

FLOOD INSURANCE STUDY



SAN DIEGO COUNTY, CALIFORNIA AND INCORPORATED AREAS

VOLUME 3 OF 7

Community Name	Community Number
CARLSBAD, CITY OF	060285
CHULA VISTA, CITY OF	065021
CORONADO, CITY OF	060287
DEL MAR, CITY OF	060288
EL CAJON, CITY OF	060289
ENCINITAS, CITY OF	060726
ESCONDIDO, CITY OF	060290
IMPERIAL BEACH, CITY OF	060291
LA MESA, CITY OF	060292
LEMON GROVE, CITY OF	060723
NATIONAL CITY, CITY OF	060293
OCEANSIDE, CITY OF	060294
POWAY, CITY OF	060702
SAN DIEGO, CITY OF	060295
SAN DIEGO COUNTY UNINCORPORATED AREAS	060284
SAN MARCOS, CITY OF	060296
SANTEE, CITY OF	060703
SOLANA BEACH, CITY OF	060725
VISTA, CITY OF	060297



REVISED:
SEPTEMBER 29, 2006



Federal Emergency Management Agency
FLOOD INSURANCE STUDY NUMBER
06073CV003B

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

This Preliminary Flood Insurance Study report does not include unrevised Floodway Data Tables or unrevised Flood Profiles. These unrevised components will appear in the final Flood Insurance Study report.

This publication incorporates revisions to the original Flood Insurance Study. These revisions are presented in Section 10.0.

Due to the large file size only the information relevant to the City of Oceanside has been provided here. For complete copy of this document please contact the City of Oceanside Engineering Division or FEMA.

TABLE OF CONTENTS

Volume 1

	<u>Page</u>
1.0 <u>INTRODUCTION</u>	1
1.1 Purpose of Study.....	1
1.2 Authority and Acknowledgments.....	1
1.3 Coordination.....	7
2.0 <u>AREA STUDIED</u>	8
2.1 Scope of Study.....	8
2.2 Community Description.....	12
2.3 Principal Flood Problems.....	23
2.4 Flood Protection Measures.....	39
3.0 <u>ENGINEERING METHODS</u>	48
3.1 Hydrologic Analyses.....	49
3.2 Hydraulic Analyses.....	82
4.0 <u>FLOODPLAIN MANAGEMENT APPLICATIONS</u>	100
4.1 Floodplain Boundaries.....	100
4.2 Floodways.....	102
5.0 <u>INSURANCE APPLICATION</u>	105
6.0 <u>FLOOD INSURANCE RATE MAP</u>	106
7.0 <u>OTHER STUDIES</u>	107
8.0 <u>LOCATION OF DATA</u>	112
9.0 <u>BIBLIOGRAPHY AND REFERENCES</u>	112
10.0 <u>REVISION DESCRIPTIONS</u>	123
10.1 First Revision.....	123
10.2 Second Revision.....	125
10.3 Third Revision.....	126
10.4 Fourth Revision.....	139
10.5 Fifth Revision.....	140
10.6 Sixth Revision.....	141
10.7 Seventh Revision.....	144

TABLE OF CONTENTS (Cont'd)

Volume 1 (Cont'd)

Page

FIGURES

Figure 1 - Estimated Flood Elevations, Las Chollas Creek.....37
Figure 2 - Estimated Flood Elevations, Las Chollas Creek.....37
Figure 3 - Estimated Flood Elevations, Las Puleta Creek.....38
Figure 4 - Estimated Flood Elevations, Las Puleta Creek.....38
Figures 5-7 - Frequency-Discharge, Drainage Area Curves.....78-80
Figure 8 - Floodway Schematic.....105

TABLES

Table 1 - Community Coordination Officer Meetings.....9
Table 2 - Streams Studied by Detailed Methods.....10
Table 3 - Areas of Probable Damage to Structures in the City of Poway.....34
Table 4 - Summary of Discharges.....50
Table 5 - Summary of Elevations.....68
Table 6 - Summary of Pacific Ocean Wave Elevations.....70
Table 7 - Summary of Manning's "n" Values.....87
Table 8 - Floodway Data.....See Vol. 2
Table 9 - Community Map History.....108

Volume 2

TABLES

Table 8 - Floodway Data

Volume 3

EXHIBITS

Exhibit 1 - Flood Profiles

Agua Hedionda Creek (At City of Vista)	Panels 01P-05P
Beaver Hollow Creek	Panels 06P-10P
Beeler Creek	Panels 11P-17P
Broadway Creek	Panels 18P-20P
Buena Creek	Panels 21P-29P
Buena Vista Creek	Panels 30P-49P
Buena Vista Creek Tributary 1	Panels 50P-51P
Carmel Valley Creek	Panels 52P-54P
Carroll Canyon Creek	Panels 55P-65P
Coleman Creek	Panels 66P-72P
County Ditch Creek	Panels 73P-74P
Deer Springs Creek	Panel 75P
Descanso Creek	Panels 76P-78P
Encanto Branch	Panels 79P-82P
Escondido Creek	Panels 83P-91P
Escondido Creek (Above Lake Wohlford)	Panel 92P
Escondido Creek (Left Reach)	Panel 93P
Eucalyptus Hills (East Branch)	Panel 94P
Eucalyptus Hills (West Branch)	Panels 95P-96P
Florida Drive Branch	Panel 97P

TABLE OF CONTENTS (Cont'd)

Volume 4

EXHIBITS (Cont'd)

Exhibit 1 - Flood Profiles (Cont'd)

Forester Creek	Panels	98P-118P
Forester Creek-Carlton Hills Boulevard Overflow	Panel	119P
Garrison Creek	Panels	120P-123P
Gopher Canyon Creek	Panels	124P-127P
Green Valley Creek	Panels	128P-131P
Green Valley Creek Tributary	Panel	132P
Harbison Canyon Creek	Panels	133P-139P
Hatfield Creek	Panels	140P-141P
Home Avenue Branch	Panels	142P-144P
Kit Carson Park Creek	Panels	145P-149P
Las Chollas Creek	Panels	150P-154P
Las Posas Creek (Upper)	Panel	155P
Las Puleta Creek	Panels	156P-157P
Lawson Valley Creek	Panels	158P-163P
Loma Alta Creek	Panels	164P-169P
Los Penasquitos Creek	Panels	170P-178P
Lusardi Creek	Panel	179P
Mexican Canyon Creek	Panels	180P-183P
Panel Not Printed	Panel	184P
Moosa Creek (North Branch)	Panels	185P-187P
Moosa Creek (South Branch)	Panel	188P
Murphy Canyon Creek	Panels	189P-191P
Murray Canyon Creek	Panels	192P-195P
Nestor Creek	Panels	196P-201P
North Branch Poway Creek	Panels	202P-203P
North Tributary to Santa Maria Creek	Panels	204P-205P

Volume 5

Olive Creek	Panels	206P-207P
Otay River	Panels	208P-231P
Pala Mesa Creek	Panels	232P-233P
Paradise Creek	Panels	234P-238P
Poggi Canyon Creek	Panels	239P-242P
Poway Creek	Panels	243P-250P
Rainbow Creek (Main Branch)	Panels	251P-252P
Rainbow Creek (West Branch)	Panel	253P
Rattlesnake Creek	Panels	254P-261P
Rattlesnake Creek Split Flow at Heritage Hills	Panels	262P-263P
Rattlesnake Creek Split Flow at Midland Road	Panel	264P
Reidy Creek	Panels	265P-269P
Rice Canyon Creek	Panels	270P-272P
Rose Canyon Creek	Panels	273P-279P
Samagutuma Creek	Panels	280P-282P
San Clemente Canyon Creek	Panels	283P-285P
San Diego River	Panels	286P-306P
San Dieguito River	Panels	307P-309P
San Elijo Creek	Panel	310P
Panels Not Printed	Panels	311P-351P

TABLE OF CONTENTS (Cont=d)

Volume 6

EXHIBITS (Cont'd)

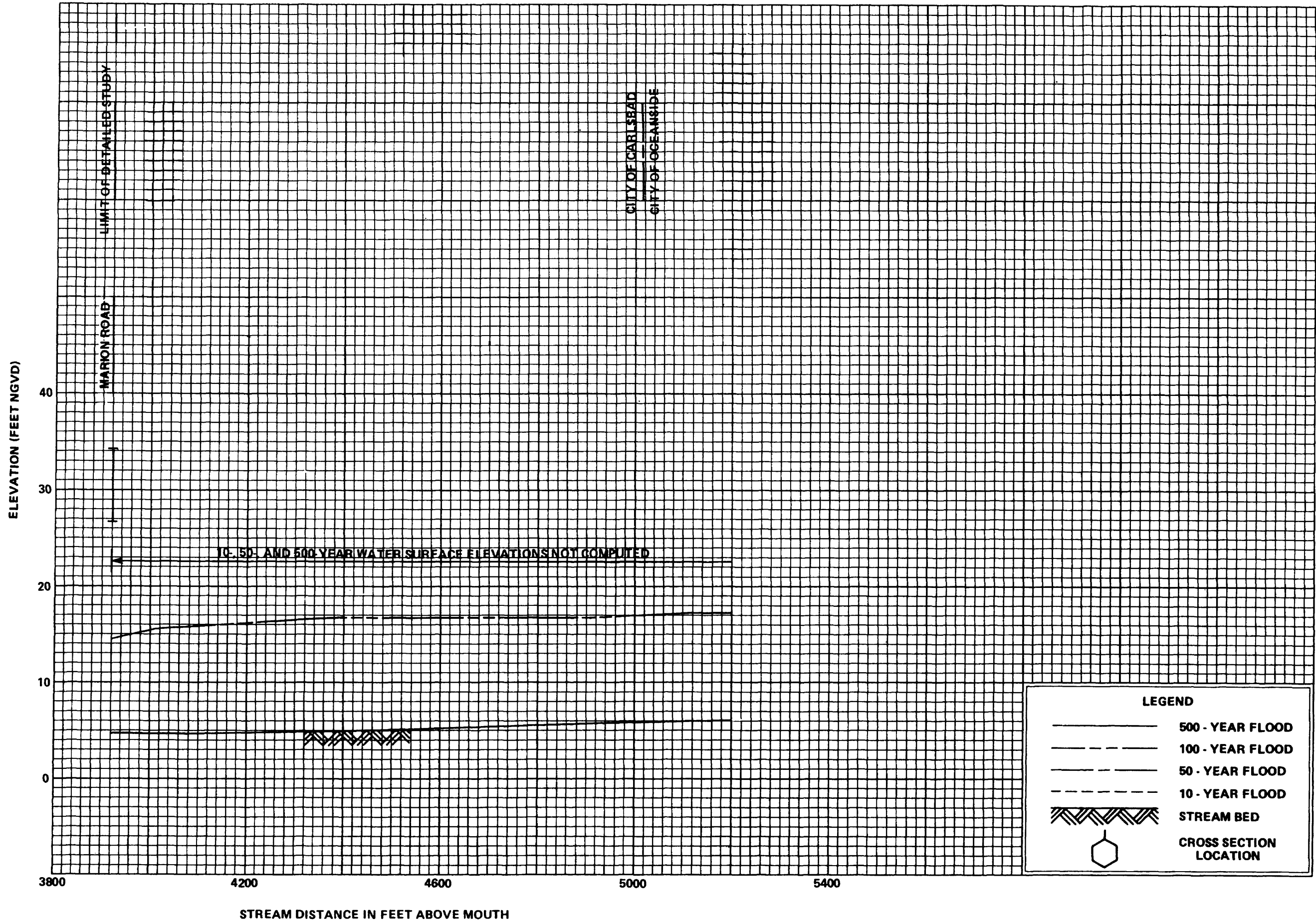
Exhibit 1 - Flood Profiles (Cont'd)

Panels Not Printed	Panels 352P-365P
San Luis Rey River (At Oceanside)	Panels 366P-374P
San Marcos Creek	Panels 375P-378P
San Marcos Creek Highway 78 Split Flow	Panel 379P
San Vicente Creek	Panels 380P-382P
Santa Maria Creek (San Pasqual Valley Area)	Panels 383P-386P
Santa Maria Creek (Santa Maria Valley Area)	Panels 387P-406P
Santa Ysabel Creek	Panels 407P-418P
Slaughterhouse Creek	Panels 419P-420P
Soledad Canyon	Panels 421P-425P
South Branch Poway Creek	Panels 426P-427P
South Fork Moosa Canyon Creek	Panels 428P-432P
South Las Chollas Creek	Panels 433P-436P
South Tributary to Santa Maria Creek	Panels 437P-438P
Spring Valley Creek	Panel 439P
Steele Canyon Creek	Panels 440P-448P
Stevenson Creek	Panel 449P
Sunrise Overflow	Panel 450P

Volume 7

Sweetwater River (Above Reservoir)	Panels 451P-473P
Sweetwater River (At National City)	Panels 474P-479P
Sweetwater River (Descanso Area)	Panels 480P-483P
Switzer Creek	Panel 484P
Tecolote Creek	Panels 485P-494P
Telegraph Canyon Creek	Panels 495P-501P
Panels Not Printed	Panels 502P-503P
Tijuana River	Panels 504P-508P
Tributary of South Tributary to Santa Maria Creek	Panel 509P
Tributary to Sweetwater River	Panels 510P-511P
Twin Oaks Valley Creek	Panels 512P-516P
Wabash Branch	Panel 517P
Witch Creek	Panels 518P-520P
Tributary to Forester Creek	Panels 521P-522P
Tributary to Forester Creek (South Branch)	Panel 523P
Agua Hedionda Creek (At City of Carlsbad)	Panels 524P-525P
Calavera Creek	Panel 526P
Calavera Creek Split Flow	Panel 527P
Pilgrim Creek	Panels 528P-530P
Pomerado Creek	Panels 531P-534P
Johnson Canyon Creek	Panels 535P-540P
Telegraph Canyon Creek	Panels 541P-552P
Alvarado Creek	Panels 553P-561P

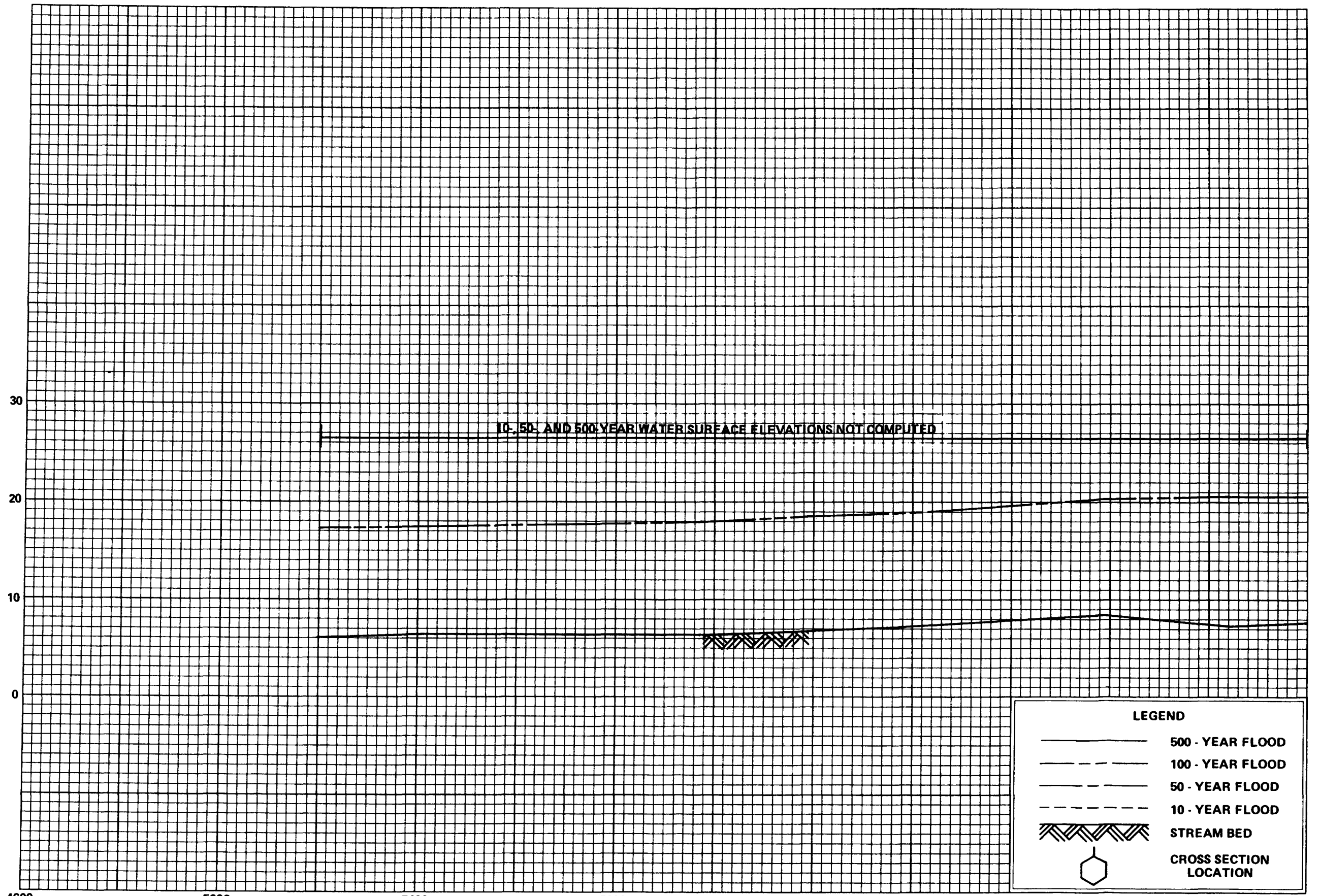
Exhibit 2 - Flood Insurance Rate Map Index
Flood Insurance Rate Map





FLOOD PROFILES
 BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 AND INCORPORATED AREAS

ELEVATION (FEET NGVD)



10, 50, AND 500 YEAR WATER SURFACE ELEVATIONS NOT COMPUTED

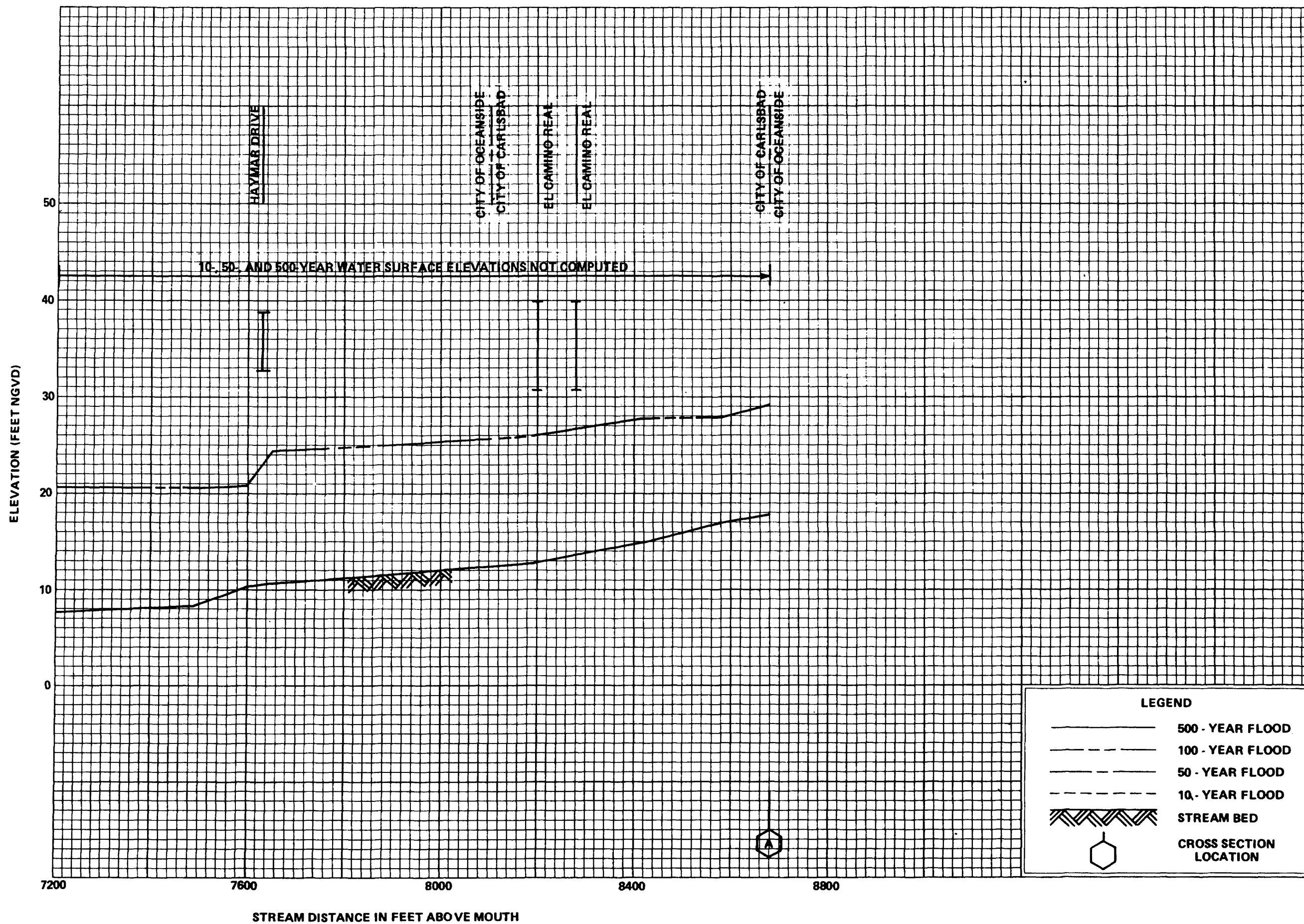
LEGEND	
—	500 - YEAR FLOOD
- - -	100 - YEAR FLOOD
- · - · -	50 - YEAR FLOOD
· · · · ·	10 - YEAR FLOOD
	STREAM BED
	CROSS SECTION LOCATION

FLOOD PROFILES

BUENA VISTA CREEK

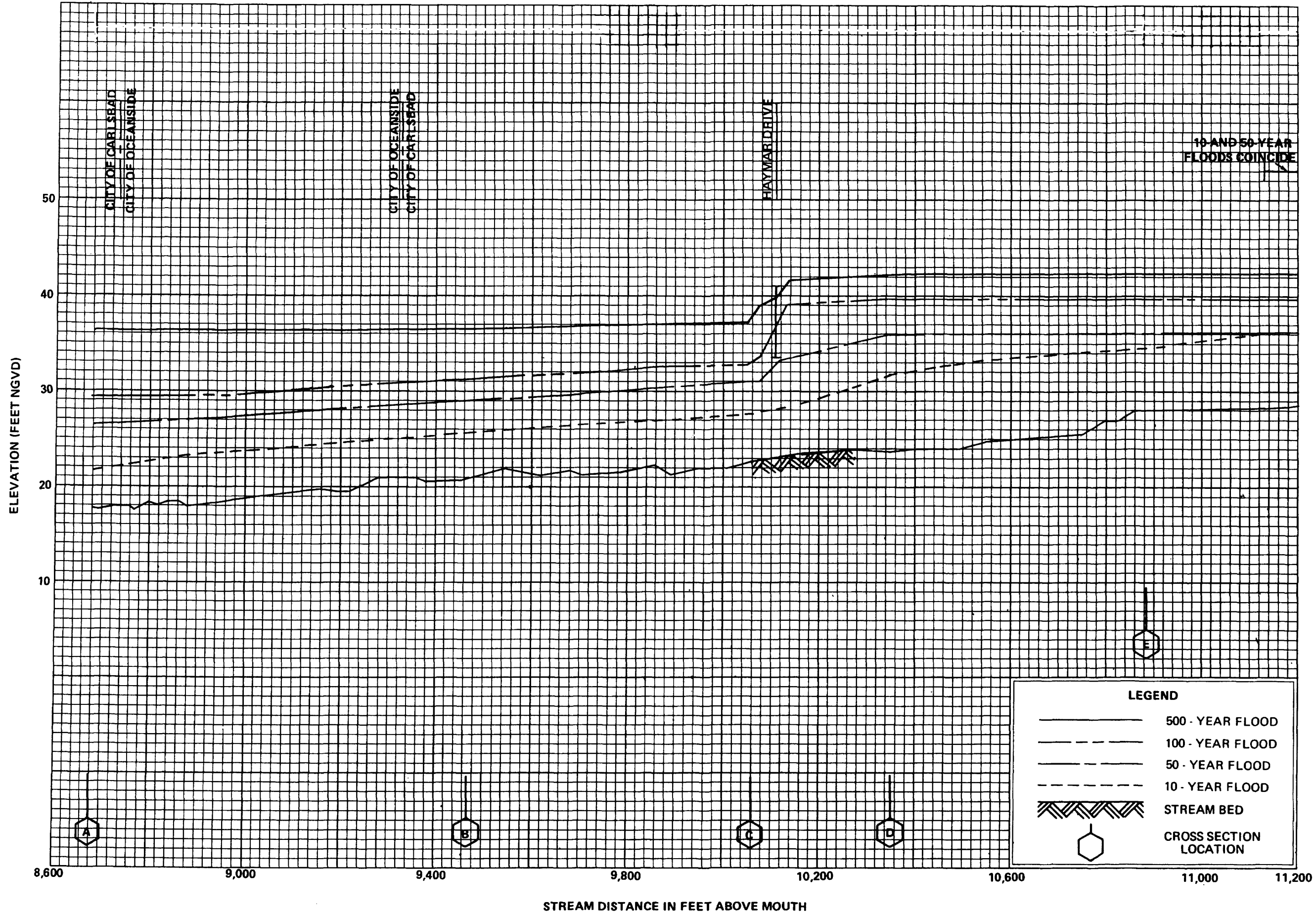
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS

STREAM DISTANCE IN FEET ABOVE MOUTH



FLOOD PROFILES
BUENA VISTA CREEK

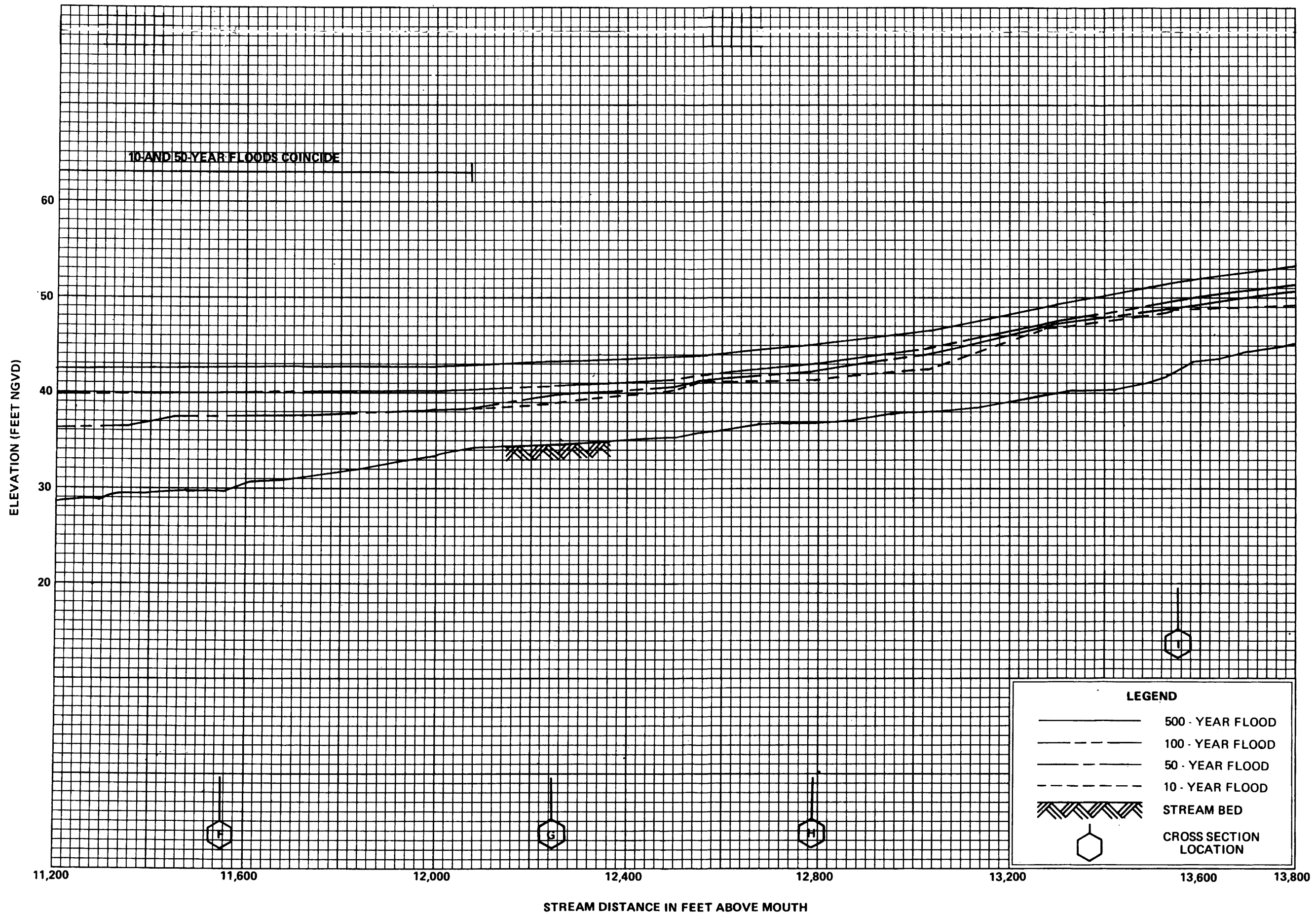
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS



FLOOD PROFILES

BUENA VISTA CREEK

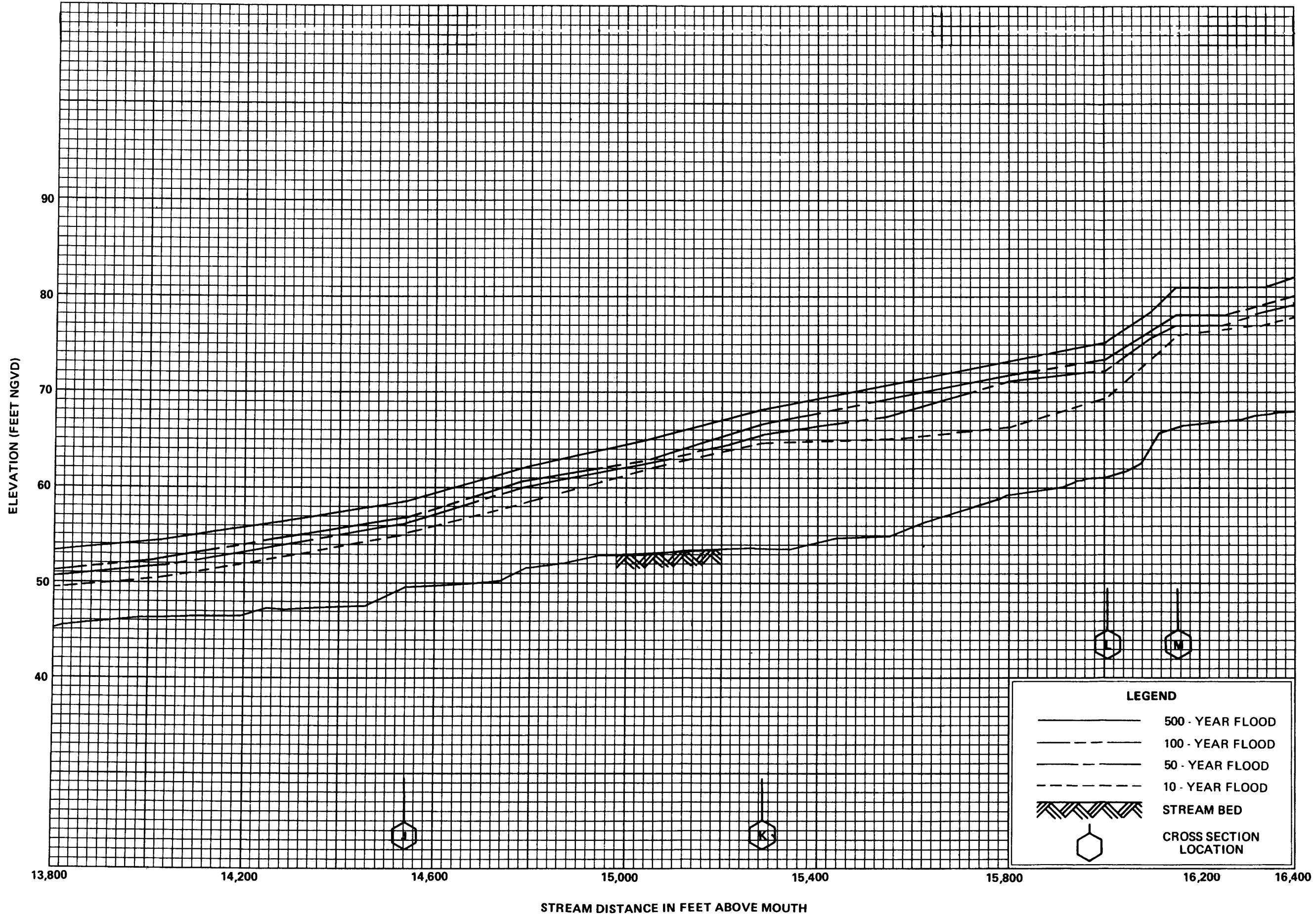
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS



FLOOD PROFILES

BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 AND INCORPORATED AREAS



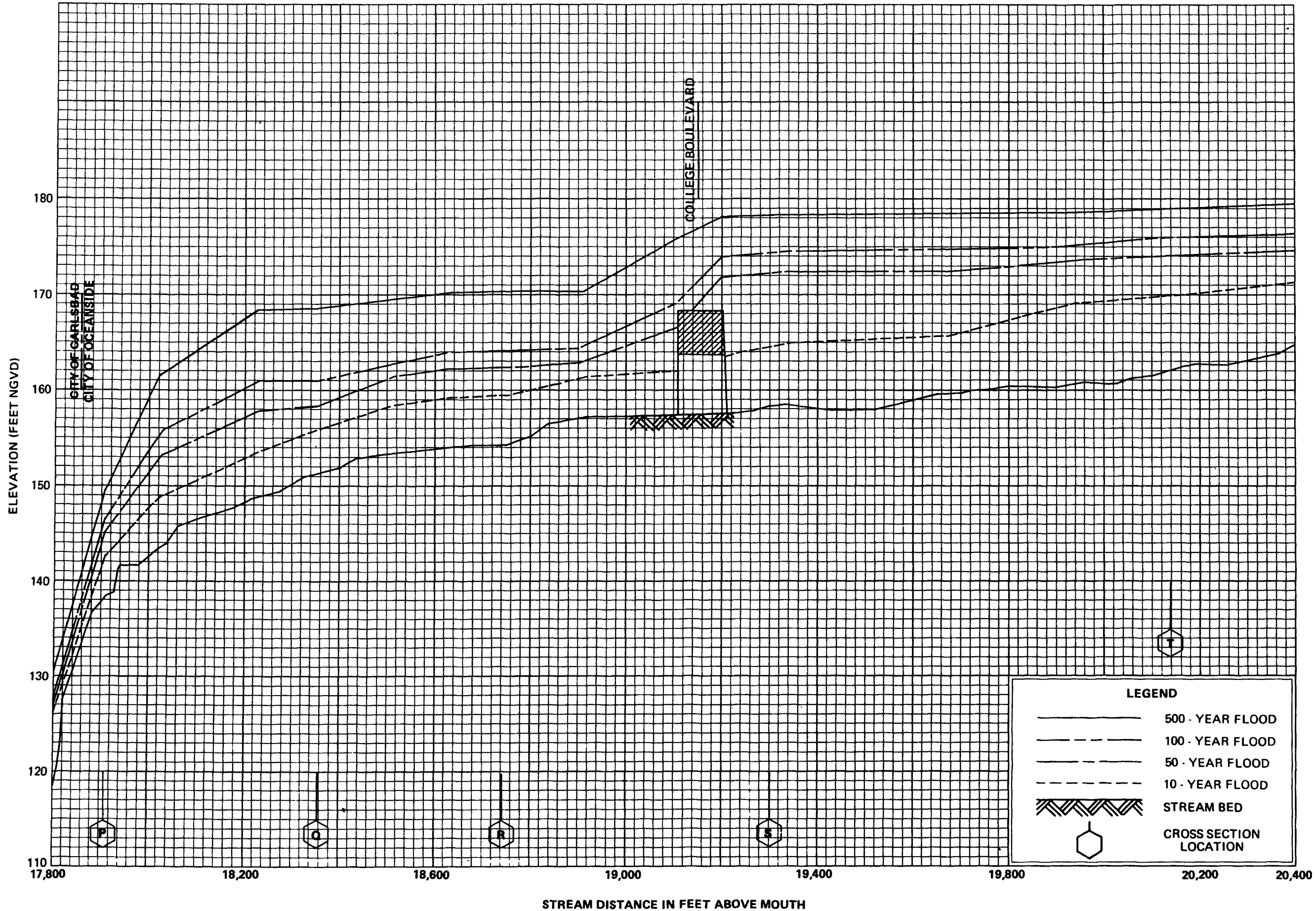
LEGEND	
	500 - YEAR FLOOD
	100 - YEAR FLOOD
	50 - YEAR FLOOD
	10 - YEAR FLOOD
	STREAM BED
	CROSS SECTION LOCATION

FLOOD PROFILES

BUENA VISTA CREEK

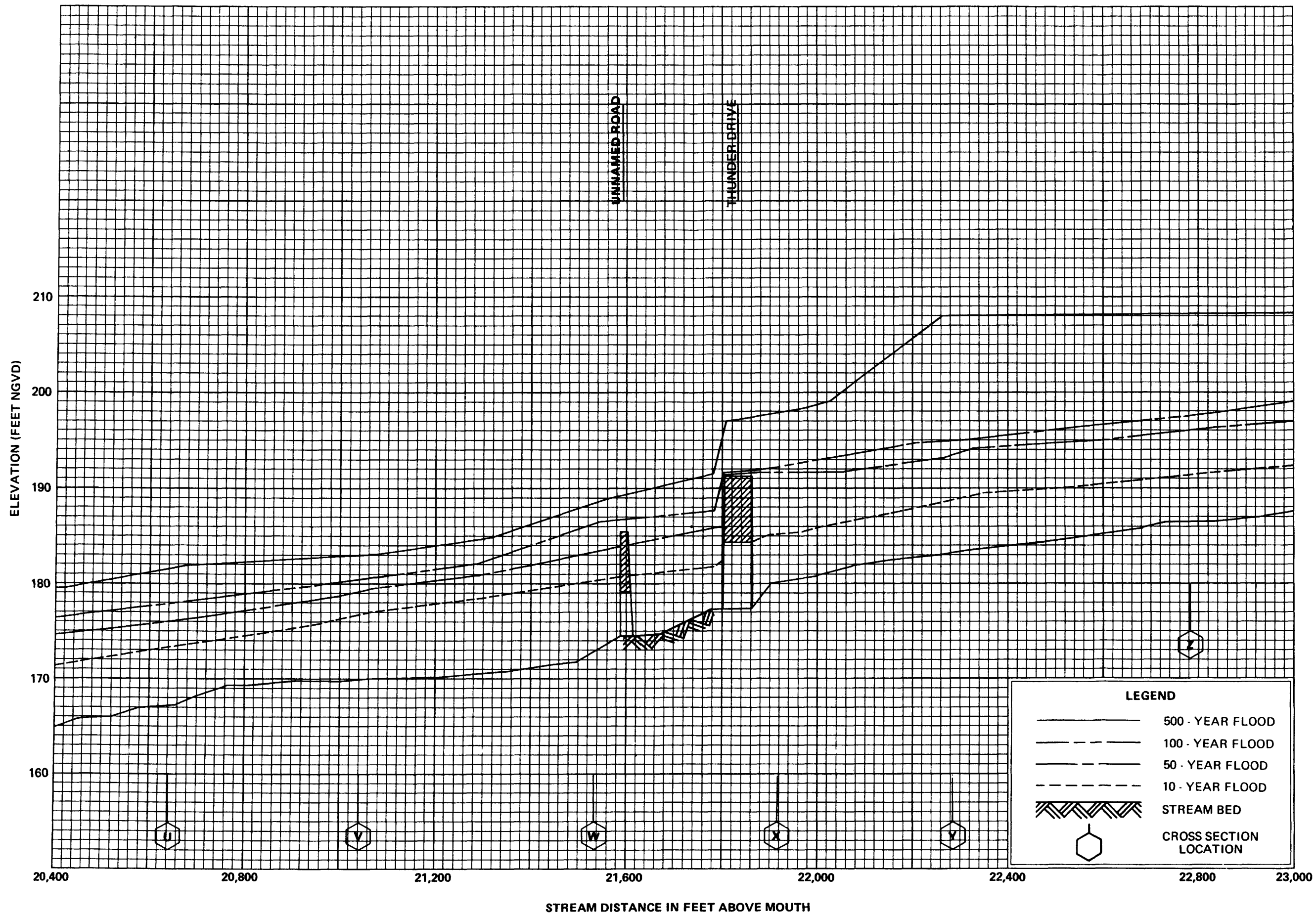
FEDERAL EMERGENCY MANAGEMENT AGENCY

**SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS**



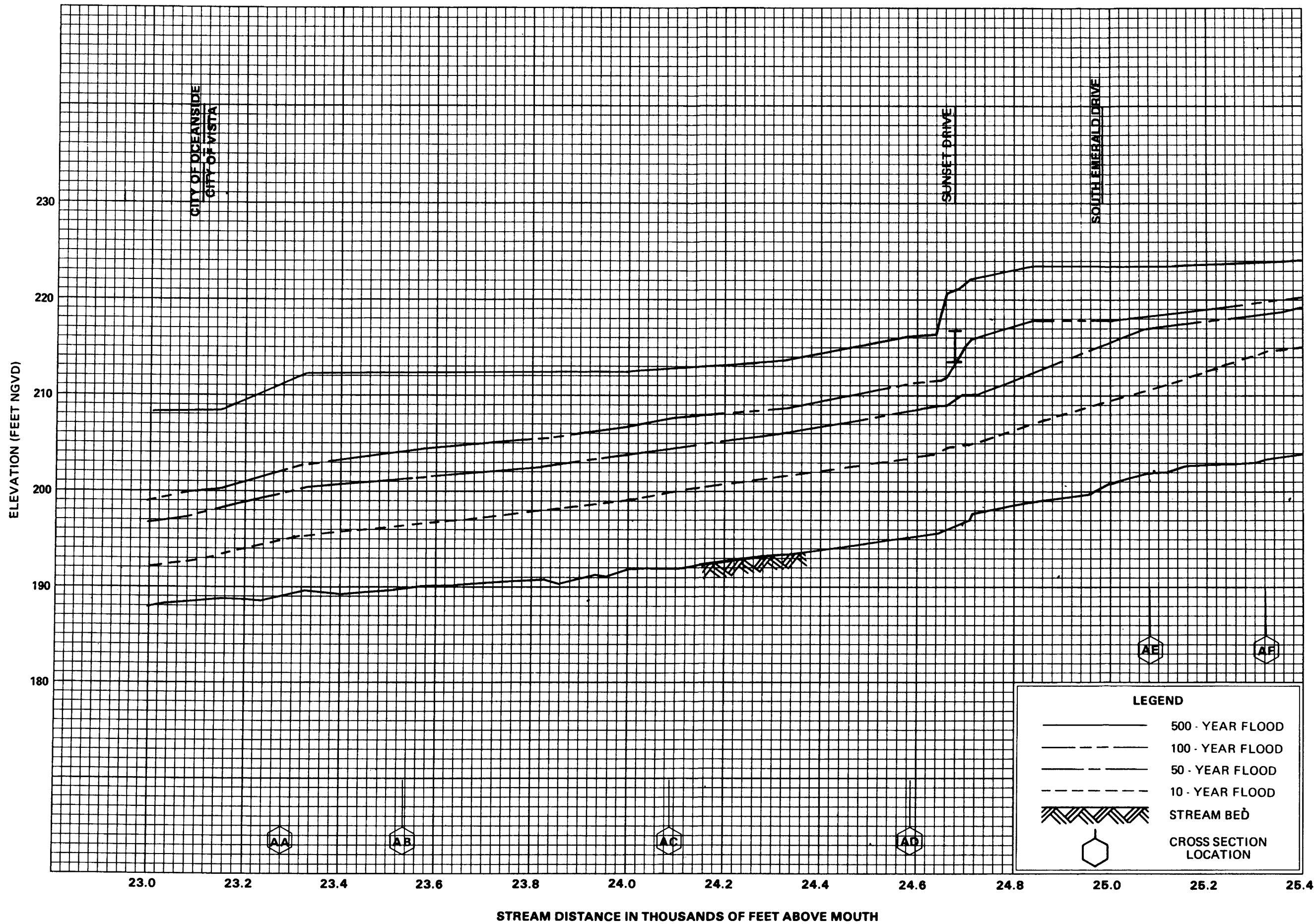
FLOOD PROFILES
 BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 AND INCORPORATED AREAS



FLOOD PROFILES
BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS

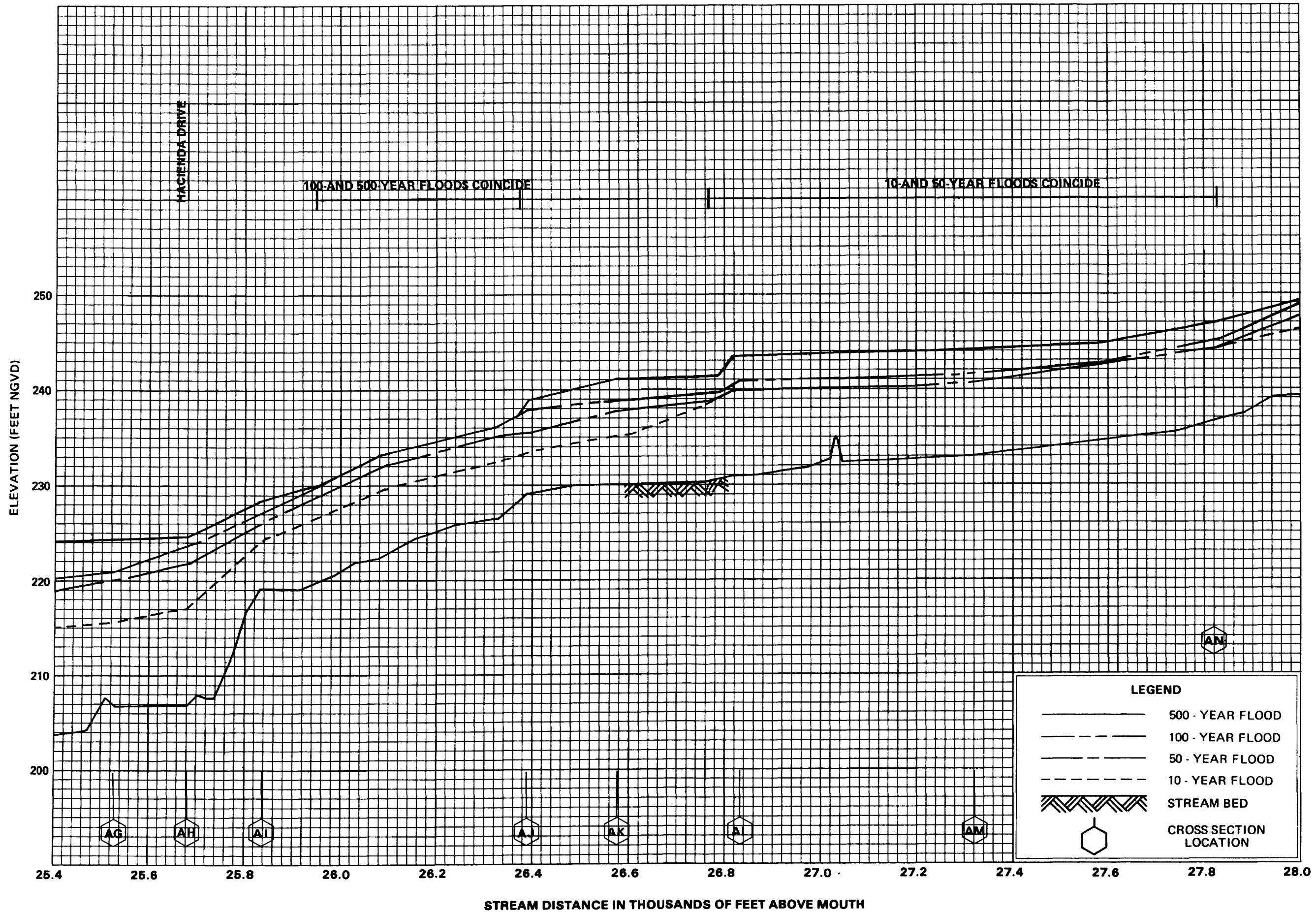


FLOOD PROFILES

BUENA VISTA CREEK

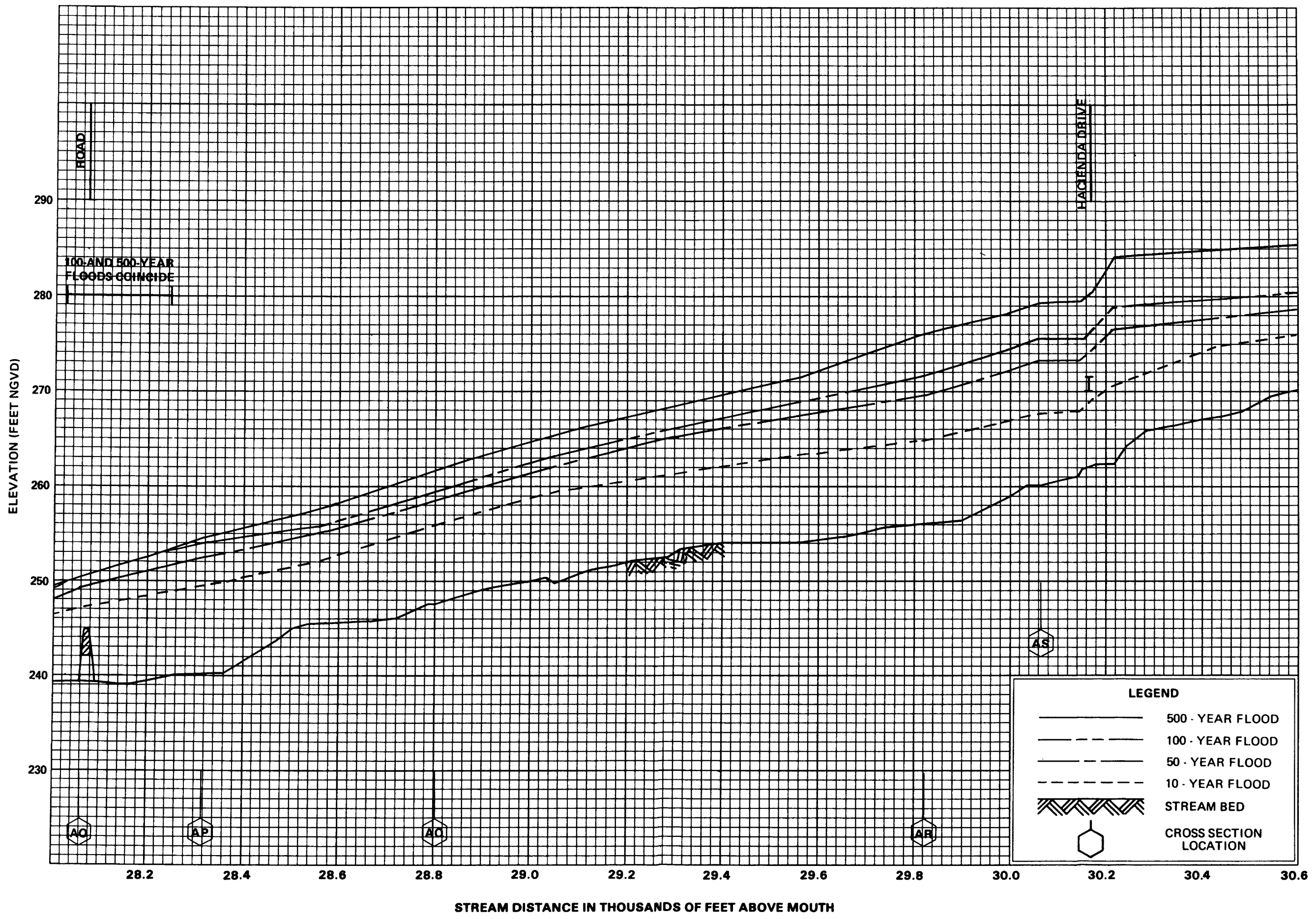
FEDERAL EMERGENCY MANAGEMENT AGENCY

**SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS**



FLOOD PROFILES
BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS

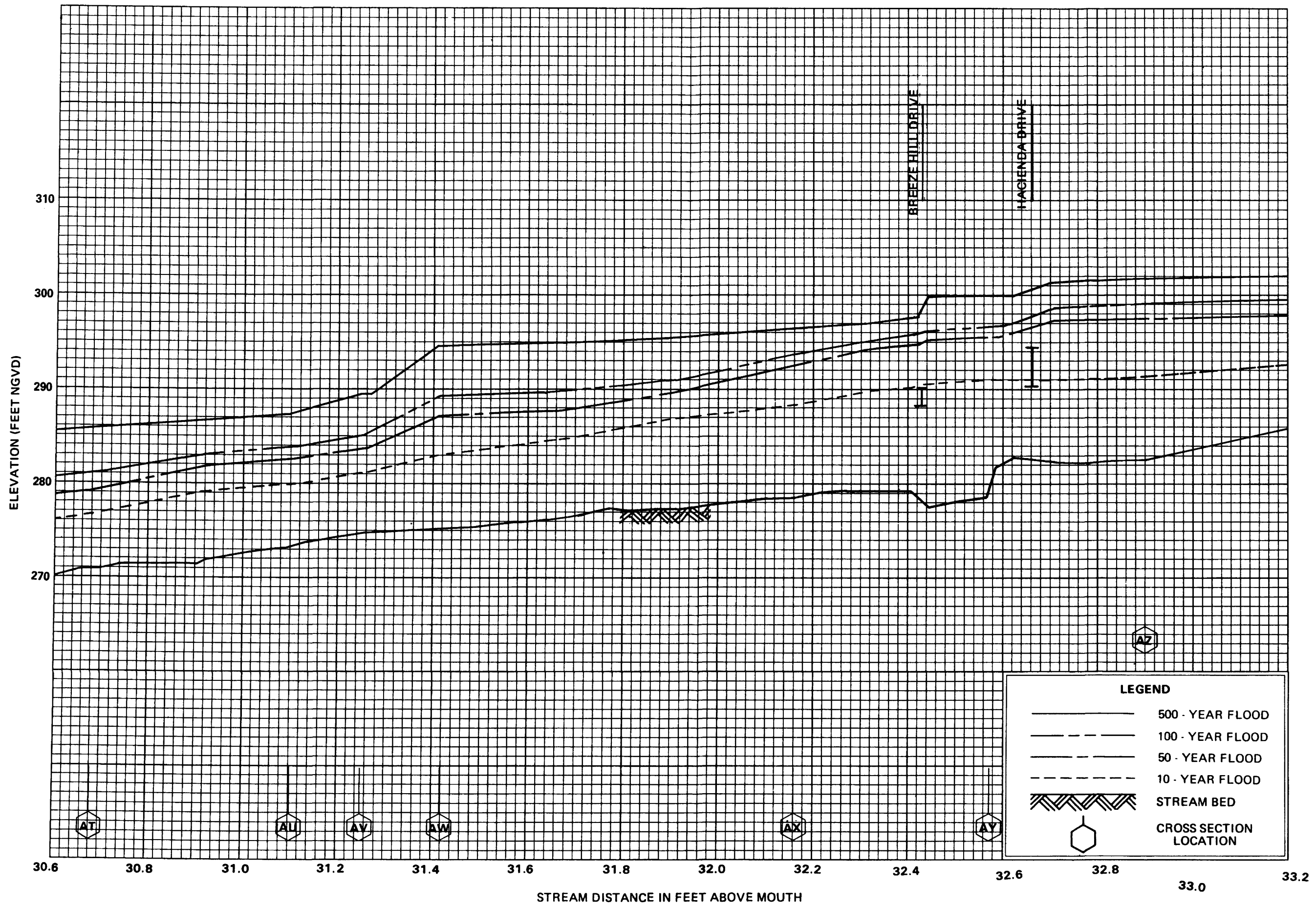


FLOOD PROFILES

BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

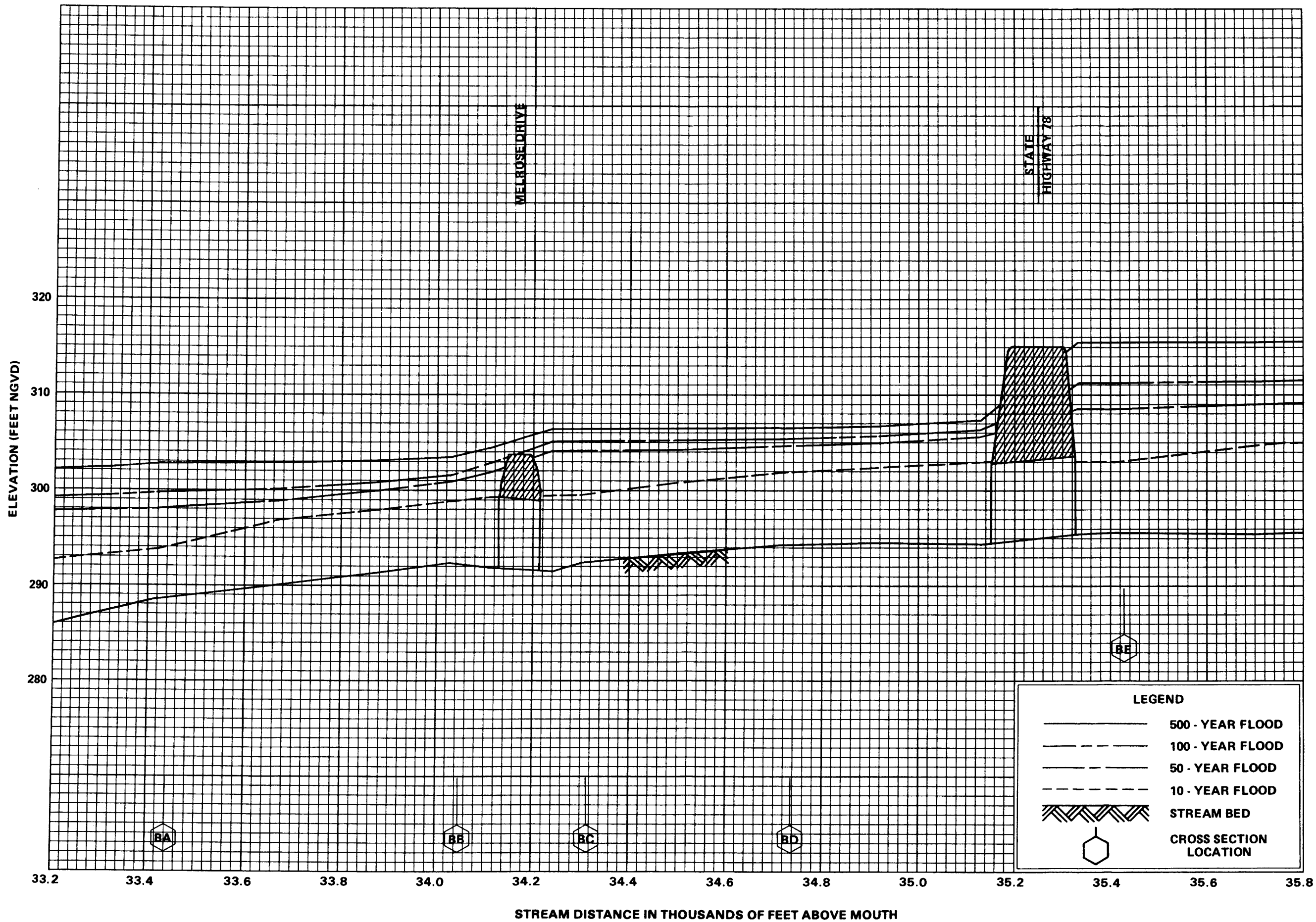
**SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS**



FLOOD PROFILES

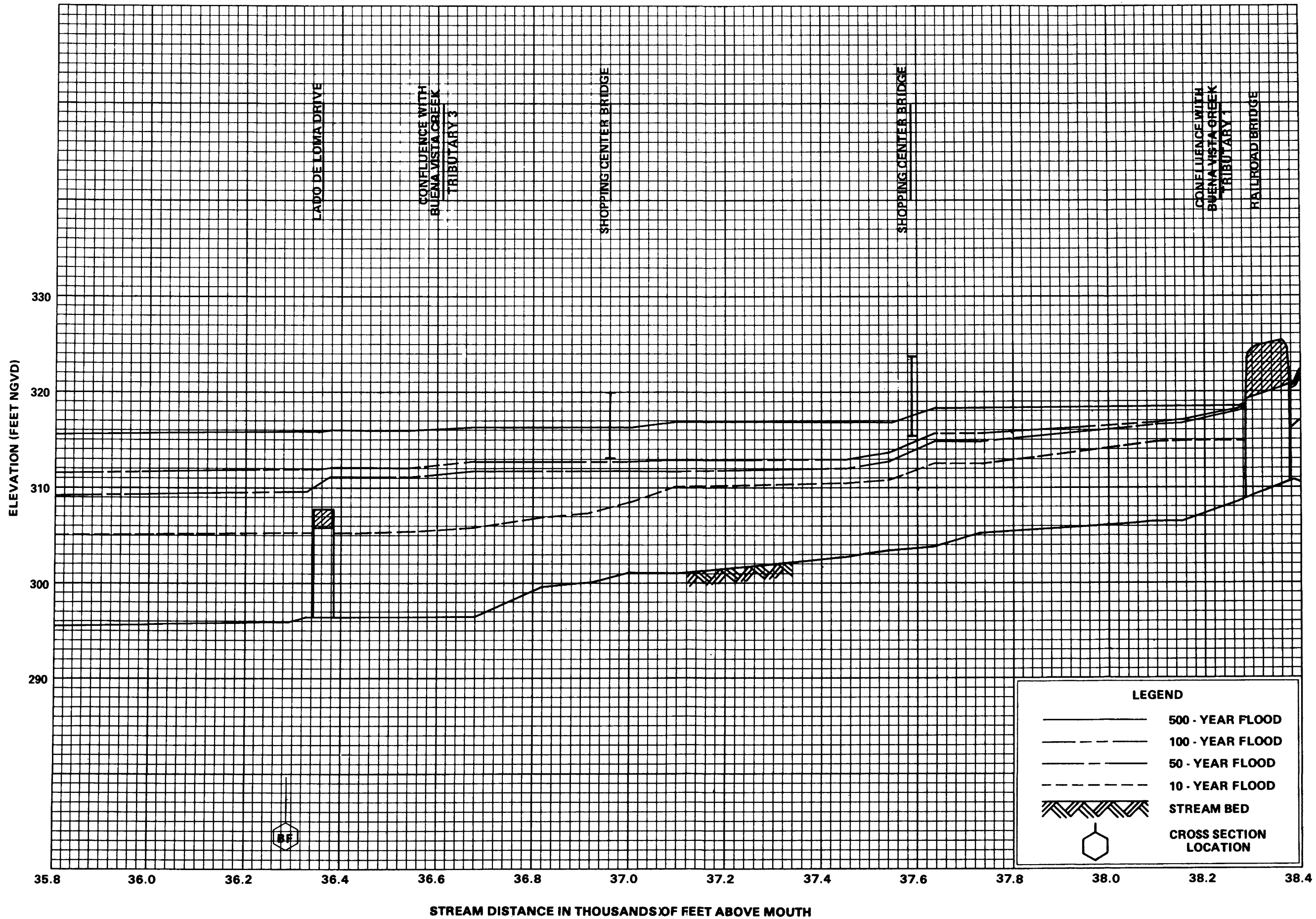
BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
**SAN DIEGO COUNTY, CA
 AND INCORPORATED AREAS**



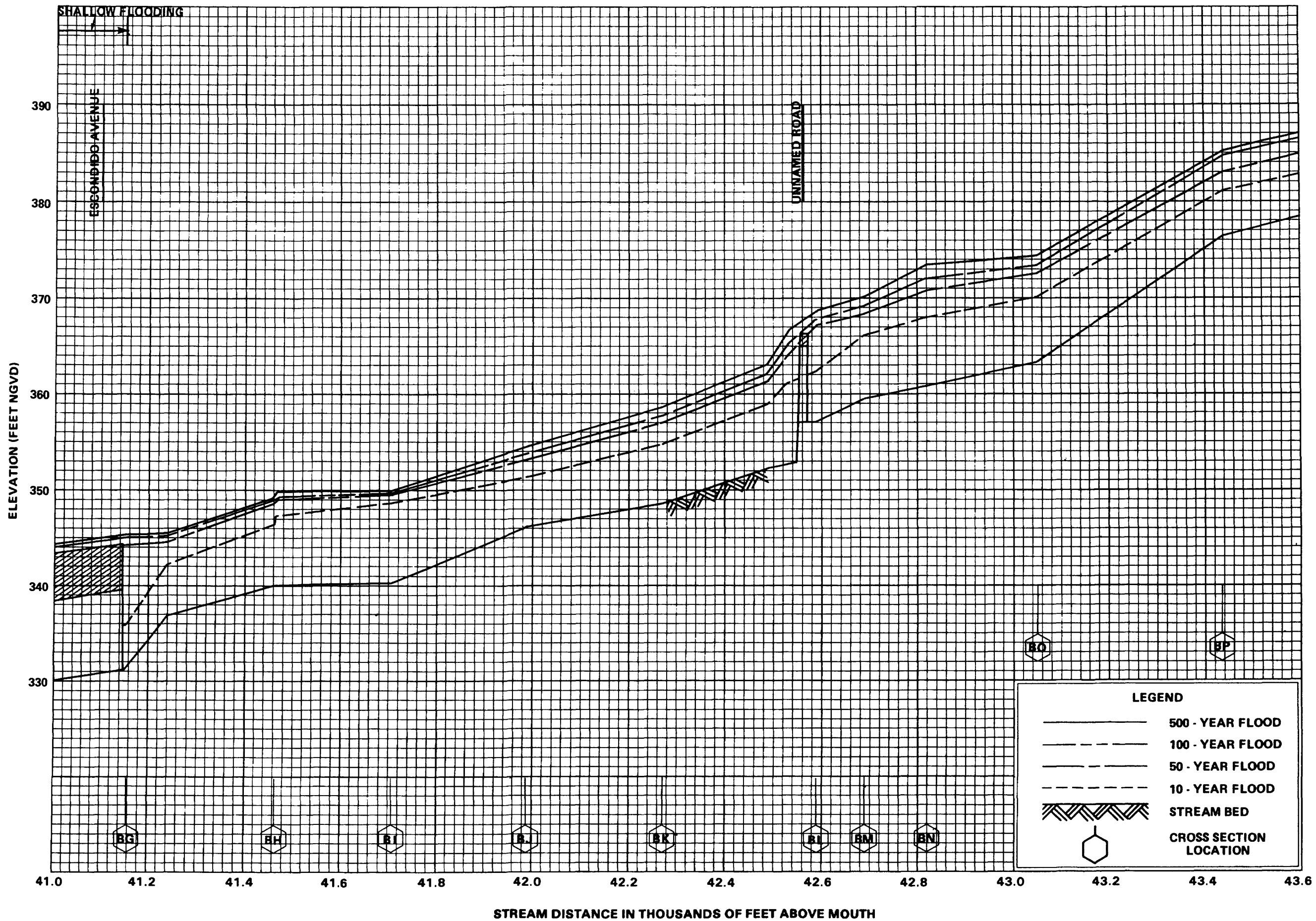
FLOOD PROFILES
BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS



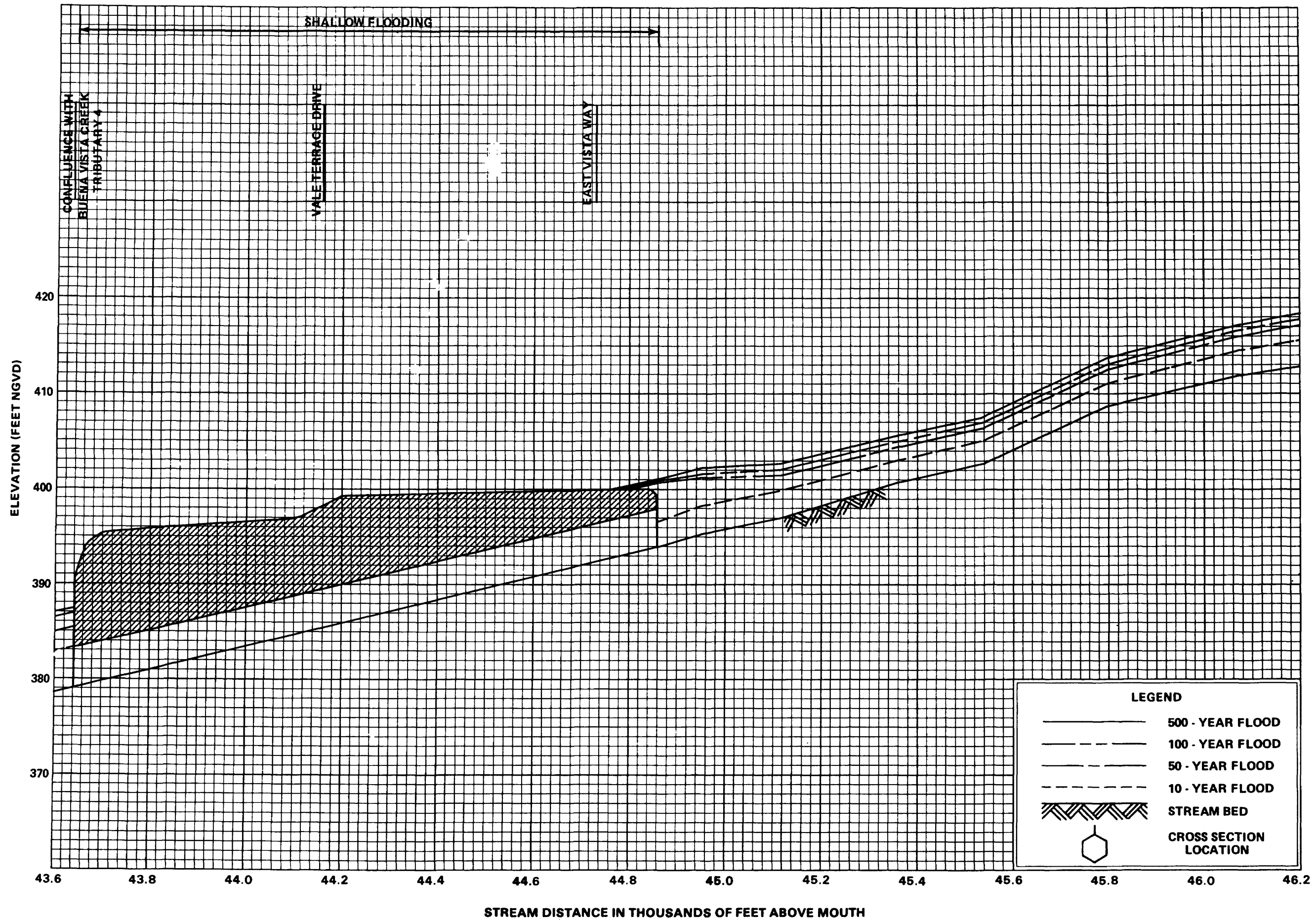
FLOOD PROFILES
BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS



FLOOD PROFILES
BUENA VISTA CREEK

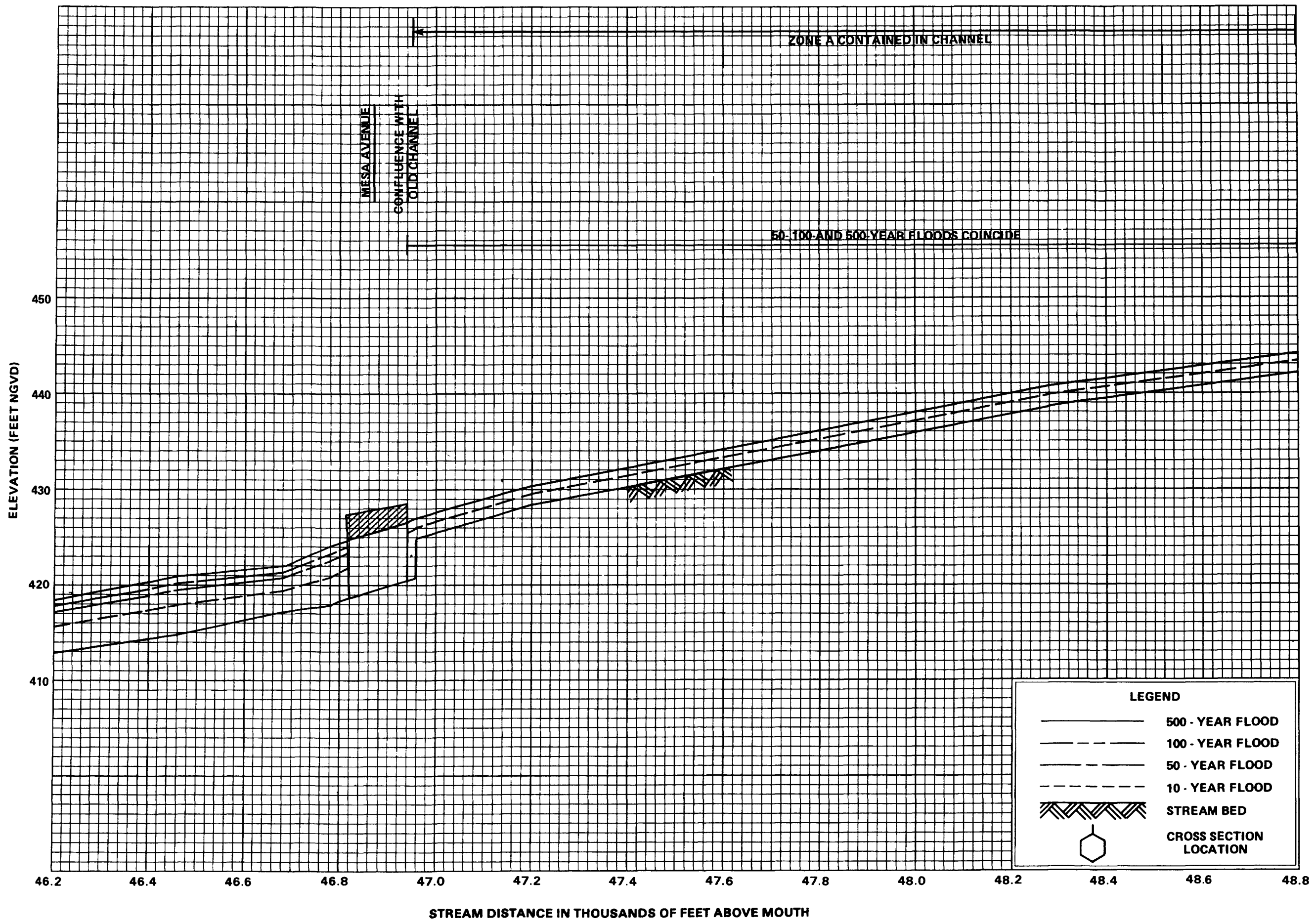
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS



FLOOD PROFILES

BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 AND INCORPORATED AREAS

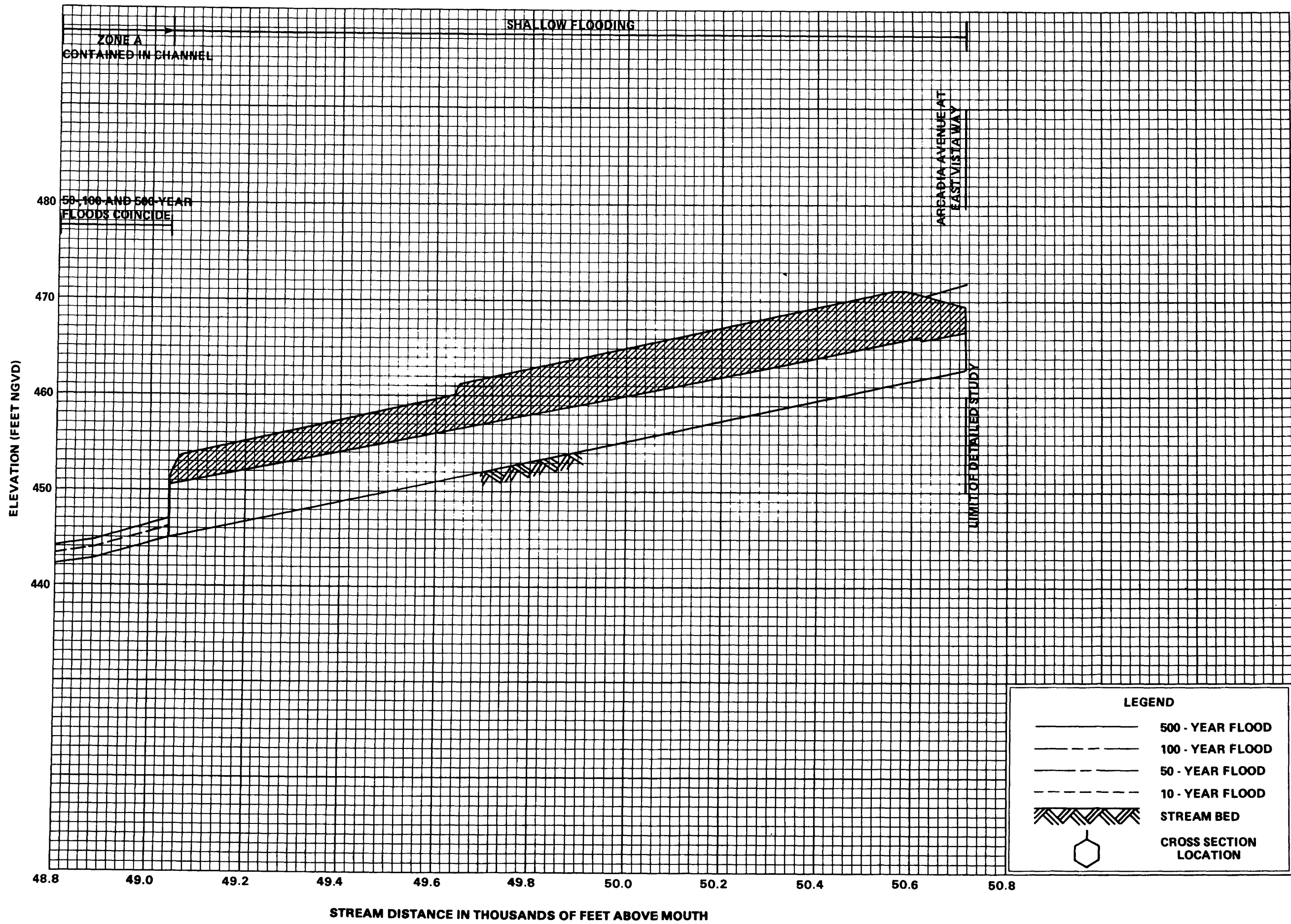


FLOOD PROFILES

BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

**SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS**

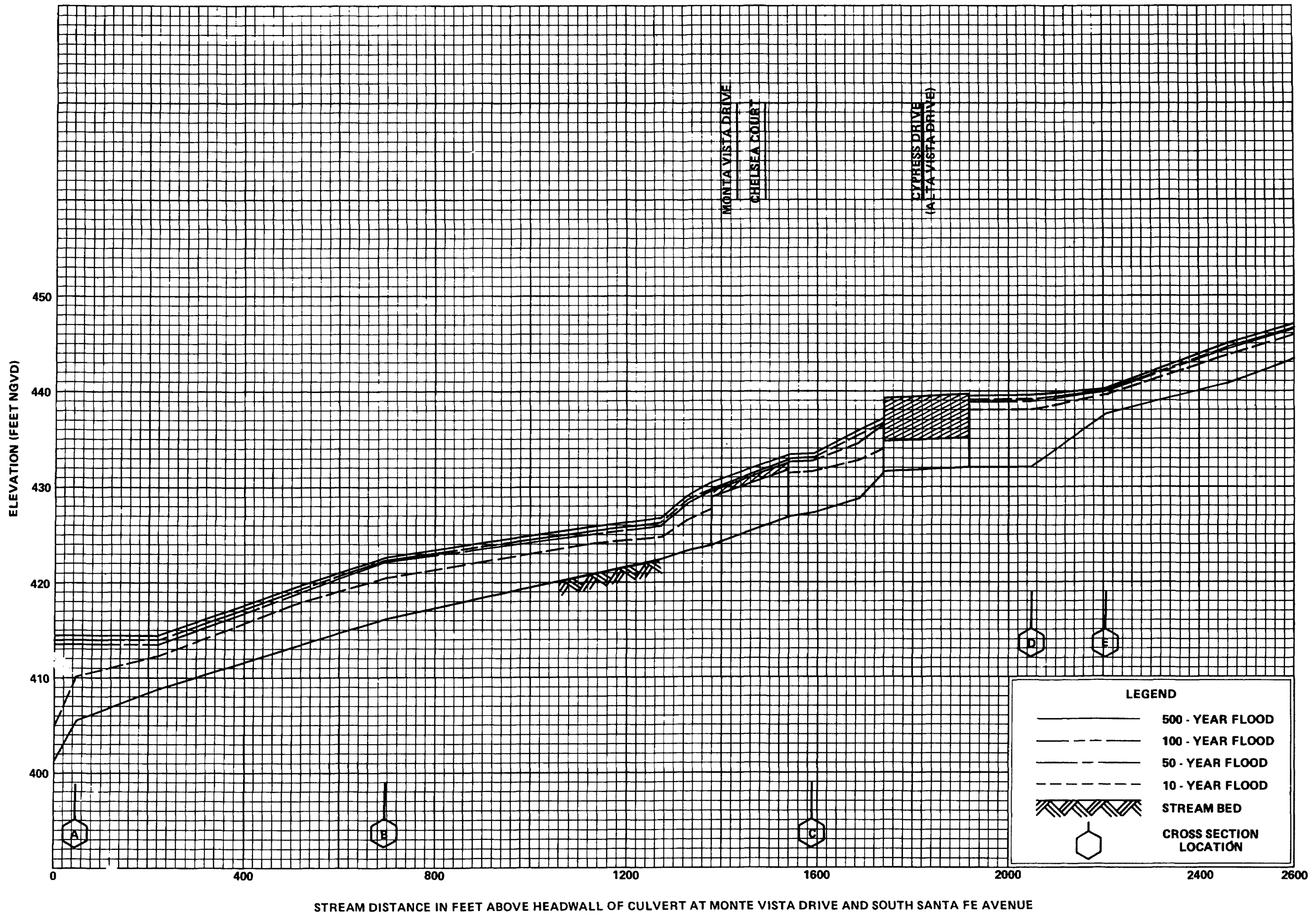


FLOOD PROFILES

BUENA VISTA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

**SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS**



FLOOD PROFILES

BUENA VISTA CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS

