Flood Control District of Maricopa County
Contract FCD 89-79

WICKENBURG AREA DRAINAGE MASTER STUDY

TECHNICAL DOCUMENTATION REPORT

HYDROLOGIC ANALYSES

FLOODLAIN DELINEATION

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

BLACK & VEATCH
PROGRESS BY DESIGN

COE & VAN LOO
PLANNING • ENGINEERING
LANDSCAPE ARCHITECTURE

Project No. 17676

May 1994

CVL No. 1197-02

Flood Control District of Maricopa County
Contract FCD 89-79

WICKENBURG AREA DRAINAGE MASTER STUDY

TECHNICAL DOCUMENTATION REPORT

Appendix 4.7: HEC-2 Models & Cross Section Plots for Sols Wash Area Wash HARTMAN WASH (Wash ai)

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

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

May 1994

FEDERAL EMERGENCY MANAGEMENT AGENCY **HYDROLOGIC ANALYSIS FORM**	O.M.B. Burden No. 3067-0148 Expires July 31, 1994	FEMA USE ONLY

PUBLIC BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 3.67 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W., Washington, DC 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0148), Washington, DC 20503.

Community Name: UNINCORPORATED MARICOPA COUNTY / TOWN OF WICKENBURG

Flooding Source: WASH A1: HARTMAN WASH
(One form for each flooding source)

Project Name /Identifier: WICKENBURG ADMS FCD 89-79

1. HYDROLOGIC ANALYSIS IN FIS

- ☒ Approximate study stream (Zone A)
- ☐ Detailed study stream (briefly explain methodology) _____

2. REASON FOR NEW HYDROLOGIC ANALYSIS

- ☐ No existing analysis
- ☐ Improved data *(see data revision on page 3)*
- ☐ Changed physical conditions of watershed *(explain)* _____
- ☐ Alternative methodology *(justify why the revised model is better than model used in the effective FIS)*
- ☐ Evaluation of proposed conditions (CLOMRs only) (explain) _____
- ☒ Other No existing analysis or analysis being updated to reflect existing conditions

If a computer program/model was used in revising the hydrologic analysis, please provide a diskette with the input files for the 10-, 50-, 100 - and 500-year recurrence intervals.

Only the 100-year recurrence interval need be included for SFHAs designated as Zone A.

3. APPROVAL OF ANALYSIS

- ☒ Approval of hydrologic analysis, including the resulting peak discharge value (s) has been provided by the appropriate local, state, or Federal Agency. (i.e., Flood Control District of Maricopa County)
  Attach evidence of approval.
- ☐ Approval of the hydrologic analysis is not required by any local, State, or Federal Agency.

Stream: WASH AT: HARMAN WASH

Comparison of 100-year Discharges

Location:	Drainage area (Sq mi.)	FIS (cfs):	Revised (cfs):
Sols Wash Confluence	7.42	—	3802
U S HWY 60	5.41		3641
STATION 6.586	3.49		3395
STATION 6.703	1.98		1855

Note: When revised discharges are not significantly different than FIS discharges, FEMA may require a confidence limits analysis on attachment D at a later date to complete the review.

As is often the case with revision requests, only a portion of a stream may actually be revised or be affected by a revision. Therefore, transition to the unrevised portion is important to maintain the continuity of the study. NFIP regulations stipulate that such a transition must be assured. What is the transition from the proposed discharges to the effective discharges? Please explain how the transition was made *(attach separate sheet if necessary)*

ATTACH A COMPLETED REVIEW OF RESULTS PAGE FOR EACH FLOODING SOURCE.

Is the new hydrologic analysis being developed solely to revise the flow values presented in the FIS *(i.e. no changed hydraulic conditions)*? ☐ Yes ☒ No

If yes, does the 100-year water surface elevation change by 1.0 foot or more? ☐ Yes ☐ No

FEMA does not normally revise NFIP maps solely due to insignificant flow changes where changes in 100-year water surface elevation are less than 1.0 foot.

5. HISTORICAL FLOODING INFORMATION

Is historical data available for the flooding source? ☐ Yes ☒ No

If yes, provide the following:

Location along flooding source: _____

Maximum peak discharge: _____ cfs

Second highest peak discharge: _____ cfs

Source of information: _____

6. GAGE RECORD INFORMATION

Location of nearest gage to project site *(along flooding source or similar watershed; specify)*

NA

Gaging Station: _____

Drainage area at gage: _____ mi^2

Number of years of data: _____

7. DATA REVISION

Please use the following table to list all the data and/or parameters affected by this request and identify them as new data (*New*) or as revising existing data (*Revised*). *(If necessary, attach a separate sheet.)*

Data Parameter	New	Revised	Data Source
NA	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

- Data source can be from a Federal, State, or local government agency, or from a private source. Some State and local governments may have less strict data requirements than Federal agencies, in which case the hydrologic data may not be accepted by FEMA unless it is demonstrated that the data give a better estimate of the flood discharge.
- Attach documentation corroborating each data source *(i.e., certified statement, report, bibliographical reference to a published document)*. In the case of a published document or a government report, providing copies of the cover and pertinent pages may be helpful.

8. METHODOLOGY FOR NEW ANALYSIS

☐ Statistical Analysis of Gage Records (*use Attachment A*)

☐ Regional Regression Equations *(use Attachment B)*

☒ Precipitation/Runoff Model *(use Attachment C)*

☐ Other *(specify; attach backup computations and supporting data)* _____

Gaging Station: NA

Gage Location (latitude and longitude): _____

	FIS:	Revised:
1. Number of years of data		
Systematic		
Historical		
2. Homogeneous data	☐ Yes ☐ No	☐ Yes ☐ No
3. Data adjustments	☐ Yes ☐ No	☐ Yes ☐ No
4. Number of high outliers		
Low outliers		
Zero events		
5. Generalized skew		
6. Station skew		
7. Adopted skew		
8. Probability distribution used (justify if log-Pearson III was not used)		

9. Transfer equations to ungaged sites ☐ Yes ☐ No

If yes, specify method

_____

_____

_____

10. Expected probability* ☐ Yes ☐ No

11. Comparison of results with other analyses ☐ Yes ☐ No

If yes, describe comparison

_____

_____

_____

*FEMA does not accept expected probability analyses for the purpose of reflecting flood hazard information in a FIS.

If any data is not available, indicate by N/A.

Attach analysis including plot of flood frequency curve.

1. Bibliographical Reference:

NA

(Attach a copy of title page, table of contents, and pertinent pages including equations.)

2. Gaged or ungaged stream: _____

3. Hydrologic region(s): _____
Attach backup map.

4. Provide parameters, values, and source of data used to define parameters.

	FIS:		Revised:	
5. Urbanized conditions calculations	☐ Yes	☐ No	☐ Yes	☐ No
6 Percent of watershed urbanization	_____		_____	
7. Is the watershed controlled?	☐ Yes	☐ No	☐ Yes	☐ No
8. Comparison with other analyses	☐ Yes	☐ No	☐ Yes	☐ No

If the answer to 5, 7, or 8 is yes, explain methodology in Comments.

If data is not available, indicate by N/A.

Comments

Attach computation and supporting maps, delineating the watershed boundary and drainage area divides.

		FIS:	Revised
1.	Method or model used:		HEC-1
	Version:		VER 3.0
	Date:		02 AUG 88
2.	Source of rainfall depth:		NOAA ATLAS 2
3.	Source of rainfall distribution:		SCS TYPE II
4.	Rainfall duration:		24 HOURS
5.	Areal adjustment to precipitation (%):		NWS HYDRO-40
6.	Hydrograph development method:		S-GRAPH
7.	Loss rate method:		GREEN-AMPT
	Source of soils information:		SCS
	Source of land use information		TOWN OF WICKENBURG
8.	Channel routing method:		NORMAL DEPTH
9.	Reservoir routing:	☐ Yes ☐ No	☐ Yes ☐ No
10.	Baseflow considerations:	☐ Yes ☐ No	☐ Yes ☒ No

If yes, explain how baseflow was determined:

11.	Snowmelt considerations:	☐ Yes ☐ No	☐ Yes ☒ No
12.	Model calibration:	☐ Yes ☐ No	☒ Yes ☐ No

If yes, explain how calibration was performed Computed discharges were compared with DISCHARGE VS DRAINAGE AREA curves and envelopes prepared by the Flood Control District of Maricopa County

13. Future land use condition: ☐ Yes ☒ No

If yes, explain why

NOTE: FEMA policy is to base flooding on existing conditions.
If data is not available, indicate by N/A.

Attach precipitation/runoff model, hydrologic model schematic, curve number calculations, time of concentration calculations, and supporting maps, delineating the watershed boundary and drainage area divides.

eam: NA – NO FLOW RECORDS

Select one location for Confidence Limits Evaluation (*describe location*): _____

_____

Discharges for selected location:

Exceedance Probability		FIS	Revised
10%	(10-year)	_____ cfs	_____ cfs
2%	(50-year)	_____ cfs	_____ cfs
1%	(100-year)	_____ cfs	_____ cfs
0.2%	(500-year)	_____ cfs	_____ cfs

1% (100-year) Flood Confidence Intervals

90% Confidence Interval: 5% limit _____ cfs

95% limit _____ cfs

50% Confidence Interval: 25% limit _____ cfs

75% limit _____ cfs

If the value of the 100-year frequency flood in the FIS is beyond the 50% confidence interval but within the 90% confidence interval, does the 100-year water surface elevation change by 1.0 foot or more? ☐ Yes ☐ No

An example of confidence limits analysis can be found in Appendix 9 of Bulletin 17B.

ttach Confidence Limits Analysis.

FEDERAL EMERGENCY MANAGEMENT AGENCY RIVERINE HYDRAULIC ANALYSIS FORM	O.M.B. Burden No 3067-0148 Expires July 31, 1994	FEMA USE ONLY

PUBLIC BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 2.25 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W., Washington, DC 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0148), Washington, DC 20503.

Community Name: Unincorporated Maricopa County / Town of Wickenburg

Flooding Source: WASH A-I: HARTMAN WASH
(One form for each flooding source)

Project Name/Identifier: Wickenburg ADMS FCD 89-79

1. REACH TO BE REVISED

Downstream limit: Station 0.000 (Sols Wash Confluence)

Upstream limit: Station 9.695

2. EFFECTIVE FIS

☐ Not studied

☒ Studied by approximate methods

Downstream limit of study STATION 2.054

Upstream limit of study STATION 2.523

☐ Studied by detailed methods

Downstream limit of study

Upstream limit of study

☐ Floodway delineated

Downstream limit of Floodway

Upstream limit of Floodway

3. HYDRAULIC ANALYSIS

Why is the hydraulic analysis different from that used to develop the FIRM. *(Check all that apply)*

☐ Not studied in FIS

☒ Improved hydrologic data/analysis. Explain: Hydrologic Analysis procedures standardized by the Flood Control District of Maricopa County

☐ Improved hydraulic analysis. Explain:

☐ Flood control structure. Explain:

☐ Other. Explain:

Full input and output listings along with files on diskette *(if available)* for each of the models listed below and summary of the source of input parameters used in the models must be provided. The summary must include a complete description of any changes made from model to model *(e.g. duplicate effective model to corrected effective model)*. Only the Duplicate Effective and the Revised or Post-Project Conditions models must be submitted. See instructions for directions on when other models may be required. Only the 100-year flood profile is required for SFHAs with a Zone A designation. For areas which do not have detailed flooding, a hydraulic model is not required; however BFE's may not be added to the revised FIRM.

☐ Duplicate Effective Model — Natural ☐ Floodway ☐

Copies of the hydraulic analysis used in the effective FIS, referred to as the effective models *(10-, 50-, 100-, and 500-year multi-profile runs and the floodway run)* must be obtained and then reproduced on the requestor's equipment to produce the duplicate effective model. This is required to assure that the effective model input data has been transferred correctly to the requestor's equipment and to assure that the revised data will be integrated into the effective data to provide a continuous FIS model upstream and downstream of the revised reach.

☐ Corrected Effective Model — Natural ☐ Floodway ☐

The corrected effective model is the model that corrects any errors that occur in the duplicate effective model, adds any additional cross sections to the duplicate effective model, or incorporates more detailed topographic information than that used in the currently effective model. The corrected effective model must not reflect any man-made physical changes since the date of the effective model. An error could be a technical error in the modeling procedures, or any construction in the floodplain that occurred prior to the date of the effective model but was not incorporated into the effective model.

☐ Existing or Pre-Project Conditions Model — Natural ☐ Floodway ☐

The duplicate effective or corrected model is modified to produce the existing or pre-project conditions model to reflect any modifications that have occurred within the floodplain since the date of the effective model but prior to the construction of the project for which the revision is being requested. If no modification has occurred since the date of the effective model, then this model would be identical to the corrected effective or duplicate effective model.

☐ Revised or Post-Project Conditions Model — Natural ☐ Floodway ☐

The existing or pre-project conditions model *(or duplicate effective or corrected effective model, as appropriate)* is revised to reflect revised or post-project conditions. This model must incorporate any physical changes to the floodplain since the effective model was produced as well as the effects of the project. When the request is for proposed project this model should reflect proposed conditions.

☒ Other: Please attach a sheet describing all other models or calculations submitted. — Natural ☒ Floodway ☒

New Model
(Proposed Effective Model)

4. MODEL PARAMETERS *(from model used to revise 100-year water surface elevation)*

Discharges:	Upstream Limit	Downstream Limit
10-year		
50-year		
100-year	1855 cfs	3802 cfs
500-year		

Attach diagram showing changes in 100-year discharge

2. Explain how the starting water surface elevations were determined Starting water surface elevation determined by the Slope-Area Method

3. Give range of friction loss coefficients (*Manning's "N"*) Channel ..... .025 – .040

Overbanks ..... .050

If friction loss coefficients are different anywhere along the revised reach from those used to develop the FIRM, give location, value used in the effective FIS, and revised values and an explanation as to how the revised values were determined.

Location	FIS	Revised
NA		

Explain:

4. Describe how the cross section geometry data were determined *(e.g., field survey, topographic map, taken from previous study)* and list cross sections that were added.

Data points for cross sections are based on the photogrammetric models for the topographic maps

5. Explain how reach lengths for channel and overbanks were determined:

All reach lengths were measured from floodplain work maps.

5. RESULTS (from model used to revise 100-year water surface elevations)

1. Do the results indicate:

a. Water surface elevations higher than end points of cross sections? ..... ☐ Yes ☒ No

b. Supercritical depth? ..... ☐ Yes ☒ No

c. Critical depth? ..... ☒ Yes ☐ No

d. Other unique situations ..... ☒ Yes ☐ No

(If yes, Special Problem Report attached)

If yes to any of the above, attach an explanation that discusses the situation and how it is presented on the profiles, tables, and maps.

2. What is the maximum change in energy gradient between cross-sections? 14.39

Specify location 3.498

3. What is the distance between the cross-sections in 2 above? 620

Specify location 3.498

4. What is the maximum distance between cross-sections? 750

Specify location 0.737

5. Floodway determination

a. What is the maximum surcharge allowed by the community or State? ..... 1 foot

b. What is the maximum surcharge for the revised conditions? ..... 0.9 foot

Specify location 0.345, 7.468

c. What is the maximum velocity? ..... 14.0 fps

Specify location 3.919

Explain:

d. Are there any negeative surcharge values at any cross-section ☒ Yes ☐ No

If yes, the floodway may need to widen. If it is not widened, please explain and indicate the maximum negative surcharge

The maximum negative surcharge is 0.2 ft at Section 2.826. This is a result of adjacent encroachment that increases velocity and lowers the water surface elevation at the section.

6. Is the discharge value used to determine the floodway anywhere different from that used to determine the natural 100-year flood elevations? ..... ☐ Yes ☒ No

If Yes, explain:

7. Do 100-year water surface elevations increase at any location? ..... ☐ Yes ☒ No

If yes, please attach a list of the locations where the increases occur, state whether or not the increases are located on the requestor's property, and provide an explanation of the reason for the increases.

NA- New Model

Please attach a completed comparison table entitled: Water Surface Elevation Check (See page 6)

6. REVISED FIRM/FBFM AND FLOOD PROFILES

A. The revised water surface elevations tie into those computed by the effective FIS Model *(10-, 50-, 100-, and 500-year)*, downstream of the project at cross-section NA within _____ feet and upstream of the project at cross section _____ within _____ feet.

B. The revised floodway elevations tie into those computed by the effective FIS model, dowstream of the project at cross section NA within _____ feet and upstream of the project at cross section _____ within NA feet.

C. Attach profiles, at the same vertical and horizontal scale as the profiles in the effective FIS report, showing stream bed and profiles of all floods studied (without encroachment). Also, label all cross sections, road crossings (including low chord and top-of-road data), culverts, tributaries, corporate limits, and study limits. If channel distance has changed, the stationing should be revised for all profile sheets.

D. Attach a Floodway Data Table showing data for each cross section listed in the published Floodway Data Table in the FIS report.

Proceed to Riverine /Coastal Mapping Form

FEDERAL EMERGENCY MANAGMENT AGENCY

WATER SURFACE ELEVATION CHECK

COMMUNITY NAME	FLOODIND SOURCE	PROJECT NAME /IDENTIFIER
Unincorporated Maricopa County/ Town of Wickenburg		Wickenburg ADMS F-1089-79

	EFFECTIVE			DUPLICATE EFFECTIVE			CORRECTED EFFECTIVE			EXISTING/PRE-PROJECT			REVISED/PROJECT		
SECTIO	NCWSEL[1]	FCWSEL[2]	SURC.[3]	NCWSEL[1]	FCWSEL[2]	SURC.[3]	NCWSEL[1]	FCWSEL[2]	SURC.[3]	NCWSEL[1]	FCWSEL[2]	SURC.[3]	NCWSEL[1]	FCWSEL[2]	SURC.[3]

COMMENTS: New Model - See following Floodway Data Tables FROM UPHRTMN AND LOWHRTMN OUTPUT FILES

1-100-year (natural) Water Surface Elevation 2-Encroachment (floodway) Water Surface Elevation 3-Surcharge Value

Include all cross sections in the models between tie-in points. Any interpolated values should be indicated in parentheses.

Sheet 1 of 1

FLOODWAY DATA, WASH AI: HARTMAN WASH LOWHRTMN.OUT
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.095	69.	228.	10.3	2186.1	2186.1	.0
.133	77.	282.	8.3	2187.6	2187.6	.0
.144	83.	539.	4.4	2188.7	2188.7	.0
.147	83.	553.	4.2	2189.0	2189.0	.0
.154	106.	266.	8.8	2188.9	2188.9	.0
.171	224.	393.	6.4	2192.2	2192.2	.0
.216	349.	649.	5.9	2195.2	2195.2	.0
.254	470.	790.	4.8	2199.9	2199.6	.3
.345	461.	788.	4.8	2205.4	2204.5	.9
.423	357.	677.	5.6	2212.0	2212.0	.0
.540	415.	680.	5.6	2220.6	2220.3	.3
.595	546.	649.	5.9	2226.2	2226.2	.0
.737	390.	607.	6.3	2239.3	2239.2	.1
.826	173.	490.	7.8	2247.3	2246.8	.5
.921	110.	426.	8.9	2255.1	2255.1	.0
.979	226.	594.	6.4	2258.7	2258.7	.0
1.108	445.	690.	5.5	2266.7	2266.7	.0
1.203	154.	467.	8.1	2270.8	2270.8	.0
1.301	308.	649.	5.9	2276.7	2276.7	.0
1.392	301.	610.	6.2	2283.9	2283.9	.0
1.476	429.	761.	5.0	2290.5	2290.5	.0
1.587	340.	626.	6.1	2298.2	2297.5	.7
1.676	499.	772.	4.9	2306.0	2305.8	.2
1.771	412.	618.	6.2	2313.8	2313.2	.6
1.871	333.	618.	6.2	2322.0	2321.5	.5
1.964	349.	652.	5.8	2329.1	2328.4	.7
2.054	549.	885.	4.3	2335.0	2334.5	.5
2.149	148.	458.	8.3	2341.6	2341.4	.2
2.242	126.	440.	8.7	2348.4	2348.0	.4
2.331	207.	560.	6.8	2354.2	2353.7	.5
2.430	213.	653.	5.8	2361.1	2360.7	.4
2.523	329.	635.	6.0	2366.4	2366.0	.4
2.582	285.	590.	6.4	2371.8	2371.8	.0
2.620	253.	596.	6.4	2374.6	2374.4	.2
2.716	146.	458.	8.3	2383.4	2383.3	.1
2.826	228.	608.	6.2	2389.7	2389.9	-.2
2.909	118.	415.	9.2	2393.1	2393.1	.0
3.002	122.	433.	8.8	2398.7	2398.4	.3
3.093	123.	388.	9.4	2403.3	2403.4	-.1
3.195	136.	415.	8.8	2409.8	2409.8	.0

FLOODWAY DATA, WASH AI: HARTMAN WASH
PROFILE NO. 2

UPHRTMN.OUT

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
3.093	123.	397.	9.2	2403.4	2403.4	.0
3.195	136.	412.	8.9	2409.8	2409.8	.0
3.309	31.	75.	6.0	2416.1	2416.1	.0
3.381	36.	64.	7.1	2421.9	2421.9	.0
3.498	54.	131.	3.4	2437.0	2437.0	.0
3.582	76.	138.	3.3	2438.3	2438.3	.0
3.661	497.	760.	4.8	2441.7	2441.7	.0
3.756	429.	810.	4.5	2445.5	2445.5	.0
3.822	448.	1031.	3.6	2447.2	2447.2	.0
3.887	117.	512.	7.2	2448.1	2448.1	.0
3.911	69.	318.	11.5	2448.8	2448.8	.0
3.918	52.	291.	12.5	2454.7	2454.7	.0
3.919	44.	260.	14.0	2457.9	2457.9	.0
3.926	44.	261.	13.9	2458.7	2458.7	.0
4.023	162.	1211.	3.0	2462.3	2462.2	.1
4.110	162.	501.	7.3	2463.9	2463.9	.0
4.210	198.	506.	7.2	2469.1	2469.0	.1
4.301	133.	440.	8.3	2475.8	2475.8	.0
4.390	160.	487.	7.5	2480.9	2480.9	.0
4.487	168.	502.	7.3	2485.3	2485.3	.0
4.585	139.	512.	7.1	2489.1	2489.0	.1
4.674	137.	461.	7.9	2495.3	2495.3	.0
4.771	181.	512.	7.1	2499.2	2499.2	.0
4.860	254.	564.	6.5	2503.3	2503.3	.0
4.989	128.	430.	8.5	2510.7	2510.7	.0
5.055	140.	491.	7.4	2514.9	2514.4	.5
5.182	190.	505.	7.2	2521.5	2521.5	.0
5.244	164.	468.	7.8	2525.8	2525.7	.1
5.341	217.	538.	6.8	2531.4	2531.4	.0
5.426	220.	610.	6.0	2535.0	2534.7	.3
5.532	509.	896.	4.1	2544.7	2544.7	.0
5.538	472.	858.	4.2	2544.8	2544.8	.0
5.566	117.	677.	5.4	2545.5	2545.5	.0
5.652	150.	763.	4.8	2546.3	2546.3	.0
5.764	143.	460.	7.9	2550.4	2550.4	.0
5.836	147.	571.	6.4	2553.4	2553.4	.0
5.937	148.	448.	8.1	2559.0	2559.0	.0
6.029	139.	458.	7.9	2563.1	2563.1	.0
6.124	160.	458.	7.9	2569.6	2569.2	.4
6.213	140.	468.	7.8	2574.3	2574.2	.1
6.317	140.	561.	6.5	2578.4	2578.1	.3
6.419	140.	464.	7.8	2581.8	2581.6	.2

FLOODWAY DATA, WASH AI: HARTMAN WASH
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
6.508	150.	487.	7.5	2586.4	2586.1	.3
6.568	157.	587.	5.8	2588.5	2587.8	.7
6.703	188.	327.	5.7	2594.2	2594.2	.0
6.778	98.	253.	7.3	2599.2	2599.2	.0
6.890	96.	268.	6.9	2603.9	2603.9	.0
6.983	70.	219.	8.5	2607.7	2607.9	-.2
7.074	83.	244.	7.6	2612.8	2612.9	-.1
7.157	88.	237.	7.8	2619.1	2619.1	.0
7.275	86.	246.	7.5	2624.0	2624.2	-.2
7.375	71.	221.	8.4	2631.4	2631.4	.0
7.468	108.	356.	5.2	2634.8	2633.9	.9
7.559	99.	250.	7.4	2639.1	2639.1	.0
7.641	89.	269.	6.9	2642.3	2642.0	.3
7.747	100.	244.	7.6	2647.3	2647.2	.1
7.834	91.	289.	6.4	2651.2	2650.9	.3
7.908	288.	423.	4.4	2654.5	2654.6	-.1
.012	247.	386.	4.8	2658.5	2658.5	.0
8.124	195.	342.	5.4	2664.2	2664.2	.0
8.207	100.	251.	7.4	2668.9	2668.5	.4
8.317	105.	279.	6.6	2673.9	2673.7	.2
8.408	101.	255.	7.3	2678.9	2678.9	.0
8.510	100.	264.	7.0	2685.2	2684.8	.4
8.603	100.	264.	7.0	2691.1	2690.8	.3
8.715	93.	246.	7.5	2697.9	2698.0	-.1
8.798	100.	334.	5.5	2701.2	2700.8	.4
8.889	100.	250.	7.4	2705.9	2705.5	.4
8.984	177.	331.	5.6	2712.8	2712.8	.0
9.043	128.	323.	5.7	2714.8	2714.8	.0
9.142	76.	224.	8.3	2722.1	2722.1	.0
9.246	97.	254.	7.3	2727.3	2727.4	-.1
9.313	100.	259.	7.2	2733.1	2732.7	.4
9.430	103.	262.	7.1	2738.3	2738.2	.1
9.513	100.	257.	7.2	2745.0	2744.7	.3
9.598	106.	259.	7.2	2750.3	2750.3	.0
9.695	100.	256.	7.2	2758.1	2758.1	.0
-6.568	157.	588.	3.2	2588.5	2587.8	.7
.129	241.	297.	5.2	2594.0	2594.0	.0
.162	87.	214.	7.3	2595.2	2595.2	.0
.214	86.	217.	7.2	2598.4	2598.1	.3
.309	85.	216.	7.2	2603.4	2603.3	.1
-3.093	123.	397.	9.2	2403.4	2403.4	.0
.195	136.	412.	8.9	2409.8	2409.8	.0

FLOODWAY DATA, WASH AI: HARTMAN WASH
PROFILE NO. 2

STATION	------- FLOODWAY ------- WIDTH	SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
.064	244.	516.	6.2	2417.4	2417.5	-.1
.122	153.	369.	8.7	2421.2	2421.2	.0
.168	145.	389.	8.3	2425.1	2425.1	.0
.272	302.	565.	5.7	2431.9	2431.9	.0
.366	272.	654.	4.9	2436.1	2436.1	.0

Wickenburg ADMS FCD 89-79

EXPLANATORY NOTES FOR
FORM 4 SECTION 5 PARAGRAPH 1.C

This watercourse islocated in a mountainous area. It is common for this watercourse to flow in subcritical, supercritical, and transitional flow regimes. The subcritical profile has been used to delineate the 100 year floodplain and prepare maps, tables, etc.

BRIDGE

FEDERAL EMERGENCY MANAGEMENT AGENCY BRIDGE/CULVERT FORM	O.M.B. Burden No. 3067-0148 Expires July 31, 1994	FEMA USE ONLY

PUBLIC BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 2 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W., Washington, DC 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0148), Washington, DC 20503.

Community Name: Unincorporated Maricopa County / Town of Wickenburg

Flooding Source: WASH AT: HAETMAN WASH

Project Name/Identifier: Wickenburg ADMS FCD 89-79

1. IDENTIFIER

1. Name of roadway, railroad, etc.: AT & SF RAILWAY
2. Location of bridge/culvert along flooding source (in terms of stream distance or cross-section identifier): Station 0.144 to Station 0.147
3. This revision reflects *(check one of the following)*:
   - ☒ New bridge/culvert not modeled in the FIS
   - ☐ Modified bridge/culvert previously modeled in the FIS
   - ☐ New analysis of bridge/culvert previously modeled in the FIS

   (Explain why new analysis was performed)

2. BACKGROUND

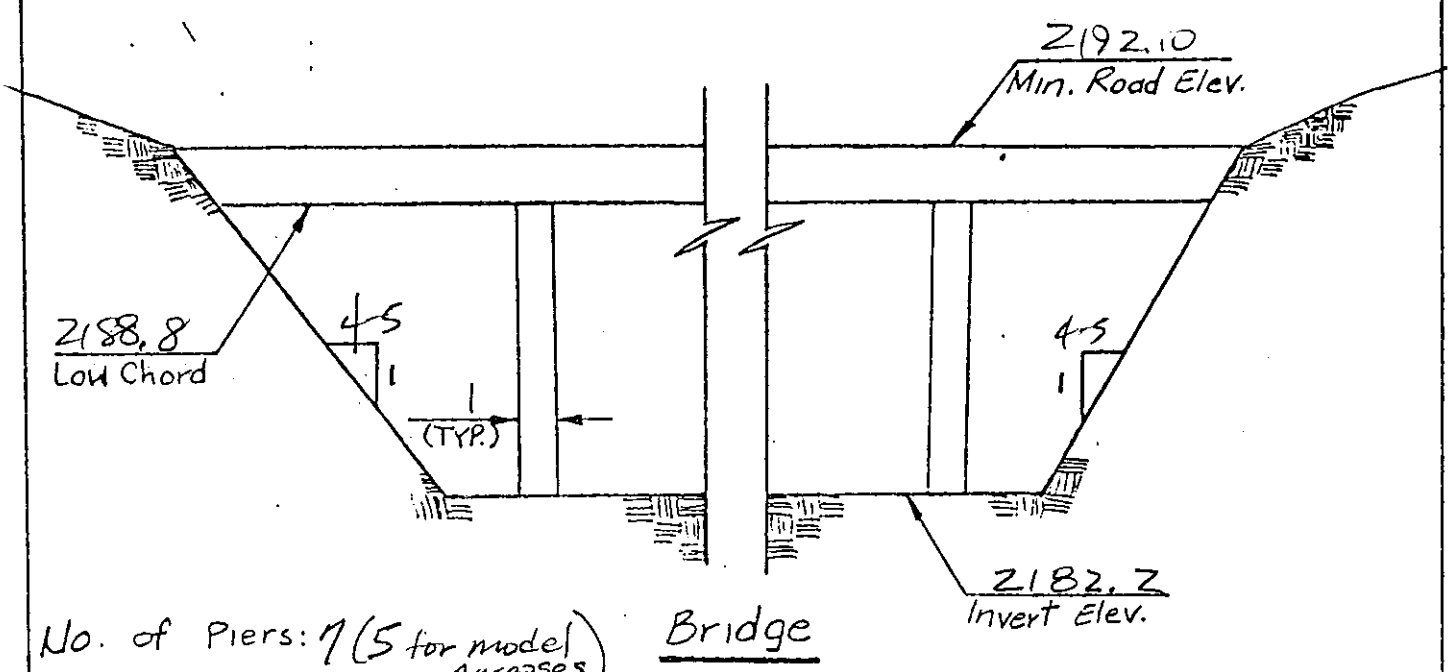
Provide the following information about the structure:

1. Dimension, material, and shape (e.g. two 10 x 5 feet reinforced concrete box culvert; three 30-foot span bridge with 2 rows of two 3- foot diameter circular piers; 40-foot wide ogee shape spillway) Eight 13-ft span wood bridge with 7 rows of ~~5~~ five 1ft diameter circular piers, 2 of which are virtually buried by sloping embankment.
2. Entrance geometry of culvert/type of bridge opening (e.g. 30° - 75° wing walls with square top edge, sloping embankments and vertical abutments) Sloping embankments, buried abutments
3. Hydraulic model used to analyze the structure *(e.g., HEC-2 with special bridge routine, WSPRO, HY8)* HEC-2 with special bridge routine

   If different than hydraulic analysis for the flooding source, justify why the hydraulic analysis used for the flooding source could not analyze the structure(s). *(Attach justification)*

Note: If any items do not apply to submitted hydraulic analysis, indicate by N/A
* One form per new/revised bridge/culvert

Sketch the downstream face of the structure together with the road profile. Show, at a minimum, the maximum low chord elevation, invert elevation, minimum top of road elevation, and ineffective flow widths.

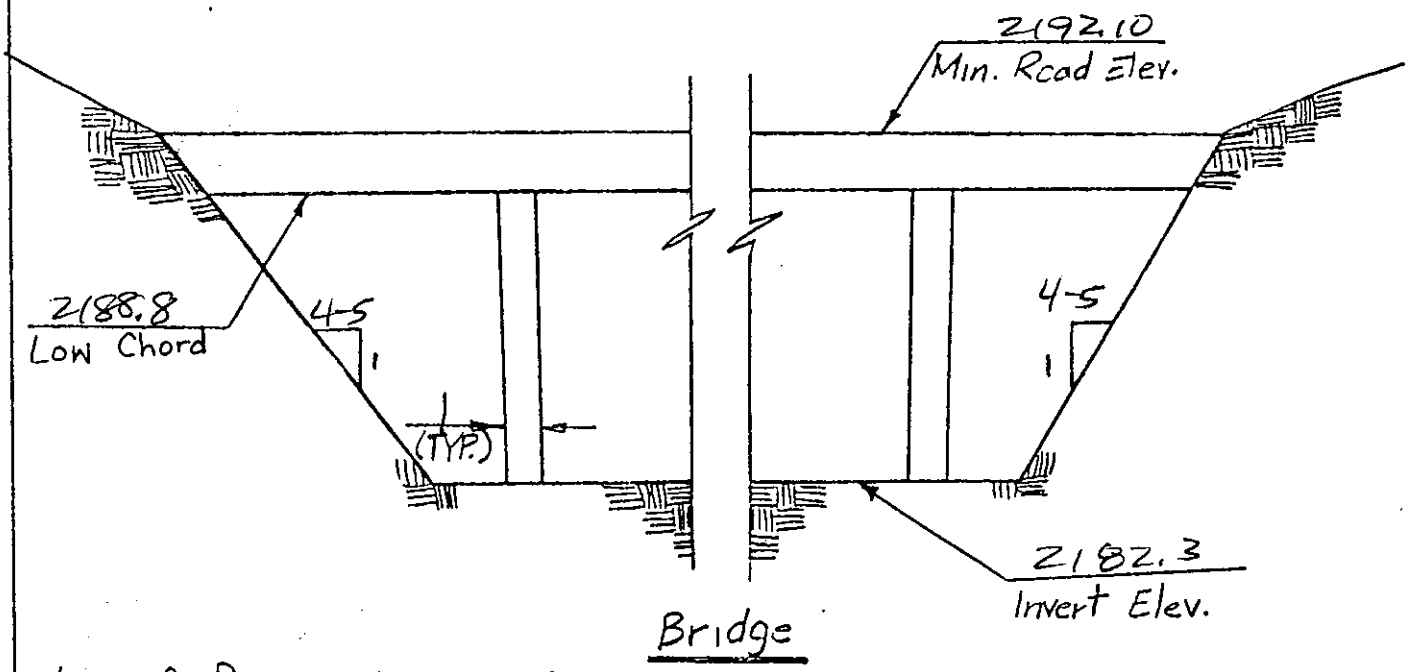


No. of Piers: 7 (5 for model purposes)

Total Width of Piers: 5 ft

See Cross Section #0.144

Sketch the upstream face of the structure together with the road profile. Show, at a minimum, the maximum low chord elevation, invert elevation, and minimum top of road elevation.

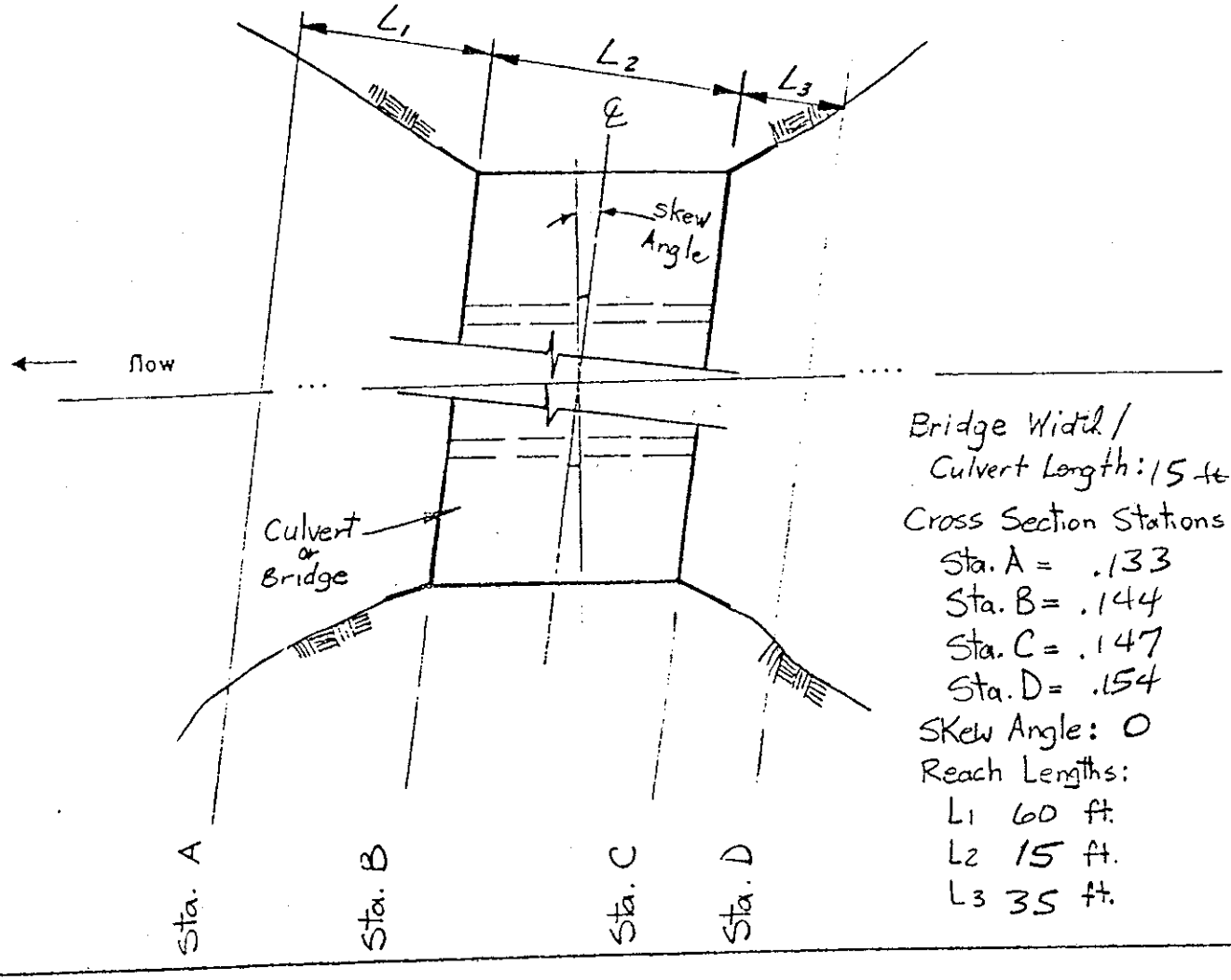


No. of Piers: AS ABOVE

Total Width of Piers:

See Cross Section #0.147

Sketch the plan view of the structure(s) Show, at a minimum, the skew angle, cross-section locations, distances between cross sections, and length of structure (s).



Bridge Width / Culvert Length: 15 ft
Cross Section Stations
Sta. A = .133
Sta. B = .144
Sta. C = .147
Sta. D = .154
Skew Angle: 0
Reach Lengths:
L1 60 ft.
L2 15 ft.
L3 35 ft.

Attach plans of the structure (s) certified by a registered Professional Engineer.

Culvert length or bridge width (ft)	15
Calculated culvert/bridge area (ft²) by the hydraulic model, if applicable	507
Total culvert/bridge area (ft²)	507

Elevations Above Which Flow is Effective for Overbanks

	Left Overbank	Right Overbank
Upstream face .147	2192.5	2192.10
Downstream face .144	2192.5	2192.10

Minimum Top of Road Elevation

	Left Overbank	Right Overbank
Upstream face	2192.50	2192.10
Downstream face	2192.50	2192.10

100-Year Elevations	Water Surface Elevations	Energy Gradient Elevations
Upstream face .147	2188.96	2189.24
Downstream face .144	2188.70	2188.99

Discharge	Low Flow	Pressure Flow	Weir Flow	Total Flow
Amount of flow through/over the structure (s) (cfs)	—	2350	—	2350

The maximum depth of flow over the roadway/railroad (ft.) ..... NA

Weir length (ft.) ..... NA

Top Widths

	Floodplain	Floodway
Upstream face	83	83
Downstream face	83	83

Top Widths

	Effective Flow	Effective and Ineffective Flow
Upstream face	83	83
Downstream face	83	83

Loss Coefficients

Entrance loss coefficient	—
Manning's "n" value assigned to the structure(s)	.025
Friction loss coefficient through structure (s)	—
Other loss coefficients (e.g., bend manhole, etc.)	—
Total loss coefficient	1.64
Weir coefficient	NA
Pier coefficient	1.05
Contraction loss coefficient	0.3
Expansion loss coefficient	0.5

4. SEDIMENT TRANSPORT CONSIDERATIONS

1. A. Is there any indication from historical records that sediment transport (*including scour and deposition*) can affect the *100-year water surface elevations?* ..... ☐ Yes ☐ No

B Based on the conditions (*such as geomorphology, vegetative cover and development of the watershed and stream bed, and bank conditions*), is there a potential for debris and sediment transport (*including scour and deposition*) to affect the 100-year water surface elevations and/or conveyance capacity through the bridge/culvert? ..... ☐ Yes ☐ No

.. If the answer to either 1A or 1B is yes:

A. What is the estimated sediment (*bed material*) load?
_____cfs (*attach gradation curve*)

Explain method used to estimate the sediment transport and the depth of scour and/or deposition NA - Sediment transport not considered in analysis.

B. Will sediment accumulate anywhere through the bridge/culvert? ☐ Yes ☐ No

If yes, explain the impact on the conveyance capacity through the bridge/culvert?_____

5. FLOODWAY ANALYSIS

Explain method of bridge encroachment (floodway run) _____

Comments (explain any unusual situations):

Low right bank levee just upstream of bridge modeled using split flow option. Diverted flow enters Sols Wash approximately 800 ~~ft~~ ft downstream along Railroad embankment.

Attach analysis.

FEDERAL EMERGENCY MANAGEMENT AGENCY BRIDGE/CULVERT FORM	O.M.B. Burden No. 3067-0148 Expires July 31, 1994	FEMA USE ONLY

PUBLIC BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 2 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W., Washington, DC 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0148), Washington, DC 20503.

Community Name: Unincorporated Maricopa County / Town of Wickenburg

Flooding Source: WASH AE: HARTMAN WASH

Project Name/Identifier: Wickenburg ADMS FCD 89-79

1. IDENTIFIER

1. Name of roadway, railroad, etc.: U.S. Hwy 60
2. Location of bridge/culvert along flooding source (in terms of stream distance or cross-section identifier): Station 3.919 to Station 3.926
3. This revision reflects *(check one of the following)*:
   - ☒ New bridge/culvert not modeled in the FIS
   - ☐ Modified bridge/culvert previously modeled in the FIS
   - ☐ New analysis of bridge/culvert previously modeled in the FIS

   (Explain why new analysis was performed) _____

2. BACKGROUND

Provide the following information about the structure:

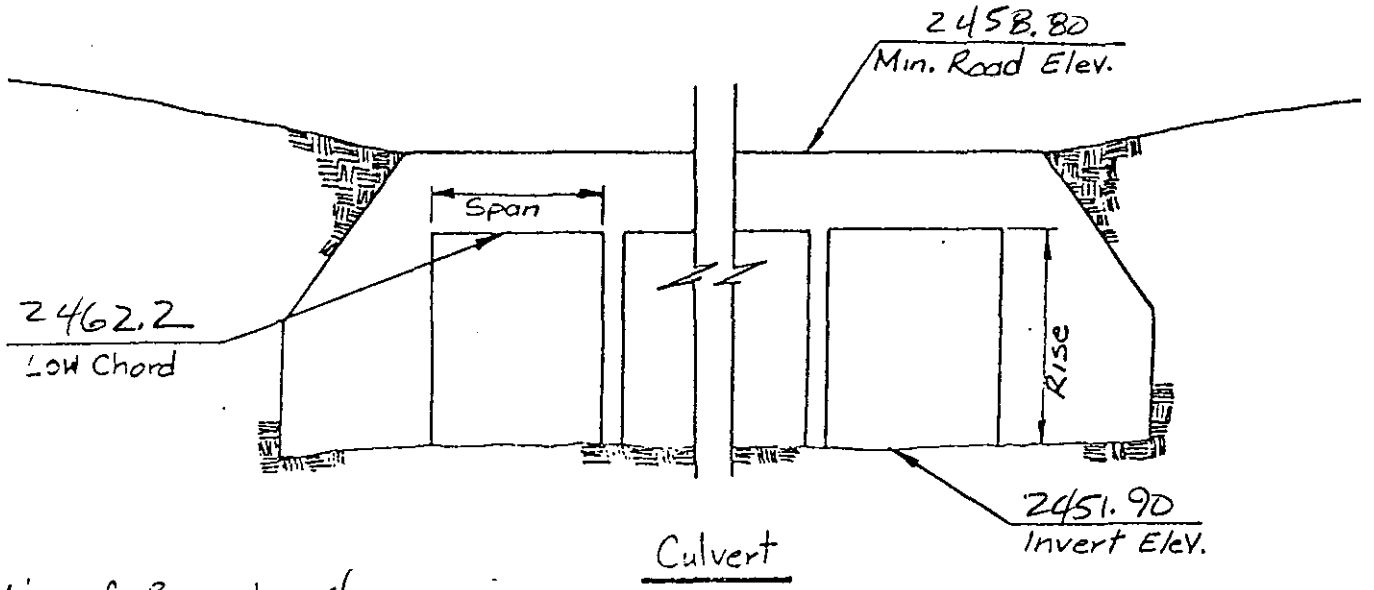
1. Dimension, material, and shape (e.g. two 10 x 5 feet reinforced concrete box culvert; three 30-foot span bridge with 2 rows of two 3- foot diameter circular piers; 40-foot wide ogee shape spillway) Four 12x8-ft reinforced concrete box culvert
2. Entrance geometry of culvert/type of bridge opening (e.g. 30° - 75° wing walls with square top edge, sloping embankments and vertical abutments) 30°-75° Wing Walls with square top edge.
3. Hydraulic model used to analyze the structure (*e.g., HEC-2 with special bridge routine, WSPRO, HY8*) HEC-2 with Normal Bridge (Low chord higher than top of road in XSection).

If different than hydraulic analysis for the flooding source, justify why the hydraulic analysis used for the flooding source could not analyze the structure(s). *(Attach justification)*

Note: If any items do not apply to submitted hydraulic analysis, indicate by N/A

* One form per new/revised bridge/culvert

Sketch the downstream face of the structure together with the road profile. Show, at a minimum, the maximum low chord elevation, invert elevation, minimum top of road elevation, and ineffective flow widths.



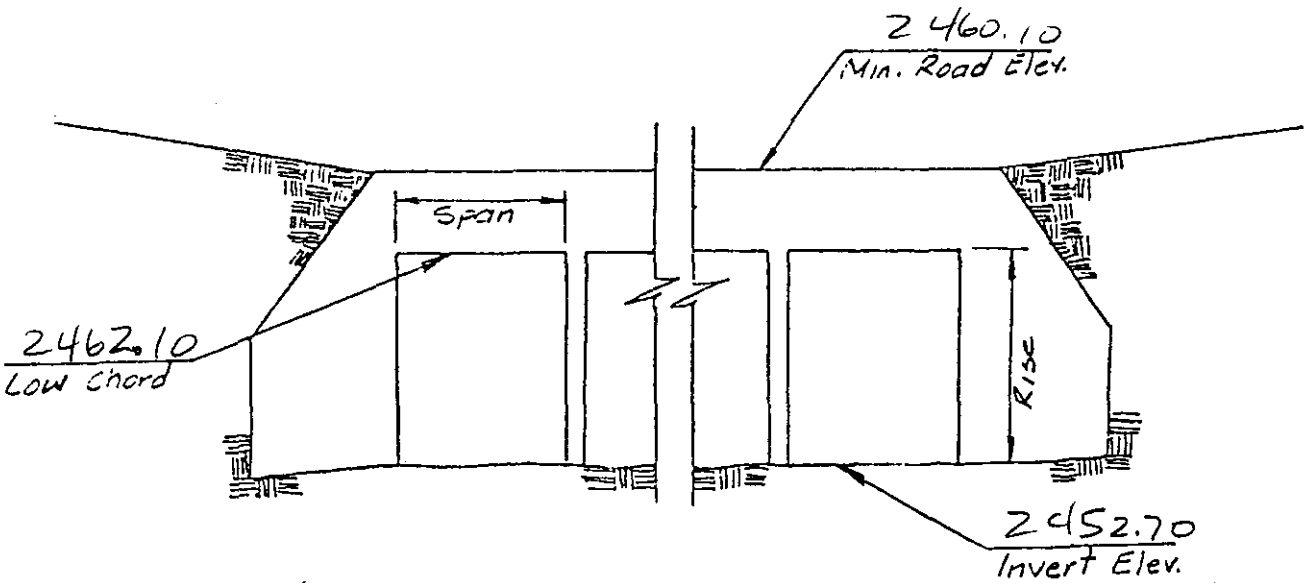
No. of Barrels: 4

Culvert Size: 12x8

Approx. Depth of Sediment in Culvert: —

See Cross Section # 3.919

Sketch the upstream face of the structure together with the road profile. Show, at a minimum, the maximum low chord elevation, invert elevation, and minimum top of road elevation.



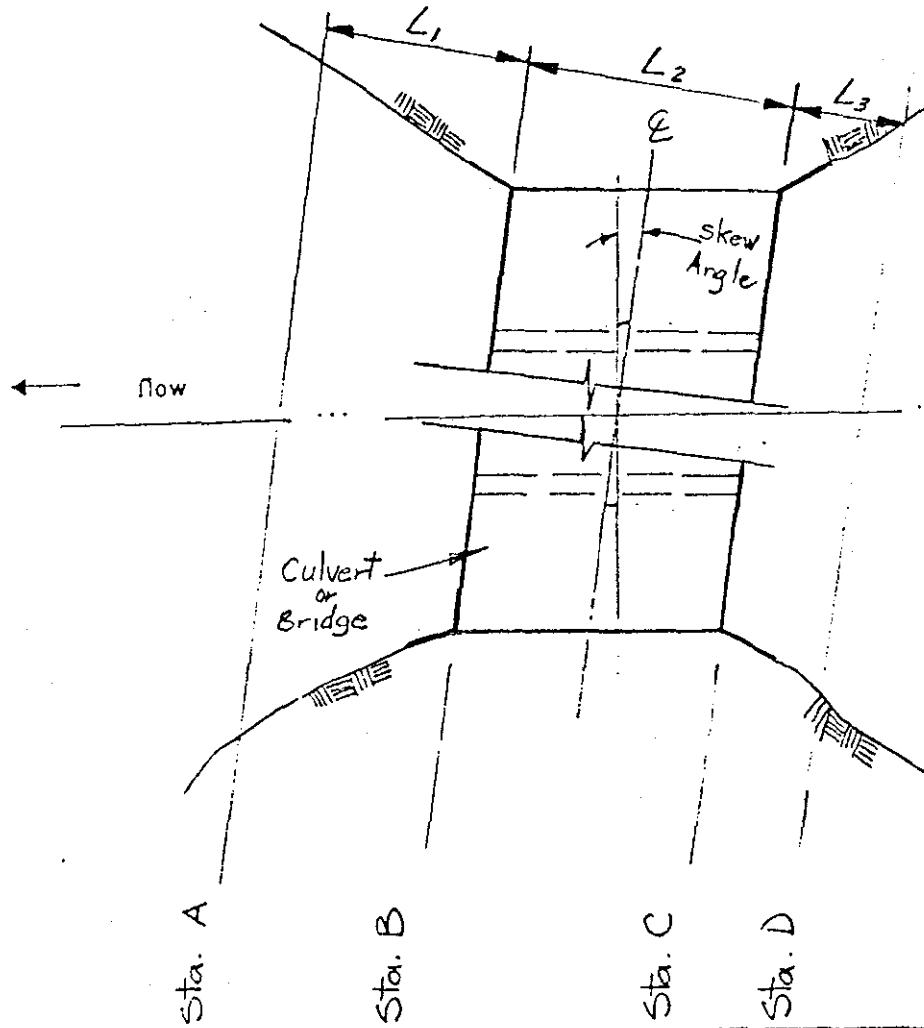
No. of Barrels: 4

Culvert Size: 12x8

Approx. Depth of Sediment in Culvert: —

See Cross Section # 3.926

Sketch the plan view of the structure(s) Show, at a minimum, the skew angle, cross-section locations, distances between cross sections, and length of structure (s).



Bridge Width / Culvert Length: 42

Cross Section Stations

Sta. A = 3.918*

Sta. B = 3.919

Sta. C = 3.926

Sta. D = 4.023

Skew Angle: 30

Reach Lengths:

L1 1* ft.

L2 42 ft.

L3 510 ft.

Attach plans of the structure (s) certified by a registered Professional Engineer.

Culvert length or bridge width (ft)	42
Calculated culvert/bridge area (ft²) by the hydraulic model, if applicable	—
Total culvert/bridge area (ft²)	192

*1.3 FT DROP at DS FACE OF CULVERT 3.911 → 3.918 = 39 ft.

Elevations Above Which Flow is Effective for Overbanks

	Left Overbank	Right Overbank
Upstream face	2462.70	2460.10
Downstream face	2462.70	2459.90

Minimum Top of Road Elevation

	Left Overbank	Right Overbank
Upstream face	2462.20	2460.10
Downstream face	2462.20	2458.80

100-Year Elevations	Water Surface Elevations	Energy Gradient Elevations
Upstream face	2458.72	2461.73
Downstream face	2457.90	2460.93

Discharge	Low Flow	Pressure Flow	Weir Flow	Total Flow
Amount of flow through/over the structure (s) (cfs)	3641	—	*	3641

The maximum depth of flow over the roadway/railroad (ft.) ..... — 1.63 FT

Weir length (ft.) ..... —

Top Widths

	Floodplain	Floodway
Upstream face	43.43	43.43
Downstream face	43.43	43.43

Top Widths

	Effective Flow	Effective and Ineffective Flow
Upstream face	43.43	43.43
Downstream face	43.43	43.43

* DIVIDED FLOW - ROAD ACTS AS WEIR IN R. OVERBANK IF MAPPED TO EGL

Loss Coefficients

Entrance loss coefficient	—
Manning's "n" value assigned to the structure(s)	.015
Friction loss coefficient through structure (s)	—
Other loss coefficients (e.g., bend manhole, etc.)	—
Total loss coefficient	—
Weir coefficient	NA
Pier coefficient	—
Contraction loss coefficient	0.6
Expansion loss coefficient	0.8

4. SEDIMENT TRANSPORT CONSIDERATIONS

1. A. Is there any indication from historical records that sediment transport *(including scour and deposition)* can affect the 100-year water surface elevations? ..... ☐ Yes ☐ No

B Based on the conditions *(such as geomorphology, vegetative cover and development of the watershed and stream bed, and bank conditions)*, is there a potential for debris and sediment transport *(including scour and deposition)* to affect the 100-year water surface elevations and/or conveyance capacity through the bridge/culvert? ..... ☐ Yes ☐ No

.. If the answer to either 1A or 1B is yes:

A. What is the estimated sediment *(bed material)* load?
_____ cfs *(attach gradation curve)*

Explain method used to estimate the sediment transport and the depth of scour and/or deposition NA - Sediment transport not considered in analysis.

B. Will sediment accumulate anywhere through the bridge/culvert? ☐ Yes ☐ No

If yes, explain the impact on the conveyance capacity through the bridge/culvert? _____

5. FLOODWAY ANALYSIS

Explain method of bridge encroachment (floodway run) NA

Comments *(explain any unusual situations)*:

On the right overbank of this culvert the top of road is lower than the top of the box opening. Special culvert and special bridge routines will not model weir flow until pressure flow occurs, so normal bridge routine was used.

Attach analysis.

FEDERAL EMERGENCY MANAGEMENT AGENCY BRIDGE/CULVERT FORM	O.M.B. Burden No. 3067-0148 Expires July 31, 1994	FEMA USE ONLY

PUBLIC BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 2 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W., Washington, DC 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0148), Washington, DC 20503.

Community Name: Unincorporated Maricopa County / Town of Wickenburg

Flooding Source: WASH A-I: HARTMAN WASH

Project Name/Identifier: Wickenburg ADMS FCD 89-79

1. IDENTIFIER

1. Name of roadway, railroad, etc.: OLD U.S. HWY 60 (ABANDONED)
2. Location of bridge/culvert along flooding source (in terms of stream distance or cross-section identifier): Station 5.532 to Station 5.538
3. This revision reflects (*check one of the following*):
   - ☒ New bridge/culvert not modeled in the FIS
   - ☐ Modified bridge/culvert previously modeled in the FIS
   - ☐ New analysis of bridge/culvert previously modeled in the FIS

   (*Explain why new analysis was performed*) _____

2. BACKGROUND

Provide the following information about the structure:

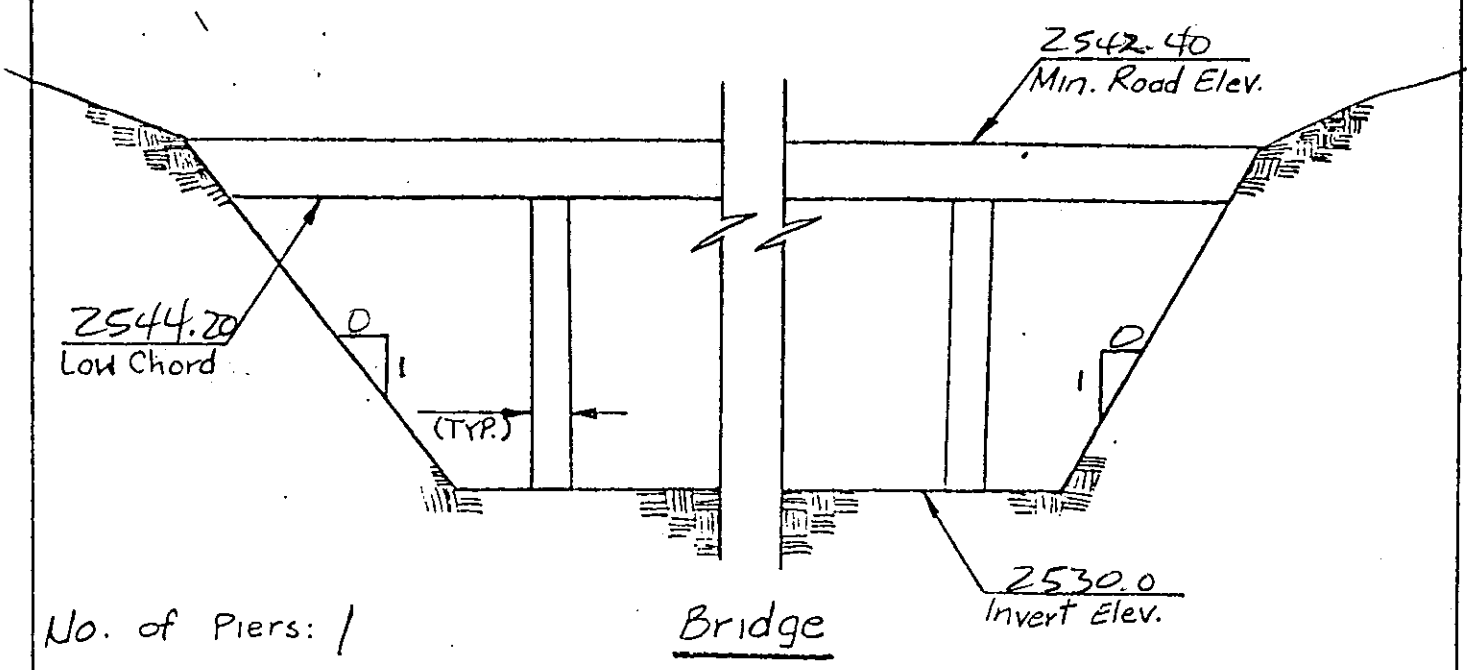
1. Dimension, material, and shape (e.g. two 10 x 5 feet reinforced concrete box culvert; three 30-foot span bridge with 2 rows of two 3- foot diameter circular piers; 40-foot wide ogee shape spillway) Two 17-ft span bridge with square nose and tail pier
2. Entrance geometry of culvert/type of bridge opening (e.g. 30°-75° wing walls with square top edge, sloping embankments and vertical abutments) ~~Sloping embankments~~ Opening has 30°-75° wing walls, vertical abutments as culvert.
3. Hydraulic model used to analyze the structure (*e.g., HEC-2 with special bridge routine, WSPRO, HY8*) HEC-2 with normal bridge (see comments pg 6)

If different than hydraulic analysis for the flooding source, justify why the hydraulic analysis used for the flooding source could not analyze the structure(s). (*Attach justification*)

Note: If any items do not apply to submitted hydraulic analysis, indicate by N/A

* One form per new/revised bridge/culvert

Sketch the downstream face of the structure together with the road profile. Show, at a minimum, the maximum low chord elevation, invert elevation, minimum top of road elevation, and ineffective flow widths.

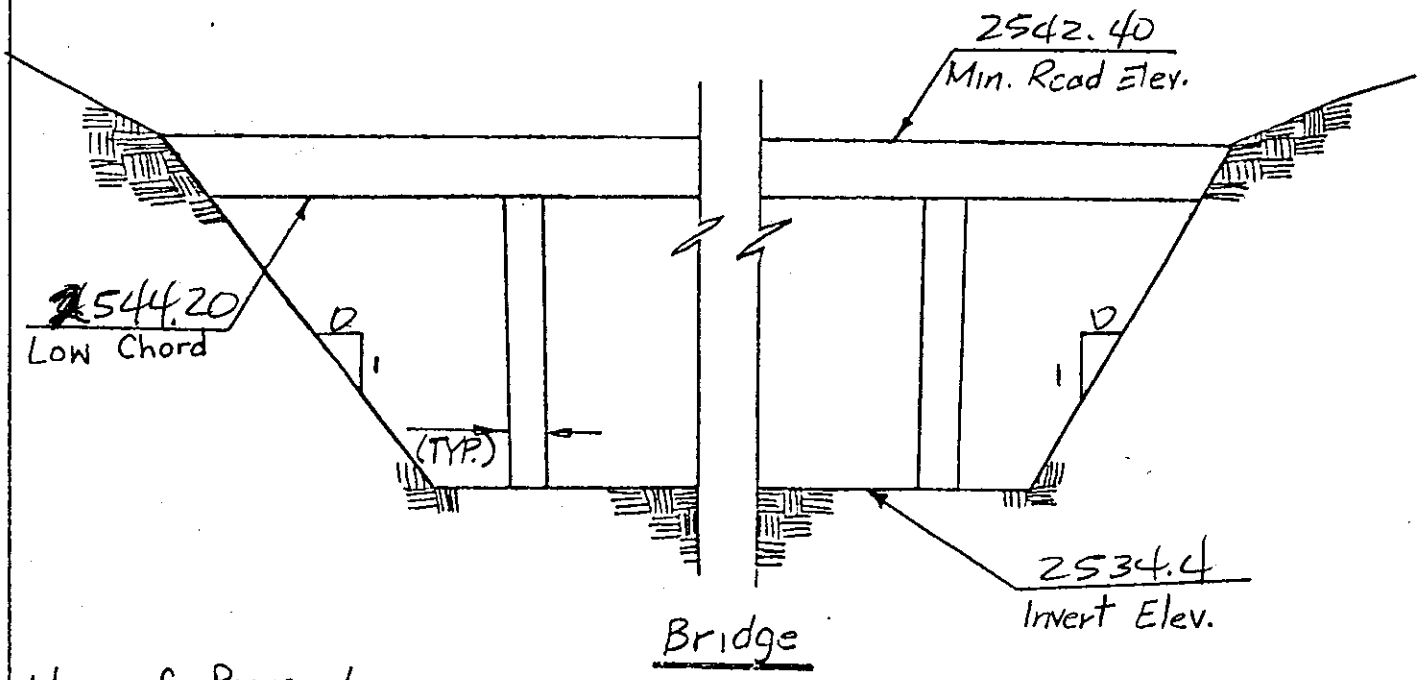


No. of Piers: 1

Total Width of Piers: 1.75'

See Cross Section #5.532

Sketch the upstream face of the structure together with the road profile. Show, at a minimum, the maximum low chord elevation, invert elevation, and minimum top of road elevation.

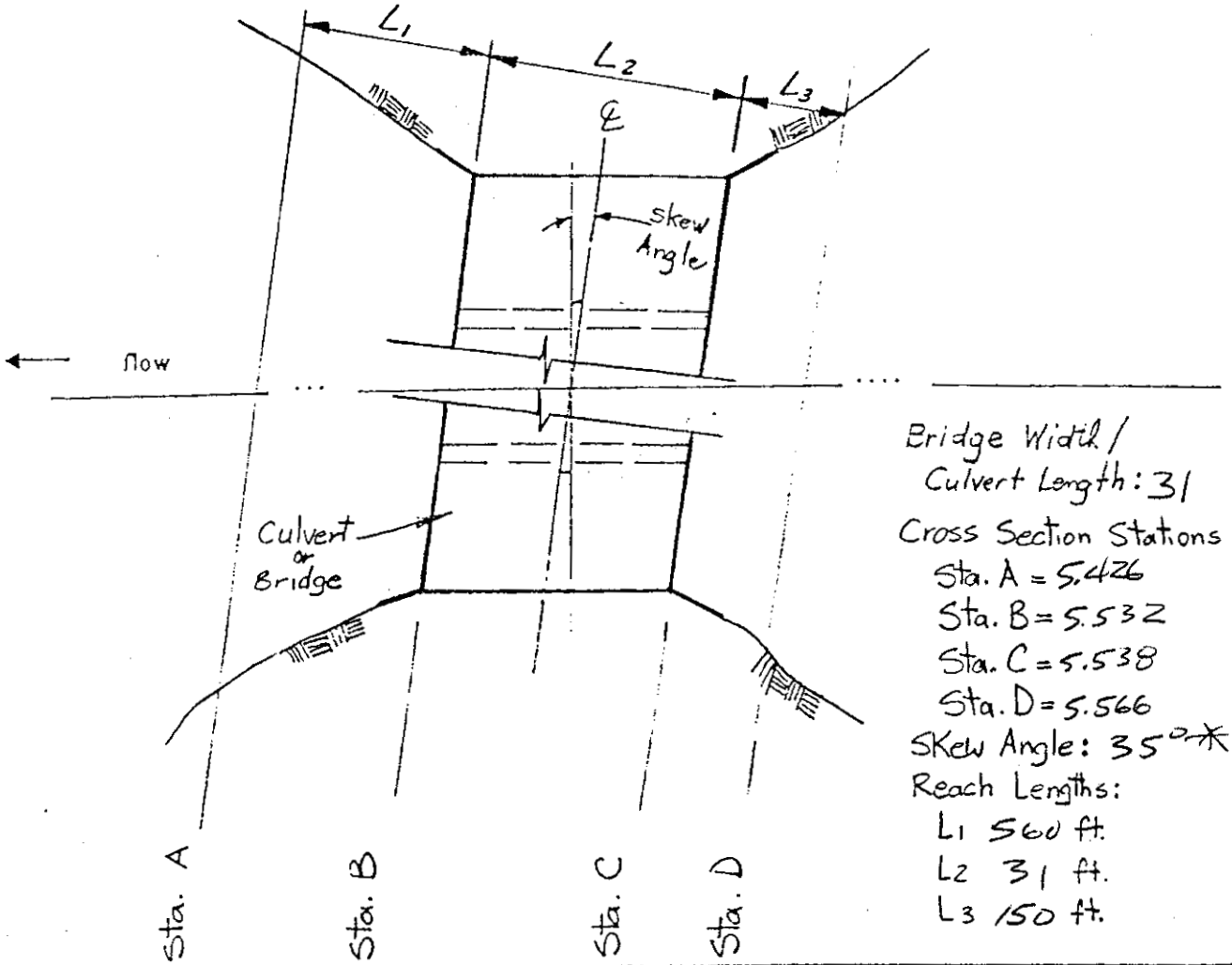


No. of Piers: 1

Total Width of Piers: 1.75'

See Cross Section #5.538

etch the plan view of the structure(s) Show, at a minimum, the skew angle, cross-section locations, distances tween cross sections, and length of structure (s).



Bridge Width / Culvert Length: 31

Cross Section Stations

Sta. A = 5.426

Sta. B = 5.532

Sta. C = 5.538

Sta. D = 5.566

Skew Angle: 35° *

Reach Lengths:

L1 560 ft.

L2 31 ft.

L3 150 ft.

Attach plans of the structure (s) certified by a registered Professional Engineer.

Culvert length or bridge width (ft)	31
Calculated culvert/bridge area (ft²) by the hydraulic model, if applicable	—
Total culvert/bridge area (ft²)	306

* Section adjusted for skew ~~[illegible]~~

Elevations Above Which Flow is Effective for Overbanks

	Left Overbank	Right Overbank
Upstream face	2545.70	2542.40
Downstream face	2545.70	2542.40

Minimum Top of Road Elevation

	Left Overbank	Right Overbank
Upstream face	2545.70	2542.40
Downstream face	2545.70	2542.40

100-Year Elevations	Water Surface Elevations	Energy Gradient Elevations
Upstream face	2544.85	2545.69
Downstream face	2544.73	2545.52

Discharge	Low Flow	Pressure Flow	Weir Flow	Total Flow
Amount of flow through/over the structure (s) (cfs)				3641*

The maximum depth of flow over the roadway/railroad (ft.) 3.7

Weir length (ft.) 508

Top Widths

	Floodplain	Floodway
Upstream face	508.99	508.99
Downstream face	471.88	471.88

Top Widths

	Effective Flow	Effective and Ineffective Flow
Upstream face	508.99	508.99
Downstream face	471.88	471.88

* Divided flow, road acts as weir in R. overbank ~ 400 ft from ~~culvert~~ bridge

Loss Coefficients

Entrance loss coefficient	—
Manning's "n" value assigned to the structure(s)	0.020
Friction loss coefficient through structure (s)	—
Other loss coefficients (e.g., bend manhole, etc.)	—
Total loss coefficient	—
Weir coefficient	—
Pier coefficient	—
Contraction loss coefficient	0.3
Expansion loss coefficient	0.5

4. SEDIMENT TRANSPORT CONSIDERATIONS

1. A. Is there any indication from historical records that sediment transport (*including scour and deposition*) can affect the 100-year water surface elevations? ..... ☐ Yes ☐ No

B Based on the conditions (*such as geomorphology, vegetative cover and development of the watershed and stream bed, and bank conditions*), is there a potential for debris and sediment transport (*including scour and deposition*) to affect the 100-year water surface elevations and/or conveyance capacity through the bridge/culvert? ..... ☐ Yes ☐ No

.. If the answer to either 1A or 1B is yes:

A. What is the estimated sediment (*bed material*) load?
_____cfs (*attach gradation curve*)

Explain method used to estimate the sediment transport and the depth of scour and/or deposition NA - Sediment transport not considered in analysis.

B. Will sediment accumulate anywhere through the bridge/culvert? ☐ Yes ☐ No

If yes, explain the impact on the conveyance capacity through the bridge/culvert? _____

5. FLOODWAY ANALYSIS

Explain method of bridge encroachment (floodway run) _____

Comments (*explain any unusual situations*):

Approximately 400 ft into the right overbank the top of road is lower than the bridge low chord.

Attach analysis.

FEDERAL EMERGENCY MANAGEMENT AGENCY RIVERINE/COASTAL MAPPING FORM	O.M.B. Burden No. 3067-0148 Expires July 31, 1994	FEMA USE ONLY

PUBLIC BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 1.5 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W., Washington, DC 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0148), Washington, DC 20503.

Community Name: Unincorporated Maricopa County/Town of Wickenburg

Flooding Source: WASH AE: HARTMAN WASH

Project Name/Identifier: Wickenburg ADMS FCD 89-79

1. MAPPING CHANGES

1. A topographic work map of suitable scale, contour interval, and planimetric definition must be submitted showing *(Indicate N/A when not applicable)*:

		Included		
A.	Revised approximate 100-year floodplain boundaries (Zone A)	☐ Yes	☒ No	☐ N/A
B.	Revised detailed 100- and 500-year floodplain boundaries	☒ Yes	☐ No	☐ N/A
C.	Revised 100-year floodway boundaries	☒ Yes	☐ No	☐ N/A
D.	Location and alignment of all cross sections used in the revised hydraulic model with stationing control indicated	☒ Yes	☐ No	☐ N/A
E.	Stream alignments, road and dam alignments	☒ Yes	☐ No	☐ N/A
F.	Current community boundaries	☒ Yes	☐ No	☐ N/A
G.	Effective 100- and 500-year floodplain and 100-year floodway boundaries from the FIRM/FBFM reduced or enlarged to the scale of the topographic work map	☐ Yes	☐ No	☒ N/A
H.	Tie-ins between the effective and revised 100- and 500-year floodplains and 100-year floodway boundaries	☐ Yes	☐ No	☒ N/A
I.	The requestor's property boundaries and community easements	☐ Yes	☐ No	☒ N/A
J.	The signed certification of a registered professional engineer	☒ Yes	☐ No	☐ N/A
K.	Location and description of reference marks	☒ Yes	☐ No	☐ N/A
L.	Vertical datum (example: NGVD, NAVD etc.)	☒ Yes	☐ No	☐ N/A
M.	Coastal zone designations tie into adjacent areas not being revised	☐ Yes	☐ No	☒ N/A
N.	Location and alignment of all coastal transects used to revise the coastal analyses	☐ Yes	☐ No	☒ N/A

If any of the items above are marked no or N/A, please explain: No Zone A, 500-year, or coastal zones revised or delineated. Revised 100-year floodplains tie into effective Hassayampa River floodplain.

2. What is the source and date of the updated topographic information *(example: orthophoto maps, July 1985; field survey, May 1979, beach profiles, June 1987, etc.)*? Photo: Jan. 1991 (E), Oct 1990 (W); Maps 1992

3. What is the scale and contour interval of the following work maps?
   a. Effective FIS unknown scale unknown Contour interval
   b. Revision Request 1" = 200' scale 2 FT AND 4 FT Contour interval

NOTE: Revised topographic information must be of equal or greater detail.

4. Attach an annotated FIRM and FBFM at the scale of the effective FIRM and FBFM showing the revised 100-year and 500-year floodplains and the 100-year floodway boundaries and how they tie into those shown on the effective FIRM and FBFM downstream and upstream of the revision or adjacent to the area of revision for coastal studies.

Attach additional pages if needed.

5. Flood Boundaries and 100-year water surface elevations:

Has the 100-year floodplain been shifted or increased or the 100-year water surface elevation increased at any location on property other than the requestor's or community's? ☐ Yes ☒ No

If yes, please give the location of shift or increase and an explanation for the increase.

New ~~Revised~~ detailed 100-year floodplain; replaces effective Zone A floodplain near airport.

a. Have the affected property owners been notified of this shift or increase and the effect it will have on their property? ..... ☐ Yes ☒ No

If yes, please attach letters from these property owners stating they have no objections to the revised flood boundaries if a LOMR is being requested.

b. What is the number of insurable structures that will be impacted by this shift or increase? _____

6. Have the floodway boundaries shifted or increased at any location compared to those shown on the effective FBFM or FIRM? ..... ☐ Yes ☒ No

If yes, explain:

7. If a V-zone has been designated, has it been delineated to extend landward to the heel of the primary frontal dune? ☐ Yes ☒ No

If no, explain:

NA

8. Manual or digital map submission:

☒ Manual

☐ Digital

Digital map submissions may be used to update digital FIRMs (DFIRMs). For updating DFIRMs, these submissions must be coordinated with FEMA Headquarters as far in advance of submission as possible.

2. EARTH FILL PLACEMENT

1. The fill is: ☐ Existing ☐ Proposed ☒ N/A

2. Has fill been/will be placed in the regulatory floodway? ..... ☐ Yes ☒ No
   If yes, please attach completed Riverine Hydraulic Analysis Form.

3. Has fill been/will be placed in floodway fringe *(area between the floodway and 100-year floodplain boundaries)*? ..... ☐ Yes ☒ No

   If yes, then complete A, B, C, and D below.

   A. Are fill slopes for granular materials steeper than one vertical on one-and-one-half horizontal? ..... ☐ Yes ☐ No

   If yes, justify steeper slopes_____

   B. Is adequate erosion protection provided for fill slopes exposed to moving flood waters? *(Slopes exposed to flows with velocities of up to 5 feet per second (fps) during the 100-year flood must, at a minimum, be protected by a cover of grass, vines, weeds, or similar vegetation; slopes exposed to flows with velocities greater than 5 fps during the 100-year flood must, at a minimum, be protected by stone or rock riprap.)* ..... ☐ Yes ☐ No

   If no, describe erosion protection provided_____

   C. Has all fill placed in revised 100-year floodplain been compacted to 95 percent of the maximum density obtainable with the Standard Proctor Test Method or acceptable equivalent method? ☐ Yes ☐ No

   D. Can structures conceivably be constructed on the fill at any time in the future? ☐ Yes ☐ No

   If yes, provide certification of fill compaction (item C. above) by the community's NFIP permit official, a registered professional engineer, or an accredited soils engineer.

4. Has fill been/will be placed in a V-zone? ☐ Yes ☒ No

   If yes, is the fill protected from erosion by a flood control structure such as a revetment or seawall? ☐ Yes ☐ No

   If yes, attach the coastal structures form.

```
*****************************************
*  HEC-2 WATER SURFACE PROFILES         *
*                                       *
*  Version   4.6.2;  May 1991           *
*                                       *
*  RUN DATE    07JUL92    TIME   15:51:00 *
*****************************************
```

```
*************************************
*  U.S. ARMY CORPS OF ENGINEERS     *
*  HYDROLOGIC ENGINEERING CENTER    *
*  609 SECOND STREET, SUITE D       *
*  DAVIS, CALIFORNIA 95616-4687     *
*          (916) 756-1104           *
*************************************
```

```
X     X  XXXXXXX   XXXXX             XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X        X                 X
X     X  X        X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
```

THIS RUN EXECUTED 07JUL92 15:51:00

```
*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************



SPLIT FLOW BEING PERFORMED


SF      RIGHT BANK LEVEE US FROM AT&SF RAILROAD


JC      ENERGY GRADE LINE USED TO DETERMINE WEIR FLOW
JP                              1

TW      RIGHT BANK LEVEE BETWEEN SECTIONS 0.147 & 0.154
WS     8   0.147   0.154      -1     2.8
WC     0  2192.2     7.7  2192.1    10.4  2192.0    14.2  2191.2    19.8  2190.6
WC  21.7  2190.3    26.4  2190.3    39.2  2190.4

        RIGHT BANK LEVEE BETWEEN SECTIONS 0.154 & 0.171
       8   0.154   0.171      -1     2.8
WC     0  2190.4     7.9  2190.5    16.4  2190.7    25.6  2190.8    38.3  2190.9
WC  51.2  2191.2    65.4  2191.5    80.0  2191.7

TW      RIGHT BANK LEVEE BETWEEN SECTIONS 0.171 & 0.216
WS    21   0.171   0.216      -1     2.8
WC     0  2191.7    12.3  2191.8    26.4  2192.0    42.5  2192.0    55.7  2192.1
WC  70.0  2192.1    90.9  2192.1   108.2  2192.2   128.8  2192.2   147.1  2192.2
WC 161.2  2192.3   170.0  2194.0   181.9  2196.0   190.1  2198.0   192.0  2200.0
WC 209.8  2202.0   212.0  2204.0   222.3  2206.0   240.0  2208.0   250.0  2208.2
WC 260.0  2208.0
```

```
      WICKENBURG ADMS: CONTRACT FCD 89-79
      BLACK & VEATCH PN 17676  COE & VAN LOO JN 1197-02
T3    WASH AI: HARTMAN WASH        (FILE LOWHRTMN.DAT)

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2        0        0    0.0140       0        0        0    2185.0     0

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

      1               -1                                     -1                         15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    150       200

NC    0.050     0.050     0.025       0.1       0.3
QT        2      3802      3802
ET                          9.1                                                        950.1     1046.3
            CONFLUENCE OF WASH AI: HARTMAN WASH
            AND SOLS WASH BETWEEN CROSS-SECTIONS
                AH (SOLS WASH RIVER MILE 3.07)
                AJ (SOLS WASH RIVER MILE 3.27)
            CROSS-SECTION DESIGNATION FROM
                SOLS WASH FLOODPLAIN DELINEATION
                HASSAYAMPA RIVER TO MARICOPA COUNTY LINE
                CELLA BARR ASSOCIATES

            SWSE DETERMINED BY SLOPE AREA METHOD

            SPLIT FLOW OPTION USED FROM XSECT 0.147 TO XSECT 0.216
            TO MODEL OVERFLOW LEVEE IN RIGHT OVERBANK.  THE PROGRAM
            WILL USE THE ENERGY GRADE LINE TO DETERMINE OVERFLOW.

            X3 RECORD: CONFINE FLOW TO THE CHANNEL
X1    0.095        72     950.1    1046.3         0         0         0
X3       10
GR  2192.1     571.1    2191.4     580.1    2190.7     589.2    2190.0     598.2    2190.0     608.3
GR  2189.9     618.5    2189.6     628.5    2189.3     638.5    2189.1     648.5    2188.8     658.5
GR  2188.5     668.5    2183.9     672.2    2183.9     681.6    2183.9     691.0    2183.9     700.4
GR  2183.9     709.8    2184.0     719.1    2184.0     728.5    2184.0     737.9    2184.0     747.3
GR  2184.0     757.6    2184.0     767.9    2184.1     778.1    2184.1     788.4    2184.1     798.7
GR  2184.1     809.0    2184.2     819.2    2184.2     829.5    2184.2     839.8    2184.1     852.1
GR  2184.1     864.4    2184.1     873.8    2184.2     883.1    2184.2     892.5    2184.1     903.4
GR  2184.1     914.4    2184.0     925.3    2187.9     937.6    2188.0     950.1    2187.5     954.8
GR  2187.0     959.5    2185.5     964.2    2185.2     969.9    2184.8     975.7    2183.9     978.4
GR  2182.9     986.0    2181.9     990.7    2180.0     995.3    2179.9    1000.0    2180.0    1005.3
GR  2181.4    1010.6    2182.2    1015.9    2182.9    1021.0    2183.5    1026.0    2185.7    1030.9
GR  2187.9    1035.8    2188.7    1041.1    2189.5    1046.3    2189.5    1099.7    2189.8    1109.2
GR  2190.1    1118.7    2190.2    1129.2    2190.2    1139.6    2190.3    1150.1    2190.4    1160.6
GR  2190.4    1171.0    2190.5    1181.5    2190.6    1191.7    2190.7    1201.9    2190.9    1212.1
    2191.0    1222.3    2191.1    1232.5
```

```
                        9.1                                                949.9    1056.3
X1    0.133      40    949.9    1056.3     200     200     200
GR   2190.2   912.5   2190.3     918.1  2190.4   923.7  2190.4   929.2  2190.5    934.8
GR   2190.4   939.8   2190.2     944.9  2190.1   949.9  2189.2   954.4  2188.4    959.0
GR   2187.5   963.5   2186.6     968.5  2185.6   973.4  2184.7   978.3  2183.8    983.3
GR   2183.6   984.8   2182.3     994.4  2182.1  1000.0  2182.2  1004.5  2182.4   1009.0
GR   2182.5  1013.5   2182.7    1018.0  2182.8  1022.5  2183.9  1027.3  2184.9   1032.1
GR   2186.9  1036.8   2188.0    1041.6  2188.7  1046.5  2189.3  1051.4  2190.0   1056.3
GR   2190.3  1063.2   2190.3    1068.4  2190.3  1073.6  2190.4  1078.9  2190.4   1084.1
GR   2190.4  1089.3   2190.4    1094.5  2190.5  1099.8  2190.5  1105.0  2190.5   1110.2

NC    0.050   0.050    0.025       0.3     0.5
            DS FACE: AT&SF RAILROAD BRIDGE (STRUCTURE AI-3)

              NOTE: CENTERLINE SECTION OF AT&SF RAILROAD WAS
                    USED TO CREATE THE DS FACE CROSS-SECTION
X1    0.144      34    958.5    1041.5      65      50      60
X2
X3       10                                                     2192.5   2192.1
GR   2194.0   609.0   2193.7     660.7  2193.7   668.6  2193.5   738.4  2193.3    790.1
GR   2193.3   799.7   2193.2     809.3  2193.2   819.0  2193.1   828.6  2193.1    847.8
GR   2193.0   857.4   2193.0     867.0  2192.9   876.7  2192.9   886.3  2192.8    895.9
GR   2192.8   905.5   2192.7     916.0  2192.7   926.5  2192.6   937.0  2192.6    947.5
GR   2192.5   958.0   2192.5    958.49  2182.2   958.5  2182.2   968.5  2182.2    979.0
GR   2182.2   989.5   2182.2    1000.0  2182.2  1029.8  2182.2  1039.7  2182.2   1041.5
     2192.2  1041.51  2192.2    1109.3  2192.1  1119.2  2192.1  1149.0

SB    1.05    1.64     2.8         0    83.0       5   507.0       0  2182.3   2182.2
            US FACE: AT&SF RAILROAD BRIDGE (STRUCTURE AI-3)

              NOTE: CENTERLINE SECTION OF AT&SF RAILROAD WAS
                    USED TO CREATE THE US FACE CROSS-SECTION
X1    0.147      34    958.5    1041.5    14.7    14.7    14.7
X2                        1    2188.8  2192.1                      1.33
X3       10                                                     2192.5   2192.1
BT      -34   609.0   2194.0             660.7  2193.8           668.6   2193.7
BT            738.4   2193.5             790.1  2193.3           799.7   2193.3
BT            809.3   2193.2             819.0  2193.2           828.6   2193.1
BT            847.8   2193.1             857.4  2193.0           867.0   2193.0
BT            876.7   2192.9             886.3  2192.9           895.9   2192.8
BT            905.5   2192.8             916.0  2192.7           926.5   2192.7
BT            937.0   2192.6             947.5  2192.6           958.0   2192.5
BT           958.49   2192.5            958.5   2192.5           968.5   2192.5
BT            979.0   2192.4             989.5  2192.4          1000.0   2192.3
BT           1029.8   2192.3            1039.7  2192.2          1041.5   2192.2
BT           1041.51  2192.2            1109.3  2192.2          1119.2   2192.1
BT           1149.0   2192.1
GR   2194.0   609.0   2193.8     660.7  2193.7   668.6  2193.5   738.4  2193.3    790.1
GR   2193.3   799.7   2193.2     809.3  2193.2   819.0  2193.1   828.6  2193.1    847.8
GR   2193.0   857.4   2193.0     867.0  2192.9   876.7  2192.9   886.3  2192.8    895.9
GR   2192.8   905.5   2192.7     916.0  2192.7   926.5  2192.6   937.0  2192.6    947.5
     2192.5   958.0   2192.5    958.49  2182.3   958.5  2182.3   968.5  2182.3    979.0
     2182.3   989.5   2182.3    1000.0  2182.3  1029.8  2182.3  1039.7  2182.3   1041.5
```

```
     2192.2    1041.51     2192.2     1109.3     2192.1     1119.2     2192.1     1149.0

NC   0.050      0.050      0.025       0.3        0.5
ET                9.1        9.1                                                    940.      1079.5
                ET RECORD: STATION 940. MODEL 1 TO 1
                           FLOW CONTRACTION UPSTREAM
                           OF AT&SF RAILROAD BRIDGE

                ET RECORD: STATION 1079.5 TOP OF OVERFLOW
                           LEVEE IN RIGHT OVERBANK
X1   0.154         50      955.6     1039.5         30         35         35
GR   2194.3      575.2     2194.0      584.7     2193.8      601.5     2193.2      612.8     2192.6      618.7
GR   2192.0      633.2     2191.7      641.5     2191.3      654.8     2190.8      666.9     2190.3      675.8
GR   2190.0      684.9     2190.1      697.1     2190.0      704.6     2190.0      716.8     2189.8      737.7
GR   2190.1      748.4     2190.3      764.9     2190.4      778.2     2190.4      792.9     2190.5      805.3
GR   2190.5      822.4     2190.5      837.9     2190.4      855.5     2190.5      866.7     2190.5      884.3
GR   2190.7      899.7     2190.5      911.2     2190.4      927.6     2190.4      933.8     2190.0      941.5
GR   2188.0      948.1     2187.0      955.6     2186.0      962.8     2185.7      968.7     2185.7      981.4
GR   2185.7      990.2     2185.7     1000.0     2185.8     1007.7     2185.8     1015.9     2186.1     1022.4
GR   2186.4     1033.5     2187.2     1039.5     2188.0     1045.7     2189.0     1051.6     2190.0     1060.4
GR   2190.2     1063.1     2190.2     1069.8     2190.4     1079.5     2190.5     1129.0     2192.1     1159.5

NC   0.050      0.050      0.030       0.3        0.5
ET                9.1        9.1                                                    915.      1139.1
                ET RECORD: STATION 915. MODEL 1 TO 1
                           FLOW CONTRACTION UPSTREAM
                           OF AT&SF RAILROAD BRIDGE

                ET RECORD: STATION 1139.1 TOP OF OVERFLOW
                           LEVEE IN RIGHT OVERBANK

                MAPPED FLOODPLAIN TO CWSEL

X1   0.171         45      982.6     1044.7         85         80         90
GR   2200.0       523     2198.0       528     2196.0       533     2194.0       545     2192.0       558
GR   2190.0       582     2188.0       605     2188.0       630     2188.0       670     2188.0       765
GR   2190.0       883     2192.0       963     2192.0       973     2190.1      982.6     2190.0       990
GR   2189.6      991.3     2189.1     1000.0     2189.1     1009.3     2189.2     1018.7     2189.5     1028.0
GR   2190.0     1036.3     2190.1     1044.7     2189.5     1053.0     2189.2     1062.1     2190.0     1071.1
GR   2190.3     1080.2     2190.5     1091.0     2190.6     1100.2     2190.7     1109.4     2190.8     1118.7
GR   2191.3     1127.9     2191.7     1139.1     2190.0       1149     2188.0       1178     2186.0       1306
GR   2184.0       1348     2184.0       1428     2186.0       1443     2188.0       1456     2190.0       1469
GR   2192.0       1485     2194.0       1491     2196.0       1504     2198.0       1521     2200.0       1528

ET                9.1        9.1                                                    745.      1188.7
                ET RECORD: STATION 745. MODEL 1 TO 1
                           FLOW CONTRACTION UPSTREAM
                           OF AT&SF RAILROAD BRIDGE
```

ET RECORD: STATION 1188.7 TOP OF OVERFLOW
LEVEE IN RIGHT OVERBANK

MAPPED FLOODPLAIN TO CWSEL

X1	0.216	66	962.5	1007.4	235	245	240			
GR	2204.0	430.0	2202.1	441.5	2200.0	453.2	2194.0	475.6	2193.3	483.1
GR	2193.2	490.5	2192.9	504.3	2193.0	511.9	2193.1	518.7	2193.0	533.2
GR	2193.2	544.8	2193.4	555.5	2193.5	566.1	2193.4	591.8	2193.1	611.7
GR	2193.0	633.3	2193.1	649.5	2193.1	674.9	2193.0	691.4	2192.8	708.4
GR	2192.7	733.4	2192.5	748.6	2192.6	772.8	2193.0	791.4	2193.2	814.6
GR	2193.6	832.6	2193.9	841.5	2194.2	854.6	2194.4	867.4	2194.2	878.9
GR	2193.9	889.2	2193.7	912.5	2193.4	933.2	2193.2	949.1	2193.0	962.5
GR	2192.9	971.4	2192.8	985.6	2192.7	987.2	2192.6	991.4	2192.5	996.5
GR	2192.4	1000.0	2193.0	1007.4	2193.2	1009.6	2193.7	1011.4	2194.0	1016.9
GR	2194.4	1021.1	2194.4	1025.8	2194.2	1032.8	2194.0	1038.3	2193.5	1047.4
GR	2193.0	1055.4	2192.2	1063.8	2192.0	1066.7	2191.7	1071.1	2191.7	1073.6
GR	2191.9	1076.8	2193.8	1088.4	2195.7	1095.6	2201.0	1112.7	2206.3	1130.5
GR	2208.0	1145.2	2208.2	1153.9	2208.4	1162.4	2208.6	1174.6	2208.4	1180.0
GR	2208.0	1188.7								
NC	0.050	0.050	0.030	0.1	0.3					
ET			9.1						800.	1270.19
X1	0.254	91	978.2	1013.8	240	190	200			
GR	2201.4	490.8	2200.8	499.5	2199.6	509.2	2198.8	518.8	2198.5	528.5
GR	2198.6	539.3	2198.8	550.0	2198.9	560.8	2198.3	571.5	2198.7	582.3
	2199.7	593.0	2198.7	602.9	2198.8	612.8	2198.1	622.8	2198.5	632.7
	2198.2	642.6	2197.2	652.5	2198.9	662.8	2198.3	673.0	2199.4	683.3
GR	2199.5	693.5	2199.9	702.7	2200.0	711.9	2198.1	721.1	2198.6	730.3
GR	2198.5	739.5	2198.1	750.0	2198.3	760.5	2198.0	771.0	2198.2	781.5
GR	2198.9	792.0	2198.7	802.5	2198.4	813.0	2199.9	823.5	2199.7	834.3
GR	2199.4	845.2	2199.7	856.0	2199.5	866.9	2199.1	877.7	2199.1	888.5
GR	2198.9	899.3	2198.1	910.2	2198.8	921.0	2198.0	925.5	2198.3	930.0
GR	2198.3	934.5	2198.9	938.9	2198.8	947.9	2197.0	952.1	2197.8	956.3
GR	2197.1	960.6	2197.3	969.0	2196.6	973.6	2196.4	978.2	2196.3	982.8
GR	2195.5	991.4	2195.6	995.7	2195.5	1000.0	2195.8	1009.2	2196.8	1013.8
GR	2196.9	1018.3	2197.5	1022.9	2197.6	1027.5	2197.9	1031.9	2197.2	1040.7
GR	2197.0	1049.5	2197.3	1053.9	2197.9	1058.3	2197.7	1067.1	2197.8	1071.5
GR	2197.9	1080.6	2198.3	1089.8	2198.3	1098.9	2200.0	1108.0	2198.8	1119.2
GR	2198.6	1130.3	2197.9	1141.5	2197.8	1151.6	2197.8	1161.8	2198.8	1171.9
GR	2199.0	1181.5	2198.5	1191.1	2198.1	1200.6	2199.0	1210.2	2198.4	1220.9
GR	2198.1	1231.5	2199.0	1242.2	2198.7	1252.8	2198.9	1263.5	2199.9	1272.5
GR	2201.8	1281.5								
ET			9.1						838.5	1300.
X1	0.345	92	974.5	1019.5	380	495	480			
GR	2210.0	610.5	2208.6	612.0	2206.5	619.5	2204.5	625.5	2202.7	635.5
GR	2202.6	646.6	2202.5	657.7	2203.0	668.8	2203.4	689.9	2203.4	699.6
GR	2203.3	709.3	2203.4	719.0	2203.9	728.6	2203.9	738.3	2203.4	748.0
GR	2203.6	758.6	2203.8	769.2	2204.5	779.8	2204.0	790.3	2204.4	800.9
GR	2204.9	811.5	2204.3	820.5	2204.2	829.5	2205.3	838.5	2204.9	847.9
GR	2205.0	857.3	2204.2	866.7	2204.5	876.1	2204.3	885.5	2204.7	896.5
	2203.9	907.5	2203.2	918.5	2204.6	929.0	2204.2	939.5	2203.6	951.0
	2203.2	958.8	2203.0	966.7	2202.6	974.5	2202.4	983.0	2202.0	991.5

	2201.2	1000.0	2201.5	1011.0	2202.6	1019.5	2202.9	1031.0	2203.1	1040.2
	2204.6	1049.3	2204.2	1058.5	2204.5	1067.5	2204.4	1076.5	2204.4	1085.5
GR	2204.9	1095.4	2204.9	1105.2	2204.9	1115.1	2203.0	1124.9	2203.9	1134.8
GR	2203.5	1144.6	2203.4	1154.5	2203.6	1163.8	2203.1	1173.1	2203.0	1182.4
GR	2203.7	1191.6	2203.4	1200.9	2203.7	1210.2	2203.0	1219.5	2203.8	1229.8
GR	2203.0	1240.0	2203.6	1250.3	2203.9	1260.5	2203.4	1270.8	2203.8	1281.0
GR	2202.8	1291.6	2202.8	1302.3	2202.8	1312.9	2202.5	1323.5	2202.4	1332.4
GR	2202.1	1341.3	2202.8	1350.1	2202.3	1359.0	2202.0	1367.3	2202.9	1375.7
GR	2202.8	1384.0	2202.2	1393.4	2202.5	1402.8	2202.8	1412.1	2203.9	1430.5
GR	2205.0	1435.7	2206.3	1439.8	2207.1	1449.0	2212.0	1463.5	2214.3	1472.2
GR	2217.8	1480.8	2221.0	1489.5						
ET			9.1						931.15	1300.
X1	0.423	61	972.9	1010.2	350	505	410			
GR	2218.5	869.0	2218.1	880.3	2218.7	891.5	2216.1	903.5	2215.4	915.5
GR	2213.6	924.6	2211.4	933.8	2210.4	942.9	2208.4	952.0	2207.8	965.5
GR	2207.7	972.9	2207.1	977.0	2207.6	988.5	2207.6	1000.0	2207.7	1010.2
GR	2208.4	1020.3	2209.6	1030.5	2209.6	1040.0	2210.8	1049.5	2209.1	1061.7
GR	2209.0	1073.9	2209.9	1084.4	2210.6	1095.0	2210.3	1105.5	2210.4	1115.5
GR	2210.7	1125.5	2211.0	1135.1	2210.0	1144.8	2211.5	1154.4	2211.2	1164.0
GR	2211.1	1173.2	2211.6	1182.3	2210.3	1191.5	2211.1	1200.8	2211.3	1210.2
GR	2211.4	1219.5	2211.3	1229.8	2211.4	1240.0	2211.4	1250.3	2211.7	1260.5
GR	2211.6	1270.8	2211.2	1281.0	2212.3	1290.5	2212.6	1300.0	2212.1	1309.5
GR	2212.6	1319.7	2212.5	1329.8	2212.8	1340.0	2211.8	1349.5	2211.9	1359.0
GR	2211.3	1369.2	2211.8	1379.4	2211.5	1389.7	2211.8	1399.9	2211.2	1410.1
GR	2211.0	1420.3	2211.5	1430.5	2212.4	1439.0	2214.1	1447.5	2218.1	1456.0
	2221.0	1469.0								
ET			9.1						655.43	1070.1
X1	0.540	96	985.2	1020.4	635	550	620			
GR	2228.0	625.5	2227.0	633.6	2223.3	641.8	2221.7	649.9	2220.3	655.5
GR	2220.9	661.0	2219.5	668.8	2219.6	676.7	2219.6	684.5	2219.3	690.8
GR	2219.9	697.1	2219.5	703.4	2219.8	709.7	2220.1	716.0	2220.9	722.5
GR	2220.0	729.0	2220.6	737.0	2220.8	745.0	2219.6	753.0	2219.9	760.4
GR	2219.9	767.7	2219.9	775.1	2219.2	782.4	2219.3	789.8	2219.8	797.1
GR	2219.6	804.5	2219.1	811.7	2219.9	818.8	2219.5	826.0	2219.5	833.2
GR	2219.3	840.3	2219.1	847.5	2219.9	854.7	2219.7	861.8	2219.2	869.0
GR	2220.2	875.9	2220.5	882.8	2220.2	889.6	2220.7	896.5	2221.0	902.6
GR	2219.3	908.8	2219.3	914.9	2218.6	921.0	2218.1	927.9	2218.8	934.8
GR	2217.8	941.7	2217.5	948.6	2217.3	955.5	2217.7	962.9	2217.5	970.3
GR	2217.4	977.8	2217.0	985.2	2216.8	992.6	2216.5	1000.0	2216.7	1006.8
GR	2216.9	1013.6	2217.0	1020.4	2217.5	1027.2	2217.1	1034.0	2217.2	1041.2
GR	2217.3	1048.4	2217.6	1055.6	2218.7	1062.9	2218.9	1070.1	2218.5	1077.3
GR	2218.4	1084.5	2218.3	1091.4	2218.4	1098.3	2218.8	1105.1	2218.5	1112.0
GR	2219.0	1118.9	2218.6	1125.8	2218.8	1132.6	2218.5	1139.5	2218.9	1146.1
GR	2218.8	1152.8	2219.5	1159.4	2219.8	1166.1	2219.4	1172.7	2219.4	1179.4
GR	2220.7	1186.0	2220.8	1193.3	2220.1	1200.6	2220.2	1207.9	2220.0	1215.3
GR	2220.3	1222.6	2220.7	1229.9	2220.5	1237.2	2221.6	1244.5	2222.7	1251.1
GR	2223.4	1257.8	2224.5	1264.4	2225.6	1271.1	2226.4	1277.7	2227.3	1284.4
GR	2228.5	1291.0								

			9.1						475.35	1021.
X1	0.595	50	982.	1012.	330	270	290			
GR	2240.0	371.3	2240.1	381.9	2239.3	392.6	2239.0	403.2	2238.7	413.8
GR	2236.9	415.6	2234.6	435.4	2232.3	456.2	2230.2	465.0	2228.1	472.8
GR	2226.0	475.6	2222.4	483.3	2222.2	497.2	2224.6	507.3	2225.0	516.8
GR	2225.8	527.1	2225.4	537.5	2226.2	547.8	2226.8	559.8	2226.8	571.8
GR	2226.5	582.1	2226.1	592.3	2226.5	602.6	2226.9	612.8	2226.3	622.3
GR	2227.9	631.8	2227.9	641.3	2227.3	651.5	2227.7	661.7	2227.1	672.0
GR	2227.2	682.2	2228.5	692.4	2228.0	702.7	2227.7	713.0	2227.1	723.3
GR	2227.5	733.7	2227.0	744.	2226.	794.	2224.	870.	2224.3	890.
GR	2224.	922.	2223.7	947.	2224.	959.	2222.	982.	2221.8	1000.
GR	2222.	1012.	2224.	1021.	2226.	1076.	2228.	1090.	2230.	1100.
ET			9.1						731.93	1122.
X1	0.737	30	940.0	1020.0	555	755	750			
GR	2248.	556.2	2246.	583.2	2244.	596.2	2242.	617.2	2240.	669.2
GR	2238.	823.2	2237.4	848.2	2237.5	885.0	2237.8	897.5	2238.0	910.0
GR	2237.8	925.0	2237.5	940.0	2237.5	990.0	2237.0	1000.0	2237.3	1010.0
GR	2237.5	1020.0	2237.4	1033.0	2237.3	1046.0	2237.2	1059.0	2237.1	1072.0
GR	2237.0	1085.0	2237.2	1096.7	2237.3	1108.3	2237.5	1120.0	2237.7	1131.7
GR	2237.8	1143.3	2238.0	1155.0	2239.0	1165.0	2240.0	1175.0	2250.0	1190.0
ET			9.1						949.48	1122.
X1	0.826	70	984.9	1021.1	460	410	470			
GR	2263.0	861.5	2261.1	873.1	2260.7	884.8	2258.7	895.0	2255.3	905.2
	2253.6	915.5	2251.0	925.7	2249.9	930.5	2248.9	935.4	2247.5	940.3
	2247.7	945.2	2246.7	950.0	2245.2	954.9	2244.0	959.8	2244.4	964.8
GR	2245.0	969.8	2244.8	974.9	2244.7	979.9	2244.1	984.9	2243.8	990.0
GR	2243.7	995.0	2243.6	1000.0	2243.6	1005.3	2243.7	1010.6	2243.8	1015.8
GR	2244.0	1021.1	2244.1	1026.5	2244.5	1031.9	2244.6	1037.2	2244.6	1042.6
GR	2244.8	1048.0	2245.0	1053.3	2245.0	1062.6	2244.9	1071.9	2244.5	1081.2
GR	2244.1	1090.5	2244.6	1101.0	2244.7	1111.5	2244.5	1122.0	2244.6	1130.9
GR	2244.3	1139.9	2244.1	1148.8	2244.2	1157.8	2244.9	1168.4	2245.8	1179.1
GR	2245.7	1189.7	2246.3	1200.3	2246.4	1211.0	2246.7	1220.1	2247.2	1229.1
GR	2246.7	1240.3	2246.0	1251.4	2247.0	1261.2	2245.0	1270.9	2245.2	1280.6
GR	2245.1	1291.6	2246.6	1302.6	2247.0	1313.5	2246.6	1324.5	2247.3	1334.0
GR	2247.2	1343.5	2247.0	1353.1	2248.4	1362.6	2248.2	1372.1	2249.9	1381.9
GR	2249.2	1391.8	2250.9	1401.6	2252.7	1412.7	2254.7	1423.8	2256.6	1434.9
ET			9.1						972.77	1083.
X1	0.921	57	985.0	1020.8	510	450	500			
GR	2258.7	960.1	2258.1	964.6	2254.4	974.8	2250.2	985.0	2249.9	990.0
GR	2249.6	995.0	2249.6	1000.0	2249.7	1005.0	2249.8	1010.0	2249.6	1015.0
GR	2250.8	1020.8	2251.8	1026.6	2251.1	1031.5	2251.2	1036.4	2251.1	1041.3
GR	2251.1	1046.3	2251.8	1051.2	2251.7	1056.1	2252.5	1061.0	2252.6	1071.8
GR	2252.1	1082.6	2252.5	1093.5	2253.8	1104.3	2253.1	1115.1	2253.1	1126.1
GR	2254.1	1137.1	2254.5	1148.0	2255.5	1159.0	2255.9	1168.2	2255.1	1177.3
GR	2255.9	1186.5	2255.6	1195.7	2255.3	1206.5	2255.7	1217.3	2255.9	1228.1
GR	2255.1	1238.9	2255.1	1249.8	2254.1	1260.6	2254.5	1271.3	2254.1	1282.1
GR	2254.4	1291.7	2254.6	1301.2	2254.0	1310.8	2254.1	1320.3	2254.2	1329.9
GR	2254.7	1339.4	2255.8	1348.8	2255.4	1358.3	2255.4	1367.8	2255.5	1377.3
	2255.8	1386.7	2256.5	1396.2	2256.8	1405.7	2256.4	1415.2	2257.9	1423.8
	2257.9	1432.5	2258.4	1441.1						

			9.1						800.	1025.92
X1	0.979	92	975.1	1007.7	295	250	310			
GR	2270	586.1	2269.8	591.3	2267.9	596.4	2266.3	601.5	2265.2	606.6
GR	2264.4	611.7	2264.4	623	2263	628.7	2263.6	634.4	2263.8	640.1
GR	2262.9	645.8	2262.5	651.5	2262.8	657.6	2262.9	663.8	2262.1	670
GR	2262.5	676.6	2262	683.2	2262.8	689.7	2261.9	697.2	2260.1	704.5
GR	2260.3	716.2	2260.8	722	2259.7	726.8	2259.5	731.5	2258.9	737.2
GR	2258.8	748.5	2258.8	754.1	2258.1	759.7	2258.2	771	2258.8	782.2
GR	2257.1	787.7	2257.5	798.7	2256.6	804.3	2256.1	815.7	2256.9	827.6
GR	2256.2	839.5	2256.1	845.4	2257	851.3	2256.4	857.3	2256.3	863.2
GR	2256.9	869.1	2256.9	875.1	2256.3	881	2256.5	887.2	2256.4	893.4
GR	2256.6	899.5	2257	905.7	2256.1	911.9	2256.5	923.4	2256.2	929.1
GR	2256.9	934.8	2256.8	940.6	2255.5	946.4	2255.8	957.9	2255.9	963.6
GR	2254.7	969.4	2255	975.1	2254	977.2	2254.7	979.3	2254.4	985.5
GR	2254.2	991.7	2253.9	997.9	2253.5	1003.8	2254.8	1005.8	2255.2	1007.7
GR	2256.5	1009.6	2256.3	1011.5	2256.9	1013.4	2257.1	1017.3	2258	1019.2
GR	2258.2	1025.2	2259.7	1027.3	2259.1	1031.3	2259.7	1033.4	2260.3	1037.5
GR	2261	1039.5	2260.4	1041.6	2261.4	1048	2263	1054.4	2263.1	1065.9
GR	2263.3	1071.6	2264.4	1077.3	2265	1088.8	2265.8	1100.3	2266.7	1106.4
GR	2266.4	1112.7	2267.6	1118.9	2268.3	1125.1	2268.7	1131.3	2269.8	1137.5
GR	2269.2	1143.7	2270.3	1149.9						
ET			9.1						603.52	1048.49
X1	1.108	67	960.7	1014.7	450	680	680			
GR	2277.0	509.9	2276.6	519.8	2276.0	529.7	2274.1	539.5	2273.9	549.4
	2272.8	559.3	2271.5	568.2	2270.9	577.0	2270.9	585.9	2267.8	598.1
	2265.3	610.2	2263.6	619.2	2264.0	630.2	2265.3	641.1	2264.1	652.1
GR	2265.7	660.9	2265.6	669.7	2266.9	677.9	2266.3	686.1	2266.9	695.3
GR	2266.9	704.5	2265.1	713.4	2265.3	722.3	2264.9	731.1	2264.8	740.0
GR	2264.8	750.5	2264.8	761.0	2264.5	771.5	2265.2	782.0	2266.0	792.0
GR	2265.9	802.0	2265.5	812.1	2265.4	822.1	2265.1	832.1	2265.0	842.1
GR	2265.2	852.1	2265.4	862.0	2266.0	871.9	2265.3	881.8	2265.7	891.7
GR	2265.6	901.6	2265.0	911.5	2265.6	921.5	2264.8	931.3	2264.3	941.1
GR	2264.3	950.9	2264.4	960.7	2264.0	970.5	2263.9	980.4	2263.7	990.2
GR	2263.6	1000.0	2263.7	1008.3	2264.4	1014.7	2264.6	1016.5	2265.6	1027.0
GR	2266.7	1037.4	2266.6	1047.9	2268.0	1058.3	2268.2	1068.9	2269.2	1079.5
GR	2269.9	1090.1	2270.1	1100.7	2272.5	1110.5	2273.8	1120.4	2274.4	1130.2
GR	2276.3	1140.1	2277.3	1149.9						
ET			9.1						963.97	1118.23
X1	1.203	93	989.8	1010.6	345	530	500			
GR	2280.1	891.0	2278.4	896.1	2277.8	901.2	2276.7	906.3	2275.3	911.5
GR	2273.8	916.2	2272.0	920.9	2271.7	925.6	2271.8	930.3	2272.0	935.1
GR	2272.1	939.8	2272.2	944.5	2272.5	950.4	2272.2	956.2	2271.4	961.3
GR	2270.3	966.3	2268.0	971.0	2266.0	974.5	2265.9	979.6	2265.8	984.7
GR	2265.8	989.8	2265.8	994.9	2265.8	1000.0	2265.8	1005.3	2265.8	1010.6
GR	2266.0	1015.8	2267.0	1021.1	2266.5	1026.1	2267.0	1031.1	2267.4	1036.0
GR	2267.6	1041.0	2267.4	1046.0	2267.4	1051.0	2267.9	1055.9	2268.2	1060.9
GR	2268.1	1065.9	2268.3	1070.9	2268.9	1075.8	2269.3	1080.7	2269.7	1085.5
GR	2269.4	1090.4	2269.6	1095.3	2270.2	1100.2	2270.5	1105.1	2270.8	1110.0
GR	2270.2	1114.9	2271.1	1119.8	2271.6	1124.7	2271.7	1129.6	2271.8	1134.4
	2271.3	1139.3	2271.2	1144.8	2271.0	1150.2	2271.6	1155.6	2271.6	1161.0
	2271.2	1166.5	2271.3	1171.4	2271.4	1176.3	2271.4	1181.3	2271.1	1186.2

	2271.1	1191.4	2271.6	1196.5	2271.8	1201.7	2271.7	1206.8	2271.4	1212.0
	2271.8	1217.2	2271.8	1223.3	2271.6	1229.3	2271.9	1234.7	2271.7	1240.1
GR	2271.8	1245.4	2271.7	1250.8	2271.8	1256.1	2271.5	1260.9	2271.5	1265.7
GR	2271.7	1270.7	2272.0	1275.8	2272.4	1280.9	2272.1	1285.9	2273.5	1291.0
GR	2273.5	1296.0	2273.1	1300.9	2273.3	1305.9	2273.4	1310.9	2273.3	1315.8
GR	2273.5	1320.8	2273.8	1325.8	2274.3	1330.7	2274.1	1335.7	2275.2	1340.7
GR	2275.6	1345.6	2275.7	1350.6	2275.7	1355.6				
ET			9.1						713.85	1021.53
X1	1.301	95	961.5	1004.0	500	480	520			
GR	2290.9	679.2	2280.2	706.5	2273.9	719.6	2273.5	730.7	2273.9	750.4
GR	2274.3	774.1	2274.1	792.8	2274.1	811.5	2274.4	832.8	2274.0	854.2
GR	2274.4	873.0	2275.8	891.8	2275.2	893.8	2275.2	895.8	2275.0	897.8
GR	2275.4	899.7	2276.0	901.7	2275.8	903.7	2275.0	905.7	2275.4	907.7
GR	2275.0	909.7	2275.5	911.7	2275.8	913.7	2275.0	915.7	2275.0	917.7
GR	2275.1	919.6	2275.3	921.6	2275.4	923.6	2275.7	925.6	2275.2	927.6
GR	2275.8	929.6	2275.1	931.6	2275.2	933.6	2275.5	935.6	2275.3	937.5
GR	2275.3	939.5	2275.8	941.5	2275.3	943.5	2275.8	945.5	2275.9	947.5
GR	2275.4	949.5	2275.4	951.5	2275.9	953.5	2275.8	955.5	2275.4	957.5
GR	2275.1	959.4	2274.0	961.5	2274.0	963.5	2274.1	965.5	2274.1	967.5
GR	2274.2	969.6	2274.1	971.6	2274.1	973.6	2274.2	975.7	2274.0	977.7
GR	2274.1	979.7	2274.1	981.8	2274.2	983.8	2274.2	985.8	2274.1	987.8
GR	2274.1	989.9	2274.2	991.9	2274.1	993.9	2274.2	995.9	2274.1	998.0
GR	2274.0	1000.0	2274.1	1002.0	2274.0	1004.0	2274.4	1006.0	2274.9	1008.0
GR	2275.0	1010.0	2275.7	1012.1	2275.8	1014.2	2275.6	1016.3	2275.8	1018.5
GR	2276.4	1020.6	2277.0	1022.7	2277.0	1024.8	2277.2	1042.4	2277.3	1060.1
	2277.7	1077.8	2278.9	1095.5	2279.1	1117.5	2279.7	1139.5	2280.1	1150.1
	2281.1	1166.7	2284.4	1189.5	2283.5	1206.4	2282.6	1230.4	2283.8	1249.9
GR	2284.1	1269.3	2285.3	1288.2	2287.7	1307.0	2288.7	1325.9	2290.0	1341.4
ET			9.1						731.52	1032.26
X1	1.392	93	987.5	1016.0	590	480	480			
GR	2290.3	461.0	2289.1	469.6	2289.8	479.9	2288.9	490.2	2288.0	500.5
GR	2287.4	510.8	2287.0	521.1	2287.4	530.8	2287.0	540.5	2286.3	550.3
GR	2286.3	560.0	2286.3	569.7	2285.7	579.4	2285.0	589.1	2285.2	597.6
GR	2285.0	606.0	2285.4	614.5	2284.7	626.7	2284.0	632.1	2284.0	640.1
GR	2286.0	651.6	2285.5	663.2	2285.4	674.8	2285.8	686.4	2285.1	695.1
GR	2285.3	703.9	2285.5	712.7	2285.4	721.5	2284.0	731.3	2282.1	739.5
GR	2282.0	747.5	2281.0	755.5	2280.8	764.2	2280.9	772.8	2280.0	779.4
GR	2280.8	788.0	2281.2	796.6	2280.5	811.4	2281.1	821.2	2282.5	830.9
GR	2283.4	840.7	2283.6	850.4	2283.1	860.2	2283.9	870.0	2283.2	881.5
GR	2283.3	893.0	2283.8	904.6	2282.1	913.4	2282.2	922.2	2283.4	934.6
GR	2282.0	944.4	2281.1	954.1	2281.9	961.8	2281.6	969.5	2281.4	971.4
GR	2281.6	973.4	2281.0	975.4	2281.0	977.3	2281.8	979.3	2281.8	981.2
GR	2281.9	983.3	2281.3	985.4	2281.3	987.5	2280.8	989.6	2279.9	991.7
GR	2279.9	993.8	2279.7	995.8	2279.6	997.9	2279.6	1000.0	2279.6	1002.0
GR	2279.7	1004.0	2279.6	1006.0	2279.8	1008.0	2279.9	1010.0	2280.3	1012.0
GR	2281.1	1014.0	2281.3	1016.0	2282.0	1018.0	2281.3	1020.0	2281.1	1022.0
GR	2281.6	1024.0	2282.0	1025.9	2282.6	1027.9	2282.4	1029.9	2283.8	1031.7
GR	2284.3	1033.6	2285.9	1035.5	2286.8	1037.4	2287.8	1039.2	2288.2	1041.1
GR	2294.1	1050.5	2300.1	1059.9	2310.9	1071.6				

			9.1						583.67	1012.64
X1	1.476	51	980.4	1005.0	380	440	440			
GR	2300.1	566.7	2295.8	578.9	2290.0	584.1	2289.5	599.9	2289.1	610.2
GR	2289.9	620.5	2289.0	631.7	2289.8	642.8	2289.2	654.0	2289.1	663.3
GR	2289.9	672.7	2288.6	682.0	2288.7	691.3	2288.6	701.4	2287.9	711.5
GR	2288.6	720.7	2288.7	729.9	2288.9	738.4	2289.2	747.0	2288.0	755.7
GR	2287.7	764.4	2288.4	772.7	2289.7	781.0	2288.5	791.0	2288.8	801.0
GR	2288.5	811.0	2288.6	820.6	2288.2	830.2	2288.9	839.8	2289.0	849.3
GR	2288.2	860.2	2288.4	871.1	2288.7	881.1	2289.3	891.0	2290.0	901.0
GR	2289.7	909.9	2289.9	918.8	2288.6	927.8	2288.5	936.7	2288.0	946.4
GR	2288.8	956.1	2287.2	965.8	2287.7	975.5	2287.7	980.4	2287.1	985.3
GR	2286.2	990.2	2286.2	995.1	2286.1	1000.0	2287.3	1005.0	2289.4	1010.1
GR	2300.0	1035.0								
ET			9.1						859.57	1200.
X1	1.587	94	984.8	1085.7	480	540	590			
GR	2307.8	800.0	2306.8	811.7	2306.9	823.4	2305.5	835.1	2300.9	846.7
GR	2297.4	859.9	2296.5	870.7	2296.9	881.4	2296.6	891.0	2296.5	900.6
GR	2296.3	910.2	2296.4	919.8	2297.8	929.3	2297.0	939.4	2296.5	949.4
GR	2296.3	959.5	2296.1	969.5	2296.3	974.6	2296.1	979.7	2295.9	984.8
GR	2295.4	989.8	2295.3	994.9	2295.1	1000.0	2295.5	1005.1	2295.9	1010.3
GR	2295.8	1015.4	2295.5	1020.5	2295.5	1025.6	2295.8	1030.8	2295.6	1035.9
GR	2295.9	1041.0	2295.4	1045.5	2295.4	1054.6	2295.5	1059.1	2295.6	1064.2
GR	2295.9	1069.2	2295.5	1074.2	2295.6	1079.2	2295.7	1084.2	2295.9	1085.7
GR	2296.4	1089.3	2296.4	1105.6	2296.9	1116.1	2296.9	1137.2	2297.6	1158.2
	2296.4	1169.1	2296.1	1190.0	2296.9	1200.0	2296.2	1210.1	2296.0	1220.2
	2297.0	1230.0	2296.3	1239.8	2296.6	1249.7	2296.3	1259.5	2295.5	1269.3
GR	2295.7	1279.6	2295.3	1290.0	2295.6	1300.3	2295.9	1310.6	2295.9	1341.3
GR	2295.6	1351.3	2296.0	1361.3	2296.0	1380.0	2295.7	1388.8	2295.4	1397.7
GR	2296.4	1406.4	2296.2	1417.7	2297.2	1429.0	2296.6	1438.6	2296.9	1448.3
GR	2296.8	1457.9	2297.1	1466.7	2297.2	1475.4	2298.1	1484.2	2298.9	1493.8
GR	2299.8	1503.5	2299.1	1513.2	2299.4	1522.8	2299.5	1532.5	2300.3	1542.1
GR	2300.3	1552.5	2302.0	1562.9	2301.8	1573.3	2302.6	1583.8	2303.0	1594.2
GR	2303.2	1604.6	2303.8	1615.0	2304.7	1627.1	2305.1	1639.2	2308.0	1649.9
GR	2308.1	1660.6	2309.4	1671.0	2309.6	1681.4	2310.2	1691.8		
ET			9.1						784.89	1284.
X1	1.676	94	979.1	1011.0	460	525	470			
GR	2317	721.1	2314.5	731.3	2312.6	740.6	2310.6	741.5	2306.4	751.5
GR	2305.4	803.9	2306.0	816.3	2305.1	826.2	2306.1	836.0	2305.1	846.2
GR	2305.4	856.5	2306.0	866.7	2305.4	877.0	2305.3	887.2	2304.1	898.3
GR	2304.9	920.5	2304.9	931.6	2303.6	939.4	2305.0	949.7	2304.8	965.8
GR	2304.8	971.5	2303.2	975.3	2302.9	979.1	2301.9	984.4	2301.6	1000.0
GR	2301.7	1005.5	2302.9	1011.0	2302.5	1026.3	2303.7	1031.1	2303.3	1043.3
GR	2304.1	1055.4	2303.2	1064.4	2303.5	1082.3	2303.7	1101.2	2303.0	1111.1
GR	2303.1	1120.3	2304.5	1129.4	2305.2	1151.2	2306.0	1162.1	2305.1	1171.1
GR	2304.5	1180.0	2304.5	1200.1	2305.7	1211.3	2306.0	1222.5	2305.3	1233.8
GR	2305.1	1245.0	2304.1	1255.6	2304.0	1275.3	2304.9	1284.4	2304.2	1295.4
GR	2304.2	1306.4	2304.8	1317.3	2304.3	1328.3	2305.1	1339.2	2304.5	1348.5
GR	2304.7	1367.0	2304.1	1376.3	2304.8	1388.1	2305.5	1400.0	2305.0	1420.2
GR	2305.6	1440.3	2305.4	1459.8	2305.4	1479.3	2305.6	1499.6	2305.5	1520.9
	2305.0	1531.6	2305.7	1541.2	2305.1	1560.4	2305.5	1570.0	2304.7	1580.8
	2304.1	1591.6	2304.1	1602.6	2304.9	1613.6	2304.9	1634.7	2304.1	1644.9

	2304.9	1655.1	2304.9	1665.3	2304.2	1674.3	2304.8	1683.2	2305.0	1703.3
	2305.3	1714.4	2306.7	1725.5	2306.1	1748.1	2306.9	1759.6	2306.9	1767.4
GR	2306.0	1775.2	2306.8	1784.4	2307.5	1793.7	2307.1	1802.9	2308.2	1812.1
GR	2308.7	1821.4	2310.2	1835.7	2312.1	1839.0	2316.7	1851.5		
ET			9.1						797.6	1210.
X1	1.771	89	990.0	1029.6	525	450	500			
GR	2324.0	540.0	2322.3	550.6	2321.7	561.3	2319.3	569.0	2317.6	586.7
GR	2316.7	606.7	2315.5	616.7	2314.1	626.7	2313.6	648.3	2313.4	669.9
GR	2313.8	691.5	2313.0	711.5	2313.9	731.6	2313.4	750.5	2312.7	768.2
GR	2312.7	787.3	2313.8	797.6	2312.7	811.1	2311.6	830.3	2311.7	849.5
GR	2311.3	870.2	2311.5	890.8	2311.4	911.5	2312.4	920.4	2313.7	929.4
GR	2314.1	949.7	2314.4	968.3	2313.0	985.0	2312.0	990.0	2311.1	1004.9
GR	2311.6	1019.7	2312.0	1029.6	2312.4	1043.6	2312.3	1061.7	2312.6	1079.9
GR	2312.8	1094.4	2312.6	1110.3	2312.4	1131.3	2312.1	1146.0	2312.1	1155.0
GR	2312.4	1176.3	2312.1	1196.2	2312.1	1208.1	2312.2	1220.0	2312.3	1237.4
GR	2312.1	1256.0	2312.4	1275.7	2312.9	1296.1	2313.2	1316.5	2313.9	1328.0
GR	2313.9	1339.6	2313.7	1359.7	2314.0	1379.9	2313.5	1400.4	2313.0	1420.8
GR	2313.3	1441.3	2313.3	1460.9	2313.8	1480.5	2313.5	1500.1	2313.7	1519.8
GR	2313.3	1539.4	2313.0	1559.0	2313.2	1578.7	2313.4	1598.4	2313.4	1618.1
GR	2313.7	1637.8	2313.2	1658.9	2312.9	1680.0	2312.5	1698.7	2311.3	1717.3
GR	2311.7	1726.7	2311.3	1737.8	2311.2	1749.0	2311.8	1762.5	2311.6	1771.2
GR	2311.2	1791.9	2311.3	1801.7	2311.8	1811.5	2311.3	1822.8	2311.4	1834.0
GR	2312.5	1845.2	2312.9	1856.5	2313.0	1865.5	2313.8	1874.6	2314.5	1882.9
GR	2314.6	1891.2	2316.0	1895.0	2318.0	1910.0	2320.0	1920.0		
			9.1						843.92	1176.70
	1.871	89	977.6	1022.4	545	490	530			
GR	2330.0	824.5	2325.9	835.3	2320.3	846.2	2319.9	856.3	2319.3	865.5
GR	2319.4	874.7	2319.3	883.9	2319.4	893.1	2319.5	902.3	2320.6	911.5
GR	2320.3	922.5	2320.6	933.5	2320.2	944.5	2321.0	955.5	2320.9	966.4
GR	2319.3	977.6	2319.3	988.8	2319.1	1000.0	2319.2	1011.2	2319.5	1022.4
GR	2320.0	1033.7	2320.8	1044.9	2320.6	1055.1	2320.9	1065.4	2320.2	1075.7
GR	2320.3	1085.9	2320.4	1096.2	2320.3	1106.5	2319.9	1115.5	2319.3	1124.5
GR	2320.3	1139.4	2321.5	1150.0	2321.3	1159.2	2321.4	1168.4	2322.1	1177.7
GR	2322.3	1186.9	2322.5	1196.1	2322.6	1205.3	2322.3	1214.5	2323.0	1223.6
GR	2322.8	1232.8	2323.5	1242.0	2323.9	1252.0	2322.3	1262.0	2322.9	1272.0
GR	2322.9	1282.0	2322.6	1291.9	2322.9	1301.9	2323.0	1311.9	2322.9	1321.9
GR	2322.2	1331.9	2322.7	1341.9	2322.3	1351.9	2322.9	1361.8	2322.6	1371.7
GR	2322.7	1381.6	2322.7	1391.5	2322.9	1401.4	2322.7	1411.3	2322.2	1420.6
GR	2322.7	1429.9	2322.4	1439.3	2321.3	1448.6	2321.7	1457.9	2321.5	1467.3
GR	2322.0	1476.6	2321.4	1487.0	2321.8	1497.4	2321.9	1507.9	2320.7	1518.3
GR	2320.1	1528.8	2320.5	1539.2	2320.5	1549.5	2320.5	1559.9	2320.8	1570.2
GR	2320.7	1580.6	2319.9	1590.9	2319.4	1601.2	2320.0	1611.6	2319.2	1621.9
GR	2319.7	1633.1	2319.1	1644.3	2319.2	1655.5	2319.2	1666.7	2320.3	1680.0
GR	2322.5	1690.1	2324.5	1700.1	2326.1	1711.0	2327.3	1721.6		
ET			9.1						762.4	1111.
X1	1.964	90	994.0	1050.0	610	340	490			
GR	2338.0	320.0	2336.3	330.4	2334.7	340.9	2332.9	351.3	2331.3	360.5
GR	2330.8	369.7	2330.4	380.2	2329.6	390.6	2329.5	401.1	2328.2	411.5
GR	2328.6	420.8	2327.8	430.0	2327.3	439.3	2327.2	448.5	2326.8	457.7
	2327.0	467.0	2326.9	476.2	2326.0	485.4	2326.8	494.5	2326.5	504.7
	2326.6	514.8	2326.5	524.9	2326.8	535.0	2326.6	544.6	2326.7	554.3

	2326.7	563.9	2326.2	573.6	2327.1	583.2	2327.4	592.8	2327.5	602.5
	2327.5	612.1	2327.6	621.8	2327.5	632.6	2327.0	643.5	2327.6	654.3
GR	2327.2	665.1	2328.3	676.0	2328.3	686.1	2328.4	696.1	2328.3	706.2
GR	2328.3	717.2	2329.3	728.2	2329.6	739.2	2329.7	748.7	2329.6	758.2
GR	2328.5	767.6	2328.7	777.1	2328.1	786.5	2328.3	796.0	2328.8	805.5
GR	2328.1	815.0	2328.7	824.8	2328.6	834.6	2328.1	844.4	2328.2	853.5
GR	2328.2	862.6	2328.0	871.7	2328.3	880.8	2328.3	889.9	2327.8	899.7
GR	2327.8	909.4	2327.6	919.2	2327.5	929.3	2327.5	939.5	2327.1	949.6
GR	2326.4	959.6	2326.8	969.5	2326.9	978.8	2326.7	988.0	2325.7	994.0
GR	2325.4	1000.0	2325.5	1006.1	2325.4	1012.1	2325.6	1017.1	2325.6	1022.1
GR	2325.8	1027.1	2325.6	1032.0	2325.6	1041.0	2325.6	1050.0	2325.8	1061.1
GR	2326.8	1068.8	2326.8	1076.5	2326.1	1089.0	2326.9	1100.0	2327.0	1111.0
GR	2328.0	1196.0	2330.0	1281.0	2332.0	1341.0	2334.0	1391.0	2336.0	1461.0
ET			9.1						780.	1328.99
X1	2.054	71	986.3	1010.3	195	490	475			
GR	2342.0	225.0	2340.0	236.3	2338.4	261.1	2334.1	287.0	2333.6	309.5
GR	2333.4	332.0	2333.8	354.4	2333.4	373.7	2333.8	393.0	2333.4	412.3
GR	2333.3	431.6	2333.1	451.1	2333.3	470.7	2333.7	490.2	2333.3	509.8
GR	2334.2	529.3	2333.3	547.4	2333.6	565.4	2333.0	583.4	2333.5	601.5
GR	2333.1	621.5	2333.4	641.6	2333.5	659.9	2333.3	688.1	2333.4	702.0
GR	2333.5	735.3	2333.6	741.4	2333.6	750.2	2333.6	757.4	2333.2	779.4
GR	2333.5	801.5	2333.1	820.3	2334.5	839.2	2333.8	857.4	2333.3	875.5
GR	2333.1	892.4	2333.8	909.3	2333.0	926.1	2333.2	944.7	2333.5	963.2
GR	2332.5	967.8	2333.0	972.4	2332.9	977.0	2332.9	981.6	2331.9	986.3
GR	2330.9	991.0	2330.6	995.5	2330.5	1000.0	2330.6	1005.2	2331.2	1010.3
	2332.3	1015.7	2332.2	1021.1	2334.0	1026.4	2333.6	1043.2	2333.1	1059.9
	2333.9	1076.7	2332.7	1100.0	2334.3	1130.0	2334.6	1145.0	2334.6	1166.5
GR	2333.1	1189.9	2333.5	1207.4	2333.5	1225.0	2333.5	1247.8	2333.8	1270.6
GR	2333.3	1291.0	2333.7	1311.5	2335.0	1339.1	2338.1	1355.6	2340.1	1365.4
GR	2342.1	1375.0								
ET			9.1						950.	1100.
X1	2.149	64	970.0	1026.0	495	450	500			
GR	2346.0	688.0	2346.0	698.0	2346.0	708.0	2344.5	717.0	2343.0	726.0
GR	2341.5	735.0	2341.2	745.0	2340.8	755.0	2340.5	765.0	2340.0	772.5
GR	2339.5	780.0	2339.5	790.0	2339.5	800.0	2340.5	811.0	2340.8	821.5
GR	2341.0	832.0	2341.3	842.5	2341.5	853.0	2341.4	862.3	2341.3	871.5
GR	2341.1	880.8	2341.0	890.0	2340.9	900.5	2340.8	911.0	2340.8	921.5
GR	2340.7	932.0	2340.6	942.5	2340.5	953.0	2339.0	958.7	2338.2	964.3
GR	2337.0	970.0	2337.0	975.0	2337.0	980.0	2337.0	985.0	2337.0	990.0
GR	2337.0	995.0	2337.0	1000.0	2337.0	1005.2	2337.0	1010.4	2337.0	1015.6
GR	2337.0	1020.8	2337.0	1026.0	2337.8	1030.8	2338.1	1035.5	2339.3	1040.3
GR	2340.0	1045.0	2339.8	1056.0	2339.7	1067.0	2339.5	1078.0	2340.0	1090.0
GR	2342.0	1100.0	2342.2	1110.0	2342.3	1120.0	2342.5	1130.0	2342.3	1140.0
GR	2342.2	1150.0	2342.0	1160.0	2340.5	1170.0	2339.0	1180.0	2337.5	1190.0
GR	2338.8	1199.0	2340.0	1208.0	2345.0	1219.0	2350.0	1230.0		
NC	0.050	0.050	0.025	0.1	0.3					
ET			9.1						952.23	1090.

	2.242	90	985.0	1034.3	460	500	490			
	2356.0	768.0	2355.5	777.3	2355.0	786.5	2354.5	795.8	2354.0	805.0
GR	2353.7	814.2	2353.3	823.3	2353.0	832.5	2352.7	841.7	2352.3	850.8
GR	2352.0	860.0	2352.0	890.0	2351.6	901.3	2351.3	912.5	2350.9	923.8
GR	2350.5	935.0	2349.8	940.0	2348.5	945.0	2348.4	950.0	2347.6	955.0
GR	2346.9	960.0	2346.2	965.0	2345.5	970.0	2345.0	975.0	2344.5	980.0
GR	2344.4	985.0	2344.3	990.0	2344.1	995.0	2344.0	1000.0	2344.1	1004.9
GR	2344.1	1009.8	2344.1	1014.7	2344.2	1019.6	2344.3	1024.5	2344.3	1029.4
GR	2344.4	1034.3	2344.4	1044.1	2344.5	1049.0	2344.8	1054.7	2345.2	1060.3
GR	2345.5	1066.0	2345.8	1070.8	2347.1	1075.6	2349.4	1080.4	2350.7	1085.2
GR	2352.0	1090.0	2351.8	1100.0	2351.5	1110.0	2351.1	1121.0	2350.8	1132.0
GR	2350.4	1143.0	2350.0	1154.0	2349.9	1164.6	2349.9	1175.1	2349.8	1185.7
GR	2349.7	1196.3	2349.6	1206.9	2349.6	1217.4	2349.5	1228.0	2349.5	1305.0
GR	2349.7	1313.7	2349.8	1322.3	2350.0	1331.0	2349.9	1341.0	2349.7	1351.0
GR	2349.6	1361.0	2349.4	1371.0	2349.3	1381.0	2349.1	1391.0	2349.0	1401.0
GR	2348.9	1410.5	2348.8	1420.0	2348.6	1429.5	2348.5	1439.0	2347.7	1449.7
GR	2346.8	1460.3	2346.0	1471.0	2345.8	1480.0	2345.5	1489.0	2346.0	1500.0
GR	2345.5	1511.0	2345.8	1519.0	2346.0	1527.0	2346.0	1540.0	2348.0	1550.5
GR	2350.0	1561.0	2352.5	1570.5	2355.0	1580.0	2357.5	1589.5	2360.0	1599.0
ET			9.1						921.8	1128.7
X1	2.331	48	985.0	1020.0	470	535	470			
GR	2370.0	810.0	2360.0	830.0	2356.0	835.0	2351.5	850.0	2352.0	875.0
GR	2352.5	895.0	2352.0	910.0	2351.5	925.0	2352.5	950.0	2352.3	955.0
GR	2352.2	960.0	2352.0	965.0	2351.5	970.0	2351.0	975.0	2350.9	980.0
GR	2350.8	985.0	2350.7	990.0	2350.6	995.0	2350.5	1000.0	2350.6	1005.0
	2350.6	1010.0	2350.7	1015.0	2350.8	1020.0	2350.8	1025.0	2350.9	1030.0
	2350.9	1035.0	2351.0	1040.0	2351.3	1045.0	2351.5	1050.0	2351.8	1055.0
GR	2352.0	1060.0	2352.3	1065.0	2352.5	1070.0	2352.8	1075.0	2353.0	1080.0
GR	2352.0	1100.0	2350.5	1120.0	2353.0	1140.0	2352.0	1160.0	2352.5	1175.0
GR	2351.5	1200.0	2352.8	1215.0	2354.0	1230.0	2355.0	1245.0	2356.0	1260.0
GR	2358.0	1275.0	2360.0	1290.0	2363.0	1310.0				
ET			9.1						966.82	1180.
X1	2.430	62	990.0	1010.0	530	500	525			
GR	2370.0	950.0	2364.5	960.0	2359.0	970.0	2358.5	972.0	2358.0	974.0
GR	2357.5	976.0	2357.0	978.0	2356.5	980.0	2356.0	982.0	2355.5	984.0
GR	2355.0	986.0	2354.5	988.0	2354.0	990.0	2353.8	992.0	2353.6	994.0
GR	2353.4	996.0	2353.2	998.0	2353.0	1000.0	2353.2	1002.0	2353.4	1004.0
GR	2353.6	1006.0	2353.8	1008.0	2354.0	1010.0	2354.5	1011.9	2355.0	1013.8
GR	2355.5	1015.6	2356.0	1017.5	2356.5	1019.4	2357.0	1021.3	2357.5	1023.1
GR	2358.0	1025.0	2358.2	1027.1	2358.3	1029.2	2358.5	1031.3	2358.7	1033.3
GR	2358.8	1035.4	2359.0	1037.5	2359.2	1039.6	2359.3	1041.7	2359.5	1043.8
GR	2359.7	1045.8	2359.8	1047.9	2360.0	1050.0	2359.9	1060.5	2359.8	1071.0
GR	2359.6	1081.5	2359.5	1092.0	2359.3	1102.2	2359.1	1112.4	2358.9	1122.6
GR	2358.7	1132.8	2358.5	1143.0	2358.0	1154.0	2358.5	1167.0	2358.0	1179.5
GR	2357.5	1192.0	2356.8	1201.0	2356.0	1210.0	2360.0	1221.0	2361.3	1232.0
GR	2362.7	1243.0	2364.0	1254.0						

	0.050	0.050	0.030	0.1	0.3					
ET			9.1						870.77	1200.
X1	2.523	90	975.0	1000.0	495	490	490			
GR	2387.5	680.0	2388.0	692.0	2387.5	703.5	2387.0	715.0	2386.7	724.0
GR	2386.3	733.0	2386.0	742.0	2382.5	752.5	2379.0	763.0	2376.8	772.3
GR	2374.5	781.5	2372.3	790.8	2370.0	800.0	2369.5	810.0	2369.8	821.0
GR	2370.0	832.0	2368.7	842.3	2367.3	852.7	2366.0	871.0	2364.8	884.0
GR	2363.5	893.8	2363.5	920.0	2363.8	925.0	2364.0	930.0	2364.3	935.0
GR	2364.5	940.0	2364.7	945.0	2364.8	950.0	2365.0	955.0	2364.4	960.0
GR	2363.4	965.0	2363.1	970.0	2362.5	975.0	2362.5	980.0	2362.5	985.0
GR	2362.5	990.0	2362.5	995.0	2362.5	1000.0	2362.9	1005.0	2363.1	1010.0
GR	2364.4	1015.0	2364.8	1020.0	2365.4	1025.0	2366.0	1030.0	2366.1	1035.5
GR	2366.3	1041.0	2366.4	1046.5	2366.5	1052.0	2366.3	1064.5	2366.0	1077.0
GR	2365.8	1086.5	2365.5	1096.0	2365.3	1105.5	2365.0	1115.0	2364.8	1124.0
GR	2364.5	1133.0	2364.3	1142.0	2364.0	1151.0	2363.5	1160.0	2364.0	1170.0
GR	2364.2	1180.3	2364.3	1190.7	2364.5	1201.0	2364.3	1212.0	2364.0	1223.0
GR	2366.0	1230.0	2366.1	1240.0	2366.3	1250.0	2366.4	1260.0	2366.5	1270.0
GR	2366.4	1280.3	2366.3	1290.5	2366.1	1300.8	2366.0	1311.0	2365.8	1321.4
GR	2365.6	1331.8	2365.4	1342.2	2365.2	1352.6	2365.0	1363.0	2364.8	1372.5
GR	2364.5	1382.0	2364.3	1391.5	2364.0	1401.0	2363.5	1415.0	2363.8	1424.0
GR	2364.0	1433.0	2366.5	1442.3	2369.0	1451.5	2371.5	1460.8	2374.0	1470.0
ET			9.1						930.13	1215.
X1	2.582	60	948.0	1025.0	305	320	310			
GR	2380.0	600.0	2375.5	610.0	2375.3	630.7	2375.2	651.3	2375.0	672.0
[illegible]	2375.0	693.8	2375.0	715.5	2375.0	737.3	2375.0	759.0	2374.9	779.1
[illegible]	2374.9	799.3	2374.8	819.4	2374.8	839.5	2374.7	859.6	2374.6	879.8
GR	2374.6	899.9	2374.5	920.0	2372.0	929.3	2369.5	938.7	2368.5	948.0
GR	2368.5	958.4	2368.5	968.8	2368.5	979.2	2368.5	989.6	2368.5	1000.0
GR	2368.5	1012.5	2368.5	1025.0	2368.8	1035.0	2368.9	1045.0	2369.0	1055.0
GR	2369.5	1065.0	2370.0	1075.0	2370.3	1083.0	2370.5	1091.0	2370.5	1110.5
GR	2370.5	1130.0	2370.5	1147.3	2370.5	1164.7	2370.5	1182.0	2370.7	1203.2
GR	2370.8	1224.3	2371.0	1245.5	2371.2	1266.7	2371.3	1287.8	2371.5	1309.0
GR	2372.0	1331.0	2372.3	1353.0	2372.7	1375.0	2373.0	1397.0	2373.2	1417.3
GR	2373.3	1437.7	2373.5	1458.0	2373.8	1474.5	2374.0	1491.0	2374.7	1510.0
GR	2375.3	1529.0	2376.0	1548.0	2376.7	1568.7	2377.3	1589.3	2378.0	1610.0
ET			9.1						920.	1173.
X1	2.620	75	988.0	1021.0	215	180	200			
GR	2380.0	710.0	2379.5	736.0	2375.5	762.0	2376.0	789.0	2376.5	802.0
GR	2376.0	811.0	2374.5	833.0	2374.3	852.3	2374.2	871.7	2374.0	891.0
GR	2374.5	920.0	2374.3	925.0	2374.0	930.0	2373.7	935.3	2373.3	940.7
GR	2373.0	946.0	2372.7	951.3	2372.3	956.7	2372.0	962.0	2371.6	967.2
GR	2371.2	972.4	2370.8	977.6	2370.4	982.8	2370.0	988.0	2369.5	994.0
GR	2369.0	1000.0	2369.3	1005.3	2369.5	1010.5	2369.8	1015.8	2370.0	1021.0
GR	2370.8	1026.5	2371.5	1032.0	2371.8	1036.5	2372.0	1041.0	2372.7	1045.7
GR	2373.3	1050.3	2374.0	1055.0	2374.1	1059.6	2374.2	1064.2	2374.3	1068.8
GR	2374.4	1073.4	2374.5	1078.0	2374.0	1105.0	2372.0	1119.0	2371.5	1130.0
GR	2372.0	1146.0	2372.5	1155.0	2372.6	1172.5	2372.8	1190.0	2372.9	1207.5
GR	2373.0	1225.0	2373.0	1244.0	2373.0	1263.0	2373.0	1282.0	2373.0	1301.0
GR	2373.2	1321.3	2373.3	1341.7	2373.5	1362.0	2374.0	1382.0	2376.0	1400.0
[illegible]	2376.3	1415.5	2376.5	1431.0	2376.3	1448.0	2376.0	1465.0	2376.3	1484.5
[illegible]	2376.7	1504.0	2377.0	1523.5	2377.3	1543.0	2377.7	1562.5	2378.0	1582.0

	2378.4	1601.6	2378.8	1621.2	2379.2	1640.8	2379.6	1660.4	2380.0	1680.0
ET			9.1						953.94	1100.
X1	2.716	60	975.0	1022.0	475	550	510			
GR	2389.0	930.0	2386.0	941.0	2385.0	945.5	2384.0	950.0	2383.1	955.0
GR	2382.2	960.0	2381.3	965.0	2380.4	970.0	2379.5	975.0	2379.4	980.0
GR	2379.3	985.0	2379.2	990.0	2379.1	995.0	2379.0	1000.0	2379.1	1005.5
GR	2379.3	1011.0	2379.4	1016.5	2379.5	1022.0	2379.6	1026.8	2379.8	1031.5
GR	2379.9	1036.3	2380.0	1041.0	2380.1	1046.5	2380.3	1052.0	2380.4	1057.5
GR	2380.5	1063.0	2380.8	1068.7	2381.2	1074.3	2381.5	1080.0	2381.5	1100.0
GR	2381.5	1120.0	2381.5	1140.0	2381.5	1168.0	2382.0	1192.0	2381.5	1210.0
GR	2382.0	1220.0	2382.5	1233.0	2382.6	1254.2	2382.7	1275.3	2382.8	1296.5
GR	2382.8	1317.7	2382.9	1338.8	2383.0	1360.0	2383.1	1378.7	2383.1	1397.4
GR	2383.2	1416.1	2383.3	1434.9	2383.4	1453.6	2383.4	1472.3	2383.5	1491.0
GR	2384.0	1501.0	2384.8	1524.5	2385.5	1548.0	2386.0	1562.0	2386.3	1584.7
GR	2386.7	1607.3	2387.0	1630.0	2387.5	1650.7	2388.0	1671.3	2388.5	1692.0
ET			9.1						882.	1110.
X1	2.826	67	978.0	1010.0	535	555	580			
GR	2394.0	715.0	2393.5	732.0	2392.0	755.0	2389.5	781.0	2389.3	803.3
GR	2389.0	825.5	2388.8	847.8	2388.5	870.0	2388.5	876.0	2388.5	882.0
GR	2388.0	887.0	2387.5	892.0	2387.0	897.0	2386.5	902.0	2386.8	906.8
GR	2387.0	911.5	2387.3	916.3	2387.5	921.0	2387.5	926.5	2387.5	932.0
GR	2387.8	937.0	2388.0	942.0	2388.0	946.8	2388.0	951.5	2388.0	956.3
GR	2388.0	961.0	2386.6	966.7	2385.0	972.3	2384.0	978.0	2383.9	983.5
GR	2383.8	989.0	2383.6	994.5	2383.5	1000.0	2383.8	1005.0	2384.0	1010.0
	2385.0	1015.0	2388.0	1020.0	2387.9	1025.0	2387.8	1030.0	2387.7	1035.0
	2387.6	1040.0	2387.5	1045.0	2388.0	1066.0	2388.5	1088.0	2389.0	1110.0
GR	2389.0	1132.0	2389.0	1154.0	2389.0	1176.0	2389.0	1198.0	2389.2	1215.3
GR	2389.3	1232.7	2389.5	1250.0	2389.6	1269.3	2389.8	1288.5	2389.9	1307.8
GR	2390.0	1327.0	2390.3	1349.5	2390.5	1372.0	2390.3	1391.0	2390.0	1410.0
GR	2390.3	1430.5	2390.5	1451.0	2390.8	1471.5	2391.0	1492.0	2391.3	1512.5
GR	2391.5	1533.0	2392.0	1562.0						
ET			9.1						936.08	1054.56
X1	2.909	72	986.0	1031.0	435	460	440			
GR	2402.0	810.0	2401.3	819.3	2400.7	828.7	2400.0	838.0	2399.2	848.6
GR	2398.4	859.2	2397.6	869.8	2396.8	880.4	2396.0	891.0	2395.5	901.3
GR	2395.0	911.7	2394.5	922.0	2394.3	927.5	2394.0	933.0	2393.0	936.3
GR	2392.0	939.5	2391.0	942.8	2390.0	944.0	2389.9	958.5	2389.8	963.0
GR	2389.6	967.5	2389.5	972.0	2389.3	976.7	2389.2	981.3	2389.0	986.0
GR	2388.8	990.7	2388.7	995.3	2388.5	1000.0	2388.6	1005.2	2388.7	1010.3
GR	2388.8	1015.5	2388.8	1020.7	2388.9	1025.8	2389.0	1031.0	2389.2	1036.0
GR	2389.3	1039.0	2389.5	1042.0	2390.6	1045.8	2391.8	1052.5	2392.9	1054.3
GR	2394.0	1056.0	2394.1	1070.0	2394.1	1075.0	2394.2	1080.0	2394.3	1085.0
GR	2394.4	1090.0	2394.4	1095.0	2394.5	1100.0	2394.4	1111.3	2394.3	1122.5
GR	2394.1	1133.8	2394.0	1145.0	2394.2	1156.3	2394.3	1167.7	2394.5	1179.0
GR	2394.6	1189.3	2394.7	1199.6	2394.8	1209.9	2394.9	1220.2	2395.0	1230.5
GR	2395.1	1240.8	2395.2	1251.1	2395.3	1261.4	2395.4	1271.7	2395.5	1282.0
GR	2396.0	1291.5	2396.5	1301.0	2398.3	1310.5	2400.0	1320.0	2400.7	1330.3
GR	2401.3	1340.7	2402.0	1351.0						

			9.1						968.80	1090.9
X1	3.002	45	976.0	1021.5	490	470	490			
GR	2408.0	933.0	2407.0	941.5	2406.0	950.0	2403.0	960.0	2398.8	968.0
GR	2394.5	976.0	2394.3	988.0	2394.0	1000.0	2394.0	1011.0	2394.5	1021.5
GR	2395.0	1032.0	2395.5	1040.5	2396.0	1049.0	2396.0	1060.0	2395.8	1067.5
GR	2395.5	1075.0	2396.0	1085.0	2396.1	1094.5	2396.2	1104.0	2396.3	1113.5
GR	2396.3	1123.0	2396.4	1132.5	2396.5	1142.0	2396.7	1150.7	2396.8	1159.3
GR	2397.0	1168.0	2397.3	1179.5	2397.5	1191.0	2398.3	1200.3	2399.2	1209.7
GR	2400.0	1219.0	2400.2	1229.6	2400.4	1240.2	2400.6	1250.8	2400.8	1261.4
GR	2401.0	1272.0	2401.1	1282.8	2401.3	1293.5	2401.4	1304.3	2401.5	1315.0
GR	2402.3	1324.0	2403.2	1333.0	2404.0	1342.0	2405.0	1352.5	2406.0	1363.0
QT	2	3660	3660							
NC	0.050	0.050	0.040	0.1	0.3					
ET			9.1						938.51	1062.
X1	3.093	57	993.8	1010.0	490	450	480			
GR	2410.0	800.0	2408.8	810.5	2407.5	821.0	2407.1	831.3	2406.8	841.5
GR	2406.4	851.8	2406.0	862.0	2405.7	871.4	2405.4	880.9	2405.1	890.3
GR	2404.9	899.7	2404.6	909.1	2404.3	918.6	2404.0	932.0	2403.5	937.8
GR	2403.0	942.6	2402.5	947.4	2402.0	952.2	2402.0	957.0	2401.7	962.3
GR	2400.3	967.7	2399.0	970.2	2398.1	972.7	2397.0	993.8	2396.9	994.3
GR	2396.5	1000.0	2396.9	1005.0	2397.0	1010.0	2397.9	1015.0	2399.9	1020.0
GR	2400.2	1025.0	2402.0	1030.0	2402.4	1039.4	2402.8	1048.8	2403.2	1058.2
GR	2403.6	1067.6	2404.0	1077.0	2404.0	1089.0	2404.0	1101.0	2403.5	1111.3
GR	2403.0	1121.7	2402.5	1132.0	2402.3	1144.5	2402.0	1157.0	2401.5	1165.0
	2401.8	1174.0	2402.0	1183.0	2403.0	1193.0	2404.0	1203.0	2404.0	1211.0
	2404.0	1219.0	2403.0	1228.5	2402.0	1238.0	2404.0	1250.5	2406.0	1263.0
GR	2407.0	1270.5	2408.0	1278.0						
ET			9.1						970.53	1106.44
X1	3.195	94	985.0	1020.0	530	550	540			
GR	2415.6	870.9	2415.3	876.8	2414.9	882.7	2414.6	888.6	2414.2	890.5
GR	2413.8	930.5	2413.4	936.4	2413.1	942.3	2412.7	948.2	2412.4	954.1
GR	2412.0	960.0	2411.0	965.0	2410.0	970.0	2408.0	975.0	2406.0	980.0
GR	2404.0	985.0	2403.7	990.0	2403.3	995.0	2403.0	1000.0	2403.3	1005.0
GR	2403.5	1010.0	2403.8	1015.0	2404.0	1020.0	2405.0	1025.0	2406.0	1030.0
GR	2407.0	1035.0	2408.0	1040.0	2408.1	1045.5	2408.2	1051.0	2408.3	1056.5
GR	2408.4	1062.0	2408.5	1067.5	2408.6	1073.0	2408.7	1078.5	2408.8	1084.0
GR	2408.9	1089.5	2409.0	1095.0	2409.3	1100.0	2409.7	1105.0	2410.0	1110.0
GR	2410.3	1115.8	2410.7	1121.7	2411.0	1127.5	2411.3	1133.3	2411.7	1139.2
GR	2412.0	1145.0	2412.0	1170.0	2411.8	1176.0	2411.6	1182.0	2411.4	1188.0
GR	2411.2	1194.0	2411.0	1200.0	2411.3	1205.0	2411.5	1210.0	2411.8	1215.0
GR	2412.0	1220.0	2412.5	1226.3	2413.0	1232.5	2413.5	1238.8	2414.0	1245.0
GR	2414.1	1250.0	2414.3	1255.0	2414.4	1260.0	2414.5	1265.0	2414.4	1270.0
GR	2414.3	1275.0	2414.1	1280.0	2414.0	1285.0	2413.7	1290.0	2413.3	1295.0
GR	2413.0	1300.0	2412.9	1305.8	2412.9	1311.5	2412.8	1317.3	2412.7	1323.1
GR	2412.6	1328.8	2412.5	1334.6	2412.5	1340.4	2412.4	1346.2	2412.3	1351.9
GR	2412.2	1357.7	2412.1	1363.5	2412.1	1369.2	2412.0	1375.0	2412.2	1380.8
GR	2412.3	1386.7	2412.5	1392.5	2412.7	1398.3	2412.8	1404.2	2413.0	1410.0
GR	2413.3	1416.3	2413.5	1422.5	2413.8	1428.8	2414.0	1435.0		

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
*SECNO .095
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2188.00 ELREA= 2189.50

CONFLUENCE OF WASH AI: HARTMAN WASH
AND SOLS WASH BETWEEN CROSS-SECTIONS
AH (SOLS WASH RIVER MILE 3.07)
AJ (SOLS WASH RIVER MILE 3.27)
CROSS-SECTION DESIGNATION FROM
SOLS WASH FLOODPLAIN DELINEATION
HASSAYAMPA RIVER TO MARICOPA COUNTY LINE
CELLA BARR ASSOCIATES

SWSE DETERMINED BY SLOPE AREA METHOD

SPLIT FLOW OPTION USED FROM XSECT 0.147 TO XSECT 0.216
TO MODEL OVERFLOW LEVEE IN RIGHT OVERBANK. THE PROGRAM
WILL USE THE ENERGY GRADE LINE TO DETERMINE OVERFLOW.

X3 RECORD: CONFINE FLOW TO THE CHANNEL

.095	6.16	2186.06	2186.06	2185.00	2187.71	1.65	.00	.00	2188.00
2349.8	.0	2349.8	.0	.0	228.1	.0	.0	.0	2189.50
.00	.00	10.30	.00	.000	.025	.000	.000	2179.90	962.43
.006330	0.	0.	0.	0	8	4	.00	69.28	1031.71

FLOW DISTRIBUTION FOR SECNO= .09 CWSEL= 2186.06

STA= 962. 1046.
PER Q= 100.0
AREA= 228.1
VEL= 10.3
DEPTH= 3.3

*SECNO .133

```
SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3301 HV CHANGED MORE THAN HVINS

     .133      5.52   2187.62   2186.88       .00   2188.70      1.08       .93       .06   2190.10
   2349.8        .0    2349.8        .0        .0     281.9        .0       1.2        .3   2190.00
     .01       .00      8.34       .00      .000      .025      .000      .000   2182.10    962.90
  .003560      200.      200.      200.         3        15         0       .00     77.05   1039.95


FLOW DISTRIBUTION FOR SECNO=       .13          CWSEL=   2187.62

STA=     963.    1056.
  PER Q=    100.0
   AREA=    281.9
    VEL=      8.3
  DEPTH=      3.7

CCHV=     .300 CEHV=     .500
*SECNO  .144

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.83


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      2192.50 ELREA=      2192.10

            DS FACE: AT&SF RAILROAD BRIDGE (STRUCTURE AI-3)

               NOTE: CENTERLINE SECTION OF AT&SF RAILROAD WAS
                     USED TO CREATE THE DS FACE CROSS-SECTION
     .144      6.50   2188.70   2185.11       .00   2188.99       .29       .06       .24   2182.20
   2349.8        .0    2349.8        .0        .0     539.3        .0       1.7        .4   2182.20
     .01       .00      4.36       .00      .000      .025      .000      .000   2182.20    958.50
  .000443       65.       60.       50.         3        11         0       .00     83.00   1041.50


FLOW DISTRIBUTION FOR SECNO=       .14          CWSEL=   2188.70

STA=     959.    1042.
  PER Q=    100.0
   AREA=    539.3
    VEL=      4.4
  DEPTH=      6.5
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.64	2.80	.00	83.00	5.00	507.00	.00	2182.30	2182.20

*SECNO .147
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
2189.24	2189.03	.03	0.	2350.	507.	507.	2188.80	2192.10	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2192.50 ELREA= 2192.10

US FACE: AT&SF RAILROAD BRIDGE (STRUCTURE AI-3)

NOTE: CENTERLINE SECTION OF AT&SF RAILROAD WAS
USED TO CREATE THE US FACE CROSS-SECTION

.147	6.66	2188.96	.00	.00	2189.24	.28	.25	.00	2182.30
2349.8	.0	2349.8	.0	.0	553.1	.0	1.9	.5	2182.30
.01	.00	4.25	.00	.000	.025	.000	.000	2182.30	958.50
.000407	15.	15.	15.	2	0	0	.00	83.00	1041.50

FLOW DISTRIBUTION FOR SECNO= .15 CWSEL= 2188.96

STA= 959. 1042.
PER Q= 100.0
AREA= 553.1
VEL= 4.2
DEPTH= 6.7

CCHV= .300 CEHV= .500
*SECNO .154

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

```
SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3470 ENCROACHMENT STATIONS=      940.0    1079.5  TYPE=      1  TARGET=      139.500
            ET RECORD: STATION 940. MODEL 1 TO 1
                       FLOW CONTRACTION UPSTREAM
                       OF AT&SF RAILROAD BRIDGE

            ET RECORD: STATION 1079.5 TOP OF OVERFLOW
                       LEVEE IN RIGHT OVERBANK
     .154      3.17   2188.87   2188.87   2188.87   2190.22      1.34       .04       .53   2187.00
   2349.8      30.8    2294.8      24.2      11.5     244.0      10.1       2.2        .5   2187.20
     .01      2.67      9.41      2.39      .050      .025      .050      .000   2185.70    945.22
  .006046      30.       35.       35.         0        11         0       .00    105.63   1050.85


FLOW DISTRIBUTION FOR SECNO=       .15          CWSEL=   2188.87

STA=     945.     948.     956.    1040.    1046.    1051.
  PER Q=       .1      1.2     97.7       .9       .1
   AREA=      1.3     10.3    244.0      7.9      2.2
    VEL=      1.3      2.8      9.4      2.7      1.3
  DEPTH=       .4      1.4      2.9      1.3       .4

CCHV=     .300 CEHV=     .500
*SECNO  .171
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      915.0    1139.1  TYPE=      1  TARGET=      224.100
            ET RECORD: STATION 915. MODEL 1 TO 1
                       FLOW CONTRACTION UPSTREAM
                       OF AT&SF RAILROAD BRIDGE

            ET RECORD: STATION 1139.1 TOP OF OVERFLOW
                       LEVEE IN RIGHT OVERBANK

            MAPPED FLOODPLAIN TO CWSEL

     .171      8.23   2192.23   2192.23   2192.23   2193.19       .97       .66       .11   2190.10
   2500.3     138.1    1573.2     789.1      53.3     167.9     171.3       2.9        .9   2190.10
     .02      2.59      9.37      4.61      .050      .030      .050      .000   2184.00    915.00
  .009509       85.       90.       80.         0        12         0       .00    224.10   1139.10
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .17 CWSEL= 2192.23

STA=	915.	963.	983.	1045.	1053.	1062.	1071.	1080.	1091.	1109.	1128.	1139.
PER Q=	4.0	1.5	62.9	4.2	6.1	5.2	3.6	3.4	4.8	3.5	.7	
AREA=	39.7	13.6	167.9	20.2	26.2	23.7	18.9	19.7	30.0	24.6	8.2	
VEL=	2.5	2.8	9.4	5.2	5.9	5.5	4.7	4.3	4.0	3.5	2.3	
DEPTH=	.8	.7	2.7	2.4	2.9	2.6	2.1	1.8	1.6	1.3	.7	

*SECNO .216

3470 ENCROACHMENT STATIONS= 745.0 1188.7 TYPE= 1 TARGET= 443.700

ET RECORD: STATION 745. MODEL 1 TO 1
FLOW CONTRACTION UPSTREAM
OF AT&SF RAILROAD BRIDGE

ET RECORD: STATION 1188.7 TOP OF OVERFLOW
LEVEE IN RIGHT OVERBANK

MAPPED FLOODPLAIN TO CWSEL

.216	3.48	2195.18	2195.00	2195.18	2195.88	.70	2.60	.08	2193.00
3802.0	1880.5	1058.6	862.9	382.0	108.8	158.7	5.8	2.4	2193.00
.03	4.92	9.73	5.44	.050	.030	.050	.000	2191.70	745.00
.011878	235.	240.	245.	4	18	0	.00	348.63	1093.63

FLOW DISTRIBUTION FOR SECNO= .22 CWSEL= 2195.18

STA=	745.	773.	791.	815.	833.	867.	913.	933.	949.	963.	1007.	1038.	1055.
PER Q=	11.4	6.7	6.7	4.0	3.6	5.3	4.0	3.9	3.9	27.8	3.4	3.4	
AREA=	73.2	44.3	48.3	32.0	38.8	53.9	33.7	29.9	27.9	108.8	34.9	28.5	
VEL=	5.9	5.8	5.3	4.8	3.6	3.7	4.5	4.9	5.3	9.7	3.7	4.6	
DEPTH=	2.6	2.4	2.1	1.8	1.1	1.2	1.6	1.9	2.1	2.4	1.1	1.7	

STA=	1055.	1064.	1071.	1077.	1088.	1094.
PER Q=	3.5	4.4	3.8	4.0	.2	
AREA=	21.7	23.6	19.5	27.0	3.6	
VEL=	6.1	7.1	7.4	5.6	2.5	
DEPTH=	2.6	3.2	3.4	2.3	.7	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCHV= .100 CEHV= .300
*SECNO .254

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.254	4.14	2199.64	2199.64	2199.64	2200.26	.61	1.86	.01	2196.40
3802.0	1325.1	1316.2	1160.6	455.0	134.7	350.0	9.7	5.2	2196.80
.04	2.91	9.77	3.32	.050	.030	.050	.000	2195.50	508.85
.006643	240.	200.	190.	0	11	0	.00	718.38	1270.19

FLOW DISTRIBUTION FOR SECNO= .25 CWSEL= 2199.64

STA=	509.	572.	633.	663.	740.	771.	813.	926.	956.	969.	978.	1014.	1028.
PER Q=	3.4	3.6	4.3	3.1	3.6	3.4	3.2	3.4	3.4	3.5	34.6	3.9	
AREA=	55.5	55.6	48.5	48.8	44.9	48.0	55.6	41.2	30.0	26.9	134.7	33.4	
VEL=	2.3	2.5	3.4	2.4	3.1	2.7	2.2	3.1	4.3	4.9	9.8	4.4	
DEPTH=	.9	.9	1.6	.6	1.4	1.1	.5	1.3	2.4	2.9	3.8	2.4	

=	1028.	1050.	1067.	1090.	1142.	1162.	1210.	1253.	1270.
PER Q=	5.4	3.8	3.6	3.2	3.5	3.6	3.0	.6	
AREA=	49.1	36.2	38.9	46.5	36.9	52.5	45.0	11.5	
VEL=	4.2	3.9	3.5	2.6	3.6	2.6	2.6	2.0	
DEPTH=	2.2	2.1	1.7	.9	1.8	1.1	1.1	.7	

*SECNO .345

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.345	3.30	2204.50	2204.50	2204.50	2205.04	.55	3.72	.01	2202.60
3802.0	819.5	1093.1	1889.4	247.1	116.5	480.1	18.9	12.3	2202.60
.06	3.32	9.39	3.94	.050	.030	.050	.000	2201.20	625.53
.010143	380.	480.	495.	0	16	0	.00	715.82	1433.31

FLOW DISTRIBUTION FOR SECNO= .34 CWSEL= 2204.50

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	626.	647.	669.	700.	748.	928.	975.	1020.	1040.	1155.	1192.	1230.	1271.
PER Q=	3.1	4.9	3.4	3.4	3.1	3.7	28.7	3.7	3.0	3.9	3.2	3.1	
AREA=	29.4	41.0	38.0	44.3	53.7	40.8	116.5	33.8	43.8	43.9	39.5	39.8	
VEL=	4.0	4.5	3.5	2.9	2.2	3.4	9.4	4.2	2.6	3.4	3.1	3.0	
DEPTH=	1.4	1.8	1.2	.9	.3	.9	2.6	1.6	.4	1.2	1.0	1.0	

STA=	1271.	1302.	1324.	1341.	1359.	1376.	1393.	1412.	1433.
PER Q=	3.8	4.3	5.0	4.4	4.9	3.8	4.7	1.8	
AREA=	39.9	37.5	38.2	35.3	36.6	32.4	37.3	21.9	
VEL=	3.6	4.4	5.0	4.7	5.1	4.5	4.8	3.2	
DEPTH=	1.3	1.8	2.1	2.0	2.2	1.8	2.0	1.0	

*SECNO .423

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.423	4.93	2212.03	2212.03	2212.03	2212.90	.87	3.29	.09	2207.70
3802.0	611.8	1723.2	1467.0	119.9	168.5	445.9	27.1	18.4	2207.70
.08	5.10	10.23	3.29	.050	.030	.050	.000	2207.10	931.15
.005717	350.	410.	505.	0	11	0	.00	445.27	1435.53

FLOW DISTRIBUTION FOR SECNO= .42 CWSEL= 2212.03

STA=	931.	952.	966.	973.	1010.	1020.	1031.	1050.	1074.	1084.	1116.	1145.	1201.
PER Q=	3.3	7.8	4.9	45.3	6.0	3.8	4.0	6.9	3.0	4.4	3.1	3.4	
AREA=	35.1	53.1	31.7	168.5	40.2	30.9	40.5	61.8	27.1	52.3	41.0	55.5	
VEL=	3.6	5.6	5.9	10.2	5.6	4.7	3.8	4.2	4.2	3.2	2.8	2.3	
DEPTH=	1.7	3.9	4.3	4.5	4.0	3.0	2.1	2.5	2.6	1.7	1.4	1.0	

STA=	1201.	1410.	1436.
PER Q=	3.1	1.0	
AREA=	77.6	18.8	
VEL=	1.5	2.0	
DEPTH=	.4	.7	

*SECNO .540

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.540	3.82	2220.32	2220.32	2220.32	2221.07	.75	4.08	.01	2217.00
3802.0	1179.7	1302.7	1319.7	309.7	124.5	302.8	37.0	24.7	2217.00
.11	3.81	10.46	4.36	.050	.030	.050	.000	2216.50	655.43
.008283	635.	620.	550.	0	19	0	.00	498.41	1222.91

FLOW DISTRIBUTION FOR SECNO= .54 CWSEL= 2220.32

STA=	655.	790.	848.	928.	949.	963.	978.	985.	1020.	1027.	1034.	1041.	1048.
PER Q=	3.3	3.1	3.9	5.5	5.9	5.9	3.5	34.3	3.1	3.0	3.5	3.3	
AREA=	60.6	47.8	50.5	45.2	41.0	41.6	23.1	124.5	20.9	20.5	22.8	22.1	
VEL=	2.1	2.4	3.0	4.6	5.5	5.4	5.8	10.5	5.7	5.6	5.8	5.7	
DEPTH=	.5	.8	.6	2.2	2.9	2.8	3.1	3.5	3.1	3.0	3.2	3.1	

STA=	1048.	1063.	1085.	1098.	1119.	1140.	1173.	1223.
PER Q=	4.8	3.6	3.0	3.4	3.2	3.1	.6	
AREA=	36.5	36.0	27.1	34.0	33.0	37.4	12.6	
VEL=	5.0	3.8	4.2	3.8	3.7	3.1	1.8	
DEPTH=	2.5	1.7	2.0	1.6	1.6	1.1	.3	

*SECNO .595

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.595	4.39	2226.19	2226.19	2226.19	2227.05	.86	2.31	.03	2222.00
3802.0	2054.0	1412.8	335.2	485.5	128.6	94.0	42.1	27.8	2222.00
.12	4.23	10.99	3.57	.050	.030	.050	.000	2221.80	475.35
.007069	330.	290.	270.	0	8	0	.00	369.25	1077.30

FLOW DISTRIBUTION FOR SECNO= .60 CWSEL= 2226.19

STA=	475.	497.	507.	870.	890.	922.	947.	959.	982.	1012.	1021.	1076.	1077.
PER Q=	10.3	3.6	8.6	4.3	6.9	6.8	3.2	10.4	37.2	4.0	4.8	.0	
AREA=	69.3	28.1	122.5	40.7	65.1	58.4	28.0	73.3	128.6	28.7	65.2	.1	
VEL=	5.6	4.9	2.7	4.0	4.0	4.4	4.4	5.4	11.0	5.3	2.8	.5	
DEPTH=	3.2	2.8	.3	2.0	2.0	2.3	2.3	3.2	4.3	3.2	1.2	.1	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .737
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.737	2.19	2239.19	2239.19	2239.19	2239.93	.75	6.95	.01	2237.50
3802.0	1058.5	1324.5	1419.0	232.7	141.8	250.8	52.0	33.6	2237.50
.15	4.55	9.34	5.66	.050	.030	.050	.000	2237.00	731.93
.016572	555.	750.	755.	0	8	0	.00	434.92	1166.85

FLOW DISTRIBUTION FOR SECNO= .74 CWSEL= 2239.19

STA=	732.	823.	848.	885.	910.	940.	1020.	1033.	1046.	1059.	1072.	1085.	1097.
PER Q=	3.8	4.9	9.3	4.5	5.4	34.8	3.3	3.6	3.9	4.3	4.6	4.0	
AREA=	54.1	37.1	63.9	35.3	42.3	141.8	22.6	23.9	25.2	26.5	27.8	24.4	
VEL=	2.7	5.0	5.5	4.8	4.8	9.3	5.5	5.7	5.9	6.1	6.3	6.2	
DEPTH=	.6	1.5	1.7	1.4	1.4	1.8	1.7	1.8	1.9	2.0	2.1	2.1	

STA=	1097.	1108.	1120.	1143.	1167.
PER Q=	3.5	3.1	4.7	2.3	
AREA=	22.4	20.9	35.2	22.1	
VEL=	5.9	5.6	5.0	4.0	
DEPTH=	1.9	1.8	1.5	.9	

*SECNO .826

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.826	3.21	2246.81	2246.81	2246.81	2247.69	.88	5.96	.04	2244.10
3802.0	368.9	1228.3	2204.8	70.7	110.7	440.7	58.2	37.6	2244.00
.16	5.22	11.10	5.00	.050	.030	.050	.000	2243.60	949.48
.011310	460.	470.	410.	0	14	0	.00	348.66	1327.32

FLOW DISTRIBUTION FOR SECNO= .83 CWSEL= 2246.81

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	949.	965.	980.	985.	1021.	1032.	1043.	1063.	1081.	1091.	1101.	1112.	1122.
PER Q=	3.9	4.1	1.8	32.3	4.5	3.4	4.9	4.8	3.6	3.9	3.1	3.3	
AREA=	28.1	30.6	12.0	110.7	28.4	23.9	38.3	36.9	23.3	25.8	22.7	23.2	
VEL=	5.2	5.1	5.7	11.1	6.0	5.4	4.9	5.0	5.8	5.8	5.3	5.4	
DEPTH=	1.8	2.0	2.4	3.1	2.6	2.2	1.9	2.0	2.5	2.5	2.2	2.2	

STA=	1122.	1140.	1149.	1158.	1168.	1200.	1281.	1327.
PER Q=	6.0	3.7	3.8	3.4	3.2	3.3	3.0	
AREA=	41.3	23.2	23.9	23.9	35.4	40.3	30.2	
VEL=	5.5	6.0	6.1	5.4	3.5	3.1	3.8	
DEPTH=	2.3	2.6	2.7	2.3	1.1	.5	.6	

*SECNO .921

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.921	5.54	2255.14	2255.14	2255.14	2256.29	1.16	3.59	.08	2250.20
3802.0	120.9	2101.6	1579.4	29.7	190.2	402.4	64.9	40.9	2250.80
.18	4.07	11.05	3.93	.050	.030	.050	.000	2249.60	972.77
.005392	510.	500.	450.	0	14	0	.00	287.81	1343.13

FLOW DISTRIBUTION FOR SECNO= .92 CWSEL= 2255.14

STA=	973.	985.	1021.	1027.	1036.	1046.	1056.	1072.	1083.	1094.	1115.	1137.	1320.
PER Q=	3.2	55.3	3.1	5.3	5.8	4.6	4.8	3.4	3.6	3.4	3.4	3.4	
AREA=	29.7	190.2	22.3	37.6	39.7	34.7	42.8	30.1	30.9	39.7	39.3	68.5	
VEL=	4.1	11.0	5.3	5.3	5.5	5.1	4.3	4.3	4.4	3.3	3.2	1.9	
DEPTH=	2.4	5.3	3.8	3.8	4.0	3.5	2.7	2.8	2.8	1.8	1.8	.4	

STA=	1320.	1343.
PER Q=	.8	
AREA=	16.8	
VEL=	1.9	
DEPTH=	.7	

*SECNO .979

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.979	5.22	2258.72	2258.72	2258.72	2259.79	1.08	1.85	.01	2255.00
3802.0	2027.1	1675.9	99.0	448.8	146.0	26.7	68.9	42.7	2255.20
.19	4.52	11.48	3.71	.050	.030	.050	.000	2253.50	754.76
.007513	295.	310.	250.	0	11	0	.00	269.36	1025.92

FLOW DISTRIBUTION FOR SECNO= .98 CWSEL= 2258.72

STA=	755.	816.	828.	845.	863.	881.	893.	912.	923.	935.	958.	969.	975.
PER Q=	6.1	3.0	4.8	4.4	3.9	3.3	4.3	3.4	3.0	8.0	5.2	3.7	
AREA=	66.6	26.4	40.9	38.9	35.9	28.4	38.9	27.8	25.9	61.0	36.2	22.0	
VEL=	3.5	4.4	4.5	4.3	4.1	4.5	4.2	4.6	4.4	5.0	5.5	6.3	
DEPTH=	1.1	2.2	2.3	2.2	2.0	2.3	2.1	2.4	2.3	2.6	3.1	3.9	

STA=	975.	1008.	1026.
PER Q=	44.1	2.6	
AREA=	146.0	26.7	
VEL=	11.5	3.7	
DEPTH=	4.5	1.5	

*SECNO 1.108

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.108	3.08	2266.68	2266.68	2266.68	2267.46	.79	4.83	.03	2264.40
3802.0	2193.6	1509.9	98.6	511.3	151.2	26.4	76.6	46.6	2264.40
.21	4.29	9.99	3.74	.050	.030	.050	.000	2263.60	603.52
.010310	450.	680.	680.	0	14	0	.00	424.54	1048.49

FLOW DISTRIBUTION FOR SECNO= 1.11 CWSEL= 2266.68

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	604.	630.	652.	713.	740.	761.	782.	822.	842.	862.	902.	931.	951.
PER Q=	8.1	5.5	3.2	4.8	4.8	5.0	3.3	3.2	3.0	3.4	4.2	6.0	
AREA=	56.3	43.9	36.6	43.3	39.5	40.5	40.3	30.6	29.5	41.8	41.9	44.2	
VEL=	5.4	4.8	3.3	4.2	4.6	4.7	3.1	4.0	3.9	3.1	3.8	5.2	
DEPTH=	2.1	2.0	.6	1.6	1.9	1.9	1.0	1.5	1.5	1.1	1.4	2.3	

STA=	951.	961.	1015.	1048.
PER Q=	3.2	39.7	2.6	
AREA=	22.8	151.2	26.4	
VEL=	5.3	10.0	3.7	
DEPTH=	2.3	2.8	.8	

*SECNO 1.203

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.203	5.01	2270.81	2270.81	2270.81	2272.39	1.58	4.36	.24	2265.80
3802.0	742.7	1455.3	1604.0	97.4	104.2	260.8	82.3	49.3	2265.80
.23	7.62	13.96	6.15	.050	.030	.050	.000	2265.80	963.97
.009259	345.	500.	530.	0	14	0	.00	154.26	1118.23

FLOW DISTRIBUTION FOR SECNO= 1.20 CWSEL= 2270.81

STA=	964.	975.	980.	985.	990.	1011.	1016.	1021.	1026.	1031.	1036.	1046.	1056.
PER Q=	3.0	5.4	5.5	5.6	38.3	5.5	4.5	3.9	3.9	3.1	5.5	5.4	
AREA=	21.7	24.8	25.3	25.6	104.2	25.5	22.9	20.3	20.3	17.7	33.1	32.6	
VEL=	5.3	8.2	8.3	8.4	14.0	8.3	7.5	7.3	7.3	6.7	6.4	6.3	
DEPTH=	2.1	4.9	5.0	5.0	5.0	4.9	4.3	4.1	4.1	3.6	3.3	3.3	

STA=	1056.	1066.	1076.	1105.	1118.
PER Q=	4.0	3.2	3.0	.1	
AREA=	27.1	23.9	34.0	3.3	
VEL=	5.6	5.2	3.4	1.2	
DEPTH=	2.7	2.4	1.2	.3	

*SECNO 1.301

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

1.301	3.17	2276.67	2276.35	2276.67	2277.33	.66	4.84	.09	2274.00
3802.0	2701.2	1010.9	89.8	523.9	108.8	22.6	88.7	52.0	2274.00
.25	5.16	9.29	3.97	.050	.030	.050	.000	2273.50	713.84
.010047	500.	520.	480.	4	11	0	.00	307.71	1021.55

FLOW DISTRIBUTION FOR SECNO= 1.30 CWSEL= 2276.67

STA=	714.	731.	750.	774.	793.	812.	833.	854.	873.	892.	918.	944.	962.
PER Q=	6.1	9.5	9.0	6.6	7.1	7.3	7.6	6.7	3.1	3.2	3.1	1.9	
AREA=	41.0	58.5	60.9	46.2	48.1	51.6	52.9	46.5	29.5	33.9	33.5	21.4	
VEL=	5.6	6.2	5.6	5.4	5.6	5.4	5.4	5.4	4.0	3.6	3.5	3.4	
DEPTH=	2.4	3.0	2.6	2.5	2.6	2.4	2.5	2.5	1.6	1.3	1.3	1.2	

STA=	962.	1004.	1022.
PER Q=	26.6	2.4	
AREA=	108.8	22.6	
VEL=	9.3	4.0	
DEPTH=	2.6	1.3	

*SECNO 1.392
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.392	4.35	2283.95	2283.95	2283.95	2284.92	.97	5.32	.10	2281.30
3802.0	2364.4	1289.8	147.8	467.9	110.8	31.7	96.9	56.0	2281.30
.27	5.05	11.64	4.66	.050	.030	.050	.000	2279.60	731.53
.009222	590.	480.	480.	0	11	0	.00	300.73	1032.26

FLOW DISTRIBUTION FOR SECNO= 1.39 CWSEL= 2283.95

STA=	732.	756.	764.	773.	779.	788.	797.	811.	821.	841.	922.	954.	970.
PER Q=	4.9	4.2	4.2	4.0	5.3	3.9	7.3	5.0	3.3	3.9	5.3	4.7	
AREA=	42.1	26.5	26.6	23.1	30.5	25.3	45.8	30.8	30.6	56.4	49.7	35.8	
VEL=	4.4	6.0	6.1	6.5	6.6	5.9	6.1	6.1	4.1	2.7	4.1	5.0	
DEPTH=	1.8	3.0	3.1	3.5	3.5	2.9	3.1	3.1	1.6	.7	1.6	2.3	

STA=	970.	979.	988.	1016.	1026.	1032.
PER Q=	3.6	2.5	33.9	3.2	.7	
AREA=	25.5	19.0	110.8	24.0	7.8	
VEL=	5.3	5.0	11.6	5.1	3.4	
DEPTH=	2.6	2.3	3.9	2.4	1.2	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 1.476
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.476	4.38	2290.48	2290.48	2290.48	2291.22	.74	3.57	.02	2287.70
3802.0	2684.3	1068.1	49.6	653.0	95.0	12.3	103.0	59.2	2287.30
.29	4.11	11.24	4.05	.050	.030	.050	.000	2286.10	583.67
.008617	380.	440.	440.	0	5	0	.00	428.98	1012.64

FLOW DISTRIBUTION FOR SECNO= 1.48 CWSEL= 2290.48

STA=	584.	632.	673.	701.	721.	738.	764.	781.	801.	821.	840.	860.	881.
PER Q=	3.3	3.5	4.8	5.3	3.3	6.1	3.7	3.2	4.1	4.5	3.7	5.1	
AREA=	45.6	44.7	47.0	43.1	31.2	51.6	32.1	32.2	36.9	38.6	35.1	43.1	
VEL=	2.7	2.9	3.9	4.7	4.0	4.5	4.4	3.8	4.2	4.4	4.0	4.5	
DEPTH=	.9	1.1	1.6	2.2	1.8	2.0	1.9	1.6	1.9	2.0	1.7	2.1	

STA=	881.	928.	946.	966.	976.	980.	1005.	1013.
PER Q=	3.5	4.6	5.6	4.5	2.0	28.1	1.3	
AREA=	45.8	38.9	44.3	29.4	13.6	95.0	12.3	
VEL=	2.9	4.5	4.8	5.8	5.5	11.2	4.0	
DEPTH=	1.0	2.1	2.3	3.0	2.8	3.9	1.6	

*SECNO 1.587

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.587	2.39	2297.49	2297.49	2297.49	2298.09	.61	5.43	.01	2295.90
3802.0	361.1	1625.6	1815.4	109.2	193.0	452.3	112.1	65.4	2295.90
.32	3.31	8.42	4.01	.050	.030	.050	.000	2295.10	859.57
.012198	480.	590.	540.	0	11	0	.00	608.23	1478.22

FLOW DISTRIBUTION FOR SECNO= 1.59 CWSEL= 2297.49

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	860.	910.	970.	985.	1086.	1137.	1190.	1220.	1260.	1280.	1300.	1341.	1361.
PER Q=	3.2	4.1	2.2	42.8	3.6	3.1	3.1	3.3	4.4	5.7	8.0	4.2	
AREA=	40.8	47.7	20.7	193.0	43.8	36.5	33.4	38.4	35.0	41.7	66.7	34.3	
VEL=	2.9	3.3	4.0	8.4	3.1	3.2	3.6	3.2	4.8	5.2	4.5	4.7	
DEPTH=	.8	.8	1.4	1.9	.9	.7	1.1	1.0	1.7	2.0	1.6	1.7	

STA=	1361.	1380.	1398.	1429.	1478.
PER Q=	3.1	4.0	3.6	1.6	
AREA=	27.8	31.7	36.2	27.0	
VEL=	4.3	4.9	3.8	2.3	
DEPTH=	1.5	1.8	1.2	.5	

*SECNO 1.676

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.676	4.16	2305.76	2305.76	2305.76	2306.27	.51	4.15	.01	2302.90
3802.0	338.5	1143.1	2320.3	136.0	122.1	765.2	122.4	74.1	2302.90
.34	2.49	9.36	3.03	.050	.030	.050	.000	2301.60	784.90
.006026	460.	470.	525.	0	14	0	.00	892.46	1718.07

FLOW DISTRIBUTION FOR SECNO= 1.68 CWSEL= 2305.76

STA=	785.	921.	966.	979.	1011.	1026.	1043.	1064.	1082.	1101.	1120.	1180.	1256.
PER Q=	3.4	3.4	2.1	30.1	6.0	4.3	4.3	4.7	4.1	5.5	3.4	3.3	
AREA=	63.2	50.3	22.5	122.1	46.9	40.4	44.0	43.2	40.9	48.8	50.7	53.2	
VEL=	2.1	2.6	3.6	9.4	4.9	4.1	3.8	4.1	3.9	4.3	2.6	2.3	
DEPTH=	.5	1.1	1.7	3.8	3.1	2.4	2.1	2.4	2.2	2.6	.8	.7	

STA=	1256.	1284.	1317.	1367.	1440.	1603.	1655.	1714.	1718.
PER Q=	3.8	3.3	3.6	3.1	4.3	3.8	3.3	.0	
AREA=	45.7	44.3	55.4	55.1	83.0	57.8	55.1	.8	
VEL=	3.2	2.8	2.5	2.2	2.0	2.5	2.3	.9	
DEPTH=	1.6	1.3	1.1	.8	.5	1.1	.9	.2	

*SECNO 1.771

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.771	2.08	2313.19	2313.19	2313.19	2313.69	.51	4.62	.00	2312.00
3802.0	966.0	609.4	2226.7	189.7	65.2	490.3	131.9	83.0	2312.00
.37	5.09	9.34	4.54	.050	.030	.050	.000	2311.10	706.87
.018311	525.	500.	450.	0	8	0	.00	756.23	1867.60

FLOW DISTRIBUTION FOR SECNO= 1.77 CWSEL= 2313.19

STA=	707.	850.	870.	891.	912.	990.	1030.	1080.	1146.	1176.	1208.	1256.	1699.
PER Q=	7.1	5.2	5.7	5.5	1.8	16.0	4.0	3.5	3.1	3.3	4.9	3.5	
AREA=	64.9	34.9	36.8	35.9	17.2	65.2	42.3	42.9	29.7	31.5	46.9	48.7	
VEL=	4.2	5.7	5.9	5.8	4.0	9.3	3.6	3.1	4.0	4.0	4.0	2.7	
DEPTH=	.5	1.7	1.8	1.7	.2	1.6	.8	.6	1.0	1.0	1.0	.1	

STA=	1699.	1727.	1749.	1763.	1792.	1802.	1823.	1834.	1868.
PER Q=	5.4	6.4	3.4	7.5	3.1	5.1	3.3	2.1	
AREA=	39.7	40.4	22.7	49.9	19.0	34.5	20.6	21.6	
VEL=	5.1	6.0	5.7	5.7	6.2	5.6	6.0	3.7	
DEPTH=	1.4	1.8	1.7	1.7	1.9	1.6	1.8	.6	

*SECNO 1.871

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.871	2.38	2321.48	2321.48	2321.48	2322.14	.66	8.14	.04	2319.30
3802.0	898.0	997.9	1906.1	188.8	100.0	411.5	140.4	90.3	2319.50
.39	4.76	9.98	4.63	.050	.030	.050	.000	2319.10	843.90
.013934	545.	530.	490.	0	8	0	.00	507.71	1685.42

FLOW DISTRIBUTION FOR SECNO= 1.87 CWSEL= 2321.48

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	844.	866.	884.	902.	934.	978.	1022.	1045.	1086.	1116.	1139.	1550.	1591.
PER Q=	4.1	6.0	5.8	3.7	4.1	26.2	3.8	3.4	3.8	5.6	3.9	3.4	
AREA=	32.6	39.2	38.3	35.9	42.8	100.0	31.7	37.6	35.7	42.0	45.2	38.5	
VEL=	4.8	5.8	5.7	3.9	3.6	10.0	4.5	3.4	4.0	5.1	3.3	3.4	
DEPTH=	1.5	2.1	2.1	1.1	1.0	2.2	1.4	.9	1.2	1.8	.1	.9	

STA=	1591.	1612.	1633.	1644.	1656.	1667.	1680.	1685.
PER Q=	5.1	6.1	3.5	4.2	4.1	3.1	.2	
AREA=	37.4	42.1	23.3	26.1	25.5	23.0	3.2	
VEL=	5.2	5.5	5.7	6.2	6.1	5.0	2.4	
DEPTH=	1.8	2.0	2.1	2.3	2.3	1.7	.6	

*SECNO 1.964

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.964	3.00	2328.40	2328.40	2328.40	2329.00	.60	5.09	.01	2325.70
3802.0	1644.9	1437.7	719.4	484.0	158.4	199.6	148.9	97.1	2325.60
.41	3.40	9.08	3.60	.050	.030	.050	.000	2325.40	409.90
.008394	610.	490.	340.	0	11	0	.00	700.98	1213.00

FLOW DISTRIBUTION FOR SECNO= 1.96 CWSEL= 2328.40

STA=	410.	467.	485.	505.	525.	545.	564.	583.	633.	676.	950.	970.	994.
PER Q=	3.9	3.2	3.9	4.0	3.5	3.4	3.9	3.2	3.0	3.2	3.5	4.4	
AREA=	48.0	31.3	36.0	37.4	34.0	33.3	35.7	46.3	42.3	63.1	34.3	42.3	
VEL=	3.1	3.9	4.1	4.1	3.9	3.9	4.1	2.6	2.7	2.0	3.9	4.0	
DEPTH=	.8	1.7	1.9	1.8	1.7	1.7	1.9	.9	1.0	.2	1.7	1.7	

STA=	994.	1050.	1061.	1077.	1100.	1196.	1213.
PER Q=	37.8	4.2	3.1	5.0	6.6	.1	
AREA=	158.4	30.0	28.5	45.3	92.4	3.4	
VEL=	9.1	5.3	4.1	4.2	2.7	.9	
DEPTH=	2.8	2.7	1.8	1.9	1.0	.2	

*SECNO 2.054

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.054	4.02	2334.52	2334.52	2334.52	2335.00	.47	2.69	.01	2331.90
3802.0	2090.7	903.2	808.1	754.2	88.7	290.8	155.8	102.7	2331.20
.44	2.77	10.18	2.78	.050	.030	.050	.000	2330.50	284.45
.007461	195.	475.	490.	0	14	0	.00	1018.03	1328.99

FLOW DISTRIBUTION FOR SECNO= 2.05 CWSEL= 2334.52

STA=	284.	354.	412.	451.	490.	547.	583.	622.	660.	702.	750.	802.	876.
PER Q=	3.7	3.4	3.8	3.5	3.0	3.1	3.7	3.4	3.5	3.4	4.2	3.9	
AREA=	59.4	53.5	48.5	45.9	49.2	41.4	47.5	45.3	48.0	49.8	57.3	61.1	
VEL=	2.4	2.4	3.0	2.9	2.3	2.8	3.0	2.9	2.8	2.6	2.8	2.4	
DEPTH=	.8	.9	1.2	1.2	.9	1.1	1.2	1.2	1.1	1.0	1.1	.8	

STA=	876.	909.	945.	972.	986.	1010.	1021.	1077.	1130.	1225.	1291.	1329.
PER Q=	3.1	3.6	3.1	2.5	23.8	3.4	3.9	4.3	3.8	4.1	1.7	
AREA=	40.5	45.4	36.9	24.7	88.7	27.3	56.5	59.2	56.5	63.1	28.2	
VEL=	2.9	3.1	3.1	3.8	10.2	4.7	2.6	2.8	2.5	2.5	2.3	
DEPTH=	1.2	1.3	1.3	1.8	3.7	2.5	1.0	1.1	.6	1.0	.7	

*SECNO 2.149

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.149	4.37	2341.37	2341.37	2341.37	2342.36	.99	3.07	.16	2337.00
3802.0	532.2	2383.1	886.7	189.0	244.8	232.4	165.8	110.5	2337.00
.45	2.82	9.74	3.82	.050	.030	.050	.000	2337.00	739.30
.005406	495.	500.	450.	0	8	0	.00	385.61	1211.02

FLOW DISTRIBUTION FOR SECNO= 2.15 CWSEL= 2341.37

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	739.	790.	822.	964.	970.	1026.	1036.	1056.	1078.	1180.	1190.	1199.	1211.
PER Q=	3.6	3.0	4.4	2.9	62.7	4.8	3.3	3.1	3.1	3.8	3.6	1.7	
AREA=	50.7	41.4	75.5	21.5	244.8	35.1	37.1	37.3	42.9	31.2	29.0	19.8	
VEL=	2.7	2.8	2.2	5.2	9.7	5.2	3.3	3.1	2.8	4.6	4.7	3.2	
DEPTH=	1.0	1.3	.5	3.8	4.4	3.7	1.8	1.7	.4	3.1	3.2	1.6	

CCHV= .100 CEHV= .300
*SECNO 2.242

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.242	4.04	2348.04	2348.04	2348.04	2349.30	1.26	2.80	.08	2344.40
3802.0	318.5	2158.9	1324.6	71.4	189.9	316.9	172.7	113.9	2344.40
.47	4.46	11.37	4.18	.050	.025	.050	.000	2344.00	952.23
.006054	460.	490.	500.	0	11	0	.00	230.95	1550.73

FLOW DISTRIBUTION FOR SECNO= 2.24 CWSEL= 2348.04

=	952.	975.	985.	1034.	1044.	1055.	1066.	1471.	1489.	1511.	1527.	1551.
PER Q=	3.6	4.8	56.8	5.1	5.2	4.0	3.8	4.3	5.3	3.8	3.3	
AREA=	37.0	34.4	189.9	35.7	36.9	32.4	46.8	40.8	50.4	36.3	37.5	
VEL=	3.7	5.3	11.4	5.5	5.3	4.7	3.1	4.0	4.0	4.0	3.3	
DEPTH=	1.6	3.4	3.9	3.6	3.5	2.9	.1	2.3	2.3	2.3	1.6	

*SECNO 2.331
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.331	3.23	2353.73	2353.73	2353.73	2354.59	.85	3.48	.04	2350.80
3802.0	1051.8	1243.9	1506.3	255.9	108.2	359.1	180.3	117.5	2350.80
.49	4.11	11.50	4.19	.050	.025	.050	.000	2350.50	842.55
.008309	470.	470.	535.	0	15	0	.00	384.12	1226.68

FLOW DISTRIBUTION FOR SECNO= 2.33 CWSEL= 2353.73

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	843.	875.	910.	925.	950.	970.	980.	985.	1020.	1030.	1040.	1050.	1070.
PER Q=	6.2	4.8	3.3	4.5	3.2	3.6	2.1	32.7	4.2	4.0	3.2	3.5	
AREA=	57.9	51.9	29.8	43.4	32.2	26.3	14.4	108.2	29.1	28.1	24.6	34.2	
VEL=	4.1	3.5	4.3	3.9	3.8	5.2	5.5	11.5	5.5	5.4	4.9	3.9	
DEPTH=	1.8	1.5	2.0	1.7	1.6	2.6	2.9	3.1	2.9	2.8	2.5	1.7	

STA=	1070.	1120.	1140.	1175.	1200.	1227.
PER Q=	9.2	4.4	4.1	4.5	2.5	
AREA=	84.0	39.7	46.9	43.4	29.2	
VEL=	4.2	4.3	3.3	3.9	3.3	
DEPTH=	1.7	2.0	1.3	1.7	1.1	

*SECNO 2.430
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.430	7.75	2360.75	2360.75	2360.75	2362.05	1.30	2.54	.14	2354.00
3802.0	397.7	1834.3	1570.0	87.7	144.9	478.0	188.7	121.3	2354.00
.51	4.53	12.66	3.28	.050	.025	.050	.000	2353.00	966.82
.003254	530.	525.	500.	0	17	0	.00	260.50	1227.32

OW DISTRIBUTION FOR SECNO= 2.43 CWSEL= 2360.75

STA=	967.	982.	988.	990.	1010.	1014.	1019.	1031.	1092.	1133.	1154.	1180.	1192.
PER Q=	4.0	4.5	2.0	48.2	3.5	3.6	3.3	3.5	4.2	3.9	5.2	3.5	
AREA=	41.7	33.0	13.0	144.9	23.7	27.9	35.3	69.3	67.2	49.4	63.7	37.5	
VEL=	3.6	5.2	5.8	12.7	5.6	4.9	3.5	1.9	2.4	3.0	3.1	3.5	
DEPTH=	2.8	5.5	6.5	7.2	6.2	5.0	3.0	1.1	1.6	2.3	2.5	3.0	

STA=	1192.	1201.	1210.	1227.
PER Q=	3.4	4.6	2.6	
AREA=	32.4	39.1	32.6	
VEL=	4.0	4.5	3.0	
DEPTH=	3.6	4.3	1.9	

CCHV= .100 CEHV= .300
*SECNO 2.523

3265 DIVIDED FLOW

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.523	3.52	2366.02	2366.02	2366.02	2366.76	.75	2.56	.06	2362.50
3802.0	962.4	992.6	1847.1	198.1	87.9	435.0	196.8	125.3	2362.50
.53	4.86	11.29	4.25	.050	.030	.050	.000	2362.50	870.77
.009719	495.	490.	490.	0	14	0	.00	446.54	1440.50

FLOW DISTRIBUTION FOR SECNO= 2.52 CWSEL= 2366.02

STA=	871.	920.	935.	960.	970.	975.	1000.	1010.	1106.	1142.	1160.	1170.	1191.
PER Q=	12.0	4.0	3.2	3.4	2.7	26.1	5.3	3.0	4.1	4.7	3.0	4.4	
AREA=	92.2	31.7	33.7	24.4	16.1	87.9	31.7	35.0	45.1	37.2	22.7	38.1	
VEL=	4.9	4.8	3.6	5.3	6.4	11.3	6.3	3.3	3.5	4.8	5.1	4.4	
DEPTH=	1.9	2.1	1.3	2.4	3.2	3.5	3.2	.4	1.2	2.1	2.3	1.8	

STA=	1191.	1212.	1332.	1382.	1401.	1415.	1433.	1441.
PER Q=	3.7	3.1	3.5	3.7	4.2	5.3	.6	
AREA=	34.4	32.2	45.9	33.1	31.7	40.3	7.6	
VEL=	4.0	3.6	2.9	4.3	5.1	5.0	2.9	
DEPTH=	1.6	.3	.9	1.7	2.3	2.2	1.0	

*SECNO 2.582
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.582	3.28	2371.78	2371.78	2371.78	2372.67	.89	2.60	.04	2368.50
3802.0	154.1	2334.9	1313.0	35.6	252.6	375.9	201.8	128.3	2368.50
.54	4.33	9.24	3.49	.050	.030	.050	.000	2368.50	930.13
.007145	305.	310.	320.	0	11	0	.00	391.21	1321.33

FLOW DISTRIBUTION FOR SECNO= 2.58 CWSEL= 2371.78

STA=	930.	948.	1025.	1035.	1045.	1055.	1065.	1083.	1130.	1165.	1203.	1267.	1321.
PER Q=	4.1	61.4	4.4	4.0	3.7	3.1	3.3	4.8	3.5	3.6	3.3	.8	
AREA=	35.6	252.6	31.3	29.3	28.3	25.3	33.3	61.0	44.4	47.2	54.8	21.0	
VEL=	4.3	9.2	5.4	5.1	5.0	4.7	3.8	3.0	3.0	2.9	2.3	1.4	
DEPTH=	2.0	3.3	3.1	2.9	2.8	2.5	1.9	1.3	1.3	1.2	.9	.4	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 2.620

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.620	5.41	2374.41	2374.41	2374.41	2375.20	.78	1.15	.01	2370.00
3802.0	574.9	1638.2	1588.9	150.4	161.7	511.7	205.0	130.3	2370.00
.55	3.82	10.13	3.11	.050	.030	.050	.000	2369.00	841.25
.005041	215.	200.	180.	0	14	0	.00	528.85	1385.73

FLOW DISTRIBUTION FOR SECNO= 2.62 CWSEL= 2374.41

STA=	841.	962.	972.	983.	988.	1021.	1027.	1037.	1119.	1130.	1146.	1173.	1208.
PER Q=	3.8	3.2	4.9	3.2	43.1	3.1	3.5	4.2	3.1	4.5	4.6	4.4	
AREA=	61.6	29.3	37.6	21.9	161.7	22.1	30.4	59.5	29.3	42.6	52.1	57.4	
VEL=	2.3	4.2	5.0	5.5	10.1	5.3	4.4	2.7	4.1	4.1	3.3	2.9	
DEPTH=	.5	2.8	3.6	4.2	4.9	4.0	3.0	.7	2.7	2.7	2.0	1.6	

STA=	1208.	1244.	1282.	1321.	1382.	1386.
PER Q=	3.7	3.8	3.7	3.2	.0	
AREA=	52.5	53.8	53.6	57.6	.8	
VEL=	2.7	2.7	2.6	2.1	.7	
DEPTH=	1.4	1.4	1.4	.9	.2	

*SECNO 2.716
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.716	4.29	2383.29	2383.29	2383.29	2384.12	.83	2.90	.01	2379.50
3802.0	165.6	1859.0	1777.4	39.9	189.6	502.6	214.5	136.5	2379.50
.57	4.15	9.80	3.54	.050	.030	.050	.000	2379.00	953.94
.006102	475.	510.	550.	0	15	0	.00	479.08	1433.02

FLOW DISTRIBUTION FOR SECNO= 2.72 CWSEL= 2383.29

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	954.	975.	1022.	1032.	1041.	1052.	1063.	1074.	1100.	1120.	1140.	1168.	1192.
PER Q=	4.4	48.9	5.1	4.4	4.6	3.9	3.1	4.3	3.2	3.2	4.5	3.0	
AREA=	39.9	189.6	34.8	32.2	34.8	31.8	27.9	46.9	35.8	35.8	50.1	37.0	
VEL=	4.2	9.8	5.5	5.2	5.0	4.7	4.2	3.5	3.4	3.4	3.4	3.1	
DEPTH=	1.9	4.0	3.7	3.4	3.2	2.9	2.5	1.8	1.8	1.8	1.8	1.5	

STA=	1192.	1220.	1318.	1433.
PER Q=	3.5	3.1	.8	
AREA=	43.1	64.5	27.9	
VEL=	3.1	1.8	1.0	
DEPTH=	1.5	.7	.2	

*SECNO 2.826
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.826	6.35	2389.85	2389.85	2389.85	2390.71	.86	2.63	.01	2384.00
3802.0	1062.1	1945.9	794.0	340.8	194.7	314.9	224.6	142.8	2384.00
.60	3.12	9.99	2.52	.050	.030	.050	.000	2383.50	777.34
.003666	535.	580.	555.	0	8	0	.00	521.16	1298.50

W DISTRIBUTION FOR SECNO= 2.83 CWSEL= 2389.85

STA=	777.	870.	897.	907.	921.	937.	961.	972.	978.	1010.	1015.	1030.	1066.
PER Q=	3.3	3.4	3.1	3.5	3.0	3.2	3.9	4.4	51.2	3.8	3.0	6.1	
AREA=	74.2	47.7	30.9	38.4	36.9	44.9	37.2	30.5	194.7	26.8	36.3	77.2	
VEL=	1.7	2.7	3.9	3.5	3.1	2.7	4.0	5.5	10.0	5.4	3.2	3.0	
DEPTH=	.8	1.8	3.2	2.7	2.3	1.9	3.3	5.4	6.1	5.4	2.4	2.1	

STA=	1066.	1110.	1198.	1299.
PER Q=	3.5	3.2	1.2	
AREA=	59.5	75.0	40.3	
VEL=	2.2	1.6	1.2	
DEPTH=	1.4	.9	.4	

*SECNO 2.909

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
2.909	4.57	2393.07	2393.07	2393.07	2394.82	1.76	2.42	.27	2389.00
3802.0	966.5	2420.7	414.8	154.1	194.0	67.6	231.1	146.1	2389.00
.61	6.27	12.48	6.14	.050	.030	.050	.000	2388.50	936.08
.009052	435.	440.	460.	0	13	0	.00	118.48	1054.56

FLOW DISTRIBUTION FOR SECNO= 2.91 CWSEL= 2393.07

STA=	936.	959.	968.	977.	981.	986.	1031.	1036.	1042.	1053.	1055.
PER Q=	8.1	4.9	5.8	3.2	3.5	63.7	3.7	4.0	3.1	.1	
AREA=	55.2	29.6	33.1	17.6	18.6	194.0	19.8	22.4	24.0	1.3	
VEL=	5.6	6.3	6.6	6.9	7.1	12.5	7.1	6.8	5.0	2.0	
DEPTH=	2.5	3.3	3.6	3.8	4.0	4.3	4.0	3.7	2.3	.6	

*SECNO 3.002

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.002	4.37	2398.37	2398.37	2398.37	2399.56	1.19	3.97	.06	2394.50
3802.0	51.0	2098.1	1652.9	13.9	189.6	370.2	236.5	148.0	2394.50
.63	3.66	11.06	4.47	.050	.030	.050	.000	2394.00	968.80
.007441	490.	490.	470.	0	11	0	.00	232.24	1201.04

FLOW DISTRIBUTION FOR SECNO= 3.00 CWSEL= 2398.37

STA=	969.	976.	1022.	1032.	1041.	1060.	1075.	1085.	1104.	1123.	1142.	1168.	1201.
PER Q=	1.3	55.2	6.0	3.8	6.0	5.0	3.4	5.0	4.4	4.0	3.9	2.0	
AREA=	13.9	189.6	38.0	26.5	48.4	38.9	26.2	43.1	39.8	37.4	42.1	29.6	
VEL=	3.7	11.1	6.0	5.5	4.7	4.8	4.9	4.4	4.2	4.0	3.5	2.6	
DEPTH=	1.9	4.2	3.6	3.1	2.5	2.6	2.6	2.3	2.1	2.0	1.6	.9	

CCHV= .100 CEHV= .300
*SECNO 3.093

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
3.093	6.93	2403.43	2403.43	2403.43	2404.65	1.22	3.72	.01	2397.00
3660.0	1391.7	1293.6	974.7	183.7	107.6	211.9	242.3	150.5	2397.00
.64	7.58	12.02	4.60	.050	.040	.050	.000	2396.50	938.51
.008417	490.	480.	450.	0	11	0	.00	231.90	1246.91

FLOW DISTRIBUTION FOR SECNO= 3.09 CWSEL= 2403.43

STA=	939.	968.	973.	994.	1010.	1015.	1020.	1030.	1145.	1174.	1247.
PER Q=	3.9	4.1	30.1	35.3	7.3	4.4	4.3	3.1	4.6	3.1	
AREA=	38.1	21.6	124.0	107.6	29.9	22.6	28.5	45.6	45.3	39.9	
VEL=	3.7	6.9	8.9	12.0	8.9	7.1	5.5	2.5	3.7	2.8	
DEPTH=	1.3	4.3	5.9	6.6	6.0	4.5	2.9	.4	1.5	.5	

*SECNO 3.195
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.195	6.79	2409.79	2409.79	2409.79	2411.49	1.70	4.67	.15	2404.00
3660.0	264.7	2612.3	782.9	41.9	219.5	151.2	248.0	152.8	2404.00
.66	6.33	11.90	5.18	.050	.040	.050	.000	2403.00	970.53
.008890	530.	540.	550.	0	5	0	.00	135.91	1106.44

FLOW DISTRIBUTION FOR SECNO= 3.19 CWSEL= 2409.79

STA=	971.	985.	1020.	1025.	1030.	1040.	1062.	1100.	1106.
PER Q=	7.2	71.4	6.1	4.3	4.2	3.6	3.1	.0	
AREA=	41.9	219.5	26.4	21.4	27.9	34.9	39.0	1.5	
VEL=	6.3	11.9	8.4	7.3	5.6	3.8	2.9	1.2	
DEPTH=	2.9	6.3	5.3	4.3	2.8	1.6	1.0	.2	

RIGHT BANK LEVEE BETWEEN SECTIONS 0.147 & 0.154

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	7	2189.244	2190.216	.147	.154

TW RIGHT BANK LEVEE BETWEEN SECTIONS 0.154 & 0.171

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
150.48	150.52	.03	150.48	150.52	.03	7	2190.216	2193.195	.154	.171

TW RIGHT BANK LEVEE BETWEEN SECTIONS 0.171 & 0.216

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1301.69	1301.79	.01	1452.18	1452.32	.01	7	2193.195	2195.877	.171	.216

FLOODWAY DETERMINATION
1.0 FT TARGET INCREASE
T3 WASH AI: HARTMAN WASH

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
		3							2186.06	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15		-1				-1			

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS
0

CCHV= .100 CEHV= .300
*SECNO .095

3470 ENCROACHMENT STATIONS= 950.1 1046.3 TYPE= 1 TARGET= 96.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2188.00 ELREA= 100000.00

CONFLUENCE OF WASH AI: HARTMAN WASH
AND SOLS WASH BETWEEN CROSS-SECTIONS
AH (SOLS WASH RIVER MILE 3.07)
AJ (SOLS WASH RIVER MILE 3.27)
CROSS-SECTION DESIGNATION FROM
SOLS WASH FLOODPLAIN DELINEATION
HASSAYAMPA RIVER TO MARICOPA COUNTY LINE
CELLA BARR ASSOCIATES

SWSE DETERMINED BY SLOPE AREA METHOD

SPLIT FLOW OPTION USED FROM XSECT 0.147 TO XSECT 0.216
TO MODEL OVERFLOW LEVEE IN RIGHT OVERBANK. THE PROGRAM
WILL USE THE ENERGY GRADE LINE TO DETERMINE OVERFLOW.

X3 RECORD: CONFINE FLOW TO THE CHANNEL

.095	6.16	2186.06	2186.03	2186.06	2187.71	1.65	.00	.00	2188.00
2349.7	.0	2349.7	.0	.0	227.8	.0	.0	.0	100000.00
.00	.00	10.31	.00	.000	.025	.000	.000	2179.90	962.45
.006354	0.	0.	0.	0	4	0	.00	69.26	1031.70

*SECNO .133

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 949.9 1056.3 TYPE= 1 TARGET= 106.400

.133	5.52	2187.62	2186.88	2187.61	2188.70	1.08	.93	.06	2190.10
2349.7	.0	2349.7	.0	.0	282.1	.0	1.2	.3	100000.00
.01	.00	8.33	.00	.000	.025	.000	.000	2182.10	962.88
.003552	200.	200.	200.	3	15	0	.00	77.08	1039.96

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCHV= .300 CEHV= .500
*SECNO .144

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.83

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2192.50 ELREA= 2192.10

DS FACE: AT&SF RAILROAD BRIDGE (STRUCTURE AI-3)

NOTE: CENTERLINE SECTION OF AT&SF RAILROAD WAS
USED TO CREATE THE DS FACE CROSS-SECTION

.144	6.50	2188.70	2185.11	2188.69	2188.99	.29	.06	.23	2182.20
2349.7	.0	2349.7	.0	.0	539.3	.0	1.7	.4	2182.20
.01	.00	4.36	.00	.000	.025	.000	.000	2182.20	958.50
.000443	65.	60.	50.	3	11	0	.00	83.00	1041.50

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.64	2.80	.00	83.00	5.00	507.00	.00	2182.30	2182.20

*SECNO .147
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
2189.24	2189.03	.03	0.	2350.	507.	507.	2188.80	2192.10	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2192.50 ELREA= 2192.10

US FACE: AT&SF RAILROAD BRIDGE (STRUCTURE AI-3)

NOTE: CENTERLINE SECTION OF AT&SF RAILROAD WAS
USED TO CREATE THE US FACE CROSS-SECTION

.147	6.66	2188.96	.00	2188.96	2189.24	.28	.25	.00	2182.30
2349.7	.0	2349.7	.0	.0	553.2	.0	1.9	.5	2182.30
.01	.00	4.25	.00	.000	.025	.000	.000	2182.30	958.50
.000407	15.	15.	15.	2	0	0	.00	83.00	1041.50

```
SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


CCHV=     .300 CEHV=     .500
*SECNO  .154

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      940.0    1079.5  TYPE=      1  TARGET=      139.500
            ET RECORD: STATION 940. MODEL 1 TO 1
                       FLOW CONTRACTION UPSTREAM
                       OF AT&SF RAILROAD BRIDGE

            ET RECORD: STATION 1079.5 TOP OF OVERFLOW
                       LEVEE IN RIGHT OVERBANK
     .154      3.17   2188.87   2188.87   2188.87   2190.22      1.34       .04       .53   2187.00
   2349.7      30.8    2294.7      24.2      11.5     243.9      10.1       2.2        .5   2187.20
     .01      2.67      9.41      2.39      .050      .025      .050      .000   2185.70    945.22
  .006049       30.       35.       35.         0        11         0       .00    105.62   1050.84


V=     .300 CEHV=     .500
*SECNO  .171
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      915.0    1139.1  TYPE=      1  TARGET=      224.100
            ET RECORD: STATION 915. MODEL 1 TO 1
                       FLOW CONTRACTION UPSTREAM
                       OF AT&SF RAILROAD BRIDGE

            ET RECORD: STATION 1139.1 TOP OF OVERFLOW
                       LEVEE IN RIGHT OVERBANK

            MAPPED FLOODPLAIN TO CWSEL

     .171      8.23   2192.23   2192.23   2192.23   2193.19       .97       .67       .11   2190.10
  2500.3     138.1    1573.1     789.1      53.3     167.9     171.3       2.9        .9   2190.10
     .02      2.59      9.37      4.61      .050      .030      .050      .000   2184.00    915.00
  .009509       85.       90.       80.         0        12         0       .00    224.10   1139.10
```

```
SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO  .216

3470 ENCROACHMENT STATIONS=      745.0    1188.7  TYPE=      1  TARGET=      443.700
            ET RECORD: STATION 745. MODEL 1 TO 1
                       FLOW CONTRACTION UPSTREAM
                       OF AT&SF RAILROAD BRIDGE

            ET RECORD: STATION 1188.7 TOP OF OVERFLOW
                       LEVEE IN RIGHT OVERBANK

            MAPPED FLOODPLAIN TO CWSEL

     .216      3.48   2195.18   2195.00   2195.18   2195.88       .70      2.60       .08   2193.00
   3802.0    1880.5    1058.6     862.9     382.0     108.8     158.7       5.8       2.4   2193.00
     .03      4.92      9.73      5.44      .050      .030      .050      .000   2191.70    745.00
  .011878     235.      240.      245.         4        18         0       .00    348.63   1093.63


CCHV=     .100 CEHV=     .300
*SECNO  .254

 65 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      800.0    1270.2  TYPE=      1  TARGET=      470.190
     .254      4.44   2199.94   2199.94   2199.94   2200.71       .77      1.83       .02   2196.40
   3802.0     750.8    1494.3    1556.9     218.8     145.4     426.1       9.3       4.5   2196.80
     .04      3.43     10.28      3.65      .050      .030      .050      .000   2195.50    800.00
  .006637     240.      200.      190.         0        11         0       .00    469.36   1270.19


*SECNO  .345
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      838.5    1300.0  TYPE=      1  TARGET=      461.500
     .345      4.15   2205.35   2205.35   2205.35   2206.04       .69      3.27       .01   2202.60
   3802.0     553.3    1491.8    1756.9     166.9     154.9     466.3      17.7       9.3   2202.60
     .06      3.32      9.63      3.77      .050      .030      .050      .000   2201.20    838.50
  .007300     380.      480.      495.         0        10         0       .00    461.50   1300.00
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .423
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 931.2 1300.0 TYPE= 1 TARGET= 368.850

.423	4.89	2211.99	2211.99	2211.99	2212.95	.96	2.96	.08	2207.70
3802.0	625.3	1769.8	1406.9	118.3	167.1	391.8	25.3	13.7	2207.70
.07	5.29	10.59	3.59	.050	.030	.050	.000	2207.10	931.32
.006206	350.	410.	505.	0	8	0	.00	356.54	1287.86

*SECNO .540

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 655.4 1070.1 TYPE= 1 TARGET= 414.670

.540	4.12	2220.62	2220.62	2220.62	2221.48	.87	4.18	.01	2217.00
3802.0	1544.0	1442.7	815.3	396.7	135.0	148.5	34.6	18.8	2217.00
.10	3.89	10.68	5.49	.050	.030	.050	.000	2216.50	655.43
.007753	635.	620.	550.	0	12	0	.00	388.85	1070.10

*SECNO .595

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 475.4 1021.0 TYPE= 1 TARGET= 545.650

.595	4.41	2226.21	2226.21	2226.21	2227.20	.99	2.37	.04	2222.00
3802.0	2177.2	1485.3	139.5	491.4	129.2	28.9	39.4	21.4	2222.00
.11	4.43	11.50	4.83	.050	.030	.050	.000	2221.80	475.35
.007686	330.	290.	270.	0	8	0	.00	315.42	1021.00

*SECNO .737
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 731.9 1122.0 TYPE= 1 TARGET= 390.070

.737	2.28	2239.28	2239.28	2239.28	2240.07	.79	7.11	.02	2237.50
3802.0	1163.4	1408.5	1230.1	251.5	149.1	206.1	48.6	26.4	2237.50
.14	4.62	9.45	5.97	.050	.030	.050	.000	2237.00	731.93
.015866	555.	750.	755.	0	11	0	.00	390.07	1122.00

*SECNO .826

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 949.5 1122.0 TYPE= 1 TARGET= 172.520

.826	3.71	2247.31	2247.31	2247.31	2248.65	1.34	5.99	.16	2244.10
3802.0	531.1	1597.0	1673.8	88.4	128.8	272.8	54.1	29.2	2244.00
.15	6.01	12.40	6.14	.050	.030	.050	.000	2243.60	949.48
.011554	460.	470.	410.	0	14	0	.00	172.52	1122.00

*SECNO .921

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 972.8 1083.0 TYPE= 1 TARGET= 110.230

.921	5.52	2255.12	2255.12	2255.12	2256.99	1.87	4.43	.16	2250.20
3802.0	141.0	2462.1	1198.9	29.5	189.6	207.3	59.1	30.8	2250.80
.16	4.78	12.98	5.78	.050	.030	.050	.000	2249.60	972.81
.007479	510.	500.	450.	0	14	0	.00	110.19	1083.00

*SECNO .979

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 800.0 1025.9 TYPE= 1 TARGET= 225.920

.979	5.24	2258.74	2258.74	2258.74	2259.87	1.13	2.24	.07	2255.00
3802.0	1991.9	1708.0	102.2	420.6	146.7	27.1	62.5	31.9	2255.20
.18	4.74	11.64	3.77	.050	.030	.050	.000	2253.50	800.00
.007679	295.	310.	250.	0	12	0	.00	225.92	1025.92

*SECNO 1.108

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 603.5 1048.5 TYPE= 1 TARGET= 444.970

1.108	3.08	2266.68	2266.68	2266.68	2267.46	.78	4.89	.04	2264.40
3802.0	2194.5	1508.8	98.7	512.2	151.4	26.5	70.1	35.6	2264.40
.20	4.28	9.97	3.73	.050	.030	.050	.000	2263.60	603.52
.010259	450.	680.	680.	0	14	0	.00	425.00	1048.49

*SECNO 1.203

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 964.0 1118.2 TYPE= 1 TARGET= 154.260

1.203	5.04	2270.84	2270.84	2270.84	2272.39	1.55	4.29	.23	2265.80
3802.0	741.5	1450.6	1609.9	98.2	104.9	264.2	75.8	38.3	2265.80
.21	7.55	13.83	6.09	.050	.030	.050	.000	2265.80	963.97
.009007	345.	500.	530.	0	14	0	.00	154.26	1118.23

*SECNO 1.301

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 713.8 1021.5 TYPE= 1 TARGET= 307.680

1.301	3.15	2276.65	2276.34	2276.65	2277.32	.67	4.84	.09	2274.00
3802.0	2700.5	1012.3	89.2	519.1	108.0	22.3	82.1	40.9	2274.00
.23	5.20	9.37	4.00	.050	.030	.050	.000	2273.50	713.88
.010335	500.	520.	480.	4	11	0	.00	307.60	1021.48

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 1.392
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 731.5 1032.3 TYPE= 1 TARGET= 300.740

1.392	4.35	2283.95	2283.95	2283.95	2284.92	.97	5.40	.09	2281.30
3802.0	2364.3	1289.9	147.8	467.8	110.8	31.7	90.3	44.9	2281.30
.26	5.05	11.64	4.66	.050	.030	.050	.000	2279.60	731.53
.009228	590.	480.	480.	0	11	0	.00	300.73	1032.26

*SECNO 1.476
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 583.7 1012.6 TYPE= 1 TARGET= 428.970

1.476	4.38	2290.48	2290.48	2290.48	2291.22	.74	3.57	.02	2287.70
3802.0	2684.6	1067.8	49.6	653.3	95.0	12.3	96.5	48.2	2287.30
.27	4.11	11.24	4.04	.050	.030	.050	.000	2286.10	583.67
.008607	380.	440.	440.	0	5	0	.00	428.97	1012.64

*SECNO 1.587
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 859.6 1200.0 TYPE= 1 TARGET= 340.430

1.587	3.08	2298.18	2298.18	2298.18	2299.07	.89	4.81	.04	2295.90
3802.0	775.5	2381.2	645.4	194.7	262.6	168.7	104.7	52.7	2295.90
.29	3.98	9.07	3.83	.050	.030	.050	.000	2295.10	859.57
.009379	480.	590.	540.	0	19	0	.00	340.43	1200.00

*SECNO 1.676

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 784.9 1284.0 TYPE= 1 TARGET= 499.110

1.676	4.37	2305.97	2305.97	2305.97	2306.74	.77	3.96	.01	2302.90
3802.0	500.0	1358.0	1944.0	174.3	128.8	468.9	112.6	57.4	2302.90
.32	2.87	10.54	4.15	.050	.030	.050	.000	2301.60	784.89
.007107	460.	470.	525.	0	14	0	.00	492.89	1284.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 1.771

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 797.6 1210.0 TYPE= 1 TARGET= 412.400

1.771	2.72	2313.82	2313.82	2313.82	2314.62	.80	4.91	.01	2312.00
3802.0	1572.1	968.0	1262.0	263.9	90.5	263.6	120.3	62.2	2312.00
.34	5.96	10.69	4.79	.050	.030	.050	.000	2311.10	797.60
.015504	525.	500.	450.	0	14	0	.00	372.89	1210.00

*SECNO 1.871
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 843.9 1176.7 TYPE= 1 TARGET= 332.780

1.871	2.91	2322.01	2322.01	2322.01	2322.89	.88	7.15	.02	2319.30
3802.0	1373.0	1327.1	1101.9	259.4	123.6	234.7	127.7	66.4	2319.50
.36	5.29	10.74	4.69	.050	.030	.050	.000	2319.10	843.92
.012140	545.	530.	490.	0	8	0	.00	332.57	1176.49

*SECNO 1.964
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 762.4 1111.0 TYPE= 1 TARGET= 348.600

1.964	3.71	2329.11	2329.11	2329.11	2330.05	.94	4.62	.02	2325.70
3802.0	1011.4	1981.5	809.2	290.6	198.3	163.1	134.9	70.3	2325.60
.38	3.48	9.99	4.96	.050	.030	.050	.000	2325.40	762.40
.007543	610.	490.	340.	0	11	0	.00	348.60	1111.00

*SECNO 2.054
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 780.0 1329.0 TYPE= 1 TARGET= 548.990

2.054	4.52	2335.02	2335.02	2335.02	2335.68	.66	2.93	.03	2331.90
3802.0	1199.1	1095.8	1507.1	336.6	100.7	448.0	141.4	73.9	2331.20
.40	3.56	10.89	3.36	.050	.030	.050	.000	2330.50	780.00
.007200	195.	475.	490.	0	11	0	.00	548.99	1328.99

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

```
*SECNO 2.149

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      950.0    1100.0  TYPE=      1  TARGET=      150.000
     2.149      4.58   2341.58   2341.58   2341.58   2343.16      1.58      3.40       .28   2337.00
    3802.0     266.2    2893.4     642.4      53.0     256.4     148.5     148.7      77.6   2337.00
       .41      5.02     11.28      4.33      .050      .030      .050      .000   2337.00    950.00
   .006826      495.      500.      450.         0         5         0       .00    147.89   1097.89


CCHV=     .100 CEHV=     .300
*SECNO 2.242
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      952.2    1090.0  TYPE=      1  TARGET=      137.770
     2.242      4.46   2348.46   2348.46   2348.46   2350.23      1.77      3.20       .06   2344.40
    3802.0     417.1    2609.7     775.2      85.2     210.7     143.5     153.7      79.2   2344.40
       .42      4.89     12.38      5.40      .050      .025      .050      .000   2344.00    952.23
   .006257      460.      490.      500.         0         8         0       .00    126.22   1078.45


*SECNO 2.331
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      921.8    1128.7  TYPE=      1  TARGET=      206.900
     2.331      3.74   2354.24   2354.24   2354.24   2355.53      1.28      3.50       .05   2350.80
    3802.0     764.7    1598.8    1438.5     155.4     126.0     278.5     159.4      81.1   2350.80
       .44      4.92     12.69      5.17      .050      .025      .050      .000   2350.50    921.80
   .008270      470.      470.      535.         0        15         0       .00    206.90   1128.70


*SECNO 2.430
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      966.8    1180.0  TYPE=      1  TARGET=      213.180
     2.430      8.13   2361.13   2361.13   2361.13   2362.64      1.51      2.54       .07   2354.00
    3802.0     458.3    2002.8    1341.0      96.7     152.7     403.7     166.6      83.5   2354.00
       .46      4.74     13.12      3.32      .050      .025      .050      .000   2353.00    966.82
   .003261      530.      525.      500.         0        17         0       .00    213.18   1180.00
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCHV= .100 CEHV= .300
*SECNO 2.523

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 870.8 1200.0 TYPE= 1 TARGET= 329.230

2.523	3.93	2366.43	2366.43	2366.43	2367.36	.93	2.52	.06	2362.50
3802.0	1265.8	1161.9	1374.2	241.0	98.2	295.6	173.8	86.5	2362.50
.48	5.25	11.83	4.65	.050	.030	.050	.000	2362.50	870.77
.009206	495.	490.	490.	0	11	0	.00	320.77	1200.00

*SECNO 2.582
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 930.1 1215.0 TYPE= 1 TARGET= 284.870

2.582	3.24	2371.74	2371.74	2371.74	2372.77	1.03	2.68	.03	2368.50
3802.0	159.2	2427.8	1215.0	35.0	249.7	305.5	178.2	88.7	2368.50
.49	4.55	9.72	3.98	.050	.030	.050	.000	2368.50	930.26
.008022	305.	310.	320.	0	15	0	.00	284.73	1215.00

*SECNO 2.620
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 920.0 1173.0 TYPE= 1 TARGET= 253.000

2.620	5.66	2374.66	2374.66	2374.66	2375.84	1.18	1.35	.05	2370.00
3802.0	714.9	1942.2	1144.9	152.1	169.7	273.7	180.9	89.9	2370.00
.49	4.70	11.44	4.18	.050	.030	.050	.000	2369.00	920.00
.006025	215.	200.	180.	0	14	0	.00	253.00	1173.00

*SECNO 2.716
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 953.9 1100.0 TYPE= 1 TARGET= 146.060

2.716	4.43	2383.43	2383.43	2383.43	2384.98	1.56	3.72	.11	2379.50
3802.0	217.4	2346.1	1238.5	42.7	196.0	218.9	187.2	92.3	2379.50
.51	5.09	11.97	5.66	.050	.030	.050	.000	2379.00	953.94
.008707	475.	510.	550.	0	15	0	.00	146.06	1100.00

*SECNO 2.826
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 882.0 1110.0 TYPE= 1 TARGET= 228.000

2.826	6.19	2389.69	2389.69	2389.69	2390.99	1.29	3.70	.03	2384.00
3802.0	960.4	2190.8	650.8	235.0	189.6	183.7	194.0	94.7	2384.00
.53	4.09	11.55	3.54	.050	.030	.050	.000	2383.50	882.00
.005077	535.	580.	555.	0	11	0	.00	228.00	1110.00

*SECNO 2.909
[illegible]85 MINIMUM SPECIFIC ENERGY
[illegible]0 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 936.1 1054.6 TYPE= 1 TARGET= 118.480

2.909	4.56	2393.06	2393.06	2393.06	2394.83	1.76	2.93	.14	2389.00
3802.0	966.3	2421.0	414.7	154.0	193.8	67.5	199.2	96.5	2389.00
.54	6.28	12.49	6.14	.050	.030	.050	.000	2388.50	936.09
.009073	435.	440.	460.	0	19	0	.00	118.46	1054.55

*SECNO 3.002
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 968.8 1090.9 TYPE= 1 TARGET= 122.100

3.002	4.68	2398.68	2398.68	2398.68	2400.41	1.73	4.25	.00	2394.50
3802.0	67.6	2512.3	1222.1	16.1	203.5	213.0	203.9	97.8	2394.50
.55	4.19	12.34	5.74	.050	.030	.050	.000	2394.00	968.80
.008432	490.	490.	470.	0	8	0	.00	122.10	1090.90

CCHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.093
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 938.5 1062.0 TYPE= 1 TARGET= 123.490

3.093	6.86	2403.36	2403.36	2403.36	2405.07	1.70	4.47	.00	2397.00
3660.0	1528.0	1431.4	700.6	180.1	106.5	101.5	208.4	99.1	2397.00
.57	8.48	13.43	6.90	.050	.040	.050	.000	2396.50	939.13
.010647	490.	480.	450.	0	11	0	.00	122.87	1062.00

*SECNO 3.195
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 970.5 1106.4 TYPE= 1 TARGET= 135.910

3.195	6.81	2409.81	2409.81	2409.81	2411.49	1.68	5.20	.00	2404.00
3660.0	265.2	2606.7	788.1	42.1	220.2	152.9	213.3	100.7	2404.00
.58	6.29	11.84	5.15	.050	.040	.050	.000	2403.00	970.53
.008758	530.	540.	550.	0	5	0	.00	135.91	1106.44

W RIGHT BANK LEVEE BETWEEN SECTIONS 0.147 & 0.154

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	7	2189.245	2190.216	.147	.154

TW RIGHT BANK LEVEE BETWEEN SECTIONS 0.154 & 0.171

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
150.54	150.51	.02	150.54	150.51	.02	7	2190.216	2193.195	.154	.171

TW RIGHT BANK LEVEE BETWEEN SECTIONS 0.171 & 0.216

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1301.72	1301.55	.01	1452.26	1452.05	.01	7	2193.195	2195.877	.171	.216

THIS RUN EXECUTED 07JUL92 15:57:22

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

WASH AI: HARTMAN WASH

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	.095	.00	.00	.00	2179.90	2349.82	2186.06	2186.06	2187.71	63.30	10.30	228.11	295.34
	.095	.00	.00	.00	2179.90	2349.74	2186.06	2186.03	2187.71	63.54	10.31	227.82	294.79
	.133	200.00	.00	.00	2182.10	2349.82	2187.62	2186.88	2188.70	35.60	8.34	281.91	393.85
	.133	200.00	.00	.00	2182.10	2349.74	2187.62	2186.88	2188.70	35.52	8.33	282.12	394.24
	.144	60.00	.00	.00	2182.20	2349.82	2188.70	2185.11	2188.99	4.43	4.36	539.26	1116.13
	.144	60.00	.00	.00	2182.20	2349.74	2188.70	2185.11	2188.99	4.43	4.36	539.30	1116.27
	.147	14.70	2192.10	2188.80	2182.30	2349.82	2188.96	.00	2189.24	4.07	4.25	553.14	1164.42
	.147	14.70	2192.10	2188.80	2182.30	2349.74	2188.96	.00	2189.24	4.07	4.25	553.22	1164.70
*	.154	35.00	.00	.00	2185.70	2349.82	2188.87	2188.87	2190.22	60.46	9.41	265.66	302.21
*	.154	35.00	.00	.00	2185.70	2349.74	2188.87	2188.87	2190.22	60.49	9.41	265.61	302.13
*	.171	90.00	.00	.00	2184.00	2500.31	2192.23	2192.23	2193.19	95.09	9.37	392.58	256.40
*	.171	90.00	.00	.00	2184.00	2500.28	2192.23	2192.23	2193.19	95.09	9.37	392.58	256.40
	.216	240.00	.00	.00	2191.70	3802.00	2195.18	2195.00	2195.88	118.78	9.73	649.49	348.84
	.216	240.00	.00	.00	2191.70	3802.00	2195.18	2195.00	2195.88	118.78	9.73	649.49	348.84
*	.254	200.00	.00	.00	2195.50	3802.00	2199.64	2199.64	2200.26	66.43	9.77	939.71	466.48
*	.254	200.00	.00	.00	2195.50	3802.00	2199.94	2199.94	2200.71	66.37	10.28	790.31	466.69
*	.345	480.00	.00	.00	2201.20	3802.00	2204.50	2204.50	2205.04	101.43	9.39	843.62	377.52
*	.345	480.00	.00	.00	2201.20	3802.00	2205.35	2205.35	2206.04	73.00	9.63	788.04	444.99
*	.423	410.00	.00	.00	2207.10	3802.00	2212.03	2212.03	2212.90	57.17	10.23	734.30	502.82
*	.423	410.00	.00	.00	2207.10	3802.00	2211.99	2211.99	2212.95	62.06	10.59	677.11	482.63
*	.540	620.00	.00	.00	2216.50	3802.00	2220.32	2220.32	2221.07	82.83	10.46	737.02	417.76
*	.540	620.00	.00	.00	2216.50	3802.00	2220.62	2220.62	2221.48	77.53	10.68	680.17	431.79

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	.595	290.00	.00	.00	2221.80	3802.00	2226.19	2226.19	2227.05	70.69	10.99	708.10	452.19
*	.595	290.00	.00	.00	2221.80	3802.00	2226.21	2226.21	2227.20	76.86	11.50	649.43	433.68
*	.737	750.00	.00	.00	2237.00	3802.00	2239.19	2239.19	2239.93	165.72	9.34	625.26	295.34
*	.737	750.00	.00	.00	2237.00	3802.00	2239.28	2239.28	2240.07	158.66	9.45	606.77	301.84
*	.826	470.00	.00	.00	2243.60	3802.00	2246.81	2246.81	2247.69	113.10	11.10	622.13	357.51
*	.826	470.00	.00	.00	2243.60	3802.00	2247.31	2247.31	2248.65	115.54	12.40	489.92	353.70
*	.921	500.00	.00	.00	2249.60	3802.00	2255.14	2255.14	2256.29	53.92	11.05	622.31	517.75
*	.921	500.00	.00	.00	2249.60	3802.00	2255.12	2255.12	2256.99	74.79	12.98	426.46	439.64
*	.979	310.00	.00	.00	2253.50	3802.00	2258.72	2258.72	2259.79	75.13	11.48	621.50	438.65
*	.979	310.00	.00	.00	2253.50	3802.00	2258.74	2258.74	2259.87	76.79	11.64	594.38	433.86
*	1.108	680.00	.00	.00	2263.60	3802.00	2266.68	2266.68	2267.46	103.10	9.99	688.82	374.44
*	1.108	680.00	.00	.00	2263.60	3802.00	2266.68	2266.68	2267.46	102.59	9.97	690.07	375.36
*	1.203	500.00	.00	.00	2265.80	3802.00	2270.81	2270.81	2272.39	92.59	13.96	462.45	395.12
*	1.203	500.00	.00	.00	2265.80	3802.00	2270.84	2270.84	2272.39	90.07	13.83	467.38	400.61
	1.301	520.00	.00	.00	2273.50	3802.00	2276.67	2276.35	2277.33	100.47	9.29	655.41	379.31
	1.301	520.00	.00	.00	2273.50	3802.00	2276.65	2276.34	2277.32	103.35	9.37	649.40	373.98
	1.392	480.00	.00	.00	2279.60	3802.00	2283.95	2283.95	2284.92	92.22	11.64	610.45	395.91
	1.392	480.00	.00	.00	2279.60	3802.00	2283.95	2283.95	2284.92	92.28	11.64	610.30	395.79
*	1.476	440.00	.00	.00	2286.10	3802.00	2290.48	2290.48	2291.22	86.17	11.24	760.32	409.57
*	1.476	440.00	.00	.00	2286.10	3802.00	2290.48	2290.48	2291.22	86.07	11.24	760.63	409.81
*	1.587	590.00	.00	.00	2295.10	3802.00	2297.49	2297.49	2298.09	121.98	8.42	754.52	344.25
*	1.587	590.00	.00	.00	2295.10	3802.00	2298.18	2298.18	2299.07	93.79	9.07	625.98	392.59
*	1.676	470.00	.00	.00	2301.60	3802.00	2305.76	2305.76	2306.27	60.26	9.36	1023.24	489.76
*	1.676	470.00	.00	.00	2301.60	3802.00	2305.97	2305.97	2306.74	71.07	10.54	772.02	450.98
*	1.771	500.00	.00	.00	2311.10	3802.00	2313.19	2313.19	2313.69	183.11	9.34	745.29	280.97
*	1.771	500.00	.00	.00	2311.10	3802.00	2313.82	2313.82	2314.62	155.04	10.69	617.97	305.34
*	1.871	530.00	.00	.00	2319.10	3802.00	2321.48	2321.48	2322.14	139.34	9.98	700.28	322.08
*	1.871	530.00	.00	.00	2319.10	3802.00	2322.01	2322.01	2322.89	121.40	10.74	617.74	345.06
*	1.964	490.00	.00	.00	2325.40	3802.00	2328.40	2328.40	2329.00	83.94	9.08	842.01	414.99
*	1.964	490.00	.00	.00	2325.40	3802.00	2329.11	2329.11	2330.05	75.43	9.99	652.01	437.76
*	2.054	475.00	.00	.00	2330.50	3802.00	2334.52	2334.52	2335.00	74.61	10.18	1133.70	440.17
*	2.054	475.00	.00	.00	2330.50	3802.00	2335.02	2335.02	2335.68	72.00	10.89	885.28	448.08
*	2.149	500.00	.00	.00	2337.00	3802.00	2341.37	2341.37	2342.36	54.06	9.74	666.22	517.11
*	2.149	500.00	.00	.00	2337.00	3802.00	2341.58	2341.58	2343.16	68.26	11.28	457.89	460.18

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	2.242	490.00	.00	.00	2344.00	3802.00	2348.04	2348.04	2349.30	60.54	11.37	578.29	488.63
*	2.242	490.00	.00	.00	2344.00	3802.00	2348.46	2348.46	2350.23	62.57	12.38	439.51	480.65
*	2.331	470.00	.00	.00	2350.50	3802.00	2353.73	2353.73	2354.59	83.09	11.50	723.23	417.10
*	2.331	470.00	.00	.00	2350.50	3802.00	2354.24	2354.24	2355.53	82.70	12.69	559.80	418.08
*	2.430	525.00	.00	.00	2353.00	3802.00	2360.75	2360.75	2362.05	32.54	12.66	710.68	666.53
*	2.430	525.00	.00	.00	2353.00	3802.00	2361.13	2361.13	2362.64	32.61	13.12	653.07	665.79
*	2.523	490.00	.00	.00	2362.50	3802.00	2366.02	2366.02	2366.76	97.19	11.29	720.97	385.66
*	2.523	490.00	.00	.00	2362.50	3802.00	2366.43	2366.43	2367.36	92.06	11.83	634.87	396.25
*	2.582	310.00	.00	.00	2368.50	3802.00	2371.78	2371.78	2372.67	71.45	9.24	664.14	449.78
*	2.582	310.00	.00	.00	2368.50	3802.00	2371.74	2371.74	2372.77	80.22	9.72	590.26	424.50
*	2.620	200.00	.00	.00	2369.00	3802.00	2374.41	2374.41	2375.20	50.41	10.13	823.75	535.48
*	2.620	200.00	.00	.00	2369.00	3802.00	2374.66	2374.66	2375.84	60.25	11.44	595.53	489.83
*	2.716	510.00	.00	.00	2379.00	3802.00	2383.29	2383.29	2384.12	61.02	9.80	732.15	486.71
*	2.716	510.00	.00	.00	2379.00	3802.00	2383.43	2383.43	2384.98	87.07	11.97	457.63	407.45
*	2.826	580.00	.00	.00	2383.50	3802.00	2389.85	2389.85	2390.71	36.66	9.99	850.42	627.98
*	2.826	580.00	.00	.00	2383.50	3802.00	2389.69	2389.69	2390.99	50.77	11.55	608.34	533.60
	2.909	440.00	.00	.00	2388.50	3802.00	2393.07	2393.07	2394.82	90.52	12.48	415.64	399.62
	2.909	440.00	.00	.00	2388.50	3802.00	2393.06	2393.06	2394.83	90.73	12.49	415.32	399.15
*	3.002	490.00	.00	.00	2394.00	3802.00	2398.37	2398.37	2399.56	74.41	11.06	573.74	440.75
*	3.002	490.00	.00	.00	2394.00	3802.00	2398.68	2398.68	2400.41	84.32	12.34	432.64	414.05
*	3.093	480.00	.00	.00	2396.50	3660.00	2403.43	2403.43	2404.65	84.17	12.02	503.17	398.93
*	3.093	480.00	.00	.00	2396.50	3660.00	2403.36	2403.36	2405.07	106.47	13.43	388.22	354.70
*	3.195	540.00	.00	.00	2403.00	3660.00	2409.79	2409.79	2411.49	88.90	11.90	412.53	388.18
*	3.195	540.00	.00	.00	2403.00	3660.00	2409.81	2409.81	2411.49	87.58	11.84	415.25	391.09

H AI: HARTMAN WASH

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	.095	2349.82	2186.06	.00	.00	1.06	69.28	.00
	.095	2349.74	2186.06	.00	.00	.00	69.26	.00
	.133	2349.82	2187.62	.00	1.56	.00	77.05	200.00
	.133	2349.74	2187.62	.00	1.56	.01	77.08	200.00
*	.144	2349.82	2188.70	.00	1.08	.00	83.00	60.00
*	.144	2349.74	2188.70	.00	1.08	.01	83.00	60.00
	.147	2349.82	2188.96	.00	.27	.00	83.00	14.70
	.147	2349.74	2188.96	.00	.27	.01	83.00	14.70
*	.154	2349.82	2188.87	.00	-.09	.00	105.63	35.00
*	.154	2349.74	2188.87	.00	-.09	.00	105.62	35.00
*	.171	2500.31	2192.23	.00	3.36	.00	224.10	90.00
*	.171	2500.28	2192.23	.00	3.36	.00	224.10	90.00
	.216	3802.00	2195.18	.00	2.95	.00	348.63	240.00
	.216	3802.00	2195.18	.00	2.95	.00	348.63	240.00
*	.254	3802.00	2199.64	.00	4.47	.00	718.38	200.00
*	.254	3802.00	2199.94	.30	4.77	.00	469.36	200.00
*	.345	3802.00	2204.50	.00	4.85	.00	715.82	480.00
*	.345	3802.00	2205.35	.85	5.41	.00	461.50	480.00
*	.423	3802.00	2212.03	.00	7.54	.00	445.27	410.00
*	.423	3802.00	2211.99	-.04	6.64	.00	356.54	410.00
*	.540	3802.00	2220.32	.00	8.28	.00	498.41	620.00
*	.540	3802.00	2220.62	.30	8.62	.00	388.85	620.00
*	.595	3802.00	2226.19	.00	5.87	.00	369.25	290.00
*	.595	3802.00	2226.21	.02	5.59	.00	315.42	290.00
*	.737	3802.00	2239.19	.00	13.00	.00	434.92	750.00
*	.737	3802.00	2239.28	.09	13.07	.00	390.07	750.00
*	.826	3802.00	2246.81	.00	7.62	.00	348.66	470.00
*	.826	3802.00	2247.31	.50	8.03	.00	172.52	470.00
*	.921	3802.00	2255.14	.00	8.33	.00	287.81	500.00
*	.921	3802.00	2255.12	-.02	7.81	.00	110.19	500.00
	.979	3802.00	2258.72	.00	3.58	.00	269.36	310.00
	.979	3802.00	2258.74	.02	3.62	.00	225.92	310.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	1.108	3802.00	2266.68	.00	7.96	.00	424.54	680.00
*	1.108	3802.00	2266.68	.00	7.94	.00	425.00	680.00
*	1.203	3802.00	2270.81	.00	4.13	.00	154.26	500.00
*	1.203	3802.00	2270.84	.03	4.16	.00	154.26	500.00
	1.301	3802.00	2276.67	.00	5.86	.00	307.71	520.00
	1.301	3802.00	2276.65	-.02	5.81	.00	307.60	520.00
*	1.392	3802.00	2283.95	.00	7.28	.00	300.73	480.00
*	1.392	3802.00	2283.95	.00	7.30	.00	300.73	480.00
*	1.476	3802.00	2290.48	.00	6.54	.00	428.98	440.00
*	1.476	3802.00	2290.48	.00	6.54	.00	428.97	440.00
*	1.587	3802.00	2297.49	.00	7.01	.00	608.23	590.00
*	1.587	3802.00	2298.18	.69	7.69	.00	340.43	590.00
*	1.676	3802.00	2305.76	.00	8.27	.00	892.46	470.00
*	1.676	3802.00	2305.97	.21	7.80	.00	492.89	470.00
*	1.771	3802.00	2313.19	.00	7.42	.00	756.23	500.00
*	1.771	3802.00	2313.82	.64	7.85	.00	372.89	500.00
	1.871	3802.00	2321.48	.00	8.30	.00	507.71	530.00
	1.871	3802.00	2322.01	.53	8.19	.00	332.57	530.00
*	1.964	3802.00	2328.40	.00	6.92	.00	700.98	490.00
*	1.964	3802.00	2329.11	.71	7.10	.00	348.60	490.00
*	2.054	3802.00	2334.52	.00	6.12	.00	1018.03	475.00
*	2.054	3802.00	2335.02	.50	5.91	.00	548.99	475.00
*	2.149	3802.00	2341.37	.00	6.85	.00	385.61	500.00
*	2.149	3802.00	2341.58	.21	6.56	.00	147.89	500.00
*	2.242	3802.00	2348.04	.00	6.67	.00	230.95	490.00
*	2.242	3802.00	2348.46	.42	6.89	.00	126.22	490.00
*	2.331	3802.00	2353.73	.00	5.69	.00	384.12	470.00
*	2.331	3802.00	2354.24	.51	5.78	.00	206.90	470.00
*	2.430	3802.00	2360.75	.00	7.01	.00	260.50	525.00
*	2.430	3802.00	2361.13	.39	6.89	.00	213.18	525.00
*	2.523	3802.00	2366.02	.00	5.27	.00	446.54	490.00
*	2.523	3802.00	2366.43	.41	5.29	.00	320.77	490.00
*	2.582	3802.00	2371.78	.00	5.76	.00	391.21	310.00
*	2.582	3802.00	2371.74	-.04	5.32	.00	284.73	310.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	2.620	3802.00	2374.41	.00	2.63	.00	528.85	200.00
*	2.620	3802.00	2374.66	.24	2.92	.00	253.00	200.00
*	2.716	3802.00	2383.29	.00	8.88	.00	479.08	510.00
*	2.716	3802.00	2383.43	.14	8.77	.00	146.06	510.00
*	2.826	3802.00	2389.85	.00	6.56	.00	521.16	580.00
*	2.826	3802.00	2389.69	-.16	6.27	.00	228.00	580.00
*	2.909	3802.00	2393.07	.00	3.21	.00	118.48	440.00
*	2.909	3802.00	2393.06	.00	3.37	.00	118.46	440.00
*	3.002	3802.00	2398.37	.00	5.30	.00	232.24	490.00
*	3.002	3802.00	2398.68	.30	5.61	.00	122.10	490.00
*	3.093	3660.00	2403.43	.00	5.06	.00	231.90	480.00
*	3.093	3660.00	2403.36	-.06	4.69	.00	122.87	480.00
*	3.195	3660.00	2409.79	.00	6.36	.00	135.91	540.00
*	3.195	3660.00	2409.81	.02	6.44	.00	135.91	540.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
CAUTION SECNO=      .095  PROFILE=  1  CRITICAL DEPTH ASSUMED

WARNING SECNO=      .144  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .144  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .154  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .154  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .154  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .154  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .171  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .171  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .171  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .171  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .254  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .254  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .254  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .254  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .345  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .345  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .345  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .345  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .423  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .423  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .423  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .423  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .540  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .540  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .540  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .540  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .595  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .595  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .595  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .595  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .737  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .737  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .737  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .737  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .826  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .826  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .826  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .826  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .921  PROFILE=  1  CRITICAL DEPTH ASSUMED
```

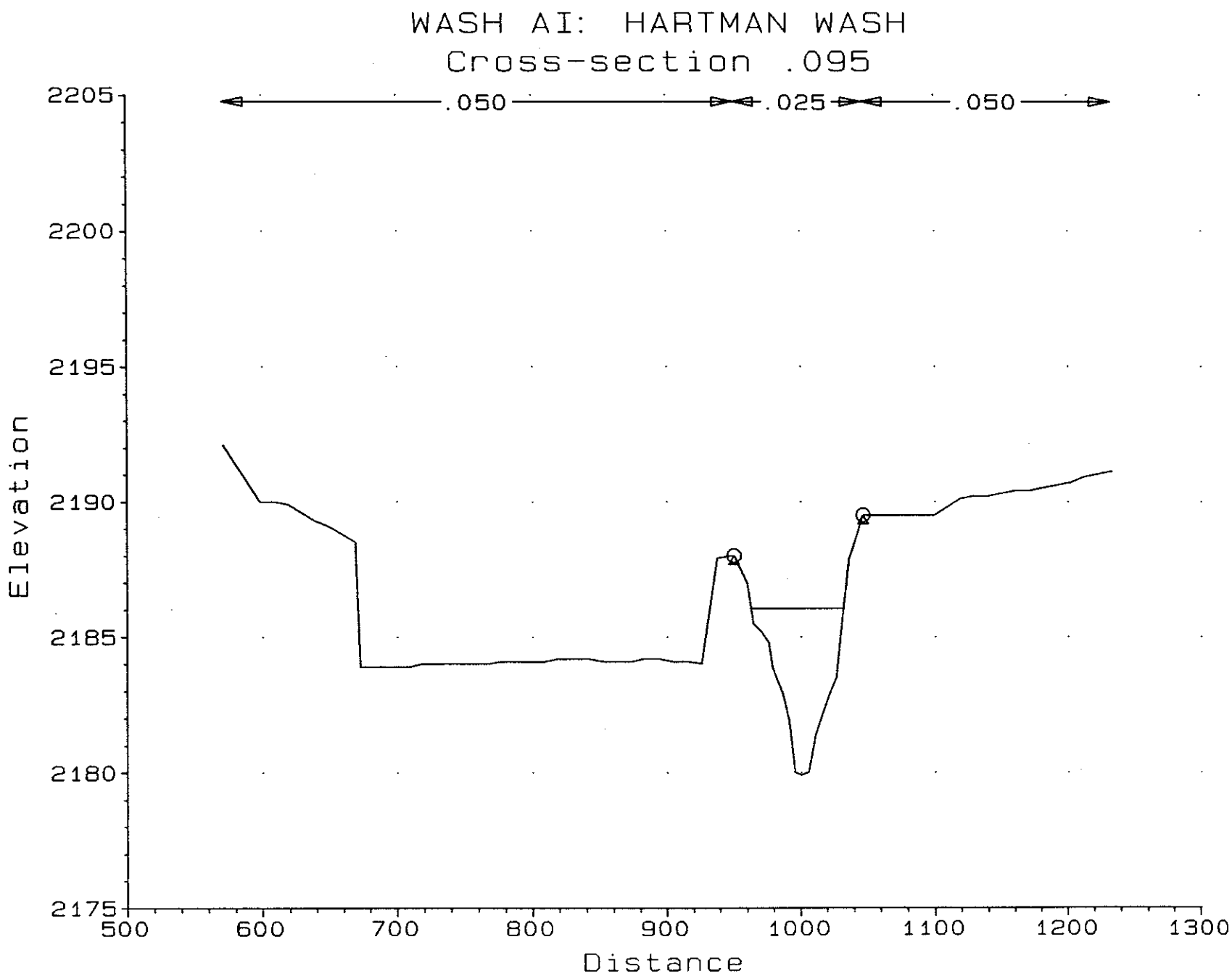
```
TION SECNO=      .921  PROFILE=  1  MINIMUM SPECIFIC ENERGY
UTION SECNO=     .921  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   .921  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   .979  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   .979  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   .979  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   .979  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=  1.108  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.108  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=  1.108  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.108  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=  1.203  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.203  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=  1.203  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.203  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=  1.392  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.392  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=  1.392  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.392  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=  1.476  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.476  PROFILE=  1  MINIMUM SPECIFIC ENERGY
UTION SECNO=    1.476  PROFILE=  2  CRITICAL DEPTH ASSUMED
TION SECNO=     1.476  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=  1.587  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.587  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=  1.587  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.587  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=  1.676  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.676  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=  1.676  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.676  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=  1.771  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.771  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=  1.771  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.771  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=  1.871  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.871  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=  1.871  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.871  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=  1.964  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=  1.964  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=  1.964  PROFILE=  2  CRITICAL DEPTH ASSUMED
TION SECNO=     1.964  PROFILE=  2  MINIMUM SPECIFIC ENERGY
```

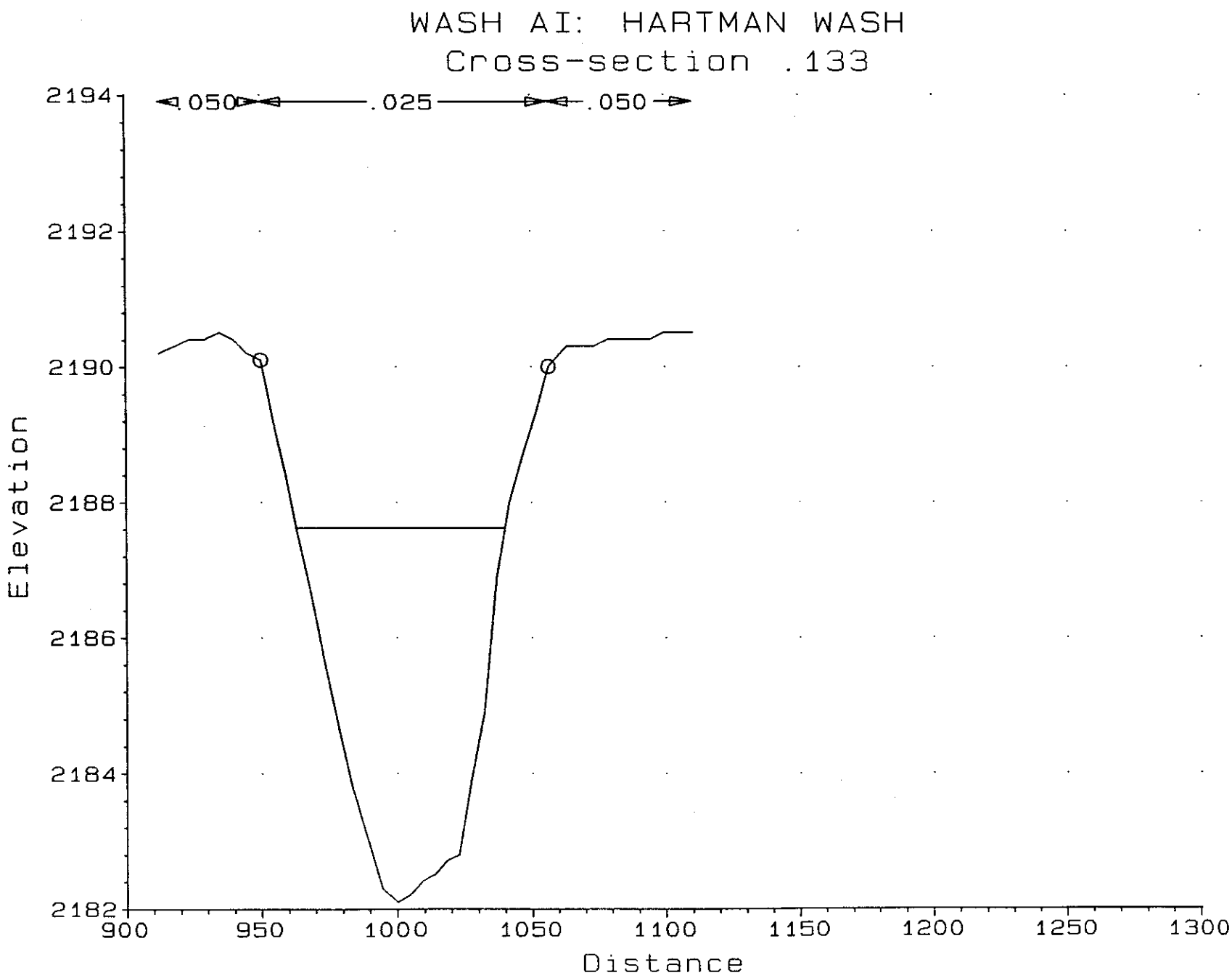
```
UTION SECNO=      2.054  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.054  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.054  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.054  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    2.149  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.149  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.149  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.149  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    2.242  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.242  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.242  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.242  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    2.331  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.331  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.331  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.331  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    2.430  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.430  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.430  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.430  PROFILE=  2  MINIMUM SPECIFIC ENERGY

UTION SECNO=      2.523  PROFILE=  1  CRITICAL DEPTH ASSUMED
TION SECNO=       2.523  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.523  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.523  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    2.582  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.582  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.582  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.582  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    2.620  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.620  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.620  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.620  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    2.716  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.716  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.716  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.716  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    2.826  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.826  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    2.826  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.826  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    2.909  PROFILE=  1  CRITICAL DEPTH ASSUMED
TION SECNO=       2.909  PROFILE=  1  MINIMUM SPECIFIC ENERGY
TION SECNO=       2.909  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    2.909  PROFILE=  2  MINIMUM SPECIFIC ENERGY
```

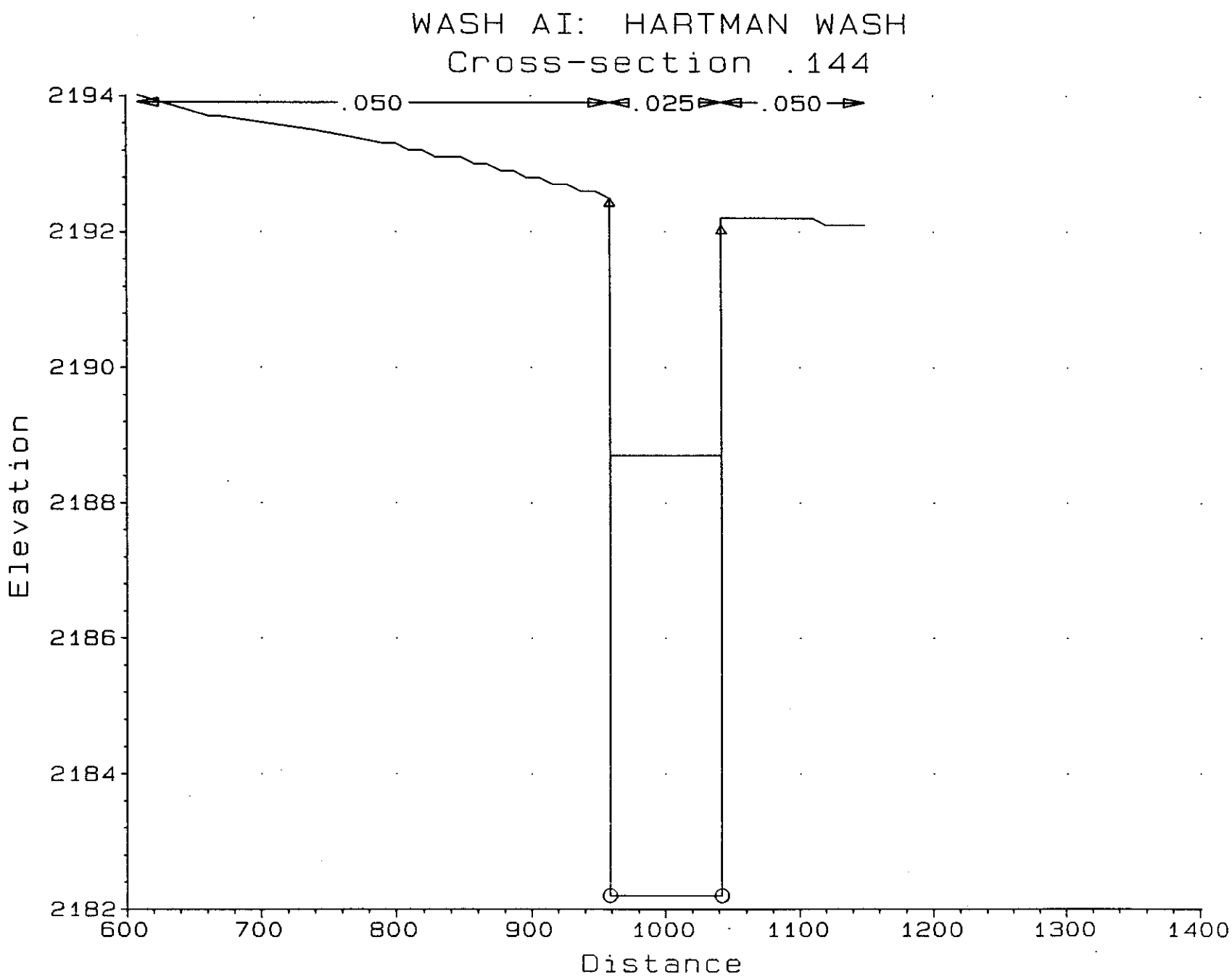
```
CAUTION SECNO=      3.002  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.002  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      3.002  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.002  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      3.093  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.093  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      3.093  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.093  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      3.195  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.195  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      3.195  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      3.195  PROFILE=  2  MINIMUM SPECIFIC ENERGY
```

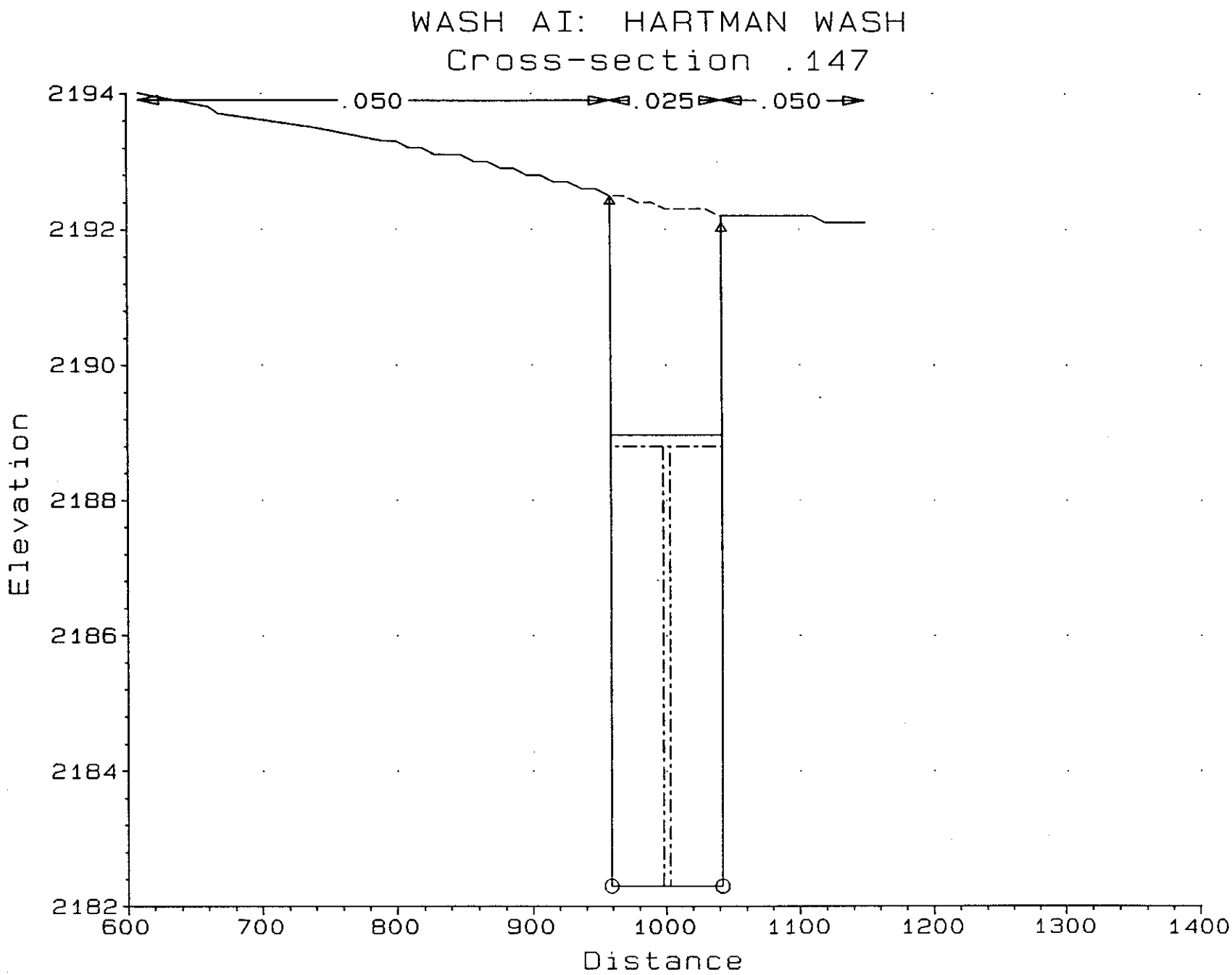
FLOODWAY DATA, WASH AI: HARTMAN WASH
PROFILE NO. 2

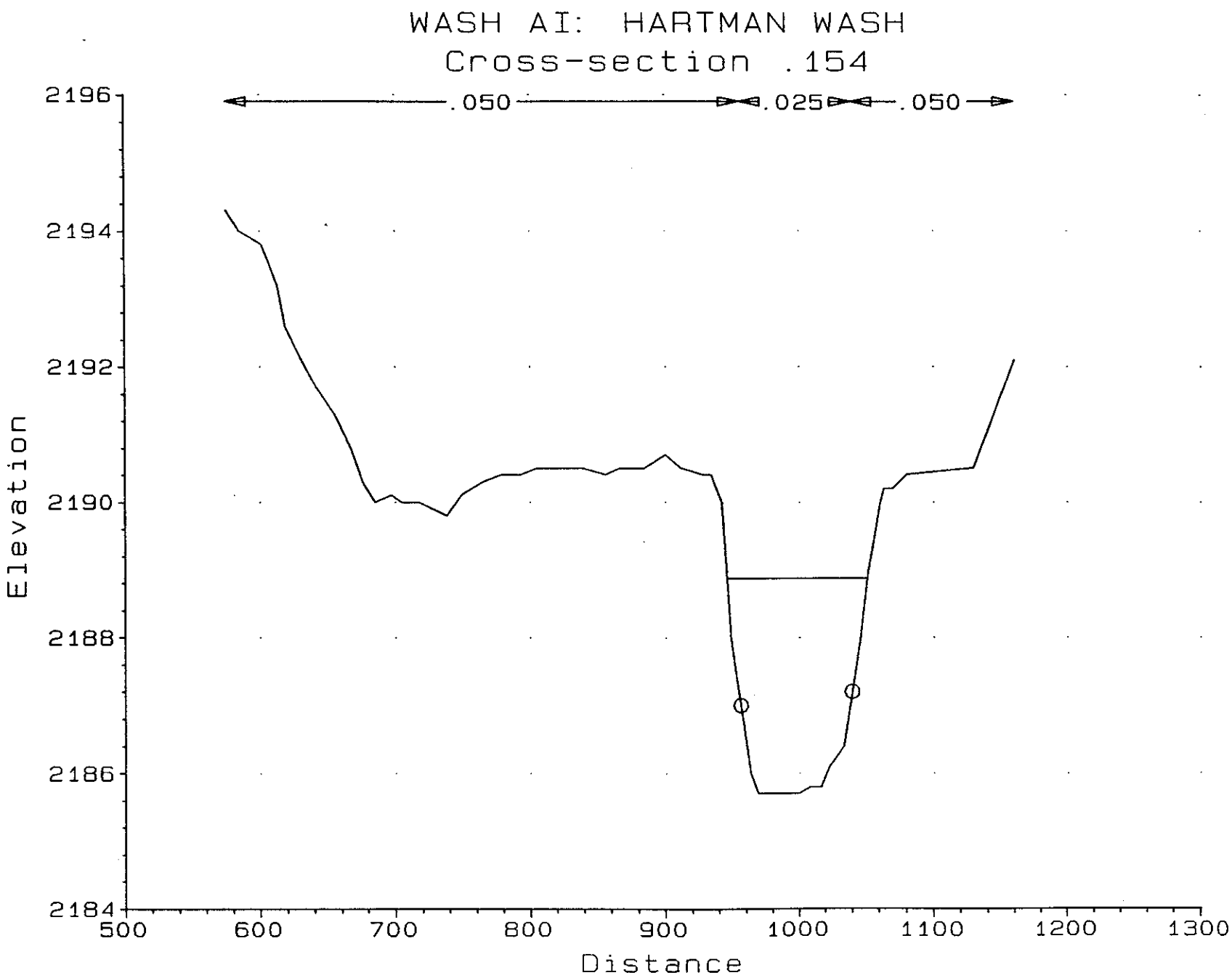
STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.095	69.	228.	10.3	2186.1	2186.1	.0
.133	77.	282.	8.3	2187.6	2187.6	.0
.144	83.	539.	4.4	2188.7	2188.7	.0
.147	83.	553.	4.2	2189.0	2189.0	.0
.154	106.	266.	8.8	2188.9	2188.9	.0
.171	224.	393.	6.4	2192.2	2192.2	.0
.216	349.	649.	5.9	2195.2	2195.2	.0
.254	470.	790.	4.8	2199.9	2199.6	.3
.345	461.	788.	4.8	2205.4	2204.5	.9
.423	357.	677.	5.6	2212.0	2212.0	.0
.540	415.	680.	5.6	2220.6	2220.3	.3
.595	546.	649.	5.9	2226.2	2226.2	.0
.737	390.	607.	6.3	2239.3	2239.2	.1
.826	173.	490.	7.8	2247.3	2246.8	.5
.921	110.	426.	8.9	2255.1	2255.1	.0
.979	226.	594.	6.4	2258.7	2258.7	.0
1.108	445.	690.	5.5	2266.7	2266.7	.0
1.203	154.	467.	8.1	2270.8	2270.8	.0
1.301	308.	649.	5.9	2276.7	2276.7	.0
1.392	301.	610.	6.2	2283.9	2283.9	.0
1.476	429.	761.	5.0	2290.5	2290.5	.0
1.587	340.	626.	6.1	2298.2	2297.5	.7
1.676	499.	772.	4.9	2306.0	2305.8	.2
1.771	412.	618.	6.2	2313.8	2313.2	.6
1.871	333.	618.	6.2	2322.0	2321.5	.5
1.964	349.	652.	5.8	2329.1	2328.4	.7
2.054	549.	885.	4.3	2335.0	2334.5	.5
2.149	148.	458.	8.3	2341.6	2341.4	.2
2.242	126.	440.	8.7	2348.4	2348.0	.4
2.331	207.	560.	6.8	2354.2	2353.7	.5
2.430	213.	653.	5.8	2361.1	2360.7	.4
2.523	329.	635.	6.0	2366.4	2366.0	.4
2.582	285.	590.	6.4	2371.8	2371.8	.0
2.620	253.	596.	6.4	2374.6	2374.4	.2
2.716	146.	458.	8.3	2383.4	2383.3	.1
2.826	228.	608.	6.2	2389.7	2389.9	-.2
2.909	118.	415.	9.2	2393.1	2393.1	.0
3.002	122.	433.	8.8	2398.7	2398.4	.3
3.093	123.	388.	9.4	2403.3	2403.4	-.1
3.195	136.	415.	8.8	2409.8	2409.8	.0

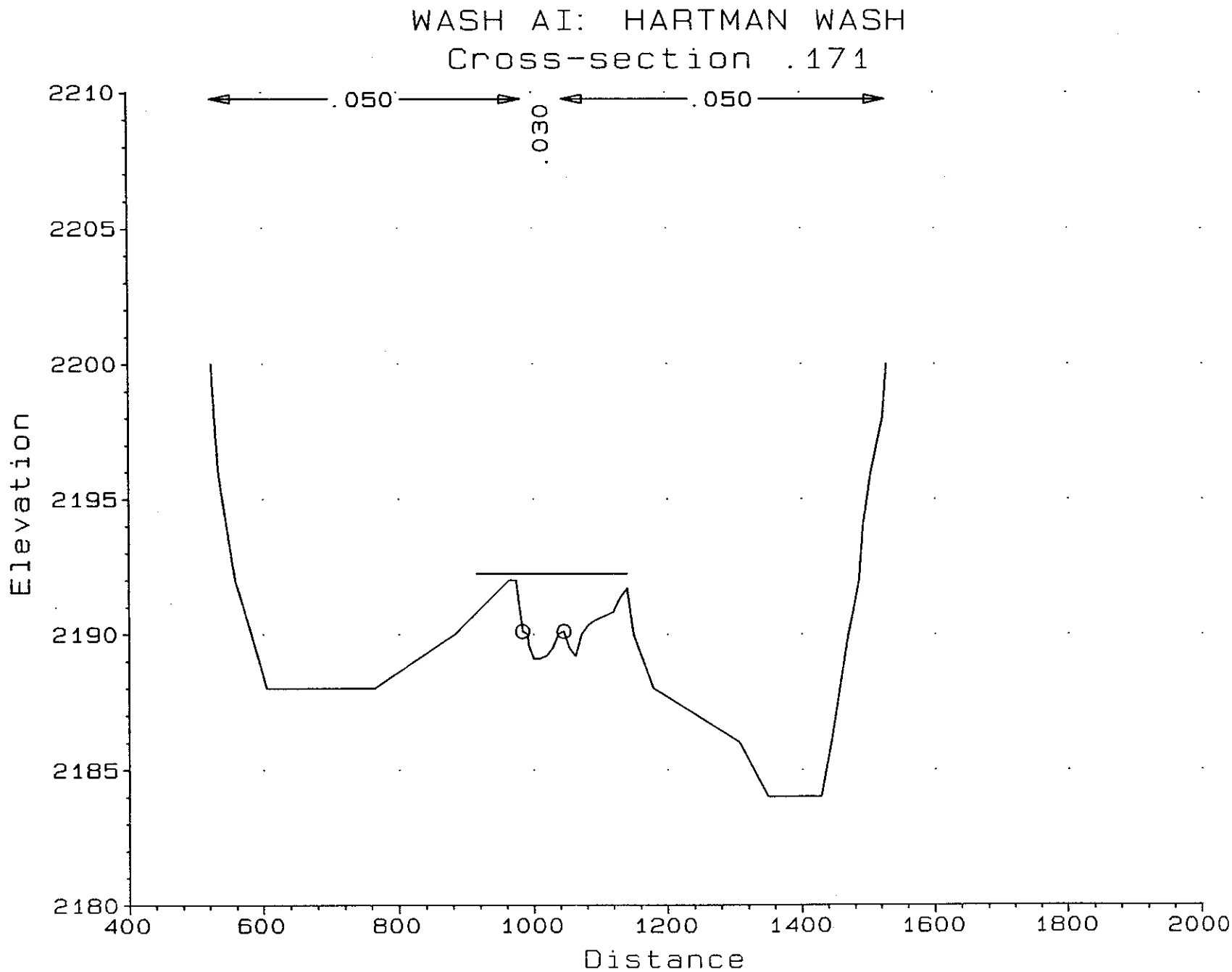

WASH AI: HARTMAN WASH
Cross-section .095
.050
.025
.050
2205
2200
2195
2190
2185
2180
2175
Elevation
500
600
700
800
900
1000
1100
1200
1300
Distance

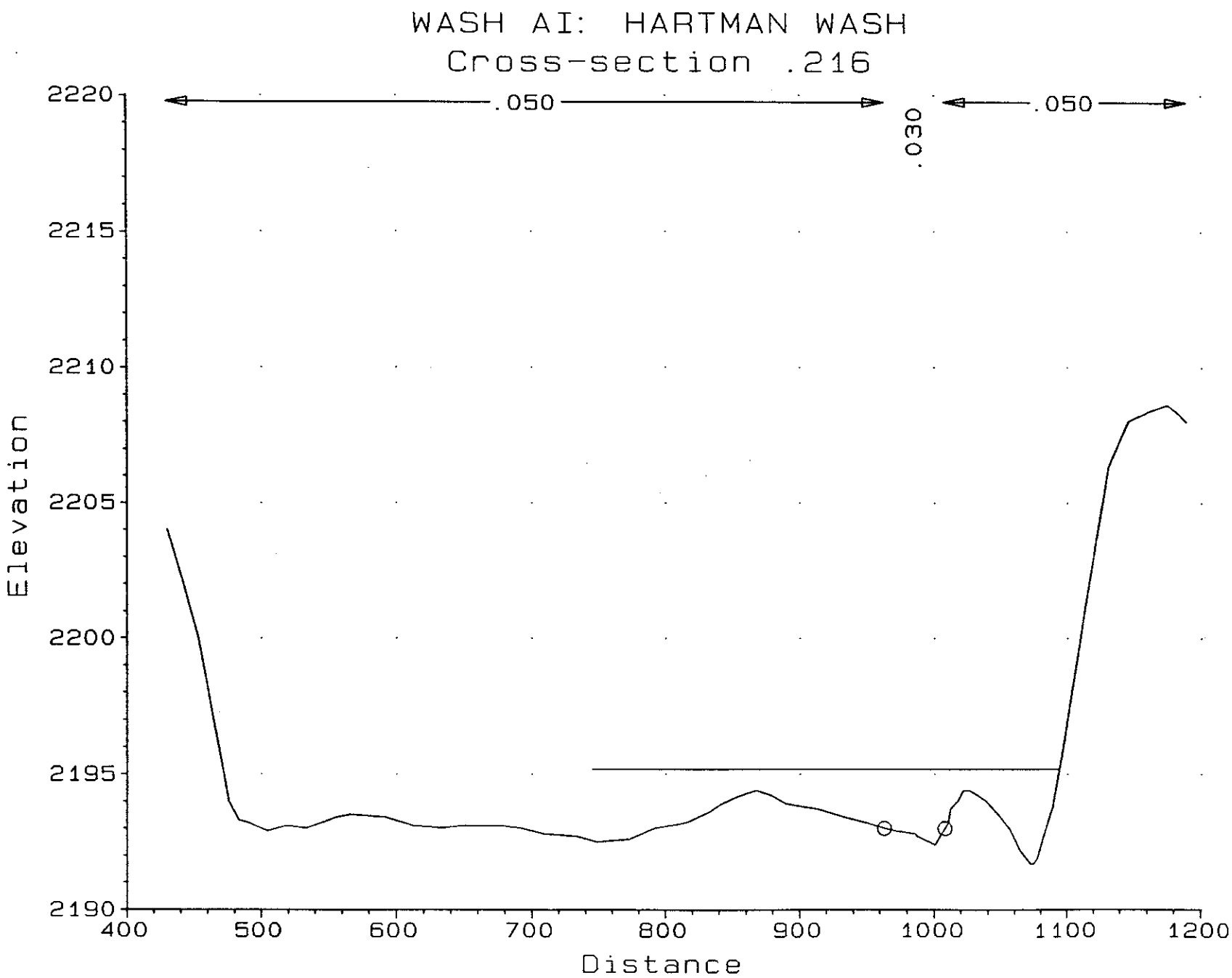

WASH AI: HARTMAN WASH
Cross-section .133
.050
.025
.050
2194
2192
2190
2188
2186
2184
2182
Elevation
900
950
1000
1050
1100
1150
1200
1250
1300
Distance

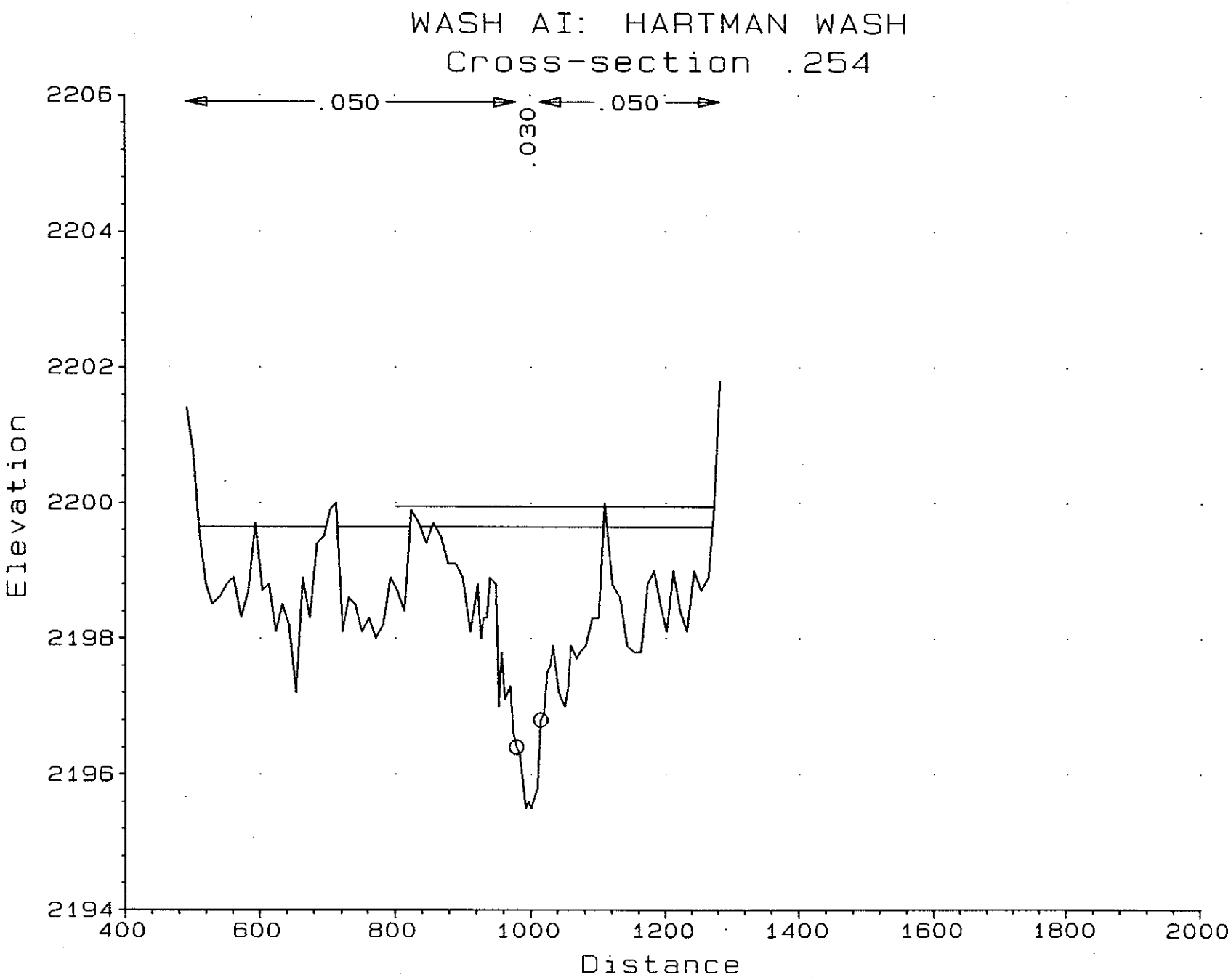

WASH AI: HARTMAN WASH
Cross-section .144
.050
.025
.050
2194
2192
2190
2188
2186
2184
2182
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance

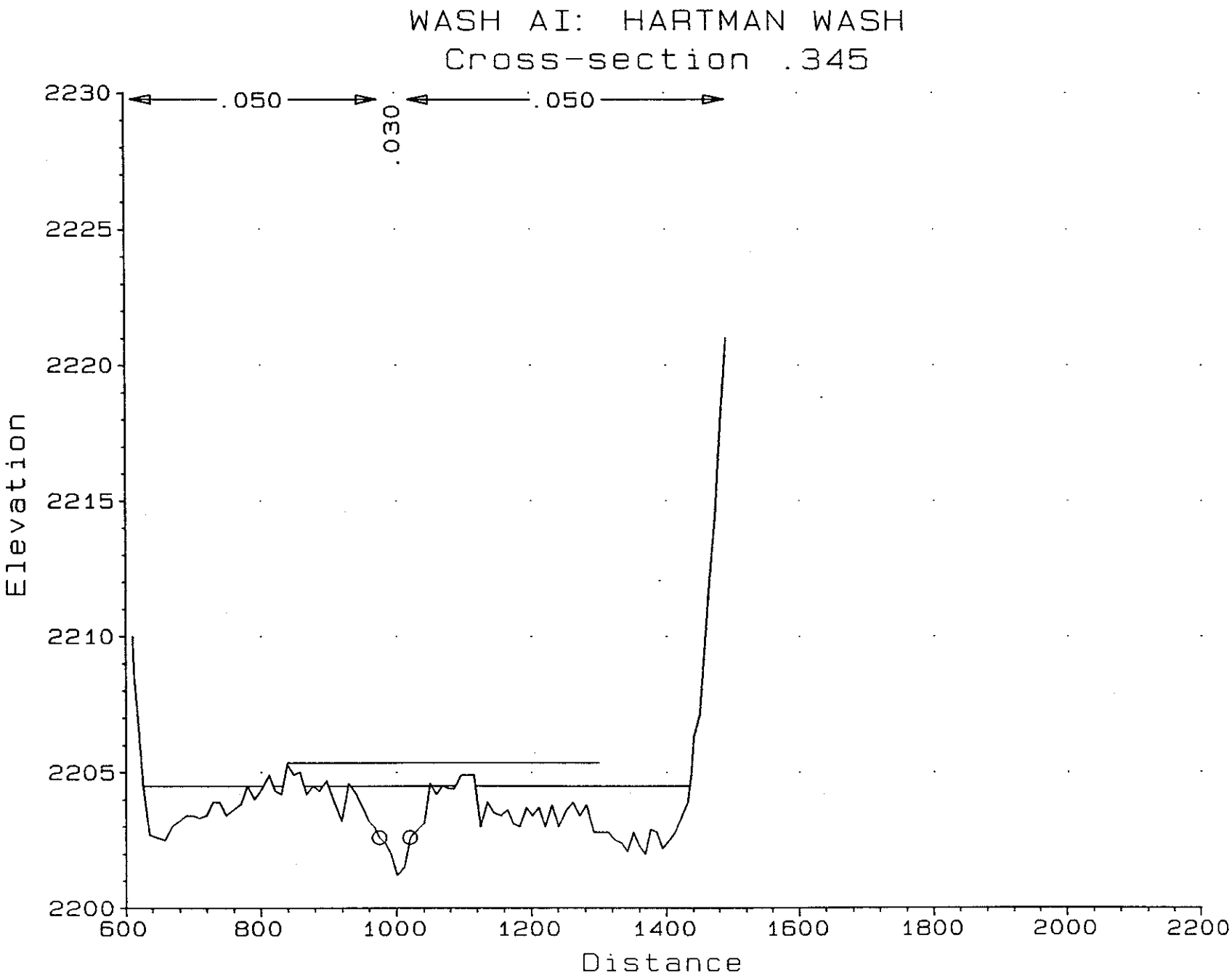

WASH AI: HARTMAN WASH
Cross-section .147
.050
.025
.050
2194
2192
2190
2188
2186
2184
2182
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance

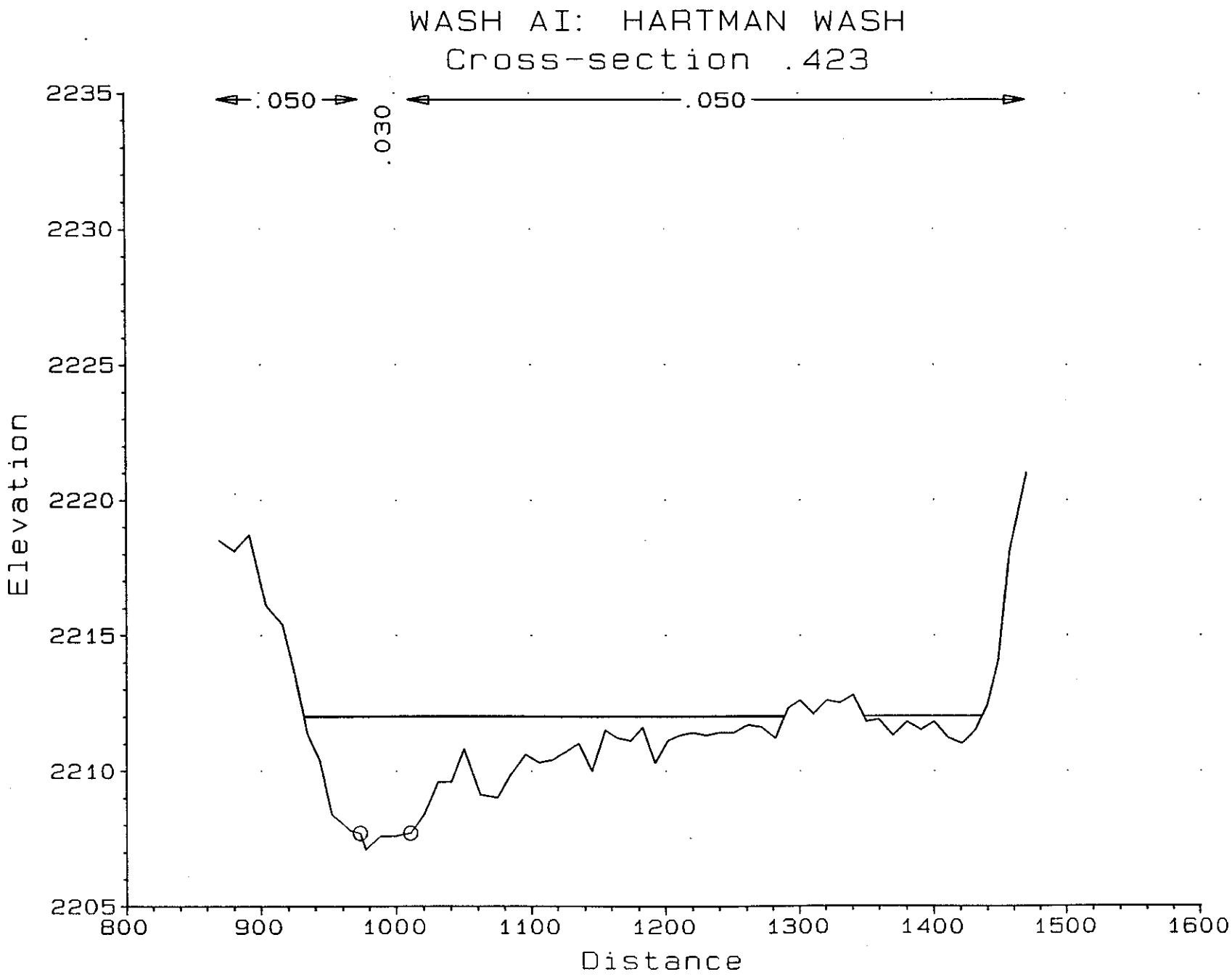

WASH AI: HARTMAN WASH
Cross-section .154
.050
.025
.050
Elevation
2196
2194
2192
2190
2188
2186
2184
500
600
700
800
900
1000
1100
1200
1300
Distance

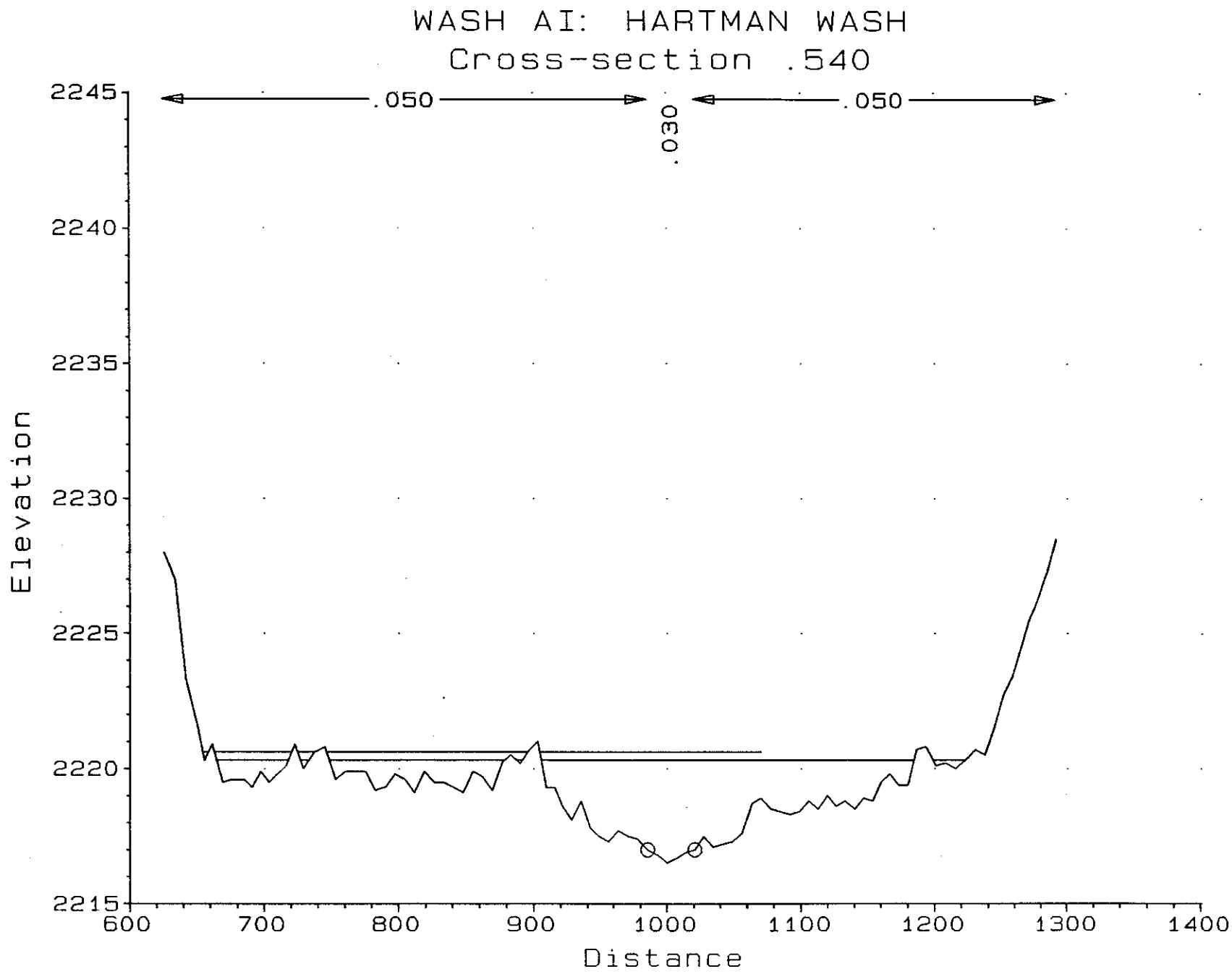

WASH AI: HARTMAN WASH
Cross-section .171
.050
.030
.050
Elevation
2210
2205
2200
2195
2190
2185
2180
400
600
800
1000
1200
1400
1600
1800
2000
Distance

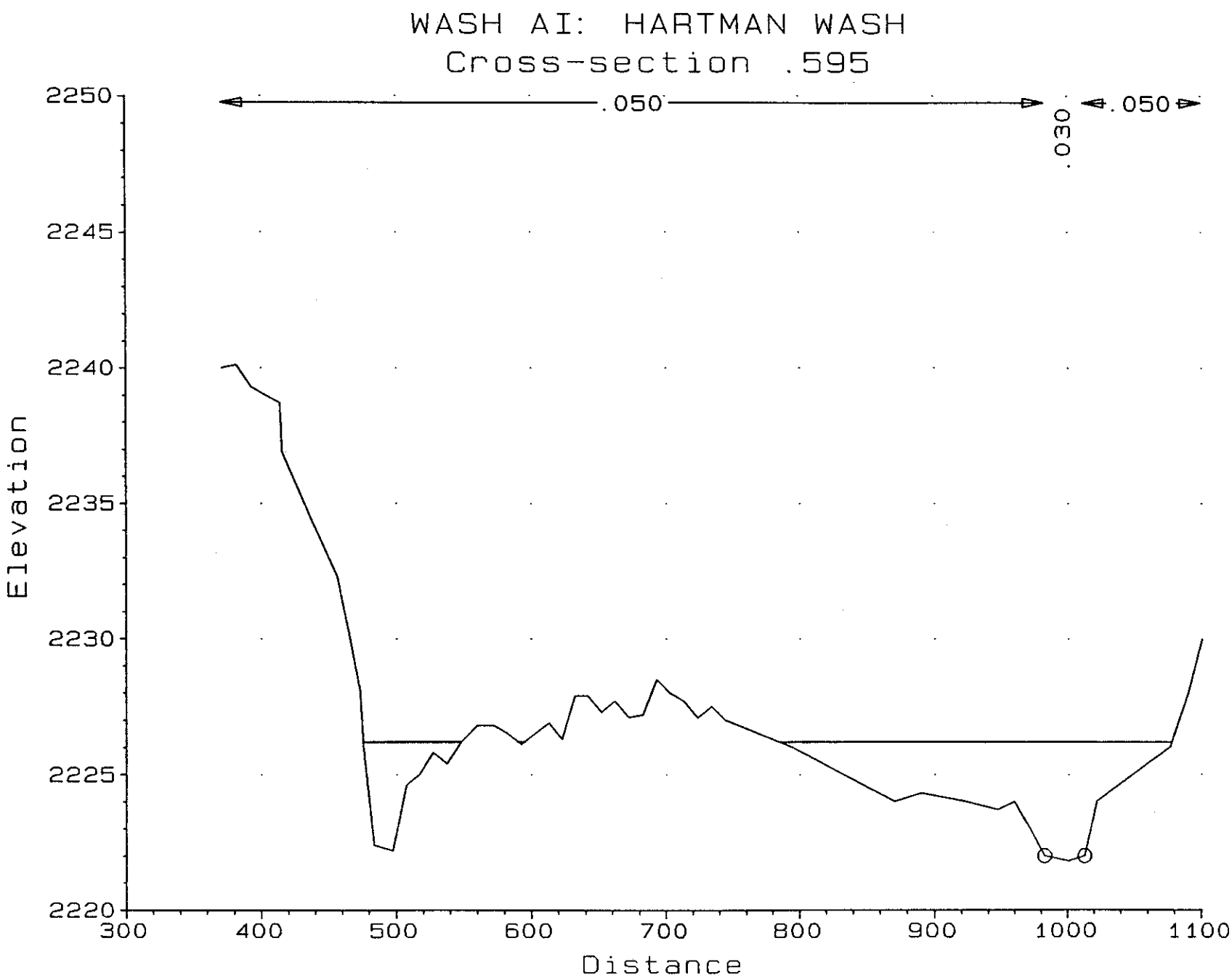

WASH AI: HARTMAN WASH
Cross-section .216
.050
.030
.050
Elevation
2220
2215
2210
2205
2200
2195
2190
400
500
600
700
800
900
1000
1100
1200
Distance

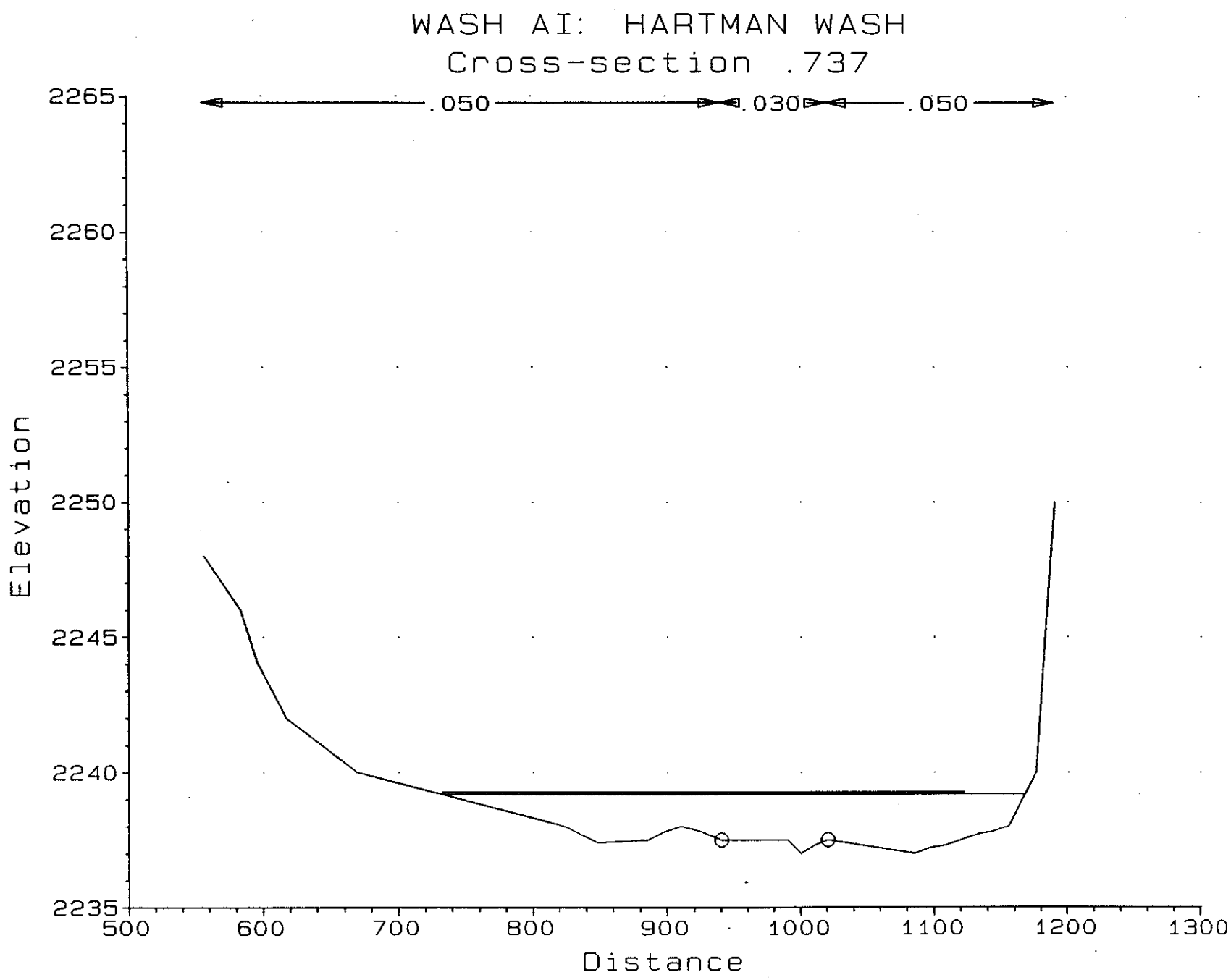

WASH AI: HARTMAN WASH
Cross-section .254
.050
.030
.050
Elevation
2206
2204
2202
2200
2198
2196
2194
400
600
800
1000
1200
1400
1600
1800
2000
Distance

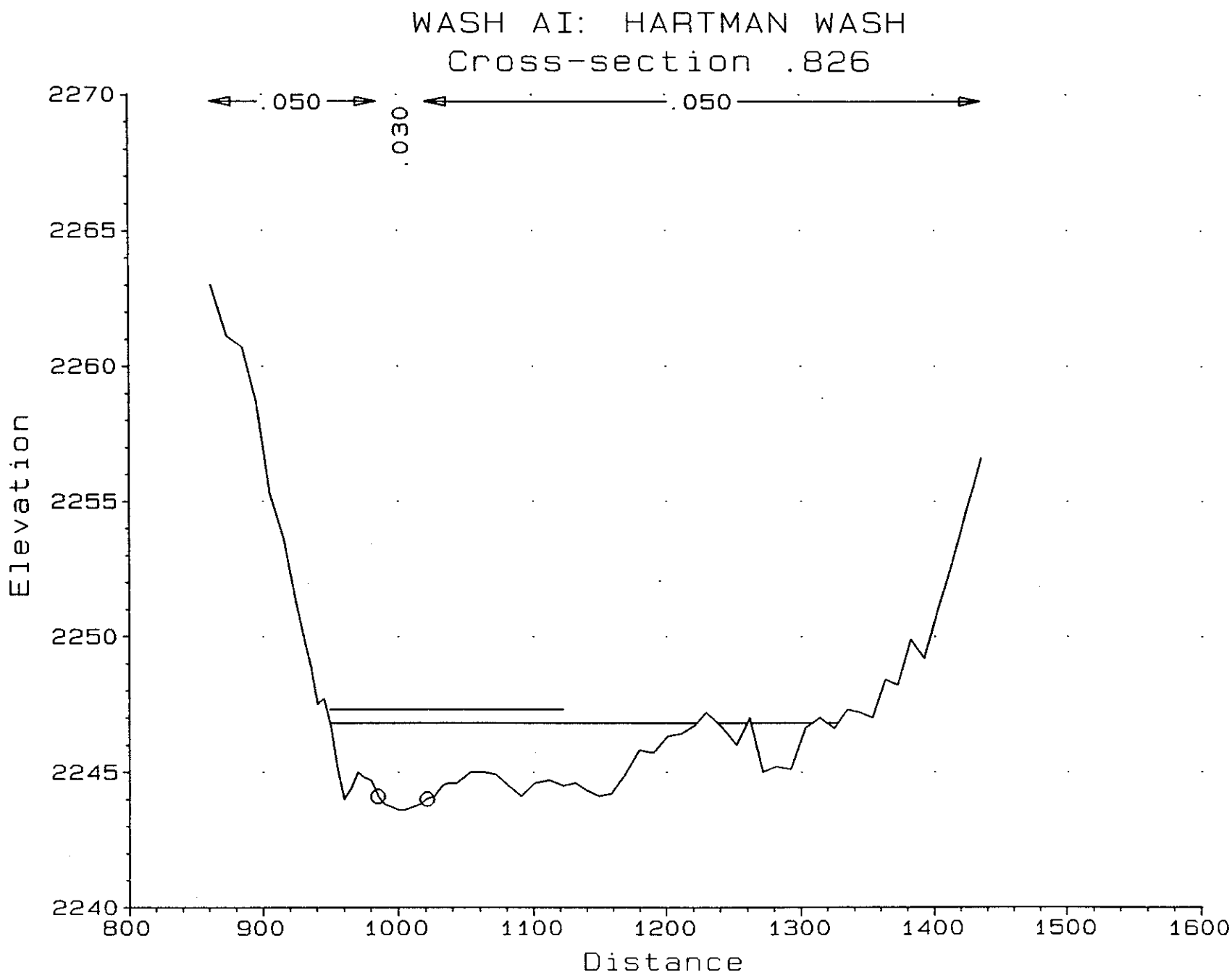

WASH AI: HARTMAN WASH
Cross-section .345
.050
.030
.050
Elevation
2230
2225
2220
2215
2210
2205
2200
600
800
1000
1200
1400
1600
1800
2000
2200
Distance

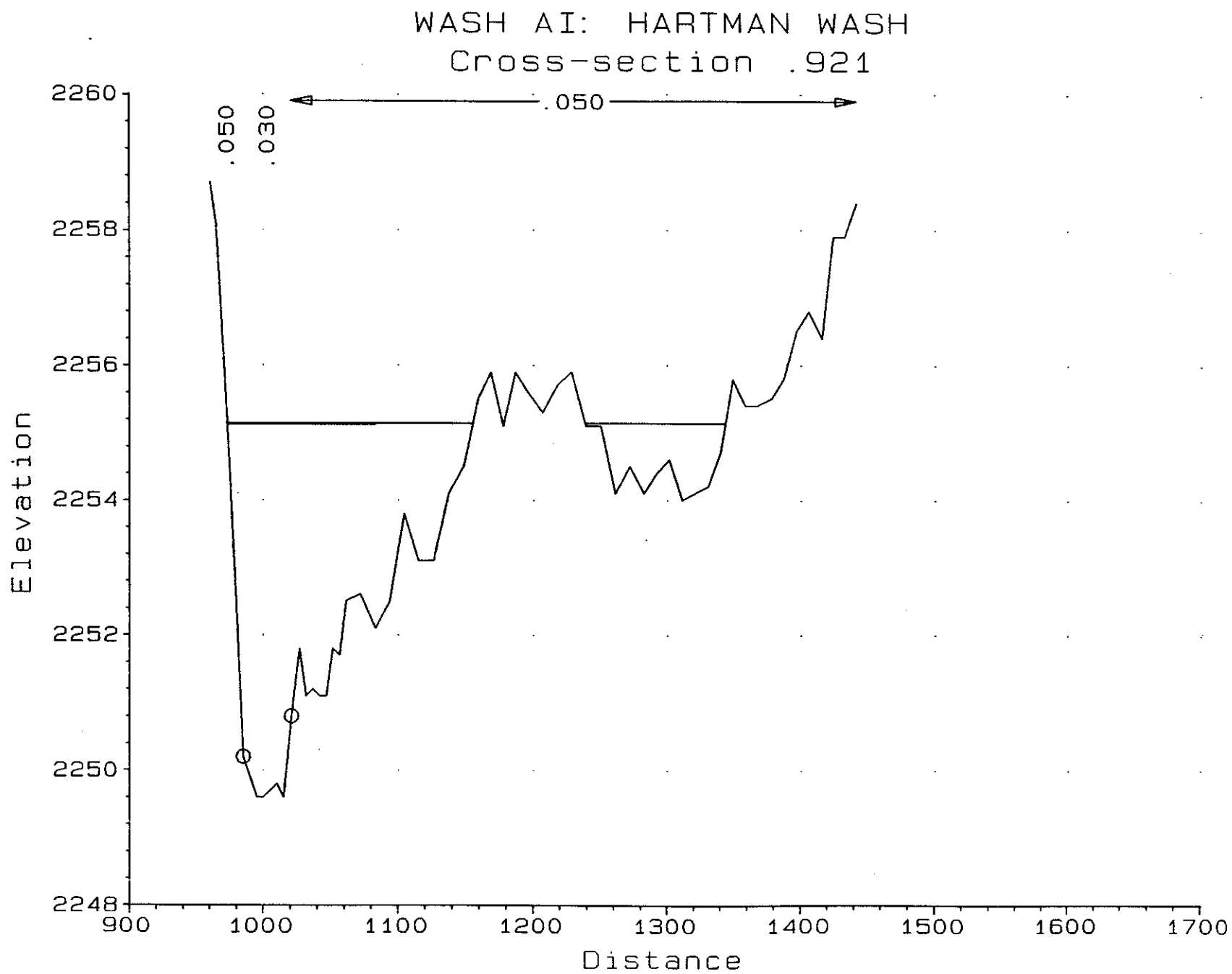

WASH AI: HARTMAN WASH
Cross-section .423
.050
.030
.050
Elevation
2235
2230
2225
2220
2215
2210
2205
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

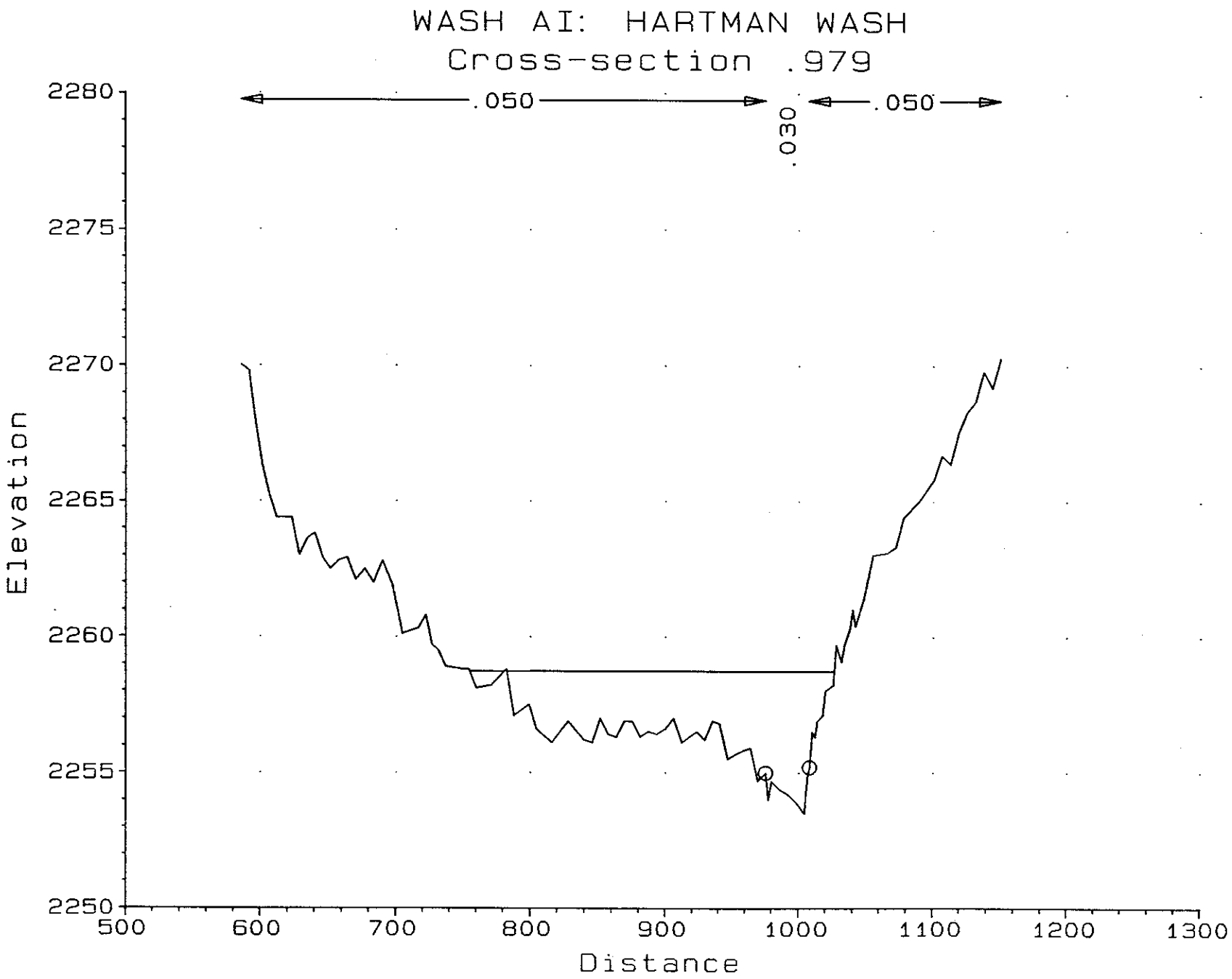

WASH AI: HARTMAN WASH
Cross-section .540
.050
.030
.050
Elevation
2245
2240
2235
2230
2225
2220
2215
600
700
800
900
1000
1100
1200
1300
1400
Distance

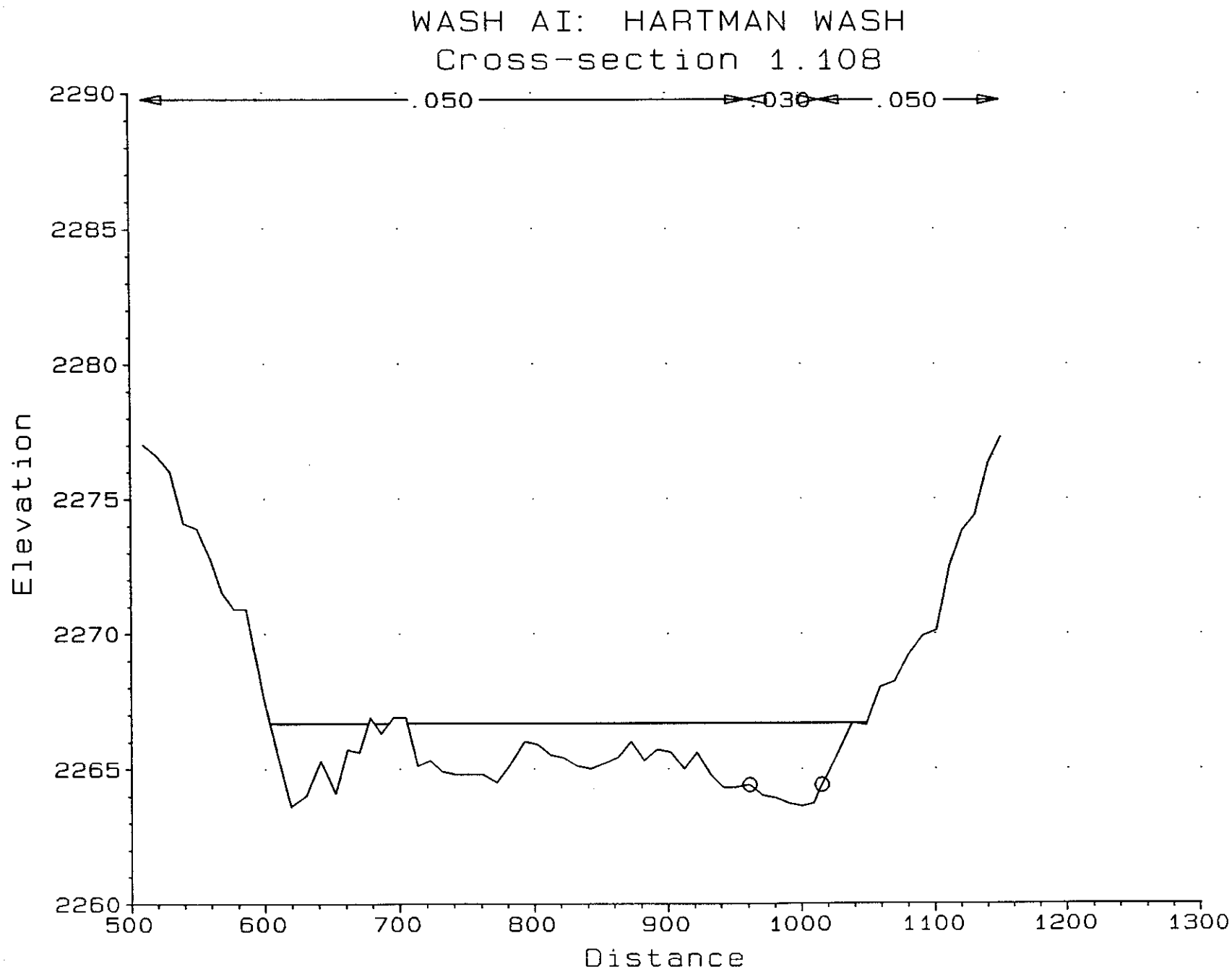

WASH AI: HARTMAN WASH
Cross-section .595
.050
.050
.030
2250
2245
2240
2235
2230
2225
2220
Elevation
300
400
500
600
700
800
900
1000
1100
Distance

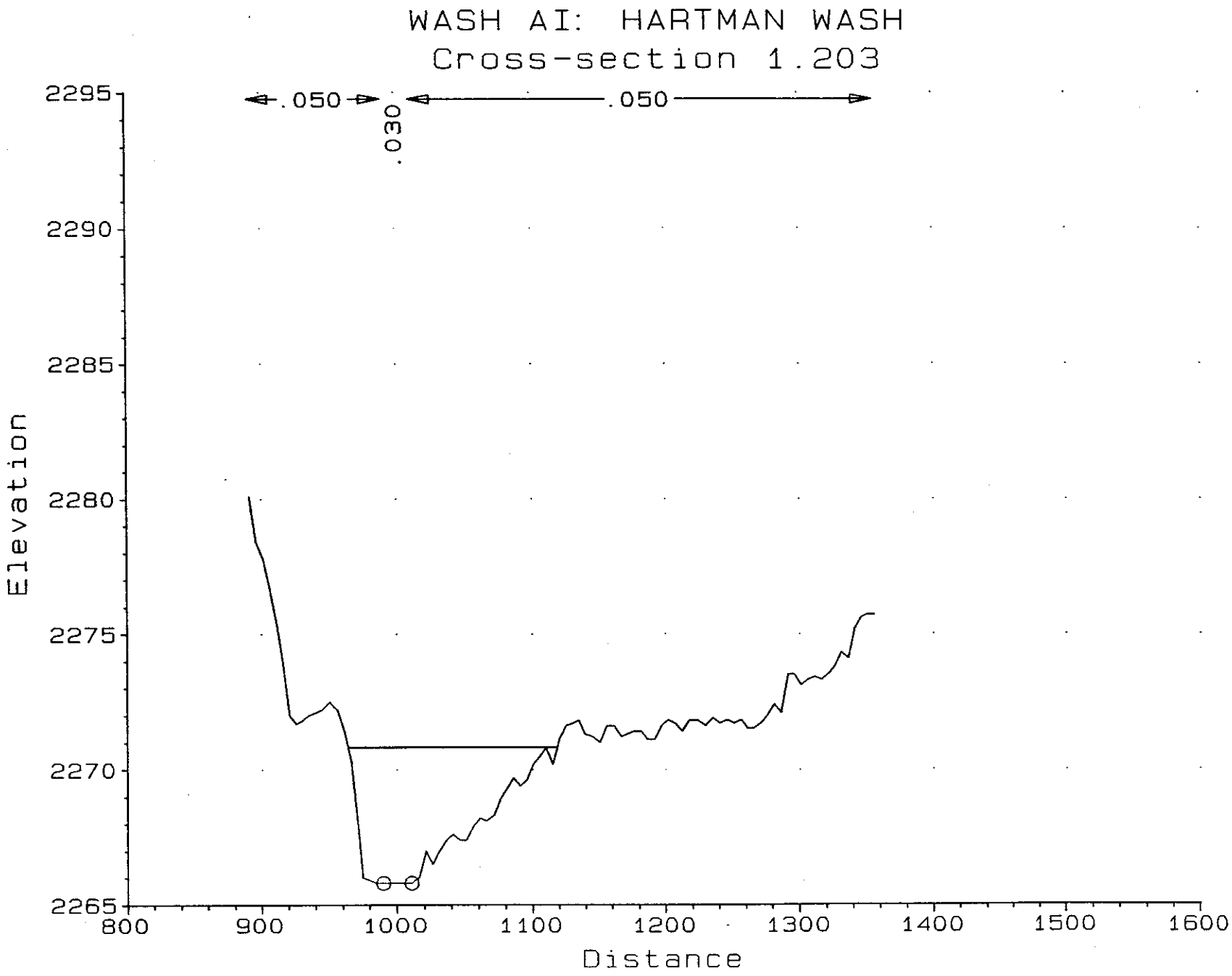

WASH AI: HARTMAN WASH
Cross-section .737
.050
.030
.050
2265
2260
2255
2250
2245
2240
2235
Elevation
500
600
700
800
900
1000
1100
1200
1300
Distance

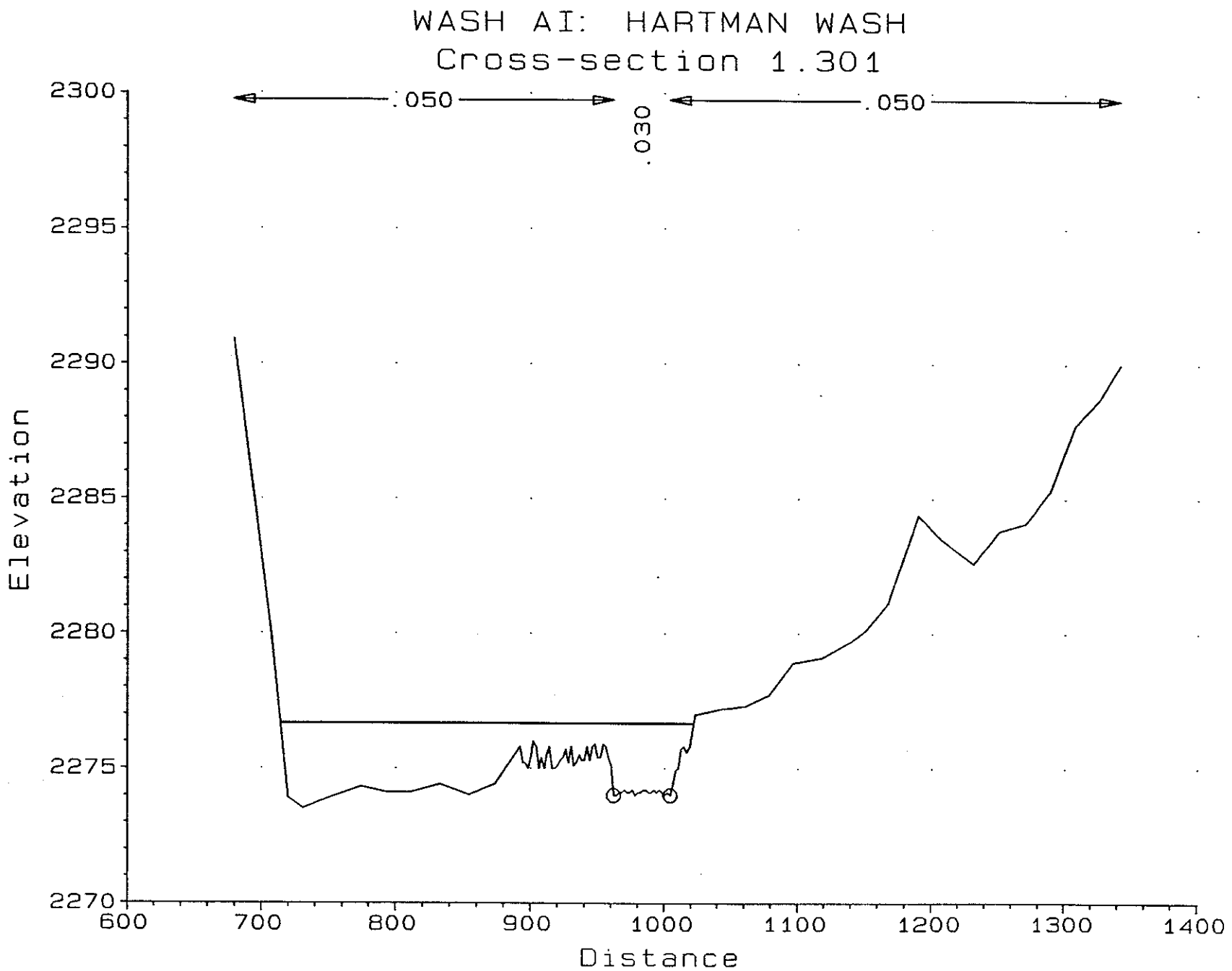

WASH AI: HARTMAN WASH
Cross-section .826
.050
.030
.050
Elevation
2270
2265
2260
2255
2250
2245
2240
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

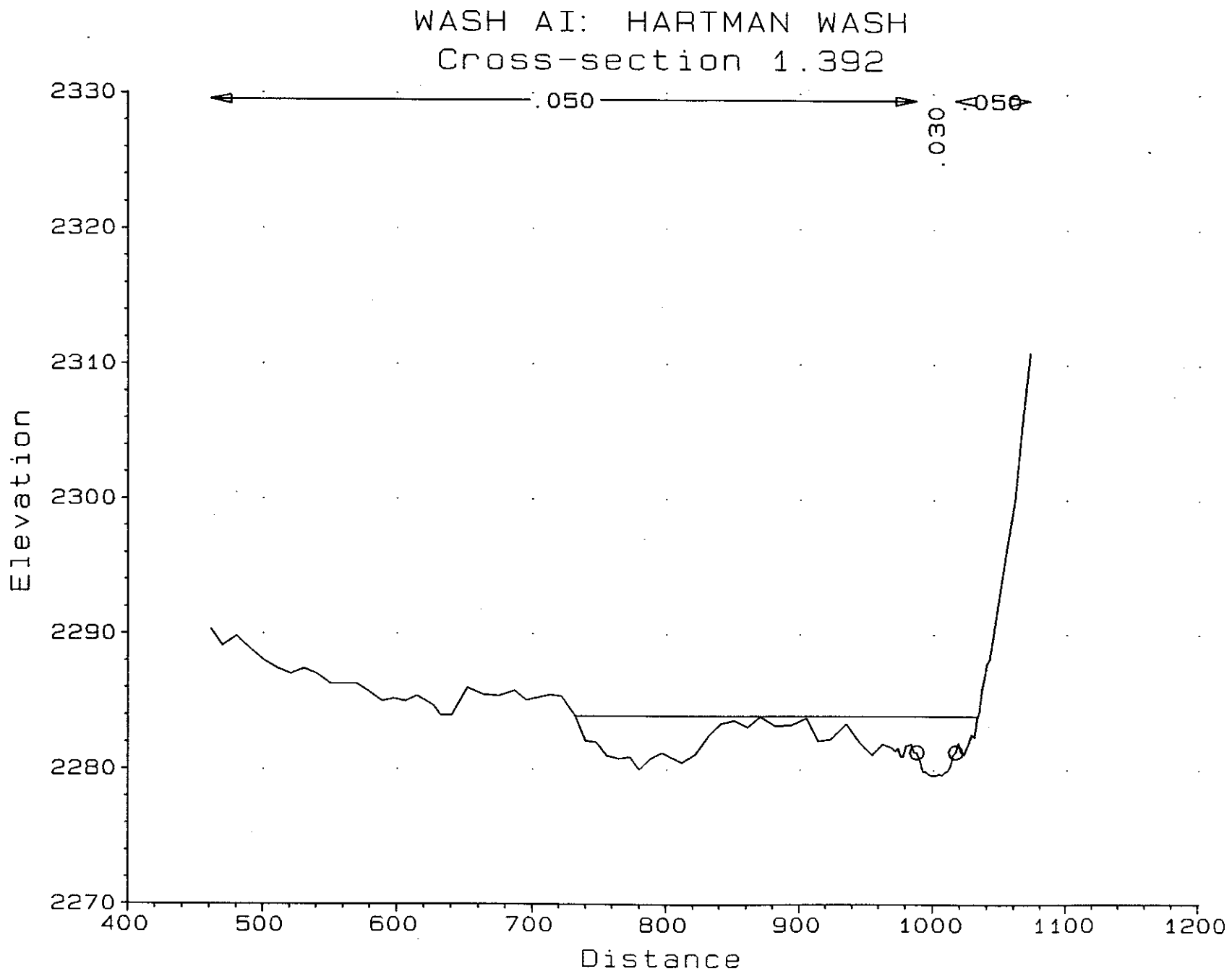

WASH AI: HARTMAN WASH
Cross-section .921
.050
.050
.030
Elevation
2260
2258
2256
2254
2252
2250
2248
900
1000
1100
1200
1300
1400
1500
1600
1700
Distance

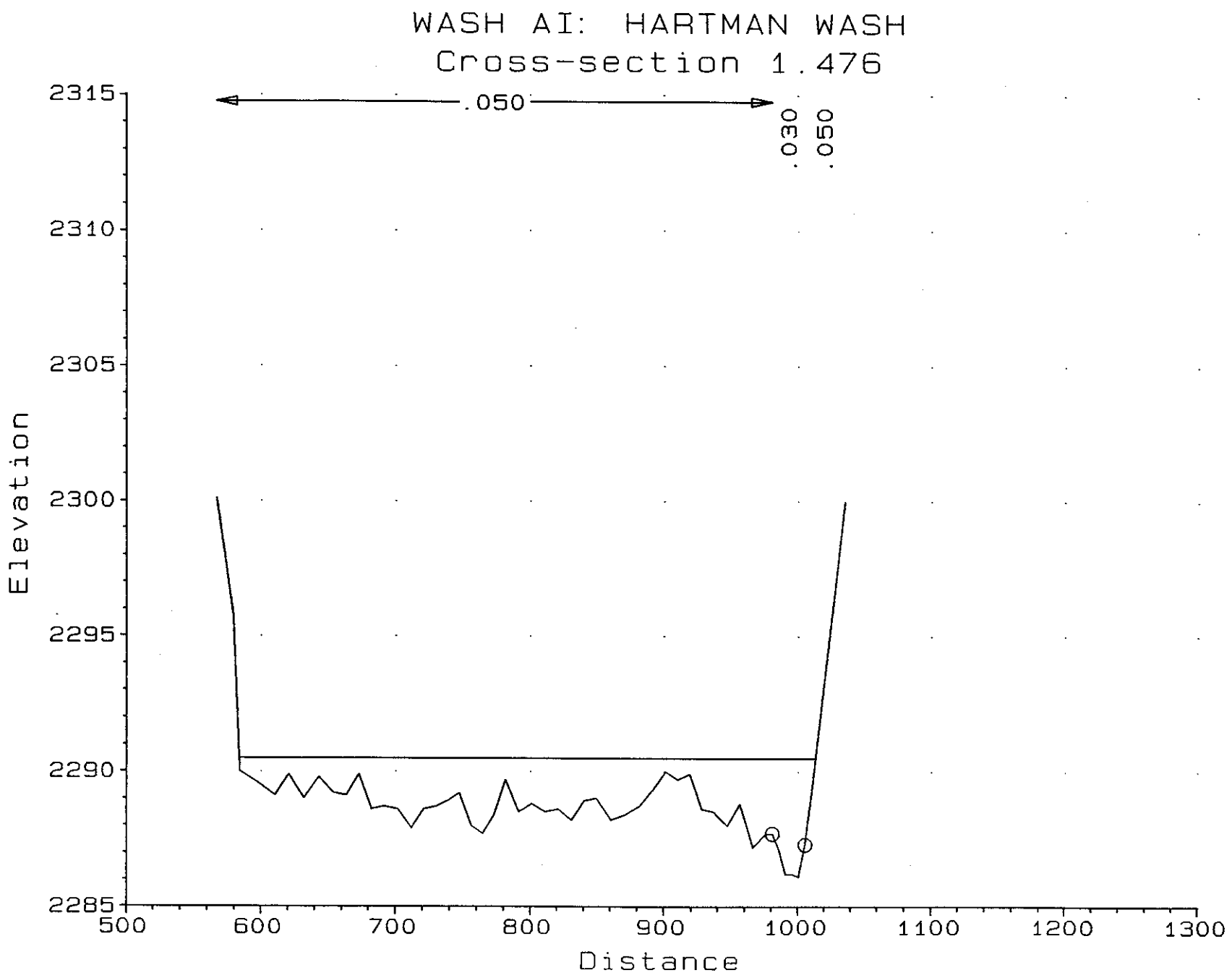

WASH AI: HARTMAN WASH
Cross-section .979
.050
.030
.050
Elevation
2280
2275
2270
2265
2260
2255
2250
500
600
700
800
900
1000
1100
1200
1300
Distance

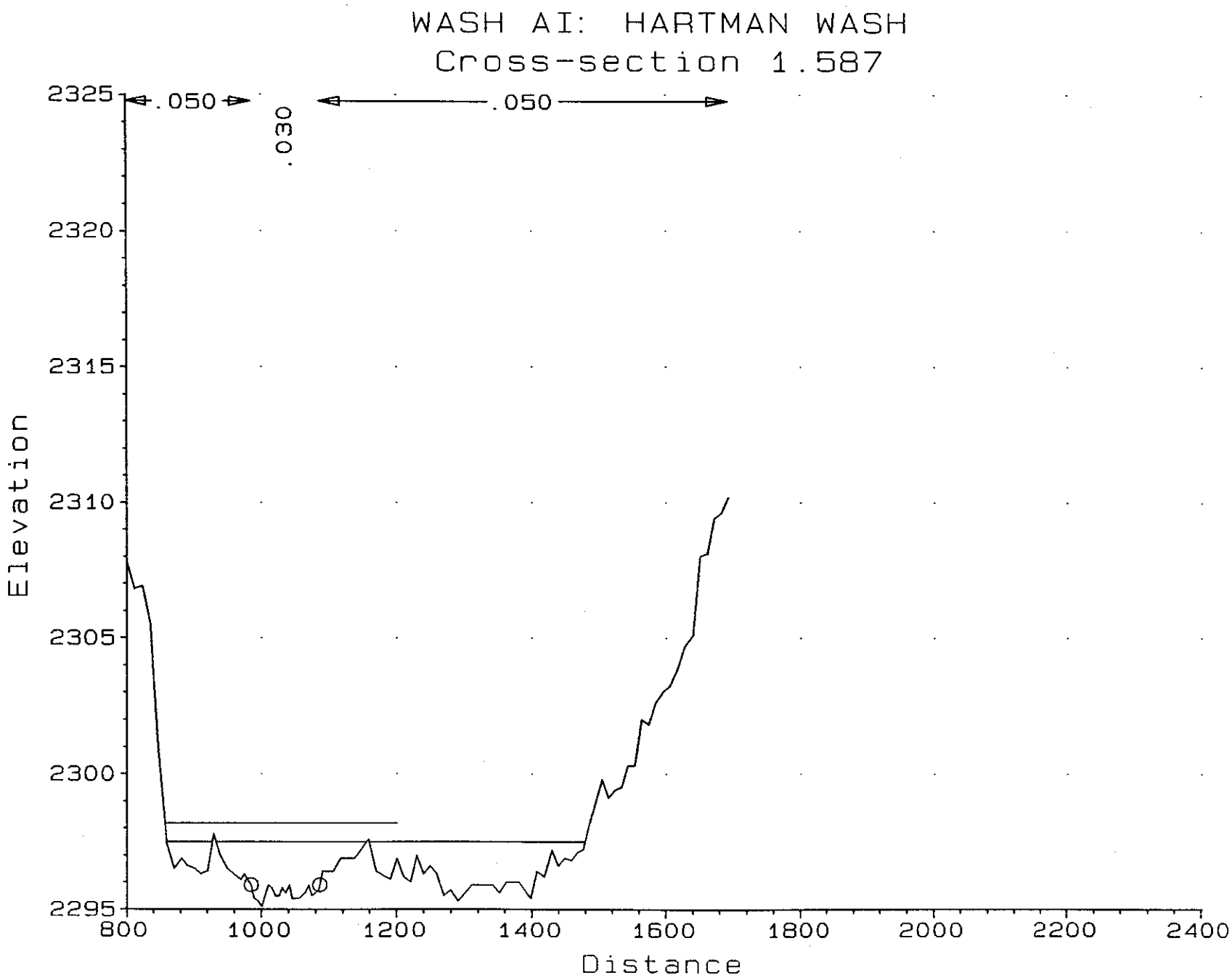

WASH AI: HARTMAN WASH
Cross-section 1.108
.050
.030
.050
2290
2285
2280
2275
2270
2265
2260
Elevation
500
600
700
800
900
1000
1100
1200
1300
Distance

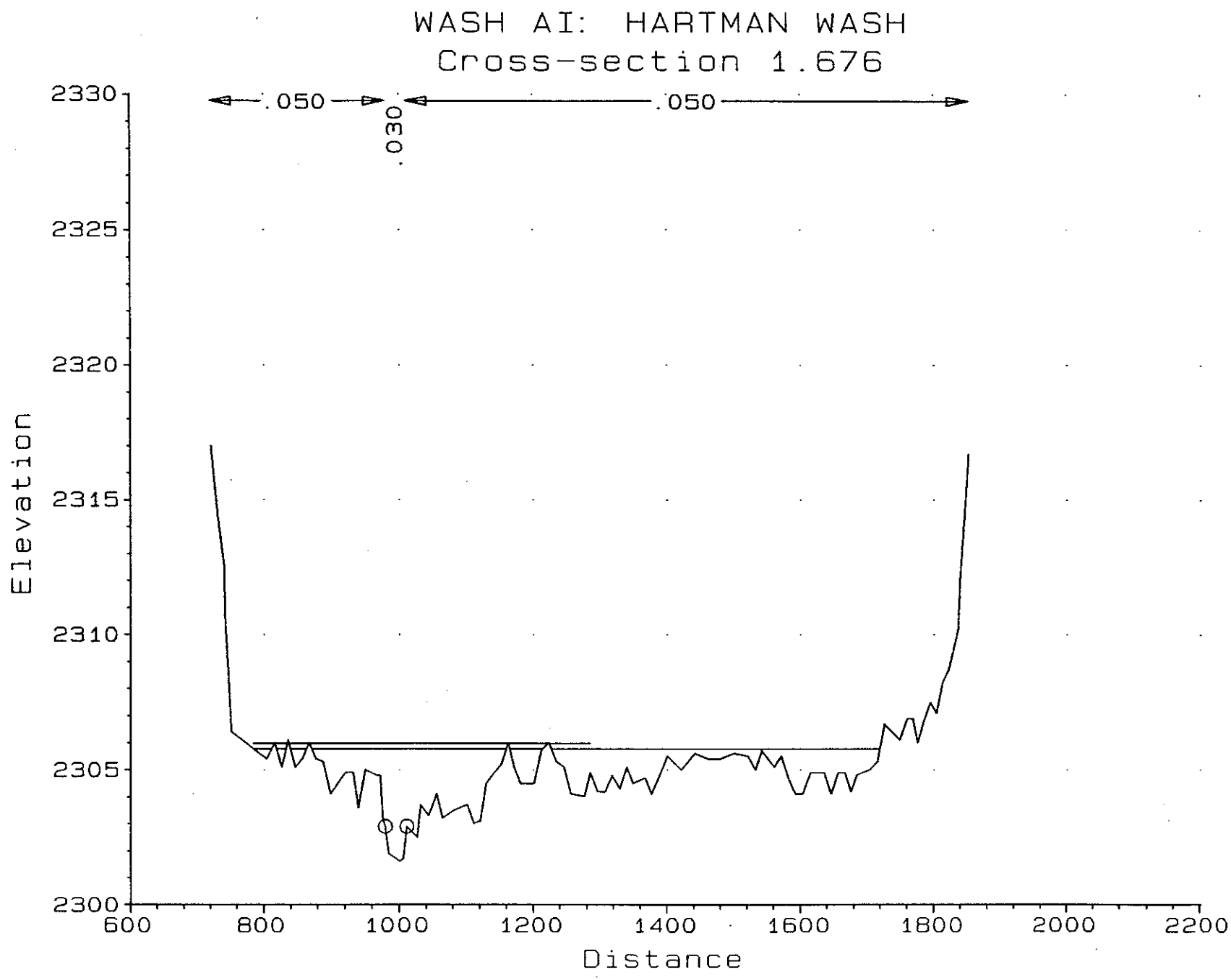

WASH AI: HARTMAN WASH
Cross-section 1.203
.050
.030
.050
Elevation
2295
2290
2285
2280
2275
2270
2265
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

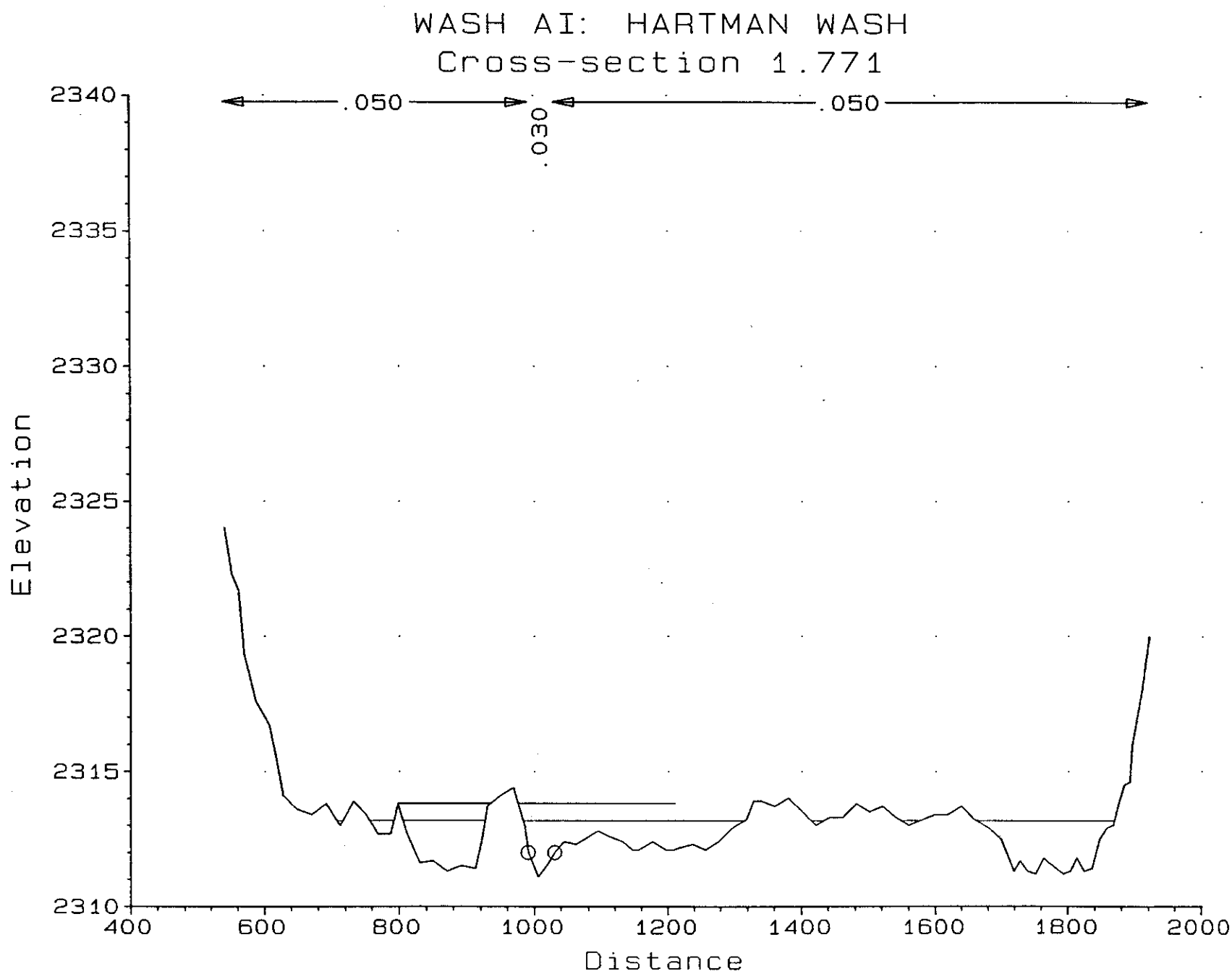

WASH AI: HARTMAN WASH
Cross-section 1.301
.050
.030
.050
Elevation
2300
2295
2290
2285
2280
2275
2270
600
700
800
900
1000
1100
1200
1300
1400
Distance

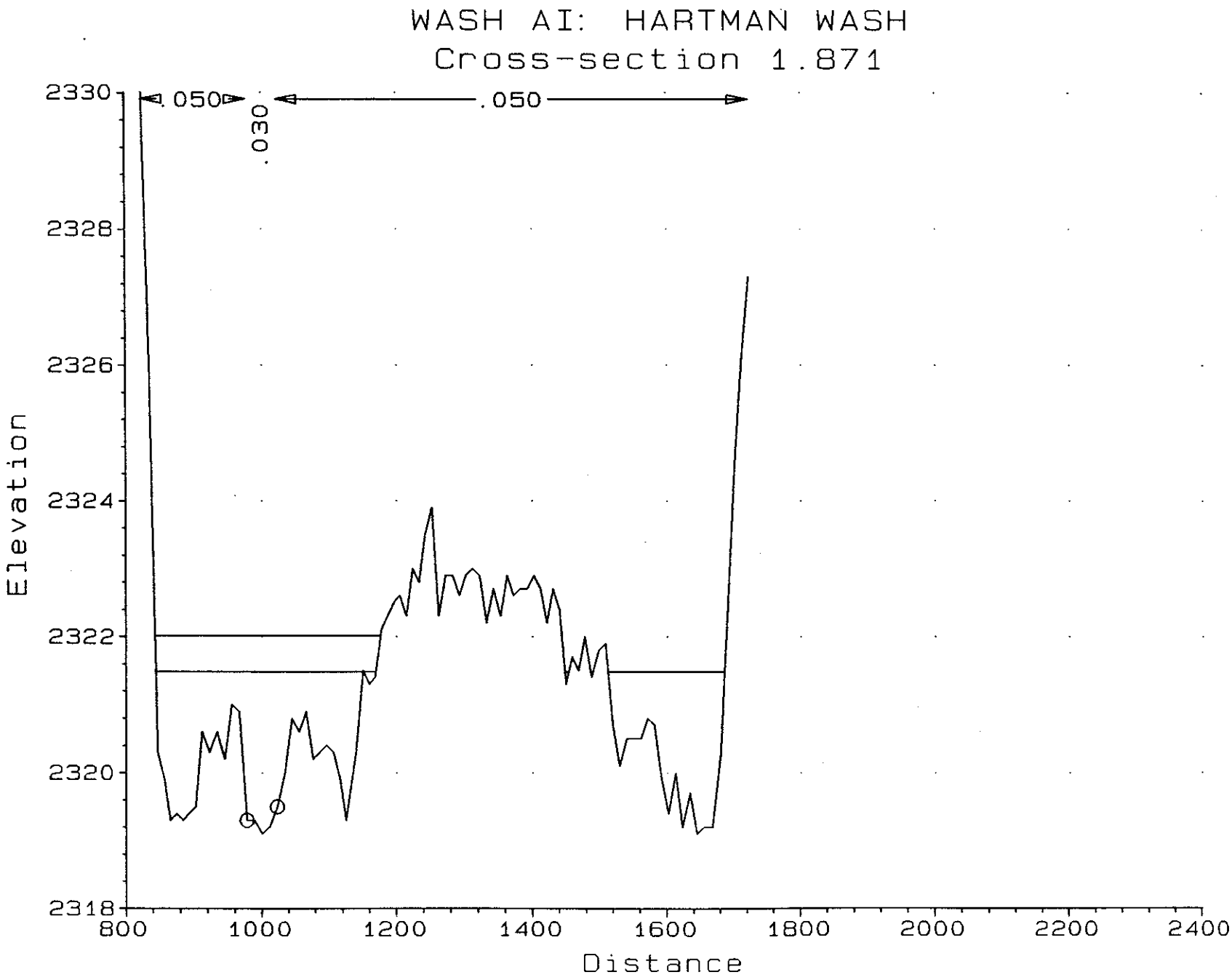

WASH AI: HARTMAN WASH
Cross-section 1.392
.050
.030
.050
Elevation
2330
2320
2310
2300
2290
2280
2270
400
500
600
700
800
900
1000
1100
1200
Distance

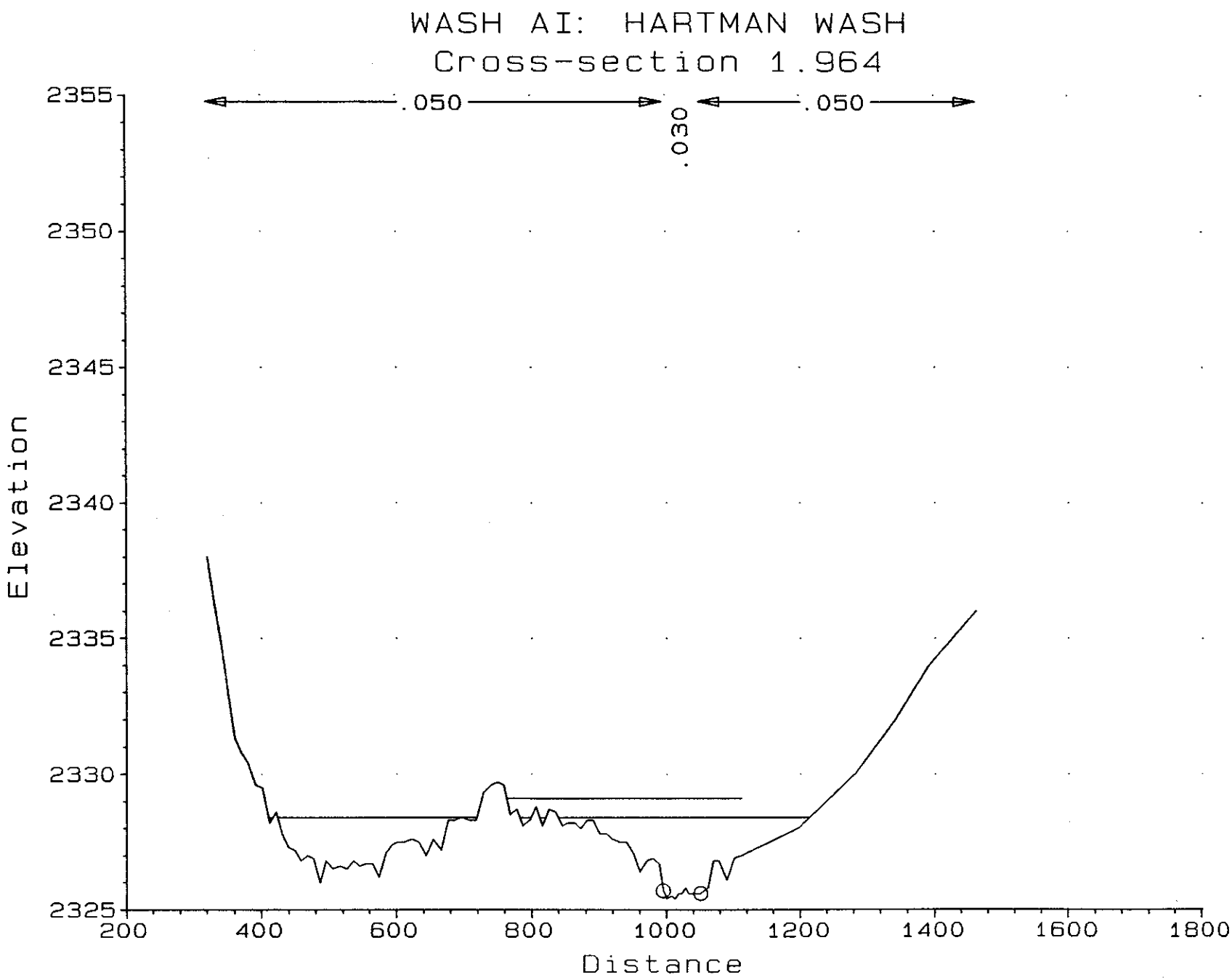

WASH AI: HARTMAN WASH
Cross-section 1.476
.050
.030
.050
Elevation
2315
2310
2305
2300
2295
2290
2285
500
600
700
800
900
1000
1100
1200
1300
Distance

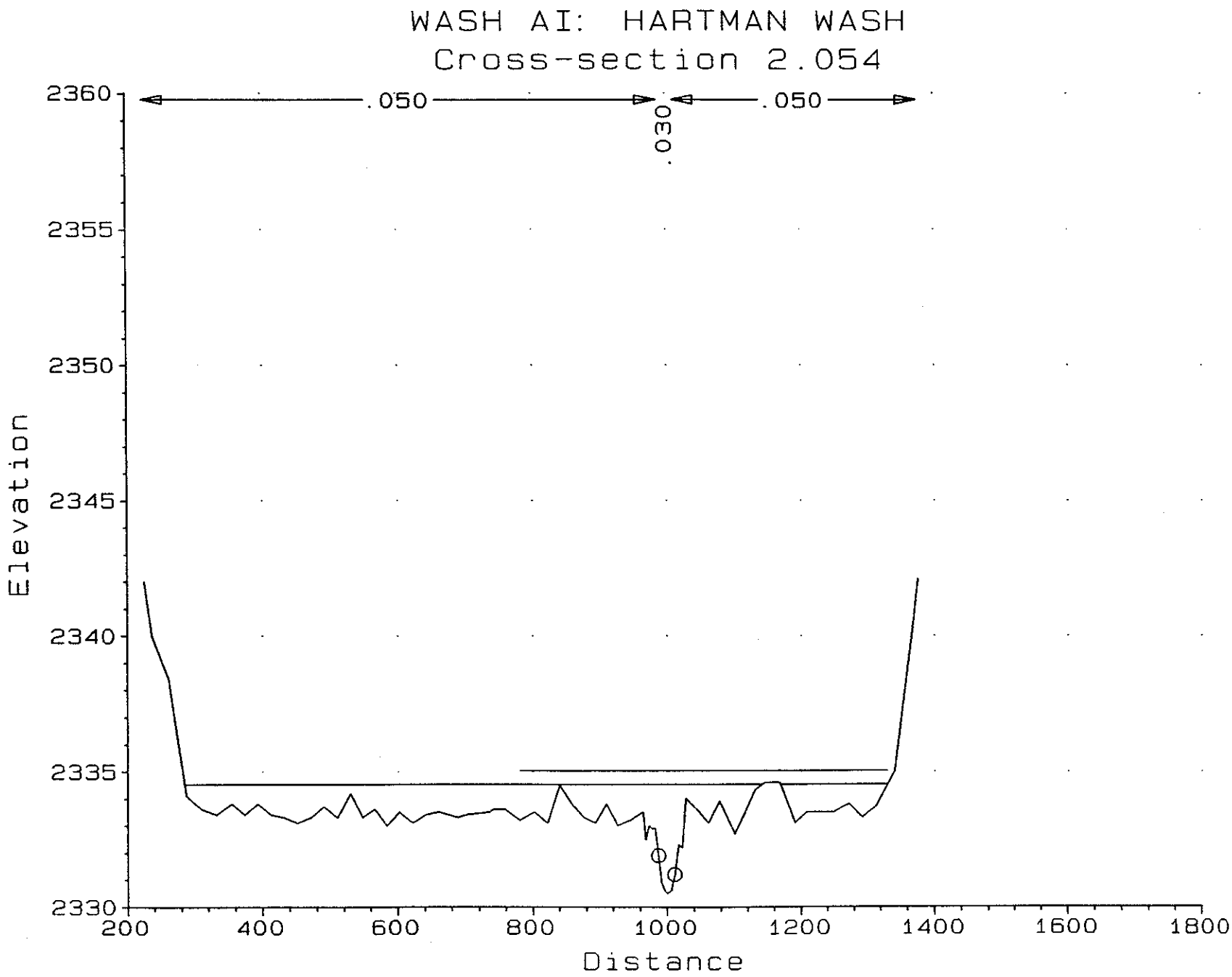

WASH AI: HARTMAN WASH
Cross-section 1.587
.050
.030
.050
Elevation
2325
2320
2315
2310
2305
2300
2295
800
1000
1200
1400
1600
1800
2000
2200
2400
Distance

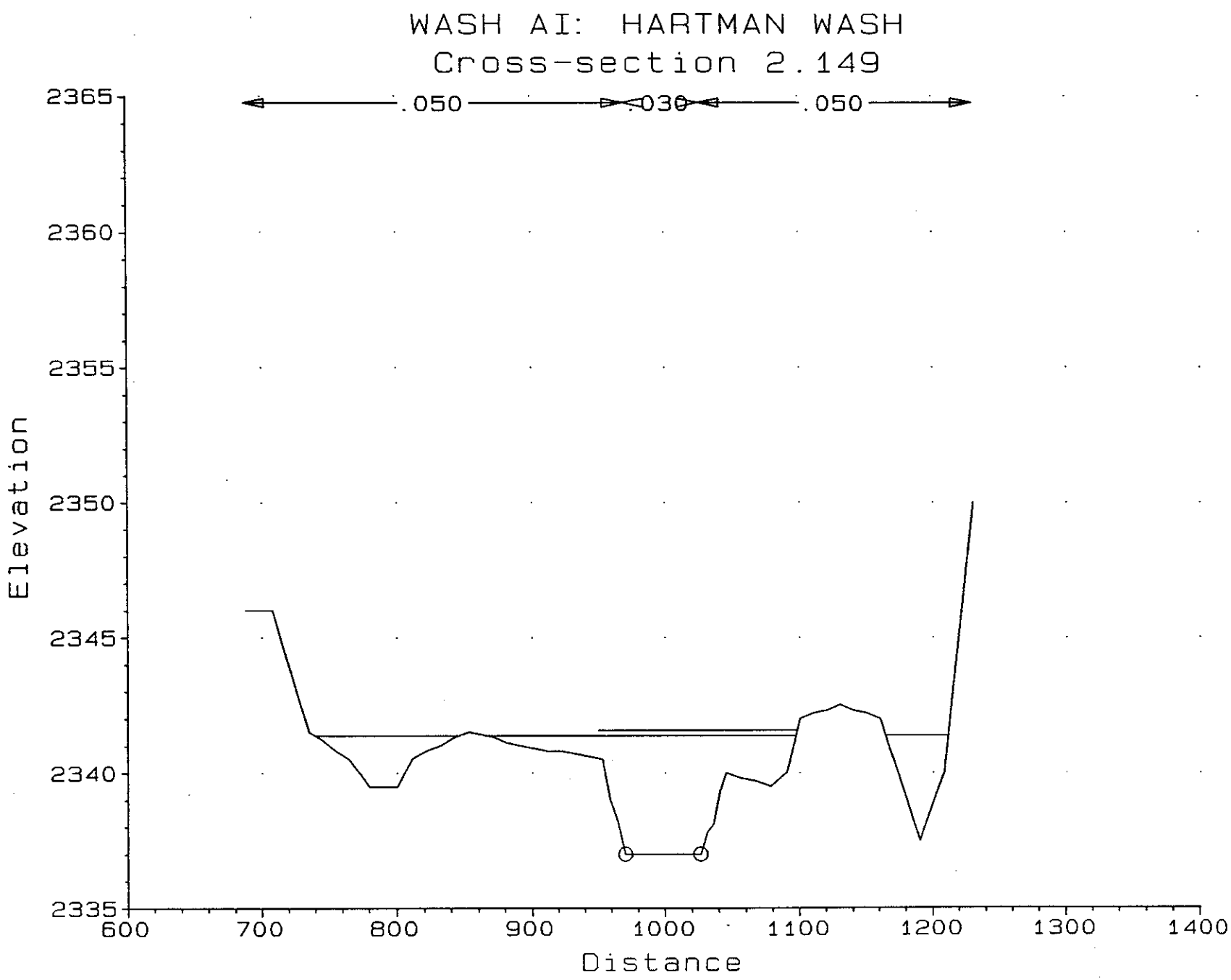

WASH AI: HARTMAN WASH
Cross-section 1.676
.050
.030
.050
Elevation
2330
2325
2320
2315
2310
2305
2300
600
800
1000
1200
1400
1600
1800
2000
2200
Distance

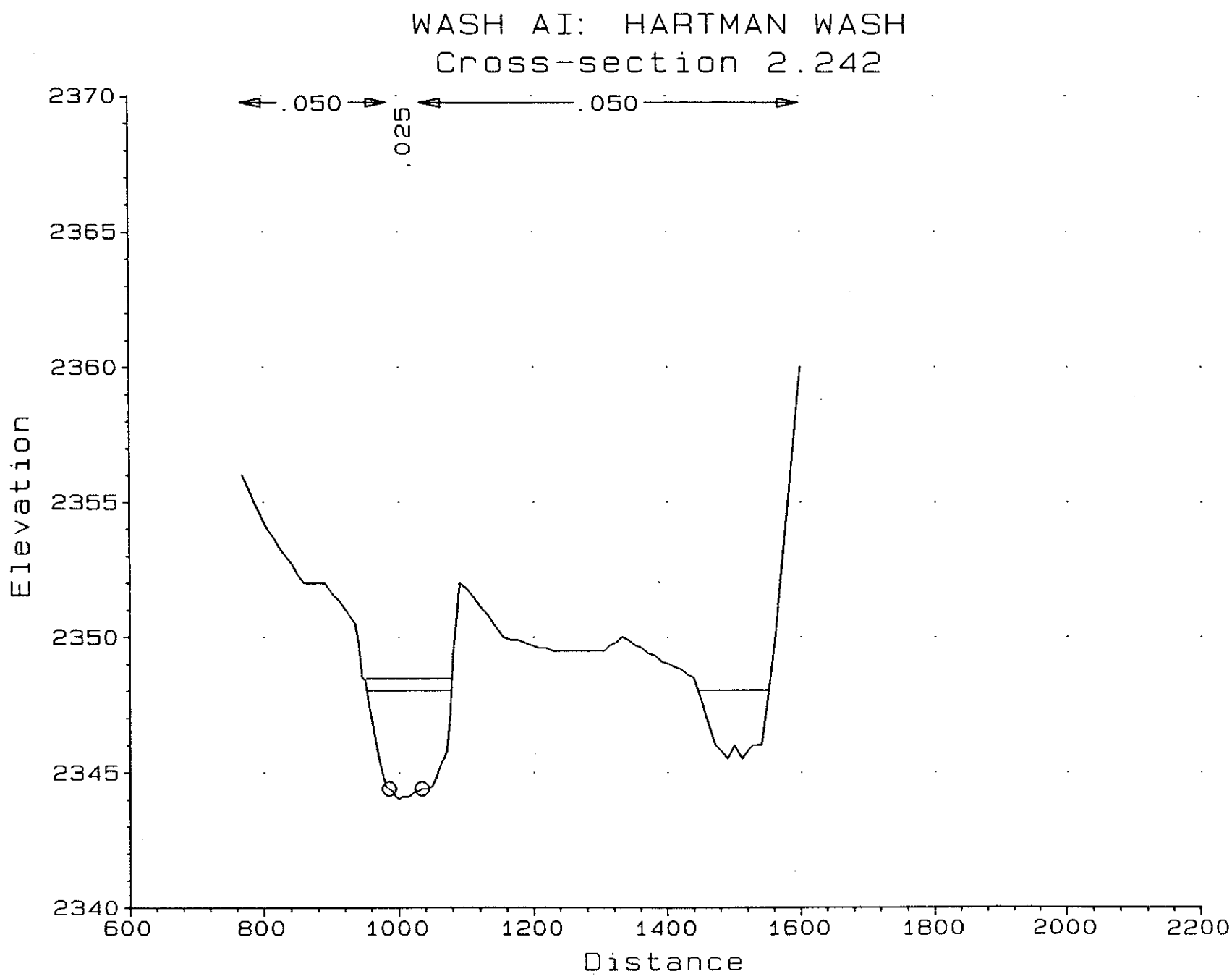

WASH AI: HARTMAN WASH
Cross-section 1.771
.050
.030
.050
Elevation
2340
2335
2330
2325
2320
2315
2310
400
600
800
1000
1200
1400
1600
1800
2000
Distance

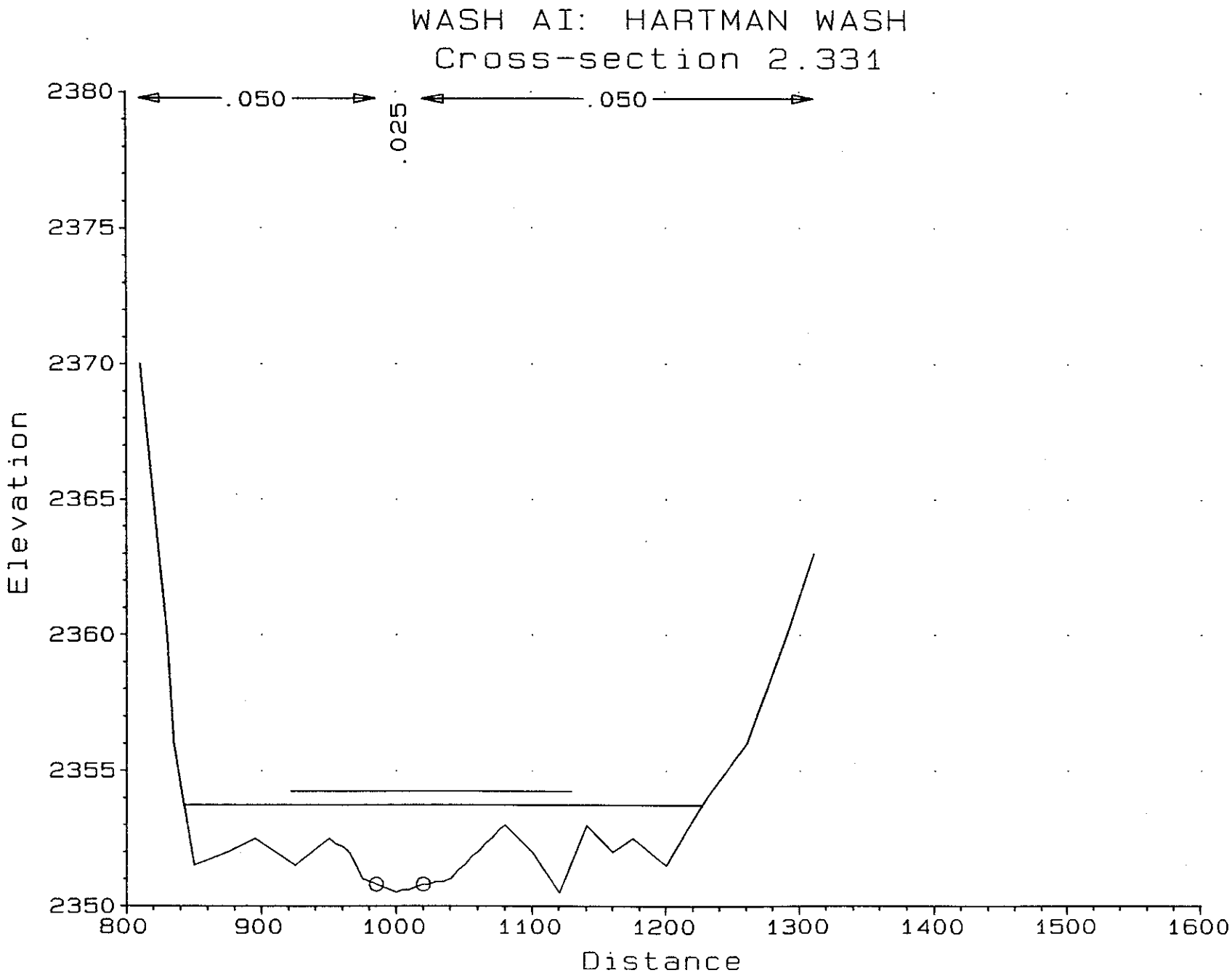

WASH AI: HARTMAN WASH
Cross-section 1.871
.050
.030
.050
Elevation
2330
2328
2326
2324
2322
2320
2318
800
1000
1200
1400
1600
1800
2000
2200
2400
Distance

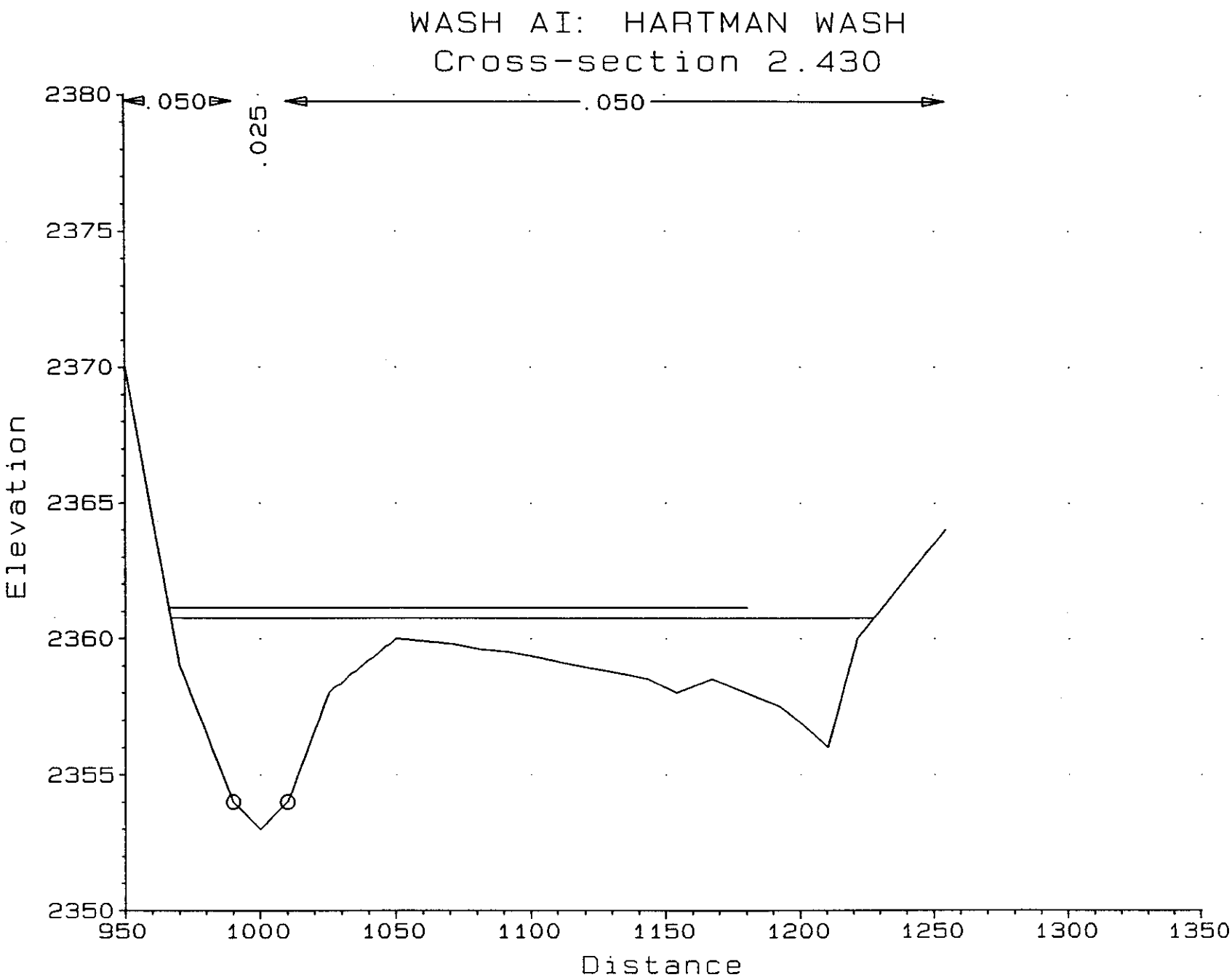

WASH AI: HARTMAN WASH
Cross-section 1.964
.050
.030
.050
Elevation
2355
2350
2345
2340
2335
2330
2325
200
400
600
800
1000
1200
1400
1600
1800
Distance

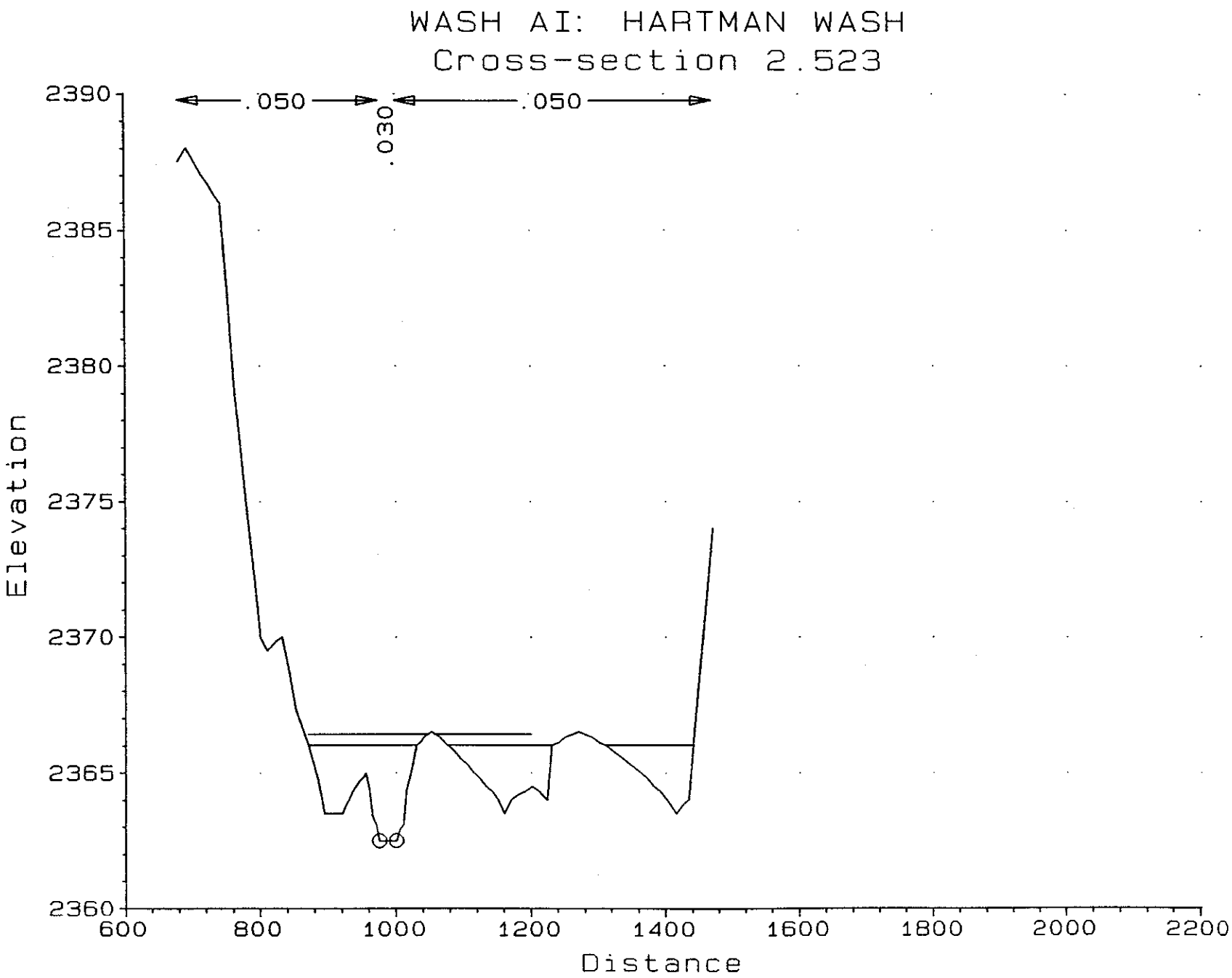

WASH AI: HARTMAN WASH
Cross-section 2.054
.050
.030
.050
2360
2355
2350
2345
2340
2335
2330
Elevation
200
400
600
800
1000
1200
1400
1600
1800
Distance

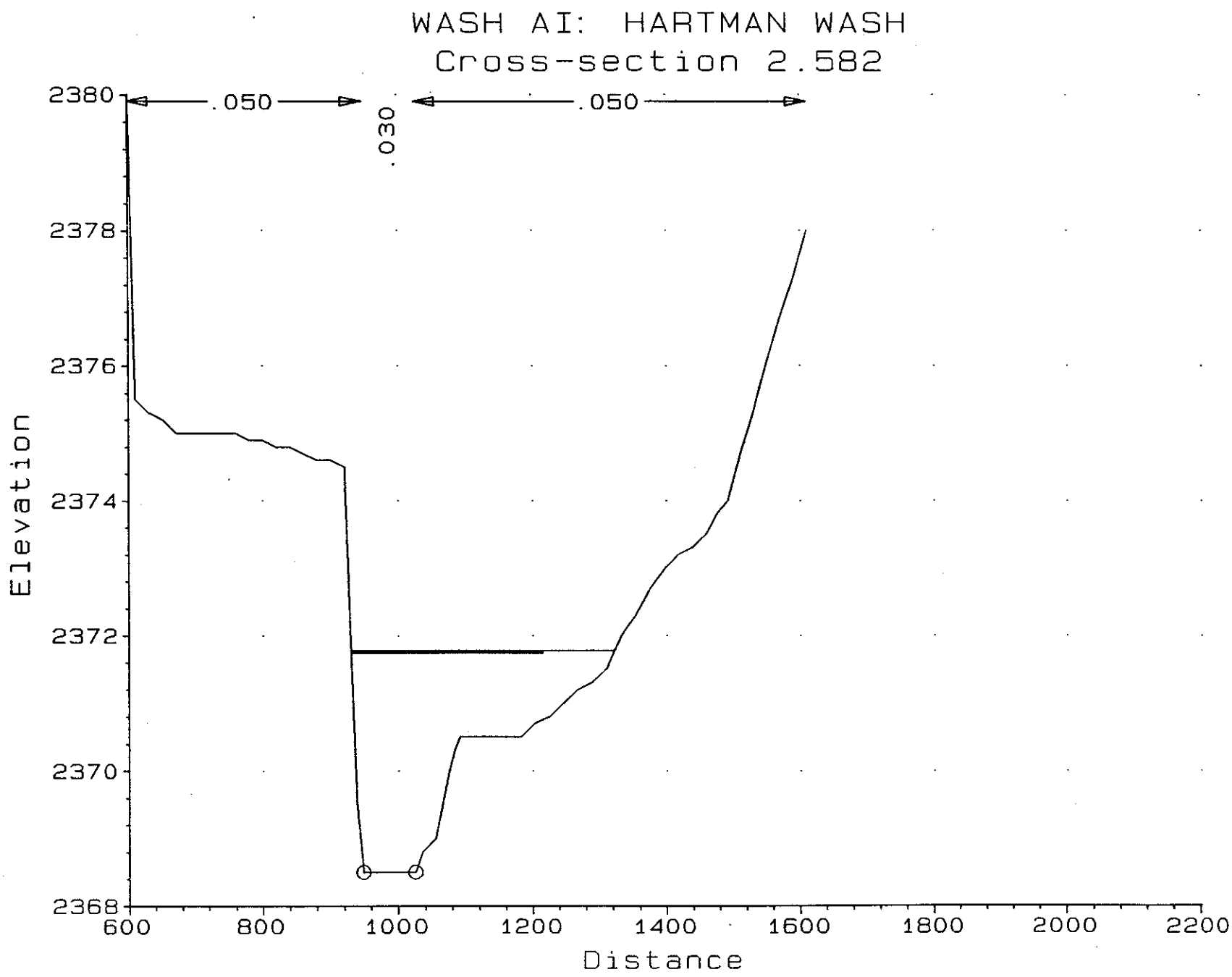

WASH AI: HARTMAN WASH
Cross-section 2.149
.050
.030
.050
2365
2360
2355
2350
2345
2340
2335
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance

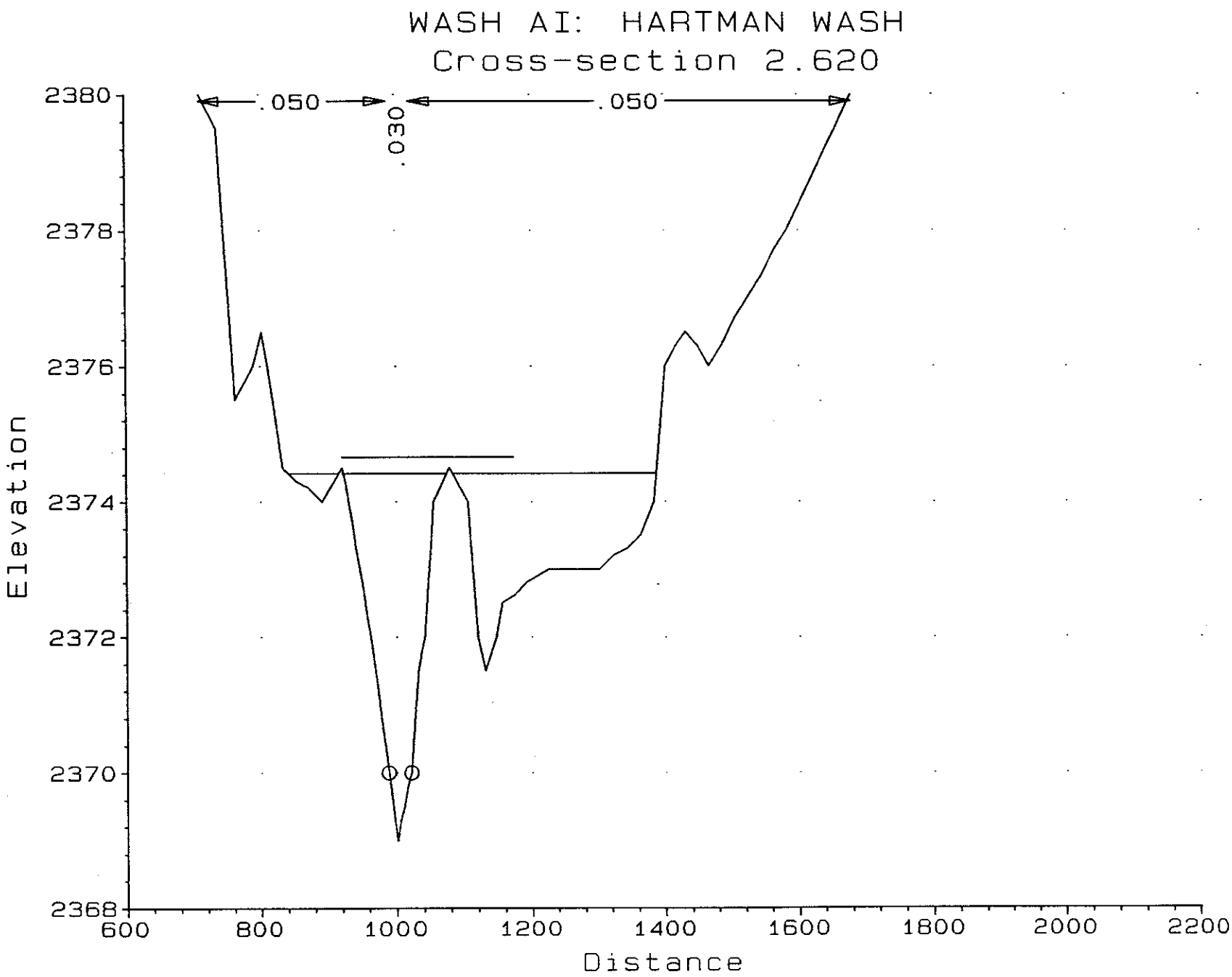

WASH AI: HARTMAN WASH
Cross-section 2.242
.050
.025
.050
Elevation
2370
2365
2360
2355
2350
2345
2340
600
800
1000
1200
1400
1600
1800
2000
2200
Distance

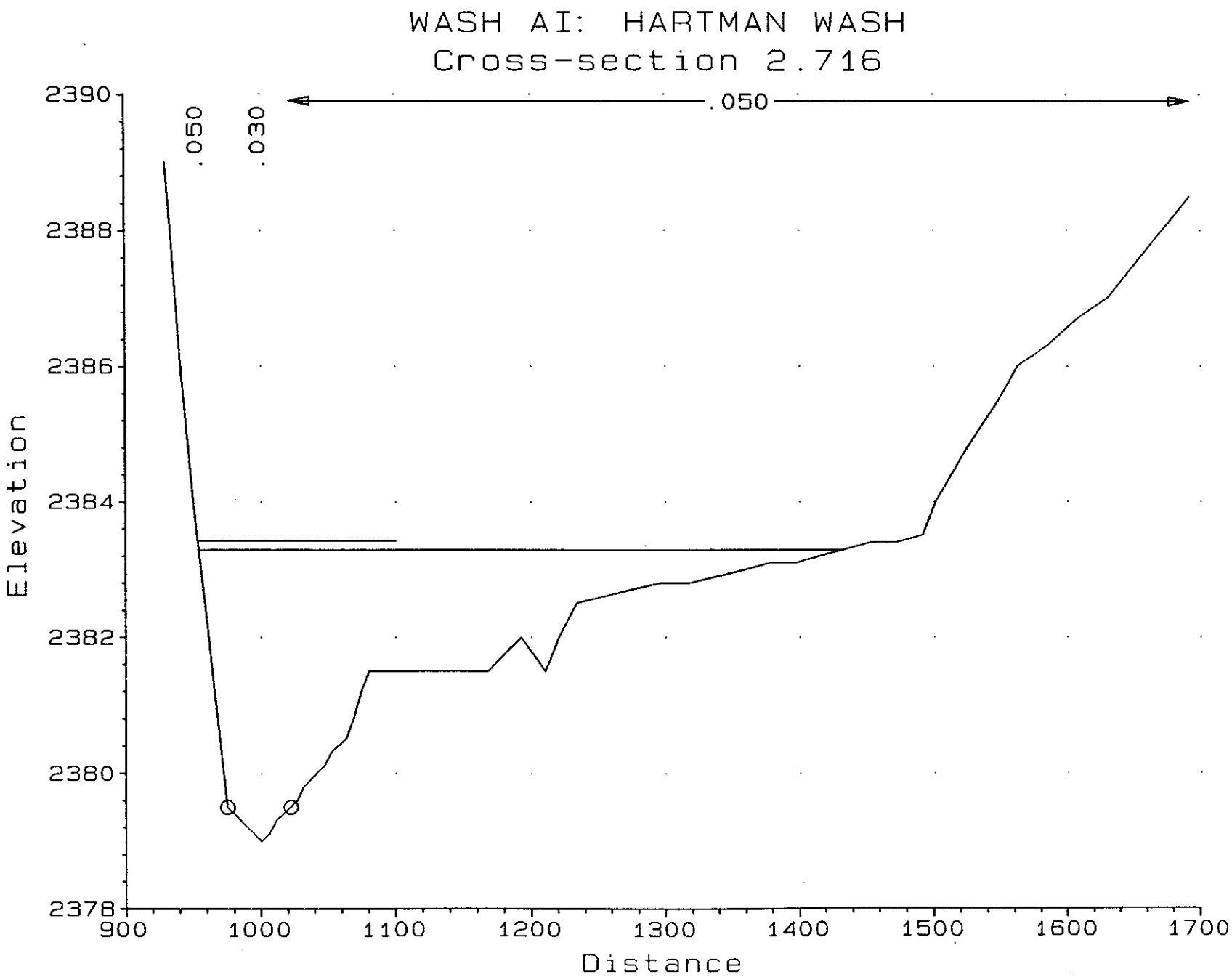

WASH AI: HARTMAN WASH
Cross-section 2.331
.050
.025
.050
Elevation
2380
2375
2370
2365
2360
2355
2350
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

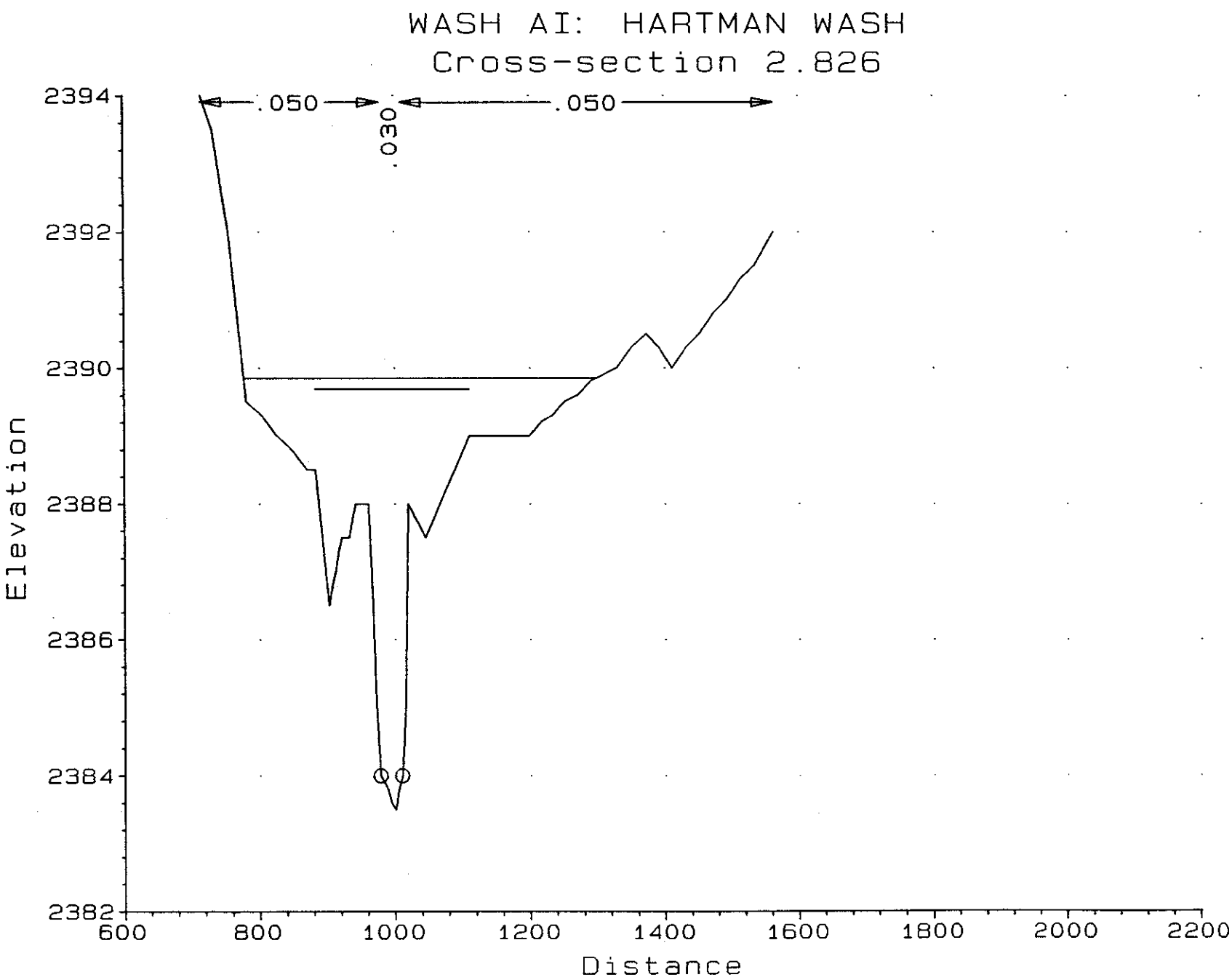

WASH AI: HARTMAN WASH
Cross-section 2.430
.050
.025
.050
Elevation
2380
2375
2370
2365
2360
2355
2350
950
1000
1050
1100
1150
1200
1250
1300
1350
Distance

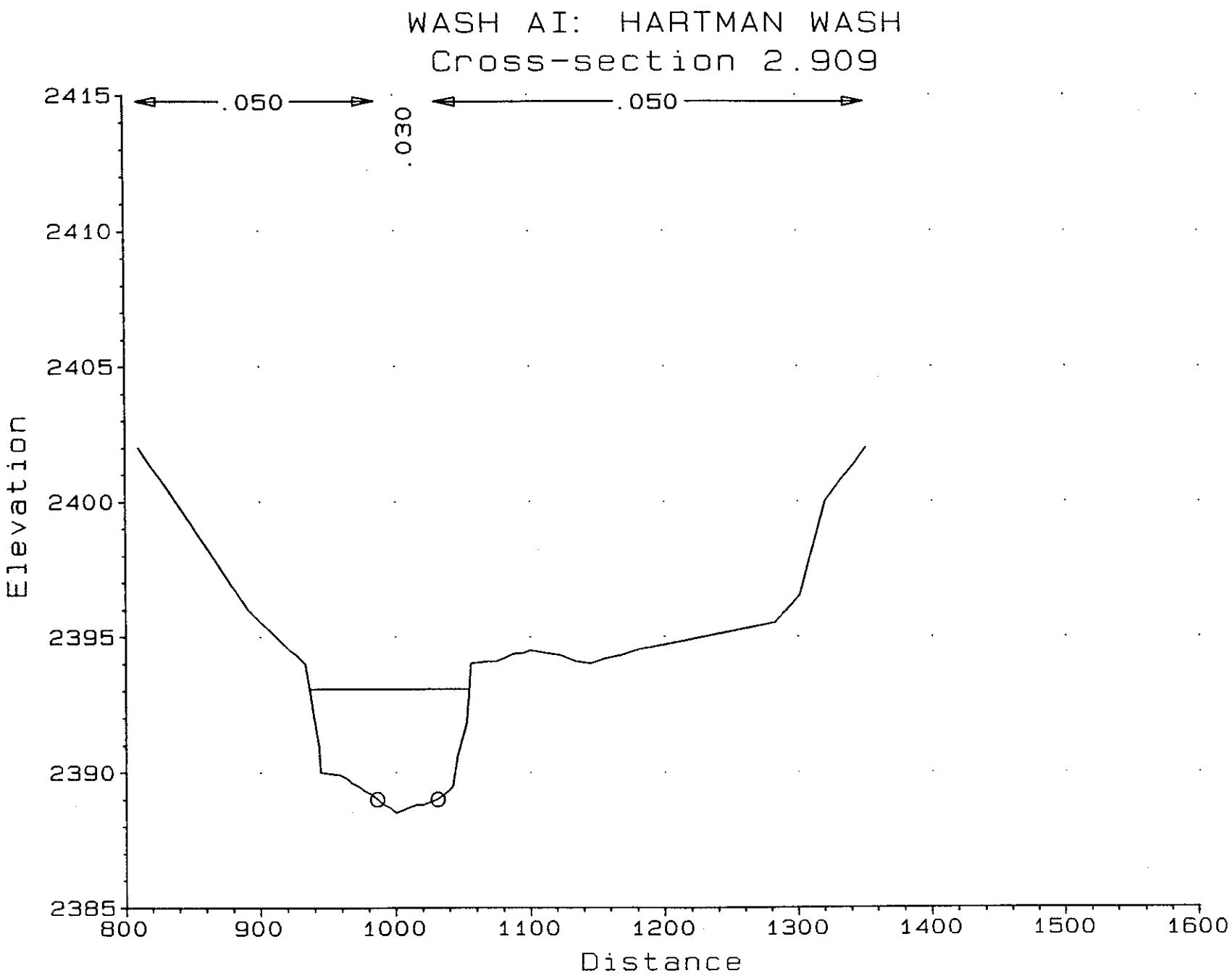

WASH AI: HARTMAN WASH
Cross-section 2.523
.050
.030
.050
Elevation
2390
2385
2380
2375
2370
2365
2360
600
800
1000
1200
1400
1600
1800
2000
2200
Distance

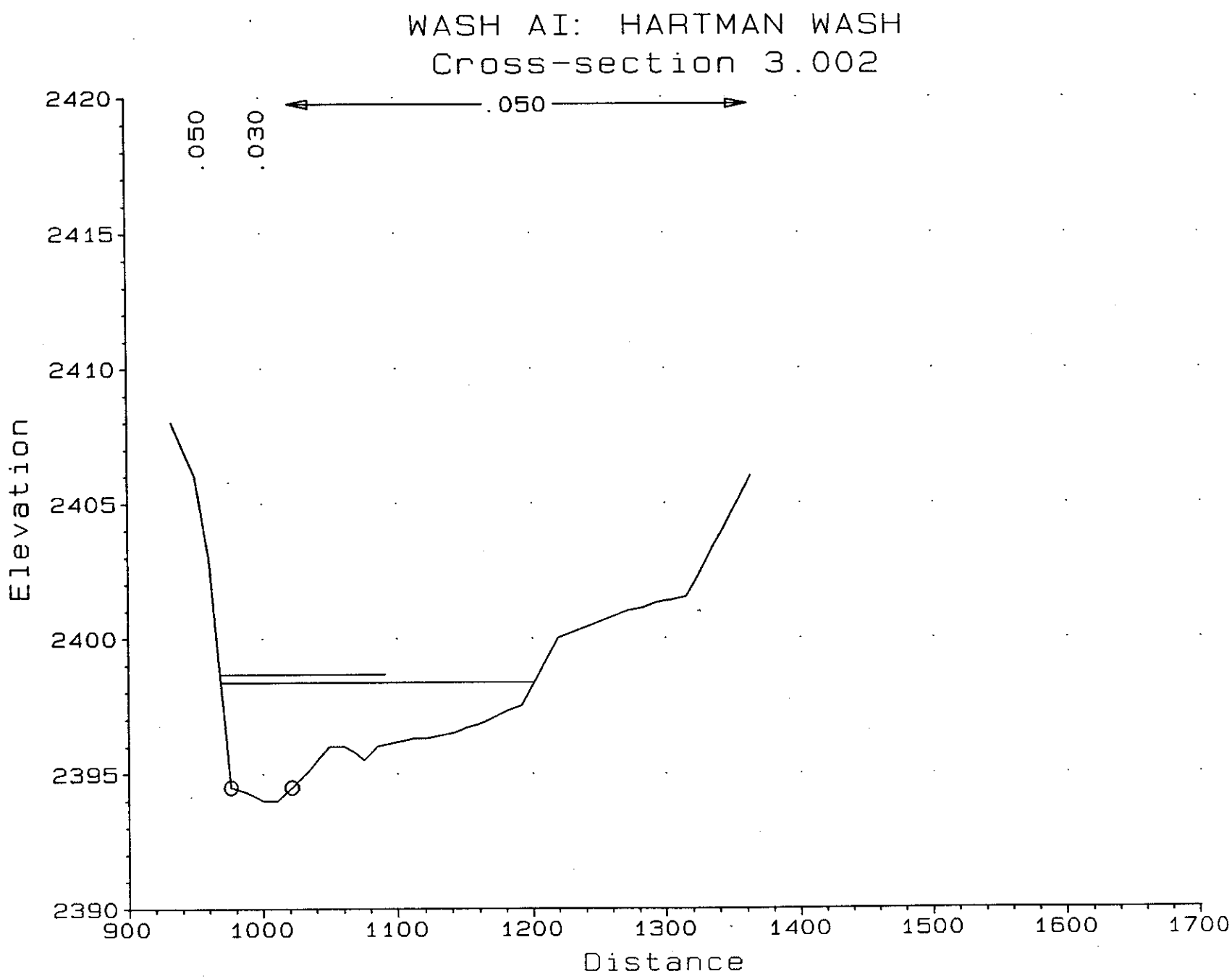

WASH AI: HARTMAN WASH
Cross-section 2.582
.050
.030
.050
Elevation
2380
2378
2376
2374
2372
2370
2368
600
800
1000
1200
1400
1600
1800
2000
2200
Distance

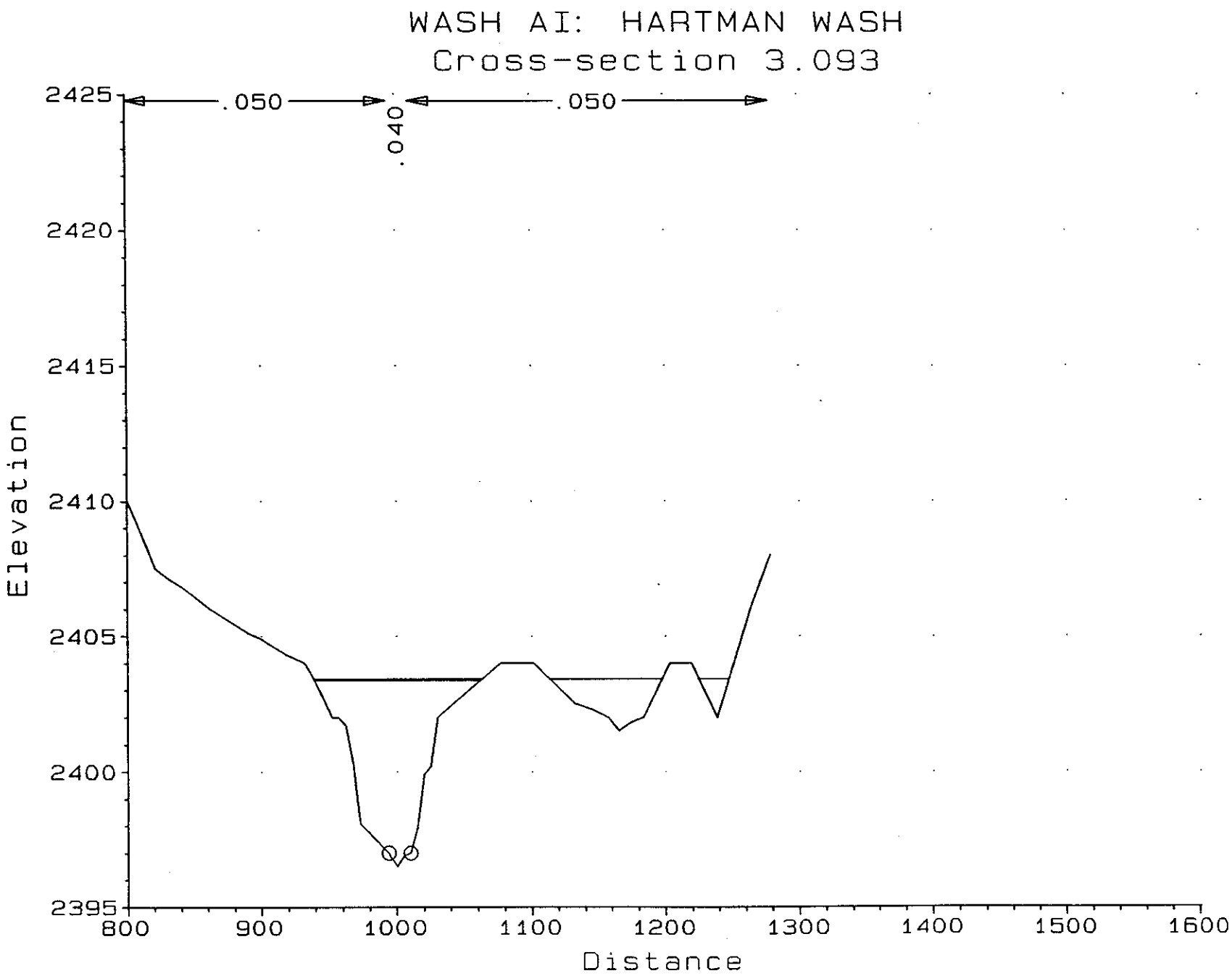

WASH AI: HARTMAN WASH
Cross-section 2.620
.050
.030
.050
2380
2378
2376
2374
2372
2370
2368
Elevation
600
800
1000
1200
1400
1600
1800
2000
2200
Distance

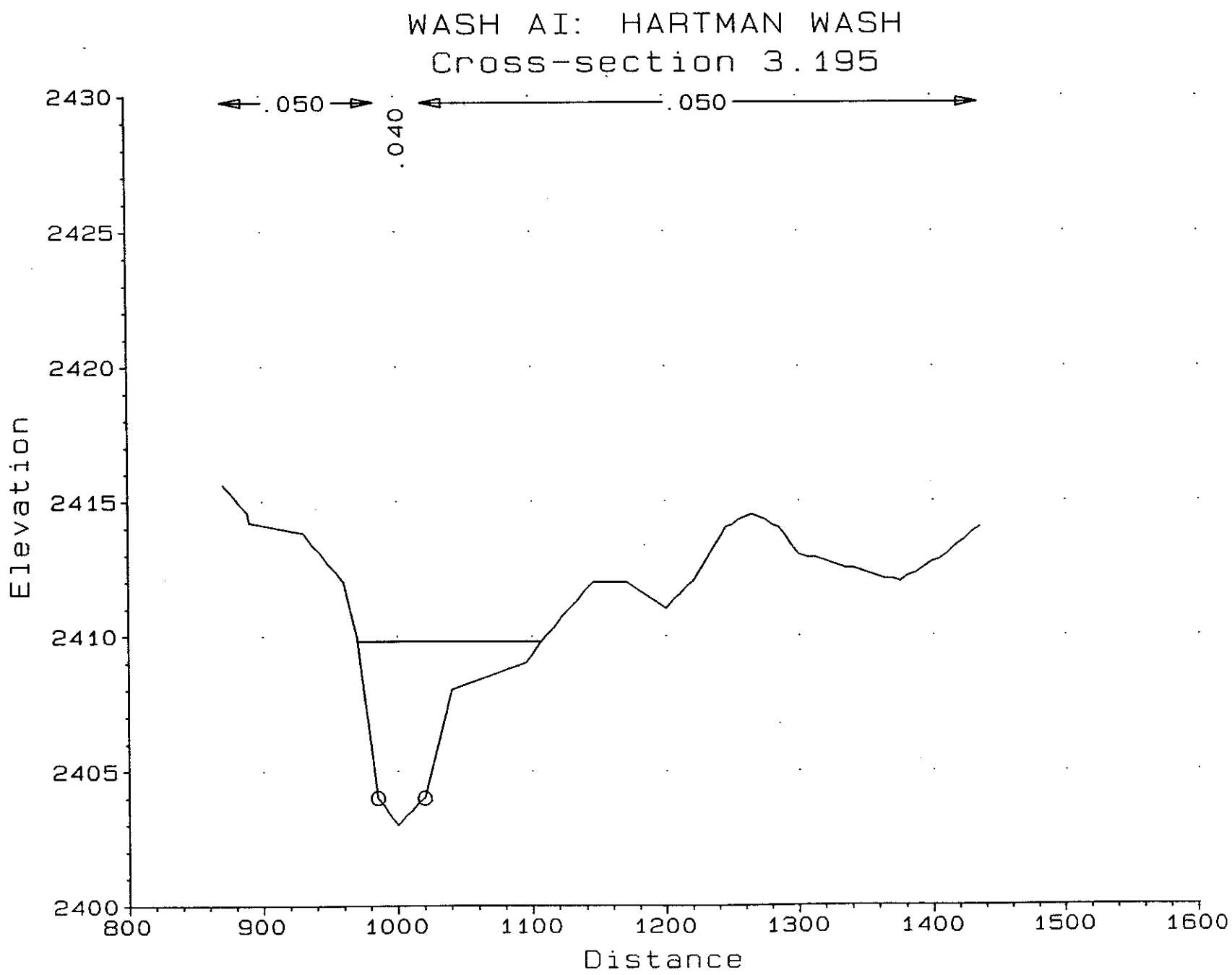

WASH AI: HARTMAN WASH
Cross-section 2.716
.050
.050
.030
Elevation
2390
2388
2386
2384
2382
2380
2378
900
1000
1100
1200
1300
1400
1500
1600
1700
Distance

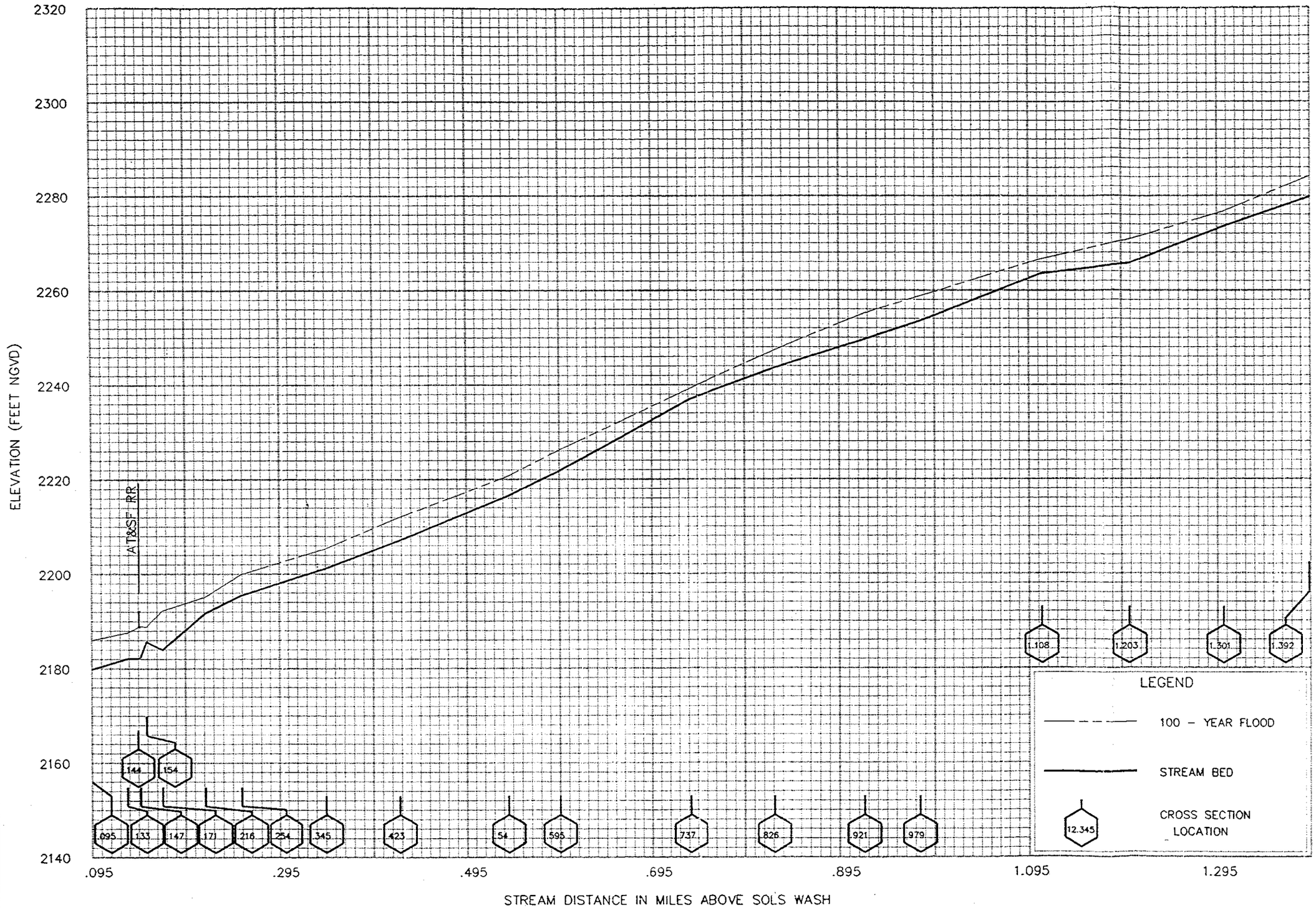

WASH AI: HARTMAN WASH
Cross-section 2.826
.050
.030
.050
2394
2392
2390
2388
2386
2384
2382
Elevation
600
800
1000
1200
1400
1600
1800
2000
2200
Distance


WASH AI: HARTMAN WASH
Cross-section 2.909
.050
.030
.050
2415
2410
2405
2400
2395
2390
2385
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance


WASH AI: HARTMAN WASH
Cross-section 3.002
.050
.050
.030
2420
2415
2410
2405
2400
2395
2390
Elevation
900
1000
1100
1200
1300
1400
1500
1600
1700
Distance


WASH AI: HARTMAN WASH
Cross-section 3.093
.050
.040
.050
2425
2420
2415
2410
2405
2400
2395
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance


WASH AI: HARTMAN WASH
Cross-section 3.195
.050
.040
.050
2430
2425
2420
2415
2410
2405
2400
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance



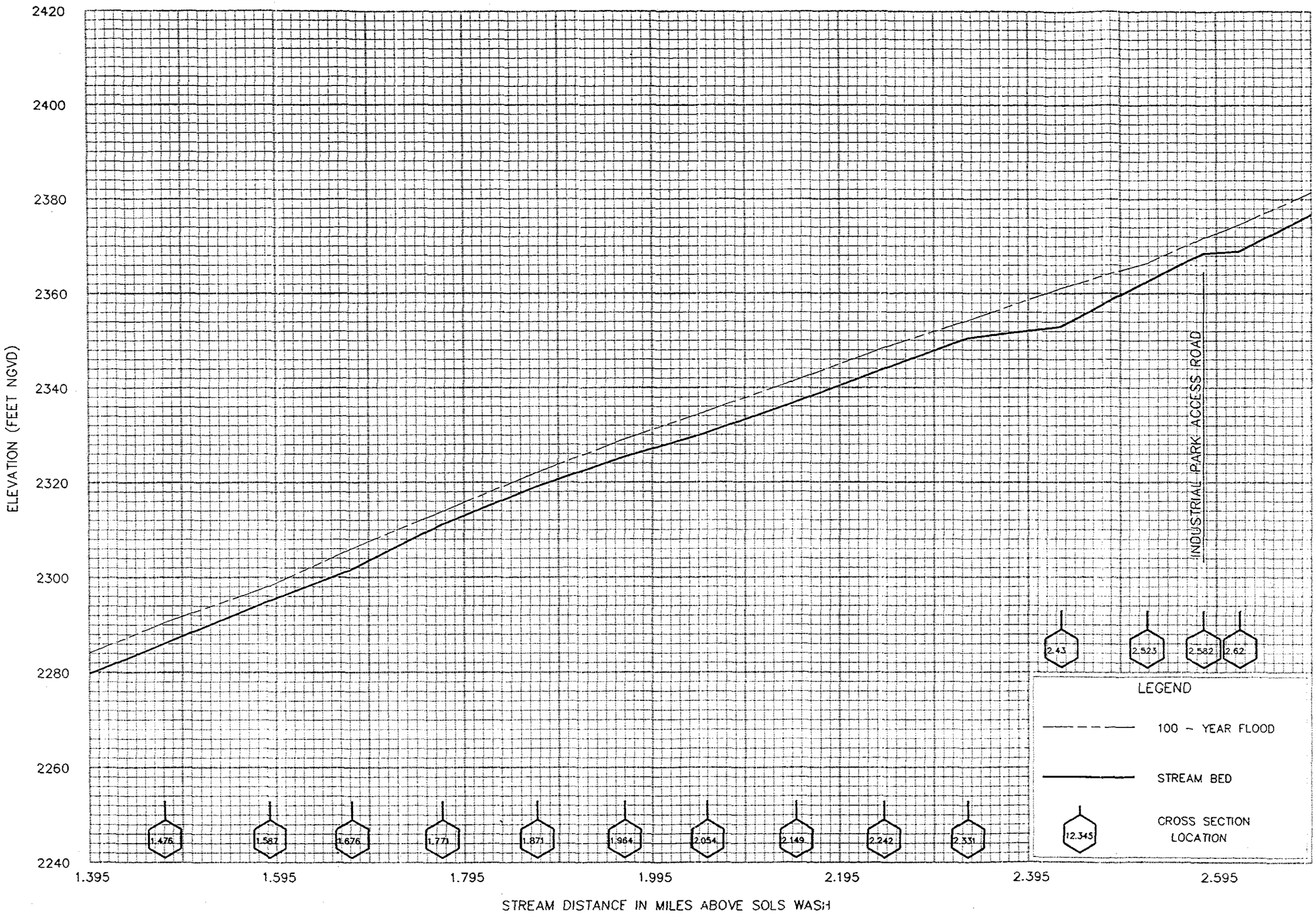
FLOOD PROFILES

HARTMAN WASH (A1)(LOWER)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

PC FILE:LOWHRTMN.DWG



FLOOD PROFILES

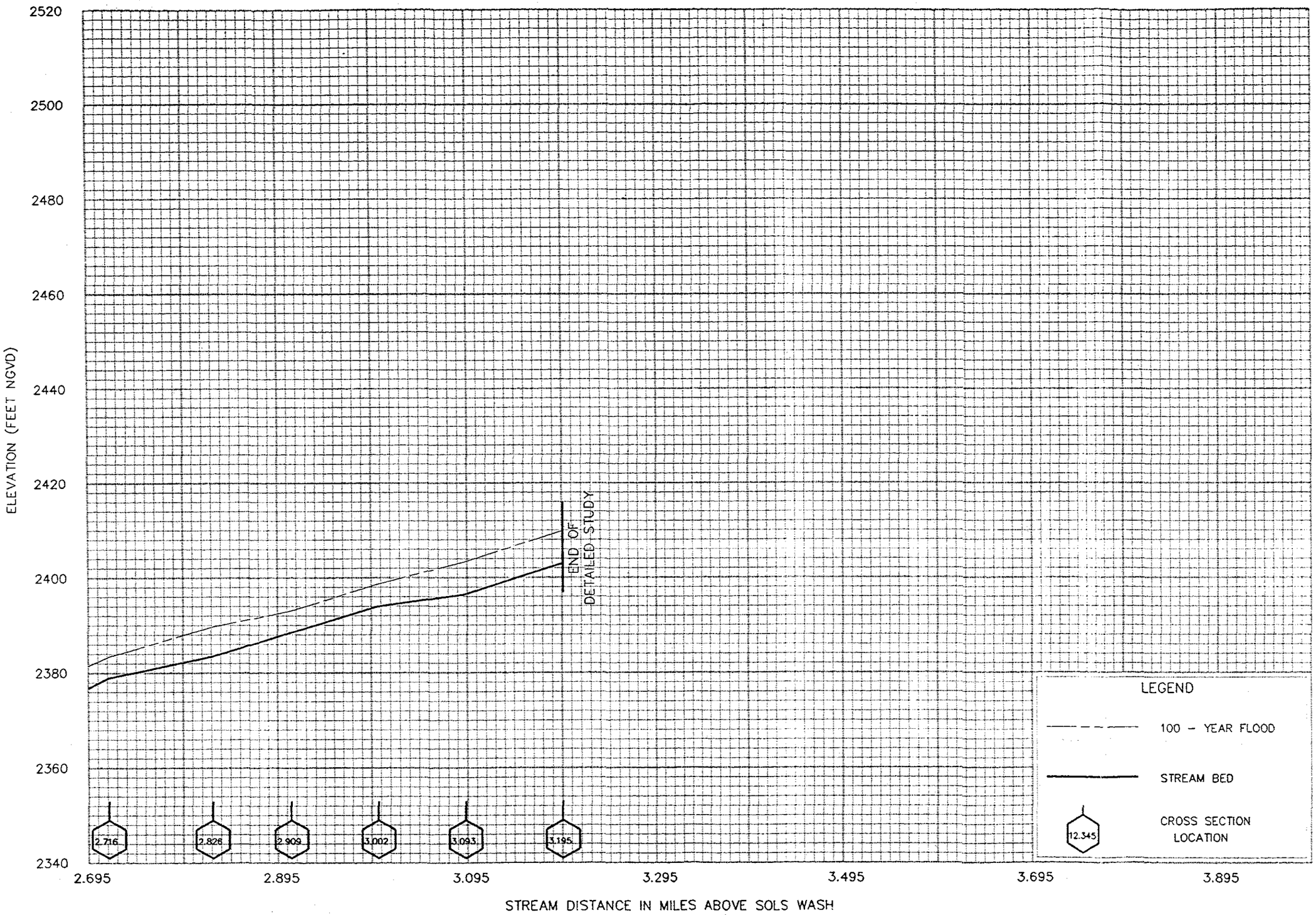
HARTMAN WASH (A1)(LOWER)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

02/17/94 16:28:30 ACD-12_

PC FILE:LOWHRTMN.DWG



PC FILE:LOWHRTMN.DWG

FLOOD PROFILES

HARTMAN WASH (A1)(LOWER)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

```
*********************************************
*  HEC-2 WATER SURFACE PROFILES             *
*                                           *
*  Version   4.6.2;  May 1991               *
*                                           *
*  RUN DATE    10JUL92    TIME    10:41:21  *
*********************************************
```

```
****************************************
*  U.S. ARMY CORPS OF ENGINEERS        *
*  HYDROLOGIC ENGINEERING CENTER       *
*  609 SECOND STREET, SUITE D          *
*  DAVIS, CALIFORNIA 95616-4687        *
*          (916) 756-1104              *
****************************************
```

```
X     X  XXXXXXX   XXXXX              XXXXX
X     X  X        X     X            X     X
X     X  X        X                        X
XXXXXXX  XXXX     X          XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX   XXXXX             XXXXXXX
```

THIS RUN EXECUTED 10JUL92 10:41:21

```
************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
************************************


T1      WICKENBURG ADMS: CONTRACT FCD 89-79
T2      BLACK & VEATCH PN 17676  COE & VAN LOO JN 1197-02
T3      WASH AI: HARTMAN WASH          (FILE UPHRTMN.DAT)

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

                2                                                          2403.43

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     1                  -1                                      -1                            15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    150       200

     0.050     0.050     0.040       0.1       0.3
QT       2      3660      3660
ET                         9.1                                                                938.51      1062.
            DISCHARGE FROM HEC-1 MODEL:  CAI167  Q = 3660 cfs

            CROSS-SECTION 3.093 & 3.195 TAKEN FROM LOWHRTMN.DAT

            SWSE EQUALS CWSEL FOR CROSS-SECTION 3.093 OF LOWHRTMN.DAT

X1    3.093        57     993.8    1010.0       490       450       480
GR   2410.0     800.0    2408.8     810.5    2407.5     821.0    2407.1     831.3    2406.8     841.5
GR   2406.4     851.8    2406.0     862.0    2405.7     871.4    2405.4     880.9    2405.1     890.3
GR   2404.9     899.7    2404.6     909.1    2404.3     918.6    2404.0     932.0    2403.5     937.8
GR   2403.0     942.6    2402.5     947.4    2402.0     952.2    2402.0     957.0    2401.7     962.3
GR   2400.3     967.7    2399.0     970.2    2398.1     972.7    2397.0     993.8    2396.9     994.3
GR   2396.5    1000.0    2396.9    1005.0    2397.0    1010.0    2397.9    1015.0    2399.9    1020.0
GR   2400.2    1025.0    2402.0    1030.0    2402.4    1039.4    2402.8    1048.8    2403.2    1058.2
GR   2403.6    1067.6    2404.0    1077.0    2404.0    1089.0    2404.0    1101.0    2403.5    1111.3
GR   2403.0    1121.7    2402.5    1132.0    2402.3    1144.5    2402.0    1157.0    2401.5    1165.0
GR   2401.8    1174.0    2402.0    1183.0    2403.0    1193.0    2404.0    1203.0    2404.0    1211.0
GR   2404.0    1219.0    2403.0    1228.5    2402.0    1238.0    2404.0    1250.5    2406.0    1263.0
GR   2407.0    1270.5    2408.0    1278.0

ET                         9.1                                                                970.53     1106.44
X1    3.195        94     985.0    1020.0       530       550       540
GR   2415.6     870.9    2415.3     876.8    2414.9     882.7    2414.6     888.6    2414.2     890.5
GR   2413.8     930.5    2413.4     936.4    2413.1     942.3    2412.7     948.2    2412.4     954.1
GR   2412.0     960.0    2411.0     965.0    2410.0     970.0    2408.0     975.0    2406.0     980.0
GR   2404.0     985.0    2403.7     990.0    2403.3     995.0    2403.0    1000.0    2403.3    1005.0
```

GR	2403.5	1010.0	2403.8	1015.0	2404.0	1020.0	2405.0	1025.0	2406.0	1030.0

```
     2407.0    1035.0    2408.0    1040.0    2408.1    1045.5    2408.2    1051.0    2408.3    1056.5
     2408.4    1062.0    2408.5    1067.5    2408.6    1073.0    2408.7    1078.5    2408.8    1084.0
GR   2408.9    1089.5    2409.0    1095.0    2409.3    1100.0    2409.7    1105.0    2410.0    1110.0
GR   2410.3    1115.8    2410.7    1121.7    2411.0    1127.5    2411.3    1133.3    2411.7    1139.2
GR   2412.0    1145.0    2412.0    1170.0    2411.8    1176.0    2411.6    1182.0    2411.4    1188.0
GR   2411.2    1194.0    2411.0    1200.0    2411.3    1205.0    2411.5    1210.0    2411.8    1215.0
GR   2412.0    1220.0    2412.5    1226.3    2413.0    1232.5    2413.5    1238.8    2414.0    1245.0
GR   2414.1    1250.0    2414.3    1255.0    2414.4    1260.0    2414.5    1265.0    2414.4    1270.0
GR   2414.3    1275.0    2414.1    1280.0    2414.0    1285.0    2413.7    1290.0    2413.3    1295.0
GR   2413.0    1300.0    2412.9    1305.8    2412.9    1311.5    2412.8    1317.3    2412.7    1323.1
GR   2412.6    1328.8    2412.5    1334.6    2412.5    1340.4    2412.4    1346.2    2412.3    1351.9
GR   2412.2    1357.7    2412.1    1363.5    2412.1    1369.2    2412.0    1375.0    2412.2    1380.8
GR   2412.3    1386.7    2412.5    1392.5    2412.7    1398.3    2412.8    1404.2    2413.0    1410.0
GR   2413.3    1416.3    2413.5    1422.5    2413.8    1428.8    2414.0    1435.0

QT       2       450       450
ET                          9.1                                                       982.84    1013.58
             DISCHARGE IS 3660 cfs - (LEVEE OVERFLOW).

             LEVEE OVERFLOW DETERMINED FROM RATING CURVE
             FOR CROSS-SECTION 3.582 OF UPHRTMN.DAT
X1   3.309        27     990.0    1010.0       600       600       600
GR   2424.0    930.0    2423.5     937.5    2423.0     945.0    2422.5     952.5    2422.0     960.0
GR   2420.0    970.0    2417.0     980.0    2414.0     990.0    2412.0    1000.0    2414.0    1010.0
GR   2420.0   1020.0    2421.0    1028.3    2422.0    1036.7    2423.0    1045.0    2424.0    1053.3
GR   2425.0   1061.7    2426.0    1070.0    2426.7    1078.3    2427.3    1086.7    2428.0    1095.0
     2428.1   1102.9    2428.3    1110.7    2428.4    1118.6    2428.6    1126.4    2428.7    1134.3
     2428.9   1142.1    2429.0    1150.0

ET                          9.1                                                       985.95    1021.63
X1   3.381        32     991.0    1011.0       380       380       380
GR   2432.0    840.0    2430.0     866.0    2429.0     888.5    2428.0     911.0    2427.3     935.5
GR   2426.5    960.0    2426.3     965.0    2426.2     970.0    2426.0     975.0    2424.0     980.3
GR   2422.0    985.7    2419.9     991.0    2419.6     995.5    2419.5    1000.0    2419.6    1005.5
GR   2419.9   1011.0    2420.5    1016.5    2422.0    1022.0    2423.5    1027.5    2426.0    1033.0
GR   2426.5   1037.9    2427.0    1042.8    2427.5    1047.6    2428.0    1052.5    2428.5    1057.4
GR   2429.0   1062.3    2429.5    1067.1    2430.0    1072.0    2431.0    1096.0    2432.0    1120.0
GR   2432.3   1141.5    2432.5    1163.0

             X3 RECORD: STA 1035. TOP OF LEVEE
                        ELIMINATE INEFFECTIVE FLOW
                        AREA IN RIGHT OVERBANK
X1   3.498        52     985.8    1001.8       620       620       620
X3                                                    1035.    2438.5
GR   2442.0    855.0    2441.8     878.5    2441.5     902.0    2441.0     926.0    2440.5     950.0
GR   2440.3    955.0    2440.0     960.0    2438.5     965.3    2437.0     970.5    2435.5     975.8
GR   2434.0    981.0    2434.0     985.8    2433.9     990.5    2433.9     995.3    2433.9    1000.0
GR   2434.0   1001.8    2434.2    1005.5    2434.5    1011.0    2434.3    1016.5    2436.0    1022.0
GR   2437.8   1026.0    2438.0    1030.0    2438.5    1035.0    2436.0    1070.0    2434.0    1087.0
GR   2432.0   1115.0    2431.5    1134.3    2431.0    1153.5    2430.5    1172.8    2430.0    1192.0
GR   2429.8   1213.7    2429.7    1235.3    2429.5    1257.0    2429.5    1279.0    2429.5    1301.0
GR   2430.0   1317.0    2432.5    1327.0    2432.0    1341.0    2429.0    1363.0    2428.0    1377.0
     2428.8   1404.5    2430.0    1411.0    2432.0    1420.0    2432.2    1445.0    2432.0    1470.0
     2429.5   1485.0    2430.0    1509.0    2432.0    1519.5    2434.0    1522.0    2440.0    1570.0
```

```
     2441.0     1573.5     2442.0     1602.0

              X3 RECORD: STA 1035. TOP OF LEVEE
                         ELIMINATE INEFFECTIVE FLOW
                         AREA IN RIGHT  OVERBANK
X1    3.582        75      983.0     1014.0       440       440       440
X3                                                 1035.    2438.5
GR   2447.5     749.0     2447.5      779.0    2447.0     800.0    2446.5     821.0    2444.8     843.0
GR   2443.0     865.0     2441.5      890.5    2440.0     916.0    2439.5     934.0    2439.3     937.1
GR   2439.1     940.3     2438.9      943.4    2438.8     946.5    2438.6     949.6    2438.4     952.8
GR   2438.2     955.9     2438.0      959.0    2437.0     974.0    2435.6     980.0    2435.5     983.0
GR   2435.5     986.0     2435.5      989.0    2435.5     991.8    2435.5     994.5    2435.5     997.3
GR   2435.5    1000.0     2435.5     1014.0    2436.1    1017.0    2436.4    1020.0    2437.8    1023.0
GR   2438.1    1026.0     2438.2     1029.0    2438.4    1032.0    2438.5    1035.0    2438.5    1038.0
GR   2438.4    1041.0     2438.2     1044.0    2438.1    1047.0    2437.8    1050.0    2437.0    1053.0
GR   2436.8    1056.0     2435.9     1059.0    2435.5    1062.0    2435.3    1065.0    2434.2    1068.0
GR   2434.0    1071.0     2433.6     1074.2    2433.9    1076.3    2433.8    1080.5    2433.6    1083.7
GR   2433.3    1086.8     2433.2     1090.0    2433.0    1115.0    2433.2    1140.0    2433.3    1160.5
GR   2433.6    1181.0     2433.9     1201.5    2434.0    1211.0    2433.8    1229.3    2433.7    1247.7
GR   2433.5    1266.0     2433.5     1288.0    2433.5    1310.0    2435.5    1325.5    2437.5    1341.0
GR   2438.0    1362.0     2438.0     1392.0    2437.5    1406.0    2438.0    1420.0    2440.0    1445.0
GR   2442.0    1450.0     2444.0     1460.0    2446.0    1465.0    2448.0    1471.0    2450.0    1495.0

QT        2      3660       3660
ET                           9.1                                                        715.39    1212.09
              DISCHARGE FROM HEC-1 MODEL:  CAI167  Q = 3660 cfs
     3.661        86      990.0     1011.0       420       425       420
     2452.0     490.0     2451.8      499.6    2451.7     509.2    2451.5     518.8    2451.3     528.3
GR   2451.2     537.9     2451.0      547.5    2450.8     557.1    2450.7     566.7    2450.5     576.3
GR   2448.3     585.8     2447.2      595.4    2447.0     605.0    2445.6     615.4    2444.8     625.8
GR   2444.2     636.2     2443.8      646.6    2443.0     657.0    2443.2     667.2    2443.4     677.4
GR   2442.6     687.6     2442.8      697.8    2442.0     700.0    2441.7     718.4    2441.4     728.9
GR   2441.1     739.3     2441.9      749.7    2441.6     760.1    2441.3     770.6    2441.0     781.0
GR   2441.8     791.3     2441.6      801.6    2441.4     811.9    2441.1     822.1    2440.9     832.4
GR   2440.7     842.7     2440.5      853.0    2440.2     862.3    2440.2     871.7    2440.1     881.0
GR   2440.1     891.5     2440.0      902.0    2439.9     912.8    2439.8     923.5    2439.6     934.3
GR   2439.5     945.0     2439.5      954.0    2439.5     963.0    2439.5     972.0    2439.3     981.0
GR   2439.0     990.0     2438.5     1000.0    2439.0    1011.0    2439.1    1021.3    2439.3    1031.5
GR   2439.4    1041.8     2439.5     1052.0    2439.6    1061.6    2439.7    1071.2    2439.8    1080.8
GR   2439.9    1090.4     2440.0     1100.0    2440.1    1109.3    2440.3    1118.5    2440.4    1127.8
GR   2440.5    1137.0     2440.3     1148.0    2440.2    1159.0    2440.0    1170.0    2439.8    1180.7
GR   2439.7    1191.3     2440.5     1202.0    2441.8    1212.5    2443.0    1223.0    2444.2    1235.0
GR   2444.5    1237.1     2446.0     1252.0    2446.0    1261.3    2446.0    1270.7    2445.0    1280.0
GR   2444.0    1290.5     2443.0     1301.0    2446.5    1311.0    2450.0    1321.0    2455.0    1330.5
GR   2460.0    1340.0

ET                           9.1                                                        819.06    1247.88
X1    3.756        42      992.5     1017.5       450       510       500
GR   2448.0     530.0     2447.8      566.0    2447.6     587.0    2447.4     608.0    2447.2     629.0
GR   2447.0     650.0     2447.0      671.0    2447.0     692.0    2447.0     713.0    2447.0     734.0
GR   2447.0     755.0     2446.8      778.0    2446.0     801.0    2445.4     824.0    2445.2     847.0
GR   2445.0     870.0     2444.7      891.7    2444.3     913.3    2444.1     935.0    2444.0     955.0
     2442.5     977.5     2441.5      992.5    2441.0    1000.0    2441.5    1017.5    2442.0    1035.0
     2442.5    1050.0     2442.0     1074.8    2442.5    1099.5    2443.5    1124.3    2444.0    1149.0
```

```
     2444.2    1170.8    2444.3    1192.7    2444.5    1214.5    2445.0    1236.3    2446.0    1258.2
     2447.0    1280.0    2448.0    1300.0    2450.0    1312.0    2450.0    1345.0    2454.0    1365.0
GR   2456.0    1375.0    2460.0    1390.0

ET                        9.1                                                         795.25    1243.59
X1    3.822      39     980.0    1000.0     380       310       350
GR   2456.0     400.0    2455.8     424.8    2455.5     449.5    2455.3     474.3    2455.0     499.0
GR   2454.7     522.7    2454.3     546.3    2454.0     570.0    2453.3     593.3    2452.7     616.7
GR   2452.0     640.0    2451.0     663.8    2450.0     687.5    2449.0     711.3    2448.0     735.0
GR   2447.7     760.0    2447.3     785.0    2447.0     810.0    2446.5     835.3    2446.0     860.5
GR   2445.5     885.8    2445.0     911.0    2444.5     935.5    2444.0     960.0    2443.0     980.0
GR   2443.0    1000.0    2443.5    1012.0    2443.6    1031.0    2443.7    1050.0    2443.8    1073.7
GR   2443.9    1097.3    2444.0    1121.0    2444.6    1145.2    2445.2    1169.4    2445.8    1193.6
GR   2446.4    1217.8    2447.0    1242.0    2448.0    1251.0    2452.0    1277.0

ET                 9.1       9.1                                                        930.      1060.
                ET RECORD: STA 930 & 1060 MODEL 4 TO 1 FLOW
                           EXPANSION DS OF US HWY 60 BRIDGE

                MAPPED FLOODPLAIN TO CWSEL

X1    3.887      38     990.0    1017.5     370       290       340
GR   2462.0     780.0    2461.3     791.7    2460.7     803.3    2460.0     815.0    2458.0     827.5
GR   2456.0     840.0    2454.0     851.0    2452.0     862.0    2451.5     871.0    2451.0     880.0
GR   2450.5     890.8    2450.0     901.7    2449.5     912.5    2449.0     923.3    2448.5     934.2
GR   2448.0     945.0    2446.5     955.0    2445.0     965.0    2443.0     980.0    2442.5     990.0
     2442.0    1000.0    2442.3    1011.7    2442.5    1017.5    2442.7    1023.3    2443.0    1035.0
     2444.0    1050.0    2444.2    1060.0    2444.4    1070.0    2444.6    1080.0    2444.8    1090.0
GR   2445.0    1100.0    2445.2    1112.0    2445.4    1124.0    2445.6    1136.0    2445.8    1148.0
GR   2446.0    1160.0    2448.0    1200.     2452.0    1250.

ET                 9.1       9.1                                                        914.44    983.72
                CROSS-SECTION & ET STATIONS ADJUSTED
                FOR 30 DEGREE SKEW ANGLE

                ET RECORD: STA 914.44 & 983.72 MODEL 4 TO 1
                           FLOW EXPANSION DS OF US HWY 60 BRIDGE

                MAPPED FLOODPLAIN TO CWSEL

X1    3.911      72     986.7    1018.6     145       115       130       0.866
GR   2463.0     620.0    2462.8     626.7    2462.6     633.3    2462.4     640.0    2462.2     646.7
GR   2462.0     653.3    2461.8     660.0    2461.6     666.7    2461.4     673.3    2461.2     680.0
GR   2461.0     686.7    2460.8     693.3    2460.6     700.0    2460.4     706.7    2460.2     713.3
GR   2460.0     720.0    2459.3     726.8    2458.7     733.7    2458.0     740.5    2457.3     747.3
GR   2456.7     754.2    2456.0     761.0    2455.6     767.7    2455.1     774.3    2454.7     781.0
GR   2454.2     787.7    2453.8     794.3    2453.3     801.0    2452.9     807.7    2452.4     814.3
GR   2452.0     821.0    2451.8     827.6    2451.6     834.2    2451.3     840.8    2451.1     847.4
GR   2450.9     854.1    2450.7     860.7    2450.4     867.3    2450.2     873.9    2450.0     880.5
GR   2449.8     887.1    2449.6     893.7    2449.3     900.3    2449.1     906.9    2448.9     913.6
GR   2448.7     920.2    2448.4     926.8    2448.2     933.4    2448.0     940.0    2447.3     946.7
GR   2446.7     953.3    2446.0     960.0    2445.3     966.7    2444.7     973.3    2444.0     980.0
     2443.8     986.7    2443.7     993.3    2443.5    1000.0    2443.6    1006.2    2443.7    1012.4
     2443.8    1018.6    2443.9    1024.8    2444.0    1031.0    2445.3    1037.3    2446.7    1043.7
```

```
      2448.0    1050.0    2448.3    1056.7    2448.7    1063.3    2449.0    1070.0    2449.3    1076.7
      2449.7    1083.3    2450.0    1090.0

NC    0.050     0.050     0.015     0.6       0.8
QT    2         3641      3641
ET              9.1       9.1                                                         948.56    1000.52
            CROSS-SECTION & ET STATIONS ADJUSTED
            FOR 30 DEGRE SKEW ANGLE

            ET RECORD: STA 948.56 & 1000.52 MODEL 4 TO 1
                       FLOW EXPANSION DS OF US HWY 60 BRIDGE

            MAPPED FLOODPLAIN TO CWSEL

X1    3.918     23        974.5     1025.5    39        39        39        0.866
GR    2460.0    810.0     2459.8    831.5     2459.7    858.6     2459.6    869.9     2459.8    892.7
GR    2459.6    904.6     2459.2    933.3     2458.6    955.4     2455.2    966.7     2449.0    974.5
GR    2449.0    981.2     2448.7    991.8     2448.7    1000.0    2448.7    1008.7    2449.0    1019.3
GR    2449.0    1025.5    2452.3    1032.8    2454.7    1037.6    2455.3    1048.1    2456.2    1072.6
GR    2456.5    1097.1    2456.8    1113.6    2457.1    1125.4

            DOWNSTREAM FACE: 4 - 12' X 8' RCB

            MODELED STRUCTURE AS NORMAL BRIDGE
            SINCE MAX ELLC > MIN ELTRD

            CROSS SECTION ADJUSTED FOR
            30 DEGREE SKEW ANGLE
X1    3.919     23        974.5     1025.5    1         1         1         0.866
X2                                                                                      0.866
X3    10                                                                    2462.7    2459.9
X4    13        2451.9    954.81    2459.9    954.82    2459.9    955.67    2451.9    955.68    2451.9
X4    966.07    2459.9    966.08    2459.9    966.92    2451.9    966.93    2451.9    976.81    2451.9
X4    977.32    2459.9    977.33    2459.9    978.18    2451.9    978.19
BT    -23       750.0     2464.9    2464.9    771.0     2464.7    2464.7    793.4     2464.5    2464.5
BT              818.4     2464.2    2464.2    844.9     2464.0    2464.0    864.8     2463.8    2463.8
BT              888.8     2463.5    2463.5    897.4     2463.5    2463.5    921.6     2463.2    2463.2
BT              941.5     2463.0    2463.0    966.8     2462.8    2462.8    974.4     2462.7    2462.7
BT              974.5     2462.7    2459.9    976.2     2462.7    2459.9    1000.0    2462.5    2459.9
BT              1018.3    2462.3    2459.9    1025.5    2462.2    2459.9    1025.6    2462.2    2462.2
BT              1047.2    2461.9    2461.9    1104.8    2461.2    2461.2    1155.1    2460.5    2460.5
BT              1193.4    2459.9    2459.9    1250.0    2458.8    2458.8
GR    2464.9    750.0     2464.7    771.0     2464.5    793.4     2464.2    818.4     2464.0    844.9
GR    2463.8    864.8     2463.5    888.8     2463.5    897.4     2463.2    921.6     2463.0    941.5
GR    2462.8    966.8     2462.7    974.4     2451.9    974.5     2451.9    976.2     2451.9    1000.0
GR    2451.9    1018.3    2451.9    1025.5    2462.2    1025.6    2461.9    1047.2    2461.2    1104.8
GR    2460.5    1155.1    2459.9    1193.4    2458.8    1250.0

            UPSTREAM FACE: 4 - 12' X 8' RCB
```

```
MODELED STRUCTURE AS NORMAL BRIDGE
SINCE MAX ELLC > MIN ELTRD

CROSS-SECTION ADJUSTED FOR
30 DEGREE SKEW ANGLE
X1    3.926      27    974.5   1025.5     42.2     42.2     42.2    0.866
X2                                                                   0.866
X3       10                                                   2462.7  2460.1
X4       13  2452.7   954.81   2460.7   954.82   2460.7   955.67  2452.7  955.68  2452.7
X4   966.07  2460.7   966.08   2460.7   966.92   2452.7   966.93  2452.7  976.81  2452.7
X4   977.32  2460.7   977.33   2460.7   978.18   2452.7   978.19
BT      -27   750.0   2464.9   2464.9    771.0   2464.7   2464.7   793.4  2464.5  2464.5
BT            818.4   2464.2   2464.2    844.9   2464.0   2464.0   864.8  2463.8  2463.8
BT            888.8   2463.5   2463.5    897.4   2463.5   2463.5   921.6  2463.2  2463.2
BT            941.5   2463.0   2463.0    966.8   2462.8   2462.8   974.4  2462.7  2462.7
BT            974.5   2462.7   2460.7    976.2   2462.7   2460.7  1000.0  2462.5  2460.7
BT           1018.3   2462.3   2460.7   1025.5   2462.2   2460.7  1025.6  2462.2  2462.2
BT           1047.2   2461.9   2461.9    1060.   2461.9   2461.9   1070.  2461.5  2461.5
BT            1080.   2461.0   2461.0    1090.   2460.6   2460.6   1100.  2460.2  2460.2
BT            1110.   2460.1   2460.1    1120.   2460.2   2460.2   1130.  2460.8  2460.8
GR   2464.9   750.0   2464.7    771.0   2464.5    793.4   2464.2   818.4  2464.0   844.9
GR   2463.8   864.8   2463.5    888.8   2463.5    897.4   2463.2   921.6  2463.0   941.5
GR   2462.8   966.8   2462.7    974.4   2452.7    974.5   2452.7   976.2  2452.7  1000.0
GR   2452.7  1018.3   2452.7   1025.5   2462.2   1025.6   2461.9  1047.2  2461.9   1060.
GR   2461.5   1070.   2461.0    1080.   2460.6    1090.   2460.2   1100.  2460.1   1110.
     2460.2   1120.   2460.8    1130.

NC    0.050   0.050    0.030     0.1     0.3
QT        2    3641     3641
ET                      9.1                                          938.    1100.
X1    4.023      40    992.6   1028.4     470      535      510
GR   2468.0   769.0   2467.0    783.5   2466.0    798.0   2465.3   811.0  2464.7   824.0
GR   2464.0   837.0   2462.0    848.5   2460.0    860.0   2455.0   880.0  2455.5   892.5
GR   2456.0   905.0   2455.5    917.5   2455.0    930.0   2455.5   945.5  2456.0   961.0
GR   2455.3   974.0   2454.7    987.0   2454.4    992.6   2454.0  1000.0  2454.2  1014.2
GR   2454.4  1028.4   2454.6   1042.6   2454.8   1056.8   2455.0  1071.0  2455.0  1085.5
GR   2455.0  1100.0   2456.0   1120.0   2457.3   1133.3   2458.7  1146.7  2460.0  1160.0
GR   2460.8  1176.0   2461.6   1192.0   2462.4   1208.0   2463.2  1224.0  2464.0  1240.0
GR   2464.8  1256.0   2465.6   1272.0   2466.4   1288.0   2467.2  1304.0  2468.0  1320.0

ET                      9.1                                          863.   1025.11
X1    4.110      21    989.0   1010.0     480      450      460
GR   2472.0   630.0   2470.7    658.3   2469.3    686.7   2468.0   715.0  2466.0   747.0
GR   2464.0   779.0   2465.0    800.0   2464.0    830.0   2463.0   863.0  2462.0   896.0
GR   2461.0   928.0   2460.0    960.0   2459.0    989.0   2458.0  1000.0  2459.0  1010.0
GR   2460.0  1011.0   2468.0   1040.0   2468.5   1050.0   2472.0    1110  2476.0    1388
GR   2480.0    1472
```

[illegible]			9.1						866.02	1064.
X1	4.210	22	985.0	1015.0	525	535	530			
GR	2477.0	764.0	2476.7	775.0	2476.3	800.0	2476.0	825.0	2472.0	850.0
GR	2468.0	871.0	2467.0	889.0	2466.8	913.0	2466.5	937.0	2466.3	961.0
GR	2466.0	985.0	2465.0	1000.0	2466.0	1015.0	2466.5	1039.5	2467.0	1064.0
GR	2467.5	1094.5	2468.0	1125.0	2468.0	1157.0	2470.0	1178.5	2472.0	1200.0
GR	2476.0	1225.0	2480.0	1254.0						
ET			9.1						896.	1028.62
X1	4.301	89	984.0	1008.0	475	475	480			
GR	2481.5	710.6	2481.3	714.7	2481.0	718.8	2480.8	722.8	2480.5	726.9
GR	2480.3	730.9	2480.0	735.0	2479.9	739.0	2479.7	743.1	2479.5	747.1
GR	2479.4	751.2	2479.2	755.2	2479.1	759.2	2478.9	763.3	2478.8	767.3
GR	2478.6	771.3	2478.5	775.4	2478.3	779.4	2478.1	783.5	2478.0	787.5
GR	2477.9	791.5	2477.7	795.6	2477.5	799.6	2477.4	803.7	2477.2	807.7
GR	2477.1	811.7	2476.9	815.8	2476.8	819.8	2476.6	823.8	2476.5	827.9
GR	2476.3	831.9	2476.1	836.0	2476.0	840.0	2475.9	844.0	2475.7	848.0
GR	2475.6	852.0	2475.5	856.0	2475.3	860.0	2475.2	864.0	2475.1	868.0
GR	2474.9	872.0	2474.8	876.0	2474.7	880.0	2474.5	884.0	2474.4	888.0
GR	2474.3	892.0	2474.1	896.0	2474.0	900.0	2473.9	904.0	2473.7	908.0
GR	2473.6	912.0	2473.5	916.0	2473.3	920.0	2473.2	924.0	2473.1	928.0
GR	2472.9	932.0	2472.8	936.0	2472.7	940.0	2472.5	944.0	2472.4	948.0
GR	2472.3	952.0	2472.1	956.0	2472.0	960.0	2471.9	964.0	2471.8	968.0
GR	2471.7	972.0	2471.6	976.0	2471.5	980.0	2471.4	984.0	2471.3	988.0
GR	2471.2	992.0	2471.1	996.0	2471.0	1000.0	2471.2	1004.0	2471.4	1008.0
[illegible]	2471.6	1012.0	2471.8	1016.0	2472.0	1020.0	2473.6	1024.0	2475.2	1028.0
[illegible]	2478.8	1032.0	2480.4	1036.0	2484.0	1040.0	2486.3	1043.8	2487.5	1047.5
GR	2488.8	1051.3	2490.0	1055.0	2491.8	1058.8	2492.2	1062.5		
ET			9.1						910.	1070.
X1	4.390	33	980.0	1010.0	385	490	470			
GR	2487.0	415.0	2487.0	438.8	2487.0	462.5	2487.0	486.3	2487.0	510.0
GR	2486.8	537.5	2486.5	565.0	2486.3	592.5	2486.0	620.0	2485.8	647.3
GR	2485.5	674.5	2485.3	701.8	2485.0	729.0	2484.7	756.0	2484.3	783.0
GR	2484.0	810.0	2482.7	838.3	2481.3	866.7	2480.0	895.0	2479.0	910.0
GR	2478.5	936.0	2478.0	962.0	2477.0	980.0	2476.0	1000.0	2477.0	1010.0
GR	2478.0	1025.0	2478.5	1047.5	2479.0	1070.0	2480.0	1090.0	2484.0	1110.0
GR	2488.0	1130.0	2492.0	1163.0	2496.0	1180.0				
ET			9.1						876.64	1045.
X1	4.487	62	995.0	1030.0	500	510	510			
GR	2493.0	830.0	2492.4	835.0	2491.8	840.0	2491.1	845.0	2490.5	850.0
GR	2489.9	855.0	2489.3	860.0	2488.6	865.0	2488.0	870.0	2486.0	875.0
GR	2484.0	880.0	2483.8	885.0	2483.5	890.0	2483.3	895.0	2483.0	900.0
GR	2483.0	905.0	2483.0	910.0	2483.0	915.0	2483.0	920.0	2483.0	925.0
GR	2483.0	930.0	2483.0	935.0	2483.0	940.0	2483.0	945.0	2482.9	950.0
GR	2482.8	955.0	2482.6	960.0	2482.5	965.0	2482.4	970.0	2482.3	975.0
GR	2482.1	980.0	2482.0	985.0	2481.7	990.0	2481.3	995.0	2481.0	1000.0
GR	2480.8	1005.0	2480.5	1010.0	2480.3	1015.0	2480.0	1020.0	2480.7	1025.0
GR	2481.3	1030.0	2482.0	1035.0	2482.7	1040.0	2483.3	1045.0	2484.0	1050.0
GR	2484.4	1055.0	2484.9	1060.0	2485.3	1065.0	2485.8	1070.0	2486.2	1075.0
[illegible]	2486.7	1080.0	2487.1	1085.0	2487.6	1090.0	2488.0	1095.0	2488.5	1100.1
[illegible]	2489.0	1105.3	2489.5	1110.4	2490.0	1115.5	2490.5	1120.6	2491.0	1125.8

	2491.5	1130.9	2492.0	1136.0						
ET			9.1						955.78	1095.
X1	4.585	44	979.0	1005.0	520	575	520			
GR	2500.0	945.0	2498.7	946.3	2497.3	947.7	2496.0	949.0	2492.0	952.0
GR	2488.0	957.0	2484.0	979.0	2483.8	984.3	2483.5	989.5	2483.3	994.8
GR	2483.0	1000.0	2484.0	1005.0	2484.2	1010.0	2484.4	1015.0	2484.6	1020.0
GR	2484.8	1025.0	2485.0	1030.0	2485.2	1035.0	2485.4	1040.0	2485.6	1045.0
GR	2485.8	1050.0	2486.0	1055.0	2486.2	1060.7	2486.3	1066.3	2486.5	1072.0
GR	2486.7	1077.7	2486.8	1083.3	2487.0	1089.0	2487.3	1094.8	2487.5	1100.5
GR	2487.8	1106.3	2488.0	1112.0	2489.0	1117.8	2490.0	1123.5	2491.0	1129.3
GR	2492.0	1135.0	2492.5	1140.4	2493.0	1145.8	2493.5	1151.1	2494.0	1156.5
GR	2494.5	1161.9	2495.0	1167.3	2495.5	1172.6	2496.0	1178.0		
ET			9.1						971.68	1108.61
X1	4.674	40	990.0	1012.0	485	460	470			
GR	2520.0	940.0	2514.0	945.0	2508.0	950.0	2502.0	955.0	2496.0	970.0
GR	2494.0	975.0	2492.0	980.0	2490.0	985.0	2488.0	990.0	2487.5	995.0
GR	2487.0	1000.0	2487.5	1006.0	2488.0	1012.0	2489.3	1017.3	2490.7	1022.7
GR	2492.0	1028.0	2492.3	1033.5	2492.5	1039.0	2492.8	1044.5	2493.0	1050.0
GR	2493.2	1054.8	2493.3	1059.7	2493.5	1064.5	2493.7	1069.3	2493.8	1074.2
GR	2494.0	1079.0	2494.2	1084.2	2494.4	1089.4	2494.6	1094.6	2494.8	1099.8
GR	2495.0	1105.0	2495.5	1110.5	2496.0	1116.0	2496.5	1121.5	2497.0	1127.0
GR	2497.4	1131.9	2497.8	1136.8	2498.1	1141.6	2498.5	1146.5	2499.9	1151.4
ET			9.1						969.68	1150.47
X1	4.771	53	989.0	1013.0	510	480	510			
GR	2516.0	940.0	2512.8	943.6	2509.6	950.2	2506.4	955.8	2503.2	963.4
GR	2500.0	968.0	2497.5	973.5	2495.0	989.0	2494.5	994.5	2494.0	1000.0
GR	2494.3	1004.3	2494.7	1008.7	2495.0	1013.0	2495.1	1017.9	2495.3	1022.8
GR	2495.4	1027.6	2495.5	1032.5	2495.6	1037.4	2495.8	1042.3	2495.9	1047.1
GR	2496.0	1052.0	2496.3	1056.8	2496.5	1061.5	2496.8	1066.3	2497.0	1071.0
GR	2497.1	1075.9	2497.3	1080.8	2497.4	1085.6	2497.5	1090.5	2497.6	1095.4
GR	2497.8	1100.3	2497.9	1105.1	2498.0	1110.0	2497.7	1115.0	2497.3	1120.0
GR	2497.0	1125.0	2496.7	1130.0	2496.3	1135.0	2496.0	1140.0	2497.3	1144.3
GR	2498.7	1148.7	2500.0	1153.0	2501.0	1158.5	2502.0	1164.0	2503.0	1169.5
GR	2504.0	1175.0	2504.6	1179.7	2505.1	1184.4	2505.7	1189.1	2506.3	1193.9
GR	2506.9	1198.6	2507.4	1203.3	2508.0	1208.0				
ET			9.1						921.	1175.
X1	4.860	36	973.0	1010.0	480	425	470			
GR	2516.0	740.0	2512.0	750.0	2510.0	767.0	2508.0	784.0	2507.5	798.4
GR	2507.0	812.8	2506.5	827.1	2506.0	841.5	2505.5	855.9	2505.0	870.3
GR	2504.5	884.6	2504.0	899.0	2503.0	913.3	2502.0	927.5	2501.0	941.8
GR	2500.0	956.0	2499.0	973.0	2498.5	986.5	2498.0	1000.0	2499.0	1010.0
GR	2500.0	1031.0	2500.7	1043.7	2501.3	1056.3	2502.0	1069.0	2502.5	1081.0
GR	2503.0	1093.0	2502.5	1109.0	2502.0	1125.0	2502.5	1143.0	2503.0	1161.0
GR	2503.3	1174.0	2503.7	1187.0	2504.0	1200.0	2504.3	1213.0	2504.7	1226.0
GR	2505.0	1239.0								

			9.1						928.	1055.84
X1	4.989	95	987.3	1021.0	660	690	680			
GR	2520.0	830.0	2519.7	833.1	2519.4	836.2	2519.1	839.2	2518.8	842.3
GR	2517.5	845.4	2516.1	848.5	2515.9	851.5	2515.5	854.6	2515.2	857.7
GR	2514.9	860.8	2513.6	863.8	2512.3	866.9	2512.2	870.0	2512.8	873.0
GR	2512.1	876.1	2511.5	879.1	2511.3	882.2	2511.1	885.2	2511.0	888.3
GR	2510.8	891.3	2510.6	894.3	2510.4	897.4	2510.3	900.4	2510.1	903.5
GR	2509.9	906.5	2509.7	909.6	2509.6	912.6	2509.4	915.7	2509.2	918.7
GR	2509.0	921.7	2508.9	924.8	2508.7	927.8	2508.5	930.9	2508.4	933.9
GR	2508.4	937.0	2508.3	940.0	2508.3	943.1	2508.2	946.3	2508.1	949.4
GR	2507.9	952.5	2507.8	955.6	2507.7	958.8	2507.6	961.9	2507.5	965.0
GR	2507.4	968.2	2507.3	971.4	2507.2	974.5	2507.2	977.7	2507.1	980.9
GR	2506.9	984.1	2506.7	987.3	2506.6	990.5	2506.4	993.6	2506.2	996.8
GR	2506.0	1000.0	2506.1	1003.0	2506.2	1006.0	2506.3	1009.0	2506.4	1012.0
GR	2506.5	1015.0	2506.6	1018.0	2506.7	1021.0	2506.8	1024.0	2506.9	1027.0
GR	2507.0	1030.0	2507.1	1033.3	2507.2	1036.7	2507.4	1040.0	2507.6	1043.3
GR	2507.8	1046.7	2508.0	1050.0	2509.4	1053.0	2510.8	1056.0	2511.9	1059.0
GR	2513.6	1062.0	2514.0	1065.0	2514.4	1068.0	2514.8	1071.0	2515.2	1074.0
GR	2515.6	1077.0	2516.0	1080.0	2516.2	1083.2	2516.6	1089.5	2517.1	1095.8
GR	2517.5	1102.1	2517.9	1108.4	2518.3	1114.7	2518.5	1117.9	2518.7	1121.1
GR	2518.9	1124.2	2519.4	1130.5	2519.6	1133.7	2519.8	1136.8	2520.0	1140.0
ET			9.1						947.04	1087.
X1	5.055	41	987.5	1005.3	350	350	350			
GR	2525.0	818.0	2523.3	835.3	2521.7	852.7	2520.0	870.0	2519.2	884.4
	2518.4	898.8	2517.6	913.2	2516.8	927.6	2516.0	942.0	2512.0	955.0
	2510.0	975.0	2509.0	987.5	2508.0	1000.0	2509.0	1005.3	2512.0	1021.0
GR	2512.3	1034.0	2512.7	1047.0	2513.0	1060.0	2513.0	1073.3	2513.0	1086.7
GR	2513.0	1100.0	2512.5	1112.5	2512.0	1125.0	2513.0	1146.0	2512.0	1165.0
GR	2512.5	1182.5	2513.0	1200.0	2513.7	1213.7	2514.3	1227.3	2515.0	1241.0
GR	2516.0	1255.5	2517.0	1270.0	2516.0	1290.0	2515.5	1305.5	2515.0	1321.0
GR	2515.5	1333.0	2516.0	1345.0	2518.0	1357.0	2520.0	1369.0	2522.0	1387.0
GR	2524.0	1405.0								
ET			9.1						849.57	1039.34
X1	5.182	23	989.5	1009.5	680	640	670			
GR	2529.0	740.0	2528.5	756.0	2528.0	772.0	2526.0	790.5	2524.0	809.0
GR	2523.0	825.5	2522.0	842.0	2521.0	858.5	2520.0	875.0	2519.7	888.3
GR	2519.3	901.7	2519.0	915.0	2518.8	931.0	2518.5	947.0	2518.3	963.0
GR	2518.0	979.0	2517.5	989.5	2517.0	1000.0	2517.5	1009.5	2518.0	1019.0
GR	2520.0	1036.0	2526.0	1049.0	2532.0	1062.0				
ET			9.1						820.	1024.59
X1	5.244	55	980.0	1002.2	240	340	330			
GR	2530.0	600.0	2530.0	618.0	2529.0	641.5	2528.0	665.0	2526.0	682.0
GR	2524.0	699.0	2525.0	720.0	2524.5	744.0	2524.0	768.0	2525.0	788.0
GR	2526.0	808.0	2526.0	832.5	2526.0	857.0	2525.7	861.7	2525.4	866.4
GR	2525.1	871.1	2524.9	875.9	2524.6	880.6	2524.3	885.3	2524.0	890.0
GR	2523.8	895.5	2523.5	901.0	2523.3	906.5	2523.0	912.0	2522.9	916.8
GR	2522.8	921.6	2522.7	926.3	2522.6	931.1	2522.4	935.9	2522.3	940.7
GR	2522.2	945.4	2522.1	950.2	2522.0	955.0	2521.9	960.0	2521.8	965.0
	2521.7	970.0	2521.6	975.0	2521.4	980.0	2521.3	985.0	2521.2	990.0
	2521.1	995.0	2521.0	1000.0	2521.4	1002.2	2522.0	1005.5	2523.0	1008.0

```
     2523.3    1010.8    2523.5    1013.5    2523.8    1015.3    2524.0    1020.0    2526.0    1025.5
     2528.0    1031.0    2529.0    1035.8    2530.0    1040.5    2531.0    1045.3    2532.0    1050.0

ET                        9.1                                                         902.69    1120.
X1    5.341        59    990.0    1016.0       460       550       510
GR   2534.0     800.0   2534.0     839.5    2534.0     860.0    2533.7     864.7    2533.3     869.3
GR   2533.0     874.0   2533.0     879.3    2533.0     884.7    2533.0     890.0    2532.3     895.3
GR   2531.7     900.7   2531.0     906.0    2530.7     910.9    2530.4     915.7    2530.1     920.6
GR   2529.9     925.4   2529.6     930.3    2529.3     935.1    2529.0     940.0    2528.9     945.0
GR   2528.8     950.0   2528.7     955.0    2528.6     960.0    2528.5     965.0    2528.4     970.0
GR   2528.3     975.0   2528.2     980.0    2528.1     985.0    2528.0     990.0    2527.5     995.0
GR   2527.0    1000.0   2527.3    1005.3    2527.7    1010.7    2528.0    1016.0    2528.3    1020.7
GR   2528.7    1025.3   2529.0    1030.0    2529.0    1035.0    2529.0    1040.0    2529.0    1045.0
GR   2529.0    1050.0   2529.0    1055.0    2529.0    1060.0    2529.0    1065.0    2529.5    1092.5
GR   2530.0    1120.0   2530.0    1150.0    2530.0    1180.0    2530.3    1201.7    2530.7    1223.3
GR   2531.0    1245.0   2532.0    1272.0    2533.0    1296.5    2534.0    1321.0    2535.0    1345.5
GR   2536.0    1370.0   2537.3    1393.3    2538.7    1416.7    2540.0    1430.0

ET                        9.1                                                         945.64    1165.60
X1    5.426        46    992.5    1020.5       445       455       450
GR   2540.0     900.0   2538.0     917.0    2536.0     934.0    2534.0     952.0    2533.6     956.8
GR   2533.2     961.6   2532.8     966.4    2532.4     971.2    2532.0     976.0    2531.5     980.5
GR   2531.0     985.0   2530.7     990.0    2530.5     992.5    2530.3     995.0    2530.0    1000.0
GR   2530.0    1005.5   2530.0    1011.0    2530.3    1015.8    2530.5    1020.5    2530.8    1025.3
GR   2531.0    1030.0   2531.0    1035.3    2531.0    1040.7    2531.0    1046.0    2531.1    1050.7
GR   2531.3    1055.4   2531.4    1060.1    2531.6    1064.9    2531.7    1069.6    2531.9    1074.3
GR   2532.0    1079.0   2532.5    1091.5    2533.0    1104.0    2533.5    1121.0    2534.0    1138.0
GR   2534.3    1151.7   2534.7    1165.3    2535.0    1179.0    2535.3    1194.3    2535.5    1209.5
GR   2535.8    1224.8   2536.0    1240.0    2536.8    1255.0    2537.5    1270.0    2538.3    1285.0
GR   2540.0    1300.0

NC    0.050     0.050    0.020       0.3       0.5
          DOWNSTREAM FACE: CONC. BRIDGE - OLD US HWY 60

          MODELED STRUCTURE AS NORMAL BRIDGE
          SINCE MAX ELLC > MIN ELTRD

          CROSS-SECTION ADJUSTED FOR
          35 DEGREE SKEW ANGLE
X1    5.532        88    982.0    1018.0       580       340       560     0.819
X2                                                                                0.819
X3       10                                                                2545.7    2542.4
X4        4    2534.1    932.27    2542.7    932.28    2542.7    933.90    2534.1    933.91
BT      -88     630.0   2559.0    2559.0     639.5    2558.7    2558.7     649.1    2558.4    2558.4
BT            658.6    2558.2    2558.2     668.2    2557.9    2557.9     677.7    2557.6    2557.6
BT            687.3    2557.4    2557.4     696.8    2557.1    2557.1     706.4    2556.8    2556.8
BT            715.9    2556.6    2556.6     725.5    2556.3    2556.3     735.0    2556.0    2556.0
BT            744.5    2555.6    2555.6     754.1    2555.3    2555.3     763.6    2554.9    2554.9
BT            773.2    2554.6    2554.6     782.7    2554.2    2554.2     792.3    2553.8    2553.8
BT            801.8    2553.4    2553.4     811.4    2553.1    2553.1     820.9    2552.7    2552.7
BT            830.5    2552.4    2552.4     840.0    2552.0    2552.0     849.5    2551.6    2551.6
BT            859.1    2551.3    2551.3     868.6    2550.9    2550.9     878.2    2550.6    2550.6
              887.7    2550.2    2550.2     897.3    2549.8    2549.8     906.8    2549.4    2549.4
              916.4    2549.1    2549.1     925.9    2548.7    2548.7     935.5    2548.4    2548.4
```

		945.0	2548.0	2548.0	954.2	2547.4	2547.4	963.3	2546.8	2546.8
		972.5	2546.3	2546.3	981.9	2545.7	2545.7	982.0	2545.7	2542.7
BT		990.8	2545.1	2542.7	1000.0	2544.5	2542.7	1010.0	2544.4	2542.7
BT		1018.0	2544.4	2542.7	1018.1	2544.4	2544.4	1020.0	2544.4	2544.4
BT		1030.0	2544.3	2544.3	1040.0	2544.3	2544.3	1050.0	2544.2	2544.2
BT		1060.0	2544.2	2544.2	1070.0	2544.1	2544.1	1080.0	2544.1	2544.1
BT		1090.0	2544.0	2544.0	1099.6	2544.0	2544.0	1109.2	2543.9	2543.9
BT		1128.5	2543.9	2543.9	1138.1	2543.8	2543.8	1147.7	2543.8	2543.8
BT		1157.3	2543.7	2543.7	1166.9	2543.7	2543.7	1176.5	2543.6	2543.6
BT		1195.8	2543.6	2543.6	1205.4	2543.5	2543.5	1224.6	2543.5	2543.5
BT		1234.2	2543.4	2543.4	1253.5	2543.4	2543.4	1263.1	2543.3	2543.3
BT		1272.7	2543.3	2543.3	1282.3	2543.2	2543.2	1291.9	2543.2	2543.2
BT		1301.5	2543.1	2543.1	1320.8	2543.1	2543.1	1330.4	2543.0	2543.0
BT		1349.6	2543.0	2543.0	1359.2	2542.9	2542.9	1368.8	2542.9	2542.9
BT		1378.4	2542.8	2542.8	1397.6	2542.8	2542.8	1407.2	2542.7	2542.7
BT		1416.8	2542.7	2542.7	1426.4	2542.6	2542.6	1445.6	2542.6	2542.6
BT		1455.2	2542.5	2542.5	1464.8	2542.5	2542.5	1474.4	2542.4	2542.4
BT		1480.0	2542.4	2542.4	1500.0	2542.4	2542.4	1555.0	2544.0	2544.0
BT		1820.0	2548.0	2548.0						
GR	2559.0	630.0	2558.7	639.5	2558.4	649.1	2558.2	658.6	2557.9	668.2
GR	2557.6	677.7	2557.4	687.3	2557.1	696.8	2556.8	706.4	2556.6	715.9
GR	2556.3	725.5	2556.0	735.0	2555.6	744.5	2555.3	754.1	2554.9	763.6
GR	2554.6	773.2	2554.2	782.7	2553.8	792.3	2553.4	801.8	2553.1	811.4
GR	2552.7	820.9	2552.4	830.5	2552.0	840.0	2551.6	849.5	2551.3	859.1
GR	2550.9	868.6	2550.6	878.2	2550.2	887.7	2549.8	897.3	2549.4	906.8
GR	2549.1	916.4	2548.7	925.9	2548.4	935.5	2548.0	945.0	2547.4	954.2
[illegible]	2546.8	963.3	2546.3	972.5	2545.7	981.9	2534.1	982.0	2534.1	990.8
[illegible]	2534.1	1000.0	2534.1	1010.0	2534.1	1018.0	2544.4	1018.1	2544.4	1020.0
GR	2544.3	1030.0	2544.3	1040.0	2544.2	1050.0	2544.2	1060.0	2544.1	1070.0
GR	2544.1	1080.0	2544.0	1090.0	2544.0	1099.6	2543.9	1109.2	2543.9	1128.5
GR	2543.8	1138.1	2543.8	1147.7	2543.7	1157.3	2543.7	1166.9	2543.6	1176.5
GR	2543.6	1195.8	2543.5	1205.4	2543.5	1224.6	2543.4	1234.2	2543.4	1253.5
GR	2543.3	1263.1	2543.3	1272.7	2543.2	1282.3	2543.2	1291.9	2543.1	1301.5
GR	2543.1	1320.8	2543.0	1330.4	2543.0	1349.6	2542.9	1359.2	2542.9	1368.8
GR	2542.8	1378.4	2542.8	1397.6	2542.7	1407.2	2542.7	1416.8	2542.6	1426.4
GR	2542.6	1445.6	2542.5	1455.2	2542.5	1464.8	2542.4	1474.4	2542.4	1480.0
GR	2542.4	1500.0	2544.0	1555.0	2548.0	1820.0				

UPSTREAM FACE: CONC. BRIDGE - OLD US HWY 60

MODELED STRUCTURE AS NORMAL BRIDGE
SINCE MAX ELLC > MIN ELTRD

CROSS-SECTION ADJUSTED FOR
35 DEGREE SKEW ANGLE

X1	5.538	84	982.0	1018.0	30.5	30.5	30.5	0.819		
X2									0.819	
X3	10							2545.7	2542.5	
X4	4	2534.4	932.27	2543.0	932.28	2543.0	933.90	2534.4	933.91	
BT	-84	630.0	2559.0	2559.0	639.5	2558.7	2558.7	649.1	2558.4	2558.4
BT		658.6	2558.2	2558.2	668.2	2557.9	2557.9	677.7	2557.6	2557.6
BT		687.3	2557.4	2557.4	696.8	2557.1	2557.1	706.4	2556.8	2556.8
		715.9	2556.6	2556.6	725.5	2556.3	2556.3	735.0	2556.0	2556.0
		744.5	2555.6	2555.6	754.1	2555.3	2555.3	763.6	2554.9	2554.9

		773.2	2554.6	2554.6	782.7	2554.2	2554.2	792.3	2553.8	2553.8
		801.8	2553.4	2553.4	811.4	2553.1	2553.1	820.9	2552.7	2552.7
BT		830.5	2552.4	2552.4	840.0	2552.0	2552.0	849.5	2551.6	2551.6
BT		859.1	2551.3	2551.3	868.6	2550.9	2550.9	878.2	2550.6	2550.6
BT		887.7	2550.2	2550.2	897.3	2549.8	2549.8	906.8	2549.4	2549.4
BT		916.4	2549.1	2549.1	925.9	2548.7	2548.7	935.5	2548.4	2548.4
BT		945.0	2548.0	2548.0	954.2	2547.4	2547.4	963.3	2546.8	2546.8
BT		972.5	2546.3	2546.3	981.9	2545.7	2545.7	982.0	2545.7	2543.0
BT		990.8	2545.1	2543.0	1000.0	2544.5	2543.0	1010.0	2544.4	2543.0
BT		1018.0	2544.4	2543.0	1018.1	2544.4	2544.4	1020.0	2544.4	2544.4
BT		1030.0	2544.3	2544.3	1040.0	2544.3	2544.3	1050.0	2544.2	2544.2
BT		1060.0	2544.2	2544.2	1070.0	2544.1	2544.1	1080.0	2544.1	2544.1
BT		1090.0	2544.0	2544.0	1099.6	2544.0	2544.0	1109.2	2543.9	2543.9
BT		1128.5	2543.9	2543.9	1138.1	2543.8	2543.8	1147.7	2543.8	2543.8
BT		1157.3	2543.7	2543.7	1166.9	2543.7	2543.7	1176.5	2543.6	2543.6
BT		1195.8	2543.6	2543.6	1205.4	2543.5	2543.5	1224.6	2543.5	2543.5
BT		1234.2	2543.4	2543.4	1253.5	2543.4	2543.4	1263.1	2543.3	2543.3
BT		1272.7	2543.3	2543.3	1282.3	2543.2	2543.2	1291.9	2543.2	2543.2
BT		1301.5	2543.1	2543.1	1320.8	2543.1	2543.1	1330.4	2543.0	2543.0
BT		1349.6	2543.0	2543.0	1359.2	2542.9	2542.9	1368.8	2542.9	2542.9
BT		1378.4	2542.8	2542.8	1397.6	2542.8	2542.8	1407.2	2542.7	2542.7
BT		1416.8	2542.7	2542.7	1426.4	2542.6	2542.6	1445.6	2542.6	2542.6
BT		1455.2	2542.5	2542.5	1507.2	2544.0	2544.0	1747.2	2548.0	2548.0
GR	2559.0	630.0	2558.7	639.5	2558.4	649.1	2558.2	658.6	2557.9	668.2
GR	2557.6	677.7	2557.4	687.3	2557.1	696.8	2556.8	706.4	2556.6	715.9
GR	2556.3	725.5	2556.0	735.0	2555.6	744.5	2555.3	754.1	2554.9	763.6
	2554.6	773.2	2554.2	782.7	2553.8	792.3	2553.4	801.8	2553.1	811.4
	2552.7	820.9	2552.4	830.5	2552.0	840.0	2551.6	849.5	2551.3	859.1
GR	2550.9	868.6	2550.6	878.2	2550.2	887.7	2549.8	897.3	2549.4	906.8
GR	2549.1	916.4	2548.7	925.9	2548.4	935.5	2548.0	945.0	2547.4	954.2
GR	2546.8	963.3	2546.3	972.5	2545.7	981.9	2534.4	982.0	2534.4	990.8
GR	2534.4	1000.0	2534.4	1010.0	2534.4	1018.0	2544.4	1018.1	2544.4	1020.0
GR	2544.3	1030.0	2544.3	1040.0	2544.2	1050.0	2544.2	1060.0	2544.1	1070.0
GR	2544.1	1080.0	2544.0	1090.0	2544.0	1099.6	2543.9	1109.2	2543.9	1128.5
GR	2543.8	1138.1	2543.8	1147.7	2543.7	1157.3	2543.7	1166.9	2543.6	1176.5
GR	2543.6	1195.8	2543.5	1205.4	2543.5	1224.6	2543.4	1234.2	2543.4	1253.5
GR	2543.3	1263.1	2543.3	1272.7	2543.2	1282.3	2543.2	1291.9	2543.1	1301.5
GR	2543.1	1320.8	2543.0	1330.4	2543.0	1349.6	2542.9	1359.2	2542.9	1368.8
GR	2542.8	1378.4	2542.8	1397.6	2542.7	1407.2	2542.7	1416.8	2542.6	1426.4
GR	2542.6	1445.6	2542.5	1455.2	2544.0	1507.2	2548.0	1747.2		
NC	0.050	0.050	0.030	0.3	0.5					
ET		9.1	9.1						901.	1035

ET RECORD: STA 901 & 1035 MODEL
EFFECTIVE FLOW AREA

MAPPED FLOODPLAIN TO CWSEL

X1	5.566	75	985.0	1010.0	140	290	150			
GR	2548.0	900.0	2546.7	910.0	2545.3	920.0	2544.0	930.0	2542.7	938.3
GR	2541.3	946.7	2540.0	955.0	2539.8	958.0	2539.6	961.0	2539.4	964.0
GR	2539.2	967.0	2539.0	970.0	2538.8	973.0	2538.6	976.0	2538.4	979.0
	2538.2	982.0	2538.0	985.0	2537.8	988.0	2537.6	991.0	2537.4	994.0
	2537.2	997.0	2537.0	1000.0	2537.3	1003.3	2537.7	1006.7	2538.0	1010.0

	2538.1	1012.8	2538.3	1015.5	2538.2	1018.3	2538.0	1021.0	2538.1	1023.9
	2538.3	1026.8	2538.4	1029.7	2538.2	1032.6	2538.4	1035.5	2538.6	1038.4
GR	2538.6	1041.3	2538.4	1044.2	2538.2	1047.1	2538.0	1050.0	2538.2	1058.3
GR	2538.1	1066.7	2538.0	1075.0	2538.0	1083.3	2538.0	1091.7	2538.0	1100.0
GR	2538.3	1109.7	2538.7	1119.3	2538.5	1129.0	2538.3	1139.3	2538.7	1149.7
GR	2539.0	1160.0	2539.0	1170.0	2539.0	1180.0	2539.0	1190.0	2539.0	1200.0
GR	2539.0	1210.0	2539.0	1220.0	2539.0	1230.0	2539.3	1240.0	2539.7	1250.0
GR	2540.0	1260.0	2541.3	1270.0	2542.7	1280.0	2544.0	1290.0	2544.6	1298.4
GR	2545.2	1306.8	2545.8	1315.2	2546.4	1323.6	2547.0	1332.0	2547.3	1340.3
GR	2547.5	1348.5	2547.8	1356.8	2548.0	1365.0	2548.5	1375.0	2549.0	1385.0
NC	0.050	0.050	0.030	0.1	0.3					
ET			9.1						937.85	1088.08
X1	5.652	27	975.	1030.	455	445	450			
GR	2556.0	915.0	2552.0	932.5	2544.0	940.0	2542.0	962.5	2540.0	975.0
GR	2538.5	987.5	2538.0	991.7	2538.0	1000.0	2538.0	1013.0	2540.0	1030.0
GR	2542.0	1050.0	2544.0	1072.0	2546.0	1086.0	2548.0	1100.0	2548.3	1113.3
GR	2548.7	1126.7	2549.0	1140.0	2549.0	1155.0	2549.0	1170.0	2548.7	1183.3
GR	2548.3	1196.7	2548.0	1210.0	2547.0	1230.0	2548.0	1250.0	2549.3	1266.7
GR	2550.7	1283.3	2552.0	1300.0						
ET			9.1						950.86	1093.85
X1	5.764	48	990.0	1021.0	595	600	595			
GR	2560.0	910.0	2556.0	927.0	2552.0	944.0	2548.0	961.0	2547.8	965.8
GR	2547.5	970.5	2547.3	975.3	2547.0	980.0	2546.5	985.0	2546.0	990.0
GR	2545.5	995.0	2544.8	1000.0	2544.8	1005.3	2544.8	1010.5	2545.5	1015.8
	2546.0	1021.0	2546.2	1025.8	2546.4	1030.6	2546.6	1035.4	2546.8	1040.2
	2547.0	1045.0	2547.2	1050.0	2547.4	1055.0	2547.6	1060.0	2547.8	1065.0
GR	2548.0	1070.0	2550.0	1090.0	2552.0	1110.0	2552.3	1127.5	2552.5	1145.0
GR	2552.8	1162.5	2553.0	1180.0	2553.2	1197.0	2553.4	1214.0	2553.6	1231.0
GR	2553.8	1248.0	2554.0	1265.0	2554.3	1280.8	2554.7	1296.7	2555.0	1312.5
GR	2555.3	1328.3	2555.7	1344.2	2556.0	1360.0	2556.8	1377.4	2557.6	1394.8
GR	2558.4	1412.2	2559.2	1429.6	2560.0	1437.0				
ET			9.1						923.	1070.
X1	5.836	84	985.0	1010.0	395	325	380			
GR	2560.0	780.0	2559.3	785.0	2558.7	790.0	2558.0	795.0	2557.3	800.0
GR	2556.7	805.0	2556.0	810.0	2555.6	815.5	2555.3	820.9	2554.9	826.4
GR	2554.6	831.8	2554.2	837.3	2553.8	842.7	2553.4	848.2	2553.1	853.6
GR	2552.7	859.1	2552.4	864.5	2552.0	870.0	2551.8	875.3	2551.7	880.5
GR	2551.5	885.8	2551.4	891.0	2551.2	896.3	2551.1	901.6	2550.9	906.8
GR	2550.7	912.1	2550.6	917.4	2550.4	922.6	2550.3	927.9	2550.1	933.2
GR	2549.9	938.4	2549.8	943.7	2549.6	949.0	2549.5	954.2	2549.3	959.5
GR	2549.2	964.7	2549.0	970.0	2548.8	975.0	2548.7	980.0	2548.5	985.0
GR	2548.4	990.0	2548.3	995.0	2548.3	1000.0	2548.4	1005.0	2548.5	1010.0
GR	2548.7	1015.0	2548.8	1020.0	2549.0	1025.0	2549.4	1030.6	2549.8	1036.3
GR	2550.1	1041.9	2550.5	1047.5	2550.9	1053.1	2551.3	1058.8	2551.6	1064.4
GR	2552.0	1070.0	2552.3	1075.0	2552.7	1080.0	2553.0	1085.0	2553.3	1090.0
GR	2553.7	1095.0	2554.0	1100.0	2554.2	1105.6	2554.4	1111.1	2554.7	1116.7
GR	2554.9	1122.2	2555.1	1127.8	2555.3	1133.3	2555.6	1138.9	2555.8	1144.4
GR	2556.0	1150.0	2556.3	1155.4	2556.6	1160.8	2556.9	1166.2	2557.2	1171.5
GR	2557.5	1176.9	2557.9	1182.3	2558.1	1187.7	2558.5	1193.1	2558.8	1198.5
	2559.1	1203.8	2559.4	1209.2	2559.7	1214.6	2560.0	1220.0		

```
                 5.1       9.1                 850.      1080.                          904.67    1052.48
          ET RECORD: STA 850 ELIMINATE INNEFECTIVE
                     FLOW AREA IN LEFT OVERBANK
X1   5.937       81     980.0    1010.0       495       525       530
GR  2568.0    655.0    2567.7     660.8    2567.3     666.7    2567.0     672.5    2566.7     678.3
GR  2566.3    684.2    2566.0     690.0    2565.1     695.9    2564.3     701.7    2563.4     707.6
GR  2562.6    713.4    2561.7     719.3    2560.9     725.1    2560.0     731.0    2559.8     737.0
GR  2559.5    743.0    2559.3     749.0    2559.0     755.0    2559.2     760.3    2559.3     765.7
GR  2559.5    771.0    2559.7     776.3    2559.8     781.7    2560.0     787.0    2560.2     792.7
GR  2560.4    798.5    2560.6     804.2    2560.7     809.9    2560.9     815.6    2561.1     821.4
GR  2561.3    827.1    2561.4     832.8    2561.6     838.5    2561.8     844.3    2562.0     850.0
GR  2561.8    854.9    2561.5     859.8    2561.3     864.6    2561.0     869.5    2560.8     874.4
GR  2560.5    879.3    2560.3     884.1    2560.0     889.0    2559.7     894.3    2559.3     899.7
GR  2559.0    905.0    2558.6     910.1    2558.3     915.3    2557.9     920.4    2557.5     925.5
GR  2557.1    930.6    2556.8     935.8    2556.4     940.9    2556.0     946.0    2555.7     950.7
GR  2555.3    955.3    2555.0     960.0    2554.9     965.0    2554.8     970.0    2554.6     975.0
GR  2554.5    980.0    2554.4     985.0    2554.3     990.0    2554.1     995.0    2554.0    1000.0
GR  2554.3   1005.0    2554.5    1010.0    2554.8    1015.0    2555.0    1020.0    2555.7    1025.7
GR  2556.3   1031.3    2557.0    1037.0    2557.6    1041.6    2558.2    1046.2    2558.8    1050.8
GR  2559.4   1055.4    2560.0    1060.0    2560.3    1065.0    2564.5    1070.0    2564.8    1075.0
GR  2565.0   1080.0

ET                       9.1                                                          900.    1039.50
X1   6.029       41     980.0    1010.0       445       510       490
GR  2572.0    781.0    2571.0     794.5    2570.0     808.0    2569.0     821.5    2568.0     835.0
    2564.0    860.0    2562.7     866.7    2561.3     883.3    2560.0     900.0    2559.0     915.0
    2560.0    929.0    2561.0     950.0    2560.7     955.0    2560.3     960.0    2560.0     965.0
GR  2559.7    970.0    2559.3     975.0    2559.0     980.0    2558.8     985.0    2558.5     990.0
GR  2558.3    995.0    2558.0    1000.0    2558.5    1005.0    2559.0    1010.0    2559.5    1015.0
GR  2560.0   1020.0    2560.8    1025.0    2561.6    1030.0    2562.4    1035.0    2563.2    1040.0
GR  2564.0   1045.0    2564.5    1050.0    2565.0    1055.0    2565.5    1060.0    2566.0    1065.0
GR  2566.5   1070.0    2567.0    1075.0    2567.5    1080.0    2568.0    1085.0    2570.0    1102.0
GR  2572.0   1119.0

ET                       9.1                                                          900.      1060.
X1   6.124       76     990.0    1020.0       540       450       500
GR  2580.0    440.0    2578.0     472.5    2576.0     495.0    2575.0     523.0    2574.0     551.0
GR  2573.0    579.0    2573.0     598.5    2573.0     618.0    2574.0     650.0    2572.0     685.0
GR  2571.0    712.0    2570.0     739.0    2569.5     767.0    2570.0     795.0    2570.0     822.5
GR  2569.0    850.0    2568.9     855.0    2568.8     860.0    2568.7     865.0    2568.6     870.0
GR  2568.4    875.0    2568.3     880.0    2568.2     885.0    2568.1     890.0    2568.0     895.0
GR  2567.9    900.0    2567.9     905.0    2567.8     910.0    2567.7     915.0    2567.6     920.0
GR  2567.5    925.0    2567.5     930.0    2567.4     935.0    2567.3     940.0    2567.2     945.0
GR  2567.1    950.0    2567.1     955.0    2567.0     960.0    2566.9     965.0    2566.8     970.0
GR  2566.6    975.0    2566.5     980.0    2566.4     985.0    2566.3     990.0    2566.1     995.0
GR  2566.0   1000.0    2566.1    1005.0    2566.1    1010.0    2566.2    1015.0    2566.3    1020.0
GR  2566.3   1025.0    2566.4    1030.0    2566.4    1035.0    2566.5    1040.0    2566.6    1045.0
GR  2566.6   1050.0    2566.7    1055.0    2566.8    1060.0    2566.8    1065.0    2566.9    1070.0
GR  2566.9   1075.0    2567.0    1080.0    2567.0    1085.0    2567.0    1090.0    2567.0    1095.0
GR  2567.0   1100.0    2567.0    1105.0    2567.3    1110.0    2567.7    1115.0    2568.0    1120.0
GR  2569.0   1144.0    2570.0    1168.0    2572.0    1190.0    2576.0    1220.0    2578.0    1240.0
    2580.0   1260.0
```

			9.1						920.	1060.
X1	6.213	31	979.5	1010.5	500	440	470			
GR	2584.0	610.0	2583.2	628.0	2582.4	646.0	2581.6	664.0	2580.8	682.0
GR	2580.0	700.0	2576.0	712.0	2576.0	730.0	2576.5	750.5	2577.0	771.0
GR	2577.0	795.0	2576.7	811.7	2576.3	828.3	2576.0	845.0	2575.5	860.0
GR	2575.0	875.0	2574.3	890.0	2573.5	905.0	2572.8	920.0	2572.0	935.0
GR	2571.0	959.0	2570.0	979.5	2569.0	1000.0	2570.0	1010.5	2571.0	1021.0
GR	2571.5	1035.5	2572.0	1070.0	2574.0	1084.5	2576.0	1089.0	2580.0	1142.0
GR	2584.0	1197.0								
ET			9.1						900.	1040.
X1	6.317	95	982.0	1013.0	535	555	550			
GR	2588.0	508.0	2587.1	527.7	2586.0	554.0	2585.7	560.6	2585.4	567.1
GR	2585.1	573.7	2584.9	580.3	2584.6	586.9	2584.3	593.4	2584.0	600.0
GR	2583.9	606.6	2583.8	613.1	2583.7	619.7	2583.6	626.2	2583.4	632.8
GR	2583.3	639.3	2583.2	645.9	2583.1	652.4	2583.0	659.0	2582.9	665.3
GR	2582.8	671.7	2582.8	678.0	2582.7	684.3	2582.6	690.7	2582.5	697.0
GR	2582.4	703.3	2582.3	709.7	2582.3	716.0	2582.2	722.3	2582.1	728.7
GR	2582.0	735.0	2581.8	741.3	2581.7	747.7	2581.5	754.0	2581.3	760.3
GR	2581.2	766.7	2581.0	773.0	2580.8	779.3	2580.7	785.7	2580.5	792.0
GR	2580.3	798.3	2580.2	804.7	2580.0	811.0	2579.2	817.8	2578.4	824.6
GR	2577.6	831.4	2576.8	838.2	2576.0	845.0	2575.9	851.4	2575.8	857.7
GR	2575.7	864.1	2575.6	870.5	2575.6	876.8	2575.4	883.2	2575.4	889.5
GR	2575.3	895.9	2575.2	902.3	2575.1	908.6	2575.0	915.0	2574.9	921.7
GR	2574.8	928.4	2574.7	935.1	2574.6	941.8	2574.5	948.5	2574.4	955.2
	2574.3	961.9	2574.2	968.6	2574.1	975.3	2574.0	982.0	2573.7	988.0
	2573.3	994.0	2573.0	1000.0	2573.5	1006.5	2574.0	1013.0	2574.3	1019.5
GR	2574.7	1026.0	2575.0	1032.5	2575.3	1039.0	2575.7	1045.5	2576.0	1052.0
GR	2576.6	1058.1	2578.1	1064.3	2579.9	1070.4	2582.3	1076.6	2582.9	1082.7
GR	2583.4	1088.9	2585.0	1095.0	2586.5	1101.3	2587.8	1107.5	2589.5	1113.8
GR	2592.0	1120.0	2594.5	1126.3	2596.0	1132.5	2597.5	1138.8	2600.0	1145.0
ET			9.1						903.	1043.30
X1	6.419	95	990.0	1011.0	530	535	535			
GR	2592.0	575.0	2591.6	585.0	2591.3	590.0	2591.1	595.0	2590.9	600.0
GR	2590.7	605.0	2590.4	610.0	2590.2	615.0	2590.0	620.0	2589.8	625.0
GR	2589.6	630.0	2589.3	635.0	2589.1	640.0	2588.9	645.0	2588.7	650.0
GR	2588.4	655.0	2588.2	660.0	2588.0	665.0	2587.8	670.0	2587.6	675.1
GR	2587.4	680.2	2587.2	685.2	2586.9	690.3	2586.7	695.3	2586.5	700.4
GR	2586.3	705.4	2586.1	710.5	2585.9	715.5	2585.7	720.6	2585.5	725.6
GR	2585.3	730.7	2585.1	735.7	2584.8	740.8	2584.6	745.8	2584.4	750.9
GR	2584.2	756.0	2584.0	761.0	2583.5	765.7	2583.0	770.3	2582.5	775.0
GR	2582.0	779.7	2581.5	784.3	2581.0	789.0	2581.1	794.1	2581.3	799.3
GR	2581.4	804.4	2581.6	809.6	2581.7	814.7	2581.9	819.9	2582.0	825.0
GR	2582.2	830.0	2582.3	835.0	2582.5	840.0	2582.7	845.0	2582.8	850.0
GR	2583.0	855.0	2582.5	860.2	2582.0	865.3	2581.5	870.5	2581.0	875.7
GR	2580.5	880.8	2580.0	886.0	2579.8	891.0	2579.6	896.0	2579.4	901.0
GR	2579.2	906.0	2579.0	911.0	2578.9	916.1	2578.8	921.3	2578.6	926.4
GR	2578.5	931.5	2578.4	936.6	2578.3	941.8	2578.1	946.9	2578.0	952.0
GR	2578.0	990.0	2577.5	995.0	2577.0	1000.0	2577.5	1005.5	2578.0	1011.0
GR	2579.0	1012.0	2579.2	1016.7	2579.3	1021.3	2579.5	1026.0	2579.7	1030.7
	2579.8	1035.3	2580.0	1040.0	2582.5	1045.0	2585.0	1050.0	2587.5	1055.0
	2590.0	1060.0	2592.5	1065.0	2595.0	1070.0	2595.5	1075.0	2596.0	1080.0

```
                        9.1                                                905.      1055.
X1    6.508      92    980.0    1012.0     420     480     470
GR   2596.0   640.0   2595.7     645.1  2595.4   650.3  2595.1    655.4  2594.9     660.6
GR   2594.6   665.7   2594.3     670.9  2594.0   676.0  2593.7    681.1  2593.4     686.3
GR   2593.1   691.4   2592.9     696.6  2592.6   701.7  2592.3    706.9  2592.0     712.0
GR   2591.7   716.8   2591.4     721.7  2591.1   726.5  2590.8    731.4  2590.5     736.2
GR   2590.1   741.1   2589.9     745.9  2589.5   750.8  2589.2    755.6  2588.9     760.5
GR   2588.6   765.3   2588.3     770.2  2588.0   775.0  2587.8    780.0  2587.6     784.9
GR   2587.5   789.9   2587.3     794.8  2587.1   799.8  2587.0    804.7  2586.8     809.7
GR   2586.6   814.7   2586.4     819.6  2586.3   824.6  2586.1    829.5  2585.9     834.5
GR   2585.7   839.4   2585.6     844.4  2585.4   849.3  2585.2    854.3  2585.0     859.3
GR   2584.9   864.2   2584.7     869.2  2584.5   874.1  2584.4    879.1  2584.2     884.0
GR   2584.0   889.0   2583.8     894.3  2583.5   899.5  2583.3    904.8  2583.0     910.0
GR   2583.2   915.0   2583.3     920.0  2583.5   925.0  2583.7    930.0  2583.8     935.0
GR   2584.0   940.0   2583.9     945.0  2583.8   950.0  2583.6    955.0  2583.5     960.0
GR   2583.4   965.0   2583.3     970.0  2583.1   975.0  2583.0    980.0  2582.8     985.0
GR   2582.5   990.0   2582.3     995.0  2582.0  1000.0  2582.5   1006.0  2583.0    1012.0
GR   2583.0  1055.0   2582.8    1059.5  2582.5  1064.0  2582.3   1068.5  2583.0    1073.0
GR   2583.5  1078.0   2584.0    1083.0  2584.5  1088.0  2585.0   1093.0  2587.0    1097.5
GR   2588.0  1102.0   2589.0    1106.5  2590.0  1111.0  2591.0   1115.8  2592.0    1120.5
GR   2594.0  1125.3   2596.0    1130.0

QT       2     3395     3395
ET                      9.1                                               891.29      1048.
X1    6.568      91    989.0    1015.0     310     320     320
GR   2600.0   715.0   2599.5     721.8  2599.0   728.5  2598.5    735.3  2598.0     742.0
GR   2597.8   749.0   2597.6     756.0  2597.3   763.0  2597.1    770.0  2596.9     777.0
GR   2596.7   784.0   2596.4     791.0  2596.2   798.0  2596.0    805.0  2595.3     811.8
GR   2594.7   818.7   2594.0     825.5  2593.3   832.3  2592.7    839.2  2592.0     846.0
GR   2591.3   852.8   2590.7     859.7  2590.0   866.5  2589.3    873.3  2588.7     880.2
GR   2588.0   887.0   2587.7     894.3  2587.3   901.7  2587.0    909.0  2586.7     916.3
GR   2586.3   923.7   2586.0     931.0  2585.7   938.3  2585.3    945.7  2585.0     953.0
GR   2584.7   960.3   2584.3     967.7  2584.0   975.0  2583.5    982.0  2583.0     989.0
GR   2582.5   994.5   2582.0    1000.0  2582.5  1007.5  2583.0   1015.0  2584.0    1021.0
GR   2584.3  1027.7   2584.7    1034.3  2585.0  1041.0  2585.3   1048.2  2585.5    1055.3
GR   2585.8  1062.5   2586.0    1069.7  2586.3  1076.8  2586.5   1084.0  2586.8    1091.2
GR   2587.0  1098.3   2587.3    1105.5  2587.5  1112.7  2587.8   1119.8  2588.0    1127.0
GR   2588.3  1133.9   2588.7    1140.8  2589.0  1147.8  2589.3   1154.7  2589.7    1161.6
GR   2590.0  1168.5   2590.3    1175.4  2590.7  1182.3  2591.0   1189.3  2591.3    1196.2
GR   2591.7  1203.1   2592.0    1210.0  2592.8  1217.0  2593.6   1224.0  2594.4    1231.0
GR   2595.2  1238.0   2596.0    1245.0  2597.0  1252.3  2598.0   1259.5  2599.0    1266.8
GR   2600.0  1274.0   2600.7    1280.8  2601.3  1287.7  2602.0   1294.5  2602.7    1301.3
GR   2603.3  1308.2   2604.0    1315.0  2604.8  1322.5  2605.5   1330.0  2606.3    1337.5
GR   2607.0  1345.0

QT       2     1855     1855
ET                      9.1                                               929.00      1116.82
            DISCHARGE FROM HEC-1 MODEL:  SAI150  Q = 1855 cfs
X1    6.703      30    985.0    1012.0     690     740     710
GR   2600.0   891.0   2599.0     895.0  2598.0   898.0  2597.0    902.0  2596.0     910.0
GR   2595.3   915.0   2594.5     925.0  2593.8   935.0  2593.0    945.0  2592.5     955.5
     2592.0   966.0   2591.5     975.5  2591.0   985.0  2590.5    992.5  2590.0    1000.0
     2591.0  1012.0   2591.5    1021.0  2592.0  1030.0  2592.5   1041.0  2593.0    1052.0
```

```
    2593.2    1061.3    2593.3    1070.7    2593.5    1080.0    2593.7    1089.3    2593.8    1098.7
    2594.0    1108.0    2594.2    1116.4    2594.6    1124.8    2594.8    1133.2    2595.2    1140.0

ET                        9.1                                                         953.89    1052.04
X1   6.778        26     985.0    1005.0       410       380       400
GR  2620.0     890.0    2618.0     905.0    2616.0     920.0    2608.0     935.0    2600.0     950.0
GR  2598.0     960.0    2596.0     970.0    2595.5     985.0    2595.0    1000.0    2595.5    1005.0
GR  2596.0    1010.0    2597.3    1033.3    2598.7    1046.7    2600.0    1060.0    2600.6    1072.9
GR  2601.1    1085.7    2601.7    1098.6    2602.3    1111.4    2602.9    1124.3    2603.4    1137.1
GR  2604.0    1150.0    2604.2    1162.0    2604.4    1174.0    2604.6    1186.0    2604.8    1198.0
GR  2605.0    1210.0

ET            5.1       9.1                 775.0     1072.0                          924.     1019.79
            ET RECORD: STA 775 ELIMINATE INEFFECTIVE
                       FLOW AREA IN LEFT OVERBANK
X1   6.890        46     990.0    1012.0       620       550       590
GR  2612.0     420.0    2610.0     435.0    2608.0     450.0    2606.0     463.0    2604.0     476.0
GR  2603.5     488.0    2603.0     500.0    2603.0     515.5    2603.0     531.0    2603.0     546.5
GR  2603.0     562.0    2603.5     578.5    2604.0     595.0    2604.7     609.3    2605.3     623.7
GR  2606.0     638.0    2606.7     652.3    2607.3     666.7    2608.0     681.0    2608.5     698.0
GR  2609.0     715.0    2609.0     730.0    2609.0     745.0    2609.0     760.0    2609.0     775.0
GR  2608.5     790.0    2608.0     805.0    2606.7     820.0    2605.3     835.0    2604.0     850.0
GR  2603.5     867.5    2603.0     885.0    2602.8     898.0    2602.6     911.0    2602.4     924.0
GR  2602.2     937.0    2602.0     950.0    2601.5     963.0    2601.0     976.0    2600.0     990.0
GR  2599.0    1000.0    2600.0    1012.0    2608.0    1028.0    2612.0    1040.0    2612.5    1056.0
GR  2613.0    1072.0

            5.1       9.1                 840.      1081.                           960.     1030.74
            ET RECORD: STA 840 & 1081 ELIMINATE INEFFECTIVE
                       FLOW AREAS IN OVERBANKS
X1   6.983        95     985.0    1015.0       360       510       490
GR  2615.0     489.0    2614.0     496.3    2613.0     503.7    2612.0     511.0    2611.7     519.0
GR  2611.0     535.0    2610.7     550.0    2610.5     557.5    2610.3     565.0    2610.2     572.5
GR  2610.0     580.0    2609.8     588.3    2609.7     596.7    2609.5     605.0    2609.3     613.3
GR  2609.2     621.7    2609.0     630.0    2608.5     637.5    2608.0     645.0    2607.5     652.5
GR  2607.0     660.0    2607.3     668.3    2607.7     676.7    2608.0     685.0    2608.7     692.0
GR  2609.3     699.0    2610.0     706.0    2609.7     713.7    2609.3     721.3    2609.0     729.0
GR  2608.5     737.3    2608.0     745.5    2607.5     753.8    2607.0     762.0    2607.7     770.3
GR  2608.3     778.7    2609.0     787.0    2609.7     795.3    2610.3     803.7    2611.0     812.0
GR  2611.0     840.0    2610.7     848.3    2610.3     856.7    2610.0     865.0    2609.7     873.3
GR  2609.3     881.7    2609.0     890.0    2608.7     898.3    2608.3     906.7    2608.0     915.0
GR  2607.8     922.6    2607.6     930.2    2607.4     937.8    2607.2     945.4    2607.0     953.0
GR  2606.3     960.3    2605.7     967.7    2605.0     975.0    2604.5     982.5    2604.0     985.0
GR  2603.0    1000.0    2604.0    1015.0    2608.0    1031.0    2609.0    1034.0    2609.2    1038.5
GR  2609.3    1047.0    2609.5    1055.5    2609.7    1064.0    2609.8    1072.5    2610.0    1081.0
GR  2609.8    1088.3    2609.7    1095.7    2609.5    1103.0    2609.3    1110.3    2609.2    1117.7
GR  2609.0    1125.0    2608.8    1132.3    2608.5    1139.5    2608.3    1146.8    2608.0    1154.0
GR  2607.7    1161.0    2607.3    1168.0    2607.0    1175.0    2607.0    1200.0    2607.5    1210.0
GR  2608.0    1220.0    2608.8    1228.6    2609.6    1237.2    2610.4    1245.8    2611.2    1254.4
GR  2612.0    1263.0    2612.8    1271.4    2613.6    1279.8    2614.4    1288.2    2616.0    1305.0
```

			9.1						957.	1040.
X1	7.074	95	985.0	1006.0	485	470	480			
GR	2620.0	700.0	2619.7	707.6	2619.3	715.1	2619.0	722.7	2618.7	730.2
GR	2618.3	737.8	2618.0	745.3	2617.7	752.9	2617.3	760.4	2617.0	768.0
GR	2616.7	775.3	2616.3	782.7	2616.0	790.0	2615.7	796.3	2615.3	802.7
GR	2615.0	809.0	2616.0	819.0	2616.3	827.7	2616.7	836.3	2617.0	845.0
GR	2617.0	880.0	2616.8	887.3	2616.5	894.5	2616.3	901.8	2616.0	909.0
GR	2615.2	915.8	2614.4	922.6	2613.6	929.4	2612.8	936.2	2612.0	943.0
GR	2611.5	949.8	2611.0	956.5	2610.5	963.3	2610.0	970.0	2609.5	977.5
GR	2609.0	985.0	2608.5	992.5	2608.0	1000.0	2609.0	1006.0	2610.0	1012.0
GR	2610.5	1018.5	2611.0	1025.0	2611.5	1032.5	2612.0	1040.0	2612.3	1047.5
GR	2612.5	1055.0	2612.8	1062.5	2613.0	1070.0	2613.3	1077.1	2613.6	1084.3
GR	2613.9	1091.4	2614.1	1098.6	2614.4	1105.7	2614.7	1112.9	2615.0	1120.0
GR	2615.3	1128.3	2615.7	1136.7	2616.0	1145.0	2616.3	1152.8	2616.5	1160.5
GR	2616.8	1168.3	2617.0	1176.0	2617.2	1183.7	2617.3	1191.3	2617.5	1199.0
GR	2617.7	1206.7	2617.8	1214.3	2618.0	1222.0	2617.9	1229.5	2617.8	1237.0
GR	2617.6	1244.5	2617.4	1259.5	2617.3	1267.0	2617.1	1274.5	2617.0	1282.0
GR	2616.6	1290.0	2616.2	1298.0	2615.8	1306.0	2615.4	1314.0	2615.0	1322.0
GR	2614.8	1329.6	2614.6	1337.2	2614.4	1344.8	2614.2	1352.4	2614.0	1360.0
GR	2614.4	1367.0	2614.8	1374.0	2615.2	1381.0	2615.6	1388.0	2616.0	1395.0
GR	2616.8	1403.0	2617.6	1411.0	2618.4	1419.0	2619.2	1427.0	2620.0	1435.0
ET			9.1						968.61	1057.
X1	7.157	94	980.0	1015.0	450	440	440			
GR	2632.0	900.0	2631.5	905.0	2631.0	910.0	2630.5	915.0	2630.0	920.0
	2629.5	925.0	2629.0	930.0	2628.5	935.0	2628.0	940.0	2626.0	945.0
	2624.0	955.0	2622.0	960.0	2620.0	965.0	2619.3	968.0	2618.7	970.0
GR	2618.0	975.0	2617.3	977.0	2616.7	978.0	2616.0	980.0	2615.8	985.0
GR	2615.5	990.0	2615.3	995.0	2615.0	1000.0	2615.3	1005.0	2615.7	1010.0
GR	2616.0	1015.0	2616.2	1020.2	2616.4	1025.5	2616.6	1030.7	2616.8	1035.9
GR	2616.9	1041.2	2617.1	1046.4	2617.3	1051.7	2617.5	1056.9	2617.7	1062.1
GR	2617.9	1067.4	2618.1	1072.6	2618.3	1077.9	2618.5	1083.1	2618.7	1088.3
GR	2618.9	1093.6	2619.1	1098.8	2619.2	1104.1	2619.4	1119.3	2619.6	1134.5
GR	2619.8	1140.8	2620.0	1150.0	2620.1	1155.2	2620.2	1160.4	2620.3	1165.7
GR	2620.4	1170.9	2620.4	1175.1	2620.6	1180.4	2620.6	1185.6	2620.7	1190.8
GR	2620.8	1192.1	2620.9	1197.3	2621.0	1200.5	2621.1	1207.7	2621.2	1212.9
GR	2621.3	1218.2	2621.4	1223.4	2621.4	1228.6	2621.6	1233.9	2621.6	1239.1
GR	2621.7	1244.3	2621.8	1249.6	2621.9	1254.8	2622.0	1255.0	2622.1	1260.2
GR	2622.2	1265.4	2622.2	1270.6	2622.3	1275.8	2622.4	1280.0	2622.5	1285.2
GR	2622.6	1290.4	2622.6	1291.6	2622.7	1296.8	2622.8	1298.0	2622.9	1300.2
GR	2623.0	1302.4	2623.0	1307.6	2623.1	1312.8	2623.2	1318.0	2623.3	1323.2
GR	2623.4	1328.4	2623.4	1333.6	2623.5	1338.8	2623.6	1344.0	2623.7	1349.2
GR	2623.8	1354.4	2623.8	1369.6	2623.9	1374.8	2624.0	1385.0		
ET			9.1						944.	1032.10
X1	7.275	95	985.0	1006.0	490	600	620			
GR	2632.0	415.6	2631.7	422.5	2631.3	429.3	2631.0	436.2	2630.7	447.1
GR	2630.3	453.9	2630.0	457.8	2629.3	474.5	2628.7	488.3	2628.3	495.1
GR	2628.0	502.0	2627.7	508.8	2627.4	515.5	2627.1	522.3	2626.8	530.1
GR	2626.5	535.8	2626.1	542.6	2625.9	551.4	2625.5	556.2	2625.2	565.9
GR	2624.9	572.7	2624.6	576.5	2624.3	588.2	2624.0	598.0	2623.7	603.7
	2623.3	608.3	2623.0	613.0	2623.5	617.5	2624.0	625.0	2624.5	642.5
	2625.0	660.0	2625.5	677.5	2626.0	685.0	2626.0	711.0	2625.8	717.8

	2625.6	724.6	2625.4	731.4	2625.2	738.2	2625.0	745.0	2625.2	751.6
GR	2625.4	758.2	2625.6	764.8	2625.8	771.4	2626.0	778.0	2625.8	784.7
GR	2625.6	791.4	2625.4	798.1	2625.2	804.8	2625.0	811.5	2624.8	818.2
GR	2624.6	824.9	2624.4	831.6	2624.2	838.3	2624.0	845.0	2623.9	852.1
GR	2623.9	859.2	2623.8	866.2	2623.7	873.3	2623.6	880.4	2623.5	887.5
GR	2623.5	894.5	2623.4	901.6	2623.3	908.7	2623.2	915.8	2623.1	922.8
GR	2623.1	929.9	2623.0	937.0	2622.6	943.6	2622.2	950.2	2621.8	956.8
GR	2621.4	963.4	2621.0	970.0	2620.5	977.5	2620.0	985.0	2619.5	992.5
GR	2619.0	1000.0	2619.5	1005.5	2620.0	1006.0	2621.0	1009.5	2622.0	1012.0
GR	2622.4	1015.6	2622.8	1017.2	2623.2	1024.8	2623.6	1028.4	2624.0	1030.0
GR	2624.7	1036.7	2625.3	1043.3	2626.0	1045.0	2626.7	1050.7	2627.3	1058.3
GR	2628.0	1060.0	2629.0	1067.0	2630.0	1074.0	2631.0	1081.0	2632.0	1088.0
ET			9.1						960.	1031.
X1	7.375	82	985.0	1015.0	485	500	530			
GR	2644.0	500.0	2643.2	509.8	2642.4	519.6	2641.6	529.4	2640.8	539.2
GR	2640.0	549.0	2639.6	558.0	2639.2	567.0	2638.8	576.0	2638.4	585.0
GR	2638.0	594.0	2637.6	603.0	2637.2	612.0	2636.8	621.0	2636.4	630.0
GR	2636.0	639.0	2635.8	647.3	2635.5	655.5	2635.3	663.8	2635.0	672.0
GR	2635.0	730.0	2634.9	738.9	2634.8	747.8	2634.7	756.7	2634.6	765.6
GR	2634.4	774.4	2634.3	783.3	2634.2	792.2	2634.1	801.1	2634.0	810.0
GR	2633.9	819.4	2633.8	828.9	2633.7	838.3	2633.6	847.8	2633.4	857.2
GR	2633.3	866.7	2633.2	876.1	2633.1	885.6	2633.0	895.0	2632.4	904.0
GR	2631.8	913.0	2631.2	922.0	2630.6	931.0	2630.0	940.0	2629.7	950.0
GR	2629.3	960.0	2629.0	970.0	2628.5	977.5	2628.0	985.0	2627.5	992.5
GR	2627.0	1000.0	2627.5	1007.5	2628.0	1015.0	2629.0	1022.0	2629.5	1031.0
	2630.0	1040.0	2630.2	1048.4	2630.4	1056.8	2630.6	1065.2	2630.8	1073.6
	2631.0	1082.0	2631.0	1135.0	2630.8	1145.0	2630.5	1155.0	2630.3	1165.0
GR	2630.0	1175.0	2630.3	1183.8	2630.5	1192.5	2630.8	1201.3	2631.0	1210.0
GR	2631.0	1308.0	2631.3	1318.3	2631.7	1328.7	2632.0	1339.0	2633.0	1347.0
GR	2634.0	1355.0	2635.0	1363.0	2636.0	1371.0	2637.0	1380.8	2638.0	1390.5
GR	2639.0	1400.3	2640.0	1410.0						
ET			9.1						928.77	1036.39
X1	7.468	95	989.0	1011.0	490	485	490			
GR	2644.0	809.0	2643.0	821.8	2642.0	834.5	2641.0	847.3	2640.0	860.0
GR	2639.2	866.0	2638.4	872.0	2637.6	878.0	2636.8	884.0	2636.0	890.0
GR	2635.7	896.1	2635.3	902.2	2635.0	908.3	2634.7	914.4	2634.3	920.6
GR	2634.0	926.7	2633.7	932.8	2633.3	938.9	2633.0	945.0	2632.5	951.3
GR	2632.0	957.5	2631.5	963.8	2631.0	970.0	2630.7	976.3	2630.3	982.7
GR	2630.0	989.0	2629.5	994.5	2629.0	1000.0	2629.5	1005.5	2630.0	1011.0
GR	2631.0	1016.5	2632.0	1022.0	2632.8	1027.8	2633.5	1033.5	2634.3	1039.3
GR	2635.0	1045.0	2635.3	1050.7	2635.6	1056.4	2635.9	1062.1	2636.1	1067.9
GR	2636.4	1073.6	2636.7	1079.3	2637.0	1085.0	2636.9	1091.0	2636.8	1097.0
GR	2636.6	1103.0	2636.5	1109.0	2636.4	1115.0	2636.3	1121.0	2636.1	1127.0
GR	2636.0	1133.0	2636.1	1139.1	2636.3	1145.1	2636.4	1151.2	2636.5	1157.3
GR	2636.6	1163.3	2636.8	1169.4	2636.9	1175.4	2637.0	1181.5	2637.1	1187.6
GR	2637.3	1193.6	2637.4	1199.7	2637.5	1205.8	2637.6	1211.8	2637.8	1217.9
GR	2637.9	1223.9	2638.0	1230.0	2638.1	1236.1	2638.3	1242.2	2638.5	1248.2
GR	2638.6	1254.3	2638.8	1260.4	2638.9	1266.5	2639.1	1272.5	2639.2	1278.6
GR	2639.4	1284.7	2639.5	1290.8	2639.7	1296.8	2639.9	1302.9	2640.0	1309.0
GR	2640.4	1315.2	2640.8	1321.4	2641.2	1327.6	2641.6	1333.8	2642.0	1340.0
	2642.5	1346.3	2643.0	1352.5	2643.5	1358.8	2644.0	1365.0	2644.7	1370.8
	2645.3	1376.7	2646.0	1382.5	2646.7	1388.3	2647.3	1394.2	2648.0	1400.0

			9.1						976.11	1075.
X1	7.559	95	992.5	1030.0	450	500	480			
GR	2652.0	895.0	2651.5	901.3	2651.0	907.5	2650.5	913.8	2650.0	920.0
GR	2649.5	926.3	2649.0	932.5	2648.5	938.8	2648.0	945.0	2646.0	951.8
GR	2644.0	958.5	2642.0	965.3	2640.0	972.0	2638.5	978.5	2637.0	985.0
GR	2636.0	992.5	2635.0	1000.0	2635.2	1007.0	2635.4	1014.0	2635.5	1020.0
GR	2635.8	1026.0	2636.0	1030.0	2637.0	1038.0	2637.0	1044.0	2637.0	1050.0
GR	2637.1	1056.3	2637.3	1062.5	2637.4	1068.8	2637.5	1075.0	2637.6	1081.3
GR	2637.8	1087.5	2637.9	1093.8	2638.0	1100.0	2638.1	1106.0	2638.3	1112.0
GR	2638.4	1118.0	2638.5	1124.0	2638.7	1130.0	2638.8	1136.0	2638.9	1142.0
GR	2639.1	1148.0	2639.2	1154.0	2639.3	1160.0	2639.5	1166.0	2639.6	1172.0
GR	2639.7	1178.0	2639.9	1184.0	2640.0	1190.0	2640.2	1195.9	2640.4	1201.9
GR	2640.6	1207.8	2640.8	1213.8	2641.0	1219.8	2641.2	1225.7	2641.4	1231.7
GR	2641.6	1237.6	2641.8	1243.6	2642.0	1249.5	2642.2	1255.4	2642.4	1261.4
GR	2642.6	1267.3	2642.8	1273.3	2643.0	1279.3	2643.2	1285.2	2643.4	1291.2
GR	2643.6	1297.1	2643.8	1303.1	2644.0	1309.0	2644.2	1315.2	2644.4	1321.3
GR	2644.6	1327.4	2644.8	1333.6	2645.0	1339.8	2645.2	1345.9	2645.4	1352.1
GR	2645.6	1358.2	2645.8	1364.3	2646.0	1370.5	2646.2	1376.7	2646.4	1382.8
GR	2646.6	1388.9	2646.8	1395.1	2647.0	1401.3	2647.2	1407.4	2647.4	1413.6
GR	2647.6	1419.7	2647.8	1425.8	2648.0	1432.0	2648.6	1437.7	2649.1	1443.4
GR	2649.7	1449.1	2650.3	1454.9	2650.9	1460.6	2651.4	1466.3	2652.0	1472.0
ET			9.1						956.18	1045.
X1	7.641	95	985.0	1013.5	450	370	435			
GR	2662.0	790.0	2661.0	800.0	2660.0	810.0	2659.1	818.9	2658.2	827.8
	2657.8	832.2	2657.3	836.7	2656.9	841.1	2656.0	850.0	2655.4	854.3
	2654.9	858.6	2654.3	862.9	2653.7	867.1	2653.1	871.4	2652.6	875.7
GR	2652.0	880.0	2651.5	884.4	2651.0	888.8	2650.5	893.1	2650.0	897.5
GR	2649.5	901.9	2649.0	906.3	2648.5	910.6	2648.0	915.0	2647.5	919.7
GR	2647.0	924.3	2646.5	929.0	2646.0	933.7	2645.5	938.3	2645.0	943.0
GR	2644.0	947.4	2643.0	951.8	2642.0	956.2	2641.0	960.6	2640.0	965.0
GR	2639.7	970.0	2639.3	975.0	2639.0	980.0	2638.8	985.0	2638.5	990.0
GR	2638.3	995.0	2638.0	1000.0	2638.3	1004.5	2638.5	1009.0	2638.8	1013.5
GR	2639.0	1018.0	2639.2	1022.4	2639.4	1026.8	2639.6	1031.2	2639.8	1035.6
GR	2640.0	1040.0	2640.3	1045.0	2640.7	1050.0	2641.0	1055.0	2641.2	1059.6
GR	2641.4	1064.1	2641.6	1068.7	2641.9	1073.3	2642.1	1077.9	2642.3	1082.4
GR	2642.5	1087.0	2642.7	1091.6	2642.9	1096.1	2643.1	1100.7	2643.4	1105.3
GR	2643.6	1109.9	2643.8	1114.4	2644.0	1119.0	2644.1	1123.4	2644.3	1127.7
GR	2644.4	1132.1	2644.6	1136.4	2644.7	1140.8	2644.9	1145.1	2645.0	1149.5
GR	2645.1	1153.9	2645.3	1158.2	2645.4	1162.6	2645.6	1166.9	2645.7	1171.3
GR	2645.9	1175.6	2646.0	1180.0	2646.2	1184.7	2646.4	1189.3	2646.7	1194.0
GR	2646.9	1198.7	2647.1	1203.3	2647.3	1208.0	2647.6	1212.7	2647.8	1217.3
GR	2648.0	1222.0	2649.0	1231.5	2650.0	1241.0	2651.0	1250.5	2652.0	1260.0
ET			9.1						970.	1070.
X1	7.747	80	982.0	1012.0	520	580	560			
GR	2656.0	519.0	2654.7	529.3	2653.3	539.7	2652.0	550.0	2651.6	559.8
GR	2651.2	569.6	2650.8	579.4	2650.4	589.2	2650.0	599.0	2649.0	605.0
GR	2649.0	613.6	2649.0	622.3	2649.0	630.9	2649.0	639.5	2649.0	648.2
GR	2649.0	656.8	2649.0	665.5	2649.0	674.1	2649.0	682.7	2649.0	691.4
GR	2649.0	700.0	2648.8	708.7	2648.7	717.3	2648.5	726.0	2648.3	734.7
	2648.2	743.3	2648.0	752.0	2647.3	761.7	2646.7	771.3	2646.0	781.0
	2646.3	790.5	2646.5	800.0	2646.8	809.5	2647.0	819.0	2647.0	828.3

	2647.0	837.7	2647.0	847.0	2647.0	856.3	2647.0	865.7	2647.0	875.0
	2646.9	884.3	2646.7	893.6	2646.6	902.9	2646.4	912.1	2646.3	921.4
GR	2646.1	930.7	2646.0	940.0	2646.0	950.0	2646.0	960.0	2646.0	970.0
GR	2645.0	982.0	2644.5	991.0	2644.0	1000.0	2645.0	1012.0	2646.0	1025.0
GR	2645.3	1035.0	2644.7	1045.0	2644.0	1055.0	2644.3	1063.3	2644.7	1071.7
GR	2645.0	1080.0	2645.6	1089.0	2646.2	1098.0	2646.8	1107.0	2647.4	1116.0
GR	2648.0	1125.0	2649.0	1133.8	2650.0	1142.5	2651.0	1151.3	2652.0	1160.0
GR	2652.3	1168.3	2652.7	1176.7	2653.0	1185.0	2653.3	1193.3	2653.7	1201.7
GR	2654.0	1210.0	2654.8	1220.0	2655.5	1230.0	2656.3	1240.0	2657.0	1250.0
ET			9.1						938.	1029.
X1	7.834	95	983.0	1007.5	410	490	460			
GR	2660.0	740.0	2658.3	744.7	2657.7	751.3	2657.1	757.9	2656.0	771.0
GR	2655.7	778.2	2655.1	792.6	2654.9	799.9	2654.3	814.3	2654.0	821.5
GR	2653.7	828.7	2653.1	843.1	2652.9	850.4	2652.3	864.8	2652.0	872.0
GR	2651.7	879.3	2651.4	886.6	2651.1	893.9	2650.8	901.2	2650.5	908.5
GR	2650.2	915.8	2649.9	923.1	2649.6	930.4	2649.3	937.7	2649.0	945.0
GR	2648.8	952.8	2648.5	960.5	2648.3	968.3	2648.0	976.0	2647.5	983.0
GR	2647.0	990.0	2646.0	1000.0	2647.5	1007.5	2648.0	1010.0	2648.5	1016.0
GR	2649.0	1022.0	2649.3	1029.0	2649.5	1036.0	2649.8	1043.0	2650.0	1050.0
GR	2650.2	1057.0	2650.4	1064.0	2650.6	1071.0	2650.7	1078.0	2650.9	1085.0
GR	2651.1	1092.0	2651.3	1099.0	2651.4	1106.0	2651.6	1113.0	2651.8	1120.0
GR	2652.0	1127.0	2652.1	1134.0	2652.2	1141.0	2652.3	1148.0	2652.4	1155.0
GR	2652.6	1162.0	2652.7	1169.0	2652.8	1176.0	2652.9	1183.0	2653.0	1190.0
GR	2653.3	1197.3	2653.6	1204.6	2653.8	1211.8	2654.1	1219.1	2654.4	1226.4
GR	2654.6	1233.6	2654.9	1240.9	2655.2	1248.2	2655.4	1255.4	2655.7	1262.7
	2656.0	1270.0	2656.1	1277.1	2656.1	1284.2	2656.2	1291.2	2656.3	1298.3
	2656.4	1305.4	2656.5	1312.5	2656.6	1326.6	2656.7	1333.7	2656.8	1340.8
GR	2656.9	1347.8	2657.0	1362.0	2657.2	1368.8	2657.5	1375.5	2657.7	1382.3
GR	2657.9	1389.1	2658.1	1395.8	2658.4	1402.6	2658.6	1409.4	2658.9	1416.2
GR	2659.1	1422.9	2659.3	1429.7	2659.5	1436.5	2659.8	1443.2	2660.0	1450.0
ET			9.1						976.18	1268.01
X1	7.908	87	995.0	1018.0	390	400	390			
GR	2668.0	819.0	2666.0	829.5	2664.0	840.0	2663.5	850.0	2663.0	860.0
GR	2662.5	870.0	2662.0	880.0	2661.6	888.2	2661.2	896.4	2660.8	904.6
GR	2660.4	912.8	2660.0	921.0	2659.5	929.5	2659.0	938.0	2658.5	946.5
GR	2658.0	955.0	2656.7	963.3	2655.3	971.7	2654.0	980.0	2652.0	990.0
GR	2651.0	995.0	2650.0	1000.0	2650.5	1009.0	2651.0	1018.0	2652.0	1027.0
GR	2652.3	1035.7	2652.7	1044.3	2653.0	1053.0	2653.0	1120.0	2653.1	1129.3
GR	2653.2	1138.6	2653.3	1147.8	2653.4	1157.1	2653.4	1166.4	2653.6	1175.6
GR	2653.6	1184.9	2653.7	1194.2	2653.8	1203.4	2653.9	1212.7	2654.0	1222.0
GR	2654.1	1231.2	2654.2	1240.4	2654.3	1249.7	2654.4	1258.9	2654.6	1268.1
GR	2654.7	1277.3	2654.8	1286.6	2654.9	1295.8	2655.0	1305.0	2655.2	1313.3
GR	2655.3	1321.7	2655.5	1330.0	2655.7	1338.3	2655.8	1346.7	2656.0	1355.0
GR	2656.3	1363.8	2656.6	1372.7	2656.9	1381.5	2657.2	1390.4	2657.5	1399.2
GR	2657.9	1408.1	2658.1	1416.9	2658.5	1425.8	2658.8	1434.6	2659.1	1443.5
GR	2659.4	1452.3	2659.7	1461.2	2660.0	1470.0	2660.2	1479.0	2660.4	1488.0
GR	2660.6	1497.0	2660.7	1506.0	2660.9	1515.0	2661.1	1524.0	2661.3	1533.0
GR	2661.4	1542.0	2661.6	1551.0	2661.8	1560.0	2662.0	1569.0	2662.3	1577.9
GR	2662.5	1586.8	2662.8	1595.6	2663.0	1604.5	2663.3	1613.4	2663.5	1622.3
GR	2663.8	1631.1	2664.0	1660.0						

			9.1						900.18	1147.42
X1	8.012	94	995.0	1019.0	580	450	550			
GR	2665.0	720.0	2664.8	730.0	2664.7	740.0	2664.5	750.0	2664.3	760.0
GR	2664.2	770.0	2664.0	780.0	2663.2	790.0	2662.4	800.0	2661.6	810.0
GR	2660.8	820.0	2660.4	830.0	2660.0	840.0	2659.5	850.0	2659.3	860.0
GR	2659.0	870.0	2658.8	880.8	2658.7	891.7	2658.5	902.5	2658.3	913.3
GR	2658.2	924.2	2658.0	935.0	2657.8	944.3	2657.5	953.5	2657.3	962.8
GR	2657.0	972.0	2656.5	981.0	2656.0	990.0	2655.0	995.0	2654.0	1000.0
GR	2654.5	1009.5	2655.0	1019.0	2656.0	1030.0	2656.3	1040.0	2656.7	1050.0
GR	2657.0	1060.0	2657.0	1070.0	2657.0	1080.0	2657.2	1090.0	2657.4	1100.0
GR	2657.6	1110.0	2657.8	1120.0	2658.0	1130.0	2658.3	1140.8	2658.7	1151.7
GR	2659.0	1162.5	2659.3	1173.3	2659.7	1184.2	2660.0	1195.0	2660.3	1205.0
GR	2660.6	1215.0	2660.9	1225.0	2661.1	1235.0	2661.4	1245.0	2661.7	1255.0
GR	2662.0	1265.0	2662.2	1274.5	2662.4	1284.0	2662.6	1293.5	2662.8	1303.0
GR	2663.0	1312.5	2663.2	1322.0	2663.4	1331.5	2663.6	1341.0	2663.8	1350.5
GR	2664.0	1360.0	2664.1	1370.0	2664.3	1380.0	2664.4	1390.0	2664.5	1400.0
GR	2664.6	1410.0	2664.8	1420.0	2664.9	1430.0	2665.0	1440.0	2665.1	1450.0
GR	2665.2	1460.0	2665.3	1470.0	2665.4	1480.0	2665.5	1490.0	2665.6	1500.0
GR	2665.7	1510.0	2665.8	1520.0	2665.9	1530.0	2666.0	1540.0	2666.2	1550.0
GR	2666.4	1560.0	2666.6	1570.0	2666.8	1580.0	2667.0	1590.0	2667.2	1600.0
GR	2667.4	1610.0	2667.6	1620.0	2667.8	1630.0	2668.0	1640.0		
ET			9.1						869.24	1064.10
X1	8.124	95	990.0	1015.0	575	575	590.			
GR	2672.0	740.0	2671.7	745.8	2671.4	751.6	2671.1	757.4	2670.9	763.1
	2670.6	768.9	2670.3	774.7	2670.0	780.5	2669.7	786.3	2669.4	792.1
	2669.1	797.9	2668.9	803.6	2668.6	809.4	2668.3	815.2	2668.0	821.0
GR	2667.5	827.4	2667.0	833.8	2666.5	840.1	2666.0	846.5	2665.5	852.9
GR	2665.0	859.3	2664.5	865.6	2664.0	872.0	2663.9	878.2	2663.8	884.4
GR	2663.7	890.5	2663.6	896.7	2663.6	902.9	2663.4	909.1	2663.4	915.3
GR	2663.3	921.5	2663.2	927.6	2663.1	933.8	2663.0	940.0	2662.8	946.5
GR	2662.7	953.0	2662.5	959.5	2662.3	966.0	2662.2	972.5	2662.0	979.0
GR	2661.0	984.5	2660.0	990.0	2659.5	995.0	2659.0	1000.0	2659.5	1007.5
GR	2660.0	1015.0	2661.0	1021.0	2662.0	1027.0	2662.5	1033.8	2663.0	1040.5
GR	2663.5	1047.3	2664.0	1054.0	2664.1	1060.4	2664.3	1066.8	2664.4	1073.1
GR	2664.5	1079.5	2664.6	1085.9	2664.8	1092.3	2664.9	1098.6	2665.0	1105.0
GR	2665.5	1110.8	2666.0	1116.7	2666.5	1122.5	2667.0	1128.3	2667.5	1134.2
GR	2668.0	1140.0	2668.5	1147.5	2669.0	1155.0	2669.0	1175.0	2669.1	1181.0
GR	2669.3	1187.0	2669.4	1193.0	2669.5	1199.0	2669.6	1205.0	2669.8	1211.0
GR	2669.9	1217.0	2670.0	1223.0	2670.1	1229.1	2670.3	1235.3	2670.4	1241.4
GR	2670.5	1247.5	2670.6	1253.6	2670.8	1259.8	2670.9	1265.9	2671.0	1272.0
GR	2671.1	1277.8	2671.2	1283.5	2671.3	1289.3	2671.4	1300.8	2671.5	1306.5
GR	2671.6	1312.3	2671.7	1318.0	2671.8	1323.8	2671.9	1335.3	2672.0	1341.0
ET			9.1						953.	1052.99
X1	8.207	82	979.0	1015.0	340	470	440			
GR	2680.0	55.0	2679.9	76.1	2679.8	87.3	2679.6	98.4	2679.5	109.5
GR	2679.4	120.6	2679.3	131.8	2679.1	142.9	2679.0	154.0	2678.8	165.4
GR	2678.5	176.8	2678.3	188.1	2678.0	199.5	2677.8	210.9	2677.5	222.3
GR	2677.3	233.6	2677.0	245.0	2676.9	256.5	2676.8	267.9	2676.7	279.4
GR	2676.6	290.8	2676.6	302.3	2676.4	313.7	2676.4	325.2	2676.3	336.6
	2676.2	348.1	2676.1	359.5	2676.0	371.0	2675.8	382.6	2675.6	394.3
	2675.4	405.9	2675.3	417.5	2675.1	429.2	2674.9	440.8	2674.7	452.5

	2674.6	464.1	2674.4	475.7	2674.2	487.4	2674.0	499.0	2674.0	610.0
	2673.7	620.0	2673.3	630.0	2673.0	640.0	2673.0	725.0	2672.8	737.3
GR	2672.7	749.7	2672.5	762.0	2672.3	774.3	2672.2	786.7	2672.0	799.0
GR	2671.2	810.2	2670.4	821.4	2669.6	832.6	2668.8	843.8	2668.0	855.0
GR	2667.8	866.3	2667.5	877.5	2667.3	888.8	2667.0	900.0	2666.7	959.7
GR	2666.3	969.3	2666.0	979.0	2665.5	989.5	2665.0	1000.0	2666.0	1015.0
GR	2666.7	1026.7	2667.3	1038.3	2668.0	1050.0	2670.0	1062.5	2672.0	1075.0
GR	2673.3	1085.3	2674.7	1095.7	2676.0	1106.0	2676.3	1115.7	2676.7	1125.3
GR	2677.0	1135.0	2680.0	1152.0	2682.7	1164.7	2685.3	1177.3	2688.0	1190.0
GR	2690.0	1200.0	2692.0	1210.0						
ET			9.1						928.	1033.
X1	8.317	95	980.0	1012.0	620	540	580			
GR	2684.0	540.0	2683.8	547.3	2683.6	554.5	2683.4	561.8	2683.3	569.1
GR	2683.1	576.4	2682.9	583.6	2682.7	590.9	2682.6	598.2	2682.4	605.5
GR	2682.2	612.7	2682.0	620.0	2681.8	627.3	2681.6	634.5	2681.4	641.8
GR	2681.3	649.1	2681.1	656.4	2680.9	663.6	2680.7	670.9	2680.6	678.2
GR	2680.4	685.5	2680.2	692.7	2680.0	700.0	2679.8	706.9	2679.5	713.8
GR	2679.3	720.6	2679.0	727.5	2678.8	734.4	2678.5	741.3	2678.3	748.1
GR	2678.0	755.0	2677.8	761.9	2677.5	768.8	2677.3	775.6	2677.0	782.5
GR	2676.8	789.4	2676.5	796.3	2676.3	803.1	2676.0	810.0	2675.8	816.9
GR	2675.6	823.8	2675.4	830.7	2675.2	837.6	2675.0	844.5	2674.8	851.4
GR	2674.6	858.3	2674.4	865.2	2674.2	872.1	2674.0	879.0	2673.8	886.0
GR	2673.5	893.0	2673.3	900.0	2673.0	907.0	2672.8	914.0	2672.5	921.0
GR	2672.3	928.0	2672.0	935.0	2671.8	941.8	2671.5	948.5	2671.3	955.3
GR	2671.0	962.0	2671.0	980.0	2670.7	986.7	2670.3	993.3	2670.0	1000.0
	2670.5	1006.0	2671.0	1012.0	2672.0	1020.0	2672.3	1026.7	2672.7	1033.3
	2673.0	1040.0	2673.3	1046.3	2673.5	1052.5	2673.8	1058.8	2674.0	1065.0
GR	2674.0	1152.0	2674.2	1158.8	2674.4	1165.6	2674.6	1172.4	2674.8	1179.2
GR	2675.0	1186.0	2675.2	1192.8	2675.4	1199.6	2675.6	1206.4	2675.8	1213.2
GR	2676.0	1220.0	2676.3	1226.7	2676.7	1233.3	2677.0	1240.0	2678.0	1247.0
GR	2679.0	1254.0	2680.0	1261.0	2681.3	1268.0	2682.7	1275.0	2684.0	1282.0
ET			9.1						923.	1023.84
X1	8.408	95	988.0	1011.0	445	480	480			
GR	2689.0	630.0	2688.8	634.9	2688.6	639.8	2688.4	644.7	2688.2	649.6
GR	2688.0	654.5	2687.8	659.4	2687.6	664.3	2687.4	669.2	2687.2	674.1
GR	2687.0	679.0	2686.8	684.1	2686.6	689.1	2686.4	694.2	2686.2	699.3
GR	2686.0	704.3	2685.8	709.4	2685.6	714.5	2685.4	719.5	2685.2	724.6
GR	2685.0	729.7	2684.8	734.7	2684.6	739.8	2684.4	744.9	2684.2	749.9
GR	2684.0	755.0	2683.6	760.0	2683.1	765.0	2682.7	770.0	2682.2	775.0
GR	2681.8	780.0	2681.3	785.0	2680.9	790.0	2680.4	795.0	2680.0	800.0
GR	2679.8	805.0	2679.6	810.0	2679.4	815.0	2679.2	820.0	2679.0	825.0
GR	2678.9	829.9	2678.8	834.8	2678.7	839.7	2678.6	844.6	2678.6	849.5
GR	2678.4	854.5	2678.4	859.4	2678.3	864.3	2678.2	869.2	2678.1	874.1
GR	2678.0	879.0	2677.9	884.1	2677.8	889.2	2677.7	894.3	2677.6	899.4
GR	2677.6	904.5	2677.4	909.5	2677.4	914.6	2677.3	919.7	2677.2	924.8
GR	2677.1	929.9	2677.0	935.0	2676.9	940.0	2676.7	945.0	2676.6	950.0
GR	2676.4	955.0	2676.3	960.0	2676.1	965.0	2676.0	970.0	2676.0	988.0
GR	2675.5	994.0	2675.0	1000.0	2675.5	1005.5	2676.0	1011.0	2677.0	1015.5
GR	2678.0	1020.0	2679.0	1024.5	2680.0	1029.0	2681.3	1034.3	2682.5	1039.5
GR	2683.8	1044.8	2685.0	1050.0	2686.2	1055.0	2687.3	1060.0	2688.5	1065.0
	2689.7	1070.0	2690.8	1075.0	2692.0	1080.0	2693.0	1084.9	2694.0	1089.8
	2695.0	1094.6	2696.0	1099.5	2697.0	1104.4	2698.0	1109.3	2700.0	1119.0

```
                          9.1                                                971.03      1071.
X1    8.510       95     990.0    1010.0     450     510     540
GR   2692.0    660.0    2691.8     687.5  2691.7   696.7  2691.6     705.8  2691.5     715.0
GR   2691.4    724.2    2691.3     733.3  2691.3   742.5  2691.2     751.7  2691.1     760.8
GR   2691.0    770.0    2690.9     779.2  2690.9   788.5  2690.8     797.7  2690.7     806.9
GR   2690.6    816.2    2690.5     825.4  2690.5   834.6  2690.4     843.8  2690.3     853.1
GR   2690.2    862.3    2690.1     871.5  2690.1   880.8  2690.0     890.0  2689.8     899.4
GR   2689.5    908.8    2689.3     918.1  2689.0   927.5  2688.8     936.9  2688.5     946.3
GR   2688.3    955.6    2688.0     960.0  2686.0   965.0  2684.0     975.0  2680.0     990.0
GR   2679.0   1000.0    2680.0    1010.0  2681.3  1015.0  2682.7    1020.0  2684.0    1028.0
GR   2684.0   1060.0    2684.5    1070.0  2684.4  1079.2  2684.3    1088.3  2684.1    1097.5
GR   2684.0   1106.7    2683.9    1115.8  2683.8  1125.0  2683.6    1134.2  2683.5    1143.3
GR   2683.4   1152.5    2683.3    1161.7  2683.1  1170.8  2683.0    1180.0  2683.1    1188.9
GR   2683.2   1197.8    2683.3    1206.7  2683.4  1215.6  2683.6    1224.4  2683.7    1233.3
GR   2683.8   1242.2    2683.9    1251.1  2684.0  1260.0  2684.5    1268.3  2685.0    1276.7
GR   2685.5   1285.0    2686.0    1293.3  2686.5  1301.7  2687.0    1310.0  2686.9    1319.2
GR   2686.7   1328.5    2686.5    1337.7  2686.4  1346.9  2686.2    1356.2  2686.1    1365.4
GR   2685.9   1374.6    2685.8    1383.8  2685.6  1393.1  2685.5    1402.3  2685.3    1411.5
GR   2685.1   1420.8    2685.0    1430.0  2685.8  1440.0  2686.5    1450.0  2687.3    1460.0
GR   2688.0   1470.0    2688.4    1478.9  2688.9  1487.8  2689.3    1496.7  2689.8    1505.6
GR   2690.2   1514.4    2690.7    1523.3  2691.1  1532.2  2691.6    1536.1  2692.0    1540.0

ET            5.1       9.1                511.    1060.                          934.    1033.76
          ET RECORD: STA 1060 ELIMINATE INEFFECTIVE
                     FLOW AREA IN RIGHT OVERBANK
X1    8.603       89     991.0    1012.5     510     440     490
GR   2700.0    510.0    2699.9     519.0  2699.8   528.0  2699.7     547.0  2699.6     566.0
GR   2699.4    575.0    2699.3     584.0  2699.2   593.0  2699.1     602.0  2699.0     611.0
GR   2698.6    620.9    2698.1     630.7  2697.7   640.6  2697.3     650.4  2696.9     660.3
GR   2696.4    670.1    2696.0     680.0  2694.7   690.0  2693.3     700.0  2692.0     710.0
GR   2691.8    720.0    2691.7     730.0  2691.5   740.0  2691.3     750.0  2691.2     760.0
GR   2691.0    770.0    2690.9     779.4  2690.8   788.8  2690.6     798.1  2690.5     807.5
GR   2690.4    816.9    2690.3     826.3  2690.1   835.6  2690.0     845.0  2689.9     855.0
GR   2689.7    865.0    2689.6     875.0  2689.4   885.0  2689.3     895.0  2689.1     905.0
GR   2689.0    915.0    2689.0     969.0  2688.0   982.0  2687.5     991.0  2687.0    1000.0
GR   2687.0   1005.0    2687.5    1012.5  2688.0  1020.0  2692.0    1040.0  2692.5    1050.0
GR   2693.0   1060.0    2692.7    1068.3  2692.3  1076.7  2692.0    1085.0  2691.7    1094.2
GR   2691.3   1103.3    2691.0    1112.5  2690.7  1121.7  2690.3    1130.8  2690.0    1140.0
GR   2690.0   1215.0    2690.3    1224.1  2690.6  1233.3  2690.9    1242.4  2691.1    1251.6
GR   2691.4   1260.7    2691.7    1269.9  2692.0  1279.0  2692.4    1288.0  2692.9    1297.0
GR   2693.3   1306.0    2693.8    1315.0  2694.2  1324.0  2694.7    1333.0  2695.1    1342.0
GR   2695.6   1351.0    2696.0    1360.0  2696.0  1405.0  2695.3    1413.3  2694.7    1421.7
GR   2694.0   1430.0    2694.5    1440.0  2695.0  1450.0  2695.5    1460.0  2696.0    1470.0
GR   2697.0   1480.0    2698.0    1490.0  2699.0  1500.0  2700.0    1510.0

ET                      9.1                                                950.17      1044.
X1    8.715       93     985.0    1015.0     515     615     590
GR   2705.0    730.0    2704.9     737.0  2704.8   744.0  2704.7     751.0  2704.6     758.0
GR   2704.5    765.0    2704.4     772.0  2704.3   779.0  2704.2     786.0  2704.1     793.0
GR   2704.0    800.0    2703.8     806.7  2703.6   813.3  2703.3     820.0  2703.1     826.7
GR   2702.9    833.3    2702.7     840.0  2702.4   846.7  2702.2     853.3  2702.0     860.0
GR   2701.8    867.0    2701.6     874.0  2701.4   881.0  2701.2     888.0  2701.0     895.0
GR   2700.8    902.0    2700.6     909.0  2700.4   916.0  2700.2     923.0  2700.0     930.0
```

	2699.3	936.7	2698.7	943.3	2698.0	950.0	2697.3	956.7	2696.7	963.3
	2696.0	970.0	2695.3	977.5	2694.5	985.0	2693.8	992.5	2693.0	1000.0
GR	2693.8	1007.5	2694.5	1015.0	2695.3	1022.5	2696.0	1030.0	2696.2	1036.7
GR	2696.4	1043.5	2696.5	1050.2	2696.7	1057.0	2696.9	1063.7	2697.0	1070.4
GR	2697.2	1077.2	2697.4	1083.9	2697.6	1090.7	2697.7	1097.4	2697.9	1104.1
GR	2698.1	1110.9	2698.3	1117.6	2698.4	1124.3	2698.6	1131.1	2698.8	1137.8
GR	2699.0	1144.6	2699.1	1151.3	2699.3	1158.0	2699.5	1164.8	2699.6	1167.5
GR	2699.8	1168.3	2700.0	1172.0	2700.6	1178.5	2701.2	1184.1	2701.9	1190.6
GR	2702.5	1197.2	2703.1	1203.7	2703.7	1209.2	2704.3	1215.8	2704.9	1221.3
GR	2705.5	1226.8	2706.1	1231.4	2706.8	1237.9	2707.4	1242.5	2708.0	1247.0
GR	2708.3	1252.9	2708.6	1258.8	2708.9	1264.8	2709.2	1270.7	2709.5	1275.6
GR	2709.9	1281.5	2710.1	1288.5	2710.5	1295.4	2710.8	1302.3	2711.1	1309.2
GR	2711.4	1316.2	2711.7	1323.1	2712.0	1330.0				
ET			9.1						944.	1044.
X1	8.798	95	991.0	1014.7	440	400	440			
GR	2708.2	630.0	2707.4	636.0	2707.0	639.0	2706.8	645.0	2706.6	651.0
GR	2706.5	657.0	2706.3	663.0	2706.2	669.0	2706.0	675.0	2705.8	681.0
GR	2705.7	687.0	2705.5	693.0	2705.4	699.0	2705.2	705.0	2705.0	711.0
GR	2704.9	717.0	2704.7	723.0	2704.6	729.0	2704.4	735.0	2704.2	741.0
GR	2704.1	747.0	2703.9	753.0	2703.7	758.9	2703.6	764.9	2703.4	770.8
GR	2703.2	776.8	2703.1	782.8	2702.9	788.7	2702.7	794.7	2702.6	800.6
GR	2702.4	806.6	2702.2	812.5	2702.0	818.5	2701.9	824.5	2701.7	830.4
GR	2701.5	836.4	2701.4	842.3	2701.2	848.3	2701.0	854.3	2700.9	860.2
GR	2700.7	866.2	2700.5	872.1	2700.3	878.1	2700.2	884.0	2700.0	890.0
GR	2699.8	896.0	2699.6	902.0	2699.4	908.0	2699.2	914.0	2699.0	920.0
	2698.8	926.0	2698.6	932.0	2698.4	938.0	2698.2	944.0	2698.0	950.0
	2698.0	985.0	2697.6	991.0	2697.2	997.0	2697.0	1000.0	2697.2	1005.9
GR	2697.5	1011.8	2697.6	1014.7	2697.8	1020.6	2698.1	1026.5	2698.3	1032.3
GR	2698.5	1038.2	2698.8	1044.1	2699.0	1050.0	2699.3	1056.3	2699.6	1062.6
GR	2699.9	1068.9	2700.0	1072.0	2700.9	1078.2	2701.8	1084.4	2702.7	1090.7
GR	2703.6	1096.9	2704.2	1103.0	2704.7	1109.0	2705.1	1115.0	2705.6	1121.0
GR	2706.0	1127.0	2706.4	1133.0	2706.9	1139.0	2707.3	1145.0	2707.8	1151.0
GR	2708.2	1157.0	2708.5	1162.9	2708.8	1168.8	2709.2	1174.7	2709.5	1180.6
GR	2709.8	1186.5	2710.2	1192.5	2710.5	1198.4	2710.8	1204.3	2712.0	1225.0
ET			9.1						948.07	1048.
X1	8.889	95	989.0	1018.0	520	390	480			
GR	2716.0	600.0	2715.8	602.4	2715.5	604.8	2715.3	607.1	2715.0	615.5
GR	2714.8	623.9	2714.5	632.3	2714.3	640.6	2714.0	649.0	2713.8	656.6
GR	2713.6	664.2	2713.4	671.8	2713.2	679.4	2713.0	687.0	2712.8	694.6
GR	2712.6	702.2	2712.4	709.8	2712.2	717.4	2712.0	725.0	2711.8	732.5
GR	2711.7	740.0	2711.5	747.5	2711.3	755.0	2711.2	762.5	2711.0	770.0
GR	2710.7	778.2	2710.4	786.4	2710.2	794.5	2709.9	802.7	2709.6	810.9
GR	2709.4	819.1	2709.1	827.3	2708.8	835.5	2708.6	843.6	2708.3	851.8
GR	2708.0	860.0	2707.9	867.5	2707.8	875.0	2707.6	882.5	2707.5	890.0
GR	2707.4	897.5	2707.3	905.0	2707.1	912.5	2707.0	920.0	2706.6	927.9
GR	2706.1	935.7	2705.7	943.6	2705.3	951.4	2704.9	959.3	2704.4	967.1
GR	2704.0	975.0	2703.5	982.0	2703.0	989.0	2702.0	1000.0	2702.5	1009.0
GR	2703.0	1018.0	2703.0	1055.0	2703.5	1064.0	2704.0	1073.0	2704.1	1080.7
GR	2704.2	1088.4	2704.3	1096.1	2704.4	1103.8	2704.5	1111.5	2704.6	1119.2
GR	2704.7	1126.9	2704.8	1134.6	2704.9	1142.3	2705.0	1150.0	2705.2	1157.6
	2705.4	1165.2	2705.6	1172.8	2705.8	1180.4	2706.0	1188.0	2706.3	1196.4
	2706.5	1204.8	2706.8	1213.1	2707.0	1221.5	2707.3	1229.9	2707.5	1238.3

	2707.8	1246.6	2708.0	1255.0	2708.5	1263.4	2709.0	1271.8	2709.5	1280.1
	2710.0	1288.5	2710.5	1296.9	2711.0	1305.3	2711.5	1313.6	2712.0	1322.0
GR	2712.8	1329.4	2713.6	1336.8	2714.4	1344.2	2715.2	1351.6	2716.0	1370.0
ET		5.1	9.1		930.	1179.			942.74	1120.

ET RECORD: STA 930 ELIMINATE INEFFECTIVE
FLOW AREA IN LEFT OVERBANK

X1	8.984	92	984.0	1005.0	470	530	500			
GR	2720.0	479.0	2719.7	486.2	2719.4	493.3	2719.1	500.5	2718.8	507.6
GR	2718.5	514.8	2718.1	521.9	2717.9	529.1	2717.5	536.2	2717.2	543.4
GR	2716.9	550.5	2716.6	557.7	2716.3	564.8	2716.0	572.0	2715.9	578.8
GR	2715.8	585.5	2715.8	592.3	2715.7	599.0	2715.6	605.8	2715.5	612.5
GR	2715.4	619.3	2715.3	626.0	2715.3	632.8	2715.2	639.5	2715.1	646.3
GR	2715.0	653.0	2714.8	660.2	2714.5	667.5	2714.3	674.7	2714.1	681.9
GR	2713.9	689.2	2713.6	696.4	2713.4	703.6	2713.1	710.8	2712.9	718.1
GR	2712.7	725.3	2712.5	732.5	2712.2	739.8	2712.0	747.0	2711.8	753.4
GR	2711.6	759.8	2711.4	766.2	2711.2	772.6	2711.0	779.0	2711.0	786.0
GR	2711.0	863.0	2711.0	870.0	2711.3	876.3	2711.5	882.5	2711.8	888.8
GR	2712.0	895.0	2712.7	903.0	2713.3	911.0	2714.0	919.0	2714.0	924.5
GR	2714.0	930.0	2713.3	936.7	2712.7	943.3	2712.0	950.0	2711.0	956.7
GR	2710.7	963.3	2710.0	970.0	2709.8	977.0	2709.5	984.0	2709.2	991.0
GR	2709.0	1000.0	2709.5	1005.0	2710.0	1012.0	2710.4	1019.0	2710.8	1026.0
GR	2711.0	1033.0	2711.0	1040.0	2711.0	1047.0	2711.1	1053.9	2711.2	1060.8
GR	2711.3	1067.7	2711.4	1074.6	2711.5	1081.4	2711.6	1088.3	2711.7	1095.2
GR	2711.8	1102.1	2711.9	1109.0	2712.0	1119.2	2712.3	1123.3	2712.5	1130.5
GR	2712.7	1137.7	2712.8	1144.8	2713.0	1152.0	2714.5	1158.5	2716.0	1165.0
	2718.0	1172.5	2720.0	1180.0						
ET			9.1						951.	1078.88
X1	9.043	95	990.0	1010.0	310	280	310			
GR	2724.0	460.0	2723.6	467.4	2723.1	474.9	2722.7	482.3	2722.3	489.7
GR	2721.9	497.1	2721.4	504.6	2721.0	512.0	2721.2	518.9	2721.4	525.9
GR	2721.5	532.8	2721.7	539.8	2721.9	546.7	2722.1	553.7	2722.2	560.6
GR	2722.4	567.5	2722.6	574.5	2722.8	581.4	2722.9	588.3	2723.1	595.3
GR	2723.3	602.2	2723.5	609.2	2723.6	616.1	2723.8	623.1	2724.0	630.0
GR	2723.6	637.0	2723.2	644.0	2722.8	651.0	2722.4	658.0	2722.0	665.0
GR	2721.5	671.8	2721.0	678.5	2720.5	685.3	2720.0	692.0	2719.7	699.2
GR	2719.3	706.3	2719.0	713.5	2718.7	720.7	2718.3	727.8	2718.0	735.0
GR	2718.0	774.4	2718.0	781.0	2717.7	788.3	2717.4	795.6	2717.1	802.9
GR	2716.9	810.1	2716.6	817.4	2716.3	824.7	2716.0	832.0	2716.2	839.6
GR	2716.4	847.2	2716.6	854.8	2716.8	862.4	2717.0	870.0	2716.8	876.3
GR	2716.5	882.5	2716.3	888.8	2716.0	895.0	2715.6	902.0	2715.2	909.0
GR	2714.8	916.0	2714.4	923.0	2714.0	930.0	2713.7	937.0	2713.4	944.0
GR	2713.1	951.0	2712.9	958.0	2712.6	965.0	2712.3	972.0	2712.0	979.0
GR	2711.5	984.5	2711.0	990.0	2710.0	1000.0	2711.0	1010.0	2711.5	1017.5
GR	2712.0	1025.0	2712.3	1031.7	2712.6	1038.4	2712.9	1045.1	2713.1	1051.9
GR	2713.4	1058.6	2713.7	1065.3	2714.0	1072.0	2714.7	1078.0	2715.3	1084.0
GR	2716.0	1090.0	2717.3	1096.0	2718.7	1102.0	2720.0	1108.0	2721.3	1115.3
GR	2722.7	1122.7	2724.0	1130.0	2725.3	1136.7	2726.7	1143.3	2728.0	1150.0

			9.1						957.25	1033.27
X1	9.142	94	985.0	1010.0	515	530	525			
GR	2732.0	890.0	2731.7	892.4	2731.4	894.9	2731.1	897.3	2730.9	899.7
GR	2730.6	902.1	2730.3	904.6	2730.0	907.0	2729.7	909.4	2729.4	911.9
GR	2729.1	914.3	2728.9	916.7	2728.6	919.1	2728.3	921.6	2728.0	924.0
GR	2727.6	926.6	2727.2	929.2	2726.8	931.8	2726.4	934.4	2726.0	937.0
GR	2725.6	939.6	2725.2	942.2	2724.8	944.8	2724.4	947.4	2724.0	950.0
GR	2723.3	952.5	2722.7	955.0	2722.0	957.5	2721.3	960.0	2720.7	962.5
GR	2720.0	965.0	2719.8	967.5	2719.5	970.0	2719.3	972.5	2719.0	975.0
GR	2718.8	977.5	2718.5	980.0	2718.3	982.5	2718.0	985.0	2717.8	987.5
GR	2717.7	990.0	2717.5	992.5	2717.3	995.0	2717.2	997.5	2717.0	1000.0
GR	2717.3	1002.5	2717.5	1005.0	2717.8	1007.5	2718.0	1010.0	2718.5	1012.3
GR	2719.0	1014.7	2719.5	1017.0	2720.0	1019.3	2720.5	1021.7	2721.0	1024.0
GR	2721.3	1026.6	2721.6	1029.2	2721.9	1031.8	2722.2	1034.4	2722.5	1037.0
GR	2722.8	1039.6	2723.1	1042.2	2723.4	1044.8	2723.7	1047.4	2724.0	1050.0
GR	2724.3	1052.4	2724.7	1054.8	2725.0	1057.3	2725.3	1059.7	2725.7	1062.1
GR	2726.0	1064.5	2726.3	1066.9	2726.7	1069.3	2727.0	1071.8	2727.3	1074.2
GR	2727.7	1076.6	2728.0	1079.0	2728.5	1081.6	2729.0	1084.3	2729.5	1086.9
GR	2730.0	1089.5	2730.5	1092.1	2731.0	1094.8	2731.5	1097.4	2732.0	1100.0
GR	2732.4	1102.4	2732.9	1104.9	2733.3	1107.3	2733.8	1109.8	2734.2	1112.2
GR	2734.7	1114.7	2735.1	1117.1	2735.6	1119.6	2736.0	1122.0		
ET			9.1						920.	1017.68
X1	9.246	95	990.0	1010.0	500	550	550			
GR	2736.0	754.0	2735.6	759.0	2735.2	764.1	2734.9	766.6	2734.5	771.7
	2734.1	776.7	2733.9	779.3	2733.5	784.3	2733.1	789.4	2732.8	791.9
	2732.4	797.0	2732.0	802.0	2731.6	807.0	2731.2	811.9	2730.9	814.4
GR	2730.5	819.3	2730.1	824.3	2729.9	826.7	2729.7	829.2	2729.5	831.7
GR	2729.3	834.2	2729.1	836.6	2728.8	839.1	2728.6	841.6	2728.4	844.0
GR	2728.2	846.5	2728.0	849.0	2727.9	854.1	2727.8	859.1	2727.7	861.7
GR	2727.6	866.7	2727.5	869.3	2727.4	874.3	2727.3	879.4	2727.2	881.9
GR	2727.1	887.0	2727.0	889.5	2726.9	894.6	2726.8	899.6	2726.7	902.2
GR	2726.6	907.2	2726.5	909.8	2726.4	914.8	2726.3	919.9	2726.2	922.4
GR	2726.1	927.5	2726.0	930.0	2725.9	932.5	2725.8	935.0	2725.7	937.5
GR	2725.6	940.0	2725.4	942.5	2725.3	945.0	2725.2	947.5	2725.1	950.0
GR	2725.0	952.5	2724.9	955.0	2724.8	957.5	2724.7	960.0	2724.6	962.5
GR	2724.4	965.0	2724.3	967.5	2724.2	970.0	2724.1	972.5	2724.0	975.0
GR	2724.0	990.0	2723.8	992.5	2723.5	995.0	2723.3	997.5	2723.0	1000.0
GR	2723.3	1002.5	2723.5	1005.0	2723.8	1007.5	2724.0	1010.0	2725.0	1012.3
GR	2726.0	1014.5	2727.0	1016.8	2728.0	1019.0	2728.5	1021.6	2729.0	1024.3
GR	2729.5	1026.9	2730.0	1029.5	2730.5	1032.1	2731.0	1034.8	2731.5	1037.4
GR	2732.0	1040.0	2732.3	1042.5	2732.7	1045.0	2733.0	1047.5	2733.7	1052.5
GR	2734.0	1055.0	2734.7	1060.0	2735.0	1062.5	2736.0	1065.0	2737.0	1070.0
ET			9.1						963.	1063.43
X1	9.313	94	988.0	1010.0	340	350	350			
GR	2744.0	755.0	2743.2	761.0	2742.8	763.5	2742.0	770.5	2741.2	774.5
GR	2740.4	780.5	2740.0	785.0	2739.5	793.7	2738.9	802.3	2738.4	811.0
GR	2738.1	815.3	2737.9	819.7	2737.6	824.0	2737.3	828.3	2737.1	832.7
GR	2736.8	837.0	2736.5	841.3	2736.3	845.7	2736.0	865.0	2735.6	867.4
GR	2735.1	870.6	2734.7	873.3	2734.2	876.1	2733.8	878.9	2733.3	881.7
	2732.9	884.4	2732.4	887.6	2732.0	890.0	2731.9	894.3	2731.8	898.6
	2731.7	902.9	2731.6	907.1	2731.5	911.4	2731.4	915.7	2731.3	920.0

	2731.2	924.3	2731.1	928.6	2731.1	932.9	2730.9	937.1	2730.9	941.4
	2730.8	945.7	2730.7	950.0	2730.6	954.3	2730.5	958.6	2730.4	962.9
GR	2730.3	967.1	2730.2	971.4	2730.1	975.7	2730.0	980.0	2729.8	984.0
GR	2729.6	988.0	2729.4	992.0	2729.2	996.0	2729.0	1000.0	2729.3	1005.0
GR	2729.7	1010.0	2730.0	1015.0	2730.3	1019.4	2730.5	1023.8	2730.8	1028.1
GR	2731.0	1032.5	2731.1	1036.9	2731.3	1041.3	2731.5	1045.6	2731.7	1050.0
GR	2731.8	1054.3	2731.9	1058.6	2732.2	1062.9	2735.8	1067.1	2736.7	1071.4
GR	2738.9	1075.7	2740.0	1080.0	2740.9	1084.3	2741.8	1088.6	2742.7	1092.9
GR	2743.6	1097.3	2744.6	1101.6	2745.4	1105.9	2746.4	1110.2	2747.3	1114.6
GR	2748.2	1118.9	2749.1	1123.2	2750.0	1127.5	2750.9	1131.8	2751.8	1136.1
GR	2752.7	1140.4	2753.6	1144.8	2754.6	1149.1	2755.4	1153.4	2756.4	1157.7
GR	2757.3	1162.1	2758.2	1166.4	2759.1	1170.7	2760.0	1175.0		
ET			9.1						927.33	1030.16
X1	9.430	95	982.5	1006.0	620	600	620			
GR	2748.0	805.0	2747.0	811.0	2746.0	817.0	2745.0	823.0	2744.0	829.0
GR	2743.4	835.0	2743.1	838.0	2742.8	841.0	2742.5	844.0	2742.1	847.0
GR	2741.9	850.0	2741.5	853.0	2741.2	856.0	2740.9	859.0	2740.6	862.0
GR	2740.3	865.0	2740.0	868.0	2740.0	870.9	2740.0	873.9	2740.0	876.8
GR	2740.0	879.7	2740.0	882.6	2740.0	885.6	2740.0	888.5	2740.0	891.4
GR	2740.0	894.4	2740.0	897.3	2740.0	900.2	2740.0	903.1	2740.0	906.1
GR	2740.0	909.0	2739.7	912.1	2739.4	915.2	2739.1	918.3	2738.8	921.4
GR	2738.5	924.5	2738.2	927.6	2737.9	930.7	2737.6	933.8	2737.3	936.9
GR	2737.0	940.0	2736.8	943.1	2736.6	946.2	2736.3	949.3	2736.1	952.4
GR	2735.9	955.6	2735.7	958.7	2735.4	961.8	2735.2	964.9	2735.0	968.0
GR	2734.9	970.9	2734.8	973.8	2734.7	976.7	2734.6	979.6	2734.6	982.5
	2734.4	985.5	2734.4	988.4	2734.3	991.3	2734.2	994.2	2734.1	997.1
	2734.0	1000.0	2734.4	1003.0	2734.6	1006.0	2735.2	1009.0	2735.6	1012.0
GR	2736.0	1015.0	2736.4	1018.0	2736.9	1021.0	2737.3	1024.0	2737.8	1027.0
GR	2738.2	1030.0	2738.7	1033.0	2739.1	1036.0	2739.6	1039.0	2740.0	1042.0
GR	2740.3	1045.0	2740.7	1048.0	2741.0	1051.0	2741.3	1054.0	2741.7	1057.0
GR	2742.0	1060.0	2742.3	1062.0	2742.7	1064.0	2743.0	1066.0	2743.3	1068.0
GR	2743.7	1070.0	2744.0	1072.0	2744.4	1074.0	2744.7	1076.0	2745.1	1078.0
GR	2745.4	1080.0	2746.8	1082.0	2747.2	1085.0	2747.6	1087.0	2748.0	1089.0
ET			9.1						930.	1030.44
X1	9.513	95	983.3	1010.5	400	440	440			
GR	2756.0	705.0	2755.5	718.6	2754.9	732.2	2754.8	735.6	2754.7	739.0
GR	2754.5	742.4	2754.4	745.8	2754.3	749.2	2754.1	752.6	2754.0	756.0
GR	2753.8	759.5	2753.6	763.1	2753.4	766.6	2753.3	770.2	2753.1	773.7
GR	2752.9	777.3	2752.7	780.8	2752.6	784.4	2752.4	787.9	2752.2	791.5
GR	2752.0	795.0	2751.8	798.4	2751.5	801.9	2751.3	805.3	2751.0	808.8
GR	2750.8	812.2	2750.5	815.6	2750.3	819.1	2750.0	822.5	2749.8	825.9
GR	2749.5	829.4	2749.3	832.8	2749.0	836.3	2748.8	839.7	2748.5	843.1
GR	2748.3	846.6	2748.0	850.0	2747.8	853.6	2747.6	857.1	2747.4	860.7
GR	2747.1	864.3	2746.9	867.9	2746.7	871.4	2746.5	875.0	2746.3	878.6
GR	2746.1	882.1	2745.9	885.7	2745.6	889.3	2745.4	892.9	2745.2	896.4
GR	2745.0	900.0	2744.5	903.3	2744.0	906.7	2743.5	910.0	2743.0	913.3
GR	2742.5	916.7	2742.0	920.0	2742.1	923.4	2742.2	926.9	2742.3	930.3
GR	2742.4	933.8	2742.6	937.2	2742.7	940.7	2742.8	944.1	2742.9	947.6
GR	2743.0	951.0	2742.9	954.6	2742.8	958.3	2742.6	961.9	2742.5	965.5
GR	2742.4	969.1	2742.3	972.8	2742.1	976.4	2742.0	980.0	2741.8	983.3
	2741.7	986.7	2741.5	990.0	2741.3	993.3	2741.2	996.7	2741.0	1000.0
	2741.3	1003.5	2741.5	1007.0	2741.8	1010.5	2742.0	1014.0	2743.6	1017.2

	2744.2	1030.4	2746.8	1030.6	2748.4	1031.8	2750.0	1033.0	2751.0	1035.6
GR	2752.0	1039.1	2753.0	1040.6	2754.0	1042.2	2755.0	1045.7	2756.0	1047.3
ET			9.1						923.92	1030.63
X1	9.598	95	983.4	1007.7	430	450	450			
GR	2760.0	808.0	2759.5	812.9	2758.9	817.9	2758.4	822.8	2758.1	825.3
GR	2757.6	830.2	2757.1	835.1	2756.5	840.1	2756.3	842.5	2756.0	845.0
GR	2755.8	847.5	2755.7	850.0	2755.5	852.5	2755.3	855.0	2755.2	857.5
GR	2755.0	860.0	2754.8	862.5	2754.7	865.0	2754.5	867.5	2754.3	870.0
GR	2754.2	872.5	2754.0	875.0	2753.8	877.5	2753.7	880.0	2753.5	882.5
GR	2753.3	885.0	2753.2	887.5	2753.0	890.0	2752.8	892.5	2752.7	895.0
GR	2752.5	897.5	2752.3	900.0	2752.2	902.5	2752.0	905.0	2751.8	907.5
GR	2751.6	910.0	2751.3	912.5	2751.1	915.0	2750.9	917.5	2750.7	920.0
GR	2750.4	922.5	2750.2	925.0	2750.0	927.5	2749.8	930.0	2749.6	932.5
GR	2749.3	935.0	2749.1	937.5	2748.9	940.0	2748.7	942.5	2748.4	945.0
GR	2748.2	947.5	2748.0	950.0	2747.9	952.6	2747.8	955.2	2747.8	957.8
GR	2747.7	960.3	2747.6	962.9	2747.5	965.5	2747.4	968.1	2747.3	970.7
GR	2747.3	973.3	2747.2	975.8	2747.1	978.4	2747.0	981.0	2746.9	983.4
GR	2746.8	985.8	2746.6	988.1	2746.5	990.5	2746.4	992.9	2746.3	995.3
GR	2746.1	997.6	2746.0	1000.0	2746.3	1002.6	2746.6	1005.1	2746.9	1007.7
GR	2747.1	1010.3	2747.4	1012.9	2747.7	1015.4	2748.0	1018.0	2748.4	1020.4
GR	2748.9	1022.9	2749.3	1025.3	2749.8	1027.8	2750.2	1030.2	2750.7	1032.7
GR	2751.1	1035.1	2751.6	1037.6	2752.0	1040.0	2752.6	1042.4	2753.1	1044.9
GR	2753.7	1047.3	2754.3	1049.7	2754.9	1052.1	2755.4	1054.6	2756.0	1057.0
ET			9.1						945.	1045.51
	9.695	45	989.3	1013.5	520	510	510			
	2764.0	850.0	2760.0	880.0	2759.0	897.5	2758.0	915.0	2757.8	920.0
GR	2757.6	925.0	2757.3	930.0	2757.1	935.0	2756.9	940.0	2756.7	945.0
GR	2756.4	950.0	2756.2	955.0	2756.0	960.0	2755.8	964.8	2755.6	969.6
GR	2755.4	974.4	2755.2	979.2	2755.0	984.0	2754.7	989.3	2754.3	994.7
GR	2754.0	1000.0	2754.3	1004.5	2754.5	1009.0	2754.8	1013.5	2755.0	1018.0
GR	2755.3	1022.7	2755.7	1027.3	2756.0	1032.0	2756.8	1037.2	2757.6	1042.4
GR	2758.4	1047.6	2759.2	1052.8	2760.0	1058.0	2760.8	1063.5	2761.5	1069.0
GR	2762.3	1074.5	2763.0	1080.0	2764.4	1085.0	2765.9	1090.0	2767.4	1095.0
GR	2768.8	1100.0	2770.3	1105.0	2771.7	1110.0	2773.2	1115.0	2776.0	1120.0
ET			9.1						891.29	1048.
		CONFLUENCE OF HARTMAN WASH (MAIN CHANNEL)								
		AND HARTMAN WASH TRIBUTARY (SUBBASIN SAI 155)								
X1	-6.568	91	989.0	1015.0	310	320	320			
GR	2600.0	715.0	2599.5	721.8	2599.0	728.5	2598.5	735.3	2598.0	742.0
GR	2597.8	749.0	2597.6	756.0	2597.3	763.0	2597.1	770.0	2596.9	777.0
GR	2596.7	784.0	2596.4	791.0	2596.2	798.0	2596.0	805.0	2595.3	811.8
GR	2594.7	818.7	2594.0	825.5	2593.3	832.3	2592.7	839.2	2592.0	846.0
GR	2591.3	852.8	2590.7	859.7	2590.0	866.5	2589.3	873.3	2588.7	880.2
GR	2588.0	887.0	2587.7	894.3	2587.3	901.7	2587.0	909.0	2586.7	916.3
GR	2586.3	923.7	2586.0	931.0	2585.7	938.3	2585.3	945.7	2585.0	953.0
GR	2584.7	960.3	2584.3	967.7	2584.0	975.0	2583.5	982.0	2583.0	989.0
GR	2582.5	994.5	2582.0	1000.0	2582.5	1007.5	2583.0	1015.0	2584.0	1021.0
GR	2584.3	1027.7	2584.7	1034.3	2585.0	1041.0	2585.3	1048.2	2585.5	1055.3
GR	2585.8	1062.5	2586.0	1069.7	2586.3	1076.8	2586.5	1084.0	2586.8	1091.2
	2587.0	1098.3	2587.3	1105.5	2587.5	1112.7	2587.8	1119.8	2588.0	1127.0
	2588.3	1133.9	2588.7	1140.8	2589.0	1147.8	2589.3	1154.7	2589.7	1161.6

```
     2590.0    1168.5    2590.3    1175.4    2590.7    1182.3    2591.0    1189.3    2591.3    1196.2
     2591.7    1203.1    2592.0    1210.0    2592.8    1217.0    2593.6    1224.0    2594.4    1231.0
GR   2595.2    1238.0    2596.0    1245.0    2597.0    1252.3    2598.0    1259.5    2599.0    1266.8
GR   2600.0    1274.0    2600.7    1280.8    2601.3    1287.7    2602.0    1294.5    2602.7    1301.3
GR   2603.3    1308.2    2604.0    1315.0    2604.8    1322.5    2605.5    1330.0    2606.3    1337.5
GR   2607.0    1345.0

QT       2      1559      1559
ET                         9.1                                                       896.54    1137.09
             DISCHARGE FROM HEC-1 MODEL:  SAI155  Q = 1559 cfs
X1   0.129        65     981.3    1016.7       710       650       680
GR   2594.7     880.0    2594.3     888.3    2594.0     896.7    2593.7     905.0    2593.5     913.3
GR   2593.2     921.7    2593.0     930.0    2592.8     938.4    2592.6     946.8    2592.4     955.2
GR   2592.2     963.6    2592.0     972.0    2591.3     981.3    2590.7     990.7    2590.0    1000.0
GR   2590.7    1008.3    2591.3    1016.7    2592.0    1025.0    2592.3    1033.7    2592.7    1042.3
GR   2593.0    1051.0    2593.3    1059.5    2593.5    1068.0    2593.8    1076.5    2594.0    1085.0
GR   2594.0    1137.0    2594.5    1145.3    2595.0    1153.5    2595.5    1161.8    2596.0    1170.0
GR   2596.5    1181.0    2597.0    1192.0    2597.1    1200.6    2597.3    1209.1    2597.4    1217.7
GR   2597.6    1226.3    2597.7    1234.9    2597.9    1243.4    2598.0    1252.0    2597.5    1261.3
GR   2597.0    1270.5    2596.5    1279.8    2596.0    1289.0    2595.7    1299.0    2595.3    1309.0
GR   2595.0    1319.0    2595.2    1328.2    2595.4    1337.4    2595.6    1346.6    2595.8    1355.8
GR   2596.0    1365.0    2596.3    1376.0    2596.7    1388.0    2597.0    1398.0    2597.3    1409.0
GR   2597.7    1420.0    2598.0    1430.0    2598.5    1448.0    2599.0    1457.0    2599.5    1466.0
GR   2600.0    1472.0    2601.0    1479.0    2602.0    1487.0    2603.0    1495.0    2604.0    1502.0

ET                         9.1                                                       952.      1039.
X1   0.162        68     988.0    1012.9       170       160       175
GR   2604.5     505.0    2604.0     520.0    2603.3     533.3    2602.7     546.7    2602.0     560.0
GR   2601.3     573.3    2600.7     586.7    2600.0     600.0    2599.3     611.7    2598.7     623.3
GR   2598.0     635.0    2597.3     646.7    2596.7     658.3    2596.0     670.0    2596.0     683.3
GR   2596.0     696.7    2596.0     710.0    2595.7     723.3    2595.5     736.7    2595.4     750.0
GR   2595.5     760.0    2596.0     770.0    2596.3     782.5    2596.5     795.0    2596.8     807.5
GR   2597.0     820.0    2596.8     832.0    2596.6     844.0    2596.4     856.0    2596.2     868.0
GR   2596.0     880.0    2595.6     892.0    2595.2     904.0    2594.8     916.0    2594.4     928.0
GR   2594.0     940.0    2593.6     952.0    2593.2     964.0    2592.8     976.0    2592.4     988.0
GR   2592.0    1000.0    2592.6    1012.9    2593.1    1025.7    2593.7    1038.6    2594.3    1051.4
GR   2594.9    1064.3    2595.4    1077.1    2596.0    1090.0    2596.4    1102.2    2596.9    1114.4
GR   2597.3    1126.7    2597.8    1138.9    2598.2    1151.1    2598.7    1163.3    2599.1    1175.6
GR   2599.6    1187.8    2600.0    1200.0    2600.6    1212.9    2601.1    1225.7    2601.7    1238.6
GR   2602.3    1251.4    2602.9    1264.3    2603.4    1277.1    2604.0    1290.0    2605.0    1302.5
GR   2606.0    1315.0    2607.0    1327.5    2608.0    1330.0

ET                         9.1                                                       961.      1047.
X1   0.214        47     987.5    1012.0       275       270       275
GR   2612.8     640.0    2612.7     653.0    2612.5     666.0    2612.3     679.0    2612.2     692.0
GR   2612.0     705.0    2610.7     720.0    2609.3     735.0    2608.0     750.0    2606.7     765.0
GR   2605.3     780.0    2604.0     795.0    2603.6     808.6    2603.1     822.1    2602.7     835.7
GR   2602.2     849.2    2601.8     862.8    2601.3     876.3    2600.9     889.9    2600.4     903.4
GR   2600.0     917.0    2599.0     931.5    2598.0     946.0    2597.0     960.5    2596.0     975.0
GR   2595.5     987.5    2595.0    1000.0    2595.5    1012.0    2596.0    1024.0    2596.0    1039.5
GR   2596.0    1055.0    2596.7    1069.8    2597.3    1084.7    2598.0    1099.5    2598.7    1114.3
GR   2599.3    1129.2    2600.0    1144.0    2600.8    1158.8    2601.6    1173.6    2602.4    1188.4
     2603.2    1203.2    2604.0    1218.0    2605.3    1234.0    2606.7    1250.0    2608.0    1266.0
     2610.0    1280.5    2612.0    1295.0
```

```
                          9.1                                                951.11    1036.51
X1    0.309       10      990      1010      510      470      500
GR   2608.0    881.0   2604.0     945.0   2600.0    980.0   2600.0    990.0   2600.0    1000.0
GR   2600.0   1010.0   2600.0    1020.0   2604.0   1040.0   2608.0   1055.0   2612.0    1068.0

NC    0.050    0.050    0.040       0.1      0.3
QT        2     3660     3660
ET                         9.1                                                938.51      1062.
            CONFLUENCE OF HARTMAN WASH (MAIN CHANNEL)
            AND CHANNEL THAT CARRIES LEVEE OVERFLOW

            CROSS-SECTION 3.093 & 3.195 TAKEN FROM LOWHRTMN.DAT

            SWSE EQUALS CWSEL FOR CROSS-SECTION 3.093 OF LOWHRTMN.DAT

X1   -3.093       57    993.8    1010.0      490      450      480
GR   2410.0    800.0   2408.8     810.5   2407.5    821.0   2407.1    831.3   2406.8     841.5
GR   2406.4    851.8   2406.0     862.0   2405.7    871.4   2405.4    880.9   2405.1     890.3
GR   2404.9    899.7   2404.6     909.1   2404.3    918.6   2404.0    932.0   2403.5     937.8
GR   2403.0    942.6   2402.5     947.4   2402.0    952.2   2402.0    957.0   2401.7     962.3
GR   2400.3    967.7   2399.0     970.2   2398.1    972.7   2397.0    993.8   2396.9     994.3
GR   2396.5   1000.0   2396.9    1005.0   2397.0   1010.0   2397.9   1015.0   2399.9    1020.0
GR   2400.2   1025.0   2402.0    1030.0   2402.4   1039.4   2402.8   1048.8   2403.2    1058.2
GR   2403.6   1067.6   2404.0    1077.0   2404.0   1089.0   2404.0   1101.0   2403.5    1111.3
GR   2403.0   1121.7   2402.5    1132.0   2402.3   1144.5   2402.0   1157.0   2401.5    1165.0
GR   2401.8   1174.0   2402.0    1183.0   2403.0   1193.0   2404.0   1203.0   2404.0    1211.0
GR   2404.0   1219.0   2403.0    1228.5   2402.0   1238.0   2404.0   1250.5   2406.0    1263.0
GR   2407.0   1270.5   2408.0    1278.0

ET                         9.1                                                970.53    1106.44
X1    3.195       94    985.0    1020.0      530      550      540
GR   2415.6    870.9   2415.3     876.8   2414.9    882.7   2414.6    888.6   2414.2     890.5
GR   2413.8    930.5   2413.4     936.4   2413.1    942.3   2412.7    948.2   2412.4     954.1
GR   2412.0    960.0   2411.0     965.0   2410.0    970.0   2408.0    975.0   2406.0     980.0
GR   2404.0    985.0   2403.7     990.0   2403.3    995.0   2403.0   1000.0   2403.3    1005.0
GR   2403.5   1010.0   2403.8    1015.0   2404.0   1020.0   2405.0   1025.0   2406.0    1030.0
GR   2407.0   1035.0   2408.0    1040.0   2408.1   1045.5   2408.2   1051.0   2408.3    1056.5
GR   2408.4   1062.0   2408.5    1067.5   2408.6   1073.0   2408.7   1078.5   2408.8    1084.0
GR   2408.9   1089.5   2409.0    1095.0   2409.3   1100.0   2409.7   1105.0   2410.0    1110.0
GR   2410.3   1115.8   2410.7    1121.7   2411.0   1127.5   2411.3   1133.3   2411.7    1139.2
GR   2412.0   1145.0   2412.0    1170.0   2411.8   1176.0   2411.6   1182.0   2411.4    1188.0
GR   2411.2   1194.0   2411.0    1200.0   2411.3   1205.0   2411.5   1210.0   2411.8    1215.0
GR   2412.0   1220.0   2412.5    1226.3   2413.0   1232.5   2413.5   1238.8   2414.0    1245.0
GR   2414.1   1250.0   2414.3    1255.0   2414.4   1260.0   2414.5   1265.0   2414.4    1270.0
GR   2414.3   1275.0   2414.1    1280.0   2414.0   1285.0   2413.7   1290.0   2413.3    1295.0
GR   2413.0   1300.0   2412.9    1305.8   2412.9   1311.5   2412.8   1317.3   2412.7    1323.1
GR   2412.6   1328.8   2412.5    1334.6   2412.5   1340.4   2412.4   1346.2   2412.3    1351.9
GR   2412.2   1357.7   2412.1    1363.5   2412.1   1369.2   2412.0   1375.0   2412.2    1380.8
GR   2412.3   1386.7   2412.5    1392.5   2412.7   1398.3   2412.8   1404.2   2413.0    1410.0
GR   2413.3   1416.3   2413.5    1422.5   2413.8   1428.8   2414.0   1435.0
```

```
          2      3210      3210
ET                          9.1                                                  844.08    1089.61
                DISCHARGE IS LEVEE OVERFLOW

                LEVEE OVERFLOW DETERMINED FROM RATING CURVE
                FOR CROSS-SECTION 3.582 OF UPHRTMN.DAT

X1     0.064       13       991      1014       325       350       340
GR     2420.      837.     2418.      842.     2416.      850.     2416.      935.    2417.3      950.
GR     2416.      963.     2414.      980.     2412.      991.    2411.8     1000.     2412.     1014.
GR     2414.     1024.     2416.     1060.     2418.     1100.

ET                          9.1                                                  982.09    1134.84
X1     0.122       30       985      1010       300       305       305
GR    2429.0    900.0    2428.8     909.0    2428.6     918.0    2428.4     927.0    2428.2     936.0
GR    2428.0    945.0    2427.3     953.3    2426.7     961.7    2426.0     970.0    2423.0     977.5
GR    2420.0    985.0    2418.0     992.5    2418.0    1000.0    2420.0    1010.0    2419.8    1020.0
GR    2418.6   1027.5    2417.9    1035.0    2417.7    1042.5    2417.5    1050.0    2417.7    1060.0
GR    2418.2   1070.0    2418.3    1078.6    2418.6    1087.1    2418.9    1095.7    2419.1    1104.3
GR    2419.4   1112.9    2419.7    1121.4    2420.0    1130.0    2421.8    1137.5    2422.2    1145.0

ET                          9.1                                                  984.95    1129.76
                X3 RECORD: STA 1149 ELIMINATE INEFFECTIVE
                           FLOW AREA ON SOUTH SIDE OF
                           US HWY 60
       0.168       39       990      1010       240       235       240
                                                          1149.    2425.7
GR    2432.5    963.0    2430.0     977.0    2422.0     990.0    2422.0    1000.0    2422.0    1010.0
GR    2426.0   1023.0    2426.0    1049.0    2420.0    1064.0    2420.0    1083.0    2420.8    1106.9
GR    2422.0   1120.0    2425.5    1131.0    2425.7    1149.0    2425.5    1167.0    2424.4    1185.0
GR    2424.3   1203.0    2424.1    1221.0    2424.0    1239.0    2423.8    1257.5    2423.5    1276.0
GR    2424.0   1288.0    2426.5    1300.0    2423.5    1323.0    2422.0    1331.0    2422.5    1346.5
GR    2423.5   1362.0    2424.0    1378.0    2424.0    1403.0    2422.0    1431.0    2422.0    1448.0
GR    2422.5   1465.0    2422.5    1485.0    2422.0    1501.0    2424.4    1527.0    2424.5    1545.0
GR    2425.0   1563.0    2426.0    1581.0    2430.8    1602.0    2436.0    1623.0

ET                          9.1                                                 1117.90    1419.66
                HYDRAULIC BASE LINE IS @ STA. 1279.

                X3 RECORD: STA 1445 ELIMINATE INEFFECTIVE
                           FLOW AREA ON SOUTH SIDE OF
                           US HWY 60

X1     0.272       30     1257.0     1301.0       560       550       550
X3                                                         1445.    2432.2
GR    2438.5   1035.0    2436.0     1070.0    2434.0    1087.0    2432.0    1115.0    2431.5    1134.3
GR    2431.0   1153.5    2430.5     1172.8    2430.0    1192.0    2429.8    1213.7    2429.7    1235.3
GR    2429.5   1257.0    2429.5     1279.0    2429.5    1301.0    2430.0    1317.0    2432.5    1327.0
GR    2432.0   1341.0    2429.0     1363.0    2428.0    1377.0    2428.8    1404.5    2430.0    1411.0
GR    2432.0   1420.0    2432.2     1445.0    2432.0    1470.0    2429.5    1485.0    2430.0    1509.0
GR    2432.0   1519.5    2434.0     1522.0    2440.0    1570.0    2441.0    1573.5    2442.0    1602.0
```

9.1 1058.40 1330.00

HYDRAULIC BASE LINE IS @ STA. 1115.

X1	0.366	41	1090	1140	465	450	500			
GR	2438.5	1038.0	2438.4	1041.0	2438.2	1044.0	2438.1	1047.0	2437.8	1050.0
GR	2437.0	1053.0	2436.8	1056.0	2435.9	1059.0	2435.5	1062.0	2435.3	1065.0
GR	2434.2	1068.0	2434.0	1071.0	2433.6	1074.2	2433.9	1076.3	2433.8	1080.5
GR	2433.6	1083.7	2433.3	1086.8	2433.2	1090.0	2433.0	1115.0	2433.2	1140.0
GR	2433.3	1160.5	2433.6	1181.0	2433.9	1201.5	2434.0	1211.0	2433.8	1229.3
GR	2433.7	1247.7	2433.5	1266.0	2433.5	1288.0	2433.5	1310.0	2435.5	1325.5
GR	2437.5	1341.0	2438.0	1362.0	2438.0	1392.0	2437.5	1406.0	2438.0	1420.0
GR	2440.0	1445.0	2442.0	1450.0	2444.0	1460.0	2446.0	1465.0	2448.0	1471.0
GR	2450.0	1495								

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS
0

CCHV= .100 CEHV= .300
*SECNO 3.093

3265 DIVIDED FLOW

DISCHARGE FROM HEC-1 MODEL: CAI167 Q = 3660 cfs

CROSS-SECTION 3.093 & 3.195 TAKEN FROM LOWHRTMN.DAT

SWSE EQUALS CWSEL FOR CROSS-SECTION 3.093 OF LOWHRTMN.DAT

3.093	6.93	2403.43	2403.42	2403.43	2404.65	1.22	.00	.00	2397.00
3660.0	1391.3	1292.6	976.0	183.9	107.7	212.5	.0	.0	2397.00
.00	7.57	12.01	4.59	.050	.040	.050	.000	2396.50	938.47
.008390	490.	480.	450.	0	4	0	.00	232.19	1246.94

FLOW DISTRIBUTION FOR SECNO= 3.09 CWSEL= 2403.43

STA=	938.	968.	973.	994.	1010.	1015.	1020.	1030.	1145.	1174.	1247.
PER Q=	3.9	4.1	30.0	35.3	7.2	4.4	4.3	3.1	4.6	3.1	
AREA=	38.2	21.6	124.1	107.7	29.9	22.7	28.5	45.8	45.5	40.1	
VEL=	3.7	6.9	8.9	12.0	8.9	7.1	5.5	2.5	3.7	2.8	
DEPTH=	1.3	4.3	5.9	6.6	6.0	4.5	2.9	.4	1.5	.5	

*SECNO 3.195
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.195	6.79	2409.79	2409.79	.00	2411.49	1.70	4.66	.15	2404.00
3660.0	264.7	2612.5	782.8	41.8	219.5	151.1	5.7	2.3	2404.00
.01	6.33	11.90	5.18	.050	.040	.050	.000	2403.00	970.54
.008893	530.	540.	550.	0	5	0	.00	135.90	1106.43

FLOW DISTRIBUTION FOR SECNO= 3.19 CWSEL= 2409.79

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	971.	985.	1020.	1025.	1030.	1040.	1062.	1100.	1106.
PER Q=	7.2	71.4	6.1	4.3	4.2	3.6	3.1	.0	
AREA=	41.8	219.5	26.4	21.4	27.9	34.9	39.0	1.5	
VEL=	6.3	11.9	8.4	7.3	5.6	3.8	2.9	1.2	
DEPTH=	2.9	6.3	5.3	4.3	2.8	1.6	1.0	.2	

*SECNO 3.309

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .14

DISCHARGE IS 3660 cfs - (LEVEE OVERFLOW).

LEVEE OVERFLOW DETERMINED FROM RATING CURVE
FOR CROSS-SECTION 3.582 OF UPHRTMN.DAT

3.309	4.15	2416.15	2415.51	.00	2416.80	.66	5.21	.10	2414.00
450.0	19.8	421.1	9.2	7.7	62.9	3.8	9.1	3.4	2414.00
.04	2.57	6.69	2.39	.050	.040	.050	.000	2412.00	982.84
.007216	600.	600.	600.	4	11	0	.00	30.74	1013.58

FLOW DISTRIBUTION FOR SECNO= 3.31 CWSEL= 2416.15

STA=	983.	990.	1010.	1014.
PER Q=	4.4	93.6	2.0	
AREA=	7.7	62.9	3.8	
VEL=	2.6	6.7	2.4	
DEPTH=	1.1	3.1	1.1	

*SECNO 3.381
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.381	2.40	2421.90	2421.90	.00	2422.82	.92	3.99	.08	2419.90
450.0	18.4	370.1	61.5	5.0	45.0	12.9	9.6	3.7	2419.90
.05	3.65	8.23	4.75	.050	.040	.050	.000	2419.50	985.95
.016654	380.	380.	380.	0	11	0	.00	35.68	1021.63

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 3.38 CWSEL= 2421.90

STA=	986.	991.	1011.	1017.	1022.
PER Q=	4.1	82.2	11.3	2.4	
AREA=	5.0	45.0	9.3	3.6	
VEL=	3.7	8.2	5.4	3.0	
DEPTH=	1.0	2.2	1.7	.7	

*SECNO 3.498

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 1035.0 TYPE= 1 TARGET= 1034.999
X3 RECORD: STA 1035. TOP OF LEVEE
ELIMINATE INEFFECTIVE FLOW
AREA IN RIGHT OVERBANK

3.498	9.01	2437.01	2437.01	.00	2437.21	.21	3.66	.07	2434.00
450.0	86.2	212.9	150.8	30.2	49.4	51.1	11.0	4.4	2434.00
.10	2.86	4.31	2.95	.050	.040	.050	.000	2428.00	970.47
.002994	620.	620.	620.	0	12	0	.00	53.77	1024.24

FLOW DISTRIBUTION FOR SECNO= 3.50 CWSEL= 2437.01

STA=	970.	976.	981.	986.	1002.	1006.	1011.	1017.	1022.	1024.
PER Q=	1.2	7.1	10.9	47.3	7.9	10.1	9.8	5.4	.2	
AREA=	4.0	11.7	14.4	49.4	10.8	14.6	14.3	10.2	1.1	
VEL=	1.3	2.7	3.4	4.3	3.3	3.1	3.1	2.4	1.0	
DEPTH=	.8	2.3	3.0	3.1	2.9	2.7	2.6	1.9	.5	

*SECNO 3.582

3470 ENCROACHMENT STATIONS= .0 1035.0 TYPE= 1 TARGET= 1034.999
X3 RECORD: STA 1035. TOP OF LEVEE
ELIMINATE INEFFECTIVE FLOW
AREA IN RIGHT OVERBANK

3.582	5.29	2438.29	2437.21	.00	2438.48	.19	1.26	.00	2435.50
450.0	70.7	335.8	43.5	32.8	86.7	18.8	12.4	5.0	2435.50
.14	2.15	3.87	2.32	.050	.040	.050	.000	2433.00	954.41
.002761	440.	440.	440.	1	13	0	.00	76.03	1030.44

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 3.58 CWSEL= 2438.29

STA=	954.	959.	974.	980.	983.	1014.	1017.	1020.	1023.	1026.	1029.	1030.
PER Q=	.1	3.6	6.5	5.6	74.6	4.7	3.4	1.3	.2	.0	.0	
AREA=	.7	11.9	12.0	8.2	86.7	7.5	6.1	3.6	1.0	.4	.1	
VEL=	.5	1.3	2.4	3.1	3.9	2.8	2.5	1.6	.8	.4	.0	
DEPTH=	.1	.8	2.0	2.7	2.8	2.5	2.0	1.2	.3	.1	.0	

*SECNO 3.661

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.19

DISCHARGE FROM HEC-1 MODEL: CAI167 Q = 3660 cfs

3.661	3.24	2441.74	2441.40	.00	2442.15	.41	3.61	.06	2439.00
3660.0	1434.8	496.3	1728.9	329.3	63.0	367.3	16.7	7.8	2439.00
.16	4.36	7.88	4.71	.050	.040	.050	.000	2438.50	715.39
.010419	420.	420.	425.	5	11	0	.00	486.22	1212.09

FLOW DISTRIBUTION FOR SECNO= 3.66 CWSEL= 2441.74

STA=	715.	853.	881.	902.	924.	945.	963.	981.	990.	1011.	1021.	1032.	1042.
PER Q=	3.8	4.6	4.1	5.0	6.3	5.8	6.0	3.7	13.6	4.5	4.0	3.7	
AREA=	60.9	42.4	35.2	39.7	45.7	40.5	41.4	23.4	63.0	27.8	26.0	24.7	
VEL=	2.3	4.0	4.3	4.6	5.0	5.2	5.3	5.7	7.9	5.9	5.7	5.4	
DEPTH=	.4	1.5	1.7	1.8	2.1	2.2	2.3	2.6	3.0	2.7	2.5	2.4	

STA=	1042.	1052.	1071.	1090.	1109.	1137.	1159.	1181.	1202.	1212.
PER Q=	3.4	5.7	4.8	4.0	4.1	3.3	4.6	4.8	.4	
AREA=	23.5	41.3	37.4	33.1	39.2	31.3	37.9	38.8	6.3	
VEL=	5.3	5.1	4.7	4.4	3.8	3.8	4.4	4.5	2.2	
DEPTH=	2.3	2.1	1.9	1.7	1.4	1.4	1.7	1.8	.6	

*SECNO 3.756

3.756	4.53	2445.53	2444.92	.00	2445.93	.40	3.77	.00	2441.50
3660.0	745.4	805.2	2109.4	215.0	107.0	488.1	25.5	12.8	2441.50
.19	3.47	7.53	4.32	.050	.040	.050	.000	2441.00	819.06
.005917	450.	500.	510.	4	11	0	.00	428.82	1247.88

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 3.76 CWSEL= 2445.53

STA=	819.	935.	978.	993.	1018.	1035.	1050.	1075.	1100.	1124.	1149.	1193.	1248.
PER Q=	4.8	7.9	7.7	22.0	10.0	6.8	11.2	11.2	7.3	4.0	4.5	2.6	
AREA=	81.2	80.8	52.9	107.0	66.1	49.2	81.3	81.0	62.7	43.9	59.2	44.6	
VEL=	2.2	3.6	5.3	7.5	5.5	5.0	5.0	5.0	4.2	3.4	2.8	2.2	
DEPTH=	.7	1.9	3.5	4.3	3.8	3.3	3.3	3.3	2.5	1.8	1.4	.8	

*SECNO 3.822

3.822	4.17	2447.17	2445.93	.00	2447.39	.22	1.45	.02	2443.00
3660.0	990.1	463.4	2206.5	324.8	83.5	622.3	32.6	16.2	2443.00
.22	3.05	5.55	3.55	.050	.040	.050	.000	2443.00	795.25
.003314	380.	350.	310.	3	14	0	.00	448.34	1243.59

FLOW DISTRIBUTION FOR SECNO= 3.82 CWSEL= 2447.17

STA=	795.	886.	911.	936.	960.	980.	1000.	1012.	1031.	1050.	1074.	1097.	1121.
PER Q=	3.5	3.5	5.0	6.9	8.2	12.7	5.5	7.6	7.3	8.6	8.2	7.8	
AREA=	71.6	48.6	59.5	71.7	73.5	83.5	47.1	68.9	67.0	81.2	78.5	76.5	
VEL=	1.8	2.6	3.1	3.5	4.1	5.5	4.3	4.0	4.0	3.9	3.8	3.7	
DEPTH=	.8	1.9	2.4	2.9	3.7	4.2	3.9	3.6	3.5	3.4	3.3	3.2	

STA=	1121.	1145.	1169.	1218.	1244.
PER Q=	6.6	4.5	4.0	.3	
AREA=	69.6	55.1	66.6	11.7	
VEL=	3.5	3.0	2.2	1.0	
DEPTH=	2.9	2.3	1.4	.5	

*SECNO 3.887

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 930.0 1060.0 TYPE= 1 TARGET= 130.000
ET RECORD: STA 930 & 1060 MODEL 4 TO 1 FLOW
EXPANSION DS OF US HWY 60 BRIDGE

MAPPED FLOODPLAIN TO CWSEL

3.887	6.11	2448.11	2446.89	.00	2449.02	.91	1.42	.21	2442.50
3660.0	855.4	1515.8	1288.8	147.5	161.4	202.7	38.3	18.4	2442.50
.23	5.80	9.39	6.36	.050	.040	.050	.000	2442.00	942.65
.006040	370.	340.	290.	2	8	0	.00	117.35	1060.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 3.89 CWSEL= 2448.11

STA=	943.	955.	965.	980.	990.	1018.	1023.	1035.	1050.	1060.
PER Q=	.5	2.6	9.9	10.3	41.4	6.3	11.7	12.1	5.1	
AREA=	8.7	23.6	61.6	53.6	161.4	32.0	61.5	69.1	40.1	
VEL=	2.0	4.1	5.9	7.1	9.4	7.2	7.0	6.4	4.7	
DEPTH=	.7	2.4	4.1	5.4	5.9	5.5	5.3	4.6	4.0	

*SECNO 3.911

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 914.4 983.7 TYPE= 1 TARGET= 69.280
CROSS-SECTION & ET STATIONS ADJUSTED
FOR 30 DEGREE SKEW ANGLE

ET RECORD: STA 914.44 & 983.72 MODEL 4 TO 1
FLOW EXPANSION DS OF US HWY 60 BRIDGE

MAPPED FLOODPLAIN TO CWSEL

3.911	5.28	2448.78	2448.78	.00	2451.07	2.29	1.20	.41	2443.80
3660.0	873.1	1971.9	815.0	93.8	141.4	82.4	39.5	18.6	2443.80
.23	9.31	13.94	9.89	.050	.040	.050	.000	2443.50	914.44
.015969	145.	130.	115.	0	11	0	.00	69.28	983.72

FLOW DISTRIBUTION FOR SECNO= 3.91 CWSEL= 2448.78

STA=	914.	920.	926.	932.	938.	965.	971.	976.	981.	984.
PER Q=	3.1	5.4	7.1	8.4	53.9	7.9	7.6	5.8	1.0	
AREA=	18.2	21.6	25.7	28.3	141.4	26.5	25.9	22.5	7.4	
VEL=	6.2	9.1	10.1	10.8	13.9	10.9	10.7	9.5	4.7	
DEPTH=	3.1	3.8	4.4	4.9	5.1	4.9	4.8	4.1	3.2	

CCHV= .600 CEHV= .800
*SECNO 3.918

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 948.6 1000.5 TYPE= 1 TARGET= 51.960
CROSS-SECTION & ET STATIONS ADJUSTED
FOR 30 DEGRE SKEW ANGLE

ET RECORD: STA 948.56 & 1000.52 MODEL 4 TO 1
FLOW EXPANSION DS OF US HWY 60 BRIDGE

MAPPED FLOODPLAIN TO CWSEL

3.918	5.97	2454.67	2454.67	.00	2457.60	2.92	.16	.51	2449.00
3641.0	31.3	3569.6	40.0	15.1	257.7	18.1	39.8	18.7	2449.00
.23	2.07	13.85	2.21	.050	.015	.050	.000	2448.70	948.56
.001863	39.	39.	39.	0	8	0	.00	51.96	1000.52

W DISTRIBUTION FOR SECNO= 3.92 CWSEL= 2454.67

STA=	949.	952.	997.	1001.
PER Q=	.9	98.0	1.1	
AREA=	15.1	257.7	18.1	
VEL=	2.1	13.9	2.2	
DEPTH=	3.9	5.8	4.7	

*SECNO 3.919

3265 DIVIDED FLOW

3370 NORMAL BRIDGE, NRD= 23 MIN ELTRD= 2458.80 MAX ELLC= 2462.20

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2462.70 ELREA= 2459.90

DOWNSTREAM FACE: 4 - 12' X 8' RCB

```
          MODELED STRUCTURE AS NORMAL BRIDGE
          SINCE MAX ELLC > MIN ELTRD

          CROSS SECTION ADJUSTED FOR
          30 DEGREE SKEW ANGLE
    3.919     6.00   2457.90   2457.90      .00   2460.93     3.03      .00      .09   2451.90
   3641.0       .0    3641.0       .0       .0     260.5       .0     39.8     18.7   2451.90
      .23      .00     13.98       .00     .000      .015     .000     .000  2451.90    944.42
  .002527       1.        1.        1.        0        15        0      .00    43.43    988.58


FLOW DISTRIBUTION FOR SECNO=      3.92          CWSEL=   2457.90

STA=     944.     989.
  PER Q=    100.0
   AREA=    260.5
    VEL=     14.0
  DEPTH=      6.0

*SECNO 3.926

3265 DIVIDED FLOW


3370 NORMAL BRIDGE, NRD=  27 MIN ELTRD=  2460.10 MAX ELLC=  2462.20

3485 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      2462.70 ELREA=      2460.10

          UPSTREAM FACE: 4 - 12' X 8' RCB

          MODELED STRUCTURE AS NORMAL BRIDGE
          SINCE MAX ELLC > MIN ELTRD

          CROSS-SECTION ADJUSTED FOR
          30 DEGREE SKEW ANGLE
    3.926     6.02   2458.72   2458.72      .00   2461.73     3.01      .11      .01   2452.70
   3641.0       .0    3641.0       .0       .0     261.4       .0     40.1     18.7   2452.70
      .23      .00     13.93       .00     .000      .015     .000     .000  2452.70    944.42
  .002499      42.       42.       42.        0        17        0      .00    43.43    988.58


FLOW DISTRIBUTION FOR SECNO=      3.93          CWSEL=   2458.72
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

```
STA=     944.     989.
  PER Q=    100.0
   AREA=    261.4
    VEL=     13.9
  DEPTH=      6.0

CCHV=     .100 CEHV=     .300
*SECNO 4.023

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.26

     4.023      8.24   2462.24   2457.32       .00   2462.31       .06       .28       .29   2454.40
    3641.0    1387.6     876.3    1377.1     878.2     287.9     886.0      53.5      21.1   2454.40
       .31      1.58      3.04      1.55      .050      .030      .050      .000   2454.00    847.11
   .000235      470.      510.      535.         3        11         0       .00    357.72   1204.83


FLOW DISTRIBUTION FOR SECNO=      4.02          CWSEL=   2462.24

STA=     847.     880.     893.     905.     918.     930.     946.     961.     974.     987.     993.    1028.    1043.
  PER Q=      3.5      4.0      3.5      3.5      4.0      5.0      4.4      3.8      4.4      2.1     24.1      5.4
   AREA=    109.3     87.4     81.1     81.1     87.4    108.4    100.6     85.7     94.1     43.1    287.9    109.9
    VEL=      1.2      1.7      1.6      1.6      1.7      1.7      1.6      1.6      1.7      1.8      3.0      1.8
  DEPTH=      3.3      7.0      6.5      6.5      7.0      7.0      6.5      6.6      7.2      7.7      8.0      7.7

STA=    1043.    1057.    1071.    1086.    1100.    1120.    1147.    1205.
  PER Q=      5.1      4.9      4.9      4.9      6.0      4.8      1.8
   AREA=    107.1    104.2    105.0    105.0    134.8    131.2     88.7
    VEL=      1.8      1.7      1.7      1.7      1.6      1.3       .7
  DEPTH=      7.5      7.3      7.2      7.2      6.7      4.9      1.5

*SECNO 4.110

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     4.110      5.89   2463.89   2463.89       .00   2465.25      1.36       .32       .39   2459.00
    3641.0    2024.2    1485.5     131.3     371.7     113.3      31.9      67.2      24.0   2459.00
       .32      5.45     13.12      4.12      .050      .030      .050      .000   2458.00    833.53
   .007458      480.      460.      450.         0        19         0       .00    191.58   1025.11
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.11 CWSEL= 2463.89

STA=	834.	863.	896.	928.	960.	989.	1010.	1011.	1025.
PER Q=	.5	4.0	9.7	17.3	24.1	40.8	.7	2.9	
AREA=	13.2	46.0	76.6	108.6	127.4	113.3	4.4	27.5	
VEL=	1.5	3.2	4.6	5.8	6.9	13.1	5.5	3.9	
DEPTH=	.4	1.4	2.4	3.4	4.4	5.4	4.4	1.9	

*SECNO 4.210

4.210	3.96	2468.96	2468.92	.00	2469.86	.90	4.57	.05	2466.00
3641.0	1369.1	1175.6	1096.3	261.2	103.5	243.6	74.0	27.0	2466.00
.34	5.24	11.36	4.50	.050	.030	.050	.000	2465.00	866.02
.010123	525.	530.	535.	1	23	0	.00	301.19	1167.20

FLOW DISTRIBUTION FOR SECNO= 4.21 CWSEL= 2468.96

STA=	866.	913.	937.	961.	985.	1015.	1040.	1064.	1095.	1125.	1167.
PER Q=	9.4	7.9	9.4	11.0	32.3	10.5	7.5	6.1	3.4	2.7	
AREA=	77.6	55.2	61.2	67.2	103.5	66.1	53.9	51.8	36.6	35.2	
VEL=	4.4	5.2	5.6	5.9	11.4	5.8	5.1	4.3	3.4	2.7	
DEPTH=	1.7	2.3	2.5	2.8	3.4	2.7	2.2	1.7	1.2	.8	

*SECNO 4.301
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

4.301	4.76	2475.76	2475.76	.00	2477.11	1.35	4.57	.13	2471.40
3641.0	1788.5	1418.1	434.4	309.3	109.4	66.1	80.0	29.6	2471.40
.36	5.78	12.96	6.57	.050	.030	.050	.000	2471.00	846.85
.009072	475.	480.	475.	0	11	0	.00	181.77	1028.62

FLOW DISTRIBUTION FOR SECNO= 4.30 CWSEL= 2475.76

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	847.	896.	912.	924.	932.	940.	948.	956.	964.	968.	972.	976.	980.
PER Q=	3.2	3.6	3.9	3.2	3.8	4.4	5.0	5.6	3.0	3.1	3.3	3.4	
AREA=	39.6	30.3	28.3	21.5	23.7	25.9	27.9	30.1	15.6	16.0	16.4	16.8	
VEL=	2.9	4.3	5.0	5.5	5.8	6.2	6.5	6.8	7.0	7.1	7.3	7.4	
DEPTH=	.8	1.9	2.4	2.7	3.0	3.2	3.5	3.8	3.9	4.0	4.1	4.2	

STA=	980.	984.	1008.	1012.	1016.	1024.	1029.
PER Q=	3.5	38.9	3.5	3.2	4.8	.5	
AREA=	17.2	109.4	17.0	16.2	27.3	5.6	
VEL=	7.5	13.0	7.4	7.2	6.3	3.2	
DEPTH=	4.3	4.6	4.3	4.1	3.4	1.2	

*SECNO 4.390
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

4.390	4.94	2480.94	2480.94	.00	2482.14	1.20	3.77	.02	2477.00
3641.0	1086.1	1602.6	952.3	220.2	133.3	192.6	85.1	31.6	2477.00
.37	4.93	12.03	4.94	.050	.030	.050	.000	2476.00	874.50
.008099	385.	470.	490.	0	8	0	.00	220.21	1094.71

FLOW DISTRIBUTION FOR SECNO= 4.39 CWSEL= 2480.94

STA=	874.	895.	910.	936.	962.	980.	1010.	1025.	1048.	1070.	1090.	1095.
PER Q=	.4	2.0	7.1	9.9	10.4	44.0	8.6	8.6	6.1	2.7	.1	
AREA=	9.7	21.6	57.0	70.0	62.0	133.3	51.6	60.6	49.3	28.8	2.2	
VEL=	1.6	3.4	4.5	5.2	6.1	12.0	6.1	5.2	4.5	3.4	1.6	
DEPTH=	.5	1.4	2.2	2.7	3.4	4.4	3.4	2.7	2.2	1.4	.5	

*SECNO 4.487
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

4.487	5.34	2485.34	2485.34	.00	2486.66	1.31	3.88	.03	2481.30
3641.0	1411.6	1934.1	295.3	293.8	164.0	64.0	91.3	34.0	2481.30
.39	4.80	11.80	4.62	.050	.030	.050	.000	2480.00	876.64
.007266	500.	510.	510.	0	8	0	.00	188.78	1065.42

FLOW DISTRIBUTION FOR SECNO= 4.49 CWSEL= 2485.34

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	877.	900.	915.	930.	945.	955.	965.	975.	985.	995.	1030.	1035.	1045.
PER Q=	3.9	4.3	4.3	4.3	3.1	3.7	4.2	4.9	6.1	53.1	3.0	3.6	
AREA=	38.6	35.1	35.1	35.1	24.4	27.2	29.4	32.2	36.7	164.0	18.5	26.7	
VEL=	3.7	4.5	4.5	4.5	4.6	4.9	5.2	5.5	6.0	11.8	6.0	4.9	
DEPTH=	1.7	2.3	2.3	2.3	2.4	2.7	2.9	3.2	3.7	4.7	3.7	2.7	

STA=	1045.	1065.
PER Q=	1.5	
AREA=	18.9	
VEL=	2.9	
DEPTH=	.9	

*SECNO 4.585

4.585	5.97	2488.97	2488.74	.00	2490.22	1.25	3.56	.01	2484.00
3641.0	311.4	1694.7	1634.9	66.0	141.7	318.7	97.8	36.2	2484.00
.41	4.72	11.96	5.13	.050	.030	.050	.000	2483.00	955.78
.006113	520.	520.	575.	2	8	0	.00	161.85	1117.64

FLOW DISTRIBUTION FOR SECNO= 4.59 CWSEL= 2488.97

STA=	956.	979.	1005.	1010.	1015.	1020.	1025.	1030.	1035.	1045.	1055.	1066.	1078.
PER Q=	8.6	46.5	4.5	4.2	3.9	3.6	3.3	3.0	5.3	4.4	4.0	3.3	
AREA=	66.0	141.7	24.4	23.4	22.4	21.4	20.4	19.4	35.7	31.7	31.6	28.2	
VEL=	4.7	12.0	6.7	6.5	6.3	6.1	5.9	5.7	5.4	5.0	4.6	4.3	
DEPTH=	2.8	5.5	4.9	4.7	4.5	4.3	4.1	3.9	3.6	3.2	2.8	2.5	

STA=	1078.	1095.	1118.
PER Q=	3.6	1.9	
AREA=	34.8	25.5	
VEL=	3.7	2.7	
DEPTH=	2.0	1.1	

*SECNO 4.674

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

4.674	8.33	2495.33	2495.33	.00	2497.19	1.86	2.49	.18	2488.00
3641.0	363.3	2292.8	984.9	67.1	172.2	222.1	103.1	37.7	2488.00
.42	5.41	13.31	4.43	.050	.030	.050	.000	2487.00	971.68
.004672	485.	470.	460.	0	11	0	.00	136.93	1108.61

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.67 CWSEL= 2495.33

STA=	972.	985.	990.	1012.	1017.	1023.	1034.	1045.	1060.	1089.	1109.
PER Q=	4.2	5.7	63.0	6.9	4.8	5.0	3.4	3.3	3.2	.4	
AREA=	35.5	31.6	172.2	35.4	28.8	38.6	30.8	34.2	43.9	10.4	
VEL=	4.3	6.6	13.3	7.1	6.1	4.7	4.0	3.5	2.7	1.5	
DEPTH=	2.7	6.3	7.8	6.7	5.3	3.6	2.8	2.3	1.5	.5	

*SECNO 4.771

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

4.771	5.23	2499.23	2499.23	.00	2500.55	1.32	3.08	.05	2495.00
3641.0	269.2	1464.6	1907.2	49.6	113.6	347.9	108.6	39.5	2495.00
.44	5.43	12.89	5.48	.050	.030	.050	.000	2494.00	969.68
.008556	510.	510.	480.	0	14	0	.00	180.78	1150.47

FLOW DISTRIBUTION FOR SECNO= 4.77 CWSEL= 2499.23

STA=	970.	989.	1013.	1018.	1023.	1028.	1033.	1037.	1042.	1052.	1062.	1071.	1086.
PER Q=	7.4	40.2	4.0	3.8	3.5	3.4	3.3	3.0	5.4	4.4	3.2	3.6	
AREA=	49.6	113.6	20.5	19.8	18.6	18.5	18.1	17.3	32.3	28.1	23.4	29.7	
VEL=	5.4	12.9	7.1	7.0	6.8	6.7	6.6	6.4	6.1	5.7	5.0	4.4	
DEPTH=	2.6	4.7	4.2	4.0	3.9	3.8	3.7	3.5	3.3	3.0	2.5	2.0	

STA=	1086.	1105.	1125.	1135.	1144.	1150.
PER Q=	3.2	3.4	3.6	4.0	.5	
AREA=	31.2	32.3	25.6	26.5	5.9	
VEL=	3.8	3.9	5.1	5.5	2.9	
DEPTH=	1.6	1.6	2.6	2.9	1.0	

*SECNO 4.860
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

4.860	5.35	2503.35	2503.35	.00	2504.49	1.14	3.22	.02	2499.00
3641.0	672.8	1968.3	999.8	145.2	179.4	250.7	114.2	41.8	2499.00
.45	4.63	10.97	3.99	.050	.030	.050	.000	2498.00	908.32
.005994	480.	470.	425.	0	5	0	.00	267.25	1175.57

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.86 CWSEL= 2503.35

STA=	908.	942.	956.	973.	1010.	1031.	1044.	1056.	1093.	1161.	1176.
PER Q=	3.2	5.1	10.1	54.1	12.5	5.0	3.3	3.1	3.4	.1	
AREA=	39.3	40.4	65.4	179.4	80.8	38.1	29.6	41.9	57.7	2.6	
VEL=	3.0	4.6	5.6	11.0	5.6	4.8	4.1	2.7	2.2	.8	
DEPTH=	1.2	2.8	3.8	4.8	3.8	3.0	2.3	1.1	.8	.2	

*SECNO 4.989
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

4.989	4.72	2510.72	2510.72	.00	2512.16	1.44	4.86	.09	2506.70
3641.0	1151.7	1815.1	674.2	212.7	147.0	108.7	122.3	45.1	2506.70
.47	5.41	12.35	6.20	.050	.030	.050	.000	2506.00	892.43
.008736	660.	680.	690.	0	15	0	.00	163.41	1055.84

FLOW DISTRIBUTION FOR SECNO= 4.99 CWSEL= 2510.72

STA=	892.	928.	940.	949.	959.	965.	971.	978.	984.	987.	1021.	1027.	1033.
PER Q=	3.3	3.7	3.3	4.1	3.2	3.6	3.9	4.2	2.4	49.9	4.5	4.3	
AREA=	36.1	27.7	23.4	26.9	19.4	21.3	22.1	23.4	12.6	147.0	23.5	23.5	
VEL=	3.3	4.8	5.1	5.6	5.9	6.2	6.4	6.6	6.9	12.4	6.9	6.7	
DEPTH=	1.0	2.3	2.5	2.9	3.1	3.3	3.5	3.6	3.9	4.4	3.9	3.7	

STA=	1033.	1040.	1047.	1056.
PER Q=	4.1	3.4	2.2	
AREA=	23.5	20.9	17.3	
VEL=	6.4	5.9	4.7	
DEPTH=	3.5	3.1	1.9	

*SECNO 5.055
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

5.055	6.45	2514.45	2514.45	.00	2515.51	1.06	2.49	.04	2509.00
3641.0	791.7	1315.4	1534.0	140.6	105.9	412.2	126.8	46.9	2509.00
.49	5.63	12.42	3.72	.050	.030	.050	.000	2508.00	947.04
.005893	350.	350.	350.	0	11	0	.00	283.17	1230.21

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 5.05 CWSEL= 2514.45

STA=	947.	975.	988.	1005.	1021.	1034.	1060.	1087.	1113.	1146.	1165.	1183.	1214.
PER Q=	10.5	11.2	36.1	9.6	3.3	4.3	3.1	3.4	6.9	3.6	4.1	3.7	
AREA=	78.7	61.9	105.9	62.0	29.9	46.1	38.7	40.5	68.4	37.0	38.5	44.8	
VEL=	4.9	6.6	12.4	5.6	4.0	3.4	2.9	3.1	3.7	3.6	3.9	3.0	
DEPTH=	2.8	4.9	5.9	3.9	2.3	1.8	1.4	1.6	2.0	1.9	2.2	1.4	

STA=	1214.	1230.
PER Q=	.2	
AREA=	6.3	
VEL=	1.3	
DEPTH=	.4	

*SECNO 5.182
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

5.182	4.54	2521.54	2521.54	.00	2522.79	1.25	5.11	.06	2517.50
3641.0	1981.3	1145.1	514.6	334.1	85.8	81.8	135.6	50.5	2517.50
.51	5.93	13.34	6.29	.050	.030	.050	.000	2517.00	849.57
.010421	680.	670.	640.	0	19	0	.00	189.77	1039.34

FLOW DISTRIBUTION FOR SECNO= 5.18 CWSEL= 2521.54

STA=	850.	888.	902.	915.	931.	947.	963.	979.	990.	1010.	1019.	1036.	1039.
PER Q=	4.2	3.7	4.7	6.7	7.8	9.0	10.2	8.1	31.5	7.3	6.7	.2	
AREA=	42.1	27.4	31.8	42.3	46.3	50.3	54.3	39.8	85.8	36.0	43.2	2.6	
VEL=	3.6	4.9	5.4	5.8	6.2	6.5	6.8	7.4	13.3	7.4	5.6	2.4	
DEPTH=	1.1	2.0	2.4	2.6	2.9	3.1	3.4	3.8	4.3	3.8	2.5	.8	

*SECNO 5.244

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

5.244	4.67	2525.67	2525.67	.00	2526.76	1.09	2.66	.02	2521.40
3641.0	2140.9	1241.1	259.0	425.3	99.2	50.0	138.9	51.9	2521.40
.52	5.03	12.51	5.18	.050	.030	.050	.000	2521.00	684.80
.008676	240.	330.	340.	0	8	0	.00	279.04	1024.59

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 5.24 CWSEL= 2525.67

STA=	685.	744.	768.	885.	901.	912.	922.	931.	941.	950.	955.	960.	965.
PER Q=	4.5	3.3	3.2	3.1	3.6	4.0	4.4	5.2	5.7	3.1	3.4	3.5	
AREA=	58.5	34.1	43.7	28.0	26.3	26.6	28.2	31.2	33.0	17.4	18.6	19.1	
VEL=	2.8	3.5	2.7	4.1	5.0	5.5	5.7	6.1	6.3	6.5	6.6	6.8	
DEPTH=	1.0	1.4	.4	1.8	2.4	2.8	3.0	3.2	3.5	3.6	3.7	3.8	

STA=	965.	970.	975.	980.	1002.	1008.	1020.	1025.
PER Q=	3.7	3.9	4.1	34.1	3.7	3.2	.2	
AREA=	19.6	20.1	20.9	99.2	21.0	25.1	3.8	
VEL=	6.9	7.0	7.2	12.5	6.4	4.6	2.4	
DEPTH=	3.9	4.0	4.2	4.5	3.6	2.1	.8	

*SECNO 5.341
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

5.341	4.44	2531.44	2531.44	.00	2532.23	.79	4.14	.03	2528.00
3641.0	982.2	1125.5	1533.3	196.5	102.4	382.7	146.1	55.5	2528.00
.54	5.00	10.99	4.01	.050	.030	.050	.000	2527.00	902.69
.007957	460.	510.	550.	0	10	0	.00	354.12	1256.81

FLOW DISTRIBUTION FOR SECNO= 5.34 CWSEL= 2531.44

STA=	903.	935.	945.	955.	965.	975.	985.	990.	1016.	1025.	1035.	1045.	1055.
PER Q=	3.5	3.1	3.7	4.1	4.6	5.2	2.8	30.9	4.5	3.3	3.2	3.2	
AREA=	38.4	23.6	26.4	28.4	30.4	32.4	16.9	102.4	29.0	24.3	24.4	24.4	
VEL=	3.3	4.7	5.1	5.3	5.6	5.8	6.0	11.0	5.7	4.9	4.8	4.8	
DEPTH=	1.2	2.4	2.6	2.8	3.0	3.2	3.4	3.9	3.1	2.5	2.4	2.4	

STA=	1055.	1065.	1093.	1120.	1150.	1180.	1223.	1257.
PER Q=	3.2	7.4	4.8	4.0	4.0	3.8	.7	
AREA=	24.4	60.1	46.4	43.1	43.1	48.2	15.3	
VEL=	4.8	4.5	3.8	3.4	3.4	2.9	1.7	
DEPTH=	2.4	2.2	1.7	1.4	1.4	1.1	.5	

*SECNO 5.426

5.426	4.71	2534.71	2534.64	.00	2535.87	1.16	3.53	.11	2530.50
3641.0	520.0	1519.8	1601.2	101.6	127.4	309.1	152.4	58.5	2530.50
.56	5.12	11.93	5.18	.050	.030	.050	.000	2530.00	945.64
.007697	445.	450.	455.	2	8	0	.00	219.96	1165.60

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 5.43 CWSEL= 2534.71

STA=	946.	976.	985.	990.	993.	1021.	1025.	1030.	1035.	1041.	1046.	1055.	1065.
PER Q=	4.5	4.5	3.4	1.9	41.7	3.5	3.1	3.4	3.4	3.4	5.6	4.9	
AREA=	43.2	28.9	19.3	10.3	127.4	19.5	17.9	19.6	20.0	19.6	33.7	31.2	
VEL=	3.8	5.7	6.4	6.7	11.9	6.6	6.4	6.2	6.2	6.2	6.1	5.8	
DEPTH=	1.4	3.2	3.9	4.1	4.6	4.1	3.8	3.7	3.7	3.7	3.6	3.3	

STA=	1065.	1074.	1092.	1121.	1166.
PER Q=	4.2	5.8	5.0	1.6	
AREA=	28.0	43.7	49.2	26.7	
VEL=	5.4	4.9	3.7	2.1	
DEPTH=	3.0	2.5	1.7	.6	

CCHV= .300 CEHV= .500
*SECNO 5.532

3370 NORMAL BRIDGE, NRD= 88 MIN ELTRD= 2542.40 MAX ELLC= 2544.20

7185 MINIMUM SPECIFIC ENERGY
7220 CRITICAL DEPTH ASSUMED

5495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2545.70 ELREA= 2542.40

DOWNSTREAM FACE: CONC. BRIDGE - OLD US HWY 60

MODELED STRUCTURE AS NORMAL BRIDGE
SINCE MAX ELLC > MIN ELTRD

CROSS-SECTION ADJUSTED FOR
35 DEGREE SKEW ANGLE

5.532	10.63	2544.73	2544.73	.00	2545.52	.79	2.06	.11	2534.10
3641.0	.0	2288.4	1352.6	.0	258.4	637.3	159.3	61.6	2534.10
.58	.00	8.86	2.12	.000	.020	.050	.000	2534.10	918.29
.002810	580.	560.	340.	0	10	0	-55.15	508.99	1427.28

FLOW DISTRIBUTION FOR SECNO= 5.53 CWSEL= 2544.73

STA=	918.	948.	1070.	1125.	1172.	1204.	1235.	1259.	1282.	1306.	1326.	1388.	1427.
PER Q=	62.9	3.1	3.2	3.7	3.1	3.5	3.0	3.3	3.7	3.5	6.9	.3	
AREA=	258.4	86.5	65.1	66.9	51.4	55.6	45.2	47.9	50.7	46.2	107.2	14.5	
VEL=	8.9	1.3	1.8	2.0	2.2	2.3	2.4	2.5	2.6	2.7	2.3	.8	
DEPTH=	8.8	.7	1.2	1.4	1.6	1.8	1.9	2.0	2.1	2.3	1.7	.4	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 5.538

4575 CRITICAL DEPTH ASSUMED BELOW ELLC OF 2544.200 EGLC= 2546.055 EGC= 2546.094 WSEL= 2542.113

3370 NORMAL BRIDGE, NRD= 84 MIN ELTRD= 2542.50 MAX ELLC= 2544.20

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2545.70 ELREA= 2542.50

UPSTREAM FACE: CONC. BRIDGE - OLD US HWY 60

MODELED STRUCTURE AS NORMAL BRIDGE
SINCE MAX ELLC > MIN ELTRD

CROSS-SECTION ADJUSTED FOR
35 DEGREE SKEW ANGLE

5.538	10.45	2544.85	2544.85	.00	2545.69	.84	.09	.02	2534.40
3641.0	.0	2348.3	1292.7	.0	260.5	597.3	159.9	62.0	2534.40
.58	.00	9.01	2.16	.000	.020	.050	.000	2534.40	918.29
.002952	31.	31.	31.	0	23	0	-47.60	471.88	1390.16

FLOW DISTRIBUTION FOR SECNO= 5.54 CWSEL= 2544.85

STA=	918.	948.	1054.	1117.	1156.	1196.	1227.	1259.	1282.	1306.	1348.	1390.
PER Q=	64.5	3.2	4.0	3.3	4.2	3.9	4.5	3.7	4.1	4.1	.4	
AREA=	260.5	83.2	78.3	57.9	66.6	58.2	63.3	50.7	53.4	68.1	17.7	
VEL=	9.0	1.4	1.9	2.1	2.3	2.4	2.6	2.7	2.8	2.2	.9	
DEPTH=	8.8	.8	1.2	1.5	1.7	1.8	2.0	2.1	2.3	1.6	.4	

CCHV= .300 CEHV= .500
*SECNO 5.566

3470 ENCROACHMENT STATIONS= 901.0 1035.0 TYPE= 1 TARGET= 134.000
ET RECORD: STA 901 & 1035 MODEL
EFFECTIVE FLOW AREA

MAPPED FLOODPLAIN TO CWSEL

5.566	8.53	2545.53	2542.83	.00	2546.17	.65	.43	.06	2538.00
3641.0	1140.6	1681.5	819.0	293.0	200.7	183.2	163.8	63.7	2538.00
.59	3.89	8.38	4.47	.050	.030	.050	.000	2537.00	918.37
.001788	140.	150.	290.	2	11	0	.00	116.63	1035.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 5.57 CWSEL= 2545.53

STA=	918.	947.	955.	961.	967.	973.	979.	985.	1010.	1016.	1021.	1027.	1033.
PER Q=	3.7	4.0	3.8	4.2	4.7	5.2	5.7	46.2	5.3	5.3	5.6	5.4	
AREA=	56.7	40.5	34.4	36.8	39.2	41.6	44.0	200.7	40.7	40.4	42.9	41.8	
VEL=	2.4	3.6	4.0	4.2	4.4	4.6	4.7	8.4	4.8	4.7	4.8	4.7	
DEPTH=	2.0	4.9	5.7	6.1	6.5	6.9	7.3	8.0	7.4	7.4	7.4	7.2	

STA=	1033.	1035.
PER Q=	.9	
AREA=	17.4	
VEL=	1.9	
DEPTH=	7.2	

CCHV= .100 CEHV= .300

*SECNO 5.652

5.652	8.30	2546.30	2543.62	.00	2546.82	.53	.64	.01	2540.00
3641.0	369.3	2763.8	507.9	142.9	422.7	196.9	171.2	65.1	2540.00
.61	2.58	6.54	2.58	.050	.030	.050	.000	2538.00	937.85
.001156	455.	450.	445.	2	14	0	.00	150.23	1088.08

FLOW DISTRIBUTION FOR SECNO= 5.65 CWSEL= 2546.30

STA=	938.	940.	963.	975.	1030.	1050.	1072.	1086.	1088.
PER Q=	.1	4.5	5.5	75.9	8.9	4.4	.6	.0	
AREA=	2.5	74.2	66.2	422.7	105.9	72.5	18.2	.3	
VEL=	.9	2.2	3.0	6.5	3.1	2.2	1.2	.3	
DEPTH=	1.1	3.3	5.3	7.7	5.3	3.3	1.3	.1	

*SECNO 5.764

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

5.764	5.59	2550.39	2550.39	.00	2551.97	1.59	1.42	.32	2546.00
3641.0	560.3	2026.4	1054.3	105.3	159.8	193.8	179.6	67.1	2546.00
.63	5.32	12.68	5.44	.050	.030	.050	.000	2544.80	950.86
.007398	595.	595.	600.	0	19	0	.00	142.99	1093.85

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 5.76 CWSEL= 2550.39

STA=	951.	971.	980.	985.	990.	1021.	1026.	1031.	1035.	1045.	1055.	1065.	1090.
PER Q=	4.2	4.4	3.0	3.7	55.7	3.8	3.5	3.2	5.7	4.8	3.9	4.0	
AREA=	36.9	29.5	18.2	20.7	159.8	20.6	19.6	18.6	34.4	31.9	27.9	40.1	
VEL=	4.2	5.4	6.0	6.6	12.7	6.7	6.5	6.3	6.0	5.5	5.1	3.6	
DEPTH=	1.9	3.1	3.6	4.1	5.2	4.3	4.1	3.9	3.6	3.2	2.8	1.6	

STA=	1090.	1094.
PER Q=	.0	
AREA=	.7	
VEL=	.8	
DEPTH=	.2	

*SECNO 5.836

3301 HV CHANGED MORE THAN HVINS

5.836	5.13	2553.43	2552.55	.00	2554.03	.60	1.95	.10	2548.50
3641.0	1566.8	1156.8	917.4	378.0	126.1	216.6	184.5	68.8	2548.50
.64	4.14	9.17	4.24	.050	.030	.050	.000	2548.30	847.85
.003961	395.	380.	325.	2	19	0	.00	243.72	1091.57

FLOW DISTRIBUTION FOR SECNO= 5.84 CWSEL= 2553.43

STA=	848.	891.	907.	923.	933.	944.	954.	965.	970.	975.	980.	985.	1010.
PER Q=	3.5	3.2	4.5	3.7	4.4	5.0	5.7	3.1	3.2	3.4	3.5	31.8	
AREA=	52.1	35.9	43.8	33.4	36.8	39.9	43.0	22.9	22.6	23.4	24.1	126.1	
VEL=	2.4	3.2	3.7	4.0	4.3	4.6	4.8	5.0	5.1	5.2	5.3	9.2	
DEPTH=	1.2	2.3	2.8	3.2	3.5	3.8	4.1	4.3	4.5	4.7	4.8	5.0	

STA=	1010.	1015.	1020.	1025.	1031.	1042.	1053.	1075.	1092.
PER Q=	3.5	3.4	3.2	3.2	5.0	3.4	3.1	.4	
AREA=	24.1	23.4	22.6	23.7	41.3	32.8	39.8	9.0	
VEL=	5.3	5.2	5.1	4.9	4.4	3.8	2.9	1.4	
DEPTH=	4.8	4.7	4.5	4.2	3.7	2.9	1.8	.5	

*SECNO 5.937

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 850.0 1080.0 TYPE= 1 TARGET= 230.000
ET RECORD: STA 850 ELIMINATE INNEFECTIVE
FLOW AREA IN LEFT OVERBANK

5.937	5.02	2559.02	2559.02	.00	2560.56	1.54	2.86	.28	2554.50
3641.0	1175.5	1820.0	645.5	196.1	142.6	109.4	191.4	71.0	2554.50
.66	5.99	12.77	5.90	.050	.030	.050	.000	2554.00	904.67
.008320	495.	530.	525.	0	8	0	.00	147.81	1052.48

FLOW DISTRIBUTION FOR SECNO= 5.94 CWSEL= 2559.02

STA=	905.	936.	946.	955.	960.	965.	970.	975.	980.	1010.	1015.	1020.	1026.
PER Q=	3.3	3.8	5.2	3.3	3.9	4.0	4.3	4.5	50.0	4.3	3.9	3.7	
AREA=	35.0	26.7	31.1	18.2	20.3	20.8	21.6	22.3	142.6	21.8	20.6	20.9	
VEL=	3.5	5.2	6.1	6.7	6.9	7.0	7.2	7.4	12.8	7.2	7.0	6.4	
DEPTH=	1.1	2.6	3.3	3.9	4.1	4.2	4.3	4.5	4.8	4.4	4.1	3.7	

STA=	1026.	1037.	1052.
PER Q=	4.4	1.4	
AREA=	30.4	15.6	
VEL=	5.3	3.2	
DEPTH=	2.7	1.0	

*SECNO 6.029

6.029	5.12	2563.12	2562.95	.00	2564.33	1.21	3.74	.03	2559.00
3641.0	1668.4	1631.1	341.4	314.0	138.1	66.6	196.6	72.8	2559.00
.67	5.31	11.81	5.12	.050	.030	.050	.000	2558.00	864.53
.007446	445.	490.	510.	2	5	0	.00	174.97	1039.50

FLOW DISTRIBUTION FOR SECNO= 6.03 CWSEL= 2563.12

STA=	865.	900.	915.	929.	950.	960.	970.	975.	980.	1010.	1015.	1025.	1040.
PER Q=	6.7	9.0	8.4	7.4	3.1	4.7	3.0	3.5	44.8	3.3	4.5	1.5	
AREA=	60.3	54.3	50.7	55.0	24.5	31.2	18.1	19.9	138.1	19.4	30.5	16.8	
VEL=	4.1	6.0	6.0	4.9	4.7	5.5	6.0	6.4	11.8	6.3	5.4	3.3	
DEPTH=	1.7	3.6	3.6	2.6	2.4	3.1	3.6	4.0	4.6	3.9	3.0	1.2	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 6.124
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

6.124	3.24	2569.24	2569.24	.00	2570.16	.92	4.67	.03	2566.30
3641.0	1117.4	1072.8	1450.8	225.5	93.3	257.5	203.0	75.6	2566.30
.69	4.95	11.50	5.63	.050	.030	.050	.000	2566.00	843.33
.011882	540.	500.	450.	0	14	0	.00	306.50	1149.82

FLOW DISTRIBUTION FOR SECNO= 6.12 CWSEL= 2569.24

STA=	843.	900.	920.	935.	950.	960.	970.	980.	990.	1020.	1030.	1040.	1050.
PER Q=	3.4	3.3	3.4	4.2	3.2	3.7	4.4	5.1	29.5	5.3	5.0	4.6	
AREA=	40.7	29.1	26.1	29.9	21.7	23.4	26.2	28.4	93.3	29.2	28.2	26.7	
VEL=	3.0	4.2	4.7	5.1	5.4	5.7	6.2	6.5	11.5	6.6	6.5	6.2	
DEPTH=	.7	1.5	1.7	2.0	2.2	2.3	2.6	2.8	3.1	2.9	2.8	2.7	

STA=	1050.	1060.	1070.	1080.	1090.	1100.	1110.	1144.	1150.
PER Q=	4.2	3.9	3.6	3.4	3.4	3.2	3.2	.0	
AREA=	25.4	24.2	23.2	22.4	22.4	21.7	33.5	.7	
VEL=	6.0	5.8	5.7	5.6	5.6	5.4	3.5	.8	
DEPTH=	2.5	2.4	2.3	2.2	2.2	2.2	1.0	.1	

*SECNO 6.213
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

6.213	5.23	2574.23	2574.23	.00	2575.52	1.29	4.35	.11	2570.00
3641.0	954.4	1762.6	924.0	190.6	146.6	185.8	208.9	78.3	2570.00
.71	5.01	12.02	4.97	.050	.030	.050	.000	2569.00	891.31
.007440	500.	470.	440.	0	14	0	.00	193.70	1085.02

FLOW DISTRIBUTION FOR SECNO= 6.21 CWSEL= 2574.23

STA=	891.	905.	920.	935.	959.	980.	1011.	1021.	1036.	1070.	1085.
PER Q=	.2	1.2	2.9	9.0	12.9	48.4	6.6	6.3	11.0	1.4	
AREA=	5.0	16.2	27.4	65.5	76.5	146.6	39.2	43.2	85.6	17.8	
VEL=	1.3	2.7	3.8	5.0	6.2	12.0	6.1	5.3	4.7	2.9	
DEPTH=	.4	1.1	1.8	2.7	3.7	4.7	3.7	3.0	2.5	1.2	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 6.317

3301 HV CHANGED MORE THAN HVINS

6.317	5.05	2578.05	2577.34	.00	2578.68	.62	3.09	.07	2574.00
3641.0	1814.3	1281.9	544.8	434.6	141.1	134.1	216.6	81.0	2574.00
.74	4.17	9.08	4.06	.050	.030	.050	.000	2573.00	827.55
.004469	535.	550.	555.	2	15	0	.00	236.55	1064.10

FLOW DISTRIBUTION FOR SECNO= 6.32 CWSEL= 2578.05

STA=	828.	858.	877.	890.	902.	915.	928.	942.	955.	962.	969.	975.	982.
PER Q=	3.6	4.4	3.4	3.8	4.2	5.0	5.5	6.0	3.2	3.4	3.5	3.7	
AREA=	45.2	45.6	33.0	35.2	37.5	42.2	44.9	47.6	24.8	25.5	26.1	26.8	
VEL=	2.9	3.5	3.8	3.9	4.1	4.3	4.5	4.6	4.8	4.8	4.9	5.0	
DEPTH=	1.5	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.7	3.8	3.9	4.0	

STA=	982.	1013.	1020.	1033.	1046.	1064.
PER Q=	35.2	3.4	5.4	3.8	2.4	
AREA=	141.1	25.4	43.9	35.5	29.4	
VEL=	9.1	4.9	4.5	3.9	2.9	
DEPTH=	4.6	3.9	3.4	2.7	1.6	

*SECNO 6.419

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

6.419	4.65	2581.65	2581.65	.00	2582.88	1.23	3.48	.18	2578.00
3641.0	2174.6	1136.2	330.2	344.6	87.1	66.0	223.9	83.6	2578.00
.75	6.31	13.04	5.00	.050	.030	.050	.000	2577.00	782.94
.010466	530.	535.	535.	0	11	0	.00	203.44	1043.30

FLOW DISTRIBUTION FOR SECNO= 6.42 CWSEL= 2581.65

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	783.	896.	906.	916.	926.	937.	942.	947.	952.	990.	1011.	1021.	1035.
PER Q=	4.0	3.2	4.2	5.0	5.8	3.2	3.3	3.6	27.4	31.2	4.0	3.9	
AREA=	42.2	22.5	26.5	29.6	32.1	17.1	17.6	18.3	138.6	87.1	26.2	28.9	
VEL=	3.4	5.2	5.8	6.1	6.5	6.7	6.9	7.1	7.2	13.0	5.5	4.9	
DEPTH=	.4	2.2	2.6	2.9	3.1	3.3	3.4	3.6	3.6	4.1	2.5	2.1	

STA=	1035.	1043.
PER Q=	1.2	
AREA=	10.9	
VEL=	3.9	
DEPTH=	1.4	

*SECNO 6.508

3301 HV CHANGED MORE THAN HVINS

6.508	4.08	2586.08	2585.66	.00	2586.78	.70	3.85	.05	2583.00
3641.0	1294.1	1112.4	1234.5	294.7	113.9	236.8	229.8	86.0	2583.00
.77	4.39	9.76	5.21	.050	.030	.050	.000	2582.00	830.10
.007166	420.	470.	480.	3	15	0	.00	265.32	1095.42

FLOW DISTRIBUTION FOR SECNO= 6.51 CWSEL= 2586.08

STA=	830.	879.	894.	905.	915.	925.	940.	955.	965.	975.	980.	1012.	1055.
PER Q=	3.2	3.3	3.5	4.3	3.7	4.2	4.0	3.3	3.8	2.2	30.6	19.3	
AREA=	42.7	30.1	26.8	30.1	27.5	34.9	33.6	25.8	28.0	15.1	113.9	132.3	
VEL=	2.7	4.0	4.7	5.2	4.9	4.4	4.3	4.7	5.0	5.3	9.8	5.3	
DEPTH=	.9	2.0	2.6	3.0	2.8	2.3	2.2	2.6	2.8	3.0	3.6	3.1	

STA=	1055.	1064.	1073.	1083.	1095.
PER Q=	4.6	5.1	3.4	1.5	
AREA=	29.7	32.0	25.8	17.1	
VEL=	5.6	5.8	4.7	3.3	
DEPTH=	3.3	3.6	2.6	1.4	

*SECNO 6.568

6.568	5.82	2587.82	2587.69	.00	2588.87	1.04	1.99	.10	2583.00
3395.0	1003.2	1546.5	845.3	221.4	138.4	204.7	234.2	87.8	2583.00
.79	4.53	11.17	4.13	.050	.030	.050	.000	2582.00	891.29
.005494	310.	320.	320.	3	11	0	.00	229.36	1120.65

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 6.57 CWSEL= 2587.82

STA=	891.	938.	953.	968.	975.	982.	989.	1015.	1021.	1028.	1034.	1048.	1063.
PER Q=	4.1	4.4	6.5	4.1	4.7	5.7	45.6	4.4	3.8	3.2	5.1	3.7	
AREA=	51.0	36.7	46.3	26.8	28.5	32.0	138.4	25.9	24.6	21.9	39.2	32.9	
VEL=	2.7	4.1	4.7	5.2	5.6	6.1	11.2	5.8	5.2	4.9	4.4	3.8	
DEPTH=	1.1	2.5	3.1	3.7	4.1	4.6	5.3	4.3	3.7	3.3	2.8	2.3	

STA=	1063.	1084.	1121.
PER Q=	3.3	1.4	
AREA=	36.0	24.2	
VEL=	3.1	2.0	
DEPTH=	1.7	.7	

*SECNO 6.703
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
DISCHARGE FROM HEC-1 MODEL: SAI150 Q = 1855 cfs

6.703	4.22	2594.22	2594.22	.00	2595.14	.92	4.24	.01	2591.00
1855.0	399.4	994.5	461.1	97.3	100.4	128.1	241.5	91.2	2591.00
.81	4.11	9.90	3.60	.050	.030	.050	.000	2590.00	929.00
.006957	690.	710.	740.	0	19	0	.00	187.82	1116.82

FLOW DISTRIBUTION FOR SECNO= 6.70 CWSEL= 2594.22

STA=	929.	956.	966.	976.	985.	1012.	1021.	1030.	1041.	1061.	1099.	1117.
PER Q=	3.7	4.3	5.7	7.8	53.6	7.4	5.4	4.5	4.3	3.0	.2	
AREA=	24.9	20.7	23.5	28.2	100.4	26.7	22.2	21.7	26.6	26.9	4.0	
VEL=	2.7	3.9	4.5	5.1	9.9	5.1	4.5	3.9	3.0	2.1	1.0	
DEPTH=	.9	2.0	2.5	3.0	3.7	3.0	2.5	2.0	1.3	.7	.2	

*SECNO 6.778
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

6.778	4.22	2599.22	2599.22	.00	2600.51	1.29	3.11	.11	2595.50
1855.0	446.3	929.0	479.7	78.0	79.4	95.1	244.1	92.5	2595.50
.83	5.72	11.69	5.05	.050	.030	.050	.000	2595.00	953.89
.008878	410.	400.	380.	0	5	0	.00	98.15	1052.04

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 6.78 CWSEL= 2599.22

STA=	954.	960.	970.	985.	1005.	1010.	1033.	1047.	1052.
PER Q=	.4	5.6	18.0	50.1	6.0	17.0	2.8	.1	
AREA=	3.7	22.2	52.1	79.4	17.4	59.9	16.4	1.4	
VEL=	2.0	4.7	6.4	11.7	6.4	5.3	3.2	1.1	
DEPTH=	.6	2.2	3.5	4.0	3.5	2.6	1.2	.3	

*SECNO 6.890
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 775.0 1072.0 TYPE= 1 TARGET= 297.000
ET RECORD: STA 775 ELIMINATE INEFFECTIVE
FLOW AREA IN LEFT OVERBANK

6.890	4.90	2603.90	2603.90	.00	2604.90	1.00	4.34	.03	2600.00
1855.0	801.0	1002.9	51.1	214.5	96.7	15.2	248.0	94.4	2600.00
.85	3.73	10.37	3.37	.050	.030	.050	.000	2599.00	853.67
.006124	620.	590.	550.	0	11	0	.00	166.12	1019.79

W DISTRIBUTION FOR SECNO= 6.89 CWSEL= 2603.90

STA=	854.	868.	885.	898.	911.	924.	937.	950.	963.	976.	990.	1012.	1020.
PER Q=	.1	1.1	1.6	2.2	2.8	3.5	4.3	5.8	8.2	13.4	54.1	2.8	
AREA=	2.7	11.3	12.9	15.5	18.1	20.7	23.3	27.9	34.4	47.5	96.7	15.2	
VEL=	.8	1.7	2.3	2.6	2.9	3.2	3.4	3.9	4.4	5.2	10.4	3.4	
DEPTH=	.2	.6	1.0	1.2	1.4	1.6	1.8	2.1	2.6	3.4	4.4	1.9	

*SECNO 6.983
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 840.0 1081.0 TYPE= 1 TARGET= 241.000
ET RECORD: STA 840 & 1081 ELIMINATE INEFFECTIVE
FLOW AREAS IN OVERBANKS

6.983	4.93	2607.93	2607.93	.00	2609.25	1.32	2.75	.10	2604.00
1855.0	357.0	1387.4	110.6	92.2	133.0	31.0	250.9	95.6	2604.00
.86	3.87	10.43	3.57	.050	.030	.050	.000	2603.00	917.50
.006103	360.	490.	510.	0	5	0	.00	113.24	1030.74

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 6.98 CWSEL= 2607.93

STA=	917.	930.	938.	945.	953.	960.	968.	975.	983.	985.	1015.	1031.
PER Q=	.1	.2	.4	.7	1.4	2.8	4.4	6.5	2.7	74.8	6.0	
AREA=	2.1	3.3	4.8	6.3	9.4	14.3	18.9	23.9	9.2	133.0	31.0	
VEL=	.8	1.3	1.7	2.1	2.7	3.6	4.4	5.0	5.5	10.4	3.6	
DEPTH=	.2	.4	.6	.8	1.3	1.9	2.6	3.2	3.7	4.4	2.0	

*SECNO 7.074
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.074	4.94	2612.94	2612.94	.00	2614.08	1.15	3.07	.02	2609.00
1855.0	497.5	1015.7	341.7	107.4	93.1	86.2	253.9	97.0	2609.00
.88	4.63	10.91	3.97	.050	.030	.050	.000	2608.00	935.05
.006701	485.	480.	470.	0	5	0	.00	132.51	1067.56

FLOW DISTRIBUTION FOR SECNO= 7.07 CWSEL= 2612.94

STA=	935.	957.	963.	970.	978.	985.	1006.	1012.	1019.	1025.	1040.	1068.
PER Q=	3.6	3.3	4.5	6.8	8.6	54.8	6.1	4.4	3.1	3.6	1.1	
AREA=	23.1	14.9	18.0	23.9	27.6	93.1	20.6	17.5	14.2	21.5	12.4	
VEL=	2.9	4.1	4.7	5.3	5.8	10.9	5.5	4.7	4.1	3.1	1.7	
DEPTH=	1.1	2.2	2.7	3.2	3.7	4.4	3.4	2.7	2.2	1.4	.4	

*SECNO 7.157
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.157	4.12	2619.12	2619.12	.00	2620.25	1.13	3.10	.00	2616.00
1855.0	52.5	1257.8	544.7	14.7	126.1	133.2	256.7	98.3	2616.00
.89	3.57	9.97	4.09	.050	.030	.050	.000	2615.00	968.61
.007353	450.	440.	440.	0	15	0	.00	131.14	1099.75

FLOW DISTRIBUTION FOR SECNO= 7.16 CWSEL= 2619.12

STA=	969.	980.	1015.	1020.	1026.	1031.	1036.	1046.	1057.	1073.	1100.
PER Q=	2.8	67.8	4.5	4.1	3.6	3.1	5.3	3.9	3.4	1.4	
AREA=	14.7	126.1	15.7	14.9	13.6	12.6	23.0	19.1	20.7	13.6	
VEL=	3.6	10.0	5.3	5.1	4.8	4.6	4.3	3.8	3.1	1.9	
DEPTH=	1.3	3.6	3.0	2.8	2.6	2.4	2.2	1.8	1.3	.5	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 7.275

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.275	5.22	2624.22	2624.22	.00	2625.11	.89	3.55	.02	2620.00
1855.0	711.3	992.6	151.2	216.0	100.4	42.8	260.8	100.6	2620.00
.92	3.29	9.89	3.53	.050	.030	.050	.000	2619.00	590.82
.005034	490.	620.	600.	0	11	0	.00	236.33	1032.10

FLOW DISTRIBUTION FOR SECNO= 7.28 CWSEL= 2624.22

STA=	591.	888.	923.	944.	957.	963.	970.	978.	985.	1006.	1010.	1017.	1032.
PER Q=	3.1	3.3	3.4	4.9	3.7	4.7	6.8	8.5	53.5	3.5	3.1	1.5	
AREA=	39.7	31.1	25.6	26.7	17.3	19.9	26.0	29.8	100.4	13.0	16.7	13.1	
VEL=	1.5	2.0	2.4	3.4	4.0	4.4	4.8	5.3	9.9	4.9	3.5	2.2	
DEPTH=	.1	.9	1.2	2.0	2.6	3.0	3.5	4.0	4.8	3.7	2.2	.9	

ECNO 7.375
5 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.375	4.41	2631.41	2631.41	.00	2632.05	.64	2.48	.03	2628.00
1855.0	392.1	987.3	475.6	116.1	117.4	225.2	265.5	104.2	2628.00
.94	3.38	8.41	2.11	.050	.030	.050	.000	2627.00	918.80
.004687	485.	530.	500.	0	9	0	.00	402.46	1321.25

FLOW DISTRIBUTION FOR SECNO= 7.38 CWSEL= 2631.41

STA=	919.	950.	960.	970.	978.	985.	1015.	1022.	1031.	1048.	1135.	1175.	1201.
PER Q=	3.8	3.2	4.3	4.2	5.6	53.2	4.5	3.6	3.8	4.1	3.8	3.0	
AREA=	30.6	19.1	22.6	20.0	23.7	117.4	20.4	19.5	26.0	49.3	35.5	26.7	
VEL=	2.3	3.1	3.5	3.9	4.4	8.4	4.1	3.4	2.7	1.5	2.0	2.1	
DEPTH=	1.0	1.9	2.3	2.7	3.2	3.9	2.9	2.2	1.5	.6	.9	1.0	

STA=	1201.	1321.
PER Q=	2.9	
AREA=	47.9	
VEL=	1.1	
DEPTH=	.4	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 7.468

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.468	4.90	2633.90	2633.90	.00	2635.18	1.28	2.80	.19	2630.00
1855.0	570.8	1083.1	201.1	119.3	96.8	45.4	269.6	107.1	2630.00
.96	4.78	11.19	4.43	.050	.030	.050	.000	2629.00	928.77
.007127	490.	490.	485.	0	8	0	.00	107.61	1036.39

FLOW DISTRIBUTION FOR SECNO= 7.47 CWSEL= 2633.90

STA=	929.	958.	964.	970.	976.	983.	989.	1011.	1017.	1022.	1036.
PER Q=	3.7	3.0	4.2	5.5	6.6	7.7	58.4	5.7	3.2	2.0	
AREA=	24.8	13.5	16.4	19.2	21.7	23.6	96.8	18.7	13.2	13.5	
VEL=	2.8	4.2	4.8	5.3	5.7	6.0	11.2	5.6	4.4	2.8	
DEPTH=	.9	2.1	2.6	3.0	3.4	3.7	4.4	3.4	2.4	.9	

*SECNO 7.559
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.559	4.05	2639.05	2639.05	.00	2640.03	.98	3.24	.03	2636.00
1855.0	109.2	1263.6	482.1	28.3	135.2	147.1	272.7	108.6	2636.00
.98	3.86	9.35	3.28	.050	.030	.050	.000	2635.00	976.11
.006458	450.	480.	500.	0	15	0	.00	170.46	1146.57

FLOW DISTRIBUTION FOR SECNO= 7.56 CWSEL= 2639.05

STA=	976.	993.	1030.	1038.	1050.	1063.	1075.	1094.	1124.	1147.
PER Q=	5.9	68.1	4.9	5.1	4.8	3.7	4.0	3.1	.4	
AREA=	28.3	135.2	20.4	24.6	24.1	20.7	25.4	25.8	6.1	
VEL=	3.9	9.3	4.4	3.9	3.7	3.3	2.9	2.2	1.1	
DEPTH=	1.7	3.6	2.6	2.1	1.9	1.7	1.4	.9	.3	

*SECNO 7.641
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.641	4.00	2642.00	2642.00	.00	2643.17	1.16	3.06	.05	2638.80
1855.0	304.9	1088.5	461.6	61.9	102.7	102.6	275.4	110.0	2638.80
.99	4.92	10.60	4.50	.050	.030	.050	.000	2638.00	956.18
.008300	450.	435.	370.	0	5	0	.00	119.51	1075.70

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 7.64 CWSEL= 2642.00

STA=	956.	970.	975.	980.	985.	1014.	1018.	1022.	1027.	1036.	1045.	1064.	1076.
PER Q=	4.1	3.4	4.2	4.8	58.7	4.3	3.8	3.4	5.5	4.3	3.3	.3	
AREA=	19.6	12.5	14.3	15.5	102.7	14.0	12.8	11.9	21.2	18.5	20.6	3.6	
VEL=	3.8	5.0	5.4	5.8	10.6	5.8	5.5	5.3	4.9	4.3	3.0	1.5	
DEPTH=	1.4	2.5	2.9	3.1	3.6	3.1	2.9	2.7	2.4	2.0	1.1	.3	

*SECNO 7.747

3301 HV CHANGED MORE THAN HVINS

7.747	3.17	2647.17	2647.09	.00	2647.72	.55	4.49	.06	2645.00
1855.0	354.7	672.0	828.4	143.0	80.2	189.1	279.8	112.9	2645.00
1.02	2.48	8.38	4.38	.050	.030	.050	.000	2644.00	763.74
.007744	520.	560.	580.	2	15	0	.00	348.84	1112.59

FLOW DISTRIBUTION FOR SECNO= 7.75 CWSEL= 2647.17

STA=	764.	800.	921.	950.	970.	982.	1012.	1025.	1045.	1055.	1063.	1072.	1080.
PER Q=	3.3	3.4	4.7	3.7	4.0	36.2	4.3	8.0	7.9	7.4	6.1	4.8	
AREA=	26.8	41.4	31.2	23.4	20.1	80.2	21.7	36.9	28.2	25.1	22.4	19.3	
VEL=	2.3	1.5	2.8	2.9	3.7	8.4	3.7	4.0	5.2	5.5	5.0	4.6	
DEPTH=	.7	.3	1.1	1.2	1.7	2.7	1.7	1.8	2.8	3.0	2.7	2.3	

STA=	1080.	1089.	1113.
PER Q=	3.6	2.6	
AREA=	16.9	18.5	
VEL=	4.0	2.6	
DEPTH=	1.9	.8	

*SECNO 7.834
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.834	4.91	2650.91	2650.91	.00	2651.85	.94	3.17	.12	2647.50
1855.0	543.4	1009.4	302.2	140.3	100.9	90.9	283.6	115.6	2647.50
1.04	3.87	10.00	3.32	.050	.030	.050	.000	2646.00	898.55
.006253	410.	460.	490.	0	14	0	.00	186.76	1085.32

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 7.83 CWSEL= 2650.91

STA=	899.	938.	953.	961.	968.	976.	983.	1008.	1016.	1029.	1043.	1085.
PER Q=	4.1	5.5	3.8	4.6	5.3	6.0	54.4	6.0	5.0	3.1	2.2	
AREA=	31.5	28.5	17.4	19.6	21.2	22.1	100.9	23.9	25.3	19.4	22.4	
VEL=	2.4	3.6	4.0	4.3	4.6	5.1	10.0	4.7	3.7	2.9	1.8	
DEPTH=	.8	1.9	2.3	2.5	2.8	3.2	4.1	2.8	1.9	1.4	.5	

*SECNO 7.908
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.908	4.60	2654.60	2654.60	.00	2655.23	.63	2.19	.03	2651.00
1855.0	114.6	842.1	898.3	32.6	94.3	317.1	287.2	117.8	2651.00
1.06	3.51	8.93	2.83	.050	.030	.050	.000	2650.00	976.18
.004996	390.	390.	400.	0	10	0	.00	291.83	1268.01

FLOW DISTRIBUTION FOR SECNO= 7.91 CWSEL= 2654.60

STA=	976.	995.	1018.	1027.	1036.	1044.	1120.	1139.	1157.	1185.	1231.	1268.
PER Q=	6.2	45.4	6.7	4.4	3.3	19.1	4.1	3.2	3.7	3.3	.6	
AREA=	32.6	94.3	27.9	21.3	18.0	122.3	27.9	24.0	30.5	34.6	10.5	
VEL=	3.5	8.9	4.4	3.8	3.4	2.9	2.8	2.5	2.2	1.8	1.0	
DEPTH=	1.7	4.1	3.1	2.4	2.1	1.6	1.5	1.3	1.1	.7	.3	

*SECNO 8.012
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

8.012	4.54	2658.54	2658.54	.00	2659.35	.80	2.77	.05	2655.00
1855.0	308.8	932.3	613.9	99.2	97.0	182.8	291.8	120.8	2655.00
1.08	3.11	9.61	3.36	.050	.030	.050	.000	2654.00	900.18
.005883	580.	550.	450.	0	5	0	.00	247.24	1147.42

FLOW DISTRIBUTION FOR SECNO= 8.01 CWSEL= 2658.54

STA=	900.	963.	981.	990.	995.	1019.	1030.	1040.	1050.	1070.	1090.	1110.	1147.
PER Q=	3.5	4.9	4.4	3.9	50.3	8.6	5.3	4.0	5.5	4.8	3.1	1.8	
AREA=	34.3	29.0	20.6	15.2	97.0	33.5	23.9	20.4	32.4	29.9	22.9	19.9	
VEL=	1.9	3.1	4.0	4.7	9.6	4.8	4.1	3.7	3.1	3.0	2.5	1.7	
DEPTH=	.5	1.6	2.3	3.0	4.0	3.0	2.4	2.0	1.6	1.5	1.1	.5	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 8.124
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

8.124	5.22	2664.22	2664.22	.00	2665.18	.96	3.11	.05	2660.00
1855.0	449.4	1143.0	262.5	151.2	117.9	72.7	296.6	123.7	2660.00
1.10	2.97	9.70	3.61	.050	.030	.050	.000	2659.00	869.24
.004866	575.	590.	575.	0	8	0	.00	194.86	1064.10

FLOW DISTRIBUTION FOR SECNO= 8.12 CWSEL= 2664.22

STA=	869.	928.	953.	966.	979.	985.	990.	1015.	1021.	1027.	1041.	1064.
PER Q=	3.1	4.2	3.6	4.8	3.2	5.4	61.6	5.9	3.5	3.8	1.0	
AREA=	35.1	31.9	22.3	26.5	14.9	20.4	117.9	22.3	16.3	23.2	11.0	
VEL=	1.6	2.4	3.0	3.3	4.0	4.9	9.7	4.9	4.0	3.0	1.6	
DEPTH=	.6	1.3	1.7	2.0	2.7	3.7	4.7	3.7	2.7	1.7	.5	

*SECNO 8.207
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

8.207	3.48	2668.48	2668.48	.00	2669.29	.81	2.57	.02	2666.00
1855.0	667.5	993.4	194.1	183.3	107.2	52.5	299.7	125.5	2666.00
1.12	3.64	9.26	3.70	.050	.030	.050	.000	2665.00	848.30
.008177	340.	440.	470.	0	23	0	.00	204.69	1052.99

FLOW DISTRIBUTION FOR SECNO= 8.21 CWSEL= 2668.48

STA=	848.	889.	960.	969.	979.	1015.	1027.	1038.	1053.
PER Q=	3.8	22.1	4.3	5.7	53.6	6.0	3.2	1.3	
AREA=	29.6	112.1	19.0	22.6	107.2	24.9	17.2	10.4	
VEL=	2.4	3.7	4.2	4.7	9.3	4.4	3.5	2.3	
DEPTH=	.7	1.6	2.0	2.3	3.0	2.1	1.5	.7	

*SECNO 8.317
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

8.317	3.71	2673.71	2673.71	.00	2674.70	.99	4.96	.05	2671.00
1855.0	655.9	1028.7	170.4	147.8	102.8	47.9	304.1	128.0	2671.00
1.14	4.44	10.01	3.56	.050	.030	.050	.000	2670.00	888.04
.008632	620.	580.	540.	0	8	0	.00	168.93	1056.96

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 8.32 CWSEL= 2673.71

STA=	888.	928.	942.	949.	955.	962.	980.	1012.	1020.	1033.	1057.
PER Q=	4.1	4.9	3.3	4.1	4.8	14.1	55.5	4.5	3.5	1.3	
AREA=	29.0	23.3	13.8	15.7	17.2	48.8	102.8	17.7	18.5	11.7	
VEL=	2.6	3.9	4.5	4.8	5.2	5.4	10.0	4.7	3.5	2.0	
DEPTH=	.7	1.7	2.1	2.3	2.6	2.7	3.2	2.2	1.4	.5	

*SECNO 8.408
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

8.408	3.85	2678.85	2678.85	.00	2679.72	.87	4.01	.01	2676.00
1855.0	988.4	793.0	73.6	229.0	77.1	18.3	307.4	129.9	2676.00
1.16	4.32	10.28	4.02	.050	.030	.050	.000	2675.00	832.21
.008631	445.	480.	480.	0	8	0	.00	191.63	1023.84

FLOW DISTRIBUTION FOR SECNO= 8.41 CWSEL= 2678.85

STA=	832.	889.	905.	920.	930.	940.	950.	955.	960.	965.	970.	988.	1011.
PER Q=	3.3	3.0	4.1	3.5	4.2	5.2	3.1	3.4	3.8	4.1	15.4	42.7	
AREA=	29.3	18.1	21.8	16.9	18.7	21.3	11.8	12.5	13.3	14.0	51.4	77.1	
VEL=	2.1	3.1	3.5	3.9	4.2	4.6	4.9	5.1	5.3	5.5	5.6	10.3	
DEPTH=	.5	1.2	1.4	1.7	1.9	2.1	2.4	2.5	2.7	2.8	2.9	3.4	

STA=	1011.	1020.	1024.
PER Q=	3.8	.1	
AREA=	16.7	1.6	
VEL=	4.3	1.5	
DEPTH=	1.9	.4	

*SECNO 8.510
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

8.510	5.79	2684.79	2684.79	.00	2685.58	.79	2.85	.01	2680.00
1855.0	153.4	998.2	703.4	43.5	105.9	299.2	311.8	132.7	2680.00
1.18	3.53	9.43	2.35	.050	.030	.050	.000	2679.00	971.03
.003953	450.	540.	510.	0	11	0	.00	302.20	1273.23

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 8.51 CWSEL= 2684.79

STA=	971.	990.	1010.	1015.	1028.	1098.	1134.	1162.	1180.	1198.	1216.	1242.	1273.
PER Q=	8.3	53.8	5.3	4.2	3.3	3.2	4.5	4.3	4.3	3.5	3.4	1.8	
AREA=	43.5	105.9	20.7	25.5	43.5	33.3	37.0	30.5	30.1	26.6	30.8	21.1	
VEL=	3.5	9.4	4.7	3.0	1.4	1.8	2.3	2.6	2.7	2.4	2.1	1.6	
DEPTH=	2.3	5.3	4.1	2.0	.6	.9	1.3	1.7	1.7	1.5	1.2	.7	

*SECNO 8.603
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 511.0 1060.0 TYPE= 1 TARGET= 549.000
ET RECORD: STA 1060 ELIMINATE INEFFECTIVE
FLOW AREA IN RIGHT OVERBANK

8.603	3.75	2690.75	2690.75	.00	2691.49	.74	2.55	.00	2687.50
1855.0	920.6	756.5	177.9	259.3	76.5	41.4	316.3	135.7	2687.50
1.20	3.55	9.88	4.29	.050	.030	.050	.000	2687.00	791.05
.007339	510.	490.	440.	0	14	0	.00	242.71	1033.76

OW DISTRIBUTION FOR SECNO= 8.60 CWSEL= 2690.75

STA=	791.	865.	885.	905.	915.	969.	982.	991.	1013.	1020.	1034.
PER Q=	4.0	3.6	5.3	3.3	18.9	6.9	7.7	40.8	6.4	3.2	
AREA=	38.3	23.5	29.5	17.0	94.6	29.3	27.0	76.5	22.5	18.9	
VEL=	1.9	2.8	3.3	3.6	3.7	4.4	5.3	9.9	5.3	3.1	
DEPTH=	.5	1.2	1.5	1.7	1.8	2.3	3.0	3.6	3.0	1.4	

*SECNO 8.715
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

8.715	4.98	2697.98	2697.98	.00	2699.05	1.07	3.72	.10	2694.50
1855.0	231.6	1240.5	382.8	60.3	126.2	116.6	320.7	138.2	2694.50
1.22	3.84	9.83	3.28	.050	.030	.050	.000	2693.00	950.17
.005834	515.	590.	615.	0	11	0	.00	156.73	1106.90

FLOW DISTRIBUTION FOR SECNO= 8.72 CWSEL= 2697.98

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	950.	978.	985.	1015.	1023.	1030.	1044.	1057.	1084.	1107.
PER Q=	6.5	6.0	66.9	6.0	3.8	4.3	3.1	3.1	.4	
AREA=	37.1	23.1	126.2	23.1	17.5	24.1	19.7	25.4	6.8	
VEL=	3.3	4.8	9.8	4.8	4.0	3.3	2.9	2.2	1.2	
DEPTH=	1.4	3.1	4.2	3.1	2.3	1.8	1.5	.9	.3	

*SECNO 8.798

3301 HV CHANGED MORE THAN HVINS

8.798	3.84	2700.84	2700.25	.00	2701.26	.42	2.15	.06	2697.60
1855.0	819.2	633.9	401.9	240.5	84.1	121.2	324.4	140.0	2697.60
1.25	3.41	7.54	3.32	.050	.030	.050	.000	2697.00	861.95
.004286	440.	440.	400.	2	14	0	.00	215.85	1077.80

FLOW DISTRIBUTION FOR SECNO= 8.80 CWSEL= 2700.84

STA=	862.	908.	926.	938.	950.	985.	991.	1015.	1021.	1027.	1032.	1044.	1056.
PER Q=	3.2	4.8	4.8	6.4	20.9	4.0	34.2	4.2	3.6	3.1	5.0	3.5	
AREA=	32.9	31.3	26.9	31.7	99.5	18.2	84.1	18.5	17.1	15.3	27.3	22.1	
VEL=	1.8	2.8	3.3	3.7	3.9	4.1	7.5	4.2	3.9	3.7	3.4	2.9	
DEPTH=	.7	1.7	2.2	2.6	2.8	3.0	3.5	3.1	2.9	2.6	2.3	1.8	

STA=	1056.	1078.
PER Q=	2.3	
AREA=	20.8	
VEL=	2.1	
DEPTH=	1.0	

*SECNO 8.889
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

8.889	3.47	2705.47	2705.47	.00	2706.26	.79	2.75	.11	2703.00
1855.0	175.8	831.5	847.7	47.3	86.2	205.9	328.5	142.3	2703.00
1.27	3.72	9.65	4.12	.050	.030	.050	.000	2702.00	948.07
.008917	520.	480.	390.	0	15	0	.00	219.83	1167.90

FLOW DISTRIBUTION FOR SECNO= 8.89 CWSEL= 2705.47

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	948.	982.	989.	1018.	1055.	1064.	1073.	1088.	1104.	1127.	1168.
PER Q=	5.5	4.0	44.8	25.3	5.1	3.4	3.9	3.0	3.1	1.9	
AREA=	31.7	15.5	86.2	91.4	20.0	15.5	21.1	18.0	21.3	18.6	
VEL=	3.2	4.8	9.7	5.1	4.8	4.0	3.5	3.1	2.7	1.9	
DEPTH=	.9	2.2	3.0	2.5	2.2	1.7	1.4	1.2	.9	.5	

*SECNO 8.984
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 930.0 1179.0 TYPE= 1 TARGET= 249.000
ET RECORD: STA 930 ELIMINATE INEFFECTIVE
FLOW AREA IN LEFT OVERBANK

8.984	3.75	2712.75	2712.75	.00	2713.58	.83	4.29	.01	2709.50
1855.0	386.6	761.8	706.6	81.4	74.2	186.3	332.5	144.7	2709.50
1.29	4.75	10.27	3.79	.050	.030	.050	.000	2709.00	942.74
.008014	470.	500.	530.	0	8	0	.00	198.54	1141.28

FLOW DISTRIBUTION FOR SECNO= 8.98 CWSEL= 2712.75

STA=	943.	963.	970.	977.	984.	1005.	1012.	1019.	1026.	1040.	1054.	1068.	1081.
PER Q=	4.4	4.1	5.8	6.6	41.1	6.3	4.8	3.6	5.4	4.9	4.1	3.2	
AREA=	23.6	16.1	20.0	21.7	74.2	21.0	17.9	15.1	25.2	24.0	21.4	18.5	
VEL=	3.4	4.8	5.3	5.7	10.3	5.5	5.0	4.4	3.9	3.8	3.6	3.3	
DEPTH=	1.1	2.4	2.9	3.1	3.5	3.0	2.6	2.2	1.8	1.7	1.6	1.4	

STA=	1081.	1102.	1141.
PER Q=	3.5	2.3	
AREA=	22.8	20.5	
VEL=	2.8	2.1	
DEPTH=	1.1	.5	

*SECNO 9.043

9.043	4.79	2714.79	2714.56	.00	2715.57	.79	1.99	.00	2711.00
1855.0	486.4	833.8	534.8	129.2	85.8	136.0	334.9	145.9	2711.00
1.30	3.76	9.72	3.93	.050	.030	.050	.000	2710.00	916.21
.005566	310.	310.	280.	2	11	0	.00	162.67	1078.88

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 9.04 CWSEL= 2714.79

STA=	916.	951.	965.	972.	979.	985.	990.	1010.	1018.	1025.	1032.	1038.	1052.
PER Q=	4.1	4.9	3.4	4.2	4.2	5.4	44.9	7.4	5.7	4.0	3.3	4.8	
AREA=	31.4	26.8	16.4	18.5	16.7	19.5	85.8	26.5	22.8	17.7	15.7	25.8	
VEL=	2.4	3.4	3.9	4.2	4.6	5.1	9.7	5.1	4.6	4.2	3.9	3.4	
DEPTH=	.9	1.9	2.3	2.6	3.0	3.5	4.3	3.5	3.0	2.6	2.3	1.9	

STA=	1052.	1072.	1079.
PER Q=	3.5	.2	
AREA=	24.9	2.7	
VEL=	2.6	1.3	
DEPTH=	1.2	.4	

*SECNO 9.142

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.142	5.07	2722.07	2722.07	.00	2723.65	1.58	3.30	.24	2718.00
1855.0	351.6	1315.5	187.8	68.9	114.0	40.9	338.3	147.4	2718.00
1.32	5.10	11.54	4.59	.050	.030	.050	.000	2717.00	957.25
.007213	515.	525.	530.	0	8	0	.00	76.02	1033.27

FLOW DISTRIBUTION FOR SECNO= 9.14 CWSEL= 2722.07

STA=	957.	970.	975.	980.	985.	1010.	1015.	1022.	1033.
PER Q=	4.0	3.8	4.9	6.3	70.9	5.3	3.9	1.0	
AREA=	19.5	14.0	16.5	19.0	114.0	16.8	16.2	8.0	
VEL=	3.8	5.0	5.6	6.1	11.5	5.8	4.4	2.3	
DEPTH=	1.5	2.8	3.3	3.8	4.6	3.6	2.3	.7	

*SECNO 9.246

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.246	4.40	2727.40	2727.40	.00	2728.46	1.06	4.09	.05	2724.00
1855.0	944.2	855.0	55.8	197.3	77.5	13.1	341.4	148.7	2724.00
1.34	4.78	11.03	4.26	.050	.030	.050	.000	2723.00	874.24
.008198	500.	550.	550.	0	15	0	.00	143.44	1017.68

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 9.25 CWSEL= 2727.40

STA=	874.	920.	935.	945.	953.	958.	963.	968.	973.	990.	1010.	1018.
PER Q=	3.0	3.6	4.0	4.2	3.3	3.8	4.5	5.0	19.5	46.1	3.0	
AREA=	25.6	20.1	18.4	16.9	12.5	13.5	14.9	16.0	59.4	77.5	13.1	
VEL=	2.2	3.3	4.1	4.6	5.0	5.2	5.6	5.8	6.1	11.0	4.3	
DEPTH=	.6	1.3	1.8	2.3	2.5	2.7	3.0	3.2	3.4	3.9	1.7	

*SECNO 9.313
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.313	3.66	2732.66	2732.66	.00	2733.50	.84	2.91	.02	2729.60
1855.0	743.6	757.9	353.4	173.2	73.6	84.9	343.8	149.9	2729.70
1.35	4.29	10.30	4.16	.050	.030	.050	.000	2729.00	885.96
.008665	340.	350.	350.	0	12	0	.00	177.47	1063.43

FLOW DISTRIBUTION FOR SECNO= 9.31 CWSEL= 2732.66

STA=	886.	916.	929.	941.	950.	959.	967.	976.	980.	984.	988.	1010.	1015.
PER Q=	3.7	3.4	4.4	3.6	4.3	4.9	5.7	3.2	3.2	3.6	40.9	4.2	
AREA=	25.9	18.1	21.2	16.0	17.7	19.2	21.1	11.2	11.0	11.8	73.6	14.0	
VEL=	2.7	3.5	3.9	4.2	4.5	4.8	5.0	5.2	5.4	5.7	10.3	5.5	
DEPTH=	.9	1.4	1.7	1.9	2.1	2.3	2.5	2.6	2.8	3.0	3.3	2.8	

STA=	1015.	1019.	1028.	1037.	1054.	1063.
PER Q=	3.0	4.6	3.1	3.4	.7	
AREA=	11.0	18.6	14.8	20.3	6.2	
VEL=	5.1	4.6	3.9	3.1	2.2	
DEPTH=	2.5	2.1	1.7	1.2	.7	

*SECNO 9.430
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.430	4.23	2738.23	2738.23	.00	2739.48	1.26	5.22	.13	2734.60
1855.0	626.0	1031.1	197.9	120.4	92.2	42.6	348.0	151.9	2734.60
1.37	5.20	11.18	4.64	.050	.030	.050	.000	2734.00	927.33
.008247	620.	620.	600.	0	8	0	.00	102.83	1030.16

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 9.43 CWSEL= 2738.23

STA=	927.	949.	956.	962.	968.	971.	974.	977.	980.	983.	1006.	1009.	1015.
PER Q=	3.8	3.2	4.3	5.7	3.0	3.2	3.4	3.5	3.6	55.6	3.2	4.4	
AREA=	22.1	13.4	15.8	18.8	9.5	9.8	10.1	10.4	10.5	92.2	10.0	15.8	
VEL=	3.2	4.5	5.0	5.6	6.0	6.1	6.2	6.3	6.4	11.2	5.9	5.1	
DEPTH=	1.0	2.1	2.6	3.0	3.3	3.4	3.5	3.6	3.6	3.9	3.3	2.6	

STA=	1015.	1027.	1030.
PER Q=	3.1	.0	
AREA=	16.2	.7	
VEL=	3.5	1.0	
DEPTH=	1.4	.2	

*SECNO 9.513
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.513	3.70	2744.70	2744.70	.00	2745.76	1.07	3.74	.02	2741.80
1855.0	799.9	948.6	106.5	165.0	89.3	26.4	350.6	153.0	2741.80
1.39	4.85	10.62	4.03	.050	.030	.050	.000	2741.00	901.99
.009432	400.	440.	440.	0	15	0	.00	128.44	1030.44

FLOW DISTRIBUTION FOR SECNO= 9.51 CWSEL= 2744.70

STA=	902.	917.	923.	930.	937.	944.	955.	962.	969.	976.	983.	1011.	1014.
PER Q=	3.1	4.9	4.9	4.2	3.4	4.3	3.4	4.2	5.0	5.7	51.1	3.0	
AREA=	16.2	17.1	17.2	15.7	13.8	18.7	14.0	15.8	17.7	18.8	89.3	9.8	
VEL=	3.6	5.4	5.3	5.0	4.6	4.2	4.5	4.9	5.2	5.6	10.6	5.7	
DEPTH=	1.1	2.5	2.5	2.3	2.0	1.8	1.9	2.2	2.4	2.7	3.3	2.8	

STA=	1014.	1030.
PER Q=	2.7	
AREA=	16.6	
VEL=	3.0	
DEPTH=	1.0	

*SECNO 9.598
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.598	4.29	2750.29	2750.29	.00	2751.50	1.21	3.91	.04	2746.90
1855.0	614.6	1027.6	212.9	123.6	93.2	44.1	353.3	154.2	2746.90
1.40	4.97	11.02	4.83	.050	.030	.050	.000	2746.00	923.92
.008283	430.	450.	450.	0	8	0	.00	106.71	1030.63

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 9.60 CWSEL= 2750.29

STA=	924.	945.	953.	958.	963.	968.	973.	978.	983.	1008.	1013.	1018.	1031.
PER Q=	3.1	4.0	3.4	3.6	4.2	4.6	4.9	5.3	55.4	5.2	3.6	2.7	
AREA=	19.0	16.5	12.8	13.2	14.5	15.4	15.7	16.4	93.2	16.4	13.2	14.5	
VEL=	3.0	4.5	4.9	5.1	5.4	5.6	5.7	6.0	11.0	5.8	5.1	3.5	
DEPTH=	.9	2.2	2.5	2.6	2.8	3.0	3.1	3.3	3.8	3.2	2.6	1.1	

*SECNO 9.695
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.695	4.08	2758.08	2758.08	.00	2759.17	1.10	4.24	.01	2754.70
1855.0	576.9	965.9	312.2	127.6	89.8	64.5	356.5	155.6	2754.80
1.42	4.52	10.75	4.84	.050	.030	.050	.000	2754.00	913.62
.008225	520.	510.	510.	0	11	0	.00	131.89	1045.51

FLOW DISTRIBUTION FOR SECNO= 9.69 CWSEL= 2758.08

STA=	914.	945.	955.	965.	974.	979.	984.	989.	1014.	1018.	1023.	1027.	1037.
PER Q=	3.0	3.4	4.8	6.3	3.8	4.3	5.4	52.1	4.5	4.1	3.2	4.4	
AREA=	22.1	16.5	20.4	23.8	13.3	14.3	17.1	89.8	14.3	13.8	11.9	19.2	
VEL=	2.5	3.8	4.4	4.9	5.3	5.6	5.9	10.8	5.8	5.5	5.1	4.2	
DEPTH=	.7	1.7	2.1	2.5	2.8	3.0	3.2	3.7	3.2	2.9	2.6	1.9	

STA=	1037.	1046.
PER Q=	.6	
AREA=	5.3	
VEL=	2.3	
DEPTH=	.6	

*SECNO -6.568
START TRIB COMP

-6.568	6.568	2587.825

3301 HV CHANGED MORE THAN HVINS

CONFLUENCE OF HARTMAN WASH (MAIN CHANNEL)
AND HARTMAN WASH TRIBUTARY (SUBBASIN SAI 155)

-6.568	5.82	2587.82	.00	.00	2588.14	.31	.99	3.25	2583.00
1855.0	548.2	844.8	462.0	221.5	138.4	204.8	359.6	156.9	2583.00
1.44	2.47	6.10	2.26	.050	.030	.050	.000	2582.00	891.26
.001638	310.	320.	320.	0	0	0	.00	229.44	1120.70

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= -6.57 CWSEL= 2587.82

STA=	891.	938.	953.	968.	975.	982.	989.	1015.	1021.	1028.	1034.	1048.	1063.
PER Q=	4.1	4.4	6.5	4.1	4.7	5.7	45.5	4.4	3.8	3.2	5.1	3.7	
AREA=	51.1	36.7	46.3	26.8	28.5	32.0	138.4	25.9	24.6	21.9	39.2	32.9	
VEL=	1.5	2.2	2.6	2.9	3.1	3.3	6.1	3.2	2.9	2.7	2.4	2.1	
DEPTH=	1.1	2.5	3.2	3.7	4.1	4.6	5.3	4.3	3.7	3.3	2.8	2.3	

STA=	1063.	1084.	1121.
PER Q=	3.3	1.4	
AREA=	36.0	24.2	
VEL=	1.7	1.1	
DEPTH=	1.7	.7	

*SECNO .129
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
DISCHARGE FROM HEC-1 MODEL: SAI155 Q = 1559 cfs

.129	4.01	2594.01	2594.01	.00	2594.80	.80	1.83	.15	2591.30
1559.0	317.0	1012.8	229.2	102.8	117.8	75.3	366.3	160.6	2591.30
1.47	3.08	8.59	3.04	.050	.030	.050	.000	2590.00	896.54
.006079	710.	680.	650.	0	16	0	.00	240.55	1137.09

FLOW DISTRIBUTION FOR SECNO= .13 CWSEL= 2594.01

STA=	897.	938.	955.	964.	972.	981.	1017.	1025.	1034.	1051.	1137.
PER Q=	3.5	4.4	3.0	3.7	5.8	65.0	5.1	3.6	4.2	1.8	
AREA=	27.0	23.6	14.3	16.0	21.9	117.8	19.6	16.1	23.0	16.6	
VEL=	2.0	2.9	3.3	3.6	4.1	8.6	4.1	3.5	2.8	1.7	
DEPTH=	.6	1.4	1.7	1.9	2.4	3.3	2.4	1.9	1.3	.2	

*SECNO .162

.162	3.24	2595.24	2595.22	.00	2596.07	.83	1.26	.01	2592.40
1559.0	510.2	724.8	324.0	120.6	74.3	79.7	367.4	161.4	2592.60
1.48	4.23	9.75	4.07	.050	.030	.050	.000	2592.00	902.92
.009037	170.	175.	160.	2	15	0	.00	169.98	1072.90

FLOW DISTRIBUTION FOR SECNO= .16 CWSEL= 2595.24

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	903.	940.	952.	964.	976.	988.	1013.	1026.	1039.	1051.	1073.
PER Q=	3.5	4.0	6.0	8.3	10.9	46.5	9.9	6.4	3.3	1.2	
AREA=	22.9	17.2	22.0	26.8	31.6	74.3	30.5	23.7	15.8	9.6	
VEL=	2.4	3.6	4.2	4.8	5.4	9.8	5.0	4.2	3.3	1.9	
DEPTH=	.6	1.4	1.8	2.2	2.6	3.0	2.4	1.8	1.2	.4	

*SECNO .214
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.214	3.05	2598.05	2598.05	.00	2598.90	.84	2.62	.00	2595.50
1559.0	257.2	682.6	619.2	59.3	68.6	138.1	369.1	162.4	2595.50
1.49	4.34	9.94	4.48	.050	.030	.050	.000	2595.00	945.25
.010211	275.	275.	270.	0	11	0	.00	155.35	1100.60

FLOW DISTRIBUTION FOR SECNO= .21 CWSEL= 2598.05

STA=	945.	961.	975.	988.	1012.	1024.	1040.	1055.	1070.	1085.	1100.
PER Q=	1.0	5.8	9.7	43.8	9.3	9.9	9.9	6.9	3.1	.6	
AREA=	8.0	22.5	28.8	68.6	27.6	31.8	31.8	25.2	15.7	5.9	
VEL=	2.0	4.0	5.2	9.9	5.2	4.8	4.8	4.3	3.1	1.6	
DEPTH=	.5	1.6	2.3	2.8	2.3	2.1	2.1	1.7	1.1	.4	

*SECNO .309
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.309	3.30	2603.30	2603.30	.00	2604.59	1.29	5.28	.13	2600.00
1559.0	440.0	769.6	349.4	80.7	66.0	60.3	371.8	163.7	2600.00
1.50	5.45	11.66	5.80	.050	.030	.050	.000	2600.00	951.11
.011264	510.	500.	470.	0	8	0	.00	85.39	1036.51

FLOW DISTRIBUTION FOR SECNO= .31 CWSEL= 2603.30

STA=	951.	980.	990.	1010.	1020.	1037.
PER Q=	13.4	14.8	49.4	14.8	7.6	
AREA=	47.7	33.0	66.0	33.0	27.2	
VEL=	4.4	7.0	11.7	7.0	4.3	
DEPTH=	1.7	3.3	3.3	3.3	1.7	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCHV= .100 CEHV= .300
*SECNO -3.093
START TRIB COMP
-3.093 3.093 2403.430

3265 DIVIDED FLOW

CONFLUENCE OF HARTMAN WASH (MAIN CHANNEL)
AND CHANNEL THAT CARRIES LEVEE OVERFLOW

CROSS-SECTION 3.093 & 3.195 TAKEN FROM LOWHRTMN.DAT

SWSE EQUALS CWSEL FOR CROSS-SECTION 3.093 OF LOWHRTMN.DAT

-3.093	6.93	2403.43	.00	.00	2404.65	1.22	4.34	1.08	2397.00
3660.0	1391.3	1292.6	976.0	183.9	107.7	212.5	375.6	165.4	2397.00
1.52	7.57	12.01	4.59	.050	.040	.050	.000	2396.50	938.47
.008390	490.	480.	450.	0	0	0	.00	232.19	1246.94

FLOW DISTRIBUTION FOR SECNO= -3.09 CWSEL= 2403.43

STA=	938.	968.	973.	994.	1010.	1015.	1020.	1030.	1145.	1174.	1247.
PER Q=	3.9	4.1	30.0	35.3	7.2	4.4	4.3	3.1	4.6	3.1	
AREA=	38.2	21.6	124.1	107.7	29.9	22.7	28.5	45.8	45.5	40.1	
VEL=	3.7	6.9	8.9	12.0	8.9	7.1	5.5	2.5	3.7	2.8	
DEPTH=	1.3	4.3	5.9	6.6	6.0	4.5	2.9	.4	1.5	.5	

*SECNO 3.195
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.195	6.79	2409.79	2409.79	.00	2411.49	1.70	4.66	.15	2404.00
3660.0	264.7	2612.5	782.8	41.8	219.5	151.1	381.3	167.7	2404.00
1.54	6.33	11.90	5.18	.050	.040	.050	.000	2403.00	970.54
.008893	530.	540.	550.	0	5	0	.00	135.90	1106.43

FLOW DISTRIBUTION FOR SECNO= 3.19 CWSEL= 2409.79

STA=	971.	985.	1020.	1025.	1030.	1040.	1062.	1100.	1106.
PER Q=	7.2	71.4	6.1	4.3	4.2	3.6	3.1	.0	
AREA=	41.8	219.5	26.4	21.4	27.9	34.9	39.0	1.5	
VEL=	6.3	11.9	8.4	7.3	5.6	3.8	2.9	1.2	
DEPTH=	2.9	6.3	5.3	4.3	2.8	1.6	1.0	.2	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .064

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
DISCHARGE IS LEVEE OVERFLOW

LEVEE OVERFLOW DETERMINED FROM RATING CURVE
FOR CROSS-SECTION 3.582 OF UPHRTMN.DAT

.064	5.68	2417.48	2417.48	.00	2418.40	.92	2.88	.08	2412.00
3210.0	1058.9	1346.6	804.6	244.9	128.4	156.0	385.0	169.2	2412.00
1.55	4.32	10.49	5.16	.050	.040	.050	.000	2411.80	844.08
.008058	325.	340.	350.	0	10	0	.00	245.53	1089.61

FLOW DISTRIBUTION FOR SECNO= .06 CWSEL= 2417.48

STA=	844.	850.	935.	950.	963.	980.	991.	1014.	1024.	1060.	1090.
PER Q=	.3	13.6	.9	.8	6.4	11.0	41.9	10.0	13.6	1.5	
AREA=	4.4	125.8	12.5	10.8	42.2	49.3	128.4	44.8	89.3	21.9	
VEL=	2.1	3.5	2.4	2.3	4.9	7.2	10.5	7.2	4.9	2.2	
DEPTH=	.7	1.5	.8	.8	2.5	4.5	5.6	4.5	2.5	.7	

*SECNO .122
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.122	3.66	2421.16	2421.16	.00	2422.39	1.23	3.85	.09	2420.00
3210.0	5.0	620.1	2584.9	1.7	61.6	300.6	388.1	170.6	2420.00
1.56	2.97	10.07	8.60	.050	.040	.050	.000	2417.50	982.09
.022657	300.	305.	305.	0	14	0	.00	152.75	1134.84

FLOW DISTRIBUTION FOR SECNO= .12 CWSEL= 2421.16

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	982.	985.	1010.	1028.	1035.	1043.	1050.	1060.	1070.	1079.	1087.	1096.	1104.
PER Q=	.2	19.3	5.2	6.2	7.9	8.7	11.6	9.7	7.1	6.2	5.2	4.3	
AREA=	1.7	61.6	27.3	21.8	25.2	26.7	35.6	32.1	25.0	23.1	20.7	18.6	
VEL=	3.0	10.1	6.2	9.1	10.0	10.4	10.4	9.7	9.1	8.7	8.0	7.5	
DEPTH=	.6	2.5	1.6	2.9	3.4	3.6	3.6	3.2	2.9	2.7	2.4	2.2	

STA=	1104.	1113.	1130.	1135.
PER Q=	3.5	4.5	.3	
AREA=	16.4	25.0	2.8	
VEL=	6.9	5.8	3.1	
DEPTH=	1.9	1.5	.6	

*SECNO .168

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= .0 1149.0 TYPE= 1 TARGET= 1148.999
X3 RECORD: STA 1149 ELIMINATE INEFFECTIVE
FLOW AREA ON SOUTH SIDE OF
US HWY 60

.168	5.11	2425.11	2424.49	.00	2426.17	1.06	3.77	.02	2422.00
3210.0	30.6	534.8	2644.6	7.8	62.1	321.5	390.1	171.3	2422.00
1.57	3.90	8.61	8.23	.050	.040	.050	.000	2420.00	984.95
.011849	240.	240.	235.	2	11	0	.00	113.67	1129.76

FLOW DISTRIBUTION FOR SECNO= .17 CWSEL= 2425.11

STA=	985.	990.	1010.	1020.	1064.	1083.	1107.	1120.	1130.
PER Q=	1.0	16.7	2.1	5.8	29.0	31.8	11.7	2.0	
AREA=	7.8	62.1	15.7	32.6	97.0	112.5	48.6	15.2	
VEL=	3.9	8.6	4.2	5.8	9.6	9.1	7.7	4.2	
DEPTH=	1.6	3.1	1.6	.7	5.1	4.7	3.7	1.6	

*SECNO .272

3265 DIVIDED FLOW

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= .0 1445.0 TYPE= 1 TARGET= 1444.999
HYDRAULIC BASE LINE IS @ STA. 1279.

X3 RECORD: STA 1445 ELIMINATE INEFFECTIVE
FLOW AREA ON SOUTH SIDE OF
US HWY 60

.272	3.93	2431.93	2431.49	.00	2432.48	.54	6.25	.05	2429.50
3210.0	988.9	745.0	1476.1	212.6	106.7	243.2	396.2	173.9	2429.50
1.59	4.65	6.98	6.07	.050	.040	.050	.000	2428.00	1117.90
.010845	560.	550.	550.	4	20	0	.00	284.91	1419.66

FLOW DISTRIBUTION FOR SECNO= .27 CWSEL= 2431.93

STA=	1118.	1173.	1192.	1214.	1235.	1257.	1301.	1317.	1363.	1377.	1405.	1420.
PER Q=	3.5	4.4	6.8	7.6	8.5	23.2	5.6	4.6	10.5	21.6	3.7	
AREA=	39.1	32.2	43.9	47.0	50.4	106.7	34.8	38.8	47.9	96.9	24.7	
VEL=	2.9	4.4	5.0	5.2	5.4	7.0	5.2	3.8	7.0	7.2	4.8	
DEPTH=	.7	1.7	2.0	2.2	2.3	2.4	2.2	.8	3.4	3.5	1.6	

*SECNO .366
HYDRAULIC BASE LINE IS @ STA. 1115.

.366	3.08	2436.08	2435.33	.00	2436.49	.41	4.00	.01	2433.20
3210.0	248.9	956.0	2005.1	59.6	149.0	447.5	402.7	176.8	2433.20
1.62	4.18	6.42	4.48	.050	.040	.050	.000	2433.00	1058.40
.006952	465.	500.	450.	4	14	0	.00	271.60	1330.00

FLOW DISTRIBUTION FOR SECNO= .37 CWSEL= 2436.08

STA=	1058.	1081.	1090.	1140.	1161.	1181.	1202.	1229.	1248.	1266.	1288.	1310.	1330.
PER Q=	4.1	3.6	29.8	9.0	7.9	6.5	7.8	5.8	6.4	8.2	8.2	2.6	
AREA=	34.7	24.8	149.0	58.0	53.9	47.8	60.1	42.9	45.4	56.8	56.8	25.8	
VEL=	3.8	4.7	6.4	5.0	4.7	4.4	4.1	4.4	4.5	4.7	4.7	3.2	
DEPTH=	1.6	2.6	3.0	2.8	2.6	2.3	2.2	2.3	2.5	2.6	2.6	1.3	

T1 FLOODWAY DETERMINATION
T2 1.0 FT TARGET INCREASE
T3 WASH AI: HARTMAN WASH

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
		3							2403.43	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15		-1				-1			

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS
0

CCHV= .100 CEHV= .300
*SECNO 3.093

3470 ENCROACHMENT STATIONS= 938.5 1062.0 TYPE= 1 TARGET= 123.490
DISCHARGE FROM HEC-1 MODEL: CAI167 Q = 3660 cfs

CROSS-SECTION 3.093 & 3.195 TAKEN FROM LOWHRTMN.DAT

SWSE EQUALS CWSEL FOR CROSS-SECTION 3.093 OF LOWHRTMN.DAT

3.093	6.93	2403.43	2403.31	2403.43	2405.07	1.64	.00	.00	2397.00
3660.0	1529.9	1421.4	708.7	183.9	107.7	105.1	.0	.0	2397.00
.00	8.32	13.20	6.75	.050	.040	.050	.000	2396.50	938.51
.010144	490.	480.	450.	0	4	0	.00	123.49	1062.00

*SECNO 3.195
3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 970.5 1106.4 TYPE= 1 TARGET= 135.910

3.195	6.78	2409.78	2409.78	2409.79	2411.49	1.71	5.13	.02	2404.00
3660.0	264.6	2614.1	781.4	41.8	219.3	150.6	5.0	1.6	2404.00
.01	6.34	11.92	5.19	.050	.040	.050	.000	2403.00	970.55
.008931	530.	540.	550.	0	5	0	.00	135.79	1106.34

*SECNO 3.309

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .14

3470 ENCROACHMENT STATIONS= 982.8 1013.6 TYPE= 1 TARGET= 30.740
DISCHARGE IS 3660 cfs - (LEVEE OVERFLOW).

```
          LEVEE OVERFLOW DETERMINED FROM RATING CURVE
          FOR CROSS-SECTION 3.582 OF UPHRTMN.DAT
    3.309     4.17  2416.17  2415.51  2416.15  2416.81      .65     5.22      .11  2414.00
    450.0     20.1    420.6      9.3      7.8     63.3      3.9      8.4      2.8  2414.00
      .04     2.57     6.65     2.38     .050     .040     .050     .000  2412.00   982.84
  .007071     600.     600.     600.        4       11        0      .00    30.74  1013.58


*SECNO 3.381
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      986.0    1021.6  TYPE=      1  TARGET=      35.680
    3.381     2.42  2421.92  2421.92  2421.90  2422.82      .90     3.89      .08  2419.90
    450.0     18.7    369.5     61.9      5.1     45.4     13.1      9.0      3.1  2419.90
      .06     3.63     8.15     4.71     .050     .040     .050     .000  2419.50   985.95
  .016160     380.     380.     380.        0       11        0      .00    35.68  1021.63


*SECNO 3.498

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=         .0    1035.0  TYPE=      1  TARGET=     1034.999
          X3 RECORD: STA 1035. TOP OF LEVEE
                     ELIMINATE INEFFECTIVE FLOW
                     AREA IN RIGHT OVERBANK
    3.498     9.01  2437.01  2437.01  2437.01  2437.21      .21     3.63      .07  2434.00
    450.0     86.2    212.9    150.8     30.2     49.4     51.1     10.4      3.7  2434.00
      .10     2.86     4.31     2.95     .050     .040     .050     .000  2428.00   970.47
  .002994     620.     620.     620.        0       12        0      .00    53.77  1024.24


*SECNO 3.582

3470 ENCROACHMENT STATIONS=         .0    1035.0  TYPE=      1  TARGET=     1034.999
          X3 RECORD: STA 1035. TOP OF LEVEE
                     ELIMINATE INEFFECTIVE FLOW
                     AREA IN RIGHT  OVERBANK
    3.582     5.29  2438.29  2437.21  2438.29  2438.48      .19     1.26      .00  2435.50
    450.0     70.7    335.8     43.5     32.8     86.7     18.8     11.7      4.3  2435.50
      .14     2.15     3.87     2.32     .050     .040     .050     .000  2433.00   954.41
  .002761     440.     440.     440.        1       13        0      .00    76.03  1030.44
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.661

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.19

3470 ENCROACHMENT STATIONS= 715.4 1212.1 TYPE= 1 TARGET= 496.700
DISCHARGE FROM HEC-1 MODEL: CAI167 Q = 3660 cfs

3.661	3.24	2441.74	2441.40	2441.74	2442.15	.41	3.61	.06	2439.00
3660.0	1434.8	496.3	1728.9	329.3	63.0	367.3	16.1	7.1	2439.00
.16	4.36	7.88	4.71	.050	.040	.050	.000	2438.50	715.39
.010419	420.	420.	425.	5	11	0	.00	486.22	1212.09

*SECNO 3.756

3470 ENCROACHMENT STATIONS= 819.1 1247.9 TYPE= 1 TARGET= 428.820

3.756	4.53	2445.53	2444.92	2445.53	2445.93	.40	3.77	.00	2441.50
3660.0	745.4	805.2	2109.4	215.0	107.0	488.1	24.9	12.1	2441.50
.19	3.47	7.53	4.32	.050	.040	.050	.000	2441.00	819.06
.005917	450.	500.	510.	4	11	0	.00	428.82	1247.88

*SECNO 3.822

3470 ENCROACHMENT STATIONS= 795.3 1243.6 TYPE= 1 TARGET= 448.340

3.822	4.17	2447.17	2445.93	2447.17	2447.39	.22	1.45	.02	2443.00
3660.0	990.0	463.4	2206.6	324.8	83.5	622.3	31.9	15.5	2443.00
.22	3.05	5.55	3.55	.050	.040	.050	.000	2443.00	795.27
.003315	380.	350.	310.	3	14	0	.00	448.32	1243.59

*SECNO 3.887

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 930.0 1060.0 TYPE= 1 TARGET= 130.000
ET RECORD: STA 930 & 1060 MODEL 4 TO 1 FLOW
EXPANSION DS OF US HWY 60 BRIDGE

MAPPED FLOODPLAIN TO CWSEL

3.887	6.11	2448.11	2446.89	2448.11	2449.02	.91	1.42	.21	2442.50
3660.0	855.4	1515.8	1288.8	147.5	161.4	202.7	37.6	17.7	2442.50
.23	5.80	9.39	6.36	.050	.040	.050	.000	2442.00	942.65
.006040	370.	340.	290.	2	8	0	.00	117.35	1060.00

*SECNO 3.911

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 914.4 983.7 TYPE= 1 TARGET= 69.280
CROSS-SECTION & ET STATIONS ADJUSTED
FOR 30 DEGREE SKEW ANGLE

ET RECORD: STA 914.44 & 983.72 MODEL 4 TO 1
FLOW EXPANSION DS OF US HWY 60 BRIDGE

MAPPED FLOODPLAIN TO CWSEL

3.911	5.28	2448.78	2448.78	2448.78	2451.07	2.28	1.20	.41	2443.80
3660.0	873.2	1971.7	815.1	93.8	141.5	82.4	38.9	17.9	2443.80
.23	9.30	13.93	9.89	.050	.040	.050	.000	2443.50	914.44
.015934	145.	130.	115.	0	11	0	.00	69.28	983.72

CCHV= .600 CEHV= .800
*SECNO 3.918

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 948.6 1000.5 TYPE= 1 TARGET= 51.960
CROSS-SECTION & ET STATIONS ADJUSTED
FOR 30 DEGRE SKEW ANGLE

ET RECORD: STA 948.56 & 1000.52 MODEL 4 TO 1
FLOW EXPANSION DS OF US HWY 60 BRIDGE

MAPPED FLOODPLAIN TO CWSEL

3.918	5.97	2454.67	2454.67	2454.67	2457.60	2.92	.16	.51	2449.00
3641.0	31.3	3569.6	40.0	15.1	257.7	18.1	39.1	18.0	2449.00
.23	2.07	13.85	2.21	.050	.015	.050	.000	2448.70	948.56
.001862	39.	39.	39.	0	8	0	.00	51.96	1000.52

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.919

3265 DIVIDED FLOW

3370 NORMAL BRIDGE, NRD= 23 MIN ELTRD= 2458.80 MAX ELLC= 2462.20

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2462.70 ELREA= 2459.90

DOWNSTREAM FACE: 4 - 12' X 8' RCB

MODELED STRUCTURE AS NORMAL BRIDGE
SINCE MAX ELLC > MIN ELTRD

CROSS SECTION ADJUSTED FOR
30 DEGREE SKEW ANGLE

3.919	6.00	2457.90	2457.90	2457.90	2460.93	3.03	.00	.09	2451.90
3641.0	.0	3641.0	.0	.0	260.5	.0	39.1	18.0	2451.90
.23	.00	13.98	.00	.000	.015	.000	.000	2451.90	944.42
.002527	1.	1.	1.	0	15	0	.00	43.43	988.58

*SECNO 3.926

3265 DIVIDED FLOW

3370 NORMAL BRIDGE, NRD= 27 MIN ELTRD= 2460.10 MAX ELLC= 2462.20

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2462.70 ELREA= 2460.10

UPSTREAM FACE: 4 - 12' X 8' RCB

MODELED STRUCTURE AS NORMAL BRIDGE
SINCE MAX ELLC > MIN ELTRD

CROSS-SECTION ADJUSTED FOR

```
          30 DEGREE SKEW ANGLE
   3.926      6.02   2458.72   2458.72   2458.72   2461.73      3.01       .11       .01   2452.70
  3641.0        .0    3641.0       .0       .0     261.4        .0      39.4      18.0   2452.70
     .23       .00     13.93       .00      .000      .015      .000      .000   2452.70    944.42
 .002499       42.       42.       42.         0        17         0       .00     43.43    988.58


CCHV=     .100 CEHV=     .300
*SECNO 4.023

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.15


3470 ENCROACHMENT STATIONS=      938.0    1100.0  TYPE=      1  TARGET=      162.000
   4.023      8.34   2462.34   2457.73   2462.24   2462.53       .19       .51       .28   2454.40
  3641.0     915.0    1361.0    1365.0     380.5     291.5     538.5      48.0      19.2   2454.40
     .27      2.40      4.67      2.53      .050      .030      .050      .000   2454.00    938.00
 .000542      470.      510.      535.         3        14         0       .00    162.00   1100.00


*SECNO 4.110

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      863.0    1025.1  TYPE=      1  TARGET=      162.110
   4.110      5.88   2463.88   2463.88   2463.89   2465.28      1.41       .63       .37   2459.00
  3641.0    2011.3    1498.0     131.7     356.4     112.9      31.6      57.1      21.0   2459.00
     .29      5.64     13.27      4.17      .050      .030      .050      .000   2458.00    863.00
 .007664      480.      460.      450.         0        16         0       .00    162.05   1025.05


*SECNO 4.210
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      866.0    1064.0  TYPE=      1  TARGET=      197.980
   4.210      4.06   2469.06   2469.06   2468.96   2470.26      1.20      4.92       .02   2466.00
  3641.0    1580.7    1323.6     736.7     274.0     106.7     125.3      63.2      23.2   2466.00
     .31      5.77     12.40      5.88      .050      .030      .050      .000   2465.00    866.02
 .011577      525.      530.      535.         0        19         0       .00    197.98   1064.00
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 4.301
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 896.0 1028.6 TYPE= 1 TARGET= 132.620

4.301	4.72	2475.72	2475.72	2475.76	2477.27	1.55	5.13	.10	2471.40
3641.0	1720.3	1471.6	449.1	266.4	108.5	65.4	68.4	25.0	2471.40
.32	6.46	13.56	6.87	.050	.030	.050	.000	2471.00	896.00
.010038	475.	480.	475.	0	8	0	.00	132.58	1028.58

*SECNO 4.390
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 910.0 1070.0 TYPE= 1 TARGET= 160.000

4.390	4.96	2480.96	2480.96	2480.94	2482.38	1.42	4.18	.01	2477.00
3641.0	1049.1	1698.8	893.2	190.5	133.9	162.9	73.0	26.4	2477.00
.34	5.51	12.68	5.48	.050	.030	.050	.000	2476.00	910.00
.008947	385.	470.	490.	0	8	0	.00	160.00	1070.00

*SECNO 4.487
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 876.6 1045.0 TYPE= 1 TARGET= 168.360

4.487	5.34	2485.34	2485.34	2485.34	2486.73	1.39	4.16	.00	2481.30
3641.0	1435.5	1970.7	234.8	293.0	163.7	45.0	78.8	28.3	2481.30
.35	4.90	12.04	5.21	.050	.030	.050	.000	2480.00	876.66
.007581	500.	510.	510.	0	8	0	.00	168.34	1045.00

*SECNO 4.585

3470 ENCROACHMENT STATIONS= 955.8 1095.0 TYPE= 1 TARGET= 139.220

4.585	6.05	2489.05	2488.71	2488.97	2490.32	1.26	3.58	.01	2484.00
3641.0	321.3	1713.6	1606.1	67.8	143.8	300.6	85.0	30.2	2484.00
.37	4.74	11.92	5.34	.050	.030	.050	.000	2483.00	955.78
.005959	520.	520.	575.	2	8	0	.00	139.22	1095.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 4.674

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 971.7 1108.6 TYPE= 1 TARGET= 136.930

4.674	8.33	2495.33	2495.33	2495.33	2497.19	1.86	2.46	.18	2488.00
3641.0	363.2	2292.9	984.9	67.1	172.2	222.1	90.2	31.7	2488.00
.38	5.41	13.31	4.44	.050	.030	.050	.000	2487.00	971.68
.004673	485.	470.	460.	0	11	0	.00	136.93	1108.61

*SECNO 4.771

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

70 ENCROACHMENT STATIONS= 969.7 1150.5 TYPE= 1 TARGET= 180.790

4.771	5.24	2499.24	2499.24	2499.23	2500.55	1.31	3.07	.05	2495.00
3641.0	269.2	1464.0	1907.8	49.6	113.7	348.3	95.7	33.5	2495.00
.40	5.43	12.88	5.48	.050	.030	.050	.000	2494.00	969.68
.008531	510.	510.	480.	0	14	0	.00	180.79	1150.47

*SECNO 4.860
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 921.0 1175.0 TYPE= 1 TARGET= 254.000

4.860	5.33	2503.33	2503.33	2503.35	2504.50	1.17	3.26	.01	2499.00
3641.0	664.7	1979.9	996.3	138.5	178.6	247.2	101.3	35.7	2499.00
.41	4.80	11.09	4.03	.050	.030	.050	.000	2498.00	921.00
.006154	480.	470.	425.	0	5	0	.00	253.88	1174.88

*SECNO 4.989
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 928.0 1055.8 TYPE= 1 TARGET= 127.840

4.989	4.71	2510.71	2510.71	2510.72	2512.33	1.62	5.13	.14	2506.70
3641.0	1057.4	1885.0	698.6	175.2	146.3	108.0	109.0	38.6	2506.70
.43	6.04	12.88	6.47	.050	.030	.050	.000	2506.00	928.00
.009556	660.	680.	690.	0	15	0	.00	127.80	1055.80

*SECNO 5.055
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 947.0 1087.0 TYPE= 1 TARGET= 139.960

5.055	6.93	2514.93	2514.93	2514.45	2516.48	1.55	2.74	.01	2509.00
3641.0	1014.0	1575.4	1051.6	160.1	114.5	216.5	112.7	39.7	2509.00
.44	6.34	13.76	4.86	.050	.030	.050	.000	2508.00	947.04
.006520	350.	350.	350.	0	11	0	.00	139.96	1087.00

*SECNO 5.182
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 849.6 1039.3 TYPE= 1 TARGET= 189.770

5.182	4.56	2521.56	2521.56	2521.54	2522.79	1.24	5.39	.03	2517.50
3641.0	1983.9	1142.3	514.7	336.4	86.2	82.3	120.3	42.2	2517.50
.47	5.90	13.26	6.26	.050	.030	.050	.000	2517.00	849.57
.010239	680.	670.	640.	0	14	0	.00	189.77	1039.34

*SECNO 5.244
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 820.0 1024.6 TYPE= 1 TARGET= 204.590

5.244	4.76	2525.76	2525.76	2525.67	2527.19	1.43	2.83	.06	2521.40
3641.0	1987.0	1362.9	291.2	315.0	101.2	51.9	123.3	43.3	2521.40
.48	6.31	13.47	5.61	.050	.030	.050	.000	2521.00	860.81
.009814	240.	330.	340.	0	8	0	.00	163.78	1024.59

*SECNO 5.341
7185 MINIMUM SPECIFIC ENERGY

```
SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      902.7    1120.0  TYPE=      1  TARGET=      217.310
    5.341      4.46   2531.46   2531.46   2531.44   2532.61      1.15      4.95       .03   2528.00
   3641.0    1126.8    1283.1    1231.1     198.8     103.1     235.8     129.0      45.5   2528.00
      .49      5.67     12.45      5.22      .050      .030      .050      .000   2527.00    902.69
  .010106      460.      510.      550.         0        11         0       .00    217.31   1120.00


*SECNO 5.426

3470 ENCROACHMENT STATIONS=      945.6    1165.6  TYPE=      1  TARGET=      219.960
    5.426      5.04   2535.04   2534.65   2534.71   2535.94       .90      3.31       .02   2530.50
   3641.0     537.6    1450.3    1653.2     116.9     136.6     356.5     135.0      47.8   2530.50
      .51      4.60     10.62      4.64      .050      .030      .050      .000   2530.00    945.64
  .005562      445.      450.      455.         2         8         0       .00    219.96   1165.60


CCHV=     .300 CEHV=     .500
*SECNO 5.532

70 NORMAL BRIDGE, NRD=  88 MIN ELTRD=  2542.40 MAX ELLC=  2544.20

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      2545.70 ELREA=      2542.40

            DOWNSTREAM FACE: CONC. BRIDGE - OLD US HWY 60

            MODELED STRUCTURE AS NORMAL BRIDGE
            SINCE MAX ELLC > MIN ELTRD

            CROSS-SECTION ADJUSTED FOR
            35 DEGREE SKEW ANGLE
    5.532     10.63   2544.73   2544.73   2544.73   2545.52       .79      1.81       .03   2534.10
   3641.0        .0    2288.4    1352.6        .0     258.4     637.3     142.2      50.9   2534.10
      .53       .00      8.86      2.12      .000      .020      .050      .000   2534.10    918.29
  .002810      580.      560.      340.         0        10         0    -55.15    508.99   1427.28


*SECNO 5.538
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

4575 CRITICAL DEPTH ASSUMED BELOW ELLC OF 2544.200 EGLC= 2546.055 EGC= 2546.094 WSEL= 2542.113

3370 NORMAL BRIDGE, NRD= 84 MIN ELTRD= 2542.50 MAX ELLC= 2544.20

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2545.70 ELREA= 2542.50

UPSTREAM FACE: CONC. BRIDGE - OLD US HWY 60

MODELED STRUCTURE AS NORMAL BRIDGE
SINCE MAX ELLC > MIN ELTRD

CROSS-SECTION ADJUSTED FOR
35 DEGREE SKEW ANGLE

5.538	10.45	2544.85	2544.85	2544.85	2545.69	.84	.09	.02	2534.40
3641.0	.0	2348.3	1292.7	.0	260.5	597.3	142.8	51.2	2534.40
.53	.00	9.01	2.16	.000	.020	.050	.000	2534.40	918.29
.002952	31.	31.	31.	0	23	0	-47.60	471.88	1390.16

CCHV= .300 CEHV= .500
*SECNO 5.566

3470 ENCROACHMENT STATIONS= 901.0 1035.0 TYPE= 1 TARGET= 134.000
ET RECORD: STA 901 & 1035 MODEL
EFFECTIVE FLOW AREA

MAPPED FLOODPLAIN TO CWSEL

5.566	8.53	2545.53	2542.83	2545.53	2546.17	.65	.43	.06	2538.00
3641.0	1140.6	1681.5	819.0	293.0	200.7	183.2	146.7	53.0	2538.00
.54	3.89	8.38	4.47	.050	.030	.050	.000	2537.00	918.37
.001788	140.	150.	290.	2	11	0	.00	116.63	1035.00

CCHV= .100 CEHV= .300
*SECNO 5.652

3470 ENCROACHMENT STATIONS= 937.8 1088.1 TYPE= 1 TARGET= 150.230

5.652	8.30	2546.30	2543.62	2546.30	2546.82	.53	.64	.01	2540.00
3641.0	369.3	2763.8	507.9	142.9	422.7	197.0	154.1	54.4	2540.00
.56	2.58	6.54	2.58	.050	.030	.050	.000	2538.00	937.85
.001155	455.	450.	445.	2	14	0	.00	150.23	1088.08

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 5.764

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 950.9 1093.8 TYPE= 1 TARGET= 142.990

5.764	5.59	2550.39	2550.39	2550.39	2551.97	1.58	1.41	.32	2546.00
3641.0	560.8	2024.9	1055.3	105.5	160.1	194.4	162.5	56.4	2546.00
.58	5.31	12.65	5.43	.050	.030	.050	.000	2544.80	950.86
.007352	595.	595.	600.	0	19	0	.00	142.99	1093.85

*SECNO 5.836

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 923.0 1070.0 TYPE= 1 TARGET= 147.000

5.836	5.12	2553.42	2552.60	2553.43	2554.31	.89	2.26	.07	2548.50
3641.0	1303.7	1323.6	1013.7	244.3	125.9	200.6	166.8	57.6	2548.50
.60	5.34	10.51	5.05	.050	.030	.050	.000	2548.30	923.00
.005221	395.	380.	325.	2	15	0	.00	147.00	1070.00

*SECNO 5.937

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 904.7 1052.5 TYPE= 1 TARGET= 147.810
ET RECORD: STA 850 ELIMINATE INNEFECTIVE
FLOW AREA IN LEFT OVERBANK

5.937	5.02	2559.02	2559.02	2559.02	2560.56	1.54	3.36	.19	2554.50
3641.0	1175.5	1820.0	645.5	196.1	142.6	109.4	172.8	59.3	2554.50
.61	5.99	12.77	5.90	.050	.030	.050	.000	2554.00	904.67
.008320	495.	530.	525.	0	8	0	.00	147.81	1052.48

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 6.029

3470 ENCROACHMENT STATIONS= 900.0 1039.5 TYPE= 1 TARGET= 139.500

6.029	5.12	2563.12	2563.09	2563.12	2564.63	1.51	4.06	.00	2559.00
3641.0	1501.9	1768.8	370.3	253.7	138.1	66.7	177.7	60.8	2559.00
.63	5.92	12.81	5.56	.050	.030	.050	.000	2558.00	900.00
.008753	445.	490.	510.	1	5	0	.00	139.50	1039.50

*SECNO 6.124
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 900.0 1060.0 TYPE= 1 TARGET= 160.000

6.124	3.68	2569.68	2569.68	2569.24	2571.06	1.37	5.25	.01	2566.30
3641.0	1386.8	1368.9	885.3	224.5	106.5	127.1	183.1	62.6	2566.30
.64	6.18	12.85	6.97	.050	.030	.050	.000	2566.00	900.00
.012441	540.	500.	450.	0	19	0	.00	160.00	1060.00

*SECNO 6.213

3470 ENCROACHMENT STATIONS= 920.0 1060.0 TYPE= 1 TARGET= 140.000

6.213	5.28	2574.28	2574.23	2574.23	2575.78	1.50	4.69	.04	2570.00
3641.0	963.3	1871.7	806.0	172.5	148.2	147.4	188.1	64.2	2570.00
.66	5.58	12.63	5.47	.050	.030	.050	.000	2569.00	920.00
.008093	500.	470.	440.	3	14	0	.00	140.00	1060.00

*SECNO 6.317

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 900.0 1040.0 TYPE= 1 TARGET= 140.000

6.317	5.39	2578.39	2577.57	2578.05	2579.31	.92	3.47	.06	2574.00
3641.0	1591.2	1546.3	503.5	309.8	151.6	100.0	194.5	66.0	2574.00
.68	5.14	10.20	5.03	.050	.030	.050	.000	2573.00	900.00
.005119	535.	550.	555.	3	15	0	.00	140.00	1040.00

*SECNO 6.419

```
SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3470 ENCROACHMENT STATIONS=      903.0    1043.3  TYPE=      1  TARGET=      140.300
   6.419      4.82   2581.82   2581.66   2581.65   2583.17      1.35      3.73       .13   2578.00
  3641.0    2074.4    1197.1     369.6     301.9      90.7      71.5     200.8      67.7   2578.00
     .69      6.87     13.20      5.17      .050      .030      .050      .000   2577.00    903.00
 .010159      530.      535.      535.         2        15         0       .00    140.30   1043.30


*SECNO 6.508

3470 ENCROACHMENT STATIONS=      905.0    1055.0  TYPE=      1  TARGET=      150.000
   6.508      4.38   2586.38   2586.13   2586.08   2587.60      1.22      4.42       .01   2583.00
  3641.0    1262.7    1473.4     904.9     217.5     123.8     145.5     205.6      69.2   2583.00
     .71      5.81     11.91      6.22      .050      .030      .050      .000   2582.00    905.00
 .009542      420.      470.      480.         2        15         0       .00    150.00   1055.00


*SECNO 6.568

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.51


3470 ENCROACHMENT STATIONS=      891.3    1048.0  TYPE=      1  TARGET=      156.710
   6.568      6.57   2588.57   2587.73   2587.82   2589.43       .86      1.80       .04   2583.00
  3395.0    1218.3    1568.4     608.3     293.8     157.7     135.6     209.5      70.3   2583.00
     .72      4.15      9.95      4.49      .050      .030      .050      .000   2582.00    891.29
 .003660      310.      320.      320.         2        11         0       .00    156.71   1048.00


*SECNO 6.703
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      929.0    1116.8  TYPE=      1  TARGET=      187.820
            DISCHARGE FROM HEC-1 MODEL:  SAI150  Q = 1855 cfs
   6.703      4.22   2594.22   2594.22   2594.22   2595.14       .92      3.19       .02   2591.00
  1855.0     399.6     993.5     461.8      97.5     100.6     128.6     217.0      73.1   2591.00
     .75      4.10      9.88      3.59      .050      .030      .050      .000   2590.00    929.00
 .006917      690.      710.      740.         0        14         0       .00    187.82   1116.82


*SECNO 6.778
7185 MINIMUM SPECIFIC ENERGY
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 953.9 1052.0 TYPE= 1 TARGET= 98.150

6.778	4.23	2599.23	2599.23	2599.22	2600.51	1.28	3.09	.11	2595.50
1855.0	446.5	928.3	480.2	78.2	79.6	95.4	219.6	74.4	2595.50
.76	5.71	11.67	5.04	.050	.030	.050	.000	2595.00	953.89
.008821	410.	400.	380.	0	5	0	.00	98.15	1052.04

*SECNO 6.890

3470 ENCROACHMENT STATIONS= 924.0 1019.8 TYPE= 1 TARGET= 95.790
ET RECORD: STA 775 ELIMINATE INEFFECTIVE
FLOW AREA IN LEFT OVERBANK

6.890	4.92	2603.92	2603.90	2603.90	2605.19	1.27	4.68	.00	2600.00
1855.0	711.0	1088.1	55.9	155.3	97.2	15.3	223.2	75.7	2600.00
.78	4.58	11.20	3.64	.050	.030	.050	.000	2599.00	924.00
.007095	620.	590.	550.	2	8	0	.00	95.79	1019.79

*SECNO 6.983
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 960.0 1030.7 TYPE= 1 TARGET= 70.740
ET RECORD: STA 840 & 1081 ELIMINATE INEFFECTIVE
FLOW AREAS IN OVERBANKS

6.983	4.76	2607.76	2607.76	2607.93	2609.37	1.61	3.32	.10	2604.00
1855.0	303.9	1442.1	109.1	62.5	127.9	28.3	225.6	76.5	2604.00
.79	4.86	11.27	3.85	.050	.030	.050	.000	2603.00	960.00
.007509	360.	490.	510.	0	8	0	.00	70.06	1030.06

*SECNO 7.074
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 957.0 1040.0 TYPE= 1 TARGET= 83.000

7.074	4.86	2612.86	2612.86	2612.94	2614.30	1.44	3.73	.02	2609.00
1855.0	440.2	1083.1	331.7	81.3	91.6	71.2	228.1	77.4	2609.00
.81	5.42	11.83	4.66	.050	.030	.050	.000	2608.00	957.00
.008068	485.	480.	470.	0	8	0	.00	83.00	1040.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

```
*SECNO 7.157
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      968.6    1057.0  TYPE=      1  TARGET=      88.390
     7.157      4.08   2619.08   2619.08   2619.12   2620.43      1.35      3.64       .01   2616.00
    1855.0      54.3    1325.4     475.3      14.3     124.9      97.6     230.6      78.2   2616.00
       .82      3.79     10.61      4.87      .050      .030      .050      .000   2615.00    968.72
   .008438      450.      440.      440.         0        15         0       .00     88.27   1057.00


*SECNO 7.275
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      944.0    1032.1  TYPE=      1  TARGET=      88.100
     7.275      5.03   2624.03   2624.03   2624.22   2625.47      1.44      4.70       .03   2620.00
    1855.0     571.0    1126.4     157.6     111.3      96.4      38.1     233.8      79.4   2620.00
       .84      5.13     11.68      4.14      .050      .030      .050      .000   2619.00    944.00
   .007411      490.      620.      600.         0        11         0       .00     86.30   1030.30


*SECNO 7.375
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      960.0    1031.0  TYPE=      1  TARGET=      71.000
     7.375      4.38   2631.38   2631.38   2631.41   2632.94      1.56      4.15       .04   2628.00
    1855.0     336.5    1328.4     190.1      65.4     116.3      39.3     236.5      80.3   2628.00
       .86      5.14     11.42      4.84      .050      .030      .050      .000   2627.00    960.00
   .008749      485.      530.      500.         0        15         0       .00     71.00   1031.00


*SECNO 7.468

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.65


3470 ENCROACHMENT STATIONS=      928.8    1036.4  TYPE=      1  TARGET=     107.620
     7.468      5.77   2634.77   2633.90   2633.90   2635.46       .69      2.43       .09   2630.00
    1855.0     638.0    981.4     235.6     172.0     116.0      67.6     239.8      81.3   2630.00
       .88      3.71     8.46      3.48      .050      .030      .050      .000   2629.00    928.77
   .003196      490.      490.      485.         3         8         0       .00    107.62   1036.39
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 7.559

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 976.1 1075.0 TYPE= 1 TARGET= 98.890

7.559	4.02	2639.02	2639.02	2639.05	2640.30	1.27	2.27	.18	2636.00
1855.0	117.4	1372.7	364.8	27.8	134.1	88.5	243.1	82.4	2636.00
.89	4.23	10.24	4.12	.050	.030	.050	.000	2635.00	976.23
.007829	450.	480.	500.	0	19	0	.00	98.77	1075.00

*SECNO 7.641

3470 ENCROACHMENT STATIONS= 956.2 1045.0 TYPE= 1 TARGET= 88.820

7.641	4.30	2642.30	2641.97	2642.00	2643.36	1.06	3.04	.02	2638.80
1855.0	330.5	1108.9	415.5	70.4	111.1	87.6	245.5	83.3	2638.80
.91	4.70	9.98	4.74	.050	.030	.050	.000	2638.00	956.18
.006633	450.	435.	370.	0	5	0	.00	88.82	1045.00

*SECNO 7.747
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 970.0 1070.0 TYPE= 1 TARGET= 100.000

7.747	3.30	2647.30	2647.30	2647.17	2648.53	1.22	5.03	.05	2645.00
1855.0	100.1	932.6	822.3	21.6	84.1	137.8	248.8	84.5	2645.00
.93	4.63	11.09	5.97	.050	.030	.050	.000	2644.00	970.00
.012711	520.	560.	580.	0	15	0	.00	100.00	1070.00

*SECNO 7.834

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.51

3470 ENCROACHMENT STATIONS= 938.0 1029.0 TYPE= 1 TARGET= 91.000

7.834	5.24	2651.24	2650.86	2650.91	2652.26	1.02	3.71	.02	2647.50
1855.0	536.3	1086.0	232.8	123.4	109.1	56.3	251.6	85.5	2647.50
.94	4.35	9.96	4.13	.050	.030	.050	.000	2646.00	938.00
.005579	410.	460.	490.	3	14	0	.00	91.00	1029.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 7.908
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 976.2 1268.0 TYPE= 1 TARGET= 291.830

7.908	4.53	2654.53	2654.53	2654.60	2655.23	.71	2.19	.03	2651.00
1855.0	114.5	864.2	876.2	31.3	92.6	299.3	254.9	87.3	2651.00
.96	3.66	9.33	2.93	.050	.030	.050	.000	2650.00	976.64
.005580	390.	390.	400.	0	9	0	.00	288.08	1264.72

*SECNO 8.012
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 900.2 1147.4 TYPE= 1 TARGET= 247.240

8.012	4.57	2658.57	2658.57	2658.54	2659.35	.78	2.89	.02	2655.00
1855.0	312.0	925.0	618.0	101.7	97.7	186.2	259.5	90.2	2655.00
.98	3.07	9.47	3.32	.050	.030	.050	.000	2654.00	900.18
.005666	580.	550.	450.	0	5	0	.00	247.24	1147.42

*SECNO 8.124
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 869.2 1064.1 TYPE= 1 TARGET= 194.860

8.124	5.21	2664.21	2664.21	2664.22	2665.18	.96	3.06	.06	2660.00
1855.0	449.2	1143.3	262.5	151.1	117.9	72.7	264.3	93.2	2660.00
1.01	2.97	9.70	3.61	.050	.030	.050	.000	2659.00	869.26
.004873	575.	590.	575.	0	8	0	.00	194.80	1064.06

*SECNO 8.207
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 953.0 1053.0 TYPE= 1 TARGET= 99.990

8.207	3.85	2668.85	2668.85	2668.48	2670.10	1.25	2.72	.09	2666.00
1855.0	308.8	1257.2	289.0	63.2	120.8	66.7	267.1	94.5	2666.00
1.02	4.89	10.41	4.33	.050	.030	.050	.000	2665.00	953.00
.008817	340.	440.	470.	0	19	0	.00	99.99	1052.99

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 8.317

3470 ENCROACHMENT STATIONS= 928.0 1033.0 TYPE= 1 TARGET= 105.000

8.317	3.92	2673.92	2673.73	2673.71	2674.92	1.00	4.80	.02	2671.00
1855.0	621.4	1072.5	161.1	129.5	109.4	40.2	270.7	95.9	2671.00
1.04	4.80	9.81	4.01	.050	.030	.050	.000	2670.00	928.00
.007636	620.	580.	540.	2	8	0	.00	105.00	1033.00

*SECNO 8.408
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 923.0 1023.8 TYPE= 1 TARGET= 100.840

8.408	3.90	2678.90	2678.90	2678.85	2680.12	1.22	4.14	.06	2676.00
1855.0	876.0	894.2	84.9	157.6	78.2	18.9	273.5	97.0	2676.00
1.06	5.56	11.43	4.48	.050	.030	.050	.000	2675.00	923.00
.010469	445.	480.	480.	0	5	0	.00	100.84	1023.84

*SECNO 8.510
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 971.0 1071.0 TYPE= 1 TARGET= 99.970

8.510	6.17	2685.17	2685.17	2684.79	2686.61	1.44	3.64	.07	2680.00
1855.0	219.6	1280.7	354.8	50.6	113.4	100.3	276.4	98.1	2680.00
1.07	4.34	11.29	3.54	.050	.030	.050	.000	2679.00	971.03
.005175	450.	540.	510.	0	17	0	.00	99.97	1071.00

*SECNO 8.603
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 934.0 1033.8 TYPE= 1 TARGET= 99.760
ET RECORD: STA 1060 ELIMINATE INEFFECTIVE
FLOW AREA IN RIGHT OVERBANK

8.603	4.03	2691.03	2691.03	2690.75	2692.27	1.24	3.26	.02	2687.50
1855.0	665.0	949.6	240.4	133.6	82.6	47.4	279.4	99.2	2687.50
1.09	4.98	11.50	5.07	.050	.030	.050	.000	2687.00	934.00
.008977	510.	490.	440.	0	14	0	.00	99.76	1033.76

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 8.715
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 950.2 1044.0 TYPE= 1 TARGET= 93.830

8.715	4.92	2697.92	2697.92	2697.98	2699.29	1.37	4.58	.04	2694.50
1855.0	243.5	1335.4	276.1	58.1	124.3	63.6	282.7	100.4	2694.50
1.11	4.19	10.74	4.34	.050	.030	.050	.000	2693.00	950.77
.007106	515.	590.	615.	0	11	0	.00	93.23	1044.00

*SECNO 8.798

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 944.0 1044.0 TYPE= 1 TARGET= 100.000

8.798	4.22	2701.22	2700.40	2700.84	2701.89	.67	2.53	.07	2697.60
1855.0	672.0	803.0	380.0	152.1	93.1	89.2	285.5	101.4	2697.60
1.13	4.42	8.62	4.26	.050	.030	.050	.000	2697.00	944.00
.004897	440.	440.	400.	2	19	0	.00	100.00	1044.00

*SECNO 8.889

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 948.1 1048.0 TYPE= 1 TARGET= 99.930

8.889	3.90	2705.90	2705.90	2705.47	2707.17	1.27	3.14	.18	2703.00
1855.0	284.6	1084.1	486.2	64.8	98.6	87.0	288.7	102.5	2703.00
1.14	4.39	10.99	5.59	.050	.030	.050	.000	2702.00	948.07
.009664	520.	480.	390.	0	11	0	.00	99.93	1048.00

*SECNO 8.984
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 942.7 1120.0 TYPE= 1 TARGET= 177.260
ET RECORD: STA 930 ELIMINATE INEFFECTIVE

```
                    FLOW AREA IN LEFT OVERBANK
    8.984      3.72   2712.72   2712.72   2712.75   2713.60       .88      4.55       .04   2709.50
   1855.0     388.2     770.9     695.9      80.1      73.5     177.1     292.1     104.1   2709.50
     1.16      4.85     10.49      3.93      .050      .030      .050      .000   2709.00    943.09
  .008453      470.      500.      530.         0        11         0       .00    176.91   1120.00


*SECNO 9.043

3470 ENCROACHMENT STATIONS=      951.0    1078.9  TYPE=       1  TARGET=      127.880
    9.043      4.82   2714.82   2714.55   2714.79   2715.69       .88      2.10       .00   2711.00
   1855.0     425.2     867.6     562.2      99.0      86.4     138.1     294.3     105.1   2711.00
     1.17      4.30     10.05      4.07      .050      .030      .050      .000   2710.00    951.00
  .005889      310.      310.      280.         2        11         0       .00    127.88   1078.88


*SECNO 9.142

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      957.3    1033.3  TYPE=       1  TARGET=       76.020
    9.142      5.07   2722.07   2722.07   2722.07   2723.65      1.58      3.41       .21   2718.00
   1855.0     351.6    1315.7     187.7      68.9     114.0      40.9     297.6     106.3   2718.00
     1.19      5.10     11.55      4.59      .050      .030      .050      .000   2717.00    957.26
  .007222      515.      525.      530.         0         8         0       .00     76.00   1033.26


*SECNO 9.246
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      920.0    1017.7  TYPE=       1  TARGET=       97.680
    9.246      4.32   2727.32   2727.32   2727.40   2728.58      1.27      4.41       .03   2724.00
   1855.0     907.6     891.1      56.3     165.7      75.8      12.5     300.5     107.4   2724.00
     1.21      5.48     11.75      4.52      .050      .030      .050      .000   2723.00    920.00
  .009584      500.      550.      550.         0        15         0       .00     97.50   1017.50


*SECNO 9.313
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      963.0    1063.4  TYPE=       1  TARGET=      100.430
    9.313      4.01   2733.01   2733.01   2732.66   2734.26      1.24      3.29       .00   2729.60
   1855.0     419.7     935.4     499.8      73.6      81.5     104.1     302.5     108.2   2729.70
     1.22      5.70     11.48      4.80      .050      .030      .050      .000   2729.00    963.00
  .009406      340.      350.      350.         0        11         0       .00    100.43   1063.43
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 9.430

3470 ENCROACHMENT STATIONS= 927.3 1030.2 TYPE= 1 TARGET= 102.830

9.430	4.29	2738.29	2738.21	2738.23	2739.48	1.19	5.21	.01	2734.60
1855.0	630.7	1023.3	201.0	124.3	93.9	44.3	306.2	109.6	2734.60
1.24	5.08	10.90	4.53	.050	.030	.050	.000	2734.00	927.33
.007654	620.	620.	600.	2	8	0	.00	102.83	1030.16

*SECNO 9.513
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 930.0 1030.4 TYPE= 1 TARGET= 100.440

9.513	3.95	2744.95	2744.95	2744.70	2746.19	1.24	3.56	.02	2741.80
1855.0	662.0	1058.9	134.1	128.8	96.3	31.5	308.7	110.6	2741.80
1.25	5.14	10.99	4.26	.050	.030	.050	.000	2741.00	930.00
.009150	400.	440.	440.	0	11	0	.00	100.44	1030.44

*SECNO 9.598
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 923.9 1030.6 TYPE= 1 TARGET= 106.710

9.598	4.27	2750.27	2750.27	2750.29	2751.50	1.23	3.90	.00	2746.90
1855.0	612.8	1030.0	212.2	122.3	92.7	43.6	311.3	111.6	2746.90
1.27	5.01	11.11	4.86	.050	.030	.050	.000	2746.00	924.18
.008474	430.	450.	450.	0	8	0	.00	106.34	1030.53

*SECNO 9.695
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 945.0 1045.5 TYPE= 1 TARGET= 100.510

9.695	4.04	2758.04	2758.04	2758.08	2759.29	1.25	4.52	.01	2754.70
1855.0	531.8	1002.3	320.9	103.8	88.9	63.3	314.3	112.8	2754.80
1.28	5.12	11.27	5.07	.050	.030	.050	.000	2754.00	945.00
.009156	520.	510.	510.	0	11	0	.00	100.27	1045.27

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

```
*SECNO -6.568
START TRIB COMP
    -6.568     6.568  2588.569

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=      891.3    1048.0  TYPE=      1  TARGET=      156.710
            CONFLUENCE OF HARTMAN WASH (MAIN CHANNEL)
            AND HARTMAN WASH TRIBUTARY (SUBBASIN SAI 155)
   -6.568      6.57   2588.57       .00   2587.82   2588.83       .26       .76      3.76   2583.00
   1855.0     666.0     856.6     332.4     294.3     157.8     135.8     317.4     113.8   2583.00
     1.31      2.26      5.43      2.45      .050      .030      .050      .000   2582.00    891.29
  .001089      310.      320.      320.         0         0         0       .00    156.71   1048.00


*SECNO  .129

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      896.5    1137.1  TYPE=      1  TARGET=      240.550
            DISCHARGE FROM HEC-1 MODEL:  SAI155  Q = 1559 cfs
     .129      4.01   2594.01   2594.01   2594.01   2594.80       .79      1.37       .16   2591.30
   1559.0     317.6    1011.7     229.7     103.2     118.0      75.9     324.3     116.9   2591.30
     1.34      3.08      8.57      3.03      .050      .030      .050      .000   2590.00    896.54
  .006038      710.      680.      650.         0        14         0       .00    240.55   1137.09


*SECNO  .162
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      952.0    1039.0  TYPE=      1  TARGET=       87.000
     .162      3.28   2595.28   2595.28   2595.24   2596.47      1.19      1.37       .12   2592.40
   1559.0     441.9     824.2     293.0      82.2      75.5      56.0     325.3     117.5   2592.60
     1.34      5.38     10.92      5.23      .050      .030      .050      .000   2592.00    952.00
  .011097      170.      175.      160.         0        15         0       .00     87.00   1039.00
```

```
SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO  .214

3470 ENCROACHMENT STATIONS=      961.0    1047.0  TYPE=      1  TARGET=      86.000
     .214      3.31   2598.31   2598.27   2598.05   2599.46      1.16      2.99       .00   2595.50
   1559.0     296.2     813.4     449.4      57.7      75.1      84.0     326.7     118.0   2595.50
     1.35      5.13     10.83      5.35      .050      .030      .050      .000   2595.00    961.00
  .010749      275.      275.      270.         0         5         0       .00     86.00   1047.00


*SECNO  .309

3470 ENCROACHMENT STATIONS=      951.1    1036.5  TYPE=      1  TARGET=      85.400
     .309      3.41   2603.41   2603.38   2603.30   2604.59      1.18      5.12       .01   2600.00
   1559.0     445.6     762.0     351.3      84.7      68.1      63.0     329.1     119.0   2600.00
     1.37      5.26     11.20      5.58      .050      .030      .050      .000   2600.00    951.11
  .009978      510.      500.      470.         2         5         0       .00     85.40   1036.51


CCHV=     .100 CEHV=     .300
*SECNO -3.093
START TRIB COMP
   -3.093     3.093  2403.430

3470 ENCROACHMENT STATIONS=      938.5    1062.0  TYPE=      1  TARGET=      123.490
            CONFLUENCE OF HARTMAN WASH (MAIN CHANNEL)
            AND CHANNEL THAT CARRIES LEVEE OVERFLOW

            CROSS-SECTION 3.093 & 3.195 TAKEN FROM LOWHRTMN.DAT

            SWSE EQUALS CWSEL FOR CROSS-SECTION 3.093 OF LOWHRTMN.DAT

   -3.093      6.93   2403.43       .00   2403.43   2405.07      1.64      4.82       .31   2397.00
   3660.0    1529.9    1421.4     708.7     183.9     107.7     105.1     332.5     120.1   2397.00
     1.38      8.32     13.20      6.75      .050      .040      .050      .000   2396.50    938.51
  .010144      490.      480.      450.         0         0         0       .00    123.49   1062.00


*SECNO 3.195
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      970.5    1106.4  TYPE=      1  TARGET=      135.910
     3.195      6.78   2409.78   2409.78   2409.79   2411.49      1.71      5.13       .02   2404.00
   3660.0     264.6    2614.1     781.4      41.8     219.3     150.6     337.5     121.8   2404.00
     1.40      6.34     11.92      5.19      .050      .040      .050      .000   2403.00    970.55
  .008931      530.      540.      550.         0         5         0       .00    135.79   1106.34
```

```
SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO  .064

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      844.1    1089.6  TYPE=      1  TARGET=      245.530
            DISCHARGE IS LEVEE OVERFLOW

            LEVEE OVERFLOW DETERMINED FROM RATING CURVE
            FOR CROSS-SECTION 3.582 OF UPHRTMN.DAT

     .064      5.63   2417.43   2417.43   2417.48   2418.39       .97      2.97       .07   2412.00
   3210.0    1042.7    1365.4     801.9     237.1     127.1     152.0     341.1     123.2   2412.00
     1.41      4.40     10.74      5.28      .050      .040      .050      .000   2411.80    844.29
  .008555      325.      340.      350.         0        12         0       .00    244.25   1088.54


*SECNO  .122

02 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .63


3470 ENCROACHMENT STATIONS=      982.1    1134.8  TYPE=      1  TARGET=      152.750
     .122      3.70   2421.20   2421.16   2421.16   2422.39      1.20      3.93       .07   2420.00
   3210.0       5.3     620.7    2583.9       1.8      62.4     304.6     344.2     124.6   2420.00
     1.42      2.99      9.95      8.48      .050      .040      .050      .000   2417.50    982.09
  .021731      300.      305.      305.         1        14         0       .00    152.75   1134.84


*SECNO  .168

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=         .0    1149.0  TYPE=      1  TARGET=     1148.999
            X3 RECORD: STA 1149 ELIMINATE INEFFECTIVE
                       FLOW AREA ON SOUTH SIDE OF
                       US HWY 60
     .168      5.08   2425.08   2424.49   2425.11   2426.15      1.08      3.75       .01   2422.00
   3210.0      30.2     533.3    2646.5       7.7      61.6     319.3     346.2     125.3   2422.00
     1.43      3.92      8.65      8.29      .050      .040      .050      .000   2420.00    984.99
  .012102      240.      240.      235.         2        11         0       .00    113.41   1129.68
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .272

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= .0 1445.0 TYPE= 1 TARGET= 1444.999
HYDRAULIC BASE LINE IS @ STA. 1279.

X3 RECORD: STA 1445 ELIMINATE INEFFECTIVE
FLOW AREA ON SOUTH SIDE OF
US HWY 60

.272	3.94	2431.94	2431.49	2431.93	2432.48	.54	6.27	.05	2429.50
3210.0	990.6	744.8	1474.5	213.8	107.1	244.1	352.3	127.9	2429.50
1.45	4.63	6.96	6.04	.050	.040	.050	.000	2428.00	1117.57
.010714	560.	550.	550.	4	18	0	.00	285.37	1419.70

ECNO .366

3470 ENCROACHMENT STATIONS= 1058.4 1330.0 TYPE= 1 TARGET= 271.600
HYDRAULIC BASE LINE IS @ STA. 1115.

.366	3.08	2436.08	2435.33	2436.08	2436.49	.41	3.99	.01	2433.20
3210.0	248.7	956.5	2004.8	59.4	148.7	446.4	358.8	130.8	2433.20
1.48	4.19	6.43	4.49	.050	.040	.050	.000	2433.00	1058.42
.007004	465.	500.	450.	4	14	0	.00	271.54	1329.95

THIS RUN EXECUTED 10JUL92 10:43:28

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

WASH AI: HARTMAN WASH

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	3.093	.00	.00	.00	2396.50	3660.00	2403.43	2403.42	2404.65	83.90	12.01	504.02	399.59
	3.093	.00	.00	.00	2396.50	3660.00	2403.43	2403.31	2405.07	101.44	13.20	396.61	363.40
*	3.195	540.00	.00	.00	2403.00	3660.00	2409.79	2409.79	2411.49	88.93	11.90	412.46	388.11
*	3.195	540.00	.00	.00	2403.00	3660.00	2409.78	2409.78	2411.49	89.31	11.92	411.70	387.29
	3.309	600.00	.00	.00	2412.00	450.00	2416.15	2415.51	2416.80	72.16	6.69	74.47	52.98
	3.309	600.00	.00	.00	2412.00	450.00	2416.17	2415.51	2416.81	70.71	6.65	75.00	53.52
*	3.381	380.00	.00	.00	2419.50	450.00	2421.90	2421.90	2422.82	166.54	8.23	62.98	34.87
*	3.381	380.00	.00	.00	2419.50	450.00	2421.92	2421.92	2422.82	161.60	8.15	63.62	35.40
*	3.498	620.00	.00	.00	2428.00	450.00	2437.01	2437.01	2437.21	29.94	4.31	130.68	82.24
*	3.498	620.00	.00	.00	2428.00	450.00	2437.01	2437.01	2437.21	29.94	4.31	130.68	82.24
	3.582	440.00	.00	.00	2433.00	450.00	2438.29	2437.21	2438.48	27.61	3.87	138.26	85.64
	3.582	440.00	.00	.00	2433.00	450.00	2438.29	2437.21	2438.48	27.61	3.87	138.26	85.64
*	3.661	420.00	.00	.00	2438.50	3660.00	2441.74	2441.40	2442.15	104.19	7.88	759.56	358.57
*	3.661	420.00	.00	.00	2438.50	3660.00	2441.74	2441.40	2442.15	104.19	7.88	759.56	358.57
	3.756	500.00	.00	.00	2441.00	3660.00	2445.53	2444.92	2445.93	59.17	7.53	810.05	475.82
	3.756	500.00	.00	.00	2441.00	3660.00	2445.53	2444.92	2445.93	59.17	7.53	810.05	475.82
	3.822	350.00	.00	.00	2443.00	3660.00	2447.17	2445.93	2447.39	33.14	5.55	1030.71	635.79
	3.822	350.00	.00	.00	2443.00	3660.00	2447.17	2445.93	2447.39	33.15	5.55	1030.60	635.70
	3.887	340.00	.00	.00	2442.00	3660.00	2448.11	2446.89	2449.02	60.40	9.39	511.62	470.94
	3.887	340.00	.00	.00	2442.00	3660.00	2448.11	2446.89	2449.02	60.40	9.39	511.62	470.94
*	3.911	130.00	.00	.00	2443.50	3660.00	2448.78	2448.78	2451.07	159.69	13.94	317.57	289.63
*	3.911	130.00	.00	.00	2443.50	3660.00	2448.78	2448.78	2451.07	159.34	13.93	317.79	289.95

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	3.918	39.00	.00	.00	2448.70	3641.00	2454.67	2454.67	2457.60	18.63	13.85	290.93	843.67
*	3.918	39.00	.00	.00	2448.70	3641.00	2454.67	2454.67	2457.60	18.62	13.85	290.94	843.73
*	3.919	1.00	2458.80	2462.20	2451.90	3641.00	2457.90	2457.90	2460.93	25.27	13.98	260.49	724.23
*	3.919	1.00	2458.80	2462.20	2451.90	3641.00	2457.90	2457.90	2460.93	25.27	13.98	260.49	724.23
*	3.926	42.20	2460.10	2462.20	2452.70	3641.00	2458.72	2458.72	2461.73	24.99	13.93	261.45	728.27
*	3.926	42.20	2460.10	2462.20	2452.70	3641.00	2458.72	2458.72	2461.73	24.99	13.93	261.45	728.27
*	4.023	510.00	.00	.00	2454.00	3641.00	2462.24	2457.32	2462.31	2.35	3.04	2052.11	2377.61
*	4.023	510.00	.00	.00	2454.00	3641.00	2462.34	2457.73	2462.53	5.42	4.67	1210.58	1563.33
*	4.110	460.00	.00	.00	2458.00	3641.00	2463.89	2463.89	2465.25	74.58	13.12	516.80	421.61
*	4.110	460.00	.00	.00	2458.00	3641.00	2463.88	2463.88	2465.28	76.64	13.27	500.91	415.91
	4.210	530.00	.00	.00	2465.00	3641.00	2468.96	2468.92	2469.86	101.23	11.36	608.28	361.89
*	4.210	530.00	.00	.00	2465.00	3641.00	2469.06	2469.06	2470.26	115.77	12.40	506.07	338.39
*	4.301	480.00	.00	.00	2471.00	3641.00	2475.76	2475.76	2477.11	90.72	12.96	484.77	382.27
*	4.301	480.00	.00	.00	2471.00	3641.00	2475.72	2475.72	2477.27	100.38	13.56	440.28	363.41
*	4.390	470.00	.00	.00	2476.00	3641.00	2480.94	2480.94	2482.14	80.99	12.03	546.04	404.57
*	4.390	470.00	.00	.00	2476.00	3641.00	2480.96	2480.96	2482.38	89.47	12.68	487.33	384.92
	4.487	510.00	.00	.00	2480.00	3641.00	2485.34	2485.34	2486.66	72.66	11.80	521.79	427.13
	4.487	510.00	.00	.00	2480.00	3641.00	2485.34	2485.34	2486.73	75.81	12.04	501.78	418.18
	4.585	520.00	.00	.00	2483.00	3641.00	2488.97	2488.74	2490.22	61.13	11.96	526.42	465.70
	4.585	520.00	.00	.00	2483.00	3641.00	2489.05	2488.71	2490.32	59.59	11.92	512.18	471.65
*	4.674	470.00	.00	.00	2487.00	3641.00	2495.33	2495.33	2497.19	46.72	13.31	461.44	532.66
*	4.674	470.00	.00	.00	2487.00	3641.00	2495.33	2495.33	2497.19	46.73	13.31	461.40	532.62
*	4.771	510.00	.00	.00	2494.00	3641.00	2499.23	2499.23	2500.55	85.56	12.89	511.13	393.63
*	4.771	510.00	.00	.00	2494.00	3641.00	2499.24	2499.24	2500.55	85.31	12.88	511.66	394.20
*	4.860	470.00	.00	.00	2498.00	3641.00	2503.35	2503.35	2504.49	59.94	10.97	575.33	470.29
*	4.860	470.00	.00	.00	2498.00	3641.00	2503.33	2503.33	2504.50	61.54	11.09	564.29	464.13
*	4.989	680.00	.00	.00	2506.00	3641.00	2510.72	2510.72	2512.16	87.36	12.35	468.35	389.56
*	4.989	680.00	.00	.00	2506.00	3641.00	2510.71	2510.71	2512.33	95.56	12.88	429.51	372.47
*	5.055	350.00	.00	.00	2508.00	3641.00	2514.45	2514.45	2515.51	58.93	12.42	658.65	474.31
*	5.055	350.00	.00	.00	2508.00	3641.00	2514.93	2514.93	2516.48	65.20	13.76	490.99	450.90
*	5.182	670.00	.00	.00	2517.00	3641.00	2521.54	2521.54	2522.79	104.21	13.34	501.71	356.67
*	5.182	670.00	.00	.00	2517.00	3641.00	2521.56	2521.56	2522.79	102.39	13.26	504.82	359.82
*	5.244	330.00	.00	.00	2521.00	3641.00	2525.67	2525.67	2526.76	86.76	12.51	574.53	390.91
*	5.244	330.00	.00	.00	2521.00	3641.00	2525.76	2525.76	2527.19	98.14	13.47	468.11	367.53

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	5.341	510.00	.00	.00	2527.00	3641.00	2531.44	2531.44	2532.23	79.57	10.99	681.53	408.17
*	5.341	510.00	.00	.00	2527.00	3641.00	2531.46	2531.46	2532.61	101.06	12.45	537.74	362.19
	5.426	450.00	.00	.00	2530.00	3641.00	2534.71	2534.64	2535.87	76.97	11.93	538.15	415.01
	5.426	450.00	.00	.00	2530.00	3641.00	2535.04	2534.65	2535.94	55.62	10.62	610.05	488.22
*	5.532	560.00	2542.40	2544.20	2534.10	3641.00	2544.73	2544.73	2545.52	28.10	8.86	895.63	686.84
*	5.532	560.00	2542.40	2544.20	2534.10	3641.00	2544.73	2544.73	2545.52	28.10	8.86	895.63	686.84
*	5.538	30.50	2542.50	2544.20	2534.40	3641.00	2544.85	2544.85	2545.69	29.52	9.01	857.88	670.12
*	5.538	30.50	2542.50	2544.20	2534.40	3641.00	2544.85	2544.85	2545.69	29.52	9.01	857.88	670.12
	5.566	150.00	.00	.00	2537.00	3641.00	2545.53	2542.83	2546.17	17.88	8.38	676.94	861.19
	5.566	150.00	.00	.00	2537.00	3641.00	2545.53	2542.83	2546.17	17.88	8.38	676.94	861.19
	5.652	450.00	.00	.00	2538.00	3641.00	2546.30	2543.62	2546.82	11.56	6.54	762.49	1071.07
	5.652	450.00	.00	.00	2538.00	3641.00	2546.30	2543.62	2546.82	11.55	6.54	762.52	1071.13
*	5.764	595.00	.00	.00	2544.80	3641.00	2550.39	2550.39	2551.97	73.98	12.68	458.93	423.33
*	5.764	595.00	.00	.00	2544.80	3641.00	2550.39	2550.39	2551.97	73.52	12.65	459.98	424.64
	5.836	380.00	.00	.00	2548.30	3641.00	2553.43	2552.55	2554.03	39.61	9.17	720.75	578.49
	5.836	380.00	.00	.00	2548.30	3641.00	2553.42	2552.60	2554.31	52.21	10.51	570.87	503.90
	5.937	530.00	.00	.00	2554.00	3641.00	2559.02	2559.02	2560.56	83.20	12.77	448.06	399.16
	5.937	530.00	.00	.00	2554.00	3641.00	2559.02	2559.02	2560.56	83.20	12.77	448.06	399.16
	6.029	490.00	.00	.00	2558.00	3641.00	2563.12	2562.95	2564.33	74.46	11.81	518.72	421.94
	6.029	490.00	.00	.00	2558.00	3641.00	2563.12	2563.09	2564.63	87.53	12.81	458.47	389.17
*	6.124	500.00	.00	.00	2566.00	3641.00	2569.24	2569.24	2570.16	118.82	11.50	576.36	334.02
*	6.124	500.00	.00	.00	2566.00	3641.00	2569.68	2569.68	2571.06	124.41	12.85	458.04	326.43
*	6.213	470.00	.00	.00	2569.00	3641.00	2574.23	2574.23	2575.52	74.40	12.02	523.09	422.13
	6.213	470.00	.00	.00	2569.00	3641.00	2574.28	2574.23	2575.78	80.93	12.63	468.15	404.73
	6.317	550.00	.00	.00	2573.00	3641.00	2578.05	2577.34	2578.68	44.69	9.08	709.82	544.64
	6.317	550.00	.00	.00	2573.00	3641.00	2578.39	2577.57	2579.31	51.19	10.20	561.46	508.91
*	6.419	535.00	.00	.00	2577.00	3641.00	2581.65	2581.65	2582.88	104.66	13.04	497.70	355.90
	6.419	535.00	.00	.00	2577.00	3641.00	2581.82	2581.66	2583.17	101.59	13.20	464.08	361.24
	6.508	470.00	.00	.00	2582.00	3641.00	2586.08	2585.66	2586.78	71.66	9.76	645.40	430.12
	6.508	470.00	.00	.00	2582.00	3641.00	2586.38	2586.13	2587.60	95.42	11.91	486.73	372.73
	6.568	320.00	.00	.00	2582.00	3395.00	2587.82	2587.69	2588.87	54.94	11.17	564.48	458.01
*	6.568	320.00	.00	.00	2582.00	3395.00	2588.57	2587.73	2589.43	36.60	9.95	587.09	561.15
*	6.703	710.00	.00	.00	2590.00	1855.00	2594.22	2594.22	2595.14	69.57	9.90	325.83	222.40
*	6.703	710.00	.00	.00	2590.00	1855.00	2594.22	2594.22	2595.14	69.17	9.88	326.65	223.05

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	6.778	400.00	.00	.00	2595.00	1855.00	2599.22	2599.22	2600.51	88.78	11.69	252.55	196.87
*	6.778	400.00	.00	.00	2595.00	1855.00	2599.23	2599.23	2600.51	88.21	11.67	253.14	197.51
*	6.890	590.00	.00	.00	2599.00	1855.00	2603.90	2603.90	2604.90	61.24	10.37	326.36	237.05
	6.890	590.00	.00	.00	2599.00	1855.00	2603.92	2603.90	2605.19	70.95	11.20	267.74	220.23
*	6.983	490.00	.00	.00	2603.00	1855.00	2607.93	2607.93	2609.25	61.03	10.43	256.22	237.45
*	6.983	490.00	.00	.00	2603.00	1855.00	2607.76	2607.76	2609.37	75.09	11.27	218.80	214.07
*	7.074	480.00	.00	.00	2608.00	1855.00	2612.94	2612.94	2614.08	67.01	10.91	286.75	226.60
*	7.074	480.00	.00	.00	2608.00	1855.00	2612.86	2612.86	2614.30	80.68	11.83	244.06	206.52
*	7.157	440.00	.00	.00	2615.00	1855.00	2619.12	2619.12	2620.25	73.53	9.97	274.08	216.33
*	7.157	440.00	.00	.00	2615.00	1855.00	2619.08	2619.08	2620.43	84.38	10.61	236.83	201.95
*	7.275	620.00	.00	.00	2619.00	1855.00	2624.22	2624.22	2625.11	50.34	9.89	359.21	261.45
*	7.275	620.00	.00	.00	2619.00	1855.00	2624.03	2624.03	2625.47	74.11	11.68	245.80	215.48
*	7.375	530.00	.00	.00	2627.00	1855.00	2631.41	2631.41	2632.05	46.87	8.41	458.71	270.97
*	7.375	530.00	.00	.00	2627.00	1855.00	2631.38	2631.38	2632.94	87.49	11.42	221.06	198.32
*	7.468	490.00	.00	.00	2629.00	1855.00	2633.90	2633.90	2635.18	71.27	11.19	261.51	219.73
*	7.468	490.00	.00	.00	2629.00	1855.00	2634.77	2633.90	2635.46	31.96	8.46	355.65	328.11
*	7.559	480.00	.00	.00	2635.00	1855.00	2639.05	2639.05	2640.03	64.58	9.35	310.58	230.84
	7.559	480.00	.00	.00	2635.00	1855.00	2639.02	2639.02	2640.30	78.29	10.24	250.41	209.64
*	7.641	435.00	.00	.00	2638.00	1855.00	2642.00	2642.00	2643.17	83.00	10.60	267.20	203.61
	7.641	435.00	.00	.00	2638.00	1855.00	2642.30	2641.97	2643.36	66.33	9.98	269.07	227.76
	7.747	560.00	.00	.00	2644.00	1855.00	2647.17	2647.09	2647.72	77.44	8.38	412.24	210.79
*	7.747	560.00	.00	.00	2644.00	1855.00	2647.30	2647.30	2648.53	127.11	11.09	243.54	164.53
*	7.834	460.00	.00	.00	2646.00	1855.00	2650.91	2650.91	2651.85	62.53	10.00	332.14	234.59
*	7.834	460.00	.00	.00	2646.00	1855.00	2651.24	2650.86	2652.26	55.79	9.96	288.77	248.35
*	7.908	390.00	.00	.00	2650.00	1855.00	2654.60	2654.60	2655.23	49.96	8.93	443.98	262.43
*	7.908	390.00	.00	.00	2650.00	1855.00	2654.53	2654.53	2655.23	55.80	9.33	423.24	248.32
*	8.012	550.00	.00	.00	2654.00	1855.00	2658.54	2658.54	2659.35	58.83	9.61	379.05	241.86
*	8.012	550.00	.00	.00	2654.00	1855.00	2658.57	2658.57	2659.35	56.66	9.47	385.57	246.44
*	8.124	590.00	.00	.00	2659.00	1855.00	2664.22	2664.22	2665.18	48.66	9.70	341.86	265.92
*	8.124	590.00	.00	.00	2659.00	1855.00	2664.21	2664.21	2665.18	48.73	9.70	341.62	265.73
*	8.207	440.00	.00	.00	2665.00	1855.00	2668.48	2668.48	2669.29	81.77	9.26	343.03	205.13
*	8.207	440.00	.00	.00	2665.00	1855.00	2668.85	2668.85	2670.10	88.17	10.41	250.64	197.55
*	8.317	580.00	.00	.00	2670.00	1855.00	2673.71	2673.71	2674.70	86.32	10.01	298.49	199.66
	8.317	580.00	.00	.00	2670.00	1855.00	2673.92	2673.73	2674.92	76.36	9.81	278.98	212.29

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	8.408	480.00	.00	.00	2675.00	1855.00	2678.85	2678.85	2679.72	86.31	10.28	324.46	199.67
*	8.408	480.00	.00	.00	2675.00	1855.00	2678.90	2678.90	2680.12	104.69	11.43	254.77	181.30
*	8.510	540.00	.00	.00	2679.00	1855.00	2684.79	2684.79	2685.58	39.53	9.43	448.52	295.03
*	8.510	540.00	.00	.00	2679.00	1855.00	2685.17	2685.17	2686.61	51.75	11.29	264.34	257.86
*	8.603	490.00	.00	.00	2687.00	1855.00	2690.75	2690.75	2691.49	73.39	9.88	377.25	216.54
*	8.603	490.00	.00	.00	2687.00	1855.00	2691.03	2691.03	2692.27	89.77	11.50	263.58	195.78
*	8.715	590.00	.00	.00	2693.00	1855.00	2697.98	2697.98	2699.05	58.34	9.83	303.07	242.86
*	8.715	590.00	.00	.00	2693.00	1855.00	2697.92	2697.92	2699.29	71.06	10.74	246.09	220.05
	8.798	440.00	.00	.00	2697.00	1855.00	2700.84	2700.25	2701.26	42.86	7.54	445.81	283.34
	8.798	440.00	.00	.00	2697.00	1855.00	2701.22	2700.40	2701.89	48.97	8.62	334.38	265.08
*	8.889	480.00	.00	.00	2702.00	1855.00	2705.47	2705.47	2706.26	89.17	9.65	339.29	196.44
*	8.889	480.00	.00	.00	2702.00	1855.00	2705.90	2705.90	2707.17	96.64	10.99	250.48	188.70
*	8.984	500.00	.00	.00	2709.00	1855.00	2712.75	2712.75	2713.58	80.14	10.27	341.85	207.22
*	8.984	500.00	.00	.00	2709.00	1855.00	2712.72	2712.72	2713.60	84.53	10.49	330.73	201.77
	9.043	310.00	.00	.00	2710.00	1855.00	2714.79	2714.56	2715.57	55.66	9.72	351.01	248.64
	9.043	310.00	.00	.00	2710.00	1855.00	2714.82	2714.55	2715.69	58.89	10.05	323.42	241.73
	9.142	525.00	.00	.00	2717.00	1855.00	2722.07	2722.07	2723.65	72.13	11.54	223.84	218.42
	9.142	525.00	.00	.00	2717.00	1855.00	2722.07	2722.07	2723.65	72.22	11.55	223.73	218.28
*	9.246	550.00	.00	.00	2723.00	1855.00	2727.40	2727.40	2728.46	81.98	11.03	287.96	204.87
*	9.246	550.00	.00	.00	2723.00	1855.00	2727.32	2727.32	2728.58	95.84	11.75	253.98	189.48
*	9.313	350.00	.00	.00	2729.00	1855.00	2732.66	2732.66	2733.50	86.65	10.30	331.72	199.27
*	9.313	350.00	.00	.00	2729.00	1855.00	2733.01	2733.01	2734.26	94.06	11.48	259.10	191.27
*	9.430	620.00	.00	.00	2734.00	1855.00	2738.23	2738.23	2739.48	82.47	11.18	255.24	204.27
	9.430	620.00	.00	.00	2734.00	1855.00	2738.29	2738.21	2739.48	76.54	10.90	262.50	212.03
*	9.513	440.00	.00	.00	2741.00	1855.00	2744.70	2744.70	2745.76	94.32	10.62	280.73	191.00
*	9.513	440.00	.00	.00	2741.00	1855.00	2744.95	2744.95	2746.19	91.50	10.99	256.67	193.93
*	9.598	450.00	.00	.00	2746.00	1855.00	2750.29	2750.29	2751.50	82.83	11.02	260.89	203.83
*	9.598	450.00	.00	.00	2746.00	1855.00	2750.27	2750.27	2751.50	84.74	11.11	258.68	201.51
*	9.695	510.00	.00	.00	2754.00	1855.00	2758.08	2758.08	2759.17	82.25	10.75	281.88	204.54
*	9.695	510.00	.00	.00	2754.00	1855.00	2758.04	2758.04	2759.29	91.56	11.27	256.00	193.86
	-6.568	320.00	.00	.00	2582.00	1855.00	2587.82	.00	2588.14	16.38	6.10	564.76	458.28
	-6.568	320.00	.00	.00	2582.00	1855.00	2588.57	.00	2588.83	10.89	5.43	587.82	562.11
*	.129	680.00	.00	.00	2590.00	1559.00	2594.01	2594.01	2594.80	60.79	8.59	296.00	199.96
*	.129	680.00	.00	.00	2590.00	1559.00	2594.01	2594.01	2594.80	60.38	8.57	297.11	200.64

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	.162	175.00	.00	.00	2592.00	1559.00	2595.24	2595.22	2596.07	90.37	9.75	274.62	164.00
*	.162	175.00	.00	.00	2592.00	1559.00	2595.28	2595.28	2596.47	110.97	10.92	213.68	148.00
*	.214	275.00	.00	.00	2595.00	1559.00	2598.05	2598.05	2598.90	102.11	9.94	266.03	154.28
	.214	275.00	.00	.00	2595.00	1559.00	2598.31	2598.27	2599.46	107.49	10.83	216.84	150.37
*	.309	500.00	.00	.00	2600.00	1559.00	2603.30	2603.30	2604.59	112.64	11.66	206.98	146.89
	.309	500.00	.00	.00	2600.00	1559.00	2603.41	2603.38	2604.59	99.78	11.20	215.69	156.07
	-3.093	480.00	.00	.00	2396.50	3660.00	2403.43	.00	2404.65	83.90	12.01	504.02	399.59
	-3.093	480.00	.00	.00	2396.50	3660.00	2403.43	.00	2405.07	101.44	13.20	396.61	363.40
*	3.195	540.00	.00	.00	2403.00	3660.00	2409.79	2409.79	2411.49	88.93	11.90	412.46	388.11
*	3.195	540.00	.00	.00	2403.00	3660.00	2409.78	2409.78	2411.49	89.31	11.92	411.70	387.29
*	.064	340.00	.00	.00	2411.80	3210.00	2417.48	2417.48	2418.40	80.58	10.49	529.30	357.59
*	.064	340.00	.00	.00	2411.80	3210.00	2417.43	2417.43	2418.39	85.55	10.74	516.20	347.05
*	.122	305.00	.00	.00	2417.50	3210.00	2421.16	2421.16	2422.39	226.57	10.07	363.81	213.26
*	.122	305.00	.00	.00	2417.50	3210.00	2421.20	2421.16	2422.39	217.31	9.95	368.77	217.75
	.168	240.00	.00	.00	2420.00	3210.00	2425.11	2424.49	2426.17	118.49	8.61	391.44	294.89
	.168	240.00	.00	.00	2420.00	3210.00	2425.08	2424.49	2426.15	121.02	8.65	388.61	291.80
	.272	550.00	.00	.00	2428.00	3210.00	2431.93	2431.49	2432.48	108.45	6.98	562.52	308.24
	.272	550.00	.00	.00	2428.00	3210.00	2431.94	2431.49	2432.48	107.14	6.96	564.96	310.13
	.366	500.00	.00	.00	2433.00	3210.00	2436.08	2435.33	2436.49	69.52	6.42	656.03	384.98
	.366	500.00	.00	.00	2433.00	3210.00	2436.08	2435.33	2436.49	70.04	6.43	654.50	383.56

SH AI: HARTMAN WASH

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	3.093	3660.00	2403.43	.00	.00	.00	232.19	.00
	3.093	3660.00	2403.43	.00	.00	.00	123.49	.00
*	3.195	3660.00	2409.79	.00	6.36	.00	135.90	540.00
*	3.195	3660.00	2409.78	-.01	6.35	-.01	135.79	540.00
*	3.309	450.00	2416.15	.00	6.36	.00	30.74	600.00
*	3.309	450.00	2416.17	.02	6.38	.02	30.74	600.00
*	3.381	450.00	2421.90	.00	5.75	.00	35.68	380.00
*	3.381	450.00	2421.92	.02	5.75	.02	35.68	380.00
*	3.498	450.00	2437.01	.00	15.11	.00	53.77	620.00
*	3.498	450.00	2437.01	.00	15.09	.00	53.77	620.00
	3.582	450.00	2438.29	.00	1.28	.00	76.03	440.00
	3.582	450.00	2438.29	.00	1.28	.00	76.03	440.00
*	3.661	3660.00	2441.74	.00	3.46	.00	486.22	420.00
*	3.661	3660.00	2441.74	.00	3.46	.00	486.22	420.00
	3.756	3660.00	2445.53	.00	3.79	.00	428.82	500.00
	3.756	3660.00	2445.53	.00	3.79	.00	428.82	500.00
	3.822	3660.00	2447.17	.00	1.65	.00	448.34	350.00
	3.822	3660.00	2447.17	.00	1.65	.00	448.32	350.00
	3.887	3660.00	2448.11	.00	.93	.00	117.35	340.00
	3.887	3660.00	2448.11	.00	.93	.00	117.35	340.00
*	3.911	3660.00	2448.78	.00	.67	.00	69.28	130.00
*	3.911	3660.00	2448.78	.00	.68	.00	69.28	130.00
*	3.918	3641.00	2454.67	.00	5.89	.00	51.96	39.00
*	3.918	3641.00	2454.67	.00	5.89	.00	51.96	39.00
*	3.919	3641.00	2457.90	.00	3.23	.00	43.43	1.00
*	3.919	3641.00	2457.90	.00	3.23	.00	43.43	1.00
*	3.926	3641.00	2458.72	.00	.82	.00	43.43	42.20
*	3.926	3641.00	2458.72	.00	.82	.00	43.43	42.20
*	4.023	3641.00	2462.24	.00	3.52	.00	357.72	510.00
*	4.023	3641.00	2462.34	.10	3.62	.10	162.00	510.00
*	4.110	3641.00	2463.89	.00	1.65	.00	191.58	460.00
	4.110	3641.00	2463.88	-.02	1.53	-.02	162.05	460.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	4.210	3641.00	2468.96	.00	5.06	.00	301.19	530.00
*	4.210	3641.00	2469.06	.10	5.18	.10	197.98	530.00
*	4.301	3641.00	2475.76	.00	6.80	.00	181.77	480.00
*	4.301	3641.00	2475.72	-.04	6.66	-.04	132.58	480.00
*	4.390	3641.00	2480.94	.00	5.18	.00	220.21	470.00
*	4.390	3641.00	2480.96	.02	5.24	.02	160.00	470.00
*	4.487	3641.00	2485.34	.00	4.40	.00	188.78	510.00
*	4.487	3641.00	2485.34	-.01	4.37	-.01	168.34	510.00
	4.585	3641.00	2488.97	.00	3.63	.00	161.85	520.00
	4.585	3641.00	2489.05	.08	3.72	.08	139.22	520.00
*	4.674	3641.00	2495.33	.00	6.36	.00	136.93	470.00
*	4.674	3641.00	2495.33	.00	6.28	.00	136.93	470.00
*	4.771	3641.00	2499.23	.00	3.91	.00	180.78	510.00
*	4.771	3641.00	2499.24	.00	3.91	.00	180.79	510.00
*	4.860	3641.00	2503.35	.00	4.11	.00	267.25	470.00
*	4.860	3641.00	2503.33	-.02	4.09	-.02	253.88	470.00
	4.989	3641.00	2510.72	.00	7.38	.00	163.41	680.00
	4.989	3641.00	2510.71	-.02	7.38	-.02	127.80	680.00
*	5.055	3641.00	2514.45	.00	3.72	.00	283.17	350.00
*	5.055	3641.00	2514.93	.48	4.22	.48	139.96	350.00
*	5.182	3641.00	2521.54	.00	7.09	.00	189.77	670.00
*	5.182	3641.00	2521.56	.02	6.63	.02	189.77	670.00
*	5.244	3641.00	2525.67	.00	4.13	.00	279.04	330.00
*	5.244	3641.00	2525.76	.09	4.20	.09	163.78	330.00
*	5.341	3641.00	2531.44	.00	5.77	.00	354.12	510.00
*	5.341	3641.00	2531.46	.03	5.71	.03	217.31	510.00
	5.426	3641.00	2534.71	.00	3.27	.00	219.96	450.00
	5.426	3641.00	2535.04	.34	3.58	.34	219.96	450.00
*	5.532	3641.00	2544.73	.00	10.03	.00	508.99	560.00
*	5.532	3641.00	2544.73	.00	9.69	.00	508.99	560.00
*	5.538	3641.00	2544.85	.00	.12	.00	471.88	30.50
*	5.538	3641.00	2544.85	.00	.12	.00	471.88	30.50
	5.566	3641.00	2545.53	.00	.68	.00	116.63	150.00
	5.566	3641.00	2545.53	.00	.68	.00	116.63	150.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	5.652	3641.00	2546.30	.00	.77	.00	150.23	450.00
	5.652	3641.00	2546.30	.00	.77	.00	150.23	450.00
*	5.764	3641.00	2550.39	.00	4.09	.00	142.99	595.00
*	5.764	3641.00	2550.39	.01	4.10	.01	142.99	595.00
	5.836	3641.00	2553.43	.00	3.04	.00	243.72	380.00
	5.836	3641.00	2553.42	-.01	3.02	-.01	147.00	380.00
*	5.937	3641.00	2559.02	.00	5.59	.00	147.81	530.00
*	5.937	3641.00	2559.02	.00	5.60	.00	147.81	530.00
	6.029	3641.00	2563.12	.00	4.10	.00	174.97	490.00
	6.029	3641.00	2563.12	.00	4.10	.00	139.50	490.00
*	6.124	3641.00	2569.24	.00	6.12	.00	306.50	500.00
*	6.124	3641.00	2569.68	.44	6.57	.44	160.00	500.00
*	6.213	3641.00	2574.23	.00	4.99	.00	193.70	470.00
	6.213	3641.00	2574.28	.05	4.60	.05	140.00	470.00
	6.317	3641.00	2578.05	.00	3.82	.00	236.55	550.00
	6.317	3641.00	2578.39	.34	4.11	.34	140.00	550.00
	6.419	3641.00	2581.65	.00	3.60	.00	203.44	535.00
	6.419	3641.00	2581.82	.17	3.43	.17	140.30	535.00
	6.508	3641.00	2586.08	.00	4.43	.00	265.32	470.00
	6.508	3641.00	2586.38	.30	4.56	.30	150.00	470.00
	6.568	3395.00	2587.82	.00	1.75	.00	229.36	320.00
*	6.568	3395.00	2588.57	.74	2.19	.74	156.71	320.00
*	6.703	1855.00	2594.22	.00	6.40	.00	187.82	710.00
*	6.703	1855.00	2594.22	.00	5.66	.00	187.82	710.00
*	6.778	1855.00	2599.22	.00	5.00	.00	98.15	400.00
*	6.778	1855.00	2599.23	.01	5.00	.01	98.15	400.00
*	6.890	1855.00	2603.90	.00	4.67	.00	166.12	590.00
	6.890	1855.00	2603.92	.02	4.69	.02	95.79	590.00
*	6.983	1855.00	2607.93	.00	4.04	.00	113.24	490.00
*	6.983	1855.00	2607.76	-.17	3.85	-.17	70.06	490.00
*	7.074	1855.00	2612.94	.00	5.00	.00	132.51	480.00
*	7.074	1855.00	2612.86	-.08	5.09	-.08	83.00	480.00
*	7.157	1855.00	2619.12	.00	6.18	.00	131.14	440.00
*	7.157	1855.00	2619.08	-.04	6.22	-.04	88.27	440.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	7.275	1855.00	2624.22	.00	5.10	.00	236.33	620.00
*	7.275	1855.00	2624.03	-.19	4.95	-.19	86.30	620.00
*	7.375	1855.00	2631.41	.00	7.19	.00	402.46	530.00
*	7.375	1855.00	2631.38	-.04	7.35	-.04	71.00	530.00
*	7.468	1855.00	2633.90	.00	2.48	.00	107.61	490.00
*	7.468	1855.00	2634.77	.87	3.39	.87	107.62	490.00
*	7.559	1855.00	2639.05	.00	5.15	.00	170.46	480.00
*	7.559	1855.00	2639.02	-.03	4.25	-.03	98.77	480.00
*	7.641	1855.00	2642.00	.00	2.95	.00	119.51	435.00
	7.641	1855.00	2642.30	.29	3.27	.29	88.82	435.00
	7.747	1855.00	2647.17	.00	5.17	.00	348.84	560.00
*	7.747	1855.00	2647.30	.13	5.01	.13	100.00	560.00
*	7.834	1855.00	2650.91	.00	3.74	.00	186.76	460.00
*	7.834	1855.00	2651.24	.33	3.94	.33	91.00	460.00
*	7.908	1855.00	2654.60	.00	3.69	.00	291.83	390.00
*	7.908	1855.00	2654.53	-.07	3.29	-.07	288.08	390.00
	8.012	1855.00	2658.54	.00	3.94	.00	247.24	550.00
	8.012	1855.00	2658.57	.03	4.04	.03	247.24	550.00
*	8.124	1855.00	2664.22	.00	5.67	.00	194.86	590.00
*	8.124	1855.00	2664.21	.00	5.65	.00	194.80	590.00
*	8.207	1855.00	2668.48	.00	4.26	.00	204.69	440.00
*	8.207	1855.00	2668.85	.38	4.64	.38	99.99	440.00
*	8.317	1855.00	2673.71	.00	5.23	.00	168.93	580.00
	8.317	1855.00	2673.92	.20	5.06	.20	105.00	580.00
*	8.408	1855.00	2678.85	.00	5.14	.00	191.63	480.00
*	8.408	1855.00	2678.90	.05	4.98	.05	100.84	480.00
*	8.510	1855.00	2684.79	.00	5.94	.00	302.20	540.00
*	8.510	1855.00	2685.17	.38	6.27	.38	99.97	540.00
*	8.603	1855.00	2690.75	.00	5.96	.00	242.71	490.00
*	8.603	1855.00	2691.03	.28	5.86	.28	99.76	490.00
*	8.715	1855.00	2697.98	.00	7.23	.00	156.73	590.00
*	8.715	1855.00	2697.92	-.06	6.89	-.06	93.23	590.00
	8.798	1855.00	2700.84	.00	2.86	.00	215.85	440.00
	8.798	1855.00	2701.22	.38	3.30	.38	100.00	440.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	8.889	1855.00	2705.47	.00	4.63	.00	219.83	480.00
*	8.889	1855.00	2705.90	.43	4.68	.43	99.93	480.00
*	8.984	1855.00	2712.75	.00	7.28	.00	198.54	500.00
*	8.984	1855.00	2712.72	-.03	6.82	-.03	176.91	500.00
	9.043	1855.00	2714.79	.00	2.04	.00	162.67	310.00
	9.043	1855.00	2714.82	.03	2.10	.03	127.88	310.00
*	9.142	1855.00	2722.07	.00	7.28	.00	76.02	525.00
*	9.142	1855.00	2722.07	.00	7.25	.00	76.00	525.00
*	9.246	1855.00	2727.40	.00	5.33	.00	143.44	550.00
*	9.246	1855.00	2727.32	-.08	5.25	-.08	97.50	550.00
*	9.313	1855.00	2732.66	.00	5.25	.00	177.47	350.00
*	9.313	1855.00	2733.01	.36	5.70	.36	100.43	350.00
*	9.430	1855.00	2738.23	.00	5.57	.00	102.83	620.00
	9.430	1855.00	2738.29	.06	5.28	.06	102.83	620.00
*	9.513	1855.00	2744.70	.00	6.47	.00	128.44	440.00
*	9.513	1855.00	2744.95	.26	6.66	.26	100.44	440.00
*	9.598	1855.00	2750.29	.00	5.59	.00	106.71	450.00
	9.598	1855.00	2750.27	-.02	5.31	-.02	106.34	450.00
*	9.695	1855.00	2758.08	.00	7.79	.00	131.89	510.00
*	9.695	1855.00	2758.04	-.04	7.78	-.04	100.27	510.00
	-6.568	1855.00	2587.82	.00	-170.25	.00	229.44	320.00
	-6.568	1855.00	2588.57	.74	-169.47	.74	156.71	320.00
*	.129	1559.00	2594.01	.00	6.18	.00	240.55	680.00
*	.129	1559.00	2594.01	.00	5.44	.00	240.55	680.00
	.162	1559.00	2595.24	.00	1.23	.00	169.98	175.00
*	.162	1559.00	2595.28	.05	1.27	.05	87.00	175.00
*	.214	1559.00	2598.05	.00	2.82	.00	155.35	275.00
	.214	1559.00	2598.31	.25	3.02	.25	86.00	275.00
*	.309	1559.00	2603.30	.00	5.25	.00	85.39	500.00
	.309	1559.00	2603.41	.11	5.10	.11	85.40	500.00
	-3.093	3660.00	2403.43	.00	-199.87	.00	232.19	480.00
	-3.093	3660.00	2403.43	.00	-199.98	.00	123.49	480.00
*	3.195	3660.00	2409.79	.00	6.36	.00	135.90	540.00
*	3.195	3660.00	2409.78	-.01	6.35	-.01	135.79	540.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	.064	3210.00	2417.48	.00	7.69	.00	245.53	340.00
*	.064	3210.00	2417.43	-.05	7.65	-.05	244.25	340.00
*	.122	3210.00	2421.16	.00	3.68	.00	152.75	305.00
*	.122	3210.00	2421.20	.03	3.77	.03	152.75	305.00
	.168	3210.00	2425.11	.00	3.95	.00	113.67	240.00
	.168	3210.00	2425.08	-.04	3.88	-.04	113.41	240.00
	.272	3210.00	2431.93	.00	6.82	.00	284.91	550.00
	.272	3210.00	2431.94	.01	6.87	.01	285.37	550.00
	.366	3210.00	2436.08	.00	4.15	.00	271.60	500.00
	.366	3210.00	2436.08	.00	4.14	.00	271.54	500.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
CAUTION SECNO=     3.195  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.195  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.195  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.195  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.309  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.309  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.381  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.381  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.381  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.381  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     3.498  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.498  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.498  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.498  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.661  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.661  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.911  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.911  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.911  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.911  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     3.918  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.918  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.918  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.918  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     3.919  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.919  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.919  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.919  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     3.926  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.926  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.926  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.926  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     4.023  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     4.023  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     4.110  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     4.110  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     4.110  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     4.110  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     4.210  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     4.210  PROFILE=  2  MINIMUM SPECIFIC ENERGY
```

```
CAUTION SECNO=      4.301  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.301  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      4.301  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.301  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      4.390  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.390  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      4.390  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.390  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      4.487  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.487  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      4.487  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.487  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      4.674  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.674  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      4.674  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.674  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      4.771  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.771  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      4.771  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.771  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      4.860  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.860  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      4.860  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.860  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      4.989  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.989  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      4.989  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      4.989  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      5.055  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      5.055  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      5.055  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      5.055  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      5.182  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      5.182  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      5.182  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      5.182  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      5.244  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      5.244  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      5.244  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      5.244  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      5.341  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      5.341  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      5.341  PROFILE=  2  CRITICAL DEPTH ASSUMED
```

```
UTION SECNO=      5.341  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    5.532  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    5.532  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    5.532  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    5.532  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    5.538  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    5.538  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    5.538  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    5.538  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    5.764  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    5.764  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    5.764  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    5.764  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    5.937  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    5.937  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    5.937  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    5.937  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    6.124  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.124  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    6.124  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.124  PROFILE=  2  MINIMUM SPECIFIC ENERGY

TION SECNO=       6.213  PROFILE=  1  CRITICAL DEPTH ASSUMED
AUTION SECNO=     6.213  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    6.419  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.419  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    6.568  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    6.703  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.703  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    6.703  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.703  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    6.778  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.778  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    6.778  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.778  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    6.890  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.890  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    6.983  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.983  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    6.983  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    6.983  PROFILE=  2  MINIMUM SPECIFIC ENERGY

TION SECNO=       7.074  PROFILE=  1  CRITICAL DEPTH ASSUMED
```

```
ITION SECNO=     7.074  PROFILE=  1  MINIMUM SPECIFIC ENERGY
UTION SECNO=     7.074  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.074  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   7.157  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.157  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   7.157  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.157  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   7.275  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.275  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   7.275  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.275  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   7.375  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.375  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   7.375  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.375  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   7.468  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.468  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=   7.468  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=   7.559  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.559  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   7.559  PROFILE=  2  CRITICAL DEPTH ASSUMED
AUTION SECNO=    7.559  PROFILE=  2  MINIMUM SPECIFIC ENERGY

AUTION SECNO=    7.641  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.641  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   7.747  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.747  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   7.834  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.834  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=   7.834  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=   7.908  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.908  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   7.908  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   7.908  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   8.012  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   8.012  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   8.012  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   8.012  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   8.124  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   8.124  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   8.124  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   8.124  PROFILE=  2  MINIMUM SPECIFIC ENERGY

TION SECNO=      8.207  PROFILE=  1  CRITICAL DEPTH ASSUMED
```

```
CAUTION SECNO=     8.207  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     8.207  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.207  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     8.317  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.317  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     8.408  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.408  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     8.408  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.408  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     8.510  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.510  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     8.510  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.510  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     8.603  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.603  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     8.603  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.603  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     8.715  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.715  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     8.715  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.715  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     8.889  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.889  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     8.889  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.889  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     8.984  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.984  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     8.984  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     8.984  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     9.142  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     9.142  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     9.142  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     9.142  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     9.246  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     9.246  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     9.246  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     9.246  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     9.313  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     9.313  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     9.313  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     9.313  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     9.430  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     9.430  PROFILE=  1  MINIMUM SPECIFIC ENERGY
```

```
 TION SECNO=      9.513  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    9.513  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    9.513  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    9.513  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    9.598  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    9.598  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    9.598  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    9.598  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    9.695  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    9.695  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    9.695  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    9.695  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     .129  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     .129  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     .129  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     .129  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     .162  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     .162  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     .214  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     .214  PROFILE=  1  MINIMUM SPECIFIC ENERGY

 TION SECNO=       .309  PROFILE=  1  CRITICAL DEPTH ASSUMED
UTION SECNO=       .309  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    3.195  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    3.195  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    3.195  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    3.195  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     .064  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     .064  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     .064  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     .064  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     .122  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     .122  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     .122  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

FLOODWAY DATA, WASH AI: HARTMAN WASH
PROFILE NO. 2

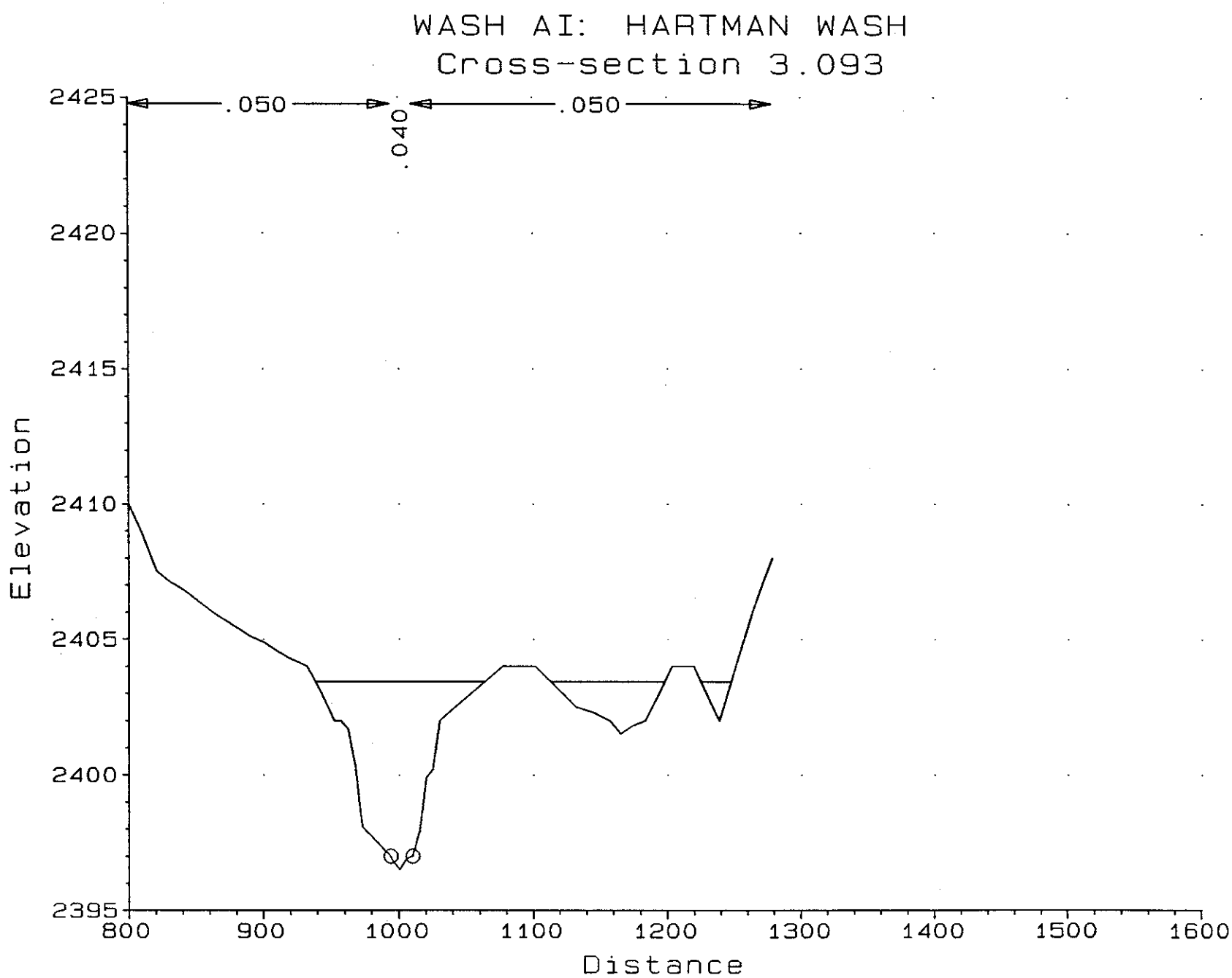
STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
3.093	123.	397.	9.2	2403.4	2403.4	.0
3.195	136.	412.	8.9	2409.8	2409.8	.0
3.309	31.	75.	6.0	2416.1	2416.1	.0
3.381	36.	64.	7.1	2421.9	2421.9	.0
3.498	54.	131.	3.4	2437.0	2437.0	.0
3.582	76.	138.	3.3	2438.3	2438.3	.0
3.661	497.	760.	4.8	2441.7	2441.7	.0
3.756	429.	810.	4.5	2445.5	2445.5	.0
3.822	448.	1031.	3.6	2447.2	2447.2	.0
3.887	117.	512.	7.2	2448.1	2448.1	.0
3.911	69.	318.	11.5	2448.8	2448.8	.0
3.918	52.	291.	12.5	2454.7	2454.7	.0
3.919	44.	260.	14.0	2457.9	2457.9	.0
3.926	44.	261.	13.9	2458.7	2458.7	.0
4.023	162.	1211.	3.0	2462.3	2462.2	.1
4.110	162.	501.	7.3	2463.9	2463.9	.0
4.210	198.	506.	7.2	2469.1	2469.0	.1
4.301	133.	440.	8.3	2475.8	2475.8	.0
4.390	160.	487.	7.5	2480.9	2480.9	.0
4.487	168.	502.	7.3	2485.3	2485.3	.0
4.585	139.	512.	7.1	2489.1	2489.0	.1
4.674	137.	461.	7.9	2495.3	2495.3	.0
4.771	181.	512.	7.1	2499.2	2499.2	.0
4.860	254.	564.	6.5	2503.3	2503.3	.0
4.989	128.	430.	8.5	2510.7	2510.7	.0
5.055	140.	491.	7.4	2514.9	2514.4	.5
5.182	190.	505.	7.2	2521.5	2521.5	.0
5.244	164.	468.	7.8	2525.8	2525.7	.1
5.341	217.	538.	6.8	2531.4	2531.4	.0
5.426	220.	610.	6.0	2535.0	2534.7	.3
5.532	509.	896.	4.1	2544.7	2544.7	.0
5.538	472.	858.	4.2	2544.8	2544.8	.0
5.566	117.	677.	5.4	2545.5	2545.5	.0
5.652	150.	763.	4.8	2546.3	2546.3	.0
5.764	143.	460.	7.9	2550.4	2550.4	.0
5.836	147.	571.	6.4	2553.4	2553.4	.0
5.937	148.	448.	8.1	2559.0	2559.0	.0
6.029	139.	458.	7.9	2563.1	2563.1	.0
6.124	160.	458.	7.9	2569.6	2569.2	.4
6.213	140.	468.	7.8	2574.3	2574.2	.1
6.317	140.	561.	6.5	2578.4	2578.1	.3
6.419	140.	464.	7.8	2581.8	2581.6	.2

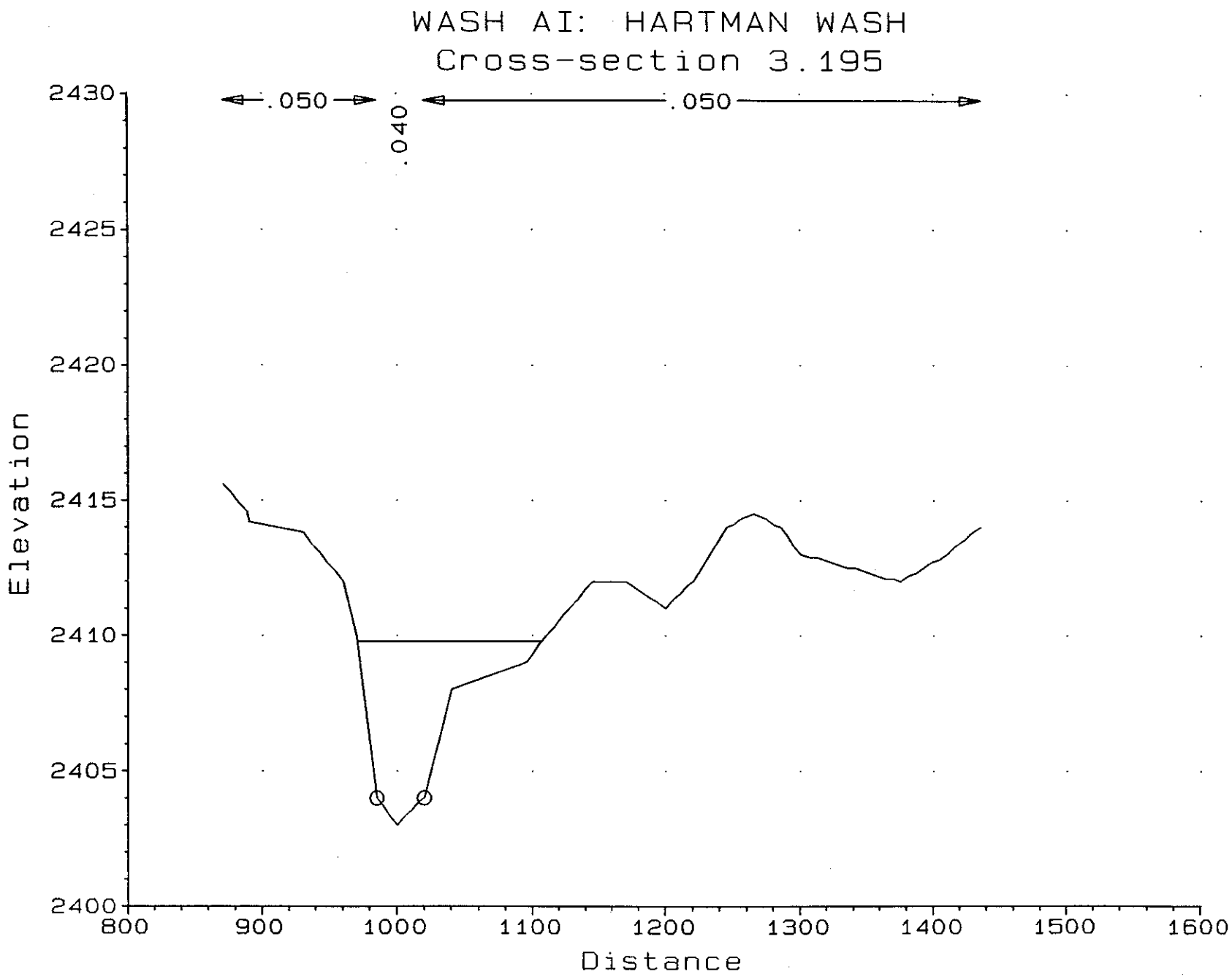
FLOODWAY DATA, WASH AI: HARTMAN WASH
PROFILE NO. 2

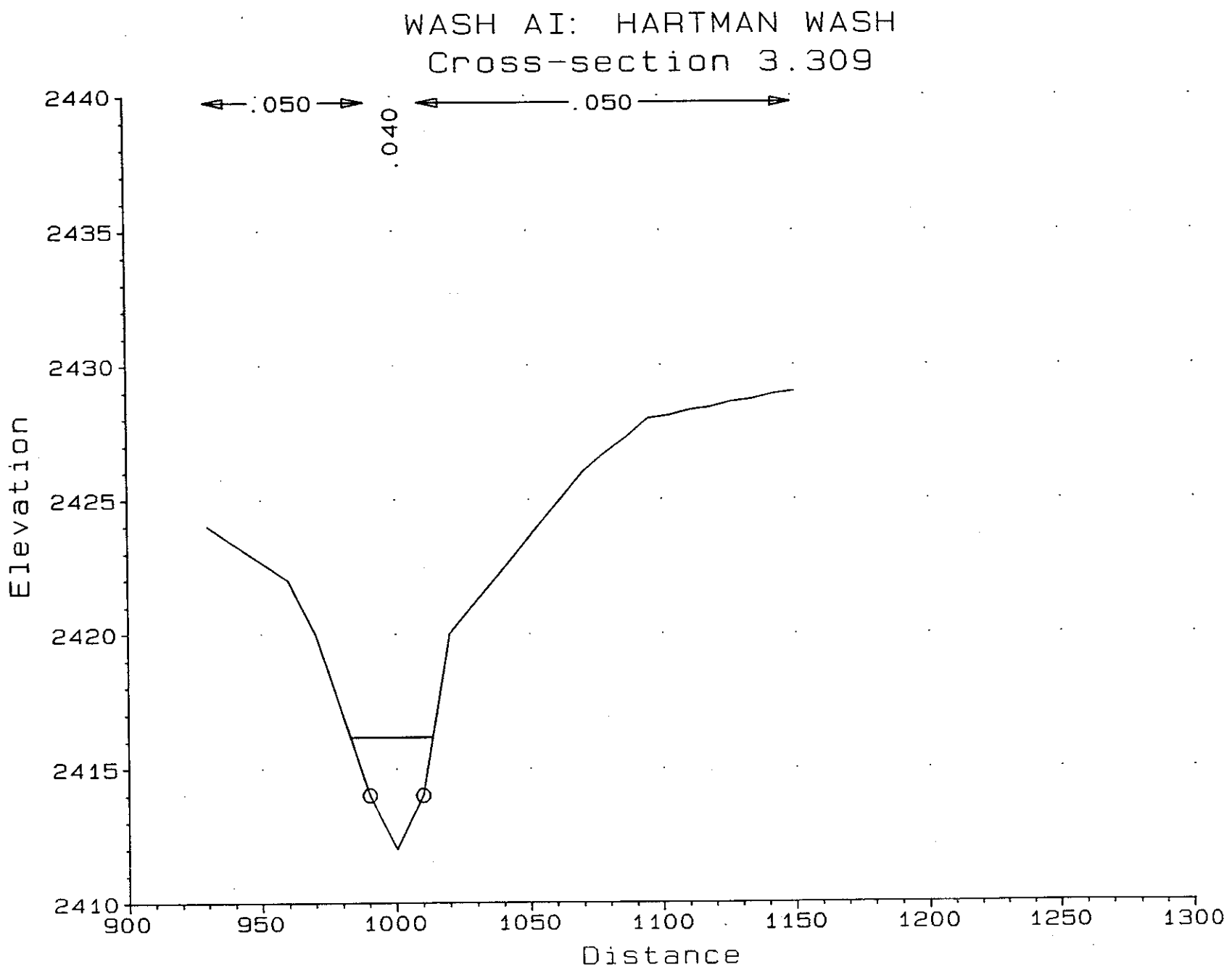
STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
6.508	150.	487.	7.5	2586.4	2586.1	.3
6.568	157.	587.	5.8	2588.5	2587.8	.7
6.703	188.	327.	5.7	2594.2	2594.2	.0
6.778	98.	253.	7.3	2599.2	2599.2	.0
6.890	96.	268.	6.9	2603.9	2603.9	.0
6.983	70.	219.	8.5	2607.7	2607.9	-.2
7.074	83.	244.	7.6	2612.8	2612.9	-.1
7.157	88.	237.	7.8	2619.1	2619.1	.0
7.275	86.	246.	7.5	2624.0	2624.2	-.2
7.375	71.	221.	8.4	2631.4	2631.4	.0
7.468	108.	356.	5.2	2634.8	2633.9	.9
7.559	99.	250.	7.4	2639.1	2639.1	.0
7.641	89.	269.	6.9	2642.3	2642.0	.3
7.747	100.	244.	7.6	2647.3	2647.2	.1
7.834	91.	289.	6.4	2651.2	2650.9	.3
7.908	288.	423.	4.4	2654.5	2654.6	-.1
8.012	247.	386.	4.8	2658.5	2658.5	.0
8.124	195.	342.	5.4	2664.2	2664.2	.0
8.207	100.	251.	7.4	2668.9	2668.5	.4
8.317	105.	279.	6.6	2673.9	2673.7	.2
8.408	101.	255.	7.3	2678.9	2678.9	.0
8.510	100.	264.	7.0	2685.2	2684.8	.4
8.603	100.	264.	7.0	2691.1	2690.8	.3
8.715	93.	246.	7.5	2697.9	2698.0	-.1
8.798	100.	334.	5.5	2701.2	2700.8	.4
8.889	100.	250.	7.4	2705.9	2705.5	.4
8.984	177.	331.	5.6	2712.8	2712.8	.0
9.043	128.	323.	5.7	2714.8	2714.8	.0
9.142	76.	224.	8.3	2722.1	2722.1	.0
9.246	97.	254.	7.3	2727.3	2727.4	-.1
9.313	100.	259.	7.2	2733.1	2732.7	.4
9.430	103.	262.	7.1	2738.3	2738.2	.1
9.513	100.	257.	7.2	2745.0	2744.7	.3
9.598	106.	259.	7.2	2750.3	2750.3	.0
9.695	100.	256.	7.2	2758.1	2758.1	.0
-6.568	157.	588.	3.2	2588.5	2587.8	.7
.129	241.	297.	5.2	2594.0	2594.0	.0
.162	87.	214.	7.3	2595.2	2595.2	.0
.214	86.	217.	7.2	2598.4	2598.1	.3
.309	85.	216.	7.2	2603.4	2603.3	.1
-3.093	123.	397.	9.2	2403.4	2403.4	.0
3.195	136.	412.	8.9	2409.8	2409.8	.0

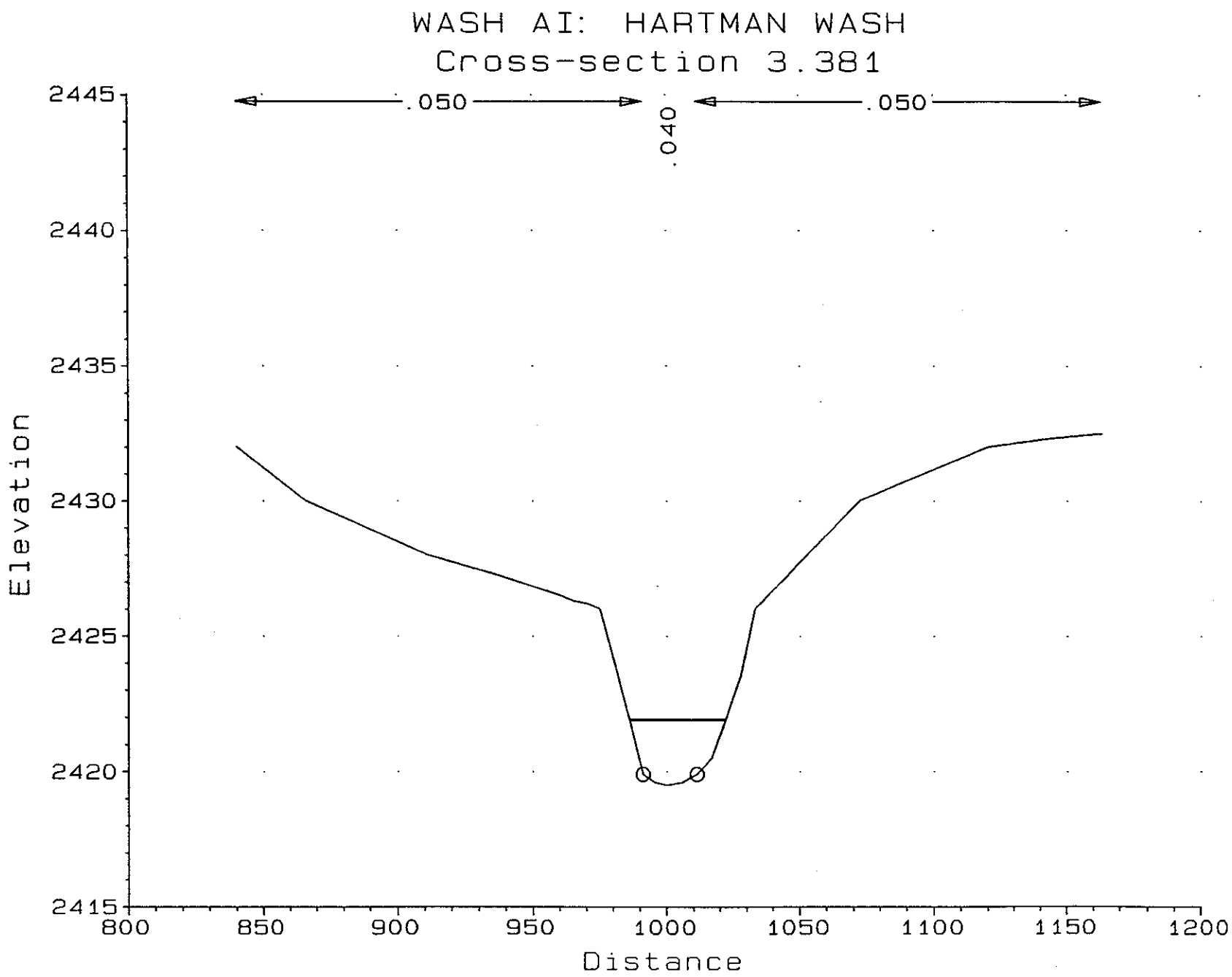
FLOODWAY DATA, WASH AI: HARTMAN WASH
PROFILE NO. 2

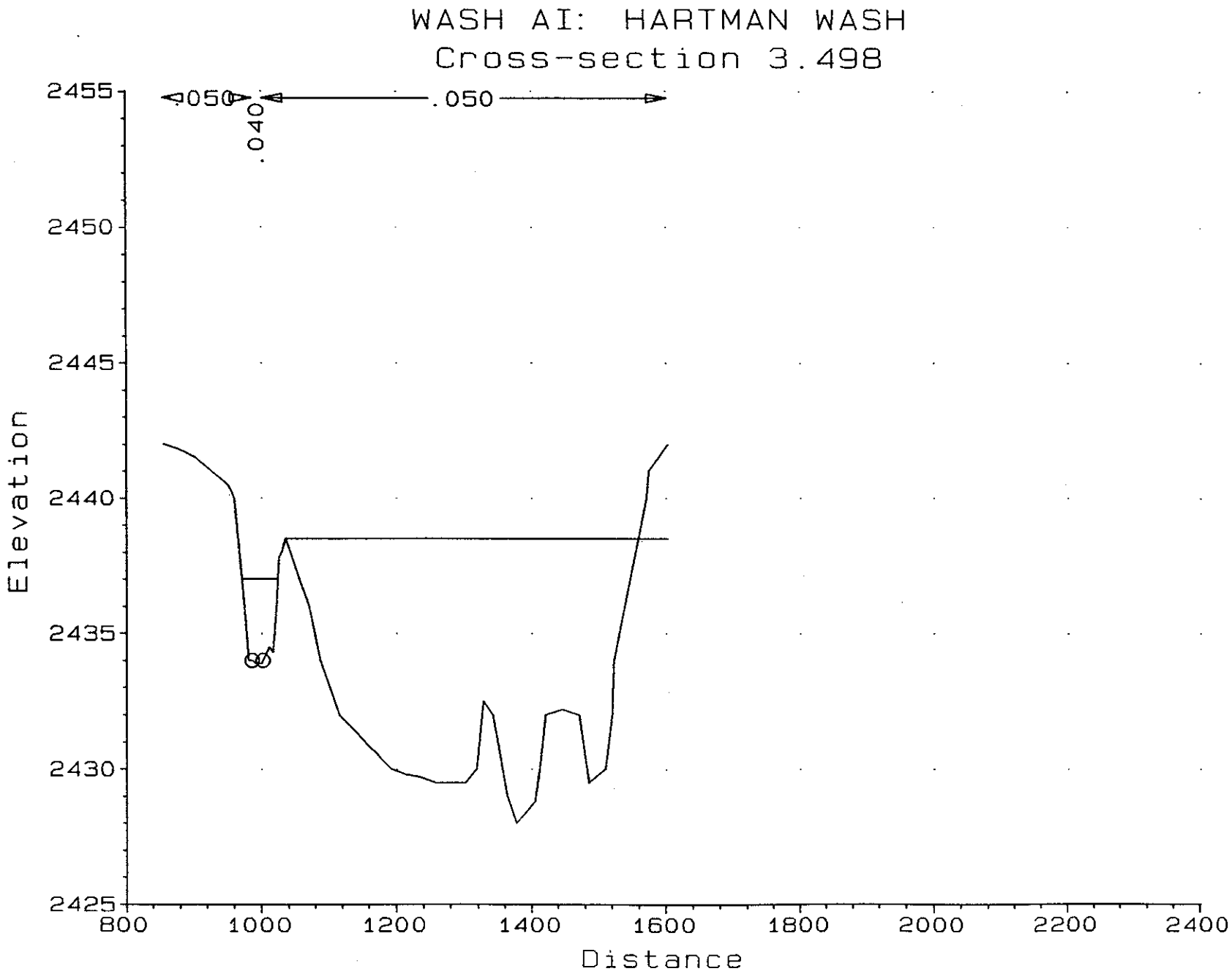
STATION	------- FLOODWAY ------- WIDTH	SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
.064	244.	516.	6.2	2417.4	2417.5	-.1
.122	153.	369.	8.7	2421.2	2421.2	.0
.168	145.	389.	8.3	2425.1	2425.1	.0
.272	302.	565.	5.7	2431.9	2431.9	.0
.366	272.	654.	4.9	2436.1	2436.1	.0

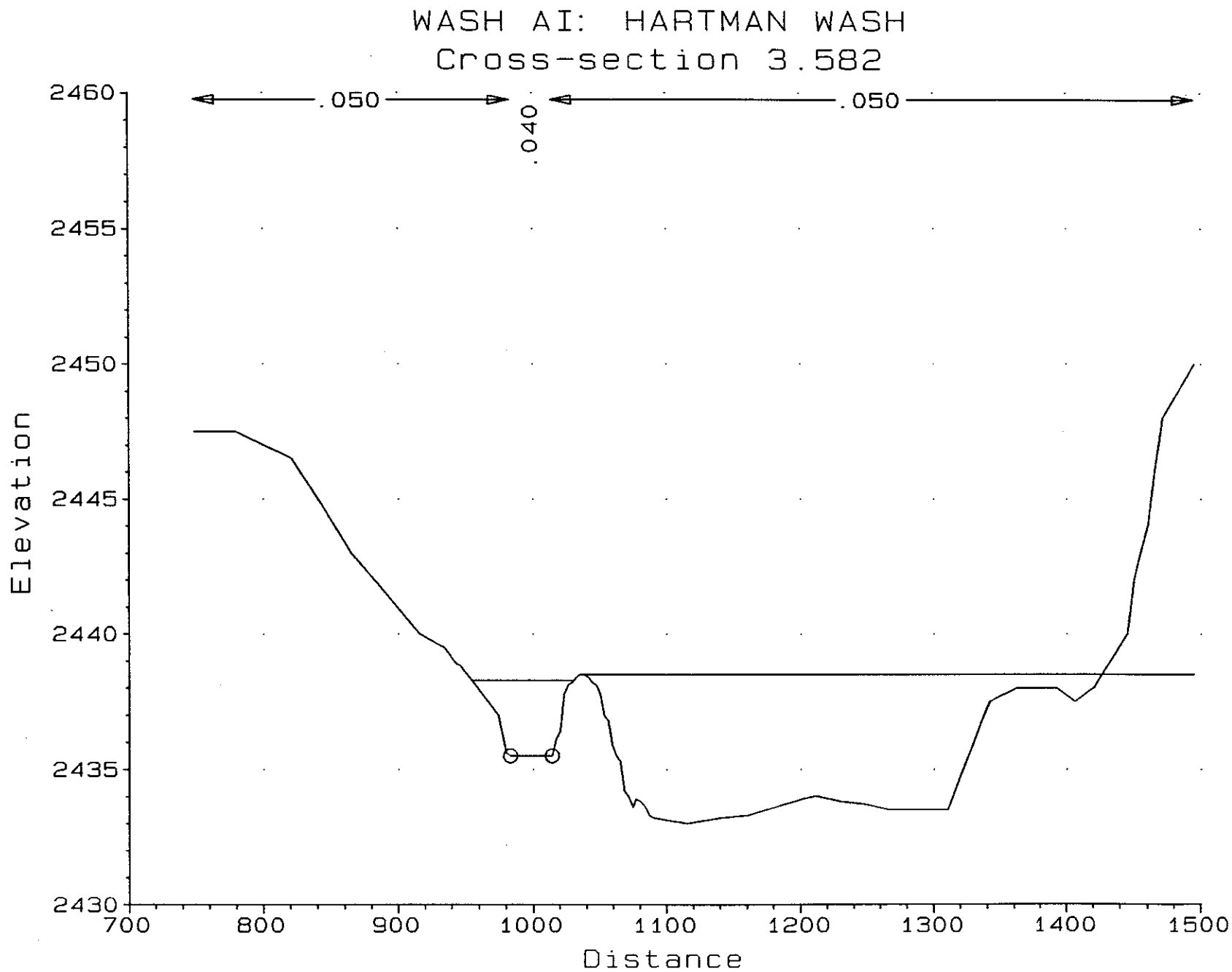

WASH AI: HARTMAN WASH
Cross-section 3.093
.050
.040
.050
2425
2420
2415
2410
2405
2400
2395
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

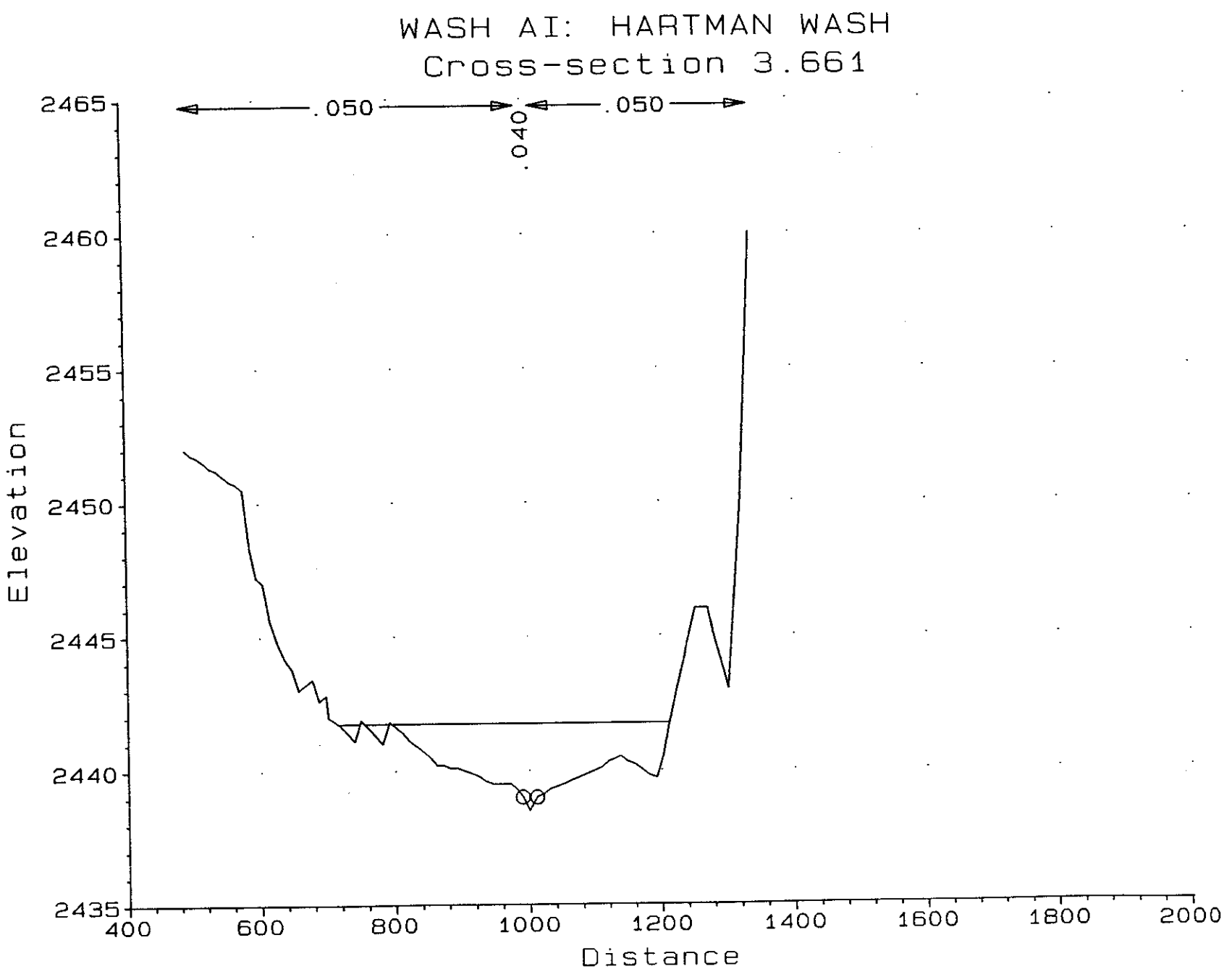

WASH AI: HARTMAN WASH
Cross-section 3.195
.050
.040
.050
2430
2425
2420
2415
2410
2405
2400
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

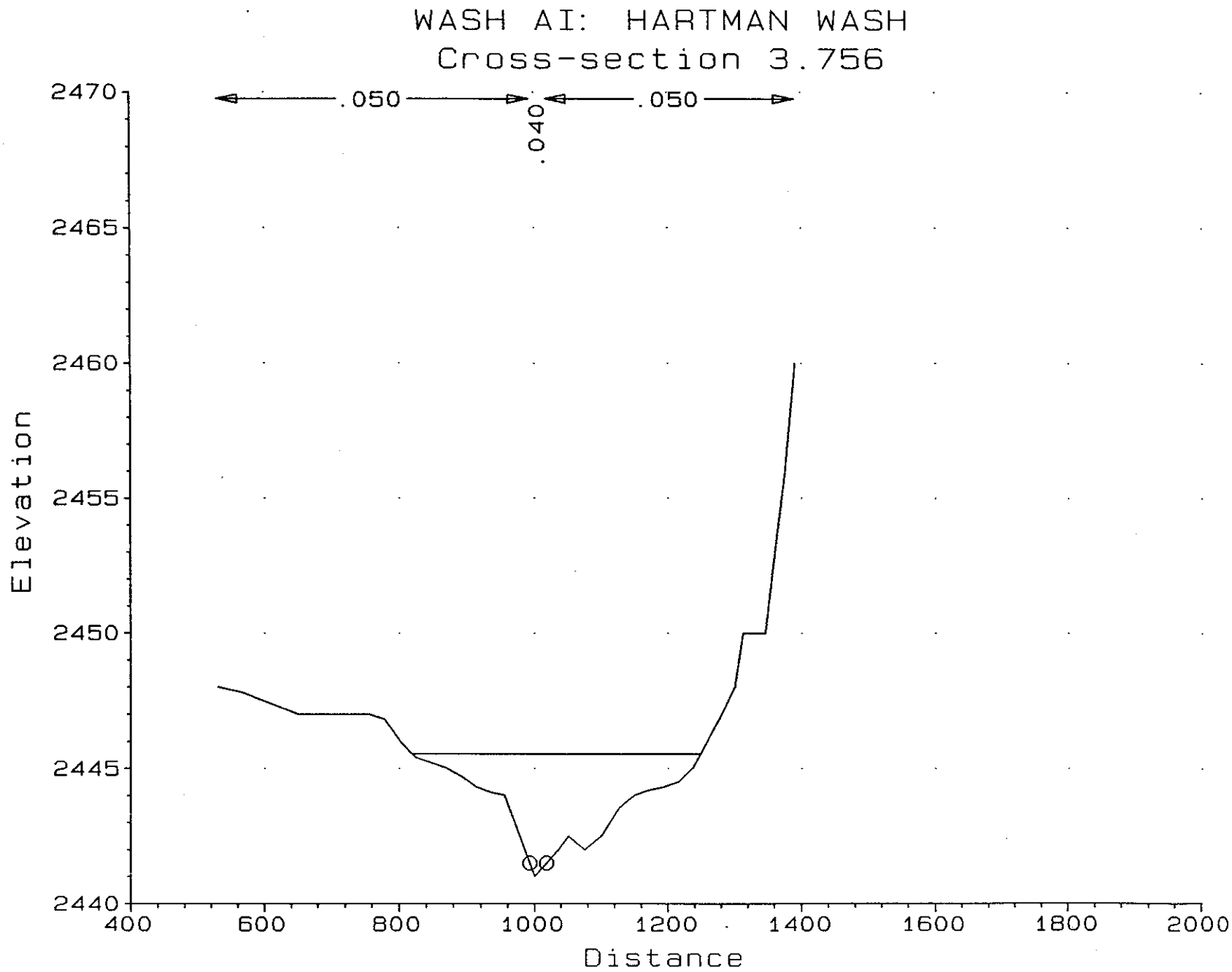

WASH AI: HARTMAN WASH
Cross-section 3.309
.050
.040
.050
Elevation
2440
2435
2430
2425
2420
2415
2410
900
950
1000
1050
1100
1150
1200
1250
1300
Distance

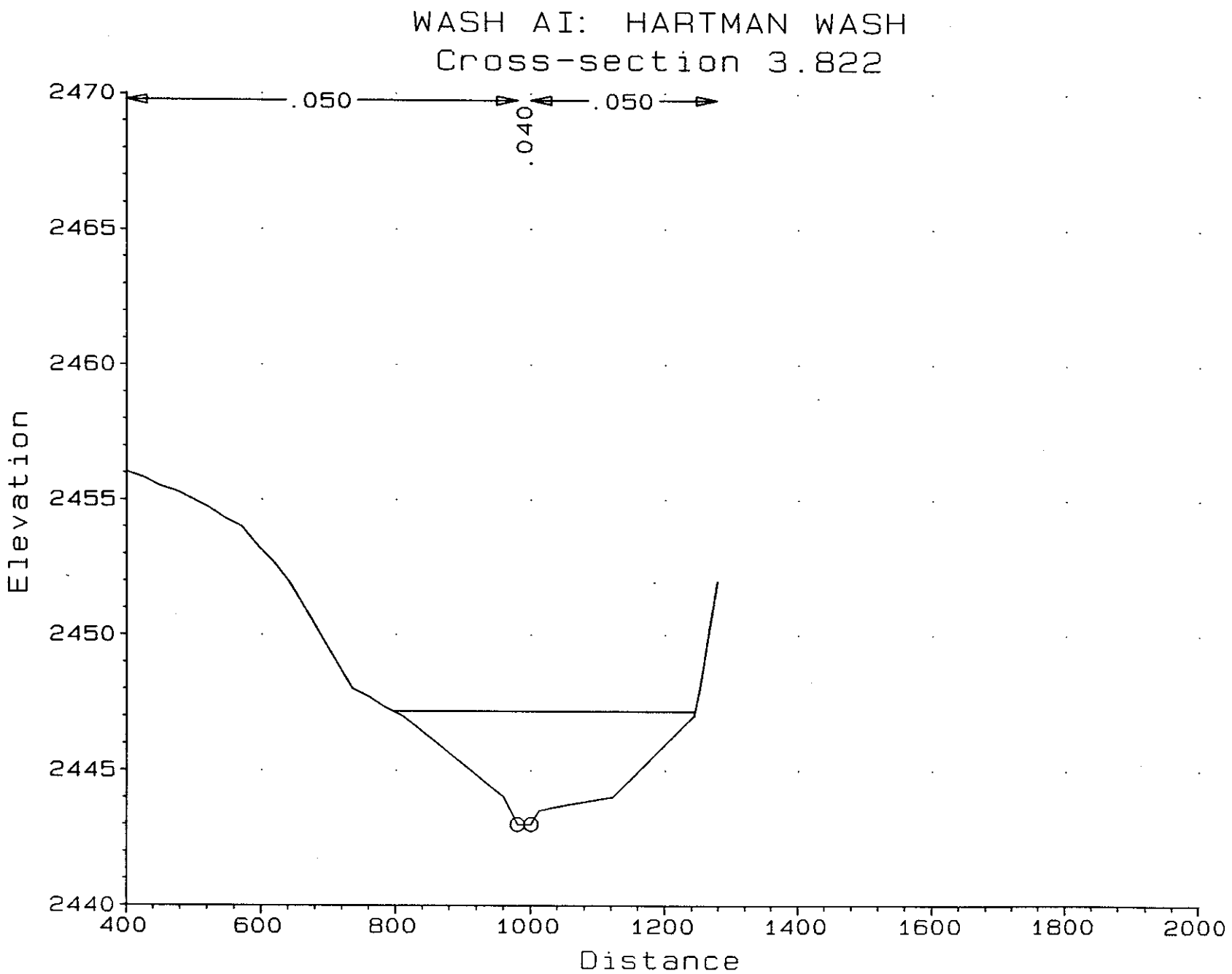

WASH AI: HARTMAN WASH
Cross-section 3.381
.050
.040
.050
Elevation
2445
2440
2435
2430
2425
2420
2415
800
850
900
950
1000
1050
1100
1150
1200
Distance

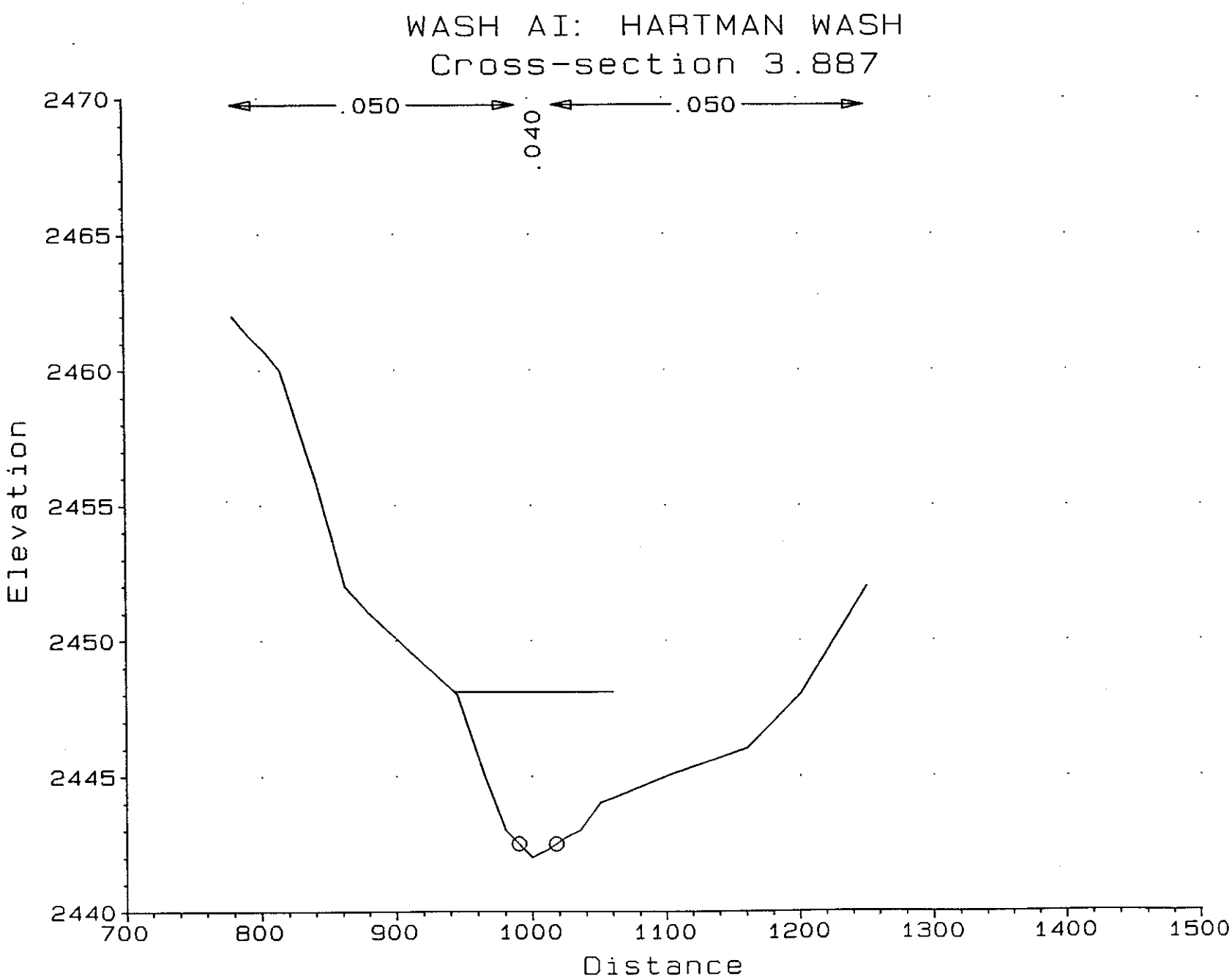

WASH AI: HARTMAN WASH
Cross-section 3.498
.050
.050
.040
2455
2450
2445
2440
2435
2430
2425
Elevation
800
1000
1200
1400
1600
1800
2000
2200
2400
Distance

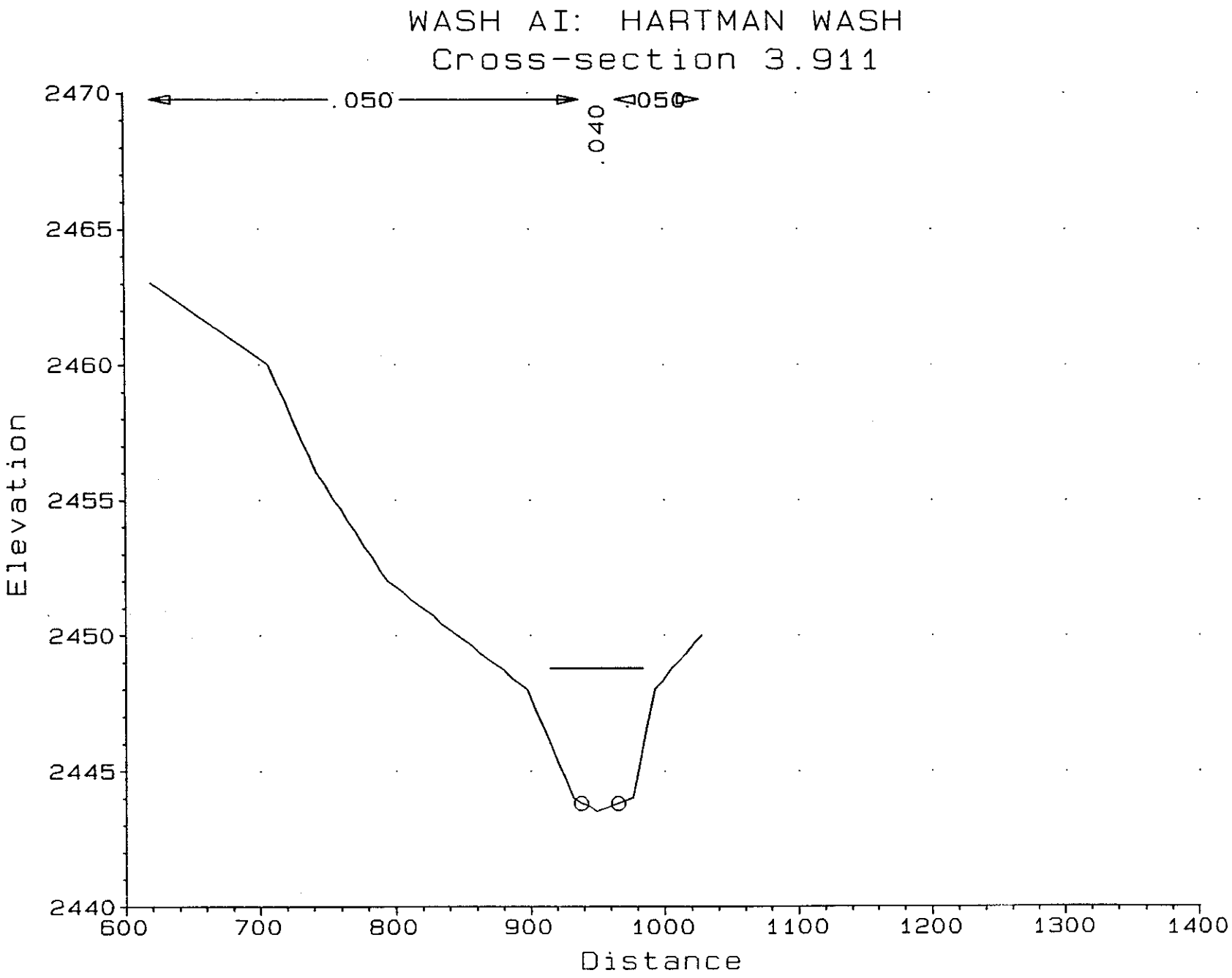

WASH AI: HARTMAN WASH
Cross-section 3.582
.050
.040
.050
2460
2455
2450
2445
2440
2435
2430
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

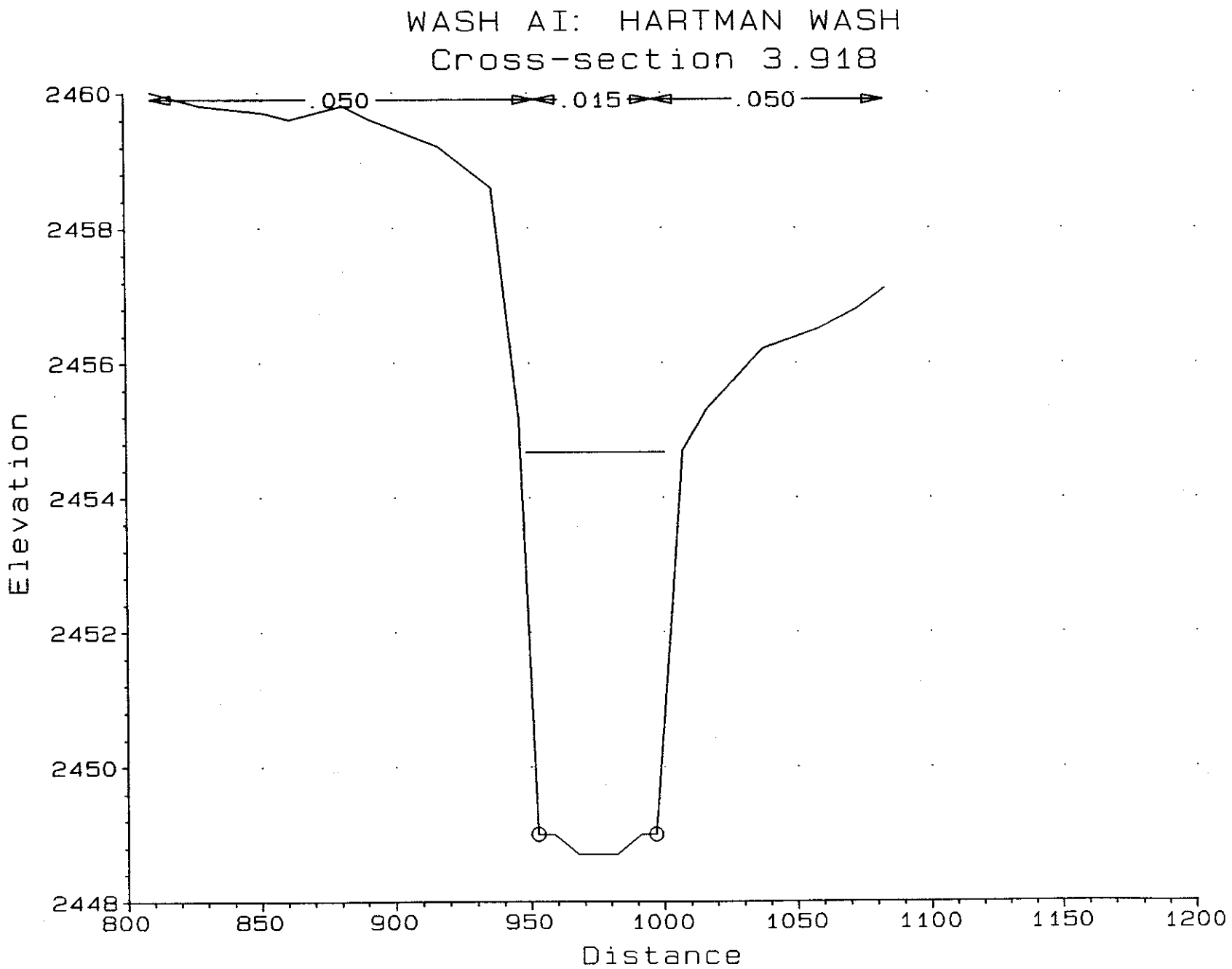

WASH AI: HARTMAN WASH
Cross-section 3.661
.050
.040
.050
2465
2460
2455
2450
2445
2440
2435
Elevation
400
600
800
1000
1200
1400
1600
1800
2000
Distance

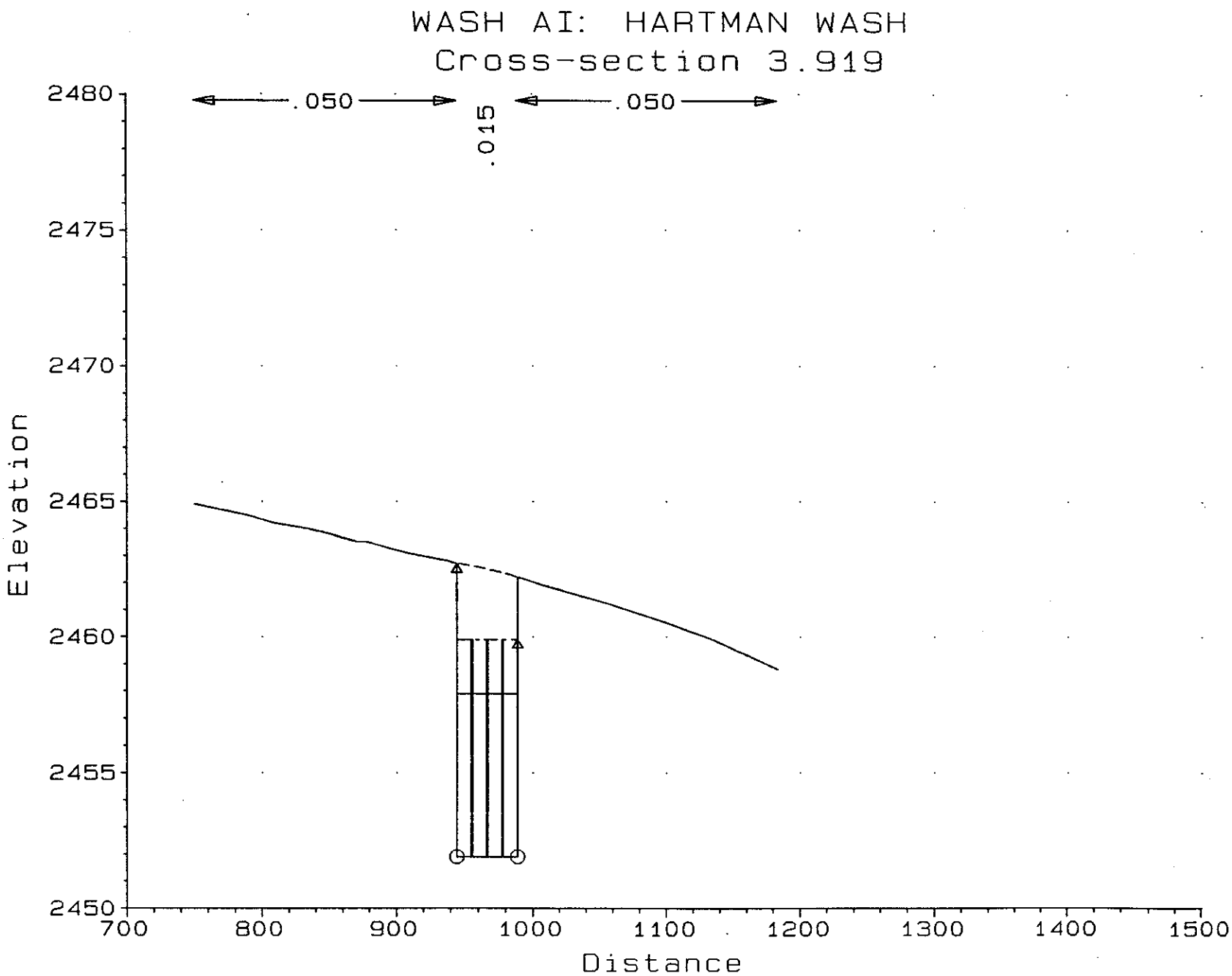

WASH AI: HARTMAN WASH
Cross-section 3.756
.050
.040
.050
2470
2465
2460
2455
2450
2445
2440
Elevation
400
600
800
1000
1200
1400
1600
1800
2000
Distance

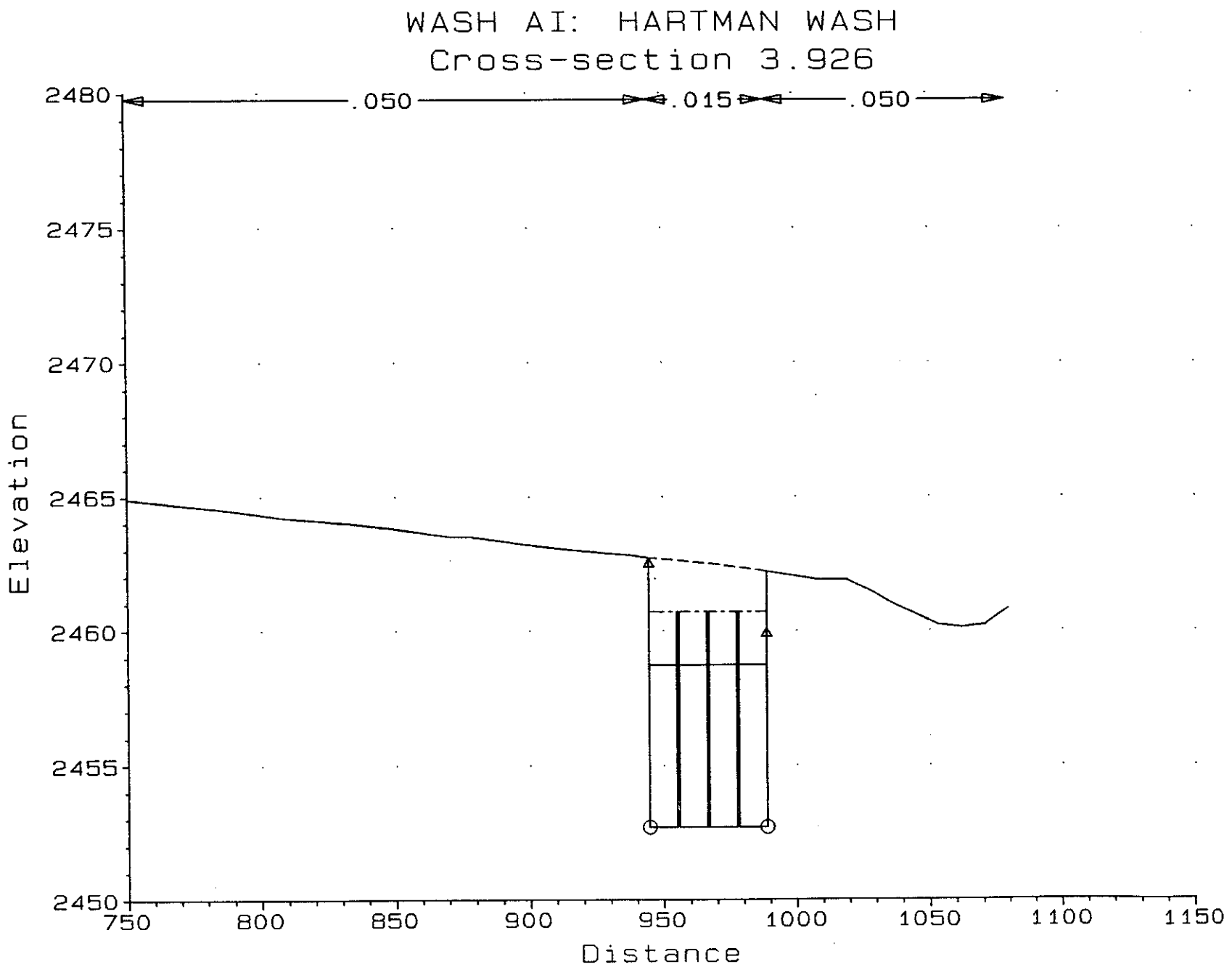

WASH AI: HARTMAN WASH
Cross-section 3.822
.050
.040
.050
2470
2465
2460
2455
2450
2445
2440
Elevation
400
600
800
1000
1200
1400
1600
1800
2000
Distance

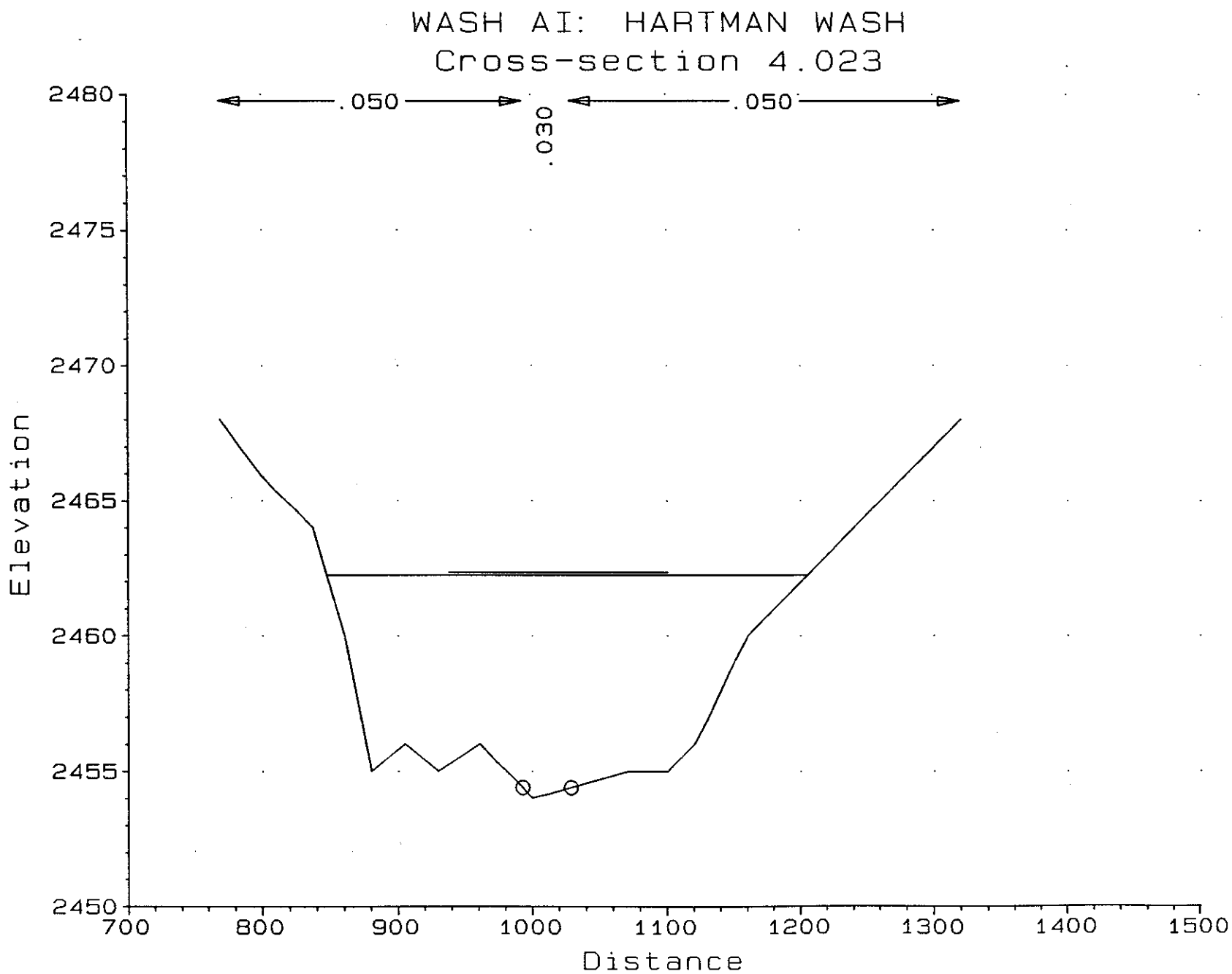

WASH AI: HARTMAN WASH
Cross-section 3.887
.050
.040
.050
2470
2465
2460
2455
2450
2445
2440
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

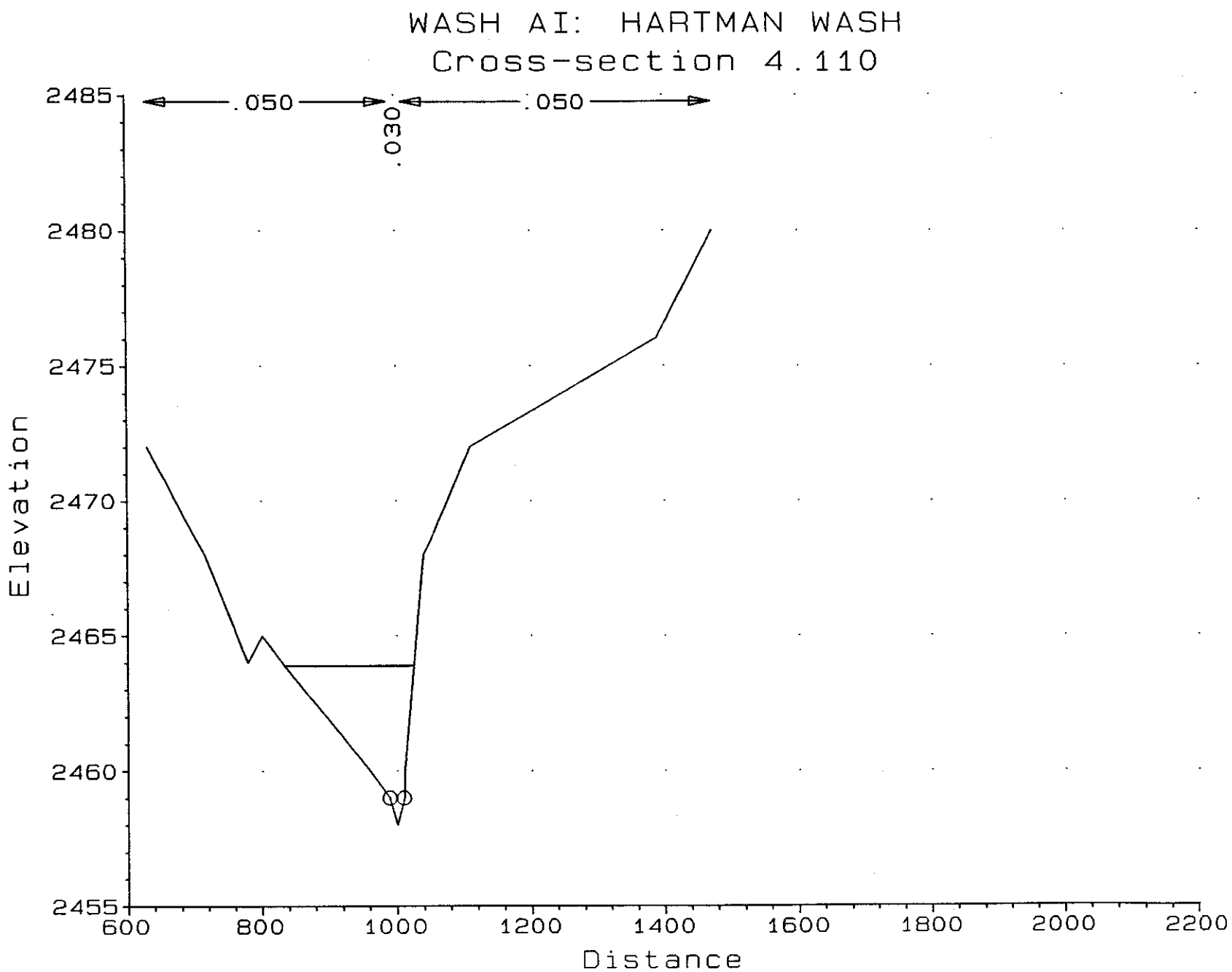

WASH AI: HARTMAN WASH
Cross-section 3.911
.050
.050
.040
2470
2465
2460
2455
2450
2445
2440
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance

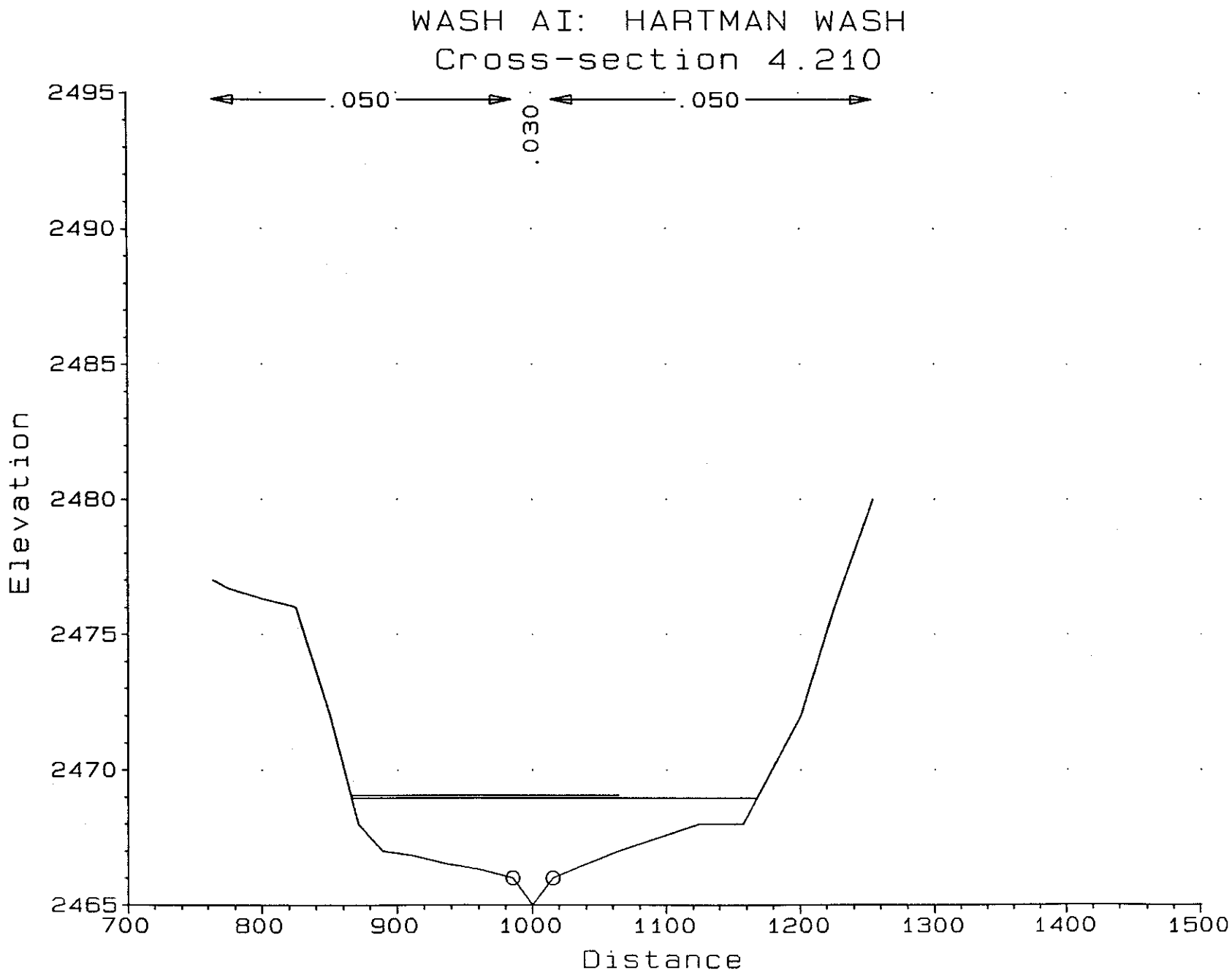

WASH AI: HARTMAN WASH
Cross-section 3.918
.050
.015
.050
Elevation
2460
2458
2456
2454
2452
2450
2448
800
850
900
950
1000
1050
1100
1150
1200
Distance

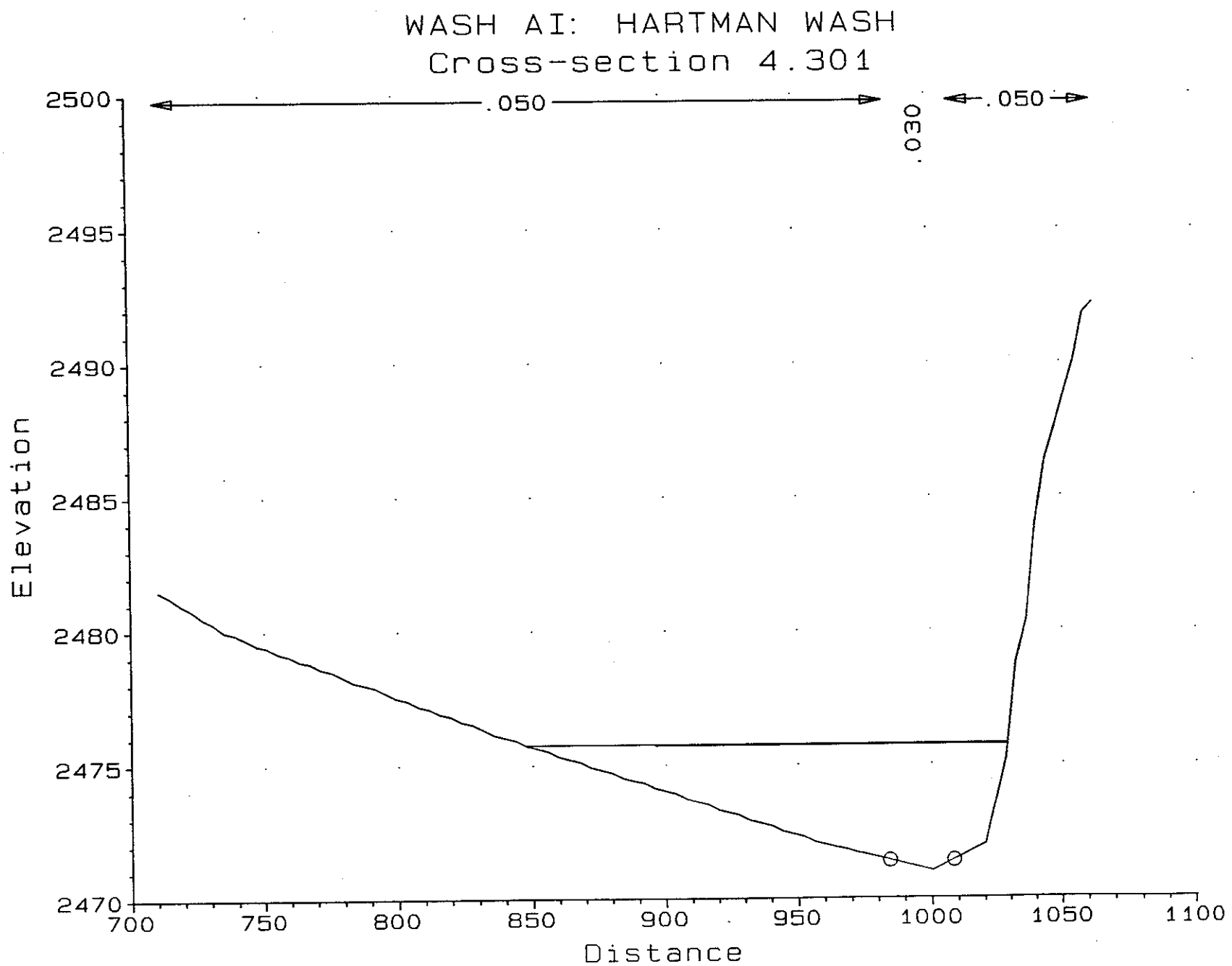

WASH AI: HARTMAN WASH
Cross-section 3.919
.050
.015
.050
2480
2475
2470
2465
2460
2455
2450
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

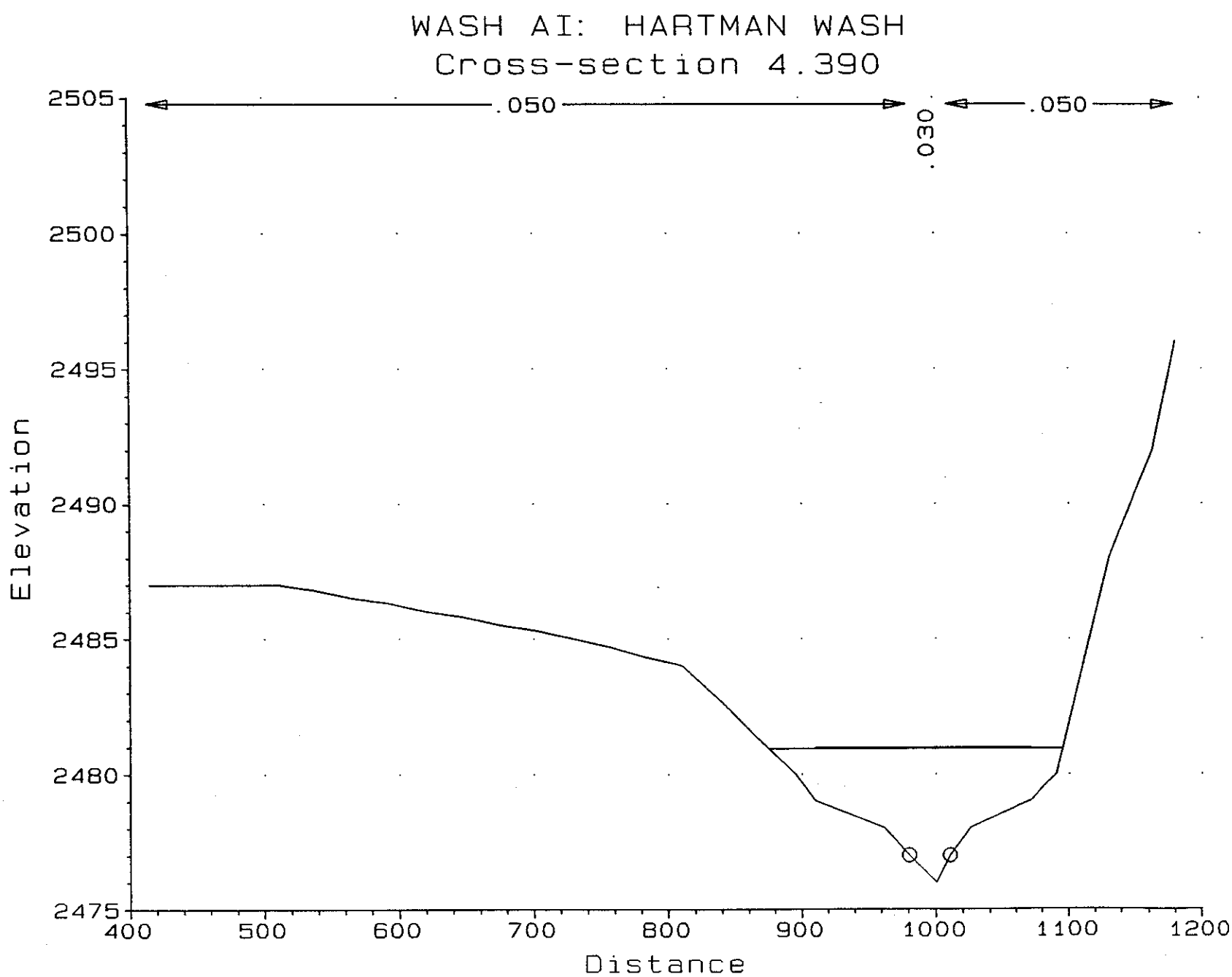

WASH AI: HARTMAN WASH
Cross-section 3.926
.050
.015
.050
2480
2475
2470
2465
2460
2455
2450
Elevation
750
800
850
900
950
1000
1050
1100
1150
Distance

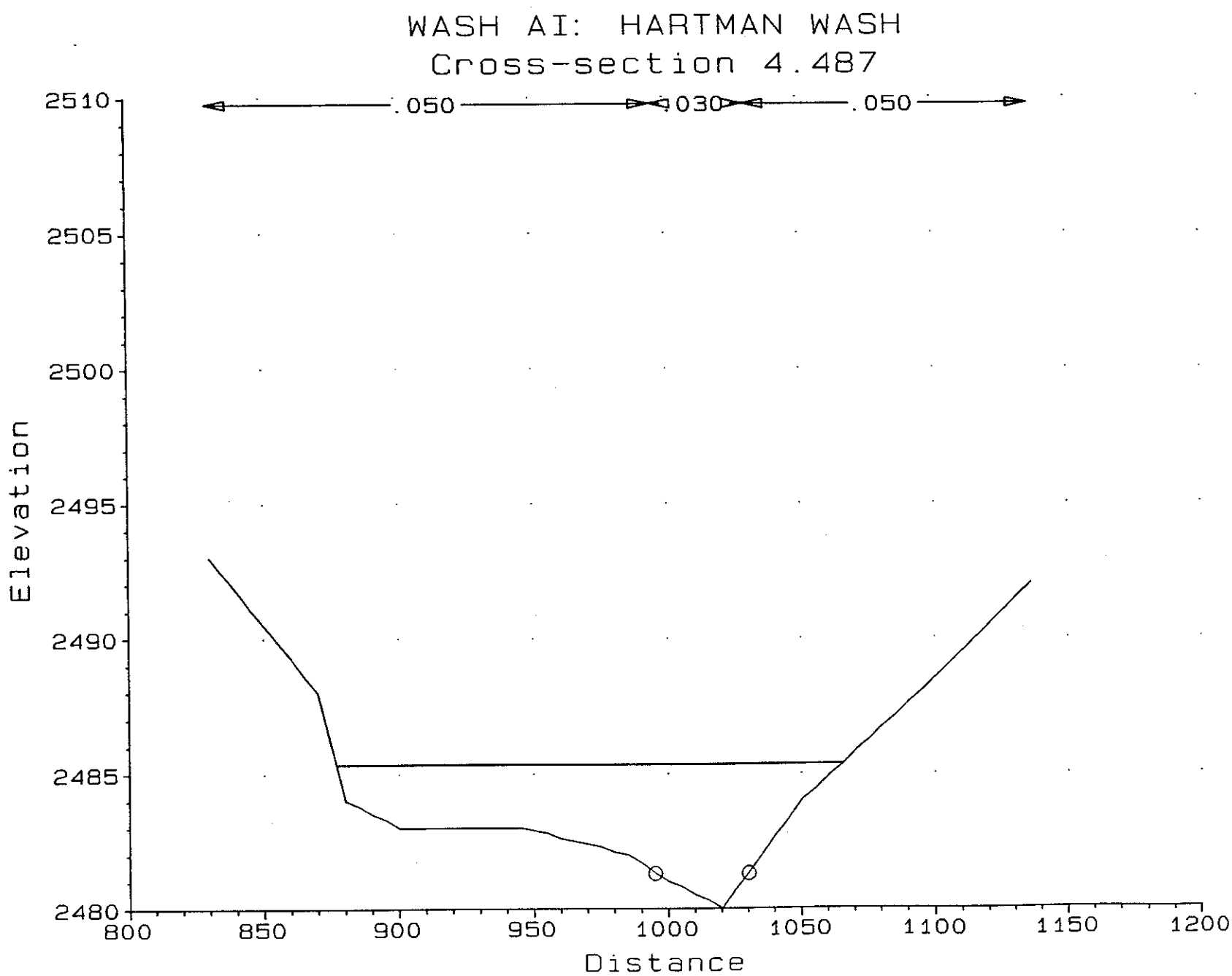

WASH AI: HARTMAN WASH
Cross-section 4.023
.050
.030
.050
2480
2475
2470
2465
2460
2455
2450
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

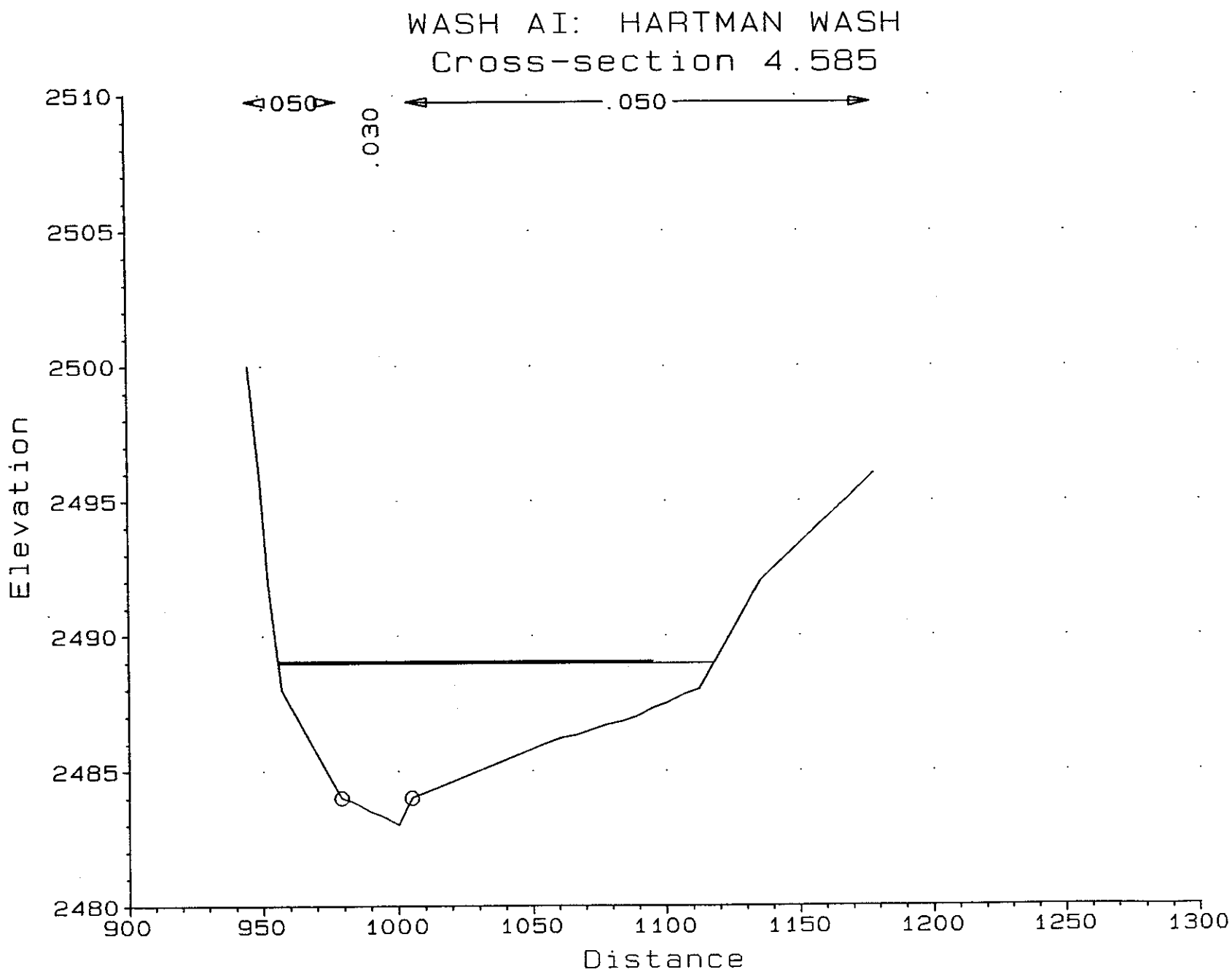

WASH AI: HARTMAN WASH
Cross-section 4.110
.050
.030
.050
2485
2480
2475
2470
2465
2460
2455
Elevation
600
800
1000
1200
1400
1600
1800
2000
2200
Distance

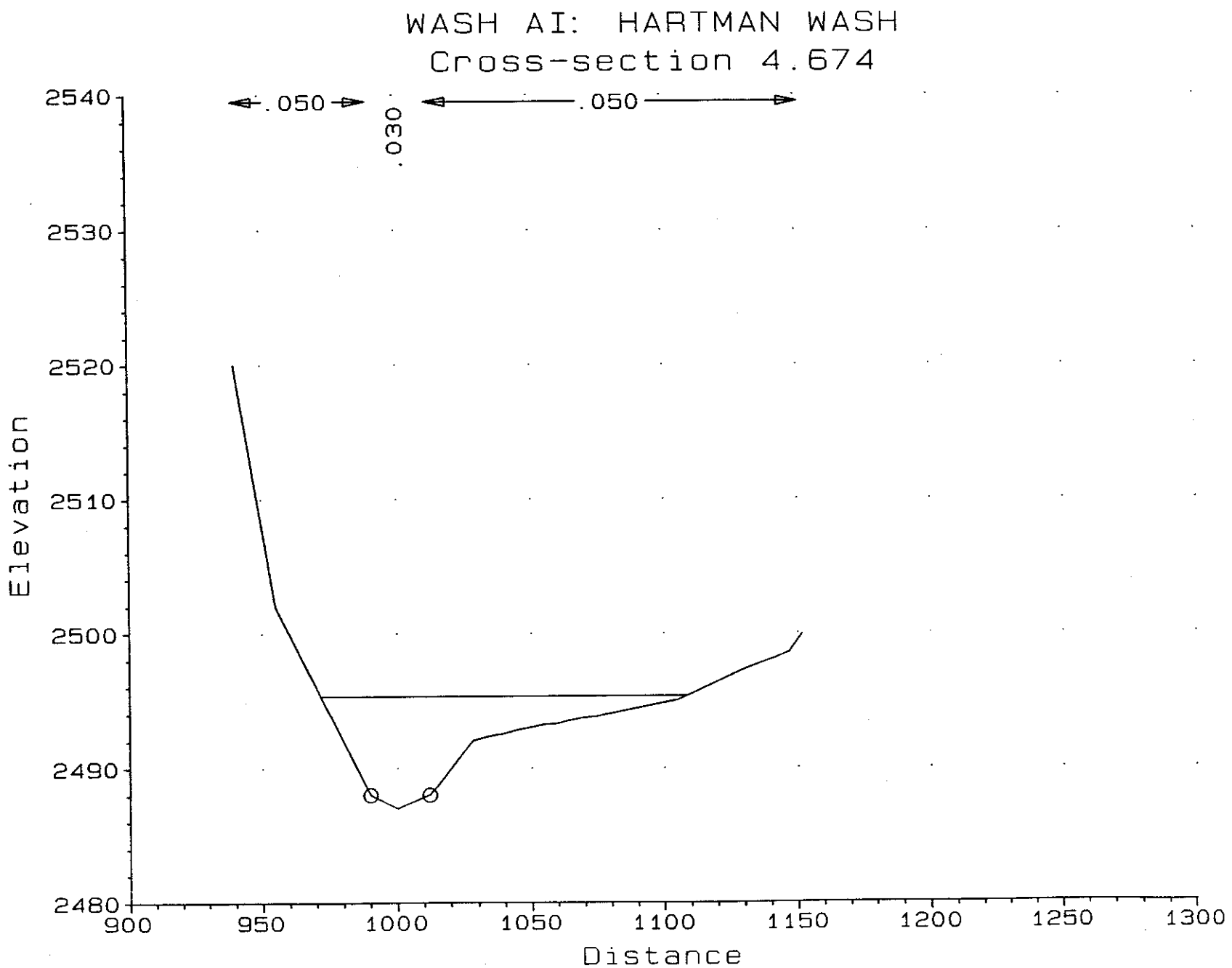

WASH AI: HARTMAN WASH
Cross-section 4.210
.050
.050
.030
2495
2490
2485
2480
2475
2470
2465
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

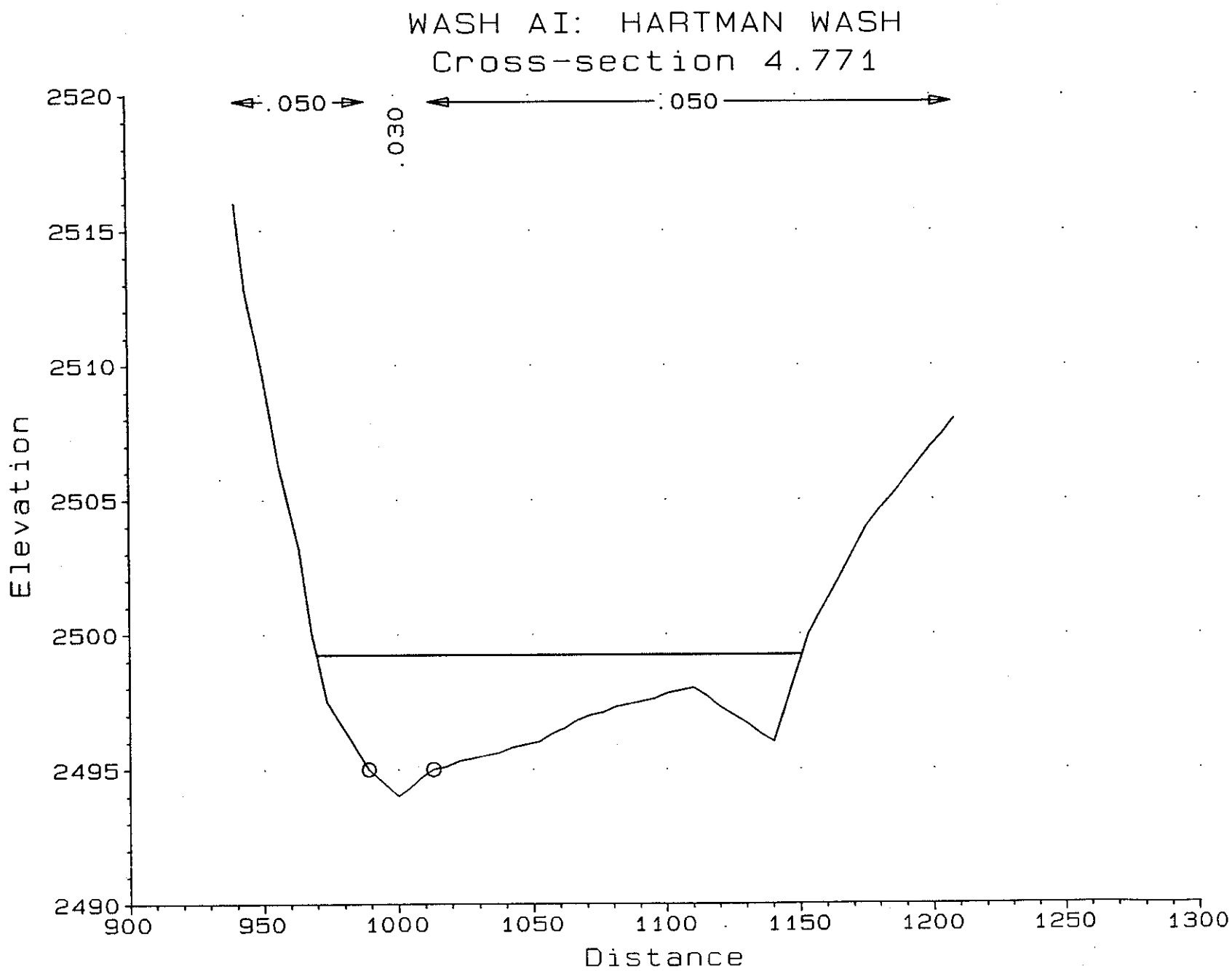

WASH AI: HARTMAN WASH
Cross-section 4.301
.050
.030
.050
2500
2495
2490
2485
2480
2475
2470
Elevation
700
750
800
850
900
950
1000
1050
1100
Distance

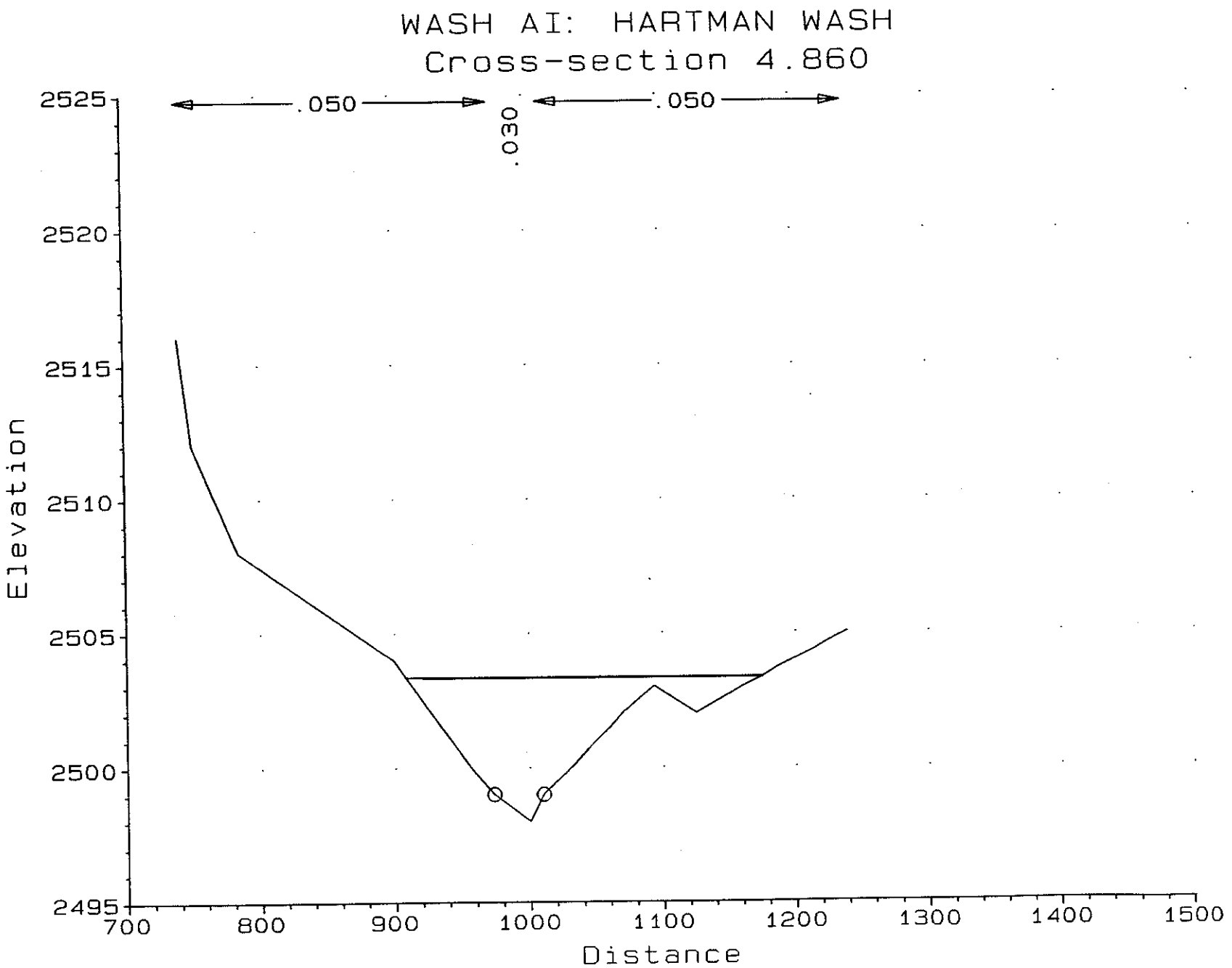

WASH AI: HARTMAN WASH
Cross-section 4.390
.050
.030
.050
2505
2500
2495
2490
2485
2480
2475
Elevation
400
500
600
700
800
900
1000
1100
1200
Distance

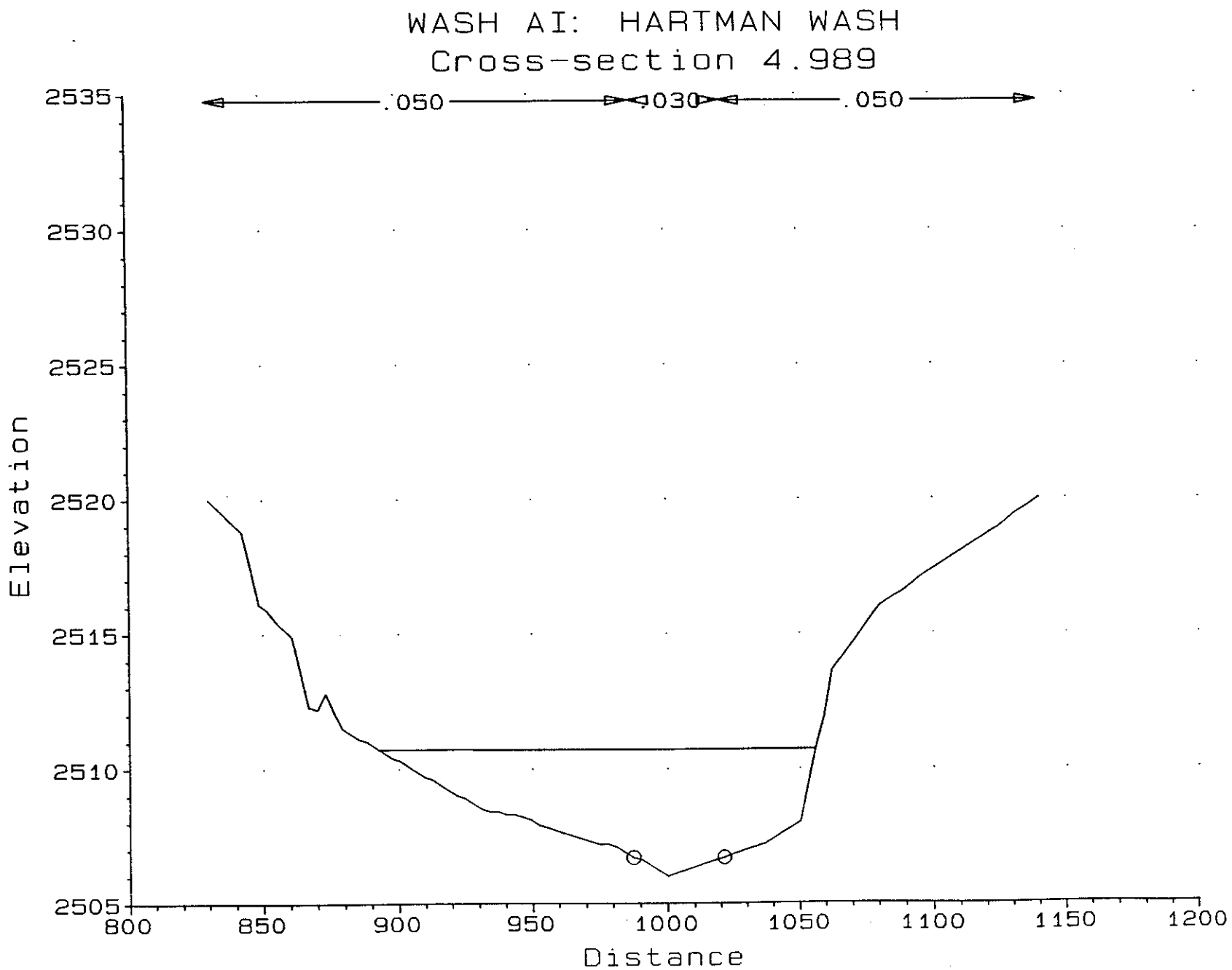

WASH AI: HARTMAN WASH
Cross-section 4.487
.050
.030
.050
2510
2505
2500
2495
2490
2485
2480
Elevation
800
850
900
950
1000
1050
1100
1150
1200
Distance

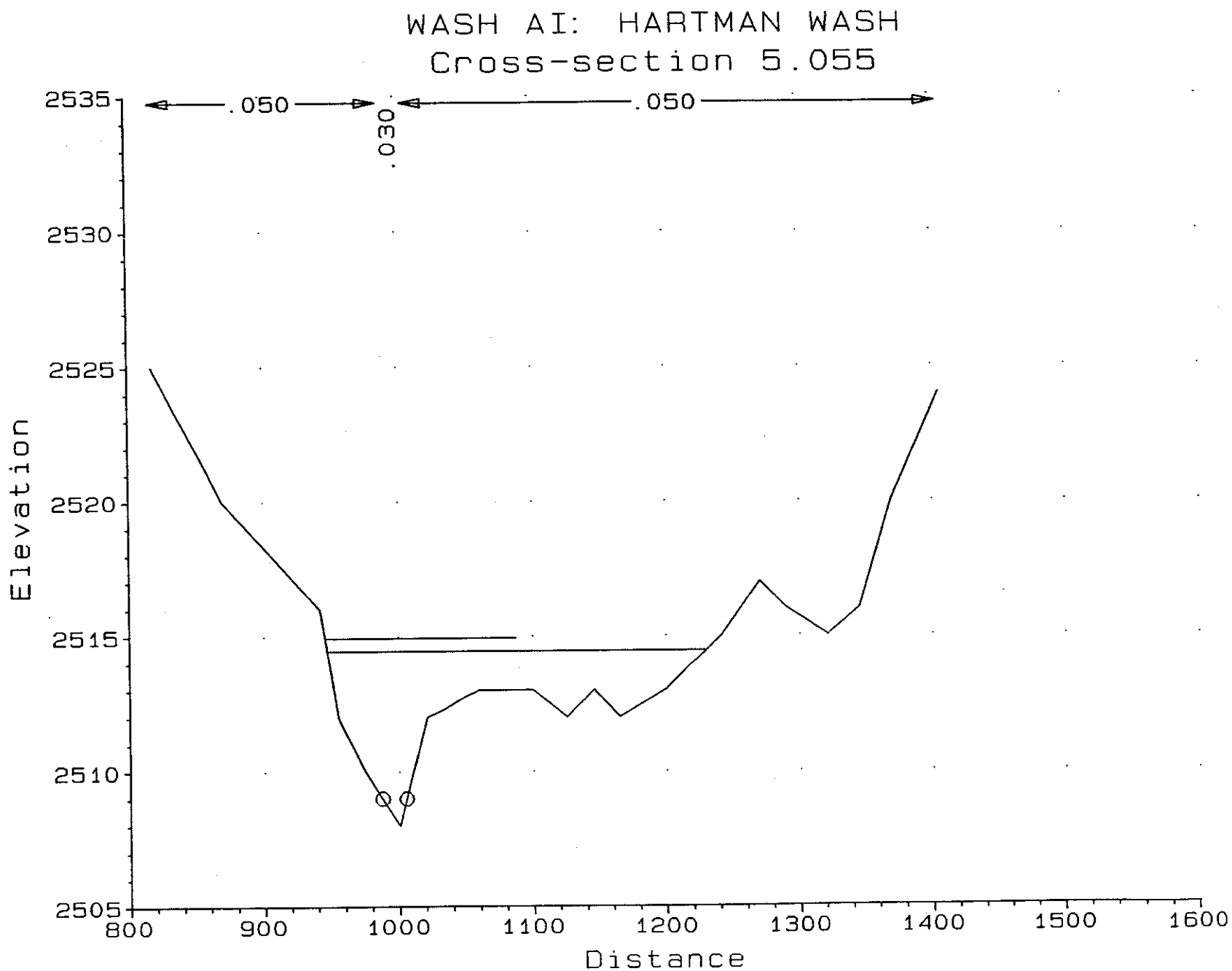

WASH AI: HARTMAN WASH
Cross-section 4.585
.050
.050
.030
2510
2505
2500
2495
2490
2485
2480
Elevation
900
950
1000
1050
1100
1150
1200
1250
1300
Distance

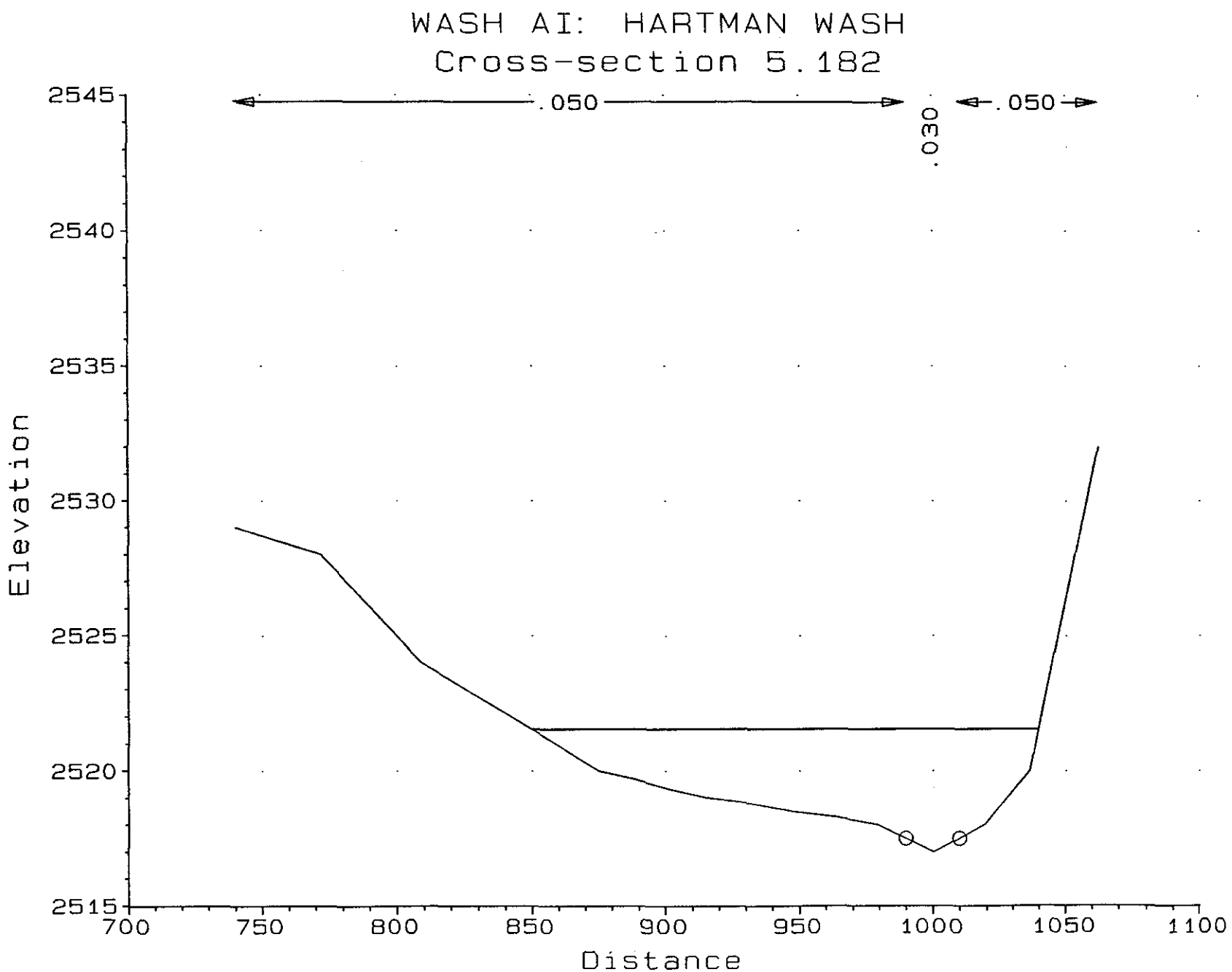

WASH AI: HARTMAN WASH
Cross-section 4.674
.050
.030
.050
Elevation
2540
2530
2520
2510
2500
2490
2480
900
950
1000
1050
1100
1150
1200
1250
1300
Distance

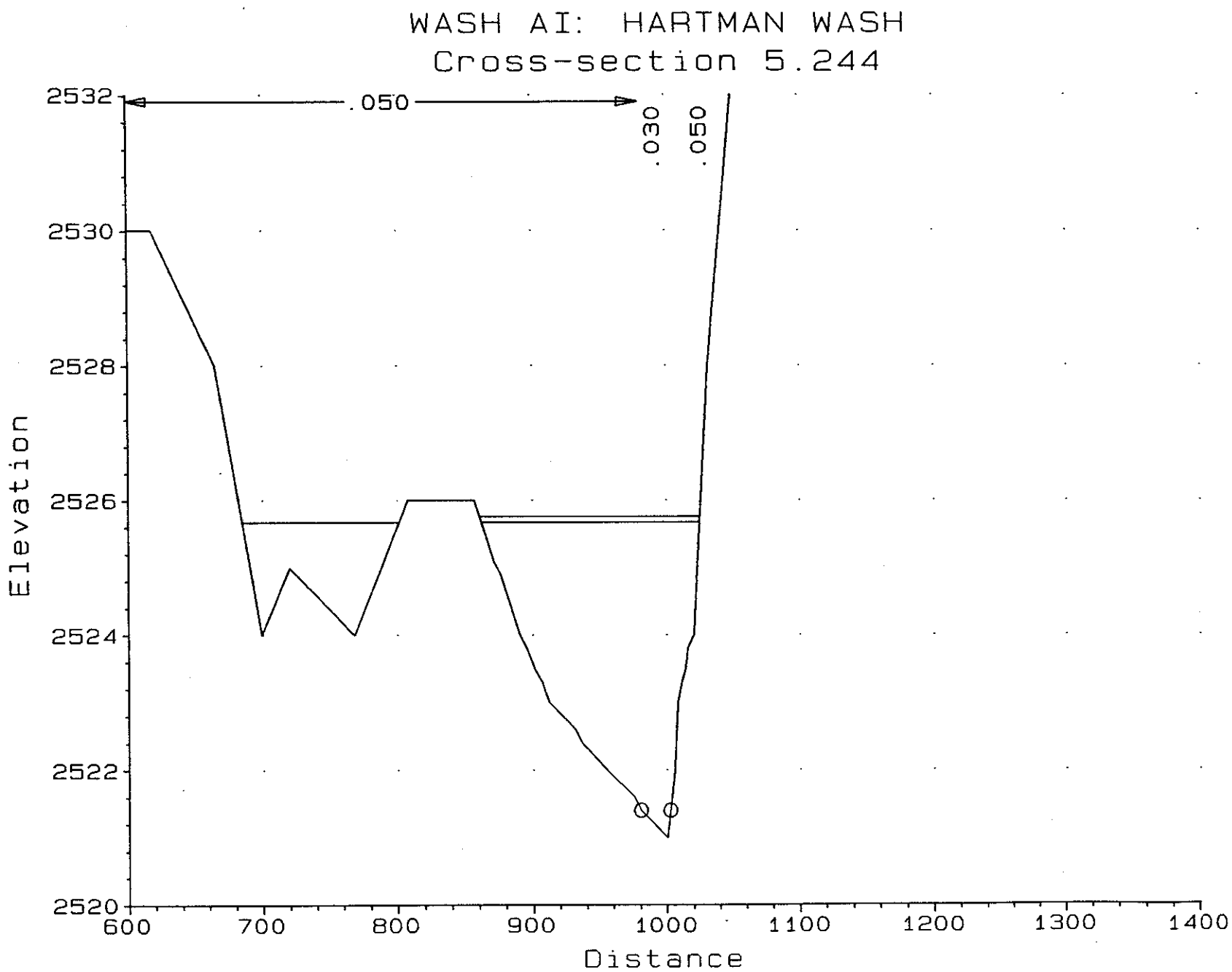

WASH AI: HARTMAN WASH
Cross-section 4.771
.050
.030
.050
2520
2515
2510
2505
2500
2495
2490
Elevation
900
950
1000
1050
1100
1150
1200
1250
1300
Distance

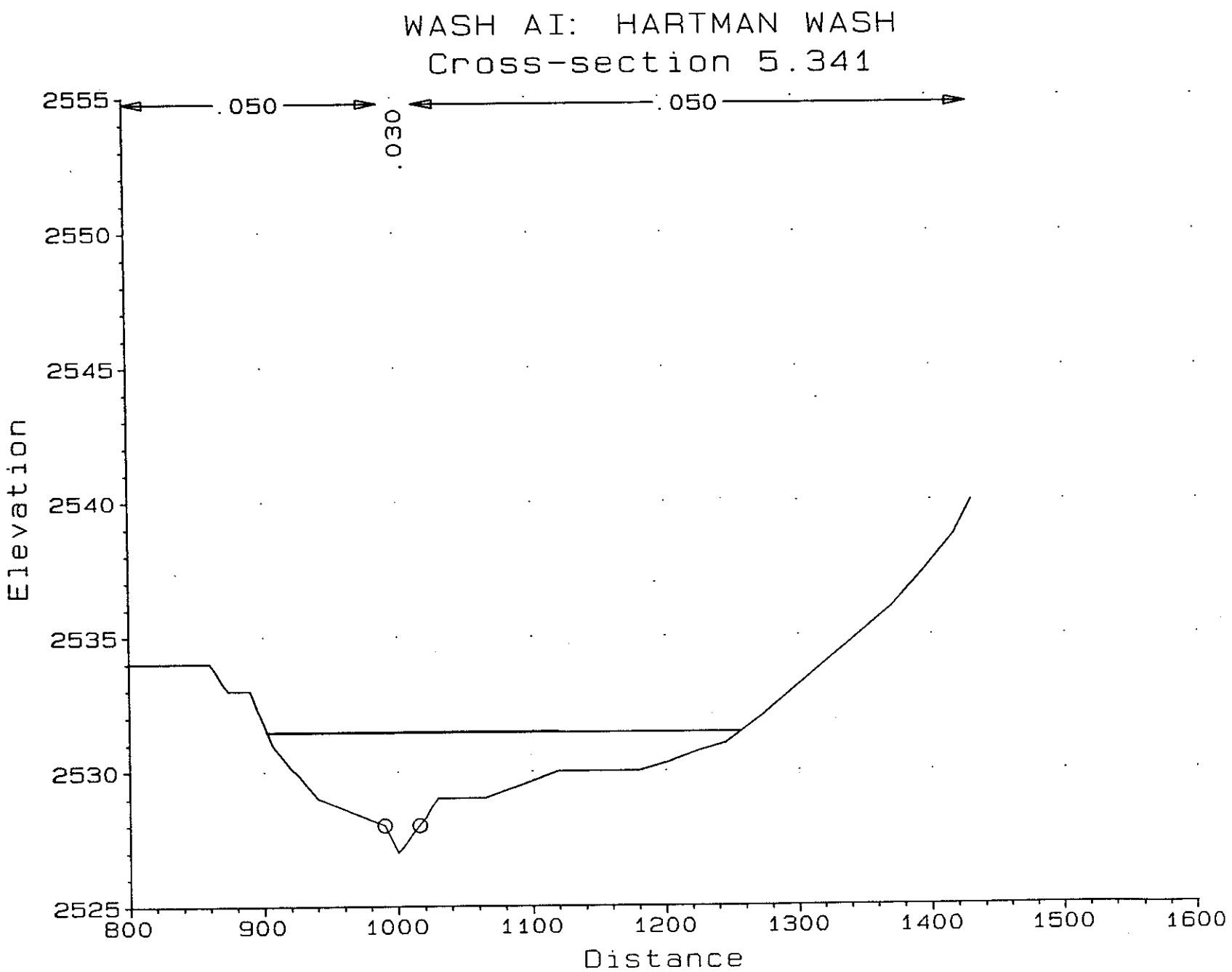

WASH AI: HARTMAN WASH
Cross-section 4.860
.050
.030
.050
2525
2520
2515
2510
2505
2500
2495
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

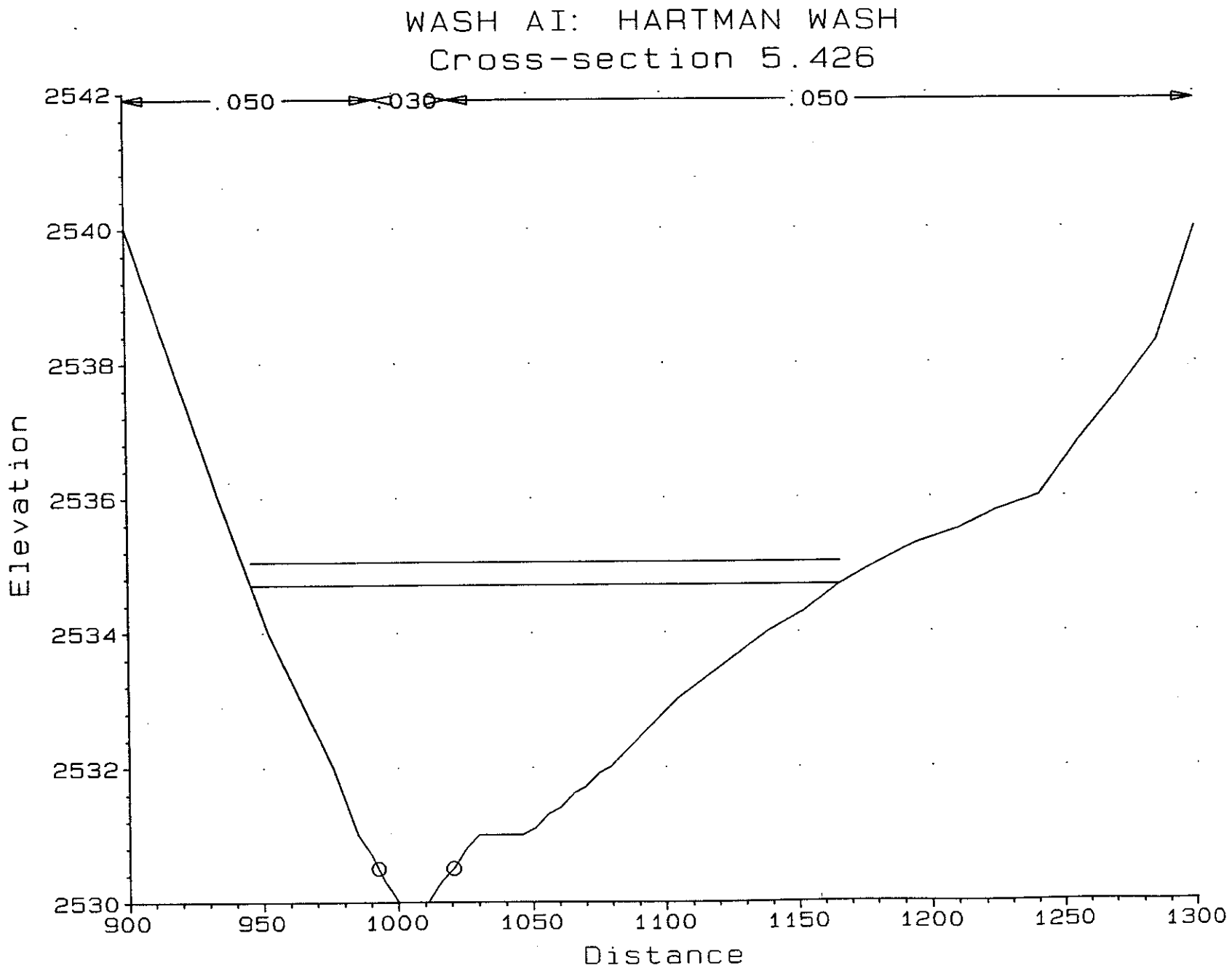

WASH AI: HARTMAN WASH
Cross-section 4.989
.050
.030
.050
2535
2530
2525
2520
2515
2510
2505
Elevation
800
850
900
950
1000
1050
1100
1150
1200
Distance

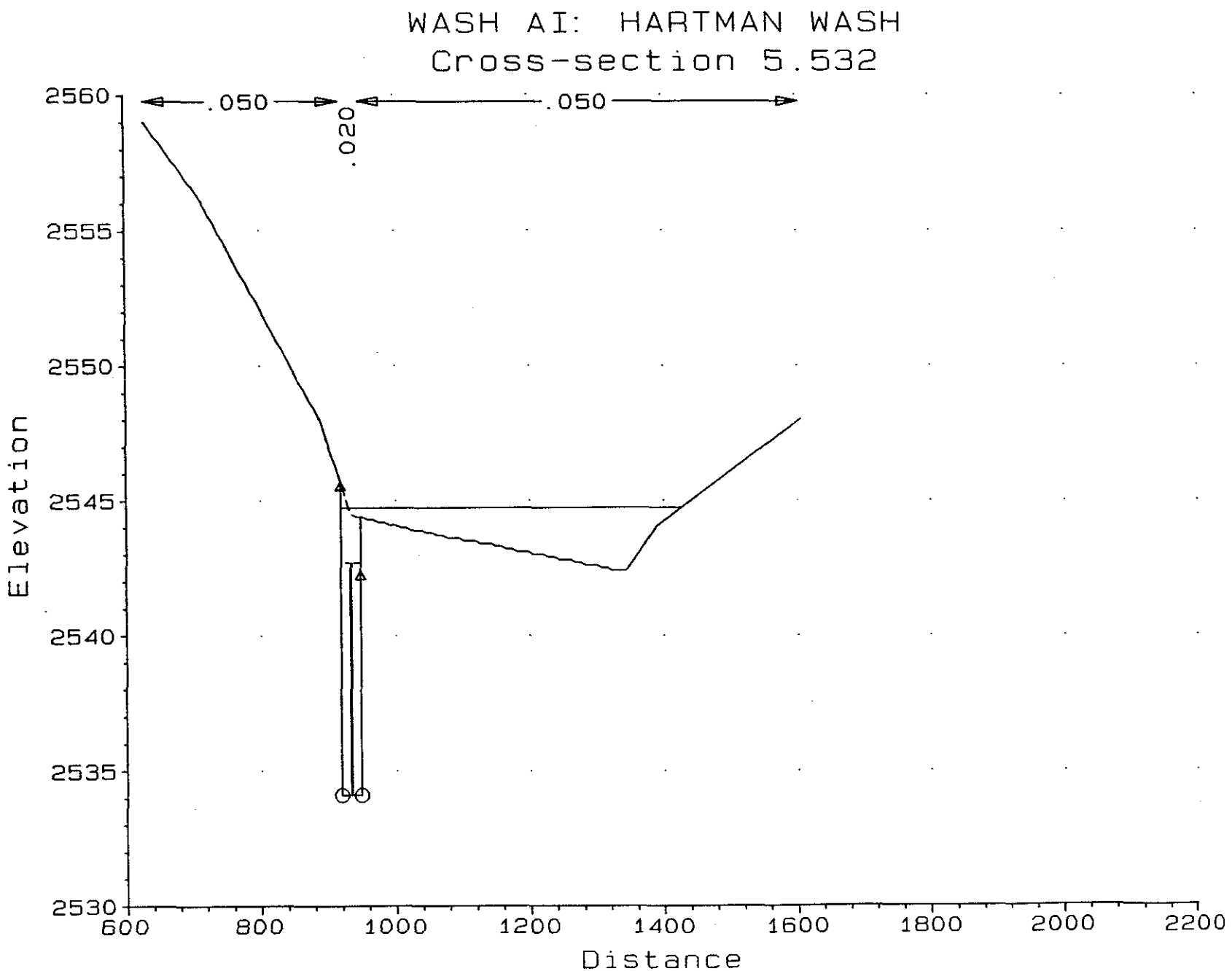

WASH AI: HARTMAN WASH
Cross-section 5.055
.050
.030
.050
2535
2530
2525
2520
2515
2510
2505
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

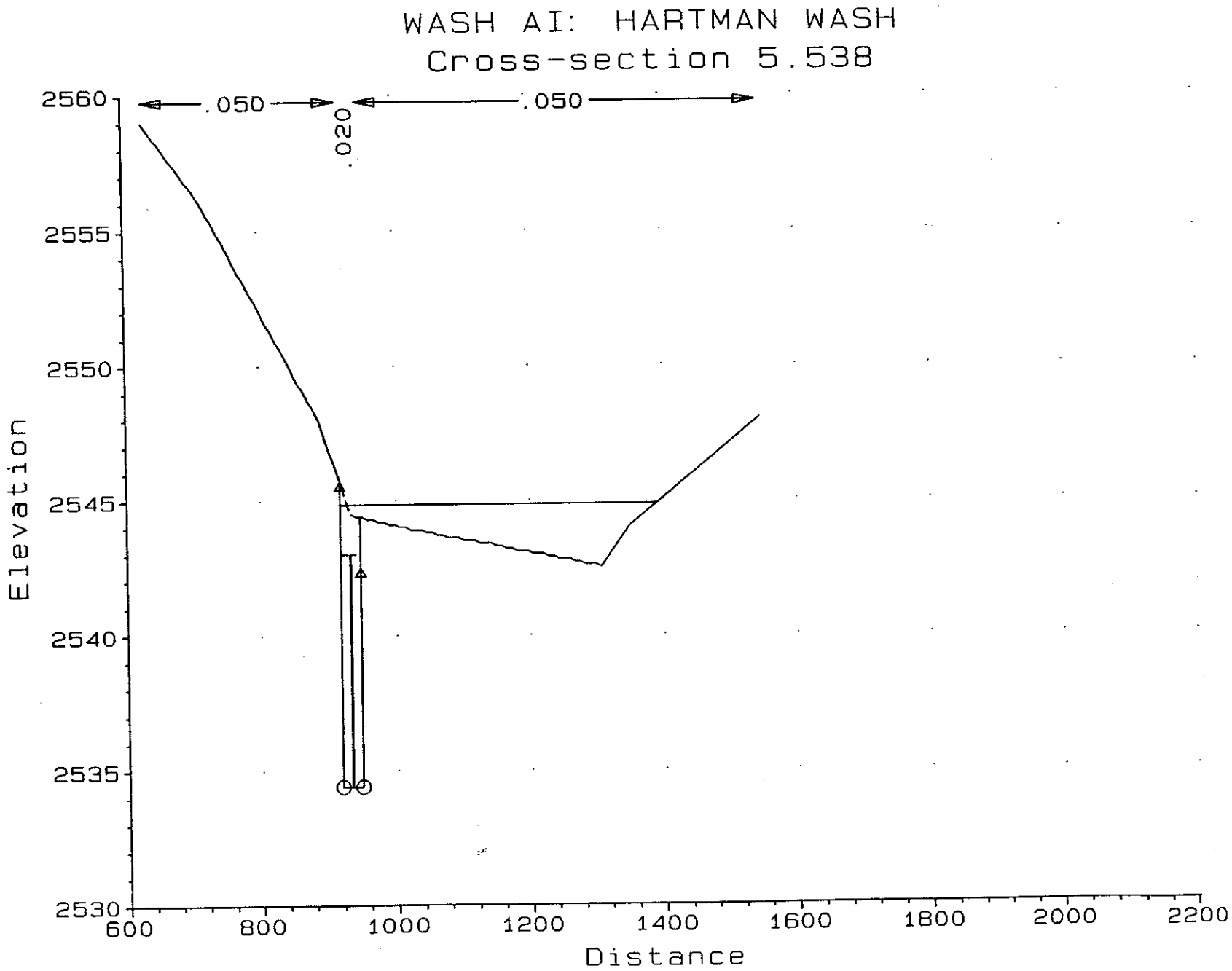

WASH AI: HARTMAN WASH
Cross-section 5.182
.050
.030
.050
2545
2540
2535
2530
2525
2520
2515
Elevation
700
750
800
850
900
950
1000
1050
1100
Distance

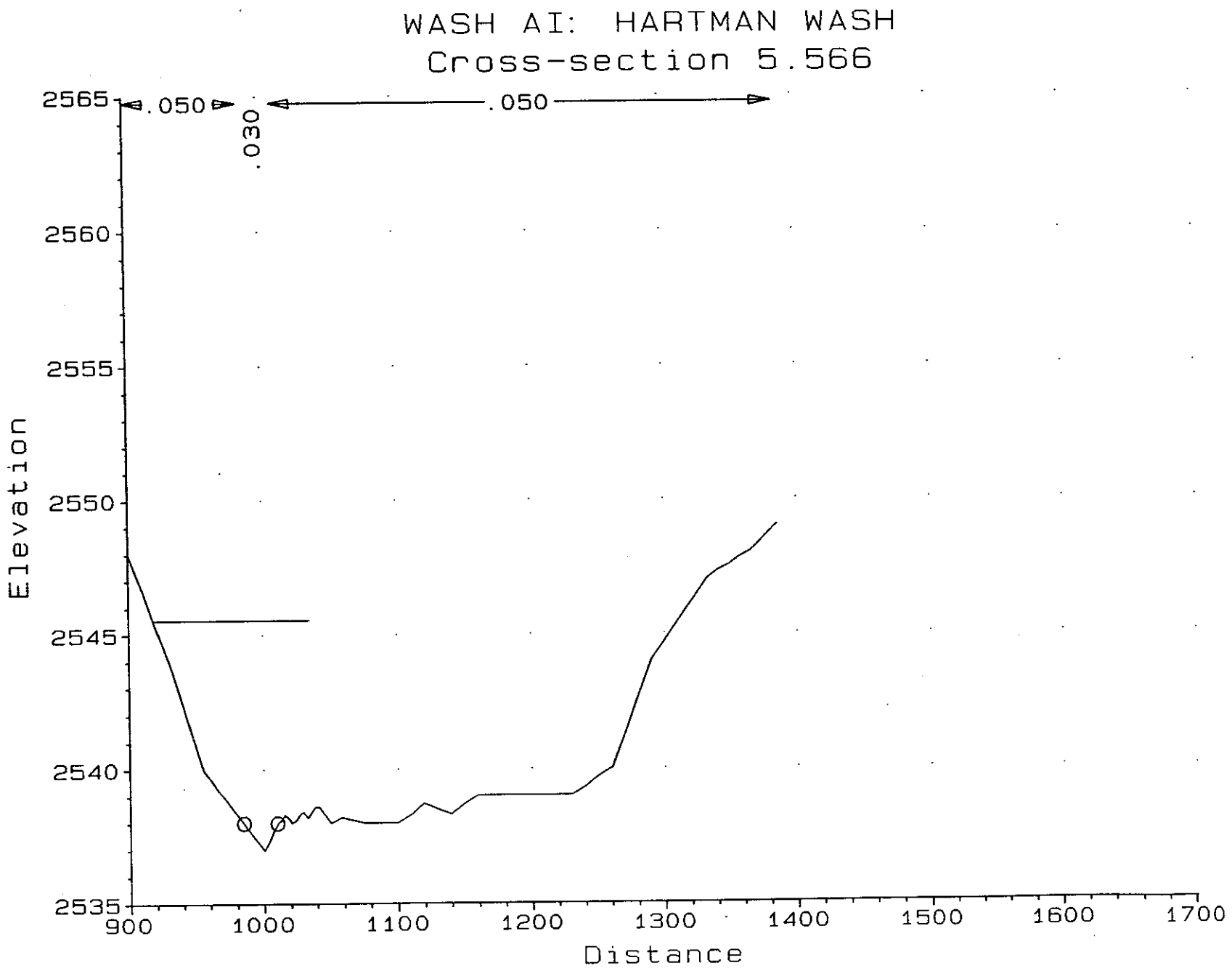

WASH AI: HARTMAN WASH
Cross-section 5.244
.050
.030
.050
2532
2530
2528
2526
2524
2522
2520
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance

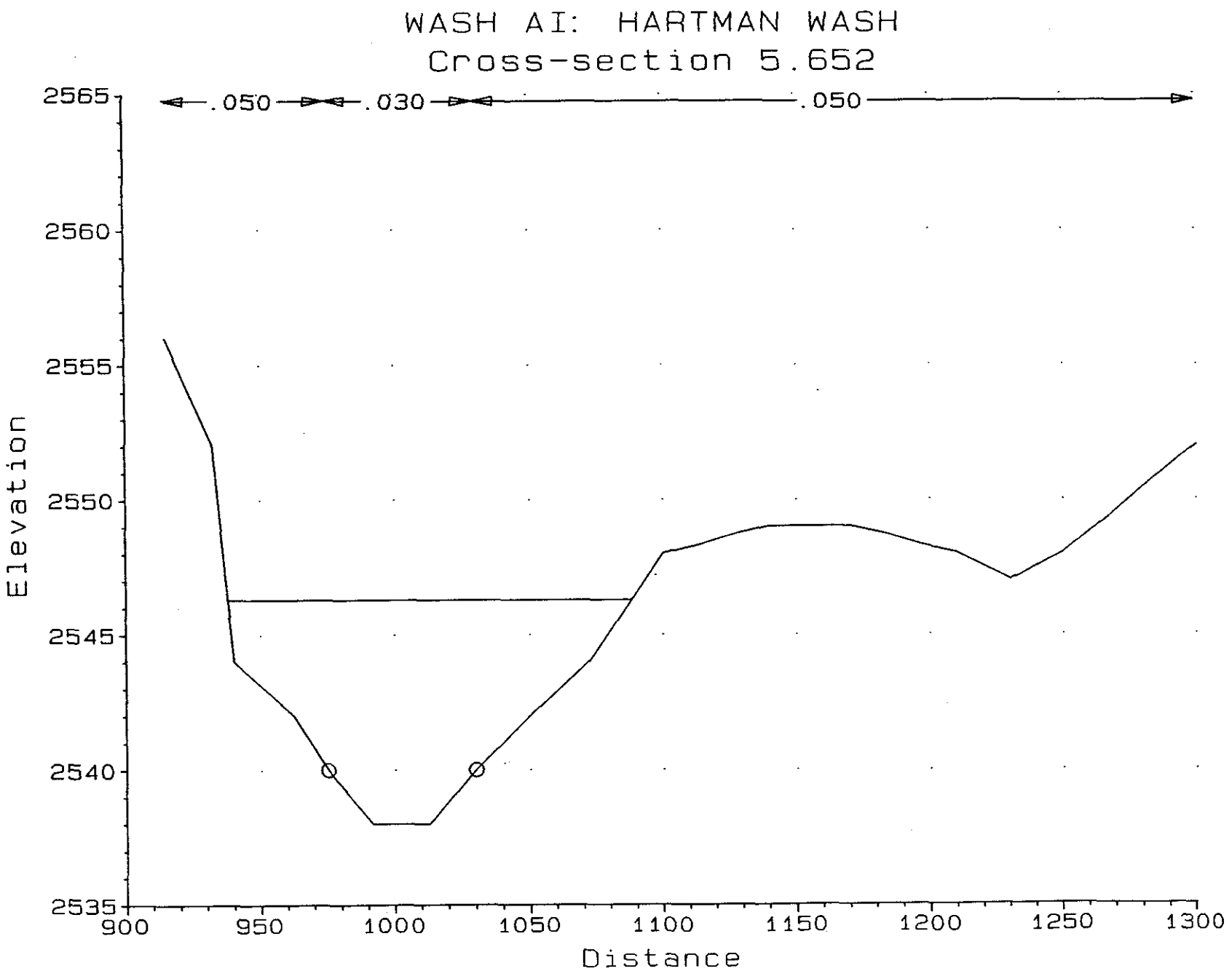

WASH AI: HARTMAN WASH
Cross-section 5.341
.050
.030
.050
2555
2550
2545
2540
2535
2530
2525
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

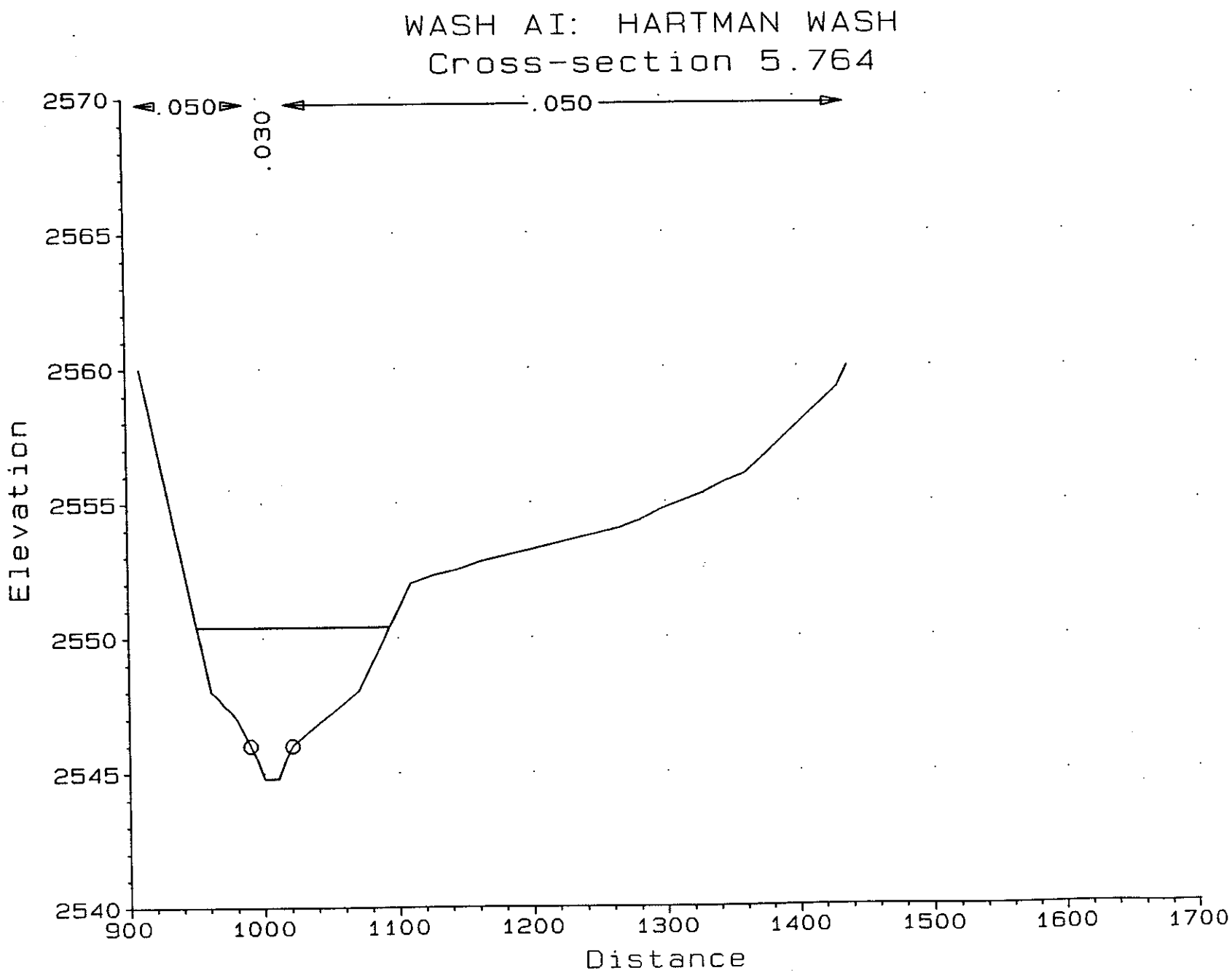

WASH AI: HARTMAN WASH
Cross-section 5.426
.050
.030
.050
2542
2540
2538
2536
2534
2532
2530
Elevation
900
950
1000
1050
1100
1150
1200
1250
1300
Distance

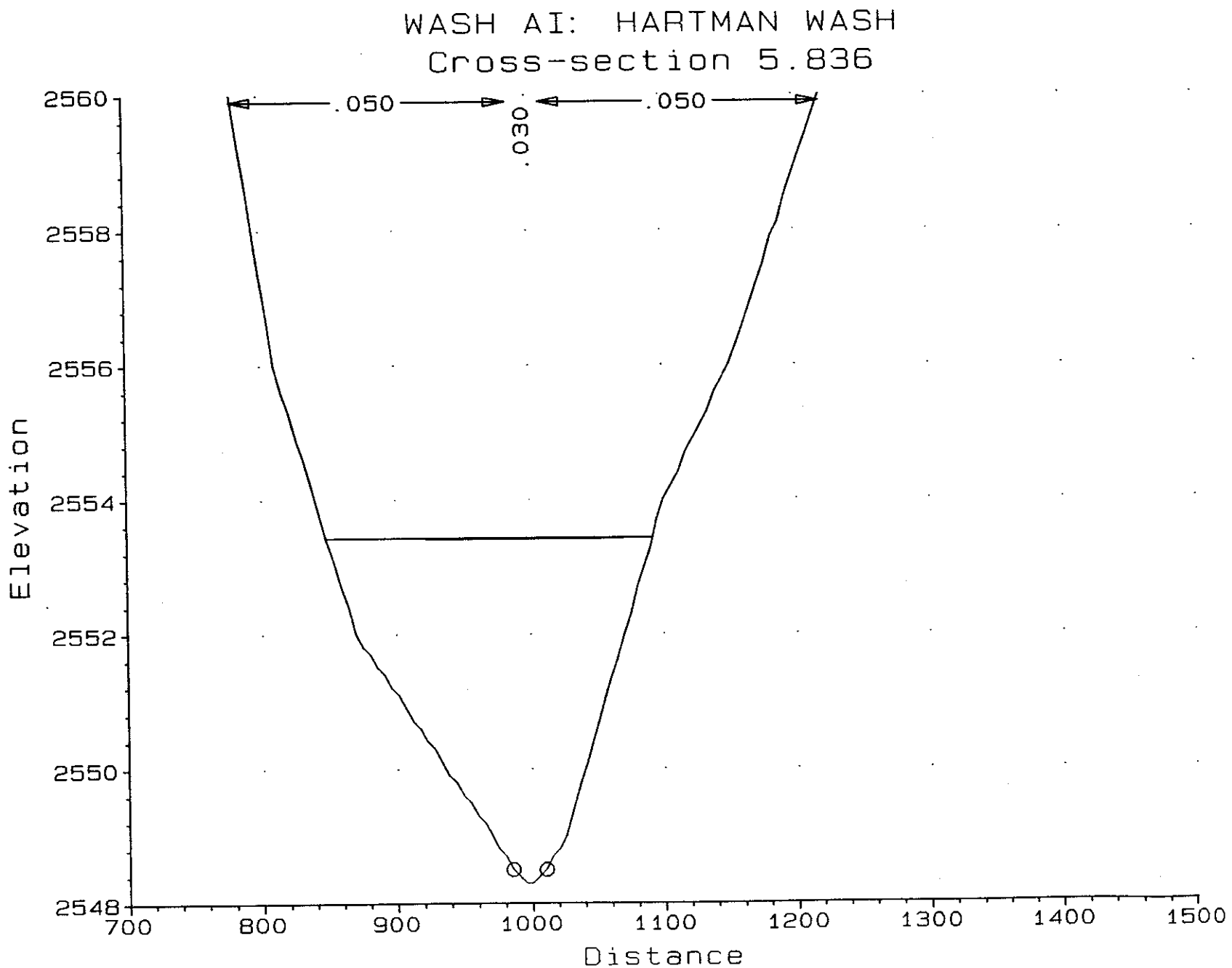

WASH AI: HARTMAN WASH
Cross-section 5.532
.050
.020
.050
2560
2555
2550
2545
2540
2535
2530
Elevation
600
800
1000
1200
1400
1600
1800
2000
2200
Distance

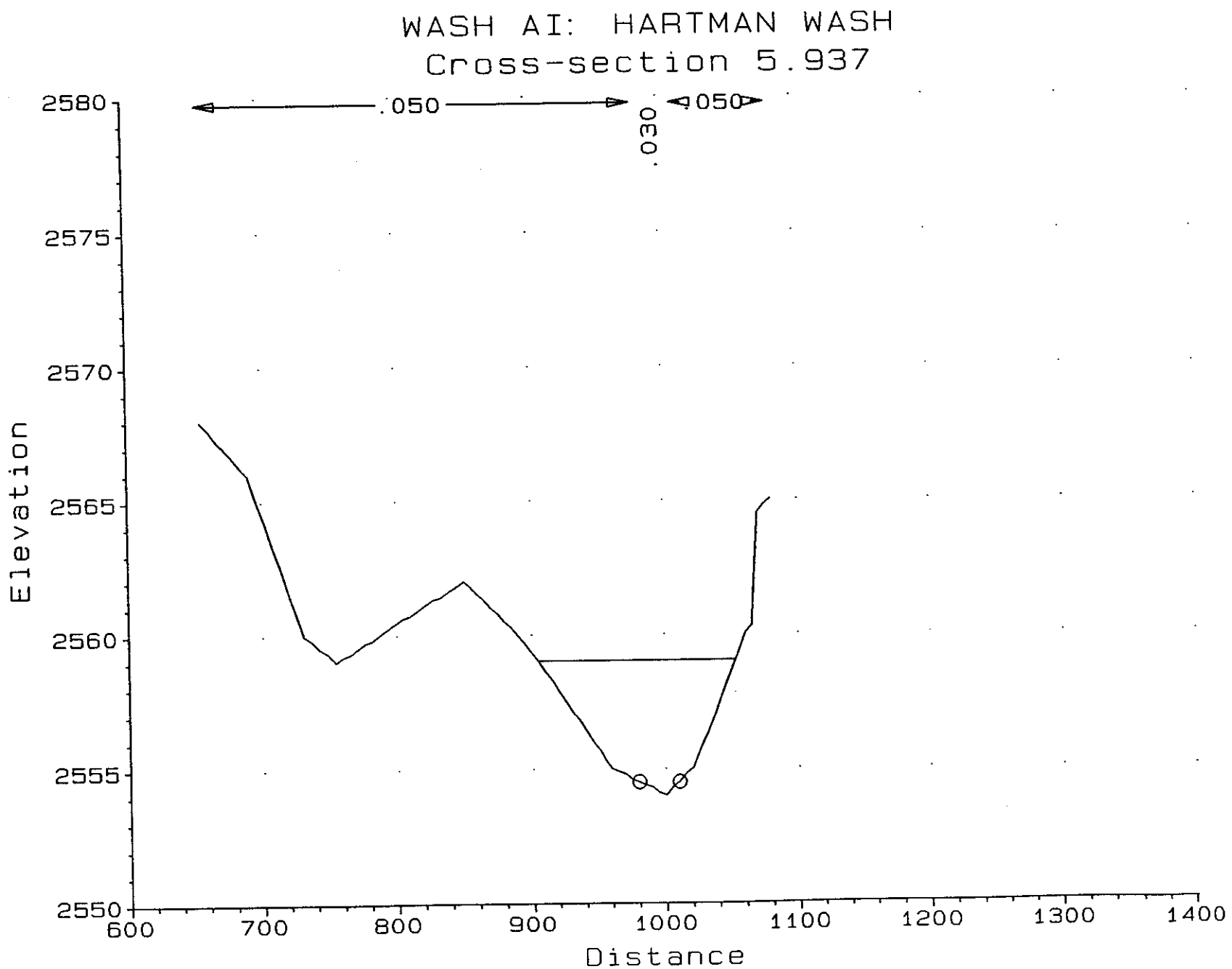

WASH AI: HARTMAN WASH
Cross-section 5.538
.050
.020
.050
Elevation
2560
2555
2550
2545
2540
2535
2530
600
800
1000
1200
1400
1600
1800
2000
2200
Distance

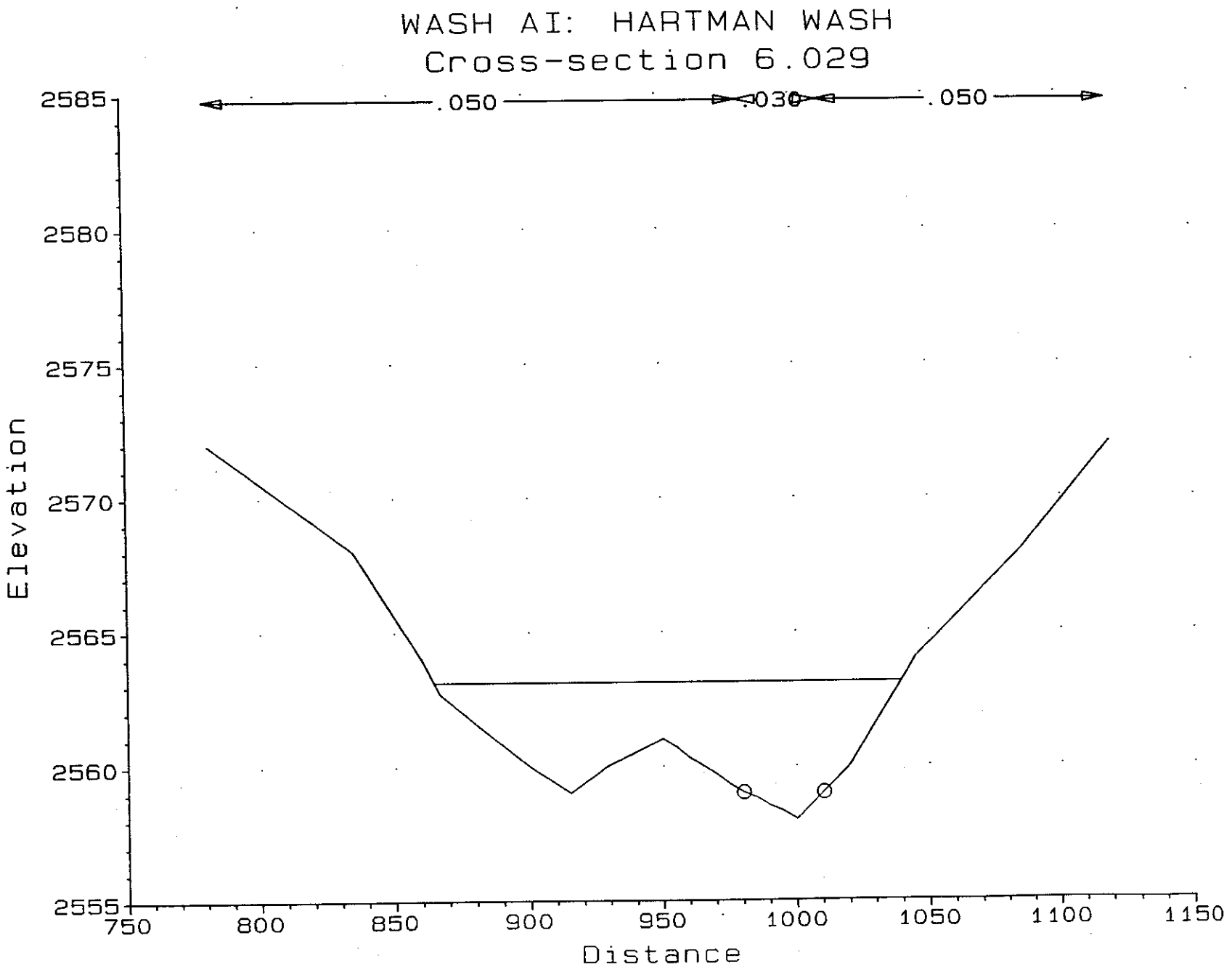

WASH AI: HARTMAN WASH
Cross-section 5.566
.050
.030
.050
2565
2560
2555
2550
2545
2540
2535
Elevation
900
1000
1100
1200
1300
1400
1500
1600
1700
Distance

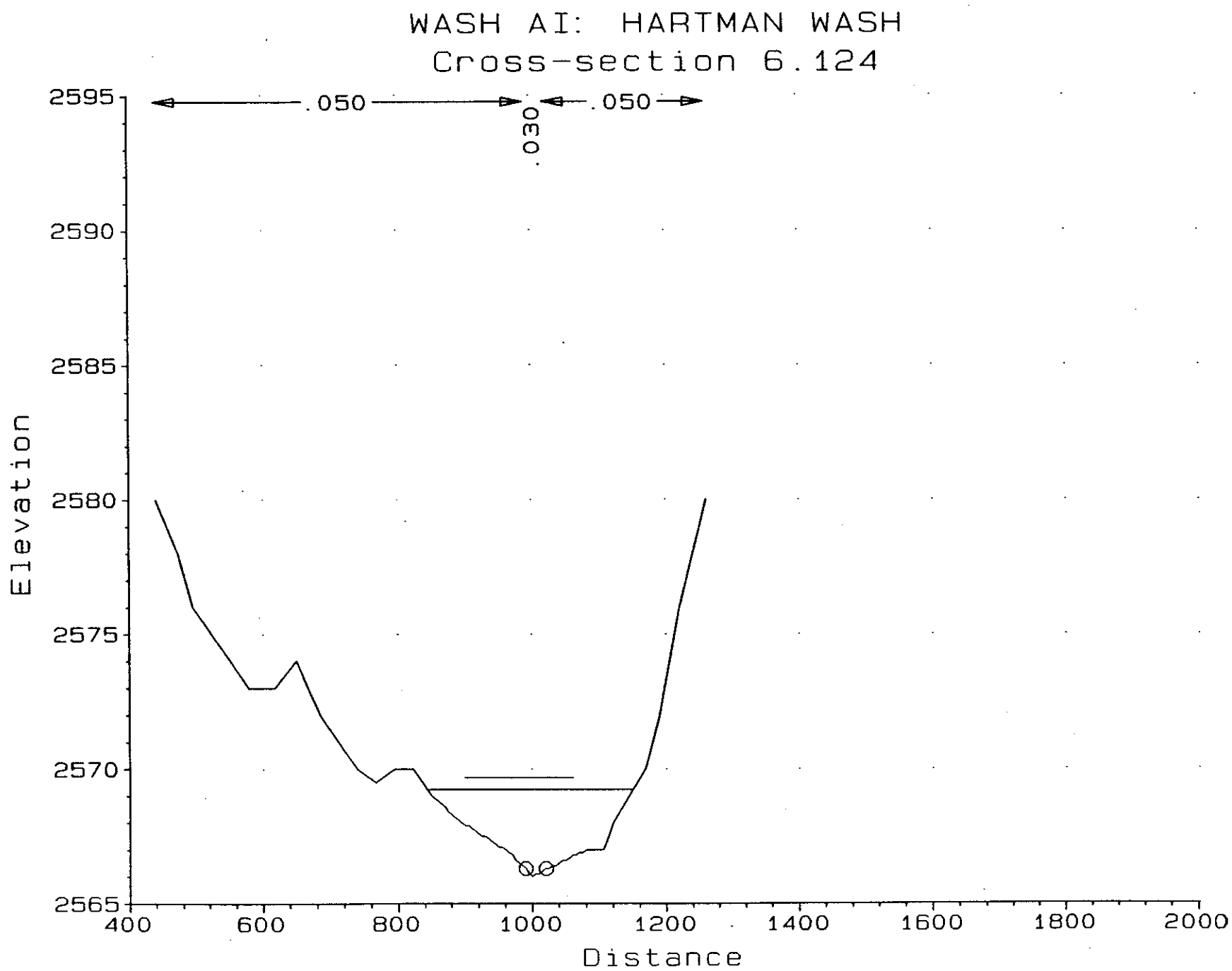

WASH AI: HARTMAN WASH
Cross-section 5.652
.050
.030
.050
2565
2560
2555
2550
2545
2540
2535
Elevation
900
950
1000
1050
1100
1150
1200
1250
1300
Distance

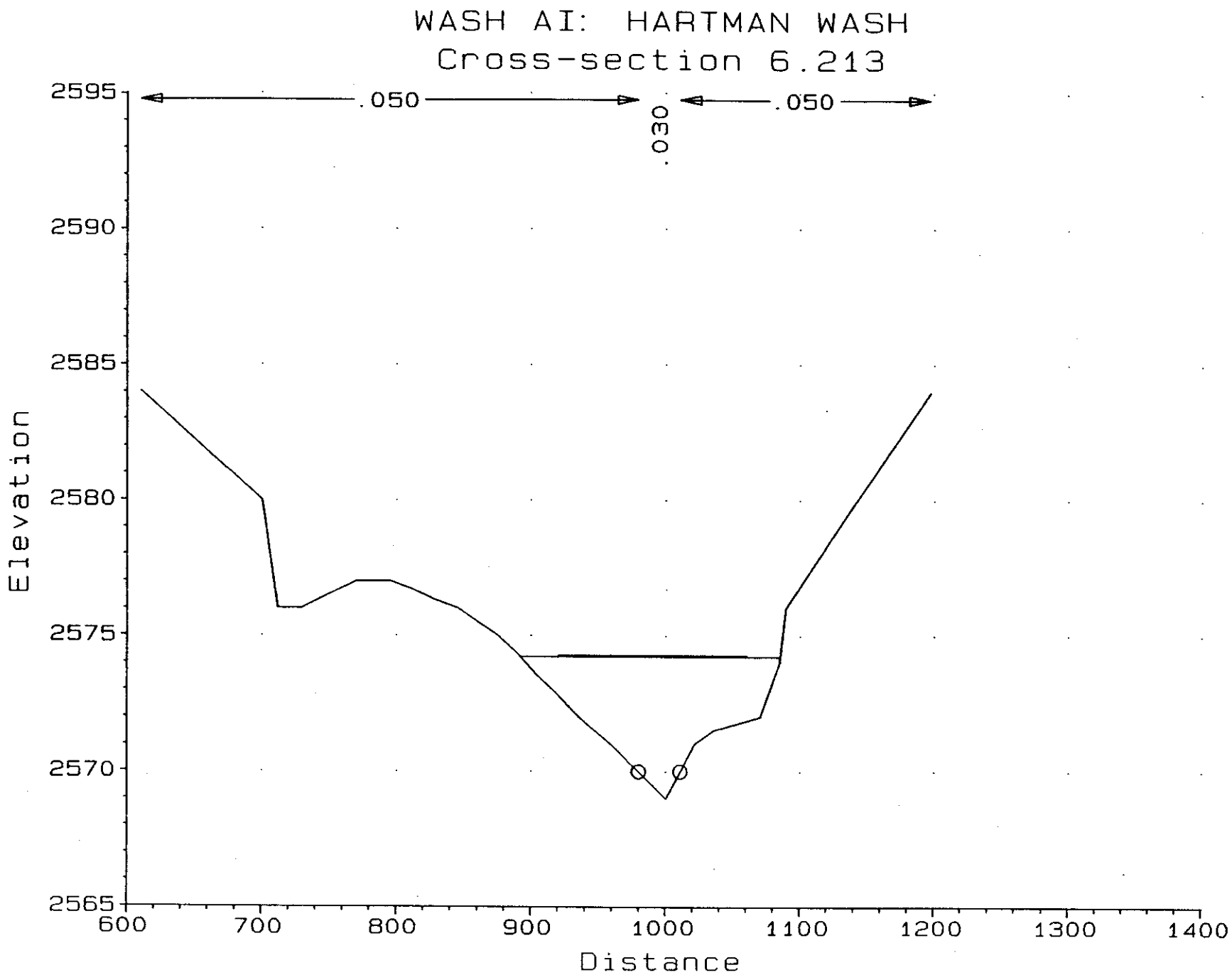

WASH AI: HARTMAN WASH
Cross-section 5.764
.050
.030
.050
2570
2565
2560
2555
2550
2545
2540
Elevation
900
1000
1100
1200
1300
1400
1500
1600
1700
Distance

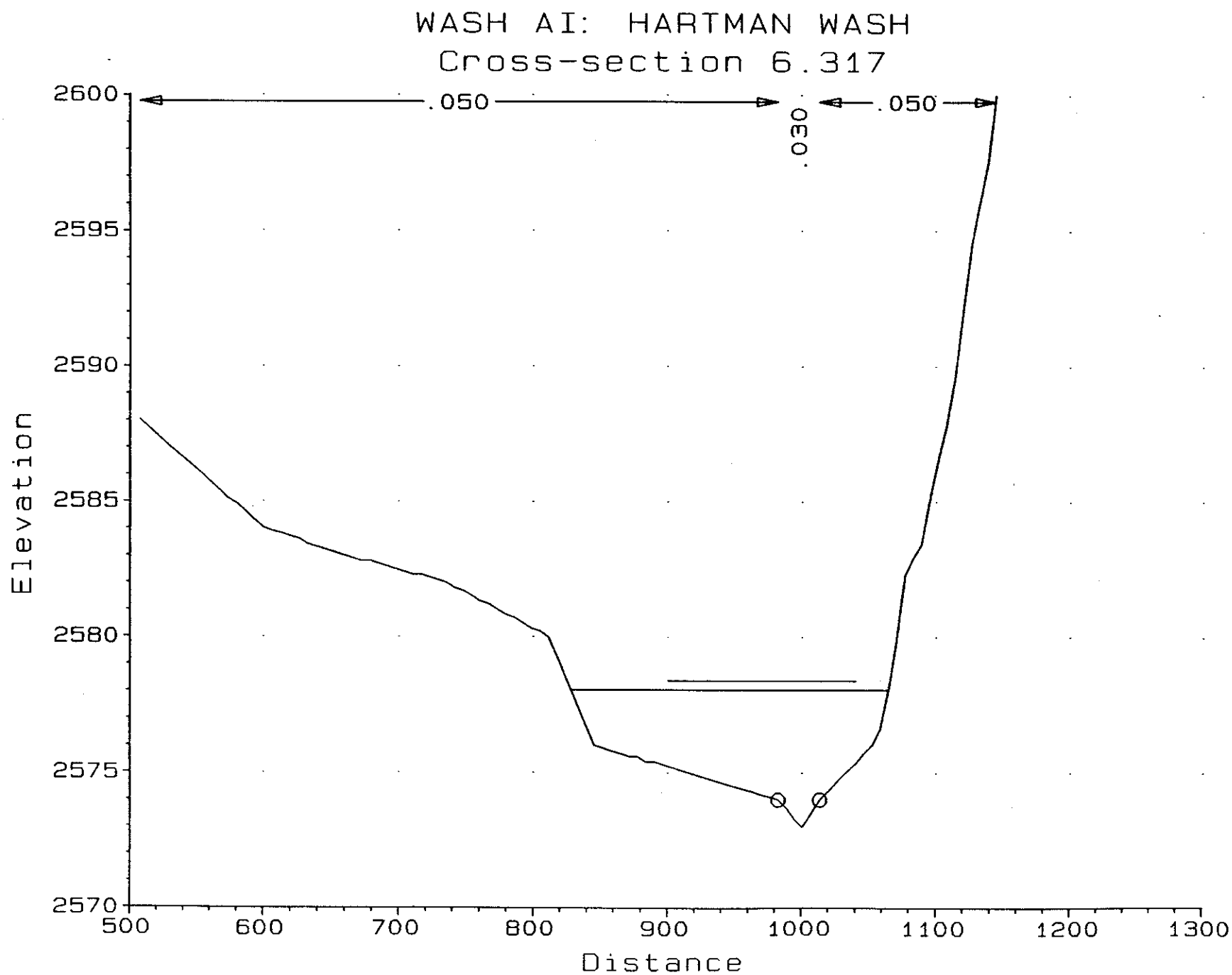

WASH AI: HARTMAN WASH
Cross-section 5.836
.050
.030
.050
2560
2558
2556
2554
2552
2550
2548
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

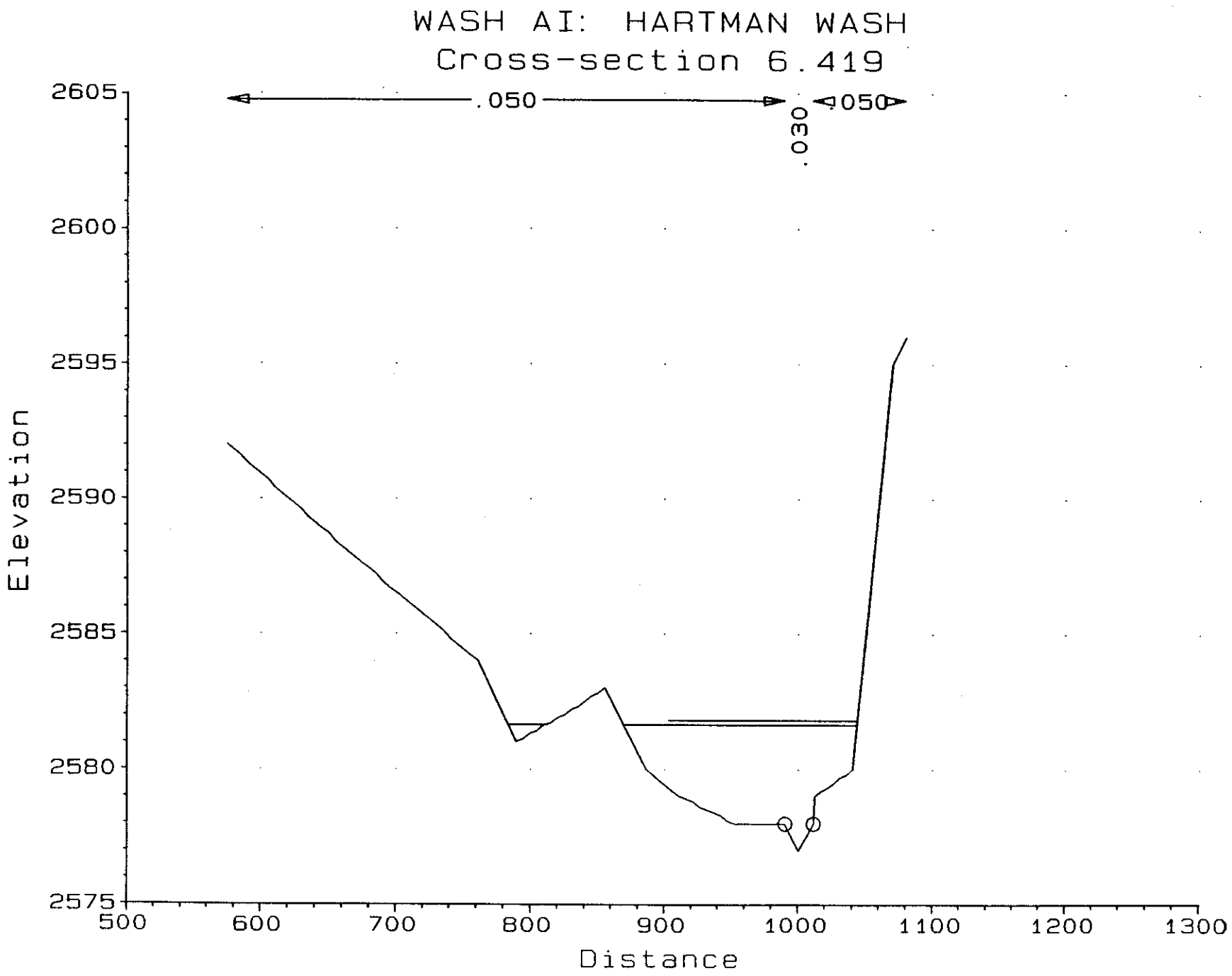

WASH AI: HARTMAN WASH
Cross-section 5.937
.050
.050
.030
2580
2575
2570
2565
2560
2555
2550
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance

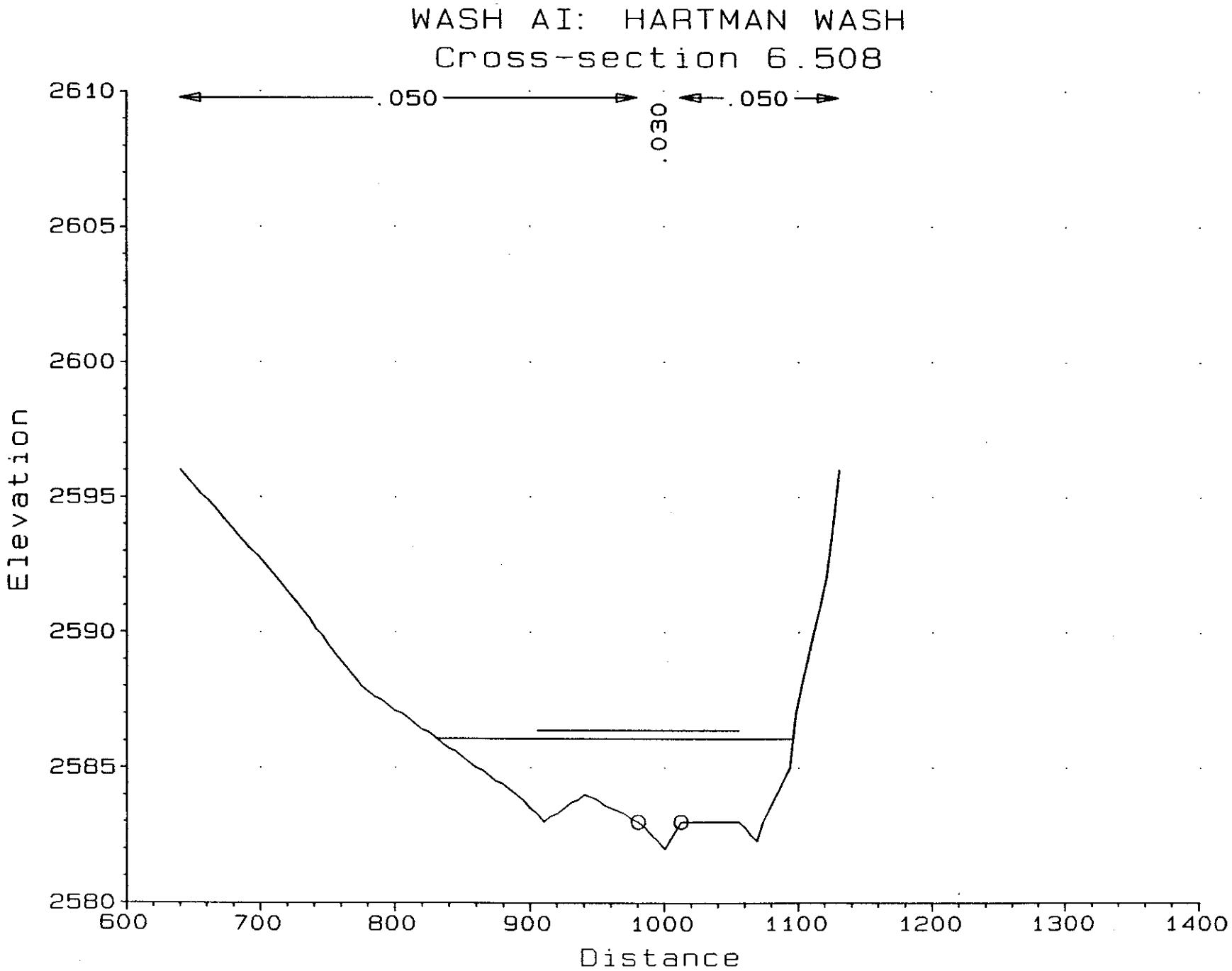

WASH AI: HARTMAN WASH
Cross-section 6.029
.050
.030
.050
2585
2580
2575
2570
2565
2560
2555
Elevation
750
800
850
900
950
1000
1050
1100
1150
Distance

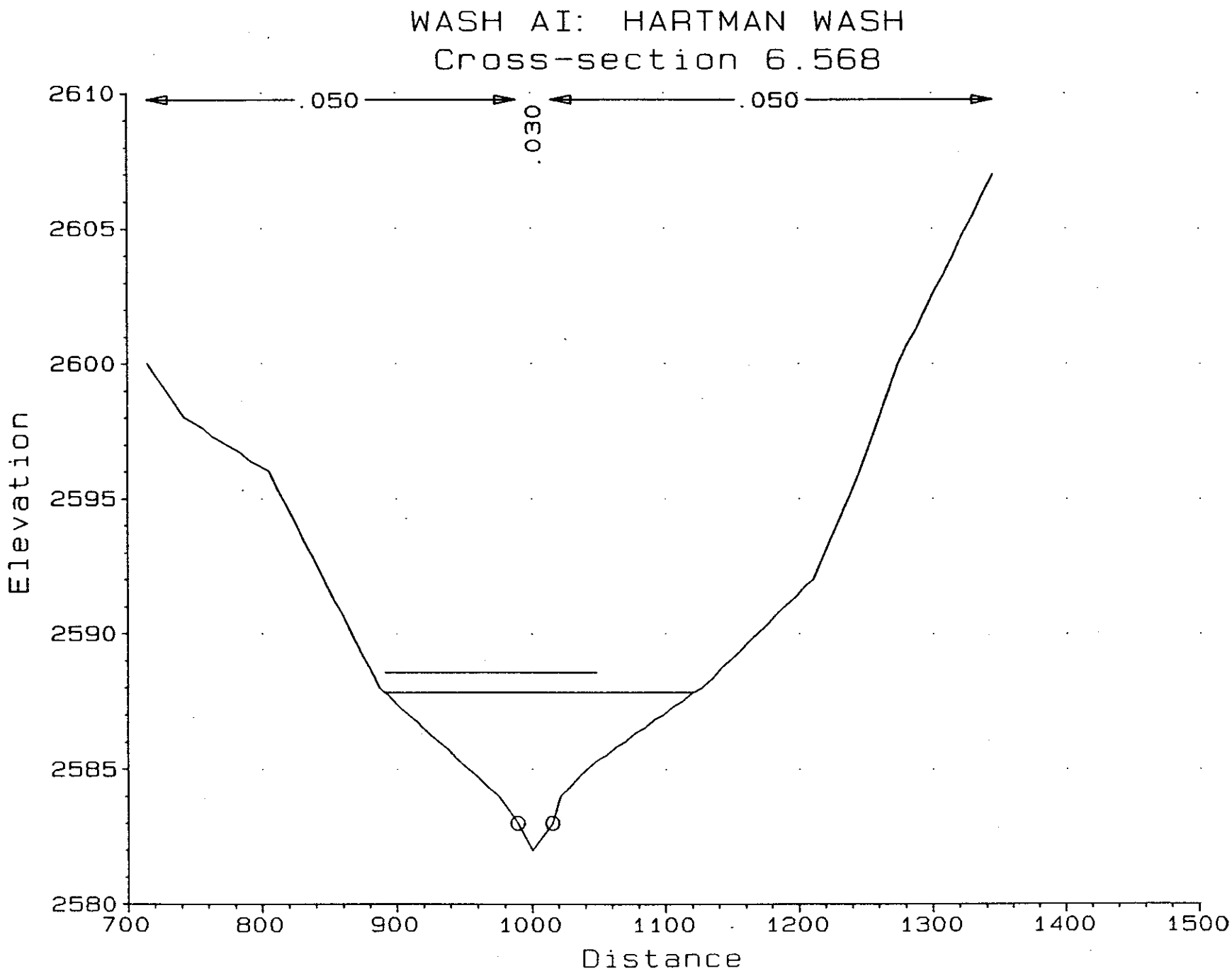

WASH AI: HARTMAN WASH
Cross-section 6.124
.050
.030
.050
2595
2590
2585
2580
2575
2570
2565
Elevation
400
600
800
1000
1200
1400
1600
1800
2000
Distance

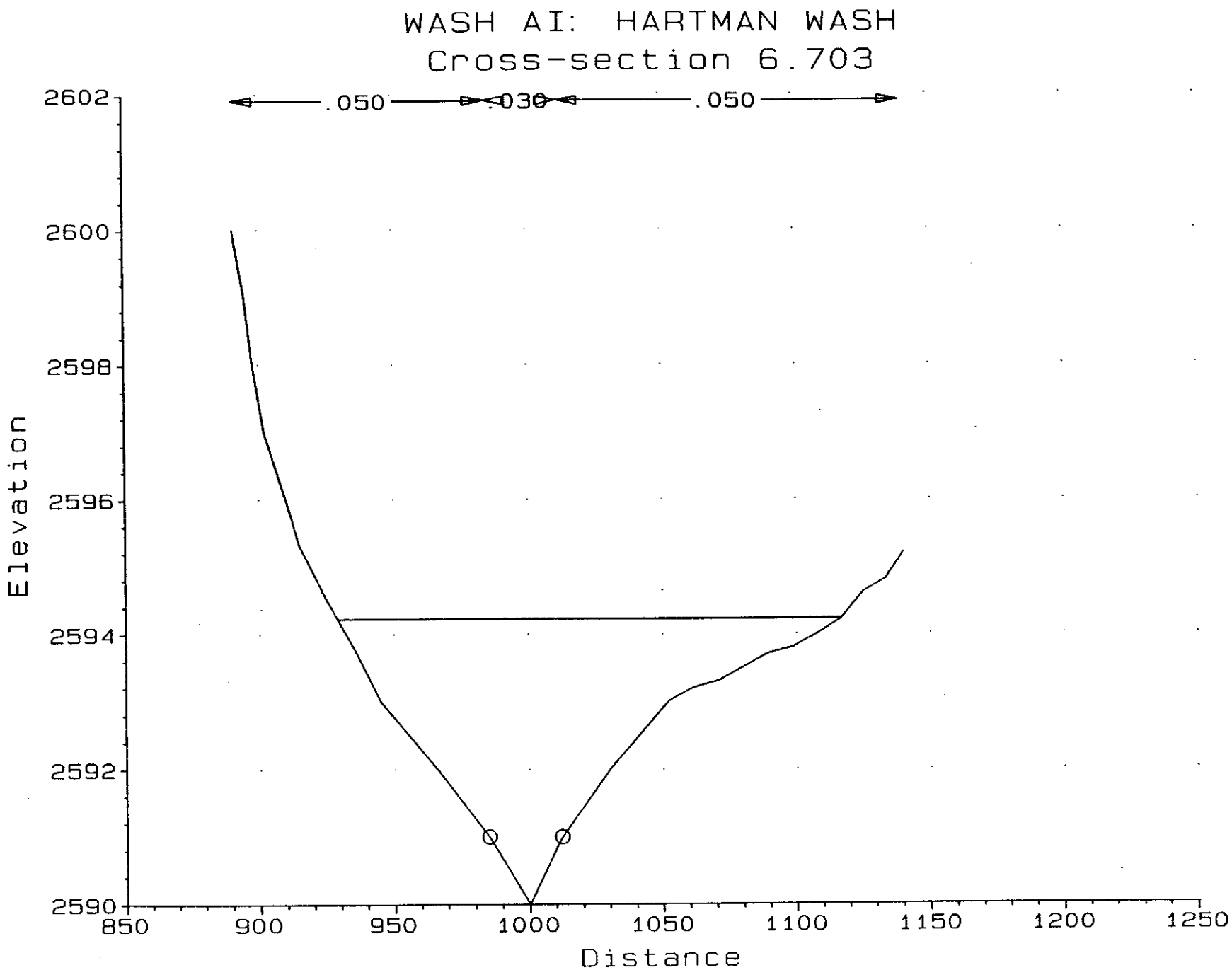

WASH AI: HARTMAN WASH
Cross-section 6.213
.050
.030
.050
2595
2590
2585
2580
2575
2570
2565
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance

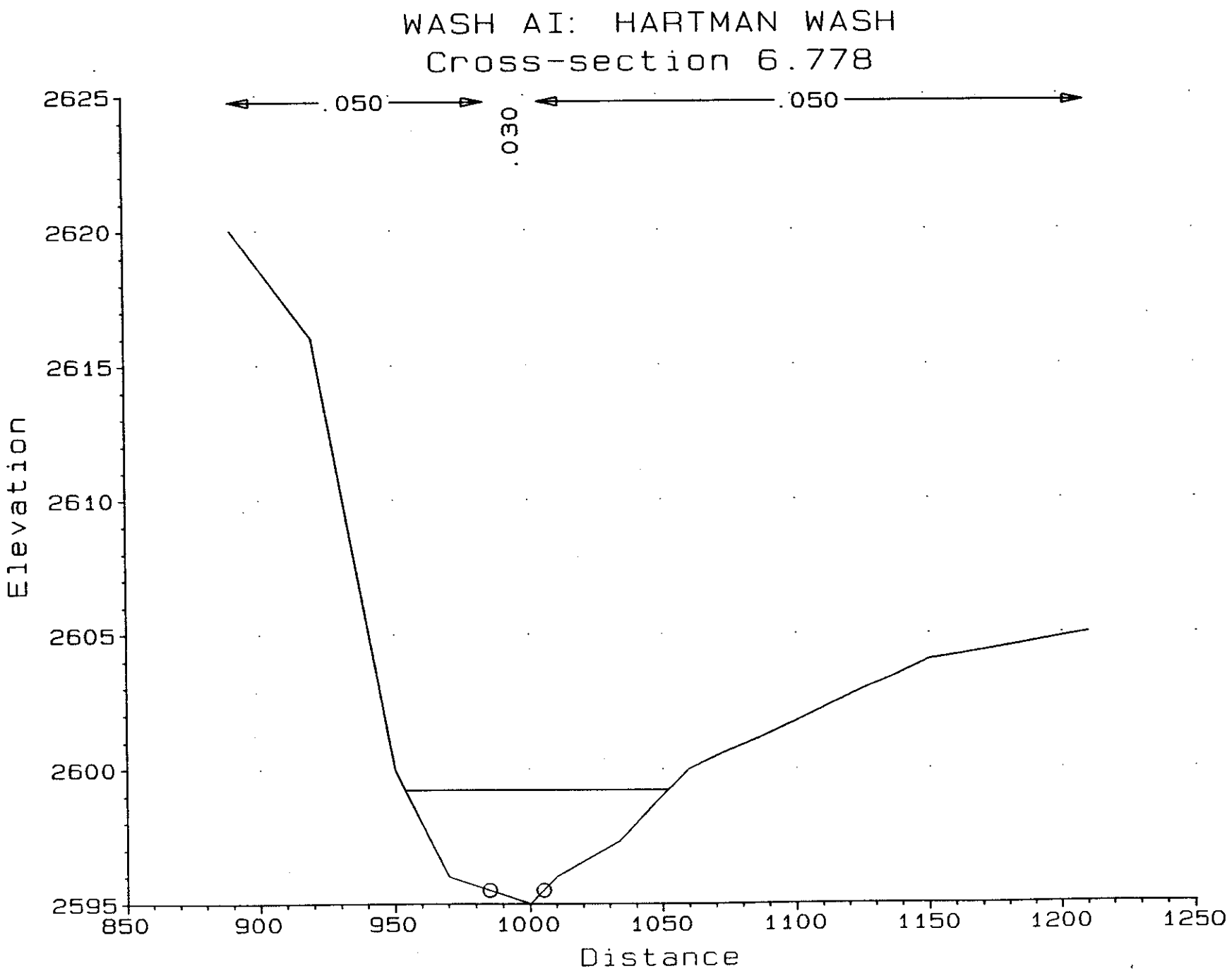

WASH AI: HARTMAN WASH
Cross-section 6.317
.050
.030
.050
2600
2595
2590
2585
2580
2575
2570
Elevation
500
600
700
800
900
1000
1100
1200
1300
Distance

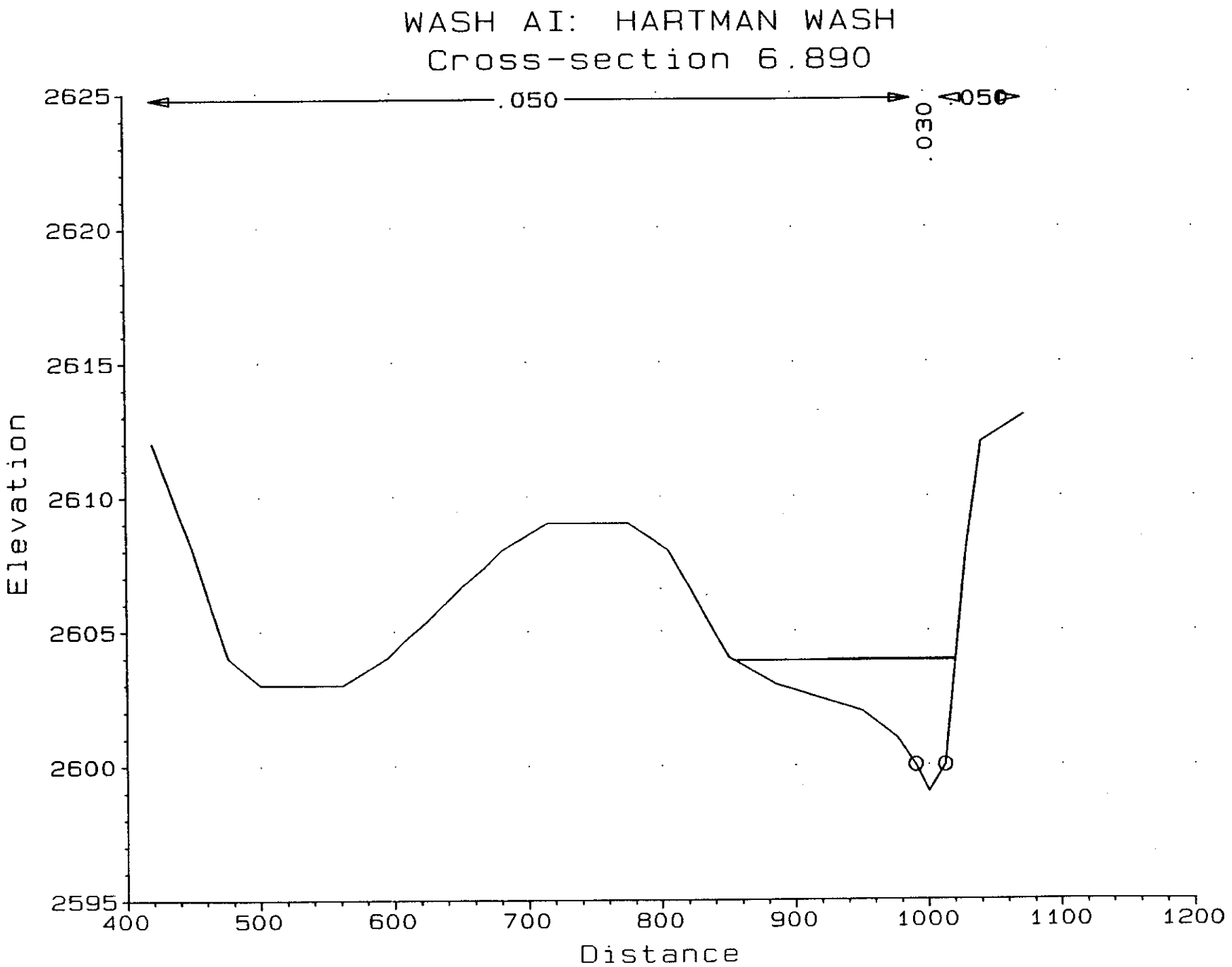

WASH AI: HARTMAN WASH
Cross-section 6.419
.050
.050
.030
2605
2600
2595
2590
2585
2580
2575
Elevation
500
600
700
800
900
1000
1100
1200
1300
Distance


WASH AI: HARTMAN WASH
Cross-section 6.508
.050
.030
.050
2610
2605
2600
2595
2590
2585
2580
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance

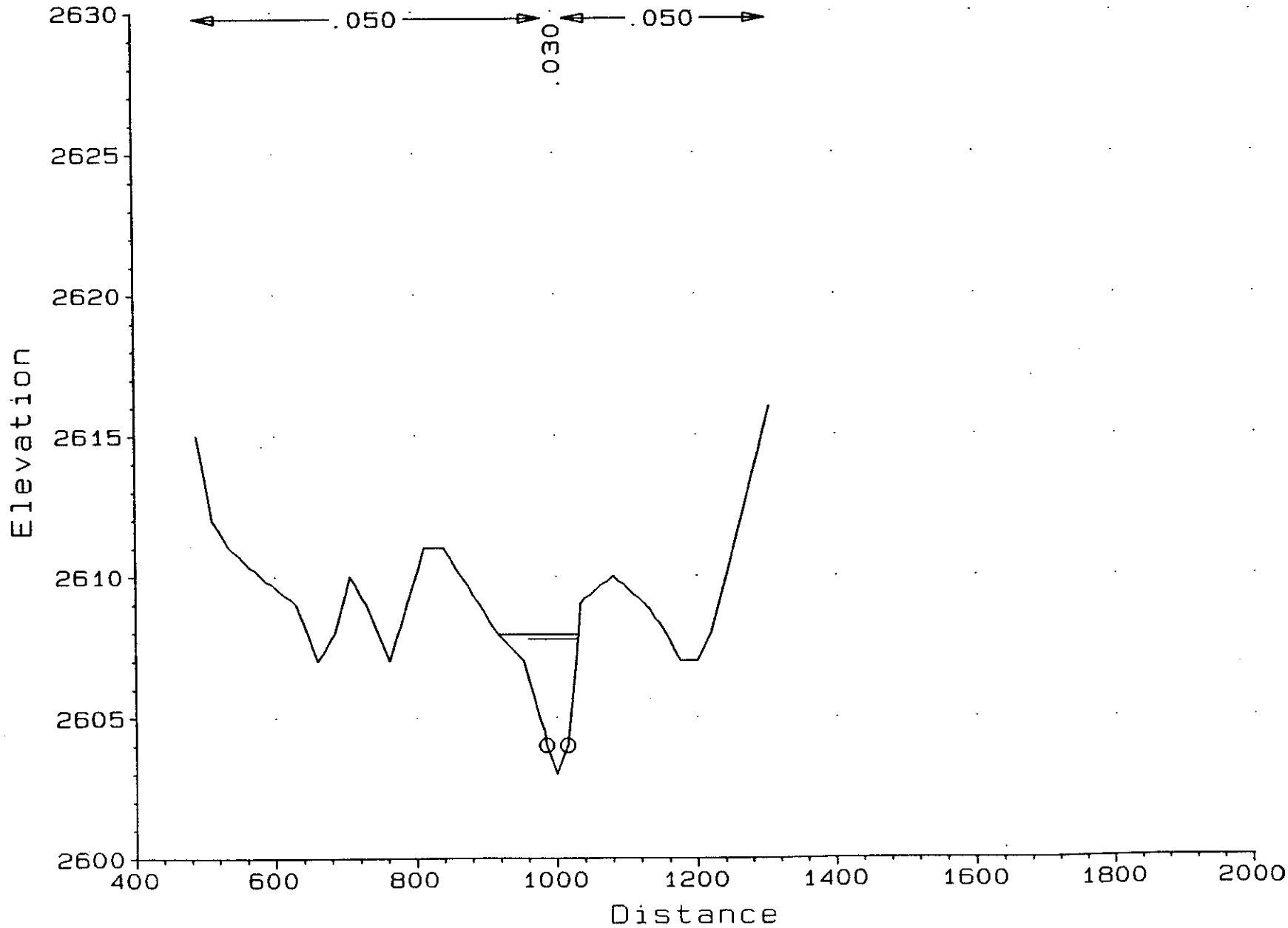

WASH AI: HARTMAN WASH
Cross-section 6.568
.050
.030
.050
2610
2605
2600
2595
2590
2585
2580
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

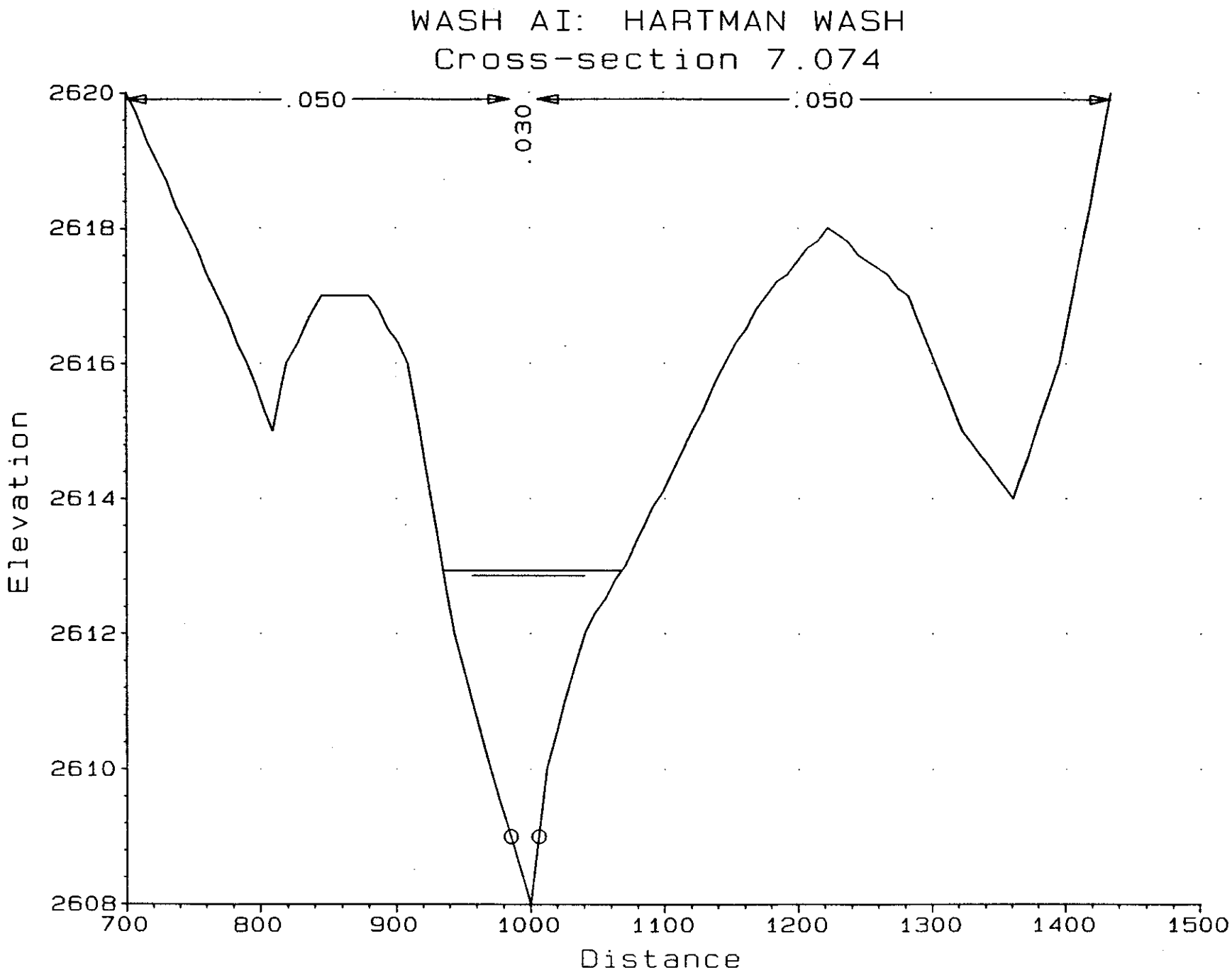

WASH AI: HARTMAN WASH
Cross-section 6.703
.050
.030
.050
2602
2600
2598
2596
2594
2592
2590
Elevation
850
900
950
1000
1050
1100
1150
1200
1250
Distance

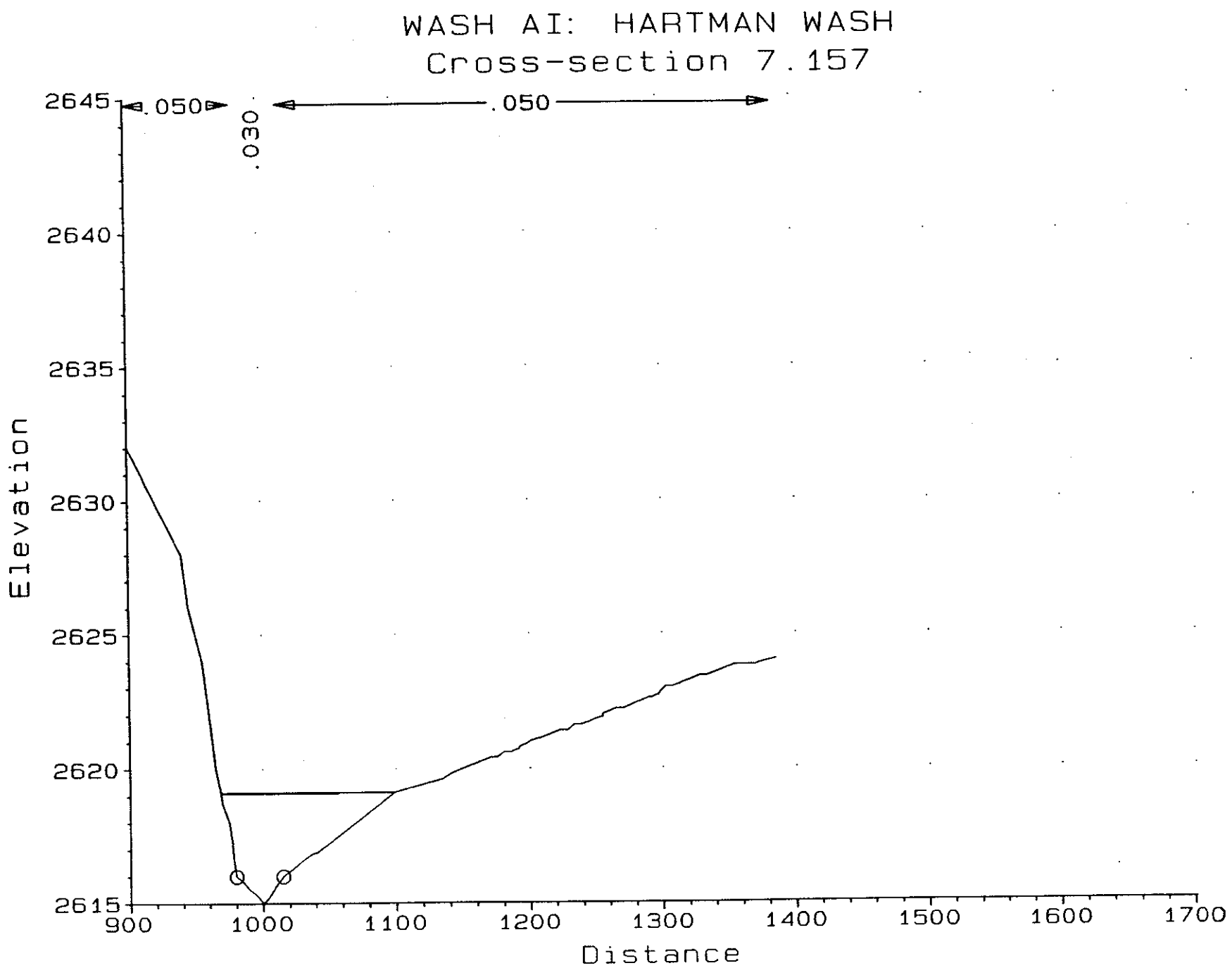

WASH AI: HARTMAN WASH
Cross-section 6.778
.050
.030
.050
2625
2620
2615
2610
2605
2600
2595
Elevation
850
900
950
1000
1050
1100
1150
1200
1250
Distance

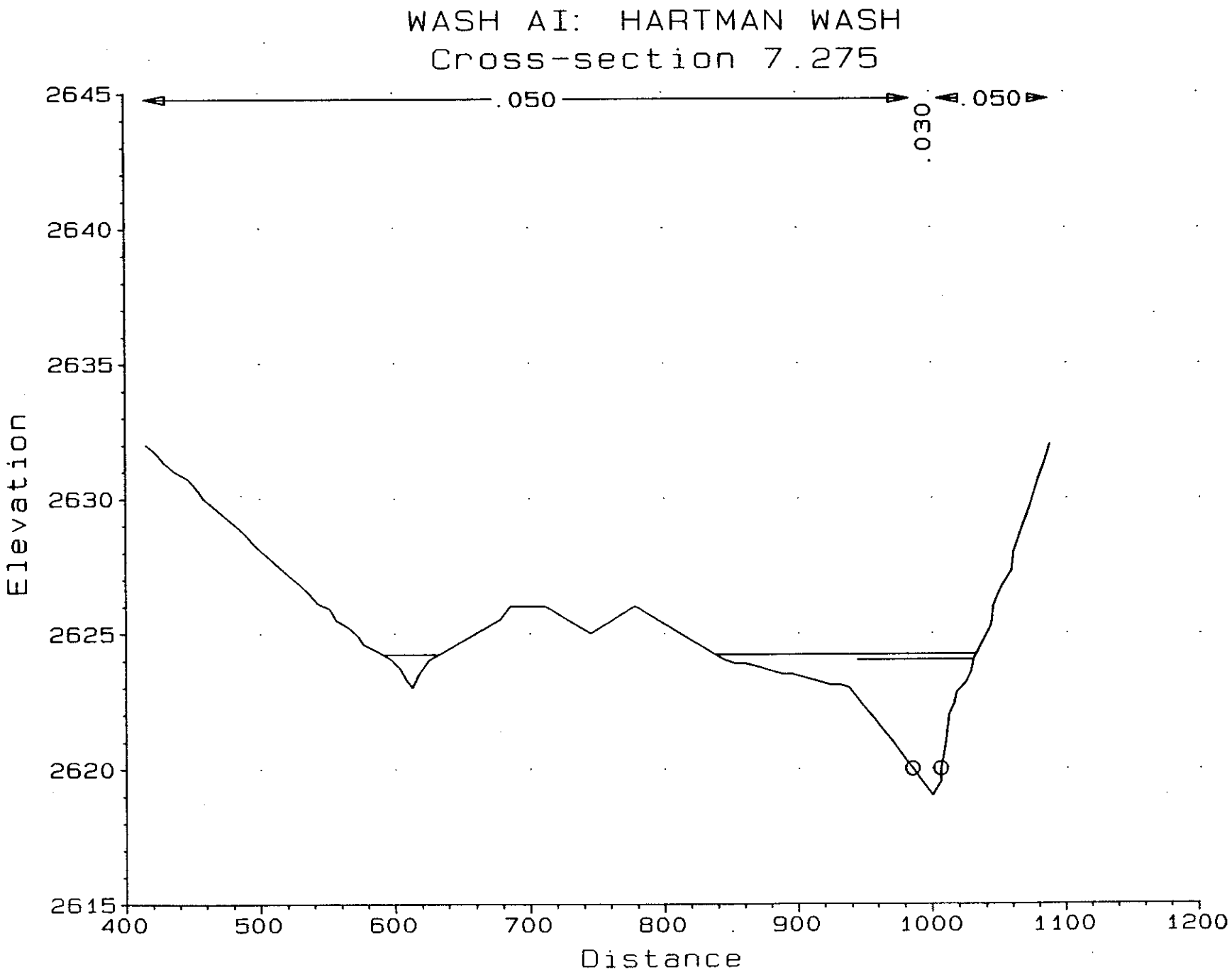

WASH AI: HARTMAN WASH
Cross-section 6.890
.050
.050
.030
2625
2620
2615
2610
2605
2600
2595
Elevation
400
500
600
700
800
900
1000
1100
1200
Distance

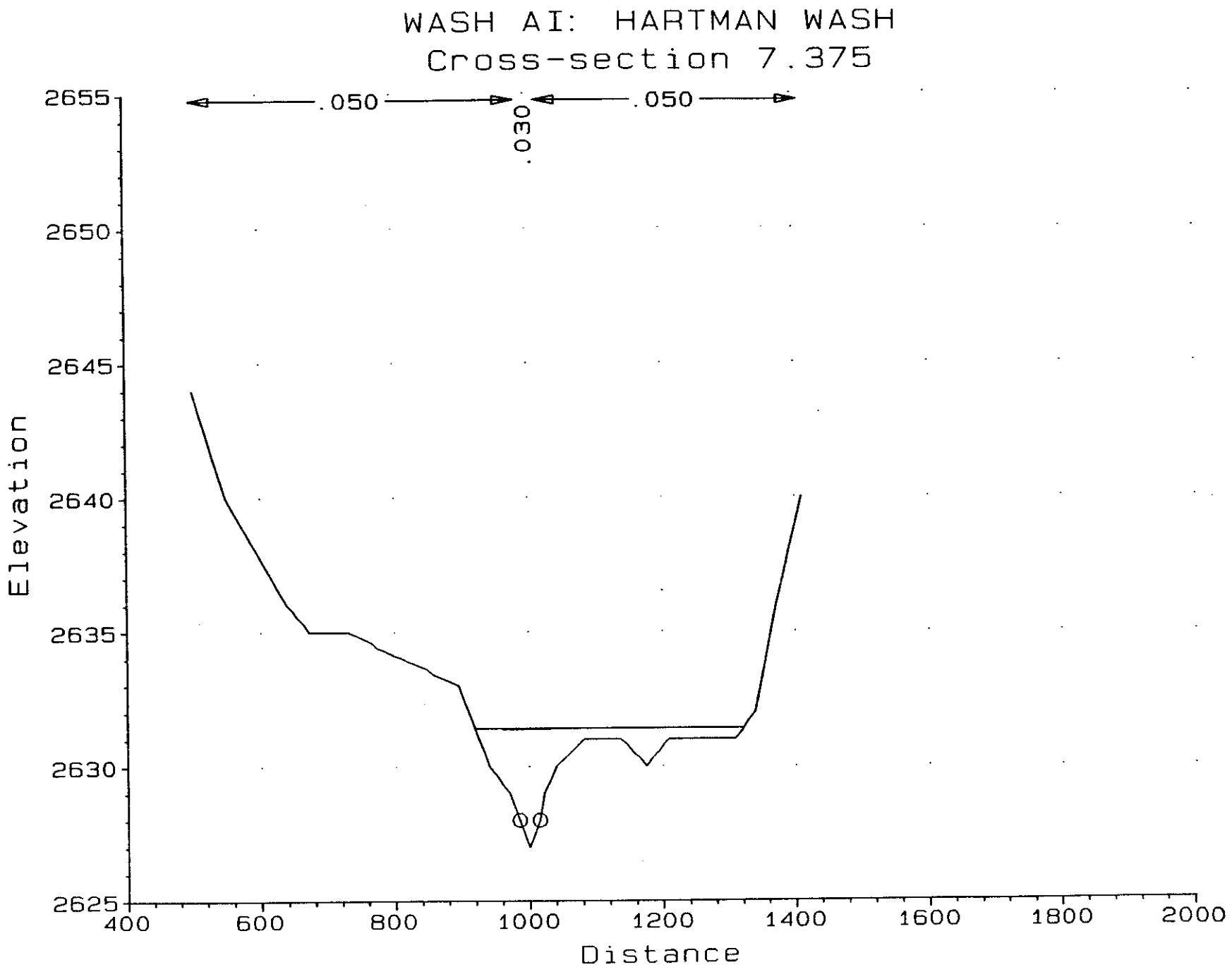
WASH AI: HARTMAN WASH
Cross-section 6.983

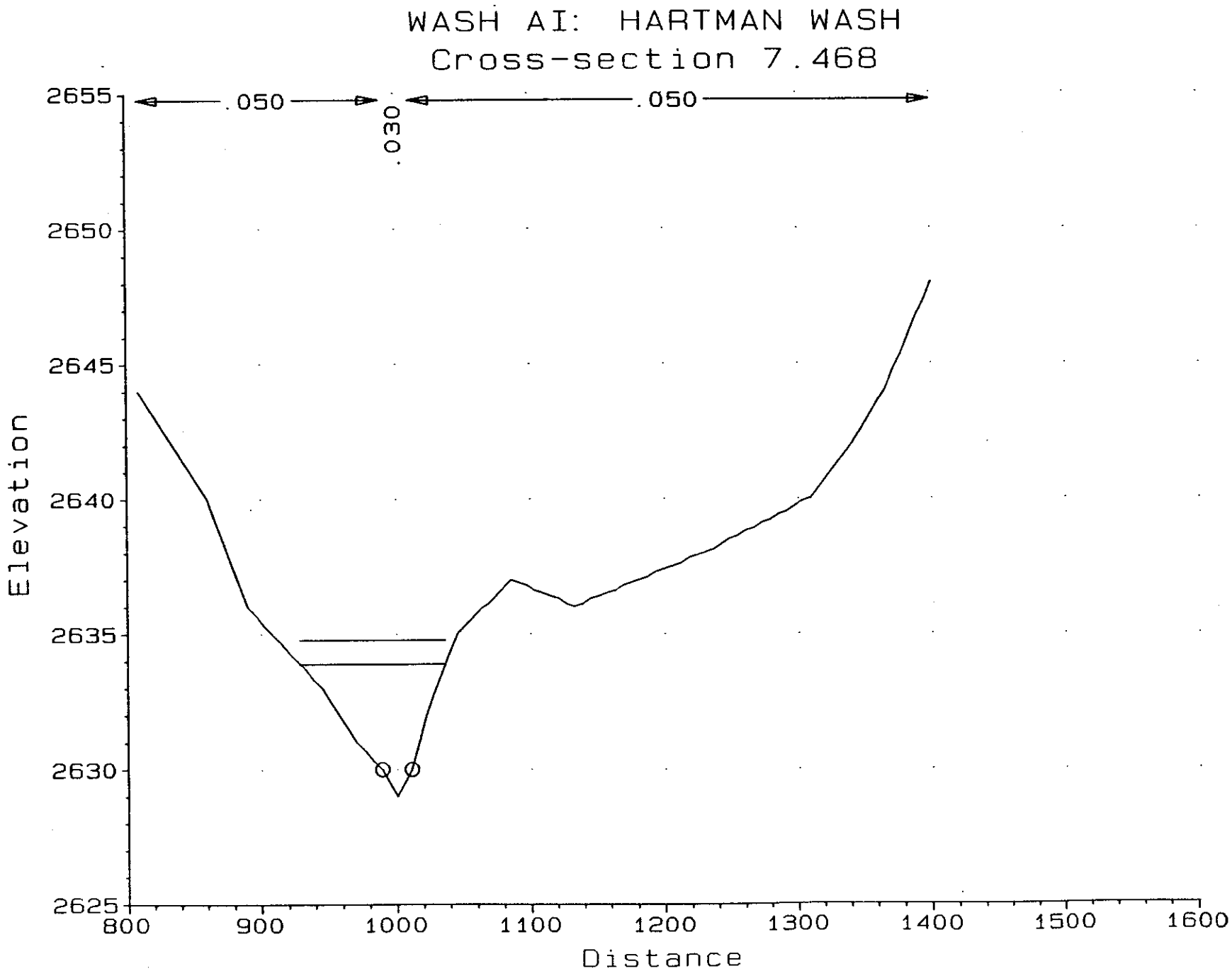


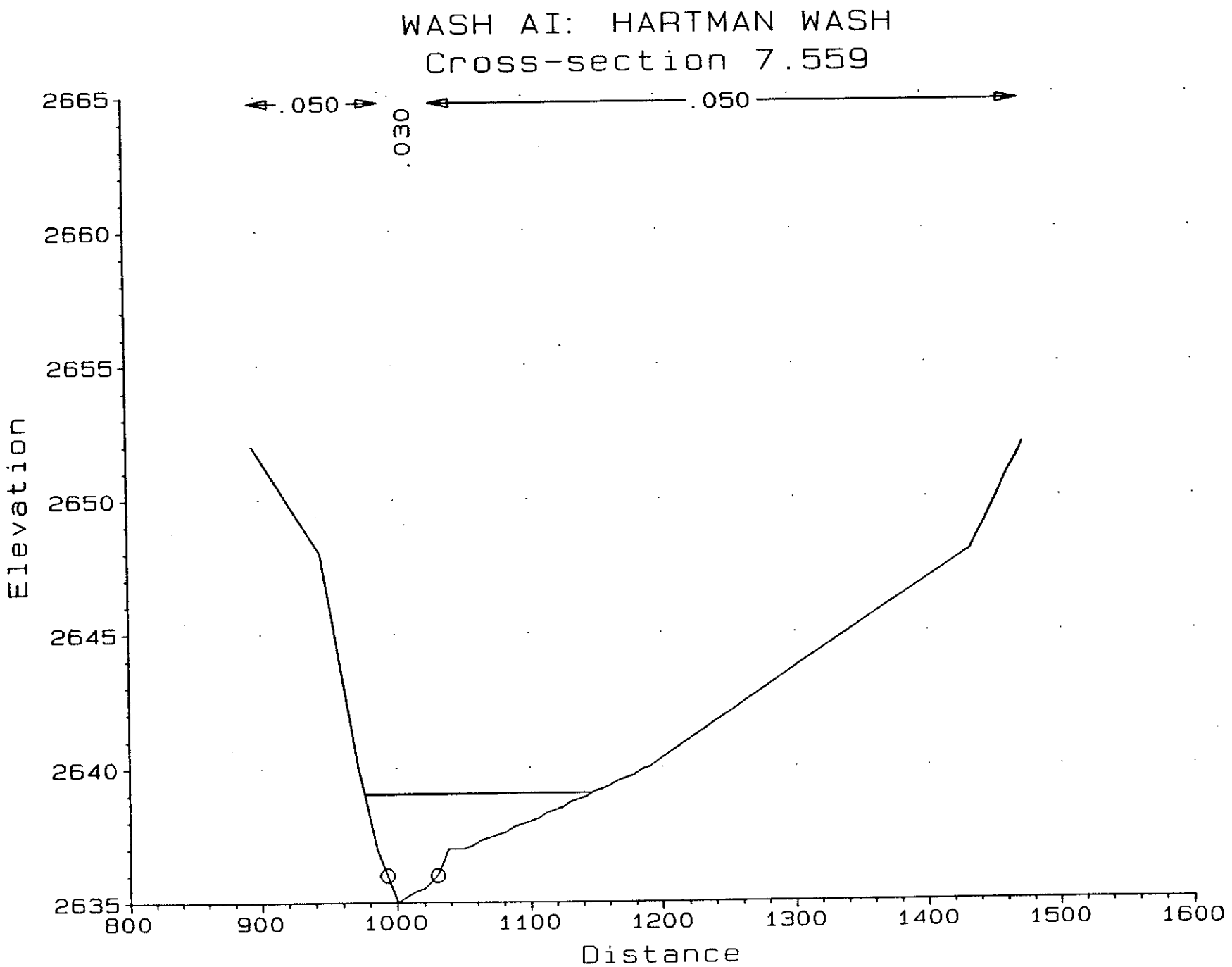

WASH AI: HARTMAN WASH
Cross-section 7.074
.050
.030
.050
2620
2618
2616
2614
2612
2610
2608
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance


WASH AI: HARTMAN WASH
Cross-section 7.157
.050
.050
.030
2645
2640
2635
2630
2625
2620
2615
Elevation
900
1000
1100
1200
1300
1400
1500
1600
1700
Distance

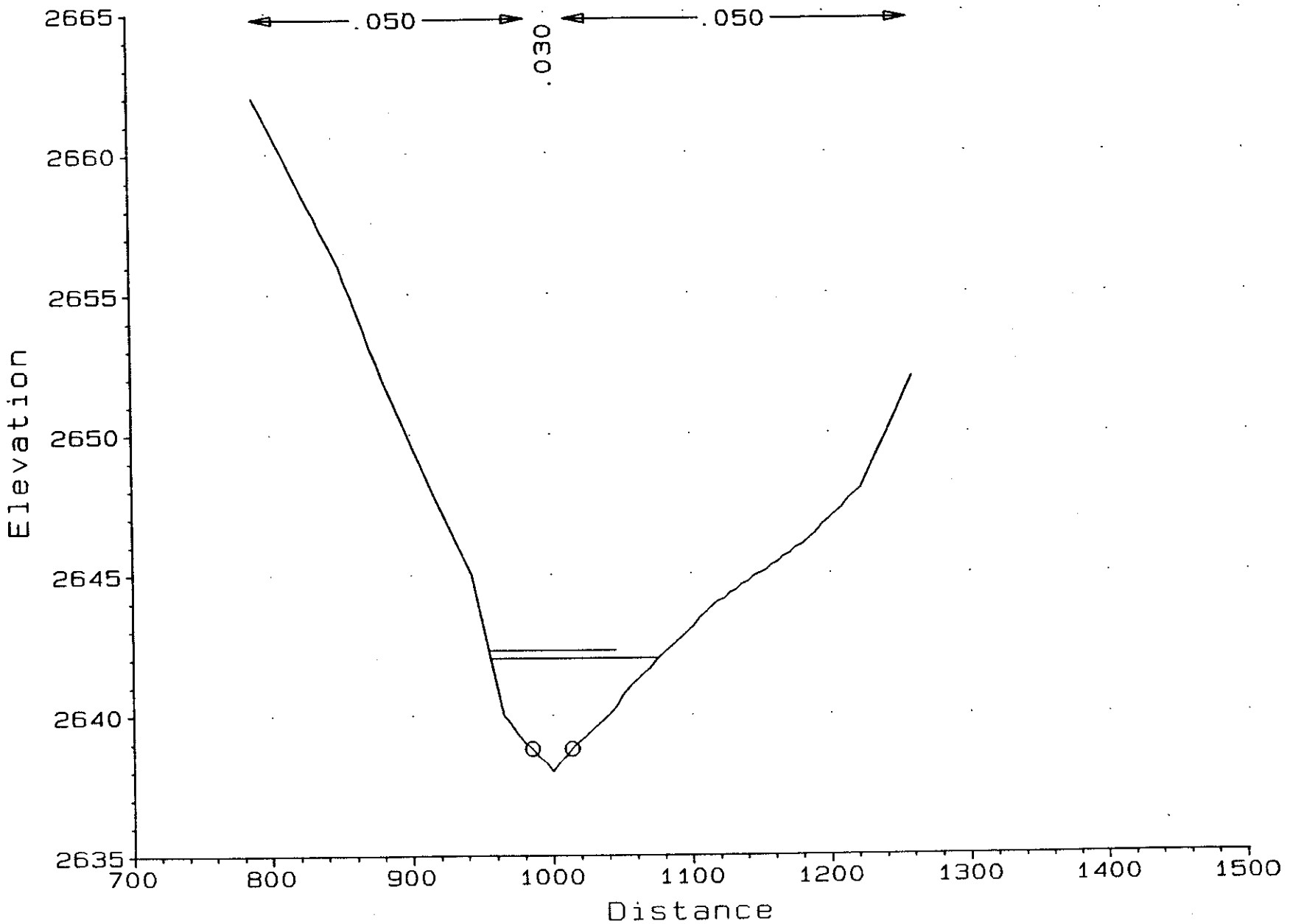

WASH AI: HARTMAN WASH
Cross-section 7.275
.050
.050
.030
2645
2640
2635
2630
2625
2620
2615
Elevation
400
500
600
700
800
900
1000
1100
1200
Distance

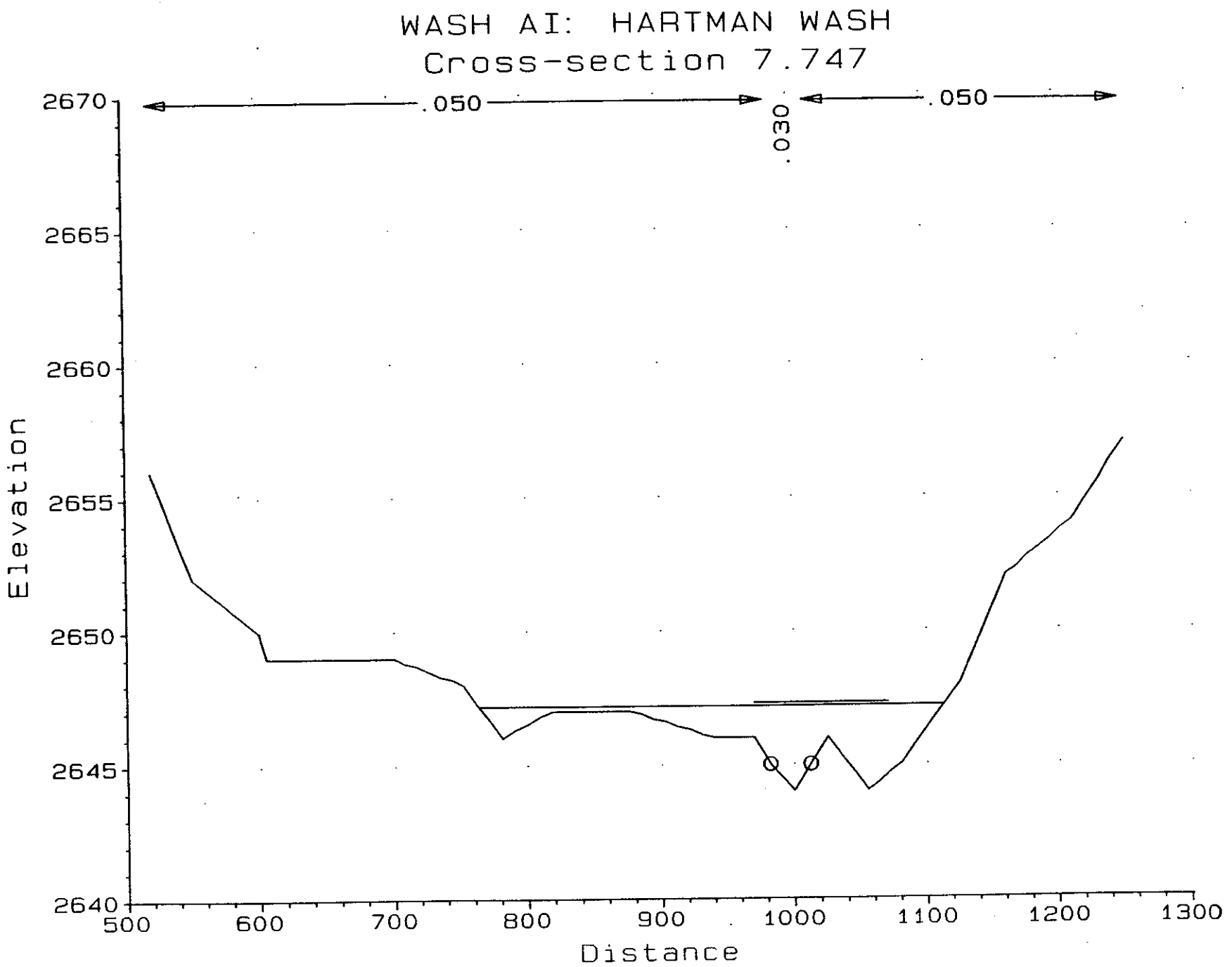

WASH AI: HARTMAN WASH
Cross-section 7.375
.050
.030
.050
2655
2650
2645
2640
2635
2630
2625
Elevation
400
600
800
1000
1200
1400
1600
1800
2000
Distance


WASH AI: HARTMAN WASH
Cross-section 7.468
.050
.030
.050
2655
2650
2645
2640
2635
2630
2625
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

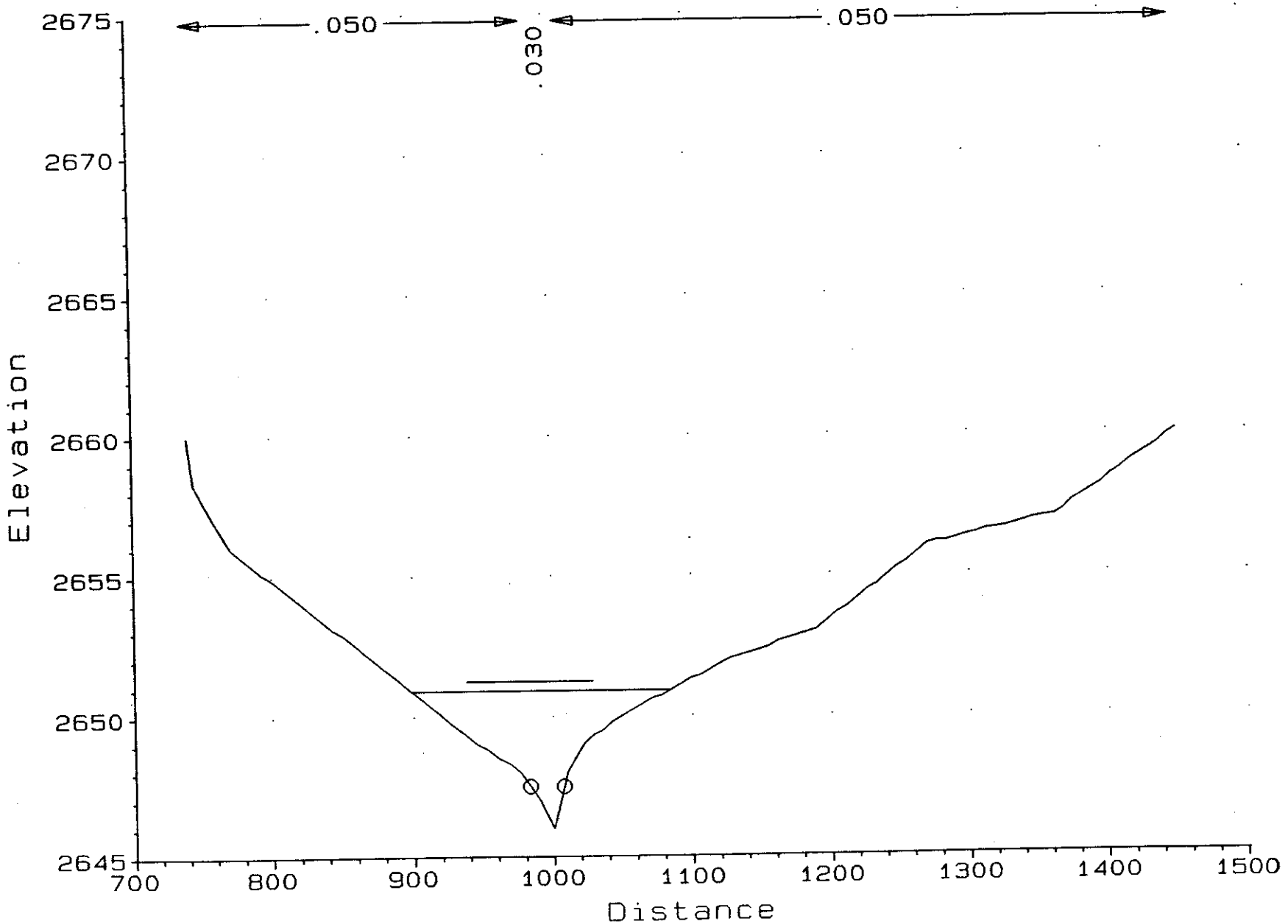

WASH AI: HARTMAN WASH
Cross-section 7.559
.050
.030
.050
2665
2660
2655
2650
2645
2640
2635
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

WASH AI: HARTMAN WASH
Cross-section 7.641

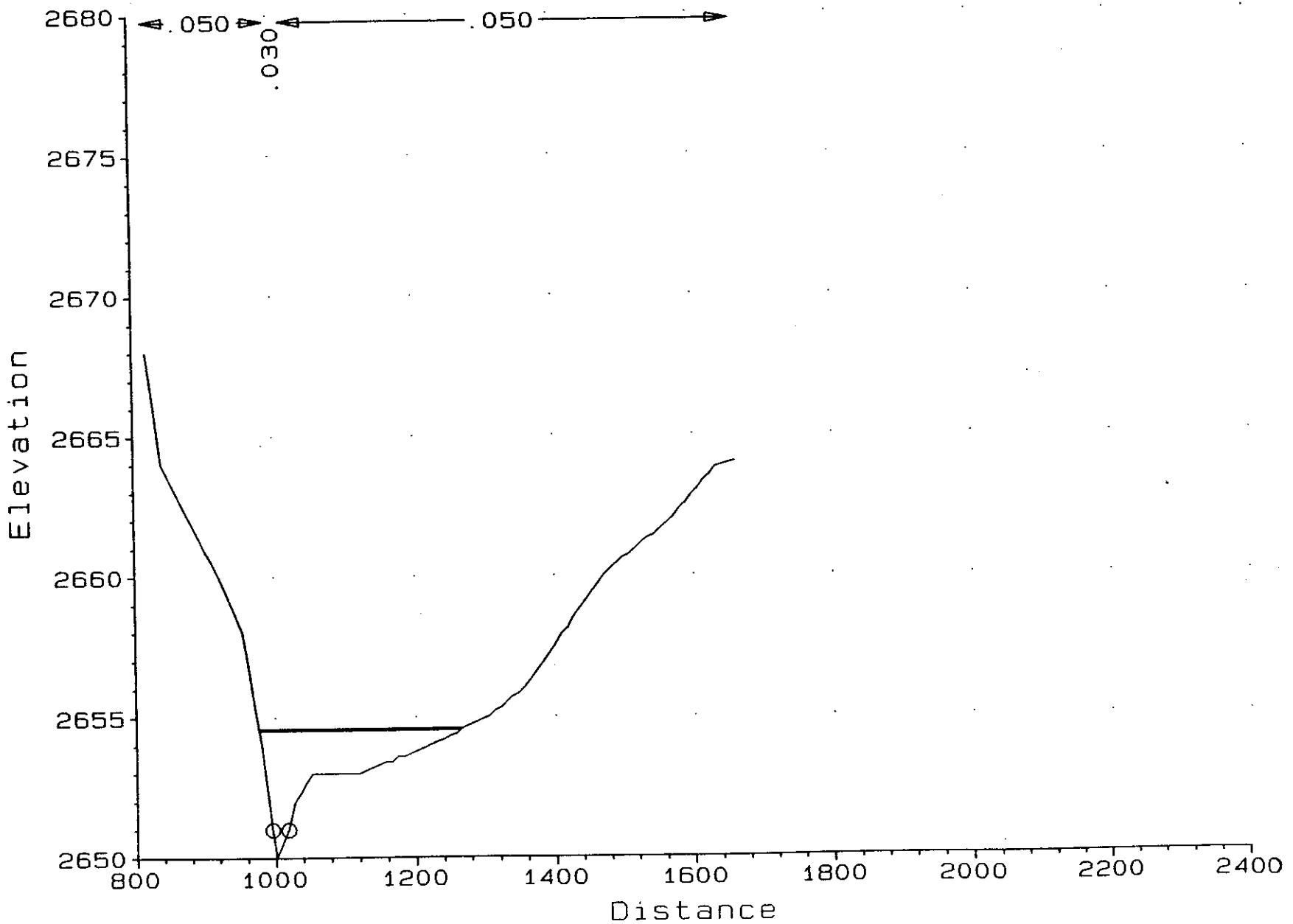



WASH AI: HARTMAN WASH
Cross-section 7.747
.050
.030
.050
2670
2665
2660
2655
2650
2645
2640
Elevation
500
600
700
800
900
1000
1100
1200
1300
Distance

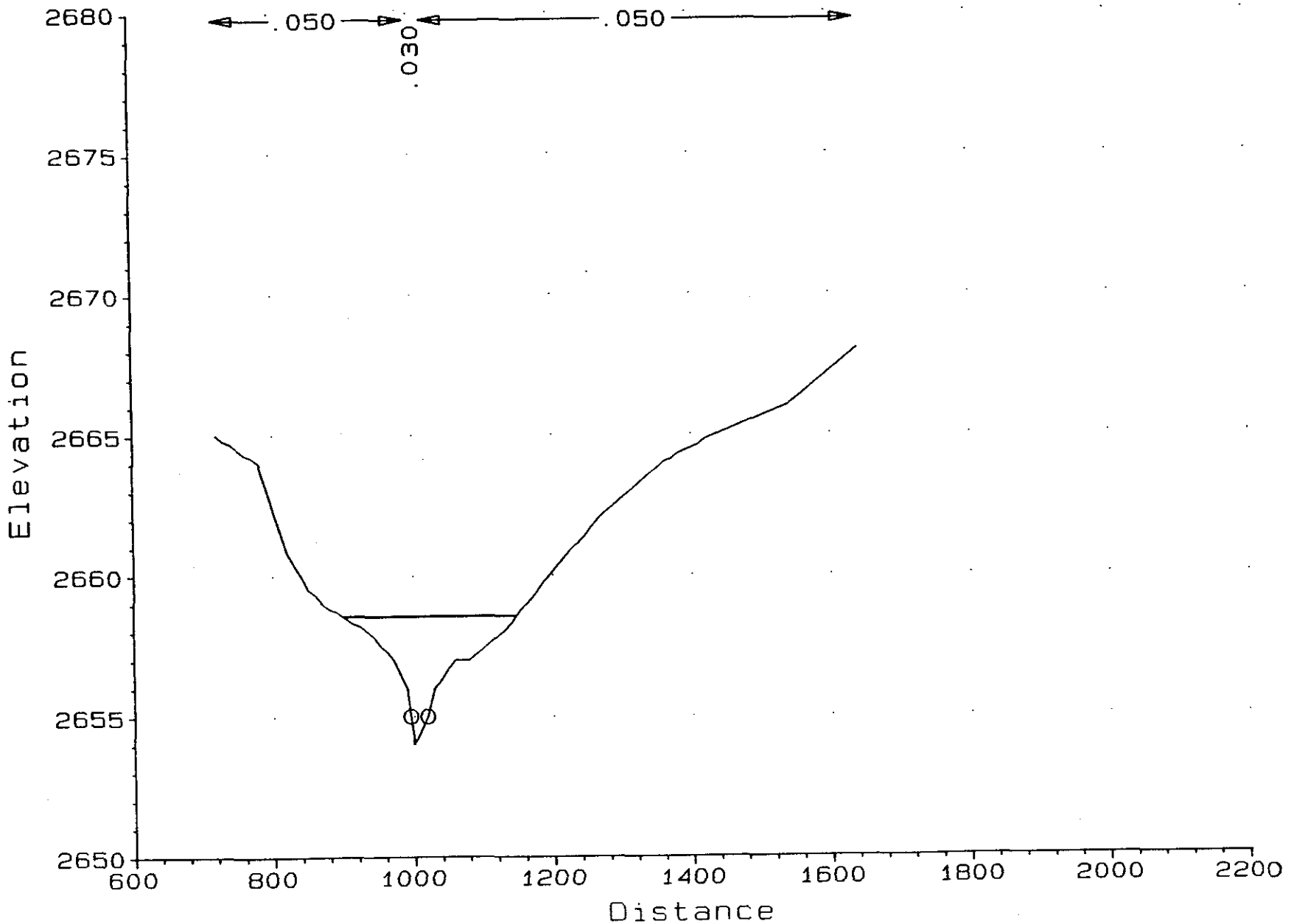
WASH AI: HARTMAN WASH
Cross-section 7.834

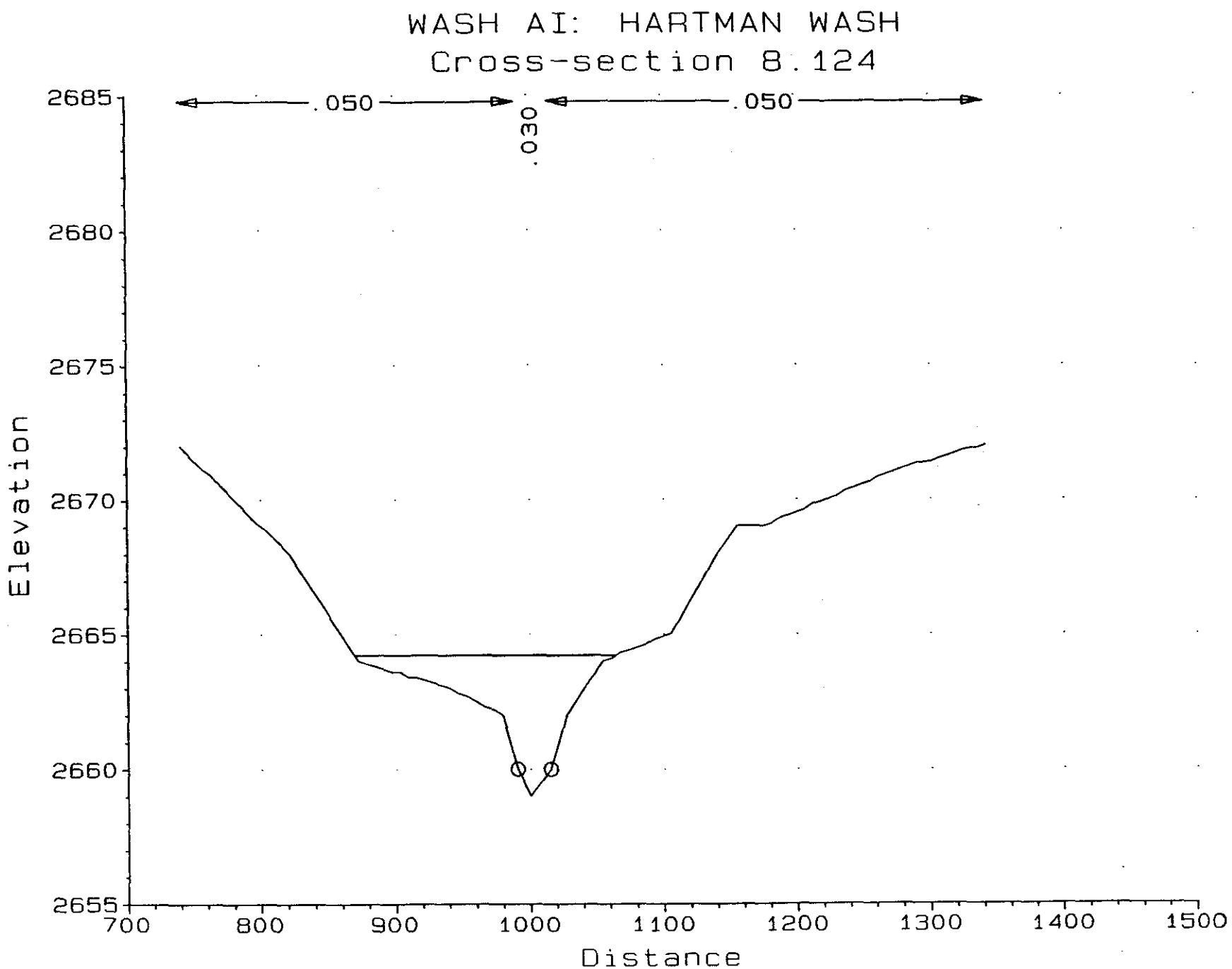


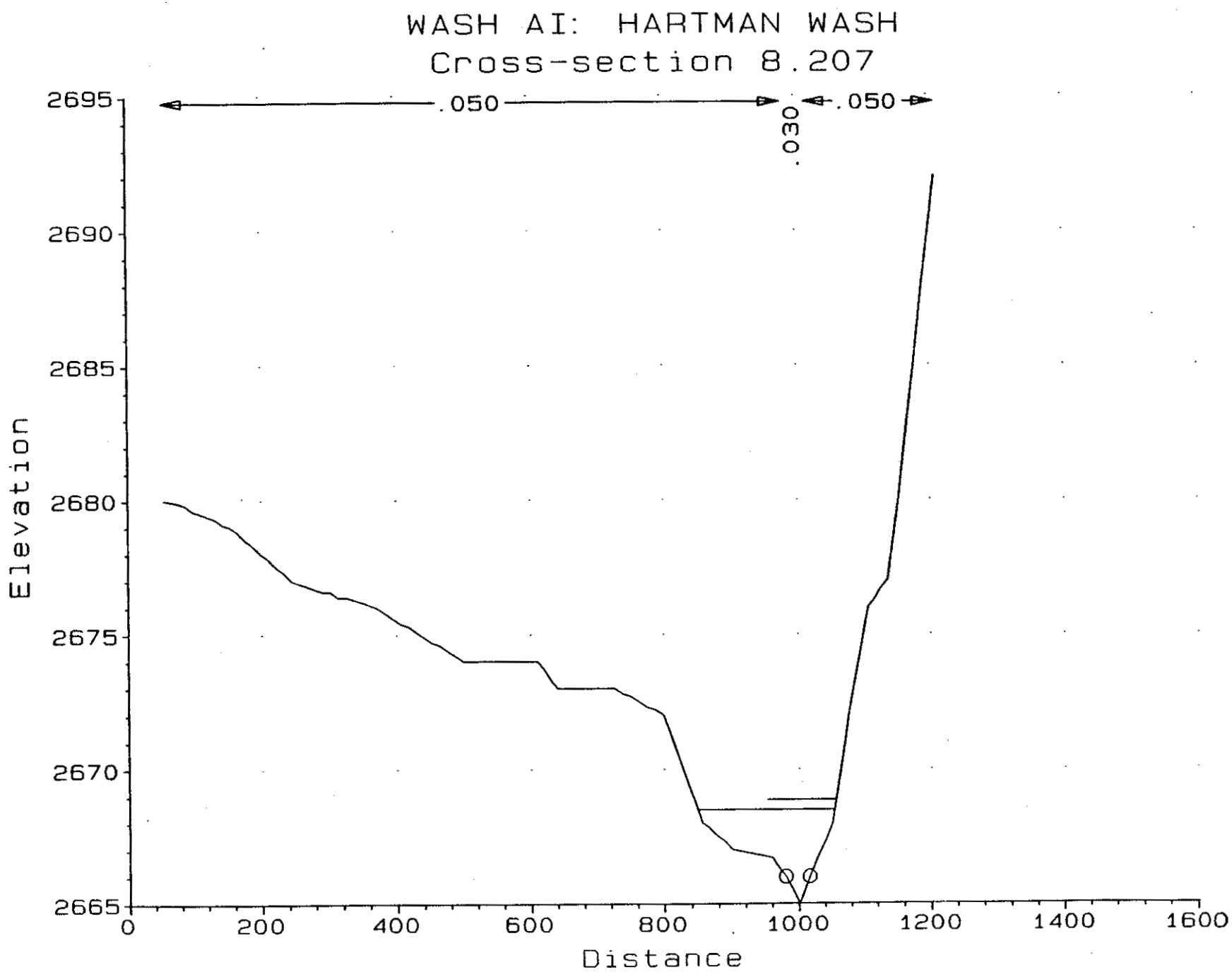
WASH AI: HARTMAN WASH
Cross-section 7.908



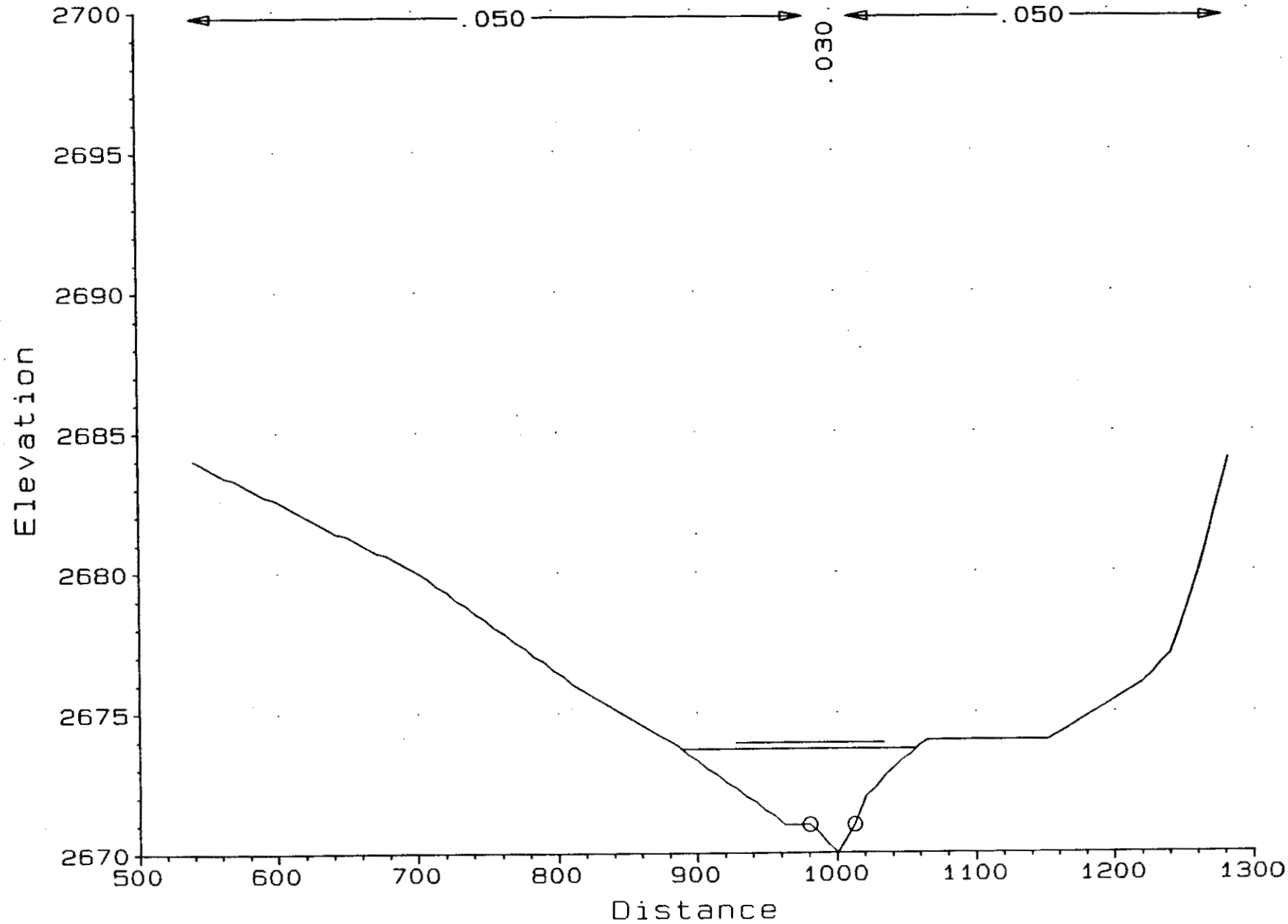
WASH AI: HARTMAN WASH
Cross-section 8.012



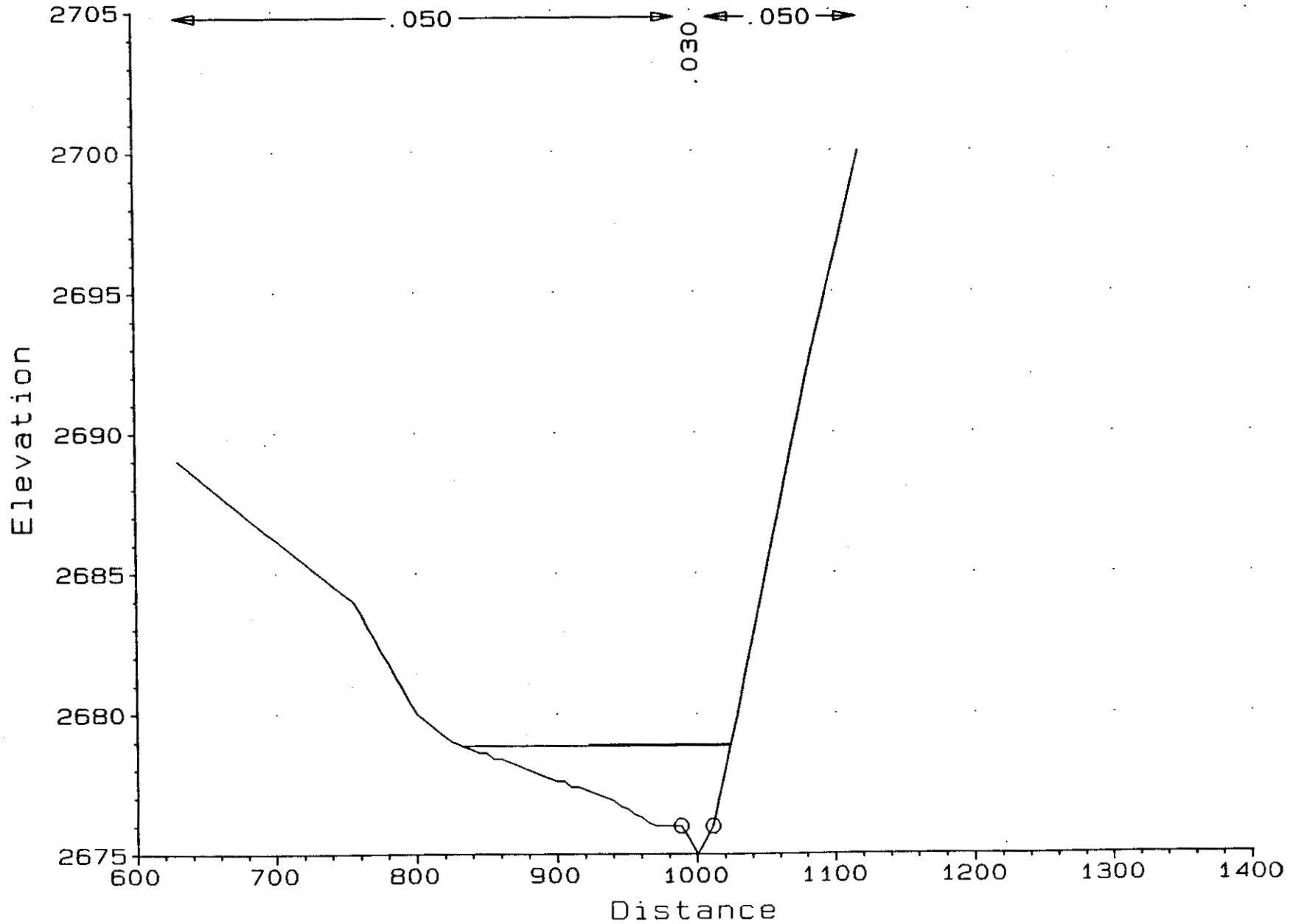

WASH AI: HARTMAN WASH
Cross-section 8.124
.050
.030
.050
2685
2680
2675
2670
2665
2660
2655
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

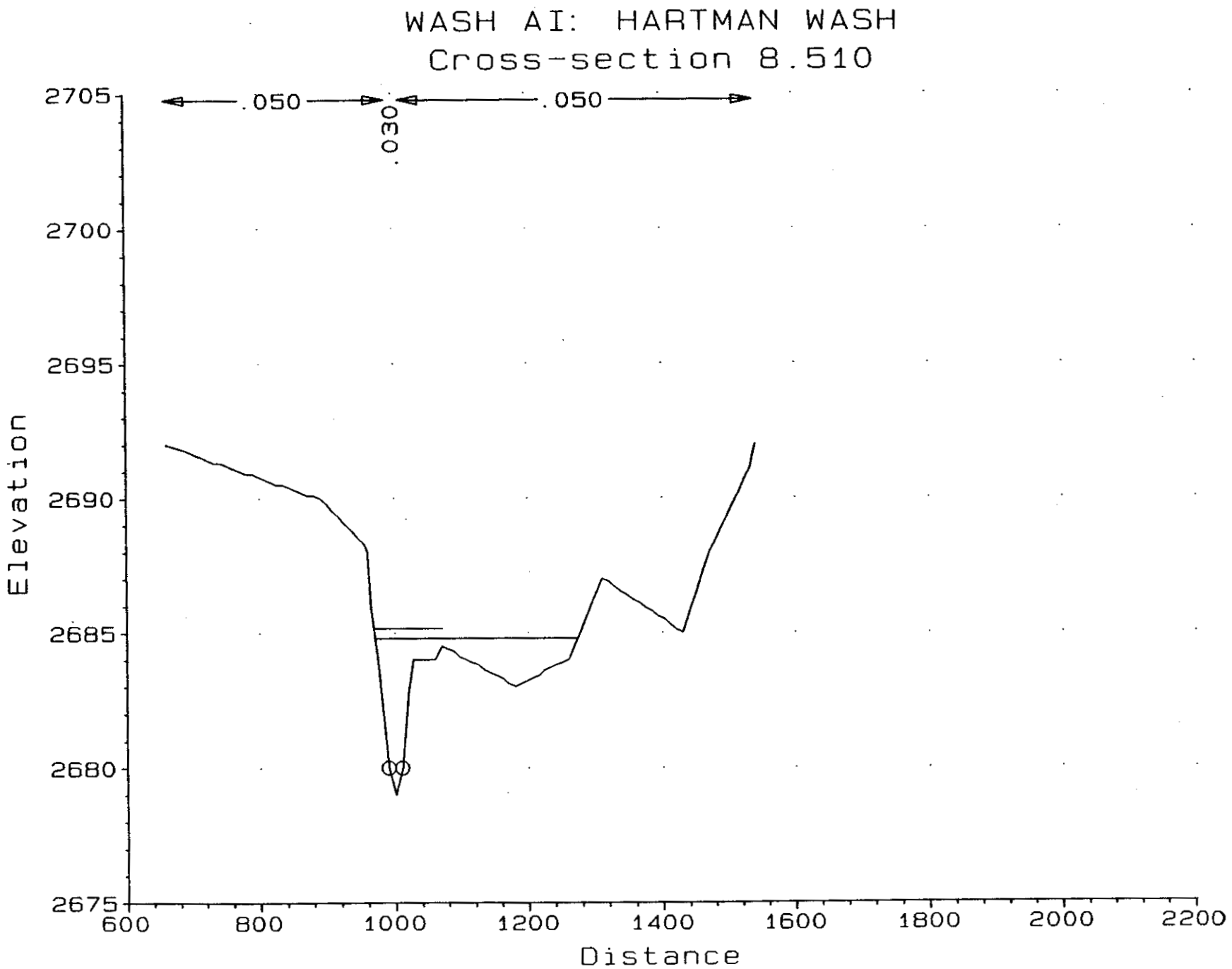

WASH AI: HARTMAN WASH
Cross-section 8.207
.050
.030
.050
2695
2690
2685
2680
2675
2670
2665
Elevation
0
200
400
600
800
1000
1200
1400
1600
Distance

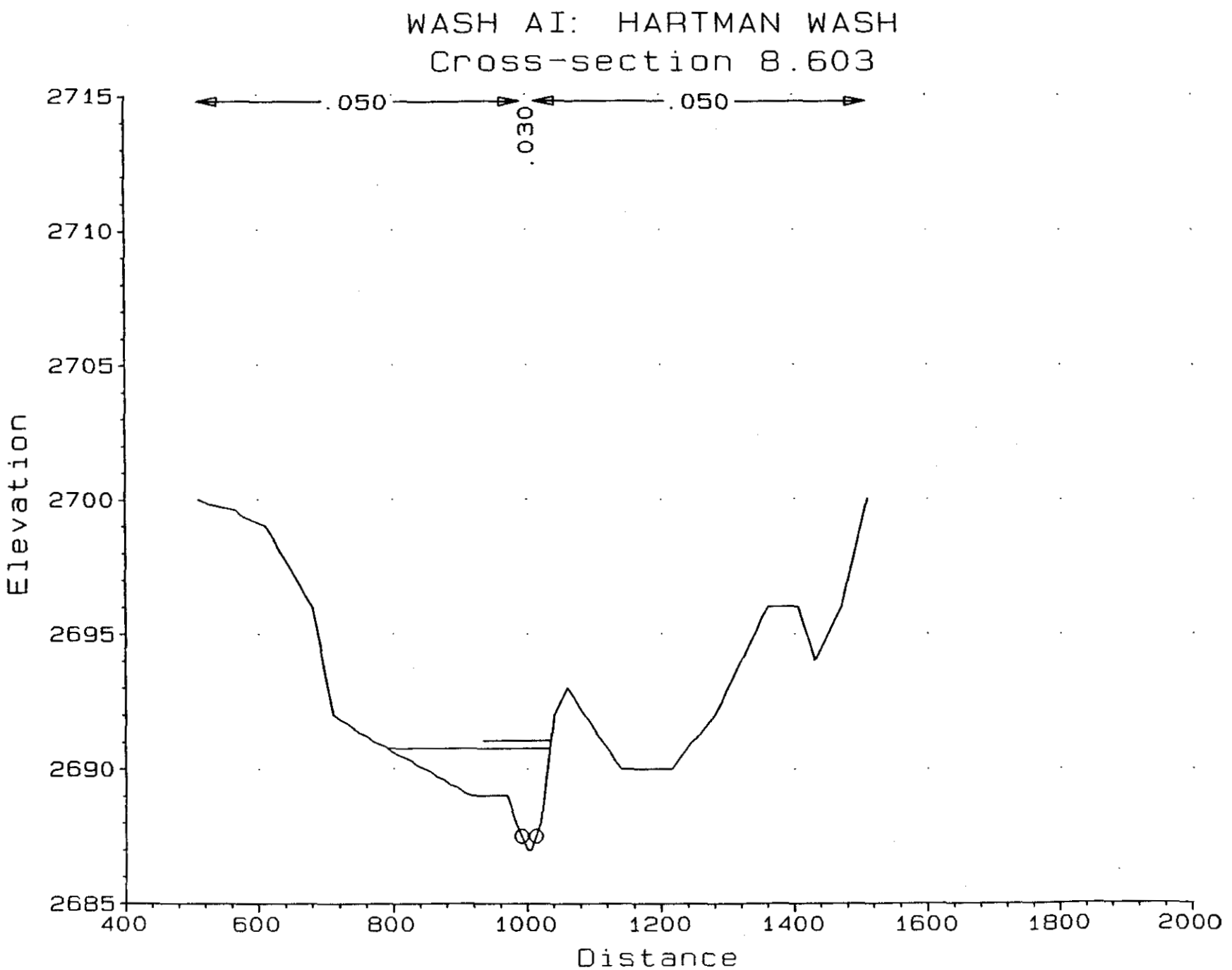
WASH AI: HARTMAN WASH
Cross-section 8.317

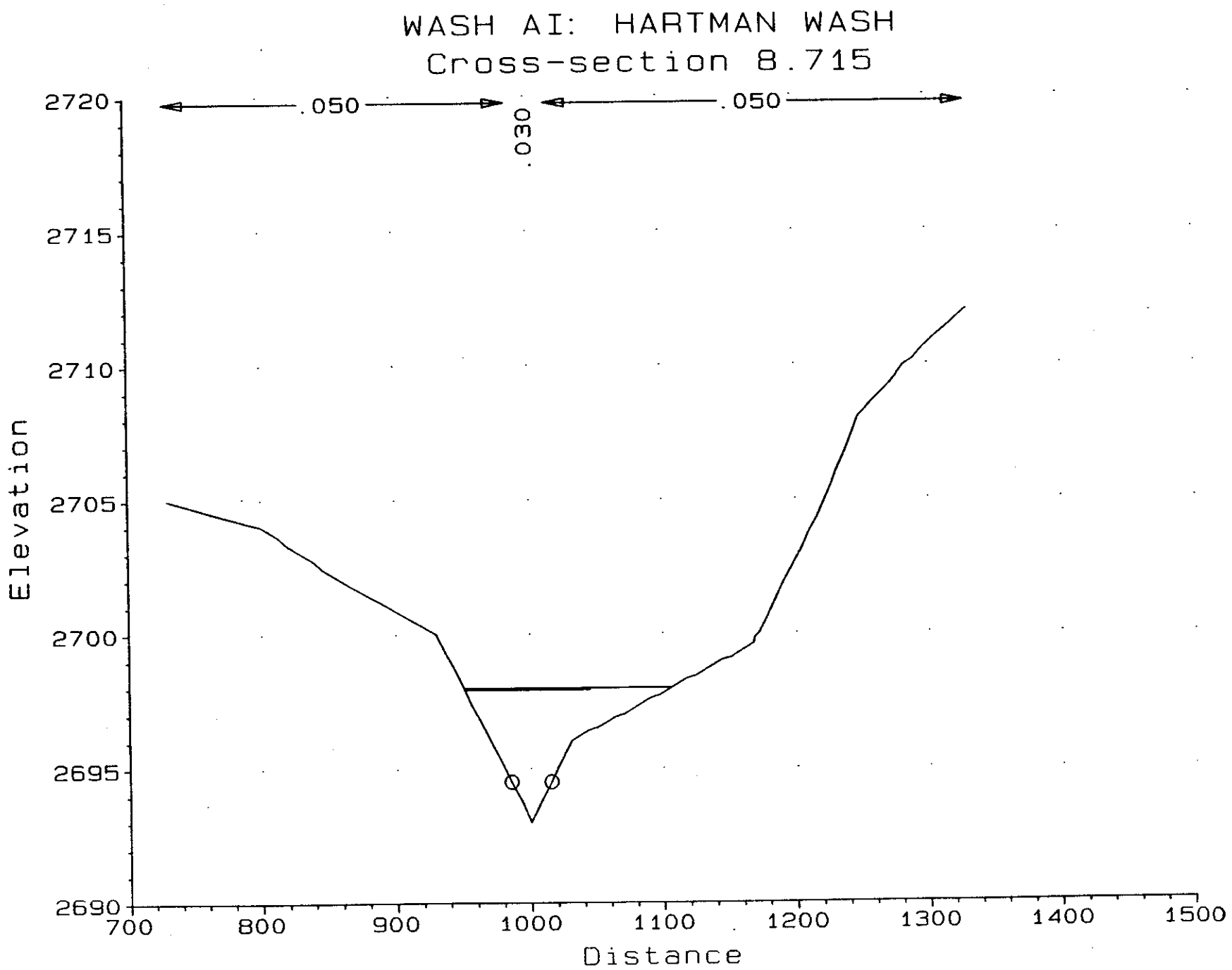


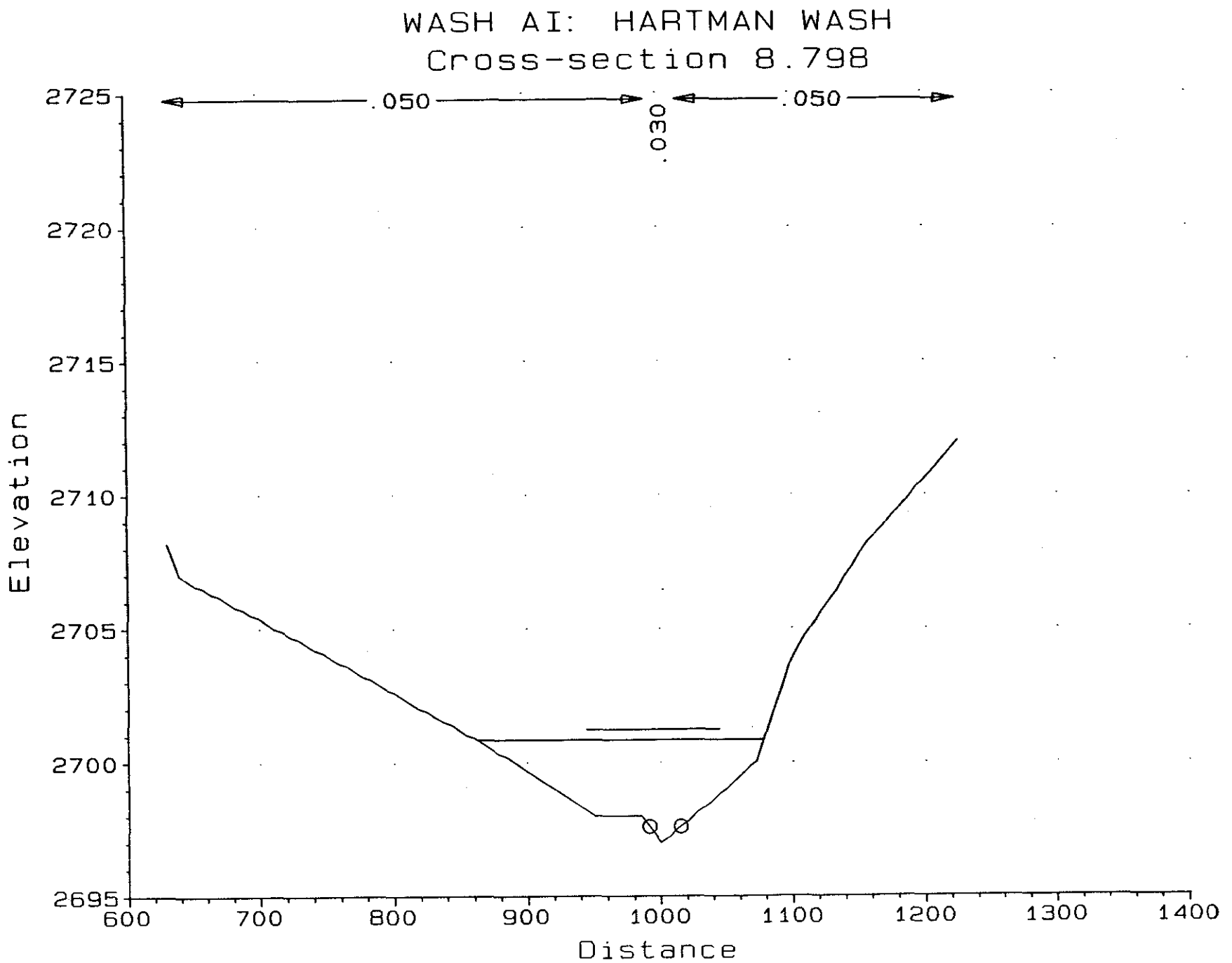
WASH AI: HARTMAN WASH
Cross-section 8.408

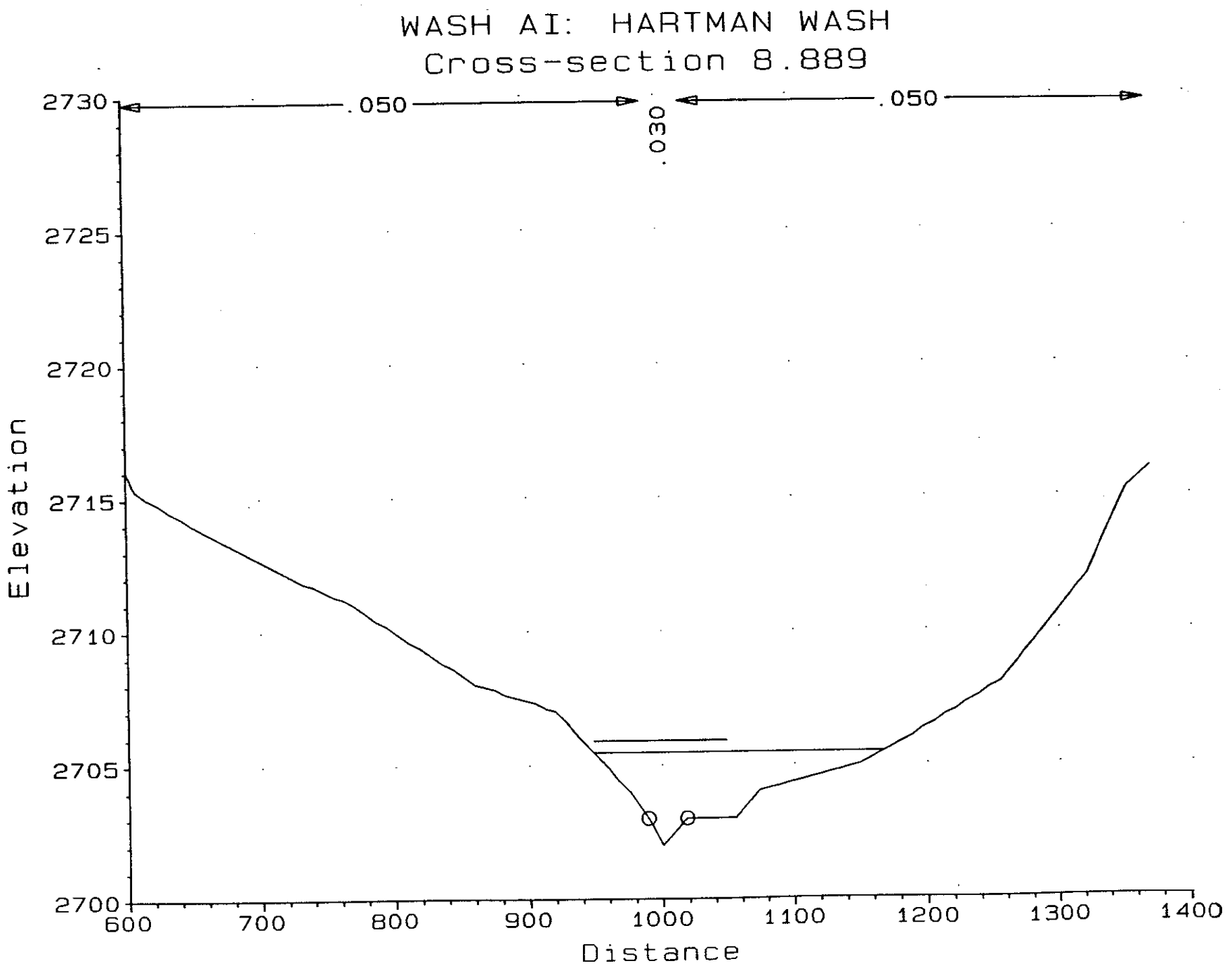


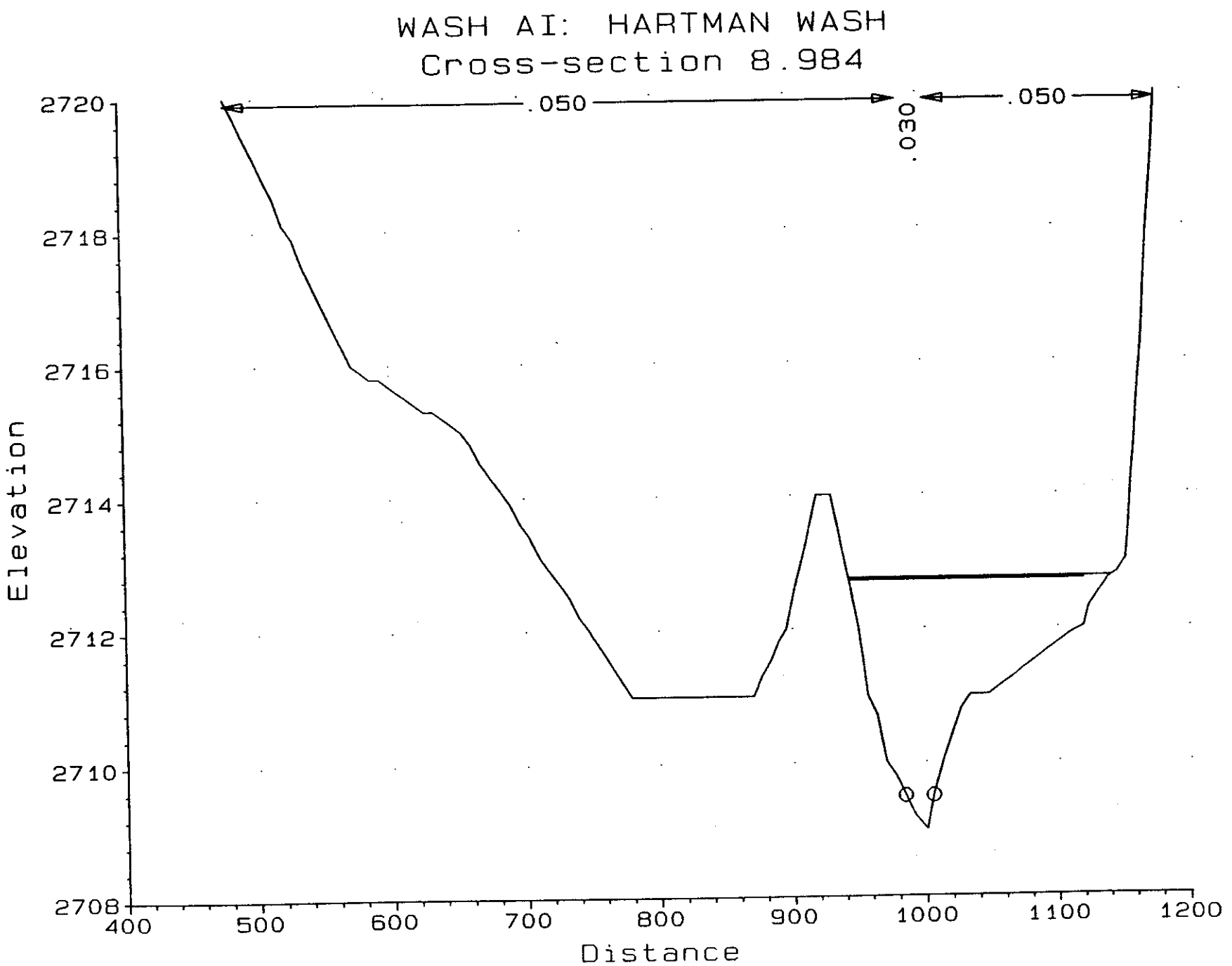

WASH AI: HARTMAN WASH
Cross-section 8.510
.050
.030
.050
2705
2700
2695
2690
2685
2680
2675
Elevation
600
800
1000
1200
1400
1600
1800
2000
2200
Distance


WASH AI: HARTMAN WASH
Cross-section 8.603
.050
.030
.050
2715
2710
2705
2700
2695
2690
2685
Elevation
400
600
800
1000
1200
1400
1600
1800
2000
Distance

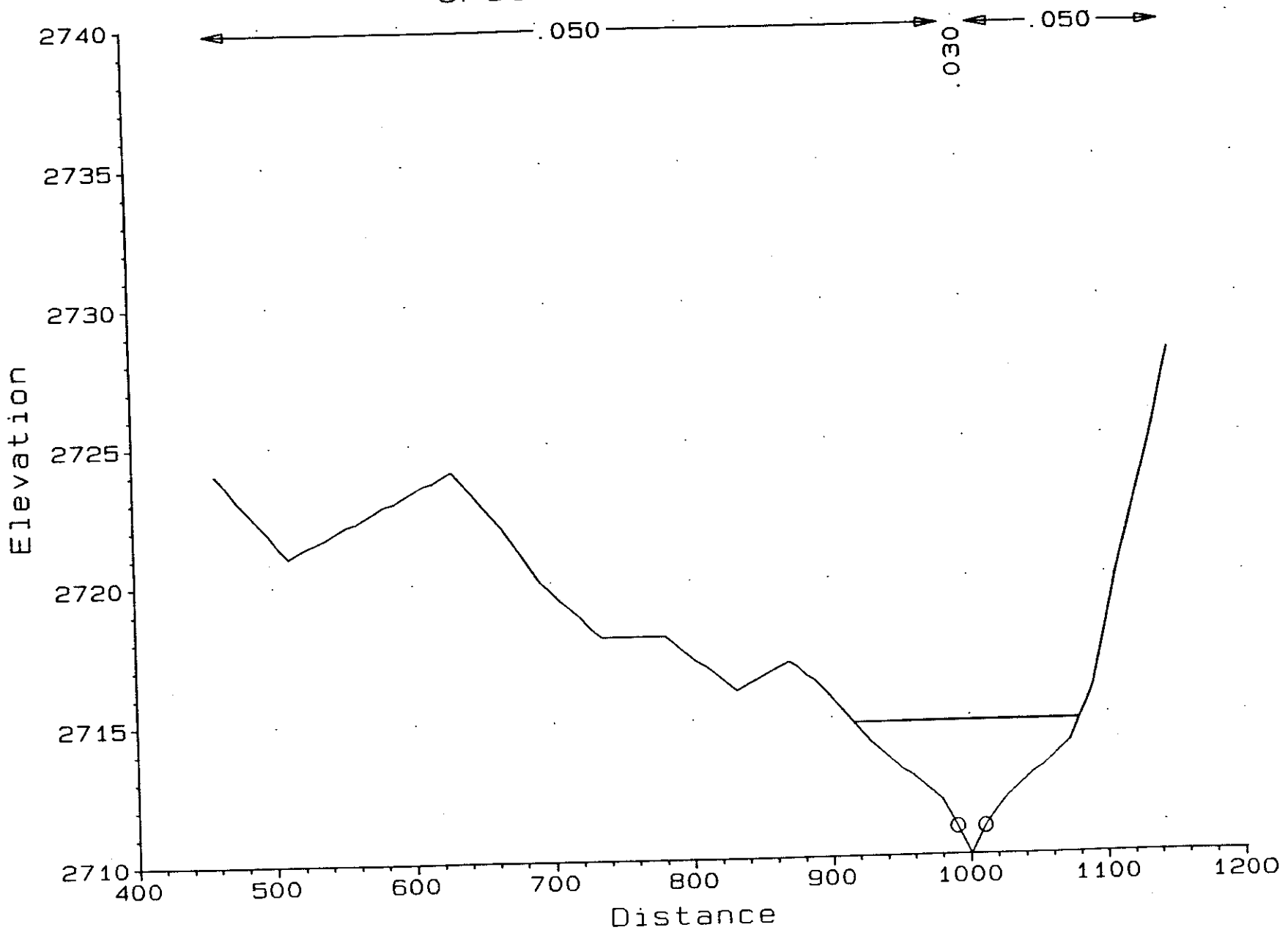

WASH AI: HARTMAN WASH
Cross-section 8.715
.050
.030
.050
2720
2715
2710
2705
2700
2695
2690
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance


WASH AI: HARTMAN WASH
Cross-section 8.798
.050
.030
.050
2725
2720
2715
2710
2705
2700
2695
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance

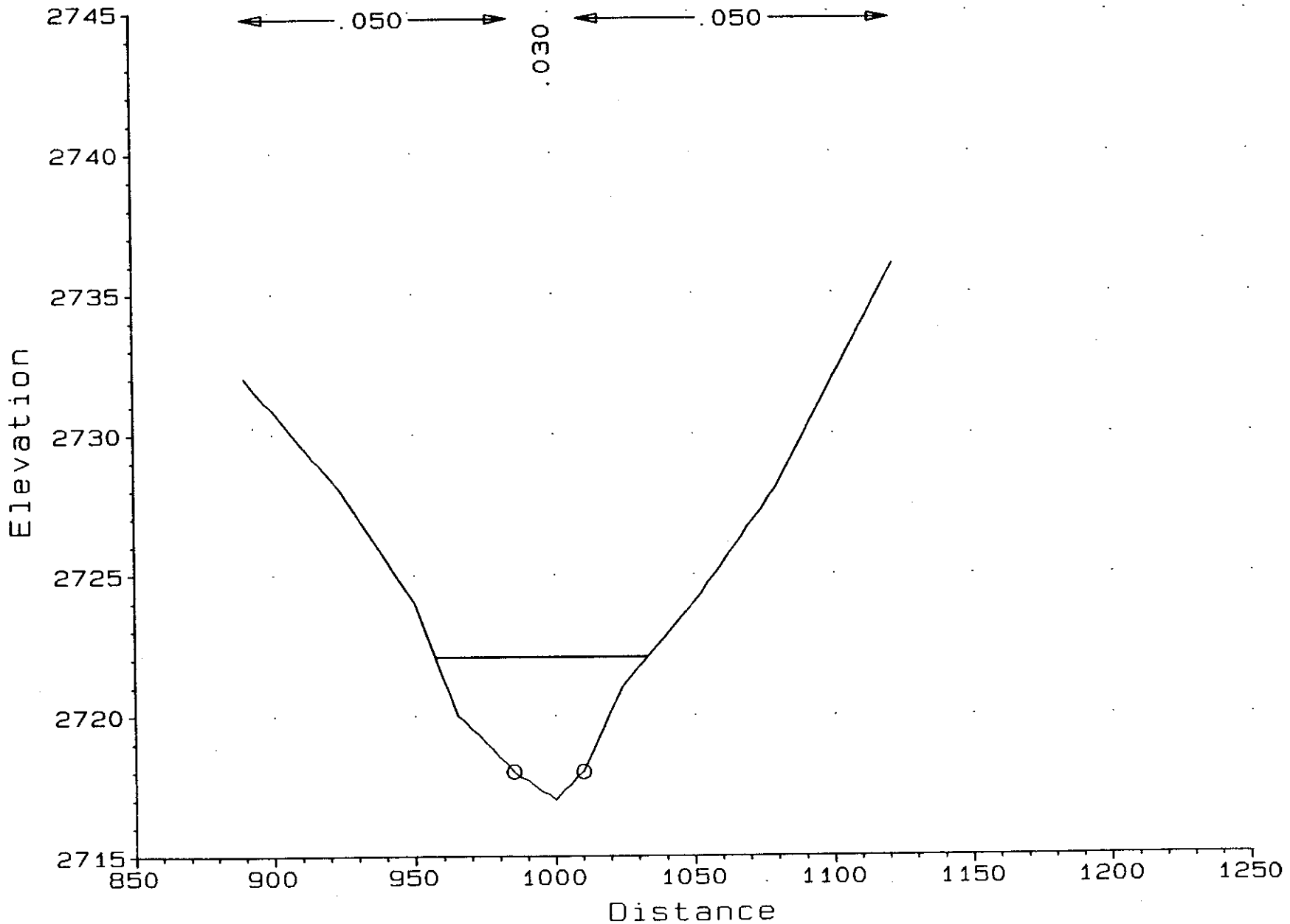

WASH AI: HARTMAN WASH
Cross-section 8.889
.050
.030
.050
2730
2725
2720
2715
2710
2705
2700
Elevation
600
700
800
900
1000
1100
1200
1300
1400
Distance


WASH AI: HARTMAN WASH
Cross-section 8.984
.050
.030
.050
2720
2718
2716
2714
2712
2710
2708
Elevation
400
500
600
700
800
900
1000
1100
1200
Distance

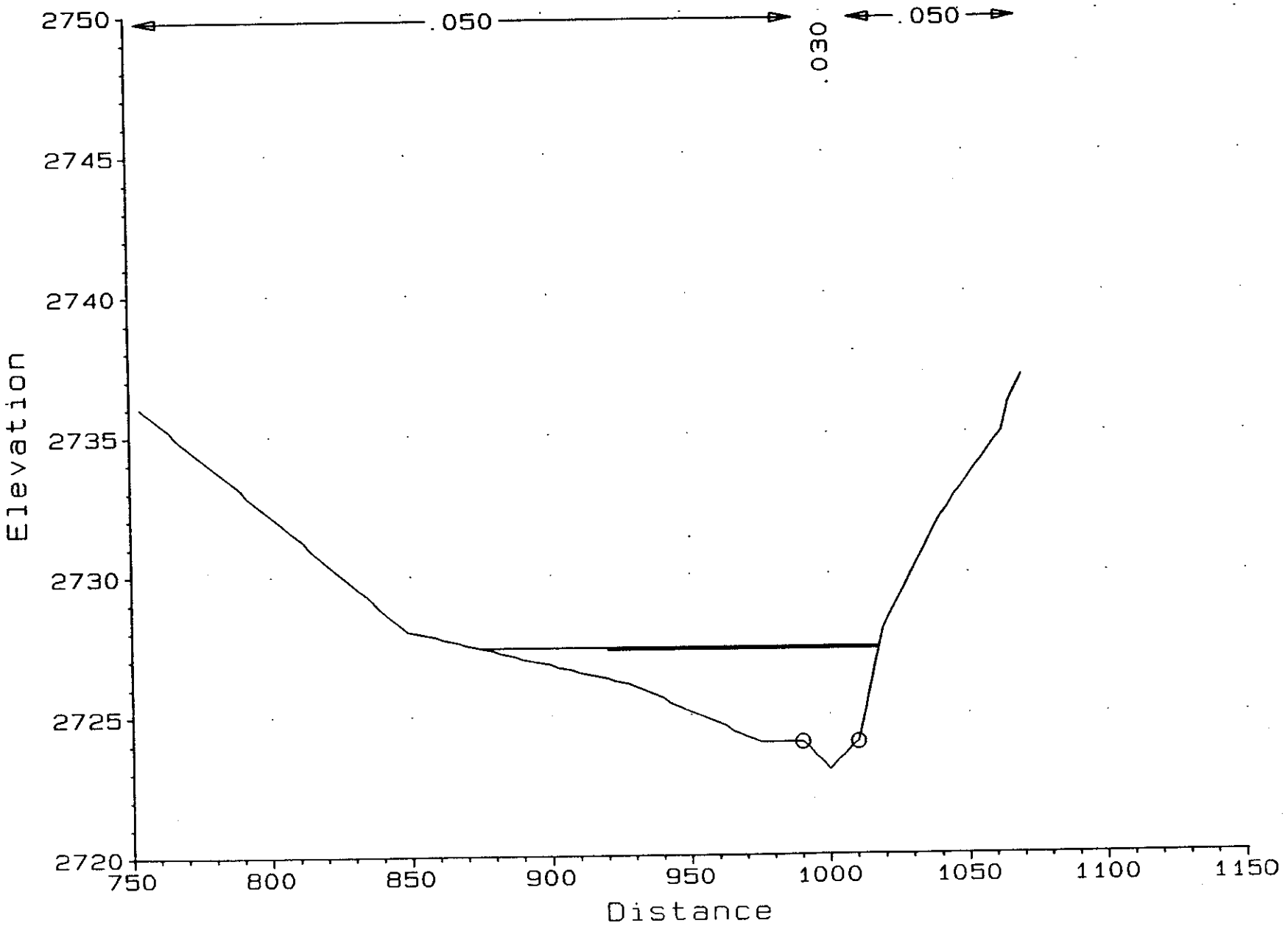
WASH AI: HARTMAN WASH
Cross-section 9.043

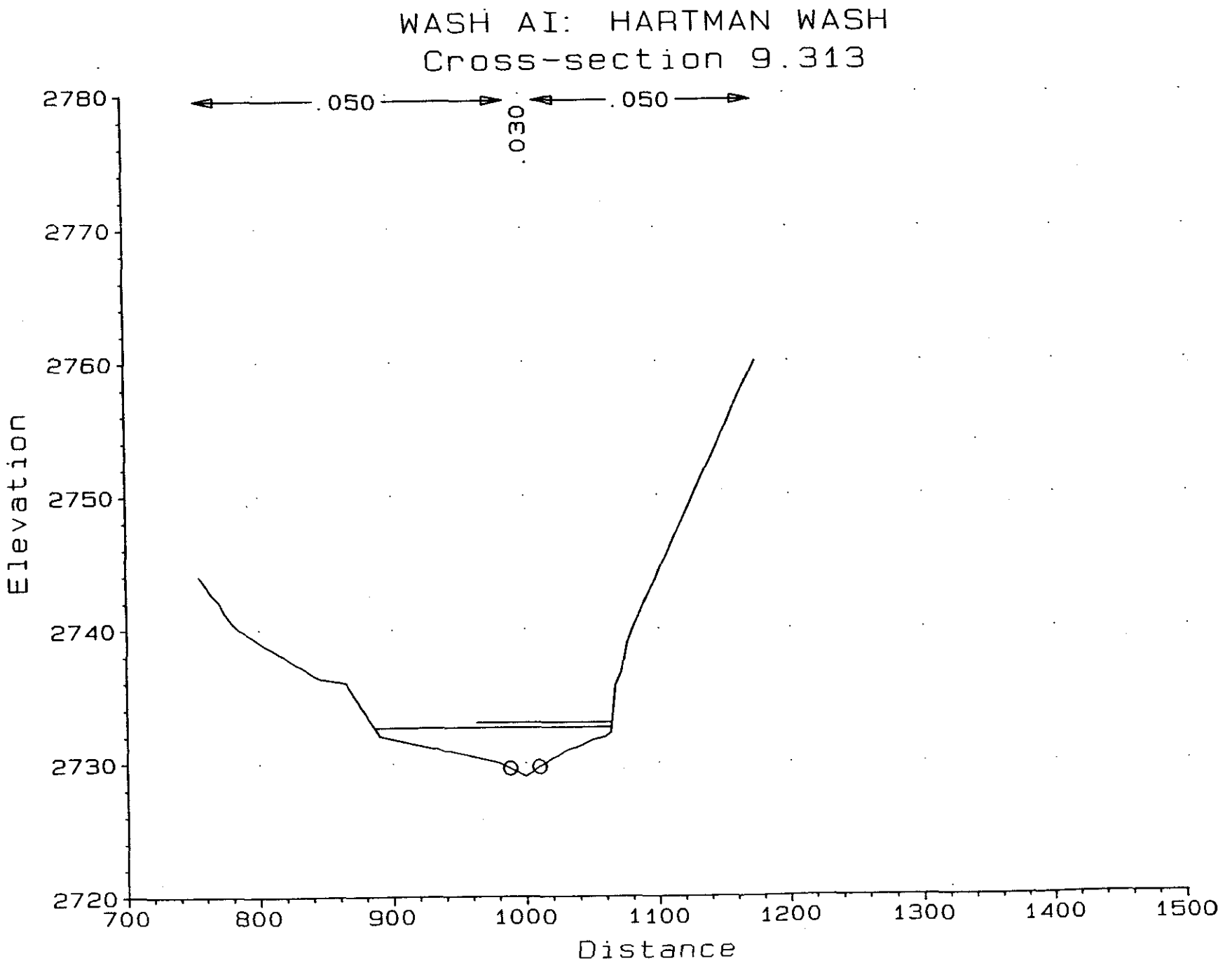


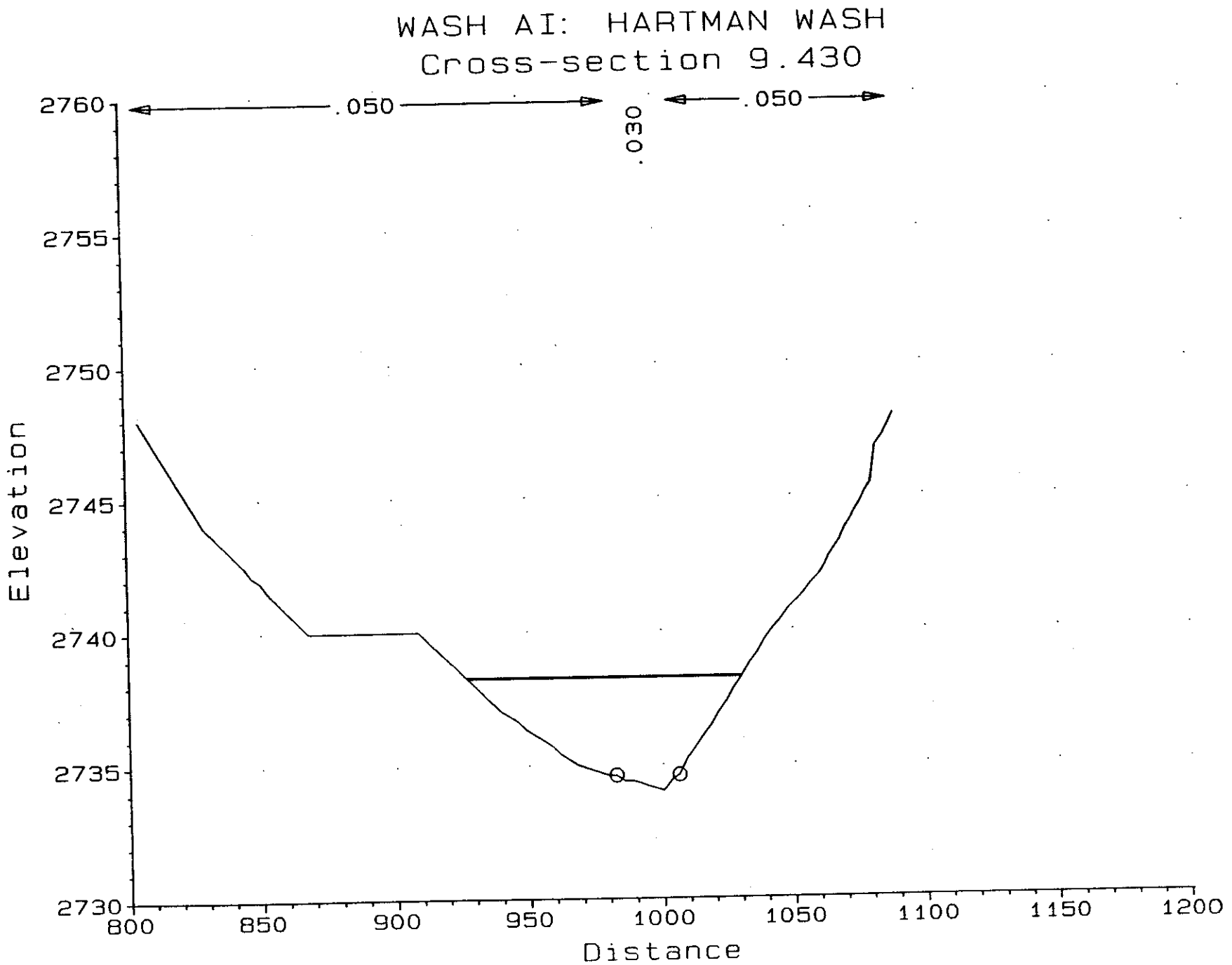
WASH AI: HARTMAN WASH
Cross-section 9.142



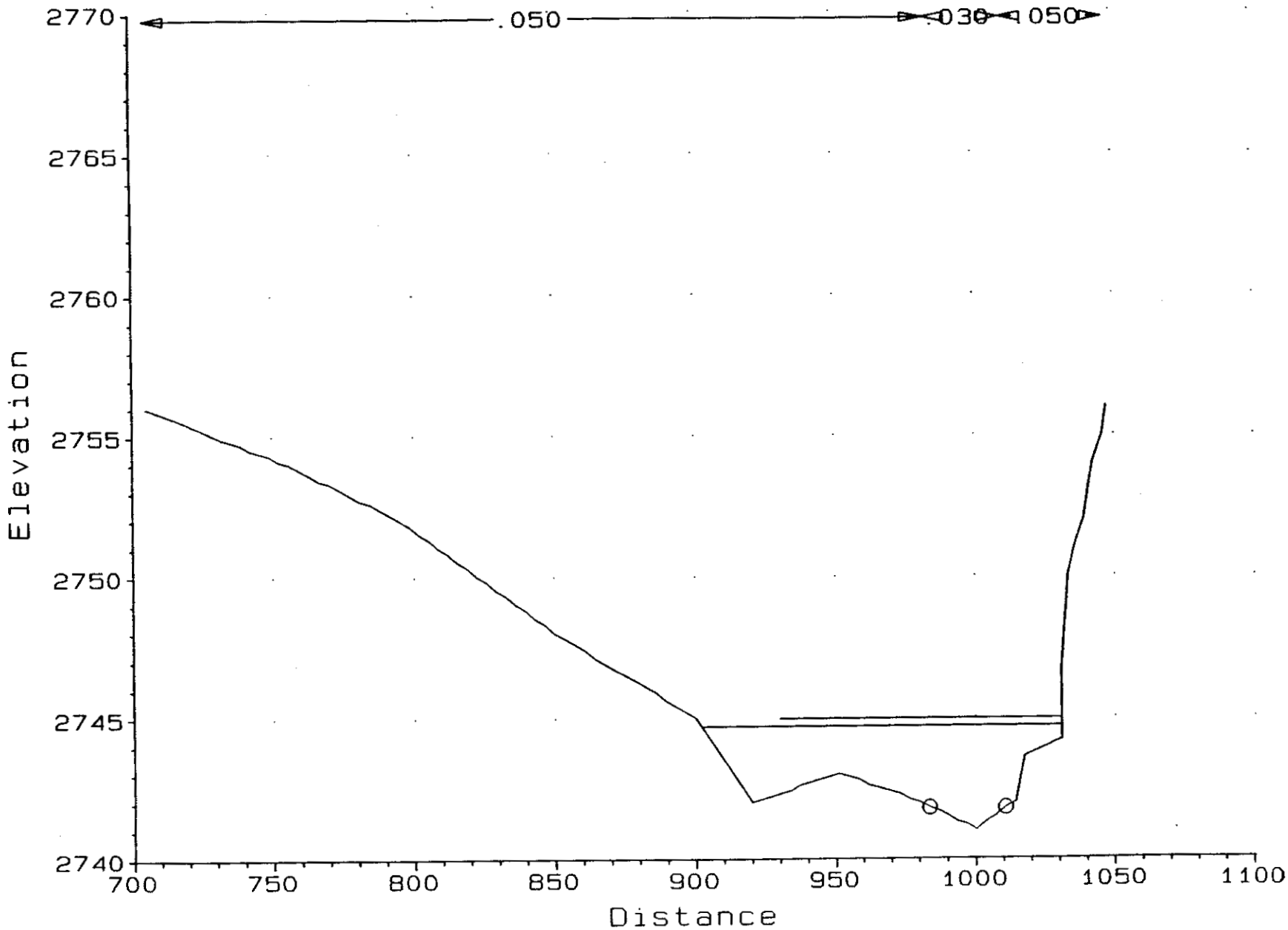
WASH AI: HARTMAN WASH
Cross-section 9.246

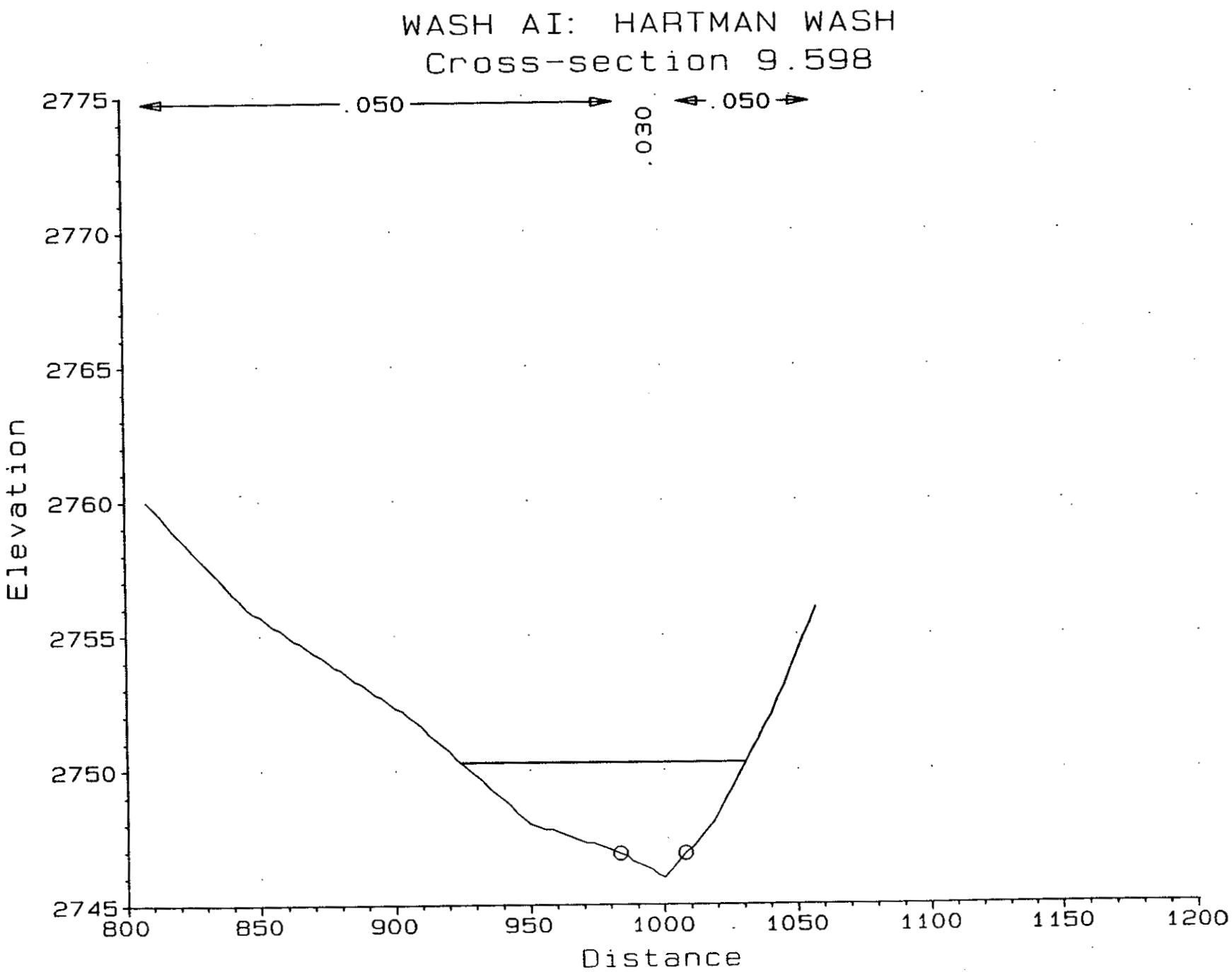


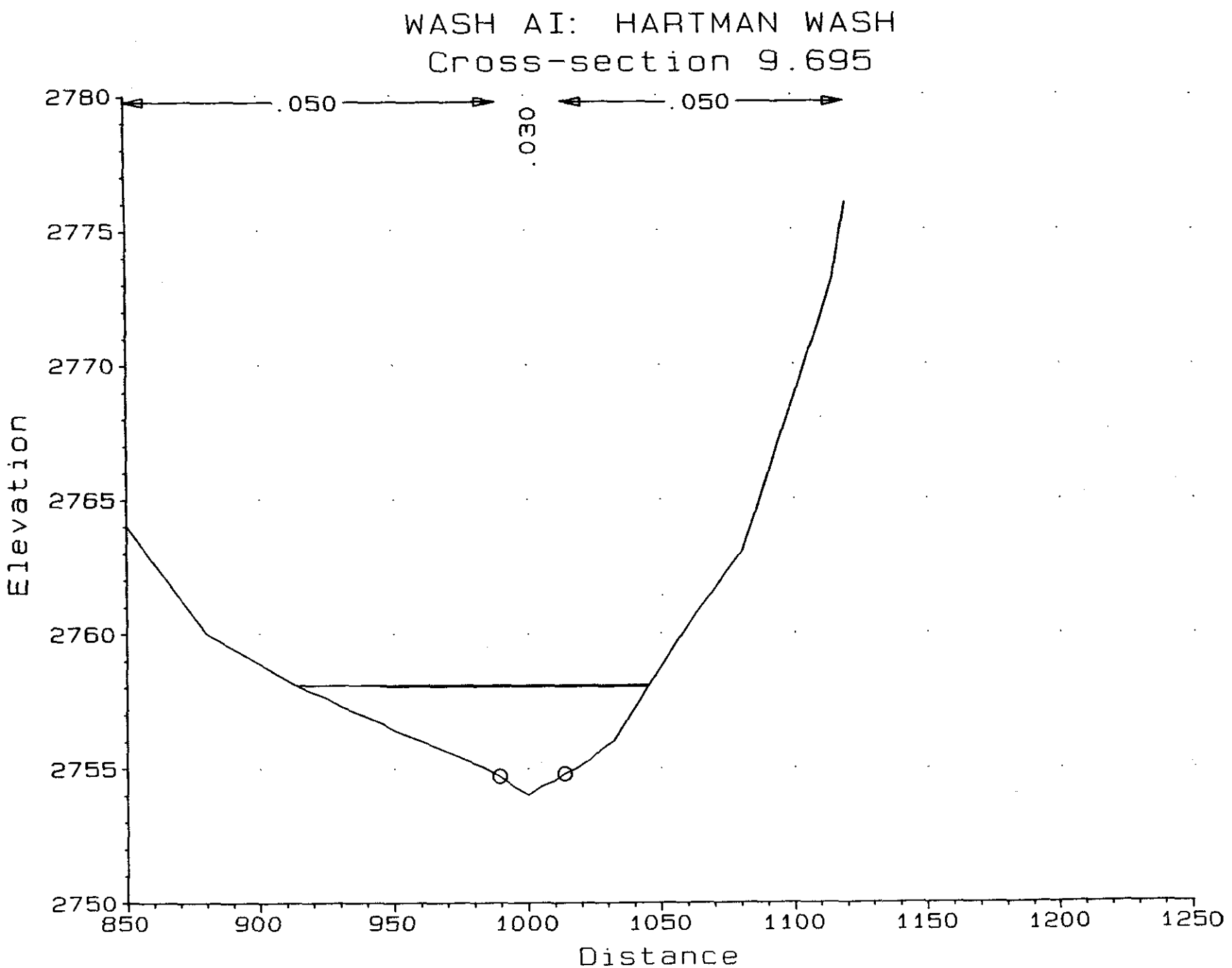

WASH AI: HARTMAN WASH
Cross-section 9.313
.050
.030
.050
Elevation
2780
2770
2760
2750
2740
2730
2720
700
800
900
1000
1100
1200
1300
1400
1500
Distance

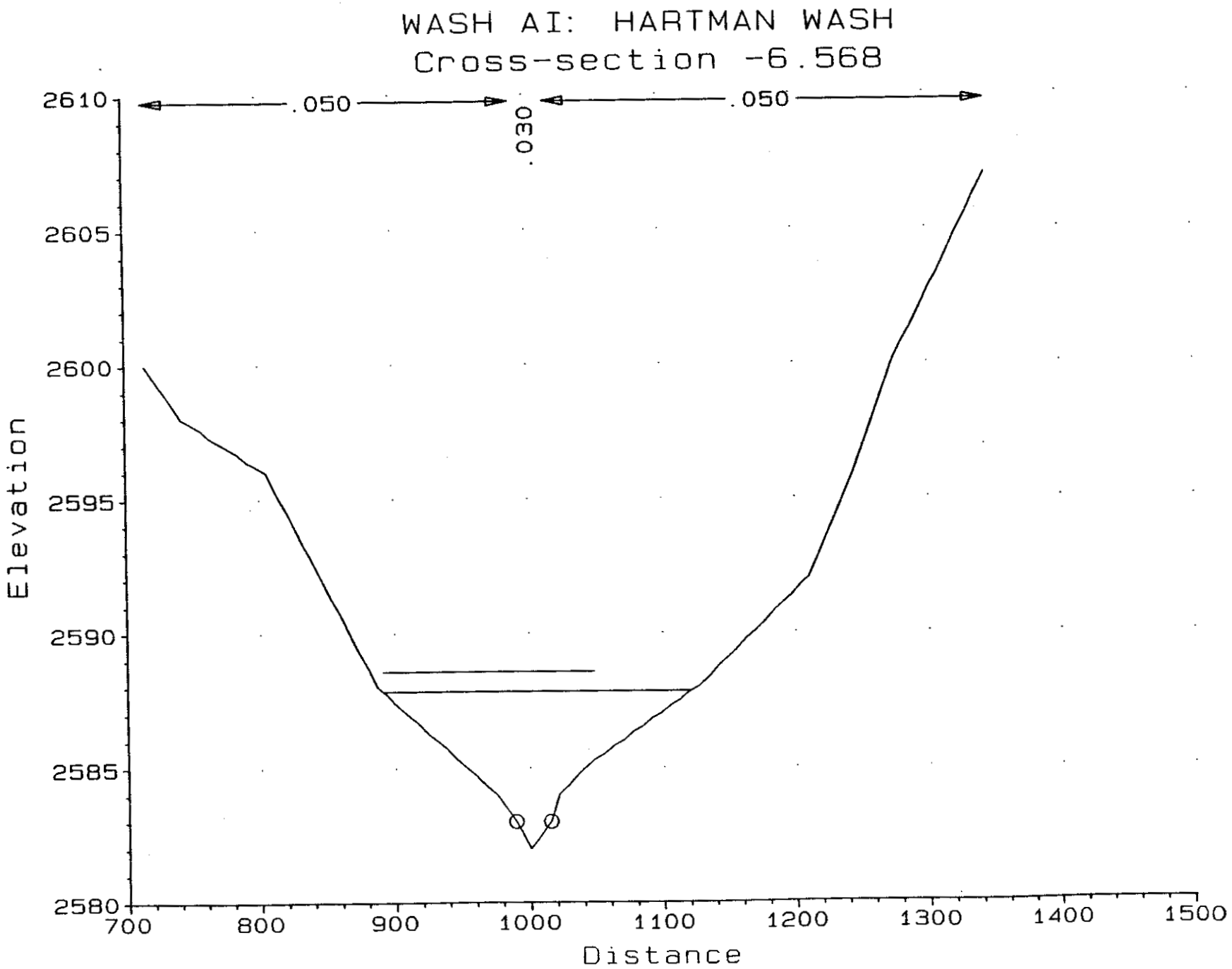

WASH AI: HARTMAN WASH
Cross-section 9.430
.050
.030
.050
2760
2755
2750
2745
2740
2735
2730
Elevation
800
850
900
950
1000
1050
1100
1150
1200
Distance

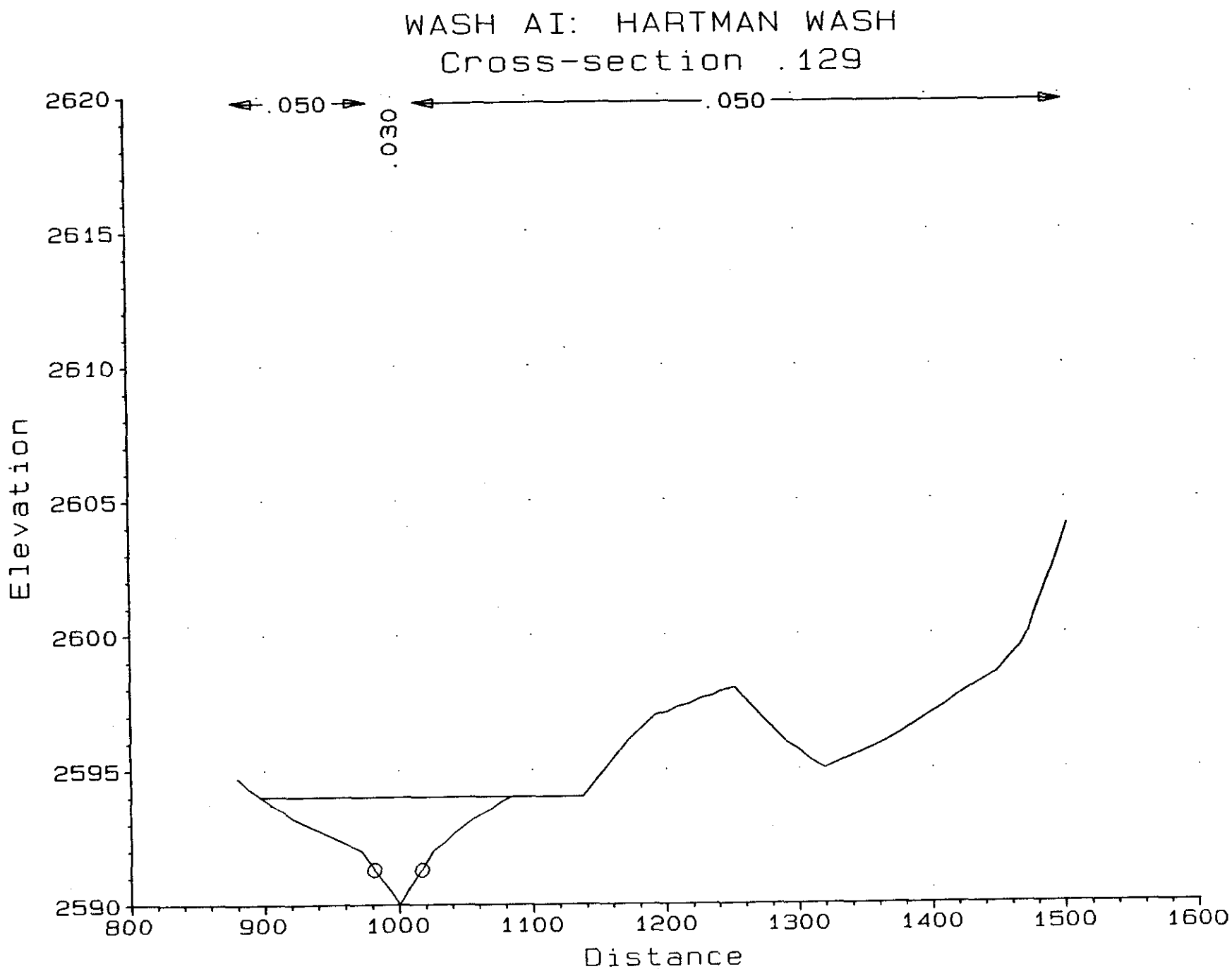
WASH AI: HARTMAN WASH
Cross-section 9.513



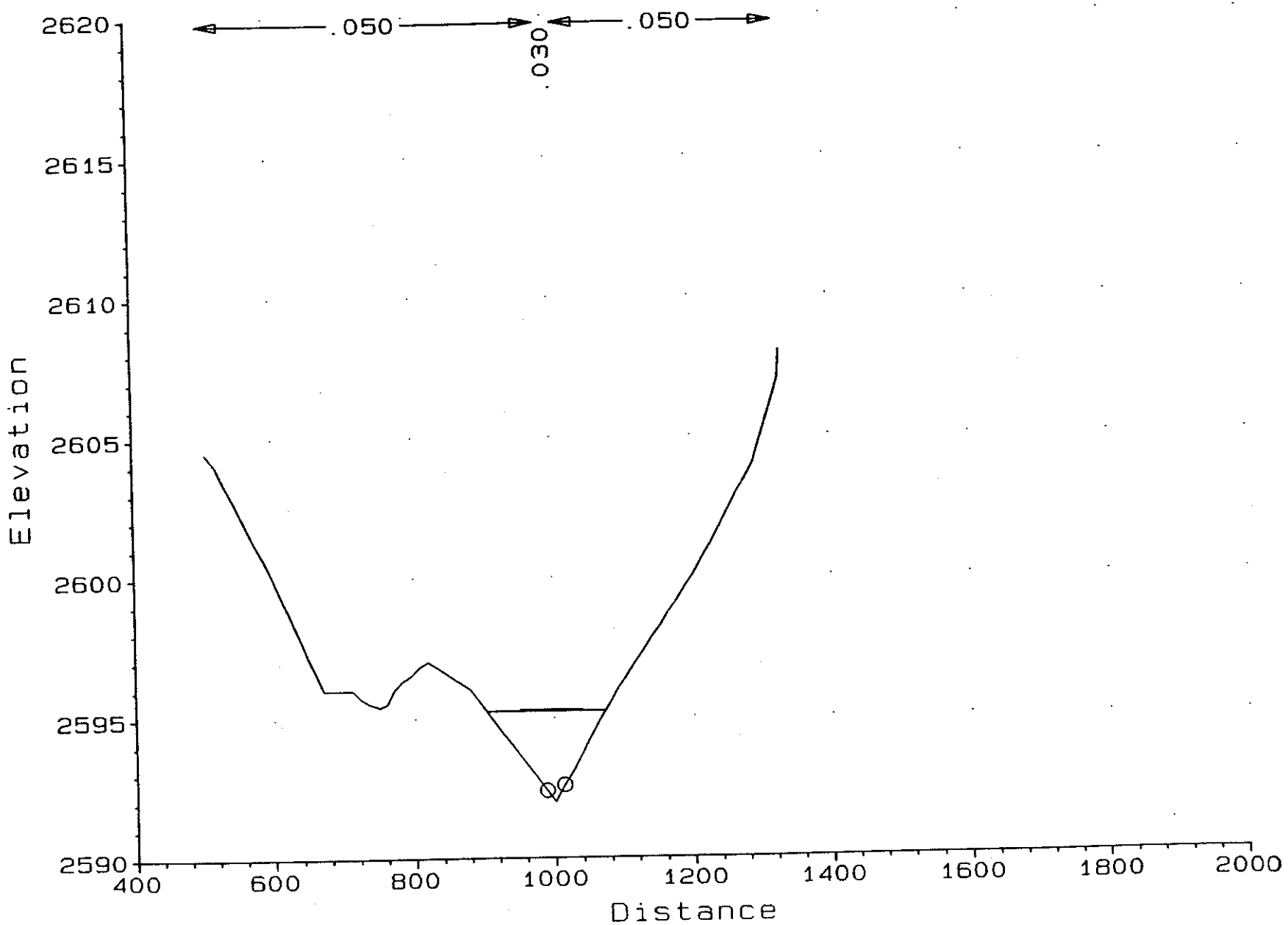

WASH AI: HARTMAN WASH
Cross-section 9.598
.050
.030
.050
Elevation
2775
2770
2765
2760
2755
2750
2745
800
850
900
950
1000
1050
1100
1150
1200
Distance


WASH AI: HARTMAN WASH
Cross-section 9.695
.050
.030
.050
2780
2775
2770
2765
2760
2755
2750
Elevation
850
900
950
1000
1050
1100
1150
1200
1250
Distance

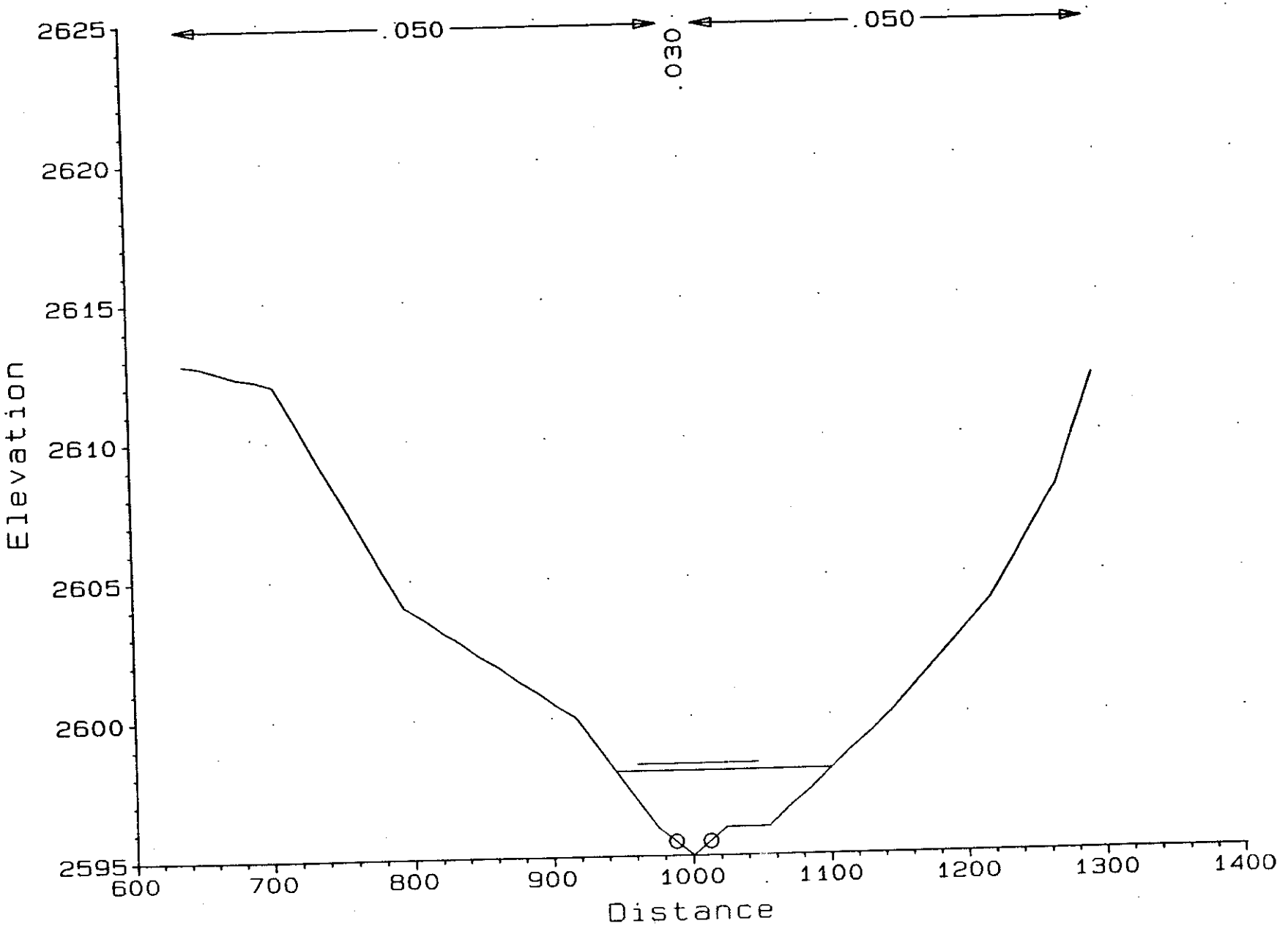

WASH AI: HARTMAN WASH
Cross-section -6.568
.050
.030
.050
2610
2605
2600
2595
2590
2585
2580
Elevation
700
800
900
1000
1100
1200
1300
1400
1500
Distance

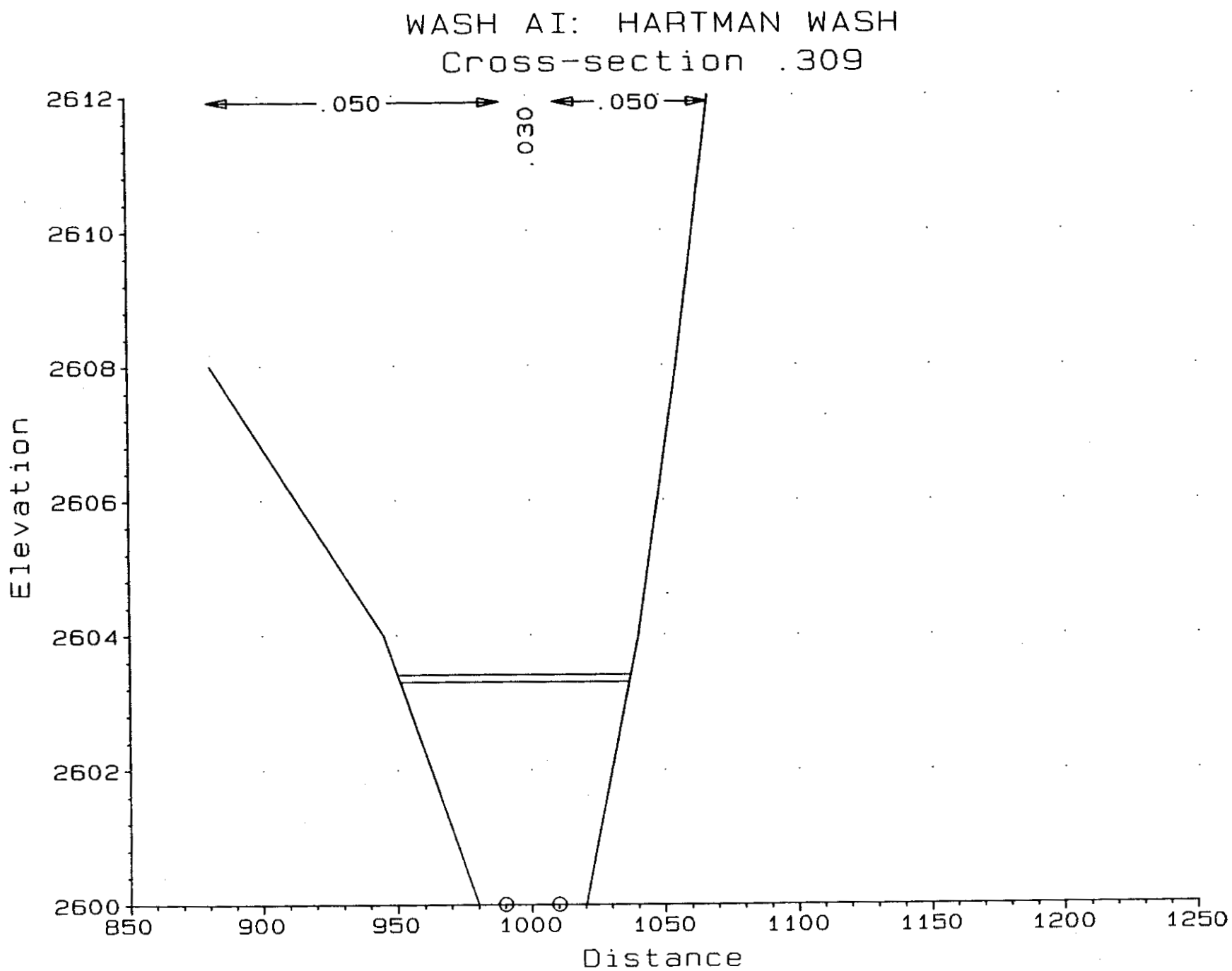

WASH AI: HARTMAN WASH
Cross-section .129
.050
.030
.050
2620
2615
2610
2605
2600
2595
2590
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

WASH AI: HARTMAN WASH
Cross-section .162

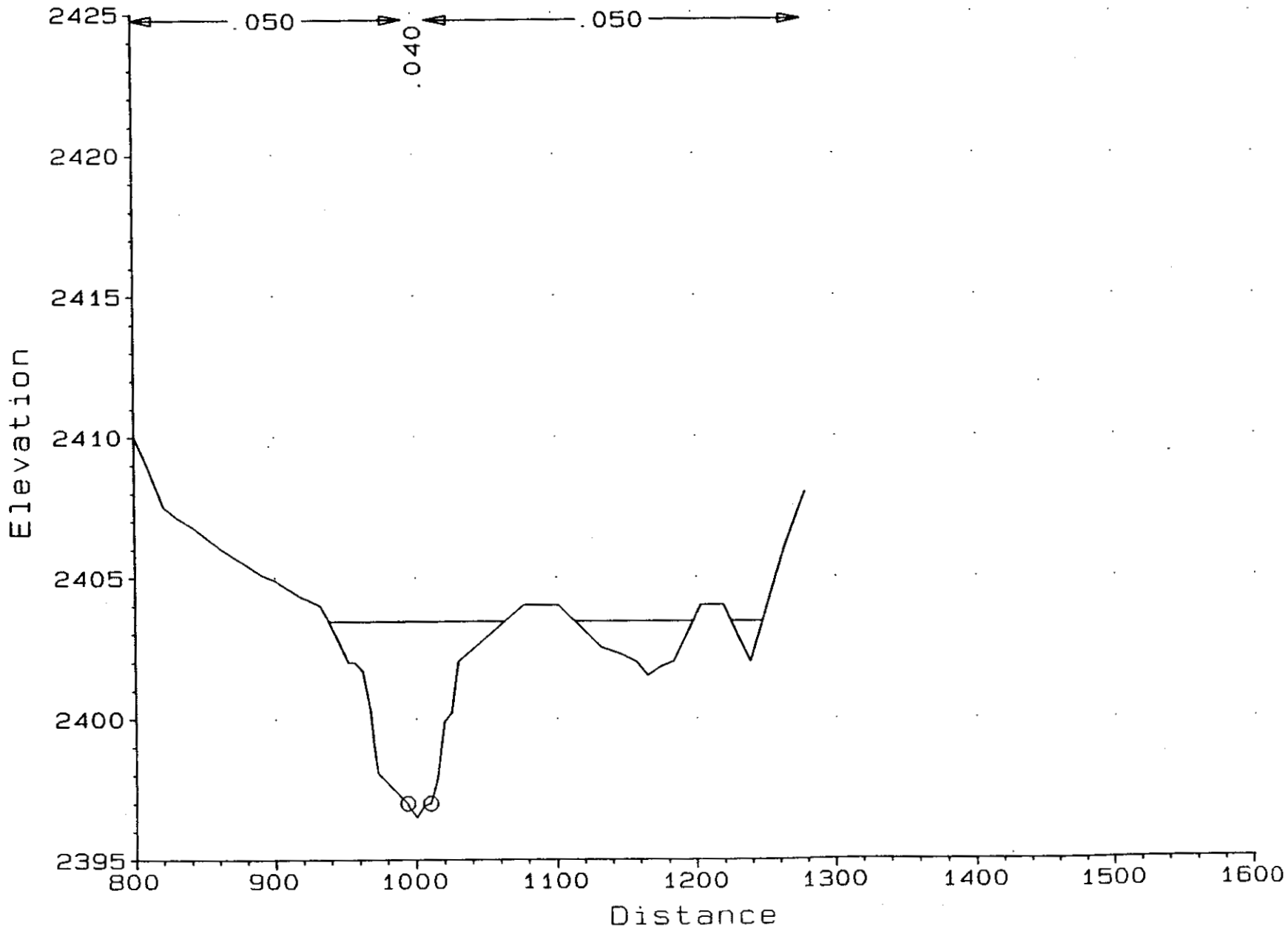


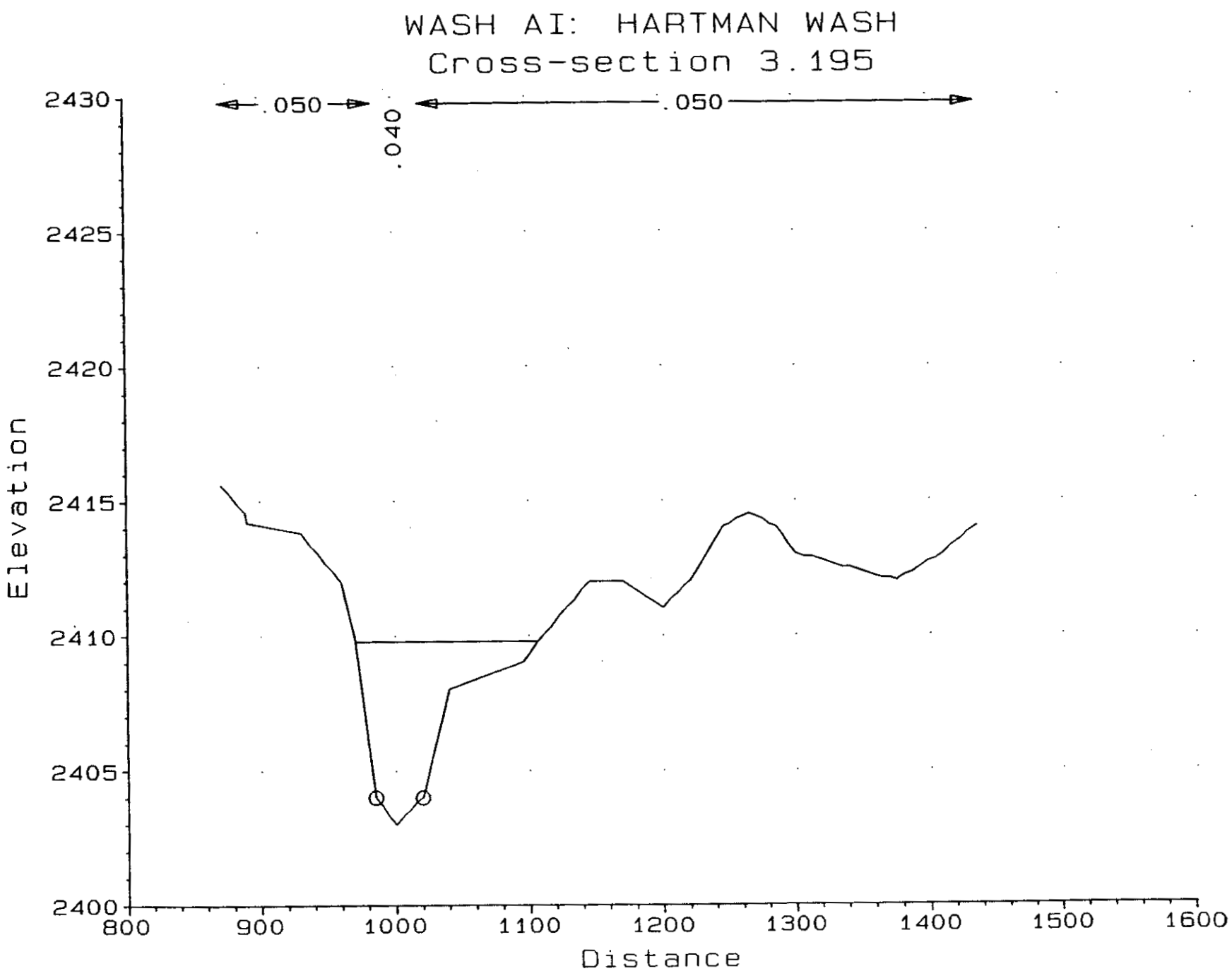
WASH AI: HARTMAN WASH
Cross-section .214

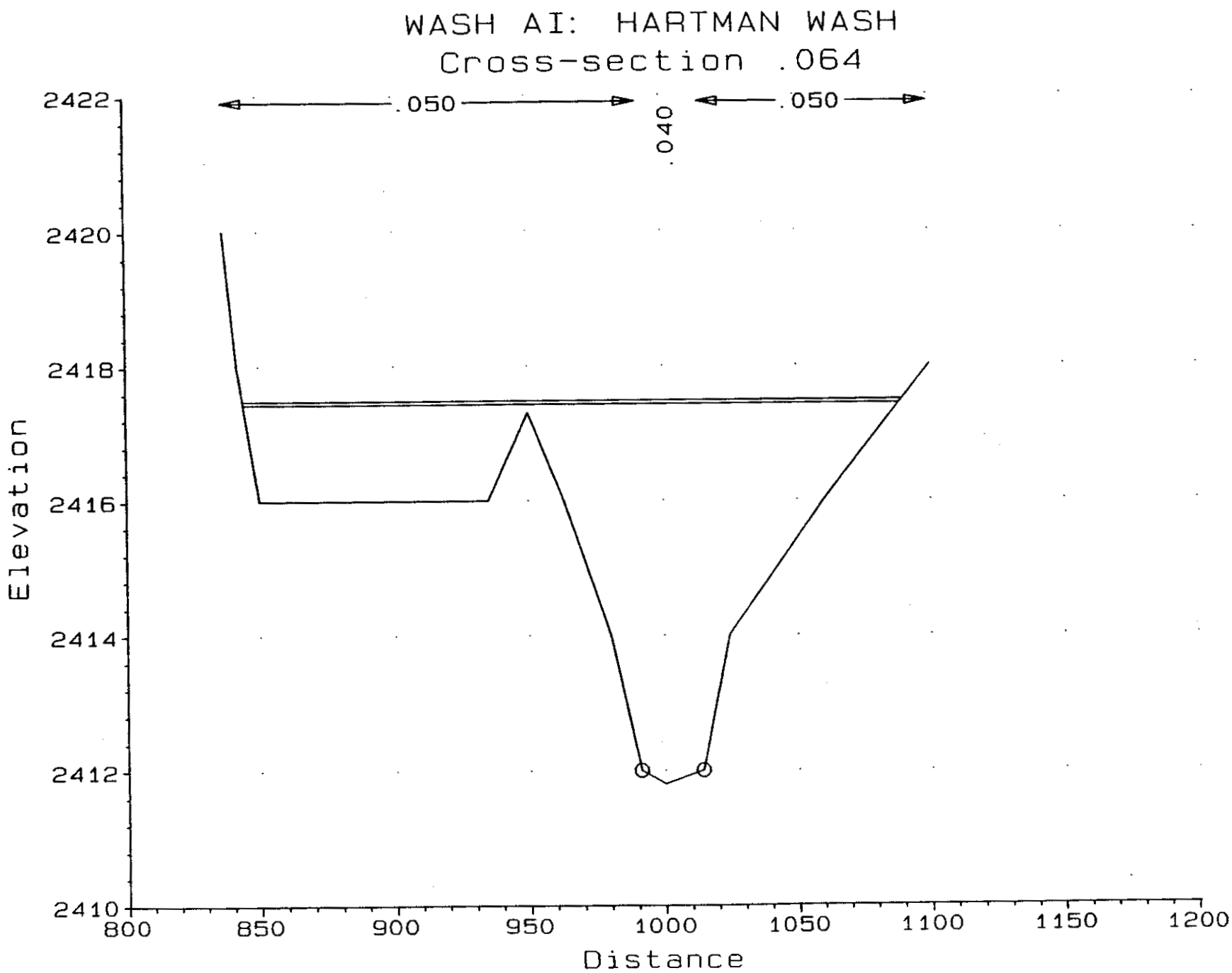


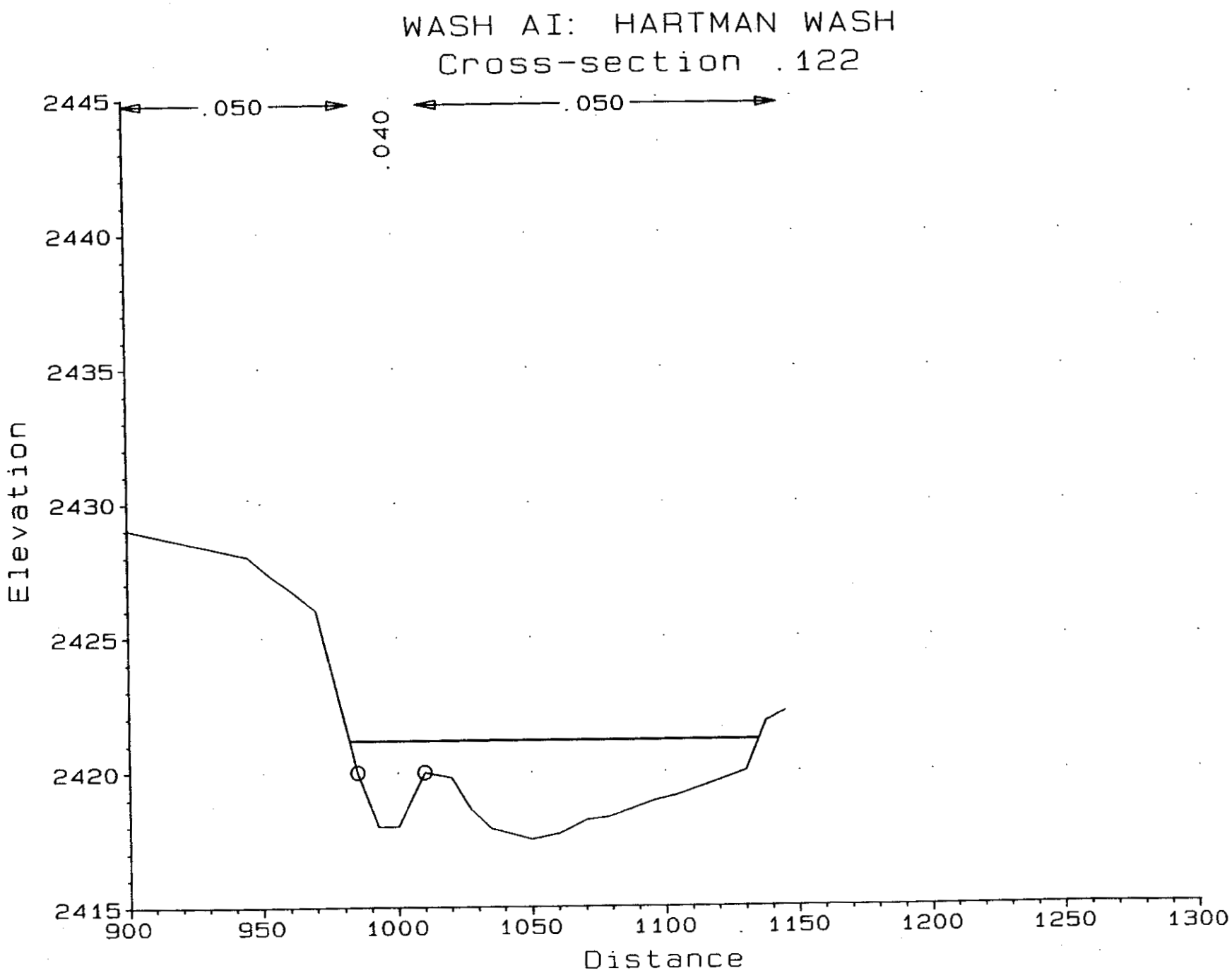

WASH AI: HARTMAN WASH
Cross-section .309
.050
.030
.050
2612
2610
2608
2606
2604
2602
2600
Elevation
850
900
950
1000
1050
1100
1150
1200
1250
Distance

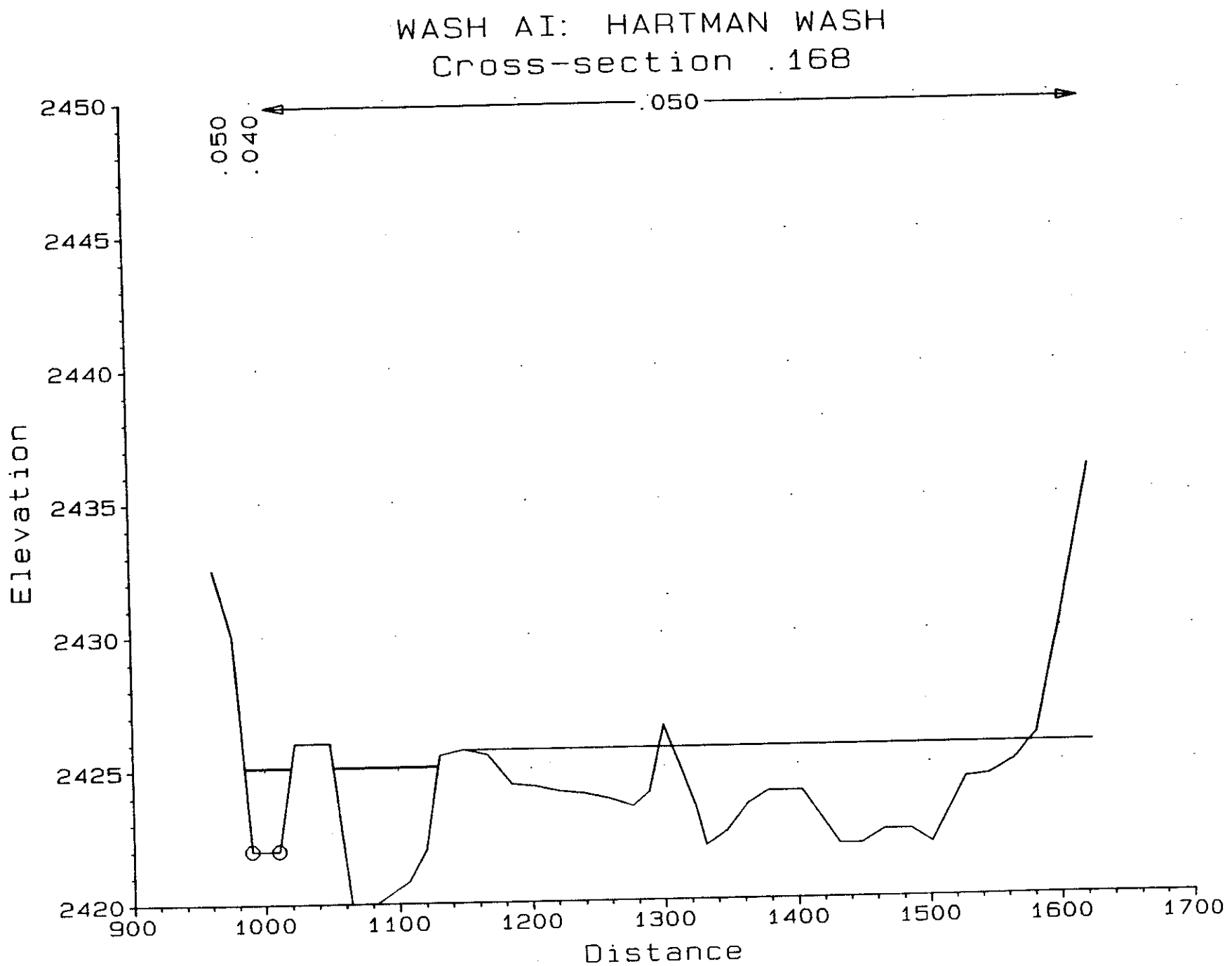
WASH AI: HARTMAN WASH
Cross-section -3.093

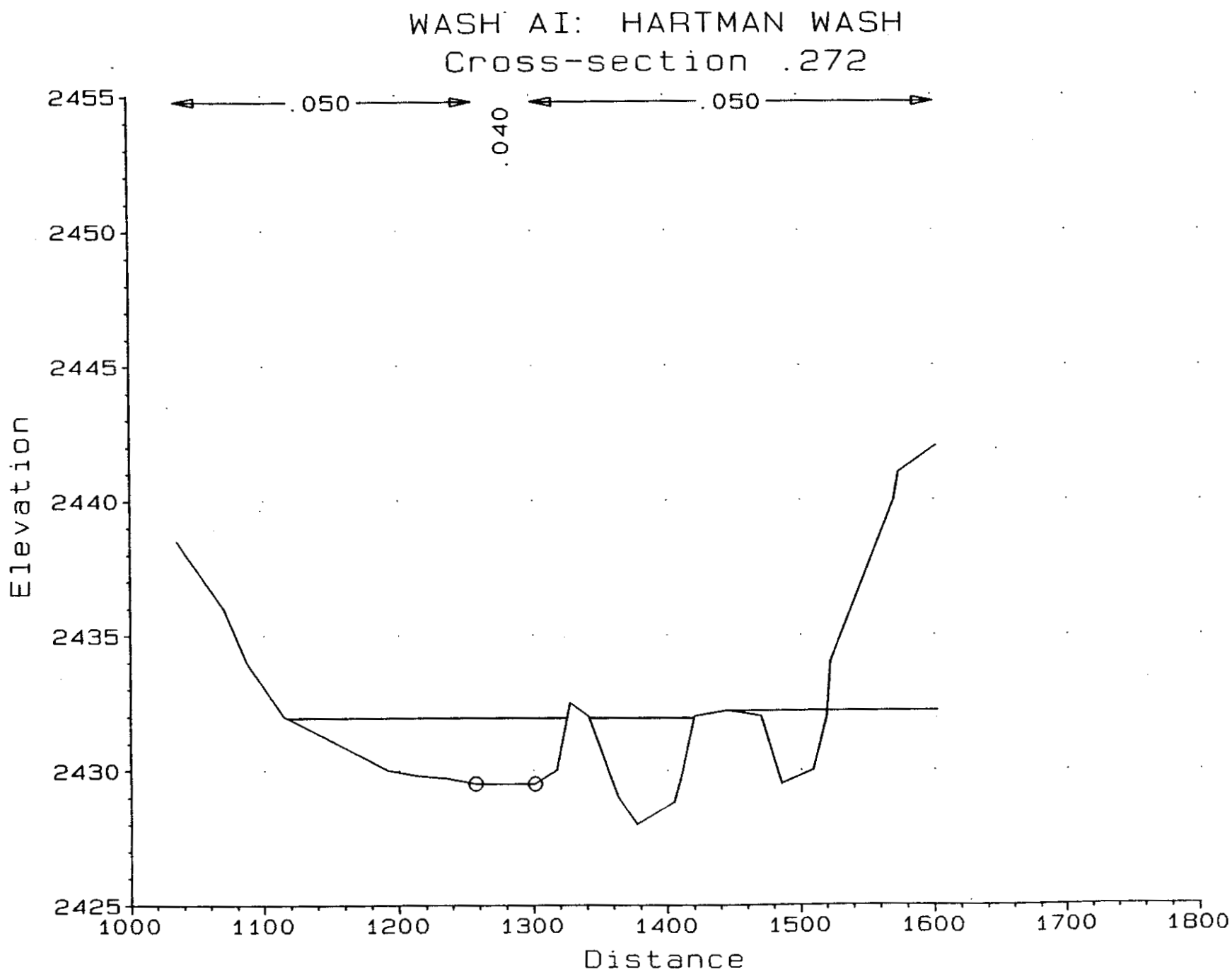


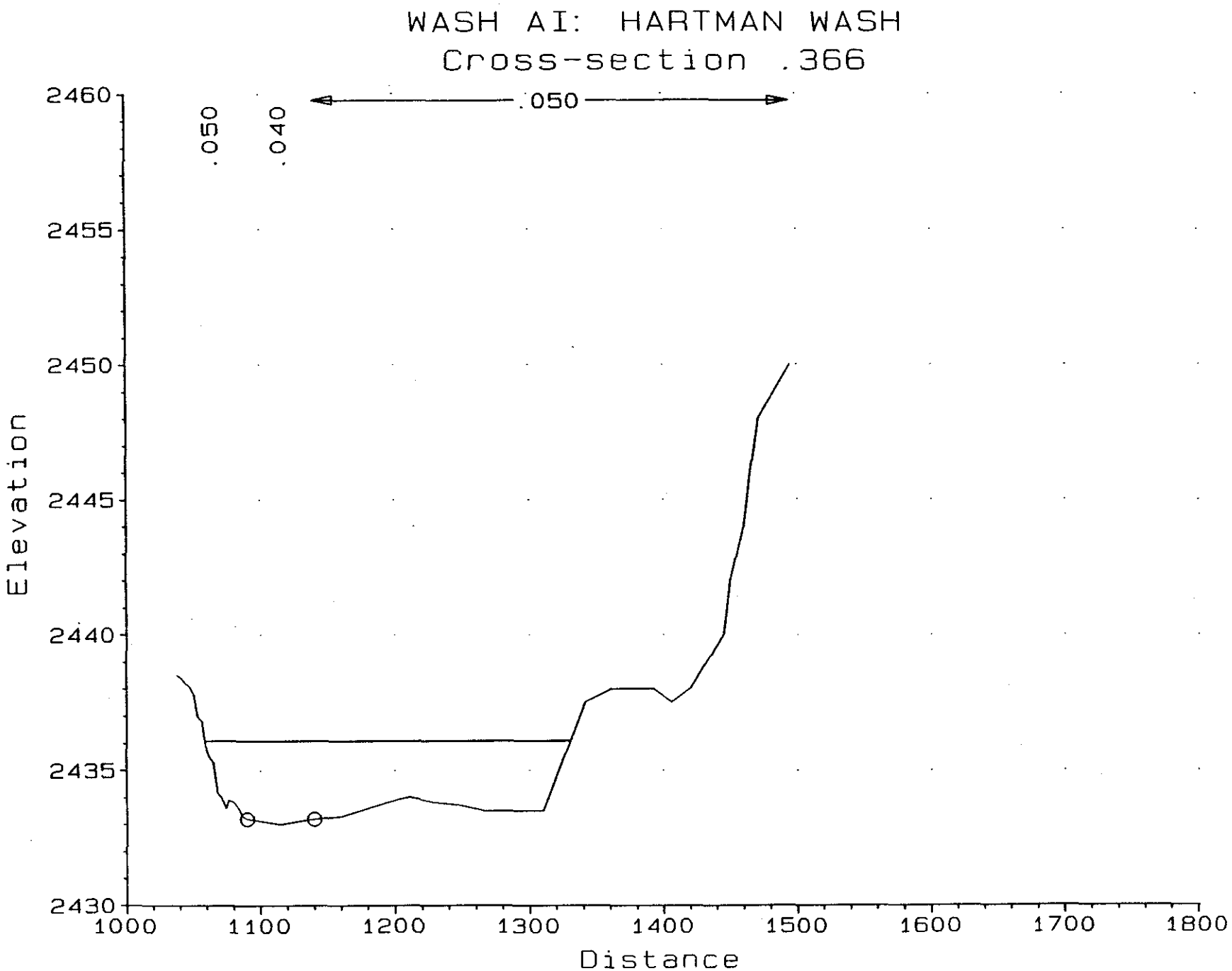

WASH AI: HARTMAN WASH
Cross-section 3.195
.050
.040
.050
2430
2425
2420
2415
2410
2405
2400
Elevation
800
900
1000
1100
1200
1300
1400
1500
1600
Distance

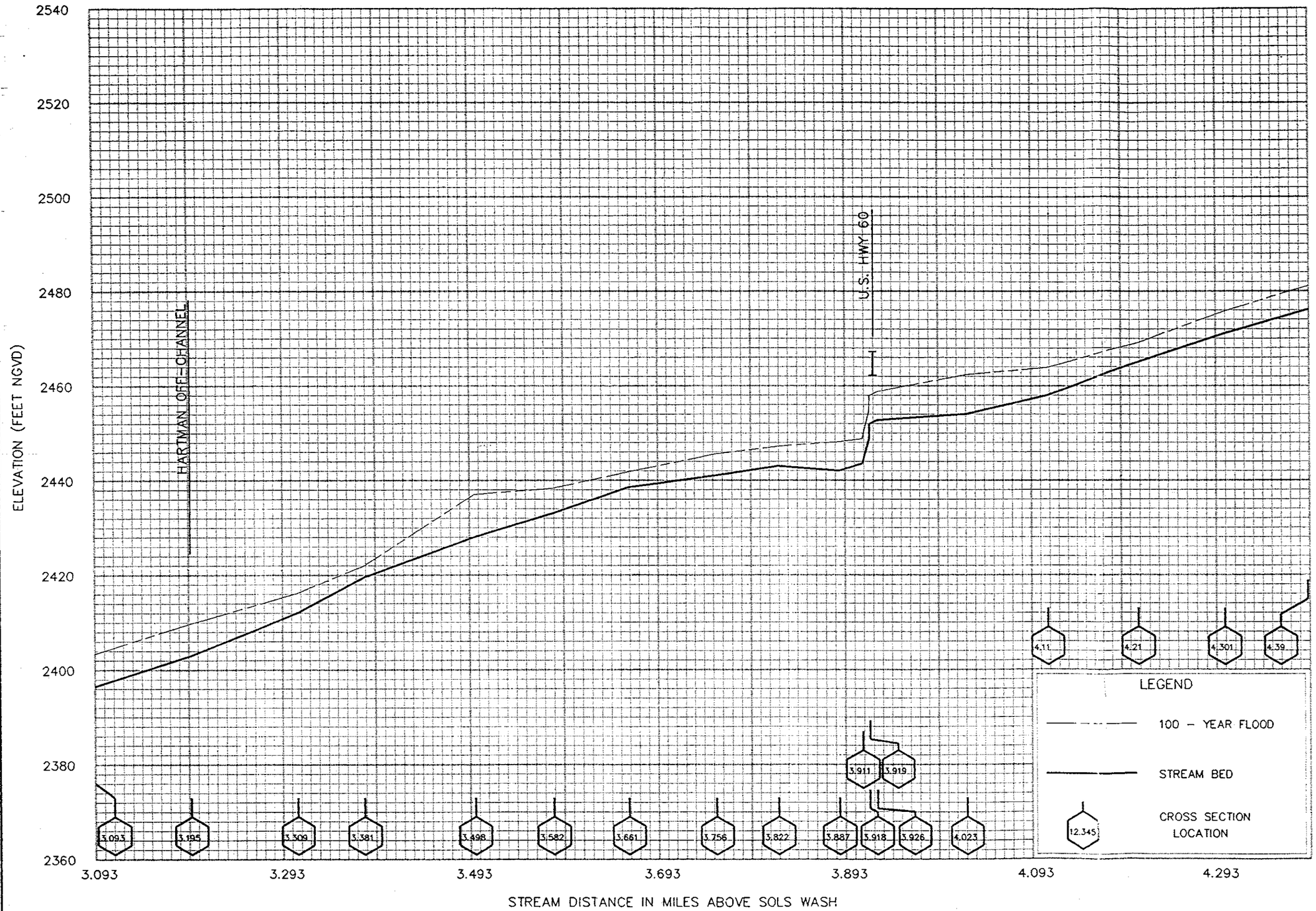

WASH AI: HARTMAN WASH
Cross-section .064
.050
.040
.050
2422
2420
2418
2416
2414
2412
2410
Elevation
800
850
900
950
1000
1050
1100
1150
1200
Distance


WASH AI: HARTMAN WASH
Cross-section .122
.050
.040
.050
2445
2440
2435
2430
2425
2420
2415
Elevation
900
950
1000
1050
1100
1150
1200
1250
1300
Distance


WASH AI: HARTMAN WASH
Cross-section .168
.050
.050
.040
Elevation
2450
2445
2440
2435
2430
2425
2420
900
1000
1100
1200
1300
1400
1500
1600
1700
Distance


WASH AI: HARTMAN WASH
Cross-section .272
.050
.040
.050
2455
2450
2445
2440
2435
2430
2425
Elevation
1000
1100
1200
1300
1400
1500
1600
1700
1800
Distance


WASH AI: HARTMAN WASH
Cross-section .366
.050
.050
.040
Elevation
2460
2455
2450
2445
2440
2435
2430
1000
1100
1200
1300
1400
1500
1600
1700
1800
Distance



FLOOD PROFILES

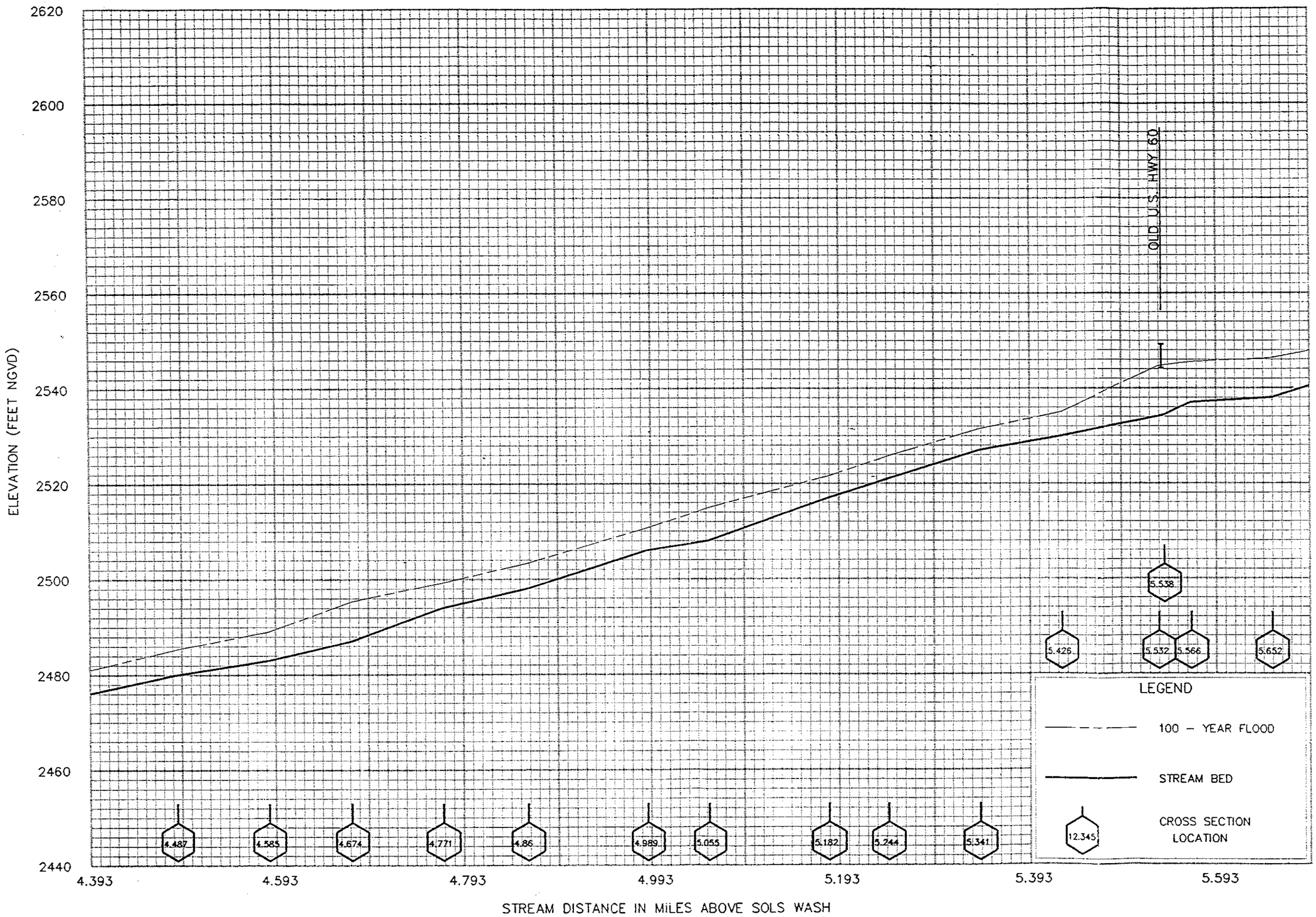
HARTMAN WASH (A1)(UPPER)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

02/21/94 13:10:52 ACD-12_

PC FILE:UPHRT.DWG

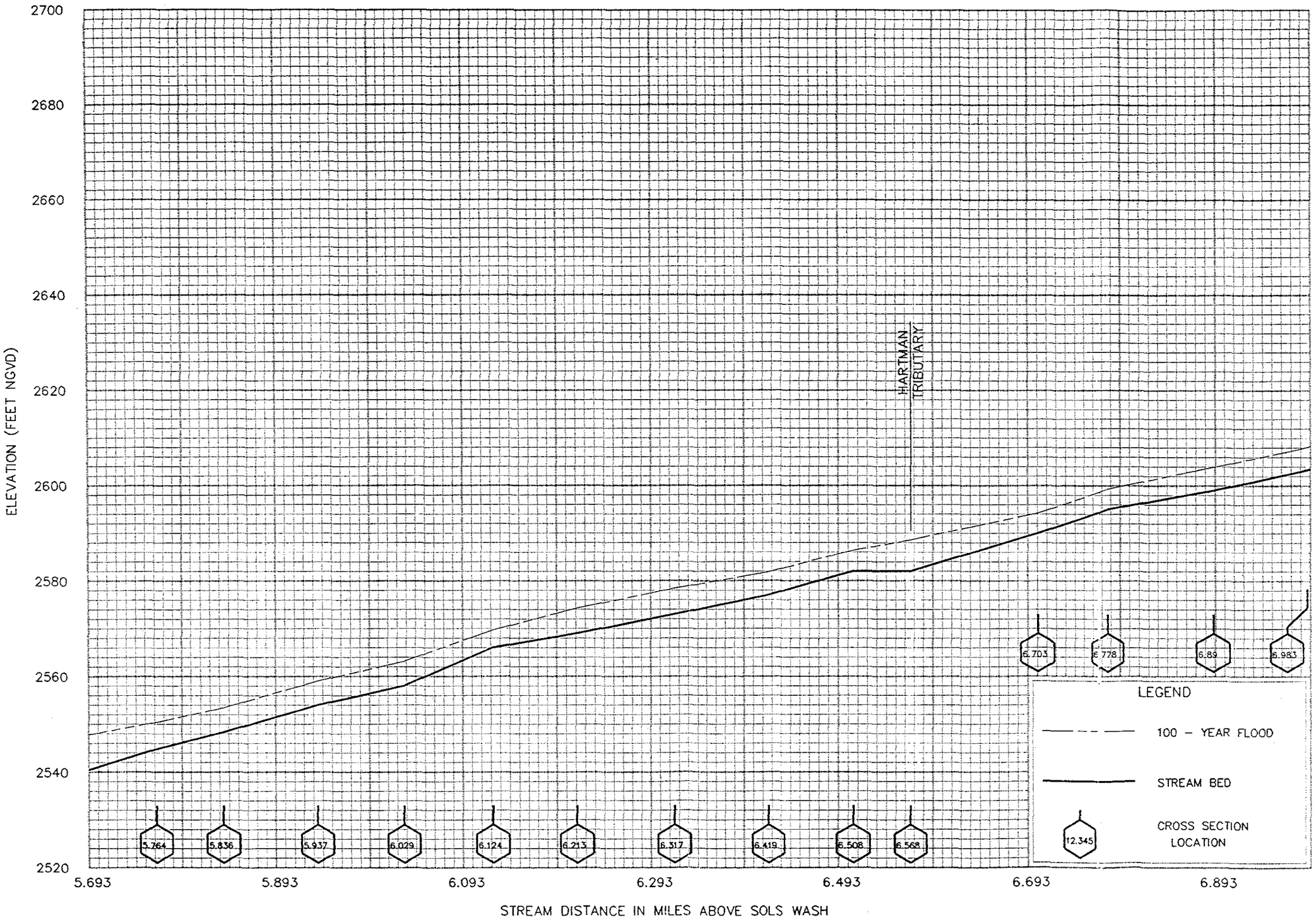


FLOOD PROFILES

HARTMAN WASH (A1)(UPPER)

FEDERAL EMERGENCY MANAGEMENT AGENCY
MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

PC FILE:UPHRT.DWG



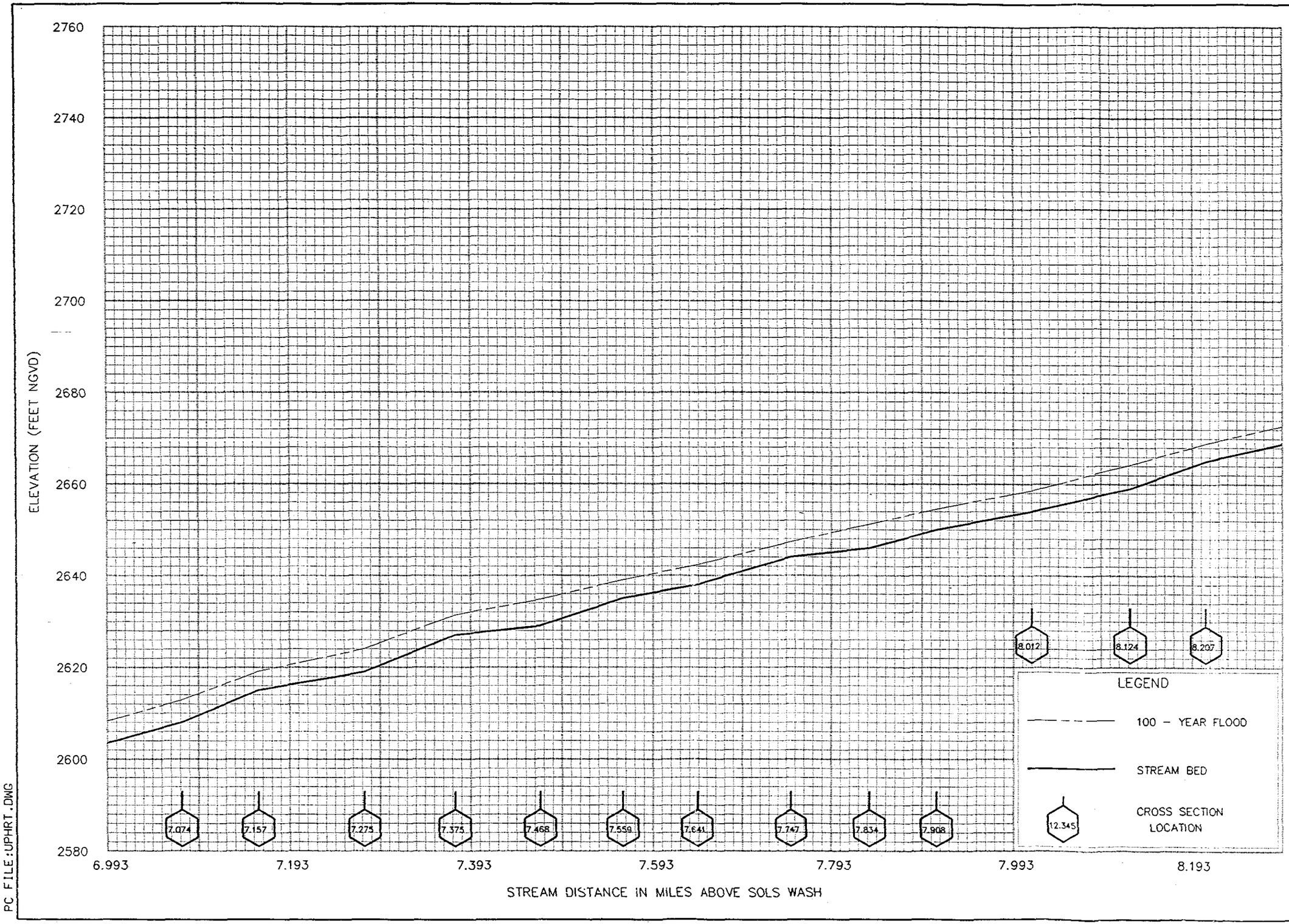
PC FILE:UPHRT.DWG

FLOOD PROFILES

HARTMAN WASH (A1)(UPPER)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



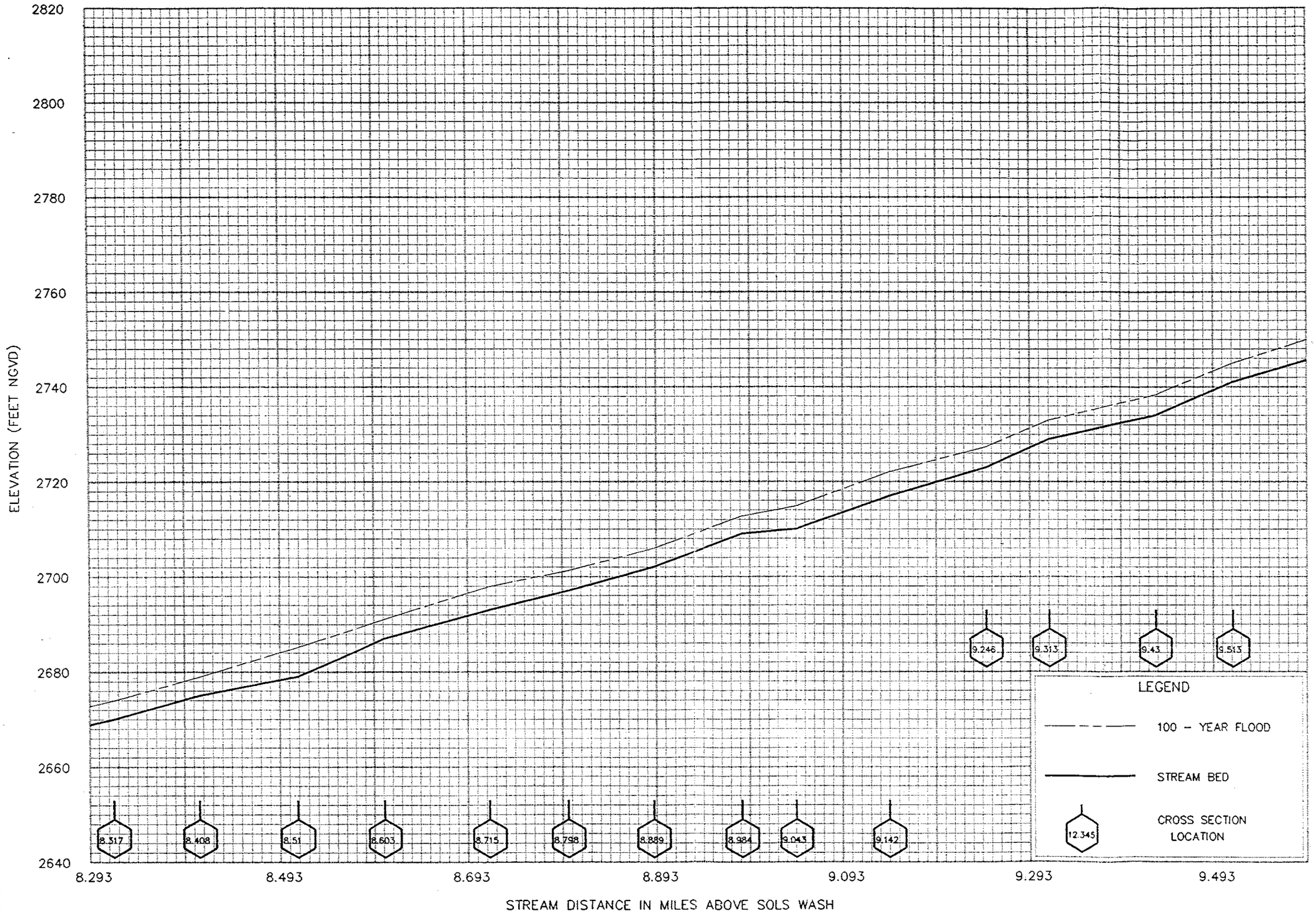
PC FILE:UPHRT.DWG

FLOOD PROFILES

HARTMAN WASH (A1)(UPPER)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



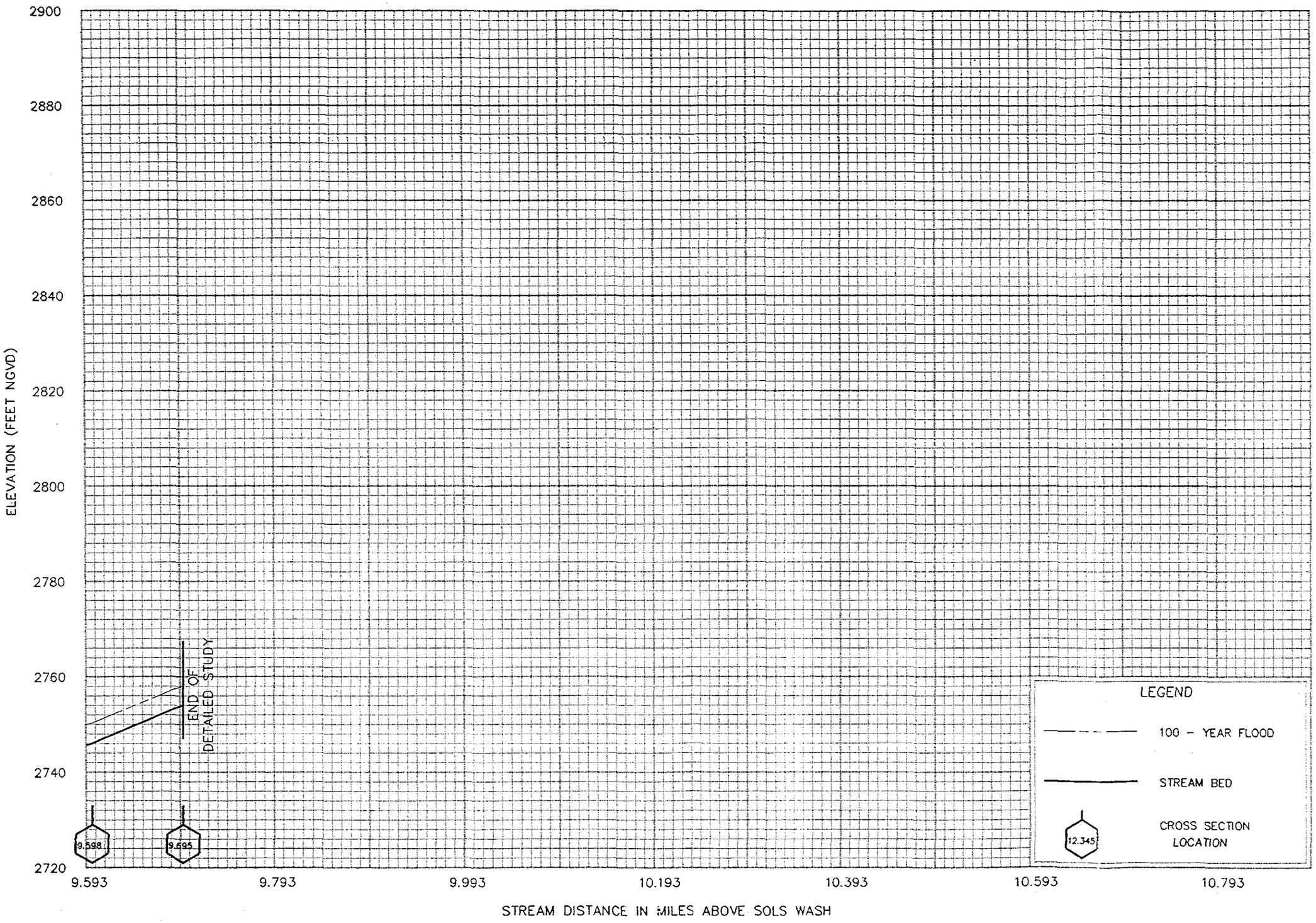
PC FILE:UPHRT.DWG

FLOOD PROFILES

HARTMAN WASH (A1)(UPPER)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS



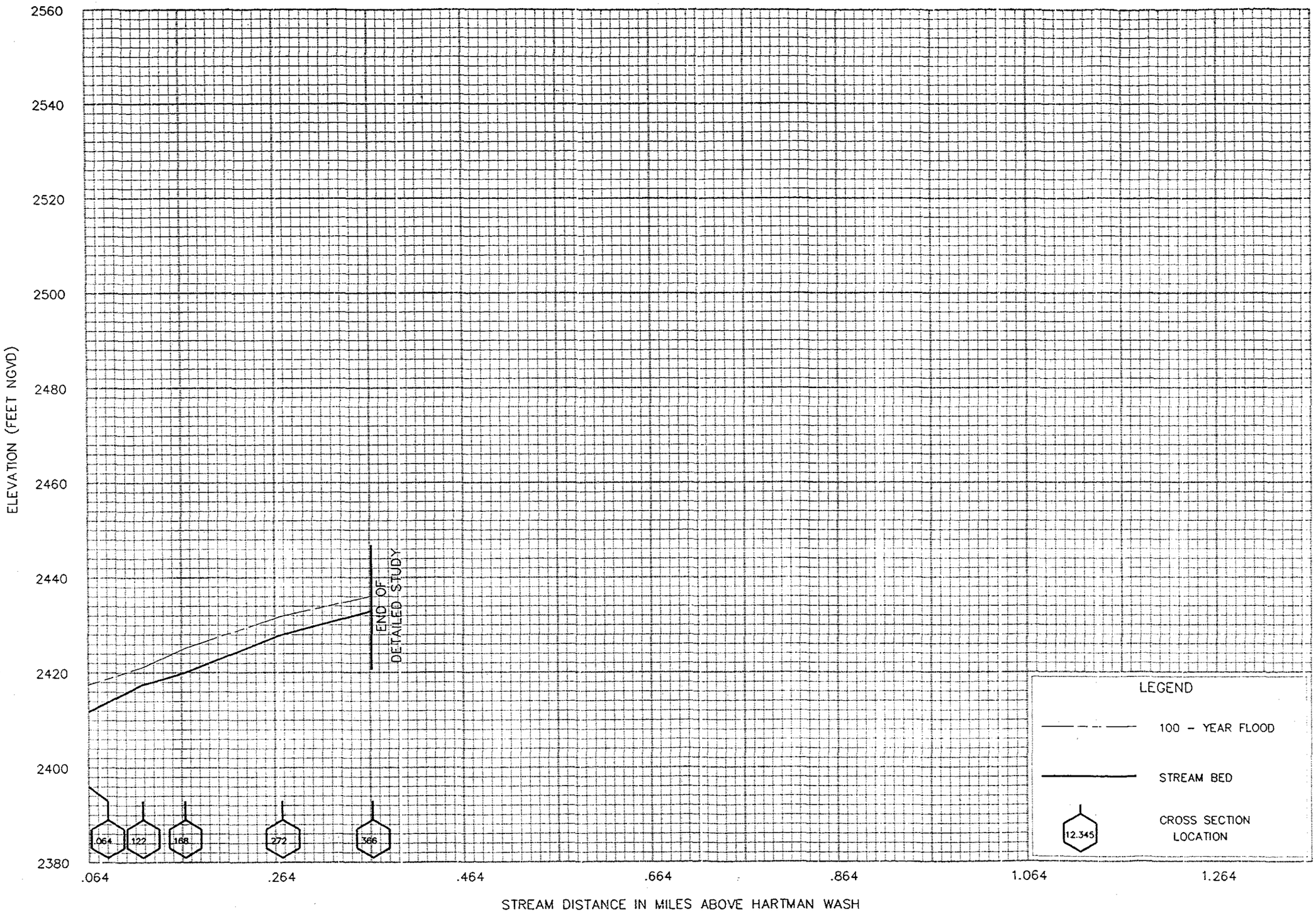
FLOOD PROFILES

HARTMAN WASH (A1)(UPPER)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

PC FILE:UPHRT.DWG



FLOOD PROFILES

HARTMAN OFF-CHANNEL

FEDERAL EMERGENCY MANAGEMENT AGENCY

MARICOPA COUNTY, AZ
AND INCORPORATED AREAS

02/21/94 13:23:49 ACD-12

PC FILE:OCHART.DWG