

# RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

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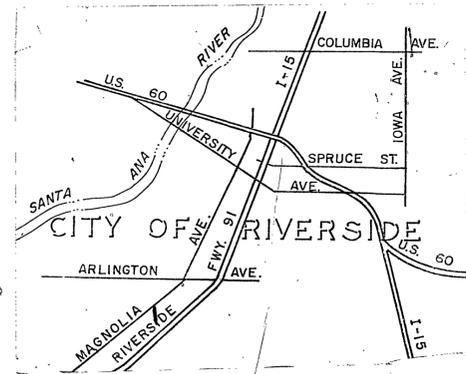
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## CITY OF RIVERSIDE STANDARD DRAWINGS

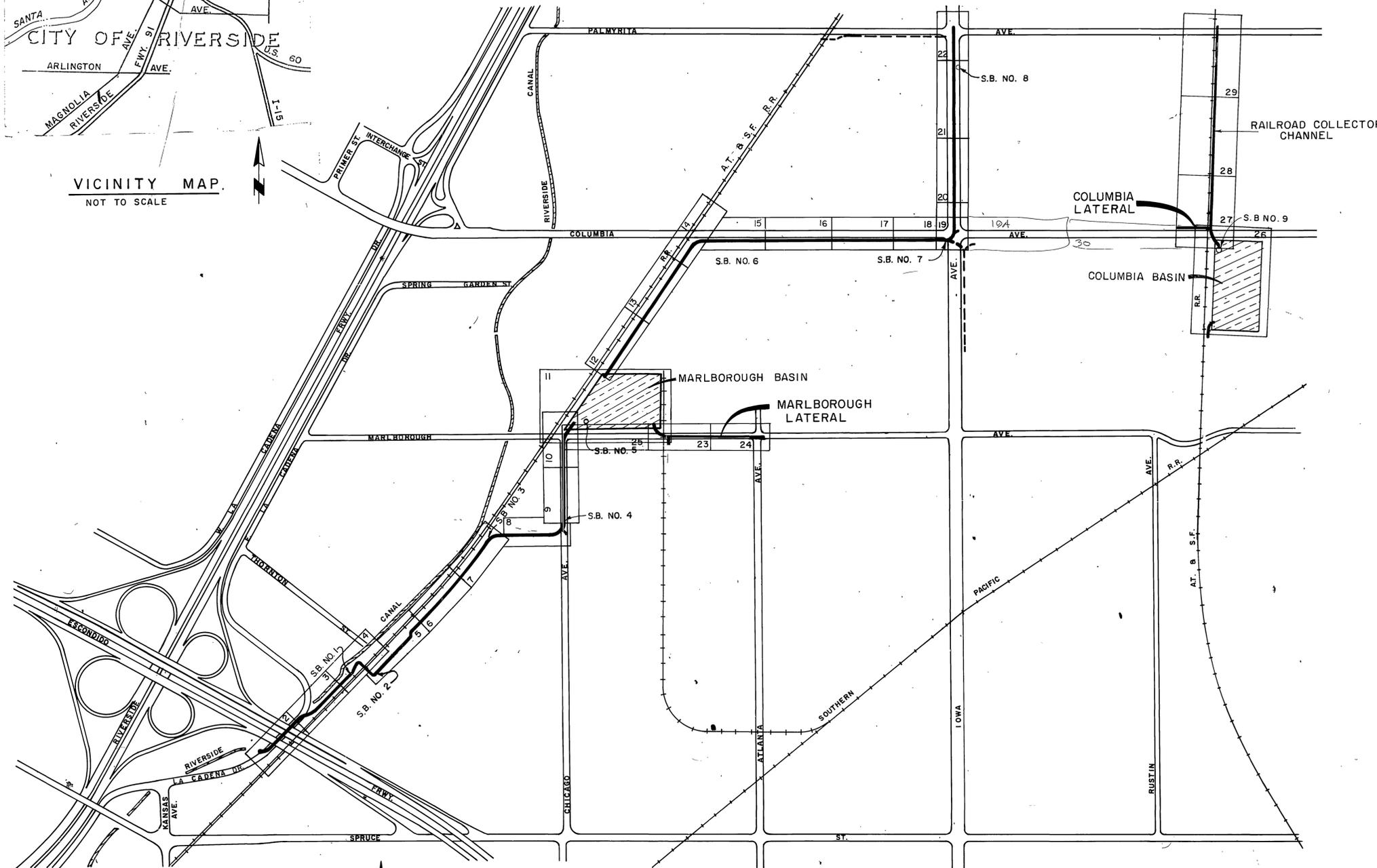
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### GENERAL NOTES

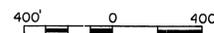
- TOPOGRAPHIC FEATURES, BOTH CONTOURS AND CULTURE ARE BASED UPON RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT PHOTOGRAMMETRY DATED 2-3-77 OR 1-1-78.
- ALL ELEVATIONS SHOWN ARE IN FEET, BASED ON USC&GS DATUM.
- SOIL TEST BORINGS FOR THIS PROJECT WERE DONE ON 10-9-78.
- TIES TO CATCH BASINS ARE FROM CURB RETURN TO THE CENTERLINE OF THE CATCH BASIN UNLESS OTHERWISE SHOWN. WHERE NO TIE IS SHOWN, LOCAL DEPRESSION SHALL BEGIN AT CURB RETURN.
- PIPE CONNECTIONS TO MAINLINE SHALL CONFORM TO J.S. NO. 4 UNLESS OTHERWISE SHOWN.
- OPENINGS RESULTING FROM THE CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES OR SIMILAR STRUCTURES SHALL BE SEALED WITH 8" OF BRICK & MORTAR, OR 6" OF CONCRETE NOTED ON THE PLANS AS "PLUG".
- STREET RESURFACING SHALL BE 3" A.C. ON 6" CLASS 3 A.B. UNLESS SHOWN OTHERWISE.



VICINITY MAP  
NOT TO SCALE



LOCATION MAP



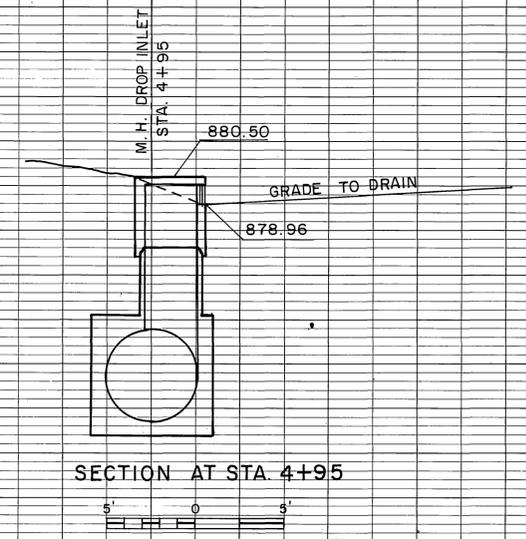
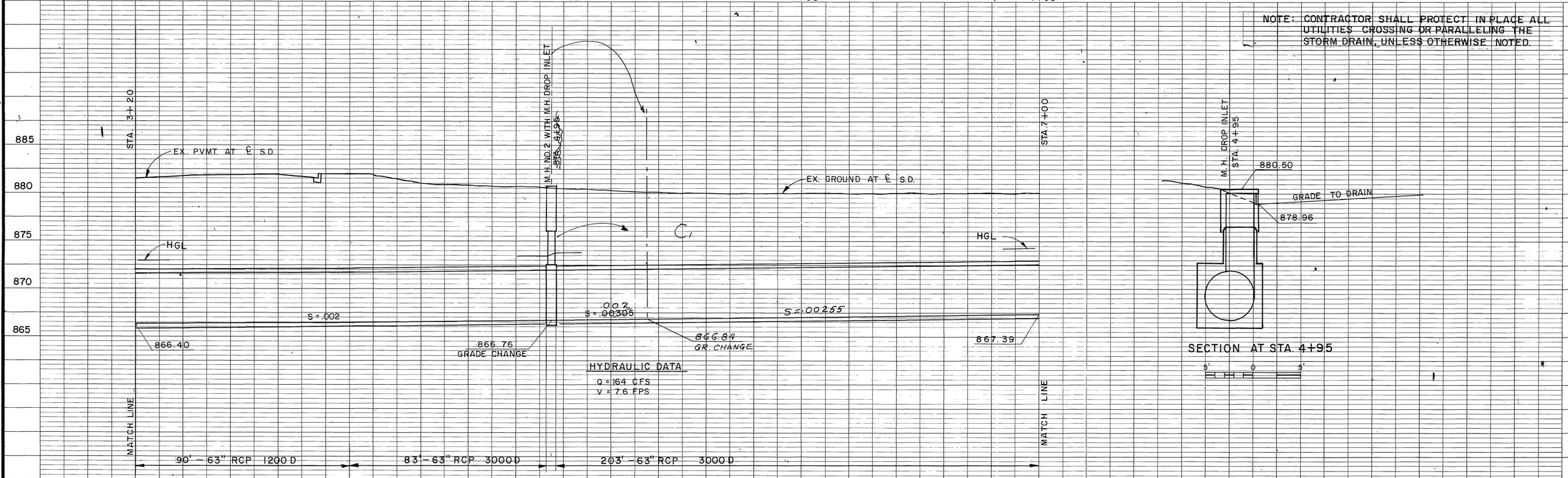
REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		UNIVERSITY WASH		PROJECT NO. 1-0-122	
		DESIGNED BY: J. L. H.		THORNTON STORM DRAIN		DRAWING NO. 1-364	
		DRAWN BY: S. L. M.		APPROVED BY: <i>[Signature]</i>		SHEET NO. 1 OF 62	
		DATE DRAWN: 6-78		CHIEF ENGINEER R.E. NO. 12400		1970 STORM DRAIN BOND ISSUE PROJECT NO. 2	
		CHECKED BY: N. L. S.		DATE: 8/13/78			

AS BUILT



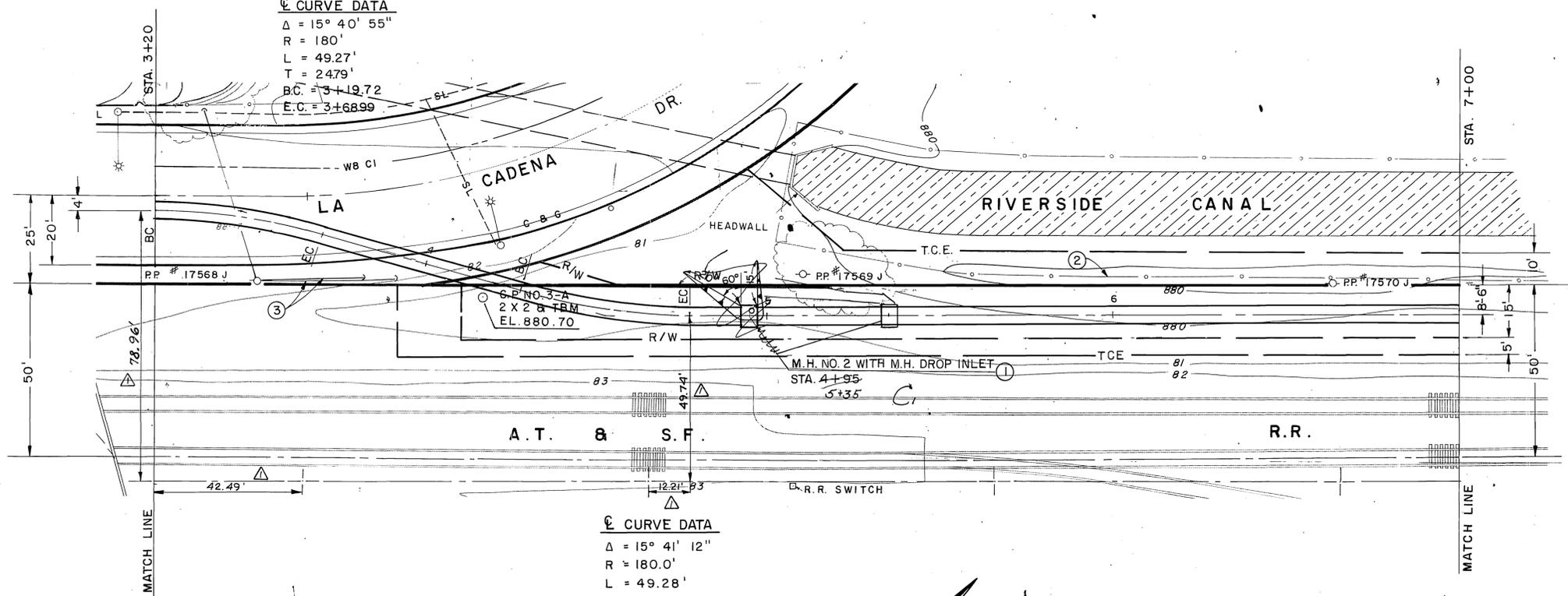
4+00 5+00 6+00 7+00

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.

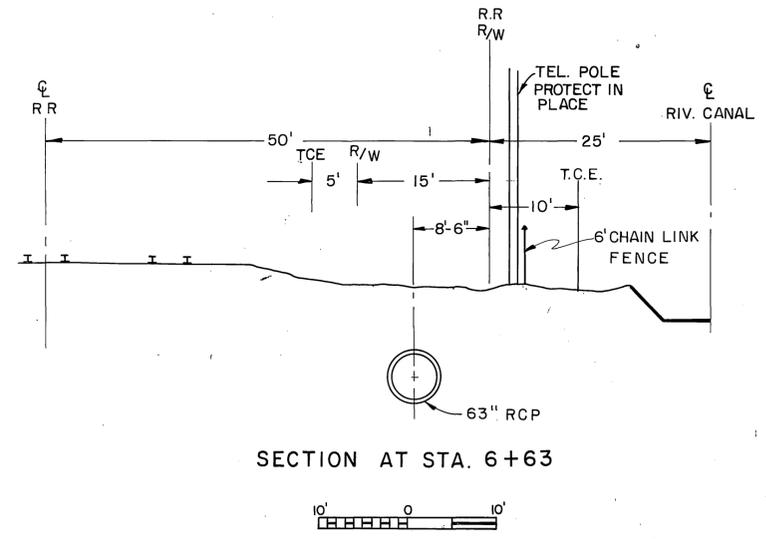


HYDRAULIC DATA  
 Q = 164 CFS  
 V = 7.6 FPS

⊙ CURVE DATA  
 Δ = 15° 40' 55"  
 R = 180'  
 L = 49.27'  
 T = 24.79'  
 B.C. = 3+19.72  
 E.C. = 3+68.99



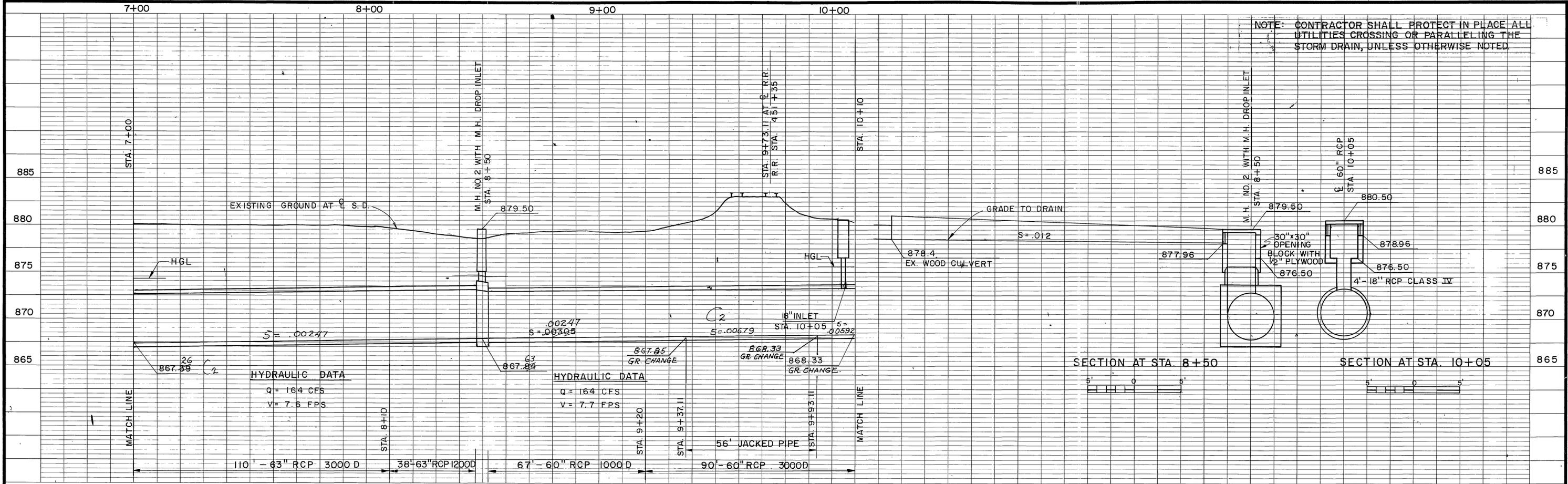
⊙ CURVE DATA  
 Δ = 15° 41' 12"  
 R = 180.0'  
 L = 49.28'  
 T = 24.80'  
 B.C. = 4+28.54  
 E.C. = 4+77.82



- NOTES
- ① M.H. NO. 2 WITH M.H. DROP INLET, OPENING ON N.W. SIDE. TOP EL. 880.50 W=3' V=4'. SEE PROFILE THIS SHEET.
  - ② REMOVE AND REPLACE CHAIN LINK FENCE IF NECESSARY FOR WORKING AREA.
  - ③ PROTECT ANCHORS IN PLACE.

PLAN  
 1" = 20'

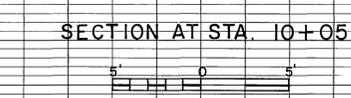
REVISIONS Δ Added time 10/22/77		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		UNIVERSITY WASH THORNTON STORM DRAIN STA. 3+20 TO STA. 7+00 1979 STORM DRAIN BOND ISSUE PROJECT NO.2		PROJECT NO. 1-0-122
DESIGNED BY: DZ, N.J., J.H. DRAWN BY: S.L.M. DATE DRAWN: 6-79 CHECKED BY: M.H.		APPROVED BY: [Signature] CHIEF ENGINEER R.E. NO. 12400 DATE: 8/13/77		DRAWING NO. 1-364		SHEET NO. 3 OF 62
REF. Moved M.H. to Sta. 5+35 1/25/80		APPR. DATE		AS BUILT		0-425



NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.

HYDRAULIC DATA  
 Q = 164 CFS  
 V = 7.6 FPS

HYDRAULIC DATA  
 Q = 164 CFS  
 V = 7.7 FPS

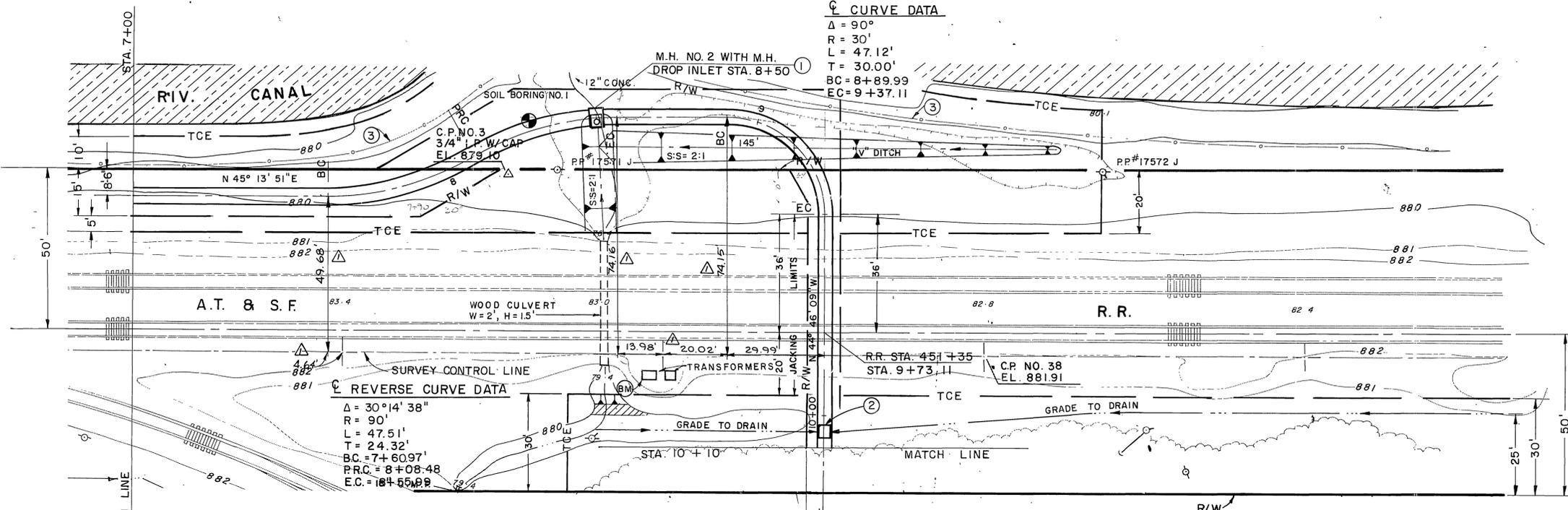


**C CURVE DATA**

Δ = 90°  
 R = 30'  
 L = 47.12'  
 T = 30.00'  
 BC = 8+89.99  
 EC = 9+37.11

**NOTES:**

- ① M.H. NO. 2 WITH M.H. DROP INLET, OPENING ON S.E. SIDE W=3', V=4'. FILL & GRADE LOW AREA TO DRAIN AS DIRECTED. SEE PROFILE THIS SHEET.
- ② CONC. DROP INLET, OPENINGS ON N.E. & S.W. SIDES. W=3', V=4'. 4'-18" RCP CL. IV. SEE CONNECTOR PIPE PROFILE THIS SHEET. GRADE TO DRAIN AS SHOWN AND FILL CROSS HATCHED AREA TO EL. 880.00 AS DIRECTED.
- ③ SEE NOTE 2 ON SHEET 3.



**REVERSE CURVE DATA**  
 Δ = 30°14'38"  
 R = 90'  
 L = 47.51'  
 T = 24.32'  
 BC = 7+60.97'  
 P.R.C. = 8+08.48  
 E.C. = 10+55.89

**PLAN**  
 1" = 20'

BENCH MARK: SET CUT BOX SELY  
 COR. CONC. SLAB OF TRANSFORMER BOX  
 B.M.-1 EL. 883.32

REVISIONS	
Δ Added ties	10/22/79
C2 El. & Grade Change As Shown	10/30
REF.	APPR. DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: DZ, N.J., J.H.	APPROVED BY:
DRAWN BY: S.L.M.	DATE: 8/13/79
DATE DRAWN: 6-79	CHEF ENGINEER R.E. NO. 12400
CHECKED BY: [Signature]	DATE: 8/13/79

**UNIVERSITY WASH**  
**THORNTON STORM DRAIN**  
 STA. 7+00 TO STA. 10+10  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

PROJECT NO.	1-0-122
DRAWING NO.	1-364
SHEET NO.	4 OF 62

AS BUILT

D-425

10+10

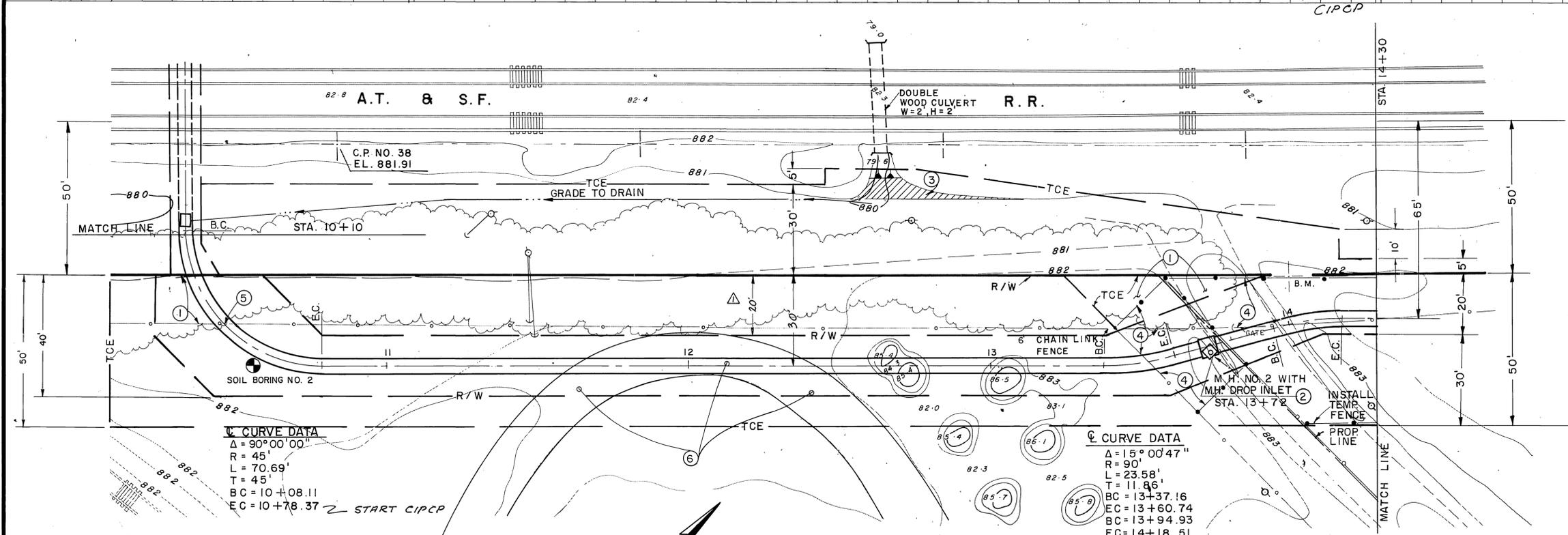
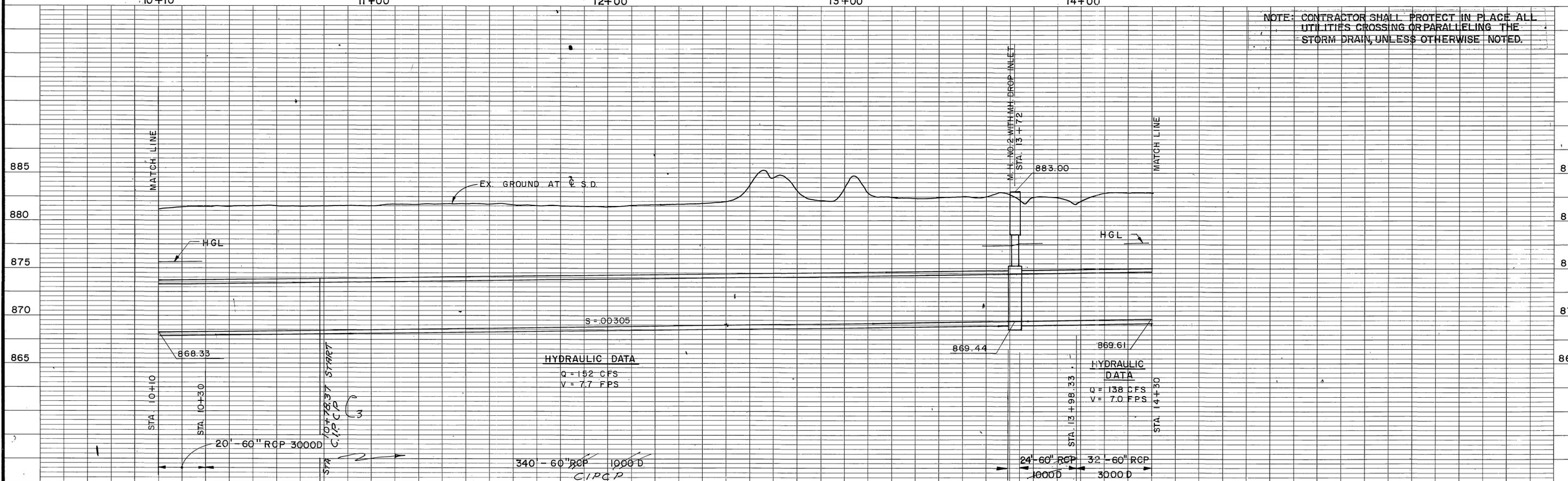
11+00

12+00

13+00

14+00

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.

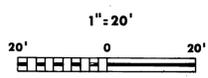


- NOTES:
- 1 REMOVE INTERFERING TREES.
  - 2 M.H. NO. 2 WITH M.H. DROP INLET, OPENING ON E. SIDE. W=3', V=4', CONST. AS SHOWN AND GRADE TO DRAIN AS DIRECTED.
  - 3 GRADE TO DRAIN AS SHOWN AND FILL CROSS HATCHED AREA TO EL. 881.00 AS DIRECTED.
  - 4 RELOCATE FENCE AS SHOWN. REMOVE GATE AND LEAVE ON SITE FOR SALVAGE BY OWNER.
  - 5 REMOVE & REINSTALL FENCE.
  - 6 PAVED TRUCK TURNAROUND SHALL BE KEPT CLEAR AS MUCH AS POSSIBLE. MATERIAL STORAGE OR EQUIPMENT PARKING WILL NOT BE ALLOWED. REPLACE DAMAGED PAVING IN KIND.

**CURVE DATA**  
 $\Delta = 90^{\circ}00'00''$   
 $R = 45'$   
 $L = 70.69'$   
 $T = 45'$   
 $BC = 10+08.11$   
 $EC = 10+78.37$  **START CIPCP**

**CURVE DATA**  
 $\Delta = 15^{\circ}00'47''$   
 $R = 90'$   
 $L = 23.58'$   
 $T = 11.86'$   
 $BC = 13+37.16$   
 $EC = 13+60.74$   
 $BC = 13+94.93$   
 $EC = 14+18.51$

**PLAN**

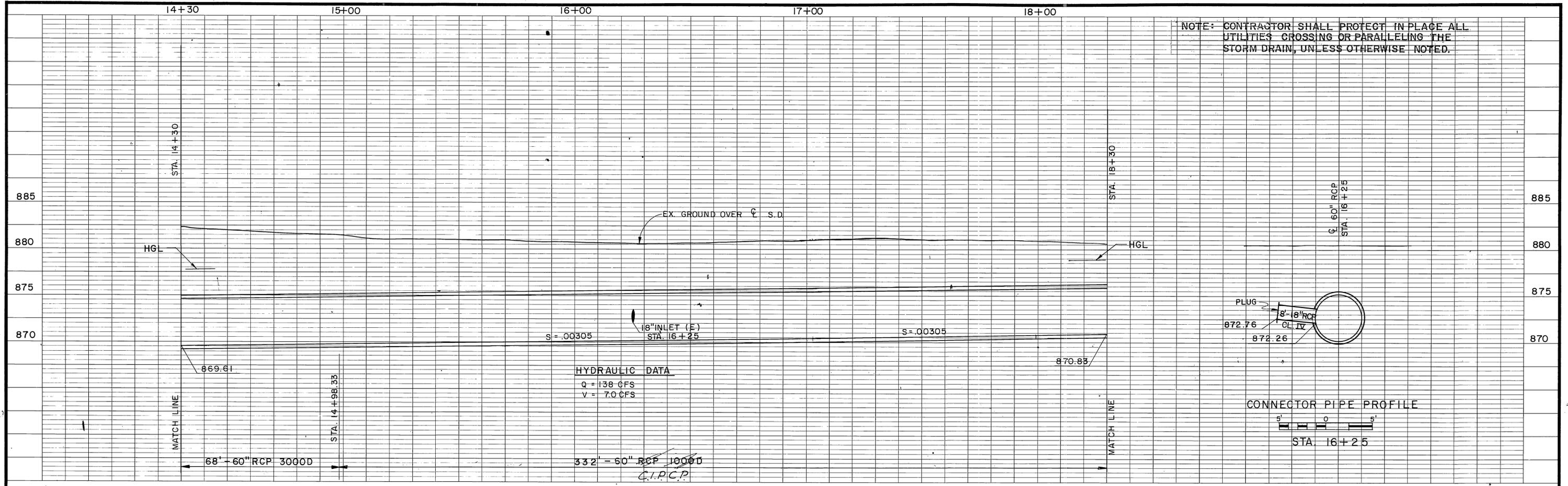


BENCH MARK USC & GS BRASS DISK V-1142 EL. 881.894 SCALE: 1"=20'	REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		UNIVERSITY WASH THORNTON STORM DRAIN STA. 10+10 TO STA. 14+30 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2	PROJECT NO. 1-0-122 DRAWING NO. 1-364 SHEET NO. 5 OF 62
	DATE:	DESCRIPTION	APPROVED BY:	DATE:		
	Added dimensions	DESIGNED BY: D.Z., N.J., J.H.	APPROVED BY: <i>[Signature]</i> CHIEF ENGINEER R.E. NO. 12400			
	CIPCP Instead of RCP As Shown	DRAWN BY: S.L.M.	DATE DRAWN: 4-79	CHECKED BY: <i>[Signature]</i>		

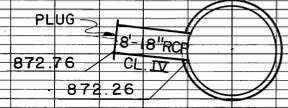
AS BUILT

D-425

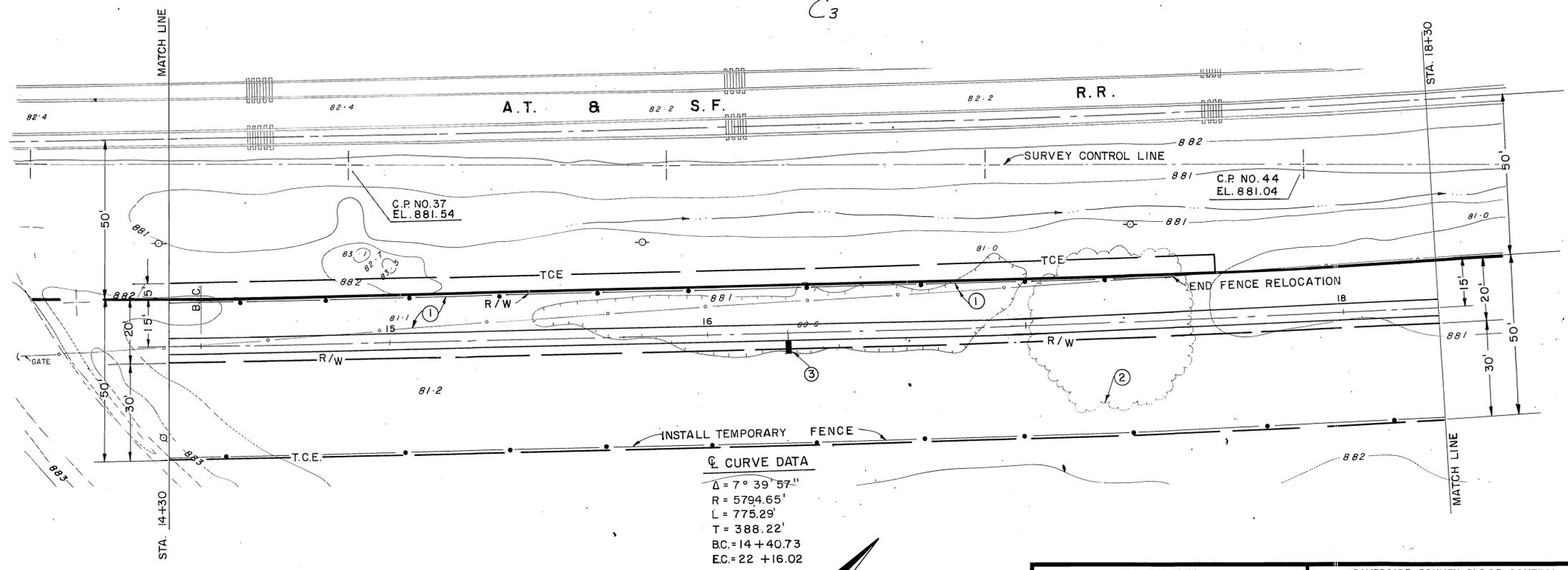
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



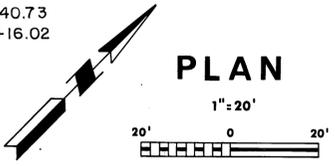
HYDRAULIC DATA  
 Q = 138 CFS  
 V = 7.0 CFS



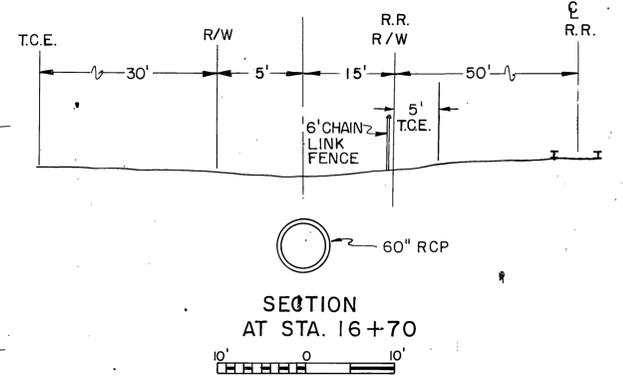
CONNECTOR PIPE PROFILE



CL CURVE DATA  
 $\Delta = 7^\circ 39' 57''$   
 R = 5794.65'  
 L = 775.29'  
 T = 388.22'  
 BC = 14 + 40.73  
 EC = 22 + 16.02



PLAN



SECTION AT STA. 16+70

- NOTE:
- ① RELOCATE FENCE TO 6" FROM R/W LINE AS SHOWN
  - ② REMOVE TREE.
  - ③ INSTALL 8'-18" RCP. CL. IV. SEE PROFILE THIS SHEET. BLOCK END CONC. PLUG.

BENCH MARK: SET R.R. SPIKE IN ELY. SIDE OF TELEGRAPH POLE  
 JSM S1 ± WLY @ STA. 14+30  
 BM-2' EL. 883.26

REF.	DESCRIPTION	APPR. DATE
C7	Change - C.I.P.C.P.	10/60

DESIGNED BY: JH		APPROVED BY:	
DRAWN BY: SLM		[Signature]	
DATE DRAWN: 6-79		CHIEF ENGINEER R.E. NO. 12400	
CHECKED BY: [Signature]		DATE: 8/13/79	

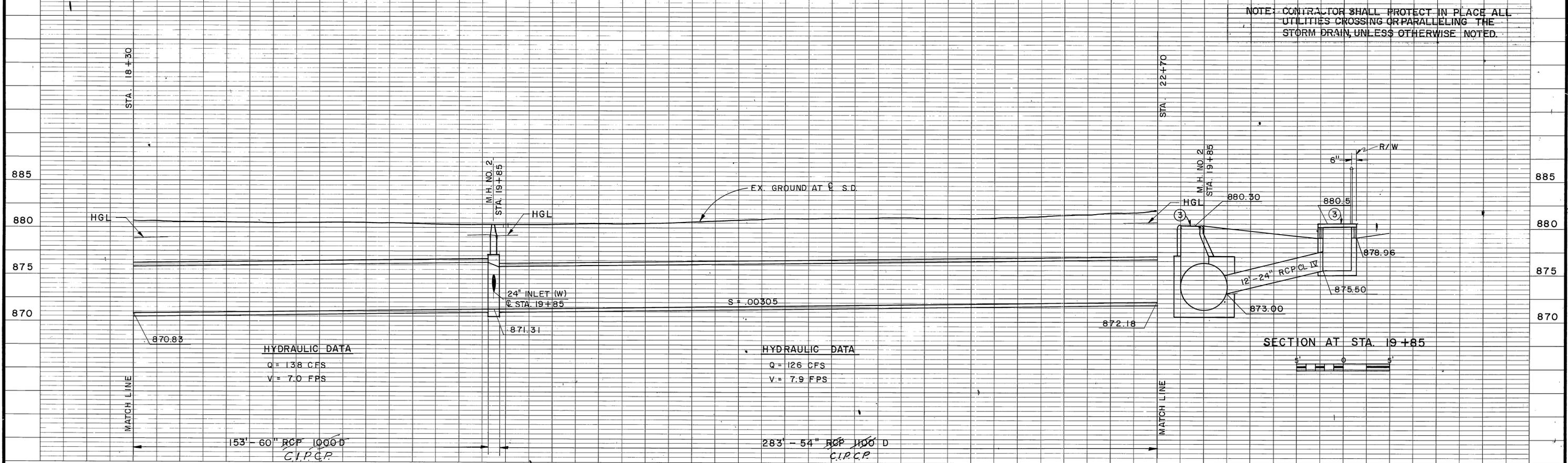
UNIVERSITY WASH  
 THORNTON STORM DRAIN  
 STA. 14+30 TO STA. 18+30  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

PROJECT NO.	1-0-122
DRAWING NO.	1-364
SHEET NO.	6 OF 62

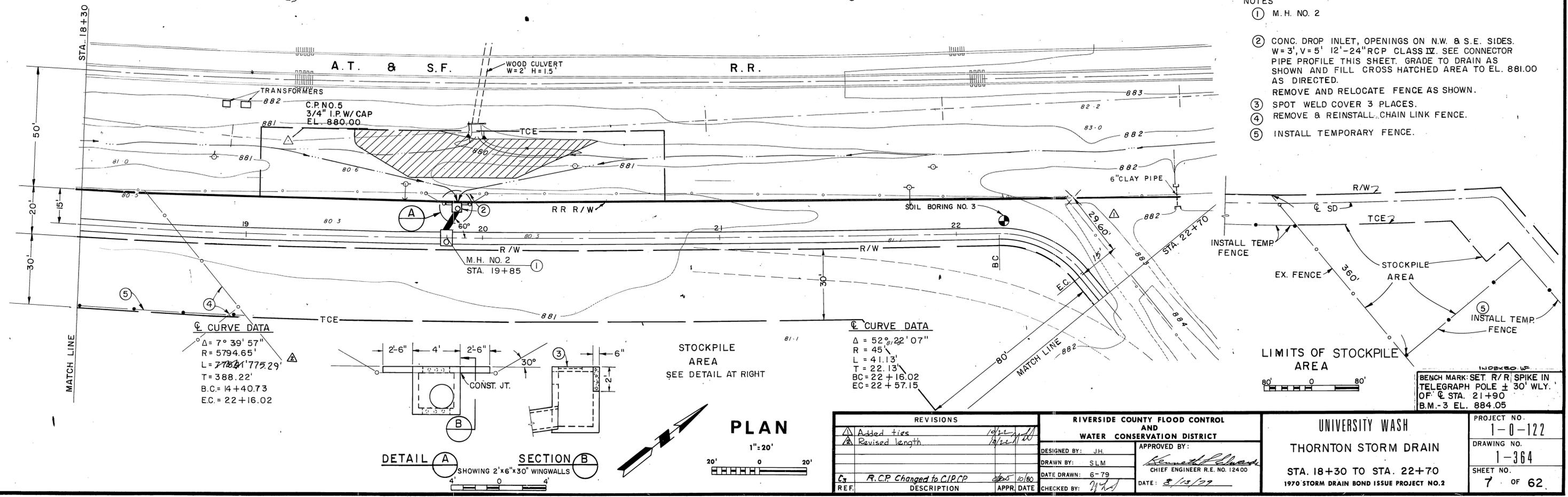
AS BUILT

18+30 19+00 20+00 21+00 22+00 22+70

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.

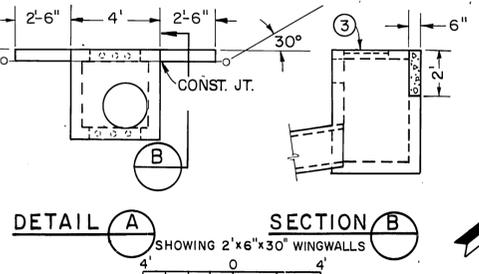


- NOTES
- ① M.H. NO. 2
  - ② CONC. DROP INLET, OPENINGS ON N.W. & S.E. SIDES. W=3', V=5' 12'-24" RCP CLASS IV. SEE CONNECTOR PIPE PROFILE THIS SHEET. GRADE TO DRAIN AS SHOWN AND FILL CROSS HATCHED AREA TO EL. 881.00 AS DIRECTED.  
REMOVE AND RELOCATE FENCE AS SHOWN.
  - ③ SPOT WELD COVER 3 PLACES.
  - ④ REMOVE & REINSTALL CHAIN LINK FENCE.
  - ⑤ INSTALL TEMPORARY FENCE.

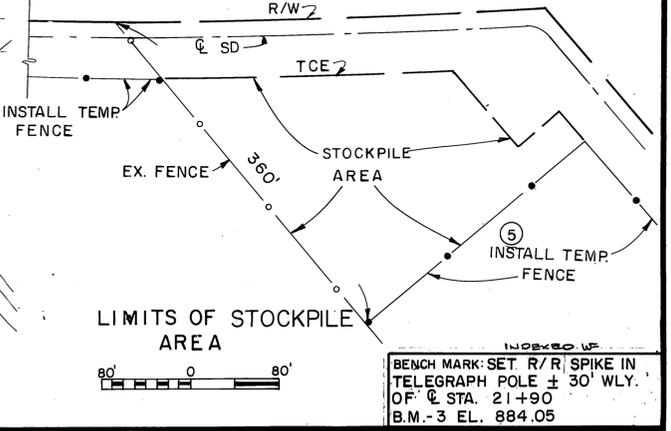
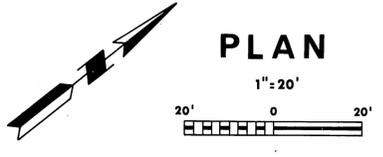


**☉ CURVE DATA**  
 $\Delta = 7^\circ 39' 57''$   
 $R = 5794.65'$   
 $L = 718.41'$   
 $T = 388.22'$   
 $B.C. = 14+40.73$   
 $E.C. = 22+16.02$

**☉ CURVE DATA**  
 $\Delta = 52^\circ 22' 07''$   
 $R = 45'$   
 $L = 41.13'$   
 $T = 22.13'$   
 $B.C. = 22+16.02$   
 $E.C. = 22+57.15$



STOCKPILE AREA  
SEE DETAIL AT RIGHT



BENCH MARK: SET R/R SPIKE IN TELEGRAPH POLE ± 30' WLY. OF C STA. 21+90 B.M.-3 EL. 884.05

REVISIONS	
△ Added ties	10/22/77
▲ Revised length	10/22/77
C <sub>2</sub> R.C.P. Changed to C.I.P.C.P.	6/5/80

**RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT**  
 DESIGNED BY: J.H.  
 DRAWN BY: S.L.M.  
 DATE DRAWN: 6-79  
 CHECKED BY: J.H.S.  
 APPROVED BY: *[Signature]*  
 CHIEF ENGINEER R.E. NO. 12400  
 DATE: 8/15/77

**UNIVERSITY WASH**  
**THORNTON STORM DRAIN**  
 STA. 18+30 TO STA. 22+70  
 1970 STORM DRAIN BOND ISSUE PROJECT NO.2

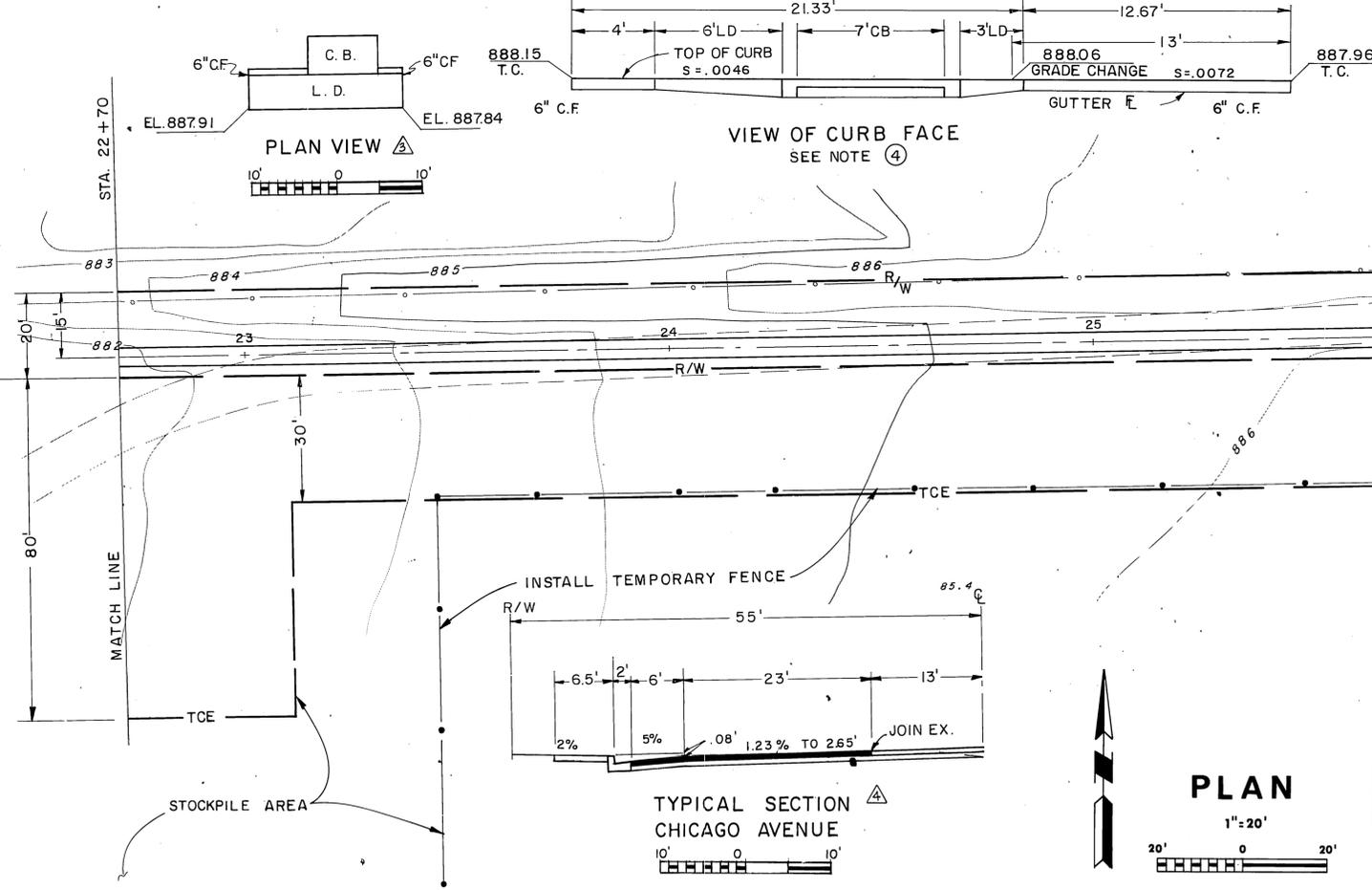
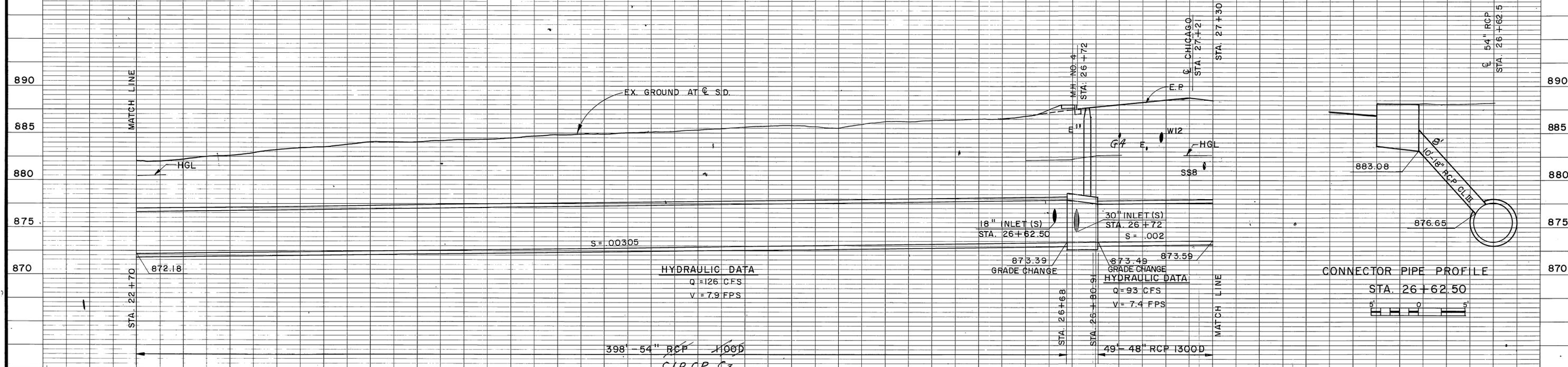
PROJECT NO. 1-0-122  
 DRAWING NO. 1-364  
 SHEET NO. 7 OF 62

AS BUILT

D-425

22+70 23+00 24+00 25+00 26+00 27+00

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.

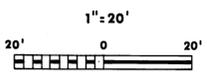


**☐ CURVE DATA**  
 $\Delta = 20^\circ 00' 00''$   
 $R = 45'$   
 $T = 7.93'$   
 $L = 15.71'$   
 $BC = 26 + 52.29$   
 $EC = 26 + 68.00$

**☐ CURVE DATA**  
 $\Delta = 60^\circ 00' 00''$   
 $R = 45'$   
 $L = 47.12'$   
 $T = 25.98'$   
 $BC = 0 + 61.54$   
 $EC = 1 + 08.66$

- NOTES:
- M.H. NO. 4 STA. 26+72  
 $A = 65^\circ$  B = 30" C = 6'-6"  
 $D_1 = 54"$   $D_2 = 48"$
  - C.B. NO. 1, W=14', V=4'  
 10'-18" RCP CLASS III  
 SEE PROFILE SHEET 34.
  - C.B. NO. 1; W=7', V=5'  
 10'-18" RCP CLASS III  
 SEE PROFILE & DETAIL THIS SHEET.
  - CONST. 17' CURB & GUTTER, TYPE I (6" C.F.) FOR DETAILS SEE C/R STD. DWG. NO. 200.  
 CONST. CURB SIDEWALK. FOR DETAILS SEE C/R STD. DWG. NO. 325.
  - PALM TREE TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.
  - CONST. 4 1/2" A.C. OVER 4 1/2" A.B. CL. 3.
  - J.S. NO. 2 STA. 1+06'  
 $A = 60^\circ$  B = 18" C = 3'-6" D = 30"  
 $E = 2'-6"$  F = 1.1' G = 1.4' L = 3.1'  
 EL. "R" = 882.50 EL. "S" = 882.40
  - REMOVE & REINSTALL 50'± CHAIN LINK FENCE.

**PLAN**



REVISIONS	
△	Changed X Pt. @ Sta. 26+68
△	Changed Curve Data
△	Added Plan View of C.B. (5)
△	Added Typical Section Chicago Ave.
Cy	Changes As Shown
Cg	RCP Changed to CIPCR
REF.	DESCRIPTION

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: J.H.	APPROVED BY: Kenneth J. Edwards
DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO. 12400
DATE DRAWN: 6-79	DATE: 8/13/77
CHECKED BY: [Signature]	

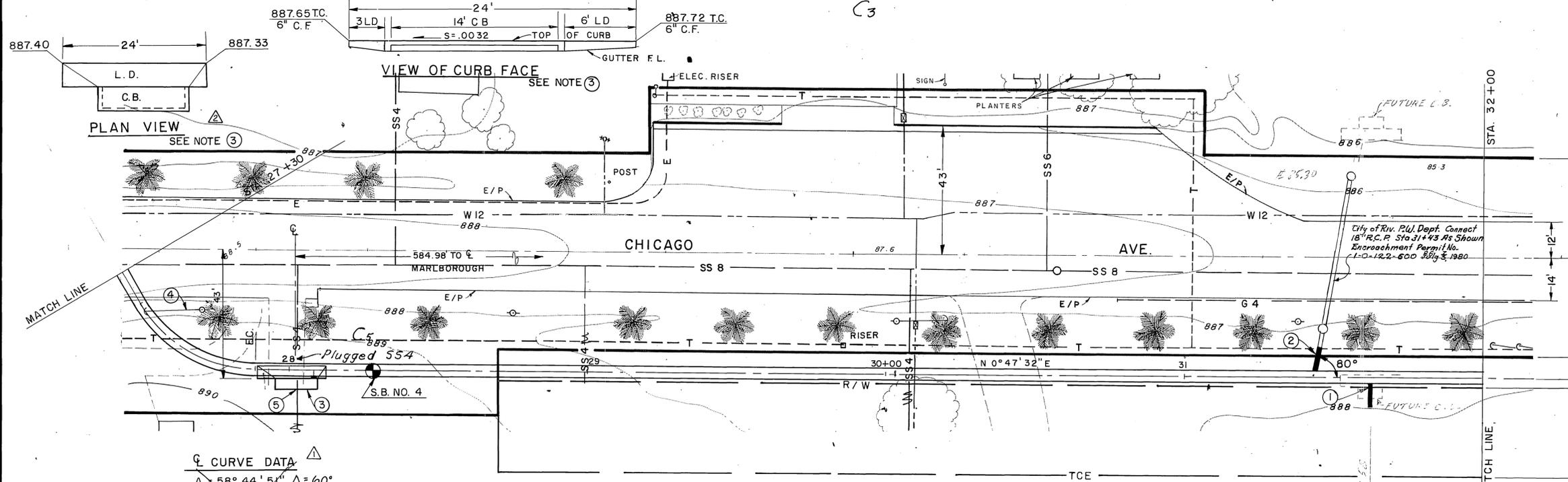
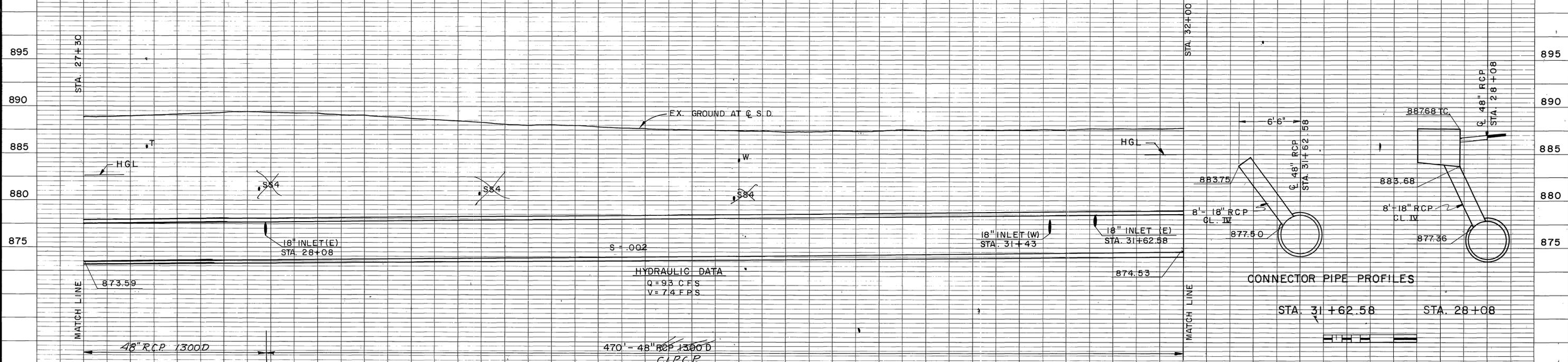
**UNIVERSITY WASH**  
**THORNTON STORM DRAIN**  
 STA. 22+70 TO STA. 27+30  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

PROJECT NO.	1-0-122
DRAWING NO.	1-364
SHEET NO.	8 OF 62

AS BUILT

27+30 28+00 29+00 30+00 31+00 32+00

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.



- NOTES:
- ① 8'-18" RCP CL. IV. "PLUG." SEE PROFILE THIS SHEET.
  - ② 8'-18" RCP CL. IV. SEE PROFILE SH. 34.
  - ③ CB NO. 1; W=14', V=4'  
8'-18" RCP CL. IV  
SEE PROFILE & DETAIL THIS SHEET.
  - ④ POLE ANCHOR TO BE RELOCATED BY OTHERS.
  - ⑤ REMODEL SS4 IF NECESSARY.

Q CURVE DATA

$\Delta = 58^\circ 44' 51''$	$\Delta = 60^\circ$
$R = 45'$	$R = 45'$
$L = 46.4'$	$L = 47.12'$
$T = 25.33'$	$T = 25.98'$
$BC = 27+42.46$	$BC = 27+41.81$
$EC = 27+88.60$	$EC = 27+88.93$

PLAN  
1" = 20'

REVISIONS	DESCRIPTION	APPR. DATE
①	Changed Curve Data	
②	Added Plan View C.B. ③	
C5	Plugged SS4	10/80
C3	R.C.P. Changed to C.I.R.C.P.	10/80

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: J.H.	APPROVED BY:
DRAWN BY: S.L.M.	<i>Kenneth J. ...</i> CHIEF ENGINEER R.E. NO. 12400
DATE DRAWN: 6-79	DATE: 8/13/79
CHECKED BY: <i>...</i>	

UNIVERSITY WASH  
THORNTON STORM DRAIN

STA. 27+30 TO STA. 32+00  
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

PROJECT NO. 1-0-122
DRAWING NO. 1-364
SHEET NO. 9 OF 62

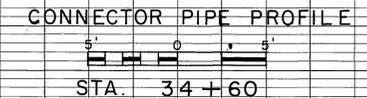
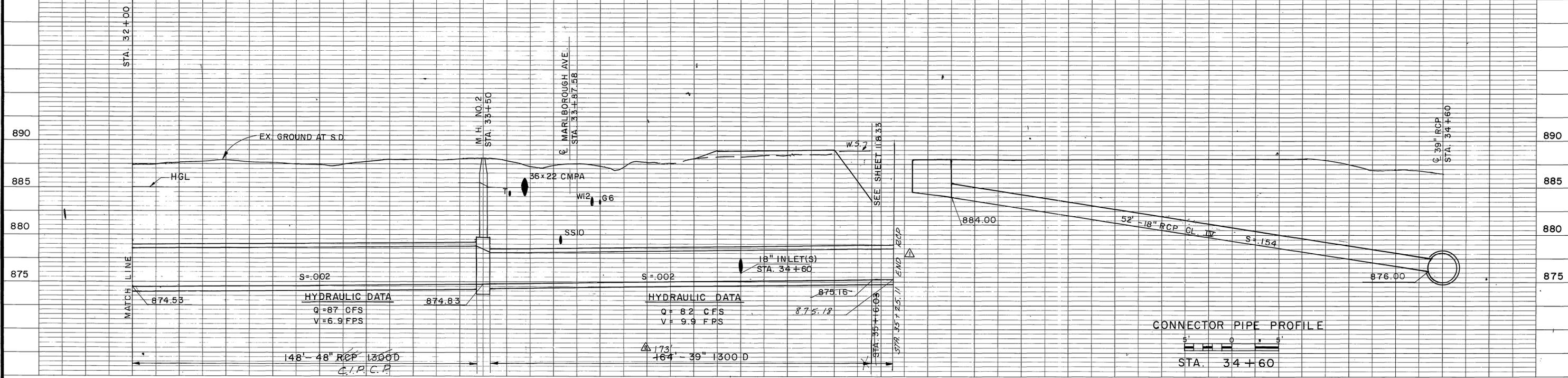
BENCH MARK: SET R/R SPIKE IN PP # 5029 J ± 20' WLY. OF Q STA. 30+05  
B.M.-5 EL. 888.59

AS BUILT

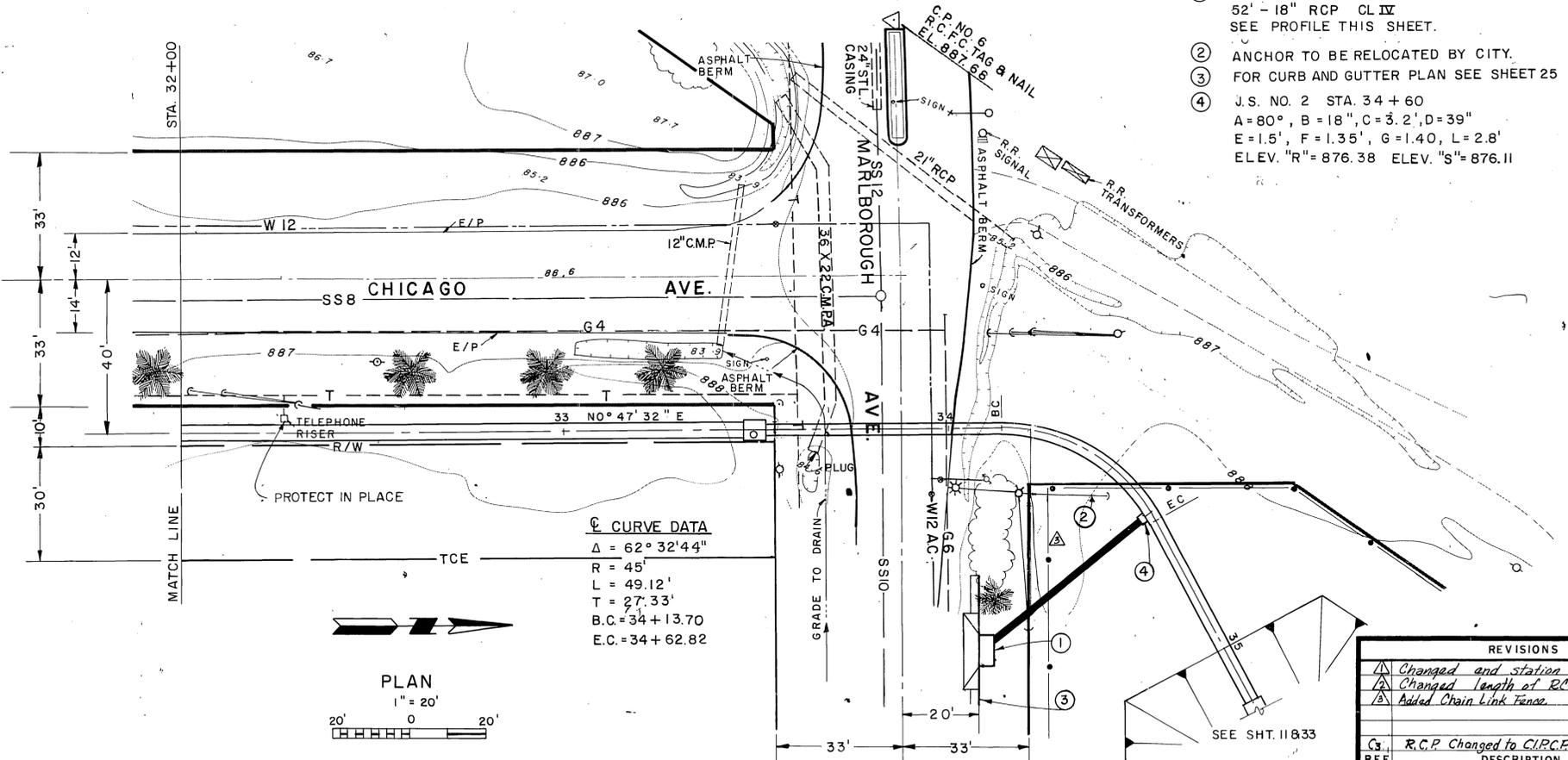
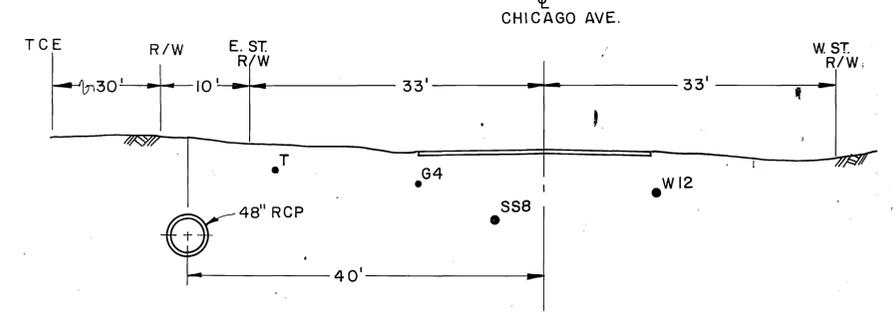
D-425

32+00 33+00 34+00 35+00

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



- NOTES:
- ① C.B. NO. 1, W=7', V=4'  
52'-18" RCP CL IV  
SEE PROFILE THIS SHEET.
  - ② ANCHOR TO BE RELOCATED BY CITY.
  - ③ FOR CURB AND GUTTER PLAN SEE SHEET 25
  - ④ J.S. NO. 2 STA. 34+60  
A=80°, B=18", C=3.2', D=39"  
E=1.5', F=1.35', G=1.40, L=2.8'  
ELEV. "R"=876.38 ELEV. "S"=876.11



**℄ CURVE DATA**  
 $\Delta = 62^\circ 32' 44''$   
 $R = 45'$   
 $L = 49.12'$   
 $T = 27.33'$   
 $B.C. = 34+13.70$   
 $E.C. = 34+62.82$

REVISIONS	
①	Changed and station
②	Changed length of RCP
③	Added Chain Link Fence

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: J.H.	APPROVED BY: <i>Kenneth J. Edwards</i>
DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO. 12,400
DATE DRAWN: 6-79	DATE: 8/13/79
CHECKED BY: <i>WJ</i>	

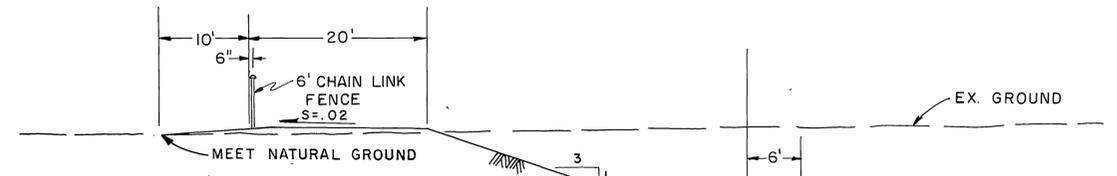
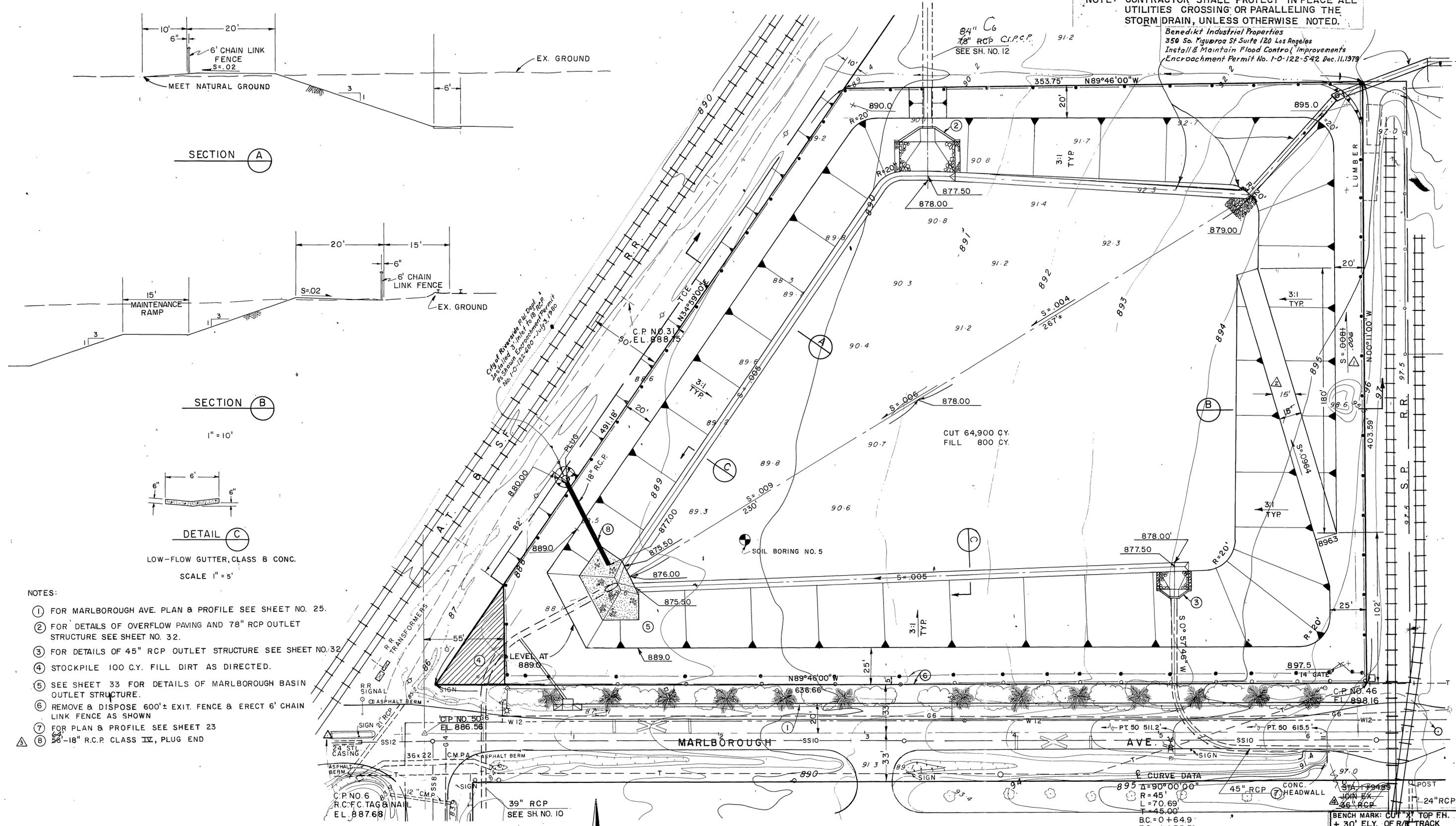
UNIVERSITY WASH  
 THORNTON STORM DRAIN  
 STA. 32+00 TO STA. 35+16.03  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

PROJECT NO. 1-0-122  
 DRAWING NO. 1-364  
 SHEET NO. 10 OF 62

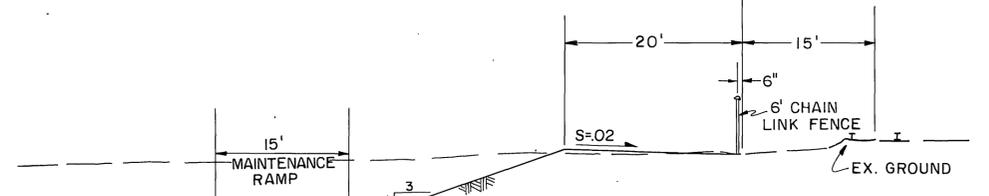
AS BUILT

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.

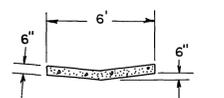
Benedikt Industrial Properties  
350 So. Figueroa St Suite 120 Los Angeles  
Install & Maintain Flood Control Improvements  
Encroachment Permit No. 1-0-122-542 Dec. 11, 1979



SECTION A



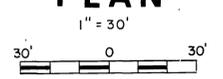
SECTION B



DETAIL C

- NOTES:
- FOR MARLBOROUGH AVE. PLAN & PROFILE SEE SHEET NO. 25.
  - FOR DETAILS OF OVERFLOW PAVING AND 78" RCP OUTLET STRUCTURE SEE SHEET NO. 32.
  - FOR DETAILS OF 45" RCP OUTLET STRUCTURE SEE SHEET NO. 32.
  - STOCKPILE 100 C.Y. FILL DIRT AS DIRECTED.
  - SEE SHEET 33 FOR DETAILS OF MARLBOROUGH BASIN OUTLET STRUCTURE.
  - REMOVE & DISPOSE 600'± EXIT FENCE & ERECT 6' CHAIN LINK FENCE AS SHOWN.
  - FOR PLAN & PROFILE SEE SHEET 23.
  - 18" R.C.P. CLASS IV, PLUG END.

PLAN



REVISIONS	
1	Changed slope on maintenance road
2	Changed dimension of maintenance ramp
3	Changed length of 18" RCP
4	Deleted data
Ca	R.C.P. Changed 78" to 84" C.R.C.P. 1/12/79
REF.	DESCRIPTION APPR. DATE

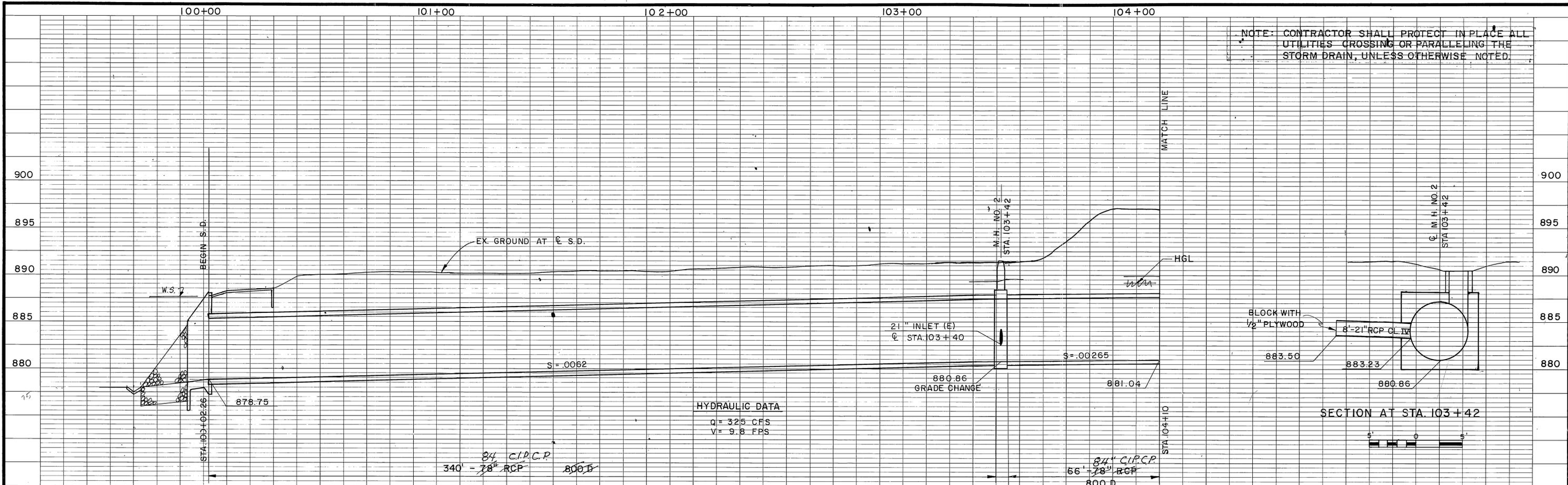
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: N.W.J.	APPROVED BY: <i>John E. ...</i>
DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO.
DATE DRAWN: 12-78	DATE: 8/13/79
CHECKED BY: <i>[Signature]</i>	

UNIVERSITY WASH	
THORNTON STORM DRAIN MARLBOROUGH BASIN	
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2	

PROJECT NO.	1-0-122
DRAWING NO.	1-364
SHEET NO.	11 OF 62

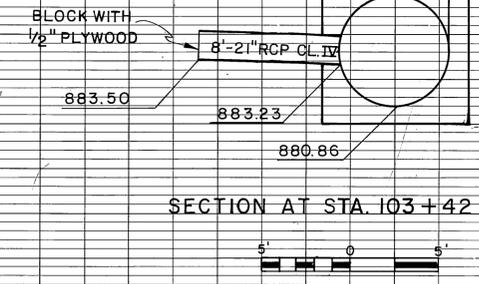
AS BUILT

D-425

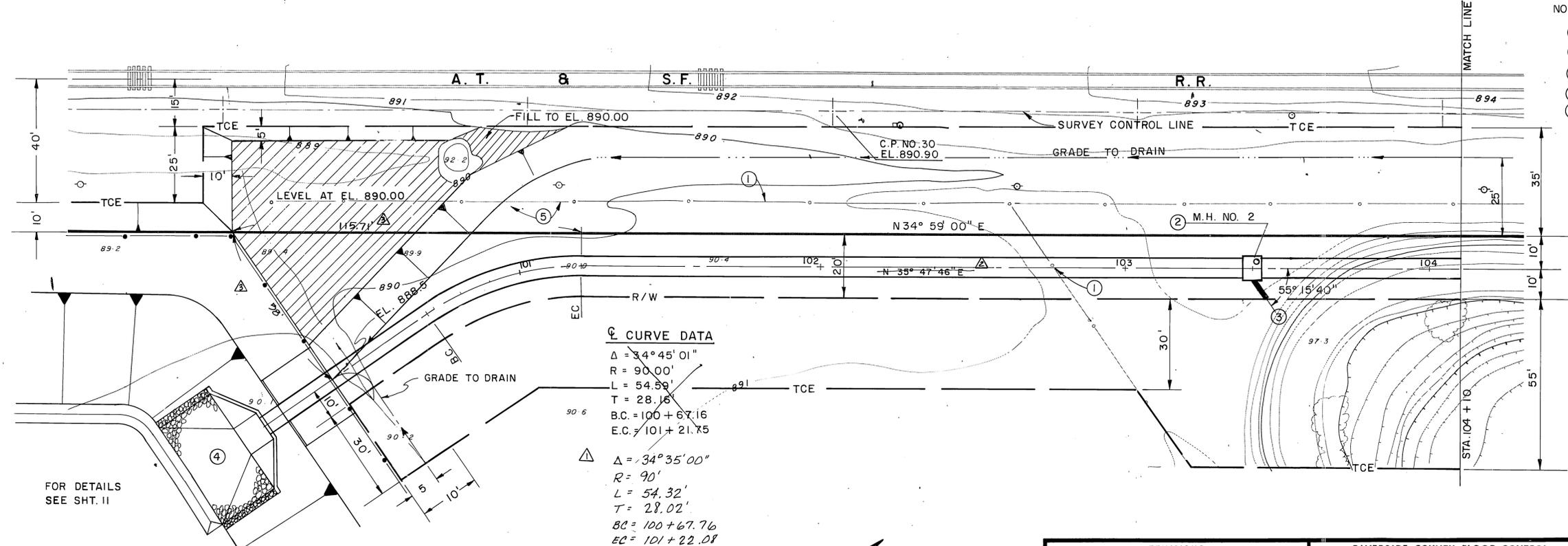


NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.

HYDRAULIC DATA  
 Q = 325 CFS  
 V = 9.8 FPS

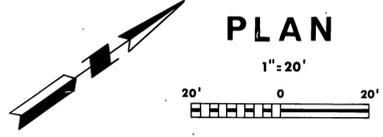


- NOTES:
- ① REMOVE AND REINSTALL INTERFERING PORTIONS OF FENCE.
  - ② M. H. NO. 2. USE GRATED COVER.
  - ③ 8'-21" RCP CL. IV. SEE PROFILE THIS SHEET.
  - ④ SEE DETAILS OF 78" RCP OUTLET STRUCTURE ON SH. 32.
  - ⑤ REMOVE 90'± OF FENCE.



CL CURVE DATA  
 $\Delta = 34^\circ 45' 01''$   
 $R = 90.00'$   
 $L = 54.59'$   
 $T = 28.16'$   
 $B.C. = 100 + 67.16$   
 $E.C. = 101 + 21.75$

$\Delta = 34^\circ 35' 00''$   
 $R = 90'$   
 $L = 54.32'$   
 $T = 28.02'$   
 $B.C. = 100 + 67.76$   
 $E.C. = 101 + 22.01$



REVISIONS	
△	Changed Curve Data
△	Deleted Bearing
△	Added Ties
C7	Changed AS Shown in Profile

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: J.H.	APPROVED BY: <i>[Signature]</i>
DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO. 12400
DATE DRAWN: 6-79	DATE: 8/13/79
CHECKED BY: N.L.S.	

UNIVERSITY WASH  
 THORNTON STORM DRAIN  
 STA. 100+00 TO STA. 104+10  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

PROJECT NO. 1-0-122
DRAWING NO. 1-364
SHEET NO. 12 OF 62

AS BUILT

D-425

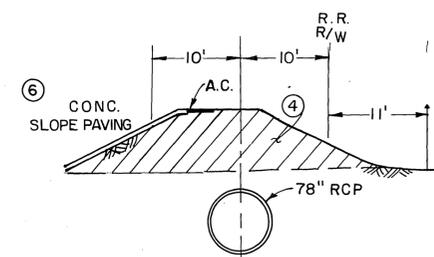
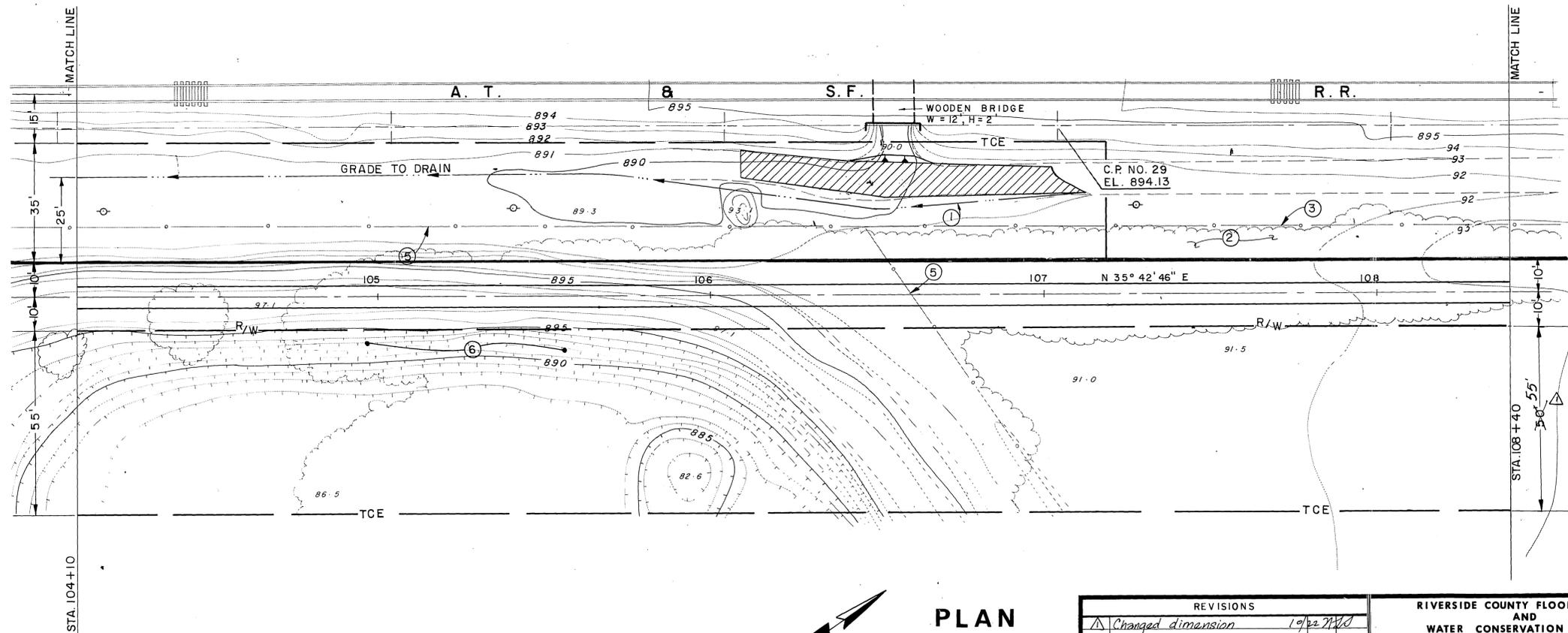
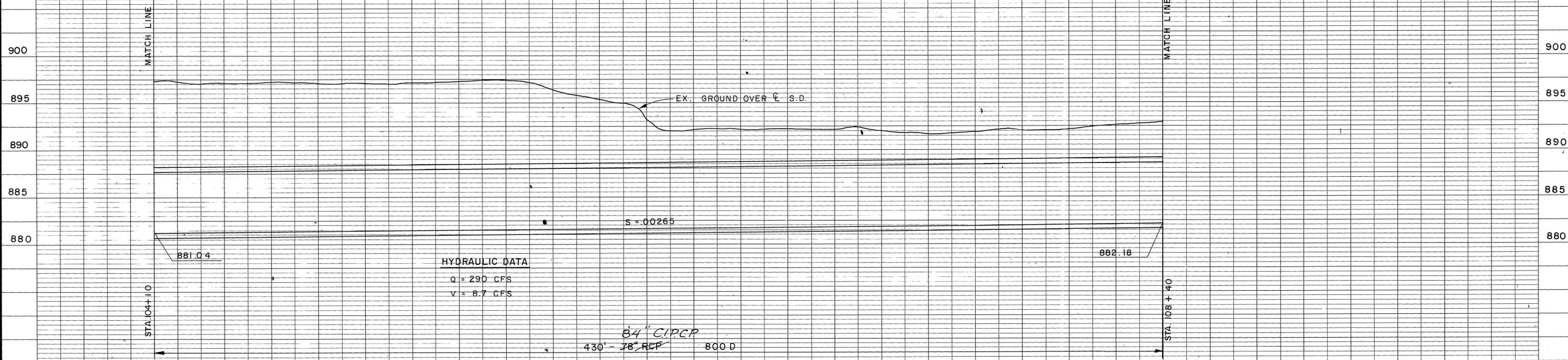
105+00

106+00

107+00

108+00

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



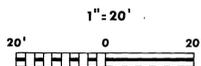
SECTION AT STA. 105+00

NOTES:

- ① GRADE TO DRAIN AS SHOWN AND FILL CROSS HATCHED AREA TO EL. 891.00 AS DIRECTED.
- ② REMOVE TREES AS NECESSARY.
- ③ PROTECT EX. FENCE IN PLACE.
- ④ REMOVE AS NECESSARY. DO NOT REPLACE.
- ⑤ REMOVE INTERFERING PORTIONS OF EX. FENCE & REPLACE.
- ⑥ EXISTING CONC. SLOPE PAVING

BENCH MARK: SET R/R SPIKE IN ELY. SIDE TELEGRAPH POLE ± 40' WLY. OF C. STA. 107+10 B.M. 7 EL. 893.07

PLAN



REVISIONS	
Δ	Changed dimension 1/9/79 MLD
C3	78" R.C.P. Changed to 84" CIPCP 1/25/79
REF.	

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: J.H.	APPROVED BY: Kenneth J. Edwards
DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO. 12400
DATE DRAWN: 6-79	DATE: 8/13/79
CHECKED BY: N.S.	

UNIVERSITY WASH  
THORNTON STORM DRAIN

STA. 104+10 TO STA. 108+40  
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

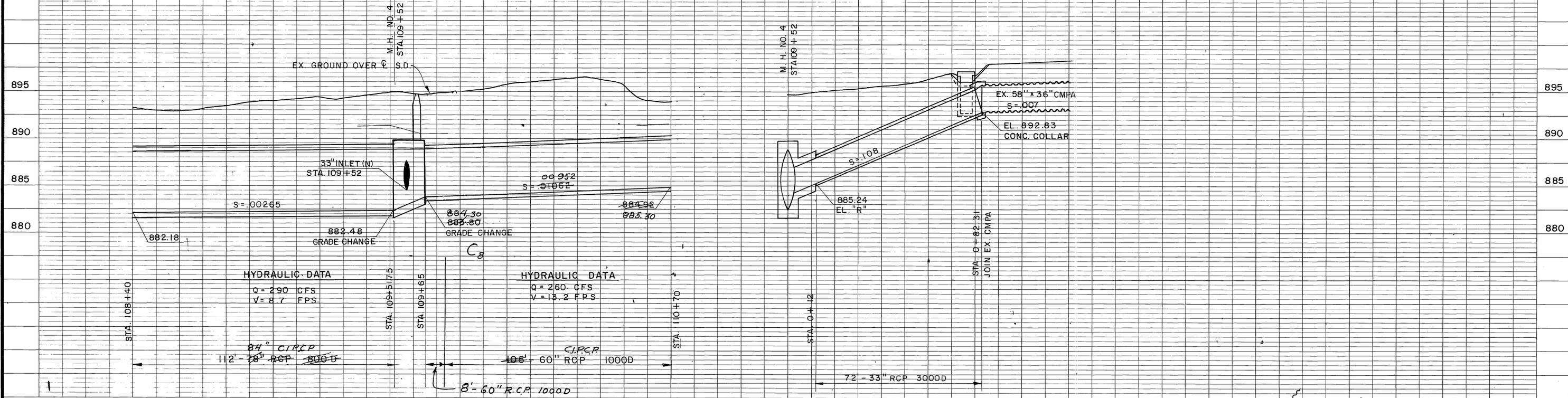
PROJECT NO.	1-0-122
DRAWING NO.	1-364
SHEET NO.	13 OF 62

AS BUILT

D-425

109+00 110+00

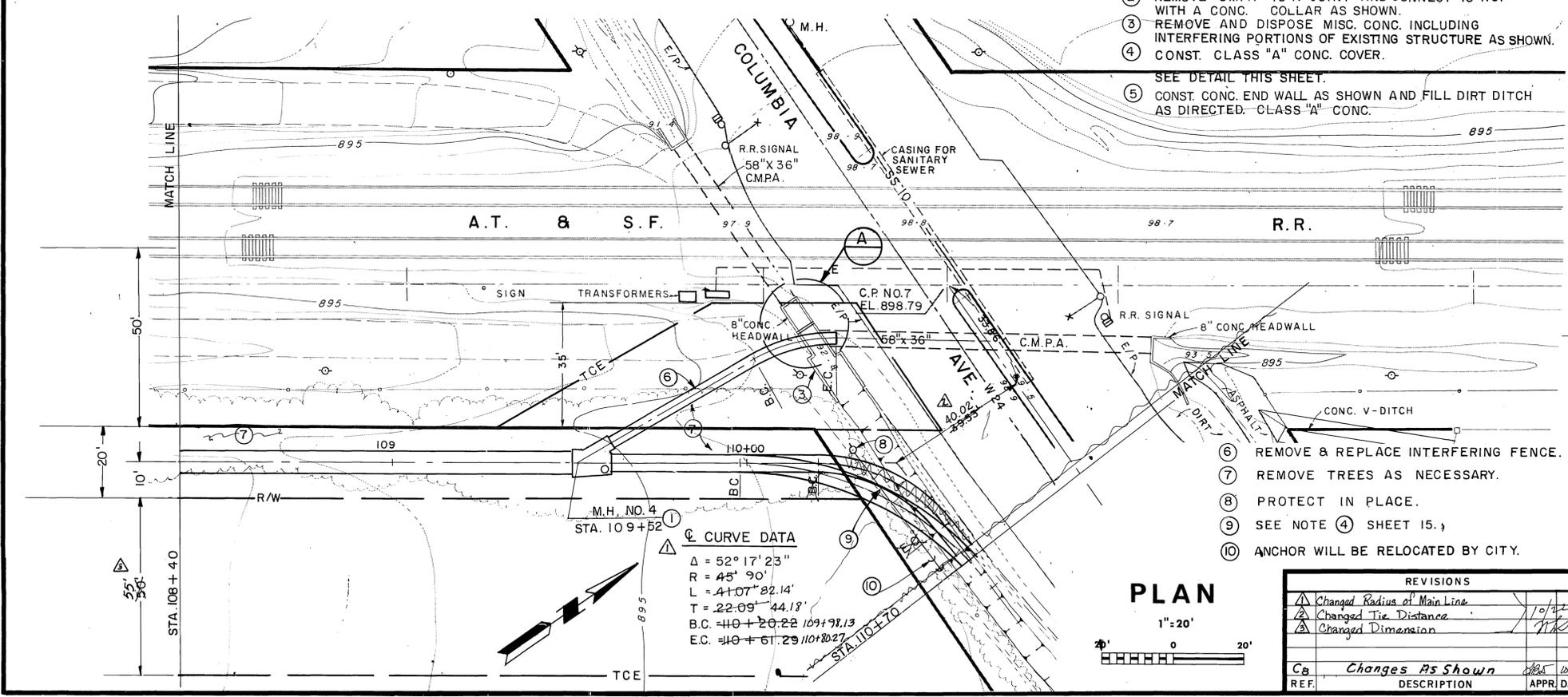
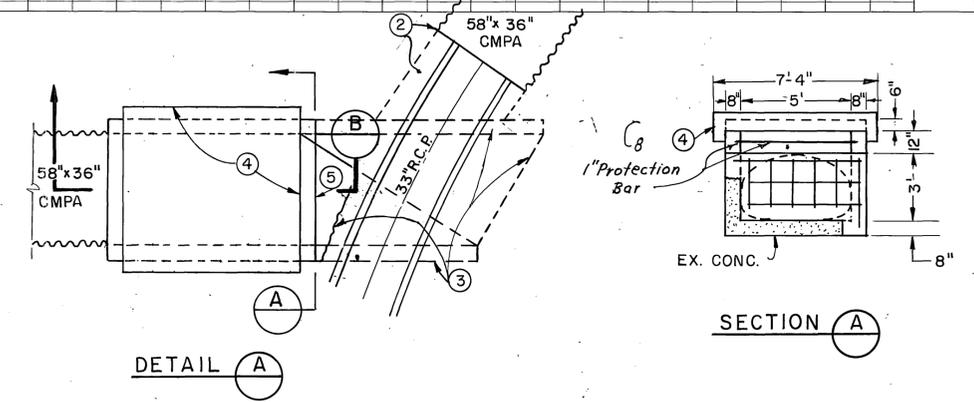
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



HYDRAULIC DATA  
Q = 2.90 CFS  
V = 8.7 FPS

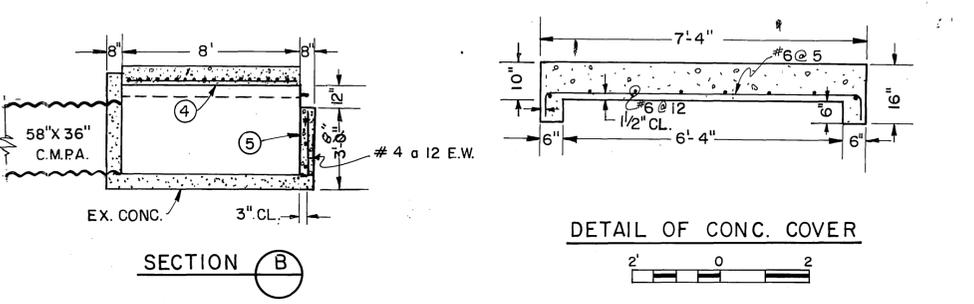
HYDRAULIC DATA  
Q = 2.60 CFS  
V = 13.2 FPS

- NOTES:
- M.H. NO. 4 STA. 109+52  
A = 30" B = 33" C = 12" D<sub>1</sub> = 78" D<sub>2</sub> = 60"  
EL. "R" = 885.24 EL. "S" = 884.50
  - REMOVE CMPA TO A JOINT AND CONNECT TO RCP WITH A CONC. COLLAR AS SHOWN.
  - REMOVE AND DISPOSE MISC. CONC. INCLUDING INTERFERING PORTIONS OF EXISTING STRUCTURE AS SHOWN.
  - CONST. CLASS "A" CONC. COVER.
- SEE DETAIL THIS SHEET.
- CONST. CONC. END WALL AS SHOWN AND FILL DIRT DITCH AS DIRECTED. CLASS "A" CONC.



① CURVE DATA  
Δ = 52° 17' 23"  
R = 45' 90"  
L = 41.07' 82.14'  
T = 22.09' 44.18'  
B.C. = 40+20.22 109+98.13  
E.C. = 40+61.29 110+80.27

PLAN  
1" = 20'



- REMOVE & REPLACE INTERFERING FENCE.
- REMOVE TREES AS NECESSARY.
- PROTECT IN PLACE.
- SEE NOTE ④ SHEET 15.
- ANCHOR WILL BE RELOCATED BY CITY.

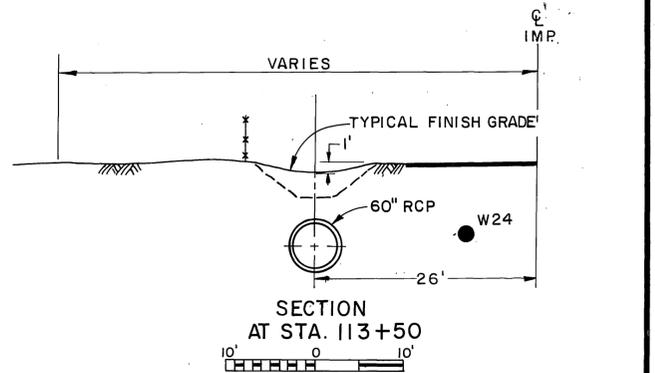
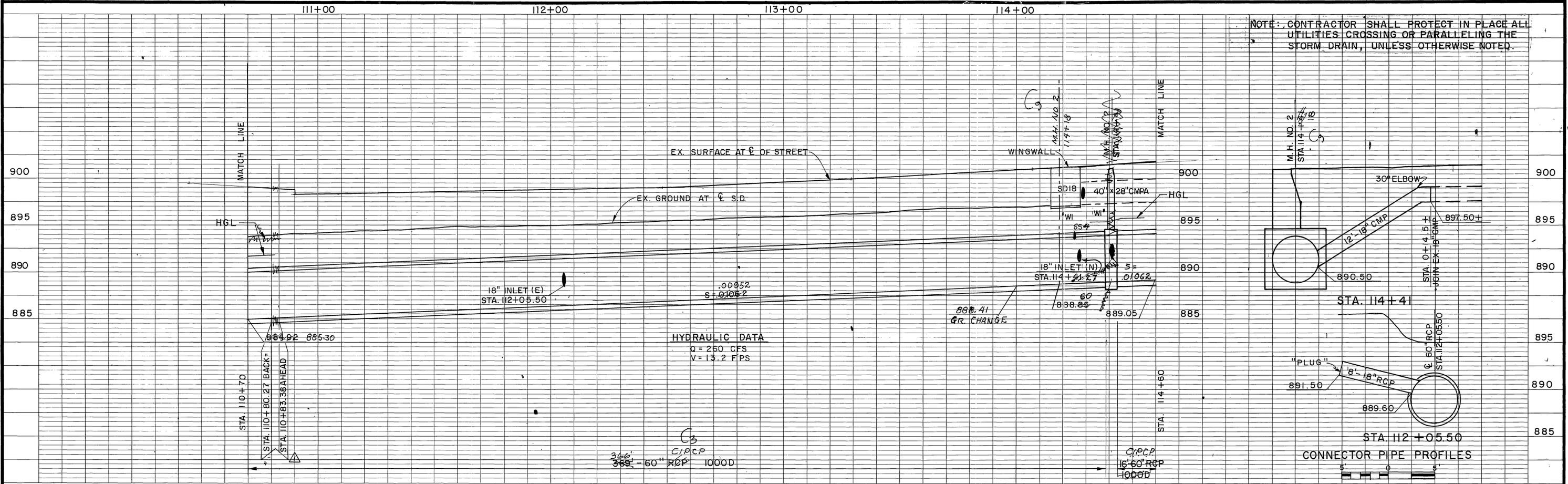
REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
①	Changed Radius of Main Line	DESIGNED BY: J.H.	APPROVED BY: Kenneth A. Edwards
②	Changed Tie Distance	DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO. 12400
③	Changed Dimension	DATE DRAWN: JUNE 79	DATE: 8/13/79
C.B.	Changes As Shown	CHECKED BY: N.L. [Signature]	
REF.	DESCRIPTION	APPR. DATE	

UNIVERSITY WASH  
THORNTON STORM DRAIN  
STA. 108+40 TO STA. 110+70  
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

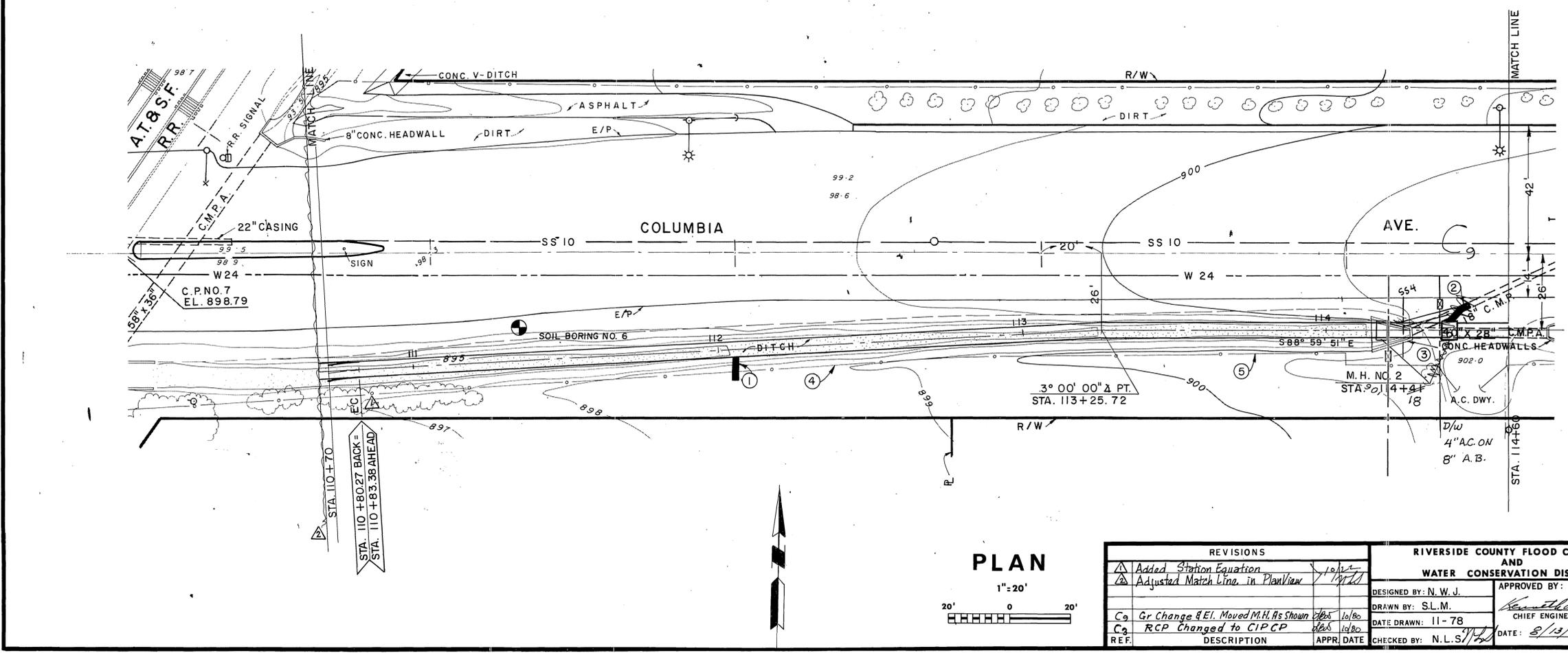
PROJECT NO. 1-0-122  
DRAWING NO. 1-364  
SHEET NO. 14 OF 62  
BENCH MARK: C.P. NO. 7  
NAIL & RCFC TAG  
EL. 898.79

AS BUILT

D-425



- NOTES
- 8'-18" RCP CLASS IV, "PLUG" END. SEE CONNECTOR PIPE PROFILE THIS SHEET.
  - 12'-18" CMP, 1=.0598 & 30° ELBOW. CONNECT TO EX. 18" CMP. SEE CONNECTOR PIPE PROFILE THIS SHEET.
  - REMOVE & DISPOSE CONC. STRUCTURE & C.M.P.A.
  - REMOVE FENCE ON STREET R/W FROM R.R. TO STA. 112+75 (270±) & STOCKPILE ON PRIVATE PROPERTY AS DIRECTED.
  - REMOVE FENCE & GATE ON ST. R/W FROM STA. 112+75 TO STA. 115+42 (265±) & STOCKPILE NEAR DWY. AS DIRECTED.



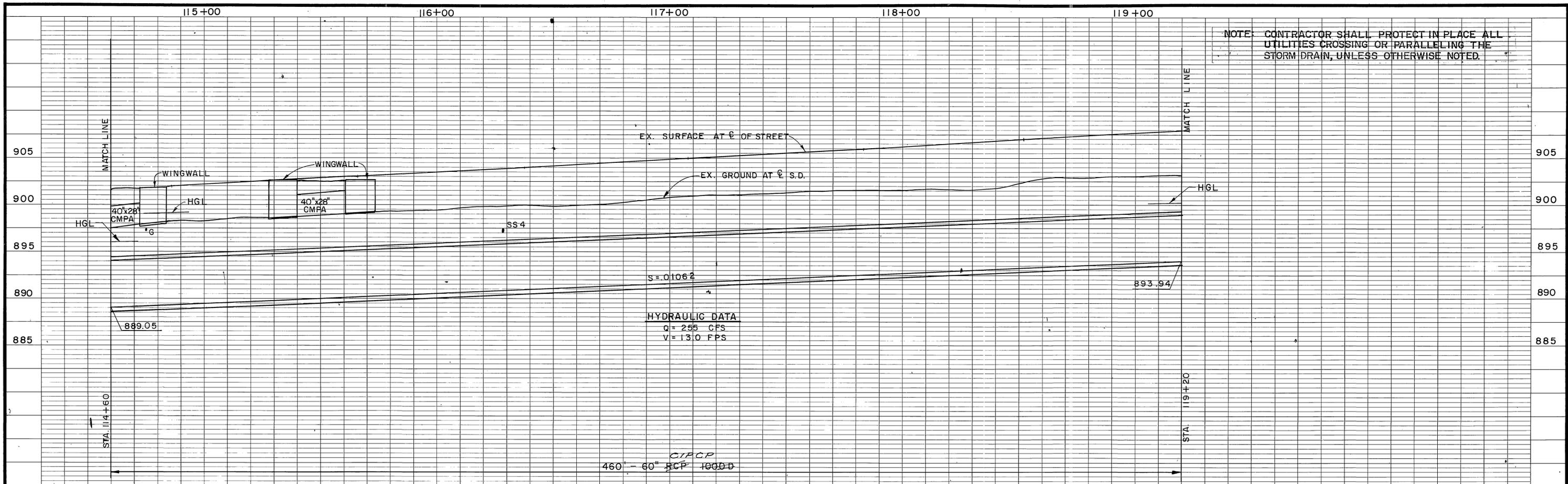
REVISIONS	
△	Added Station Equation
△	Adjusted Match Line in Plan/View
C <sub>3</sub>	Gr Change & El. Moved M.H. As Shown
C <sub>2</sub>	RCP Changed to CIPCP
REF.	DESCRIPTION

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: N. W. J.	APPROVED BY:
DRAWN BY: S.L.M.	<i>[Signature]</i>
DATE DRAWN: 11-78	CHIEF ENGINEER R.E. NO. 12400
CHECKED BY: N.L.S.	DATE: 8/13/99

UNIVERSITY WASH THORNTON STORM DRAIN	
PROJECT NO. 1-0-122	DRAWING NO. 1-364
STA. 110+70 TO STA. 114+60	
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2	
SHEET NO. 15 OF 62	

AS BUILT

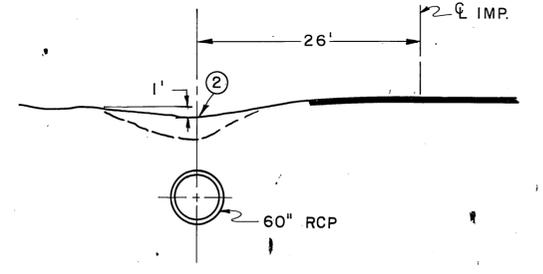
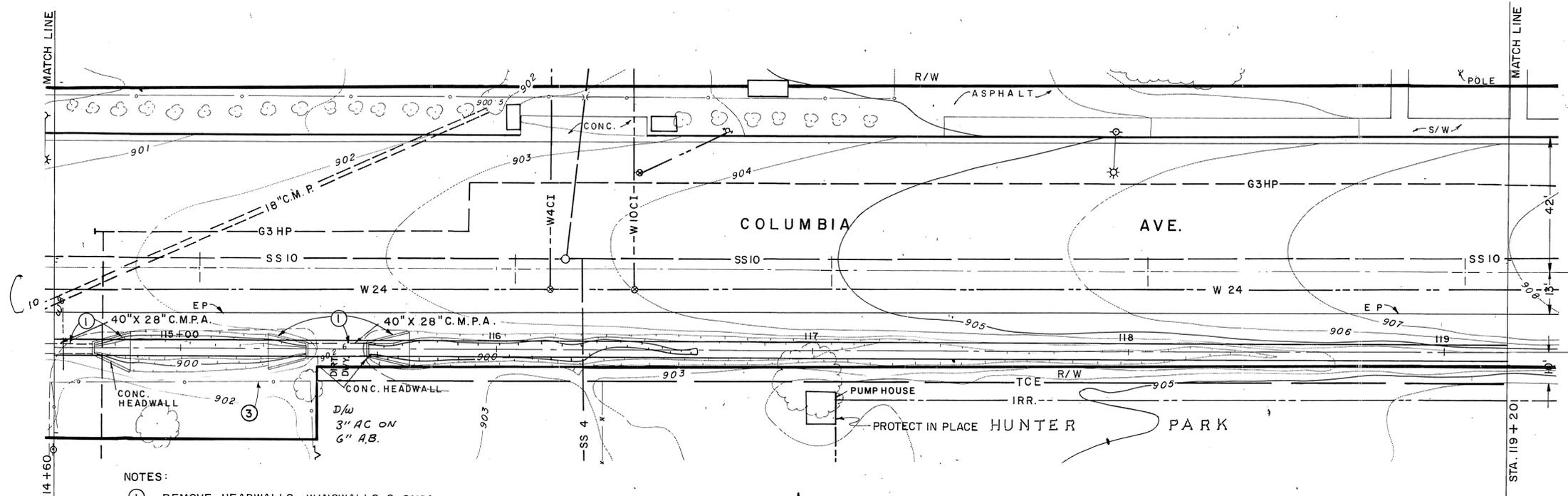
D-425



NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.

HYDRAULIC DATA  
 Q = 255 CFS  
 V = 13.0 FPS

CIPCP  
 460' - 60" RCP 1000 D



TYPICAL SECTION AT STA. 118+00

1" = 10'  
 10' 0' 10'

- NOTES:
- ① REMOVE HEADWALLS, WINGWALLS & CMPA
  - ② GRADE WITH 1' DEEP SWALE AS DIRECTED BY ENGINEER. SEE TYPICAL SECTION THIS SHEET.
  - ③ SEE NOTE ⑤ SHEET 15

PLAN

1" = 20'  
 20' 0' 20'

NO.	DESCRIPTION	DATE
C10	Add - WB	10/80
C3	RCP Changed to CIPCP	10/80

REVISIONS

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: J.H.  
 DRAWN BY: S.L.M.  
 DATE DRAWN: JUNE 79  
 CHECKED BY: N.L.S.M.

APPROVED BY: *Kenneth F. Edwards*  
 CHIEF ENGINEER R.E. NO. 12400  
 DATE: 8/13/79

UNIVERSITY WASH  
 THORNTON STORM DRAIN

STA. 114+60 TO STA. 119+20  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

INDEXED UP

BENCH MARK: CUT "X" TOP OF F.H.  
 ± 60' NLY. C STA. 116+80  
 B.M.-8 EL. 906.23

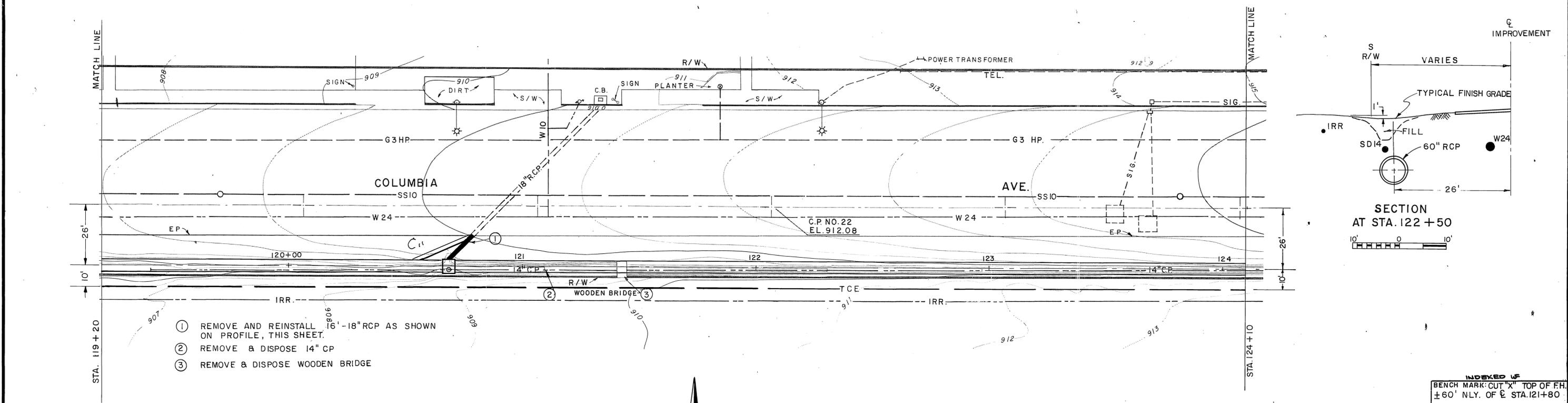
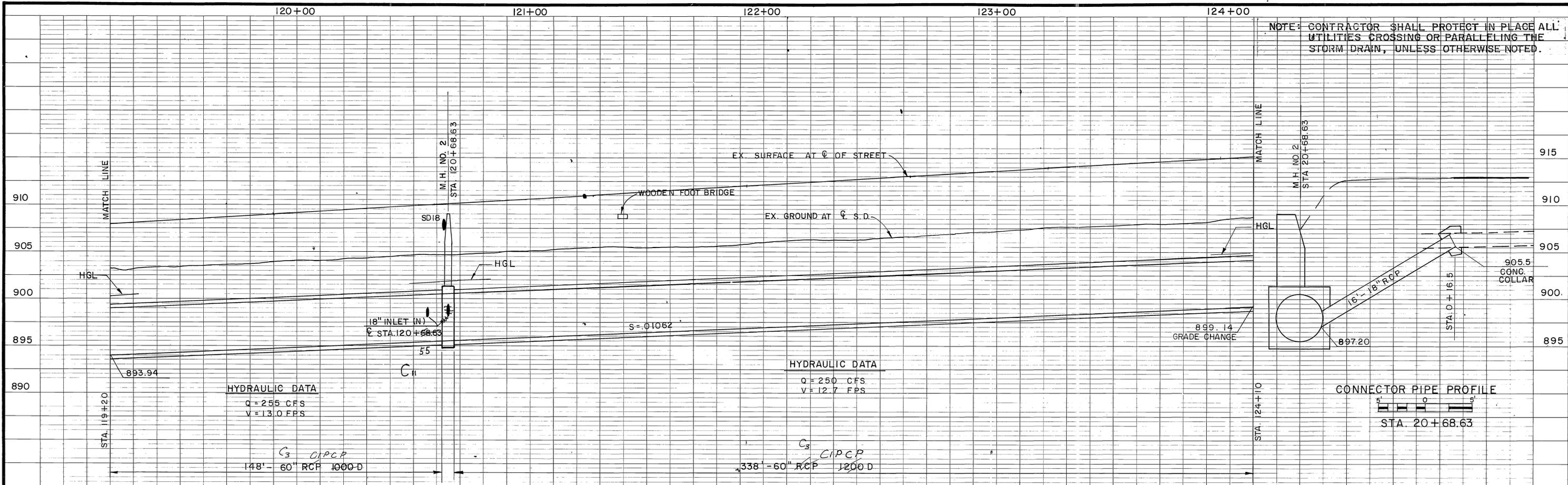
PROJECT NO.  
 1-0-122

DRAWING NO.  
 1-364

SHEET NO.  
 16 OF 62

AS BUILT

D.425



- ① REMOVE AND REINSTALL 16'-18" RCP AS SHOWN ON PROFILE, THIS SHEET.
- ② REMOVE & DISPOSE 14" CP
- ③ REMOVE & DISPOSE WOODEN BRIDGE



**PLAN**  
 1" = 20'  
 20' 0 20'

REF.	DESCRIPTION	APPR.	DATE
C11	Inlet Sta. Changed	SLM	10/80
C13	RCP Changed to CIPCP	SLM	10/80

REVISIONS

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: N.W.J.  
 DRAWN BY: S.L.M.  
 DATE DRAWN: 5-79  
 CHECKED BY: N.L.S.

APPROVED BY:  
 Chief Engineer R.E. No. 12400  
 DATE: 8/13/79

UNIVERSITY WASH  
 THORNTON STORM DRAIN

STA. 119+20 TO STA. 124+10  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

INDEXED UP  
 BENCH MARK: CUT "X" TOP OF F.H. ±60' NLY. OF  $\phi$  STA. 121+80  
 BM-9 EL. 912.08

PROJECT NO. 1-0-122  
 DRAWING NO. 1-364  
 SHEET NO. 17 OF 62

AS BUILT

D-425

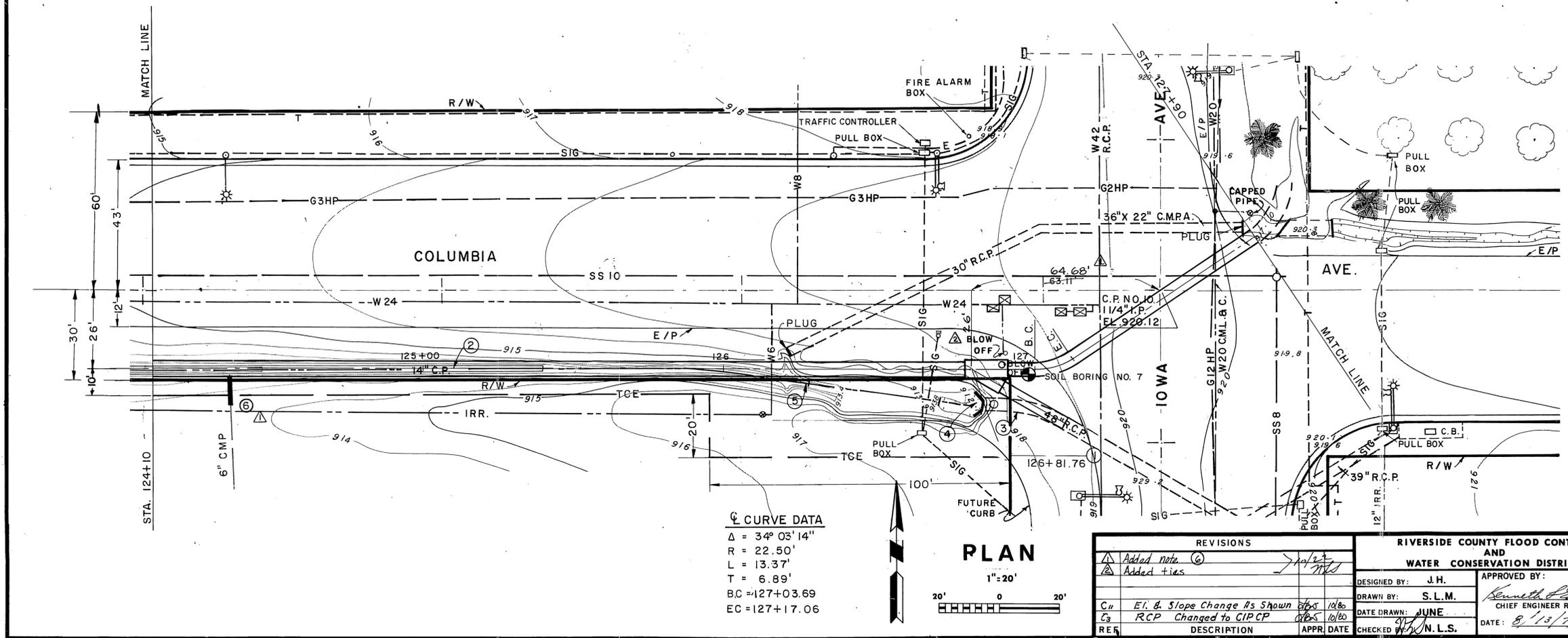
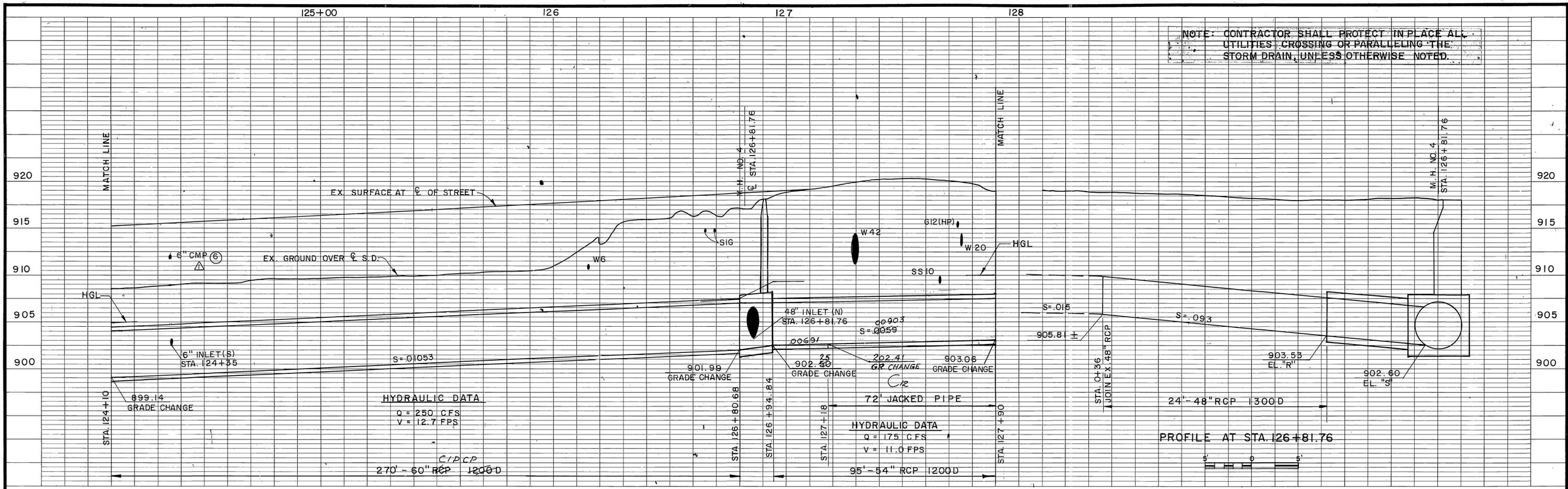
125+00

126

127

128

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



- NOTES:
- ① M.H. NO. 4 STA. 126 + 81.76  
A=30° B=30" C=12'  
D<sub>1</sub>=60" D<sub>2</sub>=54"  
EL."R"=903.53 EL."S"=902.60
  - ② REMOVE & DISPOSE 14" C.P.
  - ③ SALVAGE & RECONNECT 24'-48" RCP  
SEE PROFILE THIS SHEET.
  - ④ BURY IN PLACE.
  - ⑤ CUT & "PLUG"
  - ⑥ CONNECT TO 60" RCP WITH 45° ELBOW & 12'-6" CMP. 1=0.598.

BENCH MARK: CUT "X" BASE OF LIGHT STANDARD, TOP OF CURB, NW COR. OF IOWA & COLUMBIA, B.M.-10, EL. 918.10

NO.	REVISIONS	DATE
1	Added note ⑥	10/80
2	Added ties	10/80
C1	El. & Slope Change As Shown	10/80
C2	RCP Changed to CIPCP	10/80
RES	DESCRIPTION	APPR. DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: J.H.  
DRAWN BY: S.L.M.  
DATE DRAWN: JUNE  
CHECKED BY: N.L.S.

APPROVED BY: Kenneth Edwards  
CHIEF ENGINEER R.E. NO. 12400  
DATE: 5/13/79

UNIVERSITY WASH  
THORNTON STORM DRAIN

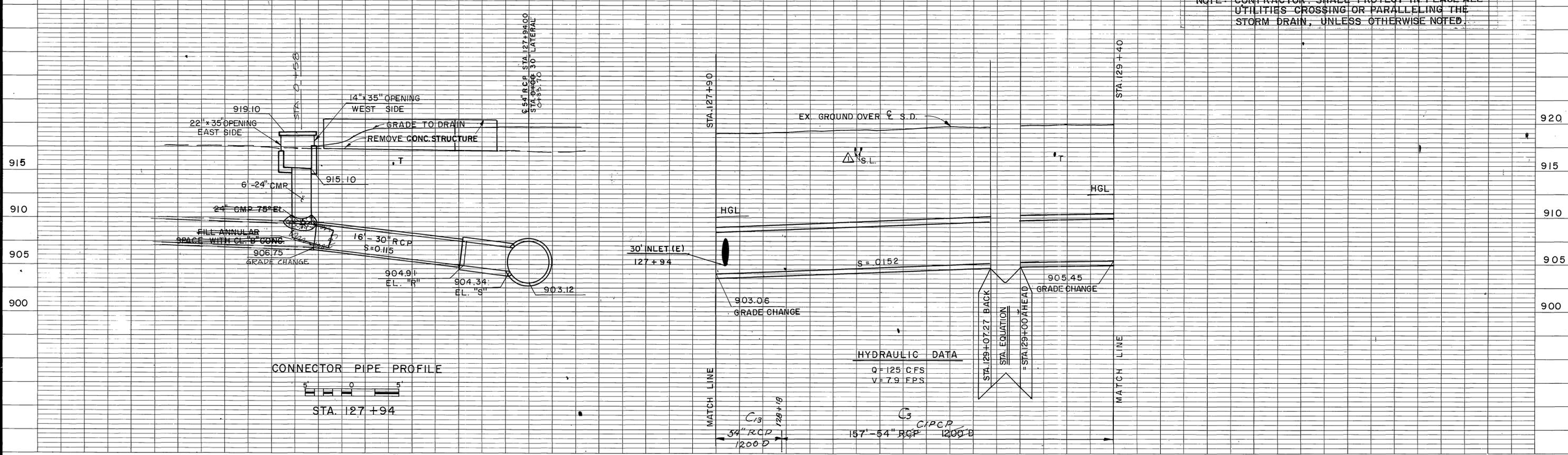
PROJECT NO. 1-0-122  
DRAWING NO. 1-364  
SHEET NO. 18 OF 62

STA. 124+10 TO STA. 127+90  
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

AS BUILT

D-426

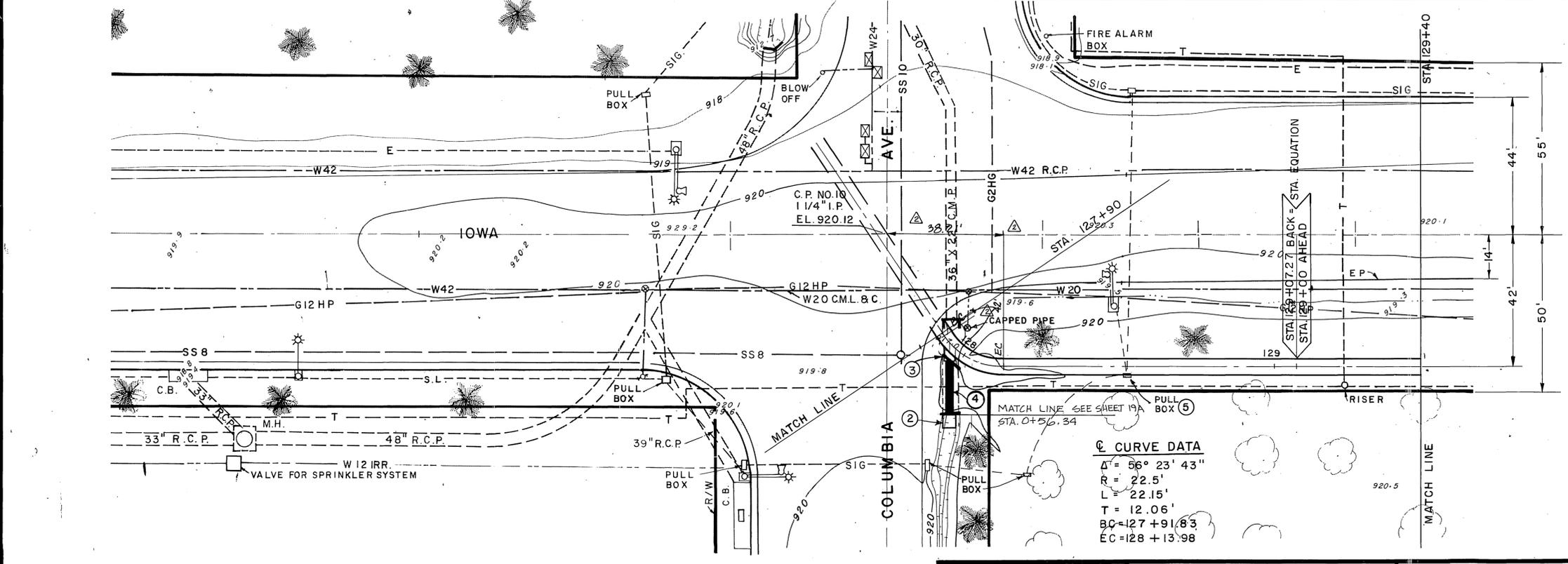
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



HYDRAULIC DATA

Q=125 CFS
V=7.9 FPS

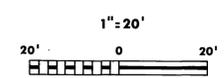
- NOTES:
- IOWA AVE. RESURFACING SHALL BE 3' 2 1/2" AC. OVER 12" A.B.
  - CONC. DROP INLET. V=4' OPENINGS E. & W. SEE PROFILE THIS SHEET. PLACE CLASS "B" CONC. COLLAR AROUND 24" CMP @ 30" RCP AS DIRECTED. J.S. NO. 2. STA. 127+94  
A=40' B=30' C=7'-2" D=54"  
E=5.8' F=1.65' G=1.70' L=6.0'  
EL. "R" = 904.91 EL. "S" = 904.34
  - REMOVE CONCRETE STRUCTURE
  - PROTECT IN PLACE



Q CURVE DATA

Δ = 56° 23' 43"
R = 22.5'
L = 22.15'
T = 12.06'
BC = 127+91.83
EC = 128+13.98

PLAN

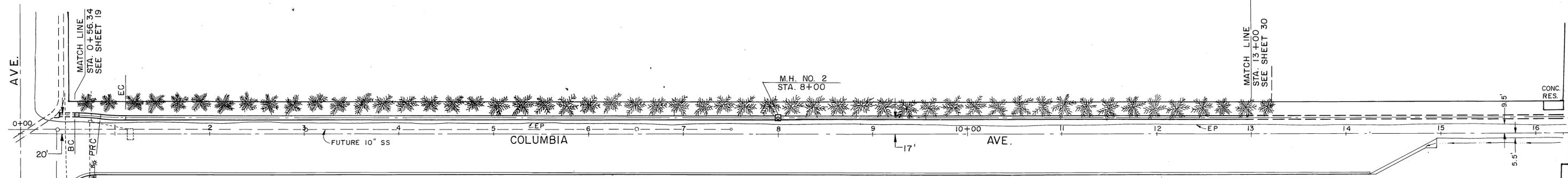
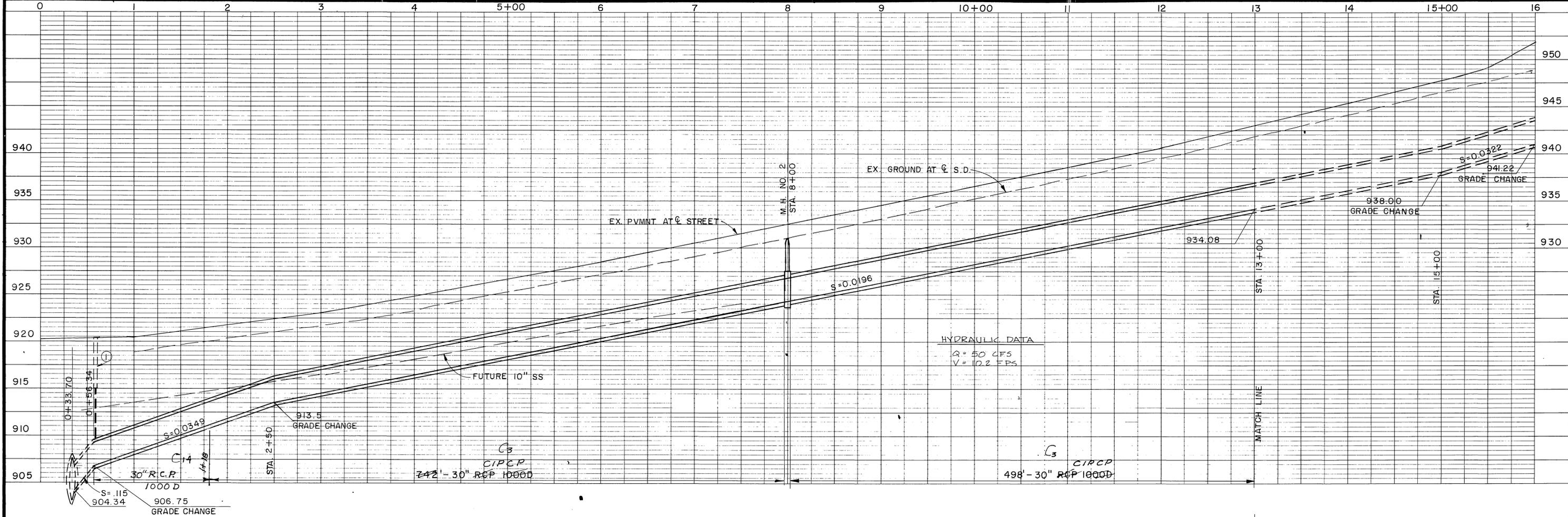


BENCH MARK	REVISIONS:	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	PROJECT NO.
	<p>1 Added SL to Profile 10/2/27</p> <p>2 Added ties 10/2/27</p> <p>3 Revised Connector Pipe Table, see Note 2, 10/2/27</p>		1-0-122
SCALE:	DESIGNED BY: J.L.H. & N.J.	APPROVED BY:	DRAWING NO.
DATE:	DRAWN BY: S.L.M.	<p>DATE DRAWN: 12-78</p> <p>DATE: 8/12/79</p>	1-364
	DESCRIPTION	CHECKED BY: W.L.S.	SHEET NO.
			19 OF 62

BENCH MARK: CUT "B" BASE OF LIGHT STANDARD TOP OF CURB ± 93' W. OF C. STA. 132+50 B.M.-11 EL. 920.08

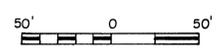
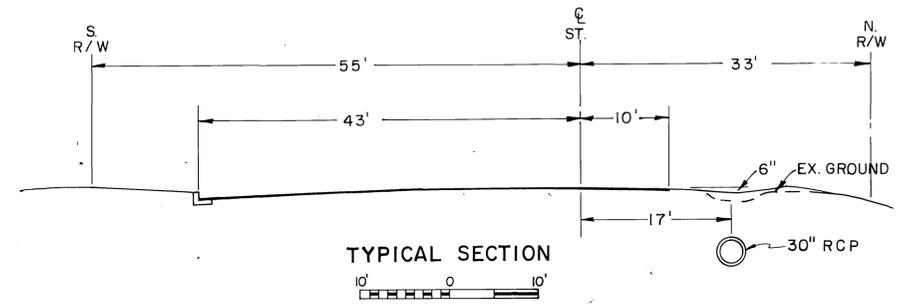
UNIVERSITY WASH THORNTON STORM DRAIN

\*STA. 127+90 TO STA. 129+40 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2



**☉ CURVE DATA**  
 $\Delta = 6^\circ 16' 46''$   
 $R = 250'$   
 $L = 27.40'$   
 $T = 13.71'$   
 $BC = 0 + 56.34$   
 $PRC = 0 + 83.74$   
 $EC = 1 + 11.14$

**NOTES:**  
 ① SEE SHEET 19 FOR DETAILS OF CONC. DROP INLET.



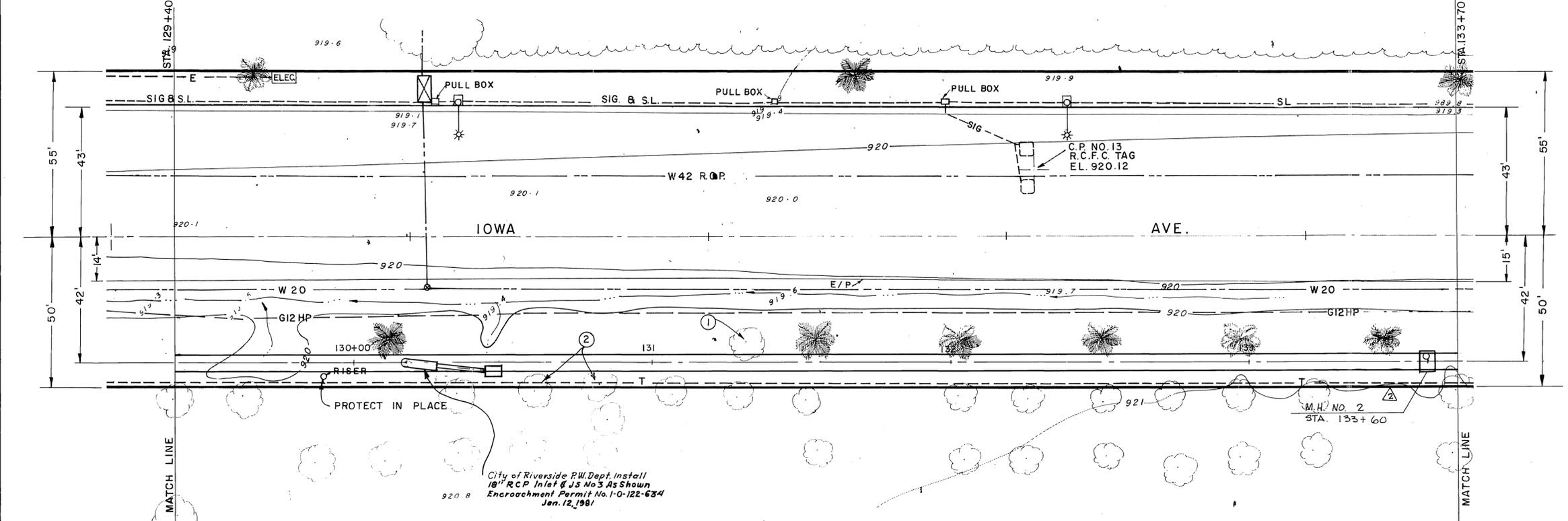
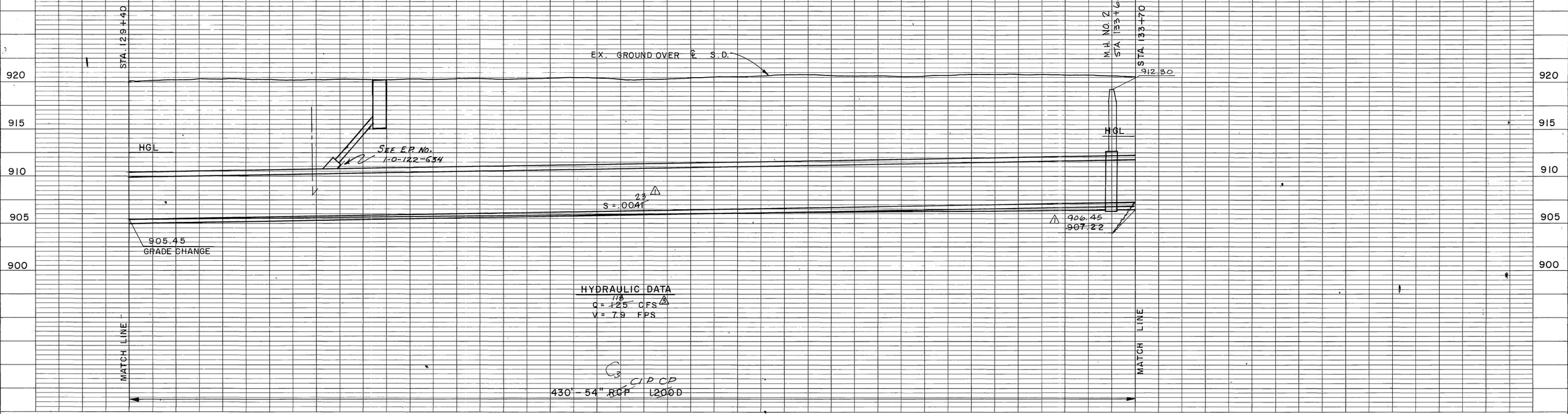
REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		UNIVERSITY WASH THORNTON STORM DRAIN COLUMBIA AVE. EXTENSION		INDEXED UP	
		DESIGNED BY: JH & SS	APPROVED BY: <i>Kenneth J. Edwards</i>	PROJECT NO. 1-0-122			
		DRAWN BY: SLM	CHIEF ENGINEER R.E. NO. 12400	DRAWING NO. 1-364			
		DATE DRAWN: 4-80	DATE: 4/22/80	SHEET NO. 19A OF 62			
		CHECKED BY: R.A.K.		1970 STORM DRAIN BOND ISSUE PROJECT NO. 2			

AS BUILT

D-425

129+50 130+00 131+00 132+00 133+00

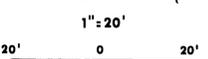
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



- NOTE:
- ① REMOVE TREE.
  - ② TRIM AS REQUIRED TO CLEAR WORK AREA.

City of Riverside P.W. Dept. Install  
18" RCP Inlet @ JS No 3 As Shown  
Encroachment Permit No. 1-0-122-634  
Jan. 12, 1981

**PLAN**



BENCH MARK CUT BOX AT BASE  
LIGHT STANDARD TOP OF CURB  
± 93' W. & STA. 132+50  
B.M.-11 EL. 920.08  
SCALE:  
DATE:

REVISIONS	
△ LOWERED GRADE	12/19/77
△ ADDED M.H.	
△ REVISED Q	
C <sub>3</sub> RCP Changed to CIPCP	10/80
REF.	APPR. DATE

**RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT**

DESIGNED BY: J.H.  
DRAWN BY: S.L.M.  
DATE DRAWN: JUNE 79  
CHECKED BY: N.L. 8/13/79

APPROVED BY:  
[Signature]  
CHIEF ENGINEER R.E. NO. 12400  
DATE: 8/13/79

**UNIVERSITY WASH  
THORNTON STORM DRAIN**

STA. 129+40 TO STA. 133+70  
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

INDEXED UP

PROJECT NO. 1-0-122  
DRAWING NO. 1-364  
SHEET NO. 20 OF 62

AS BUILT

D-425

134+00

135+00

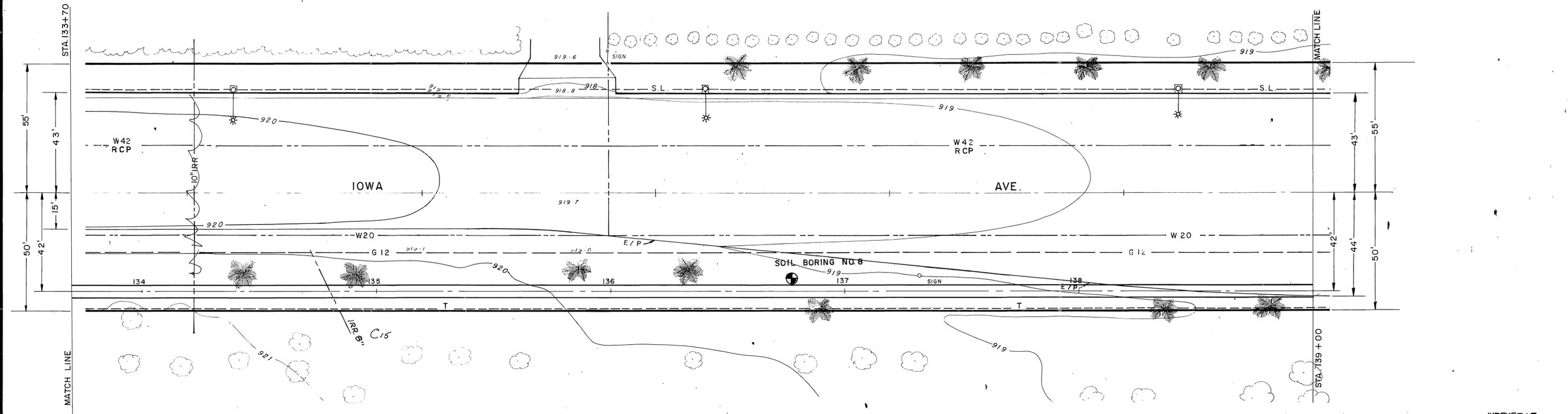
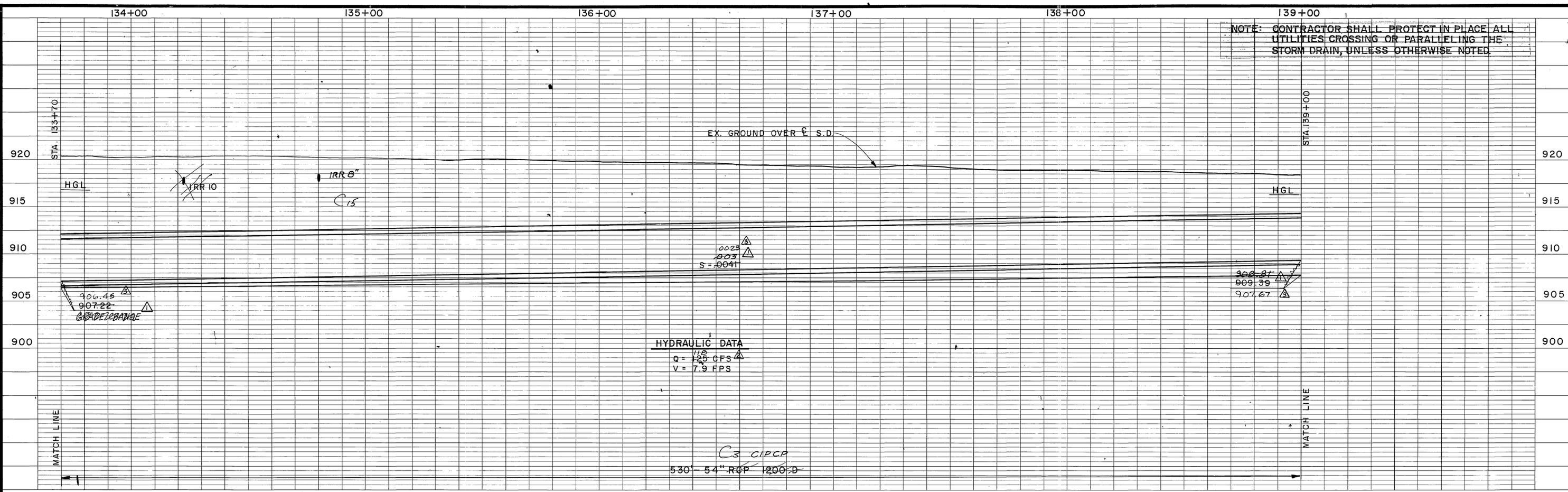
136+00

137+00

138+00

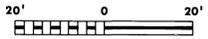
139+00

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



PLAN

1" = 20'



BENCH MARK CUT "X" AT BASE  
 LIGHT STANDARD TOP OF CURB  
 ± 93' W.  $\bar{C}$  STA. 136+50  
 B.M. - 12 EL. 919.06  
 SCALE:  
 DATE:

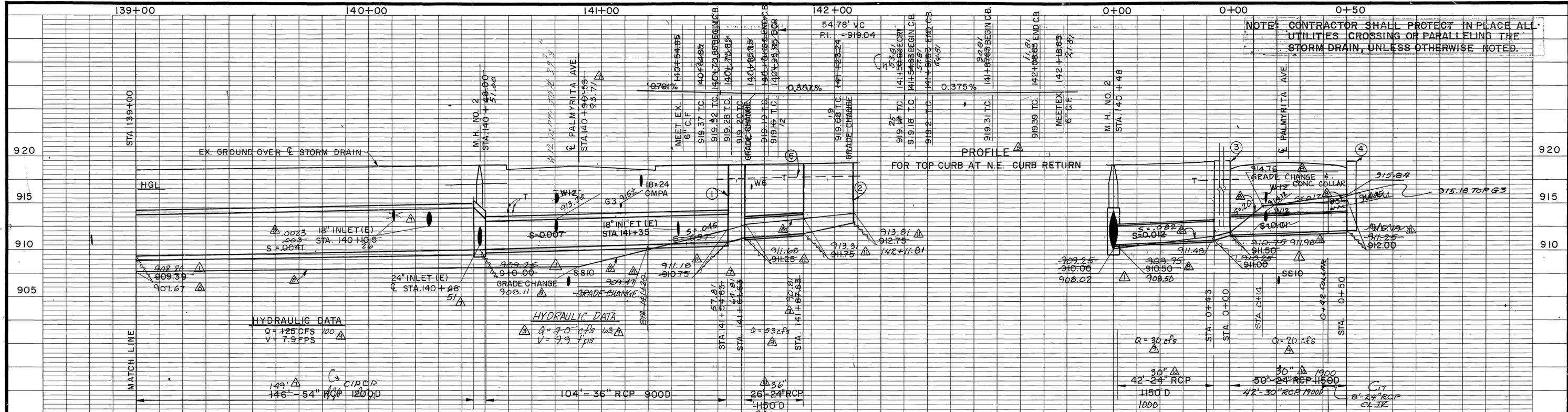
REVISIONS	DESCRIPTION	APPR. DATE
$\Delta$	Changed slope	12/10/78
$\square$	Revised Q	12/10/78
$\nabla$	Changed slope	12/10/78
C15	Add 8" IRR. As Shown	5/25/80
C3	RCP Changed to CIPCP	5/25/80

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
 DESIGNED BY: J.H.  
 DRAWN BY: S.L.M.  
 DATE DRAWN: JUNE 79  
 CHECKED BY: N.L.S.  
 APPROVED BY: *Kenneth P. Edwards*  
 CHIEF ENGINEER R.E. NO. 12400  
 DATE: 8/13/77

INDEXED W/P  
 PROJECT NO. 1-0-122  
 DRAWING NO. 1-364  
 SHEET NO. 21 OF 62  
 UNIVERSITY WASH THORNTON STORM DRAIN  
 STA. 133+70 TO STA. 139+00  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

AS BUILT

D-425

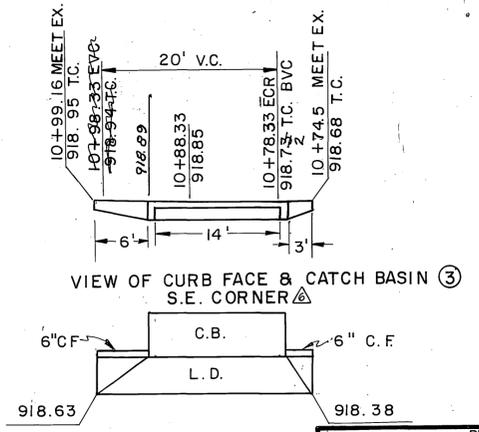
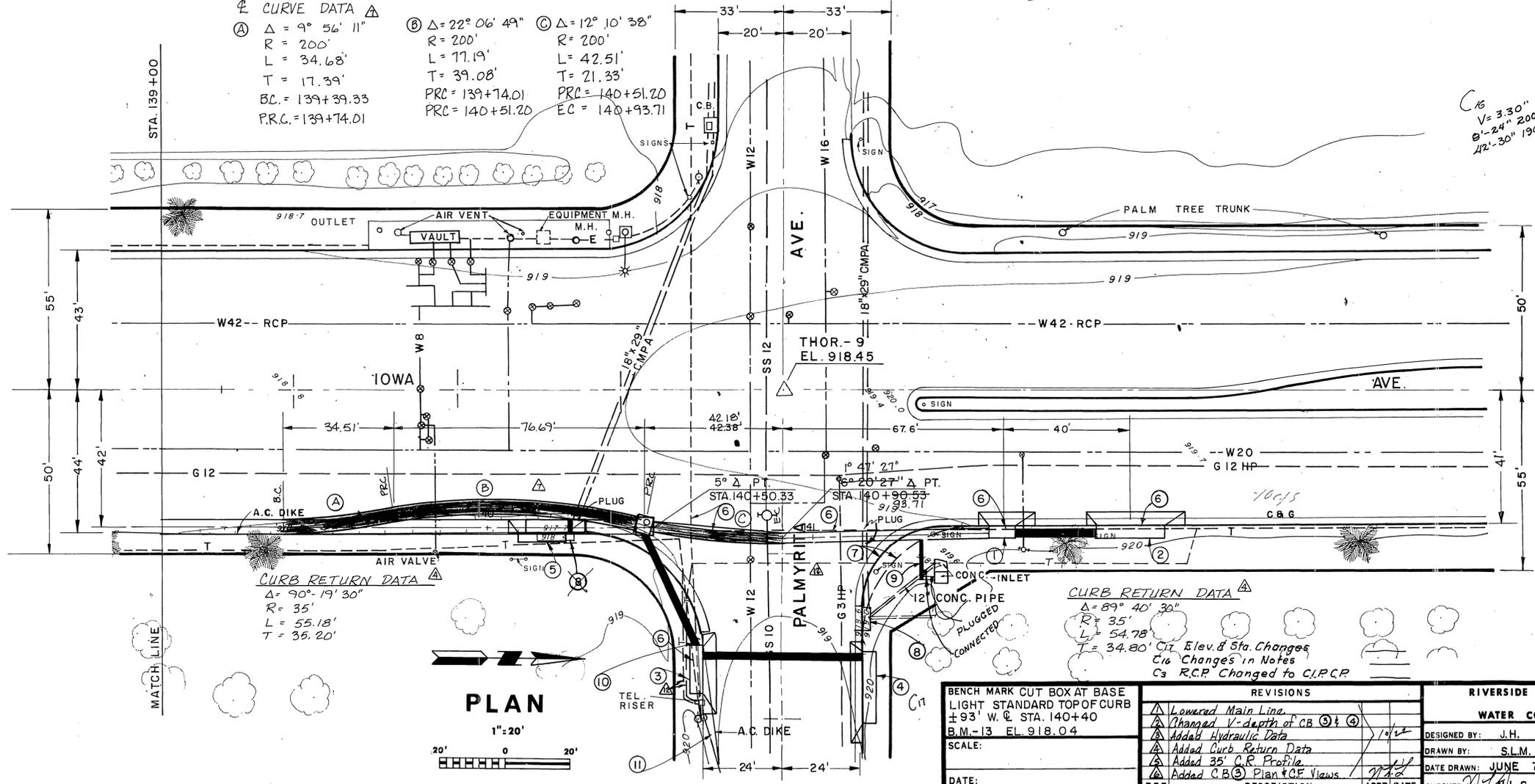


HYDRAULIC DATA  
 $Q = 125 \text{ CFS}$   
 $V = 7.9 \text{ FPS}$

HYDRAULIC DATA  
 $Q = 7.0 \text{ cfs}$   
 $V = 9.9 \text{ fps}$

CURVE DATA  
 (A)  $\Delta = 9^\circ 56' 11''$   
 $R = 200'$   
 $L = 34.68'$   
 $T = 17.39'$   
 $BC = 139+39.33$   
 $PRC = 139+74.01$   
 (B)  $\Delta = 22^\circ 06' 49''$   
 $R = 200'$   
 $L = 17.19'$   
 $T = 39.08'$   
 $PRC = 139+74.01$   
 $EC = 140+51.20$   
 (C)  $\Delta = 12^\circ 10' 38''$   
 $R = 200'$   
 $L = 42.51'$   
 $T = 21.33'$   
 $PRC = 140+51.20$   
 $EC = 140+93.71$

- NOTES:
- ① C.B. NO. 1,  $W = 7'$ ,  $V = 8' 7''$
  - ② C.B. NO. 1,  $W = 21'$ ,  $V = 25' 6''$
  - ③ C.B. NO. 1,  $W = 14'$ ,  $V = 25' 7' 25''$  SEE PROFILE THIS SHEET.
  - ④ C.B. NO. 1,  $W = 21'$ ,  $V = 25' 7' 25''$  SEE PROFILE THIS SHEET.
  - ⑤ C.B. NO. 1,  $W = 14'$ ,  $V = 4' 2''$  18" RCP CL. IV SEE SHEET 34 FOR PROFILE.
  - ⑥ TEL. TO BE RELOCATED BY OTHERS PRIOR TO CONST.
  - ⑦ RECONSTRUCT CURB & GUTTER,  $R = 35'$
  - ⑧ REMOVE CATCH BASINS.
  - ⑨ CONNECT GROVE INLET TO S.D. WITH 12'-18" R.C.P.
  - ⑩ ANCHOR TO BE RELOCATED BY CITY.
  - ⑪ RECONSTRUCT A.C. DIKE TO MEET C & G.

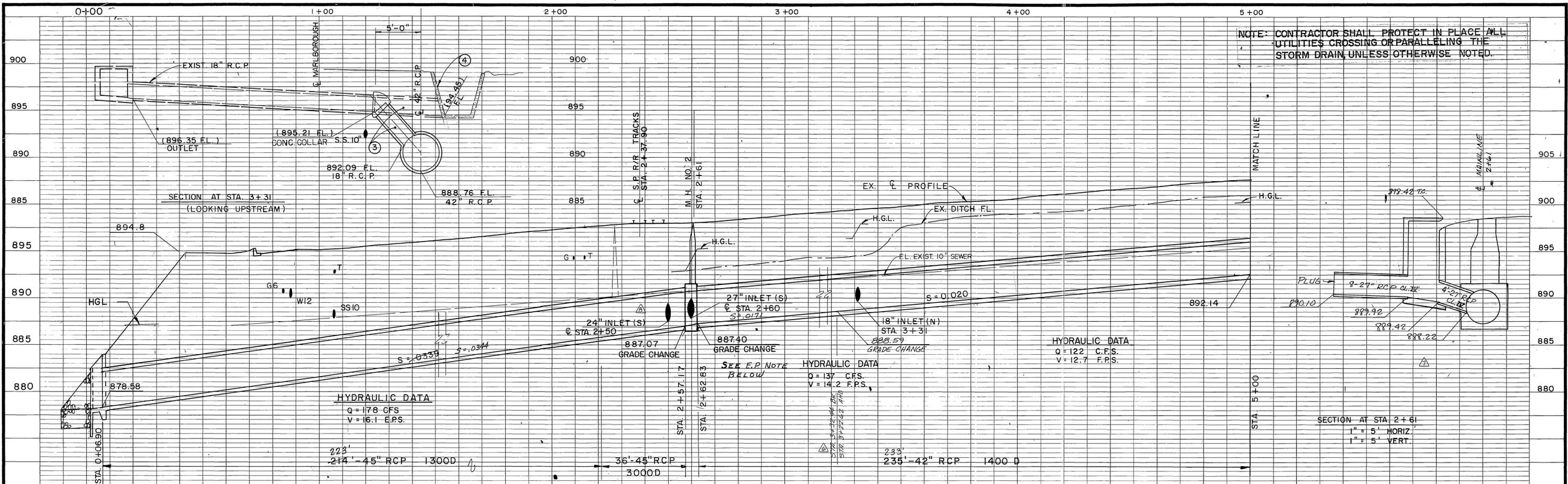


NO.	DESCRIPTION	DATE
1	Alignment change to save C.B.	
2	Changed grade	
3	Revised Q	
4	Increased pipe sizes	
5	Changed 'V' depth of C.B. (2)(3)(4)	
6	Moved tel. ducts	

BENCH MARK CUT BOX AT BASE LIGHT STANDARD TOP OF CURB ± 93' W. STA. 140+40 B.M. -13 EL. 918.04		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		UNIVERSITY WASH THORNTON STORM DRAIN		PROJECT NO. 1-0-122	
SCALE:		DESIGNED BY: J.H.		APPROVED BY:		DRAWING NO. 1-364	
DATE:		DRAWN BY: S.L.M.		DATE: JUNE 79		SHEET NO. 22 OF 62	
REF.		DESCRIPTION		APPR. DATE		PROJECT NO. 1-0-122	

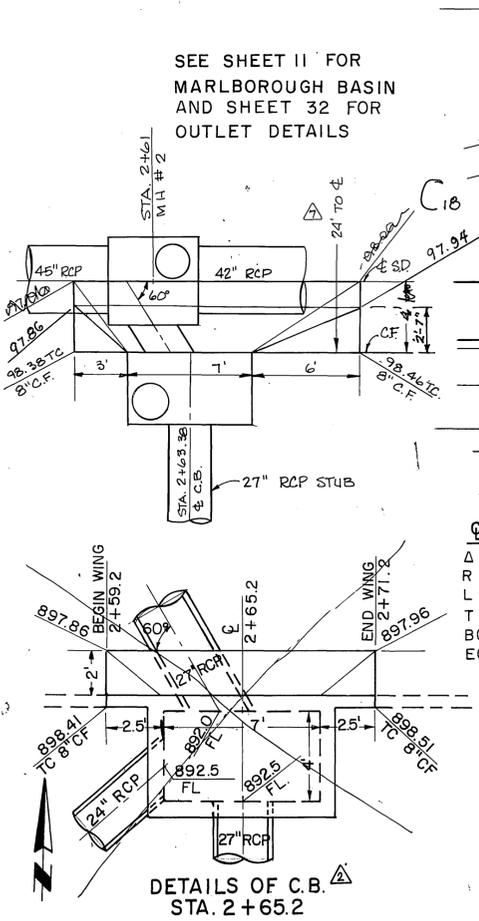
AS BUILT

D-425



NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.

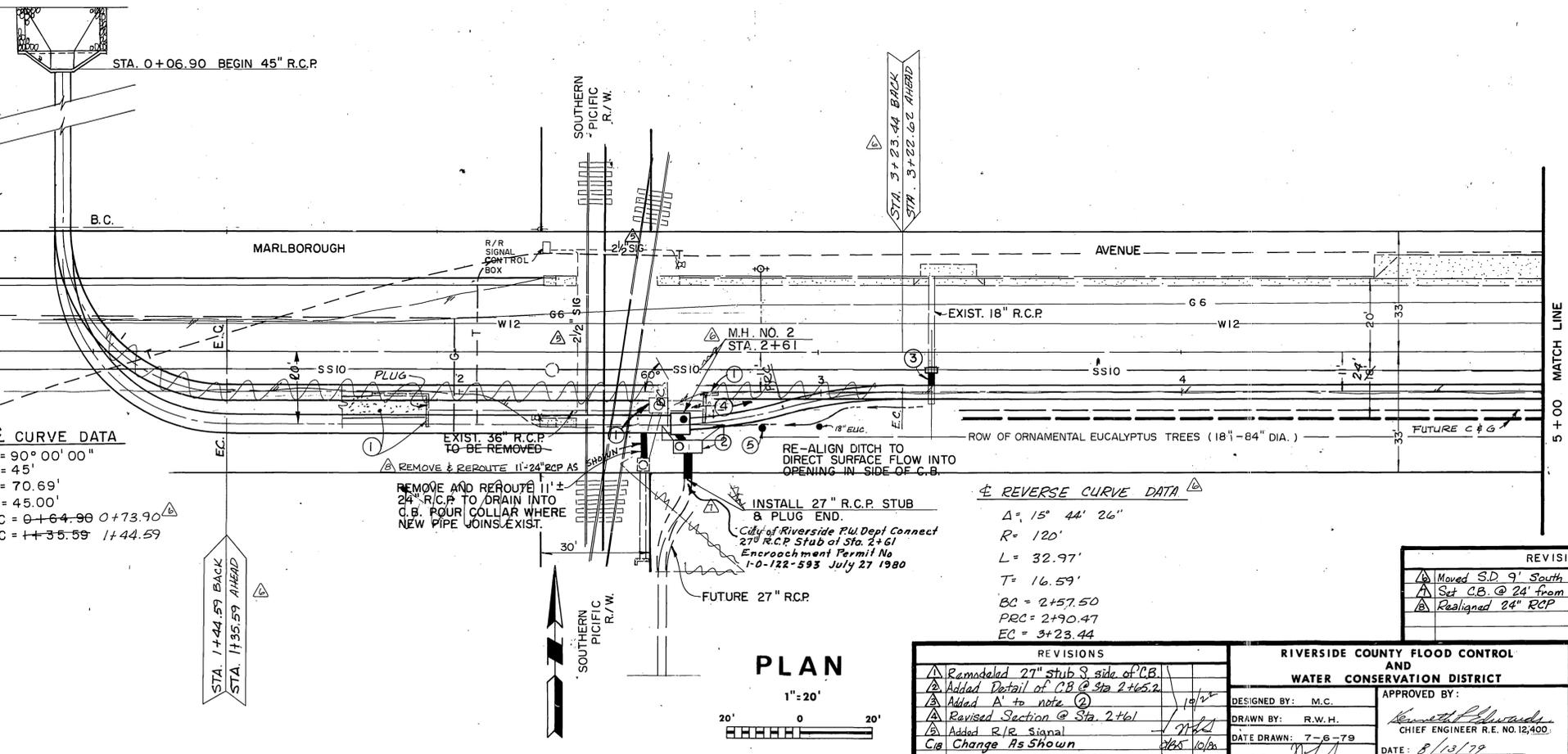
SEE SHEET 11 FOR MARLBOROUGH BASIN AND SHEET 32 FOR OUTLET DETAILS



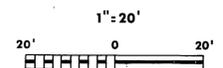
**Curve Data**  
 $\Delta = 90^\circ 00' 00''$   
 $R = 45'$   
 $L = 70.69'$   
 $T = 45.00'$   
 $BC = 0 + 64.90 \quad 0 + 73.90$   
 $EC = 1 + 35.59 \quad 1 + 44.59$

**Reverse Curve Data**  
 $\Delta = 15^\circ 44' 26''$   
 $R = 120'$   
 $L = 32.97'$   
 $T = 16.59'$   
 $BC = 2 + 57.50$   
 $PC = 2 + 90.47$   
 $EC = 3 + 23.44$

- NOTE:
- REMOVE & DISPOSE M.H., HEADWALLS, & CONC. CHANNELS. REMOVE FOR REUSE 66'-36" RGR 11'-24" RCP, & M.H. FRAME & COVER. C.B.#1 PER FLOOD CONTROL C.B.#1 A'=4.0' W=7' V=8' STA. 2+65-20 LEAVE 2+63.38 LEAVE 1' HIGH X 2' WIDE OPENING IN EASTERLY SIDE OF C.B. TO ACCEPT FLOWS. OPENING FL. ELEVATION 896.00 INSTALL PROTECTION BARS IN OPENING PER R.C.F.C.D. STD. DWG. C.B. 110
  - REMOVE & SALVAGE 6'-18" RCP & PLACE 5'-18" RCP, CL. IV. SEE PROFILE THIS SHEET.
  - REMOVE & DISPOSE INTERFERING PORTIONS OF CONC. CHANNEL.
  - REMOVE & DISPOSE DEAD EUCALYPTUS.



PLAN



REVISIONS	
1	Moved S.D. 9' South
2	Set C.B. @ 24' from E. St.
3	Realigned 24" RCP

**ALBERT A. WEBB ASSOCIATES**  
 CIVIL ENGINEERS  
 RIVERSIDE, CALIFORNIA  
 APPROVED BY: *[Signature]* DATE: 7/30/79  
 R.E. No. 9876

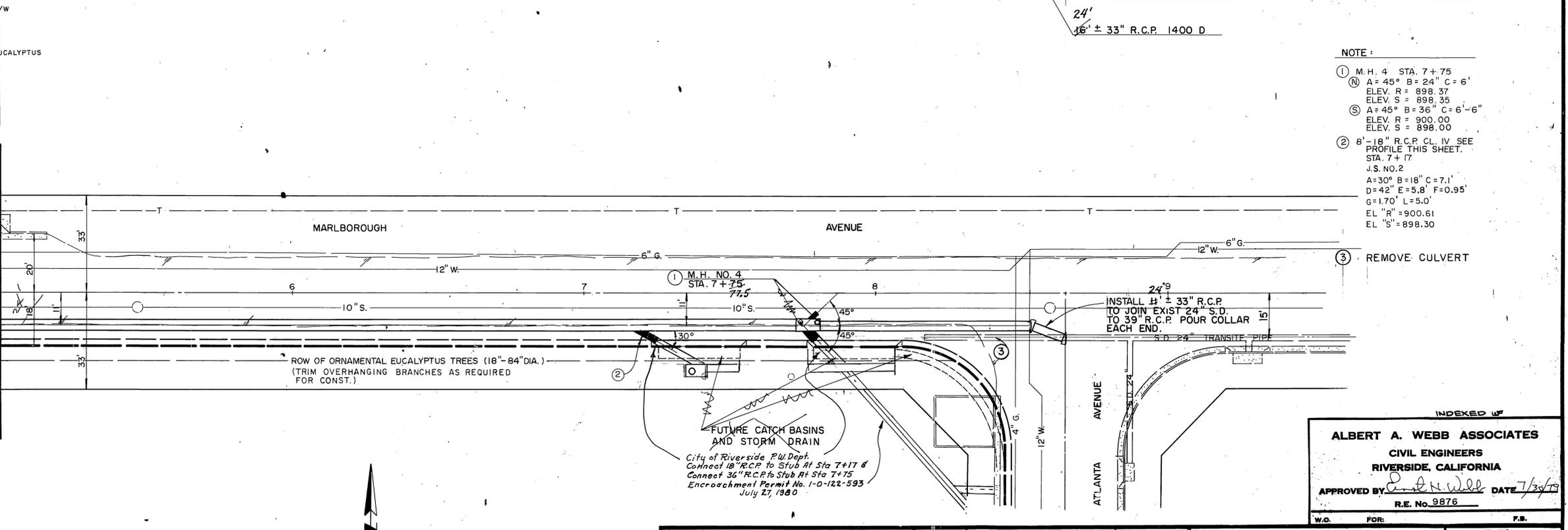
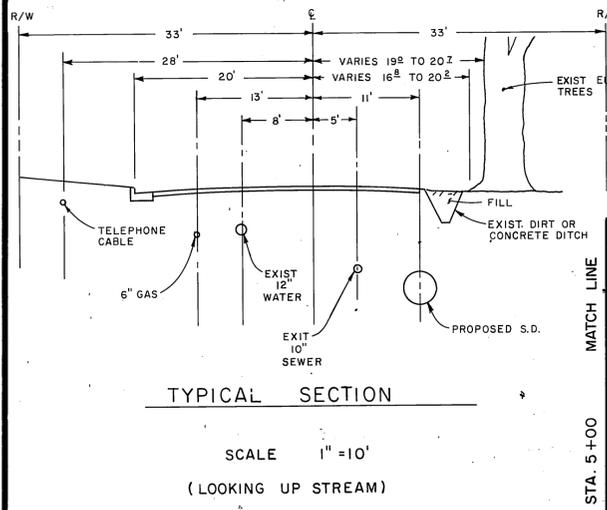
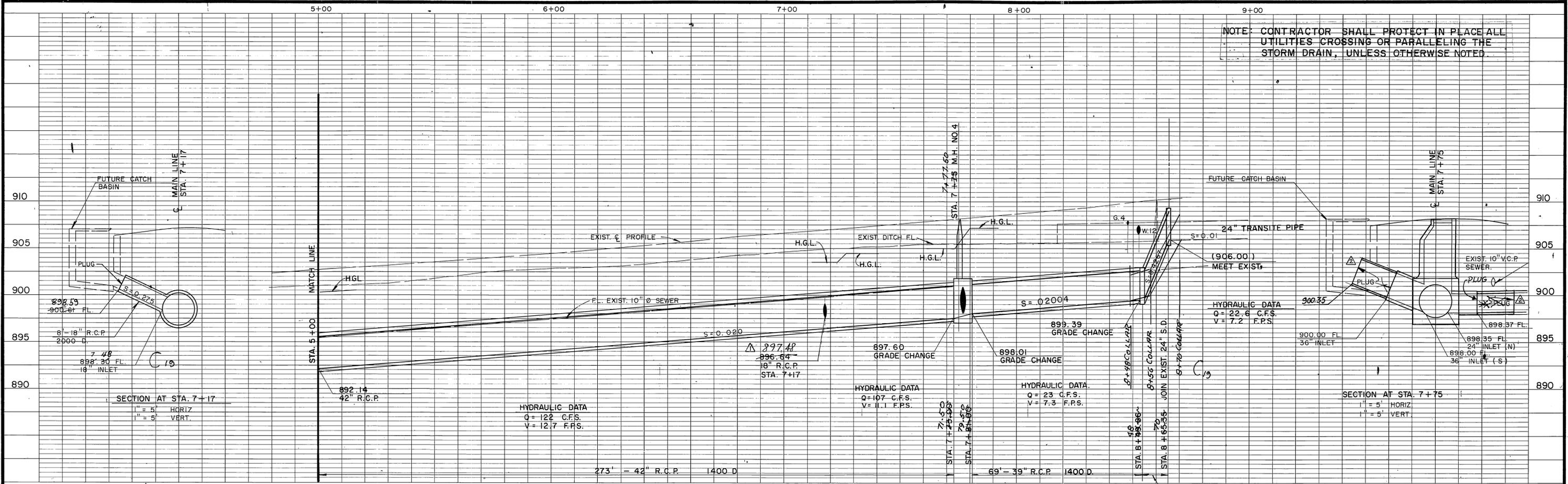
REVISIONS	
1	Remodeled 27" stub S. side of C.B.
2	Added Detail of C.B. @ Sta. 2+65.2
3	Added A' to note (2)
4	Revised Section @ Sta. 2+61
5	Added R/R Signal
6	Change As Shown

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY:	M.C.
APPROVED BY:	<i>[Signature]</i>
DRAWN BY:	R.W.H.
DATE DRAWN:	7-6-79
CHEF ENGINEER R.E. NO. 12,400	
CHECKED BY:	<i>[Signature]</i>
DATE:	8/13/79

UNIVERSITY WASH	
THORNTON STORM DRAIN	
MARLBOROUGH LATERAL	
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2	
PROJECT NO.	1-0-122
DRAWING NO.	1-364
SHEET NO.	23 OF 62

AS BUILT

D-425 W.O. 79-80



PLAN  
 1" = 20'

REVISIONS	DESCRIPTION	DATE
1	Revised elevation of 19" inlet	10/22/77
2	Add 4' stubs S. side	7/25/77

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: M.C.  
 DRAWN BY: R.W.H.  
 DATE DRAWN: 7-9-79  
 CHECKED BY: [Signature]

APPROVED BY: [Signature]  
 CHIEF ENGINEER R.E. NO. 12400  
 DATE: 8/13/79

UNIVERSITY WASH  
 THORNTON STORM DRAIN  
 MARLBOROUGH LATERAL

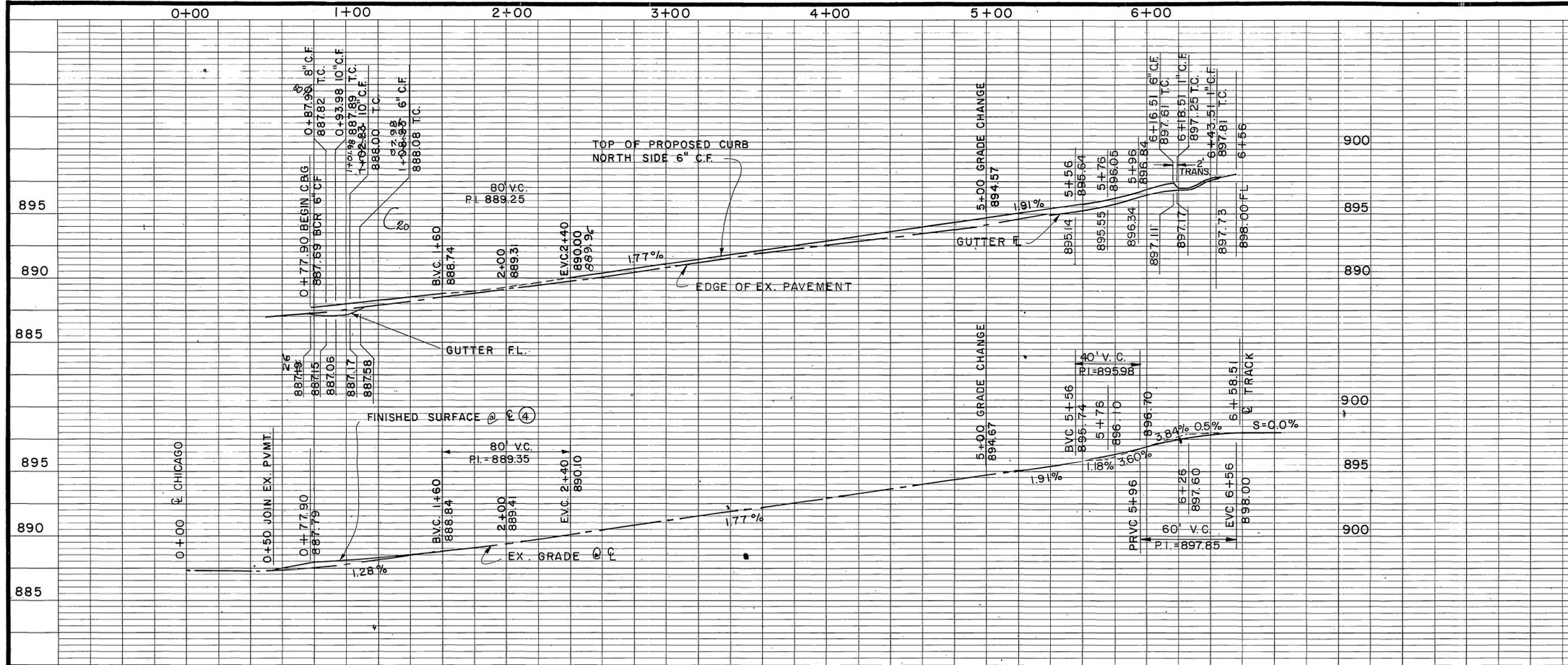
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

PROJECT NO. 1-0-122  
 DRAWING NO. 1-364  
 SHEET NO. 24 OF 62

INDEXED BY

ALBERT A. WEBB ASSOCIATES  
 CIVIL ENGINEERS  
 RIVERSIDE, CALIFORNIA

APPROVED BY: [Signature] DATE 7/30/79  
 R.E. No. 9876

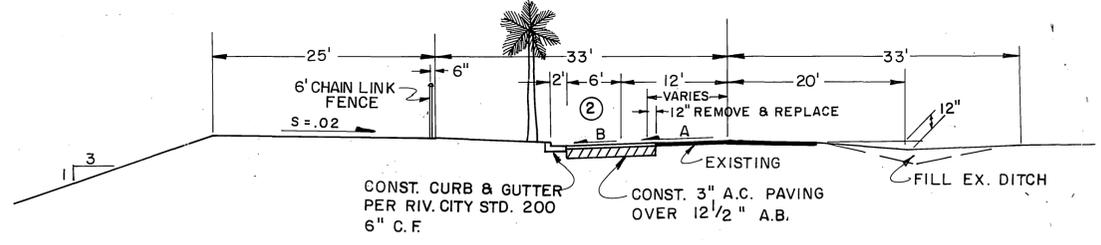
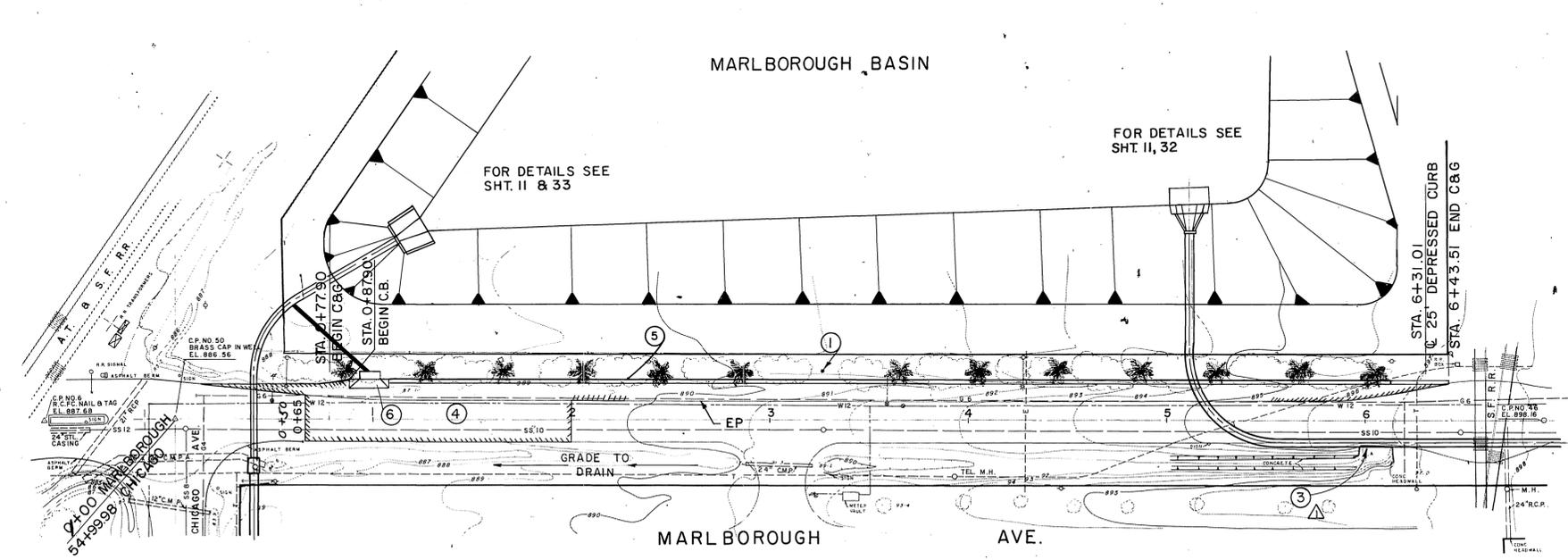


NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.

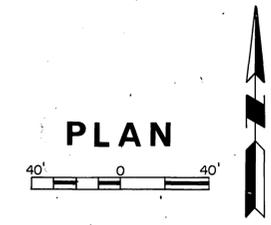
NOTES:

- ① REMOVE PALM STUMP PROTECT OTHERS IN PLACE
- ② SEE CITY OF RIVERSIDE STD. DWG. NO. 302 TYPE IV, A=15', B=29'
- ③ REMOVE & DISPOSE CONC. HEADWALLS, GUNITE DITCH, & GROUTED RIPRAP. FILL DITCH AS SHOWN IN TYPICAL SECTION.
- ④ STATION 0+65 TO 2+00 USE SHOWN DEPTH A.C. OVER EX. PVMT. TO OBTAIN NEW GRADE. CONST. MATCH UP PER TYP. SECTION.
- ⑤ TRIM BUSHES AS NEEDED FOR CONSTRUCTION (DO NOT REMOVE)
- ⑥ CATCH BASIN DETAILS - SEE SHT. 10.

STATION	CROSS A %	FALL B %	C ELEV.	T.C. ELEV.	FLOWLINE ELEV.
0+77.90	2.00	4.00	887.79	887.69	887.19
0+87.90	2.00	4.00	887.92	887.82	887.15
0+93.90	2.00	4.00	887.99	887.89	887.06
1+02.23	2.00	4.00	888.10	888.00	887.17
1+08.23	2.00	4.00	888.18	888.08	887.58
5+56	2.00	4.00	895.74	895.64	895.14
5+76	2.00	3.16	896.10	896.05	895.55
5+96	1.33	1.33	896.70	896.84	896.34
6+15.51	0.76	0.76	897.37	897.61	897.11
6+18.51	0.71	0.71	897.42	897.25	897.17
6+26	0.5	0.5	897.60	897.47	897.39
6+36	0.33	0.33	897.79	897.69	897.61
6+43.51	0.21	0.21	897.89	897.81	897.73
6+56	0.00	0.00	898.00		



TYPICAL SECTION (WIDENING) STA. 2+00 TO 6+43.51



PLAN

REVISIONS	DESCRIPTION	DATE
Added Leader		10/22/11
C20	Changes As Shown	10/20/11

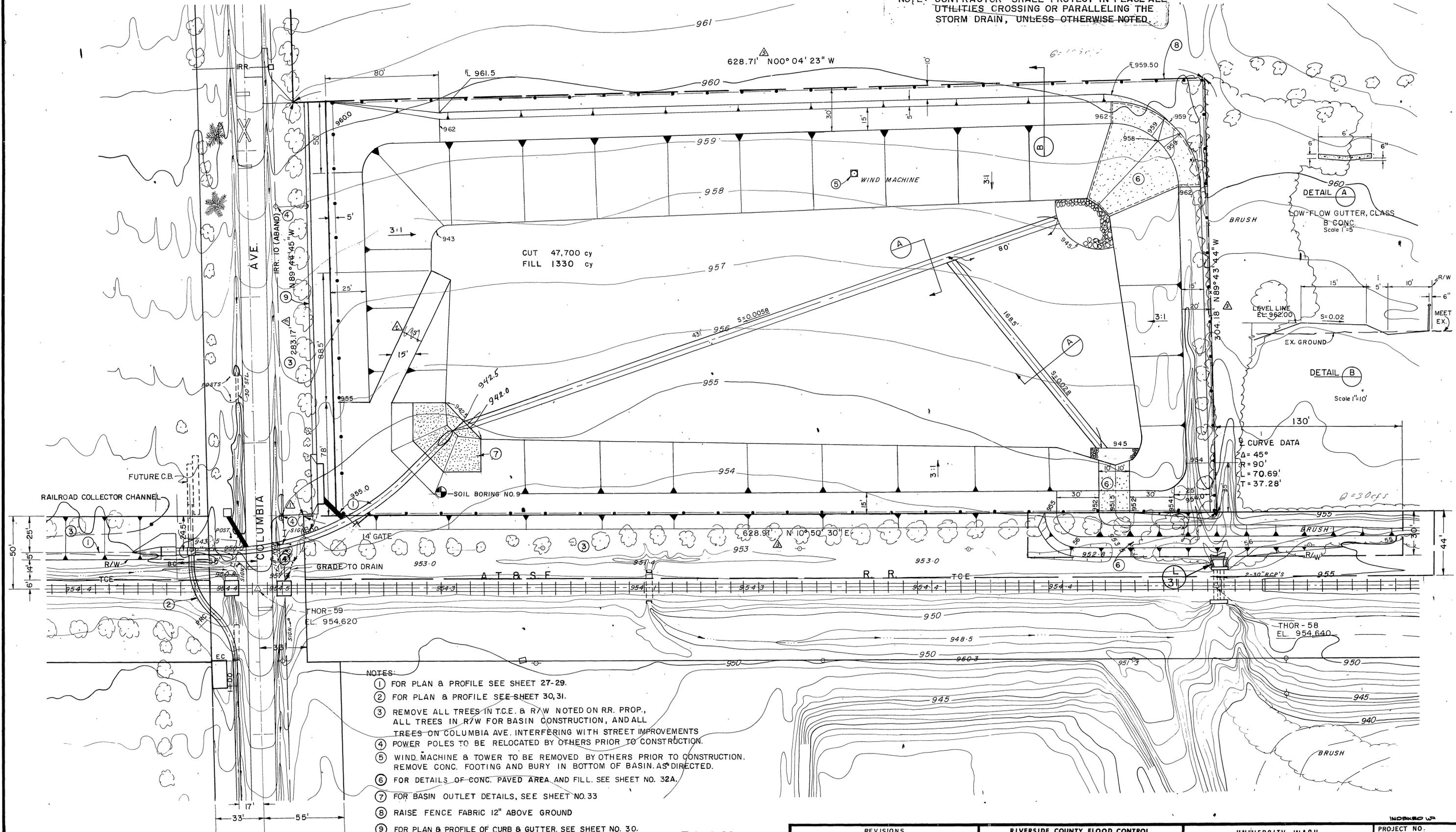
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
 DESIGNED BY: J.L.H.  
 DRAWN BY: S.L.M.  
 DATE DRAWN: 5-79  
 CHECKED BY: [Signature]  
 APPROVED BY: [Signature]  
 CHIEF ENGINEER R.E. NO. 12400  
 DATE: 8/12/11

UNIVERSITY WASH  
 THORNTON STORM DRAIN STREET PLAN & PROFILE  
 MARLBOROUGH AVE.  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

BENCH MARK: SET R/R SPIKE IN P.P. # 17890-J  
 B.M.-14 EL. 953.40  
 PROJECT NO. 1-0-122  
 DRAWING NO. 1-364  
 SHEET NO. 25 OF 62

AS BUILT

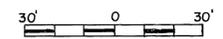
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



CUT 47,700 cy  
FILL 1330 cy

- NOTES:
- 1 FOR PLAN & PROFILE SEE SHEET 27-29.
  - 2 FOR PLAN & PROFILE SEE SHEET 30,31.
  - 3 REMOVE ALL TREES IN T.C.E. & R/W NOTED ON RR. PROP., ALL TREES IN R/W FOR BASIN CONSTRUCTION, AND ALL TREES ON COLUMBIA AVE. INTERFERING WITH STREET IMPROVEMENTS
  - 4 POWER POLES TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.
  - 5 WIND MACHINE & TOWER TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION. REMOVE CONC. FOOTING AND BURY IN BOTTOM OF BASIN AS DIRECTED.
  - 6 FOR DETAILS OF CONC. PAVED AREA AND FILL. SEE SHEET NO. 32A.
  - 7 FOR BASIN OUTLET DETAILS, SEE SHEET NO. 33
  - 8 RAISE FENCE FABRIC 12" ABOVE GROUND
  - 9 FOR PLAN & PROFILE OF CURB & GUTTER. SEE SHEET NO. 30.

PLAN



REVISIONS	
△	Moved sign and power pole
△	Revised dimension on maintenance ramp
△	Added distances & bearings
Ca	Added Elevations
REF.	DESCRIPTION

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: N. J.	APPROVED BY: Kenneth P. Edwards
DRAWN BY: SLM	CHIEF ENGINEER R.E. NO. 12400
DATE DRAWN: 12-78	DATE: 8/13/77
CHECKED BY: N.J.S.	

UNIVERSITY WASH  
THORNTON STORM DRAIN  
COLUMBIA BASIN  
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

PROJECT NO.	1-0-122
DRAWING NO.	1-364
SHEET NO.	26 OF 62

AS BUILT

0+00

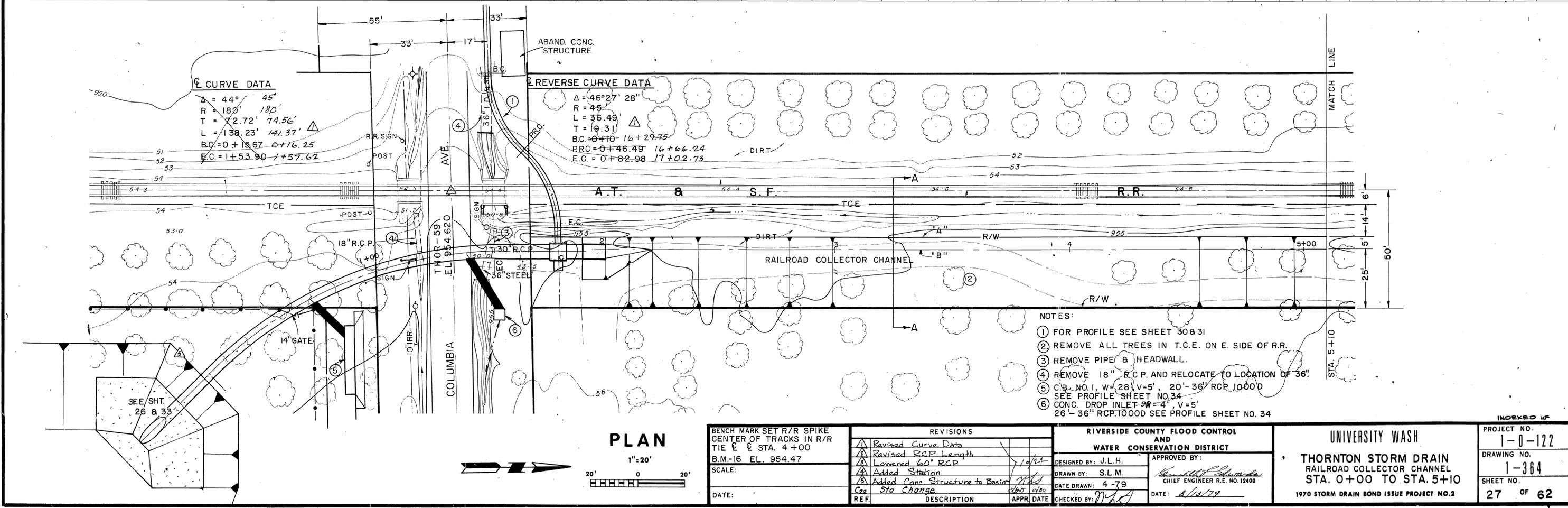
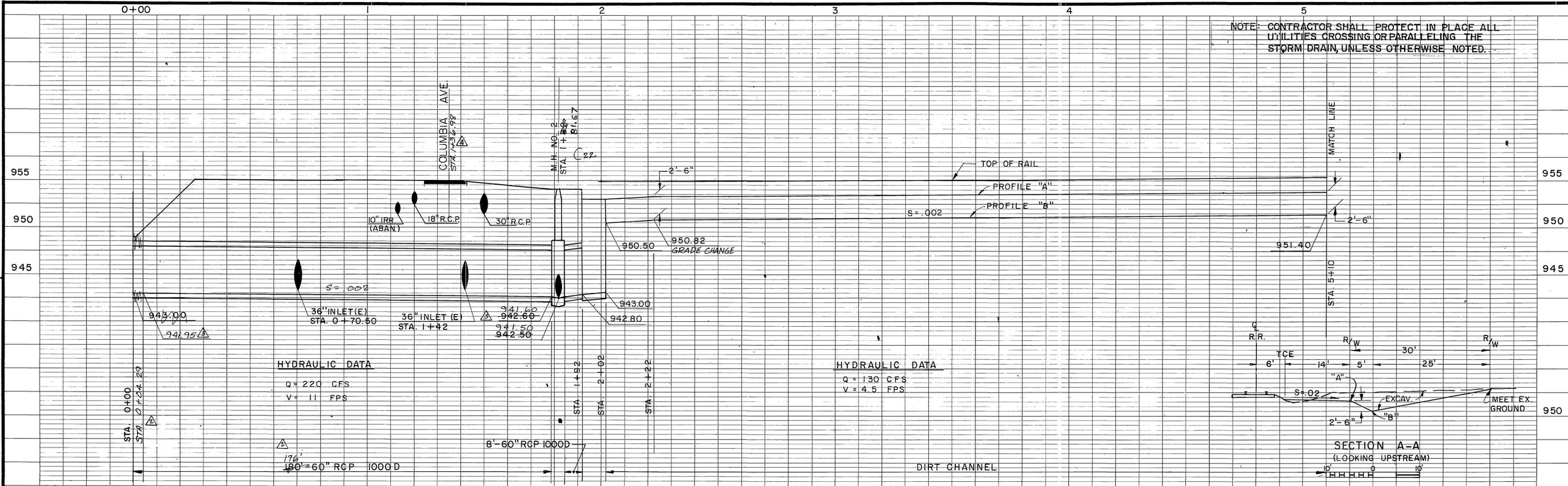
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3

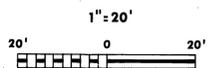
4

5

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN, UNLESS OTHERWISE NOTED.



PLAN



- NOTES:
- FOR PROFILE SEE SHEET 30&31
  - REMOVE ALL TREES IN T.C.E. ON E. SIDE OF R.R.
  - REMOVE PIPE & HEADWALL.
  - REMOVE 18" R.C.P. AND RELOCATE TO LOCATION OF 36"
  - C.B. NO. 1, W=28", V=5', 20'-36" RCP 1000D SEE PROFILE SHEET NO. 34
  - CONC. DROP INLET 4" x 4", V=5' 26'-36" RCP 1000D SEE PROFILE SHEET NO. 34

BENCH MARK SET R/R SPIKE  
 CENTER OF TRACKS IN R/R  
 TIE @ STA. 4+00  
 B.M.-16 EL. 954.47  
 SCALE:  
 DATE:

REVISIONS	
△	Revised Curve Data
△	Revised RCP Length
△	Lowered 60" RCP
△	Added Station
△	Added Conc. Structure to Basin
△	Sta Change
REF.	DESCRIPTION

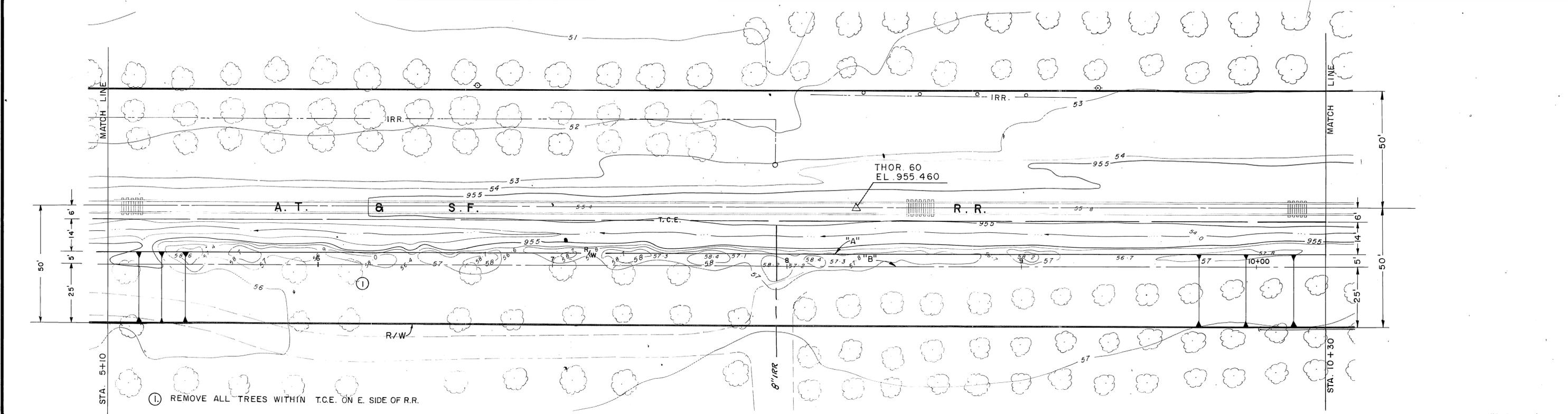
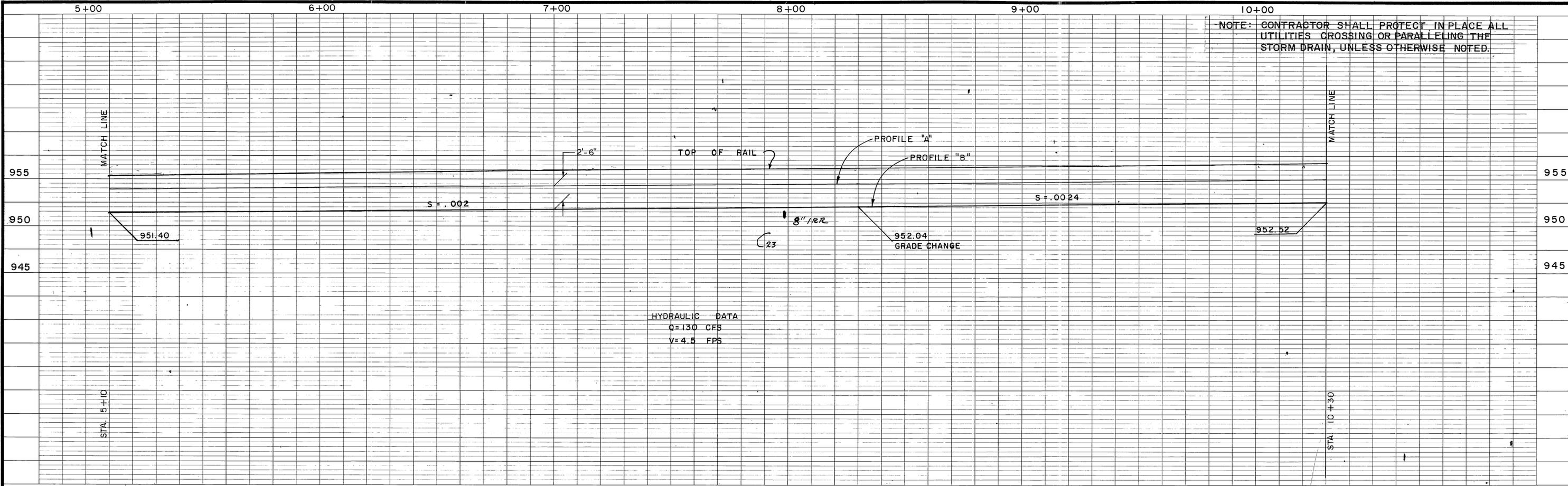
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
 DESIGNED BY: J.L.H.  
 DRAWN BY: S.L.M.  
 DATE DRAWN: 4-79  
 CHECKED BY: [Signature]

UNIVERSITY WASH  
 THORNTON STORM DRAIN  
 RAILROAD COLLECTOR CHANNEL  
 STA. 0+00 TO STA. 5+10  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

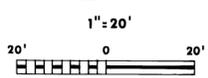
INDEXED UP  
 PROJECT NO. 1-0-122  
 DRAWING NO. 1-364  
 SHEET NO. 27 OF 62

AS BUILT

D-428



**PLAN**



BENCH MARK	REVISIONS
SCALE:	
DATE:	

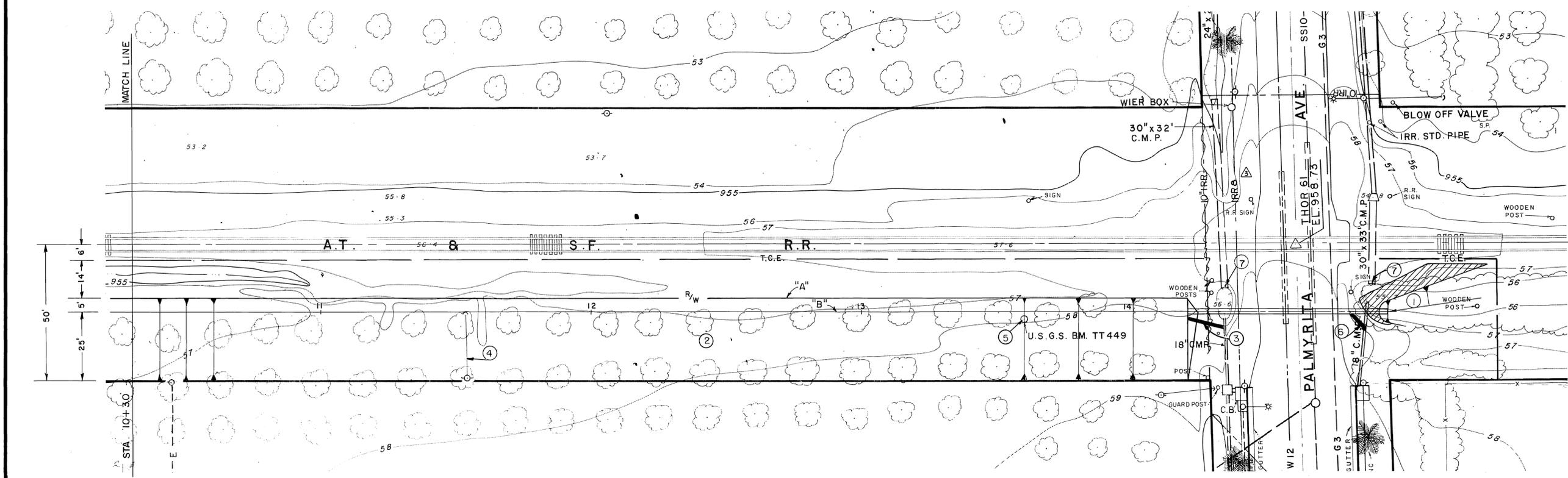
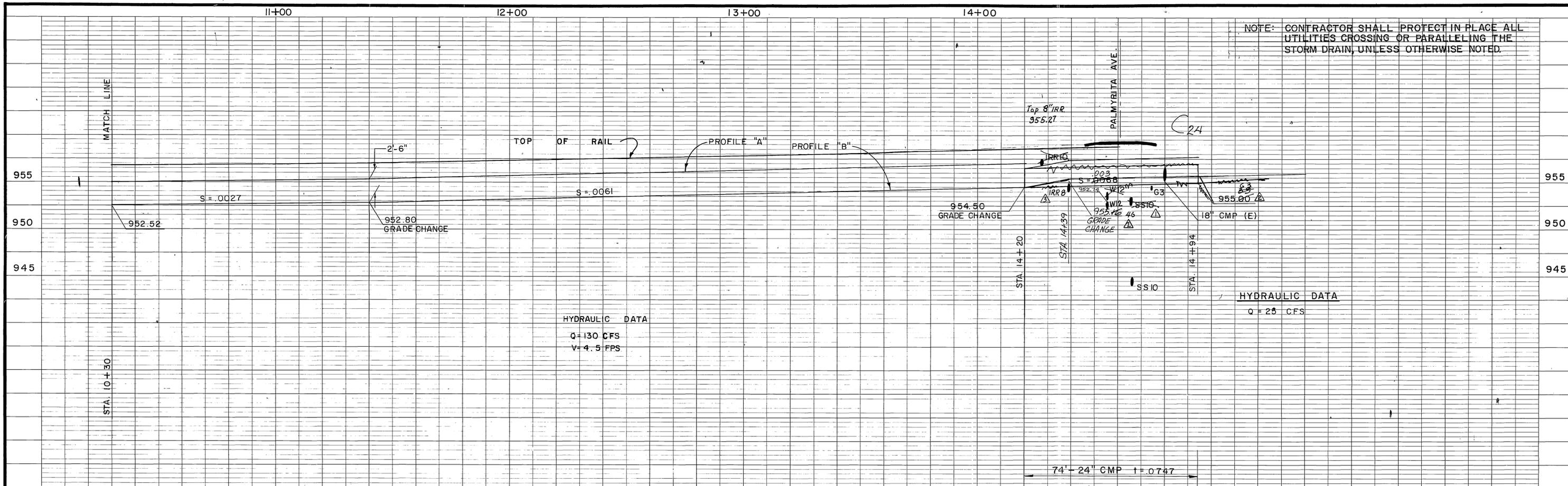
C23	Added 8" IRR	10/80
REF.	DESCRIPTION	APPR. DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: J.L.H.	APPROVED BY: <i>Kenneth Edwards</i>
DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO. 12400
DATE DRAWN: 4-79	DATE: 8/12/79
CHECKED BY: <i>M.L.A.</i>	

UNIVERSITY WASH  
 THORNTON STORM DRAIN  
 RAILROAD COLLECTOR CHANNEL  
 STA. 5+10 TO STA. 10+30  
 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

INDEXED UP
PROJECT NO. 1-0-122
DRAWING NO. 1-364
SHEET NO. 28 OF 62

AS BUILT



- NOTE:
- ① GRADE TO DRAIN AS SHOWN AND FILL CROSS HATCHED AREA TO EL. 957.50 AS DIRECTED.
  - ② REMOVE ALL TREES WITHIN T.C.E. ON E. SIDE OF R.R.
  - ③ REMOVE 8' OF 18" C.M.P. FOR REUSE AND INSTALL A TOT. OF 16' OF 18" C.M.P. 1=0598" AS SHOWN. JOIN TO EXISTING WITH 60° ELBOW.
  - ④ ANCHOR TO BE RELOCATED BY OTHERS PRIOR TO CONST.
  - ⑤ B.M. TO BE RELOCATED BY DISTRICT SURVEY CREW.
  - ⑥ REMOVE 6' OF 18" C.M.P. FOR REUSE AND INSTALL 6' AS SHOWN. 1=0598" JOIN TO EXISTING WITH 45° ELBOW.
  - ⑦ DO NOT BLOCK CULVERTS.

**PLAN**



BENCH MARK SET R/R SPIKE IN PP # 22835 J W. OF Q STA. 12+00 ±.

SCALE:

DATE:

REVISIONS	
△	Corrected SS10
△	Raised pipe to clear irr
△	Corrected location of W12
△	Corrected location of W12
C24	Changed Slope to Clear 6" Irr
REF.	

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: J.L.H.

APPROVED BY: *[Signature]*

CHIEF ENGINEER R.E. NO. 12400

DATE: 5/13/77

UNIVERSITY WASH

THORNTON STORM DRAIN RAILROAD COLLECTOR CHANNEL STA. 10+30 TO STA. 14+94 1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

INDEXED UP

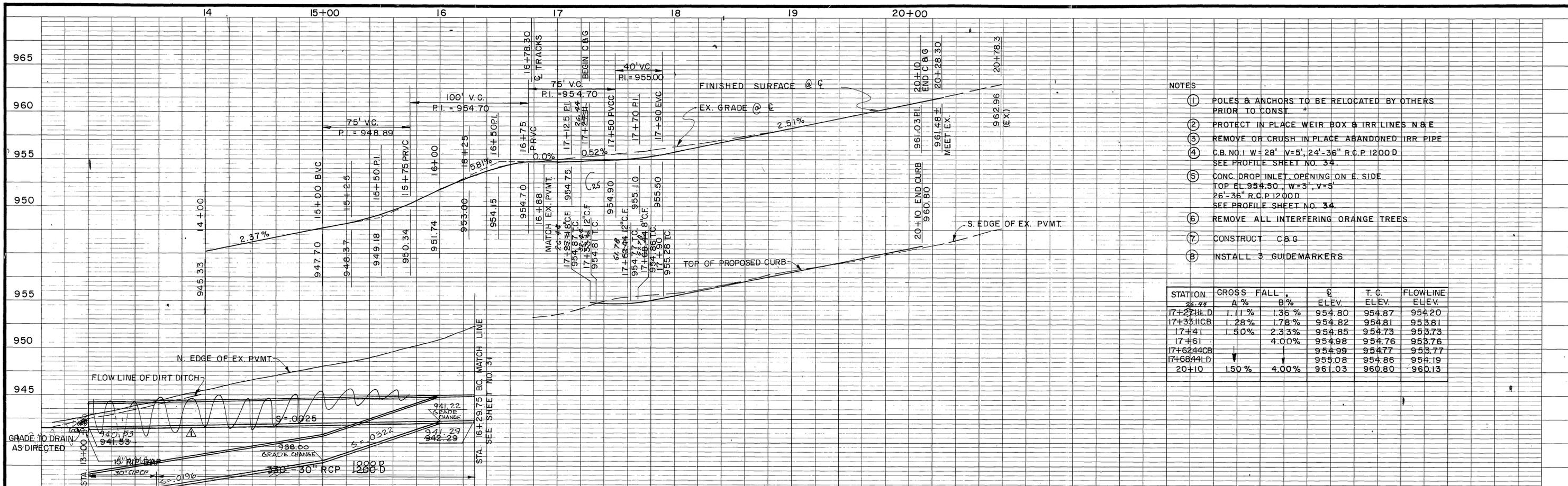
PROJECT NO. 1-0-122

DRAWING NO. 1-364

SHEET NO. 29 OF 62

AS BUILT

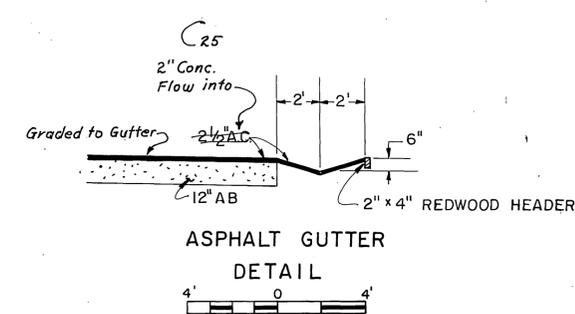
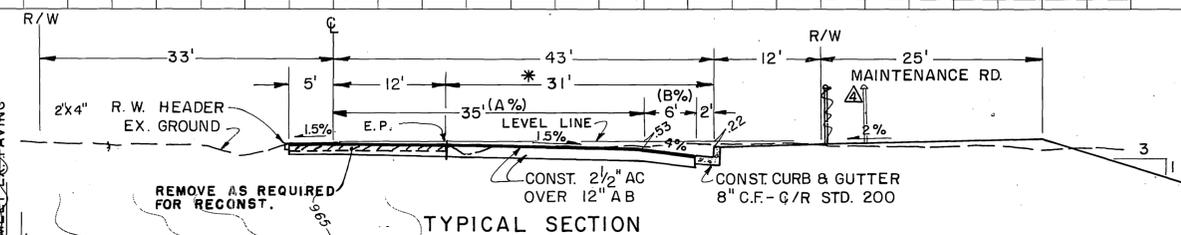
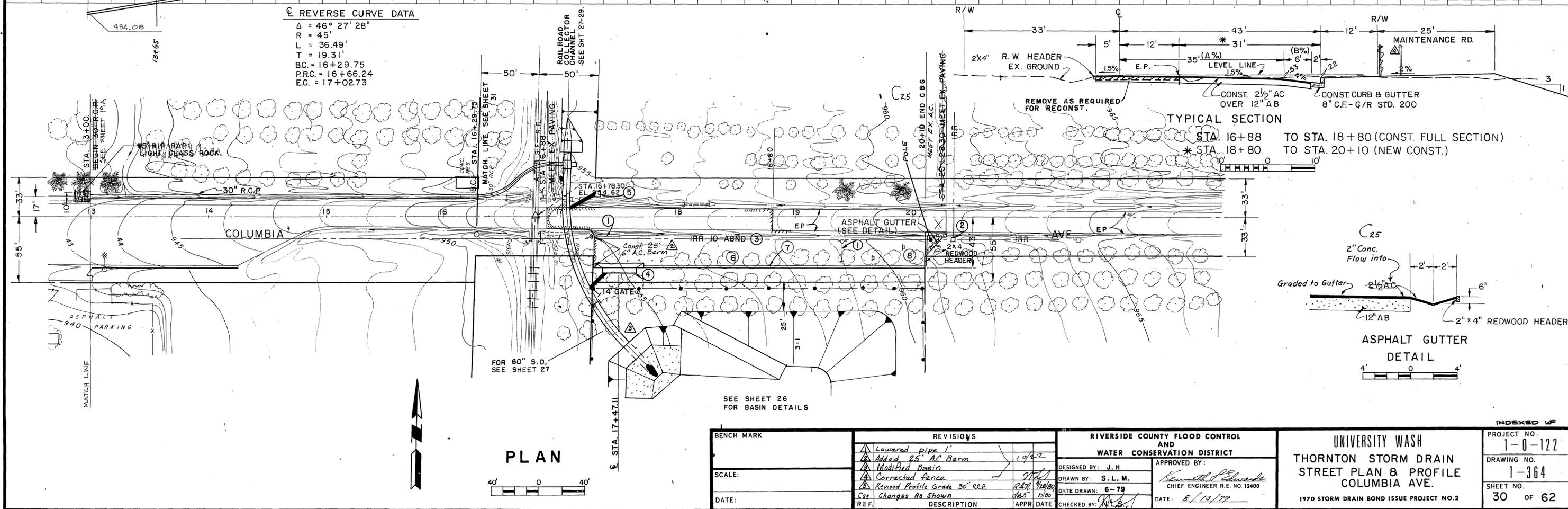
D.425



- NOTES
- POLES & ANCHORS TO BE RELOCATED BY OTHERS PRIOR TO CONST.
  - PROTECT IN PLACE WEIR BOX & IRR LINES N & E
  - REMOVE OR CRUSH IN PLACE ABANDONED IRR PIPE
  - C.B. NO. 1 W=28' V=5', 24'-36" R.C.P. 1200D SEE PROFILE SHEET NO. 34.
  - CONC. DROP INLET, OPENING ON E. SIDE TOP EL. 954.50, W=3', V=5' 26'-36" R.C.P. 1200D SEE PROFILE SHEET NO. 34.
  - REMOVE ALL INTERFERING ORANGE TREES
  - CONSTRUCT C&G
  - INSTALL 3 GUIDEMARKERS

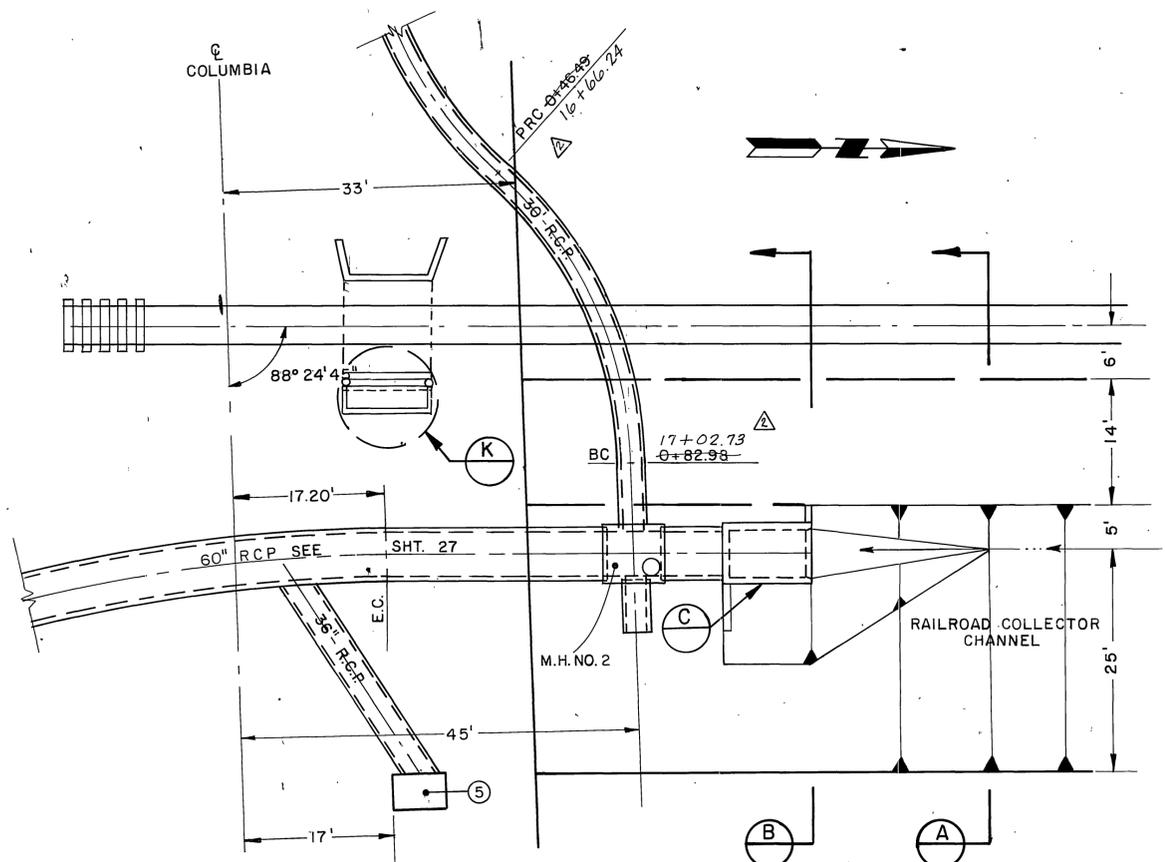
STATION	CROSS FALL	T.C. ELEV.	FLOWLINE ELEV.
17+27.77	A 1.11% B 1.36%	954.80	954.87
17+35.11	A 1.28% B 1.78%	954.82	954.81
17+41	A 1.50% B 2.33%	954.85	954.73
17+61	A 4.00% B 4.00%	954.98	954.76
17+62.44		954.99	954.77
17+68.44		955.08	954.86
20+10	A 1.50% B 4.00%	961.03	960.80

REVERSE CURVE DATA  
 $\Delta = 46^\circ 27' 28''$   
 $R = 45'$   
 $L = 36.49'$   
 $T = 19.31'$   
 $BC = 16+29.75$   
 $PRC = 16+66.24$   
 $EC = 17+02.73$

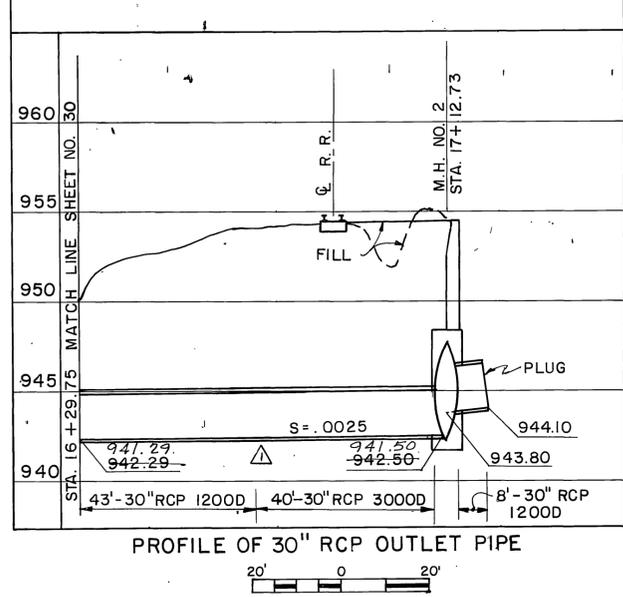


BENCH MARK	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		INDEXED W/P
SCALE:	<ul style="list-style-type: none"> <li>Lowered pipe 1'</li> <li>Added 25" A.C. Barm</li> <li>Modified Basin</li> <li>Corrected fence</li> <li>Revised Profile Grade 30" R.C.P.</li> <li>Changes As Shown</li> </ul>	DESIGNED BY: J. H.	APPROVED BY: Kenneth P. Blum	PROJECT NO. 1-0-122
DATE:	APPR. DATE	DRAWN BY: S. L. M.	CHIEF ENGINEER R.E. NO. 12400	DRAWING NO. 1-364
		DATE DRAWN: 6-79	DATE: 8/13/79	SHEET NO. 30 OF 62
		CHECKED BY: [Signature]		1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

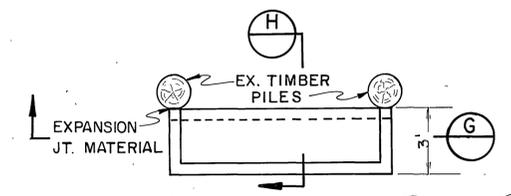
AS BUILT



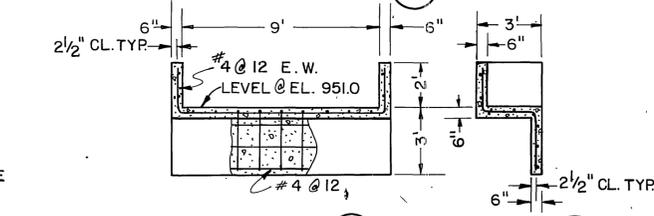
PLAN VIEW  
INLET & OUTLET PIPES AT N.W. CORNER OF COLUMBIA BASIN



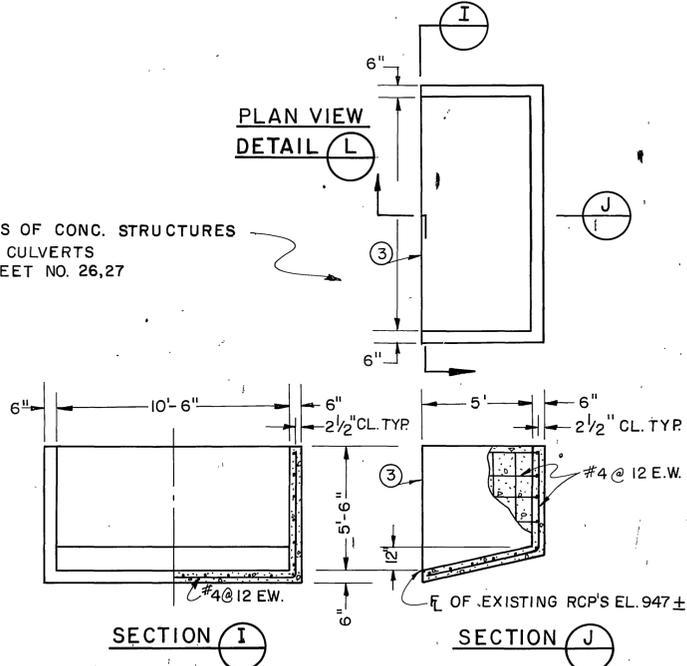
PROFILE OF 30" RCP OUTLET PIPE



PLAN VIEW DETAIL K



SECTION G SECTION H

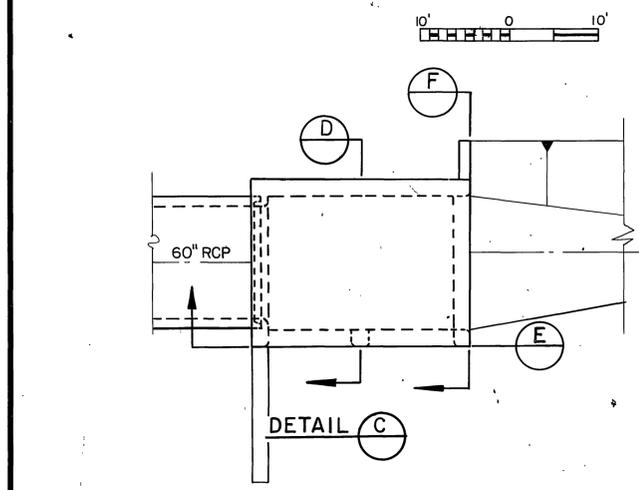


PLAN VIEW  
DETAIL L

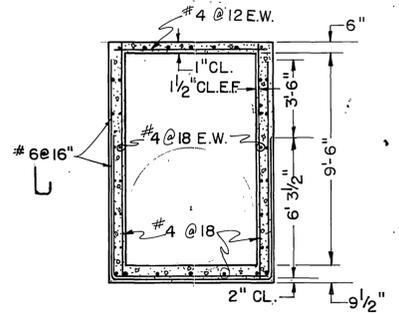
SECTION I SECTION J

DETAILS OF CONC. STRUCTURES  
@ R.R. CULVERTS  
SEE SHEET NO. 26,27

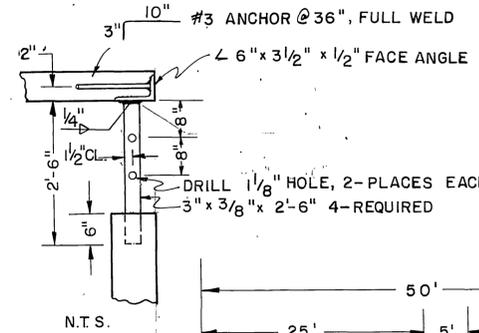
- NOTES:
1. ALL REINFORCED CONCRETE SHALL BE CLASS "A".
  2. 3/4" CHAMFER ON ALL EXPOSED EDGES OF CONCRETE.
  3. PLACE 1/2" EXPANSION JOINT MATERIAL BETWEEN RCP HEADWALL & CONC. STRUCTURE.
  4. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED PRIOR TO ASSEMBLY. WELDING, MACHINING AND DRILLING SHALL BE DONE BEFORE GALVANIZING. ALL DIMENSIONS ARE FINISHED DIMENSIONS AND INCLUDE GALVANIZING.
  5. CONC. DROP INLET, SEE SHT. 34



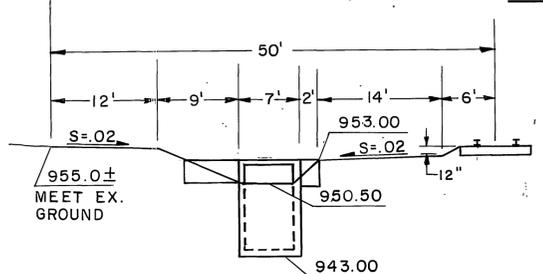
DETAIL C



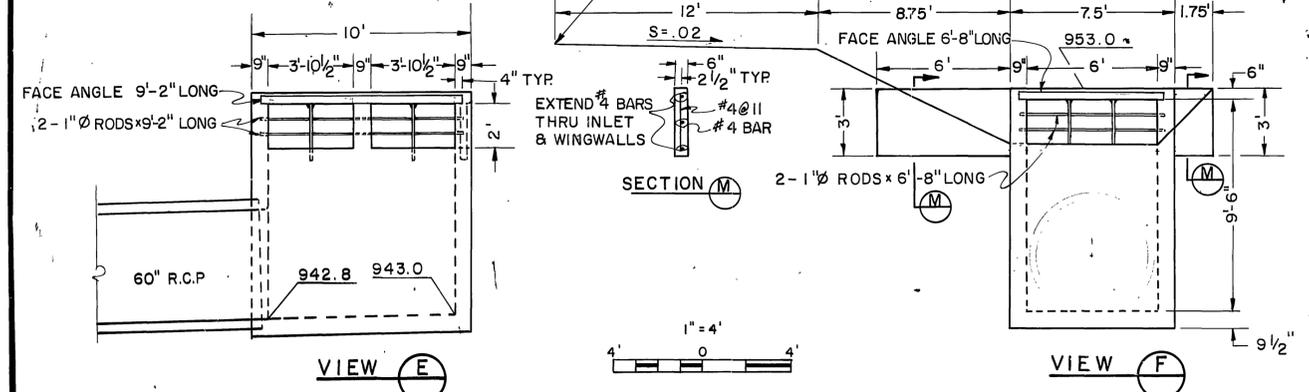
SECTION D



SECTION A



SECTION B



VIEW E

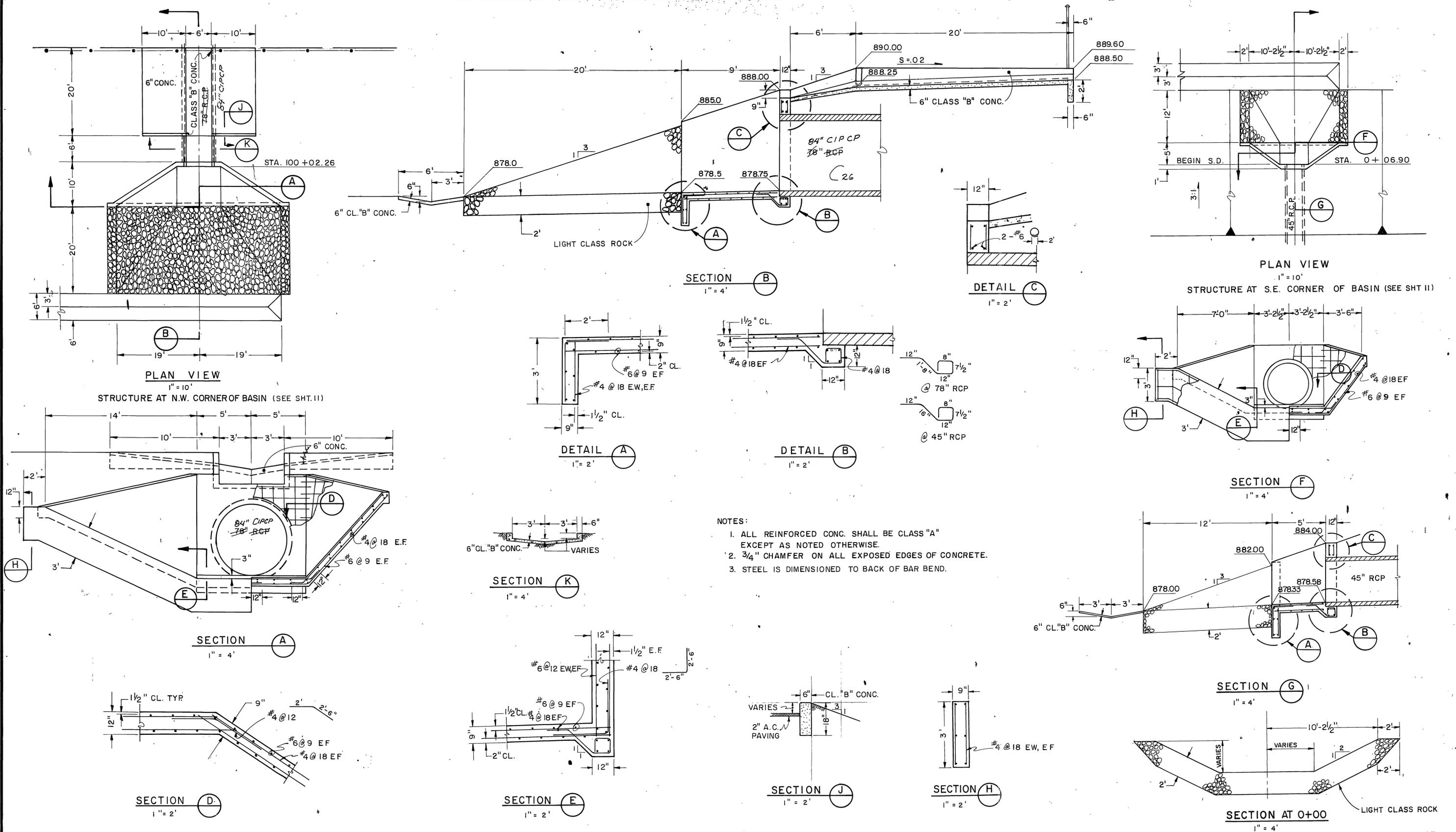
VIEW F

REVISIONS	
Δ	Revised elevations on 30" RCP Profile 10/2/79
Δ	Revised Sta. at BC & PRC 11/1/79
	No Change 5/25 10/20
REF.	DESCRIPTION

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: J.H.	APPROVED BY: <i>[Signature]</i>
DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO. 12400
DATE DRAWN: 6-79	DATE: 8/13/79
CHECKED BY: <i>[Signature]</i>	

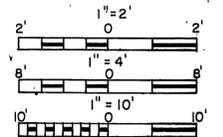
UNIVERSITY WASH  
THORNTON STORM DRAIN  
COLUMBIA BASIN &  
RAILROAD COLLECTOR CHANNEL  
DETAILS  
.1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

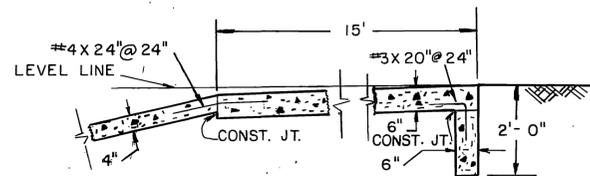
INDEXED W/P	
PROJECT NO.	1-0-122
DRAWING NO.	1-364
SHEET NO.	31 OF 62



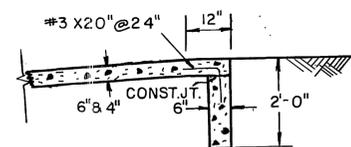
- NOTES:
1. ALL REINFORCED CONC. SHALL BE CLASS "A" EXCEPT AS NOTED OTHERWISE.
  2. 3/4" CHAMFER ON ALL EXPOSED EDGES OF CONCRETE.
  3. STEEL IS DIMENSIONED TO BACK OF BAR BEND.

REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		UNIVERSITY WASH THORNTON STORM DRAIN DETAILS		PROJECT NO. 1-0-122	
		DESIGNED BY: J.L.H. & HR	APPROVED BY: <i>[Signature]</i>	DRAWING NO. 1-364		SHEET NO. 32 OF 62	
		DRAWN BY: SLM	CHIEF ENGINEER R.E. NO. 12400	STRUCTURES IN MARLBOROUGH BASIN		1970 STORM DRAIN BOND ISSUE PROJECT NO. 2	
		DATE DRAWN: 7-79	DATE: 8/13/79				
			CHECKED BY: N.S.A.				

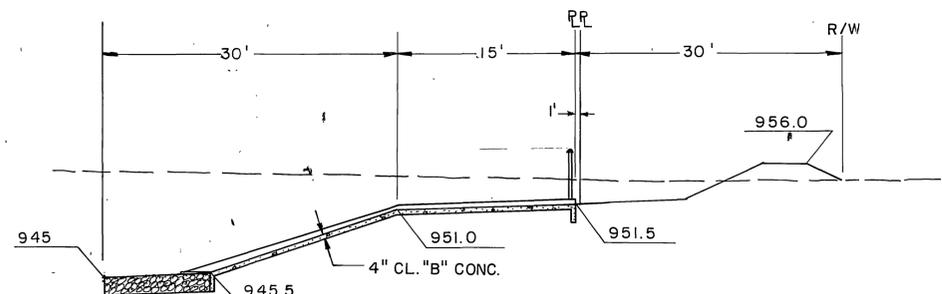
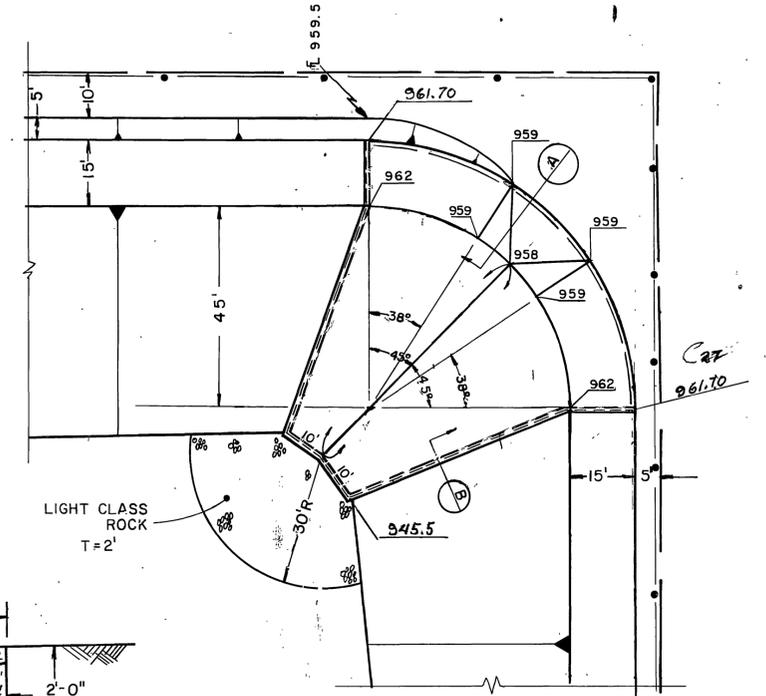




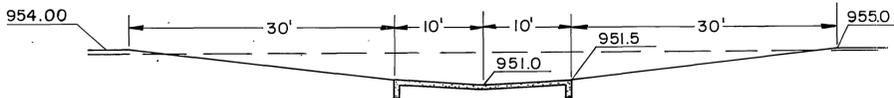
SECTION A



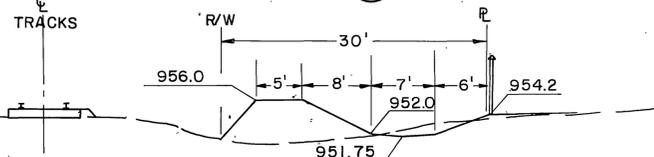
SECTION B



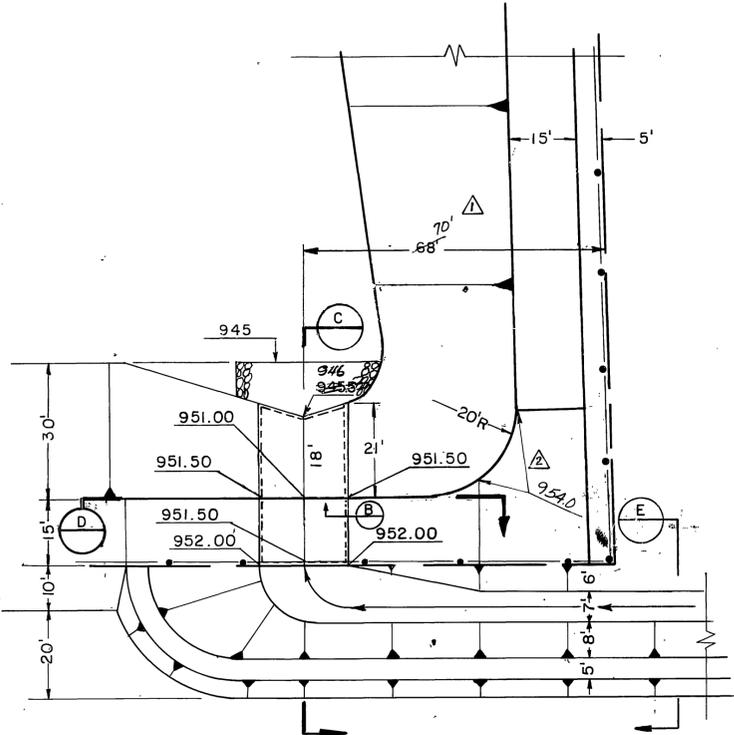
SECTION C



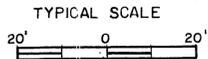
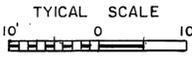
SECTION D



SECTION E



PLAN VIEW

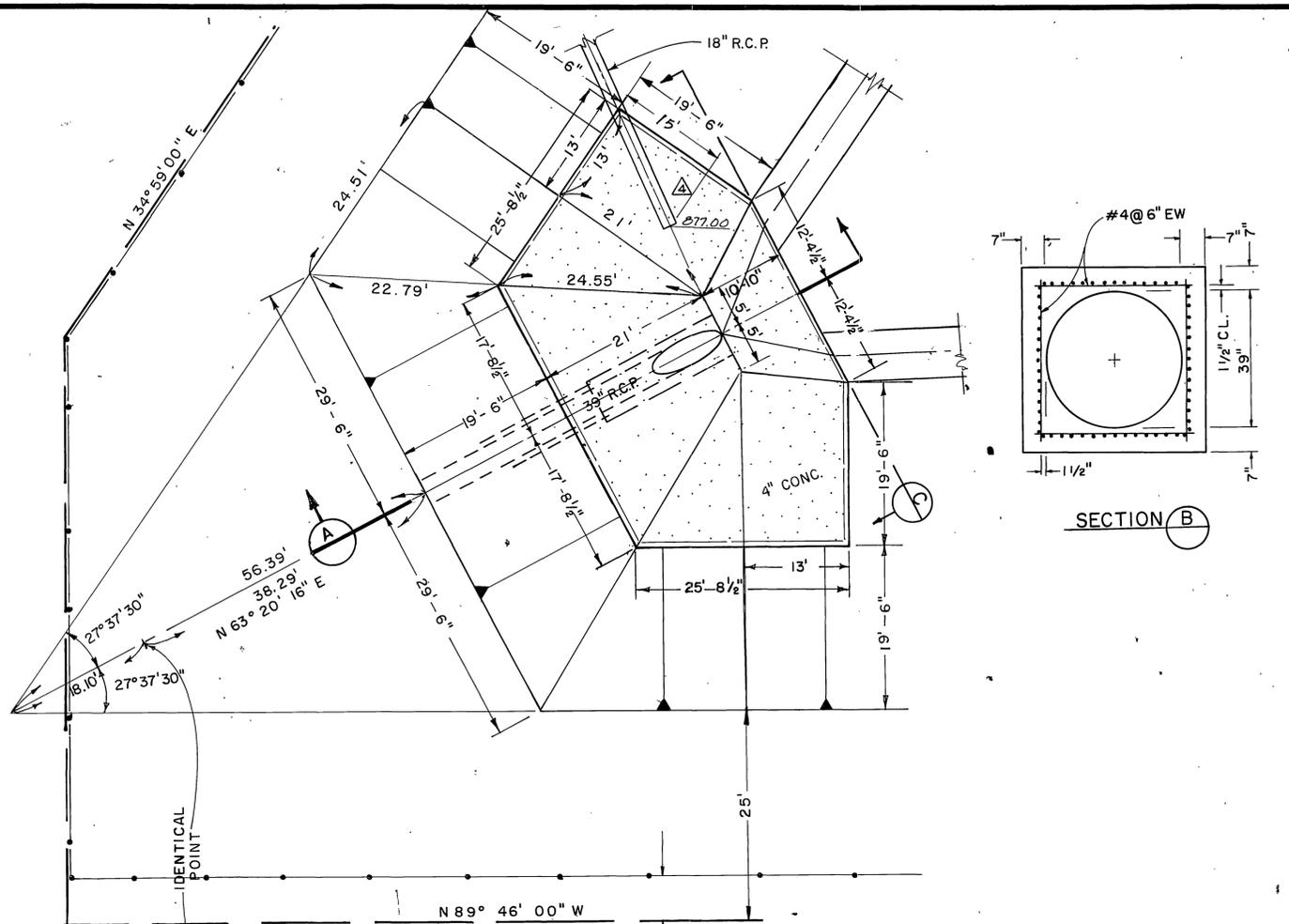


REVISIONS	
△	Changed distance to "V" ditch
△	Added elevation to R @ top of slope
C27	EL. Changes
REF.	DESCRIPTION

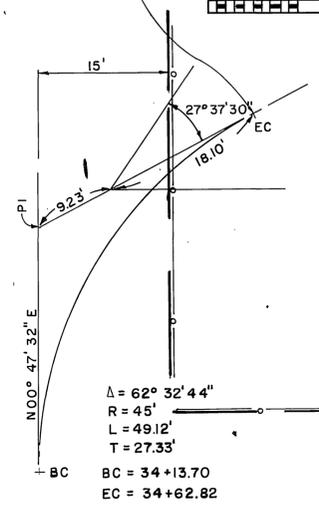
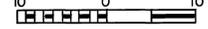
DESIGNED BY: J.H.		APPROVED BY:	
DRAWN BY: S.L.M.		Chief Engineer R.E. No. 12400	
DATE DRAWN: 8/13/79		DATE: 8/13/79	
CHECKED BY: [Signature]		DATE: [Signature]	

**UNIVERSITY WASH**  
**THORNTON STORM DRAIN**  
**COLUMBIA BASIN DETAILS**  
 1970 STORM DRAIN BOND ISSUE PROJECT NO.2

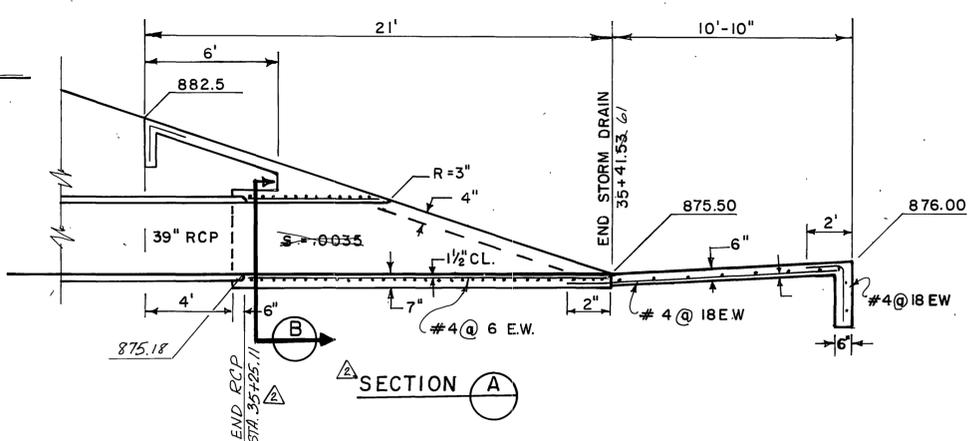
PROJECT NO.	1-0-122
DRAWING NO.	1-364
SHEET NO.	32 A OF 62



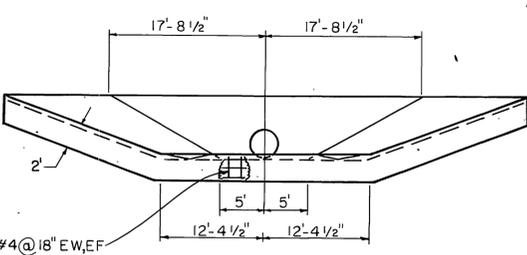
PLAN VIEW  
OUTLET STRUC. FOR MARLBOROUGH BASIN  
REFER TO BASIN PLAN SHEET NO. II



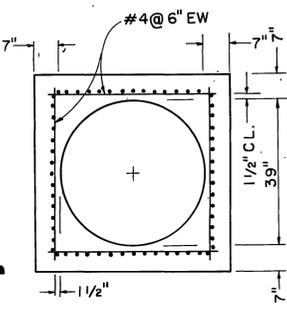
$\Delta = 62^\circ 32' 44''$   
 $R = 45'$   
 $L = 49.12'$   
 $T = 27.33'$   
 $BC = 34 + 13.70$   
 $EC = 34 + 62.82$



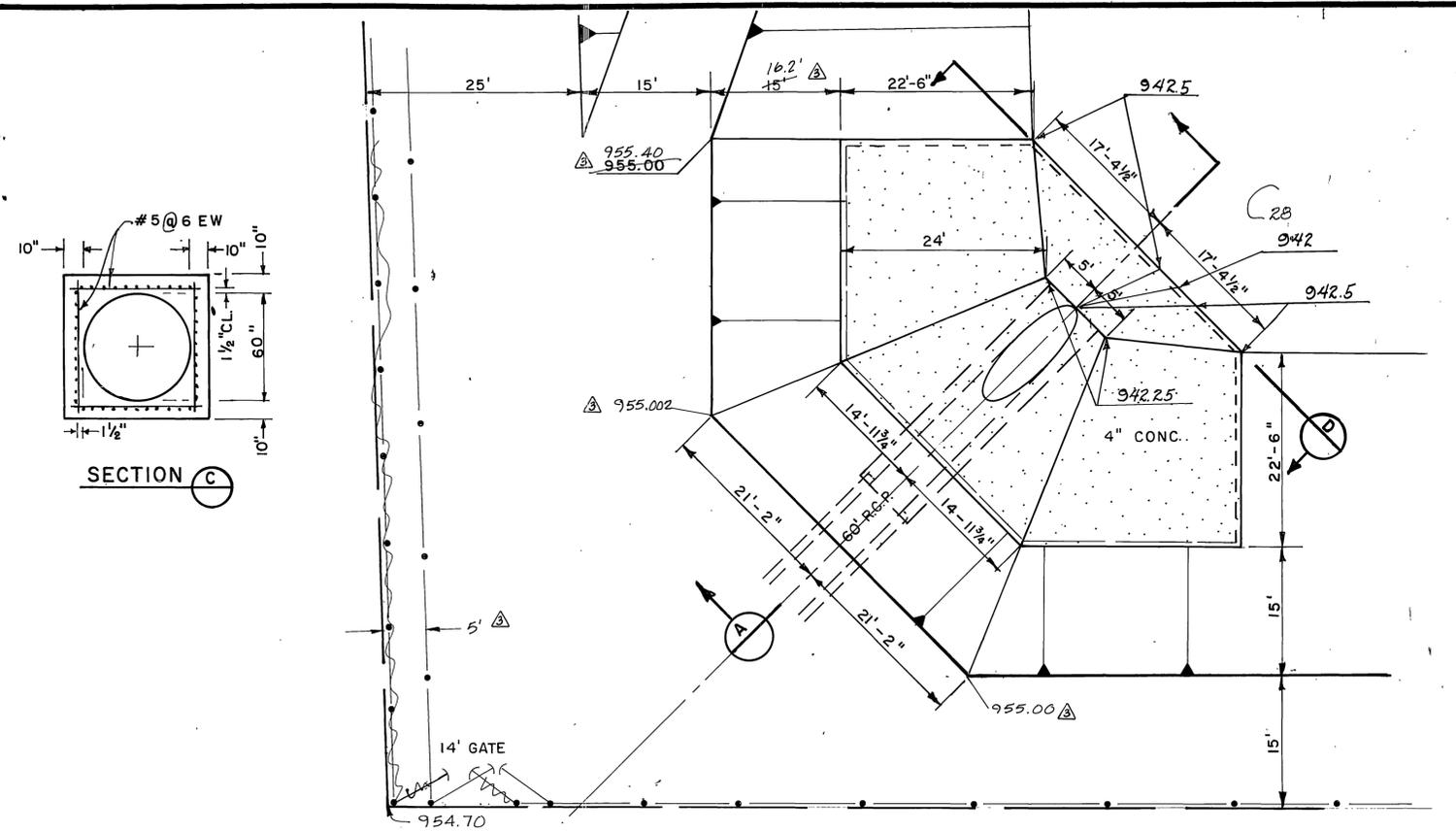
SECTION A



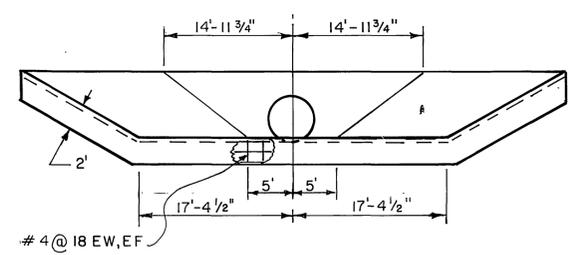
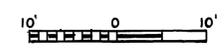
SECTION C



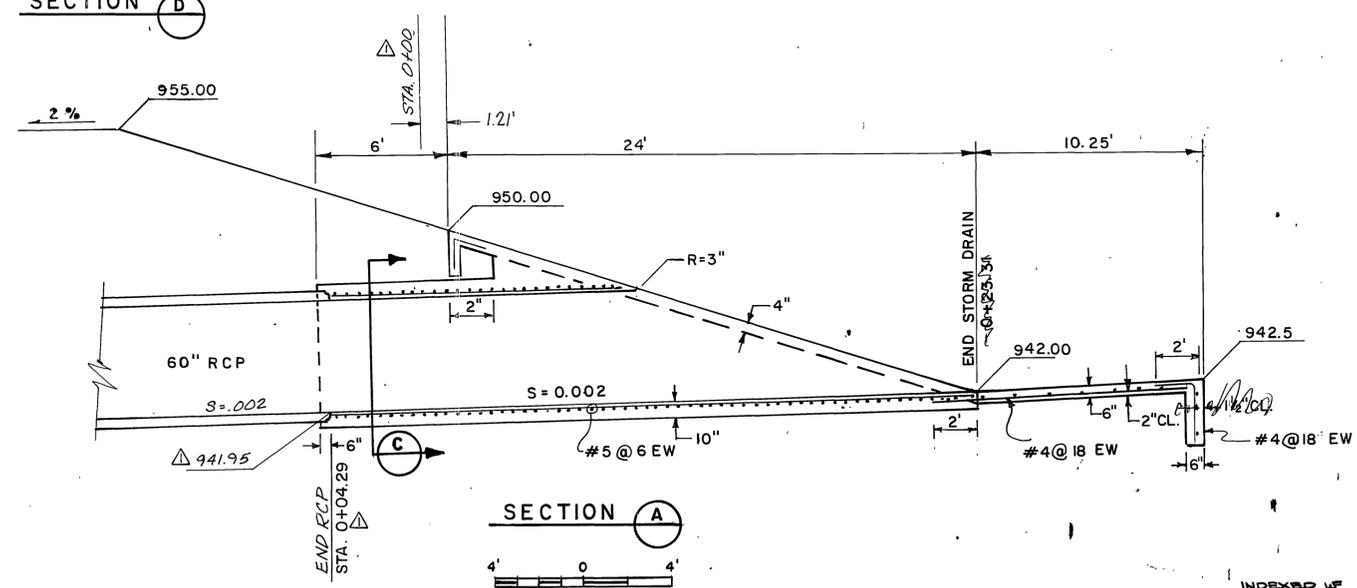
SECTION B



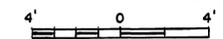
PLAN VIEW  
COLUMBIA BASIN OUTLET



SECTION D



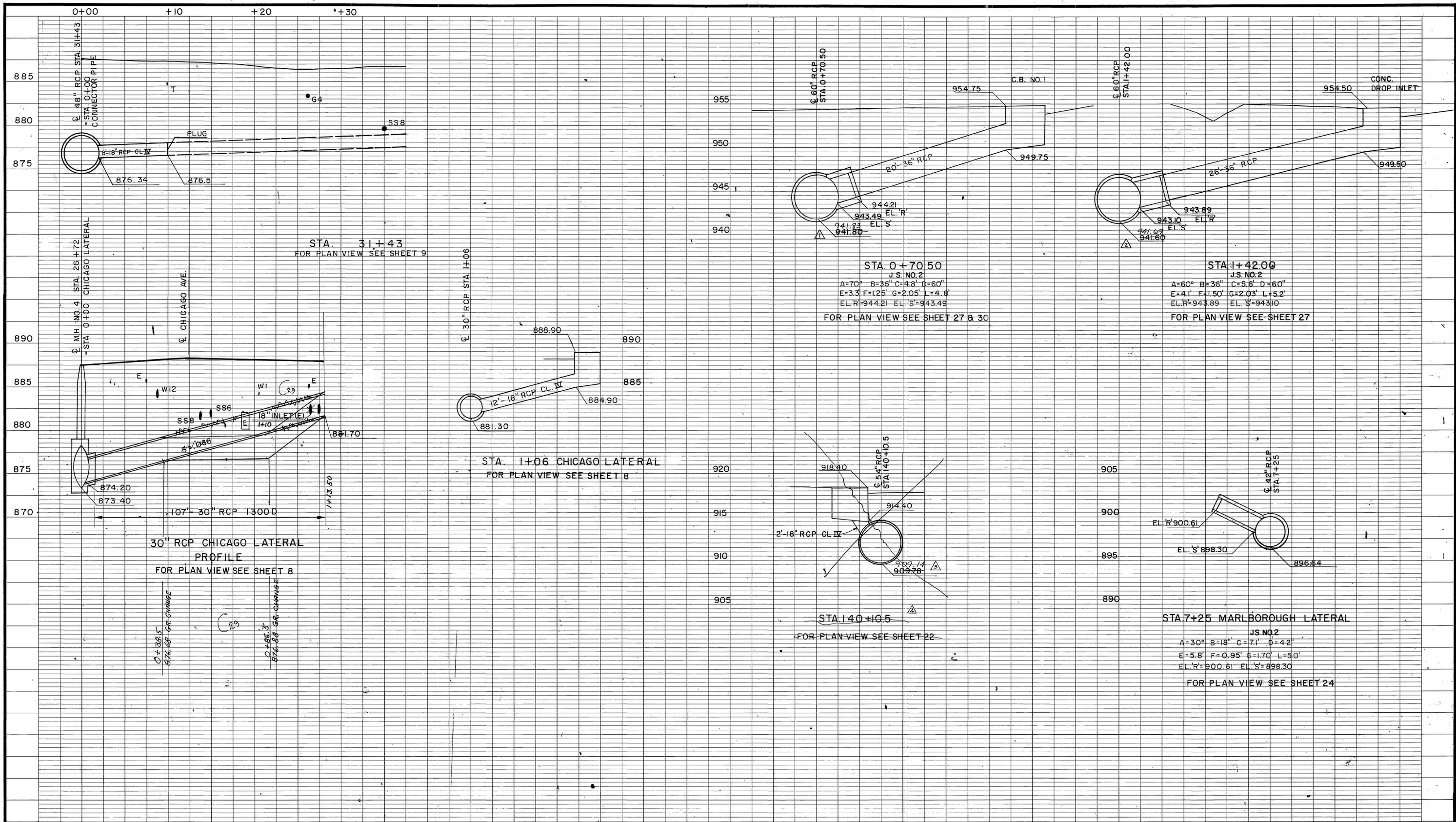
SECTION A



REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		UNIVERSITY WASH THORNTON STORM DRAIN BASIN OUTLET DETAIL		PROJECT NO. 1-0-122	
1	Added stationing sloped to Sta. A	DESIGNED BY:	N. J.	APPROVED BY:	<i>[Signature]</i>	DRAWING NO.	1-364
2	Added label & Sta.	DRAWN BY:	K.R.B.	CHIEF ENGINEER R.E. NO. 12400		SHEET NO.	33 OF 62
3	Corrected fence & data	DATE DRAWN:	8/13/79	DATE:	8/12/79		
4	Added dimension & elevation to R.C.P.P.	CHECKED BY:	<i>[Signature]</i>				
Case	51. Changes	APPR. DATE	10/60				
REF.	DESCRIPTION						

AS BUILT

D-425



STA. 3+43  
FOR PLAN VIEW SEE SHEET 9

30" RCP CHICAGO LATERAL  
PROFILE  
FOR PLAN VIEW SEE SHEET 8

STA. 1+06 CHICAGO LATERAL  
FOR PLAN VIEW SEE SHEET 8

STA. 0+70.50  
J.S. NO. 2  
A=70° B=36" C=4.8' D=60"  
E=3.3' F=1.25' G=2.05' L=4.8'  
EL. R'=944.21 EL. S'=943.49  
FOR PLAN VIEW SEE SHEET 27 & 30

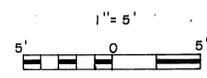
STA. 1+42.00  
J.S. NO. 2  
A=60° B=36" C=5.6' D=60"  
E=4.1' F=1.50' G=2.03' L=5.2'  
EL. R'=943.89 EL. S'=943.10  
FOR PLAN VIEW SEE SHEET 27

STA. 140+10.5  
FOR PLAN VIEW SEE SHEET 22

STA. 7+25 MARLBOROUGH LATERAL  
J.S. NO. 2  
A=30° B=18" C=7.1' D=42"  
E=5.8' F=0.95' G=1.70' L=5.0'  
EL. R'=900.61 EL. S'=898.30  
FOR PLAN VIEW SEE SHEET 24

C+388.5  
876.62 GR. CHANGE

C+386.5  
876.88 GR. CHANGE



REVISIONS	
△	Changed M.L. @ Sta. 0+70.50
△	Changed M.L. @ Sta. 1+42.00
△	Changed M.L. @ Sta. 140+10.5
△	Detailed Profile @ Sta. 140+10.5

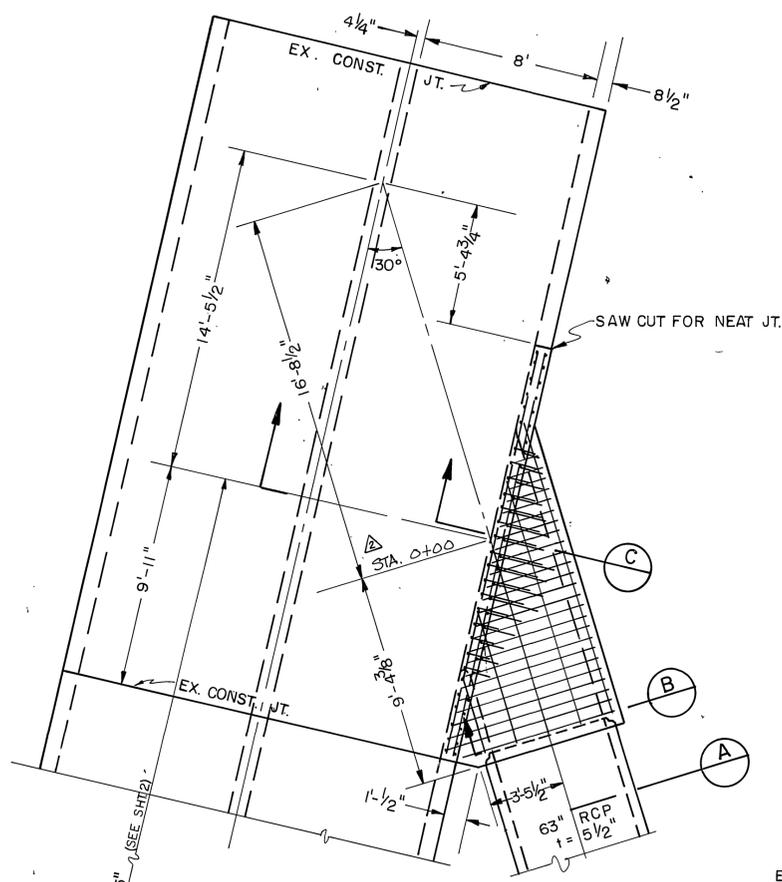
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: J.H.	APPROVED BY: <i>Kenneth P. Edwards</i>
DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO. 12406
DATE DRAWN: 6-79	DATE: 8/13/79
CHECKED BY: <i>M.D.</i>	

UNIVERSITY WASH  
THORNTON STORM DRAIN  
CONNECTOR PIPE PROFILES  
1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

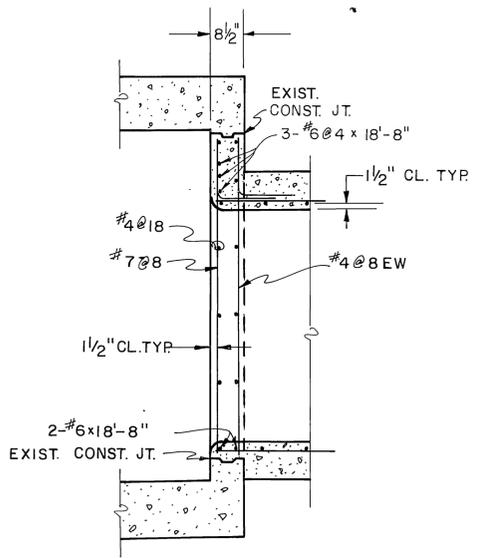
PROJECT NO. 1-0-12.2
DRAWING NO. 1-364
SHEET NO. 34 OF 62

AS BUILT

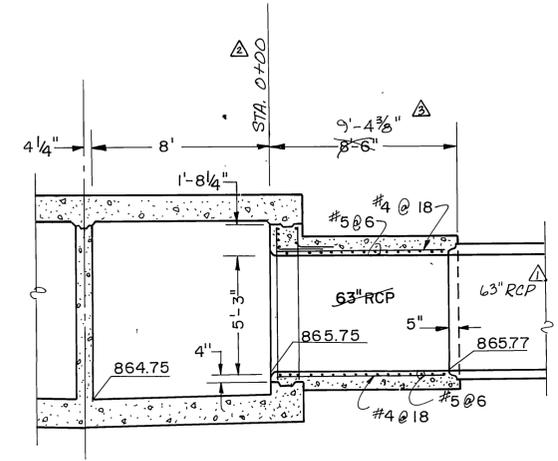
D-425



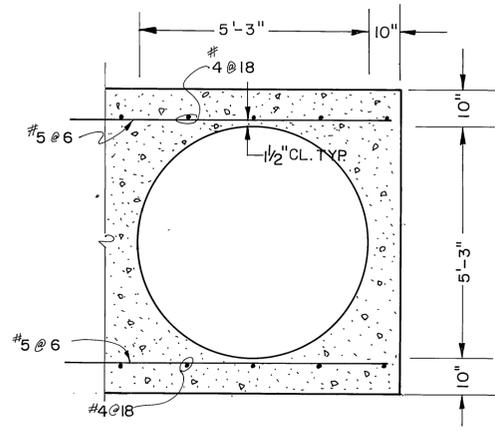
**PLAN VIEW**  
 JUNCTION WITH DBL. 8' X 8' RCB  
 SEE SHEET NO. 2 FOR OVERALL VIEW



**SECTION C**



**SECTION A**



**SECTION B**

- NOTES**
1. REMOVE 19' OF SIDE WALL FROM BOTTOM SLAB JOINT TO TOP SLAB JOINT AS SHOWN. PLACE 1/2" EXPANSION JOINT MATERIAL @ VERTICAL JOINTS & LEAVE 24" OF EXISTING STEEL EXPOSED & IMBED IN NEW CONST.
  2. VERTICAL WALL STEEL SHALL BE CUT IN CENTER OF OPENING & BENT INTO TOP & BOTTOM OF JUNCTION STRUCTURE AS SHOWN.
  3. CONC. SHALL BE CLASS "A"
  4. REINFORCING STEEL IN EX. RCB NOT SHOWN.

REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
△	Corrected RCP label	DESIGNED BY: J.H.	APPROVED BY: <i>Kenneth Edwards</i>
△	Added Stationing	DRAWN BY: S.L.M.	CHIEF ENGINEER R.E. NO. 12400
△	Corrected dimension	DATE DRAWN: 6-79	DATE: 8/13/79
	No Change	CHECKED BY: <i>NSA</i>	
REF.	DESCRIPTION	APPR. DATE	

**UNIVERSITY WASH**  
**THORNTON STORM DRAIN**  
 JUNCTION WITH STATE R.C.B.  
**DETAILS**

1970 STORM DRAIN BOND ISSUE PROJECT NO. 2

INDEXED WF  
 PROJECT NO. 1-0-122  
 DRAWING NO. 1-364  
 SHEET NO. 35 OF 62

AS BUILT

D-425