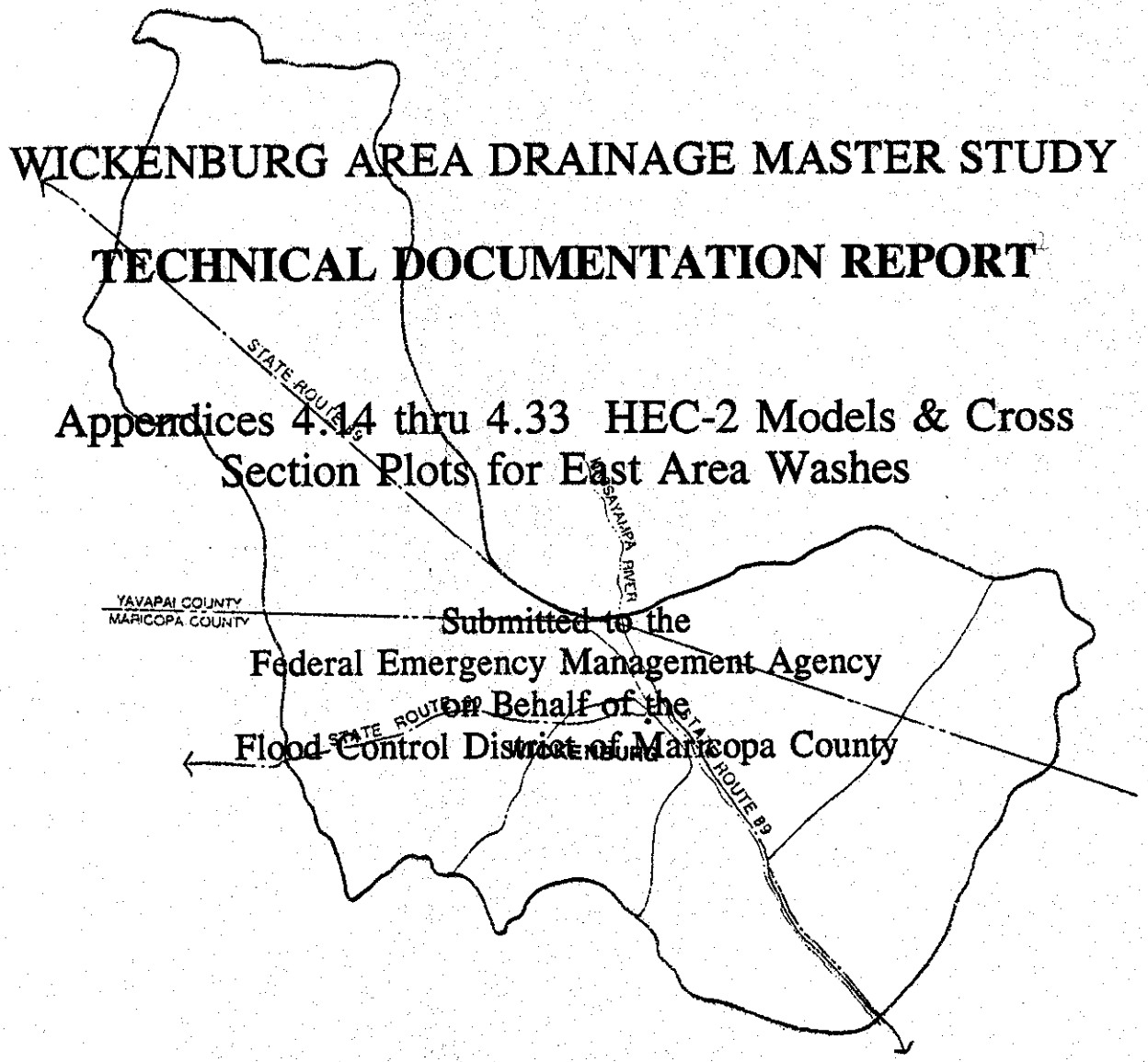
Flood Control District of Maricopa County
Contract FCD 89-79

WICKENBURG AREA DRAINAGE MASTER STUDY

TECHNICAL DOCUMENTATION REPORT

Appendices 4.14 thru 4.33 HEC-2 Models & Cross Section Plots for East Area Washes



Submitted to the
Federal Emergency Management Agency
On Behalf of the
Flood Control District of Maricopa County

DRAFT

BLACK & VEATCH
Progress By Design
Project No. 17676

COE & VAN LOO
PLANNING • ENGINEERING
LANDSCAPE ARCHITECTURE
CVL No. 1197-02

December 1992

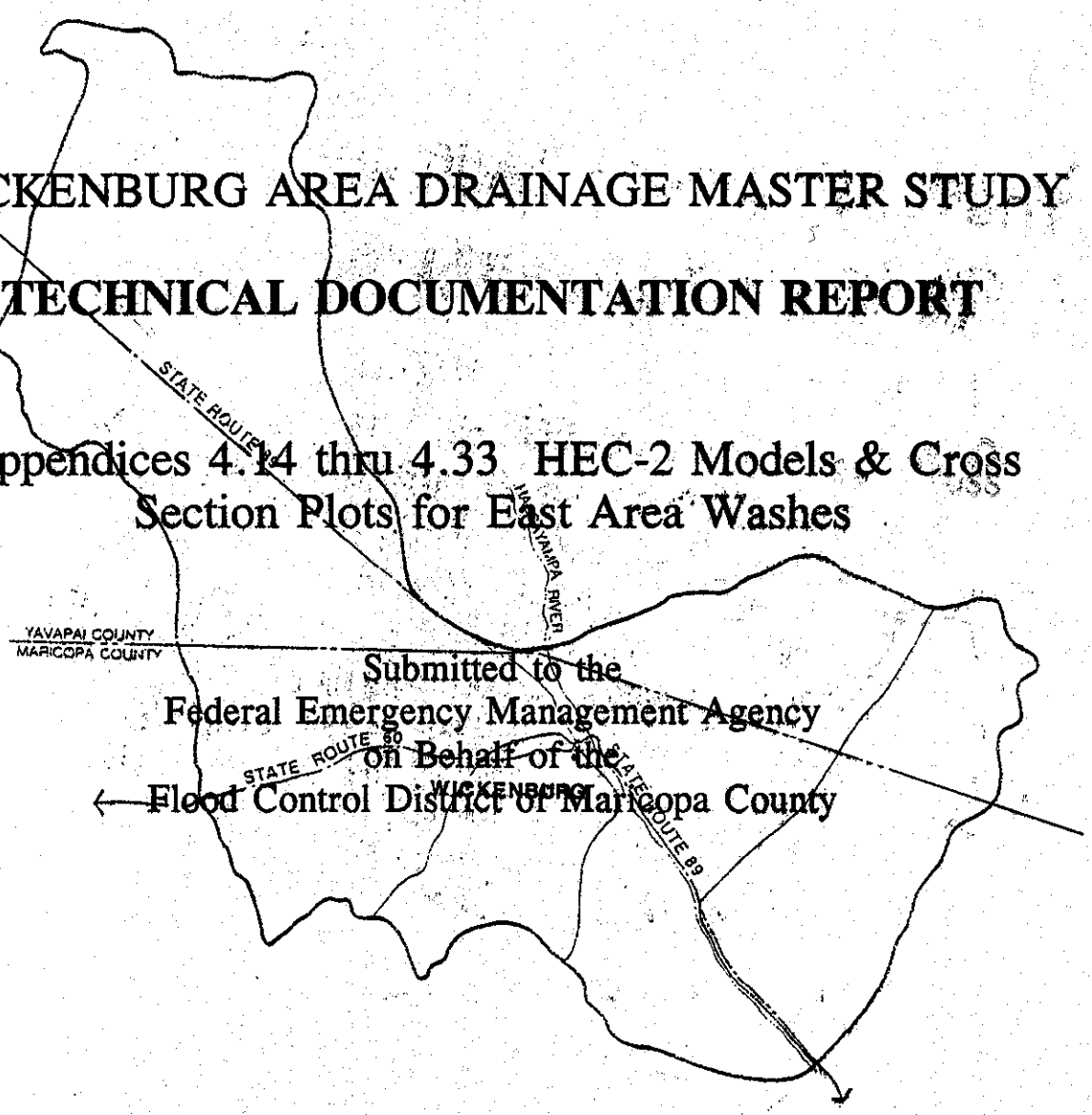
Q:\1197\02\ADMIN\119702RP.063

Flood Control District of Maricopa County
Contract FCD 89-79

WICKENBURG AREA DRAINAGE MASTER STUDY

TECHNICAL DOCUMENTATION REPORT

Appendices 4.14 thru 4.33 HEC-2 Models & Cross Section Plots for East Area Washes



Submitted to the
Federal Emergency Management Agency
on Behalf of the
Flood Control District of Maricopa County

BLACK & VEATCH
Progress By Design
Project No. 17676

COE & VAN LOO
PLANNING · ENGINEERING
LANDSCAPE ARCHITECTURE
CVL No. 1197-02

Q:\1197\02\ADMIN\119702RP.063

December 1992

Flood Control District of Maricopa County
Contract FCD 89-79

Property of
Flood Control District of MC Library
Please Return to
2801 W. Durango
Phoenix, AZ 85009

WICKENBURG AREA DRAINAGE MASTER STUDY

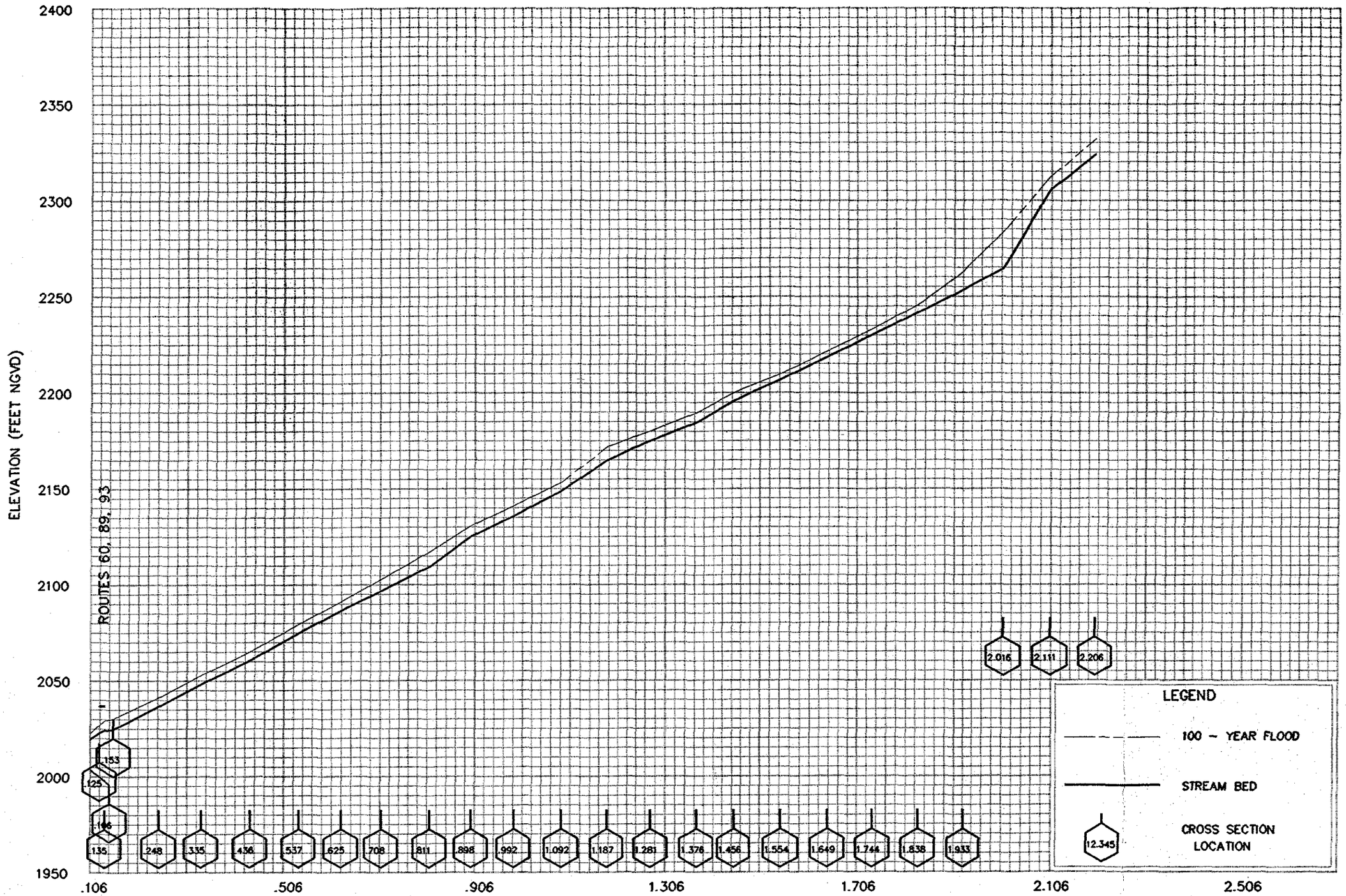
TECHNICAL DOCUMENTATION REPORT

Appendices 4.14 thru 4.33 HEC-2 Models & Cross Section Plots for East Area Washes

Submitted to the
Federal Emergency Management Agency
on Behalf of the
Flood Control District of Maricopa County

December 1992

Appendix 4.14: HEC-2 Models & Cross Section Plots for East Area Wash
CALAMITY WASH (Wash b)



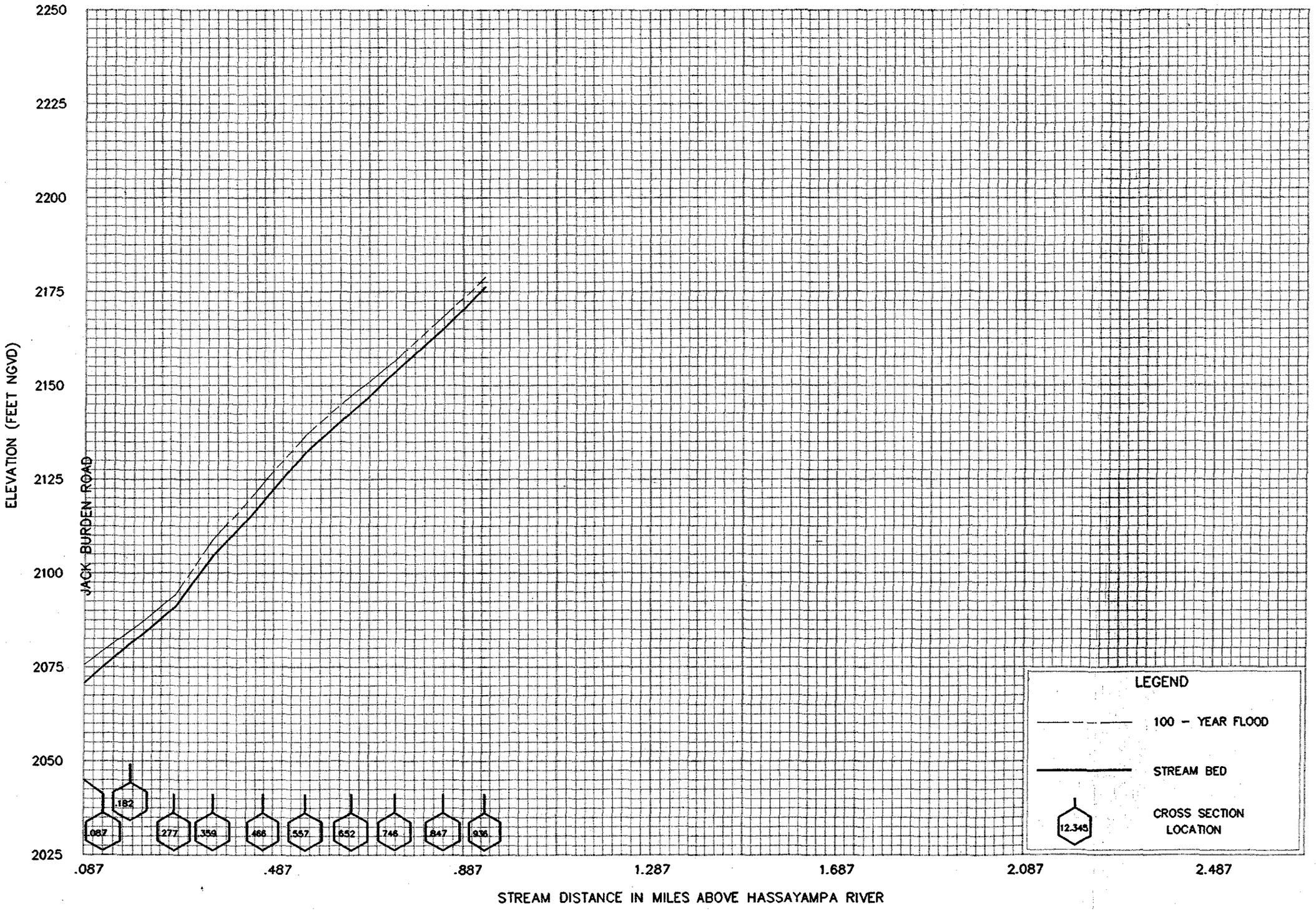
FLOOD PROFILES

CALAMITY WASH (B)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

B-1

Appendix 4.15: HEC-2 Models & Cross Section Plots for East Area Wash BLUE TANKS WASH (Wash c)

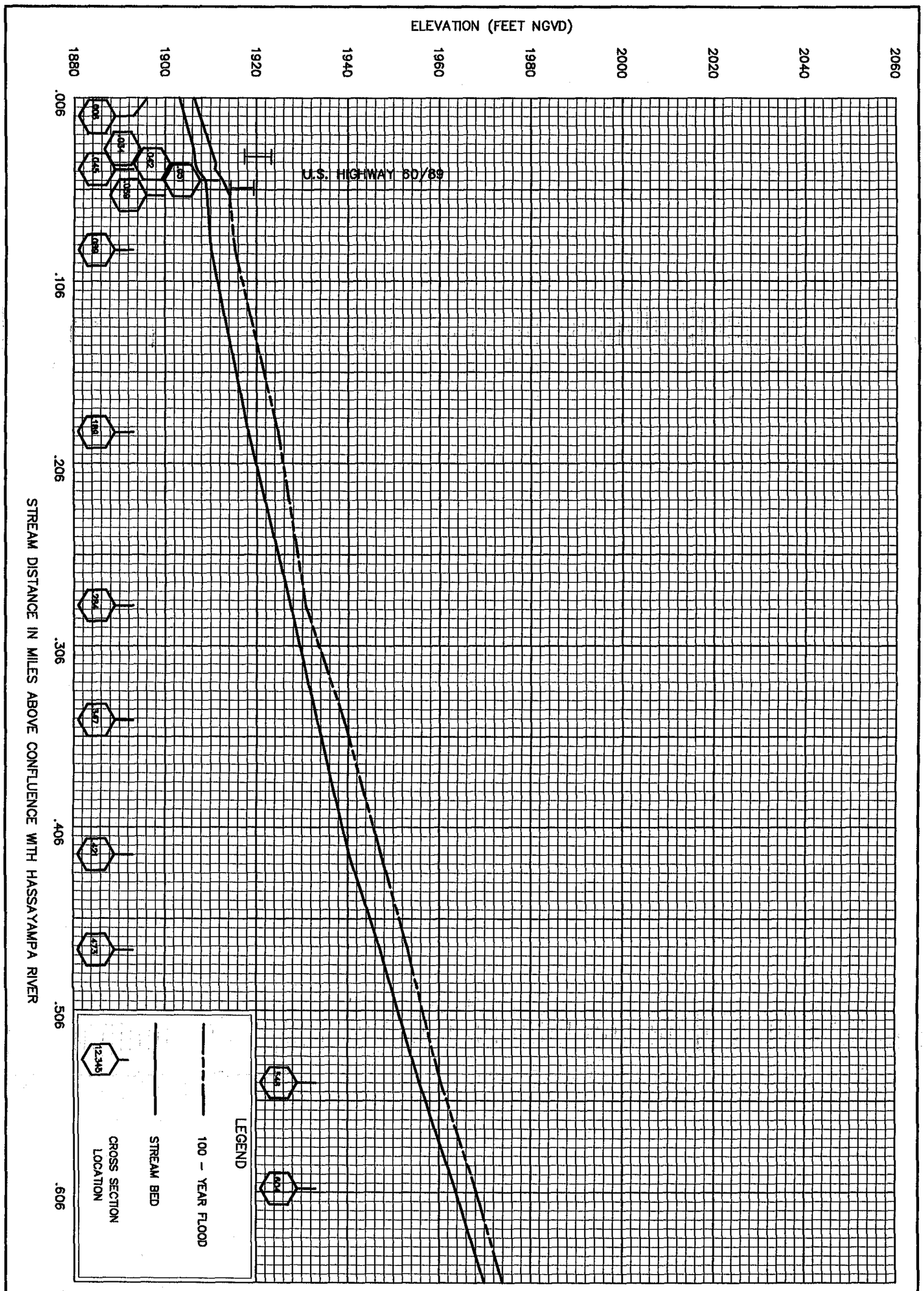


FLOOD PROFILES

BLUETANK WASH (C)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

Appendix 4.16: HEC-2 Models & Cross Section Plots for East Area Wash
MONARCH WASH (Wash d)

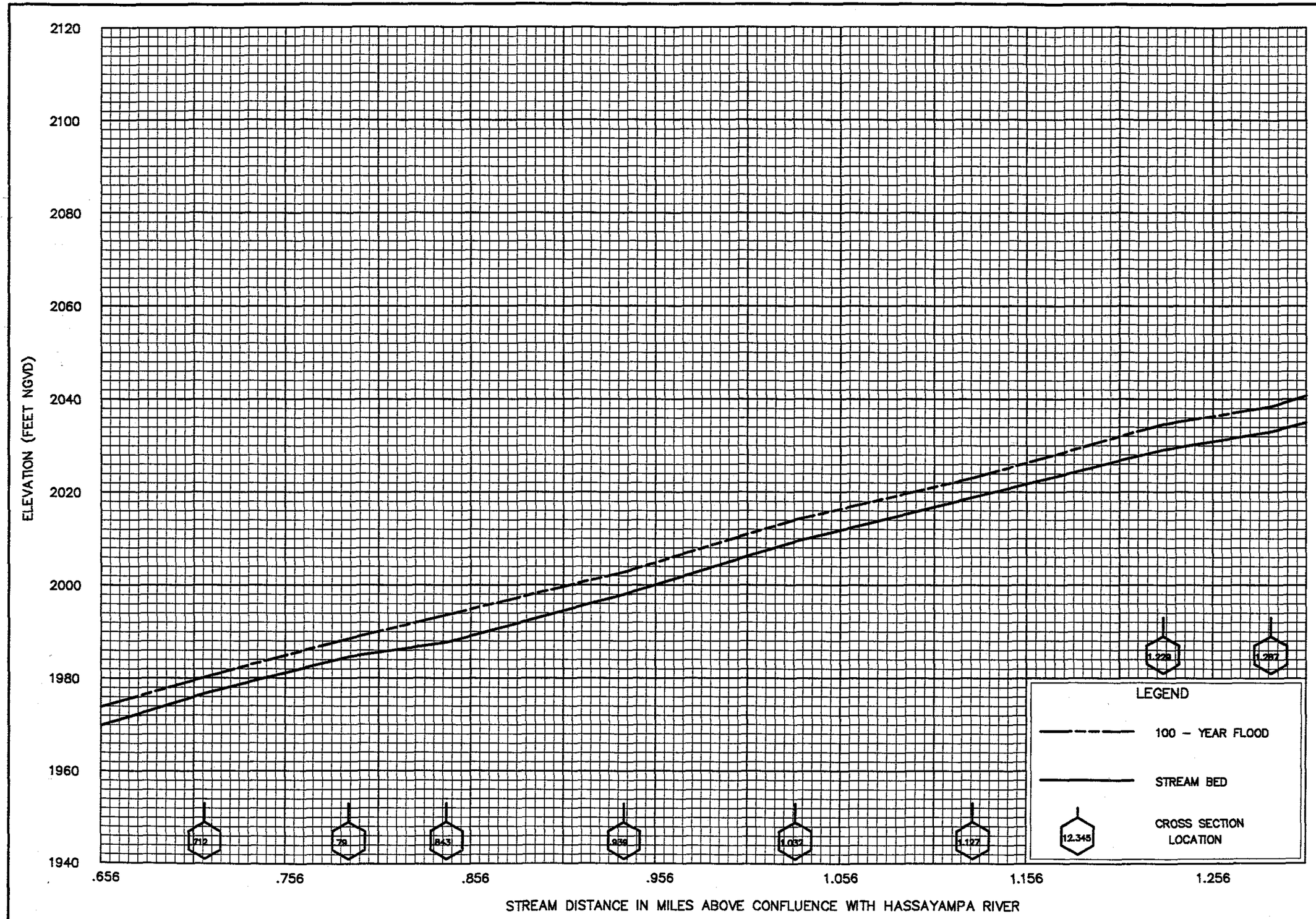


FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

FLOOD PROFILES

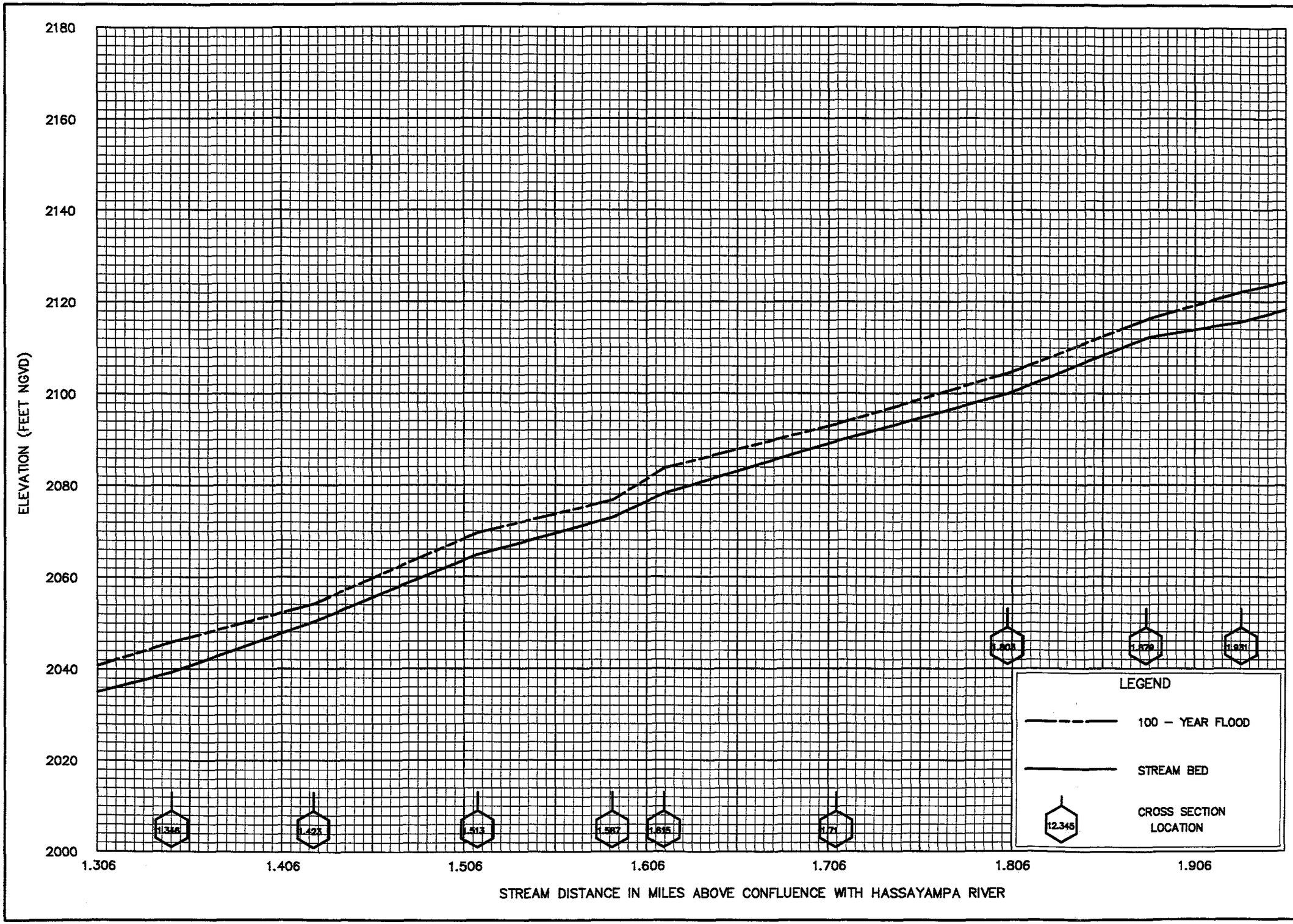
MONARCH WASH (WASH D)



FLOOD PROFILES

MONARCH WASH (WASH D)

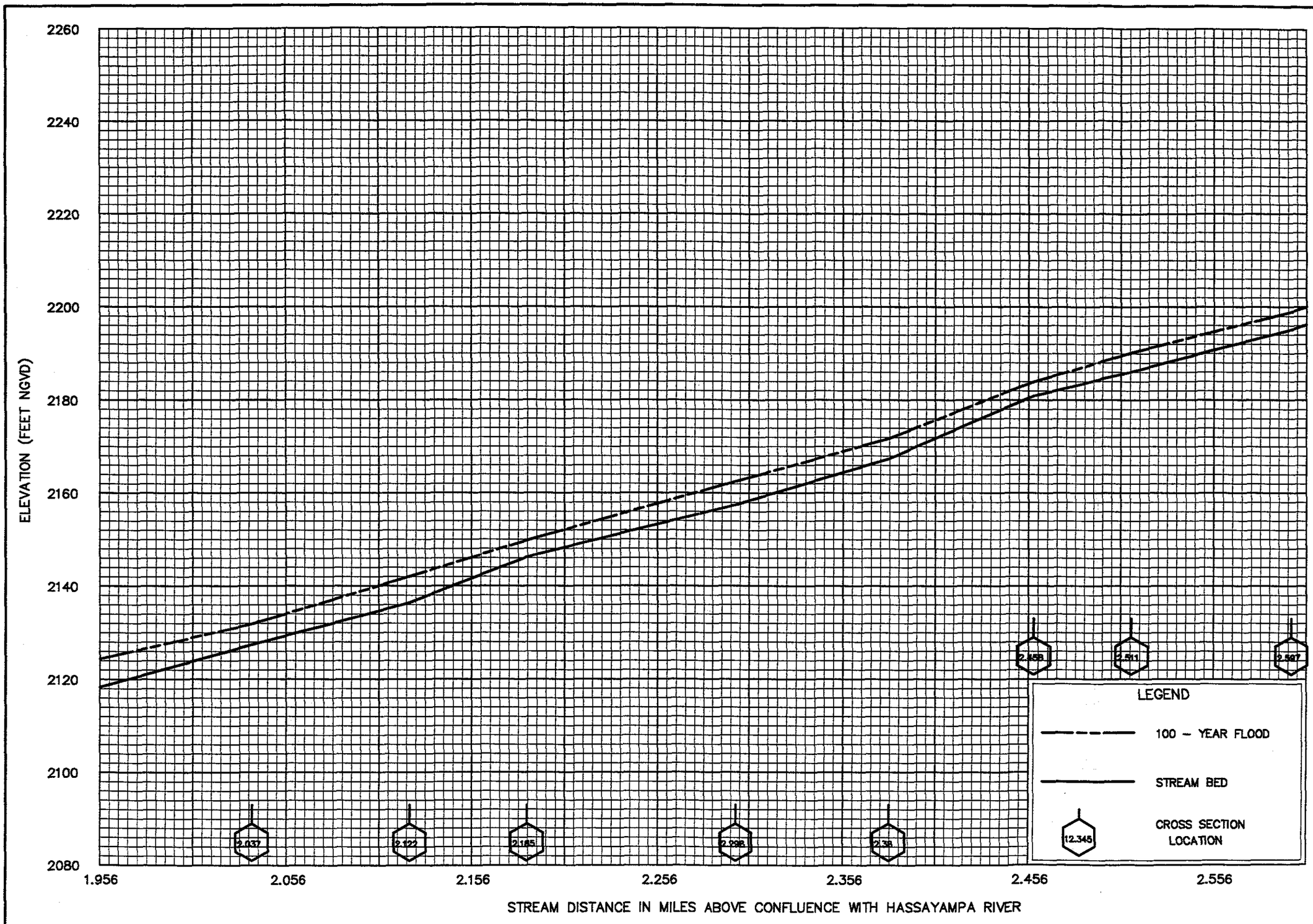
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

MONARCH WASH (WASH D)

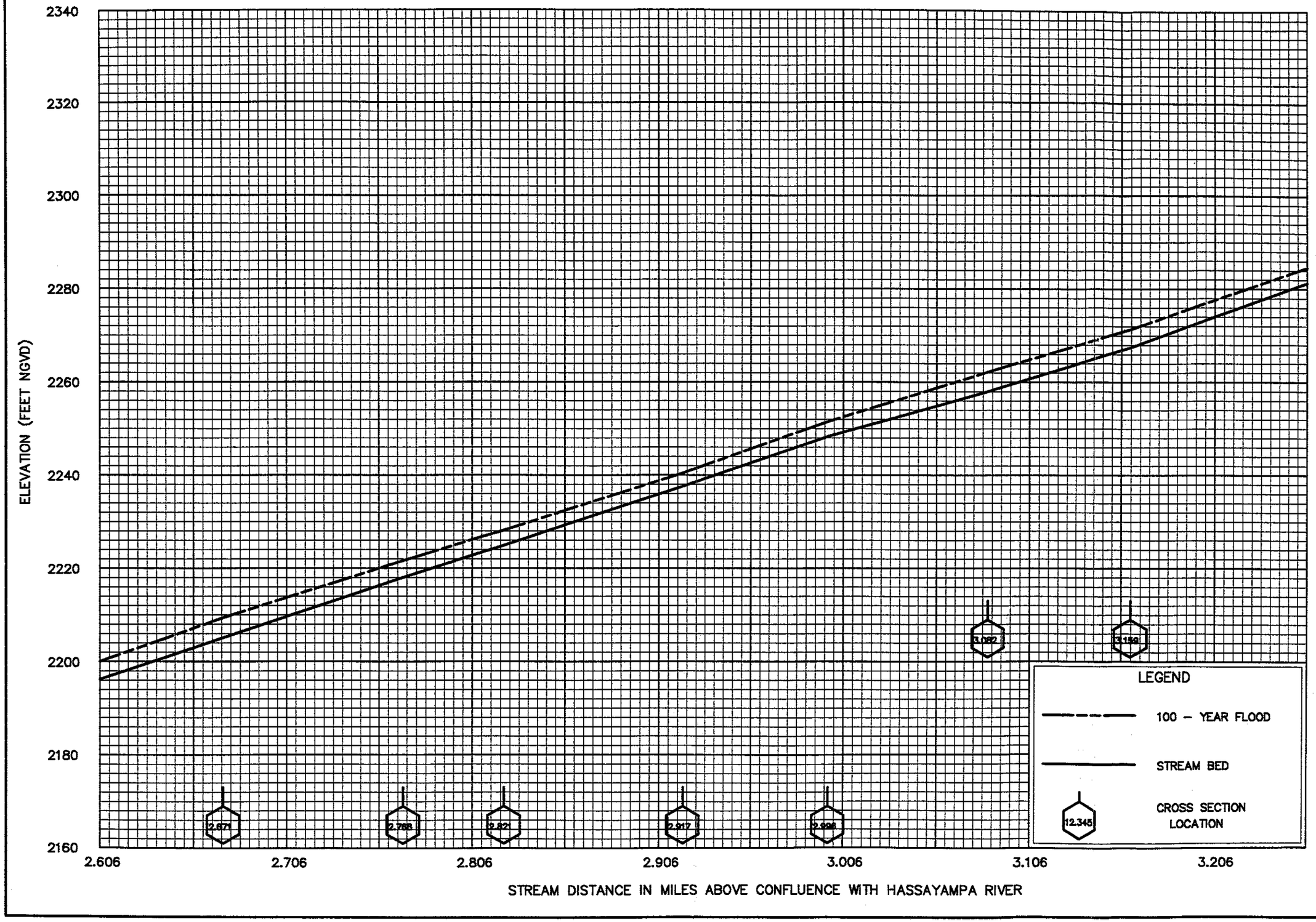
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

MONARCH WASH (WASH D)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



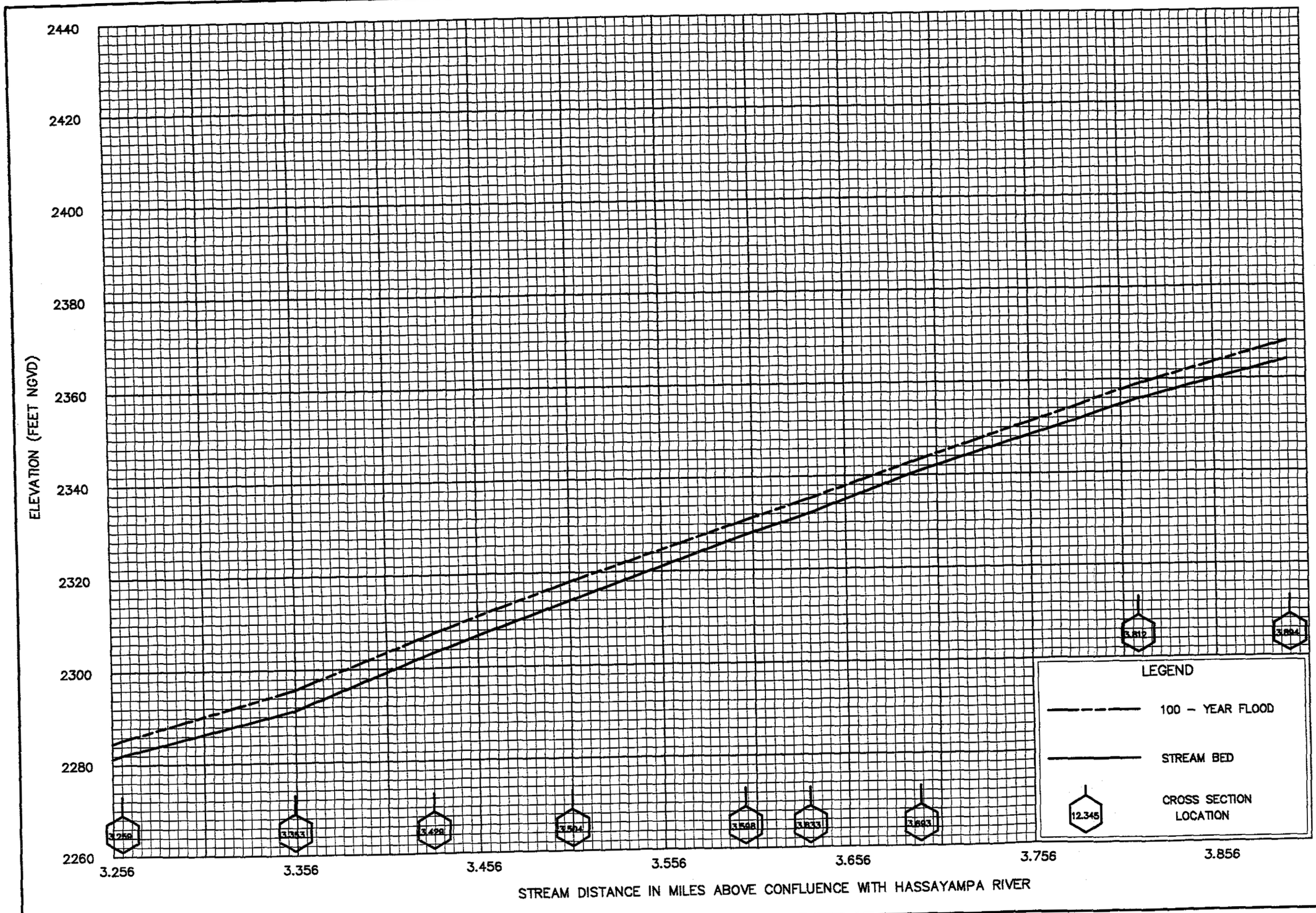
FLOOD PROFILES

MONARCH WASH (WASH D)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

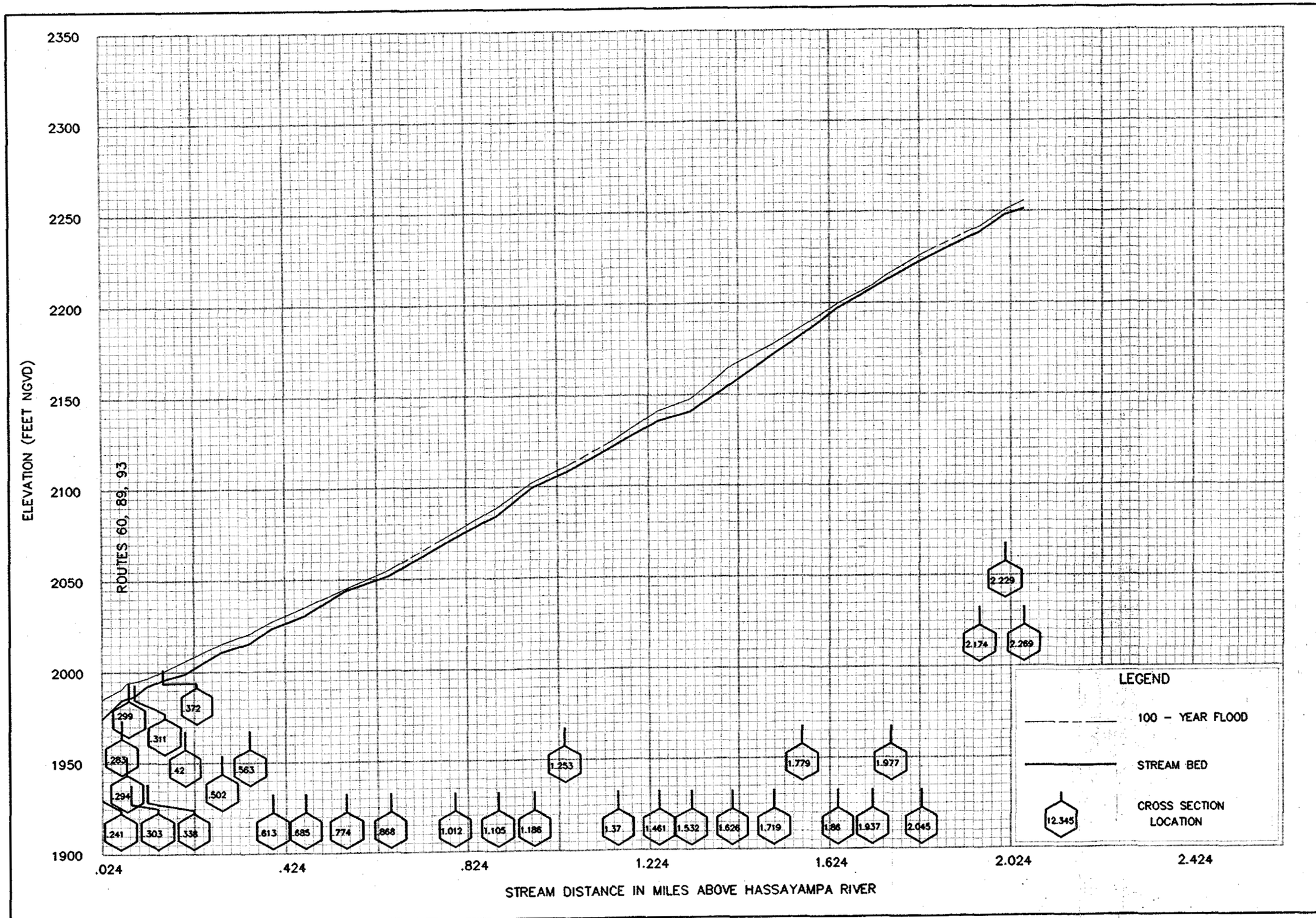
FLOOD PROFILES

MONARCH WASH (WASH D)



FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

Appendix 4.17: HEC-2 Models & Cross Section Plots for East Area Wash MOCKINGBIRD WASH (Wash e)



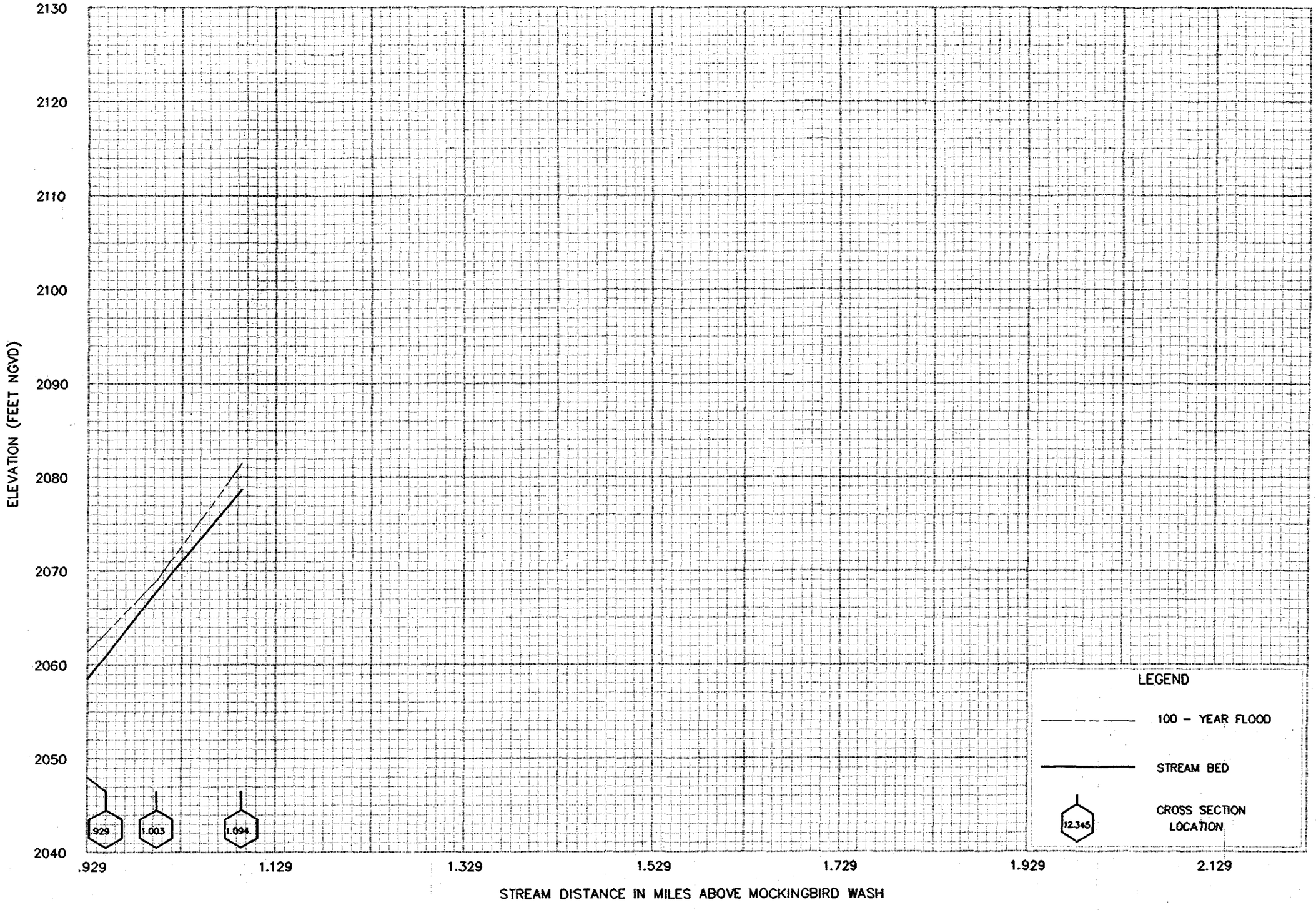
FLOOD PROFILES

MOCKINGBIRD WASH (E)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

E-1



FLOOD PROFILES

MOCKINGBIRD WASH TRIBUTARY

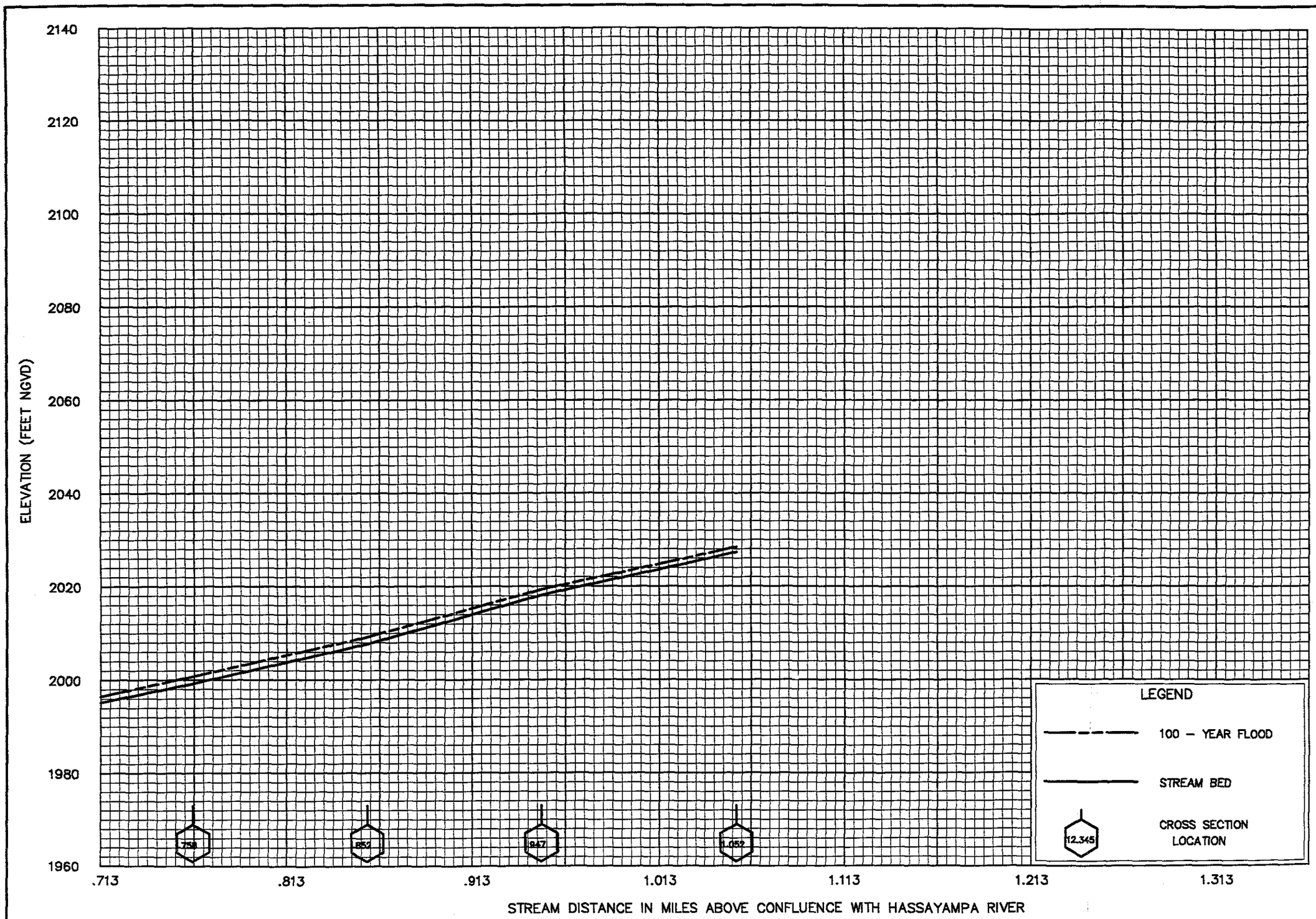
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

Appendix 4.18: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #1 & TRIBUTARY (Wash f)

FLOOD PROFILES

UN–NAMED WASH #1 (WASH F)

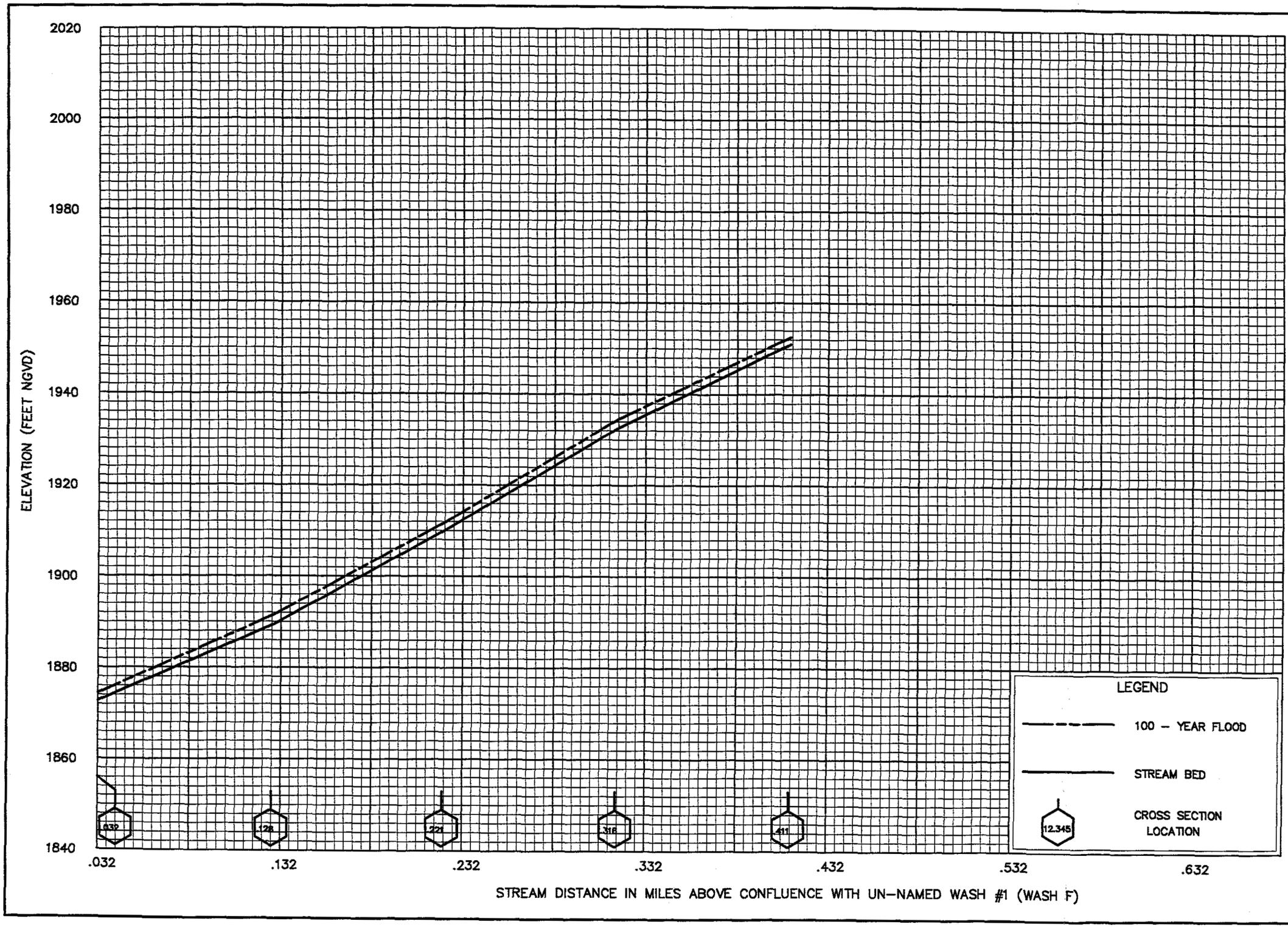
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

UN–NAMED WASH #1 (WASH F)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

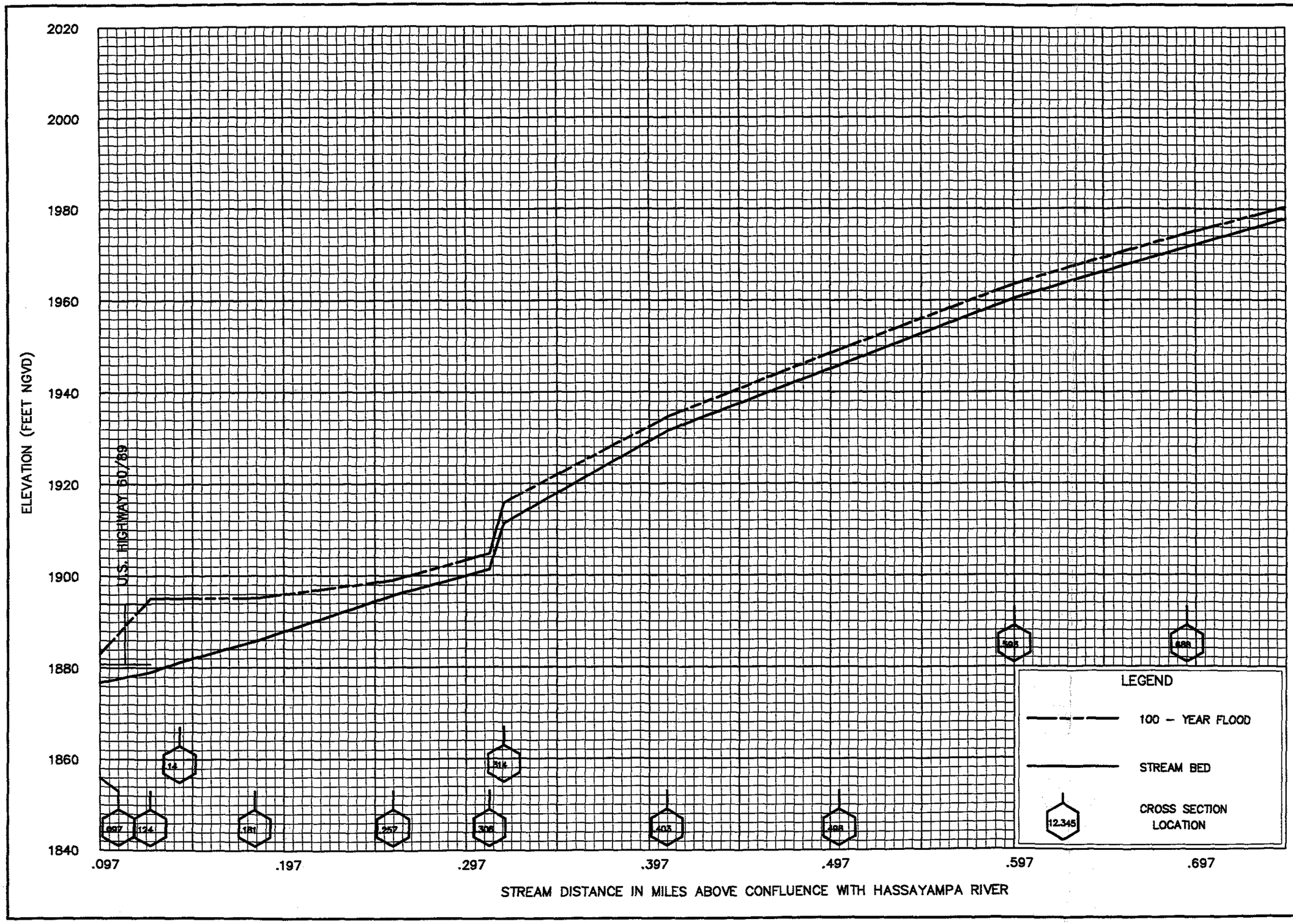


FLOOD PROFILES

TRIBUTARY TO UN-NAMED WASH #1 (WASH F)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

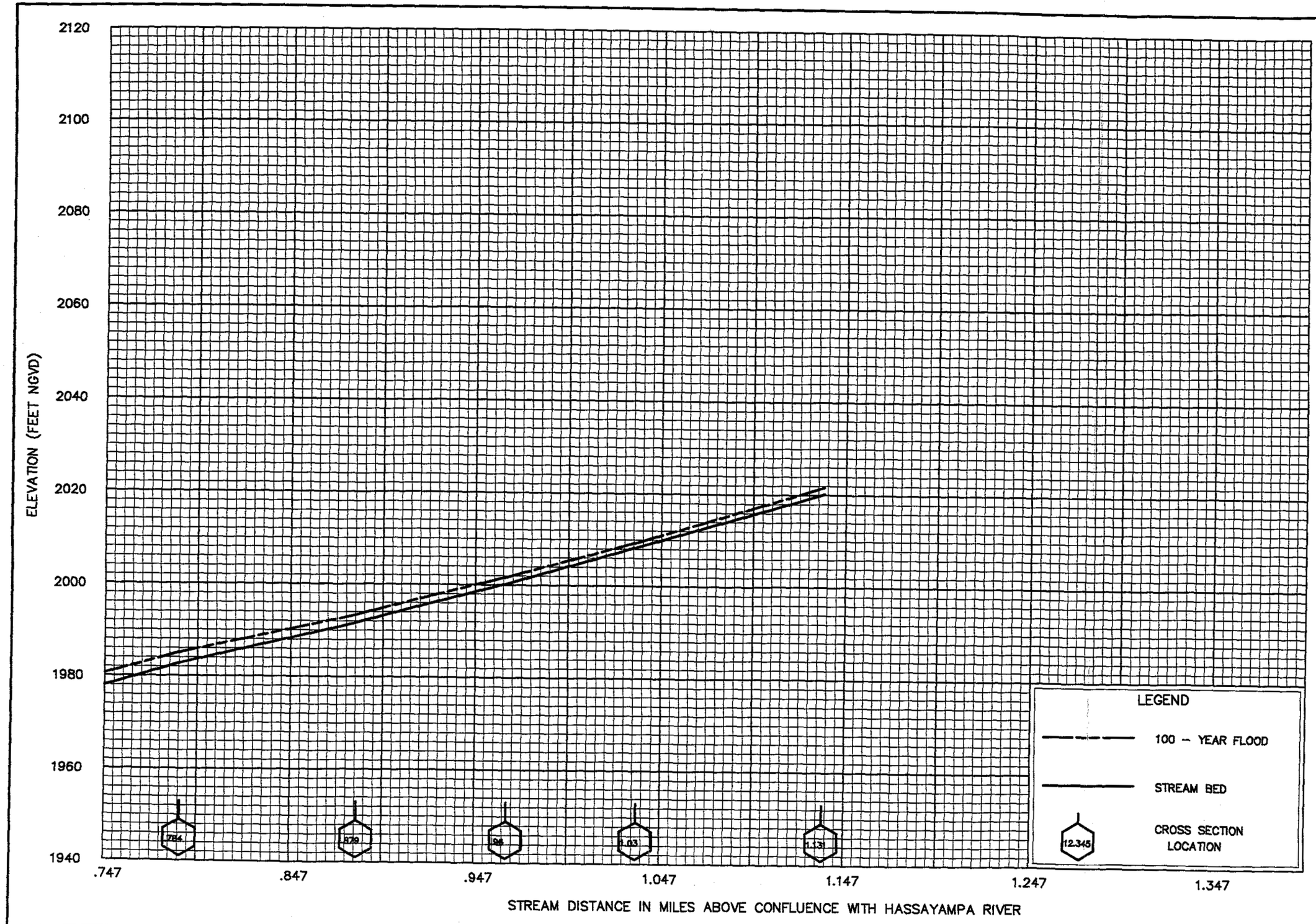
Appendix 4.19: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #2 (Wash g)



FLOOD PROFILES

UN–NAMED WASH #2 (WASH G)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

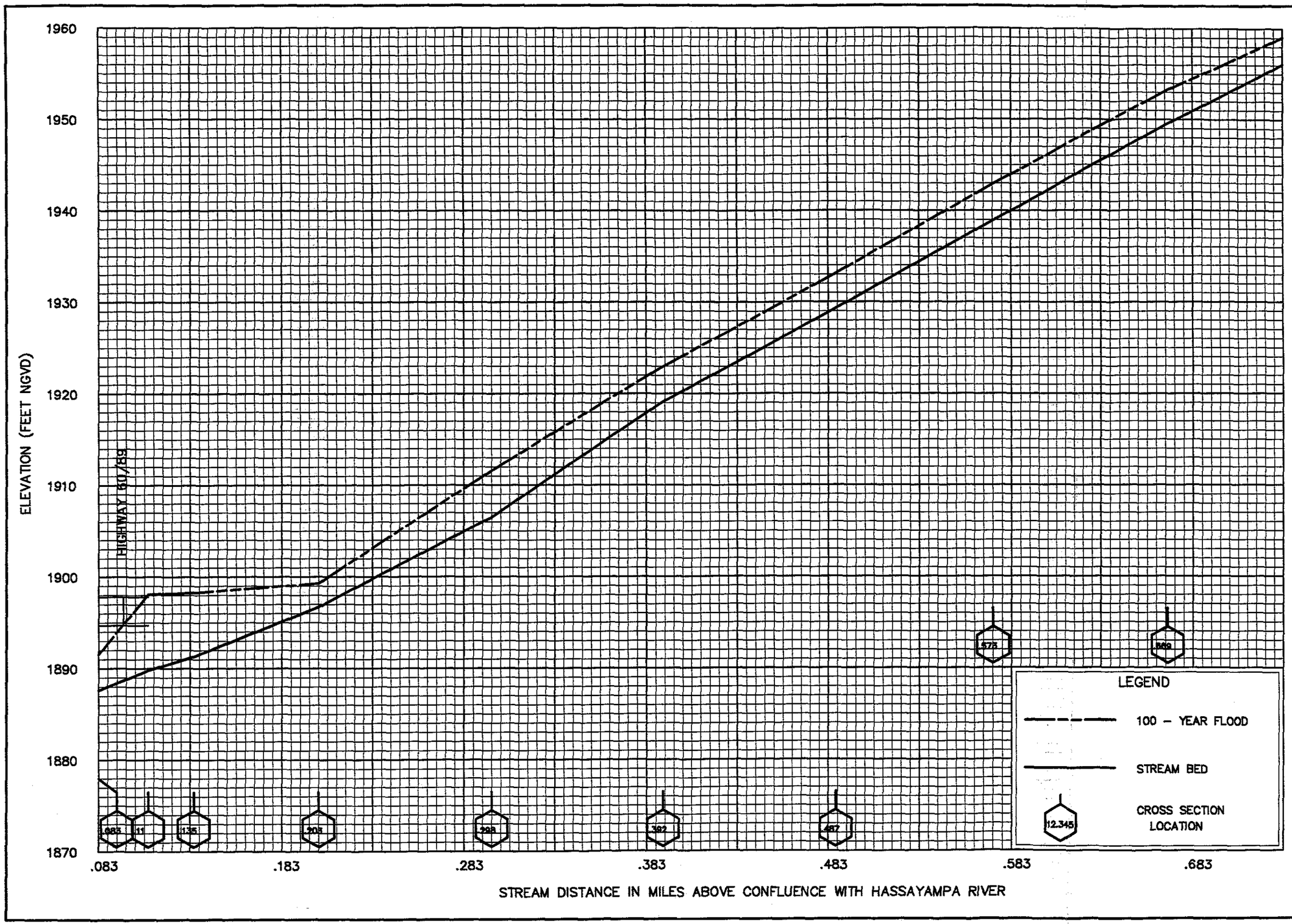


FLOOD PROFILES

UN–NAMED WASH #2 (WASH G)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

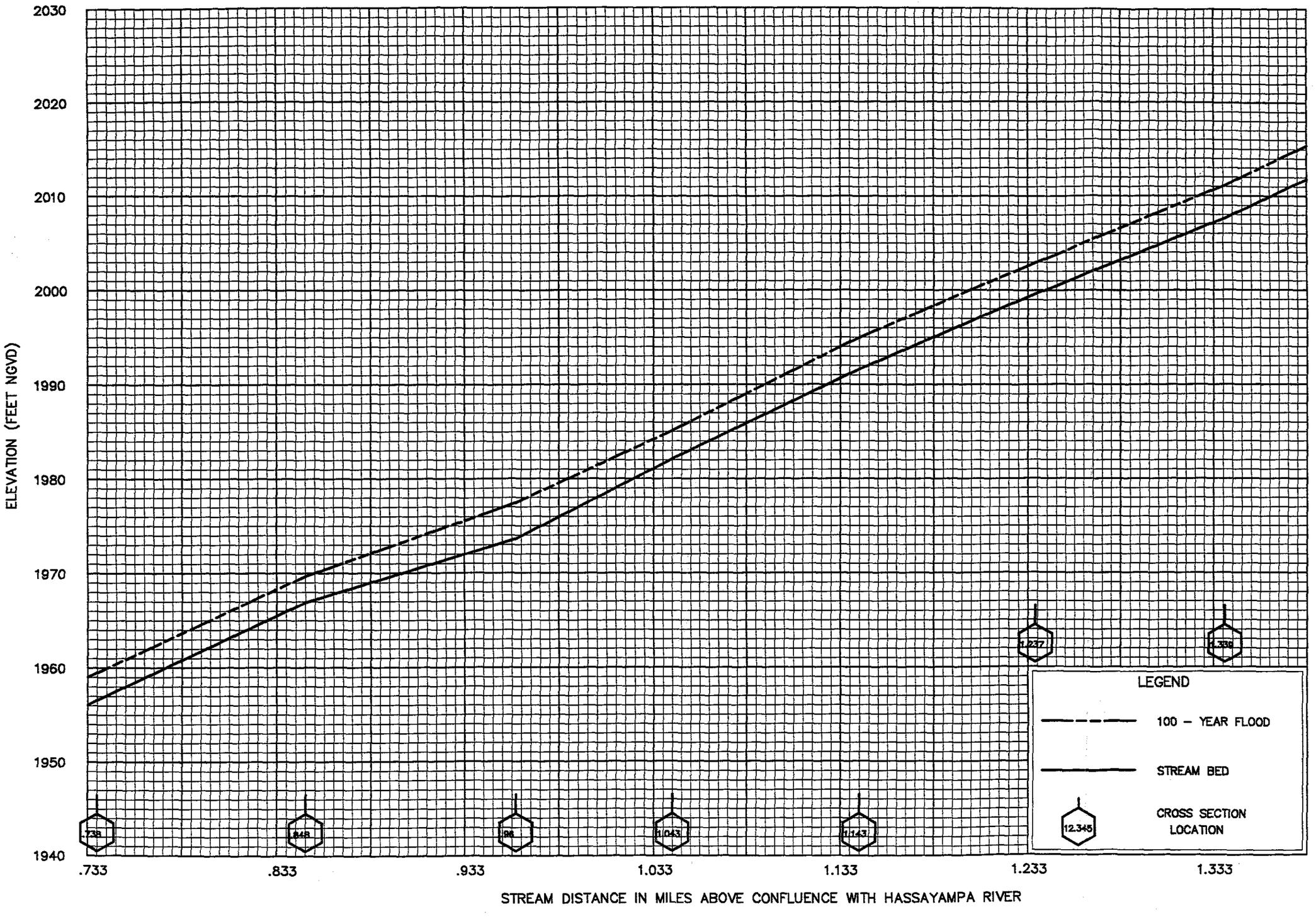
Appendix 4.20: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #3 (Wash h)



FLOOD PROFILES

WASH H: UN-NAMED WASH #3

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

WASH H: UN-NAMED WASH #3

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

2090
2080
2070
2060
2050
2040
2030
2020
2010
2000

ELEVATION (FEET NGVD)

1.434
1.526
1.583
1.674
1.767
1.888

LEGEND

100 – YEAR FLOOD

STREAM BED

12.345 CROSS SECTION LOCATION

1.383 1.483 1.583 1.683 1.783 1.883 1.983

STREAM DISTANCE IN MILES ABOVE CONFLUENCE WITH HASSAYAMPA RIVER

FLOOD PROFILES

WASH H: UN-NAMED WASH #3

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

Appendix 4.21: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #4 (Wash i)

FLOOD PROFILES

UN-NAMED WASH #4 (WASH 1)

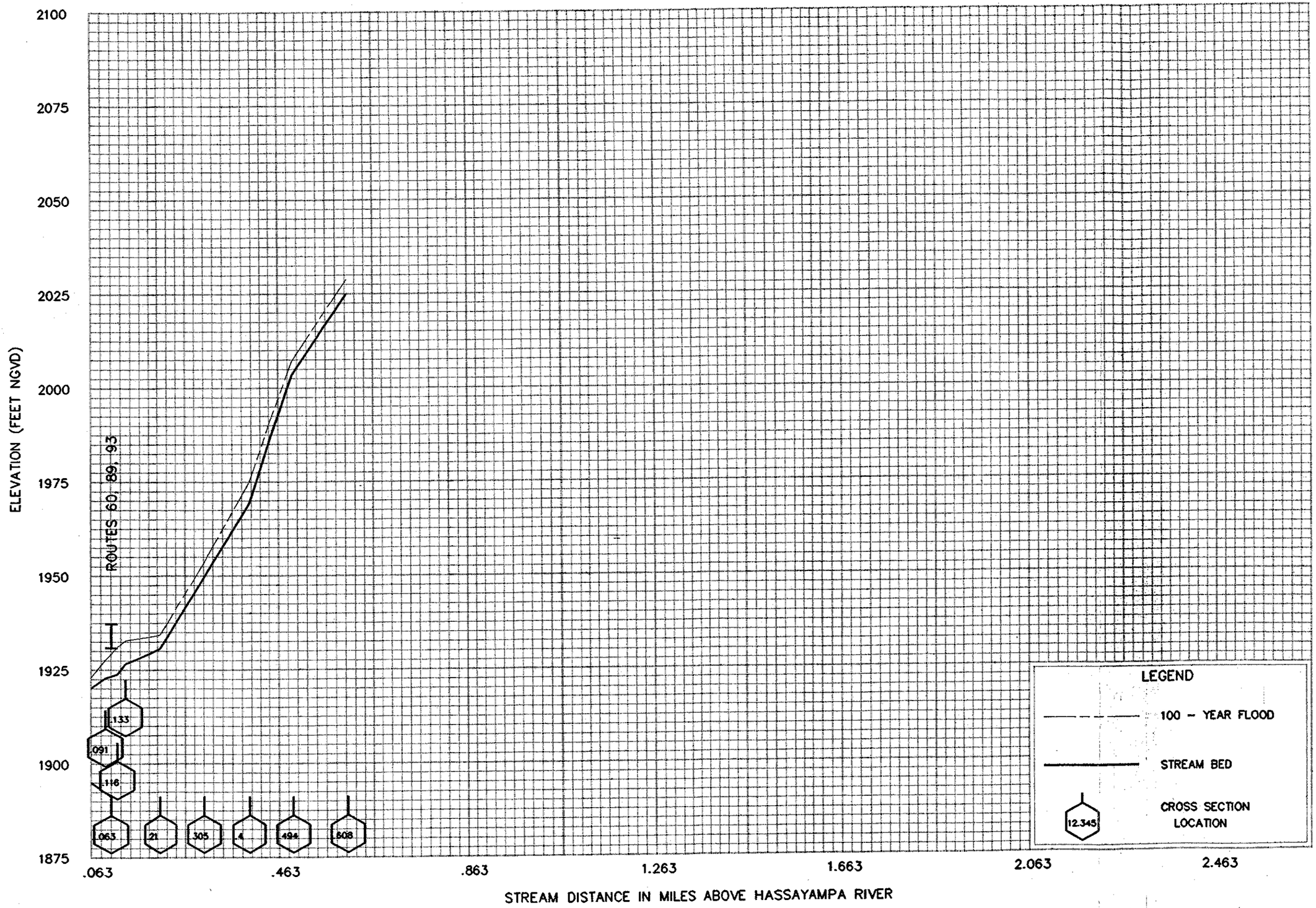
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

FLOOD PROFILES

UN-NAMED WASH #4 (WASH 1)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

Appendix 4.22: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #5 (Wash j)



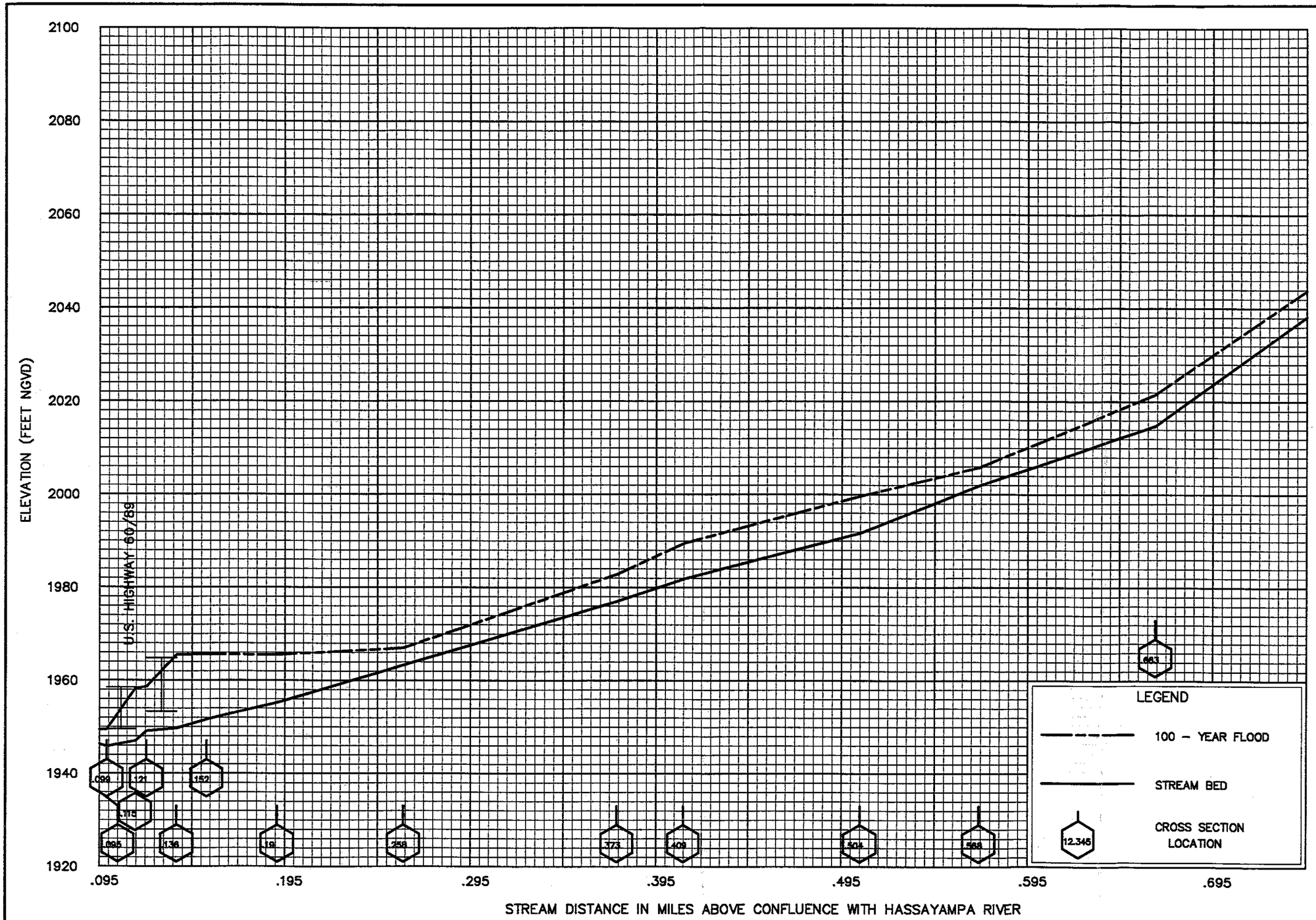
FLOOD PROFILES

UNNAMED WASH #5 (J)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

J-1

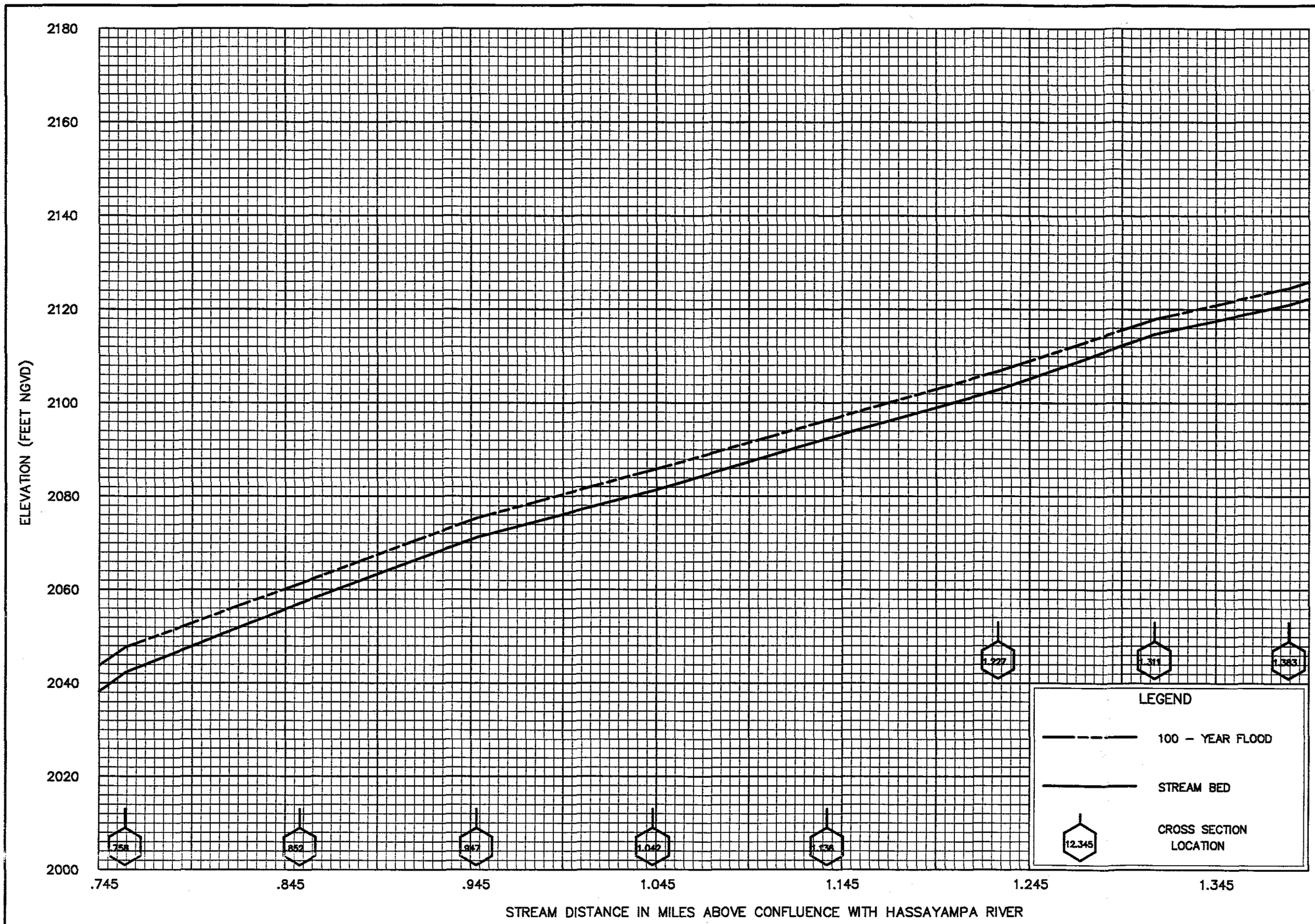
Appendix 4.23: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #6 & TRIBUTARY (Wash k)



FLOOD PROFILES

UN–NAMED WASH #6 (WASH K)

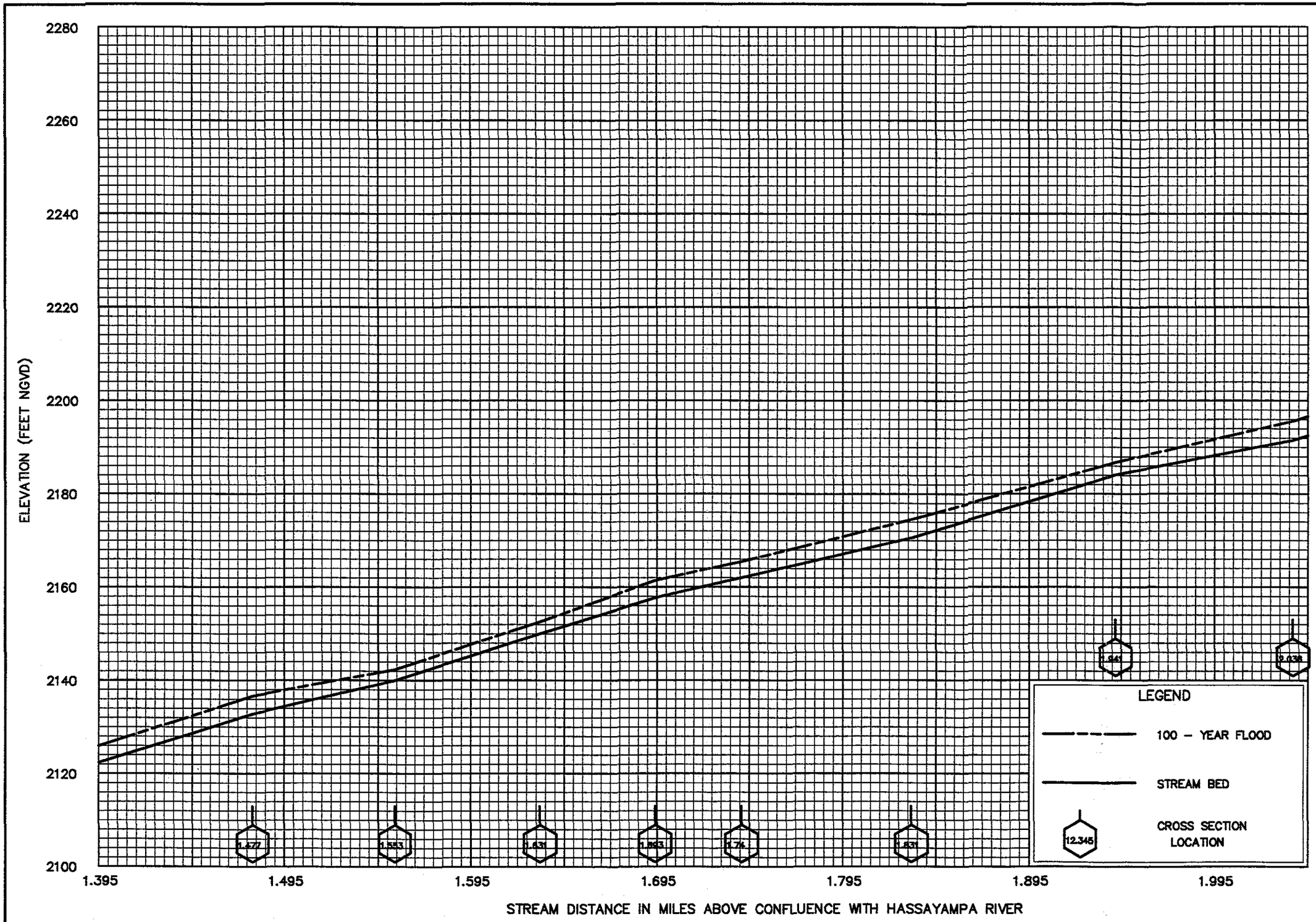
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

UN–NAMED WASH #6 (WASH K)

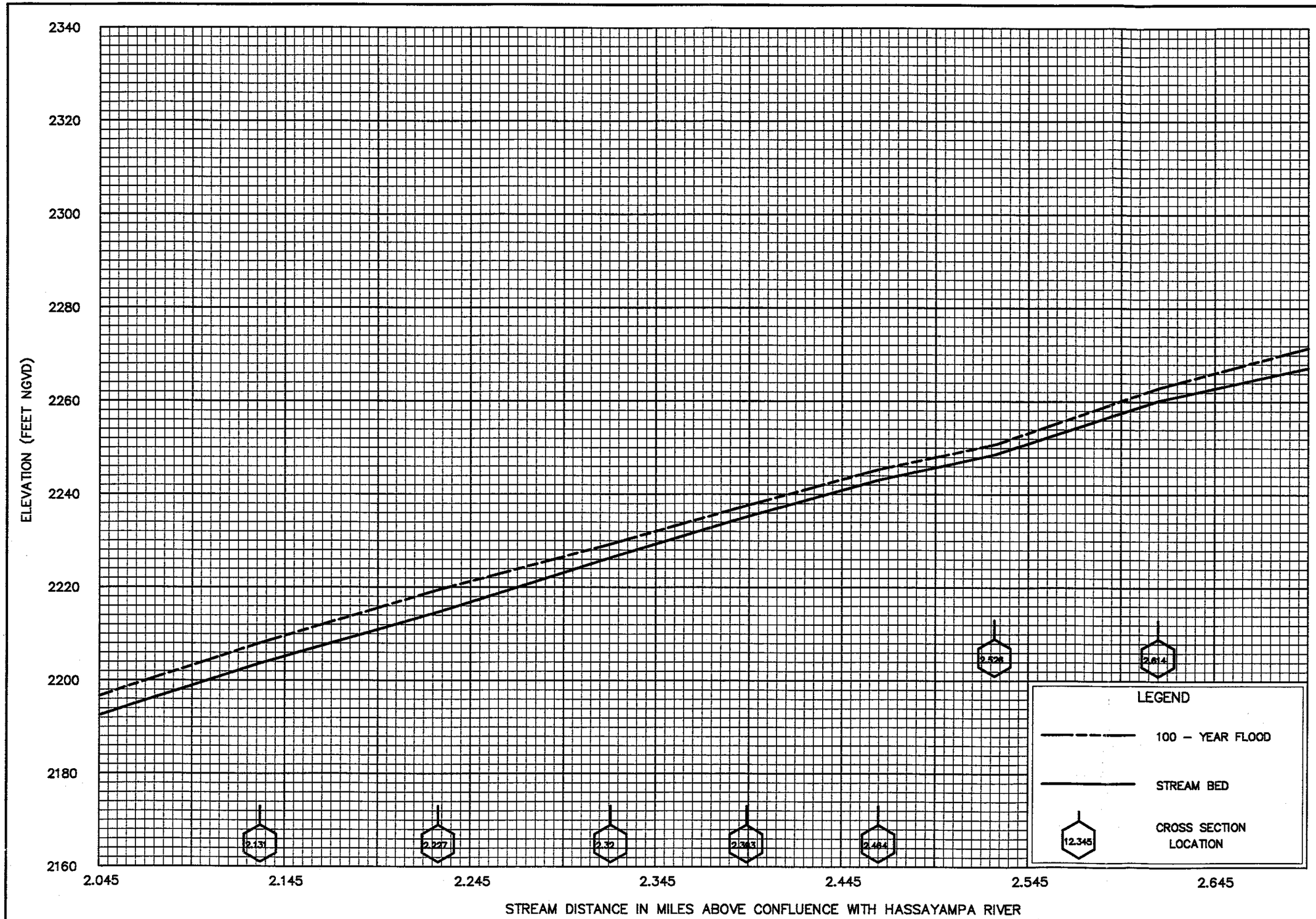
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

UN-NAMED WASH #6 (WASH K)

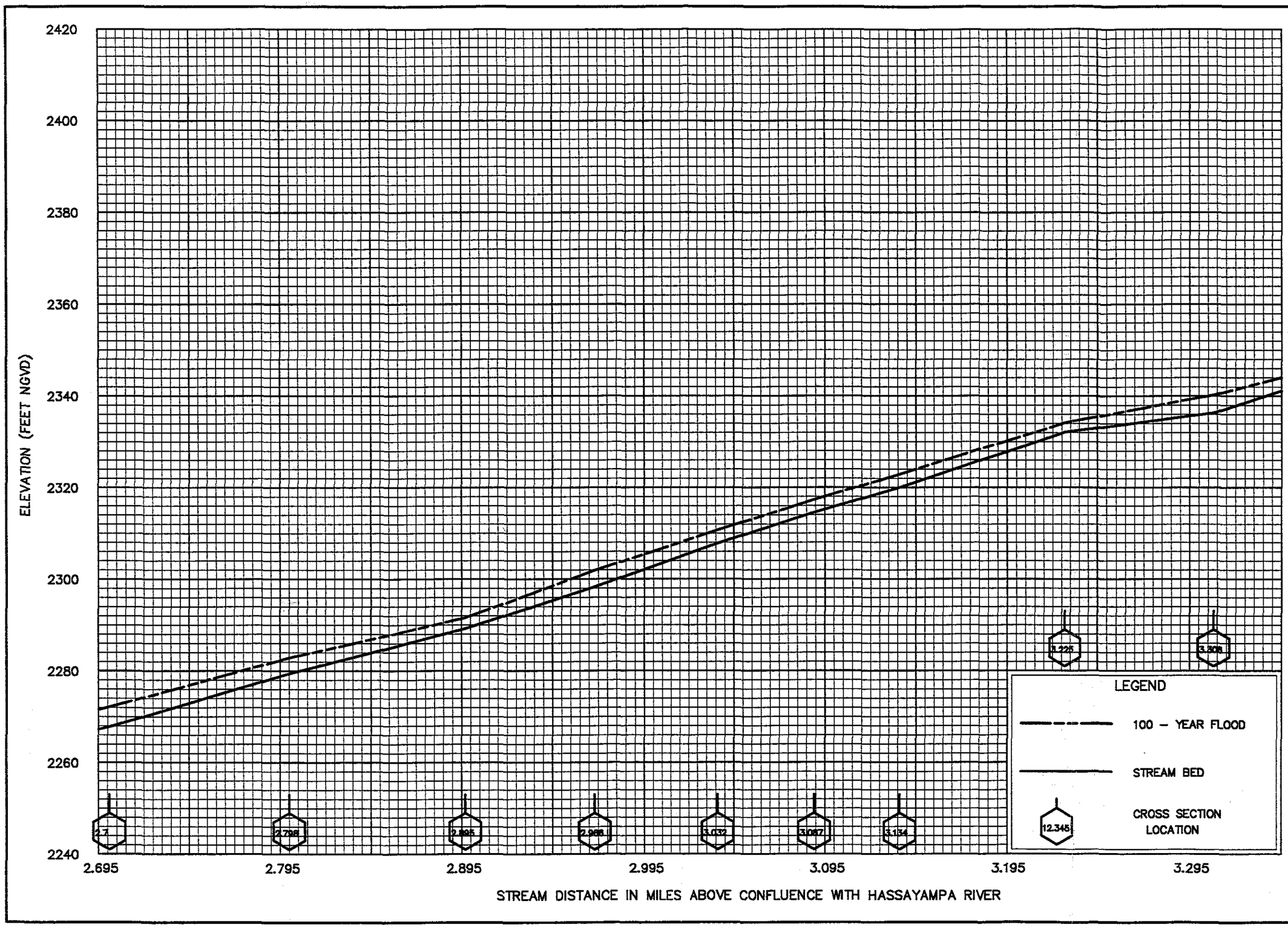
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

UN-NAMED WASH #6 (WASH K)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

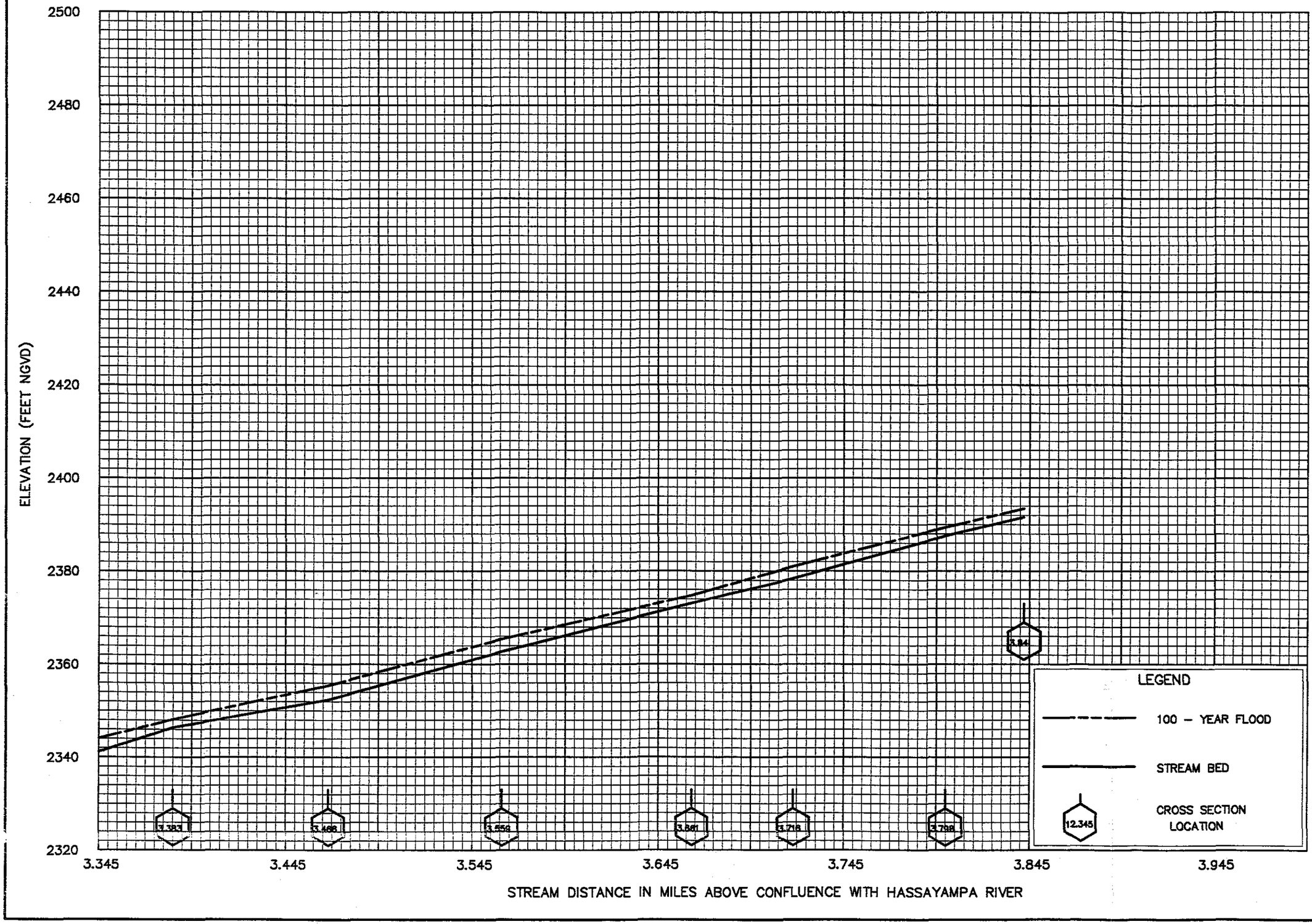


FLOOD PROFILES

UN–NAMED WASH #6 (WASH K)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

UN–NAMED WASH #6 (WASH K)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

FLOOD PROFILES

TRIBUTARY TO UN-NAMED WASH #6 (WASH K)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

FLOOD PROFILES

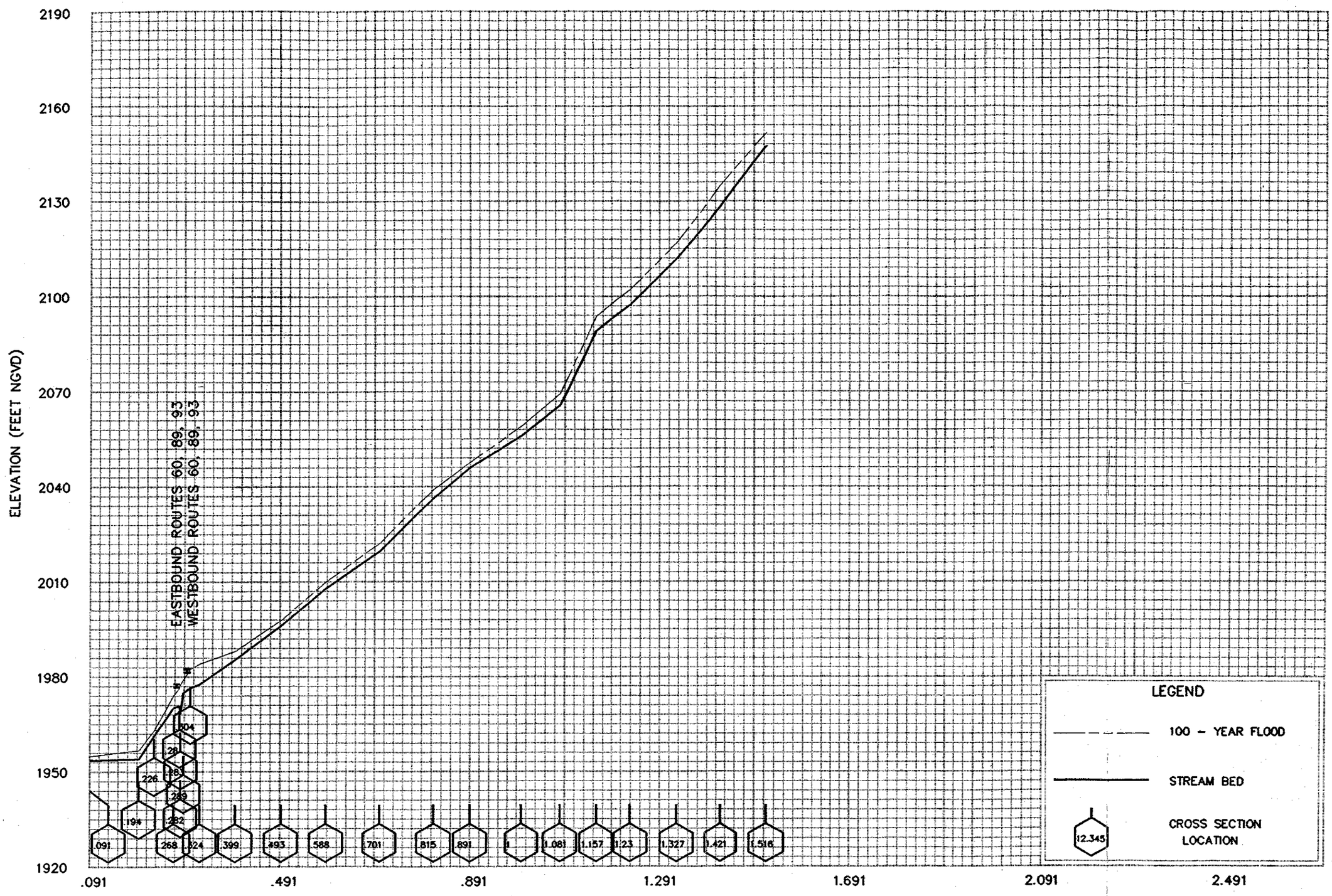
TRIBUTARY TO UN-NAMED WASH #6 (WASH K)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

Appendix 4.24: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #7 (Wash l)

FLOOD PROFILES

UNNAMED WASH #7 (L)



FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

Appendix 4.25: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #8 (Wash m)

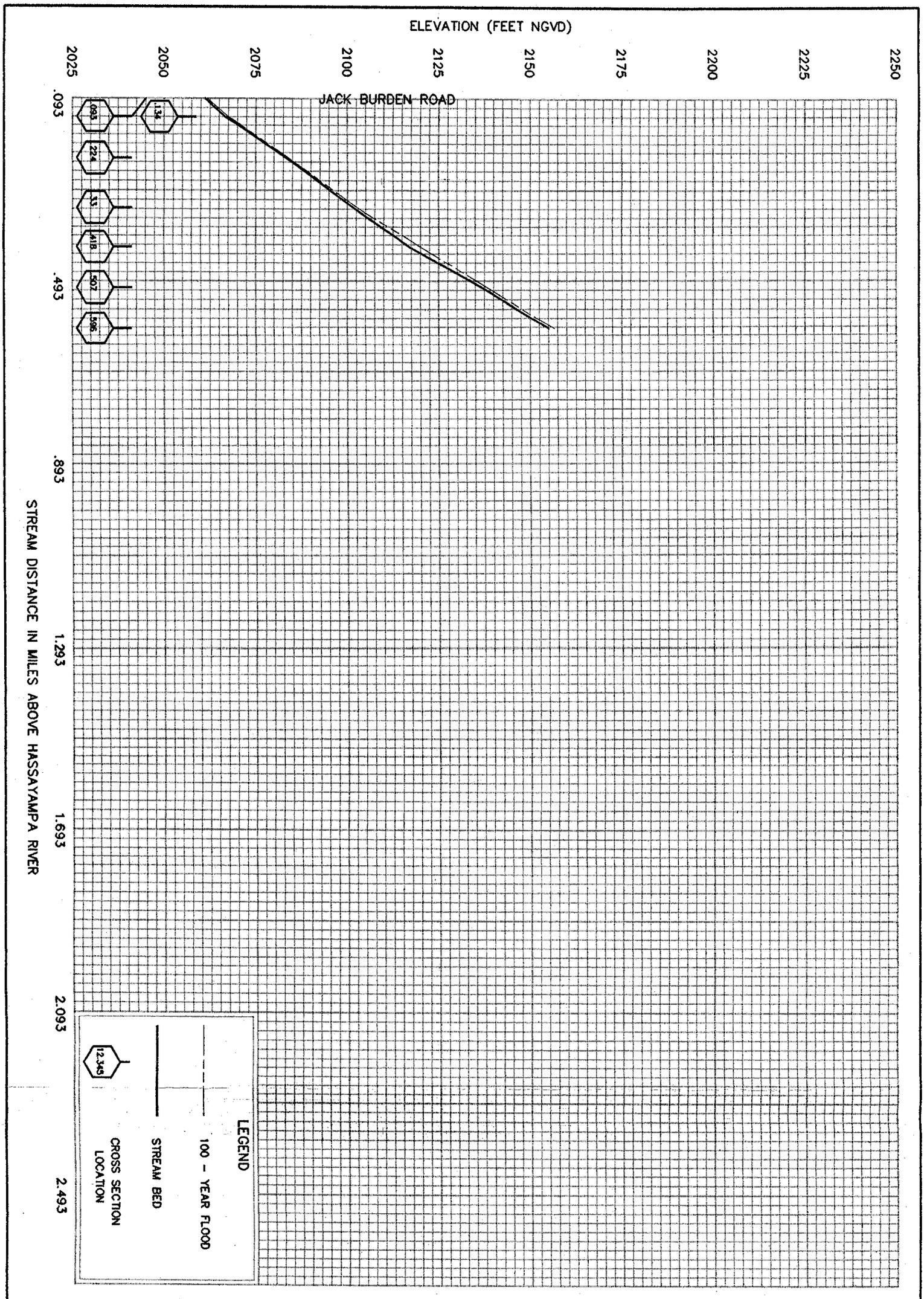
FLOOD PROFILES

UNNAMED WASH #8 (M)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

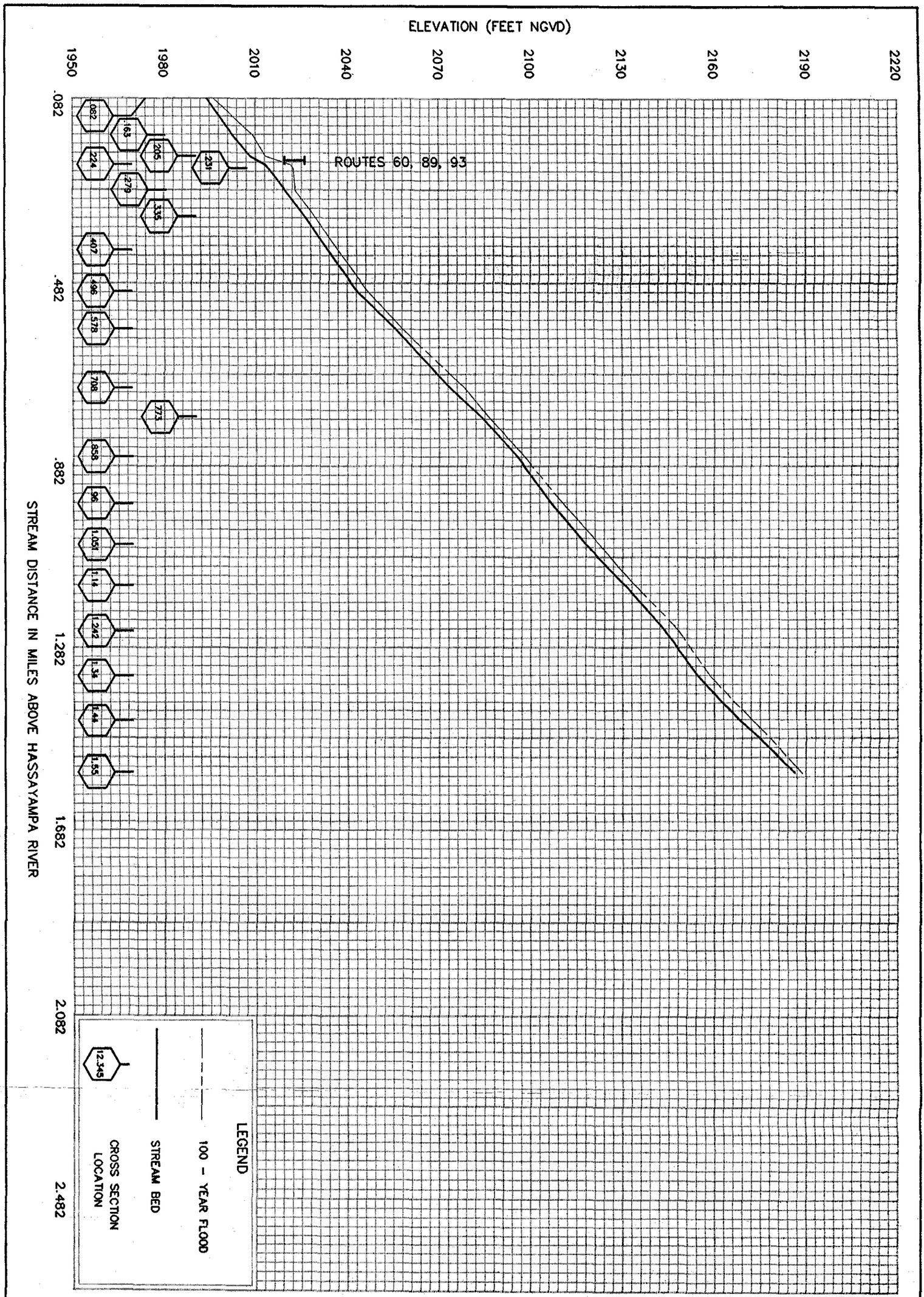
M-1

Appendix 4.26: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #11 (Wash n)



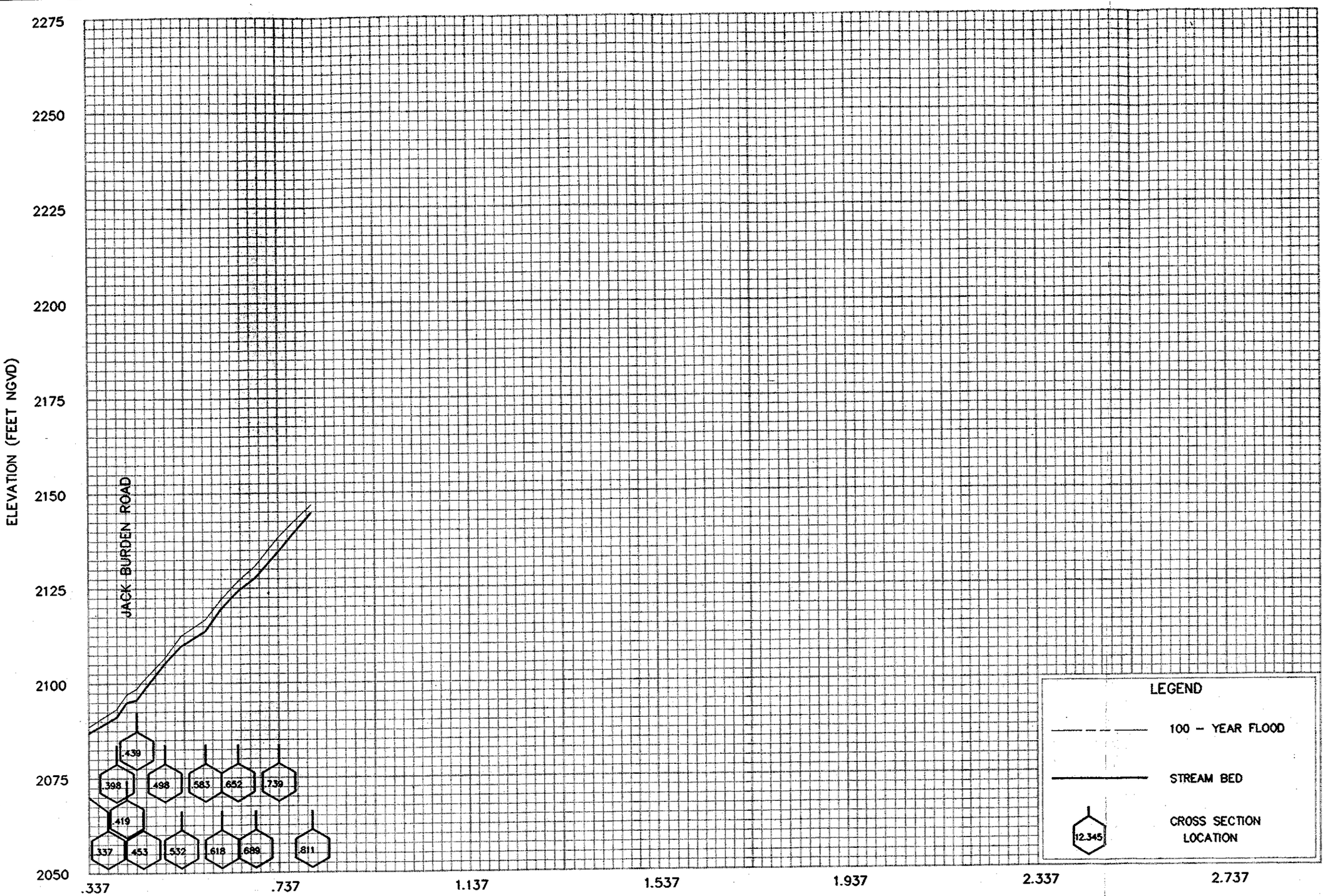
N-1	FEDERAL EMERGENCY MANAGEMENT AGENCY MARICOPA COUNTY, AZ AND INCORPORATED AREAS	FLOOD PROFILES UNNAMED WASH #11 (N)

Appendix 4.27: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #12 (Wash o)



D-1	FEDERAL EMERGENCY MANAGEMENT AGENCY MARICOPA COUNTY, AZ AND INCORPORATED AREAS	FLOOD PROFILES UNNAMED WASH #12 (O)

Appendix 4.28: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #13 (Wash p)



FLOOD PROFILES

UNNAMED WASH #13 (P)

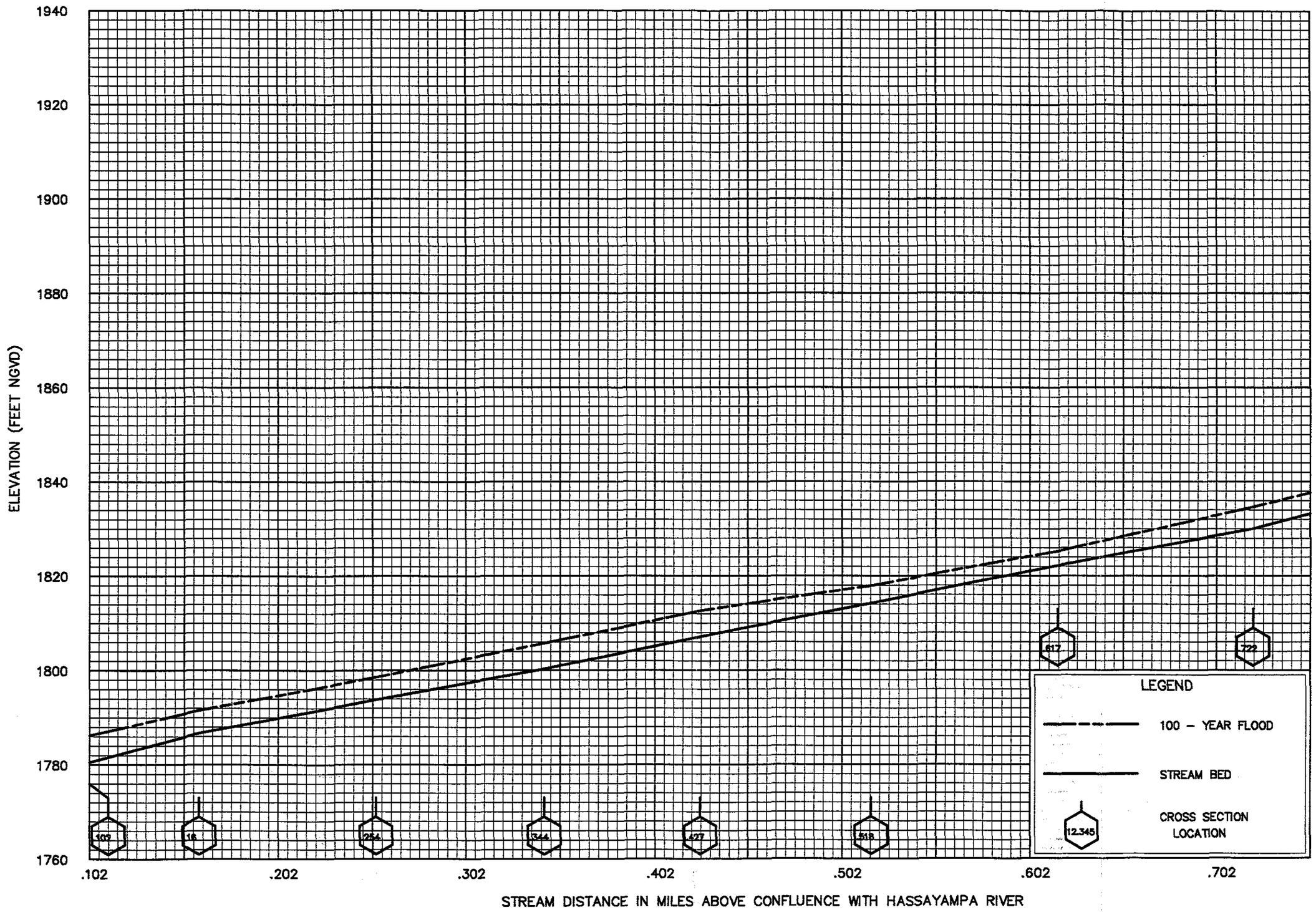
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

P-1

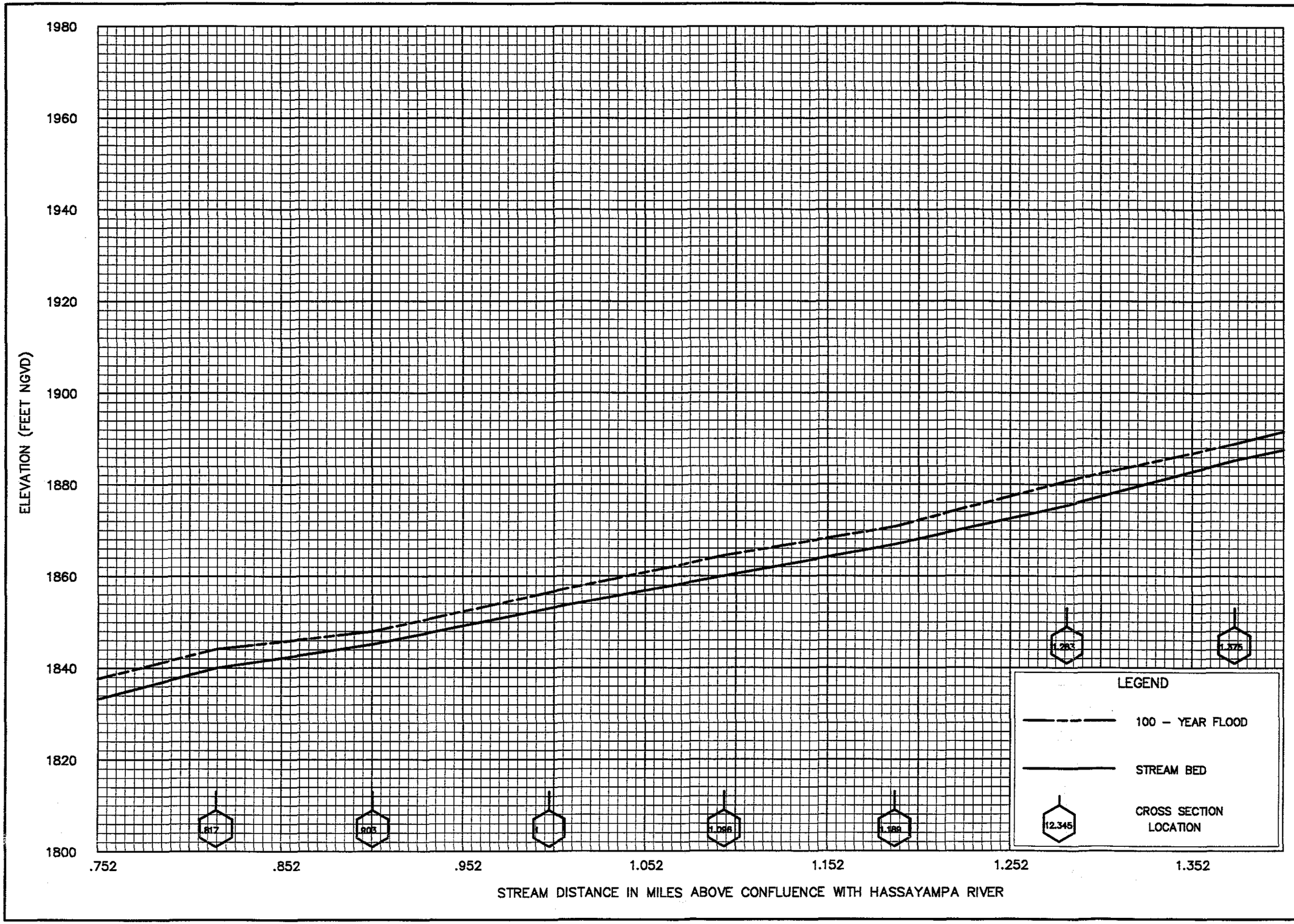
Appendix 4.29: HEC-2 Models & Cross Section Plots for East Area Wash
LITTLE SAN DOMINGO WASH (Wash s)

FLOOD PROFILES

LITTLE SAN DOMINGO WASH (WASH S)



FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

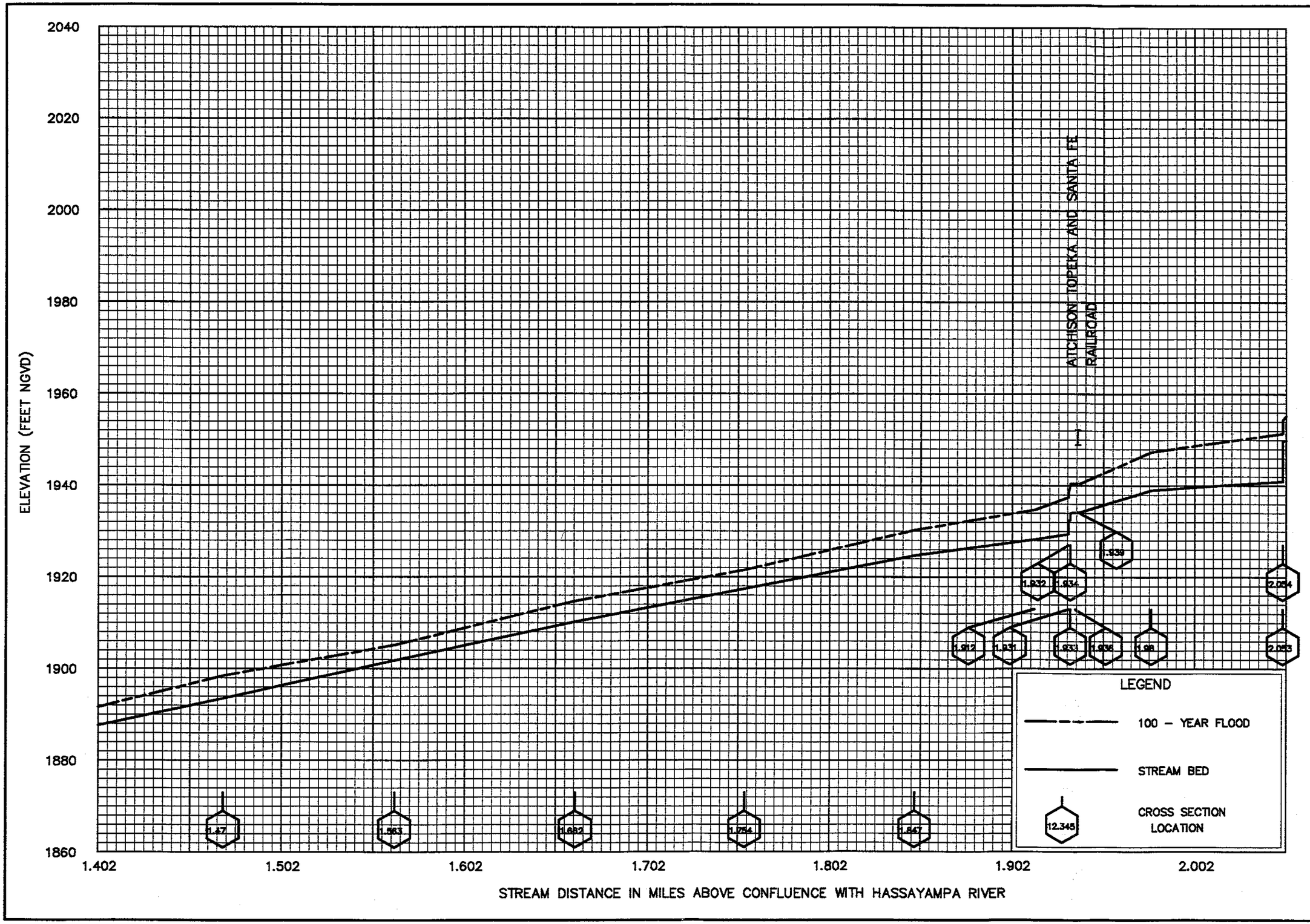


FLOOD PROFILES

LITTLE SAN DOMINGO WASH (WASH S)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

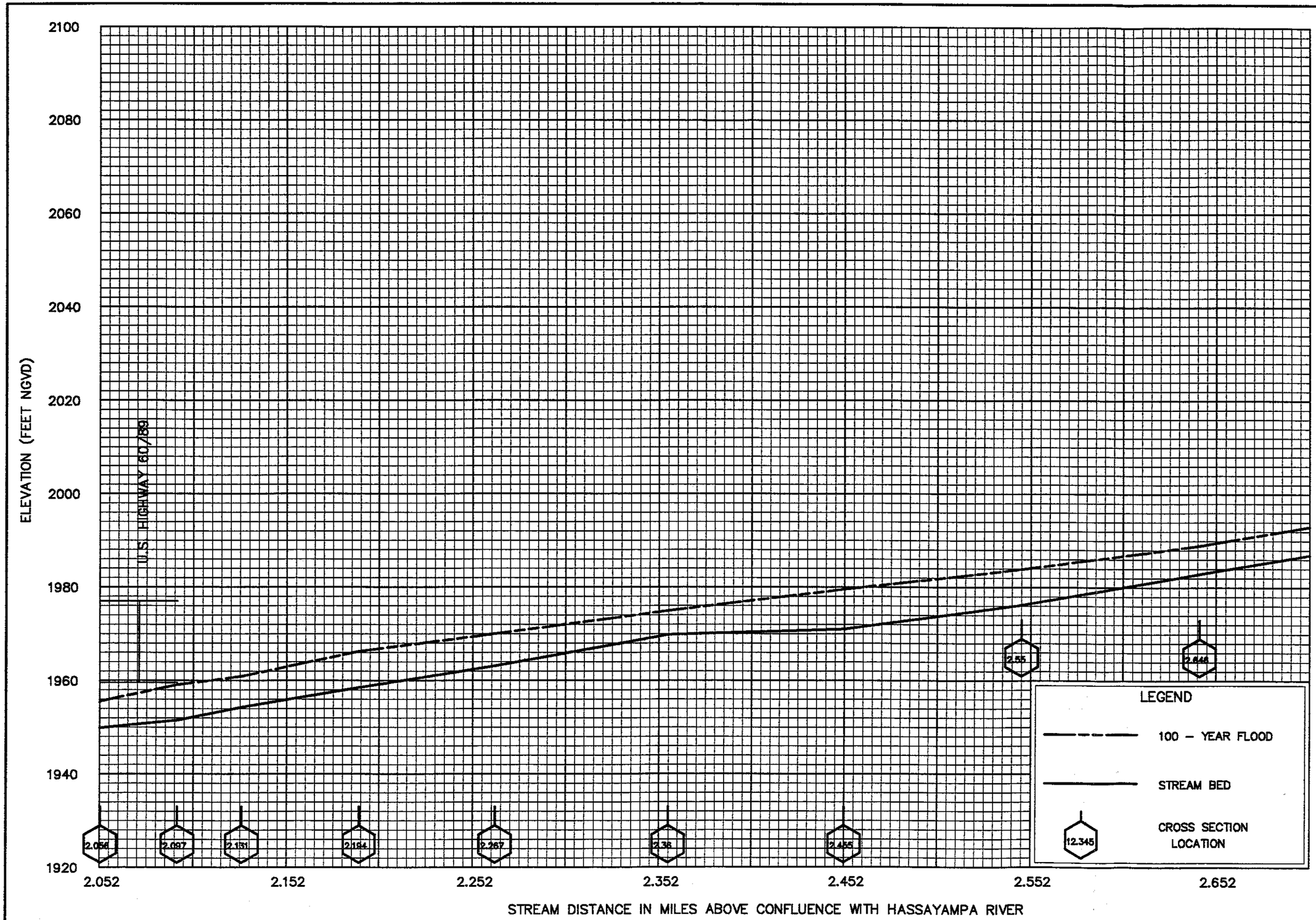
S–2



FLOOD PROFILES

LITTLE SAN DOMINGO WASH (WASH S)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

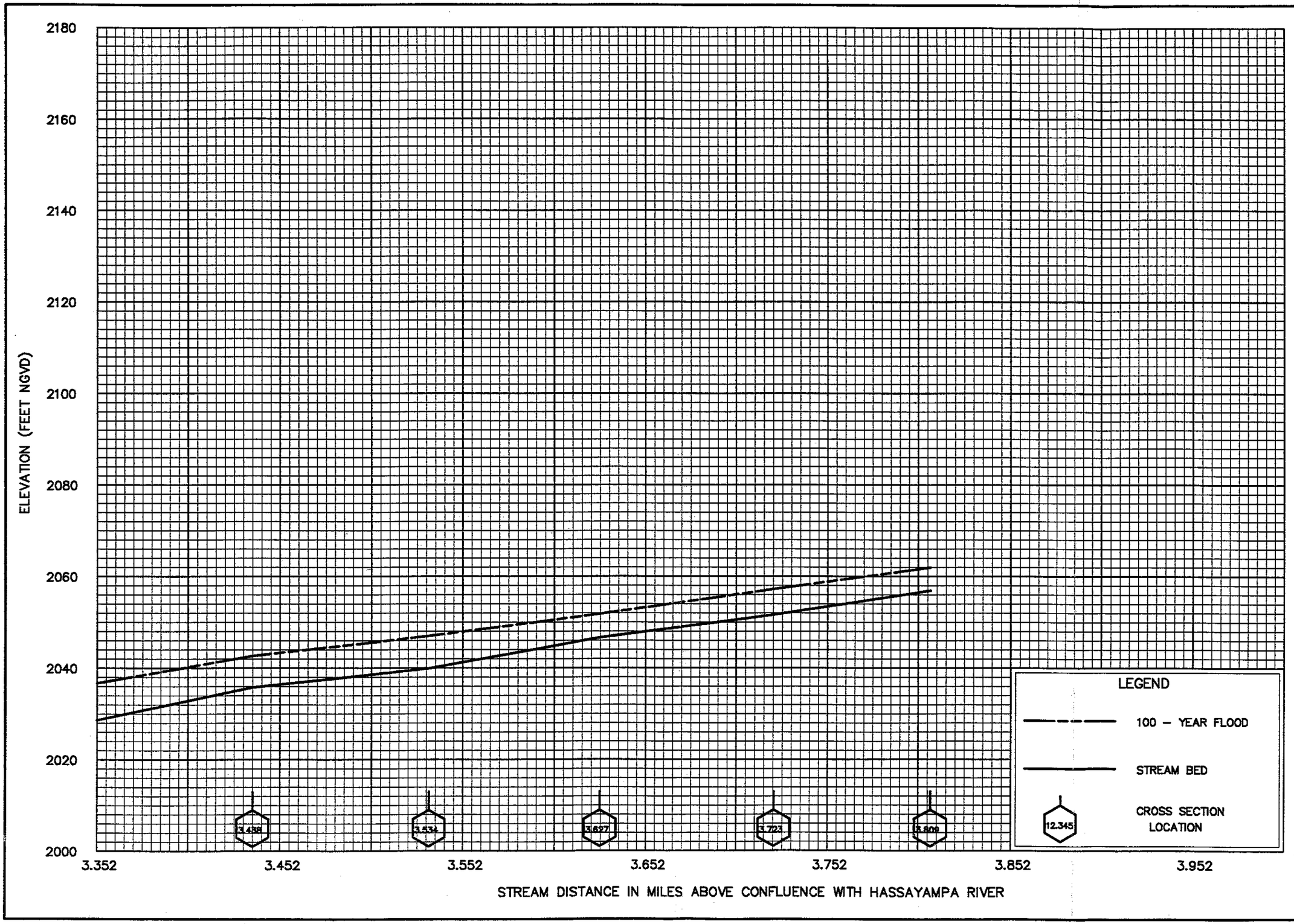
LITTLE SAN DOMINGO WASH (WASH S)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

FLOOD PROFILES

LITTLE SAN DOMINGO WASH (WASH S)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

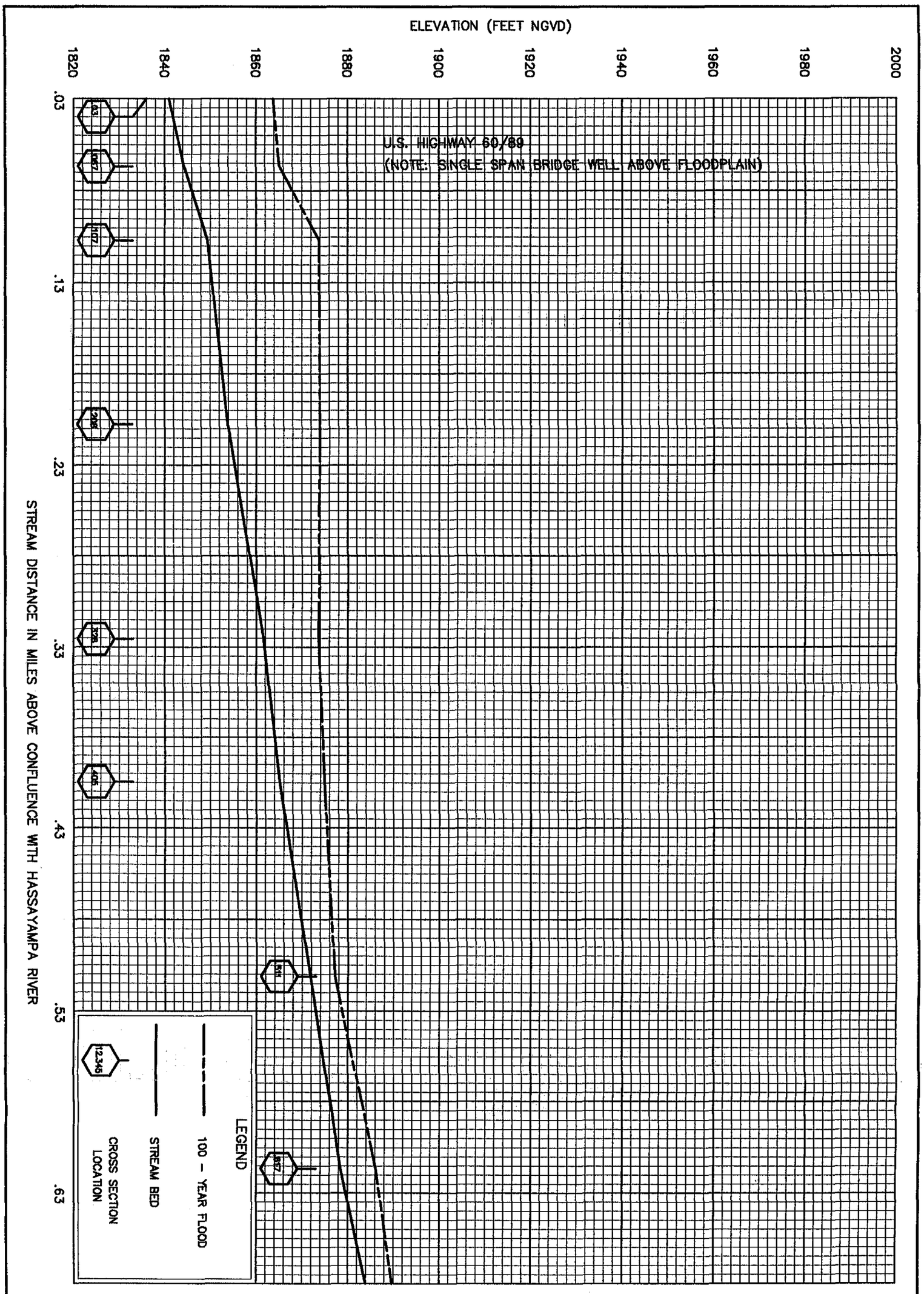


FLOOD PROFILES

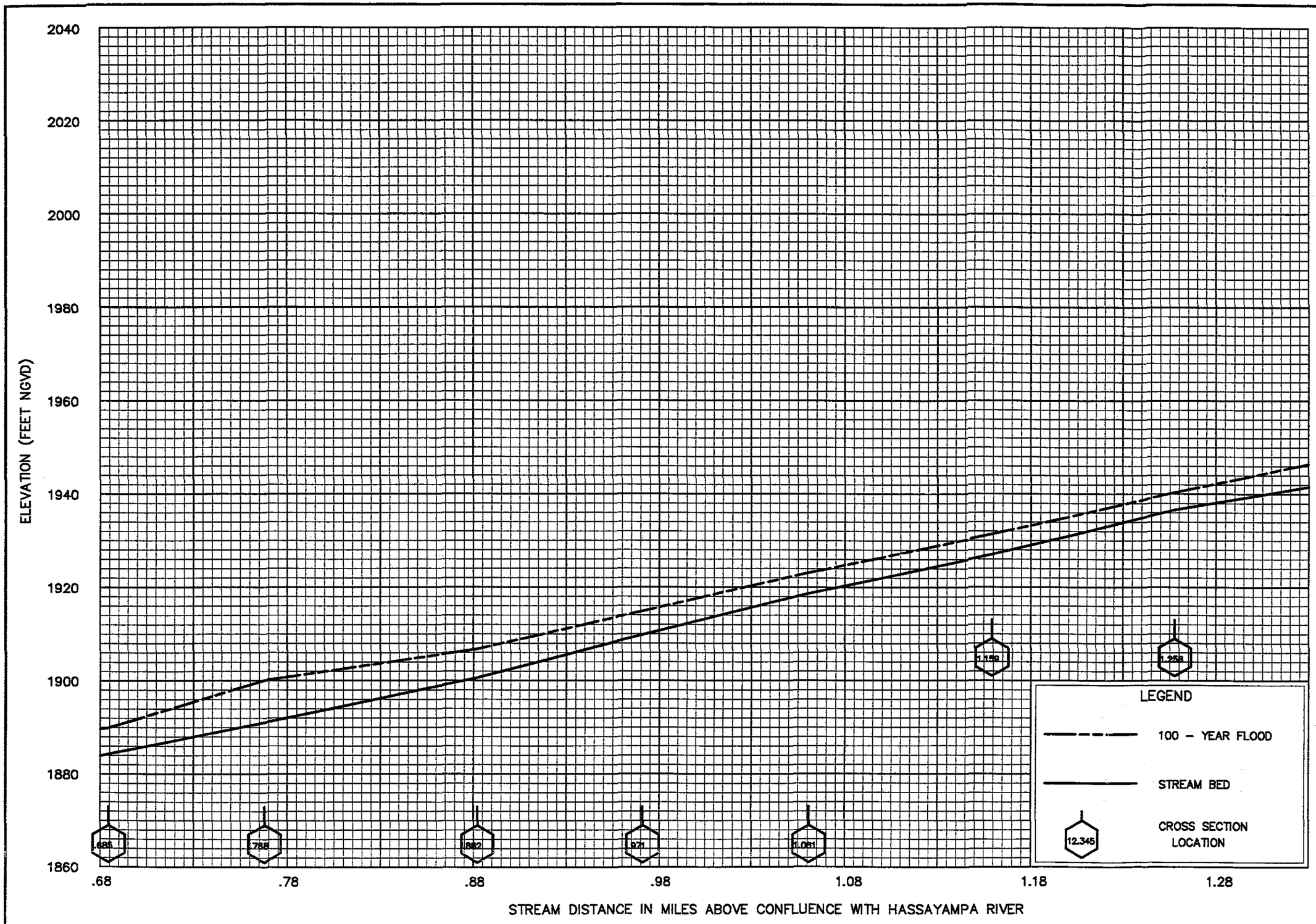
LITTLE SAN DOMINGO WASH (WASH S)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

Appendix 4.30: HEC-2 Models & Cross Section Plots for East Area Wash
SAN DOMINGO WASH (Wash t)



T-1	FEDERAL EMERGENCY MANAGEMENT AGENCY MARICOPA COUNTY, AZ AND INCORPORATED AREAS	FLOOD PROFILES SAN DOMINGO WASH (WASH T)



FLOOD PROFILES

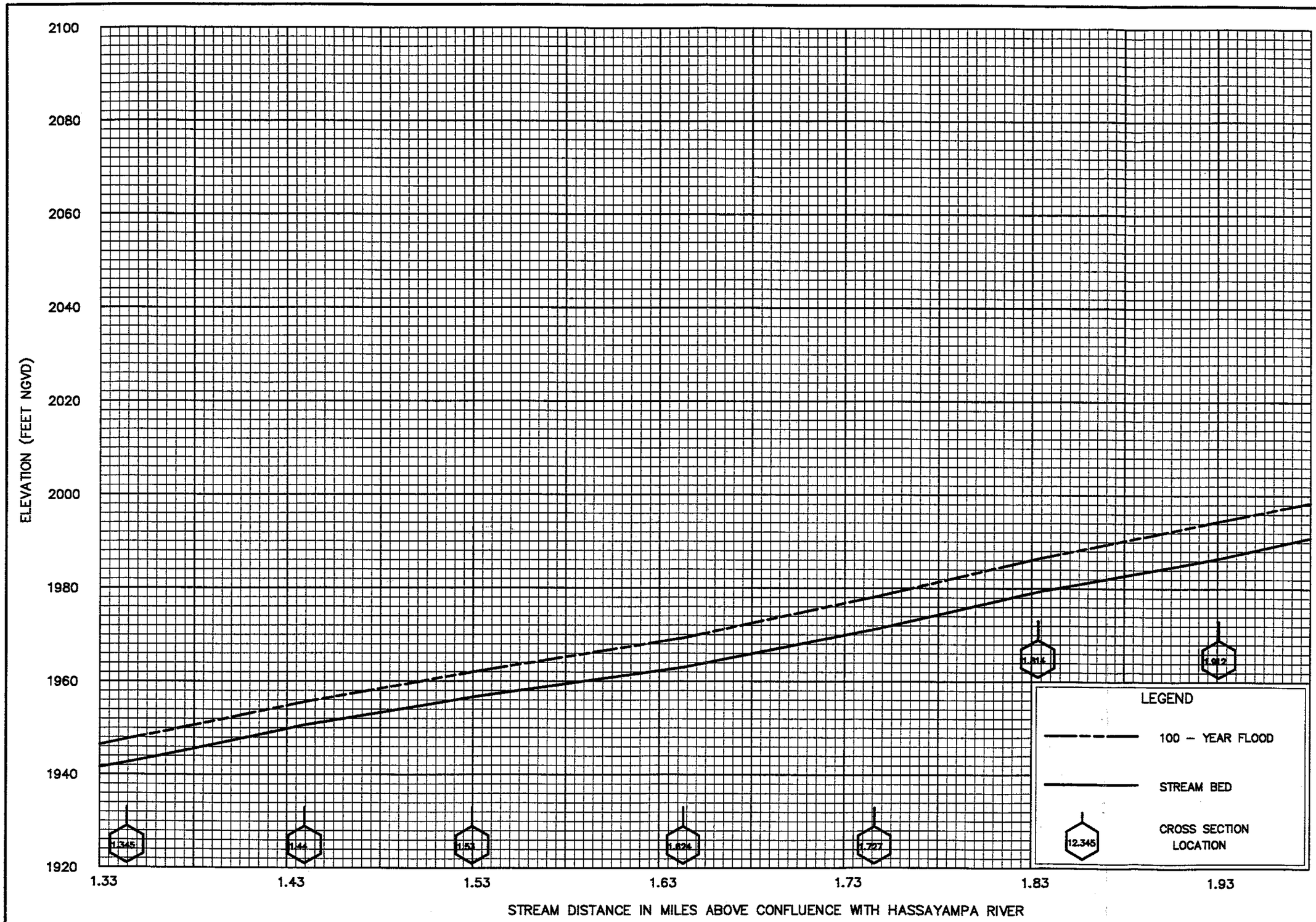
SAN DOMINGO WASH (WASH T)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

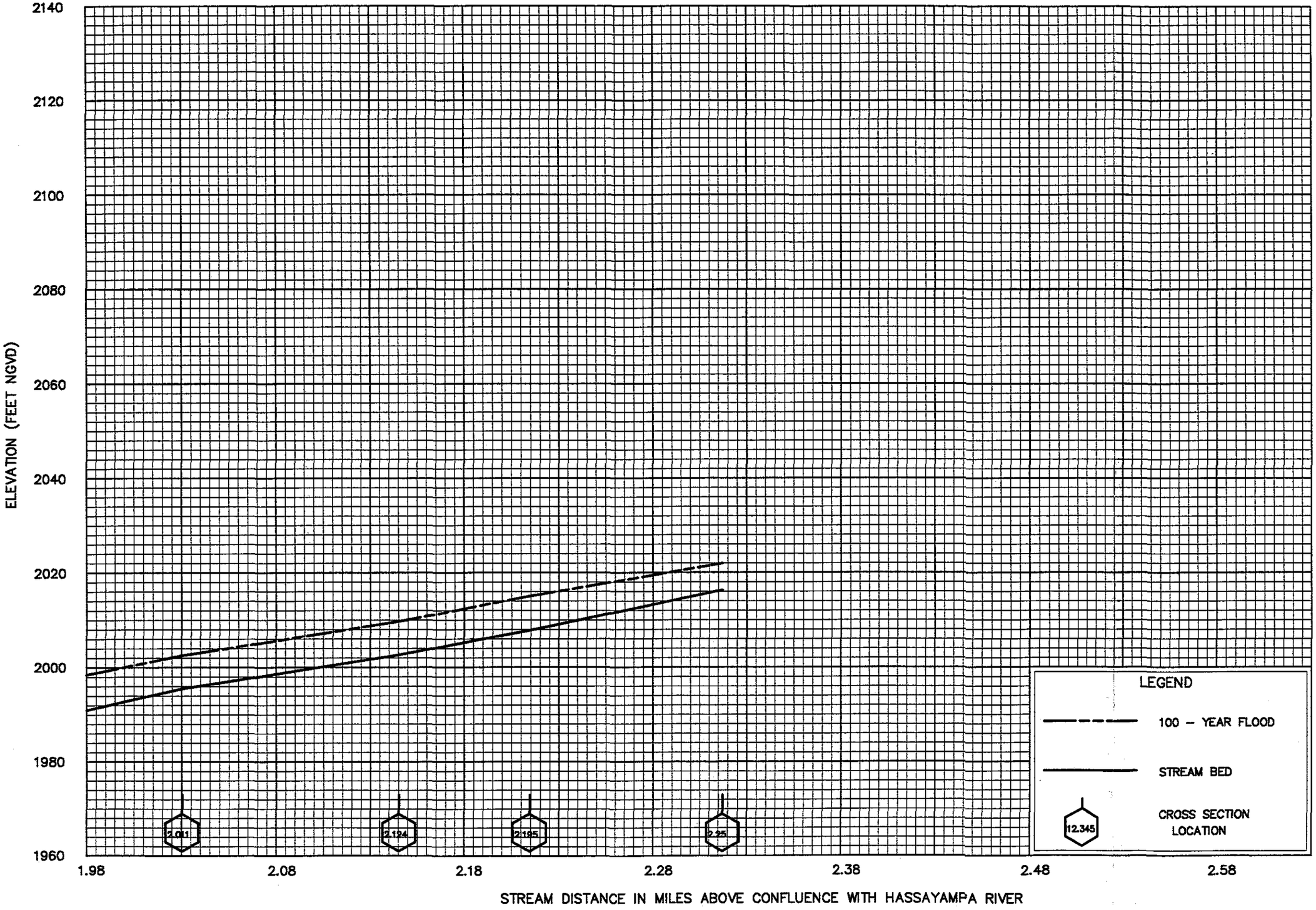
T–2

FLOOD PROFILES

SAN DOMINGO WASH (WASH T)



FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ.
AND INCORPORATED AREAS

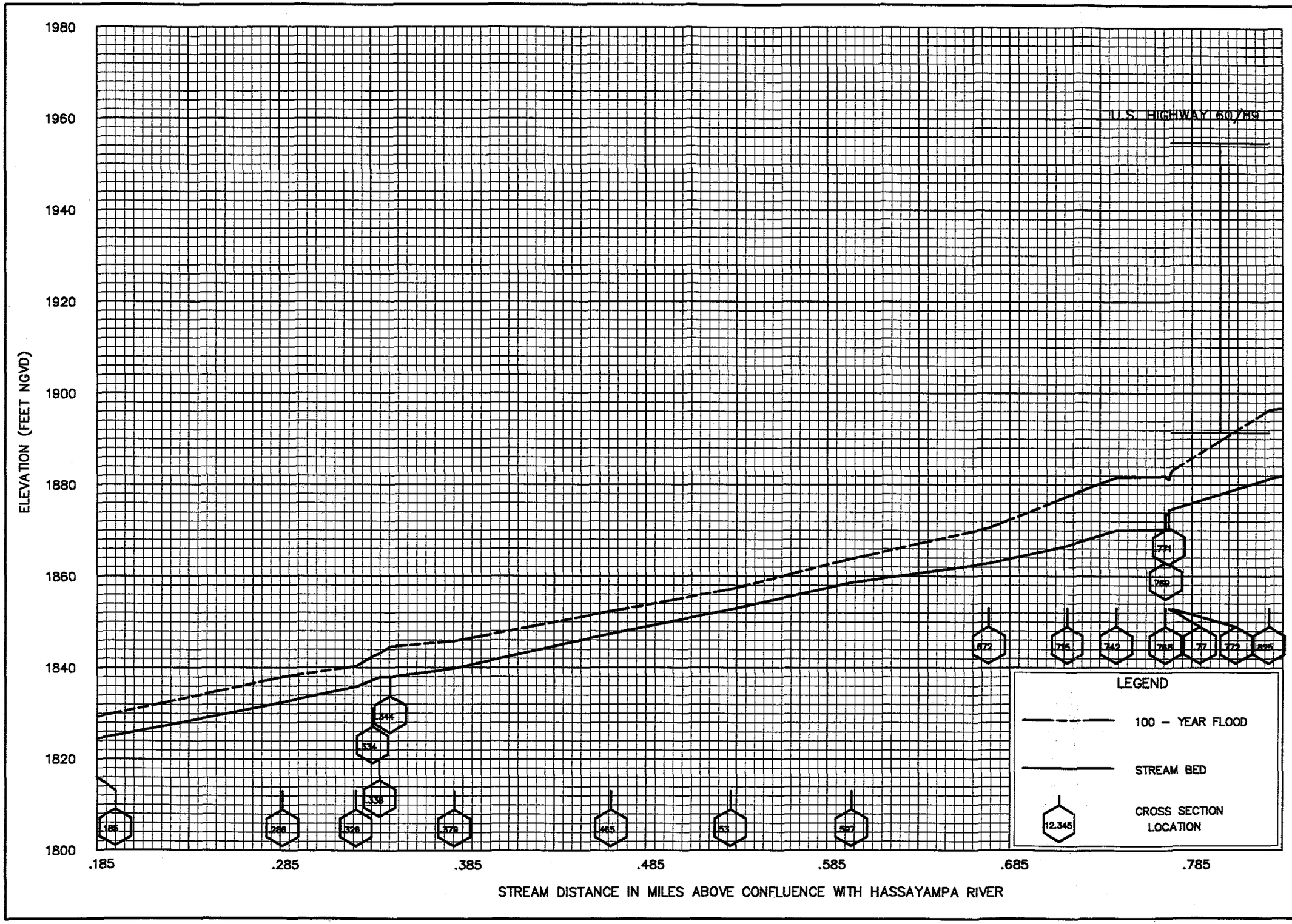


FLOOD PROFILES

SAN DOMINGO WASH (WASH T)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

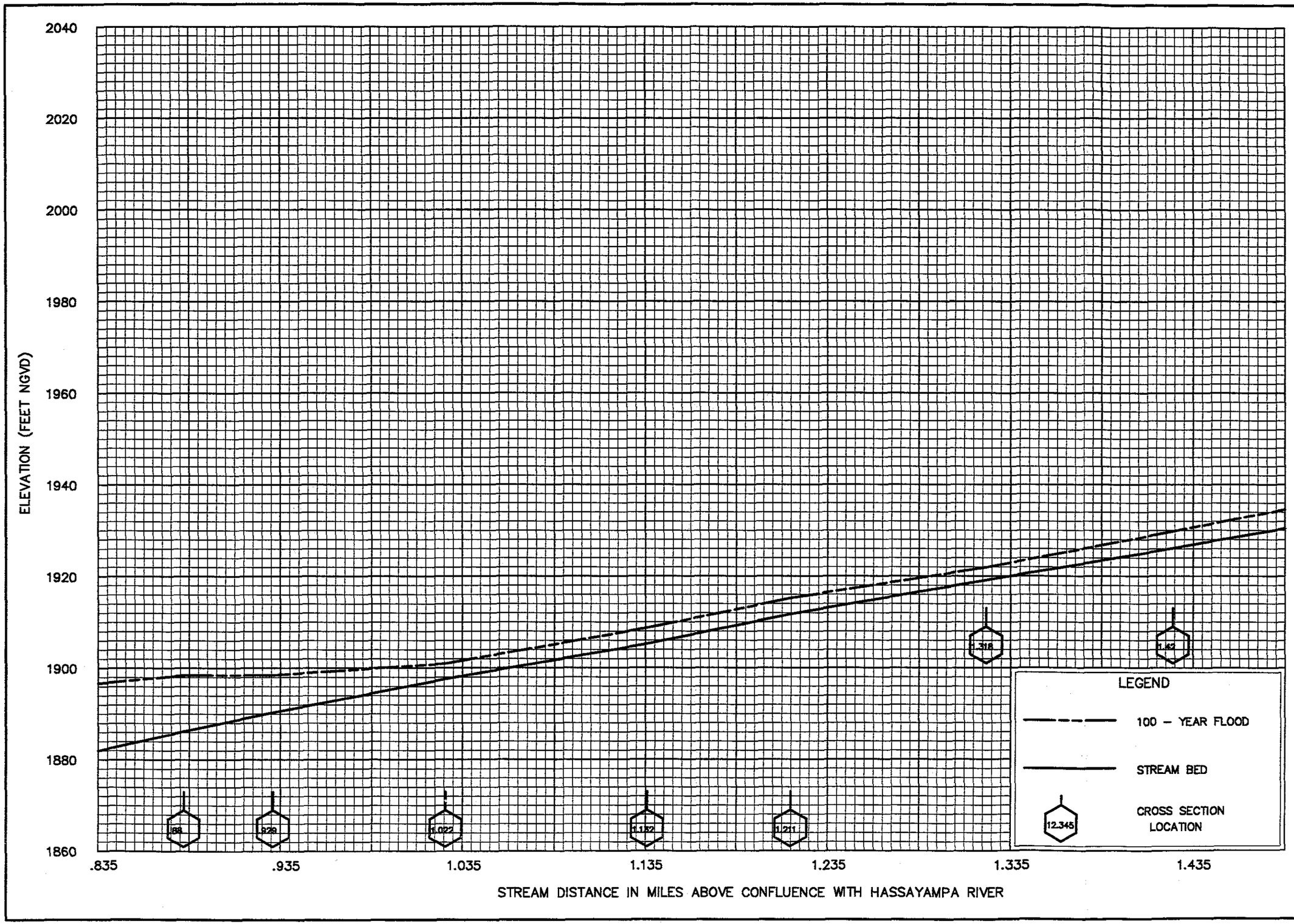
Appendix 4.31: HEC-2 Models & Cross Section Plots for East Area Wash OX WASH (Wash v)



FLOOD PROFILES

OX WASH (WASH V)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

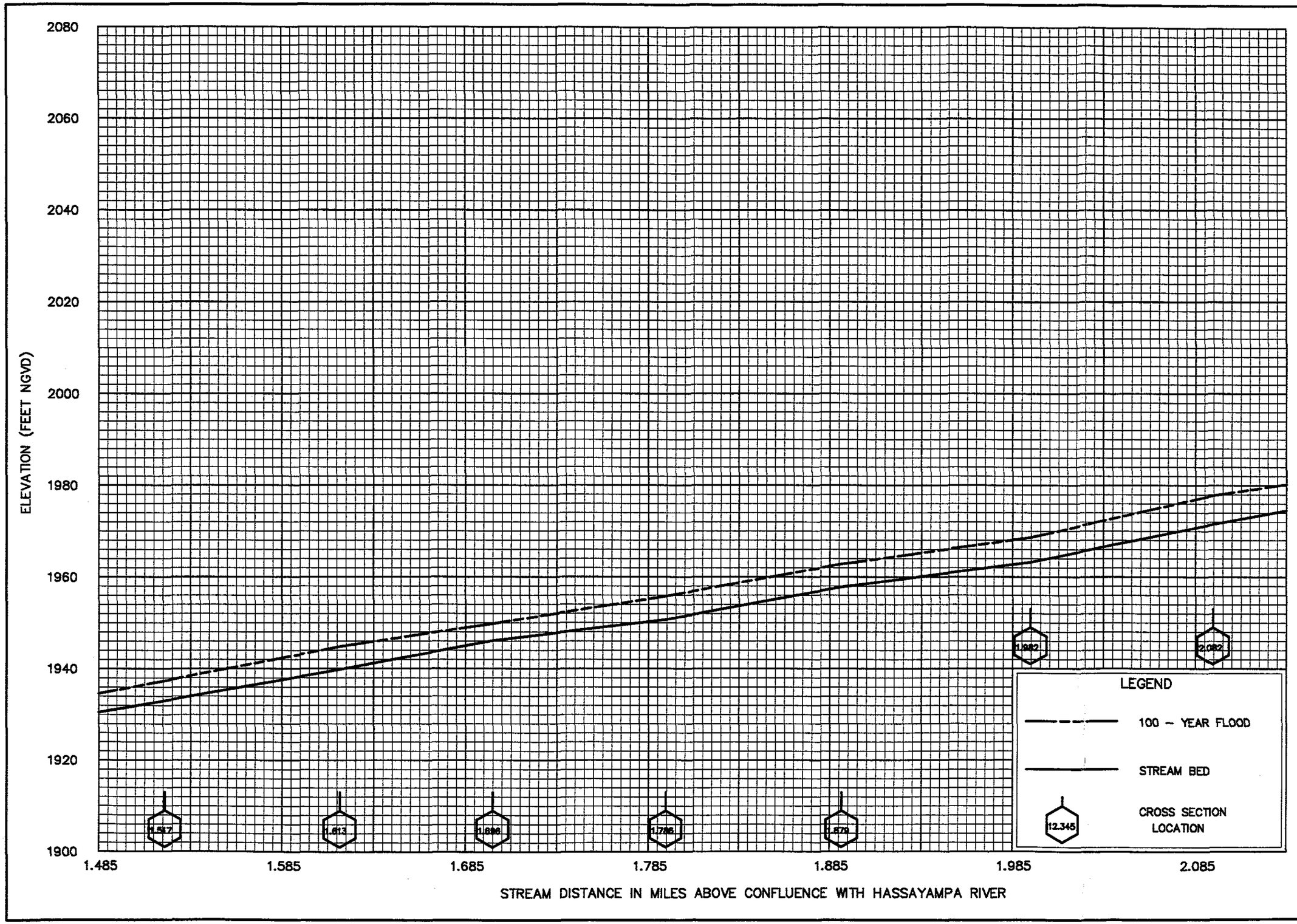


FLOOD PROFILES

OX WASH (WASH V)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

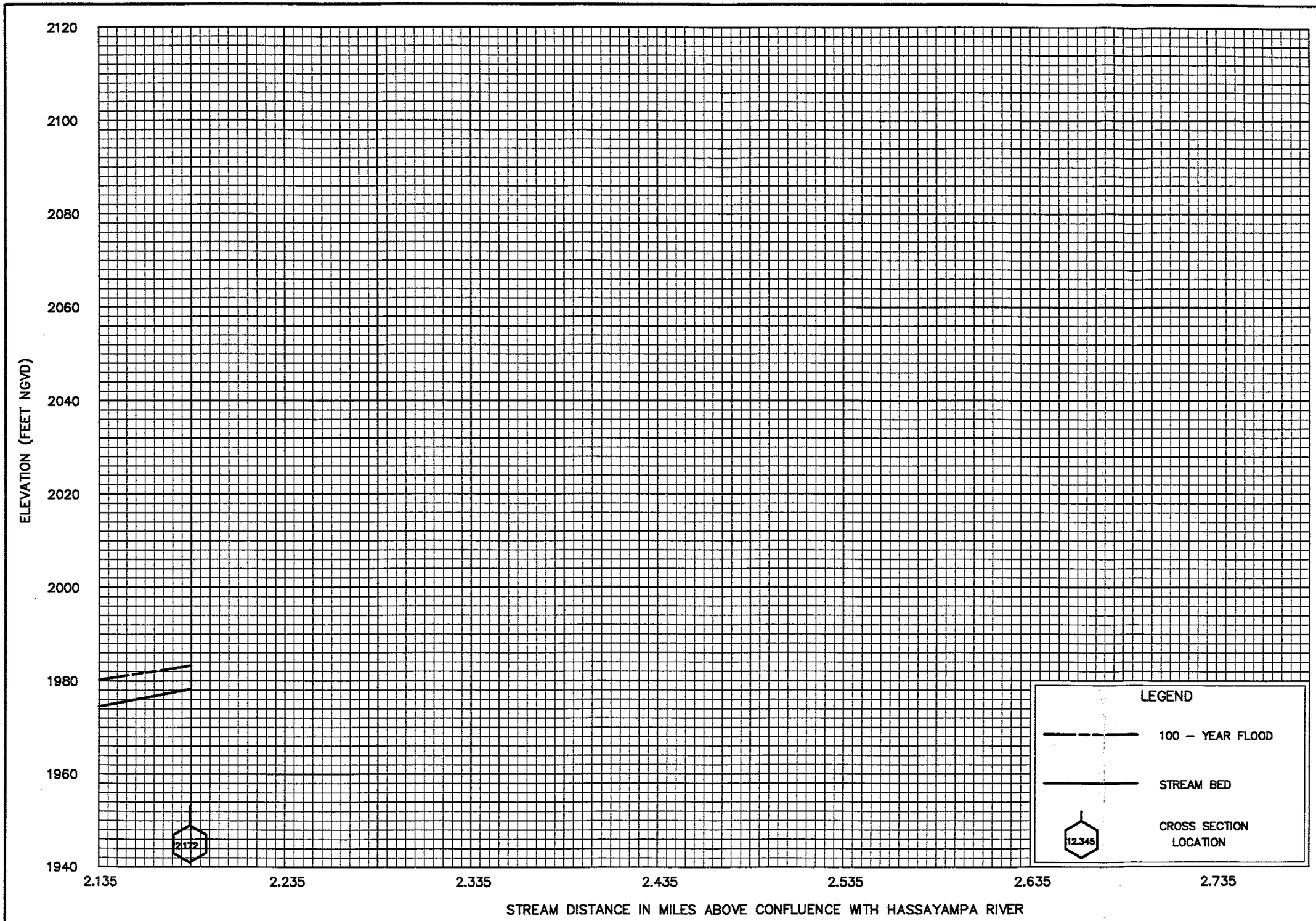
V–2



FLOOD PROFILES

OX WASH (WASH V)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



FLOOD PROFILES

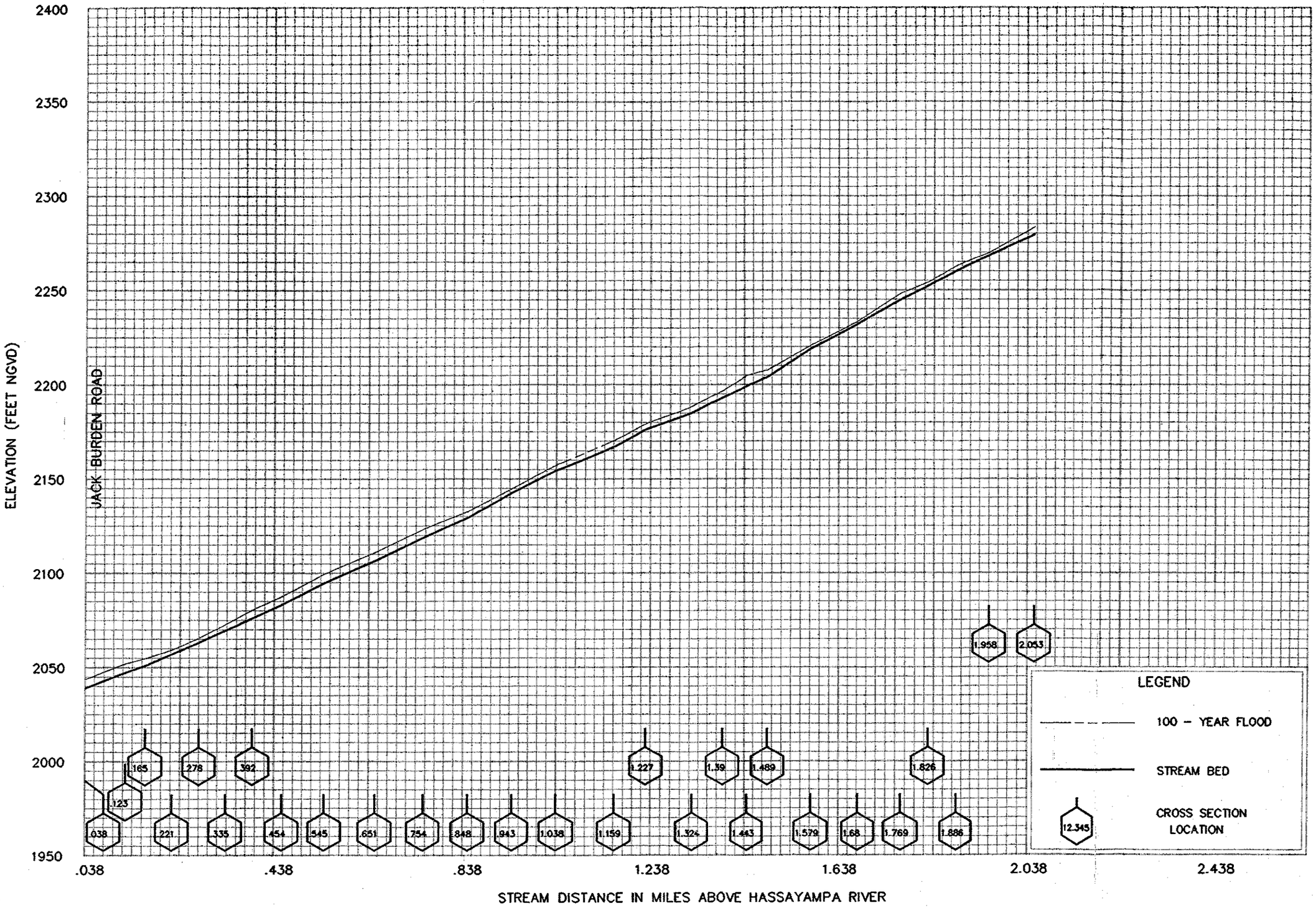
OX WASH (WASH V)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

Appendix 4.32: HEC-2 Models & Cross Section Plots for East Area Wash POWDER HOUSE WASH & TRIBUTARIES (Wash aa)

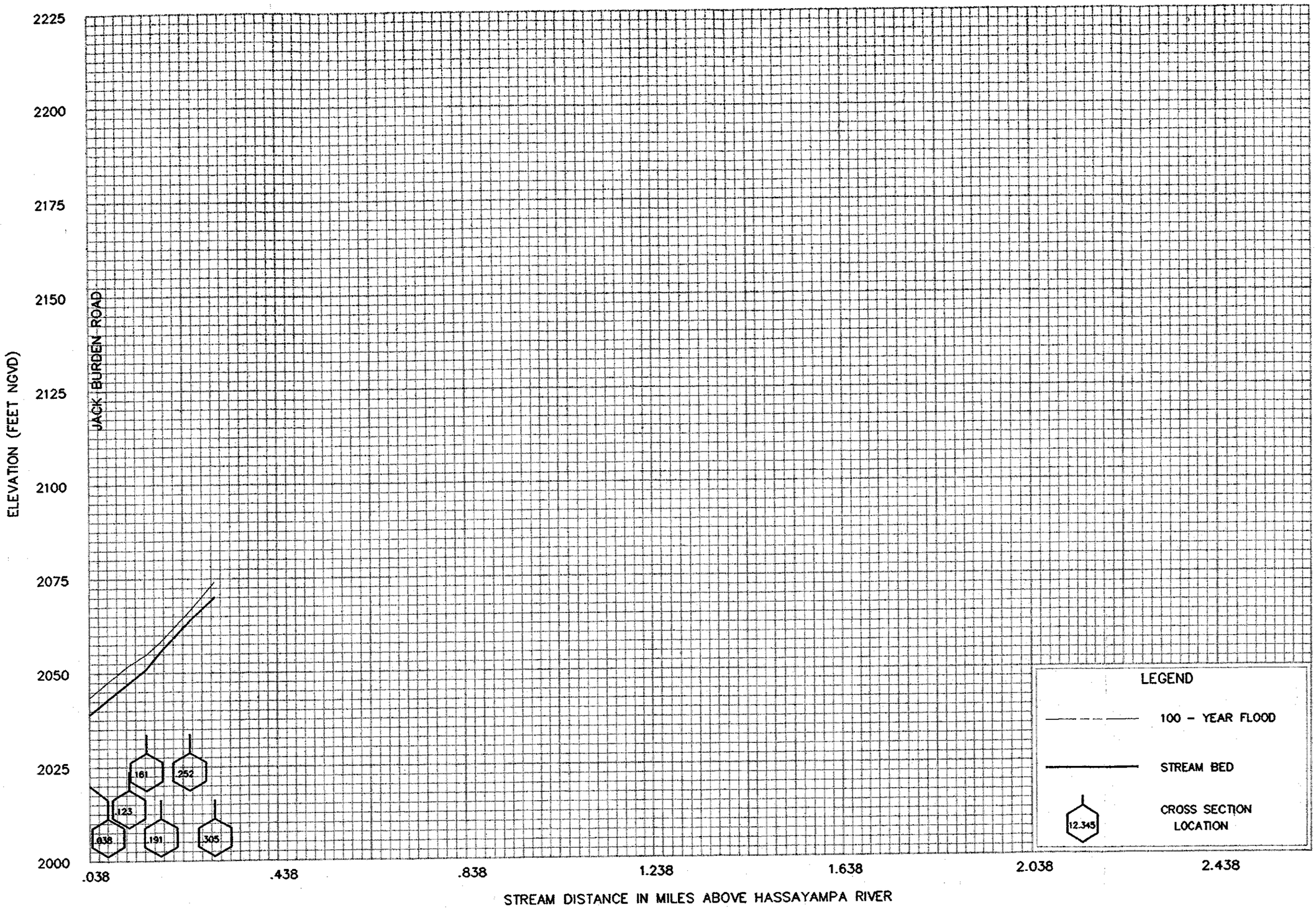
FLOOD PROFILES

POWDER HOUSE WASH (AA)



FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

AA-1



FLOOD PROFILES

POWDER HOUSE WASH (CONST)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

AA-2

FLOOD PROFILES

POWDER HOUSE WASH TRIBUTARY AA2

ELEVATION (FEET NGVD)

2330
2320
2310
2300
2290
2280
2270
2260
2250
2240

.104 .304 .504 .704 .904 1.104 1.304

STREAM DISTANCE IN MILES ABOVE POWDER HOUSE WASH

104 199 294

LEGEND

100 - YEAR FLOOD

STREAM BED

12.345 CROSS SECTION LOCATION

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

AA-3

FLOOD PROFILES

POWDER HOUSE WASH TRIBUTARY AA3

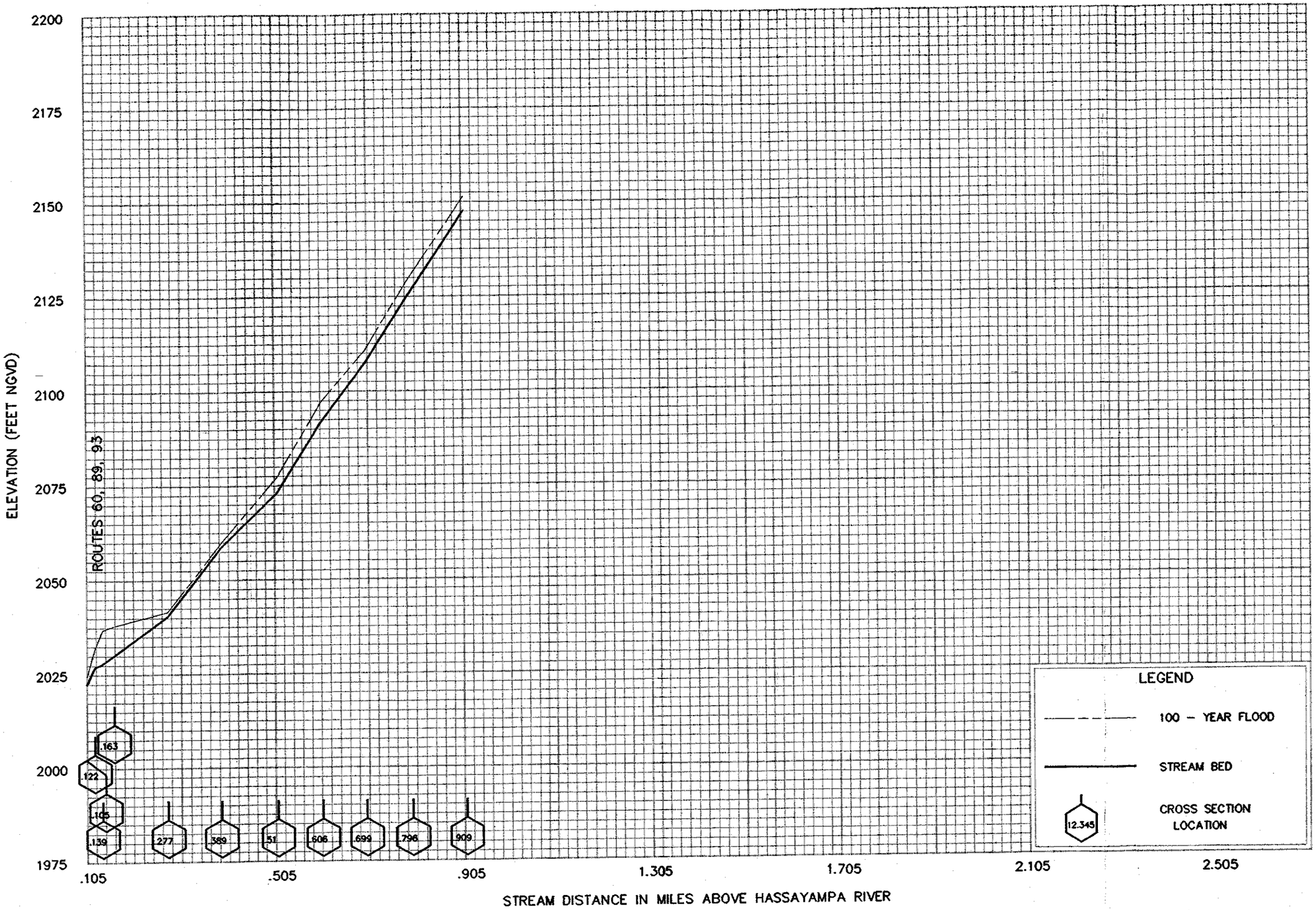
FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

AA-4

Appendix 4.33: HEC-2 Models & Cross Section Plots for East Area Wash UNNAMED WASH #9 (Wash #9)

FLOOD PROFILES

UNNAMED WASH #9 (AF)



FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

AF-1

Flood Control District of Maricopa County
Contract FCD 89-79

WICKENBURG AREA DRAINAGE MASTER STUDY

TECHNICAL DOCUMENTATION REPORT

Appendix 4.34 HEC-2 Models on 3.5" Diskettes

Submitted to the
Federal Emergency Management Agency
on Behalf of the
Flood Control District of Maricopa County

December 1992

Flood Control District of Maricopa County
Contract FCD 89-79

WICKENBURG AREA DRAINAGE MASTER STUDY

TECHNICAL DOCUMENTATION REPORT

Appendix 4.35 Floodplain Delineation Maps

Submitted to the
Federal Emergency Management Agency
on Behalf of the
Flood Control District of Maricopa County

December 1992

2 of 2

LETTER OF TRANSMITTAL

BLACK & VEATCH
ENGINEERS-ARCHITECTS
2111 East Highland Avenue, Suite 305
Phoenix, Arizona 85016
TEL (602) 381-4400

DATE 8/20/92 JOB NO. 17676.400
ATTENTION Jan Opstein
RE: Wickenburg ADMS
FCD 89-79

TO
Jan Opstein
Flood Control District
of Maricopa County
2801 W. Durango Street
Phoenix, AZ 85009

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via FIRST DELIVERY the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☒ Preliminary Floodplain Delineations

COPIES	DATE	NO.	DESCRIPTION
1		2	Sheets 9, 76 (Powder House Wash)
1		2	Sheets 61, 114 (AH3)
1		2	HEC-2 I/O Files on 3.5" Disk (1-Powder House, 1-AH3)
			3rd Submittal

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19 _____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO G. Rodzenko, ORM, File L.1

SIGNED: Jim Meyer

If enclosures are not as noted, kindly notify us at once.