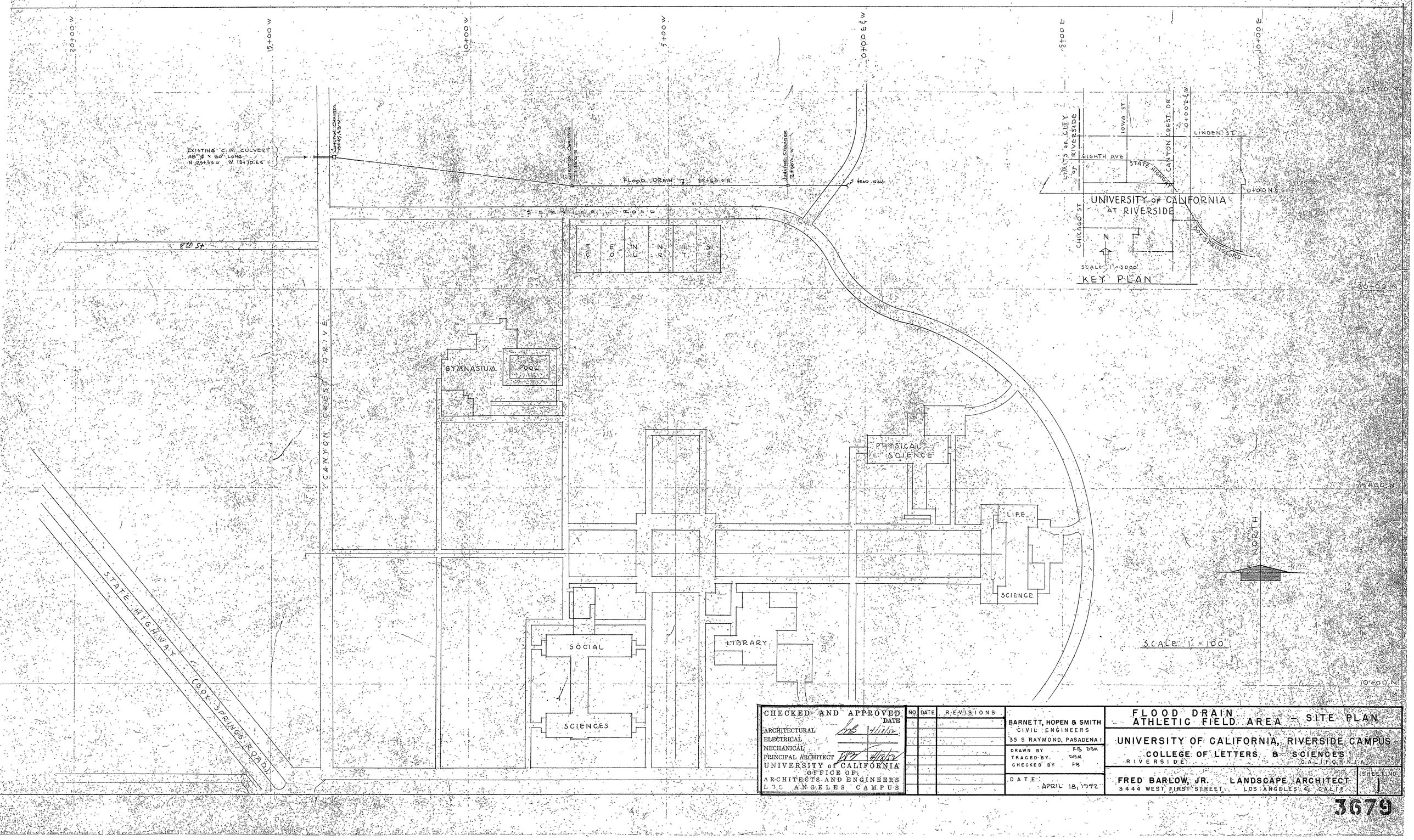


CHECKED AND APPROVED	DATE
ARCHITECTURAL	4/18/52
ELECTRICAL	
MECHANICAL	
PRINCIPAL ARCHITECT	4/18/52

UNIVERSITY of CALIFORNIA
OFFICE OF
ARCHITECTS AND ENGINEERS
LOS ANGELES CAMPUS

NO	DATE	REVISIONS

BARNETT, HOPEN & SMITH
CIVIL ENGINEERS
35 S RAYMOND, PASADENA 1

DRAWN BY FB DBM
TRACED BY DBM
CHECKED BY FB

DATE: APRIL 18, 1952

FLOOD DRAIN
ATHLETIC FIELD AREA - SITE PLAN

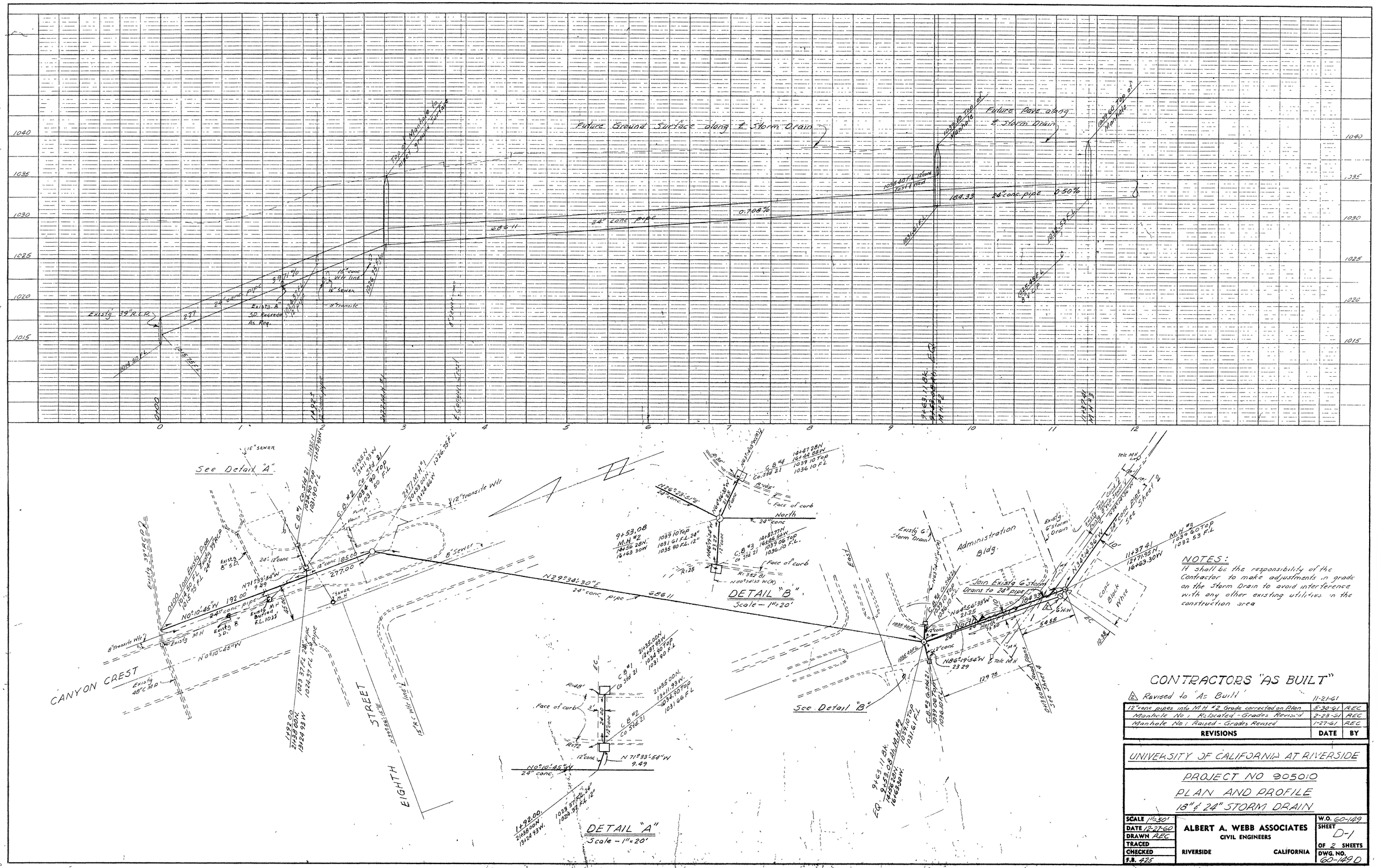
UNIVERSITY OF CALIFORNIA, RIVERSIDE CAMPUS
COLLEGE OF LETTERS & SCIENCES
RIVERSIDE CALIFORNIA

FRED BARLOW, JR. LANDSCAPE ARCHITECT
3444 WEST FIRST STREET LOS ANGELES 4, CALIF.

SHEET NO. 1

3679

D-70



NOTES:
It shall be the responsibility of the Contractor to make adjustments in grade on the Storm Drain to avoid interference with any other existing utilities in the construction area

CONTRACTORS "AS BUILT"

Revised to "As Built" 11-21-61

REVISIONS	DATE	BY
12" conc pipes into M.H. #2 Grade corrected on Plan	5-30-61	REC
Manhole No. 1 Relocated - Grades Revised	2-23-61	REC
Manhole No. 1 Raised - Grades Revised	1-27-61	REC

UNIVERSITY OF CALIFORNIA AT RIVERSIDE

PROJECT NO 905010

PLAN AND PROFILE

18" & 24" STORM DRAIN

SCALE 1"=50'	ALBERT A. WEBB ASSOCIATES CIVIL ENGINEERS RIVERSIDE CALIFORNIA	W.O. 60-149
DATE 12-27-60		SHEET D-1
DRAWN REC		OF 2 SHEETS
TRACED		DWG. NO. 60-149 D
CHECKED		
F.B. 425		

PROFILE

PLAN

PLATE 1 PLAN PROFILE O F R & R E STANDARD

KUFFEL & ESSER CO NEW YORK

K & E CO NO 347-IR ® KEUFFEL & ESSER CO MADE IN U.S.A. 3457O

PROFILE

SURVEYED
PLOTTED
CHECKED
QUANTITIES CHECKED
B. M.'S NOTED
STRUCTURE MYIATIS CH KD

NOTE BOOK
NO

BY

DATE

1065
1060
1055
1050
1045
1040
1035

14 13 12 11 10 9 8 7 6 5 4 3 2 1 0

Existing Ground on ℄ Proposed Storm Drain Channel

Flow Line of Proposed Storm Drain Channel

2.16%

0.936%

Road to Health Center Bldg.

20' conc. Encasement See Detail

38" cone Culv

Class "C" concrete

ENCASEMENT DETAIL

N3 3 Bars 18" o.c. both ways

1056.00 Top

1054.50 F.L.

12" conc pipe

Grating made up 1/4" x 2" steel bars at 1 1/4" centers 2 - 1/2" steel bolts and 3/4" x 3/4" pipe spacers Angle Frams (4 sides) 2 1/2" x 2 1/2" x 3/8" Grate and Frame to be galvanized Catch Basin to conform to Riverside County Std. No. 19

NO. 1 CATCH BASIN DETAIL

146.60 ± 1061.22 F.L. Existg CMP

N 0°00'15" W

55'

1056.00 Top Catch Basin
1054.50 F.L. Outlet

No 1 Catch Basin

Abandon existg 12" CMP & const Catch Basin at site of inlet end of 12" CMP

12" CMP to be abandoned

Existg 00 ±

35' 12" conc pipe

1054.00 F.L. 12" conc pipe

4" Water Line

2" Gas Line

Contractor shall relocate existing Blow-Off to drain into storm channel at same elevation as 4" Water Line

Cat h Basin Co Std #21 1053.14 Top 1052.64 F.L.

98.50

Catch Basin Co Std #21 1052.14 Top 1052.00 F.L.

N 55°50'56" W

36" 28" conc pipe

Gate Valve

1051.80 F.L. 12" Culvert

1049.80 F.L. 12" Culvert

1050.48 F.L. 12" Culvert

℄ Relocated Storm Drain Channel

Approximate Location of existing Storm Drain Channel - Contractor shall regrade as necessary to meet Relocated Storm Drain Channel

72" conc Culvert & Headwalls

Elect & Tele Conduits

20' conc Encasement over existing 8" V.C.P. See Detail.

8" V.C.P. San Sewer

N 89°59'45" W

Existg 12" conc pipe

Existg 38" conc Culvert

0+00.00 ± 1038.39 F.L. Existg CMP

2:1 Max

6'-0"

3'-0"

3'-0"

2:1 Max

TYPICAL SECTION STORM DRAIN CHANNEL

PLAN

SURVEYED
PLOTTED
CHECKED
QUANTITIES CHECKED
B. M.'S NOTED
STRUCTURE MYIATIS CH KD

NOTE BOOK
NO

BY

DATE

REVISIONS	DATE	BY

UNIVERSITY OF CALIFORNIA AT RIVERSIDE

PROJECT NO 905010

OLIVE AVE. PROFILE

STORM DRAIN CHANNEL

SCALE 1"=20'	W.O. 61-95
DATE 7-21-61	SHEET D-1
DRAWN RE	OF 2 SHEETS
TRACED	DWG. NO. 61 9-0
CHECKED	
F.B.	

ALBERT A. WEBB ASSOCIATES
CIVIL ENGINEERS
RIVERSIDE CALIFORNIA

D-70

K&E Co No 347-1R ALBANENE 1952 TRACING PAPER MADE IN U S A 24034
PLATE 1 PLAN PROFILE O P R & R E STANDARD
KEUFFEL & ESSER CO, NEW YORK
1050
1045
1040
1035
1030
1039.60 Top of Manhole
1032.53 F.L.
594.27
24" conc. pipe
0.5%
Future Pave along Storm Drain
1045.50 Top of Manhole
12" W.W. line
8" V.C.P.
203.27
24" conc. pipe
0.5%
1035.50 F.L.
1036.81 F.L.
1037.15 F.L.
1036.52 F.L.
1047.70 Top of Manhole
1041.63 F.L.
1040.72 F.L. 8" V.C.P.
1042.51 F.L. 12" conc. pipe
461.17
18" conc. pipe
0.50%
1050.73 Top of Catch Basin
1046.90 F.L. 12" conc. pipe
1043.84 F.L.
11+37.41 M.H. #3
17+31.68 M.H. #4
17+92.68 12" conc. pipe from Catch Basin #5
18+61.68 12" conc. pipe from Catch Basin #6
19+34.95 M.H. #5
20+31.50 12" conc. pipe from C.B. #7
23+90.12 C.B. #8 Co. Std. 21
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
PROFILE
NOTE BOOK
NO.
North
10'
See Sheet
Tele MH
MH
Admin Bldg.
0+13.50 BC Road Plans Sheet 4
54.55
11+37.41 12+71.95 N. 16+63.30 W
MH #3 1039.60 Top 1032.53 F.L.
1038 EC
Conc Block Whse
8" VCP Sewer
Tele MH
Tele Cond
N 34°14'36" W 460.54
N 34°14'36" W
24" conc. pipe
594.27
Conc Block Whse
Tele cond
E'ly R/W Line of Freeway
Tele M.H.
8" VCP Sewer
L=40.69 R=300'
N 26°28'18" W 109.11
Elect MH
Tele MH
PP
17+31.68 M.H. #4 7+80.70 N. 13+28.90 W. 1045.50 Top 1035.50 F.L.
Garage
Tele Cond
Elect Cond
18+61.68 C.B. #6 Co. Std. 21
1047.20 Top 1044.20 F.L.
Cafe
Connect Existg. Storm Drain to C.B. #6 Existg Storm Drain to West of C.B. to be Abandoned.
Existg. Storm Drain
19+34.95 M.H. #5 1047.70 Top 1036.52 F.L. 24" 1041.53 F.L. 18"
20+31.50 - C.B. #7 1048.62 Top - Co Std. 21 1045.62 F.L.
10' - 12" conc. pipe
N 49°02'12" W
N 56°09'17" W 276.43
18" conc. pipe
30'
24" conc. pipe
8" VCP sewer
12" conc. pipe
House
3.63
38.63
17+92.68 C.B. #5 Co. Std. 21 1046.28 Top 1043.28 F.L.
Remove Existing Catch Basins
R=360
Δ=16°49'47" L=105.74
461.17
Δ=17°09'
L=107.85
23+90.12 C.B. #8 Co Std 21 1050.73 Top 1043.84 F.L. 18" 1046.90 F.L. 12"
23.50
45.32 - 12" conc pipe N 48°13'44" E
C.B. #9 Co. Std. 21 1050.92 Top 1047.10 F.L.
N 50°40'30" E (R) ℄ Underpass
N 65°33'58" E (R)
N 67°50'23" E (R)
3'-0"
D+12" (3'-0½" Min)
variable
3'-0" Min
Curb
Point A
Straight Grade
4'-0"
PLAN
Normal Curb Face
3" Weephole (Omit if D1 is used as siphon or if floor is filled with concrete to invert of pipe
D+12 3'-0½" Min
6"
ELEVATION
6"x3½"x3/8" Galv Plate
Point A
2" Clr (Typ)
Alternate Pipe
See County of Riverside subdivision Improvement Std #21 for additional Details and Steel Schedule
SECTION B-B
CURB INLET CATCH BASIN DETAILS
COUNTY OF RIVERSIDE STANDARD No 21
Scale ¼" = 1'-0"
A A'
4'-0"
14"
PLAN
Finished Grade
Alhambra Foundry A-1590 or equal
2'-0"
6"
3'-1"
Precast Concrete Manhole
½ V.C. Pipe Channel
5'-4½"
SECTION A-A
MANHOLE STRUCTURE
CONTRACTORS "AS BUILT"
2 Revised to "As Built" 11-21-61
Catch Basins No. 7 & 8 Relocated 3-23-61 REC
Catch Basin No 8 Relocated 2-1-61 REC
Manholes No 4 & 5 Lowered - Grades Revised 1-27-61 REC
REVISIONS DATE BY
UNIVERSITY OF CALIFORNIA AT RIVERSIDE
PROJECT NO. 305010
PLAN AND PROFILE
18" & 24" STORM DRAIN
SCALE 1"=50'
DATE 12-28-60
DRAWN REC
TRACED
CHECKED
F.B. 425
ALBERT A. WEBB ASSOCIATES
CIVIL ENGINEERS
RIVERSIDE CALIFORNIA
W.O. 60-149
SHEET D-2-1
OF 2 SHEETS
DWG. NO. 60-149D
PLAN
NOTE BOOK
NO.
F-36
D-70