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RAINBOW WASH FLOOD INSURANCE STUDY

Gila River through S.R. 85

FCD 90-66

HYDRAULICS REPORT
VOLUME 2 OF 2

MAY, 1994

sla SIMONS, LI & ASSOCIATES, INC.

RAINBOW WASH FLOODPLAIN/FLOODWAY DELINEATION STUDY

FCD 90-66

TECHNICAL DATA NOTEBOOK HYDRAULICS

Prepared for:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
2801 West Durango Street
Phoenix, Arizona 85009

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ARIZONA, U.S.A.

MAY, 1994

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SECTION 4: Hydraulic Analysis

4.1 Method Description

Water surface elevations for Rainbow Wash and it's tributary are computed through the use of the Department of the Army, Corps of Engineers HEC-2 Water Surface Profiles computer program. The program vendor was Simons, Li & Associates, Inc. 4600 S. Mill Avenue, Tempe, Arizona, 85282. The program version was 4.6.2: May, 1991.

The Rainbow Wash model starts at critical depth at the mouth of Rainbow Wash at the Gila River. Critical depth was assumed as the starting WSEL for Rainbow Wash because preliminary HEC-2 model runs indicated that the reach of Rainbow Wash defined from cross-section 0.02 through cross-section 0.59 flows supercritical. Preliminary model results for this reach indicated critical depth for each cross-section within the reach. Ordinarily the starting water surface elevation would begin assuming normal depth. Normal depth for subcritical conditions is greater than critical depth. However, the initial reach of Rainbow Wash as stated above, appears to flow supercritical. Normal depth for supercritical conditions is less than critical depth. Since the Rainbow Wash HEC-2 model was developed for subcritical conditions the starting water surface elevation can only begin at (critical) normal depth or critical depth. The model conditions cannot assume a starting water surface of normal depth for supercritical flow. Therefore, critical depth was assumed as the starting water surface elevation.

The starting water surface elevation for the Rainbow Wash tributary was obtained from the 100-year water surface elevation in the Rainbow Wash mainstem (at the confluence of Rainbow Wash and its tributary). Coincident peaks for the mainstem and tributary was assumed as the times of peak flows are similar for the combining watersheds.

SECTION 4: Hydraulic Analysis

4.2 Parameter Estimation

N Value Determination Report

RAINBOW WASH

FLOOD INSURANCE STUDY

FCD 90-66

Submitted to:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
2801 West Durango Street
Phoenix, Arizona 85007

FCD 90-66

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April, 1992

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I. INTRODUCTION

This report was prepared by Simons, Li & Associates, Inc., as part of the Flood Insurance Study (FIS) of Rainbow Wash (Contract No. FCD 90-66) for the Flood Control District of Maricopa County. Rainbow Wash is a tributary of the Gila River and is located approximately 10 miles southwest of Buckeye, Arizona. The study limits for the Rainbow Wash FIS begin at the Gila River floodplain and continue along the main channel for approximately 3 miles upstream of State Route 85; and along the tributary of Rainbow Wash for approximately 1 mile upstream of State Route 85. A site map showing the limits of the Rainbow Wash FIS is provided on Figure 1.

The purpose of this report is to present the results of a detailed analysis to define Manning's roughness coefficients for Rainbow Wash and is intended to provide supplementary technical documentation for the development of a detailed hydraulic model.

The "Hydrologic Design Manual" (9) states that precipitation in Maricopa County can typically be divided into two seasons: summer and winter. The summer precipitation season occurs approximately from June through October, whereas, the winter precipitation season occurs from December through March. Major storms generally occur during these two seasons.

The manual categorizes storm patterns into three generalized types: general winter storms, general summer storms, and local storms. General winter storms are characterized as "low intensity, long duration, and large areal extent "(9). General summer storms "consists of a band of locally heavy rain cells within a larger area of light to moderate rainfall" and "are more localized along a southeast to northwest band of rainfall" (9). Local storms more frequently occur during the summer months and are associated with intense, local downpours with lightning and thunder.

The implication of precipitation season and storm type in regards to determination of Manning's coefficients will be presented in Section III.

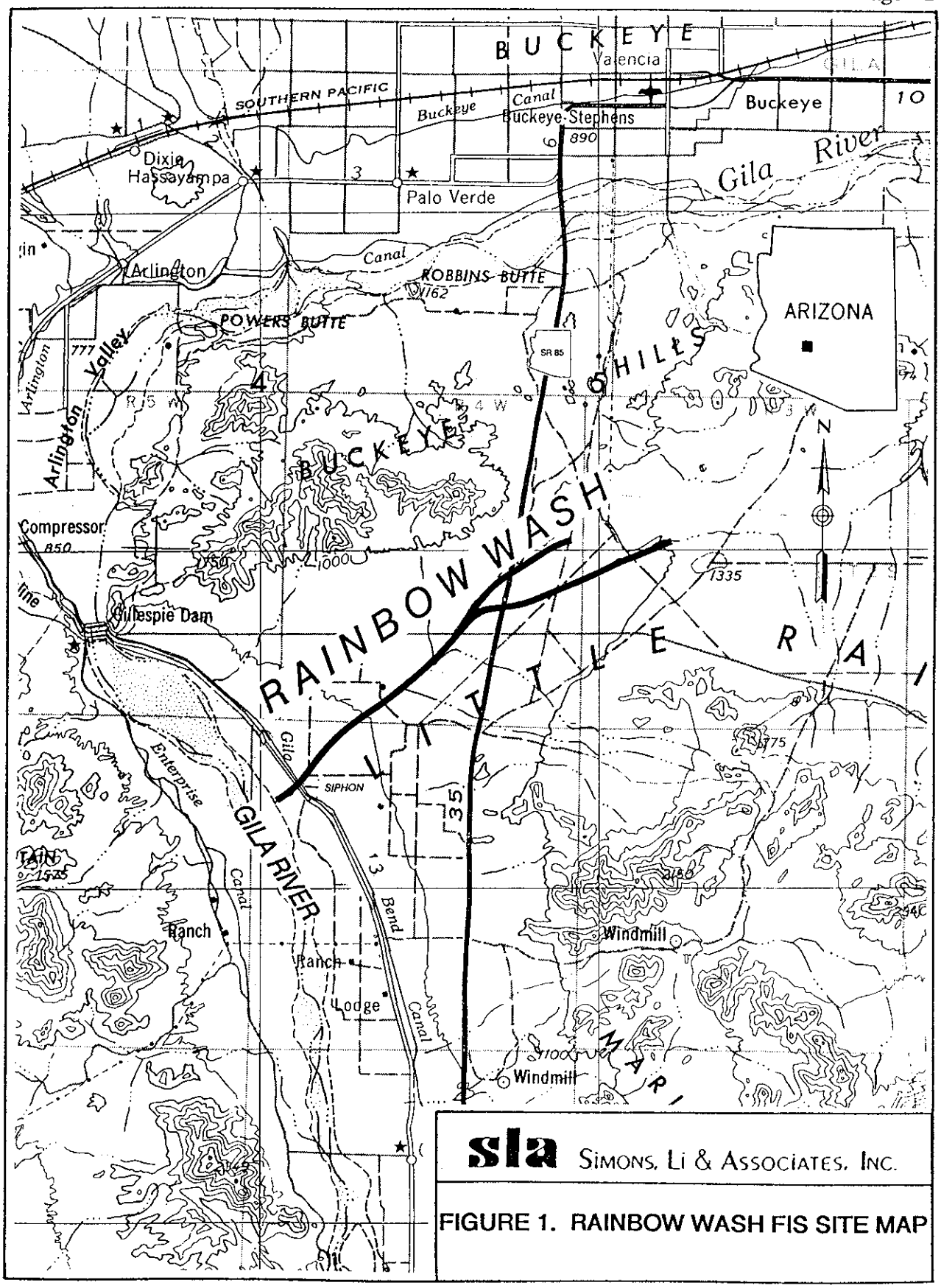

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FIGURE 1. RAINBOW WASH FIS SITE MAP

II. METHODOLOGY

Values for the Manning's roughness coefficient, "n", may be assigned for conditions that exist at the time of a specific flow event, for average conditions over a range in stage, or for anticipated conditions at the time of some future flow event. The Manning's "n" values developed in this study for the Rainbow Wash FIS were developed for the 100-year peak flood discharges (1).

Several sources of data were utilized to develop the "n" values presented in this report. The information available included: 1) two separate sets of aerial photo contact prints (Cooper Aerial - December, 1990; Kenney Aerial - October, 1991); 2) ground level photographs; and 3) video tape of the study reach. The ground level photographs and video tape were obtained during a field reconnaissance trip conducted January 15, 1992. The photographic documentation presented in this report were taken during the field reconnaissance trip.

The "n" value assigned to a stream reach should represent the factors that tend to impede flow. Two procedures will be used to develop the "n" value for the detailed hydraulic model. The first procedure assigns a base "n" value that represents the surface roughness for a straight uniform channel of a given bed material (2). Vegetation, channel shape and irregularity, stage, discharge, and other factors that increase roughness are accounted for by a multiplication factor or by adding increments of roughness to the base "n" value.

The second procedure assigns an "n" value horizontally for the subdivided segments of a specific cross section. The hydraulic model (HEC-2) then computes the average "n" value for the specific section (3). This procedure was utilized to define the average "n" value where vegetation or other obstructions significantly effect the conveyance of a defined portion of a cross section.

Once the composite "n" values were assigned for the various reaches using one or a combination of the methods stated above, the "n" values were compared with channels having

similar characteristics. Several references (4,5,6) were used to verify the range of "n" values that were developed for the Rainbow Wash FIS.

Rainbow Wash is a sand bed channel which transports significant sediment load during flow events. Resistance to flow varies greatly in sand bed channels because the bed material moves easily and assumes different bed configurations or bed forms. The channel bed form is a function of flow velocity, grain size and other variables. Photograph 1 illustrates remnants of bed forms that existed during recent flows. However, Photograph 1 may not represent the bed forms that would be present during the 100-year peak flood discharge. The base "n" values developed for sand bed channels assume the natural channel to be in the upper flow regime. If the natural channel is in the lower or transitional flow regime, the base "n" value will be much larger as a result of the bed form roughness. Therefore, the flow regime was estimated for representative reaches to confirm the applicability of the base "n" values.

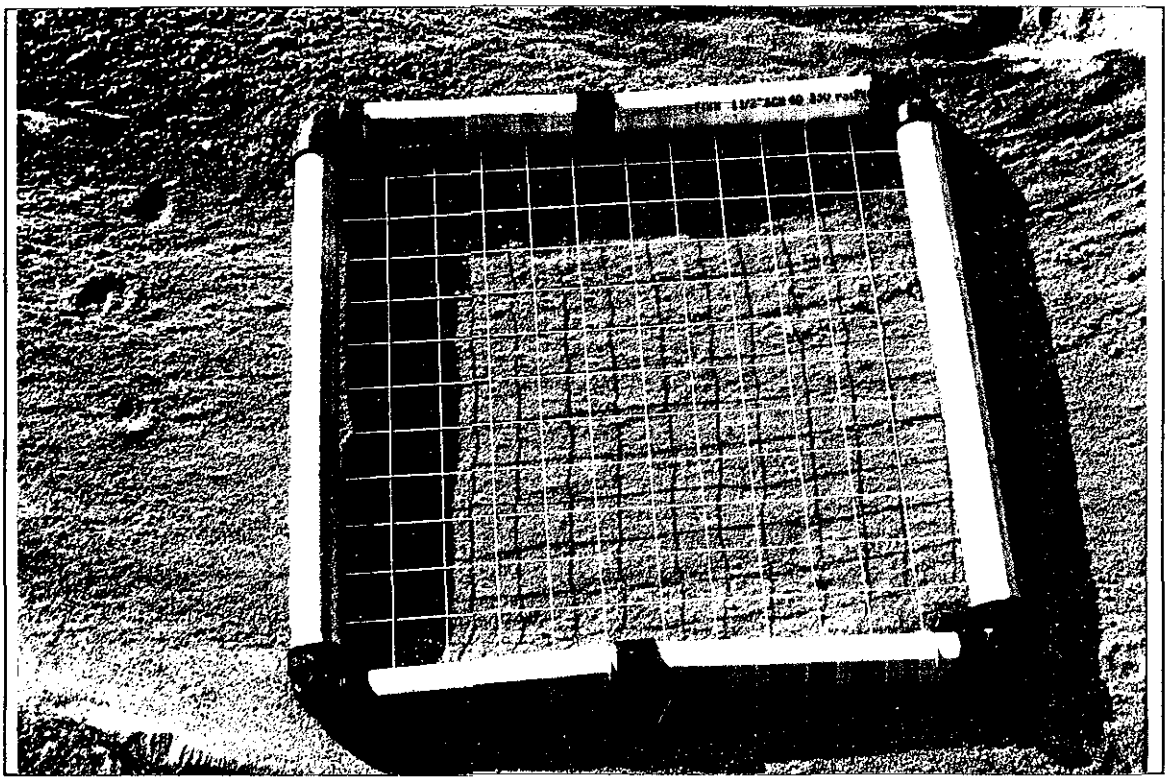
PHOTOGRAPH 1. Remnants of Bed Forms.

III. BASE VALUE DETERMINATION

The base "n" value for Rainbow Wash was assigned for flood flows in sand channels with moveable beds. Photograph 2 illustrates typical bed material found in the main channel of the mainstem and tributary of Rainbow Wash. The bed material can be characterized as medium to coarse grain sand. Close-up photographs of the bed material of Rainbow Wash were compared with a detailed example in reference 2, Waterman Wash above Eagle Mountain Road. Waterman Wash and Rainbow Wash are located in the same general area of Maricopa County. Close examination of the bed material photographs indicate a representative base "n" value for Rainbow Wash would be 0.025.

To check the applicability of the base "n" value, single section hydraulic models of the 100-year peak discharge were developed for 11 cross sections to represent the mainstem and tributary of Rainbow Wash. The hydraulic parameters calculated by these single section models were utilized to determine stream power for the reaches which the cross sections represent. A median bed material size of 0.8 mm was used for the comparison. The computed stream power was compared with the value necessary to cause upper regime flow by entering Figure 1 of reference 4. It was estimated that a minimum stream power of 1.7 foot-pounds per second would be necessary to maintain upper regime flow conditions for the 100-year peak discharge. When the hydraulic conditions for the representative reaches approached the minimum stream power threshold, a minimum overall "n" value of 0.035 was applied to the main channel (7) to account for bed form roughness.

The base "n" values for the overbanks were assigned considering stable channels conditions (2). Review of photographs of the overbanks provide little evidence of bed material movement except in locations where small channels have formed in the overbank. Comparison of base "n" values for the overbanks of Waterman Wash with the overbanks of Rainbow Wash indicate that the bed material can be considered "firm soil." Therefore, a base "n" value of 0.025 was assigned to the overbanks for Rainbow Wash.



PHOTOGRAPH 2. Typical Bed Material

Significant lengths of overbank along Rainbow Wash are wide active and inactive cultivated fields. The field reconnaissance indicates that these fields are planted with cotton. Since it is impossible to predict the time of year when a 100-year flood might occur, it was assumed for the purposes of this study that the 100-year flood would occur during the growing season for cotton at a time when the cotton fields were fully mature. The single section hydraulic analyses indicate that the depth of flow for inactive cultivated overbank areas would generally be shallow (i.e. 1 to 2 feet). A value of 0.040 was selected for inactive cultivated overbanks due to the depth of flow and orientation of the cotton field with respect to the flow lines. A value of 0.15 was selected for active cultivated overbanks (see page 18, Section V).

IV. ADJUSTMENTS TO THE BASE VALUE

The base "n" value (n_b) must be adjusted accordingly for factors such as depth of flow, channel irregularities, obstructions, vegetation, changes in channel shape, and degree of meandering. An accepted method of arriving at the overall "n" is to add increments of roughness to the base "n" for each condition that increases the roughness (2). The base "n" values used in this study generally apply to average conditions rather than the smoothest reach attainable for a given bed material (4). Therefore, the base values require smaller adjustments than do the base values defined in other procedures (5).

Channel irregularity can have a great impact on the overall "n" when the width to depth ratio is small. The width of the main channel of Rainbow Wash is relatively large in comparison to the depth. Therefore, only minor adjustments have been applied to the base "n" value to account for channel irregularity (n_1). Several overbank reaches include small channels parallel to the main channel. Under these conditions a minor increase to the base "n" was included as a component of the overall "n". A minor adjustment due to channel irregularity was also included for the Rainbow Wash tributary.

Obstructions are physical objects which disturb the flow pattern and increase the "n" value. The amount of increase depends upon the channel slope, shape of the obstruction, the size in relation to the cross section, and the number, arrangement, and spacing of obstructions. Engineering judgement and experience was applied when assigning adjustments to the base "n" value for obstructions so as not to duplicate conditions considered for other adjustment factors. The adjustment for obstructions (n_2) was considered to be relatively small throughout the Rainbow Wash study reach.

Several factors impact the extent to which vegetation affects the base "n" value. The percentage of wetted perimeter covered by vegetation, the density of vegetation below the high water line, the degree to which the vegetation is flattened by high water, and the alignment of vegetation relative to the flow all impact the value assigned to the vegetation adjustment factor

(n_3). Vegetation is the primary factor that affects "n" for portions of a number of reaches of Rainbow Wash. Therefore, some parts of the channel or flood plains were assigned "n" values for the vegetation rather than for the material in which it is growing. A majority of the main channel which remains in a natural state had a large growth of trees (e.g., palo verde, mesquite) along the banks. The density of vegetation in the overbanks varied from relatively dense growths of tall brush (e.g., creosote) and trees to sparse brush and weeds.

The extent to which the depth of flow, channel shape, and degree of meandering impact the "n" value were evaluated for Rainbow Wash. In general, these factors were considered when assigning adjustment factors for the components listed above. Several main channel reaches of Rainbow Wash are divided at normal and lower flow stages by small in-stream islands. These braided reaches were considered as a single channel for determining the overall "n" values.

V. DETAILED ANALYSES

Eleven cross-sections of the mainstem and tributary were developed from the Rainbow Wash FIS topographic mapping for the detailed evaluation of typical "n" value characteristics. The representative cross sections were then divided into subsections, where applicable, primarily based on major breaks in cross section geometry. Each of these subsections were evaluated in detail to systematically define the "n" value for the subdivided portions of the cross section. The preliminary flow regime models indicate generally shallow, wide flow depths for the 100-year peak discharges. Composite "n" values were computed by using values weighted by wetted perimeter for each segment of a subsection to account for the roughness attributed to low-lying boundary material. Photographs are used to illustrate typical channel and overbank features and characteristics for each of the 11 cross-sections. The channel and overbank features depicted in the photographs can be applied to the particular cross-section as well as to the reach of the stream for a distance both upstream and downstream of the cross-section. Results from the detailed analysis for each of the 11 cross sections follows:

CROSS SECTION 0.19

Location of cross section:

The mainstem of Rainbow Wash at river mile 0.19, approximately 1,000 feet upstream of the confluence with the Gila River and 2,000 feet downstream of the Gila Bend Canal.

Description of channel:

The main channel bed consists of medium to coarse grain sand and has the capacity to convey the entire 100-year peak discharge. Erosion is evident along both banks of the main channel. The flow depth is approximately 4 to 5 feet and the little vegetation existing in the channel would be flattened by the flood flows.

Portion of area or wetted perimeter of subsection from left end	Components	Weighted and composite values
	$n_b = 0.025$	
	$n_1 = 0.003$	
	$n_2 = 0.000$	
	$n_3 = 0.002$	$n = 0.030$

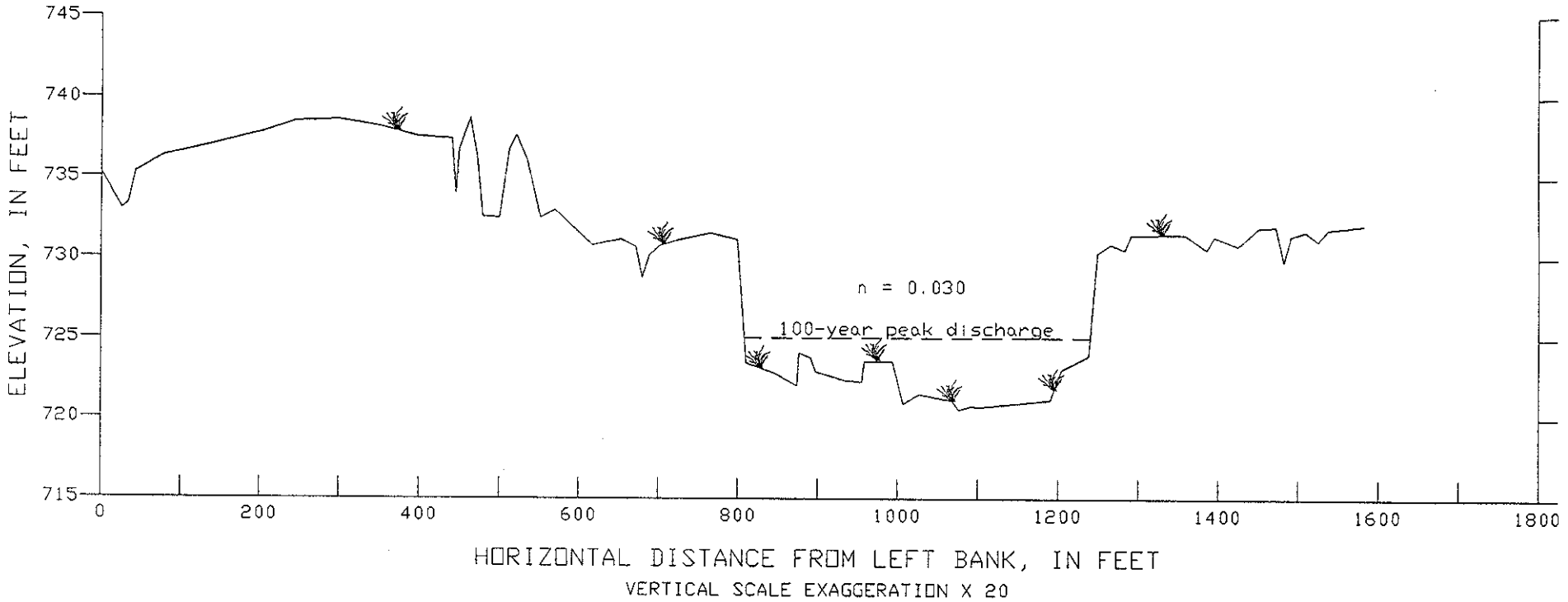


FIGURE 2 Cross section of Rainbow Wash near the confluence with the Gila River

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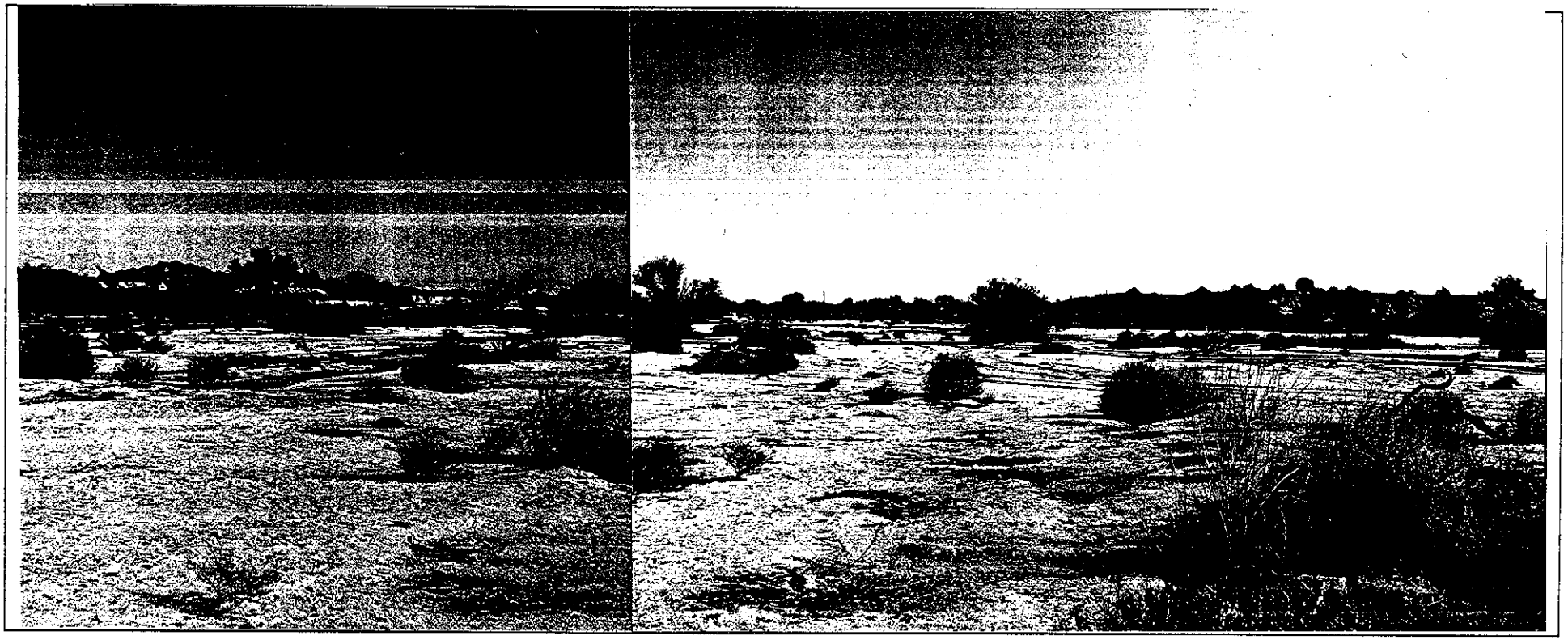
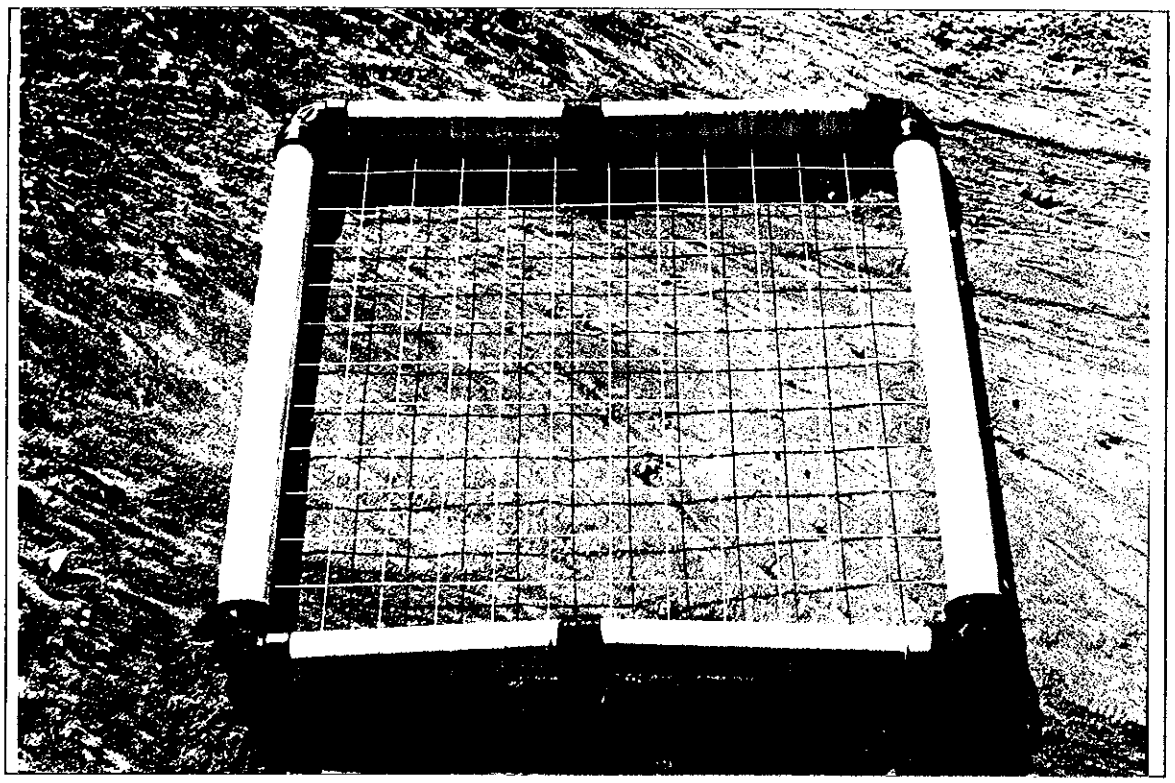


PHOTOGRAPH 3. Looking upstream at Rainbow Wash from the confluence with the Gila River. Selected n = 0.030 due to little vegetation and only small scattered brush.



PHOTOGRAPH 4. Close-up of the finest bed material upstream of the confluence with the Gila River. A base "n" of 0.025 was assigned.

PHOTOGRAPH 5. North bank of main channel near the confluence with the Gila River. Relatively tall eroded banks.

CROSS SECTION 0.38

Location of cross section:

The mainstream of Rainbow Wash at river mile 0.38, approximately 1,800 feet upstream of the confluence with the Gila River and 1,100 feet downstream of the Gila Bend Canal.

Description of channel:

The main channel bed consists of medium to coarse grain sand and has the capacity to convey the entire 100-year peak discharge. Erosion is evident along both banks of the main channel. The flow depth is approximately 6 feet. Vegetation consists of palo verde trees, shrubs and weeds. Five percent of the flow area was estimated to contain significant obstruction by vegetation. Most, if not all, of the smaller vegetation would be flattened by flood flows.

Portion of area or wetted perimeter of subsection from left end		Components		Weighted and composite values
		$n_b = 0.025$ $n_1 = 0.001$ $n_2 = 0.002$ $n_3 = 0.004$		
0.95	x	$n = 0.032$	=	0.030
		$n_b = 0.025$ $n_3 = 0.035$		
0.05	x	$n = 0.060$	=	0.003
1.00				$n = 0.033$

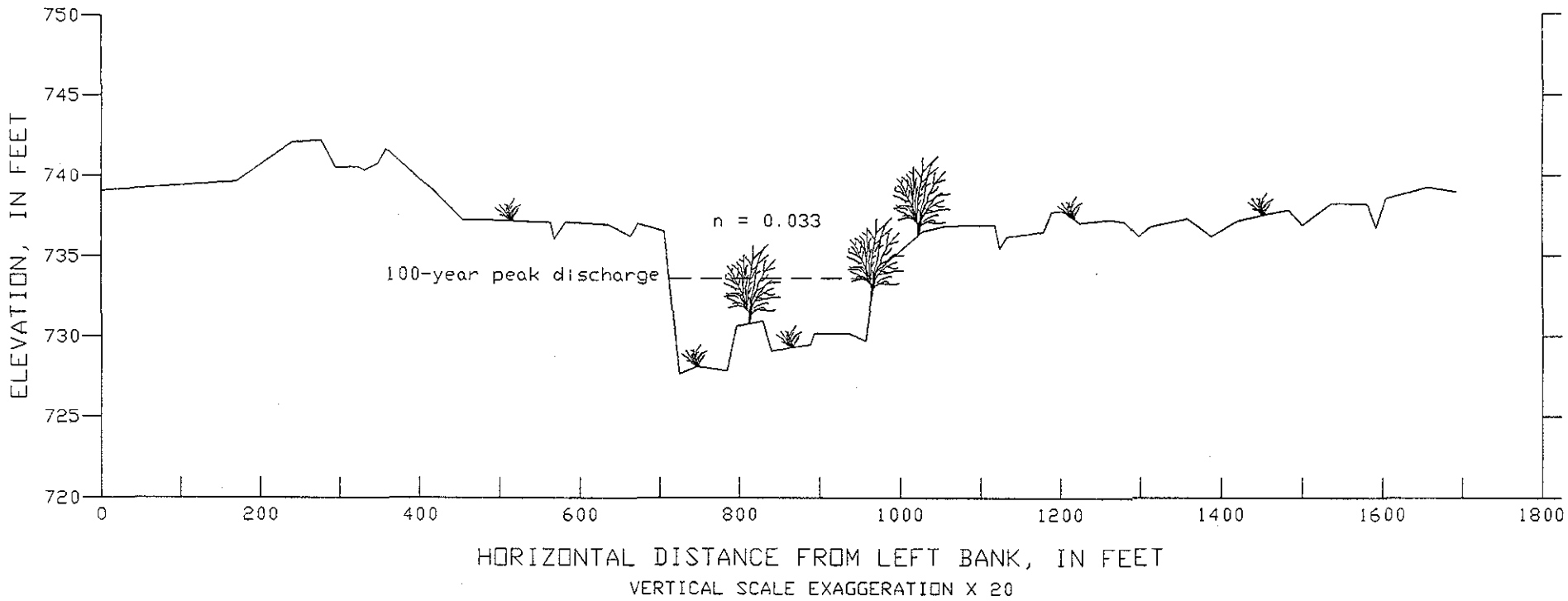


FIGURE 3 Cross section of Rainbow Wash near the Gila Bend Canal

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PHOTOGRAPH 6. Looking upstream towards the Gila Bend Canal at the vegetation within the main channel.

PHOTOGRAPH 7. Looking upstream towards the Gila Bend Canal. The vegetation is assigned an overall "n" value of 0.060 for the estimated flow depths.

PHOTOGRAPH 8. Looking downstream towards the confluence with the Gila River. The overall "n" assigned to this reach is 0.033.

CROSS SECTION 1.36

Location of cross section:

The mainstem of Rainbow Wash at river mile 1.36, approximately 4,000 feet upstream of the Gila Bend Canal.

Description of channel:

The main channel consists of medium to coarse sand that has been bulldozed over the banks to increase channel conveyance. The resulting banks are higher than the surrounding overbank areas. Little or no vegetation exists in the main channel. Both overbanks experience shallow flooding (i.e. 1 to 2 feet) and are active cropland planted in cotton. The estimation of the roughness coefficient for the left and right overbanks was based on the recommendations provided in reference 2 (pages 10 and 11). Since the time (seasonality) of a storm event is unpredictable, it was assumed that the overbank areas were fields of fully developed mature cotton plants instead of defoliated cotton. "Fields of mature cotton plants are comparable to dense brush in summer" (ref.2) and were assigned an "n" value of 0.15.

Portion of area or wetted perimeter of subsection from left end	Components	Weighted and composite values
Main Channel	$n_b=0.025$ $n_1=0.003$ $n_2=0.001$ $n_3=0.001$	$n=0.03$
Left and Right Overbanks	$n_3=0.150$	$n=0.15$

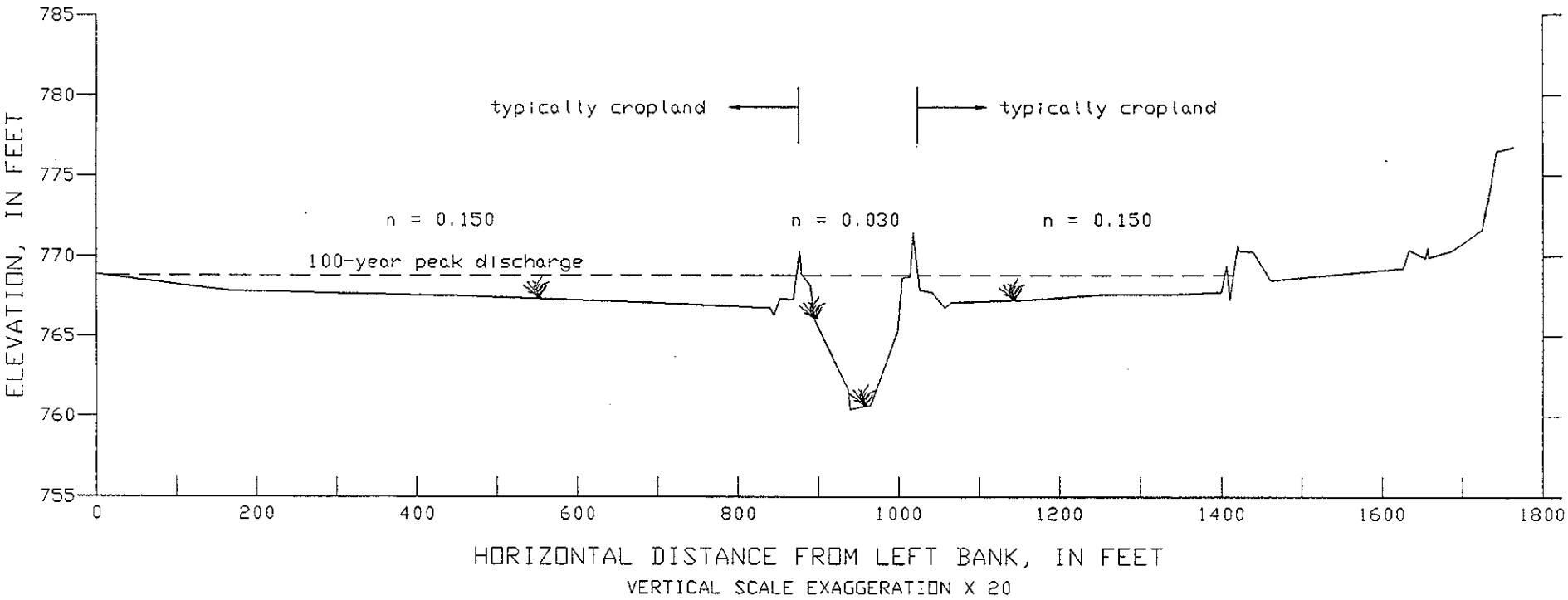

FIGURE 4 Cross section of Rainbow Wash where main channel is graded and the overbanks are cropland

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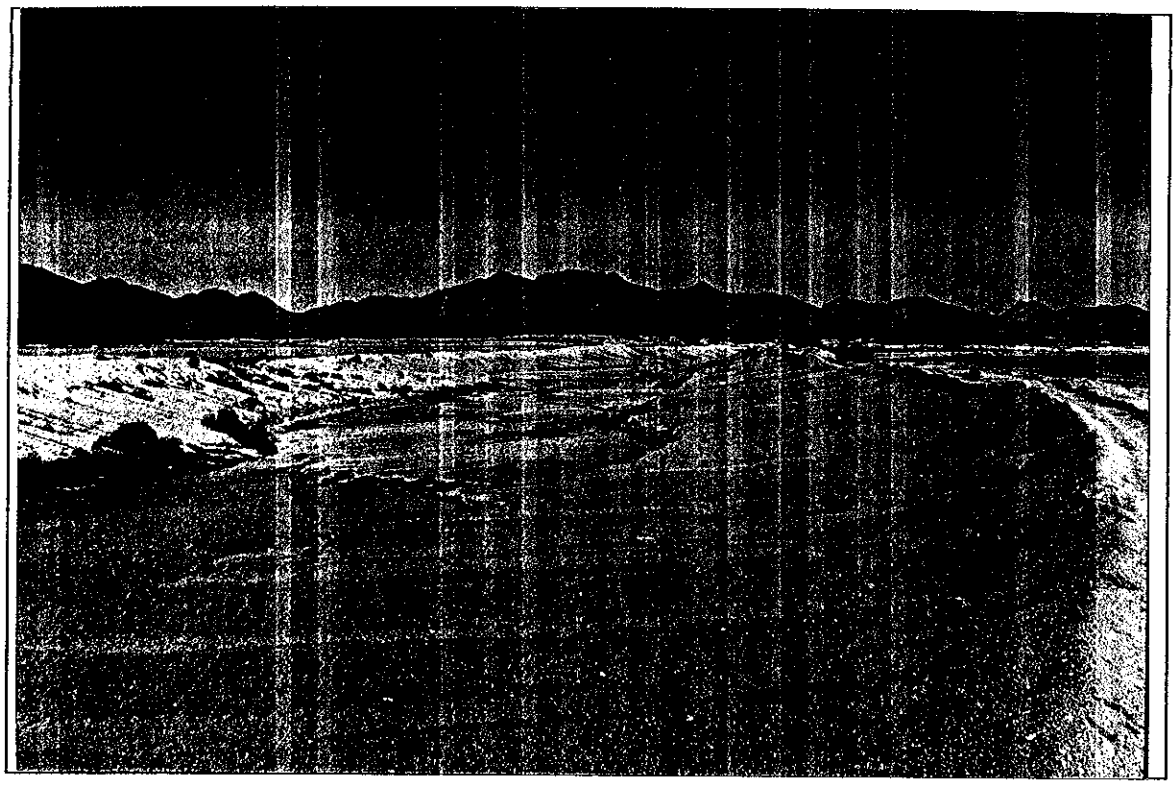
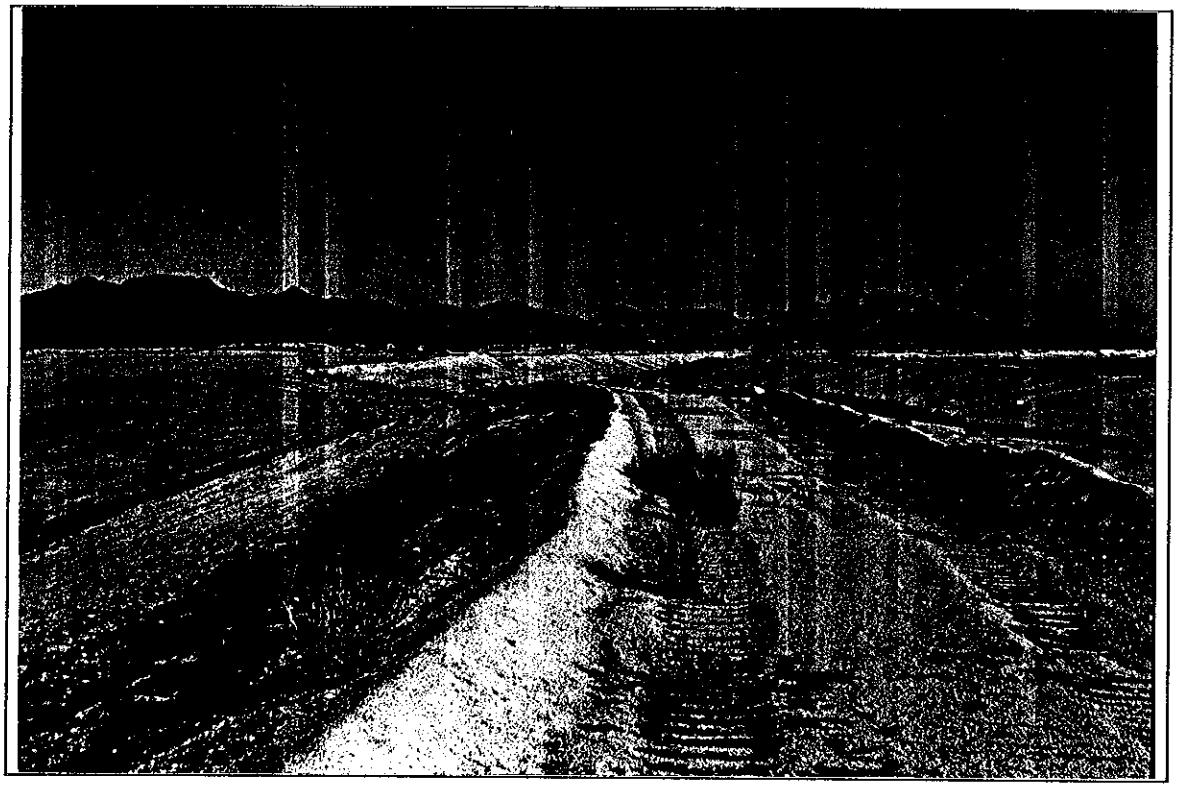
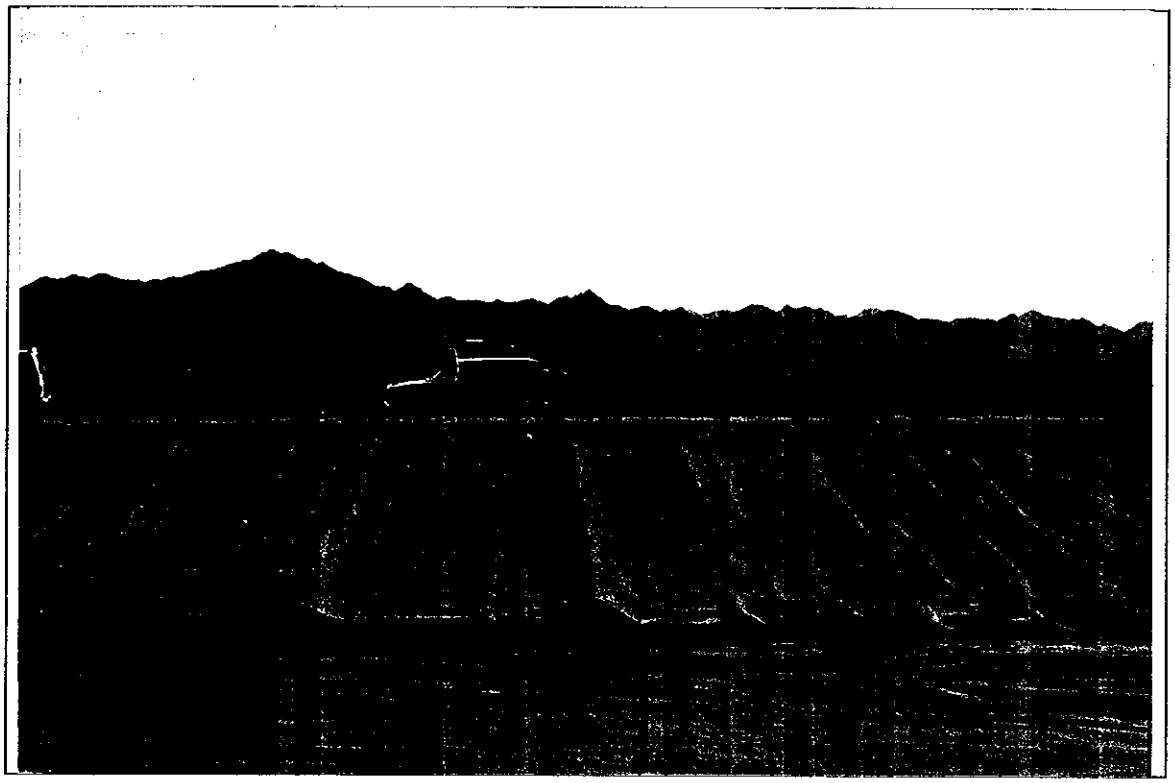


PHOTOGRAPH 9. Looking upstream at the bulldozed banks of the main channel. The main channel was assigned n = 0.03.



PHOTOGRAPH 10. Looking upstream at the right overbank. Active cropland planted in cotton with shallow flooding likely. Assigned n = 0.150.



PHOTOGRAPH 11. Looking at the south bank and the channel irregularities caused by bulldozing material out of the main channel.

CROSS SECTION 2.02

Location of cross section:

The mainstem of Rainbow Wash at river mile 2.02, approximately 8,000 feet upstream of the Gila Bend Canal.

Description of channel:

The main channel consists of medium to coarse grain sand with flow depths ranging from 3 to 4 feet. The main channel is in a natural condition with relatively large palo verde and mesquite trees lining the banks. Five percent of the flow width is estimated to be obstructed by vegetation. Both overbanks experience shallow flooding (1 to 1.5 feet) and are cropland, planted with cotton.

Portion of area or wetted perimeter subsection from left end		Components		Weighted and composite values
Main Channel		$n_b=0.025$ $n_1=0.001$ $n_2=0.002$ $n_3=0.002$		
0.95	x	$n=0.030$	=	0.030
0.05	x	$n_3=0.080$	=	0.004
1.00				$n=0.033$
Left and Right Overbanks		$n_3=0.150$		$n=0.150$

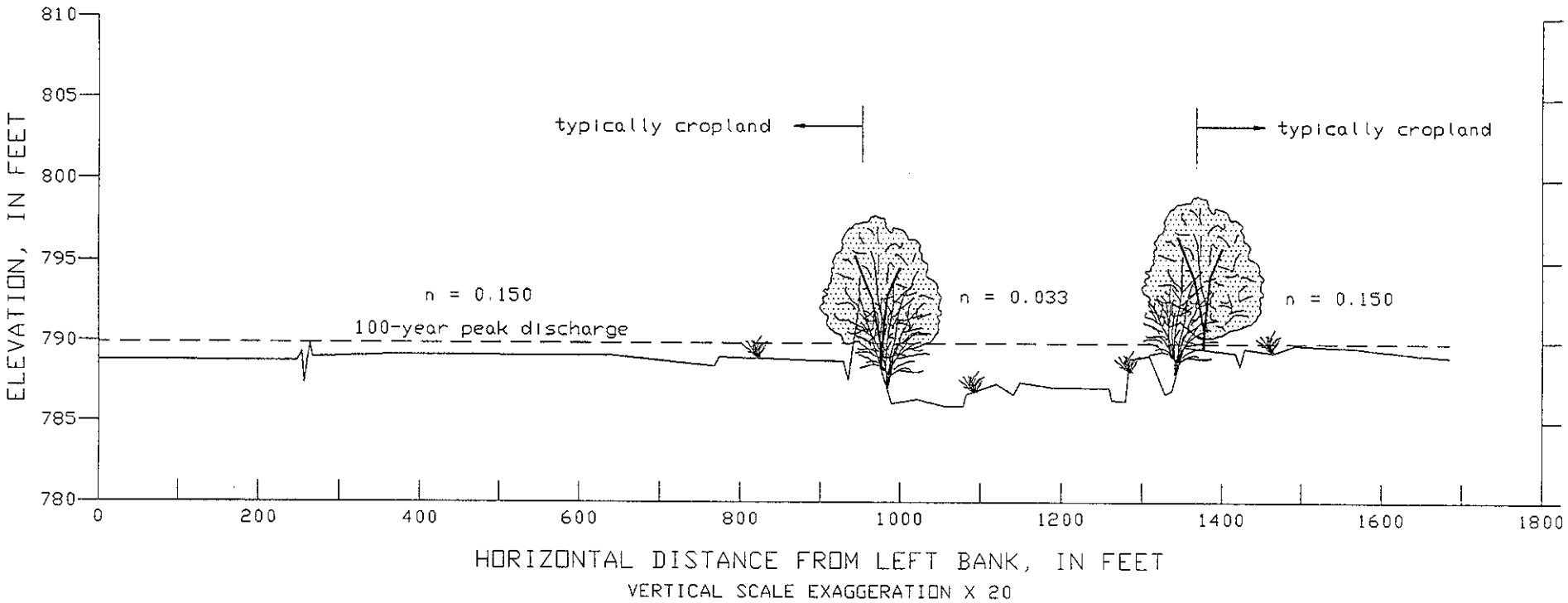


FIGURE 5 Cross section of Rainbow Wash natural main channel and overbanks are cropland

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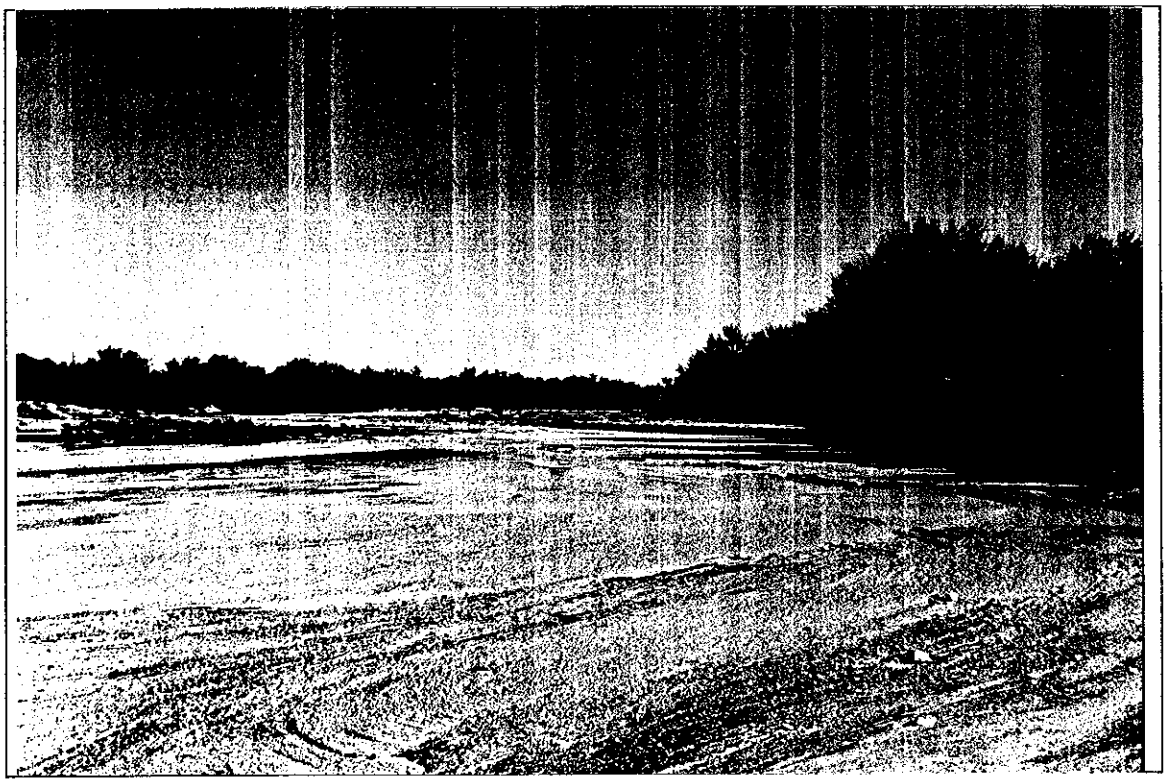

PHOTOGRAPH 12. Typical natural main channel with large palo verde and mesquite lining the banks. Assigned an overall main channel n = 0.033.

CROSS SECTION 2.63

Location of cross section:

The mainstem of Rainbow Wash at river mile 2.63, approximately 11,000 feet upstream of the Gila Bend Canal.

Description of channel:

The main channel consists of medium to coarse grain sand with flow depths ranging from 3 to 5 feet. The main channel remains in a natural condition with relatively large palo verde and mesquite trees lining the banks. Vegetation is estimated to obstruct 5 percent of the flow width in the main channel. Both overbanks experience shallow flooding (ie. 1 to 2.5 feet) and the right overbank is cropland planted in cotton. The left overbank remains in a natural state with a relatively dense growth of creosote, sage, small palo verde trees, and cactus.

Portion of area or wetted perimeter of subsection from left end		Components		Weighted and composite values
Main Channel		$n_b=0.025$ $n_1=0.001$ $n_2=0.002$ $n_3=0.030$		
0.95	x	$n=0.030$	=	0.029
0.05	x	$n_b=0.080$	=	0.004
1.00				$n=0.033$
Left Overbank		$n_b=0.025$ $n_1=0.003$ $n_2=0.002$ $n_3=0.020$		$n=0.050$
Right Overbank		$n_b=0.015$		$n=0.015$

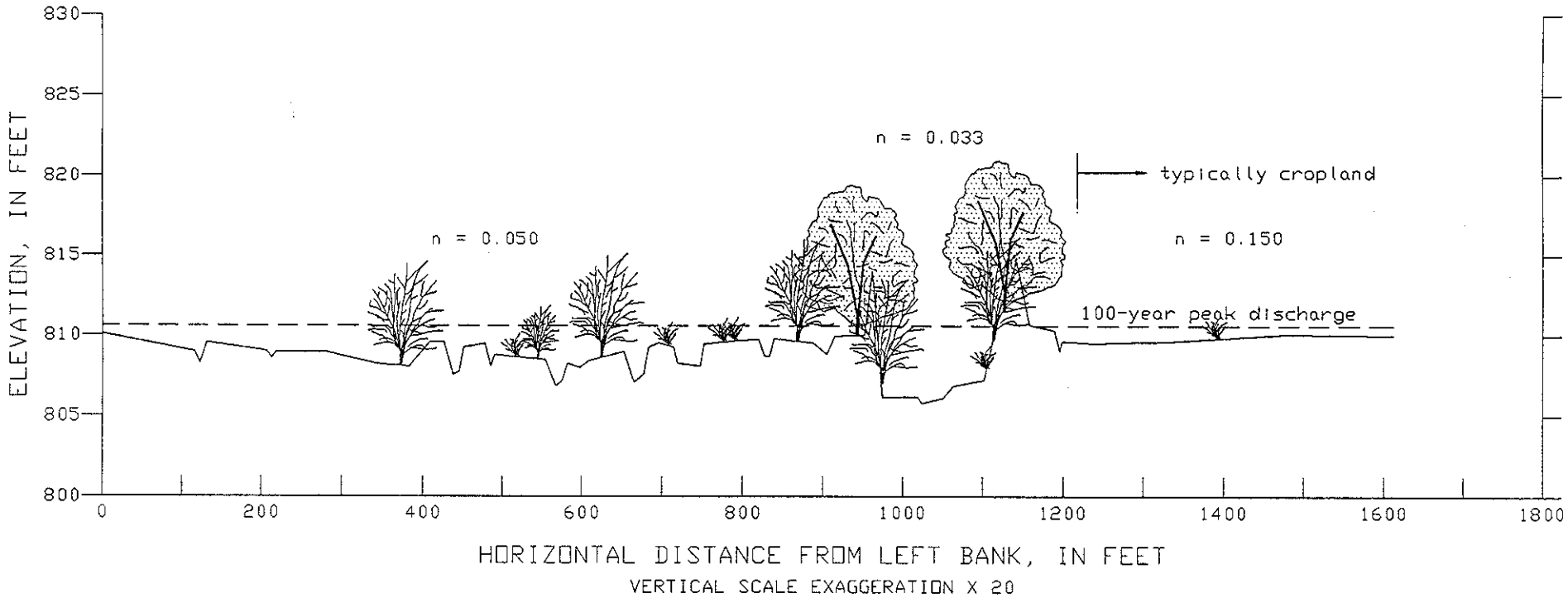

FIGURE 6 Cross section of Rainbow Wash with natural main channel and one overbank, cropland in other overbank

PHOTOGRAPH 13. Relatively dense growth in the right overbank. Assigned an overall n = 0.050.

PHOTOGRAPH 14. Natural main channel with large trees on both banks. Assigned n = 0.033 for the overall main channel.

CROSS SECTION 4.25

Location of cross section:

The mainstem of Rainbow Wash at river mile 4.25, approximately 19,000 feet upstream of the Gila Bend Canal and 10,000 feet downstream of S.R. 85.

Description of channel:

The main channel consists of medium to coarse grain sand with flow depths ranging from 3 to 5 feet. The main channel in this reach of Rainbow Wash is braided with several small islands. Fairly dense stands of vegetation line the banks and stabilize the islands. The subordinate channels of this braided reach were analyzed as a single channel. Therefore, no overbanks were subdivided out of the total cross section.

Portion of area or wetted perimeter of subsection from left end		Components		Weighted and composite values
0.45	x	$n_b=0.025$ $n_1=0.001$ $n_2=0.002$ $n_3=0.002$ $n=0.030$	=	0.014
0.15	x	$n_b=0.025$ $n_3=0.055$ $n=0.080$	=	0.012
0.40	x	$n_b=0.025$ $n_1=0.002$ $n_2=0.003$ $n_3=0.005$ $n=0.035$	=	0.014
1.00				$n=0.040$

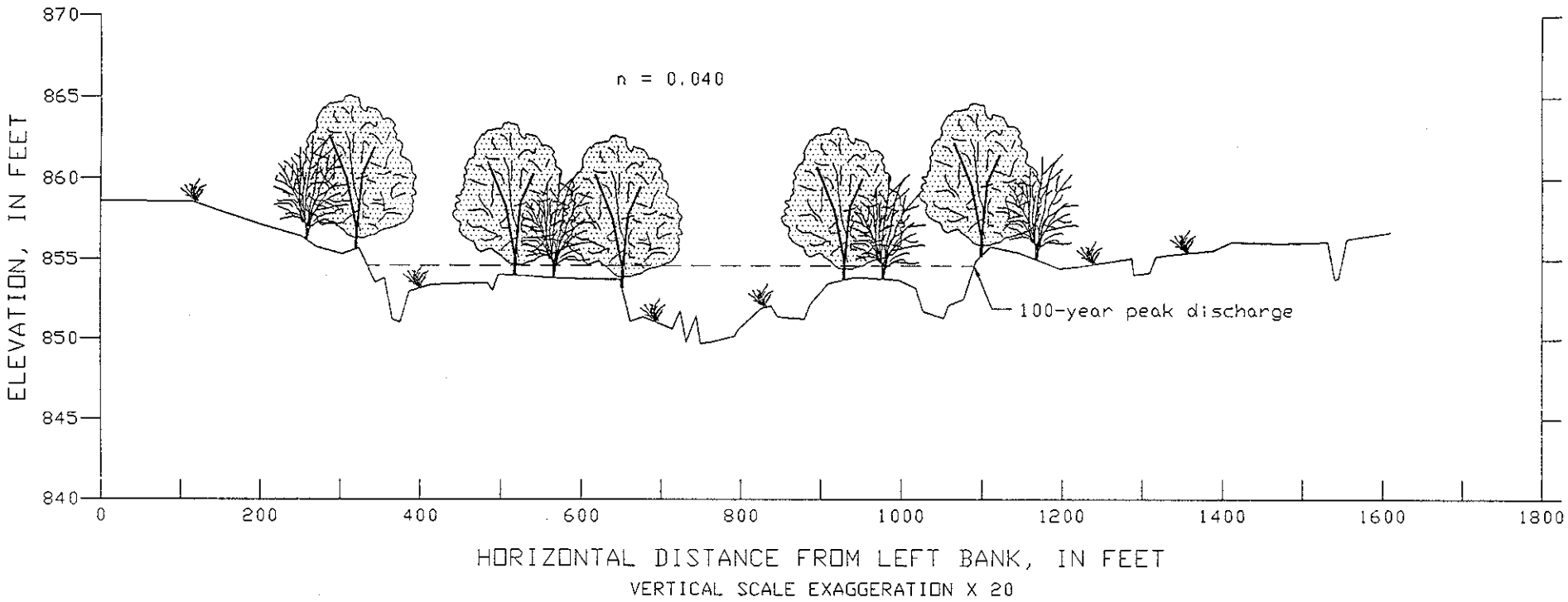

FIGURE 7 Cross section of Rainbow Wash braided channel

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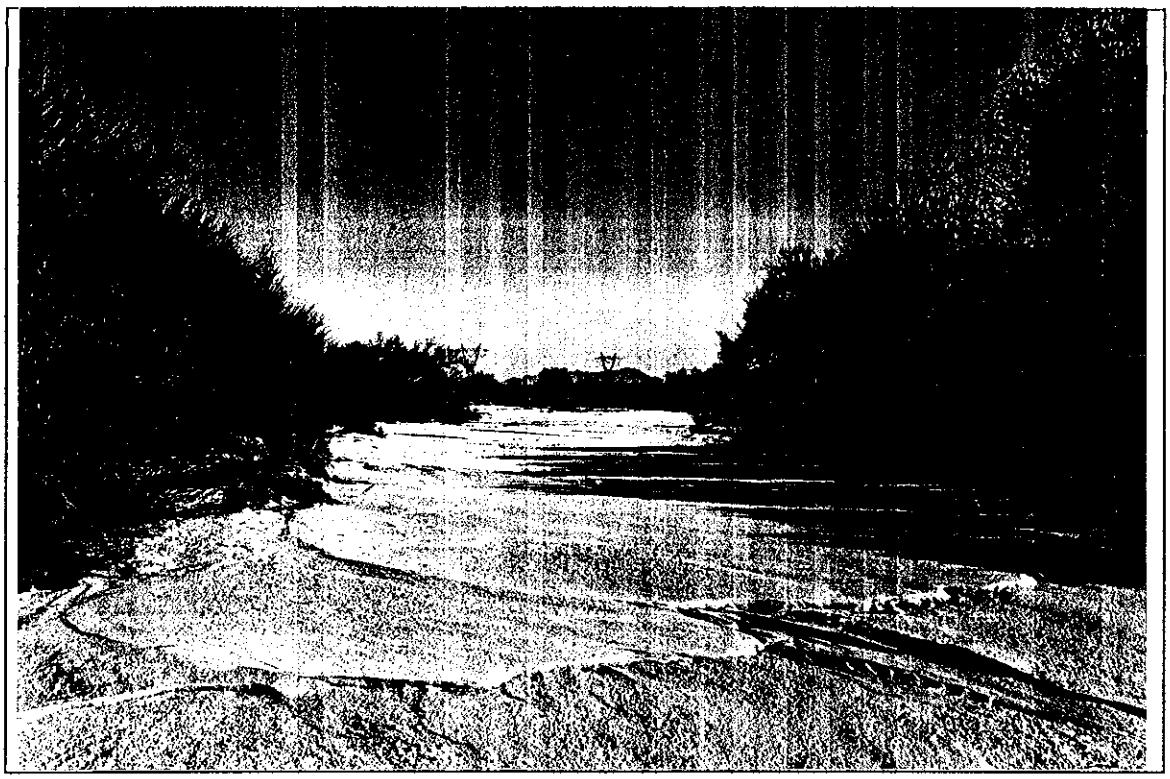
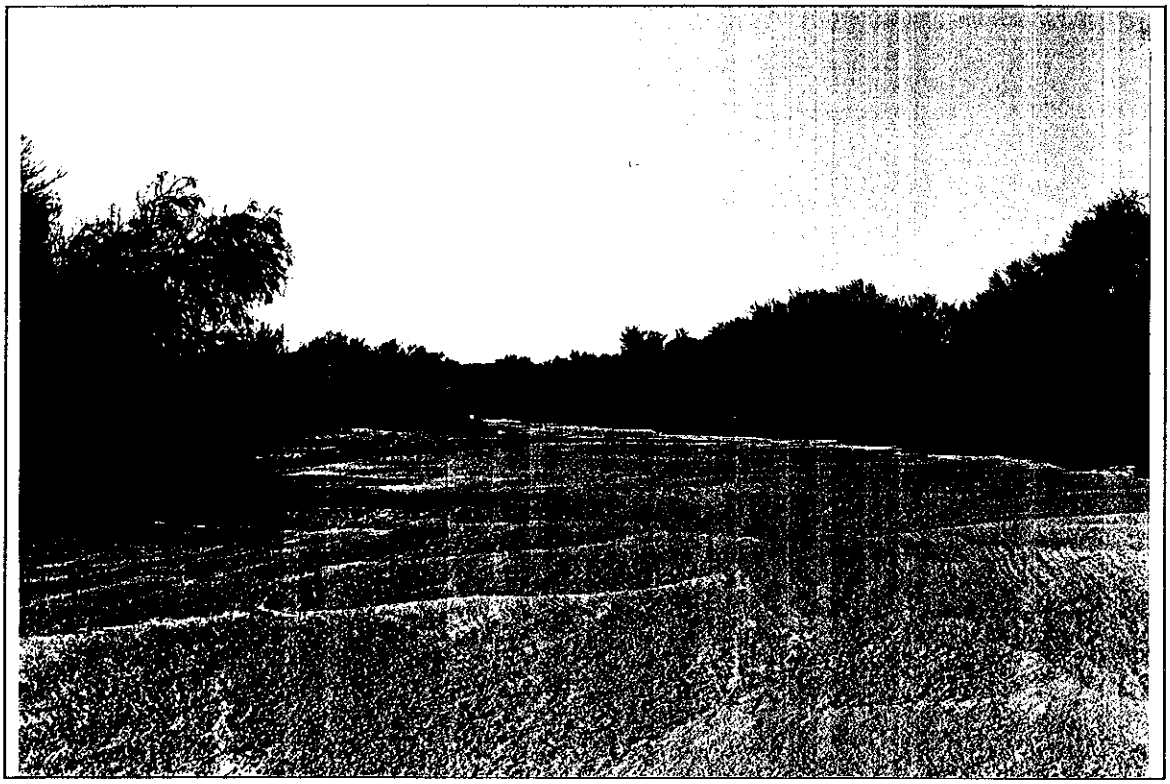


PHOTOGRAPH 15. The subordinate channels of this braided reach were analyzed as a single channel. The overall "n" value assigned is 0.040.



PHOTOGRAPH 16. The subordinate channels of this braided reach were analyzed as single channel. The overall "n" value assigned is 0.040.

CROSS SECTION 4.56

Location of cross section:

The mainstem of Rainbow Wash at river mile 4.56, approximately 21,000 feet upstream of the Gila Bend Canal and 8,000 feet downstream of S.R. 85.

Description of channel:

The main channel consists of medium to coarse grain sand with flow depths ranging from 3 to 5 feet. This reach of Rainbow Wash presents a typical transition between main channel and overbank flow to a braided stream with several small islands. The main channel is generally lined on one side with large palo verde and mesquite trees. Typical flow depths in the overbanks range form 1 to 3 feet. Vegetation in the overbanks generally consist of creosote, brush and cactus.

Portion of area or wetted perimeter of subsection from left end		Components		Weighted and composite values
Main Channel		$n_b=0.025$ $n_1=0.001$ $n_2=0.002$ $n_3=0.002$		
0.90	x	$n=0.030$	=	0.027
		$n_b=0.025$ $n_3=0.055$		
0.10	x	$n=0.080$	=	0.003
1.00				$n=0.035$
Left Overbank		$n_b=0.025$ $n_1=0.004$ $n_2=0.001$ $n_3=0.015$		$n=0.045$
Right Overbank		$n_b=0.025$ $n_1=0.002$ $n_2=0.001$ $n_3=0.012$		$n=0.040$

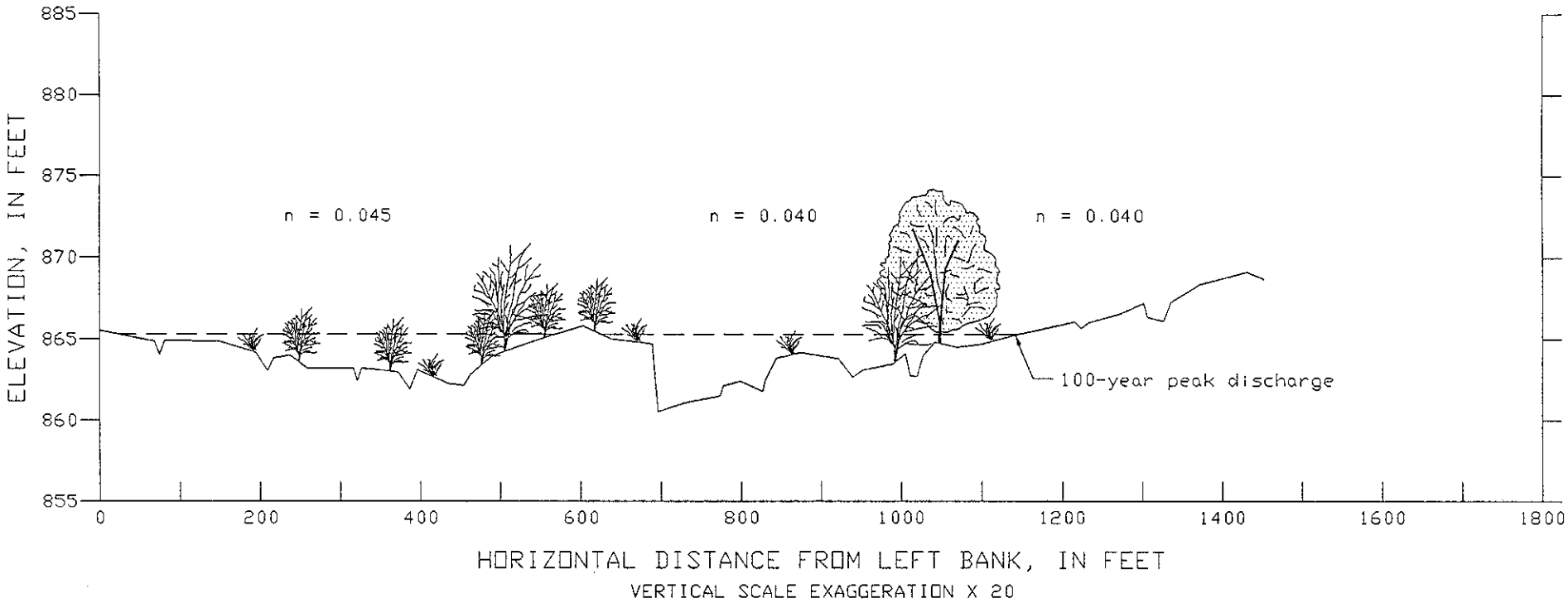
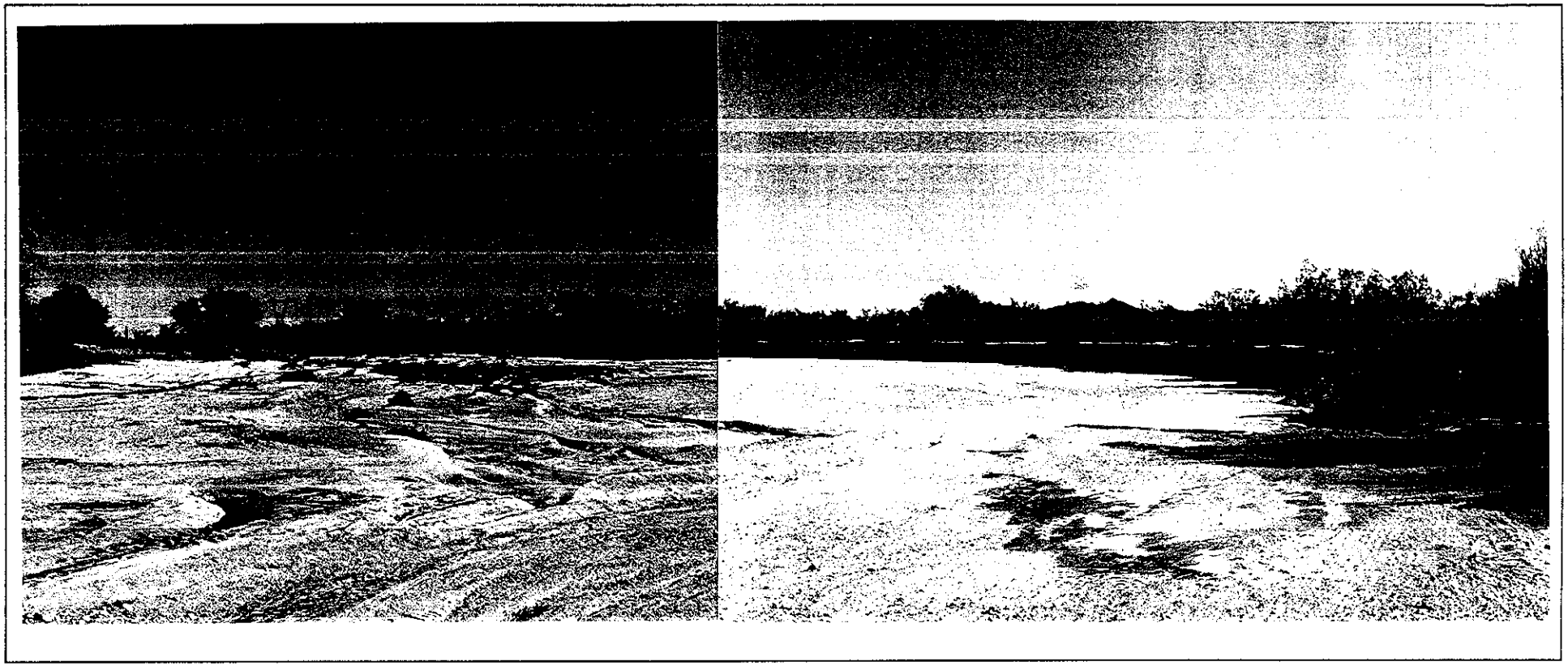


FIGURE 8 Cross section of Rainbow Wash transition from overbank to braided channel



PHOTOGRAPH 17. Main channel of Rainbow Wash looking upstream towards the left bank. Typical transition reach from overbank and main channel flow to a braided stream. Assigned n = 0.040.

PHOTOGRAPH 18. Left overbank looking upstream. Assigned n = 0.040.

PHOTOGRAPH 19. Left overbank looking upstream. Assigned n = 0.040.

CROSS SECTION 4.48

Location of cross section:

The mainstem of Rainbow Wash at river mile 4.48, approximately 6,500 feet downstream of S.R. 85.

Description of channel:

The main channel consists of medium to coarse grain sand with flow depths ranging from 4 to 5 feet. The banks of the main channel are lined with large, dense palo verde trees and shrubs. Vegetation is estimated to influence around 10 percent of the main channel flow width. Flow depths range between 1 and 3 feet in the overbanks. The density of vegetation in the left overbank is substantially greater than the right overbank. Vegetation in the overbanks generally consist of creosote, palo verde, and brush.

Portion of area or wetted perimeter of subsection from left end		Components		Weighted and composite values
Main Channel		n_b=0.025 n_1=0.001 n_2=0.002 n_3=0.002		
0.90	x	n =0.030	=	0.027
0.10	x	n_3=0.080	=	0.008
1.00				n=0.035
Left Overbank		n_b=0.025 n_1=0.002 n_2=0.003 n_3=0.030		n=0.060
Right Overbank		n_b=0.025 n_1=0.002 n_2=0.001 n_3=0.002		n=0.040

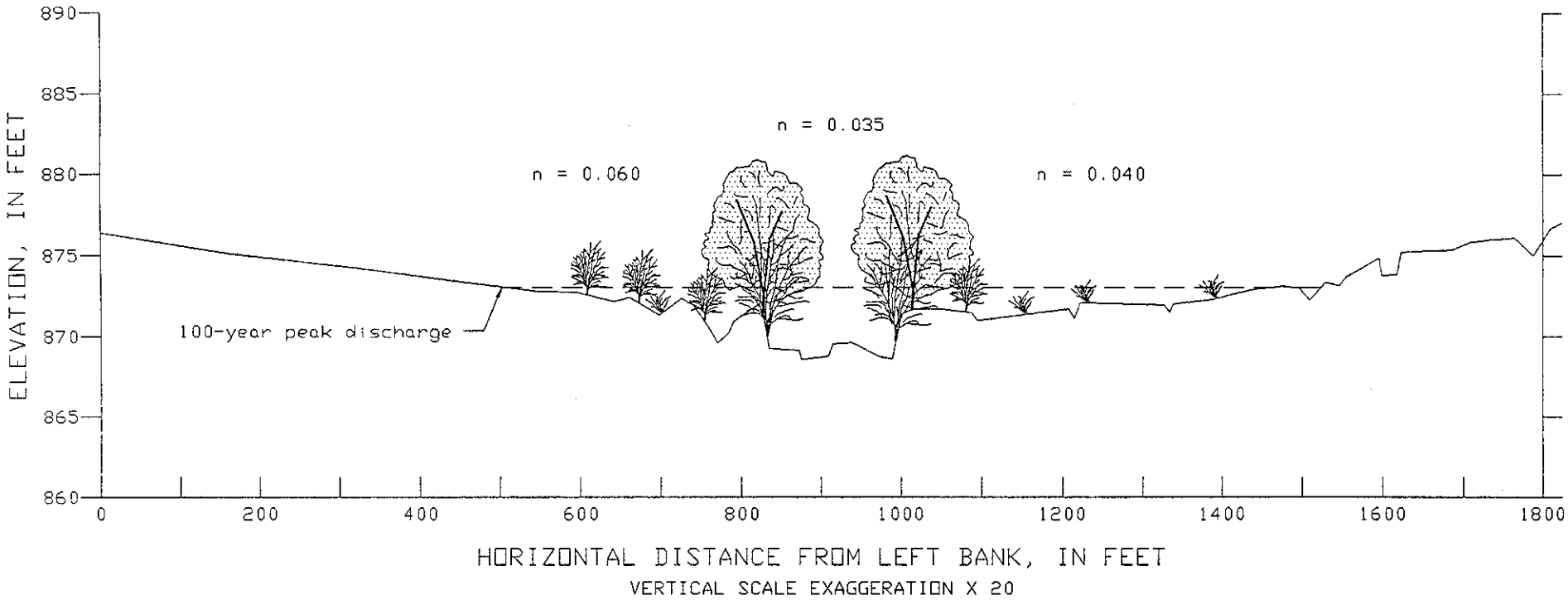
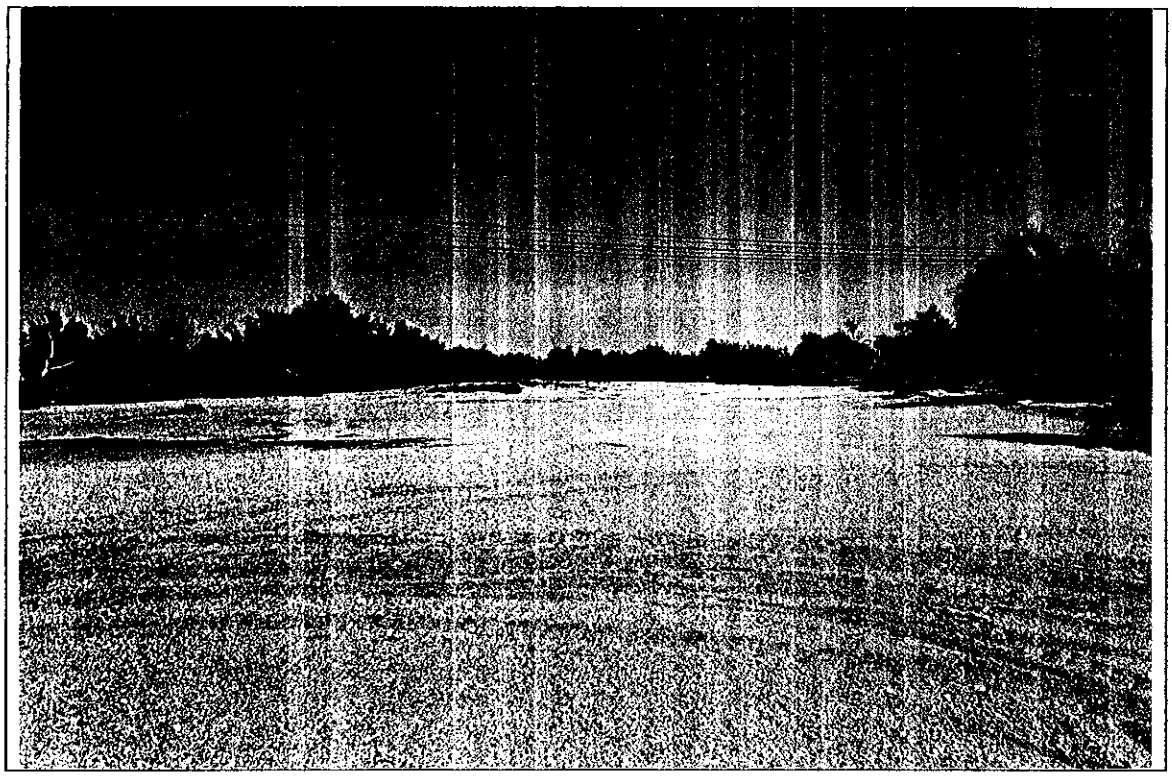
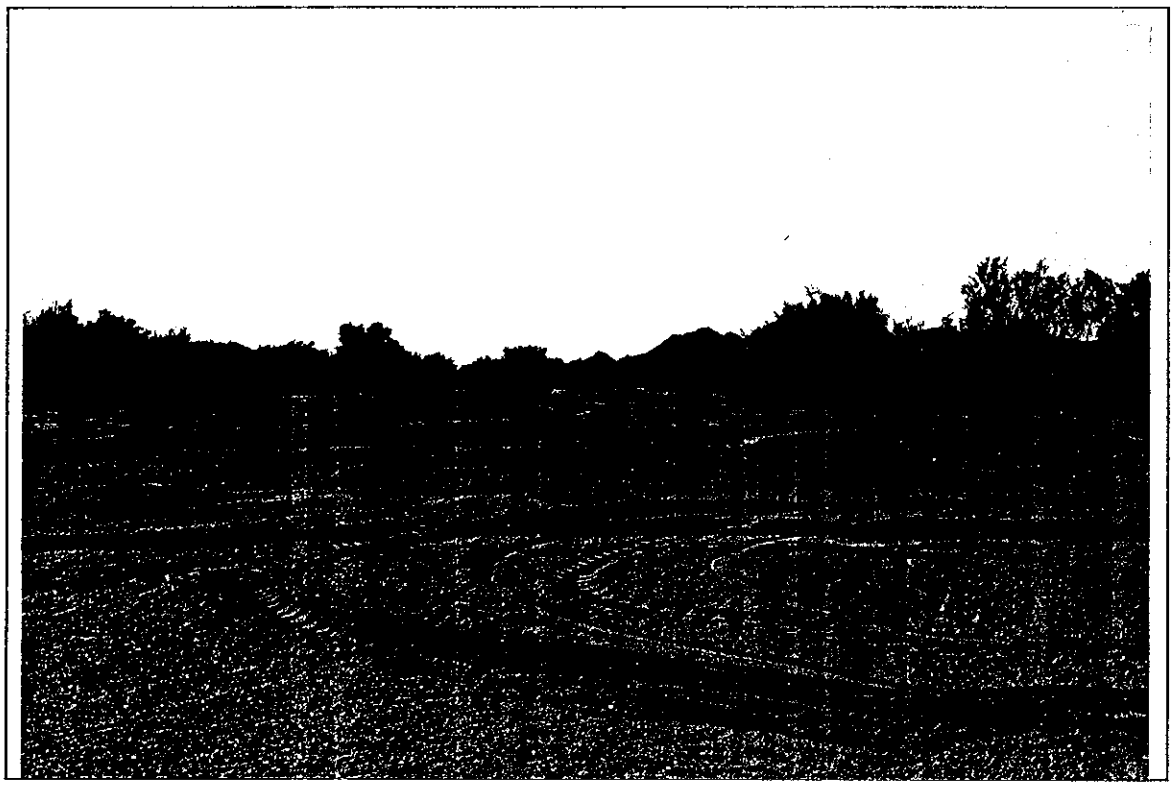


FIGURE 9 Cross section of Rainbow Wash with substantial vegetation in the left overbank



PHOTOGRAPH 20. Main channel looking upstream and downsteram. Assigned n = 0.035.



PHOTOGRAPH 21. Main channel looking upstream and downstream. Assigned n = 0.035.

CROSS SECTION 7.02

Location of cross section:

The mainstem of Rainbow Wash at river mile 7.02, approximately 5,500 feet upstream of S.R. 85.

Description of channel:

The main channel consists of medium to coarse grain sand with flow depths ranging from 6 to 8 feet. The banks of the main channel are lined with large, dense palo verde trees and shrubs. Vegetation is estimated to influence around 10 percent of the main channel flow width. Flow depths range between 1 and 3 feet in the overbanks. The density of vegetation in the left overbank is greater than in the right overbank. Vegetation in the overbanks generally consist of creosote, palo verde, brush and cactus.

Portion of area or wetted perimeter of subsection from left end		Components		Weighted and composite values
		n_b=0.025 n_1=0.001 n_2=0.002 n_3=0.002		
0.90	x	n =0.030		0.027
0.10	x	n =0.080	=	0.008
1.00				n =0.035
Left Overbank		n_b=0.025 n_1=0.004 n_2=0.001 n_3=0.015		n=0.045
Right Overbank		n_b=0.025 n_1=0.002 n_2=0.001 n_3=0.012		n=0.040

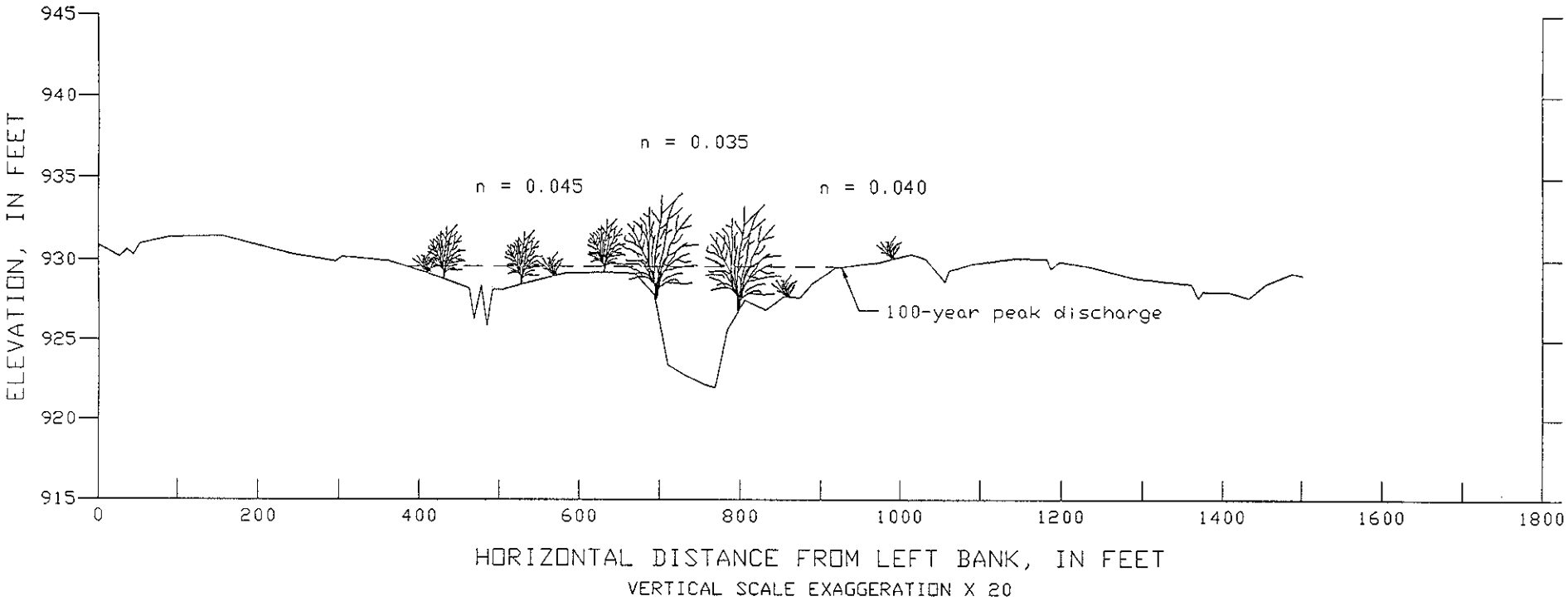


FIGURE 10 Cross section of Rainbow Wash upstream of S.R. 85

PHOTOGRAPH 22. Main channel of Rainbow Wash upstream of S.R. 85. Banks lined with palo verde and brush. Assigned n = 0.035.

PHOTOGRAPH 23. Left bank erosion and vegetation.

PHOTOGRAPH 24. Right bank vegetation is relatively dense.

CROSS SECTION 0.29

Location of cross section:

The tributary of Rainbow Wash at river mile 0.29, approximately 1,600 feet upstream of the confluence with the mainstem and 2,100 feet downstream of S.R. 85.

Description of channel:

The main channel is medium to coarse grain sand with flow depths probably limited to the top of the left bank elevation. The maximum flow depth within the main channel is approximately 5 feet. A normal depth analysis indicates that the main channel does not have the capacity to convey the 100-year peak flood flows. The width of the main channel ranges from 50 to 80 feet. The banks are generally densely lined with brush and palo verde. The left overbank falls away from the main channel indicating potential split flow conditions. Flow in the right overbank may be non-existent.

Portion of area or wetted perimeter of subsection from left end	Components		Weighted and composite values
Main Channel	$n_b=0.025$ $n_1=0.003$ $n_2=0.002$ $n=0.010$	=	0.040
Left and Right Overbanks	$n_b=0.025$ $n_1=0.003$ $n_2=0.002$ $n_3=0.015$	=	0.045

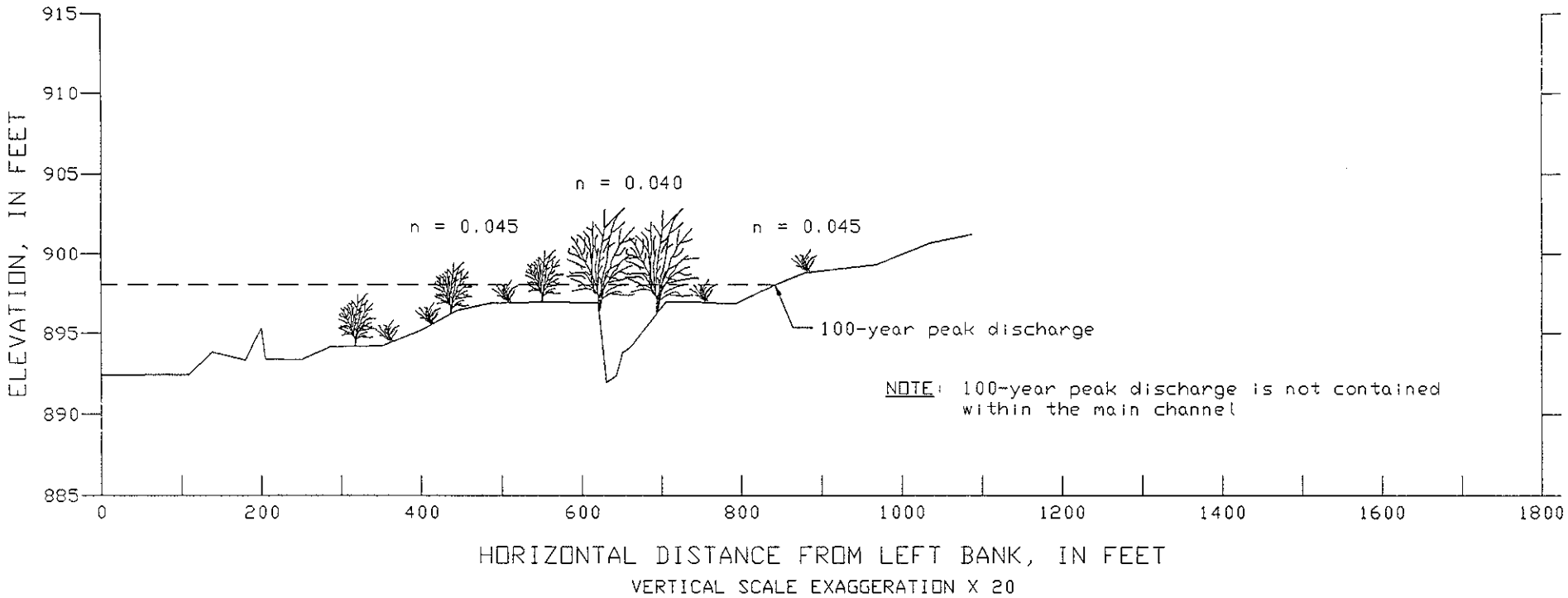


FIGURE 11 Cross section of Rainbow Wash tributary downstream of S.R. 85

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PHOTOGRAPH 25. Rainbow Wash tributary looking upsteam from the confluence with the mainstem.

PHOTOGRAPH 26. Rainbow Wash tributary looking upstream. Banks are typically lined with vegetation.

PHOTOGRAPH 27.

Rainbow Wash tributary main channel showing remnants of bed forms.

PHOTOGRAPH 28. Rainbow Wash Tributary typical bank vegetation. The main channel was assigned n = 0.040.

CROSS SECTION 0.88

Location of cross section:

The tributary of Rainbow Wash at river mile 0.88, approximately 1,000 feet upstream of S.R. 85.

Description of channel:

The main channel is medium to coarse grain sand with fine material intermixed. The main channel is relatively narrow with a dense growth of palo verde and brush lining the banks. Main channel flow depths range from 2 to 7 feet. Overbank flow depths vary from 1 to 3 feet. Creosote and brush typically cover the overbanks.

Portion of area or wetted perimeter of subsection from left end	Components		Weighted and composite values
Main Channel	$n_b=0.025$ $n_1=0.003$ $n_2=0.002$ $n_3=0.010$	=	0.040
Left and Right Overbanks	$n_b=0.025$ $n_1=0.001$ $n_2=0.002$ $n_3=0.012$	=	0.040

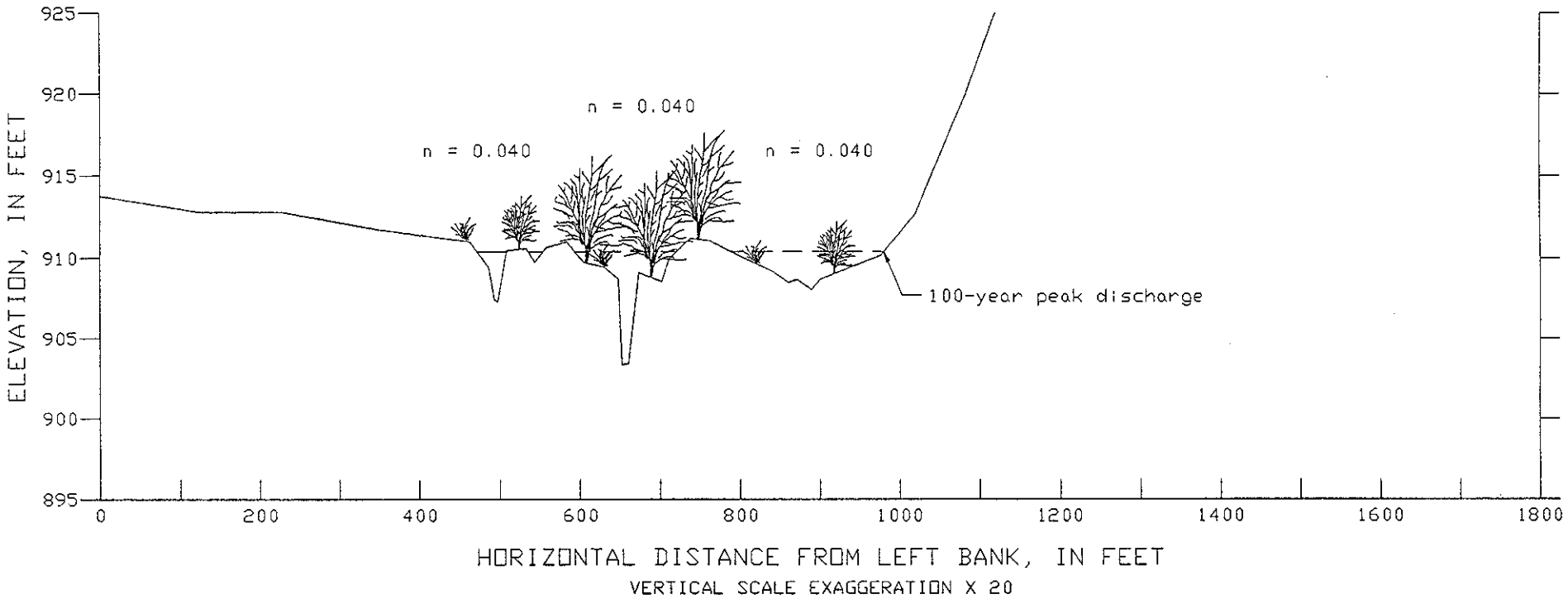
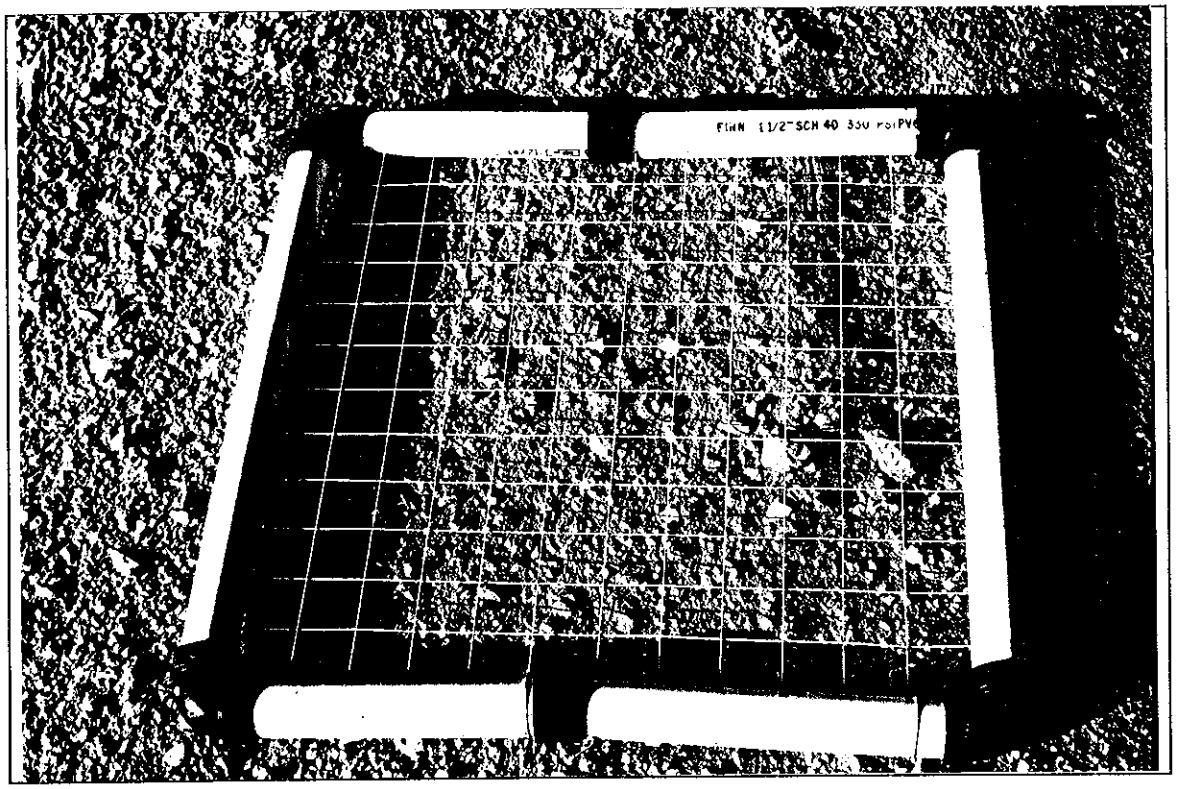


FIGURE 12 Cross section of Rainbow Wash tributary upstream of S.R. 85

PHOTOGRAPH 29. Rainbow Wash tributary upstream of S.R. 85. Large bushes and trees line the banks. Assigned n = 0.040.

PHOTOGRAPH 30. Rainbow Wash tributary upstream of S.R. 85. Large bushes and trees line the banks. Assigned n = 0.040.



PHOTOGRAPH 31. Close-up of the Rainbow Wash tributary bed material. Fine material intermixed with sand. Assigned base n = 0.025.

VI. SUMMARY

Results from the "n" value analysis were used to define "n" values for the cross sections incorporated in the detailed hydraulic model. The assignment of "n" values for subsections of each individual cross section was accomplished utilizing aerial photographs and the "n" values established in the detailed "n" value analysis. The location of each cross section and the factors which affect the overall "n" value were compared on the aerial photographs with the cross-sections developed in the detailed "n" value analyses.

The contraction and expansion coefficients assigned to each cross section were typically 0.1 and 0.3, respectively (3). Contraction and expansion coefficients for braided portions of the study reach were assigned values of 0.2 and 0.4, respectively, to account for the small in-stream islands in the channel. At bridges and culverts values of 0.3 and 0.5 were assigned to the contraction and expansion coefficients (3).

The channel reach lengths were measured along the channel thalweg developed from the digital terrain model. The channel thalweg is defined as the hydraulic baseline for the Rainbow Wash Flood Insurance Study. The overbank reach lengths were measured along the anticipated path of the center of mass of the overbank flow (3).

The "n" values, contraction and expansion coefficients, and reach lengths assigned to the cross sections for use in the detailed hydraulic model are presented in Tables 1 and 2 for Rainbow Wash and it's tributary, respectively. Slight adjustment to the values presented in Table 1 and Table 2 may be required during the detailed hydraulic analysis of Rainbow Wash.

SECNO	Distance (miles)	Distance (ft)	XLOBL (ft)	XLOBR (ft)	XLCH (ft)	XNL	XNR	XNCH	CCHV	CEHV	Remarks
0.02	0.02	95	0	0	0	0.030	0.030	0.030	0.1	0.3	
0.11	0.11	574	460	280	479	0.030	0.030	0.030	0.1	0.3	
0.15	0.15	790	140	250	216	0.030	0.030	0.030	0.1	0.3	
0.19	0.19	1015	160	250	226	0.030	0.030	0.030	0.1	0.3	
0.29	0.29	1525	475	480	510	0.033	0.033	0.033	0.1	0.3	
0.34	0.34	1774	200	240	249	0.033	0.033	0.033	0.1	0.3	
0.38	0.38	2014	150	185	240	0.033	0.033	0.033	0.1	0.3	
0.47	0.47	2476	470	440	462	0.033	0.033	0.033	0.1	0.3	
0.55	0.55	2884	490	300	408	0.033	0.033	0.033	0.1	0.3	
0.57	0.57	2990	130	95	106	0.033	0.016	0.016	0.1	0.3	Old U.S. 80
0.58	0.58	3045	45	55	55	0.033	0.033	0.033	0.1	0.3	
0.59	0.59	3115	150	60	70	0.033	0.033	0.033	0.3	0.5	
0.60	0.60	3159	30	40	44	0.033	0.033	0.033	0.3	0.5	Gila Bend Canal
0.61	0.61	3205	40	40	46	0.033	0.033	0.033	0.3	0.5	
0.66	0.66	3478	440	230	272	0.033	0.050	0.033	0.3	0.5	
0.70	0.70	3701	230	170	223	0.033	0.050	0.033	0.1	0.3	
0.79	0.79	4193	300	560	493	0.033	0.040	0.033	0.1	0.3	
0.89	0.89	4690	515	480	496	0.033	0.040	0.030	0.1	0.3	
0.98	0.98	5190	560	465	501	0.150	0.150	0.030	0.1	0.3	
1.08	1.08	5682	430	440	491	0.150	0.150	0.030	0.1	0.3	
1.17	1.17	6183	300	650	502	0.150	0.150	0.030	0.1	0.3	
1.26	1.26	6678	450	520	494	0.150	0.150	0.030	0.1	0.3	
1.36	1.36	7177	560	450	500	0.150	0.150	0.030	0.1	0.3	
1.45	1.45	7674	515	480	497	0.150	0.150	0.030	0.1	0.3	
1.55	1.55	8179	530	480	505	0.150	0.150	0.030	0.1	0.3	
1.61	1.61	8507	330	330	328	0.150	0.150	0.030	0.1	0.3	
1.64	1.64	8670	160	165	162	0.150	0.150	0.030	0.1	0.3	
1.67	1.67	8833	170	170	164	0.150	0.150	0.030	0.1	0.3	
1.74	1.74	9168	300	340	335	0.150	0.045	0.033	0.2	0.3	

TABLE 1. Rainbow Wash Reach Lengths, Roughness, and Loss Coefficients

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SECNO	Distance (miles)	Distance (ft)	XLOBL (ft)	XLOBR (ft)	XLCH (ft)	XNL	XNR	XNCH	CCHV	CEHV	Remarks
1.83	1.83	9666	520	460	498	0.150	0.045	0.033	0.1	0.3	
1.88	1.88	9935	250	280	270	0.150	0.045	0.033	0.1	0.3	
1.92	1.92	10162	220	220	227	0.150	0.045	0.033	0.1	0.3	
2.02	2.02	10652	475	490	490	0.150	0.045	0.033	0.1	0.3	
2.11	2.11	11150	490	490	497	0.150	0.058	0.033	0.1	0.3	
2.21	2.21	11652	400	530	503	0.040	0.045	0.033	0.2	0.3	
2.30	2.30	12154	470	490	502	0.045	0.045	0.033	0.1	0.3	
2.39	2.39	12644	490	470	490	0.045	0.045	0.033	0.1	0.3	
2.49	2.49	13136	490	490	493	0.050	0.045	0.033	0.1	0.3	
2.58	2.58	13639	500	500	503	0.050	0.045	0.033	0.1	0.3	
2.63	2.63	13860	215	230	221	0.050	0.045	0.033	0.1	0.3	
2.68	2.68	14133	270	275	273	0.050	0.045	0.033	0.1	0.3	
2.73	2.73	14435	320	275	301	0.050	0.040	0.033	0.2	0.3	
2.77	2.77	14623	210	180	188	0.050	0.050	0.033	0.2	0.3	
2.86	2.86	15120	460	530	497	0.050	0.050	0.033	0.2	0.3	
2.96	2.96	15628	500	470	508	0.045	0.050	0.033	0.1	0.3	
3.05	3.05	16121	520	430	493	0.040	0.050	0.033	0.1	0.3	
3.15	3.15	16620	495	505	499	0.040	0.050	0.033	0.1	0.3	
3.24	3.24	17116	425	510	496	0.040	0.045	0.033	0.1	0.3	
3.34	3.34	17613	450	520	497	0.040	0.040	0.033	0.1	0.3	
3.43	3.43	18113	500	495	500	0.040	0.040	0.033	0.2	0.3	
3.52	3.52	18605	525	440	492	0.040	0.045	0.045	0.1	0.3	
3.62	3.62	19100	470	520	495	0.040	0.045	0.045	0.1	0.3	
3.71	3.71	19598	480	510	498	0.040	0.040	0.033	0.1	0.3	
3.81	3.81	20104	515	485	506	0.040	0.045	0.033	0.2	0.3	
3.90	3.90	20582	515	475	478	0.040	0.045	0.035	0.1	0.3	
4.00	4.00	21101	550	420	519	0.040	0.045	0.040	0.2	0.4	
4.09	4.09	21599	480	520	498	0.040	0.045	0.040	0.2	0.4	
4.15	4.15	21889	300	275	290	0.040	0.045	0.040	0.2	0.4	

TABLE 1. Rainbow Wash Reach Lengths, Roughness, and Loss Coefficients (Cont.)

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SECNO	Distance (miles)	Distance (ft)	XLOBL (ft)	XLOBR (ft)	XLCH (ft)	XNL	XNR	XNCH	CCHV	CEHV	Remarks
4.18	4.18	22094	195	215	205	0.040	0.045	0.040	0.2	0.4	
4.28	4.28	22597	480	510	503	0.040	0.045	0.040	0.2	0.4	
4.33	4.33	22845	230	250	248	0.040	0.045	0.040	0.2	0.4	
4.37	4.37	23083	160	270	238	0.040	0.045	0.040	0.2	0.4	
4.47	4.47	23583	280	600	500	0.040	0.045	0.040	0.1	0.3	
4.56	4.56	24076	400	510	493	0.040	0.045	0.036	0.1	0.3	
4.65	4.65	24573	550	370	497	0.040	0.045	0.035	0.1	0.3	
4.75	4.75	25069	570	380	496	0.040	0.045	0.047	0.1	0.3	
4.84	4.84	25571	490	505	503	0.040	0.045	0.034	0.1	0.3	
4.94	4.94	26068	490	510	497	0.040	0.045	0.031	0.1	0.3	
5.03	5.03	26570	540	430	502	0.040	0.045	0.029	0.1	0.3	
5.13	5.13	27062	470	500	492	0.040	0.045	0.045	0.2	0.4	
5.22	5.22	27564	430	485	503	0.040	0.045	0.045	0.2	0.4	
5.31	5.31	28058	480	480	494	0.040	0.045	0.045	0.2	0.4	
5.41	5.41	28559	450	580	500	0.040	0.045	0.045	0.2	0.4	
5.50	5.50	29057	330	540	499	0.040	0.045	0.040	0.2	0.4	
5.54	5.54	29269	160	160	212	0.040	0.045	0.040	0.2	0.4	
5.60	5.60	29549	140	250	280	0.040	0.045	0.040	0.2	0.4	Tributary
5.67	5.67	29947	170	470	398	0.040	0.045	0.040	0.2	0.4	
5.75	5.75	30355	260	420	408	0.040	0.045	0.040	0.2	0.4	
5.83	5.83	30758	300	370	404	0.040	0.045	0.040	0.2	0.4	
5.90	5.90	31153	280	360	395	0.040	0.045	0.040	0.2	0.4	
5.94	5.94	31372	190	225	219	0.040	0.045	0.035	0.2	0.4	
5.97	5.98	31565	185	210	194	0.040	0.045	0.025	0.3	0.5	
5.99	5.99	31622	45	45	45	0.040	0.045	0.025	0.3	0.5	State Route 85
6.04	6.04	31867	260	210	244	0.040	0.040	0.035	0.3	0.5	
6.08	6.08	32115	250	240	248	0.040	0.040	0.035	0.1	0.3	
6.18	6.18	32614	560	420	500	0.040	0.040	0.035	0.1	0.3	

TABLE 1. Rainbow Wash Reach Lengths, Roughness, and Loss Coefficients (Cont.)

SLA Simons, Li & Associates, Inc.
Water Resources & Civil Engineering Consultants

SECNO	Distance (miles)	Distance (ft)	XLOBL (ft)	XLOBR (ft)	XLCH (ft)	XNL	XNR	XNCH	CCHV	CEHV	Remarks
6.27	6.27	33114	560	430	500	0.045	0.040	0.035	0.1	0.3	
6.37	6.37	33611	590	390	497	0.045	0.040	0.035	0.1	0.3	
6.46	6.46	34105	490	500	494	0.050	0.040	0.035	0.1	0.3	
6.55	6.55	34605	480	510	501	0.050	0.040	0.035	0.1	0.3	
6.65	6.65	35104	500	480	498	0.050	0.040	0.035	0.1	0.3	
6.74	6.74	35597	460	530	494	0.050	0.040	0.035	0.1	0.3	
6.84	6.84	36096	520	480	499	0.050	0.040	0.035	0.1	0.3	
6.93	6.93	36585	475	500	489	0.050	0.040	0.035	0.1	0.3	
7.02	7.02	37086	480	510	501	0.045	0.040	0.035	0.1	0.3	
7.12	7.12	37581	430	520	495	0.045	0.040	0.035	0.1	0.3	
7.21	7.21	38087	465	480	506	0.045	0.040	0.035	0.1	0.3	
7.30	7.30	38568	560	400	482	0.045	0.040	0.035	0.1	0.3	
7.40	7.40	39076	490	520	508	0.045	0.040	0.035	0.1	0.3	
7.45	7.45	39329	250	255	253	0.045	0.040	0.035	0.1	0.3	
7.49	7.49	39573	240	255	245	0.045	0.040	0.035	0.1	0.3	
7.59	7.59	40070	480	505	496	0.045	0.040	0.035	0.1	0.3	
7.70	7.70	40661	620	575	592	0.045	0.040	0.035	0.1	0.3	
7.78	7.78	41066	420	380	404	0.045	0.040	0.035	0.1	0.3	
7.82	7.82	41305	230	255	240	0.045	0.040	0.035	0.1	0.3	
7.87	7.87	41557	240	260	252	0.045	0.040	0.035	0.1	0.3	
7.97	7.97	42059	430	510	502	0.045	0.040	0.040	0.1	0.3	
8.01	8.01	42299	260	200	240	0.045	0.040	0.040	0.1	0.3	
8.06	8.06	42564	300	215	265	0.045	0.040	0.040	0.1	0.3	
8.15	8.15	43053	550	430	490	0.045	0.040	0.040	0.1	0.3	
8.25	8.25	43544	480	495	491	0.040	0.040	0.035	0.1	0.3	
8.34	8.34	44044	450	530	500	0.040	0.040	0.035	0.1	0.3	
8.43	8.43	44535	450	530	491	0.040	0.040	0.035	0.1	0.3	
8.53	8.53	45042	400	600	507	0.040	0.040	0.035	0.1	0.3	
8.62	8.62	45534	475	505	492	0.045	0.040	0.035	0.1	0.3	

TABLE 1. Rainbow Wash Reach Lengths, Roughness, and Loss Coefficients (Cont.)

Simons, Li & Associates, Inc.
Water Resources & Civil Engineering Consultants

SECNO	Distance (miles)	Distance (ft)	XLOBL (ft)	XLOBR (ft)	XLCH (ft)	XNL	XNR	XNCH	CCHV	CEHV	Remarks
8.72	8.72	46034	650	380	500	0.045	0.040	0.040	0.2	0.4	
8.81	8.81	46526	480	470	492	0.045	0.040	0.040	0.2	0.4	
8.91	8.91	47028	490	495	502	0.050	0.040	0.040	0.2	0.4	
9.00	9.00	47515	510	485	487	0.050	0.040	0.035	0.1	0.3	
9.09	9.09	48010	530	465	495	0.050	0.040	0.040	0.2	0.4	
9.19	9.19	48505	450	505	494	0.050	0.040	0.040	0.2	0.4	
9.28	9.28	49005	440	540	500	0.045	0.040	0.035	0.1	0.3	
9.38	9.38	49504	410	515	499	0.045	0.045	0.035	0.1	0.3	
9.47	9.47	49996	500	480	492	0.045	0.045	0.035	0.1	0.3	
9.56	9.56	50500	420	540	504	0.045	0.050	0.040	0.2	0.4	
9.66	9.66	51003	530	390	503	0.045	0.050	0.040	0.2	0.4	

TABLE 1. Rainbow Wash Reach Lengths, Roughness, and Loss Coefficients (Cont.)

SECNO	Distance (miles)	Distance (ft)	XLOBL (ft)	XLOBR (ft)	XLCH (ft)	XNL	XNR	XNCH	CCHV	CEHV	Remarks
0.06	0.06	335	320	300	335	0.050	0.040	0.040	0.1	0.3	Confluence
0.14	0.14	728	250	480	394	0.050	0.045	0.040	0.1	0.3	
0.18	0.18	939	250	160	211	0.050	0.045	0.040	0.1	0.3	
0.21	0.21	1129	235	160	190	0.045	0.040	0.040	0.1	0.3	
0.29	0.29	1527	370	405	398	0.045	0.045	0.040	0.1	0.3	
0.36	0.36	1925	230	420	398	0.040	0.045	0.040	0.1	0.3	
0.44	0.44	2338	420	400	413	0.040	0.040	0.040	0.1	0.3	
0.52	0.52	2731	415	380	393	0.045	0.040	0.040	0.2	0.4	
0.59	0.59	3125	455	325	394	0.040	0.040	0.040	0.2	0.4	
0.67	0.67	3533	110	550	409	0.040	0.040	0.040	0.2	0.4	
0.68	0.68	3610	80	75	77	0.040	0.040	0.013	0.3	0.5	
0.70	0.69	3661	47	47	47	0.040	0.040	0.013	0.3	0.5	State Route 85
0.79	0.79	4146	580	320	485	0.040	0.040	0.040	0.3	0.5	
0.88	0.88	4652	520	420	506	0.040	0.040	0.040	0.1	0.3	
0.93	0.93	4884	240	235	233	0.040	0.040	0.040	0.1	0.3	
0.98	0.98	5150	280	250	266	0.040	0.040	0.040	0.2	0.4	
1.03	1.03	5423	200	250	273	0.040	0.040	0.040	0.2	0.4	
1.07	1.07	5655	195	220	232	0.040	0.040	0.040	0.1	0.3	
1.17	1.17	6161	530	490	506	0.040	0.040	0.040	0.1	0.3	
1.26	1.26	6650	490	500	489	0.040	0.040	0.040	0.1	0.3	
1.31	1.31	6897	240	255	247	0.040	0.040	0.040	0.1	0.3	
1.35	1.35	7144	220	260	248	0.040	0.040	0.040	0.1	0.3	
1.45	1.45	7639	500	490	494	0.040	0.040	0.040	0.1	0.3	
1.52	1.52	8006	400	340	367	0.040	0.040	0.040	0.1	0.3	

TABLE 2. Rainbow Wash Tributary Reach Lengths, Roughness, and Loss Coefficients

Simons, Li & Associates, Inc.
Water Resources & Environmental Consultants

VII. REFERENCES

1. Donohue & Associates, Inc., "Hydrology Report, Gila Bend Canal Flood Plain Delineation Study, Gillespie Dam to Gila Bend," prepared for the Flood Control District of Maricopa County, September 1991.

2. U.S. Geological Survey, Water Resources Division, "Estimated Manning's Roughness Coefficients for Stream Channels and Flood Plains in Maricopa County, Arizona," prepared for the Flood Control District of Maricopa County, April 1991.

3. U.S. Army Corps of Engineers, Hydrologic Engineering Center, "HEC-2 Water Surface Profiles User's Manual" September 1990.

4. Aldridge, B.N. and Garrett, J.M., "Roughness Coefficients for Stream Channels in Arizona," U.S. Geological Survey Open-File Report 78-3. prepared for the Arizona Highway Department, February 1973.

5. Chow, V.T., Open-Channel Hydraulics, New York: McGraw-Hill, 1959.

6. Barnes, Harry H., Roughness Characteristics of Natural Channels, U.S. Geological Survey Water-Supply Paper 1849, Washington: U.S. Government Printing Office, 1967.

7. Simons, Li & Associates, Inc., "Design Manual for Engineering Analysis of Fluvial Systems," prepared for the Arizona Department of Water Resources, March 1985.

8. Simons, Li & Associates, Inc., Engineering Analysis of Fluvial Systems, Simons, Li & Associates, Inc., 1982.

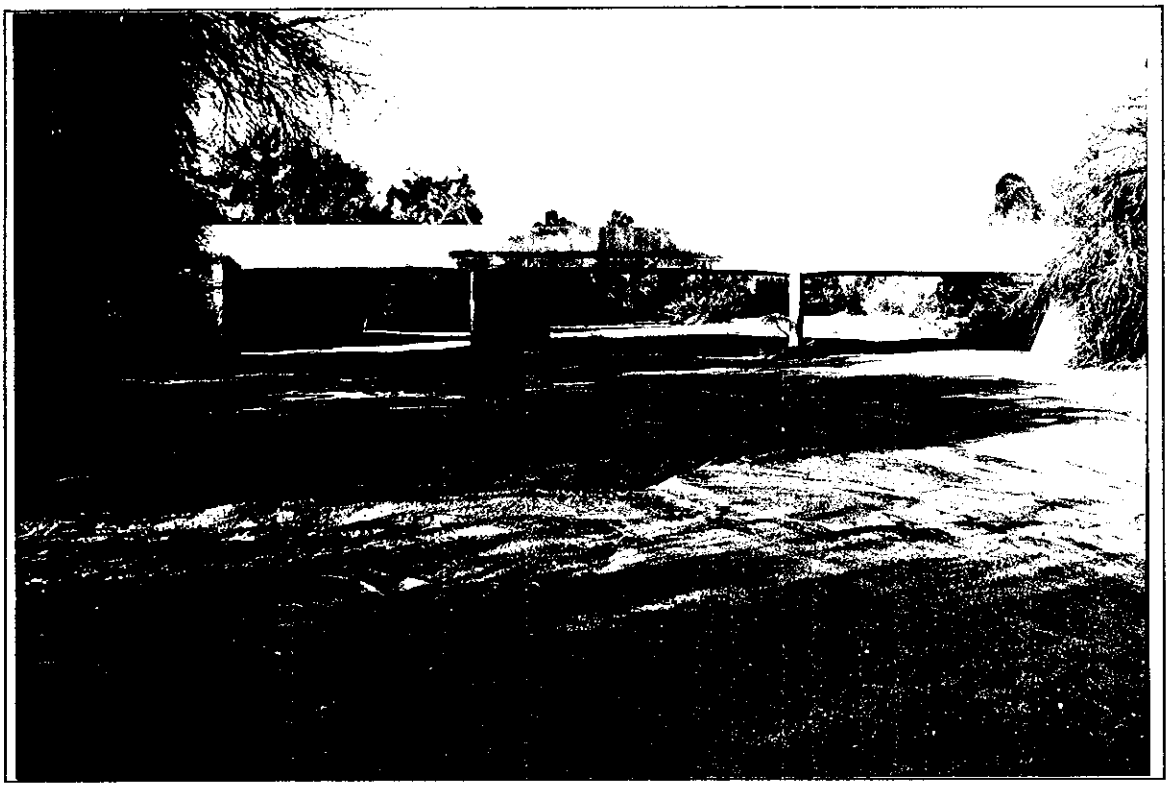
9. "Hydrologic Design Manual for Maricopa County, Arizona", Flood Control District of Maricopa County. September, 1990.

10. U.S. Department of Agriculture. Agricultural Stabilization and Conservation Service. Maricopa County ASCS office. Maps depicting cropland areas along Rainbow Wash.

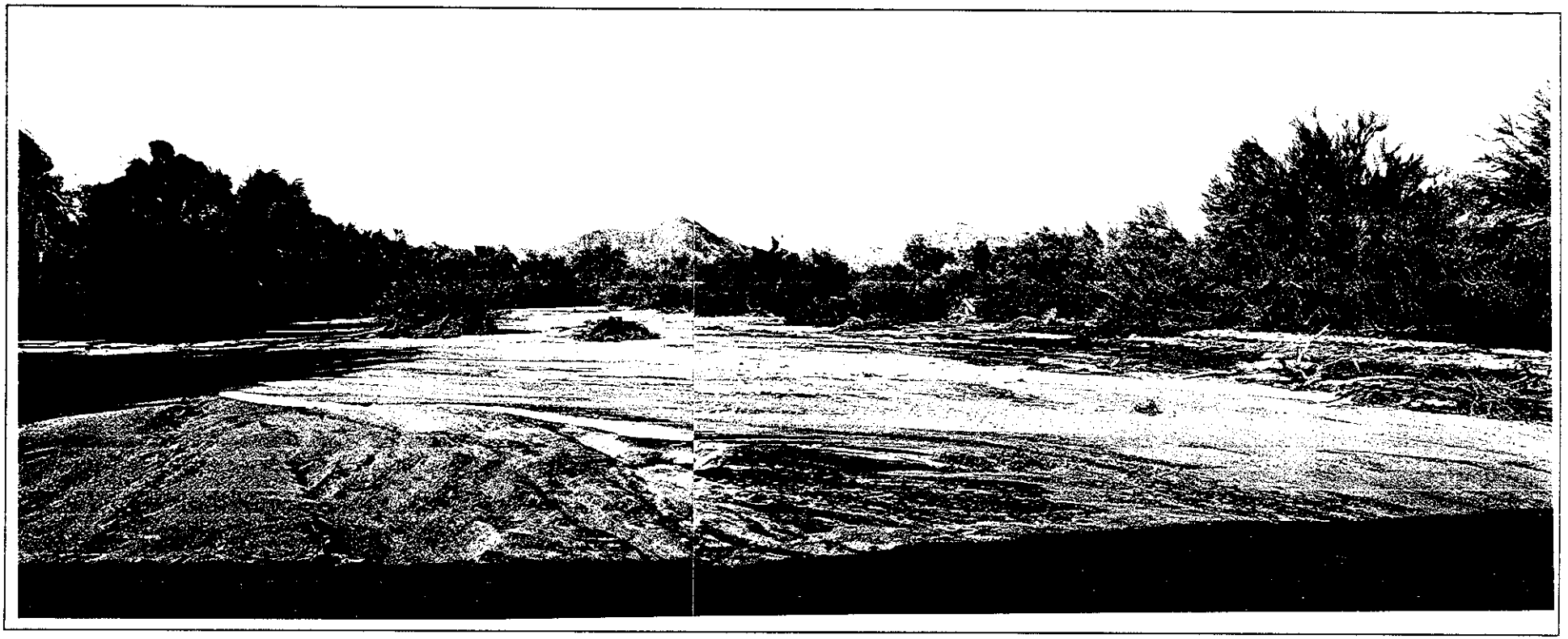
APPENDIX A

Photographic Record of Hydraulic Structures

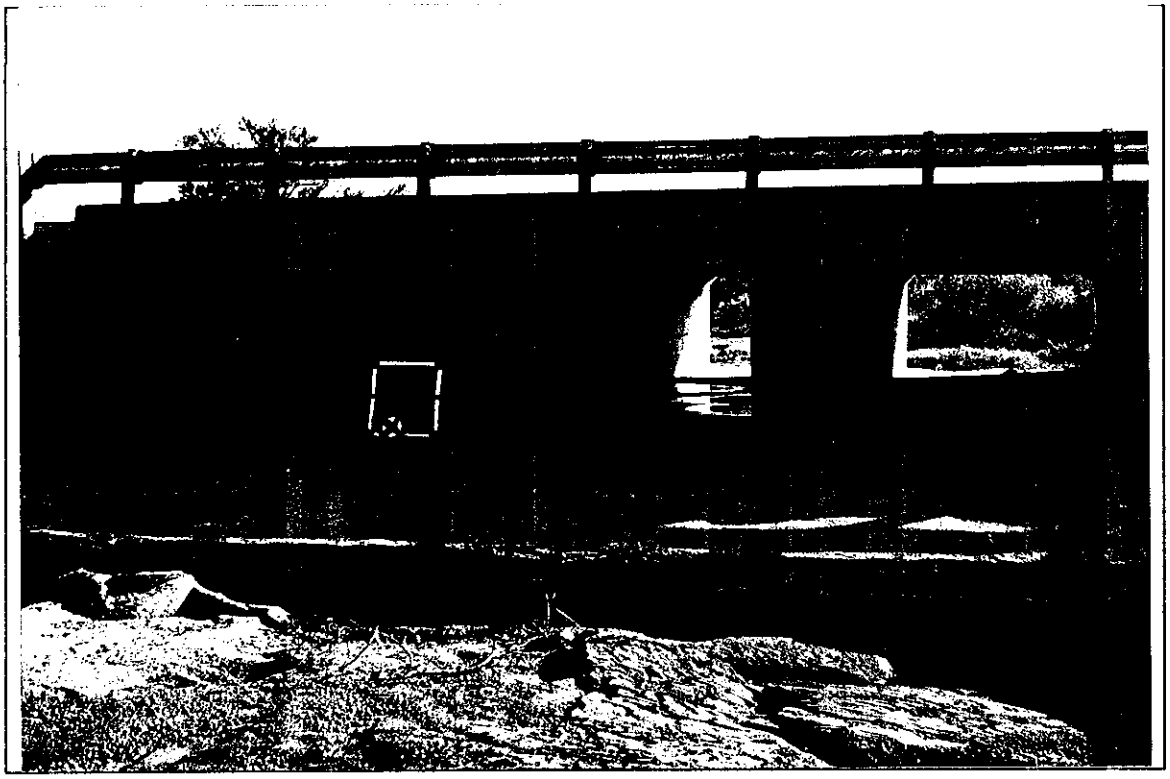
PHOTOGRAPH 32. Looking upstream at the S.R. 85 bridge over the mainstem of Rainbow Wash.



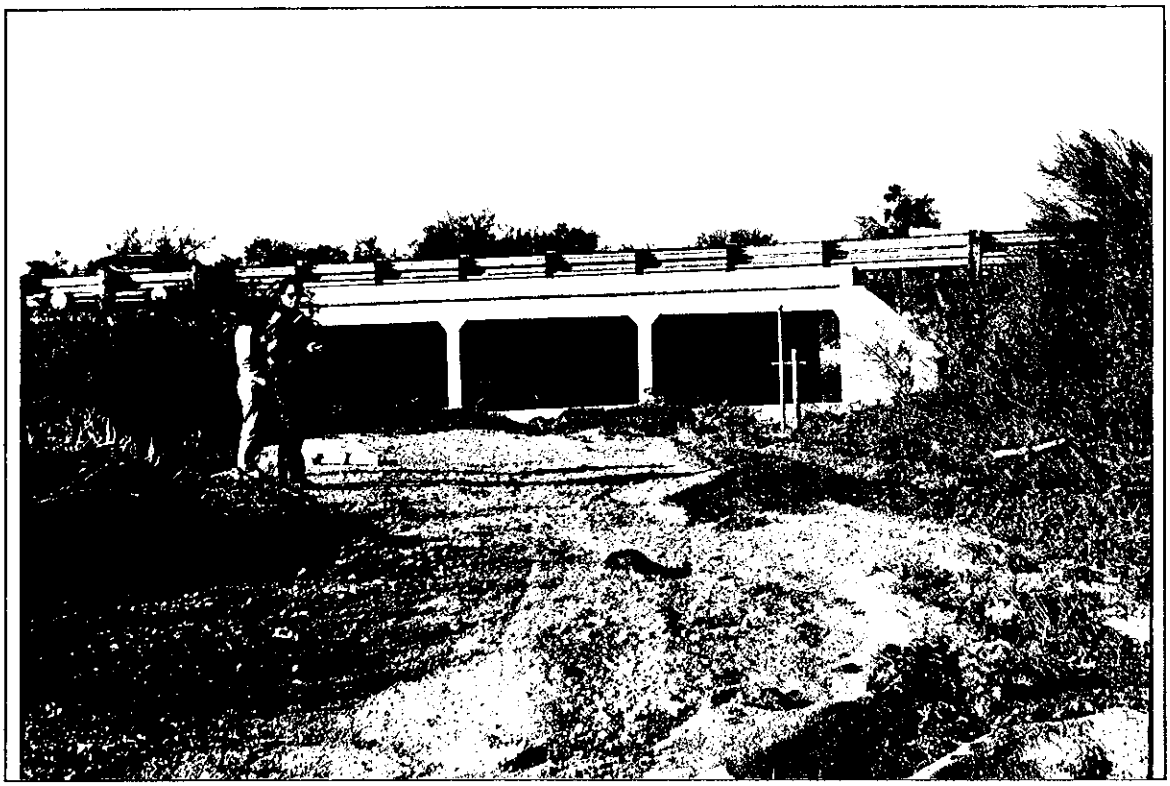
PHOTOGRAPH 33. Looking downstream at the S.R. 85 bridge over the mainstem of Rainbow Wash.



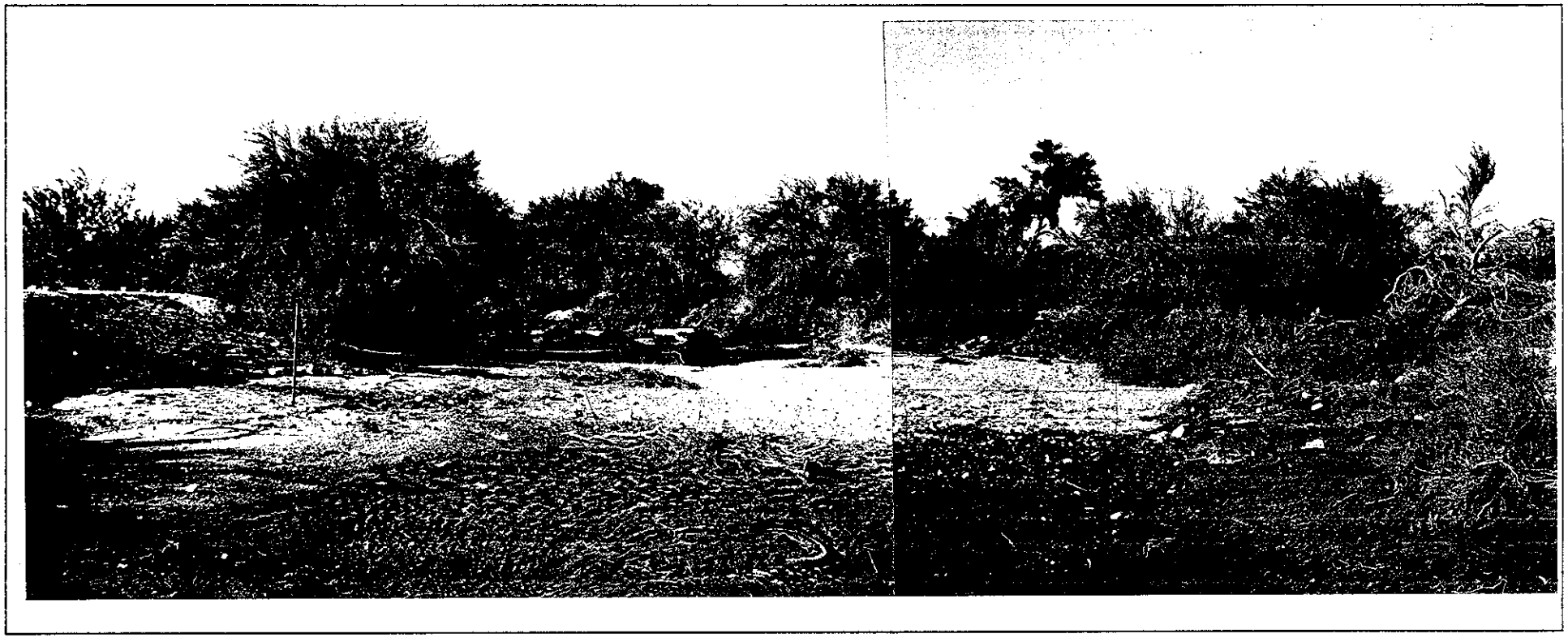
PHOTOGRAPH 34. Looking downstream at the main channel of Rainbow Wash from S.R. 85.



PHOTOGRAPH 35. Upstream photos of the Rainbow Wash tributary triple box culvert.



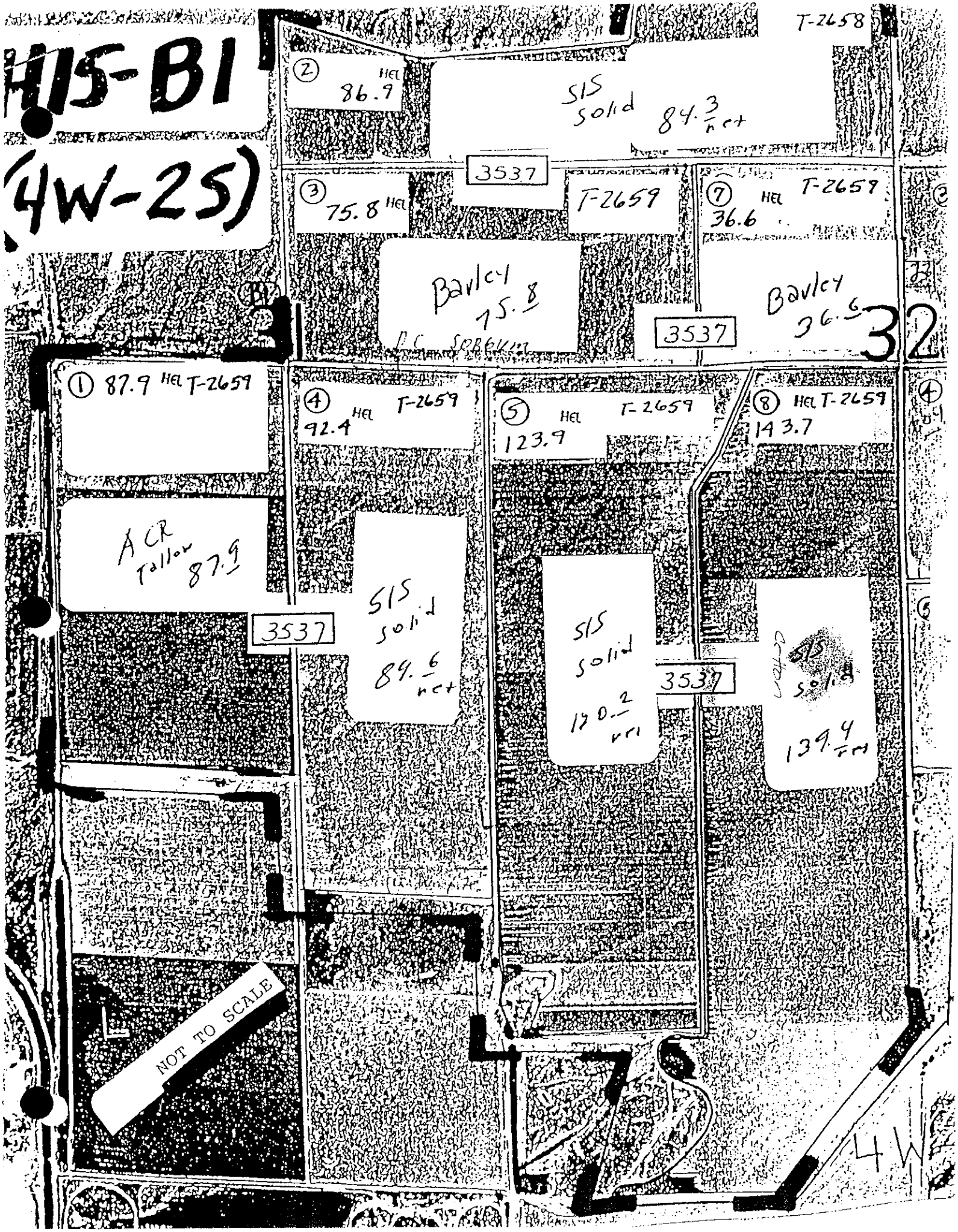
PHOTOGRAPH 36. Downstream photos of the Rainbow Wash tributary triple box culvert.



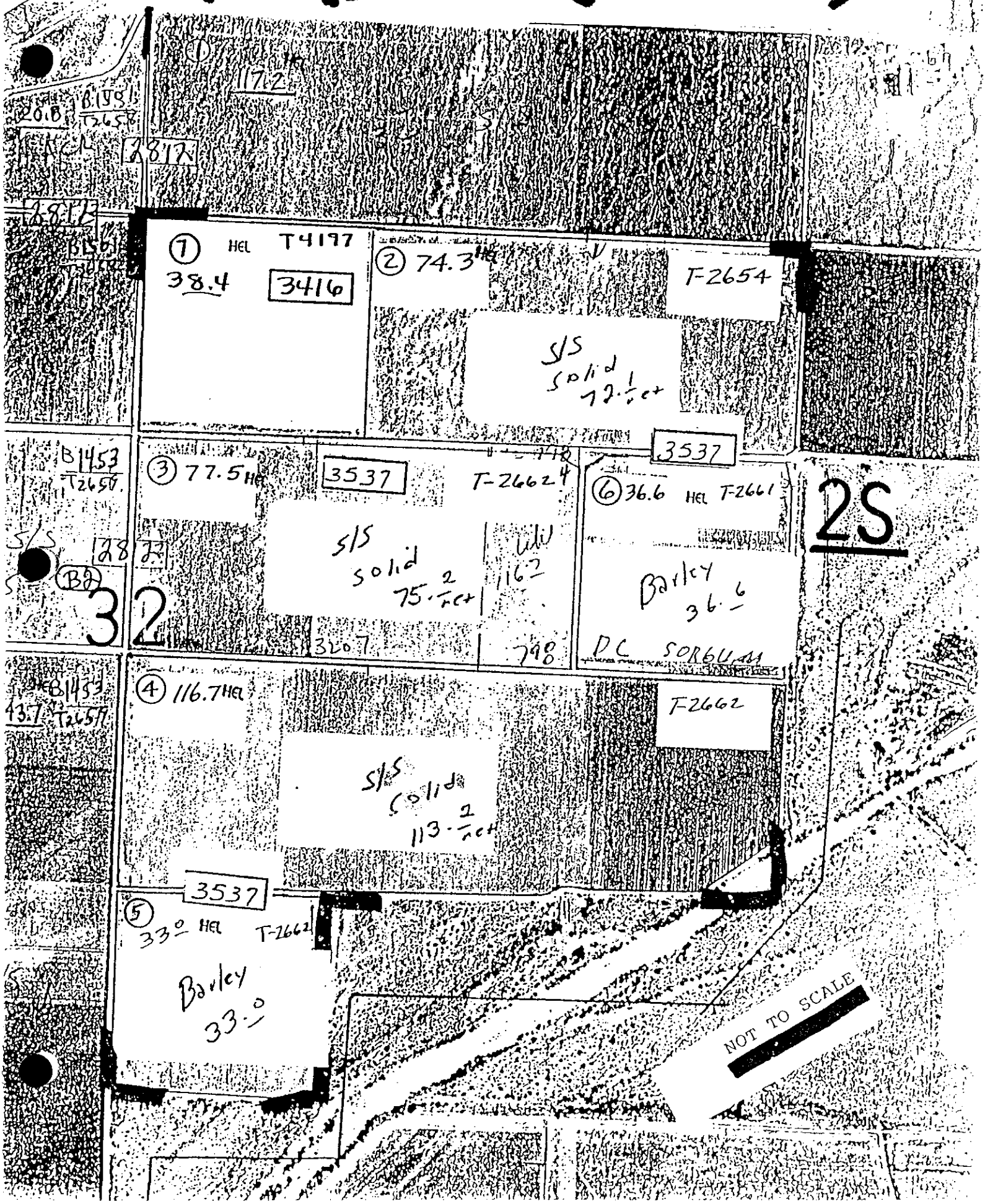
PHOTOGRAPH 37. Looking downstream at the Rainbow Wash tributary from the box culvert at S.R. 85.

APPENDIX B

Cropland Mapping by A.S.C.S


T-2658
H15-B1
(4W-25)
② HEL 86.9
SIS solid 84.3 net
3537
③ 75.8 HEL
T-2659
⑦ HEL T-2659 36.6
Barley 75.8
Barley 36.6
3537
32
① 87.9 HEL T-2659
④ HEL T-2659 92.4
⑤ HEL T-2659 123.9
⑧ HEL T-2659 143.7
ACR Tallow 87.9
SIS solid 89.6 net
SIS solid 120.2 net
SIS solid 139.4 net
3537
3537
NOT TO SCALE
4W

H15-B2 (4W-2S)


117.2
20.8
B1581
T2658
128.72
128.72
B1561
① HEL T4197
38.4
3416
② 74.3 HEL
T-2654
S/S
solid
72.1 rct
3537
B1453
T2658
③ 77.5 HEL
3537
T-2662
S/S
solid
75.2 rct
Wil
116.2
320.7
798
⑥ 36.6 HEL T-2661
Barley
36.6
DC SORGUM
2S
128.22
B2
32
B1453
43.7
T2657
④ 116.7 HEL
T-2662
S/S
Solid
113.2 rct
3537
⑤
33.0 HEL
T-2662
Barley
33.0
NOT TO SCALE

H16-A1 (4W-25)

NOT TO SCALE

(A-1)

28

①

NOT CROPLAND '89

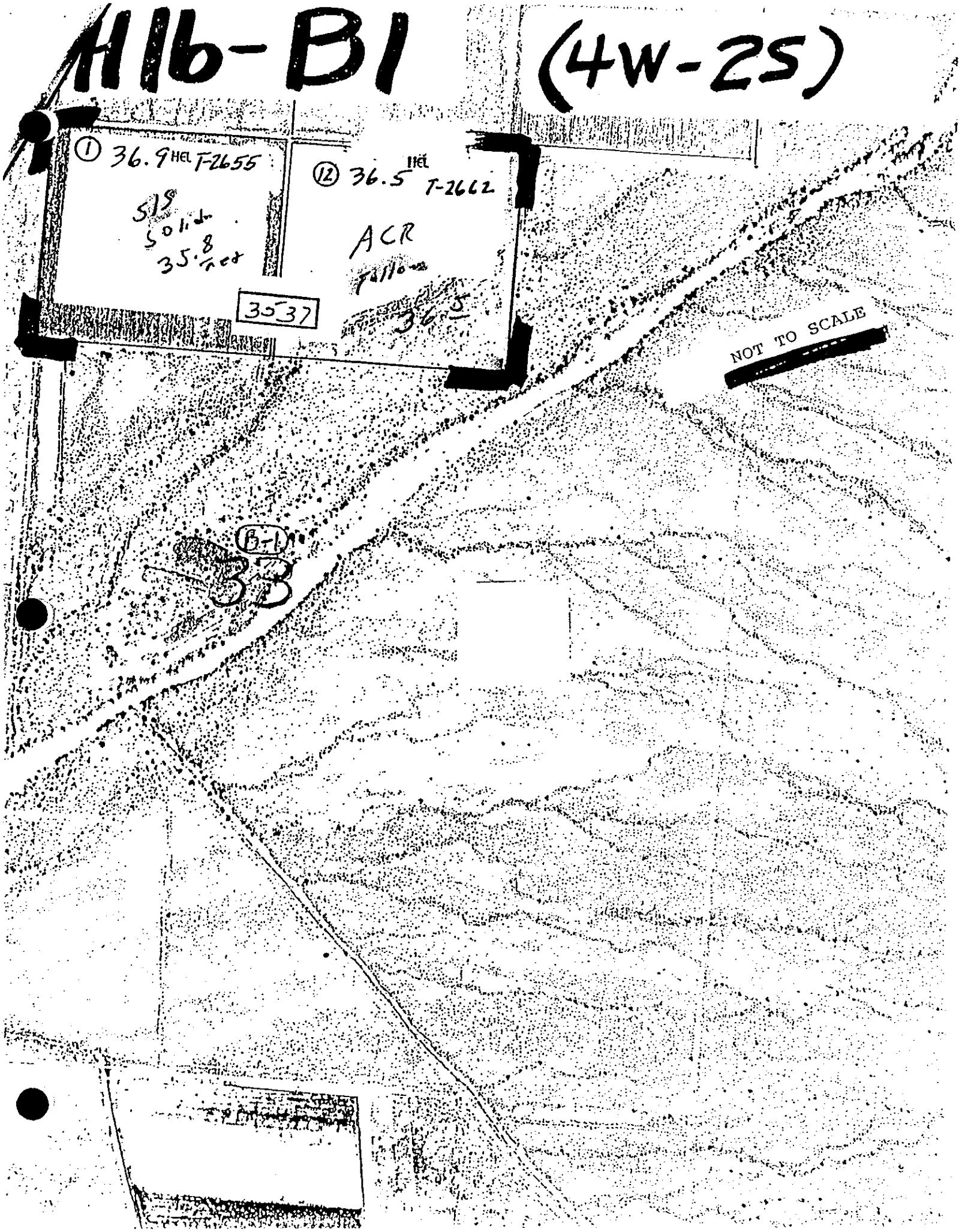
② 73.5 HEL 3537 T-2662

SIS
solid
71.3 ct

3474
T2655

⑫ 36.5 HEL 10/70
T2662

116-B1 (4W-25)


① 36.9 HEL T-2655
519
Solid
35.8
Fed
3537
⑫ 36.5 HEL T-2662
ACR
Fallow
36.5
NOT TO SCALE
B-1
33

H18-A2

(4W-3S)

NOT TO SCALE

(10) 24.9 HEL T-2165

(Fallow)

3321

B479

T-2165

(11) 39.9 HEL T-2165

Cua

3321

66.4 HEL

(8)

S/S.

(A9)

5

T2164

(12) 60.9 HEL T-2165

(1A) 20.0 HEL

(1B) 5.2 T-2657 ACR 5.2

3537

(9) 46.6 HEL T-2165

110.4 HEL

(2)

3537

3321

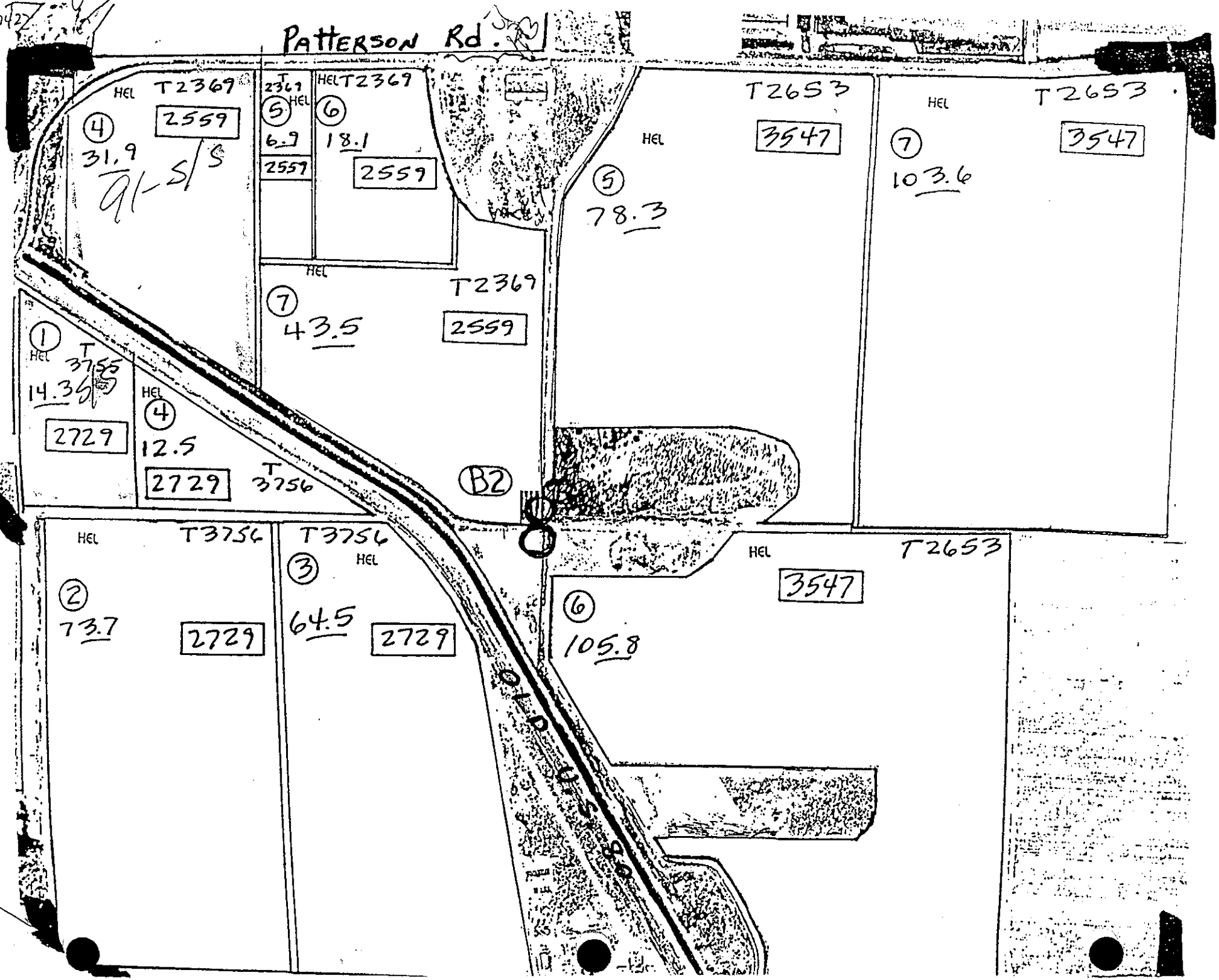
S/S

Solid

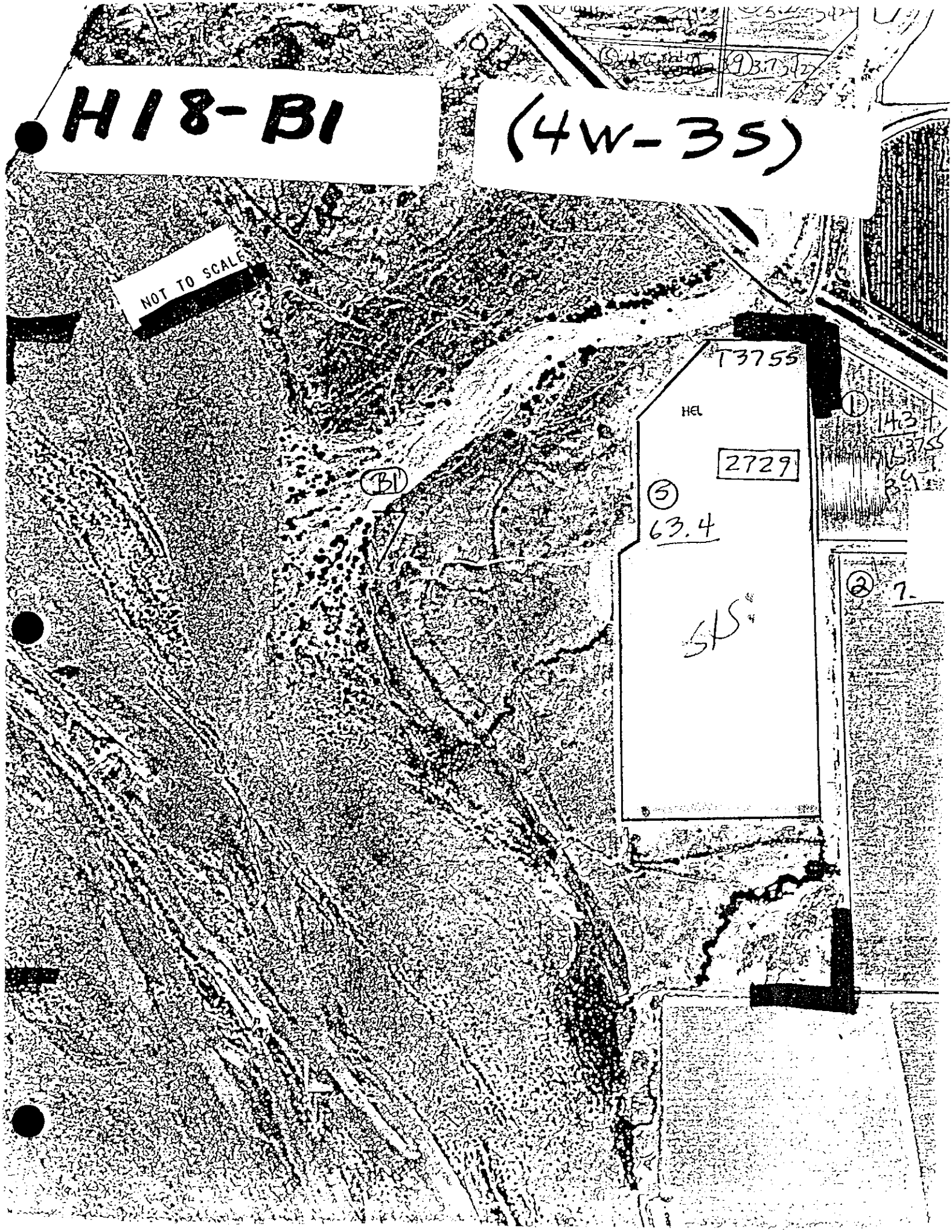
107.1 ACT

(5) 78.3 HEL B1462 P263

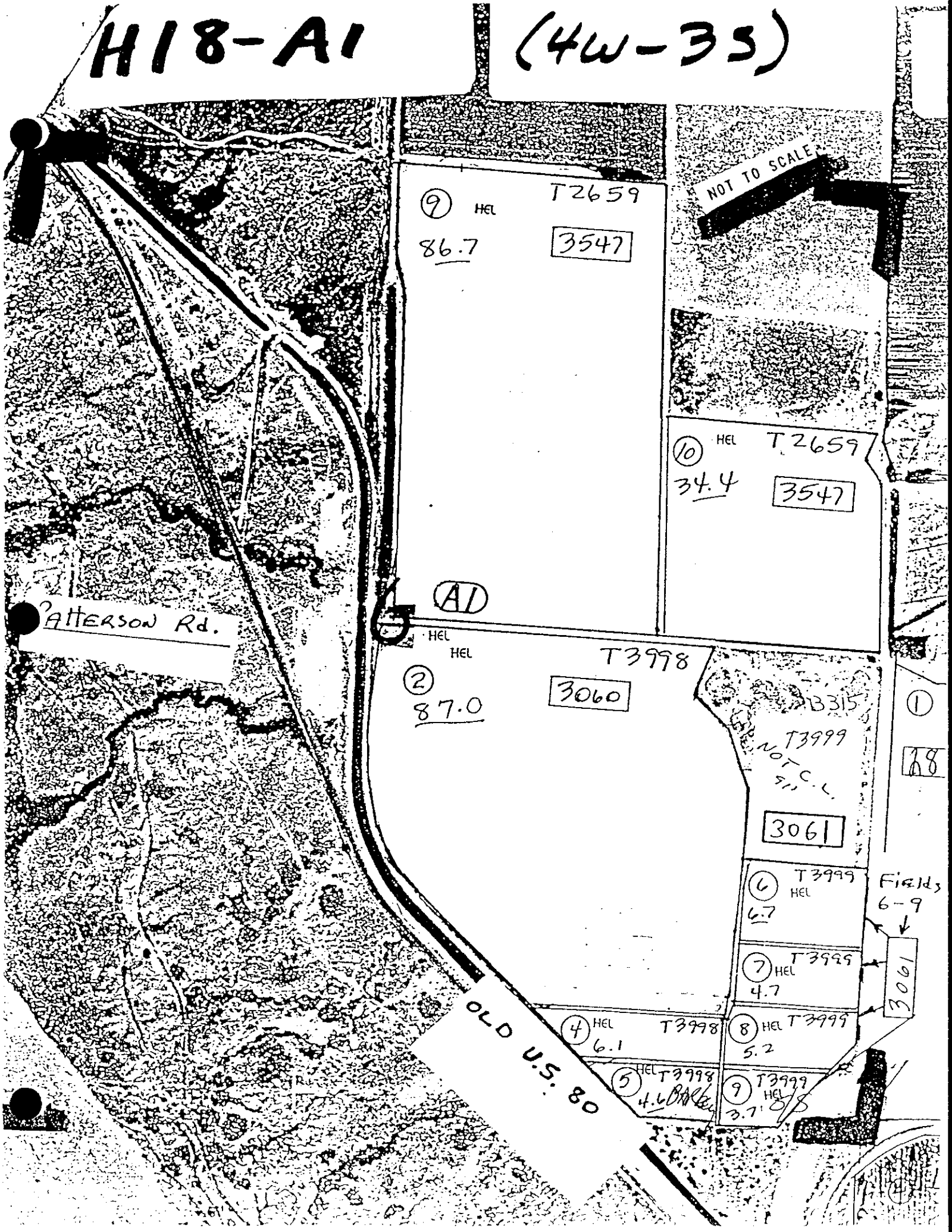
(7) 103.6 HEL

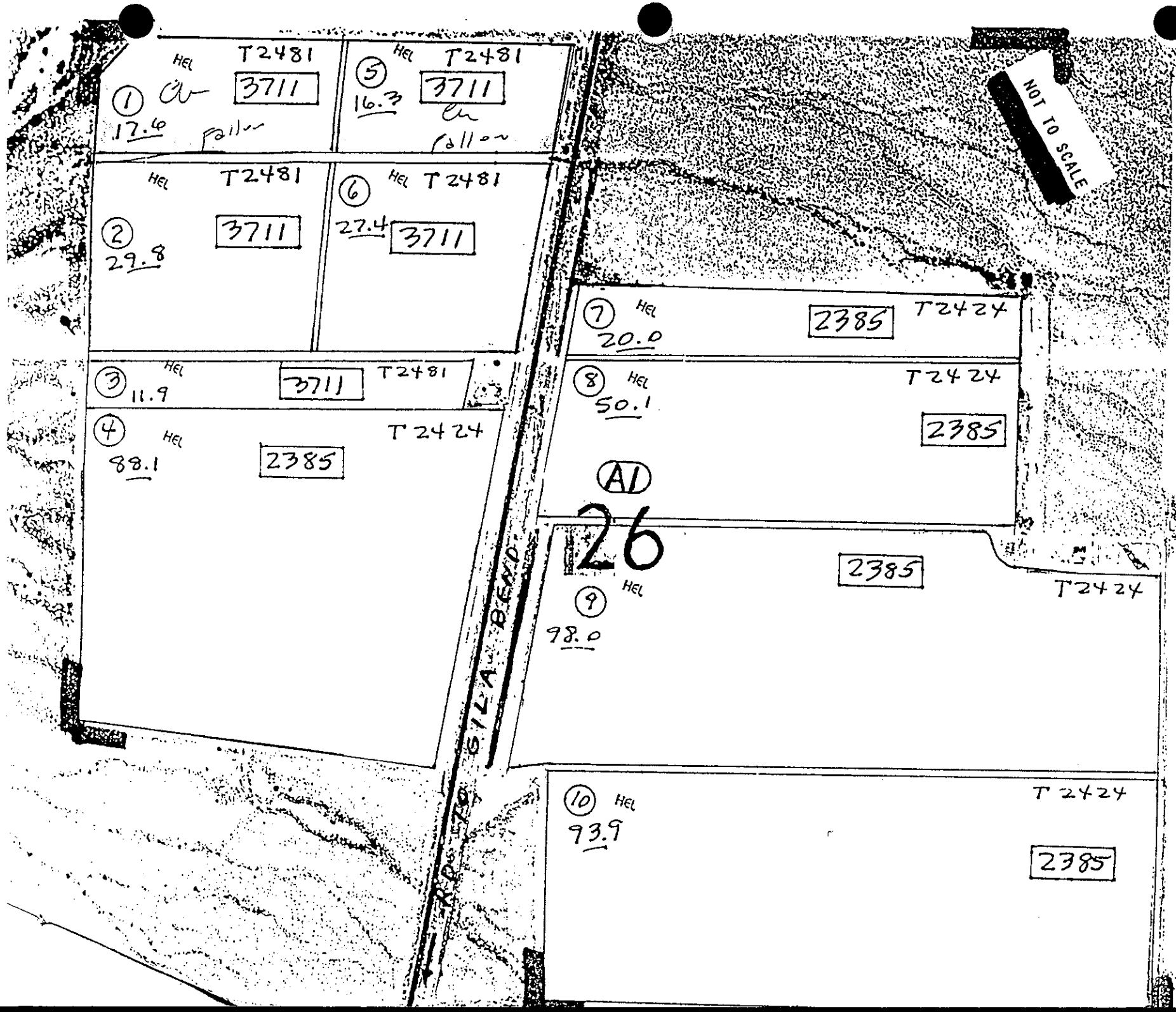

PATTERSON Rd.
T2369
2559
HEL
4
31.9
T2369
2559
5
6.9
HEL T2369
6
18.1
2559
HEL
7
43.5
T2369
2559
T2653
3547
HEL
5
78.3
T2653
3547
HEL
7
103.6
1
HEL
T 3755
14.3
2729
HEL
4
12.5
2729
T 3756
B2
HEL
T3756
2
73.7
2729
T3756
HEL
3
64.5
2729
HEL
T2653
3547
6
105.8
OLD US 80

H18-B1 (4W-3S)



H18-A1 (4W-33)


NOT TO SCALE
9 HEL T2659
86.7
3547
10 HEL T2659
34.4
3547
A1
Patterson Rd.
HEL
HEL
T3998
2
87.0
3060
B315
T3999
NOT C.L.
3061
1
68
6 T3999 HEL
6.7
Fields 6-9
7 T3999 HEL
4.7
3061
4 HEL T3998
6.1
8 HEL T3999
5.2
5 HEL T3998
4.6
9 T3999 HEL
3.7
OLD U.S. 80


HEL T2481
3711
1
17.6
fallow
HEL T2481
5
16.3
3711
fallow
HEL T2481
2
29.8
3711
HEL T2481
6
27.4
3711
HEL
3
11.9
3711
T2481
HEL
4
88.1
2385
T2424
HEL
7
20.0
2385
T2424
HEL
8
50.1
T2424
2385
A1
26
HEL
9
98.0
2385
T2424
HEL
10
93.9
T2424
2385
GILA BEND
NOT TO SCALE

H17-A1

(4W-25)

AZ-MC-14
RAINBOW FIS
Rec'd 4/16/92
from FCD
J. Opstein

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& CONSERVATION SERVICE

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PROGRAM ASSISTANT Gilbert Carranza

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602 379-4406

SECTION 4: Hydraulic Analysis

4.3 Cross-Section Description

Following completion of reproducible topographic mapping, the Rainbow Wash thalweg was sketched on work prints. Cross-section locations spaced about 500 feet were selected. Criteria for selection included:

- o Represent the local stream reach
- o Orient perpendicular to the predicted 100-year floodplain
- o Avoid inclusion of non-effective areas
- o Include the predicted 100-year floodplain

At confluence and other areas where it was anticipated that flow may not be fully two dimensional, "broken back" cross-sections were selected to reflect the predicted flow pattern.

Cross-section labeling represents each section's distance upstream of the mouth of the Gila River, measured in miles along the thalweg.

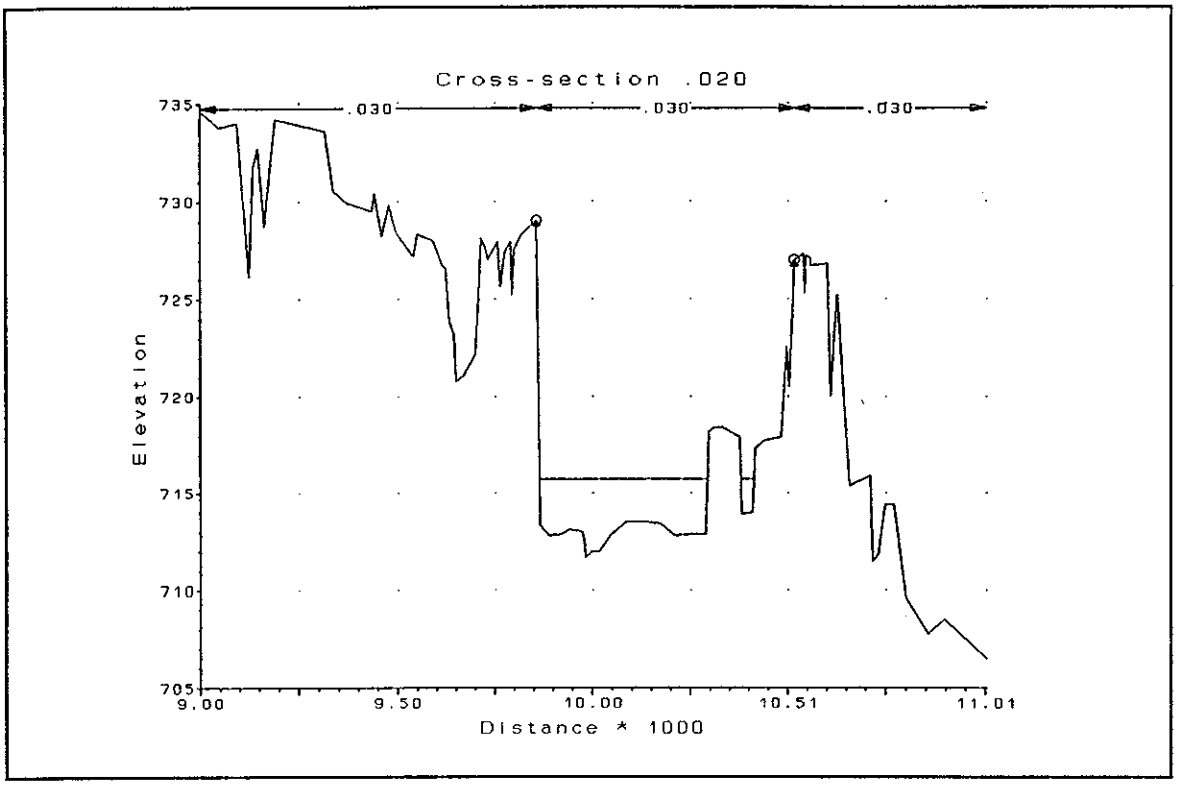
Digitized cross-sections at the locations selected were provided by Kenny Aerial Mapping Co., Inc. Sections were processed by Simons, Li & Associates to develop section plots. For each cross section, station 10,000 represents the intersection with the thalweg as delineated by SLA on the topographic mapping.

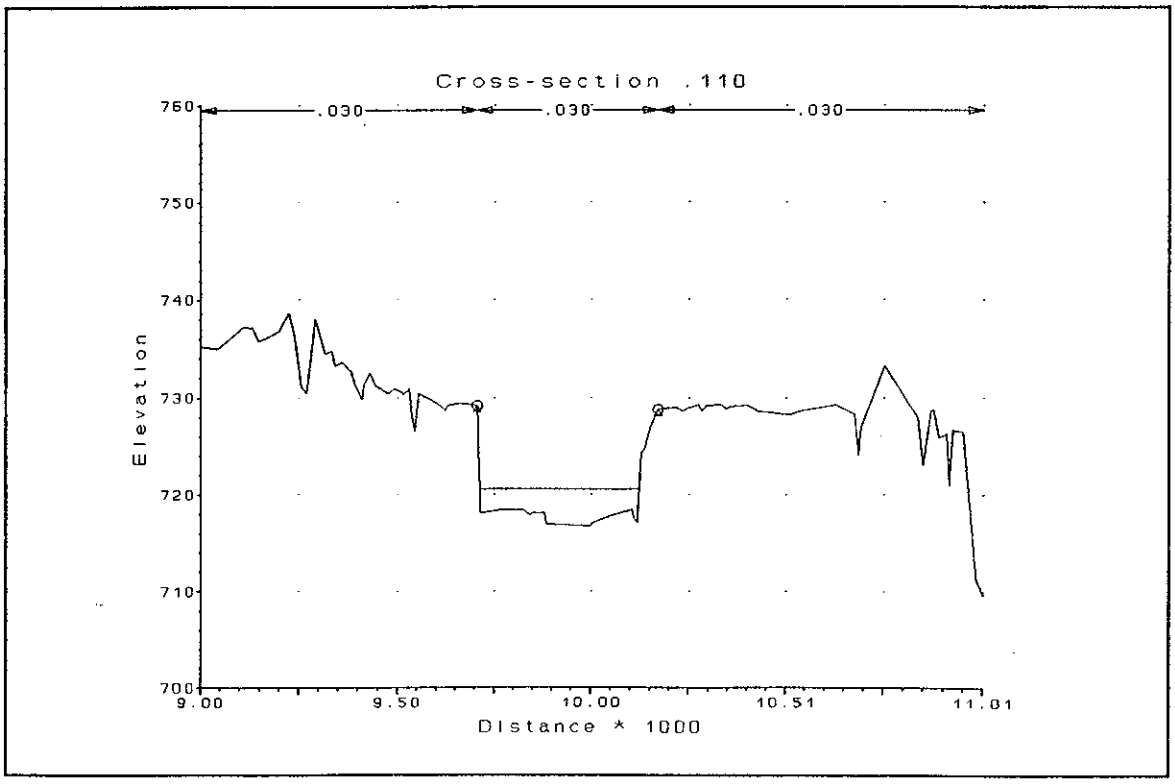
Cross-section plots were reviewed in conjunction with aerial photographs and topographic mapping to determine if the sections were representative to the reach. Adjustments were made to remove non-effective areas, bank stations selected, and Manning's "n" values were assigned.

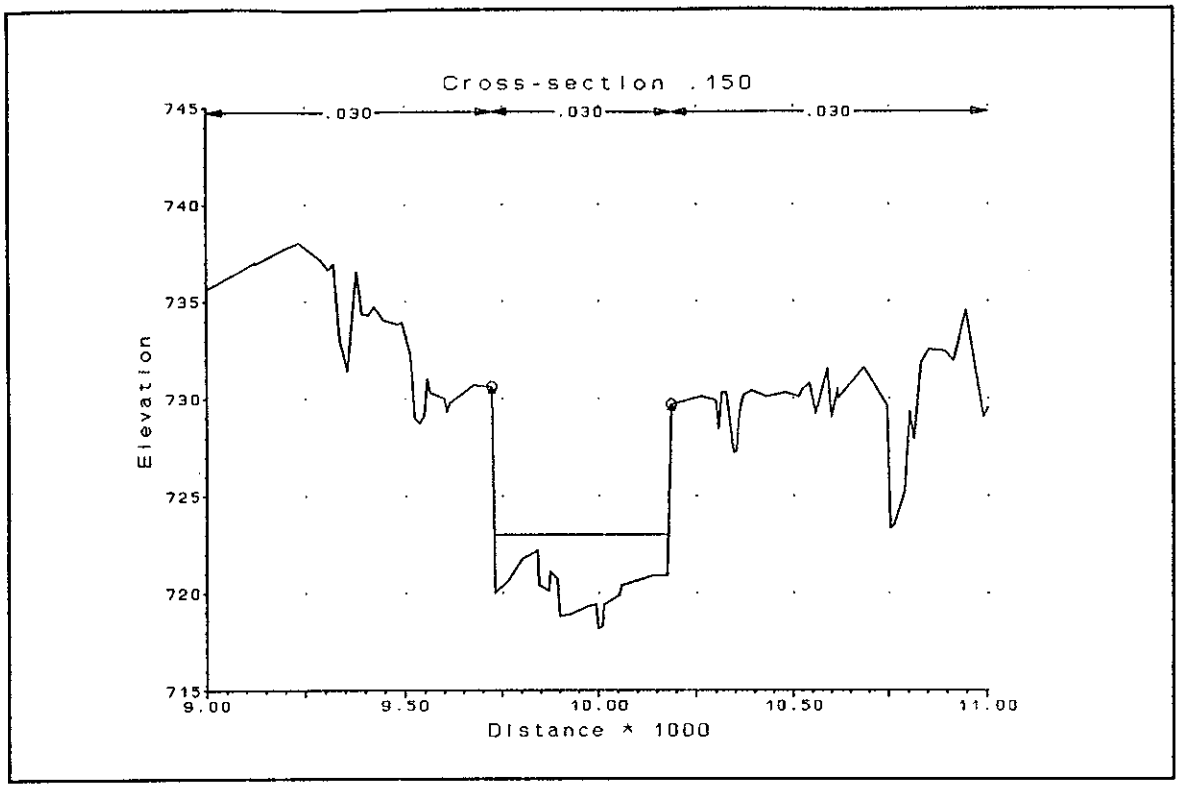
Predicted overbank flow lines were sketched on the work maps, and flow lengths were scaled along these lines and the thalweg.

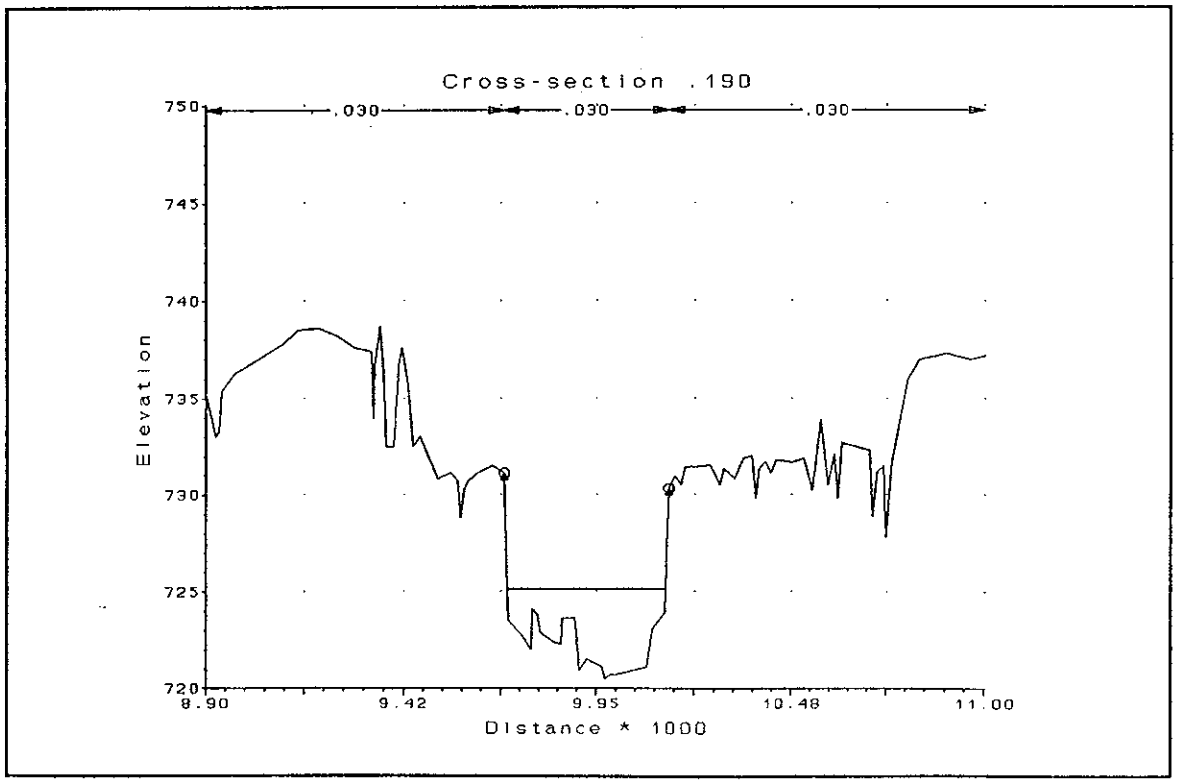
Results of the initial HEC-2 runs were reviewed to determine if sections were representative of the reach. Further adjustments were made to remove non-effective flow areas.

Following are copies of work prints of cross-sections showing bank stations and Manning's "n" values:


Cross-section .020
.030
.030
.030
735
730
725
720
715
710
705
Elevation
9.00
9.50
10.00
10.51
11.01
Distance * 1000


Cross-section .110
.030
.030
.030
760
750
740
730
720
710
700
Elevation
9.00
9.50
10.00
10.51
11.01
Distance * 1000


Cross-section .150
.030
.030
.030
745
740
735
730
725
720
715
Elevation
9.00
9.50
10.00
10.50
11.00
Distance * 1000


Cross-section .190
.030
.030
.030
750
745
740
735
730
725
720
Elevation
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9.42
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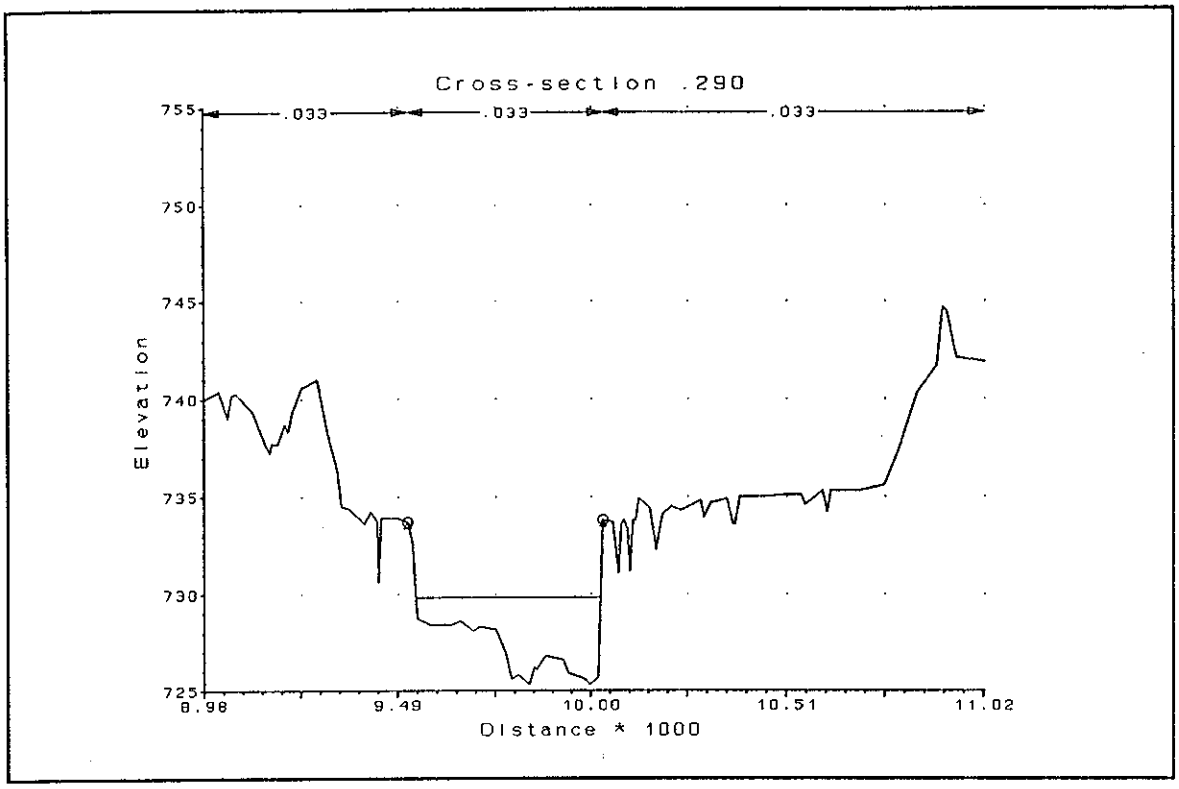
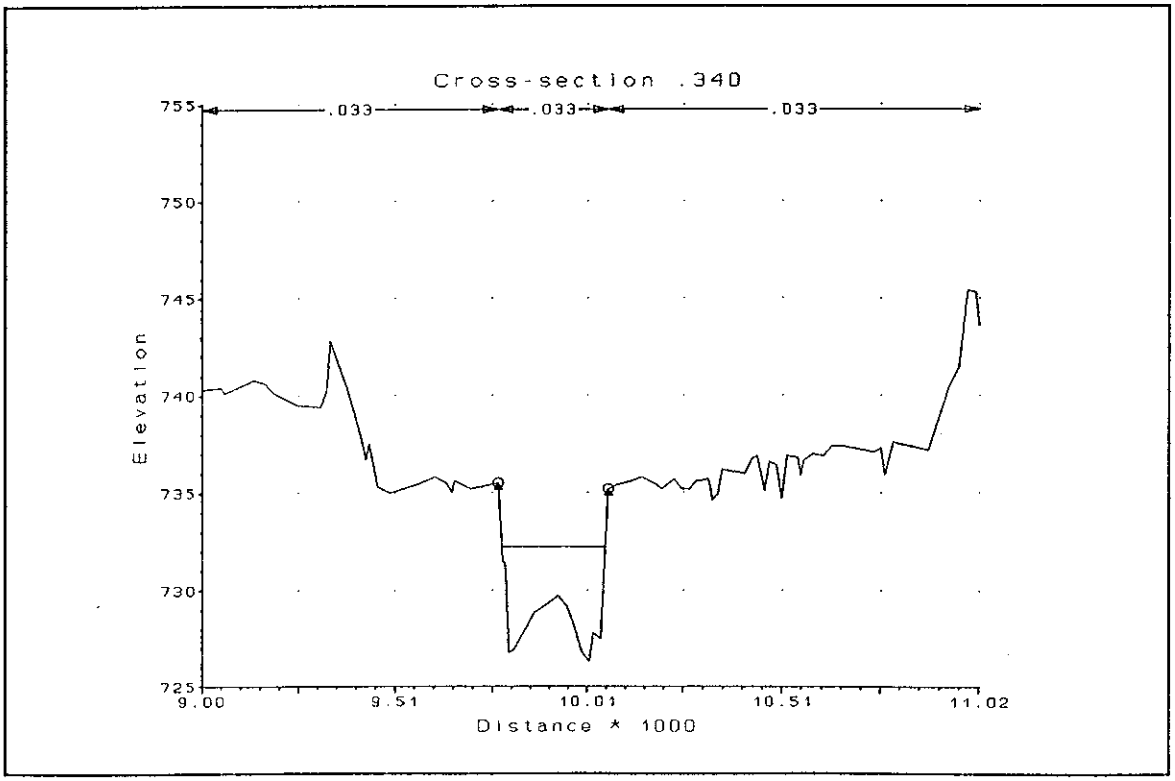
10.48
11.00
Distance * 1000


Cross-section .290
.033
.033
.033
755
750
745
740
735
730
725
Elevation
8.98
9.49
10.00
10.51
11.02
Distance * 1000


Cross-section .340
.033
.033
.033
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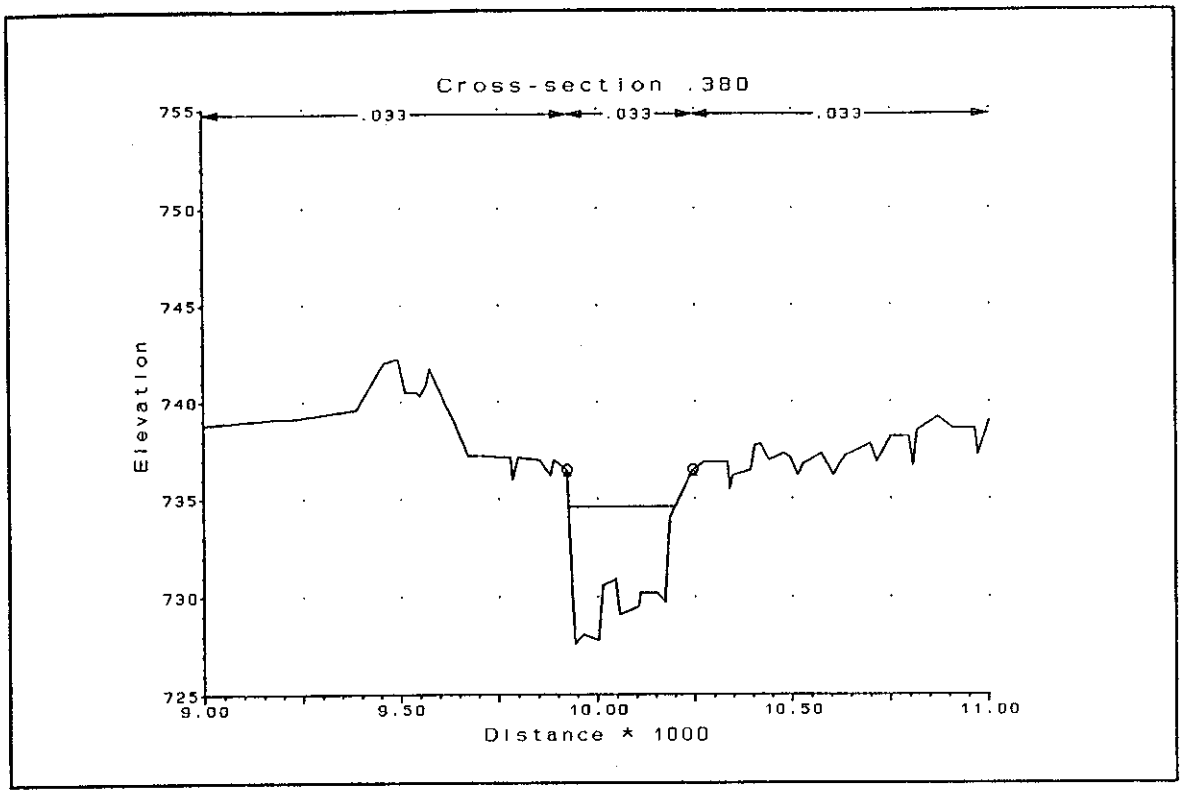
745
740
735
730
725
Elevation
9.00
9.51
10.01
10.51
11.02
Distance * 1000


Cross-section .380
.033
.033
.033
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745
740
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730
725
Elevation
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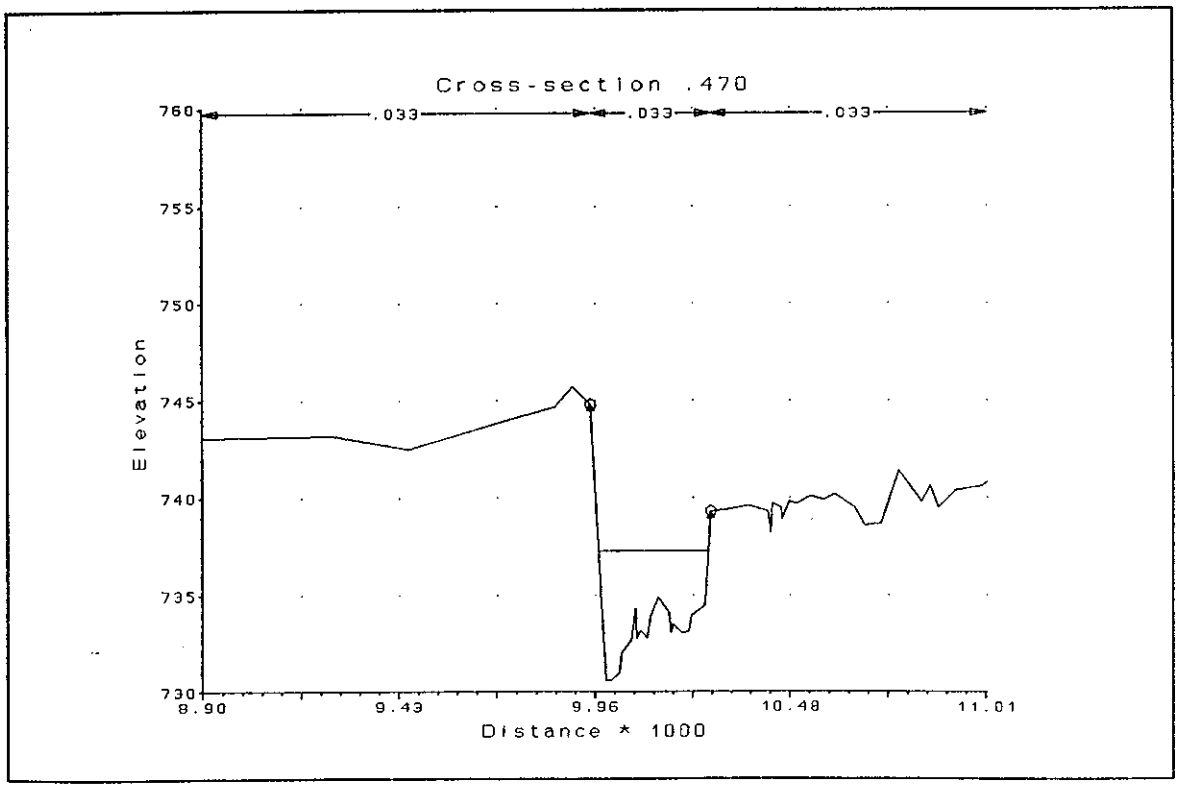
10.50
11.00
Distance * 1000


Cross-section .470
.033
.033
.033
760
755
750
745
740
735
730
Elevation
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9.43
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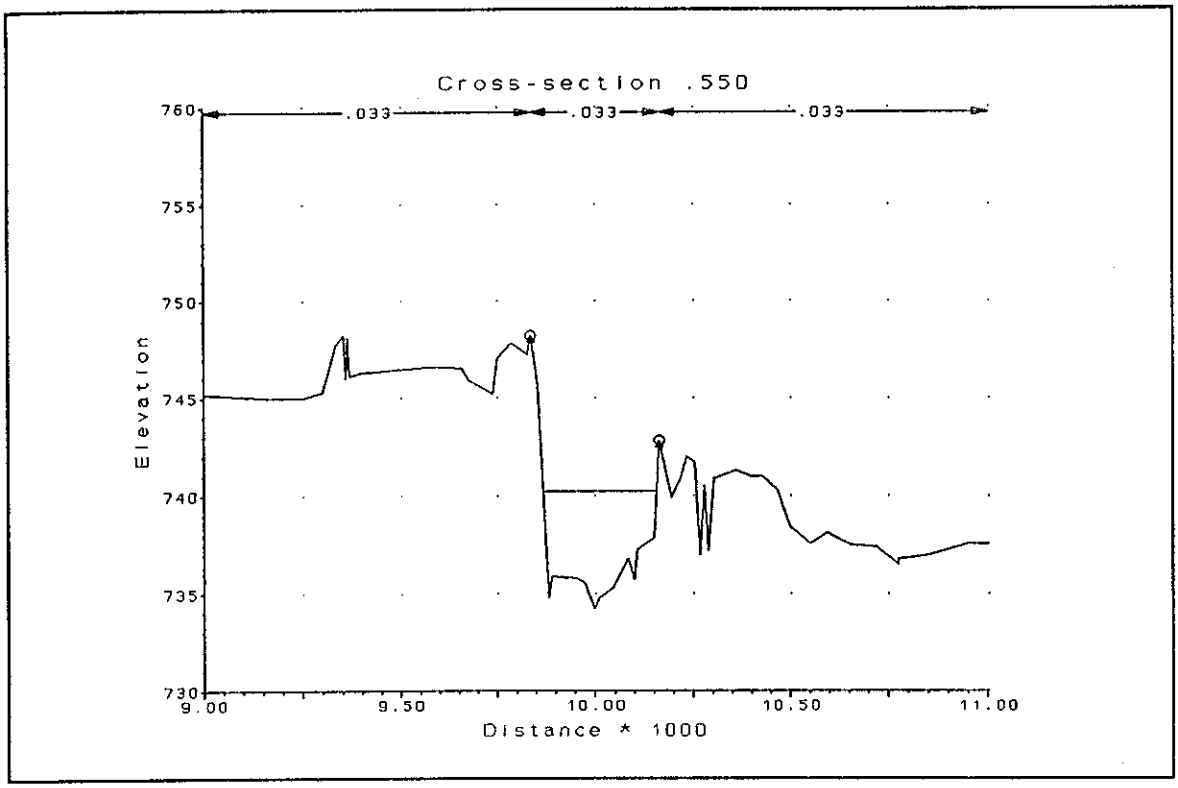
10.48
11.01
Distance * 1000


Cross-section .550
.033
.033
.033
760
755
750
745
740
735
730
Elevation
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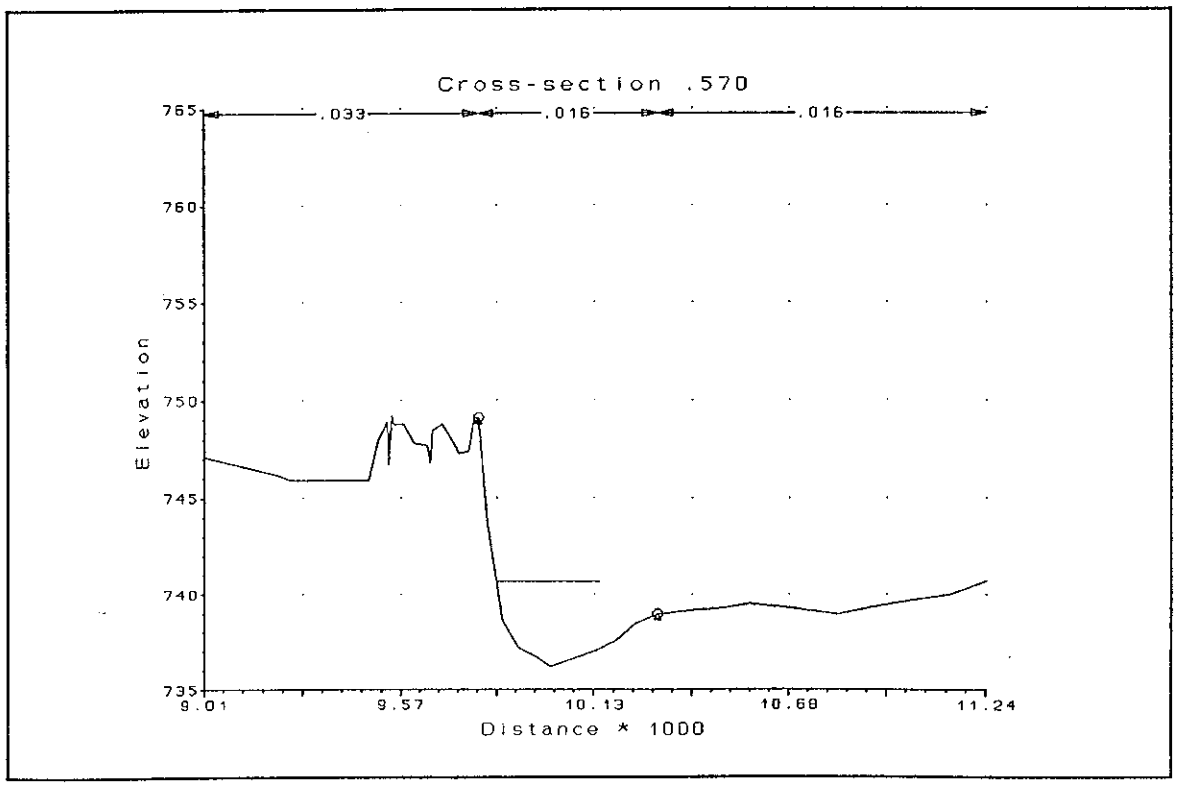
9.50
10.00
10.50
11.00
Distance * 1000


Cross-section .570
.033
.016
.016
765
760
755
750
745
740
735
Elevation
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9.57
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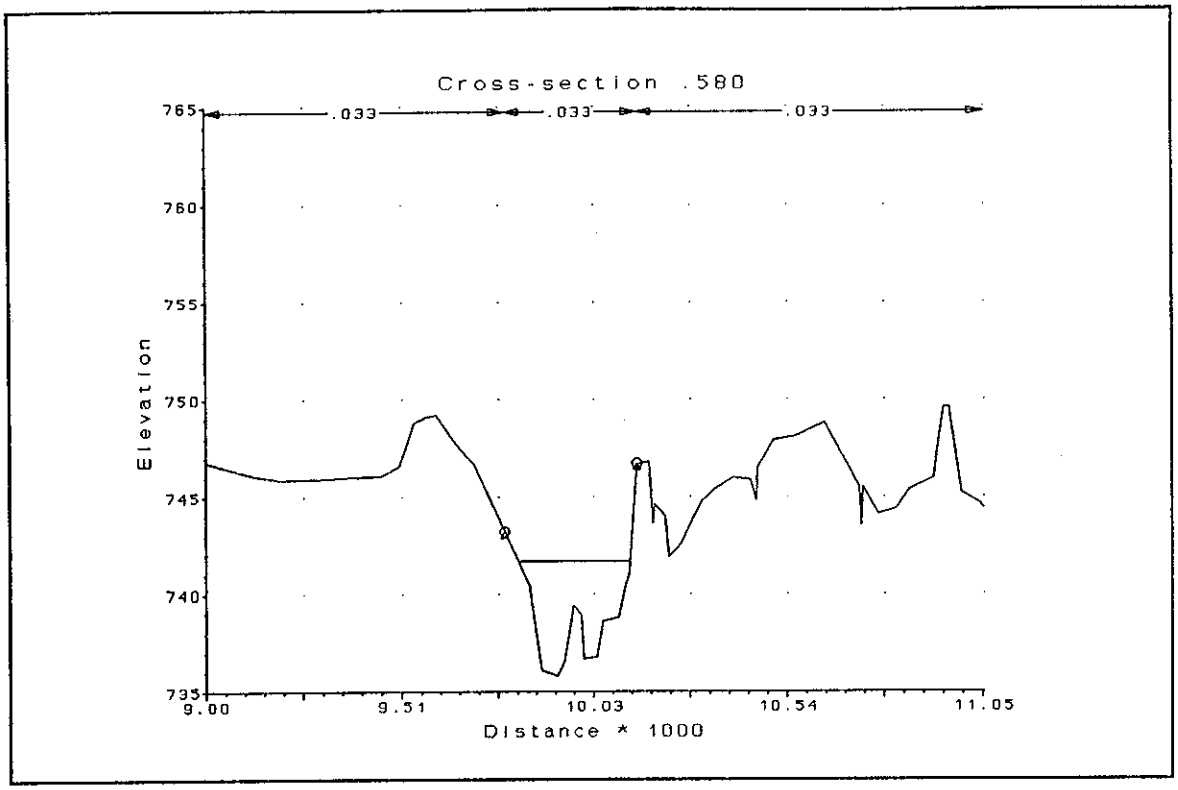
11.24
Distance * 1000


Cross-section .580
.033
.033
.033
765
760
755
750
745
740
735
Elevation
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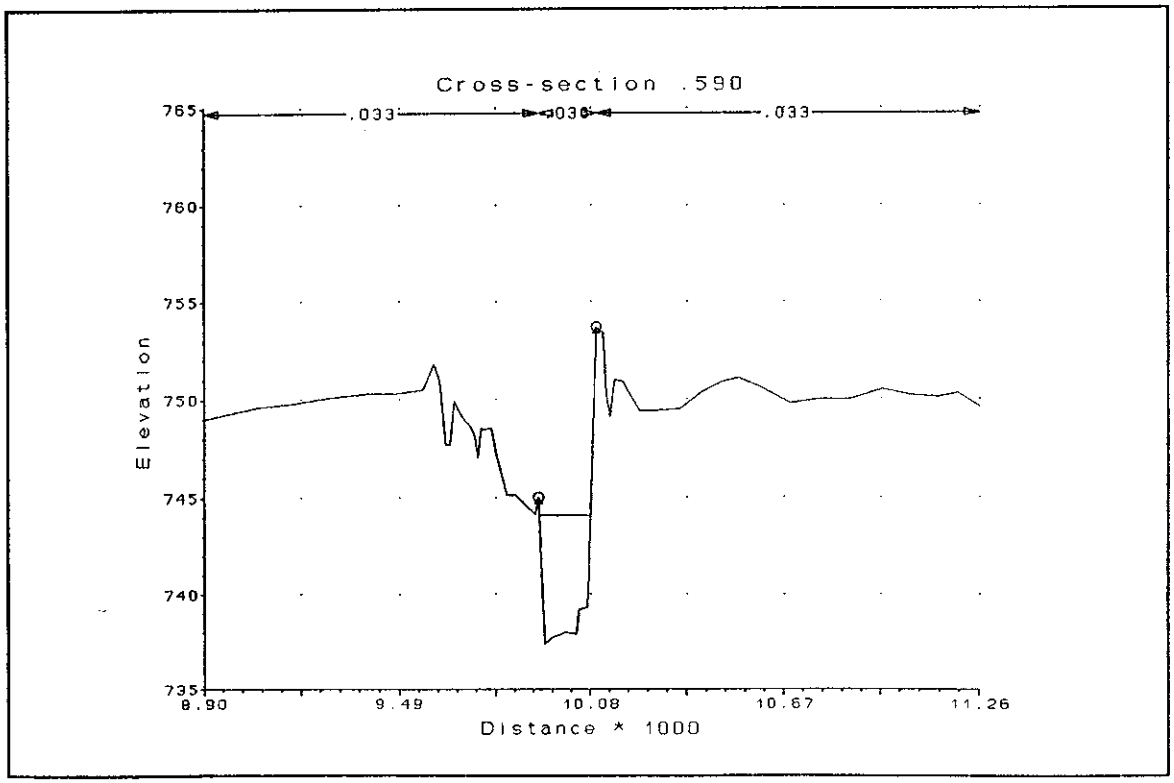
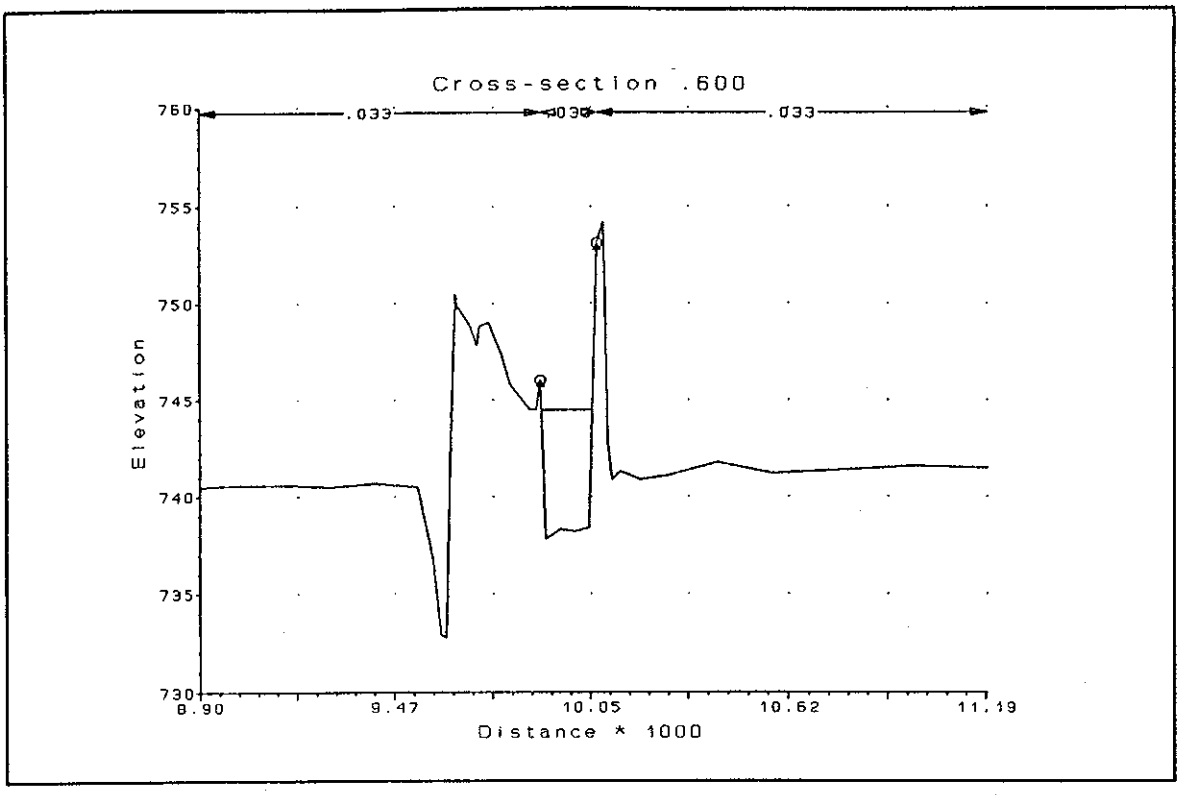
9.51
10.03
10.54
11.05
Distance * 1000


Cross-section .590
.033
.033
.033
765
760
755
750
745
740
735
Elevation
8.90
9.49
10.08
10.67
11.26
Distance * 1000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750
745
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735
730
Elevation
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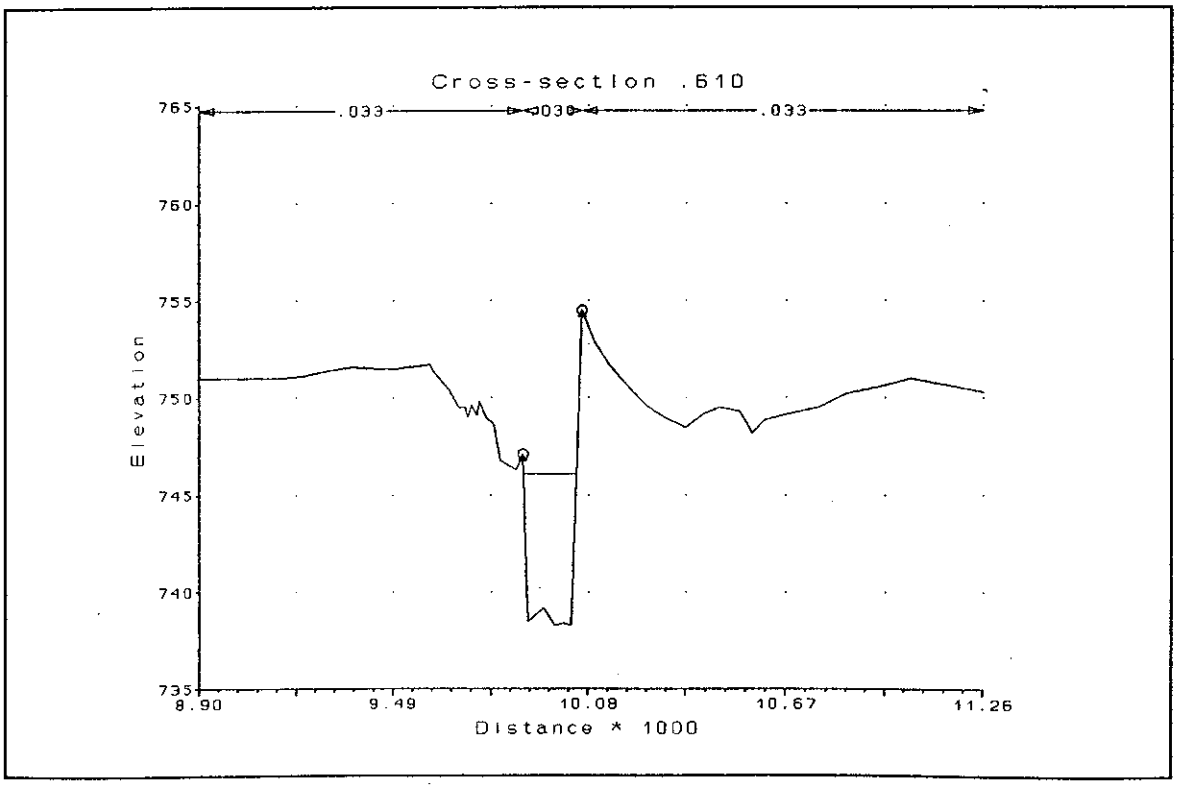
11.19
Distance * 1000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.030
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755
750
745
740
735
Elevation
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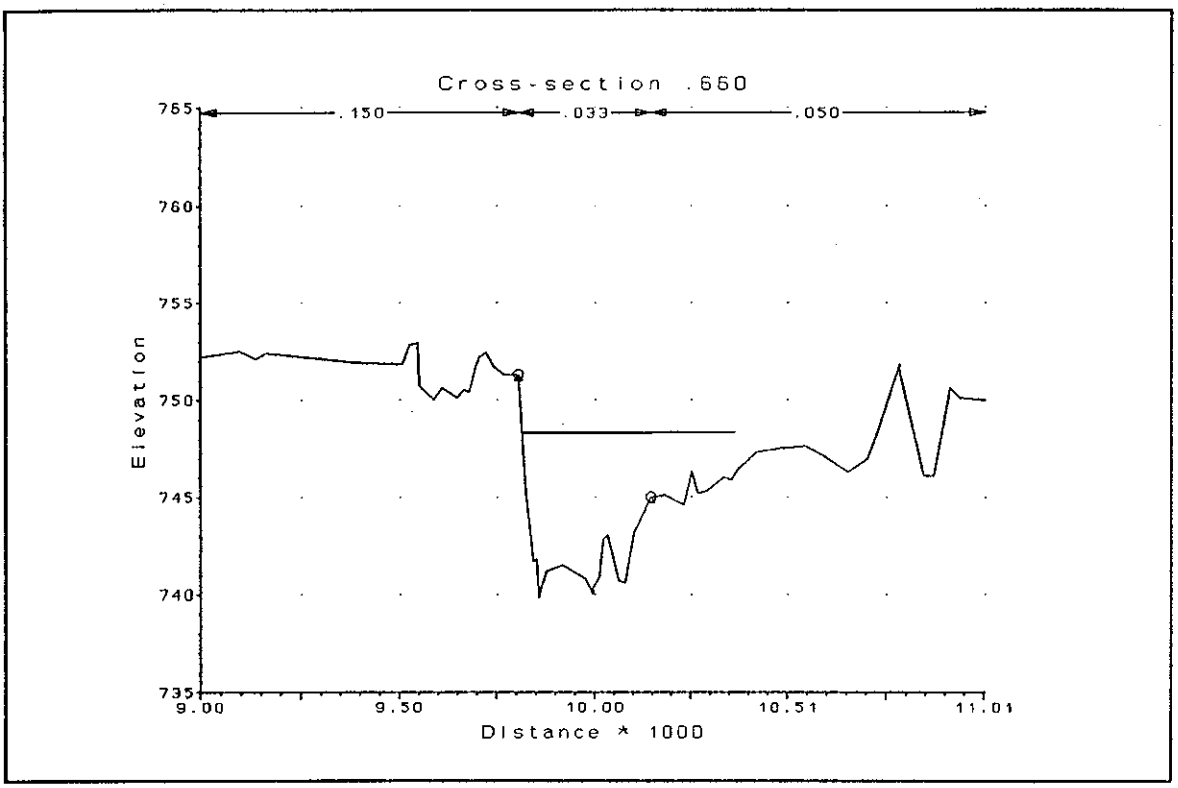
9.49
10.08
10.67
11.26
Distance * 1000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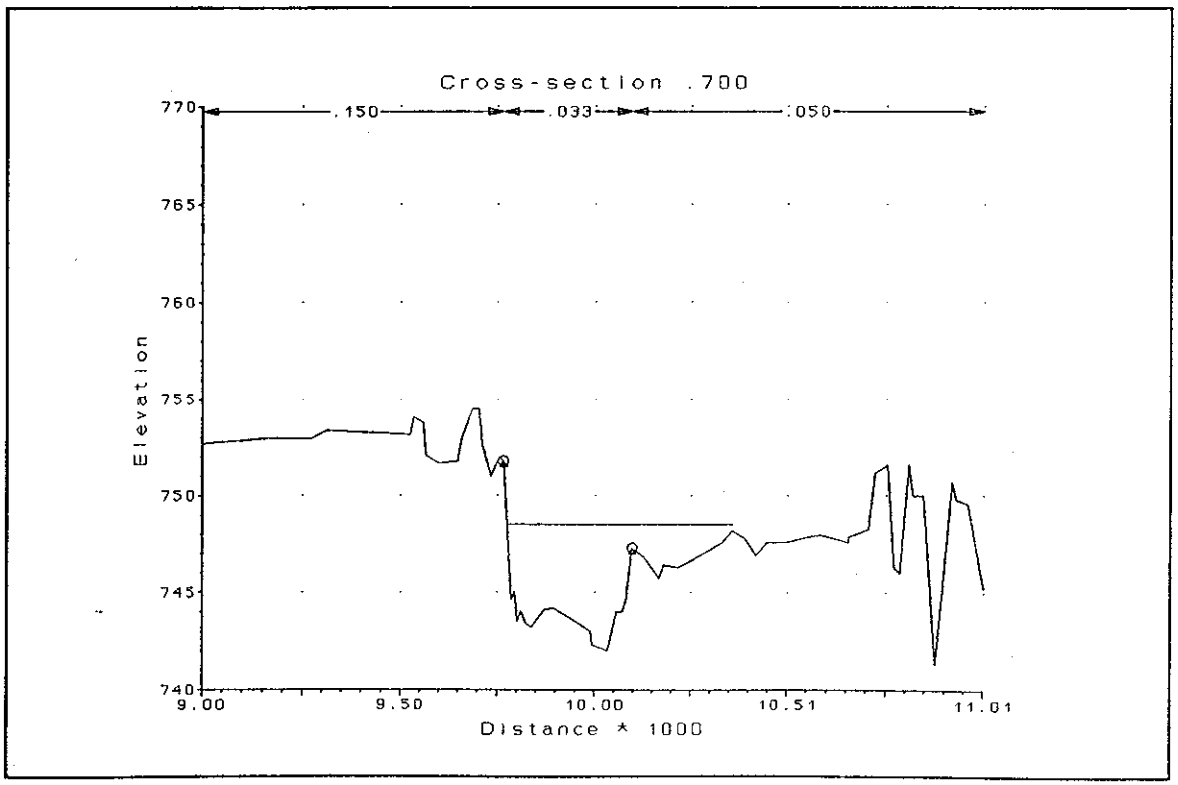
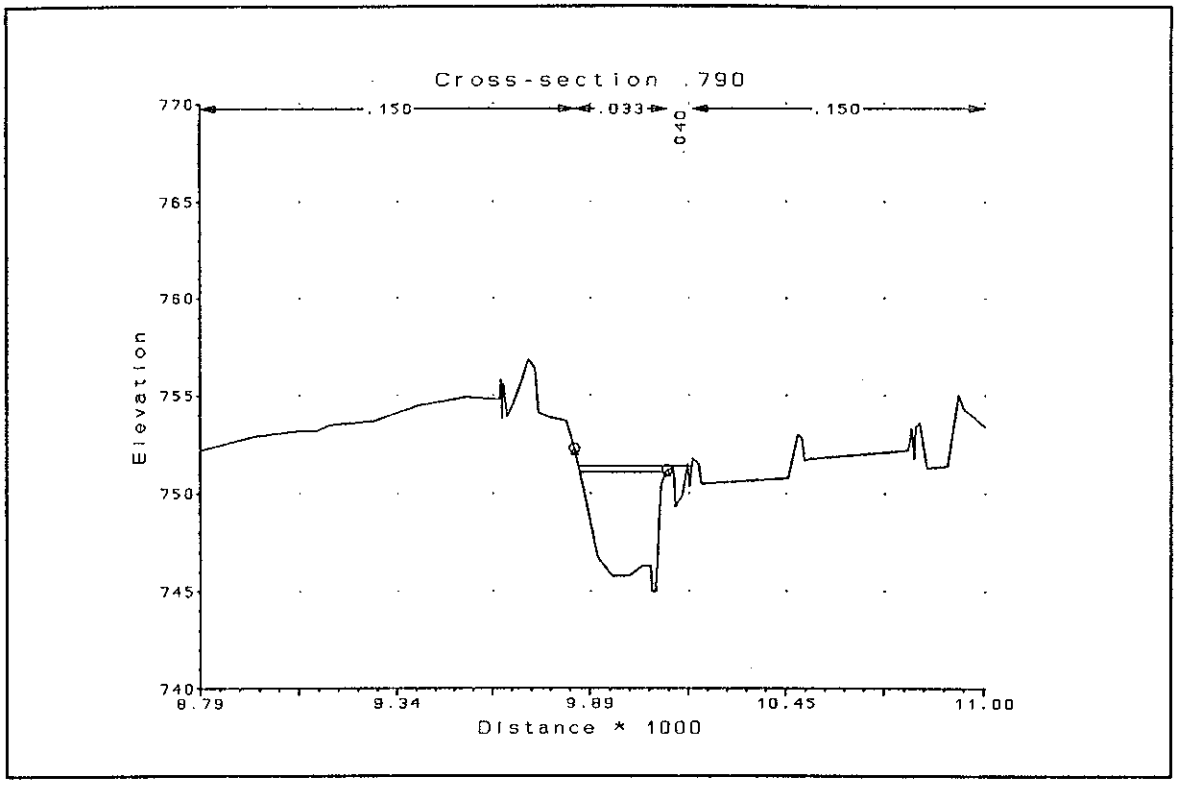
765
760
755
750
745
740
735
Elevation
9.00
9.50
10.00
10.51
11.01
Distance * 1000


Cross-section .700
.150
.033
.050
770
765
760
755
750
745
740
Elevation
9.00
9.50
10.00
10.51
11.01
Distance * 1000


Cross-section .790
.150
.033
.040
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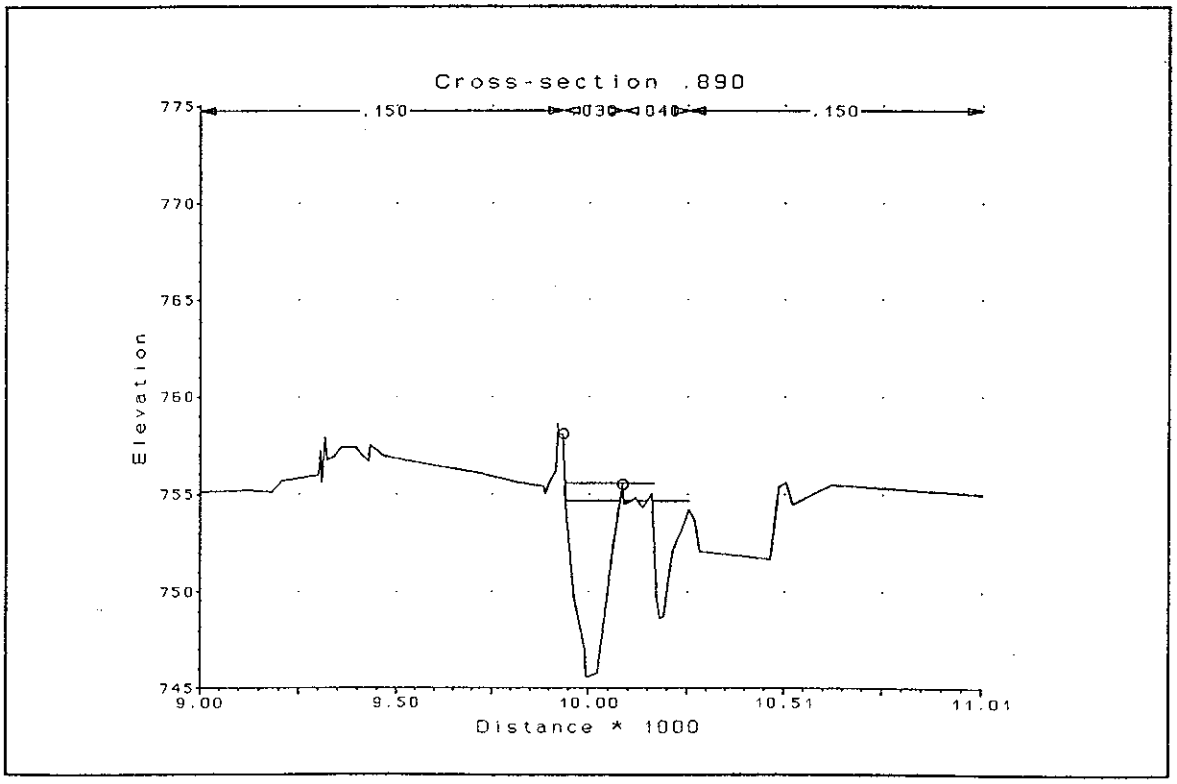
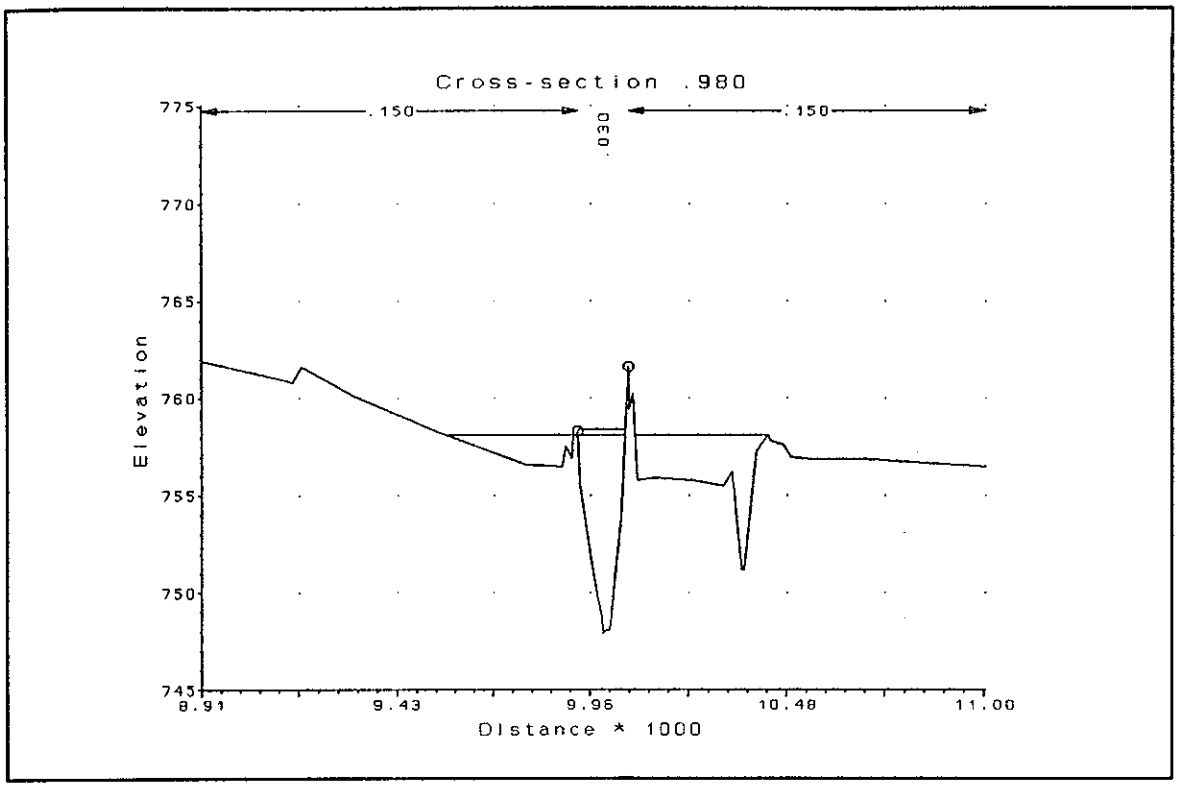
770
765
760
755
750
745
740
Elevation
8.79
9.34
9.89
10.45
11.00
Distance * 1000


Cross-section .890
.150
.030
.040
.150
775
770
765
760
755
750
745
Elevation
9.00
9.50
10.00
10.51
11.01
Distance * 1000


Cross-section .980
.150
.030
.150
775
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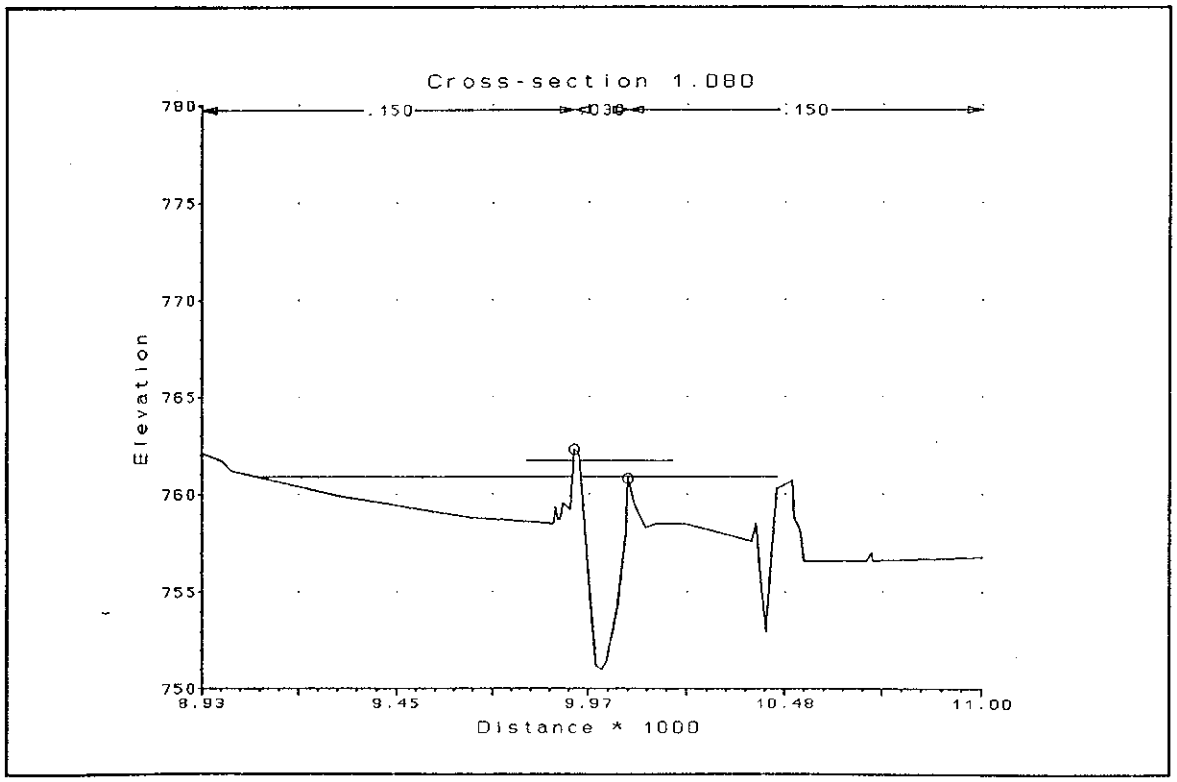
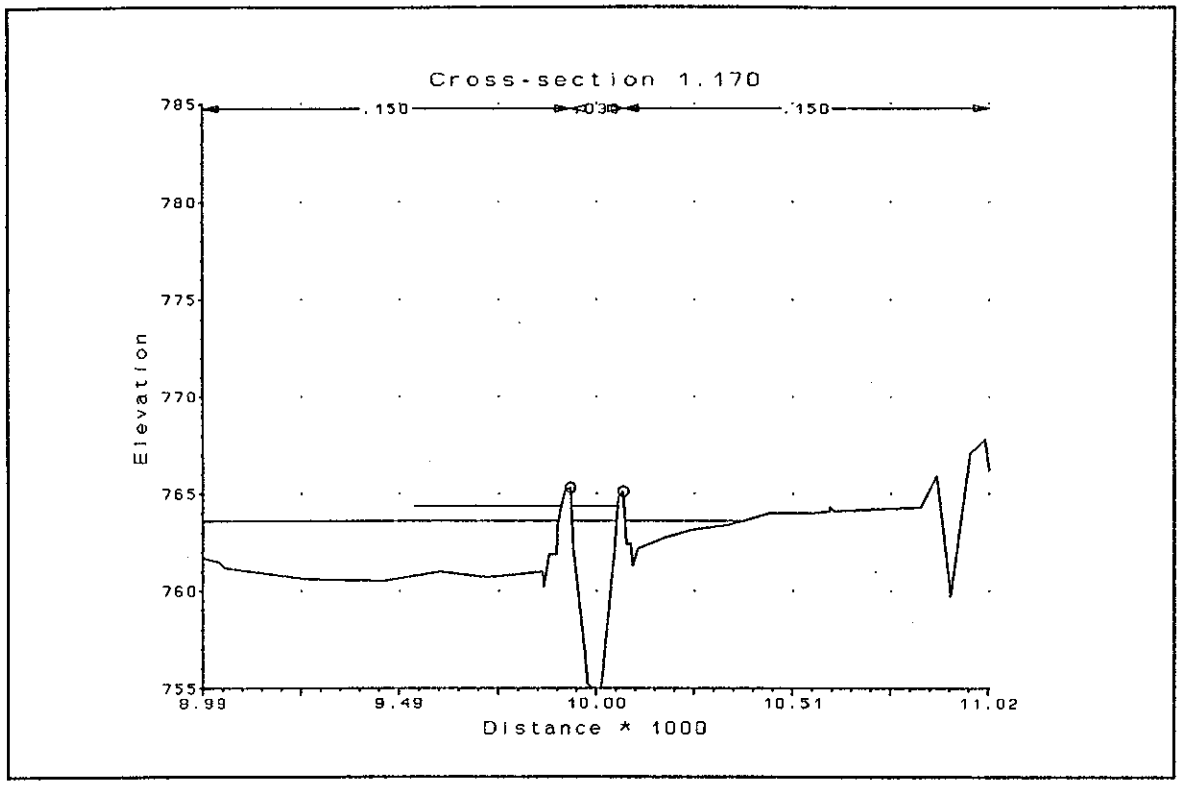
765
760
755
750
745
Elevation
8.91
9.43
9.96
10.48
11.00
Distance * 1000


Cross-section 1.080
.150
.030
.150
780
775
770
765
760
755
750
Elevation
8.93
9.45
9.97
10.48
11.00
Distance * 1000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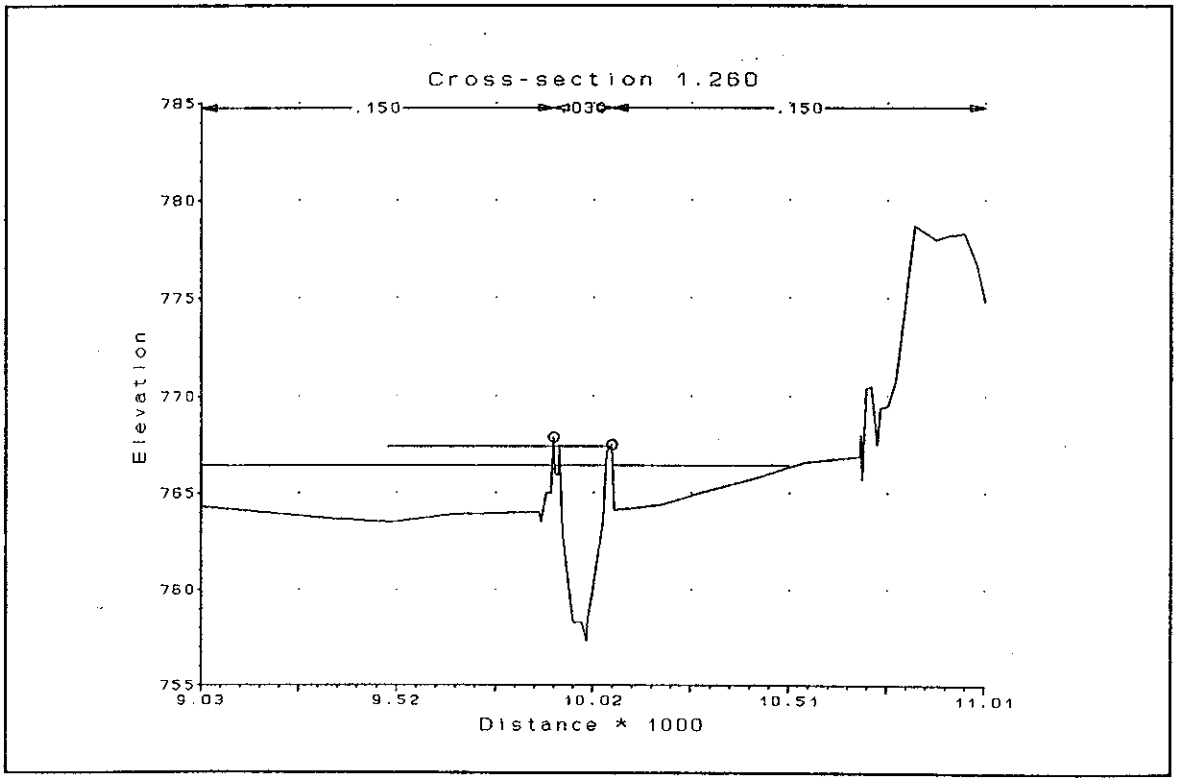
.030
.150
785
780
775
770
765
760
755
Elevation
8.99
9.49
10.00
10.51
11.02
Distance * 1000


Cross-section 1.260
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.030
.150
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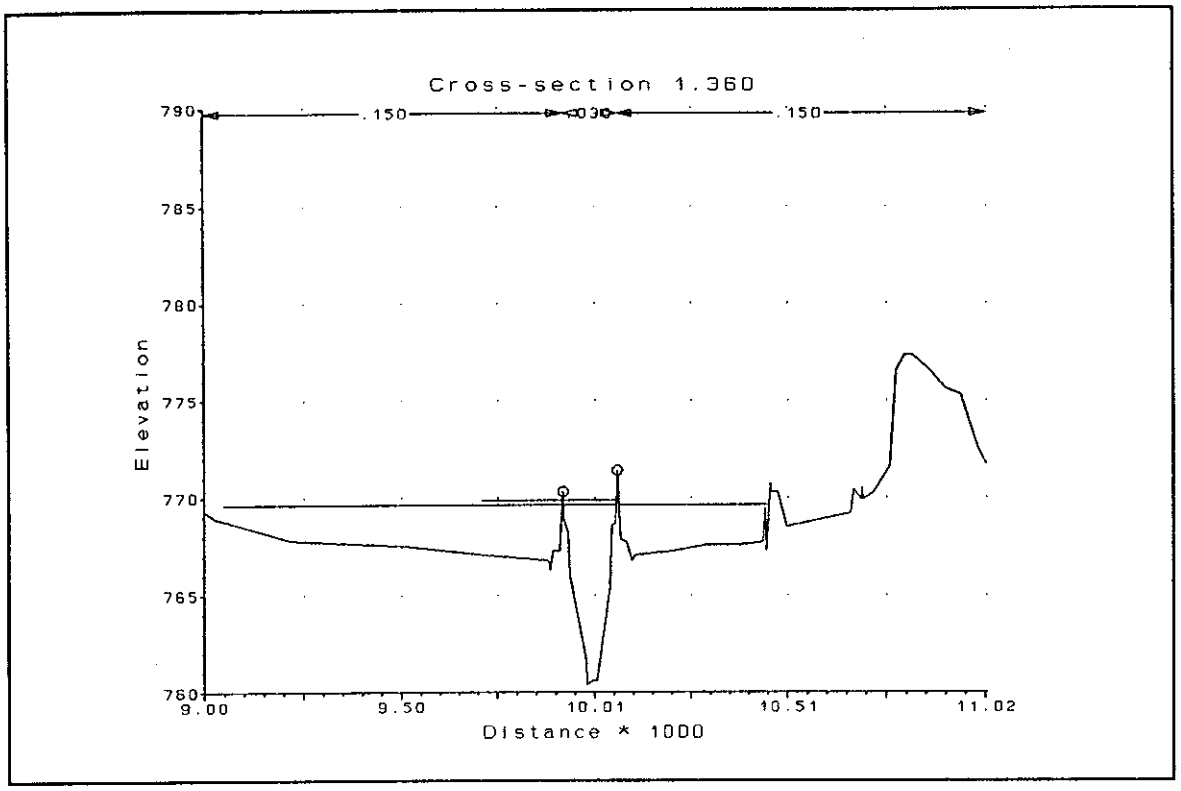
775
770
765
760
755
Elevation
9.03
9.52
10.02
10.51
11.01
Distance * 1000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.150
.030
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780
775
770
765
760
Elevation
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9.50
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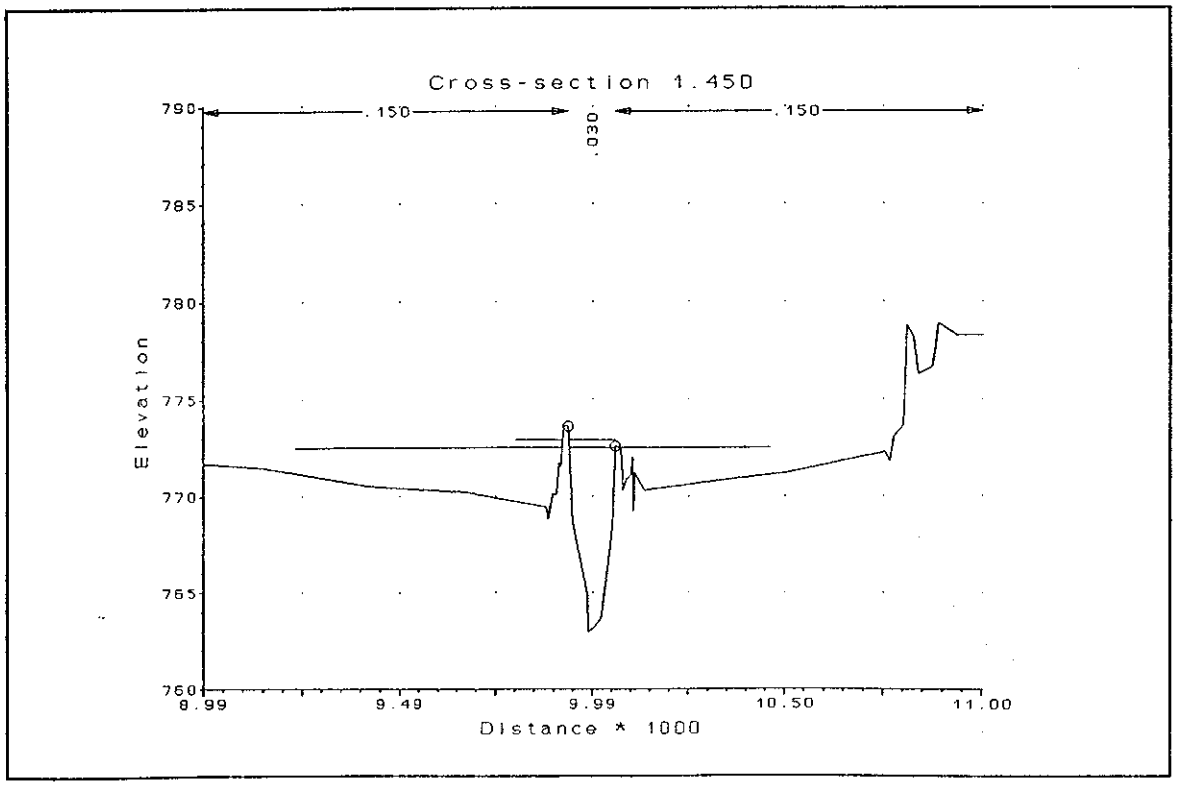
10.51
11.02
Distance * 1000


Cross-section 1.450
.150
.030
.150
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785
780
775
770
765
760
Elevation
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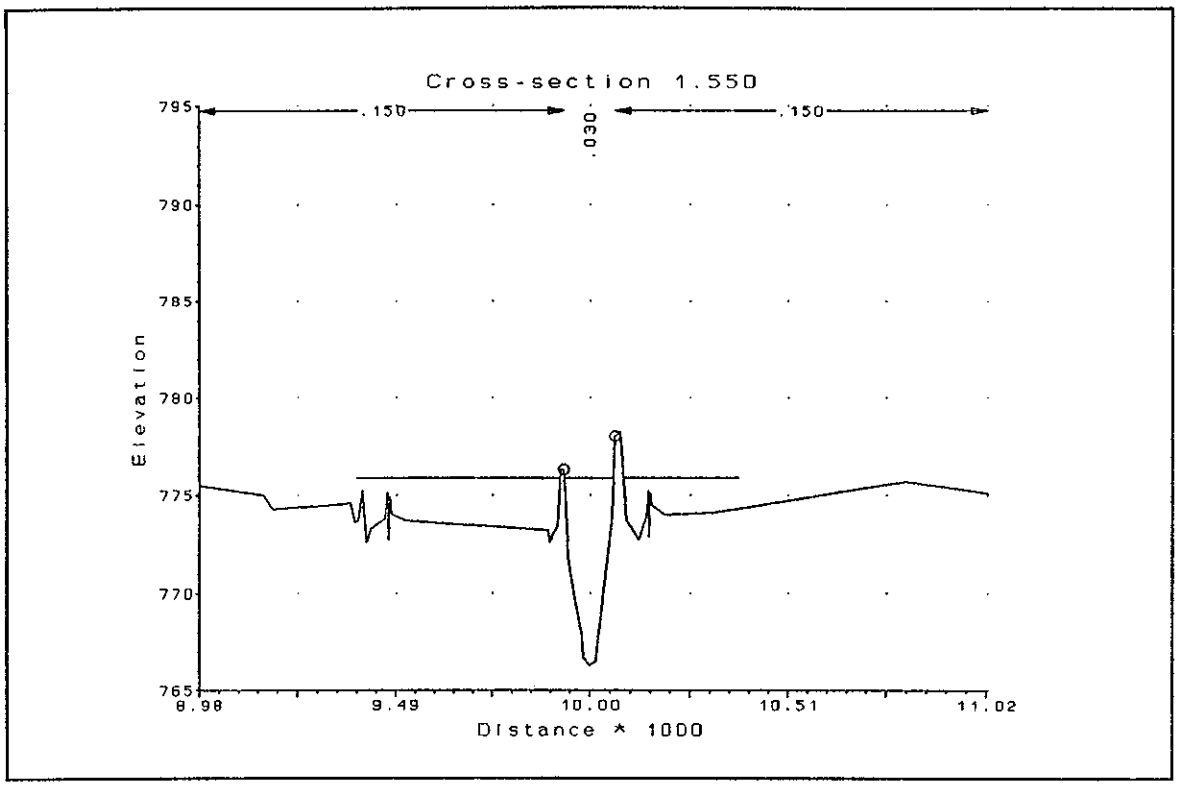
9.49
9.99
10.50
11.00
Distance * 1000


Cross-section 1.550
.150
.030
.150
795
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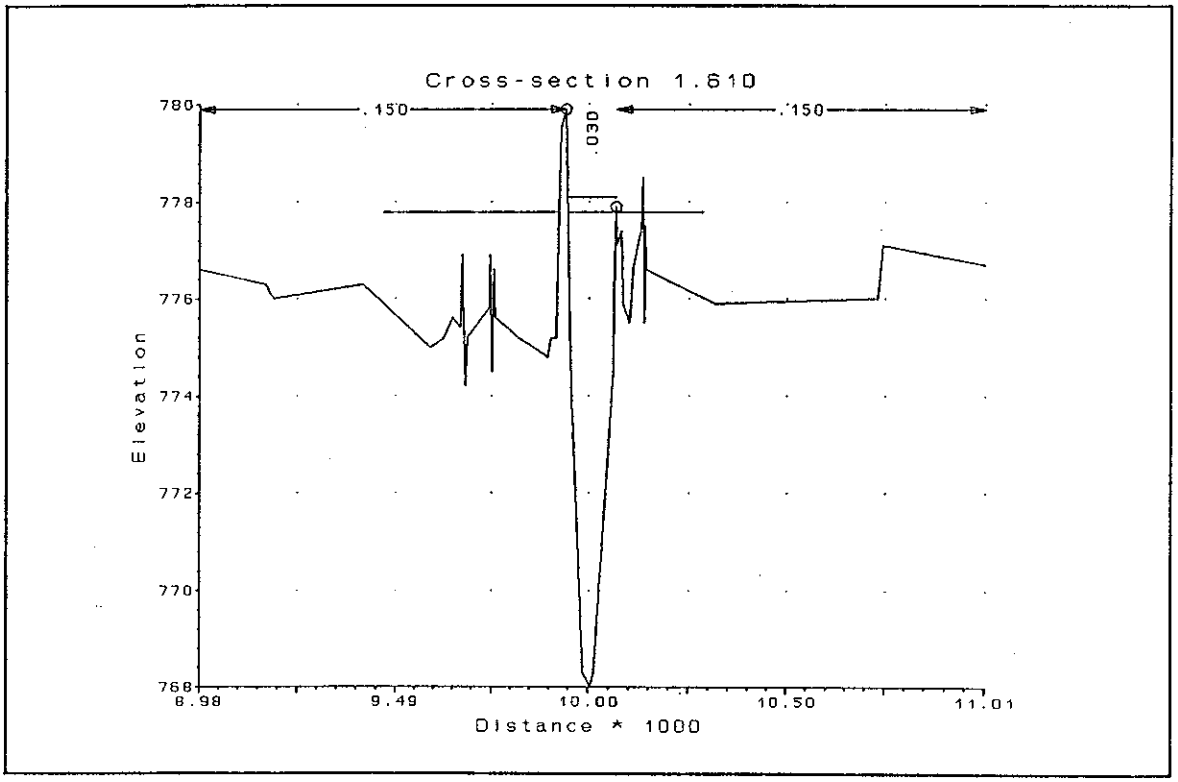
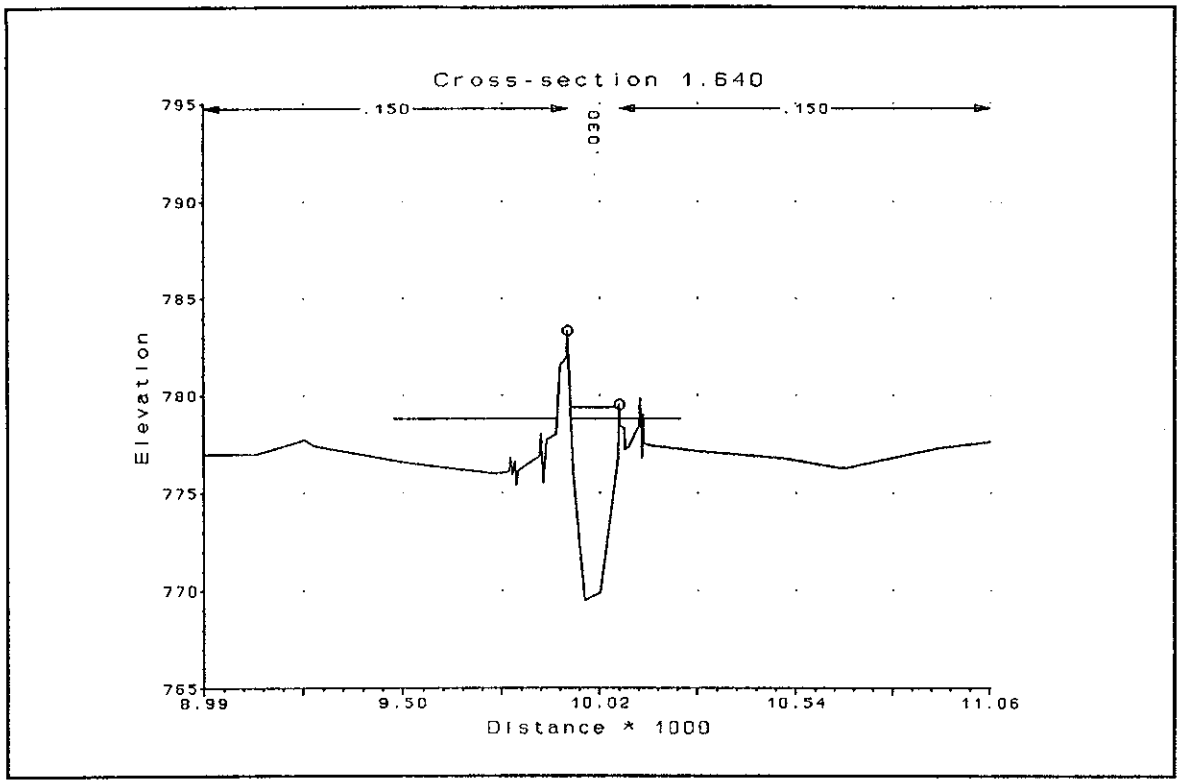
785
780
775
770
765
Elevation
8.98
9.49
10.00
10.51
11.02
Distance * 1000


Cross-section 1.610
.150
.030
.150
780
778
776
774
772
770
768
Elevation
8.98
9.49
10.00
10.50
11.01
Distance * 1000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.030
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785
780
775
770
765
Elevation
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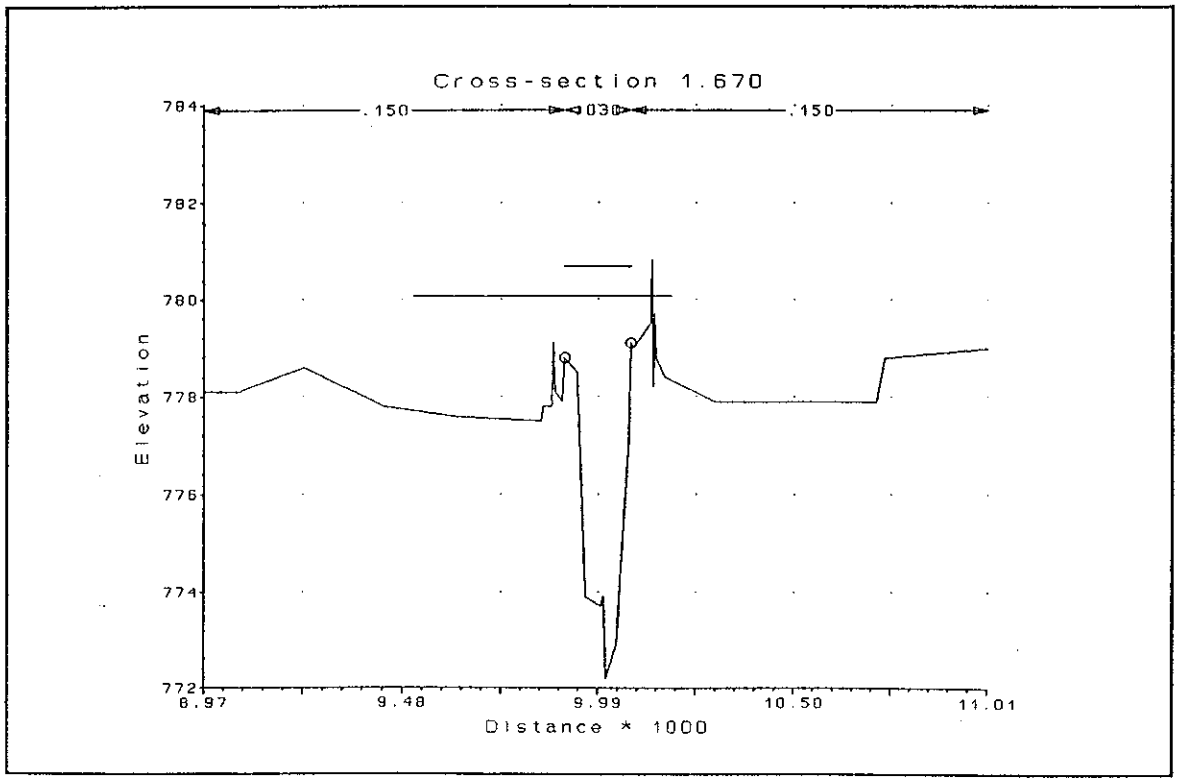
10.54
11.06
Distance * 1000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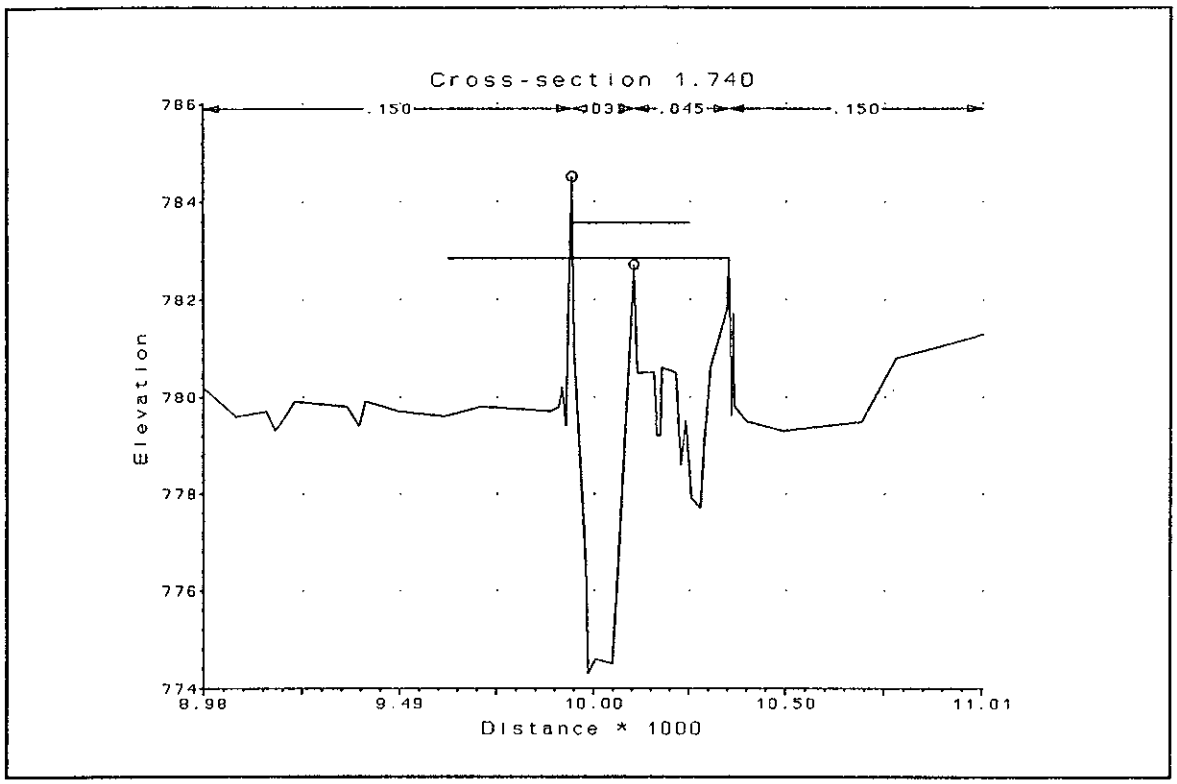
.030
.150
784
782
780
778
776
774
772
Elevation
8.97
9.48
9.99
10.50
11.01
Distance * 1000


Cross-section 1.740
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.031
.045
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784
782
780
778
776
774
Elevation
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9.49
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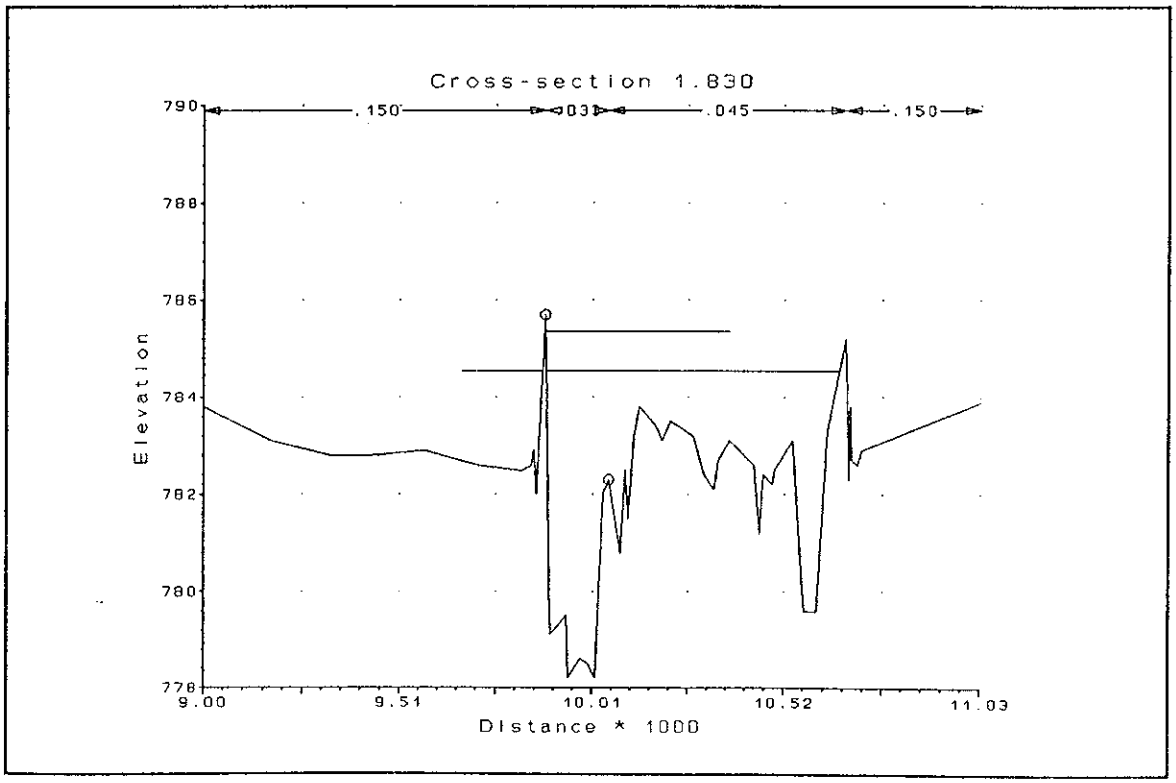
10.50
11.01
Distance * 1000


Cross-section 1.830
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.045
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784
782
780
778
Elevation
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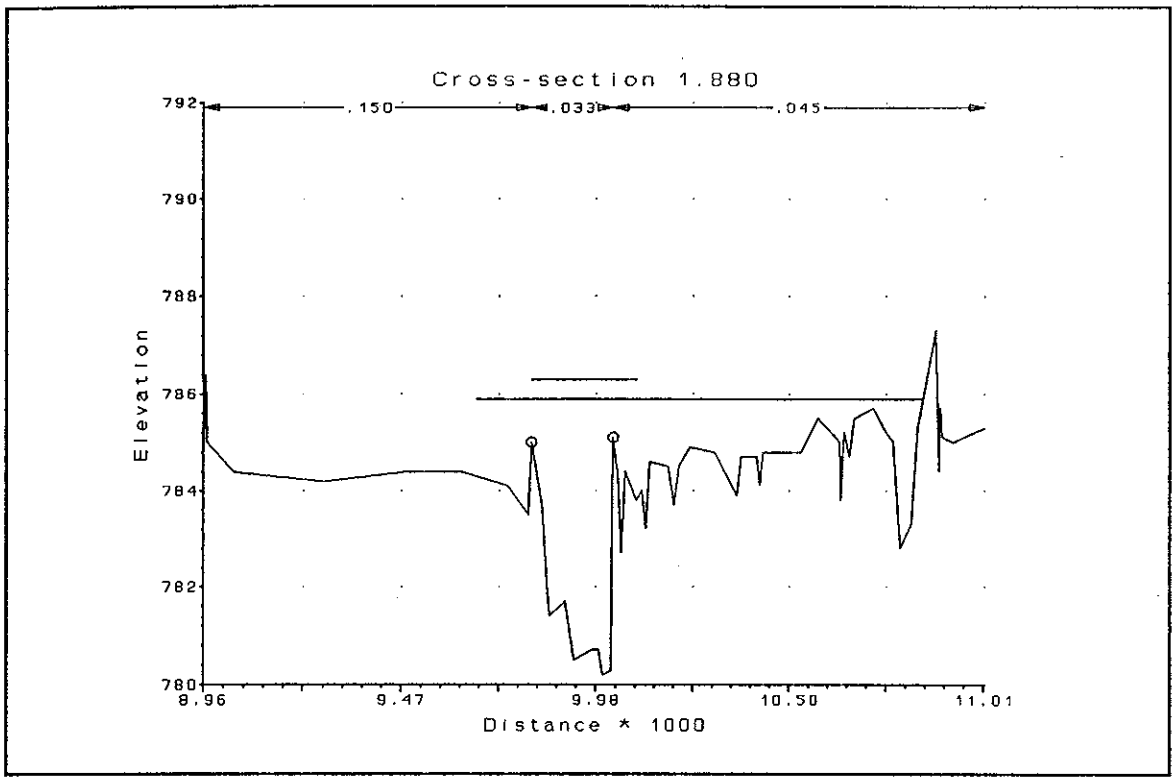
11.03
Distance * 1000


Cross-section 1.880
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.033
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786
784
782
780
Elevation
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9.47
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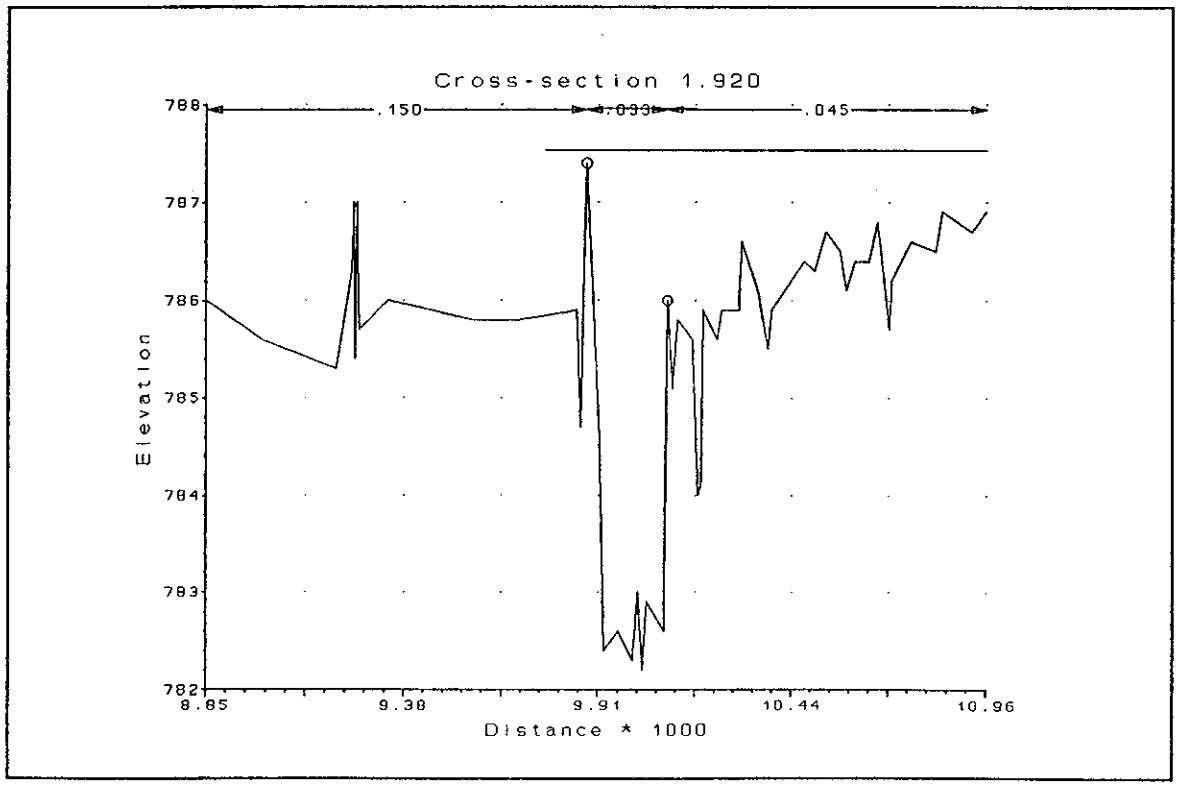
11.01
Distance * 1000


Cross-section 1.920
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783
782
Elevation
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9.38
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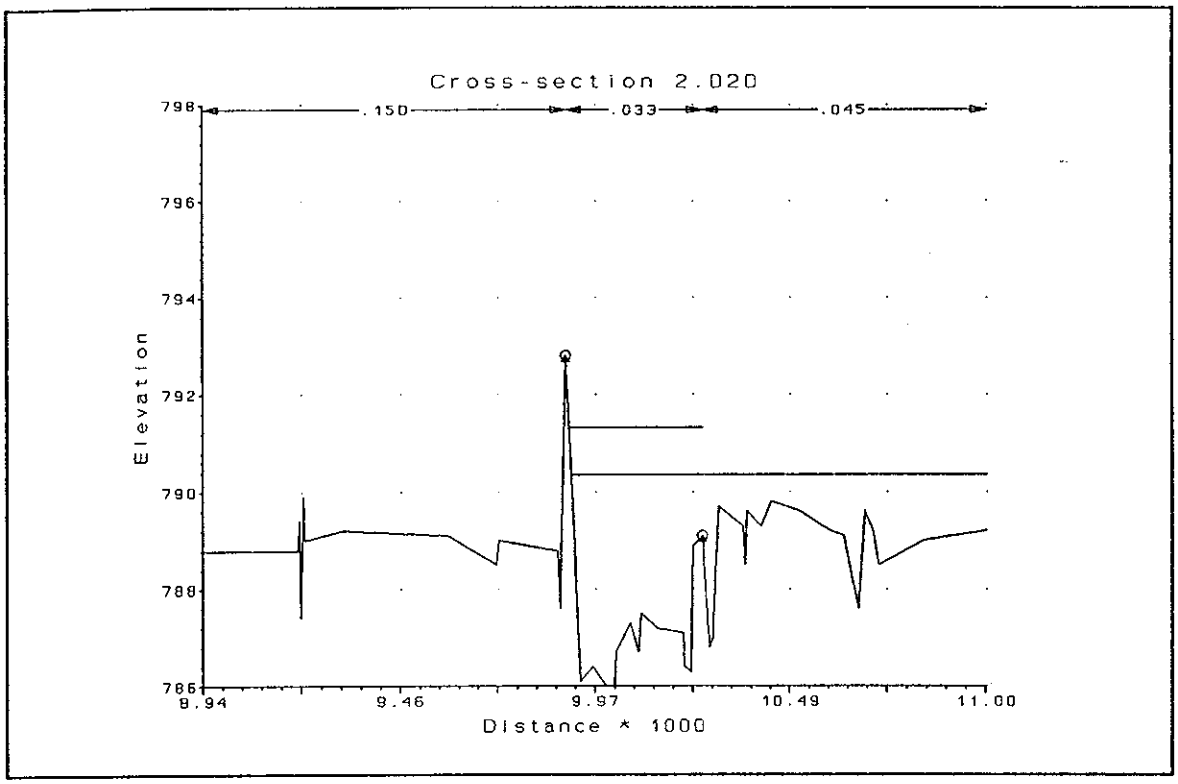
Distance * 1000


Cross-section 2.020
.150
.033
.045
798
796
794
792
790
788
786
Elevation
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9.46
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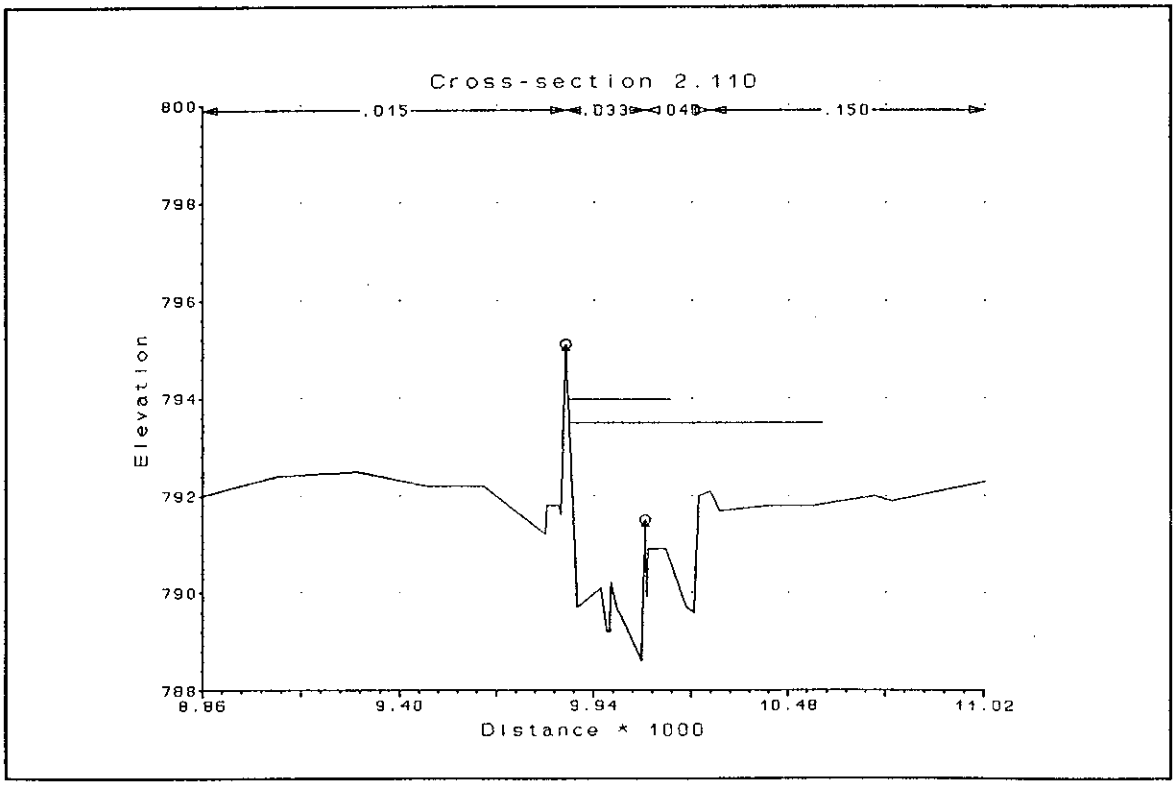
10.49
11.00
Distance * 1000


Cross-section 2.110
.015
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794
792
790
788
Elevation
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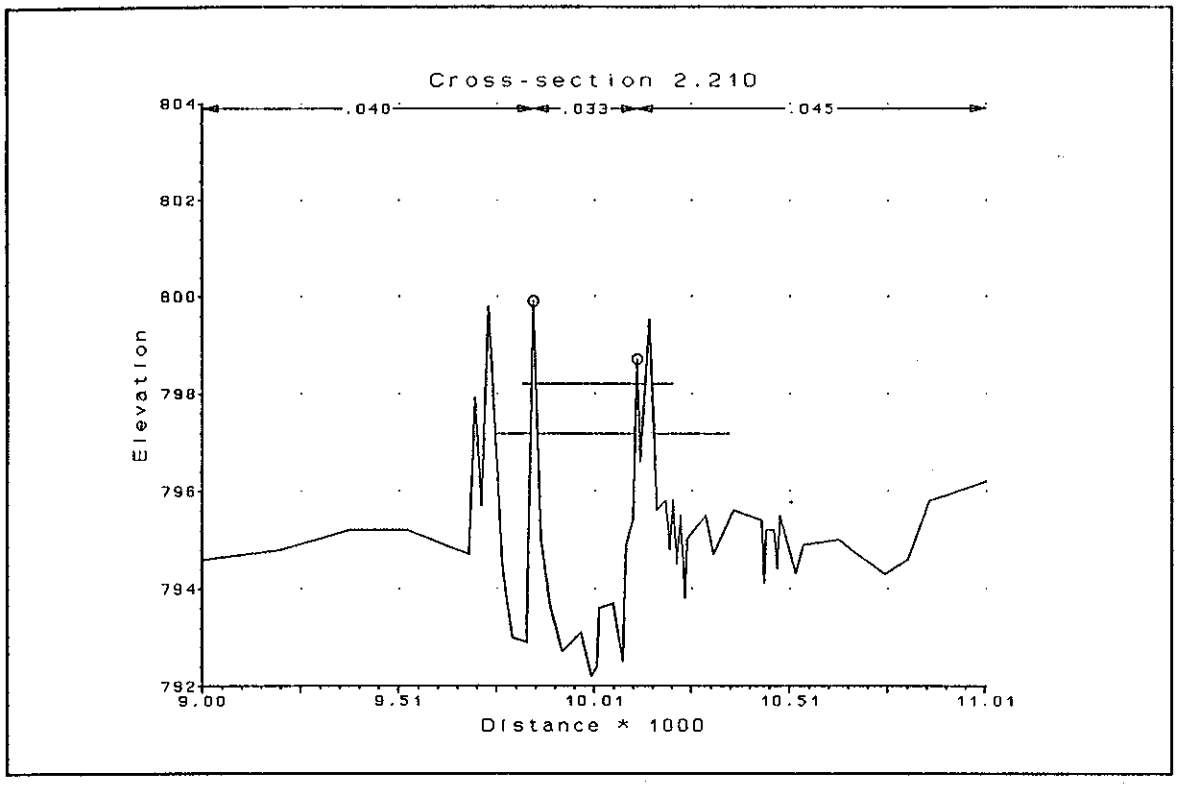
10.48
11.02
Distance * 1000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.040
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798
796
794
792
Elevation
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9.51
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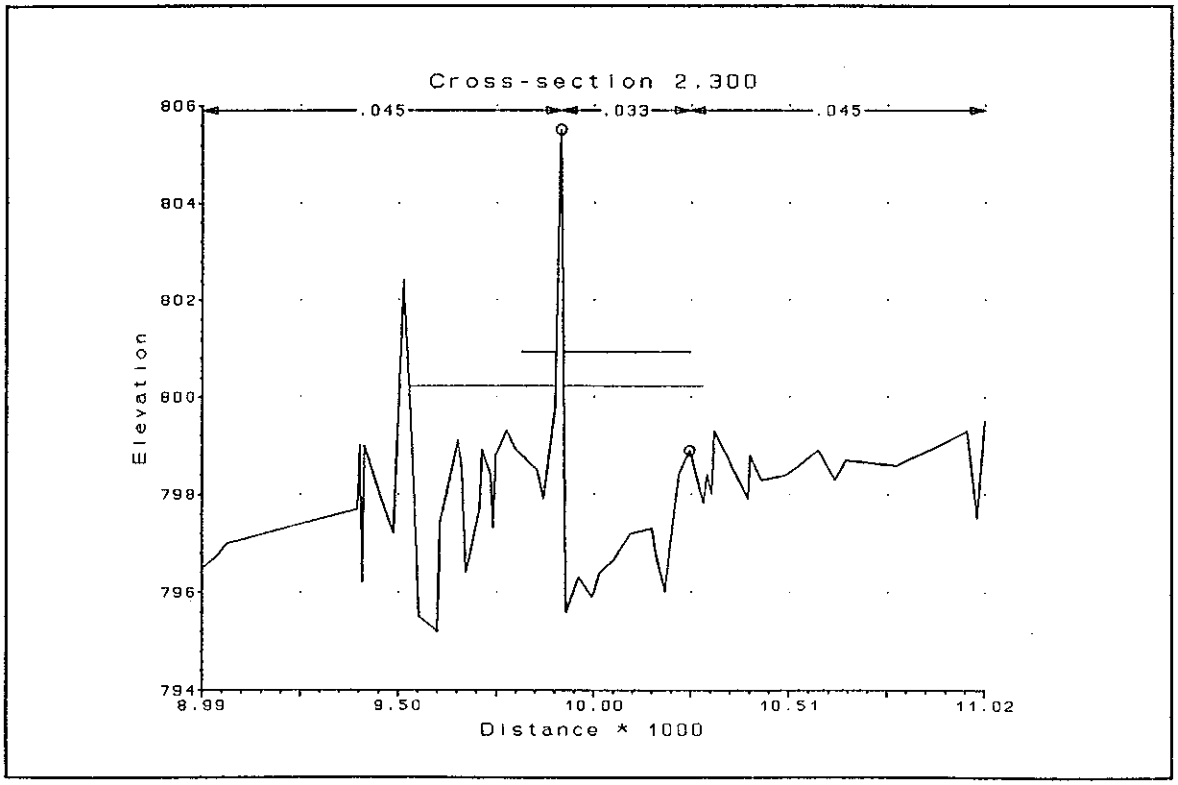
11.01
Distance * 1000


Cross-section 2.300
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.045
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802
800
798
796
794
Elevation
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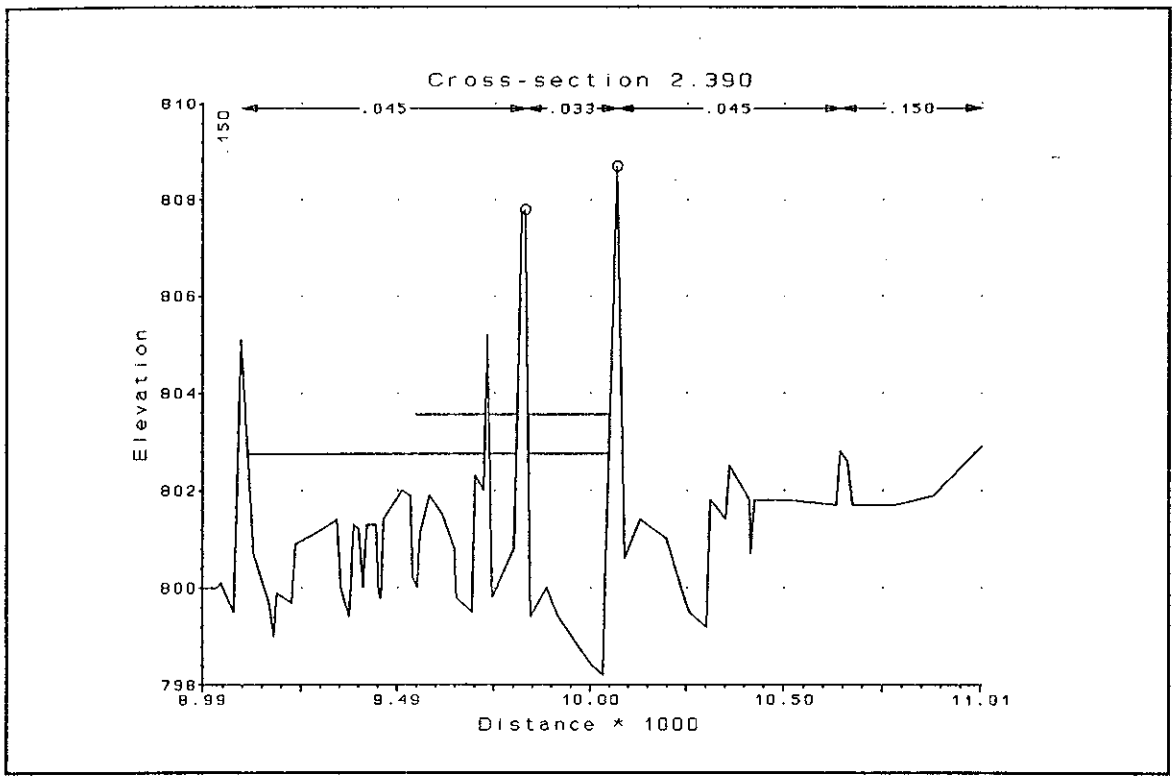
9.50
10.00
10.51
11.02
Distance * 1000


Cross-section 2.390
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.033
.045
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.150
810
808
806
804
802
800
798
Elevation
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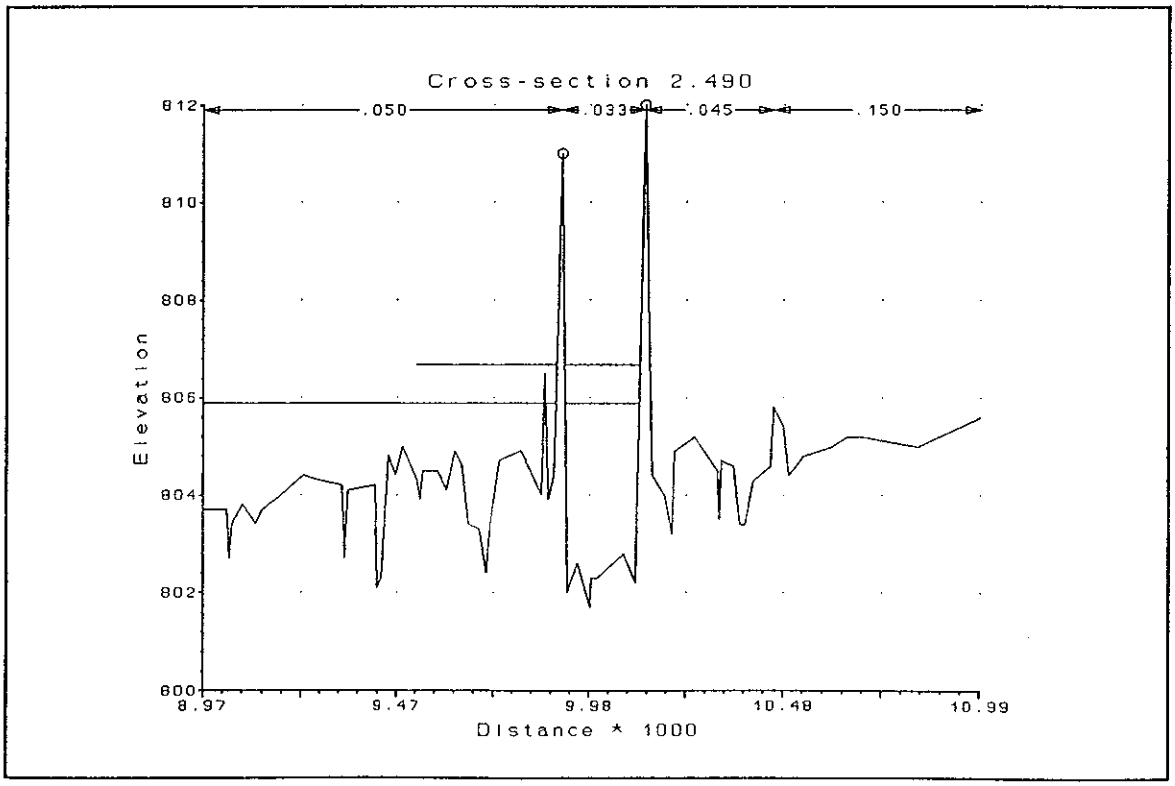
9.49
10.00
10.50
11.01
Distance * 1000


Cross-section 2.490
.050
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810
808
806
804
802
800
Elevation
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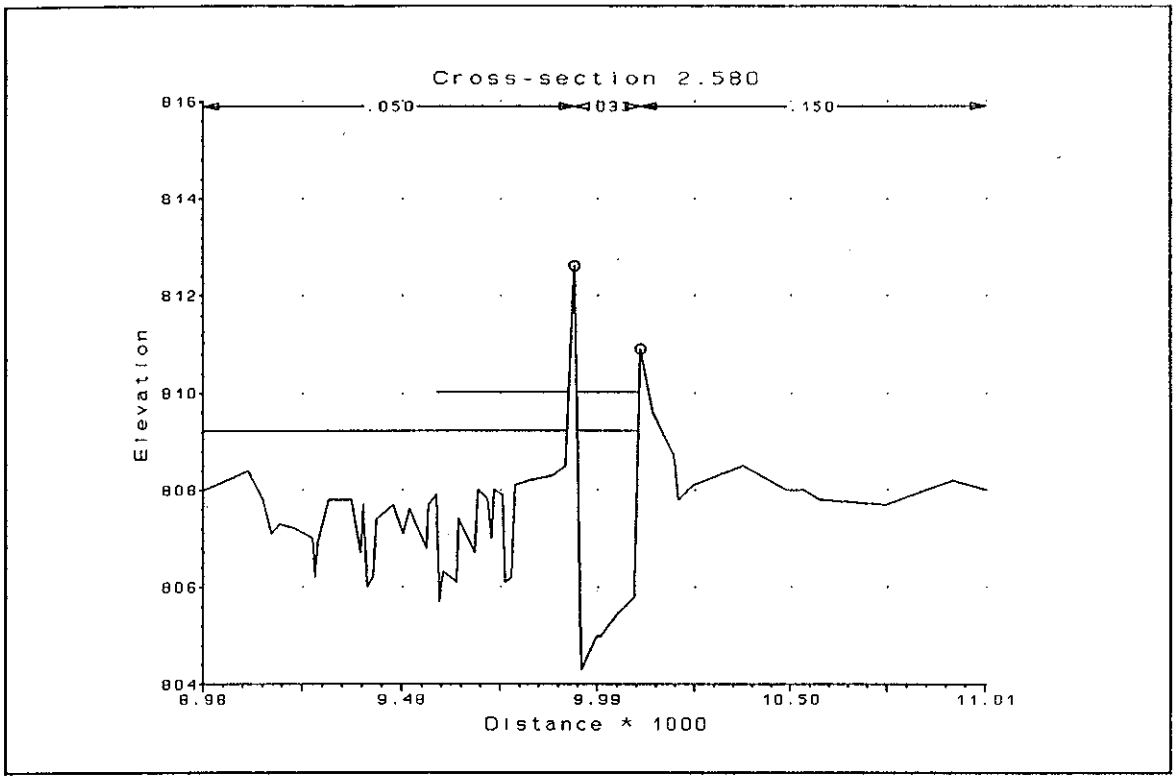
10.48
10.99
Distance * 1000


Cross-section 2.580
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Elevation
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9.48
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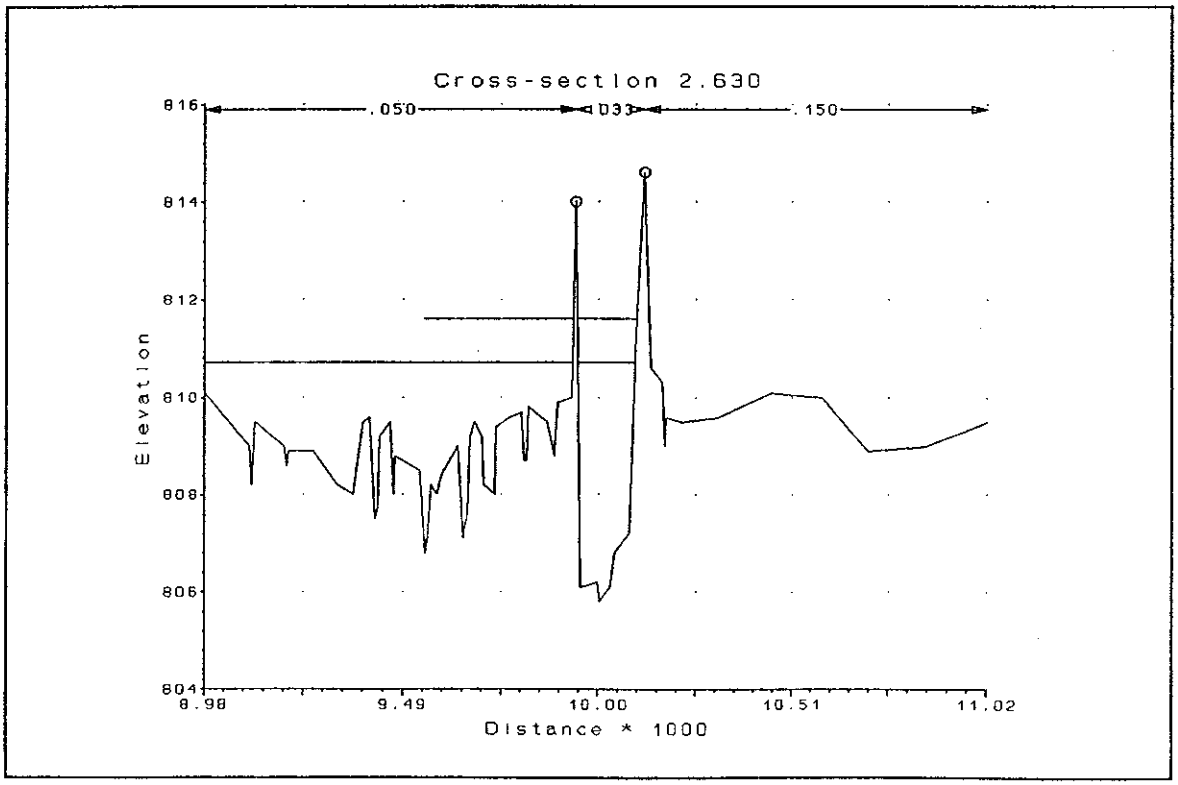
10.50
11.01
Distance * 1000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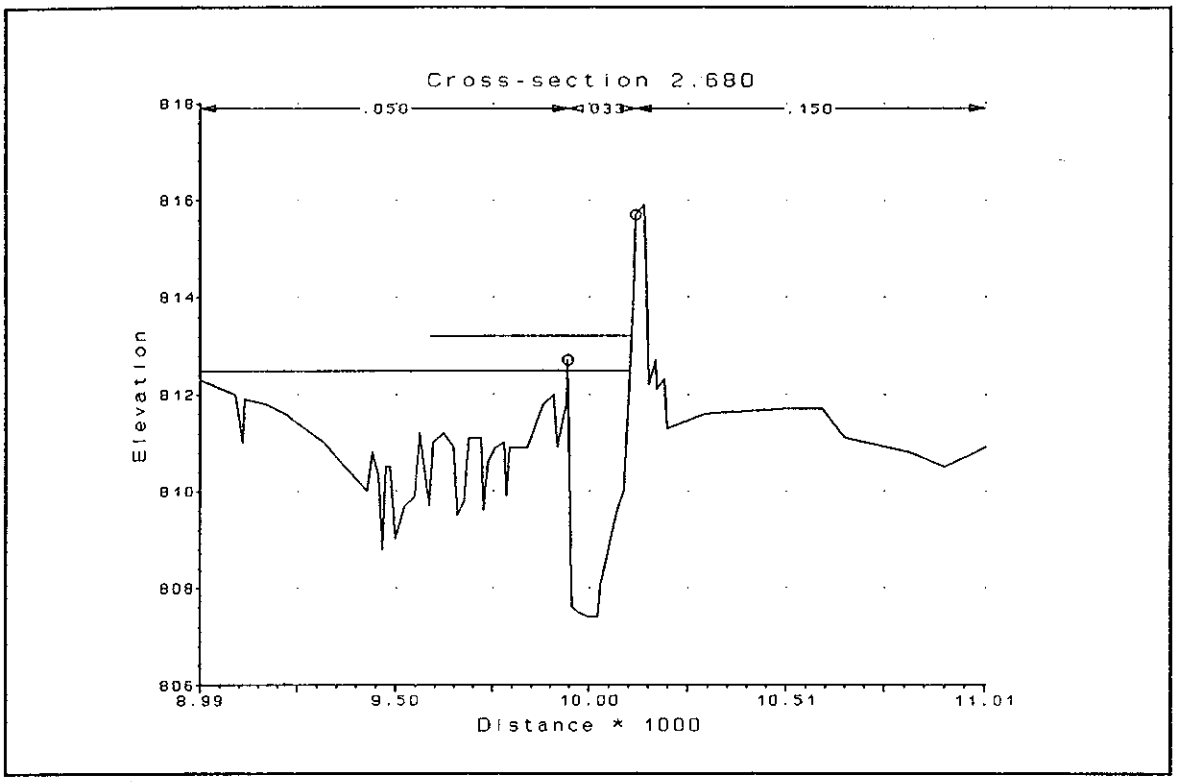
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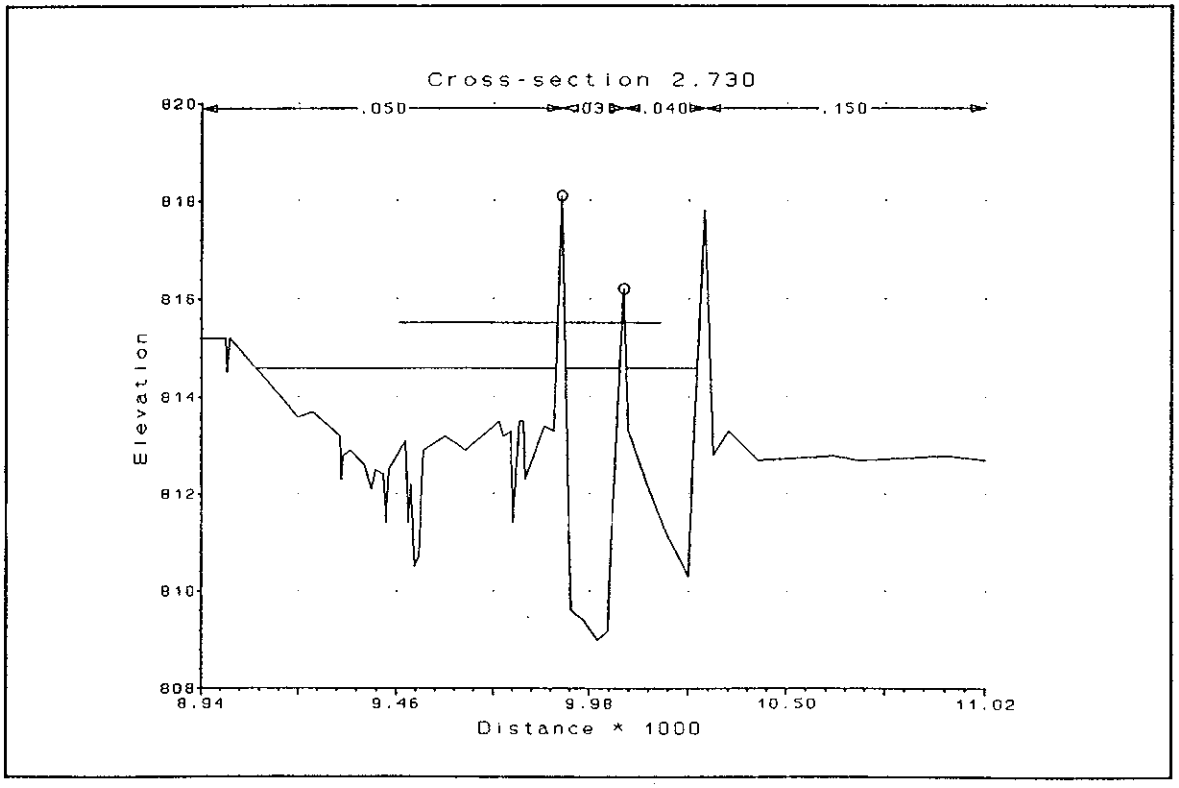
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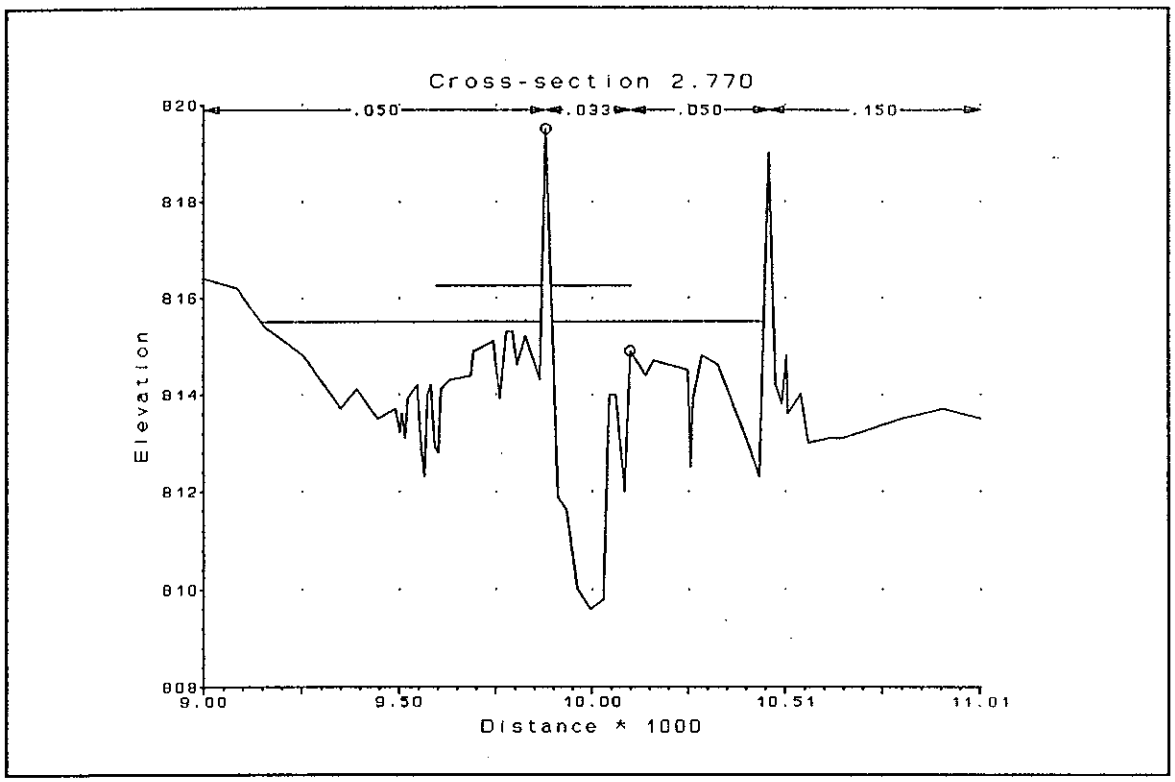
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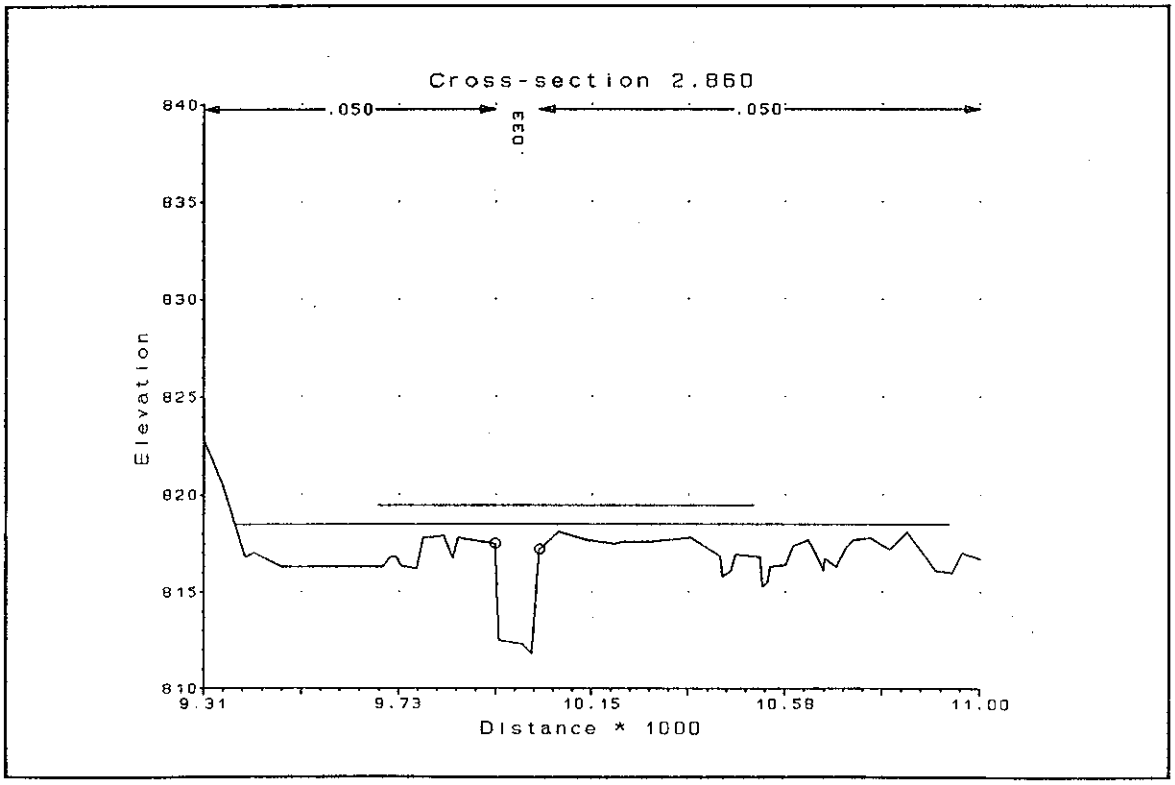
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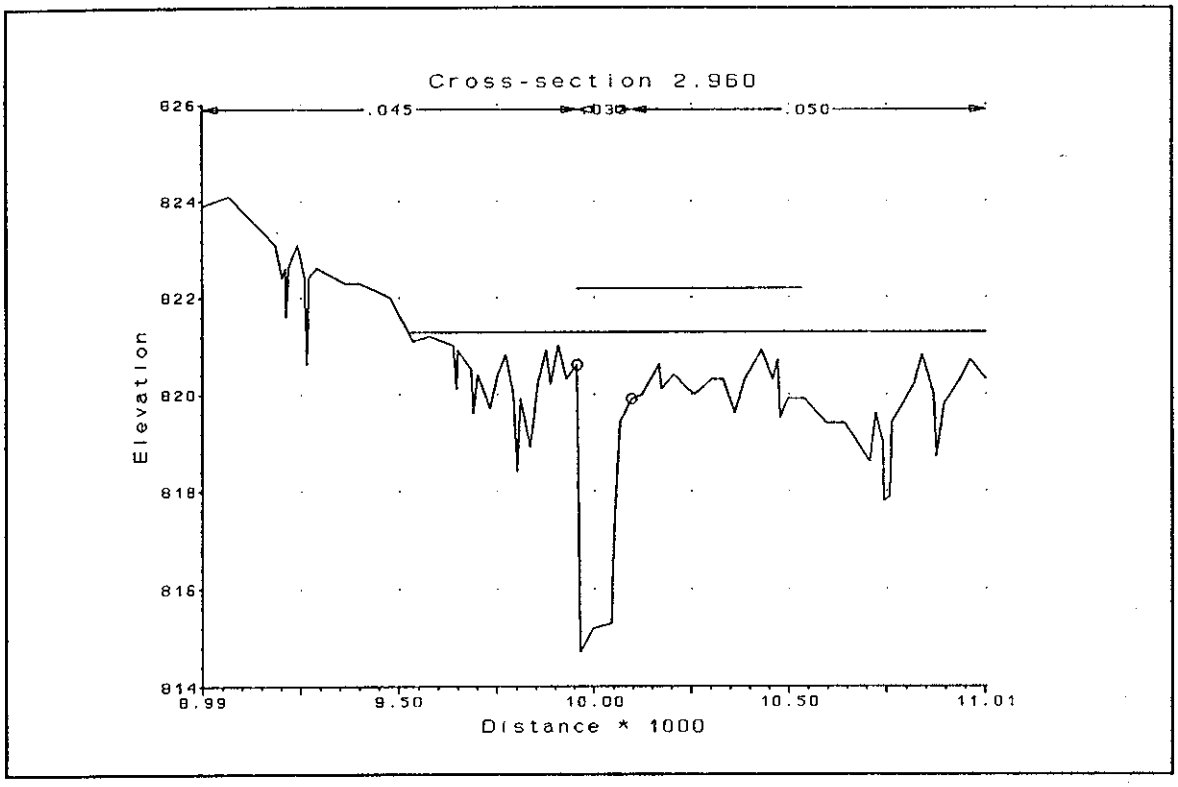
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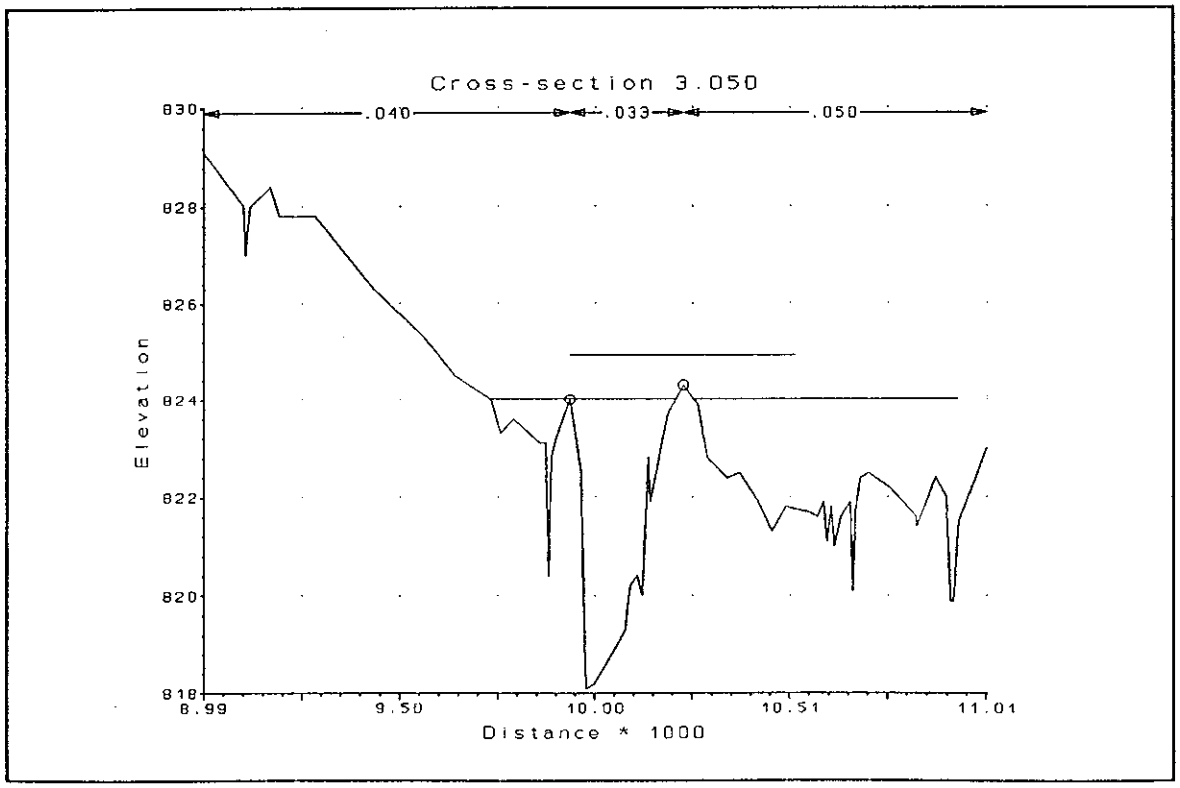
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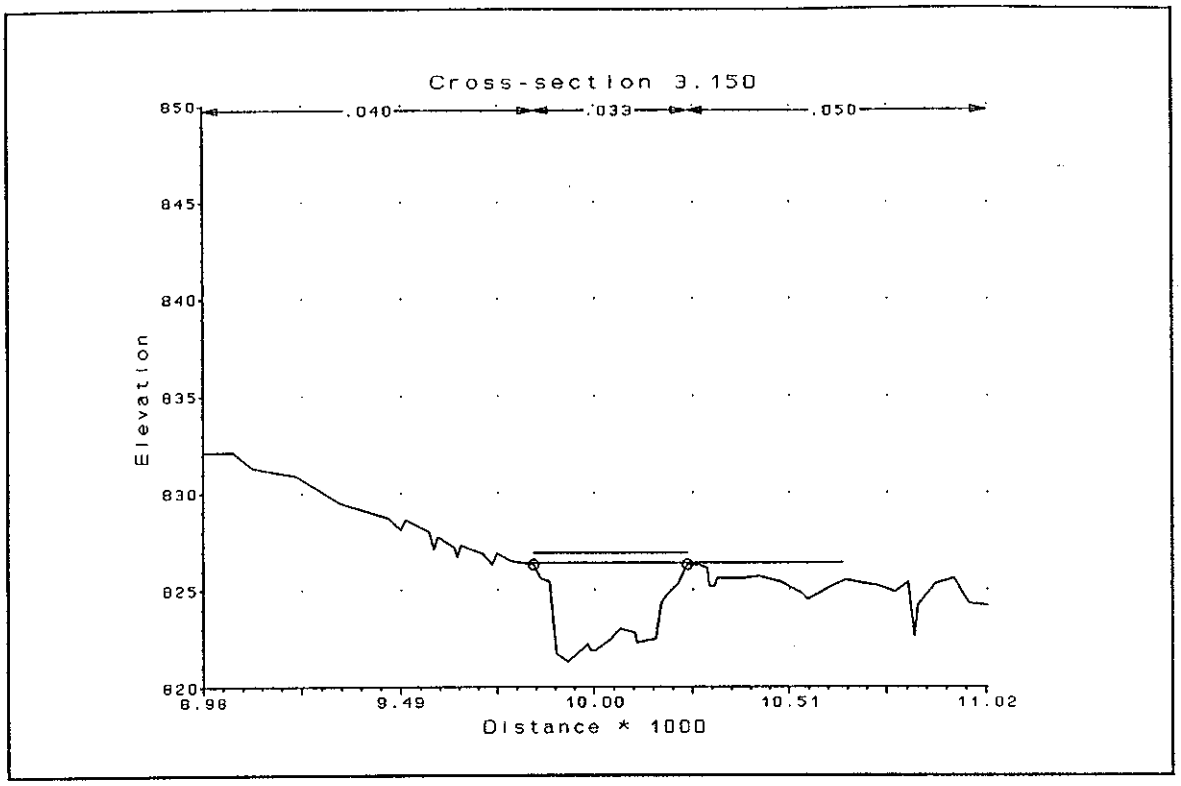
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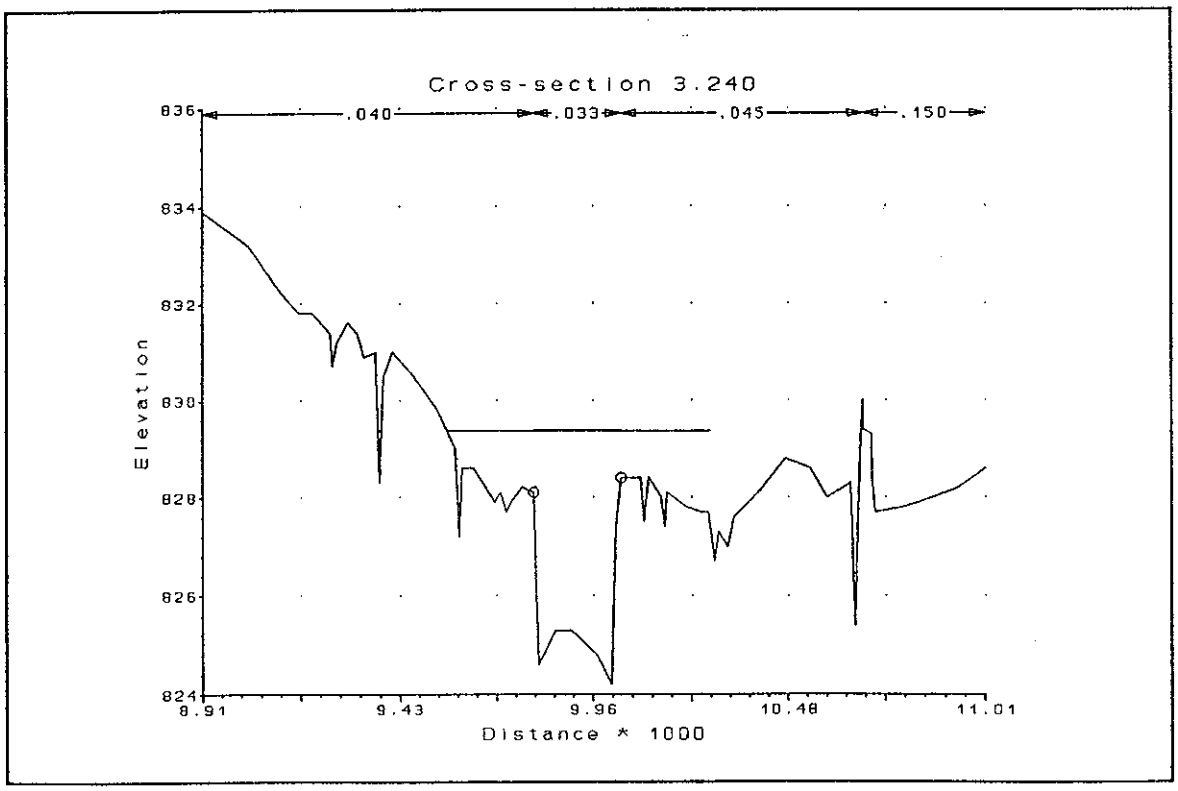
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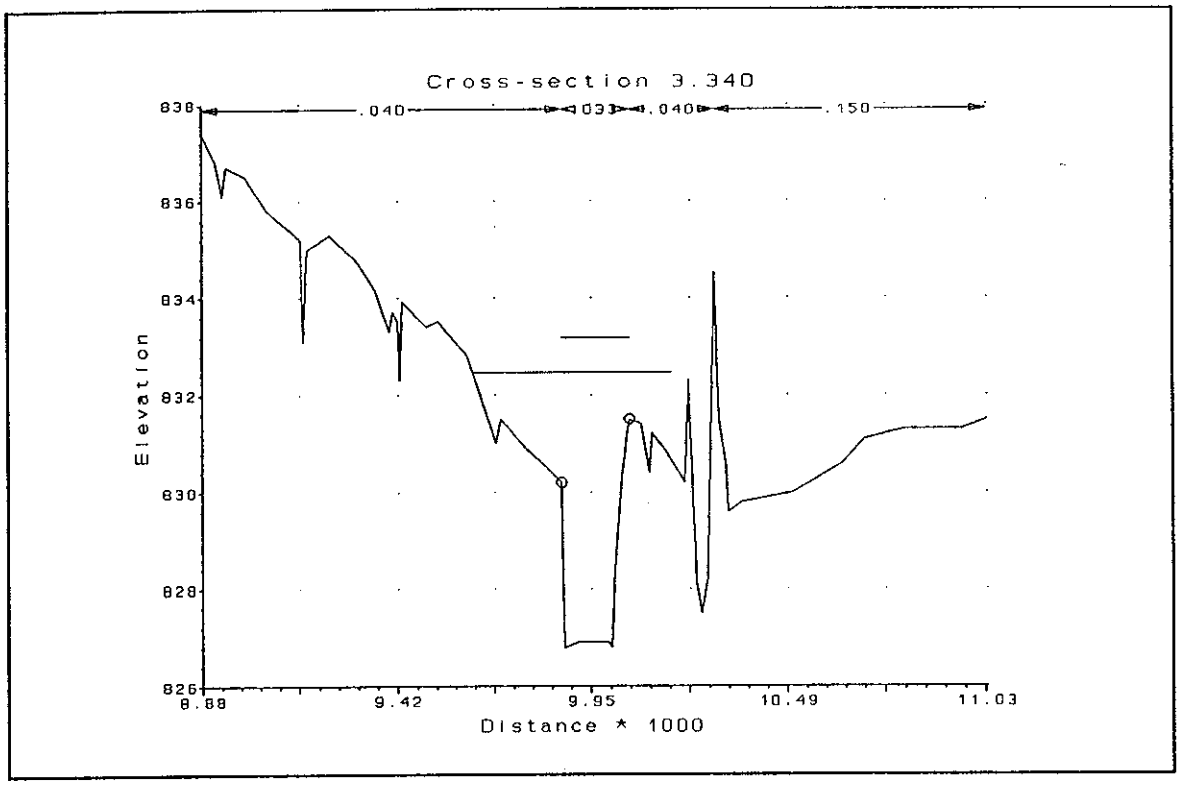
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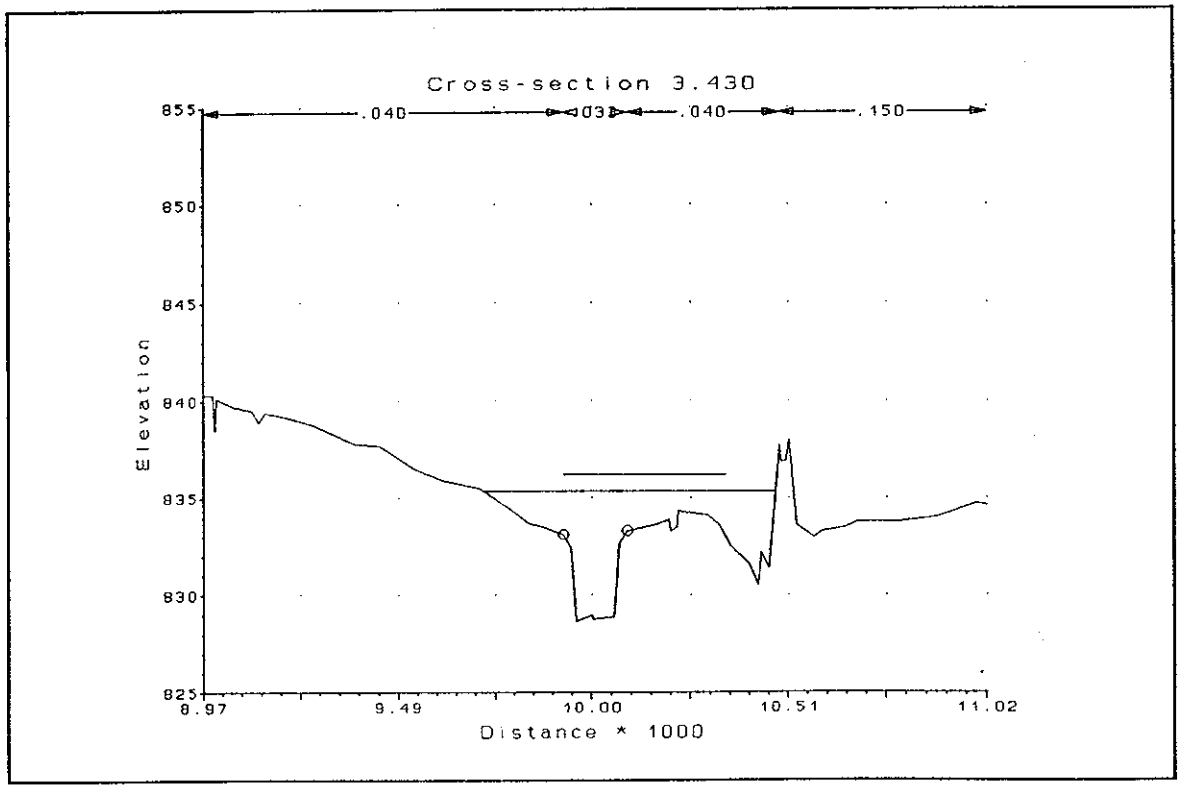
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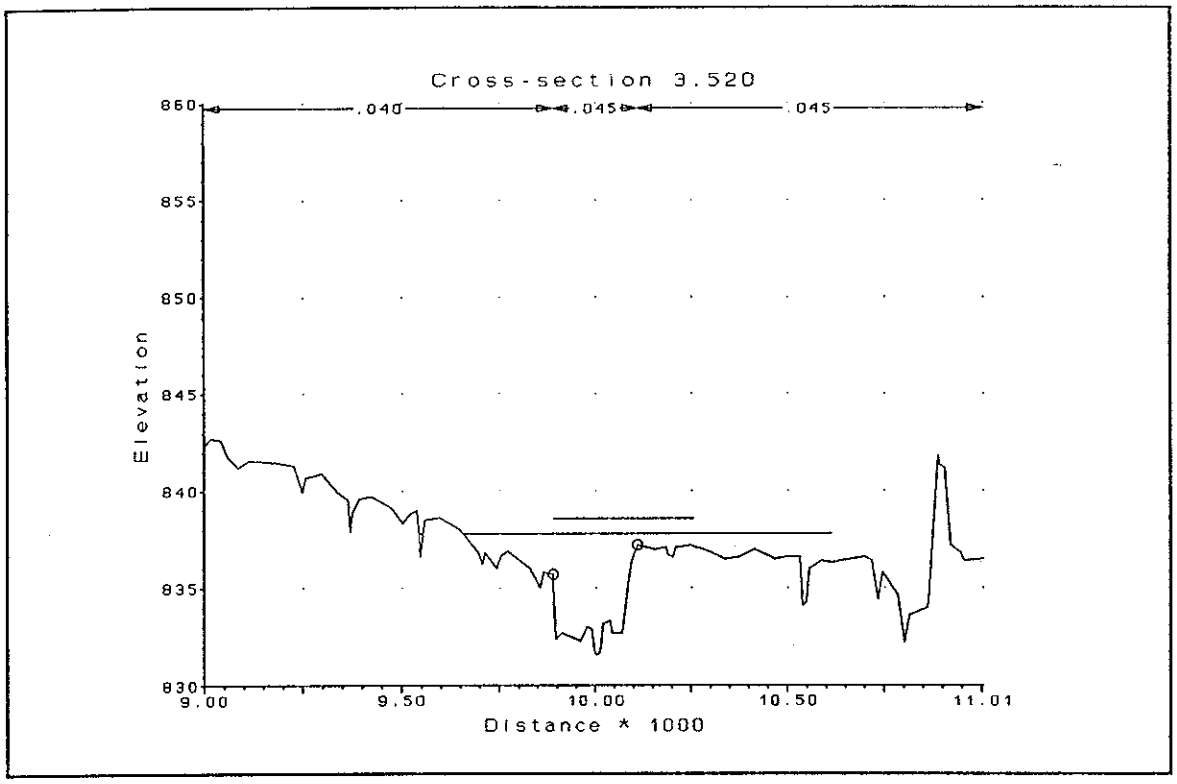
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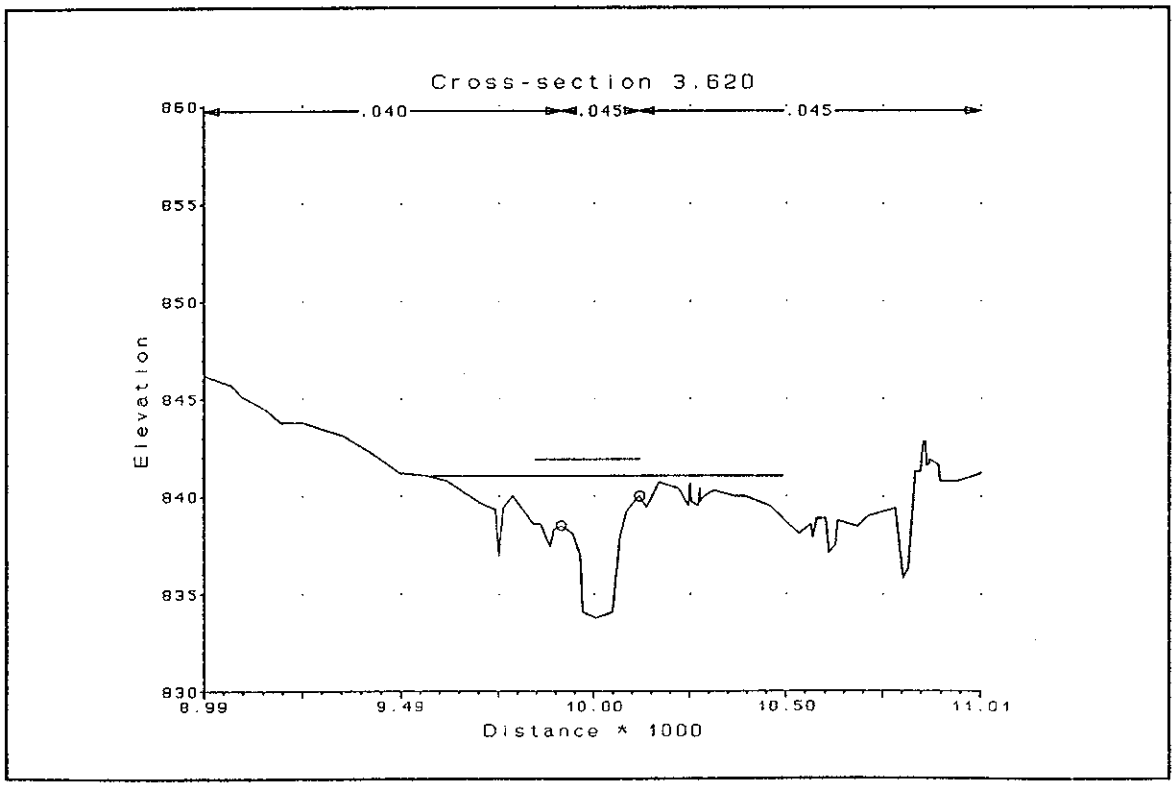
Distance * 1000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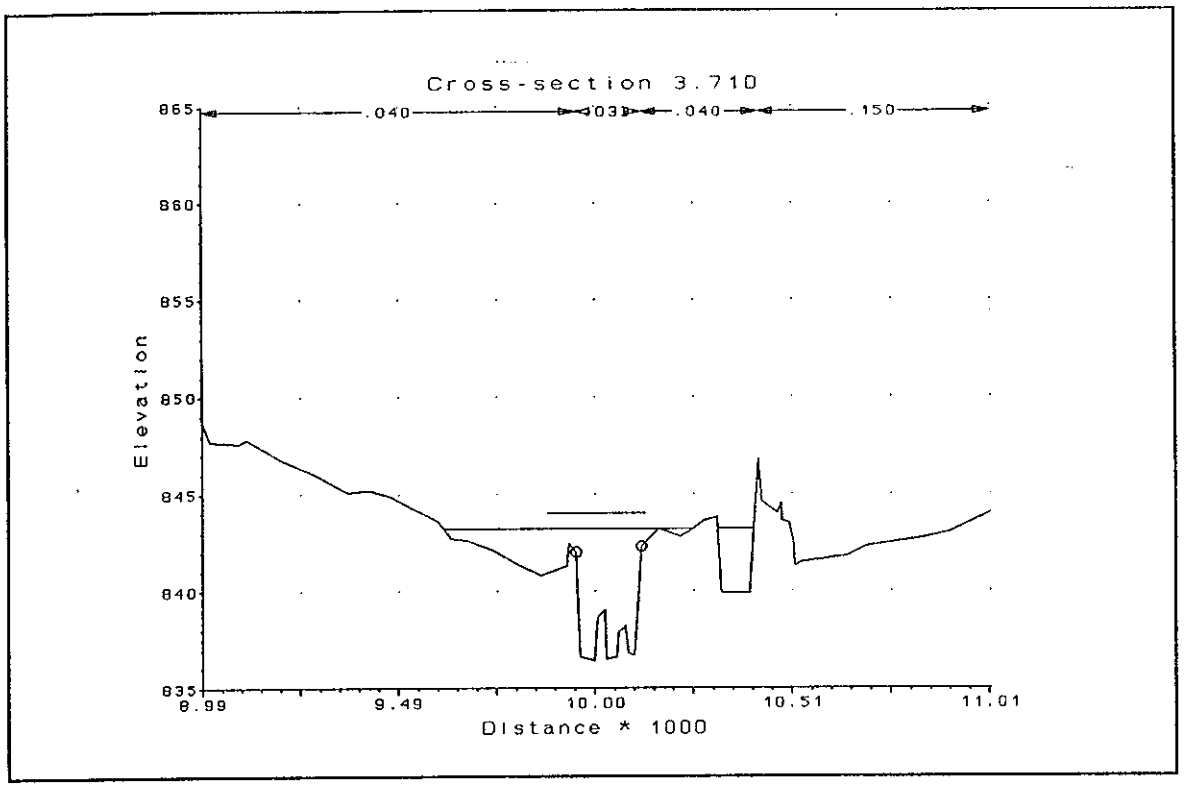
Distance * 1000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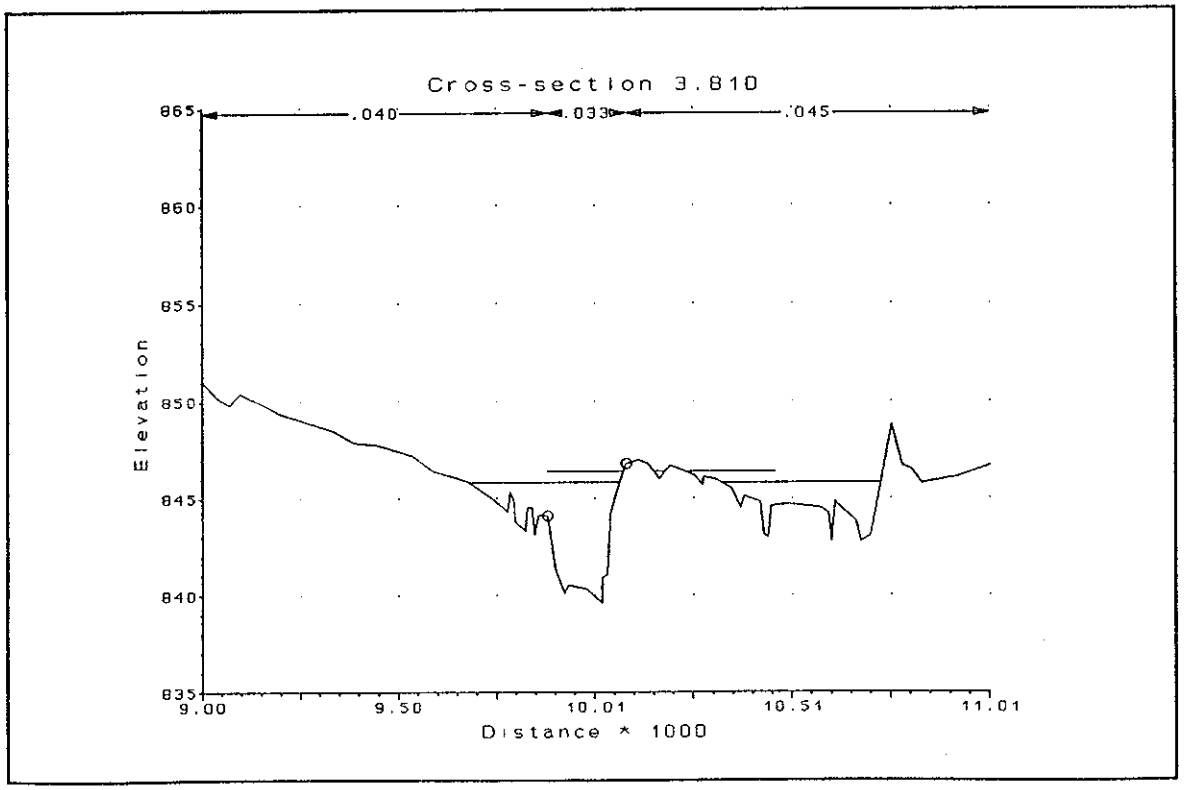
Distance * 1000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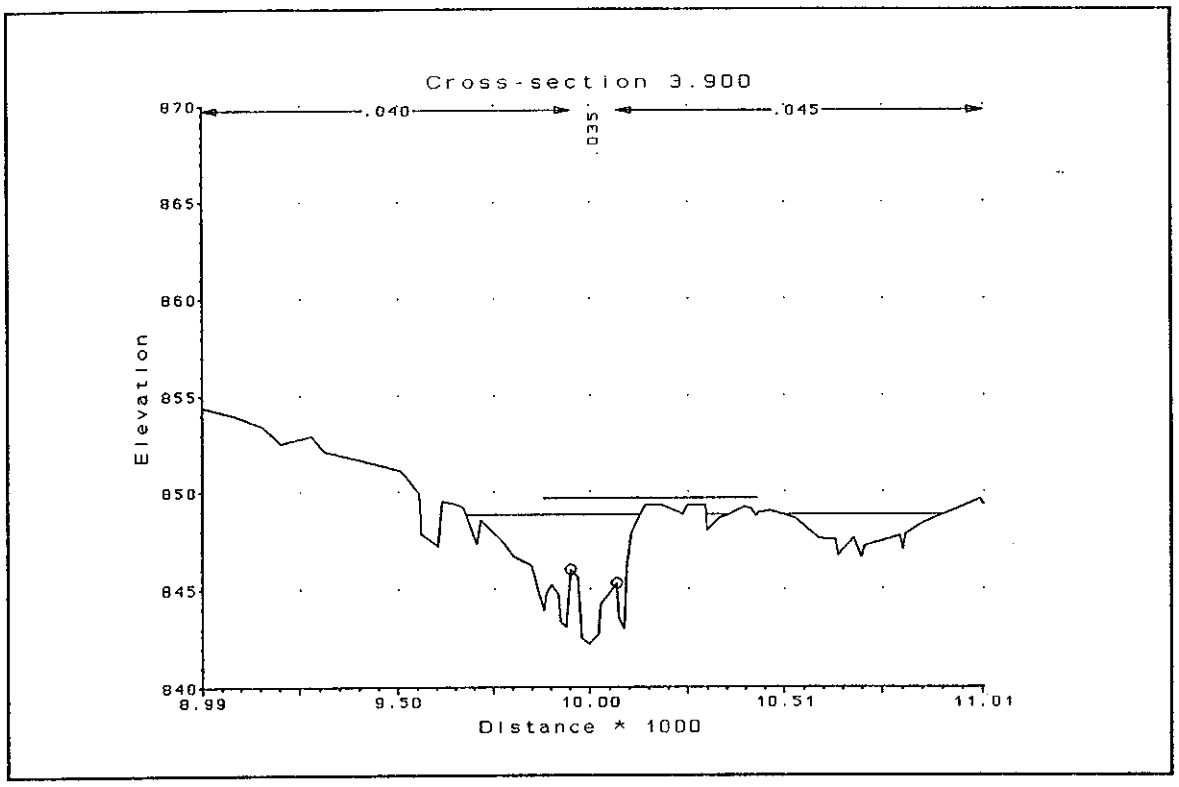
Distance * 1000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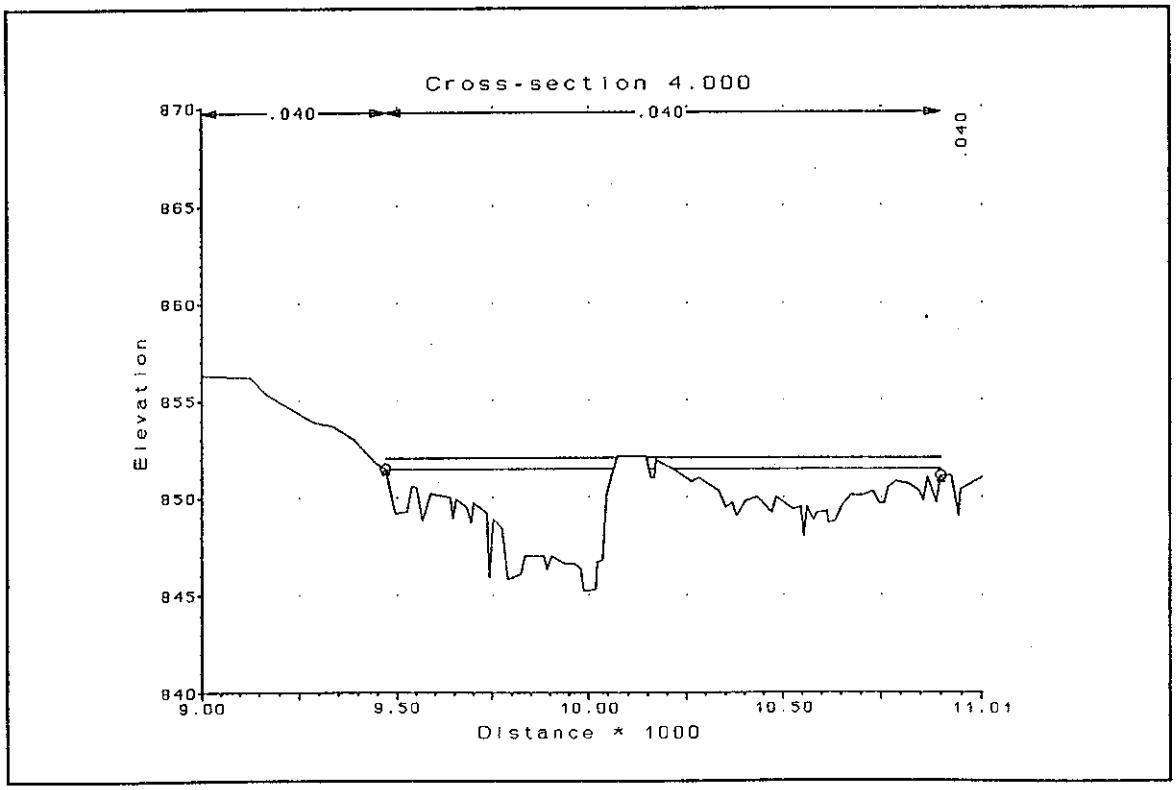
Distance * 1000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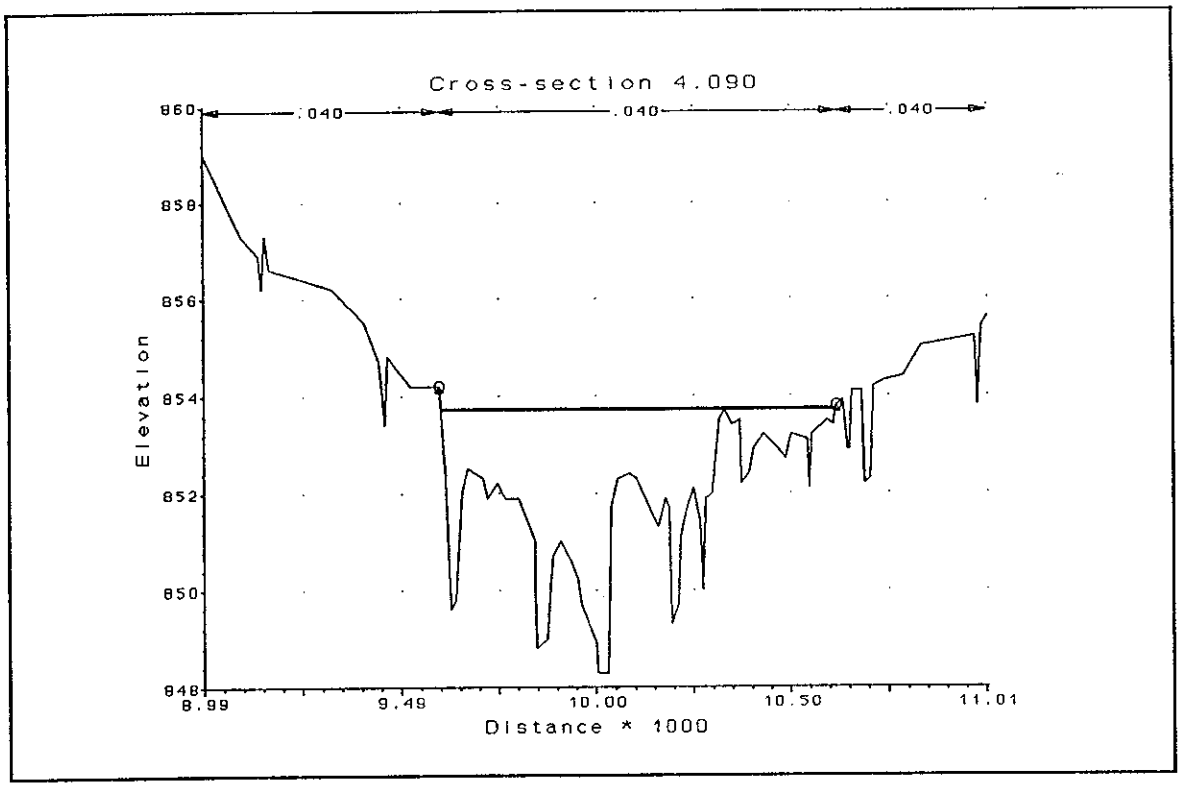
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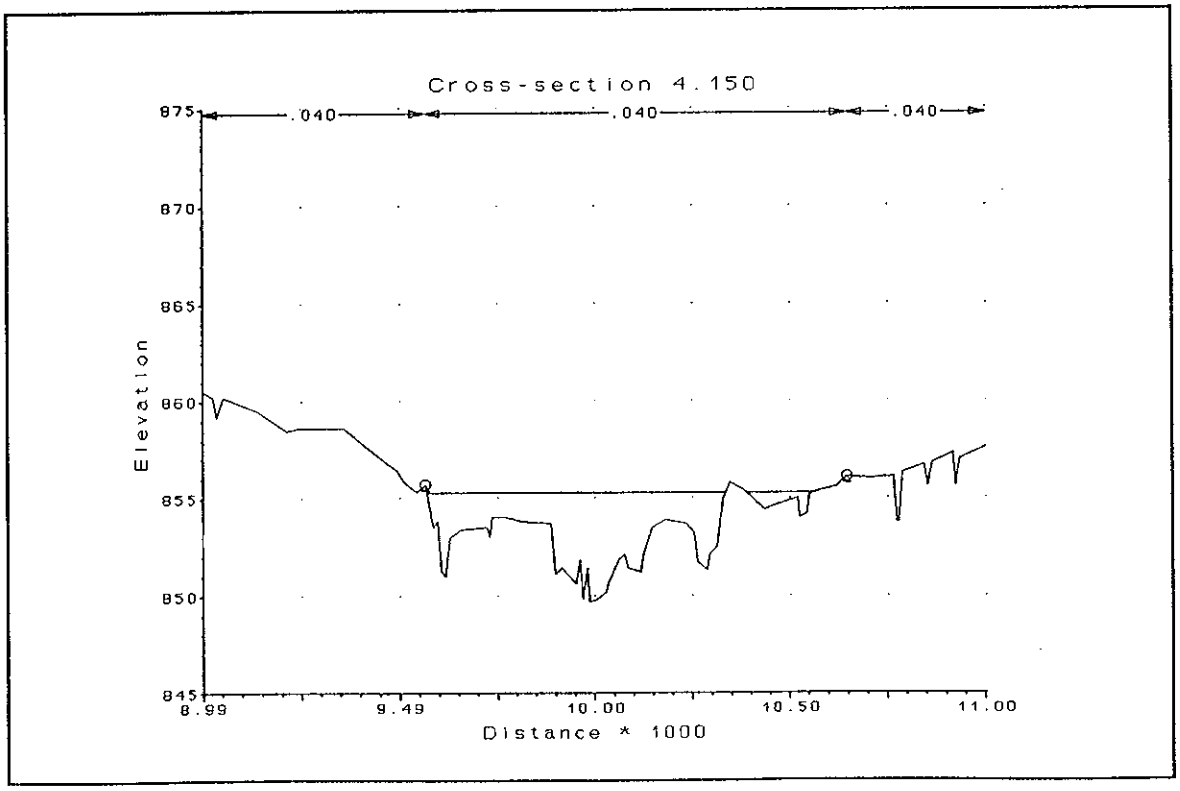
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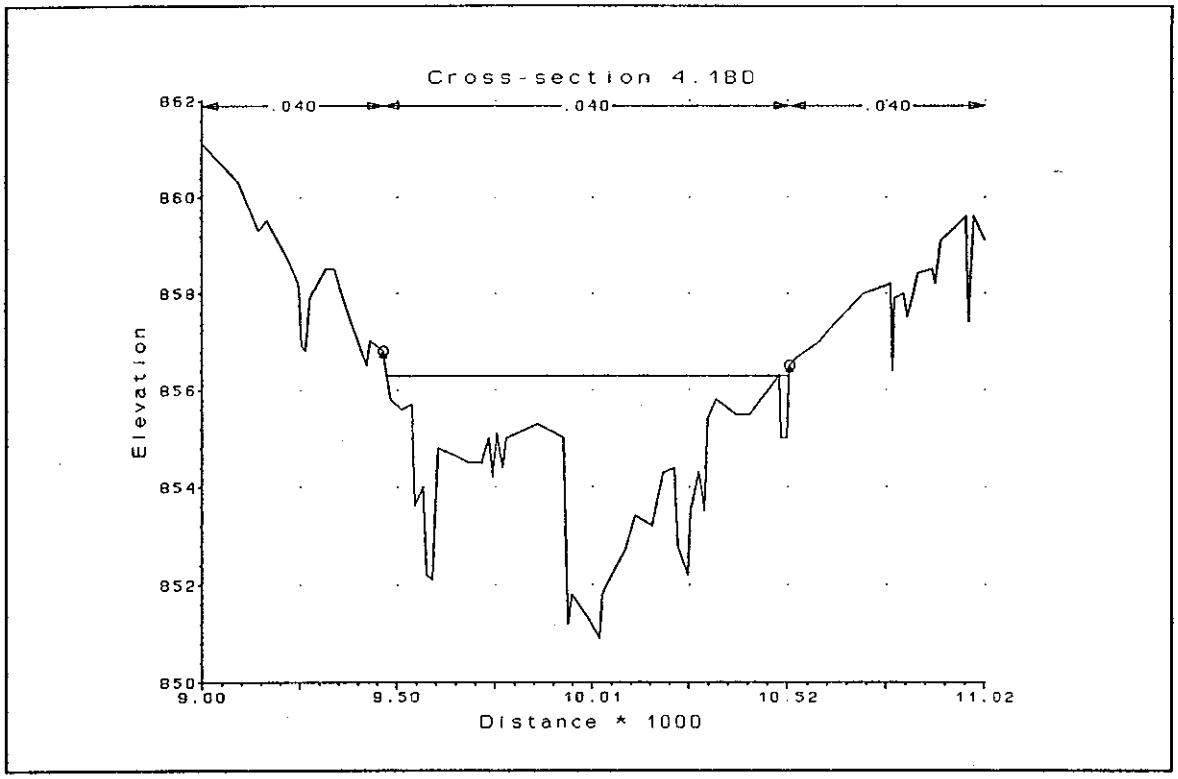
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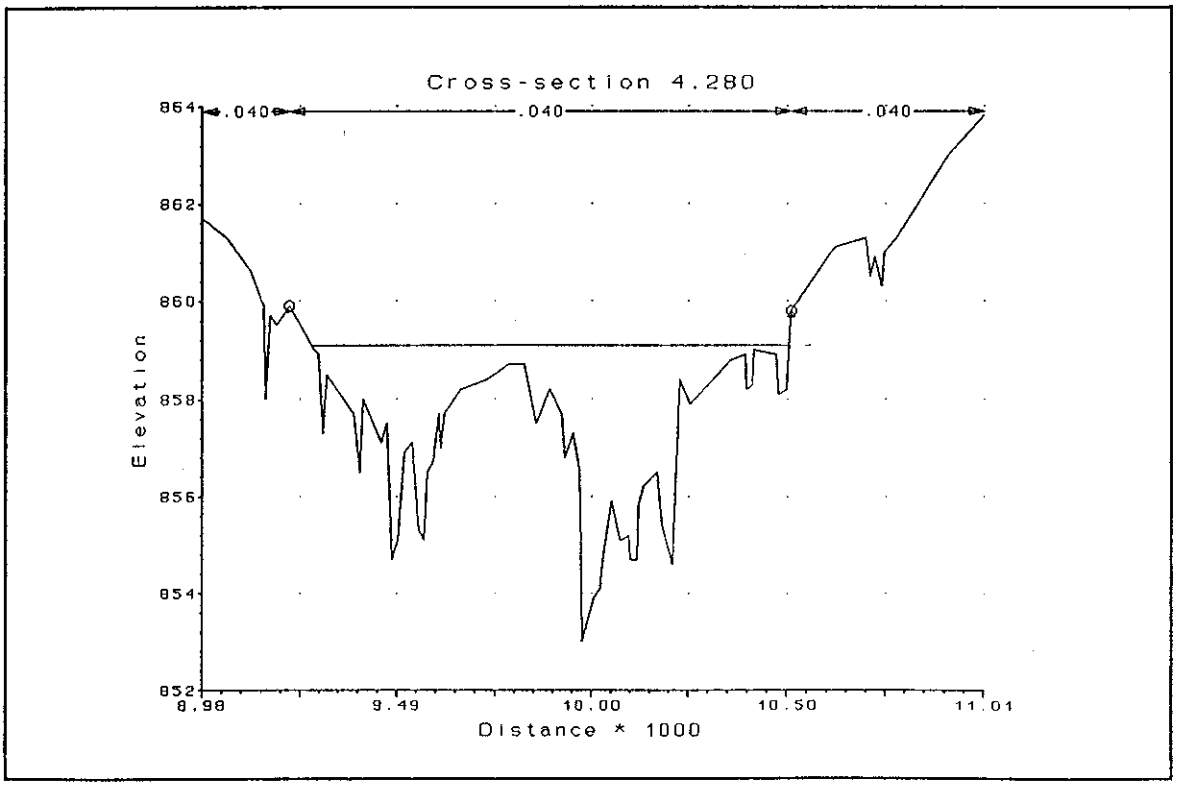
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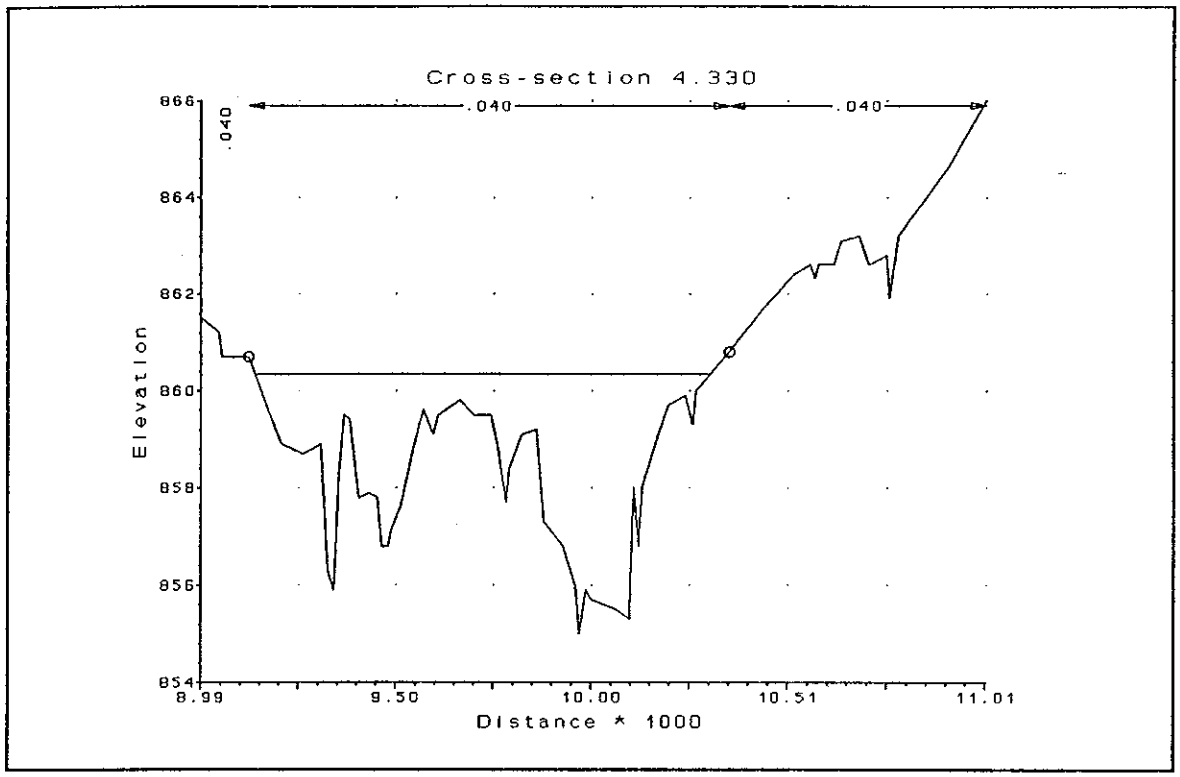
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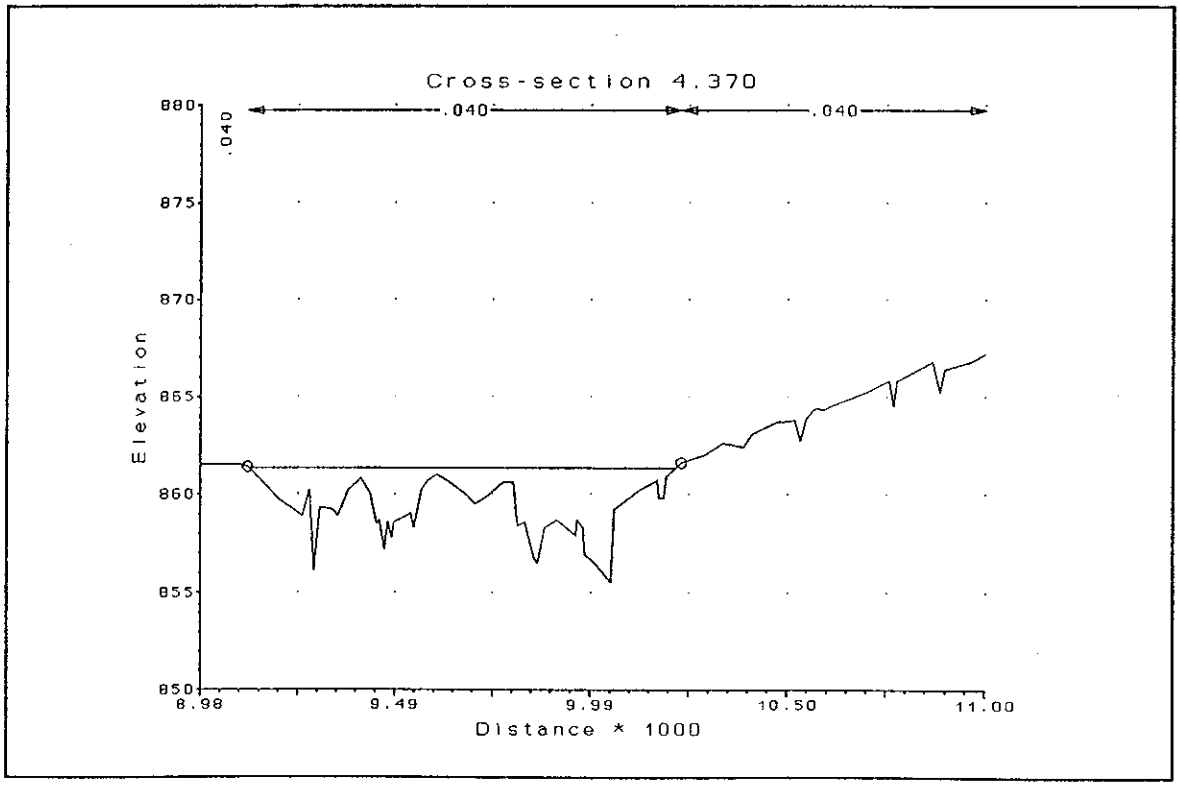
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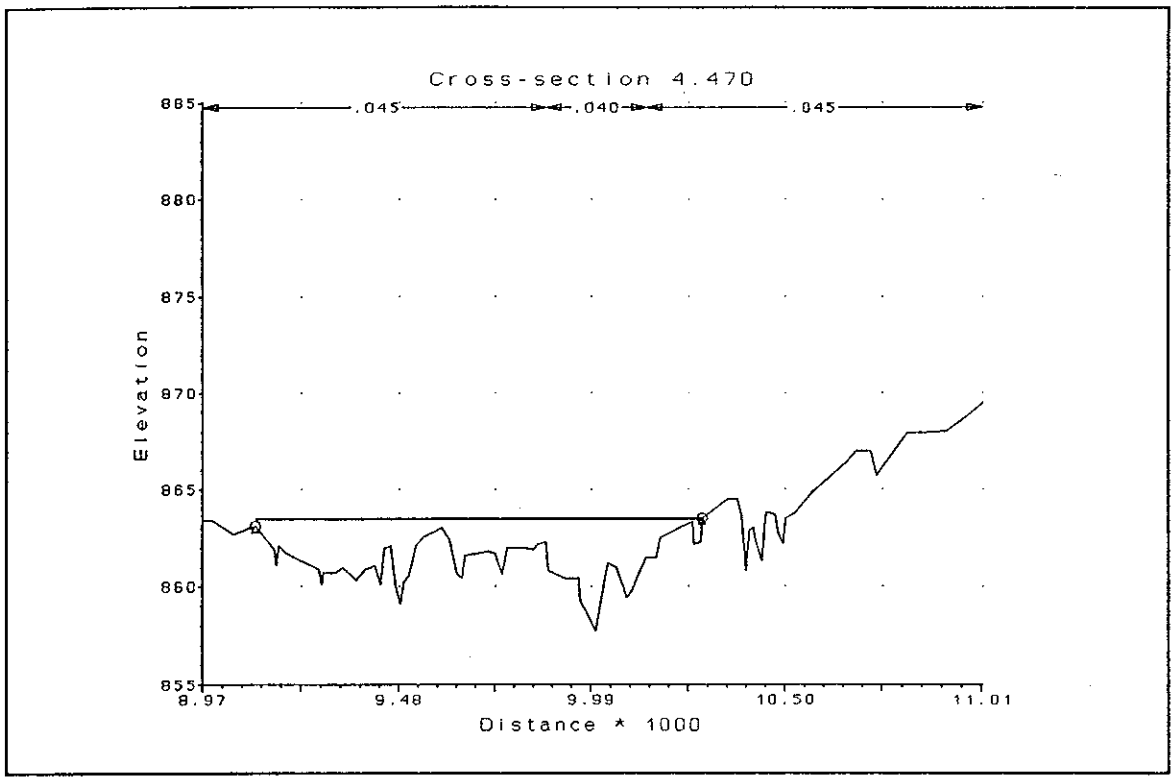
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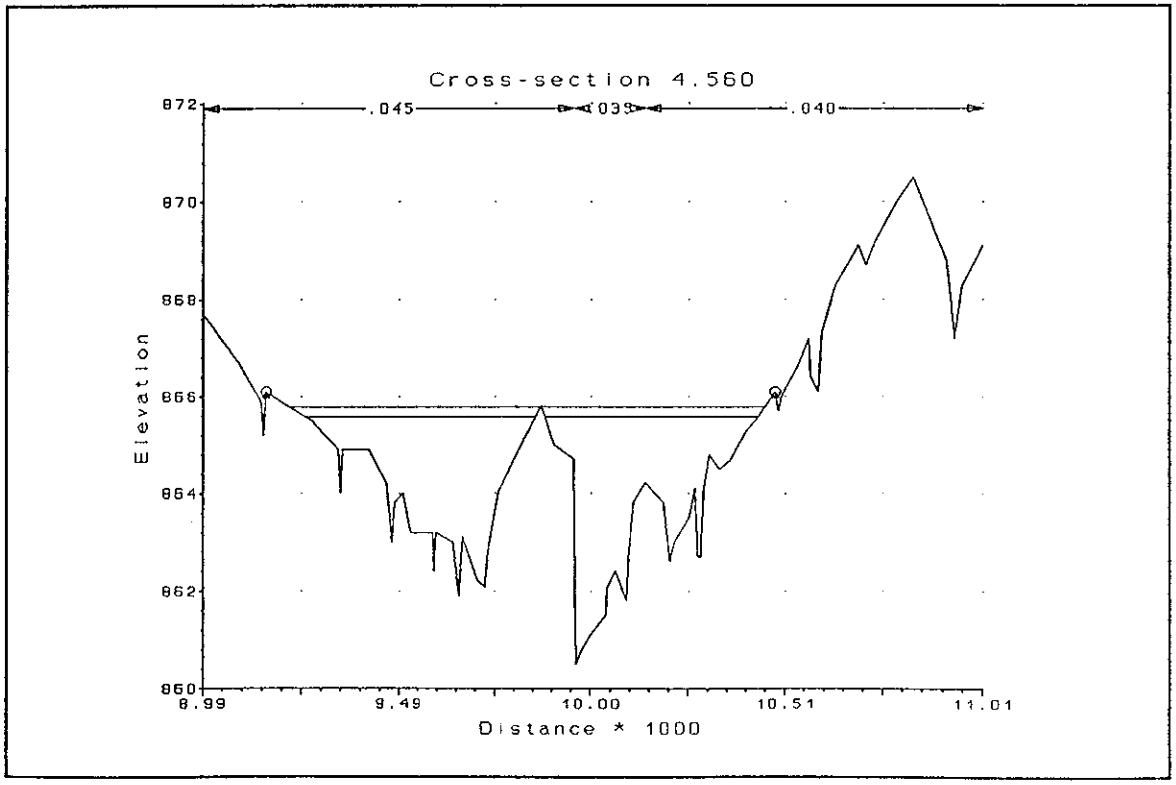
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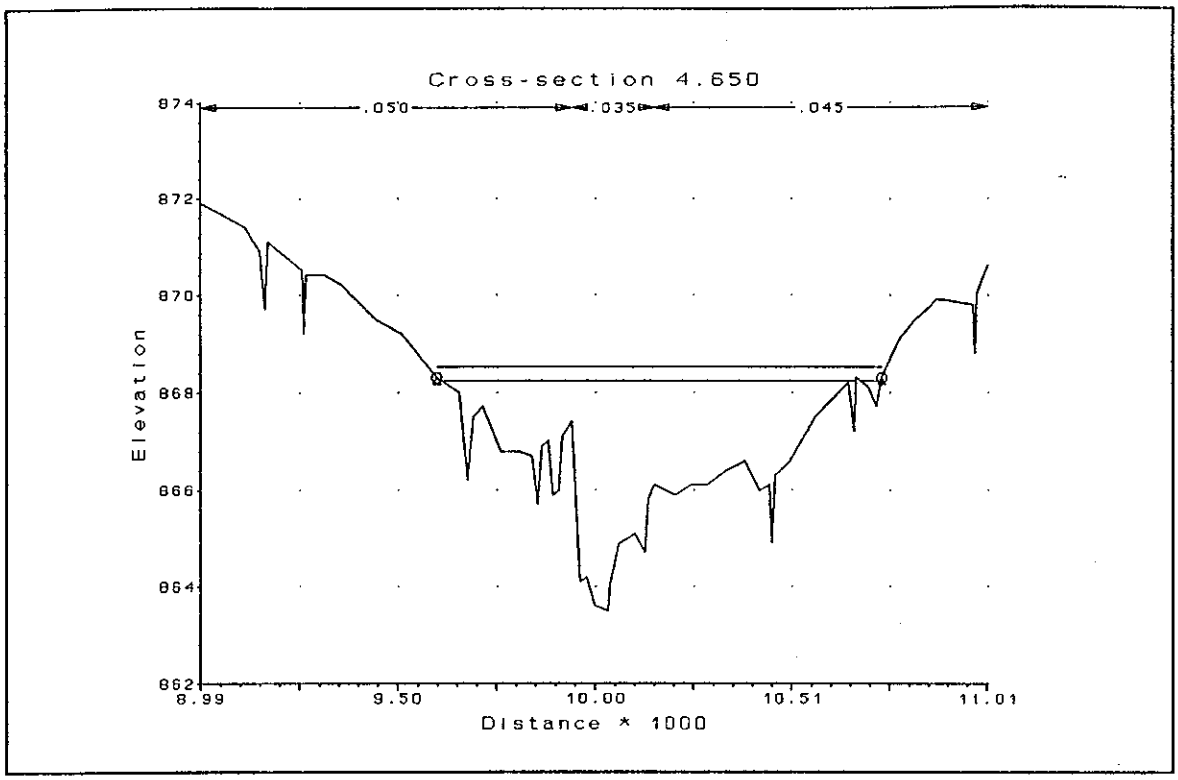
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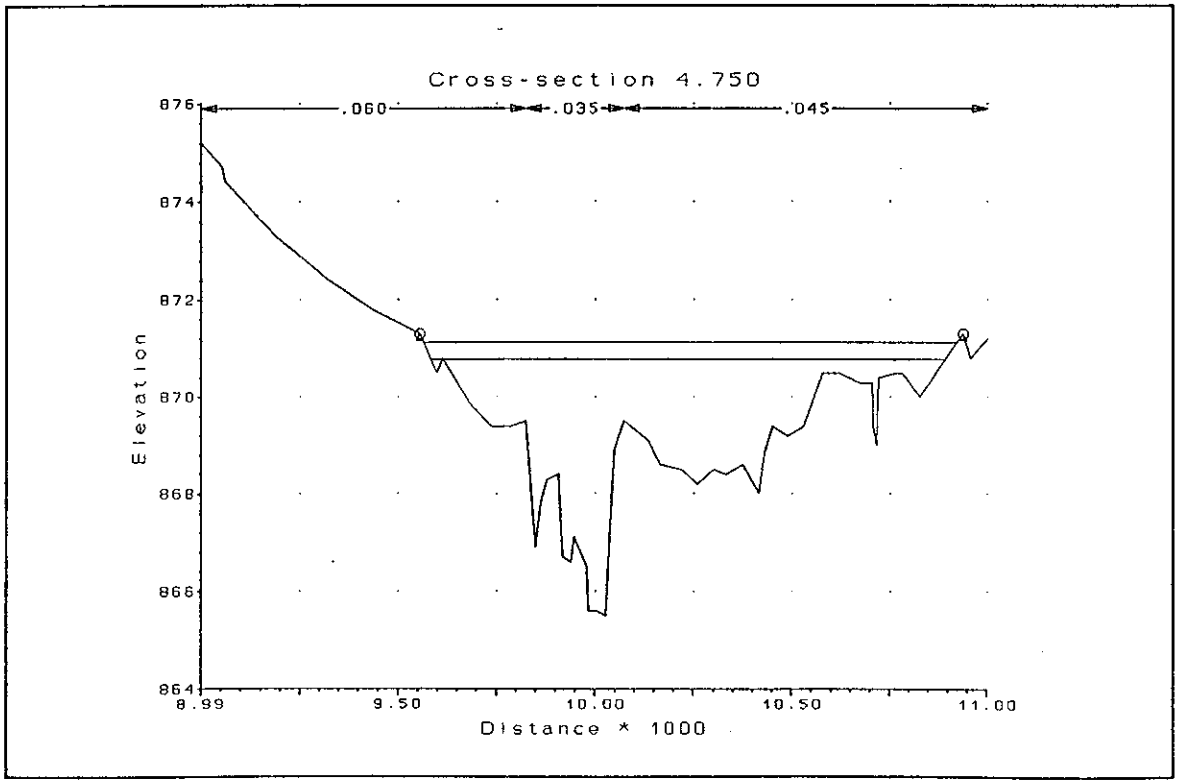
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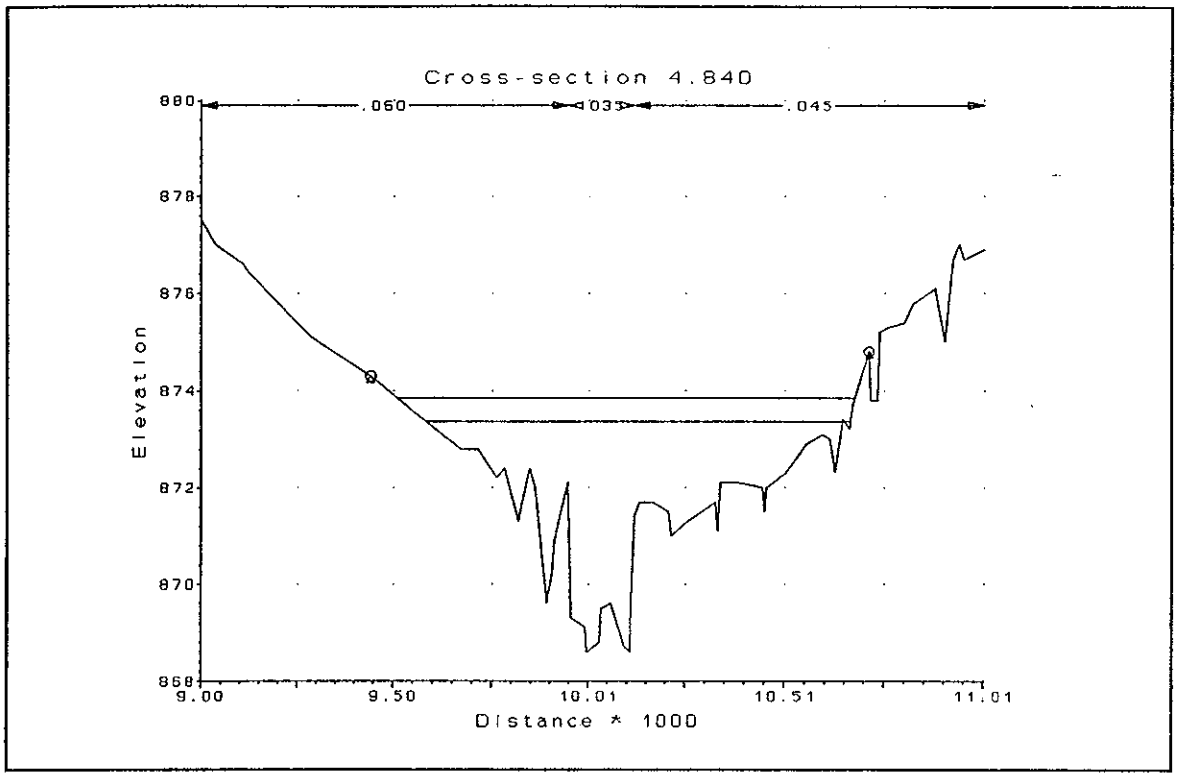
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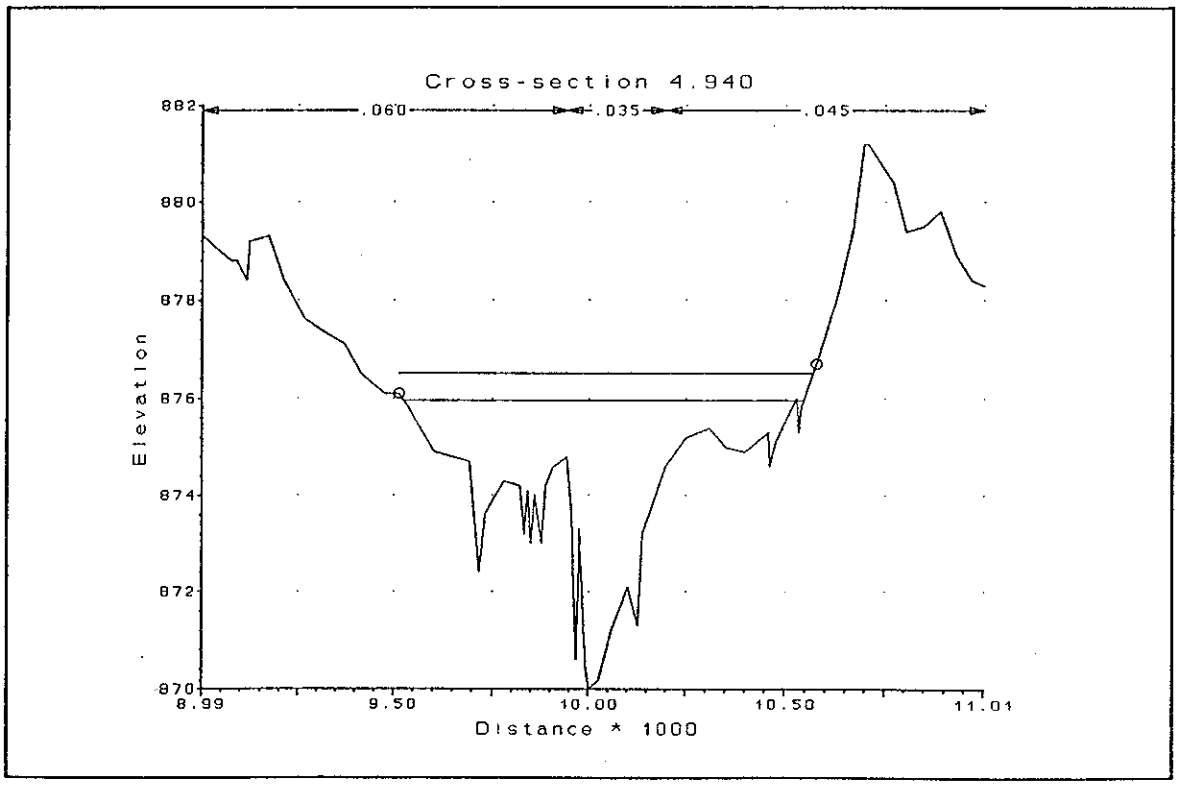
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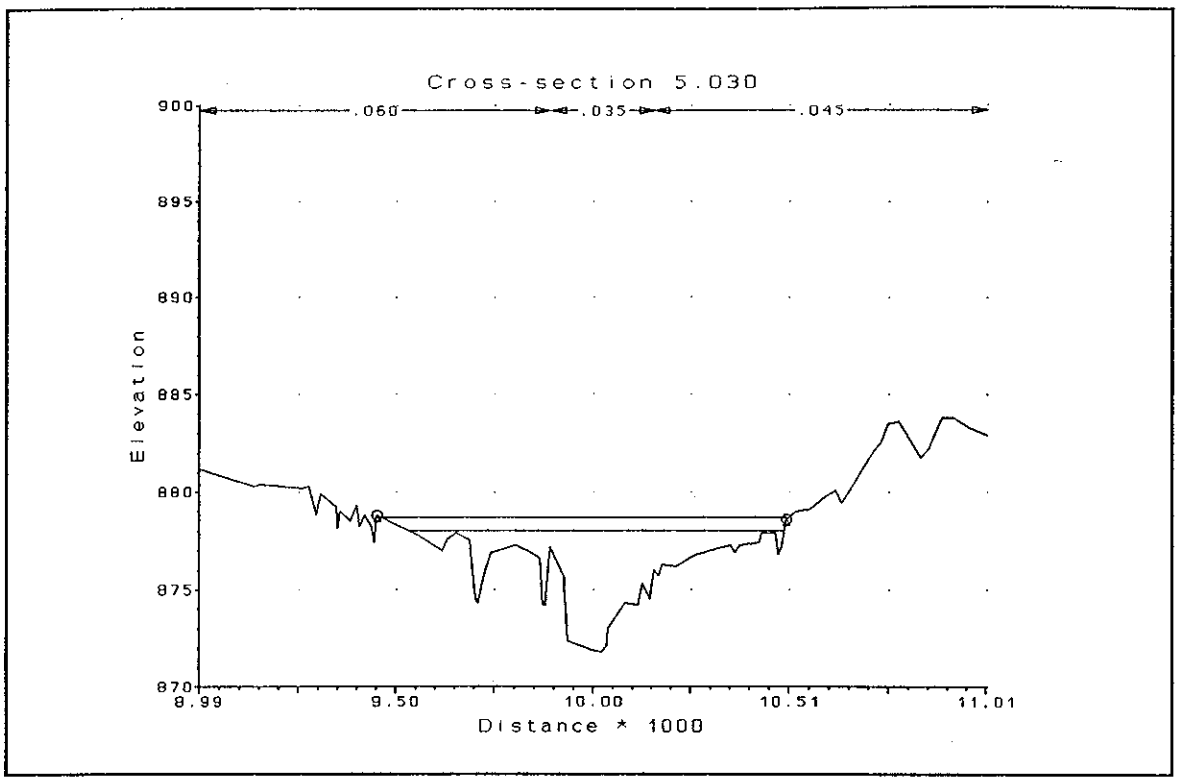
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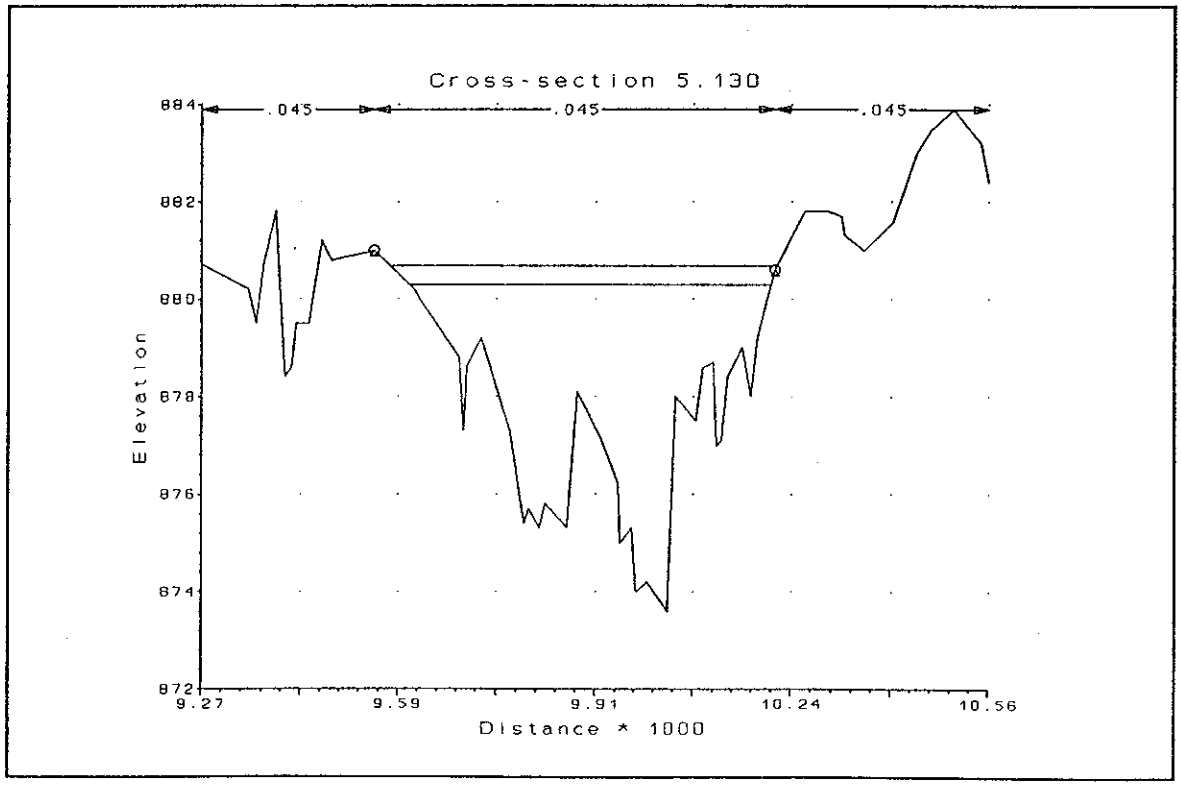
Distance * 1000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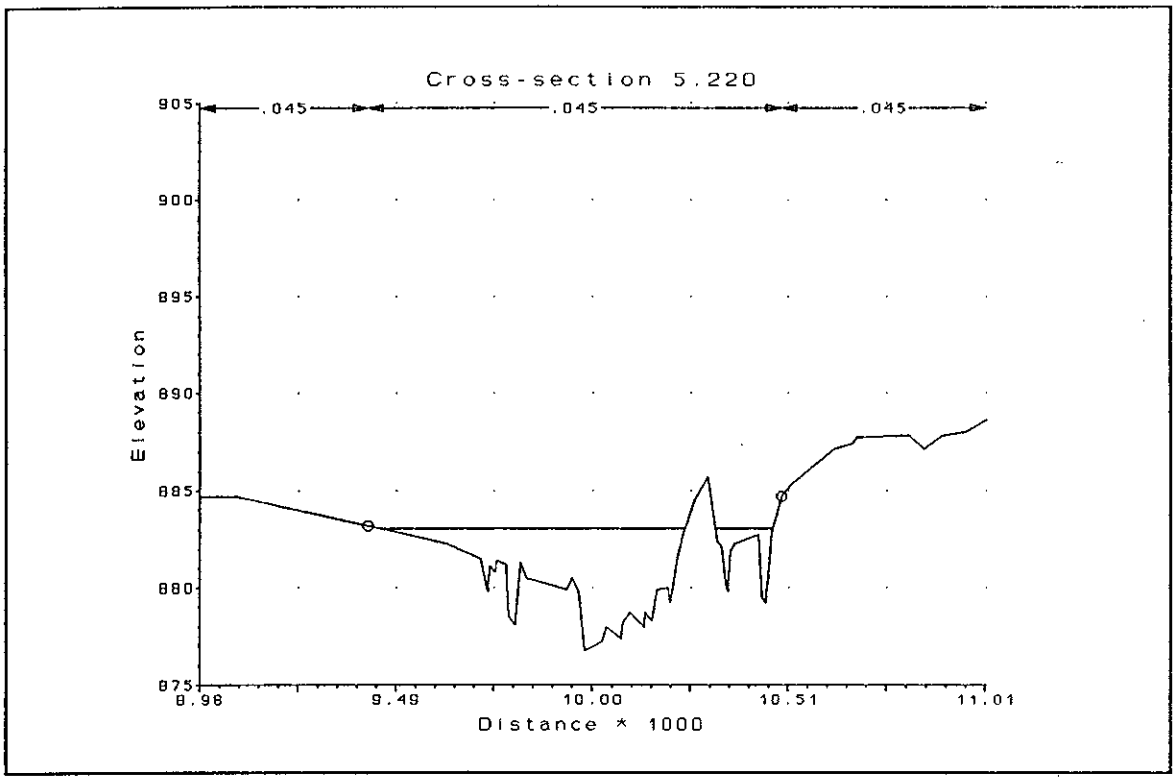
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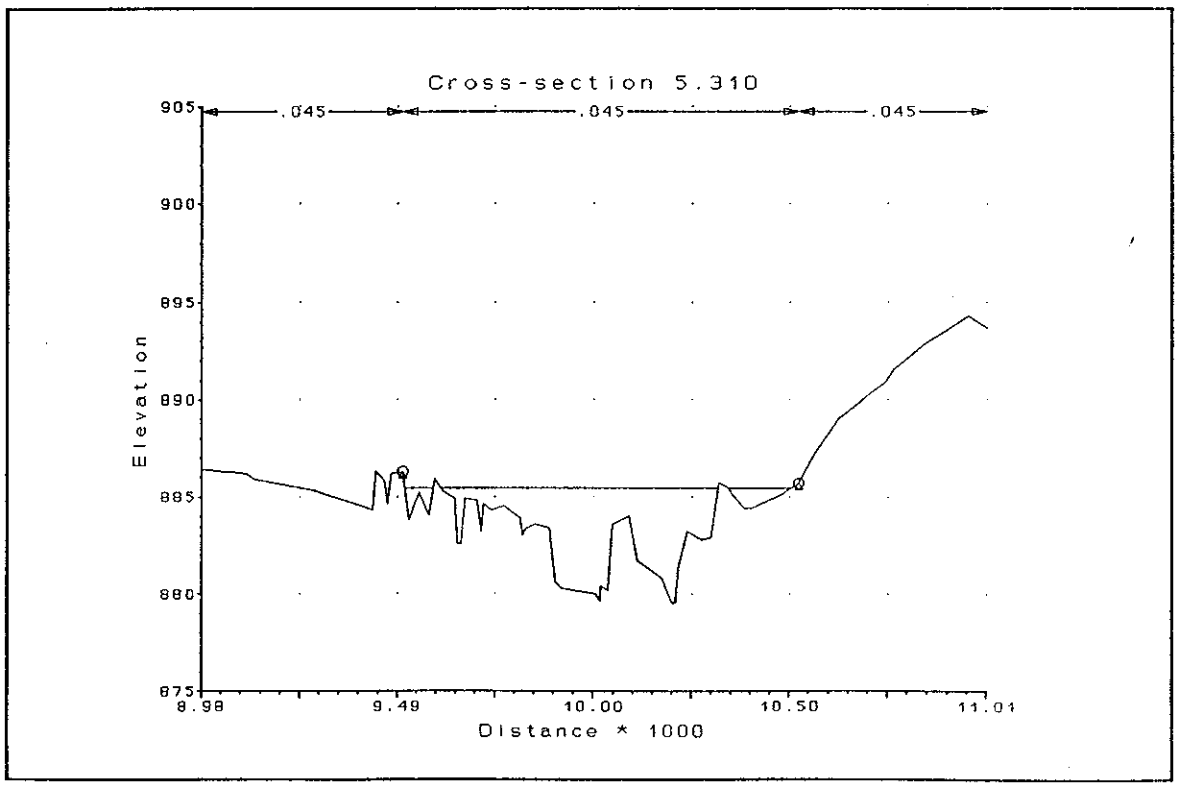
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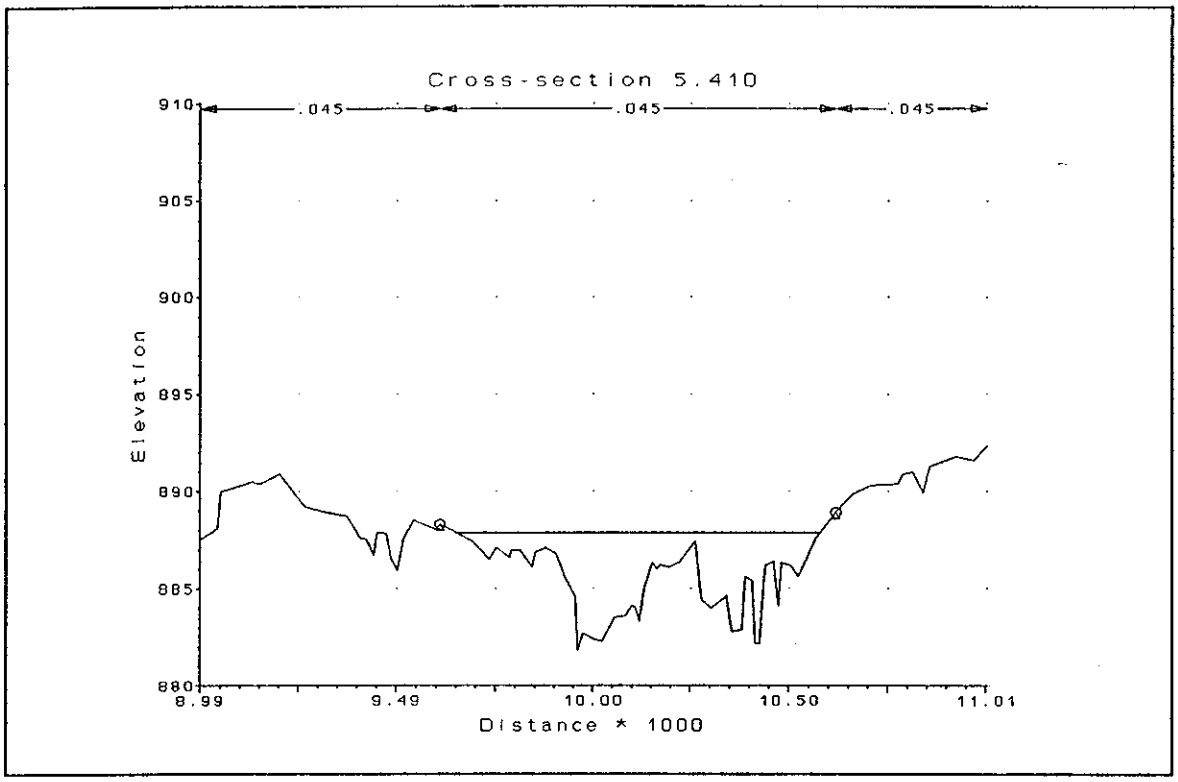
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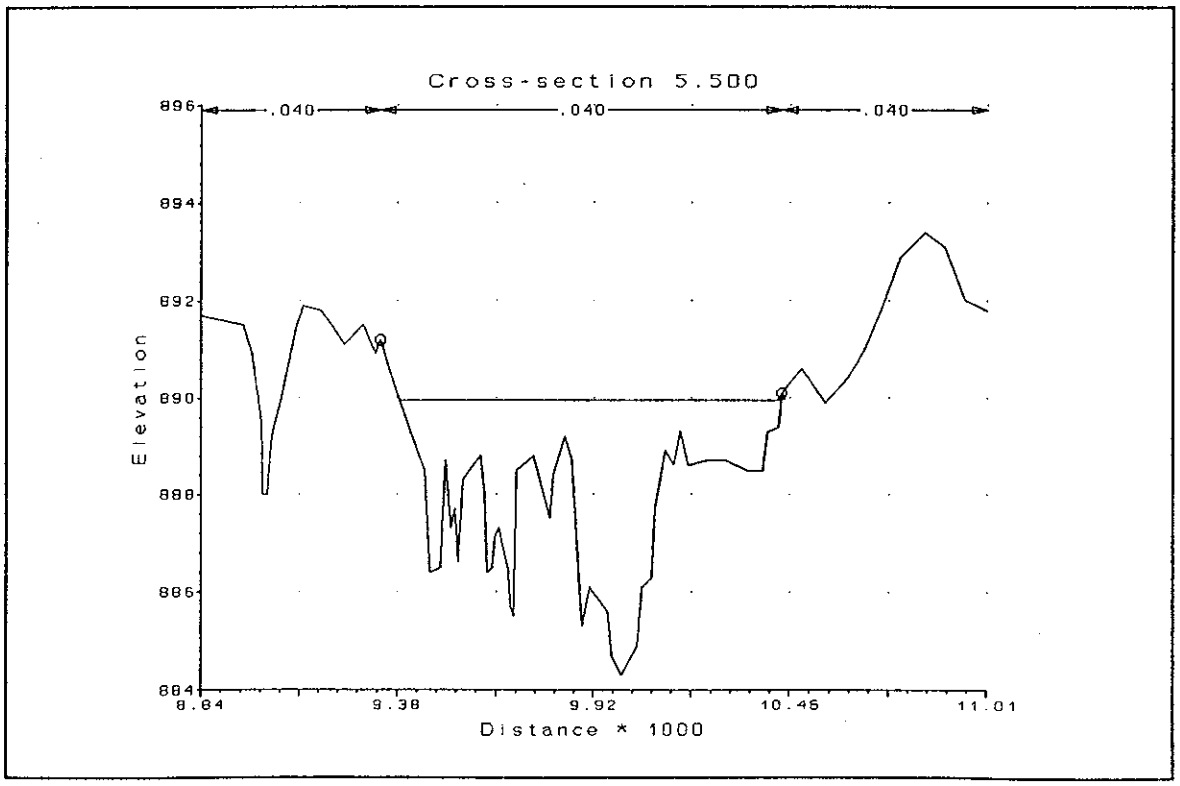
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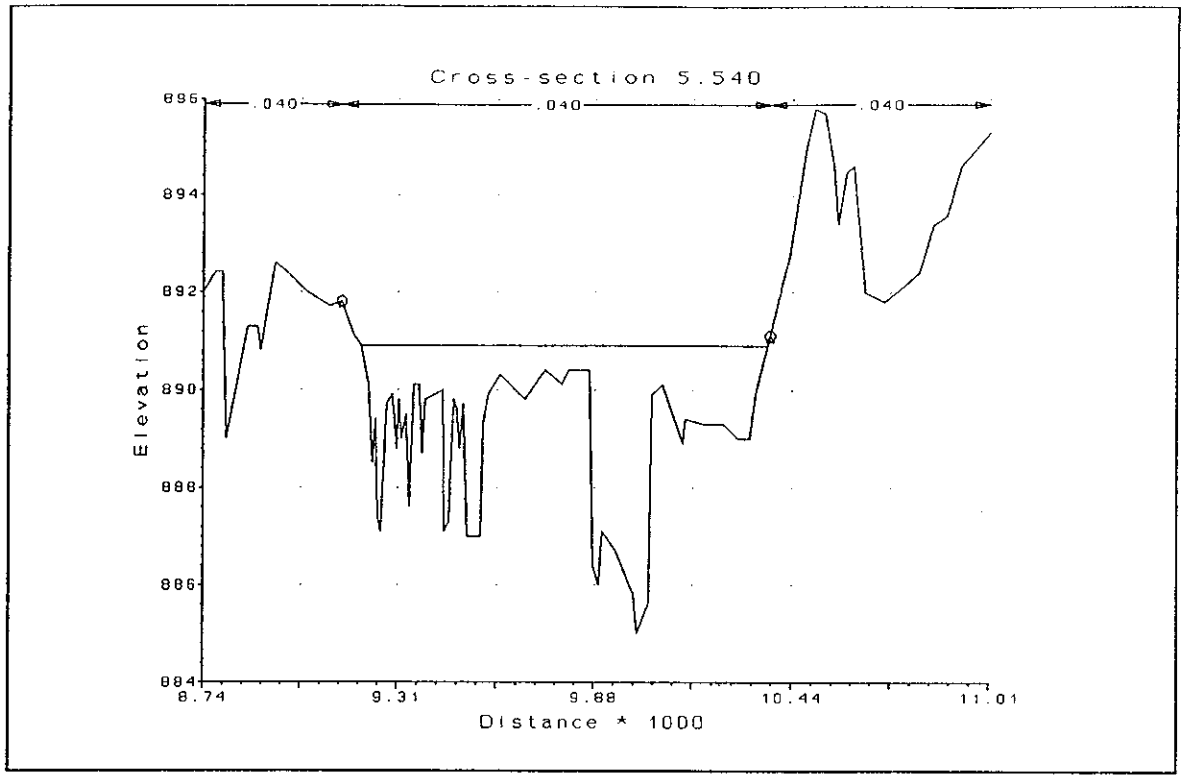
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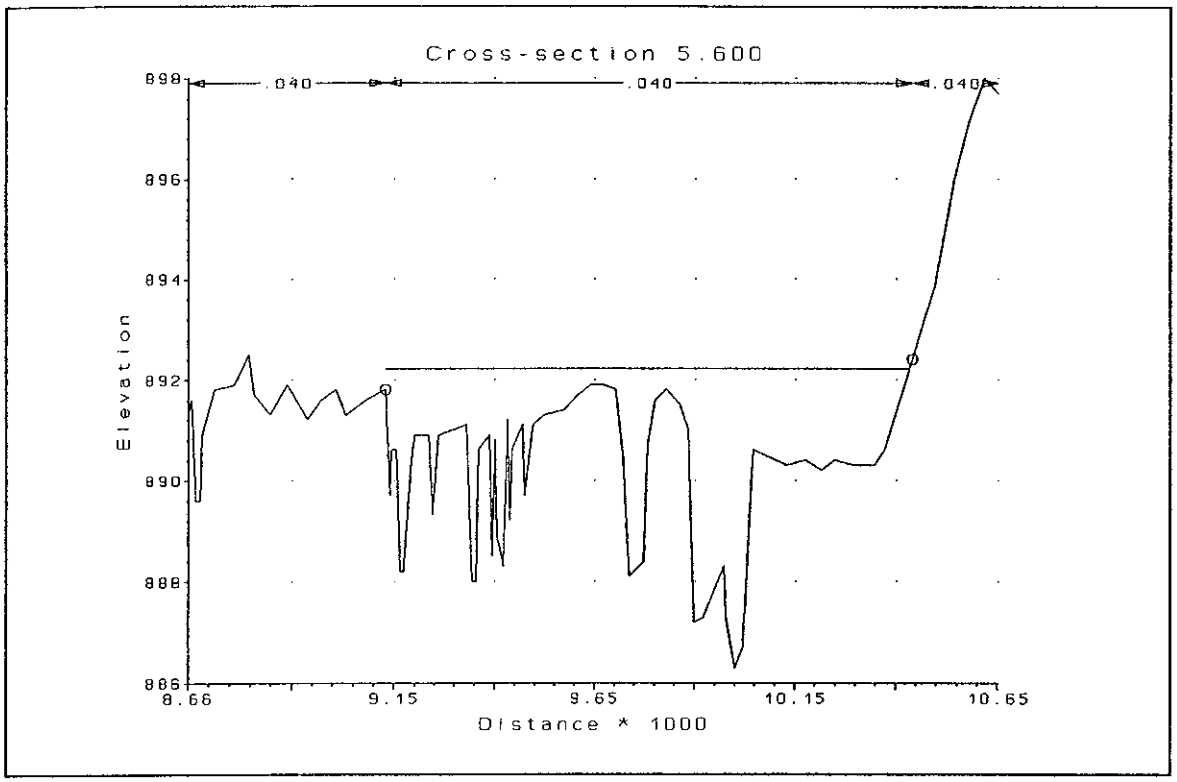
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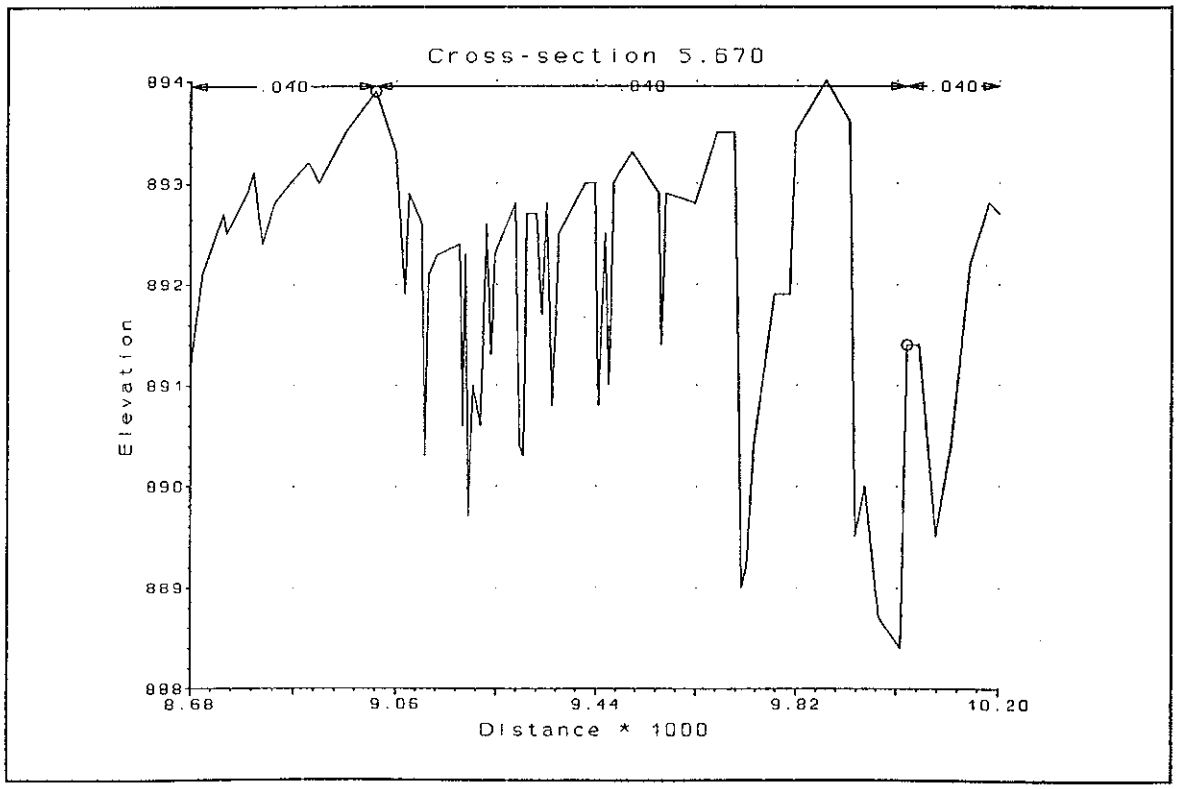
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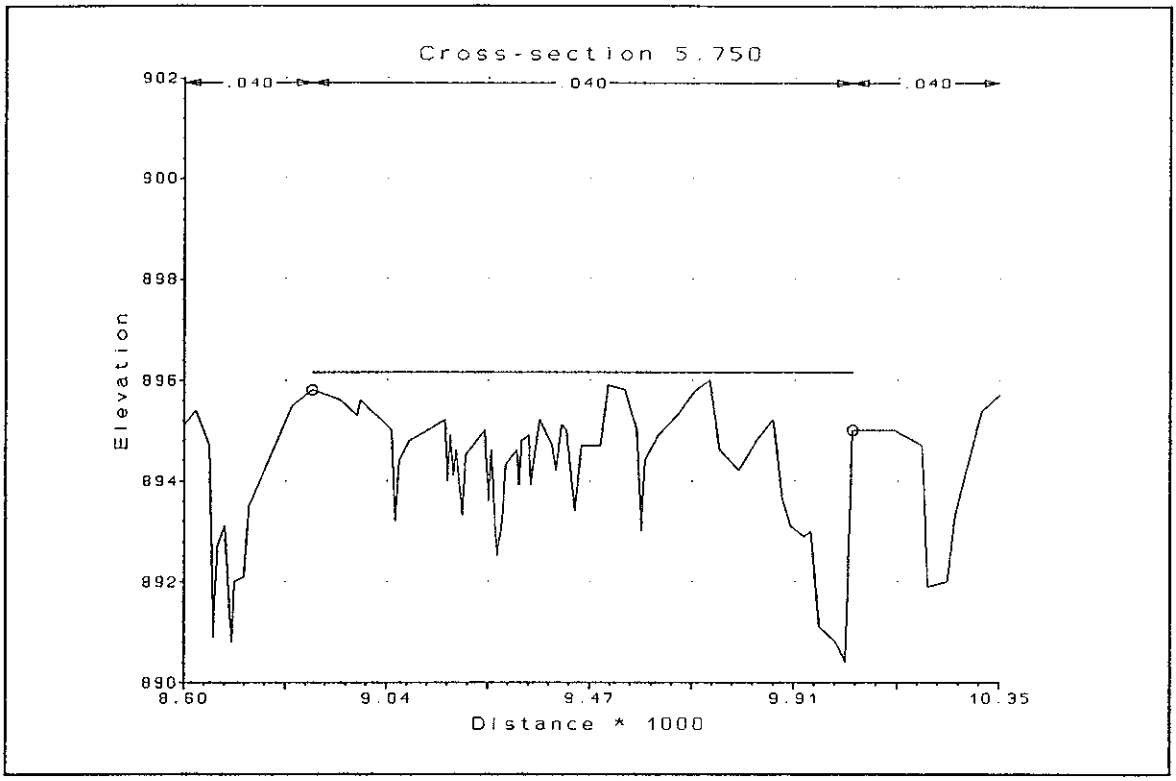
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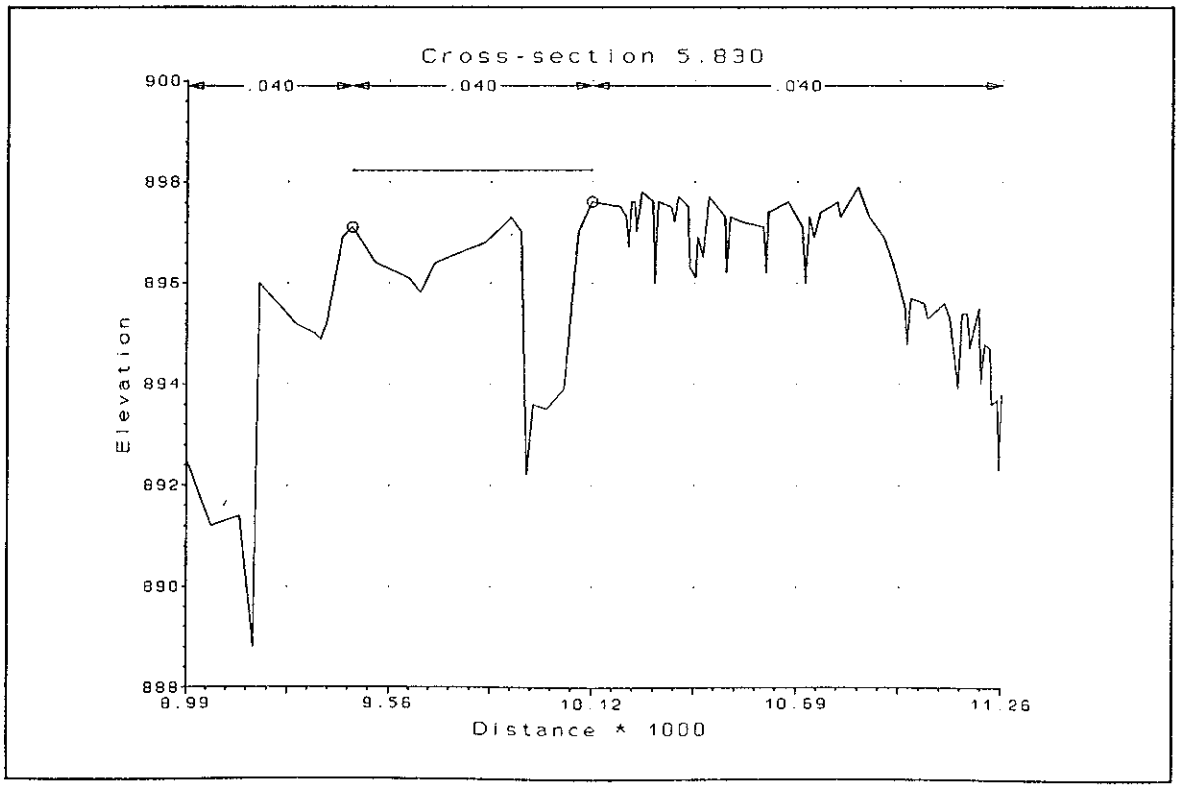
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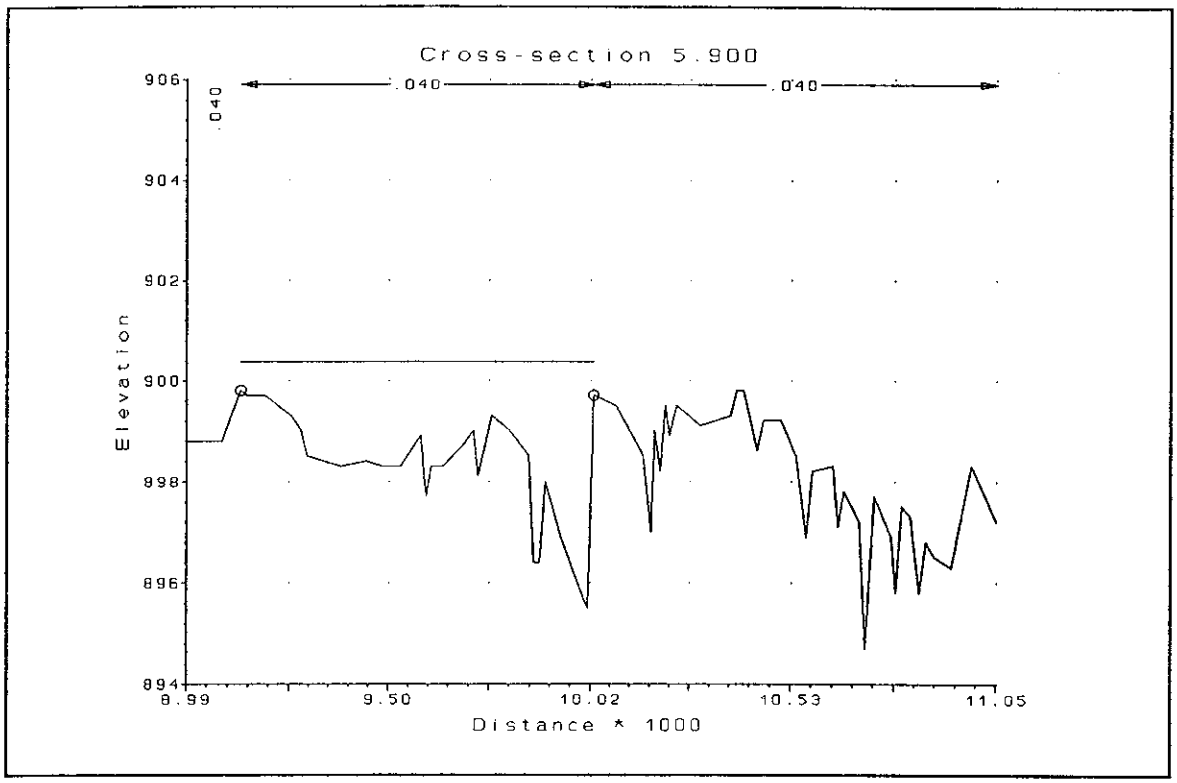
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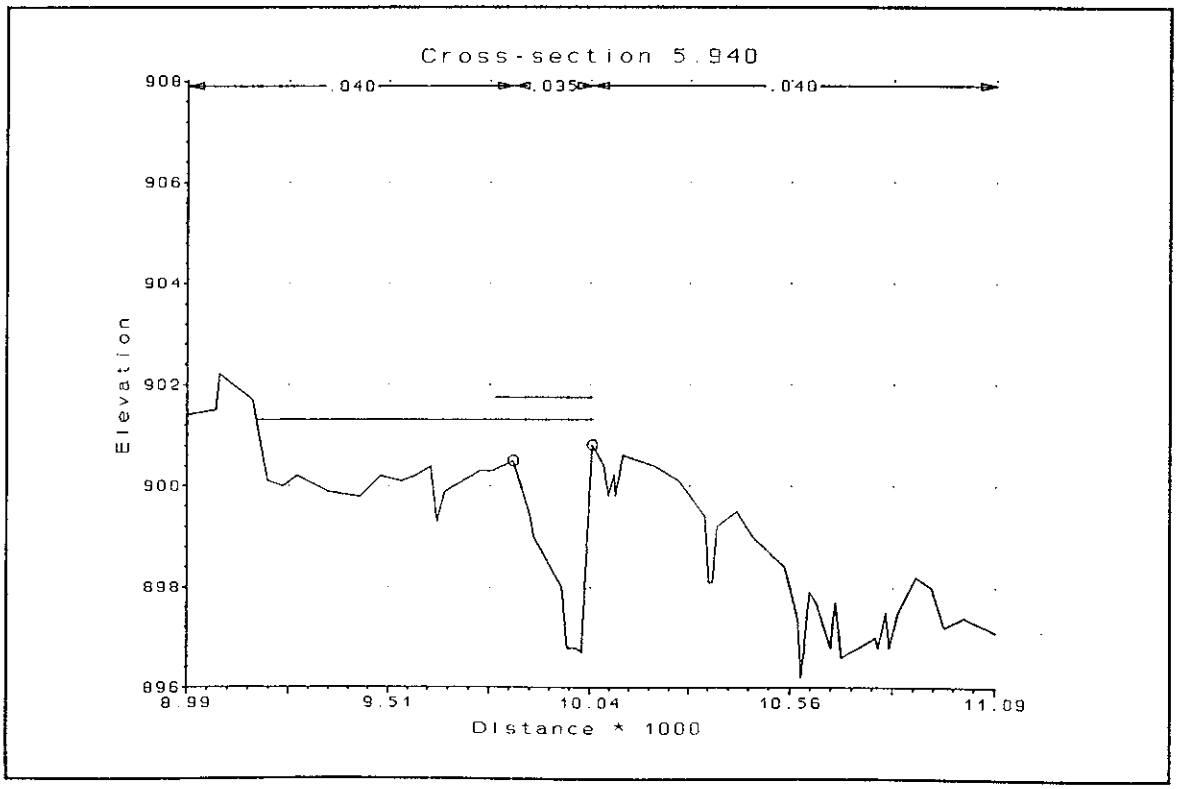
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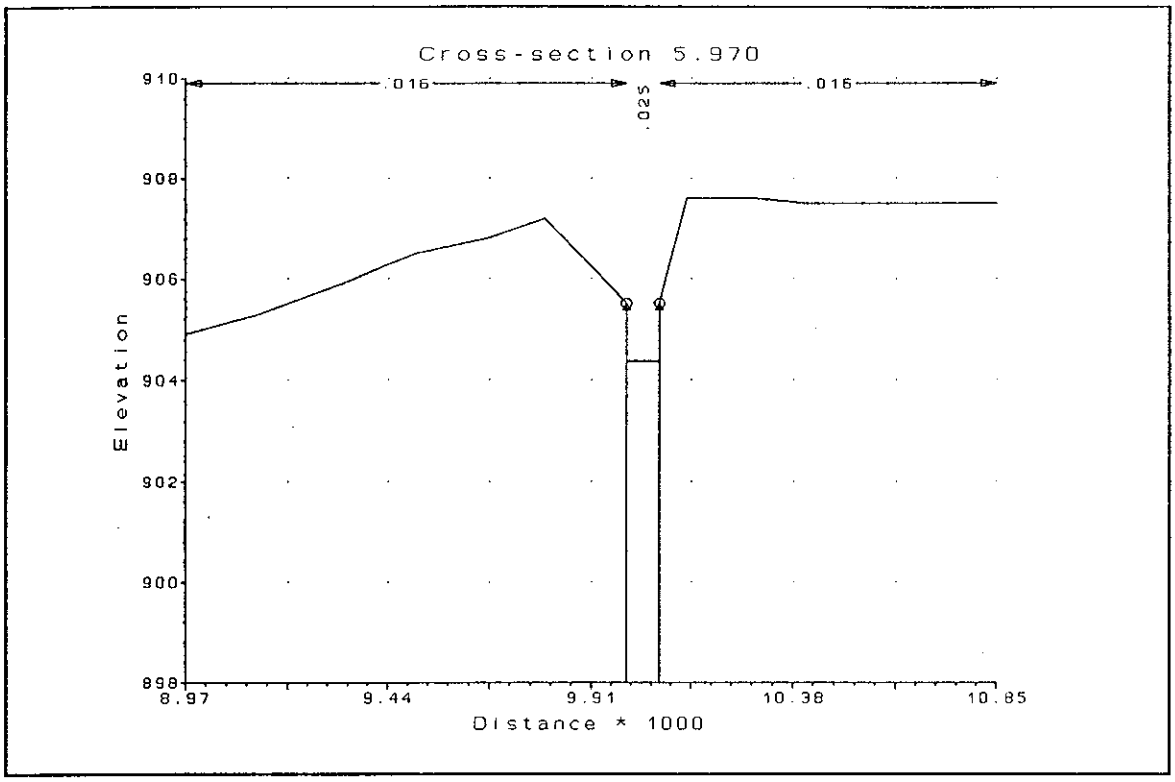
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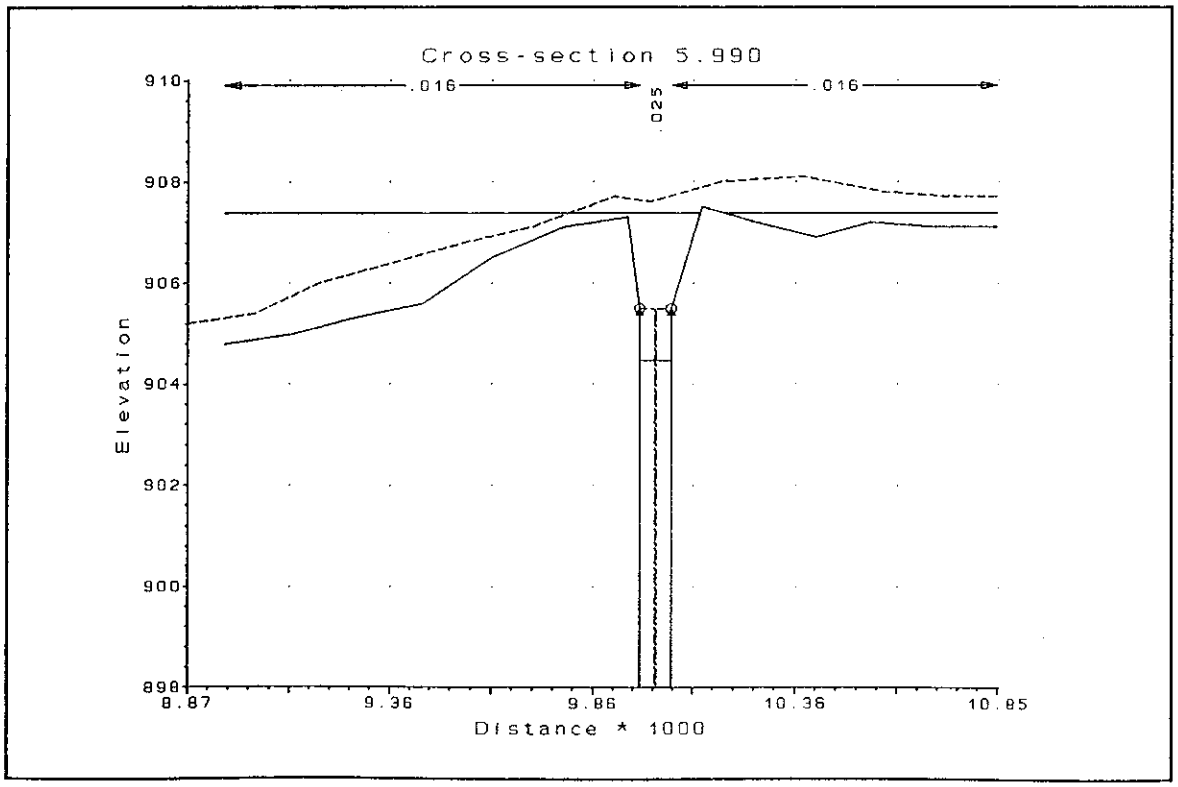
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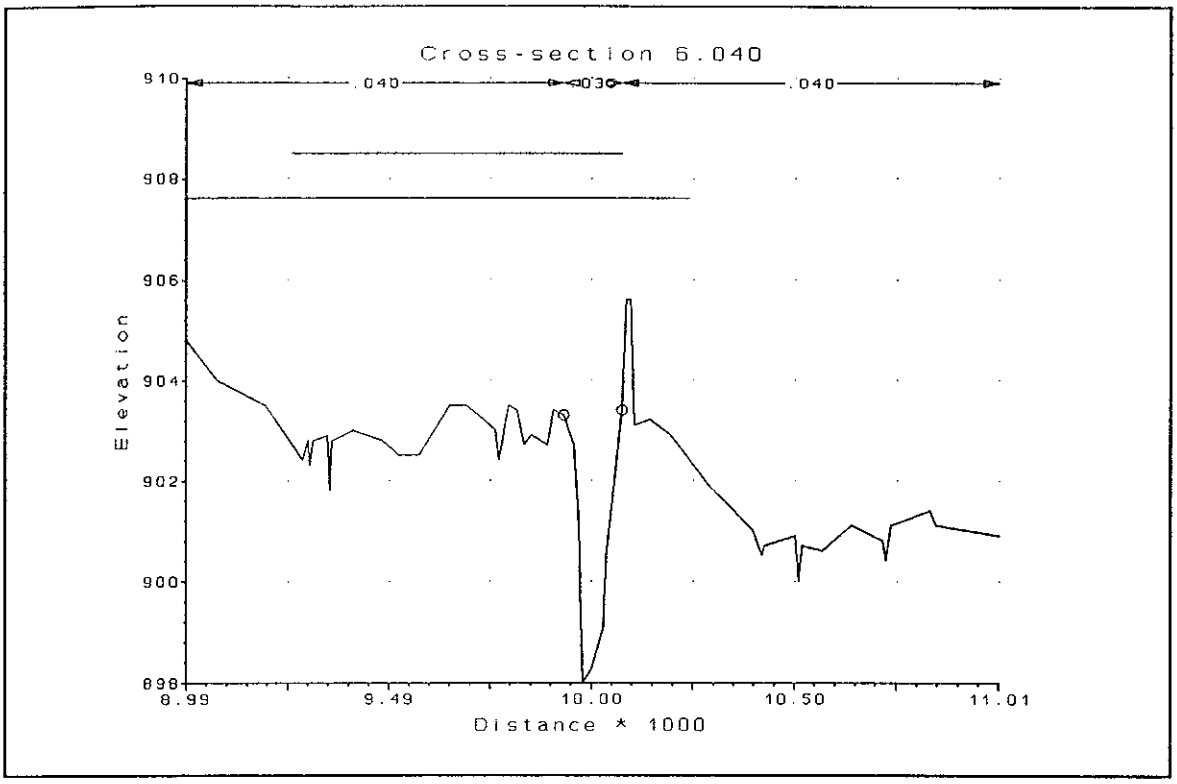
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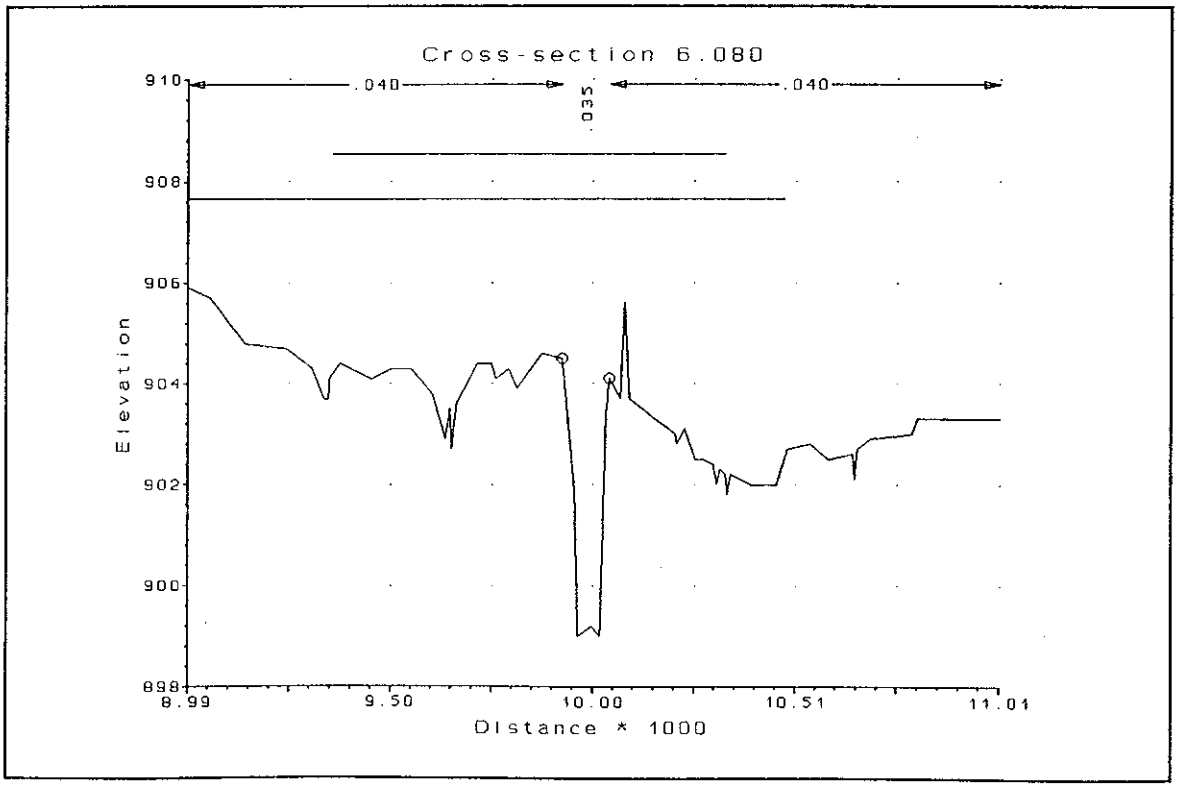
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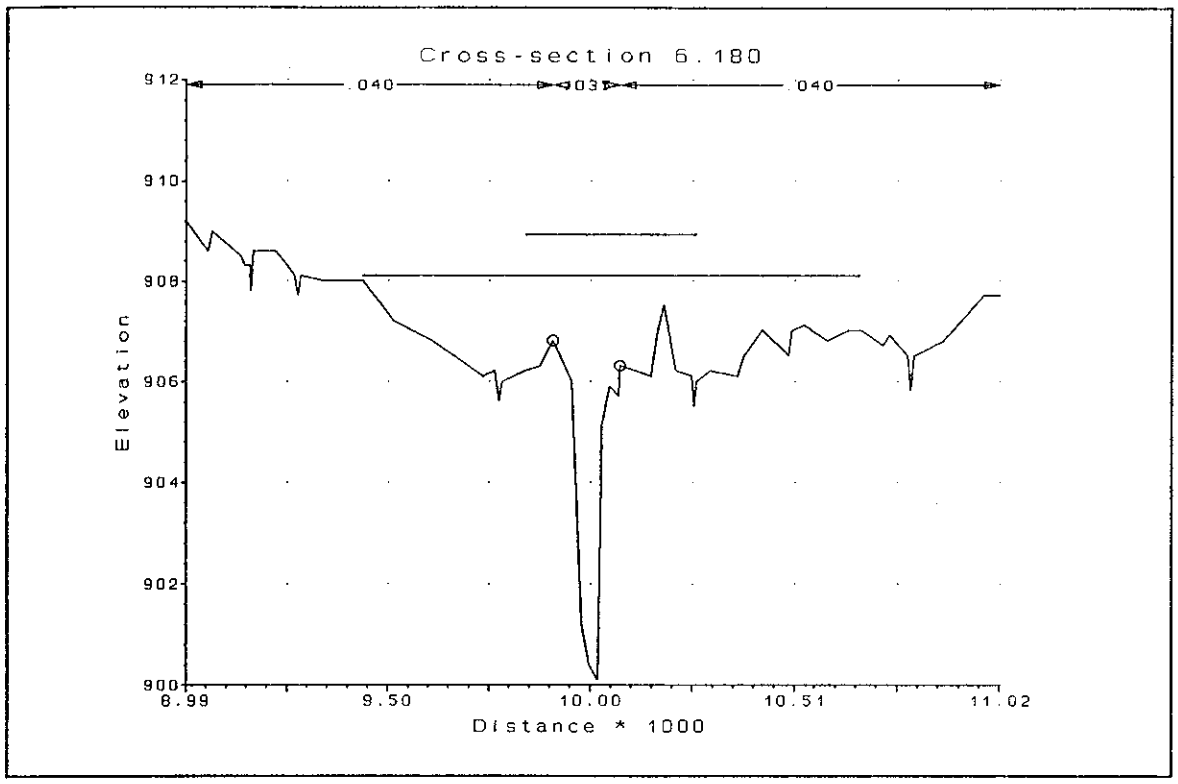
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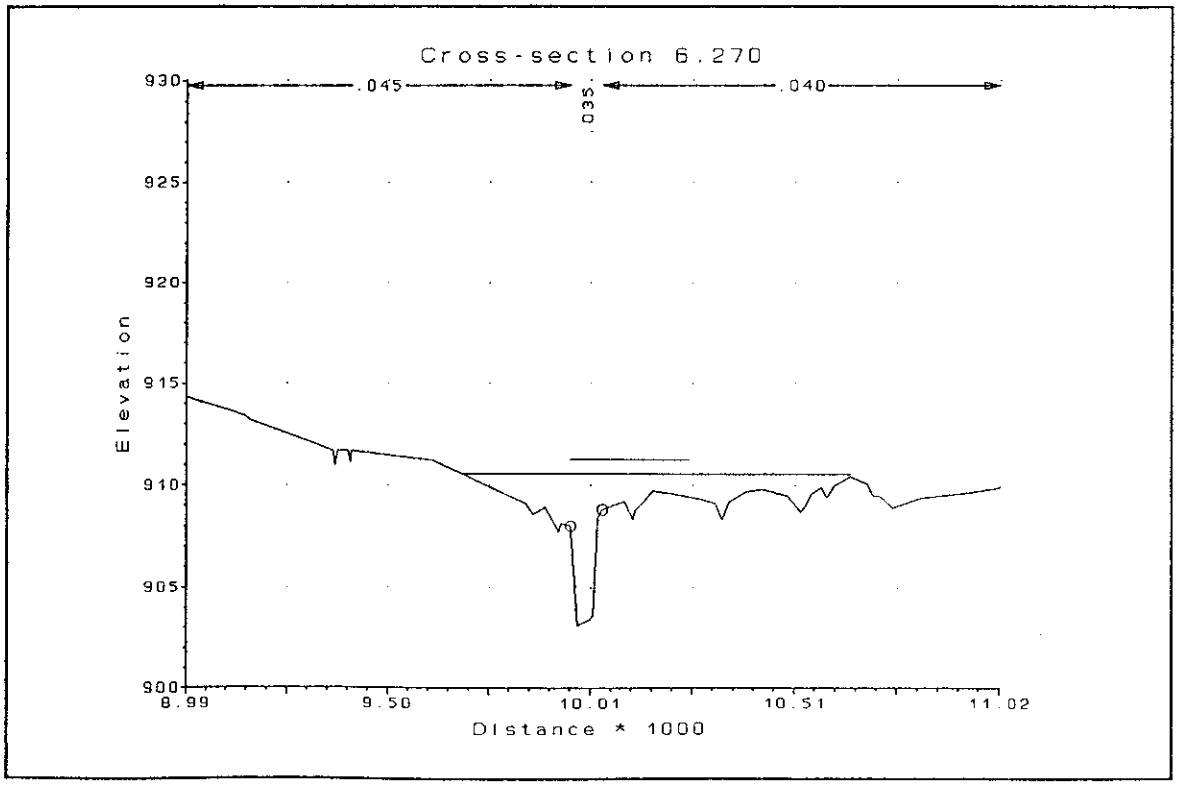
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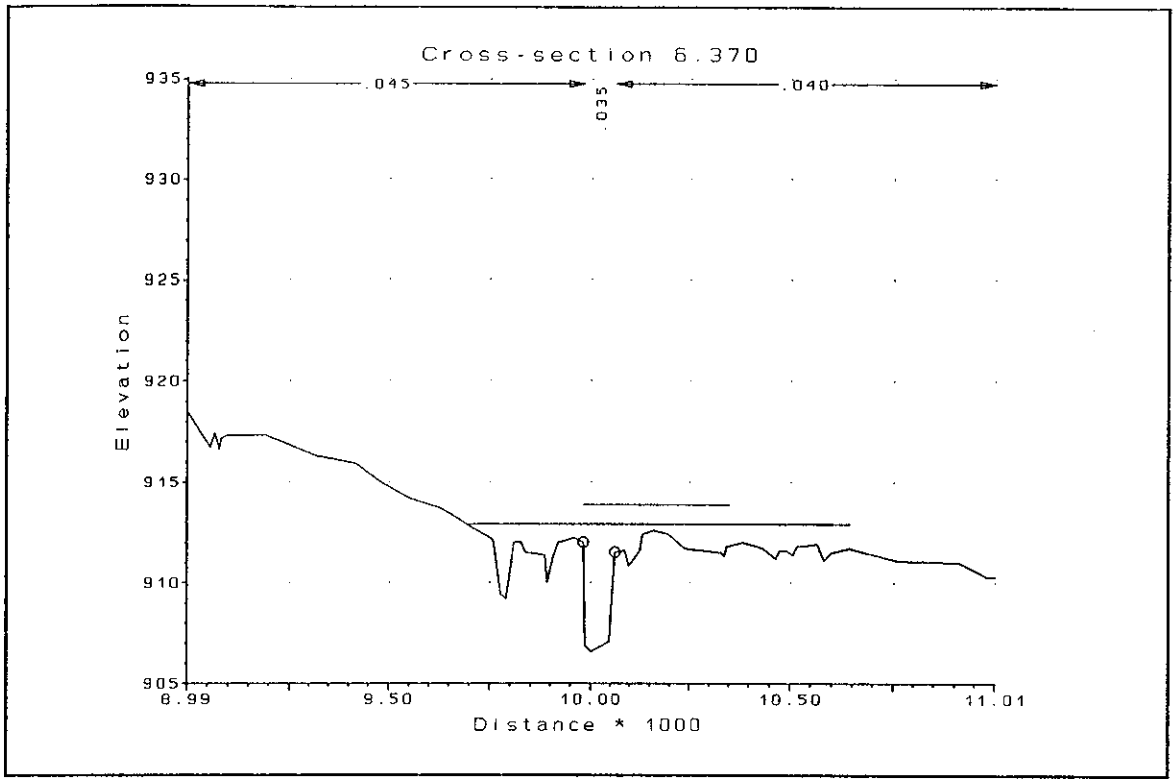
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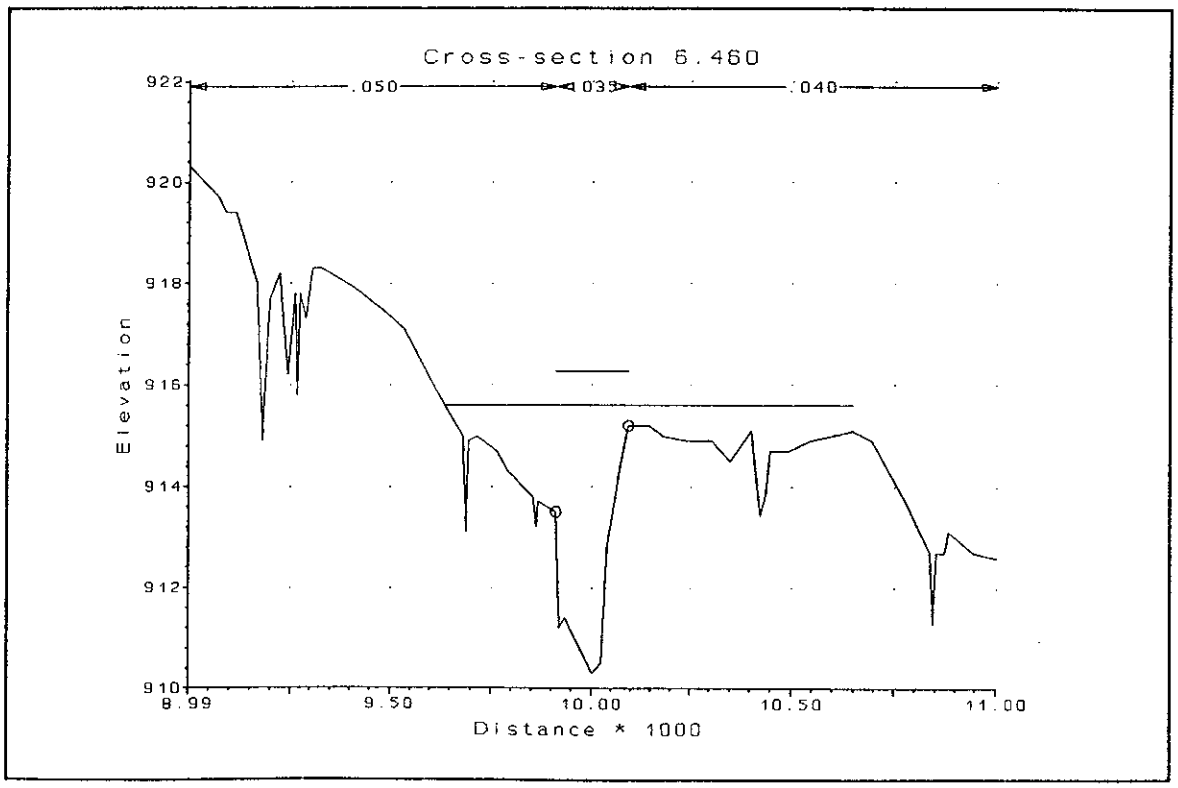
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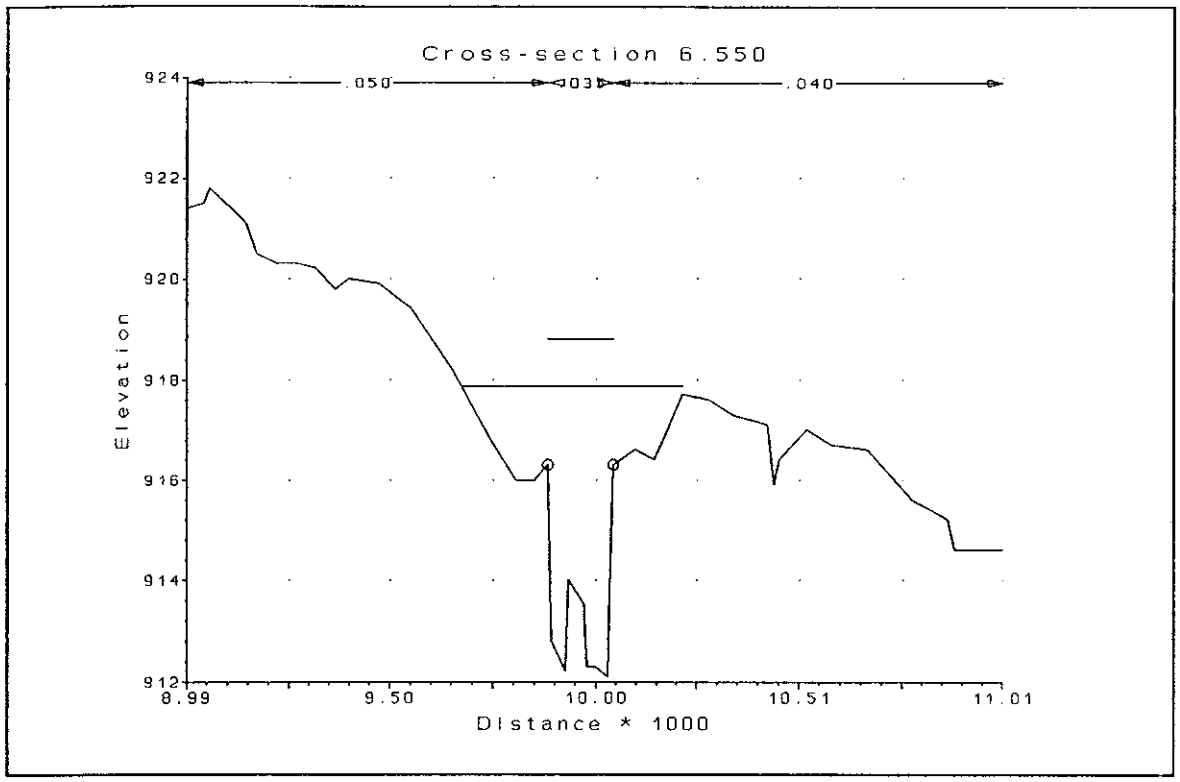
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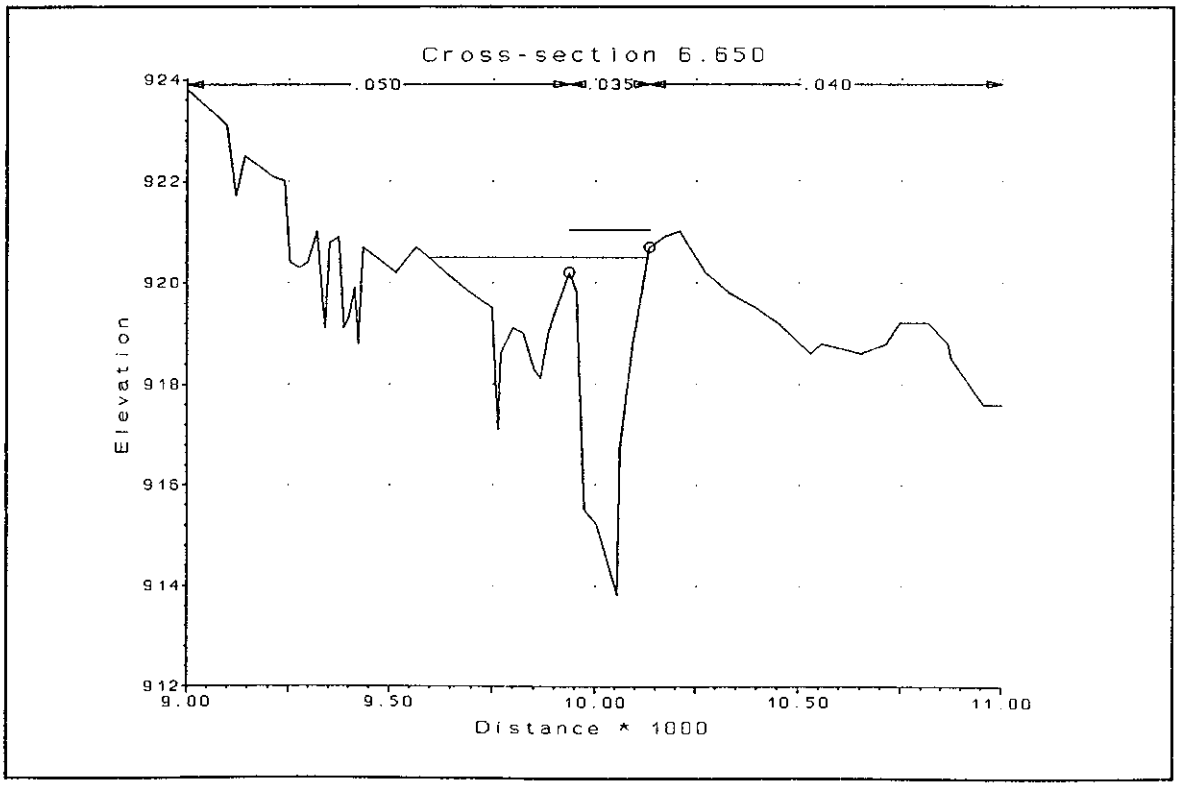
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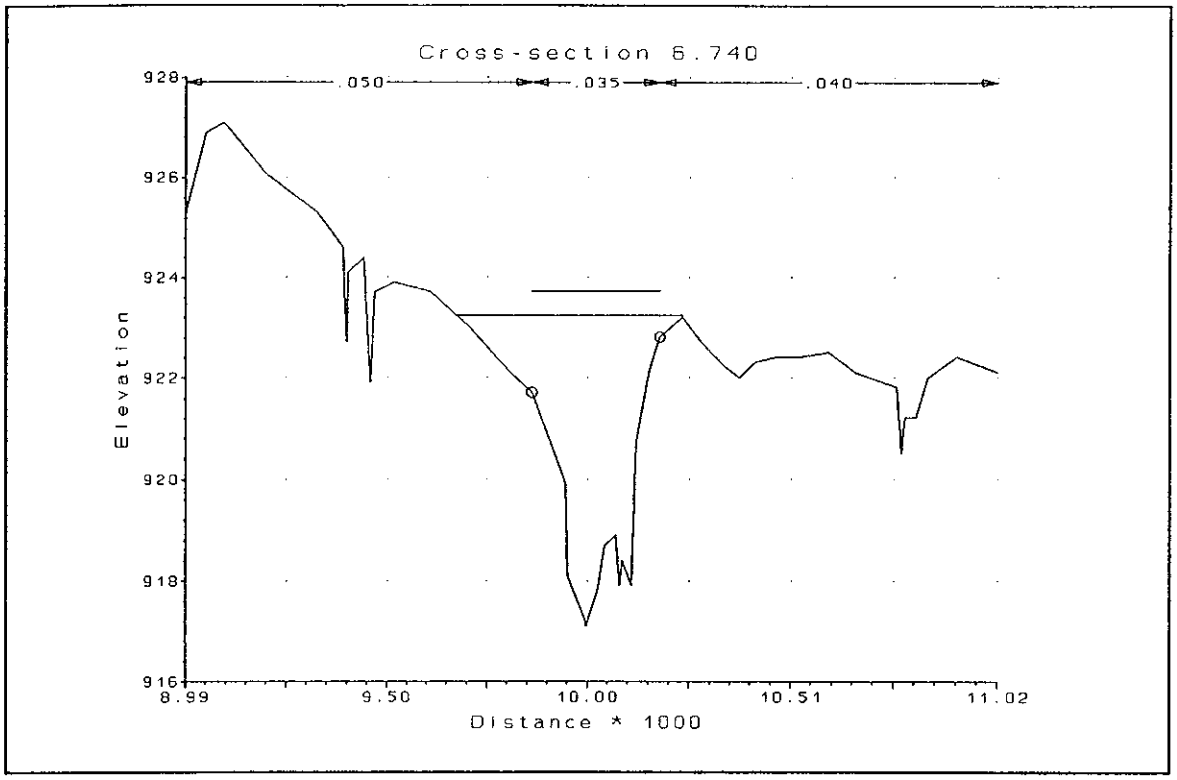
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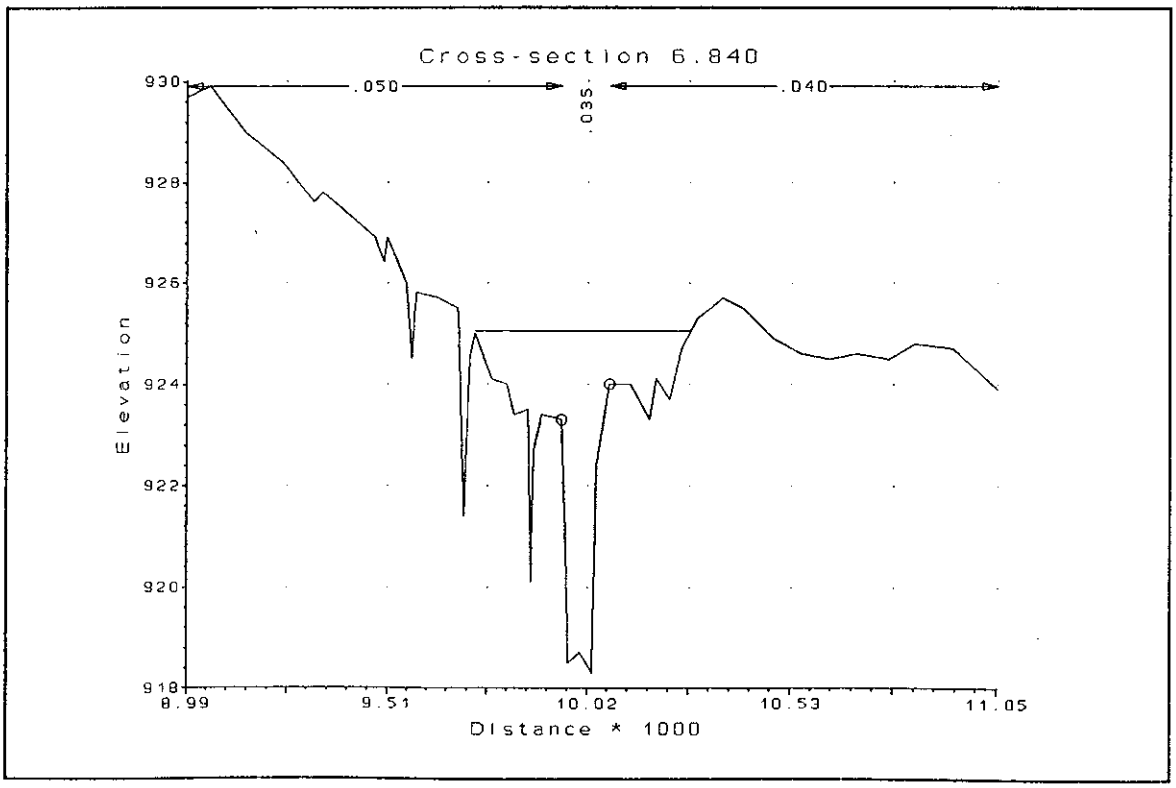
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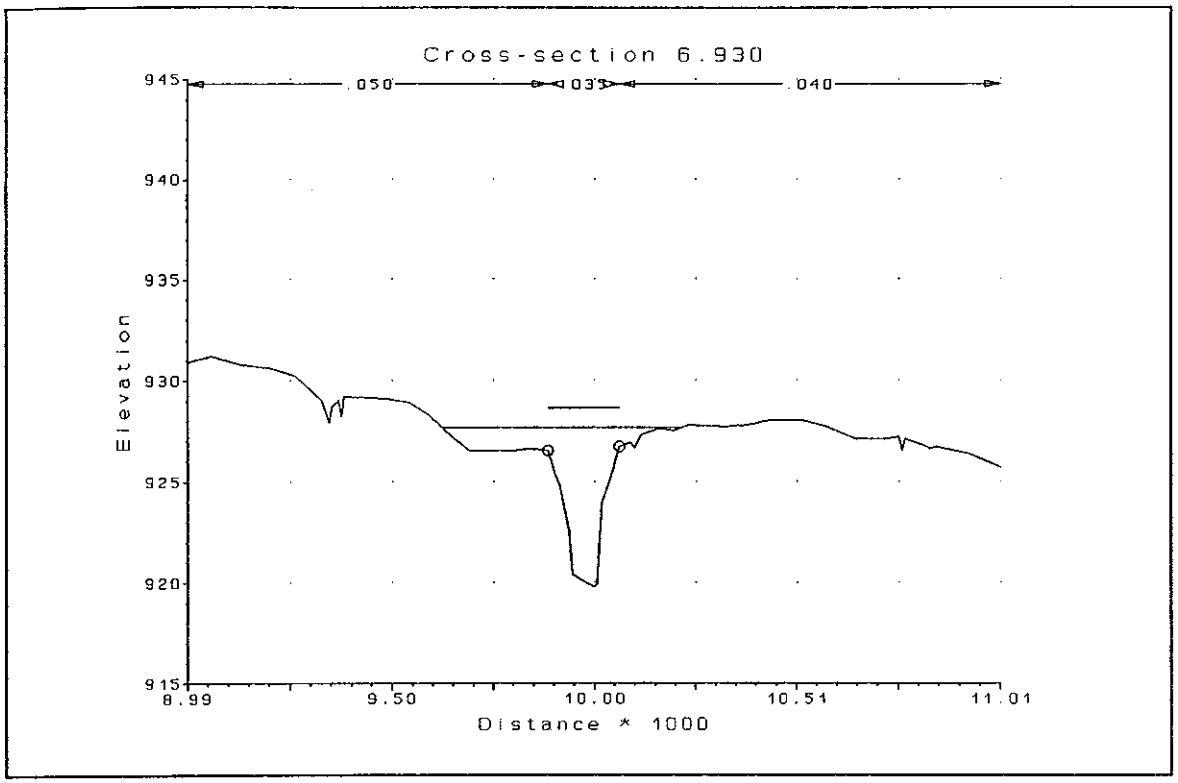
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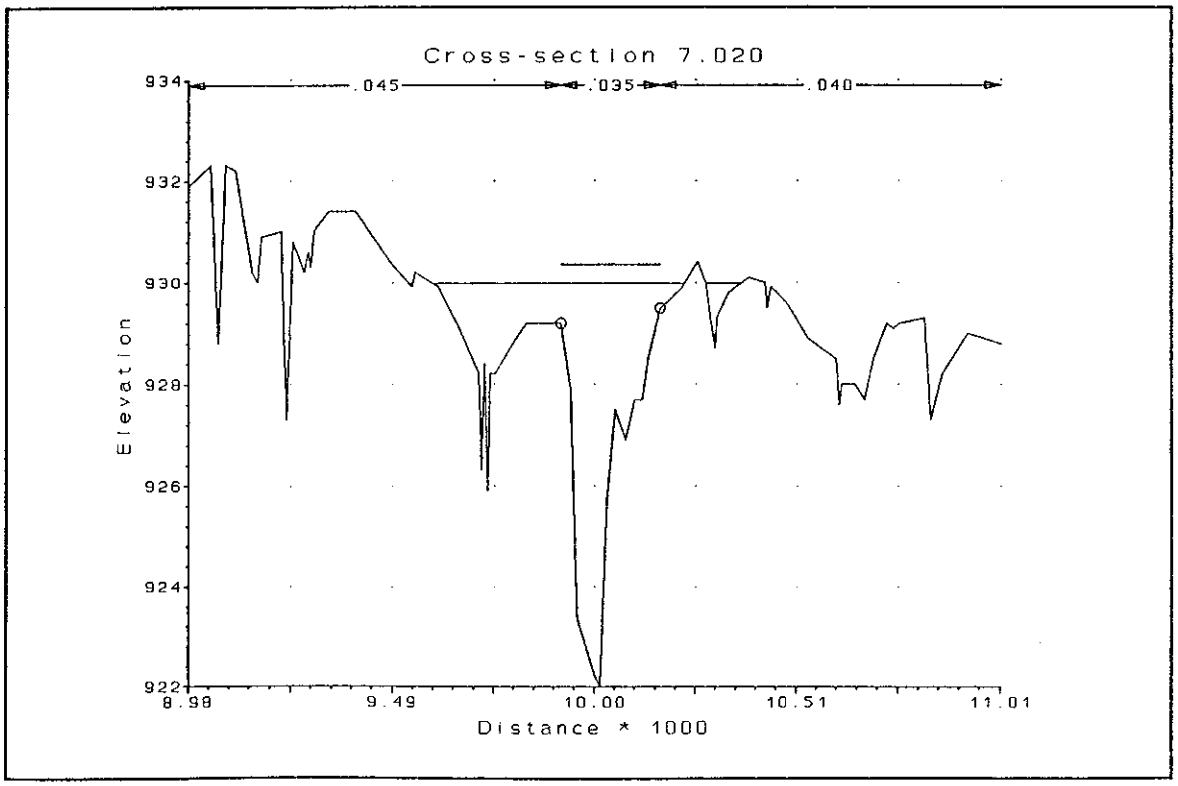
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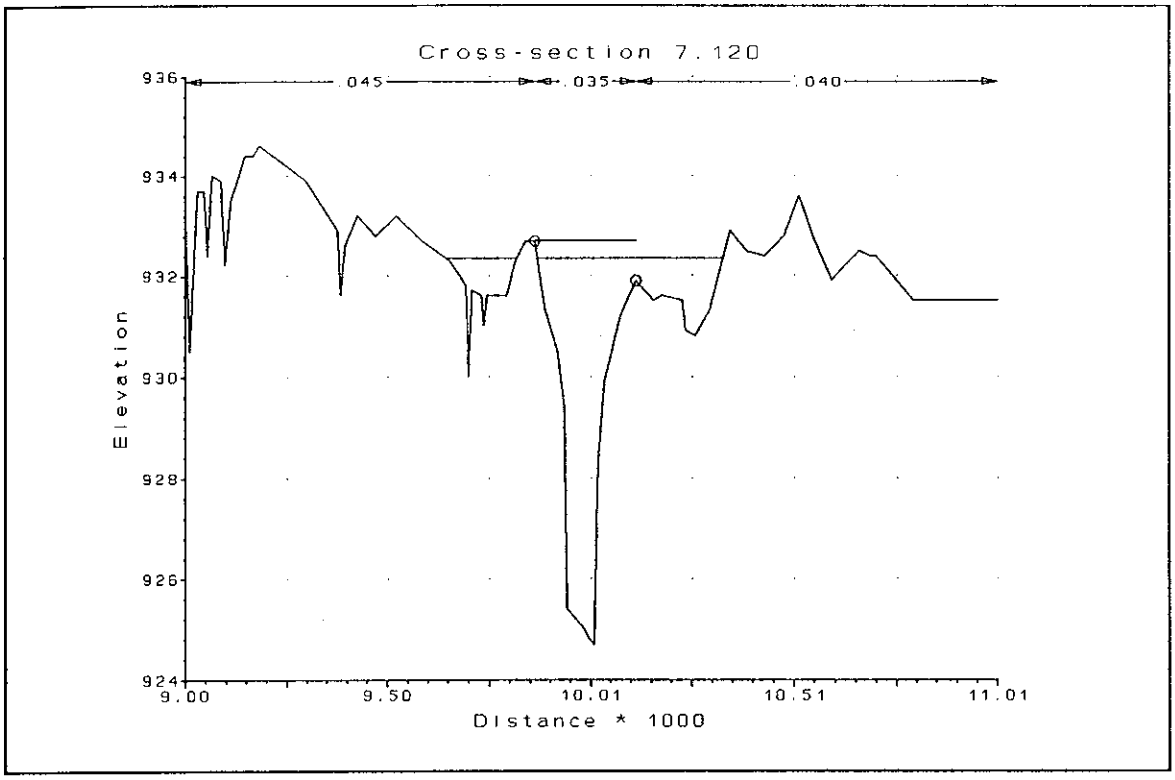
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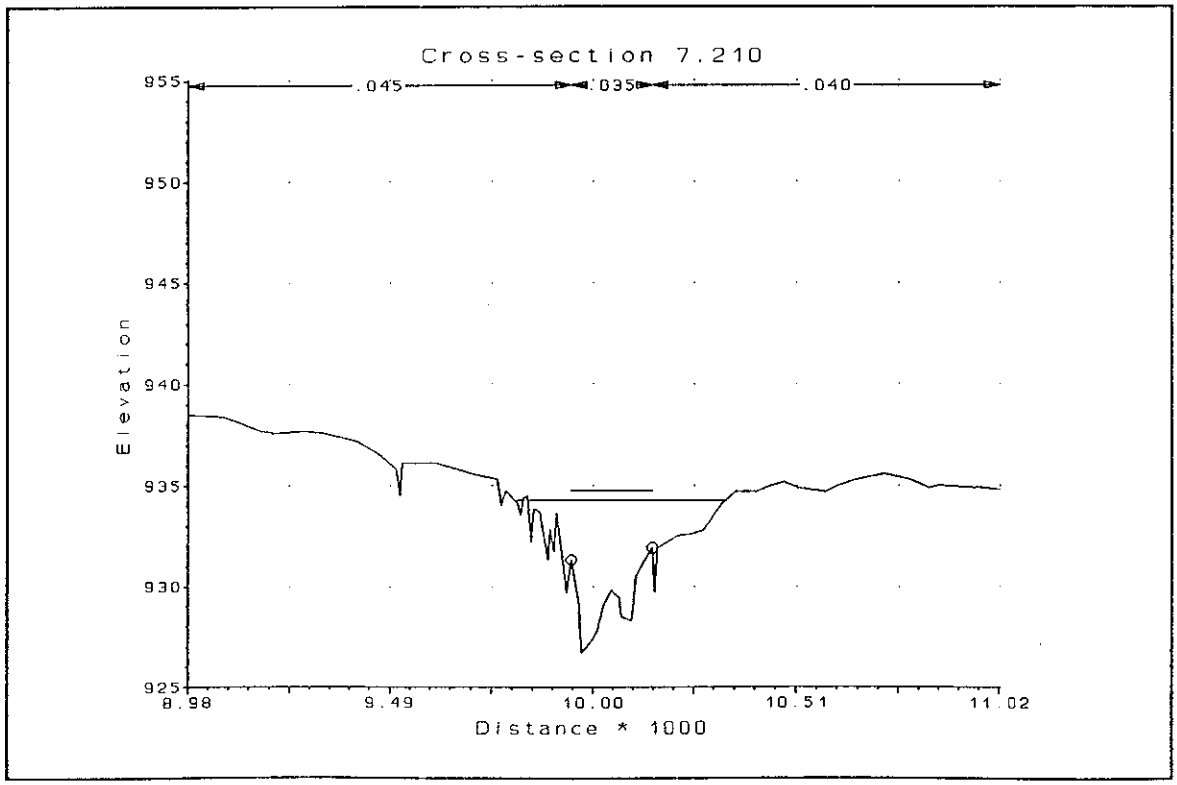
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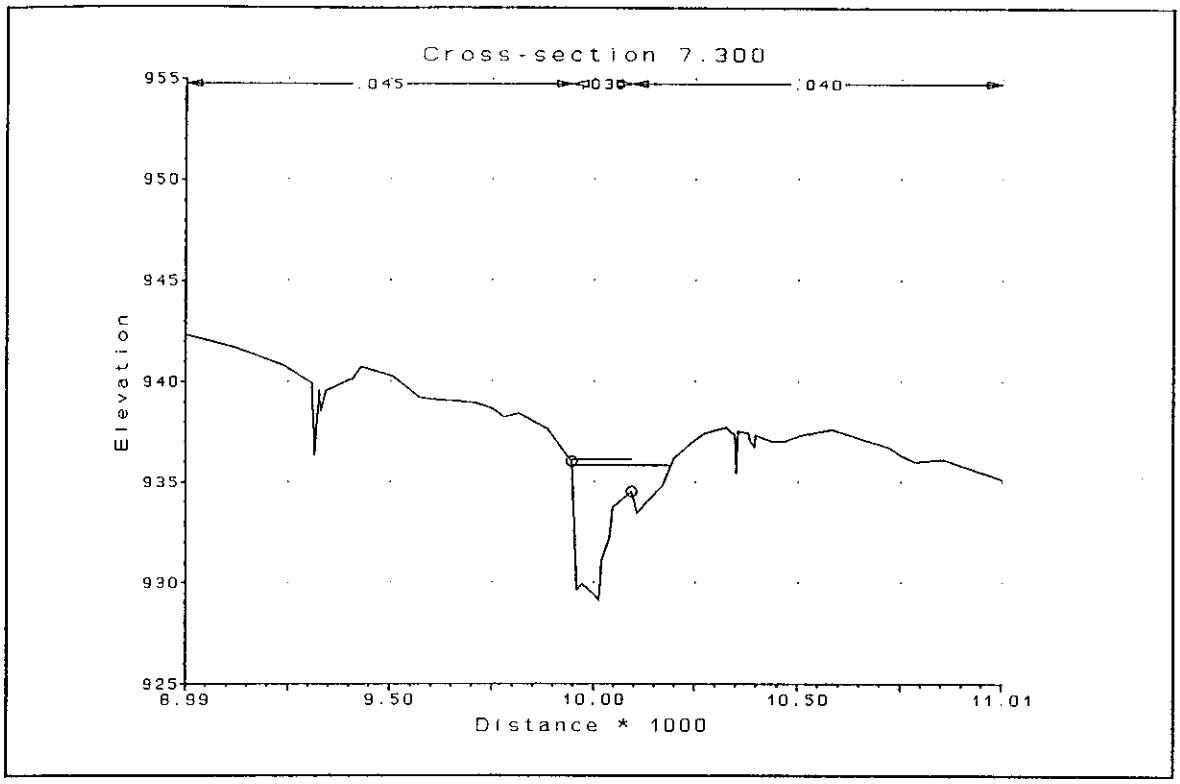
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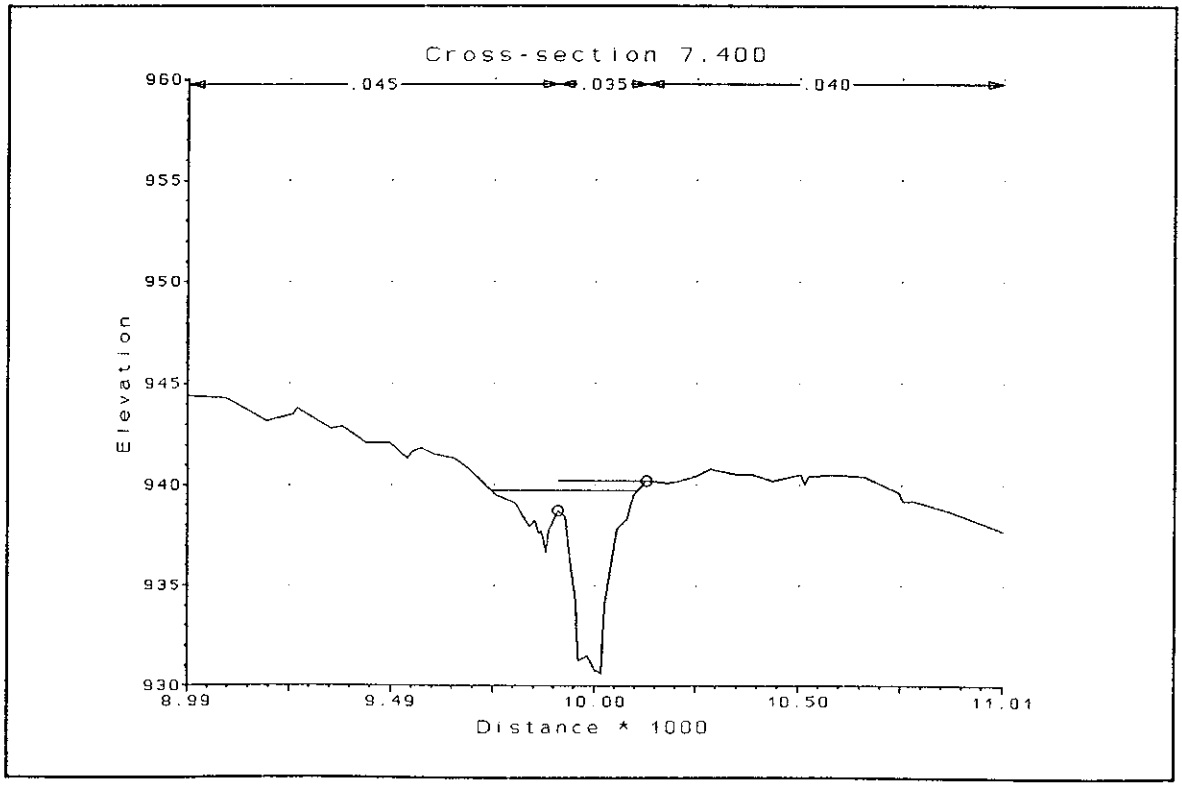
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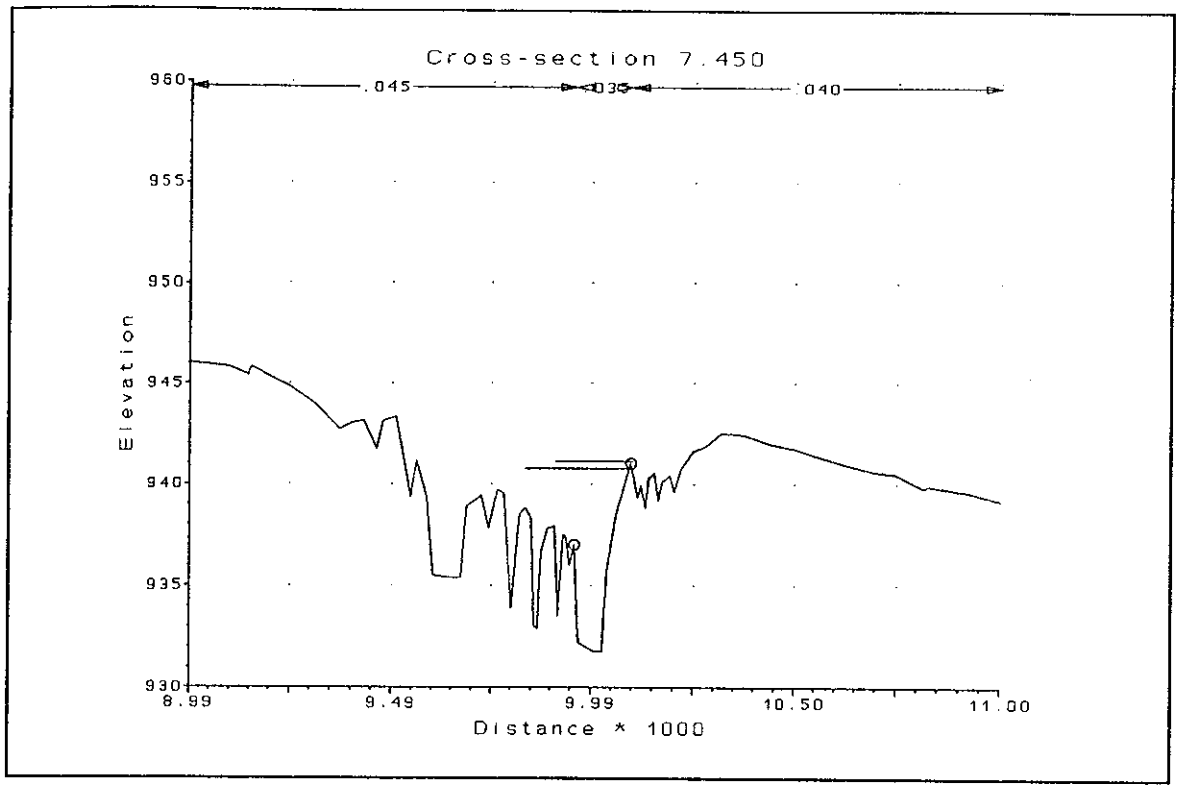
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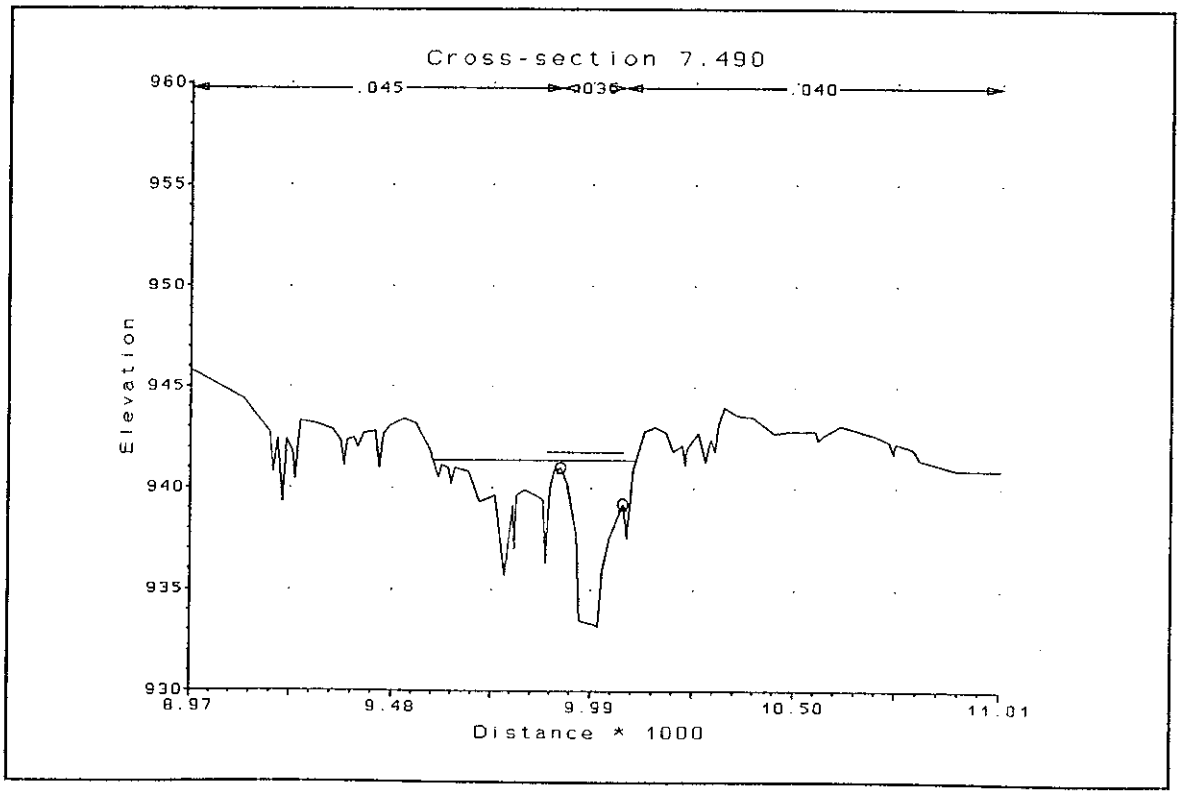
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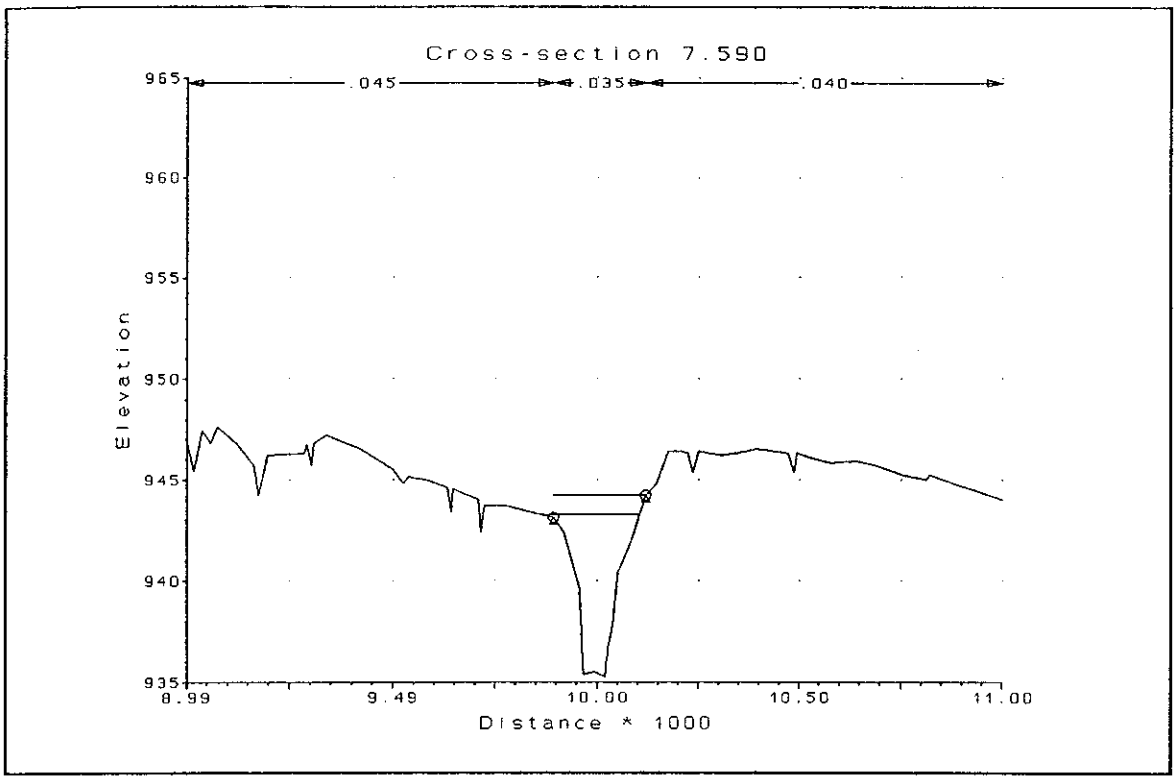
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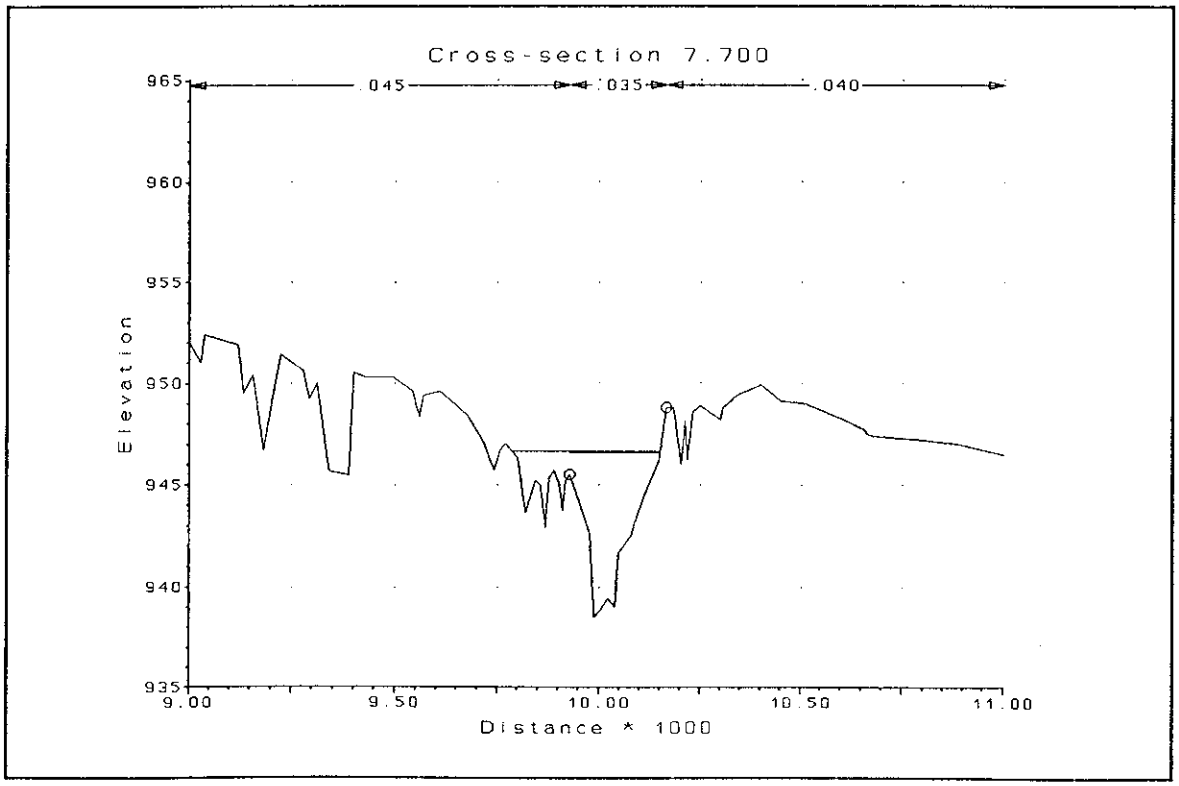
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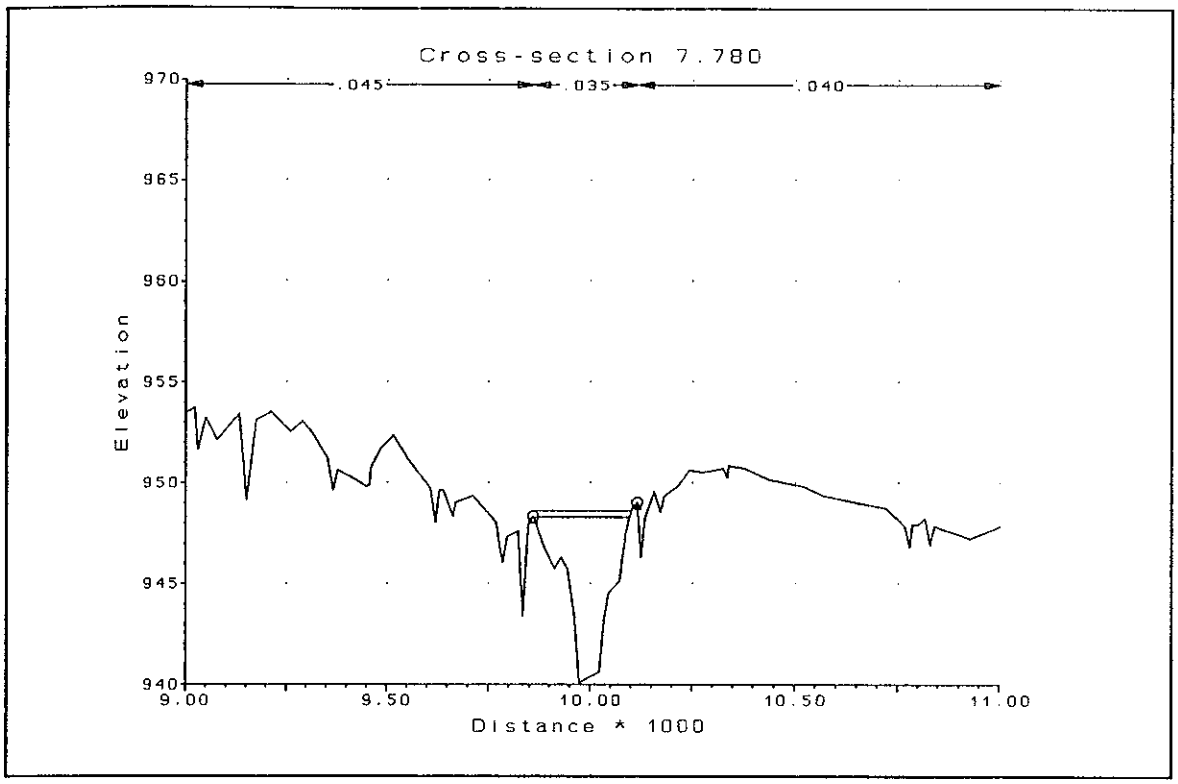
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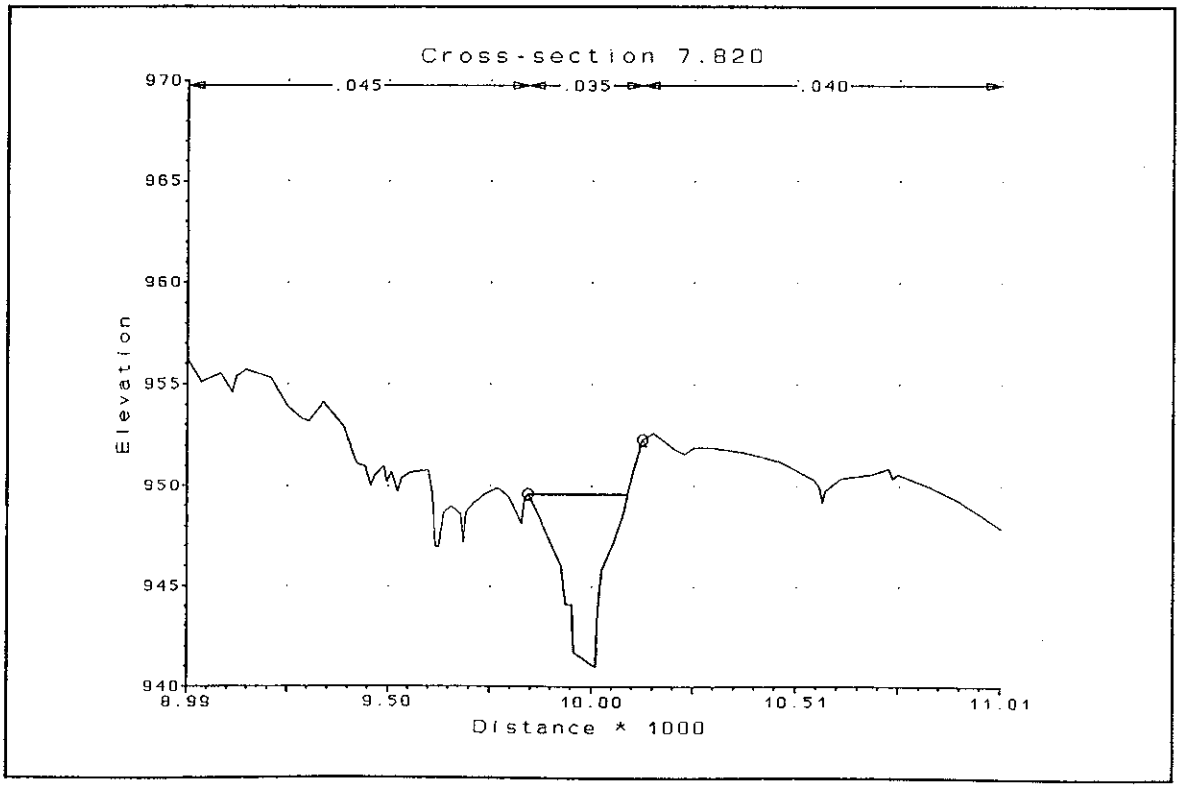
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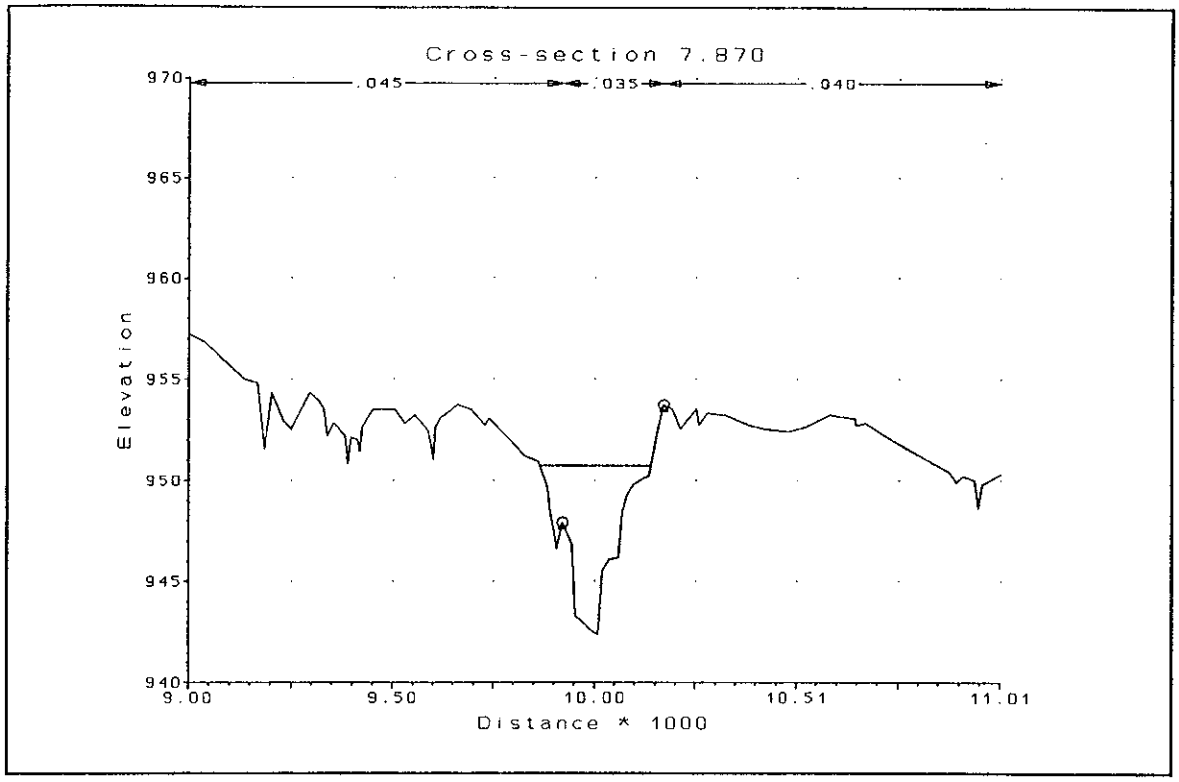
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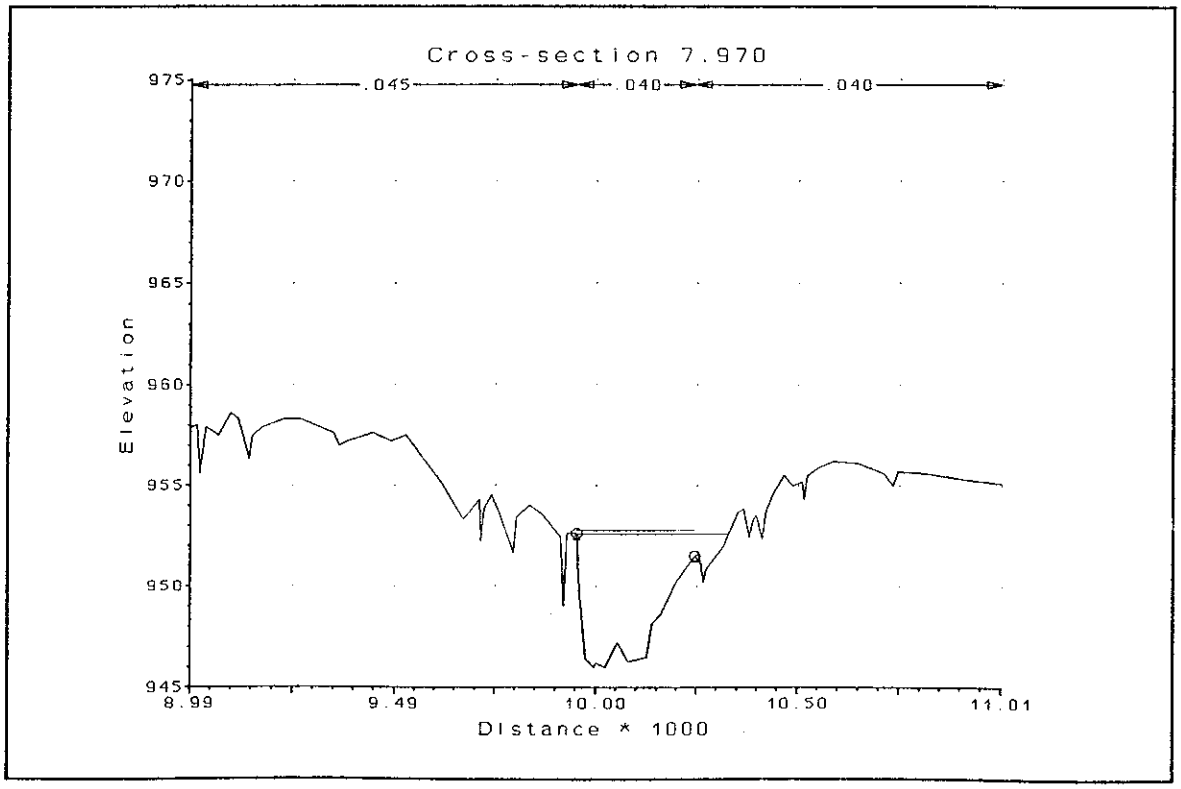
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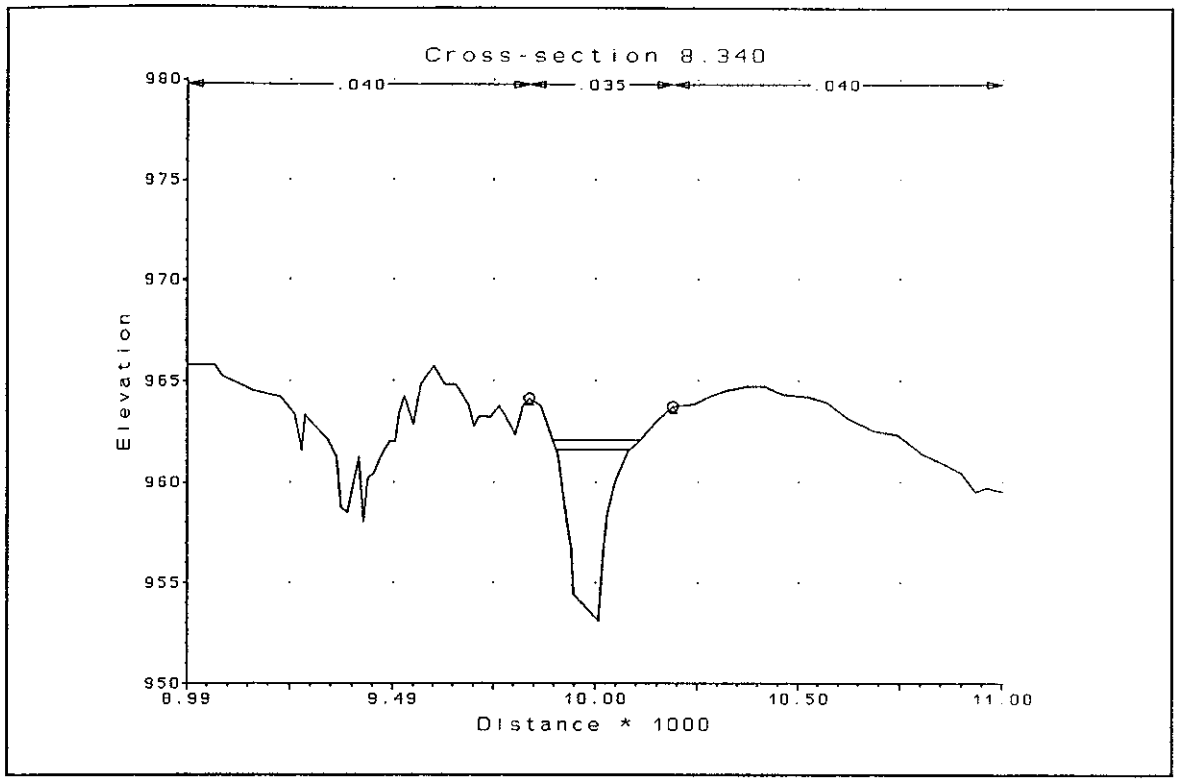
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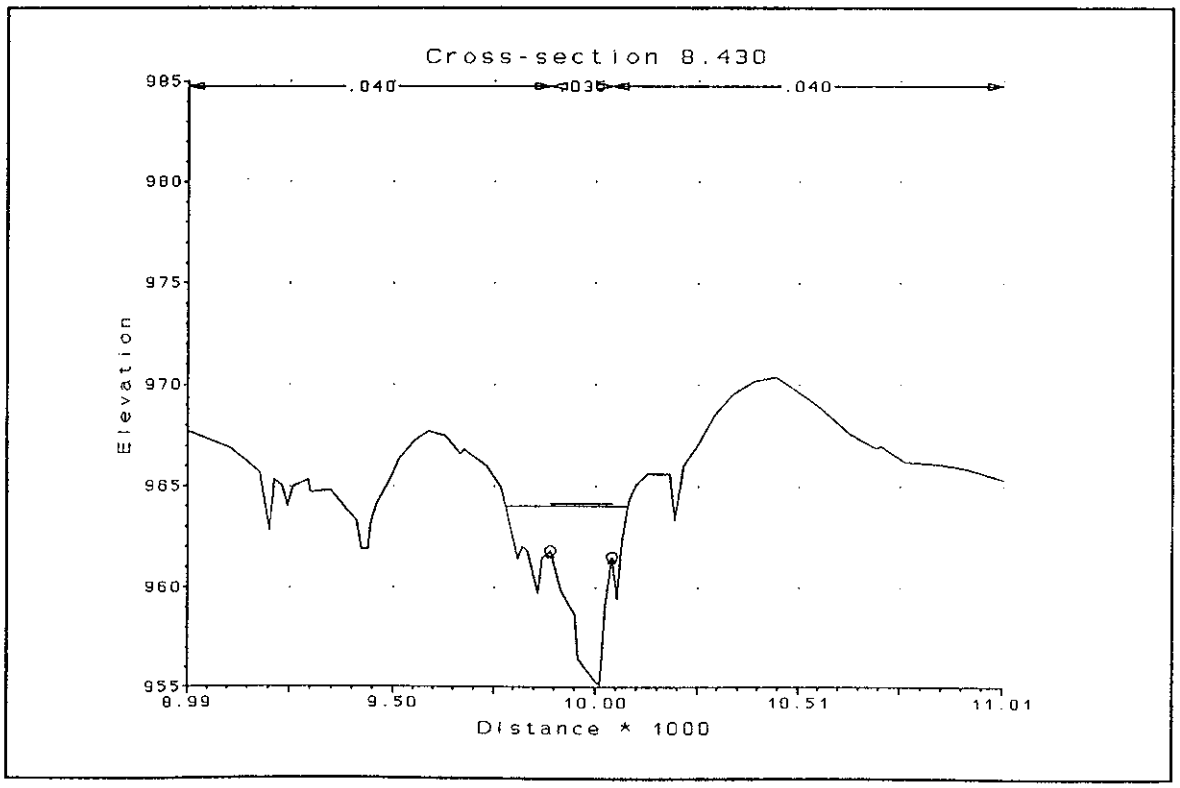
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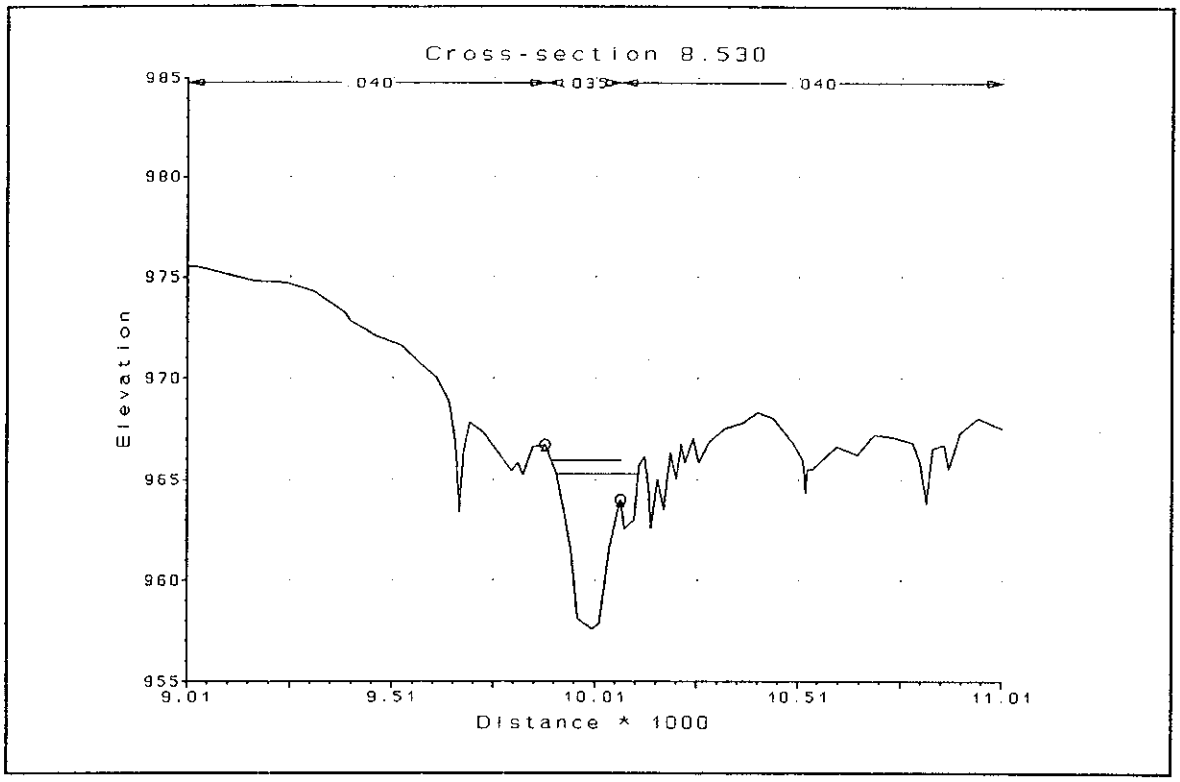
Distance * 1000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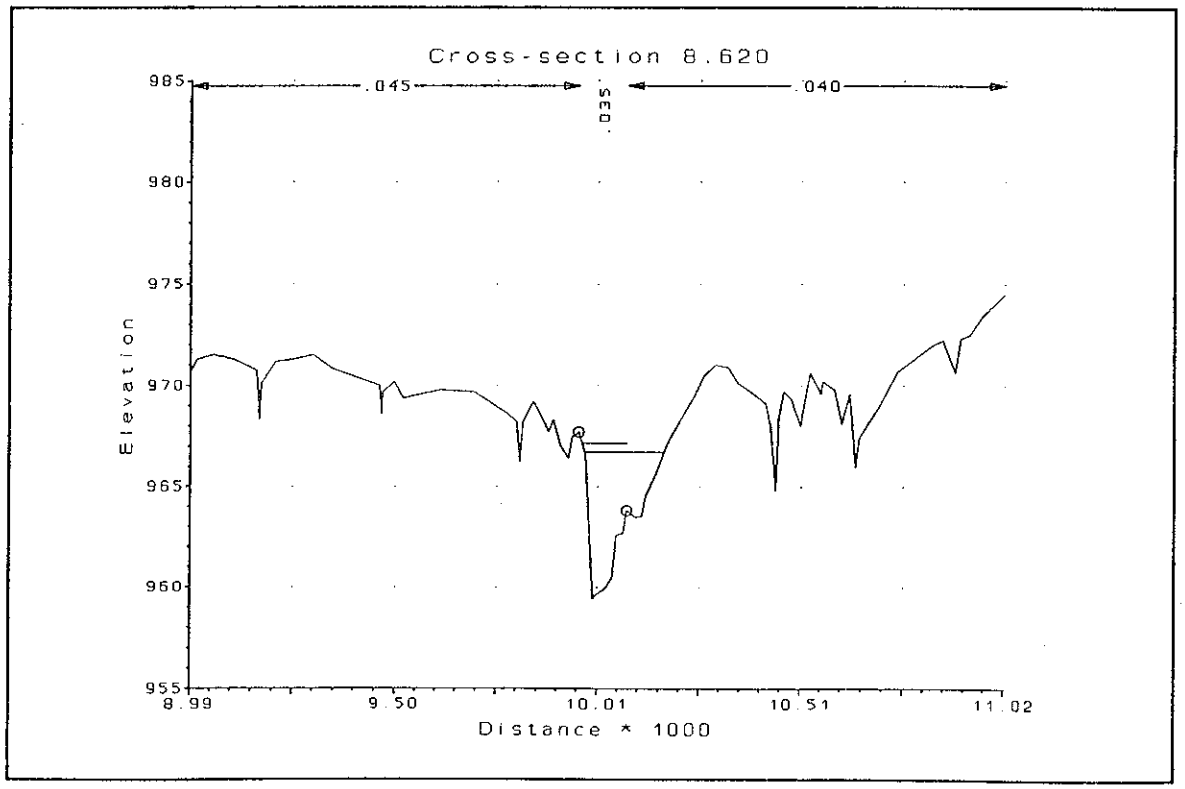
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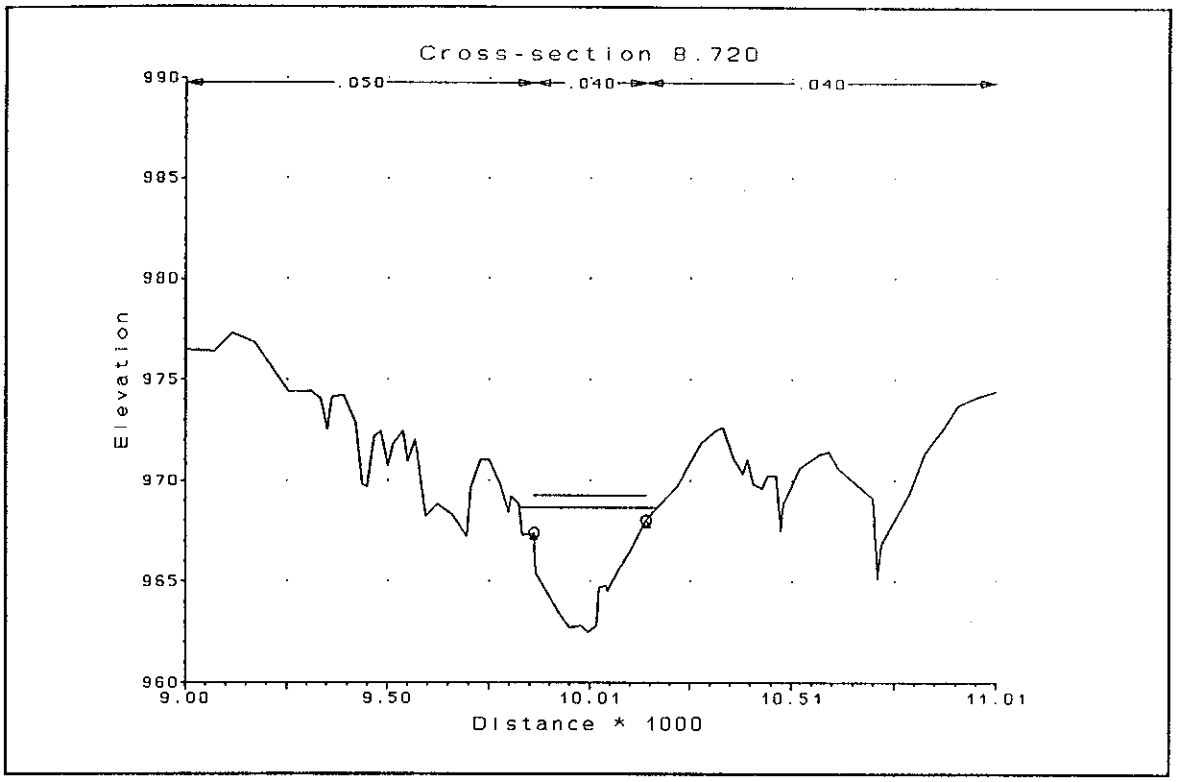
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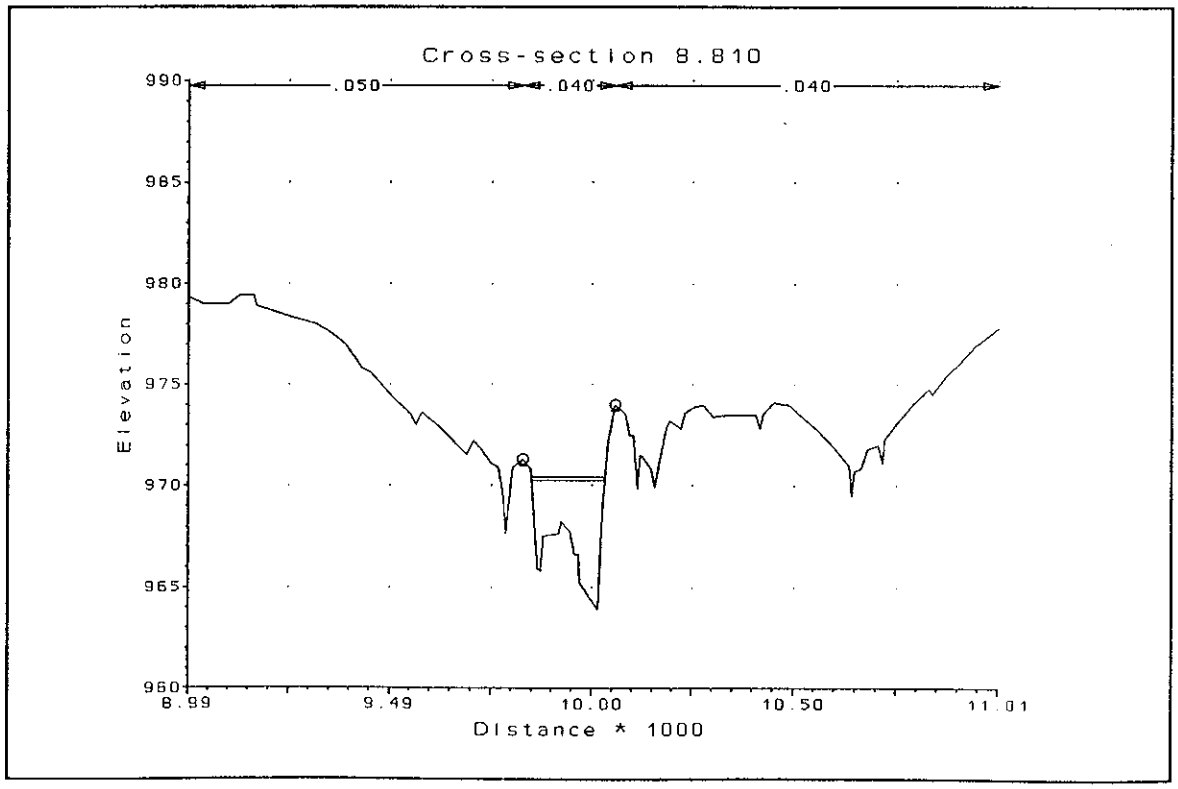
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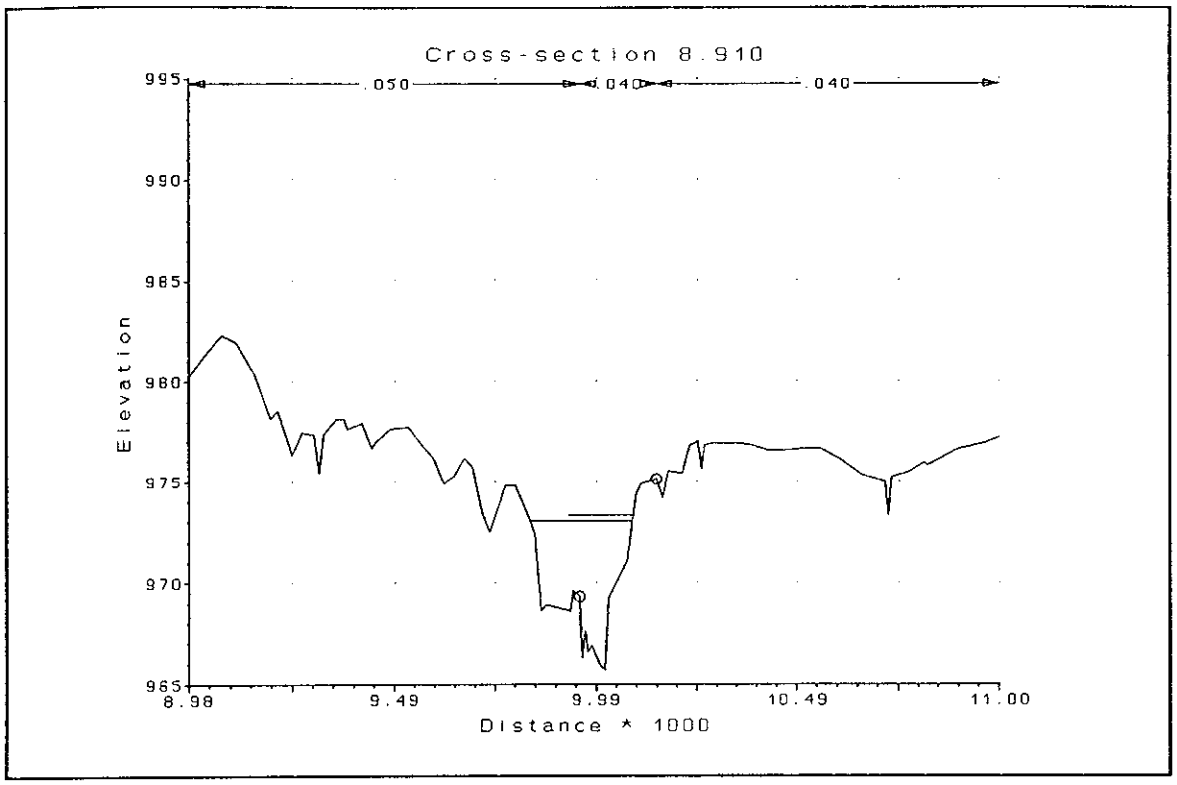
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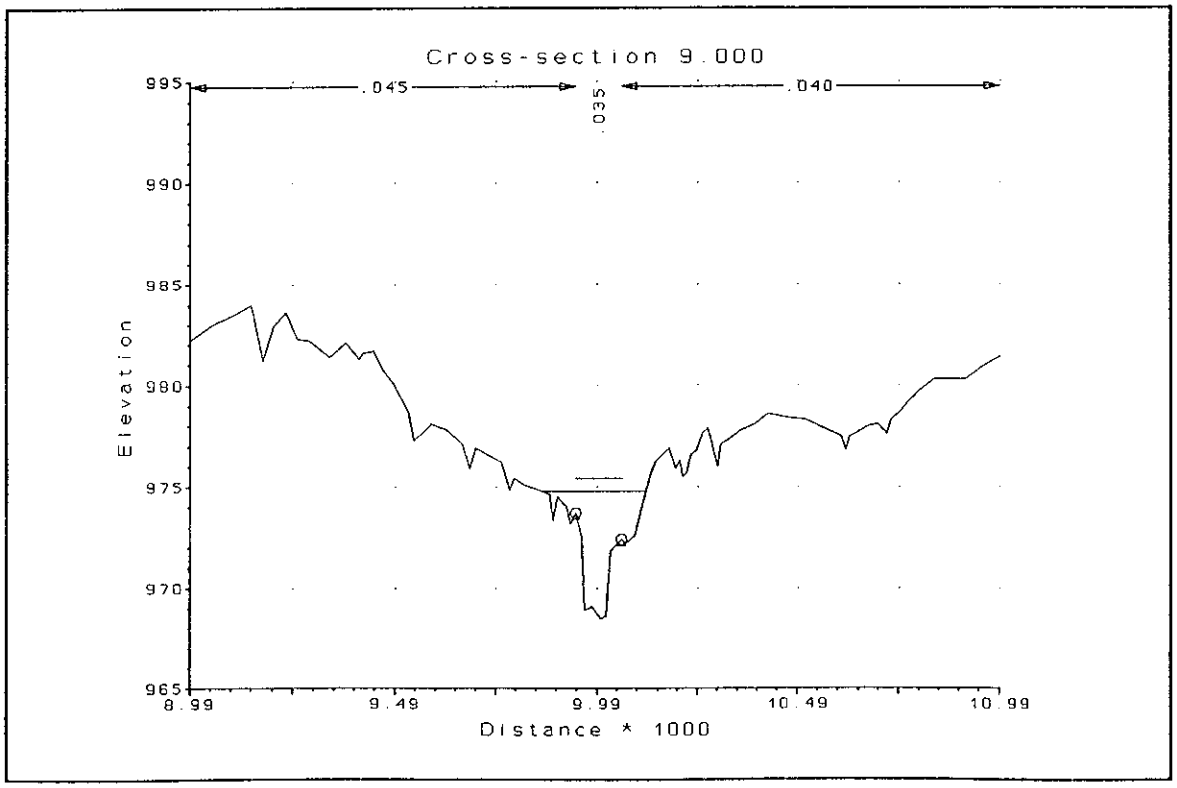
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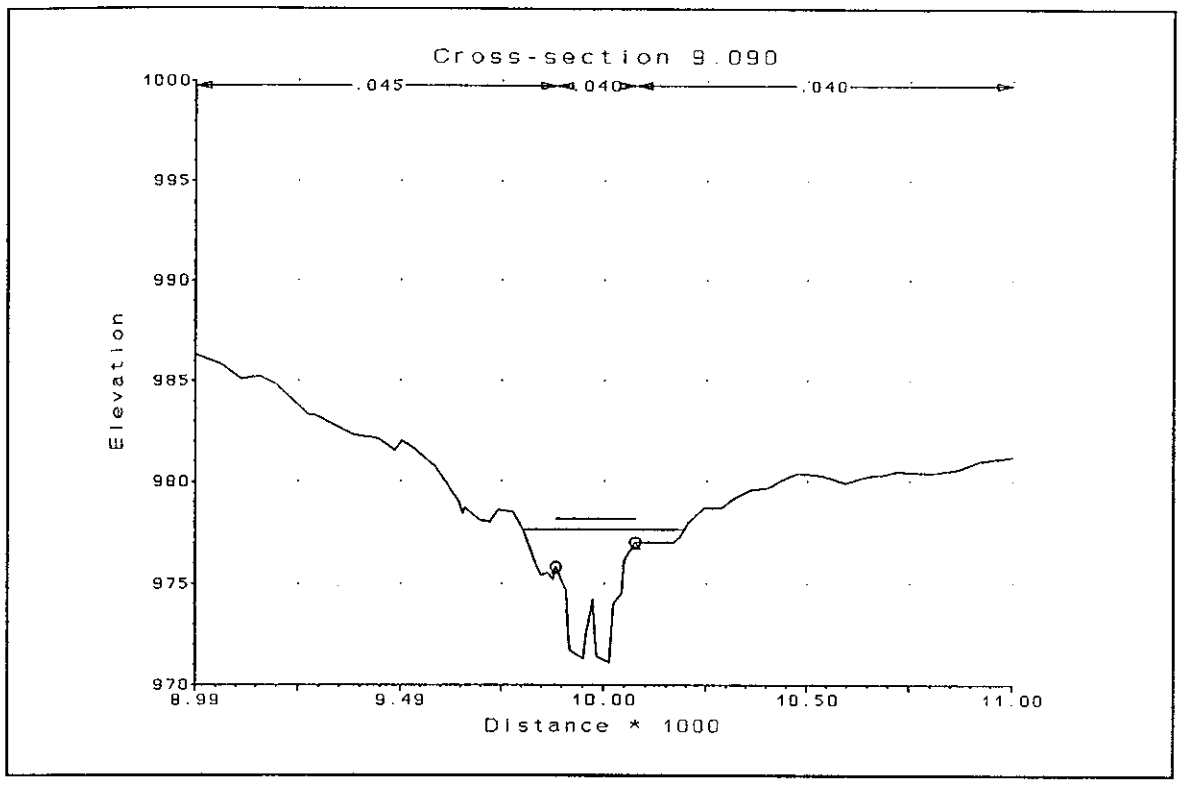
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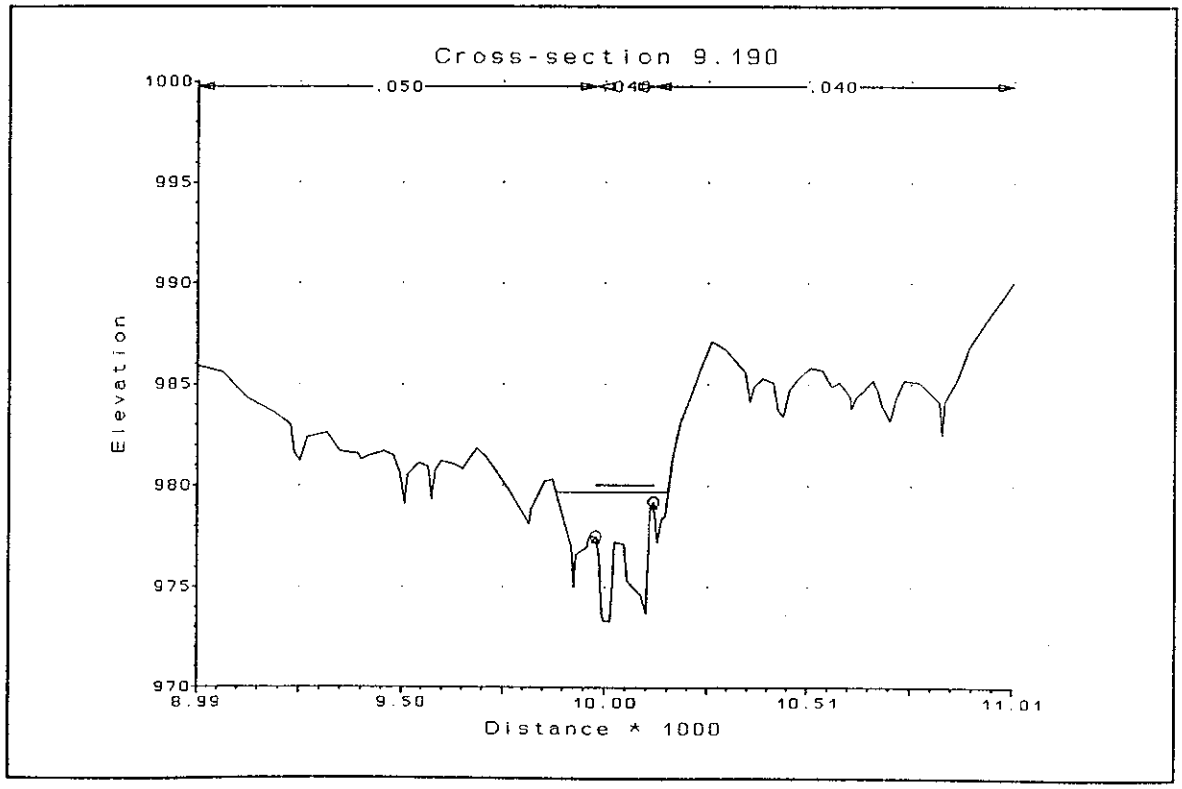
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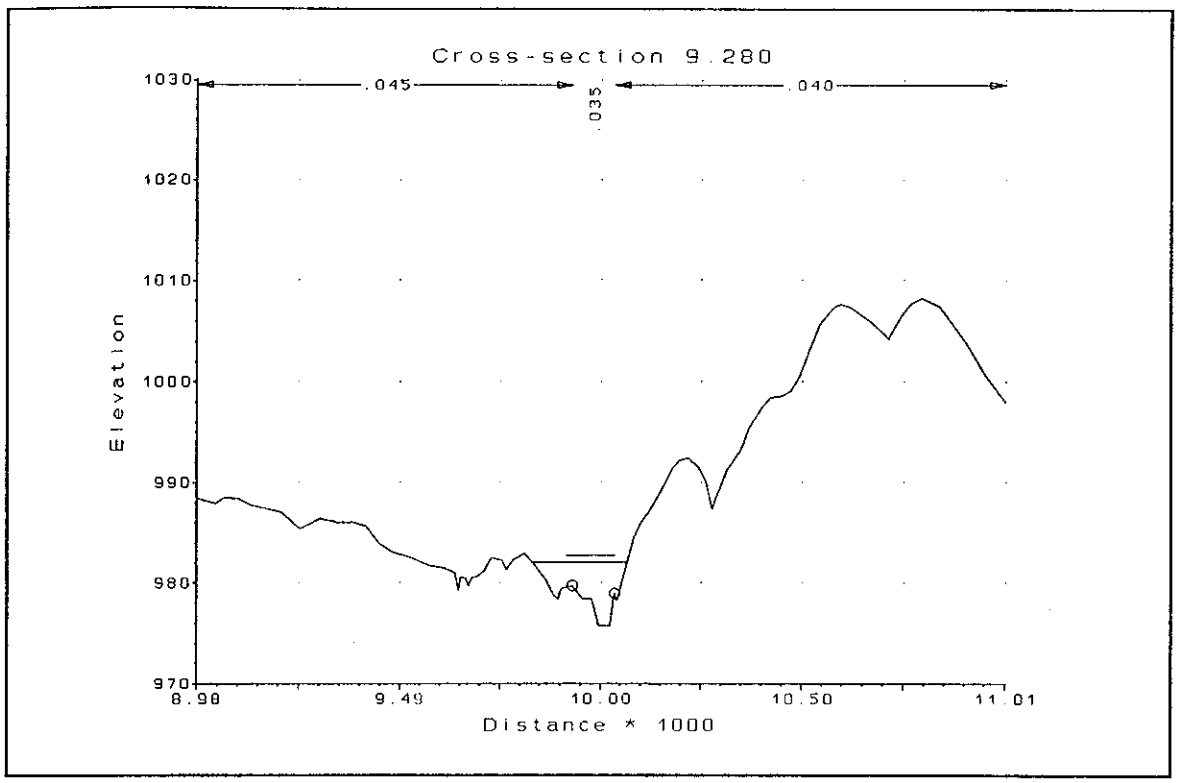
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10.50
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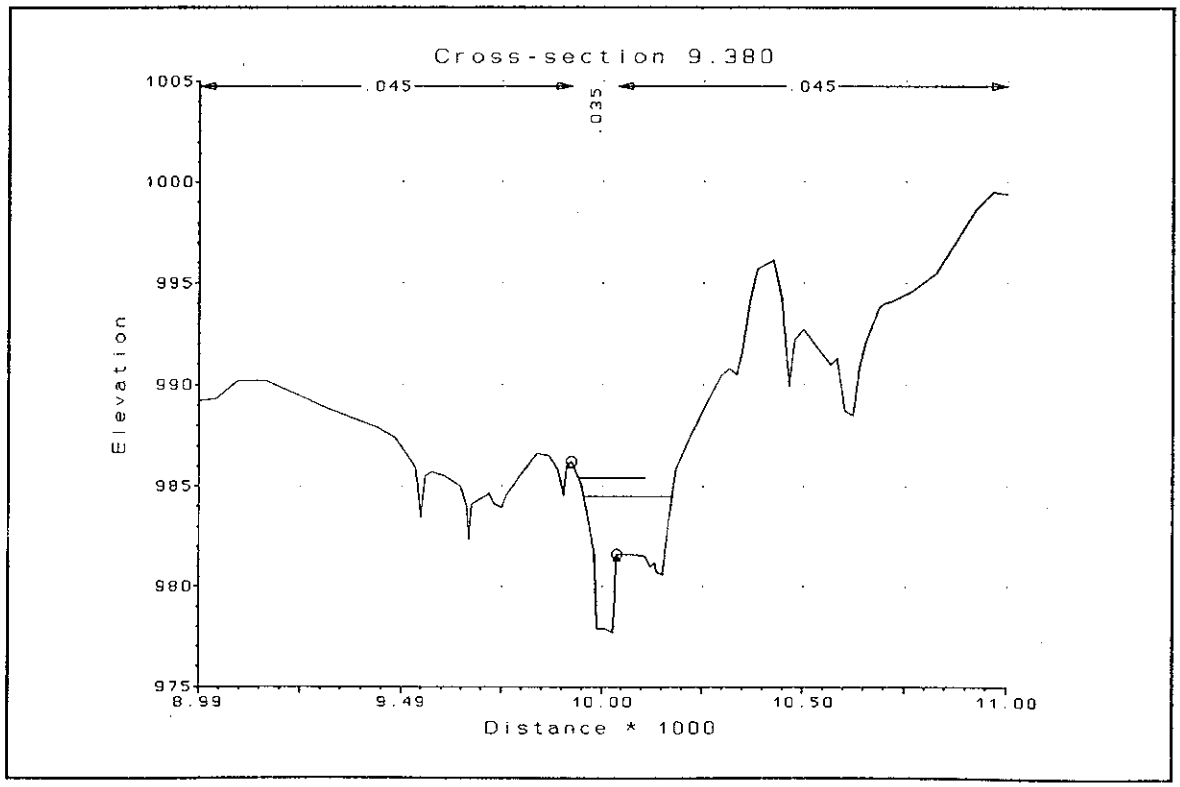
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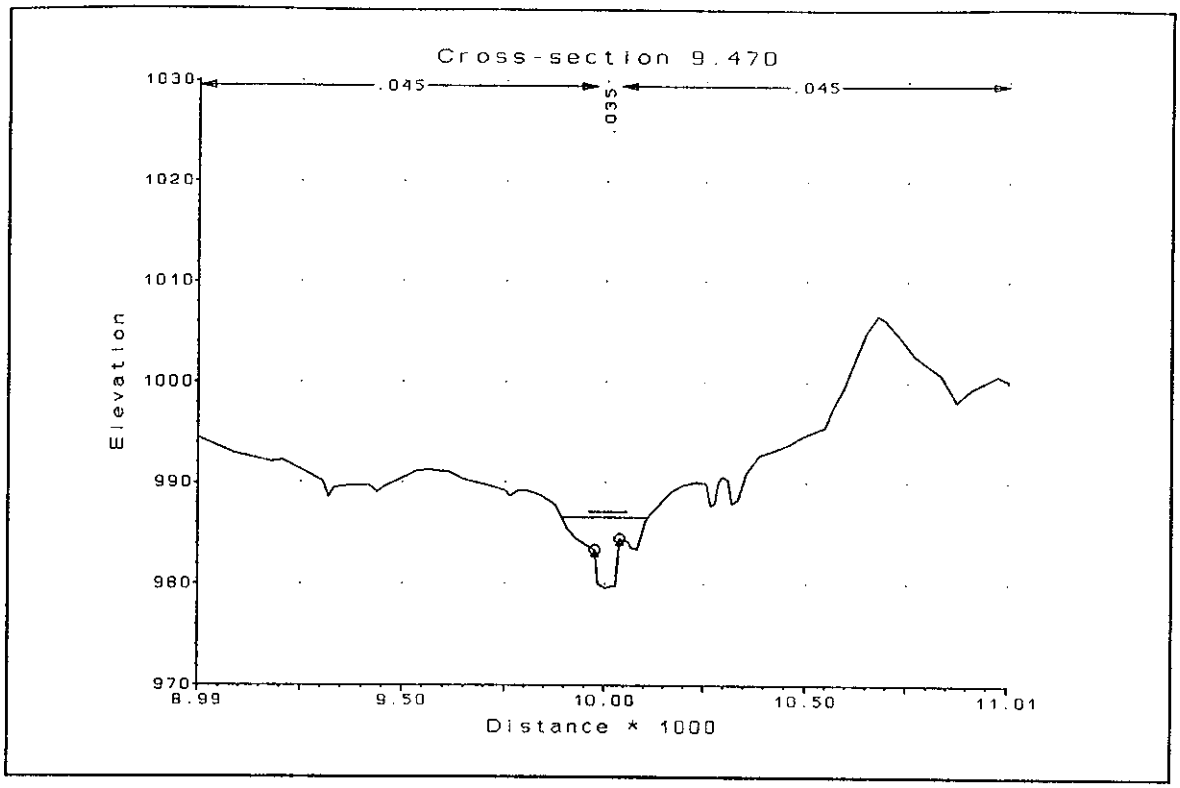
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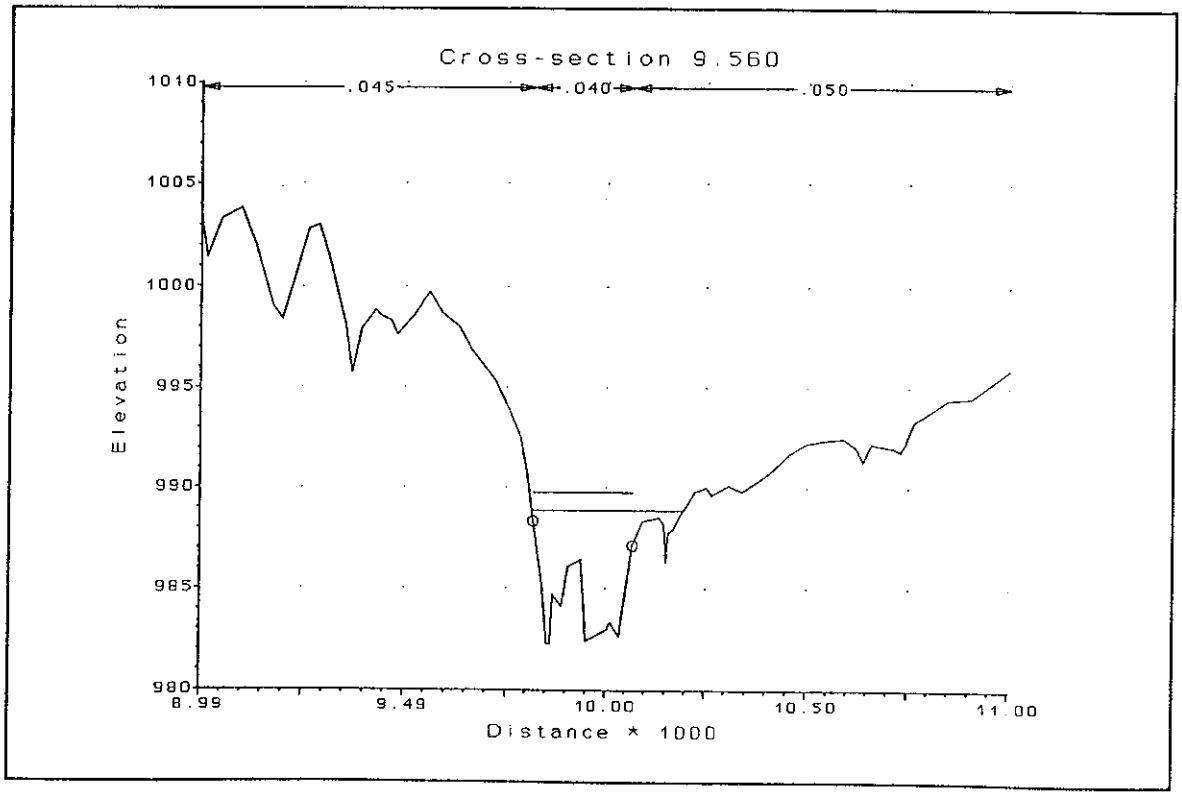
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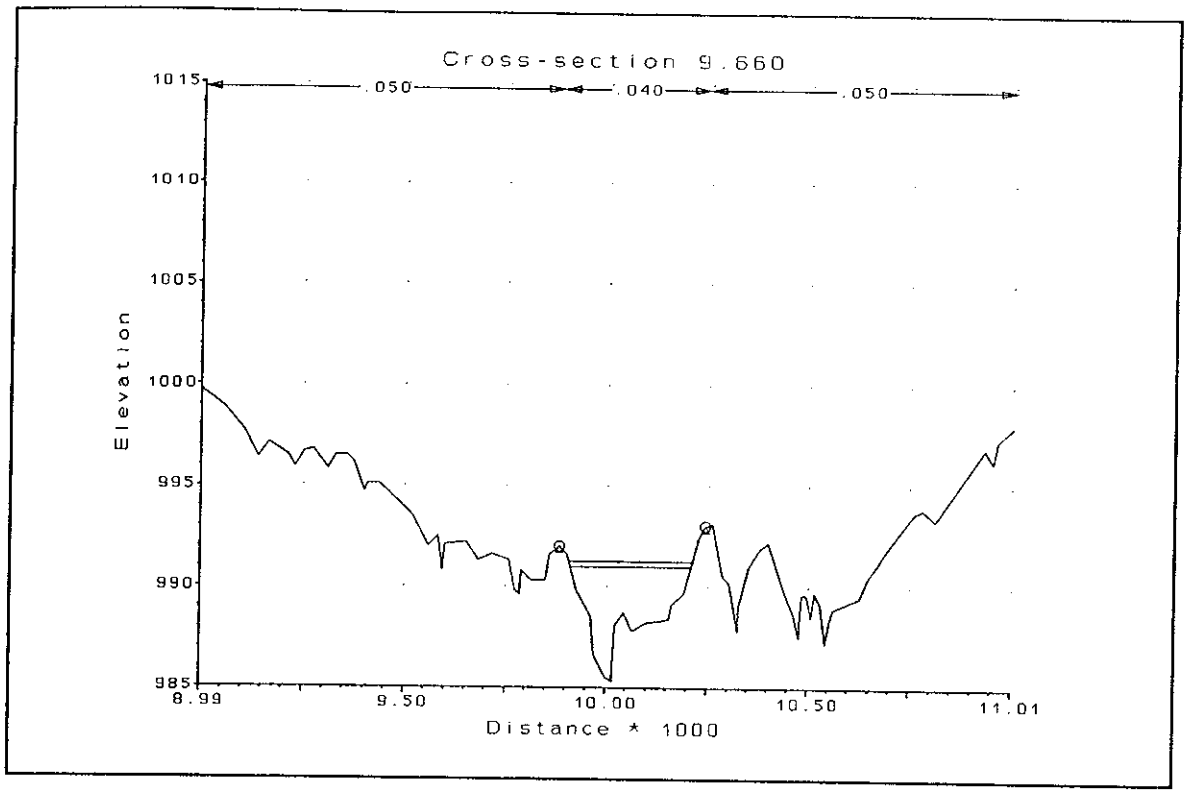
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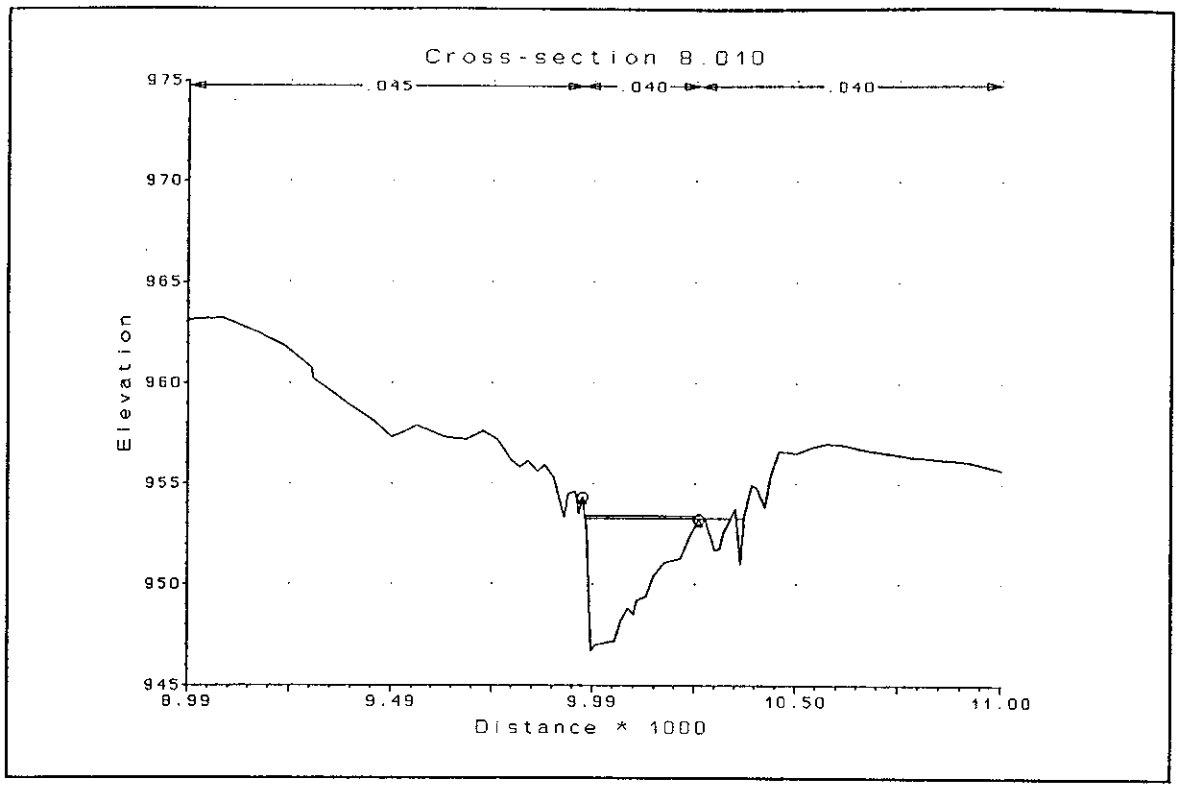
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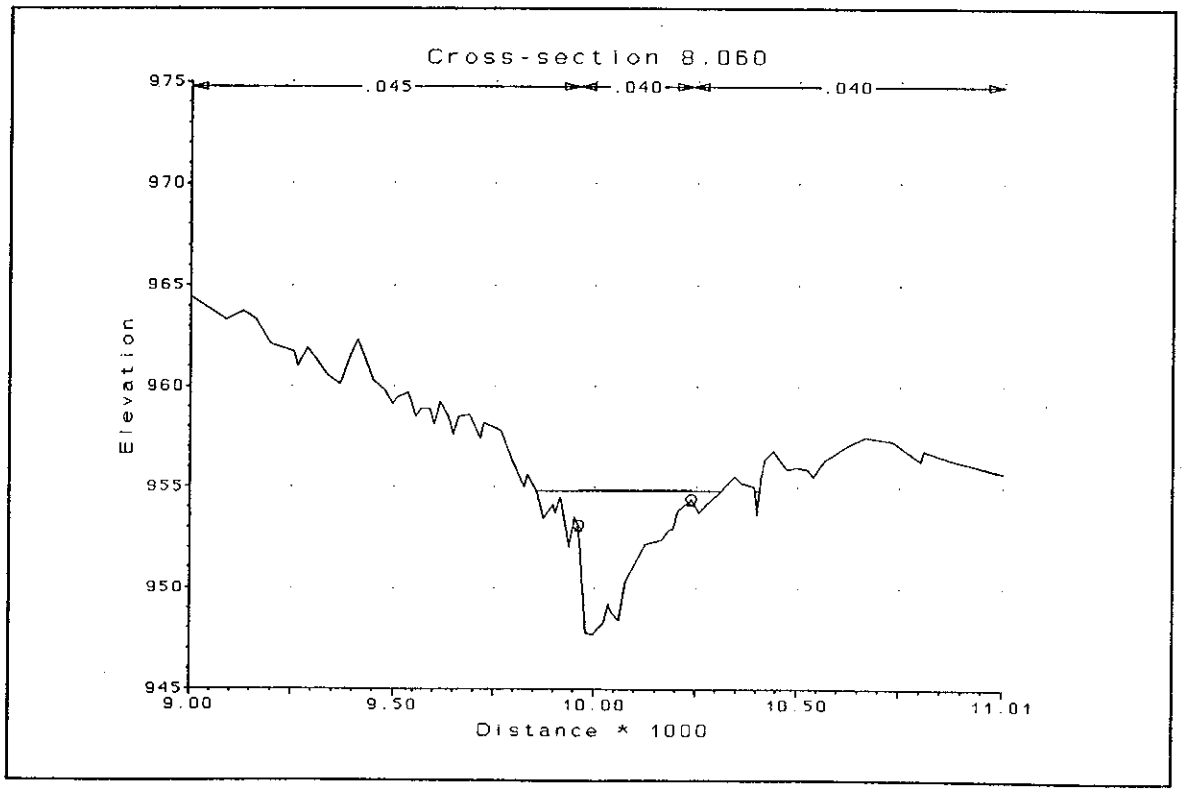
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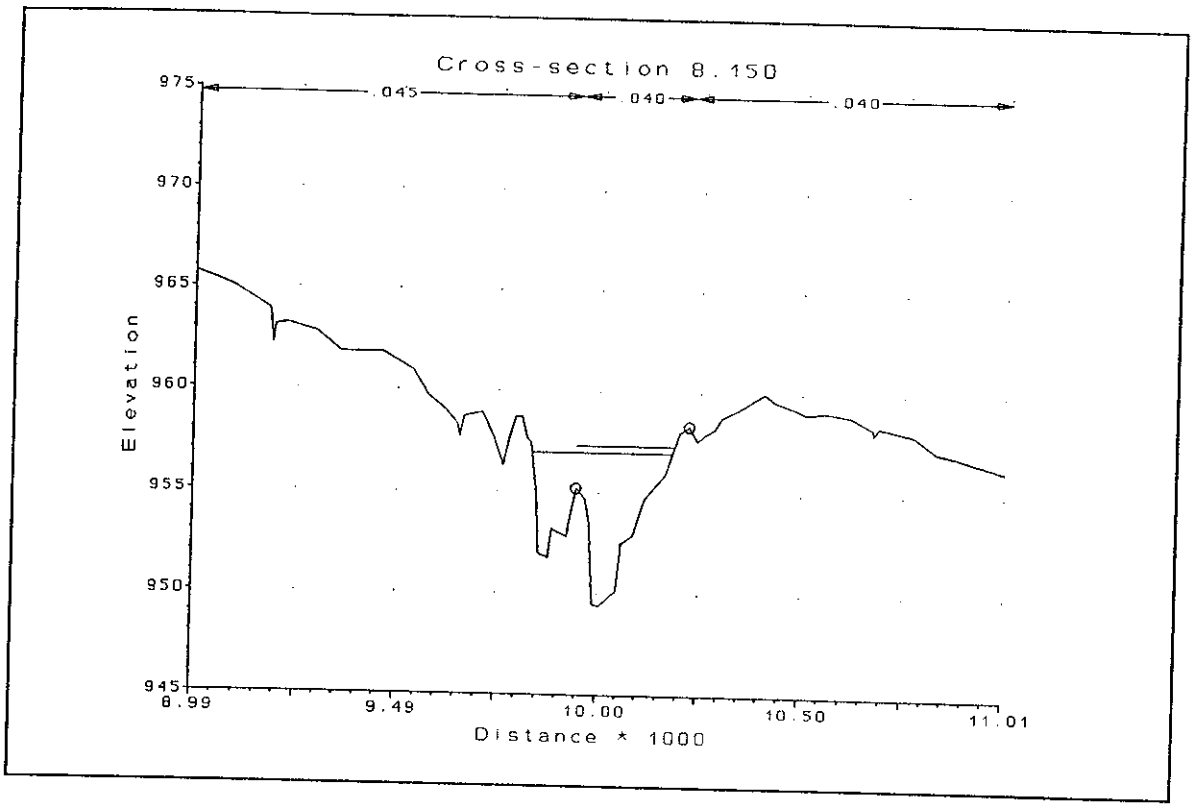
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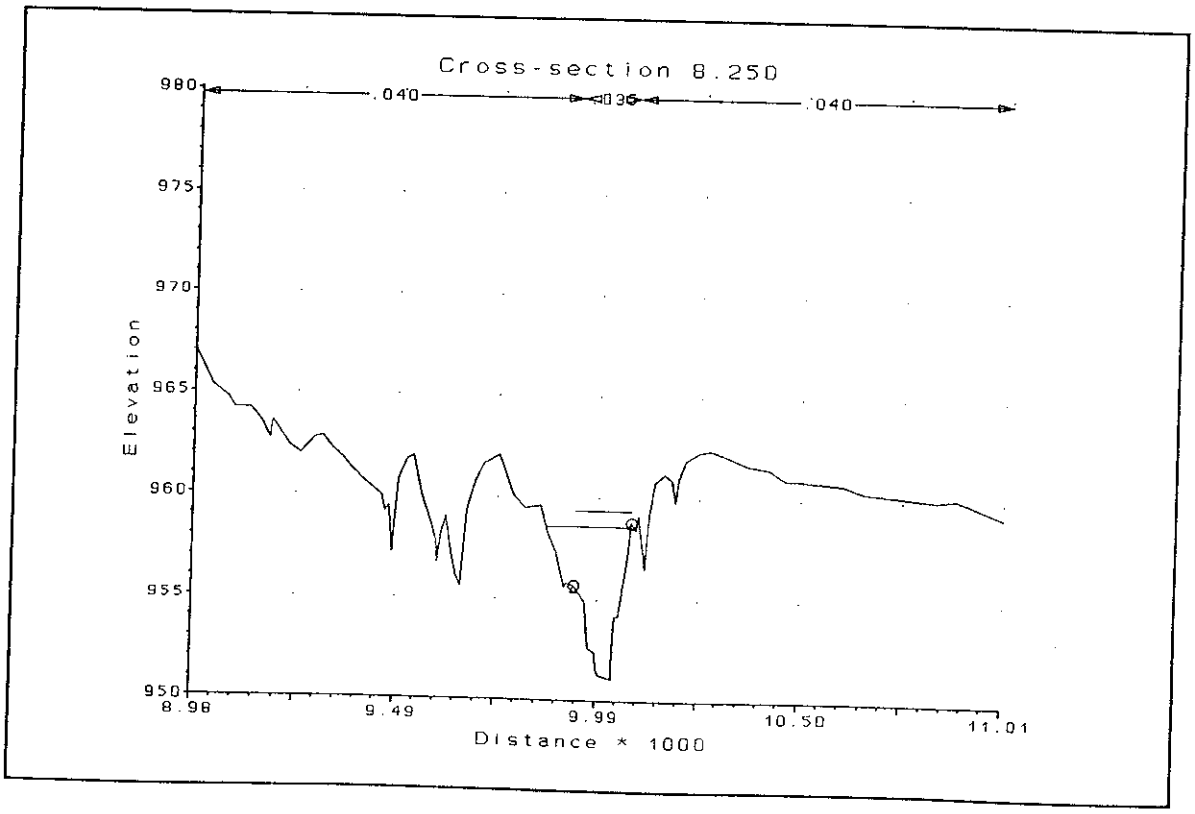
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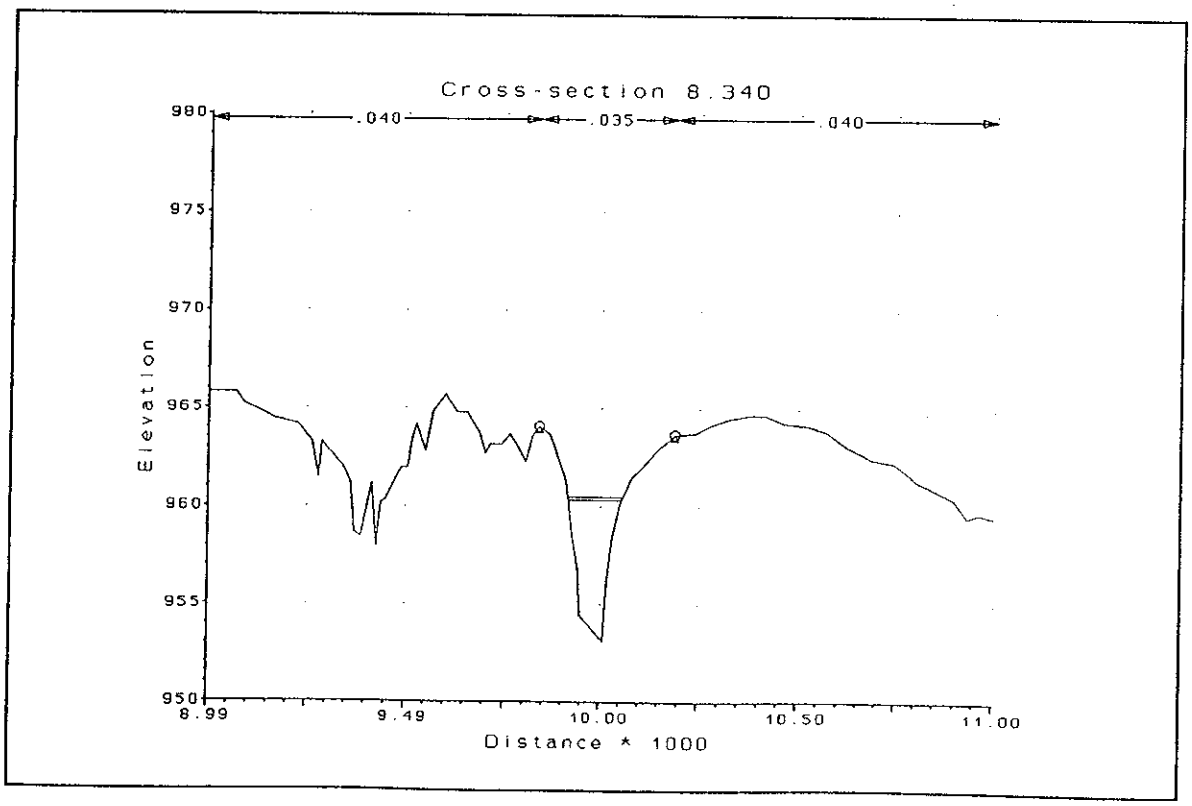
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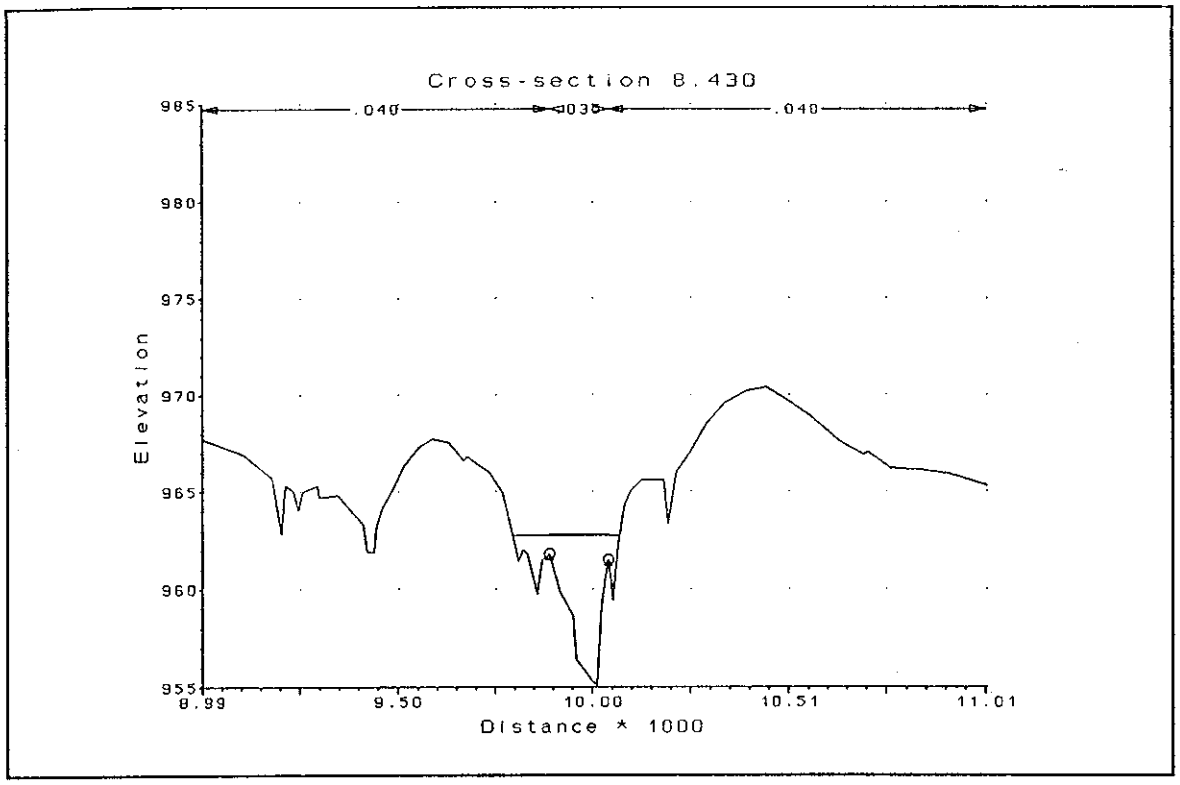
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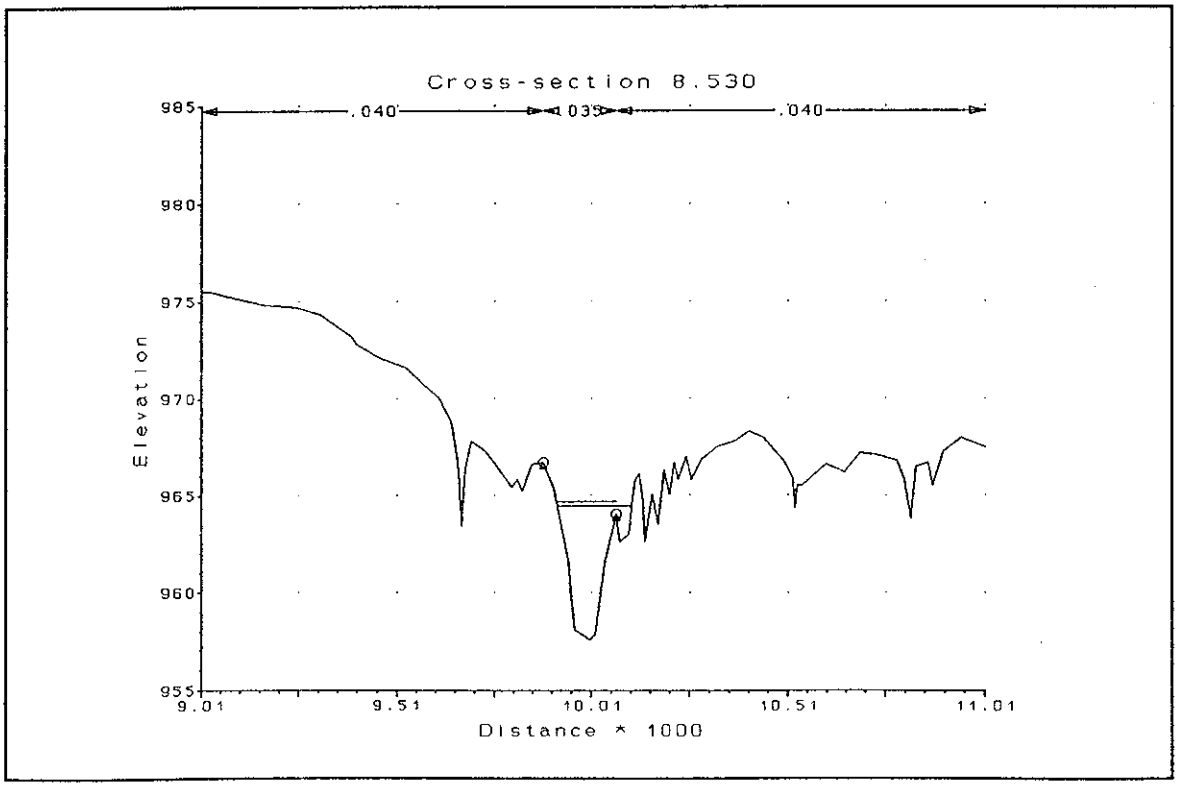
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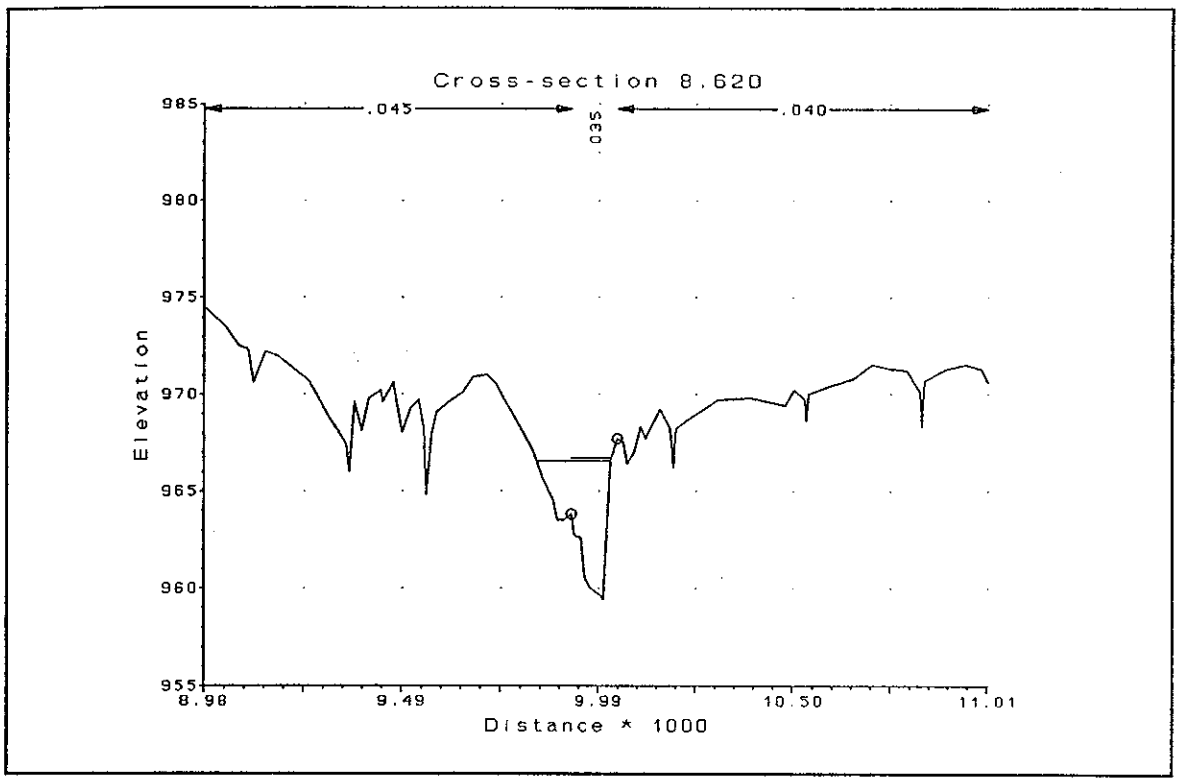
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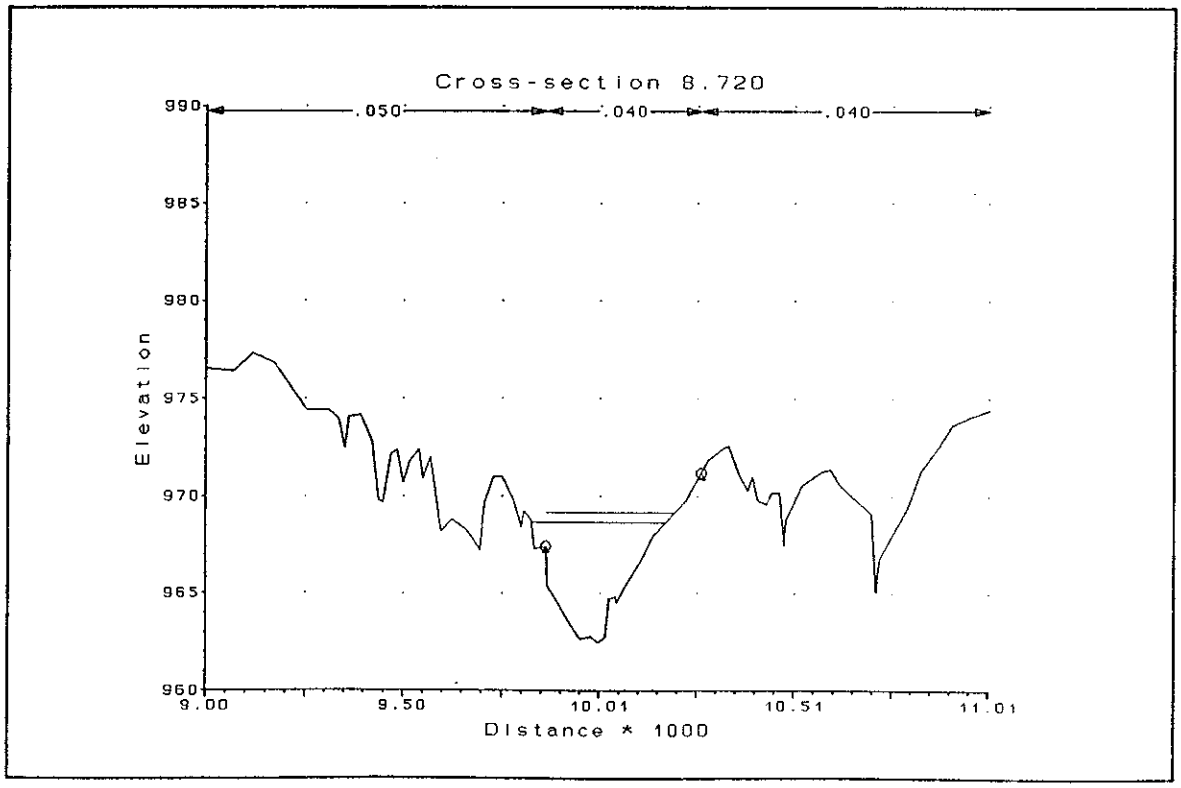
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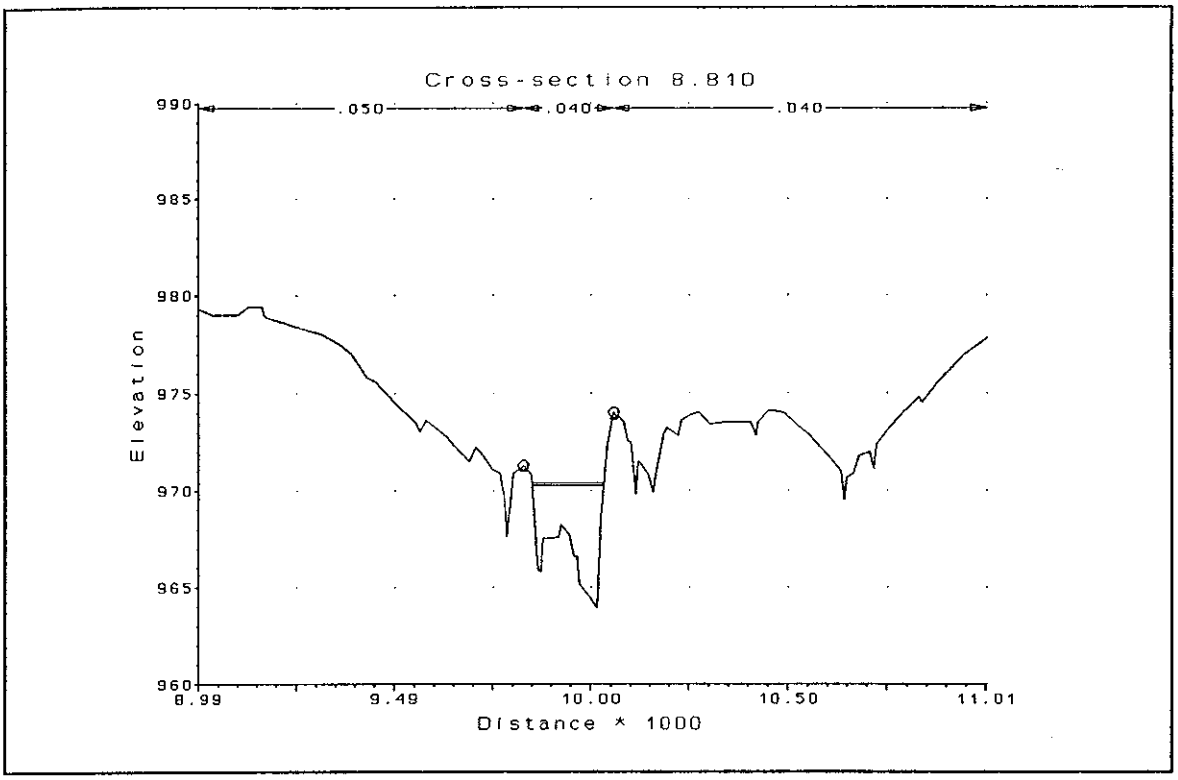
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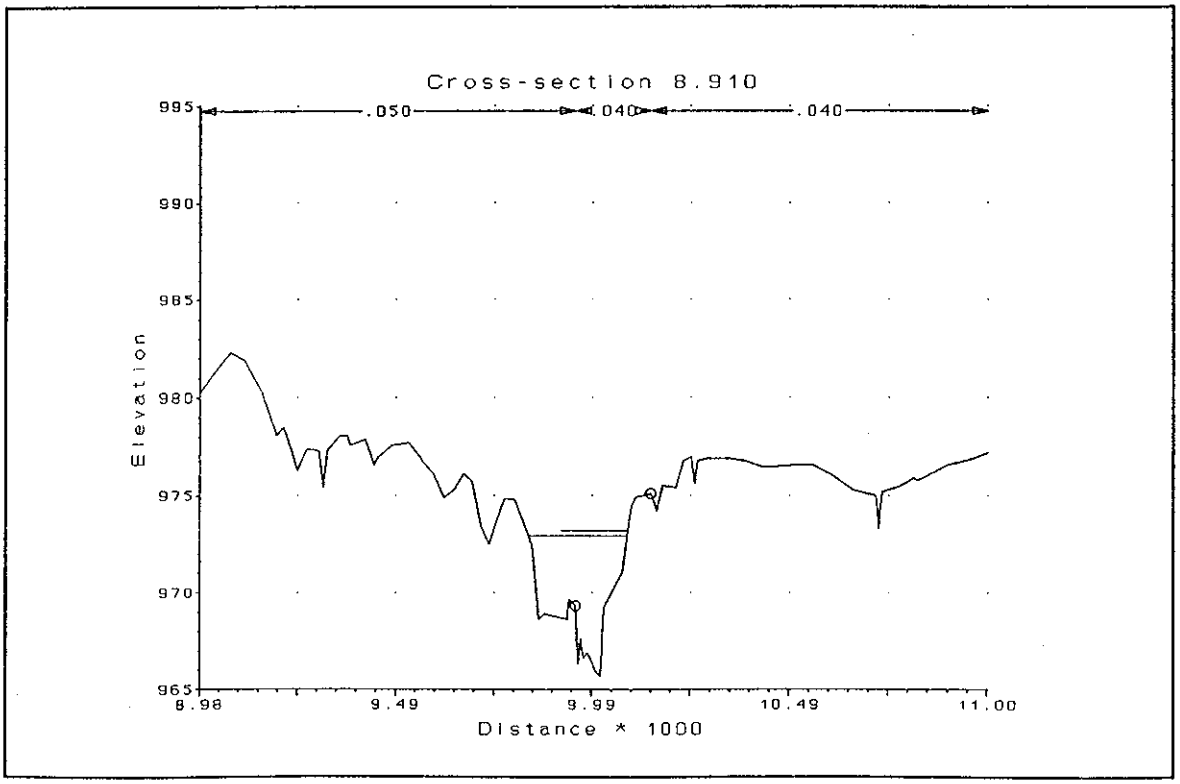
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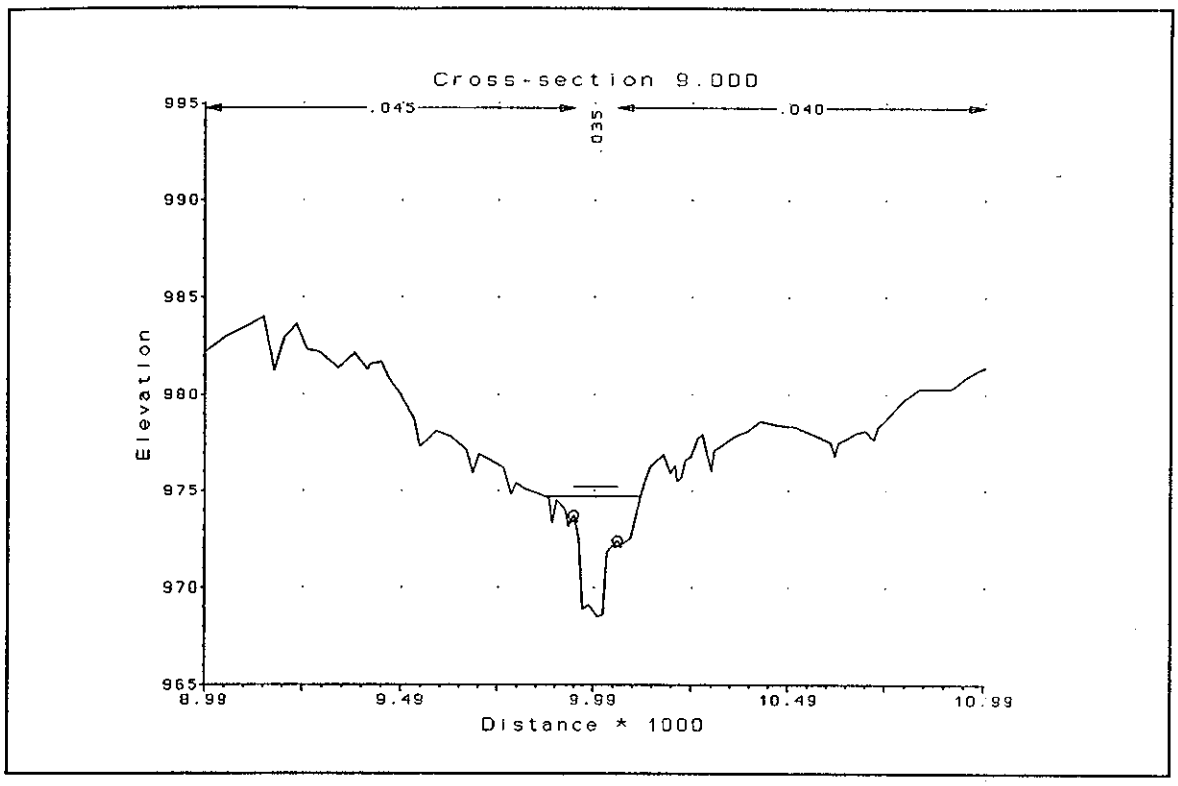
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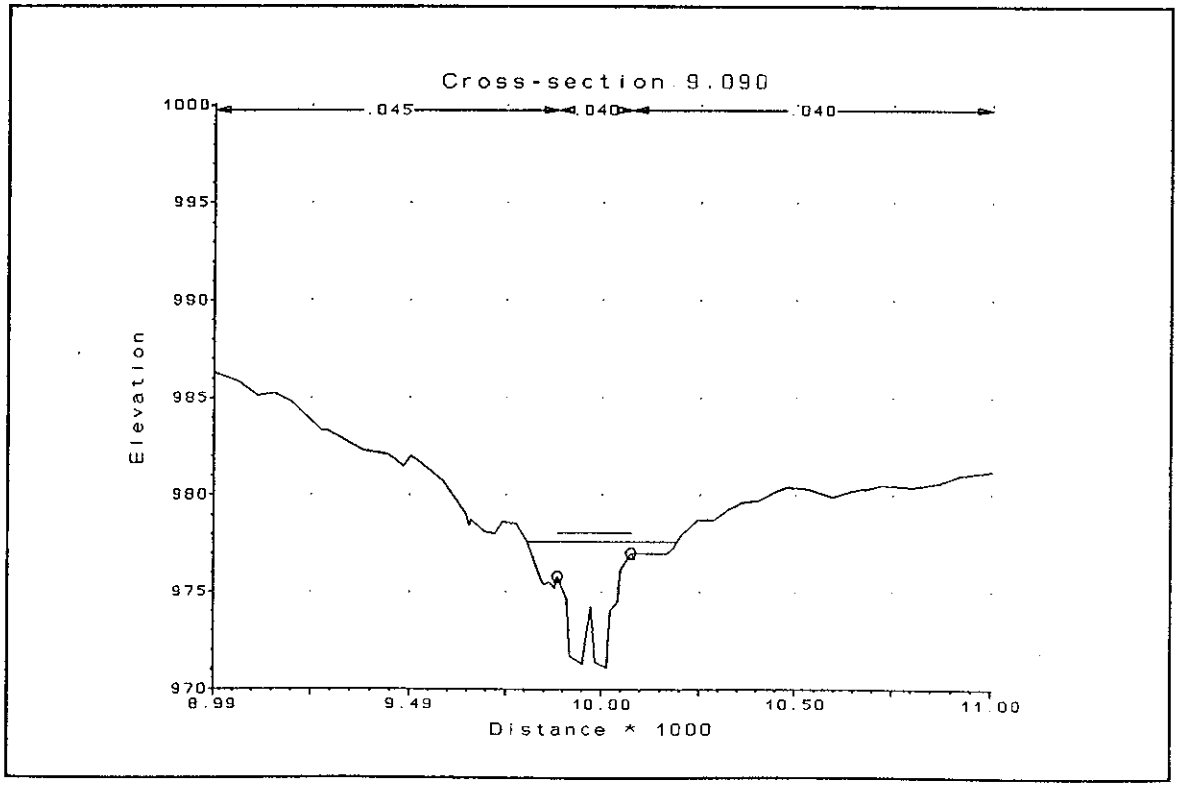
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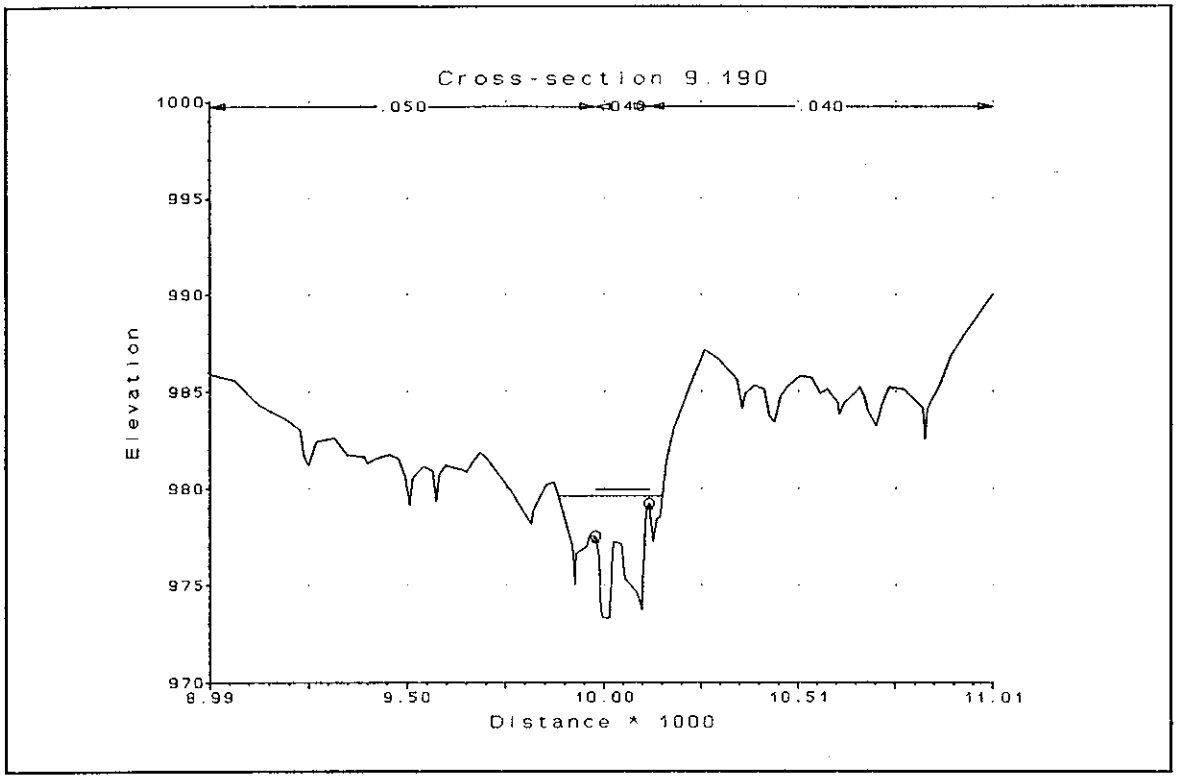
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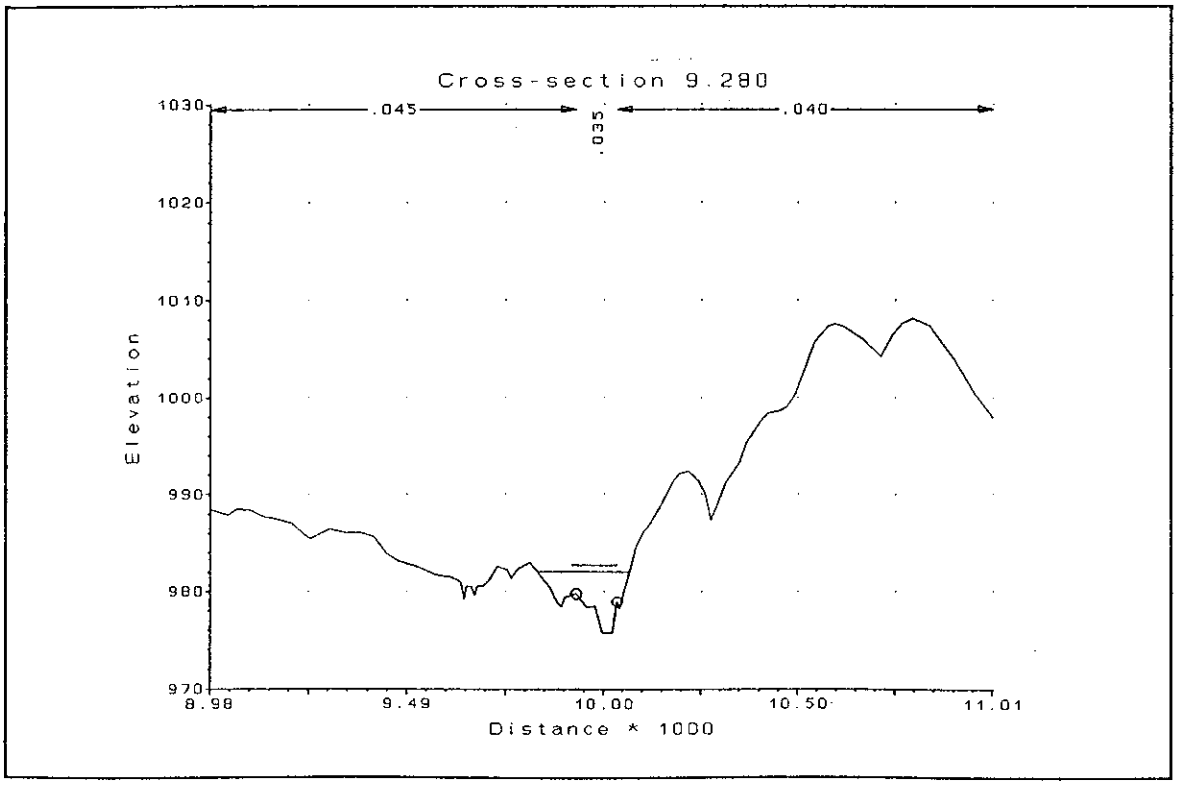
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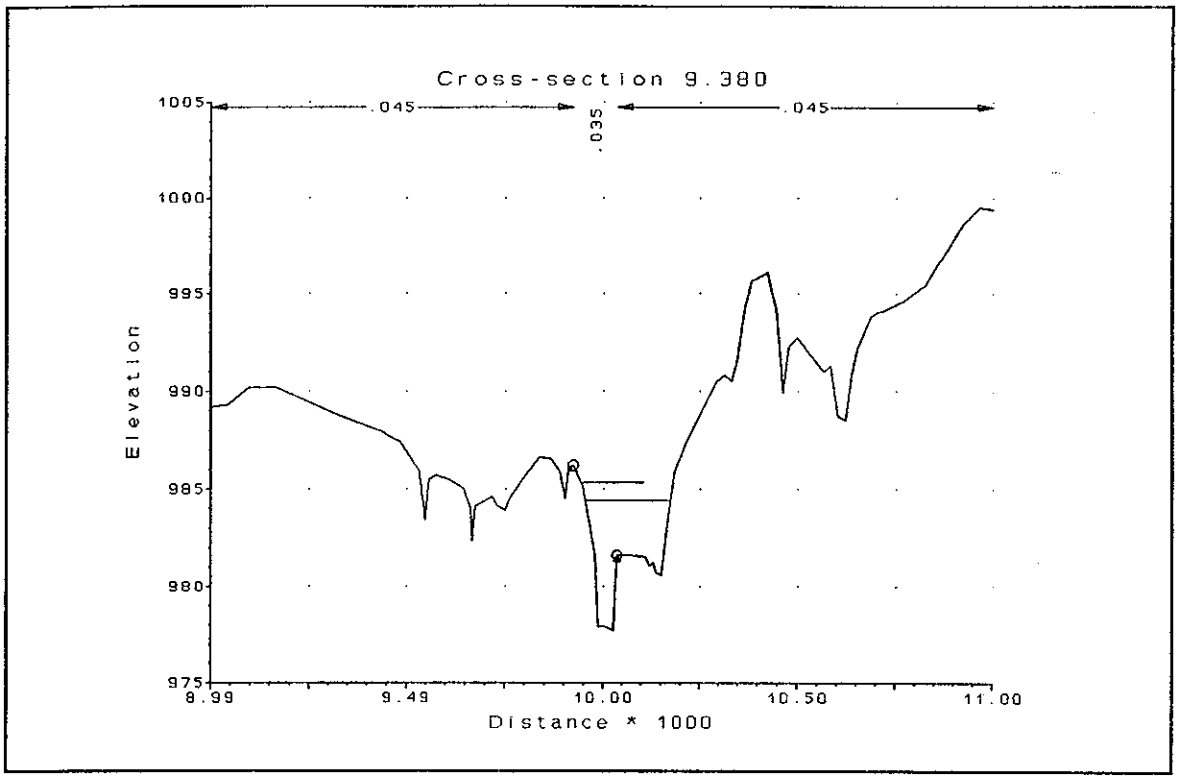
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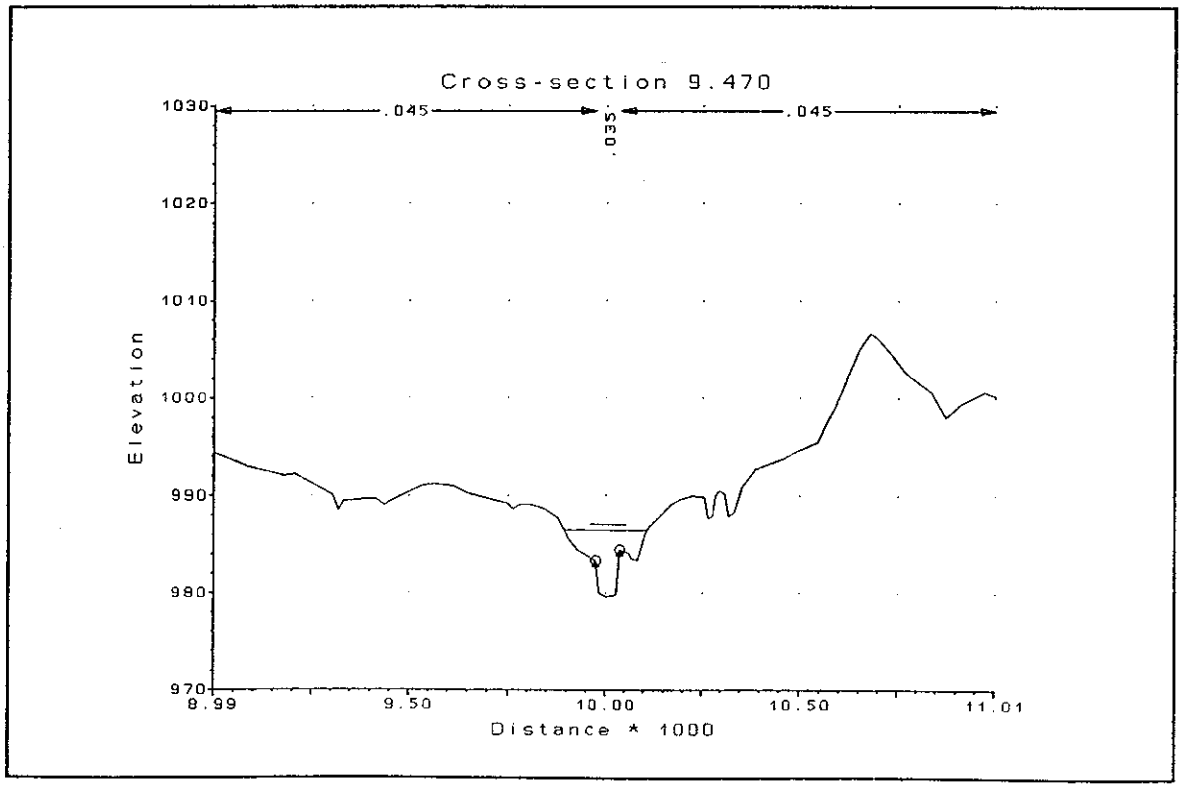
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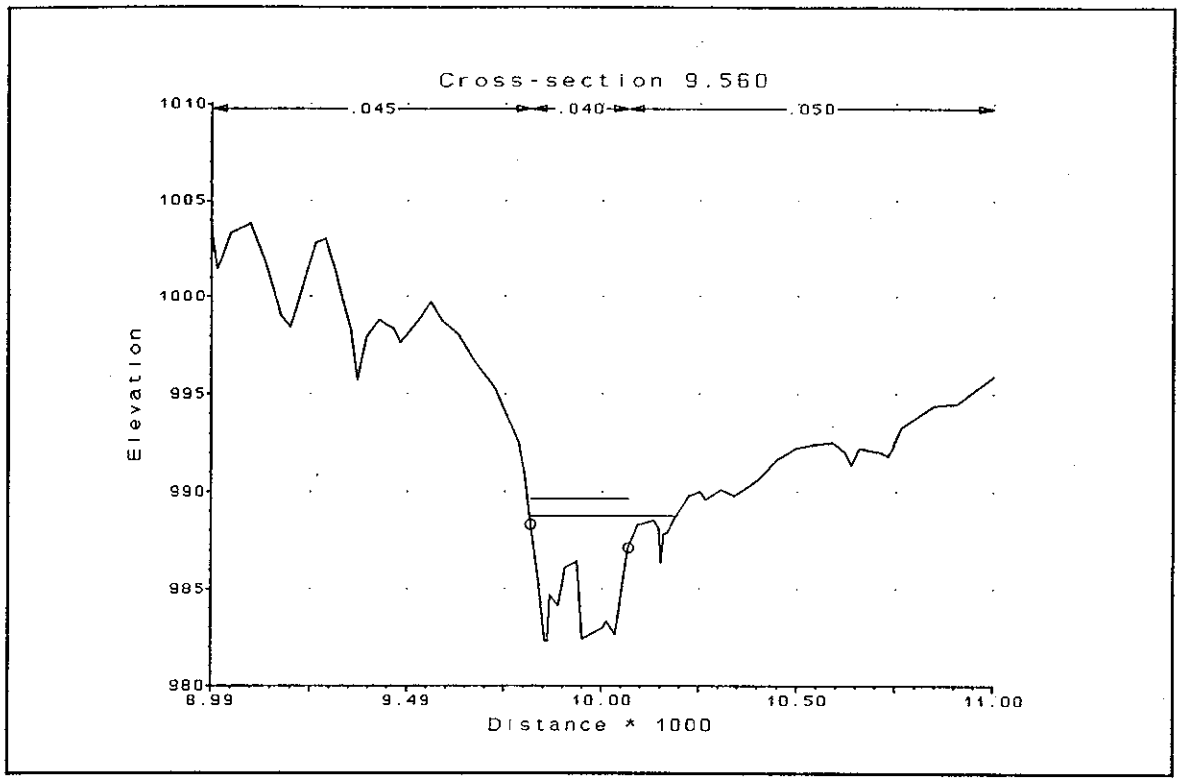
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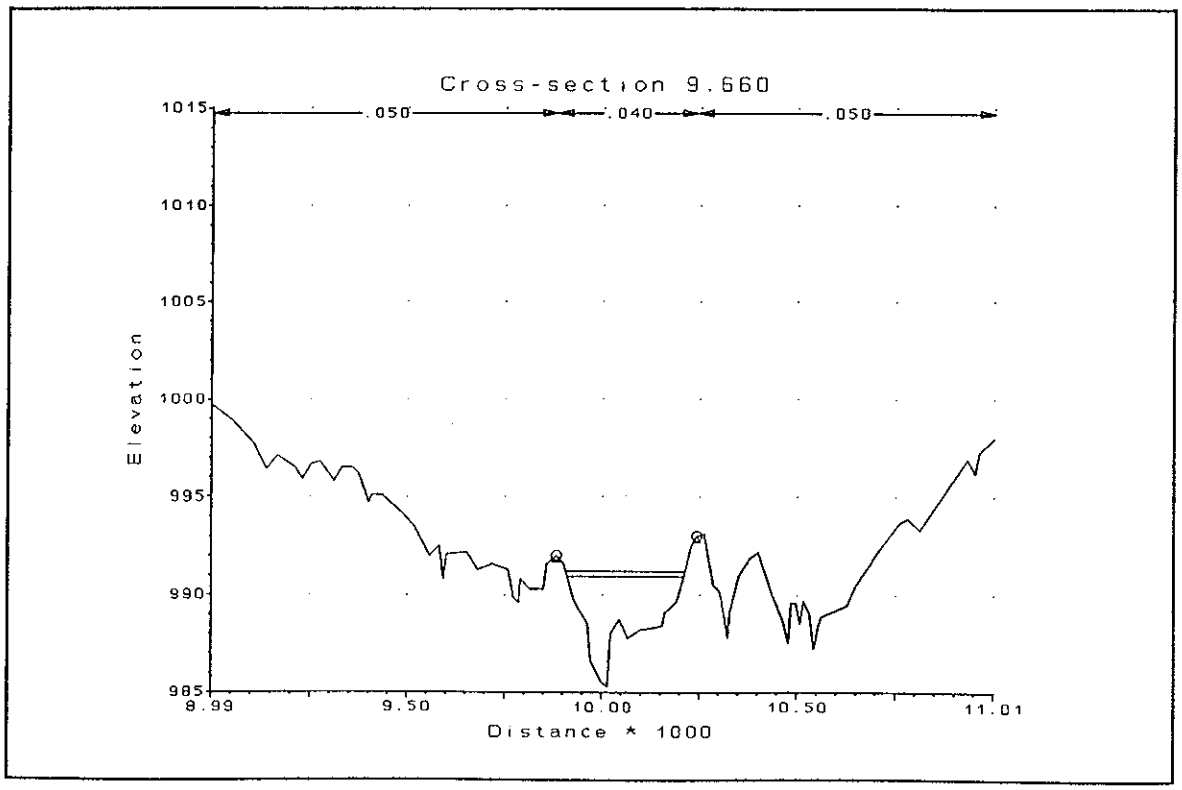
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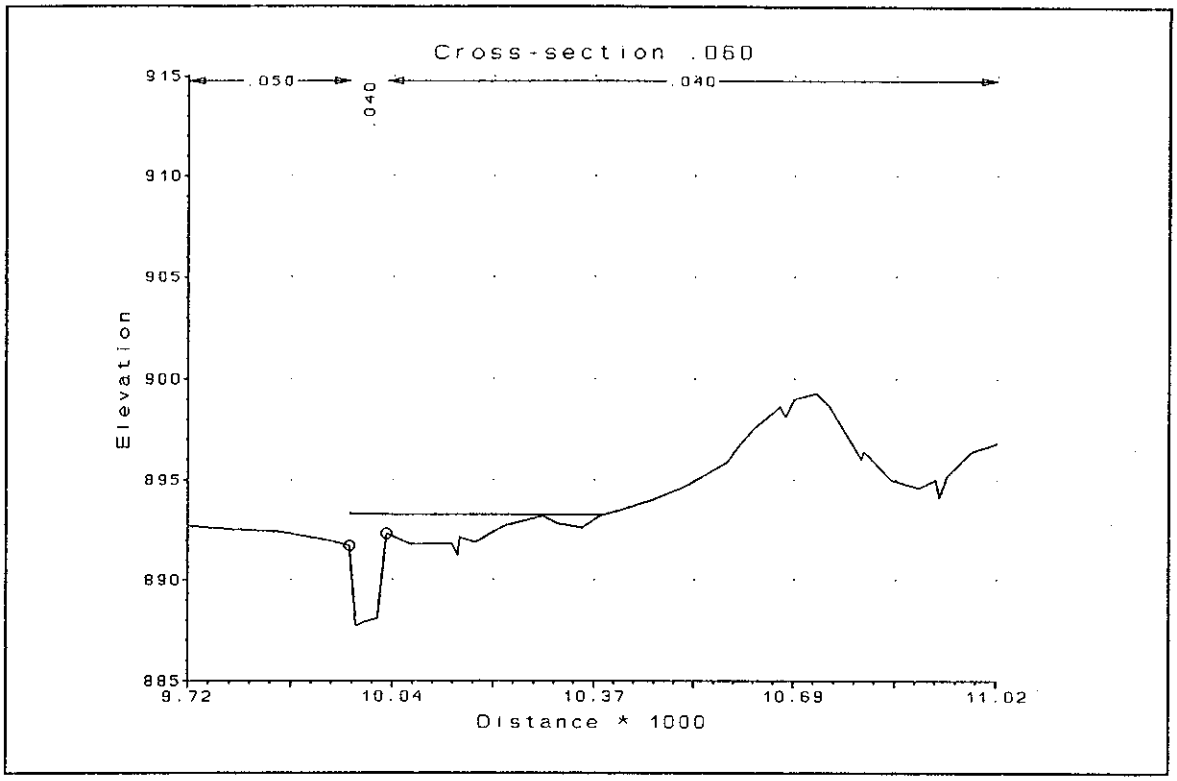
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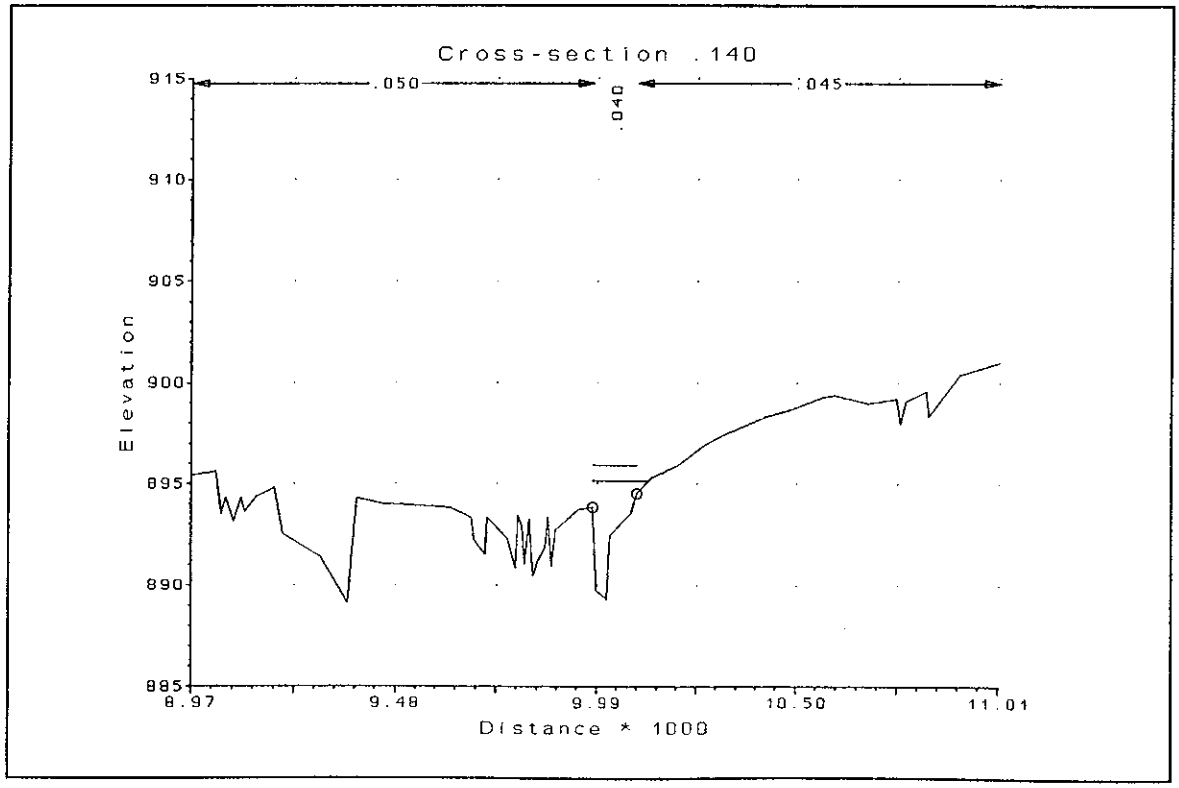
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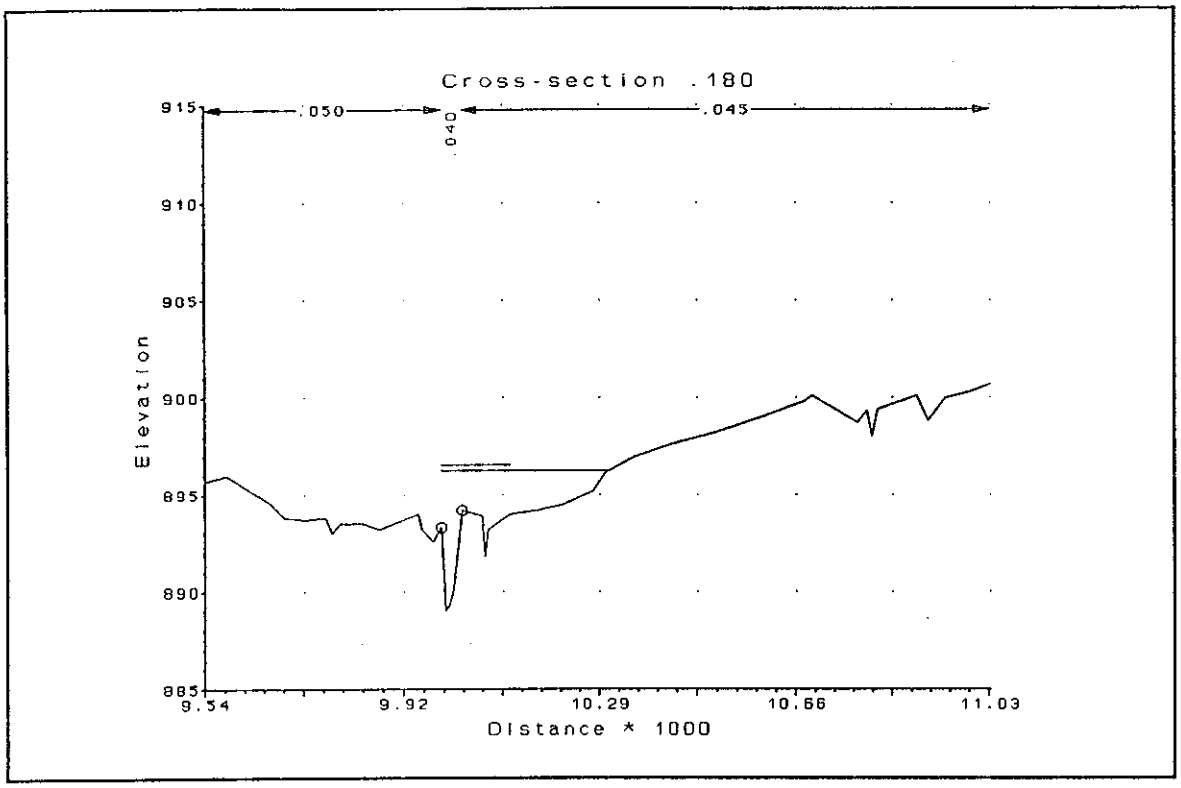
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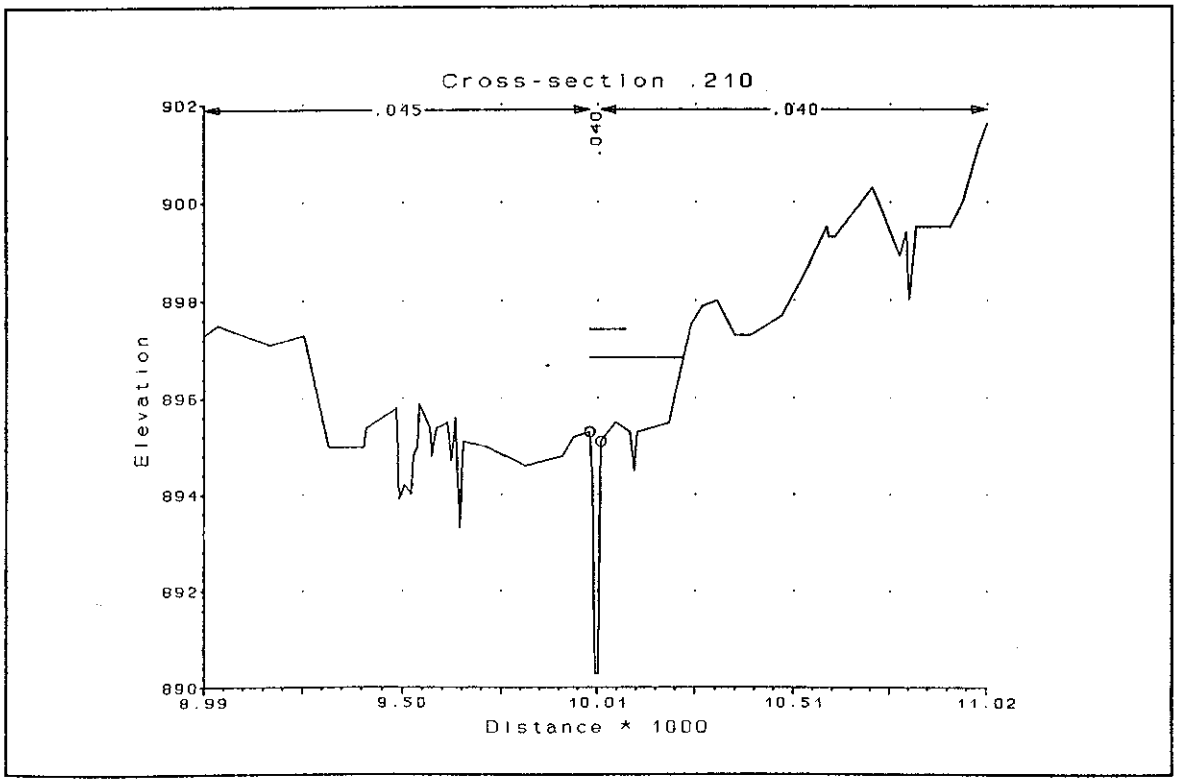
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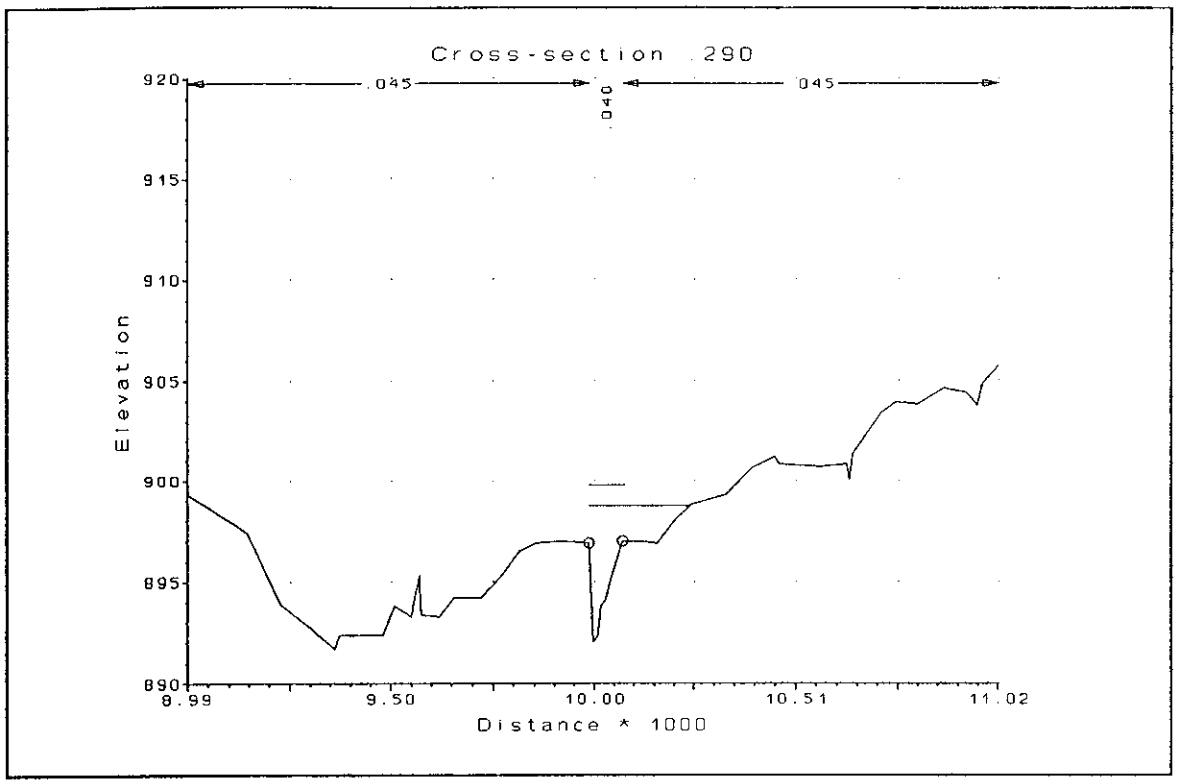
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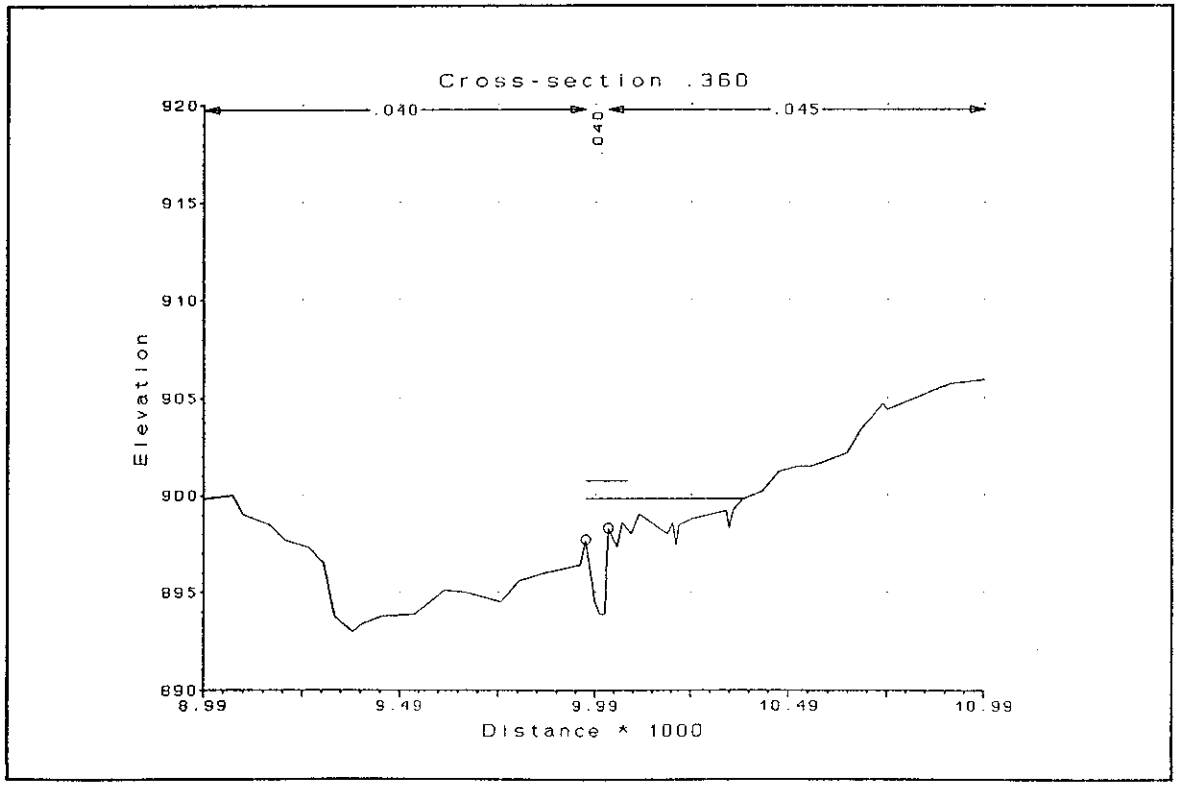
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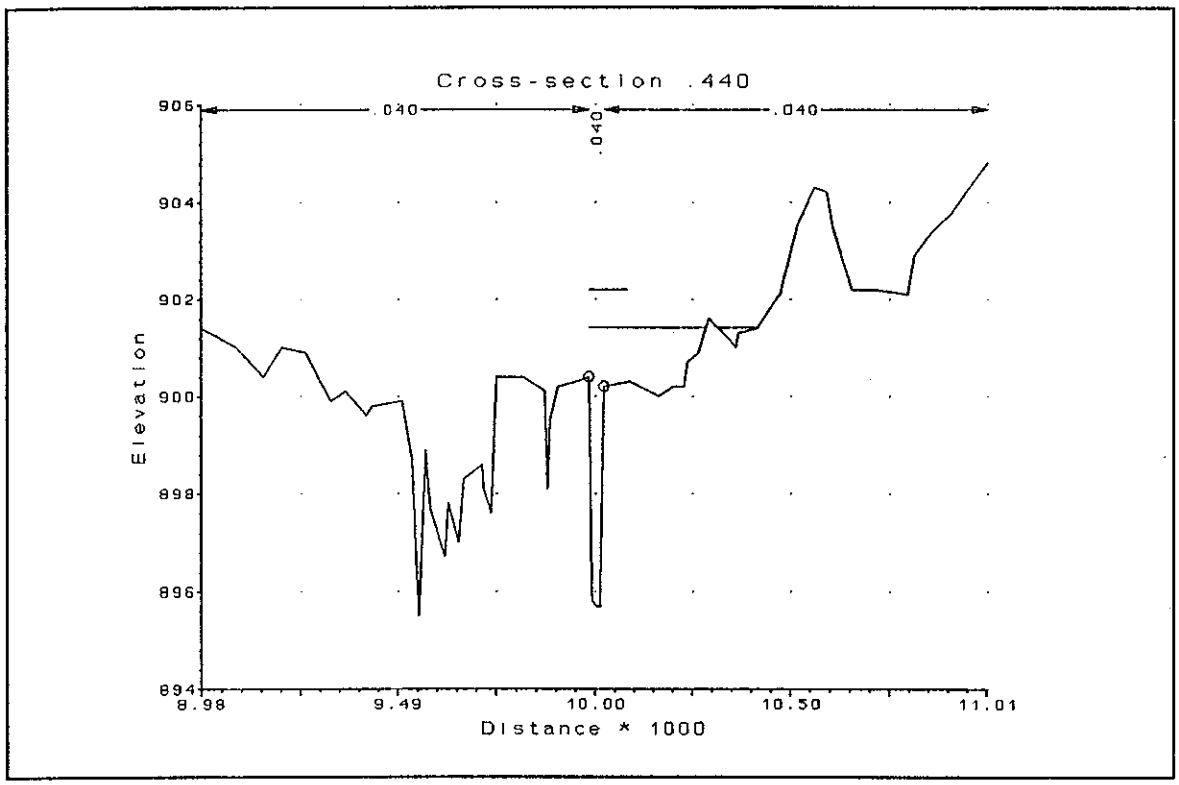
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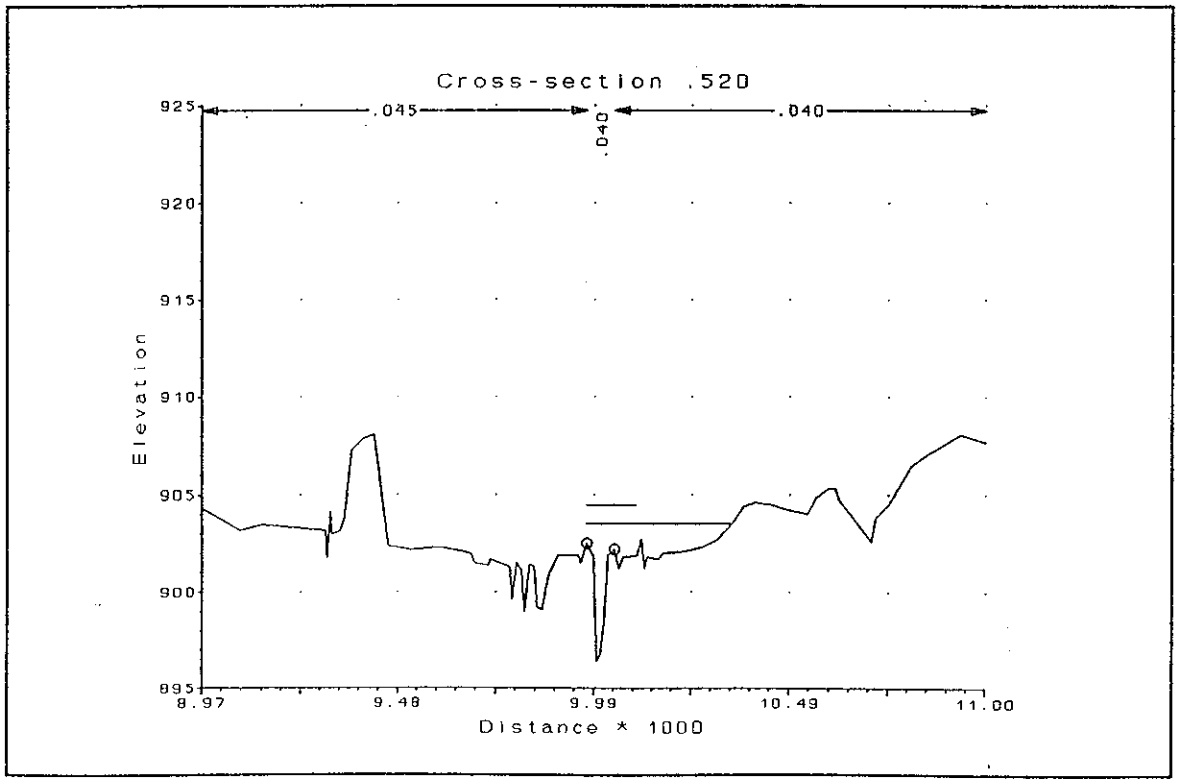
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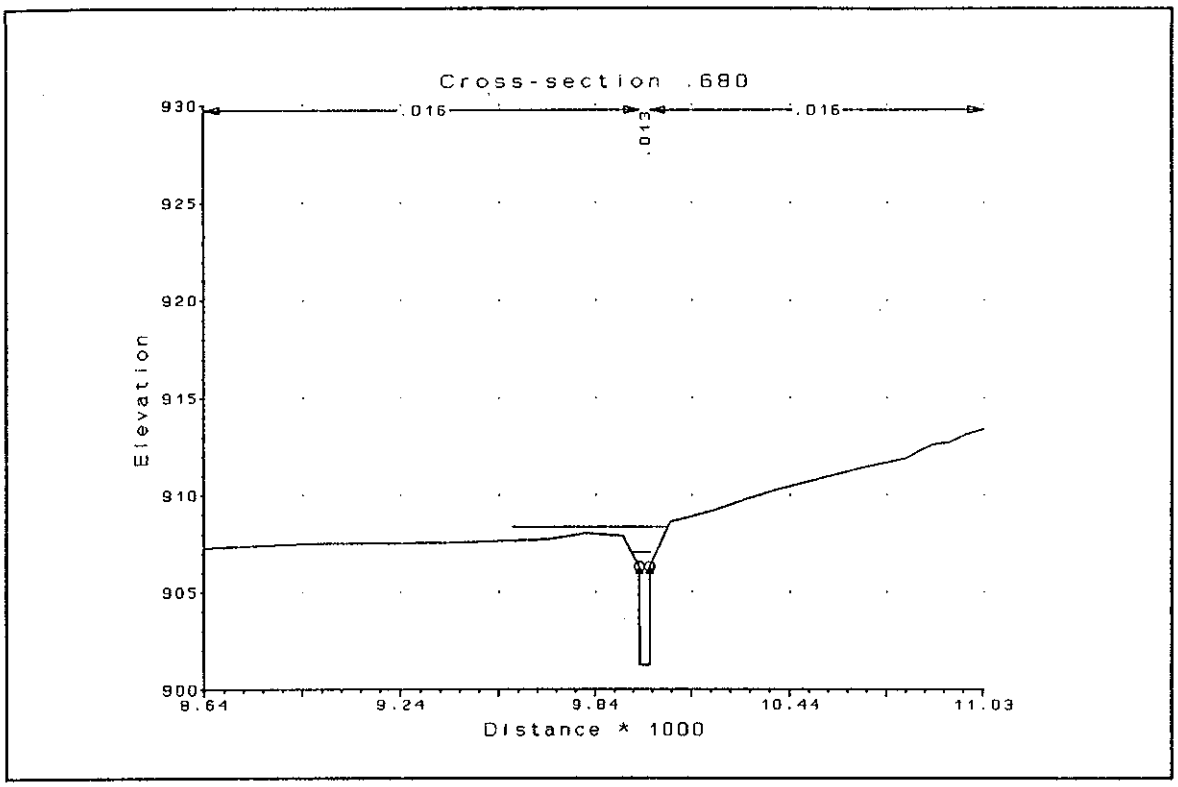
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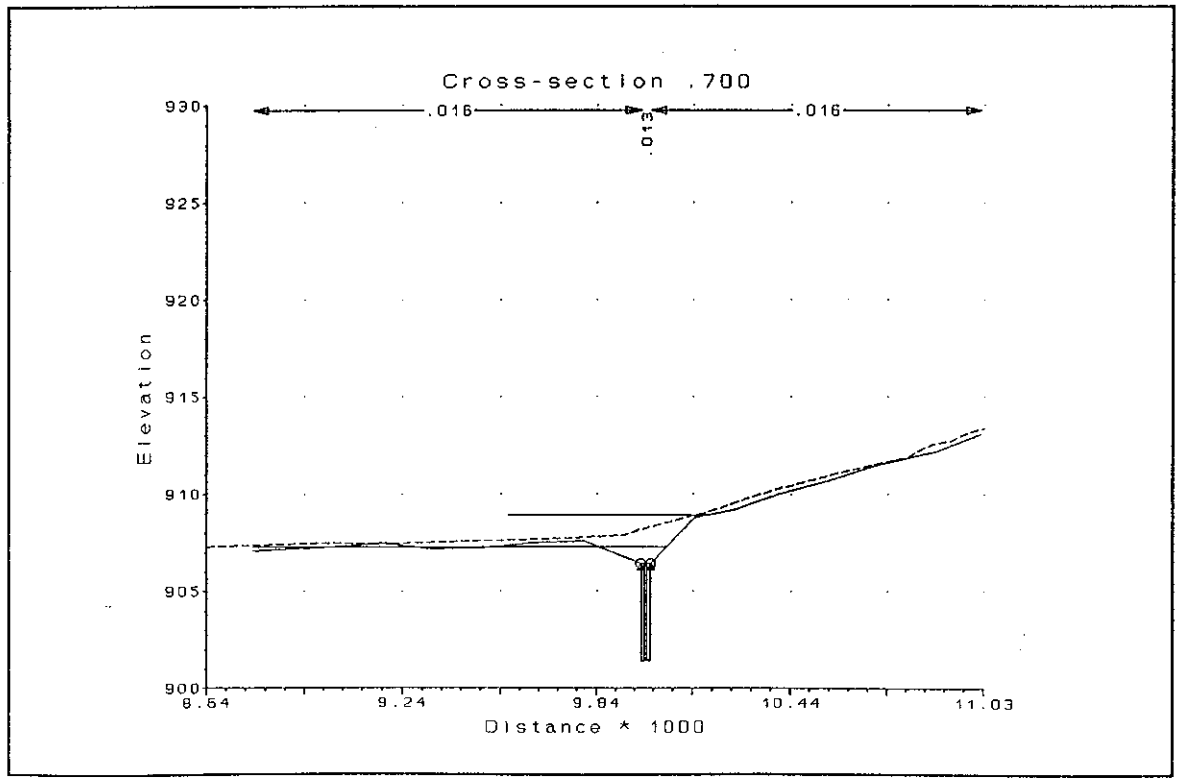
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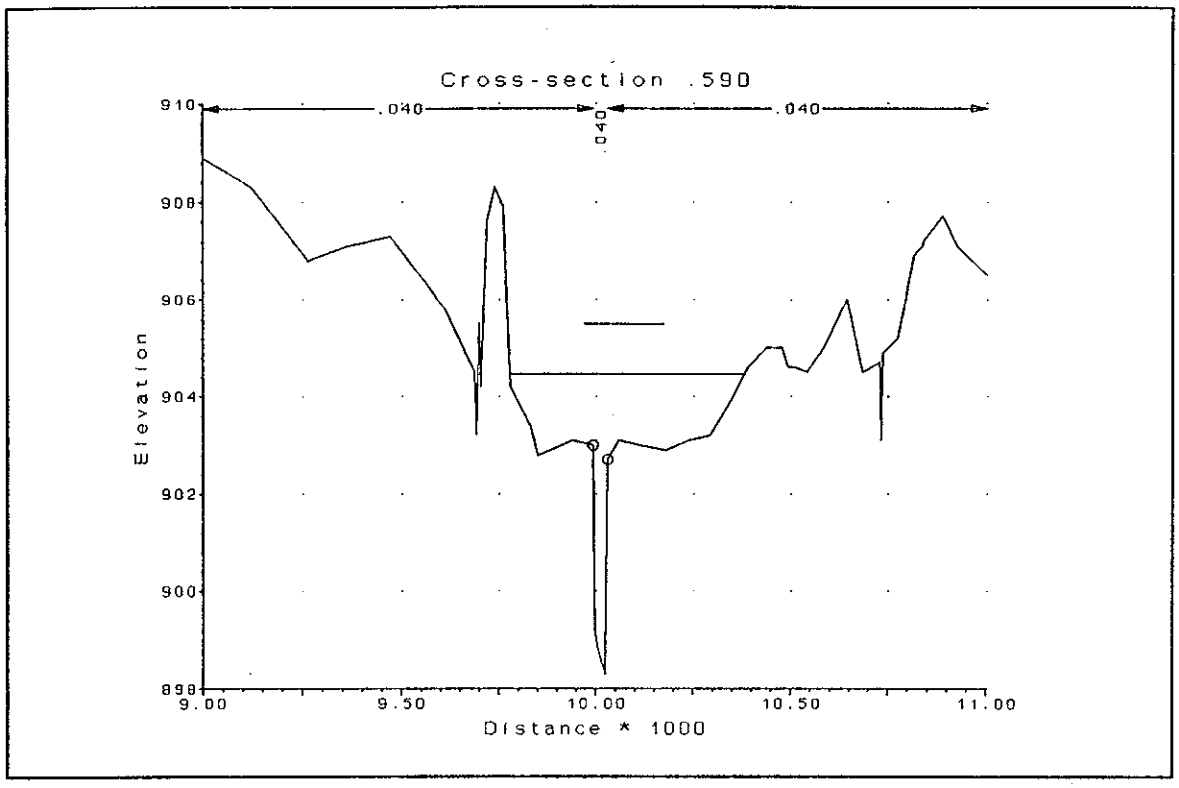
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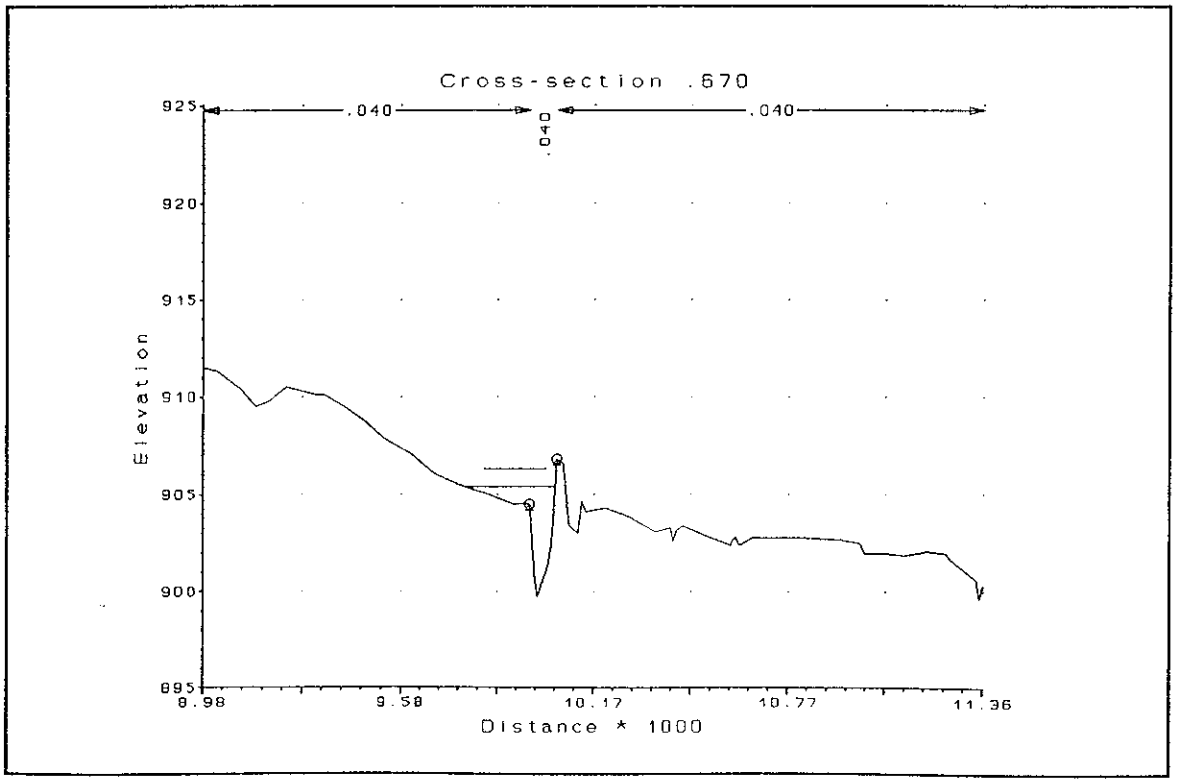
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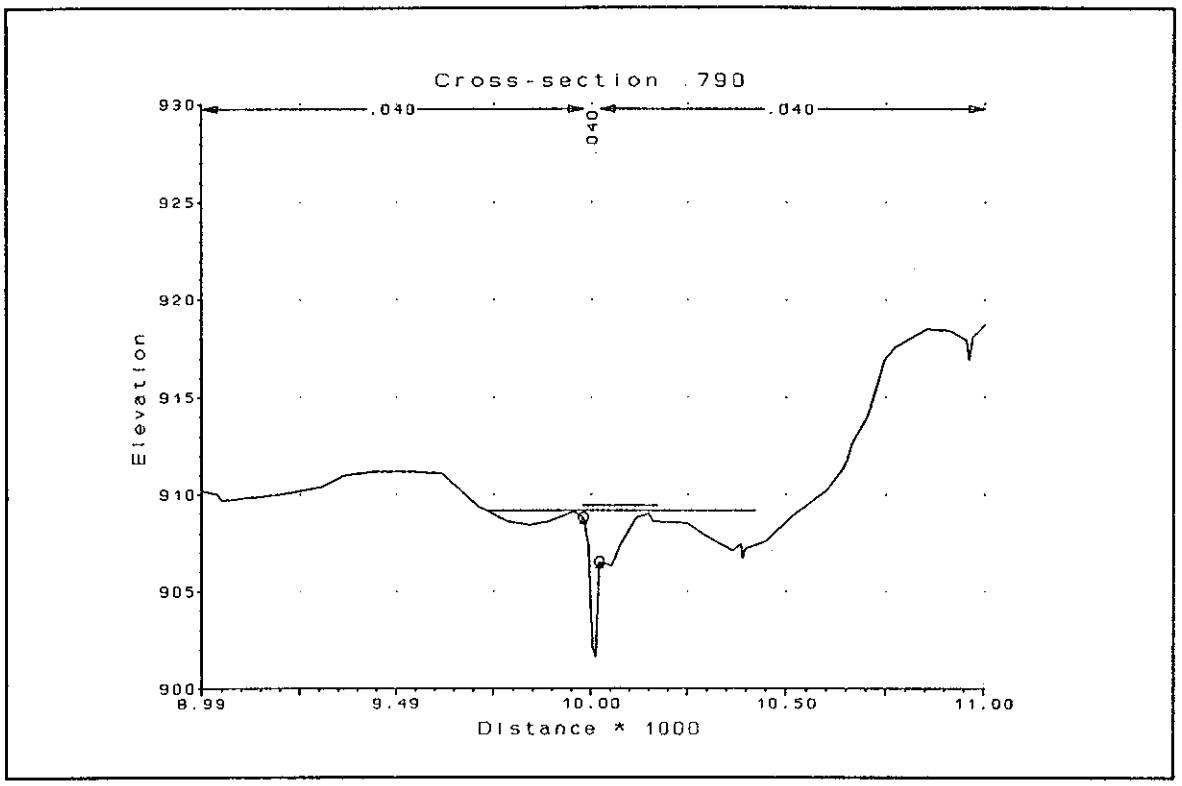
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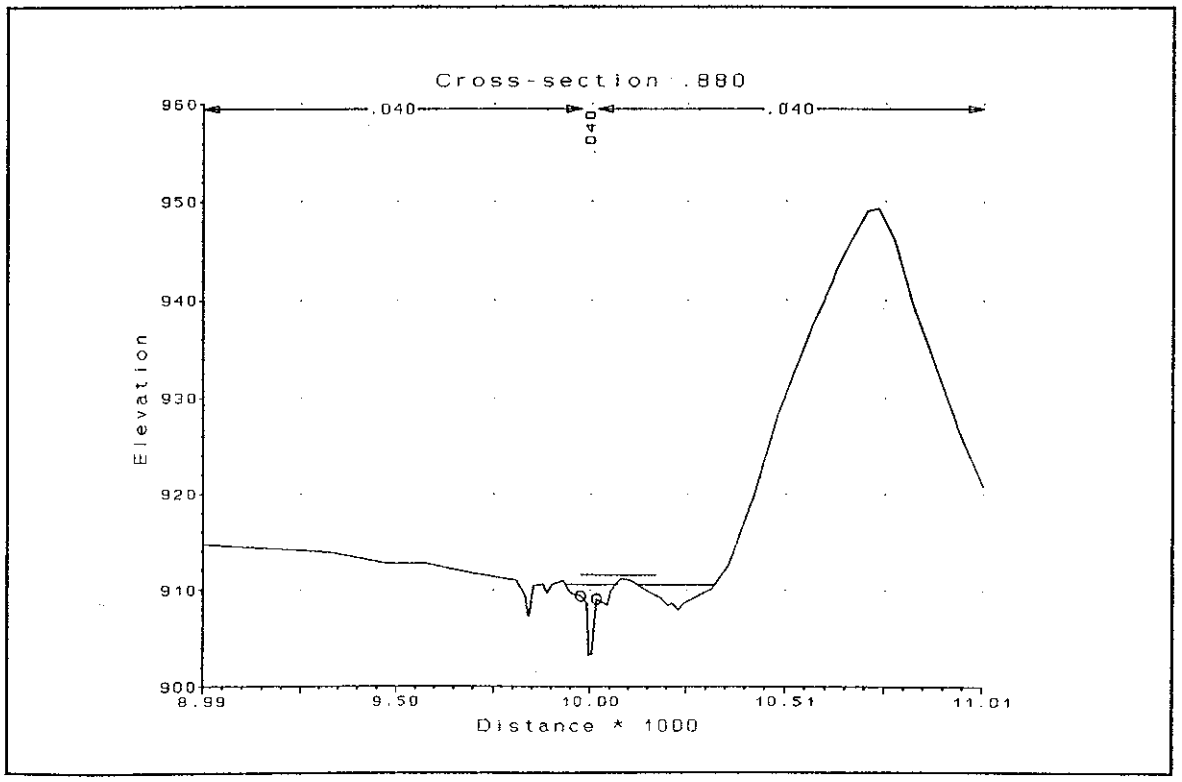
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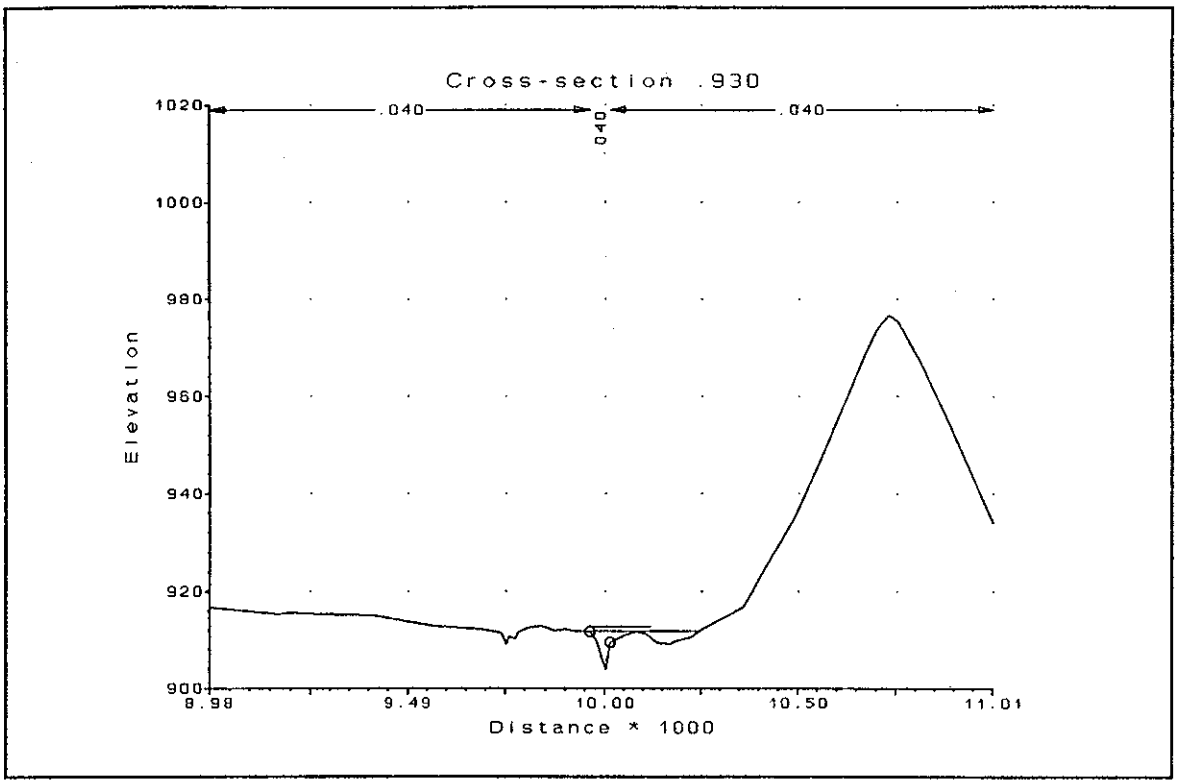
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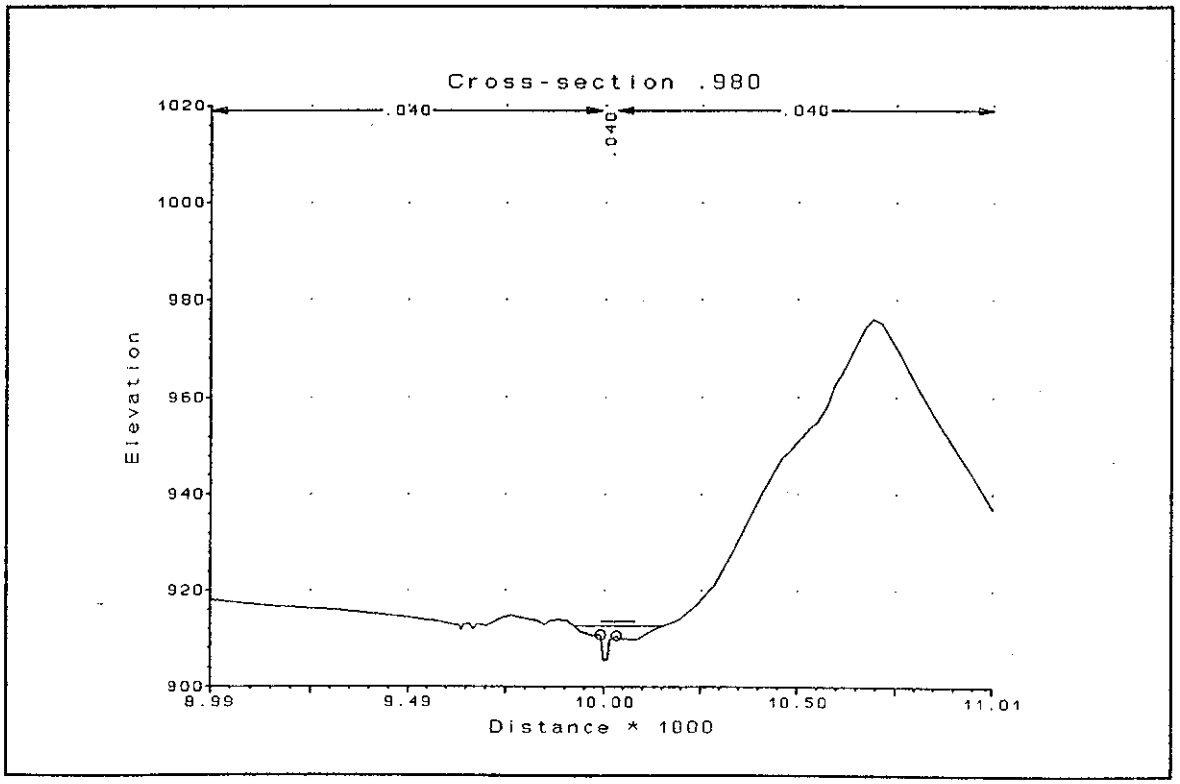
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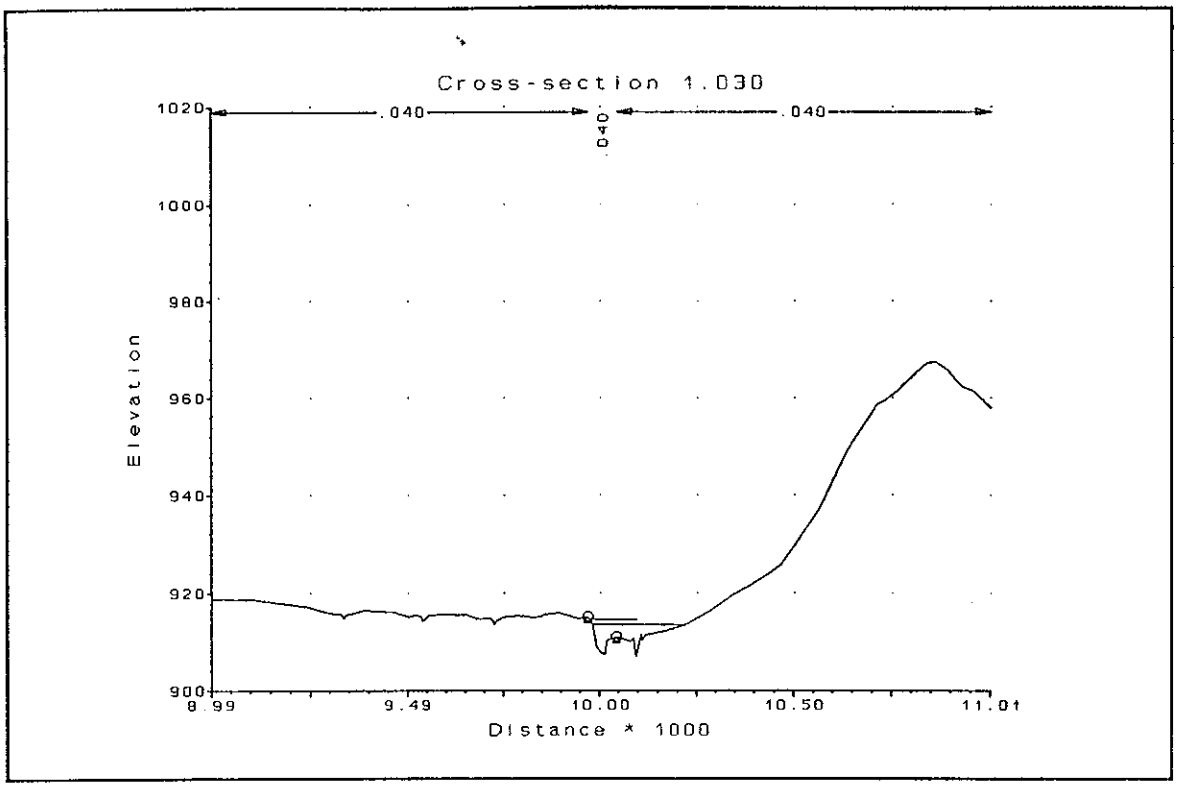
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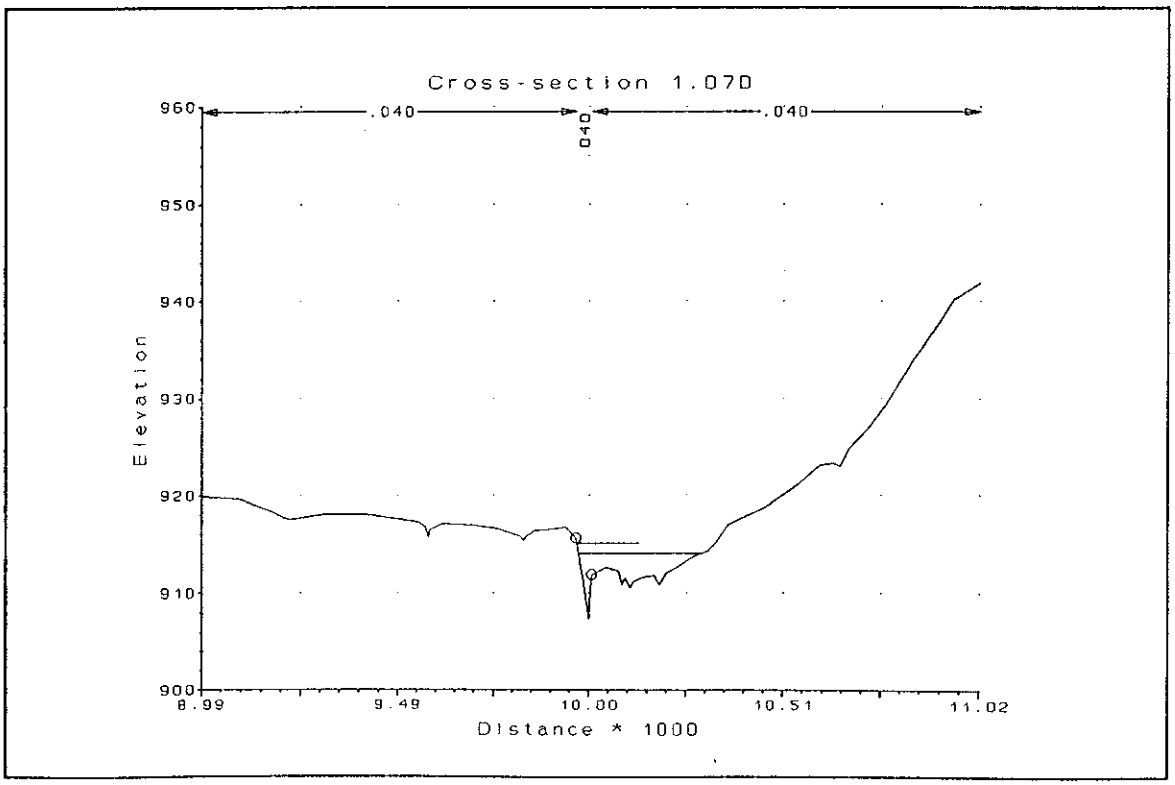
920
900
Elevation
8.99
9.49
10.00
10.50
11.01
Distance * 1000


Cross-section 1.070
.040
.040
.040
960
950
940
930
920
910
900
Elevation
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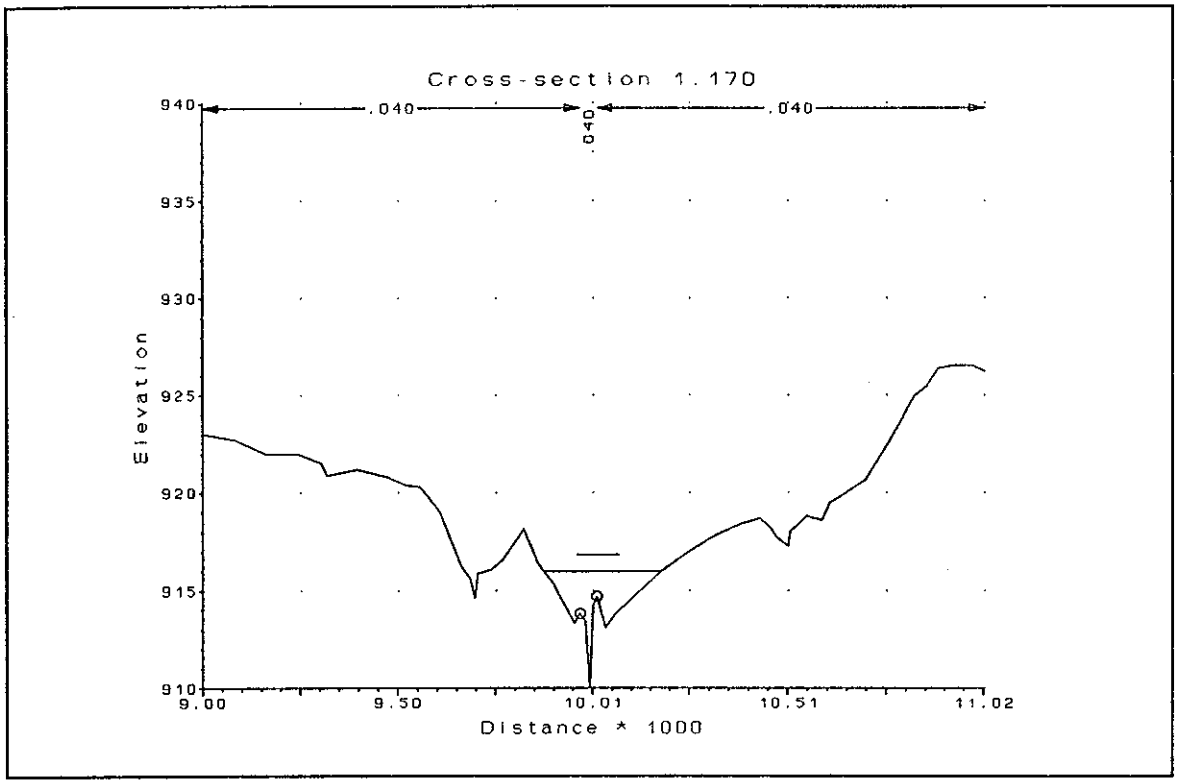
9.49
10.00
10.51
11.02
Distance * 1000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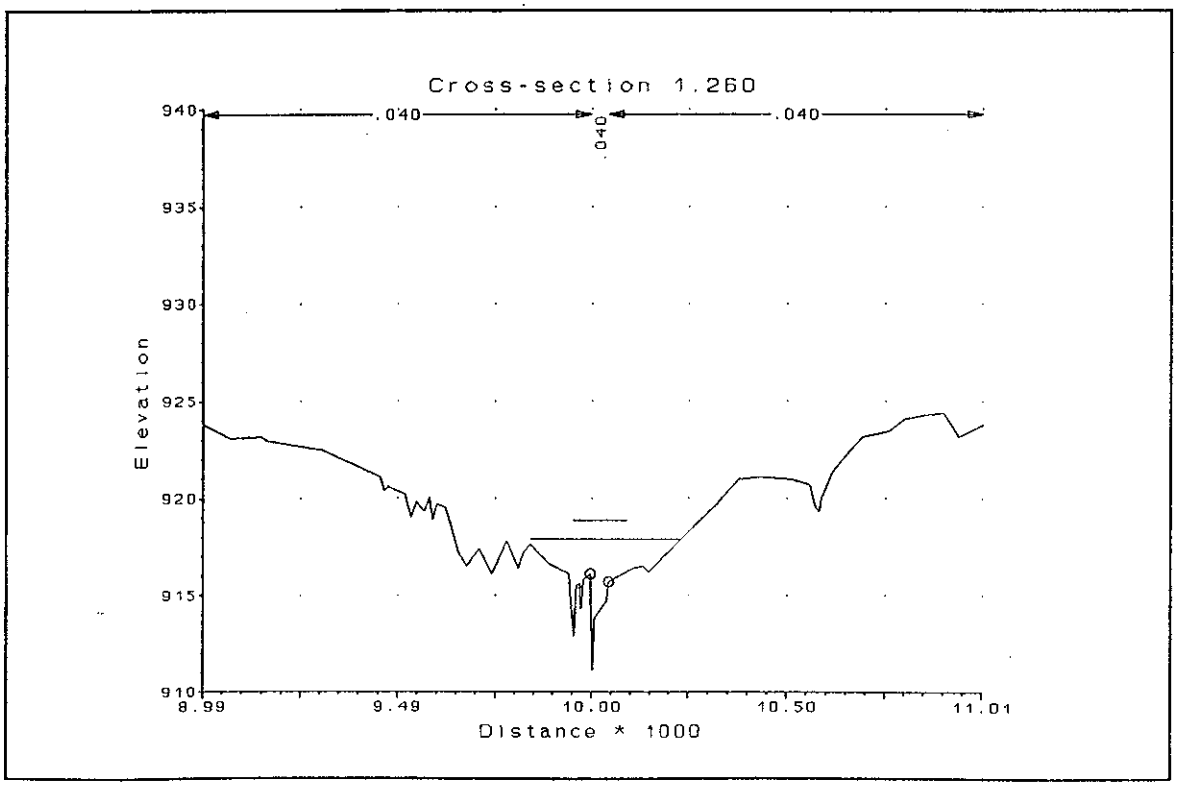
.040
.040
940
935
930
925
920
915
910
Elevation
9.00
9.50
10.01
10.51
11.02
Distance * 1000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.040
.040
.040
940
935
930
925
920
915
910
Elevation
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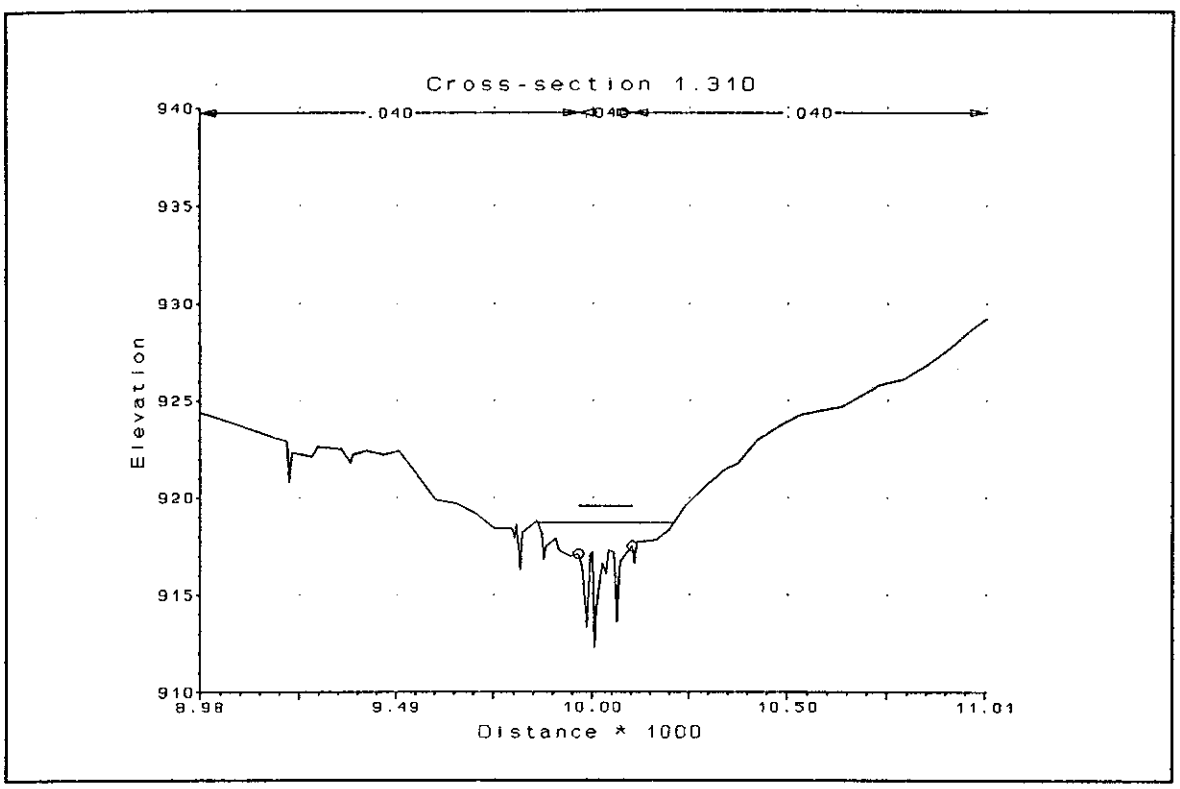
9.49
10.00
10.50
11.01
Distance * 1000


Cross-section 1.310
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.040
.040
940
935
930
925
920
915
910
Elevation
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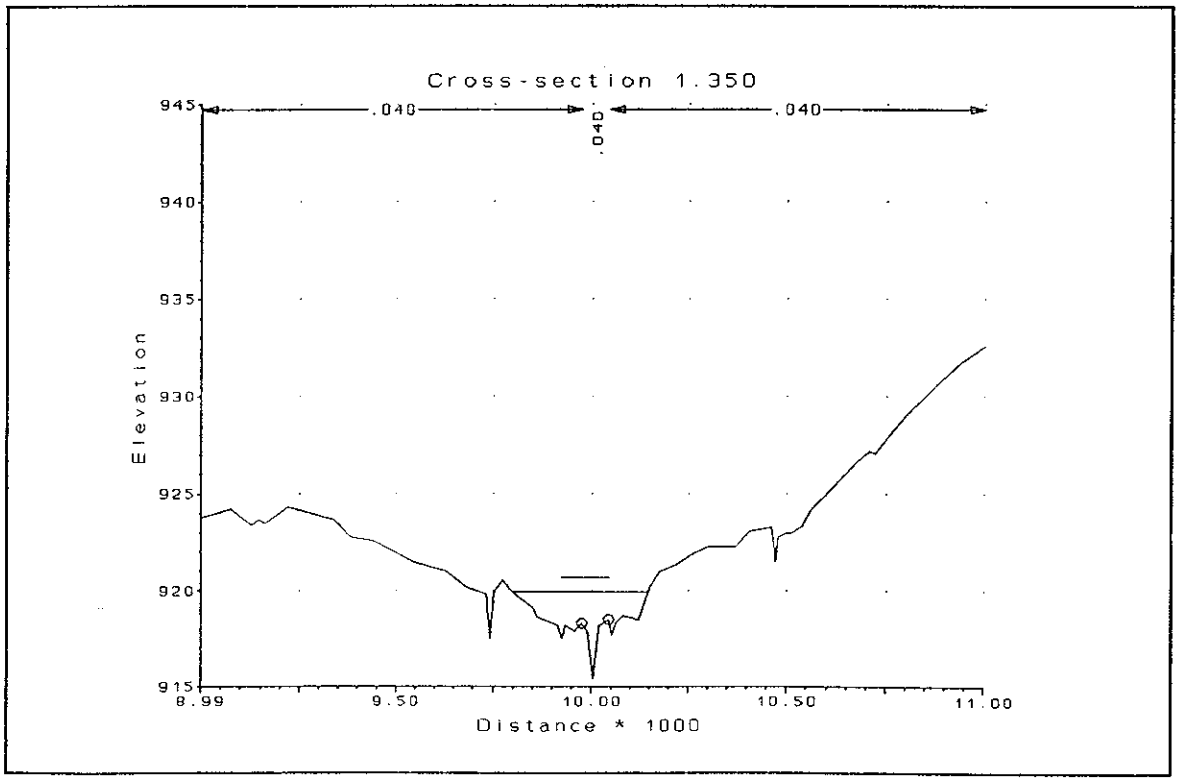
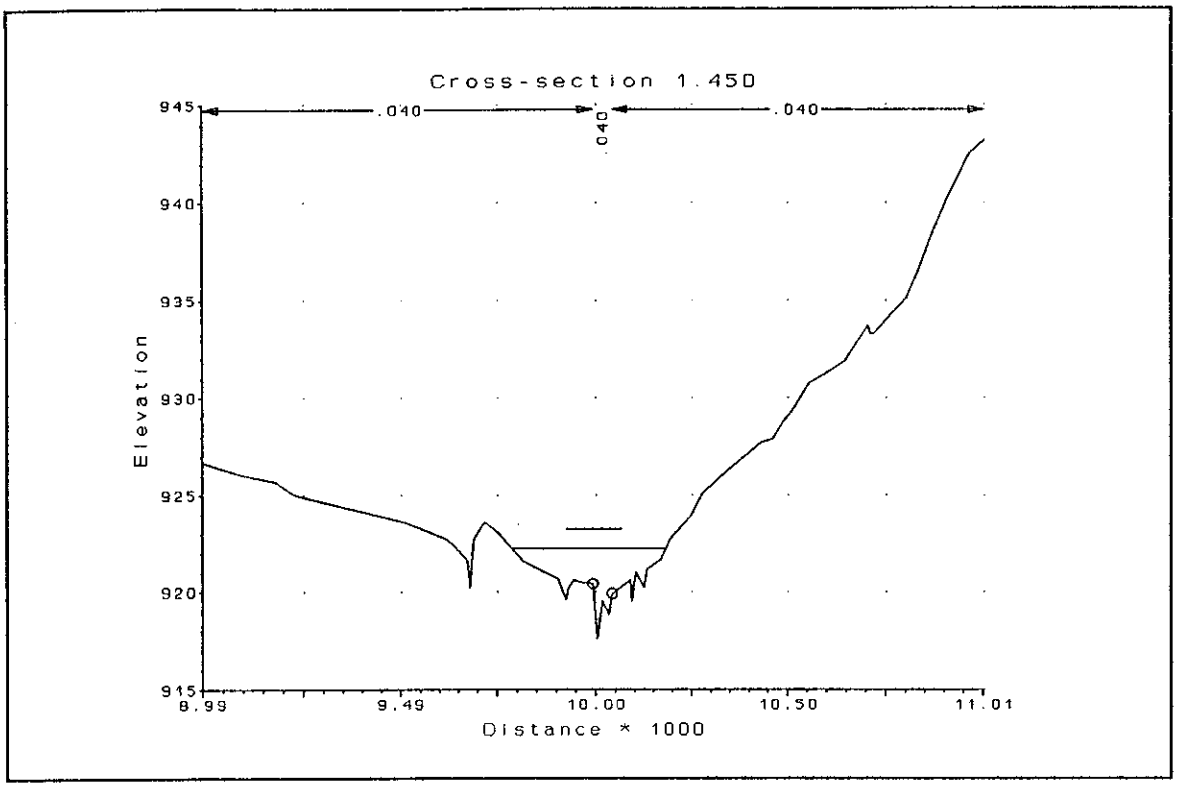
9.49
10.00
10.50
11.01
Distance * 1000


Cross-section 1.350
.040
.040
.040
945
940
935
930
925
920
915
Elevation
8.99
9.50
10.00
10.50
11.00
Distance * 1000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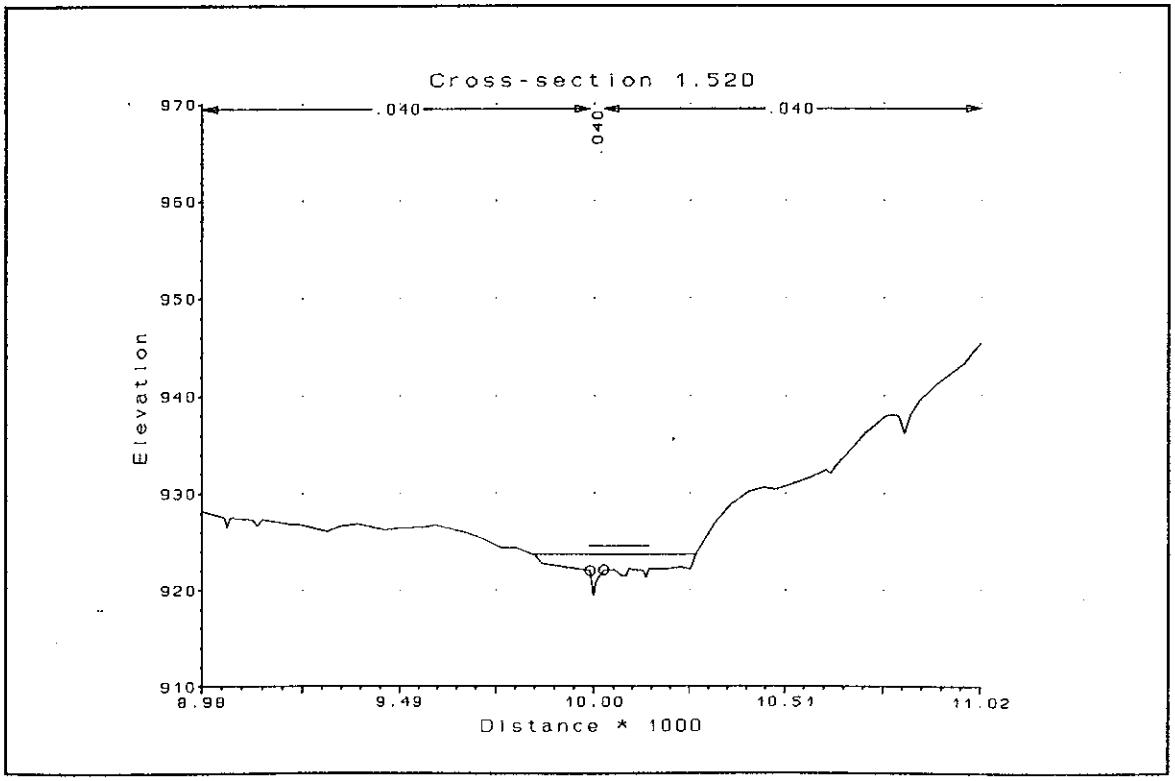
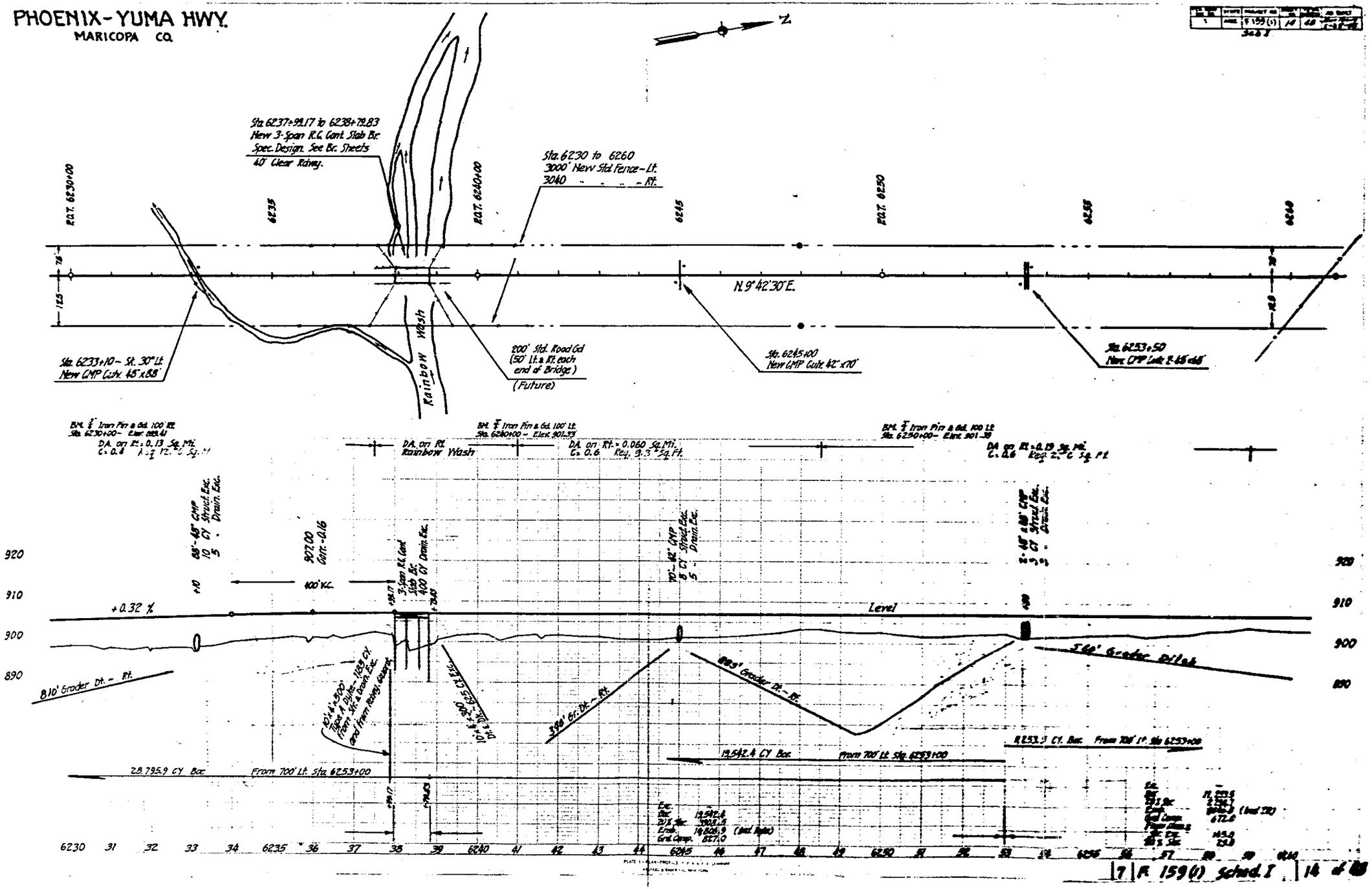
.040
.040
.040
945
940
935
930
925
920
915
Elevation
8.99
9.49
10.00
10.50
11.01
Distance * 1000


Cross-section 1.52D
.040
.040
.040
970
960
950
940
930
920
910
Elevation
8.98
9.49
10.00
10.51
11.02
Distance * 1000

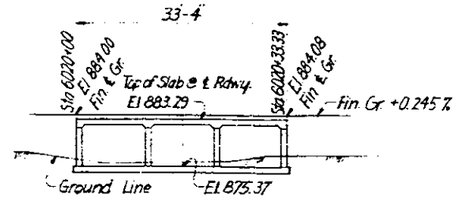
SECTION 4: Hydraulic Analysis

4.4 Bridge/Culvert Asbuilts

PHOENIX-YUMA HWY.
MARICOPA CO.

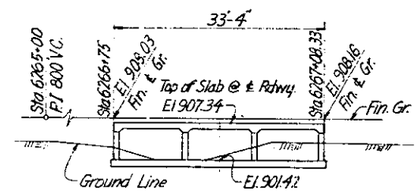


7 | F. 159(1) Schedl. I | 14 of 88



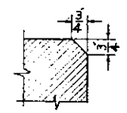
STA 6020+
SECTION ON ℄ RDWY
New 3-10×7×47-0 Box Culv. C.P.
37'-6" Spec. Road Guard Lt. & Rt.
Scale: 1"=10'-0"

NOTE~
Build Culvert on -0.4% slope to left.
See Std. CI-10-3 & Spec. Road Guard Sheet #48 for all other details, dimensions, bend diagrams & steel lists.

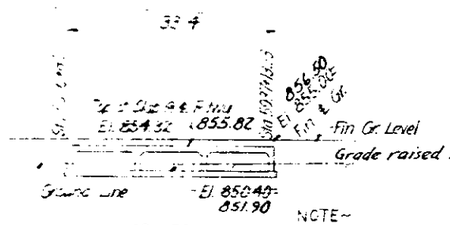


STA 6266+
SECTION ON ℄ RDWY
New 3-10×5×47-0 Box Culv.
37'-6" Spec. Road Guard Lt. & Rt.
Scale: 1"=10'-0"

NOTE~
Build Culvert on -0.3% slope to left.
See Std. CI-10-3 & Spec. Road Guard Sheet #48 for all other details, dimensions, bend diagrams & steel lists.

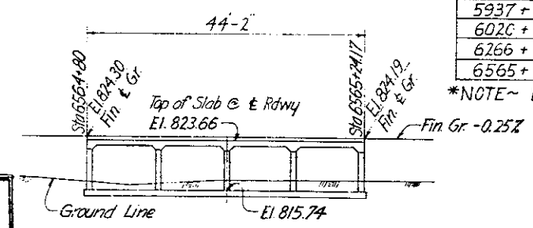


Chamfer all exposed corners thus unless otherwise noted.



STA 5937+
SECTION ON ℄ RDWY
New 3-10×3×47-0 Box Culv.
37'-6" Spec. Road Guard Lt. & Rt.
Scale: 1"=10'-0"

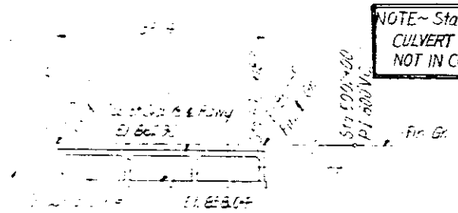
NOTE~
Build Culvert on -0.2% slope to left.
See Std. CI-10-3 & Spec. Road Guard Sheet #48 for all other details, dimensions, bend diagrams & steel lists.



NOTE~ Sta 5900+
CULVERT TO BE FUTURE.
NOT IN CONTRACT F.I. 159(1)

STA 6565+
SECTION ON ℄ RDWY
New 4-10×7×47-0 Box Culv.
50'-0" Spec. Road Guard Lt. & Rt.
Scale: 1"=10'-0"

NOTE~
Build Culvert on -0.5% slope to left.
See Std. CI-10-4 & Spec. Road Guard Sheet #48 for all other details, dimensions, bend diagrams & steel lists.



STA 5900+
SECTION ON ℄ RDWY
New 3-10×4×47-0 Box Culv.
37'-6" Spec. Road Guard Lt. & Rt.
Scale: 1"=10'-0"

NOTE~
Build Culvert on -1.5% slope to left.
See Std. CI-10-3 & Spec. Road Guard Sheet # for all other details, dimensions, bend diagrams & steel lists.

APPROXIMATE QUANTITIES

	Structure	Std. No.	Sheet No.	Struct. Excav. C.Y.	Class "A" Conc. C.Y.	Reinf. Steel Lbs.	Spec. Road Guard Lin. Ft.
FUTURE	Sta. 5900+						
	New 3-10×4×47-0 Box Culv. Spec. Road Guard Lt. & Rt.	Spec. CI-10-3 CI-10-5		280	157.36	18,695	75
F.I. 159(1)	Sta. 5937+						
	New 3-10×3×47-0 Box Culv. Spec. Road Guard Lt. & Rt.	Spec. CI-10-3 CI-10-5	33, 48 45 47	220	148.72	18,300	75
	Sta. 6020+						
	New 3-10×7×47-0 Box Culv. C.P. Spec. Road Guard Lt. & Rt.	Spec. CI-10-3 CI-10-5	33, 48 45 47	210	180.75	20,065	75
	Sta. 6266+						
	New 3-10×5×47-0 Box Culv. Spec. Road Guard Lt. & Rt.	Spec. CI-10-3 CI-10-5	33, 48 45 47	220	164.43	19,070	75
	Sta. 6565+						
	New 4-10×7×47-0 Box Culv. Spec. Road Guard Lt. & Rt.	Spec. CI-10-4 CI-10-5	33, 48 46 47	330	231.64	27,365	100

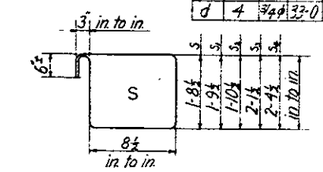
STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
ARIZONA	F.I. 159(1) Sec. 1	33	

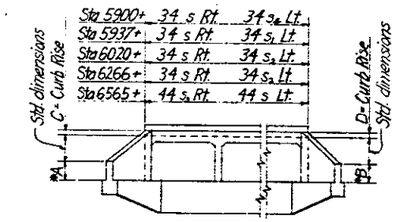
AS BUILT 5-17-55 R.W.

STEEL LIST

Mark	No.	Size	Length	Bend
Sta 6266+				
2 Curbs				
s	34	½ ϕ	6-3	S
s_2	34	–	6-9	–
d	4	¾ ϕ	33-0	Str.
Sta 6565+				
2 Curbs				
s	44	½ ϕ	6-3	S
s_2	44	–	7-3	–
d	8	¾ ϕ	23-0	Str.

Mark	No.	Size	Length	Bend
Sta 5900+				
2 Curbs				
s	34	½ ϕ	6-3	S
s_2	34	–	7-6	–
d	4	¾ ϕ	33-0	Str.
Sta 5937+				
2 Curbs				
s	34	½ ϕ	6-3	S
s_1	34	–	6-6	–
d	4	¾ ϕ	33-0	Str.
Sta 6020+				
2 Curbs				
s	34	½ ϕ	6-3	S
s_2	34	–	6-9	–
d	4	¾ ϕ	33-0	Str.





STA 5900+, 5937+, 6020+, 6266+, 6565+
TYPICAL END ELEVATION
Scale: 1"=10'-0"

DIMENSIONS

STA	LEFT *A	LEFT *B	LEFT C	LEFT D	RIGHT *A	RIGHT *B	RIGHT C	RIGHT D
5900+	3'-0"	3'-0"	10"	10"	2'-4"	2'-4"	2"	2"
5937+	1'-11"	1'-11"	3"	3"	1'-10"	1'-10"	2"	2"
6020+	4'-0"	4'-0"	4"	4"	3'-10"	3'-10"	2"	2"
6266+	3'-0"	3'-0"	4"	4"	2'-10"	2'-10"	2"	2"
6565+	3'-10"	3'-10"	2"	2"	4'-3"	4'-3"	7"	7"

*NOTE~ Dimensions A & B are different than Standard

GENERAL NOTES~
Construction - Standard Specifications - Arizona Highway Dept. Edition of 1948.
Reinforcing steel shall be intermediate grade and shall conform to AASHO Designation M 137-48.

JOINT NOTE~
All culverts shall have contraction or cold joints in top slab & barrel walls (optional in floor slab) spaced not more than 40 feet apart.
The joint may be made with ¼ plywood bulkhead which shall be left in place. Reinforcing steel shall project through the joint. Plywood for bulkhead shall be treated, either hot dipped 4 hours in approved treating solution or standard pressure treated.

ALL CONCRETE CLASS "A"

		DATE
LAYOUT		
DESIGN		
ARCHITECTURE		
DRAWN	R.D.B.	9-30-54
TRACED		
CHECKED	J.A.W.	10-8-54
2-22-55		

ARIZONA HIGHWAY DEPARTMENT
BRIDGE DIVISION
STA 5900+, 5937+, 6020+, 6266+, 6565+
LOCATION & SPECIAL DETAILS

Registered Professional Engineer (Civil) Certificate Expires June 30, 1955 Arizona U.S.A.

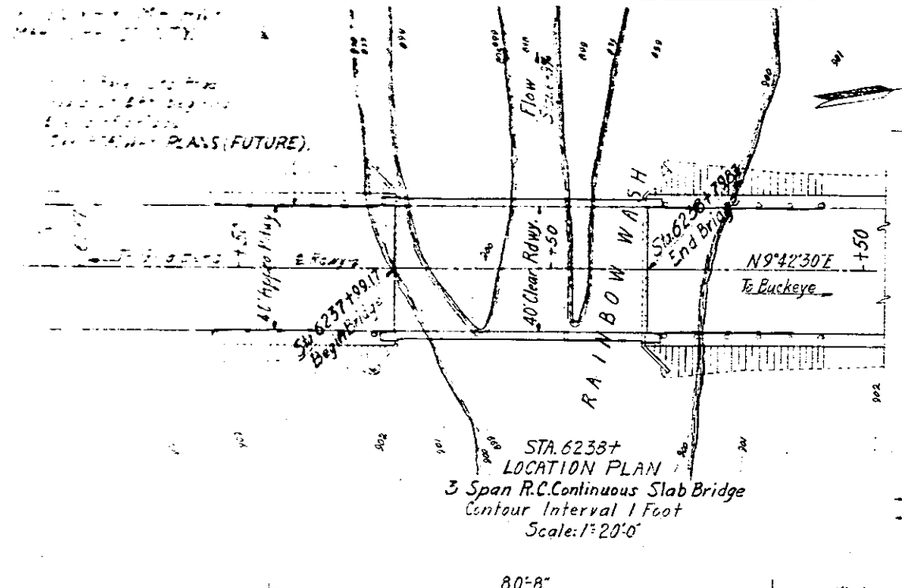
F.I. 159 (1)

18

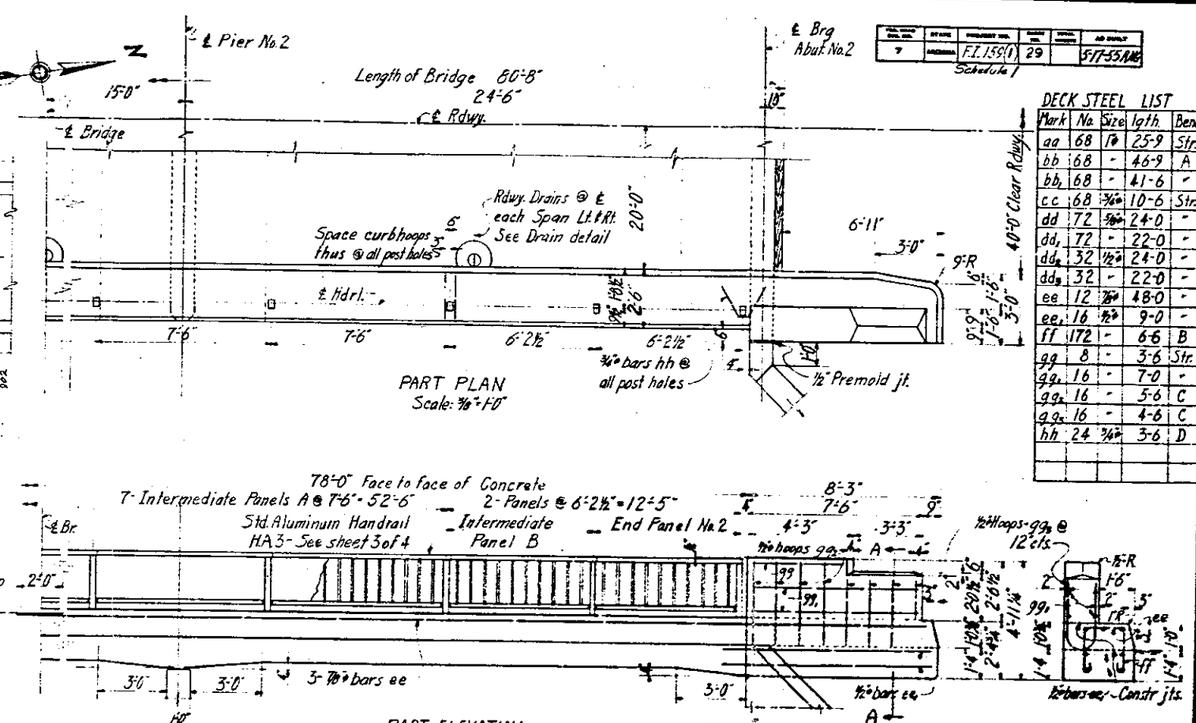
20

FED. AID PROJ. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZONA	F.I. 159(1)	29		5-17-55 AHC

Schedule 1

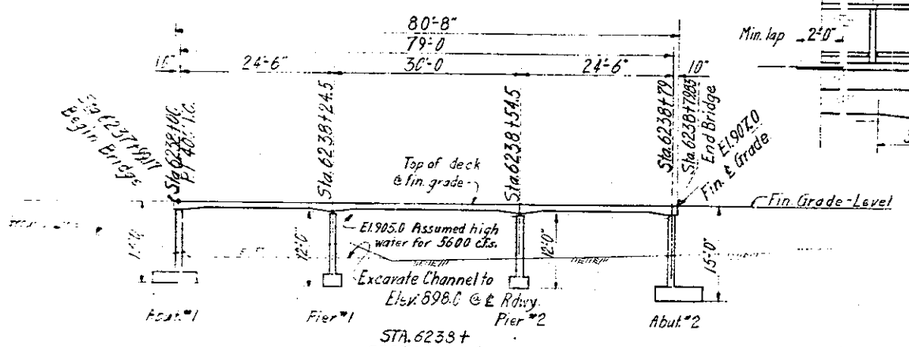


STA. 6238+
LOCATION PLAN
3 Span R.C. Continuous Slab Bridge
Contour Interval 1 Foot
Scale: 1" = 20'-0"



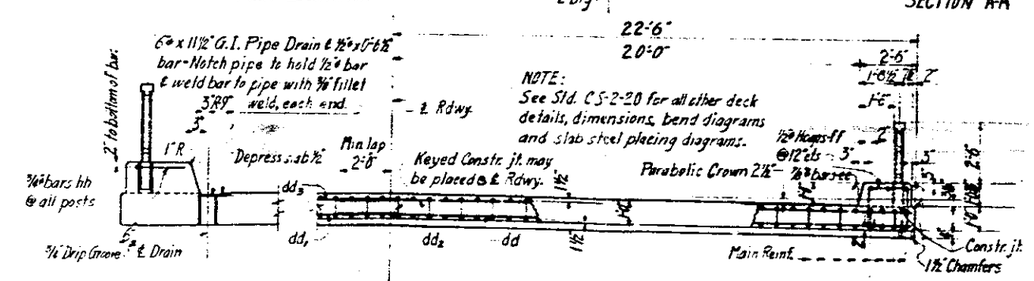
DECK STEEL LIST

Mark	No.	Size	lgth.	Bend
aa	68	1"	25-9	Str.
bb	68	-	46-9	A
bb₁	68	-	41-6	-
cc	68	3/4"	10-6	Str.
dd	72	5/8"	24-0	-
dd₁	72	-	22-0	-
dd₂	32	1½"	24-0	-
dd₃	32	-	22-0	-
ee	12	7/8"	48-0	-
ee₁	16	1½"	9-0	-
ff	172	-	6-6	B
gg	8	-	3-6	Str.
gg₁	16	-	7-0	-
gg₂	16	-	5-6	C
gg₃	16	-	4-6	C
hh	24	3/4"	3-6	D



STA. 6238+
SECTION ON ℄ Rdwy.
Scale: 1" = 10'-0"

NOTE ~
Excavate all Abutments & Piers to neat lines.



NOTE:
See Std. CS-2-20 for all other deck details, dimensions, bend diagrams and slab steel placing diagrams.

DRAIN DETAIL
Scale ½" = 1'-0"

HALF DECK SECTION NEAR PIER
Scale: 3/16" = 1'-0"

See Std. CS-2-20 sheet 4 of 4

GENERAL NOTES

Construction - Standard Specifications Arizona Highway Department Edition 1948.
Design - A.A.S.H.O. Specifications 1953 Revised to Date.
Loading - H20-S16-'44.
Stresses - "A" Conc. $f_s = 20{,}000$ - $f_c = 1000$ - $n = 12$
"D" Conc. $f_s = 20{,}000$ - $f_c = 1200$ - $n = 10$
No wearing surface allowances in deck slab design
Reinforcing steel shall be intermediate grade and shall conform to A.A.S.H.O. designation M137-'48.
Forms shall be cambered as per Std. Spec., See page 135.
Curbs shall be poured to grade without camber after falsework has been struck.

Chamfer all exposed corners unless otherwise noted.

APPROXIMATE QUANTITIES

ITEM	Std. No.	Sheet No.	Str. Excav. C.Y.	Conc. C.Y. Class A	Conc. C.Y. Class D	Reinf. Steel lbs.	Alum. Hndrl. lin. ft.
Abut. No. 1	Spec.	30	160	51.95		3805	
Pier No. 1	-	30	70	26.59		1840	
Pier No. 2	-	30	60	26.59		1840	
Abut. No. 2	-	30	220	65.17		5195	
Deck & Hdrl.	Std. CS-2-20	4			166.44	34215	156
TOTALS			510	170.30	166.44	46895	156

DECK CONCRETE CLASS D - ALL OTHER CLASS A.

	RAH	5-54
	C.W.M.	5-54
	C.W.M.	5-18-54
	R.J.	5-25-54
6-21-54	1	

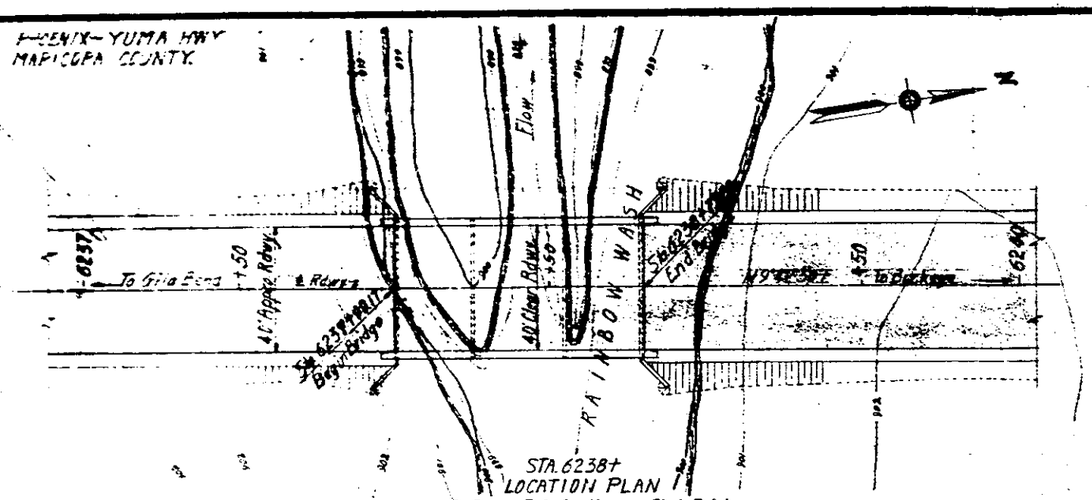
ARIZONA HIGHWAY DEPARTMENT
BRIDGE DIVISION

STA. 6238+
RAINBOW WASH BRIDGE
LOCATION & DECK DETAILS

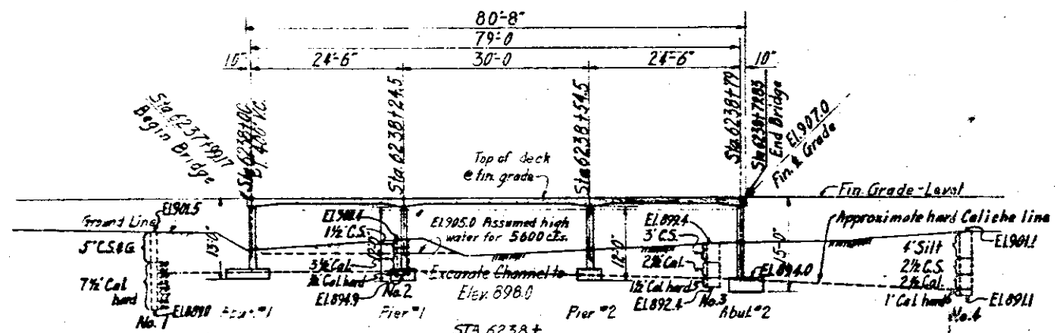
Registered Professional Engineer (Structural) No. 2175 ARIZONA U.S.A.

F.I. - 159(1)

PHOENIX-YUMA HWY
MARICOPA COUNTY



STA. 6238+
LOCATION PLAN
3 Span R.C. Continous Slab Bridge
Contour Interval 1 Foot
Scale: 1" = 20'



STA. 6238+
SECTION ON ℄
Scale: 1" = 10'-0"

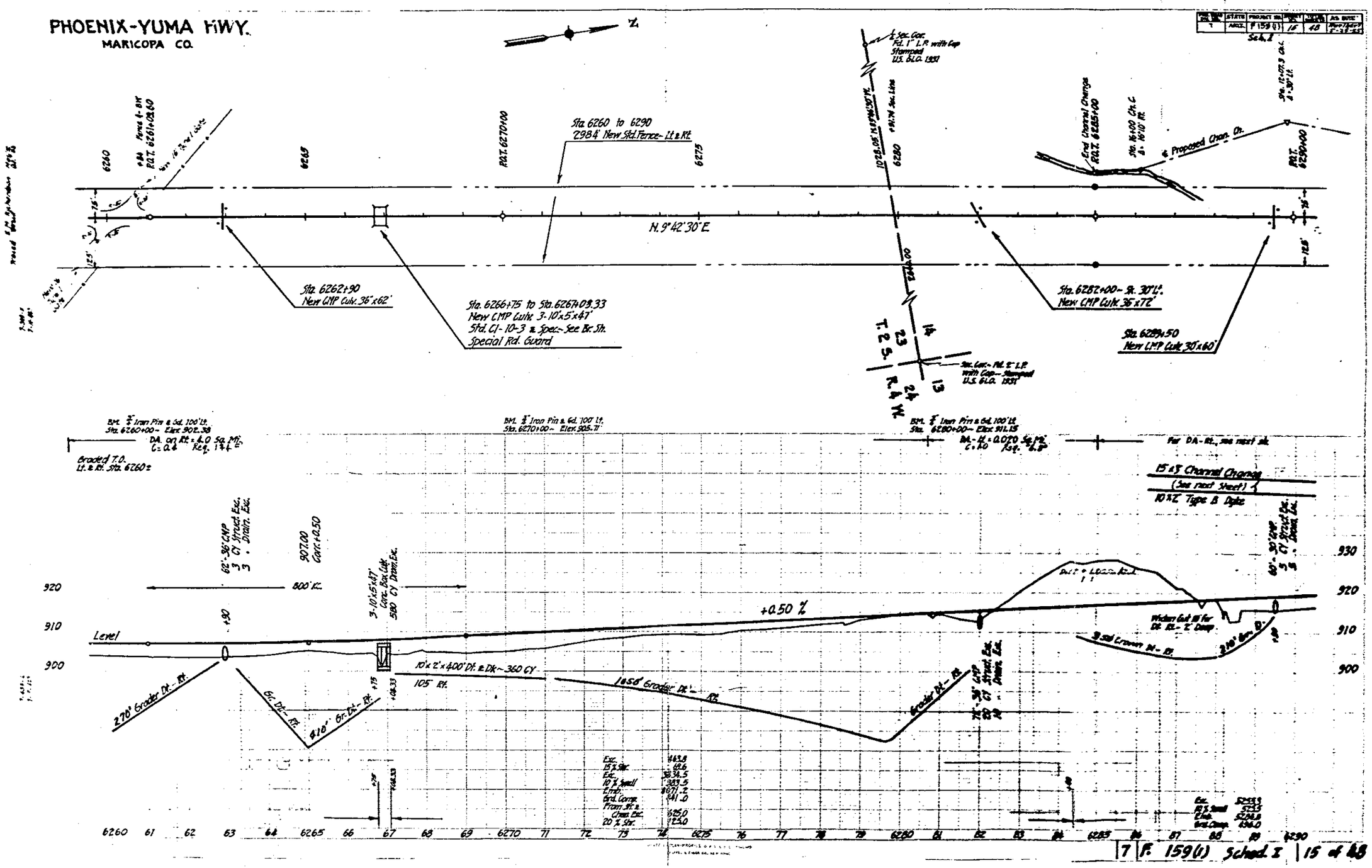
LEGEND
Silt
C.S. - Course Sand
G - Gravel
Cal. - Caliche

No. 1 - Machine Dug.
Nos. 2-3-4 Hand Dug.

THIS IS NOT A CONTRACT DRAWING

BRIDGE DIVISION
STA. 6238+
RAINBOW WASH BRIDGE
FOUNDATION DATA

F.I. 157(1)

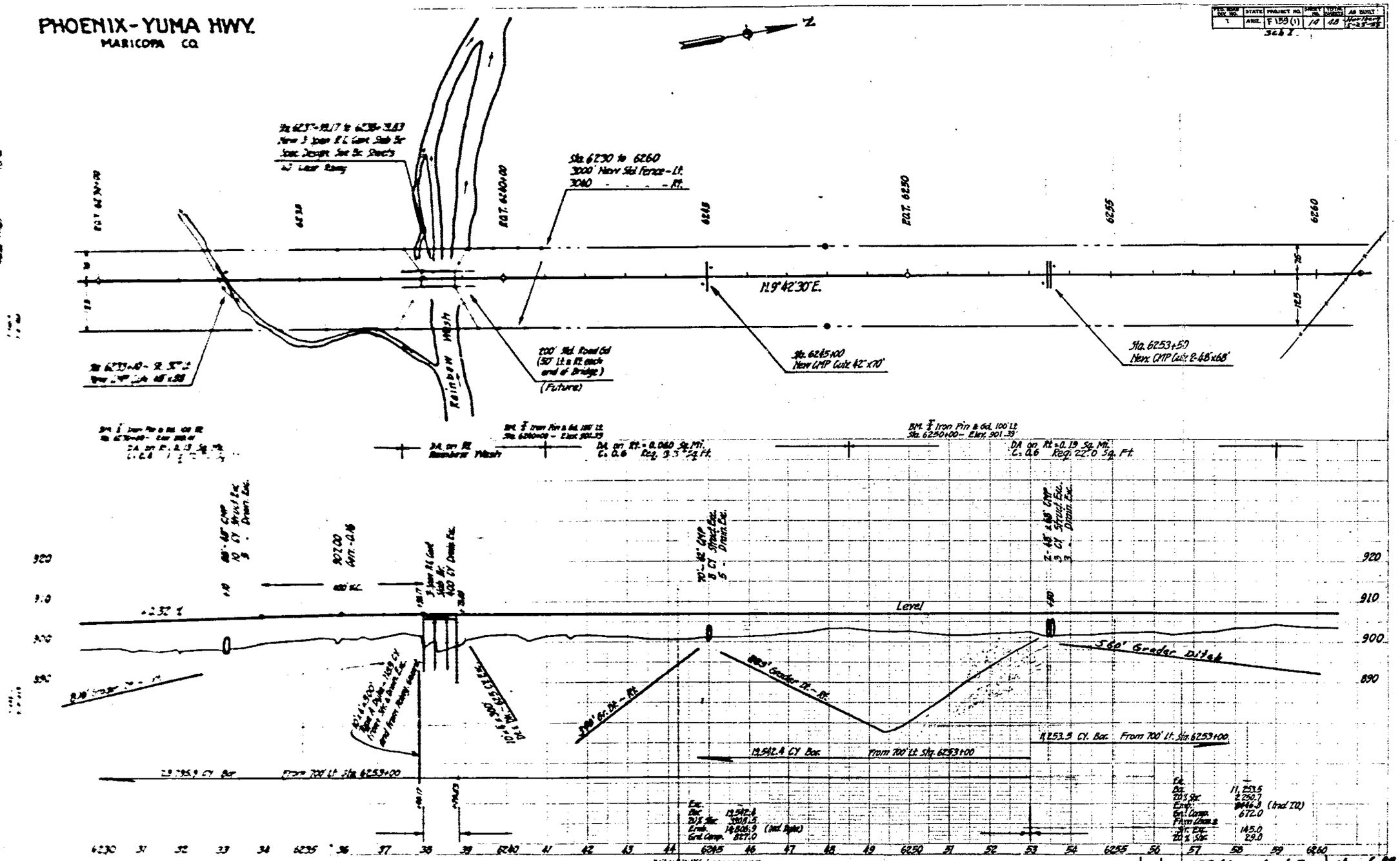

PHOENIX-YUMA HWY.
MARICOPA CO.
Sta. 6260 to 6290
298.4' New Std. Fence - Lt. & Rt.
Sta. 6262+90
New CMP Culv. 36" x 62'
Sta. 6266+75 to Sta. 6267+09.33
New CMP Culv. 3-10' x 5' x 47'
Std. CI-10-3 & Spec.-See Br. Sh.
Special Rd. Guard
Sta. 6282+00 - Sk. 30' Lt.
New CMP Culv. 36" x 72'
Sta. 6289+50
New CMP Culv. 30" x 60'
N. 9° 42' 30" E
Proposed Chan. Ch.
End Channel Change
R.O.T. 6285+00
R.O.T. 6290+00
Sec. Cor. Rd. 1" I.P. with Cap Stamped U.S. G.L.O. 1891
T. 2 S.
R. 4 W.
BM. 3/4" Iron Pin & Gd. 100' Lt. Sta. 6260+00 - Elev. 902.38
DA. on Rt. = 6.0 Sq. Mi.
C = 0.6 Req. 1% ±
Graded T.O. Lt. & Rt. Sta. 6260±
BM. 3/4" Iron Pin & Gd. 100' Lt. Sta. 6270+00 - Elev. 905.71
BM. 3/4" Iron Pin & Gd. 100' Lt. Sta. 6280+00 - Elev. 911.15
DA. - H = 0.070 Sq. Mi.
C = 0.0 Req. 0.5%
For DA-Rt., see next sh.
15 x 3 Channel Change
(See next Sheet)
10 % Z Type B Dike
62'-36" CMP
3 CY Struct. Exc.
3 " Drain. Exc.
907.00
Corr. +0.50
800' K.
3-10' x 5' x 47' Conc. Box Culv.
580 CY Drain. Ex.
+0.50 %
Level
270' Grader Dk. - Rt.
Gr. Dk. - Rt.
410' Gr. Dk. - Rt.
10' x 2' x 400' Dk. & Dk. - 360 CY
105' Rt.
1050' Grader Dk. - Rt.
Grader Dk. - Rt.
74'-36" CMP
22 CY Struct. Ex.
22 " Drain. Ex.
Widen Cut 10' for Dk. Rt. - 2' Deep
3.50' Crown Dk. - Rt.
2.10' Gr. Dk.
Exc. 443.8
15 % Str. 62.6
Exc. 3834.5
10 % Swell 383.5
Emb. 3671.2
Grd. Comp. 641.0
From Sh. 2
Chan. Exc. 625.0
20 % Str. 125.0
Exc. 5233.5
10 % Swell 523.3
Emb. 5210.3
Grd. Comp. 636.0
920
910
900
930
6260 61 62 63 64 6265 66 67 68 69 6270 71 72 73 74 6275 76 77 78 79 6280 81 82 83 84 6285 86 87 88 89 6290
7 F. 159(1) Sched. I 15 of 48

PHOENIX-YUMA HWY.

MARICOPA CO.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
1	ARIZ.	F 159 (1)	14	48	Hor. Alinm. 2-25-65

Sch. I



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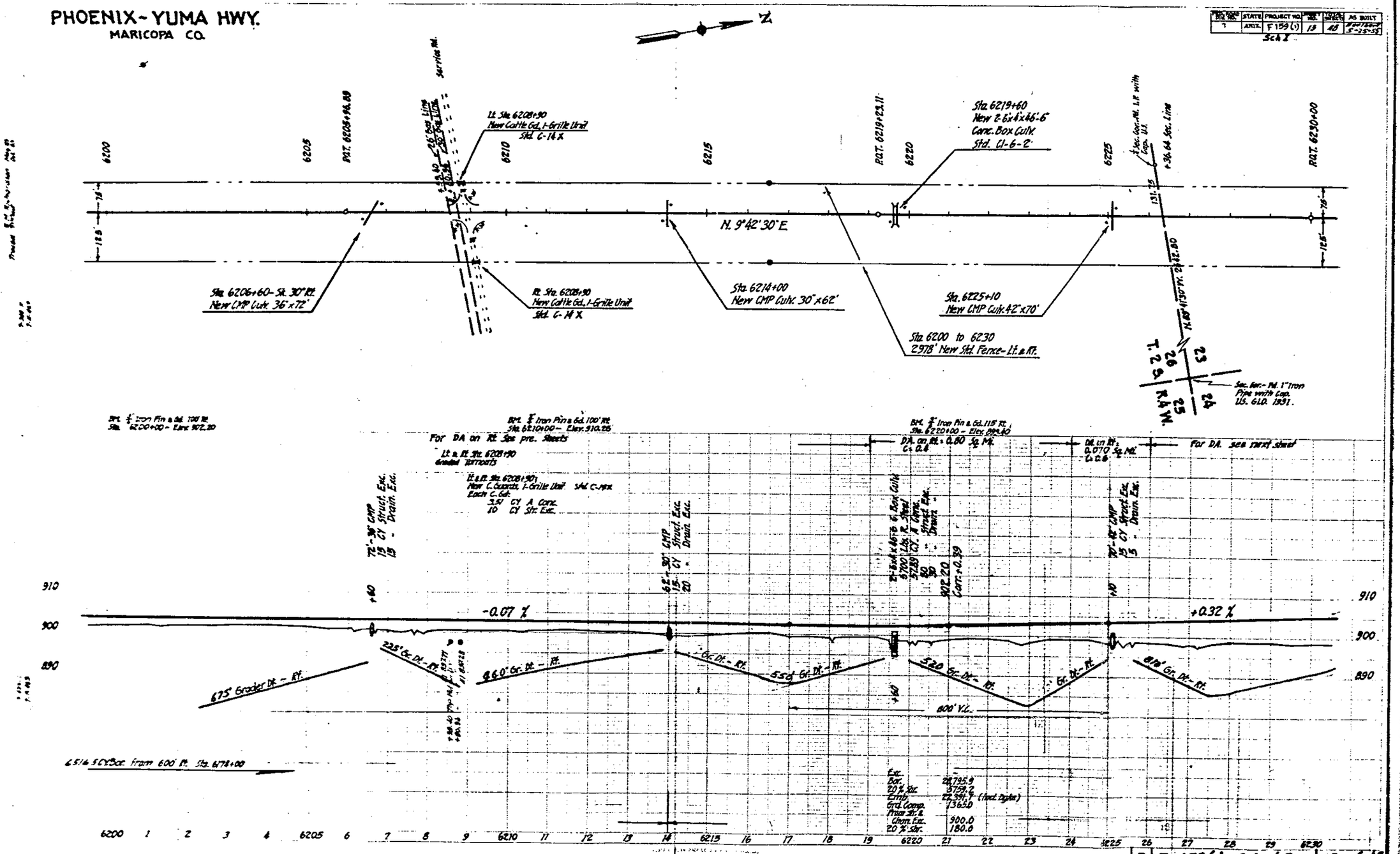
PHOENIX-YUMA HWY.

MARICOPA CO.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
7	ARIZ.	F 159 (1)	13	48	[illegible] 5-25-55

Sch I



7 | F. 159(1) Sched. I | 13 of 48

SECTION 4: Hydraulic Analysis

4.5 Special Problems/Solutions

Preliminary HEC-2 modeling results indicated that the topwidth for the 100-year floodplain would extend beyond the limits of the topographic mapping developed for this study. This is particularly evident in reachs of Rainbow Wash where the overbank areas fall away from the main channel (i.e.; Rainbow Wash functions as a perched channel). Consultations with the Flood Control District provided three approaches to tie the 100-year floodplain topwidths to the cross-sections. The first approach was to map the floodplain limits to a depth of 1-foot in the overbank areas. A second approach was to incorporate into the project topographic mapping, United States Geological Survey (USGS) topographic quadrangle maps to extend the limits of the project mapping. Interpolated ground elevations from the USGS quad maps were used to extend project cross-sections to delineate the floodplain limits. The final approach was to map the floodplain limits to the limits of the cross-sections.

The most appropriate approach to be used on a particular cross-section or group of cross-sections depended upon how far the floodplain limits might extend beyond the cross-sections, the depth of flow in the overbanks, and the degree of resolution and mapping provided in the 2000 scale USGS maps. In most cases the floodplains were delineated to the 1-foot depth. The HEC-2 input also incorporates the approach used by cross-section with the use of comment cards.

The study area between the mainstem and tributary of Rainbow Wash and downstream of SR 85 posed unusual conditions. The land within this triangle is of lower elevation than the water courses which surround it. A conservative approach of limiting the effective flow to the adjacent channel banks was used in this reach in the hydraulic analysis. The adjacent channel banks define the floodway boundary and zone break between Zone A and Zone AE.

SECTION 4: Hydraulic Analysis

4.6 Floodway Modeling

Following completion of the natural 100-year profile models for Rainbow Wash and it's tributary, floodway models were developed.

The floodway model for Rainbow Wash was developed starting at the Gila Confluence (cross-section 0.02). The analysis was started with a 1.0 foot surcharge with the computer generating a floodway using Method 4 (equal loss of conveyance). The initial computed floodway was plotted on work maps and reviewed. Adjustments were made and encroachment stations set by Method 1 based on the following criteria:

- Top widths to be more uniform
- Avoid excessive velocities
- Achieve goal of 1.0 foot surcharge with no point exceeding 1.0 foot

The floodway model for the Rainbow Wash tributary was developed subsequent to the mainstem floodway model. The starting water surface elevation was obtained from the mainstem 100-year floodway elevation at the confluence. Backwater from the mainstem was considered because it was assumed that the peaks coincide. The floodway was initially computed using Method 4 and a 1.0 foot initial surcharge. Criteria to develop final encroachments by Method 1 were stated above.

SECTION 4: Hydraulic Analysis

4.7 Final Results/Computer Runs

```
*****************************************
*  HEC-2 WATER SURFACE PROFILES          *
*                                        *
*  Version   4.6.2;  May 1991            *
*                                        *
*  RUN DATE    02FEB93    TIME   14:57:12 *
*****************************************
```

```
****************************************
*  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 02FEB93 14:57:12

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

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


T1      RAINBOW WASH FLOOD INSURANCE STUDY (MCFCD 90-66)
T2      SIMONS, LI & ASSOCIATES, INC. - TEMPE, AZ
T3      RAINBOW.DAT             FLOODPLAIN

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      0         2         0         0        -1         0         0         0       715         0

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

      1         0        -1         0         0         0        -1         0         0         0


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    110       200

J6  IHLEQ     ICOPY     SUBDIV    STRTDS    RMILE

      1


NC    0.030     0.030     0.030       0.1       0.3
QT        2     11568     11568
ET                          9.1                                                          9858.9    10521.5
X1     0.02        84    9858.9   10521.5         0         0         0
X3       10
GR    734.6    8997.9     733.8    9042.8     734.0    9092.0     726.1    9122.9     731.7    9132.8
GR    732.7    9145.6     728.7    9161.2     734.2    9190.3     733.6    9314.3     730.5    9336.3
GR    729.9    9370.3     729.5    9434.0     730.4    9441.1     728.2    9459.2     729.8    9477.7
GR    728.4    9496.7     727.3    9533.6     727.2    9540.3     728.3    9550.5     728.0    9591.1
GR    726.7    9614.9     726.6    9623.8     723.8    9634.1     723.2    9645.4     720.8    9649.6
GR    721.1    9671.6     722.1    9700.7     728.1    9715.1     727.7    9725.7     727.0    9733.3
GR    727.9    9757.8     725.6    9765.2     727.4    9776.4     727.9    9792.0     725.2    9795.1
GR    727.5    9800.9     728.3    9819.2     729.0    9858.9     713.3    9869.0     712.8    9889.9
GR    712.9    9923.1     713.1    9943.2     713.0    9973.9     712.6    9981.5     711.7    9984.3
GR    712.0   10000.0     712.0   10019.4     712.9   10050.3     713.5   10086.9     713.5   10138.5
GR    713.4   10175.9     712.8   10210.4     712.9   10258.1     712.9   10292.2     718.2   10299.7
GR    718.4   10314.3     718.4   10334.9     717.9   10379.2     713.9   10385.4     714.0   10413.2
GR    717.3   10420.6     717.7   10441.0     717.9   10486.6     722.5   10500.9     720.5   10508.0
GR    727.0   10521.5     727.3   10544.0     725.3   10547.6     727.2   10550.8     727.1   10562.9
GR    726.7   10563.0     726.8   10605.8     720.0   10613.7     725.2   10631.9     715.4   10663.3
GR    715.9   10715.6     711.5   10721.6     711.8   10736.4     714.4   10754.2     714.4   10775.5
GR    709.6   10804.8     707.8   10860.5     708.5   10902.7     706.5   11007.5
```

ET			9.1						9707.7	10174.5
X1	0.11	83	9707.7	10174.5	460	280	479			
X3	10									
GR	735.2	8999.6	735.0	9042.8	737.2	9108.5	737.1	9132.9	735.8	9147.7
GR	736.0	9160.9	736.8	9200.6	738.6	9225.1	736.5	9239.3	731.1	9256.5
GR	730.4	9270.5	738.0	9292.3	734.5	9317.5	734.8	9334.1	733.3	9341.4
GR	733.6	9360.7	732.6	9383.4	731.3	9393.9	729.8	9411.1	731.2	9415.4
GR	732.5	9432.5	731.2	9444.1	730.4	9476.5	730.9	9492.6	730.4	9518.7
GR	730.9	9531.9	727.6	9540.5	726.6	9546.6	730.4	9557.1	729.9	9584.8
GR	729.1	9613.9	728.7	9625.4	729.2	9632.9	729.4	9660.9	729.2	9707.7
GR	718.1	9716.1	718.4	9768.1	718.4	9827.4	717.9	9843.4	718.1	9850.4
GR	718.1	9884.0	717.0	9887.5	716.9	9928.6	716.8	9998.7	716.7	10000.0
GR	717.2	10009.9	717.8	10051.1	718.5	10108.8	717.6	10111.9	717.2	10121.7
GR	724.4	10131.8	724.7	10140.5	727.0	10155.0	728.8	10174.5	729.0	10217.3
GR	728.6	10238.1	728.9	10245.6	729.3	10277.6	728.6	10288.4	729.2	10299.7
GR	729.3	10337.0	728.9	10350.3	729.1	10359.2	729.2	10402.3	728.6	10434.1
GR	728.3	10512.2	728.7	10546.1	729.3	10632.7	728.3	10682.3	724.1	10691.3
GR	727.0	10699.2	733.2	10758.9	728.0	10840.9	723.1	10855.6	728.7	10874.4
GR	728.8	10880.8	726.0	10894.7	726.3	10914.0	721.0	10921.6	726.7	10930.0
GR	726.5	10956.8	711.3	10989.7	709.7	11008.0				
ET			9.1						9723.3	10187.5
X1	0.15	85	9723.3	10187.5	140	250	216			
X3	10									
GR	735.6	8999.3	736.1	9043.3	737.0	9122.6	736.9	9123.1	737.6	9187.4
GR	738.0	9234.0	737.1	9289.4	736.6	9309.1	736.9	9322.0	733.0	9336.4
GR	731.4	9356.4	736.5	9379.9	734.3	9393.5	734.3	9410.1	734.7	9425.1
GR	734.0	9445.8	733.8	9480.7	733.9	9492.2	732.2	9513.2	729.0	9524.0
GR	728.7	9537.3	729.1	9549.1	731.0	9557.2	730.3	9563.1	730.0	9599.1
GR	729.3	9606.8	729.8	9615.8	730.7	9676.5	730.6	9723.3	720.0	9730.6
GR	720.7	9767.4	721.8	9803.0	722.2	9842.1	720.4	9845.5	720.1	9871.1
GR	721.1	9875.1	720.7	9893.5	718.8	9899.2	718.9	9927.9	719.3	9971.2
GR	719.4	9995.0	718.2	10000.0	718.3	10011.6	719.4	10015.0	719.9	10054.4
GR	720.4	10060.3	720.7	10108.3	720.9	10137.9	720.9	10177.4	729.7	10187.5
GR	729.9	10225.4	730.1	10262.4	729.9	10300.1	728.4	10307.1	730.3	10315.5
GR	730.3	10327.7	727.2	10345.2	727.3	10353.4	729.2	10360.5	730.2	10372.8
GR	730.4	10391.9	730.1	10429.6	730.3	10479.0	730.1	10516.0	730.5	10526.6
GR	730.8	10542.2	729.2	10559.5	731.5	10589.9	729.0	10600.5	730.5	10617.9
GR	730.0	10618.9	731.6	10686.5	729.6	10746.6	723.3	10755.2	723.5	10764.1
GR	725.2	10790.8	729.3	10804.4	727.9	10816.5	731.8	10834.9	732.5	10856.7
GR	732.4	10894.1	731.9	10917.5	734.5	10948.3	729.0	10991.8	729.5	11002.6
ET			9.1						9695.2	10144.1
X1	0.19	86	9695.2	10144.1	160	250	226			
X3	10									
GR	735.2	8895.9	733.0	8921.7	733.3	8929.9	735.3	8938.3	736.3	8974.7
GR	737.0	9036.4	737.8	9103.1	738.5	9141.8	738.6	9195.7	738.2	9246.1
GR	737.6	9294.2	737.4	9337.1	734.0	9342.0	736.7	9346.1	738.7	9360.0
GR	736.3	9368.6	732.5	9375.1	732.5	9395.7	736.7	9408.5	737.6	9417.8
GR	736.0	9431.0	732.5	9447.6	733.0	9466.1	730.8	9513.1	730.9	9521.9
GR	731.1	9549.0	730.7	9568.2	728.8	9576.1	730.2	9584.4	730.7	9597.1
GR	731.1	9621.2	731.5	9661.3	731.1	9695.2	723.5	9706.7	722.8	9741.8
GR	722.0	9769.5	724.1	9772.5	723.8	9787.3	722.9	9793.3	722.4	9830.0

GR	722.3	9851.0	723.6	9854.7	723.6	9889.8	720.9	9903.1	721.5	9922.8
GR	721.1	9963.8	720.5	9972.8	720.7	9986.0	720.7	10000.0	721.1	10085.6
GR	723.1	10100.6	723.9	10133.6	730.3	10144.1	730.9	10161.0	730.5	10178.2
GR	731.4	10186.2	731.5	10253.7	730.5	10280.8	731.3	10290.5	730.8	10320.8
GR	731.9	10345.4	732.0	10367.6	729.8	10378.0	731.3	10386.8	731.7	10404.5
GR	731.1	10420.7	731.8	10433.4	731.7	10477.4	731.9	10509.8	730.2	10533.9
GR	733.9	10555.8	730.5	10578.0	732.1	10594.8	729.8	10605.2	732.7	10616.1
GR	732.3	10692.5	728.9	10701.1	731.2	10713.6	731.5	10731.5	727.8	10737.5
GR	731.7	10754.2	735.9	10795.5	737.0	10828.6	737.3	10899.3	737.0	10962.2
GR	737.2	11003.0								
NC	0.033	0.033	0.033							
ET			9.1						9519.2	10034.6
X1	0.29	84	9519.2	10034.6	475	480	510			
X3	10									
GR	740.0	8984.9	740.4	9023.1	739.0	9046.6	740.2	9056.1	740.3	9066.2
GR	739.4	9110.6	737.9	9140.8	737.2	9157.8	737.7	9162.0	737.7	9179.9
GR	738.7	9195.6	738.3	9205.8	739.3	9216.5	740.6	9242.1	741.0	9281.8
GR	738.1	9310.8	736.4	9335.4	734.5	9345.7	734.4	9365.1	733.6	9406.2
GR	734.2	9423.2	733.7	9441.7	730.6	9444.6	733.9	9450.9	733.9	9493.5
GR	733.7	9519.2	732.5	9534.0	728.7	9544.8	728.4	9578.2	728.4	9632.4
GR	728.6	9656.7	728.1	9690.6	728.3	9706.0	728.2	9749.2	727.0	9774.5
GR	725.6	9792.0	725.8	9808.1	725.3	9837.7	726.2	9851.8	726.1	9859.5
GR	726.8	9882.8	726.6	9929.8	725.9	9942.5	725.6	9984.5	725.3	10000.0
GR	725.7	10021.3	733.8	10034.6	733.7	10060.8	731.1	10076.7	733.5	10083.4
GR	733.8	10090.4	733.3	10100.0	731.2	10105.6	733.8	10114.6	733.8	10122.2
GR	734.9	10130.5	734.4	10158.7	732.3	10176.2	734.1	10193.0	734.5	10214.9
GR	734.3	10239.5	734.8	10292.4	733.9	10300.7	734.7	10318.9	734.9	10360.1
GR	733.6	10374.8	733.6	10381.7	735.0	10392.5	735.0	10445.4	735.1	10515.7
GR	735.1	10549.0	734.6	10559.6	735.3	10605.7	734.2	10616.5	735.3	10627.3
GR	735.3	10699.2	735.6	10765.9	737.4	10802.7	740.3	10850.3	741.7	10899.8
GR	744.7	10915.1	744.5	10925.1	742.1	10949.9	741.9	11022.3		
ET			9.1						9772.7	10064.8
X1	0.34	77	9772.7	10064.8	200	240	249			
X3	10									
GR	740.3	9003.0	740.4	9052.3	740.1	9059.5	740.8	9137.4	740.6	9168.5
GR	740.1	9190.1	739.5	9251.1	739.4	9313.4	740.2	9328.1	742.8	9337.1
GR	741.7	9357.5	740.4	9381.5	737.9	9418.1	736.7	9430.6	737.5	9440.0
GR	735.3	9461.7	735.0	9492.1	735.4	9557.5	735.8	9608.4	735.5	9638.0
GR	735.0	9653.0	735.6	9659.0	735.2	9700.4	735.3	9728.0	735.5	9772.7
GR	731.5	9783.8	731.4	9792.0	726.8	9801.3	727.0	9816.8	728.9	9868.8
GR	729.7	9931.2	729.2	9953.7	728.4	9968.9	726.8	9994.1	726.7	10000.0
GR	726.3	10015.2	727.8	10024.5	727.5	10044.7	735.2	10064.8	735.4	10086.0
GR	735.6	10123.5	735.8	10151.8	735.4	10190.8	735.2	10202.9	735.7	10235.9
GR	735.2	10255.8	735.2	10278.2	735.6	10293.5	735.7	10324.5	734.6	10334.6
GR	734.9	10347.4	736.2	10359.5	736.0	10418.0	736.8	10438.1	736.9	10447.6
GR	735.1	10466.9	736.6	10479.6	736.4	10498.0	734.7	10511.3	736.9	10524.7
GR	736.8	10551.0	735.9	10559.7	736.7	10567.5	737.0	10589.6	736.9	10617.9
GR	737.4	10639.5	737.4	10669.6	737.1	10746.3	737.3	10764.0	735.9	10774.8
GR	737.6	10796.2	737.2	10885.3	740.4	10938.7	741.5	10965.0	745.4	10985.4
GR	745.3	11007.2	743.6	11016.4						

```
ET                      9.1                                                     9921.5    10244.5
X1    0.38       61    9921.5    10244.5      150       185       240
X3      10
GR   738.8   8996.0    739.1     9172.7    739.1    9216.2     739.6    9385.3    742.0    9455.8
GR   742.2   9492.2    740.5     9510.4    740.5    9538.0     740.3    9547.1    740.8    9563.5
GR   741.7   9573.3    739.9     9612.0    739.1    9632.8     737.2    9669.9    737.2    9700.1
GR   737.1   9778.7    736.0     9783.3    737.1    9797.8     737.0    9851.1    736.2    9879.0
GR   737.0   9888.5    736.5     9921.5    727.6    9940.5     728.1    9963.0    727.8   10000.0
GR   730.6  10012.3    730.9    10044.9    729.1   10055.3     729.5   10104.1    730.2   10109.1
GR   730.2  10152.1    729.7    10172.9    734.0   10185.0     736.5   10244.5    736.9   10273.2
GR   736.9  10333.4    735.5    10339.3    736.2   10347.8     736.5   10394.5    737.7   10403.9
GR   737.8  10418.7    737.0    10440.4    737.3   10478.2     737.1   10496.0    736.2   10514.4
GR   736.8  10528.9    737.3    10574.4    736.2   10604.2     737.2   10636.2    737.5   10668.5
GR   737.8  10699.3    736.9    10716.1    738.2   10752.1     738.2   10797.0    736.7   10808.3
GR   738.5  10819.5    739.2    10872.1    738.6   10909.0     738.6   10966.2    737.2   10973.3
GR   739.0  11002.1

ET                      9.1                                                     9944.1    10269.7
X1    0.47       47    9944.1    10269.7      470       440       462
X3      10
GR   743.1   8903.7    743.2     9250.6    742.5    9454.6     744.7    9848.8    745.7    9897.0
GR   744.8   9944.1    730.6     9985.3    730.6   10000.0     731.0   10022.3    732.0   10027.8
GR   732.7  10053.5    734.3    10065.5    732.8   10069.8     733.2   10079.4    732.8   10097.2
GR   733.9  10105.8    734.9    10127.4    734.1   10155.9     733.1   10161.1    733.5   10166.3
GR   733.1  10189.9    733.2    10209.7    734.0   10218.0     734.5   10252.9    739.3   10269.7
GR   739.4  10314.3    739.6    10370.5    739.3   10425.4     738.2   10431.4    739.7   10437.1
GR   739.5  10459.1    738.9    10463.7    739.8   10481.6     739.7   10501.2    740.1   10537.3
GR   739.9  10570.9    740.2    10603.1    739.5   10657.3     738.6   10683.3    738.7   10728.3
GR   741.4  10774.1    739.8    10835.7    740.6   10860.9     739.5   10881.4    740.4   10928.5
GR   740.6  10997.8    740.8    11011.2

ET                      9.1                                                     9838.0    10164.7
        Right end of cross section extended 1.62 feet.  Floodplain mapped
        to the end of the FIS mapping for consistency with adjacent cross
        sections.  No USGS contour data available for this cross section.
X1    0.55       54    9838.0    10164.7      490       300       408
X3      10
GR   745.2   9001.0    745.0     9170.0    745.0    9220.1     745.0    9249.7    745.3    9301.8
GR   747.7   9334.7    748.2     9354.7    746.0    9359.4     748.1    9365.3    746.1    9370.4
GR   746.3   9396.2    746.6     9585.5    746.5    9660.0     745.9    9678.2    745.2    9741.0
GR   747.0   9752.8    747.8     9787.8    747.2    9830.1     748.2    9838.0    745.6    9856.9
GR   734.8   9884.1    735.9     9893.7    735.8    9954.8     735.5    9976.6    734.2   10000.0
GR   734.8  10012.3    735.3    10047.7    736.8   10084.6     735.7   10101.0    737.3   10108.7
GR   737.9  10151.0    742.8    10164.7    739.9   10196.0     740.9   10219.0    742.0   10235.3
GR   741.7  10256.3    737.0    10269.6    740.5   10279.9     737.2   10289.9    740.9   10305.0
GR   741.3  10361.3    741.0    10400.3    741.0   10429.4     740.3   10467.6    738.4   10501.5
GR   737.6  10552.2    738.1    10594.9    737.5   10655.8     737.4   10721.3    736.5   10777.3
GR   736.8  10777.4    737.0    10849.6    737.6   10950.7     737.6   11003.5
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NC              0.016     0.016
ET                9.1       9.1                                                  9007.6    10140.0
        Cross section 0.57 is aligned down the center of Old U.S.
        Highway 80 in the right overbank.
X1    0.57        39    9792.1   10305.8       130        95       106
X3      10
GR   747.1    9007.6     746.2    9211.6     745.9    9251.8     745.9    9473.4     747.9    9499.0
GR   748.9    9527.1     746.7    9531.7     749.2    9540.8     748.8    9546.7     748.8    9574.6
GR   747.8    9605.7     747.7    9642.3     746.8    9651.7     748.5    9659.1     748.8    9686.4
GR   747.9    9716.1     747.3    9735.3     747.4    9763.7     749.1    9779.8     749.1    9792.1
GR   743.8    9818.0     738.6    9862.7     737.2    9907.9     736.7    9963.2     736.2   10000.0
GR   736.7   10075.7     737.1   10134.7     737.6   10187.1     738.5   10242.6     739.0   10305.8
GR   739.2   10395.0     739.3   10495.5     739.5   10569.8     739.3   10685.8     739.0   10822.5
GR   739.3   10910.7     739.7   11032.6     740.0   11136.7     740.7   11243.2

NC              0.033     0.033
ET                        9.1                                                  9787.6    10143.3
X1    0.58        55    9787.6   10143.3        45        55        55
X3      10
GR   746.8    9001.5     746.1    9130.2     745.9    9194.0     745.9    9252.2     746.1    9460.3
GR   746.6    9508.9     748.8    9547.8     749.1    9576.6     749.2    9604.6     747.7    9656.9
GR   746.7    9705.1     743.2    9787.6     740.4    9854.7     736.1    9886.1     735.8    9929.7
GR   736.5    9948.5     739.4    9973.3     738.9    9993.7     736.7   10000.0     736.8   10036.5
GR   738.6   10051.6     738.8   10093.2     741.1   10121.8     746.7   10143.3     746.8   10175.2
GR   743.6   10185.7     744.6   10191.2     744.0   10217.3     741.9   10228.0     742.6   10260.1
GR   743.5   10283.0     744.8   10315.2     745.4   10349.1     746.0   10395.6     745.9   10441.0
GR   744.8   10458.7     746.5   10461.9     746.9   10474.6     747.9   10505.3     748.1   10560.3
GR   748.8   10639.6     745.5   10729.8     743.5   10735.5     745.5   10740.6     744.7   10762.3
GR   744.1   10782.1     744.4   10829.7     745.4   10863.8     746.0   10925.5     747.4   10933.4
GR   749.6   10950.3     749.6   10964.3     745.2   10997.5     744.7   11041.6     744.4   11053.9

NC                                    0.3       0.5
ET                        9.1                                                  9915.9    10095.9
        Cross section 0.59 is aligned with the downstream side of the Gila
        Bend canal.
X1    0.59        51    9915.9   10095.9       150        60        70
X3      10
GR   749.0    8897.7     749.6    9061.2     749.8    9175.6     750.1    9286.7     750.3    9393.4
GR   750.3    9473.0     750.5    9560.0     751.8    9592.5     750.9    9611.1     747.7    9629.4
GR   747.7    9638.8     747.7    9641.9     749.9    9655.6     749.2    9674.4     748.5    9708.9
GR   748.1    9719.2     747.0    9727.9     748.5    9738.3     748.5    9768.7     747.0    9786.9
GR   745.1    9817.9     745.1    9843.7     744.1    9906.8     745.0    9915.9     737.4    9934.6
GR   737.7    9955.4     738.0   10000.0     737.9   10032.7     739.2   10043.0     739.3   10067.6
GR   753.7   10095.9     753.4   10116.6     750.2   10126.5     749.1   10138.4     751.0   10151.4
GR   750.9   10177.8     749.4   10229.3     749.4   10275.6     749.5   10352.3     750.4   10420.1
GR   750.9   10478.7     751.1   10529.3     750.7   10586.3     749.8   10686.3     750.0   10771.3
GR   750.0   10869.9     750.5   10967.5     750.2   11049.5     750.1   11134.6     750.3   11193.7
GR   749.6   11258.7
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ET                          9.1                                                  9900.1    10065.7
        Cross section 0.60 is aligned through the center of the Gila Bend
        canal.
X1    0.60       38    9900.1   10065.7       30       40       44
X3      10
GR   740.5   8900.7    740.6    9002.5    740.6   9168.2    740.5   9284.3    740.7    9416.7
GR   740.5   9541.2    736.7    9587.0    732.9   9609.3    732.8   9624.8    741.8    9636.5
GR   750.4   9651.1    749.7    9656.5    749.8   9661.4    748.8   9695.3    747.8    9713.5
GR   748.8   9721.2    749.0    9747.6    747.3   9786.8    745.8   9810.1    744.5    9867.5
GR   744.5   9888.3    746.0    9900.1    737.8   9914.3    738.3   9956.5    738.2   10000.0
GR   738.4  10041.4    753.1   10065.7    754.2  10084.0    742.7  10097.7    740.9   10109.8
GR   741.3  10133.4    740.9   10191.7    741.1  10275.4    741.8  10418.7    741.2   10573.2
GR   741.4  10780.2    741.6   10977.5    741.5  11195.0

ET                          9.1                                                  9876.8    10055.8
        Cross section 0.61 is aligned with the upstream side of the Gila
        Bend canal.
X1    0.61       46    9876.8   10055.8       40       40       46
X3      10
GR   751.0   8895.3    751.0    8993.0    751.0   9122.9    751.1   9203.0    751.4    9285.2
GR   751.6   9362.1    751.5    9437.7    751.5   9490.5    751.6   9537.6    751.7    9596.6
GR   751.4   9604.0    750.4    9653.1    749.5   9682.2    749.5   9703.0    749.0    9709.1
GR   749.6   9722.4    749.1    9737.5    749.8   9745.7    749.0   9764.7    748.6    9787.3
GR   746.8   9808.6    746.3    9856.0    747.1   9876.8    738.5   9891.0    739.2    9938.6
GR   738.3   9971.4    738.4   10000.0    738.3  10023.8    754.5  10055.8    752.9   10092.6
GR   751.7  10137.3    750.8   10182.9    749.6  10250.3    749.0  10307.0    748.5   10368.5
GR   749.2  10421.9    749.5   10467.8    749.3  10529.2    748.2  10566.2    748.9   10605.9
GR   749.2  10666.9    749.5   10760.2    750.2  10841.5    750.6  10951.5    751.0   11037.3
GR   750.3  11256.1

NC   0.150    0.050
ET                7.1       9.1                                   8995.0   10370.0    9807.2   10151.2
X1    0.66       61    9807.2   10151.2      440      230      272
X3      10
GR   752.2   8995.0    752.5    9091.9    752.1   9132.5    752.4   9158.0    751.9    9379.5
GR   751.8   9506.4    752.8    9525.0    752.9   9546.5    750.7   9551.3    750.0    9588.5
GR   750.6   9610.3    750.1    9648.6    750.5   9668.1    750.4   9680.6    751.7    9696.6
GR   752.2   9707.9    752.4    9724.8    751.7   9744.5    751.3   9769.5    751.3    9807.2
GR   745.2   9826.9    741.7    9845.7    741.8   9854.1    739.8   9860.5    741.2    9879.5
GR   741.5   9920.8    740.8    9980.0    740.0   9999.9    740.3  10000.0    740.9   10015.6
GR   741.4  10017.5    742.8   10026.2    743.0  10038.6    740.7  10067.1    740.6   10083.4
GR   743.1  10106.9    745.0   10151.2    745.1  10188.4    744.7  10225.6    744.6   10239.3
GR   746.3  10258.6    745.2   10272.8    745.3  10295.2    746.0  10339.8    745.9   10364.7
GR   746.5  10383.0    747.3   10427.8    747.5  10495.0    747.6  10554.2    747.1   10600.4
GR   746.3  10662.8    747.0   10713.4    748.3  10737.5    751.8  10795.0    751.6   10795.2
GR   751.3  10797.3    746.1   10857.4    746.1  10883.3    750.6  10925.7    750.1   10949.6
GR   750.0  11014.5
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NC                                  0.1       0.3
ET              7.1       9.1                                9004.0   10362.0    9769.3   10101.1
X1     0.70      62    9769.3   10101.1       230       170      223
X3       10
GR    752.7    9004.0    753.0    9169.0    753.0    9277.5    753.4    9314.2    753.2    9528.3
GR    754.1    9538.1    753.8    9562.5    752.1    9568.9    751.7    9602.0    751.8    9651.9
GR    752.9    9661.5    754.5    9690.3    754.5    9705.7    752.7    9714.2    751.0    9737.7
GR    752.0    9759.3    751.8    9769.3    744.6    9791.1    745.0    9800.0    743.5    9805.2
GR    744.0    9815.6    743.4    9827.9    743.2    9842.5    744.1    9875.4    744.2    9895.8
GR    743.5    9954.8    743.0    9992.5    742.3    9997.9    742.3   10000.0    742.0   10037.1
GR    744.0   10060.4    744.0   10076.0    744.7   10086.0    747.3   10101.1    746.8   10131.9
GR    745.7   10171.4    746.4   10184.2    746.3   10219.6    746.7   10260.3    747.6   10336.8
GR    748.2   10362.0    747.8   10394.0    746.9   10423.3    747.6   10453.2    747.6   10497.8
GR    747.9   10560.1    748.0   10587.5    747.6   10661.6    747.9   10661.7    748.3   10711.0
GR    751.2   10728.0    751.6   10759.3    746.3   10775.7    746.0   10790.7    751.6   10813.4
GR    750.0   10823.2    750.0   10850.4    741.3   10881.9    750.7   10924.7    749.8   10934.2
GR    749.6   10965.0    745.2   11005.8

NH       4     0.150    9848.9    0.033   10108.1    0.040   10180.5    0.150   10997.6
ET              7.1       9.1                                8789.9   10180.5    9848.9   10108.1
        CWSEL intersects detailed cross section but upstream CWSEL's
        indicate potential flooding.  Floodplain plotted to the limits of the
        detailed cross section because of the Ag fields.
X1     0.79      56    9848.9   10108.1       300       560      493
X3       10
GR    752.2    8789.9    752.9    8938.5    753.2    9067.2    753.2    9113.9    753.5    9150.1
GR    753.7    9273.7    754.5    9402.7    754.9    9537.3    754.8    9637.1    755.8    9640.6
GR    753.8    9642.9    755.6    9647.4    753.9    9658.8    754.6    9677.2    755.5    9695.6
GR    756.8    9718.2    756.4    9735.9    754.1    9747.1    753.9    9775.5    753.7    9825.8
GR    752.3    9848.9    749.5    9883.0    746.7    9913.5    745.8    9954.0    745.8   10000.0
GR    746.3   10035.6    746.3   10061.6    745.0   10066.1    745.0   10076.9    750.4   10091.8
GR    751.2   10108.1    751.3   10125.5    749.3   10132.0    749.9   10150.7    751.5   10165.8
GR    750.3   10171.6    751.8   10180.5    751.5   10196.3    750.5   10203.3    750.6   10289.2
GR    750.8   10451.1    753.0   10478.1    752.8   10488.4    751.7   10496.5    751.8   10514.1
GR    751.8   10522.0    752.2   10786.3    753.3   10795.9    751.8   10802.5    753.4   10807.3
GR    753.6   10817.3    751.3   10838.8    751.4   10895.3    755.0   10924.9    754.3   10939.7
GR    753.4   10997.6

NH       4     0.150    9936.9    0.030   10087.6    0.040   10257.8    0.150   11007.3
ET              7.1       9.1                                9431.5   10257.8    9936.9   10166.5
        CWSEL intersects detailed cross section but upstream CWSEL's
        indicate potential flooding.  Floodplain plotted to the limits of the
        detailed cross section because of the Ag fields.
X1     0.89      52    9936.9   10087.6       515       480      496
GR    755.1    8998.3    755.2    9124.8    755.1    9181.9    755.7    9207.5    756.0    9299.0
GR    757.2    9304.5    755.6    9307.1    757.9    9316.2    756.8    9320.0    757.0    9340.7
GR    757.4    9358.5    757.4    9395.6    757.2    9400.2    756.7    9426.9    757.5    9431.5
GR    757.0    9463.2    756.4    9623.9    756.1    9717.1    755.6    9819.4    755.4    9886.4
GR    755.0    9889.7    755.7    9902.4    756.2    9917.2    758.6    9923.0    758.1    9924.9
GR    758.1    9936.9    754.4    9943.4    749.7    9965.3    747.0    9992.5    745.6    9996.0
GR    745.6   10000.0    745.8   10024.2    752.1   10062.6    755.5   10087.6    754.5   10090.5
GR    754.8   10120.0    754.3   10138.2    755.0   10161.7    749.7   10174.6    748.6   10184.5
GR    748.8   10193.7    752.1   10215.8    753.6   10247.4    754.2   10257.8    753.7   10271.6
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GR    752.1    10285.7     751.7    10467.7     755.4    10490.0     755.6    10507.7     754.5    10524.8
GR    755.5    10624.0     755.0    11007.3

NC    0.150     0.150     0.030
ET                7.1       9.1                                    8908.5    10429.2    9922.2    10056.9
        Right end of cross section extended 1.59 feet.  Floodplain plotted
        to the limits of the detailed cross section because of the Ag fields.
        No USGS contour data available for this cross section.
X1     0.98        38    9922.2    10056.9       560      465       501
GR    761.9    8908.5     761.2     9063.7     760.8    9152.9     761.6    9179.0     760.1    9316.6
GR    758.3    9535.0     756.6     9782.0     756.5    9880.9     757.5    9891.1     756.9    9906.0
GR    758.1    9909.5     758.0     9918.8     758.3    9922.2     755.6    9927.1     751.3    9961.6
GR    748.8    9985.3     747.9     9991.4     748.1   10000.0     748.1   10008.9     753.8   10037.7
GR    761.6   10056.9     759.4    10059.3     760.2   10070.0     755.8   10081.3     755.9   10128.5
GR    755.8   10220.9     755.5    10310.8     756.2   10333.1     751.2   10358.2     751.2   10365.4
GR    757.2   10397.6     758.1    10429.2     757.8   10435.2     757.6   10469.6     757.0   10489.9
GR    756.9   10545.0     756.9    10684.3     756.5   11004.4

ET                7.1       9.1                                    8932.2    10459.7    9797.4    10185.7
        Right end of cross section extended 3.10 feet.  Floodplain plotted
        to the limits of the detailed cross section because of the Ag fields.
        No USGS contour data available for this cross section.
X1     1.08        38    9925.6    10067.8       430      440       491
GR    762.1    8932.2     761.7     8987.4     761.2    9010.7     759.9    9298.6     759.3    9485.5
GR    758.8    9652.1     758.5     9871.2     759.3    9876.2     758.7    9880.8     758.7    9888.0
GR    759.5    9896.2     759.2     9914.9     762.3    9925.6     762.2    9933.1     762.2    9938.0
GR    751.2    9983.4     751.0    10000.0     751.4   10012.2     754.2   10040.5     758.0   10062.2
GR    760.8   10067.8     759.5    10084.6     758.3   10114.7     758.5   10141.5     758.5   10217.8
GR    758.0   10316.5     757.6    10392.4     758.5   10404.5     753.0   10431.7     760.3   10459.7
GR    760.7   10499.7     758.8    10505.9     758.2   10521.8     756.6   10530.5     756.6   10696.6
GR    757.0   10711.8     756.6    10712.0     756.8   10998.6

ET                7.1       9.1                                    8988.0    10446.8    9532.6    10070.8
        Left end of cross section extended 1.92 feet.  Floodplain plotted to
        the limits of the detailed cross section because of the Ag fields.
        No USGS contour data available for this cross section.
X1     1.17        42    9933.9    10070.8       300      650       502
GR    761.7    8988.0     761.5     9027.9     761.2    9045.0     760.6    9255.8     760.5    9453.5
GR    761.0    9598.0     760.7     9717.6     761.0    9862.2     760.2    9866.3     761.9    9879.6
GR    761.9    9897.3     763.4     9901.0     764.1    9908.1     765.2    9920.5     765.3    9933.9
GR    762.2    9941.2     756.8     9970.8     755.2    9978.0     755.0    9988.5     755.0   10000.0
GR    755.0   10012.7     761.7    10047.2     764.8   10058.0     765.1   10070.8     762.4   10078.3
GR    762.4   10090.5     761.3    10094.9     762.2   10109.2     762.7   10173.9     763.1   10246.8
GR    763.4   10345.7     764.0    10446.8     764.0   10556.6     764.1   10603.4     764.3   10603.5
GR    764.1   10612.9     764.3    10840.2     765.9   10880.8     759.7   10915.8     767.1   10966.4
GR    767.8   11005.7     766.2    11015.0

ET                7.1       9.1                                    9028.0    10510.0    9500.1    10063.5
        Left end of cross section extended 2.14 feet.  Floodplain plotted to
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        the limits of the detailed cross section because of the Ag fields.
        No USGS contour data available for this cross section.
X1    1.26       42    9915.7   10063.5      450      520      494
GR   764.3   9028.0     763.7    9345.5    763.5   9508.3    763.9   9660.8    764.0   9879.6
GR   763.5   9883.9     765.0    9897.7    765.0   9908.5    767.9   9915.7    766.0   9918.5
GR   765.9   9926.4     767.3    9930.9    763.0   9938.2    758.3   9966.2    758.3   9986.9
GR   757.3  10000.0     758.5   10004.5    763.6  10042.2    767.1  10049.8    767.5  10063.5
GR   764.1  10069.4     764.2   10118.0    764.4  10194.8    765.0  10287.9    765.8  10430.7
GR   766.6  10548.7     766.9   10688.1    768.0  10691.5    765.7  10695.0    770.4  10705.1
GR   770.5  10718.3     767.5   10733.4    769.4  10741.1    769.5  10759.8    769.5  10759.9
GR   770.8  10780.6     778.7   10827.3    778.0  10880.6    778.2  10913.1    778.3  10954.3
GR   776.6  10986.4     774.8   11006.5

ET              7.1       9.1                                 9045.0  10467.2   9713.3  10065.1
        Left end of cross section extended less than 1 foot.  Mapped
        floodplain to edge of the detailed cross section.
X1    1.36       51    9923.8   10065.1      560      450      500
GR   769.3   8995.8     768.9    9025.4    768.8   9047.0    767.8   9214.1    767.5   9513.2
GR   767.1   9717.7     766.8    9886.8    766.3   9891.6    767.3   9898.8    767.3   9915.6
GR   770.3   9923.8     768.9    9925.5    768.2   9937.0    766.0   9942.3    761.6   9984.1
GR   760.4   9986.1     760.6   10000.0    760.6  10012.0    765.3  10045.5    768.6  10050.9
GR   768.7  10060.8     771.4   10065.1    767.9  10073.3    767.7  10088.3    766.8  10104.1
GR   767.1  10111.9     767.3   10208.7    767.6  10300.2    767.6  10385.6    767.7  10446.7
GR   769.4  10453.2     767.3   10457.3    770.7  10467.2    770.3  10468.8    770.3  10485.8
GR   768.5  10508.5     769.2   10672.7    770.4  10680.5    769.9  10700.0    770.5  10703.3
GR   769.9  10705.0     770.3   10733.5    771.6  10772.3    776.5  10789.0    777.3  10811.0
GR   777.3  10832.2     776.7   10866.4    775.6  10915.1    775.3  10953.1    772.5  10997.8
GR   771.7  11018.2

ET              7.1       9.1                                 9220.0  10455.0   9792.8  10051.7
        Left end of cross section extended less than 1 foot.  Mapped
        floodplain to edge of the detailed cross section.
X1    1.45       40    9928.4   10051.7      515      480      497
GR   771.7   8985.9     771.5    9134.2    770.5   9411.2    770.2   9661.7    769.4   9873.1
GR   768.8   9877.4     770.1    9888.4    770.1   9899.8    771.7   9903.6    771.5   9909.6
GR   773.6   9917.5     773.6    9928.4    768.6   9940.3    764.8   9978.5    763.0   9981.3
GR   763.3  10000.0     763.6   10013.3    768.3  10044.8    772.6  10051.7    772.5  10066.9
GR   770.3  10071.9     770.9   10083.2    771.1  10092.3    772.0  10096.8    769.2  10099.5
GR   771.2  10102.8     770.3   10127.2    770.8  10321.1    771.2  10495.8    772.3  10750.3
GR   771.8  10764.5     773.1   10773.6    773.6  10797.6    778.8  10807.0    778.2  10823.7
GR   776.3  10836.3     776.7   10872.5    778.9  10887.7    778.3  10932.8    778.3  10999.0

ET              7.1       9.1                                 9390.0  10380.0   9873.5  10065.0
        Both ends of the cross section were extended less than 1 foot.
        Mapped floodplain to edge of the detailed cross section.
X1    1.55       45    9933.1   10065.0      530      480      505
GR   775.5   8983.1     775.3    9046.9    775.0   9149.8    774.3   9173.0    774.5   9329.0
GR   774.6   9373.6     773.6    9385.6    773.7   9393.3    775.2   9403.3    772.6   9415.4
GR   773.3   9428.4     773.8    9462.7    775.1   9469.7    772.7   9472.7    774.9   9477.0
GR   774.0   9481.4     773.7    9517.6    773.5   9651.4    773.4   9748.3    773.2   9893.5
GR   772.6   9897.6     773.0    9905.5    773.4   9918.8    776.3   9924.7    776.3   9933.1
GR   775.0   9939.2     771.8    9945.0    767.8   9980.2    766.7   9984.1    766.3  10000.0
GR   766.5  10016.8     773.9   10058.2    778.0  10065.0    778.2  10078.6    773.7  10093.3
GR   772.7  10124.8     773.9   10144.0    775.2  10148.3    772.9  10150.6    775.1  10154.2
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GR    774.5    10157.5     774.0    10189.2     774.1    10314.4     775.7    10814.5     775.1    11021.7

ET                7.1       9.1                                     9455.0    10285.0    9936.6    10064.0
      Left and right ends of the cross section were extended 1.19 and
      1.09 feet, respectively.  The left floodplain edge was mapped to
      STA 8805 using interpolated USGS quad contour data.  The right
      floodplain edge was interpolated to be 3105 feet beyond the end of
      the detailed cross section using USGS quad contour data.
      Therefore, the right floodplain edge was mapped to the end of the
      cross section (artificial boundary).
X1     1.61        43    9936.6    10064.0     330      330      328
GR    776.6    8980.1     776.3     9152.9     776.0    9172.6     776.3    9400.9     775.0     9577.5
GR    775.2    9615.5     775.6     9638.4     775.4    9659.5     776.9    9663.6     774.2     9673.3
GR    775.2    9677.8     775.8     9734.4     776.9    9738.2     774.5    9742.8     776.6     9747.6
GR    775.6    9750.9     775.2     9812.4     774.8    9888.8     775.2    9897.9     775.2     9910.4
GR    779.5    9923.0     779.9     9936.6     774.2    9950.0     768.3    9980.2     768.0    10000.0
GR    768.3   10009.1     774.5    10056.5     777.9   10064.0     777.1   10066.2     777.4    10077.9
GR    775.9   10081.1     775.5    10098.2     776.6   10106.5     777.4   10126.4     778.5    10131.5
GR    775.5   10135.2     777.5    10138.2     776.6   10140.4     776.5   10162.3     775.9    10316.3
GR    776.0   10738.4     777.1    10751.2     776.7   11010.3

ET                7.1       9.1                                     9480.0    10235.0    9937.5    10074.6
      Left and right ends of the cross section were extended 1.80 and
      1.20 feet, respectively.  The left floodplain edge was mapped to
      STA 8927 using interpolated USGS quad contour data.  The right
      floodplain edge was interpolated to be 2850 feet beyond the end of
      the detailed cross section using USGS quad contour data.
      Therefore, the right floodplain edge was mapped to the end of the
      cross section (artificial boundary).
X1     1.64        43    9937.5    10074.6     160      165      162
GR    777.0    8986.9     777.0     9120.3     777.7    9248.9     777.4    9273.2     776.6     9499.2
GR    776.3    9619.1     776.0     9744.5     776.1    9783.4     776.8    9786.0     775.9     9791.0
GR    776.6    9798.4     775.4     9801.9     776.2    9808.4     776.9    9862.6     778.0     9866.8
GR    775.5    9874.1     777.7     9881.5     778.0    9908.3     781.5    9917.8     781.9     9934.8
GR    783.3    9937.5     776.1     9951.9     769.5    9983.6     769.7   10000.0     769.9    10024.9
GR    776.8   10070.0     779.5    10074.6     778.4   10076.1     778.3   10087.2     777.2    10089.2
GR    777.4   10101.3     778.4    10125.1     779.8   10128.6     776.8   10133.6     779.0    10137.6
GR    777.5   10139.6     777.4    10161.6     777.1   10293.7     776.8   10500.5     776.3    10657.0
GR    776.3   10673.6     777.3    10922.6     777.6   11058.0

ET                7.1       9.1                                     9510.0    10185.0    9904.8    10078.2
      Left and right ends of the cross section were extended 1.98 and
      1.08 feet, respectively.  The left floodplain edge was mapped to
      STA 8480 using interpolated USGS quad contour data.  No USGS
      contour data available for the right overbank.  Therefore, the right
      floodplain edge was mapped to the end of the cross section
      (artificial boundary).
X1     1.67        32    9904.8    10078.2     170      170      164
GR    778.1    8972.8     778.1     9062.9     778.2    9093.1     778.6    9229.5     777.8     9435.8
GR    777.6    9624.2     777.5     9842.7     777.8    9848.7     777.8    9871.3     779.1     9874.3
GR    778.1    9880.1     777.9     9899.3     778.8    9904.8     778.5    9938.4     773.9     9960.2
GR    773.7   10000.0     773.9    10007.7     772.2   10013.3     772.9   10041.6     777.1    10073.6
GR    779.1   10078.2     779.0    10085.7     779.5   10131.2     780.8   10133.0     778.2    10137.8
GR    779.7   10140.8     778.8    10143.8     778.4   10166.2     777.9   10297.3     777.9    10721.0
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GR    778.8    10743.0     779.0    11014.6

NC                                    0.2
NH        4      0.150    9936.4     0.033    10100.5     0.045    10352.6     0.150    11009.5
ET               7.1        9.1                                   9615.0    10352.6    9936.4    10247.6
        Left and right ends of the cross section were extended 2.64 and
        1.54 feet, respectively.  The left floodplain edge was mapped to
        STA 8254 using interpolated USGS quad contour data.  The right
        floodplain edge was interpolated to be 708 feet beyond the end of
        the detailed cross section using USGS quad contour data.
        Therefore, for consistency with adjacent cross sections, the right
        floodplain edge was mapped to the end of the cross section
        (artificial boundary).
X1     1.74        44    9936.4    10100.5       300       340       335
GR    780.2    8980.9     779.6     9062.0     779.7    9140.4     779.3    9165.3     779.9    9214.3
GR    779.8    9349.8     779.4     9380.7     779.9    9398.1     779.7    9481.1     779.6    9602.9
GR    779.8    9699.6     779.7     9882.0     779.8    9903.0     780.2    9911.6     779.4    9920.9
GR    784.5    9936.4     781.0     9942.2     776.5    9973.5     774.3    9980.9     774.6   10000.0
GR    774.5   10044.3     782.7    10100.5     780.5   10108.8     780.5   10154.4     779.2   10161.9
GR    779.2   10170.7     780.6    10175.5     780.5   10211.0     778.6   10225.1     779.5   10239.4
GR    777.9   10254.1     777.7    10276.9     779.1   10286.5     780.6   10304.7     781.8   10347.0
GR    782.8   10352.6     779.6    10359.0     781.7   10364.1     779.8   10368.4     779.5   10399.4
GR    779.3   10493.5     779.5    10696.5     780.8   10786.0     781.3   11009.5

NC                                    0.1
NH        4      0.150    9887.4     0.033    10053.9     0.045    10676.4     0.150    11025.5
ET               7.1        9.1                                   9670.0    10676.4    9887.4    10374.6
        Both ends of the cross section were extended less than 1 foot.
        Mapped floodplain to edge of the detailed cross section.
X1     1.83        49    9887.4    10053.9       520       460       498
GR    783.8    8998.9     783.7     9021.6     783.1    9171.7     782.8    9326.3     782.8    9424.5
GR    782.9    9570.7     782.6     9713.5     782.5    9825.6     782.6    9850.4     782.9    9857.0
GR    782.0    9864.2     785.7     9887.4     779.1    9900.8     779.5    9943.3     778.2    9948.9
GR    778.6    9979.6     778.5    10000.0     778.2   10019.0     782.0   10038.5     782.3   10053.9
GR    780.8   10086.6     782.5    10097.0     781.5   10105.6     783.2   10122.0     783.8   10136.4
GR    783.4   10180.4     783.1    10196.7     783.5   10217.9     783.2   10278.7     782.4   10307.9
GR    782.1   10334.0     782.7    10345.6     783.1   10376.1     782.6   10439.8     781.2   10454.7
GR    782.4   10464.7     782.2    10487.6     782.5   10494.0     783.1   10540.8     779.6   10570.2
GR    779.6   10602.2     783.3    10629.5     785.2   10676.4     782.3   10684.5     783.8   10688.5
GR    782.7   10691.9     782.6    10706.9     782.9   10718.2     783.9   11025.5

NC    0.150     0.045     0.033
ET               7.1        9.1                                   9665.0    10883.0    9813.0    10090.7
        Left end of cross section extended 1.30 feet.  The left floodplain
        edge was mapped to STA 8589 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
X1     1.88        57    9813.0    10028.2       250       280       270
GR    784.6    8956.1     786.4     8961.7     785.0    8965.8     784.4    9033.2     784.3    9134.7
GR    784.2    9265.8     784.4     9480.3     784.4    9626.6     784.1    9748.7     783.5    9805.0
GR    785.0    9813.0     783.6     9841.4     781.4    9860.2     781.7    9901.3     780.5    9925.3
GR    780.7    9971.6     780.7     9989.5     780.2   10000.0     780.3   10021.7     785.1   10028.2
GR    784.3   10041.3     782.7    10050.4     784.4   10060.4     783.8   10088.7     784.0   10104.1
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GR    783.2    10115.0     784.6    10124.9     784.5    10174.0     783.7    10189.6     784.5    10203.2
GR    784.9    10230.7     784.8    10298.4     783.9    10357.8     784.7    10368.2     784.7    10410.3
GR    784.1    10417.6     784.8    10426.3     784.8    10471.5     784.8    10528.7     785.5    10573.1
GR    785.0    10630.7     783.8    10634.4     785.2    10643.2     784.7    10656.2     785.5    10668.9
GR    785.7    10719.8     785.2    10753.1     785.0    10770.9     782.8    10791.1     783.3    10818.7
GR    785.3    10835.7     787.3    10883.0     784.4    10891.9     785.7    10896.4     785.1    10901.0
GR    785.0    10927.8     785.3    11010.5

ET              7.1         9.1                                      9765.0    10962.9     9875.9    10172.2
      Left end of cross section extended 1.53 feet.  The left floodplain
      edge was mapped to STA 8415 using interpolated USGS quad
      contour data.  Right end of cross section extended less than 1 foot.
      The right floodplain edge was mapped to the end of the detailed
      cross section.
X1     1.92        51     9875.9    10093.6       220       220       227
GR    786.0     8852.5     785.6     9000.8     785.3     9197.9     786.3     9240.7     787.0     9245.1
GR    785.4     9248.6     787.0     9255.0     785.7     9258.7     786.0     9338.8     785.8     9566.9
GR    785.8     9687.5     785.9     9849.1     784.7     9860.5     787.4     9875.9     784.6     9910.8
GR    782.4     9923.8     782.6     9961.7     782.3    10000.0     783.0    10014.1     782.2    10026.1
GR    782.9    10038.5     782.6    10085.0     786.0    10093.6     785.1    10108.0     785.8    10122.3
GR    785.6    10163.4     784.0    10178.5     784.1    10186.2     785.9    10192.9     785.6    10230.9
GR    785.9    10245.0     785.9    10291.5     786.6    10298.7     786.1    10342.3     785.5    10371.0
GR    785.9    10380.3     786.4    10470.8     786.3    10497.5     786.7    10528.6     786.5    10567.8
GR    786.1    10586.2     786.4    10608.7     786.4    10646.5     786.8    10668.7     785.7    10700.7
GR    786.2    10707.8     786.6    10759.7     786.5    10827.0     786.9    10843.7     786.7    10923.7
GR    786.9    10962.9

ET              7.1         9.1                                      9893.9    11000.2     9893.9    10253.7
      Left end of cross section extended 1.55 feet.  The left floodplain
      edge was mapped to STA 8529 using interpolated USGS quad
      contour data.  Right end of cross section extended 1.15 feet.  The
      right floodplain edge was mapped to STA 11655 using interpolated
      USGS quad contour data.
X1     2.02        45     9893.9    10253.7       475       490       490
X3       10
GR    788.8     8944.3     788.8     9192.1     789.4     9197.4     787.4     9200.5     789.9     9207.3
GR    789.0     9210.8     789.2     9307.2     789.1     9582.9     788.5     9712.6     789.0     9718.1
GR    788.8     9873.5     787.6     9879.6     792.8     9893.9     788.9     9917.3     786.1     9933.6
GR    786.4     9964.8     786.0    10000.0     786.0    10023.1     786.7    10027.3     787.3    10064.2
GR    786.7    10085.9     787.5    10093.1     787.2    10133.5     787.1    10203.8     786.4    10207.3
GR    786.3    10223.5     788.9    10228.7     789.1    10253.7     786.8    10272.8     787.0    10281.6
GR    789.7    10296.2     789.3    10360.9     788.5    10366.7     789.6    10372.7     789.3    10408.9
GR    789.8    10436.4     789.6    10513.2     789.2    10592.0     789.1    10628.7     787.6    10667.3
GR    789.6    10685.2     789.2    10705.7     788.5    10719.9     789.0    10837.6     789.2    11000.2

NH       4     0.015     9860.2     0.033    10079.3     0.040    10260.0     0.150    11015.3
ET              7.1         9.1                                      9860.2    10570.0     9860.2    10147.0
      Left end of cross section extended 1.49 feet.  The left floodplain
      edge was mapped to STA 8508 using interpolated USGS quad
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        contour data.  Right end of cross section extended 1.19 feet.  The
        right floodplain edge was mapped to STA 11641 using interpolated
        USGS quad contour data.
X1    2.11       31    9860.2   10079.3      490      490      497
X3      10
GR   792.0   8861.9     792.4    9065.6    792.5   9282.1    792.2   9473.8    792.2   9632.5
GR   791.2   9804.9     791.8    9808.2    791.8   9839.9    791.6   9846.9    795.1   9860.2
GR   789.7   9892.8     790.1    9957.6    789.2   9973.7    789.2   9983.4    790.2   9986.1
GR   789.7  10000.0     788.6   10070.2    791.5  10079.3    789.9  10083.7    790.9  10088.2
GR   790.9  10136.1     789.7   10192.7    789.6  10214.5    792.0  10227.4    792.1  10260.0
GR   791.7  10283.5     791.8   10426.2    791.8  10543.9    792.0  10715.1    791.9  10761.7
GR   792.3  11015.3

NC   0.040    0.045     0.033       0.2
ET              7.1       9.1                                9736.6  10355.0    9822.6  10209.6
        Left end of cross section extended 2.58 feet.  The left floodplain
        edge was mapped to STA 8001 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
X1    2.21       52    9851.1   10119.2      400      530      503
GR   794.6   9004.3     794.8    9198.9    795.2   9380.4    795.2   9527.2    794.7   9687.3
GR   797.9   9702.0     795.7    9717.4    799.8   9736.6    794.5   9770.6    793.0   9798.0
GR   792.9   9834.3     799.9    9851.1    795.0   9871.1    793.6   9895.7    792.7   9925.5
GR   793.1   9974.3     792.2   10000.0    792.4  10015.3    793.6  10020.0    793.7  10057.2
GR   792.5  10082.4     794.9   10090.5    795.4  10108.3    798.7  10119.2    796.6  10127.1
GR   799.5  10149.6     795.6   10169.5    795.8  10193.0    794.8  10203.1    795.8  10211.2
GR   794.5  10221.2     795.5   10231.2    793.8  10243.9    795.0  10248.6    795.5  10295.8
GR   794.7  10315.9     795.6   10368.6    795.4  10439.2    794.1  10446.0    795.2  10450.2
GR   795.2  10471.5     794.4   10479.3    795.5  10486.6    794.3  10525.5    794.9  10545.9
GR   795.0  10635.3     794.7   10682.6    794.3  10754.3    794.6  10812.8    795.8  10867.5
GR   795.9  10902.7     796.2   11013.5

NC   0.045                         0.1
ET              7.1       9.1                                9509.2  10290.0    9814.0  10255.6
        Left end of cross section extended 3.73 feet.  The left floodplain
        edge was mapped to STA 8018 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
X1    2.30       57    9918.8   10255.6      470      490      502
GR   796.5   8986.5     796.8    9032.6    797.0   9050.8    797.7   9388.7    799.0   9395.2
GR   796.2   9402.5     799.0    9407.2    797.9   9451.5    797.2   9483.6    802.4   9509.2
GR   798.9   9532.9     795.5    9549.2    795.2   9597.2    797.4   9603.4    799.1   9650.3
GR   798.5   9660.9     796.4    9670.8    796.8   9683.0    797.7   9706.8    798.9   9712.7
GR   798.4   9735.6     797.3    9742.6    798.8   9747.7    799.3   9777.7    798.9   9801.3
GR   798.5   9855.9     797.9    9873.9    799.8   9903.0    805.5   9918.8    795.6   9932.0
GR   796.3   9964.0     795.9   10000.0    796.4  10020.8    796.7  10060.1    797.2  10100.5
GR   797.3  10156.6     796.8   10166.0    796.0  10191.6    797.0  10205.2    798.4  10227.0
GR   798.9  10255.6     797.8   10291.8    798.4  10301.0    798.0  10312.8    799.3  10319.7
GR   797.9  10407.3     798.8   10412.7    798.3  10441.8    798.4  10505.5    798.9  10587.5
GR   798.3  10631.8     798.7   10661.5    798.6  10790.8    799.0  10899.6    799.3  10975.8
GR   797.5  11002.8     799.5   11023.3
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NH      5     0.150     9084.0     0.045     9825.3     0.033    10066.5     0.045    10646.7     0.150
NH  11009
ET              7.1       9.1                                    9084.0    10066.5     9539.2    10066.5
        Left end of cross section extended 2.75 feet.  The left floodplain
        edge was mapped to STA 8291 using interpolated USGS quad
        contour data.
X1   2.39       65    9825.3    10066.5       490       470       490
GR  800.0   8985.7     800.0     9020.9     800.1    9031.9     799.5    9065.6     805.1    9084.0
GR  800.7   9115.6     799.7     9155.5     799.0    9168.2     799.9    9175.7     799.7    9214.7
GR  800.9   9224.7     801.1     9271.7     801.4    9332.8     800.0    9343.2     799.4    9364.9
GR  801.3   9377.2     801.2     9389.9     800.0    9401.8     801.3    9412.2     801.3    9434.5
GR  799.8   9444.8     799.8     9449.3     801.4    9455.7     802.0    9503.5     801.9    9526.1
GR  800.2   9532.0     800.0     9544.6     801.1    9550.3     801.9    9574.8     801.5    9609.7
GR  800.8   9641.6     799.8     9646.1     799.5    9686.0     802.3    9694.2     802.0    9715.9
GR  805.2   9726.4     799.8     9739.1     800.8    9796.8     807.7    9815.3     807.8    9825.3
GR  799.4   9839.8     800.0     9881.0     799.4    9911.1     798.4   10000.0     798.2   10030.0
GR  808.7  10066.5     800.6    10087.8     801.4   10127.8     801.0   10197.3     799.5   10256.1
GR  799.2  10302.3     801.8    10311.8     801.4   10352.0     802.5   10363.0     801.8   10413.5
GR  800.7  10418.0     801.8    10428.1     801.8   10515.1     801.7   10636.6     802.8   10646.7
GR  802.6  10665.6     801.7    10678.4     801.7   10785.5     801.9   10887.0     802.9   11009.0

NH      4     0.050     9906.3     0.033    10124.4     0.045    10459.8     0.150    10990.2
ET              7.1       9.1                                    8969.0    10124.4     9524.8    10124.4
        Left end of cross section extended 2.19 feet.  The left floodplain
        edge was mapped to STA 8391 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
X1   2.49       67    9906.3    10124.4       490       490       493
GR  803.7   8969.0     803.7     9028.4     802.7    9035.8     803.4    9042.9     803.8    9071.1
GR  803.4   9104.1     803.7     9120.9     804.0    9169.6     804.4    9226.5     804.3    9272.3
GR  804.2   9329.5     802.7     9336.2     804.1    9345.9     804.2    9416.4     802.1    9422.7
GR  802.3   9433.6     804.8     9451.6     804.4    9470.1     805.0    9489.7     804.3    9528.5
GR  803.9   9535.7     804.5     9542.9     804.5    9581.5     804.1    9604.3     804.9    9626.5
GR  804.6   9644.4     803.4     9662.1     803.3    9689.7     802.4    9708.7     803.5    9720.5
GR  804.7   9742.0     804.9     9798.6     804.0    9851.9     806.5    9861.2     803.9    9870.5
GR  804.4   9885.9     811.0     9906.3     802.0    9920.8     802.6    9947.5     801.7    9980.6
GR  802.3   9984.5     802.3    10000.0     802.8   10068.6     802.2   10100.1     812.0   10124.4
GR  804.4  10143.0     804.0    10176.1     803.2   10194.7     804.9   10202.1     805.2   10254.0
GR  804.5  10314.9     803.5    10318.5     804.7   10324.0     804.6   10356.5     803.4   10372.7
GR  803.4  10386.0     804.3    10407.9     804.6   10451.0     805.8   10459.8     805.4   10484.5
GR  804.4  10497.4     804.8    10537.1     805.0   10607.9     805.2   10646.4     805.2   10685.0
GR  805.0  10829.9     805.6    10990.2

NC  0.050     0.150     0.033
ET              7.1       9.1                                    8976.8    10102.7     9572.2    10102.7
        Left end of cross section extended 1.23 feet.  The left floodplain
        edge was mapped to STA 8756 using interpolated USGS quad
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contour data. Right end of cross section extended 1.23 feet. The right floodplain edge was mapped to STA 11319 using interpolated USGS quad contour data.

X1	2.58	56	9931.3	10102.7	500	500	503			
GR	808.0	8976.8	808.4	9092.5	807.8	9130.9	807.1	9152.2	807.3	9174.3
GR	807.2	9212.0	807.0	9256.0	806.2	9262.1	806.9	9269.3	807.8	9299.2
GR	807.8	9354.7	806.7	9378.1	807.7	9385.6	806.0	9396.6	806.2	9410.2
GR	807.4	9420.0	807.7	9461.1	807.1	9486.7	807.6	9503.5	806.8	9546.3
GR	807.7	9552.3	807.9	9572.3	805.7	9580.3	806.3	9590.2	806.1	9623.4
GR	807.4	9629.5	806.7	9671.0	808.0	9679.4	807.8	9705.2	807.0	9713.9
GR	808.0	9722.0	807.9	9743.2	806.1	9749.1	806.2	9766.0	808.1	9776.4
GR	808.2	9809.4	808.3	9874.5	808.5	9908.3	812.6	9931.3	804.3	9948.8
GR	805.0	9990.3	805.0	10000.0	805.5	10049.3	805.8	10087.3	810.9	10102.7
GR	809.6	10133.7	808.7	10189.0	807.8	10200.5	808.1	10240.5	808.5	10370.7
GR	808.0	10486.8	808.0	10531.7	807.8	10574.7	807.7	10746.7	808.2	10919.3
GR	808.0	11006.1								
ET		7.1	9.1				8975.5	10117.8	9540.4	10117.8

Left end of cross section extended less than 1 foot. The left floodplain edge was mapped to the end of the detailed cross section. Right end of cross section extended 1.22 feet. The right floodplain edge was mapped to STA 11228 using interpolated USGS quad contour data.

X1	2.63	63	9937.7	10117.8	215	230	221			
GR	810.1	8975.5	809.0	9091.7	808.2	9098.4	809.5	9106.6	809.0	9182.5
GR	808.6	9188.5	808.9	9193.6	808.9	9256.5	808.2	9319.3	808.0	9358.8
GR	809.5	9384.8	809.6	9402.2	807.5	9414.4	807.7	9421.7	809.2	9427.3
GR	809.5	9454.5	808.0	9461.6	808.8	9466.1	808.5	9530.1	806.8	9543.5
GR	807.1	9551.2	808.2	9558.1	808.0	9573.8	808.4	9585.7	809.0	9629.1
GR	807.1	9641.3	807.6	9653.9	809.2	9659.8	809.5	9672.3	809.2	9690.7
GR	808.2	9695.6	808.0	9723.8	809.4	9728.1	809.6	9761.8	809.7	9795.7
GR	808.7	9803.0	808.7	9808.9	809.8	9815.2	809.5	9863.8	808.8	9881.1
GR	809.9	9890.8	810.0	9927.5	814.0	9937.7	806.1	9950.0	806.2	9994.1
GR	805.8	10000.0	806.1	10026.9	806.8	10039.2	807.2	10077.6	811.3	10095.6
GR	814.6	10117.8	810.6	10133.9	810.3	10164.9	809.0	10171.3	809.6	10174.1
GR	809.5	10213.7	809.6	10308.9	810.1	10451.6	810.0	10587.4	809.8	10608.7
GR	808.9	10708.3	809.0	10857.7	809.5	11018.7				
ET		7.1	9.1				8990.2	10143.9	9583.8	10121.8

Left end of cross section extended less than 1 foot. The left floodplain edge was mapped to the end of the detailed cross section. Right end of cross section extended 1.58 feet. The right floodplain edge was mapped to STA 11275 using interpolated USGS quad contour data.

X1	2.68	60	9946.4	10121.8	270	275	273			
GR	812.3	8990.2	812.0	9081.7	811.0	9101.0	811.9	9106.7	811.8	9162.9
GR	811.6	9210.5	811.0	9310.5	810.5	9365.6	810.0	9422.7	810.8	9436.8
GR	810.3	9452.0	808.8	9461.1	810.5	9470.6	810.5	9482.7	809.0	9494.8
GR	809.7	9518.1	809.9	9546.0	811.2	9558.0	809.7	9582.0	811.0	9592.7
GR	811.2	9618.4	810.9	9645.7	809.5	9655.3	809.8	9675.1	811.1	9686.7
GR	811.1	9717.7	809.6	9725.4	810.6	9735.8	810.9	9756.5	811.0	9777.9
GR	809.9	9784.6	810.9	9793.6	810.9	9840.1	811.8	9881.7	812.0	9908.8
GR	810.9	9918.7	811.8	9942.0	812.7	9946.4	807.6	9957.6	807.5	9973.2
GR	807.4	10000.0	807.4	10023.7	808.1	10032.2	809.6	10074.0	810.0	10091.9

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GR    813.8    10115.4     815.7    10121.8     815.9    10143.9     812.2    10155.6     812.7    10173.0
GR    812.1    10174.6     812.3    10194.4     811.3    10201.4     811.6    10298.9     811.7    10510.8
GR    811.7    10599.9     811.1    10658.9     810.8    10826.3     810.5    10912.1     810.9    11015.0

NC                                   0.2
NH        4     0.050     9903.5     0.033    10068.1     0.040    10279.1     0.150    11016.9
ET                7.1        9.1                                   8940.5    10279.1     9466.1    10163.3
          Right end of cross section extended 1.88 feet.  The right floodplain
          edge was mapped to STA 11403 using interpolated USGS quad
          contour data.
X1     2.73        55     9903.5    10068.1       320       275       301
GR    815.2    8940.5     815.2     9005.0     814.5     9009.5     815.2     9016.1     814.5     9097.5
GR    814.1    9143.9     813.6     9198.9     813.7     9237.8     813.2     9311.6     812.3     9315.7
GR    812.8    9320.0     812.9     9337.7     812.6     9375.4     812.1     9394.0     812.5     9404.3
GR    812.4    9424.3     811.4     9431.3     812.5     9438.6     813.1     9483.8     811.4     9491.1
GR    812.2    9497.3     810.5     9507.9     810.7     9519.5     812.9     9529.0     813.2     9588.1
GR    812.9    9643.9     813.2     9685.5     813.5     9734.0     813.2     9744.2     813.3     9765.3
GR    811.4    9772.5     813.5     9790.0     813.5     9799.2     812.3     9805.3     813.4     9856.1
GR    813.3    9881.7     818.1     9903.5     809.6     9929.1     809.4     9962.4     809.0    10000.0
GR    809.2   10026.0     816.2    10068.1     813.3    10080.1     812.0    10137.9     811.1    10185.6
GR    810.3   10238.8     812.9    10250.8     817.8    10279.1     812.8    10302.5     813.3    10342.7
GR    812.7   10421.0     812.8    10622.1     812.7    10690.2     812.8    10913.5     812.7    11016.9

NH        4     0.050     9883.2     0.033    10103.1     0.050    10464.6     0.150    11009.5
ET                7.1        9.1                                   8999.0    10464.6     9596.0    10103.1
          Right end of cross section extended 2.01 feet.  The right floodplain
          edge was mapped to STA 11458 using interpolated USGS quad
          contour data.
X1     2.77        61     9883.2    10103.1       210       180       188
GR    816.4    8999.0     816.2     9084.3     815.4     9155.1     814.8     9253.8     813.7     9350.0
GR    814.1    9392.6     813.5     9446.2     813.7     9492.4     813.2     9503.1     813.6     9508.4
GR    813.1    9517.1     813.9     9523.1     814.2     9548.2     812.9     9558.8     812.3     9567.6
GR    814.0    9575.2     814.2     9584.0     812.9     9593.2     812.8     9603.0     814.1     9609.8
GR    814.3    9632.9     814.4     9689.2     814.9     9695.7     815.1     9745.7     813.9     9762.5
GR    815.3    9779.4     815.3     9796.5     814.6     9808.6     815.2     9830.2     814.3     9868.2
GR    819.5    9883.2     811.9     9914.2     811.6     9938.1     810.0     9966.1     809.6    10000.0
GR    809.8   10034.1     814.0    10048.8     814.0    10065.3     812.0    10088.7     814.9    10103.1
GR    814.4   10143.7     814.7    10165.0     814.5    10254.1     812.5    10260.3     813.9    10267.6
GR    814.8   10290.7     814.6    10331.9     813.1    10404.3     812.3    10439.7     819.0    10464.6
GR    814.2   10481.2     813.8    10498.5     814.8    10510.5     813.6    10512.6     814.0    10546.1
GR    813.0   10566.3     813.1    10618.5     813.1    10654.6     813.5    10806.8     813.7    10912.2
GR    813.5   11009.5

NC    0.050     0.050     0.033
QT        2     10743     10743
ET                7.1        9.1                                   9305.2    10935.0     9684.5    10509.7
          Right end of cross section extended 1.79 feet.  The right floodplain
          edge was mapped to STA 11112 using interpolated USGS quad
          contour data.
X1     2.86        53     9940.7    10038.1       460       530       497
GR    822.8    9305.2     820.6     9345.1     816.8     9395.4     817.0     9414.2     816.3     9472.6
GR    816.3    9505.2     816.3     9572.9     816.3     9610.7     816.3     9663.5     816.3     9694.5
GR    816.8    9713.5     816.8     9723.4     816.3     9735.6     816.3     9744.8     816.2     9768.3
GR    817.8    9783.6     817.9     9828.0     816.7     9847.2     817.8     9859.1     817.5     9940.7
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GR    812.5    9949.1    812.3   10000.0    811.8   10021.0    817.2   10038.1    818.1   10080.0
GR    817.7   10139.5    817.5   10202.5    817.6   10227.1    817.6   10281.2    817.8   10372.5
GR    816.8   10436.5    815.8   10441.6    816.1   10460.7    816.9   10470.3    816.8   10523.8
GR    815.3   10529.2    815.5   10540.2    816.3   10546.8    816.4   10579.9    817.4   10596.9
GR    817.7   10629.6    816.1   10661.1    816.7   10665.2    816.3   10690.3    817.3   10711.8
GR    817.7   10727.0    817.8   10764.5    817.2   10807.0    818.1   10845.0    816.1   10906.3
GR    816.0   10942.5    817.0   10964.1    816.7   11003.4

NC    0.045                       0.1
ET                         9.1                                                    9956.6   10535.3
      Right end of cross section extended less than 1 foot.  The right
      floodplain edge was mapped to the end of the detailed cross
      section.
X1     2.96       75    9956.6   10097.6      500      470      508
GR    823.9    8994.2    824.1    9059.8    823.4    9144.2    823.1    9182.2    822.4    9198.1
GR    822.6    9206.1    821.6    9208.4    822.6    9214.1    823.1    9239.0    822.4    9256.3
GR    820.6    9261.4    822.4    9266.9    822.6    9287.4    822.3    9357.9    822.3    9395.1
GR    822.0    9475.4    821.1    9533.5    821.2    9575.0    821.0    9636.5    820.1    9644.0
GR    820.9    9647.6    820.5    9683.4    819.6    9687.4    820.4    9700.2    819.7    9731.0
GR    820.4    9750.6    820.8    9771.6    820.0    9791.1    818.4    9800.9    819.9    9809.7
GR    818.9    9835.0    820.2    9855.4    820.9    9875.9    820.2    9887.2    821.0    9907.4
GR    820.3    9930.2    820.6    9956.6    814.7    9963.8    815.2   10000.0    815.3   10045.3
GR    817.5   10054.7    819.4   10068.0    819.9   10097.6    820.0   10125.8    820.6   10168.8
GR    820.1   10175.5    820.4   10206.9    820.1   10243.0    820.0   10260.7    820.3   10304.9
GR    820.3   10334.3    819.6   10363.6    820.3   10391.0    820.9   10433.2    820.3   10462.6
GR    820.7   10475.3    819.5   10480.9    819.9   10501.9    819.9   10544.0    819.4   10599.8
GR    819.4   10647.1    818.6   10711.3    819.6   10727.1    819.0   10745.7    817.8   10748.8
GR    817.9   10763.1    819.4   10768.6    820.2   10824.9    820.8   10845.1    820.0   10874.7
GR    818.7   10882.7    819.8   10902.5    820.3   10943.3    820.7   10969.4    820.3   11007.7

NC    0.040
ET                 7.1        9.1                                 8992.7   10935.0    9935.3   10516.8
      Right end of cross section extended 1.01 feet.  The right floodplain
      edge was mapped to STA 11283 using interpolated USGS quad
      contour data.
X1     3.05       60    9935.3   10229.6      520      430      493
GR    829.1    8992.7    828.0    9094.6    827.0    9099.7    828.0    9111.7    828.4    9162.1
GR    827.8    9186.8    827.8    9277.3    826.3    9429.9    825.3    9556.3    824.5    9637.2
GR    824.0    9730.5    823.3    9756.2    823.6    9788.8    823.1    9855.5    823.1    9872.9
GR    820.4    9880.7    822.8    9887.6    823.2    9899.0    824.0    9935.3    822.5    9964.0
GR    818.1    9977.8    818.2   10000.0    818.8   10045.2    819.3   10079.5    820.2   10092.5
GR    820.4   10111.4    820.0   10124.2    822.8   10139.5    821.9   10144.4    823.7   10190.6
GR    824.3   10229.6    823.9   10266.9    822.8   10291.6    822.4   10341.8    822.5   10375.5
GR    821.9   10424.0    821.3   10458.6    821.8   10496.3    821.7   10552.8    821.6   10576.7
GR    821.9   10591.8    821.1   10600.4    821.8   10613.0    821.0   10620.6    821.6   10636.6
GR    821.9   10661.3    820.1   10667.5    821.7   10674.9    822.4   10688.0    822.5   10707.6
GR    822.2   10761.2    821.6   10828.9    821.4   10830.3    822.4   10880.1    822.0   10905.4
GR    819.9   10916.8    819.9   10925.2    821.5   10938.1    822.5   10986.4    823.0   11010.0
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ET              7.1       9.1                                   8981.3    10645.0     9838.8    10238.0
        Right end of cross section extended 2.18 feet.  The right floodplain
        edge was mapped to STA 11519 using interpolated USGS quad
        contour data.
X1    3.15       59    9838.8   10238.0       495       505       499
GR   832.1   8981.3     832.1    9057.5     831.6    9089.8     831.3    9108.5     830.9    9220.7
GR   829.5   9332.8     828.7    9457.3     828.1    9490.3     828.6    9502.3     828.0    9563.2
GR   827.1   9576.7     827.7    9587.0     827.2    9629.5     826.7    9636.6     827.3    9646.6
GR   826.9   9703.5     826.3    9729.0     826.9    9743.0     826.5    9778.8     826.3    9838.8
GR   825.6   9856.8     825.4    9882.3     821.7    9898.5     821.3    9929.4     821.8    9955.8
GR   822.2   9980.6     821.9    9988.1     821.9   10000.0     822.5   10042.1     823.0   10065.4
GR   822.8  10102.8     822.3   10107.8     822.5   10157.2     824.3   10169.5     824.7   10184.6
GR   825.3  10213.4     826.3   10238.0     826.3   10268.0     826.1   10291.6     825.2   10294.9
GR   825.2  10310.2     825.6   10315.7     825.6   10384.0     825.7   10425.6     825.4   10483.1
GR   824.8  10538.5     824.5   10554.5     824.8   10582.3     825.2   10617.1     825.5   10652.5
GR   825.2  10738.9     824.9   10781.7     825.4   10815.3     822.6   10831.5     824.2   10840.4
GR   825.3  10883.6     825.6   10930.9     824.3   10969.5     824.2   11015.6

NH       4    0.040    9796.5       0.033  10033.1       0.045  10686.1       0.150  11009.7
ET              7.1       9.1                                   8907.4    10270.0     9796.5    10033.1
        Right end of cross section extended less than 1 foot.  The right
        floodplain edge was mapped to the end of the detailed cross
        section.
X1    3.24       64    9796.5   10033.1       425       510       496
GR   833.9   8907.4     833.2    9031.0     832.2    9119.0     831.8    9165.9     831.8    9200.5
GR   831.4   9247.5     830.7    9253.8     831.2    9265.5     831.6    9295.1     831.4    9319.1
GR   830.9   9337.4     831.0    9368.6     828.3    9379.3     830.5    9389.2     831.0    9413.2
GR   830.5   9470.9     829.8    9533.5     829.0    9582.9     827.2    9593.0     828.6    9600.9
GR   828.6   9631.9     827.9    9689.8     828.1    9705.6     827.7    9722.2     827.9    9735.8
GR   828.2   9765.2     828.1    9796.5     824.6    9810.0     825.3    9855.2     825.3    9897.3
GR   824.8   9969.3     824.3   10000.0     824.2   10007.4     827.4   10020.0     828.4   10033.1
GR   828.4  10086.1     827.5   10094.8     828.4   10106.3     828.0   10139.5     827.4   10150.2
GR   828.1  10155.8     827.8   10206.3     827.7   10247.1     827.7   10267.1     826.7   10283.4
GR   827.3  10294.6     827.0   10318.7     827.6   10336.3     828.2   10413.7     828.8   10477.5
GR   828.6  10542.8     828.0   10587.8     828.3   10652.0     825.4   10664.3     828.9   10678.6
GR   830.0  10686.1     829.4   10688.2     829.3   10707.7     828.4   10709.4     827.7   10719.3
GR   827.8  10795.9     828.0   10871.3     828.2   10937.6     828.6   11009.7

NH       4    0.040    9872.5       0.033  10057.9       0.040  10289.8       0.150  11026.6
ET              7.1       9.1                                   8881.9    10170.0     9872.5    10057.9
        Right end of cross section extended less than 1 foot.  The right
        floodplain edge was mapped to the end of the detailed cross
        section.
X1    3.34       53    9872.5   10057.9       450       520       497
GR   837.4   8881.9     836.8    8917.4     836.1    8938.7     836.7    8948.5     836.5    9001.5
GR   835.8   9062.4     835.2    9153.4     833.1    9161.0     835.0    9172.1     835.3    9231.8
GR   834.8   9302.2     834.2    9355.1     833.3    9395.7     833.7    9403.7     833.5    9418.0
GR   832.3   9424.2     833.9    9430.9     833.4    9497.4     833.5    9528.8     832.8    9609.3
GR   831.0   9690.3     831.5    9704.5     830.9    9772.9     830.5    9830.9     830.2    9872.5
GR   826.8   9879.5     826.9    9917.7     826.9    9949.9     826.9   10000.0     826.8   10009.9
GR   828.4  10018.0     830.3   10037.8     831.5   10057.9     831.4   10088.3     830.4   10112.7
GR   831.2  10120.0     830.8   10160.5     830.2   10208.6     832.3   10218.3     828.1   10240.2
GR   827.5  10253.3     828.2   10270.4     834.5   10289.8     831.5   10301.7     830.5   10321.3
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GR    829.6    10327.5     829.8    10361.7     830.0    10504.6     830.6    10643.2     831.1    10702.3
GR    831.3    10811.1     831.3    10960.0     831.5    11026.6

NH        4      0.040    9923.4      0.033   10090.2      0.040   10486.7      0.150   11024.5
ET               7.1       9.1                                    8972.1    10486.7    9923.4    10344.3
        Right end of cross section extended less than 1 foot.  The right
        floodplain edge was mapped to the end of the detailed cross
        section.
X1    3.43       51    9923.4    10090.2       500       495       500
GR    840.3   8972.1     840.3     8996.2     838.5    9001.6     840.1    9005.6     839.7    9052.7
GR    839.5   9101.3     838.9     9119.0     839.4    9135.9     839.2    9191.1     838.8    9261.3
GR    837.8   9371.1     837.7     9434.4     836.5    9525.2     835.9    9600.2     835.5    9697.3
GR    834.2   9795.2     833.7     9830.6     833.5    9869.5     833.1    9923.4     832.4    9944.3
GR    828.7   9957.5     829.0     9999.1     828.8   10000.0     828.9   10055.8     832.6   10069.3
GR    833.3  10090.2     833.6    10158.3     833.9   10198.4     833.3   10201.2     833.5   10218.7
GR    834.3  10221.6     834.1    10298.7     833.6   10328.8     832.5   10360.2     831.6   10407.7
GR    830.5  10431.5     832.2    10440.7     831.4   10460.6     837.7   10486.7     836.9   10490.6
GR    836.9  10504.8     838.0    10513.3     833.6   10534.2     833.0   10577.0     833.3   10599.8
GR    833.5  10658.7     833.8    10693.3     833.8   10800.0     834.0   10897.8     834.7   10997.5
GR    834.6  11024.5

NC    0.040    0.045     0.045       0.1
ET               7.1       9.1                                    8996.1    10615.0    9888.9    10256.7
        Right end of cross section extended 1.26 feet.  The right floodplain
        edge was mapped to STA 11294 using interpolated USGS quad
        contour data.
X1    3.52       84    9888.9    10110.4       525       440       492
GR    842.3   8996.1     842.7     9013.5     842.6    9038.8     841.9    9051.9     841.2    9080.8
GR    841.6   9108.0     841.5     9175.4     841.3    9224.9     839.9    9245.5     840.7    9253.9
GR    840.9   9294.8     839.9     9336.6     839.5    9362.8     837.9    9367.2     838.8    9372.0
GR    839.6   9391.6     839.7     9421.9     839.1    9473.0     838.3    9500.5     838.8    9519.5
GR    839.0   9537.1     836.6     9545.2     838.5    9557.8     838.6    9595.8     838.0    9644.5
GR    836.8   9695.5     836.2     9704.7     836.8    9712.4     836.0    9741.7     836.7    9754.8
GR    836.9   9769.2     836.0     9828.3     835.0    9856.0     835.8    9865.2     835.7    9888.9
GR    832.4   9895.7     832.7     9910.5     832.3    9960.3     833.0    9979.6     832.9    9990.6
GR    831.8   9996.8     831.6    10000.0     831.7   10012.3     833.2   10020.3     833.3   10039.7
GR    832.7  10043.9     832.7    10070.5     834.0   10079.2     836.3   10093.7     837.2   10110.4
GR    837.0  10153.3     837.1    10185.4     836.7   10190.2     836.6   10203.8     837.1   10210.3
GR    837.2  10249.0     836.9    10294.7     836.5   10338.9     836.6   10376.4     837.0   10414.1
GR    836.5  10467.5     836.6    10497.2     836.6   10535.0     834.1   10541.4     834.3   10550.6
GR    836.0  10559.0     836.4    10588.4     836.3   10616.1     836.4   10639.7     836.6   10699.7
GR    836.4  10719.8     834.4    10736.7     835.8   10749.5     834.6   10789.1     832.2   10805.0
GR    833.6  10817.9     834.0    10866.0     841.8   10892.4     841.3   10896.4     841.2   10908.8
GR    837.2  10924.1     836.8    10950.2     836.4   10958.1     836.5   11005.6

ET               7.1       9.1                                    8986.7    10490.0    9839.1    10115.0
X1    3.62       68    9907.9    10115.0       470       520       495
GR    846.2   8986.7     845.7     9054.7     845.1    9083.5     844.4    9146.9     843.8    9181.4
GR    843.8   9239.3     843.1     9344.6     842.3    9409.9     841.2    9488.1     841.1    9551.2
GR    840.8   9608.9     839.6     9698.9     839.3    9734.6     836.9    9744.0     839.4    9754.6
GR    840.0   9780.2     838.6     9834.4     838.6    9853.8     837.4    9879.3     838.3    9888.1
GR    838.5   9907.9     838.1     9937.3     837.0    9958.0     834.1    9964.0     833.8   10000.0
GR    834.1  10043.9     838.0    10065.0     839.2   10080.3     840.0   10115.0     839.4   10132.0
GR    840.7  10166.7     840.4    10215.8     839.5   10243.5     840.6   10247.8     839.7   10251.4
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GR	839.5	10269.4	840.4	10272.6	839.7	10274.8	840.0	10284.3	840.3	10310.3
GR	840.0	10365.0	840.0	10388.0	840.0	10391.4	839.5	10457.3	838.1	10532.0
GR	838.6	10563.2	837.9	10569.3	838.9	10579.1	838.9	10601.8	837.1	10611.1
GR	837.5	10627.9	838.8	10634.0	838.5	10686.2	839.0	10713.5	839.4	10785.3
GR	835.8	10804.4	836.3	10817.7	841.3	10836.6	841.3	10849.5	842.8	10856.6
GR	842.8	10862.9	841.6	10864.4	841.7	10873.2	841.9	10873.3	841.6	10896.3
GR	840.8	10900.6	840.8	10945.0	841.2	11005.3				
NH	4	0.040	9952.6	0.033	10120.4	0.040	10420.0	0.150	11014.3	
ET		7.1	9.1				8988.3	10420.0	9879.4	10129.4
X1	3.71	51	9952.6	10120.4	480	510	498			
GR	848.7	8988.3	847.7	9007.8	847.6	9081.2	847.8	9103.0	846.8	9190.0
GR	846.1	9270.3	845.1	9363.3	845.2	9420.1	844.9	9471.6	844.3	9525.8
GR	843.6	9593.7	842.7	9629.8	842.6	9673.1	842.1	9739.0	841.3	9809.2
GR	840.8	9861.6	841.3	9928.4	842.4	9934.0	842.0	9952.6	836.6	9962.0
GR	836.4	10000.0	838.6	10008.1	839.0	10025.8	836.5	10029.9	836.6	10056.0
GR	837.9	10062.1	838.2	10078.9	836.8	10086.5	836.7	10102.6	842.3	10120.4
GR	843.2	10165.5	842.8	10218.4	843.1	10245.3	843.6	10279.3	843.8	10314.5
GR	839.9	10326.4	839.9	10397.9	846.8	10420.0	844.6	10428.6	844.0	10468.6
GR	844.5	10478.1	843.6	10480.9	843.5	10499.1	842.6	10511.4	841.3	10514.5
GR	841.5	10529.5	841.8	10645.7	842.3	10696.1	842.7	10837.4	843.0	10907.1
GR	844.0	11014.3								
NC	0.040	0.045	0.033	0.2						
ET		7.1	9.1				8999.7	10761.0	9885.4	10464.2
X1	3.81	64	9885.4	10085.5	515	485	506			
GR	851.0	8999.7	850.2	9037.4	849.8	9069.9	850.4	9095.7	849.8	9158.5
GR	849.4	9193.8	848.5	9336.7	847.9	9386.7	847.8	9444.6	847.2	9539.4
GR	846.4	9590.5	845.9	9677.4	845.0	9740.1	844.3	9781.5	845.3	9789.1
GR	844.8	9798.6	843.8	9802.4	843.3	9827.7	844.5	9834.0	844.5	9845.5
GR	843.1	9851.5	844.1	9862.2	844.1	9885.4	841.3	9905.5	840.1	9927.3
GR	840.5	9940.5	840.3	9983.9	840.0	10000.0	839.6	10022.9	840.9	10025.8
GR	841.1	10036.7	844.2	10045.0	845.8	10068.8	846.8	10085.5	847.0	10114.7
GR	846.8	10139.3	846.0	10169.2	846.7	10198.6	846.2	10258.3	845.7	10280.1
GR	846.1	10283.4	846.0	10312.4	845.5	10353.2	844.5	10376.9	845.1	10386.3
GR	844.8	10426.6	843.1	10435.4	843.0	10445.7	844.6	10453.9	844.7	10494.1
GR	844.6	10542.0	844.5	10580.2	844.2	10600.4	842.8	10606.9	844.8	10617.7
GR	843.8	10671.5	842.8	10681.9	843.1	10706.7	848.8	10761.0	846.7	10787.1
GR	846.5	10810.6	845.8	10836.1	846.1	10926.8	846.7	11010.6		
NC			0.035	0.1						
ET		7.1	9.1				9669.1	11009.0	9880.3	10431.1
X1	3.90	62	9951.9	10070.2	515	475	478			
GR	854.4	8994.5	854.0	9075.3	853.4	9152.3	852.5	9197.1	852.9	9275.8
GR	852.1	9308.2	851.1	9504.9	849.9	9553.5	847.8	9559.3	847.2	9604.2
GR	849.5	9614.2	849.4	9641.1	849.2	9669.1	847.3	9705.3	848.5	9714.8
GR	847.5	9767.9	846.7	9800.5	846.2	9848.1	843.9	9881.8	844.8	9887.8
GR	845.2	9901.9	844.7	9920.1	843.3	9925.6	843.1	9939.6	846.0	9951.9
GR	845.6	9970.2	842.5	9979.7	842.2	10000.0	842.7	10023.6	844.2	10028.0
GR	845.3	10070.2	843.5	10075.9	843.0	10088.4	846.1	10094.9	847.9	10106.2
GR	849.3	10143.0	849.3	10185.6	848.8	10240.0	849.3	10252.0	849.3	10298.7
GR	848.0	10302.4	848.3	10318.8	848.6	10333.3	848.8	10358.5	849.2	10398.6
GR	849.1	10417.4	848.7	10430.5	848.9	10436.3	849.0	10466.0	848.6	10530.9
GR	847.6	10592.8	847.5	10637.0	846.7	10643.5	847.6	10682.7	846.6	10702.9

GR	847.2	10711.5	847.7	10800.0	847.0	10807.8	847.8	10815.8	848.3	10853.1
GR	849.6	11000.0	849.3	11009.0						
NC		0.040	0.040	0.2	0.4					
ET		7.1	9.1				8997.2	10903.0	9469.4	10903.0
X1	4.00	83	9469.4	10903.0	550	420	519			
X3	10									
GR	856.3	8997.2	856.2	9123.9	855.3	9167.7	853.9	9287.9	853.7	9334.1
GR	853.0	9388.8	851.8	9443.3	851.5	9469.4	849.2	9494.7	849.3	9526.5
GR	850.6	9539.8	850.5	9550.5	848.8	9566.0	850.2	9587.6	850.0	9638.9
GR	848.9	9645.0	849.9	9653.5	849.5	9681.4	848.7	9694.6	849.7	9700.9
GR	849.2	9734.5	845.9	9741.8	848.9	9751.8	848.4	9775.4	845.8	9789.7
GR	846.1	9825.3	847.0	9835.8	847.0	9885.1	846.3	9893.5	847.0	9905.4
GR	846.6	9937.5	846.6	9963.0	846.3	9981.8	845.2	9988.4	845.2	10000.0
GR	845.3	10019.5	846.7	10022.5	846.8	10036.6	850.0	10046.5	851.2	10061.7
GR	852.1	10074.9	852.1	10147.6	851.0	10159.8	851.0	10169.8	851.9	10172.6
GR	851.5	10213.0	850.8	10263.7	851.0	10283.0	850.3	10334.9	849.5	10352.5
GR	849.7	10370.8	849.0	10382.0	849.8	10405.0	850.0	10434.8	849.2	10474.3
GR	850.0	10484.5	849.4	10526.1	849.5	10548.3	848.0	10555.9	849.5	10565.5
GR	848.8	10580.7	849.2	10589.9	849.3	10616.7	848.7	10620.3	848.8	10638.0
GR	849.5	10653.4	850.1	10677.6	850.1	10706.0	850.3	10735.1	849.7	10749.3
GR	849.7	10763.0	850.5	10772.1	850.8	10789.3	850.7	10821.2	850.3	10848.5
GR	849.8	10859.6	851.0	10871.1	849.7	10892.8	851.1	10903.0	851.1	10928.7
GR	849.0	10946.6	850.4	10952.2	851.0	11005.1				
QT	2	9028	9028							
ET			9.1						9588.3	10620.6
X1	4.09	82	9588.3	10620.6	480	520	498			
X3	10									
GR	859.0	8985.0	857.3	9080.9	856.9	9125.0	856.2	9132.4	857.3	9141.0
GR	856.6	9152.9	856.2	9314.2	855.5	9396.0	854.7	9433.8	853.4	9449.3
GR	854.8	9456.1	854.2	9514.5	854.2	9588.3	852.3	9604.3	849.6	9617.8
GR	849.8	9630.0	852.0	9647.2	852.5	9661.3	852.3	9701.7	851.9	9714.2
GR	852.2	9740.1	851.9	9758.4	851.9	9794.8	851.0	9836.4	848.8	9839.8
GR	849.0	9868.3	850.7	9884.3	851.0	9904.6	850.6	9930.0	850.2	9948.8
GR	849.7	9957.0	848.9	9995.6	848.3	10000.0	848.3	10027.0	851.7	10034.6
GR	852.3	10053.1	852.4	10080.8	852.3	10099.9	851.3	10157.3	851.9	10175.9
GR	851.7	10184.7	849.3	10192.7	849.7	10208.9	851.1	10215.0	851.6	10227.8
GR	852.1	10248.0	851.4	10264.6	850.0	10271.7	851.9	10279.8	852.0	10297.5
GR	853.5	10315.6	853.7	10328.6	853.4	10347.6	853.5	10369.4	852.2	10373.3
GR	852.4	10392.2	852.9	10403.4	853.2	10431.1	852.9	10467.5	852.7	10488.2
GR	853.2	10502.5	853.1	10544.2	852.1	10550.4	853.2	10555.6	853.5	10594.8
GR	853.4	10610.9	853.8	10620.6	853.9	10637.5	852.9	10647.5	852.9	10653.8
GR	854.1	10660.0	854.1	10685.5	852.2	10691.5	852.3	10706.5	854.2	10714.7
GR	854.3	10742.3	854.4	10792.8	855.0	10839.3	855.2	10975.6	853.8	10983.5
GR	855.4	10993.3	855.6	11007.1						
ET			9.1						9557.2	10645.5
X1	4.15	72	9557.2	10645.5	300	275	290			
X3	10									
GR	860.5	8989.3	860.2	9015.2	859.2	9026.4	860.2	9041.8	859.5	9129.6
GR	858.5	9202.3	858.6	9233.3	858.6	9348.6	857.2	9433.3	856.4	9484.7
GR	855.8	9504.3	855.3	9535.8	855.7	9557.2	853.5	9577.6	853.8	9589.4
GR	851.2	9598.7	851.0	9608.9	853.0	9619.8	853.4	9648.0	853.5	9717.3

GR	853.0	9723.8	854.0	9730.5	854.0	9763.7	853.8	9807.0	853.7	9881.6
GR	851.1	9894.4	851.4	9910.6	850.6	9947.4	851.8	9957.0	849.8	9964.6
GR	851.4	9977.2	849.7	9982.5	849.8	10000.0	850.2	10025.4	850.6	10030.1
GR	851.9	10058.5	852.1	10071.2	851.4	10079.7	851.2	10113.5	852.1	10119.7
GR	853.5	10142.8	853.9	10176.3	853.7	10229.7	853.2	10251.1	851.7	10260.8
GR	851.3	10285.7	852.1	10291.9	852.5	10310.8	854.9	10325.9	855.8	10343.8
GR	855.4	10379.1	854.4	10431.0	854.6	10455.7	855.0	10520.5	854.0	10523.5
GR	854.2	10542.9	855.2	10550.4	855.4	10579.2	855.6	10621.3	856.1	10645.5
GR	856.0	10706.1	856.1	10764.7	853.8	10773.3	853.8	10777.7	856.3	10788.8
GR	856.7	10843.5	855.6	10853.7	856.8	10863.9	857.3	10917.9	855.6	10924.3
GR	857.0	10934.5	857.6	11001.4						
ET			9.1						9468.0	10521.2
X1	4.18	73	9468.0	10521.2	195	215	205			
X3	10									
GR	861.1	8997.6	860.3	9090.9	859.3	9142.0	859.5	9163.4	858.7	9219.0
GR	858.2	9246.6	856.9	9255.3	856.8	9264.5	857.9	9276.8	858.5	9318.2
GR	858.5	9340.5	857.4	9382.9	856.5	9425.0	857.0	9433.4	856.8	9468.0
GR	855.8	9487.5	855.6	9515.0	855.7	9543.2	853.6	9549.8	854.0	9572.0
GR	852.2	9580.0	852.1	9594.5	854.8	9609.3	854.6	9664.2	854.5	9686.2
GR	854.5	9721.4	855.0	9739.9	854.2	9750.7	855.1	9759.8	854.4	9775.5
GR	855.0	9785.6	855.3	9865.2	855.0	9933.8	851.2	9945.9	851.8	9956.6
GR	851.3	10000.0	850.9	10028.8	851.8	10035.1	852.7	10094.7	853.4	10122.5
GR	853.2	10165.0	854.3	10195.2	854.4	10224.5	852.8	10231.8	852.2	10259.8
GR	853.5	10266.5	854.3	10288.0	853.5	10302.6	855.4	10311.8	855.8	10332.3
GR	855.5	10382.5	855.5	10420.2	856.3	10495.3	855.0	10498.1	855.0	10514.4
GR	856.5	10521.2	856.7	10544.6	857.0	10597.3	857.2	10618.1	858.0	10711.5
GR	858.2	10780.5	856.4	10785.8	857.9	10790.7	858.0	10813.9	857.5	10823.1
GR	858.4	10851.0	858.5	10886.9	858.2	10895.6	859.1	10909.1	859.6	10973.7
GR	857.4	10981.0	859.6	10995.0	859.1	11022.1				
ET			9.1						9206.7	10513.1
X1	4.28	76	9206.7	10513.1	480	510	503			
X3	10									
GR	861.7	8980.8	861.3	9043.5	860.6	9105.9	859.9	9139.9	858.0	9145.7
GR	859.7	9156.5	859.5	9174.7	859.9	9206.7	859.0	9271.2	858.9	9283.1
GR	857.3	9294.5	858.5	9305.0	857.7	9376.1	856.5	9392.1	858.0	9400.7
GR	857.1	9447.8	857.5	9463.2	854.7	9476.3	855.1	9491.2	856.9	9507.8
GR	857.1	9529.0	855.3	9545.0	855.1	9559.2	856.5	9566.9	856.7	9582.8
GR	857.7	9597.5	857.0	9602.5	857.7	9610.2	858.2	9654.0	858.4	9719.8
GR	858.7	9776.7	858.7	9816.5	857.5	9849.6	858.2	9883.9	857.7	9916.2
GR	856.8	9924.5	857.3	9945.9	856.5	9964.2	853.0	9970.8	853.9	10000.0
GR	854.1	10018.2	854.6	10023.0	855.9	10047.5	855.1	10069.5	855.2	10092.4
GR	854.7	10096.0	854.7	10115.1	855.8	10118.4	856.2	10131.4	856.5	10166.2
GR	855.4	10179.7	854.6	10207.4	858.4	10224.8	857.9	10252.8	858.3	10301.0
GR	858.8	10360.1	858.9	10395.6	858.2	10398.9	858.3	10414.2	859.0	10417.4
GR	858.9	10474.1	858.1	10481.8	858.2	10500.5	859.8	10513.1	860.2	10548.0
GR	860.8	10597.9	861.1	10624.9	861.3	10703.8	860.5	10715.5	860.9	10728.9
GR	860.3	10746.5	861.0	10753.9	861.3	10785.3	861.6	10808.2	863.0	10917.1
GR	863.8	11010.5								

ET			9.1						9114.5	10356.4
X1	4.33	65	9114.5	10356.4	230	250	248			
GR	861.5	8991.9	861.2	9038.1	860.7	9046.5	860.7	9114.5	859.6	9165.6
GR	858.9	9200.4	858.7	9255.4	858.9	9301.6	856.3	9320.9	855.9	9335.8
GR	858.3	9348.9	859.5	9362.0	859.4	9377.6	857.8	9400.4	857.9	9427.2
GR	857.8	9449.9	856.8	9459.9	856.8	9478.1	857.1	9484.6	857.6	9508.5
GR	858.8	9540.8	859.6	9567.2	859.1	9593.5	859.5	9606.8	859.8	9661.2
GR	859.5	9697.9	859.5	9743.0	858.8	9761.1	857.7	9782.1	858.4	9790.2
GR	859.1	9823.3	859.2	9860.3	857.3	9879.6	856.8	9928.4	856.0	9960.5
GR	855.0	9969.7	855.9	9987.2	855.7	10000.0	855.5	10065.5	855.3	10100.7
GR	858.0	10110.9	856.8	10125.0	858.0	10132.4	859.1	10173.6	859.7	10201.2
GR	859.9	10243.4	859.3	10263.5	860.0	10270.7	860.2	10292.8	860.8	10356.4
GR	861.7	10445.4	862.4	10524.5	862.6	10563.5	862.3	10574.6	862.6	10585.0
GR	862.6	10624.2	863.1	10642.8	863.2	10686.8	863.2	10687.7	862.6	10711.5
GR	862.8	10757.7	861.9	10764.7	863.2	10787.8	864.6	10914.8	866.0	11012.4
ET			9.1						9103.3	10226.3
X1	4.37	72	9103.3	10226.3	160	270	238			
GR	861.5	8981.9	861.5	8988.9	861.5	8996.7	861.5	9087.8	861.4	9103.3
GR	859.7	9185.2	858.9	9245.3	860.2	9264.5	856.1	9276.4	859.3	9290.9
GR	859.2	9325.2	858.9	9338.2	859.3	9349.1	860.2	9366.3	860.8	9398.3
GR	860.0	9423.5	858.5	9439.7	858.7	9448.0	857.2	9460.3	858.6	9468.3
GR	857.8	9479.1	858.6	9485.7	859.0	9527.8	858.3	9535.3	860.2	9555.3
GR	860.7	9572.8	861.0	9594.3	860.6	9629.7	859.9	9674.2	859.5	9695.4
GR	859.9	9726.3	860.6	9766.8	860.6	9793.9	858.4	9805.9	858.6	9823.6
GR	856.8	9846.8	856.5	9857.5	858.3	9876.3	858.7	9905.3	857.9	9954.7
GR	858.7	9958.1	858.3	9972.8	856.9	9978.4	856.6	10000.0	855.5	10044.6
GR	859.2	10052.9	860.2	10118.1	860.7	10165.5	859.8	10168.7	859.8	10182.5
GR	860.9	10189.7	861.6	10226.3	862.0	10284.6	862.6	10333.2	862.4	10387.0
GR	863.1	10409.2	863.7	10468.9	863.8	10516.5	862.7	10532.1	863.9	10546.2
GR	864.4	10571.6	864.3	10591.2	864.5	10606.8	865.2	10696.5	865.8	10757.5
GR	864.5	10768.8	865.8	10777.6	866.8	10869.1	865.2	10888.3	866.4	10900.1
GR	866.8	10966.8	867.2	11004.2						
NC				0.1	0.3					
NH	3	0.045	9868.5	0.040	10132.7	0.045	11008.2			
ET		7.1	9.1				9106.1	11008.2	9106.1	10279.0
X1	4.47	83	9106.1	10279.0	280	600	500			
X3	10									
GR	863.4	8969.0	863.4	8982.5	863.4	8991.0	862.7	9047.2	863.1	9106.1
GR	861.9	9155.3	861.1	9161.3	862.1	9167.1	861.7	9185.5	860.9	9269.8
GR	860.1	9277.7	860.7	9282.1	860.7	9310.8	861.0	9330.7	860.3	9366.6
GR	860.9	9391.7	861.1	9415.1	860.1	9429.8	862.0	9440.6	862.1	9457.4
GR	860.1	9469.4	859.1	9482.9	860.2	9490.8	860.5	9504.4	862.1	9524.9
GR	862.6	9544.3	863.0	9592.0	862.4	9613.3	860.6	9632.4	860.4	9645.6
GR	861.6	9653.8	861.8	9716.1	861.7	9734.1	860.6	9752.9	862.0	9765.4
GR	862.0	9808.6	861.9	9835.2	862.2	9848.1	862.3	9868.5	860.8	9875.5
GR	860.4	9919.7	860.4	9956.9	859.2	9959.6	858.6	9979.1	857.7	10000.0
GR	859.0	10012.8	861.2	10032.7	861.0	10054.7	859.4	10081.7	859.7	10093.7
GR	861.5	10132.7	861.5	10159.2	862.5	10169.0	863.0	10217.8	863.3	10253.3
GR	862.2	10257.1	862.3	10276.1	863.5	10279.0	864.5	10345.6	864.5	10372.3
GR	863.6	10383.0	860.8	10395.6	862.9	10402.7	863.0	10413.2	862.1	10424.3
GR	861.3	10437.5	863.8	10447.9	863.7	10471.4	862.7	10479.8	862.2	10492.2

GR	863.5	10499.5	863.8	10525.8	864.9	10572.8	866.1	10641.2	866.5	10663.4
GR	867.0	10684.6	867.0	10722.4	865.7	10737.2	866.6	10768.8	867.9	10816.0
GR	868.0	10915.3	868.8	10969.1	869.5	11008.2				
NH	3	0.045	9953.5	0.035	10139.9	0.040	11013.2			
ET			9.1						9149.0	10479.4
X1	4.56	72	9149.0	10479.4	400	510	493			
X3	10									
GR	867.7	8986.1	866.7	9076.1	865.9	9134.6	865.2	9141.3	866.1	9149.0
GR	865.6	9245.2	865.5	9265.0	864.9	9332.9	864.0	9339.8	864.9	9345.8
GR	864.9	9412.9	864.2	9458.9	863.0	9473.5	863.8	9481.4	864.0	9502.0
GR	863.2	9523.0	863.2	9581.2	862.4	9585.4	863.2	9590.9	863.0	9636.1
GR	861.9	9651.8	863.1	9661.2	862.2	9700.4	862.1	9719.3	862.8	9727.4
GR	864.0	9755.0	864.7	9796.2	865.2	9828.7	865.8	9867.9	865.0	9902.8
GR	864.7	9953.5	860.5	9961.0	860.8	9975.3	861.1	10000.0	861.5	10038.1
GR	862.1	10042.5	862.4	10063.5	861.8	10091.7	862.5	10095.1	863.8	10109.2
GR	864.2	10139.9	863.8	10186.6	862.6	10204.7	863.0	10215.4	863.5	10254.1
GR	864.1	10269.5	862.7	10275.9	862.7	10284.2	864.0	10291.7	864.8	10306.2
GR	864.5	10334.0	864.7	10363.9	865.3	10406.1	865.5	10429.9	866.1	10479.4
GR	865.7	10488.3	866.0	10497.0	866.6	10536.9	867.2	10566.3	866.4	10571.0
GR	866.1	10591.2	867.3	10600.2	868.3	10636.5	869.1	10696.0	868.7	10716.3
GR	869.2	10739.1	870.0	10795.3	870.5	10836.3	868.8	10921.5	867.2	10941.2
GR	868.3	10961.1	869.1	11013.2						
NH	3	0.050	9940.1	0.035	10151.7	0.045	11010.6			
ET			9.1						9594.9	10736.7
X1	4.65	63	9594.9	10736.7	550	370	497			
X3	10									
GR	871.9	8991.4	871.4	9103.6	870.9	9142.9	869.7	9155.8	871.1	9162.2
GR	870.5	9250.9	869.2	9255.3	870.4	9260.6	870.4	9306.8	870.2	9352.9
GR	869.5	9438.1	869.2	9505.5	868.3	9594.9	868.0	9651.4	866.2	9673.6
GR	867.5	9688.8	867.7	9712.7	866.8	9758.5	866.8	9805.5	866.7	9838.9
GR	865.7	9853.6	866.9	9864.1	867.0	9880.0	865.9	9892.4	866.0	9908.1
GR	867.1	9915.9	867.4	9940.1	864.1	9961.4	864.2	9977.8	863.6	10000.0
GR	863.5	10033.1	864.1	10038.8	864.9	10061.7	865.1	10100.7	864.7	10127.7
GR	865.8	10136.5	866.1	10151.7	865.9	10204.6	866.1	10245.6	866.1	10286.9
GR	866.4	10334.9	866.6	10382.9	866.0	10420.5	866.1	10446.1	864.9	10453.3
GR	866.3	10462.0	866.6	10500.3	867.5	10566.1	868.2	10650.2	867.2	10666.0
GR	868.3	10670.1	868.1	10702.7	867.7	10722.6	868.3	10736.7	869.1	10782.2
GR	869.5	10823.6	869.8	10865.6	869.9	10877.7	869.9	10896.9	869.8	10973.5
GR	868.8	10978.0	870.0	10982.5	870.6	11010.6				
NH	3	0.060	9821.8	0.035	10071.2	0.045	11003.8			
ET			9.1						9549.8	10940.6
X1	4.75	53	9549.8	10940.6	570	380	496			
X3	10									
GR	875.2	8992.2	874.7	9045.4	874.4	9053.0	873.3	9180.9	872.4	9317.1
GR	871.8	9428.5	871.3	9549.8	870.5	9592.8	870.8	9608.3	869.9	9675.5
GR	869.4	9732.3	869.4	9781.5	869.5	9821.8	866.9	9845.6	867.8	9859.4
GR	868.3	9875.4	868.4	9904.8	866.7	9914.7	866.6	9935.7	867.1	9945.1
GR	866.5	9976.0	865.6	9980.9	865.6	10000.0	865.5	10023.7	868.9	10046.6
GR	869.5	10071.2	869.1	10132.5	868.6	10163.1	868.5	10217.7	868.2	10258.1
GR	868.5	10299.1	868.4	10330.9	868.6	10374.5	868.0	10415.2	868.8	10429.3
GR	869.4	10451.1	869.2	10488.2	869.4	10530.1	870.5	10578.3	870.5	10620.7

GR	870.3	10673.9	870.3	10705.9	869.4	10708.8	869.0	10717.0	870.4	10722.1
GR	870.5	10765.8	870.5	10782.3	870.4	10792.8	870.0	10828.3	870.9	10905.3
GR	871.3	10940.6	870.8	10960.3	871.2	11003.8				
NH	3	0.060	9949.7	0.035	10125.0	0.045	11010.9			
ET			9.1						9443.7	10719.9
X1	4.84	62	9443.7	10719.9	490	505	503			
X3	10									
GR	877.5	8999.9	877.0	9036.0	876.6	9107.4	876.4	9124.5	875.1	9287.3
GR	874.3	9443.7	873.5	9565.2	872.8	9674.7	872.8	9718.4	872.2	9766.2
GR	872.4	9785.5	871.3	9823.2	871.4	9824.4	872.4	9850.8	872.0	9865.2
GR	870.4	9886.5	869.6	9895.3	870.2	9909.0	870.9	9914.9	872.1	9949.7
GR	869.3	9959.5	869.1	9996.8	868.6	10000.0	868.8	10034.0	869.5	10039.3
GR	869.6	10063.1	868.7	10097.7	868.6	10113.5	871.4	10125.0	871.7	10139.2
GR	871.7	10172.3	871.5	10212.4	871.0	10219.7	871.3	10261.4	871.7	10332.5
GR	871.1	10340.0	872.1	10346.4	872.1	10389.4	872.0	10452.2	871.5	10458.4
GR	872.0	10462.8	872.3	10511.2	872.9	10562.4	873.1	10600.2	873.0	10621.4
GR	872.3	10633.8	873.4	10653.6	873.2	10670.3	873.7	10679.4	874.8	10719.9
GR	873.8	10723.2	873.8	10741.7	875.2	10747.3	875.3	10766.4	875.4	10810.7
GR	875.8	10833.8	876.1	10888.4	875.0	10912.2	876.7	10933.8	877.0	10948.5
GR	876.7	10959.8	876.9	11010.9						
NH	3	0.060	9941.3	0.035	10200.4	0.045	11007.3			
ET			9.1						9510.5	10581.1
X1	4.94	63	9510.5	10581.5	490	510	497			
GR	879.3	8992.9	878.8	9066.2	878.8	9080.7	878.4	9109.3	879.2	9116.8
GR	879.3	9167.0	878.4	9205.6	877.6	9263.7	877.4	9304.4	877.1	9367.6
GR	876.5	9412.1	876.1	9472.9	876.1	9510.5	875.8	9534.8	874.9	9600.1
GR	874.8	9648.6	874.7	9689.8	872.4	9714.8	873.6	9730.0	874.3	9778.2
GR	874.2	9819.1	873.2	9831.6	874.1	9839.6	873.0	9847.4	874.0	9857.4
GR	873.0	9876.7	874.2	9887.0	874.6	9906.1	874.8	9941.3	873.6	9955.6
GR	870.6	9966.2	873.3	9975.2	870.5	9991.4	870.0	10000.0	870.2	10025.9
GR	871.2	10059.3	872.1	10101.7	871.3	10128.9	873.2	10139.7	874.6	10200.4
GR	875.2	10253.8	875.4	10312.4	875.0	10353.3	874.9	10401.3	875.3	10462.0
GR	874.6	10466.1	875.1	10479.6	876.0	10531.8	875.3	10537.5	875.8	10543.2
GR	876.7	10581.5	878.2	10639.1	879.5	10674.9	881.2	10701.5	881.2	10711.7
GR	881.0	10726.8	880.4	10775.6	879.4	10808.6	879.5	10852.6	879.8	10894.9
GR	878.9	10935.5	878.4	10975.6	878.3	11007.3				
NH	3	0.060	9891.8	0.035	10160.2	0.045	11012.2			
ET			9.1						9449.5	10500.0
X1	5.03	72	9449.5	10500.0	540	430	502			
X3	10									
GR	881.2	8993.9	880.3	9131.8	880.4	9147.0	880.2	9254.9	880.3	9271.7
GR	878.8	9292.2	879.9	9303.6	879.2	9344.0	878.1	9347.6	879.0	9352.9
GR	878.5	9381.3	879.3	9396.7	878.2	9403.8	878.8	9416.5	878.2	9435.8
GR	877.4	9442.6	878.8	9449.5	877.7	9558.3	877.0	9617.5	877.6	9630.5
GR	877.9	9650.3	877.5	9687.8	874.4	9704.1	874.3	9709.3	876.1	9728.5
GR	876.9	9743.2	877.3	9802.5	877.0	9833.8	876.6	9865.7	874.2	9872.1
GR	874.2	9880.4	877.2	9891.8	875.6	9927.8	872.4	9936.5	871.9	10000.0
GR	871.8	10023.3	872.1	10036.5	873.0	10039.5	874.3	10084.2	874.2	10118.7
GR	875.3	10130.0	874.5	10149.6	876.0	10160.2	875.7	10171.5	876.3	10182.1
GR	876.2	10215.3	876.8	10266.5	877.1	10318.4	877.3	10356.7	876.9	10368.2
GR	877.3	10381.6	877.4	10430.2	877.9	10436.7	877.9	10471.9	876.8	10479.0

GR	877.2	10486.6	878.6	10500.0	879.0	10523.3	879.1	10559.0	879.8	10598.3
GR	880.1	10624.6	879.4	10639.4	882.1	10720.9	882.5	10739.5	883.5	10758.0
GR	883.6	10785.0	881.8	10839.6	882.2	10861.8	883.8	10896.4	883.8	10926.6
GR	883.3	10963.7	882.9	11012.2						
NC	0.045	0.045	0.045	0.2	0.4					
ET			9.1						9549.7	10210.5
X1	5.13	53	9549.7	10210.5	470	500	492			
X3	10									
GR	880.7	9265.4	880.2	9341.9	879.5	9354.9	880.7	9365.7	881.8	9387.0
GR	878.4	9402.1	878.6	9412.9	879.5	9419.9	879.5	9441.2	881.2	9462.5
GR	880.8	9479.3	881.0	9549.7	880.2	9615.1	878.8	9690.7	877.3	9698.1
GR	878.6	9703.5	879.2	9727.1	877.3	9773.2	875.4	9796.2	875.7	9803.7
GR	875.3	9821.6	875.8	9831.4	875.3	9866.4	878.1	9883.2	877.2	9919.9
GR	876.2	9951.3	875.0	9954.7	875.3	9973.7	874.0	9981.0	874.2	10000.0
GR	873.6	10033.8	878.0	10046.6	877.5	10080.0	878.6	10092.2	878.7	10109.0
GR	877.0	10114.5	877.1	10122.7	878.4	10133.1	879.0	10157.2	878.0	10171.6
GR	879.2	10182.5	880.6	10210.5	881.8	10259.3	881.8	10296.0	881.7	10318.2
GR	881.3	10323.3	881.0	10354.6	881.6	10403.0	883.0	10441.7	883.5	10466.8
GR	883.9	10503.1	883.2	10549.0	882.4	10562.2				
ET			9.1						9416.2	10487.7
X1	5.22	58	9416.2	10487.7	430	485	503			
GR	884.7	8981.8	884.7	9076.1	884.3	9167.8	884.2	9184.9	883.2	9416.2
GR	882.3	9619.1	881.5	9708.3	879.8	9728.3	881.1	9733.1	880.8	9747.0
GR	881.4	9751.3	881.2	9776.2	878.5	9781.8	878.1	9800.0	881.3	9812.4
GR	880.5	9828.6	879.9	9932.6	880.5	9946.3	879.8	9963.0	876.8	9977.3
GR	877.0	10000.0	877.3	10023.0	878.0	10033.3	877.4	10070.2	878.2	10074.4
GR	878.7	10092.6	878.0	10130.4	878.7	10132.5	878.3	10151.0	879.9	10164.9
GR	880.0	10193.1	879.2	10198.3	881.5	10216.3	882.8	10233.2	884.5	10261.8
GR	885.7	10296.5	882.4	10320.5	882.1	10332.6	880.3	10342.1	879.8	10348.3
GR	881.9	10356.1	882.3	10367.1	882.6	10405.8	882.7	10427.1	879.5	10437.2
GR	879.2	10446.8	882.8	10461.1	884.7	10487.7	885.4	10517.6	886.3	10572.7
GR	887.1	10623.4	887.4	10674.0	887.7	10683.2	887.8	10816.6	887.1	10852.5
GR	887.8	10901.6	888.0	10961.7	888.6	11013.5				
ET			9.1						9502.3	10525.3
X1	5.31	61	9502.3	10525.3	480	480	494			
X3	10									
GR	886.4	8981.9	886.2	9095.3	885.9	9115.2	885.3	9273.2	884.3	9424.7
GR	886.3	9432.2	885.8	9455.5	884.6	9462.9	886.2	9472.9	886.3	9502.3
GR	883.8	9519.3	885.2	9545.7	884.0	9570.6	885.9	9586.2	885.3	9605.3
GR	884.9	9637.1	882.6	9644.9	882.6	9655.0	884.9	9664.8	884.8	9694.9
GR	883.2	9706.5	884.6	9711.9	884.3	9731.7	884.5	9765.6	883.9	9806.8
GR	883.0	9813.5	883.4	9824.6	883.6	9845.1	883.4	9882.5	880.6	9897.0
GR	880.3	9913.0	880.0	10000.0	879.6	10011.4	880.4	10013.7	880.2	10032.6
GR	883.6	10044.7	884.0	10085.7	881.7	10107.8	880.8	10171.1	879.5	10197.4
GR	879.6	10205.9	881.3	10212.9	883.2	10236.4	882.8	10272.4	882.9	10299.3
GR	885.7	10319.1	885.5	10338.4	884.4	10382.0	884.4	10401.9	884.9	10455.6
GR	885.2	10486.5	885.7	10525.3	887.3	10569.3	889.1	10630.3	890.2	10700.8
GR	891.0	10751.7	891.6	10771.8	892.8	10843.0	893.7	10910.8	894.3	10958.9
GR	893.7	11008.6								

ET			9.1						9604.5	10620.8
X1	5.41	75	9604.5	10620.8	450	580	500			
X3	10									
GR	887.5	8990.1	888.1	9033.6	890.0	9043.1	890.5	9121.8	890.4	9141.5
GR	890.9	9192.8	889.2	9257.3	888.9	9312.8	888.7	9367.8	887.6	9401.8
GR	887.5	9418.8	886.7	9436.7	887.9	9444.2	887.8	9468.8	886.6	9479.7
GR	885.9	9497.0	887.5	9511.0	888.5	9537.5	888.0	9594.9	888.3	9604.5
GR	887.4	9686.8	886.5	9730.7	887.1	9748.5	886.6	9781.5	887.0	9786.6
GR	887.0	9808.3	886.1	9840.1	886.9	9847.6	887.1	9874.9	886.8	9902.4
GR	885.5	9927.3	884.6	9951.3	881.8	9958.5	882.7	9971.6	882.4	10000.0
GR	882.3	10021.6	883.5	10054.8	883.6	10082.9	884.1	10098.2	884.0	10109.5
GR	883.3	10119.2	885.1	10132.4	886.3	10151.7	886.0	10163.3	886.2	10172.3
GR	886.1	10195.3	886.4	10223.8	887.4	10262.2	884.4	10278.1	884.0	10302.5
GR	884.6	10343.0	882.8	10354.8	882.9	10382.9	885.6	10390.7	885.4	10408.4
GR	882.2	10416.2	882.2	10426.8	886.2	10441.6	886.4	10462.0	884.1	10475.6
GR	886.3	10482.5	886.2	10505.2	885.6	10524.7	887.5	10569.5	888.9	10620.8
GR	889.9	10667.4	890.3	10708.9	890.4	10780.9	890.9	10791.7	891.0	10817.3
GR	889.9	10844.1	891.3	10860.8	891.8	10927.2	891.6	10974.0	892.3	11006.9
NC	0.040	0.040	0.040							
ET			9.1						9335.1	10442.3
X1	5.50	71	9335.1	10442.3	330	540	499			
X3	10									
GR	891.7	8840.1	891.5	8954.1	890.9	8980.4	889.5	9005.0	888.0	9009.4
GR	888.0	9021.3	889.2	9033.7	890.0	9060.3	891.4	9100.0	891.9	9121.7
GR	891.8	9170.9	891.1	9236.3	891.5	9288.4	890.9	9323.1	891.2	9335.1
GR	890.5	9362.9	889.3	9417.7	888.5	9456.9	886.4	9471.4	886.5	9499.5
GR	888.7	9513.5	887.3	9528.3	887.7	9539.5	886.6	9548.5	888.3	9561.0
GR	888.8	9608.9	888.0	9619.7	886.4	9626.7	886.5	9641.7	887.1	9648.4
GR	887.3	9659.9	886.4	9686.1	885.7	9691.3	885.5	9701.1	888.5	9708.3
GR	888.8	9754.5	887.5	9801.4	888.4	9809.7	889.2	9842.6	888.7	9861.5
GR	885.3	9891.0	886.1	9911.3	885.6	9961.9	884.7	9973.3	884.3	10000.0
GR	884.9	10044.1	886.1	10057.8	886.3	10084.4	887.7	10093.4	888.9	10122.0
GR	888.6	10145.2	889.3	10162.8	888.6	10184.1	888.7	10236.8	888.7	10287.3
GR	888.5	10348.3	888.5	10390.7	889.3	10402.8	889.4	10434.2	890.1	10442.3
GR	890.6	10496.5	889.9	10561.4	890.4	10622.7	891.0	10668.9	892.1	10728.4
GR	892.5	10747.2	892.9	10768.0	893.4	10833.0	893.1	10890.4	892.0	10946.2
GR	891.8	11006.2								
ET			9.1						9145.4	10379.4
X1	5.54	80	9145.4	10379.4	160	160	212			
X3	10									
GR	892.0	8742.6	892.4	8778.1	892.4	8796.9	889.0	8809.3	889.7	8827.7
GR	891.3	8872.0	891.3	8898.8	890.8	8908.8	892.6	8952.5	892.0	9042.4
GR	891.7	9109.0	891.8	9145.4	891.1	9182.0	890.9	9202.3	890.1	9225.9
GR	888.5	9235.8	889.4	9245.3	887.4	9251.7	887.1	9261.6	889.7	9278.1
GR	889.9	9293.9	888.8	9307.8	889.8	9312.9	889.0	9320.8	889.5	9333.2
GR	887.6	9343.4	890.1	9355.6	890.1	9372.4	888.7	9380.0	889.8	9387.8
GR	890.0	9439.3	887.1	9443.3	887.3	9456.6	889.8	9467.8	889.6	9478.3
GR	888.8	9485.1	889.7	9497.5	887.0	9509.2	887.0	9545.3	889.3	9553.8
GR	889.9	9568.2	890.3	9601.1	889.8	9672.7	890.4	9730.5	890.1	9780.2
GR	890.4	9801.1	890.4	9859.7	886.4	9871.7	886.0	9887.9	887.1	9898.5
GR	886.7	9937.8	885.8	9987.3	885.0	10000.0	885.6	10031.4	889.9	10040.1

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GR    890.1    10070.1    888.9    10131.2    889.4    10137.8    889.3    10190.0    889.3    10247.1
GR    889.0    10287.1    889.0    10321.6    889.9    10338.7    891.1    10379.4    892.7    10433.1
GR    894.9    10478.6    895.8    10505.6    895.7    10533.3    894.6    10559.3    893.4    10572.7
GR    894.5    10597.2    894.6    10618.0    892.0    10651.4    891.8    10704.9    891.9    10724.1
GR    892.4    10806.2    893.4    10847.8    893.6    10887.2    894.6    10926.0    895.3    11008.3

ET                 7.1       9.1                                  9132.3    10649.2    9132.3    10439.6
      Left end of cross section extended approx. 1 foot.  The left
      floodplain edge was mapped to the end of the detailed cross
      section.
X1    5.60       77     9132.3    10439.6    140      250      280
GR    891.3    8655.0    891.6    8663.2    889.6    8672.0    889.6    8684.1    890.9    8688.8
GR    891.8    8718.2    891.9    8766.4    892.5    8801.6    891.7    8814.4    891.3    8852.5
GR    891.9    8893.4    891.2    8942.2    891.6    8976.4    891.8    9012.0    891.3    9035.0
GR    891.6    9084.0    891.8    9132.3    889.7    9143.1    890.6    9146.8    890.6    9159.6
GR    888.2    9168.1    888.2    9176.3    890.4    9194.9    890.9    9204.2    890.9    9238.8
GR    889.3    9247.5    890.9    9262.2    891.1    9331.6    888.0    9345.9    888.0    9355.8
GR    890.6    9361.9    890.9    9389.2    888.5    9395.5    890.8    9403.8    888.9    9408.6
GR    888.3    9424.7    891.2    9433.6    889.2    9440.0    890.6    9445.8    891.1    9471.5
GR    889.7    9477.1    891.1    9497.5    891.3    9525.2    891.4    9577.0    891.7    9611.8
GR    891.9    9641.3    891.9    9671.9    891.8    9703.9    890.4    9724.0    888.1    9738.5
GR    888.4    9774.4    890.7    9784.7    891.6    9803.2    891.8    9830.0    891.5    9862.7
GR    891.0    9883.8    887.2    9898.4    887.3    9921.7    888.3    9973.3    887.3    9978.4
GR    886.3    10000.0   886.7    10020.9   889.2    10035.9   890.6    10046.7   890.3    10128.2
GR    890.4    10175.3   890.2    10214.1   890.4    10246.5   890.3    10294.5   890.3    10346.8
GR    890.6    10371.8   892.4    10439.6   893.9    10495.7   896.0    10542.1   897.1    10577.5
GR    898.0    10615.7   897.7    10649.2

QT      2       7124      7124
      RIGHT OVERBANK IS TRIBUTARY SECNO 0.06
ET                 9.1       9.1                                                   9021.4    10024.2
      Left and right ends of the cross section were extended 2.75 and
      1.25 feet, respectively.  The left floodplain edge was interpolated
      to be 753 feet beyond the end of the detailed cross section using
      USGS quad contour data.  Therefore, for consistency between
      adjacent cross sections, the left floodplain edge was mapped to the
      end of the cross section (artificial boundary).  The right side of the
      cross section between the mainstem and the tributary is ineffective
      but flooded and will be mapped as Zone A.
X1    5.67       71     9021.4    10024.2    170      470      398
GR    891.2    8680.3    892.1    8703.3    892.7    8741.9    892.5    8747.1    892.9    8785.3
GR    893.1    8797.2    892.4    8813.2    892.8    8834.8    893.0    8863.4    893.2    8897.4
GR    893.0    8916.7    893.5    8966.3    893.9    9021.4    893.3    9059.1    891.9    9076.3
GR    892.9    9083.4    892.6    9107.4    890.3    9113.6    892.1    9120.8    892.3    9136.4
GR    892.4    9178.8    890.6    9184.5    892.3    9190.0    889.7    9196.2    891.0    9204.2
GR    890.6    9219.4    892.6    9229.8    891.3    9238.2    892.3    9245.8    892.8    9283.8
GR    890.4    9292.2    890.3    9299.7    892.7    9305.7    892.7    9324.6    891.7    9334.4
GR    892.8    9343.3    890.8    9354.6    892.5    9366.7    893.0    9416.6    893.0    9435.7
GR    890.8    9442.5    892.5    9454.1    891.0    9462.0    893.0    9470.7    893.3    9505.1
GR    892.9    9555.5    891.4    9561.4    892.9    9569.2    892.8    9625.2    893.5    9666.4
GR    893.5    9699.3    889.0    9713.3    889.2    9722.8    890.4    9736.7    891.9    9775.1
GR    891.9    9804.1    893.5    9815.0    894.0    9872.1    893.6    9916.6    889.5    9927.9
GR    890.0    9945.8    888.7    9971.9    888.5    10000.0   888.4    10013.5   891.4    10024.2
GR    891.4    10047.0   889.5    10078.2   890.4    10106.0   892.2    10141.3   892.8    10176.2
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GR    892.7    10195.6

ET                 9.1        9.1                                                    8875.2     10035.2
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Left end of the cross section extended 1.04 feet. The left floodplain edge was interpolated to be 718 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

```
X1    5.75       76    8875.2    10035.2       260       420       408
GR    895.1    8598.0    895.4    8623.0    894.7    8652.3    890.9    8662.4    892.7    8669.9
GR    893.1    8685.8    890.8    8701.0    892.0    8707.4    892.1    8727.8    893.5    8739.8
GR    894.5    8785.9    895.5    8832.5    895.8    8875.2    895.6    8936.0    895.3    8972.7
GR    895.6    8979.3    895.0    9045.5    893.2    9055.2    894.4    9063.7    894.8    9085.8
GR    895.2    9161.7    894.0    9168.2    894.9    9173.5    894.1    9180.6    894.6    9186.1
GR    893.3    9200.4    894.5    9206.3    895.0    9247.3    893.6    9255.7    894.6    9261.9
GR    892.5    9273.3    893.2    9284.5    894.3    9291.9    894.6    9317.2    893.9    9321.7
GR    894.8    9327.2    894.9    9342.0    893.9    9346.5    895.2    9366.4    894.7    9392.1
GR    894.2    9400.4    895.1    9412.9    895.0    9423.4    893.4    9440.8    894.7    9456.0
GR    894.7    9495.6    895.9    9512.5    895.8    9547.1    895.0    9573.6    893.0    9584.1
GR    894.4    9590.9    894.9    9619.7    895.3    9660.1    895.8    9701.1    896.0    9730.5
GR    894.6    9751.4    894.2    9794.0    894.8    9831.5    895.2    9865.2    893.6    9886.2
GR    893.1    9904.0    892.9    9931.4    893.0    9947.2    891.1    9965.2    890.8    10000.0
GR    890.4    10021.1   895.0    10035.2   895.0    10088.3   895.0    10124.0   894.7    10182.2
GR    891.9    10195.7   892.0    10236.6   893.3    10254.2   894.2    10277.5   895.4    10311.6
GR    895.7    10349.4

ET                 9.1        9.1                                                    9454.4     10124.0
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Left and right ends of the cross section were extended 5.78 and 4.48 feet, respectively. The left floodplain edge was interpolated to be 1846 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

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X1    5.83       82    9454.4    10124.0       300       370       404
GR    892.5    8989.9    891.2    9060.2    891.4    9139.9    888.8    9179.7    896.0    9194.4
GR    895.2    9297.0    895.0    9350.8    894.9    9366.8    895.2    9384.4    896.9    9426.5
GR    897.1    9454.4    896.4    9519.0    896.1    9612.8    895.8    9646.6    896.4    9686.8
GR    896.6    9750.4    896.8    9824.7    897.3    9898.5    897.0    9927.2    892.2    9942.2
GR    893.6    9961.0    893.5    10000.0   893.9    10048.5   897.0    10086.0   897.6    10124.0
GR    897.5    10201.7   897.3    10217.5   896.7    10224.8   897.6    10232.9   897.6    10242.6
GR    897.0    10247.8   897.8    10262.0   897.6    10292.2   896.0    10297.9   897.6    10306.9
GR    897.5    10342.5   897.2    10351.6   897.7    10363.8   897.5    10389.9   896.3    10396.1
GR    896.1    10411.2   896.9    10417.0   896.5    10431.1   897.7    10447.7   897.3    10493.1
GR    896.2    10497.2   897.3    10507.6   897.2    10544.8   897.1    10599.8   896.2    10607.7
GR    897.4    10613.4   897.6    10668.4   897.1    10707.7   896.0    10716.3   897.3    10726.9
GR    896.9    10739.7   897.4    10757.8   897.6    10805.0   897.3    10811.9   897.9    10861.4
GR    897.3    10892.5   896.9    10932.1   896.4    10957.2   895.5    10990.8   894.8    10997.6
GR    895.7    11008.7   895.6    11044.1   895.3    11052.6   895.6    11099.7   895.3    11115.4
GR    893.9    11138.5   895.4    11148.6   895.4    11162.9   894.7    11171.2   895.5    11195.4
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GR    894.0    11202.0     894.8    11212.1     894.7    11226.1     893.6    11230.3     893.7    11246.3
GR    892.3    11251.9     893.8    11259.4

ET               9.1        9.1                                                          9122.9    10026.3
      Left and right ends of the cross section were extended 1.56 and
      3.16 feet, respectively.  No USGS quad contour data was available
      at this cross section.  Therefore, for consistency between adjacent
      cross sections, the left floodplain edge was mapped to the end of
      the cross section (artificial boundary).  The right side of the cross
      section between the mainstem and the tributary is ineffective but
      flooded and will be mapped as Zone A.
X1     5.90       64     9122.9    10026.3       280       360       395
GR    898.8    8987.4     898.8     9029.8     898.8    9077.1     899.8     9122.9     899.7     9136.3
GR    899.7    9183.4     899.3     9251.3     899.0    9277.4     898.5     9291.3     898.3     9379.0
GR    898.4    9444.9     898.3     9485.5     898.3    9535.0     898.9     9585.7     897.7     9601.0
GR    898.3    9613.8     898.3     9644.0     898.7    9692.4     899.0     9720.5     898.1     9731.8
GR    899.3    9766.5     899.0     9811.1     898.5    9860.3     896.4     9874.5     896.4     9889.4
GR    898.0    9903.0     896.9     9943.0     895.7   10000.0     895.5    10011.9     899.7    10026.3
GR    899.5   10084.7     898.5    10156.0     897.0   10176.7     899.0    10184.1     898.2    10198.8
GR    899.5   10212.9     898.9    10224.5     899.5   10242.4     899.1    10303.7     899.3    10381.4
GR    899.8   10398.1     899.8    10414.8     898.6   10450.2     899.2    10465.4     899.2    10509.0
GR    898.5   10547.1     896.9    10573.5     898.2   10587.0     898.3    10638.9     897.1    10652.1
GR    897.8   10665.9     897.2    10703.8     894.7   10719.6     897.7    10742.0     896.9    10784.8
GR    895.8   10796.5     897.5    10811.7     897.3   10833.2     895.8    10856.0     896.8    10872.3
GR    896.5   10893.8     896.3    10936.8     898.3   10988.0     897.2    11050.4

NC                        0.035
ET               7.1        9.1                                    9155.5    10043.4    9790.4    10043.4
      CWSEL intersects left side of cross section.  However, for
      consistency with flow overtopping the roadway, the floodplain was
      mapped to the end of the detailed cross section.  The right side of
      the cross section between the mainstem and the tributary is
      ineffective but flooded and will be mapped as Zone A.
X1     5.94       57     9837.0    10043.4       190       225       219
GR    901.4    8986.5     901.5     9061.2     902.2    9069.3     901.7     9155.5     900.1     9193.8
GR    900.0    9233.4     900.2     9269.8     899.9    9350.3     899.8     9437.5     900.2     9489.9
GR    900.1    9545.8     900.2     9581.1     900.4    9623.5     899.3     9639.5     899.9     9659.4
GR    900.3    9750.0     900.3     9782.5     900.5    9837.0     899.4     9881.6     899.0     9890.2
GR    898.0    9964.6     896.8     9977.1     896.8   10000.0     896.7    10016.5     900.8    10043.4
GR    900.4   10074.0     899.8    10085.8     900.2   10100.7     899.8    10105.2     900.6    10124.8
GR    900.4   10207.5     900.1    10272.0     899.4   10342.7     898.1    10353.3     898.1    10363.3
GR    899.2   10375.0     899.5    10424.4     899.0   10467.2     898.4    10549.9     897.4    10583.7
GR    896.2   10590.6     896.7    10599.0     897.9   10612.3     897.7    10630.0     896.8    10666.3
GR    897.7   10678.5     896.6    10694.0     897.0   10780.9     896.8    10788.1     897.5    10807.9
GR    896.8   10816.0     897.5    10840.4     898.2   10885.5     898.0    10925.5     897.2    10958.1
GR    897.4   11008.0     897.1    11089.5

NC    0.016    0.016      0.025       0.3       0.5
ET                        9.1                                                          9987.9    10066.1
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The HEC-2 model requires a downstream section for use in calculating losses through the special bridge model (SR 85). The CWSEL calculated at this section is inconsistent with adjacent cross sections. The left edge of the floodplain was mapped to the end of the detailed cross section to be consistent with the weir flow calculated at the upstream face of the bridge. The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

X1	5.97	18	9987.9	10066.1	185	210	194			
X3	10									
GR	904.90	8966.0	905.30	9135.2	905.90	9327.1	906.50	9497.8	906.80	9663.6
GR	907.20	9796.1	905.5	9987.9	898.0	9988.0	898.0	10000.0	898.0	10066.0
GR	905.5	10066.1	907.60	10131.0	907.60	10284.1	907.50	10405.5	907.50	10532.8
GR	907.50	10662.2	907.50	10794.4	907.50	10845.5				
SB	1.25	1.56	2.6	0	78	2	570	0	898.0	898.0
ET			9.1						9335.2	10053.1

The upstream section of the special bridge model for the structure at SR 85. Left end of cross section extended 2.57 feet. No USGS data available to extend this cross section. The left edge of the floodplain was mapped to the end of the detailed cross section due to the weir flow conditions. The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

X1	5.99	18	9974.9	10053.1	45	45	45			
X2			1	905.5	905.2					
X3	10									
BT	-13	8868.2	905.2		9028.5	905.4		9188.1	906.0	
BT		9368.4	906.4		9543.8	906.8		9707.0	907.1	
BT		9908.4	907.7		10000.0	907.6		10175.6	908.0	
BT		10374.1	908.1		10563.4	907.8		10718.6	907.7	
BT		10850.7	907.7							
GR	904.80	8957.7	905.00	9125.0	905.30	9270.5	905.60	9444.4	906.50	9611.9
GR	907.10	9786.7	907.30	9944.8	905.5	9974.9	898.0	9975.0	898.0	10000.0
GR	898.0	10053.0	905.5	10053.1	907.50	10129.8	907.20	10259.3	906.90	10405.2
GR	907.20	10535.8	907.10	10693.7	907.10	10845.5				
NC	0.040	0.040	0.035							
ET		7.1	9.1				8987.8	10240.0	9251.3	10074.3

Left and right ends of the cross section were extended 2.82 and 6.72 feet, respectively. The left floodplain edge was interpolated to be 1282 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

X1	6.04	55	9928.7	10074.3	260	210	244			
GR	904.8	8987.8	904.0	9065.0	903.5	9183.9	902.4	9277.3	902.6	9285.3
GR	902.8	9290.7	902.3	9296.3	902.8	9304.0	902.9	9339.5	901.8	9345.7
GR	902.8	9350.5	903.0	9401.3	902.8	9475.0	902.5	9516.9	902.5	9570.1
GR	903.5	9645.7	903.5	9685.2	903.2	9730.0	903.0	9758.5	902.4	9767.5
GR	903.5	9792.2	903.4	9812.8	902.7	9831.2	902.9	9848.8	902.7	9888.0
GR	903.4	9903.6	903.3	9928.7	902.7	9954.7	901.1	9967.2	898.0	9977.0

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GR    898.3    10000.0    899.1    10028.3    900.5    10035.5    903.4    10074.3    905.6    10086.0
GR    905.6    10095.6    903.1    10104.8    903.2    10143.0    902.9    10194.6    901.9    10288.3
GR    901.5    10339.8    901.0    10400.2    900.5    10421.8    900.7    10428.3    900.9    10504.4
GR    900.0    10513.7    900.7    10521.3    900.6    10572.6    901.1    10645.0    900.8    10722.5
GR    900.4    10730.5    901.1    10742.6    901.4    10837.5    901.1    10852.8    900.9    11009.3

NC                                  0.1        0.3
ET              7.1        9.1                                   8994.3    10480.0    9354.9    10334.2
      Left and right ends of the cross section were extended 1.75 and
      4.35 feet, respectively.  The left floodplain edge was interpolated
      to be 818 feet beyond the end of the detailed cross section using
      USGS quad contour data.  Therefore, for consistency between
      adjacent cross sections, the left floodplain edge was mapped to the
      end of the cross section (artificial boundary).  The right side of the
      cross section between the mainstem and the tributary is ineffective
      but flooded and will be mapped as Zone A.
X1    6.08       58         9927.5   10045.2    250      240        248
GR    905.9    8994.3       905.7    9049.0     904.8    9136.1     904.7    9237.4     904.3    9304.8
GR    903.7    9332.5       903.7    9344.6     904.1    9348.2     904.4    9373.2     904.1    9451.7
GR    904.3    9499.6       904.3    9551.0     903.8    9604.4     902.9    9636.9     903.5    9647.4
GR    902.7    9652.8       903.6    9663.8     904.4    9716.9     904.4    9750.2     904.1    9761.0
GR    904.3    9793.8       903.9    9815.3     904.6    9878.0     904.5    9927.5     901.9    9958.5
GR    899.0    9966.9       899.2    10000.0    899.0    10021.8    903.4    10036.8    904.1    10045.2
GR    903.7    10072.5      905.6    10084.7    903.7    10095.5    903.3    10158.2    903.0    10210.3
GR    902.8    10213.5      903.1    10232.5    902.5    10258.3    902.5    10277.4    902.4    10302.3
GR    902.0    10310.6      902.3    10320.0    902.2    10334.1    901.8    10338.9    902.2    10346.5
GR    902.0    10396.9      902.0    10461.6    902.7    10488.5    902.8    10543.9    902.5    10589.5
GR    902.6    10651.5      902.1    10656.7    902.7    10662.9    902.9    10694.2    903.0    10796.9
GR    903.3    10812.2      903.3    10935.8    903.3    11013.3

ET              7.1        9.1                                   9434.9    10670.0    9842.6    10263.9
      Right end of cross section extended less than 1 foot.  No USGS
      quad contour data available.  To maintain consistency between
      adjacent cross sections, the right side of the cross section between
      the mainstem and the tributary will be mapped as Zone A.
X1    6.18       56         9909.8   10075.7    560      420        500
GR    909.2    8992.3       908.6    9046.8     909.0    9058.6     908.5    9128.8     908.3    9139.4
GR    908.3    9152.9       907.8    9155.8     908.6    9161.8     908.6    9216.1     908.1    9262.7
GR    907.7    9273.5       908.1    9279.5     908.0    9337.4     908.0    9434.9     907.2    9511.0
GR    906.8    9607.1       906.1    9734.9     906.2    9764.5     905.6    9776.7     906.0    9784.3
GR    906.2    9840.9       906.3    9880.0     906.8    9909.8     906.0    9957.5     901.2    9981.2
GR    900.4    10000.0      900.1    10021.8    905.1    10030.9    905.9    10050.0    905.7    10072.3
GR    906.3    10075.7      906.1    10153.8    906.9    10167.5    907.5    10185.6    906.2    10214.8
GR    906.1    10254.8      905.5    10260.2    906.0    10266.8    906.2    10299.4    906.1    10368.2
GR    906.5    10383.8      907.0    10429.6    906.5    10495.0    907.0    10501.3    907.1    10531.7
GR    906.8    10588.6      907.0    10642.0    907.0    10673.3    906.7    10727.7    906.9    10743.7
GR    906.5    10786.9      905.8    10794.8    906.5    10803.8    906.8    10875.7    907.7    10975.1
GR    907.7    11015.1
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NC    0.045
ET                7.1       9.1                                   8992.3    10649.1    9954.9    10248.7
        Right end of cross section extended less than 1 foot.  No USGS
        quad contour data available.  To maintain consistency between
        adjacent cross sections, the right side of the cross section between
        the mainstem and the tributary will be mapped as Zone A.
X1     6.27        53    9954.9   10034.3       560       430       500
GR    914.3    8992.3     913.7    9095.8     913.4    9138.4     913.2    9155.4     912.1    9305.7
GR    911.7    9361.5     911.0    9366.7     911.7    9372.5     911.7    9400.0     911.1    9405.1
GR    911.7    9408.9     911.5    9483.7     911.2    9609.3     910.0    9742.5     909.1    9842.8
GR    908.6    9860.7     908.9    9891.9     907.7    9925.8     908.1    9931.4     908.0    9954.9
GR    903.1    9972.2     903.4   10000.0     903.6   10011.2     908.4   10023.4     908.8   10034.3
GR    909.0   10060.6     909.2   10088.8     908.3   10110.6     908.8   10117.5     909.3   10141.9
GR    909.7   10160.1     909.6   10202.8     909.3   10285.0     909.1   10316.2     908.3   10332.3
GR    909.2   10348.7     909.7   10393.0     909.8   10431.1     909.5   10493.7     908.7   10527.7
GR    909.0   10540.3     909.6   10554.2     909.9   10578.3     909.4   10591.1     910.0   10611.0
GR    910.4   10649.1     910.1   10691.3     909.5   10706.0     909.5   10721.4     908.9   10754.0
GR    909.4   10824.0     909.6   10925.8     909.9   11018.6

ET                7.1       9.1                                   8994.9    10645.8    9980.4    10352.2
        Right end of cross section extended 2.61 feet.  No USGS quad
        contour data available.  To maintain consistency between adjacent
        cross sections, the right side of the cross section between the
        mainstem and the tributary will be mapped as Zone A.
X1     6.37        55    9980.4   10060.8       590       390       497
GR    918.5    8994.9     916.7    9050.8     917.4    9062.3     916.6    9073.5     917.2    9078.4
GR    917.3    9092.3     917.3    9186.4     916.3    9311.4     915.9    9413.8     915.0    9476.5
GR    914.2    9547.2     913.7    9623.3     912.1    9757.3     909.4    9776.4     909.2    9788.8
GR    912.0    9808.0     912.0    9824.9     911.5    9835.3     911.4    9884.3     910.0    9891.1
GR    911.3    9905.6     912.0    9918.5     912.2    9957.2     912.0    9980.4     906.9    9986.4
GR    906.6   10000.0     907.1   10047.2     911.5   10060.8     911.6   10085.5     910.8   10096.7
GR    911.6   10125.0     912.4   10132.2     912.6   10159.6     912.4   10195.7     911.7   10237.6
GR    911.6   10278.9     911.5   10331.9     911.3   10340.7     911.8   10347.0     912.0   10384.4
GR    911.7   10436.5     911.2   10466.9     911.6   10476.2     911.6   10492.9     911.4   10508.2
GR    911.8   10519.4     911.9   10568.2     911.1   10586.2     911.5   10603.3     911.7   10645.8
GR    911.1   10763.4     911.0   10898.9     911.0   10914.8     910.3   10984.3     910.3   11006.2

NC    0.050
ET                7.1       9.1                                   9322.2    10648.6    9908.2    10091.6
        Right end of cross section extended 3.01 feet.  No USGS quad
        contour data available.  To maintain consistency between adjacent
        cross sections, the right side of the cross section between the
        mainstem and the tributary will be mapped as Zone A.
X1     6.46        58    9908.2   10091.6       490       500       494
GR    920.3    8994.5     919.7    9066.2     919.4    9085.7     919.4    9108.5     918.0    9162.7
GR    914.9    9176.2     917.7    9193.5     918.2    9217.1     916.2    9238.8     917.8    9256.5
GR    915.8    9262.1     917.8    9269.7     917.3    9284.5     918.3    9300.4     918.3    9322.2
GR    917.9    9406.5     917.5    9474.7     917.1    9530.9     915.9    9610.8     915.0    9677.4
GR    913.1    9685.4     914.9    9691.9     915.0    9711.7     914.7    9761.8     914.3    9788.8
GR    913.8    9851.3     913.2    9858.7     913.7    9864.5     913.5    9908.2     911.2    9917.0
GR    911.4    9932.0     910.3   10000.0     910.5   10023.0     912.8   10037.7     914.4   10071.4
GR    915.2   10091.6     915.2   10144.8     915.0   10179.2     914.9   10240.3     914.9   10303.6
GR    914.5   10351.4     915.1   10402.1     913.4   10425.3     913.9   10439.1     914.7   10448.8
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GR	914.7	10492.3	914.9	10543.0	915.0	10592.0	915.1	10648.6	914.9	10696.3
GR	913.7	10779.3	912.7	10838.5	911.3	10846.1	912.7	10853.7	912.7	10875.0
GR	913.1	10885.0	912.7	10945.8	912.6	11003.6				
ET		7.1	9.1				8991.8	10216.9	9882.6	10044.1
X1	6.55	41	9882.6	10044.1	480	510	501			
GR	921.4	8991.8	921.5	9034.3	921.8	9047.6	921.1	9139.2	920.5	9164.7
GR	920.3	9210.6	920.3	9257.2	920.2	9309.9	919.8	9358.5	920.0	9393.9
GR	919.9	9467.8	919.4	9549.5	918.2	9649.6	916.8	9743.0	916.0	9804.0
GR	916.0	9850.0	916.3	9882.6	912.8	9892.9	912.2	9925.8	914.0	9933.7
GR	913.5	9972.0	912.3	9979.4	912.3	10000.0	912.1	10029.9	916.3	10044.1
GR	916.6	10097.6	916.4	10146.6	916.9	10175.0	917.7	10216.9	917.6	10283.1
GR	917.3	10342.8	917.1	10428.3	915.9	10444.3	916.4	10458.1	917.0	10524.4
GR	916.7	10584.3	916.6	10671.1	915.6	10784.3	915.2	10873.0	914.6	10888.2
GR	914.6	11012.0								
ET		7.1	9.1				9562.7	10205.6	9932.5	10131.3
X1	6.65	54	9932.5	10131.3	500	480	498			
GR	923.8	8997.0	923.1	9095.7	921.7	9117.9	922.5	9140.6	922.1	9203.9
GR	922.0	9237.8	920.4	9250.6	920.3	9272.7	920.4	9295.2	921.0	9317.2
GR	919.1	9337.3	920.8	9348.2	920.9	9371.8	919.1	9384.6	919.3	9396.5
GR	919.9	9410.8	918.8	9420.9	920.7	9432.0	920.2	9512.8	920.7	9562.4
GR	919.9	9677.0	919.5	9746.3	917.1	9761.6	918.6	9767.3	919.1	9795.3
GR	919.0	9821.4	918.3	9847.2	918.1	9863.5	919.0	9882.8	919.4	9898.0
GR	920.2	9932.5	919.8	9951.2	915.5	9970.6	915.2	10000.0	913.8	10051.4
GR	916.7	10058.1	918.8	10089.8	920.7	10131.3	920.9	10168.5	921.0	10205.6
GR	920.2	10269.6	919.8	10327.8	919.5	10394.6	919.2	10447.2	918.6	10524.6
GR	918.8	10553.2	918.6	10646.3	918.8	10710.5	919.2	10744.6	919.2	10813.3
GR	918.8	10861.6	918.5	10870.8	917.6	10951.9	917.6	10997.8		
ET		7.1	9.1				9512.6	10238.8	9862.0	10183.0
X1	6.74	47	9862.0	10183.0	460	530	494			
GR	925.3	8989.4	926.9	9041.3	927.1	9084.3	926.4	9158.4	926.1	9186.8
GR	925.3	9320.5	924.6	9385.2	922.7	9394.4	924.1	9398.9	924.4	9436.9
GR	921.9	9454.3	923.7	9465.0	923.9	9512.6	923.7	9605.2	923.0	9704.6
GR	922.1	9806.8	921.7	9862.0	919.9	9947.6	918.1	9952.4	917.2	9997.9
GR	917.1	10000.0	917.8	10028.6	918.7	10047.0	918.9	10074.7	917.9	10084.5
GR	918.4	10090.3	917.9	10112.3	920.7	10124.3	922.1	10157.0	922.8	10183.0
GR	923.2	10238.8	922.7	10286.5	922.2	10345.6	922.0	10381.3	922.3	10420.8
GR	922.4	10471.6	922.4	10532.3	922.5	10603.0	922.2	10652.5	922.1	10667.6
GR	921.8	10770.4	920.5	10782.4	921.2	10789.7	921.2	10817.6	922.0	10847.0
GR	922.4	10916.0	922.1	11017.0						
ET		7.1	9.1				9730.2	10360.2	9915.7	10076.4
X1	6.84	47	9951.7	10075.3	520	480	499			
GR	929.7	8992.8	929.9	9052.5	929.0	9141.7	928.4	9237.3	927.6	9318.5
GR	927.8	9341.6	926.9	9473.5	926.4	9497.1	926.9	9505.4	926.0	9554.5
GR	924.5	9568.2	925.8	9579.9	925.7	9635.2	925.5	9687.6	921.4	9702.9
GR	924.5	9717.1	925.0	9730.2	924.1	9773.0	924.0	9812.7	923.4	9831.2
GR	923.5	9866.8	920.1	9874.7	922.7	9882.0	923.4	9900.8	923.3	9951.7
GR	921.1	9962.5	918.5	9970.6	918.7	10000.0	918.3	10032.5	922.4	10043.2
GR	924.0	10075.3	924.0	10127.4	923.3	10176.3	924.1	10193.5	923.7	10228.0
GR	924.7	10257.5	925.3	10298.5	925.7	10360.2	925.5	10410.6	924.9	10487.7
GR	924.6	10556.6	924.5	10628.6	924.6	10697.3	924.5	10779.0	924.8	10841.9

GR	924.7	10935.9	923.9	11046.9						
ET		7.1	9.1				8992.0	10438.1	9886.0	10063.7
X1	6.93	56	9886.0	10063.7	475	500	489			
GR	930.9	8992.0	931.2	9049.5	930.8	9120.2	930.6	9194.3	930.5	9210.7
GR	930.2	9256.5	929.0	9322.9	927.9	9342.5	928.7	9348.7	929.0	9364.9
GR	928.2	9372.3	929.2	9378.0	929.1	9477.4	928.9	9538.1	928.3	9585.6
GR	927.1	9651.2	926.5	9687.4	926.5	9735.6	926.5	9745.0	926.5	9764.2
GR	926.5	9774.5	926.5	9783.7	926.5	9802.7	926.6	9837.7	926.5	9886.0
GR	925.3	9903.1	924.8	9914.7	922.5	9939.9	920.4	9948.1	920.0	9979.8
GR	919.8	10000.0	919.9	10008.4	923.9	10020.4	925.5	10047.0	926.7	10063.7
GR	926.9	10090.3	926.6	10102.2	927.3	10118.8	927.6	10159.0	927.5	10198.7
GR	927.8	10236.8	927.7	10327.1	927.8	10383.2	928.0	10438.1	928.0	10520.9
GR	927.7	10581.1	927.1	10654.7	927.1	10719.7	927.2	10760.9	926.5	10768.8
GR	927.1	10776.1	926.7	10830.2	926.6	10835.8	926.7	10852.7	926.4	10929.8
GR	925.7	11012.5								
NC	0.045									
ET		7.1	9.1				9398.5	10385.3	9913.4	10162.1
X1	7.02	70	9913.4	10162.1	480	510	501			
GR	931.9	8984.0	932.3	9039.0	928.8	9059.0	932.3	9077.6	932.2	9101.1
GR	930.2	9142.8	930.0	9155.8	930.9	9165.2	931.0	9214.8	927.3	9227.3
GR	930.8	9243.4	930.2	9270.7	930.6	9280.2	930.3	9287.5	931.0	9296.3
GR	931.4	9333.2	931.4	9398.5	930.4	9485.0	929.9	9539.4	930.2	9547.5
GR	929.9	9605.7	929.2	9651.1	928.2	9706.9	926.3	9712.4	928.4	9721.3
GR	925.9	9728.5	928.2	9736.0	928.2	9748.5	928.7	9785.0	929.2	9827.3
GR	929.2	9885.5	929.2	9913.4	927.9	9937.4	923.4	9953.8	922.8	9976.0
GR	922.2	10000.0	922.0	10012.8	925.7	10028.1	927.5	10049.4	926.9	10075.5
GR	927.7	10097.9	927.7	10117.8	928.5	10132.6	929.5	10162.1	929.9	10218.2
GR	930.4	10257.3	930.0	10276.3	928.7	10300.2	929.3	10305.6	929.8	10334.1
GR	930.1	10385.3	930.0	10426.2	929.5	10430.9	929.9	10441.2	929.6	10480.4
GR	928.9	10533.8	928.5	10604.0	927.6	10613.2	928.0	10618.8	928.0	10650.7
GR	927.7	10676.4	928.5	10697.4	929.2	10731.5	929.1	10745.0	929.2	10759.3
GR	929.3	10822.5	927.3	10838.6	928.2	10869.1	929.0	10931.7	928.8	11012.3
ET		7.1	9.1				9522.8	10351.2	9864.9	10117.6
X1	7.12	63	9864.9	10117.6	430	520	495			
GR	933.1	8998.6	930.5	9010.3	933.7	9029.5	933.7	9045.3	932.4	9053.1
GR	934.0	9064.2	933.9	9086.2	932.2	9097.2	933.5	9110.6	934.4	9146.7
GR	934.4	9166.5	934.6	9181.6	933.9	9297.6	932.9	9377.8	931.6	9385.7
GR	932.6	9396.3	933.2	9426.8	932.8	9471.8	933.2	9522.8	932.7	9587.6
GR	932.3	9655.4	931.8	9696.1	930.0	9703.6	931.7	9710.5	931.6	9734.4
GR	931.0	9739.8	931.6	9747.4	931.6	9795.6	932.3	9818.6	932.7	9842.7
GR	932.7	9864.9	931.4	9889.0	930.5	9920.9	929.4	9939.3	925.4	9945.5
GR	925.0	9989.5	924.8	10000.0	924.7	10012.2	928.3	10022.7	929.9	10038.7
GR	931.2	10079.3	931.9	10117.6	931.5	10160.8	931.6	10180.7	931.5	10232.8
GR	930.9	10240.7	930.8	10264.3	931.3	10300.5	932.0	10323.3	932.9	10351.2
GR	932.5	10391.4	932.4	10436.4	932.8	10484.6	933.6	10520.0	932.8	10554.1
GR	931.9	10600.8	932.2	10634.5	932.5	10667.7	932.4	10695.5	932.4	10707.8
GR	931.5	10800.9	931.5	10912.3	931.5	11011.5				

ET			9.1						9948.0	10153.4
X1	7.21	62	9948.0	10153.4	465	480	506			
GR	938.5	8983.9	938.4	9071.7	937.7	9167.1	937.7	9170.0	937.6	9199.8
GR	937.7	9277.5	937.6	9323.6	937.2	9411.1	936.6	9463.2	935.8	9510.2
GR	934.5	9519.7	936.1	9525.0	936.1	9609.4	935.6	9696.4	935.3	9763.5
GR	934.0	9772.8	934.7	9784.0	934.1	9813.3	933.5	9821.4	934.4	9828.5
GR	934.5	9837.3	932.2	9848.4	933.8	9854.3	933.7	9868.1	931.3	9889.3
GR	932.8	9895.3	931.7	9903.9	933.6	9911.3	929.7	9937.5	931.3	9948.0
GR	929.1	9967.3	926.7	9974.3	927.3	10000.0	927.8	10014.9	929.0	10029.8
GR	929.8	10048.7	929.4	10071.2	928.5	10075.6	928.3	10102.0	930.5	10113.4
GR	931.9	10153.4	929.7	10159.6	931.9	10167.4	932.5	10217.0	932.6	10253.2
GR	932.8	10281.7	933.4	10304.7	934.1	10329.2	934.7	10362.7	934.7	10414.6
GR	935.0	10450.3	935.2	10482.1	934.9	10517.6	934.7	10586.6	935.0	10613.8
GR	935.3	10661.2	935.6	10731.0	935.3	10796.7	934.9	10843.7	935.0	10867.5
GR	934.9	10970.9	934.8	11024.5						
ET		7.1	9.1				9425.5	10327.8	9944.7	10093.7
X1	7.30	57	9944.7	10093.7	560	400	482			
GR	942.3	8991.6	941.7	9108.8	940.8	9232.0	939.9	9303.0	936.3	9310.5
GR	939.5	9320.6	938.5	9326.5	939.5	9338.2	939.9	9377.3	940.1	9398.9
GR	940.1	9405.0	940.7	9425.5	940.2	9504.3	939.2	9566.0	939.1	9600.3
GR	939.0	9661.8	938.9	9707.9	938.6	9749.4	938.2	9775.7	938.4	9812.4
GR	938.0	9846.5	937.6	9885.3	936.4	9929.5	936.0	9944.7	929.6	9957.6
GR	929.9	9970.4	929.4	10000.0	929.1	10012.1	931.1	10019.2	932.2	10037.8
GR	933.7	10045.9	934.5	10093.7	933.4	10107.1	934.0	10132.5	934.8	10171.2
GR	936.2	10200.9	936.9	10241.5	937.4	10275.1	937.7	10327.8	937.3	10349.9
GR	935.4	10352.9	937.5	10358.2	937.4	10384.4	937.0	10387.7	936.7	10398.1
GR	937.3	10400.5	937.0	10441.0	937.0	10469.8	937.3	10512.3	937.6	10589.0
GR	937.1	10665.2	936.7	10728.1	936.3	10758.2	936.1	10779.4	936.0	10791.0
GR	936.1	10863.8	935.1	11008.5						
ET		7.1	9.1				8987.3	10285.1	9905.2	10125.6
X1	7.40	54	9905.2	10125.6	490	520	508			
GR	944.4	8987.3	944.3	9081.3	943.2	9182.2	943.5	9248.7	943.8	9259.4
GR	942.8	9342.1	942.9	9369.8	942.1	9427.6	942.1	9486.3	941.3	9532.0
GR	941.7	9545.6	941.8	9565.4	941.5	9599.2	941.3	9646.3	940.8	9682.5
GR	939.5	9749.6	939.1	9798.0	937.9	9834.6	938.2	9847.2	937.6	9856.3
GR	937.7	9863.9	936.6	9875.6	937.7	9882.4	938.7	9905.2	938.4	9923.0
GR	936.2	9936.0	934.2	9950.0	931.3	9957.6	931.5	9978.8	930.7	9998.8
GR	930.8	10000.0	930.6	10013.6	934.0	10021.7	937.8	10052.5	938.3	10077.5
GR	939.5	10094.5	940.2	10125.6	940.1	10179.2	940.2	10208.0	940.4	10245.1
GR	940.8	10285.1	940.5	10350.8	940.5	10386.6	940.2	10437.9	940.5	10507.1
GR	940.0	10518.5	940.4	10525.7	940.5	10583.3	940.4	10663.0	939.6	10750.5
GR	939.2	10758.9	939.2	10784.2	938.7	10872.9	937.7	11007.9		
ET		7.1	9.1				9827.5	10090.5	9903.8	10094.9
X1	7.45	67	9951.9	10090.5	250	255	253			
GR	946.0	8987.3	945.8	9085.1	945.4	9134.6	945.8	9143.0	944.8	9239.5
GR	944.0	9296.7	942.7	9361.7	943.0	9392.3	943.1	9420.4	941.7	9453.3
GR	943.1	9468.7	943.3	9500.3	939.3	9537.8	941.1	9552.0	939.3	9577.2
GR	935.5	9594.1	935.4	9631.9	935.4	9664.3	938.9	9678.3	939.4	9716.5
GR	937.8	9735.7	939.7	9756.9	939.5	9773.6	933.9	9793.4	938.5	9814.2
GR	938.8	9827.5	938.3	9842.7	933.0	9851.4	932.9	9859.6	936.6	9868.6

GR	937.8	9885.0	937.9	9901.5	933.5	9912.1	937.5	9924.6	937.4	9930.6
GR	936.0	9940.9	937.0	9951.9	932.2	9962.8	931.8	10000.0	931.8	10021.2
GR	935.7	10031.7	938.5	10053.5	941.0	10090.5	939.3	10107.0	939.9	10115.3
GR	938.8	10127.1	940.3	10134.4	940.5	10147.8	939.2	10159.3	940.1	10168.9
GR	940.4	10186.3	939.6	10197.0	940.7	10213.0	941.6	10244.9	941.9	10276.8
GR	942.5	10312.5	942.4	10370.1	942.0	10431.8	941.7	10498.3	941.4	10547.2
GR	941.0	10612.6	940.6	10694.1	940.5	10743.9	939.8	10810.8	939.9	10824.5
GR	939.6	10919.9	939.2	11000.0						
ET		7.1	9.1				9511.4	10150.2	9879.3	10070.8
X1	7.49	83	9914.7	10070.8	240	255	245			
X3	10									
GR	945.8	8974.1	944.4	9110.0	942.7	9178.3	940.8	9186.4	942.4	9197.5
GR	939.3	9210.8	942.4	9220.0	941.8	9235.0	940.4	9241.9	943.3	9255.0
GR	943.2	9292.0	942.9	9334.4	942.3	9355.3	941.1	9362.9	942.4	9371.1
GR	942.5	9388.2	942.0	9397.0	942.7	9412.5	942.8	9441.1	941.0	9450.7
GR	942.6	9460.1	943.1	9479.2	943.4	9511.4	943.2	9541.5	941.9	9578.3
GR	940.5	9600.0	941.1	9608.3	941.0	9626.0	940.2	9633.2	941.0	9642.3
GR	940.8	9678.6	939.3	9705.1	939.6	9746.6	935.7	9771.7	939.1	9792.5
GR	937.0	9796.4	939.6	9801.9	939.9	9822.1	939.4	9870.5	936.3	9878.0
GR	939.9	9888.7	940.9	9899.7	941.0	9914.7	940.2	9932.2	937.6	9955.8
GR	933.5	9963.9	933.3	10000.0	933.2	10011.9	935.8	10019.3	937.5	10037.9
GR	939.2	10070.8	937.5	10081.5	940.9	10096.3	942.8	10125.5	943.0	10150.2
GR	942.7	10179.1	941.8	10195.6	942.1	10217.0	941.1	10225.9	941.9	10229.9
GR	942.7	10258.9	941.3	10276.8	942.4	10289.6	941.8	10300.5	943.1	10309.0
GR	944.0	10324.0	943.6	10356.5	943.5	10395.0	942.7	10450.6	942.8	10483.3
GR	942.8	10553.7	942.4	10561.3	942.6	10574.1	943.1	10616.3	942.6	10700.4
GR	942.3	10737.3	941.7	10748.8	942.2	10753.4	942.0	10785.9	941.9	10798.6
GR	941.4	10812.0	940.9	10903.2	940.9	11010.5				
ET		7.1	9.1				9768.9	10172.9	9887.6	10115.5
X1	7.59	60	9887.6	10115.5	480	505	496			
X3	10									
GR	946.9	8987.9	945.4	9005.7	947.4	9026.4	946.8	9047.7	947.6	9065.3
GR	946.7	9114.2	945.7	9153.5	944.2	9165.1	946.2	9187.3	946.3	9275.2
GR	946.7	9282.6	945.7	9292.8	946.8	9299.7	947.2	9328.7	946.5	9410.9
GR	945.5	9491.0	944.8	9515.9	945.1	9529.9	945.0	9571.8	944.6	9624.9
GR	943.4	9633.9	944.5	9639.0	944.0	9701.4	942.4	9708.4	943.7	9717.7
GR	943.7	9768.9	943.4	9828.5	943.1	9887.6	942.4	9914.1	939.6	9951.8
GR	935.4	9961.2	935.5	9988.3	935.4	10000.0	935.3	10014.4	936.7	10022.5
GR	937.8	10034.5	940.4	10046.2	942.0	10080.3	944.2	10115.5	944.8	10143.6
GR	946.4	10172.9	946.4	10201.1	946.3	10220.3	945.3	10233.1	946.4	10247.8
GR	946.2	10302.3	946.3	10340.3	946.5	10393.2	946.3	10471.2	945.3	10487.9
GR	946.3	10493.2	946.1	10522.4	945.8	10577.2	945.9	10640.9	945.7	10688.4
GR	945.2	10758.2	945.0	10814.4	945.2	10823.3	944.7	10898.0	944.0	11003.9
ET		7.1	9.1				9767.0	10163.1	9925.0	10163.1
X1	7.70	67	9925.0	10163.1	620	575	592			
GR	952.0	8997.7	951.0	9026.9	952.4	9036.7	951.9	9117.7	949.5	9132.0
GR	950.4	9155.0	946.7	9180.8	949.5	9204.7	951.4	9222.3	950.6	9275.8
GR	949.2	9289.8	950.0	9309.6	945.7	9337.8	945.5	9386.3	950.5	9397.5
GR	950.3	9426.1	950.3	9492.8	949.6	9541.4	948.3	9556.8	949.4	9566.5
GR	949.6	9605.6	948.4	9673.8	947.1	9713.2	945.7	9740.2	946.7	9754.4
GR	947.0	9767.0	946.3	9797.0	943.6	9816.7	945.2	9840.5	945.0	9853.3

GR	942.9	9866.8	945.3	9873.9	945.7	9887.8	945.0	9900.8	943.7	9908.7
GR	945.2	9915.5	945.5	9925.0	942.6	9974.2	938.5	9985.3	938.8	10000.0
GR	939.4	10019.3	939.0	10036.8	941.6	10045.7	942.5	10077.5	943.0	10083.5
GR	944.6	10112.5	946.2	10146.0	948.8	10163.1	948.8	10181.0	946.0	10199.9
GR	948.1	10209.5	946.2	10215.1	948.6	10228.5	948.9	10246.0	948.2	10296.8
GR	948.8	10303.3	949.4	10338.7	949.9	10398.0	949.1	10445.3	949.0	10510.1
GR	948.3	10589.5	947.7	10654.3	947.5	10660.3	947.4	10675.4	947.2	10797.5
GR	947.0	10880.8	946.5	10997.6						
ET			9.1						9860.2	10116.1
X1	7.78	77	9860.2	10116.1	420	380	404			
X3	10									
GR	953.5	9000.7	953.7	9022.7	951.6	9031.7	953.2	9050.6	952.1	9079.3
GR	953.4	9132.8	949.1	9152.1	953.1	9177.0	953.5	9212.5	952.5	9260.7
GR	953.0	9291.5	952.4	9316.3	951.2	9354.0	949.6	9368.2	950.6	9378.8
GR	950.2	9416.1	949.8	9450.0	949.9	9458.7	950.7	9461.7	951.7	9487.2
GR	952.3	9518.7	951.1	9554.5	949.7	9608.2	948.0	9621.3	949.6	9630.6
GR	949.6	9640.8	948.3	9664.1	949.0	9671.7	949.3	9712.0	948.0	9770.6
GR	946.0	9785.6	947.3	9796.8	947.6	9823.7	943.4	9835.7	948.2	9849.6
GR	948.3	9860.2	946.8	9888.1	945.7	9913.4	946.3	9929.4	945.7	9944.5
GR	943.3	9962.6	940.1	9973.6	940.4	10000.0	940.6	10024.1	943.2	10034.8
GR	944.5	10045.3	945.1	10073.2	947.6	10088.8	948.8	10104.2	949.0	10116.1
GR	946.3	10126.0	948.2	10135.1	949.5	10157.6	948.5	10174.0	949.3	10182.5
GR	949.9	10220.5	950.6	10245.4	950.5	10276.0	950.6	10304.3	950.7	10326.9
GR	950.2	10337.9	950.8	10341.5	950.7	10377.3	950.1	10441.1	949.8	10521.0
GR	949.3	10571.0	949.0	10646.9	948.7	10722.5	947.8	10768.6	946.8	10781.7
GR	947.9	10787.4	947.9	10800.5	948.2	10818.8	946.9	10830.5	947.8	10843.0
GR	947.2	10928.2	947.8	11002.3						
ET			9.1						9842.2	10127.0
X1	7.82	71	9842.2	10127.0	230	255	240			
X3	10									
GR	956.2	8991.2	955.1	9025.2	955.5	9074.0	954.6	9104.5	955.4	9114.9
GR	955.7	9139.4	955.3	9200.9	953.9	9244.5	953.3	9279.5	953.2	9298.2
GR	954.1	9333.8	952.9	9385.3	951.1	9416.7	951.0	9438.5	950.0	9452.5
GR	950.5	9462.8	951.0	9485.1	950.2	9493.6	950.7	9503.8	949.7	9520.5
GR	950.4	9530.5	950.7	9550.8	950.8	9596.0	949.5	9607.0	947.0	9614.1
GR	947.0	9622.3	948.7	9634.6	949.0	9653.2	948.6	9676.1	947.2	9683.7
GR	948.7	9690.5	949.2	9711.3	949.6	9735.2	949.9	9766.3	949.5	9795.0
GR	948.1	9826.3	949.5	9834.3	949.6	9842.2	948.3	9872.9	947.3	9895.4
GR	946.0	9924.2	944.1	9935.5	944.1	9951.6	941.7	9957.2	941.1	10000.0
GR	941.0	10011.8	944.3	10018.1	945.8	10027.1	947.2	10055.2	948.5	10078.2
GR	950.5	10100.0	952.3	10127.0	952.6	10151.9	951.8	10206.9	951.6	10230.2
GR	951.9	10254.0	951.9	10297.9	951.7	10375.5	951.2	10465.9	950.3	10550.0
GR	949.9	10563.5	949.2	10570.2	949.8	10577.8	950.4	10613.7	950.6	10689.2
GR	950.9	10731.5	950.4	10741.8	950.6	10754.6	950.0	10830.3	949.4	10897.1
GR	947.9	11010.9								
ET			9.1						9922.7	10174.5
X1	7.87	75	9922.7	10174.5	240	260	252			
X3	10									
GR	957.2	8995.7	956.8	9035.1	955.0	9130.0	954.8	9164.7	951.5	9181.7
GR	954.3	9199.0	952.9	9228.1	952.5	9247.2	954.3	9292.8	953.9	9315.2
GR	953.5	9328.4	952.2	9336.8	952.8	9352.4	952.2	9380.9	950.8	9387.1

GR	952.1	9395.3	952.0	9412.3	951.4	9416.3	952.6	9423.2	953.5	9450.3
GR	953.5	9502.8	952.8	9528.1	953.2	9553.0	952.4	9586.3	951.0	9599.4
GR	952.6	9605.3	953.1	9619.7	953.7	9658.8	953.5	9692.5	952.7	9728.2
GR	953.0	9739.1	952.0	9790.0	951.2	9828.1	950.9	9862.8	949.6	9885.5
GR	948.4	9892.2	947.5	9901.3	946.6	9908.2	947.9	9922.7	946.8	9947.3
GR	943.3	9954.6	942.5	10000.0	942.4	10011.3	945.5	10022.5	946.1	10038.9
GR	946.2	10062.0	948.4	10072.2	949.2	10081.5	949.8	10099.9	950.1	10124.3
GR	950.2	10137.2	952.4	10158.0	953.7	10174.5	953.5	10195.2	952.5	10216.5
GR	953.5	10256.3	952.7	10262.2	953.3	10283.8	953.2	10327.0	952.7	10388.0
GR	952.5	10430.9	952.4	10486.6	952.6	10526.8	953.2	10587.2	953.0	10651.8
GR	952.7	10653.3	952.8	10676.7	951.8	10755.5	950.4	10882.7	949.9	10900.5
GR	950.2	10916.1	950.0	10945.6	948.6	10955.0	949.8	10964.1	950.3	11010.3
NC			0.040							
ET			9.1						9949.7	10245.0
X1	7.97	73	9949.7	10245.0	430	510	502			
X3	10									
GR	957.9	8990.0	958.0	9006.7	955.6	9015.3	957.9	9029.0	957.5	9060.7
GR	958.6	9091.0	958.3	9107.4	956.3	9136.2	957.5	9142.9	957.9	9166.3
GR	958.3	9218.8	958.3	9260.4	957.6	9342.8	957.0	9356.0	957.2	9374.9
GR	957.6	9440.3	957.2	9484.4	957.5	9521.6	956.1	9573.2	955.0	9614.4
GR	953.3	9664.3	953.7	9685.0	954.3	9706.0	952.2	9710.5	953.8	9717.4
GR	954.5	9737.2	953.6	9757.3	951.6	9791.7	953.4	9800.9	954.0	9832.9
GR	953.5	9865.4	952.4	9909.9	949.0	9917.6	952.6	9926.2	952.6	9949.7
GR	949.8	9956.0	946.4	9972.7	946.0	9992.3	946.2	10000.0	946.0	10022.2
GR	947.2	10053.0	946.3	10078.7	946.5	10124.3	948.1	10137.3	948.6	10160.9
GR	950.2	10199.3	951.5	10245.0	951.6	10255.5	950.2	10266.3	950.8	10273.3
GR	951.9	10315.2	953.7	10354.1	953.8	10365.8	952.4	10381.0	953.3	10390.3
GR	953.5	10398.3	952.3	10412.7	953.7	10422.8	954.5	10439.6	955.5	10467.1
GR	955.0	10488.9	955.2	10512.9	954.3	10517.8	955.5	10526.4	955.9	10553.2
GR	956.2	10589.8	956.1	10651.2	955.6	10716.0	955.0	10738.3	955.7	10751.4
GR	955.6	10817.3	955.3	10913.0	955.1	11006.7				
ET			9.1						9967.2	10254.1
X1	8.01	62	9967.2	10254.1	260	200	240			
X3	10									
GR	963.1	8987.1	963.2	9070.3	962.5	9155.5	961.8	9225.7	960.7	9294.2
GR	960.2	9295.5	958.8	9391.5	958.1	9445.1	957.3	9488.7	957.6	9524.0
GR	957.9	9552.5	957.3	9621.3	957.2	9674.9	957.6	9718.2	957.2	9753.3
GR	956.2	9788.4	955.8	9810.6	956.1	9830.2	955.6	9854.4	955.9	9872.0
GR	955.3	9894.7	953.3	9921.6	954.5	9932.6	954.6	9949.0	953.5	9958.2
GR	954.3	9967.2	952.6	9977.8	946.7	9990.0	947.0	10000.0	947.2	10047.4
GR	948.1	10061.2	948.8	10078.9	948.5	10093.2	949.2	10102.4	949.4	10124.3
GR	950.4	10142.2	951.1	10170.4	951.3	10209.4	952.4	10232.8	953.2	10254.1
GR	953.3	10268.8	951.7	10294.8	951.8	10306.3	952.6	10317.0	953.7	10345.6
GR	951.0	10357.9	953.4	10368.8	954.9	10385.9	954.8	10399.0	953.8	10418.7
GR	955.4	10433.8	956.6	10454.4	956.5	10495.6	956.8	10536.9	957.0	10573.6
GR	956.9	10618.2	956.7	10660.5	956.5	10723.2	956.3	10791.4	956.3	10804.1
GR	956.1	10913.4	955.7	10998.9						

ET			9.1						9964.1	10241.3
X1	8.06	75	9964.1	10241.3	300	215	265			
X3	10									
GR	964.4	9002.3	963.3	9090.0	963.7	9133.2	963.3	9163.7	962.1	9199.0
GR	961.7	9257.1	961.0	9266.6	961.9	9290.2	960.5	9340.8	960.1	9371.2
GR	961.5	9396.2	962.3	9413.9	960.3	9452.1	959.8	9480.8	959.1	9499.7
GR	959.5	9515.1	959.7	9538.4	958.5	9557.9	958.9	9572.6	958.9	9593.0
GR	958.1	9603.5	959.2	9618.8	958.5	9639.3	957.6	9652.7	958.5	9665.1
GR	958.6	9692.2	957.4	9719.5	958.2	9727.0	957.8	9769.8	956.3	9799.6
GR	955.0	9829.3	955.6	9837.5	954.7	9860.5	953.4	9877.8	954.1	9901.4
GR	953.7	9906.0	954.5	9919.2	952.0	9940.1	953.5	9953.3	953.1	9964.1
GR	947.8	9982.5	947.7	10000.0	948.3	10027.7	949.2	10038.2	948.8	10044.5
GR	948.4	10064.8	950.3	10080.7	952.2	10129.1	952.4	10169.2	952.9	10188.5
GR	952.9	10196.5	953.8	10208.7	954.4	10241.3	953.7	10261.2	954.2	10283.4
GR	954.9	10320.2	955.5	10348.5	955.2	10365.5	955.0	10398.4	953.6	10404.8
GR	955.4	10413.6	956.4	10424.3	956.8	10444.5	955.9	10478.0	956.0	10500.0
GR	955.9	10529.6	955.5	10544.0	956.4	10574.3	957.1	10628.4	957.5	10669.4
GR	957.3	10736.4	956.3	10805.9	956.8	10813.0	956.3	10886.8	955.7	11005.3
ET		7.1	9.1				9801.9	10408.1	9938.3	10220.7
X1	8.15	63	9938.3	10220.7	550	430	490			
GR	965.7	8985.1	965.0	9077.0	963.9	9167.9	962.2	9176.1	963.1	9181.3
GR	963.2	9211.3	962.8	9284.0	961.8	9345.8	961.8	9395.6	961.8	9453.2
GR	960.9	9530.2	959.7	9566.8	959.0	9611.1	958.3	9643.1	957.7	9648.5
GR	958.7	9658.8	958.8	9679.6	958.9	9704.3	957.7	9733.2	956.3	9757.5
GR	957.6	9771.8	958.7	9787.1	958.7	9801.9	957.6	9815.8	957.4	9826.1
GR	954.9	9841.0	952.0	9847.6	951.8	9871.1	953.2	9880.1	952.8	9917.1
GR	954.1	9928.5	955.2	9938.3	954.7	9960.8	953.5	9972.5	949.5	9983.6
GR	949.4	10000.0	950.2	10044.4	952.5	10053.9	952.9	10083.7	954.7	10112.1
GR	955.9	10163.2	956.8	10178.0	958.0	10198.2	958.3	10220.7	957.6	10242.2
GR	957.9	10258.1	958.2	10285.2	958.8	10303.9	959.2	10344.2	959.7	10384.0
GR	960.0	10408.1	959.6	10431.8	959.3	10479.2	959.0	10510.3	959.1	10561.3
GR	958.9	10620.7	958.3	10676.5	958.0	10678.6	958.4	10693.2	958.0	10777.6
GR	957.2	10834.7	957.0	10883.2	956.3	11006.2				
NC	0.040		0.035							
ET		7.1	9.1				9847.8	11007.2	9934.3	10077.2
X1	8.25	82	9934.3	10077.2	480	495	491			
X3	10									
GR	967.0	8978.5	965.3	9022.7	964.7	9061.5	964.2	9076.3	964.2	9115.2
GR	963.5	9144.7	962.7	9164.7	963.6	9170.9	962.4	9214.0	962.0	9241.2
GR	962.8	9279.0	962.9	9295.7	962.3	9321.2	961.8	9349.9	961.3	9371.2
GR	960.9	9394.4	960.3	9427.0	960.0	9448.8	959.2	9457.7	959.5	9467.6
GR	957.2	9477.2	960.8	9490.7	961.8	9511.7	962.0	9528.2	960.1	9549.0
GR	958.7	9573.1	957.8	9587.6	956.7	9591.5	958.2	9599.9	959.0	9612.3
GR	957.3	9625.6	956.0	9639.0	955.6	9650.3	959.3	9663.1	960.8	9684.0
GR	961.7	9706.7	962.1	9743.3	960.1	9780.4	959.5	9809.2	959.6	9847.8
GR	958.3	9865.6	957.3	9889.5	955.6	9910.2	955.8	9915.5	955.7	9934.3
GR	954.9	9961.3	952.6	9972.3	952.5	9981.4	952.4	9989.4	951.5	9994.1
GR	951.3	10000.0	951.1	10032.5	954.2	10037.4	954.2	10047.6	957.1	10068.3
GR	958.8	10077.2	958.4	10088.9	959.1	10094.8	956.5	10112.5	959.0	10120.9
GR	960.8	10135.2	961.2	10158.1	960.9	10176.5	959.8	10186.9	961.0	10194.1
GR	961.9	10212.0	962.3	10244.8	962.4	10272.6	962.1	10316.1	961.7	10365.2

GR	961.5	10421.5	961.0	10462.0	961.0	10497.7	960.9	10535.2	960.9	10543.5
GR	960.8	10602.5	960.4	10658.7	960.3	10714.3	960.2	10784.5	960.1	10837.2
GR	960.2	10887.4	959.3	11007.2						
ET			9.1						9834.8	10186.7
X1	8.34	68	9834.8	10186.7	450	530	500			
X3	10									
GR	965.8	8990.6	965.8	9058.8	965.2	9078.5	964.5	9154.6	964.2	9219.5
GR	963.3	9255.6	961.5	9271.8	963.3	9279.8	962.8	9300.8	962.1	9333.4
GR	961.2	9355.5	958.7	9366.0	958.5	9382.2	961.2	9409.4	958.0	9421.6
GR	960.2	9432.4	960.4	9446.0	961.2	9463.1	962.0	9485.2	962.0	9499.9
GR	963.4	9510.0	964.2	9522.7	962.8	9544.7	964.8	9564.0	965.7	9596.1
GR	964.8	9623.4	964.8	9651.2	963.7	9684.3	962.7	9696.4	963.2	9708.6
GR	963.2	9738.3	963.7	9758.9	963.3	9772.6	962.3	9800.1	963.7	9818.7
GR	964.1	9834.8	963.7	9864.2	961.3	9905.1	958.9	9921.2	956.6	9938.7
GR	954.4	9944.7	953.2	10000.0	953.1	10004.8	956.5	10015.8	958.4	10026.6
GR	960.0	10045.5	961.5	10076.7	962.2	10112.6	963.1	10152.7	963.7	10186.7
GR	963.8	10240.2	964.2	10277.2	964.5	10323.2	964.7	10374.7	964.7	10416.0
GR	964.3	10463.3	964.2	10522.0	963.9	10571.3	963.1	10625.0	962.5	10688.7
GR	962.3	10745.3	961.7	10785.5	961.4	10802.3	960.9	10855.7	960.4	10902.3
GR	959.5	10936.4	959.7	10964.2	959.5	11004.3				
ET		7.1	9.1				9673.1	10126.8	9889.4	10041.5
X1	8.43	61	9889.4	10041.5	450	530	491			
X3	10									
GR	967.7	8991.0	966.9	9096.5	965.7	9170.4	962.8	9195.3	965.3	9205.9
GR	965.0	9225.1	964.0	9238.9	965.0	9250.7	965.3	9288.0	964.7	9293.5
GR	964.8	9341.6	963.8	9382.4	963.3	9405.9	961.9	9416.9	961.9	9434.0
GR	963.1	9439.4	964.1	9455.1	965.4	9489.5	966.3	9509.5	967.3	9551.6
GR	967.7	9583.0	967.5	9626.8	966.6	9663.7	966.8	9673.1	966.0	9730.4
GR	964.9	9767.3	961.4	9808.5	962.0	9820.5	961.8	9832.2	959.7	9858.3
GR	961.5	9870.1	961.8	9889.4	959.8	9917.1	958.6	9950.7	956.4	9958.5
GR	955.3	10000.0	955.1	10012.5	959.1	10024.5	961.5	10041.5	959.4	10053.6
GR	962.2	10065.5	964.3	10082.8	965.1	10101.0	965.6	10126.8	965.6	10182.9
GR	963.3	10194.9	966.0	10217.3	967.0	10251.6	968.5	10295.9	969.6	10343.6
GR	970.2	10395.0	970.4	10448.0	969.6	10509.2	968.9	10559.2	967.6	10634.4
GR	966.9	10698.1	967.0	10710.7	966.2	10768.8	966.1	10846.3	965.9	10917.0
GR	965.3	11011.1								
QT	2	5054	5054							
ET		7.1	9.1				9005.7	10114.4	9882.5	10068.4
X1	8.53	70	9882.5	10068.4	400	600	507			
X3	10									
GR	975.5	9005.7	975.5	9025.9	975.1	9105.9	974.8	9169.8	974.7	9246.2
GR	974.3	9310.5	973.2	9389.8	972.8	9403.3	972.1	9461.2	971.6	9527.1
GR	970.7	9572.8	970.0	9612.9	968.8	9645.3	966.7	9661.4	963.4	9671.0
GR	966.3	9680.0	967.8	9695.8	967.3	9730.5	966.3	9768.5	965.4	9799.8
GR	965.8	9815.4	965.2	9828.0	966.6	9853.0	966.7	9882.5	965.3	9909.8
GR	963.3	9930.3	961.5	9947.3	958.1	9963.4	957.6	10000.0	957.9	10016.4
GR	961.6	10040.6	964.0	10068.4	962.6	10077.0	963.0	10101.0	965.7	10114.4
GR	966.1	10126.8	964.7	10136.1	962.6	10142.0	965.0	10159.4	963.5	10174.2
GR	966.3	10190.4	965.0	10204.3	966.7	10216.3	965.8	10225.6	967.0	10246.5
GR	965.8	10258.5	966.9	10287.3	967.5	10323.1	967.8	10369.0	968.3	10405.0
GR	968.0	10442.2	966.8	10492.3	965.9	10517.5	964.3	10524.1	965.5	10529.3

GR	965.5	10541.1	965.8	10557.2	966.6	10601.3	966.2	10651.5	967.2	10691.2
GR	967.1	10734.6	966.8	10784.9	965.8	10802.6	963.8	10818.6	966.5	10832.7
GR	966.7	10862.4	965.5	10873.2	967.3	10901.6	968.0	10945.3	967.5	11006.2
NC	0.045									
ET		7.1	9.1				9958.0	10295.6	9958.0	10077.8
X1	8.62	75	9958.0	10077.8	475	505	492			
GR	970.6	8994.5	971.3	9011.2	971.5	9052.3	971.3	9103.6	970.7	9159.9
GR	968.3	9166.8	970.1	9171.7	971.2	9206.1	971.3	9243.1	971.5	9296.7
GR	970.8	9344.9	970.4	9408.4	970.0	9460.7	968.6	9466.7	969.7	9470.0
GR	970.2	9497.0	969.4	9519.8	969.8	9611.2	969.7	9696.5	968.6	9780.5
GR	968.2	9804.2	966.2	9812.5	968.2	9820.3	969.2	9846.3	967.7	9884.4
GR	968.3	9896.2	967.0	9913.3	966.4	9932.3	967.5	9941.5	967.7	9958.0
GR	966.6	9975.4	959.4	9993.7	959.6	10000.0	960.0	10027.5	960.5	10043.1
GR	962.6	10052.0	962.7	10069.8	963.8	10077.8	963.5	10097.6	963.5	10115.0
GR	964.5	10125.0	965.7	10152.0	967.1	10178.5	968.1	10205.3	969.7	10250.2
GR	970.5	10270.4	971.0	10295.6	970.9	10327.9	970.1	10354.6	969.7	10385.6
GR	969.1	10422.7	967.9	10435.8	964.8	10448.6	968.3	10456.3	969.7	10468.3
GR	969.3	10488.6	968.0	10510.5	969.3	10522.2	970.6	10534.2	969.6	10561.5
GR	970.2	10566.5	969.8	10595.6	968.1	10613.9	969.6	10632.6	966.0	10647.0
GR	967.4	10654.9	968.9	10701.7	970.7	10751.3	972.0	10834.0	972.2	10862.3
GR	970.6	10892.9	972.3	10906.4	972.5	10930.3	973.4	10960.4	974.5	11017.0
NC	0.050		0.040	0.2	0.4					
ET		7.1	9.1				9807.6	10338.4	9864.0	10145.5
X1	8.72	78	9864.1	10145.5	650	380	500			
X3	10									
GR	976.5	8998.1	976.4	9068.5	977.3	9113.8	976.8	9169.6	975.5	9215.2
GR	974.4	9252.9	974.4	9310.0	974.0	9334.7	972.5	9351.7	974.1	9361.8
GR	974.2	9391.0	972.8	9422.0	969.8	9437.8	969.7	9450.6	972.2	9469.5
GR	972.4	9485.6	970.7	9502.1	971.8	9517.5	972.4	9540.7	970.9	9552.0
GR	972.0	9571.2	968.2	9597.6	968.8	9626.2	968.3	9661.3	967.2	9697.8
GR	969.6	9707.7	971.0	9731.9	971.0	9752.7	969.8	9781.0	968.4	9801.7
GR	969.2	9807.6	968.8	9826.3	967.3	9834.9	967.4	9864.1	965.4	9867.9
GR	964.9	9882.6	963.4	9928.2	962.7	9953.1	962.8	9981.3	962.5	10000.0
GR	962.8	10020.7	964.7	10028.2	964.8	10045.3	964.5	10048.8	965.6	10077.4
GR	966.5	10106.6	968.0	10145.5	968.6	10173.9	969.7	10224.5	971.2	10266.8
GR	971.9	10287.0	972.5	10324.8	972.6	10338.4	971.1	10365.0	970.3	10388.2
GR	971.0	10400.5	969.8	10414.0	969.6	10436.8	970.2	10450.2	970.2	10470.0
GR	967.5	10481.5	968.8	10487.4	969.7	10508.7	970.6	10528.0	971.3	10578.3
GR	971.4	10600.5	970.6	10623.1	970.3	10639.7	969.1	10707.5	965.1	10719.3
GR	966.8	10728.7	967.6	10750.0	969.3	10798.2	971.3	10834.5	972.5	10880.5
GR	973.7	10918.8	974.1	10964.1	974.4	11012.2				
ET			9.1						9823.9	10056.4
X1	8.81	83	9823.9	10056.4	480	470	492			
X3	10									
GR	979.3	8987.0	979.0	9022.8	979.0	9088.2	979.4	9115.5	979.4	9152.6
GR	978.9	9158.5	978.3	9254.5	978.0	9306.7	977.5	9349.8	977.0	9381.5
GR	975.8	9421.6	975.6	9443.3	974.5	9492.6	973.5	9544.5	973.0	9558.8
GR	973.6	9573.4	972.7	9626.7	972.0	9659.2	971.5	9684.4	972.2	9700.4
GR	971.8	9719.2	971.1	9742.7	970.9	9761.8	969.7	9774.5	967.6	9781.6
GR	970.9	9797.3	971.3	9823.9	970.8	9843.9	965.9	9860.9	965.8	9869.0
GR	967.5	9875.7	967.6	9914.5	968.2	9920.9	967.7	9943.4	966.6	9954.9

GR	966.6	9964.3	965.2	9968.0	964.3	10000.0	963.9	10014.3	968.6	10023.4
GR	972.2	10038.5	974.0	10056.4	973.5	10081.7	972.5	10092.4	972.5	10101.2
GR	969.8	10112.6	971.5	10118.8	971.4	10125.8	970.8	10146.3	969.9	10156.8
GR	971.0	10166.1	972.8	10184.7	973.2	10194.4	972.8	10222.5	973.6	10232.0
GR	973.9	10254.9	974.0	10276.7	973.4	10303.8	973.5	10338.6	973.5	10409.3
GR	972.8	10421.3	973.5	10427.1	974.1	10455.4	974.0	10492.3	973.3	10528.5
GR	972.8	10559.1	971.8	10606.8	971.0	10640.1	969.5	10647.5	970.7	10654.2
GR	970.9	10671.9	971.8	10685.1	972.0	10711.2	971.1	10723.0	972.3	10727.5
GR	973.1	10758.8	974.1	10801.2	974.8	10836.5	974.5	10845.2	975.5	10883.3
GR	976.2	10919.1	977.0	10955.1	977.8	11010.1				
ET		7.1	9.1				9788.4	10998.8	9920.7	10139.1
X1	8.91	76	9947.1	10139.1	490	495	502			
GR	980.2	8980.7	981.4	9024.0	982.3	9061.1	981.9	9096.0	980.3	9141.4
GR	978.1	9179.5	978.5	9198.0	977.4	9215.3	976.3	9233.4	977.4	9258.4
GR	977.3	9287.2	975.4	9299.4	977.3	9310.3	978.1	9343.0	978.1	9361.1
GR	977.6	9368.7	977.9	9406.1	976.6	9429.6	977.0	9441.5	977.6	9474.4
GR	977.7	9519.1	976.7	9557.5	976.1	9581.8	974.9	9607.5	975.3	9636.3
GR	976.1	9659.4	975.7	9680.6	973.4	9704.3	972.5	9724.6	973.6	9742.7
GR	974.8	9763.3	974.8	9788.4	973.5	9815.3	972.4	9836.4	968.6	9852.9
GR	968.9	9866.0	968.6	9925.5	969.6	9930.9	969.3	9947.1	966.3	9954.8
GR	967.6	9961.8	966.6	9967.8	966.9	9978.1	965.9	10000.0	965.7	10010.6
GR	969.2	10019.8	971.0	10065.8	974.4	10089.6	974.9	10102.0	975.1	10139.1
GR	974.2	10155.2	975.5	10170.2	975.4	10204.2	976.8	10223.8	977.0	10242.9
GR	975.6	10253.4	976.8	10260.8	976.9	10283.6	976.9	10337.9	976.8	10379.1
GR	976.5	10423.6	976.5	10456.3	976.6	10508.1	976.6	10553.8	976.1	10599.3
GR	975.3	10657.0	975.0	10713.7	973.3	10721.7	975.2	10729.0	975.5	10773.9
GR	975.9	10807.7	975.8	10817.3	975.9	10831.5	976.6	10895.6	976.9	10960.1
GR	977.2	10998.8								
NC	0.045		0.035	0.1	0.3					
ET			9.1						9938.7	10052.3
X1	9.00	82	9938.7	10052.3	510	485	487			
X3	10									
GR	982.2	8989.7	983.0	9044.4	983.5	9095.9	984.0	9139.5	981.2	9167.8
GR	982.9	9193.0	983.6	9224.0	982.3	9250.5	982.2	9279.3	981.4	9329.2
GR	981.6	9341.3	982.1	9369.5	981.3	9403.9	981.6	9412.2	981.7	9439.0
GR	980.8	9458.8	980.1	9485.6	978.7	9523.3	977.3	9537.9	977.7	9559.7
GR	978.1	9579.8	977.8	9618.0	977.1	9658.3	975.9	9676.3	976.9	9691.9
GR	976.7	9712.1	976.2	9754.5	974.8	9775.5	975.4	9787.7	975.1	9810.5
GR	974.8	9851.7	974.6	9875.3	973.3	9883.6	974.5	9893.7	974.0	9917.3
GR	973.1	9926.4	973.7	9938.7	972.5	9953.0	968.9	9961.8	969.1	9978.9
GR	968.5	10000.0	968.6	10014.7	971.8	10025.3	972.4	10052.3	972.2	10062.1
GR	972.6	10086.2	974.4	10108.6	975.6	10124.6	976.3	10138.9	976.9	10170.3
GR	975.9	10187.7	976.3	10199.1	975.5	10204.4	975.7	10216.5	976.6	10225.7
GR	976.8	10240.7	977.7	10257.8	977.9	10268.7	976.0	10292.1	977.1	10300.4
GR	977.4	10323.7	977.8	10351.9	978.1	10387.7	978.6	10419.2	978.4	10467.4
GR	978.3	10512.2	977.5	10601.0	976.8	10613.0	977.5	10621.9	977.7	10643.5
GR	978.0	10666.5	978.1	10689.8	977.6	10713.3	978.3	10723.9	978.8	10749.4
GR	979.8	10797.3	980.3	10830.3	980.3	10898.5	980.3	10909.3	980.9	10949.8
GR	981.3	10982.9	981.4	10994.9						

NC			0.040	0.2	0.4					
ET			9.1						9881.0	10072.7
X1	9.09	66	9881.0	10072.7	530	465	495			
X3	10									
GR	986.3	8990.9	985.8	9055.8	985.1	9103.7	985.2	9147.8	984.8	9190.2
GR	983.3	9267.5	983.3	9281.5	982.3	9374.6	982.1	9436.8	981.5	9479.6
GR	982.0	9496.4	981.7	9520.5	980.7	9580.6	979.8	9612.5	979.0	9640.5
GR	978.4	9649.6	978.7	9655.0	978.1	9691.3	978.0	9717.3	978.6	9738.0
GR	978.5	9773.3	977.6	9800.4	975.8	9834.0	975.4	9844.6	975.5	9859.7
GR	975.2	9874.3	975.8	9881.0	974.6	9906.1	971.7	9914.0	971.3	9947.5
GR	972.5	9955.3	974.2	9969.8	971.4	9980.7	971.2	10000.0	971.1	10011.0
GR	974.0	10020.2	974.5	10039.0	976.1	10046.1	977.0	10072.7	977.0	10098.5
GR	977.0	10106.4	977.0	10113.3	977.0	10118.9	977.0	10127.2	977.0	10136.4
GR	977.0	10153.3	977.0	10164.4	977.3	10183.6	978.0	10204.2	978.7	10242.7
GR	978.7	10286.3	979.2	10319.5	979.6	10358.6	979.7	10402.6	980.2	10450.3
GR	980.4	10478.5	980.3	10534.2	979.9	10595.6	980.2	10642.7	980.3	10667.6
GR	980.3	10682.2	980.5	10722.5	980.4	10803.9	980.6	10869.0	981.0	10923.0
GR	981.2	11003.9								

NC	0.050									
ET		7.1	9.1				9874.3	11012.7	9980.8	10120.3
X1	9.19	92	9980.8	10120.3	450	505	494			
X3	10									
GR	985.9	8993.5	985.6	9054.5	984.3	9118.4	983.6	9185.0	983.0	9224.9
GR	981.6	9235.3	981.2	9246.8	982.4	9265.7	982.6	9311.5	981.7	9344.5
GR	981.6	9387.4	981.3	9396.3	981.5	9417.1	981.7	9452.4	981.5	9477.1
GR	980.6	9492.9	979.1	9505.2	980.5	9512.1	981.1	9540.9	980.9	9564.1
GR	979.3	9572.9	980.7	9581.3	981.2	9597.0	981.0	9633.4	980.8	9650.5
GR	981.3	9666.4	981.8	9685.8	981.4	9708.2	979.8	9765.4	978.1	9816.3
GR	978.8	9821.4	979.4	9836.3	980.2	9856.1	980.3	9874.3	978.8	9895.7
GR	977.0	9922.0	975.0	9928.4	976.6	9932.4	977.0	9960.1	977.5	9965.6
GR	977.5	9980.8	976.4	9990.3	973.7	9996.1	973.3	10000.0	973.3	10017.6
GR	977.2	10026.8	977.1	10048.5	975.3	10057.5	974.6	10088.8	973.7	10102.1
GR	978.7	10111.7	979.2	10120.3	977.2	10130.0	978.4	10140.5	978.5	10149.0
GR	981.3	10166.5	983.1	10186.7	984.4	10211.7	985.7	10236.3	987.1	10265.5
GR	986.7	10299.0	985.6	10349.8	984.1	10362.6	984.9	10371.8	985.3	10392.9
GR	985.1	10419.7	983.7	10433.2	983.4	10446.1	984.7	10461.3	985.3	10483.5
GR	985.8	10512.0	985.7	10543.2	984.9	10565.0	985.1	10584.1	984.4	10611.7
GR	983.8	10615.5	984.4	10629.2	984.8	10649.5	985.2	10668.6	984.7	10680.3
GR	984.0	10689.3	983.2	10710.5	984.3	10725.8	985.2	10744.7	985.1	10780.5
GR	984.1	10830.6	982.5	10836.3	984.1	10842.5	985.3	10875.1	986.8	10902.7
GR	987.9	10938.8	990.0	11012.7						

NC	0.045		0.035	0.1	0.3					
ET		7.1	9.1				9804.4	11007.5	9909.8	10030.1
X1	9.28	79	9924.4	10030.1	440	540	500			
GR	988.4	8984.7	987.9	9030.8	988.5	9052.2	988.4	9084.3	987.7	9121.1
GR	987.5	9149.2	987.0	9193.5	985.9	9224.8	985.4	9239.8	985.6	9251.7
GR	986.4	9290.1	986.0	9333.0	986.0	9371.5	985.6	9405.3	983.9	9437.8
GR	983.1	9468.8	982.5	9518.9	981.7	9564.7	981.5	9601.2	981.0	9628.3
GR	979.2	9638.1	980.5	9643.5	980.5	9655.5	979.6	9664.2	980.5	9671.6
GR	980.6	9685.6	981.3	9703.9	982.5	9722.7	982.2	9747.8	981.3	9759.1
GR	982.3	9777.6	982.9	9804.4	981.8	9828.5	980.2	9859.4	978.7	9876.9

GR	978.4	9888.4	979.4	9895.8	979.7	9924.4	978.4	9948.9	978.4	9973.2
GR	975.7	9990.9	975.7	10000.0	975.7	10018.4	978.9	10030.1	978.2	10036.8
GR	981.8	10061.0	984.4	10078.4	986.0	10098.2	986.8	10115.1	989.0	10146.9
GR	991.5	10179.7	992.2	10196.2	992.4	10216.7	991.4	10241.4	990.1	10259.8
GR	987.3	10275.3	988.4	10286.1	991.2	10312.8	993.2	10348.0	995.3	10367.5
GR	997.5	10403.2	998.4	10424.5	998.6	10451.3	999.1	10474.5	1000.3	10493.5
GR	1003.1	10521.2	1005.7	10546.7	1007.4	10583.6	1007.6	10599.2	1007.3	10620.0
GR	1006.0	10670.2	1004.2	10716.7	1006.4	10747.2	1007.7	10775.0	1008.2	10798.4
GR	1007.4	10843.3	1003.8	10909.2	1000.5	10958.5	997.9	11007.5		
NC		0.045								
ET			9.1						9917.5	10103.3
X1	9.38	72	9917.5	10032.0	410	515	499			
X3	10									
GR	989.2	8988.2	989.3	9030.9	990.2	9084.2	990.2	9152.7	989.5	9233.8
GR	988.8	9310.7	987.9	9430.8	987.7	9445.3	987.4	9475.3	985.9	9526.3
GR	983.4	9540.4	985.5	9551.0	985.7	9567.4	985.5	9598.9	985.0	9638.9
GR	984.0	9655.4	982.3	9661.0	984.1	9668.0	984.6	9711.6	984.1	9724.5
GR	983.9	9743.9	984.5	9755.6	985.6	9793.0	986.6	9832.5	986.5	9861.8
GR	985.8	9884.4	984.5	9897.8	986.1	9906.1	986.2	9917.5	985.1	9942.2
GR	983.5	9958.3	981.6	9974.9	977.9	9982.3	977.9	10000.0	977.7	10022.7
GR	981.6	10032.0	981.6	10066.3	981.5	10104.7	981.0	10118.0	981.2	10126.4
GR	980.7	10133.5	980.6	10148.2	982.9	10161.3	985.8	10180.5	987.2	10210.4
GR	989.3	10261.3	990.5	10293.7	990.8	10311.3	990.5	10331.2	991.5	10344.3
GR	994.2	10365.4	995.7	10382.5	996.1	10422.6	994.2	10444.7	989.9	10464.2
GR	992.2	10476.6	992.7	10499.0	991.0	10564.6	991.3	10583.0	988.7	10601.9
GR	988.5	10622.4	990.8	10636.7	992.1	10652.8	993.8	10687.1	994.0	10697.9
GR	994.1	10717.5	994.6	10768.2	995.5	10829.0	997.0	10876.2	998.6	10925.6
GR	999.5	10969.1	999.4	11003.0						
ET			9.1						9957.1	10052.5
X1	9.47	68	9973.4	10036.2	500	480	492			
X3	10									
GR	994.4	8992.0	992.9	9079.3	992.1	9170.0	992.2	9199.6	990.1	9298.7
GR	988.5	9312.5	989.5	9326.7	989.7	9380.1	989.7	9411.4	989.0	9431.4
GR	989.5	9446.8	990.0	9473.2	991.1	9532.2	991.2	9561.6	991.0	9606.8
GR	990.3	9644.6	989.8	9690.2	989.2	9745.3	988.6	9758.5	989.1	9779.2
GR	989.1	9802.0	988.7	9837.5	987.7	9874.6	985.4	9903.7	984.4	9924.9
GR	983.7	9953.7	983.3	9973.4	979.9	9982.0	979.6	10000.0	979.8	10026.3
GR	984.4	10036.2	984.1	10058.1	983.5	10065.3	983.4	10081.8	986.1	10101.8
GR	986.9	10115.0	989.1	10169.8	989.7	10194.1	990.0	10225.2	989.9	10255.4
GR	987.7	10266.4	987.9	10277.7	990.0	10285.6	990.5	10297.1	990.2	10309.3
GR	987.9	10319.5	988.3	10335.3	990.8	10354.8	992.7	10389.0	993.1	10415.9
GR	993.8	10461.0	994.4	10484.5	995.3	10536.7	995.5	10549.2	997.6	10571.4
GR	999.2	10594.3	1001.8	10619.9	1005.0	10653.0	1006.6	10681.5	1006.5	10686.7
GR	1006.2	10698.1	1004.4	10737.9	1002.6	10772.7	1000.7	10838.5	998.1	10877.8
GR	999.4	10914.7	1000.6	10977.6	1000.2	11005.7				
NC		0.050	0.040	0.2	0.4					
ET			9.1						9812.5	10064.0

X1	9.56	70	9812.5	10064.0	420	540	504			
GR	1003.4	8993.4	1001.4	9008.9	1003.3	9043.9	1003.8	9091.6	1002.0	9126.5
GR	999.0	9170.0	998.4	9193.6	1000.6	9226.6	1002.8	9258.2	1003.0	9282.7
GR	1001.6	9304.3	998.2	9348.4	995.7	9365.6	997.9	9389.2	998.8	9423.2
GR	998.6	9433.7	998.3	9459.8	997.6	9476.5	998.6	9518.6	999.7	9555.0
GR	998.7	9585.1	998.0	9627.2	996.8	9661.6	995.3	9719.3	993.8	9753.3
GR	992.5	9781.2	990.8	9797.8	988.3	9812.5	985.2	9834.8	982.3	9848.4
GR	982.3	9857.7	984.7	9862.9	984.1	9884.5	986.1	9902.0	986.4	9932.6
GR	982.4	9946.2	983.0	10000.0	983.3	10009.0	982.6	10030.5	987.1	10064.0
GR	987.3	10068.0	988.3	10088.8	988.5	10130.4	988.1	10143.9	986.3	10148.0
GR	987.8	10155.1	987.9	10166.8	988.5	10182.1	989.8	10222.1	990.0	10249.3
GR	989.6	10262.7	990.1	10302.9	989.8	10338.4	990.3	10376.2	990.7	10403.1
GR	991.7	10452.7	992.2	10492.0	992.4	10539.8	992.5	10587.9	992.0	10619.3
GR	991.3	10636.7	992.2	10657.0	992.0	10711.3	991.8	10730.3	992.3	10744.1
GR	992.4	10744.9	993.3	10764.5	994.4	10846.6	994.5	10904.5	995.9	10999.7
NC	0.050									
ET			9.1						9882.9	10245.6
X1	9.66	80	9882.9	10245.6	530	390	503			
X3	10									
GR	999.7	8994.3	998.9	9047.7	997.7	9101.4	996.4	9135.5	997.1	9161.3
GR	996.5	9207.3	995.9	9225.6	996.7	9249.9	996.8	9270.2	995.8	9307.4
GR	996.5	9327.3	996.5	9354.0	996.2	9370.7	994.7	9396.5	995.1	9405.7
GR	995.1	9432.8	994.1	9487.3	993.5	9515.5	992.0	9556.3	992.5	9580.3
GR	990.8	9591.1	992.1	9598.9	992.2	9651.7	991.3	9679.8	991.6	9715.6
GR	991.3	9757.2	989.8	9773.5	989.6	9785.4	990.8	9790.2	990.3	9812.0
GR	990.3	9849.0	991.6	9858.0	992.0	9882.9	991.6	9901.2	989.8	9926.2
GR	988.5	9963.6	986.6	9971.8	985.5	10000.0	985.3	10015.4	988.0	10022.5
GR	988.7	10045.0	987.8	10065.7	988.2	10100.4	988.3	10134.5	988.4	10157.3
GR	989.1	10164.1	989.7	10194.5	991.1	10214.5	992.4	10230.4	993.0	10245.6
GR	993.1	10264.5	990.5	10288.8	990.2	10305.7	987.8	10327.5	989.1	10331.3
GR	991.0	10355.0	991.9	10384.1	992.2	10403.5	990.0	10441.2	988.6	10469.4
GR	987.5	10482.4	989.6	10489.5	989.6	10500.9	988.5	10512.3	989.7	10520.2
GR	989.1	10535.8	987.2	10547.9	988.4	10558.9	988.9	10567.2	989.5	10633.8
GR	990.4	10653.0	992.2	10711.4	993.7	10767.8	993.9	10786.2	993.3	10818.3
GR	994.5	10857.8	996.9	10939.1	996.2	10959.7	997.3	10970.6	998.0	11007.9
NC	0.060	0.045	0.040	0.1	0.3					
QT	2	9028	9028							
ET		7.1	9.1				9132.3	10649.2	9132.3	10439.6
X1	-5.60	77	9132.3	10439.6	140	250	280			
GR	891.3	8655.0	891.6	8663.2	889.6	8672.0	889.6	8684.1	890.9	8688.8
GR	891.8	8718.2	891.9	8766.4	892.5	8801.6	891.7	8814.4	891.3	8852.5
GR	891.9	8893.4	891.2	8942.2	891.6	8976.4	891.8	9012.0	891.3	9035.0
GR	891.6	9084.0	891.8	9132.3	889.7	9143.1	890.6	9146.8	890.6	9159.6
GR	888.2	9168.1	888.2	9176.3	890.4	9194.9	890.9	9204.2	890.9	9238.8
GR	889.3	9247.5	890.9	9262.2	891.1	9331.6	888.0	9345.9	888.0	9355.8
GR	890.6	9361.9	890.9	9389.2	888.5	9395.5	890.8	9403.8	888.9	9408.6
GR	888.3	9424.7	891.2	9433.6	889.2	9440.0	890.6	9445.8	891.1	9471.5
GR	889.7	9477.1	891.1	9497.5	891.3	9525.2	891.4	9577.0	891.7	9611.8
GR	891.9	9641.3	891.9	9671.9	891.8	9703.9	890.4	9724.0	888.1	9738.5
GR	888.4	9774.4	890.7	9784.7	891.6	9803.2	891.8	9830.0	891.5	9862.7
GR	891.0	9883.8	887.2	9898.4	887.3	9921.7	888.3	9973.3	887.3	9978.4
GR	886.3	10000.0	886.7	10020.9	889.2	10035.9	890.6	10046.7	890.3	10128.2

GR	890.4	10175.3	890.2	10214.1	890.4	10246.5	890.3	10294.5	890.3	10346.8
GR	890.6	10371.8	892.4	10439.6	893.9	10495.7	896.0	10542.1	897.1	10577.5
GR	898.0	10615.7	897.7	10649.2						
NC	0.050	0.040	0.040	.1	.3					
QT	2	2263	2263							
ET		7.1	9.1				9974.7	11016.1	9974.7	10037.4
X1	0.06	39	9974.7	10033.7	320	300	335			
GR	892.7	9719.7	892.5	9793.3	892.4	9861.4	892.0	9940.0	891.7	9974.7
GR	887.7	9985.4	887.9	10000.0	888.1	10020.2	892.3	10033.7	891.8	10072.5
GR	891.8	10139.7	891.2	10148.3	892.1	10152.0	891.9	10176.4	892.7	10223.5
GR	893.2	10283.9	892.8	10308.1	892.6	10348.3	893.2	10376.2	893.5	10410.1
GR	894.0	10461.6	894.7	10516.5	895.9	10585.1	896.6	10601.6	897.6	10629.0
GR	898.6	10669.7	898.1	10679.1	899.0	10692.8	899.3	10727.3	898.6	10749.2
GR	896.0	10799.4	896.4	10803.6	895.0	10847.7	894.6	10890.6	895.0	10918.9
GR	894.1	10924.5	895.2	10937.6	896.4	10974.9	896.8	11016.1		
NC		0.045								
ET		7.1	9.1				9977.2	11008.8	9977.2	10090.3
X1	0.14	56	9977.2	10090.3	250	480	394			
GR	895.4	8969.8	895.6	9030.0	893.5	9044.3	894.3	9055.4	893.1	9075.3
GR	894.3	9091.8	893.6	9102.5	894.4	9132.7	894.8	9175.2	892.5	9197.4
GR	891.4	9290.7	889.1	9359.3	894.3	9381.4	894.0	9448.9	894.0	9460.8
GR	893.8	9615.6	893.3	9671.0	892.2	9677.7	891.5	9705.1	893.3	9710.3
GR	892.3	9761.8	890.8	9783.0	893.4	9788.5	892.9	9798.6	891.0	9805.0
GR	893.2	9816.5	890.4	9827.1	891.2	9838.8	891.8	9857.3	893.3	9862.9
GR	890.9	9873.4	892.7	9883.1	893.7	9941.0	893.8	9977.2	889.7	9987.3
GR	889.5	10000.0	889.3	10013.9	892.4	10020.7	893.5	10075.3	894.5	10090.3
GR	895.3	10130.6	895.9	10194.1	896.9	10263.1	897.5	10317.9	898.3	10419.0
GR	898.7	10487.0	899.3	10566.8	899.4	10593.3	899.0	10677.1	899.2	10749.5
GR	898.0	10759.8	899.1	10774.6	899.6	10825.7	898.3	10831.3	900.4	10909.4
GR	901.0	11008.8								
ET		7.1	9.1				9984.5	11028.4	9984.5	10113.0
X1	0.18	41	9984.5	10023.2	250	160	211			
GR	895.7	9544.3	896.0	9583.3	894.6	9664.0	893.8	9693.3	893.7	9731.9
GR	893.8	9771.1	893.0	9783.3	893.5	9799.2	893.5	9839.6	893.2	9869.7
GR	894.0	9941.4	893.2	9947.7	892.6	9969.1	893.3	9984.5	889.0	9992.9
GR	889.3	10000.0	890.2	10008.3	894.2	10023.2	893.9	10061.7	891.8	10067.0
GR	893.2	10072.1	894.0	10114.6	894.2	10166.4	894.5	10215.9	895.2	10274.2
GR	896.2	10300.4	897.0	10353.5	897.6	10423.0	898.2	10504.8	898.9	10581.2
GR	899.8	10671.3	900.1	10686.8	898.7	10774.9	899.3	10793.1	898.0	10803.2
GR	899.4	10813.6	900.1	10888.6	898.8	10911.3	900.0	10946.0	900.3	10989.8
GR	900.7	11028.4								
NC	0.045	0.040								
ET		7.1	9.1				9985.1	11019.3	9985.1	10078.4
X1	0.21	59	9985.1	10014.6	235	160	190			
GR	897.3	8993.8	897.5	9026.6	897.1	9162.9	897.3	9250.4	895.0	9314.7
GR	895.0	9350.0	895.0	9403.9	895.4	9409.3	895.8	9485.1	893.9	9492.1
GR	894.2	9505.6	894.0	9521.0	894.8	9527.3	895.0	9537.6	895.9	9541.6
GR	895.4	9568.7	894.8	9573.8	895.4	9585.4	895.5	9613.2	894.7	9624.2
GR	895.6	9634.8	893.3	9645.8	895.1	9653.9	895.0	9713.5	894.6	9816.2
GR	894.8	9914.0	895.2	9944.0	895.3	9985.1	894.3	9993.3	890.3	10000.0

GR	890.3	10007.7	895.1	10014.6	895.5	10053.7	895.3	10089.6	894.5	10101.4
GR	895.3	10108.1	895.5	10193.0	895.5	10193.3	896.5	10218.8	897.5	10247.4
GR	897.9	10278.7	898.0	10315.5	897.3	10358.7	897.3	10399.8	897.5	10442.9
GR	897.7	10480.8	898.4	10530.6	899.5	10598.0	899.3	10603.3	899.3	10620.1
GR	900.3	10719.5	898.9	10791.1	899.4	10808.6	898.0	10815.1	899.5	10834.4
GR	899.5	10923.3	900.0	10956.9	901.1	10995.4	901.6	11019.3		
NC		0.045								
ET		7.1	9.1				9989.6	11015.3	9989.6	10080.0
X1	0.29	45	9989.6	10074.8	370	405	398			
GR	899.3	8992.2	897.4	9138.2	895.4	9186.5	893.9	9221.4	892.7	9296.6
GR	891.7	9357.3	892.4	9369.6	892.4	9478.0	893.8	9506.8	893.3	9548.7
GR	895.3	9569.0	893.4	9573.4	893.3	9619.5	894.2	9655.6	894.2	9721.6
GR	895.2	9768.6	896.5	9815.7	896.9	9855.4	897.0	9919.2	896.9	9989.6
GR	892.0	10000.0	892.3	10012.3	893.8	10020.3	894.1	10030.3	897.0	10074.8
GR	897.0	10111.8	896.9	10162.4	898.1	10212.1	898.8	10248.2	899.3	10337.9
GR	900.7	10405.0	901.2	10457.1	900.8	10468.3	900.7	10568.0	900.8	10634.6
GR	900.0	10639.8	901.3	10648.3	903.4	10721.7	903.9	10754.6	903.8	10811.7
GR	904.6	10875.8	904.4	10933.4	903.7	10961.0	904.8	10973.8	905.7	11015.3
NC	0.040									
ET		7.1	9.1				9963.3	10993.2	9963.3	10070.4
X1	0.36	50	9963.3	10022.3	230	420	398			
GR	899.8	8985.9	900.0	9057.4	899.0	9085.9	898.5	9152.9	897.7	9192.1
GR	897.3	9253.2	896.5	9292.0	893.8	9320.4	893.0	9366.3	893.4	9389.6
GR	893.8	9441.6	893.9	9525.8	895.1	9602.4	895.0	9655.6	894.5	9745.8
GR	895.6	9793.6	896.0	9852.7	896.4	9950.3	897.7	9963.3	894.6	9986.7
GR	893.9	10000.0	893.9	10014.3	898.3	10022.3	897.3	10045.8	898.6	10059.3
GR	898.0	10083.1	899.0	10103.6	898.0	10179.3	898.6	10192.0	897.4	10199.7
GR	898.5	10208.3	898.8	10243.5	899.1	10310.2	899.2	10329.5	898.3	10338.1
GR	899.2	10347.9	899.8	10375.1	900.2	10425.0	901.2	10465.1	901.5	10510.4
GR	901.5	10546.7	901.8	10588.0	902.2	10638.6	903.4	10674.1	904.7	10730.8
GR	904.4	10740.6	904.9	10801.0	905.4	10863.5	905.7	10904.0	905.9	10993.2
NC		0.040								
ET		7.1	9.1				9978.5	11008.6	9978.5	10077.3
X1	0.44	56	9978.5	10017.2	420	400	413			
GR	901.4	8983.5	901.0	9071.3	900.4	9139.8	901.0	9188.5	900.9	9249.8
GR	899.9	9314.9	900.1	9352.4	899.6	9408.8	899.8	9423.1	899.9	9500.0
GR	898.7	9525.2	895.5	9543.8	898.9	9559.9	897.7	9572.9	896.7	9610.2
GR	897.8	9619.1	897.0	9646.1	898.3	9658.7	898.6	9705.6	898.1	9710.0
GR	897.6	9729.2	900.4	9744.0	900.4	9810.3	900.1	9865.9	898.1	9871.8
GR	899.5	9878.5	900.2	9898.3	900.3	9946.0	900.4	9978.5	895.8	9987.3
GR	895.7	10000.0	895.7	10007.0	900.2	10017.2	900.3	10082.5	900.0	10159.5
GR	900.2	10198.3	900.2	10228.0	900.7	10235.3	900.9	10264.1	901.6	10291.1
GR	901.0	10361.1	901.3	10368.6	901.4	10417.1	902.1	10474.5	903.5	10518.9
GR	904.3	10564.1	904.2	10593.8	903.5	10609.5	902.2	10656.8	902.2	10720.0
GR	902.1	10802.3	902.9	10818.9	903.4	10865.5	903.8	10917.0	904.4	10970.4
GR	904.8	11008.6								

NC	0.045			0.2	0.4					
ET		7.1	9.1				9965.5	10590.4	9965.5	10092.3
X1	0.52	69	9965.5	10037.5	415	380	393			
GR	904.3	8973.6	903.2	9068.8	903.5	9126.7	903.2	9290.7	901.8	9294.9
GR	904.1	9304.0	903.0	9307.5	903.2	9330.8	903.8	9340.9	907.3	9359.2
GR	907.9	9389.4	908.1	9417.2	906.3	9429.1	902.4	9453.8	902.2	9510.6
GR	902.3	9577.3	902.3	9595.5	902.0	9668.8	901.5	9678.0	901.4	9713.7
GR	901.7	9719.7	901.3	9767.6	899.6	9774.4	901.5	9785.8	901.1	9797.8
GR	899.0	9806.1	901.4	9817.9	901.3	9829.3	899.2	9837.7	899.1	9850.9
GR	900.9	9867.5	901.9	9892.3	901.9	9943.6	901.5	9950.5	902.5	9965.5
GR	901.8	9983.5	896.4	9992.8	896.7	10000.0	898.4	10010.9	901.9	10020.5
GR	902.2	10037.5	901.2	10049.7	901.8	10060.1	901.9	10097.5	902.7	10107.0
GR	901.2	10116.8	901.8	10122.8	901.7	10152.7	902.0	10165.4	902.1	10221.4
GR	902.3	10263.7	902.7	10304.6	903.6	10347.8	904.4	10373.8	904.6	10400.9
GR	904.5	10440.4	904.2	10490.2	904.0	10537.5	904.9	10561.0	905.3	10590.4
GR	905.3	10607.9	904.7	10619.2	902.6	10700.3	903.8	10710.7	904.5	10745.7
GR	906.5	10804.4	907.1	10846.9	908.1	10931.7	907.7	10997.4		
NC	0.040									
ET		7.1	9.1				9756.4	10434.2	9963.8	10169.7
X1	0.59	47	9987.2	10024.6	455	325	394			
GR	908.9	8996.4	908.3	9117.4	906.8	9260.5	907.1	9356.9	907.3	9466.3
GR	905.8	9605.5	904.5	9681.2	903.2	9685.9	905.5	9692.7	904.2	9697.9
GR	907.6	9714.4	908.3	9735.2	907.9	9756.4	904.2	9773.8	903.4	9825.6
GR	902.8	9845.8	903.1	9933.8	903.0	9987.2	899.2	9992.7	898.8	10000.0
GR	898.3	10019.3	902.7	10024.6	903.1	10053.2	903.0	10107.5	902.9	10172.5
GR	903.1	10232.2	903.2	10288.6	903.9	10341.7	904.6	10386.3	905.0	10434.2
GR	905.0	10471.6	904.6	10487.7	904.6	10501.2	904.5	10537.0	905.0	10578.7
GR	906.0	10638.3	904.5	10678.2	904.7	10722.6	903.1	10726.8	904.9	10731.9
GR	905.2	10769.1	906.9	10811.4	907.1	10832.0	907.2	10835.1	907.7	10883.1
GR	907.1	10920.5	906.5	10995.2						
ET		7.1	9.1				9610.0	11363.3	9833.2	10025.8
X1	0.67	52	9974.2	10059.1	110	550	409			
X3	10									
GR	911.5	8983.7	911.3	9026.4	910.3	9101.4	909.5	9142.1	909.8	9182.2
GR	910.5	9231.5	910.1	9322.3	910.1	9347.0	909.5	9404.1	908.7	9474.9
GR	907.9	9525.6	907.1	9608.5	906.1	9676.7	905.5	9755.5	905.0	9848.9
GR	904.5	9922.2	904.5	9974.2	900.5	9993.0	899.7	10000.0	901.3	10031.5
GR	902.5	10042.7	906.8	10059.1	906.6	10079.2	903.4	10097.3	903.0	10124.5
GR	904.6	10136.1	904.1	10148.6	904.3	10206.4	903.9	10274.7	903.1	10361.0
GR	903.3	10408.1	902.6	10416.3	903.2	10427.0	903.4	10445.8	902.9	10514.6
GR	902.4	10592.6	902.7	10598.2	902.8	10608.5	902.4	10618.6	902.8	10658.5
GR	902.8	10797.0	902.7	10927.8	902.5	10989.4	902.0	11001.3	902.0	11069.4
GR	901.9	11123.8	902.1	11190.5	902.0	11249.6	901.7	11259.8	900.6	11341.4
GR	899.6	11350.3	900.3	11363.3						
NC	0.016	0.016	0.013	0.3	0.5					
ET		7.1	9.1				9580.0	11032.7	9946.7	10006.9

X1	0.68	25	9974.9	10006.9	80	75	77			
X3	10									
GR	907.30	8642.2	907.40	8823.6	907.50	9016.9	907.50	9230.1	907.60	9441.1
GR	907.70	9688.5	908.00	9804.8	907.90	9922.0	906.28	9974.9	901.28	9975.0
GR	901.28	10000.0	901.28	10006.8	906.28	10006.9	908.60	10070.0	909.20	10203.8
GR	909.80	10301.8	910.30	10399.3	911.00	10558.1	911.50	10678.7	911.90	10792.5
GR	912.20	10825.4	912.60	10876.7	912.70	10926.6	913.10	10973.8	913.40	11032.7
SC	3.013	0.40	3.0	0	5	10	47	12.1	901.42	901.28
ET		7.1	9.1				9560.0	11022.6	9814.5	10006.9
X1	0.70	19	9974.9	10006.9	47	47	47			
X2			2	906.42	907.3					
X3	10									
BT	-20	8642.2	907.3		8823.6	907.4		9016.9	907.5	
BT		9230.1	907.5		9441.1	907.6		9688.5	907.7	
BT		9922.0	907.9		10000.0	908.3		10070.0	908.6	
BT		10203.8	909.2		10301.8	909.8		10399.3	910.3	
BT		10558.1	911.0		10678.7	911.5		10792.5	911.9	
BT		10825.4	912.2		10876.7	912.6		10926.6	912.7	
BT		10973.8	913.1		11032.7	913.4				
GR	907.10	8782.60	907.30	9022.50	907.50	9181.50	907.20	9334.60	907.30	9521.10
GR	907.50	9632.30	907.60	9796.10	906.42	9974.9	901.42	9975.0	901.42	10000.0
GR	901.42	10006.8	906.42	10006.9	908.80	10141.6	909.20	10265.3	910.00	10395.3
GR	910.70	10549.3	911.50	10695.8	912.20	10881.5	913.10	11022.6		
NC	0.040	0.040	0.040							
ET		7.1	9.1				9611.0	10420.0	9975.0	10169.6
X1	0.79	47	9975.0	10017.2	580	320	485			
X3	10									
GR	910.2	8989.0	910.0	9028.3	909.7	9037.7	910.0	9186.2	910.4	9295.7
GR	911.0	9354.7	911.2	9436.6	911.2	9530.0	911.1	9611.0	909.4	9703.3
GR	908.6	9777.5	908.4	9834.4	908.6	9886.0	909.1	9949.1	908.8	9975.0
GR	907.3	9989.5	902.3	9998.8	902.1	10000.0	901.6	10008.1	906.5	10017.2
GR	906.3	10049.5	907.4	10072.6	908.8	10114.1	909.0	10145.9	908.6	10155.2
GR	908.5	10246.5	907.9	10293.4	907.1	10363.3	907.4	10383.8	906.7	10388.6
GR	907.2	10395.5	907.6	10447.7	908.9	10515.3	910.3	10604.4	911.4	10644.2
GR	911.8	10652.2	912.6	10665.1	914.0	10704.1	916.9	10748.3	917.6	10776.5
GR	918.1	10821.7	918.5	10856.4	918.4	10914.2	917.9	10957.1	916.9	10964.1
GR	918.1	10974.5	918.7	11003.3						
NC				0.1	0.3					
ET		7.1	9.1				9928.1	11014.4	9975.5	10173.1
X1	0.88	49	9975.5	10018.1	520	420	506			
GR	914.7	8990.3	914.4	9136.0	914.2	9251.1	913.9	9327.9	913.8	9344.6
GR	912.8	9470.2	912.8	9573.0	911.8	9690.9	911.0	9808.0	909.4	9831.2
GR	907.4	9837.9	907.3	9842.1	910.5	9853.1	910.6	9878.2	909.7	9888.4
GR	910.6	9902.2	911.0	9928.1	909.7	9949.6	909.4	9975.5	908.7	9992.7
GR	903.3	9996.3	903.4	10000.0	903.4	10004.9	909.1	10018.1	908.5	10046.5
GR	910.0	10055.9	911.2	10082.6	911.1	10106.8	910.0	10147.8	909.2	10185.8
GR	908.5	10205.1	908.7	10216.2	908.0	10234.3	908.7	10246.1	910.2	10320.8
GR	912.7	10363.8	919.9	10427.4	928.3	10488.5	937.3	10573.8	942.0	10626.2
GR	943.0	10633.3	946.1	10673.3	949.1	10715.9	949.3	10743.5	946.2	10782.8
GR	938.8	10838.1	933.1	10891.9	926.5	10952.4	920.8	11014.4		

ET		7.1	9.1				9894.2	11009.3	9958.4	10115.7
X1	0.93	47	9958.4	10010.6	240	235	233			
GR	916.7	8984.8	915.3	9155.3	915.6	9185.4	915.3	9264.3	915.1	9396.4
GR	914.8	9416.9	912.8	9556.6	912.2	9679.0	911.4	9732.4	908.9	9746.3
GR	910.5	9753.0	910.1	9769.2	911.5	9777.1	912.4	9797.3	912.8	9832.7
GR	911.9	9866.5	912.2	9894.2	911.7	9922.8	911.6	9958.4	909.6	9976.5
GR	905.6	9991.3	903.9	9999.8	903.9	10000.0	909.4	10010.6	911.0	10048.8
GR	911.6	10078.6	911.1	10104.4	909.3	10131.1	909.1	10166.9	909.6	10180.4
GR	910.4	10222.2	912.1	10253.2	914.5	10308.0	916.8	10361.5	925.2	10421.2
GR	934.7	10491.7	945.3	10552.7	953.7	10597.1	955.4	10606.9	968.7	10675.8
GR	974.0	10709.1	976.6	10736.3	975.3	10759.0	966.8	10818.7	955.7	10884.0
GR	942.3	10959.3	933.9	11009.3						
NC				0.2	0.4					
ET		7.1	9.1				9877.2	11008.7	9989.3	10078.6
X1	0.98	58	9989.3	10030.6	280	250	266			
GR	918.1	8989.8	916.8	9136.7	916.0	9297.4	915.9	9314.2	914.6	9474.0
GR	913.6	9570.2	912.7	9627.7	911.7	9633.8	913.0	9639.2	913.1	9654.1
GR	911.9	9665.2	912.9	9675.5	912.7	9698.0	914.3	9736.0	914.8	9759.8
GR	914.3	9792.1	913.7	9827.8	913.0	9845.8	913.7	9858.7	914.0	9877.2
GR	913.8	9903.8	911.5	9936.6	910.7	9968.4	910.8	9989.3	905.5	9995.5
GR	905.6	10000.0	905.6	10006.4	909.7	10012.8	910.6	10030.6	910.0	10037.3
GR	909.7	10067.6	909.9	10086.9	910.9	10107.4	912.1	10132.9	913.0	10164.2
GR	914.0	10195.3	917.0	10242.7	921.1	10287.2	928.9	10341.4	935.7	10383.0
GR	940.8	10416.9	947.7	10465.2	949.4	10488.5	954.0	10538.4	955.3	10557.3
GR	958.0	10578.0	962.4	10599.1	964.7	10617.4	967.5	10633.5	974.3	10676.8
GR	975.9	10697.8	975.2	10719.5	970.3	10755.9	963.4	10803.3	956.4	10852.9
GR	952.4	10886.8	943.3	10960.2	936.9	11008.7				
ET			9.1						9965.8	10092.0
X1	1.03	61	9965.8	10040.1	200	250	273			
X3	10									
GR	918.7	8987.2	918.6	9094.0	917.1	9235.6	915.9	9286.2	915.6	9318.5
GR	914.7	9326.1	915.5	9332.5	916.4	9374.8	916.1	9449.0	915.1	9494.7
GR	915.5	9514.2	915.1	9526.0	914.1	9532.9	915.3	9545.8	915.6	9574.1
GR	915.4	9645.4	914.7	9672.5	914.7	9713.5	913.4	9720.3	914.3	9725.6
GR	914.9	9741.4	915.3	9780.0	914.9	9817.8	915.0	9840.7	915.6	9851.0
GR	915.8	9889.3	914.6	9940.5	915.1	9965.8	913.5	9978.5	909.0	9987.8
GR	907.6	10000.0	907.3	10010.5	910.3	10016.2	911.0	10040.1	910.0	10075.1
GR	910.7	10083.6	906.8	10091.3	911.5	10104.2	910.2	10107.8	911.3	10114.0
GR	911.9	10148.2	912.2	10162.7	913.5	10219.1	916.3	10281.0	919.5	10340.8
GR	921.3	10382.3	923.0	10417.0	925.8	10469.5	932.4	10526.5	937.2	10567.0
GR	949.3	10639.9	958.7	10716.5	959.5	10734.0	961.4	10766.4	965.4	10818.4
GR	967.1	10843.0	967.4	10863.2	965.7	10892.8	962.3	10930.2	961.3	10962.2
GR	957.9	11005.9								
NC				0.1	0.3					
ET			9.1						9965.5	10130.4
X1	1.07	54	9965.5	10006.8	195	220	232			
GR	919.9	8985.8	919.7	9080.3	918.3	9168.9	917.8	9193.5	917.6	9211.0
GR	918.1	9302.3	918.1	9407.5	917.7	9476.8	917.3	9545.3	916.8	9564.7
GR	915.7	9573.1	916.5	9578.1	917.1	9611.4	917.0	9685.1	916.6	9755.2
GR	915.8	9817.5	915.3	9828.2	915.8	9832.0	916.4	9856.5	916.5	9902.5

GR	916.7	9937.5	915.6	9965.5	911.3	9984.8	907.3	10000.0	911.9	10006.8
GR	912.6	10046.2	912.2	10077.2	910.8	10086.4	911.5	10095.3	910.5	10108.0
GR	911.2	10118.2	911.6	10139.9	911.8	10170.6	910.8	10184.2	912.1	10203.4
GR	912.7	10231.3	913.7	10272.7	914.3	10311.8	915.2	10332.9	917.0	10364.4
GR	917.7	10400.2	918.7	10457.2	920.0	10504.3	921.2	10548.0	923.1	10603.9
GR	923.3	10636.6	923.0	10656.5	924.8	10679.7	926.8	10726.2	929.5	10777.3
GR	933.8	10842.8	937.5	10905.7	940.2	10949.9	941.9	11015.5		
ET		7.1	9.1				9826.5	11019.7	9966.4	10072.1
X1	1.17	50	9973.2	10017.2	530	490	506			
GR	923.0	8995.4	922.7	9076.3	922.0	9158.9	922.0	9240.2	921.5	9303.0
GR	920.9	9318.4	921.2	9396.9	920.8	9475.0	920.4	9520.1	920.3	9556.9
GR	919.0	9609.3	916.3	9662.3	915.6	9687.2	914.6	9699.4	915.9	9708.3
GR	916.1	9742.3	916.7	9775.8	918.1	9826.5	916.4	9863.0	915.3	9905.0
GR	913.3	9958.7	913.8	9973.2	913.4	9987.8	910.0	10000.0	914.2	10007.3
GR	914.7	10017.2	913.1	10038.8	913.9	10070.9	914.9	10125.0	916.0	10184.6
GR	916.9	10250.3	917.7	10313.7	918.4	10390.4	918.7	10440.0	918.2	10467.1
GR	917.7	10483.4	917.3	10512.7	918.0	10518.8	918.8	10558.8	918.6	10600.3
GR	919.5	10620.0	920.0	10660.7	920.7	10711.6	922.6	10773.2	925.0	10839.1
GR	925.5	10870.9	926.4	10902.4	926.5	10940.6	926.5	10986.6	926.2	11019.7
ET		7.1	9.1				9837.1	11007.2	9949.0	10088.0
X1	1.26	60	9993.8	10041.2	490	500	489			
GR	923.8	8988.3	923.1	9060.3	923.2	9136.9	923.0	9151.2	922.5	9297.8
GR	921.6	9395.1	921.1	9447.0	920.4	9457.1	920.6	9468.1	920.2	9511.3
GR	919.0	9528.3	919.8	9540.7	919.3	9561.2	920.0	9575.0	918.9	9582.8
GR	919.7	9594.7	919.5	9616.6	917.2	9650.1	916.5	9671.5	917.4	9703.8
GR	916.1	9736.8	917.8	9775.9	916.4	9804.6	917.2	9818.9	917.6	9837.1
GR	916.6	9887.5	916.1	9937.6	912.9	9950.5	915.5	9956.7	915.6	9965.3
GR	914.3	9969.1	915.8	9974.7	916.1	9993.8	911.1	10000.0	913.8	10004.9
GR	914.7	10035.5	915.7	10041.2	916.4	10104.0	916.5	10130.6	916.2	10144.9
GR	916.9	10179.5	918.2	10245.0	919.8	10327.4	921.0	10379.8	921.1	10432.3
GR	921.0	10510.9	920.7	10560.0	919.6	10574.1	919.3	10585.4	920.0	10590.4
GR	921.3	10617.3	922.2	10652.7	923.2	10698.3	923.4	10746.1	923.5	10764.7
GR	924.1	10801.8	924.3	10857.9	924.4	10904.3	923.2	10944.4	923.8	11007.2
ET		7.1	9.1				9850.5	11008.2	9958.5	10098.4
X1	1.31	65	9958.5	10098.4	240	255	247			
GR	924.4	8982.5	923.7	9086.3	923.1	9168.9	922.9	9202.3	920.8	9207.6
GR	922.3	9217.1	922.1	9268.6	922.6	9282.5	922.5	9343.4	921.8	9368.9
GR	922.2	9373.7	922.4	9408.2	922.2	9454.3	922.4	9494.5	921.3	9538.0
GR	919.9	9589.3	919.7	9644.0	919.2	9694.1	918.4	9741.7	918.4	9788.5
GR	917.9	9794.2	918.6	9800.1	916.3	9809.4	918.2	9815.0	918.8	9850.5
GR	918.1	9863.9	916.8	9870.0	917.5	9874.7	917.9	9900.5	917.3	9908.2
GR	917.0	9936.9	917.1	9958.5	916.4	9967.6	913.3	9981.0	917.1	9988.8
GR	917.2	9995.8	912.3	10000.0	914.3	10005.4	916.6	10020.3	916.1	10030.8
GR	917.3	10035.3	917.2	10051.3	913.6	10058.5	916.7	10067.1	917.5	10098.4
GR	916.6	10104.2	917.7	10109.5	917.8	10159.5	918.3	10195.5	919.6	10238.5
GR	920.7	10295.3	921.5	10342.0	921.8	10375.7	923.0	10425.3	923.8	10487.8
GR	924.3	10534.1	924.5	10584.9	924.7	10639.3	925.6	10715.6	925.8	10728.7
GR	926.1	10796.4	926.8	10852.8	927.7	10915.0	928.6	10965.7	929.2	11008.2

ET		7.1	9.1				9769.1	11001.8	9919.5	10040.2
X1	1.35	59	9971.5	10040.2	220	260	248			
GR	923.8	8993.1	924.2	9067.4	923.4	9120.3	923.7	9137.5	923.5	9154.1
GR	924.3	9212.5	924.0	9272.4	923.7	9331.4	922.8	9375.0	922.6	9435.2
GR	921.9	9500.5	921.5	9537.8	921.2	9587.9	921.0	9625.6	920.2	9674.7
GR	919.8	9728.4	917.5	9738.3	919.9	9747.6	920.5	9769.1	919.8	9798.9
GR	919.1	9848.3	918.6	9856.2	918.2	9910.0	917.5	9921.0	918.2	9928.7
GR	917.9	9953.4	918.3	9971.5	917.9	9985.8	915.4	10000.0	918.2	10016.3
GR	918.5	10040.2	917.7	10048.2	918.4	10062.0	918.7	10077.2	918.6	10095.5
GR	918.5	10118.2	920.1	10146.8	921.0	10172.8	921.3	10209.5	921.9	10258.2
GR	922.3	10300.4	922.3	10371.2	923.1	10405.9	923.3	10461.2	921.5	10471.0
GR	922.8	10477.3	923.0	10496.3	923.0	10510.6	923.4	10539.5	924.1	10556.9
GR	925.3	10614.4	926.7	10676.9	927.2	10705.4	927.1	10721.8	928.7	10785.7
GR	929.5	10824.2	930.8	10889.3	931.8	10943.2	932.6	11001.8		
ET		7.1	9.1				9710.3	11005.8	9919.5	10060.5
X1	1.45	55	9987.8	10037.6	500	490	494			
GR	926.7	8986.3	926.1	9077.8	925.7	9168.3	925.2	9201.3	925.0	9217.8
GR	924.2	9378.3	923.6	9499.3	923.0	9573.2	922.7	9611.9	922.4	9628.8
GR	921.6	9665.3	920.2	9671.9	922.7	9682.5	923.6	9710.3	923.0	9747.3
GR	921.6	9808.6	921.2	9845.2	920.7	9897.2	919.6	9918.7	920.1	9923.8
GR	920.6	9938.9	920.5	9954.2	920.4	9987.8	918.8	9994.4	917.6	10000.0
GR	919.5	10012.0	918.8	10030.0	919.9	10037.6	920.6	10084.4	919.5	10089.5
GR	921.0	10098.8	920.2	10121.8	921.2	10130.1	921.7	10166.6	922.7	10190.2
GR	923.9	10244.7	925.1	10276.7	925.8	10313.8	926.7	10366.7	927.7	10429.9
GR	927.9	10462.5	928.8	10490.6	929.4	10515.5	930.8	10556.6	931.2	10597.2
GR	931.9	10649.0	933.7	10708.2	933.3	10712.5	933.3	10723.3	935.1	10805.1
GR	936.4	10834.7	938.4	10872.0	940.3	10912.9	942.5	10968.8	943.2	11005.8
ET			9.1						9985.7	10144.2
X1	1.52	59	9989.0	10025.4	400	340	367			
GR	928.2	8978.5	927.6	9035.4	926.5	9041.8	927.6	9050.7	927.4	9107.4
GR	926.7	9118.6	927.4	9134.2	926.9	9201.1	926.9	9221.5	926.2	9296.8
GR	926.7	9331.0	926.9	9379.5	926.3	9448.9	926.5	9495.0	926.6	9550.4
GR	926.8	9584.9	926.1	9655.1	925.3	9712.0	924.4	9758.2	924.4	9797.3
GR	923.6	9845.9	922.8	9864.3	922.4	9919.3	922.0	9989.0	919.4	10000.0
GR	920.9	10006.0	922.1	10025.4	922.1	10055.1	921.5	10071.2	921.5	10085.1
GR	922.2	10093.0	922.0	10130.3	921.3	10137.9	922.2	10146.5	922.2	10192.3
GR	922.4	10231.0	922.2	10258.1	923.8	10273.2	926.9	10322.3	929.0	10369.6
GR	930.2	10413.5	930.6	10450.7	930.5	10488.7	930.9	10520.8	931.6	10571.8
GR	932.5	10618.7	932.1	10630.7	932.8	10642.5	934.0	10671.3	936.3	10721.9
GR	938.0	10771.6	938.1	10791.5	938.0	10806.6	936.2	10822.4	937.9	10835.5
GR	939.6	10862.4	941.2	10906.2	943.4	10981.3	945.4	11023.3		

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

IHLEQ = 1. THEREFORE FRICTION LOSS (HL) IS CALCULATED AS A FUNCTION OF PROFILE TYPE, WHICH CAN VARY FROM REACH TO REACH. SEE DOCUMENTATION FOR DETAILS.

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
*SECNO .020

3265 DIVIDED FLOW

3280 CROSS SECTION .02 EXTENDED 9.22 FEET

3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 729.00 ELREA= 727.00

.020	4.02	715.72	715.72	715.00	717.09	1.37	.00	.00	729.00
11568.0	.0	11568.0	.0	.0	1233.2	.0	.0	.0	727.00
.00	.00	9.38	.00	.000	.030	.000	.000	711.70	9867.44
.009811	0.	0.	0.	0	10	0	.00	463.24	10417.06

*SECNO .110
3280 CROSS SECTION .11 EXTENDED 10.94 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 729.20 ELREA= 728.80

.110	3.94	720.64	720.64	.00	722.10	1.46	4.48	.13	729.20
11568.0	.0	11568.0	.0	.0	1193.8	.0	13.3	4.8	728.80
.01	.00	9.69	.00	.000	.030	.000	.000	716.70	9714.18
.009355	460.	479.	280.	0	8	0	.00	412.35	10126.52

*SECNO .150
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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 730.60 ELREA= 729.70

.150	4.78	722.98	722.98	.00	724.38	1.40	2.13	-.05	730.60
11568.0	.0	11568.0	.0	.0	1218.3	.0	19.3	7.0	729.70
.02	.00	9.50	.00	.000	.030	.000	.000	718.20	9728.55
.009879	140.	216.	250.	0	11	0	.00	451.24	10179.79

*SECNO .190

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 731.10 ELREA= 730.30

.190	4.61	725.11	724.93	.00	726.38	1.27	1.98	.01	731.10
11568.0	.0	11568.0	.0	.0	1278.2	.0	25.8	9.2	730.30
.03	.00	9.05	.00	.000	.030	.000	.000	720.50	9704.27
.007897	160.	226.	250.	2	11	0	.00	431.31	10135.58

*SECNO .290

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 733.70 ELREA= 733.80

.290	4.52	729.82	729.70	.00	731.04	1.21	4.65	.01	733.70
11568.0	.0	11568.0	.0	.0	1308.3	.0	40.9	14.6	733.80
.04	.00	8.84	.00	.000	.033	.000	.000	725.30	9541.61
.010351	475.	510.	480.	3	11	0	.00	486.46	10028.07

*SECNO .340

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 735.50 ELREA= 735.20

.340	5.91	732.21	732.21	.00	734.13	1.92	2.61	.20	735.50
11568.0	.0	11568.0	.0	.0	1040.4	.0	47.7	16.8	735.20
.05	.00	11.12	.00	.000	.033	.000	.000	726.30	9781.82
.010468	200.	249.	240.	0	11	0	.00	275.18	10057.00

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 .380

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.44

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 736.50 ELREA= 736.50

.380	6.99	734.59	733.53	.00	735.83	1.24	1.63	.07	736.50
11568.0	.0	11568.0	.0	.0	1294.8	.0	54.1	18.3	736.50
.06	.00	8.93	.00	.000	.033	.000	.000	727.60	9925.56
.005023	150.	240.	185.	2	5	0	.00	273.63	10199.19

*SECNO .470

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 744.80 ELREA= 739.30

.470	6.69	737.29	736.85	.00	738.76	1.46	2.86	.07	744.80
11568.0	.0	11568.0	.0	.0	1191.6	.0	67.3	21.3	739.30
.07	.00	9.71	.00	.000	.033	.000	.000	730.60	9965.86
.007358	470.	462.	440.	3	15	0	.00	296.85	10262.71

*SECNO .550
3280 CROSS SECTION .55 EXTENDED 2.61 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 748.20 ELREA= 742.80

Right end of cross section extended 1.62 feet. Floodplain mapped
to the end of the FIS mapping for consistency with adjacent cross
sections. No USGS contour data available for this cross section.

.550	6.02	740.22	739.71	.00	741.68	1.46	2.92	.00	748.20
11568.0	.0	11568.0	.0	.0	1193.9	.0	78.4	24.1	742.80
.08	.00	9.69	.00	.000	.033	.000	.000	734.20	9870.46
.006978	490.	408.	300.	2	15	0	.00	287.01	10157.47

*SECNO .570
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= 9007.6 10140.0 TYPE= 1 TARGET= 1132.400

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 749.10 ELREA= 100000.00

Cross section 0.57 is aligned down the center of Old U.S.
Highway 80 in the right overbank.

.570	4.48	740.68	740.68	.00	742.50	1.82	.26	.23	749.10
11568.0	.0	11568.0	.0	.0	1067.5	.0	81.2	24.8	100000.00
.08	.00	10.84	.00	.000	.016	.000	.000	736.20	9844.84
.002493	130.	106.	95.	0	15	0	.00	295.16	10140.00

*SECNO .580
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 743.20 ELREA= 746.70

.580	5.91	741.71	741.71	.00	743.52	1.81	.58	-.30	743.20
11568.0	.0	11568.0	.0	.0	1071.4	.0	82.5	25.2	746.70
.09	.00	10.80	.00	.000	.033	.000	.000	735.80	9823.42
.010618	45.	55.	55.	0	11	0	.00	300.70	10124.12

CCHV= .300 CEHV= .500
*SECNO .590

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 745.00 ELREA= 753.70

Cross section 0.59 is aligned with the downstream side of the Gila
Bend canal.

.590	6.69	744.09	744.09	.00	746.84	2.75	.65	.51	745.00
11568.0	.0	11568.0	.0	.0	869.3	.0	84.1	25.5	753.70
.09	.00	13.31	.00	.000	.033	.000	.000	737.40	9918.13
.009252	150.	70.	60.	0	8	0	.00	158.89	10077.02

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 .600

3280 CROSS SECTION .60 EXTENDED 3.98 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 746.00 ELREA= 753.10

Cross section 0.60 is aligned through the center of the Gila Bend canal.

.600	6.68	744.48	744.36	.00	747.24	2.76	.39	.01	746.00
11568.0	.0	11568.0	.0	.0	867.2	.0	85.0	25.7	753.10
.09	.00	13.34	.00	.000	.033	.000	.000	737.80	9902.73
.008621	30.	44.	40.	2	8	0	.00	148.72	10051.45

*SECNO .610

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 747.10 ELREA= 754.50

Cross section 0.61 is aligned with the upstream side of the Gila Bend canal.

.610	7.81	746.11	744.58	.00	747.82	1.71	.26	.31	747.10
11568.0	.0	11568.0	.0	.0	1101.2	.0	86.0	25.8	754.50
.09	.00	10.50	.00	.000	.033	.000	.000	738.30	9878.44
.004323	40.	46.	40.	13	11	0	.00	160.78	10039.22

*SECNO .660

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.11

3470 ENCROACHMENT STATIONS= 8995.0 10370.0 TYPE= 1 TARGET= 1375.000

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 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


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      751.30 ELREA=      745.00

     .660      8.54    748.34    745.26       .00    748.66       .33       .43       .42    751.30
   11568.0        .0   10305.7    1262.3        .0    2141.6     654.0      97.9      28.0    745.00
      .11       .00      4.81      1.93      .000      .033      .050      .000    739.80   9816.77
   .000967     440.      272.      230.         2        19         0       .00    553.23  10370.00


CCHV=     .100 CEHV=     .300
*SECNO  .700
3280 CROSS SECTION       .70 EXTENDED      3.32 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .58


3470 ENCROACHMENT STATIONS=     9004.0   10362.0  TYPE=      1  TARGET=     1358.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      751.80 ELREA=      747.30

     .700      6.52    748.52    747.39       .00    749.18       .66       .41       .10    751.80
   11568.0        .0   10510.5    1057.5        .0    1545.8     444.9     109.5      30.6    747.30
      .12       .00      6.80      2.38      .000      .033      .050      .000    742.00   9779.24
   .002828     230.      223.      170.         2        20         0       .00    582.75  10362.00


1490 NH CARD USED
*SECNO  .790

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     8789.9   10180.5  TYPE=      1  TARGET=     1390.600

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      752.30 ELREA=      751.20

        CWSEL intersects detailed cross section but upstream CWSEL's
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        indicate potential flooding.  Floodplain plotted to the limits of the
        detailed cross section because of the Ag fields.
     .790      6.39    751.39    751.39       .00    753.10      1.72      3.96      -.96    752.30
   11568.0        .0   11336.4     231.6        .0    1068.6      59.7     127.5      35.9    751.20
     .13        .00     10.61      3.88      .000      .033      .040      .000    745.00   9860.02
   .007977     300.      493.      560.         0         6         0       .00    316.42  10178.05


1490 NH CARD USED
*SECNO  .890

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9431.5   10257.8  TYPE=      1  TARGET=      826.300
        CWSEL intersects detailed cross section but upstream CWSEL's
        indicate potential flooding.  Floodplain plotted to the limits of the
        detailed cross section because of the Ag fields.
     .890      9.09    754.69    754.63       .00    756.74      2.05      3.54       .10    758.10
   11568.0        .0    9333.1    2234.9        .0     759.0     307.8     139.9      39.3    755.50
     .14        .00     12.30      7.26      .000      .030      .040      .000    745.60   9942.89
   .006497     515.      496.      480.         3        11         0       .00    281.01  10257.80


*SECNO  .980

3265 DIVIDED FLOW

3280 CROSS SECTION       .98 EXTENDED      1.59 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     8908.5   10429.2  TYPE=      1  TARGET=     1520.700
        Right end of cross section extended 1.59 feet.  Floodplain plotted
        to the limits of the detailed cross section because of the Ag fields.
        No USGS contour data available for this cross section.
     .980     10.19    758.09    758.09       .00    760.11      2.01      2.54       .30    758.30
   11568.0     257.5   10023.0    1287.5     341.9     820.1     889.1     157.6      45.7    761.60
     .15        .75     12.22      1.45      .150      .030      .150      .000    747.90   9564.94
   .005125     560.      501.      465.         0         8         0       .00    833.62  10428.99


*SECNO 1.080

3265 DIVIDED FLOW

3280 CROSS SECTION      1.08 EXTENDED      4.10 FEET
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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= 8932.2 10459.7 TYPE= 1 TARGET= 1527.500
Right end of cross section extended 3.10 feet. Floodplain plotted
to the limits of the detailed cross section because of the Ag fields.
No USGS contour data available for this cross section.

1.080	9.90	760.90	760.84	.00	762.35	1.45	2.18	.06	762.30
11568.0	1134.8	8951.0	1482.2	1240.1	817.3	1114.2	184.7	56.8	760.80
.17	.92	10.95	1.33	.150	.030	.150	.000	751.00	9076.64
.004073	430.	491.	440.	2	10	0	.00	1360.48	10459.70

*SECNO 1.170

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 8988.0 10446.8 TYPE= 1 TARGET= 1458.800
Left end of cross section extended 1.92 feet. Floodplain plotted to
the limits of the detailed cross section because of the Ag fields.
No USGS contour data available for this cross section.

1.170	8.62	763.62	763.62	.00	765.03	1.42	2.59	-.33	765.30
11568.0	3670.5	7739.7	157.7	2524.0	665.1	219.3	216.2	69.5	765.10
.18	1.45	11.64	.72	.150	.030	.150	.000	755.00	8988.00
.005494	300.	502.	650.	0	11	0	.00	1338.48	10382.19

*SECNO 1.260

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9028.0 10510.0 TYPE= 1 TARGET= 1482.000
Left end of cross section extended 2.14 feet. Floodplain plotted to
the limits of the detailed cross section because of the Ag fields.
No USGS contour data available for this cross section.

1.260	9.14	766.44	766.44	.00	767.77	1.33	2.52	.07	767.90
11568.0	3037.9	7904.1	625.9	2260.5	708.9	620.8	253.7	84.6	767.50
.20	1.34	11.15	1.01	.150	.030	.150	.000	757.30	9028.00
.005226	450.	494.	520.	0	9	0	.00	1455.04	10510.00

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 1.360

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9045.0 10467.2 TYPE= 1 TARGET= 1422.200
Left end of cross section extended less than 1 foot. Mapped
floodplain to edge of the detailed cross section.

1.360	9.23	769.63	769.63	.00	770.99	1.36	2.57	.06	770.30
11568.0	2150.1	8434.1	983.8	1824.0	770.5	837.1	296.0	101.8	771.40
.22	1.18	10.95	1.18	.150	.030	.150	.000	760.40	9045.00
.005048	560.	500.	450.	0	5	0	.00	1409.43	10464.07

*SECNO 1.450

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9220.0 10455.0 TYPE= 1 TARGET= 1235.000
Left end of cross section extended less than 1 foot. Mapped
floodplain to edge of the detailed cross section.

1.450	9.52	772.52	772.52	.00	774.16	1.64	2.34	.17	773.60
11568.0	1800.2	9071.5	696.4	1530.1	782.1	694.2	333.1	116.9	772.60
.23	1.18	11.60	1.00	.150	.030	.150	.000	763.00	9220.00
.004688	515.	497.	480.	0	8	0	.00	1205.53	10455.00

*SECNO 1.550

3265 DIVIDED FLOW

3280 CROSS SECTION 1.55 EXTENDED .79 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9390.0 10380.0 TYPE= 1 TARGET= 990.000
Both ends of the cross section were extended less than 1 foot.

Mapped floodplain to edge of the detailed cross section.

1.550	9.59	775.89	775.89	.00	777.60	1.71	2.40	.01	776.30
11568.0	1547.7	9431.4	588.9	1268.5	812.3	556.3	366.3	129.6	778.00
.25	1.22	11.61	1.06	.150	.030	.150	.000	766.30	9390.00
.004726	530.	505.	480.	0	5	0	.00	954.23	10380.00

*SECNO 1.610

3265 DIVIDED FLOW

3280 CROSS SECTION 1.61 EXTENDED 1.09 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9455.0 10285.0 TYPE= 1 TARGET= 830.000

Left and right ends of the cross section were extended 1.19 and 1.09 feet, respectively. The left floodplain edge was mapped to STA 8805 using interpolated USGS quad contour data. The right floodplain edge was interpolated to be 3105 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, the right floodplain edge was mapped to the end of the cross section (artificial boundary).

1.610	9.79	777.79	777.79	.00	779.78	1.99	1.66	.03	779.90
11568.0	1432.1	9863.3	272.6	1122.3	805.9	300.1	384.7	136.2	777.90
.26	1.28	12.24	.91	.150	.030	.150	.000	768.00	9455.00
.005066	330.	328.	330.	0	8	0	.00	801.69	10285.00

*SECNO 1.640

3265 DIVIDED FLOW

3280 CROSS SECTION 1.64 EXTENDED 1.20 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9480.0 10235.0 TYPE= 1 TARGET= 755.000

Left and right ends of the cross section were extended 1.80 and 1.20 feet, respectively. The left floodplain edge was mapped to STA 8927 using interpolated USGS quad contour data. The right floodplain edge was interpolated to be 2850 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, the right floodplain edge was mapped to the end of the cross section (artificial boundary).

1.640	9.30	778.80	778.80	.00	780.85	2.05	.85	.01	783.30
11568.0	1308.1	10094.1	165.8	1014.0	821.6	193.5	392.5	139.0	779.50
.26	1.29	12.29	.86	.150	.030	.150	.000	769.50	9480.00
.005227	160.	162.	165.	0	11	0	.00	712.01	10235.00

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 1.670

3265 DIVIDED FLOW

3280 CROSS SECTION 1.67 EXTENDED 1.08 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9510.0 10185.0 TYPE= 1 TARGET= 675.000
Left and right ends of the cross section were extended 1.98 and 1.08 feet, respectively. The left floodplain edge was mapped to STA 8480 using interpolated USGS quad contour data. No USGS contour data available for the right overbank. Therefore, the right floodplain edge was mapped to the end of the cross section (artificial boundary).

1.670	7.88	780.08	780.08	.00	781.95	1.87	1.12	-.11	778.80
11568.0	1408.8	10048.5	110.8	956.6	854.4	119.9	400.2	141.7	779.10
.26	1.47	11.76	.92	.150	.030	.150	.000	772.20	9510.00
.006797	170.	164.	170.	0	15	0	.00	672.66	10185.00

CCHV= .200 CEHV= .300
1490 NH CARD USED
*SECNO 1.740

3265 DIVIDED FLOW

3280 CROSS SECTION 1.74 EXTENDED 1.54 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.50

3470 ENCROACHMENT STATIONS= 9615.0 10352.6 TYPE= 1 TARGET= 737.600
Left and right ends of the cross section were extended 2.64 and 1.54 feet, respectively. The left floodplain edge was mapped to STA 8254 using interpolated USGS quad contour data. The right floodplain edge was interpolated to be 708 feet beyond the end of the detailed cross section using USGS quad contour data.

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        Therefore, for consistency with adjacent cross sections, the right
        floodplain edge was mapped to the end of the cross section
        (artificial boundary).
    1.740      8.54    782.84    781.78       .00    783.57       .72      1.39       .23    784.50
   11568.0    1102.4    7654.4    2811.2     964.3     951.9     713.0     417.0     146.8    782.70
      .28      1.14      8.04      3.94      .150      .033      .045      .000    774.30   9615.00
  .003034      300.      335.      340.         3        11         0       .00    729.81  10352.60


CCHV=     .100 CEHV=     .300
1490 NH CARD USED
*SECNO 1.830

3265 DIVIDED FLOW

3280 CROSS SECTION      1.83 EXTENDED       .66 FEET


3470 ENCROACHMENT STATIONS=     9670.0   10676.4  TYPE=      1  TARGET=     1006.400
        Both ends of the cross section were extended less than 1 foot.
        Mapped floodplain to edge of the detailed cross section.
    1.830      6.35    784.55    784.02       .00    785.21       .66      1.63       .01    785.70
   11568.0     376.1    6733.8    4458.1     405.1     838.8    1232.5     445.7     156.4    782.30
      .30       .93      8.03      3.62      .150      .033      .045      .000    778.20   9670.00
  .003665      520.      498.      460.         2        20         0       .00    980.98  10660.48


*SECNO 1.880
3280 CROSS SECTION      1.88 EXTENDED       .59 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9665.0   10883.0  TYPE=      1  TARGET=     1218.000
        Left end of cross section extended 1.30 feet.  The left floodplain
        edge was mapped to STA 8589 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
    1.880      5.69    785.89    785.89       .00    786.76       .87      1.43      -.15    785.00
   11568.0     294.0    8166.9    3107.0     272.7     941.3    1007.8     460.3     163.2    785.10
      .31      1.08      8.68      3.08      .150      .033      .045      .000    780.20   9665.00
  .005247      250.      270.      280.         0        10         0       .00   1184.76  10849.76


*SECNO 1.920
3280 CROSS SECTION      1.92 EXTENDED       .63 FEET

7185 MINIMUM SPECIFIC ENERGY
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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=     9765.0   10962.9  TYPE=      1  TARGET=     1197.900
        Left end of cross section extended 1.53 feet.  The left floodplain
        edge was mapped to STA 8415 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
    1.920      5.33    787.53    787.53       .00    788.35       .82      1.17       .01    787.40
  11568.0     189.3    7944.0    3434.8     187.3     930.4    1130.4     471.8     169.2    786.00
      .32      1.01      8.54      3.04      .150      .033      .045      .000    782.20   9765.00
  .005215      220.      227.      220.         0        10         0       .00   1197.90  10962.90


*SECNO 2.020
3280 CROSS SECTION      2.02 EXTENDED      1.16 FEET


3470 ENCROACHMENT STATIONS=     9893.9   11000.2  TYPE=      1  TARGET=     1106.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      792.80 ELREA=      789.10

        Left end of cross section extended 1.55 feet.  The left floodplain
        edge was mapped to STA 8529 using interpolated USGS quad
        contour data.  Right end of cross section extended 1.15 feet.  The
        right floodplain edge was mapped to STA 11655 using interpolated
        USGS quad contour data.
    2.020      4.35    790.35    790.14       .00    791.05       .70      2.69       .01    792.80
  11568.0        .0    8584.6    2983.4        .0    1137.7     945.9     496.1     182.1    789.10
      .34       .00      7.55      3.15      .000      .033      .045      .000    786.00   9908.56
  .005749      475.      490.      490.         2        19         0       .00   1091.64  11000.20


1490 NH CARD USED
*SECNO 2.110
3280 CROSS SECTION      2.11 EXTENDED      1.20 FEET


3470 ENCROACHMENT STATIONS=     9860.2   10570.0  TYPE=      1  TARGET=      709.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      795.10 ELREA=      791.50

        Left end of cross section extended 1.49 feet.  The left floodplain
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        edge was mapped to STA 8508 using interpolated USGS quad
        contour data.  Right end of cross section extended 1.19 feet.  The
        right floodplain edge was mapped to STA 11641 using interpolated
        USGS quad contour data.
    2.110      4.89    793.49    793.22       .00    794.52      1.03      3.38       .10    795.10
  11568.0        .0    7508.4    4059.6        .0     776.2    1027.6     518.1     192.2    791.50
      .36       .00      9.67      3.95      .000      .033      .058      .000    788.60   9869.88
  .008095      490.      497.      490.         2         8         0       .00    700.12  10570.00


CCHV=     .200 CEHV=     .300
*SECNO 2.210

3265 DIVIDED FLOW

3280 CROSS SECTION      2.21 EXTENDED       .98 FEET


3470 ENCROACHMENT STATIONS=     9736.6   10355.0  TYPE=      1  TARGET=      618.400
        Left end of cross section extended 2.58 feet.  The left floodplain
        edge was mapped to STA 8001 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
    2.210      4.98    797.18    796.75       .00    798.14       .95      3.60       .01    799.90
  11568.0    2026.6    7940.9    1600.5     292.7     924.4     381.8     537.8     199.5    798.70
      .38      6.92      8.59      4.19      .040      .033      .045      .000    792.20   9753.39
  .006470      400.      503.      530.         3        11         0       .00    543.45  10355.00


CCHV=     .100 CEHV=     .300
*SECNO 2.300

3265 DIVIDED FLOW

3280 CROSS SECTION      2.30 EXTENDED       .74 FEET


3470 ENCROACHMENT STATIONS=     9509.2   10290.0  TYPE=      1  TARGET=      780.800
        Left end of cross section extended 3.73 feet.  The left floodplain
        edge was mapped to STA 8018 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
    2.300      5.03    800.23    799.44       .00    800.80       .57      2.63       .04    805.50
  11568.0    3822.3    7540.0     205.7     865.4    1110.5      64.0     558.3     206.7    798.90
      .40      4.42      6.79      3.22      .045      .033      .045      .000    795.20   9523.85
  .004535      470.      502.      490.         2        15         0       .00    744.55  10290.00
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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

1490 NH CARD USED
*SECNO 2.390

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9084.0 10066.5 TYPE= 1 TARGET= 982.500
Left end of cross section extended 2.75 feet. The left floodplain
edge was mapped to STA 8291 using interpolated USGS quad
contour data.

2.390	4.55	802.75	802.38	.00	803.39	.64	2.56	.02	807.80
11568.0	5694.2	5873.8	.0	1328.6	739.5	.0	581.4	215.9	100000.00
.42	4.29	7.94	.00	.045	.033	.000	.000	798.20	9100.86
.005933	490.	490.	470.	2	12	0	.00	899.20	10045.83

1490 NH CARD USED
*SECNO 2.490

3265 DIVIDED FLOW

3280 CROSS SECTION 2.49 EXTENDED .29 FEET

3470 ENCROACHMENT STATIONS= 8969.0 10124.4 TYPE= 1 TARGET= 1155.400
Left end of cross section extended 2.19 feet. The left floodplain
edge was mapped to STA 8391 using interpolated USGS quad
contour data. Right end of cross section extended less than 1 foot.
The right floodplain edge was mapped to the end of the detailed
cross section.

2.490	4.19	805.89	805.61	.00	806.49	.60	3.10	.00	811.00
11568.0	6186.8	5381.2	.0	1648.3	654.9	.0	606.0	227.3	100000.00
.45	3.75	8.22	.00	.050	.033	.000	.000	801.70	8969.00
.006691	490.	493.	490.	3	15	0	.00	1111.73	10109.24

*SECNO 2.580

3265 DIVIDED FLOW

3280 CROSS SECTION 2.58 EXTENDED 1.23 FEET

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= 8976.8 10102.7 TYPE= 1 TARGET= 1125.900
Left end of cross section extended 1.23 feet. The left floodplain edge was mapped to STA 8756 using interpolated USGS quad contour data. Right end of cross section extended 1.23 feet. The right floodplain edge was mapped to STA 11319 using interpolated USGS quad contour data.

2.580	4.93	809.23	809.08	.00	809.96	.73	3.43	.04	812.60
11568.0	6042.8	5525.2	.0	1592.6	606.5	.0	631.9	239.9	100000.00
.47	3.79	9.11	.00	.050	.033	.000	.000	804.30	8976.80
.006978	500.	503.	500.	2	11	0	.00	1094.83	10097.65

*SECNO 2.630

3265 DIVIDED FLOW

3280 CROSS SECTION 2.63 EXTENDED 1.23 FEET

3470 ENCROACHMENT STATIONS= 8975.5 10117.8 TYPE= 1 TARGET= 1142.300
Left end of cross section extended less than 1 foot. The left floodplain edge was mapped to the end of the detailed cross section. Right end of cross section extended 1.22 feet. The right floodplain edge was mapped to STA 11228 using interpolated USGS quad contour data.

2.630	4.92	810.72	810.63	.00	811.40	.68	1.44	.01	814.00
11568.0	6248.2	5319.8	.0	1697.3	598.8	.0	643.1	245.4	100000.00
.48	3.68	8.88	.00	.050	.033	.000	.000	805.80	8975.50
.006263	215.	221.	230.	1	6	0	.00	1104.19	10093.11

*SECNO 2.680

3265 DIVIDED FLOW

3280 CROSS SECTION 2.68 EXTENDED 1.58 FEET

3470 ENCROACHMENT STATIONS= 8990.2 10143.9 TYPE= 1 TARGET= 1153.700
Left end of cross section extended less than 1 foot. The left floodplain edge was mapped to the end of the detailed cross section. Right end of cross section extended 1.58 feet. The right

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        floodplain edge was mapped to STA 11275 using interpolated
        USGS quad contour data.
    2.680      5.08     812.48    812.48       .00    813.37       .89      1.91       .06    812.70
  11568.0    5534.0     6034.0        .0    1418.6     617.9        .0     656.6     252.3    815.70
      .49      3.90       9.77       .00      .050      .033      .000      .000    807.40   8990.20
  .007872      270.       273.      275.         2         8         0       .00   1115.54  10107.26


CCHV=     .200 CEHV=     .300
1490 NH CARD USED
*SECNO 2.730

3265 DIVIDED FLOW

3280 CROSS SECTION      2.73 EXTENDED      1.89 FEET


3470 ENCROACHMENT STATIONS=     8940.5   10279.1  TYPE=      1  TARGET=     1338.600
        Right end of cross section extended 1.88 feet.  The right floodplain
        edge was mapped to STA 11403 using interpolated USGS quad
        contour data.
    2.730      5.58     814.58    814.25       .00    815.22       .63      1.80       .05    818.10
  11568.0    3542.9     5294.1    2731.0    1198.7     639.5     511.3     672.1     260.4    816.20
      .50      2.96       8.28      5.34      .050      .033      .040      .000    809.00   9008.93
  .004699      320.       301.      275.         1         8         0       .00   1131.77  10260.55


1490 NH CARD USED
*SECNO 2.770

3265 DIVIDED FLOW

3280 CROSS SECTION      2.77 EXTENDED      2.01 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     8999.0   10464.6  TYPE=      1  TARGET=     1465.600
        Right end of cross section extended 2.01 feet.  The right floodplain
        edge was mapped to STA 11458 using interpolated USGS quad
        contour data.
    2.770      5.91     815.51    815.51       .00    816.39       .89      1.28      -.13    819.50
  11568.0    2681.4     7372.9    1513.8     856.9     805.6     463.4     682.2     265.9    814.90
      .51      3.13       9.15      3.27      .050      .033      .050      .000    809.60   9145.72
  .006663      210.       188.      180.         0         8         0       .00   1278.08  10451.61


*SECNO 2.860
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 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


3280 CROSS SECTION      2.86 EXTENDED      1.78 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9305.2   10935.0  TYPE=      1  TARGET=     1629.800
        Right end of cross section extended 1.79 feet.  The right floodplain
        edge was mapped to STA 11112 using interpolated USGS quad
        contour data.
    2.860      6.68    818.48    818.48       .00    819.18       .71      2.24       .46    817.50
  10743.0    2835.5    5071.0    2836.5     942.6     541.6    1110.8     709.0     282.0    817.20
      .54      3.01      9.36      2.55      .050      .033      .050      .000    811.80   9373.19
  .004523      460.      497.      530.         0         8         0       .00   1561.80  10935.00


CCHV=     .100 CEHV=     .300
*SECNO 2.960

3265 DIVIDED FLOW

3280 CROSS SECTION      2.96 EXTENDED      .98 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
        Right end of cross section extended less than 1 foot.  The right
        floodplain edge was mapped to the end of the detailed cross
        section.
    2.960      6.58    821.28    821.28       .00    822.10       .82      2.74      -.22    820.60
  10743.0     972.0    6118.4    3652.6     357.6     660.1    1238.3     736.1     298.9    819.90
      .56      2.72      9.27      2.95      .045      .033      .050      .000    814.70   9259.48
  .005538      500.      508.      470.         0         5         0       .00   1489.78  11007.70


*SECNO 3.050

3265 DIVIDED FLOW

3280 CROSS SECTION      3.05 EXTENDED      .99 FEET


3470 ENCROACHMENT STATIONS=     8992.7   10935.0  TYPE=      1  TARGET=     1942.300
        Right end of cross section extended 1.01 feet.  The right floodplain
        edge was mapped to STA 11283 using interpolated USGS quad
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```
        contour data.
    3.050      5.90    824.00    823.47       .00    824.44       .44      2.31       .04    824.00
  10743.0     340.2    5900.4    4502.4     144.1     898.3    1370.0     760.8     313.0    824.30
      .58      2.36      6.57      3.29      .040      .033      .050      .000    818.10   9730.84
  .004392      520.      493.      430.         1        12         0       .00   1154.61  10935.00


*SECNO 3.150

3265 DIVIDED FLOW

3280 CROSS SECTION      3.15 EXTENDED      2.17 FEET


3470 ENCROACHMENT STATIONS=     8981.3   10645.0  TYPE=      1  TARGET=     1663.700
        Right end of cross section extended 2.18 feet.  The right floodplain
        edge was mapped to STA 11519 using interpolated USGS quad
        contour data.
    3.150      5.07    826.37    826.09       .00    827.21       .84      2.65       .12    826.30
  10743.0        .3    9760.2     982.5       1.0    1271.7     385.6     784.3     324.4    826.30
      .60       .30      7.68      2.55      .040      .033      .050      .000    821.30   9725.87
  .006211      495.      499.      505.         2        15         0       .00    833.10  10645.00


1490 NH CARD USED
*SECNO 3.240

3265 DIVIDED FLOW

3280 CROSS SECTION      3.24 EXTENDED       .76 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     8907.4   10270.0  TYPE=      1  TARGET=     1362.600
        Right end of cross section extended less than 1 foot.  The right
        floodplain edge was mapped to the end of the detailed cross
        section.
    3.240      5.16    829.36    829.36       .00    830.45      1.09      3.10       .06    828.10
  10743.0     870.7    8839.6    1032.7     263.2     969.7     318.9     802.4     333.1    828.40
      .62      3.31      9.12      3.24      .040      .033      .045      .000    824.20   9375.11
  .006278      425.      496.      510.         0         5         0       .00    718.02  10270.00


1490 NH CARD USED
*SECNO 3.340

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

3280 CROSS SECTION 3.34 EXTENDED .95 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 8881.9 10170.0 TYPE= 1 TARGET= 1288.100
Right end of cross section extended less than 1 foot. The right floodplain edge was mapped to the end of the detailed cross section.

3.340	5.65	832.45	832.45	.00	833.77	1.32	3.05	.09	830.20
10743.0	1310.6	8864.5	567.8	339.7	886.3	155.6	819.0	340.2	831.50
.63	3.86	10.00	3.65	.040	.033	.040	.000	826.80	9423.41
.006173	450.	497.	520.	0	8	0	.00	546.55	10170.00

1490 NH CARD USED
*SECNO 3.430
3280 CROSS SECTION 3.43 EXTENDED .73 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 8972.1 10486.7 TYPE= 1 TARGET= 1514.601
Right end of cross section extended less than 1 foot. The right floodplain edge was mapped to the end of the detailed cross section.

3.430	6.63	835.33	834.69	.00	835.99	.66	2.15	.07	833.10
10743.0	780.3	6683.4	3279.3	273.5	865.4	833.7	838.2	347.7	833.30
.66	2.85	7.72	3.93	.040	.033	.040	.000	828.70	9710.16
.003302	500.	500.	495.	2	8	0	.00	766.72	10476.88

CCHV= .100 CEHV= .300
*SECNO 3.520

3265 DIVIDED FLOW

3280 CROSS SECTION 3.52 EXTENDED 1.26 FEET

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

3470 ENCROACHMENT STATIONS= 8996.1 10615.0 TYPE= 1 TARGET= 1618.900
Right end of cross section extended 1.26 feet. The right floodplain
edge was mapped to STA 11294 using interpolated USGS quad
contour data.

3.520	6.15	837.75	837.56	.00	838.43	.68	2.44	.01	835.70
10743.0	1348.9	7664.1	1730.0	328.6	1021.1	546.7	859.4	357.1	837.20
.68	4.11	7.51	3.16	.040	.045	.045	.000	831.60	9541.29
.006789	525.	492.	440.	2	10	0	.00	971.79	10615.00

*SECNO 3.620

3470 ENCROACHMENT STATIONS= 8986.7 10490.0 TYPE= 1 TARGET= 1503.300

3.620	7.27	841.07	840.67	.00	841.70	.63	3.26	.00	838.50
10743.0	2586.4	6921.2	1235.4	539.1	950.3	416.2	881.0	368.0	840.00
.70	4.80	7.28	2.97	.040	.045	.045	.000	833.80	9557.69
.006426	470.	495.	520.	3	8	0	.00	932.31	10490.00

1490 NH CARD USED
*SECNO 3.710

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 8988.3 10420.0 TYPE= 1 TARGET= 1431.700

3.710	6.79	843.19	842.60	.00	844.07	.88	2.29	.07	842.00
10743.0	1457.5	7984.2	1301.3	468.5	945.1	305.3	901.6	377.5	842.30
.72	3.11	8.45	4.26	.040	.033	.040	.000	836.40	9610.22
.003612	480.	498.	510.	3	15	0	.00	730.98	10408.43

CCHV= .200 CEHV= .300
*SECNO 3.810

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 8999.7 10761.0 TYPE= 1 TARGET= 1761.300

3.810	6.22	845.82	845.82	.00	846.87	1.06	3.00	-.54	844.10
10743.0	974.6	7783.3	1985.2	252.8	825.7	562.0	921.0	386.3	846.80
.74	3.86	9.43	3.53	.040	.033	.045	.000	839.60	9683.11
.005955	515.	506.	485.	0	11	0	.00	797.46	10732.59

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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 3.900

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9669.1   11009.0  TYPE=      1  TARGET=     1339.900
     3.900      6.60    848.80    848.29       .00    849.52       .72      2.61       .03    846.00
   10743.0    3828.0    4885.6    2029.4     672.7     574.9     583.1     940.4     395.9    845.30
       .76      5.69      8.50      3.48      .040      .035      .045      .000    842.20   9676.78
   .004909      515.      478.      475.         2         5         0       .00    927.18  10909.23


CCHV=     .200 CEHV=     .400
*SECNO 4.000

3265 DIVIDED FLOW

3280 CROSS SECTION      4.00 EXTENDED       .44 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     8997.2   10903.0  TYPE=      1  TARGET=     1905.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=       851.50 ELREA=    100000.00

     4.000      6.24    851.44    850.28       .00    851.65       .21      2.02       .10    851.50
   10743.0        .0   10743.0        .0        .0    2939.1        .0     968.4     408.6 100000.00
       .80       .00      3.66       .00      .000      .040      .000      .000    845.20   9470.08
   .003266      550.      519.      420.         2        14         0       .00   1296.88  10903.00


*SECNO 4.090

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .62
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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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 854.20 ELREA= 853.80

4.090	5.39	853.69	852.84	.00	854.01	.32	2.32	.04	854.20
9028.0	.0	9028.0	.0	.0	2003.1	.0	996.7	421.9	853.80
.83	.00	4.51	.00	.000	.040	.000	.000	848.30	9592.57
.006048	480.	498.	520.	3	15	0	.00	1024.54	10618.01

*SECNO 4.150

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 855.70 ELREA= 856.10

4.150	5.54	855.24	854.25	.00	855.53	.29	1.52	.01	855.70
9028.0	.0	9028.0	.0	.0	2098.6	.0	1010.3	428.4	856.10
.85	.00	4.30	.00	.000	.040	.000	.000	849.70	9561.44
.004616	300.	290.	275.	2	10	0	.00	940.68	10556.62

*SECNO 4.180

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 856.80 ELREA= 856.50

4.180	5.35	856.25	855.28	.00	856.54	.29	1.01	.00	856.80
9028.0	.0	9028.0	.0	.0	2103.6	.0	1020.2	433.1	856.50
.86	.00	4.29	.00	.000	.040	.000	.000	850.90	9478.65
.005214	195.	205.	215.	2	15	0	.00	1036.99	10520.08

*SECNO 4.280

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 859.90 ELREA= 859.80

4.280	6.07	859.07	858.22	.00	859.34	.27	2.80	.00	859.90
9028.0	.0	9028.0	.0	.0	2175.6	.0	1044.9	446.2	859.80
.89	.00	4.15	.00	.000	.040	.000	.000	853.00	9266.16
.005923	480.	503.	510.	3	8	0	.00	1241.19	10507.35

```
   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 4.330
    4.330      5.31    860.31    859.16       .00    860.54       .22      1.19       .01    860.70
   9028.0        .0    9028.0        .0       .0    2387.6        .0    1057.9     453.1    860.80
      .91       .00      3.78       .00      .000      .040      .000      .000    855.00   9132.46
  .004020      230.      248.      250.         2        19         0       .00   1172.34  10304.81


*SECNO 4.370
    4.370      5.82    861.32    860.40       .00    861.58       .25      1.03       .01    861.40
   9028.0        .0    9028.0        .0       .0    2232.2        .0    1070.5     459.3    861.60
      .93       .00      4.04       .00      .000      .040      .000      .000    855.50   9106.96
  .004660      160.      238.      270.         2        12         0       .00   1104.90  10211.87


CCHV=     .100 CEHV=     .300
1490 NH CARD USED
*SECNO 4.470

3470 ENCROACHMENT STATIONS=     9106.1   11008.2  TYPE=      1  TARGET=     1902.101

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      863.10 ELREA=      863.50

    4.470      5.71    863.41    862.40       .00    863.62       .21      2.03       .00    863.10
   9028.0        .0    9028.0        .0       .0    2462.5        .0    1097.5     472.4    863.50
      .97       .00      3.67       .00      .000      .040      .000      .000    857.70   9106.10
  .003607      280.      500.      600.         2        14         0       .00   1172.68  10278.78


1490 NH CARD USED
*SECNO 4.560

3265 DIVIDED FLOW


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      866.10 ELREA=      866.10

    4.560      5.06    865.56    864.83       .00    865.86       .30      2.22       .03    866.10
   9028.0        .0    9028.0        .0       .0    2037.2        .0    1122.9     485.6    866.10
     1.00       .00      4.43       .00      .000      .036      .000      .000    860.50   9254.24
  .005383      400.      493.      510.         3        16         0       .00   1153.37  10434.38
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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

1490 NH CARD USED
*SECNO 4.650

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 868.30 ELREA= 868.30

4.650	4.71	868.21	867.54	.00	868.54	.32	2.67	.01	868.30
9028.0	.0	9028.0	.0	.0	1979.0	.0	1145.8	498.5	868.30
1.03	.00	4.56	.00	.000	.035	.000	.000	863.50	9611.07
.005362	550.	497.	370.	3	16	0	.00	1109.29	10734.68

1490 NH CARD USED
*SECNO 4.750

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 871.30 ELREA= 871.30

4.750	5.25	870.75	869.98	.00	871.02	.27	2.48	.01	871.30
9028.0	.0	9028.0	.0	.0	2162.0	.0	1169.4	512.2	871.30
1.06	.00	4.18	.00	.000	.034	.000	.000	865.50	9579.17
.004694	570.	496.	380.	2	10	0	.00	1307.73	10892.77

1490 NH CARD USED
*SECNO 4.840

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 874.30 ELREA= 874.80

4.840	4.74	873.34	872.77	.00	873.71	.37	2.66	.03	874.30
9028.0	.0	9028.0	.0	.0	1846.5	.0	1192.6	526.0	874.80
1.09	.00	4.89	.00	.000	.033	.000	.000	868.60	9589.58
.005875	490.	503.	505.	2	15	0	.00	1077.67	10672.92

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

1490 NH CARD USED
*SECNO 4.940

3265 DIVIDED FLOW

4.940	5.94	875.94	875.29	.00	876.28	.35	2.57	.00	876.10
9028.0	.0	9028.0	.0	.0	1908.2	.0	1214.0	538.0	876.70
1.12	.00	4.73	.00	.000	.032	.000	.000	870.00	9523.81
.004612	490.	497.	510.	2	8	0	.00	1020.90	10548.97

1490 NH CARD USED
*SECNO 5.030

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 878.80 ELREA= 878.60

5.030	6.18	877.98	877.13	.00	878.35	.37	2.06	.01	878.80
9028.0	.0	9028.0	.0	.0	1858.7	.0	1235.7	549.4	878.60
1.15	.00	4.86	.00	.000	.029	.000	.000	871.80	9531.18
.003693	540.	502.	430.	2	11	0	.00	962.83	10494.01

CCHV= .200 CEHV= .400
*SECNO 5.130

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 881.00 ELREA= 880.60

5.130	6.65	880.25	879.02	.00	880.67	.42	2.30	.02	881.00
9028.0	.0	9028.0	.0	.0	1737.4	.0	1256.0	558.2	880.60
1.17	.00	5.20	.00	.000	.045	.000	.000	873.60	9610.38
.005940	470.	492.	500.	1	15	0	.00	593.27	10203.65

*SECNO 5.220

3265 DIVIDED FLOW

5.220	6.25	883.05	881.38	.00	883.30	.25	2.59	.03	883.20
9028.0	.0	9028.0	.0	.0	2258.7	.0	1279.1	567.0	884.70
1.21	.00	4.00	.00	.000	.045	.000	.000	876.80	9450.87
.004545	430.	503.	485.	2	19	0	.00	935.21	10464.55

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 5.310

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 886.30 ELREA= 885.70

5.310	5.93	885.43	883.94	.00	885.69	.26	2.38	.01	886.30
9028.0	.0	9028.0	.0	.0	2196.3	.0	1304.3	577.7	885.70
1.24	.00	4.11	.00	.000	.045	.000	.000	879.50	9508.22
.005111	480.	494.	480.	2	19	0	.00	953.14	10504.26

*SECNO 5.410
3280 CROSS SECTION 5.41 EXTENDED .34 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 888.30 ELREA= 888.90

5.410	6.04	887.84	886.42	.00	888.09	.25	2.39	.00	888.30
9028.0	.0	9028.0	.0	.0	2264.4	.0	1329.9	588.6	888.90
1.28	.00	3.99	.00	.000	.045	.000	.000	881.80	9646.62
.004507	450.	500.	580.	2	15	0	.00	935.32	10581.94

*SECNO 5.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 891.20 ELREA= 890.10

5.500	5.62	889.92	888.96	.00	890.16	.24	2.07	.00	891.20
9028.0	.0	9028.0	.0	.0	2318.8	.0	1356.2	599.9	890.10
1.31	.00	3.89	.00	.000	.040	.000	.000	884.30	9389.35
.003833	330.	499.	540.	2	14	0	.00	1050.88	10440.23

*SECNO 5.540

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 891.80 ELREA= 891.10

5.540	5.88	890.88	890.10	.00	891.15	.27	.98	.01	891.80
9028.0	.0	9028.0	.0	.0	2165.0	.0	1367.1	605.4	891.10
1.32	.00	4.17	.00	.000	.040	.000	.000	885.00	9202.98
.005572	160.	212.	160.	2	12	0	.00	1168.85	10371.83

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 5.600

3470 ENCROACHMENT STATIONS= 9132.3 10649.2 TYPE= 1 TARGET= 1516.900
Left end of cross section extended approx. 1 foot. The left floodplain edge was mapped to the end of the detailed cross section.

5.600	5.92	892.22	891.23	.00	892.41	.19	1.25	.02	891.80
9028.0	.0	9028.0	.0	.0	2553.1	.0	1382.3	613.3	892.40
1.35	.00	3.54	.00	.000	.040	.000	.000	886.30	9132.30
.003708	140.	280.	250.	2	10	0	.00	1300.45	10432.75

*SECNO 5.670

3265 DIVIDED FLOW

3280 CROSS SECTION 5.67 EXTENDED 1.26 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .67

3470 ENCROACHMENT STATIONS= 9021.4 10024.2 TYPE= 1 TARGET= 1002.800
Left and right ends of the cross section were extended 2.75 and 1.25 feet, respectively. The left floodplain edge was interpolated to be 753 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.670	5.55	893.95	893.14	.00	894.19	.24	1.76	.02	893.90
7124.0	.0	7124.0	.0	.0	1804.9	.0	1402.2	623.8	100000.00
1.37	.00	3.95	.00	.000	.040	.000	.000	888.40	9021.40
.005154	170.	398.	470.	2	14	0	.00	993.14	10024.20

*SECNO 5.750
3280 CROSS SECTION 5.75 EXTENDED .44 FEET

3470 ENCROACHMENT STATIONS= 8875.2 10035.2 TYPE= 1 TARGET= 1160.000
Left end of the cross section extended 1.04 feet. The left

floodplain edge was interpolated to be 718 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.750	5.74	896.14	895.47	.00	896.37	.22	2.17	.00	895.80
7124.0	.0	7124.0	.0	.0	1881.6	.0	1419.4	633.8	100000.00
1.40	.00	3.79	.00	.000	.040	.000	.000	890.40	8875.20
.005478	260.	408.	420.	4	10	0	.00	1160.00	10035.20

*SECNO 5.830
3280 CROSS SECTION 5.83 EXTENDED 4.48 FEET

3470 ENCROACHMENT STATIONS= 9454.4 10124.0 TYPE= 1 TARGET= 669.600

Left and right ends of the cross section were extended 5.78 and 4.48 feet, respectively. The left floodplain edge was interpolated to be 1846 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.830	9.48	898.28	897.50	.00	898.62	.34	2.21	.05	897.10
7124.0	.0	7124.0	.0	.0	1513.4	.0	1435.2	642.3	100000.00
1.43	.00	4.71	.00	.000	.040	.000	.000	888.80	9454.40
.005443	300.	404.	370.	3	18	0	.00	669.60	10124.00

*SECNO 5.900
3280 CROSS SECTION 5.90 EXTENDED 3.17 FEET

3470 ENCROACHMENT STATIONS= 9122.9 10026.3 TYPE= 1 TARGET= 903.399

Left and right ends of the cross section were extended 1.56 and 3.16 feet, respectively. No USGS quad contour data was available at this cross section. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.900	5.66	900.36	899.54	.00	900.61	.24	1.97	.02	899.80
7124.0	.0	7124.0	.0	.0	1794.8	.0	1450.2	649.5	100000.00
1.46	.00	3.97	.00	.000	.040	.000	.000	894.70	9122.90
.004586	280.	395.	360.	2	11	0	.00	903.40	10026.30

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 5.940
3280 CROSS SECTION 5.94 EXTENDED 4.28 FEET

3470 ENCROACHMENT STATIONS= 9155.5 10043.4 TYPE= 1 TARGET= 887.900
CWSEL intersects left side of cross section. However, for consistency with flow overtopping the roadway, the floodplain was mapped to the end of the detailed cross section. The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.940	5.18	901.38	901.21	.00	901.88	.51	1.17	.11	900.50
7124.0	3008.6	4115.4	.0	850.8	597.6	.0	1458.0	653.7	100000.00
1.47	3.54	6.89	.00	.040	.035	.000	.000	896.20	9163.27
.006415	190.	219.	225.	2	9	0	.00	880.13	10043.40

CCHV= .300 CEHV= .500
*SECNO 5.970

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 905.50 ELREA= 905.50

The HEC-2 model requires a downstream section for use in calculating losses through the special bridge model (SR 85). The CWSEL calculated at this section is inconsistent with adjacent cross sections. The left edge of the floodplain was mapped to the end of the detailed cross section to be consistent with the weir flow calculated at the upstream face of the bridge. The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.970	6.35	904.35	904.35	.00	907.56	3.21	1.17	1.38	905.50
7124.0	.0	7124.0	.0	.0	495.7	.0	1462.3	655.8	905.50
1.47	.00	14.37	.00	.000	.025	.000	.000	898.00	9987.92
.006072	185.	194.	210.	0	11	0	.00	78.17	10066.08

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

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 903.61 , NOT 904.35 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.60	.00	78.00	2.00	570.00	.00	898.00	898.00

*SECNO 5.990
6870 D.S. ENERGY OF 907.56 IS HIGHER THAN COMPUTED ENERGY OF 906.78

3265 DIVIDED FLOW

3280 CROSS SECTION 5.99 EXTENDED 2.57 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.23

PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
906.78	906.78	.59	1460.	5711.	570.	570.	905.50	905.20	667.

The upstream section of the special bridge model for the structure at SR 85. Left end of cross section extended 2.57 feet. No USGS data available to extend this cross section. The left edge of the floodplain was mapped to the end of the detailed cross section due to the weir flow conditions. The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.990	9.37	907.37	.00	.00	907.56	.18	.00	.00	905.50
7124.0	3725.6	3167.3	231.1	1444.5	731.8	235.8	1463.8	656.8	905.50
1.47	2.58	4.33	.98	.016	.025	.016	.000	898.00	8957.70
.000339	45.	45.	45.	3	0	4	.00	1825.57	10845.50

*SECNO 6.040
3280 CROSS SECTION 6.04 EXTENDED 6.72 FEET

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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.68

3470 ENCROACHMENT STATIONS= 8987.8 10240.0 TYPE= 1 TARGET= 1252.200

Left and right ends of the cross section were extended 2.82 and 6.72 feet, respectively. The left floodplain edge was interpolated to be 1282 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

6.040	9.62	907.62	904.05	.00	907.65	.02	.04	.05	903.30
7124.0	4635.0	1719.0	769.9	4191.8	1017.6	718.2	1487.8	665.4	903.40
1.53	1.11	1.69	1.07	.040	.035	.040	.000	898.00	8987.80
.000119	260.	244.	210.	2	21	0	.00	1252.20	10240.00

CCHV= .100 CEHV= .300

*SECNO 6.080

3280 CROSS SECTION 6.08 EXTENDED 4.35 FEET

3470 ENCROACHMENT STATIONS= 8994.3 10480.0 TYPE= 1 TARGET= 1485.700

Left and right ends of the cross section were extended 1.75 and 4.35 feet, respectively. The left floodplain edge was interpolated to be 818 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

6.080	8.65	907.65	904.37	.00	907.68	.03	.03	.00	904.50
7124.0	2979.6	1439.0	2705.4	3019.5	797.8	2113.2	1521.5	673.2	904.10
1.59	.99	1.80	1.28	.040	.035	.040	.000	899.00	8994.30
.000143	250.	248.	240.	2	11	0	.00	1485.70	10480.00

*SECNO 6.180

3280 CROSS SECTION 6.18 EXTENDED .40 FEET

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 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


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .25


3470 ENCROACHMENT STATIONS=     9434.9   10670.0  TYPE=      1  TARGET=     1235.100
        Right end of cross section extended less than 1 foot.  No USGS
        quad contour data available.  To maintain consistency between
        adjacent cross sections, the right side of the cross section between
        the mainstem and the tributary will be mapped as Zone A.
   6.180      8.00    908.10    907.40       .00    908.33       .23       .59       .06    906.80
  7124.0    1669.5    3264.2    2190.3     688.4     654.3     907.4    1568.2     688.8    906.30
    1.62      2.43      4.99      2.41      .040      .035      .040      .000    900.10   9434.90
 .002249      560.      500.      420.         2         9         0       .00   1235.10  10670.00


*SECNO 6.270
3280 CROSS SECTION      6.27 EXTENDED       .63 FEET


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     8992.3   10649.1  TYPE=      1  TARGET=     1656.800
        Right end of cross section extended less than 1 foot.  No USGS
        quad contour data available.  To maintain consistency between
        adjacent cross sections, the right side of the cross section between
        the mainstem and the tributary will be mapped as Zone A.
   6.270      7.43    910.53    910.53       .00    911.29       .77      2.29      -.43    908.00
  7124.0    1103.7    3989.5    2030.8     347.3     443.3     693.9    1589.1     701.0    908.80
    1.64      3.18      9.00      2.93      .045      .035      .040      .000    903.10   9683.99
 .004657      560.      500.      430.         0         9         0       .00    965.11  10649.10


*SECNO 6.370
3280 CROSS SECTION      6.37 EXTENDED      2.61 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     8994.9   10645.8  TYPE=      1  TARGET=     1650.899
        Right end of cross section extended 2.61 feet.  No USGS quad
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        contour data available.  To maintain consistency between adjacent
        cross sections, the right side of the cross section between the
        mainstem and the tributary will be mapped as Zone A.
   6.370      6.31    912.91    912.91       .00    913.64       .74      2.28      -.02    912.00
  7124.0    1197.3    3898.2    2028.4     369.6     439.3     682.7    1605.1     711.1    911.50
    1.67      3.24      8.87      2.97      .045      .035      .040      .000    906.60   9689.88
 .004735      590.      497.      390.         0         9         0       .00    955.92  10645.80


*SECNO 6.460
3280 CROSS SECTION      6.46 EXTENDED      3.01 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9322.2   10648.6  TYPE=      1  TARGET=     1326.399
        Right end of cross section extended 3.01 feet.  No USGS quad
        contour data available.  To maintain consistency between adjacent
        cross sections, the right side of the cross section between the
        mainstem and the tributary will be mapped as Zone A.
   6.460      5.31    915.61    915.61       .00    916.28       .67      2.76      -.20    913.50
  7124.0     944.6    5132.6    1046.8     330.0     678.3     422.5    1621.7     722.3    915.20
    1.69      2.86      7.57      2.48      .050      .035      .040      .000    910.30   9632.62
 .005576      490.      494.      500.         0        10         0       .00   1015.98  10648.60


*SECNO 6.550
3280 CROSS SECTION      6.55 EXTENDED      3.26 FEET


3470 ENCROACHMENT STATIONS=     8991.8   10216.9  TYPE=      1  TARGET=     1225.101
   6.550      5.76    917.86    917.34       .00    918.63       .76      2.32       .03    916.30
  7124.0     656.6    5921.1     546.3     268.7     778.5     200.6    1637.1     731.2    916.30
    1.71      2.44      7.61      2.72      .050      .035      .040      .000    912.10   9672.02
 .003988      480.      501.      510.         3         5         0       .00    544.88  10216.90


*SECNO 6.650
3280 CROSS SECTION      6.65 EXTENDED      2.90 FEET


3470 ENCROACHMENT STATIONS=     9562.7   10205.6  TYPE=      1  TARGET=      642.899
   6.650      6.69    920.49    920.47       .00    921.46       .97      2.77       .06    920.20
  7124.0    1299.9    5824.1        .0     380.8     678.3        .0    1650.2     737.4    920.70
    1.73      3.41      8.59       .00      .050      .035      .000      .000    913.80   9591.07
 .007791      500.      498.      480.         1         9         0       .00    535.86  10126.93
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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 6.740
3280 CROSS SECTION 6.74 EXTENDED 1.14 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.56

3470 ENCROACHMENT STATIONS= 9512.6 10238.8 TYPE= 1 TARGET= 726.200

6.740	6.14	923.24	921.84	.00	923.74	.50	2.23	.05	921.70
7124.0	245.0	6868.2	10.8	148.4	1193.4	13.3	1663.7	743.5	922.80
1.75	1.65	5.76	.81	.050	.035	.040	.000	917.10	9670.66
.003201	460.	494.	530.	2	19	0	.00	568.14	10238.80

*SECNO 6.840
3280 CROSS SECTION 6.84 EXTENDED 1.15 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 9730.2 10360.2 TYPE= 1 TARGET= 630.000

6.840	6.75	925.05	925.01	.00	926.08	1.03	2.19	.16	923.30
7124.0	1055.4	5383.4	685.2	319.9	585.7	215.7	1677.9	749.9	924.00
1.77	3.30	9.19	3.18	.050	.035	.040	.000	918.30	9730.20
.005978	520.	499.	480.	3	8	0	.00	551.35	10281.55

*SECNO 6.930
3280 CROSS SECTION 6.93 EXTENDED 1.95 FEET

3470 ENCROACHMENT STATIONS= 8992.0 10438.1 TYPE= 1 TARGET= 1446.100

6.930	7.85	927.65	927.02	.00	928.50	.85	2.40	.02	926.50
7124.0	525.4	6495.0	103.5	263.1	843.2	58.3	1690.7	756.3	926.70
1.79	2.00	7.70	1.78	.050	.035	.040	.000	919.80	9621.17
.004164	475.	489.	500.	2	8	0	.00	596.48	10217.65

*SECNO 7.020

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

3280 CROSS SECTION 7.02 EXTENDED 1.18 FEET

3470 ENCROACHMENT STATIONS= 9398.5 10385.3 TYPE= 1 TARGET= 986.800

7.020	7.98	929.98	929.23	.00	930.56	.57	2.03	.03	929.20
7124.0	960.5	6090.5	73.0	363.0	940.0	52.0	1705.1	763.9	929.50
1.81	2.65	6.48	1.40	.045	.035	.040	.000	922.00	9530.23
.003982	480.	501.	510.	2	11	0	.00	735.86	10365.56

*SECNO 7.120

3265 DIVIDED FLOW

3280 CROSS SECTION 7.12 EXTENDED .86 FEET

3470 ENCROACHMENT STATIONS= 9522.8 10351.2 TYPE= 1 TARGET= 828.400

7.120	7.65	932.35	932.18	.00	933.15	.80	2.53	.07	932.70
7124.0	251.2	6287.6	585.2	110.5	832.0	196.3	1719.0	771.4	931.90
1.83	2.27	7.56	2.98	.045	.035	.040	.000	924.70	9645.96
.006318	430.	495.	520.	3	12	0	.00	639.04	10334.33

*SECNO 7.210

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.80

7.210	7.57	934.27	932.54	.00	934.68	.41	1.49	.04	931.30
7124.0	542.6	5823.9	757.5	221.2	1051.4	298.8	1734.4	777.9	931.90
1.86	2.45	5.54	2.54	.045	.035	.040	.000	926.70	9770.87
.001941	465.	506.	480.	3	15	0	.00	529.05	10338.71

*SECNO 7.300
3280 CROSS SECTION 7.30 EXTENDED .71 FEET

3301 HV CHANGED MORE THAN HVINS

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

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9425.5 10327.8 TYPE= 1 TARGET= 902.300

7.300	6.71	935.81	935.81	.00	937.42	1.61	4.72	-2.27	936.00
7124.0	.0	6382.4	741.6	.0	600.5	143.6	1747.0	782.1	934.50
1.87	.00	10.63	5.16	.000	.035	.040	.000	929.10	9945.09
.009904	560.	482.	400.	0	15	0	.00	247.47	10192.56

*SECNO 7.400
3280 CROSS SECTION 7.40 EXTENDED 2.01 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.53

3470 ENCROACHMENT STATIONS= 8987.3 10285.1 TYPE= 1 TARGET= 1297.800

7.400	9.11	939.71	938.59	.00	940.50	.79	3.00	.08	938.70
7124.0	587.3	6536.7	.0	200.2	883.5	.0	1757.6	785.6	940.20
1.89	2.93	7.40	.00	.045	.035	.000	.000	930.60	9738.71
.004204	490.	508.	520.	3	11	0	.00	365.15	10103.87

*SECNO 7.450
3280 CROSS SECTION 7.45 EXTENDED 1.55 FEET

3470 ENCROACHMENT STATIONS= 9827.5 10090.5 TYPE= 1 TARGET= 263.000

7.450	8.95	940.75	938.39	.00	941.26	.51	.73	.03	937.00
7124.0	2230.6	4893.4	.0	528.9	772.5	.0	1764.5	787.4	100000.00
1.90	4.22	6.33	.00	.045	.035	.000	.000	931.80	9827.50
.002214	250.	253.	255.	3	19	0	.00	259.26	10086.76

*SECNO 7.490
3280 CROSS SECTION 7.49 EXTENDED .48 FEET

3470 ENCROACHMENT STATIONS= 9511.4 10150.2 TYPE= 1 TARGET= 638.800

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
7.490	8.18	941.38	941.04	.00	941.93	.55	.66	.01	941.00
7124.0	1868.0	5001.3	254.7	564.8	743.2	66.5	1772.0	789.6	939.20
1.92	3.31	6.73	3.83	.045	.035	.040	.000	933.20	9586.32
.003182	240.	245.	255.	3	20	0	.00	517.40	10103.72

*SECNO 7.590

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

3470 ENCROACHMENT STATIONS= 9768.9 10172.9 TYPE= 1 TARGET= 404.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 943.10 ELREA= 944.20

7.590	7.95	943.25	942.24	.00	944.39	1.14	2.29	.18	943.10
7124.0	1.0	7123.0	.0	2.1	829.6	.0	1784.5	793.9	944.20
1.93	.48	8.59	.00	.045	.035	.000	.000	935.30	9858.64
.006724	480.	496.	505.	3	11	0	.00	241.61	10100.25

*SECNO 7.700
3280 CROSS SECTION 7.70 EXTENDED .16 FEET

3470 ENCROACHMENT STATIONS= 9767.0 10163.1 TYPE= 1 TARGET= 396.100

7.700	8.15	946.65	945.58	.00	947.30	.65	2.86	.05	945.50
7124.0	768.2	6355.8	.0	243.3	942.1	.0	1798.2	798.1	100000.00
1.96	3.16	6.75	.00	.045	.035	.000	.000	938.50	9781.74
.003749	620.	592.	575.	2	12	0	.00	367.26	10149.00

*SECNO 7.780
3280 CROSS SECTION 7.78 EXTENDED .48 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 948.30 ELREA= 949.00

7.780	8.18	948.28	947.15	.00	949.19	.92	1.81	.08	948.30
7124.0	.0	7124.0	.0	.0	927.0	.0	1808.1	800.9	949.00
1.97	.00	7.68	.00	.000	.035	.000	.000	940.10	9860.64
.005350	420.	404.	380.	3	8	0	.00	236.84	10097.48

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 7.820
3280 CROSS SECTION 7.82 EXTENDED 1.69 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 949.60 ELREA= 952.30

7.820	8.58	949.58	948.15	.00	950.39	.80	1.18	.01	949.60
7124.0	.0	7124.0	.0	.0	990.4	.0	1813.4	802.2	952.30
1.98	.00	7.19	.00	.000	.035	.000	.000	941.00	9842.49
.004563	230.	240.	255.	2	12	0	.00	247.57	10090.06

*SECNO 7.870
3280 CROSS SECTION 7.87 EXTENDED .43 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 947.90 ELREA= 953.70

7.870	8.33	950.73	949.07	.00	951.46	.73	1.07	.01	947.90
7124.0	520.7	6603.3	.0	124.1	940.6	.0	1819.3	803.7	953.70
1.99	4.19	7.02	.00	.045	.035	.000	.000	942.40	9865.69
.003967	240.	252.	260.	2	15	0	.00	276.56	10142.25

*SECNO 7.970

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 952.60 ELREA= 951.50

7.970	6.58	952.58	950.23	.00	952.96	.38	1.46	.04	952.60
7124.0	.0	6908.8	215.2	.0	1384.9	100.2	1833.9	807.5	951.50
2.02	.00	4.99	2.15	.000	.040	.040	.000	946.00	9949.77
.002308	430.	502.	510.	2	8	0	.00	388.72	10414.65

*SECNO 8.010

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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .61

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 954.30 ELREA= 953.20

8.010	6.55	953.25	952.21	.00	953.96	.71	.90	.10	954.30
7124.0	.0	6896.6	227.4	.0	1008.6	76.7	1840.9	809.5	953.20
2.03	.00	6.84	2.96	.000	.040	.040	.000	946.70	9973.74
.006190	260.	240.	200.	2	17	0	.00	372.53	10368.12

*SECNO 8.060

3265 DIVIDED FLOW

8.060	7.10	954.80	953.48	.00	955.37	.57	1.40	.01	953.10
7124.0	348.8	6678.6	96.6	126.8	1073.4	50.0	1848.0	812.0	954.40
2.04	2.75	6.22	1.93	.045	.040	.040	.000	947.70	9857.96
.004635	300.	265.	215.	2	8	0	.00	468.28	10410.66

*SECNO 8.150

3280 CROSS SECTION 8.15 EXTENDED .65 FEET

3470 ENCROACHMENT STATIONS= 9801.9 10408.1 TYPE= 1 TARGET= 606.199

8.150	7.55	956.95	955.28	.00	957.39	.44	2.00	.01	955.20
7124.0	1994.1	5129.9	.0	402.9	941.9	.0	1862.9	816.7	958.30
2.07	4.95	5.45	.00	.045	.040	.000	.000	949.40	9828.78
.003537	550.	490.	430.	2	12	0	.00	351.74	10180.52

*SECNO 8.250

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 9847.8 11007.2 TYPE= 1 TARGET= 1159.400

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 955.70 ELREA= 958.80

8.250	7.49	958.59	957.86	.00	959.83	1.24	2.20	.24	955.70
7124.0	641.0	6483.0	.0	132.5	700.7	.0	1875.1	819.9	958.80
2.08	4.84	9.25	.00	.040	.035	.000	.000	951.10	9861.61
.005727	480.	491.	495.	2	15	0	.00	214.49	10076.11

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

*SECNO 8.340
3280 CROSS SECTION 8.34 EXTENDED 2.08 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 964.10 ELREA= 963.70

8.340	8.49	961.59	960.41	.00	962.85	1.27	3.01	.01	964.10
7124.0	.0	7124.0	.0	.0	789.0	.0	1884.3	822.1	963.70
2.10	.00	9.03	.00	.000	.035	.000	.000	953.10	9900.32
.006399	450.	500.	530.	3	5	0	.00	180.52	10080.83

*SECNO 8.430

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.66

3470 ENCROACHMENT STATIONS= 9673.1 10126.8 TYPE= 1 TARGET= 453.700

8.430	8.89	963.99	962.28	.00	964.59	.60	1.67	.07	961.80
7124.0	871.9	5910.0	342.0	260.5	892.2	93.8	1895.7	824.8	961.50
2.12	3.35	6.62	3.65	.040	.035	.040	.000	955.10	9778.08
.002326	450.	491.	530.	2	15	0	.00	302.12	10080.20

*SECNO 8.530

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .65

3470 ENCROACHMENT STATIONS= 9005.7 10114.4 TYPE= 1 TARGET= 1108.700

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 966.70 ELREA= 964.00

8.530	7.69	965.29	963.34	.00	965.88	.59	1.28	.00	966.70
5054.0	.0	4761.1	292.9	.0	756.3	89.7	1907.8	827.7	964.00
2.14	.00	6.30	3.27	.000	.035	.040	.000	957.60	9909.95
.002757	400.	507.	600.	3	11	0	.00	202.39	10112.34

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 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 8.620

3470 ENCROACHMENT STATIONS=     9958.0   10295.6  TYPE=      1  TARGET=      337.600
    8.620      7.31    966.71    965.51       .00    967.53       .82      1.58       .07    967.70
   5054.0        .0    4231.9     822.1        .0     549.4     196.0    1916.8     830.0    963.80
     2.16       .00      7.70      4.19      .000      .035      .040      .000    959.40   9973.76
  .003657      475.      492.      505.         2        15         0       .00    197.23  10170.99


CCHV=     .200 CEHV=     .400
*SECNO 8.720

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9807.6   10338.4  TYPE=      1  TARGET=      530.801
    8.720      6.14    968.64    966.45       .00    968.93       .29      1.29       .11    967.40
   5054.0      65.3    4980.8      7.9      42.8    1155.0       9.7    1927.8     833.0    968.00
     2.20      1.53      4.31       .82      .050      .040      .040      .000    962.50   9827.22
  .002058      650.      500.      380.         2        11         0       .00    348.46  10175.68


*SECNO 8.810

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .51


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      971.30 ELREA=      974.00

    8.810      6.36    970.26    969.47       .00    971.18       .92      2.00       .25    971.30
   5054.0        .0    5054.0        .0        .0     657.4        .0    1938.3     836.0    974.00
     2.21       .00      7.69       .00      .000      .040      .000      .000    963.90   9845.79
  .008014      480.      492.      470.         2        15         0       .00    184.56  10030.35


*SECNO 8.910

3301 HV CHANGED MORE THAN HVINS
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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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

3470 ENCROACHMENT STATIONS= 9788.4 10998.8 TYPE= 1 TARGET= 1210.399

8.910	7.33	973.03	971.10	.00	973.43	.39	2.14	.11	969.30
5054.0	1741.4	3312.6	.0	435.0	604.9	.0	1948.1	838.5	975.10
2.24	4.00	5.48	.00	.050	.040	.000	.000	965.70	9824.40
.002927	490.	502.	495.	1	15	0	.00	255.58	10079.98

CCHV= .100 CEHV= .300
*SECNO 9.000

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

9.000	6.27	974.77	974.37	.00	975.86	1.09	2.22	.21	973.70
5054.0	145.1	4385.0	523.9	58.0	497.0	111.0	1957.7	841.5	972.40
2.26	2.50	8.82	4.72	.045	.035	.040	.000	968.50	9854.54
.006124	510.	487.	485.	3	15	0	.00	259.07	10113.61

CCHV= .200 CEHV= .400
*SECNO 9.090

3301 HV CHANGED MORE THAN HVINS

9.090	6.56	977.66	976.09	.00	978.11	.44	2.12	.13	975.80
5054.0	392.2	4548.5	113.3	135.9	816.4	72.5	1967.3	845.2	977.00
2.28	2.89	5.57	1.56	.045	.040	.040	.000	971.10	9798.52
.003298	530.	495.	465.	2	16	0	.00	395.75	10194.27

*SECNO 9.190

3470 ENCROACHMENT STATIONS= 9874.3 11012.7 TYPE= 1 TARGET= 1138.400

9.190	6.37	979.67	979.00	.00	980.32	.64	2.13	.08	977.50
5054.0	879.2	4003.1	171.7	216.8	576.2	48.6	1977.8	848.9	979.20
2.31	4.05	6.95	3.53	.050	.040	.040	.000	973.30	9883.27
.005424	450.	494.	505.	2	10	0	.00	273.05	10156.32

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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 9.280

3470 ENCROACHMENT STATIONS=     9804.4   11007.5  TYPE=      1  TARGET=     1203.100
    9.280      6.34    982.04    981.23       .00    982.86       .82      2.49       .05    979.70
   5054.0     888.2    3827.2     338.5     212.6     479.7      72.9    1986.7     851.7    978.90
     2.32      4.18      7.98      4.64      .045      .035      .040      .000    975.70   9823.27
  .004739      440.      500.      540.         2        15         0       .00    239.33  10062.60


*SECNO 9.380

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      986.20 ELREA=      981.60

    9.380      6.77    984.47    983.67       .00    985.23       .75      2.36       .01    986.20
   5054.0        .0    3089.5    1964.5        .0     384.4     407.2    1995.5     854.3    981.60
     2.35       .00      8.04      4.82      .000      .035      .045      .000    977.70   9948.50
  .004815      410.      499.      515.         2        11         0       .00    223.22  10171.72


*SECNO 9.470
    9.470      6.93    986.53    986.05       .00    987.64      1.11      2.31       .11    983.30
   5054.0     697.6    3713.5     642.9     174.3     388.3     158.0    2004.0     856.8    984.40
     2.36      4.00      9.56      4.07      .045      .035      .045      .000    979.60   9889.32
  .004628      500.      492.      480.         2        11         0       .00    219.68  10109.00


CCHV=     .200 CEHV=     .400
*SECNO 9.560

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.60

    9.560      6.53    988.83    986.47       .00    989.11       .28      1.30       .17    988.30
   5054.0        .5    4937.5     116.0        .8    1145.1      95.3    2015.3     860.3    987.10
     2.39       .57      4.31      1.22      .045      .040      .050      .000    982.30   9809.37
  .001804      420.      504.      540.         1        14         0       .00    382.93  10192.30


*SECNO 9.660
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 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


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .49


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      992.00 ELREA=      993.00

    9.660      5.69    990.99    990.26       .00    991.59       .60      2.35       .13    992.00
   5054.0        .0    5054.0       .0        .0     812.3        .0    2027.0     864.1    993.00
     2.42       .00      6.22       .00      .000      .040      .000      .000    985.30   9909.66
  .007570      530.      503.      390.         6        18         0       .00    303.29  10212.94


CCHV=     .100 CEHV=     .300
*SECNO -5.600
START TRIB COMP
    -5.600     5.600   892.217

3470 ENCROACHMENT STATIONS=     9132.3   10649.2  TYPE=      1  TARGET=     1516.900
   -5.600      5.92    892.22       .00       .00    892.41       .19      1.04      1.44    891.80
   9028.0        .0    9028.0       .0        .0    2551.8        .0    2037.8     869.2    892.40
     2.44       .00      3.54       .00      .000      .040      .000      .000    886.30   9132.30
  .003714      140.      280.      250.         0         0         0       .00   1300.41  10432.71


CCHV=     .100 CEHV=     .300
*SECNO  .060

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .26


3470 ENCROACHMENT STATIONS=     9974.7   11016.1  TYPE=      1  TARGET=     1041.399
     .060      5.57    893.27    892.83       .00    893.66       .38      1.19       .06    891.70
   2263.0        .0    1544.8     718.2        .0     266.0     303.9    2049.7     875.7    892.30
     2.46       .00      5.81      2.36      .000      .040      .040      .000    887.70   9974.70
  .003498      320.      335.      300.         2        12         0       .00    409.58  10384.28


*SECNO  .140

3470 ENCROACHMENT STATIONS=     9977.2   11008.8  TYPE=      1  TARGET=     1031.600
     .140      6.01    895.11    894.35       .00    895.76       .65      2.03       .08    893.80
   2263.0        .0    2251.1      11.9        .0     347.0       9.4    2054.2     878.5    894.50
     2.48       .00      6.49      1.26      .000      .040      .045      .000    889.10   9977.20
  .007070      250.      394.      480.         1        12         0       .00    143.90  10121.10
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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 .180

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.86

3470 ENCROACHMENT STATIONS= 9984.5 11028.4 TYPE= 1 TARGET= 1043.900

.180	7.22	896.22	895.16	.00	896.43	.20	.62	.04	893.30
2263.0	.0	979.5	1283.5	.0	206.3	527.0	2056.5	879.5	894.20
2.49	.00	4.75	2.44	.000	.040	.045	.000	889.00	9984.50
.002033	250.	211.	160.	1	8	0	.00	317.09	10301.59

*SECNO .210

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .50

3470 ENCROACHMENT STATIONS= 9985.1 11019.3 TYPE= 1 TARGET= 1034.200

.210	6.52	896.82	896.66	.00	897.44	.61	.89	.12	895.30
2263.0	.0	1015.5	1247.5	.0	125.6	290.1	2058.8	880.5	895.10
2.50	.00	8.08	4.30	.000	.040	.040	.000	890.30	9985.10
.008193	235.	190.	160.	3	9	0	.00	242.97	10228.07

*SECNO .290

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.78

3470 ENCROACHMENT STATIONS= 9989.6 11015.3 TYPE= 1 TARGET= 1025.700

.290	7.05	898.75	897.68	.00	899.05	.30	1.58	.03	896.90
2263.0	.0	1749.8	513.2	.0	361.7	228.5	2063.4	882.8	897.00
2.53	.00	4.84	2.25	.000	.040	.045	.000	891.70	9989.60
.002589	370.	398.	405.	1	10	0	.00	255.92	10245.52

*SECNO .360

3470 ENCROACHMENT STATIONS= 9963.3 10993.2 TYPE= 1 TARGET= 1029.900

.360	6.82	899.82	899.17	.00	900.09	.27	1.04	.00	897.70
2263.0	.0	1387.6	875.4	.0	274.9	428.9	2069.5	886.0	898.30
2.56	.00	5.05	2.04	.000	.040	.045	.000	893.00	9963.30
.002561	230.	398.	420.	2	12	0	.00	415.36	10378.66

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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  .440

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9978.5   11008.6  TYPE=      1  TARGET=     1030.100
     .440      5.91    901.41    901.41       .00    901.99       .58      2.46      -.61    900.40
   2263.0        .0    1326.8     936.2        .0     176.3     304.0    2075.0     889.8    900.20
     2.58       .00      7.53      3.08      .000      .040      .040      .000    895.50   9978.50
  .006020      420.      413.      400.         0         9         0       .00    410.03  10417.96


CCHV=     .200 CEHV=     .400
*SECNO  .520

3470 ENCROACHMENT STATIONS=     9965.5   10590.4  TYPE=      1  TARGET=      624.900
     .520      7.11    903.51    902.89       .00    903.73       .23      1.68       .07    902.50
   2263.0        .0    1106.9    1156.1        .0     237.8     412.5    2080.0     893.3    902.20
     2.60       .00      4.65      2.80      .000      .040      .040      .000    896.40   9965.50
  .003384      415.      393.      380.         2         8         0       .00    378.09  10343.59


*SECNO  .590

3470 ENCROACHMENT STATIONS=     9756.4   10434.2  TYPE=      1  TARGET=      677.800
     .590      6.17    904.47    903.95       .00    904.63       .16       .88       .01    903.00
   2263.0     527.5     877.2     858.3     271.6     193.7     441.3    2086.5     897.4    902.70
     2.64      1.94      4.53      1.95      .040      .040      .040      .000    898.30   9772.54
  .001826      455.      394.      325.         3        13         0       .00    605.30  10377.84


*SECNO  .670
3280 CROSS SECTION       .67 EXTENDED      5.11 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .57


3470 ENCROACHMENT STATIONS=     9610.0   11363.3  TYPE=      1  TARGET=     1753.300
```

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 904.50 ELREA= 906.80

.670	5.81	905.41	904.91	.00	906.05	.63	1.23	.19	904.50
2263.0	238.9	2024.1	.0	110.8	301.8	.0	2092.1	900.7	906.80
2.66	2.16	6.71	.00	.040	.040	.000	.000	899.60	9772.86
.005600	110.	409.	550.	1	11	0	.00	280.92	10053.79

CCHV= .300 CEHV= .500
*SECNO .680
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9580.0 11032.7 TYPE= 1 TARGET= 1452.700

.680	7.06	908.34	908.34	.00	909.07	.73	.04	.08	906.28
2263.0	393.3	1748.8	120.9	241.6	225.5	57.8	2093.0	901.4	906.28
2.66	1.63	7.76	2.09	.016	.013	.016	.000	901.28	9580.00
.000486	80.	77.	75.	0	12	0	.00	483.00	10063.00

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	3	.013	.40	3.00	.00	5.00	10.00	47.00	12	1	901.42	901.28

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO .700

SPECIAL CULVERT OUTLET CONTROL + WEIR FLOW EG = 908.38
5150, EG OF 908.38 LESS THAN XEG OF 909.07

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.92

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
913.14	913.70	.00	2090.	180.	4.218	150.0	907.30	1376.

3470 ENCROACHMENT STATIONS= 9560.0 11022.6 TYPE= 1 TARGET= 1462.600

.700	7.51	908.93	.00	.00	909.07	.14	.00	.00	906.42
2263.0	1020.2	1012.2	230.6	679.5	240.0	181.3	2093.8	902.0	906.42

2.66	1.50	4.22	1.27	.016	.013	.016	.000	901.42	9560.00
.000132	47.	47.	47.	2	0	0	.00	623.31	10183.31

```
   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  .790

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .23

3470 ENCROACHMENT STATIONS=     9611.0   10420.0  TYPE=      1  TARGET=     809.000
     .790      7.58    909.18    908.53       .00    909.34       .17       .25       .01    908.80
   2263.0     136.8     764.5    1361.8     115.0     171.4     531.3    2104.0     908.9    906.50
     2.70      1.19      4.46      2.56      .040      .040      .040      .000    901.60   9724.13
  .002411      580.      485.      320.         2         9         0       .00    695.87  10420.00

CCHV=     .100 CEHV=     .300
*SECNO  .880

3265 DIVIDED FLOW

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .69

3470 ENCROACHMENT STATIONS=     9928.1   11014.4  TYPE=      1  TARGET=    1086.301
     .880      7.33    910.63    910.27       .00    910.99       .36      1.59       .06    909.40
   2263.0      89.8     999.9    1173.3      35.4     164.3     332.6    2111.1     914.4    909.10
     2.73      2.53      6.08      3.53      .040      .040      .040      .000    903.30   9934.09
  .005008      520.      506.      420.         2         9         0       .00    340.28  10328.33

*SECNO  .930

3470 ENCROACHMENT STATIONS=     9894.2   11009.3  TYPE=      1  TARGET=    1115.100
     .930      7.82    911.72    911.16       .00    912.06       .34      1.07       .00    911.60
   2263.0       1.0    1105.6    1156.4       2.5     195.8     330.6    2113.9     916.2    909.40
     2.75       .41      5.65      3.50      .040      .040      .040      .000    903.90   9921.68
  .004184      240.      233.      235.         2         6         0       .00    324.59  10246.26

CCHV=     .200 CEHV=     .400
*SECNO  .980

3470 ENCROACHMENT STATIONS=     9877.2   11008.7  TYPE=      1  TARGET=    1131.500
     .980      7.20    912.70    911.86       .00    913.03       .33       .97       .00    910.80
   2263.0     303.7    1018.6     940.7     102.1     183.7     242.8    2117.1     917.8    910.60
     2.76      2.97      5.55      3.87      .040      .040      .040      .000    905.50   9919.44
  .003364      280.      266.      250.         2        14         0       .00    234.43  10153.88
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   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 1.030

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      915.10 ELREA=      911.00

    1.030      6.21    913.51    911.94       .00    913.73       .22       .67       .02    915.10
   2263.0        .0    1021.6    1241.4        .0     243.3     375.3    2120.4     919.2    911.00
     2.78       .00      4.20      3.31      .000      .040      .040      .000    907.30   9978.43
  .002131      200.      273.      250.         2        23         0       .00    240.87  10219.30


CCHV=     .100 CEHV=     .300
*SECNO 1.070
    1.070      6.77    914.07    913.01       .00    914.25       .18       .52       .00    915.60
   2263.0        .0     497.5    1765.5        .0     120.1     550.3    2123.7     920.6    911.90
     2.80       .00      4.14      3.21      .000      .040      .040      .000    907.30   9972.37
  .002557      195.      232.      220.         2         9         0       .00    324.35  10296.72


*SECNO 1.170

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .68


3470 ENCROACHMENT STATIONS=     9826.5   11019.7  TYPE=      1  TARGET=     1193.200
    1.170      5.99    915.99    915.46       .00    916.31       .33      2.02       .04    913.80
   2263.0     543.8     729.3     989.9     135.0     130.8     242.8    2130.4     924.2    914.70
     2.83      4.03      5.58      4.08      .040      .040      .040      .000    910.00   9878.75
  .005532      530.      506.      490.         3        14         0       .00    305.17  10183.92


*SECNO 1.260

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.45


3470 ENCROACHMENT STATIONS=     9837.1   11007.2  TYPE=      1  TARGET=     1170.101
    1.260      6.80    917.90    917.08       .00    918.09       .19      1.76       .01    916.10
   2263.0     829.6     810.2     623.2     269.2     180.4     248.5    2137.3     928.2    915.70
     2.87      3.08      4.49      2.51      .040      .040      .040      .000    911.10   9837.10
  .002639      490.      489.      500.         2         5         0       .00    392.71  10229.81
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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 1.310

3470 ENCROACHMENT STATIONS= 9850.5 11008.2 TYPE= 1 TARGET= 1157.700

1.310	6.41	918.71	918.06	.00	918.97	.26	.86	.02	917.10
2263.0	404.3	1640.2	218.5	133.2	363.5	91.8	2140.9	930.3	917.50
2.89	3.03	4.51	2.38	.040	.040	.040	.000	912.30	9852.33
.004352	240.	247.	255.	2	9	0	.00	356.54	10208.88

*SECNO 1.350

3470 ENCROACHMENT STATIONS= 9769.1 11001.8 TYPE= 1 TARGET= 1232.700

1.350	4.55	919.95	919.45	.00	920.24	.29	1.26	.01	918.30
2263.0	933.0	832.9	497.1	236.5	162.7	136.4	2144.0	932.3	918.50
2.90	3.94	5.12	3.64	.040	.040	.040	.000	915.40	9792.62
.006065	220.	248.	260.	4	17	0	.00	351.46	10144.08

*SECNO 1.450

3470 ENCROACHMENT STATIONS= 9710.3 11005.8 TYPE= 1 TARGET= 1295.500

1.450	4.65	922.25	921.62	.00	922.46	.22	2.22	.01	920.40
2263.0	834.8	782.3	645.9	279.7	162.2	206.4	2150.8	936.5	919.90
2.94	2.98	4.82	3.13	.040	.040	.040	.000	917.60	9780.32
.003543	500.	494.	490.	3	9	0	.00	399.17	10179.48

*SECNO 1.520

1.520	4.31	923.71	923.17	.00	923.90	.20	1.44	.00	922.00
2263.0	507.8	451.7	1303.6	174.8	97.0	387.2	2156.3	940.0	922.10
2.97	2.90	4.65	3.37	.040	.040	.040	.000	919.40	9839.72
.004327	400.	367.	340.	1	14	0	.00	432.56	10272.27

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T1      RAINBOW WASH FLOOD INSURANCE STUDY (MCFCD 90-66)
T2      SIMONS, LI & ASSOCIATES, INC. - TEMPE, AZ
T3      RAINBOW.DAT             FLOODWAY

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        3        0        0       -1        0        0        0       715       0

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     15        0       -1        0        0        0       -1        0        0        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 2

IHLEQ = 1. THEREFORE FRICTION LOSS (HL) IS CALCULATED AS A FUNCTION OF PROFILE TYPE, WHICH CAN VARY FROM REACH TO REACH. SEE DOCUMENTATION FOR DETAILS.

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
*SECNO .020

3265 DIVIDED FLOW

3280 CROSS SECTION .02 EXTENDED 9.22 FEET

3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9858.9 10521.5 TYPE= 1 TARGET= 662.600

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 729.00 ELREA= 100000.00

.020	4.02	715.72	715.72	715.72	717.09	1.37	.00	.00	729.00
11568.0	.0	11568.0	.0	.0	1233.2	.0	.0	.0	100000.00
.00	.00	9.38	.00	.000	.030	.000	.000	711.70	9867.44
.009811	0.	0.	0.	0	10	0	.00	463.24	10417.06

*SECNO .110
3280 CROSS SECTION .11 EXTENDED 10.94 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9707.7 10174.5 TYPE= 1 TARGET= 466.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 729.20 ELREA= 100000.00

.110	3.94	720.64	720.64	720.64	722.10	1.46	4.48	.13	729.20
11568.0	.0	11568.0	.0	.0	1193.8	.0	13.3	4.8	100000.00
.01	.00	9.69	.00	.000	.030	.000	.000	716.70	9714.18
.009355	460.	479.	280.	0	8	0	.00	412.35	10126.52

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 .150
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9723.3 10187.5 TYPE= 1 TARGET= 464.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 730.60 ELREA= 100000.00

.150	4.78	722.98	722.98	722.98	724.38	1.40	2.13	-.05	730.60
11568.0	.0	11568.0	.0	.0	1218.3	.0	19.3	7.0	100000.00
.02	.00	9.50	.00	.000	.030	.000	.000	718.20	9728.55
.009879	140.	216.	250.	0	11	0	.00	451.24	10179.79

*SECNO .190

3470 ENCROACHMENT STATIONS= 9695.2 10144.1 TYPE= 1 TARGET= 448.899

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 731.10 ELREA= 100000.00

.190	4.61	725.11	724.93	725.11	726.38	1.27	1.98	.01	731.10
11568.0	.0	11568.0	.0	.0	1278.2	.0	25.8	9.2	100000.00
.03	.00	9.05	.00	.000	.030	.000	.000	720.50	9704.27
.007897	160.	226.	250.	2	11	0	.00	431.31	10135.58

*SECNO .290

3470 ENCROACHMENT STATIONS= 9519.2 10034.6 TYPE= 1 TARGET= 515.399

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 733.70 ELREA= 100000.00

.290	4.52	729.82	729.70	729.82	731.04	1.21	4.65	.01	733.70
11568.0	.0	11568.0	.0	.0	1308.3	.0	40.9	14.6	100000.00
.04	.00	8.84	.00	.000	.033	.000	.000	725.30	9541.61
.010351	475.	510.	480.	3	11	0	.00	486.46	10028.07

*SECNO .340

3301 HV CHANGED MORE THAN HVINS

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= 9772.7 10064.8 TYPE= 1 TARGET= 292.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 735.50 ELREA= 100000.00

.340	5.91	732.21	732.21	732.21	734.13	1.92	2.61	.20	735.50
11568.0	.0	11568.0	.0	.0	1040.5	.0	47.7	16.8	100000.00
.05	.00	11.12	.00	.000	.033	.000	.000	726.30	9781.82
.010465	200.	249.	240.	0	11	0	.00	275.18	10057.00

*SECNO .380

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.44

3470 ENCROACHMENT STATIONS= 9921.5 10244.5 TYPE= 1 TARGET= 323.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 736.50 ELREA= 100000.00

.380	6.99	734.59	733.53	734.59	735.83	1.24	1.63	.07	736.50
11568.0	.0	11568.0	.0	.0	1294.8	.0	54.1	18.3	100000.00
.06	.00	8.93	.00	.000	.033	.000	.000	727.60	9925.56
.005023	150.	240.	185.	2	5	0	.00	273.62	10199.19

*SECNO .470

3470 ENCROACHMENT STATIONS= 9944.1 10269.7 TYPE= 1 TARGET= 325.601

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 744.80 ELREA= 100000.00

.470	6.69	737.29	736.85	737.29	738.76	1.46	2.86	.07	744.80
11568.0	.0	11568.0	.0	.0	1191.6	.0	67.3	21.3	100000.00
.07	.00	9.71	.00	.000	.033	.000	.000	730.60	9965.86
.007358	470.	462.	440.	3	15	0	.00	296.85	10262.71

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 .550
3280 CROSS SECTION .55 EXTENDED 2.61 FEET

3470 ENCROACHMENT STATIONS= 9838.0 10164.7 TYPE= 1 TARGET= 326.700

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 748.20 ELREA= 100000.00

Right end of cross section extended 1.62 feet. Floodplain mapped
to the end of the FIS mapping for consistency with adjacent cross
sections. No USGS contour data available for this cross section.

.550	6.02	740.22	739.71	740.22	741.68	1.46	2.92	.00	748.20
11568.0	.0	11568.0	.0	.0	1193.9	.0	78.4	24.1	100000.00
.08	.00	9.69	.00	.000	.033	.000	.000	734.20	9870.46
.006978	490.	408.	300.	2	15	0	.00	287.01	10157.47

*SECNO .570
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9007.6 10140.0 TYPE= 1 TARGET= 1132.400

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 749.10 ELREA= 100000.00

Cross section 0.57 is aligned down the center of Old U.S.
Highway 80 in the right overbank.

.570	4.48	740.68	740.68	740.68	742.50	1.82	.26	.23	749.10
11568.0	.0	11568.0	.0	.0	1067.5	.0	81.2	24.8	100000.00
.08	.00	10.84	.00	.000	.016	.000	.000	736.20	9844.84
.002493	130.	106.	95.	0	15	0	.00	295.16	10140.00

*SECNO .580
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9787.6 10143.3 TYPE= 1 TARGET= 355.700

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 743.20 ELREA= 100000.00

.580	5.91	741.71	741.71	741.71	743.52	1.81	.58	-.30	743.20
11568.0	.0	11568.0	.0	.0	1071.4	.0	82.5	25.2	100000.00
.09	.00	10.80	.00	.000	.033	.000	.000	735.80	9823.42
.010618	45.	55.	55.	0	11	0	.00	300.70	10124.12

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 .590

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9915.9 10095.9 TYPE= 1 TARGET= 180.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 745.00 ELREA= 100000.00

Cross section 0.59 is aligned with the downstream side of the Gila Bend canal.

.590	6.69	744.09	744.09	744.09	746.84	2.75	.65	.51	745.00
11568.0	.0	11568.0	.0	.0	869.3	.0	84.1	25.5	100000.00
.09	.00	13.31	.00	.000	.033	.000	.000	737.40	9918.13
.009252	150.	70.	60.	0	8	0	.00	158.89	10077.02

*SECNO .600
3280 CROSS SECTION .60 EXTENDED 2.98 FEET

3470 ENCROACHMENT STATIONS= 9900.1 10065.7 TYPE= 1 TARGET= 165.601

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 746.00 ELREA= 100000.00

Cross section 0.60 is aligned through the center of the Gila Bend canal.

.600	6.68	744.48	744.36	744.48	747.24	2.76	.39	.01	746.00
11568.0	.0	11568.0	.0	.0	867.2	.0	85.0	25.7	100000.00
.09	.00	13.34	.00	.000	.033	.000	.000	737.80	9902.73
.008621	30.	44.	40.	2	8	0	.00	148.72	10051.45

*SECNO .610

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

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= 9876.8 10055.8 TYPE= 1 TARGET= 179.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 747.10 ELREA= 100000.00

Cross section 0.61 is aligned with the upstream side of the Gila
Bend canal.

.610	7.81	746.11	744.58	746.11	747.82	1.71	.26	.31	747.10
11568.0	.0	11568.0	.0	.0	1101.1	.0	86.0	25.8	100000.00
.09	.00	10.51	.00	.000	.033	.000	.000	738.30	9878.44
.004324	40.	46.	40.	13	11	0	.00	160.78	10039.22

*SECNO .660

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.84

3470 ENCROACHMENT STATIONS= 9807.2 10151.2 TYPE= 1 TARGET= 344.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 751.30 ELREA= 100000.00

.660	8.47	748.27	745.16	748.34	748.73	.46	.54	.38	751.30
11568.0	.0	11568.0	.0	.0	2119.4	.0	96.1	27.4	100000.00
.10	.00	5.46	.00	.000	.033	.000	.000	739.80	9816.98
.001277	440.	272.	230.	2	19	0	.00	334.21	10151.20

CCHV= .100 CEHV= .300
*SECNO .700
3280 CROSS SECTION .70 EXTENDED 3.31 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .61

3470 ENCROACHMENT STATIONS= 9769.3 10101.1 TYPE= 1 TARGET= 331.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 751.80 ELREA= 100000.00

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
.700	6.51	748.51	747.08	748.52	749.38	.87	.53	.12	751.80
11568.0	.0	11568.0	.0	.0	1544.1	.0	105.5	29.1	100000.00
.11	.00	7.49	.00	.000	.033	.000	.000	742.00	9779.26
.003455	230.	223.	170.	2	14	0	.00	321.84	10101.10

1490 NH CARD USED
*SECNO .790

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9848.9 10108.1 TYPE= 1 TARGET= 259.199

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 752.30 ELREA= 100000.00

CWSEL intersects detailed cross section but upstream CWSEL's
indicate potential flooding. Floodplain plotted to the limits of the
detailed cross section because of the Ag fields.

.790	6.10	751.10	751.10	751.39	753.19	2.08	4.98	-1.70	752.30
11568.0	.0	11568.0	.0	.0	999.0	.0	119.8	32.3	100000.00
.12	.00	11.58	.00	.000	.033	.000	.000	745.00	9863.46
.010099	300.	493.	560.	0	11	0	.00	242.68	10106.15

1490 NH CARD USED
*SECNO .890
3280 CROSS SECTION .89 EXTENDED .57 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9936.9 10166.5 TYPE= 1 TARGET= 229.600
CWSEL intersects detailed cross section but upstream CWSEL's
indicate potential flooding. Floodplain plotted to the limits of the
detailed cross section because of the Ag fields.

.890	9.97	755.57	755.57	754.69	758.08	2.52	3.08	.86	758.10
11568.0	.0	11353.7	214.3	.0	884.2	76.4	131.0	34.9	755.50
.13	.00	12.84	2.81	.000	.030	.040	.000	745.60	9941.35
.006211	515.	496.	480.	0	14	0	.00	225.15	10166.50

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

*SECNO .980
3280 CROSS SECTION .98 EXTENDED 1.90 FEET

3470 ENCROACHMENT STATIONS= 9922.2 10056.9 TYPE= 1 TARGET= 134.700
Right end of cross section extended 1.59 feet. Floodplain plotted
to the limits of the detailed cross section because of the Ag fields.
No USGS contour data available for this cross section.

.980	10.50	758.40	757.95	758.09	761.21	2.82	3.04	.09	758.30
11568.0	.0	11568.0	.0	.0	858.8	.0	141.4	36.9	100000.00
.14	.00	13.47	.00	.000	.030	.000	.000	747.90	9922.20
.005938	560.	501.	465.	2	5	0	.00	126.82	10049.02

*SECNO 1.080

3265 DIVIDED FLOW

3280 CROSS SECTION 1.08 EXTENDED 4.92 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 9797.4 10185.7 TYPE= 1 TARGET= 388.300
Right end of cross section extended 3.10 feet. Floodplain plotted
to the limits of the detailed cross section because of the Ag fields.
No USGS contour data available for this cross section.

1.080	10.73	761.73	760.89	760.90	763.65	1.93	2.35	.09	762.30
11568.0	454.3	10673.0	440.8	359.5	920.9	343.0	155.0	39.6	760.80
.16	1.26	11.59	1.28	.150	.030	.150	.000	751.00	9797.40
.004033	430.	491.	440.	3	9	0	.00	371.95	10185.70

*SECNO 1.170

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9532.6 10070.8 TYPE= 1 TARGET= 538.200
Left end of cross section extended 1.92 feet. Floodplain plotted to

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        the limits of the detailed cross section because of the Ag fields.
        No USGS contour data available for this cross section.
    1.170      9.37    764.37    764.37    763.62    766.35      1.98      2.71      -.37    765.30
 11568.0    2147.3    9420.7        .0    1273.8     754.6        .0     172.8      43.6 100000.00
      .17      1.69     12.48       .00      .150      .030      .000      .000    755.00   9532.60
 .005628      300.      502.      650.         0         9         0       .00    499.02  10056.52


*SECNO 1.260

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9500.1   10063.5  TYPE=      1  TARGET=      563.400
        Left end of cross section extended 2.14 feet.  Floodplain plotted to
        the limits of the detailed cross section because of the Ag fields.
        No USGS contour data available for this cross section.
    1.260     10.13    767.43    767.08    766.44    768.94      1.52      2.54       .05    767.90
 11568.0    2325.0    9243.0        .0    1452.1     838.4        .0     195.9      49.2 100000.00
      .18      1.60     11.02       .00      .150      .030      .000      .000    757.30   9500.10
 .004902      450.      494.      520.         4         8         0       .00    558.81  10060.80


*SECNO 1.360

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9713.3   10065.1  TYPE=      1  TARGET=      351.800
        Left end of cross section extended less than 1 foot.  Mapped
        floodplain to edge of the detailed cross section.
    1.360      9.47    769.87    769.87    769.63    772.33      2.46      3.53      -.24    770.30
 11568.0     989.4   10578.6        .0     596.0     804.0        .0     218.5      54.8 100000.00
      .20      1.66     13.16       .00      .150      .030      .000      .000    760.40   9713.30
 .006945      560.      500.      450.         0        11         0       .00    347.66  10062.66


*SECNO 1.450

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9792.8   10051.7  TYPE=      1  TARGET=      258.900
        Left end of cross section extended less than 1 foot.  Mapped
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        floodplain to edge of the detailed cross section.
   1.450      9.91    772.91    772.61    772.52    775.48      2.57      3.12       .03    773.60
  11568.0     603.5   10964.5        .0     376.3     830.1        .0     233.6      58.3 100000.00
     .21      1.60     13.21       .00      .150      .030      .000      .000    763.00   9792.80
 .005707      515.      497.      480.         3         5         0       .00    243.81  10051.70


*SECNO 1.550

3265 DIVIDED FLOW

3280 CROSS SECTION      1.55 EXTENDED       .76 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9873.5   10065.0  TYPE=      1  TARGET=      191.500
        Both ends of the cross section were extended less than 1 foot.
        Mapped floodplain to edge of the detailed cross section.
   1.550      9.56    775.86    775.86    775.89    778.88      3.02      3.52      -.18    776.30
  11568.0     201.6   11366.4        .0     130.9     808.6        .0     246.2      60.8 100000.00
     .22      1.54     14.06       .00      .150      .030      .000      .000    766.30   9873.50
 .006954      530.      505.      480.         0         8         0       .00    176.62  10061.46


*SECNO 1.610
3280 CROSS SECTION      1.61 EXTENDED      1.39 FEET


3470 ENCROACHMENT STATIONS=     9936.6   10064.0  TYPE=      1  TARGET=      127.400
        Left and right ends of the cross section were extended 1.19 and
        1.09 feet, respectively.  The left floodplain edge was mapped to
        STA 8805 using interpolated USGS quad contour data.  The right
        floodplain edge was interpolated to be 3105 feet beyond the end of
        the detailed cross section using USGS quad contour data.
        Therefore, the right floodplain edge was mapped to the end of the
        cross section (artificial boundary).
   1.610     10.09    778.09    777.71    777.79    781.01      2.92      2.13       .01    779.90
  11568.0        .0   11568.0        .0        .0     843.3        .0     252.9      61.9 100000.00
     .22       .00     13.72       .00      .000      .030      .000      .000    768.00   9940.85
 .006070      330.      328.      330.         2         5         0       .00    123.15  10064.00


*SECNO 1.640
3280 CROSS SECTION      1.64 EXTENDED      1.78 FEET


3470 ENCROACHMENT STATIONS=     9937.5   10074.6  TYPE=      1  TARGET=      137.100
        Left and right ends of the cross section were extended 1.80 and
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1.20 feet, respectively. The left floodplain edge was mapped to STA 8927 using interpolated USGS quad contour data. The right floodplain edge was interpolated to be 2850 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, the right floodplain edge was mapped to the end of the cross section (artificial boundary).

1.640	9.87	779.37	778.64	778.80	781.96	2.59	.91	.03	783.30
11568.0	.0	11568.0	.0	.0	896.0	.0	256.1	62.4	100000.00
.23	.00	12.91	.00	.000	.030	.000	.000	769.50	9945.34
.005271	160.	162.	165.	2	11	0	.00	129.06	10074.40

*SECNO 1.670
3280 CROSS SECTION 1.67 EXTENDED 1.68 FEET

3470 ENCROACHMENT STATIONS= 9904.8 10078.2 TYPE= 1 TARGET= 173.400
Left and right ends of the cross section were extended 1.98 and 1.08 feet, respectively. The left floodplain edge was mapped to STA 8480 using interpolated USGS quad contour data. No USGS contour data available for the right overbank. Therefore, the right floodplain edge was mapped to the end of the cross section (artificial boundary).

1.670	8.49	780.69	780.27	780.08	782.94	2.26	.95	.03	778.80
11568.0	.0	11568.0	.0	.0	959.9	.0	259.6	62.9	100000.00
.23	.00	12.05	.00	.000	.030	.000	.000	772.20	9904.80
.006272	170.	164.	170.	3	15	0	.00	173.40	10078.20

CCHV= .200 CEHV= .300
1490 NH CARD USED
*SECNO 1.740
3280 CROSS SECTION 1.74 EXTENDED 2.26 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.40

3470 ENCROACHMENT STATIONS= 9936.4 10247.6 TYPE= 1 TARGET= 311.199
Left and right ends of the cross section were extended 2.64 and 1.54 feet, respectively. The left floodplain edge was mapped to STA 8254 using interpolated USGS quad contour data. The right floodplain edge was interpolated to be 708 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency with adjacent cross sections, the right floodplain edge was mapped to the end of the cross section

```
        (artificial boundary).
    1.740      9.26    783.56    782.22    782.84    784.60      1.04      1.42       .24    784.50
   11568.0       .0    9443.7    2124.3        .0    1067.5     503.7     269.4      64.8    782.70
      .24       .00      8.85      4.22      .000      .033      .045      .000    774.30   9937.97
   .003188     300.      335.      340.         3        11         0       .00    309.63  10247.60


CCHV=     .100 CEHV=     .300
1490 NH CARD USED
*SECNO 1.830
3280 CROSS SECTION      1.83 EXTENDED      1.45 FEET


3470 ENCROACHMENT STATIONS=     9887.4   10374.6  TYPE=      1  TARGET=      487.199
        Both ends of the cross section were extended less than 1 foot.
        Mapped floodplain to edge of the detailed cross section.
    1.830      7.15    785.35    784.61    784.55    786.29       .94      1.67       .01    785.70
   11568.0       .0    8502.6    3065.4        .0     969.9     804.7     287.9      69.1    782.30
      .26       .00      8.77      3.81      .000      .033      .045      .000    778.20   9888.11
   .003652     520.      498.      460.         3        19         0       .00    486.49  10374.60


*SECNO 1.880
3280 CROSS SECTION      1.88 EXTENDED       .99 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9813.0   10090.7  TYPE=      1  TARGET=      277.700
        Left end of cross section extended 1.30 feet.  The left floodplain
        edge was mapped to STA 8589 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
    1.880      6.09    786.29    785.94    785.89    787.96      1.67      1.45       .22    785.00
   11568.0       .0   10898.8     669.2        .0    1026.6     140.6     297.1      71.6    785.10
      .27       .00     10.62      4.76      .000      .033      .045      .000    780.20   9813.00
   .007052     250.      270.      280.         2        15         0       .00    277.70  10090.70


*SECNO 1.920
3280 CROSS SECTION      1.92 EXTENDED      1.06 FEET


3470 ENCROACHMENT STATIONS=     9875.9   10172.2  TYPE=      1  TARGET=      296.300
        Left end of cross section extended 1.53 feet.  The left floodplain
        edge was mapped to STA 8415 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
```

The right floodplain edge was mapped to the end of the detailed cross section.

1.920	5.76	787.96	787.60	787.53	789.54	1.58	1.58	.01	787.40
11568.0	.0	10670.6	897.4	.0	1023.8	188.1	303.3	73.0	786.00
.27	.00	10.42	4.77	.000	.033	.045	.000	782.20	9875.90
.006864	220.	227.	220.	3	15	0	.00	296.30	10172.20

*SECNO 2.020
3280 CROSS SECTION 2.02 EXTENDED 2.13 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 9893.9 10253.7 TYPE= 1 TARGET= 359.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 792.80 ELREA= 100000.00

Left end of cross section extended 1.55 feet. The left floodplain edge was mapped to STA 8529 using interpolated USGS quad contour data. Right end of cross section extended 1.15 feet. The right floodplain edge was mapped to STA 11655 using interpolated USGS quad contour data.

2.020	5.33	791.33	790.32	790.35	792.28	.95	2.67	.06	792.80
11568.0	.0	11568.0	.0	.0	1475.7	.0	318.4	76.7	100000.00
.29	.00	7.84	.00	.000	.033	.000	.000	786.00	9902.73
.004524	475.	490.	490.	1	15	0	.00	350.97	10253.70

1490 NH CARD USED
*SECNO 2.110
3280 CROSS SECTION 2.11 EXTENDED 1.68 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

3470 ENCROACHMENT STATIONS= 9860.2 10147.0 TYPE= 1 TARGET= 286.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 795.10 ELREA= 791.50

Left end of cross section extended 1.49 feet. The left floodplain edge was mapped to STA 8508 using interpolated USGS quad contour data. Right end of cross section extended 1.19 feet. The right floodplain edge was mapped to STA 11641 using interpolated

```
        USGS quad contour data.
    2.110      5.38    793.98    793.91    793.49    795.82      1.84      3.28       .27    795.10
  11568.0        .0    9954.3    1613.7        .0     877.8     212.8     333.0      80.3    791.50
      .30       .00     11.34      7.58      .000      .033      .040      .000    788.60   9866.97
  .009618      490.      497.      490.         2         5         0       .00    280.03  10147.00


CCHV=     .200 CEHV=     .300
*SECNO 2.210

3265 DIVIDED FLOW

3280 CROSS SECTION      2.21 EXTENDED      2.00 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9822.6   10209.6  TYPE=      1  TARGET=      387.000
        Left end of cross section extended 2.58 feet.  The left floodplain
        edge was mapped to STA 8001 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
    2.210      6.00    798.20    797.37    797.18    799.33      1.13      3.37       .14    799.90
  11568.0     551.7   10467.3     549.0      95.4    1183.7     139.2     347.5      84.0    798.70
      .32      5.78      8.84      3.94      .040      .033      .045      .000    792.20   9822.60
  .005134      400.      503.      530.         2         8         0       .00    355.61  10209.60


CCHV=     .100 CEHV=     .300
*SECNO 2.300

3265 DIVIDED FLOW

3280 CROSS SECTION      2.30 EXTENDED      1.43 FEET


3470 ENCROACHMENT STATIONS=     9814.0   10255.6  TYPE=      1  TARGET=      441.600
        Left end of cross section extended 3.73 feet.  The left floodplain
        edge was mapped to STA 8018 using interpolated USGS quad
        contour data.  Right end of cross section extended less than 1 foot.
        The right floodplain edge was mapped to the end of the detailed
        cross section.
    2.300      5.73    800.93    800.17    800.23    801.88       .94      2.53       .02    805.50
  11568.0     829.4   10738.6        .0     207.0    1340.0        .0     364.5      88.4 100000.00
      .34      4.01      8.01       .00      .045      .033      .000      .000    795.20   9814.00
  .004981      470.      502.      490.         2        15         0       .00    422.85  10255.60
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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

1490 NH CARD USED
*SECNO 2.390

3265 DIVIDED FLOW

3280 CROSS SECTION 2.39 EXTENDED .66 FEET

3470 ENCROACHMENT STATIONS= 9539.2 10066.5 TYPE= 1 TARGET= 527.300
Left end of cross section extended 2.75 feet. The left floodplain
edge was mapped to STA 8291 using interpolated USGS quad
contour data.

2.390	5.36	803.56	803.01	802.75	804.56	1.00	2.67	.02	807.80
11568.0	3382.2	8185.8	.0	669.8	911.6	.0	382.1	93.4	100000.00
.36	5.05	8.98	.00	.045	.033	.000	.000	798.20	9539.20
.005897	490.	490.	470.	2	15	0	.00	471.74	10048.62

1490 NH CARD USED
*SECNO 2.490

3265 DIVIDED FLOW

3280 CROSS SECTION 2.49 EXTENDED 1.07 FEET

3470 ENCROACHMENT STATIONS= 9524.8 10124.4 TYPE= 1 TARGET= 599.601
Left end of cross section extended 2.19 feet. The left floodplain
edge was mapped to STA 8391 using interpolated USGS quad
contour data. Right end of cross section extended less than 1 foot.
The right floodplain edge was mapped to the end of the detailed
cross section.

2.490	4.97	806.67	806.35	805.89	807.69	1.02	3.13	.00	811.00
11568.0	3941.4	7626.6	.0	874.6	809.1	.0	400.5	99.3	100000.00
.37	4.51	9.43	.00	.050	.033	.000	.000	801.70	9524.80
.006807	490.	493.	490.	2	15	0	.00	566.04	10111.19

*SECNO 2.580

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

3280 CROSS SECTION 2.58 EXTENDED 2.03 FEET

3470 ENCROACHMENT STATIONS= 9572.2 10102.7 TYPE= 1 TARGET= 530.500
Left end of cross section extended 1.23 feet. The left floodplain edge was mapped to STA 8756 using interpolated USGS quad contour data. Right end of cross section extended 1.23 feet. The right floodplain edge was mapped to STA 11319 using interpolated USGS quad contour data.

2.580	5.72	810.02	809.77	809.23	811.18	1.16	3.45	.04	812.60
11568.0	4103.5	7464.5	.0	854.2	735.5	.0	419.3	105.4	100000.00
.39	4.80	10.15	.00	.050	.033	.000	.000	804.30	9572.20
.006941	500.	503.	500.	1	8	0	.00	508.02	10100.07

*SECNO 2.630

3265 DIVIDED FLOW

3280 CROSS SECTION 2.63 EXTENDED 2.11 FEET

3470 ENCROACHMENT STATIONS= 9540.4 10117.8 TYPE= 1 TARGET= 577.399
Left end of cross section extended less than 1 foot. The left floodplain edge was mapped to the end of the detailed cross section. Right end of cross section extended 1.22 feet. The right floodplain edge was mapped to STA 11228 using interpolated USGS quad contour data.

2.630	5.81	811.61	811.19	810.72	812.59	.98	1.39	.02	814.00
11568.0	4571.4	6996.6	.0	1021.7	732.8	.0	427.7	108.1	100000.00
.40	4.47	9.55	.00	.050	.033	.000	.000	805.80	9540.40
.005830	215.	221.	230.	2	11	0	.00	547.45	10097.68

*SECNO 2.680
3280 CROSS SECTION 2.68 EXTENDED 2.31 FEET

3470 ENCROACHMENT STATIONS= 9583.8 10121.8 TYPE= 1 TARGET= 538.000
Left end of cross section extended less than 1 foot. The left floodplain edge was mapped to the end of the detailed cross section. Right end of cross section extended 1.58 feet. The right floodplain edge was mapped to STA 11275 using interpolated

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      USGS quad contour data.
   2.680      5.81    813.21    813.12    812.48    814.50      1.29      1.82       .09    812.70
 11568.0    3747.0    7821.0        .0     817.3     736.2        .0     438.0     111.4 100000.00
     .41      4.58     10.62       .00      .050      .033      .000      .000    807.40   9583.80
 .007684      270.      273.      275.         2         5         0       .00    527.95  10111.75


CCHV=     .200 CEHV=     .300
1490 NH CARD USED
*SECNO 2.730

3265 DIVIDED FLOW

3280 CROSS SECTION      2.73 EXTENDED      2.81 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.41


3470 ENCROACHMENT STATIONS=     9466.1   10163.3  TYPE=      1  TARGET=      697.200
        Right end of cross section extended 1.88 feet.  The right floodplain
        edge was mapped to STA 11403 using interpolated USGS quad
        contour data.
   2.730      6.51    815.51    814.85    814.58    816.19       .68      1.57       .12    818.10
 11568.0    3916.8    6377.0    1274.2    1100.8     776.8     270.9     451.1     115.7    816.20
     .42      3.56      8.21      4.70      .050      .033      .040      .000    809.00   9466.10
 .003846      320.      301.      275.         2         5         0       .00    670.68  10163.30


1490 NH CARD USED
*SECNO 2.770

3265 DIVIDED FLOW

3280 CROSS SECTION      2.77 EXTENDED      2.74 FEET


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9596.0   10103.1  TYPE=      1  TARGET=      507.100
        Right end of cross section extended 2.01 feet.  The right floodplain
        edge was mapped to STA 11458 using interpolated USGS quad
        contour data.
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  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


   2.770      6.64    816.24    816.24    815.51    817.73      1.48      1.36      -.12    819.50
 11568.0    1586.0    9982.0       .0     449.6     957.1        .0     459.2     118.4 100000.00
     .43      3.53     10.43       .00      .050      .033      .000      .000    809.60   9596.00
 .007076      210.      188.      180.         0         5         0       .00    484.43  10103.10


*SECNO 2.860
3280 CROSS SECTION      2.86 EXTENDED      2.74 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9684.5   10509.7  TYPE=      1  TARGET=      825.200
        Right end of cross section extended 1.79 feet.  The right floodplain
        edge was mapped to STA 11112 using interpolated USGS quad
        contour data.
   2.860      7.64    819.44    819.24    818.48    820.32       .88      2.47       .12    817.50
 10743.0    1852.6    6099.4    2791.0     573.4     635.6     938.1     479.4     125.8    817.20
     .45      3.23      9.60      2.98      .050      .033      .050      .000    811.80   9684.50
 .003838      460.      497.      530.         2         8         0       .00    825.20  10509.70


CCHV=     .100 CEHV=     .300
*SECNO 2.960
3280 CROSS SECTION      2.96 EXTENDED      1.87 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9956.6   10535.3  TYPE=      1  TARGET=      578.700
        Right end of cross section extended less than 1 foot.  The right
        floodplain edge was mapped to the end of the detailed cross
        section.
   2.960      7.47    822.17    822.17    821.28    823.34      1.17      2.57      -.24    820.60
 10743.0        .0    7829.7    2913.3        .0     785.0     863.3     500.7     133.6    819.90
     .46       .00      9.97      3.37      .000      .033      .050      .000    814.70   9956.60
 .005163      500.      508.      470.         0         6         0       .00    578.70  10535.30


*SECNO 3.050
3280 CROSS SECTION      3.05 EXTENDED      1.90 FEET
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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= 9935.3 10516.8 TYPE= 1 TARGET= 581.500
Right end of cross section extended 1.01 feet. The right floodplain
edge was mapped to STA 11283 using interpolated USGS quad
contour data.

3.050	6.80	824.90	824.11	824.00	825.54	.64	2.15	.05	824.00
10743.0	.0	8225.6	2517.4	.0	1162.3	701.0	519.4	139.6	824.30
.49	.00	7.08	3.59	.000	.033	.050	.000	818.10	9935.30
.003993	520.	493.	430.	2	14	0	.00	581.50	10516.80

*SECNO 3.150
3280 CROSS SECTION 3.15 EXTENDED 2.70 FEET

3470 ENCROACHMENT STATIONS= 9838.8 10238.0 TYPE= 1 TARGET= 399.200
Right end of cross section extended 2.18 feet. The right floodplain
edge was mapped to STA 11519 using interpolated USGS quad
contour data.

3.150	5.61	826.91	825.95	826.37	827.72	.82	2.13	.05	826.30
10743.0	.0	10743.0	.0	.0	1482.5	.0	538.6	145.2	100000.00
.50	.00	7.25	.00	.000	.033	.000	.000	821.30	9838.80
.004530	495.	499.	505.	2	14	0	.00	399.20	10238.00

1490 NH CARD USED
*SECNO 3.240
3280 CROSS SECTION 3.24 EXTENDED .77 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .70

3470 ENCROACHMENT STATIONS= 9796.5 10033.1 TYPE= 1 TARGET= 236.600
Right end of cross section extended less than 1 foot. The right
floodplain edge was mapped to the end of the detailed cross
section.

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 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

  3.240      5.17    829.37    829.24    829.36    831.26      1.89      3.22       .32    828.10
 10743.0       .0   10743.0       .0       .0     972.9        .0     552.6     148.9 100000.00
    .52       .00     11.04       .00     .000      .033      .000      .000    824.20   9796.50
 .009290     425.      496.      510.         2        11         0       .00    236.60  10033.10

1490 NH CARD USED
*SECNO 3.340
3280 CROSS SECTION      3.34 EXTENDED      1.64 FEET

3470 ENCROACHMENT STATIONS=     9872.5   10057.9  TYPE=      1  TARGET=      185.400
        Right end of cross section extended less than 1 foot.  The right
        floodplain edge was mapped to the end of the detailed cross
        section.
  3.340      6.35    833.15    832.36    832.45    834.89      1.74      3.61       .02    830.20
 10743.0       .0   10743.0       .0       .0    1014.1        .0     563.9     151.3 100000.00
    .53       .00     10.59       .00     .000      .033      .000      .000    826.80   9872.50
 .005976     450.      497.      520.         2         8         0       .00    185.40  10057.90

1490 NH CARD USED
*SECNO 3.430
3280 CROSS SECTION      3.43 EXTENDED      1.57 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     9923.4   10344.3  TYPE=      1  TARGET=      420.899
        Right end of cross section extended less than 1 foot.  The right
        floodplain edge was mapped to the end of the detailed cross
        section.
  3.430      7.48    836.18    835.31    835.33    837.08       .90      2.10       .08    833.10
 10743.0       .0   8419.4    2323.6       .0    1006.1     611.0     579.0     154.7    833.30
    .55       .00      8.37      3.80     .000      .033      .040      .000    828.70   9923.40
 .003249     500.      500.      495.         2         8         0       .00    420.90  10344.30

CCHV=     .100 CEHV=     .300
*SECNO 3.520
3280 CROSS SECTION      3.52 EXTENDED      2.05 FEET
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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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

3470 ENCROACHMENT STATIONS= 9888.9 10256.7 TYPE= 1 TARGET= 367.800
Right end of cross section extended 1.26 feet. The right floodplain
edge was mapped to STA 11294 using interpolated USGS quad
contour data.

3.520	6.95	838.55	837.64	837.75	839.56	1.01	2.45	.03	835.70
10743.0	.0	9952.7	790.3	.0	1196.7	220.0	595.6	158.9	837.20
.57	.00	8.32	3.59	.000	.045	.045	.000	831.60	9888.90
.006860	525.	492.	440.	2	15	0	.00	367.80	10256.70

*SECNO 3.620
3280 CROSS SECTION 3.62 EXTENDED .67 FEET

3470 ENCROACHMENT STATIONS= 9839.1 10115.0 TYPE= 1 TARGET= 275.900

3.620	8.07	841.87	840.58	841.07	842.84	.97	3.28	.00	838.50
10743.0	1735.6	9007.4	.0	251.1	1117.4	.0	611.4	162.6	100000.00
.58	6.91	8.06	.00	.040	.045	.000	.000	833.80	9839.10
.006418	470.	495.	520.	2	8	0	.00	275.90	10115.00

1490 NH CARD USED
*SECNO 3.710

3470 ENCROACHMENT STATIONS= 9879.4 10129.4 TYPE= 1 TARGET= 250.000

3.710	7.58	843.98	842.74	843.19	845.22	1.24	2.30	.08	842.00
10743.0	758.4	9945.4	39.2	185.1	1077.5	14.3	626.5	165.6	842.30
.60	4.10	9.23	2.74	.040	.033	.040	.000	836.40	9879.40
.003620	480.	498.	510.	3	15	0	.00	250.00	10129.40

CCHV= .200 CEHV= .300
*SECNO 3.810

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9885.4 10464.2 TYPE= 1 TARGET= 578.800

3.810	6.78	846.38	846.35	845.82	847.97	1.59	2.65	.10	844.10
10743.0	.0	9802.0	941.0	.0	931.9	254.5	640.7	169.6	846.80
.61	.00	10.52	3.70	.000	.033	.045	.000	839.60	9885.40
.006849	515.	506.	485.	2	11	0	.00	450.96	10464.20

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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 3.900
3280 CROSS SECTION      3.90 EXTENDED       .36 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9880.3   10431.1  TYPE=      1  TARGET=      550.800
     3.900      7.46    849.66    848.60    848.80    850.71      1.06      2.69       .05    846.00
   10743.0    2859.2    6272.5    1611.3     376.0     676.5     400.4     655.4     175.1    845.30
       .63      7.60      9.27      4.02      .040      .035      .045      .000    842.20   9880.30
   .004703      515.      478.      475.         3        10         0       .00    550.80  10431.10


CCHV=     .200 CEHV=     .400
*SECNO 4.000

3265 DIVIDED FLOW

3280 CROSS SECTION      4.00 EXTENDED      1.01 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.71


3470 ENCROACHMENT STATIONS=     9469.4   10903.0  TYPE=      1  TARGET=     1433.600

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      851.50 ELREA=    100000.00

     4.000      6.81    852.01    850.18    851.44    852.14       .13      1.24       .18    851.50
   10743.0        .0   10743.0        .0        .0    3697.8        .0     685.7     186.1 100000.00
       .68       .00      2.91       .00      .000      .040      .000      .000    845.20   9469.40
   .001618      550.      519.      420.         3        14         0       .00   1358.53  10903.00


*SECNO 4.090

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .45
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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= 9588.3 10620.6 TYPE= 1 TARGET= 1032.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 854.20 ELREA= 100000.00

4.090	5.43	853.73	852.81	853.69	854.03	.30	1.83	.07	854.20
9028.0	.0	9028.0	.0	.0	2039.1	.0	718.5	199.7	100000.00
.71	.00	4.43	.00	.000	.040	.000	.000	848.30	9592.27
.005714	480.	498.	520.	3	23	0	.00	1026.59	10618.86

*SECNO 4.150

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9557.2 10645.5 TYPE= 1 TARGET= 1088.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 855.70 ELREA= 100000.00

4.150	5.54	855.24	854.26	855.24	855.53	.29	1.49	.00	855.70
9028.0	.0	9028.0	.0	.0	2090.3	.0	732.3	206.3	100000.00
.73	.00	4.32	.00	.000	.040	.000	.000	849.70	9561.52
.004665	300.	290.	275.	2	10	0	.00	938.68	10555.35

*SECNO 4.180

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9468.0 10521.2 TYPE= 1 TARGET= 1053.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 856.80 ELREA= 100000.00

4.180	5.35	856.25	855.28	856.25	856.54	.29	1.01	.00	856.80
9028.0	.0	9028.0	.0	.0	2103.2	.0	742.1	210.9	100000.00
.74	.00	4.29	.00	.000	.040	.000	.000	850.90	9478.66
.005217	195.	205.	215.	2	15	0	.00	1036.94	10520.08

*SECNO 4.280

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= 9206.7 10513.1 TYPE= 1 TARGET= 1306.399

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 859.90 ELREA= 100000.00

4.280	6.07	859.07	858.22	859.07	859.34	.27	2.80	.00	859.90
9028.0	.0	9028.0	.0	.0	2174.9	.0	766.8	224.1	100000.00
.78	.00	4.15	.00	.000	.040	.000	.000	853.00	9266.20
.005929	480.	503.	510.	3	8	0	.00	1241.15	10507.35

*SECNO 4.330

3470 ENCROACHMENT STATIONS= 9114.5 10356.4 TYPE= 1 TARGET= 1241.900

4.330	5.32	860.32	859.16	860.31	860.54	.22	1.19	.01	860.70
9028.0	.0	9028.0	.0	.0	2389.3	.0	779.8	231.0	100000.00
.79	.00	3.78	.00	.000	.040	.000	.000	855.00	9132.39
.004011	230.	248.	250.	2	19	0	.00	1172.58	10304.97

*SECNO 4.370

3470 ENCROACHMENT STATIONS= 9103.3 10226.3 TYPE= 1 TARGET= 1123.000

4.370	5.82	861.32	860.40	861.32	861.58	.25	1.03	.01	861.40
9028.0	.0	9028.0	.0	.0	2232.2	.0	792.4	237.2	100000.00
.81	.00	4.04	.00	.000	.040	.000	.000	855.50	9106.96
.004660	160.	238.	270.	2	12	0	.00	1104.90	10211.87

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 4.470

3470 ENCROACHMENT STATIONS= 9106.1 10279.0 TYPE= 1 TARGET= 1172.900

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 863.10 ELREA= 100000.00

4.470	5.79	863.49	862.40	863.41	863.68	.19	2.10	.01	863.10
9028.0	.0	9028.0	.0	.0	2565.1	.0	820.0	250.3	100000.00
.85	.00	3.52	.00	.000	.044	.000	.000	857.70	9106.10
.003819	280.	500.	600.	2	14	0	.00	1172.89	10278.99

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

1490 NH CARD USED
*SECNO 4.560

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9149.0 10479.4 TYPE= 1 TARGET= 1330.400

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 866.10 ELREA= 100000.00

4.560	5.27	865.77	864.83	865.56	866.01	.24	2.31	.01	866.10
9028.0	.0	9028.0	.0	.0	2289.3	.0	847.5	263.9	100000.00
.88	.00	3.94	.00	.000	.042	.000	.000	860.50	9213.35
.005546	400.	493.	510.	3	16	0	.00	1234.69	10451.80

1490 NH CARD USED
*SECNO 4.650

3470 ENCROACHMENT STATIONS= 9594.9 10736.7 TYPE= 1 TARGET= 1141.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 868.30 ELREA= 100000.00

4.650	5.01	868.51	867.51	868.21	868.74	.24	2.74	.00	868.30
9028.0	.0	9028.0	.0	.0	2306.0	.0	873.7	277.4	100000.00
.92	.00	3.91	.00	.000	.045	.000	.000	863.50	9594.90
.005468	550.	497.	370.	3	19	0	.00	1141.80	10736.70

1490 NH CARD USED
*SECNO 4.750

3470 ENCROACHMENT STATIONS= 9549.8 10940.6 TYPE= 1 TARGET= 1390.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 871.30 ELREA= 100000.00

4.750	5.60	871.10	869.99	870.75	871.28	.18	2.53	.01	871.30
9028.0	.0	9028.0	.0	.0	2627.1	.0	901.8	291.7	100000.00
.96	.00	3.44	.00	.000	.046	.000	.000	865.50	9560.49
.004796	570.	496.	380.	2	14	0	.00	1362.57	10923.05

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

1490 NH CARD USED
*SECNO 4.840

3470 ENCROACHMENT STATIONS= 9443.7 10719.9 TYPE= 1 TARGET= 1276.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 874.30 ELREA= 100000.00

4.840	5.23	873.83	872.80	873.34	874.05	.22	2.75	.01	874.30
9028.0	.0	9028.0	.0	.0	2382.9	.0	930.7	306.3	100000.00
1.00	.00	3.79	.00	.000	.049	.000	.000	868.60	9516.42
.006154	490.	503.	505.	2	16	0	.00	1167.44	10683.86

1490 NH CARD USED
*SECNO 4.940

3470 ENCROACHMENT STATIONS= 9510.5 10581.1 TYPE= 1 TARGET= 1070.600

4.940	6.48	876.48	875.31	875.94	876.69	.21	2.64	.00	876.10
9028.0	.0	9028.0	.0	.0	2484.4	.0	958.4	319.0	100000.00
1.03	.00	3.63	.00	.000	.049	.000	.000	870.00	9510.50
.004667	490.	497.	510.	2	5	0	.00	1061.87	10572.37

1490 NH CARD USED
*SECNO 5.030

3470 ENCROACHMENT STATIONS= 9449.5 10500.0 TYPE= 1 TARGET= 1050.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 878.80 ELREA= 100000.00

5.030	6.88	878.68	877.16	877.98	878.87	.19	2.18	.00	878.80
9028.0	.0	9028.0	.0	.0	2566.5	.0	987.5	331.1	100000.00
1.07	.00	3.52	.00	.000	.049	.000	.000	871.80	9461.24
.004070	540.	502.	430.	2	12	0	.00	1038.76	10500.00

CCHV= .200 CEHV= .400
*SECNO 5.130

3470 ENCROACHMENT STATIONS= 9549.7 10210.5 TYPE= 1 TARGET= 660.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 881.00 ELREA= 100000.00

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
5.130	7.04	880.64	879.05	880.25	880.97	.33	2.04	.05	881.00
9028.0	.0	9028.0	.0	.0	1972.7	.0	1013.2	340.6	100000.00
1.10	.00	4.58	.00	.000	.045	.000	.000	873.60	9579.00
.004227	470.	492.	500.	2	16	0	.00	631.50	10210.50

*SECNO 5.220

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9416.2 10487.7 TYPE= 1 TARGET= 1071.500

5.220	6.19	882.99	881.38	883.05	883.25	.26	2.27	.01	883.20
9028.0	.0	9028.0	.0	.0	2209.6	.0	1037.3	349.5	100000.00
1.14	.00	4.09	.00	.000	.045	.000	.000	876.80	9462.82
.004794	430.	503.	485.	2	23	0	.00	921.25	10463.80

*SECNO 5.310

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9502.3 10525.3 TYPE= 1 TARGET= 1023.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 886.30 ELREA= 100000.00

5.310	5.93	885.43	883.94	885.43	885.69	.26	2.44	.00	886.30
9028.0	.0	9028.0	.0	.0	2202.2	.0	1062.3	360.2	100000.00
1.17	.00	4.10	.00	.000	.045	.000	.000	879.50	9508.18
.005072	480.	494.	480.	2	19	0	.00	954.20	10504.74

*SECNO 5.410

3470 ENCROACHMENT STATIONS= 9604.5 10620.8 TYPE= 1 TARGET= 1016.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 888.30 ELREA= 100000.00

5.410	6.03	887.83	886.42	887.84	888.08	.25	2.39	.00	888.30
9028.0	.0	9028.0	.0	.0	2260.4	.0	1088.0	371.0	100000.00
1.21	.00	3.99	.00	.000	.045	.000	.000	881.80	9647.01
.004530	450.	500.	580.	2	15	0	.00	934.76	10581.78

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 5.500

3470 ENCROACHMENT STATIONS= 9335.1 10442.3 TYPE= 1 TARGET= 1107.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 891.20 ELREA= 100000.00

5.500	5.62	889.92	888.96	889.92	890.16	.24	2.07	.00	891.20
9028.0	.0	9028.0	.0	.0	2319.4	.0	1114.2	382.4	100000.00
1.24	.00	3.89	.00	.000	.040	.000	.000	884.30	9389.32
.003830	330.	499.	540.	2	14	0	.00	1050.92	10440.23

*SECNO 5.540

3470 ENCROACHMENT STATIONS= 9145.4 10379.4 TYPE= 1 TARGET= 1234.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 891.80 ELREA= 100000.00

5.540	5.88	890.88	890.10	890.88	891.15	.27	.98	.01	891.80
9028.0	.0	9028.0	.0	.0	2165.2	.0	1125.1	387.8	100000.00
1.26	.00	4.17	.00	.000	.040	.000	.000	885.00	9202.98
.005571	160.	212.	160.	2	12	0	.00	1168.86	10371.84

*SECNO 5.600

3470 ENCROACHMENT STATIONS= 9132.3 10439.6 TYPE= 1 TARGET= 1307.300

Left end of cross section extended approx. 1 foot. The left floodplain edge was mapped to the end of the detailed cross section.

5.600	5.92	892.22	891.23	892.22	892.41	.19	1.25	.02	891.80
9028.0	.0	9028.0	.0	.0	2553.1	.0	1140.3	395.7	100000.00
1.28	.00	3.54	.00	.000	.040	.000	.000	886.30	9132.30
.003708	140.	280.	250.	2	10	0	.00	1300.45	10432.75

*SECNO 5.670

3265 DIVIDED FLOW

3280 CROSS SECTION 5.67 EXTENDED 1.26 FEET

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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


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .67


3470 ENCROACHMENT STATIONS=     9021.4   10024.2  TYPE=      1  TARGET=     1002.800
        Left and right ends of the cross section were extended 2.75 and
        1.25 feet, respectively.  The left floodplain edge was interpolated
        to be 753 feet beyond the end of the detailed cross section using
        USGS quad contour data.  Therefore, for consistency between
        adjacent cross sections, the left floodplain edge was mapped to the
        end of the cross section (artificial boundary).  The right side of the
        cross section between the mainstem and the tributary is ineffective
        but flooded and will be mapped as Zone A.
    5.670      5.55    893.95    893.14    893.95    894.19       .24      1.76       .02    893.90
   7124.0        .0    7124.0       .0       .0    1804.9        .0    1160.2     406.2 100000.00
     1.31       .00      3.95       .00      .000      .040      .000      .000    888.40   9021.40
  .005154      170.      398.      470.         2        14         0       .00    993.14  10024.20


*SECNO 5.750
3280 CROSS SECTION      5.75 EXTENDED       .44 FEET


3470 ENCROACHMENT STATIONS=     8875.2   10035.2  TYPE=      1  TARGET=     1160.000
        Left end of the cross section extended 1.04 feet.  The left
        floodplain edge was interpolated to be 718 feet beyond the end of
        the detailed cross section using USGS quad contour data.
        Therefore, for consistency between adjacent cross sections, the left
        floodplain edge was mapped to the end of the cross section
        (artificial boundary).  The right side of the cross section between
        the mainstem and the tributary is ineffective but flooded and will
        be mapped as Zone A.
    5.750      5.74    896.14    895.47    896.14    896.37       .22      2.17       .00    895.80
   7124.0        .0    7124.0       .0       .0    1881.6        .0    1177.4     416.3 100000.00
     1.34       .00      3.79       .00      .000      .040      .000      .000    890.40   8875.20
  .005478      260.      408.      420.         4        10         0       .00   1160.00  10035.20


*SECNO 5.830
3280 CROSS SECTION      5.83 EXTENDED      4.48 FEET


3470 ENCROACHMENT STATIONS=     9454.4   10124.0  TYPE=      1  TARGET=      669.600
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Left and right ends of the cross section were extended 5.78 and 4.48 feet, respectively. The left floodplain edge was interpolated to be 1846 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.830	9.48	898.28	897.50	898.28	898.62	.34	2.21	.05	897.10
7124.0	.0	7124.0	.0	.0	1513.4	.0	1193.2	424.8	100000.00
1.36	.00	4.71	.00	.000	.040	.000	.000	888.80	9454.40
.005443	300.	404.	370.	3	18	0	.00	669.60	10124.00

*SECNO 5.900
3280 CROSS SECTION 5.90 EXTENDED 3.17 FEET

3470 ENCROACHMENT STATIONS= 9122.9 10026.3 TYPE= 1 TARGET= 903.399

Left and right ends of the cross section were extended 1.56 and 3.16 feet, respectively. No USGS quad contour data was available at this cross section. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.900	5.66	900.36	899.54	900.36	900.61	.24	1.97	.02	899.80
7124.0	.0	7124.0	.0	.0	1794.8	.0	1208.2	431.9	100000.00
1.39	.00	3.97	.00	.000	.040	.000	.000	894.70	9122.90
.004586	280.	395.	360.	2	11	0	.00	903.40	10026.30

*SECNO 5.940
3280 CROSS SECTION 5.94 EXTENDED 4.65 FEET

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9790.4 10043.4 TYPE= 1 TARGET= 253.000

CWSEL intersects left side of cross section. However, for consistency with flow overtopping the roadway, the floodplain was mapped to the end of the detailed cross section. The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.940	5.55	901.75	901.75	901.38	903.29	1.54	2.58	-.45	900.50
7124.0	298.4	6825.6	.0	62.2	674.9	.0	1214.5	434.8	100000.00
1.39	4.79	10.11	.00	.040	.035	.000	.000	896.20	9790.40
.011792	190.	219.	225.	0	5	0	.00	253.00	10043.40

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 5.970

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9987.9 10066.1 TYPE= 1 TARGET= 78.199

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 905.50 ELREA= 100000.00

The HEC-2 model requires a downstream section for use in calculating losses through the special bridge model (SR 85). The CWSEL calculated at this section is inconsistent with adjacent cross sections. The left edge of the floodplain was mapped to the end of the detailed cross section to be consistent with the weir flow calculated at the upstream face of the bridge. The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.970	6.37	904.37	904.37	904.35	907.56	3.19	1.17	1.20	905.50
7124.0	.0	7124.0	.0	.0	497.1	.0	1217.3	435.5	100000.00
1.40	.00	14.33	.00	.000	.025	.000	.000	898.00	9987.92
.006019	185.	194.	210.	0	8	0	.00	78.17	10066.08

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 903.61 , NOT 904.37 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.60	.00	78.00	2.00	570.00	.00	898.00	898.00

*SECNO 5.990
6870 D.S. ENERGY OF 907.56 IS HIGHER THAN COMPUTED ENERGY OF 906.79
PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
906.79	906.78	.58	1472.	5697.	570.	570.	905.50	905.20	670.

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= 9335.2 10053.1 TYPE= 1 TARGET= 717.899

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 905.50 ELREA= 100000.00

The upstream section of the special bridge model for the structure at SR 85. Left end of cross section extended 2.57 feet. No USGS data available to extend this cross section. The left edge of the floodplain was mapped to the end of the detailed cross section due to the weir flow conditions. The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

5.990	6.47	904.47	.00	907.37	907.56	3.08	.00	.00	905.50
7124.0	.0	7124.0	.0	.0	505.5	.0	1217.8	435.6	100000.00
1.40	.00	14.09	.00	.000	.025	.000	.000	898.00	9974.91
.005708	45.	45.	45.	3	0	4	.00	78.17	10053.08

*SECNO 6.040
3280 CROSS SECTION 6.04 EXTENDED 7.60 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 6.63

3470 ENCROACHMENT STATIONS= 9251.3 10074.3 TYPE= 1 TARGET= 823.000

Left and right ends of the cross section were extended 2.82 and 6.72 feet, respectively. The left floodplain edge was interpolated to be 1282 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

6.040	10.50	908.50	904.12	907.62	908.53	.04	.06	.91	903.30
7124.0	4991.5	2132.5	.0	3770.6	1144.9	.0	1233.7	438.2	100000.00
1.45	1.32	1.86	.00	.040	.035	.000	.000	898.00	9251.30
.000130	260.	244.	210.	3	10	0	.00	823.00	10074.30

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 6.080
3280 CROSS SECTION 6.08 EXTENDED 5.23 FEET

3470 ENCROACHMENT STATIONS= 9354.9 10334.2 TYPE= 1 TARGET= 979.300
Left and right ends of the cross section were extended 1.75 and 4.35 feet, respectively. The left floodplain edge was interpolated to be 818 feet beyond the end of the detailed cross section using USGS quad contour data. Therefore, for consistency between adjacent cross sections, the left floodplain edge was mapped to the end of the cross section (artificial boundary). The right side of the cross section between the mainstem and the tributary is ineffective but flooded and will be mapped as Zone A.

6.080	9.53	908.53	904.83	907.65	908.57	.04	.03	.00	904.50
7124.0	3099.7	1823.2	2201.2	2518.9	901.2	1552.2	1261.8	443.4	904.10
1.49	1.23	2.02	1.42	.040	.035	.040	.000	899.00	9354.90
.000153	250.	248.	240.	2	11	0	.00	979.30	10334.20

*SECNO 6.180
3280 CROSS SECTION 6.18 EXTENDED 1.22 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .24

3470 ENCROACHMENT STATIONS= 9842.6 10263.9 TYPE= 1 TARGET= 421.301
Right end of cross section extended less than 1 foot. No USGS quad contour data available. To maintain consistency between adjacent cross sections, the right side of the cross section between the mainstem and the tributary will be mapped as Zone A.

6.180	8.83	908.93	907.82	908.10	909.38	.46	.69	.13	906.80
7124.0	588.6	4841.3	1694.1	170.3	790.0	476.7	1298.6	451.4	906.30
1.52	3.46	6.13	3.55	.040	.035	.040	.000	900.10	9842.60
.002639	560.	500.	420.	2	14	0	.00	421.30	10263.90

*SECNO 6.270
3280 CROSS SECTION 6.27 EXTENDED 1.35 FEET

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= 9954.9 10248.7 TYPE= 1 TARGET= 293.800
Right end of cross section extended less than 1 foot. No USGS quad contour data available. To maintain consistency between adjacent cross sections, the right side of the cross section between the mainstem and the tributary will be mapped as Zone A.

6.270	8.15	911.25	911.25	910.53	912.56	1.32	2.71	-.46	908.00
7124.0	.0	5214.6	1909.4	.0	500.4	428.2	1311.6	455.2	908.80
1.53	.00	10.42	4.46	.000	.035	.040	.000	903.10	9954.90
.005598	560.	500.	430.	0	10	0	.00	293.80	10248.70

*SECNO 6.370
3280 CROSS SECTION 6.37 EXTENDED 3.58 FEET

3470 ENCROACHMENT STATIONS= 9980.4 10352.2 TYPE= 1 TARGET= 371.800
Right end of cross section extended 2.61 feet. No USGS quad contour data available. To maintain consistency between adjacent cross sections, the right side of the cross section between the mainstem and the tributary will be mapped as Zone A.

6.370	7.28	913.88	913.49	912.91	914.82	.94	2.22	.04	912.00
7124.0	.0	4728.2	2395.8	.0	517.3	602.9	1322.0	458.4	911.50
1.55	.00	9.14	3.97	.000	.035	.040	.000	906.60	9980.40
.004160	590.	497.	390.	2	9	0	.00	371.80	10352.20

*SECNO 6.460
3280 CROSS SECTION 6.46 EXTENDED 3.68 FEET

3470 ENCROACHMENT STATIONS= 9908.2 10091.6 TYPE= 1 TARGET= 183.399
Right end of cross section extended 3.01 feet. No USGS quad contour data available. To maintain consistency between adjacent cross sections, the right side of the cross section between the mainstem and the tributary will be mapped as Zone A.

6.460	5.97	916.27	915.48	915.61	917.50	1.23	2.60	.09	913.50
7124.0	.0	7124.0	.0	.0	801.4	.0	1332.9	461.6	100000.00
1.57	.00	8.89	.00	.000	.035	.000	.000	910.30	9908.20
.006333	490.	494.	500.	1	19	0	.00	183.40	10091.60

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

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*SECNO 6.550
3280 CROSS SECTION      6.55 EXTENDED      4.20 FEET


3470 ENCROACHMENT STATIONS=     9882.6   10044.1  TYPE=      1  TARGET=      161.500
     6.550      6.70    918.80    916.94    917.86    919.71       .91      2.18       .03    916.30
    7124.0        .0    7124.0        .0        .0     930.4        .0    1342.9     463.6 100000.00
      1.58       .00      7.66       .00      .000      .035      .000      .000    912.10   9882.60
   .003319      480.      501.      510.         2        15         0       .00    161.50  10044.10


*SECNO 6.650
3280 CROSS SECTION      6.65 EXTENDED      3.43 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .66


3470 ENCROACHMENT STATIONS=     9932.5   10131.3  TYPE=      1  TARGET=      198.800
     6.650      7.23    921.03    920.45    920.49    922.31      1.29      2.49       .11    920.20
    7124.0        .0    7124.0        .0        .0     782.6        .0    1352.7     465.6 100000.00
      1.60       .00      9.10       .00      .000      .035      .000      .000    913.80   9932.50
   .007512      500.      498.      480.         2         5         0       .00    198.80  10131.30


*SECNO 6.740
3280 CROSS SECTION      6.74 EXTENDED      1.62 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.80


3470 ENCROACHMENT STATIONS=     9862.0   10183.0  TYPE=      1  TARGET=      321.000
     6.740      6.62    923.72    921.84    923.24    924.15       .43      1.76       .09    921.70
    7124.0        .0    7124.0        .0        .0    1347.2        .0    1364.7     468.6 100000.00
      1.63       .00      5.29       .00      .000      .035      .000      .000    917.10   9862.00
   .002327      460.      494.      530.         1        14         0       .00    321.00  10183.00
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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 6.840
3280 CROSS SECTION 6.84 EXTENDED 1.15 FEET

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9915.7 10076.4 TYPE= 1 TARGET= 160.700

6.840	6.75	925.05	925.05	925.05	927.12	2.07	4.88	-2.01	923.30
7124.0	251.2	6870.0	2.8	61.6	585.1	1.2	1376.2	471.3	924.00
1.64	4.08	11.74	2.42	.050	.035	.040	.000	918.30	9915.70
.009770	520.	499.	480.	0	5	0	.00	160.70	10076.40

*SECNO 6.930
3280 CROSS SECTION 6.93 EXTENDED 2.91 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.87

3470 ENCROACHMENT STATIONS= 9886.0 10063.7 TYPE= 1 TARGET= 177.700

6.930	8.81	928.61	926.55	927.65	929.37	.77	2.12	.13	926.50
7124.0	.0	7124.0	.0	.0	1013.7	.0	1385.5	473.2	100000.00
1.66	.00	7.03	.00	.000	.035	.000	.000	919.80	9886.00
.002793	475.	489.	500.	3	5	0	.00	177.70	10063.70

*SECNO 7.020
3280 CROSS SECTION 7.02 EXTENDED 1.55 FEET

3470 ENCROACHMENT STATIONS= 9913.4 10162.1 TYPE= 1 TARGET= 248.699

7.020	8.35	930.35	929.05	929.98	931.09	.74	1.71	.00	929.20
7124.0	.0	7124.0	.0	.0	1031.4	.0	1397.3	475.7	100000.00
1.68	.00	6.91	.00	.000	.035	.000	.000	922.00	9913.40
.004041	480.	501.	510.	3	15	0	.00	248.70	10162.10

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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 7.120
3280 CROSS SECTION      7.12 EXTENDED      1.21 FEET


3470 ENCROACHMENT STATIONS=     9864.9   10117.6  TYPE=      1  TARGET=      252.699
     7.120      8.01    932.71    931.85    932.35    933.64       .93      2.49       .06    932.70
    7124.0        .0    7124.0        .0        .0     919.6        .0    1408.3     478.5 100000.00
      1.69       .00      7.75       .00      .000      .035      .000      .000    924.70   9864.90
   .006034      430.      495.      520.         3        15         0       .00    252.70  10117.60


*SECNO 7.210

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.63


3470 ENCROACHMENT STATIONS=     9948.0   10153.4  TYPE=      1  TARGET=      205.400
     7.210      8.04    934.74    932.45    934.27    935.34       .60      1.67       .03    931.30
    7124.0        .0    7124.0        .0        .0    1146.8        .0    1420.3     481.2 100000.00
      1.72       .00      6.21       .00      .000      .035      .000      .000    926.70   9948.00
   .002263      465.      506.      480.         2        19         0       .00    205.40  10153.40


*SECNO 7.300
3280 CROSS SECTION      7.30 EXTENDED      1.01 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .48


3470 ENCROACHMENT STATIONS=     9944.7   10093.7  TYPE=      1  TARGET=      149.000
     7.300      7.01    936.11    935.87    935.81    938.00      1.89      2.27       .39    936.00
    7124.0        .0    7124.0        .0        .0     646.3        .0    1430.3     483.2 100000.00
      1.73       .00     11.02       .00      .000      .035      .000      .000    929.10   9944.70
   .009842      560.      482.      400.        10        15         0       .00    149.00  10093.70


*SECNO 7.400
3280 CROSS SECTION      7.40 EXTENDED      2.49 FEET
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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


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.56


3470 ENCROACHMENT STATIONS=     9905.2   10125.6  TYPE=      1  TARGET=      220.399
     7.400      9.59    940.19    938.20    939.71    941.01       .81      2.90       .11    938.70
    7124.0        .0    7124.0       .0        .0     984.6        .0    1439.8     485.3 100000.00
      1.75       .00      7.24       .00      .000      .035      .000      .000    930.60   9905.20
   .004021      490.      508.      520.         3         8         0       .00    220.12  10125.32


*SECNO 7.450
3280 CROSS SECTION      7.45 EXTENDED      1.90 FEET


3470 ENCROACHMENT STATIONS=     9903.8   10094.9  TYPE=      1  TARGET=      191.101
     7.450      9.30    941.10    938.73    940.75    941.85       .75       .84       .01    937.00
    7124.0    1126.9    5995.9       1.3     236.8     821.3       1.5    1445.7     486.5    941.00
      1.76      4.76      7.30       .87      .045      .035      .040      .000    931.80   9903.80
   .002809      250.      253.      255.         2        19         0       .00    191.10  10094.90


*SECNO 7.490
3280 CROSS SECTION      7.49 EXTENDED       .86 FEET


3470 ENCROACHMENT STATIONS=     9879.3   10070.8  TYPE=      1  TARGET=      191.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      941.00 ELREA=    100000.00

     7.490      8.57    941.77    941.03    941.38    942.90      1.13       .93       .11    941.00
    7124.0     191.2    6932.8        .0      59.6     802.8        .0    1451.1     487.6 100000.00
      1.77      3.21      8.64       .00      .045      .035      .000      .000    933.20   9879.30
   .004831      240.      245.      255.         2        11         0       .00    191.50  10070.80


*SECNO 7.590
3280 CROSS SECTION      7.59 EXTENDED       .22 FEET
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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= 9887.6 10115.5 TYPE= 1 TARGET= 227.900

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 943.10 ELREA= 100000.00

7.590	8.91	944.21	942.26	943.25	944.94	.72	2.00	.04	943.10
7124.0	.0	7124.0	.0	.0	1043.2	.0	1461.9	490.0	100000.00
1.79	.00	6.83	.00	.000	.035	.000	.000	935.30	9887.60
.003457	480.	496.	505.	2	12	0	.00	227.90	10115.50

*SECNO 7.700
3280 CROSS SECTION 7.70 EXTENDED .08 FEET

3470 ENCROACHMENT STATIONS= 9925.0 10163.1 TYPE= 1 TARGET= 238.100

7.700	8.08	946.58	945.44	946.65	947.50	.92	2.51	.06	945.50
7124.0	.0	7124.0	.0	.0	925.4	.0	1475.3	493.0	100000.00
1.81	.00	7.70	.00	.000	.035	.000	.000	938.50	9925.00
.005016	620.	592.	575.	2	15	0	.00	223.51	10148.51

*SECNO 7.780
3280 CROSS SECTION 7.78 EXTENDED .79 FEET

3470 ENCROACHMENT STATIONS= 9860.2 10116.1 TYPE= 1 TARGET= 255.899

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 948.30 ELREA= 100000.00

7.780	8.49	948.59	947.13	948.28	949.37	.78	1.86	.01	948.30
7124.0	.0	7124.0	.0	.0	1002.1	.0	1484.2	495.2	100000.00
1.82	.00	7.11	.00	.000	.035	.000	.000	940.10	9860.20
.004238	420.	404.	380.	2	15	0	.00	241.31	10101.51

*SECNO 7.820
3280 CROSS SECTION 7.82 EXTENDED 1.72 FEET

3470 ENCROACHMENT STATIONS= 9842.2 10127.0 TYPE= 1 TARGET= 284.800

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 949.60 ELREA= 100000.00

7.820	8.63	949.63	948.15	949.58	950.41	.79	1.04	.00	949.60
7124.0	.0	7124.0	.0	.0	999.5	.0	1489.8	496.5	100000.00
1.83	.00	7.13	.00	.000	.035	.000	.000	941.00	9842.20
.004443	230.	240.	255.	2	15	0	.00	248.26	10090.46

*SECNO 7.870
3280 CROSS SECTION 7.87 EXTENDED .41 FEET

3470 ENCROACHMENT STATIONS= 9922.7 10174.5 TYPE= 1 TARGET= 251.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 947.90 ELREA= 100000.00

7.870	8.31	950.71	949.04	950.73	951.61	.90	1.16	.03	947.90
7124.0	.0	7124.0	.0	.0	936.1	.0	1495.4	497.9	100000.00
1.84	.00	7.61	.00	.000	.035	.000	.000	942.40	9922.70
.004766	240.	252.	260.	0	19	0	.00	219.36	10142.06

*SECNO 7.970

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.49

3470 ENCROACHMENT STATIONS= 9949.7 10245.0 TYPE= 1 TARGET= 295.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 952.60 ELREA= 100000.00

7.970	6.77	952.77	950.23	952.58	953.15	.38	1.49	.05	952.60
7124.0	.0	7124.0	.0	.0	1443.7	.0	1509.1	500.8	100000.00
1.87	.00	4.93	.00	.000	.040	.000	.000	946.00	9949.70
.002151	430.	502.	510.	2	8	0	.00	295.30	10245.00

*SECNO 8.010

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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .60

3470 ENCROACHMENT STATIONS= 9967.2 10254.1 TYPE= 1 TARGET= 286.899

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 954.30 ELREA= 100000.00

8.010	6.68	953.38	952.17	953.25	954.10	.72	.85	.10	954.30
7124.0	.0	7124.0	.0	.0	1046.0	.0	1515.9	502.4	100000.00
1.88	.00	6.81	.00	.000	.040	.000	.000	946.70	9972.91
.005878	260.	240.	200.	2	15	0	.00	281.19	10254.10

*SECNO 8.060

3470 ENCROACHMENT STATIONS= 9964.1 10241.3 TYPE= 1 TARGET= 277.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 953.10 ELREA= 100000.00

8.060	7.18	954.88	953.52	954.80	955.54	.66	1.43	.01	953.10
7124.0	.0	7124.0	.0	.0	1096.4	.0	1522.4	504.1	100000.00
1.89	.00	6.50	.00	.000	.040	.000	.000	947.70	9964.10
.004968	300.	265.	215.	3	14	0	.00	277.20	10241.30

*SECNO 8.150
3280 CROSS SECTION 8.15 EXTENDED 1.02 FEET

3470 ENCROACHMENT STATIONS= 9938.3 10220.7 TYPE= 1 TARGET= 282.400

8.150	7.92	957.32	955.91	956.95	958.06	.74	2.50	.02	955.20
7124.0	.0	7124.0	.0	.0	1033.5	.0	1534.4	507.1	100000.00
1.91	.00	6.89	.00	.000	.040	.000	.000	949.40	9938.30
.005237	550.	490.	430.	2	15	0	.00	248.51	10186.81

*SECNO 8.250
3280 CROSS SECTION 8.25 EXTENDED .07 FEET

3470 ENCROACHMENT STATIONS= 9934.3 10077.2 TYPE= 1 TARGET= 142.900

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 955.70 ELREA= 100000.00

8.250	8.27	959.37	957.85	958.59	960.56	1.20	2.36	.14	955.70
7124.0	.0	7124.0	.0	.0	811.2	.0	1544.8	509.3	100000.00
1.93	.00	8.78	.00	.000	.035	.000	.000	951.10	9934.30
.004457	480.	491.	495.	2	15	0	.00	142.90	10077.20

*SECNO 8.340
3280 CROSS SECTION 8.34 EXTENDED 2.54 FEET

3470 ENCROACHMENT STATIONS= 9834.8 10186.7 TYPE= 1 TARGET= 351.900

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 964.10 ELREA= 100000.00

8.340	8.94	962.04	960.47	961.59	963.06	1.02	2.48	.02	964.10
7124.0	.0	7124.0	.0	.0	879.4	.0	1554.5	511.3	100000.00
1.94	.00	8.10	.00	.000	.035	.000	.000	953.10	9892.47
.005515	450.	500.	530.	3	12	0	.00	211.97	10104.44

*SECNO 8.430

3470 ENCROACHMENT STATIONS= 9889.4 10041.5 TYPE= 1 TARGET= 152.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 961.80 ELREA= 100000.00

8.430	9.03	964.13	962.15	963.99	965.07	.94	2.01	.01	961.80
7124.0	.0	7124.0	.0	.0	914.5	.0	1564.6	513.4	100000.00
1.96	.00	7.79	.00	.000	.035	.000	.000	955.10	9889.40
.003247	450.	491.	530.	2	15	0	.00	152.10	10041.50

*SECNO 8.530

3470 ENCROACHMENT STATIONS= 9882.5 10068.4 TYPE= 1 TARGET= 185.900

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 966.70 ELREA= 100000.00

8.530	8.33	965.93	963.32	965.29	966.46	.53	1.35	.04	966.70
5054.0	.0	5054.0	.0	.0	862.6	.0	1575.0	515.3	100000.00
1.99	.00	5.86	.00	.000	.035	.000	.000	957.60	9897.50
.002249	400.	507.	600.	2	14	0	.00	170.90	10068.40

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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 8.620

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9958.0   10077.8  TYPE=      1  TARGET=      119.800
    8.620      7.77    967.17    965.49    966.71    968.28      1.10      1.64       .17    967.70
   5054.0        .0    5054.0        .0        .0     600.1        .0    1583.2     516.9 100000.00
     2.00       .00      8.42       .00      .000      .035      .000      .000    959.40   9966.32
  .004426      475.      492.      505.         2        19         0       .00    111.48  10077.80


CCHV=     .200 CEHV=     .400
*SECNO 8.720

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.82


3470 ENCROACHMENT STATIONS=     9864.0   10145.5  TYPE=      1  TARGET=      281.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=       967.40 ELREA=    100000.00

    8.720      6.76    969.26    966.47    968.64    969.48       .23      1.03       .18    967.40
   5054.0        .0    5054.0        .0        .2    1327.2        .0    1594.3     519.1 100000.00
     2.04       .23      3.81       .00      .050      .040      .000      .000    962.50   9864.00
  .001342      650.      500.      380.         2         8         0       .00    281.50  10145.50


*SECNO 8.810

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .43


3470 ENCROACHMENT STATIONS=     9823.9   10056.4  TYPE=      1  TARGET=      232.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=       971.30 ELREA=    100000.00
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   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

    8.810      6.50    970.40    969.51    970.26    971.25       .85      1.52       .25    971.30
   5054.0        .0    5054.0       .0       .0     683.5        .0    1605.7     521.7 100000.00
     2.06       .00      7.39       .00      .000      .040      .000      .000    963.90   9845.30
  .007098      480.      492.      470.         2        12         0       .00    185.64  10030.94


*SECNO 8.910

3470 ENCROACHMENT STATIONS=     9920.7   10139.1  TYPE=      1  TARGET=      218.399
    8.910      7.63    973.33    971.69    973.03    974.06       .73      2.78       .02    969.30
   5054.0     508.8    4545.2       .0     108.0     644.2        .0    1613.9     523.7 100000.00
     2.08      4.71      7.06       .00      .050      .040      .000      .000    965.70   9920.70
  .004560      490.      502.      495.         2        11         0       .00    161.33  10082.03


CCHV=     .100 CEHV=     .300
*SECNO 9.000

3470 ENCROACHMENT STATIONS=     9938.7   10052.3  TYPE=      1  TARGET=      113.600

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      973.70 ELREA=    100000.00

    9.000      6.92    975.42    974.33    974.77    976.64      1.22      2.44       .15    973.70
   5054.0        .0    5054.0       .0       .0     570.3        .0    1621.3     525.3 100000.00
     2.09       .00      8.86       .00      .000      .035      .000      .000    968.50   9938.70
  .005426      510.      487.      485.         3        15         0       .00    113.60  10052.30


CCHV=     .200 CEHV=     .400
*SECNO 9.090

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9881.0   10072.7  TYPE=      1  TARGET=      191.700

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      975.80 ELREA=    100000.00

    9.090      7.07    978.17    975.93    977.66    978.65       .48      1.86       .15    975.80
   5054.0        .0    5054.0       .0       .0     913.6        .0    1629.8     527.0 100000.00
     2.12       .00      5.53       .00      .000      .040      .000      .000    971.10   9881.00
  .002866      530.      495.      465.         2        19         0       .00    191.70  10072.70
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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 9.190

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .65

3470 ENCROACHMENT STATIONS=     9980.8   10120.3  TYPE=      1  TARGET=      139.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=       977.50 ELREA=    100000.00

    9.190      6.73    980.03    978.93    979.67    981.04      1.01      2.18       .22    977.50
   5054.0        .0    5054.0        .0        .0     625.6        .0    1638.5     528.9 100000.00
     2.13       .00      8.08       .00      .000      .040      .000      .000    973.30   9980.80
  .006781      450.      494.      505.         2        15         0       .00    139.50  10120.30

CCHV=     .100 CEHV=     .300
*SECNO 9.280

3470 ENCROACHMENT STATIONS=     9909.8   10030.1  TYPE=      1  TARGET=      120.300
    9.280      7.06    982.76    981.58    982.04    983.91      1.15      2.83       .04    979.70
   5054.0     198.6    4855.4        .0      45.8     556.2        .0    1645.5     530.4 100000.00
     2.15      4.33      8.73       .00      .045      .035      .000      .000    975.70   9909.80
  .004883      440.      500.      540.         2        15         0       .00    120.30  10030.10

*SECNO 9.380

3470 ENCROACHMENT STATIONS=     9917.5   10103.3  TYPE=      1  TARGET=      185.800

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=       986.20 ELREA=      981.60

    9.380      7.72    985.42    984.15    984.47    986.21       .80      2.27       .04    986.20
   5054.0        .0    3656.1    1397.9        .0     468.5     274.1    1653.2     532.0    981.60
     2.17       .00      7.80      5.10      .000      .035      .045      .000    977.70   9935.02
  .004242      410.      499.      515.         2        12         0       .00    168.28  10103.30

*SECNO 9.470
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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=     9957.1   10052.5  TYPE=      1  TARGET=       95.400
    9.470      7.52    987.12    986.15    986.53    988.77      1.65      2.30       .26    983.30
   5054.0     294.8    4562.9     196.3      59.5     424.8      46.1    1660.4     533.5    984.40
     2.18      4.95     10.74      4.26      .045      .035      .045      .000    979.60   9957.10
  .005180      500.      492.      480.         2        15         0       .00     95.40  10052.50


CCHV=     .200 CEHV=     .400
*SECNO 9.560

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.21


3470 ENCROACHMENT STATIONS=     9812.5   10064.0  TYPE=      1  TARGET=      251.500
    9.560      7.43    989.73    986.46    988.83    989.94       .21       .88       .29    988.30
   5054.0        .0    5054.0        .0        .0    1370.5        .0    1671.3     535.5 100000.00
     2.22       .00      3.69       .00      .000      .040      .000      .000    982.30   9812.50
  .001061      420.      504.      540.         2        11         0       .00    251.50  10064.00


*SECNO 9.660

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .43


3470 ENCROACHMENT STATIONS=     9882.9   10245.6  TYPE=      1  TARGET=      362.699

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=       992.00 ELREA=    100000.00

    9.660      5.96    991.26    990.26    990.99    991.75       .50      1.70       .11    992.00
   5054.0        .0    5054.0        .0        .0     893.6        .0    1684.4     538.8 100000.00
     2.25       .00      5.66       .00      .000      .040      .000      .000    985.30   9905.98
  .005683      530.      503.      390.         2        23         0       .00    310.43  10216.41
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   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 -5.600
START TRIB COMP
    -5.600     5.600   892.217

3470 ENCROACHMENT STATIONS=     9132.3   10439.6  TYPE=      1  TARGET=     1307.300
   -5.600      5.92    892.22       .00    892.22    892.41       .19      1.04       .77    891.80
   9028.0        .0    9028.0        .0        .0    2551.8        .0    1695.5     543.9 100000.00
     2.27       .00      3.54       .00      .000      .040      .000      .000    886.30   9132.30
  .003714      140.      280.      250.         0         0         0       .00   1300.41  10432.71


CCHV=     .100 CEHV=     .300
*SECNO  .060

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .18


3470 ENCROACHMENT STATIONS=     9974.7   10037.4  TYPE=      1  TARGET=       62.700
      .060      5.62    893.32    892.34    893.27    894.41      1.08      1.73       .27    891.70
   2263.0        .0    2252.4      10.6        .0     269.1       3.9    1706.3     549.2    892.30
     2.28       .00      8.37      2.74      .000      .040      .040      .000    887.70   9974.70
  .007169      320.      335.      300.         2        15         0       .00     62.70  10037.40


*SECNO  .140

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.44


3470 ENCROACHMENT STATIONS=     9977.2   10090.3  TYPE=      1  TARGET=      113.100
      .140      6.79    895.89    894.34    895.11    896.31       .42      1.84       .07    893.80
   2263.0        .0    2263.0        .0        .0     434.7        .0    1709.5     550.0 100000.00
     2.30       .00      5.21       .00      .000      .040      .000      .000    889.10   9977.20
  .003453      250.      394.      480.         2        12         0       .00    113.10  10090.30
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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 .180

3470 ENCROACHMENT STATIONS= 9984.5 10113.0 TYPE= 1 TARGET= 128.500

.180	7.54	896.54	895.31	896.22	896.96	.42	.65	.00	893.30
2263.0	.0	1323.9	939.1	.0	219.1	257.8	1711.6	550.5	894.20
2.31	.00	6.04	3.64	.000	.040	.045	.000	889.00	9984.50
.003068	250.	211.	160.	2	10	0	.00	128.50	10113.00

*SECNO .210

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9985.1 10078.4 TYPE= 1 TARGET= 93.301

.210	7.12	897.42	897.42	896.82	898.64	1.23	1.96	-.68	895.30
2263.0	.0	1444.7	818.3	.0	143.1	131.9	1713.1	550.9	895.10
2.32	.00	10.09	6.20	.000	.040	.040	.000	890.30	9985.10
.010979	235.	190.	160.	0	10	0	.00	93.30	10078.40

*SECNO .290

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.29

3470 ENCROACHMENT STATIONS= 9989.6 10080.0 TYPE= 1 TARGET= 90.400

.290	8.06	899.76	897.28	898.75	900.14	.38	1.41	.08	896.90
2263.0	.0	2230.9	32.1	.0	447.6	14.3	1716.5	551.8	897.00
2.34	.00	4.98	2.24	.000	.040	.045	.000	891.70	9989.60
.002101	370.	398.	405.	4	19	0	.00	90.40	10080.00

*SECNO .360

3470 ENCROACHMENT STATIONS= 9963.3 10070.4 TYPE= 1 TARGET= 107.101

.360	7.67	900.67	898.91	899.82	901.11	.44	.95	.02	897.70
2263.0	.0	1847.7	415.3	.0	324.4	128.6	1720.7	552.7	898.30
2.36	.00	5.70	3.23	.000	.040	.045	.000	893.00	9963.30
.002661	230.	398.	420.	3	19	0	.00	107.10	10070.40

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   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  .440

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .65


3470 ENCROACHMENT STATIONS=     9978.5   10077.3  TYPE=      1  TARGET=       98.800
      .440      6.68    902.18    901.72    901.41    903.11       .93      1.85       .15    900.40
    2263.0        .0    1743.3     519.7        .0     205.7     115.7    1724.3     553.7    900.20
      2.38       .00      8.47      4.49      .000      .040      .040      .000    895.50   9978.50
   .006365      420.      413.      400.         2        16         0       .00     98.80  10077.30


CCHV=     .200 CEHV=     .400
*SECNO  .520

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.40


3470 ENCROACHMENT STATIONS=     9965.5   10092.3  TYPE=      1  TARGET=      126.800
      .520      8.09    904.49    903.10    903.51    904.89       .40      1.68       .11    902.50
    2263.0        .0    1656.2     606.8        .0     308.2     150.4    1727.8     554.7    902.20
      2.40       .00      5.37      4.04      .000      .040      .040      .000    896.40   9965.50
   .003247      415.      393.      380.         2         5         0       .00    126.80  10092.30


*SECNO  .590

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.41


3470 ENCROACHMENT STATIONS=     9963.8   10169.7  TYPE=      1  TARGET=      205.900
      .590      7.19    905.49    904.19    904.47    905.73       .24       .80       .03    903.00
    2263.0     147.9    1117.6     997.5      57.8     231.9     364.5    1732.5     556.0    902.70
      2.43      2.56      4.82      2.74      .040      .040      .040      .000    898.30   9963.80
   .001625      455.      394.      325.         3        13         0       .00    205.90  10169.70


*SECNO  .670
3280 CROSS SECTION       .67 EXTENDED      6.02 FEET
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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= 9833.2 10025.8 TYPE= 1 TARGET= 192.600

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 904.50 ELREA= 100000.00

.670	6.62	906.32	905.63	905.41	906.74	.42	.94	.07	904.50
2263.0	671.3	1591.7	.0	229.3	269.1	.0	1737.5	557.6	100000.00
2.45	2.93	5.92	.00	.040	.040	.000	.000	899.70	9833.20
.003232	110.	409.	550.	2	10	0	.00	192.60	10025.80

CCHV= .300 CEHV= .500
*SECNO .680

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9946.7 10006.9 TYPE= 1 TARGET= 60.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 906.28 ELREA= 100000.00

.680	5.76	907.04	907.04	908.34	909.34	2.29	.13	.98	906.28
2263.0	18.7	2244.3	.0	9.5	183.9	.0	1738.1	557.8	100000.00
2.45	1.97	12.20	.00	.016	.013	.000	.000	901.28	9949.98
.001619	80.	77.	75.	0	8	0	.00	56.92	10006.90

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	3	.013	.40	3.00	.00	5.00	10.00	47.00	12	1	901.42	901.28

CHART 12 - BOX CULVERT; NON-OFFSET FLARED WINGWALLS; 3/4-INCH CHAMFER AT TOP OF INLET
SCALE 1 - WINGWALLS FLARED 45 DEGREES (1:1); INLET NOT SKEWED

*SECNO .700

SPECIAL CULVERT INLET CONTROL + WEIR FLOW, EG = 907.94
5150, EG OF 907.94 LESS THAN XEG OF 909.34

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.32

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

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
913.14	912.41	.00	949.	1308.	6.099	150.0	907.30	1289.

3470 ENCROACHMENT STATIONS= 9814.5 10006.9 TYPE= 1 TARGET= 192.400

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 906.42 ELREA= 100000.00

.700	7.51	908.93	.00	908.93	909.34	.41	.00	.00	906.42
2263.0	800.4	1462.6	.0	317.6	239.8	.0	1738.5	557.9	100000.00
2.45	2.52	6.10	.00	.016	.013	.000	.000	901.42	9814.50
.000300	47.	47.	47.	3	0	0	.00	192.40	10006.90

*SECNO .790

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .25

3470 ENCROACHMENT STATIONS= 9975.0 10169.6 TYPE= 1 TARGET= 194.600

.790	7.85	909.45	908.77	909.18	909.93	.48	.56	.04	908.80
2263.0	.0	1192.5	1070.5	.0	182.8	250.1	1743.9	560.0	906.50
2.47	.00	6.52	4.28	.000	.040	.040	.000	901.60	9975.00
.004817	580.	485.	320.	2	12	0	.00	194.60	10169.60

CCHV= .100 CEHV= .300
*SECNO .880

3470 ENCROACHMENT STATIONS= 9975.5 10173.1 TYPE= 1 TARGET= 197.600

.880	8.34	911.64	910.96	910.63	912.14	.50	2.20	.00	909.40
2263.0	.0	1365.5	897.5	.0	207.3	236.5	1748.5	561.9	909.10
2.50	.00	6.59	3.79	.000	.040	.040	.000	903.30	9975.50
.004587	520.	506.	420.	2	8	0	.00	197.60	10173.10

*SECNO .930

3470 ENCROACHMENT STATIONS= 9958.4 10115.7 TYPE= 1 TARGET= 157.300

.930	8.75	912.65	911.92	911.72	913.16	.51	1.02	.01	911.60
2263.0	.0	1573.4	689.6	.0	244.0	188.6	1750.9	562.9	909.40
2.51	.00	6.45	3.66	.000	.040	.040	.000	903.90	9958.40
.004170	240.	233.	235.	2	10	0	.00	157.30	10115.70

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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=     .200 CEHV=     .400
*SECNO  .980

3470 ENCROACHMENT STATIONS=     9989.3   10078.6  TYPE=      1  TARGET=      89.300
     .980      8.14    913.64    912.03    912.70    914.14       .50       .98       .00    910.80
   2263.0        .0    1358.3     904.7        .0     222.4     179.9    1753.3     563.6    910.60
     2.52       .00      6.11      5.03      .000      .040      .040      .000    905.50   9989.30
  .003435      280.      266.      250.         2        14         0       .00     89.30  10078.60


*SECNO 1.030

3470 ENCROACHMENT STATIONS=     9965.8   10092.0  TYPE=      1  TARGET=      126.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      915.10 ELREA=      911.00

    1.030      7.25    914.55    912.11    913.51    914.82       .27       .63       .05    915.10
   2263.0        .0    1321.9     941.1        .0     312.3     227.8    1756.2     564.2    911.00
     2.54       .00      4.23      4.13      .000      .040      .040      .000    907.30   9970.12
  .001833      200.      273.      250.         0        14         0       .00    121.88  10092.00


CCHV=     .100 CEHV=     .300
*SECNO 1.070

3470 ENCROACHMENT STATIONS=     9965.5   10130.4  TYPE=      1  TARGET=      164.900
    1.070      7.73    915.03    913.45    914.07    915.30       .26       .47       .00    915.60
   2263.0        .0     687.3    1575.7        .0     155.4     397.6    1759.0     565.0    911.90
     2.56       .00      4.42      3.96      .000      .040      .040      .000    907.30   9968.04
  .002407      195.      232.      220.         2         9         0       .00    162.36  10130.40


*SECNO 1.170

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .65


3470 ENCROACHMENT STATIONS=     9966.4   10072.1  TYPE=      1  TARGET=      105.699
    1.170      6.81    916.81    915.91    915.99    917.43       .62      2.03       .11    913.80
   2263.0      99.3    1123.3    1040.4      21.3     167.5     173.2    1764.2     566.5    914.70
     2.58      4.65      6.71      6.01      .040      .040      .040      .000    910.00   9966.40
  .005754      530.      506.      490.         3        14         0       .00    105.70  10072.10
```

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 1.260

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.53

3470 ENCROACHMENT STATIONS= 9949.0 10088.0 TYPE= 1 TARGET= 139.000

1.260	7.75	918.85	917.30	917.90	919.16	.31	1.70	.03	916.10
2263.0	640.4	1135.3	487.2	157.2	225.3	135.1	1769.2	567.9	915.70
2.61	4.07	5.04	3.61	.040	.040	.040	.000	911.10	9949.00
.002468	490.	489.	500.	1	10	0	.00	139.00	10088.00

*SECNO 1.310

3470 ENCROACHMENT STATIONS= 9958.5 10098.4 TYPE= 1 TARGET= 139.900

1.310	7.25	919.55	918.12	918.71	919.89	.34	.72	.01	917.10
2263.0	.0	2263.0	.0	.0	482.0	.0	1772.0	568.7	100000.00
2.62	.00	4.69	.00	.000	.040	.000	.000	912.30	9958.50
.003368	240.	247.	255.	3	14	0	.00	139.90	10098.40

*SECNO 1.350

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .67

3470 ENCROACHMENT STATIONS= 9919.5 10040.2 TYPE= 1 TARGET= 120.700

1.350	5.27	920.67	919.99	919.95	921.32	.65	1.33	.09	918.30
2263.0	837.6	1425.4	.0	137.7	212.4	.0	1774.4	569.4	100000.00
2.63	6.08	6.71	.00	.040	.040	.000	.000	915.40	9919.50
.007614	220.	248.	260.	2	14	0	.00	120.70	10040.20

*SECNO 1.450

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.53

3470 ENCROACHMENT STATIONS= 9919.5 10060.5 TYPE= 1 TARGET= 141.000

1.450	5.63	923.23	922.03	922.25	923.61	.37	2.26	.03	920.40
2263.0	792.8	1165.6	304.6	192.6	211.5	72.5	1779.1	570.9	919.90
2.66	4.12	5.51	4.20	.040	.040	.040	.000	917.60	9919.50
.003249	500.	494.	490.	2	10	0	.00	141.00	10060.50

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

*SECNO 1.520

3470 ENCROACHMENT STATIONS= 9985.7 10144.2 TYPE= 1 TARGET= 158.500

1.520	5.20	924.60	923.68	923.71	924.99	.39	1.38	.01	922.00
2263.0	27.0	737.7	1498.3	8.6	129.9	319.0	1783.0	572.1	922.10
2.68	3.15	5.68	4.70	.040	.040	.040	.000	919.40	9985.70
.004369	400.	367.	340.	3	14	0	.00	158.50	10144.20

THIS RUN EXECUTED 02FEB93 14:58:19

****
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

RAINBOW.DAT

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	.020	715.72	.72	717.09	463.24	.00	11568.00	.00	.00	.00	9858.90	10521.50	.00
*	.020	715.72	.00	717.09	463.24	.00	11568.00	.00	662.60	9858.90	9858.90	10521.50	10521.50
*	.110	720.64	.00	722.10	412.35	.00	11568.00	.00	.00	.00	9707.70	10174.50	.00
*	.110	720.64	.00	722.10	412.35	.00	11568.00	.00	466.80	9707.70	9707.70	10174.50	10174.50
*	.150	722.98	.00	724.38	451.24	.00	11568.00	.00	.00	.00	9723.30	10187.50	.00
*	.150	722.98	.00	724.38	451.24	.00	11568.00	.00	464.20	9723.30	9723.30	10187.50	10187.50
	.190	725.11	.00	726.38	431.31	.00	11568.00	.00	.00	.00	9695.20	10144.10	.00
	.190	725.11	.00	726.38	431.31	.00	11568.00	.00	448.90	9695.20	9695.20	10144.10	10144.10
	.290	729.82	.00	731.04	486.46	.00	11568.00	.00	.00	.00	9519.20	10034.60	.00
	.290	729.82	.00	731.04	486.46	.00	11568.00	.00	515.40	9519.20	9519.20	10034.60	10034.60
*	.340	732.21	.00	734.13	275.18	.00	11568.00	.00	.00	.00	9772.70	10064.80	.00
*	.340	732.21	.00	734.13	275.18	.00	11568.00	.00	292.10	9772.70	9772.70	10064.80	10064.80
*	.380	734.59	.00	735.83	273.63	.00	11568.00	.00	.00	.00	9921.50	10244.50	.00
*	.380	734.59	.00	735.83	273.62	.00	11568.00	.00	323.00	9921.50	9921.50	10244.50	10244.50
	.470	737.29	.00	738.76	296.85	.00	11568.00	.00	.00	.00	9944.10	10269.70	.00
	.470	737.29	.00	738.76	296.85	.00	11568.00	.00	325.60	9944.10	9944.10	10269.70	10269.70
	.550	740.22	.00	741.68	287.01	.00	11568.00	.00	.00	.00	9838.00	10164.70	.00
	.550	740.22	.00	741.68	287.01	.00	11568.00	.00	326.70	9838.00	9838.00	10164.70	10164.70
*	.570	740.68	.00	742.50	295.16	.00	11568.00	.00	1132.40	9007.60	9792.10	10305.80	10140.00
*	.570	740.68	.00	742.50	295.16	.00	11568.00	.00	1132.40	9007.60	9792.10	10305.80	10140.00
*	.580	741.71	.00	743.52	300.70	.00	11568.00	.00	.00	.00	9787.60	10143.30	.00
*	.580	741.71	.00	743.52	300.70	.00	11568.00	.00	355.70	9787.60	9787.60	10143.30	10143.30

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	.590	744.09	.00	746.84	158.89	.00	11568.00	.00	.00	.00	9915.90	10095.90	.00
*	.590	744.09	.00	746.84	158.89	.00	11568.00	.00	180.00	9915.90	9915.90	10095.90	10095.90
	.600	744.48	.00	747.24	148.72	.00	11568.00	.00	.00	.00	9900.10	10065.70	.00
	.600	744.48	.00	747.24	148.72	.00	11568.00	.00	165.60	9900.10	9900.10	10065.70	10065.70
*	.610	746.11	.00	747.82	160.78	.00	11568.00	.00	.00	.00	9876.80	10055.80	.00
*	.610	746.11	.00	747.82	160.78	.00	11568.00	.00	179.00	9876.80	9876.80	10055.80	10055.80
*	.660	748.34	.00	748.66	553.23	.00	10305.72	1262.28	1375.00	8995.00	9807.20	10151.20	10370.00
*	.660	748.27	-.07	748.73	334.21	.00	11568.00	.00	344.00	9807.20	9807.20	10151.20	10151.20
*	.700	748.52	.00	749.18	582.75	.00	10510.48	1057.52	1358.00	9004.00	9769.30	10101.10	10362.00
*	.700	748.51	.00	749.38	321.84	.00	11568.00	.00	331.80	9769.30	9769.30	10101.10	10101.10
*	.790	751.39	.00	753.10	316.42	.00	11336.36	231.64	1390.60	8789.90	9848.90	10108.10	10180.50
*	.790	751.10	-.28	753.19	242.68	.00	11568.00	.00	259.20	9848.90	9848.90	10108.10	10108.10
	.890	754.69	.00	756.74	281.01	.00	9333.14	2234.85	826.30	9431.50	9936.90	10087.60	10257.80
*	.890	755.57	.88	758.08	225.15	.00	11353.74	214.26	229.60	9936.90	9936.90	10087.60	10166.50
*	.980	758.09	.00	760.11	833.62	257.52	10023.02	1287.46	1520.70	8908.50	9922.20	10056.90	10429.20
	.980	758.40	.30	761.21	126.82	.00	11568.00	.00	134.70	9922.20	9922.20	10056.90	10056.90
	1.080	760.90	.00	762.35	1360.48	1134.80	8950.98	1482.22	1527.50	8932.20	9925.60	10067.80	10459.70
	1.080	761.73	.82	763.65	371.95	454.28	10672.96	440.76	388.30	9797.40	9925.60	10067.80	10185.70
*	1.170	763.62	.00	765.03	1338.48	3670.53	7739.73	157.74	1458.80	8988.00	9933.90	10070.80	10446.80
*	1.170	764.37	.76	766.35	499.02	2147.31	9420.69	.00	538.20	9532.60	9933.90	10070.80	10070.80
*	1.260	766.44	.00	767.77	1455.04	3037.93	7904.13	625.94	1482.00	9028.00	9915.70	10063.50	10510.00
	1.260	767.43	.99	768.94	558.81	2324.98	9243.02	.00	563.40	9500.10	9915.70	10063.50	10063.50
*	1.360	769.63	.00	770.99	1409.43	2150.08	8434.09	983.82	1422.20	9045.00	9923.80	10065.10	10467.20
*	1.360	769.87	.24	772.33	347.66	989.40	10578.60	.00	351.80	9713.30	9923.80	10065.10	10065.10
*	1.450	772.52	.00	774.16	1205.53	1800.16	9071.45	696.38	1235.00	9220.00	9928.40	10051.70	10455.00
	1.450	772.91	.39	775.48	243.81	603.51	10964.49	.00	258.90	9792.80	9928.40	10051.70	10051.70
*	1.550	775.89	.00	777.60	954.23	1547.66	9431.44	588.90	990.00	9390.00	9933.10	10065.00	10380.00
*	1.550	775.86	-.03	778.88	176.62	201.57	11366.43	.00	191.50	9873.50	9933.10	10065.00	10065.00
*	1.610	777.79	.00	779.78	801.69	1432.08	9863.30	272.62	830.00	9455.00	9936.60	10064.00	10285.00
	1.610	778.09	.30	781.01	123.15	.00	11568.00	.00	127.40	9936.60	9936.60	10064.00	10064.00
*	1.640	778.80	.00	780.85	712.01	1308.10	10094.10	165.80	755.00	9480.00	9937.50	10074.60	10235.00
	1.640	779.37	.57	781.96	129.06	.00	11568.00	.00	137.10	9937.50	9937.50	10074.60	10074.60
*	1.670	780.08	.00	781.95	672.66	1408.75	10048.45	110.79	675.00	9510.00	9904.80	10078.20	10185.00
	1.670	780.69	.61	782.94	173.40	.00	11568.00	.00	173.40	9904.80	9904.80	10078.20	10078.20

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	1.740	782.84	.00	783.57	729.81	1102.41	7654.41	2811.18	737.60	9615.00	9936.40	10100.50	10352.60
*	1.740	783.56	.72	784.60	309.63	.00	9443.71	2124.29	311.20	9936.40	9936.40	10100.50	10247.60
	1.830	784.55	.00	785.21	980.98	376.08	6733.79	4458.13	1006.40	9670.00	9887.40	10053.90	10676.40
	1.830	785.35	.81	786.29	486.49	.00	8502.62	3065.38	487.20	9887.40	9887.40	10053.90	10374.60
*	1.880	785.89	.00	786.76	1184.76	294.03	8166.92	3107.05	1218.00	9665.00	9813.00	10028.20	10883.00
	1.880	786.29	.40	787.96	277.70	.00	10898.77	669.23	277.70	9813.00	9813.00	10028.20	10090.70
*	1.920	787.53	.00	788.35	1197.90	189.26	7943.97	3434.77	1197.90	9765.00	9875.90	10093.60	10962.90
	1.920	787.96	.43	789.54	296.30	.00	10670.56	897.44	296.30	9875.90	9875.90	10093.60	10172.20
	2.020	790.35	.00	791.05	1091.64	.00	8584.61	2983.39	1106.30	9893.90	9893.90	10253.70	11000.20
	2.020	791.33	.98	792.28	350.97	.00	11568.00	.00	359.80	9893.90	9893.90	10253.70	10253.70
	2.110	793.49	.00	794.52	700.12	.00	7508.40	4059.60	709.80	9860.20	9860.20	10079.30	10570.00
*	2.110	793.98	.49	795.82	280.03	.00	9954.27	1613.73	286.80	9860.20	9860.20	10079.30	10147.00
	2.210	797.18	.00	798.14	543.45	2026.56	7940.94	1600.50	618.40	9736.60	9851.10	10119.20	10355.00
	2.210	798.20	1.01	799.33	355.61	551.74	10467.29	548.97	387.00	9822.60	9851.10	10119.20	10209.60
	2.300	800.23	.00	800.80	744.55	3822.27	7540.02	205.72	780.80	9509.20	9918.80	10255.60	10290.00
	2.300	800.93	.70	801.88	422.85	829.37	10738.63	.00	441.60	9814.00	9918.80	10255.60	10255.60
	2.390	802.75	.00	803.39	899.20	5694.16	5873.83	.00	982.50	9084.00	9825.30	10066.50	10066.50
	2.390	803.56	.81	804.56	471.74	3382.15	8185.84	.00	527.30	9539.20	9825.30	10066.50	10066.50
	2.490	805.89	.00	806.49	1111.73	6186.76	5381.24	.00	1155.40	8969.00	9906.30	10124.40	10124.40
	2.490	806.67	.78	807.69	566.04	3941.43	7626.57	.00	599.60	9524.80	9906.30	10124.40	10124.40
	2.580	809.23	.00	809.96	1094.83	6042.82	5525.17	.00	1125.90	8976.80	9931.30	10102.70	10102.70
	2.580	810.02	.80	811.18	508.02	4103.47	7464.53	.00	530.50	9572.20	9931.30	10102.70	10102.70
	2.630	810.72	.00	811.40	1104.19	6248.15	5319.85	.00	1142.30	8975.50	9937.70	10117.80	10117.80
	2.630	811.61	.88	812.59	547.45	4571.43	6996.57	.00	577.40	9540.40	9937.70	10117.80	10117.80
	2.680	812.48	.00	813.37	1115.54	5534.00	6034.00	.00	1153.70	8990.20	9946.40	10121.80	10143.90
	2.680	813.21	.73	814.50	527.95	3747.00	7821.00	.00	538.00	9583.80	9946.40	10121.80	10121.80
	2.730	814.58	.00	815.22	1131.77	3542.92	5294.10	2730.98	1338.60	8940.50	9903.50	10068.10	10279.10
*	2.730	815.51	.92	816.19	670.68	3916.76	6377.00	1274.23	697.20	9466.10	9903.50	10068.10	10163.30
*	2.770	815.51	.00	816.39	1278.08	2681.36	7372.88	1513.77	1465.60	8999.00	9883.20	10103.10	10464.60
*	2.770	816.24	.74	817.73	484.43	1585.98	9982.02	.00	507.10	9596.00	9883.20	10103.10	10103.10
*	2.860	818.48	.00	819.18	1561.80	2835.46	5071.04	2836.49	1629.80	9305.20	9940.70	10038.10	10935.00
	2.860	819.44	.96	820.32	825.20	1852.57	6099.43	2790.99	825.20	9684.50	9940.70	10038.10	10509.70
*	2.960	821.28	.00	822.10	1489.78	971.96	6118.44	3652.60	.00	.00	9956.60	10097.60	.00
*	2.960	822.17	.89	823.34	578.70	.00	7829.73	2913.27	578.70	9956.60	9956.60	10097.60	10535.30

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	3.050	824.00	.00	824.44	1154.61	340.24	5900.40	4502.36	1942.30	8992.70	9935.30	10229.60	10935.00
	3.050	824.90	.90	825.54	581.50	.00	8225.60	2517.40	581.50	9935.30	9935.30	10229.60	10516.80
	3.150	826.37	.00	827.21	833.10	.30	9760.24	982.46	1663.70	8981.30	9838.80	10238.00	10645.00
	3.150	826.91	.53	827.72	399.20	.00	10743.00	.00	399.20	9838.80	9838.80	10238.00	10238.00
*	3.240	829.36	.00	830.45	718.02	870.70	8839.64	1032.66	1362.60	8907.40	9796.50	10033.10	10270.00
*	3.240	829.37	.01	831.26	236.60	.00	10743.00	.00	236.60	9796.50	9796.50	10033.10	10033.10
*	3.340	832.45	.00	833.77	546.55	1310.64	8864.52	567.84	1288.10	8881.90	9872.50	10057.90	10170.00
	3.340	833.15	.70	834.89	185.40	.00	10743.00	.00	185.40	9872.50	9872.50	10057.90	10057.90
	3.430	835.33	.00	835.99	766.72	780.32	6683.37	3279.31	1514.60	8972.10	9923.40	10090.20	10486.70
	3.430	836.18	.85	837.08	420.90	.00	8419.38	2323.62	420.90	9923.40	9923.40	10090.20	10344.30
*	3.520	837.75	.00	838.43	971.79	1348.86	7664.14	1730.00	1618.90	8996.10	9888.90	10110.40	10615.00
*	3.520	838.55	.80	839.56	367.80	.00	9952.72	790.28	367.80	9888.90	9888.90	10110.40	10256.70
	3.620	841.07	.00	841.70	932.31	2586.42	6921.15	1235.42	1503.30	8986.70	9907.90	10115.00	10490.00
	3.620	841.87	.81	842.84	275.90	1735.59	9007.41	.00	275.90	9839.10	9907.90	10115.00	10115.00
	3.710	843.19	.00	844.07	730.98	1457.51	7984.20	1301.28	1431.70	8988.30	9952.60	10120.40	10420.00
	3.710	843.98	.79	845.22	250.00	758.37	9945.42	39.21	250.00	9879.40	9952.60	10120.40	10129.40
*	3.810	845.82	.00	846.87	797.46	974.56	7783.27	1985.17	1761.30	8999.70	9885.40	10085.50	10761.00
	3.810	846.38	.56	847.97	450.96	.00	9801.97	941.02	578.80	9885.40	9885.40	10085.50	10464.20
	3.900	848.80	.00	849.52	927.18	3827.99	4885.61	2029.40	1339.90	9669.10	9951.90	10070.20	11009.00
	3.900	849.66	.86	850.71	550.80	2859.16	6272.54	1611.30	550.80	9880.30	9951.90	10070.20	10431.10
	4.000	851.44	.00	851.65	1296.88	.00	10743.00	.00	1905.80	8997.20	9469.40	10903.00	10903.00
*	4.000	852.01	.57	852.14	1358.53	.00	10743.00	.00	1433.60	9469.40	9469.40	10903.00	10903.00
*	4.090	853.69	.00	854.01	1024.54	.00	9028.00	.00	.00	.00	9588.30	10620.60	.00
*	4.090	853.73	.04	854.03	1026.59	.00	9028.00	.00	1032.30	9588.30	9588.30	10620.60	10620.60
	4.150	855.24	.00	855.53	940.68	.00	9028.00	.00	.00	.00	9557.20	10645.50	.00
	4.150	855.24	-.01	855.53	938.68	.00	9028.00	.00	1088.30	9557.20	9557.20	10645.50	10645.50
	4.180	856.25	.00	856.54	1036.99	.00	9028.00	.00	.00	.00	9468.00	10521.20	.00
	4.180	856.25	.00	856.54	1036.94	.00	9028.00	.00	1053.20	9468.00	9468.00	10521.20	10521.20
	4.280	859.07	.00	859.34	1241.19	.00	9028.00	.00	.00	.00	9206.70	10513.10	.00
	4.280	859.07	.00	859.34	1241.15	.00	9028.00	.00	1306.40	9206.70	9206.70	10513.10	10513.10
	4.330	860.31	.00	860.54	1172.34	.00	9028.00	.00	.00	.00	9114.50	10356.40	.00
	4.330	860.32	.00	860.54	1172.58	.00	9028.00	.00	1241.90	9114.50	9114.50	10356.40	10356.40
	4.370	861.32	.00	861.58	1104.90	.00	9028.00	.00	.00	.00	9103.30	10226.30	.00
	4.370	861.32	.00	861.58	1104.90	.00	9028.00	.00	1123.00	9103.30	9103.30	10226.30	10226.30

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	4.470	863.41	.00	863.62	1172.68	.00	9028.00	.00	1902.10	9106.10	9106.10	10279.00	11008.20
	4.470	863.49	.08	863.68	1172.89	.00	9028.00	.00	1172.90	9106.10	9106.10	10279.00	10279.00
	4.560	865.56	.00	865.86	1153.37	.00	9028.00	.00	.00	.00	9149.00	10479.40	.00
	4.560	865.77	.21	866.01	1234.69	.00	9028.00	.00	1330.40	9149.00	9149.00	10479.40	10479.40
	4.650	868.21	.00	868.54	1109.29	.00	9028.00	.00	.00	.00	9594.90	10736.70	.00
	4.650	868.51	.29	868.74	1141.80	.00	9028.00	.00	1141.80	9594.90	9594.90	10736.70	10736.70
	4.750	870.75	.00	871.02	1307.73	.00	9028.00	.00	.00	.00	9549.80	10940.60	.00
	4.750	871.10	.35	871.28	1362.57	.00	9028.00	.00	1390.80	9549.80	9549.80	10940.60	10940.60
	4.840	873.34	.00	873.71	1077.67	.00	9028.00	.00	.00	.00	9443.70	10719.90	.00
	4.840	873.83	.49	874.05	1167.44	.00	9028.00	.00	1276.20	9443.70	9443.70	10719.90	10719.90
	4.940	875.94	.00	876.28	1020.90	.00	9028.00	.00	.00	.00	9510.50	10581.50	.00
	4.940	876.48	.55	876.69	1061.87	.00	9028.00	.00	1070.60	9510.50	9510.50	10581.50	10581.10
	5.030	877.98	.00	878.35	962.83	.00	9028.00	.00	.00	.00	9449.50	10500.00	.00
	5.030	878.68	.70	878.87	1038.76	.00	9028.00	.00	1050.50	9449.50	9449.50	10500.00	10500.00
	5.130	880.25	.00	880.67	593.27	.00	9028.00	.00	.00	.00	9549.70	10210.50	.00
	5.130	880.64	.39	880.97	631.50	.00	9028.00	.00	660.80	9549.70	9549.70	10210.50	10210.50
	5.220	883.05	.00	883.30	935.21	.00	9028.00	.00	.00	.00	9416.20	10487.70	.00
	5.220	882.99	-.06	883.25	921.25	.00	9028.00	.00	1071.50	9416.20	9416.20	10487.70	10487.70
	5.310	885.43	.00	885.69	953.14	.00	9028.00	.00	.00	.00	9502.30	10525.30	.00
	5.310	885.43	.00	885.69	954.20	.00	9028.00	.00	1023.00	9502.30	9502.30	10525.30	10525.30
	5.410	887.84	.00	888.09	935.32	.00	9028.00	.00	.00	.00	9604.50	10620.80	.00
	5.410	887.83	.00	888.08	934.76	.00	9028.00	.00	1016.30	9604.50	9604.50	10620.80	10620.80
	5.500	889.92	.00	890.16	1050.88	.00	9028.00	.00	.00	.00	9335.10	10442.30	.00
	5.500	889.92	.00	890.16	1050.92	.00	9028.00	.00	1107.20	9335.10	9335.10	10442.30	10442.30
	5.540	890.88	.00	891.15	1168.85	.00	9028.00	.00	.00	.00	9145.40	10379.40	.00
	5.540	890.88	.00	891.15	1168.86	.00	9028.00	.00	1234.00	9145.40	9145.40	10379.40	10379.40
	5.600	892.22	.00	892.41	1300.45	.00	9028.00	.00	1516.90	9132.30	9132.30	10439.60	10649.20
	5.600	892.22	.00	892.41	1300.45	.00	9028.00	.00	1307.30	9132.30	9132.30	10439.60	10439.60
*	5.670	893.95	.00	894.19	993.14	.00	7124.00	.00	1002.80	9021.40	9021.40	10024.20	10024.20
*	5.670	893.95	.00	894.19	993.14	.00	7124.00	.00	1002.80	9021.40	9021.40	10024.20	10024.20
	5.750	896.14	.00	896.37	1160.00	.00	7124.00	.00	1160.00	8875.20	8875.20	10035.20	10035.20
	5.750	896.14	.00	896.37	1160.00	.00	7124.00	.00	1160.00	8875.20	8875.20	10035.20	10035.20
	5.830	898.28	.00	898.62	669.60	.00	7124.00	.00	669.60	9454.40	9454.40	10124.00	10124.00
	5.830	898.28	.00	898.62	669.60	.00	7124.00	.00	669.60	9454.40	9454.40	10124.00	10124.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	5.900	900.36	.00	900.61	903.40	.00	7124.00	.00	903.40	9122.90	9122.90	10026.30	10026.30
	5.900	900.36	.00	900.61	903.40	.00	7124.00	.00	903.40	9122.90	9122.90	10026.30	10026.30
	5.940	901.38	.00	901.88	880.13	3008.59	4115.41	.00	887.90	9155.50	9837.00	10043.40	10043.40
*	5.940	901.75	.37	903.29	253.00	298.37	6825.63	.00	253.00	9790.40	9837.00	10043.40	10043.40
*	5.970	904.35	.00	907.56	78.17	.00	7124.00	.00	.00	.00	9987.90	10066.10	.00
*	5.970	904.37	.02	907.56	78.17	.00	7124.00	.00	78.20	9987.90	9987.90	10066.10	10066.10
*	5.990	907.37	.00	907.56	1825.57	3725.56	3167.33	231.11	.00	.00	9974.90	10053.10	.00
*	5.990	904.47	-2.90	907.56	78.17	.00	7124.00	.00	717.90	9335.20	9974.90	10053.10	10053.10
*	6.040	907.62	.00	907.65	1252.20	4635.04	1719.02	769.94	1252.20	8987.80	9928.70	10074.30	10240.00
*	6.040	908.50	.88	908.53	823.00	4991.53	2132.47	.00	823.00	9251.30	9928.70	10074.30	10074.30
	6.080	907.65	.00	907.68	1485.70	2979.62	1439.00	2705.38	1485.70	8994.30	9927.50	10045.20	10480.00
	6.080	908.53	.88	908.57	979.30	3099.66	1823.15	2201.19	979.30	9354.90	9927.50	10045.20	10334.20
*	6.180	908.10	.00	908.33	1235.10	1669.50	3264.16	2190.34	1235.10	9434.90	9909.80	10075.70	10670.00
*	6.180	908.93	.82	909.38	421.30	588.56	4841.35	1694.09	421.30	9842.60	9909.80	10075.70	10263.90
*	6.270	910.53	.00	911.29	965.11	1103.71	3989.50	2030.79	1656.80	8992.30	9954.90	10034.30	10649.10
*	6.270	911.25	.72	912.56	293.80	.00	5214.63	1909.37	293.80	9954.90	9954.90	10034.30	10248.70
*	6.370	912.91	.00	913.64	955.92	1197.34	3898.23	2028.43	1650.90	8994.90	9980.40	10060.80	10645.80
	6.370	913.88	.97	914.82	371.80	.00	4728.22	2395.78	371.80	9980.40	9980.40	10060.80	10352.20
*	6.460	915.61	.00	916.28	1015.98	944.61	5132.58	1046.81	1326.40	9322.20	9908.20	10091.60	10648.60
	6.460	916.27	.67	917.50	183.40	.00	7124.00	.00	183.40	9908.20	9908.20	10091.60	10091.60
	6.550	917.86	.00	918.63	544.88	656.61	5921.12	546.26	1225.10	8991.80	9882.60	10044.10	10216.90
	6.550	918.80	.94	919.71	161.50	.00	7124.00	.00	161.50	9882.60	9882.60	10044.10	10044.10
	6.650	920.49	.00	921.46	535.86	1299.93	5824.07	.00	642.90	9562.70	9932.50	10131.30	10205.60
*	6.650	921.03	.53	922.31	198.80	.00	7124.00	.00	198.80	9932.50	9932.50	10131.30	10131.30
*	6.740	923.24	.00	923.74	568.14	245.03	6868.18	10.79	726.20	9512.60	9862.00	10183.00	10238.80
*	6.740	923.72	.48	924.15	321.00	.00	7124.00	.00	321.00	9862.00	9862.00	10183.00	10183.00
	6.840	925.05	.00	926.08	551.35	1055.44	5383.39	685.17	630.00	9730.20	9951.70	10075.30	10360.20
*	6.840	925.05	-.01	927.12	160.70	251.23	6869.97	2.79	160.70	9915.70	9951.70	10075.30	10076.40
	6.930	927.65	.00	928.50	596.48	525.41	6495.05	103.54	1446.10	8992.00	9886.00	10063.70	10438.10
*	6.930	928.61	.96	929.37	177.70	.00	7124.00	.00	177.70	9886.00	9886.00	10063.70	10063.70
	7.020	929.98	.00	930.56	735.86	960.48	6090.55	72.98	986.80	9398.50	9913.40	10162.10	10385.30
	7.020	930.35	.36	931.09	248.70	.00	7124.00	.00	248.70	9913.40	9913.40	10162.10	10162.10
	7.120	932.35	.00	933.15	639.04	251.23	6287.61	585.16	828.40	9522.80	9864.90	10117.60	10351.20
	7.120	932.71	.35	933.64	252.70	.00	7124.00	.00	252.70	9864.90	9864.90	10117.60	10117.60

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	7.210	934.27	.00	934.68	529.05	542.60	5823.93	757.47	.00	.00	9948.00	10153.40	.00
*	7.210	934.74	.47	935.34	205.40	.00	7124.00	.00	205.40	9948.00	9948.00	10153.40	10153.40
*	7.300	935.81	.00	937.42	247.47	.00	6382.40	741.60	902.30	9425.50	9944.70	10093.70	10327.80
*	7.300	936.11	.31	938.00	149.00	.00	7124.00	.00	149.00	9944.70	9944.70	10093.70	10093.70
*	7.400	939.71	.00	940.50	365.15	587.32	6536.68	.00	1297.80	8987.30	9905.20	10125.60	10285.10
*	7.400	940.19	.48	941.01	220.12	.00	7124.00	.00	220.40	9905.20	9905.20	10125.60	10125.60
	7.450	940.75	.00	941.26	259.26	2230.63	4893.37	.00	263.00	9827.50	9951.90	10090.50	10090.50
	7.450	941.10	.35	941.85	191.10	1126.85	5995.89	1.26	191.10	9903.80	9951.90	10090.50	10094.90
	7.490	941.38	.00	941.93	517.40	1867.99	5001.30	254.70	638.80	9511.40	9914.70	10070.80	10150.20
	7.490	941.77	.38	942.90	191.50	191.21	6932.79	.00	191.50	9879.30	9914.70	10070.80	10070.80
*	7.590	943.25	.00	944.39	241.61	1.01	7122.99	.00	404.00	9768.90	9887.60	10115.50	10172.90
	7.590	944.21	.96	944.94	227.90	.00	7124.00	.00	227.90	9887.60	9887.60	10115.50	10115.50
	7.700	946.65	.00	947.30	367.26	768.25	6355.75	.00	396.10	9767.00	9925.00	10163.10	10163.10
	7.700	946.58	-.07	947.50	223.51	.00	7124.00	.00	238.10	9925.00	9925.00	10163.10	10163.10
	7.780	948.28	.00	949.19	236.84	.00	7124.00	.00	.00	.00	9860.20	10116.10	.00
	7.780	948.59	.31	949.37	241.31	.00	7124.00	.00	255.90	9860.20	9860.20	10116.10	10116.10
	7.820	949.58	.00	950.39	247.57	.00	7124.00	.00	.00	.00	9842.20	10127.00	.00
	7.820	949.63	.04	950.41	248.26	.00	7124.00	.00	284.80	9842.20	9842.20	10127.00	10127.00
	7.870	950.73	.00	951.46	276.56	520.74	6603.26	.00	.00	.00	9922.70	10174.50	.00
	7.870	950.71	-.03	951.61	219.36	.00	7124.00	.00	251.80	9922.70	9922.70	10174.50	10174.50
	7.970	952.58	.00	952.96	388.72	.00	6908.84	215.16	.00	.00	9949.70	10245.00	.00
*	7.970	952.77	.19	953.15	295.30	.00	7124.00	.00	295.30	9949.70	9949.70	10245.00	10245.00
*	8.010	953.25	.00	953.96	372.53	.00	6896.57	227.43	.00	.00	9967.20	10254.10	.00
*	8.010	953.38	.13	954.10	281.19	.00	7124.00	.00	286.90	9967.20	9967.20	10254.10	10254.10
	8.060	954.80	.00	955.37	468.28	348.80	6678.62	96.58	.00	.00	9964.10	10241.30	.00
	8.060	954.88	.08	955.54	277.20	.00	7124.00	.00	277.20	9964.10	9964.10	10241.30	10241.30
	8.150	956.95	.00	957.39	351.74	1994.08	5129.92	.00	606.20	9801.90	9938.30	10220.70	10408.10
	8.150	957.32	.37	958.06	248.51	.00	7124.00	.00	282.40	9938.30	9938.30	10220.70	100220.70
	8.250	958.59	.00	959.83	214.49	641.03	6482.97	.00	1159.40	9847.80	9934.30	10077.20	11007.20
	8.250	959.37	.78	960.56	142.90	.00	7124.00	.00	142.90	9934.30	9934.30	10077.20	10077.20
	8.340	961.59	.00	962.85	180.52	.00	7124.00	.00	.00	.00	9834.80	10186.70	.00
	8.340	962.04	.45	963.06	211.97	.00	7124.00	.00	351.90	9834.80	9834.80	10186.70	10186.70
*	8.430	963.99	.00	964.59	302.12	871.94	5910.02	342.05	453.70	9673.10	9889.40	10041.50	10126.80
	8.430	964.13	.14	965.07	152.10	.00	7124.00	.00	152.10	9889.40	9889.40	10041.50	10041.50

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	8.530	965.29	.00	965.88	202.39	.00	4761.14	292.86	1108.70	9005.70	9882.50	10068.40	10114.40
	8.530	965.93	.64	966.46	170.90	.00	5054.00	.00	185.90	9882.50	9882.50	10068.40	10068.40
	8.620	966.71	.00	967.53	197.23	.00	4231.88	822.12	337.60	9958.00	9958.00	10077.80	10295.60
	8.620	967.17	.46	968.28	111.48	.00	5054.00	.00	119.80	9958.00	9958.00	10077.80	10077.80
	8.720	968.64	.00	968.93	348.46	65.34	4980.79	7.88	530.80	9807.60	9864.10	10145.50	10338.40
*	8.720	969.26	.61	969.48	281.50	.04	5053.96	.00	281.50	9864.00	9864.10	10145.50	10145.50
*	8.810	970.26	.00	971.18	184.56	.00	5054.00	.00	.00	.00	9823.90	10056.40	.00
*	8.810	970.40	.14	971.25	185.64	.00	5054.00	.00	232.50	9823.90	9823.90	10056.40	10056.40
*	8.910	973.03	.00	973.43	255.58	1741.38	3312.62	.00	1210.40	9788.40	9947.10	10139.10	10998.80
	8.910	973.33	.29	974.06	161.33	508.84	4545.16	.00	218.40	9920.70	9947.10	10139.10	10139.10
*	9.000	974.77	.00	975.86	259.07	145.11	4384.97	523.92	.00	.00	9938.70	10052.30	.00
	9.000	975.42	.65	976.64	113.60	.00	5054.00	.00	113.60	9938.70	9938.70	10052.30	10052.30
	9.090	977.66	.00	978.11	395.75	392.23	4548.51	113.27	.00	.00	9881.00	10072.70	.00
	9.090	978.17	.51	978.65	191.70	.00	5054.00	.00	191.70	9881.00	9881.00	10072.70	10072.70
	9.190	979.67	.00	980.32	273.05	879.25	4003.07	171.69	1138.40	9874.30	9980.80	10120.30	11012.70
*	9.190	980.03	.35	981.04	139.50	.00	5054.00	.00	139.50	9980.80	9980.80	10120.30	10120.30
	9.280	982.04	.00	982.86	239.33	888.22	3827.24	338.54	1203.10	9804.40	9924.40	10030.10	11007.50
	9.280	982.76	.72	983.91	120.30	198.60	4855.39	.00	120.30	9909.80	9924.40	10030.10	10030.10
	9.380	984.47	.00	985.23	223.22	.00	3089.46	1964.53	.00	.00	9917.50	10032.00	.00
	9.380	985.42	.94	986.21	168.28	.00	3656.09	1397.91	185.80	9917.50	9917.50	10032.00	10103.30
	9.470	986.53	.00	987.64	219.68	697.64	3713.50	642.86	.00	.00	9973.40	10036.20	.00
	9.470	987.12	.58	988.77	95.40	294.83	4562.90	196.26	95.40	9957.10	9973.40	10036.20	10052.50
*	9.560	988.83	.00	989.11	382.93	.48	4937.50	116.03	.00	.00	9812.50	10064.00	.00
*	9.560	989.73	.90	989.94	251.50	.00	5054.00	.00	251.50	9812.50	9812.50	10064.00	10064.00
*	9.660	990.99	.00	991.59	303.29	.00	5054.00	.00	.00	.00	9882.90	10245.60	.00
*	9.660	991.26	.27	991.75	310.43	.00	5054.00	.00	362.70	9882.90	9882.90	10245.60	10245.60
	-5.600	892.22	.00	892.41	1300.41	.00	9028.00	.00	1516.90	9132.30	9132.30	10439.60	10649.20
	-5.600	892.22	.00	892.41	1300.41	.00	9028.00	.00	1307.30	9132.30	9132.30	10439.60	10439.60
*	.060	893.27	.00	893.66	409.58	.00	1544.84	718.16	1041.40	9974.70	9974.70	10033.70	11016.10
*	.060	893.32	.05	894.41	62.70	.00	2252.40	10.60	62.70	9974.70	9974.70	10033.70	10037.40
	.140	895.11	.00	895.76	143.90	.00	2251.14	11.86	1031.60	9977.20	9977.20	10090.30	11008.80
*	.140	895.89	.78	896.31	113.10	.00	2263.00	.00	113.10	9977.20	9977.20	10090.30	10090.30
*	.180	896.22	.00	896.43	317.09	.00	979.52	1283.48	1043.90	9984.50	9984.50	10023.20	11028.40
	.180	896.54	.32	896.96	128.50	.00	1323.92	939.08	128.50	9984.50	9984.50	10023.20	10113.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	.210	896.82	.00	897.44	242.97	.00	1015.48	1247.52	1034.20	9985.10	9985.10	10014.60	11019.30
*	.210	897.42	.59	898.64	93.30	.00	1444.69	818.31	93.30	9985.10	9985.10	10014.60	10078.40
*	.290	898.75	.00	899.05	255.92	.00	1749.80	513.20	1025.70	9989.60	9989.60	10074.80	11015.30
*	.290	899.76	1.01	900.14	90.40	.00	2230.89	32.11	90.40	9989.60	9989.60	10074.80	10080.00
	.360	899.82	.00	900.09	415.36	.00	1387.58	875.42	1029.90	9963.30	9963.30	10022.30	10993.20
	.360	900.67	.84	901.11	107.10	.00	1847.68	415.32	107.10	9963.30	9963.30	10022.30	10070.40
*	.440	901.41	.00	901.99	410.03	.00	1326.75	936.25	1030.10	9978.50	9978.50	10017.20	11008.60
*	.440	902.18	.76	903.11	98.80	.00	1743.34	519.66	98.80	9978.50	9978.50	10017.20	10077.30
	.520	903.51	.00	903.73	378.09	.00	1106.86	1156.14	624.90	9965.50	9965.50	10037.50	10590.40
*	.520	904.49	.99	904.89	126.80	.00	1656.20	606.80	126.80	9965.50	9965.50	10037.50	10092.30
	.590	904.47	.00	904.63	605.30	527.51	877.20	858.30	677.80	9756.40	9987.20	10024.60	10434.20
*	.590	905.49	1.02	905.73	205.90	147.92	1117.63	997.46	205.90	9963.80	9987.20	10024.60	10169.70
*	.670	905.41	.00	906.05	280.92	238.95	2024.05	.00	1753.30	9610.00	9974.20	10059.10	11363.30
	.670	906.32	.90	906.74	192.60	671.33	1591.67	.00	192.60	9833.20	9974.20	10059.10	10025.80
*	.680	908.34	.00	909.07	483.00	393.28	1748.82	120.90	1452.70	9580.00	9974.90	10006.90	11032.70
*	.680	907.04	-1.30	909.34	56.92	18.69	2244.31	.00	60.20	9946.70	9974.90	10006.90	10006.90
*	.700	908.93	.00	909.07	623.31	1020.22	1012.20	230.57	1462.60	9560.00	9974.90	10006.90	11022.60
*	.700	908.93	.00	909.34	192.40	800.42	1462.58	.00	192.40	9814.50	9974.90	10006.90	10006.90
*	.790	909.18	.00	909.34	695.87	136.77	764.47	1361.76	809.00	9611.00	9975.00	10017.20	10420.00
*	.790	909.45	.27	909.93	194.60	.00	1192.45	1070.54	194.60	9975.00	9975.00	10017.20	10169.60
*	.880	910.63	.00	910.99	340.28	89.83	999.89	1173.28	1086.30	9928.10	9975.50	10018.10	11014.40
	.880	911.64	1.01	912.14	197.60	.00	1365.55	897.45	197.60	9975.50	9975.50	10018.10	10173.10
	.930	911.72	.00	912.06	324.59	1.01	1105.59	1156.40	1115.10	9894.20	9958.40	10010.60	11009.30
	.930	912.65	.93	913.16	157.30	.00	1573.41	689.59	157.30	9958.40	9958.40	10010.60	10115.70
	.980	912.70	.00	913.03	234.43	303.70	1018.64	940.66	1131.50	9877.20	9989.30	10030.60	11008.70
	.980	913.64	.94	914.14	89.30	.00	1358.31	904.69	89.30	9989.30	9989.30	10030.60	10078.60
	1.030	913.51	.00	913.73	240.87	.00	1021.59	1241.41	.00	.00	9965.80	10040.10	.00
	1.030	914.55	1.04	914.82	121.88	.00	1321.89	941.11	126.20	9965.80	9965.80	10040.10	10092.00
	1.070	914.07	.00	914.25	324.35	.00	497.51	1765.49	.00	.00	9965.50	10006.80	.00
	1.070	915.03	.96	915.30	162.36	.00	687.30	1575.70	164.90	9965.50	9965.50	10006.80	10130.40
*	1.170	915.99	.00	916.31	305.17	543.78	729.27	989.95	1193.20	9826.50	9973.20	10017.20	11019.70
*	1.170	916.81	.83	917.43	105.70	99.31	1123.28	1040.40	105.70	9966.40	9973.20	10017.20	10072.10
*	1.260	917.90	.00	918.09	392.71	829.63	810.17	623.19	1170.10	9837.10	9993.80	10041.20	11007.20
*	1.260	918.85	.95	919.16	139.00	640.44	1135.32	487.24	139.00	9949.00	9993.80	10041.20	10088.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	1.310	918.71	.00	918.97	356.54	404.29	1640.22	218.49	1157.70	9850.50	9958.50	10098.40	11008.20
	1.310	919.55	.84	919.89	139.90	.00	2263.00	.00	139.90	9958.50	9958.50	10098.40	10098.40
	1.350	919.95	.00	920.24	351.46	932.96	832.90	497.13	1232.70	9769.10	9971.50	10040.20	11001.80
*	1.350	920.67	.72	921.32	120.70	837.60	1425.39	.00	120.70	9919.50	9971.50	10040.20	10040.20
	1.450	922.25	.00	922.46	399.17	834.78	782.27	645.95	1295.50	9710.30	9987.80	10037.60	11005.80
*	1.450	923.23	.99	923.61	141.00	792.79	1165.57	304.64	141.00	9919.50	9987.80	10037.60	10060.50
	1.520	923.71	.00	923.90	432.56	507.77	451.67	1303.56	.00	.00	9989.00	10025.40	.00
	1.520	924.60	.89	924.99	158.50	26.99	737.68	1498.33	158.50	9985.70	9989.00	10025.40	10144.20

SUMMARY OF ERRORS AND SPECIAL NOTES

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CAUTION SECNO=      .020  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .020  PROFILE=  2  CRITICAL DEPTH ASSUMED

CAUTION SECNO=      .110  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .110  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .110  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .110  PROFILE=  2  MINIMUM SPECIFIC ENERGY

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CAUTION SECNO=      .150  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .150  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .150  PROFILE=  2  MINIMUM SPECIFIC ENERGY

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CAUTION SECNO=      .340  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .340  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      .380  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .380  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .570  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .570  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .570  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .570  PROFILE=  2  MINIMUM SPECIFIC ENERGY

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CAUTION SECNO=      .580  PROFILE=  1  MINIMUM SPECIFIC ENERGY
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CAUTION SECNO=      .580  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .590  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .590  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .590  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .590  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      .610  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .610  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .660  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .660  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .790  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .790  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .790  PROFILE=  2  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=      .890  PROFILE=  2  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=      .890  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .980  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     1.260  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     1.610  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     1.640  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     1.670  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.670  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     1.740  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.740  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.880  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.880  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     1.920  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.920  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     2.110  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.730  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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CAUTION SECNO=     2.770  PROFILE=  1  MINIMUM SPECIFIC ENERGY
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CAUTION SECNO=     2.860  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     2.860  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     2.960  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     2.960  PROFILE=  2  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     3.240  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.240  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     3.240  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.340  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.340  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.520  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.520  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.810  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.810  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     4.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     4.090  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     4.090  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.670  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.670  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     5.940  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     5.940  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     5.970  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     5.990  PROFILE=  1  HYDRAULIC JUMP D.S.
WARNING SECNO=     5.990  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     5.990  PROFILE=  2  HYDRAULIC JUMP D.S.

WARNING SECNO=     6.040  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=     6.180  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.180  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     6.270  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     6.270  PROFILE=  1  MINIMUM SPECIFIC ENERGY
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CAUTION SECNO=     6.370  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=     6.460  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     6.460  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     6.650  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.740  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.740  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     6.840  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     6.840  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     6.930  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.210  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.210  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     7.300  PROFILE=  1  CRITICAL DEPTH ASSUMED
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WARNING SECNO=     7.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=     7.970  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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WARNING SECNO=     8.530  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     8.720  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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CAUTION SECNO=      .210  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      .290  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .290  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .440  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .440  PROFILE=  1  MINIMUM SPECIFIC ENERGY
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WARNING SECNO=      .520  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .590  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .670  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .680  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .680  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .680  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .680  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      .700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .790  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .790  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .880  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.170  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.170  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.260  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.260  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.350  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.450  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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FLOODWAY DATA, RAINBOW.DAT
PROFILE NO. 2

STATION	WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
.020	550.	1233.	9.4	715.7	715.7	.0
.110	412.	1194.	9.7	720.6	720.6	.0
.150	451.	1218.	9.5	723.0	723.0	.0
.190	431.	1278.	9.1	725.1	725.1	.0
.290	486.	1308.	8.8	729.8	729.8	.0
.340	275.	1040.	11.1	732.2	732.2	.0
.380	274.	1295.	8.9	734.6	734.6	.0
.470	297.	1192.	9.7	737.3	737.3	.0
.550	287.	1194.	9.7	740.2	740.2	.0
.570	295.	1068.	10.8	740.7	740.7	.0
.580	301.	1071.	10.8	741.7	741.7	.0
.590	159.	869.	13.3	744.1	744.1	.0
.600	149.	867.	13.3	744.5	744.5	.0
.610	161.	1101.	10.5	746.1	746.1	.0
.660	334.	2119.	5.5	748.2	748.3	-.1
.700	322.	1544.	7.5	748.5	748.5	.0
.790	243.	999.	11.6	751.1	751.4	-.3
.890	225.	961.	12.0	755.6	754.7	.9
.980	127.	859.	13.5	758.4	758.1	.3
1.080	388.	1623.	7.1	761.7	760.9	.8
1.170	524.	2028.	5.7	764.4	763.6	.8
1.260	561.	2290.	5.1	767.4	766.4	1.0
1.360	349.	1400.	8.3	769.8	769.6	.2
1.450	259.	1206.	9.6	772.9	772.5	.4
1.550	188.	940.	12.3	775.9	775.9	.0
1.610	123.	843.	13.7	778.1	777.8	.3
1.640	129.	896.	12.9	779.4	778.8	.6
1.670	173.	960.	12.1	780.7	780.1	.6
1.740	310.	1571.	7.4	783.5	782.8	.7
1.830	486.	1775.	6.5	785.3	784.5	.8
1.880	278.	1167.	9.9	786.3	785.9	.4
1.920	296.	1212.	9.5	787.9	787.5	.4
2.020	351.	1476.	7.8	791.4	790.4	1.0
2.110	280.	1091.	10.6	794.0	793.5	.5
2.210	387.	1418.	8.2	798.2	797.2	1.0
2.300	442.	1547.	7.5	800.9	800.2	.7
2.390	509.	1581.	7.3	803.6	802.8	.8
2.490	586.	1684.	6.9	806.7	805.9	.8
2.580	528.	1590.	7.3	810.0	809.2	.8
2.630	557.	1755.	6.6	811.6	810.7	.9
2.680	528.	1554.	7.4	813.2	812.5	.7
2.730	697.	2149.	5.4	815.5	814.6	.9

FLOODWAY DATA, RAINBOW.DAT
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
2.770	507.	1407.	8.2	816.2	815.5	.7
2.860	825.	2147.	5.0	819.5	818.5	1.0
2.960	579.	1648.	6.5	822.2	821.3	.9
3.050	581.	1863.	5.8	824.9	824.0	.9
3.150	399.	1483.	7.2	826.9	826.4	.5
3.240	237.	973.	11.0	829.4	829.4	.0
3.340	185.	1014.	10.6	833.2	832.5	.7
3.430	421.	1617.	6.6	836.1	835.3	.8
3.520	368.	1417.	7.6	838.6	837.8	.8
3.620	276.	1368.	7.9	841.9	841.1	.8
3.710	250.	1277.	8.4	844.0	843.2	.8
3.810	579.	1186.	9.1	846.4	845.8	.6
3.900	551.	1453.	7.4	849.7	848.8	.9
4.000	1434.	3698.	2.9	852.0	851.4	.6
4.090	1027.	2039.	4.4	853.7	853.7	.0
4.150	994.	2090.	4.3	855.2	855.2	.0
4.180	1041.	2103.	4.3	856.3	856.3	.0
4.280	1241.	2175.	4.2	859.1	859.1	.0
4.330	1173.	2389.	3.8	860.3	860.3	.0
4.370	1105.	2232.	4.0	861.3	861.3	.0
4.470	1173.	2565.	3.5	863.5	863.4	.1
4.560	1238.	2289.	3.9	865.8	865.6	.2
4.650	1142.	2306.	3.9	868.5	868.2	.3
4.750	1363.	2627.	3.4	871.1	870.8	.3
4.840	1167.	2383.	3.8	873.8	873.3	.5
4.940	1062.	2484.	3.6	876.4	875.9	.5
5.030	1039.	2567.	3.5	878.7	878.0	.7
5.130	632.	1973.	4.6	880.7	880.3	.4
5.220	1001.	2210.	4.1	882.9	883.0	-.1
5.310	997.	2202.	4.1	885.4	885.4	.0
5.410	935.	2260.	4.0	887.8	887.8	.0
5.500	1051.	2319.	3.9	889.9	889.9	.0
5.540	1169.	2165.	4.2	890.9	890.9	.0
5.600	1300.	2553.	3.5	892.2	892.2	.0
5.670	1003.	1805.	3.9	894.0	894.0	.0
5.750	1160.	1882.	3.8	896.1	896.1	.0
5.830	670.	1513.	4.7	898.3	898.3	.0
5.900	903.	1795.	4.0	900.4	900.4	.0
5.940	253.	737.	9.7	901.8	901.4	.4
5.970	78.	497.	14.3	904.3	904.3	.0
5.990	78.	506.	14.1	904.5	907.4	-2.9
6.040	823.	4916.	1.4	908.5	907.6	.9

FLOODWAY DATA, RAINBOW.DAT
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
6.080	979.	4972.	1.4	908.6	907.7	.9
6.180	421.	1437.	5.0	908.9	908.1	.8
6.270	294.	929.	7.7	911.2	910.5	.7
6.370	372.	1120.	6.4	913.9	912.9	1.0
6.460	183.	801.	8.9	916.3	915.6	.7
6.550	161.	930.	7.7	918.8	917.9	.9
6.650	199.	783.	9.1	921.0	920.5	.5
6.740	321.	1347.	5.3	923.7	923.2	.5
6.840	161.	648.	11.0	925.1	925.1	.0
6.930	178.	1014.	7.0	928.7	927.7	1.0
7.020	249.	1031.	6.9	930.4	930.0	.4
7.120	253.	920.	7.7	932.8	932.4	.4
7.210	205.	1147.	6.2	934.8	934.3	.5
7.300	149.	646.	11.0	936.1	935.8	.3
7.400	220.	985.	7.2	940.2	939.7	.5
7.450	191.	1060.	6.7	941.0	940.7	.3
7.490	191.	862.	8.3	941.8	941.4	.4
7.590	228.	1043.	6.8	944.2	943.2	1.0
7.700	224.	925.	7.7	946.6	946.7	-.1
7.780	241.	1002.	7.1	948.6	948.3	.3
7.820	248.	999.	7.1	949.6	949.6	.0
7.870	219.	936.	7.6	950.7	950.7	.0
7.970	295.	1444.	4.9	952.8	952.6	.2
8.010	281.	1046.	6.8	953.4	953.3	.1
8.060	277.	1096.	6.5	954.9	954.8	.1
8.150	249.	1034.	6.9	957.4	957.0	.4
8.250	143.	811.	8.8	959.4	958.6	.8
8.340	212.	879.	8.1	962.1	961.6	.5
8.430	152.	915.	7.8	964.1	964.0	.1
8.530	171.	863.	5.9	965.9	965.3	.6
8.620	111.	600.	8.4	967.2	966.7	.5
8.720	281.	1327.	3.8	969.2	968.6	.6
8.810	186.	683.	7.4	970.4	970.3	.1
8.910	161.	752.	6.7	973.3	973.0	.3
9.000	114.	570.	8.9	975.5	974.8	.7
9.090	192.	914.	5.5	978.2	977.7	.5
9.190	139.	626.	8.1	980.1	979.7	.4
9.280	120.	602.	8.4	982.7	982.0	.7
9.380	168.	743.	6.8	985.4	984.5	.9
9.470	95.	530.	9.5	987.1	986.5	.6
9.560	251.	1370.	3.7	989.7	988.8	.9
9.660	310.	894.	5.7	991.3	991.0	.3

FLOODWAY DATA, RAINBOW.DAT
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
-5.600	1300.	2552.	3.5	892.2	892.2	.0
.060	63.	273.	8.3	893.4	893.3	.1
.140	113.	435.	5.2	895.9	895.1	.8
.180	128.	477.	4.7	896.5	896.2	.3
.210	93.	275.	8.2	897.4	896.8	.6
.290	90.	462.	4.9	899.7	898.7	1.0
.360	107.	453.	5.0	900.6	899.8	.8
.440	99.	321.	7.0	902.2	901.4	.8
.520	127.	459.	4.9	904.5	903.5	1.0
.590	206.	654.	3.5	905.5	904.5	1.0
.670	193.	498.	4.5	906.3	905.4	.9
.680	57.	193.	11.7	907.0	908.3	-1.3
.700	192.	557.	4.1	908.9	908.9	.0
.790	195.	433.	5.2	909.5	909.2	.3
.880	198.	444.	5.1	911.6	910.6	1.0
.930	157.	433.	5.2	912.6	911.7	.9
.980	89.	402.	5.6	913.6	912.7	.9
1.030	122.	540.	4.2	914.5	913.5	1.0
1.070	162.	553.	4.1	915.1	914.1	1.0
1.170	106.	362.	6.3	916.8	916.0	.8
1.260	139.	518.	4.4	918.9	917.9	1.0
1.310	140.	482.	4.7	919.5	918.7	.8
1.350	121.	350.	6.5	920.6	919.9	.7
1.450	141.	477.	4.7	923.2	922.2	1.0
1.520	158.	457.	4.9	924.6	923.7	.9

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C
C    234
C   0.55 Right end of cross section extended 1.62 feet.  Floodplain mapped
C   0.55 to the end of the FIS mapping for consistency with adjacent cross
C   0.55 sections.  No USGS contour data available for this cross section.
C   0.57 Cross section 0.57 is aligned down the center of Old U.S.
C   0.57 Highway 80 in the right overbank.
C   0.59 Cross section 0.59 is aligned with the downstream side of the Gila
C   0.59 Bend canal.
C   0.60 Cross section 0.60 is aligned through the center of the Gila Bend
C   0.60 canal.
C   0.61 Cross section 0.61 is aligned with the upstream side of the Gila
C   0.61 Bend canal.
C   0.79 CWSEL intersects detailed cross section but upstream CWSEL's
C   0.79 indicate potential flooding.  Floodplain plotted to the limits of the
C   0.79 detailed cross section because of the Ag fields.
C   0.89 CWSEL intersects detailed cross section but upstream CWSEL's
C   0.89 indicate potential flooding.  Floodplain plotted to the limits of the
C   0.89 detailed cross section because of the Ag fields.
C   0.98 Right end of cross section extended 1.59 feet.  Floodplain plotted
C   0.98 to the limits of the detailed cross section because of the Ag fields.
C   0.98 No USGS contour data available for this cross section.
C   1.08 Right end of cross section extended 3.10 feet.  Floodplain plotted
C   1.08 to the limits of the detailed cross section because of the Ag fields.
C   1.08 No USGS contour data available for this cross section.
C   1.17 Left end of cross section extended 1.92 feet.  Floodplain plotted to
C   1.17 the limits of the detailed cross section because of the Ag fields.
C   1.17 No USGS contour data available for this cross section.
C   1.26 Left end of cross section extended 2.14 feet.  Floodplain plotted to
C   1.26 the limits of the detailed cross section because of the Ag fields.
C   1.26 No USGS contour data available for this cross section.
C   1.36 Left end of cross section extended less than 1 foot.  Mapped
C   1.36 floodplain to edge of the detailed cross section.
C   1.45 Left end of cross section extended less than 1 foot.  Mapped
C   1.45 floodplain to edge of the detailed cross section.
C   1.55 Both ends of the cross section were extended less than 1 foot.
C   1.55 Mapped floodplain to edge of the detailed cross section.
C   1.61 Left and right ends of the cross section were extended 1.19 and
C   1.61 1.09 feet, respectively.  The left floodplain edge was mapped to
C   1.61 STA 8805 using interpolated USGS quad contour data.  The right
C   1.61 floodplain edge was interpolated to be 3105 feet beyond the end of
C   1.61 the detailed cross section using USGS quad contour data.
C   1.61 Therefore, the right floodplain edge was mapped to the end of the
C   1.61 cross section (artificial boundary).
C   1.64 Left and right ends of the cross section were extended 1.80 and
C   1.64 1.20 feet, respectively.  The left floodplain edge was mapped to
C   1.64 STA 8927 using interpolated USGS quad contour data.  The right
C   1.64 floodplain edge was interpolated to be 2850 feet beyond the end of
C   1.64 the detailed cross section using USGS quad contour data.
C   1.64 Therefore, the right floodplain edge was mapped to the end of the
C   1.64 cross section (artificial boundary).
C   1.67 Left and right ends of the cross section were extended 1.98 and
C   1.67 1.08 feet, respectively.  The left floodplain edge was mapped to
C   1.67 STA 8480 using interpolated USGS quad contour data.  No USGS
C   1.67 contour data available for the right overbank.  Therefore, the right
C   1.67 floodplain edge was mapped to the end of the cross section
C   1.67 (artificial boundary).
C   1.74 Left and right ends of the cross section were extended 2.64 and
C   1.74 1.54 feet, respectively.  The left floodplain edge was mapped to
C   1.74 STA 8254 using interpolated USGS quad contour data.  The right
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C   1.74 floodplain edge was interpolated to be 708 feet beyond the end of
C   1.74 the detailed cross section using USGS quad contour data.
C   1.74 Therefore, for consistency with adjacent cross sections, the right
C   1.74 floodplain edge was mapped to the end of the cross section
C   1.74 (artificial boundary).
C   1.83 Both ends of the cross section were extended less than 1 foot.
C   1.83 Mapped floodplain to edge of the detailed cross section.
C   1.88 Left end of cross section extended 1.30 feet.  The left floodplain
C   1.88 edge was mapped to STA 8589 using interpolated USGS quad
C   1.88 contour data.  Right end of cross section extended less than 1 foot.
C   1.88 The right floodplain edge was mapped to the end of the detailed
C   1.88 cross section.
C   1.92 Left end of cross section extended 1.53 feet.  The left floodplain
C   1.92 edge was mapped to STA 8415 using interpolated USGS quad
C   1.92 contour data.  Right end of cross section extended less than 1 foot.
C   1.92 The right floodplain edge was mapped to the end of the detailed
C   1.92 cross section.
C   2.02 Left end of cross section extended 1.55 feet.  The left floodplain
C   2.02 edge was mapped to STA 8529 using interpolated USGS quad
C   2.02 contour data.  Right end of cross section extended 1.15 feet.  The
C   2.02 right floodplain edge was mapped to STA 11655 using interpolated
C   2.02 USGS quad contour data.
C   2.11 Left end of cross section extended 1.49 feet.  The left floodplain
C   2.11 edge was mapped to STA 8508 using interpolated USGS quad
C   2.11 contour data.  Right end of cross section extended 1.19 feet.  The
C   2.11 right floodplain edge was mapped to STA 11641 using interpolated
C   2.11 USGS quad contour data.
C   2.21 Left end of cross section extended 2.58 feet.  The left floodplain
C   2.21 edge was mapped to STA 8001 using interpolated USGS quad
C   2.21 contour data.  Right end of cross section extended less than 1 foot.
C   2.21 The right floodplain edge was mapped to the end of the detailed
C   2.21 cross section.
C   2.30 Left end of cross section extended 3.73 feet.  The left floodplain
C   2.30 edge was mapped to STA 8018 using interpolated USGS quad
C   2.30 contour data.  Right end of cross section extended less than 1 foot.
C   2.30 The right floodplain edge was mapped to the end of the detailed
C   2.30 cross section.
C   2.39 Left end of cross section extended 2.75 feet.  The left floodplain
C   2.39 edge was mapped to STA 8291 using interpolated USGS quad
C   2.39 contour data.
C   2.49 Left end of cross section extended 2.19 feet.  The left floodplain
C   2.49 edge was mapped to STA 8391 using interpolated USGS quad
C   2.49 contour data.  Right end of cross section extended less than 1 foot.
C   2.49 The right floodplain edge was mapped to the end of the detailed
C   2.49 cross section.
C   2.58 Left end of cross section extended 1.23 feet.  The left floodplain
C   2.58 edge was mapped to STA 8756 using interpolated USGS quad
C   2.58 contour data.  Right end of cross section extended 1.23 feet.  The
C   2.58 right floodplain edge was mapped to STA 11319 using interpolated
C   2.58 USGS quad contour data.
C   2.63 Left end of cross section extended less than 1 foot.  The left
C   2.63 floodplain edge was mapped to the end of the detailed cross
C   2.63 section.  Right end of cross section extended 1.22 feet.  The right
C   2.63 floodplain edge was mapped to STA 11228 using interpolated
C   2.63 USGS quad contour data.
C   2.68 Left end of cross section extended less than 1 foot.  The left
C   2.68 floodplain edge was mapped to the end of the detailed cross
C   2.68 section.  Right end of cross section extended 1.58 feet.  The right
C   2.68 floodplain edge was mapped to STA 11275 using interpolated
C   2.68 USGS quad contour data.
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C   2.73 Right end of cross section extended 1.88 feet.  The right floodplain
C   2.73 edge was mapped to STA 11403 using interpolated USGS quad
C   2.73 contour data.
C   2.77 Right end of cross section extended 2.01 feet.  The right floodplain
C   2.77 edge was mapped to STA 11458 using interpolated USGS quad
C   2.77 contour data.
C   2.86 Right end of cross section extended 1.79 feet.  The right floodplain
C   2.86 edge was mapped to STA 11112 using interpolated USGS quad
C   2.86 contour data.
C   2.96 Right end of cross section extended less than 1 foot.  The right
C   2.96 floodplain edge was mapped to the end of the detailed cross
C   2.96 section.
C   3.05 Right end of cross section extended 1.01 feet.  The right floodplain
C   3.05 edge was mapped to STA 11283 using interpolated USGS quad
C   3.05 contour data.
C   3.15 Right end of cross section extended 2.18 feet.  The right floodplain
C   3.15 edge was mapped to STA 11519 using interpolated USGS quad
C   3.15 contour data.
C   3.24 Right end of cross section extended less than 1 foot.  The right
C   3.24 floodplain edge was mapped to the end of the detailed cross
C   3.24 section.
C   3.34 Right end of cross section extended less than 1 foot.  The right
C   3.34 floodplain edge was mapped to the end of the detailed cross
C   3.34 section.
C   3.43 Right end of cross section extended less than 1 foot.  The right
C   3.43 floodplain edge was mapped to the end of the detailed cross
C   3.43 section.
C   3.52 Right end of cross section extended 1.26 feet.  The right floodplain
C   3.52 edge was mapped to STA 11294 using interpolated USGS quad
C   3.52 contour data.
C   5.60 Left end of cross section extended approx. 1 foot.  The left
C   5.60 floodplain edge was mapped to the end of the detailed cross
C   5.60 section.
C   5.67 Left and right ends of the cross section were extended 2.75 and
C   5.67 1.25 feet, respectively.  The left floodplain edge was interpolated
C   5.67 to be 753 feet beyond the end of the detailed cross section using
C   5.67 USGS quad contour data.  Therefore, for consistency between
C   5.67 adjacent cross sections, the left floodplain edge was mapped to the
C   5.67 end of the cross section (artificial boundary).  The right side of the
C   5.67 cross section between the mainstem and the tributary is ineffective
C   5.67 but flooded and will be mapped as Zone A.
C   5.75 Left end of the cross section extended 1.04 feet.  The left
C   5.75 floodplain edge was interpolated to be 718 feet beyond the end of
C   5.75 the detailed cross section using USGS quad contour data.
C   5.75 Therefore, for consistency between adjacent cross sections, the left
C   5.75 floodplain edge was mapped to the end of the cross section
C   5.75 (artificial boundary).  The right side of the cross section between
C   5.75 the mainstem and the tributary is ineffective but flooded and will
C   5.75 be mapped as Zone A.
C   5.83 Left and right ends of the cross section were extended 5.78 and
C   5.83 4.48 feet, respectively.  The left floodplain edge was interpolated
C   5.83 to be 1846 feet beyond the end of the detailed cross section using
C   5.83 USGS quad contour data.  Therefore, for consistency between
C   5.83 adjacent cross sections, the left floodplain edge was mapped to the
C   5.83 end of the cross section (artificial boundary).  The right side of the
C   5.83 cross section between the mainstem and the tributary is ineffective
C   5.83 but flooded and will be mapped as Zone A.
C   5.90 Left and right ends of the cross section were extended 1.56 and
C   5.90 3.16 feet, respectively.  No USGS quad contour data was available
C   5.90 at this cross section.  Therefore, for consistency between adjacent
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C   5.90 cross sections, the left floodplain edge was mapped to the end of
C   5.90 the cross section (artificial boundary).  The right side of the cross
C   5.90 section between the mainstem and the tributary is ineffective but
C   5.90 flooded and will be mapped as Zone A.
C   5.94 CWSEL intersects left side of cross section.  However, for
C   5.94 consistency with flow overtopping the roadway, the floodplain was
C   5.94 mapped to the end of the detailed cross section.  The right side of
C   5.94 the cross section between the mainstem and the tributary is
C   5.94 ineffective but flooded and will be mapped as Zone A.
C   5.97 The HEC-2 model requires a downstream section for use in
C   5.97 calculating losses through the special bridge model (SR 85).  The
C   5.97 CWSEL calculated at this section is inconsistent with adjacent cross
C   5.97 sections.  The left edge of the floodplain was mapped to the end of
C   5.97 the detailed cross section to be consistent with the weir flow
C   5.97 calculated at the upstream face of the bridge.  The right side of the
C   5.97 cross section between the mainstem and the tributary is ineffective
C   5.97 but flooded and will be mapped as Zone A.
C   5.99 The upstream section of the special bridge model for the structure
C   5.99 at SR 85.  Left end of cross section extended 2.57 feet.  No USGS
C   5.99 data available to extend this cross section.  The left edge of the
C   5.99 floodplain was mapped to the end of the detailed cross section due
C   5.99 to the weir flow conditions.  The right side of the cross section
C   5.99 between the mainstem and the tributary is ineffective but flooded
C   5.99 and will be mapped as Zone A.
C   6.04 Left and right ends of the cross section were extended 2.82 and
C   6.04 6.72 feet, respectively.  The left floodplain edge was interpolated
C   6.04 to be 1282 feet beyond the end of the detailed cross section using
C   6.04 USGS quad contour data.  Therefore, for consistency between
C   6.04 adjacent cross sections, the left floodplain edge was mapped to the
C   6.04 end of the cross section (artificial boundary).  The right side of the
C   6.04 cross section between the mainstem and the tributary is ineffective
C   6.04 but flooded and will be mapped as Zone A.
C   6.08 Left and right ends of the cross section were extended 1.75 and
C   6.08 4.35 feet, respectively.  The left floodplain edge was interpolated
C   6.08 to be 818 feet beyond the end of the detailed cross section using
C   6.08 USGS quad contour data.  Therefore, for consistency between
C   6.08 adjacent cross sections, the left floodplain edge was mapped to the
C   6.08 end of the cross section (artificial boundary).  The right side of the
C   6.08 cross section between the mainstem and the tributary is ineffective
C   6.08 but flooded and will be mapped as Zone A.
C   6.18 Right end of cross section extended less than 1 foot.  No USGS
C   6.18 quad contour data available.  To maintain consistency between
C   6.18 adjacent cross sections, the right side of the cross section between
C   6.18 the mainstem and the tributary will be mapped as Zone A.
C   6.27 Right end of cross section extended less than 1 foot.  No USGS
C   6.27 quad contour data available.  To maintain consistency between
C   6.27 adjacent cross sections, the right side of the cross section between
C   6.27 the mainstem and the tributary will be mapped as Zone A.
C   6.37 Right end of cross section extended 2.61 feet.  No USGS quad
C   6.37 contour data available.  To maintain consistency between adjacent
C   6.37 cross sections, the right side of the cross section between the
C   6.37 mainstem and the tributary will be mapped as Zone A.
C   6.46 Right end of cross section extended 3.01 feet.  No USGS quad
C   6.46 contour data available.  To maintain consistency between adjacent
C   6.46 cross sections, the right side of the cross section between the
C   6.46 mainstem and the tributary will be mapped as Zone A.
T1      RAINBOW WASH FLOOD INSURANCE STUDY (MCFCD 90-66)
T2      SIMONS, LI & ASSOCIATES, INC. - TEMPE, AZ
T3      RAINBOW.DAT             FLOODPLAIN
J1    0       2       0       0      -1       0       0       0     715       0
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J2     1       0      -1       0       0       0      -1       0       0       0
J3   110     200
J6     1
NC 0.030   0.030   0.030     0.1     0.3
QT     2   11568   11568
ET                   9.1                                          9858.9 10521.5
X1  0.02      84  9858.9 10521.5       0       0       0
X3    10
GR 734.6  8997.9   733.8  9042.8   734.0  9092.0   726.1  9122.9   731.7  9132.8
GR 732.7  9145.6   728.7  9161.2   734.2  9190.3   733.6  9314.3   730.5  9336.3
GR 729.9  9370.3   729.5  9434.0   730.4  9441.1   728.2  9459.2   729.8  9477.7
GR 728.4  9496.7   727.3  9533.6   727.2  9540.3   728.3  9550.5   728.0  9591.1
GR 726.7  9614.9   726.6  9623.8   723.8  9634.1   723.2  9645.4   720.8  9649.6
GR 721.1  9671.6   722.1  9700.7   728.1  9715.1   727.7  9725.7   727.0  9733.3
GR 727.9  9757.8   725.6  9765.2   727.4  9776.4   727.9  9792.0   725.2  9795.1
GR 727.5  9800.9   728.3  9819.2   729.0  9858.9   713.3  9869.0   712.8  9889.9
GR 712.9  9923.1   713.1  9943.2   713.0  9973.9   712.6  9981.5   711.7  9984.3
GR 712.0 10000.0   712.0 10019.4   712.9 10050.3   713.5 10086.9   713.5 10138.5
GR 713.4 10175.9   712.8 10210.4   712.9 10258.1   712.9 10292.2   718.2 10299.7
GR 718.4 10314.3   718.4 10334.9   717.9 10379.2   713.9 10385.4   714.0 10413.2
GR 717.3 10420.6   717.7 10441.0   717.9 10486.6   722.5 10500.9   720.5 10508.0
GR 727.0 10521.5   727.3 10544.0   725.3 10547.6   727.2 10550.8   727.1 10562.9
GR 726.7 10563.0   726.8 10605.8   720.0 10613.7   725.2 10631.9   715.4 10663.3
GR 715.9 10715.6   711.5 10721.6   711.8 10736.4   714.4 10754.2   714.4 10775.5
GR 709.6 10804.8   707.8 10860.5   708.5 10902.7   706.5 11007.5
ET                   9.1                                          9707.7 10174.5
X1  0.11      83  9707.7 10174.5     460     280     479
X3    10
GR 735.2  8999.6   735.0  9042.8   737.2  9108.5   737.1  9132.9   735.8  9147.7
GR 736.0  9160.9   736.8  9200.6   738.6  9225.1   736.5  9239.3   731.1  9256.5
GR 730.4  9270.5   738.0  9292.3   734.5  9317.5   734.8  9334.1   733.3  9341.4
GR 733.6  9360.7   732.6  9383.4   731.3  9393.9   729.8  9411.1   731.2  9415.4
GR 732.5  9432.5   731.2  9444.1   730.4  9476.5   730.9  9492.6   730.4  9518.7
GR 730.9  9531.9   727.6  9540.5   726.6  9546.6   730.4  9557.1   729.9  9584.8
GR 729.1  9613.9   728.7  9625.4   729.2  9632.9   729.4  9660.9   729.2  9707.7
GR 718.1  9716.1   718.4  9768.1   718.4  9827.4   717.9  9843.4   718.1  9850.4
GR 718.1  9884.0   717.0  9887.5   716.9  9928.6   716.8  9998.7   716.7 10000.0
GR 717.2 10009.9   717.8 10051.1   718.5 10108.8   717.6 10111.9   717.2 10121.7
GR 724.4 10131.8   724.7 10140.5   727.0 10155.0   728.8 10174.5   729.0 10217.3
GR 728.6 10238.1   728.9 10245.6   729.3 10277.6   728.6 10288.4   729.2 10299.7
GR 729.3 10337.0   728.9 10350.3   729.1 10359.2   729.2 10402.3   728.6 10434.1
GR 728.3 10512.2   728.7 10546.1   729.3 10632.7   728.3 10682.3   724.1 10691.3
GR 727.0 10699.2   733.2 10758.9   728.0 10840.9   723.1 10855.6   728.7 10874.4
GR 728.8 10880.8   726.0 10894.7   726.3 10914.0   721.0 10921.6   726.7 10930.0
GR 726.5 10956.8   711.3 10989.7   709.7 11008.0
ET                   9.1                                          9723.3 10187.5
X1  0.15      85  9723.3 10187.5     140     250     216
X3    10
GR 735.6  8999.3   736.1  9043.3   737.0  9122.6   736.9  9123.1   737.6  9187.4
GR 738.0  9234.0   737.1  9289.4   736.6  9309.1   736.9  9322.0   733.0  9336.4
GR 731.4  9356.4   736.5  9379.9   734.3  9393.5   734.3  9410.1   734.7  9425.1
GR 734.0  9445.8   733.8  9480.7   733.9  9492.2   732.2  9513.2   729.0  9524.0
GR 728.7  9537.3   729.1  9549.1   731.0  9557.2   730.3  9563.1   730.0  9599.1
GR 729.3  9606.8   729.8  9615.8   730.7  9676.5   730.6  9723.3   720.0  9730.6
GR 720.7  9767.4   721.8  9803.0   722.2  9842.1   720.4  9845.5   720.1  9871.1
GR 721.1  9875.1   720.7  9893.5   718.8  9899.2   718.9  9927.9   719.3  9971.2
GR 719.4  9995.0   718.2 10000.0   718.3 10011.6   719.4 10015.0   719.9 10054.4
GR 720.4 10060.3   720.7 10108.3   720.9 10137.9   720.9 10177.4   729.7 10187.5
GR 729.9 10225.4   730.1 10262.4   729.9 10300.1   728.4 10307.1   730.3 10315.5
GR 730.3 10327.7   727.2 10345.2   727.3 10353.4   729.2 10360.5   730.2 10372.8
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GR 730.4 10391.9   730.1 10429.6   730.3 10479.0   730.1 10516.0   730.5 10526.6
GR 730.8 10542.2   729.2 10559.5   731.5 10589.9   729.0 10600.5   730.5 10617.9
GR 730.0 10618.9   731.6 10686.5   729.6 10746.6   723.3 10755.2   723.5 10764.1
GR 725.2 10790.8   729.3 10804.4   727.9 10816.5   731.8 10834.9   732.5 10856.7
GR 732.4 10894.1   731.9 10917.5   734.5 10948.3   729.0 10991.8   729.5 11002.6
ET                   9.1                                          9695.2 10144.1
X1  0.19      86  9695.2 10144.1     160     250     226
X3    10
GR 735.2  8895.9   733.0  8921.7   733.3  8929.9   735.3  8938.3   736.3  8974.7
GR 737.0  9036.4   737.8  9103.1   738.5  9141.8   738.6  9195.7   738.2  9246.1
GR 737.6  9294.2   737.4  9337.1   734.0  9342.0   736.7  9346.1   738.7  9360.0
GR 736.3  9368.6   732.5  9375.1   732.5  9395.7   736.7  9408.5   737.6  9417.8
GR 736.0  9431.0   732.5  9447.6   733.0  9466.1   730.8  9513.1   730.9  9521.9
GR 731.1  9549.0   730.7  9568.2   728.8  9576.1   730.2  9584.4   730.7  9597.1
GR 731.1  9621.2   731.5  9661.3   731.1  9695.2   723.5  9706.7   722.8  9741.8
GR 722.0  9769.5   724.1  9772.5   723.8  9787.3   722.9  9793.3   722.4  9830.0
GR 722.3  9851.0   723.6  9854.7   723.6  9889.8   720.9  9903.1   721.5  9922.8
GR 721.1  9963.8   720.5  9972.8   720.7  9986.0   720.7 10000.0   721.1 10085.6
GR 723.1 10100.6   723.9 10133.6   730.3 10144.1   730.9 10161.0   730.5 10178.2
GR 731.4 10186.2   731.5 10253.7   730.5 10280.8   731.3 10290.5   730.8 10320.8
GR 731.9 10345.4   732.0 10367.6   729.8 10378.0   731.3 10386.8   731.7 10404.5
GR 731.1 10420.7   731.8 10433.4   731.7 10477.4   731.9 10509.8   730.2 10533.9
GR 733.9 10555.8   730.5 10578.0   732.1 10594.8   729.8 10605.2   732.7 10616.1
GR 732.3 10692.5   728.9 10701.1   731.2 10713.6   731.5 10731.5   727.8 10737.5
GR 731.7 10754.2   735.9 10795.5   737.0 10828.6   737.3 10899.3   737.0 10962.2
GR 737.2 11003.0
NC 0.033   0.033   0.033
ET                   9.1                                          9519.2 10034.6
X1  0.29      84  9519.2 10034.6     475     480     510
X3    10
GR 740.0  8984.9   740.4  9023.1   739.0  9046.6   740.2  9056.1   740.3  9066.2
GR 739.4  9110.6   737.9  9140.8   737.2  9157.8   737.7  9162.0   737.7  9179.9
GR 738.7  9195.6   738.3  9205.8   739.3  9216.5   740.6  9242.1   741.0  9281.8
GR 738.1  9310.8   736.4  9335.4   734.5  9345.7   734.4  9365.1   733.6  9406.2
GR 734.2  9423.2   733.7  9441.7   730.6  9444.6   733.9  9450.9   733.9  9493.5
GR 733.7  9519.2   732.5  9534.0   728.7  9544.8   728.4  9578.2   728.4  9632.4
GR 728.6  9656.7   728.1  9690.6   728.3  9706.0   728.2  9749.2   727.0  9774.5
GR 725.6  9792.0   725.8  9808.1   725.3  9837.7   726.2  9851.8   726.1  9859.5
GR 726.8  9882.8   726.6  9929.8   725.9  9942.5   725.6  9984.5   725.3 10000.0
GR 725.7 10021.3   733.8 10034.6   733.7 10060.8   731.1 10076.7   733.5 10083.4
GR 733.8 10090.4   733.3 10100.0   731.2 10105.6   733.8 10114.6   733.8 10122.2
GR 734.9 10130.5   734.4 10158.7   732.3 10176.2   734.1 10193.0   734.5 10214.9
GR 734.3 10239.5   734.8 10292.4   733.9 10300.7   734.7 10318.9   734.9 10360.1
GR 733.6 10374.8   733.6 10381.7   735.0 10392.5   735.0 10445.4   735.1 10515.7
GR 735.1 10549.0   734.6 10559.6   735.3 10605.7   734.2 10616.5   735.3 10627.3
GR 735.3 10699.2   735.6 10765.9   737.4 10802.7   740.3 10850.3   741.7 10899.8
GR 744.7 10915.1   744.5 10925.1   742.1 10949.9   741.9 11022.3
ET                   9.1                                          9772.7 10064.8
X1  0.34      77  9772.7 10064.8     200     240     249
X3    10
GR 740.3  9003.0   740.4  9052.3   740.1  9059.5   740.8  9137.4   740.6  9168.5
GR 740.1  9190.1   739.5  9251.1   739.4  9313.4   740.2  9328.1   742.8  9337.1
GR 741.7  9357.5   740.4  9381.5   737.9  9418.1   736.7  9430.6   737.5  9440.0
GR 735.3  9461.7   735.0  9492.1   735.4  9557.5   735.8  9608.4   735.5  9638.0
GR 735.0  9653.0   735.6  9659.0   735.2  9700.4   735.3  9728.0   735.5  9772.7
GR 731.5  9783.8   731.4  9792.0   726.8  9801.3   727.0  9816.8   728.9  9868.8
GR 729.7  9931.2   729.2  9953.7   728.4  9968.9   726.8  9994.1   726.7 10000.0
GR 726.3 10015.2   727.8 10024.5   727.5 10044.7   735.2 10064.8   735.4 10086.0
GR 735.6 10123.5   735.8 10151.8   735.4 10190.8   735.2 10202.9   735.7 10235.9
GR 735.2 10255.8   735.2 10278.2   735.6 10293.5   735.7 10324.5   734.6 10334.6
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GR 734.9 10347.4   736.2 10359.5   736.0 10418.0   736.8 10438.1   736.9 10447.6
GR 735.1 10466.9   736.6 10479.6   736.4 10498.0   734.7 10511.3   736.9 10524.7
GR 736.8 10551.0   735.9 10559.7   736.7 10567.5   737.0 10589.6   736.9 10617.9
GR 737.4 10639.5   737.4 10669.6   737.1 10746.3   737.3 10764.0   735.9 10774.8
GR 737.6 10796.2   737.2 10885.3   740.4 10938.7   741.5 10965.0   745.4 10985.4
GR 745.3 11007.2   743.6 11016.4
ET                   9.1                                         9921.5 10244.5
X1  0.38      61  9921.5 10244.5     150     185     240
X3    10
GR 738.8  8996.0   739.1  9172.7   739.1  9216.2   739.6  9385.3   742.0  9455.8
GR 742.2  9492.2   740.5  9510.4   740.5  9538.0   740.3  9547.1   740.8  9563.5
GR 741.7  9573.3   739.9  9612.0   739.1  9632.8   737.2  9669.9   737.2  9700.1
GR 737.1  9778.7   736.0  9783.3   737.1  9797.8   737.0  9851.1   736.2  9879.0
GR 737.0  9888.5   736.5  9921.5   727.6  9940.5   728.1  9963.0   727.8 10000.0
GR 730.6 10012.3   730.9 10044.9   729.1 10055.3   729.5 10104.1   730.2 10109.1
GR 730.2 10152.1   729.7 10172.9   734.0 10185.0   736.5 10244.5   736.9 10273.2
GR 736.9 10333.4   735.5 10339.3   736.2 10347.8   736.5 10394.5   737.7 10403.9
GR 737.8 10418.7   737.0 10440.4   737.3 10478.2   737.1 10496.0   736.2 10514.4
GR 736.8 10528.9   737.3 10574.4   736.2 10604.2   737.2 10636.2   737.5 10668.5
GR 737.8 10699.3   736.9 10716.1   738.2 10752.1   738.2 10797.0   736.7 10808.3
GR 738.5 10819.5   739.2 10872.1   738.6 10909.0   738.6 10966.2   737.2 10973.3
GR 739.0 11002.1
ET                   9.1                                         9944.1 10269.7
X1  0.47      47  9944.1 10269.7     470     440     462
X3    10
GR 743.1  8903.7   743.2  9250.6   742.5  9454.6   744.7  9848.8   745.7  9897.0
GR 744.8  9944.1   730.6  9985.3   730.6 10000.0   731.0 10022.3   732.0 10027.8
GR 732.7 10053.5   734.3 10065.5   732.8 10069.8   733.2 10079.4   732.8 10097.2
GR 733.9 10105.8   734.9 10127.4   734.1 10155.9   733.1 10161.1   733.5 10166.3
GR 733.1 10189.9   733.2 10209.7   734.0 10218.0   734.5 10252.9   739.3 10269.7
GR 739.4 10314.3   739.6 10370.5   739.3 10425.4   738.2 10431.4   739.7 10437.1
GR 739.5 10459.1   738.9 10463.7   739.8 10481.6   739.7 10501.2   740.1 10537.3
GR 739.9 10570.9   740.2 10603.1   739.5 10657.3   738.6 10683.3   738.7 10728.3
GR 741.4 10774.1   739.8 10835.7   740.6 10860.9   739.5 10881.4   740.4 10928.5
GR 740.6 10997.8   740.8 11011.2
ET                   9.1                                         9838.0 10164.7
X1  0.55      54  9838.0 10164.7     490     300     408
X3    10
GR 745.2  9001.0   745.0  9170.0   745.0  9220.1   745.0  9249.7   745.3  9301.8
GR 747.7  9334.7   748.2  9354.7   746.0  9359.4   748.1  9365.3   746.1  9370.4
GR 746.3  9396.2   746.6  9585.5   746.5  9660.0   745.9  9678.2   745.2  9741.0
GR 747.0  9752.8   747.8  9787.8   747.2  9830.1   748.2  9838.0   745.6  9856.9
GR 734.8  9884.1   735.9  9893.7   735.8  9954.8   735.5  9976.6   734.2 10000.0
GR 734.8 10012.3   735.3 10047.7   736.8 10084.6   735.7 10101.0   737.3 10108.7
GR 737.9 10151.0   742.8 10164.7   739.9 10196.0   740.9 10219.0   742.0 10235.3
GR 741.7 10256.3   737.0 10269.6   740.5 10279.9   737.2 10289.9   740.9 10305.0
GR 741.3 10361.3   741.0 10400.3   741.0 10429.4   740.3 10467.6   738.4 10501.5
GR 737.6 10552.2   738.1 10594.9   737.5 10655.8   737.4 10721.3   736.5 10777.3
GR 736.8 10777.4   737.0 10849.6   737.6 10950.7   737.6 11003.5
NC          0.016    0.016
ET            9.1      9.1                                       9007.6 10140.0
X1  0.57      39  9792.1 10305.8     130      95     106
X3    10
GR 747.1  9007.6   746.2  9211.6   745.9  9251.8   745.9  9473.4   747.9  9499.0
GR 748.9  9527.1   746.7  9531.7   749.2  9540.8   748.8  9546.7   748.8  9574.6
GR 747.8  9605.7   747.7  9642.3   746.8  9651.7   748.5  9659.1   748.8  9686.4
GR 747.9  9716.1   747.3  9735.3   747.4  9763.7   749.1  9779.8   749.1  9792.1
GR 743.8  9818.0   738.6  9862.7   737.2  9907.9   736.7  9963.2   736.2 10000.0
GR 736.7 10075.7   737.1 10134.7   737.6 10187.1   738.5 10242.6   739.0 10305.8
GR 739.2 10395.0   739.3 10495.5   739.5 10569.8   739.3 10685.8   739.0 10822.5
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GR 739.3 10910.7   739.7 11032.6   740.0 11136.7   740.7 11243.2
NC         0.033   0.033
ET                   9.1                                        9787.6 10143.3
X1  0.58      55  9787.6 10143.3     45      55      55
X3    10
GR 746.8  9001.5   746.1  9130.2   745.9  9194.0   745.9  9252.2   746.1  9460.3
GR 746.6  9508.9   748.8  9547.8   749.1  9576.6   749.2  9604.6   747.7  9656.9
GR 746.7  9705.1   743.2  9787.6   740.4  9854.7   736.1  9886.1   735.8  9929.7
GR 736.5  9948.5   739.4  9973.3   738.9  9993.7   736.7 10000.0   736.8 10036.5
GR 738.6 10051.6   738.8 10093.2   741.1 10121.8   746.7 10143.3   746.8 10175.2
GR 743.6 10185.7   744.6 10191.2   744.0 10217.3   741.9 10228.0   742.6 10260.1
GR 743.5 10283.0   744.8 10315.2   745.4 10349.1   746.0 10395.6   745.9 10441.0
GR 744.8 10458.7   746.5 10461.9   746.9 10474.6   747.9 10505.3   748.1 10560.3
GR 748.8 10639.6   745.5 10729.8   743.5 10735.5   745.5 10740.6   744.7 10762.3
GR 744.1 10782.1   744.4 10829.7   745.4 10863.8   746.0 10925.5   747.4 10933.4
GR 749.6 10950.3   749.6 10964.3   745.2 10997.5   744.7 11041.6   744.4 11053.9
NC                         0.3     0.5
ET                   9.1                                        9915.9 10095.9
X1  0.59      51  9915.9 10095.9    150      60      70
X3    10
GR 749.0  8897.7   749.6  9061.2   749.8  9175.6   750.1  9286.7   750.3  9393.4
GR 750.3  9473.0   750.5  9560.0   751.8  9592.5   750.9  9611.1   747.7  9629.4
GR 747.7  9638.8   747.7  9641.9   749.9  9655.6   749.2  9674.4   748.5  9708.9
GR 748.1  9719.2   747.0  9727.9   748.5  9738.3   748.5  9768.7   747.0  9786.9
GR 745.1  9817.9   745.1  9843.7   744.1  9906.8   745.0  9915.9   737.4  9934.6
GR 737.7  9955.4   738.0 10000.0   737.9 10032.7   739.2 10043.0   739.3 10067.6
GR 753.7 10095.9   753.4 10116.6   750.2 10126.5   749.1 10138.4   751.0 10151.4
GR 750.9 10177.8   749.4 10229.3   749.4 10275.6   749.5 10352.3   750.4 10420.1
GR 750.9 10478.7   751.1 10529.3   750.7 10586.3   749.8 10686.3   750.0 10771.3
GR 750.0 10869.9   750.5 10967.5   750.2 11049.5   750.1 11134.6   750.3 11193.7
GR 749.6 11258.7
ET                   9.1                                        9900.1 10065.7
X1  0.60      38  9900.1 10065.7     30      40      44
X3    10
GR 740.5  8900.7   740.6  9002.5   740.6  9168.2   740.5  9284.3   740.7  9416.7
GR 740.5  9541.2   736.7  9587.0   732.9  9609.3   732.8  9624.8   741.8  9636.5
GR 750.4  9651.1   749.7  9656.5   749.8  9661.4   748.8  9695.3   747.8  9713.5
GR 748.8  9721.2   749.0  9747.6   747.3  9786.8   745.8  9810.1   744.5  9867.5
GR 744.5  9888.3   746.0  9900.1   737.8  9914.3   738.3  9956.5   738.2 10000.0
GR 738.4 10041.4   753.1 10065.7   754.2 10084.0   742.7 10097.7   740.9 10109.8
GR 741.3 10133.4   740.9 10191.7   741.1 10275.4   741.8 10418.7   741.2 10573.2
GR 741.4 10780.2   741.6 10977.5   741.5 11195.0
ET                   9.1                                        9876.8 10055.8
X1  0.61      46  9876.8 10055.8     40      40      46
X3    10
GR 751.0  8895.3   751.0  8993.0   751.0  9122.9   751.1  9203.0   751.4  9285.2
GR 751.6  9362.1   751.5  9437.7   751.5  9490.5   751.6  9537.6   751.7  9596.6
GR 751.4  9604.0   750.4  9653.1   749.5  9682.2   749.5  9703.0   749.0  9709.1
GR 749.6  9722.4   749.1  9737.5   749.8  9745.7   749.0  9764.7   748.6  9787.3
GR 746.8  9808.6   746.3  9856.0   747.1  9876.8   738.5  9891.0   739.2  9938.6
GR 738.3  9971.4   738.4 10000.0   738.3 10023.8   754.5 10055.8   752.9 10092.6
GR 751.7 10137.3   750.8 10182.9   749.6 10250.3   749.0 10307.0   748.5 10368.5
GR 749.2 10421.9   749.5 10467.8   749.3 10529.2   748.2 10566.2   748.9 10605.9
GR 749.2 10666.9   749.5 10760.2   750.2 10841.5   750.6 10951.5   751.0 11037.3
GR 750.3 11256.1
NC 0.150   0.050
ET           7.1     9.1                         8995.0 10370.0  9807.2 10151.2
X1  0.66      61  9807.2 10151.2    440     230     272
X3    10
GR 752.2  8995.0   752.5  9091.9   752.1  9132.5   752.4  9158.0   751.9  9379.5
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GR 751.8  9506.4   752.8  9525.0   752.9  9546.5   750.7  9551.3   750.0  9588.5
GR 750.6  9610.3   750.1  9648.6   750.5  9668.1   750.4  9680.6   751.7  9696.6
GR 752.2  9707.9   752.4  9724.8   751.7  9744.5   751.3  9769.5   751.3  9807.2
GR 745.2  9826.9   741.7  9845.7   741.8  9854.1   739.8  9860.5   741.2  9879.5
GR 741.5  9920.8   740.8  9980.0   740.0  9999.9   740.3 10000.0   740.9 10015.6
GR 741.4 10017.5   742.8 10026.2   743.0 10038.6   740.7 10067.1   740.6 10083.4
GR 743.1 10106.9   745.0 10151.2   745.1 10188.4   744.7 10225.6   744.6 10239.3
GR 746.3 10258.6   745.2 10272.8   745.3 10295.2   746.0 10339.8   745.9 10364.7
GR 746.5 10383.0   747.3 10427.8   747.5 10495.0   747.6 10554.2   747.1 10600.4
GR 746.3 10662.8   747.0 10713.4   748.3 10737.5   751.8 10795.0   751.6 10795.2
GR 751.3 10797.3   746.1 10857.4   746.1 10883.3   750.6 10925.7   750.1 10949.6
GR 750.0 11014.5
NC                         0.1     0.3
ET          7.1     9.1                         9004.0 10362.0  9769.3 10101.1
X1  0.70      62  9769.3 10101.1     230     170     223
X3    10
GR 752.7  9004.0   753.0  9169.0   753.0  9277.5   753.4  9314.2   753.2  9528.3
GR 754.1  9538.1   753.8  9562.5   752.1  9568.9   751.7  9602.0   751.8  9651.9
GR 752.9  9661.5   754.5  9690.3   754.5  9705.7   752.7  9714.2   751.0  9737.7
GR 752.0  9759.3   751.8  9769.3   744.6  9791.1   745.0  9800.0   743.5  9805.2
GR 744.0  9815.6   743.4  9827.9   743.2  9842.5   744.1  9875.4   744.2  9895.8
GR 743.5  9954.8   743.0  9992.5   742.3  9997.9   742.3 10000.0   742.0 10037.1
GR 744.0 10060.4   744.0 10076.0   744.7 10086.0   747.3 10101.1   746.8 10131.9
GR 745.7 10171.4   746.4 10184.2   746.3 10219.6   746.7 10260.3   747.6 10336.8
GR 748.2 10362.0   747.8 10394.0   746.9 10423.3   747.6 10453.2   747.6 10497.8
GR 747.9 10560.1   748.0 10587.5   747.6 10661.6   747.9 10661.7   748.3 10711.0
GR 751.2 10728.0   751.6 10759.3   746.3 10775.7   746.0 10790.7   751.6 10813.4
GR 750.0 10823.2   750.0 10850.4   741.3 10881.9   750.7 10924.7   749.8 10934.2
GR 749.6 10965.0   745.2 11005.8
NH     4   0.150  9848.9   0.033 10108.1   0.040 10180.5   0.150 10997.6
ET          7.1     9.1                         8789.9 10180.5  9848.9 10108.1
X1  0.79      56  9848.9 10108.1     300     560     493
X3    10
GR 752.2  8789.9   752.9  8938.5   753.2  9067.2   753.2  9113.9   753.5  9150.1
GR 753.7  9273.7   754.5  9402.7   754.9  9537.3   754.8  9637.1   755.8  9640.6
GR 753.8  9642.9   755.6  9647.4   753.9  9658.8   754.6  9677.2   755.5  9695.6
GR 756.8  9718.2   756.4  9735.9   754.1  9747.1   753.9  9775.5   753.7  9825.8
GR 752.3  9848.9   749.5  9883.0   746.7  9913.5   745.8  9954.0   745.8 10000.0
GR 746.3 10035.6   746.3 10061.6   745.0 10066.1   745.0 10076.9   750.4 10091.8
GR 751.2 10108.1   751.3 10125.5   749.3 10132.0   749.9 10150.7   751.5 10165.8
GR 750.3 10171.6   751.8 10180.5   751.5 10196.3   750.5 10203.3   750.6 10289.2
GR 750.8 10451.1   753.0 10478.1   752.8 10488.4   751.7 10496.5   751.8 10514.1
GR 751.8 10522.0   752.2 10786.3   753.3 10795.9   751.8 10802.5   753.4 10807.3
GR 753.6 10817.3   751.3 10838.8   751.4 10895.3   755.0 10924.9   754.3 10939.7
GR 753.4 10997.6
NH     4   0.150  9936.9   0.030 10087.6   0.040 10257.8   0.150 11007.3
ET          7.1     9.1                         9431.5 10257.8  9936.9 10166.5
X1  0.89      52  9936.9 10087.6     515     480     496
GR 755.1  8998.3   755.2  9124.8   755.1  9181.9   755.7  9207.5   756.0  9299.0
GR 757.2  9304.5   755.6  9307.1   757.9  9316.2   756.8  9320.0   757.0  9340.7
GR 757.4  9358.5   757.4  9395.6   757.2  9400.2   756.7  9426.9   757.5  9431.5
GR 757.0  9463.2   756.4  9623.9   756.1  9717.1   755.6  9819.4   755.4  9886.4
GR 755.0  9889.7   755.7  9902.4   756.2  9917.2   758.6  9923.0   758.1  9924.9
GR 758.1  9936.9   754.4  9943.4   749.7  9965.3   747.0  9992.5   745.6  9996.0
GR 745.6 10000.0   745.8 10024.2   752.1 10062.6   755.5 10087.6   754.5 10090.5
GR 754.8 10120.0   754.3 10138.2   755.0 10161.7   749.7 10174.6   748.6 10184.5
GR 748.8 10193.7   752.1 10215.8   753.6 10247.4   754.2 10257.8   753.7 10271.6
GR 752.1 10285.7   751.7 10467.7   755.4 10490.0   755.6 10507.7   754.5 10524.8
GR 755.5 10624.0   755.0 11007.3
NC 0.150   0.150   0.030
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ET		7.1	9.1				8908.5	10429.2	9922.2	10056.9
X1	0.98	38	9922.2	10056.9	560	465	501			
GR	761.9	8908.5	761.2	9063.7	760.8	9152.9	761.6	9179.0	760.1	9316.6
GR	758.3	9535.0	756.6	9782.0	756.5	9880.9	757.5	9891.1	756.9	9906.0
GR	758.1	9909.5	758.0	9918.8	758.3	9922.2	755.6	9927.1	751.3	9961.6
GR	748.8	9985.3	747.9	9991.4	748.1	10000.0	748.1	10008.9	753.8	10037.7
GR	761.6	10056.9	759.4	10059.3	760.2	10070.0	755.8	10081.3	755.9	10128.5
GR	755.8	10220.9	755.5	10310.8	756.2	10333.1	751.2	10358.2	751.2	10365.4
GR	757.2	10397.6	758.1	10429.2	757.8	10435.2	757.6	10469.6	757.0	10489.9
GR	756.9	10545.0	756.9	10684.3	756.5	11004.4				
ET		7.1	9.1				8932.2	10459.7	9797.4	10185.7
X1	1.08	38	9925.6	10067.8	430	440	491			
GR	762.1	8932.2	761.7	8987.4	761.2	9010.7	759.9	9298.6	759.3	9485.5
GR	758.8	9652.1	758.5	9871.2	759.3	9876.2	758.7	9880.8	758.7	9888.0
GR	759.5	9896.2	759.2	9914.9	762.3	9925.6	762.2	9933.1	762.2	9938.0
GR	751.2	9983.4	751.0	10000.0	751.4	10012.2	754.2	10040.5	758.0	10062.2
GR	760.8	10067.8	759.5	10084.6	758.3	10114.7	758.5	10141.5	758.5	10217.8
GR	758.0	10316.5	757.6	10392.4	758.5	10404.5	753.0	10431.7	760.3	10459.7
GR	760.7	10499.7	758.8	10505.9	758.2	10521.8	756.6	10530.5	756.6	10696.6
GR	757.0	10711.8	756.6	10712.0	756.8	10998.6				
ET		7.1	9.1				8988.0	10446.8	9532.6	10070.8
X1	1.17	42	9933.9	10070.8	300	650	502			
GR	761.7	8988.0	761.5	9027.9	761.2	9045.0	760.6	9255.8	760.5	9453.5
GR	761.0	9598.0	760.7	9717.6	761.0	9862.2	760.2	9866.3	761.9	9879.6
GR	761.9	9897.3	763.4	9901.0	764.1	9908.1	765.2	9920.5	765.3	9933.9
GR	762.2	9941.2	756.8	9970.8	755.2	9978.0	755.0	9988.5	755.0	10000.0
GR	755.0	10012.7	761.7	10047.2	764.8	10058.0	765.1	10070.8	762.4	10078.3
GR	762.4	10090.5	761.3	10094.9	762.2	10109.2	762.7	10173.9	763.1	10246.8
GR	763.4	10345.7	764.0	10446.8	764.0	10556.6	764.1	10603.4	764.3	10603.5
GR	764.1	10612.9	764.3	10840.2	765.9	10880.8	759.7	10915.8	767.1	10966.4
GR	767.8	11005.7	766.2	11015.0						
ET		7.1	9.1				9028.0	10510.0	9500.1	10063.5
X1	1.26	42	9915.7	10063.5	450	520	494			
GR	764.3	9028.0	763.7	9345.5	763.5	9508.3	763.9	9660.8	764.0	9879.6
GR	763.5	9883.9	765.0	9897.7	765.0	9908.5	767.9	9915.7	766.0	9918.5
GR	765.9	9926.4	767.3	9930.9	763.0	9938.2	758.3	9966.2	758.3	9986.9
GR	757.3	10000.0	758.5	10004.5	763.6	10042.2	767.1	10049.8	767.5	10063.5
GR	764.1	10069.4	764.2	10118.0	764.4	10194.8	765.0	10287.9	765.8	10430.7
GR	766.6	10548.7	766.9	10688.1	768.0	10691.5	765.7	10695.0	770.4	10705.1
GR	770.5	10718.3	767.5	10733.4	769.4	10741.1	769.5	10759.8	769.5	10759.9
GR	770.8	10780.6	778.7	10827.3	778.0	10880.6	778.2	10913.1	778.3	10954.3
GR	776.6	10986.4	774.8	11006.5						
ET		7.1	9.1				9045.0	10467.2	9713.3	10065.1
X1	1.36	51	9923.8	10065.1	560	450	500			
GR	769.3	8995.8	768.9	9025.4	768.8	9047.0	767.8	9214.1	767.5	9513.2
GR	767.1	9717.7	766.8	9886.8	766.3	9891.6	767.3	9898.8	767.3	9915.6
GR	770.3	9923.8	768.9	9925.5	768.2	9937.0	766.0	9942.3	761.6	9984.1
GR	760.4	9986.1	760.6	10000.0	760.6	10012.0	765.3	10045.5	768.6	10050.9
GR	768.7	10060.8	771.4	10065.1	767.9	10073.3	767.7	10088.3	766.8	10104.1
GR	767.1	10111.9	767.3	10208.7	767.6	10300.2	767.6	10385.6	767.7	10446.7
GR	769.4	10453.2	767.3	10457.3	770.7	10467.2	770.3	10468.8	770.3	10485.8
GR	768.5	10508.5	769.2	10672.7	770.4	10680.5	769.9	10700.0	770.5	10703.3
GR	769.9	10705.0	770.3	10733.5	771.6	10772.3	776.5	10789.0	777.3	10811.0
GR	777.3	10832.2	776.7	10866.4	775.6	10915.1	775.3	10953.1	772.5	10997.8
GR	771.7	11018.2								
ET		7.1	9.1				9220.0	10455.0	9792.8	10051.7
X1	1.45	40	9928.4	10051.7	515	480	497			
GR	771.7	8985.9	771.5	9134.2	770.5	9411.2	770.2	9661.7	769.4	9873.1
GR	768.8	9877.4	770.1	9888.4	770.1	9899.8	771.7	9903.6	771.5	9909.6
GR	773.6	9917.5	773.6	9928.4	768.6	9940.3	764.8	9978.5	763.0	9981.3

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GR 763.3 10000.0   763.6 10013.3   768.3 10044.8   772.6 10051.7   772.5 10066.9
GR 770.3 10071.9   770.9 10083.2   771.1 10092.3   772.0 10096.8   769.2 10099.5
GR 771.2 10102.8   770.3 10127.2   770.8 10321.1   771.2 10495.8   772.3 10750.3
GR 771.8 10764.5   773.1 10773.6   773.6 10797.6   778.8 10807.0   778.2 10823.7
GR 776.3 10836.3   776.7 10872.5   778.9 10887.7   778.3 10932.8   778.3 10999.0
ET          7.1     9.1                           9390.0 10380.0  9873.5 10065.0
X1  1.55     45  9933.1 10065.0     530     480     505
GR 775.5  8983.1   775.3  9046.9   775.0  9149.8   774.3  9173.0   774.5  9329.0
GR 774.6  9373.6   773.6  9385.6   773.7  9393.3   775.2  9403.3   772.6  9415.4
GR 773.3  9428.4   773.8  9462.7   775.1  9469.7   772.7  9472.7   774.9  9477.0
GR 774.0  9481.4   773.7  9517.6   773.5  9651.4   773.4  9748.3   773.2  9893.5
GR 772.6  9897.6   773.0  9905.5   773.4  9918.8   776.3  9924.7   776.3  9933.1
GR 775.0  9939.2   771.8  9945.0   767.8  9980.2   766.7  9984.1   766.3 10000.0
GR 766.5 10016.8   773.9 10058.2   778.0 10065.0   778.2 10078.6   773.7 10093.3
GR 772.7 10124.8   773.9 10144.0   775.2 10148.3   772.9 10150.6   775.1 10154.2
GR 774.5 10157.5   774.0 10189.2   774.1 10314.4   775.7 10814.5   775.1 11021.7
ET          7.1     9.1                           9455.0 10285.0  9936.6 10064.0
X1  1.61     43  9936.6 10064.0     330     330     328
GR 776.6  8980.1   776.3  9152.9   776.0  9172.6   776.3  9400.9   775.0  9577.5
GR 775.2  9615.5   775.6  9638.4   775.4  9659.5   776.9  9663.6   774.2  9673.3
GR 775.2  9677.8   775.8  9734.4   776.9  9738.2   774.5  9742.8   776.6  9747.6
GR 775.6  9750.9   775.2  9812.4   774.8  9888.8   775.2  9897.9   775.2  9910.4
GR 779.5  9923.0   779.9  9936.6   774.2  9950.0   768.3  9980.2   768.0 10000.0
GR 768.3 10009.1   774.5 10056.5   777.9 10064.0   777.1 10066.2   777.4 10077.9
GR 775.9 10081.1   775.5 10098.2   776.6 10106.5   777.4 10126.4   778.5 10131.5
GR 775.5 10135.2   777.5 10138.2   776.6 10140.4   776.5 10162.3   775.9 10316.3
GR 776.0 10738.4   777.1 10751.2   776.7 11010.3
ET          7.1     9.1                           9480.0 10235.0  9937.5 10074.6
X1  1.64     43  9937.5 10074.6     160     165     162
GR 777.0  8986.9   777.0  9120.3   777.7  9248.9   777.4  9273.2   776.6  9499.2
GR 776.3  9619.1   776.0  9744.5   776.1  9783.4   776.8  9786.0   775.9  9791.0
GR 776.6  9798.4   775.4  9801.9   776.2  9808.4   776.9  9862.6   778.0  9866.8
GR 775.5  9874.1   777.7  9881.5   778.0  9908.3   781.5  9917.8   781.9  9934.8
GR 783.3  9937.5   776.1  9951.9   769.5  9983.6   769.7 10000.0   769.9 10024.9
GR 776.8 10070.0   779.5 10074.6   778.4 10076.1   778.3 10087.2   777.2 10089.2
GR 777.4 10101.3   778.4 10125.1   779.8 10128.6   776.8 10133.6   779.0 10137.6
GR 777.5 10139.6   777.4 10161.6   777.1 10293.7   776.8 10500.5   776.3 10657.0
GR 776.3 10673.6   777.3 10922.6   777.6 11058.0
ET          7.1     9.1                           9510.0 10185.0  9904.8 10078.2
X1  1.67     32  9904.8 10078.2     170     170     164
GR 778.1  8972.8   778.1  9062.9   778.2  9093.1   778.6  9229.5   777.8  9435.8
GR 777.6  9624.2   777.5  9842.7   777.8  9848.7   777.8  9871.3   779.1  9874.3
GR 778.1  9880.1   777.9  9899.3   778.8  9904.8   778.5  9938.4   773.9  9960.2
GR 773.7 10000.0   773.9 10007.7   772.2 10013.3   772.9 10041.6   777.1 10073.6
GR 779.1 10078.2   779.0 10085.7   779.5 10131.2   780.8 10133.0   778.2 10137.8
GR 779.7 10140.8   778.8 10143.8   778.4 10166.2   777.9 10297.3   777.9 10721.0
GR 778.8 10743.0   779.0 11014.6
NC                          0.2
NH     4   0.150  9936.4   0.033 10100.5   0.045 10352.6   0.150 11009.5
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X1  1.74     44  9936.4 10100.5     300     340     335
GR 780.2  8980.9   779.6  9062.0   779.7  9140.4   779.3  9165.3   779.9  9214.3
GR 779.8  9349.8   779.4  9380.7   779.9  9398.1   779.7  9481.1   779.6  9602.9
GR 779.8  9699.6   779.7  9882.0   779.8  9903.0   780.2  9911.6   779.4  9920.9
GR 784.5  9936.4   781.0  9942.2   776.5  9973.5   774.3  9980.9   774.6 10000.0
GR 774.5 10044.3   782.7 10100.5   780.5 10108.8   780.5 10154.4   779.2 10161.9
GR 779.2 10170.7   780.6 10175.5   780.5 10211.0   778.6 10225.1   779.5 10239.4
GR 777.9 10254.1   777.7 10276.9   779.1 10286.5   780.6 10304.7   781.8 10347.0
GR 782.8 10352.6   779.6 10359.0   781.7 10364.1   779.8 10368.4   779.5 10399.4
GR 779.3 10493.5   779.5 10696.5   780.8 10786.0   781.3 11009.5
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NC                          0.1
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ET           7.1     9.1                         9670.0 10676.4  9887.4 10374.6
X1  1.83      49  9887.4 10053.9     520     460     498
GR 783.8  8998.9   783.7  9021.6   783.1  9171.7   782.8  9326.3   782.8  9424.5
GR 782.9  9570.7   782.6  9713.5   782.5  9825.6   782.6  9850.4   782.9  9857.0
GR 782.0  9864.2   785.7  9887.4   779.1  9900.8   779.5  9943.3   778.2  9948.9
GR 778.6  9979.6   778.5 10000.0   778.2 10019.0   782.0 10038.5   782.3 10053.9
GR 780.8 10086.6   782.5 10097.0   781.5 10105.6   783.2 10122.0   783.8 10136.4
GR 783.4 10180.4   783.1 10196.7   783.5 10217.9   783.2 10278.7   782.4 10307.9
GR 782.1 10334.0   782.7 10345.6   783.1 10376.1   782.6 10439.8   781.2 10454.7
GR 782.4 10464.7   782.2 10487.6   782.5 10494.0   783.1 10540.8   779.6 10570.2
GR 779.6 10602.2   783.3 10629.5   785.2 10676.4   782.3 10684.5   783.8 10688.5
GR 782.7 10691.9   782.6 10706.9   782.9 10718.2   783.9 11025.5
NC 0.150   0.045   0.033
ET           7.1     9.1                         9665.0 10883.0  9813.0 10090.7
X1  1.88      57  9813.0 10028.2     250     280     270
GR 784.6  8956.1   786.4  8961.7   785.0  8965.8   784.4  9033.2   784.3  9134.7
GR 784.2  9265.8   784.4  9480.3   784.4  9626.6   784.1  9748.7   783.5  9805.0
GR 785.0  9813.0   783.6  9841.4   781.4  9860.2   781.7  9901.3   780.5  9925.3
GR 780.7  9971.6   780.7  9989.5   780.2 10000.0   780.3 10021.7   785.1 10028.2
GR 784.3 10041.3   782.7 10050.4   784.4 10060.4   783.8 10088.7   784.0 10104.1
GR 783.2 10115.0   784.6 10124.9   784.5 10174.0   783.7 10189.6   784.5 10203.2
GR 784.9 10230.7   784.8 10298.4   783.9 10357.8   784.7 10368.2   784.7 10410.3
GR 784.1 10417.6   784.8 10426.3   784.8 10471.5   784.8 10528.7   785.5 10573.1
GR 785.0 10630.7   783.8 10634.4   785.2 10643.2   784.7 10656.2   785.5 10668.9
GR 785.7 10719.8   785.2 10753.1   785.0 10770.9   782.8 10791.1   783.3 10818.7
GR 785.3 10835.7   787.3 10883.0   784.4 10891.9   785.7 10896.4   785.1 10901.0
GR 785.0 10927.8   785.3 11010.5
ET           7.1     9.1                         9765.0 10962.9  9875.9 10172.2
X1  1.92      51  9875.9 10093.6     220     220     227
GR 786.0  8852.5   785.6  9000.8   785.3  9197.9   786.3  9240.7   787.0  9245.1
GR 785.4  9248.6   787.0  9255.0   785.7  9258.7   786.0  9338.8   785.8  9566.9
GR 785.8  9687.5   785.9  9849.1   784.7  9860.5   787.4  9875.9   784.6  9910.8
GR 782.4  9923.8   782.6  9961.7   782.3 10000.0   783.0 10014.1   782.2 10026.1
GR 782.9 10038.5   782.6 10085.0   786.0 10093.6   785.1 10108.0   785.8 10122.3
GR 785.6 10163.4   784.0 10178.5   784.1 10186.2   785.9 10192.9   785.6 10230.9
GR 785.9 10245.0   785.9 10291.5   786.6 10298.7   786.1 10342.3   785.5 10371.0
GR 785.9 10380.3   786.4 10470.8   786.3 10497.5   786.7 10528.6   786.5 10567.8
GR 786.1 10586.2   786.4 10608.7   786.4 10646.5   786.8 10668.7   785.7 10700.7
GR 786.2 10707.8   786.6 10759.7   786.5 10827.0   786.9 10843.7   786.7 10923.7
GR 786.9 10962.9
ET           7.1     9.1                         9893.9 11000.2  9893.9 10253.7
X1  2.02      45  9893.9 10253.7     475     490     490
X3    10
GR 788.8  8944.3   788.8  9192.1   789.4  9197.4   787.4  9200.5   789.9  9207.3
GR 789.0  9210.8   789.2  9307.2   789.1  9582.9   788.5  9712.6   789.0  9718.1
GR 788.8  9873.5   787.6  9879.6   792.8  9893.9   788.9  9917.3   786.1  9933.6
GR 786.4  9964.8   786.0 10000.0   786.0 10023.1   786.7 10027.3   787.3 10064.2
GR 786.7 10085.9   787.5 10093.1   787.2 10133.5   787.1 10203.8   786.4 10207.3
GR 786.3 10223.5   788.9 10228.7   789.1 10253.7   786.8 10272.8   787.0 10281.6
GR 789.7 10296.2   789.3 10360.9   788.5 10366.7   789.6 10372.7   789.3 10408.9
GR 789.8 10436.4   789.6 10513.2   789.2 10592.0   789.1 10628.7   787.6 10667.3
GR 789.6 10685.2   789.2 10705.7   788.5 10719.9   789.0 10837.6   789.2 11000.2
NH     4   0.015  9860.2   0.033 10079.3   0.040 10260.0   0.150 11015.3
ET           7.1     9.1                         9860.2 10570.0  9860.2 10147.0
X1  2.11      31  9860.2 10079.3     490     490     497
X3    10
GR 792.0  8861.9   792.4  9065.6   792.5  9282.1   792.2  9473.8   792.2  9632.5
GR 791.2  9804.9   791.8  9808.2   791.8  9839.9   791.6  9846.9   795.1  9860.2
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GR 789.7  9892.8   790.1  9957.6   789.2  9973.7   789.2  9983.4   790.2  9986.1
GR 789.7 10000.0   788.6 10070.2   791.5 10079.3   789.9 10083.7   790.9 10088.2
GR 790.9 10136.1   789.7 10192.7   789.6 10214.5   792.0 10227.4   792.1 10260.0
GR 791.7 10283.5   791.8 10426.2   791.8 10543.9   792.0 10715.1   791.9 10761.7
GR 792.3 11015.3
NC 0.040   0.045   0.033     0.2
ET           7.1     9.1                          9736.6 10355.0  9822.6 10209.6
X1  2.21      52  9851.1 10119.2     400     530     503
GR 794.6  9004.3   794.8  9198.9   795.2  9380.4   795.2  9527.2   794.7  9687.3
GR 797.9  9702.0   795.7  9717.4   799.8  9736.6   794.5  9770.6   793.0  9798.0
GR 792.9  9834.3   799.9  9851.1   795.0  9871.1   793.6  9895.7   792.7  9925.5
GR 793.1  9974.3   792.2 10000.0   792.4 10015.3   793.6 10020.0   793.7 10057.2
GR 792.5 10082.4   794.9 10090.5   795.4 10108.3   798.7 10119.2   796.6 10127.1
GR 799.5 10149.6   795.6 10169.5   795.8 10193.0   794.8 10203.1   795.8 10211.2
GR 794.5 10221.2   795.5 10231.2   793.8 10243.9   795.0 10248.6   795.5 10295.8
GR 794.7 10315.9   795.6 10368.6   795.4 10439.2   794.1 10446.0   795.2 10450.2
GR 795.2 10471.5   794.4 10479.3   795.5 10486.6   794.3 10525.5   794.9 10545.9
GR 795.0 10635.3   794.7 10682.6   794.3 10754.3   794.6 10812.8   795.8 10867.5
GR 795.9 10902.7   796.2 11013.5
NC 0.045                   0.1
ET           7.1     9.1                          9509.2 10290.0  9814.0 10255.6
X1  2.30      57  9918.8 10255.6     470     490     502
GR 796.5  8986.5   796.8  9032.6   797.0  9050.8   797.7  9388.7   799.0  9395.2
GR 796.2  9402.5   799.0  9407.2   797.9  9451.5   797.2  9483.6   802.4  9509.2
GR 798.9  9532.9   795.5  9549.2   795.2  9597.2   797.4  9603.4   799.1  9650.3
GR 798.5  9660.9   796.4  9670.8   796.8  9683.0   797.7  9706.8   798.9  9712.7
GR 798.4  9735.6   797.3  9742.6   798.8  9747.7   799.3  9777.7   798.9  9801.3
GR 798.5  9855.9   797.9  9873.9   799.8  9903.0   805.5  9918.8   795.6  9932.0
GR 796.3  9964.0   795.9 10000.0   796.4 10020.8   796.7 10060.1   797.2 10100.5
GR 797.3 10156.6   796.8 10166.0   796.0 10191.6   797.0 10205.2   798.4 10227.0
GR 798.9 10255.6   797.8 10291.8   798.4 10301.0   798.0 10312.8   799.3 10319.7
GR 797.9 10407.3   798.8 10412.7   798.3 10441.8   798.4 10505.5   798.9 10587.5
GR 798.3 10631.8   798.7 10661.5   798.6 10790.8   799.0 10899.6   799.3 10975.8
GR 797.5 11002.8   799.5 11023.3
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NH 11009
ET           7.1     9.1                          9084.0 10066.5  9539.2 10066.5
X1  2.39      65  9825.3 10066.5     490     470     490
GR 800.0  8985.7   800.0  9020.9   800.1  9031.9   799.5  9065.6   805.1  9084.0
GR 800.7  9115.6   799.7  9155.5   799.0  9168.2   799.9  9175.7   799.7  9214.7
GR 800.9  9224.7   801.1  9271.7   801.4  9332.8   800.0  9343.2   799.4  9364.9
GR 801.3  9377.2   801.2  9389.9   800.0  9401.8   801.3  9412.2   801.3  9434.5
GR 799.8  9444.8   799.8  9449.3   801.4  9455.7   802.0  9503.5   801.9  9526.1
GR 800.2  9532.0   800.0  9544.6   801.1  9550.3   801.9  9574.8   801.5  9609.7
GR 800.8  9641.6   799.8  9646.1   799.5  9686.0   802.3  9694.2   802.0  9715.9
GR 805.2  9726.4   799.8  9739.1   800.8  9796.8   807.7  9815.3   807.8  9825.3
GR 799.4  9839.8   800.0  9881.0   799.4  9911.1   798.4 10000.0   798.2 10030.0
GR 808.7 10066.5   800.6 10087.8   801.4 10127.8   801.0 10197.3   799.5 10256.1
GR 799.2 10302.3   801.8 10311.8   801.4 10352.0   802.5 10363.0   801.8 10413.5
GR 800.7 10418.0   801.8 10428.1   801.8 10515.1   801.7 10636.6   802.8 10646.7
GR 802.6 10665.6   801.7 10678.4   801.7 10785.5   801.9 10887.0   802.9 11009.0
NH     4   0.050  9906.3   0.033 10124.4   0.045 10459.8   0.150 10990.2
ET           7.1     9.1                          8969.0 10124.4  9524.8 10124.4
X1  2.49      67  9906.3 10124.4     490     490     493
GR 803.7  8969.0   803.7  9028.4   802.7  9035.8   803.4  9042.9   803.8  9071.1
GR 803.4  9104.1   803.7  9120.9   804.0  9169.6   804.4  9226.5   804.3  9272.3
GR 804.2  9329.5   802.7  9336.2   804.1  9345.9   804.2  9416.4   802.1  9422.7
GR 802.3  9433.6   804.8  9451.6   804.4  9470.1   805.0  9489.7   804.3  9528.5
GR 803.9  9535.7   804.5  9542.9   804.5  9581.5   804.1  9604.3   804.9  9626.5
GR 804.6  9644.4   803.4  9662.1   803.3  9689.7   802.4  9708.7   803.5  9720.5
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GR 804.7  9742.0   804.9  9798.6   804.0  9851.9   806.5  9861.2   803.9  9870.5
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GR 802.3  9984.5   802.3 10000.0   802.8 10068.6   802.2 10100.1   812.0 10124.4
GR 804.4 10143.0   804.0 10176.1   803.2 10194.7   804.9 10202.1   805.2 10254.0
GR 804.5 10314.9   803.5 10318.5   804.7 10324.0   804.6 10356.5   803.4 10372.7
GR 803.4 10386.0   804.3 10407.9   804.6 10451.0   805.8 10459.8   805.4 10484.5
GR 804.4 10497.4   804.8 10537.1   805.0 10607.9   805.2 10646.4   805.2 10685.0
GR 805.0 10829.9   805.6 10990.2
NC 0.050   0.150   0.033
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X1  2.58      56  9931.3 10102.7     500     500     503
GR 808.0  8976.8   808.4  9092.5   807.8  9130.9   807.1  9152.2   807.3  9174.3
GR 807.2  9212.0   807.0  9256.0   806.2  9262.1   806.9  9269.3   807.8  9299.2
GR 807.8  9354.7   806.7  9378.1   807.7  9385.6   806.0  9396.6   806.2  9410.2
GR 807.4  9420.0   807.7  9461.1   807.1  9486.7   807.6  9503.5   806.8  9546.3
GR 807.7  9552.3   807.9  9572.3   805.7  9580.3   806.3  9590.2   806.1  9623.4
GR 807.4  9629.5   806.7  9671.0   808.0  9679.4   807.8  9705.2   807.0  9713.9
GR 808.0  9722.0   807.9  9743.2   806.1  9749.1   806.2  9766.0   808.1  9776.4
GR 808.2  9809.4   808.3  9874.5   808.5  9908.3   812.6  9931.3   804.3  9948.8
GR 805.0  9990.3   805.0 10000.0   805.5 10049.3   805.8 10087.3   810.9 10102.7
GR 809.6 10133.7   808.7 10189.0   807.8 10200.5   808.1 10240.5   808.5 10370.7
GR 808.0 10486.8   808.0 10531.7   807.8 10574.7   807.7 10746.7   808.2 10919.3
GR 808.0 11006.1
ET           7.1     9.1                          8975.5 10117.8  9540.4 10117.8
X1  2.63      63  9937.7 10117.8     215     230     221
GR 810.1  8975.5   809.0  9091.7   808.2  9098.4   809.5  9106.6   809.0  9182.5
GR 808.6  9188.5   808.9  9193.6   808.9  9256.5   808.2  9319.3   808.0  9358.8
GR 809.5  9384.8   809.6  9402.2   807.5  9414.4   807.7  9421.7   809.2  9427.3
GR 809.5  9454.5   808.0  9461.6   808.8  9466.1   808.5  9530.1   806.8  9543.5
GR 807.1  9551.2   808.2  9558.1   808.0  9573.8   808.4  9585.7   809.0  9629.1
GR 807.1  9641.3   807.6  9653.9   809.2  9659.8   809.5  9672.3   809.2  9690.7
GR 808.2  9695.6   808.0  9723.8   809.4  9728.1   809.6  9761.8   809.7  9795.7
GR 808.7  9803.0   808.7  9808.9   809.8  9815.2   809.5  9863.8   808.8  9881.1
GR 809.9  9890.8   810.0  9927.5   814.0  9937.7   806.1  9950.0   806.2  9994.1
GR 805.8 10000.0   806.1 10026.9   806.8 10039.2   807.2 10077.6   811.3 10095.6
GR 814.6 10117.8   810.6 10133.9   810.3 10164.9   809.0 10171.3   809.6 10174.1
GR 809.5 10213.7   809.6 10308.9   810.1 10451.6   810.0 10587.4   809.8 10608.7
GR 808.9 10708.3   809.0 10857.7   809.5 11018.7
ET           7.1     9.1                          8990.2 10143.9  9583.8 10121.8
X1  2.68      60  9946.4 10121.8     270     275     273
GR 812.3  8990.2   812.0  9081.7   811.0  9101.0   811.9  9106.7   811.8  9162.9
GR 811.6  9210.5   811.0  9310.5   810.5  9365.6   810.0  9422.7   810.8  9436.8
GR 810.3  9452.0   808.8  9461.1   810.5  9470.6   810.5  9482.7   809.0  9494.8
GR 809.7  9518.1   809.9  9546.0   811.2  9558.0   809.7  9582.0   811.0  9592.7
GR 811.2  9618.4   810.9  9645.7   809.5  9655.3   809.8  9675.1   811.1  9686.7
GR 811.1  9717.7   809.6  9725.4   810.6  9735.8   810.9  9756.5   811.0  9777.9
GR 809.9  9784.6   810.9  9793.6   810.9  9840.1   811.8  9881.7   812.0  9908.8
GR 810.9  9918.7   811.8  9942.0   812.7  9946.4   807.6  9957.6   807.5  9973.2
GR 807.4 10000.0   807.4 10023.7   808.1 10032.2   809.6 10074.0   810.0 10091.9
GR 813.8 10115.4   815.7 10121.8   815.9 10143.9   812.2 10155.6   812.7 10173.0
GR 812.1 10174.6   812.3 10194.4   811.3 10201.4   811.6 10298.9   811.7 10510.8
GR 811.7 10599.9   811.1 10658.9   810.8 10826.3   810.5 10912.1   810.9 11015.0
NC                       0.2
NH     4   0.050  9903.5   0.033 10068.1   0.040 10279.1   0.150 11016.9
ET           7.1     9.1                          8940.5 10279.1  9466.1 10163.3
X1  2.73      55  9903.5 10068.1     320     275     301
GR 815.2  8940.5   815.2  9005.0   814.5  9009.5   815.2  9016.1   814.5  9097.5
GR 814.1  9143.9   813.6  9198.9   813.7  9237.8   813.2  9311.6   812.3  9315.7
GR 812.8  9320.0   812.9  9337.7   812.6  9375.4   812.1  9394.0   812.5  9404.3
GR 812.4  9424.3   811.4  9431.3   812.5  9438.6   813.1  9483.8   811.4  9491.1
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GR 812.2  9497.3   810.5  9507.9   810.7  9519.5   812.9  9529.0   813.2  9588.1
GR 812.9  9643.9   813.2  9685.5   813.5  9734.0   813.2  9744.2   813.3  9765.3
GR 811.4  9772.5   813.5  9790.0   813.5  9799.2   812.3  9805.3   813.4  9856.1
GR 813.3  9881.7   818.1  9903.5   809.6  9929.1   809.4  9962.4   809.0 10000.0
GR 809.2 10026.0   816.2 10068.1   813.3 10080.1   812.0 10137.9   811.1 10185.6
GR 810.3 10238.8   812.9 10250.8   817.8 10279.1   812.8 10302.5   813.3 10342.7
GR 812.7 10421.0   812.8 10622.1   812.7 10690.2   812.8 10913.5   812.7 11016.9
NH     4   0.050  9883.2   0.033 10103.1   0.050 10464.6   0.150 11009.5
ET           7.1     9.1                         8999.0 10464.6  9596.0 10103.1
X1  2.77      61  9883.2 10103.1     210     180     188
GR 816.4  8999.0   816.2  9084.3   815.4  9155.1   814.8  9253.8   813.7  9350.0
GR 814.1  9392.6   813.5  9446.2   813.7  9492.4   813.2  9503.1   813.6  9508.4
GR 813.1  9517.1   813.9  9523.1   814.2  9548.2   812.9  9558.8   812.3  9567.6
GR 814.0  9575.2   814.2  9584.0   812.9  9593.2   812.8  9603.0   814.1  9609.8
GR 814.3  9632.9   814.4  9689.2   814.9  9695.7   815.1  9745.7   813.9  9762.5
GR 815.3  9779.4   815.3  9796.5   814.6  9808.6   815.2  9830.2   814.3  9868.2
GR 819.5  9883.2   811.9  9914.2   811.6  9938.1   810.0  9966.1   809.6 10000.0
GR 809.8 10034.1   814.0 10048.8   814.0 10065.3   812.0 10088.7   814.9 10103.1
GR 814.4 10143.7   814.7 10165.0   814.5 10254.1   812.5 10260.3   813.9 10267.6
GR 814.8 10290.7   814.6 10331.9   813.1 10404.3   812.3 10439.7   819.0 10464.6
GR 814.2 10481.2   813.8 10498.5   814.8 10510.5   813.6 10512.6   814.0 10546.1
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GR 813.5 11009.5
NC 0.050   0.050   0.033
QT     2  10743   10743
ET           7.1     9.1                         9305.2 10935.0  9684.5 10509.7
X1  2.86      53  9940.7 10038.1     460     530     497
GR 822.8  9305.2   820.6  9345.1   816.8  9395.4   817.0  9414.2   816.3  9472.6
GR 816.3  9505.2   816.3  9572.9   816.3  9610.7   816.3  9663.5   816.3  9694.5
GR 816.8  9713.5   816.8  9723.4   816.3  9735.6   816.3  9744.8   816.2  9768.3
GR 817.8  9783.6   817.9  9828.0   816.7  9847.2   817.8  9859.1   817.5  9940.7
GR 812.5  9949.1   812.3 10000.0   811.8 10021.0   817.2 10038.1   818.1 10080.0
GR 817.7 10139.5   817.5 10202.5   817.6 10227.1   817.6 10281.2   817.8 10372.5
GR 816.8 10436.5   815.8 10441.6   816.1 10460.7   816.9 10470.3   816.8 10523.8
GR 815.3 10529.2   815.5 10540.2   816.3 10546.8   816.4 10579.9   817.4 10596.9
GR 817.7 10629.6   816.1 10661.1   816.7 10665.2   816.3 10690.3   817.3 10711.8
GR 817.7 10727.0   817.8 10764.5   817.2 10807.0   818.1 10845.0   816.1 10906.3
GR 816.0 10942.5   817.0 10964.1   816.7 11003.4
NC 0.045                    0.1
ET                   9.1                                         9956.6 10535.3
X1  2.96      75  9956.6 10097.6     500     470     508
GR 823.9  8994.2   824.1  9059.8   823.4  9144.2   823.1  9182.2   822.4  9198.1
GR 822.6  9206.1   821.6  9208.4   822.6  9214.1   823.1  9239.0   822.4  9256.3
GR 820.6  9261.4   822.4  9266.9   822.6  9287.4   822.3  9357.9   822.3  9395.1
GR 822.0  9475.4   821.1  9533.5   821.2  9575.0   821.0  9636.5   820.1  9644.0
GR 820.9  9647.6   820.5  9683.4   819.6  9687.4   820.4  9700.2   819.7  9731.0
GR 820.4  9750.6   820.8  9771.6   820.0  9791.1   818.4  9800.9   819.9  9809.7
GR 818.9  9835.0   820.2  9855.4   820.9  9875.9   820.2  9887.2   821.0  9907.4
GR 820.3  9930.2   820.6  9956.6   814.7  9963.8   815.2 10000.0   815.3 10045.3
GR 817.5 10054.7   819.4 10068.0   819.9 10097.6   820.0 10125.8   820.6 10168.8
GR 820.1 10175.5   820.4 10206.9   820.1 10243.0   820.0 10260.7   820.3 10304.9
GR 820.3 10334.3   819.6 10363.6   820.3 10391.0   820.9 10433.2   820.3 10462.6
GR 820.7 10475.3   819.5 10480.9   819.9 10501.9   819.9 10544.0   819.4 10599.8
GR 819.4 10647.1   818.6 10711.3   819.6 10727.1   819.0 10745.7   817.8 10748.8
GR 817.9 10763.1   819.4 10768.6   820.2 10824.9   820.8 10845.1   820.0 10874.7
GR 818.7 10882.7   819.8 10902.5   820.3 10943.3   820.7 10969.4   820.3 11007.7
NC 0.040
ET           7.1     9.1                         8992.7 10935.0  9935.3 10516.8
X1  3.05      60  9935.3 10229.6     520     430     493
GR 829.1  8992.7   828.0  9094.6   827.0  9099.7   828.0  9111.7   828.4  9162.1
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GR 824.0  9730.5   823.3  9756.2   823.6  9788.8   823.1  9855.5   823.1  9872.9
GR 820.4  9880.7   822.8  9887.6   823.2  9899.0   824.0  9935.3   822.5  9964.0
GR 818.1  9977.8   818.2 10000.0   818.8 10045.2   819.3 10079.5   820.2 10092.5
GR 820.4 10111.4   820.0 10124.2   822.8 10139.5   821.9 10144.4   823.7 10190.6
GR 824.3 10229.6   823.9 10266.9   822.8 10291.6   822.4 10341.8   822.5 10375.5
GR 821.9 10424.0   821.3 10458.6   821.8 10496.3   821.7 10552.8   821.6 10576.7
GR 821.9 10591.8   821.1 10600.4   821.8 10613.0   821.0 10620.6   821.6 10636.6
GR 821.9 10661.3   820.1 10667.5   821.7 10674.9   822.4 10688.0   822.5 10707.6
GR 822.2 10761.2   821.6 10828.9   821.4 10830.3   822.4 10880.1   822.0 10905.4
GR 819.9 10916.8   819.9 10925.2   821.5 10938.1   822.5 10986.4   823.0 11010.0
ET          7.1     9.1                           8981.3 10645.0  9838.8 10238.0
X1  3.15     59  9838.8 10238.0     495     505     499
GR 832.1  8981.3   832.1  9057.5   831.6  9089.8   831.3  9108.5   830.9  9220.7
GR 829.5  9332.8   828.7  9457.3   828.1  9490.3   828.6  9502.3   828.0  9563.2
GR 827.1  9576.7   827.7  9587.0   827.2  9629.5   826.7  9636.6   827.3  9646.6
GR 826.9  9703.5   826.3  9729.0   826.9  9743.0   826.5  9778.8   826.3  9838.8
GR 825.6  9856.8   825.4  9882.3   821.7  9898.5   821.3  9929.4   821.8  9955.8
GR 822.2  9980.6   821.9  9988.1   821.9 10000.0   822.5 10042.1   823.0 10065.4
GR 822.8 10102.8   822.3 10107.8   822.5 10157.2   824.3 10169.5   824.7 10184.6
GR 825.3 10213.4   826.3 10238.0   826.3 10268.0   826.1 10291.6   825.2 10294.9
GR 825.2 10310.2   825.6 10315.7   825.6 10384.0   825.7 10425.6   825.4 10483.1
GR 824.8 10538.5   824.5 10554.5   824.8 10582.3   825.2 10617.1   825.5 10652.5
GR 825.2 10738.9   824.9 10781.7   825.4 10815.3   822.6 10831.5   824.2 10840.4
GR 825.3 10883.6   825.6 10930.9   824.3 10969.5   824.2 11015.6
NH     4   0.040  9796.5   0.033 10033.1   0.045 10686.1   0.150 11009.7
ET          7.1     9.1                           8907.4 10270.0  9796.5 10033.1
X1  3.24     64  9796.5 10033.1     425     510     496
GR 833.9  8907.4   833.2  9031.0   832.2  9119.0   831.8  9165.9   831.8  9200.5
GR 831.4  9247.5   830.7  9253.8   831.2  9265.5   831.6  9295.1   831.4  9319.1
GR 830.9  9337.4   831.0  9368.6   828.3  9379.3   830.5  9389.2   831.0  9413.2
GR 830.5  9470.9   829.8  9533.5   829.0  9582.9   827.2  9593.0   828.6  9600.9
GR 828.6  9631.9   827.9  9689.8   828.1  9705.6   827.7  9722.2   827.9  9735.8
GR 828.2  9765.2   828.1  9796.5   824.6  9810.0   825.3  9855.2   825.3  9897.3
GR 824.8  9969.3   824.3 10000.0   824.2 10007.4   827.4 10020.0   828.4 10033.1
GR 828.4 10086.1   827.5 10094.8   828.4 10106.3   828.0 10139.5   827.4 10150.2
GR 828.1 10155.8   827.8 10206.3   827.7 10247.1   827.7 10267.1   826.7 10283.4
GR 827.3 10294.6   827.0 10318.7   827.6 10336.3   828.2 10413.7   828.8 10477.5
GR 828.6 10542.8   828.0 10587.8   828.3 10652.0   825.4 10664.3   828.9 10678.6
GR 830.0 10686.1   829.4 10688.2   829.3 10707.7   828.4 10709.4   827.7 10719.3
GR 827.8 10795.9   828.0 10871.3   828.2 10937.6   828.6 11009.7
NH     4   0.040  9872.5   0.033 10057.9   0.040 10289.8   0.150 11026.6
ET          7.1     9.1                           8881.9 10170.0  9872.5 10057.9
X1  3.34     53  9872.5 10057.9     450     520     497
GR 837.4  8881.9   836.8  8917.4   836.1  8938.7   836.7  8948.5   836.5  9001.5
GR 835.8  9062.4   835.2  9153.4   833.1  9161.0   835.0  9172.1   835.3  9231.8
GR 834.8  9302.2   834.2  9355.1   833.3  9395.7   833.7  9403.7   833.5  9418.0
GR 832.3  9424.2   833.9  9430.9   833.4  9497.4   833.5  9528.8   832.8  9609.3
GR 831.0  9690.3   831.5  9704.5   830.9  9772.9   830.5  9830.9   830.2  9872.5
GR 826.8  9879.5   826.9  9917.7   826.9  9949.9   826.9 10000.0   826.8 10009.9
GR 828.4 10018.0   830.3 10037.8   831.5 10057.9   831.4 10088.3   830.4 10112.7
GR 831.2 10120.0   830.8 10160.5   830.2 10208.6   832.3 10218.3   828.1 10240.2
GR 827.5 10253.3   828.2 10270.4   834.5 10289.8   831.5 10301.7   830.5 10321.3
GR 829.6 10327.5   829.8 10361.7   830.0 10504.6   830.6 10643.2   831.1 10702.3
GR 831.3 10811.1   831.3 10960.0   831.5 11026.6
NH     4   0.040  9923.4   0.033 10090.2   0.040 10486.7   0.150 11024.5
ET          7.1     9.1                           8972.1 10486.7  9923.4 10344.3
X1  3.43     51  9923.4 10090.2     500     495     500
GR 840.3  8972.1   840.3  8996.2   838.5  9001.6   840.1  9005.6   839.7  9052.7
GR 839.5  9101.3   838.9  9119.0   839.4  9135.9   839.2  9191.1   838.8  9261.3
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GR 828.7  9957.5   829.0  9999.1   828.8 10000.0   828.9 10055.8   832.6 10069.3
GR 833.3 10090.2   833.6 10158.3   833.9 10198.4   833.3 10201.2   833.5 10218.7
GR 834.3 10221.6   834.1 10298.7   833.6 10328.8   832.5 10360.2   831.6 10407.7
GR 830.5 10431.5   832.2 10440.7   831.4 10460.6   837.7 10486.7   836.9 10490.6
GR 836.9 10504.8   838.0 10513.3   833.6 10534.2   833.0 10577.0   833.3 10599.8
GR 833.5 10658.7   833.8 10693.3   833.8 10800.0   834.0 10897.8   834.7 10997.5
GR 834.6 11024.5
NC 0.040   0.045   0.045     0.1
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X1  3.52      84  9888.9 10110.4     525     440     492
GR 842.3  8996.1   842.7  9013.5   842.6  9038.8   841.9  9051.9   841.2  9080.8
GR 841.6  9108.0   841.5  9175.4   841.3  9224.9   839.9  9245.5   840.7  9253.9
GR 840.9  9294.8   839.9  9336.6   839.5  9362.8   837.9  9367.2   838.8  9372.0
GR 839.6  9391.6   839.7  9421.9   839.1  9473.0   838.3  9500.5   838.8  9519.5
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GR 836.9  9769.2   836.0  9828.3   835.0  9856.0   835.8  9865.2   835.7  9888.9
GR 832.4  9895.7   832.7  9910.5   832.3  9960.3   833.0  9979.6   832.9  9990.6
GR 831.8  9996.8   831.6 10000.0   831.7 10012.3   833.2 10020.3   833.3 10039.7
GR 832.7 10043.9   832.7 10070.5   834.0 10079.2   836.3 10093.7   837.2 10110.4
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GR 837.2 10249.0   836.9 10294.7   836.5 10338.9   836.6 10376.4   837.0 10414.1
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GR 836.0 10559.0   836.4 10588.4   836.3 10616.1   836.4 10639.7   836.6 10699.7
GR 836.4 10719.8   834.4 10736.7   835.8 10749.5   834.6 10789.1   832.2 10805.0
GR 833.6 10817.9   834.0 10866.0   841.8 10892.4   841.3 10896.4   841.2 10908.8
GR 837.2 10924.1   836.8 10950.2   836.4 10958.1   836.5 11005.6
ET           7.1     9.1                          8986.7 10490.0  9839.1 10115.0
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GR 846.2  8986.7   845.7  9054.7   845.1  9083.5   844.4  9146.9   843.8  9181.4
GR 843.8  9239.3   843.1  9344.6   842.3  9409.9   841.2  9488.1   841.1  9551.2
GR 840.8  9608.9   839.6  9698.9   839.3  9734.6   836.9  9744.0   839.4  9754.6
GR 840.0  9780.2   838.6  9834.4   838.6  9853.8   837.4  9879.3   838.3  9888.1
GR 838.5  9907.9   838.1  9937.3   837.0  9958.0   834.1  9964.0   833.8 10000.0
GR 834.1 10043.9   838.0 10065.0   839.2 10080.3   840.0 10115.0   839.4 10132.0
GR 840.7 10166.7   840.4 10215.8   839.5 10243.5   840.6 10247.8   839.7 10251.4
GR 839.5 10269.4   840.4 10272.6   839.7 10274.8   840.0 10284.3   840.3 10310.3
GR 840.0 10365.0   840.0 10388.0   840.0 10391.4   839.5 10457.3   838.1 10532.0
GR 838.6 10563.2   837.9 10569.3   838.9 10579.1   838.9 10601.8   837.1 10611.1
GR 837.5 10627.9   838.8 10634.0   838.5 10686.2   839.0 10713.5   839.4 10785.3
GR 835.8 10804.4   836.3 10817.7   841.3 10836.6   841.3 10849.5   842.8 10856.6
GR 842.8 10862.9   841.6 10864.4   841.7 10873.2   841.9 10873.3   841.6 10896.3
GR 840.8 10900.6   840.8 10945.0   841.2 11005.3
NH     4   0.040  9952.6   0.033 10120.4   0.040 10420.0   0.150 11014.3
ET           7.1     9.1                          8988.3 10420.0  9879.4 10129.4
X1  3.71      51  9952.6 10120.4     480     510     498
GR 848.7  8988.3   847.7  9007.8   847.6  9081.2   847.8  9103.0   846.8  9190.0
GR 846.1  9270.3   845.1  9363.3   845.2  9420.1   844.9  9471.6   844.3  9525.8
GR 843.6  9593.7   842.7  9629.8   842.6  9673.1   842.1  9739.0   841.3  9809.2
GR 840.8  9861.6   841.3  9928.4   842.4  9934.0   842.0  9952.6   836.6  9962.0
GR 836.4 10000.0   838.6 10008.1   839.0 10025.8   836.5 10029.9   836.6 10056.0
GR 837.9 10062.1   838.2 10078.9   836.8 10086.5   836.7 10102.6   842.3 10120.4
GR 843.2 10165.5   842.8 10218.4   843.1 10245.3   843.6 10279.3   843.8 10314.5
GR 839.9 10326.4   839.9 10397.9   846.8 10420.0   844.6 10428.6   844.0 10468.6
GR 844.5 10478.1   843.6 10480.9   843.5 10499.1   842.6 10511.4   841.3 10514.5
GR 841.5 10529.5   841.8 10645.7   842.3 10696.1   842.7 10837.4   843.0 10907.1
GR 844.0 11014.3
NC 0.040   0.045   0.033     0.2
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ET          7.1     9.1                         8999.7 10761.0  9885.4 10464.2
X1  3.81     64  9885.4 10085.5     515     485     506
GR 851.0  8999.7   850.2  9037.4   849.8  9069.9   850.4  9095.7   849.8  9158.5
GR 849.4  9193.8   848.5  9336.7   847.9  9386.7   847.8  9444.6   847.2  9539.4
GR 846.4  9590.5   845.9  9677.4   845.0  9740.1   844.3  9781.5   845.3  9789.1
GR 844.8  9798.6   843.8  9802.4   843.3  9827.7   844.5  9834.0   844.5  9845.5
GR 843.1  9851.5   844.1  9862.2   844.1  9885.4   841.3  9905.5   840.1  9927.3
GR 840.5  9940.5   840.3  9983.9   840.0 10000.0   839.6 10022.9   840.9 10025.8
GR 841.1 10036.7   844.2 10045.0   845.8 10068.8   846.8 10085.5   847.0 10114.7
GR 846.8 10139.3   846.0 10169.2   846.7 10198.6   846.2 10258.3   845.7 10280.1
GR 846.1 10283.4   846.0 10312.4   845.5 10353.2   844.5 10376.9   845.1 10386.3
GR 844.8 10426.6   843.1 10435.4   843.0 10445.7   844.6 10453.9   844.7 10494.1
GR 844.6 10542.0   844.5 10580.2   844.2 10600.4   842.8 10606.9   844.8 10617.7
GR 843.8 10671.5   842.8 10681.9   843.1 10706.7   848.8 10761.0   846.7 10787.1
GR 846.5 10810.6   845.8 10836.1   846.1 10926.8   846.7 11010.6
NC                 0.035     0.1
ET          7.1     9.1                         9669.1 11009.0  9880.3 10431.1
X1  3.90     62  9951.9 10070.2     515     475     478
GR 854.4  8994.5   854.0  9075.3   853.4  9152.3   852.5  9197.1   852.9  9275.8
GR 852.1  9308.2   851.1  9504.9   849.9  9553.5   847.8  9559.3   847.2  9604.2
GR 849.5  9614.2   849.4  9641.1   849.2  9669.1   847.3  9705.3   848.5  9714.8
GR 847.5  9767.9   846.7  9800.5   846.2  9848.1   843.9  9881.8   844.8  9887.8
GR 845.2  9901.9   844.7  9920.1   843.3  9925.6   843.1  9939.6   846.0  9951.9
GR 845.6  9970.2   842.5  9979.7   842.2 10000.0   842.7 10023.6   844.2 10028.0
GR 845.3 10070.2   843.5 10075.9   843.0 10088.4   846.1 10094.9   847.9 10106.2
GR 849.3 10143.0   849.3 10185.6   848.8 10240.0   849.3 10252.0   849.3 10298.7
GR 848.0 10302.4   848.3 10318.8   848.6 10333.3   848.8 10358.5   849.2 10398.6
GR 849.1 10417.4   848.7 10430.5   848.9 10436.3   849.0 10466.0   848.6 10530.9
GR 847.6 10592.8   847.5 10637.0   846.7 10643.5   847.6 10682.7   846.6 10702.9
GR 847.2 10711.5   847.7 10800.0   847.0 10807.8   847.8 10815.8   848.3 10853.1
GR 849.6 11000.0   849.3 11009.0
NC         0.040   0.040     0.2     0.4
ET          7.1     9.1                         8997.2 10903.0  9469.4 10903.0
X1  4.00     83  9469.4 10903.0     550     420     519
X3    10
GR 856.3  8997.2   856.2  9123.9   855.3  9167.7   853.9  9287.9   853.7  9334.1
GR 853.0  9388.8   851.8  9443.3   851.5  9469.4   849.2  9494.7   849.3  9526.5
GR 850.6  9539.8   850.5  9550.5   848.8  9566.0   850.2  9587.6   850.0  9638.9
GR 848.9  9645.0   849.9  9653.5   849.5  9681.4   848.7  9694.6   849.7  9700.9
GR 849.2  9734.5   845.9  9741.8   848.9  9751.8   848.4  9775.4   845.8  9789.7
GR 846.1  9825.3   847.0  9835.8   847.0  9885.1   846.3  9893.5   847.0  9905.4
GR 846.6  9937.5   846.6  9963.0   846.3  9981.8   845.2  9988.4   845.2 10000.0
GR 845.3 10019.5   846.7 10022.5   846.8 10036.6   850.0 10046.5   851.2 10061.7
GR 852.1 10074.9   852.1 10147.6   851.0 10159.8   851.0 10169.8   851.9 10172.6
GR 851.5 10213.0   850.8 10263.7   851.0 10283.0   850.3 10334.9   849.5 10352.5
GR 849.7 10370.8   849.0 10382.0   849.8 10405.0   850.0 10434.8   849.2 10474.3
GR 850.0 10484.5   849.4 10526.1   849.5 10548.3   848.0 10555.9   849.5 10565.5
GR 848.8 10580.7   849.2 10589.9   849.3 10616.7   848.7 10620.3   848.8 10638.0
GR 849.5 10653.4   850.1 10677.6   850.1 10706.0   850.3 10735.1   849.7 10749.3
GR 849.7 10763.0   850.5 10772.1   850.8 10789.3   850.7 10821.2   850.3 10848.5
GR 849.8 10859.6   851.0 10871.1   849.7 10892.8   851.1 10903.0   851.1 10928.7
GR 849.0 10946.6   850.4 10952.2   851.0 11005.1
QT     2    9028    9028
ET                  9.1                                         9588.3 10620.6
X1  4.09     82  9588.3 10620.6     480     520     498
X3    10
GR 859.0  8985.0   857.3  9080.9   856.9  9125.0   856.2  9132.4   857.3  9141.0
GR 856.6  9152.9   856.2  9314.2   855.5  9396.0   854.7  9433.8   853.4  9449.3
GR 854.8  9456.1   854.2  9514.5   854.2  9588.3   852.3  9604.3   849.6  9617.8
GR 849.8  9630.0   852.0  9647.2   852.5  9661.3   852.3  9701.7   851.9  9714.2
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GR 852.2  9740.1   851.9  9758.4   851.9  9794.8   851.0  9836.4   848.8  9839.8
GR 849.0  9868.3   850.7  9884.3   851.0  9904.6   850.6  9930.0   850.2  9948.8
GR 849.7  9957.0   848.9  9995.6   848.3 10000.0   848.3 10027.0   851.7 10034.6
GR 852.3 10053.1   852.4 10080.8   852.3 10099.9   851.3 10157.3   851.9 10175.9
GR 851.7 10184.7   849.3 10192.7   849.7 10208.9   851.1 10215.0   851.6 10227.8
GR 852.1 10248.0   851.4 10264.6   850.0 10271.7   851.9 10279.8   852.0 10297.5
GR 853.5 10315.6   853.7 10328.6   853.4 10347.6   853.5 10369.4   852.2 10373.3
GR 852.4 10392.2   852.9 10403.4   853.2 10431.1   852.9 10467.5   852.7 10488.2
GR 853.2 10502.5   853.1 10544.2   852.1 10550.4   853.2 10555.6   853.5 10594.8
GR 853.4 10610.9   853.8 10620.6   853.9 10637.5   852.9 10647.5   852.9 10653.8
GR 854.1 10660.0   854.1 10685.5   852.2 10691.5   852.3 10706.5   854.2 10714.7
GR 854.3 10742.3   854.4 10792.8   855.0 10839.3   855.2 10975.6   853.8 10983.5
GR 855.4 10993.3   855.6 11007.1
ET                   9.1                                          9557.2 10645.5
X1  4.15      72  9557.2 10645.5     300     275     290
X3    10
GR 860.5  8989.3   860.2  9015.2   859.2  9026.4   860.2  9041.8   859.5  9129.6
GR 858.5  9202.3   858.6  9233.3   858.6  9348.6   857.2  9433.3   856.4  9484.7
GR 855.8  9504.3   855.3  9535.8   855.7  9557.2   853.5  9577.6   853.8  9589.4
GR 851.2  9598.7   851.0  9608.9   853.0  9619.8   853.4  9648.0   853.5  9717.3
GR 853.0  9723.8   854.0  9730.5   854.0  9763.7   853.8  9807.0   853.7  9881.6
GR 851.1  9894.4   851.4  9910.6   850.6  9947.4   851.8  9957.0   849.8  9964.6
GR 851.4  9977.2   849.7  9982.5   849.8 10000.0   850.2 10025.4   850.6 10030.1
GR 851.9 10058.5   852.1 10071.2   851.4 10079.7   851.2 10113.5   852.1 10119.7
GR 853.5 10142.8   853.9 10176.3   853.7 10229.7   853.2 10251.1   851.7 10260.8
GR 851.3 10285.7   852.1 10291.9   852.5 10310.8   854.9 10325.9   855.8 10343.8
GR 855.4 10379.1   854.4 10431.0   854.6 10455.7   855.0 10520.5   854.0 10523.5
GR 854.2 10542.9   855.2 10550.4   855.4 10579.2   855.6 10621.3   856.1 10645.5
GR 856.0 10706.1   856.1 10764.7   853.8 10773.3   853.8 10777.7   856.3 10788.8
GR 856.7 10843.5   855.6 10853.7   856.8 10863.9   857.3 10917.9   855.6 10924.3
GR 857.0 10934.5   857.6 11001.4
ET                   9.1                                          9468.0 10521.2
X1  4.18      73  9468.0 10521.2     195     215     205
X3    10
GR 861.1  8997.6   860.3  9090.9   859.3  9142.0   859.5  9163.4   858.7  9219.0
GR 858.2  9246.6   856.9  9255.3   856.8  9264.5   857.9  9276.8   858.5  9318.2
GR 858.5  9340.5   857.4  9382.9   856.5  9425.0   857.0  9433.4   856.8  9468.0
GR 855.8  9487.5   855.6  9515.0   855.7  9543.2   853.6  9549.8   854.0  9572.0
GR 852.2  9580.0   852.1  9594.5   854.8  9609.3   854.6  9664.2   854.5  9686.2
GR 854.5  9721.4   855.0  9739.9   854.2  9750.7   855.1  9759.8   854.4  9775.5
GR 855.0  9785.6   855.3  9865.2   855.0  9933.8   851.2  9945.9   851.8  9956.6
GR 851.3 10000.0   850.9 10028.8   851.8 10035.1   852.7 10094.7   853.4 10122.5
GR 853.2 10165.0   854.3 10195.2   854.4 10224.5   852.8 10231.8   852.2 10259.8
GR 853.5 10266.5   854.3 10288.0   853.5 10302.6   855.4 10311.8   855.8 10332.3
GR 855.5 10382.5   855.5 10420.2   856.3 10495.3   855.0 10498.1   855.0 10514.4
GR 856.5 10521.2   856.7 10544.6   857.0 10597.3   857.2 10618.1   858.0 10711.5
GR 858.2 10780.5   856.4 10785.8   857.9 10790.7   858.0 10813.9   857.5 10823.1
GR 858.4 10851.0   858.5 10886.9   858.2 10895.6   859.1 10909.1   859.6 10973.7
GR 857.4 10981.0   859.6 10995.0   859.1 11022.1
ET                   9.1                                          9206.7 10513.1
X1  4.28      76  9206.7 10513.1     480     510     503
X3    10
GR 861.7  8980.8   861.3  9043.5   860.6  9105.9   859.9  9139.9   858.0  9145.7
GR 859.7  9156.5   859.5  9174.7   859.9  9206.7   859.0  9271.2   858.9  9283.1
GR 857.3  9294.5   858.5  9305.0   857.7  9376.1   856.5  9392.1   858.0  9400.7
GR 857.1  9447.8   857.5  9463.2   854.7  9476.3   855.1  9491.2   856.9  9507.8
GR 857.1  9529.0   855.3  9545.0   855.1  9559.2   856.5  9566.9   856.7  9582.8
GR 857.7  9597.5   857.0  9602.5   857.7  9610.2   858.2  9654.0   858.4  9719.8
GR 858.7  9776.7   858.7  9816.5   857.5  9849.6   858.2  9883.9   857.7  9916.2
GR 856.8  9924.5   857.3  9945.9   856.5  9964.2   853.0  9970.8   853.9 10000.0
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GR 854.1 10018.2   854.6 10023.0   855.9 10047.5   855.1 10069.5   855.2 10092.4
GR 854.7 10096.0   854.7 10115.1   855.8 10118.4   856.2 10131.4   856.5 10166.2
GR 855.4 10179.7   854.6 10207.4   858.4 10224.8   857.9 10252.8   858.3 10301.0
GR 858.8 10360.1   858.9 10395.6   858.2 10398.9   858.3 10414.2   859.0 10417.4
GR 858.9 10474.1   858.1 10481.8   858.2 10500.5   859.8 10513.1   860.2 10548.0
GR 860.8 10597.9   861.1 10624.9   861.3 10703.8   860.5 10715.5   860.9 10728.9
GR 860.3 10746.5   861.0 10753.9   861.3 10785.3   861.6 10808.2   863.0 10917.1
GR 863.8 11010.5
ET                   9.1                                          9114.5 10356.4
X1  4.33      65  9114.5 10356.4     230     250     248
GR 861.5  8991.9   861.2  9038.1   860.7  9046.5   860.7  9114.5   859.6  9165.6
GR 858.9  9200.4   858.7  9255.4   858.9  9301.6   856.3  9320.9   855.9  9335.8
GR 858.3  9348.9   859.5  9362.0   859.4  9377.6   857.8  9400.4   857.9  9427.2
GR 857.8  9449.9   856.8  9459.9   856.8  9478.1   857.1  9484.6   857.6  9508.5
GR 858.8  9540.8   859.6  9567.2   859.1  9593.5   859.5  9606.8   859.8  9661.2
GR 859.5  9697.9   859.5  9743.0   858.8  9761.1   857.7  9782.1   858.4  9790.2
GR 859.1  9823.3   859.2  9860.3   857.3  9879.6   856.8  9928.4   856.0  9960.5
GR 855.0  9969.7   855.9  9987.2   855.7 10000.0   855.5 10065.5   855.3 10100.7
GR 858.0 10110.9   856.8 10125.0   858.0 10132.4   859.1 10173.6   859.7 10201.2
GR 859.9 10243.4   859.3 10263.5   860.0 10270.7   860.2 10292.8   860.8 10356.4
GR 861.7 10445.4   862.4 10524.5   862.6 10563.5   862.3 10574.6   862.6 10585.0
GR 862.6 10624.2   863.1 10642.8   863.2 10686.8   863.2 10687.7   862.6 10711.5
GR 862.8 10757.7   861.9 10764.7   863.2 10787.8   864.6 10914.8   866.0 11012.4
ET                   9.1                                          9103.3 10226.3
X1  4.37      72  9103.3 10226.3     160     270     238
GR 861.5  8981.9   861.5  8988.9   861.5  8996.7   861.5  9087.8   861.4  9103.3
GR 859.7  9185.2   858.9  9245.3   860.2  9264.5   856.1  9276.4   859.3  9290.9
GR 859.2  9325.2   858.9  9338.2   859.3  9349.1   860.2  9366.3   860.8  9398.3
GR 860.0  9423.5   858.5  9439.7   858.7  9448.0   857.2  9460.3   858.6  9468.3
GR 857.8  9479.1   858.6  9485.7   859.0  9527.8   858.3  9535.3   860.2  9555.3
GR 860.7  9572.8   861.0  9594.3   860.6  9629.7   859.9  9674.2   859.5  9695.4
GR 859.9  9726.3   860.6  9766.8   860.6  9793.9   858.4  9805.9   858.6  9823.6
GR 856.8  9846.8   856.5  9857.5   858.3  9876.3   858.7  9905.3   857.9  9954.7
GR 858.7  9958.1   858.3  9972.8   856.9  9978.4   856.6 10000.0   855.5 10044.6
GR 859.2 10052.9   860.2 10118.1   860.7 10165.5   859.8 10168.7   859.8 10182.5
GR 860.9 10189.7   861.6 10226.3   862.0 10284.6   862.6 10333.2   862.4 10387.0
GR 863.1 10409.2   863.7 10468.9   863.8 10516.5   862.7 10532.1   863.9 10546.2
GR 864.4 10571.6   864.3 10591.2   864.5 10606.8   865.2 10696.5   865.8 10757.5
GR 864.5 10768.8   865.8 10777.6   866.8 10869.1   865.2 10888.3   866.4 10900.1
GR 866.8 10966.8   867.2 11004.2
NC                             0.1     0.3
NH     3   0.045  9868.5   0.040 10132.7   0.045 11008.2
ET           7.1     9.1                         9106.1 11008.2  9106.1 10279.0
X1  4.47      83  9106.1 10279.0     280     600     500
X3    10
GR 863.4  8969.0   863.4  8982.5   863.4  8991.0   862.7  9047.2   863.1  9106.1
GR 861.9  9155.3   861.1  9161.3   862.1  9167.1   861.7  9185.5   860.9  9269.8
GR 860.1  9277.7   860.7  9282.1   860.7  9310.8   861.0  9330.7   860.3  9366.6
GR 860.9  9391.7   861.1  9415.1   860.1  9429.8   862.0  9440.6   862.1  9457.4
GR 860.1  9469.4   859.1  9482.9   860.2  9490.8   860.5  9504.4   862.1  9524.9
GR 862.6  9544.3   863.0  9592.0   862.4  9613.3   860.6  9632.4   860.4  9645.6
GR 861.6  9653.8   861.8  9716.1   861.7  9734.1   860.6  9752.9   862.0  9765.4
GR 862.0  9808.6   861.9  9835.2   862.2  9848.1   862.3  9868.5   860.8  9875.5
GR 860.4  9919.7   860.4  9956.9   859.2  9959.6   858.6  9979.1   857.7 10000.0
GR 859.0 10012.8   861.2 10032.7   861.0 10054.7   859.4 10081.7   859.7 10093.7
GR 861.5 10132.7   861.5 10159.2   862.5 10169.0   863.0 10217.8   863.3 10253.3
GR 862.2 10257.1   862.3 10276.1   863.5 10279.0   864.5 10345.6   864.5 10372.3
GR 863.6 10383.0   860.8 10395.6   862.9 10402.7   863.0 10413.2   862.1 10424.3
GR 861.3 10437.5   863.8 10447.9   863.7 10471.4   862.7 10479.8   862.2 10492.2
GR 863.5 10499.5   863.8 10525.8   864.9 10572.8   866.1 10641.2   866.5 10663.4
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GR 867.0 10684.6   867.0 10722.4   865.7 10737.2   866.6 10768.8   867.9 10816.0
GR 868.0 10915.3   868.8 10969.1   869.5 11008.2
NH     3   0.045  9953.5   0.035 10139.9   0.040 11013.2
ET                  9.1                                          9149.0 10479.4
X1  4.56      72  9149.0 10479.4     400     510     493
X3    10
GR 867.7  8986.1   866.7  9076.1   865.9  9134.6   865.2  9141.3   866.1  9149.0
GR 865.6  9245.2   865.5  9265.0   864.9  9332.9   864.0  9339.8   864.9  9345.8
GR 864.9  9412.9   864.2  9458.9   863.0  9473.5   863.8  9481.4   864.0  9502.0
GR 863.2  9523.0   863.2  9581.2   862.4  9585.4   863.2  9590.9   863.0  9636.1
GR 861.9  9651.8   863.1  9661.2   862.2  9700.4   862.1  9719.3   862.8  9727.4
GR 864.0  9755.0   864.7  9796.2   865.2  9828.7   865.8  9867.9   865.0  9902.8
GR 864.7  9953.5   860.5  9961.0   860.8  9975.3   861.1 10000.0   861.5 10038.1
GR 862.1 10042.5   862.4 10063.5   861.8 10091.7   862.5 10095.1   863.8 10109.2
GR 864.2 10139.9   863.8 10186.6   862.6 10204.7   863.0 10215.4   863.5 10254.1
GR 864.1 10269.5   862.7 10275.9   862.7 10284.2   864.0 10291.7   864.8 10306.2
GR 864.5 10334.0   864.7 10363.9   865.3 10406.1   865.5 10429.9   866.1 10479.4
GR 865.7 10488.3   866.0 10497.0   866.6 10536.9   867.2 10566.3   866.4 10571.0
GR 866.1 10591.2   867.3 10600.2   868.3 10636.5   869.1 10696.0   868.7 10716.3
GR 869.2 10739.1   870.0 10795.3   870.5 10836.3   868.8 10921.5   867.2 10941.2
GR 868.3 10961.1   869.1 11013.2
NH     3   0.050  9940.1   0.035 10151.7   0.045 11010.6
ET                  9.1                                          9594.9 10736.7
X1  4.65      63  9594.9 10736.7     550     370     497
X3    10
GR 871.9  8991.4   871.4  9103.6   870.9  9142.9   869.7  9155.8   871.1  9162.2
GR 870.5  9250.9   869.2  9255.3   870.4  9260.6   870.4  9306.8   870.2  9352.9
GR 869.5  9438.1   869.2  9505.5   868.3  9594.9   868.0  9651.4   866.2  9673.6
GR 867.5  9688.8   867.7  9712.7   866.8  9758.5   866.8  9805.5   866.7  9838.9
GR 865.7  9853.6   866.9  9864.1   867.0  9880.0   865.9  9892.4   866.0  9908.1
GR 867.1  9915.9   867.4  9940.1   864.1  9961.4   864.2  9977.8   863.6 10000.0
GR 863.5 10033.1   864.1 10038.8   864.9 10061.7   865.1 10100.7   864.7 10127.7
GR 865.8 10136.5   866.1 10151.7   865.9 10204.6   866.1 10245.6   866.1 10286.9
GR 866.4 10334.9   866.6 10382.9   866.0 10420.5   866.1 10446.1   864.9 10453.3
GR 866.3 10462.0   866.6 10500.3   867.5 10566.1   868.2 10650.2   867.2 10666.0
GR 868.3 10670.1   868.1 10702.7   867.7 10722.6   868.3 10736.7   869.1 10782.2
GR 869.5 10823.6   869.8 10865.6   869.9 10877.7   869.9 10896.9   869.8 10973.5
GR 868.8 10978.0   870.0 10982.5   870.6 11010.6
NH     3   0.060  9821.8   0.035 10071.2   0.045 11003.8
ET                  9.1                                          9549.8 10940.6
X1  4.75      53  9549.8 10940.6     570     380     496
X3    10
GR 875.2  8992.2   874.7  9045.4   874.4  9053.0   873.3  9180.9   872.4  9317.1
GR 871.8  9428.5   871.3  9549.8   870.5  9592.8   870.8  9608.3   869.9  9675.5
GR 869.4  9732.3   869.4  9781.5   869.5  9821.8   866.9  9845.6   867.8  9859.4
GR 868.3  9875.4   868.4  9904.8   866.7  9914.7   866.6  9935.7   867.1  9945.1
GR 866.5  9976.0   865.6  9980.9   865.6 10000.0   865.5 10023.7   868.9 10046.6
GR 869.5 10071.2   869.1 10132.5   868.6 10163.1   868.5 10217.7   868.2 10258.1
GR 868.5 10299.1   868.4 10330.9   868.6 10374.5   868.0 10415.2   868.8 10429.3
GR 869.4 10451.1   869.2 10488.2   869.4 10530.1   870.5 10578.3   870.5 10620.7
GR 870.3 10673.9   870.3 10705.9   869.4 10708.8   869.0 10717.0   870.4 10722.1
GR 870.5 10765.8   870.5 10782.3   870.4 10792.8   870.0 10828.3   870.9 10905.3
GR 871.3 10940.6   870.8 10960.3   871.2 11003.8
NH     3   0.060  9949.7   0.035 10125.0   0.045 11010.9
ET                  9.1                                          9443.7 10719.9
X1  4.84      62  9443.7 10719.9     490     505     503
X3    10
GR 877.5  8999.9   877.0  9036.0   876.6  9107.4   876.4  9124.5   875.1  9287.3
GR 874.3  9443.7   873.5  9565.2   872.8  9674.7   872.8  9718.4   872.2  9766.2
GR 872.4  9785.5   871.3  9823.2   871.4  9824.4   872.4  9850.8   872.0  9865.2
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GR 870.4  9886.5   869.6  9895.3   870.2  9909.0   870.9  9914.9   872.1  9949.7
GR 869.3  9959.5   869.1  9996.8   868.6 10000.0   868.8 10034.0   869.5 10039.3
GR 869.6 10063.1   868.7 10097.7   868.6 10113.5   871.4 10125.0   871.7 10139.2
GR 871.7 10172.3   871.5 10212.4   871.0 10219.7   871.3 10261.4   871.7 10332.5
GR 871.1 10340.0   872.1 10346.4   872.1 10389.4   872.0 10452.2   871.5 10458.4
GR 872.0 10462.8   872.3 10511.2   872.9 10562.4   873.1 10600.2   873.0 10621.4
GR 872.3 10633.8   873.4 10653.6   873.2 10670.3   873.7 10679.4   874.8 10719.9
GR 873.8 10723.2   873.8 10741.7   875.2 10747.3   875.3 10766.4   875.4 10810.7
GR 875.8 10833.8   876.1 10888.4   875.0 10912.2   876.7 10933.8   877.0 10948.5
GR 876.7 10959.8   876.9 11010.9
NH     3   0.060  9941.3   0.035 10200.4   0.045 11007.3
ET                  9.1                                          9510.5 10581.1
X1  4.94      63  9510.5 10581.5     490     510     497
GR 879.3  8992.9   878.8  9066.2   878.8  9080.7   878.4  9109.3   879.2  9116.8
GR 879.3  9167.0   878.4  9205.6   877.6  9263.7   877.4  9304.4   877.1  9367.6
GR 876.5  9412.1   876.1  9472.9   876.1  9510.5   875.8  9534.8   874.9  9600.1
GR 874.8  9648.6   874.7  9689.8   872.4  9714.8   873.6  9730.0   874.3  9778.2
GR 874.2  9819.1   873.2  9831.6   874.1  9839.6   873.0  9847.4   874.0  9857.4
GR 873.0  9876.7   874.2  9887.0   874.6  9906.1   874.8  9941.3   873.6  9955.6
GR 870.6  9966.2   873.3  9975.2   870.5  9991.4   870.0 10000.0   870.2 10025.9
GR 871.2 10059.3   872.1 10101.7   871.3 10128.9   873.2 10139.7   874.6 10200.4
GR 875.2 10253.8   875.4 10312.4   875.0 10353.3   874.9 10401.3   875.3 10462.0
GR 874.6 10466.1   875.1 10479.6   876.0 10531.8   875.3 10537.5   875.8 10543.2
GR 876.7 10581.5   878.2 10639.1   879.5 10674.9   881.2 10701.5   881.2 10711.7
GR 881.0 10726.8   880.4 10775.6   879.4 10808.6   879.5 10852.6   879.8 10894.9
GR 878.9 10935.5   878.4 10975.6   878.3 11007.3
NH     3   0.060  9891.8   0.035 10160.2   0.045 11012.2
ET                  9.1                                          9449.5 10500.0
X1  5.03      72  9449.5 10500.0     540     430     502
X3    10
GR 881.2  8993.9   880.3  9131.8   880.4  9147.0   880.2  9254.9   880.3  9271.7
GR 878.8  9292.2   879.9  9303.6   879.2  9344.0   878.1  9347.6   879.0  9352.9
GR 878.5  9381.3   879.3  9396.7   878.2  9403.8   878.8  9416.5   878.2  9435.8
GR 877.4  9442.6   878.8  9449.5   877.7  9558.3   877.0  9617.5   877.6  9630.5
GR 877.9  9650.3   877.5  9687.8   874.4  9704.1   874.3  9709.3   876.1  9728.5
GR 876.9  9743.2   877.3  9802.5   877.0  9833.8   876.6  9865.7   874.2  9872.1
GR 874.2  9880.4   877.2  9891.8   875.6  9927.8   872.4  9936.5   871.9 10000.0
GR 871.8 10023.3   872.1 10036.5   873.0 10039.5   874.3 10084.2   874.2 10118.7
GR 875.3 10130.0   874.5 10149.6   876.0 10160.2   875.7 10171.5   876.3 10182.1
GR 876.2 10215.3   876.8 10266.5   877.1 10318.4   877.3 10356.7   876.9 10368.2
GR 877.3 10381.6   877.4 10430.2   877.9 10436.7   877.9 10471.9   876.8 10479.0
GR 877.2 10486.6   878.6 10500.0   879.0 10523.3   879.1 10559.0   879.8 10598.3
GR 880.1 10624.6   879.4 10639.4   882.1 10720.9   882.5 10739.5   883.5 10758.0
GR 883.6 10785.0   881.8 10839.6   882.2 10861.8   883.8 10896.4   883.8 10926.6
GR 883.3 10963.7   882.9 11012.2
NC 0.045   0.045   0.045     0.2     0.4
ET                  9.1                                          9549.7 10210.5
X1  5.13      53  9549.7 10210.5     470     500     492
X3    10
GR 880.7  9265.4   880.2  9341.9   879.5  9354.9   880.7  9365.7   881.8  9387.0
GR 878.4  9402.1   878.6  9412.9   879.5  9419.9   879.5  9441.2   881.2  9462.5
GR 880.8  9479.3   881.0  9549.7   880.2  9615.1   878.8  9690.7   877.3  9698.1
GR 878.6  9703.5   879.2  9727.1   877.3  9773.2   875.4  9796.2   875.7  9803.7
GR 875.3  9821.6   875.8  9831.4   875.3  9866.4   878.1  9883.2   877.2  9919.9
GR 876.2  9951.3   875.0  9954.7   875.3  9973.7   874.0  9981.0   874.2 10000.0
GR 873.6 10033.8   878.0 10046.6   877.5 10080.0   878.6 10092.2   878.7 10109.0
GR 877.0 10114.5   877.1 10122.7   878.4 10133.1   879.0 10157.2   878.0 10171.6
GR 879.2 10182.5   880.6 10210.5   881.8 10259.3   881.8 10296.0   881.7 10318.2
GR 881.3 10323.3   881.0 10354.6   881.6 10403.0   883.0 10441.7   883.5 10466.8
GR 883.9 10503.1   883.2 10549.0   882.4 10562.2
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ET                   9.1                                          9416.2 10487.7
X1  5.22      58  9416.2 10487.7     430     485     503
GR 884.7  8981.8   884.7  9076.1   884.3  9167.8   884.2  9184.9   883.2  9416.2
GR 882.3  9619.1   881.5  9708.3   879.8  9728.3   881.1  9733.1   880.8  9747.0
GR 881.4  9751.3   881.2  9776.2   878.5  9781.8   878.1  9800.0   881.3  9812.4
GR 880.5  9828.6   879.9  9932.6   880.5  9946.3   879.8  9963.0   876.8  9977.3
GR 877.0 10000.0   877.3 10023.0   878.0 10033.3   877.4 10070.2   878.2 10074.4
GR 878.7 10092.6   878.0 10130.4   878.7 10132.5   878.3 10151.0   879.9 10164.9
GR 880.0 10193.1   879.2 10198.3   881.5 10216.3   882.8 10233.2   884.5 10261.8
GR 885.7 10296.5   882.4 10320.5   882.1 10332.6   880.3 10342.1   879.8 10348.3
GR 881.9 10356.1   882.3 10367.1   882.6 10405.8   882.7 10427.1   879.5 10437.2
GR 879.2 10446.8   882.8 10461.1   884.7 10487.7   885.4 10517.6   886.3 10572.7
GR 887.1 10623.4   887.4 10674.0   887.7 10683.2   887.8 10816.6   887.1 10852.5
GR 887.8 10901.6   888.0 10961.7   888.6 11013.5
ET                   9.1                                          9502.3 10525.3
X1  5.31      61  9502.3 10525.3     480     480     494
X3    10
GR 886.4  8981.9   886.2  9095.3   885.9  9115.2   885.3  9273.2   884.3  9424.7
GR 886.3  9432.2   885.8  9455.5   884.6  9462.9   886.2  9472.9   886.3  9502.3
GR 883.8  9519.3   885.2  9545.7   884.0  9570.6   885.9  9586.2   885.3  9605.3
GR 884.9  9637.1   882.6  9644.9   882.6  9655.0   884.9  9664.8   884.8  9694.9
GR 883.2  9706.5   884.6  9711.9   884.3  9731.7   884.5  9765.6   883.9  9806.8
GR 883.0  9813.5   883.4  9824.6   883.6  9845.1   883.4  9882.5   880.6  9897.0
GR 880.3  9913.0   880.0 10000.0   879.6 10011.4   880.4 10013.7   880.2 10032.6
GR 883.6 10044.7   884.0 10085.7   881.7 10107.8   880.8 10171.1   879.5 10197.4
GR 879.6 10205.9   881.3 10212.9   883.2 10236.4   882.8 10272.4   882.9 10299.3
GR 885.7 10319.1   885.5 10338.4   884.4 10382.0   884.4 10401.9   884.9 10455.6
GR 885.2 10486.5   885.7 10525.3   887.3 10569.3   889.1 10630.3   890.2 10700.8
GR 891.0 10751.7   891.6 10771.8   892.8 10843.0   893.7 10910.8   894.3 10958.9
GR 893.7 11008.6
ET                   9.1                                          9604.5 10620.8
X1  5.41      75  9604.5 10620.8     450     580     500
X3    10
GR 887.5  8990.1   888.1  9033.6   890.0  9043.1   890.5  9121.8   890.4  9141.5
GR 890.9  9192.8   889.2  9257.3   888.9  9312.8   888.7  9367.8   887.6  9401.8
GR 887.5  9418.8   886.7  9436.7   887.9  9444.2   887.8  9468.8   886.6  9479.7
GR 885.9  9497.0   887.5  9511.0   888.5  9537.5   888.0  9594.9   888.3  9604.5
GR 887.4  9686.8   886.5  9730.7   887.1  9748.5   886.6  9781.5   887.0  9786.6
GR 887.0  9808.3   886.1  9840.1   886.9  9847.6   887.1  9874.9   886.8  9902.4
GR 885.5  9927.3   884.6  9951.3   881.8  9958.5   882.7  9971.6   882.4 10000.0
GR 882.3 10021.6   883.5 10054.8   883.6 10082.9   884.1 10098.2   884.0 10109.5
GR 883.3 10119.2   885.1 10132.4   886.3 10151.7   886.0 10163.3   886.2 10172.3
GR 886.1 10195.3   886.4 10223.8   887.4 10262.2   884.4 10278.1   884.0 10302.5
GR 884.6 10343.0   882.8 10354.8   882.9 10382.9   885.6 10390.7   885.4 10408.4
GR 882.2 10416.2   882.2 10426.8   886.2 10441.6   886.4 10462.0   884.1 10475.6
GR 886.3 10482.5   886.2 10505.2   885.6 10524.7   887.5 10569.5   888.9 10620.8
GR 889.9 10667.4   890.3 10708.9   890.4 10780.9   890.9 10791.7   891.0 10817.3
GR 889.9 10844.1   891.3 10860.8   891.8 10927.2   891.6 10974.0   892.3 11006.9
NC 0.040   0.040   0.040
ET                   9.1                                          9335.1 10442.3
X1  5.50      71  9335.1 10442.3     330     540     499
X3    10
GR 891.7  8840.1   891.5  8954.1   890.9  8980.4   889.5  9005.0   888.0  9009.4
GR 888.0  9021.3   889.2  9033.7   890.0  9060.3   891.4  9100.0   891.9  9121.7
GR 891.8  9170.9   891.1  9236.3   891.5  9288.4   890.9  9323.1   891.2  9335.1
GR 890.5  9362.9   889.3  9417.7   888.5  9456.9   886.4  9471.4   886.5  9499.5
GR 888.7  9513.5   887.3  9528.3   887.7  9539.5   886.6  9548.5   888.3  9561.0
GR 888.8  9608.9   888.0  9619.7   886.4  9626.7   886.5  9641.7   887.1  9648.4
GR 887.3  9659.9   886.4  9686.1   885.7  9691.3   885.5  9701.1   888.5  9708.3
GR 888.8  9754.5   887.5  9801.4   888.4  9809.7   889.2  9842.6   888.7  9861.5
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GR 885.3  9891.0   886.1  9911.3   885.6  9961.9   884.7  9973.3   884.3 10000.0
GR 884.9 10044.1   886.1 10057.8   886.3 10084.4   887.7 10093.4   888.9 10122.0
GR 888.6 10145.2   889.3 10162.8   888.6 10184.1   888.7 10236.8   888.7 10287.3
GR 888.5 10348.3   888.5 10390.7   889.3 10402.8   889.4 10434.2   890.1 10442.3
GR 890.6 10496.5   889.9 10561.4   890.4 10622.7   891.0 10668.9   892.1 10728.4
GR 892.5 10747.2   892.9 10768.0   893.4 10833.0   893.1 10890.4   892.0 10946.2
GR 891.8 11006.2
ET                   9.1                                          9145.4 10379.4
X1  5.54      80  9145.4 10379.4     160     160     212
X3    10
GR 892.0  8742.6   892.4  8778.1   892.4  8796.9   889.0  8809.3   889.7  8827.7
GR 891.3  8872.0   891.3  8898.8   890.8  8908.8   892.6  8952.5   892.0  9042.4
GR 891.7  9109.0   891.8  9145.4   891.1  9182.0   890.9  9202.3   890.1  9225.9
GR 888.5  9235.8   889.4  9245.3   887.4  9251.7   887.1  9261.6   889.7  9278.1
GR 889.9  9293.9   888.8  9307.8   889.8  9312.9   889.0  9320.8   889.5  9333.2
GR 887.6  9343.4   890.1  9355.6   890.1  9372.4   888.7  9380.0   889.8  9387.8
GR 890.0  9439.3   887.1  9443.3   887.3  9456.6   889.8  9467.8   889.6  9478.3
GR 888.8  9485.1   889.7  9497.5   887.0  9509.2   887.0  9545.3   889.3  9553.8
GR 889.9  9568.2   890.3  9601.1   889.8  9672.7   890.4  9730.5   890.1  9780.2
GR 890.4  9801.1   890.4  9859.7   886.4  9871.7   886.0  9887.9   887.1  9898.5
GR 886.7  9937.8   885.8  9987.3   885.0 10000.0   885.6 10031.4   889.9 10040.1
GR 890.1 10070.1   888.9 10131.2   889.4 10137.8   889.3 10190.0   889.3 10247.1
GR 889.0 10287.1   889.0 10321.6   889.9 10338.7   891.1 10379.4   892.7 10433.1
GR 894.9 10478.6   895.8 10505.6   895.7 10533.3   894.6 10559.3   893.4 10572.7
GR 894.5 10597.2   894.6 10618.0   892.0 10651.4   891.8 10704.9   891.9 10724.1
GR 892.4 10806.2   893.4 10847.8   893.6 10887.2   894.6 10926.0   895.3 11008.3
ET            7.1    9.1                          9132.3 10649.2  9132.3 10439.6
X1  5.60      77  9132.3 10439.6     140     250     280
GR 891.3  8655.0   891.6  8663.2   889.6  8672.0   889.6  8684.1   890.9  8688.8
GR 891.8  8718.2   891.9  8766.4   892.5  8801.6   891.7  8814.4   891.3  8852.5
GR 891.9  8893.4   891.2  8942.2   891.6  8976.4   891.8  9012.0   891.3  9035.0
GR 891.6  9084.0   891.8  9132.3   889.7  9143.1   890.6  9146.8   890.6  9159.6
GR 888.2  9168.1   888.2  9176.3   890.4  9194.9   890.9  9204.2   890.9  9238.8
GR 889.3  9247.5   890.9  9262.2   891.1  9331.6   888.0  9345.9   888.0  9355.8
GR 890.6  9361.9   890.9  9389.2   888.5  9395.5   890.8  9403.8   888.9  9408.6
GR 888.3  9424.7   891.2  9433.6   889.2  9440.0   890.6  9445.8   891.1  9471.5
GR 889.7  9477.1   891.1  9497.5   891.3  9525.2   891.4  9577.0   891.7  9611.8
GR 891.9  9641.3   891.9  9671.9   891.8  9703.9   890.4  9724.0   888.1  9738.5
GR 888.4  9774.4   890.7  9784.7   891.6  9803.2   891.8  9830.0   891.5  9862.7
GR 891.0  9883.8   887.2  9898.4   887.3  9921.7   888.3  9973.3   887.3  9978.4
GR 886.3 10000.0   886.7 10020.9   889.2 10035.9   890.6 10046.7   890.3 10128.2
GR 890.4 10175.3   890.2 10214.1   890.4 10246.5   890.3 10294.5   890.3 10346.8
GR 890.6 10371.8   892.4 10439.6   893.9 10495.7   896.0 10542.1   897.1 10577.5
GR 898.0 10615.7   897.7 10649.2
QT     2    7124    7124
*       RIGHT OVERBANK IS TRIBUTARY SECNO 0.06
ET            9.1    9.1                                          9021.4 10024.2
X1  5.67      71  9021.4 10024.2     170     470     398
GR 891.2  8680.3   892.1  8703.3   892.7  8741.9   892.5  8747.1   892.9  8785.3
GR 893.1  8797.2   892.4  8813.2   892.8  8834.8   893.0  8863.4   893.2  8897.4
GR 893.0  8916.7   893.5  8966.3   893.9  9021.4   893.3  9059.1   891.9  9076.3
GR 892.9  9083.4   892.6  9107.4   890.3  9113.6   892.1  9120.8   892.3  9136.4
GR 892.4  9178.8   890.6  9184.5   892.3  9190.0   889.7  9196.2   891.0  9204.2
GR 890.6  9219.4   892.6  9229.8   891.3  9238.2   892.3  9245.8   892.8  9283.8
GR 890.4  9292.2   890.3  9299.7   892.7  9305.7   892.7  9324.6   891.7  9334.4
GR 892.8  9343.3   890.8  9354.6   892.5  9366.7   893.0  9416.6   893.0  9435.7
GR 890.8  9442.5   892.5  9454.1   891.0  9462.0   893.0  9470.7   893.3  9505.1
GR 892.9  9555.5   891.4  9561.4   892.9  9569.2   892.8  9625.2   893.5  9666.4
GR 893.5  9699.3   889.0  9713.3   889.2  9722.8   890.4  9736.7   891.9  9775.1
GR 891.9  9804.1   893.5  9815.0   894.0  9872.1   893.6  9916.6   889.5  9927.9
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GR 890.0  9945.8   888.7  9971.9   888.5 10000.0   888.4 10013.5   891.4 10024.2
GR 891.4 10047.0   889.5 10078.2   890.4 10106.0   892.2 10141.3   892.8 10176.2
GR 892.7 10195.6
ET          9.1     9.1                                           8875.2 10035.2
X1  5.75     76  8875.2 10035.2     260     420     408
GR 895.1  8598.0   895.4  8623.0   894.7  8652.3   890.9  8662.4   892.7  8669.9
GR 893.1  8685.8   890.8  8701.0   892.0  8707.4   892.1  8727.8   893.5  8739.8
GR 894.5  8785.9   895.5  8832.5   895.8  8875.2   895.6  8936.0   895.3  8972.7
GR 895.6  8979.3   895.0  9045.5   893.2  9055.2   894.4  9063.7   894.8  9085.8
GR 895.2  9161.7   894.0  9168.2   894.9  9173.5   894.1  9180.6   894.6  9186.1
GR 893.3  9200.4   894.5  9206.3   895.0  9247.3   893.6  9255.7   894.6  9261.9
GR 892.5  9273.3   893.2  9284.5   894.3  9291.9   894.6  9317.2   893.9  9321.7
GR 894.8  9327.2   894.9  9342.0   893.9  9346.5   895.2  9366.4   894.7  9392.1
GR 894.2  9400.4   895.1  9412.9   895.0  9423.4   893.4  9440.8   894.7  9456.0
GR 894.7  9495.6   895.9  9512.5   895.8  9547.1   895.0  9573.6   893.0  9584.1
GR 894.4  9590.9   894.9  9619.7   895.3  9660.1   895.8  9701.1   896.0  9730.5
GR 894.6  9751.4   894.2  9794.0   894.8  9831.5   895.2  9865.2   893.6  9886.2
GR 893.1  9904.0   892.9  9931.4   893.0  9947.2   891.1  9965.2   890.8 10000.0
GR 890.4 10021.1   895.0 10035.2   895.0 10088.3   895.0 10124.0   894.7 10182.2
GR 891.9 10195.7   892.0 10236.6   893.3 10254.2   894.2 10277.5   895.4 10311.6
GR 895.7 10349.4
ET          9.1     9.1                                           9454.4 10124.0
X1  5.83     82  9454.4 10124.0     300     370     404
GR 892.5  8989.9   891.2  9060.2   891.4  9139.9   888.8  9179.7   896.0  9194.4
GR 895.2  9297.0   895.0  9350.8   894.9  9366.8   895.2  9384.4   896.9  9426.5
GR 897.1  9454.4   896.4  9519.0   896.1  9612.8   895.8  9646.6   896.4  9686.8
GR 896.6  9750.4   896.8  9824.7   897.3  9898.5   897.0  9927.2   892.2  9942.2
GR 893.6  9961.0   893.5 10000.0   893.9 10048.5   897.0 10086.0   897.6 10124.0
GR 897.5 10201.7   897.3 10217.5   896.7 10224.8   897.6 10232.9   897.6 10242.6
GR 897.0 10247.8   897.8 10262.0   897.6 10292.2   896.0 10297.9   897.6 10306.9
GR 897.5 10342.5   897.2 10351.6   897.7 10363.8   897.5 10389.9   896.3 10396.1
GR 896.1 10411.2   896.9 10417.0   896.5 10431.1   897.7 10447.7   897.3 10493.1
GR 896.2 10497.2   897.3 10507.6   897.2 10544.8   897.1 10599.8   896.2 10607.7
GR 897.4 10613.4   897.6 10668.4   897.1 10707.7   896.0 10716.3   897.3 10726.9
GR 896.9 10739.7   897.4 10757.8   897.6 10805.0   897.3 10811.9   897.9 10861.4
GR 897.3 10892.5   896.9 10932.1   896.4 10957.2   895.5 10990.8   894.8 10997.6
GR 895.7 11008.7   895.6 11044.1   895.3 11052.6   895.6 11099.7   895.3 11115.4
GR 893.9 11138.5   895.4 11148.6   895.4 11162.9   894.7 11171.2   895.5 11195.4
GR 894.0 11202.0   894.8 11212.1   894.7 11226.1   893.6 11230.3   893.7 11246.3
GR 892.3 11251.9   893.8 11259.4
ET          9.1     9.1                                           9122.9 10026.3
X1  5.90     64  9122.9 10026.3     280     360     395
GR 898.8  8987.4   898.8  9029.8   898.8  9077.1   899.8  9122.9   899.7  9136.3
GR 899.7  9183.4   899.3  9251.3   899.0  9277.4   898.5  9291.3   898.3  9379.0
GR 898.4  9444.9   898.3  9485.5   898.3  9535.0   898.9  9585.7   897.7  9601.0
GR 898.3  9613.8   898.3  9644.0   898.7  9692.4   899.0  9720.5   898.1  9731.8
GR 899.3  9766.5   899.0  9811.1   898.5  9860.3   896.4  9874.5   896.4  9889.4
GR 898.0  9903.0   896.9  9943.0   895.7 10000.0   895.5 10011.9   899.7 10026.3
GR 899.5 10084.7   898.5 10156.0   897.0 10176.7   899.0 10184.1   898.2 10198.8
GR 899.5 10212.9   898.9 10224.5   899.5 10242.4   899.1 10303.7   899.3 10381.4
GR 899.8 10398.1   899.8 10414.8   898.6 10450.2   899.2 10465.4   899.2 10509.0
GR 898.5 10547.1   896.9 10573.5   898.2 10587.0   898.3 10638.9   897.1 10652.1
GR 897.8 10665.9   897.2 10703.8   894.7 10719.6   897.7 10742.0   896.9 10784.8
GR 895.8 10796.5   897.5 10811.7   897.3 10833.2   895.8 10856.0   896.8 10872.3
GR 896.5 10893.8   896.3 10936.8   898.3 10988.0   897.2 11050.4
NC                 0.035
ET          7.1     9.1                           9155.5 10043.4  9790.4 10043.4
X1  5.94     57  9837.0 10043.4     190     225     219
GR 901.4  8986.5   901.5  9061.2   902.2  9069.3   901.7  9155.5   900.1  9193.8
GR 900.0  9233.4   900.2  9269.8   899.9  9350.3   899.8  9437.5   900.2  9489.9
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GR 900.1  9545.8   900.2  9581.1   900.4  9623.5   899.3  9639.5   899.9  9659.4
GR 900.3  9750.0   900.3  9782.5   900.5  9837.0   899.4  9881.6   899.0  9890.2
GR 898.0  9964.6   896.8  9977.1   896.8 10000.0   896.7 10016.5   900.8 10043.4
GR 900.4 10074.0   899.8 10085.8   900.2 10100.7   899.8 10105.2   900.6 10124.8
GR 900.4 10207.5   900.1 10272.0   899.4 10342.7   898.1 10353.3   898.1 10363.3
GR 899.2 10375.0   899.5 10424.4   899.0 10467.2   898.4 10549.9   897.4 10583.7
GR 896.2 10590.6   896.7 10599.0   897.9 10612.3   897.7 10630.0   896.8 10666.3
GR 897.7 10678.5   896.6 10694.0   897.0 10780.9   896.8 10788.1   897.5 10807.9
GR 896.8 10816.0   897.5 10840.4   898.2 10885.5   898.0 10925.5   897.2 10958.1
GR 897.4 11008.0   897.1 11089.5
NC 0.016   0.016   0.025     0.3     0.5
ET                   9.1                                         9987.9 10066.1
X1  5.97      18  9987.9 10066.1     185     210     194
X3    10
GR904.90  8966.0  905.30  9135.2  905.90  9327.1  906.50  9497.8  906.80  9663.6
GR907.20  9796.1   905.5  9987.9   898.0  9988.0   898.0 10000.0   898.0 10066.0
GR 905.5 10066.1  907.60 10131.0  907.60 10284.1  907.50 10405.5  907.50 10532.8
GR907.50 10662.2  907.50 10794.4  907.50 10845.5
SB  1.25    1.56     2.6       0      78       2     570       0   898.0   898.0
ET                   9.1                                         9335.2 10053.1
X1  5.99      18  9974.9 10053.1      45      45      45
X2                     1   905.5   905.2
X3    10
BT   -13  8868.2   905.2          9028.5   905.4          9188.1   906.0
BT        9368.4   906.4          9543.8   906.8          9707.0   907.1
BT        9908.4   907.7         10000.0   907.6         10175.6   908.0
BT       10374.1   908.1         10563.4   907.8         10718.6   907.7
BT       10850.7   907.7
GR904.80  8957.7  905.00  9125.0  905.30  9270.5  905.60  9444.4  906.50  9611.9
GR907.10  9786.7  907.30  9944.8   905.5  9974.9   898.0  9975.0   898.0 10000.0
GR 898.0 10053.0   905.5 10053.1  907.50 10129.8  907.20 10259.3  906.90 10405.2
GR907.20 10535.8  907.10 10693.7  907.10 10845.5
NC 0.040   0.040   0.035
ET           7.1     9.1                         8987.8 10240.0  9251.3 10074.3
X1  6.04      55  9928.7 10074.3     260     210     244
GR 904.8  8987.8   904.0  9065.0   903.5  9183.9   902.4  9277.3   902.6  9285.3
GR 902.8  9290.7   902.3  9296.3   902.8  9304.0   902.9  9339.5   901.8  9345.7
GR 902.8  9350.5   903.0  9401.3   902.8  9475.0   902.5  9516.9   902.5  9570.1
GR 903.5  9645.7   903.5  9685.2   903.2  9730.0   903.0  9758.5   902.4  9767.5
GR 903.5  9792.2   903.4  9812.8   902.7  9831.2   902.9  9848.8   902.7  9888.0
GR 903.4  9903.6   903.3  9928.7   902.7  9954.7   901.1  9967.2   898.0  9977.0
GR 898.3 10000.0   899.1 10028.3   900.5 10035.5   903.4 10074.3   905.6 10086.0
GR 905.6 10095.6   903.1 10104.8   903.2 10143.0   902.9 10194.6   901.9 10288.3
GR 901.5 10339.8   901.0 10400.2   900.5 10421.8   900.7 10428.3   900.9 10504.4
GR 900.0 10513.7   900.7 10521.3   900.6 10572.6   901.1 10645.0   900.8 10722.5
GR 900.4 10730.5   901.1 10742.6   901.4 10837.5   901.1 10852.8   900.9 11009.3
NC                           0.1     0.3
ET           7.1     9.1                         8994.3 10480.0  9354.9 10334.2
X1  6.08      58  9927.5 10045.2     250     240     248
GR 905.9  8994.3   905.7  9049.0   904.8  9136.1   904.7  9237.4   904.3  9304.8
GR 903.7  9332.5   903.7  9344.6   904.1  9348.2   904.4  9373.2   904.1  9451.7
GR 904.3  9499.6   904.3  9551.0   903.8  9604.4   902.9  9636.9   903.5  9647.4
GR 902.7  9652.8   903.6  9663.8   904.4  9716.9   904.4  9750.2   904.1  9761.0
GR 904.3  9793.8   903.9  9815.3   904.6  9878.0   904.5  9927.5   901.9  9958.5
GR 899.0  9966.9   899.2 10000.0   899.0 10021.8   903.4 10036.8   904.1 10045.2
GR 903.7 10072.5   905.6 10084.7   903.7 10095.5   903.3 10158.2   903.0 10210.3
GR 902.8 10213.5   903.1 10232.5   902.5 10258.3   902.5 10277.4   902.4 10302.3
GR 902.0 10310.6   902.3 10320.0   902.2 10334.1   901.8 10338.9   902.2 10346.5
GR 902.0 10396.9   902.0 10461.6   902.7 10488.5   902.8 10543.9   902.5 10589.5
GR 902.6 10651.5   902.1 10656.7   902.7 10662.9   902.9 10694.2   903.0 10796.9
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GR 903.3 10812.2   903.3 10935.8   903.3 11013.3
ET          7.1     9.1                          9434.9 10670.0  9842.6 10263.9
X1  6.18     56  9909.8 10075.7     560     420     500
GR 909.2  8992.3   908.6  9046.8   909.0  9058.6   908.5  9128.8   908.3  9139.4
GR 908.3  9152.9   907.8  9155.8   908.6  9161.8   908.6  9216.1   908.1  9262.7
GR 907.7  9273.5   908.1  9279.5   908.0  9337.4   908.0  9434.9   907.2  9511.0
GR 906.8  9607.1   906.1  9734.9   906.2  9764.5   905.6  9776.7   906.0  9784.3
GR 906.2  9840.9   906.3  9880.0   906.8  9909.8   906.0  9957.5   901.2  9981.2
GR 900.4 10000.0   900.1 10021.8   905.1 10030.9   905.9 10050.0   905.7 10072.3
GR 906.3 10075.7   906.1 10153.8   906.9 10167.5   907.5 10185.6   906.2 10214.8
GR 906.1 10254.8   905.5 10260.2   906.0 10266.8   906.2 10299.4   906.1 10368.2
GR 906.5 10383.8   907.0 10429.6   906.5 10495.0   907.0 10501.3   907.1 10531.7
GR 906.8 10588.6   907.0 10642.0   907.0 10673.3   906.7 10727.7   906.9 10743.7
GR 906.5 10786.9   905.8 10794.8   906.5 10803.8   906.8 10875.7   907.7 10975.1
GR 907.7 11015.1
NC 0.045
ET          7.1     9.1                          8992.3 10649.1  9954.9 10248.7
X1  6.27     53  9954.9 10034.3     560     430     500
GR 914.3  8992.3   913.7  9095.8   913.4  9138.4   913.2  9155.4   912.1  9305.7
GR 911.7  9361.5   911.0  9366.7   911.7  9372.5   911.7  9400.0   911.1  9405.1
GR 911.7  9408.9   911.5  9483.7   911.2  9609.3   910.0  9742.5   909.1  9842.8
GR 908.6  9860.7   908.9  9891.9   907.7  9925.8   908.1  9931.4   908.0  9954.9
GR 903.1  9972.2   903.4 10000.0   903.6 10011.2   908.4 10023.4   908.8 10034.3
GR 909.0 10060.6   909.2 10088.8   908.3 10110.6   908.8 10117.5   909.3 10141.9
GR 909.7 10160.1   909.6 10202.8   909.3 10285.0   909.1 10316.2   908.3 10332.3
GR 909.2 10348.7   909.7 10393.0   909.8 10431.1   909.5 10493.7   908.7 10527.7
GR 909.0 10540.3   909.6 10554.2   909.9 10578.3   909.4 10591.1   910.0 10611.0
GR 910.4 10649.1   910.1 10691.3   909.5 10706.0   909.5 10721.4   908.9 10754.0
GR 909.4 10824.0   909.6 10925.8   909.9 11018.6
ET          7.1     9.1                          8994.9 10645.8  9980.4 10352.2
X1  6.37     55  9980.4 10060.8     590     390     497
GR 918.5  8994.9   916.7  9050.8   917.4  9062.3   916.6  9073.5   917.2  9078.4
GR 917.3  9092.3   917.3  9186.4   916.3  9311.4   915.9  9413.8   915.0  9476.5
GR 914.2  9547.2   913.7  9623.3   912.1  9757.3   909.4  9776.4   909.2  9788.8
GR 912.0  9808.0   912.0  9824.9   911.5  9835.3   911.4  9884.3   910.0  9891.1
GR 911.3  9905.6   912.0  9918.5   912.2  9957.2   912.0  9980.4   906.9  9986.4
GR 906.6 10000.0   907.1 10047.2   911.5 10060.8   911.6 10085.5   910.8 10096.7
GR 911.6 10125.0   912.4 10132.2   912.6 10159.6   912.4 10195.7   911.7 10237.6
GR 911.6 10278.9   911.5 10331.9   911.3 10340.7   911.8 10347.0   912.0 10384.4
GR 911.7 10436.5   911.2 10466.9   911.6 10476.2   911.6 10492.9   911.4 10508.2
GR 911.8 10519.4   911.9 10568.2   911.1 10586.2   911.5 10603.3   911.7 10645.8
GR 911.1 10763.4   911.0 10898.9   911.0 10914.8   910.3 10984.3   910.3 11006.2
NC 0.050
ET          7.1     9.1                          9322.2 10648.6  9908.2 10091.6
X1  6.46     58  9908.2 10091.6     490     500     494
GR 920.3  8994.5   919.7  9066.2   919.4  9085.7   919.4  9108.5   918.0  9162.7
GR 914.9  9176.2   917.7  9193.5   918.2  9217.1   916.2  9238.8   917.8  9256.5
GR 915.8  9262.1   917.8  9269.7   917.3  9284.5   918.3  9300.4   918.3  9322.2
GR 917.9  9406.5   917.5  9474.7   917.1  9530.9   915.9  9610.8   915.0  9677.4
GR 913.1  9685.4   914.9  9691.9   915.0  9711.7   914.7  9761.8   914.3  9788.8
GR 913.8  9851.3   913.2  9858.7   913.7  9864.5   913.5  9908.2   911.2  9917.0
GR 911.4  9932.0   910.3 10000.0   910.5 10023.0   912.8 10037.7   914.4 10071.4
GR 915.2 10091.6   915.2 10144.8   915.0 10179.2   914.9 10240.3   914.9 10303.6
GR 914.5 10351.4   915.1 10402.1   913.4 10425.3   913.9 10439.1   914.7 10448.8
GR 914.7 10492.3   914.9 10543.0   915.0 10592.0   915.1 10648.6   914.9 10696.3
GR 913.7 10779.3   912.7 10838.5   911.3 10846.1   912.7 10853.7   912.7 10875.0
GR 913.1 10885.0   912.7 10945.8   912.6 11003.6
ET          7.1     9.1                          8991.8 10216.9  9882.6 10044.1
X1  6.55     41  9882.6 10044.1     480     510     501
GR 921.4  8991.8   921.5  9034.3   921.8  9047.6   921.1  9139.2   920.5  9164.7
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GR 920.3  9210.6   920.3  9257.2   920.2  9309.9   919.8  9358.5   920.0  9393.9
GR 919.9  9467.8   919.4  9549.5   918.2  9649.6   916.8  9743.0   916.0  9804.0
GR 916.0  9850.0   916.3  9882.6   912.8  9892.9   912.2  9925.8   914.0  9933.7
GR 913.5  9972.0   912.3  9979.4   912.3 10000.0   912.1 10029.9   916.3 10044.1
GR 916.6 10097.6   916.4 10146.6   916.9 10175.0   917.7 10216.9   917.6 10283.1
GR 917.3 10342.8   917.1 10428.3   915.9 10444.3   916.4 10458.1   917.0 10524.4
GR 916.7 10584.3   916.6 10671.1   915.6 10784.3   915.2 10873.0   914.6 10888.2
GR 914.6 11012.0
ET          7.1     9.1                           9562.7 10205.6  9932.5 10131.3
X1  6.65      54  9932.5 10131.3     500     480     498
GR 923.8  8997.0   923.1  9095.7   921.7  9117.9   922.5  9140.6   922.1  9203.9
GR 922.0  9237.8   920.4  9250.6   920.3  9272.7   920.4  9295.2   921.0  9317.2
GR 919.1  9337.3   920.8  9348.2   920.9  9371.8   919.1  9384.6   919.3  9396.5
GR 919.9  9410.8   918.8  9420.9   920.7  9432.0   920.2  9512.8   920.7  9562.4
GR 919.9  9677.0   919.5  9746.3   917.1  9761.6   918.6  9767.3   919.1  9795.3
GR 919.0  9821.4   918.3  9847.2   918.1  9863.5   919.0  9882.8   919.4  9898.0
GR 920.2  9932.5   919.8  9951.2   915.5  9970.6   915.2 10000.0   913.8 10051.4
GR 916.7 10058.1   918.8 10089.8   920.7 10131.3   920.9 10168.5   921.0 10205.6
GR 920.2 10269.6   919.8 10327.8   919.5 10394.6   919.2 10447.2   918.6 10524.6
GR 918.8 10553.2   918.6 10646.3   918.8 10710.5   919.2 10744.6   919.2 10813.3
GR 918.8 10861.6   918.5 10870.8   917.6 10951.9   917.6 10997.8
ET          7.1     9.1                           9512.6 10238.8  9862.0 10183.0
X1  6.74      47  9862.0 10183.0     460     530     494
GR 925.3  8989.4   926.9  9041.3   927.1  9084.3   926.4  9158.4   926.1  9186.8
GR 925.3  9320.5   924.6  9385.2   922.7  9394.4   924.1  9398.9   924.4  9436.9
GR 921.9  9454.3   923.7  9465.0   923.9  9512.6   923.7  9605.2   923.0  9704.6
GR 922.1  9806.8   921.7  9862.0   919.9  9947.6   918.1  9952.4   917.2  9997.9
GR 917.1 10000.0   917.8 10028.6   918.7 10047.0   918.9 10074.7   917.9 10084.5
GR 918.4 10090.3   917.9 10112.3   920.7 10124.3   922.1 10157.0   922.8 10183.0
GR 923.2 10238.8   922.7 10286.5   922.2 10345.6   922.0 10381.3   922.3 10420.8
GR 922.4 10471.6   922.4 10532.3   922.5 10603.0   922.2 10652.5   922.1 10667.6
GR 921.8 10770.4   920.5 10782.4   921.2 10789.7   921.2 10817.6   922.0 10847.0
GR 922.4 10916.0   922.1 11017.0
ET          7.1     9.1                           9730.2 10360.2  9915.7 10076.4
X1  6.84      47  9951.7 10075.3     520     480     499
GR 929.7  8992.8   929.9  9052.5   929.0  9141.7   928.4  9237.3   927.6  9318.5
GR 927.8  9341.6   926.9  9473.5   926.4  9497.1   926.9  9505.4   926.0  9554.5
GR 924.5  9568.2   925.8  9579.9   925.7  9635.2   925.5  9687.6   921.4  9702.9
GR 924.5  9717.1   925.0  9730.2   924.1  9773.0   924.0  9812.7   923.4  9831.2
GR 923.5  9866.8   920.1  9874.7   922.7  9882.0   923.4  9900.8   923.3  9951.7
GR 921.1  9962.5   918.5  9970.6   918.7 10000.0   918.3 10032.5   922.4 10043.2
GR 924.0 10075.3   924.0 10127.4   923.3 10176.3   924.1 10193.5   923.7 10228.0
GR 924.7 10257.5   925.3 10298.5   925.7 10360.2   925.5 10410.6   924.9 10487.7
GR 924.6 10556.6   924.5 10628.6   924.6 10697.3   924.5 10779.0   924.8 10841.9
GR 924.7 10935.9   923.9 11046.9
ET          7.1     9.1                           8992.0 10438.1  9886.0 10063.7
X1  6.93      56  9886.0 10063.7     475     500     489
GR 930.9  8992.0   931.2  9049.5   930.8  9120.2   930.6  9194.3   930.5  9210.7
GR 930.2  9256.5   929.0  9322.9   927.9  9342.5   928.7  9348.7   929.0  9364.9
GR 928.2  9372.3   929.2  9378.0   929.1  9477.4   928.9  9538.1   928.3  9585.6
GR 927.1  9651.2   926.5  9687.4   926.5  9735.6   926.5  9745.0   926.5  9764.2
GR 926.5  9774.5   926.5  9783.7   926.5  9802.7   926.6  9837.7   926.5  9886.0
GR 925.3  9903.1   924.8  9914.7   922.5  9939.9   920.4  9948.1   920.0  9979.8
GR 919.8 10000.0   919.9 10008.4   923.9 10020.4   925.5 10047.0   926.7 10063.7
GR 926.9 10090.3   926.6 10102.2   927.3 10118.8   927.6 10159.0   927.5 10198.7
GR 927.8 10236.8   927.7 10327.1   927.8 10383.2   928.0 10438.1   928.0 10520.9
GR 927.7 10581.1   927.1 10654.7   927.1 10719.7   927.2 10760.9   926.5 10768.8
GR 927.1 10776.1   926.7 10830.2   926.6 10835.8   926.7 10852.7   926.4 10929.8
GR 925.7 11012.5
NC 0.045
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ET          7.1     9.1                         9398.5 10385.3  9913.4 10162.1
X1  7.02     70  9913.4 10162.1    480     510    501
GR 931.9  8984.0   932.3  9039.0  928.8  9059.0  932.3  9077.6   932.2  9101.1
GR 930.2  9142.8   930.0  9155.8  930.9  9165.2  931.0  9214.8   927.3  9227.3
GR 930.8  9243.4   930.2  9270.7  930.6  9280.2  930.3  9287.5   931.0  9296.3
GR 931.4  9333.2   931.4  9398.5  930.4  9485.0  929.9  9539.4   930.2  9547.5
GR 929.9  9605.7   929.2  9651.1  928.2  9706.9  926.3  9712.4   928.4  9721.3
GR 925.9  9728.5   928.2  9736.0  928.2  9748.5  928.7  9785.0   929.2  9827.3
GR 929.2  9885.5   929.2  9913.4  927.9  9937.4  923.4  9953.8   922.8  9976.0
GR 922.2 10000.0   922.0 10012.8  925.7 10028.1  927.5 10049.4   926.9 10075.5
GR 927.7 10097.9   927.7 10117.8  928.5 10132.6  929.5 10162.1   929.9 10218.2
GR 930.4 10257.3   930.0 10276.3  928.7 10300.2  929.3 10305.6   929.8 10334.1
GR 930.1 10385.3   930.0 10426.2  929.5 10430.9  929.9 10441.2   929.6 10480.4
GR 928.9 10533.8   928.5 10604.0  927.6 10613.2  928.0 10618.8   928.0 10650.7
GR 927.7 10676.4   928.5 10697.4  929.2 10731.5  929.1 10745.0   929.2 10759.3
GR 929.3 10822.5   927.3 10838.6  928.2 10869.1  929.0 10931.7   928.8 11012.3
ET          7.1     9.1                         9522.8 10351.2  9864.9 10117.6
X1  7.12     63  9864.9 10117.6    430     520    495
GR 933.1  8998.6   930.5  9010.3  933.7  9029.5  933.7  9045.3   932.4  9053.1
GR 934.0  9064.2   933.9  9086.2  932.2  9097.2  933.5  9110.6   934.4  9146.7
GR 934.4  9166.5   934.6  9181.6  933.9  9297.6  932.9  9377.8   931.6  9385.7
GR 932.6  9396.3   933.2  9426.8  932.8  9471.8  933.2  9522.8   932.7  9587.6
GR 932.3  9655.4   931.8  9696.1  930.0  9703.6  931.7  9710.5   931.6  9734.4
GR 931.0  9739.8   931.6  9747.4  931.6  9795.6  932.3  9818.6   932.7  9842.7
GR 932.7  9864.9   931.4  9889.0  930.5  9920.9  929.4  9939.3   925.4  9945.5
GR 925.0  9989.5   924.8 10000.0  924.7 10012.2  928.3 10022.7   929.9 10038.7
GR 931.2 10079.3   931.9 10117.6  931.5 10160.8  931.6 10180.7   931.5 10232.8
GR 930.9 10240.7   930.8 10264.3  931.3 10300.5  932.0 10323.3   932.9 10351.2
GR 932.5 10391.4   932.4 10436.4  932.8 10484.6  933.6 10520.0   932.8 10554.1
GR 931.9 10600.8   932.2 10634.5  932.5 10667.7  932.4 10695.5   932.4 10707.8
GR 931.5 10800.9   931.5 10912.3  931.5 11011.5
ET                  9.1                                         9948.0 10153.4
X1  7.21     62  9948.0 10153.4    465     480    506
GR 938.5  8983.9   938.4  9071.7  937.7  9167.1  937.7  9170.0   937.6  9199.8
GR 937.7  9277.5   937.6  9323.6  937.2  9411.1  936.6  9463.2   935.8  9510.2
GR 934.5  9519.7   936.1  9525.0  936.1  9609.4  935.6  9696.4   935.3  9763.5
GR 934.0  9772.8   934.7  9784.0  934.1  9813.3  933.5  9821.4   934.4  9828.5
GR 934.5  9837.3   932.2  9848.4  933.8  9854.3  933.7  9868.1   931.3  9889.3
GR 932.8  9895.3   931.7  9903.9  933.6  9911.3  929.7  9937.5   931.3  9948.0
GR 929.1  9967.3   926.7  9974.3  927.3 10000.0  927.8 10014.9   929.0 10029.8
GR 929.8 10048.7   929.4 10071.2  928.5 10075.6  928.3 10102.0   930.5 10113.4
GR 931.9 10153.4   929.7 10159.6  931.9 10167.4  932.5 10217.0   932.6 10253.2
GR 932.8 10281.7   933.4 10304.7  934.1 10329.2  934.7 10362.7   934.7 10414.6
GR 935.0 10450.3   935.2 10482.1  934.9 10517.6  934.7 10586.6   935.0 10613.8
GR 935.3 10661.2   935.6 10731.0  935.3 10796.7  934.9 10843.7   935.0 10867.5
GR 934.9 10970.9   934.8 11024.5
ET          7.1     9.1                         9425.5 10327.8  9944.7 10093.7
X1  7.30     57  9944.7 10093.7    560     400    482
GR 942.3  8991.6   941.7  9108.8  940.8  9232.0  939.9  9303.0   936.3  9310.5
GR 939.5  9320.6   938.5  9326.5  939.5  9338.2  939.9  9377.3   940.1  9398.9
GR 940.1  9405.0   940.7  9425.5  940.2  9504.3  939.2  9566.0   939.1  9600.3
GR 939.0  9661.8   938.9  9707.9  938.6  9749.4  938.2  9775.7   938.4  9812.4
GR 938.0  9846.5   937.6  9885.3  936.4  9929.5  936.0  9944.7   929.6  9957.6
GR 929.9  9970.4   929.4 10000.0  929.1 10012.1  931.1 10019.2   932.2 10037.8
GR 933.7 10045.9   934.5 10093.7  933.4 10107.1  934.0 10132.5   934.8 10171.2
GR 936.2 10200.9   936.9 10241.5  937.4 10275.1  937.7 10327.8   937.3 10349.9
GR 935.4 10352.9   937.5 10358.2  937.4 10384.4  937.0 10387.7   936.7 10398.1
GR 937.3 10400.5   937.0 10441.0  937.0 10469.8  937.3 10512.3   937.6 10589.0
GR 937.1 10665.2   936.7 10728.1  936.3 10758.2  936.1 10779.4   936.0 10791.0
GR 936.1 10863.8   935.1 11008.5
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ET		7.1	9.1				8987.3	10285.1	9905.2	10125.6
X1	7.40	54	9905.2	10125.6	490	520	508			
GR	944.4	8987.3	944.3	9081.3	943.2	9182.2	943.5	9248.7	943.8	9259.4
GR	942.8	9342.1	942.9	9369.8	942.1	9427.6	942.1	9486.3	941.3	9532.0
GR	941.7	9545.6	941.8	9565.4	941.5	9599.2	941.3	9646.3	940.8	9682.5
GR	939.5	9749.6	939.1	9798.0	937.9	9834.6	938.2	9847.2	937.6	9856.3
GR	937.7	9863.9	936.6	9875.6	937.7	9882.4	938.7	9905.2	938.4	9923.0
GR	936.2	9936.0	934.2	9950.0	931.3	9957.6	931.5	9978.8	930.7	9998.8
GR	930.8	10000.0	930.6	10013.6	934.0	10021.7	937.8	10052.5	938.3	10077.5
GR	939.5	10094.5	940.2	10125.6	940.1	10179.2	940.2	10208.0	940.4	10245.1
GR	940.8	10285.1	940.5	10350.8	940.5	10386.6	940.2	10437.9	940.5	10507.1
GR	940.0	10518.5	940.4	10525.7	940.5	10583.3	940.4	10663.0	939.6	10750.5
GR	939.2	10758.9	939.2	10784.2	938.7	10872.9	937.7	11007.9		
ET		7.1	9.1				9827.5	10090.5	9903.8	10094.9
X1	7.45	67	9951.9	10090.5	250	255	253			
GR	946.0	8987.3	945.8	9085.1	945.4	9134.6	945.8	9143.0	944.8	9239.5
GR	944.0	9296.7	942.7	9361.7	943.0	9392.3	943.1	9420.4	941.7	9453.3
GR	943.1	9468.7	943.3	9500.3	939.3	9537.8	941.1	9552.0	939.3	9577.2
GR	935.5	9594.1	935.4	9631.9	935.4	9664.3	938.9	9678.3	939.4	9716.5
GR	937.8	9735.7	939.7	9756.9	939.5	9773.6	933.9	9793.4	938.5	9814.2
GR	938.8	9827.5	938.3	9842.7	933.0	9851.4	932.9	9859.6	936.6	9868.6
GR	937.8	9885.0	937.9	9901.5	933.5	9912.1	937.5	9924.6	937.4	9930.6
GR	936.0	9940.9	937.0	9951.9	932.2	9962.8	931.8	10000.0	931.8	10021.2
GR	935.7	10031.7	938.5	10053.5	941.0	10090.5	939.3	10107.0	939.9	10115.3
GR	938.8	10127.1	940.3	10134.4	940.5	10147.8	939.2	10159.3	940.1	10168.9
GR	940.4	10186.3	939.6	10197.0	940.7	10213.0	941.6	10244.9	941.9	10276.8
GR	942.5	10312.5	942.4	10370.1	942.0	10431.8	941.7	10498.3	941.4	10547.2
GR	941.0	10612.6	940.6	10694.1	940.5	10743.9	939.8	10810.8	939.9	10824.5
GR	939.6	10919.9	939.2	11000.0						
ET		7.1	9.1				9511.4	10150.2	9879.3	10070.8
X1	7.49	83	9914.7	10070.8	240	255	245			
X3	10									
GR	945.8	8974.1	944.4	9110.0	942.7	9178.3	940.8	9186.4	942.4	9197.5
GR	939.3	9210.8	942.4	9220.0	941.8	9235.0	940.4	9241.9	943.3	9255.0
GR	943.2	9292.0	942.9	9334.4	942.3	9355.3	941.1	9362.9	942.4	9371.1
GR	942.5	9388.2	942.0	9397.0	942.7	9412.5	942.8	9441.1	941.0	9450.7
GR	942.6	9460.1	943.1	9479.2	943.4	9511.4	943.2	9541.5	941.9	9578.3
GR	940.5	9600.0	941.1	9608.3	941.0	9626.0	940.2	9633.2	941.0	9642.3
GR	940.8	9678.6	939.3	9705.1	939.6	9746.6	935.7	9771.7	939.1	9792.5
GR	937.0	9796.4	939.6	9801.9	939.9	9822.1	939.4	9870.5	936.3	9878.0
GR	939.9	9888.7	940.9	9899.7	941.0	9914.7	940.2	9932.2	937.6	9955.8
GR	933.5	9963.9	933.3	10000.0	933.2	10011.9	935.8	10019.3	937.5	10037.9
GR	939.2	10070.8	937.5	10081.5	940.9	10096.3	942.8	10125.5	943.0	10150.2
GR	942.7	10179.1	941.8	10195.6	942.1	10217.0	941.1	10225.9	941.9	10229.9
GR	942.7	10258.9	941.3	10276.8	942.4	10289.6	941.8	10300.5	943.1	10309.0
GR	944.0	10324.0	943.6	10356.5	943.5	10395.0	942.7	10450.6	942.8	10483.3
GR	942.8	10553.7	942.4	10561.3	942.6	10574.1	943.1	10616.3	942.6	10700.4
GR	942.3	10737.3	941.7	10748.8	942.2	10753.4	942.0	10785.9	941.9	10798.6
GR	941.4	10812.0	940.9	10903.2	940.9	11010.5				
ET		7.1	9.1				9768.9	10172.9	9887.6	10115.5
X1	7.59	60	9887.6	10115.5	480	505	496			
X3	10									
GR	946.9	8987.9	945.4	9005.7	947.4	9026.4	946.8	9047.7	947.6	9065.3
GR	946.7	9114.2	945.7	9153.5	944.2	9165.1	946.2	9187.3	946.3	9275.2
GR	946.7	9282.6	945.7	9292.8	946.8	9299.7	947.2	9328.7	946.5	9410.9
GR	945.5	9491.0	944.8	9515.9	945.1	9529.9	945.0	9571.8	944.6	9624.9
GR	943.4	9633.9	944.5	9639.0	944.0	9701.4	942.4	9708.4	943.7	9717.7
GR	943.7	9768.9	943.4	9828.5	943.1	9887.6	942.4	9914.1	939.6	9951.8
GR	935.4	9961.2	935.5	9988.3	935.4	10000.0	935.3	10014.4	936.7	10022.5
GR	937.8	10034.5	940.4	10046.2	942.0	10080.3	944.2	10115.5	944.8	10143.6

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GR 946.4 10172.9   946.4 10201.1   946.3 10220.3   945.3 10233.1   946.4 10247.8
GR 946.2 10302.3   946.3 10340.3   946.5 10393.2   946.3 10471.2   945.3 10487.9
GR 946.3 10493.2   946.1 10522.4   945.8 10577.2   945.9 10640.9   945.7 10688.4
GR 945.2 10758.2   945.0 10814.4   945.2 10823.3   944.7 10898.0   944.0 11003.9
ET          7.1     9.1                           9767.0 10163.1  9925.0 10163.1
X1  7.70     67  9925.0 10163.1     620     575     592
GR 952.0  8997.7   951.0  9026.9   952.4  9036.7   951.9  9117.7   949.5  9132.0
GR 950.4  9155.0   946.7  9180.8   949.5  9204.7   951.4  9222.3   950.6  9275.8
GR 949.2  9289.8   950.0  9309.6   945.7  9337.8   945.5  9386.3   950.5  9397.5
GR 950.3  9426.1   950.3  9492.8   949.6  9541.4   948.3  9556.8   949.4  9566.5
GR 949.6  9605.6   948.4  9673.8   947.1  9713.2   945.7  9740.2   946.7  9754.4
GR 947.0  9767.0   946.3  9797.0   943.6  9816.7   945.2  9840.5   945.0  9853.3
GR 942.9  9866.8   945.3  9873.9   945.7  9887.8   945.0  9900.8   943.7  9908.7
GR 945.2  9915.5   945.5  9925.0   942.6  9974.2   938.5  9985.3   938.8 10000.0
GR 939.4 10019.3   939.0 10036.8   941.6 10045.7   942.5 10077.5   943.0 10083.5
GR 944.6 10112.5   946.2 10146.0   948.8 10163.1   948.8 10181.0   946.0 10199.9
GR 948.1 10209.5   946.2 10215.1   948.6 10228.5   948.9 10246.0   948.2 10296.8
GR 948.8 10303.3   949.4 10338.7   949.9 10398.0   949.1 10445.3   949.0 10510.1
GR 948.3 10589.5   947.7 10654.3   947.5 10660.3   947.4 10675.4   947.2 10797.5
GR 947.0 10880.8   946.5 10997.6
ET                   9.1                                          9860.2 10116.1
X1  7.78     77  9860.2 10116.1     420     380     404
X3    10
GR 953.5  9000.7   953.7  9022.7   951.6  9031.7   953.2  9050.6   952.1  9079.3
GR 953.4  9132.8   949.1  9152.1   953.1  9177.0   953.5  9212.5   952.5  9260.7
GR 953.0  9291.5   952.4  9316.3   951.2  9354.0   949.6  9368.2   950.6  9378.8
GR 950.2  9416.1   949.8  9450.0   949.9  9458.7   950.7  9461.7   951.7  9487.2
GR 952.3  9518.7   951.1  9554.5   949.7  9608.2   948.0  9621.3   949.6  9630.6
GR 949.6  9640.8   948.3  9664.1   949.0  9671.7   949.3  9712.0   948.0  9770.6
GR 946.0  9785.6   947.3  9796.8   947.6  9823.7   943.4  9835.7   948.2  9849.6
GR 948.3  9860.2   946.8  9888.1   945.7  9913.4   946.3  9929.4   945.7  9944.5
GR 943.3  9962.6   940.1  9973.6   940.4 10000.0   940.6 10024.1   943.2 10034.8
GR 944.5 10045.3   945.1 10073.2   947.6 10088.8   948.8 10104.2   949.0 10116.1
GR 946.3 10126.0   948.2 10135.1   949.5 10157.6   948.5 10174.0   949.3 10182.5
GR 949.9 10220.5   950.6 10245.4   950.5 10276.0   950.6 10304.3   950.7 10326.9
GR 950.2 10337.9   950.8 10341.5   950.7 10377.3   950.1 10441.1   949.8 10521.0
GR 949.3 10571.0   949.0 10646.9   948.7 10722.5   947.8 10768.6   946.8 10781.7
GR 947.9 10787.4   947.9 10800.5   948.2 10818.8   946.9 10830.5   947.8 10843.0
GR 947.2 10928.2   947.8 11002.3
ET                   9.1                                          9842.2 10127.0
X1  7.82     71  9842.2 10127.0     230     255     240
X3    10
GR 956.2  8991.2   955.1  9025.2   955.5  9074.0   954.6  9104.5   955.4  9114.9
GR 955.7  9139.4   955.3  9200.9   953.9  9244.5   953.3  9279.5   953.2  9298.2
GR 954.1  9333.8   952.9  9385.3   951.1  9416.7   951.0  9438.5   950.0  9452.5
GR 950.5  9462.8   951.0  9485.1   950.2  9493.6   950.7  9503.8   949.7  9520.5
GR 950.4  9530.5   950.7  9550.8   950.8  9596.0   949.5  9607.0   947.0  9614.1
GR 947.0  9622.3   948.7  9634.6   949.0  9653.2   948.6  9676.1   947.2  9683.7
GR 948.7  9690.5   949.2  9711.3   949.6  9735.2   949.9  9766.3   949.5  9795.0
GR 948.1  9826.3   949.5  9834.3   949.6  9842.2   948.3  9872.9   947.3  9895.4
GR 946.0  9924.2   944.1  9935.5   944.1  9951.6   941.7  9957.2   941.1 10000.0
GR 941.0 10011.8   944.3 10018.1   945.8 10027.1   947.2 10055.2   948.5 10078.2
GR 950.5 10100.0   952.3 10127.0   952.6 10151.9   951.8 10206.9   951.6 10230.2
GR 951.9 10254.0   951.9 10297.9   951.7 10375.5   951.2 10465.9   950.3 10550.0
GR 949.9 10563.5   949.2 10570.2   949.8 10577.8   950.4 10613.7   950.6 10689.2
GR 950.9 10731.5   950.4 10741.8   950.6 10754.6   950.0 10830.3   949.4 10897.1
GR 947.9 11010.9
ET                   9.1                                          9922.7 10174.5
X1  7.87     75  9922.7 10174.5     240     260     252
X3    10
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GR 957.2  8995.7   956.8  9035.1   955.0  9130.0   954.8  9164.7   951.5  9181.7
GR 954.3  9199.0   952.9  9228.1   952.5  9247.2   954.3  9292.8   953.9  9315.2
GR 953.5  9328.4   952.2  9336.8   952.8  9352.4   952.2  9380.9   950.8  9387.1
GR 952.1  9395.3   952.0  9412.3   951.4  9416.3   952.6  9423.2   953.5  9450.3
GR 953.5  9502.8   952.8  9528.1   953.2  9553.0   952.4  9586.3   951.0  9599.4
GR 952.6  9605.3   953.1  9619.7   953.7  9658.8   953.5  9692.5   952.7  9728.2
GR 953.0  9739.1   952.0  9790.0   951.2  9828.1   950.9  9862.8   949.6  9885.5
GR 948.4  9892.2   947.5  9901.3   946.6  9908.2   947.9  9922.7   946.8  9947.3
GR 943.3  9954.6   942.5 10000.0   942.4 10011.3   945.5 10022.5   946.1 10038.9
GR 946.2 10062.0   948.4 10072.2   949.2 10081.5   949.8 10099.9   950.1 10124.3
GR 950.2 10137.2   952.4 10158.0   953.7 10174.5   953.5 10195.2   952.5 10216.5
GR 953.5 10256.3   952.7 10262.2   953.3 10283.8   953.2 10327.0   952.7 10388.0
GR 952.5 10430.9   952.4 10486.6   952.6 10526.8   953.2 10587.2   953.0 10651.8
GR 952.7 10653.3   952.8 10676.7   951.8 10755.5   950.4 10882.7   949.9 10900.5
GR 950.2 10916.1   950.0 10945.6   948.6 10955.0   949.8 10964.1   950.3 11010.3
NC                 0.040
ET                   9.1                                          9949.7 10245.0
X1  7.97      73  9949.7 10245.0     430     510     502
X3    10
GR 957.9  8990.0   958.0  9006.7   955.6  9015.3   957.9  9029.0   957.5  9060.7
GR 958.6  9091.0   958.3  9107.4   956.3  9136.2   957.5  9142.9   957.9  9166.3
GR 958.3  9218.8   958.3  9260.4   957.6  9342.8   957.0  9356.0   957.2  9374.9
GR 957.6  9440.3   957.2  9484.4   957.5  9521.6   956.1  9573.2   955.0  9614.4
GR 953.3  9664.3   953.7  9685.0   954.3  9706.0   952.2  9710.5   953.8  9717.4
GR 954.5  9737.2   953.6  9757.3   951.6  9791.7   953.4  9800.9   954.0  9832.9
GR 953.5  9865.4   952.4  9909.9   949.0  9917.6   952.6  9926.2   952.6  9949.7
GR 949.8  9956.0   946.4  9972.7   946.0  9992.3   946.2 10000.0   946.0 10022.2
GR 947.2 10053.0   946.3 10078.7   946.5 10124.3   948.1 10137.3   948.6 10160.9
GR 950.2 10199.3   951.5 10245.0   951.6 10255.5   950.2 10266.3   950.8 10273.3
GR 951.9 10315.2   953.7 10354.1   953.8 10365.8   952.4 10381.0   953.3 10390.3
GR 953.5 10398.3   952.3 10412.7   953.7 10422.8   954.5 10439.6   955.5 10467.1
GR 955.0 10488.9   955.2 10512.9   954.3 10517.8   955.5 10526.4   955.9 10553.2
GR 956.2 10589.8   956.1 10651.2   955.6 10716.0   955.0 10738.3   955.7 10751.4
GR 955.6 10817.3   955.3 10913.0   955.1 11006.7
ET                   9.1                                          9967.2 10254.1
X1  8.01      62  9967.2 10254.1     260     200     240
X3    10
GR 963.1  8987.1   963.2  9070.3   962.5  9155.5   961.8  9225.7   960.7  9294.2
GR 960.2  9295.5   958.8  9391.5   958.1  9445.1   957.3  9488.7   957.6  9524.0
GR 957.9  9552.5   957.3  9621.3   957.2  9674.9   957.6  9718.2   957.2  9753.3
GR 956.2  9788.4   955.8  9810.6   956.1  9830.2   955.6  9854.4   955.9  9872.0
GR 955.3  9894.7   953.3  9921.6   954.5  9932.6   954.6  9949.0   953.5  9958.2
GR 954.3  9967.2   952.6  9977.8   946.7  9990.0   947.0 10000.0   947.2 10047.4
GR 948.1 10061.2   948.8 10078.9   948.5 10093.2   949.2 10102.4   949.4 10124.3
GR 950.4 10142.2   951.1 10170.4   951.3 10209.4   952.4 10232.8   953.2 10254.1
GR 953.3 10268.8   951.7 10294.8   951.8 10306.3   952.6 10317.0   953.7 10345.6
GR 951.0 10357.9   953.4 10368.8   954.9 10385.9   954.8 10399.0   953.8 10418.7
GR 955.4 10433.8   956.6 10454.4   956.5 10495.6   956.8 10536.9   957.0 10573.6
GR 956.9 10618.2   956.7 10660.5   956.5 10723.2   956.3 10791.4   956.3 10804.1
GR 956.1 10913.4   955.7 10998.9
ET                   9.1                                          9964.1 10241.3
X1  8.06      75  9964.1 10241.3     300     215     265
X3    10
GR 964.4  9002.3   963.3  9090.0   963.7  9133.2   963.3  9163.7   962.1  9199.0
GR 961.7  9257.1   961.0  9266.6   961.9  9290.2   960.5  9340.8   960.1  9371.2
GR 961.5  9396.2   962.3  9413.9   960.3  9452.1   959.8  9480.8   959.1  9499.7
GR 959.5  9515.1   959.7  9538.4   958.5  9557.9   958.9  9572.6   958.9  9593.0
GR 958.1  9603.5   959.2  9618.8   958.5  9639.3   957.6  9652.7   958.5  9665.1
GR 958.6  9692.2   957.4  9719.5   958.2  9727.0   957.8  9769.8   956.3  9799.6
GR 955.0  9829.3   955.6  9837.5   954.7  9860.5   953.4  9877.8   954.1  9901.4
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GR 953.7  9906.0   954.5  9919.2   952.0  9940.1   953.5  9953.3   953.1  9964.1
GR 947.8  9982.5   947.7 10000.0   948.3 10027.7   949.2 10038.2   948.8 10044.5
GR 948.4 10064.8   950.3 10080.7   952.2 10129.1   952.4 10169.2   952.9 10188.5
GR 952.9 10196.5   953.8 10208.7   954.4 10241.3   953.7 10261.2   954.2 10283.4
GR 954.9 10320.2   955.5 10348.5   955.2 10365.5   955.0 10398.4   953.6 10404.8
GR 955.4 10413.6   956.4 10424.3   956.8 10444.5   955.9 10478.0   956.0 10500.0
GR 955.9 10529.6   955.5 10544.0   956.4 10574.3   957.1 10628.4   957.5 10669.4
GR 957.3 10736.4   956.3 10805.9   956.8 10813.0   956.3 10886.8   955.7 11005.3
ET          7.1     9.1                           9801.9 10408.1  9938.3 10220.7
X1  8.15     63  9938.3 10220.7     550     430     490
GR 965.7  8985.1   965.0  9077.0   963.9  9167.9   962.2  9176.1   963.1  9181.3
GR 963.2  9211.3   962.8  9284.0   961.8  9345.8   961.8  9395.6   961.8  9453.2
GR 960.9  9530.2   959.7  9566.8   959.0  9611.1   958.3  9643.1   957.7  9648.5
GR 958.7  9658.8   958.8  9679.6   958.9  9704.3   957.7  9733.2   956.3  9757.5
GR 957.6  9771.8   958.7  9787.1   958.7  9801.9   957.6  9815.8   957.4  9826.1
GR 954.9  9841.0   952.0  9847.6   951.8  9871.1   953.2  9880.1   952.8  9917.1
GR 954.1  9928.5   955.2  9938.3   954.7  9960.8   953.5  9972.5   949.5  9983.6
GR 949.4 10000.0   950.2 10044.4   952.5 10053.9   952.9 10083.7   954.7 10112.1
GR 955.9 10163.2   956.8 10178.0   958.0 10198.2   958.3 10220.7   957.6 10242.2
GR 957.9 10258.1   958.2 10285.2   958.8 10303.9   959.2 10344.2   959.7 10384.0
GR 960.0 10408.1   959.6 10431.8   959.3 10479.2   959.0 10510.3   959.1 10561.3
GR 958.9 10620.7   958.3 10676.5   958.0 10678.6   958.4 10693.2   958.0 10777.6
GR 957.2 10834.7   957.0 10883.2   956.3 11006.2
NC 0.040           0.035
ET          7.1     9.1                           9847.8 11007.2  9934.3 10077.2
X1  8.25     82  9934.3 10077.2     480     495     491
X3    10
GR 967.0  8978.5   965.3  9022.7   964.7  9061.5   964.2  9076.3   964.2  9115.2
GR 963.5  9144.7   962.7  9164.7   963.6  9170.9   962.4  9214.0   962.0  9241.2
GR 962.8  9279.0   962.9  9295.7   962.3  9321.2   961.8  9349.9   961.3  9371.2
GR 960.9  9394.4   960.3  9427.0   960.0  9448.8   959.2  9457.7   959.5  9467.6
GR 957.2  9477.2   960.8  9490.7   961.8  9511.7   962.0  9528.2   960.1  9549.0
GR 958.7  9573.1   957.8  9587.6   956.7  9591.5   958.2  9599.9   959.0  9612.3
GR 957.3  9625.6   956.0  9639.0   955.6  9650.3   959.3  9663.1   960.8  9684.0
GR 961.7  9706.7   962.1  9743.3   960.1  9780.4   959.5  9809.2   959.6  9847.8
GR 958.3  9865.6   957.3  9889.5   955.6  9910.2   955.8  9915.5   955.7  9934.3
GR 954.9  9961.3   952.6  9972.3   952.5  9981.4   952.4  9989.4   951.5  9994.1
GR 951.3 10000.0   951.1 10032.5   954.2 10037.4   954.2 10047.6   957.1 10068.3
GR 958.8 10077.2   958.4 10088.9   959.1 10094.8   956.5 10112.5   959.0 10120.9
GR 960.8 10135.2   961.2 10158.1   960.9 10176.5   959.8 10186.9   961.0 10194.1
GR 961.9 10212.0   962.3 10244.8   962.4 10272.6   962.1 10316.1   961.7 10365.2
GR 961.5 10421.5   961.0 10462.0   961.0 10497.7   960.9 10535.2   960.9 10543.5
GR 960.8 10602.5   960.4 10658.7   960.3 10714.3   960.2 10784.5   960.1 10837.2
GR 960.2 10887.4   959.3 11007.2
ET                  9.1                                           9834.8 10186.7
X1  8.34     68  9834.8 10186.7     450     530     500
X3    10
GR 965.8  8990.6   965.8  9058.8   965.2  9078.5   964.5  9154.6   964.2  9219.5
GR 963.3  9255.6   961.5  9271.8   963.3  9279.8   962.8  9300.8   962.1  9333.4
GR 961.2  9355.5   958.7  9366.0   958.5  9382.2   961.2  9409.4   958.0  9421.6
GR 960.2  9432.4   960.4  9446.0   961.2  9463.1   962.0  9485.2   962.0  9499.9
GR 963.4  9510.0   964.2  9522.7   962.8  9544.7   964.8  9564.0   965.7  9596.1
GR 964.8  9623.4   964.8  9651.2   963.7  9684.3   962.7  9696.4   963.2  9708.6
GR 963.2  9738.3   963.7  9758.9   963.3  9772.6   962.3  9800.1   963.7  9818.7
GR 964.1  9834.8   963.7  9864.2   961.3  9905.1   958.9  9921.2   956.6  9938.7
GR 954.4  9944.7   953.2 10000.0   953.1 10004.8   956.5 10015.8   958.4 10026.6
GR 960.0 10045.5   961.5 10076.7   962.2 10112.6   963.1 10152.7   963.7 10186.7
GR 963.8 10240.2   964.2 10277.2   964.5 10323.2   964.7 10374.7   964.7 10416.0
GR 964.3 10463.3   964.2 10522.0   963.9 10571.3   963.1 10625.0   962.5 10688.7
GR 962.3 10745.3   961.7 10785.5   961.4 10802.3   960.9 10855.7   960.4 10902.3
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GR 959.5 10936.4   959.7 10964.2   959.5 11004.3
ET          7.1     9.1                          9673.1 10126.8  9889.4 10041.5
X1  8.43      61  9889.4 10041.5     450     530     491
X3    10
GR 967.7  8991.0   966.9  9096.5   965.7  9170.4   962.8  9195.3   965.3  9205.9
GR 965.0  9225.1   964.0  9238.9   965.0  9250.7   965.3  9288.0   964.7  9293.5
GR 964.8  9341.6   963.8  9382.4   963.3  9405.9   961.9  9416.9   961.9  9434.0
GR 963.1  9439.4   964.1  9455.1   965.4  9489.5   966.3  9509.5   967.3  9551.6
GR 967.7  9583.0   967.5  9626.8   966.6  9663.7   966.8  9673.1   966.0  9730.4
GR 964.9  9767.3   961.4  9808.5   962.0  9820.5   961.8  9832.2   959.7  9858.3
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GR 955.3 10000.0   955.1 10012.5   959.1 10024.5   961.5 10041.5   959.4 10053.6
GR 962.2 10065.5   964.3 10082.8   965.1 10101.0   965.6 10126.8   965.6 10182.9
GR 963.3 10194.9   966.0 10217.3   967.0 10251.6   968.5 10295.9   969.6 10343.6
GR 970.2 10395.0   970.4 10448.0   969.6 10509.2   968.9 10559.2   967.6 10634.4
GR 966.9 10698.1   967.0 10710.7   966.2 10768.8   966.1 10846.3   965.9 10917.0
GR 965.3 11011.1
QT     2    5054    5054
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X3    10
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GR 966.1 10126.8   964.7 10136.1   962.6 10142.0   965.0 10159.4   963.5 10174.2
GR 966.3 10190.4   965.0 10204.3   966.7 10216.3   965.8 10225.6   967.0 10246.5
GR 965.8 10258.5   966.9 10287.3   967.5 10323.1   967.8 10369.0   968.3 10405.0
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GR 967.4 10654.9   968.9 10701.7   970.7 10751.3   972.0 10834.0   972.2 10862.3
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GR 980.7 10133.5   980.6 10148.2   982.9 10161.3   985.8 10180.5   987.2 10210.4
GR 989.3 10261.3   990.5 10293.7   990.8 10311.3   990.5 10331.2   991.5 10344.3
GR 994.2 10365.4   995.7 10382.5   996.1 10422.6   994.2 10444.7   989.9 10464.2
GR 992.2 10476.6   992.7 10499.0   991.0 10564.6   991.3 10583.0   988.7 10601.9
GR 988.5 10622.4   990.8 10636.7   992.1 10652.8   993.8 10687.1   994.0 10697.9
GR 994.1 10717.5   994.6 10768.2   995.5 10829.0   997.0 10876.2   998.6 10925.6
GR 999.5 10969.1   999.4 11003.0
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X1  9.47      68  9973.4 10036.2     500     480     492
X3    10
GR 994.4  8992.0   992.9  9079.3   992.1  9170.0   992.2  9199.6   990.1  9298.7
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GR 990.3  9644.6   989.8  9690.2   989.2  9745.3   988.6  9758.5   989.1  9779.2
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GR 983.7  9953.7   983.3  9973.4   979.9  9982.0   979.6 10000.0   979.8 10026.3
GR 984.4 10036.2   984.1 10058.1   983.5 10065.3   983.4 10081.8   986.1 10101.8
GR 986.9 10115.0   989.1 10169.8   989.7 10194.1   990.0 10225.2   989.9 10255.4
GR 987.7 10266.4   987.9 10277.7   990.0 10285.6   990.5 10297.1   990.2 10309.3
GR 987.9 10319.5   988.3 10335.3   990.8 10354.8   992.7 10389.0   993.1 10415.9
GR 993.8 10461.0   994.4 10484.5   995.3 10536.7   995.5 10549.2   997.6 10571.4
GR 999.2 10594.3  1001.8 10619.9  1005.0 10653.0  1006.6 10681.5  1006.5 10686.7
GR1006.2 10698.1  1004.4 10737.9  1002.6 10772.7  1000.7 10838.5   998.1 10877.8
GR 999.4 10914.7  1000.6 10977.6  1000.2 11005.7
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GR 992.5  9781.2   990.8  9797.8   988.3  9812.5   985.2  9834.8   982.3  9848.4
GR 982.3  9857.7   984.7  9862.9   984.1  9884.5   986.1  9902.0   986.4  9932.6
GR 982.4  9946.2   983.0 10000.0   983.3 10009.0   982.6 10030.5   987.1 10064.0
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GR 991.3 10636.7   992.2 10657.0   992.0 10711.3   991.8 10730.3   992.3 10744.1
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X1  9.66      80  9882.9 10245.6     530     390     503
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GR 996.5  9327.3   996.5  9354.0   996.2  9370.7   994.7  9396.5   995.1  9405.7
GR 995.1  9432.8   994.1  9487.3   993.5  9515.5   992.0  9556.3   992.5  9580.3
GR 990.8  9591.1   992.1  9598.9   992.2  9651.7   991.3  9679.8   991.6  9715.6
GR 991.3  9757.2   989.8  9773.5   989.6  9785.4   990.8  9790.2   990.3  9812.0
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GR 988.7 10045.0   987.8 10065.7   988.2 10100.4   988.3 10134.5   988.4 10157.3
GR 989.1 10164.1   989.7 10194.5   991.1 10214.5   992.4 10230.4   993.0 10245.6
GR 993.1 10264.5   990.5 10288.8   990.2 10305.7   987.8 10327.5   989.1 10331.3
GR 991.0 10355.0   991.9 10384.1   992.2 10403.5   990.0 10441.2   988.6 10469.4
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GR 989.1 10535.8   987.2 10547.9   988.4 10558.9   988.9 10567.2   989.5 10633.8
GR 990.4 10653.0   992.2 10711.4   993.7 10767.8   993.9 10786.2   993.3 10818.3
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NC 0.060   0.045   0.040     0.1     0.3
QT     2    9028    9028
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X1 -5.60      77  9132.3 10439.6     140     250     280
GR 891.3  8655.0   891.6  8663.2   889.6  8672.0   889.6  8684.1   890.9  8688.8
GR 891.8  8718.2   891.9  8766.4   892.5  8801.6   891.7  8814.4   891.3  8852.5
GR 891.9  8893.4   891.2  8942.2   891.6  8976.4   891.8  9012.0   891.3  9035.0
GR 891.6  9084.0   891.8  9132.3   889.7  9143.1   890.6  9146.8   890.6  9159.6
GR 888.2  9168.1   888.2  9176.3   890.4  9194.9   890.9  9204.2   890.9  9238.8
GR 889.3  9247.5   890.9  9262.2   891.1  9331.6   888.0  9345.9   888.0  9355.8
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GR 888.4  9774.4   890.7  9784.7   891.6  9803.2   891.8  9830.0   891.5  9862.7
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GR 886.3 10000.0   886.7 10020.9   889.2 10035.9   890.6 10046.7   890.3 10128.2
GR 890.4 10175.3   890.2 10214.1   890.4 10246.5   890.3 10294.5   890.3 10346.8
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GR 898.0 10615.7   897.7 10649.2
NC 0.050   0.040   0.040      .1      .3
QT     2    2263    2263
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X1  0.06      39  9974.7 10033.7     320     300     335
GR 892.7  9719.7   892.5  9793.3   892.4  9861.4   892.0  9940.0   891.7  9974.7
GR 887.7  9985.4   887.9 10000.0   888.1 10020.2   892.3 10033.7   891.8 10072.5
GR 891.8 10139.7   891.2 10148.3   892.1 10152.0   891.9 10176.4   892.7 10223.5
GR 893.2 10283.9   892.8 10308.1   892.6 10348.3   893.2 10376.2   893.5 10410.1
GR 894.0 10461.6   894.7 10516.5   895.9 10585.1   896.6 10601.6   897.6 10629.0
GR 898.6 10669.7   898.1 10679.1   899.0 10692.8   899.3 10727.3   898.6 10749.2
GR 896.0 10799.4   896.4 10803.6   895.0 10847.7   894.6 10890.6   895.0 10918.9
GR 894.1 10924.5   895.2 10937.6   896.4 10974.9   896.8 11016.1
NC         0.045
ET            7.1     9.1                          9977.2 11008.8  9977.2 10090.3
X1  0.14      56  9977.2 10090.3     250     480     394
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GR 889.5 10000.0   889.3 10013.9   892.4 10020.7   893.5 10075.3   894.5 10090.3
GR 895.3 10130.6   895.9 10194.1   896.9 10263.1   897.5 10317.9   898.3 10419.0
GR 898.7 10487.0   899.3 10566.8   899.4 10593.3   899.0 10677.1   899.2 10749.5
GR 898.0 10759.8   899.1 10774.6   899.6 10825.7   898.3 10831.3   900.4 10909.4
GR 901.0 11008.8
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GR 889.3 10000.0   890.2 10008.3   894.2 10023.2   893.9 10061.7   891.8 10067.0
GR 893.2 10072.1   894.0 10114.6   894.2 10166.4   894.5 10215.9   895.2 10274.2
GR 896.2 10300.4   897.0 10353.5   897.6 10423.0   898.2 10504.8   898.9 10581.2
GR 899.8 10671.3   900.1 10686.8   898.7 10774.9   899.3 10793.1   898.0 10803.2
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NC 0.045   0.040
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GR 894.2  9505.6   894.0  9521.0   894.8  9527.3   895.0  9537.6   895.9  9541.6
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GR 900.7 10405.0   901.2 10457.1   900.8 10468.3   900.7 10568.0   900.8 10634.6
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NC 0.040
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X1  0.36     50  9963.3 10022.3     230     420     398
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GR 904.3 10564.1   904.2 10593.8   903.5 10609.5   902.2 10656.8   902.2 10720.0
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NC 0.045                     0.2     0.4
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GR 907.6  9714.4   908.3  9735.2   907.9  9756.4   904.2  9773.8   903.4  9825.6
GR 902.8  9845.8   903.1  9933.8   903.0  9987.2   899.2  9992.7   898.8 10000.0
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GR 903.1 10232.2   903.2 10288.6   903.9 10341.7   904.6 10386.3   905.0 10434.2
GR 905.0 10471.6   904.6 10487.7   904.6 10501.2   904.5 10537.0   905.0 10578.7
GR 906.0 10638.3   904.5 10678.2   904.7 10722.6   903.1 10726.8   904.9 10731.9
GR 905.2 10769.1   906.9 10811.4   907.1 10832.0   907.2 10835.1   907.7 10883.1
GR 907.1 10920.5   906.5 10995.2
ET           7.1     9.1                           9610.0 11363.3  9833.2 10025.8
X1  0.67      52  9974.2 10059.1     110     550     409
X3    10
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GR 904.6 10136.1   904.1 10148.6   904.3 10206.4   903.9 10274.7   903.1 10361.0
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GR 902.4 10592.6   902.7 10598.2   902.8 10608.5   902.4 10618.6   902.8 10658.5
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GR901.28 10000.0  901.28 10006.8  906.28 10006.9  908.60 10070.0  909.20 10203.8
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GR912.20 10825.4  912.60 10876.7  912.70 10926.6  913.10 10973.8  913.40 11032.7
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X2                   2  906.42   907.3
X3    10
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GR 910.5  9753.0   910.1  9769.2   911.5  9777.1   912.4  9797.3   912.8  9832.7
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GR 974.0 10709.1   976.6 10736.3   975.3 10759.0   966.8 10818.7   955.7 10884.0
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GR 958.0 10578.0   962.4 10599.1   964.7 10617.4   967.5 10633.5   974.3 10676.8
GR 975.9 10697.8   975.2 10719.5   970.3 10755.9   963.4 10803.3   956.4 10852.9
GR 952.4 10886.8   943.3 10960.2   936.9 11008.7
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GR 915.8  9817.5   915.3  9828.2   915.8  9832.0   916.4  9856.5   916.5  9902.5
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GR 912.7 10231.3   913.7 10272.7   914.3 10311.8   915.2 10332.9   917.0 10364.4
GR 917.7 10400.2   918.7 10457.2   920.0 10504.3   921.2 10548.0   923.1 10603.9
GR 923.3 10636.6   923.0 10656.5   924.8 10679.7   926.8 10726.2   929.5 10777.3
GR 933.8 10842.8   937.5 10905.7   940.2 10949.9   941.9 11015.5
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X1	1.26	60	9993.8	10041.2	490	500	489			
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X1	1.31	65	9958.5	10098.4	240	255	247			
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GR	920.7	10295.3	921.5	10342.0	921.8	10375.7	923.0	10425.3	923.8	10487.8
GR	924.3	10534.1	924.5	10584.9	924.7	10639.3	925.6	10715.6	925.8	10728.7
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ET		7.1	9.1				9769.1	11001.8	9919.5	10040.2
X1	1.35	59	9971.5	10040.2	220	260	248			
GR	923.8	8993.1	924.2	9067.4	923.4	9120.3	923.7	9137.5	923.5	9154.1
GR	924.3	9212.5	924.0	9272.4	923.7	9331.4	922.8	9375.0	922.6	9435.2
GR	921.9	9500.5	921.5	9537.8	921.2	9587.9	921.0	9625.6	920.2	9674.7
GR	919.8	9728.4	917.5	9738.3	919.9	9747.6	920.5	9769.1	919.8	9798.9
GR	919.1	9848.3	918.6	9856.2	918.2	9910.0	917.5	9921.0	918.2	9928.7
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GR	922.8	10477.3	923.0	10496.3	923.0	10510.6	923.4	10539.5	924.1	10556.9
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GR	929.5	10824.2	930.8	10889.3	931.8	10943.2	932.6	11001.8		
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X1	1.45	55	9987.8	10037.6	500	490	494			
GR	926.7	8986.3	926.1	9077.8	925.7	9168.3	925.2	9201.3	925.0	9217.8
GR	924.2	9378.3	923.6	9499.3	923.0	9573.2	922.7	9611.9	922.4	9628.8
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ET			9.1						9985.7	10144.2

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X1  1.52      59  9989.0 10025.4     400     340     367
GR 928.2  8978.5   927.6  9035.4   926.5  9041.8   927.6  9050.7   927.4  9107.4
GR 926.7  9118.6   927.4  9134.2   926.9  9201.1   926.9  9221.5   926.2  9296.8
GR 926.7  9331.0   926.9  9379.5   926.3  9448.9   926.5  9495.0   926.6  9550.4
GR 926.8  9584.9   926.1  9655.1   925.3  9712.0   924.4  9758.2   924.4  9797.3
GR 923.6  9845.9   922.8  9864.3   922.4  9919.3   922.0  9989.0   919.4 10000.0
GR 920.9 10006.0   922.1 10025.4   922.1 10055.1   921.5 10071.2   921.5 10085.1
GR 922.2 10093.0   922.0 10130.3   921.3 10137.9   922.2 10146.5   922.2 10192.3
GR 922.4 10231.0   922.2 10258.1   923.8 10273.2   926.9 10322.3   929.0 10369.6
GR 930.2 10413.5   930.6 10450.7   930.5 10488.7   930.9 10520.8   931.6 10571.8
GR 932.5 10618.7   932.1 10630.7   932.8 10642.5   934.0 10671.3   936.3 10721.9
GR 938.0 10771.6   938.1 10791.5   938.0 10806.6   936.2 10822.4   937.9 10835.5
GR 939.6 10862.4   941.2 10906.2   943.4 10981.3   945.4 11023.3
EJ
T1      RAINBOW WASH FLOOD INSURANCE STUDY (MCFCD 90-66)
T2      SIMONS, LI & ASSOCIATES, INC. - TEMPE, AZ
T3      RAINBOW.DAT              FLOODWAY
J1     0       3       0       0      -1       0       0       0     715       0
J2    15       0      -1       0       0       0      -1       0       0       0


ER
```

SECTION 4: Hydraulic Analysis

4.8 Computer Files