONS WHICH MAY BE PURCHASED FROM THE DISTRICT AND MUST BE KEPT ON THE JOB SITE AT ALL TIMES.
2. THE CONTRACTOR MUST NOTIFY THE DISTRICT'S INSPECTOR AT LEAST 24 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION BY TELEPHONING 874-7410, OR BY WRITING THE ORANGE COUNTY FLOOD CONTROL DISTRICT, 400 CIVIC CENTER DRIVE WEST, SANTA ANA, CALIF.
3. ALL CONCRETE IN REINFORCED CONCRETE STRUCTURES MUST BE 7000 POUNDS PER SQUARE INCH, IN 28 DAYS, PORTLAND CEMENT CONCRETE, CLASS A.
4. ALL STEEL THAT IS TO BE CONTINUOUS MUST BE LAPPED A MIN. OF 30 BAR DIAMETERS.
5. CLEARANCE BETWEEN EDGE OF CONCRETE AND REINFORCING STEEL MUST BE 1 1/2 INCHES MIN. UNLESS OTHERWISE CALLED FOR ON PLAN. (NOT APPLICABLE TO R.C.P.)
6. ALL REINFORCING BARS MUST BE SECURELY HELD IN PLACE IN THE FORMS. TWO-WAY MATS OF STEEL MUST BE WIRED TOGETHER BOTH WAYS AT ALTERNATE INTERSECTIONS.
7. ALL FILL MUST BE COMPACTED TO A 90% RELATIVE COMPACTION AS DETERMINED BY THE CALIFORNIA TEST METHOD NO. 216-F, 1967 "FIVE-LAYER METHOD". ALL BACKFILL MATERIAL MUST BE FREE FROM VEGETABLE MATTER.
8. ALL MATERIALS TESTING FOR THE STORM DRAIN FACILITIES AND RELATED CONSTRUCTION MUST BE PROVIDED BY THE CONTRACTOR OR DEVELOPER IN ACCORDANCE WITH THE NUMBER, LOCATION AND FREQUENCY REQUESTED BY THE FLOOD CONTROL DISTRICT'S INSPECTOR.
9. A PERMIT FOR WORK WITHIN EXISTING OR PROPOSED STREET RIGHT-OF-WAY IS REQUIRED FROM THE ORANGE COUNTY ROAD DEPARTMENT FOR ANY ENCROACHMENT NECESSARY FOR CONSTRUCTION. A COPY OF THE PERMIT SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
10. PRIOR TO THE PLACEMENT OF CHANNEL IMPROVEMENTS, THE DEVELOPER'S SOIL ENGINEER SHALL CERTIFY IN WRITING TO THE DISTRICT'S INSPECTOR THAT THE STORM DRAIN SUBGRADE IS OF ADEQUATE STRENGTH TO SUPPORT THE STRUCTURES AND ANY ANTICIPATED LOADS.
11. ALL SURVEYING REQUIRED FOR VERTICAL AND HORIZONTAL ALIGNMENT MUST BE PROVIDED BY THE CONTRACTOR OR DEVELOPER AND SUFFICIENT REFERENCE STAKING MUST BE IN ACCORDANCE WITH THE REQUEST OF THE DISTRICT'S INSPECTOR.
12. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THE DEVELOPER'S CONTRACTOR SHALL OBTAIN A PERMIT FROM THE STATE DIVISION OF INDUSTRIAL SAFETY. A COPY OF THE PERMIT SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
13. WHENEVER APPLICABLE, THE DEVELOPER SHALL OBTAIN A PERMIT FROM THE STATE DEPARTMENT OF FISH AND GAME IN ACCORDANCE WITH SECTION 1602 OF THE CALIFORNIA FISH AND GAME CODE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
14. THE AGGREGATE BASE SECTION SHALL BE COMPACTED TO A MIN. RELATIVE MAX. DENSITY OF 95% MAX. AND FIELD DENSITY TO BE DETERMINED IN ACCORDANCE WITH DISTRICT STANDARD SPECIFICATIONS.
15. CHAMFER ALL EXPOSED EDGES OF CONCRETE 1"
16. PRIOR TO CONSTRUCTION OF STORM DRAIN IMPROVEMENTS, ALL SILT SHALL BE REMOVED BY CONTRACTOR FROM EXISTING STORM DRAIN IMPROVEMENTS TO A POINT, TO BE DETERMINED BY DISTRICT INSPECTOR, WHICH WILL INSURE FREE FLOW OF STORM DRAIN DISCHARGES.

BENCH MARK: U.S.G.S. 7X-77-70
ABOUT 0.5 OF A MILE NORTHWEST ALONG
MOULTON PARKWAY FROM THE INTER-
SECTION OF EL TORO RD. TO THE NORTH
END OF THE LEISURE WORLD GOLF COURSE;
700 FEET NORTH ALONG THE EAST CURB
OF WHAT WILL BE THE MEDIAN OF THE
PARKWAY WHEN COMPLETED, IN THE TOP
OF A CONCRETE POST, ON THE BACKSIDE
AND FLUSH WITH THE TOP OF THE CURB,
WITNESSED BY A STEEL POST, 1 FOOT
WEST AND BY A CHAIN LINK FENCE
CORNER POST, 2 FEET NORTHWEST.

ADJUSTED ELEV. FT. 1970 - 297.480

REVISIONS

NO.	DESCRIPTION	SHT.	APP'D.	DATE
1	ADDED CONNECTION PIPE DIMENSIONS	4-7		4-10-75
2	ADDED DOWEL CONNECTION DETAIL	7		4-10-75
3	WROUGHT IRON FENCING NOTE	9		8-15-77



ORANGE COUNTY, CALIFORNIA
VICINITY MAP

SCALE IN MILES

PLANS FOR
THE CONSTRUCTION OF
THAT PORTION OF
CAÑADA CHANNEL
BETWEEN MOULTON PARKWAY AND
AVENIDA DE LA CARLOTA
FACILITY NO. F 23

TRACT NO. 8861

MARCH 1975

APPROVED:

J.W. Schwartz 3-14-75
ORANGE COUNTY FLOOD
CONTROL DISTRICT

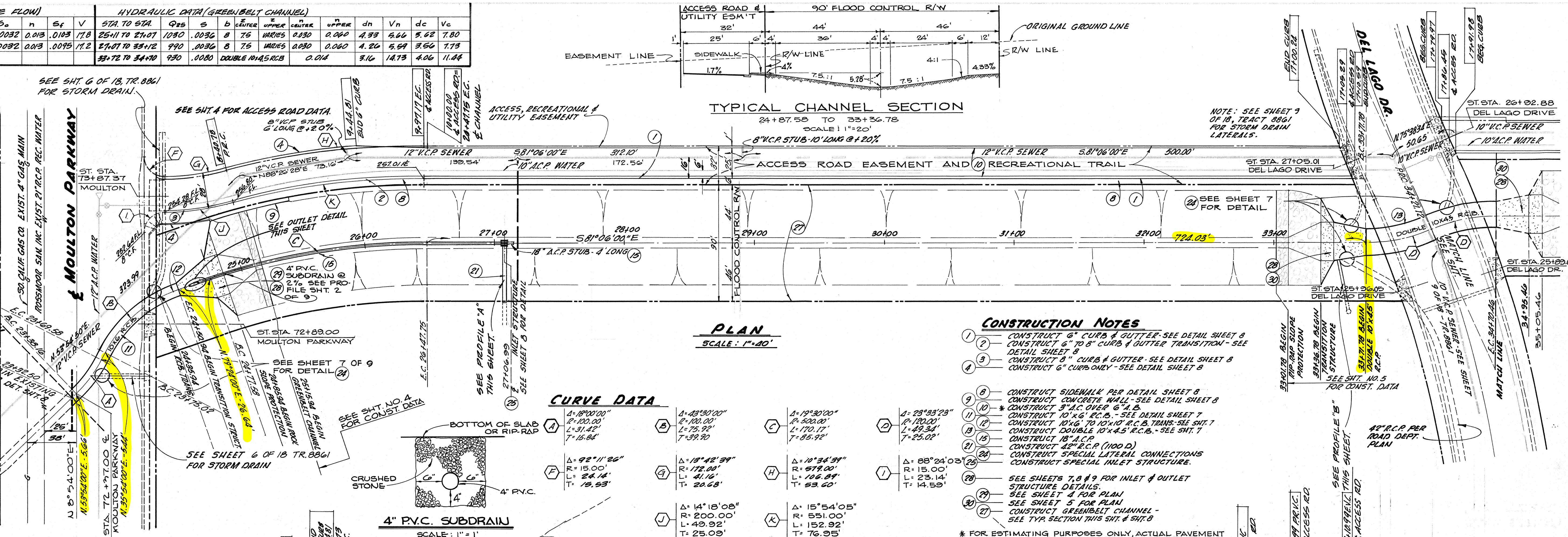
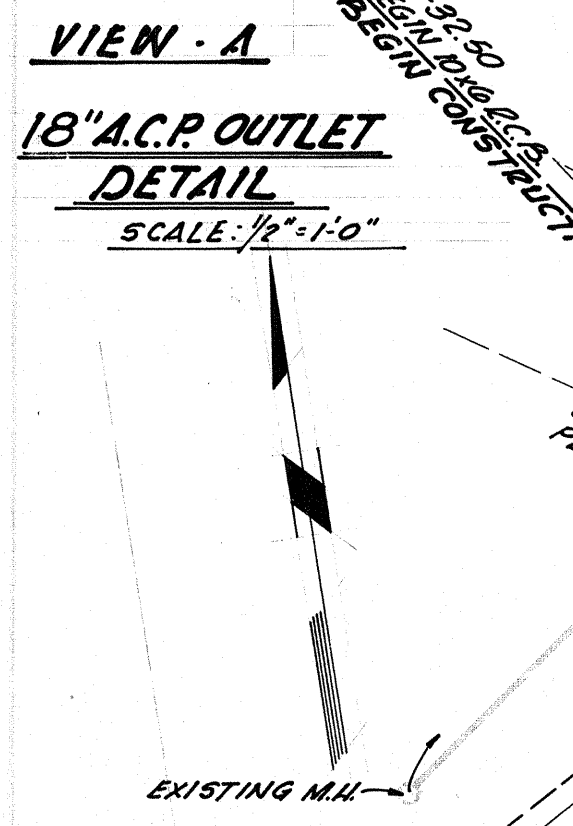
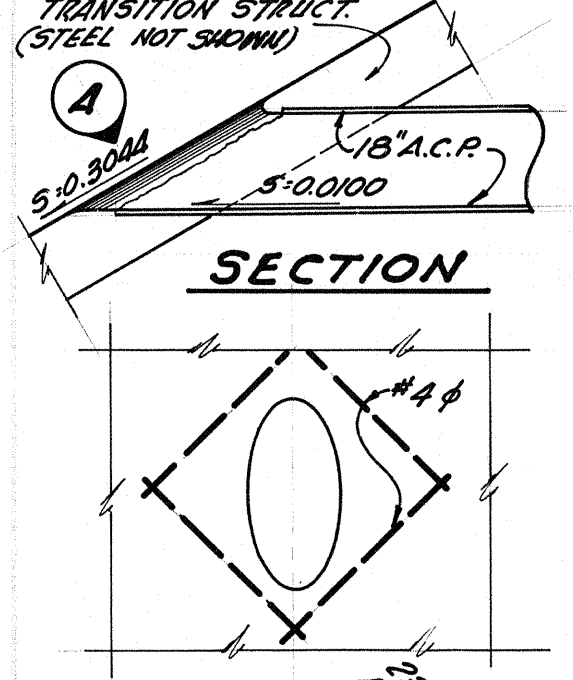
APPROVED:

COUNTY ROAD
COMMISSIONER

ORANGE COUNTY FLOOD CONTROL DISTRICT
SANTA ANA CALIFORNIA

DWG. NO. F23-701-1

HYDRAULIC DATA (PRESSURE FLOW)							HYDRAULIC DATA (GREENBELT CHANNEL)											
STA. TO STA.	Q 25	SIZE	S _a	n	S _f	V	STA. TO STA.	Q 25	S	b	CENTER UPPER	CENTER LOWER	UPPER	dh	V _n	dc	V _c	
24+32 TO 24+25	1070	10"6 RCB	.0032	0.013	.013	17.8	25+11 TO 24+07	1030	.0036	8	75	VARIABLES	.0030	0.060	4.33	5.66	5.62	7.80
24+25 TO 24+26	1030	10"6 RCB	.0032	0.013	.0095	17.2	25+07 TO 23+12	990	.0036	8	75	VARIABLES	.0030	0.060	4.26	5.64	3.66	7.73
							33+72 TO 34+70	930	.0080	DOUBLE	10"4.5 RCB		.0114	3.16	14.73	4.06	11.84	
TRANSVERSE PROFILE																		



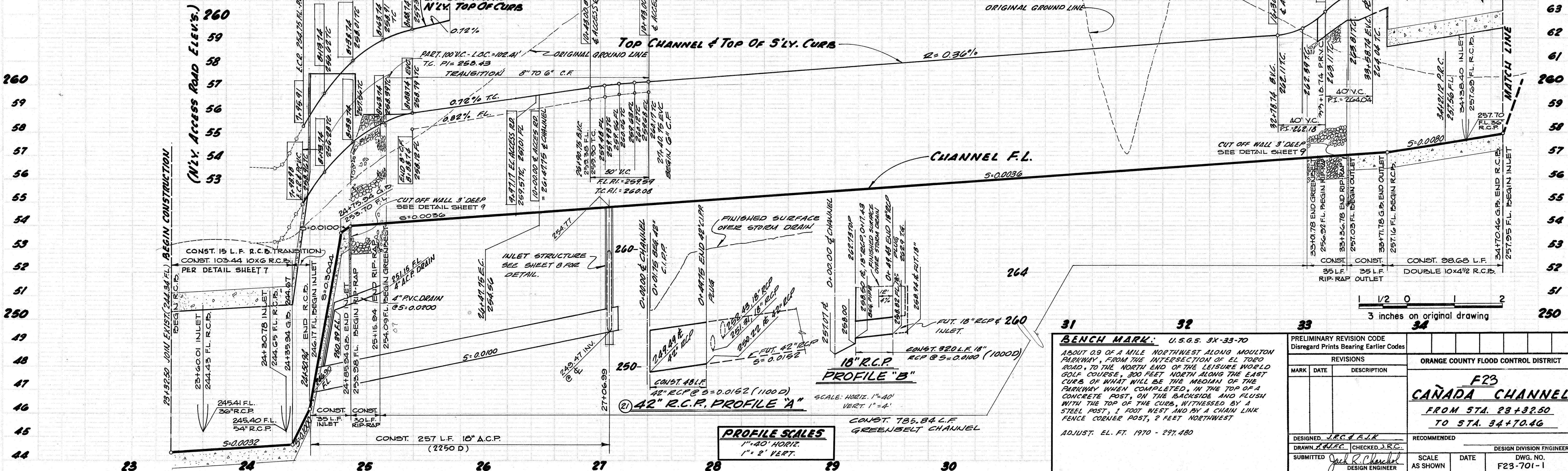
CURVE DATA

Station	Delta	Radius	Length	Offset
24+32.50	28°33'29"	170.00'	75.92'	15.84'
25+11.00	92°11'26"	15.00'	24.14'	19.93'
25+11.00	13°42'34"	172.00'	41.16'	20.68'
25+11.00	10°34'34"	579.00'	106.84'	53.60'
25+11.00	88°24'03"	15.00'	23.14'	14.59'
25+11.00	14°18'08"	200.00'	49.92'	25.09'
25+11.00	15°54'05"	551.00'	152.92'	76.95'

CONSTRUCTION NOTES

- CONSTRUCT 6" CURB & GUTTER - SEE DETAIL SHEET 8
- CONSTRUCT 6" TO 8" CURB & GUTTER TRANSITION - SEE DETAIL SHEET 8
- CONSTRUCT 8" CURB & GUTTER - SEE DETAIL SHEET 8
- CONSTRUCT 6" CURB ONLY - SEE DETAIL SHEET 8
- CONSTRUCT SIDEWALK PER DETAIL SHEET 8
- CONSTRUCT 9" A.C. OVER 6" A.C. - SEE DETAIL SHEET 8
- CONSTRUCT 10" X 6" R.C.P. - SEE DETAIL SHEET 7
- CONSTRUCT 10" X 6" TO 10" X 10" R.C.P. TRANS - SEE SHT. 7
- CONSTRUCT DOUBLE 10" X 4.5" R.C.B. - SEE SHT. 7
- CONSTRUCT 18" A.C.P. - SEE SHT. 7
- CONSTRUCT 42" R.C.P. (1000 D) - SEE SHT. 7
- CONSTRUCT SPECIAL LATERAL CONNECTIONS - SEE SHT. 7
- CONSTRUCT SPECIAL INLET STRUCTURE - SEE SHT. 7
- SEE SHEETS 7, 8 & 9 FOR INLET & OUTLET STRUCTURE DETAILS
- SEE SHEET 4 FOR PLAN
- SEE SHEET 5 FOR PLAN
- CONSTRUCT GREENBELT CHANNEL - SEE TYP. SECTION THIS SHT. & SHT. 8

* FOR ESTIMATING PURPOSES ONLY, ACTUAL PAVEMENT SECTION TO BE DETERMINED AT TIME OF CONSTRUCTION BY SOILS ENGINEER & APPROVED BY DISTRICT INSPECTOR.

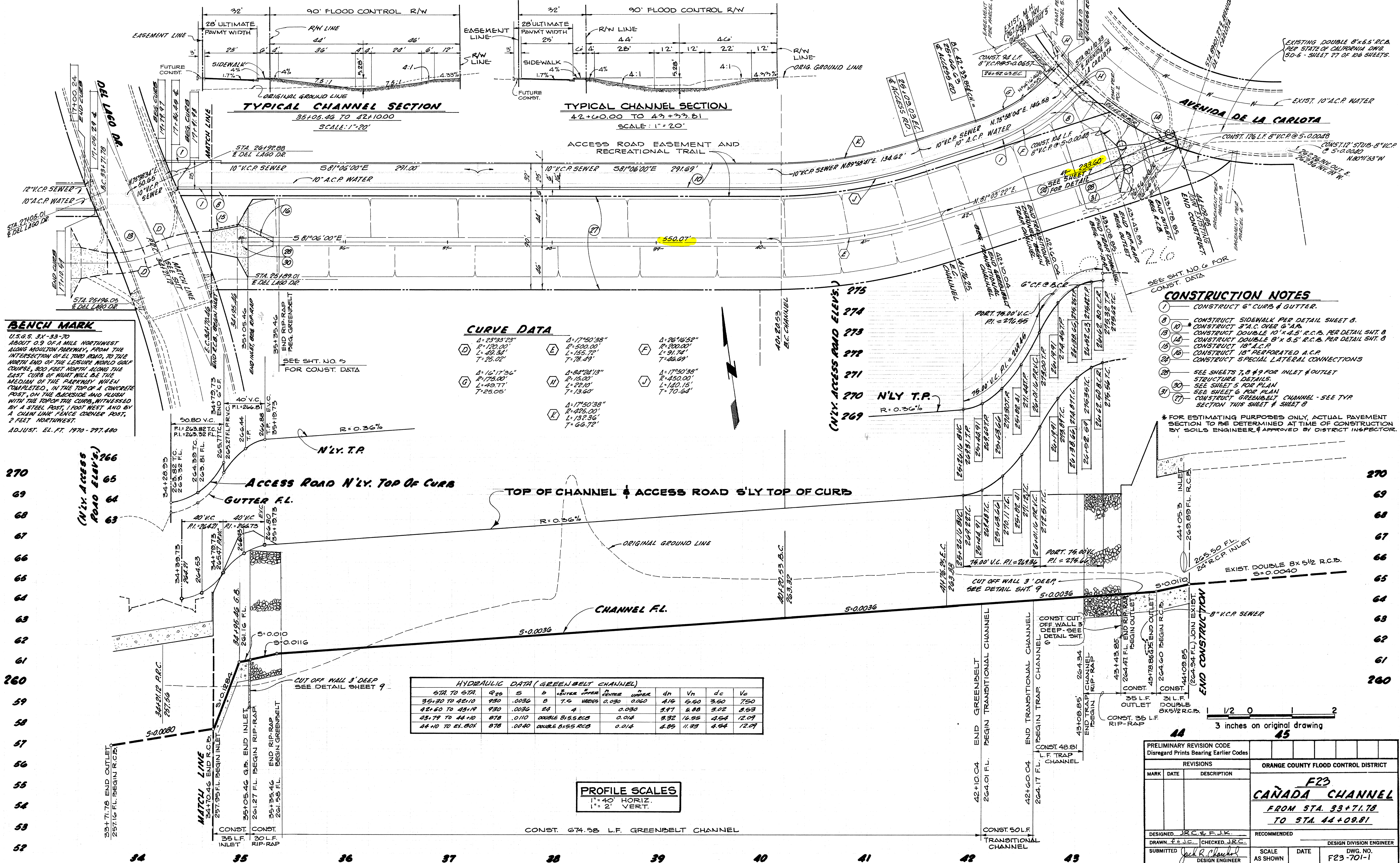


PROFILE SCALES

1" = 40' HORIZ.
1" = 2' VERT.

BENCH MARK: U.S.G.S. 3X-33-70
ABOUT 0.9 OF A MILE NORTHWEST ALONG MOULTON PARKWAY, FROM THE INTERSECTION OF EL TORO ROAD, TO THE NORTH END OF THE LEISURE WORLD GOLF COURSE, 300 FEET NORTH ALONG THE EAST CURB. OF WHAT WILL BE THE MEDIAN OF THE PARKWAY WHEN COMPLETED, IN THE TOP OF A CONCRETE POST, ON THE BACKSIDE AND FLUSH WITH THE TOP OF THE CURB, WITNESSED BY A STEEL POST, 1 FOOT WEST AND BY A CHAIN LINK FENCE CORNER POST, 2 FEET NORTHWEST
ADJUST. EL. FT. 1970 - 297.480

PRELIMINARY REVISION CODE			ORANGE COUNTY FLOOD CONTROL DISTRICT	
Disregard Prints Bearing Earlier Codes			F23	
REVISIONS			CANADA CHANNEL	
MARK	DATE	DESCRIPTION	FROM STA. 23+32.50 TO STA. 34+70.46	
DESIGNED	J.R.C. & J.R.C.		RECOMMENDED	
DRAWN	J.R.C.	CHECKED J.R.C.	DESIGN DIVISION ENGINEER	
SUBMITTED	J.R.C.		SCALE AS SHOWN	
			DATE	
			DWG. NO. F23-701-1	



BENCH MARK
U.S.G.S. 3Y-33-70
ABOUT 0.5 OF A MILE NORTHWEST
ALONG MOULTON PARKWAY, FROM THE
INTERSECTION OF EL TORO ROAD, TO THE
NORTH END OF THE LEISURE WORLD GOLF
COURSE, 300 FEET NORTH ALONG THE
EAST CURB OF WHAT WILL BE THE
MIDLINE OF THE PARKWAY. WHEN
COMPLETED, IN THE TOP OF A CONCRETE
POST, ON THE BACKSIDE AND FLUSH
WITH THE TOP OF THE CURB, WITNESSED
BY A STEEL POST, 1 FOOT WEST AND BY
A CHAIN LINK FENCE CORNER POST,
2 FEET NORTHWEST.
ADJUST. EL. FT. 1970 - 297.480

CURVE DATA			
D	$\Delta = 23^{\circ}33'23''$ $R = 170.00'$ $L = 49.34'$ $T = 25.02'$	E	$\Delta = 17^{\circ}50'38''$ $R = 500.00'$ $L = 155.72'$ $T = 78.49'$
G	$\Delta = 12^{\circ}17'36''$ $R = 175.00'$ $L = 49.77'$ $T = 25.05'$	H	$\Delta = 84^{\circ}24'13''$ $R = 15.00'$ $L = 22.10'$ $T = 13.60'$
		J	$\Delta = 17^{\circ}50'38''$ $R = 450.00'$ $L = 140.15'$ $T = 70.64'$

HYDRAULIC DATA (GREENBELT CHANNEL)									
STA. TO STA.	Q	S	b	ENTER TAPER	ENTER WHEEL	d _h	V _h	d _c	V _c
35+30 TO 42+10	930	.0036	8	T.S. VALUES	0.030	0.060	4.16	5.60	7.50
42+60 TO 43+19	930	.0036	24	A	0.030		3.97	5.88	3.02
43+19 TO 44+10	878	.0110	DOUBLE 8x5.5 R.C.B.		0.014		3.32	14.95	4.64
44+10 TO 61+00	878	.0040	DOUBLE 8x5.5 R.C.B.		0.014		4.85	11.35	4.54

PROFILE SCALES
1" = 40' HORIZ.
1" = 2' VERT.

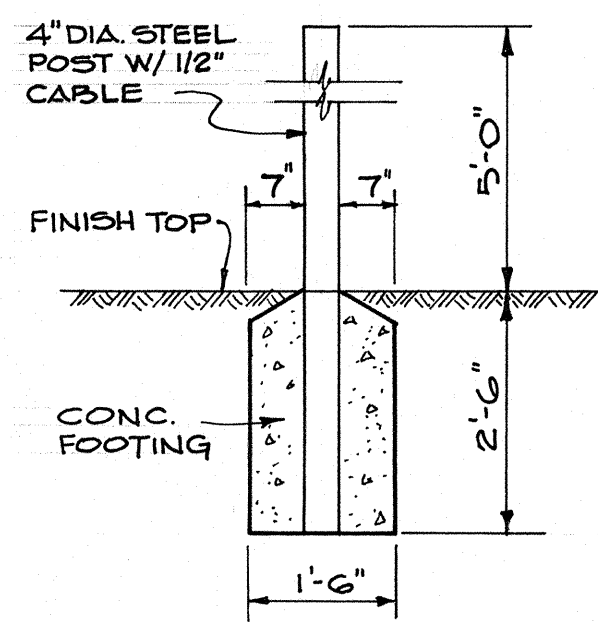
- CONSTRUCTION NOTES**
- 1. CONSTRUCT 6" CURB & GUTTER.
 - 2. CONSTRUCT SIDEWALK PER DETAIL SHEET 8.
 - 3. CONSTRUCT 3" A.C. OVER 6" A.P.
 - 4. CONSTRUCT DOUBLE 10' x 4.5' R.C.B. PER DETAIL SHT. 8
 - 5. CONSTRUCT DOUBLE 8' x 5.5' R.C.B. PER DETAIL SHT. 8
 - 6. CONSTRUCT 18" A.C.P.
 - 7. CONSTRUCT 18" PERFORATED A.C.P.
 - 8. CONSTRUCT SPECIAL LATERAL CONNECTIONS
 - 9. SEE SHEETS 7, 8 & 9 FOR INLET & OUTLET STRUCTURE DETAILS.
 - 10. SEE SHEET 5 FOR PLAN
 - 11. SEE SHEET 6 FOR PLAN
 - 12. CONSTRUCT GREENBELT CHANNEL - SEE TYP SECTION THIS SHEET & SHEET 8
- * FOR ESTIMATING PURPOSES ONLY, ACTUAL PAVEMENT SECTION TO BE DETERMINED AT TIME OF CONSTRUCTION BY SOILS ENGINEER & APPROVED BY DISTRICT INSPECTOR.

PRELIMINARY REVISION CODE			ORANGE COUNTY FLOOD CONTROL DISTRICT		
Disregard Prints Bearing Earlier Codes					
REVISIONS					
MARK	DATE	DESCRIPTION			
DESIGNED J.R.C. & F.J.K.			RECOMMENDED		
DRAWN F.J.C.			CHECKED J.R.C.		
SUBMITTED Jack R. Churchill			DESIGN DIVISION ENGINEER		
DESIGN ENGINEER			SCALE AS SHOWN		
			DATE		
			DWG. NO. F23-701-1		

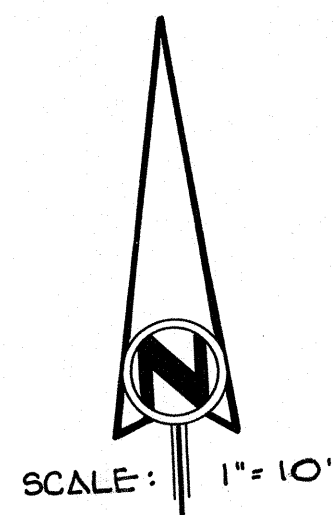
CONSTRUCTION NOTES

- 2 CONST. 6" TO 8" CURB & GUTTER TRANSITION PER DETAIL SHT. NO. 8.
- 3 CONST. 8" CURB & GUTTER PER DETAIL SHT. NO. 8.
- 4 CONST. 6" CURB ONLY PER DETAIL SHT. NO. 8.
- 6 CONC. CROSS GUTTER W/ TRACT N° 8861
- 7 WHEEL-CHAIR ACCESS RAMP W/ TRACT N° 8861
- 8 CONST. SIDEWALK PER DETAIL SHT. NO. 8.
- 9 CONST. CONC. WALL PER DETAIL SHT. NO. 8.
- 10 CONST. 3" A.C. OVER 6" A.B.
- 11 CONST. 10' x 6' R.C.B. PER DETAIL SHT. NO. 7.
- 12 CONST. 10' x 6' TO 10' x 10' R.C.B. TRANSITION
- 15 CONST. 18" ACP.
- 22 CONST. 54" R.C.P. (1500 D)
- 23 CONST. 4" P.V.C. SUBDRAIN
- 24 CONST. SPECIAL LATERAL CONNECTION PER DETAIL SHT. NO. T.
- 26 CONST. SPECIAL WROUGHT IRON FENCE-SEE SHEET 9
- 27 CONST. GREENBELT CHANNEL PER DETAIL SHT. NO. 8.
- 28 SEE SHEETS 7, 8, & 9 FOR INLET & OUTLET STRUCTURE DETAILS.
- 19 CONST. 36" R.C.P. (1500 D)

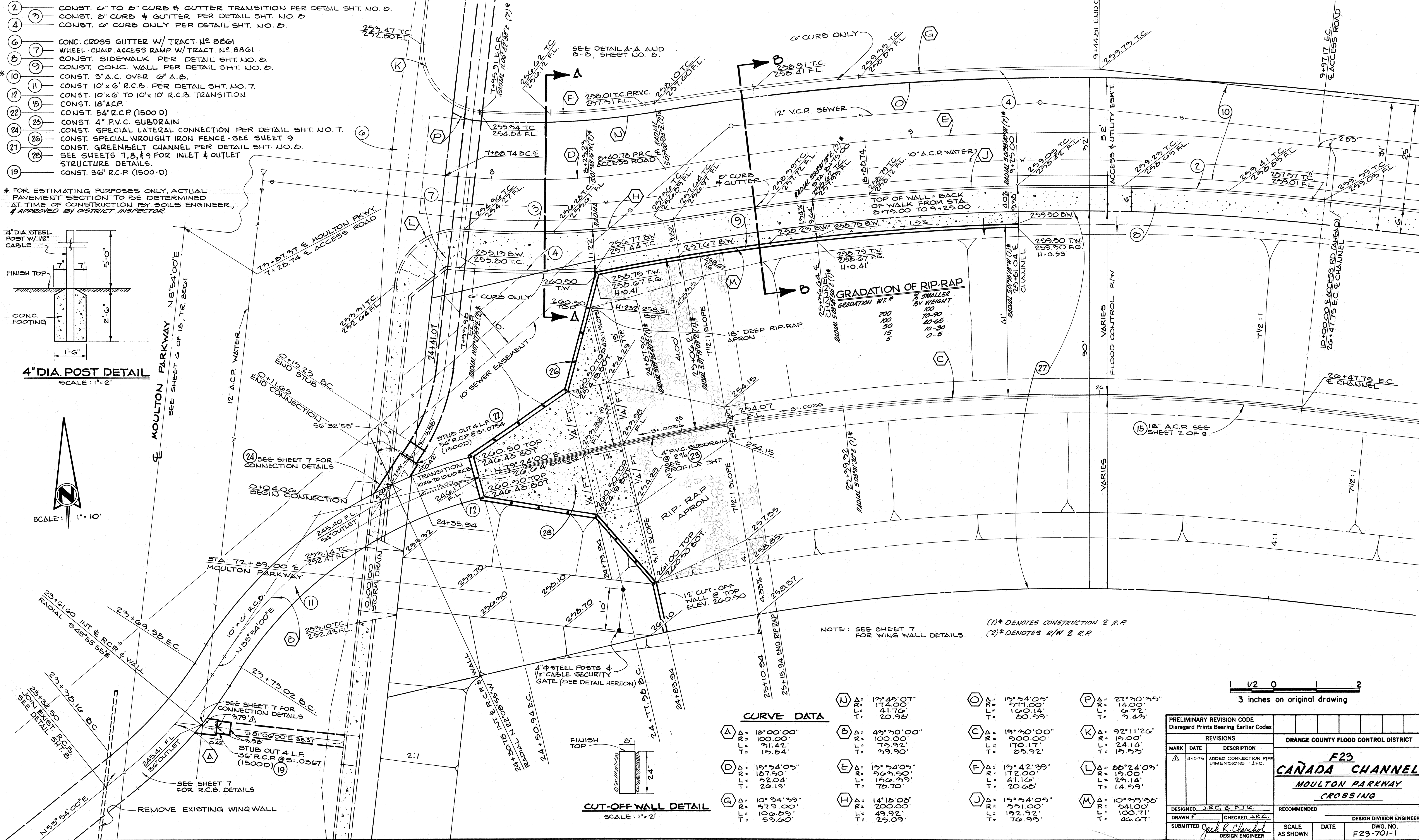
* FOR ESTIMATING PURPOSES ONLY, ACTUAL PAVEMENT SECTION TO BE DETERMINED AT TIME OF CONSTRUCTION BY SOILS ENGINEER, & APPROVED BY DISTRICT INSPECTOR.



4" DIA. POST DETAIL
SCALE: 1"=2'



SCALE: 1"=10'



NOTE: SEE SHEET 7 FOR WING WALL DETAILS.
(1)* DENOTES CONSTRUCTION 2 R.R.
(2)* DENOTES R/W 2 R.R.

CURVE DATA

A	Δ= 15°00'00"
R= 100.00'	
L= 31.42'	
T= 15.84'	

B	Δ= 13°45'07"
R= 174.00'	
L= 41.76'	
T= 20.95'	

C	Δ= 15°54'05"
R= 100.00'	
L= 170.17'	
T= 85.92'	

K	Δ= 27°30'25"
R= 14.00'	
L= 6.72'	
T= 3.43'	

D	Δ= 15°54'05"
R= 100.00'	
L= 170.17'	
T= 85.92'	

E	Δ= 13°45'07"
R= 174.00'	
L= 41.76'	
T= 20.95'	

F	Δ= 15°54'05"
R= 100.00'	
L= 170.17'	
T= 85.92'	

1 1/2 0 2
3 inches on original drawing

PRELIMINARY REVISION CODE Disregard Prints Bearing Earlier Codes			ORANGE COUNTY FLOOD CONTROL DISTRICT	
REVISIONS			F23 CANADA CHANNEL MOULTON PARKWAY CROSSING	
MARK	DATE	DESCRIPTION		
Δ	4-10-75	ADDED CONNECTION PIPE DIMENSIONS - J.F.C.		
DESIGNED J.R.C. & E.J.K.			RECOMMENDED	
DRAWN F			CHECKED J.R.C.	
SUBMITTED			DESIGN DIVISION ENGINEER	
SCALE AS SHOWN			DATE	DWG. NO. F23-701-1

CONSTRUCTION NOTES

- 1. CONSTRUCT 6" CURB & GUTTER PER DETAIL, SHT. 5.
- 2. CONSTRUCT SIDEWALK PER DETAIL, SHT. 5.
- 3. CONSTRUCT 3" A.C. OVER 6" A.B. PER DETAIL, SHT. 5.
- 4. CONSTRUCT DOUBLE 10" x 4.5" R.C.B. PER DETAIL, SHT. 7.
- 5. CONSTRUCT 18" A.C.P. (2250 D).
- 6. CONSTRUCT 18" PERFORATED A.C.P.
- 7. CONSTRUCT 18" R.C.P.
- 8. CONSTRUCT 36" R.C.P. (1500 D).
- 9. CONSTRUCT 42" R.C.P. (1500 D).
- 10. CONSTRUCT SPECIAL LATERAL CONNECTIONS PER DETAIL, SHT. 7.
- 11. CONSTRUCT SPECIAL WROUGHT IRON FENCE - SEE SHEET 9.
- 12. CONSTRUCT GREENBELT CHANNEL PER DETAIL, SHT. 5.
- 13. SEE SHEETS 7, 8 & 9 FOR INLET & OUTLET STRUCTURE DETAILS.
- 14. CONSTRUCT CONCRETE WALL PER DETAIL, SHT. 5.
- 15. CONSTRUCT 4" P.V.C. SUBDRAIN.

* FOR ESTIMATING PURPOSES ONLY, ACTUAL PAYMENT SECTIONS TO BE DETERMINED AT TIME OF CONSTRUCTION BY SOILS ENGINEER, AND APPROVED BY DISTRICT INSPECTOR.

NOTE: SEE SHEET 9 OF 10, TRACT 8861 FOR STORM DRAIN LATERALS

SEE SHEET 9 OF 10, TRACT 8861 FOR DEL LAGO DRIVE.

NOTE: SEE SHT. 7 OF 10 FOR WING WALL DETAILS

SCALE: 1" = 10'

CURVE DATA
A = 23° 33' 23"
LR = 120.00'
TR = 49.74'
T = 250.2'

1/2 0 1 2
3 inches on original drawing

PRELIMINARY REVISION CODE Disregard Prints Bearing Earlier Codes			ORANGE COUNTY FLOOD CONTROL DISTRICT		
REVISIONS			F23 CAÑADA CHANNEL		
MARK	DATE	DESCRIPTION	DEL LAGO DRIVE CROSSING		
Δ	4-10-75	ADDED CONNECTION PIPE DIMENSIONS - J.F.C.			
DESIGNED J.R.C. & F.J.K.			RECOMMENDED		
DRAWN F			DESIGN DIVISION ENGINEER		
SUBMITTED Jack B. Chancel			SCALE AS SHOWN		
DESIGN ENGINEER			DATE		
			DWG. NO. F23-701-1		

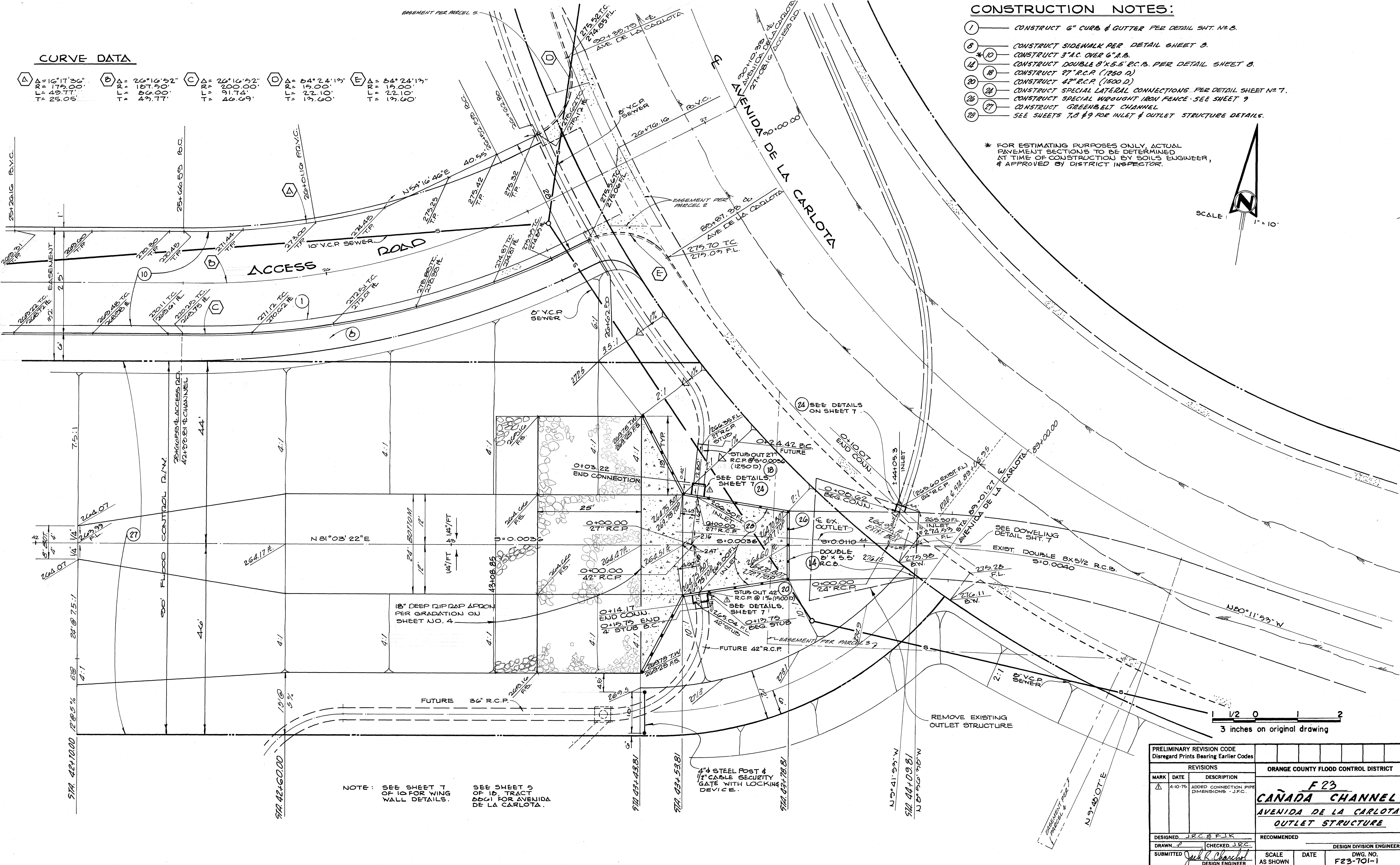
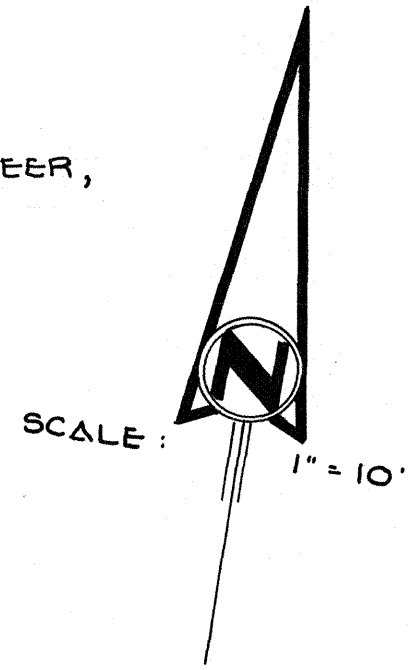
CURVE DATA

A	$\Delta = 16^{\circ}17'36''$ R = 173.00' L = 43.77' T = 25.05'	B	$\Delta = 26^{\circ}16'52''$ R = 187.50' L = 86.00' T = 47.77'	C	$\Delta = 26^{\circ}16'52''$ R = 200.00' L = 91.74' T = 46.69'	D	$\Delta = 84^{\circ}24'13''$ R = 15.00' L = 22.10' T = 13.60'	E	$\Delta = 84^{\circ}24'13''$ R = 15.00' L = 22.10' T = 13.60'
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CONSTRUCTION NOTES:

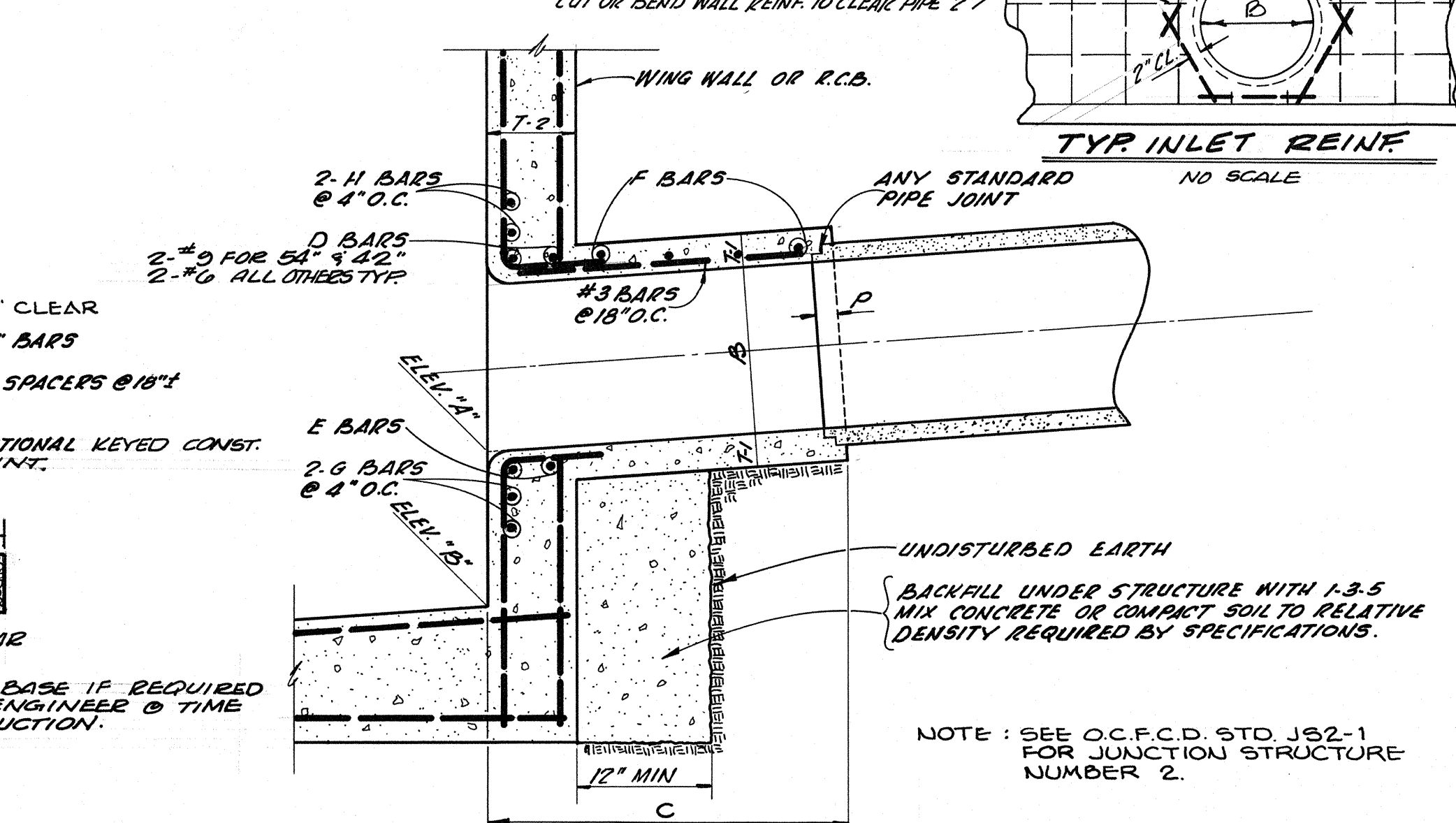
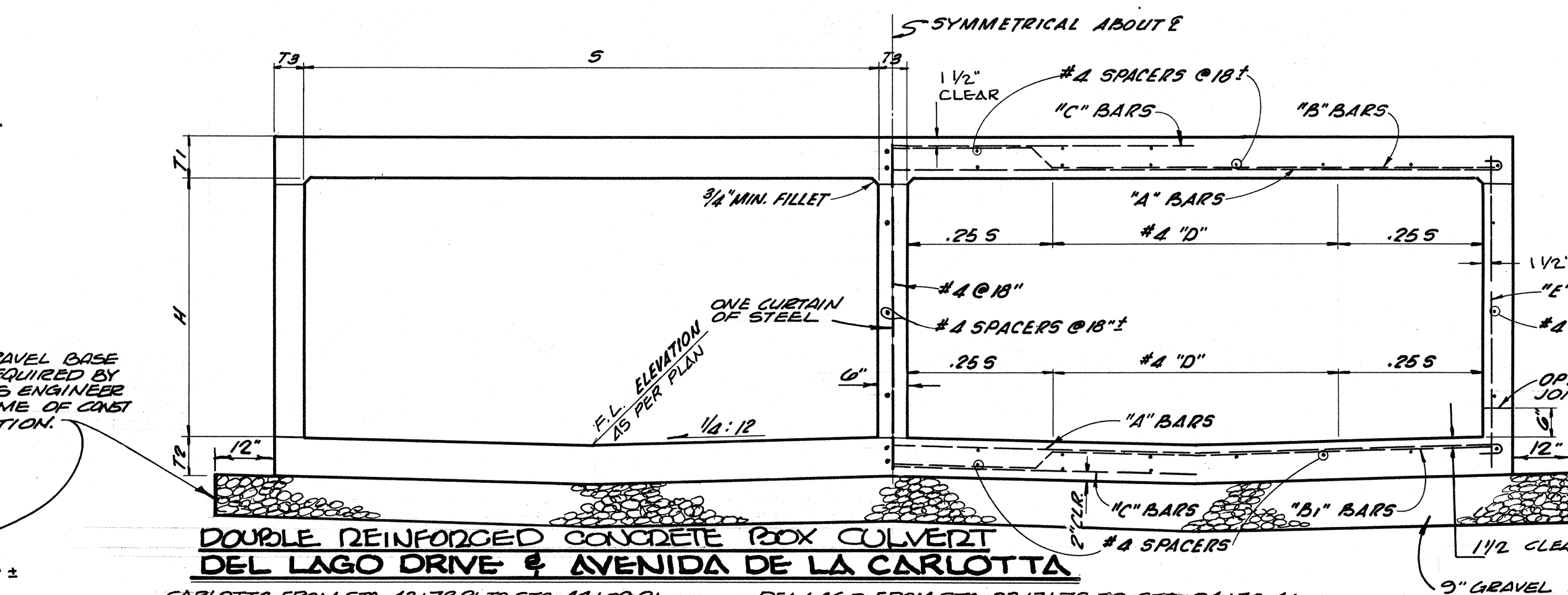
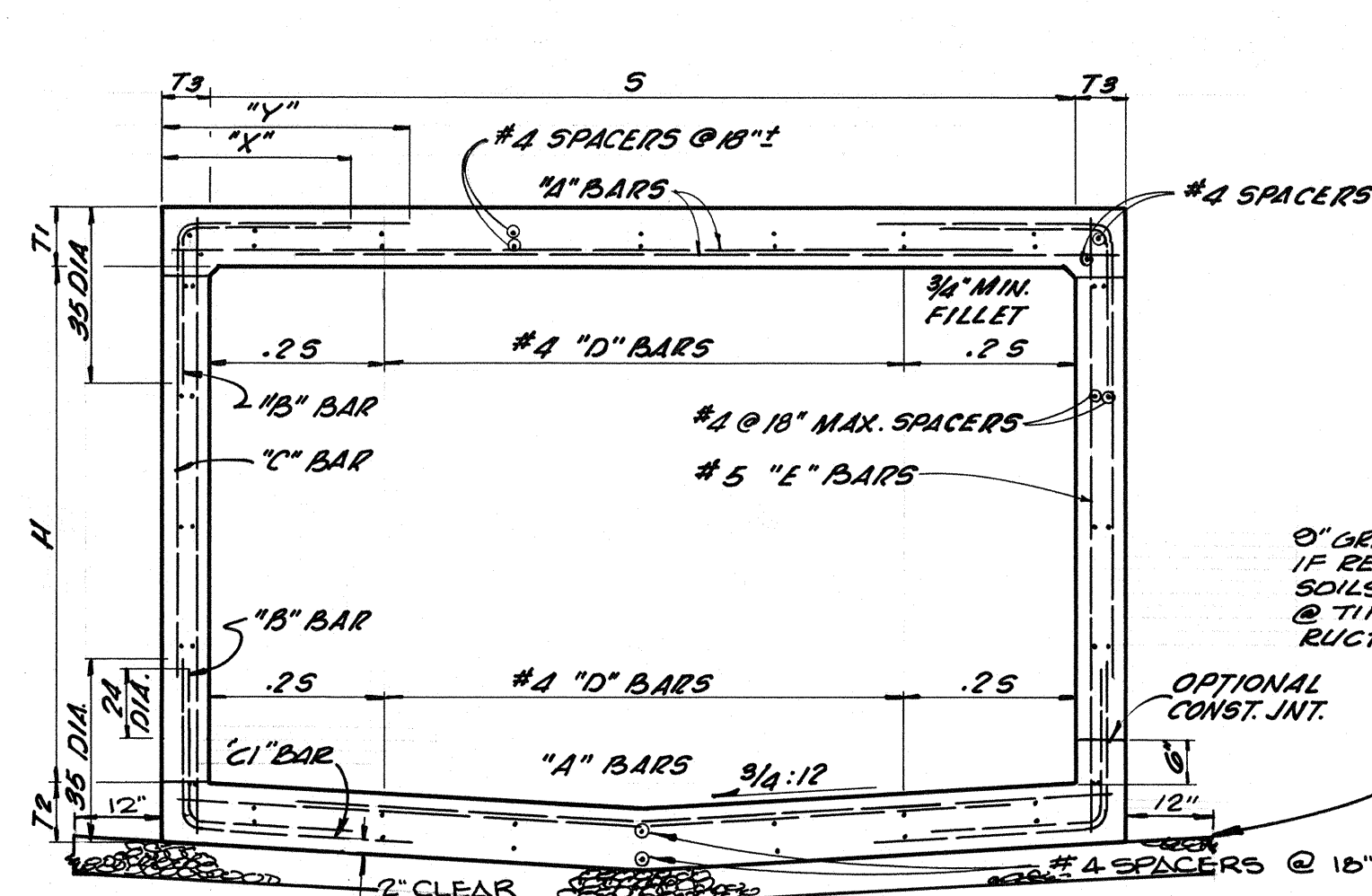
- 1 CONSTRUCT 6" CURB & GUTTER PER DETAIL SHT. N° 8.
- 8 CONSTRUCT SIDEWALK PER DETAIL SHEET 8.
- * 10 CONSTRUCT 3" A.C. OVER 6" A.B.
- 14 CONSTRUCT DOUBLE 8" X 5.5" R.C.B. PER DETAIL SHEET 8.
- 18 CONSTRUCT 27" R.C.P. (1750 D)
- 20 CONSTRUCT 42" R.C.P. (1500 D)
- 24 CONSTRUCT SPECIAL LATERAL CONNECTIONS PER DETAIL SHEET N° 7.
- 26 CONSTRUCT SPECIAL WROUGHT IRON FENCE - SEE SHEET 9
- 27 CONSTRUCT GREENBELT CHANNEL
- 28 SEE SHEETS 7, 8 & 9 FOR INLET & OUTLET STRUCTURE DETAILS.

* FOR ESTIMATING PURPOSES ONLY, ACTUAL PAVEMENT SECTIONS TO BE DETERMINED AT TIME OF CONSTRUCTION BY SOILS ENGINEER, & APPROVED BY DISTRICT INSPECTOR.



NOTE: SEE SHEET 7 OF 10 FOR WING WALL DETAILS.
SEE SHEET 5 OF 10 TRACT 5561 FOR AVENIDA DE LA CARLOTA.

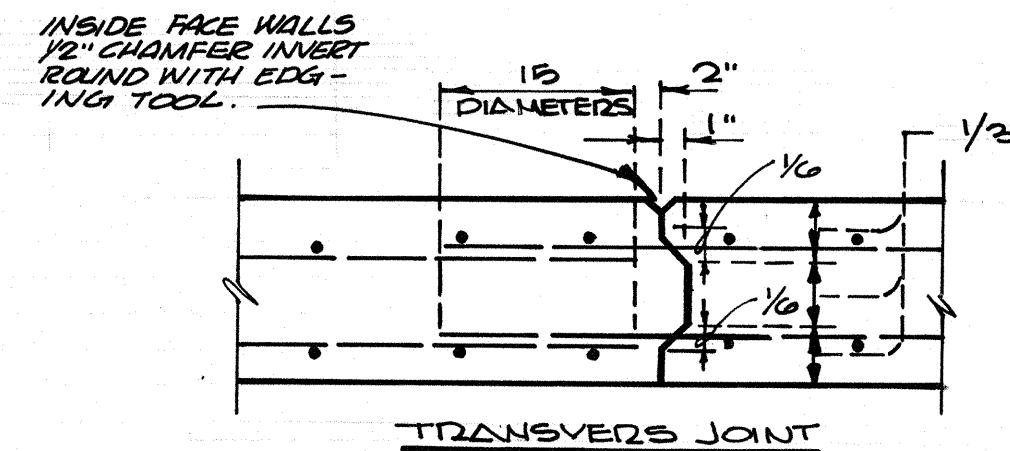
PRELIMINARY REVISION CODE Disregard Prints Bearing Earlier Codes			ORANGE COUNTY FLOOD CONTROL DISTRICT		
REVISIONS			F23 CANADA CHANNEL AVENIDA DE LA CARLOTA OUTLET STRUCTURE		
MARK	DATE	DESCRIPTION			
Δ	4-10-75	ADDED CONNECTION PIPE DIMENSIONS - J.R.C.			
DESIGNED J.R.C. & F.J.K.			RECOMMENDED		
DRAWN J.			DESIGN DIVISION ENGINEER		
SUBMITTED J.R.C. & F.J.K.			SCALE AS SHOWN	DATE	DWG. NO. F23-701-1



REINFORCED CONCRETE CULVERT - MOULTON PARKWAY
MOULTON FROM STA. 23+32.50 TO STA. 24+35.35

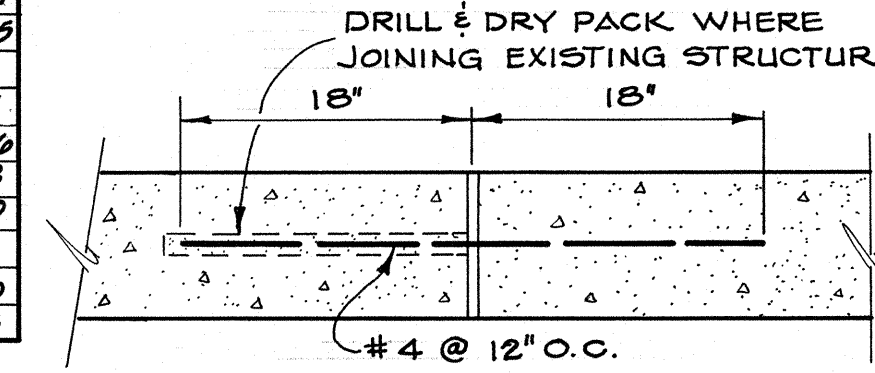
SPAN	10	10
HEIGHT	6	10
STRENGTH CLASSIFICATION	A	A
MAX. FILL OVER TOP	9	8
TOP SLAB	7'1"	8'9"
BOTTOM SLAB	7'2"	9'4"
SIDEWALLS	7'9"	9'4"
"A" SIZE: BAR #	6	6
SPACING	11	11
LENGTH	9'5"	9'7"
"B" SIZE: BAR #	5	5
SPACING	11	11
DIMENSION "X"	20	20
LENGTH	3'0"	3'0"
"C" SIZE: BAR #	5	5
SPACING	11	11
DIMENSION "Y"	28	28
LENGTH	9'1"	13'1"
"D" SIZE: BAR #	5	5
SPACING	11	11
DIMENSION "Y"	28	28
LENGTH	4'7"	4'7"
"E" TOP SLAB - N° OF	9	9
BARS BOTTOM SLAB - N° OF	5	5
"F" BARS SPACING	18	18
SPACERS TOTAL NUMBER	36	48

REINFORCED CONC. BOX DETAILS



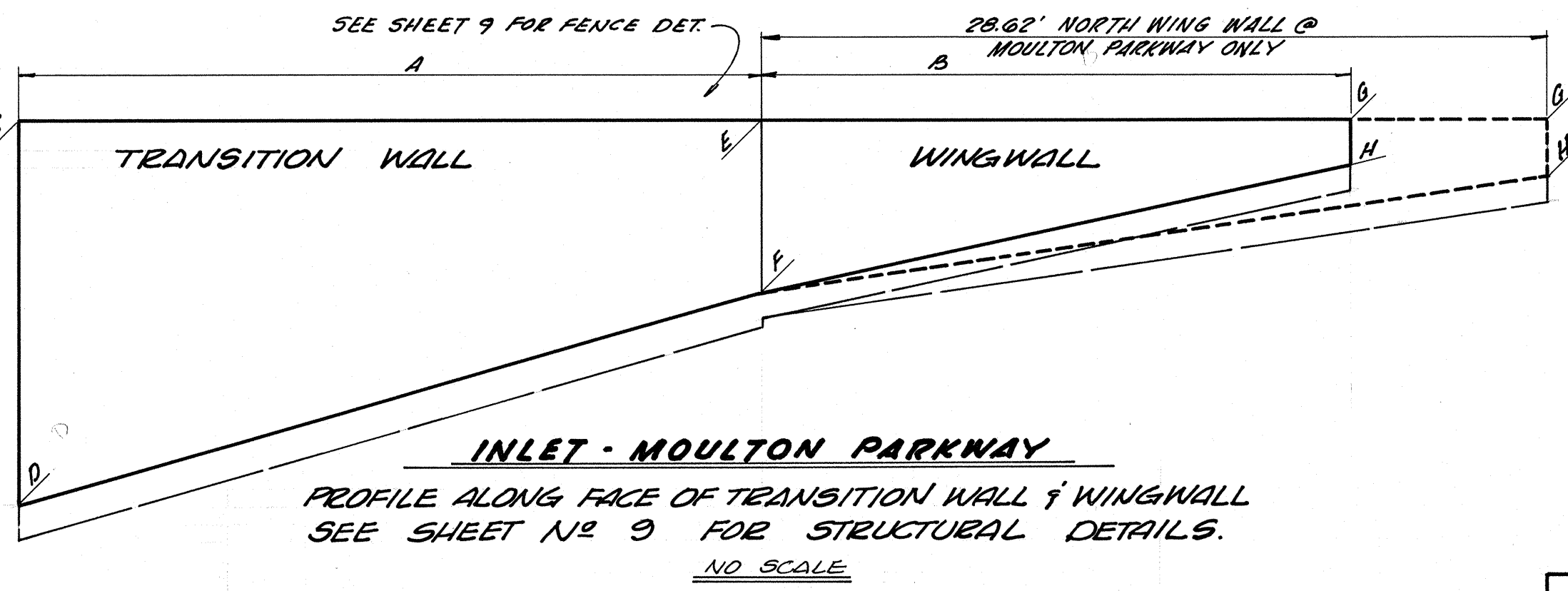
CONSTRUCTION JOINT DETAIL
NO SCALE

SPAN	8	10
HEIGHT	5.5	4.5
STRENGTH CLASSIFICATION	B	A
MAX. FILL OVER TOP	14	2
TOP SLAB	7'1"	10'9"
BOTTOM SLAB	7'2"	11'8"
SIDEWALLS	7'9"	6'0"
"A" SIZE: BAR #	9	11
SPACING	9	11
LENGTH	10'7"	10'7"
"B" SIZE: BAR #	9	11
SPACING	9	11
LENGTH	17'8"	21'7"
"C" SIZE: BAR #	6	6
SPACING	9	11
LENGTH	8'4"	10'4"
"D" TOP SLAB - TOT. NO.	8	18
BOTTOM SLAB - TOT. NO.	8	10
"E" SIZE: BAR #	5	4
BARS SPACING	17	18
SPACERS NUMBER	44	48



TYPICAL DOWEL CONNECTION AT ALL JOINTS

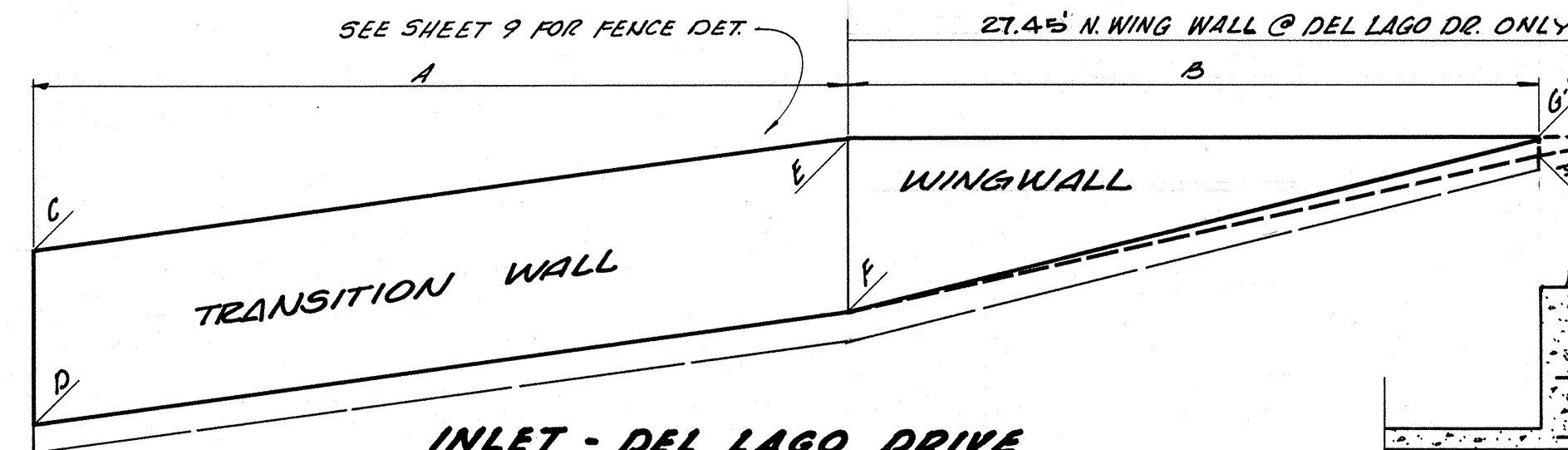
LOCATION	LATERAL SIZE	ELEV. "A"	ELEV. "B"	B	T1	T2	P	E.G. # H BARS	F BARS	D BARS	C
MOULTON PARKWAY NORTH SIDE 10'x6' R.C.B.	54"	245.40	245.25	54	9	7 1/4	5	#6	#5 @ 6" O.C.	2-#3	7.59'
MOULTON PARKWAY SOUTH SIDE 10'x6' R.C.B.	36"	245.41	244.52	36	6 1/2	7 1/4	5	#5	#4 @ 6" O.C.	2-#6	3.79'
DEL LAGO DRIVE SOUTH SIDE OUTLET STRUCTURE	42"	257.90	257.56	42	7 1/2		5	#6	#5 @ 6" O.C.	2-#3	5.62'
DEL LAGO DRIVE NORTH SIDE DBL. 10'x4.5' R.C.B.	36"	257.70	257.70	36	6 1/2	6	5	#5	#4 @ 6" O.C.	2-#6	2.95'
DEL LAGO DRIVE NORTH SIDE OUTLET STRUCTURE	18"	258.00	257.56	18	4 1/2		5	#5	#4 @ 6" O.C.	2-#6	2.56'
DEL LAGO DRIVE SOUTH SIDE OUTLET STRUCTURE	18"	258.50	258.00	18	4 1/2		5	#5	#4 @ 6" O.C.	2-#6	1.67'
AVENIDA DE LA CARLOTA SOUTH SIDE OUTLET STRUCTURE	42"	265.01	264.76	42	7 1/2		5	#6	#5 @ 6" O.C.	2-#6	2.59'
AVENIDA DE LA CARLOTA NORTH SIDE OUTLET STRUCTURE	27"	266.30	264.76	27	5 1/2		5	#5	#4 @ 6" O.C.	2-#6	3.22'
AVENIDA DE LA CARLOTA NORTH SIDE DBL. 8'x5.5' R.C.B.	24"	265.60	265.19	24	5 1/4	6	5	#5	#4 @ 6" O.C.	2-#6	1.45'
DEL LAGO DRIVE NORTH SIDE DBL. 10'x4.5' R.C.B.	18"	258.13	258.02	18	4 1/2	6	5	#5	#4 @ 6" O.C.	2-#6	1.67'



INLET - MOULTON PARKWAY

PROFILE ALONG FACE OF TRANSITION WALL & WINGWALL
SEE SHEET N° 9 FOR STRUCTURAL DETAILS.

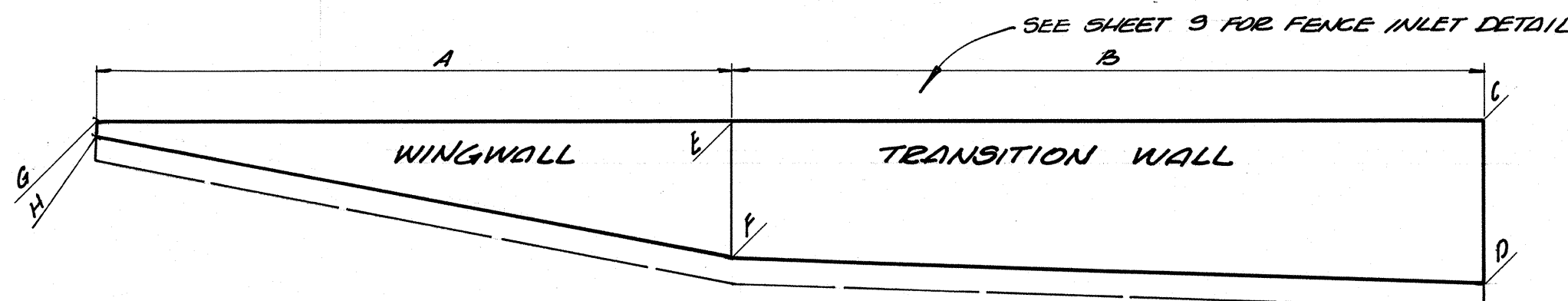
NO SCALE



INLET - DEL LAGO DRIVE

PROFILE ALONG FACE OF TRANSITION & WINGWALL
SEE SHEET N° 9 FOR STRUCTURAL DETAILS

NO SCALE

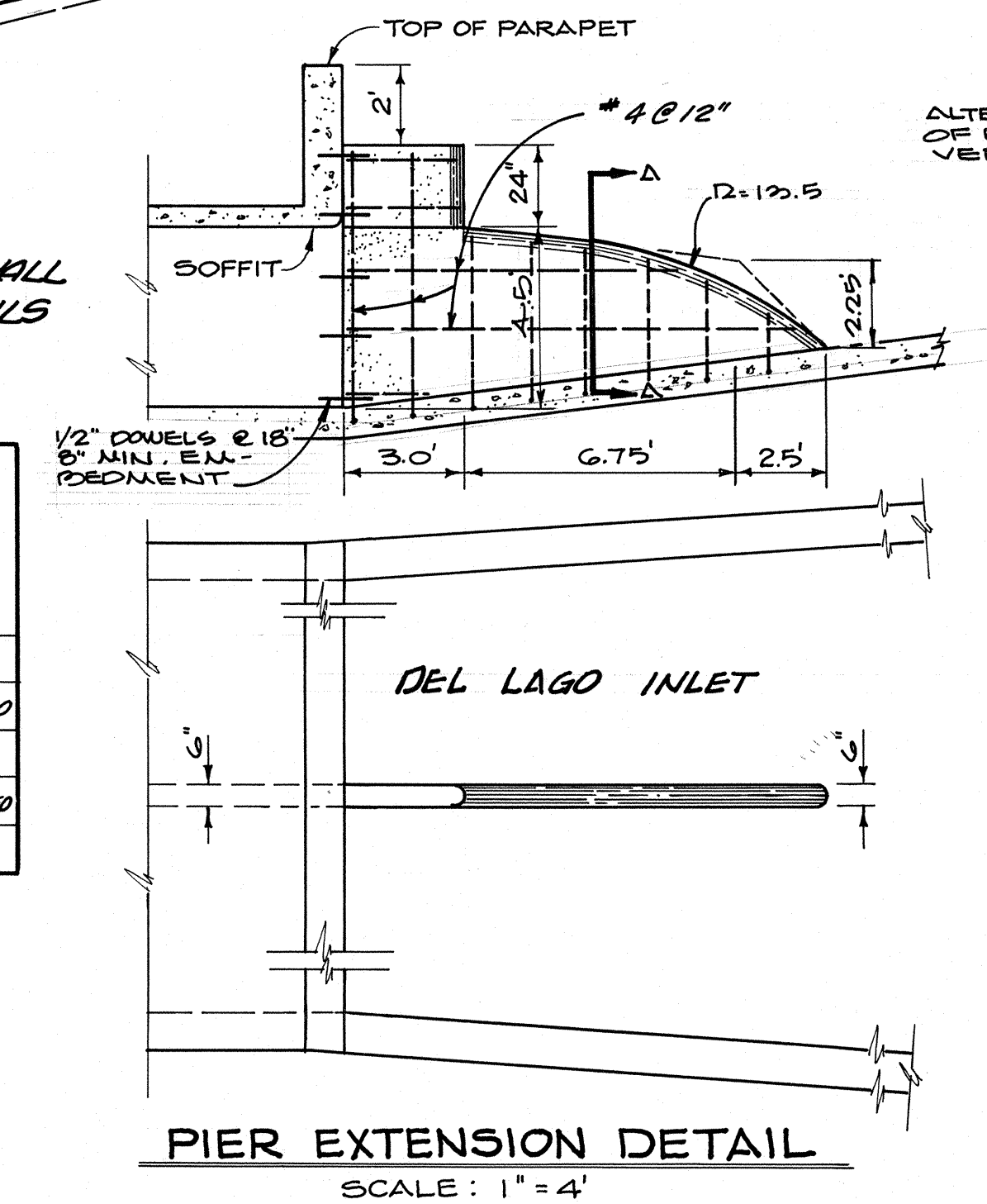


OUTLET - DEL LAGO DRIVE AND AVENIDA DE LA CARLOTA

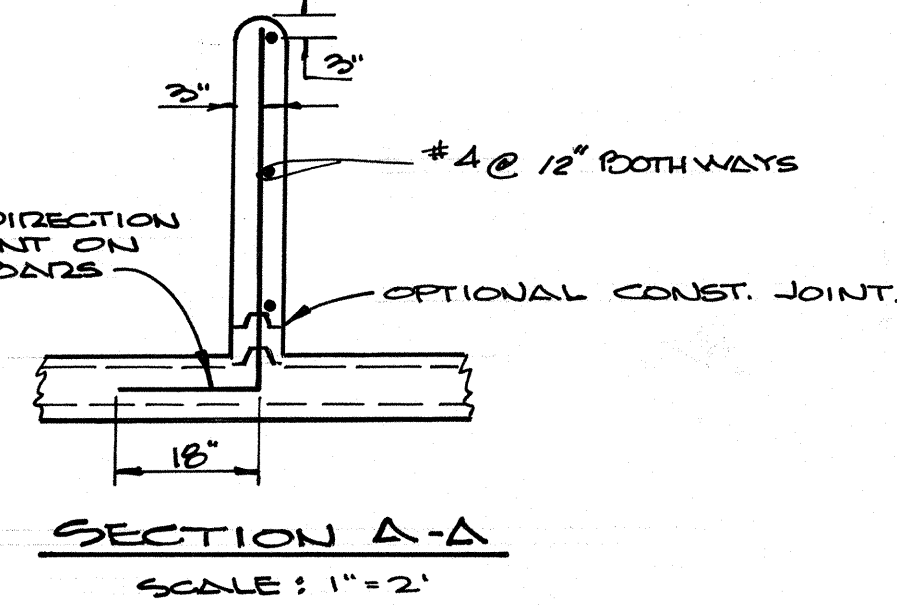
PROFILE ALONG FACE OF TRANSITION WALL & WINGWALL
SEE SHEET N° 9 FOR STRUCTURAL DETAILS.

NO SCALE

		STRUCTURE LENGTH	WING WALL LENGTH	ELEVATIONS							
TYPE	LOCATION	A	B	C	D	E	F	G	H	GI	HI
INLET	MOULTON PARKWAY	26.93'	21.41'	260.50	260.48	260.50	260.19	260.50	260.50	260.50	260.50
OUTLET	DEL LAGO DRIVE	25.45'	21.47'	263.23	261.29	262.76	263.01	262.73	262.73		
INLET	DEL LAGO DRIVE	25.66'	20.84'	264.55	268.05	267.36	261.34	267.50	267.50	267.50	266.50
OUTLET	AVENIDA DE LA CARLOTA	25.36'	21.47'	272.70	264.70	268.75	264.75	268.75	269.25		

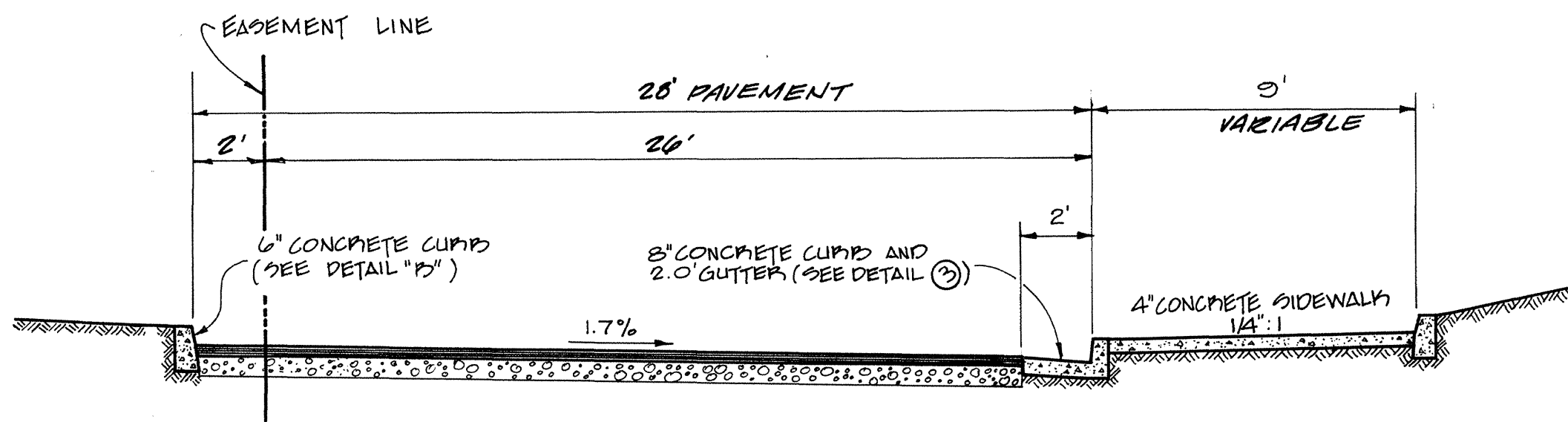


PIER EXTENSION DETAIL
SCALE: 1" = 4'



SECTION A-A
SCALE: 1" = 2'

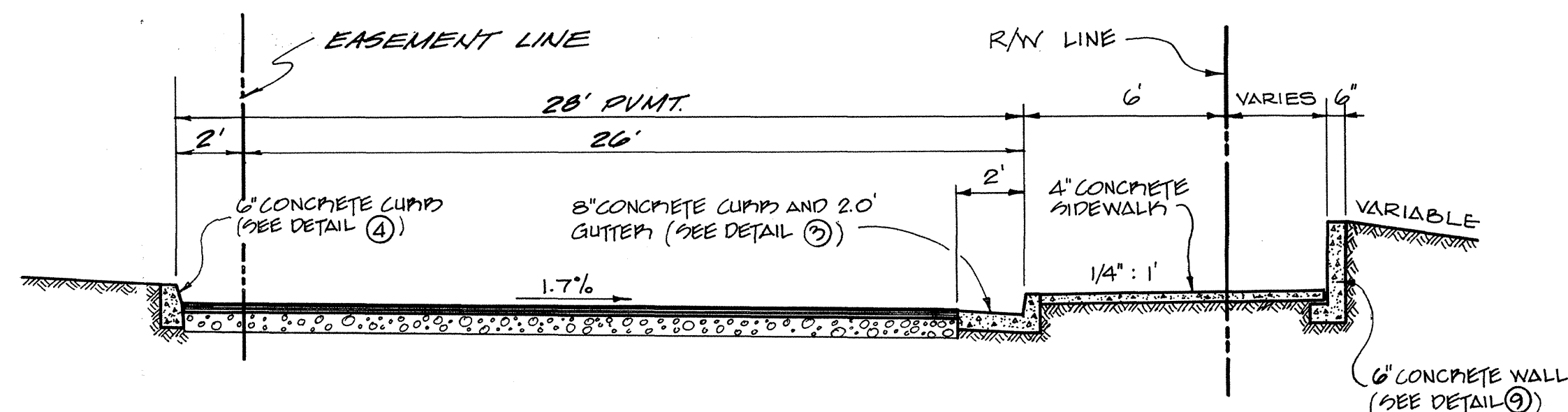
PRELIMINARY REVISION CODE			ORANGE COUNTY FLOOD CONTROL DISTRICT		
Disregard Prints Bearing Earlier Codes					
REVISIONS					
MARK	DATE	DESCRIPTION			
Δ	4-10-75	ADDED CONNECTION PIPE DIMENSIONS - J.F.C.			
Δ	4-10-75	ADDED DOWEL CONNECTION DETAIL - J.F.C.			
DESIGNED J.R.C. & F.J.R.			RECOMMENDED		
DRAWN F.J.R. & J.F.C.			DESIGN DIVISION ENGINEER		
SUBMITTED <i>Jack L. Charrel</i>			SCALE AS SHOWN		
			DATE		
			DWG. NO. F23-701-1		



SECTION A-A - SPECIAL ACCESS ROAD CROSS SECTION

SCALE: 1/4" = 1'-0"

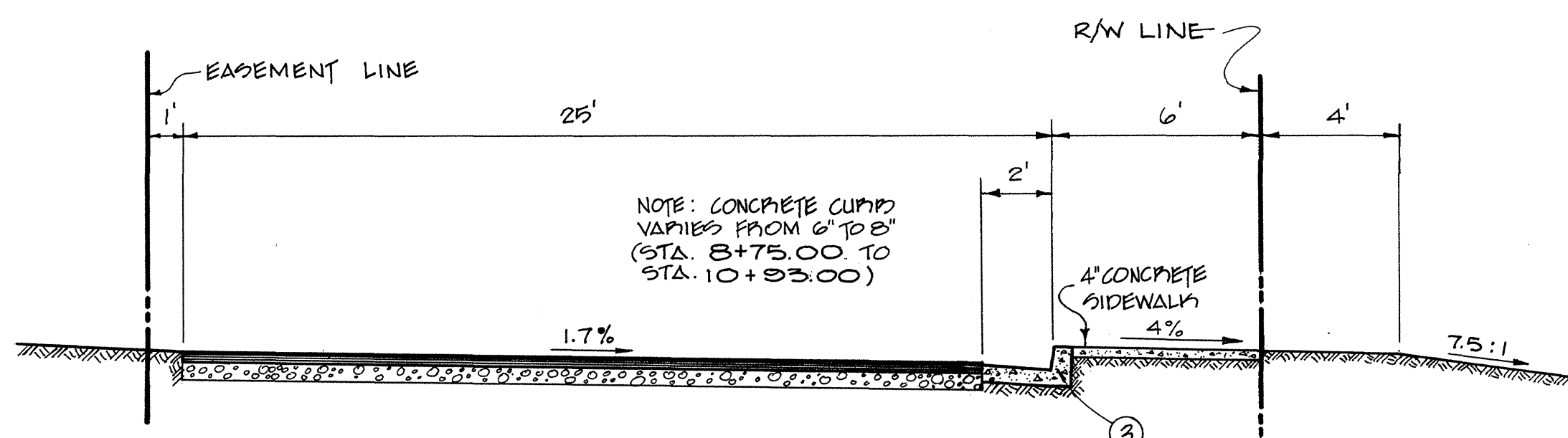
STA. 7+30.57 TO
STA. 8+23.23



SECTION B-B - SPECIAL ACCESS ROAD CROSS SECTION

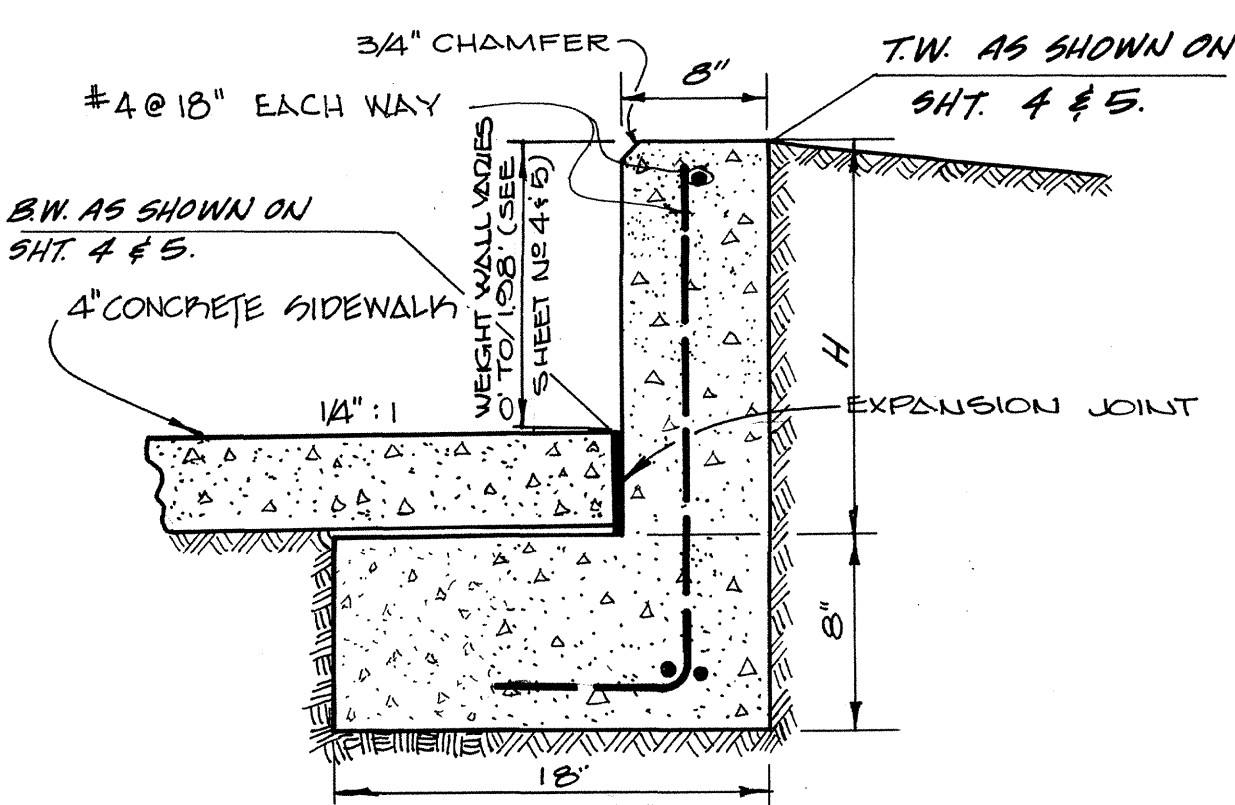
SCALE: 1/4" = 1'-0"

STA. 8+23.23 TO
STA. 9+25.00



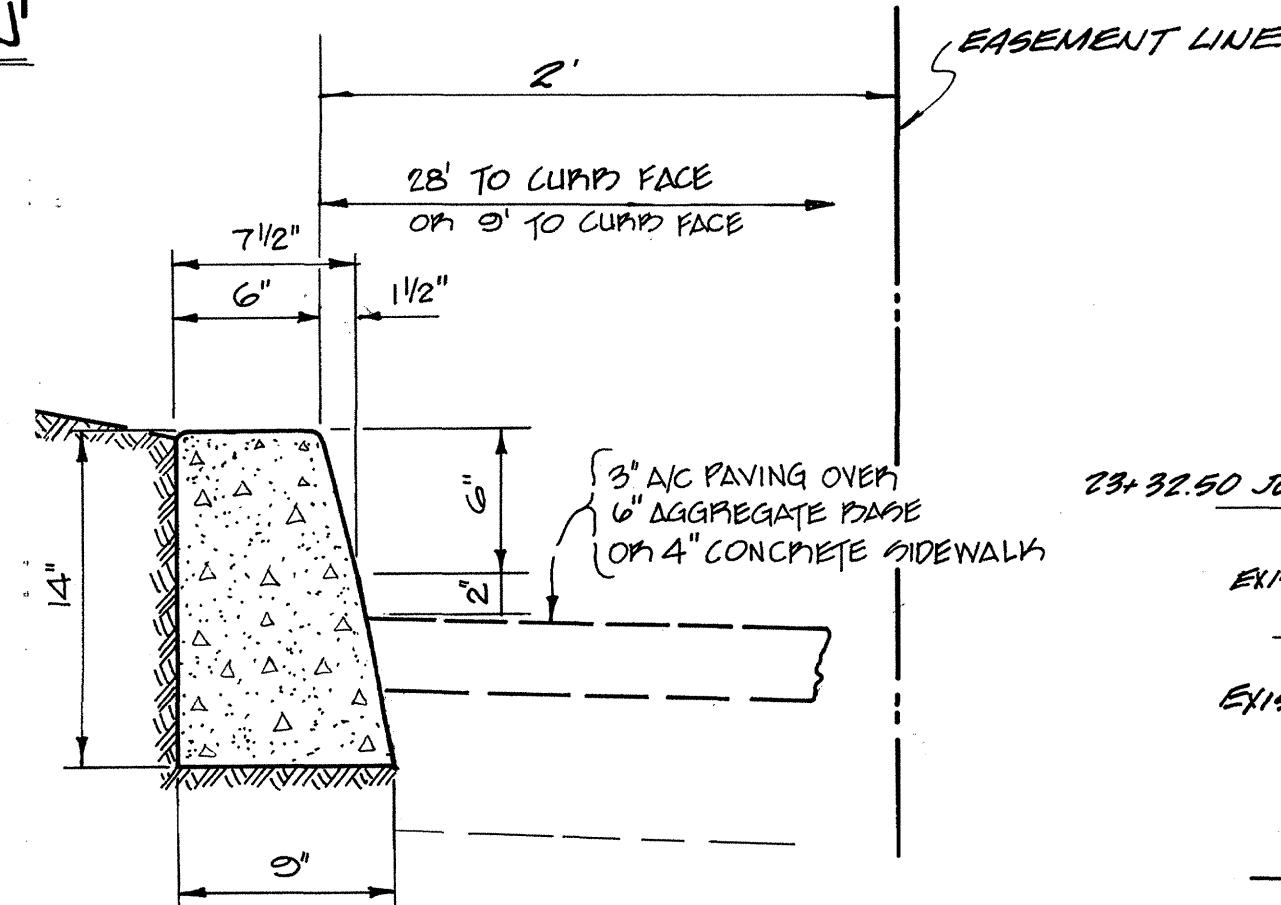
STANDARD ACCESS ROAD CROSS SECTION

SCALE: 1/4" = 1'-0"



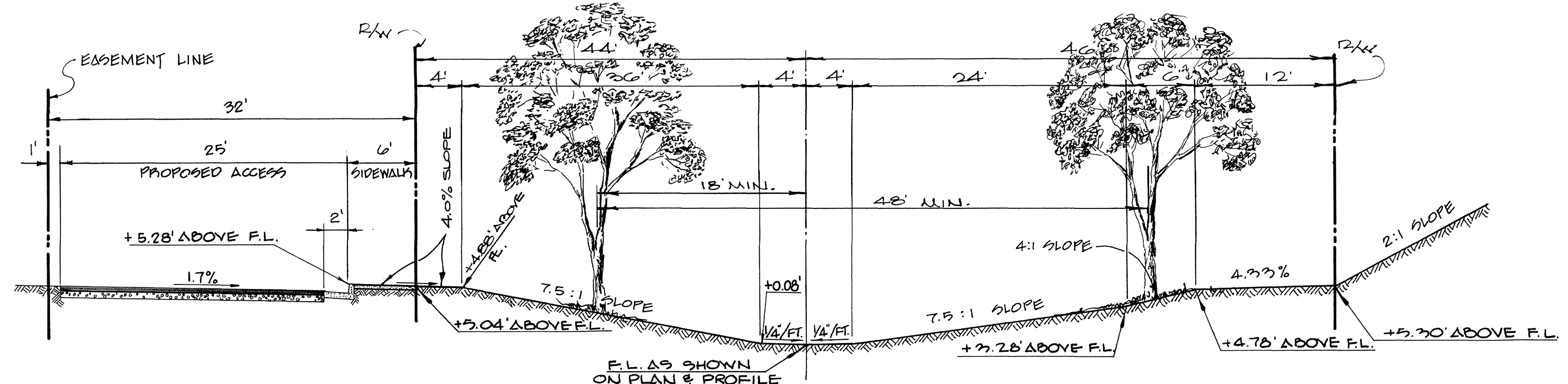
CONCRETE WALL DETAIL

SCALE: 1/2" = 1'-0"



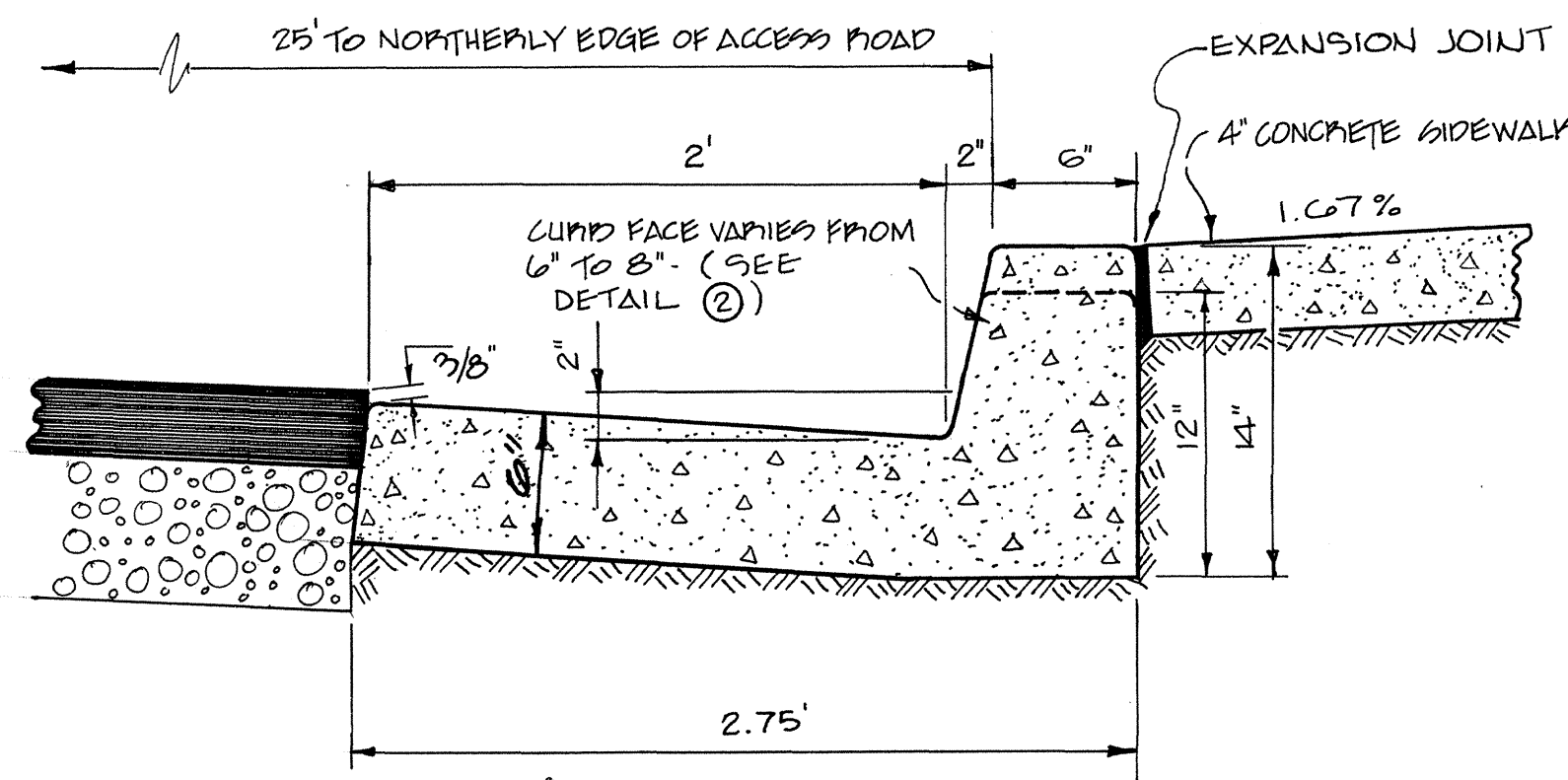
6" CONCRETE CURB DETAIL

SCALE: 1/2" = 1'-0"



PROPOSED CHANNEL SECTION LOOKING UP STREAM

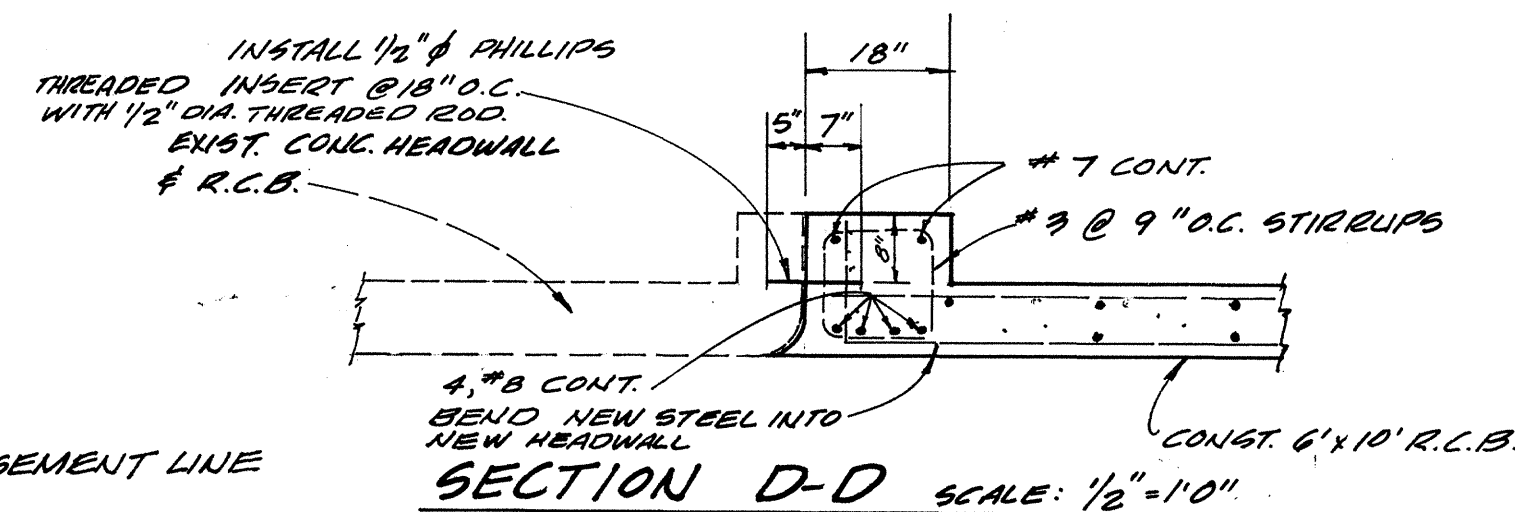
SCALE: 1/8" = 1'-0"



CONCRETE CURB AND GUTTER DETAIL

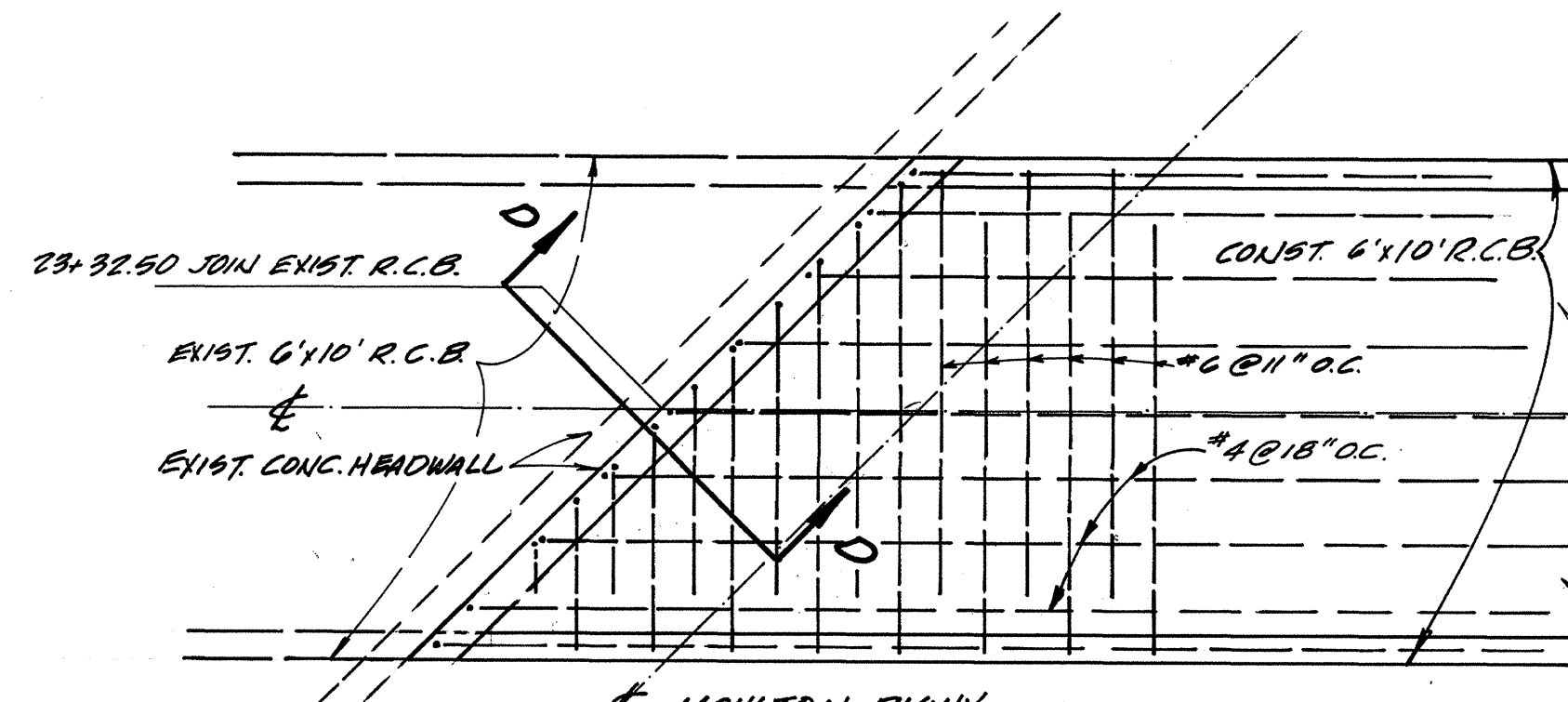
SCALE: 1/2" = 1'-0"

- ① 6" CURB FACE
- ② 6" TO 8" CURB FACE
- ③ 8" CURB FACE



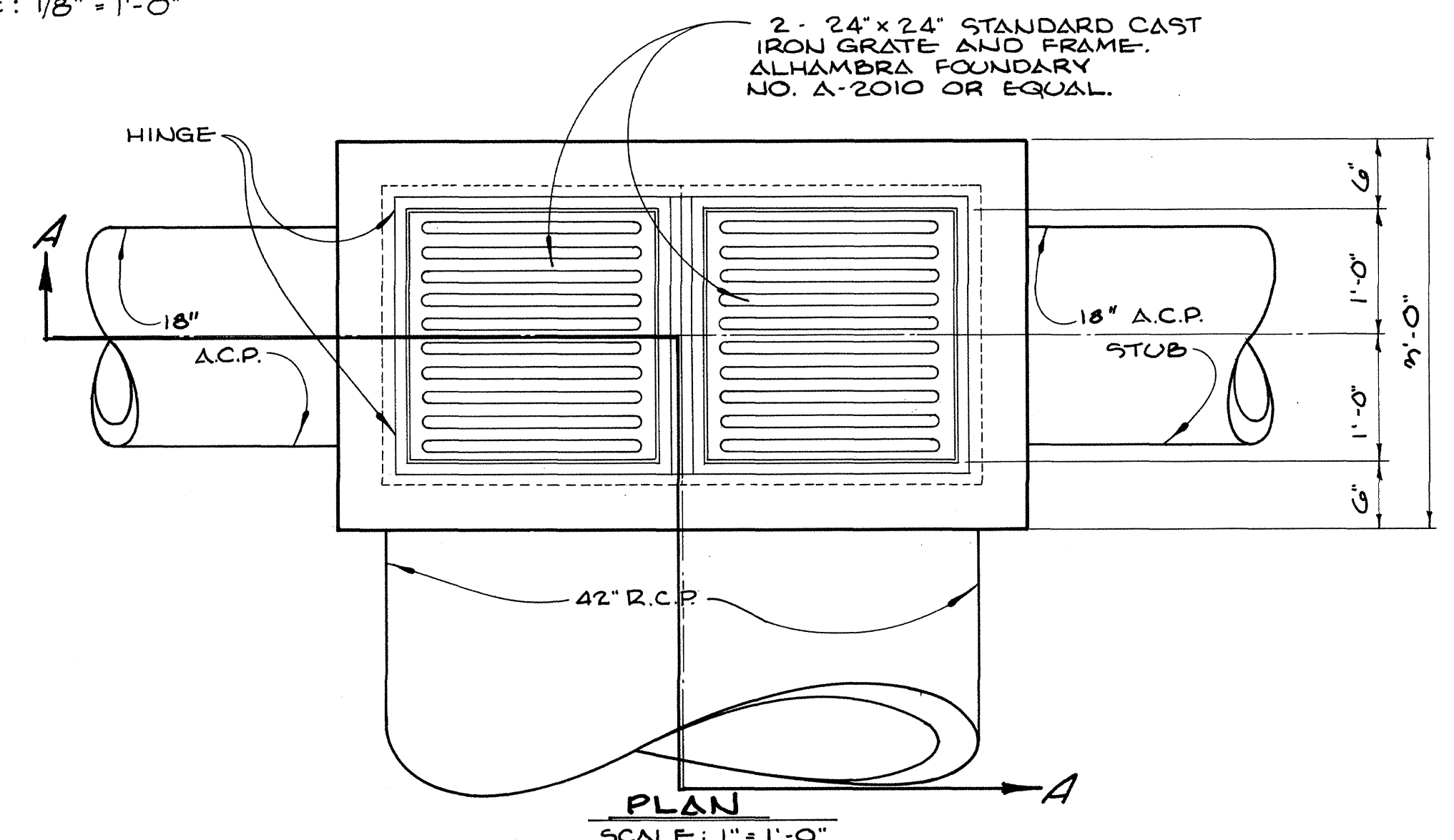
SECTION D-D

SCALE: 1/2" = 1'-0"



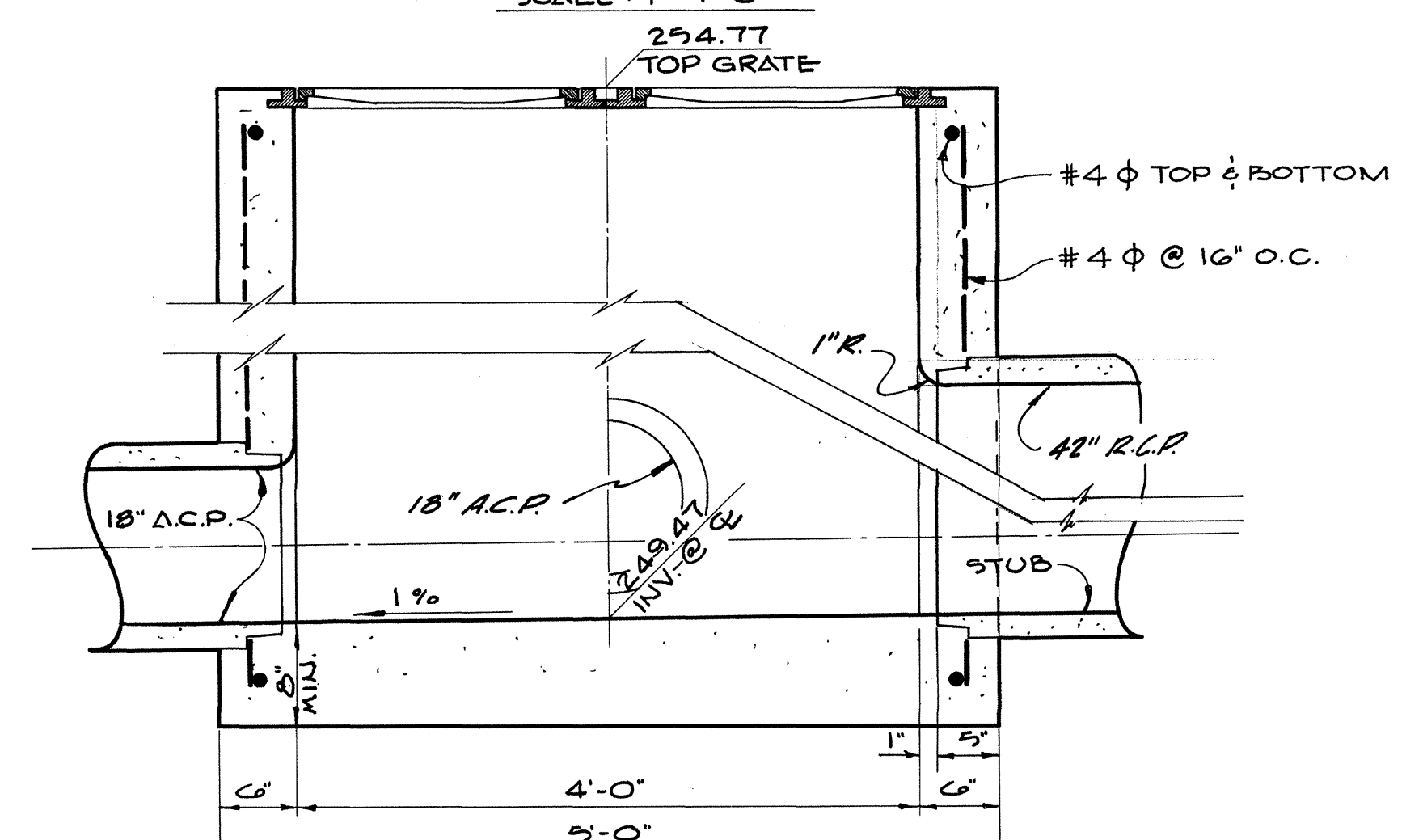
R.C.B. HEADWALL CONNECTION DETAIL AT MOULTON PARKWAY

SCALE: 1/2" = 1'



PLAN

SCALE: 1" = 1'-0"



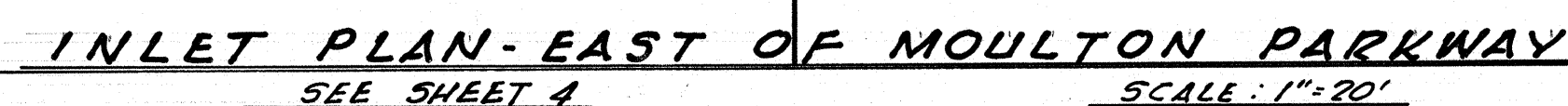
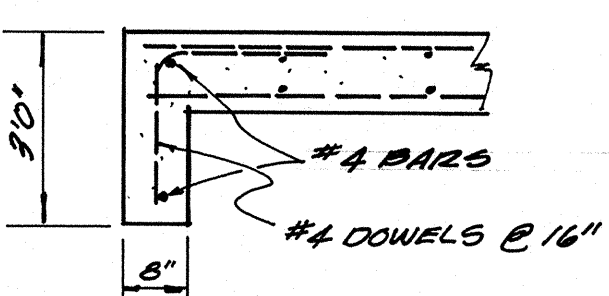
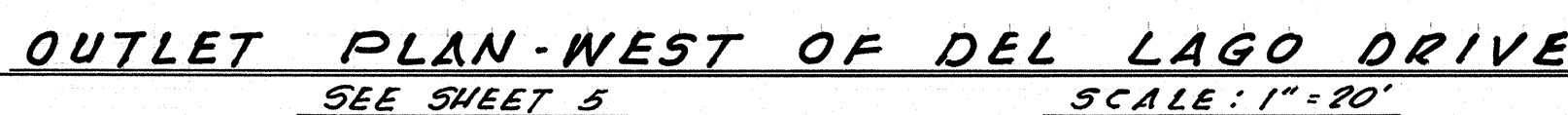
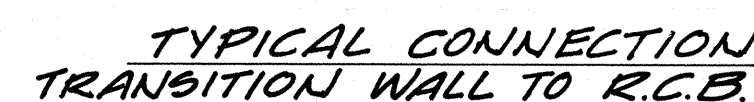
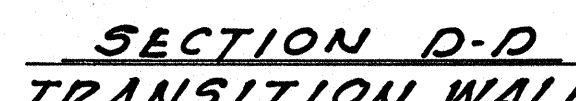
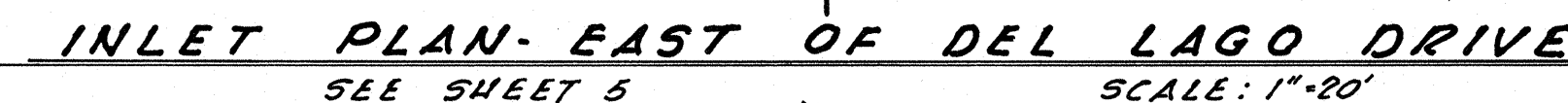
SECTION A-A

SCALE: 1" = 1'-0"

SPECIAL INLET STRUCTURE

1/2 0 2
3 inches on original drawing

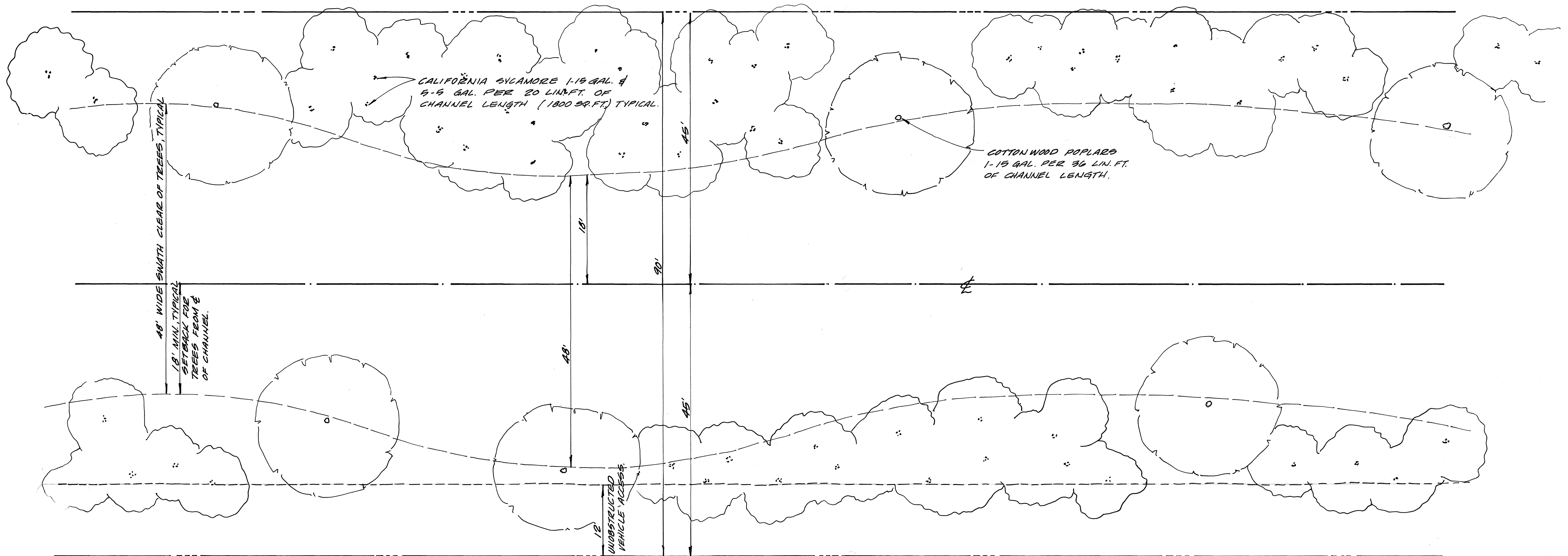
PRELIMINARY REVISION CODE			ORANGE COUNTY FLOOD CONTROL DISTRICT		
Disregard Prints Bearing Earlier Codes					
REVISIONS					
MARK	DATE	DESCRIPTION			
DESIGNED					
DRAWN					
SUBMITTED					
CHECKED					
DESIGN DIVISION ENGINEER					
SCALE					
DATE					
DWG. NO.					
F23-701-1					



TYPICAL REINFORCING STEEL LAYOUT

SEE SECTIONS A-A, D-D, E-E,
FOR PRECISE DIMENSIONS AND
STEEL SIZE. ALL STEEL SHALL BE
PLACED PARALLEL & PERPENDICULAR
TO & OF TRANSITION STRUCTURES

74-353



GENERAL NOTES

1. ALL PLANTINGS SHALL BE PLACED AT THE SPACING SHOWN ON THE PLAN AND IN A MANNER MEETING THE APPROVAL OF THE DISTRICTS INSPECTOR.
2. NO TREES OR SHRUBS SHALL BE PLANTED IN THE 48' WIDE SWATH IN THE CENTER OF THE CHANNEL.
3. THE TREES PLACED ADJACENT TO THE CENTER OF THE CHANNEL SHALL BE PLANTED ON A SMOOTH VARIING LINE AS SHOWN ON THE PLAN. NO ABRUPT CHANGES IN THE LOCATION OF THE TREES ADJACENT TO THE CENTER OF THE CHANNEL WILL BE PERMITTED.
4. DISTRICT'S INSPECTOR SHALL HAVE THE RIGHT TO REQUEST ANY TREES TO BE REMOVED, IF IN HIS OPINION THE ARRANGEMENT OF THE PLANTS WILL CAUSE AN UNDUE OBSTRUCTION TO THE FLOW.
5. BASIC CHANNEL SEED MIX: CREEPING RED FESCUE AT 70 LBS./ACRE; WHITE ALYSSUM AT 2 LBS./ACRE; CALIFORNIA POPPY AT 1/2 LB./ACRE.

SCALE: 1/8" = 1' 0"

1 1/2 0 2
3 inches on original drawing

FLOOD CONTROL GREENBELT CHANNEL

PRELIMINARY REVISION CODE Disregard Prints Bearing Earlier Codes					
REVISIONS			ORANGE COUNTY FLOOD CONTROL DISTRICT		
MARK	DATE	DESCRIPTION			
DESIGNED			RECOMMENDED		
DRAWN JMM			DESIGN DIVISION ENGINEER		
SUBMITTED			DWG. NO.		
DESIGN ENGINEER			F23-701-1		
SCALE AS SHOWN			DATE		

JOB 74-353

SHEET 10 OF 10