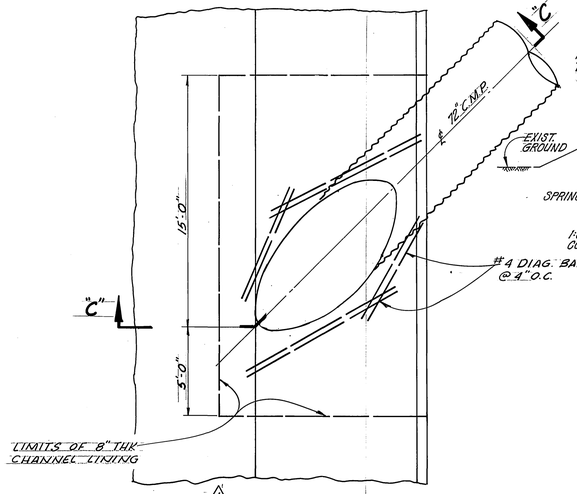
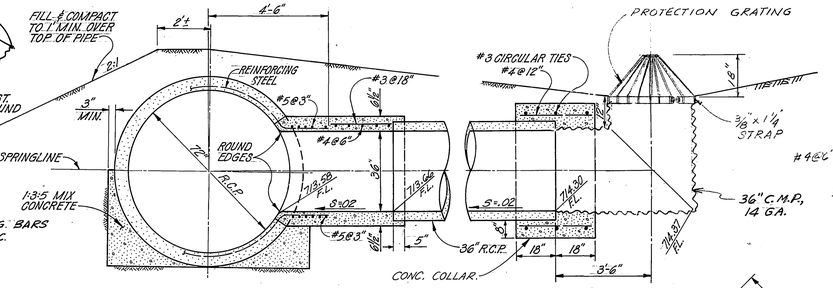
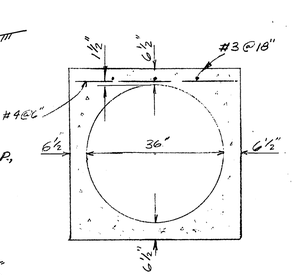


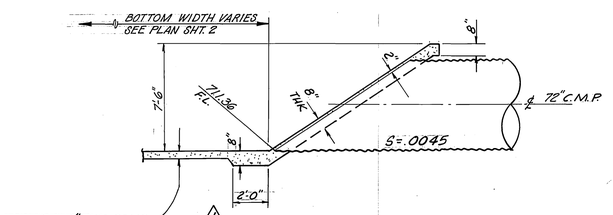
PLAN



SECTION "A-A"



SECTION "B-B"

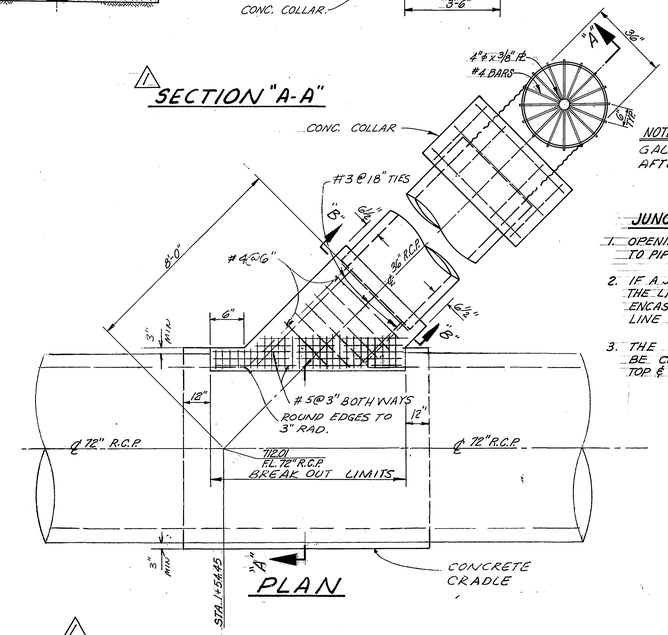


SECTION "C-C"

CHANNEL ENTRY DETAIL

72" C.M.P. FILLMORE ST. STORM DRAIN

NO SCALE



PLAN

NOTE:
GALVANIZE METAL PARTS AFTER FABRICATION.

JUNCTION STRUCTURE NOTES:

1. OPENING FOR SPUR SHALL BE RECTANGULAR, CUT NORMAL TO PIPE SURFACE & WITHOUT DAMAGING REINFORCING STEEL.
2. IF A JOINT IN THE MAIN LINE PIPE FALLS WITHIN THE LIMITS OF THE CRADLE, PROVIDE A CONCRETE ENCASEMENT 12" ABOVE THE TOP OF THE MAIN-LINE PIPE TO THE LIMITS OF CRADLE.
3. THE TRANSVERSE REINFORCEMENT IN PIPE SHALL BE CUT AT CENTER OF OPENING AND BENT INTO TOP & BOTTOM SLABS OF SPUR.

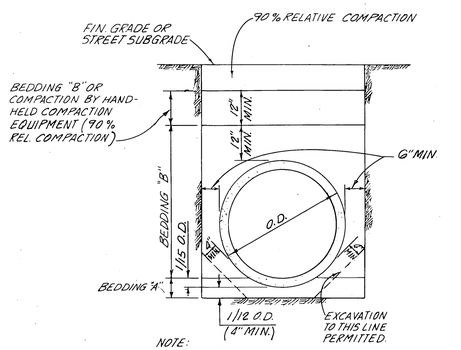
JUNCTION STRUCTURE DETAILS

STA. 1+54.45 FILLMORE STREET DRAIN

NO SCALE

GENERAL NOTES

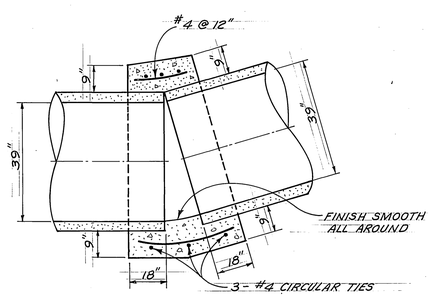
1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1970 EDITION, AND CITY OF RIVERSIDE STANDARD DRAWINGS, UNLESS OTHERWISE NOTED.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT OF WAY IN ACCORDANCE WITH THE PROVISIONS OF THE LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY.
3. LOCATIONS OF PUBLIC UTILITIES SHOWN HAVE BEEN DETERMINED FROM AVAILABLE INFORMATION. HOWEVER IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE TRUE LOCATION OF ANY EXISTING UTILITIES AND TO EXERCISE PROPER PRECAUTIONS TO AVOID INJURY OR DAMAGE THERETO.
4. ALL REINFORCED CONCRETE PIPE LAYED IN OPEN TRENCH SHALL BE BEDDED IN ACCORDANCE WITH BEDDING DETAILS SHOWN ON THIS SHEET.
5. ALL CONCRETE IN REINFORCED CONCRETE STRUCTURES OUTSIDE THE A.T.&S.F. RWY. SHALL BE 3000 POUNDS PER SQUARE INCH PORTLAND CEMENT CONCRETE.
6. ALL STEEL THAT IS TO BE CONTINUOUS SHALL BE LAPPED A MINIMUM OF 24 BAR DIAMETERS.
7. (DELETED)
8. PIPE UNDER THE A.T.&S.F. RWY. CROSSING TRACKS SHALL CONFORM TO A.S.T.M. SPECS. C-76-70 CLASS V, AND ITS CONSTRUCTION SHALL BE GOVERNED BY THE REQUIREMENTS AS OUTLINED IN A.T.&S.F.'S BEEL. 50-14. SEE PROFILES FOR WALL "B" OR "C" REQ'MT.
9. ALL CONCRETE AND CONCRETE WORK SHALL CONFORM TO THE A.T.&S.F. RAILWAY SYSTEM'S STANDARD SPECS CES 50153-58 SECTION 6 NOTE APPLIES TO CONC. WORK WITHIN THE A.T.&S.F. RIGHT OF WAY ONLY
10. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE NOT LESS THAN 3500 POUNDS PER SQUARE INCH IN 28 DAYS WITH A MAX. WATER-CEMENT RATIO OF 5 3/4 GALLONS OF TOTAL WATER PER SACK OF CEMENT (NOTE APPLIES TO CONC. WORK WITHIN THE A.T.&S.F. RWY. RIGHT OF WAY ONLY.)
11. REINFORCEMENT SHALL BE DEFORMED BARS, MEETING THE CURRENT A.S.T.M. SPECS. A615 OR A617, GRADE 40.
12. CONTRACTOR TO SUBMIT CONTRACTOR'S LETTER AGREEMENT AND INSURANCE PAPERS 4 WEEKS PRIOR TO CONSTRUCTION TO: OFFICE OF DIVISION ENGINEER, THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY, 1170 WEST THIRD STREET, SAN BERNARDINO, CALIF. 92410. (TEL. TURNER 4-2111)
13. ALL FILL SHALL BE COMPACTED TO 90% RELATIVE COMPACTION, EXCEPT STRUCTURAL BACKFILL WITHIN A.T.&S.F. RWY. RIGHT OF WAY SHALL BE COMPACTED TO 97% OF STD. COMPACTION IN ACCORDANCE WITH ASTM DESIGNATION D-698.
14. CONTRACTOR SHALL OBTAIN A PERMIT FROM RIVERSIDE COUNTY FLOOD CONTROL DISTRICT FOR WORK WITHIN THE DISTRICTS RIGHT OF WAY.
15. CONTRACTOR SHALL MAINTAIN TRAFFIC IN BOTH DIRECTIONS ON PIERCE ST. AT ALL TIMES DURING CONSTRUCTION.
16. CHAMFER ALL EXPOSED EDGES OF CONCRETE ONE INCH.



NOTE:
1. BEDDING "A" SHALL CONSIST OF SAND OR #3 (MAX.) CRUSHED ROCK OR GRAVEL. (MIN S.E. = 25)
2. BEDDING "B" SHALL CONSIST OF SAND OR OTHER GRANULAR MATERIAL (MIN. S.E. = 25).

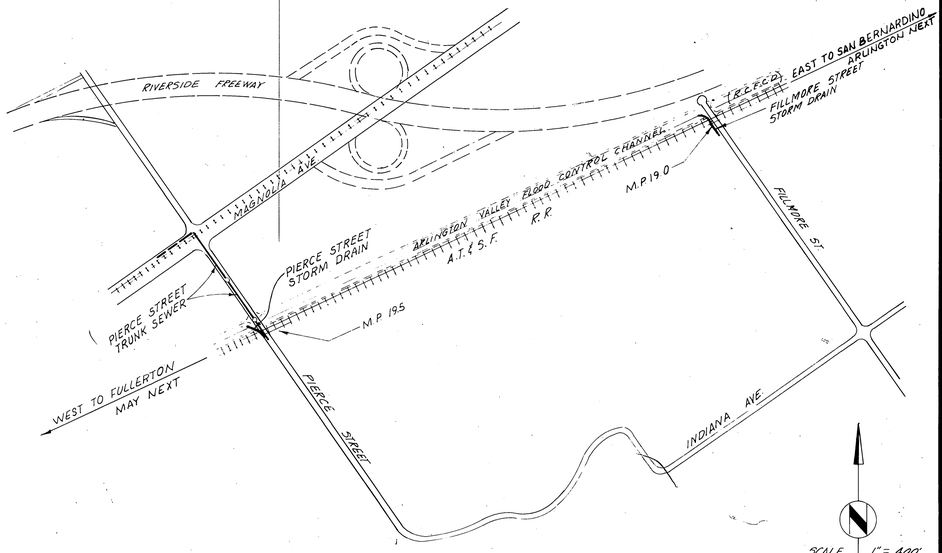
TYP. R.C.P. BEDDING DETAIL

NO SCALE



CONCRETE COLLAR DETAIL FOR 39" R.C.P.

NO SCALE



VICINITY MAP

Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this Project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineer harmless from any and all liability, real or alleged, in connection with the performance of work on this Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

BENCH MARK:
USC&GS BM K-38 1924 DISC IN HW ON NW COR FILLMORE & SANTA FE R.R TRACKS
FB 706/34
ELEV. 722.154

VTN orange county
ENGINEERS ARCHITECTS PLANNERS 2301 CAMPUS DRIVE, IRVINE, CALIFORNIA 92664 (714) 833-2450
PREPARED UNDER THE SUPERVISION OF
Jack R. Mahoney R.C.E. NO. 14325 1/21/73 DATE

MARK	REVISIONS	APPR.	DATE
1	REV. TO CONFORM TO R.C.F.C.D. MASTER PLAN OF DRAINAGE & PER R.R. REQ'MTS.	JMC	7/19/73

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
OFFICE ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
ASSISTANT CITY ENG.		6-18

APPROVED BY: DIRECTOR OF PUBLIC WORKS
DATE 6-19-73

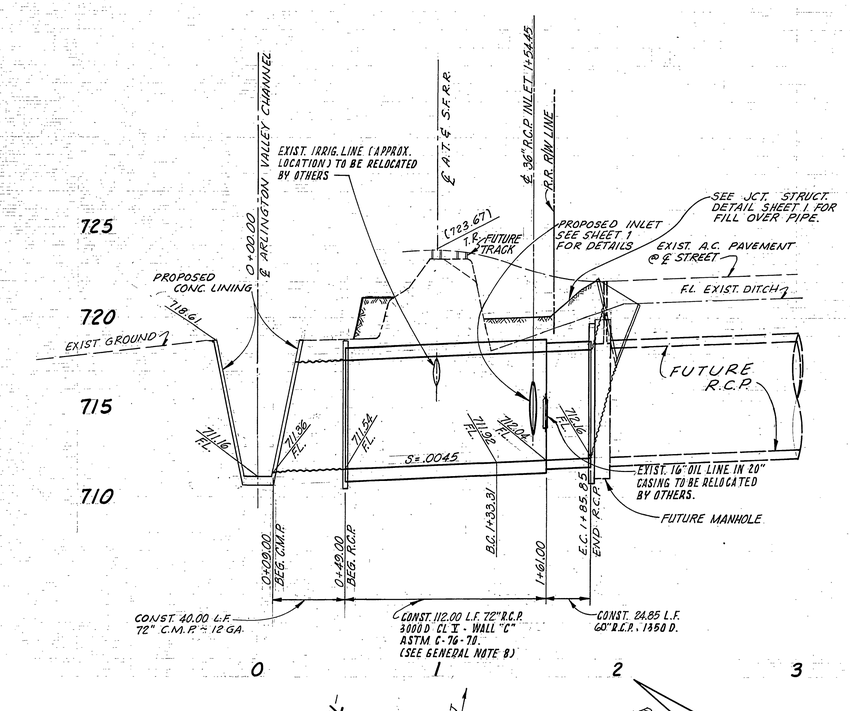
PIERCE ST. & FILLMORE ST.
STORM DRAINS
FOR TRACT ~~4514~~ 6756-1

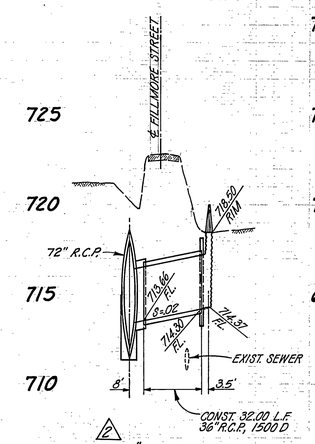
HORIZ. SCALE: AS SHOWN

PROJECT NO. D-256
SHEET 1 OF 3
FILE NO. 4513

~~6-21-73~~ 6-3-76

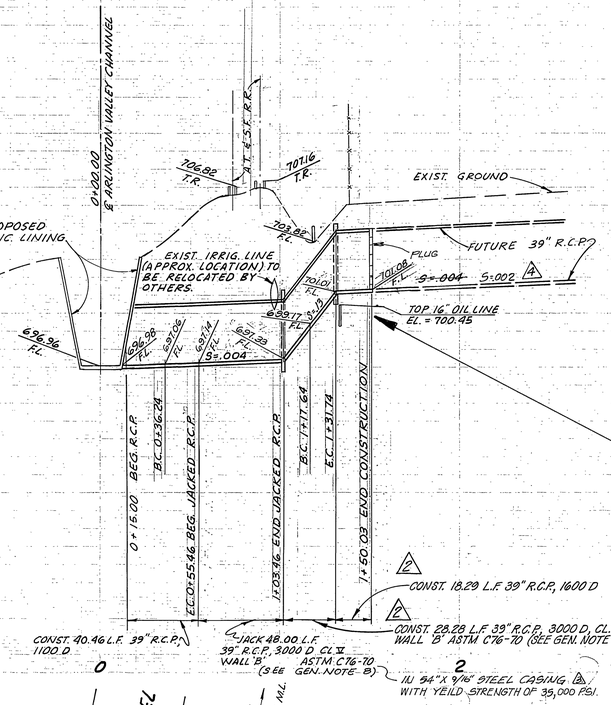
99-5

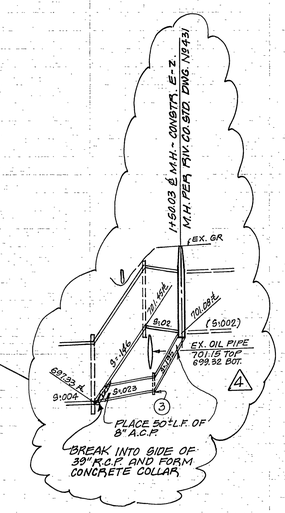


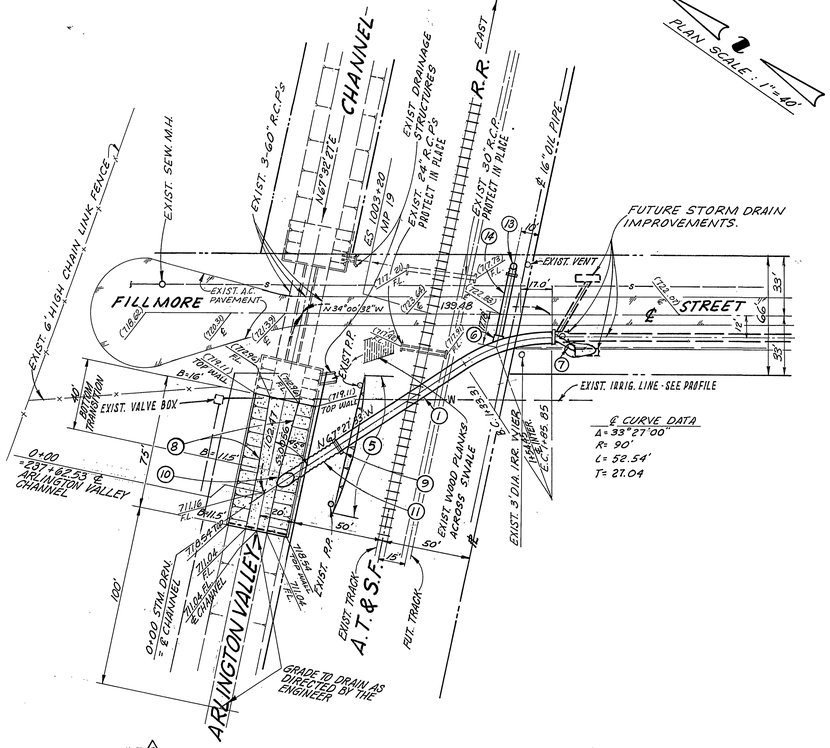


2 36" R.C.P. LATERAL

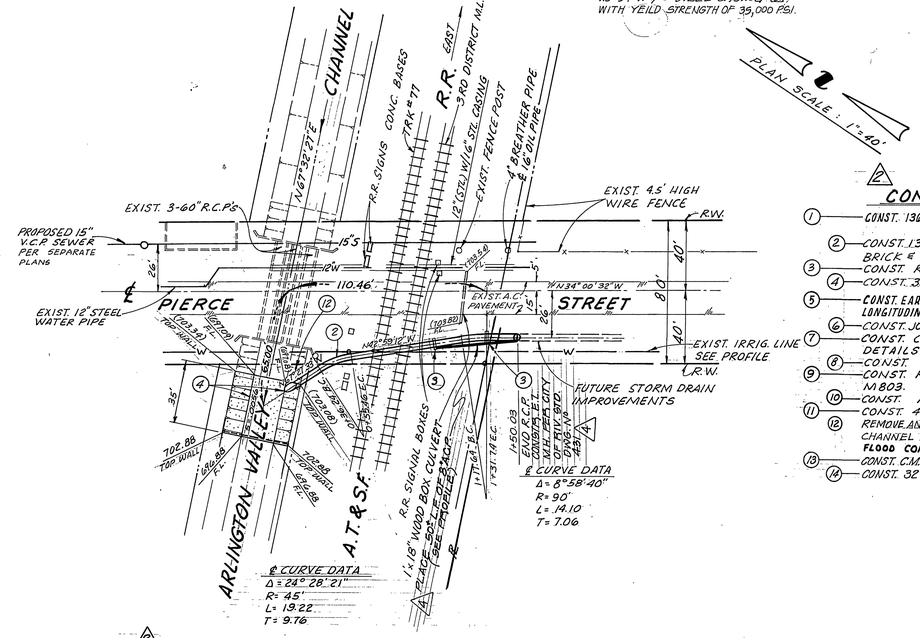
PROFILE SCALES
HORIZ. 1" = 40'
VERT. 1" = 4'







2 STORM DRAIN - FILLMORE ST.



2 STORM DRAIN - PIERCE ST.

CONSTRUCTION NOTES

1. CONST. 136.85 L.F. 72" R.C.P. - SEE PROFILE
2. CONST. 135.03 L.F. 39" R.C.P., SEAL UPSTREAM END WITH BRICK & MORTAR. SEE PROFILE
3. CONST. REINF. CONC. COLLAR PER DETAIL SHT. 1
4. CONST. 350 L.F. LINED CHANNEL PER DETAILS SHT. 3
5. CONST. EARTH RAMP TO 2' OVER TOP OF PIPE, 15' MIN. WIDTH, 10% MAX. LONGITUDINAL SLOPE, 2:1 MAX. SIDE SLOPES.
6. CONST. JCT. STRUCT. PER DETAILS SHT. 1.
7. CONST. C.M.P. INLET & APPURTENANCES PER DETAILS SHT. 3.
8. CONST. 75.0 L.F. LINED CHANNEL PER DETAILS SHT. 3.
9. CONST. REINF. CONC. COLLAR PER DIST. STD. DWG. M 803.
10. CONST. R.C. CHANNEL ENTRY PER DETAILS SHT. 1.
11. CONST. 40.0 L.F. 72" C.M.P. ~ 12 GAGE.
12. REMOVE AND REPLACE PORTION OF EXIST. LINING AS REQD FOR CHANNEL ENTRY STRUCTURE. △ BY THE RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT.
13. CONST. C.M.P. INLET & APPURTENANCES PER DETAILS SHT. 1.
14. CONST. 32 L.F. 36" R.C.P. SEE PROFILE.

vtn orange county
ENGINEERS ARCHITECTS PLANNERS 2301 CAMPUS DRIVE, IRVINE, CALIFORNIA 92664 (714) 833-2450

PREPARED UNDER THE SUPERVISION OF
Jack Mahoney 1-21-73
RCE # 14325 DATE

MARK	REVISIONS	APPR.	DATE
1	ADDED M.H., 8" A.C.P. & ELEV. CHANGES		1/16/73
2	ADDED STEEL CASING		1/17/73
3	REV. TO CONFORM TO R.C.F.C.D. MASTER PLAN OF DRAINAGE & PER R.R. REQ'MTS.		2/6/73
4	ADDED TO NOTE 12 PER RCFCD REQ.		1/16/74

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
OFFICE ENGINEER		
PARK DEPARTMENT	—	—
TRAFFIC DIVISION	—	—
ASSISTANT CITY ENG.		6-18

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 6-19-73

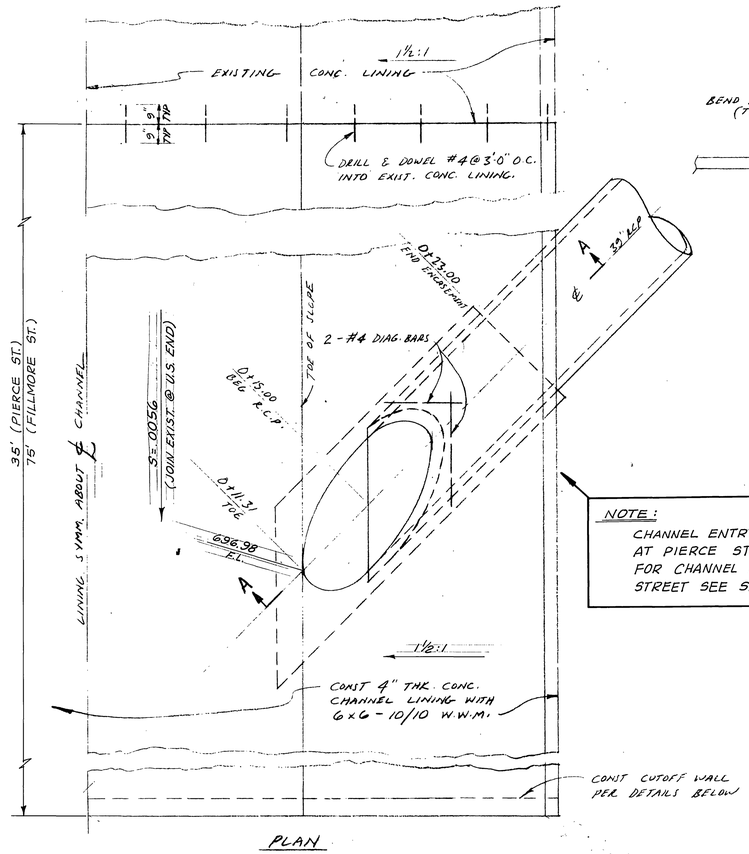
PIERCE ST. & FILLMORE ST.
STORM DRAIN
FOR TRACT Nº ~~4514~~ 6756-1

HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

PROJECT NO. D-256
SHEET 2 OF 3
FILE NO. 5513

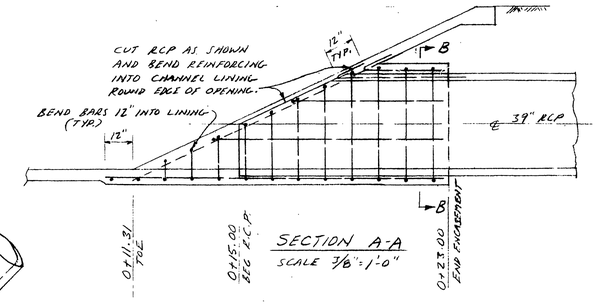
99-5

~~6-31-73~~ 6-3-76



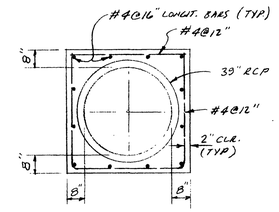
PLAN

TYP. CHANNEL LINING



SECTION A-A

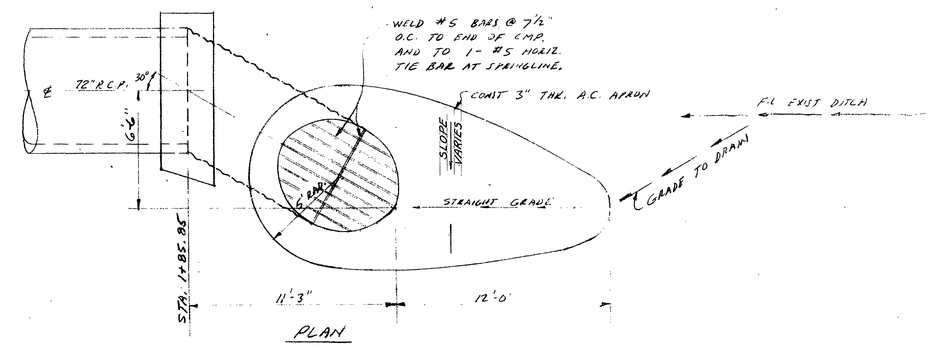
SCALE 3/8" = 1'-0"



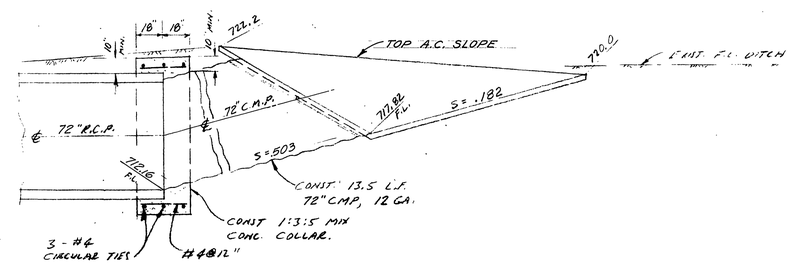
SECTION B-B

SCALE 3/8" = 1'-0"

NOTE:
CHANNEL ENTRY FOR 39" R.C.P. AT PIERCE STREET SHOWN. FOR CHANNEL ENTRY AT FILLMORE STREET SEE SHEET 1



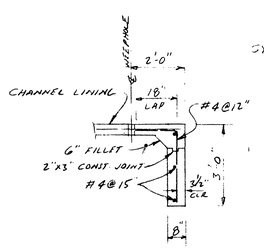
PLAN



SECTION

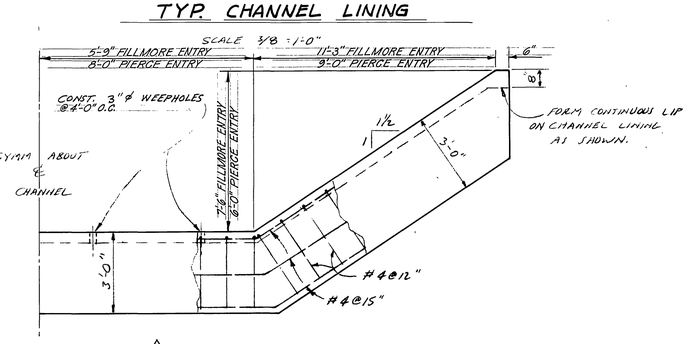
⚠ INLET STRUCTURE - UPSTREAM END FILLMORE ST. DRAIN

SCALE 1/4" = 1'-0"



TYPICAL SECTION CUTOFF WALL

SCALE 3/8" = 1'-0"



⚠ ELEVATION CUTOFF WALL

SCALE 3/8" = 1'-0"

⚠ REV. TO CONFORM TO R.C.F.C.D. MASTER PLAN OF DRAINAGE	TW	2/4/77	
MARK	REVISIONS	APPR	DATE

DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___

vtn orange county
ENGINEERS ARCHITECTS PLANNERS 2301 CAMPUS DRIVE, IRVINE, CALIFORNIA 92664 (714) 833-2400

PREPARED UNDER THE SUPERVISION OF
Jack Mahoney RCE#14325 — 1-21-73 DATE

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
OFFICE ENGINEER	TW	6-19-73
PARK DEPARTMENT		
TRAFFIC DIVISION		
ASSISTANT CITY ENG.		6-18

APPROVED BY [signature] DIRECTOR OF PUBLIC WORKS
DATE 6-19-73

PIERCE ST. & FILLMORE ST.
STORM DRAIN
FOR TRACT Nº ~~4514~~ 6756-1

HORIZ. SCALE: AS SHOWN

PROJECT NO. D-256
SHEET 3 OF 3
FILE NO. 5C18

~~5-31-73~~ 6-3-76

99-5