PLATE 1 · PLAN · PROFILE C.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK

PROFILE	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECKED		
B. M.S NOTED		
STRUCTURE NOTATIONS CHKD.		

NOTE BOOK NO.

SCALE 1" = 50'

<u>Notes referring to Eileen ST. Crossing</u>

1. Remove existing barricades and foot bridge at Eileen Street.
2. Northerly of Storm Drain extend curb and gutter to Sta. 13+71.74 on both sides.
3. Install 14" Conc. pipes leading from the gutter flow lines into the Storm drain. Inlets to be warped with P.M.S. Outlets to be flush with the Storm drain lining. Grades to be given in the field.
4. Construct Plant-mixed asphalt berms across Eileen Street at Sta's 13+51.74 and 13+71.74 ℄ Eileen Street. Extending from top of curb to top of curb. (Std. Dwg. № 656)
5. Furnish and install two reflectors, Division of Highways № W21R as required in the field.

<u>Notes referring to St. Paul Place crossing</u>

1. Remove curb, gutters, paving, driveway approaches, portion of exist. fence across St. Paul place, and eventually portions of driveways as shown. Using saw cut where new construction joins existing Concrete.
2. Reconstruct Driveway approaches as required in the field. Construct curb and gutter and replace paving as shown. (0.21' P.M.S. on 0.5' I.B.M.)
3. Provide curb openings at ℄ of street. The shape of the opening to be to same as the adjacent ditch.
4. Construct a concrete lined ditch at a 0.3% grade connecting the flow line of the new curb and gutter and the Storm drain at ℄ of street. See cross section of ditch Sheet 5.
5. Place dirt between the new curb and gutter and the Storm drain, and grade.
6. Furnish and install one W 21R Reflector on fence as required in the field.
7. Install single gate with 4' opening as per Std. Dwg. № 900

<u>Fence Notes:</u>

Install chain link fence as per Riv. Std. Dwg. № 900 - 5' High, face of the posts to be 0.95' off easement line except where noted at the following Locations.

Left			Right		
0-15	TO	4+83	1+08	TO	2+53
5+32	TO	8+00	4+33.5	TO	4+83
9+79.5	TO	15+14	5+32	TO	5+66.7
32+81	TO	45+02	13+20	TO	15+05.5
			44+45	TO	45+65

Install 4' single gates at the following Locations

Left: 39+25, 1+50,

Right: 1+82, 1+92, 4+80, 5+35, 8+40, 11+70, 15+00

PLAN	BY	DATE
SURVEYED		
PLOTTED		
ALIGNMENT CHECKED		
RT. OF WAY CHECKED		

NOTE BOOK NO.

REVISIONS		
MARK	DATE	DESCRIPTION

CITY OF RIVERSIDE CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

ARLINGTON - MONROE STORM DRAIN NO. 2

T-DITCH ELY OF ADAMS STREET TO STREETER AVENUE

Acct. No. RF 1343-4001

DESIGNED BY H.J.K. CHECKED BY
DRAWN BY dw H.R.C.
RECOMMENDED BY
ASSISTANT CITY ENGINEER
APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE

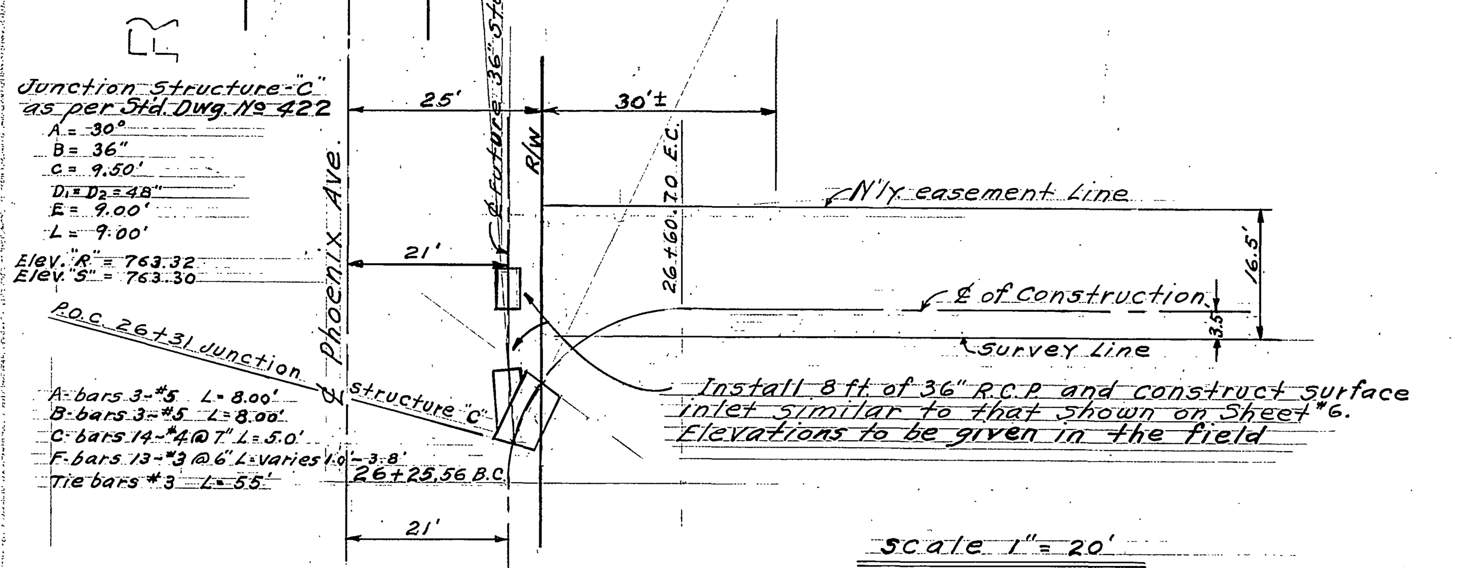
D-38

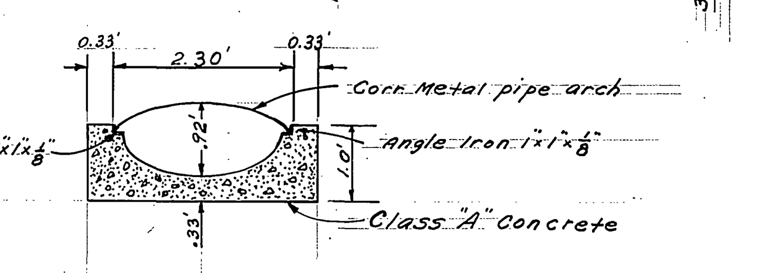
SHEET 1 OF 6

Void SAVE

EASEMENT
ARLINGTON AVENUE
PHOENIX AVENUE
Profile of Exist. Ground Survey Line
Profile Exist. Ground 10' RT. (of survey Line)
Profile Exist. Ground 10' LT. (of survey Line)
Top Edge of Storm Drain Lt. & Rt.
TRAPEZOIDAL CHANNEL
GUNITED b=9.00'
Flow Line
+0.11%
+0.445%
+0.29%
+0.15%
+0.26%
super elevation for the right side of the Storm Drain
49.08
L=31.41
L=48.59'
L=142.11
11+00 Match Line See Sheet #1 759.91
13+00 Top edge of Storm Drain Lt.& Rt. 765.12
13+17.67 B.C. Top edge of Storm Drain Rt. 765.63
13+40 P.O.C. Top edge of Storm Drain Rt. 765.73
13+49.08 E.C. Top edge of Storm Drain Rt.& Lt. 765.28
13+17.67 B.C. 60.14
13+49.08 E.C. 60.28
14+88 Beginning of Transition 760.43
BK.B.C. 15+00.34 = Ahd.B.C. 15+04.75
P.O.C. 15+06.9 End of Transition Beginning of Outlet Box
P.O.C. 15+14.0 Face of Headwall Beginning of 54" R.C.P. 760.70
E.C. 15+53.34 760.84
15+56 Junction C 760.85/95
Top edge of Storm Drain Rt.
Top edge of Storm Drain Lt.
15' Rt. of Survey Line
5' Lt. of Survey Line
Profile of Exist. Ground at ℄ Storm drain
Install 40'± of 54" R.C.Pipe D-1200 Bedding as per Std. Dwg. № 452 Case III
Exist. 12" V.C.P.
763.60±
3" Gas Line
12" Water Main to be relocated by Water Dept.
48" R.C.P. D-1100 BEDDING AS PER STD. DWG. № 452 CASE III
Const. Manhole as per Std. Dwg. № 500
19+23.13 B.C. 61.50
Const. Manhole as per Std. Dwg. № 500
P.O.C. 20+15 Manhole J.M. 761.74/84
20+65.24 E.C. 61.94
8" V.C.P.
Exist. 21" V.C.P.
30" Gas Line
762.74
℄ St. George Place
meet exist. C&G
Exist. Top of curb
T.C. 765.40
F.L. 764.90
26.90'
T.C. 765.50
Length to be determined in the field.
See sheet #3
26+00 Match Line
765
760
755
B.M. R.R. Spike in Pole #598361 H at angle point Arlington and Monroe Storm Drain #2 approx. 200' Ely. of St. George Place. Elev. 765.501
F B - 676/7-18, 35-37 Plan #R137 599/47
SCALES: HOR. 1"= 50' VER. 1"= 5'
Exist. Manhole at ℄ Via San Jose
Exist. Ground
16" Conc. Pipe
Gas Main
6" Water
Exist. 8" V.C.P.
F.L. 61.72
48" R.C.P. to be installed
F.L. 61.18
F.L. 66.31±
Const. Manhole as Per Std. Dwg. № 500
0.4%
Const. 47'± 8" V.C.P.
F.L. 59.15
760
Scales: Hor. 1"=10' Vert. 1"=5'
DETAIL "A"
Existing Manhole on ℄ Arlington Ave.
Gas Main
48" R.C.P. to be installed
F.L. 760.09
F.L. 61.71
F.L. 760.72
F.L. 759.97±
Exist. Sewer to be removed
F.L. 59.50
0.08%
Const. 36'± 21" V.C.P.
Const. Sewer Manhole as per Std. Dwg. № 500
Exist. 21" V.C.P.
Scales: Hor. 1"=10' Vert. 1"=5'
DETAIL "B"
3" Gas Main
12" Water Main Top 763.60±
0.22%
Const. 78'± 12" V.C.P.
F.L. 760.89
F.L. 760.72
Scales: Hor. 1"=50' Vert. 1"=5'
Profile of Sewer Sta. 19+50±
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
SCALE 1"=50'
SEE DETAIL SH. #5
comb. P. #598358H - 12.7 16" R.C.P. - 7.5
Eq = Ahd. B.C. 15+04.75 BK. B.C. 15+00.34
LOT 7, BLOCK 6 OF RIVERSIDE LAND AND IRRIGATING CO. SUB. DIV. MAP BOOK 1, PAGE 70, REC. OF S.B. COUNTY.
Notes Referring to St. George Place
① Remove curb and Gutter, D.Way approach, and paving as far as necessary.
② Replace curb and Gutter and paving as shown. Driveway approach as required in the field.
③ Reset exist. fence and install 4' single gate. Fill area between new curb and gutter & Storm drain with dirt and grade. Slope to be 0.3%
④ Provide opening in curb at ℄ St. George Place and construct concrete lined ditch between curb and Storm drain as shown on Sh. #5
⑤ Furnish and install one reflector, State of California, Division of Highways, Type No. W 21 R as required in the field.
Install fence along the easement line as per Std. Dwg. № 900 (Fence is not shown) Install 4' single gate at St. George Pl.
5' EASEMENT
15' EASEMENT
See Note (8) Row of Caster bean bushes
Cloth Line Post 13.5'
Survey Line
℄ Construction
Cloth Line Post 12.7' 105.71'
20" Elm 11.6'
Construct 20'± Concrete lined ditch (See Note 4)
EASEMENT LINE
See Note (9)
13+49.08 E.C. 12" Elm 11.4'
10" Tree 4'
105.72'
30" Palm 23.20'
132.17'
Survey Line
EASEMENT LINE
Replace paving (0.21' P.M.S. on 0.50' I.B.M.)
℄ curve data Δ 89°59'17" R = 20' L = 31.41' T = 20.00'
curb curve data: R = 30' Δ & L dependant upon replacing D.W. approach
Δ' = 48°28'01" L' = 26.90' For curb profile see above, right.
ST. GEORGE PLACE
VIA SAN JOSE
VIA SAN LUIS
ARLINGTON N 89°45'00" E 369.79'
PHOENIX AVE. S 00°16'34" W
AVENUE
MATCH SHEET #1
MATCH LINE 22+50
MATCH LINE 22+50
MATCH SHEET #3 26+00
CALIFORNIA GROVES
HEERS SUBDIVISION
R.S. 23/36
SEE DETAIL "A"
SEE DETAIL "B"
FOR PROFILE SEE ABOVE
Sewer manhole to be abandoned See Note (4) at right
Construct Sewer manhole as per Std. Dwg. № 500
Const. 78'± 12" V.C.P.
47'± 8" V.C.P.
Future Storm drain lateral 15" R.C.P.
Row of 4x4 Posts 2' High 6.8' apart.
Tel. Co. Buried Cable C = 4'-6"
℄ of Construction
℄ Drainage Ditch
20+65.24 E.C.
19+23.13 B.C.
℄ curve Data Δ 89°28'26" R = 91' L = 142.11' T = 90.17'
At Sta. 19+23.13 6' Lt. Construct Sewer manhole as per Std. Dwg. № 500.
At Sta. 20+10.34 P.O.C. 6' Lt. Const. Sewer manhole as per Std. Dwg. № 500.
S² SE⁴ SEC. 32 T.2 S. R.5 W
For the manhole J.M. at Sta. 20+15±, install left 4 ft. of 15" R.C.P. and right 4 ft. of 18" R.C.P. Both pipe sections to be beveled 5° on one side. (D-strength D-1500) 15" R.C.P. to be closed with bulkhead.
Pole #45926 H - 19.8'
℄ Exist. Drainage Ditch
⑧ Remove trees and bushes inside the Storm drain Right of Way.
⑨ Remove exist. fence inside the Storm drain Right of Way, and put it on the private property adjacent to it.
NOTES:
① During construction of the inverted siphon at Phoenix Ave. (21" V.C.P.) the Contractor shall pump the sewage into the newly constructed manhole at Sta. 20+10.34
② All abandoned sewer sections to be plugged (Sec. 9.09 Standard Specifications)
③ All jointing material for sanitary sewers to be asphalt jointing compound (Sec. 9.02 Standard Specifications)
④ Abandon sewer manhole at Sta. 16+93.50 6' Lt. Use 12" V.C.P. half section for covering the invert. Pour Class C Concrete to a level 1.50' above flow line. Remove M.H. shaft to 2.00' below street grade and fill with dirt and compact. Manhole frame and cover shall become the property of the contractor and may be reused on this job.
⑤ Interfering concrete pipe culverts at Sta. 20+00± may be crushed and removed.
⑥ D-Loads: 48" R.C.P. to be 1100-D 18" D-1500 15" R.C.P. to be 1500-D 54" D-1200
⑦ At Sta. 20+15± Construct Manhole JM as per Std. Dwg. № 432 with two branches. One branch to be modified to serve as a temporary inlet (see detail Sheet 6)
DIMENSIONS AND STEEL LIST FOR MANHOLE J.M. AT STA. 20+15±
A-Left = 30° A-Right = 30° Elev. "R" Lt. = 762.82, Elev. "R" Rt. = 762.82
B-Left = 15" B-Right = 18" Elev. "S" Lt. & Rt. = 762.70
C-Left = 8.00' C-Right = 8.00' Top of M.H. 767.6
D1 = D2 = 48"
E = 8.00' L = 7.00'
A-bars Left 3-#3 L: 4.0' D-bars 6-#4 L: 5.0'
A-bars Right 3-#3 L: 4.3' E-bars 4-#4 L: 4.0'
B-bars Left 3-#3 L: 4.0' F-bars none
B-bars Right 3-#3 L: 4.3' Tie bars #3 L: 35'
C-bars 4-#3 @ 6" L: 5.0'
REVISIONS
MARK DATE DESCRIPTION
CITY OF RIVERSIDE CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ARLINGTON - MONROE STORM DRAIN NO. 2
T-DITCH ELY OF ADAMS STREET TO STREETER AVENUE
Acct. No. RF 1343-4001
DESIGNED BY H.J.K. CHECKED BY
DRAWN BY H.R.C.
APPROVED BY
DIRECTOR OF PUBLIC WORKS
D-38
SHEET 2 OF 6
SAVE
Void
Brown line made of this set modified and ...

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
K & E Co No. 346-1C





Approximate Cross Section for Pipe extension at Sta. 33+25
Scale 1"= 2'

NOTES

1. Remove exist fence and put on the private property adjacent to it.
2. Remove exist. fence and reset it along the new easement line (Sta. 28+90 Rt. - 31+70 Rt. and at the Corner at Phoenix Ave.
3. Contractor to extend an existing storm drain at Sta. 33+25 Lt. with the same kind and type of material and the same dimensions as the existing.
4. Extend a 15" R.C.P. at Sta. 40+23± Rt. Outlet to be flush with the lining of the ditch.

REVISIONS		
MARK	DATE	DESCRIPTION

CITY OF RIVERSIDE CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

ARLINGTON MONROE STORM DRAIN NO.2

T-DITCH ELY OF ADAMS STREET TO STREETER AVENUE

Acct. No. RF1343-4001

DESIGNED BY H.J.K. CHECKED BY
DRAWN BY drb H.R.C.
RECOMMENDED BY
ASSISTANT CITY ENGINEER
APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE

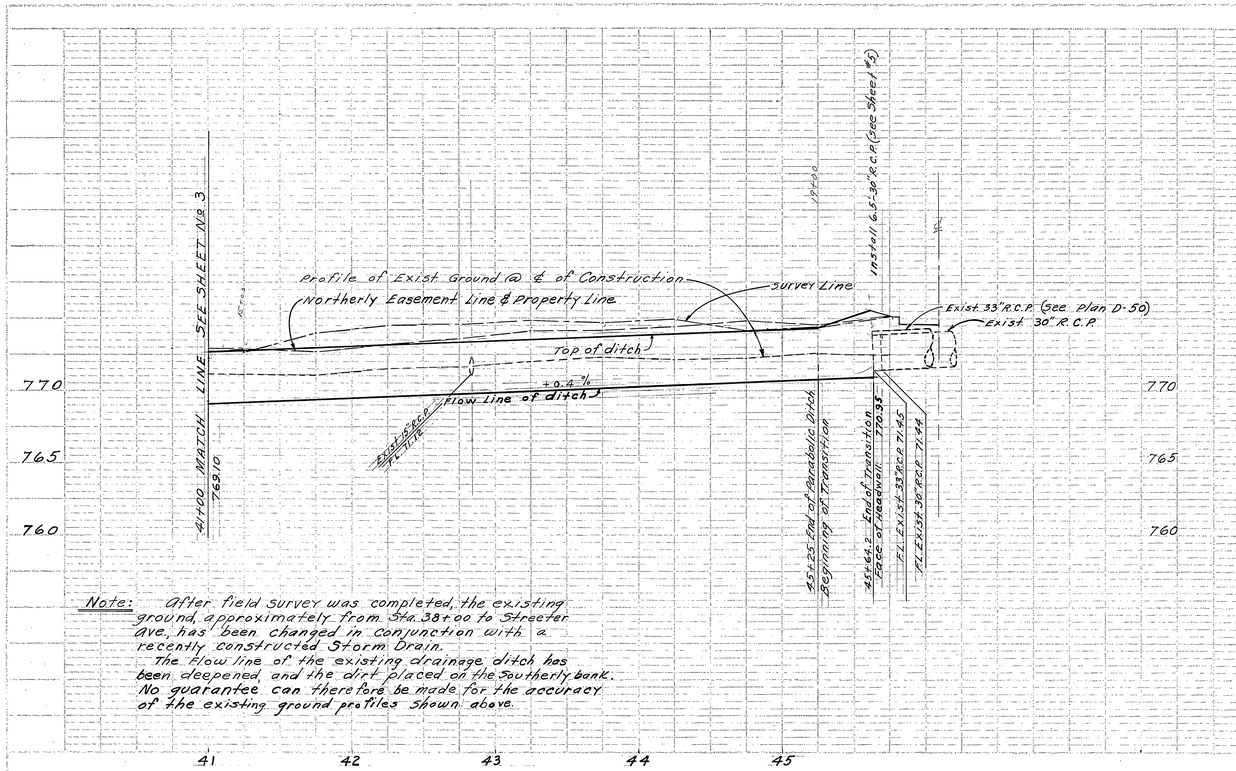
D-38

SHEET 3 OF 6

Void
SAVE

PROFILE	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECKED		
S. M.S NOTED		
STRUCTURE NOTAT'NS CHK'D.		
NOTE BOOK NO.		

PLAN	BY	DATE
SURVEYED		
PLOTTED		
ALIGNMENT CHECKED		
R.L. OF WAY CHECKED		
NOTE BOOK NO.		

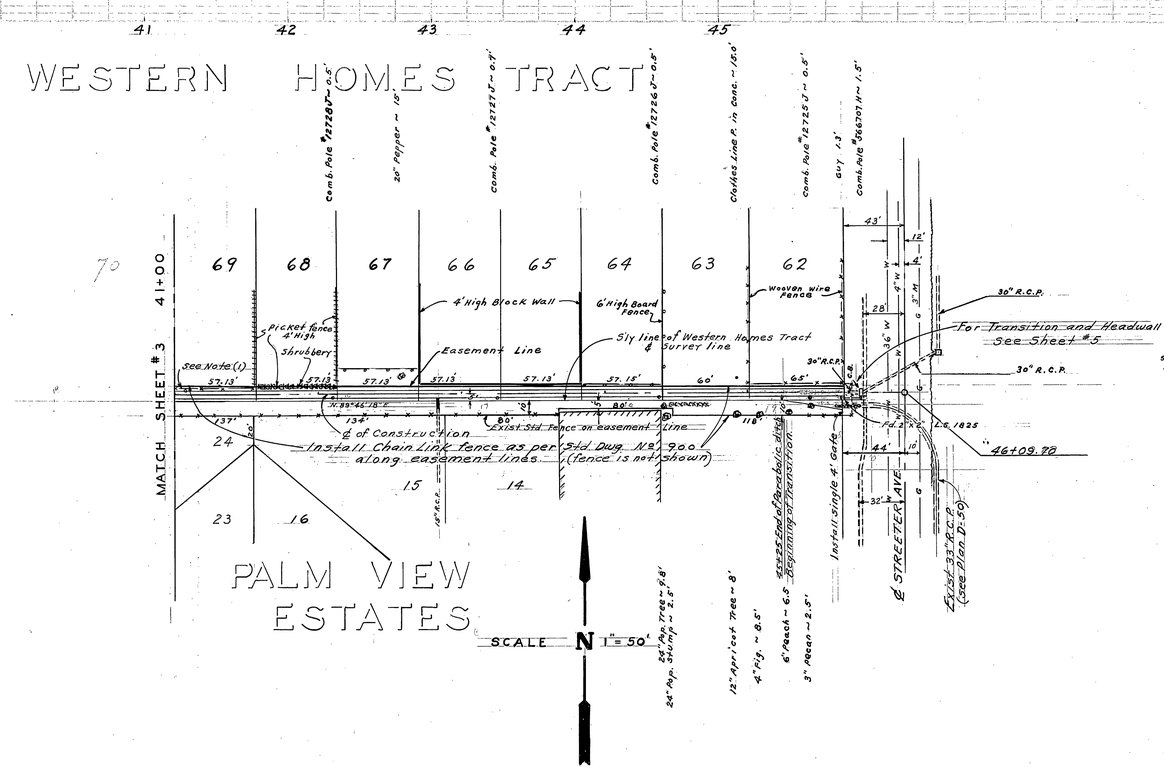


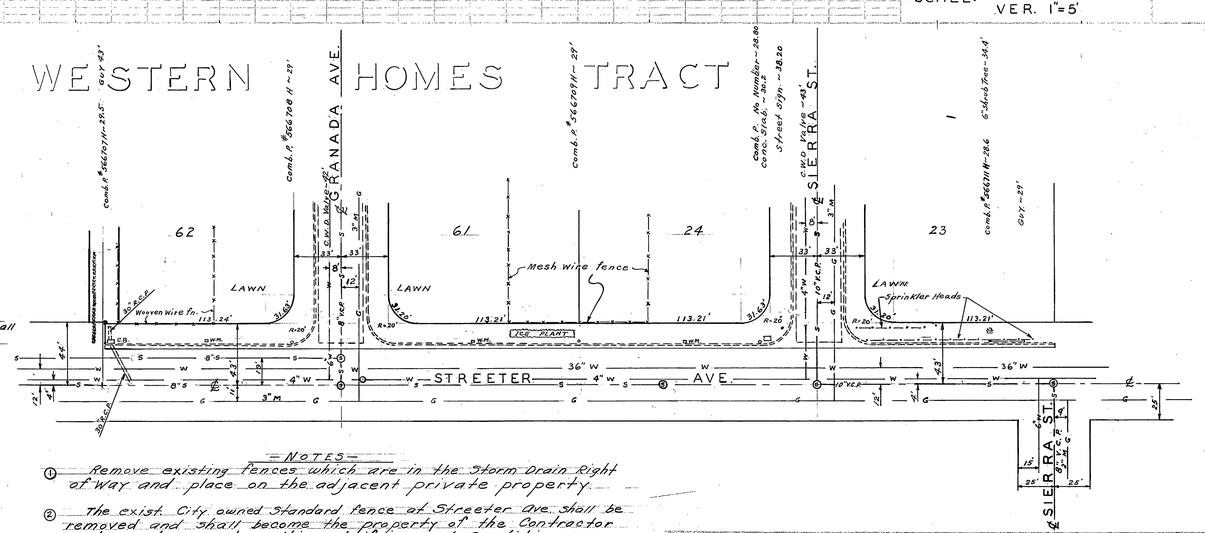
Note: After field survey was completed, the existing ground, approximately from Sta. 38+00 to Streeter Ave., has been changed in conjunction with a recently constructed Storm Drain.
The flow line of the existing drainage ditch has been deepened, and the dirt placed on the Southerly bank. No guarantee can therefore be made for the accuracy of the existing ground profiles shown above.

B.M. R.R. spike in 30" Walnut Tree approx. 60' S/W of S.W. Cor. of Western Homes Tract Approx. 664' Ely. & Phoenix Ave. El. 770.10

F.B. 676/26-34 37-41

SCALE: H.O.R. 1" = 50'
V.E.R. 1" = 5'





NOTES

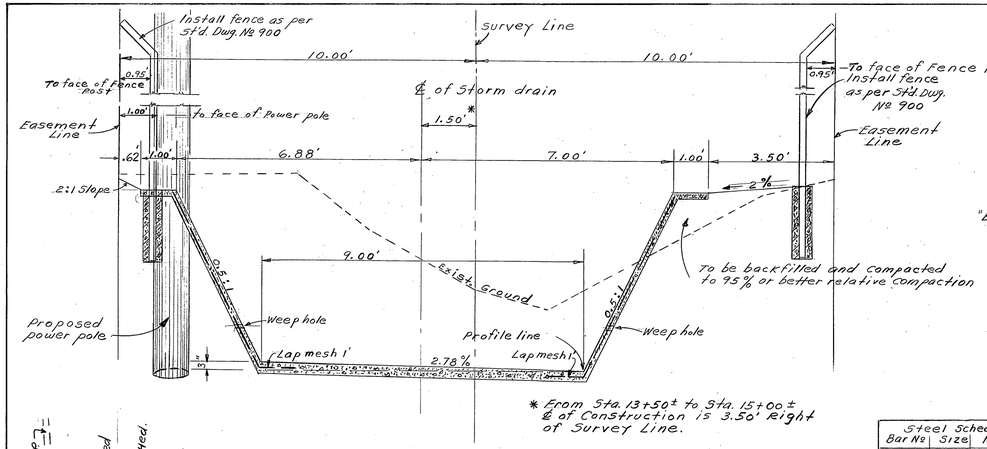
1. Remove existing fences which are in the Storm Drain Right of Way and place on the adjacent private property.
2. The exist. City owned Standard fence at Streeter Ave. shall be removed and shall become the property of the Contractor and may be reused on this job if in good condition.
3. Extend a 15" R.C.P. at Sta. 42+85 ± Rt. outlet to be flush with the lining of the ditch.

SCALE 1" = 50'

REVISIONS			CITY OF RIVERSIDE CALIFORNIA
MARK	DATE	DESCRIPTION	DEPARTMENT OF PUBLIC WORKS
			ARLINGTON MONROE STORM DRAIN NO. 2 T-DITCH ELY OF ADAMS STREET TO STREETER AVENUE
			Acct. No. RF1343-4001
DESIGNED BY H.J.K. CHECKED BY			APPROVED BY
DRAWN BY H.R.C.			DIRECTOR OF PUBLIC WORKS
RECOMMENDED BY ASSISTANT CITY ENGINEER			DATE

D-38

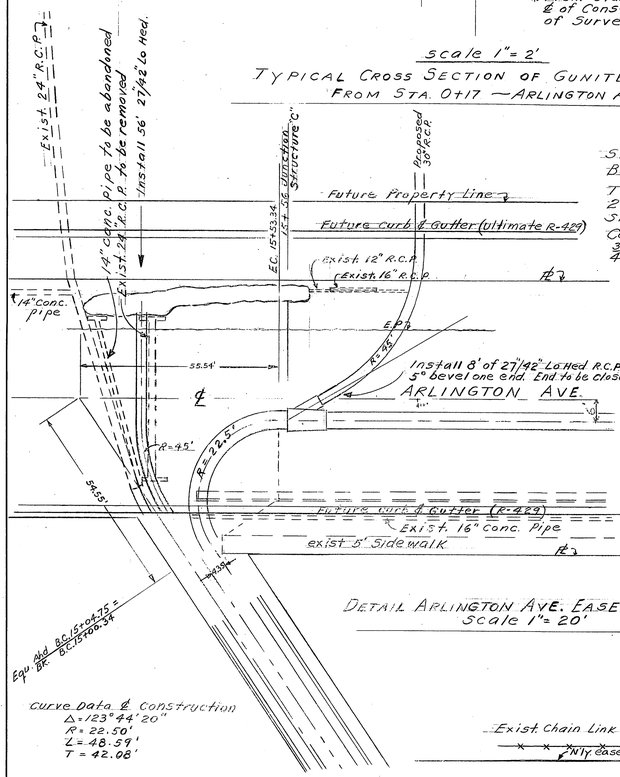
SHEET 4 OF 6



* From Sta. 13+50± to Sta. 15+00 ± ℄ of Construction is 3.50' right of Survey Line.

scale 1" = 2'

TYPICAL CROSS SECTION OF GUNITED DITCH FROM STA. 0+17 — ARLINGTON AVE

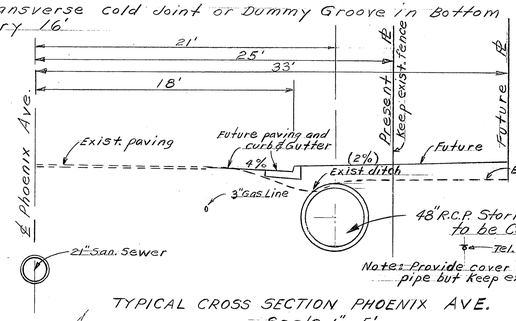


DETAIL ARLINGTON AVE. EASEMENT
Scale 1" = 20'

Curve Data & Construction
Δ = 123° 44' 20"
R = 22.50'
L = 48.59'
T = 42.08'

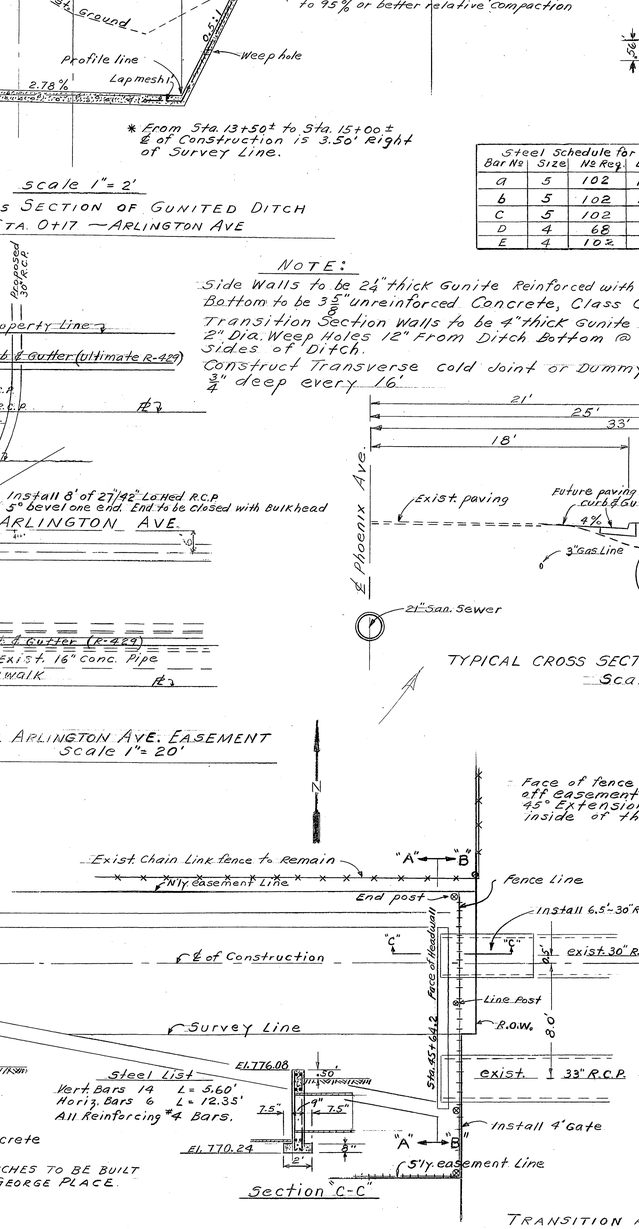
Steel Schedule for R.C.B.			
Bar №	Size	№ Req'd	Length
a	5	102	14.25'
b	5	102	13.58'
C	5	102	6.50'
D	4	68	31.06'
E	4	10±	4.75'

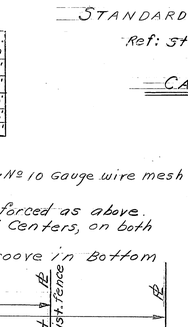
NOTE:
Side Walls to be 2½" thick Gunite Reinforced with 4x4-№ 10 Gauge wire mesh
Bottom to be 3½" unreinforced Concrete, Class C.
Transition Section Walls to be 4" thick Gunite Reinforced as above.
2" Dia. Weep Holes 12" From Ditch Bottom @ 8'-0" Centers, on both Sides of Ditch.
Construct Transverse cold Joint or Dummy Groove in Bottom ¾" deep every 16'

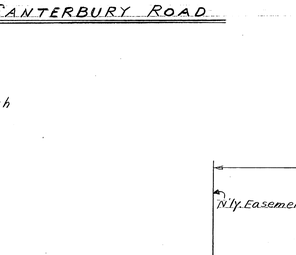


TYPICAL CROSS SECTION PHOENIX AVE.
Scale 1" = 5'

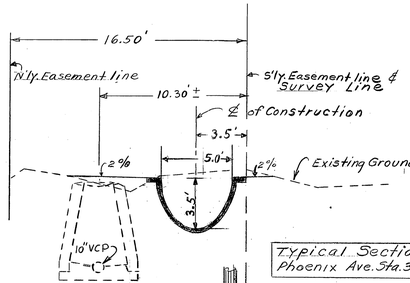
DETAIL OF CONCRETE LINED DITCHES TO BE BUILT AT ST. PAULS PLACE AND ST. GEORGE PLACE.
SCALE 1" = 1'



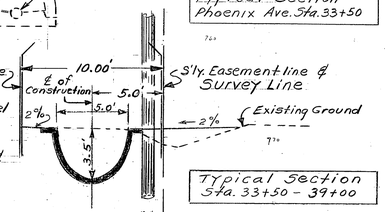




TRANSITION AND HEADWALL AT STREETER AVE. (STA. 45+60)
Scale 1" = 5'

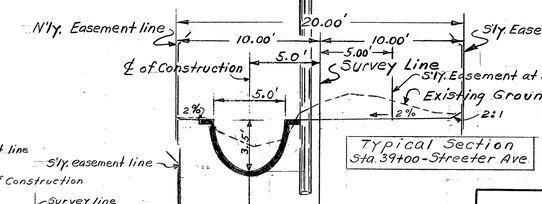


Typical Section
Phoenix Ave. Sta. 33+50



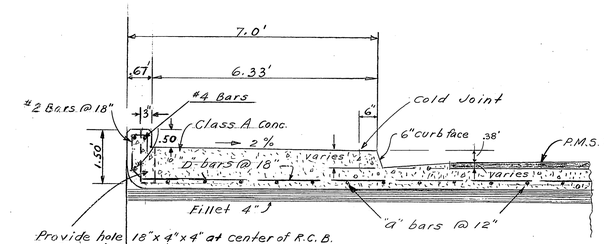
NOTE:
Parabolic ditch to be 2" gunited and steel troweled. Reinforced with 4" x 4" -10 ga. Wire mesh.
Between Phoenix & Streeter Ave's, install fence posts 0.10' off easement line.

Typical Section
Sta. 33+50 - 39+00



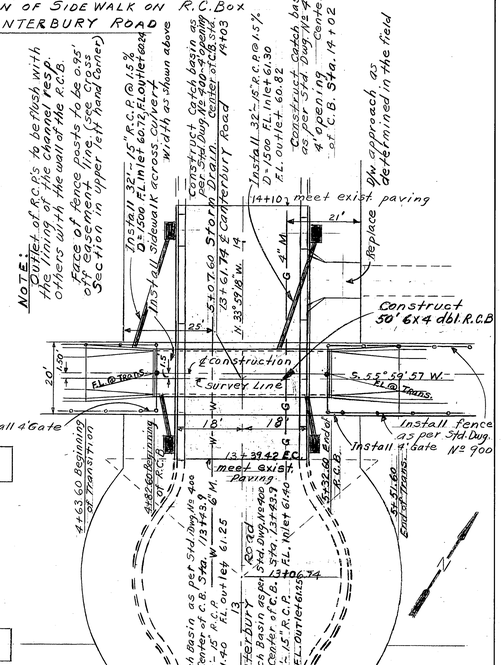
Typical Section
Sta. 39+00 - Streeter Ave

Scale 1" = 5'



Scale 1" = 2'

CROSS SECTION OF SIDEWALK ON R.C. BOX AT CANTERBURY ROAD



Scale 1" = 20'

DETAIL AT CANTERBURY ROAD

REVISIONS			CITY OF RIVERSIDE CALIFORNIA
MARK	DATE	DESCRIPTION	DEPARTMENT OF PUBLIC WORKS
			ARLINGTON - MONROE STORM DRAIN NO. 2
			Acct. No. RF 1343-4001
DESIGNED BY H.J.K. CHECKED BY DRAWN BY H.R.C.			APPROVED BY DIRECTOR OF PUBLIC WORKS
RECOMMENDED BY ASSISTANT CITY ENGINEER			DATE
			D-38 SHEET 5 OF 6

Void

Void
SAVE