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RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
HYDROLOGY REPORT

PREPARED FOR  
PIMA COUNTY DEPARTMENT OF TRANSPORTATION  
& FLOOD CONTROL DISTRICT

PREPARED BY  
DOOLEY-JONES & ASSOCIATES, INC.

NOVEMBER 17, 1986  
DJA JOB NO. 84-213.01

Rep. A2

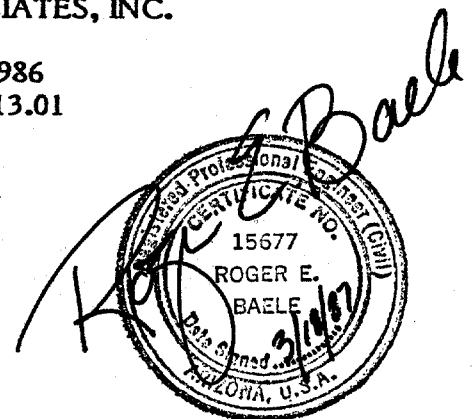
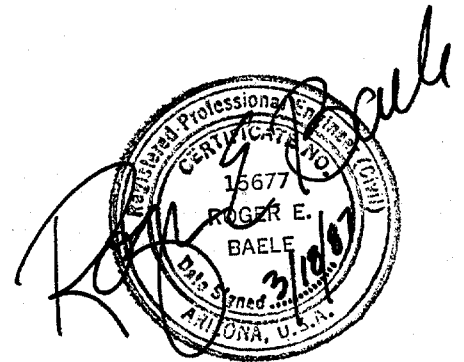




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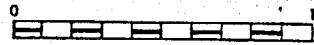


# RIVERSIDE TERRACE BASIN MANAGEMENT PLAN LOCATION MAP

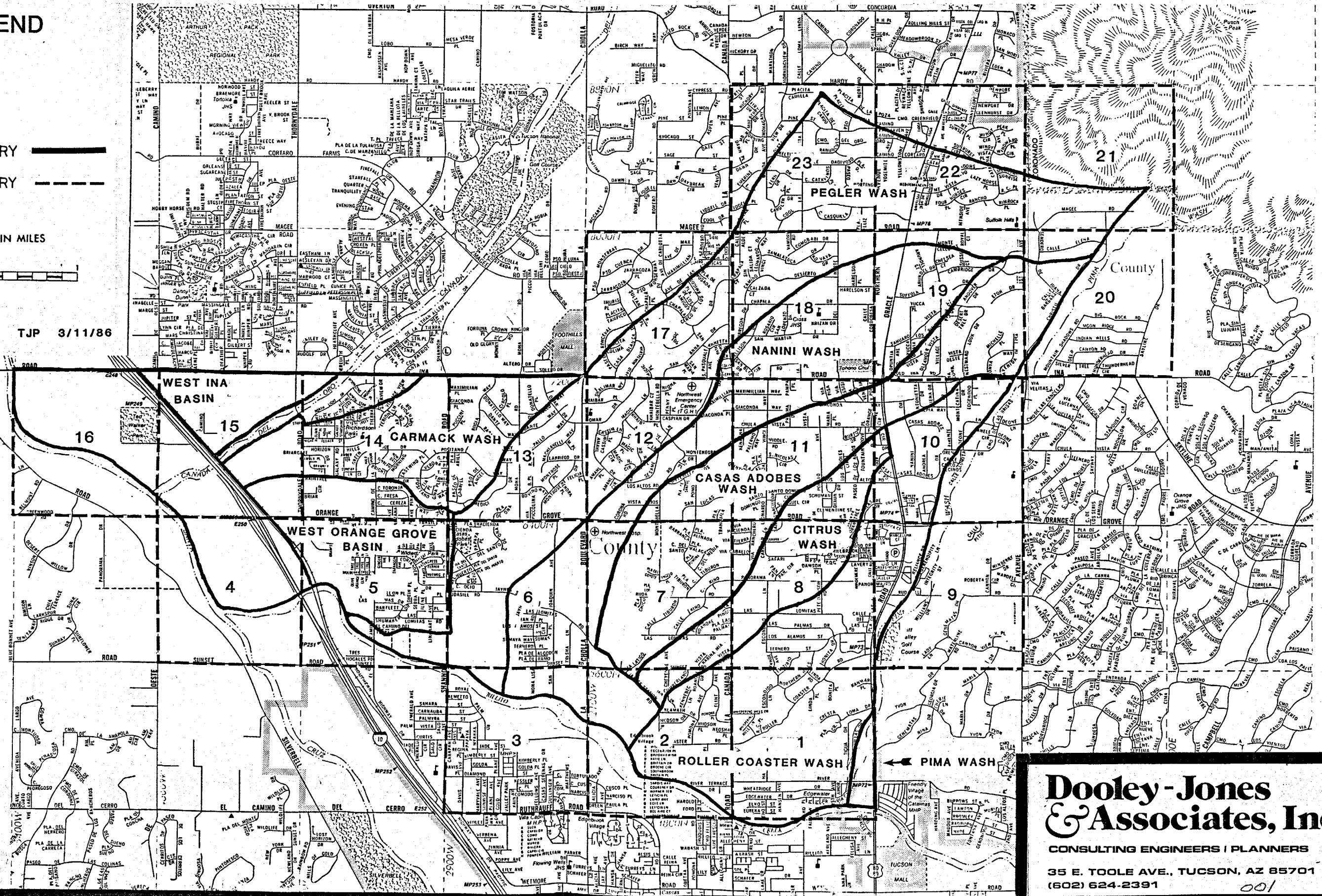
## LEGEND

BASIN BOUNDARY   
 PLATE BOUNDARY 

SCALE IN MILES



84-213.01 TJP 3/11/86



**Dooley-Jones & Associates, Inc.**  
 CONSULTING ENGINEERS | PLANNERS  
 35 E. TOOLE AVE., TUCSON, AZ 85701  
 (602) 624-2391

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## INTRODUCTION

The following is a report which is submitted to Pima County Department of Transportation and Flood Control District in partial fulfillment of the Scope of Work for the Riverside Terrace Basin Management Plan. The purpose of Phase I of the Riverside Terrace Basin Management Plan is the assessment of the existing hydrologic and basic hydraulic properties of the watershed. The analysis of these properties will provide a basis to enact flood control policies which will regulate future development in the study area. The results of the final study will help direct the County with implementing its Capital Improvement Program.

This report contains the results of a hydrologic investigation for the Riverside Terrace Basin Management Plan. The Riverside Terrace Area is roughly bordered by the Rillito River to the south, the watershed limit of the Pima Wash to the east, the Santa Cruz River to the west and the watershed limits of the Carmack Wash to the north. Small portions of the Carmack and Pima Washes are included in this study. See Location Map for project boundaries.

The Riverside Terrace Area is comprised of nine distinct watersheds and one miscellaneous drainage area. The Carmack Wash Basin, the West Orange Grove Basin, the Pegler Wash Basin, the Nanini Wash Basin, the Casas Adobes Wash Basin, the Citrus Wash Basin, the Roller Coaster Wash Basin, the Pima Wash Basin and the West Ina Basin were analyzed as separate hydrologic units which are eventual tributaries of the Santa Cruz River. The miscellaneous watershed is located west of Interstate 10.

## WATERSHED CHARACTERISTICS

This section contains information on general and basin specific hydrological characteristics. The Riverside Terrace Area generally slopes from the edge of Pusche Ridge to the southwest towards the Rillito River. The washes run on a diagonal path between the north-south major arterial roadways. The area east of Oracle Road has a land slope of approximately four percent. From Oracle Road to Ina Road, the land slope flattens gradually to about two percent. From Ina Road south to the Oracle-Jaynes Station Road alignment, the land slope slightly decreases to one and seven tenths percent. The area south of the Oracle-Jaynes Station Road alignment to the Rillito River is very flat.

The vegetative cover in the Riverside Terrace Area is composed of the typical plants of the Sonoran Desert Region. The small trees found along washes include palo verde, ironwood and mesquite. The types of cacti and common shrubs found in the study area are saguaro, cholla, prickly pear, hedgehog, catclaw acacia, creosote-bush, brittlebush, jojoba and bursage. This type of vegetation is characterized by widely spaced succulent and woody perennial plants that are well adapted to conserving water during periods of draught.

The Basin and Range province of southern Arizona is a major physiographic province within the State. The Basin and Range province is characterized by numerous mountain ranges which rise abruptly from broad plain-like valleys or basins. The Riverside Terrace Area is an alluvium-covered pediment which extends south from the Santa Catalina Mountains towards the Rillito River. The predominant soils found in the study area are listed in the following table.

## SOIL CLASSIFICATION TABLE

<u>S.C.S. DESIGNATION</u>	<u>HYDROLOGIC SOIL GROUP</u>	<u>SOIL NAME</u>	<u>PERCENT SLOPE</u>
34	B	arizo-riverwash complex	0-3
51A	B	anthony, fine sandy loam	0-3
26A	D	palos verdes-jaynes complex	2-8
26B	D	palos verdes-sonoita complex	2-8
28A	B	pinaleno, very cobbly sandy loam	1-8
28C	B	pinaleno-nickel-palos verdes complex	10-35
28B	B	pinaleno-nickel-palos verdes complex	5-16
27A	B	riveroad and tierranegre	0-2
10A	A	tanque, sandy loam	2-8

The particular boundary for the Riverside Terrace Area truncates the Carmack Wash and Pima Wash. The upstream portion of the Carmack Wash is truncated at Ina Road and the Pima Wash at Oracle Road. Since the majority of these basins are not in the study area, hydrologic information had to be generated by this study. The watershed delineations were provided by Pima County. The delineations were placed on U.S.G.S. quad maps. Updated soils information was used for the hydrologic calculations.

The hydrologic information provided by Pima County for the Carmack Wash was adjusted for the updated soil information. There was a substantial difference in the flow values produced by this updated information. See the Carmack Wash Watershed Soils Map for the updated soils information.

Pima Wash is the other wash which transects the Riverside Terrace Basin Management boundaries. The vast majority of this watershed is located outside of the study limits. The area of the study which is affected by the Pima Wash is the portion from Oracle Road to the Rillito River. Hydrologic information for the Pima Wash at the Rillito River

was obtained from Pima County Department of Flood Control. This analysis was performed in January of 1983. The Pima Wash watershed consists of 10.5 square miles. The portion which is within the study area is small enough to be considered as negligible. Because of this, it is safe to assume that this hydrologic data sheet could be used for the crossing of Pima Wash at River Road. The given soils information was checked. It did not change, so this information did not need adjustment.

The region from the Interstate 10 west to the Santa Cruz River is comprised mostly of floodplains and gravel pits. There are no clearly defined channels from the Interstate to the Santa Cruz River with the exception of the Rillito River and the Canada del Oro Wash. Extensive reclamation must be completed in order to make the land usable for development. Therefore, this region was not hydrologically analyzed for this study.

The West Ina Basin is a triangular area bounded by Ina Road, the Interstate and the Canada del Oro Wash. This area is split in the middle by a constructed drainage channel which travels from Ina Road south to the Canada del Oro Wash. The undeveloped area east of the channel is in the process of being developed. The parcel, when developed, will drain to the south into the Canada del Oro Wash. The western portion of the basin is divided again in the center. This time it is a north and south split. The northern portion of this area drains towards Ina Road and then eventually to the Santa Cruz River. The southern portions drain toward the west and passes through a culvert under the railroad and Interstate.

The terminal point of the Casas Adobes Wash and the Citrus Wash is Oracle-Jaynes Station Road. From this point, the drainage from these basins enters a flat region with no channelized sections. The contours indicate that these floodwaters turn towards the west and flow toward La Cholla Blvd. A small amount of sheet flow will enter the Rillito

River at this point. The large majority of the flow will continue westward towards the Nanini Wash along Sunset Road. The final concentration point for the flat area and the Casas Adobes and Citrus Washes is at the Nanini Wash just upstream from its confluence with the Rillito River. In order to show the largest possible flow at this point, it was assumed that no sheet flow enters the Rillito River at La Cholla Road. As a result of the above assumptions, the Casas Adobes Wash and the Citrus Wash basins are considered to be tributaries of the Nanini Wash.



## HYDROLOGIC PROCEDURES

A portion of the Riverside Terrace Area had aerial photographic topographic available from Cooper Aerial Surveys. These maps, obtained from Pima County, have a 1":200' scale and 2 foot contour interval. The 1":200' scale maps cover the entire area south of Ina Road. There is no photographic topo available for the remainder of the basin north of Ina Road. For this study, 1":200' scale topographic mapping was synthesized from existing 1":400' scale aerial photographs and U.S.G.S. quad maps. Contours from the 1":2000' scale quad maps were traced onto a sheet of vellum. This sheet was then photographically blown up to 1":400' scale. These contour lines were then traced onto the 1":400' scale aerial photographs. The 1":400' scale photo topo map was then blown up to 1":200' scale. This synthesized 1":200' scale photo topo map could then be used with the other maps south of Ina Road. These maps should not be used for design purposes due to datum and reproduction constraints. They were used only to obtain slope and basin divide information.

The actual precipitation values are located in the Hydrologic Data portion of this report. Precipitation values used are accurate relative to the size of the total watershed. The size of the basins does not change the precipitation value. Calculations show the precipitation value is the same at either end of the basin.

During the information research portion of this study, the Soil Conservation Service was contacted. At an interview with S.C.S. officials, the authors were informed about an inprogress soil study being performed in the Riverside Terrace Area. This study will be available for public use in 1987. This study updated the existing information of the areas soils. Soil maps obtained from the S.C.S. showed the existence of D type soils in the Riverside Terrace Area rather than the B type soils shown by the Pima County Hydrology

Manual. The new S.C.S. soil maps more accurately reflect the soil types than do the maps provided in the Pima County Hydrology Manual. The Hydrology Manual shows the Riverside Terrace Area to be made up of B type soils only. The S.C.S. soils maps show that the basin has a majority of D type soils. This study uses the S.C.S. soil maps for its hydrological computations. The D type soils generate larger amounts of runoff than B type soils. This adjustment of the soils will have a great computational effect upon the current regulatory flows in the basin. The existing flood control measures in the basin were formulated using B type soils. The change of soils will reduce the effective flood frequency of such improvements.

The new S.C.S. soils maps show A soil types. There are no hydrologic curve numbers for this soil type. Type B hydrologic curve numbers were used for the type A soils.

The cover density used for most of the basin was about thirty percent. This value is representative of average basin conditions. This would place the curve numbers for B and D type soils at 82 and 90. Desert brush was used as the hydrologic cover type.

The percent of impervious cover, of course, varies with the type of development. In general, the average percent of impervious cover for the Riverside Terrace Area came out to be approximately 10%. Areas which are currently developed but did not appear on the photo-topo were considered to be undeveloped. This assumption was based upon the 1985 balanced basin restriction which applies to the entire Riverside Terrace Area.

This study will analyze four frequencies of storm events. These frequencies are the two, five, ten and one-hundred year storm events. Time of concentrations, which exceed 60 minutes, were determined using the K-graph on page 137 of the Pima County Hydrology Manual.

The topographic maps are arranged in a progressing numerical order. Each section of mapping is called a plate. Within each plate the basin boundaries and concentration points are designated. Each basin within a plate has its concentration points labeled numerically starting from the number one and increasing in the upstream direction. The hydrologic data sheets are labeled by the basin name followed by the plate number then by the number of concentration point. An example of this is as follows: Citrus Wash-7-1 (wash name, plate number, concentration point number).

For the areas which 1":200' topo was not available, dip crossing locations, and channel sections were measured using a tape and hand level. This information is included in Appendix A of this report. The individual hydrologic data sheets for each concentration point are contained in Appendix B (not attached).

## REFERENCES

1. "Pima County Drainage and Channel Design Standard"; 1984.
2. Pima County Floodplain Ordinance; 1985.
3. Cochran, Chris, March 1985, Unpublished, "Report and Interpretation for the General Soil Map Eastern Pima County, Arizona", U.S. Department of Agriculture Soil Conservation Service.
4. United States Department of Agriculture Soil Conservation Service in Cooperation with Pima County Natural Resource Conservation District, 1974, General Soil Map, Pima County, Arizona.
5. Zeller, M.E., 1979, "Hydrology Manual for Engineering Design and Floodplain Management within Pima County, Arizona", Pima County Department of Transportation and Flood Control District, Tucson, Arizona.
6. Federal Emergency Management Agency, 1982, "Guidelines and Specifications for Study Contractors".
7. Wilson, Eldred D., 1962, "A Resume of the Geology of Arizona", University of Arizona, Tucson, Arizona.
8. U.S. Army Corps of Engineers, Los Angeles District, 1985, "Rillito River Draft Survey Report".

**HYDROLOGIC DATA**

PRECIPITATION VALUES

RETURN PERIOD (YEARS)	PRECIPITATION VALUES (INCHES)			
	5 HOUR DURATION		24 HOUR DURATION	
	MAP VALUE	CORRECTED VALUE	MAP VALUE	CORRECTED VALUE
2	1.58	1.62	1.92	1.92
5	2.12	2.18	2.50	2.62
10	2.52	2.52	3.10	3.09
25	3.00	2.99	3.72	3.69
50	3.35	3.40	4.30	4.24
100	3.75	3.81	4.73	4.79

$$Y_2 = -0.011 + 0.942 \left( \frac{1.62^2}{1.92} \right)$$

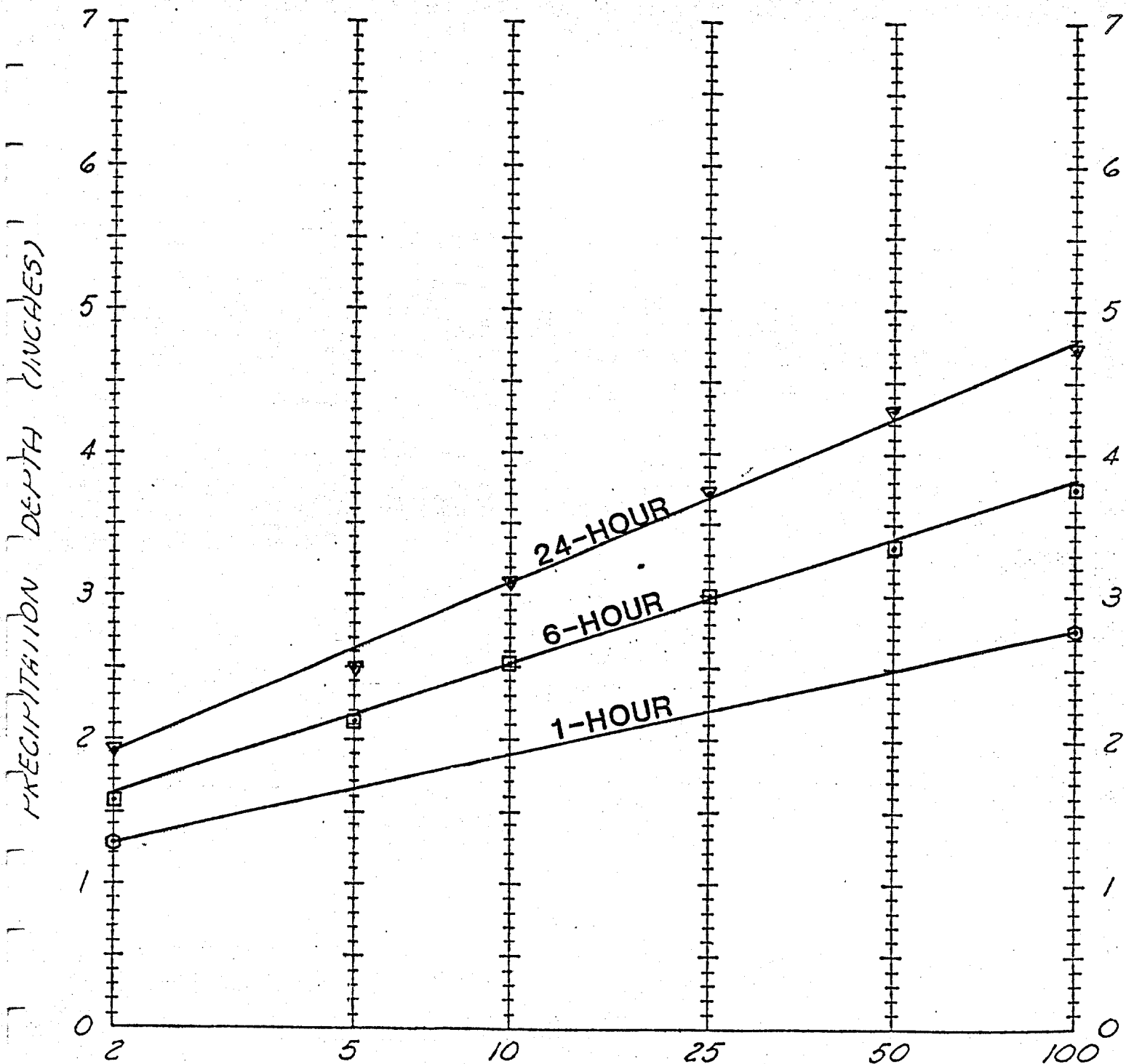
$$Y_2 = 1.28$$

$$Y_{100} = 0.494 + 0.755 \left( \frac{3.81^2}{4.79} \right)$$

$$Y_{100} = 2.78$$

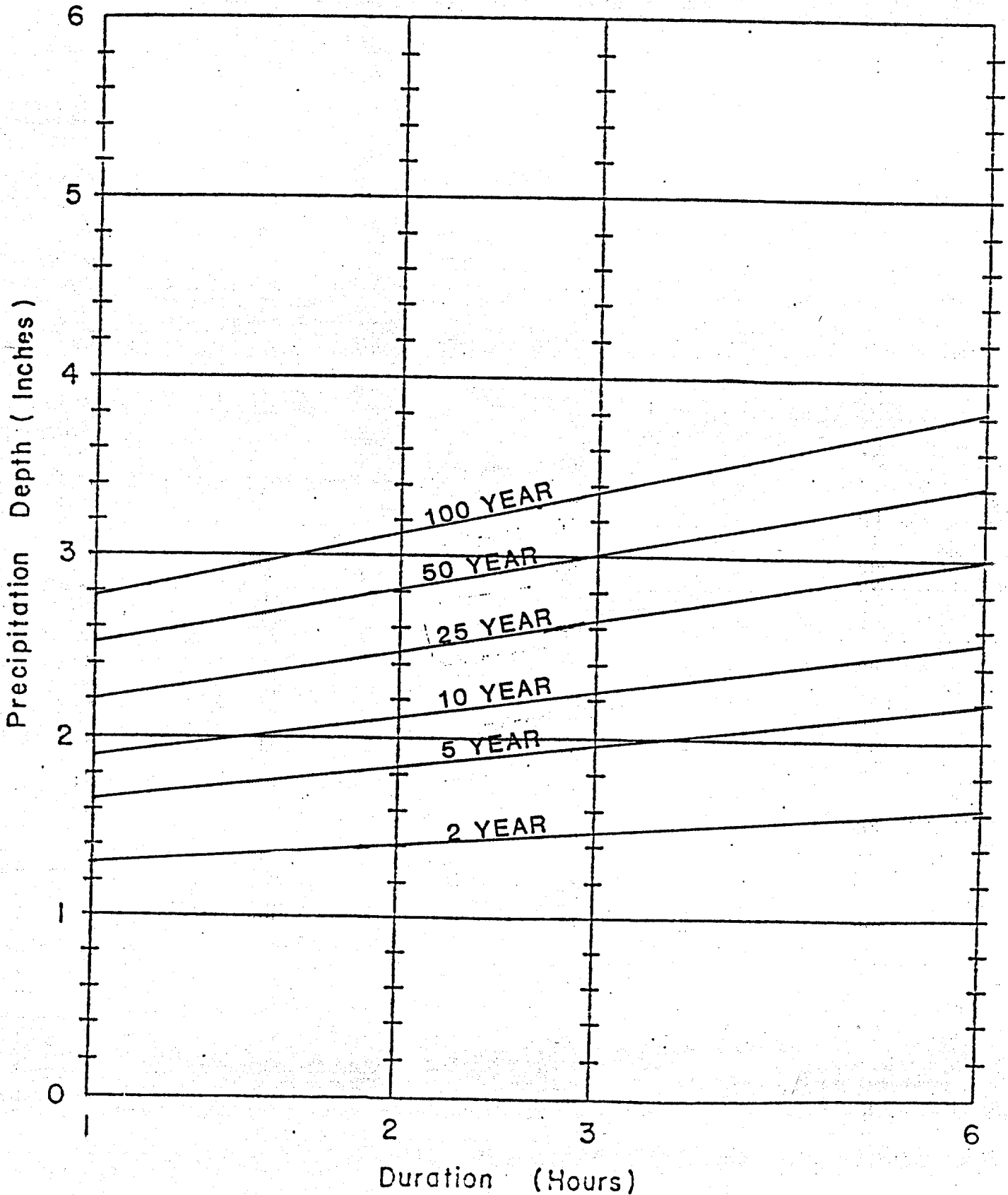
LATITUDE  $32^{\circ} 23' 00''$

LONGITUDE  $111^{\circ} 00' 00''$

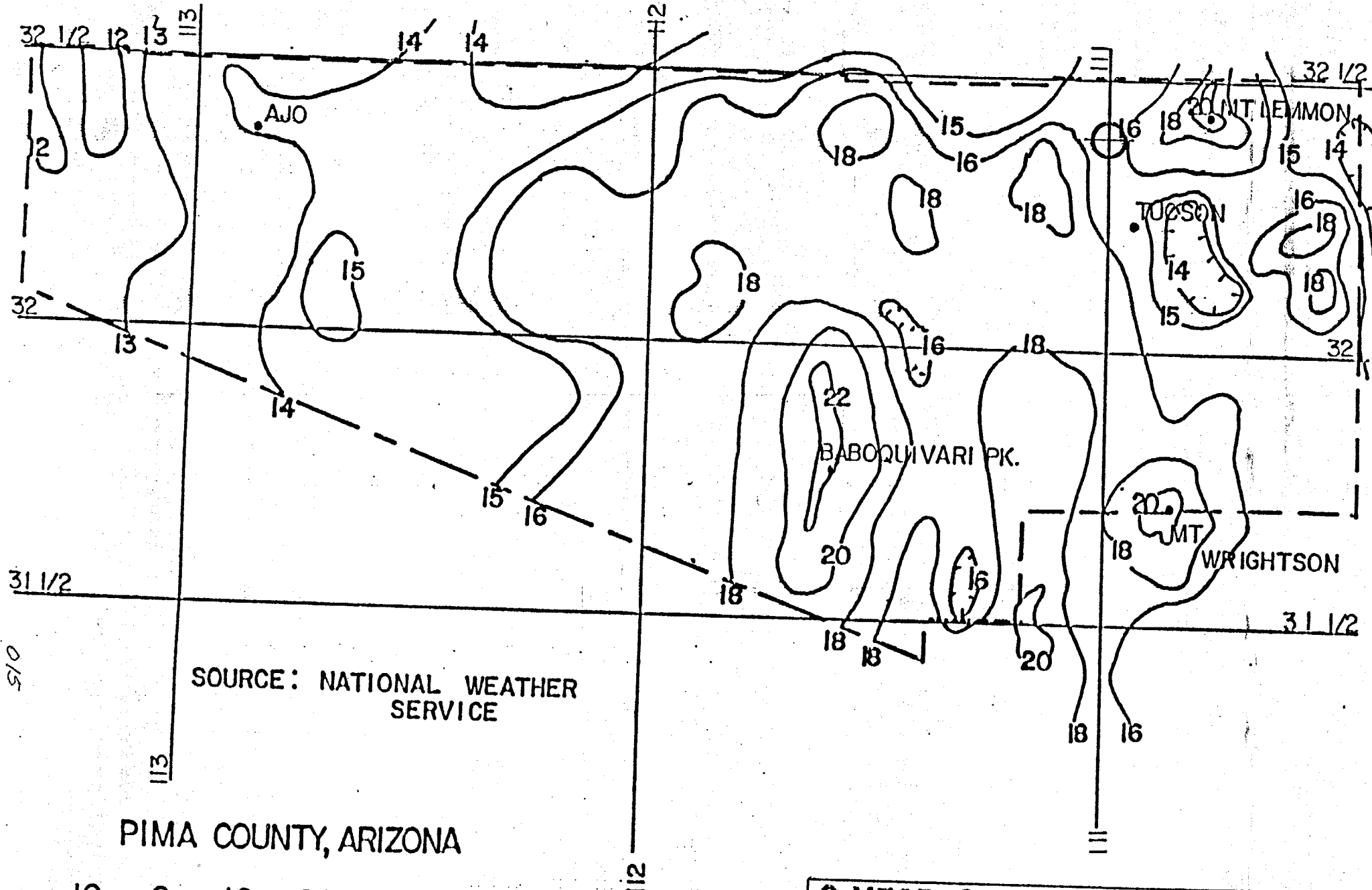


RETURN PERIOD IN YEARS, PARTIAL-DURATION SERIES

Precipitation Depth - Duration  
Diagram (1 - 6 Hours)

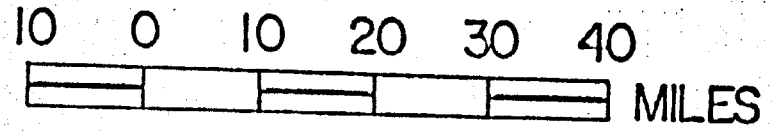




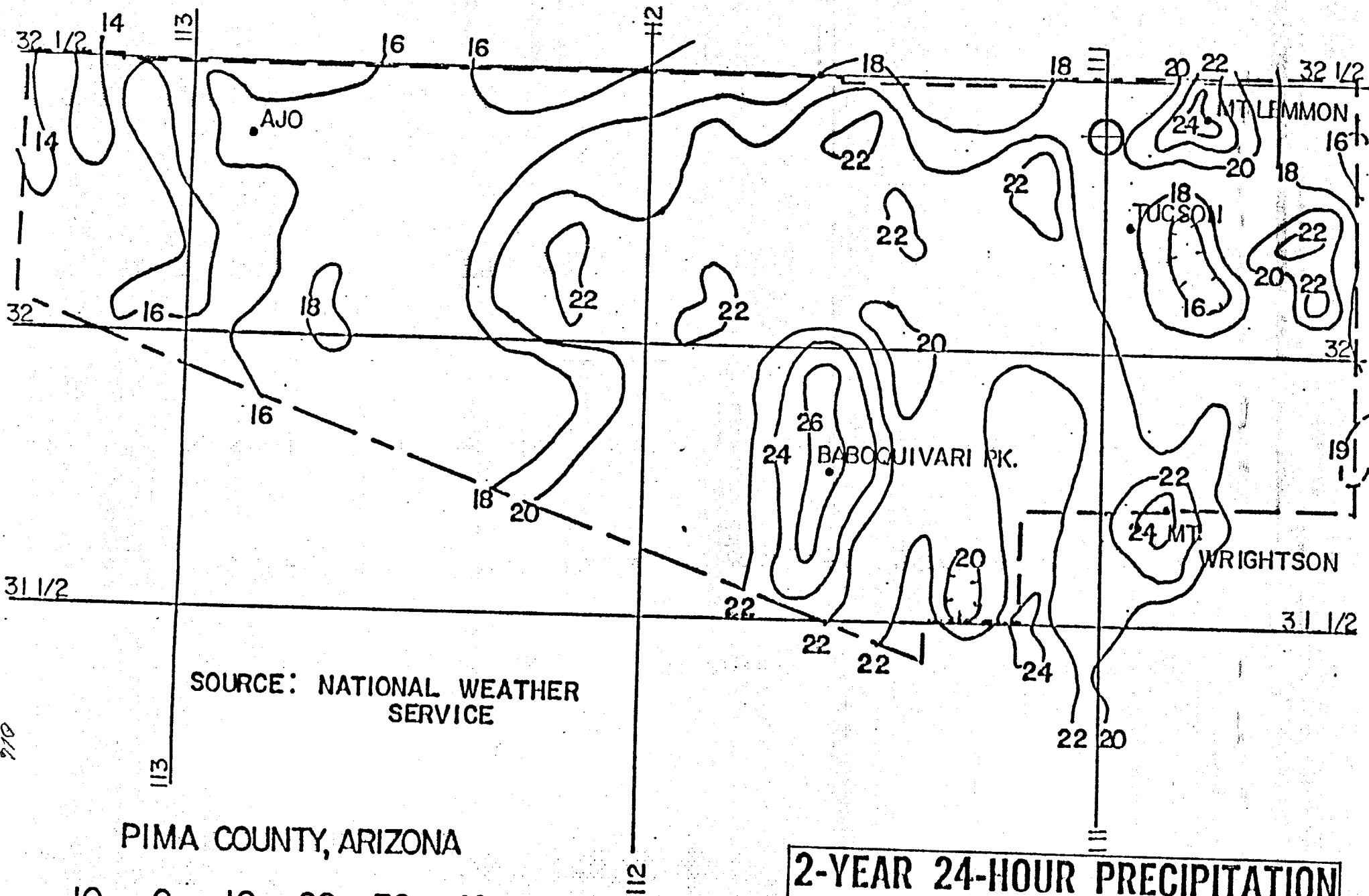


SOURCE: NATIONAL WEATHER SERVICE

PIMA COUNTY, ARIZONA

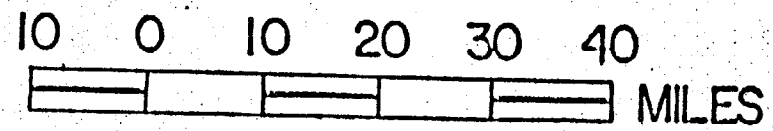


**2-YEAR 6-HOUR PRECIPITATION**  
 —10— ISOPLUVIALS OF 2-YEAR 6-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH



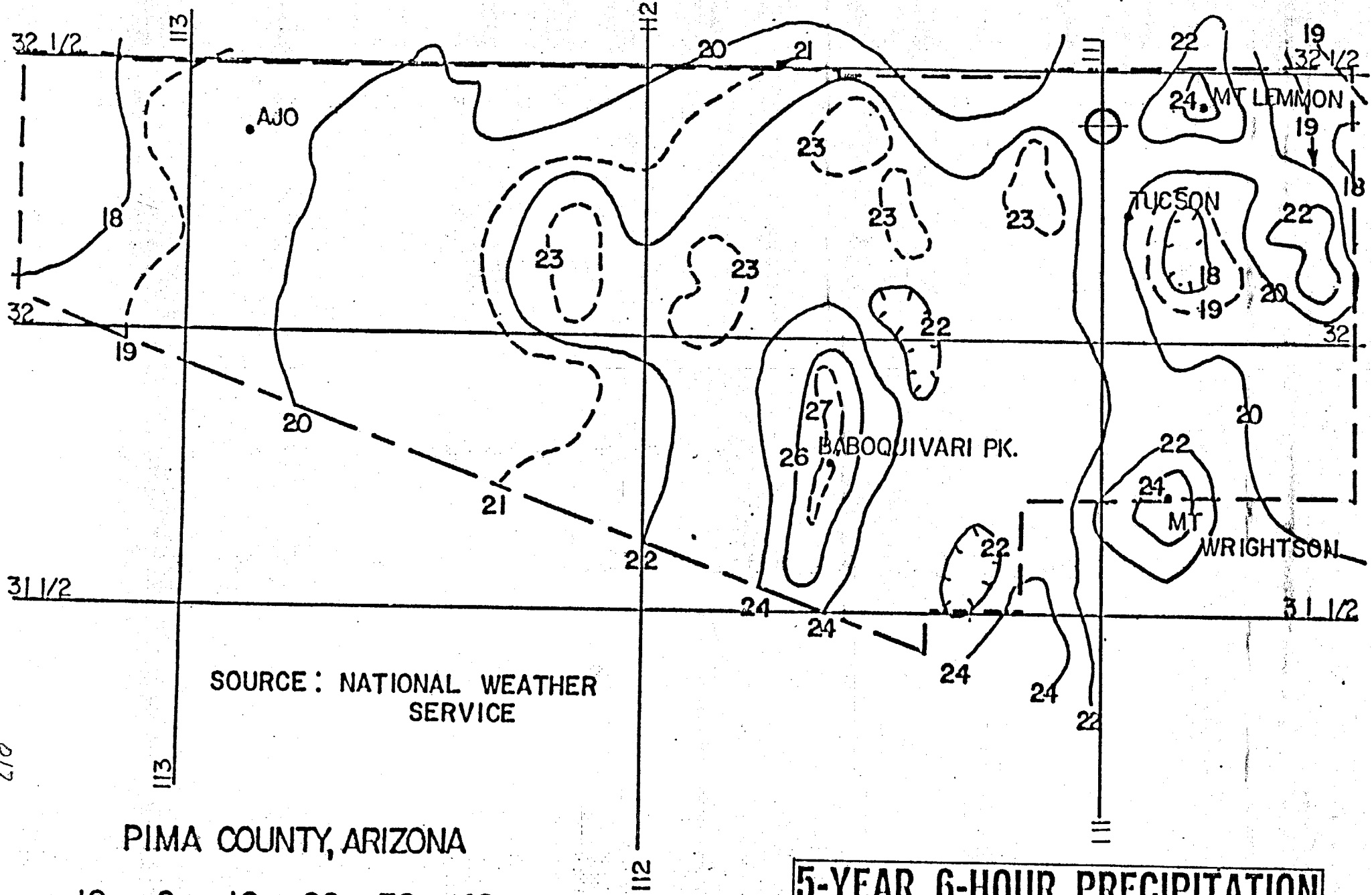
SOURCE: NATIONAL WEATHER SERVICE

PIMA COUNTY, ARIZONA



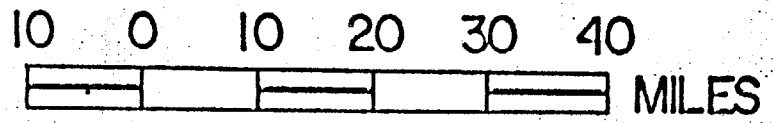
84-213.01

**2-YEAR 24-HOUR PRECIPITATION**  
 —30— ISOPLUVIALS OF 2-YEAR 24-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH



SOURCE: NATIONAL WEATHER SERVICE

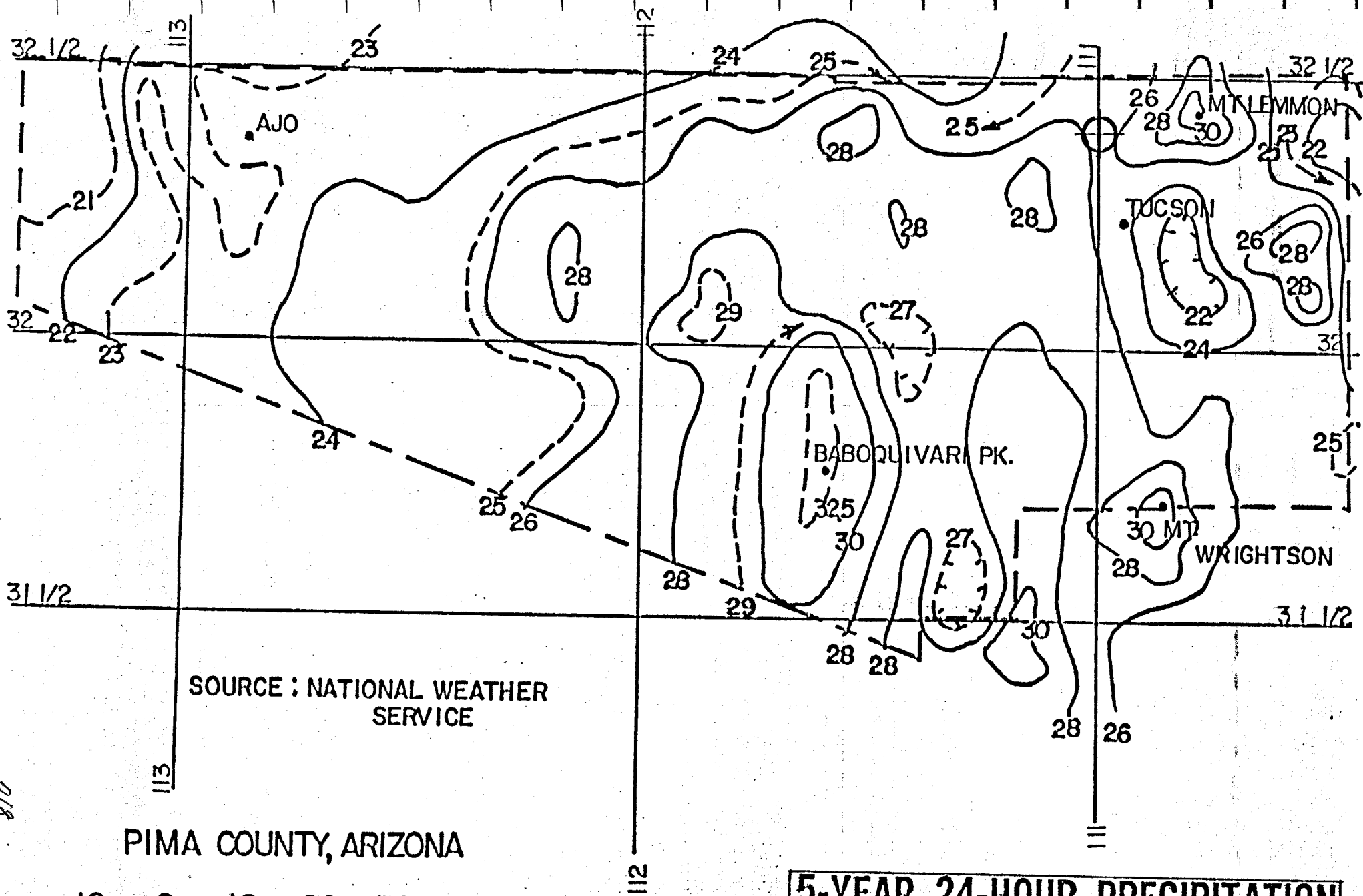
PIMA COUNTY, ARIZONA



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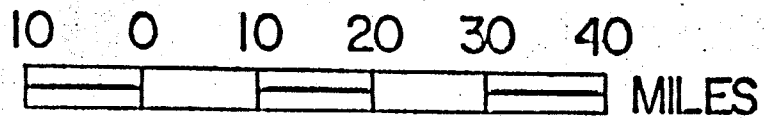
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 —30— ISOPLUVIALS OF 5-YEAR 6-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH

410



SOURCE : NATIONAL WEATHER SERVICE

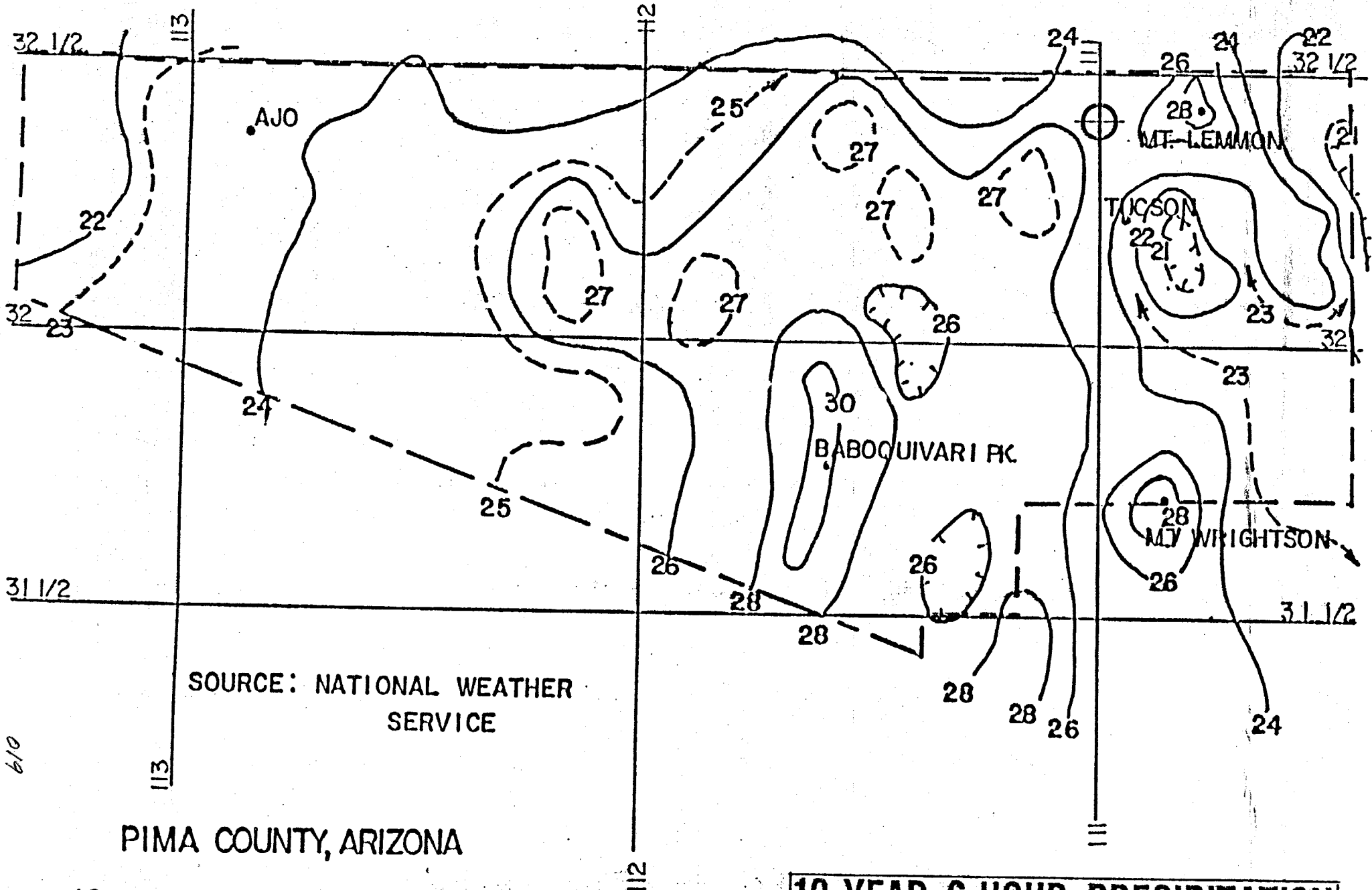
PIMA COUNTY, ARIZONA



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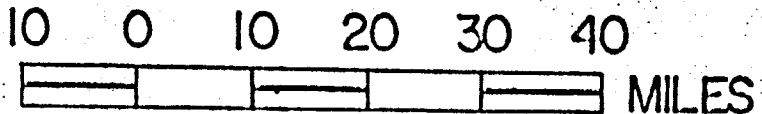
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 -20- ISOPLUVIALS OF 5-YEAR 24-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH

810



SOURCE: NATIONAL WEATHER SERVICE

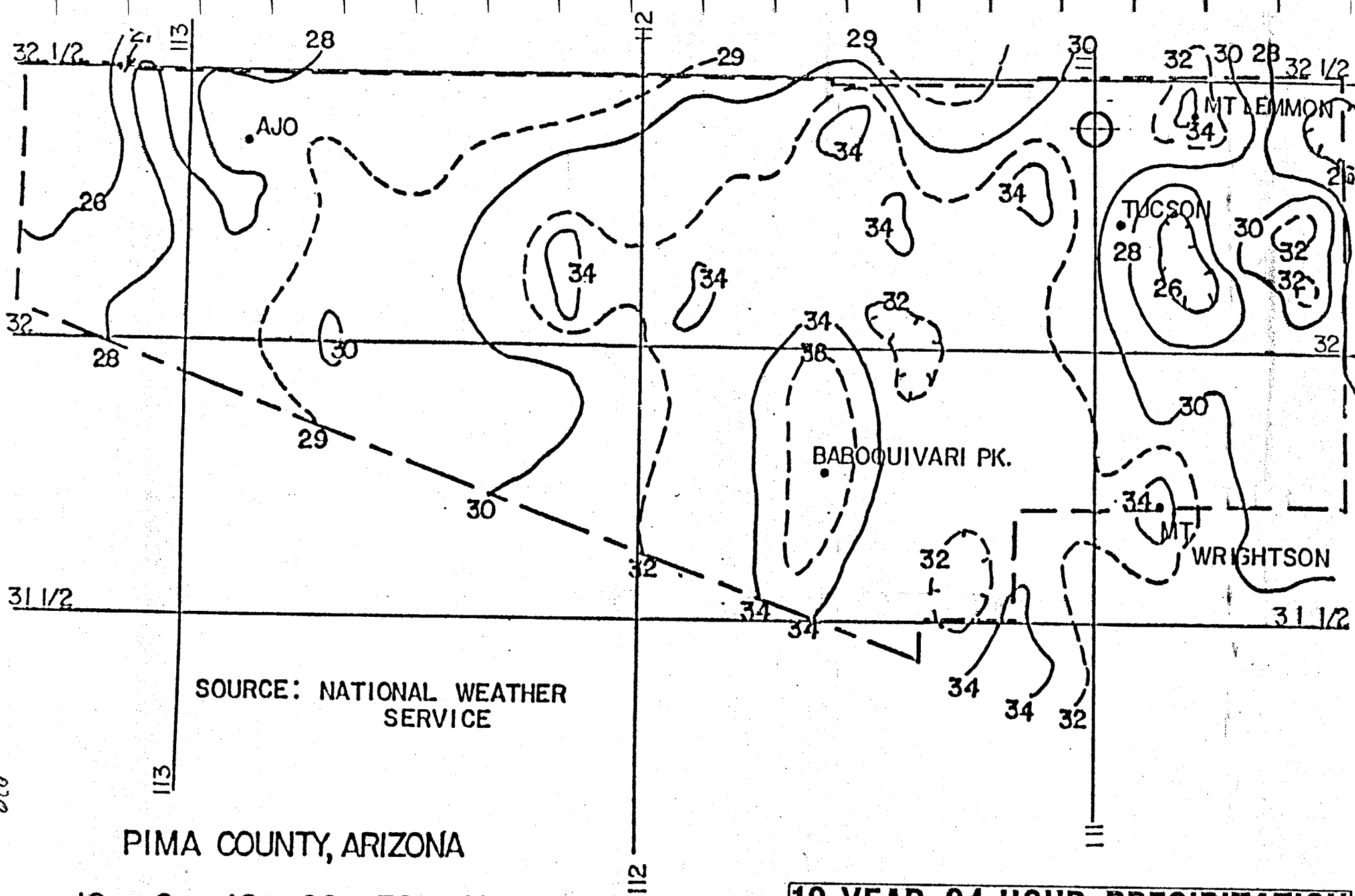
PIMA COUNTY, ARIZONA



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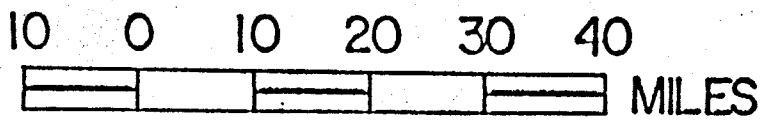
**10-YEAR 6-HOUR PRECIPITATION**  
 —20— ISOPLUVIALS OF 10-YEAR 6-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH

610



SOURCE: NATIONAL WEATHER SERVICE

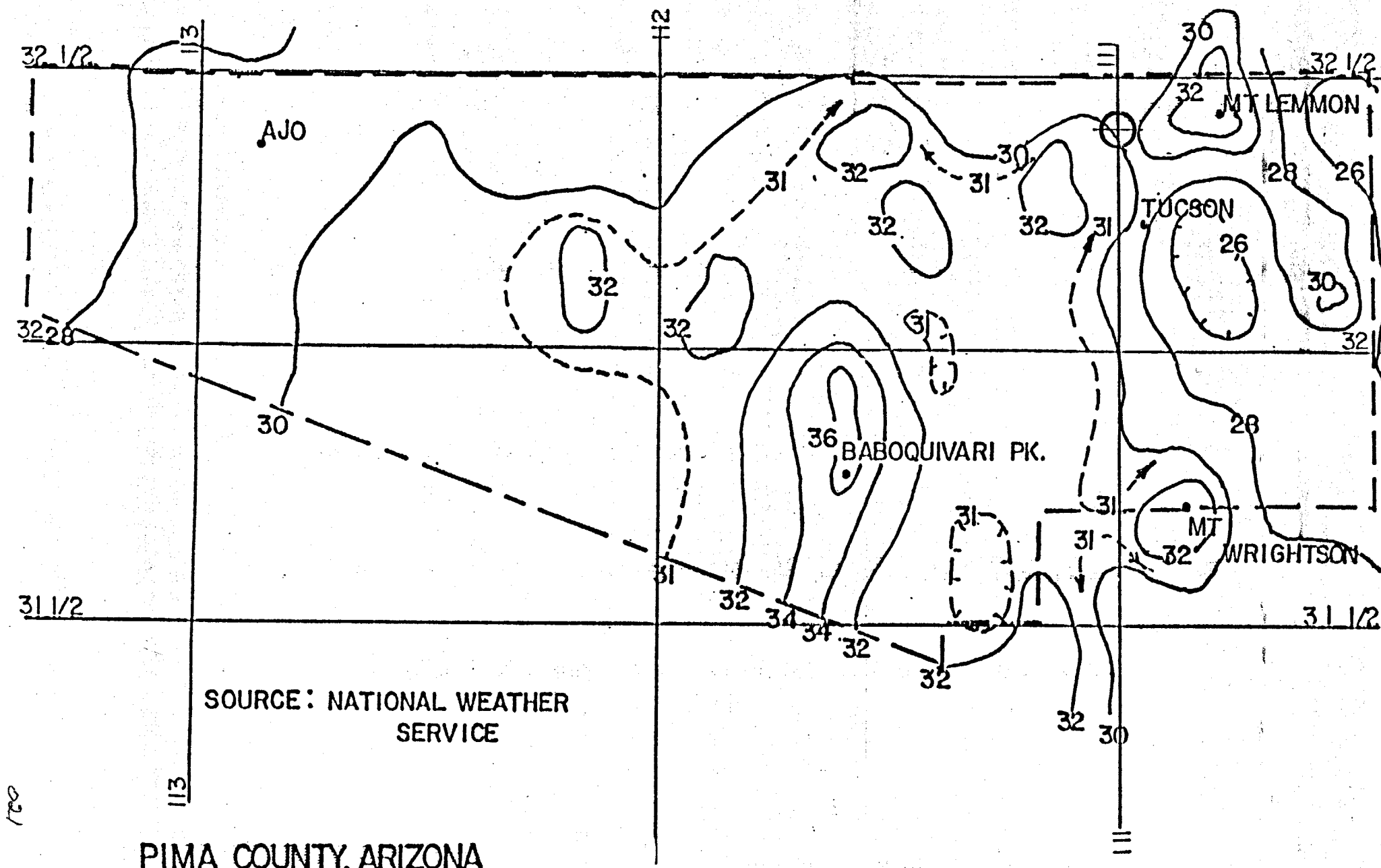
PIMA COUNTY, ARIZONA



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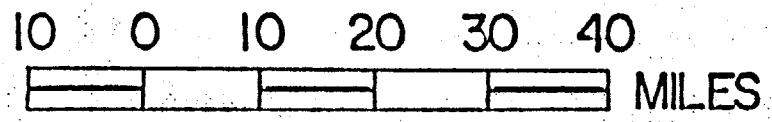
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 PRECIPITATION IN TENTHS OF AN INCH

020



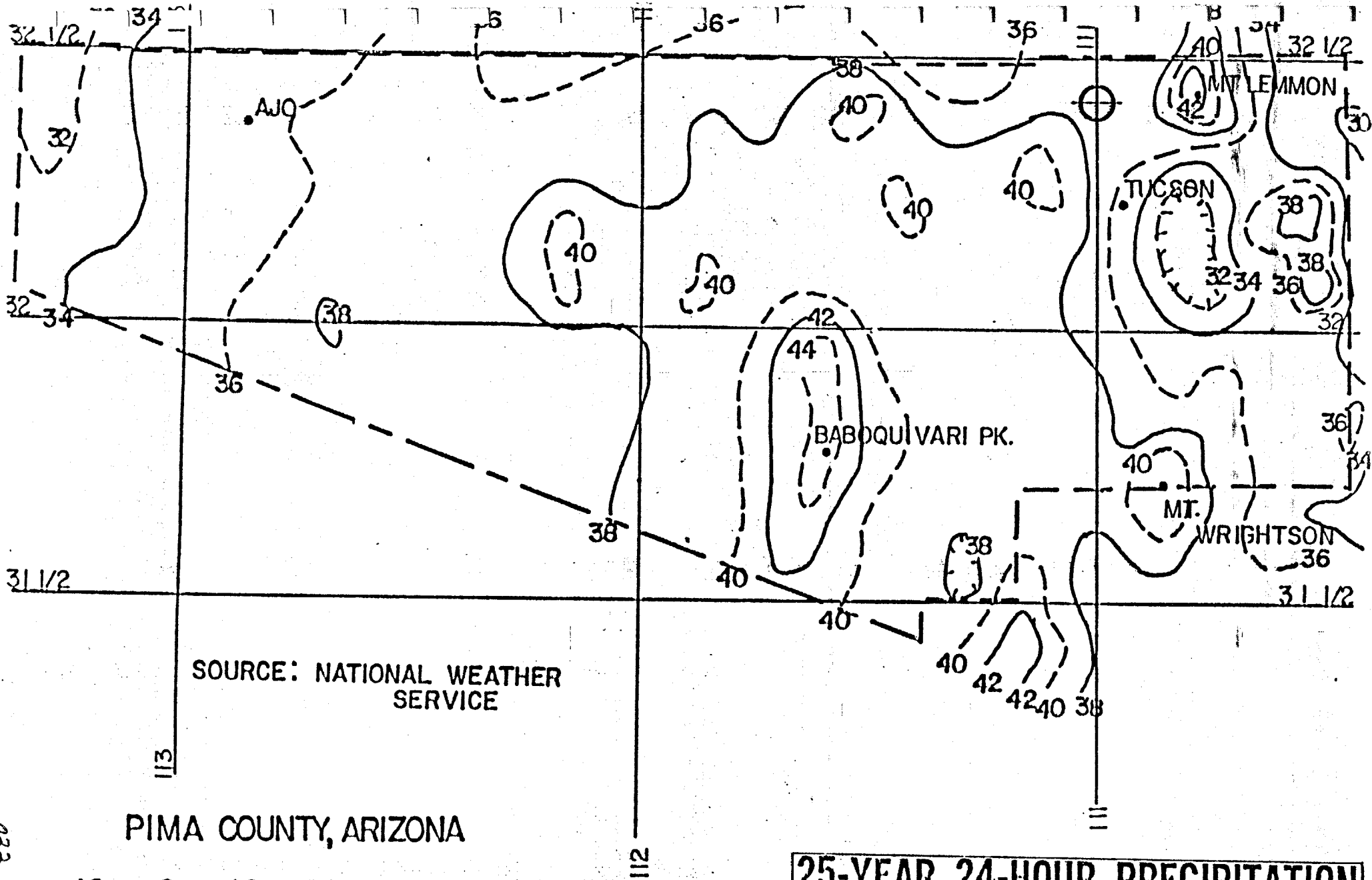
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PIMA COUNTY, ARIZONA



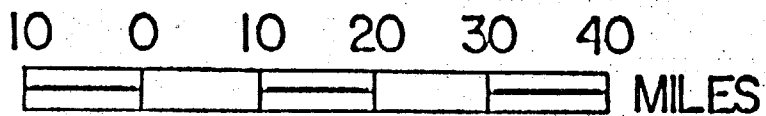
84-213.01

**25-YEAR 6-HOUR PRECIPITATION**  
 — 20 — ISOPLUVIALS OF 25-YEAR 6-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH



SOURCE: NATIONAL WEATHER SERVICE

PIMA COUNTY, ARIZONA

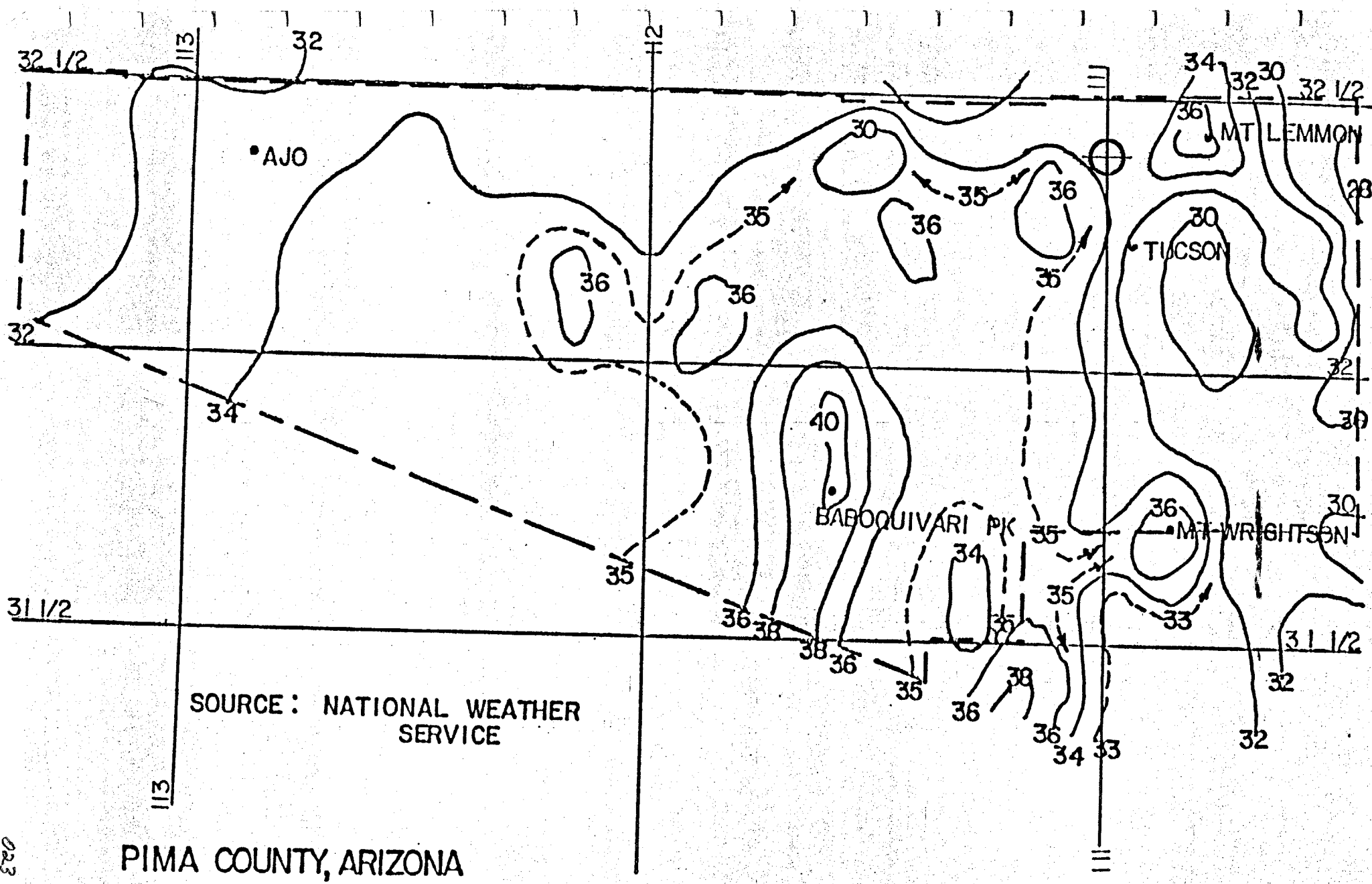


84-213.01

**25-YEAR 24-HOUR PRECIPITATION**  
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 PRECIPITATION IN TENTHS OF AN INCH

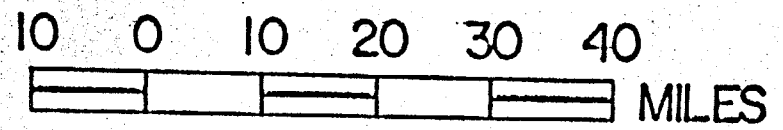
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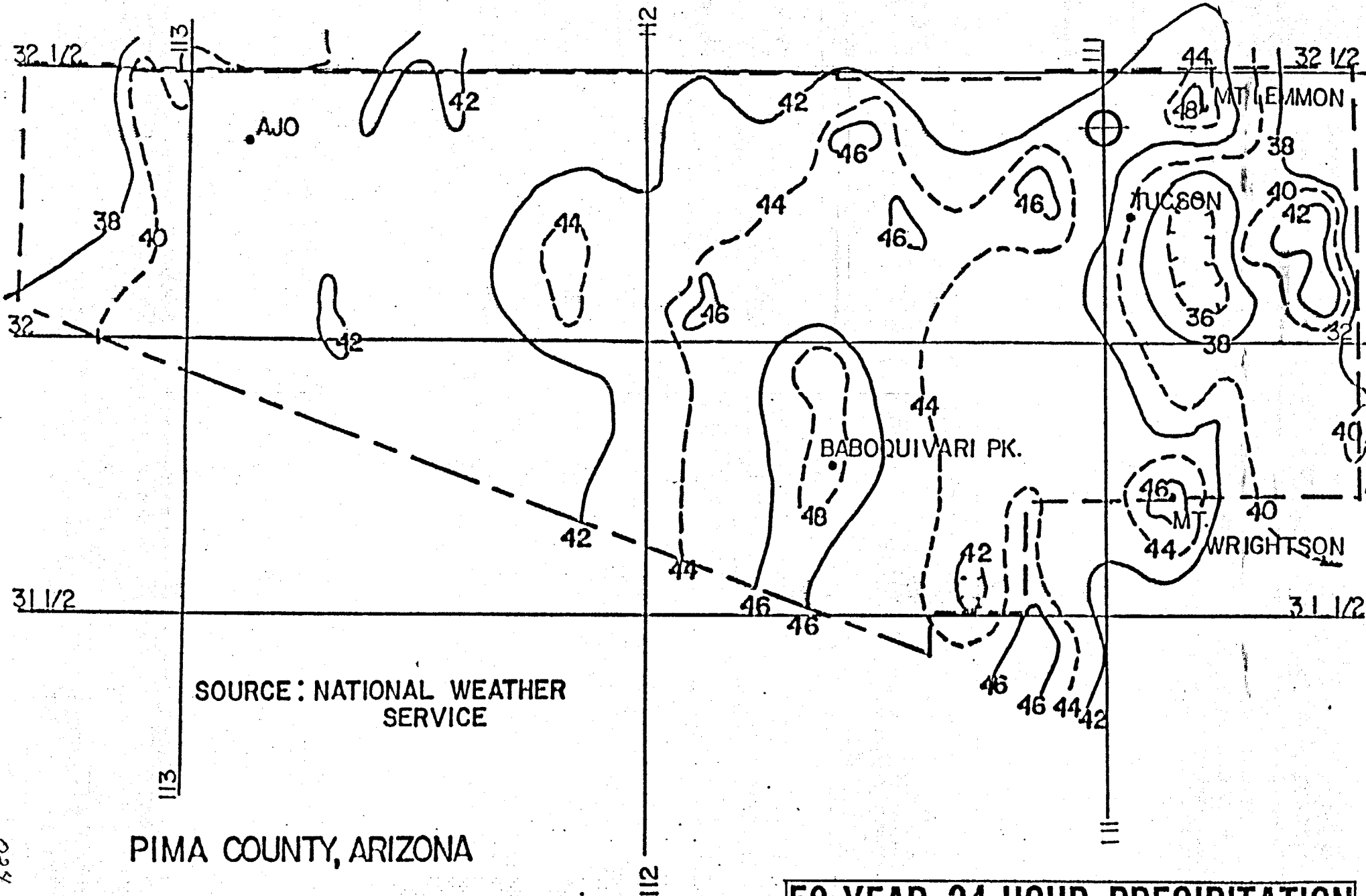
PIMA COUNTY, ARIZONA



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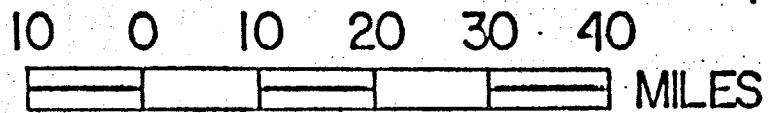
**50-YEAR 6-HOUR PRECIPITATION**  
 - 30 - ISOPLUVIALS OF 50-YEAR 6-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH

023



SOURCE: NATIONAL WEATHER SERVICE

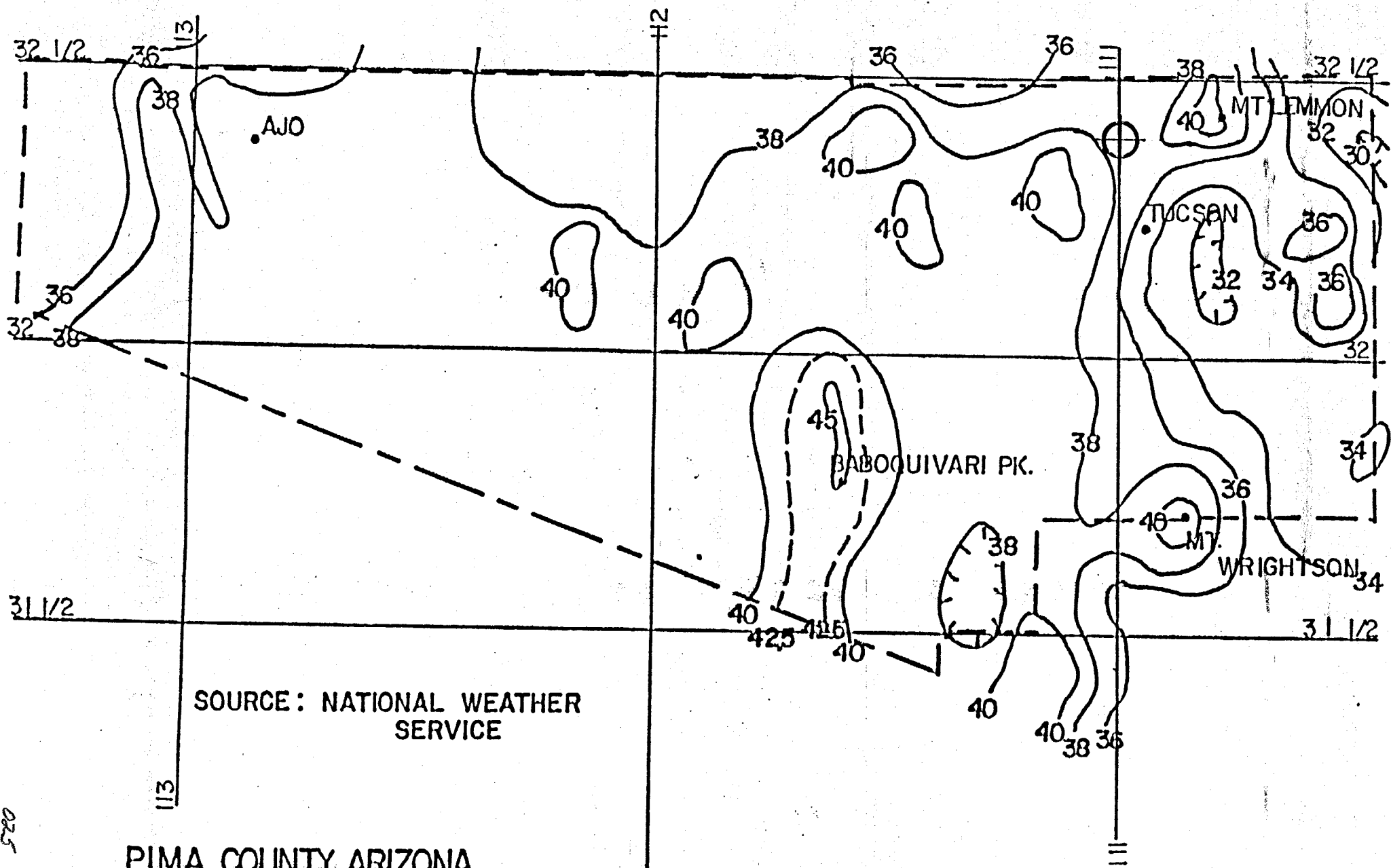
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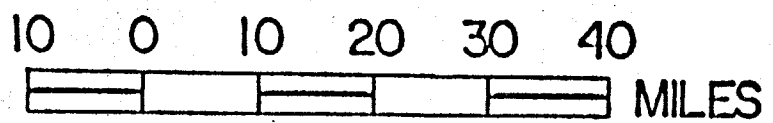
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 —30— ISOPLUVIALS OF 50-YEAR 24-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH

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SOURCE: NATIONAL WEATHER SERVICE

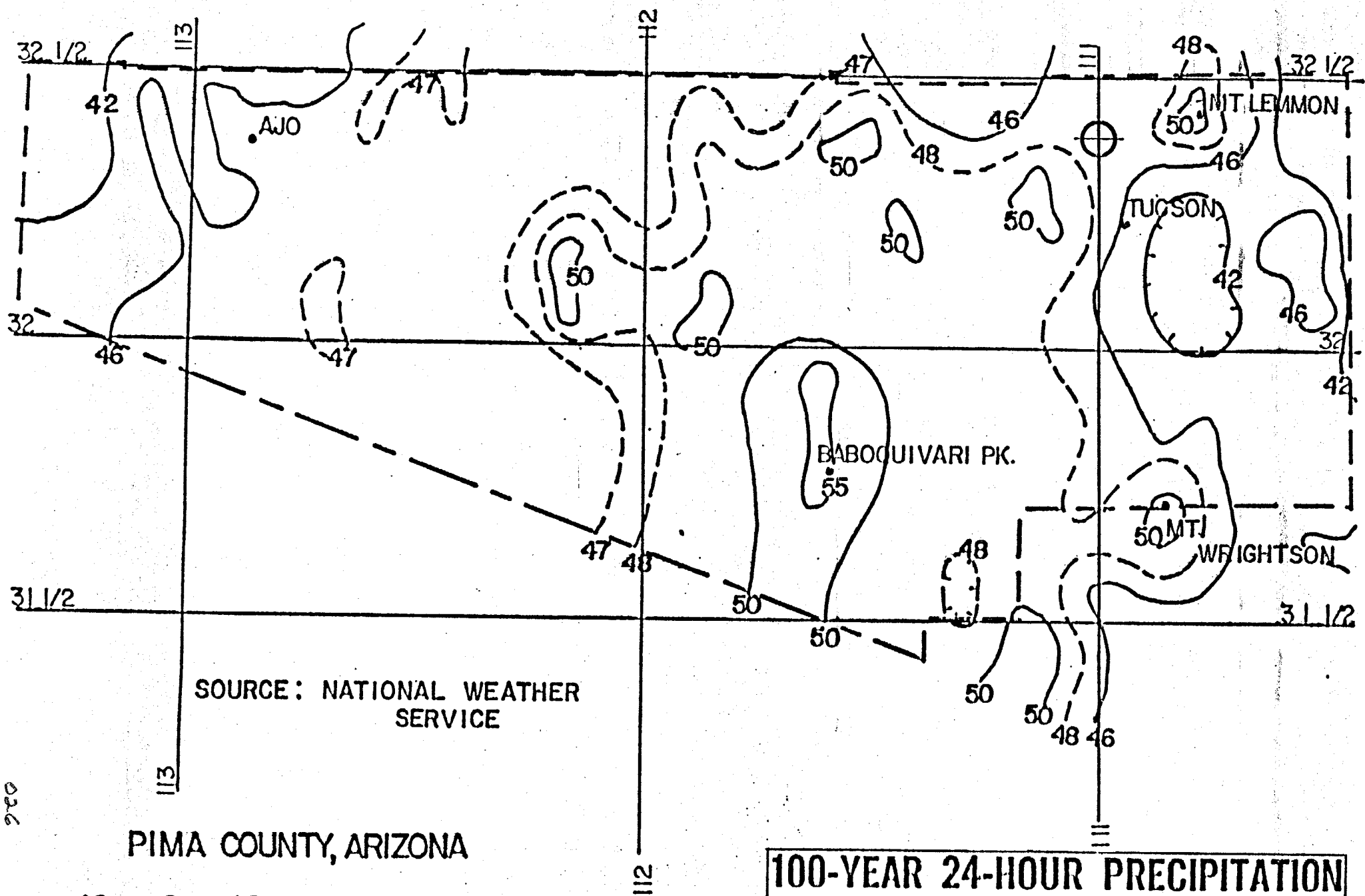
PIMA COUNTY, ARIZONA



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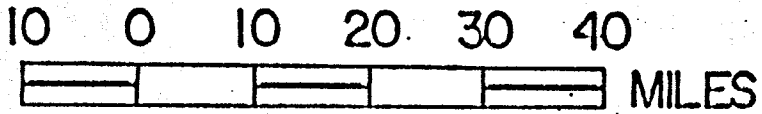
**100-YEAR 6-HOUR PRECIPITATION**  
 —30— ISOPLUVIALS OF 100-YEAR 6-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH

520



SOURCE: NATIONAL WEATHER SERVICE

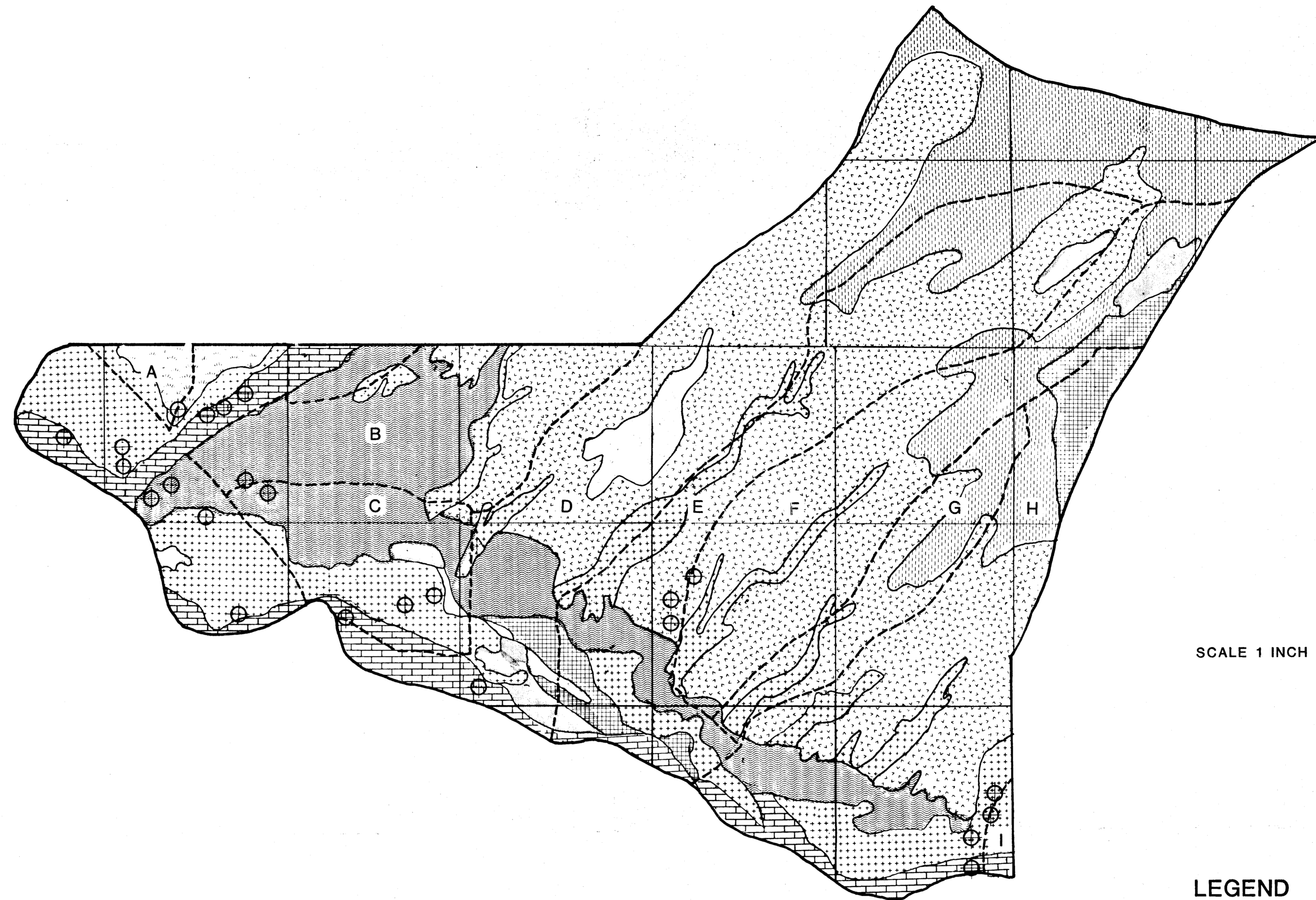
PIMA COUNTY, ARIZONA



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**100-YEAR 24-HOUR PRECIPITATION**  
 —20— ISOPLUVIALS OF 100-YEAR 24-HOUR  
 PRECIPITATION IN TENTHS OF AN INCH

980



SCALE 1 INCH = 2000 FEET

RIVERSIDE TERRACE BASIN  
MANAGEMENT STUDY  
SOILS & ARCHAEOLOGICAL SITE MAP

SOIL TYPE	SCS DESIGNATION
A	10A
B	27A 28A 28B 28C 34 51A
C	
D	26A 26B

- A - WEST INA BASIN
- B - CARMACK WASH BASIN
- C - WEST ORANGE GROVE BASIN
- D - PEGLER WASH BASIN
- E - NANINI WASH BASIN
- F - CASAS ADOBES WASH BASIN
- G - CITRUS WASH BASIN
- H - ROLLER COASTER WASH BASIN
- I - PIMA WASH BASIN

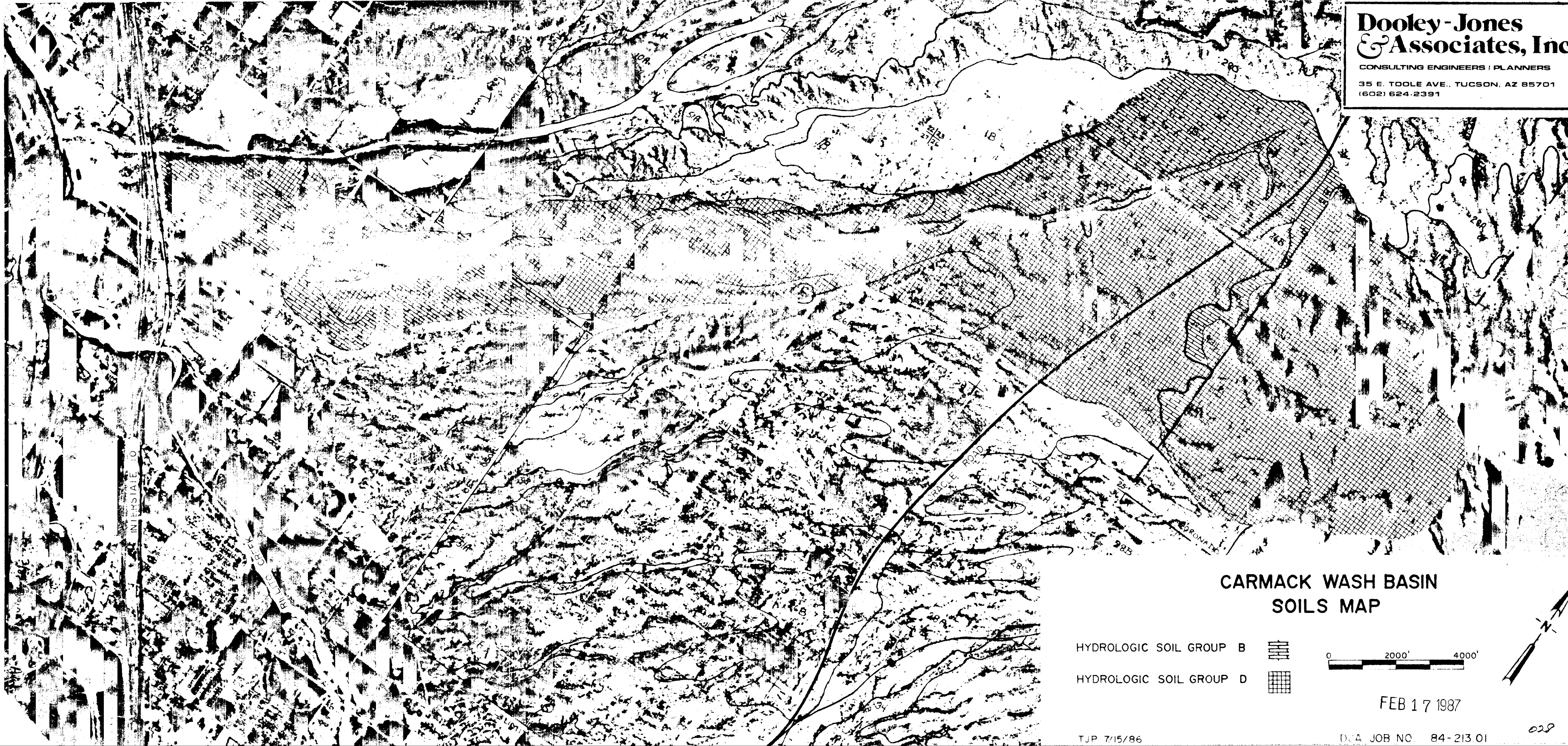
LEGEND

- ⊕ ARCHAEOLOGICAL SITE
- SOIL TYPE
- 10A
- 26A
- 26B
- 27A
- 28A
- 28B
- 28C
- 34
- 51A



FEB 17 1987

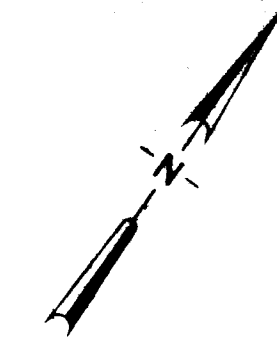
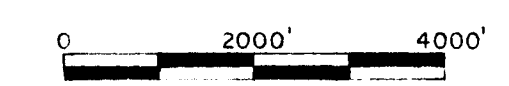
DJA JOB No. 84-213.01

**dja** **Dooley-Jones & Associates, Inc.**  
 CONSULTING ENGINEERS | PLANNERS  
 35 E. TOOLE AVE., TUCSON, AZ 85701  
 (602) 624-2391 027



**CARMACK WASH BASIN  
SOILS MAP**

- HYDROLOGIC SOIL GROUP B 
- HYDROLOGIC SOIL GROUP D 



FEB 17 1987

**HYDROLOGIC DATA TABLES**

**ROLLER COASTER WASH**



CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	Q
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	CFS
	ROLLER COASTER WASH-2-1	6.0	300.	150.	.0067	MODERATE URBAN	.028	2	30	35	100	0	5.0	15
								5					5.0	18
								10					5.0	22
								100					5.0	40
	ROLLER COASTER WASH-2-2	272.9	8115.	4058.	.012	SUBURBAN FOOTHILLS	.039	2	30	14	50	50	1.25	96
								5					53.7	224
								10					46.2	326
								100					32.7	773
	ROLLER COASTER WASH-2-3	368.0	10615.	5308.	.0126	SUBURBAN FOOTHILLS	.042	2	30	13	63	37	1.84	85
								5					1.28	212
								10					1.07	330
								100					43.1	892
	ROLLER COASTER WASH-2-4	1279.9	21310.	10655.	.0115	SUBURBAN FOOTHILLS	.034	2	30	20	34	66	2.28	321
								5					1.65	715
								10					1.41	1054
								100					59.0	2615
	ROLLER COASTER WASH-2-5	911.9	19860.	9930.	.0125	HIGHLY URBAN	.039	2	30	24	22	78	2.34	247
								5					1.73	529
								10					1.49	762
								100					1.05	1846
	ROLLER COASTER WASH-2-6	262.1	9650.	4825.	.0245	SUBURBAN FOOTHILLS	.032	2	30	19	20	80	38.9	186
								5					29.6	370
								10					26.0	513
								100					19.1	1099

031

CP	CONCENTRATION POINT	AREA	L <sub>g</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	ROLLER COASTER WASH-2-7	30.3	1850.	925.	.0359	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	10.1	41
								5					7.8	80
								10					6.9	110
								100					5.2	218
	ROLLER COASTER WASH-1-1	43.7	4550.	2275.	.0053	MODERATE URBAN	.028	2	30	35	100	0	40.5	30
								5					31.7	56
								10					27.9	77
								100					20.5	165
	ROLLER COASTER WASH-1-2	31.9	3925.	1963.	.0061	MODERATE URBAN	.028	2	30	35	100	0	33.2	25
								5					26.1	46
								10					23.1	62
								100					17.1	132
	ROLLER COASTER WASH-1-3	21.0	1800.	900.	.0522	SUBURBAN FOOTHILLS	.034	2	30	10	2	98	8.3	31
								5					6.4	59
								10					5.7	80
								100					5.0	152
	ROLLER COASTER WASH-1-4	95.4	4790.	2395.	.028	SUBURBAN FOOTHILLS	.032	2	30	14	5	95	21.0	97
								5					16.1	188
								10					14.2	258
								100					10.7	527
	ROLLER COASTER WASH-1-5	608.1	17160.	8580.	.021	SUBURBAN VALLEY	.03	2	30	27	14	86	57.6	381
								5					44.8	716
								10					39.4	984
								100					29.2	2088

032

CP	CONCENTRATION POINT	AREA	L <sub>g</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	ROLLER COASTER WASH-1-6	70.8	4750.	2375.	.0259	SUBURBAN FOOTHILLS	.033	2	30	12	17	83	23.6	62
								5					17.8	126
								10					15.6	174
								100					11.6	366
	ROLLER COASTER WASH-1-7	36.6	2950.	1475.	.0278	SUBURBAN FOOTHILLS	.032	2	30	18	0	100	14.1	49
								5					11.1	89
								10					9.9	119
								100					7.5	240
	ROLLER COASTER WASH-1-8	23.2	3275.	1638.	.0305	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	16.6	26
								5					12.7	50
								10					11.2	69
								100					8.4	142
	ROLLER COASTER WASH-1-9	467.2	14135.	7068.	.0209	HIGHLY URBAN	.029	2	30	29	6	94	45.9	356
								5					35.9	659
								10					31.7	898
								100					23.8	1841
	ROLLER COASTER WASH-1-10	35.2	2800.	1400.	.0264	SUBURBAN FOOTHILLS	.032	2	30	20	0	100	13.8	49
								5					10.9	88
								10					9.7	117
								100					7.3	234
	ROLLER COASTER WASH-1-11	198.3	7300.	3650.	.027	SUBURBAN FOOTHILLS	.031	2	30	21	12	88	27.5	185
								5					21.2	353
								10					18.7	482
								100					14.1	984

033

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS		T <sub>c</sub> Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	ROLLER COASTER WASH-8-1	19.0	2575.	1288.	.0264	SUBURBAN FOOTHILLS	.034	2	30	10	5	95	15.1	21
								5					11.5	42
								10					10.2	58
								100					7.6	120
	ROLLER COASTER WASH-8-2	53.6	3200.	1600.	.0209	MODERATE URBAN	.023	2	30	59	0	100	9.4	129
								5					7.9	199
								10					7.2	249
								100					5.8	432
	ROLLER COASTER WASH-8-3	314.2	11060.	5330.	.021	SUBURBAN VALLEY	.03	2	30	25	0	100	40.0	254
								5					31.0	480
								10					27.5	651
								100					20.5	1344
	ROLLER COASTER WASH-8-4	108.9	3700.	1850.	.033	SUBURBAN VALLEY	.029	2	30	28	0	100	12.8	171
								5					10.3	295
								10					9.2	388
								100					7.1	751
	ROLLER COASTER WASH-8-5	80.9	5300.	2650.	.0219	MODERATE URBAN	.028	2	30	34	0	100	19.0	113
								5					15.3	194
								10					13.7	253
								100					10.6	480
	ROLLER COASTER WASH-8-6	31.2	2550.	1275.	.0196	HIGHLY URBAN	.018	2	30	90	0	100	5.5	116
								5					5.0	159
								10					5.0	188
								100					5.0	285

034

CP	CONCENTRATION POINT	AREA Acres	L <sub>q</sub> Feet	L <sub>ca</sub> Feet	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS B D		T <sub>c</sub> Hr/Min	CFS
	ROLLER COASTER WASH-8-7	243.3	9550.	4775.	.0218	SUBURBAN FOOTHILLS	.03	2	30	24	0	100	35.0	212
								5					27.2	398
								10					24.1	541
								100					18.1	1107
	ROLLER COASTER WASH-8-8	43.5	3575.	1288.	.0168	MODERATE URBAN	.025	2	30	34	0	100	12.5	74
								5					10.1	124
								10					9.1	161
								100					7.1	306
	ROLLER COASTER WASH-11-1	21.3	2500.	1250.	.0198	MODERATE URBAN	.024	2	30	55	0	100	8.6	52
								5					7.3	80
								10					6.6	100
								100					5.3	174
	ROLLER COASTER WASH-10-1	206.1	7050.	3523.	.0221	SUBURBAN FOOTHILLS	.031	2	30	21	0	100	29.0	195
								5					22.5	368
								10					19.8	503
								100					15.0	1017
	ROLLER COASTER WASH-10-2	56.2	4050.	2025.	.0259	SUBURBAN FOOTHILLS	.031	2	30	22	88	12	20.5	47
								5					15.7	92
								10					13.7	128
								100					10.1	277
	ROLLER COASTER WASH-10-3	26.6	5910.	2955.	.023	SUBURBAN FOOTHILLS	.034	2	30	10	86	14	38.9	53
								5					27.4	129
								10					23.2	194
								100					16.2	475

035

CP	CONCENTRATION POINT	AREA	L <sub>g</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	ROLLER COASTER WASH-10-4	20.7	2700.	1350.	.0252	SUBURBAN Foothills	.034	2	30	10	100	0	21.1	11
								5					14.9	27
								10					12.7	40
								100					9.0	97
	ROLLER COASTER WASH-10-5	22.7	2800.	1400.	.0275	SUBURBAN Foothills	.0275	2	30	10	100	0	20.7	13
								5					14.7	30
								10					12.5	44
								100					8.8	107
	ROLLER COASTER WASH-10-6	83.4	4750.	2375.	.0244	SUBURBAN Foothills	.034	2	30	10	81	19	31.0	42
								5					22.1	98
								10					18.8	146
								100					13.3	347
	ROLLER COASTER WASH-10-7	50.6	3200.	1600.	.0231	SUBURBAN Foothills	.034	2	30	10	100	0	25.2	25
								5					17.7	61
								10					15.0	91
								100					10.6	221
	ROLLER COASTER WASH-10-8	31.0	2475.	1238.	.0259	SUBURBAN Foothills	.034	2	30	10	100	0	19.5	18
								5					13.8	42
								10					11.8	62
								100					8.3	150

036

HYDROLOGIC DATA TABLE

Project Name: Riverside Terrace BMP

DJA Job No. 84-213.01

Date: 4-7-86

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	RCN(s)		T <sub>c</sub> Hr/Mi	CFS
		Acres	Feet	Feet							B	D		
	ROLLER COASTER WASH-8-1A	5.1	750	375	.0497	SUBURBAN FOOTHILLS	.035	2	30	0	0	100	5.4	8
								5					5.0	14
								10					5.0	19
								100					5.0	36

037

**CITRUS WASH**



CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	CITRUS WASH-2-1	499.7	14045.	7023.	.0175	SUBURBAN FOOTHILLS	.033	2	30	13	9.0	91.0	1.15	227
								5					50.5	491
								10					43.8	698
								100					31.7	1572
	CITRUS WASH-2-2	30.6	2100.	2100.	.0345	SUBURBAN FOOTHILLS	.035	2	30	5	0.0	100.	12.1	36
								5					9.2	72
								10					8.0	101
								100					6.0	208
	CITRUS WASH-7-1	385.4	10695.	5348.	.0172	SUBURBAN FOOTHILLS	.031	2	30	14	8.0	92.0	49.7	227
								5					37.3	467
								10					32.4	661
								100					23.7	1442
	CITRUS WASH-7-2	30.3	3590.	1995.	.0223	SUBURBAN FOOTHILLS	.034	2	30	7	0.0	100.	22.2	28
								5					16.6	56
								10					14.6	79
								100					10.9	164
	CITRUS WASH-7-3	34.2	3440.	1720.	.0199	SUBURBAN FOOTHILLS	.034	2	30	6	0.0	100.	22.0	31
								5					16.5	64
								10					14.4	89
								100					10.7	186
	CITRUS WASH-7-4	109.0	5000.	2500.	.0181	SUBURBAN FOOTHILLS	.029	2	30	28	14.	86.	22.1	126
								5					17.5	227
								10					15.6	302
								100					11.9	595

039

CP	CONCENTRATION POINT	AREA Acres	L <sub>c</sub> Feet	L <sub>ca</sub> Feet	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS B D	T <sub>c</sub> Hr/Min	CFS
	CITRUS WASH-7-5	197.3	8635.	4318.	.0157	SUBURBAN FOOTHILLS	.034	2	30	9	0.0 100.	50.7	110
								5				37.6	234
								10				32.6	335
								100				23.7	739
	CITRUS WASH-8-1	14.54	2225.	1113.	.0198	SUBURBAN FOOTHILLS	.034	2	30	10	0.0 100.	15.4	17
								5				11.8	32
								10				10.4	44
								100				7.8	91
	CITRUS WASH-8-2	17.9	2500.	1250.	.0244	SUBURBAN FOOTHILLS	.034	2	30	10	0.0 100.	15.2	21
								5				11.6	40
								10				10.3	55
								100				7.7	113
	CITRUS WASH-11-1	66.4	5110.	2555.	.0166	SUBURBAN FOOTHILLS	.034	2	30	9	0.0 100.	32.2	50
								5				24.1	103
								10				21.0	146
								100				15.5	311
	CITRUS WASH-11-2	87.6	4610.	2305.	.0174	SUBURBAN FOOTHILLS	.032	2	30	18	0.0 100.	25.1	86
								5				19.4	166
								10				17.1	226
								100				12.9	458
	CITRUS WASH-11-3	16.5	1900.	950.	.0189	MODERATE URBAN	.024	2	30	53	0.0 100.	7.3	42
								5				6.2	65
								10				5.6	81
								100				5.0	137

040

CP	CONCENTRATION POINT	AREA	$L_c$	$L_{ca}$	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		$T_c$	CFS
		Acres	Feet	Feet	ft./ft.		$n_b$	Years	%	%	B	D	Hr/Min	
	CITRUS WASH-11-4	58.9	3910.	1955.	.0148	SUBURBAN FOOTHILLS	.034	2	30	10	0.0	100.	27.5	49
								5					20.6	101
								10					18.1	141
								100					13.5	295
	CITRUS WASH-11-5	29.1	2210.	1100.	.0149	SUBURBAN FOOTHILLS	.034	2	30	10	0.0	100.	17.6	31
								5					13.4	61
								10					11.8	84
								100					8.9	173
	CITRUS WASH-11-6	32.4	2460.	1230.	.0154	SUBURBAN FOOTHILLS	.034	2	30	10	0.0	100.	18.8	34
								5					14.3	66
								10					12.6	91
								100					9.5	187

140

**CASAS ADOBES WASH**

CP	CONCENTRATION POINT	AREA Acres	L <sub>c</sub> Feet	L <sub>ca</sub> Feet	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS B D	T <sub>c</sub> Hr/Min	CFS
	CASAS ADOBES WASH-7-1	1316.1	27230.	14210.	.0234	SUBURBAN FOOTHILLS	.0334	2	30	14	15. 85.	1.85	388
								5				1.33	892
								10				1.13	1331
								100				48.2	3123
	CASAS ADOBES WASH-7-2	66.8	6250.	3000.	.0202	SUBURBAN FOOTHILLS	.033	2	30	18	3. 97.	30.3	59
								5				23.3	113
								10				20.5	156
								100				15.4	321
	CASAS ADOBES WASH-7-3	325.9	11750.	6300.	.0187	SUBURBAN FOOTHILLS	.0337	2	30	13	8. 92.	59.6	168
								5				44.5	349
								10				38.7	495
								100				28.1	1103
	CASAS ADOBES WASH-7-4	828.4	24430.	12810.	.024	SUBURBAN FOOTHILLS	.0332	2	30	14.6	13. 87.	1.62	278
								5				1.17	635
								10				59.8	940
								100				43.1	2128
	CASAS ADOBES WASH-7-5	16.1	2300.	900.	.0217	SUBURBAN FOOTHILLS	.032	2	30	20	0. 100	12.0	24
								5				9.5	42
								10				8.4	57
								100				6.4	112
	CASAS ADOBES WASH-7-6	18.8	2650.	1050.	.0211	SUBURBAN FOOTHILLS	.032	2	30	20	0 100	13.5	26
								5				10.7	47
								10				9.5	63
								100				7.2	126

EXO

CP	CONCENTRATION POINT	AREA	L <sub>g</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>p</sub>	Years	%	%	B	D	hr/Min	
	CASAS ADOBES WASH-7-7	19.4	2250.	1200.	.0213	SUBURBAN FOOTHILLS	.033	2	30	16	0.	100	14.2	25
								5					11.1	47
								10					9.9	62
								100					7.4	127
	CASAS ADOBES WASH-7-8	91.6	4950.	2700.	.021	SUBURBAN FOOTHILLS	.034	2	30	15	2.	98.	27.6	82
								5					21.0	161
								10					18.5	222
								100					13.8	458
	CASAS ADOBES WASH-7-9	20.5	2000.	750.	.023	SUBURBAN FOOTHILLS	.035	2	30	10	0.	100	12.4	26
								5					9.5	50
								10					8.4	69
								100					6.3	139
	CASAS ADOBES WASH-7-10	256.9	9950.	5250.	.0193	SUBURBAN FOOTHILLS	.0336	2	30	12.8	2.	98.	50.0	152
								5					37.5	313
								10					32.6	444
								100					23.9	967
	CASAS ADOBES WASH-7-11	19.3	2250.	1050.	.0178	SUBURBAN FOOTHILLS	.029	2	30	36	0.	100	11.3	35
								5					9.2	58
								10					8.3	76
								100					6.5	141
	CASAS ADOBES WASH-7-12	20.4	2450.	1000.	.0212	SUBURBAN FOOTHILLS	.032	2	30	20	0.	100	12.9	29
								5					10.2	52
								10					9.1	70
								100					6.9	139

HBO

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>p</sub>	Years	%	%	B	D	Hr/Min	
	CASAS ADOBES WASH-8-1	15.9	2600.	1300.	.0208	SUBURBAN FOOTHILLS	.032	2	30	20	0.	100	14.7	21
								5					11.6	39
								10					10.3	52
								100					7.8	103
	CASAS ADOBES WASH-8-2	30.3	3050.	1500.	.022	SUBURBAN FOOTHILLS	.034	2	30	16	0.	100	17.7	35
								5					13.7	67
								10					12.1	90
								100					9.2	181
	CASAS ADOBES WASH-12-1	18.8	2100.	1000.	.02	SUBURBAN FOOTHILLS	.034	2	30	13	0.	100	14.1	23
								5					11.0	44
								10					9.7	60
								100					7.3	123
	CASAS ADOBES WASH-12-2	181.1	7950.	4100.	.0201	SUBURBAN FOOTHILLS	.033	2	30	14	0.	100	38.9	129
								5					29.3	262
								10					25.7	365
								100					19.0	781
	CASAS ADOBES WASH-12-3	15.4	1800.	750.	.02	SUBURBAN FOOTHILLS	.032	2	30	20	0.	100	10.7	24
								5					8.5	43
								10					7.5	57
								100					5.8	111
	CASAS ADOBES WASH-12-4	106.9	6300.	3300.	.0216	SUBURBAN FOOTHILLS	.033	2	30	14	0.	100.	31.2	88
								5					23.7	175
								10					20.8	243
								100					15.5	508

045

960

CP	CONCENTRATION POINT	AREA Acres	L <sub>q</sub> Feet	L <sub>ca</sub> Feet	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS B D		T <sub>c</sub> Hr/Min	CFS
	CASAS ADOBES WASH-12-5	23.0	2700.	1050.	.0156	SUBURBAN FOOTHILLS	.034	2	30	14	0.	100	17.8	26
								5					13.7	50
								10					12.1	68
								100					9.2	137
	CASAS ADOBES WASH-11-1	654.6	19980.	10110.	.0278	SUBURBAN FOOTHILLS	.0332	2	30	14.4	13.	87.	1.21	283
								5					53.1	622
								10					46.1	882
								100					33.3	1985
	CASAS ADOBES WASH-11-2	20.2	2250.	1100.	.0231	SUBURBAN FOOTHILLS	.034	2	30	15	0.	100	13.8	26
								5					10.8	49
								10					9.5	66
								100					7.2	133
	CASAS ADOBES WASH-11-3	17.3	1950.	1000.	.0221	SUBURBAN FOOTHILLS	.034	2	30	16	5.	95.	13.0	23
								5					10.1	42
								10					9.0	57
								100					6.8	116
	CASAS ADOBES WASH-11-4	19.7	2300.	1150.	.0217	SUBURBAN FOOTHILLS	.035	2	30	4	0.	100	16.4	20
								5					12.3	41
								10					10.8	57
								100					8.0	120
	CASAS ADOBES WASH-11-5	27.8	2050.	1000.	.0205	SUBURBAN FOOTHILLS	.032	2	30	20	3.	97	12.4	40
								5					9.8	72
								10					8.7	97
								100					6.6	191



047

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	INPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	CASAS ADOBES WASH-11-6	69.5	4200.	2100.	.0238	SUBURBAN FOOTHILLS	.034	2	30	11	0.	100	22.5	66
								5					17.1	132
								10					15.0	182
								100					11.3	376
	CASAS ADOBES WASH-11-7	44.8	3000.	1500.	.0273	SUBURBAN FOOTHILLS	.033	2	30	11	0.	100	15.7	52
								5					12.1	100
								10					10.6	136
								100					8.0	280
	CASAS ADOBES WASH-11-8	530.1	15825.	7913.	.0302	SUBURBAN FOOTHILLS	.033	2	30	14	12.	88.	55.4	286
								5					41.4	591
								10					36.0	839
								100					26.2	1858
	CASAS ADOBES WASH-11-9	12.2	1800.	900.	.0222	SUBURBAN FOOTHILLS	.032	2	30	20	0.	100	10.9	19
								5					8.6	34
								10					7.6	45
								100					5.9	88
	CASAS ADOBES WASH-10-1	17.4	1860.	930.	.022	SUBURBAN FOOTHILLS	.034	2	30	10	43.	57.	14.2	17
								5					10.7	34
								10					9.3	48
								100					6.8	105
	CASAS ADOBES WASH-10-2	460.1	12975.	6488.	.0404	SUBURBAN FOOTHILLS	.033	2	30	13	13.	87.	40.7	298
								5					30.3	621
								10					26.5	870
								100					19.4	1902

840

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	CASAS ADOBES WASH-10-3	257.0	10775.	5388.	.0371	SUBURBAN FOOTHILLS	.034	2	30	10	22.	78.	40.0	154
								5					29.5	331
								10					25.6	472
								100					18.5	1054
	CASAS ADOBES WASH-10-4	39.1	3675.	1813.	.0258	SUBURBAN FOOTHILLS	.034	2	30	10	0.	100	19.6	40
								5					14.9	79
								10					13.1	108
								100					9.8	222
	CASAS ADOBES WASH-19-1	415.6	11525.	5763.	.0353	SUBURBAN FOOTHILLS	.033	2	30	12	14.	86.	40.2	266
								5					29.8	560
								10					26.1	786
								100					19.0	1725
	CASAS ADOBES WASH-19-2	21.2	2360.	1180.	.0445	SUBURBAN FOOTHILLS	.027	2	30	39	13.	87.	7.1	47
								5					5.8	75
								10					5.3	96
								100					5.0	166
	CASAS ADOBES WASH-19-3	202.9	9125.	4563.	.0389	SUBURBAN FOOTHILLS	.034	2	30	10	27.	73.	34.6	131
								5					25.5	279
								10					22.1	399
								100					16.1	882
	CASAS ADOBES WASH-19-4	131.5	8350.	4175.	.0401	SUBURBAN FOOTHILLS	.034	2	30	7	9.	91.	31.0	94
								5					22.9	200
								10					19.9	285
								100					14.6	615

HYDROLOGIC DATA TABLE

Project Name: RIVERSIDE TERRACE BMP

DJA Job No. 84-213.01

Date: 3-10-86

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	RCN(s)		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	CASAS ADOBES WASH-19-5	25.8	2575.	1288.	.0439	SUBURBAN FOOTHILLS	.034	2	30	10	0.	100	11.7	33
								5					9.0	64
								10					7.9	88
								100					6.0	179
	CASAS ADOBES WASH-19-6	109.5	4900.	2450.	.0367	SUBURBAN FOOTHILLS	.033	2	30	12	2	98	19.5	114
								5					14.9	223
								10					13.1	305
								100					9.9	620
	CASAS ADOBES WASH-19-7	28.8	2310.	1155.	.0437	SUBURBAN FOOTHILLS	.034	2	30	10	7	93	11.0	37
								5					8.4	72
								10					7.4	99
								100					5.6	200
	CASAS ADOBES WASH-19-8	26.9	3375.	1688.	.0335	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	16.2	30
								5					12.4	59
								10					10.9	80
								100					8.2	166
	CASAS ADOBES WASH-19-9	28.2	2400.	1200.	.0458	SUBURBAN FOOTHILLS	.034	2	30	6	0	100	11.2	35
								5					8.5	70
								10					7.4	96
								100					5.6	196
	CASAS ADOBES WASH-20-1	51.7	4625.	2313.	.0471	SUBURBAN FOOTHILLS	.034	2	30	6	0	100	17.8	52
								5					13.4	105
								10					11.8	146
								100					8.8	305

660

CP	CONCENTRATION POINT	AREA Acres	L <sub>c</sub> Feet	L <sub>ca</sub> Feet	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD REQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS B	D	T <sub>c</sub> Hr/Min	CFS
	CASAS ADOBES WASH-20-2	22.8	2350.	1175.	.0366	SUBURBAN FOOTHILLS	.035	2	30	2	0	100	13.1	25
								5					9.8	51
								10					8.6	72
								100					6.4	151
	CASAS ADOBES WASH-20-3	36.3	2875.	1438.	.0522	SUBURBAN FOOTHILLS	.035	2	30	8	0	100	12.2	45
								5					9.3	87
								10					8.2	121
								100					6.2	247
	CASAS ADOBES WASH-11-5A	2.5	625	312	.0264	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	5.4	4
								5					5.0	8
								10					5.0	10
								100					5.0	18

050

**NANINI WASH**

CP	CONCENTRATION POINT	AREA	L <sub>q</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	NANINI WASH-6-1	1424.	26785.	13393.	.02	SUBURBAN FOOTHILLS	.033	2	30	13	14	86	1.94	399
								5					1.39	924
								10					1.18	1377
								100					50.0	3293
	NANINI WASH-6-2	52.9	3400.	1700.	.0306	SUBURBAN FOOTHILLS	.035	2	30	1	100	0	28.7	17
								5					18.3	52
								10					15.2	83
								100					10.3	218
	NANINI WASH-6-3	1198.2	23585.	11793.	.0214	SUBURBAN FOOTHILLS	.033	2	30	12	11	89	1.66	382
								5					1.19	890
								10					1.01	1337
								100					43.5	3044
	NANINI WASH-6-4	50.2	3525.	1763.	.0349	SUBURBAN FOOTHILLS	.033	2	30	9	28	76	16.7	49
								5					12.6	101
								10					11.0	141
								100					8.1	302
	NANINI WASH-6-5	15.9	2240.	1120.	.0375	SUBURBAN FOOTHILLS	.035	2	30	2	0	100	12.5	18
								5					9.4	36
								10					8.2	51
								100					6.1	107
	NANINI WASH-6-6	19.8	2450.	1225.	.0269	SUBURBAN FOOTHILLS	.033	2	30	10	0	100	13.7	24
								5					10.5	46
								10					9.3	63
								100					7.0	130

052

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>p</sub>	Years	%	%	B	D	Hr/Min	
NANINI WASH-6-7		15.0	2500.	1250.	.0264	SUBURBAN FOOTHILLS	.031	2	30	18	0	100	12.4	21
								5					9.7	38
								10					8.6	52
								100					6.6	103
NANINI WASH-7-1		14.6	2160.	1080.	.0352	SUBURBAN FOOTHILLS	.035	2	30	0	0	100	12.8	16
								5					9.5	32
								10					8.3	46
								100					6.1	97
NANINI WASH-7-2		1129.	20885.	10443.	.022	SUBURBAN FOOTHILLS	.033	2	30	13	11	89	1.45	412
								5					1.03	956
								10					53.6	1375
								100					38.7	3106
NANINI WASH-12-1		1074.3	19285.	9643.	.0225	SUBURBAN FOOTHILLS	.033	2	30	8	12	88	1.40	373
								5					58.9	900
								10					50.7	1306
								100					36.2	3024
NANINI WASH-12-2		25.6	2060.	1030.	.0194	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	14.7	30
								5					11.3	58
								10					10.0	79
								100					7.5	164
NANINI WASH-12-3		969.9	15260.	7630.	.0248	SUBURBAN FOOTHILLS	.033	2	30	14	3	97	58.7	524
								5					44.1	1071
								10					38.4	1513
								100					28.0	3334

553

CP	CONCENTRATION POINT	AREA Acres	L <sub>c</sub> Feet	L <sub>ca</sub> Feet	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS B D	T <sub>c</sub> Hr/Mi	CFS
	NANINI WASH-12-4	28.0	2300.	1150.	.0189	SUBURBAN FOOTHILLS	.034	2	30	9	0 100	16.3	31
								5				12.4	61
								10				10.9	83
								100				8.2	172
	NANINI WASH-12-5	80.6	5325.	2663.	.0289	SUBURBAN FOOTHILLS	.032	2	30	17	0 100	22.6	50
								5				17.5	96
								10				15.4	130
								100				11.7	263
	NANINI WASH-11-1	124.3	6100.	3050.	.0207	SUBURBAN FOOTHILLS	.033	2	30	13	0 100	30.8	102
								5				23.3	204
								10				20.4	284
								100				15.2	594
	NANINI WASH-11-2	101.0	4810.	2405.	.0179	SUBURBAN FOOTHILLS	.033	2	30	13	0 100	27.6	88
								5				20.9	176
								10				18.4	244
								100				13.7	506
	NANINI WASH-11-3	19.4	3300.	1650.	.0182	SUBURBAN FOOTHILLS	.034	2	30	10	0 100	21.7	19
								5				16.4	37
								10				14.4	52
								100				10.8	106
	NANINI WASH-11-4	18.2	2800.	1400.	.0164	SUBURBAN FOOTHILLS	.032	2	30	22	0 100	17.2	23
								5				13.5	42
								10				12.1	56
								100				9.2	110

654



CP	CONCENTRATION POINT	AREA	L <sub>q</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	NANINI WASH-11-5	34.9	2800.	1400.	.0193	SUBURBAN FOOTHILLS	.033	2	30	14	0	100	17.4	40
								5					13.4	76
								10					11.9	103
								100					8.9	209
	NANINI WASH-11-6	13.8	2250.	1125.	.0187	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	16.0	16
								5					12.2	30
								10					10.8	41
								100					8.1	86
	NANINI WASH-11-7	35.5	5050.	2525.	.0186	SUBURBAN FOOTHILLS	.034	2	30	15	0	100	28.7	31
								5					21.9	61
								10					19.3	85
								100					14.4	175
	NANINI WASH-11-8	18.3	1910.	955.	.0178	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	14.5	22
								5					11.1	42
								10					9.9	57
								100					7.4	118
	NANINI WASH-11-9	573.2	11790.	5896.	.0113	SUBURBAN FOOTHILLS	.032	2	30	16	5	95	1.18	269
								5					52.2	573
								10					45.5	806
								100					33.1	1784
	NANINI WASH-11-10	635.8	12190.	6095.	.0111	SUBURBAN FOOTHILLS	.033	2	30	15	4	96	1.29	272
								5					56.5	599
								10					49.2	846
								100					35.8	1879

055

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>p</sub>	Years	%	%	B	D	Hr/Min	
	NANINI WASH-18-1	32.3	3575.	1788.	.0364	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	16.2	36
								5					12.4	70
								10					10.9	97
								100					8.2	199
	NANINI WASH-18-2	426.1	10090.	5045.	.0256	SUBURBAN FOOTHILLS	.033	2	30	15	6	94	41.2	291
								5					31.0	591
								10					27.1	823
								100					20.0	1776
	NANINI WASH-18-3	121.9	6380.	3190.	.0166	SUBURBAN FOOTHILLS	.031	2	30	19	0	100	31.6	107
								5					24.3	205
								10					21.4	281
								100					16.1	579
	NANINI WASH-18-4	20.3	2650.	1375.	.0151	SUBURBAN FOOTHILLS	.034	2	30	8	0	100	20.7	19
								5					15.4	40
								10					13.7	54
								100					10.3	113
	NANINI WASH-18-5	132.2	7180.	3590.	.0351	SUBURBAN FOOTHILLS	.033	2	30	13	0	100	26.5	118
								5					20.1	236
								10					17.7	325
								100					13.2	673
	NANINI WASH-18-6	63.0	3550.	1775.	.0217	SUBURBAN FOOTHILLS	.03	2	30	27	0	100	16.0	88
								5					12.8	155
								10					11.4	205
								100					8.8	397

950

CP	CONCENTRATION POINT	AREA	L <sub>q</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	NANINI WASH-18-7	141.6	5580.	2790.	.0283	SUBURBAN FOOTHILLS	.033	2	30	16	18	82	24.7	128
								5					18.9	252
								10					16.6	348
								100					12.4	722
	NANINI WASH-18-8	112.9	5280.	2640.	.0407	SUBURBAN FOOTHILLS	.033	2	30	13	0	100	19.4	121
								5					14.9	233
								10					13.1	319
								100					9.9	644
	NANINI WASH-18-9	52.7	2680.	1340.	.0209	SUBURBAN FOOTHILLS	.034	2	30	7	0	100	17.6	54
								5					13.3	109
								10					11.7	150
								100					8.7	313
	NANINI WASH-19-1	29.1	1950.	975.	.0205	SUBURBAN FOOTHILLS	.029	2	30	34	0	100	9.9	54
								5					8.0	92
								10					7.2	119
								100					5.6	220
	NANINI WASH-19-2	46.9	3325.	1663.	.0376	SUBURBAN FOOTHILLS	.034	2	30	10	51	49	17.1	40
								5					12.8	83
								10					11.1	117
								100					8.1	259
	NANINI WASH-19-3	12.5	1840.	920.	.0435	SUBURBAN FOOTHILLS	.034	2	30	10	18	82	9.6	16
								5					7.3	32
								10					6.4	44
								100					5.0	87

057

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>B</sub>	Years	%	%	B	D	Hr/Min	
	NANINI WASH-19-4	24.1	2320.	2320.	.0345	SUBURBAN FOOTHILLS	.034	2	30	10	94	6	15.7	16
								5					11.3	37
								10					9.7	53
								100					6.9	127
	NANINI WASH-19-5	34.5	2940.	1470.	.0374	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	13.9	41
								5					10.6	80
								10					9.4	110
								100					7.0	226
	NANINI WASH-19-6	83.6	4060.	2030.	.0419	SUBURBAN FOOTHILLS	.033	2	30	15	0	100	15.5	102
								5					12.0	193
								10					10.7	260
								100					8.0	528
	NANINI WASH-19-7	22.8	2350.	1175.	.0545	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	9.9	31
								5					7.6	61
								10					6.7	83
								100					5.1	165
	NANINI WASH-19-8	12.9	1660.	830.	.0578	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	7.4	20
								5					5.8	38
								10					5.1	51
								100					5.0	94
	NANINI WASH-19-9	18.8	1760.	880.	.0648	SUBURBAN FOOTHILLS	.034	2	30	10	0	100	7.4	29
								5					5.7	56
								10					5.1	75
								100					5.0	137



**PEGLER WASH**

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	PEGLER WASH-5-1	2428.0	37450.	19800.	.0141	SUBURBAN FOOTHILLS	.031	2	30	22	23	77	2.87	534
								5					2.10	1175
								10					1.81	1701
								100					1.27	4122
	PEGLER WASH-5-2	2392.9	36450.	19300.	.0154	SUBURBAN FOOTHILLS	.031	2	30	22	22	78	2.65	566
								5					1.94	1241
								10					1.67	1793
								100					1.17	4351
	PEGLER WASH-5-3	2297.2	33900.	18000.	.0191	SUBURBAN FOOTHILLS	.031	2	30	22	19	81	2.16	656
								5					1.59	1414
								10					1.37	2055
								100					57.9	4938
	PEGLER WASH-5-4	302.9	13450.	7450.	.0162	SUBURBAN FOOTHILLS	.032	2	30	21	26	74	1.12	148
								5					50.3	303
								10					44.0	425
								100					32.0	943
	PEGLER WASH-5-5	266.8	12150.	6650.	.016	SUBURBAN FOOTHILLS	.032	2	30	21	16	84	60.0	149
								5					45.7	293
								10					40.0	409
								100					29.3	892
	PEGLER WASH-6-1	2176.2	32650.	19720.	.0221	SUBURBAN FOOTHILLS	.0315	2	30	20	14	86	2.09	633
								5					1.53	1378
								10					1.32	2011
								100					55.8	4793

170

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>p</sub>	Years	%	%	B	D	Hr/Min	
	PEGLER WASH-6-2	1838.8	31200.	15970.	.0224	SUBURBAN FOOTHILLS	.0314	2	30	20	12	88	1.83	605
								5					1.34	1315
								10					1.15	1924
								100					49.6	4401
	PEGLER WASH-6-3	51.7	5580.	2780.	.0231	SUBURBAN FOOTHILLS	.033	2	30	16	55	45	29.8	36
								5					22.3	74
								10					19.4	105
								100					14.2	230
	PEGLER WASH-6-4	33.6	3200.	1550.	.0238	SUBURBAN FOOTHILLS	.033	2	30	15	40	60	18.5	32
								5					14.1	63
								10					12.3	87
								100					9.2	184
	PEGLER WASH-13-1	244.8	11250.	5750.	.0155	SUBURBAN FOOTHILLS	.032	2	30	21	92	8	54.9	149
								5					42.0	291
								10					36.8	405
								100					27.1	868
	PEGLER WASH-13-2	23.9	2975.	1480.	.0185	SUBURBAN FOOTHILLS	.032	2	30	21	50	50	18.6	24
								5					14.4	46
								10					12.7	63
								100					9.5	130
	PEGLER WASH-13-3	1674.8	27400.	13720.	.0229	SUBURBAN FOOTHILLS	.031	2	30	22	8	92	1.51	674
								5					1.12	1443
								10					58.0	2069
								100					42.6	4489

062



CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	PEGLER WASH-13-4	191.8	9150.	4750.	.0126	SUBURBAN FOOTHILLS	.032	2	30	21	0	100	51.5	125
								5					39.5	243
								10					31.3	360
								100					23.3	754
	PEGLER WASH-13-5	49.5	3900.	1950.	.0185	SUBURBAN FOOTHILLS	.032	2	30	23	80	20	24.0	40
								5					18.4	78
								10					16.1	109
								100					11.8	234
	PEGLER WASH-13-6	53.8	4150.	2200.	.0171	SUBURBAN FOOTHILLS	.032	2	30	22	25	75	24.3	52
								5					18.8	99
								10					16.6	135
								100					12.5	276
	PEGLER WASH-13-7	22.9	2900.	1300.	.0176	SUBURBAN FOOTHILLS	.032	2	30	23	60	40	18.1	23
								5					14.0	44
								10					12.4	60
								100					9.3	124
	PEGLER WASH-13-8	21.7	3250.	1620.	.0188	SUBURBAN FOOTHILLS	.032	2	30	23	90	10	21.1	18
								5					16.2	35
								10					14.2	49
								100					10.4	106
	PEGLER WASH-13-9	125.3	7600.	4000.	.0142	SUBURBAN FOOTHILLS	.032	2	30	21	0	100	41.6	94
								5					32.0	182
								10					28.2	250
								100					20.9	523

890

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD	COVER	IMPERV. COVER %	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet				FREQ. Years	DENSITY %		B	D	Hr/Min	
	PEGLER WASH-13-10	24.5	2880.	1440.	.0194	SUBURBAN FOOTHILLS	.029	2	30	31	95	5	15.6	28
								5					12.3	49
								10					11.0	66
								100					8.2	138
	PEGLER WASH-13-11	86.4	4400.	2300.	.015	SUBURBAN FOOTHILLS	.032	2	30	21	0	100	26.1	87
								5					20.2	164
								10					17.9	222
								100					13.5	446
	PEGLER WASH-12-1	79.6	4900.	2500.	.0245	SUBURBAN FOOTHILLS	.032	2	30	20	3	97	22.0	86
								5					17.1	161
								10					15.2	218
								100					11.5	437
	PEGLER WASH-12-2	1621.2	25400.	12720.	.023	SUBURBAN FOOTHILLS	.031	2	30	22	6	94	1.40	704
								5					1.04	1502
								10					54.4	2097
								100					39.9	4550
	PEGLER WASH-12-3	1485.5	24300.	12220.	.0235	SUBURBAN FOOTHILLS	.031	2	30	22	5	95	1.33	678
								5					59.1	1434
								10					51.8	1992
								100					38.1	4304
	PEGLER WASH-12-4	60.2	3900.	1800.	.0177	SUBURBAN FOOTHILLS	.032	2	30	20	0	100	20.9	68
								5					16.3	126
								10					14.5	170
								100					11.0	338

690

HYDROLOGIC DATA TABLE

Project Name:

RIVERSIDE TERRACE Blvd

DJA Job No. 84-210.01

Date: 3-10-00

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS		T <sub>c</sub> Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	PEGLER WASH-12-5	28.5	2650.	1320.	.0189	SUBURBAN FOOTHILLS	.032	2	30	20	0	100	15.6	37
								5					12.2	68
								10					10.9	91
								100					8.3	180
	PEGLER WASH-12-6	18.3	1500.	750.	.0193	SUBURBAN FOOTHILLS	.032	2	30	21	0	100	10.1	29
								5					8.0	52
								10					7.1	70
								100					5.5	134
	PEGLER WASH-12-7	46.5	3700.	1850.	.0119	SUBURBAN FOOTHILLS	.032	2	30	20	0	100	25.4	47
								5					19.7	89
								10					17.4	120
								100					13.2	242
	PEGLER WASH-17-1	13.5	2050.	900.	.0146	SUBURBAN FOOTHILLS	.031	2	30	23	0	100	13.2	20
								5					10.5	35
								10					9.4	46
								100					7.1	92
	PEGLER WASH-17-2	36.2	3150.	1500.	.0159	SUBURBAN FOOTHILLS	.03	2	30	22	8	92	17.5	45
								5					13.8	81
								10					12.3	109
								100					9.3	215
	PEGLER WASH-17-3	1340.1	20700.	10420.	.0275	SUBURBAN FOOTHILLS	.031	2	30	22	0	100	1.03	783
								5					47.2	1522
								10					41.5	2105
								100					30.5	4524

065

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>p</sub>	Years	%	%	B	D	Hr/Min	
	PEGLER WASH-17-4	1176.7	19450.	9820.	.029	SUBURBAN FOOTHILLS	.031	2	30	21	0	100	57.2	717
								5					43.8	1392
								10					38.5	1929
								100					28.4	4123
	PEGLER WASH-17-5	135.7	7450.	3300.	.0121	SUBURBAN FOOTHILLS	.029	2	30	28	0	100	34.9	124
								5					27.4	228
								10					24.3	307
								100					18.3	620
	PEGLER WASH-17-6	83.4	5800.	2500.	.0121	SUBURBAN FOOTHILLS	.029	2	30	29	0	100	28.1	88
								5					22.2	159
								10					19.8	213
								100					15.1	421
	PEGLER WASH-17-7	1107.5	16000.	8100.	.0325	SUBURBAN FOOTHILLS	.031	2	35	21	0	100	45.9	779
								5					35.2	1510
								10					30.9	2093
								100					23.0	4382
	PEGLER WASH-17-8	28.1	2800.	1200.	.0125	SUBURBAN FOOTHILLS	.028	2	35	37	0	100	14.5	46
								5					11.8	77
								10					10.7	99
								100					8.3	187
	PEGLER WASH-18-1	651.6	13700.	6900.	.025	SUBURBAN FOOTHILLS	.03	2	35	24	0	100	43.7	491
								5					33.8	934
								10					29.7	1285
								100					22.3	2652

290

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	INPERV. COVER %	% SOILS		T <sub>c</sub> Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	PEGLER WASH-18-2	204.9	12150.	5800.	.0351	SUBURBAN FOOTHILLS	.032	2	35	18	0	100	36.6	161
								5					28.0	314
								10					24.6	434
								100					18.3	909
	PEGLER WASH-18-3	398.7	14000.	7150.	.0357	SUBURBAN FOOTHILLS	.033	2	35	17	0	100	44.0	274
								5					33.4	546
								10					29.3	759
								100					21.6	1615
	PEGLER WASH-18-4	33.1	2650.	1320.	.017	SUBURBAN FOOTHILLS	.033	2	35	15	0	100	16.4	39
								5					12.7	75
								10					11.3	101
								100					8.5	204
	PEGLER WASH-18-5	322.2	11450.	6100.	.0402	SUBURBAN FOOTHILLS	.033	2	35	17	0	100	35.7	254
								5					27.2	499
								10					23.9	689
								100					17.8	1447
	PEGLER WASH-23-1	410.4	11900.	6020.	.0266	SUBURBAN FOOTHILLS	.029	2	35	27	0	100	35.3	368
								5					27.7	680
								10					24.5	918
								100					18.5	1864
	PEGLER WASH-23-2	36.3	3300	1630	.0182	SUBURBAN FOOTHILLS	.032	2	35	20	0	100	18.6	43
								5					14.6	80
								10					13.0	108
								100					9.9	212

067

CP	CONCENTRATION POINT	AREA	$L_c$	$L_{ca}$	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR $n_b$	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS		$T_c$ Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	PEGLER WASH-23-3	123.1	9700.	4600.	.0409	SUBURBAN FOOTHILLS	.032	2	35	16	0	100	28.5	110
								5					21.8	215
								10					19.2	296
								100					14.4	609
	PEGLER WASH-23-4	20.0	2050.	950.	.0195	SUBURBAN FOOTHILLS	.032	2	35	20	0	100	12.4	29
								5					9.8	52
								10					8.7	70
								100					6.6	138
	PEGLER WASH-23-5	106.5	6800.	3300.	.0169	SUBURBAN FOOTHILLS	.03	2	35	24	0	100	30.1	102
								5					23.5	189
								10					20.8	257
								100					15.7	518
	PEGLER WASH-23-6	159.2	8750.	4450.	.0282	SUBURBAN FOOTHILLS	.027	2	35	35	0	100	23.4	200
								5					18.8	347
								10					16.8	456
								100					13.0	873
	PEGLER WASH-23-7	81.5	6400.	3100.	.0281	SUBURBAN FOOTHILLS	.03	2	35	26	0	100	21.8	196
								5					17.2	174
								10					15.3	232
								100					11.7	454
	PEGLER WASH-23-8	33.2	5200.	2400.	.0192	SUBURBAN FOOTHILLS	.029	2	35	26	0	100	21.2	40
								5					16.8	72
								10					14.9	196
								100					11.4	187

890

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	PEGLER WASH-23-9	18.2	2650.	1250.	.0189	SUBURBAN FOOTHILLS	.03	2	35	25	0	100	13.7	27
								5					10.9	47
								10					9.8	62
								100					7.5	122
	PEGLER WASH-19-1	299.5	9900.	5300.	.0429	SUBURBAN FOOTHILLS	.033	2	35	18	0	100	30.4	265
								5					23.4	510
								10					20.6	703
								100					15.4	1444
	PEGLER WASH-19-2	269.2	8800	4800.	.046	SUBURBAN FOOTHILLS	.034	2	35	13	0	100	29.0	228
								5					22.0	456
								10					19.3	633
								100					14.4	1320
	PEGLER WASH-19-3	239.2	7600.	4200.	.0474	SUBURBAN FOOTHILLS	.033	2	35	10	0	100	25.2	211
								5					19.0	428
								10					16.7	594
								100					12.4	1239
	PEGLER WASH-19-4	66.2	5650.	2830.	.0531	SUBURBAN FOOTHILLS	.035	2	35	12	0	100	19.4	70
								5					14.8	136
								10					13.1	186
								100					9.8	378
	PEGLER WASH-19-5	21.2	2650.	1300.	.0604	SUBURBAN FOOTHILLS	.033	2	35	12	0	100	9.7	30
								5					7.5	58
								10					6.6	79
								100					5.0	155

690

CP	CONCENTRATION POINT	AREA	$L_c$	$L_{ca}$	MEAN	WATERSHED TYPE	BASIN	FLOOD	COVER	IMPERV.	% SOILS		$T_c$	CFS
		Acres	Feet	Feet	SLOPE		FACTOR	FREQ.	DENSITY	COVER	B	D	Hr/Min	
					ft./ft.		$n_b$	Years	%	%				
	PEGLER WASH-19-6	105.9	4630.	1950.	.0562	SUBURBAN FOOTHILLS	.035	2	35	8	0	100	15.7	117
								5					11.9	231
								10					10.5	318
								100					7.8	661
	PEGLER WASH-19-7	55.2	4250.	1830.	.0565	SUBURBAN FOOTHILLS	.036	2	35	7	0	100	15.4	60
								5					11.7	120
								10					10.3	166
								100					7.7	346
	PEGLER WASH-19-8	40.0	4100.	2000.	.0585	SUBURBAN FOOTHILLS	.036	2	35	7	0	100	15.4	44
								5					11.7	87
								10					10.3	120
								100					7.7	251
	PEGLER WASH-20-2	39.6	3430.	1300.	.0583	SUBURBAN FOOTHILLS	.036	2	35	7	0	100	12.4	48
								5					9.4	94
								10					8.3	130
								100					6.2	268
	PEGLER WASH-20-1	31.8	3480.	1450.	.0575	SUBURBAN FOOTHILLS	.036	2	35	7	0	100	13.0	37
								5					9.9	74
								10					8.7	102
								100					6.5	212
	PEGLER WASH-22-1	103.3	7400.	3500.	.047C	SUBURBAN FOOTHILLS	.033	2	35	16	0	100	22.2	107
								5					17.1	205
								10					15.1	279
								100					11.4	565

070



CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR $\eta_b$	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS		T <sub>c</sub> Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	PEGLER WASH-22-2	95.0	6150.	2800.	.0530	SUBURBAN Foothills	.034	2	35	13	0	100	19.1	102
								5					14.6	198
								10					12.9	270
								100					9.8	546
	PEGLER WASH-22-3	62.9	5250.	2630.	.0543	SUBURBAN Foothills	.035	2	35	12	0	100	18.1	69
								5					13.9	133
								10					12.3	182
								100					9.2	370
	PEGLER WASH-22-4	41.1	3500.	1600.	.0586	SUBURBAN Foothills	.036	2	35	7	0	100	13.4	48
								5					10.2	95
								10					9.0	131
								100					6.7	271
	PEGLER WASH-22-5	24.7	2750.	1450.	.0582	SUBURBAN Foothills	.034	2	35	12	0	100	10.7	34
								5					8.3	65
								10					7.3	88
								100					5.6	176
	PEGLER WASH-22-6	27.5	3300.	1750.	.0545	SUBURBAN Foothills	.04	2	35	12	0	100	15.4	32
								5					11.9	62
								10					10.5	85
								100					7.9	173

071

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS		T <sub>c</sub> Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	PEGLER WASH-22-7	50.8	5100.	2550.	.0412	SUBURBAN FOOTHILLS	.033	2	35	21	0	100	17.8	63
								5					14.0	115
								10					12.4	154
								100					9.5	303
	PEGLER WASH-22-8	136.6	6800.	3450.	.0363	SUBURBAN FOOTHILLS	.026	2	35	37	0	100	15.0	214
								5					13.0	358
								10					11.7	464
								100					9.1	870
	PEGLER WASH-22-9	60.6	4400.	2150.	.0341	SUBURBAN FOOTHILLS	.03	2	35	27	0	100	14.9	88
								5					11.9	154
								10					10.7	203
								100					8.2	394
	PEGLER WASH-22-10	49.8	4130.	1900.	.0407	SUBURBAN FOOTHILLS	.033	2	35	26	0	100	14.4	73
								5					11.5	127
								10					10.3	168
								100					7.9	328
	PEGLER WASH-22-11	23.8	3270.	1620.	.0474	SUBURBAN FOOTHILLS	.032	2	35	20	0	100	11.6	35
								5					9.2	64
								10					8.1	86
								100					6.2	168
	PEGLER WASH-22-12	22.2	2800.	1450.	.0446	SUBURBAN FOOTHILLS	.032	2	35	20	0	100	10.8	34
								5					8.5	61
								10					7.6	82
								100					5.8	160

072

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CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN	WATERSHED TYPE	BASIN	FLOOD	COVER	IMPERV.	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	SLOPE ft./ft.		FACTOR n <sub>b</sub>	FREQ. Years	DENSITY %	COVER %	B	D	Hr/Min	
	PEGLER WASH-22--13	34.2	2500.	1250.	.0396	SUBURBAN FOOTHILLS	.033	2	35	20	0	100	10.8	52
								5					8.5	94
								10					7.6	127
								100					5.8	246
	PEGLER WASH-22 -14	25.7	2450.	1120.	.0224	SUBURBAN FOOTHILLS	.026	2	35	32	0	100	9.5	47
								5					7.7	81
								10					6.9	106
								100					5.4	196
	PEGLER WASH-21-1	30.4	2750.	1300.	.06	SUBURBAN FOOTHILLS	.036	2	35	7	0	100	11.3	38
								5					8.6	75
								10					7.5	104
								100					5.7	211
	PEGLER WASH-17-2A	19.6	2200	1100	.0159	SUBURBAN FOOTHILLS	.030	2	30	22	8	92	13.7	27
								5					10.8	49
								10					9.7	65
								100					7.3	129
	PEGLER WASH-17-2B	16.6	2950	1475	.0159	SUBURBAN FOOTHILLS	.030	2	30	22	8	92	17.0	21
								5					13.4	38
								10					11.9	51
								100					9.0	100

073

**WEST ORANGE GROVE BASIN**

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	WEST ORANGE GROVE-4-1	489.9	9825.	4913.	.0088	MODERATE URBAN	.027	2	30	31	96	4	56.8	254
								5					43.8	487
								10					38.2	683
								100					27.7	1532
	WEST ORANGE GROVE-4-2	11.1	825.	413.	.0097	SUBURBAN FOOTHILLS	.035	2	30	0	100	0	17.9	4
								5					11.5	13
								10					9.6	21
								100					6.5	55
	WEST ORANGE GROVE-4-3	446.4	9375.	4688.	.0087	MODERATE URBAN	.026	2	30	33	96	4	50.8	259
								5					39.5	487
								10					34.6	678
								100					25.3	1490
	WEST ORANGE GROVE-4-4	13.2	3550.	1775.	.0031	SUBURBAN FOOTHILLS	.035	2	30	10	100	0	36.0	5
								5					25.0	13
								10					21.1	20
								100					14.6	50
	WEST ORANGE GROVE-5-1	24.9	1550.	775.	.0026	SUBURBAN FOOTHILLS	.029	2	30	28	100	0	28.3	19
								5					21.8	36
								10					19.1	50
								100					14.0	109
	WEST ORANGE GROVE-5-2	16.5	1250.	625.	.004	MODERATE URBAN	.022	2	30	40	100	0	12.2	24
								5					9.9	40
								10					8.9	53
								100					6.8	104

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS		T <sub>c</sub> Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	WEST ORANGE GROVE-5-3	33.7	1775.	888.	.0034	MODERATE URBAN	.022	2	30	40	100	0	17.1	42
								5					13.8	71
								10					12.4	94
								100					9.4	186
	WEST ORANGE GROVE-5-4	48.1	3150.	1575.	.0032	MODERATE URBAN	.023	2	30	37	100	0	29.8	42
								5					23.6	75
								10					20.9	102
								100					15.6	211
	WEST ORANGE GROVE-5-5	162.4	6300.	3150.	.0086	MODERATE URBAN	.024	2	30	33	89	11	33.0	128
								5					25.9	235
								10					22.8	322
								100					16.9	682
	WEST ORANGE GROVE-5-6	68.2	3975.	1988.	.003	SUBURBAN FOOTHILLS	.031	2	30	16	100	0	1.22	20
								5					51.3	48
								10					43.6	72
								100					30.0	184
	WEST ORANGE GROVE-5-7	13.3	2600.	1300.	.0035	MODERATE URBAN	.026	2	30	35	100	0	29.3	11
								5					23.1	20
								10					20.4	28
								100					15.2	58
	WEST ORANGE GROVE-5-8	24.5	2500.	1250.	.0036	MODERATE URBAN	.025	2	30	42	100	0	24.8	26
								5					20.0	45
								10					17.8	59
								100					13.5	118

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HYDROLOGIC DATA TABLE

Project Name: RIVERSIDE TERRACE BMP

UJA Job No. 84-213.01

Date: 3-10-86

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>p</sub>	Years	%	%	B	D	Hr/Min	
	WEST ORANGE GROVE-5-9	97.2	4250.	2125.	.0134	MODERATE URBAN	.023	2	30	32	82	18	18.2	108
								5					14.5	192
								10					12.9	257
								100					9.7	520
	WEST ORANGE GROVE-5-10	29.9	2525.	1263.	.0055	MODERATE URBAN	.022	2	30	37	100	0	17.8	35
								5					14.3	60
								10					12.8	80
								100					9.7	160
	WEST ORANGE GROVE-5-11	16.4	1575.	788.	.0066	MODERATE URBAN	.022	2	30	35	100	0	11.8	22
								5					9.5	38
								10					8.4	51
								100					6.4	103
	WEST ORANGE GROVE-5-12	26.0	1900.	950.	.0116	MODERATE URBAN	.024	2	30	32	100	0	11.7	33
								5					9.3	58
								10					8.3	79
								100					6.2	161
	WEST ORANGE GROVE-5-13	21.4	2650.	1325.	.006	MODERATE URBAN	.023	2	30	47	100	0	17.2	30
								5					14.2	49
								10					12.7	63
								100					9.9	120
	WEST ORANGE GROVE-5-15	309.1	7825.	3913.	.0096	MODERATE URBAN	.026	2	30	30	94	6	43.0	190
								5					33.1	366
								10					28.9	511
								100					21.1	1129

077

HYDROLOGIC DATA TABLE

Project Name: RIVERSIDE TERRACE BMP

DJA Job No. 84-210.01

Date: 3-10-06

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR n <sub>b</sub>	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS		T <sub>c</sub> Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	WEST ORANGE GROVE-5-14	11.5	2550.	1275.	.0082	SUBURBAN FOOTHILLS	.035	2	30	5	100	0	41.8	3
								5					27.5	10
								10					22.9	15
								100					15.5	41
	WEST ORANGE GROVE-14-1	407.2	7875.	3938.	.0102	MODERATE URBAN	.026	2	30	34	96	4	40.3	280
								5					31.4	522
								10					27.7	716
								100					20.3	1549
	WEST ORANGE GROVE-14-2	98.1	4560.	2325.	.0129	SUB. FTH. + H. COMM.	.026	2	30	45	100	0	21.3	119
								5					17.3	198
								10					15.6	260
								100					11.9	507
	WEST ORANGE GROVE-14-3	71.1	3750.	1875.	.0155	MODERATE URBAN	.027	2	30	37	100	0	18.5	81
								5					14.9	141
								10					13.2	187
								100					10.0	376
	WEST ORANGE GROVE-14-4	50.3	3000.	1500.	.0173	SUBURBAN FOOTHILLS	.03	2	30	15	100	0	21.7	32
								5					15.9	70
								10					13.7	101
								100					9.8	233
	WEST ORANGE GROVE-14-5	24.8	2250.	1125.	.0187	MODERATE URBAN	.024	2	30	31	100	0	10.7	32
								5					8.5	58
								10					7.5	78
								100					5.7	158

078





**CARMACK WASH**

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Mir	
	CARMACK WASH-15-1	4385.5	50100.	27400.	.0119	MOUNTAIN FOOTHILLS	.0349	2	20	21.1	50.4	49.6	5.27	534
								5					3.80	1213
								10					3.25	1796
								100					2.24	4533
	CARMACK WASH @ THORNYDALE-15-2	4345.0	46900.	25800.	.0165	MOUNTAIN FOOTHILLS	.035	2	20	21	50.7	49.3	4.11	653
								5					2.95	1494
								10					2.53	2188
								100					1.76	5469
	CARMACK WASH-14-1	44.0	3550.	1700.	.0141	SUBURBAN FOOTHILLS	.022	2	20	35	100	0	14.3	56
								5					11.5	97
								10					10.2	129
								100					7.7	262
	CARMACK WASH-14-2	37.6	5000.	2400.	.0194	SUBURBAN FOOTHILLS	.025	2	25	32	97	3	19.1	39
								5					14.7	115
								10					13.0	155
								100					9.8	316
	CARMACK WASH-14-3	60.6	5150.	2550.	.0198	SUBURBAN FOOTHILLS	.024	2	25	33	98	2	18.5	65
								5					15.1	70
								10					13.4	94
								100					10.1	194
	CARMACK WASH-14-4	26.4	2400.	1100.	.0167	SUBURBAN FOOTHILLS	.022	2	20	35	100	0	9.8	39
								5					7.9	68
								10					7.0	91
								100					5.4	178

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CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	CARMACK WASH-14-5	15.7	1350.	700.	.0326	SUBURBAN FOOTHILLS	.022	2	20	35	100	0	5.0	30
								5					5.0	47
								10					5.0	60
								100					5.0	108
	CARMACK WASH-14-6	84.6	4950.	2950.	.0226	SUBURBAN FOOTHILLS	.0226	2	30	16	93	7	30.5	47
								5					22.3	103
								10					19.2	151
								100					13.7	351
	CARMACK WASH-14-7	4126.7	41100.	22900.	.0194	MOUNTAIN FOOTHILLS	.0355	2	20	20.6	49.2	50.8	3.38	735
								5					2.44	1662
								10					2.09	2452
								100					1.45	6069
	CARMACK WASH-14-8	57.3	4350.	2350.	.0221	SUBURBAN FOOTHILLS	.031	2	30	16	90	10	39.5	17
								5					28.5	51
								10					21.4	81
								100					14.5	212
	CARMACK WASH-14-9	24.8	2350.	1150.	.0153	SUBURBAN FOOTHILLS	.032	2	30	16	100	0	20.4	17
								5					15.0	36
								10					13.0	52
								100					9.3	118
	CARMACK WASH-14-10	21.6	2500.	1100.	.016	SUBURBAN FOOTHILLS	.028	2	30	29	95	5	14.4	24
								5					11.4	44
								10					10.1	59
								100					7.5	124

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CP	CONCENTRATION POINT	AREA	$L_c$	$L_{ca}$	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR $n_b$	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS		$T_c$ Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	CARMACK WASH-14-11	35.0	2950.	1400.	.0251	SUBURBAN FOOTHILLS	.024	2	20	33	100	0	10.8	47
								5					8.6	83
								10					7.7	111
								100					5.8	223
	CARMACK WASH-14-12	23.1	1450.	730.	.0145	SUBURBAN FOOTHILLS	.024	2	20	35	100	0	8.4	37
								5					6.7	64
								10					6.0	84
								100					5.0	159
	CARMACK WASH-14-13	4035.6	38200.	21450.	.0203	MOUNTAIN FOOTHILLS	.0358	2	20	20.3	48.9	51.1	3.13	769
								5					2.26	1730
								10					1.94	2551
								100					1.35	6316
	CARMACK WASH-14-14	22.9	3250.	1500.	.0215	SUBURBAN FOOTHILLS	.027	2	30	29	100	0	14.8	25
								5					11.7	45
								10					10.3	61
								100					7.7	129
	CARMACK WASH-13-1	44.9	2750.	1200.	.0196	SUBURBAN FOOTHILLS	.032	2	30	20	10	90	15.2	57
								5					11.9	105
								10					10.6	141
								100					8.0	283
	CARMACK WASH-13-2	3966.3	37200.	20950.	.0203	MOUNTAIN FOOTHILLS	.0359	2	20	20.3	48.5	51.5	3.07	771
								5					2.22	1731
								10					1.90	2548
								100					1.32	6311

CP	CONCENTRATION POINT	AREA	$L_c$	$L_{ca}$	MEAN SLOPE ft./ft.	WATERSHED TYPE	BASIN FACTOR $n_b$	FLOOD FREQ. Years	COVER DENSITY %	IMPERV. COVER %	% SOILS		$T_c$ Hr/Min	CFS
		Acres	Feet	Feet							B	D		
	CARMACK WASH-13-3	93.2	6250.	3050.	.0155	SUBURBAN FOOTHILLS	.0314	2	30	20.5	4.0	96.	32.4	81
								5					25.0	154
								10					22.0	211
								100					16.5	436
	CARMACK WASH-13-4	14.5	2200.	1000.	.0182	SUBURBAN FOOTHILLS	.032	2	30	20	20	80	13.8	19
								5					10.9	34
								10					9.7	46
								100					7.3	93
	CARMACK WASH-13-5	3871.7	36200.	20450.	.0203	MOUNTAIN FOOTHILLS	.036	2	20	20.3	47.9	52.1	3.00	769
								5					2.17	1724
								10					1.86	2532
								100					1.30	6270
	CARMACK WASH-13-6	51.1	5100.	2400.	.0165	SUBURBAN FOOTHILLS	.031	2	30	21	0	100	25.7	52
								5					19.9	98
								10					17.6	132
								100					13.3	266
	CARMACK WASH-13-7	15.1	2000.	1000.	.02	SUBURBAN FOOTHILLS	.033	2	30	20	0	100	12.8	22
								5					10.1	39
								10					9.0	52
								100					6.8	103
	CARMACK WASH-13-8	116.1	5000.	2800.	.02	SUBURBAN FOOTHILLS	.0259	2	30	35.4	6	94	18.0	167
								5					14.5	283
								10					13.1	370
								100					10.1	700

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CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	CARMACK WASH-13-9	23.1	2100.	1000.	.0186	SUBURBAN FOOTHILLS	.033	2	30	20	4	96	13.6	32
								5					10.7	57
								10					9.6	77
								100					7.2	153
	CARMACK WASH-13-10	29.6	3200.	1400.	.015	SUBURBAN FOOTHILLS	.031	2	30	22	0	100	18.2	37
								5					14.3	67
								10					12.7	89
								100					9.7	175
	CARMACK WASH-13-11	67.9	3250.	1650.	.0215	SUBURBAN FOOTHILLS	.028	2	30	34	0	100	13.4	112
								5					10.9	188
								10					9.8	243
								100					7.6	465
	CARMACK WASH-13-12	3679.7	33300.	19000.	.0213	MOUNTAIN FOOTHILLS	.0363	2	20	19.9	46.5	53.5	2.75	786
								5					1.99	1771
								10					1.71	2586
								100					1.19	6426
	CARMACK WASH SECTION #33-1	24.6	1600.	800.	.0156	SUBURBAN FOOTHILLS	.023	2	30	54	0	100	6.7	65
								5					5.7	100
								10					5.2	124
								100					5.0	204
	CARMACK WASH SECTION #33-2	39.4	3600.	1400.	.0142	SUBURBAN FOOTHILLS	.025	2	30	45	0	100	13.2	73
								5					10.9	117
								10					9.9	149
								100					7.8	275

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**WEST INA BASIN & PIMA WASH**



CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN SLOPE	WATERSHED TYPE	BASIN FACTOR	FLOOD FREQ.	COVER DENSITY	IMPERV. COVER	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	ft./ft.		n <sub>b</sub>	Years	%	%	B	D	Hr/Min	
	WEST INA ROAD-15-1	49.3	3150.	1575.	.007	LIGHT URBAN	.028	2	30	34	100	0	26.3	44
								5					20.7	80
								10					18.3	108
								100					13.6	226
	WEST INA ROAD-16-1	54.5	3600.	1800.	.0086	MODERATE URBAN	.022	2	30	59	100	0	15.8	93
								5					13.3	145
								10					12.1	183
								100					9.5	332

087

HYDROLOGIC DATA TABLE

Project Name: RIVERSIDE TERRACE BMP

DJA Job No. 84-213.01

Date: 3-10-86

CP	CONCENTRATION POINT	AREA	L <sub>c</sub>	L <sub>ca</sub>	MEAN	WATERSHED TYPE	BASIN	FLOOD	COVER	IMPERV.	% SOILS		T <sub>c</sub>	CFS
		Acres	Feet	Feet	SLOPE						FACTOR	FREQ.		
	PIMA WASH-1-1	67.4	5100.	2550.	.0221	SUBURBAN FOOTHILLS	.029	2	30	30	62	38	21.5	70
								5					16.9	128
								10					15.0	172
								100					11.3	348
	PIMA WASH-1-2 (Source from Pima County)	10.5 sq. mi	48200.	30000.	.0391	MT. SUB. FOOTHILLS	.05	100	20	30	59	41	2.38	6545

880

**APPENDIX A**  
**DIP CROSSINGS**

SESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCAL

USER : STEVE COOKE

\*\*\*\*\*  
 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 LA CHOLLA, DIP CROSSING, PEGLER WASH  
 PLATE 12, C.P. 2, SOUTH TO NORTH STATIONING

\*\*\*\*\*

IRREGULAR CROSS SECTION

STA.	0.00	90.00	320.00	370.00	535.00	600.00	655.00
ELEV.	2354.00	2352.00	2352.00	2350.00	2350.00	2352.00	2354.00
N	0.018	0.018	0.018	0.018	0.018	0.018	0.018

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

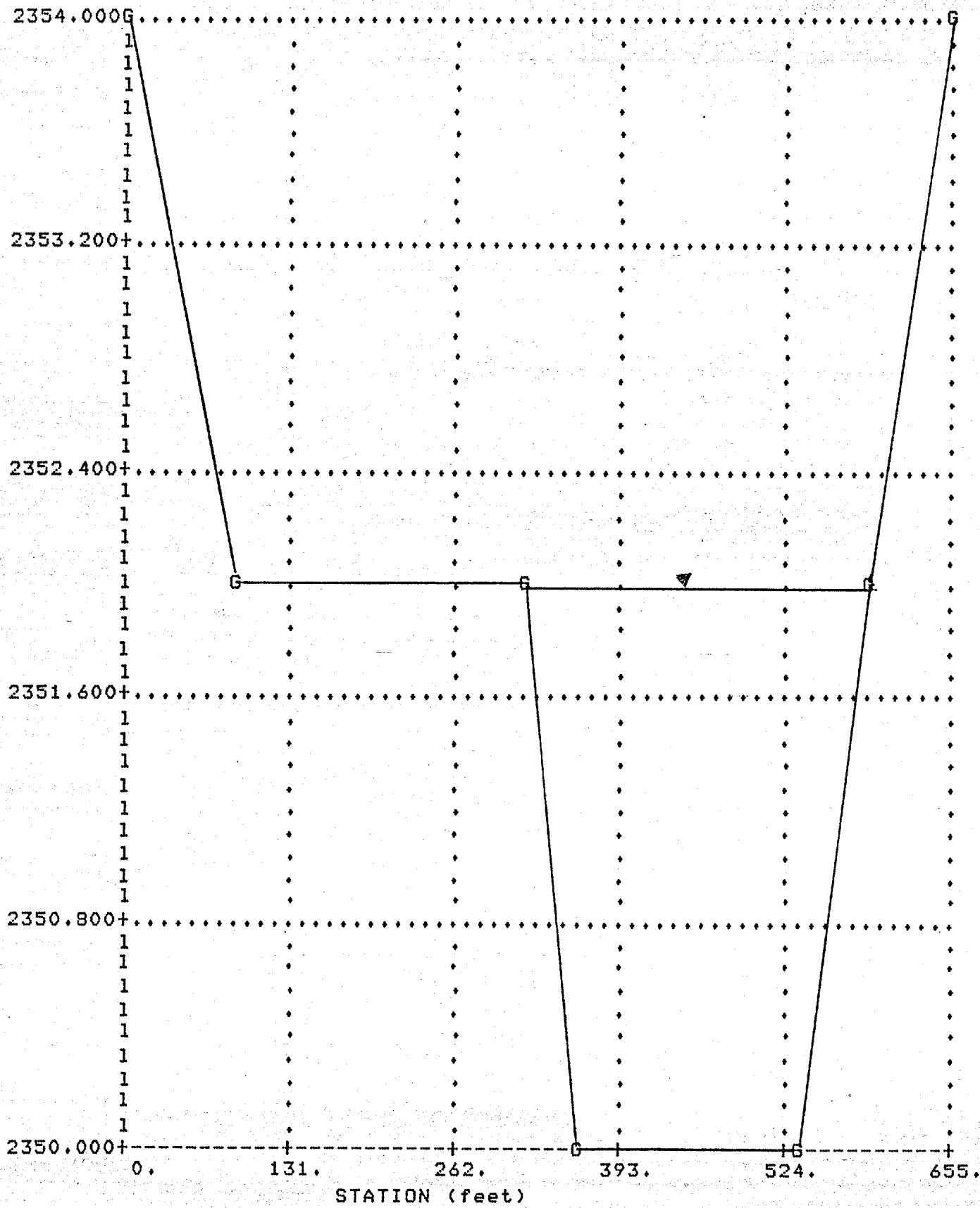
BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	1.99	279.69	443.50	0.0:1	0.0:1	279.76
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.44	10.26	0.02000	4550.00	0.01800	2.49	6.45

Q (cfs)

Q100 = 4550 cfs

Yn = 1.99 ft

ELEVATION (feet)

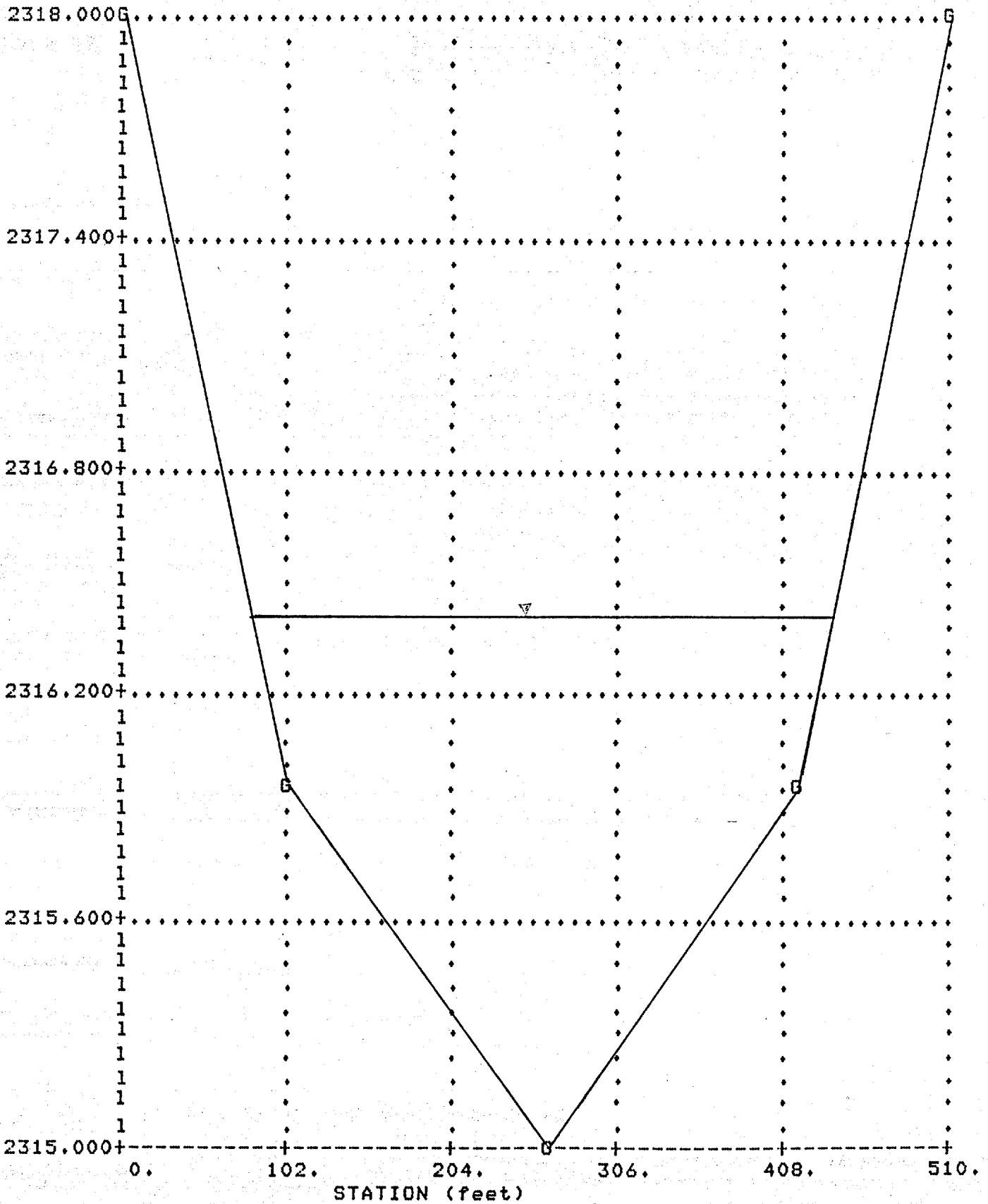


G : CROSS SECTION GROUND POINT



Q (cfs)      Q100 = 3106 cfs      Yn = 1.42 ft

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

SESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCALSESCAL

USER : STEVE COOKE

\*\*\*\*\*  
 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 LA CANANDA DRIVE, DIP CROSSING  
 CASAS ADOBES WASH BASIN, PLATE 11, C.P. 1  
 STATIONING IS FROM SOUTH TO NORTH

\*\*\*\*\*

IRREGULAR CROSS SECTION

STA.	0.00	50.00	100.00	240.00
ELEV.	2406.00	2405.00	2406.00	2408.00
N	0.018	0.018	0.018	0.018

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	1.89	162.45	167.06	0.0:1	0.0:1	163.36
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
2.06	11.88	0.02000	1985.00	0.01800	2.58	6.72

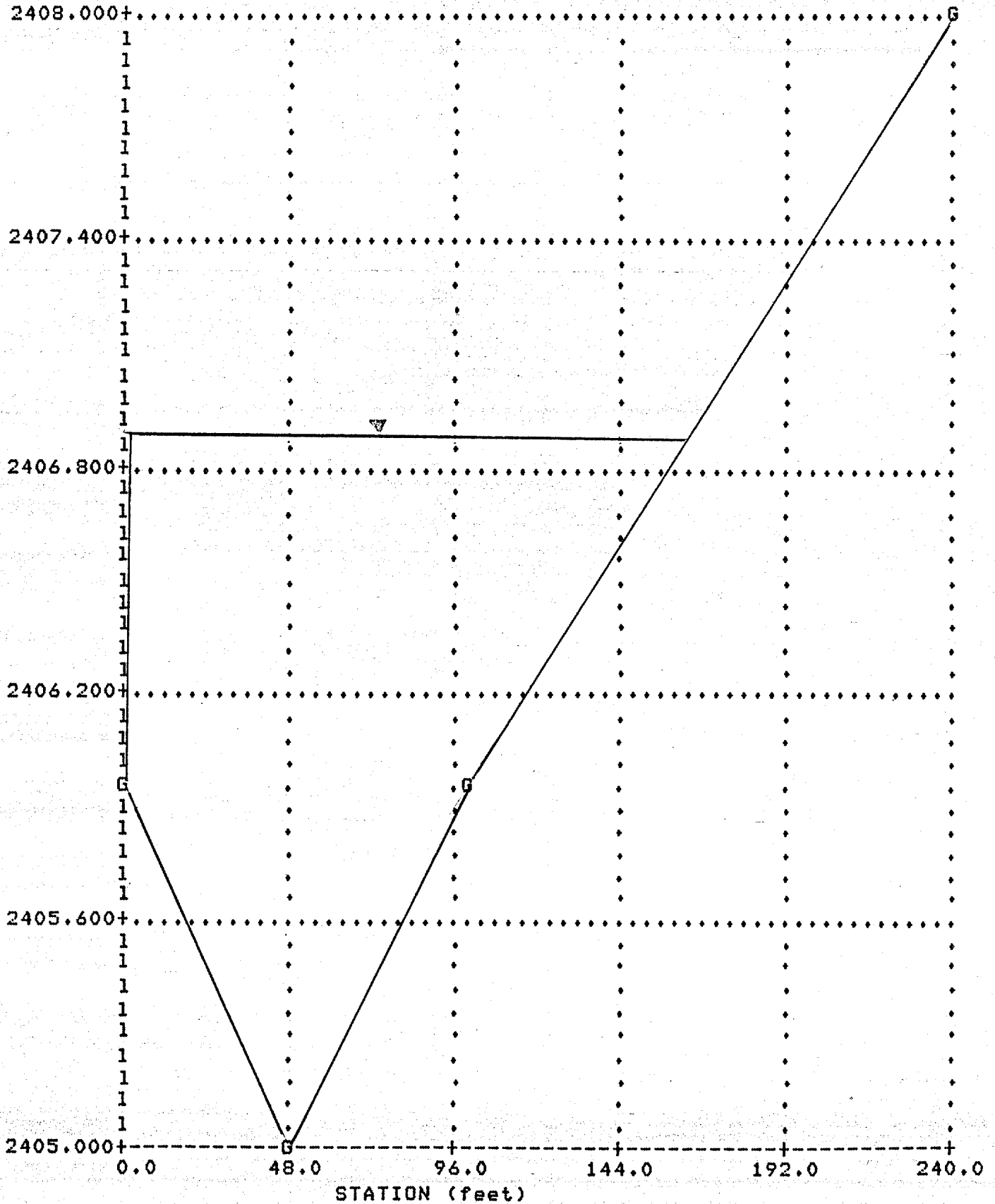


Q (cfs)

Q100 = 1985 cfs

Yn = 1.89 ft

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

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USER : STEVE COOKE

\*\*\*\*\*  
 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 LA CANADA DRIVE DIP CROSSING  
 NANINI WASH, PLATE 11, C.P. 1  
 STATIONING IS FROM SOUTH TO NORTH  
 \*\*\*\*\*

IRREGULAR CROSS SECTION

STA.	0.00	325.00	430.00
ELEV.	2434.00	2432.50	2434.00
N	0.018	0.018	0.018

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

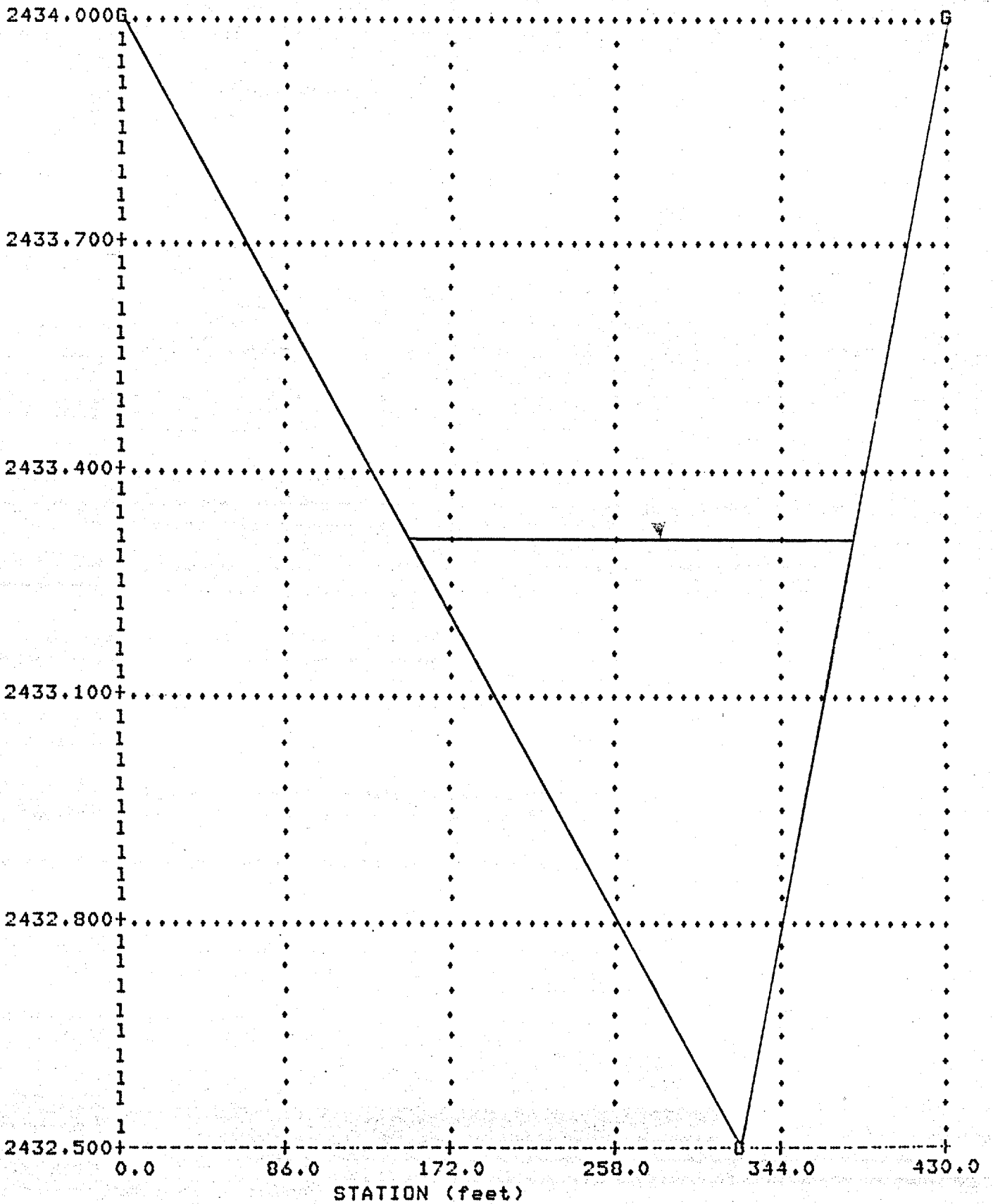
BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	0.81	230.96	93.04	0.0:1	0.0:1	230.96
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.77	6.38	0.02000	594.00	0.01800	1.01	4.04

Q (cfs)

Q100 = 594 cfs

$Y_n = 0.81$  ft

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

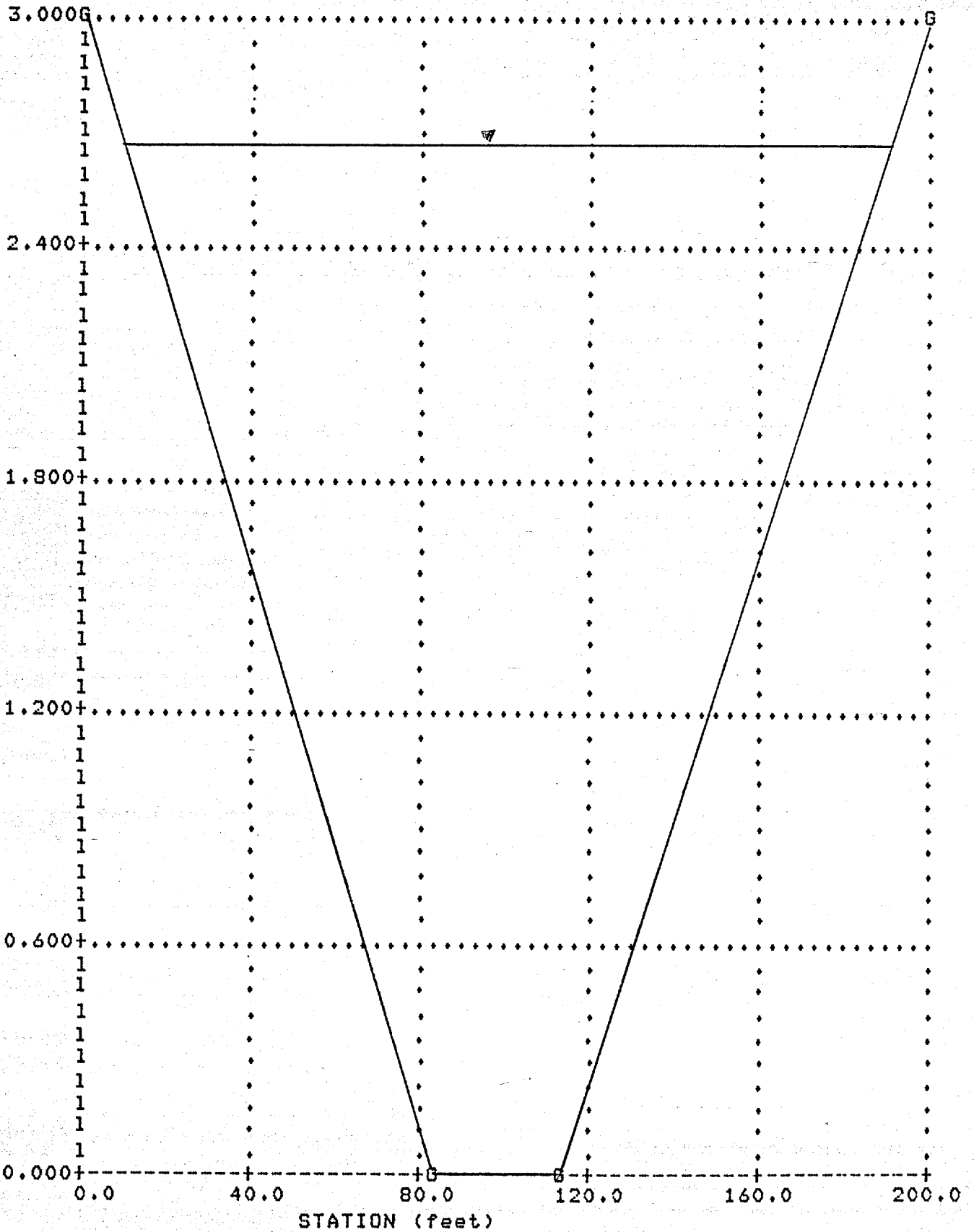


Q (cfs)

Q100 = 4382 cfs

Yn = 2.66 ft

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

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USER : STEVE COOKE

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 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 ORANGE GROVE, DIP CROSSING  
 PEGLER WASH BASIN, PLATE 13, C.P. 1  
 STATIONING IS FROM EAST TO WEST  
 \*\*\*\*\*

IRREGULAR CROSS SECTION

STA.	0.00	105.00	162.00	272.00
ELEV.	2284.00	2282.00	2280.50	2282.00
N	0.018	0.018	0.018	0.018

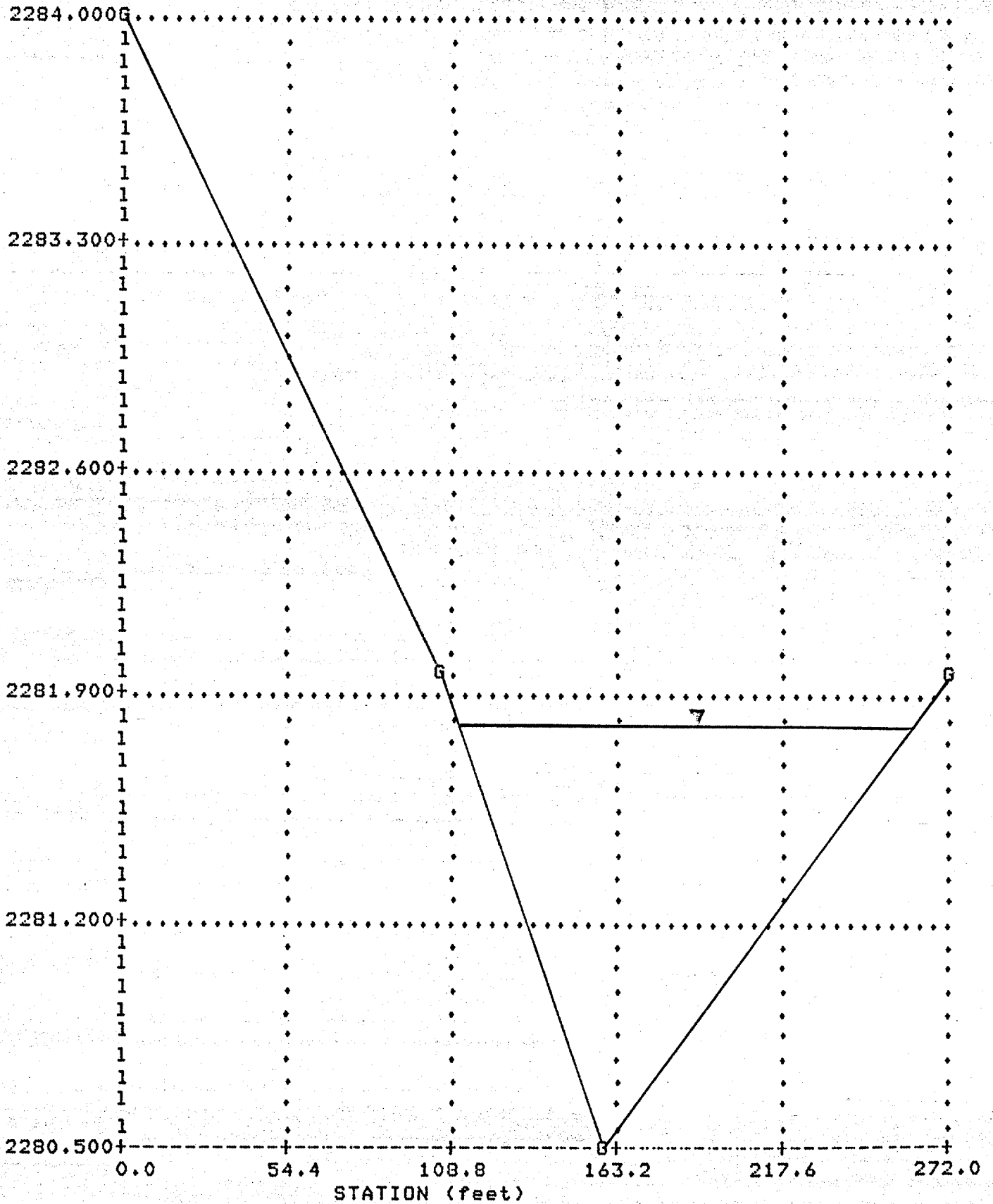
SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	1.32	147.46	97.65	0.0:1	0.0:1	147.48
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.92	8.89	0.02000	868.00	0.01800	1.71	5.40

Q (cfs) Q100 = 868 cfs Yn = 1.32 ft

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

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USER : STEVE COOKE

\*\*\*\*\*  
 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 MAGEE DRIVE, DIP CROSSING  
 PEGLER WASH, PLATE 23, C.P. 1  
 \*\*\*\*\*

IRREGULAR CROSS SECTION

STA.	0.00	20.00	40.00	80.00
ELEV.	3.00	0.00	0.00	3.00
N	0.018	0.018	0.018	0.018

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	2.54	70.80	115.33	0.0:1	0.0:1	71.09
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
2.23	16.16	0.02000	1864.00	0.01800	3.69	9.09

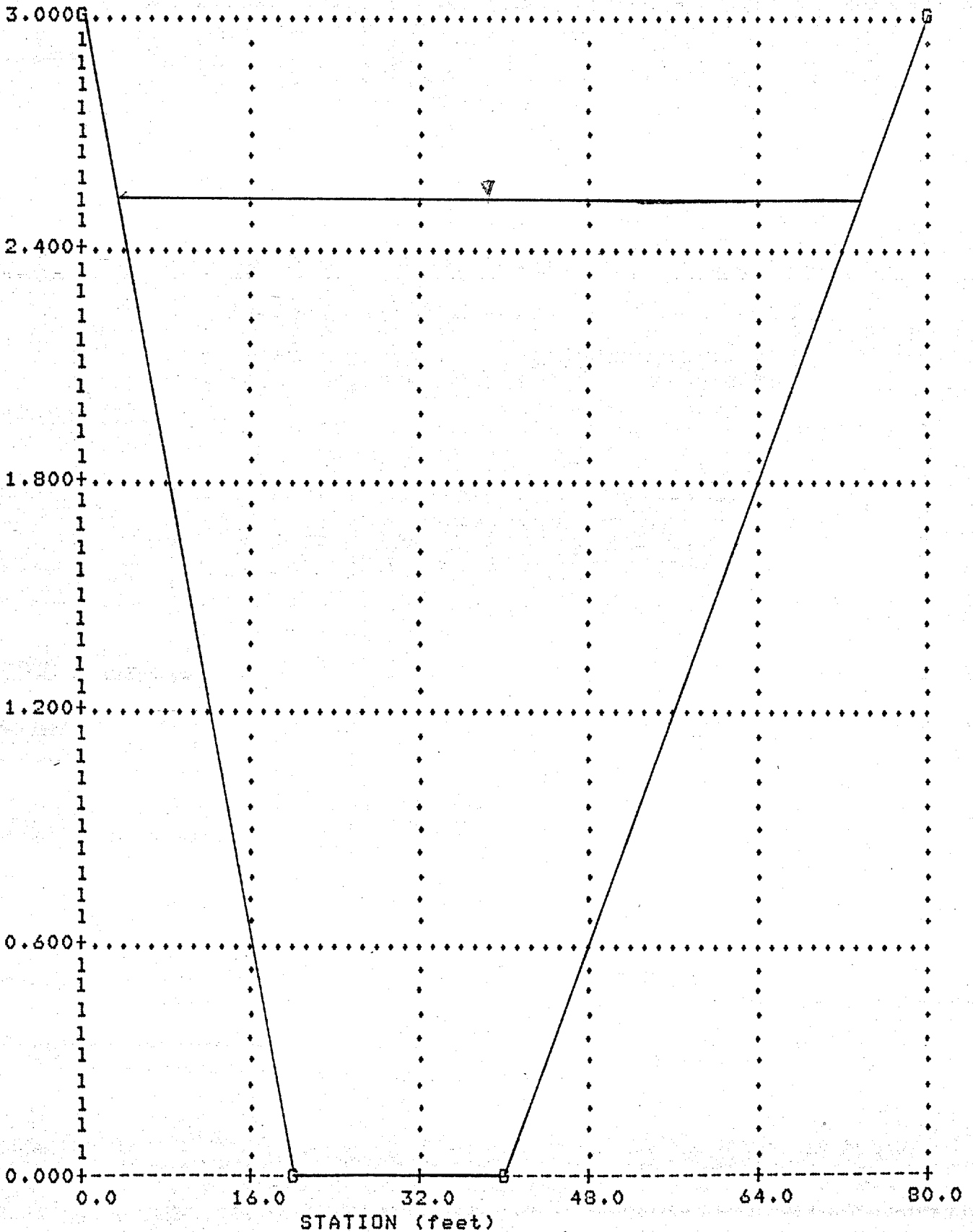


Q (cfs)

Q100 = 1864 cfs

Yn = 2.54 ft

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

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USER : STEVE COOKE

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RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 MAGEE DRIVE, DIP CROSSING  
 PEGLER WASH, PLATE 23, C.P. 3

\*\*\*\*\*

IRREGULAR CROSS SECTION

STA.	0.00	75.00	125.00	150.00
ELEV.	1.50	0.00	0.00	1.50
N	0.018	0.018	0.018	0.018

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

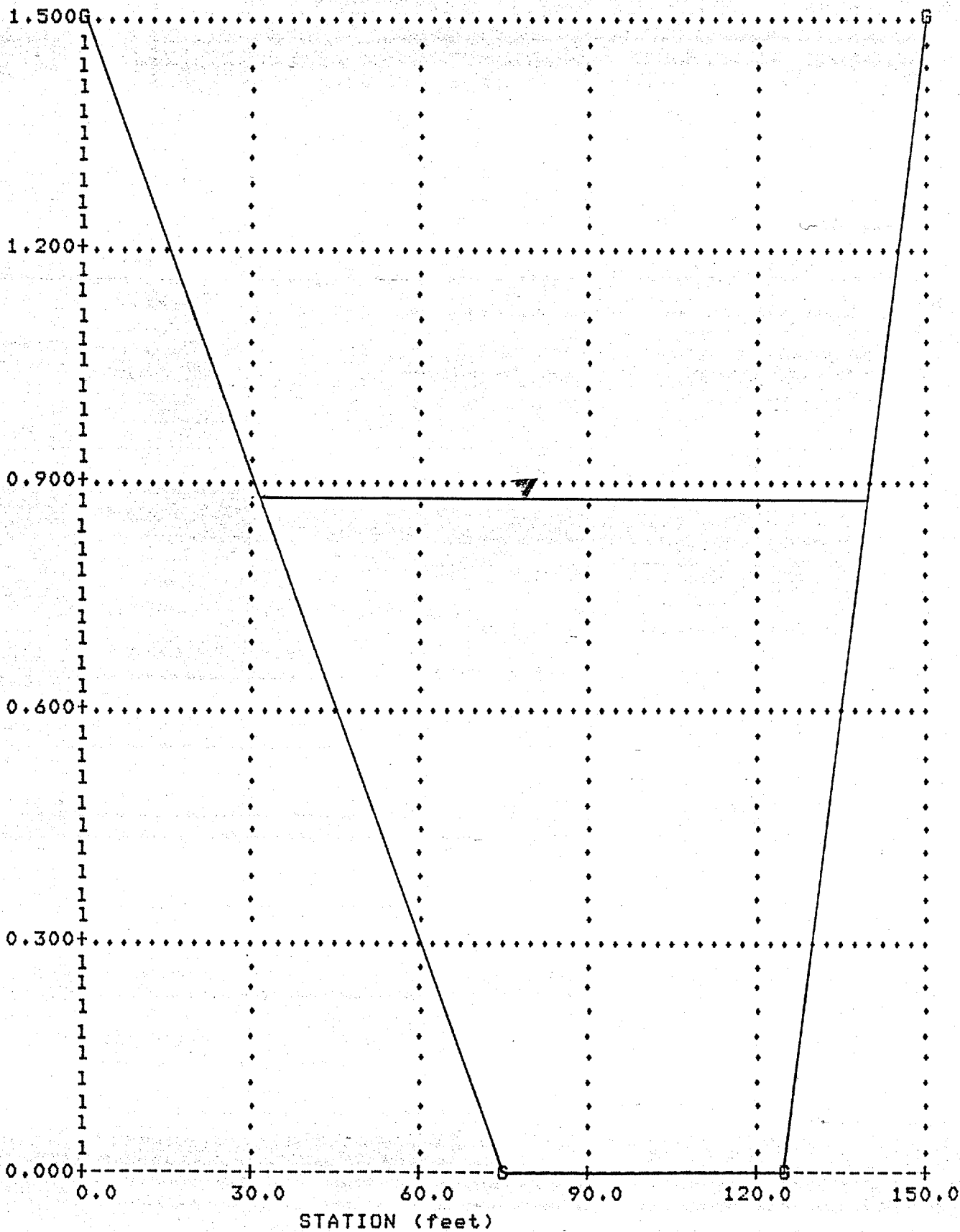
BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	0.88	108.70	69.87	0.0:1	0.0:1	108.73
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.92	8.72	0.02000	609.00	0.01800	1.26	5.27

Q (cfs)

Q100 = 609 cfs

Yn = 0.88 ft

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

**APPENDIX A**  
**CHANNEL SECTIONS**

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 IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 PEGLER WASH 17-A  
 \*\*\*\*\*

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

RECTANGULAR X-SECTION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
20.00	2.00	20.00	40.00	0.0:1	0.0:1	24.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.94	7.57	0.01600	302.79	0.03500	1.92	7.87

NOTE:

X-SECTION PLOTS FOR IRPEGULAR X-SECTIONS ONLY

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 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 PEGLER WASH 17-B  
 \*\*\*\*\*

SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
30.00	4.50	30.00	135.00	0.0:1	0.0:1	39.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N-VALUE	YC	VC
0.72	8.63	0.00400	1164.46	0.02500	3.60	10.77

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..IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 17-C  
\*\*\*\*\*

SECTION # 1 STATION 0.00 TRAPEZOIDAL SECTION

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
5.00	2.00	17.00	22.00	3.0:1	3.0:1	17.65
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.56	3.64	0.00400	80.04	0.03000	1.49	5.70

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 18-A  
\*\*\*\*\*

SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
25.00	4.50	25.00	112.50	0.0:1	0.0:1	34.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.70	8.45	0.00800	951.18	0.03500	3.56	10.70



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RIVERSIDE TERRACE BASIN MANAGEMENT PLAN

PEGLER WASH 18-B

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IRREGULAR CROSS SECTION

STA.	0.00	4.00	12.00	20.00
LEV.	1.30	0.00	0.00	2.30
N	0.030	0.030	0.030	0.030

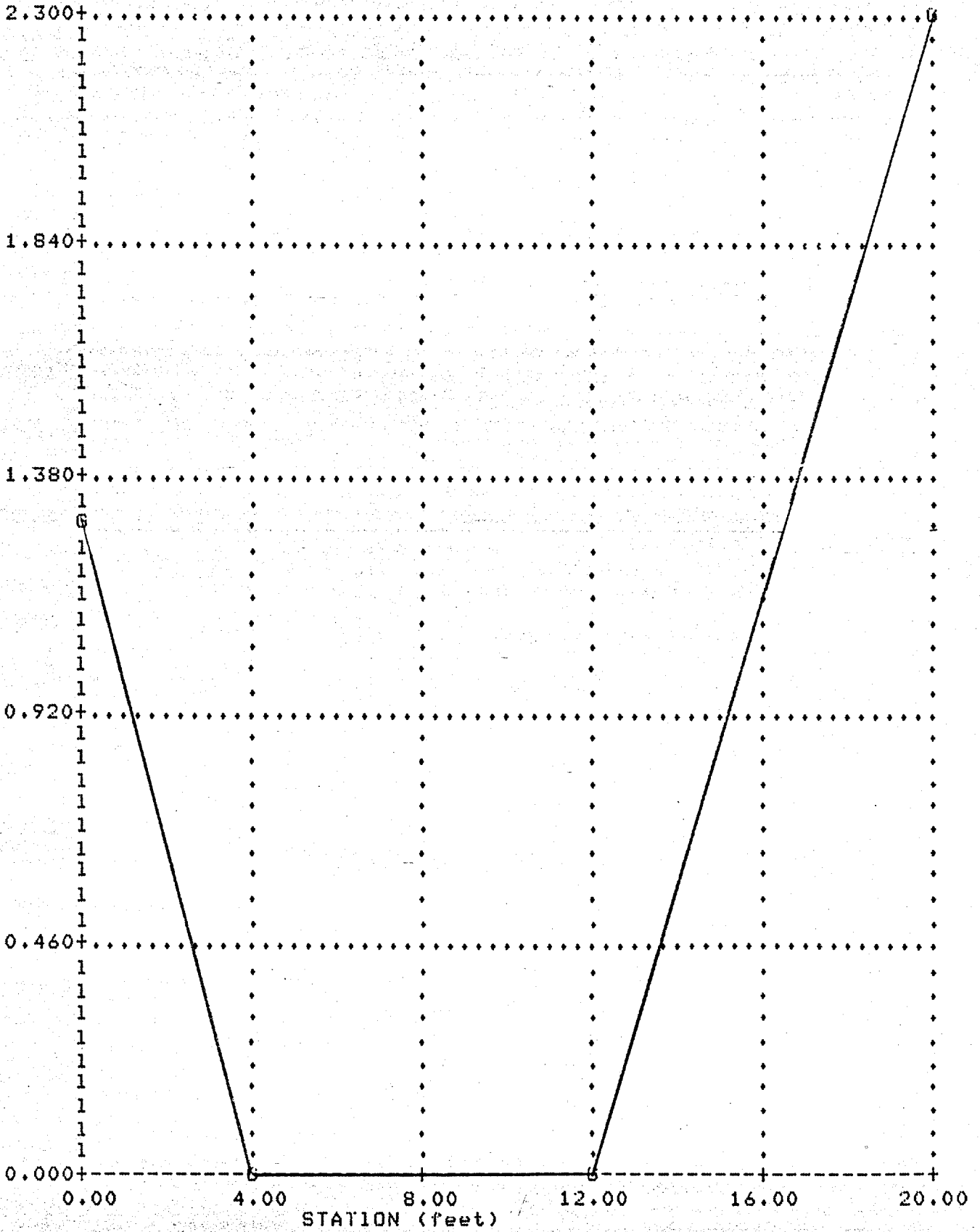
SECTION # 1 STATION 0.00

ORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	1.30	16.52	15.94	0.0:1	0.0:1	16.91
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.77	4.27	0.00800	68.07	0.03000	1.12	5.23

Q (cfs)

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 18-C  
\*\*\*\*\*

SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
58.00	4.00	58.00	232.00	0.0:1	0.0:1	66.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.64	7.26	0.00400	1684.79	0.03000	2.97	9.78

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 18-D  
\*\*\*\*\*

SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
38.00	4.50	38.00	171.00	0.0:1	0.0:1	47.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.76	9.10	0.00600	1556.21	0.03000	3.73	10.97

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 IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 PEGLER WASH 18-E  
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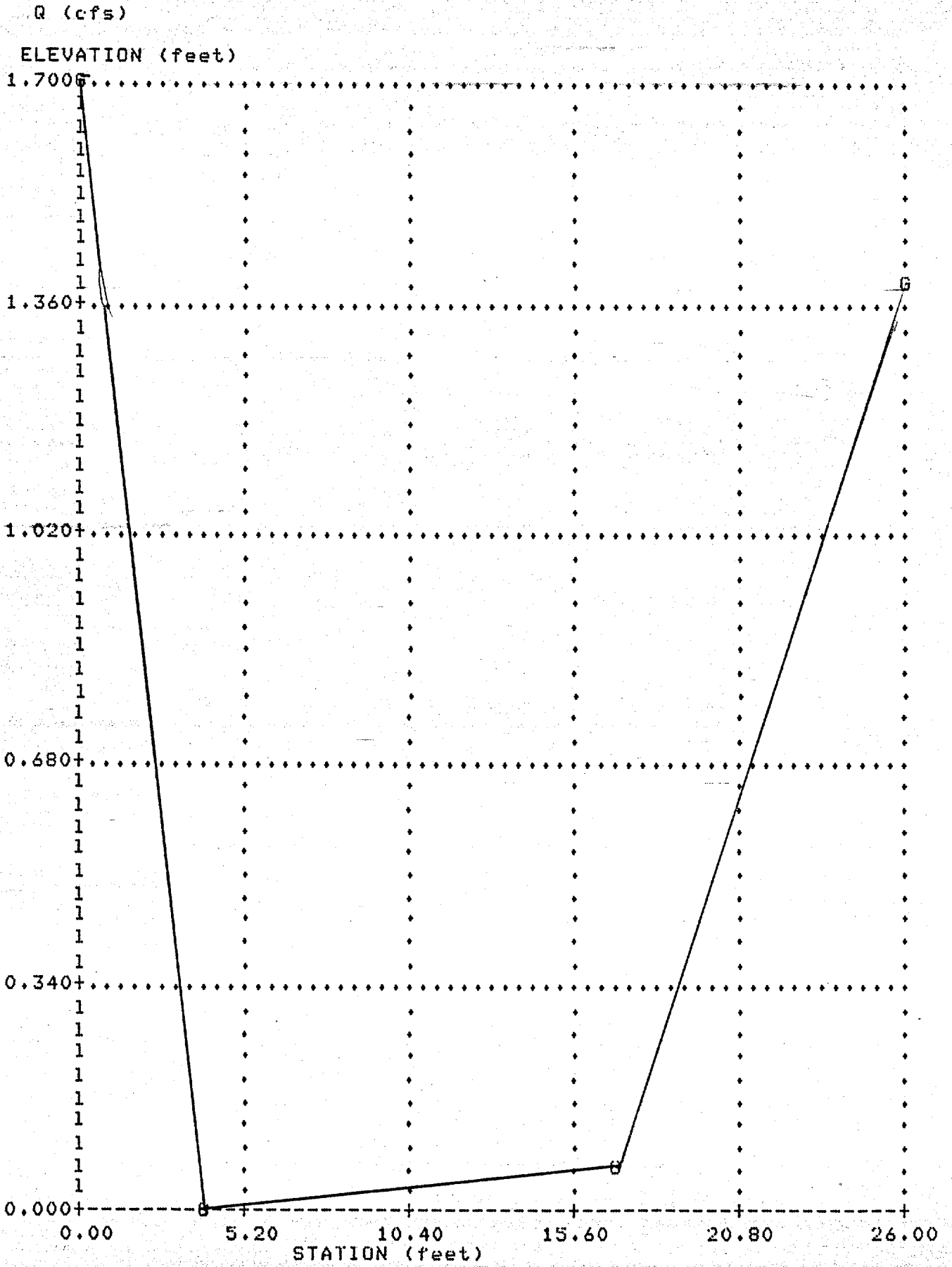
IRREGULAR CROSS SECTION

STA.	0.00	4.00	17.00	26.00
LEV.	1.70	0.00	0.10	1.40
N	0.030	0.030	0.030	0.030

SECTION # 1 STATION 0.00

ORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	1.40	25.29	25.71	0.0:1	0.0:1	25.67
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.87	4.97	0.01000	127.78	0.03000	1.30	5.53



G : CROSS SECTION GROUND POINT

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 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 PEGLER WASH 18-F  
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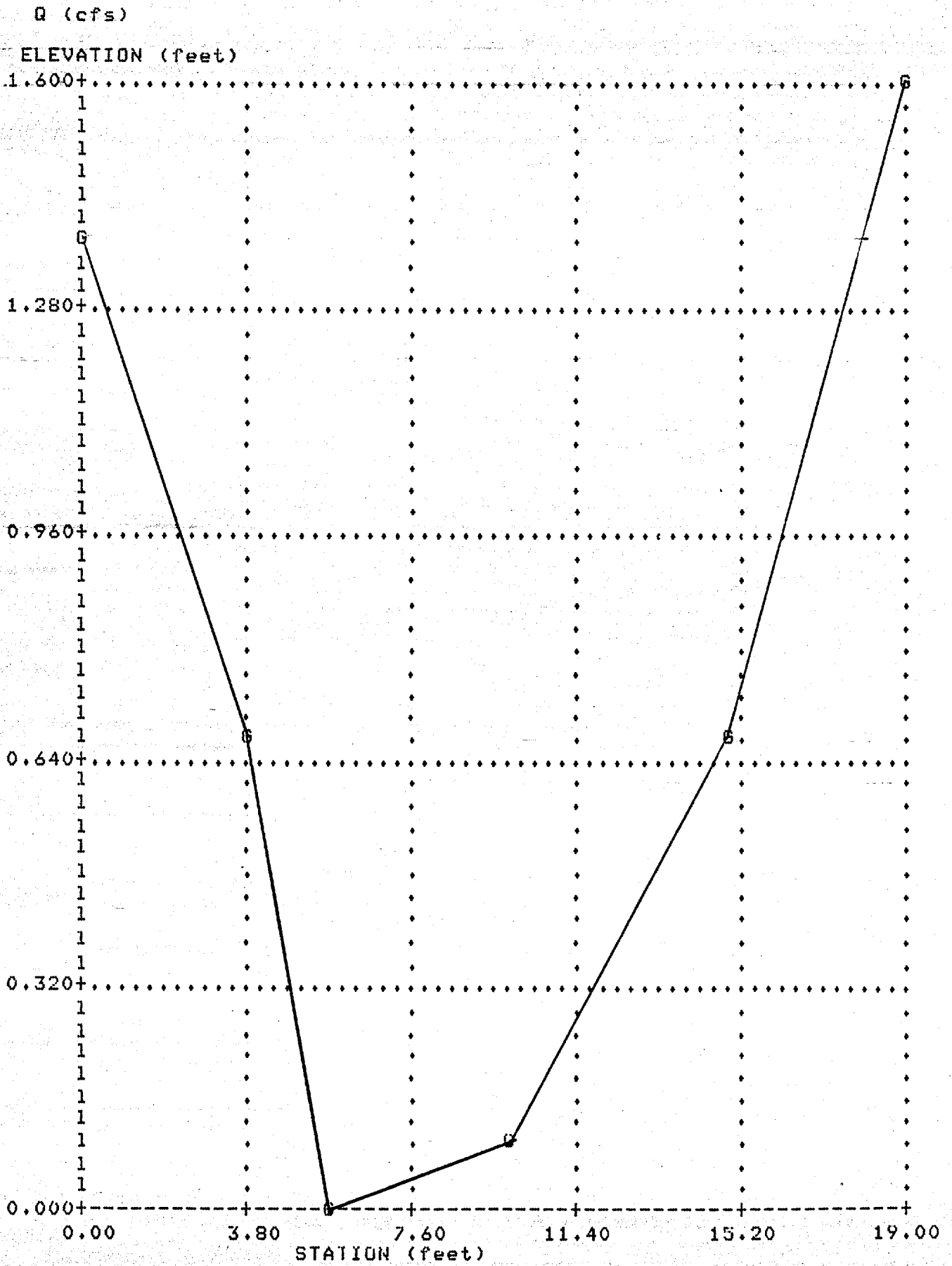
IRREGULAR CROSS SECTION

STA.	0.00	4.00	6.00	10.00	15.00	19.00
LEV.	1.40	0.70	0.00	0.10	0.70	1.60
N	0.030	0.030	0.030	0.030	0.030	0.030

SECTION # 1 STATION 0.00

ORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	1.40	18.11	14.99	0.0:1	0.0:1	18.41
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.06	5.48	0.01600	82.12	0.03000	1.44	5.25



G : CROSS SECTION GROUND POINT



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RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
NANINI WASH 18-G  
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SECTION # 1 STATION 0.00 TRAPEZOIDAL

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
5.00	2.00	17.00	22.00	3.0:1	3.0:1	17.65
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.89	5.75	0.01000	126.56	0.03000	1.89	6.29

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..IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
NANINI WASH 18-H  
\*\*\*\*\*

SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
15.00	4.00	15.00	60.00	0.0:1	0.0:1	23.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.74	8.42	0.00800	505.10	0.03000	3.28	10.27

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 IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 NANINI WASH 18-I  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
35.00	5.00	35.00	175.00	0.0:1	0.0:1	45.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.75	9.51	0.00600	1664.93	0.03000	4.13	11.53

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 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 NANINI WASH 18-J  
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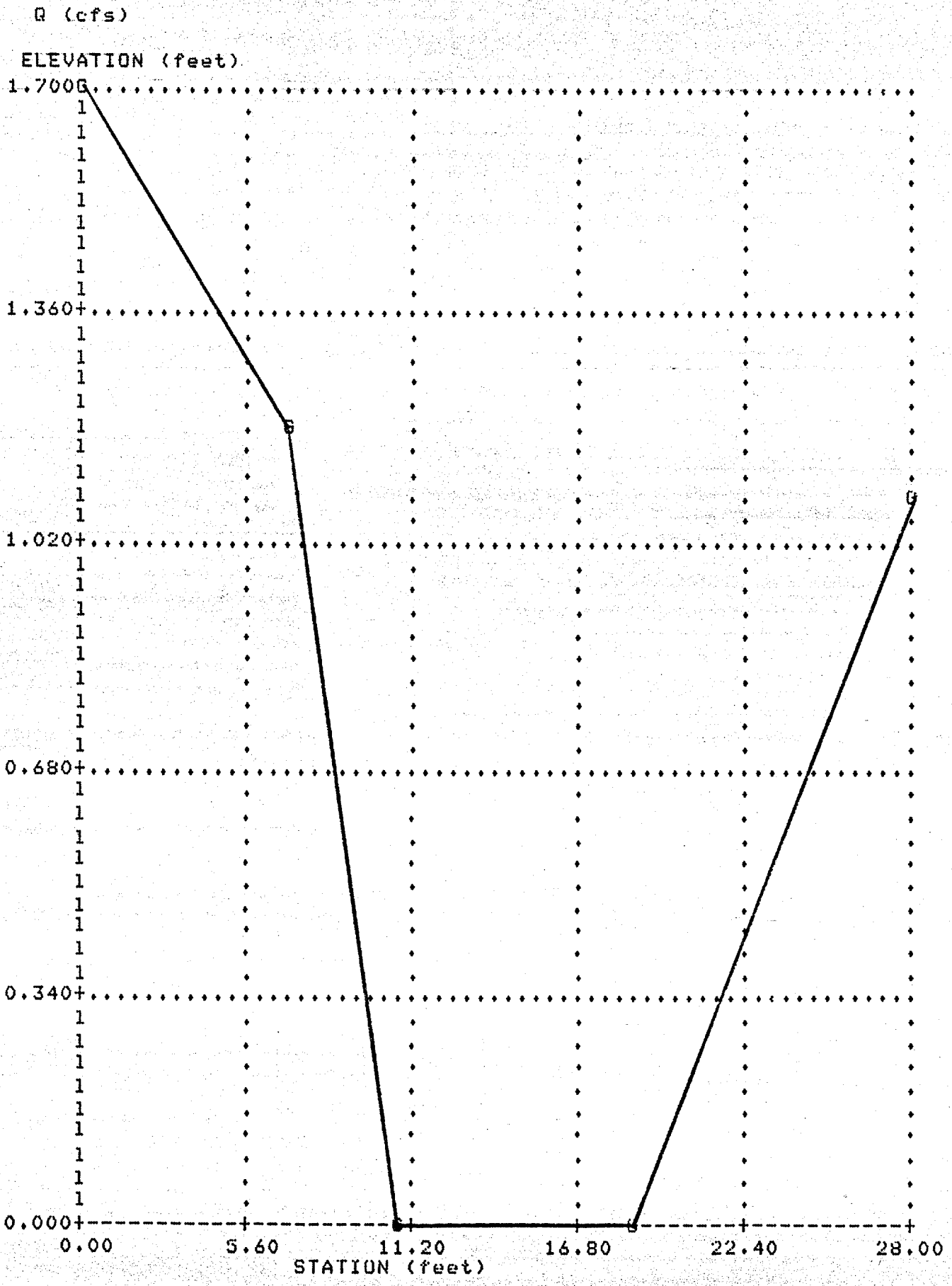
IRREGULAR CROSS SECTION

STA.	0.00	7.00	11.00	19.00	28.00
LEV.	1.70	1.20	0.00	0.00	1.10
N	0.030	0.030	0.030	0.030	0.030

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	1.10	20.67	15.77	0.0:1	0.0:1	20.90
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.83	4.12	0.01000	64.90	0.03000	0.99	4.75



G : CROSS SECTION GROUND POINT

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
NANINI WASH 18-K  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
8.00	1.00	8.00	8.00	0.0:1	0.0:1	10.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.71	4.02	0.01200	32.15	0.03500	0.79	5.06

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
NANINI WASH 18-L  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
5.00	2.00	5.00	10.00	0.0:1	0.0:1	9.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.36	2.89	0.00400	28.88	0.03500	1.01	5.71

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 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 NANINI WASH 18-M  
 \*\*\*\*\*

SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
6.00	3.00	6.00	18.00	0.0:1	0.0:1	12.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.51	4.99	0.00800	89.81	0.03500	1.91	7.84



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 IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 PEGLER WASH 19-A  
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IRREGULAR CROSS SECTION

STA.	0.00	23.00	51.00	65.00
LEV.	7.30	1.00	0.00	7.60
N	0.030	0.030	0.030	0.030

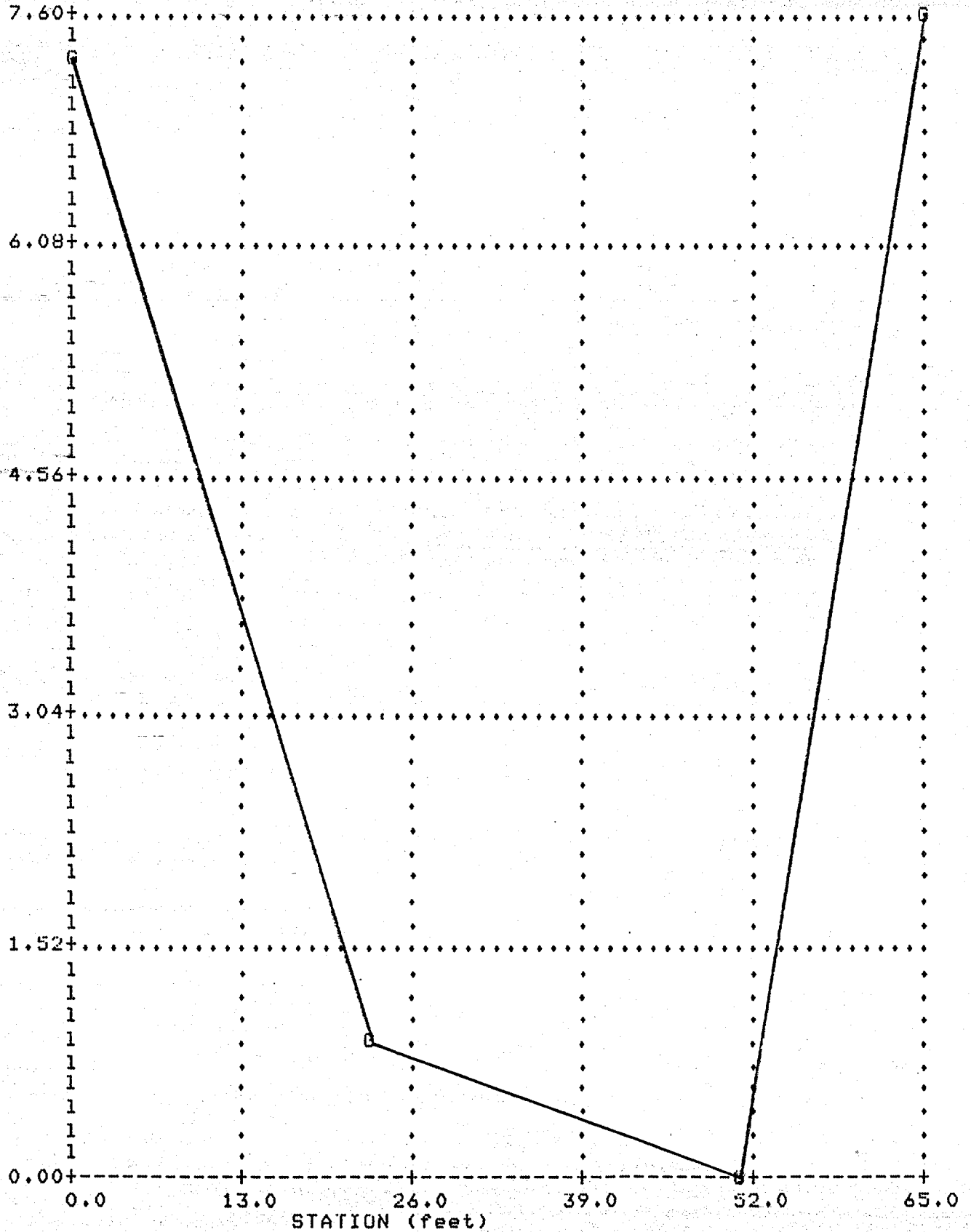
SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	7.30	64.45	311.93	0.0:1	0.0:1	67.17
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.72	21.42	0.02400	6680.96	0.03000	9.40	14.90

R (cfs)

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 19-B  
\*\*\*\*\*

SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
6.00	3.00	6.00	18.00	0.0:1	0.0:1	12.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.32	12.96	0.05400	233.34	0.03500	3.61	10.78

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RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
CASAS ADOBES WASH 19-C

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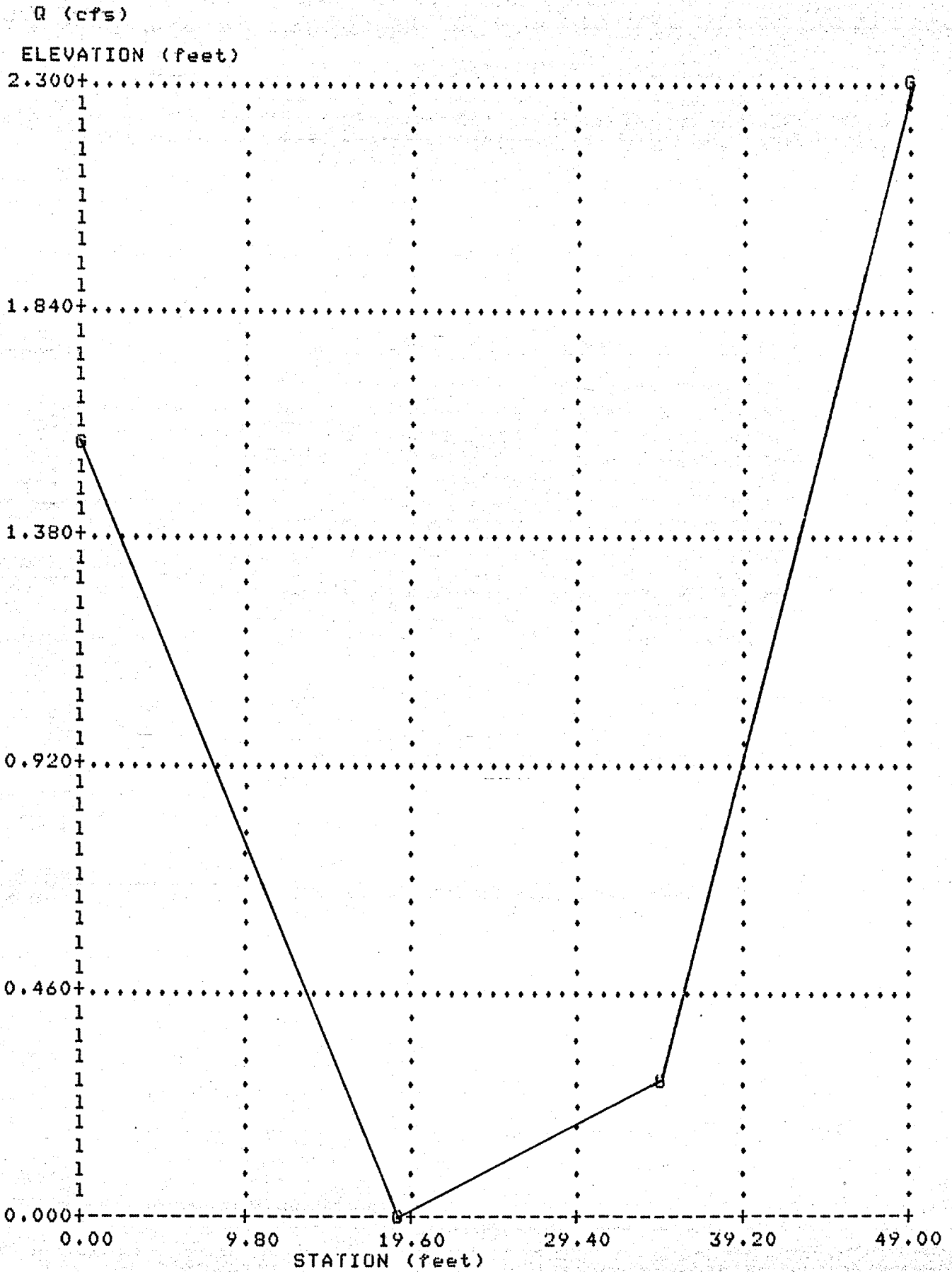
IRREGULAR CROSS SECTION

STA.	0.00	19.00	35.00	49.00
LEV.	1.60	0.00	0.30	2.30
N	0.030	0.030	0.030	0.030

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	1.60	44.10	44.32	0.0:1	0.0:1	44.26
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.83	4.72	0.00900	208.97	0.03000	1.46	5.45



G : CROSS SECTION GROUND POINT

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RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
CASAS ADOBES WASH 19-D

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IRREGULAR CROSS SECTION

STA.	0.00	7.00	29.00	36.00
LEV.	2.20	0.40	0.00	2.20
N	0.035	0.035	0.035	0.035

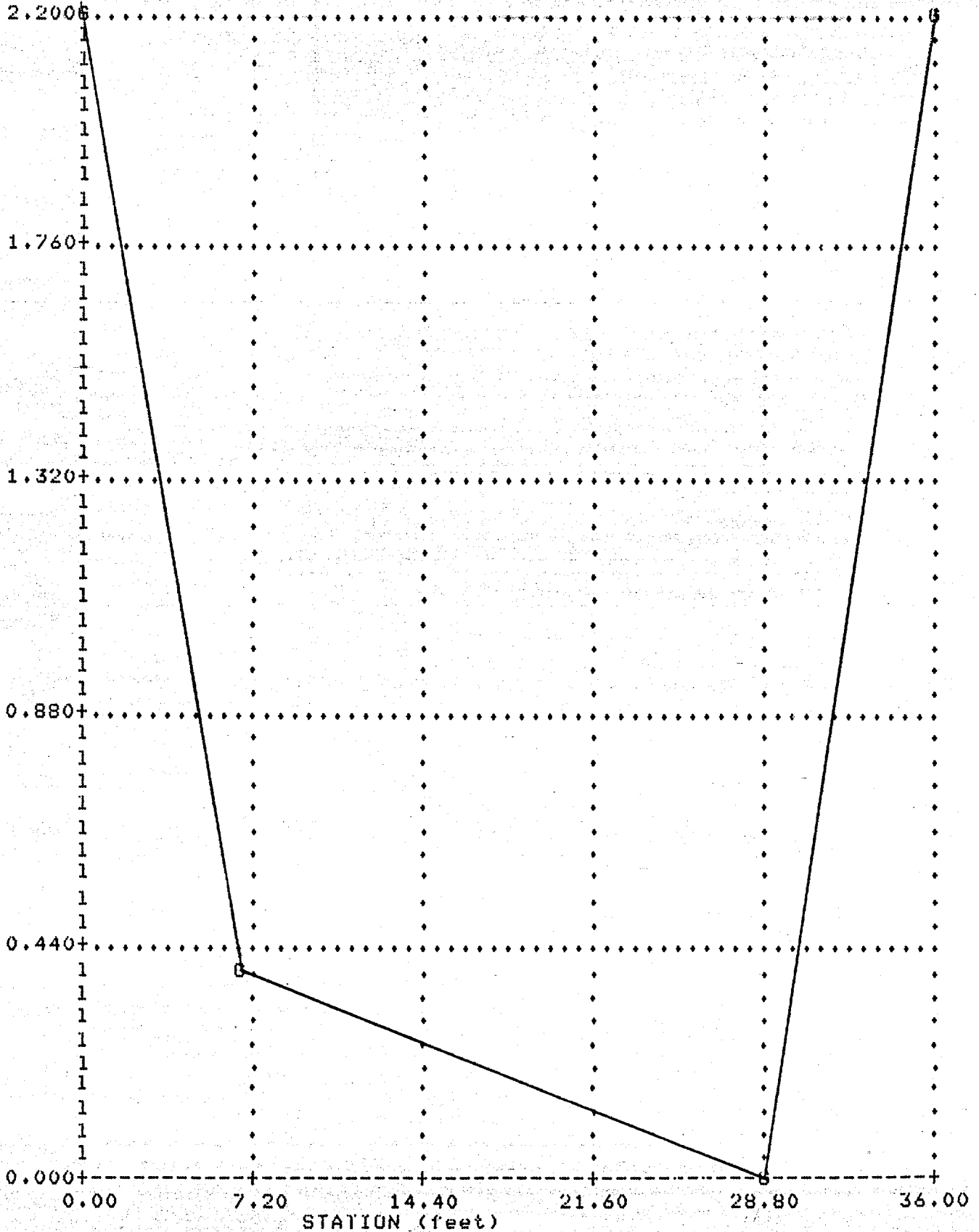
SECTION # 1 STATION 0.00

ORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	2.20	36.00	58.00	0.0:1	0.0:1	36.57
ROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.05	7.55	0.01700	437.84	0.03500	2.25	7.32

Q (cfs)

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
CASAS ADOBES WASH 19-E  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
15.00	1.50	15.00	22.50	0.0:1	0.0:1	18.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.23	8.55	0.02200	192.34	0.03000	1.72	7.45



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RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
CASAS ADOBES WASH 19-F  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
50.00	2.00	50.00	100.00	0.0:1	0.0:1	54.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.24	9.95	0.02400	994.55	0.03500	2.31	8.62

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 20-A  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
8.00	2.00	8.00	16.00	0.0:1	0.0:1	12.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.08	8.63	0.02800	138.07	0.03500	2.10	8.22

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 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 CASAS ADOBES WASH 20-B  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
20.00	3.50	20.00	70.00	0.0:1	0.0:1	27.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.51	16.07	0.04000	1124.78	0.03500	4.61	12.19

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 21-A  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
6.00	1.00	6.00	6.00	0.0:1	0.0:1	8.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.59	9.03	0.06600	54.17	0.03500	1.36	6.62

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RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 22-A  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
40.00	3.00	40.00	120.00	0.0:1	0.0:1	46.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.42	13.96	0.02200	1675.22	0.03000	3.79	11.05

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 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 PEGLER WASH 23-A  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
10.00	1.00	10.00	10.00	0.0:1	0.0:1	12.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.59	3.37	0.00800	33.72	0.03500	0.71	4.77

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 .LIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 PEGLER WASH 23-B  
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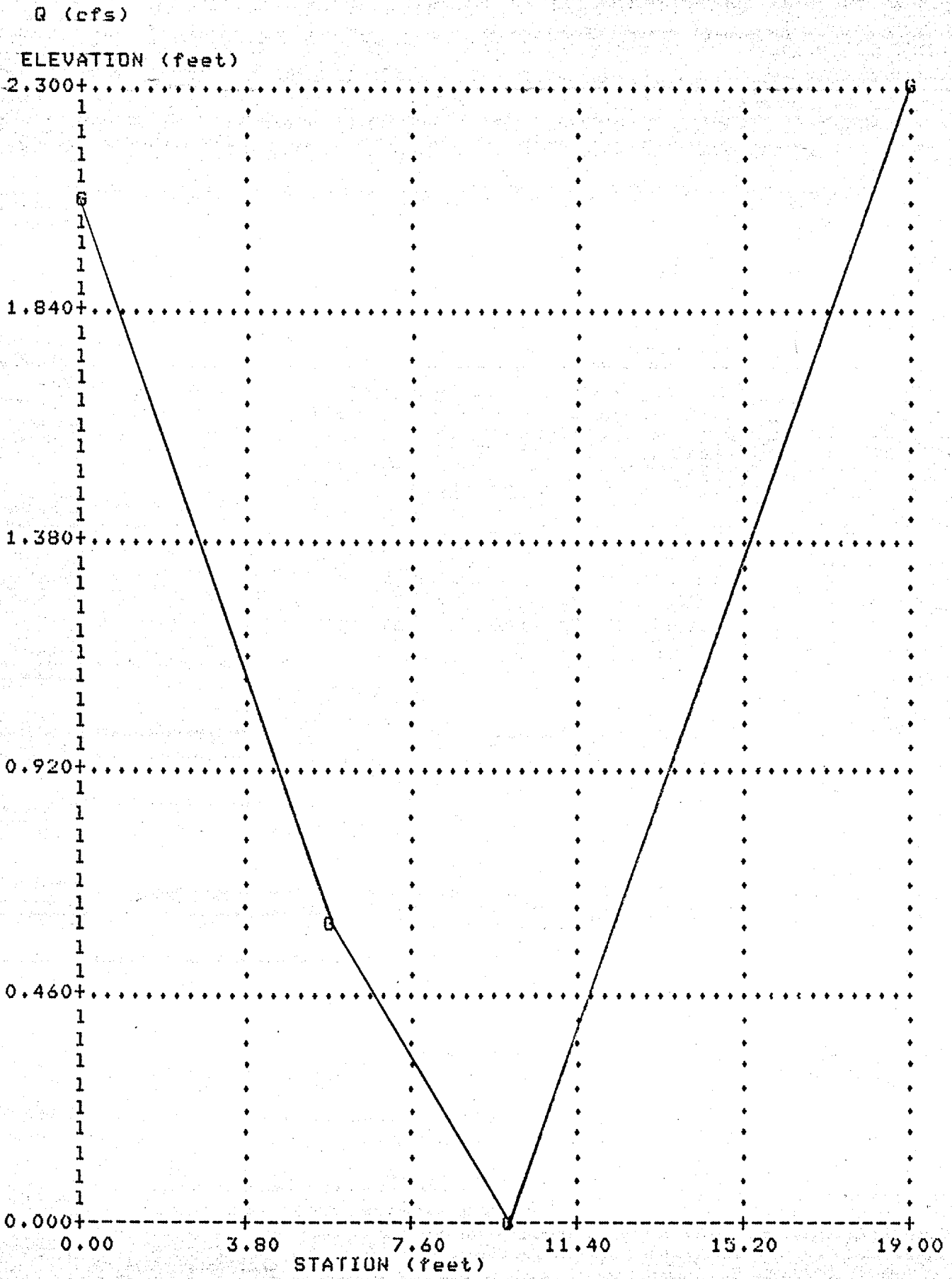
IRREGULAR CROSS SECTION

STA.	0.00	6.00	10.00	19.00
ELEV.	2.10	0.60	0.00	2.30
N	0.030	0.030	0.030	0.030

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	2.10	18.22	20.33	0.0:1	0.0:1	18.71
ROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.96	5.75	0.01200	116.89	0.03000	2.06	5.94





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 IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 PEGLER WASH 23-C  
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SECTION # 1 STATION 0.00 RECTANGULAR

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
52.00	1.50	52.00	78.00	0.0:1	0.0:1	55.00
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.88	6.13	0.01300	477.90	0.03500	1.38	6.66

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LIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 23-D

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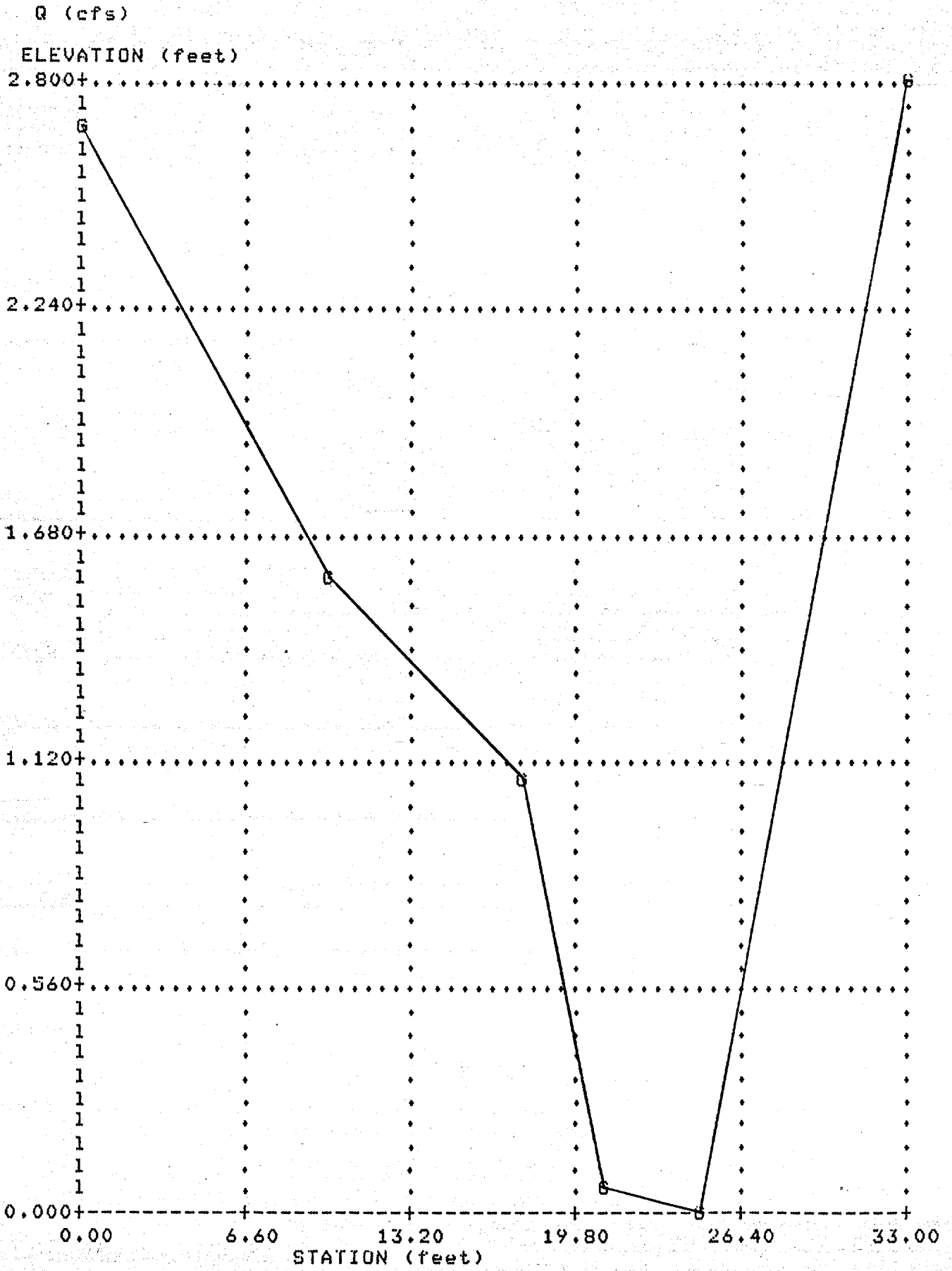
IRREGULAR CROSS SECTION

STA.	0.00	10.00	18.00	21.00	25.00	33.00
ELEV.	2.70	1.60	1.10	0.10	0.00	2.80
N	0.030	0.030	0.030	0.030	0.030	0.030

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	2.70	32.71	43.61	0.0:1	0.0:1	33.41
PROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.57	10.27	0.03000	448.13	0.03000	3.17	7.59



G : CROSS SECTION GROUND POINT

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 RIVERSIDE TERRACE BASIN MANAGEMENT PLAN  
 PEGLER WASH 23-E  
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IRREGULAR CROSS SECTION

STA.	0.00	12.00	15.00	20.00	23.00	26.00
LEV.	2.60	2.00	0.00	0.10	1.20	3.90
N	0.035	0.035	0.035	0.035	0.035	0.035

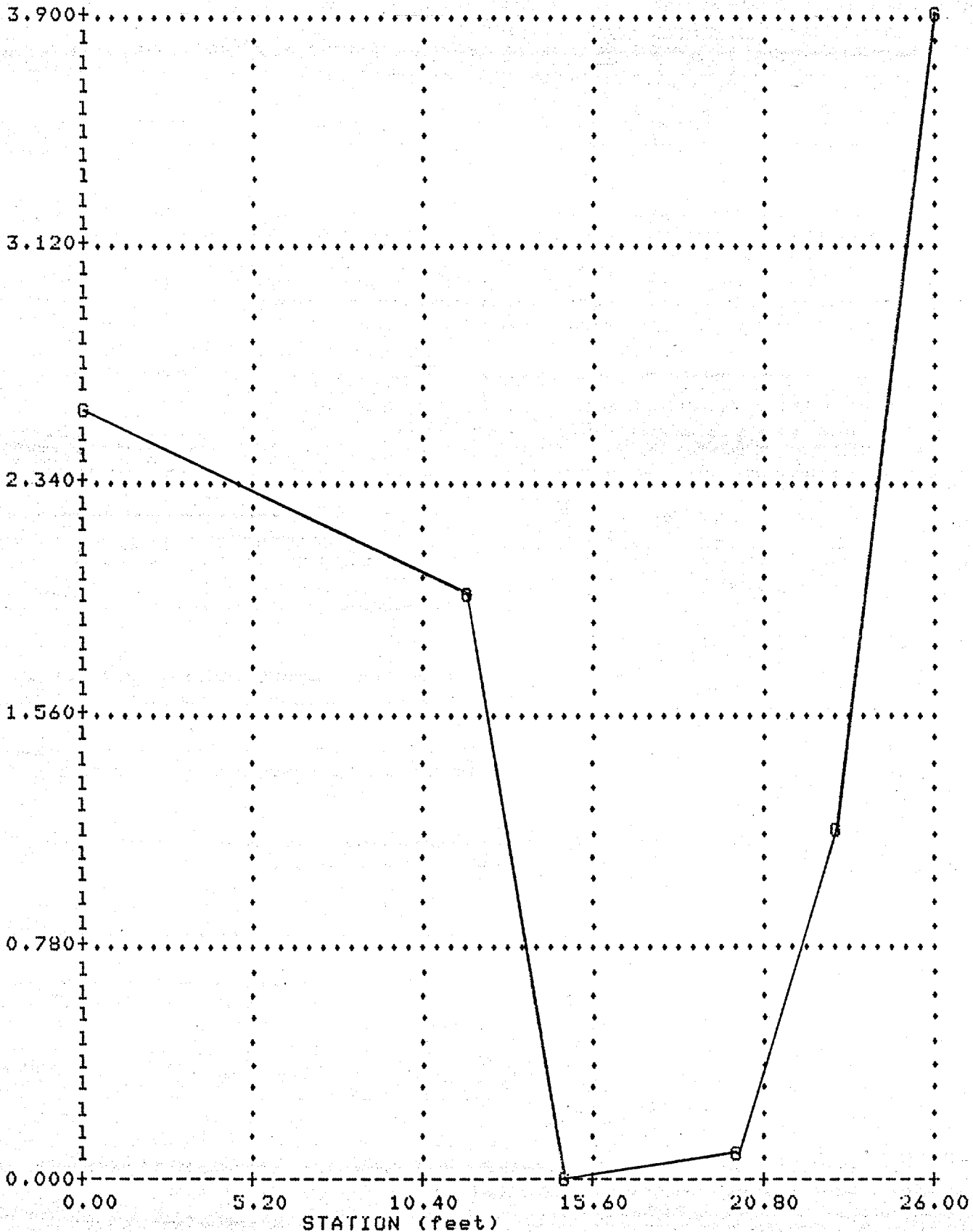
SECTION # 1 STATION 0.00

ORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	2.60	24.56	28.09	0.0:1	0.0:1	25.91
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
1.05	6.35	0.02000	178.46	0.03500	2.64	6.16

Q (cfs)

ELEVATION (feet)



G : CROSS SECTION GROUND POINT

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IVERSIDE TERRACE BASIN MANAGEMENT PLAN  
PEGLER WASH 23-F  
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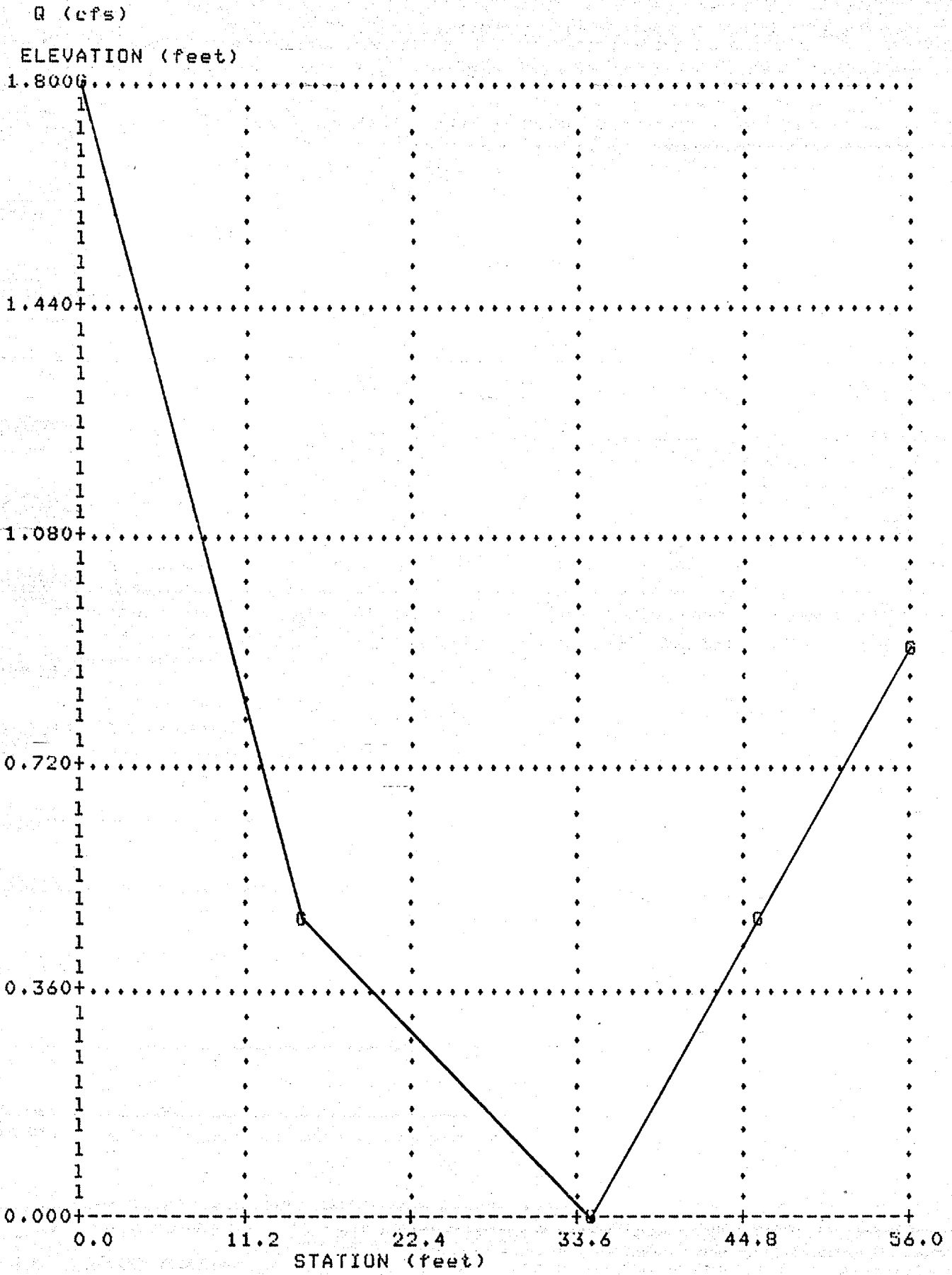
IRREGULAR CROSS SECTION

STA.	0.00	15.00	35.00	46.00	56.00
LEV.	1.80	0.50	0.00	0.50	0.90
N	0.035	0.035	0.035	0.035	0.035

SECTION # 1 STATION 0.00

NORMAL FLOW COMPUTATION

BW	YN	TOP WIDTH	AREA	L.B. SLOPE	R.B. SLOPE	PERIMETER
0.00	0.90	45.62	23.07	0.0:1	0.0:1	45.66
FROUDE #	VELOCITY	SLOPE	DISCHARGE	N VALUE	YC	VC
0.73	2.96	0.01200	68.27	0.03500	0.79	3.75



G : CROSS SECTION GROUND POINT

**VOLUME I  
TABLE OF CONTENTS  
(Not Attached)**

<b>SECTION I</b>	<b>Roller Coaster Wash</b>
<b>SECTION II</b>	<b>Citrus Wash</b>
<b>SECTION III</b>	<b>Casas Adobes Wash</b>
<b>SECTION IV</b>	<b>Nanini Wash</b>



**VOLUME II**  
**TABLE OF CONTENTS**  
**(Not Attached)**

SECTION I	Pegler Wash
SECTION II	Carmack Wash
SECTION III	West Orange Grove Basin
SECTION IV	West Ina Basin
SECTION V	Pima Wash