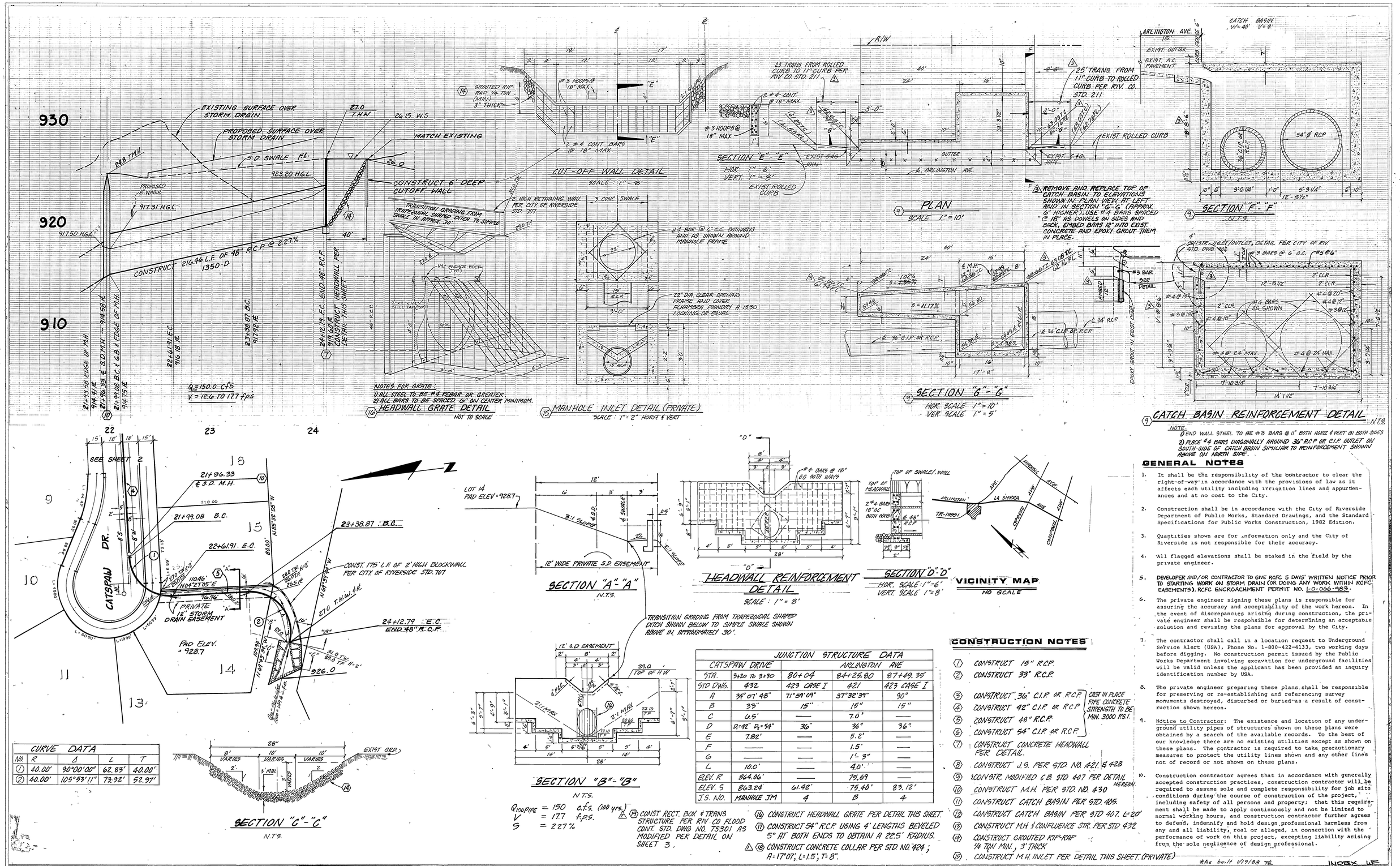
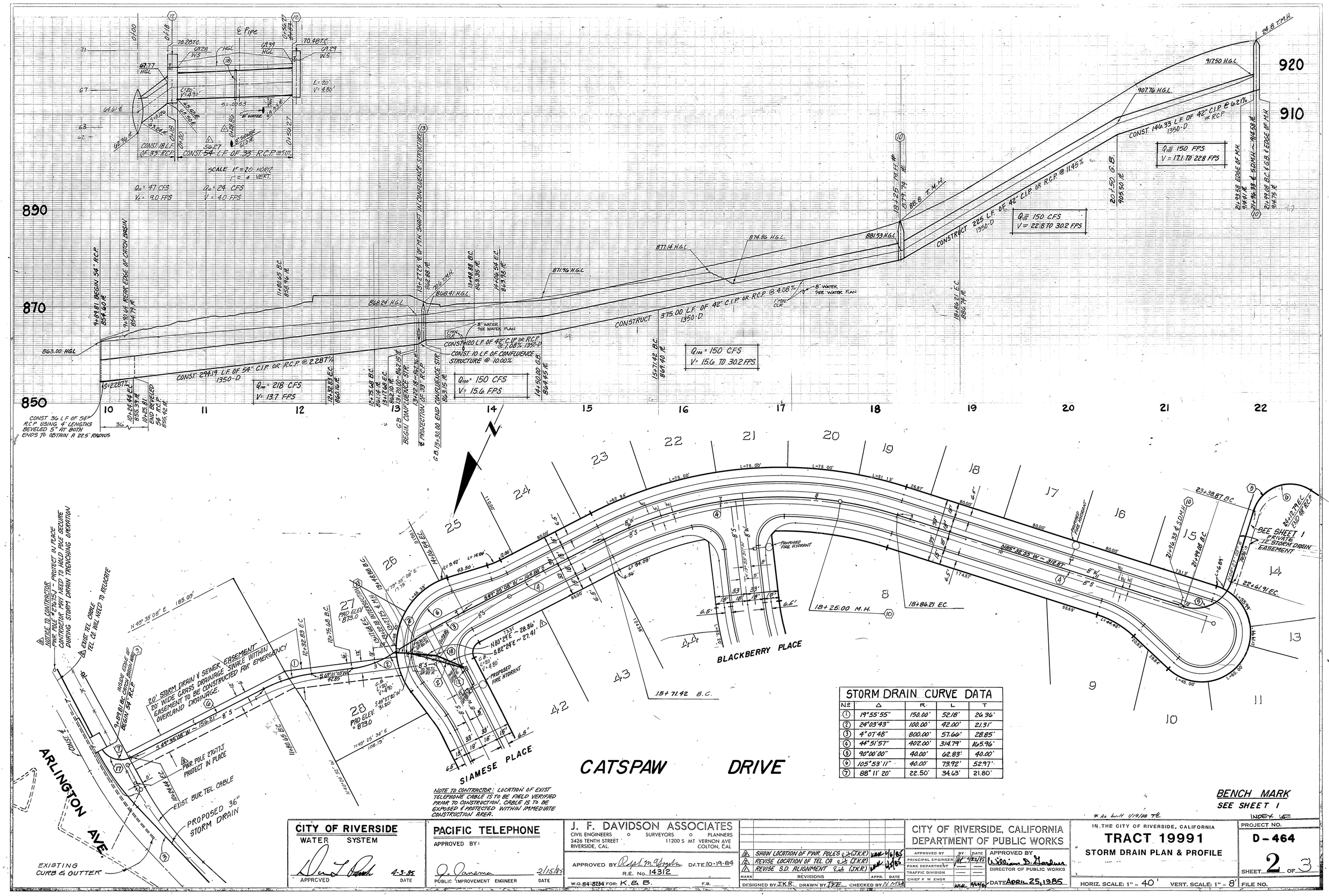

930
920
910
EXISTING SURFACE OVER STORM DRAIN
PROPOSED SURFACE OVER STORM DRAIN
27.0 T.H.W.
26.15 W.S.
MATCH EXISTING
S.D. SWALE FL.
923.20 H.G.L.
PROPOSED 8" WATER
917.31 H.G.L.
917.50 H.G.L.
CONSTRUCT 6' DEEP CUTOFF WALL
CONSTRUCT 216.46 L.F. OF 48" R.C.P. @ 2.27%
1350-D
24+12.79 E.C. END 48" R.C.P.
919.64 E
CONSTRUCT HEADWALL PER DETAIL THIS SHEET
Q100 = 150.0 CFS
V = 12.6 TO 17.7 fps
NOTES FOR GRATE:
1) ALL STEEL TO BE #4 REBAR OR GREATER.
2) ALL BARS TO BE SPACED 6" ON CENTER MINIMUM.
HEADWALL GRATE DETAIL
NOT TO SCALE
GROUTED RIP-RAP (EACH 1/4 TON (MIN) 3" THICK)
#3 HOOPS @ 18" MAX.
2 #4 CONT. BARS @ 18" MAX.
CUT-OFF WALL DETAIL
SCALE: 1" = 8'
TRANSITION GRADING FROM TRAPEZOIDAL SHAPED DITCH TO SIMPLE SWALE IN APPROX. 30'
2' HIGH RETAINING WALL PER CITY OF RIVERSIDE STD. 707
3' CONC. SWALE
1/2" ANCHOR BOLT (TYP)
#4 BAR @ 6" C.C. BOTH WAYS AND AS SHOWN AROUND MANHOLE FRAME
22" DIA. CLEAR OPENING FRAME AND COVER NEENAH OR EQUAL FOUNDRY A-1530 LOCKING OR EQUAL
MANHOLE INLET DETAIL (PRIVATE)
SCALE: 1" = 2" HORIZ & VERT
23" TRANS. FROM ROLLED CURB TO 11" CURB PER RIV. CO. STD. 211
2 #4 CONT. @ 18" MAX.
#3 HOOPS @ 18" MAX.
SECTION "E"-"E"
HOR. 1" = 6'
VERT. 1" = 8'
EXIST. ROLLED CURB
EXIST. C&G JOIN
R/W
25' TRANS. FROM 11" CURB TO ROLLED CURB PER RIV. CO. STD. 211
EXIST. ROLLED CURB
GUTTER
ARLINGTON AVE.
PLAN
SCALE 1" = 10'
REMOVE AND REPLACE TOP OF CATCH BASIN TO ELEVATIONS SHOWN IN PLAN VIEW AT LEFT AND IN SECTION "G"-"G" (APPROX. 6" HIGHER); USE #4 BARS SPACED @ 18" AS DOWELS ON SIDES AND BACK, EMBED BARS 12" INTO EXIST. CONCRETE AND EPOXY GROUT THEM IN PLACE.
SECTION "G"-"G"
HOR. SCALE 1" = 10'
VER. SCALE 1" = 5'
#3 BAR SEE DETAIL
EMBED 12"
EPOXY GROUT IN EXIST. CONC.
54" R.C.P.
36" C.I.P. OR R.C.P.
CATCH BASIN W=40' V=8'
ARLINGTON AVE.
EXIST. GUTTER
EXIST. A.C. PAVEMENT
54" Ø R.C.P.
SECTION "F"-"F"
N.T.S.
CONSTR. INLET/OUTLET, DETAIL PER CITY OF RIV. STD. DWG. 402
#3 BARS @ 6" O.C.
#4 BARS AS SHOWN
CATCH BASIN REINFORCEMENT DETAIL
N.T.S.
NOTE:
1) END WALL STEEL TO BE #3 BARS @ 11" BOTH HORIZ & VERT ON BOTH SIDES
2) PLACE #4 BARS DIAGONALLY AROUND 36" R.C.P. OR C.I.P. OUTLET ON SOUTH SIDE OF CATCH BASIN SIMILIAR TO REINFORCEMENT SHOWN ABOVE ON NORTH SIDE.
SEE SHEET 2
21+96.33 ℄ S.D. M.H.
21+99.08 B.C.
22+61.91 E.C.
23+38.87 B.C.
24+12.79 E.C.
CATSPAW DR.
CONST. 175' L.F. OF 2' HIGH BLOCKWALL PER CITY OF RIVERSIDE STD. 707
PRIVATE 12' STORM DRAIN EASEMENT
PAD ELEV. = 928.7
926.0
LOT 14 PAD ELEV = 928.7
12' WIDE PRIVATE S.D. EASEMENT
SECTION "A"-"A"
N.T.S.
TRANSITION GRADING FROM TRAPEZOIDAL SHAPED DITCH SHOWN BELOW TO SIMPLE SWALE SHOWN ABOVE IN APPROXIMATELY 30'.
12' S.D. EASEMENT
29.0 TOP OF H.W.
SECTION "B"-"B"
N.T.S.
Q100 PIPE = 150 c.f.s. (100 yrs.)
V = 17.7 f.p.s.
S = 22.7%
HEADWALL REINFORCEMENT DETAIL
SCALE: 1" = 8'
#4 BARS @ 18" O.C. BOTH WAYS
SECTION "D"-"D"
HOR. SCALE: 1" = 6'
VERT. SCALE 1" = 8'
TOP OF SWALE/WALL
TOP OF HEADWALL
2 #4 BARS 18" OC BOTH WAYS
VICINITY MAP
NO SCALE
ARLINGTON
LA SIERRA
MERRILL AVE.
SEVENTH AVE.
CAMPBELL AVE.
TR-19991
SECTION "C"-"C"
N.T.S.
EXIST. G.R.D.
CURVE DATA
NO. R Δ L T
① 40.00' 90°00'00" 62.83' 40.00'
② 40.00' 105°53'11" 73.92' 52.97'
JUNCTION STRUCTURE DATA
CATSPAW DRIVE | ARLINGTON AVE
STA. 3+20 TO 3+30 | 80+04 | 84+26.80 | 87+49.35
STD DWG. 432 | 423 CASE I | 421 | 423 CASE I
A 34°07'48" | 71°59'09" | 37°32'39" | 90°
B 33" | 15" | 15" | 15"
C 4.5' | — | 7.0' | —
D D1=42" D2=54" | 36" | 36" | 36"
E 7.82' | — | 5.2' | —
F — | — | 1.5' | —
G — | — | 1'-3" | —
L 10.0' | — | 4.0' | —
ELEV. R 864.06' | — | 75.69 | —
ELEV. S 863.24 | 61.42' | 75.40' | 89.12'
J.S. NO. MANHOLE JM | 4 | B | 4
CONSTRUCTION NOTES
① CONSTRUCT 15" R.C.P.
② CONSTRUCT 33" R.C.P.
③ CONSTRUCT 36" C.I.P. OR R.C.P.
④ CONSTRUCT 42" C.I.P. OR R.C.P.
⑤ CONSTRUCT 48" R.C.P.
⑥ CONSTRUCT 54" C.I.P. OR R.C.P.
CAST IN PLACE PIPE CONCRETE STRENGTH TO BE MIN. 3000 P.S.I.
⑦ CONSTRUCT CONCRETE HEADWALL PER DETAIL.
⑧ CONSTRUCT J.S. PER STD. NO. 421 & 423
⑨ CONSTR. MODIFIED C.B. STD. 407 PER DETAIL HEREON.
⑩ CONSTRUCT M.H. PER STD. NO. 430
⑪ CONSTRUCT CATCH BASIN PER STD. 405.
⑫ CONSTRUCT CATCH BASIN PER STD 407. L=20'
⑬ CONSTRUCT M.H. & CONFLUENCE STR. PER STD. 432
⑭ CONSTRUCT GROUTED RIP-RAP 1/4 TON MIN., 3" THICK
⑮ CONSTRUCT M.H. INLET PER DETAIL THIS SHEET. (PRIVATE)
⑯ CONSTRUCT HEADWALL GRATE PER DETAIL THIS SHEET.
⑰ CONSTRUCT 54" R.C.P. USING 4' LENGTHS BEVELED 5° AT BOTH ENDS TO OBTAIN A 22.5' RADIUS.
⑱ CONSTRUCT CONCRETE COLLAR PER STD. NO. 424; A=17°07', L=1.5', T=8".
⑲ CONST. RECT. BOX & TRANS STRUCTURE PER RIV. CO. FLOOD CONT. STD. DWG. NO. TS301 AS MODIFIED PER DETAIL ON SHEET 3.
GENERAL NOTES
1. It shall be the responsibility of the contractor to clear the right-of-way in accordance with the provisions of law as it affects each utility including irrigation lines and appurtenances and at no cost to the City.
2. Construction shall be in accordance with the City of Riverside Department of Public Works, Standard Drawings, and the Standard Specifications for Public Works Construction, 1982 Edition.
3. Quantities shown are for information only and the City of Riverside is not responsible for their accuracy.
4. All flagged elevations shall be staked in the field by the private engineer.
5. DEVELOPER AND/OR CONTRACTOR TO GIVE RCFC 5 DAYS' WRITTEN NOTICE PRIOR TO STARTING WORK ON STORM DRAIN (OR DOING ANY WORK WITHIN RCFC EASEMENTS). RCFC ENCROACHMENT PERMIT NO. 1-0-066-983.
6. The private engineer signing these plans 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 plans for approval by the City.
7. The contractor shall call in a location request to Underground Service Alert (USA), Phone No. 1-800-422-4133, two working days before digging. No construction permit issued by the Public Works Department involving excavation for underground facilities will be valid unless the applicant has been provided an inquiry identification number by USA.
8. The private engineer preparing these plans shall be responsible for preserving or re-establishing and referencing survey monuments destroyed, disturbed or buried as a result of construction shown hereon.
9. Notice to Contractor: The existence and location of any underground utility pipes of structures shown on these plans were obtained by a search of the available records. To the best of our knowledge there are no existing utilities except as shown on these plans. The contractor is required to take precautionary measures to protect the utility lines shown and any other lines not of record or not shown on these plans.
10. 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 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.
*As built 1/19/88
INDEX
-CAUTION-
PACIFIC TELEPHONE CABLES UNDERGROUND
BEFORE EXCAVATING
CALL COLLECT:
7:30 A.M. to 5 P.M. | After Hours & Holidays
Orange County 714-633-0811 714-547-6606
Riverside County 714-684-0071 714-547-6606
BENCH MARK
G2-A, FOUND BRASS DISC STAMPED (G2-A) IN CONCRETE IN MDST W'LY TRAFFIC ISLAND AT ARLINGTON AVE. & LA SIERRA AVE. F.B. 1014/14 CITY OF RIVERSIDE DATA. ELEV. 865.079
PACIFIC TELEPHONE
APPROVED BY:
PUBLIC IMPROVEMENT ENGINEER 2/15/85 DATE
CITY OF RIVERSIDE
WATER SYSTEM
APPROVED 4-3-85 DATE
J. F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS o SURVEYORS o PLANNERS
3426 TENTH STREET RIVERSIDE, CAL
11200 S MT VERNON AVE COLTON, CAL
SCALE: HORIZ: 1" = 40' VERT: 1" = 4
DATE OCT 1984
APPROVED BY: R.C.E. 14312 10-19-84 DATE
3 RAISE CATCH BASIN (J.K.R.) WLE 2/15/85
2 ADD CONST. NOTE (19) (J.K.R.) WLE 7/9/84
1 ADD CONST. NOTE (18) (J.K.R.) WLE 5/8/84
MARK REVISIONS APPR. DATE
DESIGNED BY J.K.R. DRAWN BY T.F.E. CHECKED BY N.M.S.
CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY | BY | DATE
PRINCIPAL ENGINEER WLE 4/23/85
PARK DEPARTMENT
TRAFFIC DIVISION
CHIEF P. W. ENGR.
WLE 4/24/85 DATE APRIL 25, 1985
APPROVED BY William D. Hardman DIRECTOR OF PUBLIC WORKS
IN THE CITY OF RIVERSIDE, CALIFORNIA
TRACT 19991
STORM DRAIN PLAN & PROFILE
TITLE SHEET
W.O. 84-8234 FOR KAUFMAN & BROAD
PROJECT NO. D-464
SHEET 1 OF 3
FILE NO.



STORM DRAIN CURVE DATA

Nº	Δ	R	L	T
1	19°55'55"	150.00'	52.18'	26.36'
2	24°03'43"	100.00'	42.00'	21.31'
3	4°07'48"	800.00'	57.66'	28.85'
4	44°51'57"	402.00'	314.79'	165.96'
5	90°00'00"	40.00'	62.83'	40.00'
6	105°53'11"	40.00'	73.92'	52.97'
7	88°11'20"	22.50'	34.63'	21.80'

CITY OF RIVERSIDE
WATER SYSTEM
APPRCVED 4-3-85 DATE

PACIFIC TELEPHONE
APPROVED BY:
PUBLIC IMPROVEMENT ENGINEER 2/15/85 DATE

J. F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS o SURVEYORS o PLANNERS
3426 TENTH STREET 11200 S MT VERNON AVE
RIVERSIDE, CAL. COLTON, CAL
APPROVED BY Robert M. Hayden DATE 10-19-84
R.E. No. 14312
W.O. 84-8234 FOR: K.E.B. F.B.

MARK	REVISIONS	APPR.	DATE
3	SHOW LOCATION OF PWR. POLES (J.K.R.)		6/6/85
2	REVISE LOCATION OF TEL. CA (J.K.R.)		4/25/85
1	REVISE S.D. ALIGNMENT (J.K.R.)		

DESIGNED BY J.K.R. DRAWN BY T.F.E. CHECKED BY N.M.H.

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		4/25/85
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P W ENGR		

APPROVED BY William D. Gardner
DIRECTOR OF PUBLIC WORKS
DATE APRIL 25, 1985

IN THE CITY OF RIVERSIDE, CALIFORNIA
TRACT 19991
STORM DRAIN PLAN & PROFILE

HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 8'

PROJECT NO. D-464
SHEET 2 OF 3
FILE NO.

* As built 11/9/88 TE
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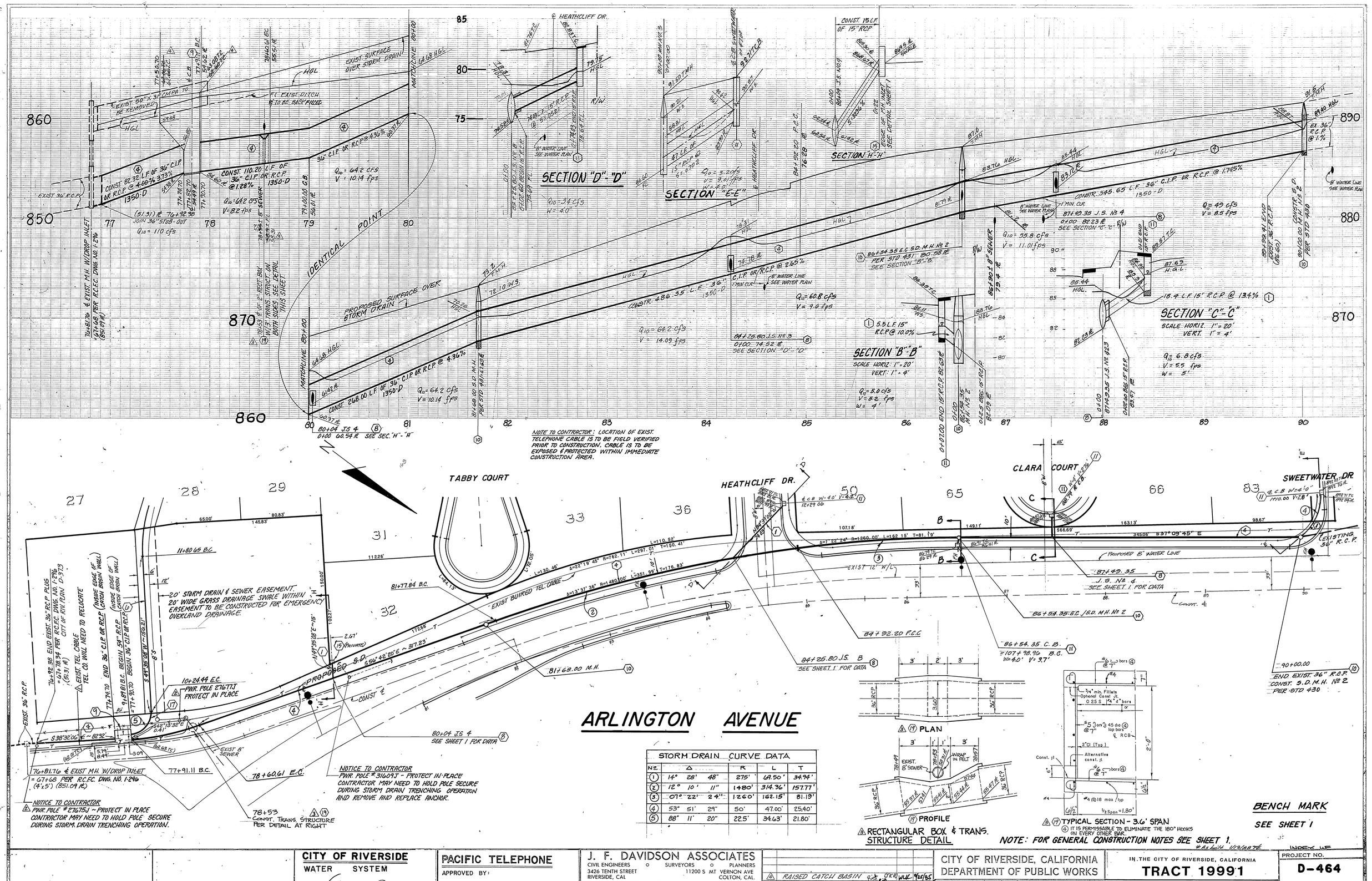

STORM DRAIN CURVE DATA

Nº	Δ			R	L	T
1	14°	28'	48"	215'	104.50'	34.94'
2	12°	10'	11"	1480'	314.36'	157.77'
3	07°	22'	24"	1260'	162.15'	81.19'
4	53°	51'	29"	50'	47.00'	25.40'
5	88°	11'	20"	22.5'	34.63'	21.80'

CITY OF RIVERSIDE
WATER SYSTEM
APPROVED 1-3-85 DATE

PACIFIC TELEPHONE
APPROVED BY:
PUBLIC IMPROVEMENT ENGINEER 2/15/85 DATE

J. F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS o SURVEYORS o PLANNERS
3426 TENTH STREET 11200 S MT VERNON AVE
RIVERSIDE, CAL COLTON, CAL.
APPROVED BY Ralph M. Arnold DATE 10-19-84
R.E. No. 14312
W.O. 84-8284 FOR: Kaufman & Broad F.B.

MARK	REVISIONS	APPR	DATE
4	RAISED CATCH BASIN ℄ (JKR)	WLK	9/25/85
3	ADD RECT BOX & TRANS. STRUCTURE (JKR)	WLK	7/3/85
2	SHOW LOCATION OF PWR. POLES (JKR)	WLK	4/6/85
1	REVISE LOCATION OF TEL. CO. (JKR)	WLK	4/5/85

DESIGNED BY JKR DRAWN BY JFE CHECKED BY WLK

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		4/22/85
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGR		

APPROVED BY William D. Hardman
DIRECTOR OF PUBLIC WORKS
DATE APRIL 25, 1985

IN THE CITY OF RIVERSIDE, CALIFORNIA
TRACT 19991
STORM DRAIN PLAN & PROFILE
ARLINGTON AVE
(STA. 76+90. to 90.+00).
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

INDEX UP
PROJECT NO. D-464
SHEET 3 OF 3
FILE NO.