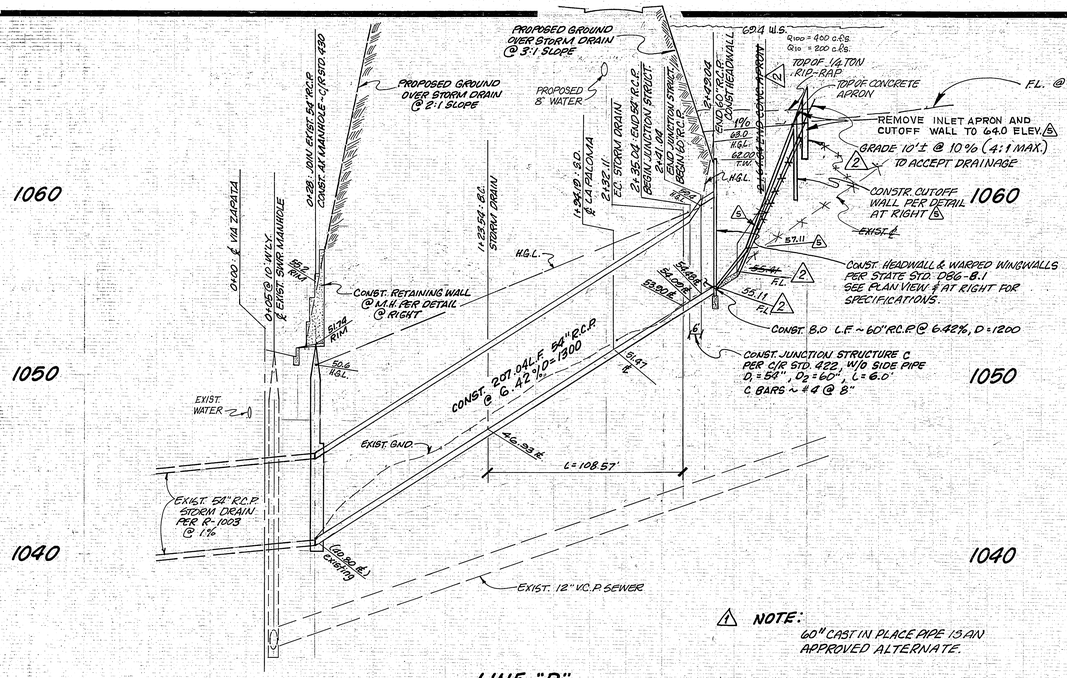
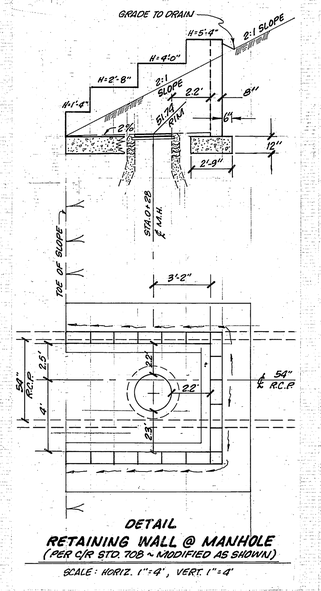


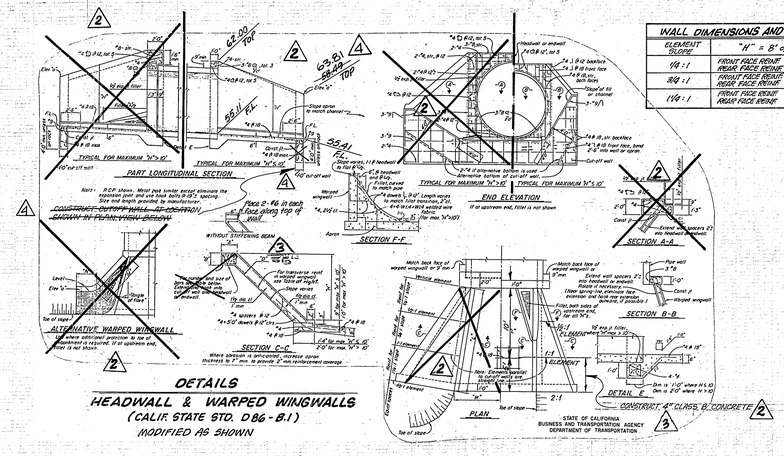
LINE "D"

0 1 2 3

⚠ **NOTE:** 60" CAST IN PLACE PIPE IS AN APPROVED ALTERNATE.



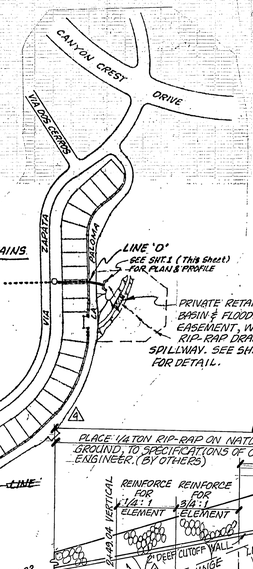
DETAIL
RETAINING WALL @ MANHOLE
(PER C/R STD. 708 ~ MODIFIED AS SHOWN)
SCALE: HORIZ. 1"=4', VERT. 1"=4'



DETAILS
HEADWALL & WARPED WINGWALLS
(CALIF. STATE STD. D86-8.1)
MODIFIED AS SHOWN

BENCH MARK:
P.K. NAIL & TAG IN BASE OF LIGHT STANDARD BACK OF N'LY. CURB CANYON CREST DRIVE 48'± W'LY. VIA CARTAGO. ELEV. 1036.55, F.B. 874/20

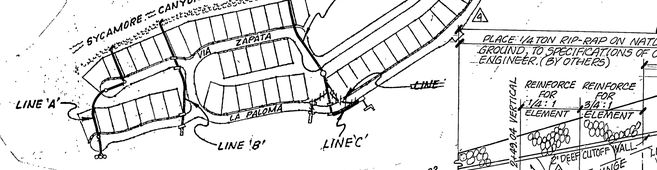
T.B.M. ~ THIS PROJECT ONLY!
H-4 B.C. @ STA. 11+08.19 ℄ VIA ZAPATA
ELEV. 1050.73

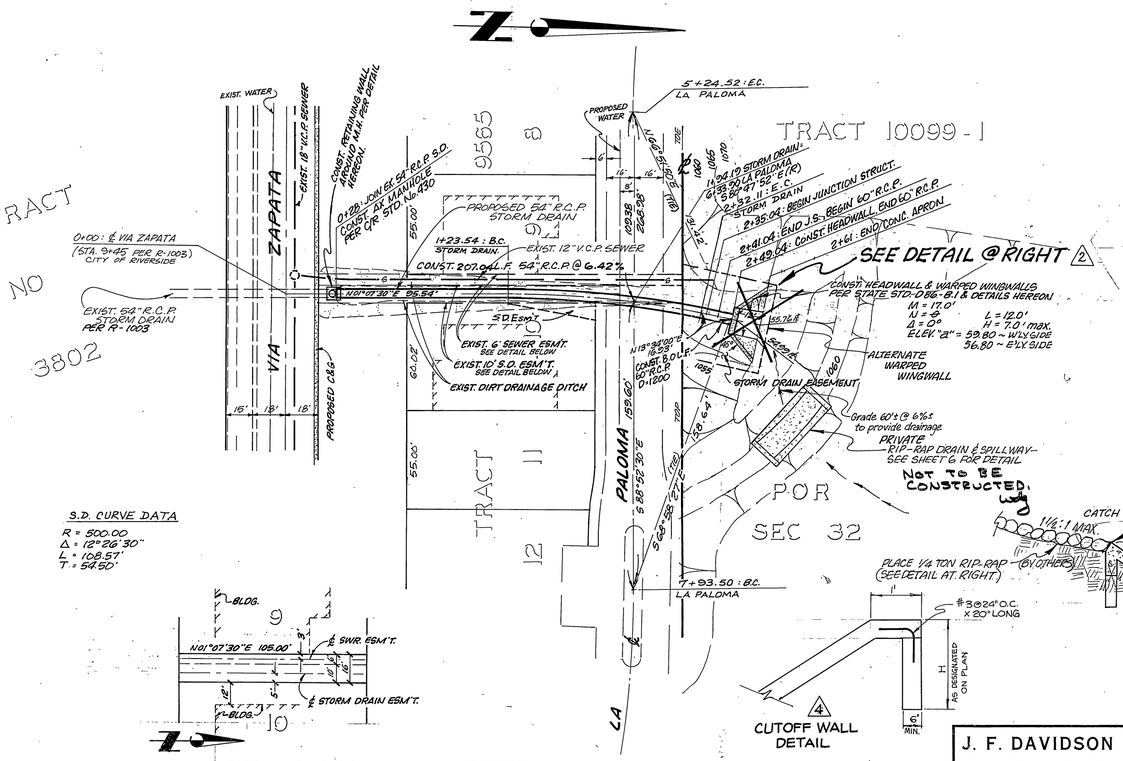


DRAWING INDEX MAP
SCALE: 1" = ?

GENERAL NOTES:

1. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SIGNING THE PLANS SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.
2. 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.
3. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE'S DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1976 EDITION.
4. PIPE SHALL BE BEDDED PER STD. DWG. #462, CASE I.

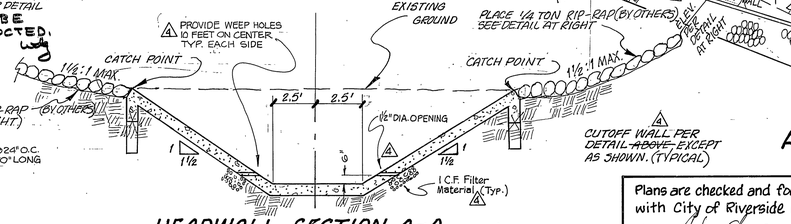




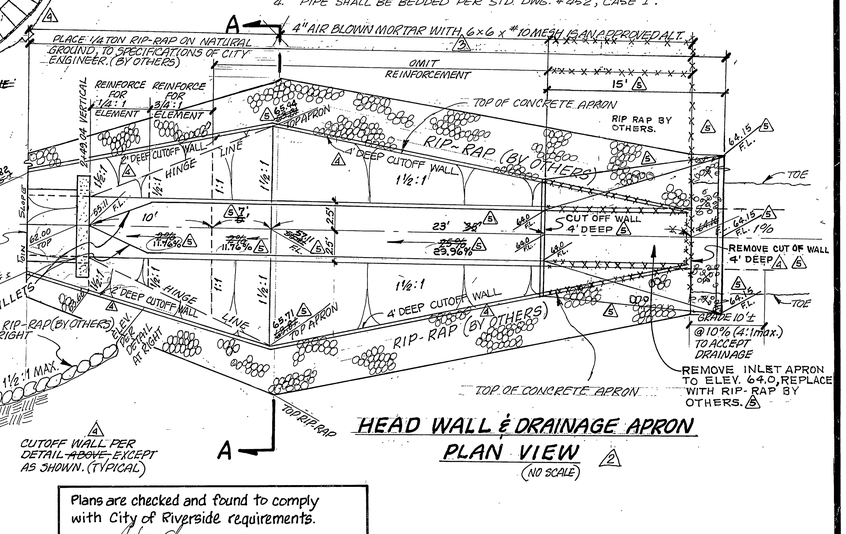
S.D. CURVE DATA
R = 500.00
Δ = 12°26'30"
L = 108.57'
T = 54.50'

EASEMENT DETAIL
SCALE 1" = 40'

CUTOFF WALL DETAIL



HEADWALL SECTION A-A
(NO SCALE)



HEAD WALL & DRAINAGE APRON
PLAN VIEW
(NO SCALE)

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.

Plans are checked and found to comply with City of Riverside requirements.
by _____ 5/25/79
CG Engineering — Date

Indexed RMF

J. F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS - SURVEYORS - PLANNERS
RIVERSIDE, CALIFORNIA
APPROVED BY _____ DATE 1/24/79
R.E. No. 17550
W.O. 6511 FOR: RIDGEWOOD F.B.

MARK	REVISIONS	APPR.	DATE
5	CORRECT PLAN TO REFLECT REMOVAL OF INTERMEDIATE PANELS INLET STRUCTURE, ENTIRE STRUCTURE COVERED BY HIGH...		10-15-80
4	REV. TO INCLUDE AIR BLOWN MORTAR ALT. MODIFIED CUTOFF WALL DETAIL. ADDED WEEP HOLES		6-8-80
3	Added air-blown mortar alt. & rev thick		7-18-80
2	REVISED HEADWALL TO MATCH EXISTING CONDITION - ADDED DETAILS		9-24-79
1	"60" CAST IN PLACE PIPE IS AN APPROVED ALTERNATE" NOTE ADDED		9-24-79

DESIGNED BY A.W. DRAWN BY E.B. CHECKED BY A.W.

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGR.		6-12

APPROVED BY _____
DIRECTOR OF PUBLIC WORKS
DATE 6/12/79

STORM DRAIN PLAN & PROFILE
STORM DRAIN EASEMENT
TRACT 9565
28' to 221' N'LY. VIA ZAPATA
STA. 9+45 PER CITY R-1003

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

PROJECT NO. D-369
SHEET 1 OF 6
FILE NO. 5566

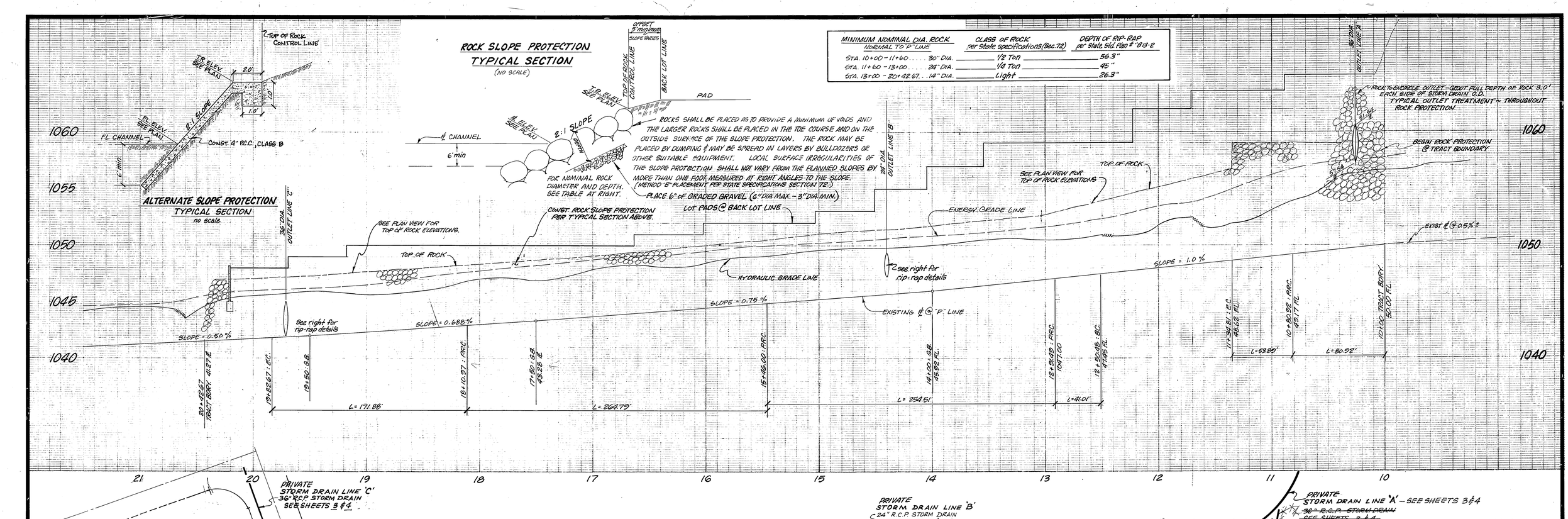
ROCK SLOPE PROTECTION
TYPICAL SECTION
(NO SCALE)

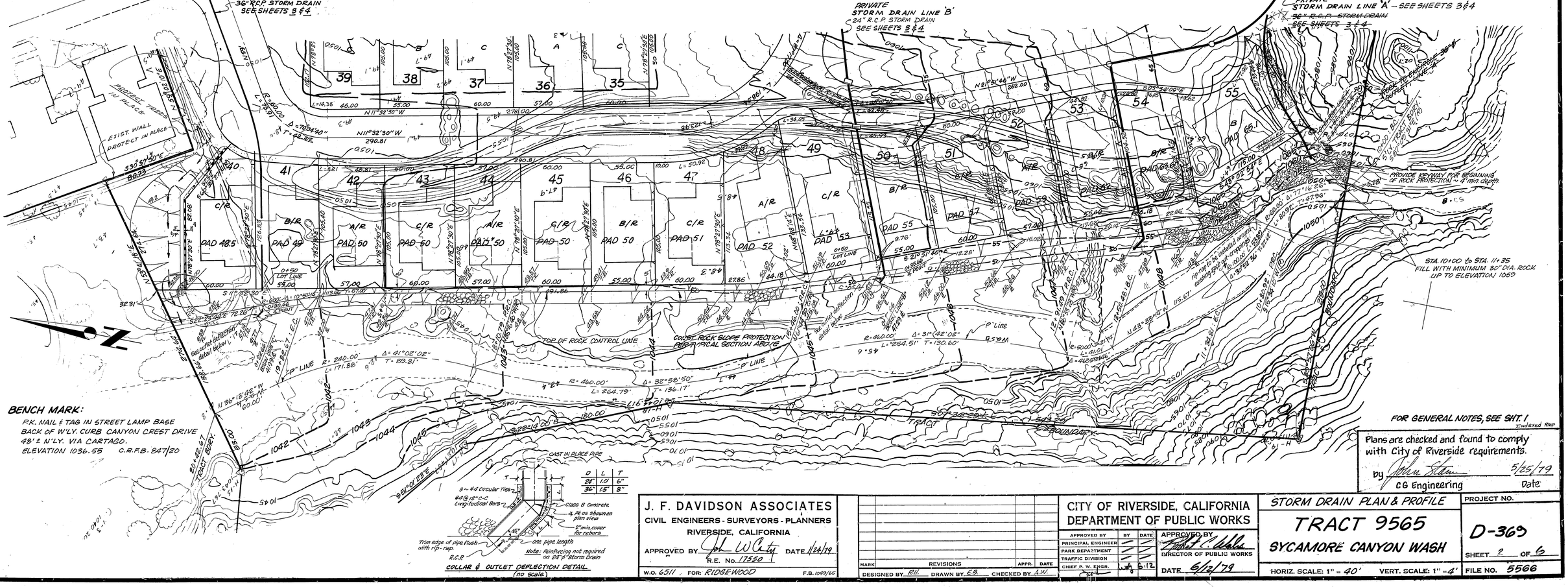
ROCKS SHALL BE PLACED AS TO PROVIDE A MINIMUM OF VOIDS AND THE LARGER ROCKS SHALL BE PLACED IN THE TOE COURSE AND ON THE OUTSIDE SURFACE OF THE SLOPE PROTECTION. THE ROCK MAY BE PLACED BY DUMPING & MAY BE SPREAD IN LAYERS BY BULLDOZERS OR OTHER SUITABLE EQUIPMENT. LOCAL SURFACE IRREGULARITIES OF THE SLOPE PROTECTION SHALL NOT VARY FROM THE PLANNED SLOPES BY MORE THAN ONE FOOT, MEASURED AT RIGHT ANGLES TO THE SLOPE. (METHOD 'B' PLACEMENT, PER STATE SPECIFICATIONS SECTION 72.)

PLACE 6" OF GRADED GRAVEL (6" DIA. MAX. - 3" DIA. MIN.)

MINIMUM NOMINAL DIA. ROCK NORMAL TO 'P' LINE	CLASS OF ROCK per State specifications (Sec. 72)	DEPTH OF RIP-RAP per State Std. Plan # 'B 8-2
STA. 10+00 - 11+60 . . . . 30" DIA.	1/2 Ton	56.3"
STA. 11+60 - 13+00 . . . . 24" DIA.	1/4 Ton	45"
STA. 13+00 - 20+42.67 . . 14" DIA.	Light	26.3"

ALTERNATE SLOPE PROTECTION
TYPICAL SECTION
no scale




PRIVATE STORM DRAIN LINE 'C' 36" R.C.P. STORM DRAIN SEE SHEETS 3 & 4
PRIVATE STORM DRAIN LINE 'B' 24" R.C.P. STORM DRAIN SEE SHEETS 3 & 4
PRIVATE STORM DRAIN LINE 'A' – SEE SHEETS 3 & 4
36" R.C.P. STORM DRAIN SEE SHEETS 3 & 4
PROPERTY LINES IN PLACE
EXIST. WALL PROTECT IN PLACE
TOP OF ROCK CONTROL LINE
CONST. ROCK SLOPE PROTECTION PER TYPICAL SECTION ABOVE
See curb detail below
See curb detail below
TRACT BDRY.
TRACT BOUNDARY
PROVIDE ACCESS FOR BEGINNING OF ROCK PROTECTION @ this depth
STA. 10+00 to STA. 11+35 FILL WITH MINIMUM 30" DIA. ROCK UP TO ELEVATION 1060
P' Line
P' LINE
P' LINE
R=460.00'
Δ=32°58'50"
L=264.79'
T=136.17'
R=460.00'
Δ=31°42'02"
L=254.51'
T=130.60'
R=240.00'
Δ=41°02'02"
L=171.88'
T=89.81'
R=60.00'
Δ=77°10'26"
L=80.92'
T=47.96'
L=41.01'
Δ=40°28'44"
R=58.00'
T=21.47'
L=53.80'
Δ=53°08'00"
R=58.00'
T=29.98'
L=115.67'
Δ=114°28'12"
R=60.00'
T=115.18'
L=118.80'
Δ=113°28'00"
R=60.00'
T=115.67

DRAINAGE WALL DETAILS
no scale

SECTION 'D-D'

FLARED END SECTION DETAIL
no scale

SECTION B-B
NO SCALE

SECTION A-A
NO SCALE

"L" HEADWALL DETAILS
(PER STATE STD. D89-4)
no scale.

PIPE CURVE DATA

LINE 'A'

① R = 100.00'
Δ = 14°40'28"
L = 25.61'
T = 12.88'

③ R = 100.00'
Δ = 28°41'39"
L = 50.08'
T = 25.85'

④ R = 100.00'
Δ = 28°41'53"
L = 50.26'
T = 25.67'

LINE 'B'

① R = 100.00'
Δ = 04°56'18"
L = 8.62'
T = 4.31'

② R = 100.00'
Δ = 1°16'38"12"
L = 29.03'
T = 14.62'

③ R = 100.00'
Δ = 11°04'25"
L = 19.62'
T = 9.98'

LINE 'C'

① R = 100.00'
Δ = 14°40'28"
L = 25.61'
T = 12.88'

② R = 100.00'
Δ = 14°40'28"
L = 25.61'
T = 12.88'

③ R = 200.00'
Δ = 19°29'28"
L = 67.80'
T = 34.23'

CONSTRUCTION NOTES:

1. CONSTRUCT CATCH BASIN PER DETAIL SHEET NO. 5.
2. CONSTRUCT CAST-IN-PLACE PIPE, SIZE AS SHOWN. AN ACCEPTABLE ALTERNATE TO THIS PIPE IS R.C.P.
3. CONSTR. M.H. PER CITY OF RIVERSIDE STD. #430
4. CONSTR. 2'X4' RCB PER DETAIL - SHEET 5.

FOR GENERAL NOTES, SEE SHEET No. 1
FOR PROFILES SEE SHEET No. 4

BENCH MARK: P.K. NAIL & TAG IN STREET LAMP BASE OF W'LY. CURB, CANYON CREST DRIVE 48'± N'LY. VIA CARTAGO
ELEV. 1036.55 C.R.F.B. 84/20

Indexed RMF

Plans are checked and found to comply with City of Riverside requirements.
by John Stan 6/4/79
CG Engineering Date

MARK	REVISIONS	APPR	DATE
1	Revised drain to case const. Rev'd Lines A & C - Deleted Line 'E'		11/79

DESIGNED BY AW DRAWN BY DLS CHECKED BY A.W.

CITY OF RIVERSIDE, CALIF.
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P.W. ENGINEER		

DIRECTOR OF PUBLIC WORKS
DATE 6/12/79

J.F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS — SURVEYORS — PLANNERS
RIVERSIDE, CALIFORNIA
APPROVED BY [illegible] W Canty DATE 9/26/78
R.E. No. 17550
W.O. 6511 FOR: RIDGEWOOD F.B.

STORM DRAIN PLAN
TRACT 9565
PRIVATE STORM DRAIN
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 40'

PROJECT NO. D-369
SHEET No. 3 OF 6
FILE NO. 5566

NOTES:

1. Reinforcing steel bar sizes, spacing, pattern and cover over the steel shall be that of the box section. The bar lengths shall vary uniformly throughout the transition.
2. The interior surface shall be smooth and vary uniformly between the two adjoining sections.
3. Keyed construction joints of the same dimensions as those of the box may be carried through the transition structure at the contractor's option. See section B-B at right.
4. Concrete shall be Class A.

TRANSITION STRUCTURE DETAIL (NO SCALE)

PLAN

SECTION A-A

SECTION B-B

SEE DETAIL SHT. 5 FOR STEEL

SEE DETAIL SHT. 5 FOR STEEL

OPTIONAL CONSTR. JOINT

I.D. PIPE

LINE "C"

CONST. 310.05 L.F. 36" ϕ CAST-IN-PLACE PIPE @ 0.30% (ALT. 36" ϕ R.C.P. D=2000 W/ CASE III BEDDING) N=3.34

STD 462-CASE III BEDDING BETWEEN EDGE OF GUTTER @ STA. 1+67.5 & STA 3+35.05, N = 3.34

CONST. 2'-4' R.C.B. PER DETAIL SHT. 5 34.95 L.F.

CONST. 137.73 L.F. ~ 30" CAST-IN-PLACE PIPE @ 10.16 % 10.05 %

CONST. RET. WALL AROUND C.B. PER DETAIL SHT.

CONST. 131.33 L.F. 30" ϕ CAST-IN-PLACE PIPE @ 1.65%

CONSTR. 48.75 L.F. 24" CAST-IN-PLACE PIPE @ 20.84%

CONSTR. 36.5 L.F. 30" ϕ CAST-IN-PLACE PIPE @ 3.48% 3.77%

CONSTR. 4" P.C.C. "V" DITCH 4' WIDE 2:1 SIDE SLOPE

CONST. 370 L.F. ~ 18" ϕ R.C.P. @ 2.16% D=1500

CONST. 104.80 L.F. 24" R.C.P. @ 4.61% D=1750

LINE "C-1"

R.C.B. TO M.H. DETAIL (NO SCALE)

LINE "B"

CONST. 135.67 L.F. 24" ϕ CAST-IN-PLACE PIPE @ 0.90%

CONST. 40.01 L.F. 24" ϕ CAST-IN-PLACE PIPE @ 0.90%

CONST. 37.5 G L.F. 18" ϕ CAST-IN-PLACE PIPE @ 2.0%

CONST. 89.65 L.F. 36" ϕ CAST-IN-PLACE PIPE @ 1.70%

CONSTR. 162.00 L.F. 36" ϕ CAST-IN-PLACE PIPE @ 2.50%

CONSTR. 210.42 L.F. 36" ϕ CAST-IN-PLACE PIPE @ 6.06%

LINE "A"

S.D. TRIM NOTE:

PIPE TO BE TRIMMED SO AS TO BE FLUSH WITH RIP-RAP SHOWN ON SHEET NO.2 ... GROUT FULL DEPTH OF RIP-RAP 3.0 FT. EACH SIDE OF PIPE O.D.

IDENTICAL POINTS

PROPOSED SEWER

Plans are checked and found to comply with City of Riverside requirements.

by John Flam 6/4/79

CG Engineering Date

MARK	REVISIONS	APPR.	DATE
1	Revised "A", "B" & "C", deleted Line "C-1"		11/19/79

DESIGNED BY A.W. DRAWN BY E.B. CHECKED BY A.W.

CITY OF RIVERSIDE, CALIF.
DEPARTMENT OF PUBLIC WORKS

	BY	DATE
APPROVED BY		
PRINCIPAL ENGR.		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P.W. ENGR.		6-12

APPROVED BY [signature] DIRECTOR OF PUBLIC WORKS

DATE 6/12/79

J. F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS - SURVEYORS - PLANNERS
RIVERSIDE, CALIFORNIA

APPROVED BY [signature] DATE 1/28/79
R.E. No. 17550

W.O. 6211 FOR: RIDGEWOOD F.B.

STORM DRAIN PLAN & PROFILE

TRACT 9565

PRIVATE STORM DRAIN

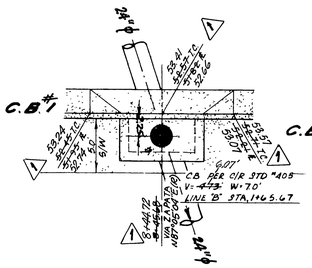
HORIZ. SCALE 1"=40' VERT. SCALE 1"=4'

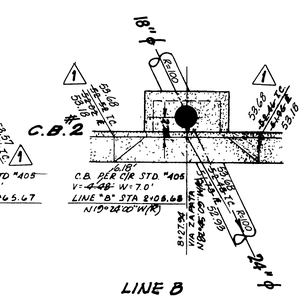
PROJECT No. D-369

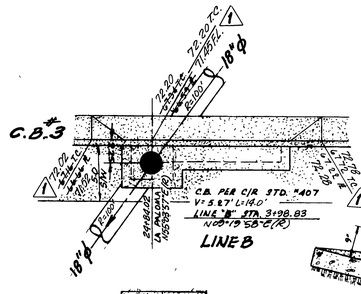
SHEET 4 of 6

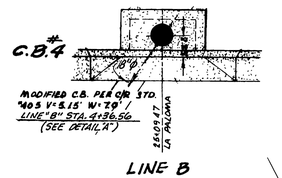
FILE No. 5566

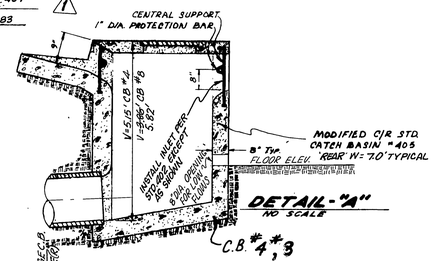
FOR CONSTRUCTION NOTES SEE SHEET 3.
FOR GENERAL NOTES SEE SHEET 1.
FOR PLAN VIEW, SEE SHEET 3

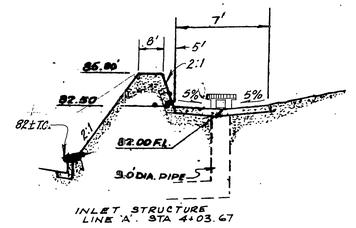


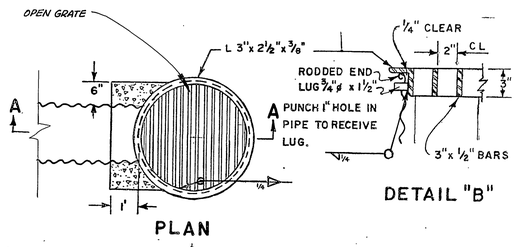


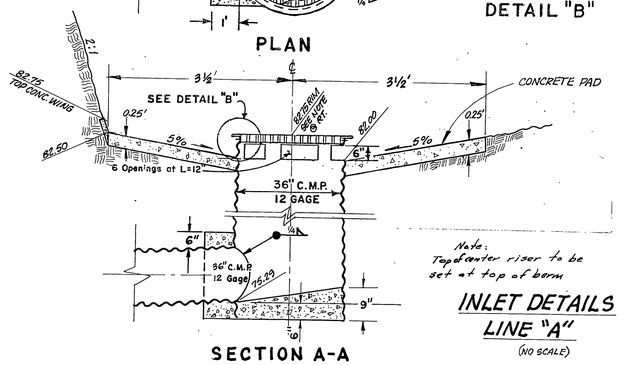








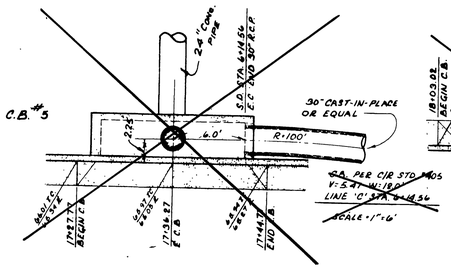


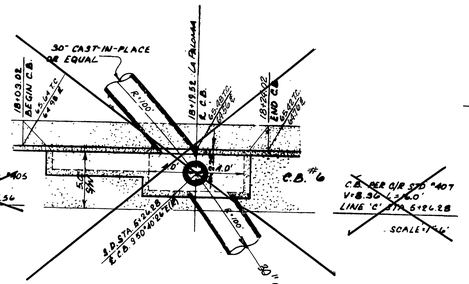


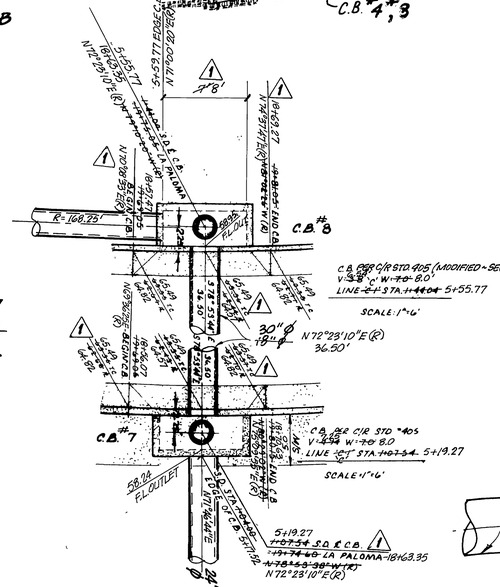
Note:
Top of center riser to be set at top of berm

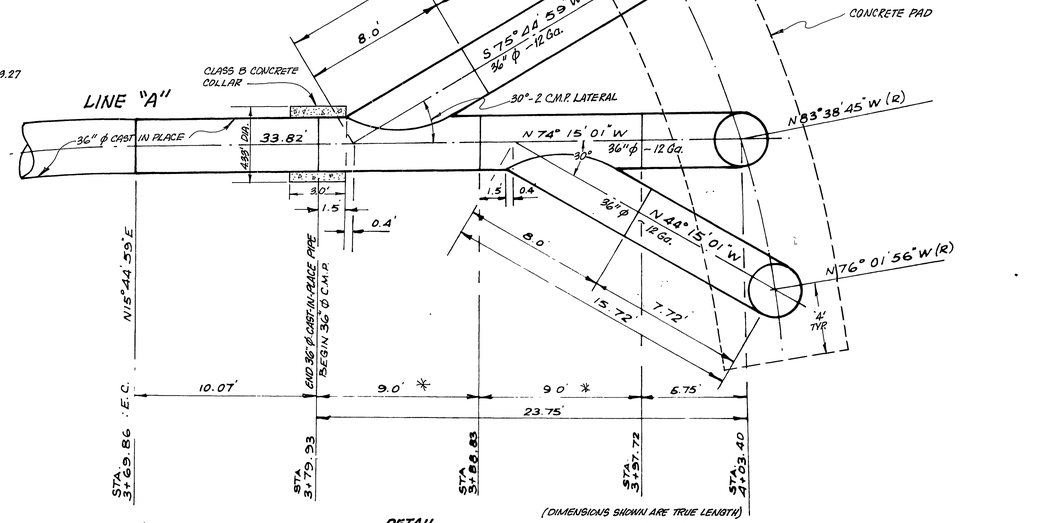
INLET DETAILS
LINE "A"
(NO SCALE)

(PER R.C.F.C. STD. CB 108 & STATE STD. D86-4 modified)

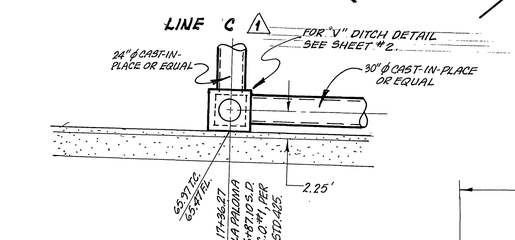


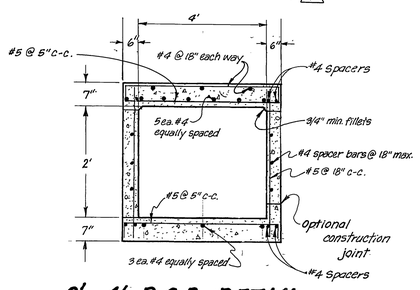


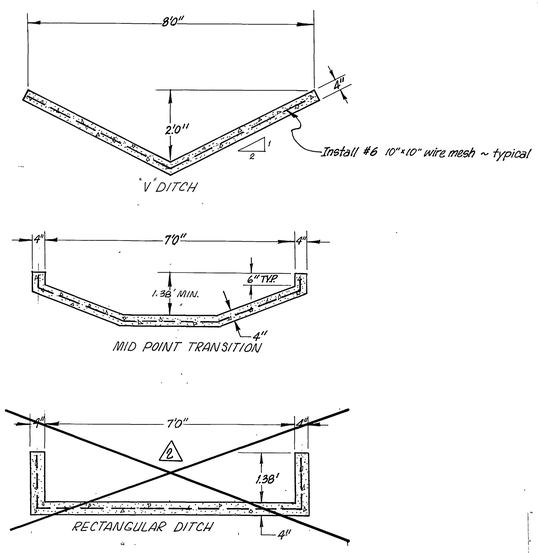




* Inlet manifold shall be factory fabricated. No field welding permitted







Plans are checked and found to comply with City of Riverside requirements.
by John Stern 6/12/79
CG Engineering Date

FOR GENERAL NOTES SEE SHEET 1.

INDEXED MAP

J. F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS - SURVEYORS - PLANNERS
RIVERSIDE, CALIFORNIA
APPROVED BY John W Canty DATE 9/26/78
R.E. No. 17550
W.O. 6511 FOR: RIDGEWOOD F.B.

MARK	REVISIONS	APPR.	DATE
2	Revised transition section to ease construction Q's	JWC	5/31/79
1	Deleted C-1, revised Line C, added C.O. #1	JWC	5/11/79

DESIGNED BY A.W. DRAWN BY P.M. CHECKED BY A.W.

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGR.		

APPROVED BY Walter L. Wheeler
DIRECTOR OF PUBLIC WORKS
DATE 6/12/79

STORM DRAIN DETAILS
TRACT 9565
PRIVATE STORM DRAIN

PROJECT NO. D-369
SHEET 5 OF 6
FILE NO. 5566
HORIZ. SCALE: 1" = AS SHOWN VERT. SCALE: 1" =