FINAL WITHOUT PROJECT ANALYSIS REPORT – VOLUME 1

VA SHLY' AY AKIMEL HYDRAULIC & SEDIMENTATION ANALYSIS

Salt River Pima-Maricopa Indian Community adjacent to the City of Mesa, Maricopa County, Arizona

September 20, 2002

Prepared For:

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

Prepared By:

Dennis L. Richards, P.E.
Selena M. Forman, Ph.D., P.E.
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EXECUTIVE SUMMARY

The purpose of this study is to complete the without project hydraulic and sedimentation analysis of the Salt River in support of the Va Shly' Ay Akimel Feasibility Study – F3 Phase, prepared by the U.S. Army Corps of Engineers, Los Angeles District (the Corps). The focus is to identify the baseline hydraulic and sediment conditions. The results will be used by the Corps in future alternative analyses to identify the preferred project alternative(s).

STUDY AREA

The study reach on the Salt River extends from the upstream limit at the Granite Reef Diversion Dam to approximately 14 miles downstream at the Pima Freeway (Loop 101). There are three bridges within the study reach at the following locations: Alma School Road, Country Club Road, and Gilbert Road. A grade control structure is located downstream of the Alma School Road Bridge.

Currently, there are several active sand- and gravel-mining operations both within the channel and in the overbank areas of the study reach. In-stream mining pits were observed approximately one mile downstream of Gilbert Road, 1.5 miles upstream of Gilbert Road, and three miles upstream of Gilbert Road.

There are also two major active mining operations in the overbanks of the Salt River. The off-line pit, located 800 feet downstream of Gilbert Road, is 50 feet deep with a volume of approximately 3,600 acre-feet (~5,808,000 yd^3). A four- to eight-foot gravel berm surrounds the upstream edge of the pit. The off-line pit, located approximately three miles upstream of Gilbert Road, is 35 feet deep with an approximate volume of 1,400 acre-feet (~2,259,000 yd^3).

This study is based upon the **current** channel geometry and gravel mining operations. **Additional gravel mining activity upstream, downstream, or within the project reach may significantly change the results of this study.**

EXISTING CONDITION HYDRAULIC ANALYSIS

A one-dimensional hydraulic model of the Salt River was created using the HEC River Analysis System (HEC-RAS), Version 3.1 Beta (March 2002). The cross section ground points, reach lengths, and bank stations were developed from the terrain data (provided by the Corps and the USGS) using the HEC-GeoRAS extension in ArcView 3.2a (Environmental Systems Research Institute, Inc., 2000). The bank stations and other hydraulic parameters (Manning *n* values, ineffective flow areas, contraction and expansion coefficients) were refined within HEC-RAS.

Because the berm surrounding the mining pit downstream of Gilbert Road (referred to as the Gilbert Mining Pit) is not an engineered structure, it was decided that the pit has the potential

to capture some or all of the flow from the main channel. Therefore, the pit was modeled as a split flow path in HEC-RAS.

The HEC-RAS model was executed for the 5-, 10-, 20-, 50-, and 100-year events. There is essentially no flow in the Gilbert Mining Pit for the 5-year event. **The berm at the Gilbert Mining Pit overtops at approximately the 7-year peak flood event (31,000 cfs).** The Pit receives 7.5 percent of the flow for the 10-year event, 8.5 percent for the 20-year event, 11 percent for the 50-year event, 12 percent for the 100-year event, and 13 percent for the 200- and 500-year events.

The water surface profiles were exported to ArcView 3.2a, and the corresponding inundation areas delineated using HEC-GeoRAS. The floodplains were reviewed and smoothed as needed to be consistent with the ground surface elevation contours. The water surface elevations at slackwater areas were modified to reflect a horizontal water surface.

The following areas, which were defined as ineffective flow, were outside of the detailed mapping limits:

- Right overbank upstream of Gilbert Road
- Left overbank upstream and downstream of Gilbert Road
- Left overbank near Country Club Road and the Center Street Landfill
- Right overbank near Country Club Road

The boundaries of the inundation limits in these areas were defined using the terrain data from the 30-meter USGS DEMs. The limits could be refined, possibly narrowed, if more detailed mapping data were available.

SEDIMENT TRANSPORT ANALYSIS

Sediment transport simulations for the existing conditions were performed using HEC-6T, *Sedimentation in Stream Networks*, Version 5.13.19 (developed by William A. Thomas, MBH Software, Inc., July 9, 2002).

The HEC-RAS cross section geometry file was converted to the HEC-6T format. The hydraulic results of the HEC-6T model, run in fixed-bed mode, were compared to the results of the HEC-RAS model for the 5-, 10-, 20-, 50-, and 100-year peak flows, which cover the range of streamflows used in the simulations. Modifications were made to the HEC-6T model until the differences in the computed water surface elevations were generally less than 0.01 feet and the channel velocity differences were within 0.5 feet per second

Bed sediment samples were obtained at 16 locations within the study reach. The measured bed gradation were input to the HEC-6T model. On average, the bed material was composed of 30 percent sand, 50 percent gravel, and 20 percent cobbles.

The bed material is composed primarily of sand and gravel. Since sand is the main transport size, and there is a high percentage of gravel in the bed, the Toffaleti, Meyer-Peter, and Muller (TMPM) combination transport method is used in the HEC-6T sediment transport simulations because the method transports gravel as well as sand.

The sediment transport model cannot be directly calibrated to historical conditions because detailed historical bed elevation data are not readily available, and the bed elevation changes have been influenced by man-made changes to the Salt River, including sand/gravel mining and channelization. Therefore, the equilibrium bed material load at the upstream limit of the project reach was calculated for a range of discharges up to 200,000 cfs and was used as a basis for the inflowing sediment load for the HEC-6T model.

Although the upstream project limit is at Granite Reef Diversion Dam, the Corps suggested that equilibrium load is a reasonable estimate for the inflowing bed material load because the dam diverts water rather than stores water, and consequently does not significantly reduce the amount of the sediment being transported in the Salt River. There was no evidence of deposition or scour observed downstream of Granite Reef Diversion Dam during the field investigations, which indicates that the assumption of equilibrium load is realistic.

Sediment transport simulations were performed using 50- and 105-year hydrographs. The 50-year simulation is referred to as the Base Case. In the Base Case, after the first streamflow greater than 20,000 cfs (April 12, 1905), flow entered the Gilbert Mining Pit, scoured the gravel berm, and formed a headcut. By the end of the next day (April 13, 1905), the pit captured the majority of the total streamflow. The erosion of the berm was computed using only HEC-6T algorithms. During the remainder of the 50-year simulation, the Pit captured all of the flow when the total streamflow was less than 50,000 cfs. In general, for the Base Case at the end of the 50-year simulation period, the in-stream mining pits were partially filled and the corresponding headcuts and tailcuts migrated upstream and downstream, respectively.

In addition to the Base Case, other sediment transport simulations were conducted to assess the impacts of several of the input parameters and modeling assumptions. To more accurately assess the extent of the headcut from the Gilbert Mining Pit, a portion of the main stem of the Salt River was replaced with the pit geometry. The three cross sections at the upstream end of the Gilbert Mining Pit were modeled as hard points to prevent berm erosion and to sustain flow in the main channel. The sensitivity of the model results to the selection of the 50-year flow series, the failure of the Alma School Road grade control structure, the inflowing sediment load, the sediment transport method, and the Manning *n* values was also evaluated.

FUTURE WITHOUT PROJECT CONDITION HYDRAULIC ANALYSIS

The cross section geometry at the end of the Base Case 50-year sediment transport simulation was imported to HEC-RAS format for the future without project conditions hydraulic analysis. The future without project conditions HEC-RAS model was executed for the 5-, 10-, 20-, 50-, 100, 200, and 500-year. The Gilbert Mining Pit captures all of the flow for the

5-year event, 92 percent for the 10-year event, 77 percent for the 20-year event, 64 percent for the 50-year event, 60 percent for the 100-year event, 54 percent for the 200-year event, and 51 percent for the 500-year event.

Between River Stations 0.00 and 10.95, the water surface elevations in the Future Without Project Condition are less than the Existing Condition for all flow events. The long-term scour that occurred throughout most of the reach caused the decrease in the water surface elevations. Between River Stations 10.95 and 11.99, for the 5- through 50-year peak flow events, the water surface elevations for the Future Without Project Condition are two to 0.5 feet higher, respectively, than the Existing Condition. The deposition at the in-stream mining pit between River Stations 10.36 and 11.14 produced the rise in the water surface elevations. Upstream of River Station 11.99, the water surface elevations in the Future Without Project Condition are less than or equal to the Existing Condition.

The HEC-RAS model results were exported to ArcView and the inundation areas were delineated. In general, the inundation areas for the Future Without Project Condition are smaller than the Existing Condition.

GEOMORPHIC ANALYSIS

An evaluation of the geomorphic characteristics of the Salt River study area was conducted. This included an assessment of flow records, bed material size characteristics, channel geometry, and historic aerial photography. The characteristics of historic channel planform and profile conditions were evaluated.

The record of historic conditions indicates progressive and increasing human influence on the channel system. Specifically, encroachment and gravel mining are affecting the study area. Impacts have occurred to both the planform and invert profile of the river. In the short term, gravel mining in the river will cause degradation upstream and downstream of the gravel pits and aggradation in the gravel pits. Long-term channel responses are entirely dependent on future development in and around the channel. With no additional gravel mining, the channel will reach a state of equilibrium only after all the gravel pits are accessed through the natural migration of the river system or restoration activities have been conducted.

TABLE OF CONTENTS

EXECUTIVE SUMMARY ..... *i*

TABLE OF CONTENTS ..... *v*

LIST OF TABLES ..... *x*

LIST OF FIGURES ..... *xi*

1. INTRODUCTION 1

    1.1. Purpose 1

    1.2. Study Area 1

        1.2.1. Watershed Characteristics 1

        1.2.2. Bridges and Grade Control Structures 1

        1.2.3. Sand and Gravel Mining 3

            1.2.3.1. Historical Sand and Gravel Mining Activities 3

            1.2.3.2. Current Sand and Gravel Mining Activities 3

    1.3. Report Outline 5

    1.4. Acknowledgements 5

2. FIELD RECONNAISSANCE & DATA COLLECTION 7

    2.1. Field Reconnaissance 7

    2.2. Data Collection 8

3. EXISTING CONDITION HYDRAULIC ANALYSIS 10

    3.1. Overview 10

    3.2. Terrain Data 10

    3.3. Development of the GIS RAS Import File 11

        3.3.1. Stream Centerline 11

3.3.2. Main Channel Bank Stations 11
3.3.3. Cross Section Cut Lines 12
3.3.4. Flow Path Centerlines 14
3.4. Other Geometry Inputs 14
3.4.1. Manning *n* Values 14
3.4.2. Bridges 15
3.4.3. Ineffective Flow Areas and Levees 15
3.5. Steady Flow Data 16
3.5.1. Peak Flow Values 16
3.5.2. Downstream Boundary Condition 16
3.6. Computation Methods 17
3.6.1. Friction Slope Method 17
3.6.2. Critical Depth Computation Method 17
3.6.3. Split Flow Optimization 17
3.7. Water Surface Profiles 17
3.8. Inundation Areas 19

4. SEDIMENT TRANSPORT ANALYSIS 27
4.1. Overview 27
4.2. Geometric Data 27
4.2.1. Deposition and Erosion Limits 28
4.2.2. Bed Sediment Reservoir 28
4.3. Sediment Data 29
4.3.1. Bed Gradations 29
4.3.2. Sediment Transport Method 31
4.3.3. Inflowing Sediment Load 31

4.4. Hydrologic Data 33
4.4.1. Hydrographs 33
4.4.2. Rating Curve 34
4.4.3. Computation Options 34
4.5. 50-Year Simulation Results – Base Case 34
4.6. 105-Year Simulation Results 46
4.7. Gilbert Mining Pit Headcut Estimation 51
4.8. No Berm Erosion at the Gilbert Mining Pit 54
4.9. Sensitivity to the 50-Year Flow Series 57
4.10. Failure of the Alma School Grade Control Structure 57
4.11. Sensitivity to Inflowing Sediment Load 59
4.12. Sensitivity to Transport Method 59
4.13. Sensitivity to Manning n 60

5. FUTURE WITHOUT PROJECT HYDRAULIC ANALYSIS 61
5.1. Water Surface Profiles 61
5.2. Inundation Areas 62

6. GEOMORPHIC ANALYSIS 77
6.1. Historical Basin Development 77
6.2. Historic Flood Events 77
6.3. Bed Material Size Characteristics 78
6.4. Aerial Photography Evaluation 79
6.4.1. Vegetation 81
6.4.2. Lateral Migration 81
6.4.3. Encroachment 87

6.4.4. Gravel Mining 87
6.5. Channel Response to Flood Events 88
6.6. Channel Characteristics 88
6.6.1. Channel Planform and Profile 88
6.6.2. Width/Depth Ratio 90
6.7. Sediment Aggradation/Degradation Potential 90
6.8. Summary 91
7. REFERENCES 92
APPENDIX 1 – Field Photographs and Log
APPENDIX 2 – Existing Condition HEC-RAS Model Results
APPENDIX 3 – Stream Bed Sampling and Testing Report
APPENDIX 4 – Bed Material Gradation Curves
APPENDIX 5 – Hydrographs from Granite Reef Diversion Dam
APPENDIX 6 – Comparison of Cross Section Geometry Before & After Base Case 50-Year HEC-6T Simulation
APPENDIX 7 – Split Flow Hydrographs from the Base Case HEC-6T Analysis
APPENDIX 8 – Average Bed Elevation Comparisons for HEC-6T Sensitivity Analyses
APPENDIX 9 – Future Without Project HEC-RAS Model Results
APPENDIX 10 – Detailed Map for the 5-Year Inundation Areas
APPENDIX 11 – Detailed Map for the 10-Year Inundation Areas
APPENDIX 12 – Detailed Map for the 20-Year Inundation Areas
APPENDIX 13 – Detailed Map for the 50-Year Inundation Areas
APPENDIX 14 – Detailed Map for the 100-Year Inundation Areas
APPENDIX 15 – Detailed Map for the 200-Year Inundation Areas

APPENDIX 16 – Detailed Map for the 500-Year Inundation Areas

APPENDIX 17 – Historical Aerial Photographs and Channel Banks

LIST OF TABLES

Table 3-1. Peak flows used in the hydraulic analysis and inundation area delineation..... 16

Table 3-2. Existing condition flow distribution between the main channel and the Gilbert Mining Pit. 18

Table 5-1. Future without project condition flow distribution between the main channel and the Gilbert Mining Pit. 61

Table 6-1. Summary of the ten largest peak discharges in the period 1889 to 2001. 78

Table 6-2. Summary of observations from historical aerial photography comparison. 79

Table 6-3. River crossings within the study area. 87

LIST OF FIGURES

Figure 1-1. Photograph of the concrete cap and gabion header at the existing Alma School Road grade control structure looking into the Salt River channel from the north bank. 2

Figure 1-2. Study area with major features identified. 4

Figure 2-1. Location and description of photographs taken during the field reconnaissance trips. 9

Figure 3-1. River system schematic showing split flow reach for the Gilbert Mining Pit. The river and reach names in the schematic correspond exactly to the names in the HEC-RAS geometry file. 12

Figure 3-2. Location map with main channel stream centerline and bank stations depicted. 13

Figure 3-3. Existing condition water surface profiles for the Salt River between River Stations 0.0 and 4.5. 20

Figure 3-4. Existing condition water surface profiles for the Salt River between River Stations 4.5 and 9.0. 21

Figure 3-5. Existing condition water surface profiles for the Salt River between River Stations 9.0 and 13.65. 22

Figure 3-6. Existing condition water surface profiles for the Gilbert Mining Pit. 23

Figure 3-7. Existing condition inundation areas for the 5-, 10-, and 20-year peak flow events. 24

Figure 3-8. Existing condition inundation areas for the 20-, 50-, and 100-year peak flow events. 25

Figure 3-9. Existing condition inundation areas for the 100-, 200-, and 500-year peak flow events. 26

Figure 4-1. Bed sediment sample locations. 30

Figure 4-2. Equilibrium bed material load curve calculated using the TMPM transport method. 32

Figure 4-3. Gradations of the equilibrium bed material load, calculated using the TMPM transport method, for several streamflows. 32

Figure 4-4. Peak flows from Granite Reef Diversion Dam for water years 1889 through 1993 33

Figure 4-5. Scour and deposition trends along the project reach from the Base Case 50-year HEC-6T simulation. 37

Figure 4-6. Comparison of the average bed elevations for the Base Case sediment transport simulation before and after water year 1905, between River Stations –2.06 and 3.50. 38

Figure 4-7. Comparison of the average bed elevations for the Base Case sediment transport simulation before and after water year 1905, between River Stations –3.50 and 9.00. 39

Figure 4-8. Comparison of the average bed elevations for the Base Case sediment transport simulation before and after water year 1905, between River Stations –9.00 and 13.64. 40

Figure 4-9. Comparison of the average bed elevations for the Base Case sediment transport simulation before and after water year 1905 in the Gilbert Mining Pit. 41

Figure 4-10. Comparison of the average bed elevations at 10-year increments during the Base Case 50-year sediment transport simulations between River Stations –2.06 and 3.50. 42

Figure 4-11. Comparison of the average bed elevations at 10-year increments during the Base Case 50-year sediment transport simulations between River Stations 3.5 and 9.0. 43

Figure 4-12. Comparison of the average bed elevations at 10-year increments during the Base Case 50-year sediment transport simulations between River Stations 9.0 and 13.64. 44

Figure 4-13. Comparison of the average bed elevations at 10-year increments during the Base Case 50-year sediment transport simulations in the Gilbert Mining Pit. 45

Figure 4-14. Comparison of the average bed elevations at 20, 30, 40, 50, and 105 years during the 105-year sediment transport simulations between River Stations –2.06 and 3.50. 47

Figure 4-15. Comparison of the average bed elevations at 20, 30, 40, 50, and 105 years during the 105-year sediment transport simulations between River Stations 3.5 and 9.0. 48

Figure 4-16. Comparison of the average bed elevations at 20, 30, 40, 50, and 105 years during the 105-year sediment transport simulations between River Stations 9.0 and 13.64. 49

Figure 4-17. Comparison of the average bed elevations at 20, 30, 40, 50, and 105 years during the 105-year sediment transport simulations in the Gilbert Mining Pit. 50

Figure 4-18. Comparison of the Maximum Headcut scenario and the Base Case 50-year average bed elevations between River Stations 5.0 and 10.5. 52

Figure 4-19. Comparison of the Maximum Headcut scenario and the Base Case 50-year average bed elevations in the Gilbert Mining Pit. 53

Figure 4-20. Comparison of the No Berm Erosion Scenario and the Base Case 50-year average bed elevations between River Stations –3.5 to 9.0. 55

Figure 4-21. Comparison of the No Berm Erosion Scenario and the Base Case 50-year average bed elevations in the Gilbert Mining Pit. 56

Figure 4-22. Comparison of the Alma School Grade Control Failure Scenario and the Base Case 50-year average bed elevations between River Stations –1.0 to 4.5. 58

Figure 5-1. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 5-year peak flow 63

Figure 5-2. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 10-year peak flow 64

Figure 5-3. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 20-year peak flow 65

Figure 5-4. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 50-year peak flow 66

Figure 5-5. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 100-year peak flow. 67

Figure 5-6. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 200-year peak flow. 68

Figure 5-7. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 500-year peak flow. 69

Figure 5-8. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 5-year peak flow. 70

Figure 5-9. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 10-year peak flow. 71

Figure 5-10. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 20-year peak flow. 72

Figure 5-11. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 50-year peak flow. 73

Figure 5-12. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 100-year peak flow. 74

Figure 5-13. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 200-year peak flow. 75

Figure 5-14. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 500-year peak flow. 76

Figure 6-1. Study reach bed material size characteristics. 79

Figure 6-2. Historic channel bank locations superimposed on 2002 imagery. 83

Figure 6-3. Aerial photographs and channel bank locations from 1935. 84

Figure 6-4. Aerial photographs and channel bank locations from 1957 and 1958. 85

Figure 6-5. Aerial photographs and channel bank locations from 1979. 86

Figure 6-6. Salt River Profile. 89

Figure 6-7. Width-depth ratio for 5-, 10-, and 100-year floods. 90

1. INTRODUCTION

1.1. PURPOSE

The purpose of this study is to complete the without project hydraulic and sedimentation analysis of the Salt River in support of the Va Shly' Ay Akimel Feasibility Study – F3 Phase, prepared by the U.S. Army Corps of Engineers, Los Angeles District (the Corps). The focus is to identify the baseline hydraulic and sediment conditions. The results will be used by the Corps in future alternative analyses to identify the preferred project alternative(s).

1.2. STUDY AREA

The study reach on the Salt River extends from the upstream limit at the Granite Reef Diversion Dam to approximately 14 miles downstream at the Pima Freeway (Loop 101) as shown in Figure 1-2. The Tri-City Landfill, Center Street Landfill, and Lehi Cemetery are adjacent to the Salt River within the study reach.

1.2.1. Watershed Characteristics

The study area has a hot, dry climate typical of the lower Sonoran Desert. Precipitation occurs during two major seasons: in late summers as intense, localized orographic thunderstorms; and in winter as large scale cyclonic storms that originate over the Pacific Ocean (CH2M Hill, SWCA Environmental Consultants, and Arizona Geological Survey, September 1996). Winter storms tend to produce the largest flows on the Salt River.

The Salt River drains an area of approximately 5,980 square miles. The head waters of the Salt River are the White and Black Rivers, which originate at elevations near 11,400 feet above mean sea level in the White Mountains. The Salt River is perennial from its headwaters to Granite Reef Diversion Dam. The Salt River is formed in alluvial fill eroded from the surrounding mountain ranges.

There are four dams on the Salt River upstream of Granite Reef: Roosevelt Dam, Horse Mesa Dam, Morman Flat Dam, and Stewart Mountain Dam. Granite Reef Dam is not used for water storage. Instead, it is used to divert water from the Salt River into the Arizona Canal and the South Canal. When the release from the Stewart Mountain Dam exceeds the capacities of the canals, water is released over the Granite Reef Diversion Dam into the normally dry Salt River bed. In 1980, up to 178,000 cfs was released over Granite Reef Diversion Dam, and up to 124.500 cfs was released in 1993.

1.2.2. Bridges and Grade Control Structures

There are three bridges within the study reach at the following locations: Alma School Road, Country Club Road, and Gilbert Road.

A grade control structure is located downstream of the Alma School Road Bridge. This structure consists of a gabion header with a concrete cap (see Figure 1-1), and a gabion mattress apron approximately 35 feet in length with a 15-foot toe-down. The Maricopa County Department of Transportation (MCDOT) has developed plans to modify the grade control structure with construction scheduled for 2004. The design is based on the post-Roosevelt 100-year peak discharge of 172,000 cfs, which is assumed to be fully conveyed through the north channel (right structure). The modified grade control structure includes a downstream apron 74 feet in length with two drops located along the apron, each drop 2.5 feet in height. The structure has a toe-down depth of 18 feet at the downstream end.

Figure 1-1. Photograph of the concrete cap and gabion header at the existing Alma School Road grade control structure looking into the Salt River channel from the north bank.

The existing Gilbert Road crossing of the Salt River is a two-lane bridge approximately 1,300 feet in length. The Maricopa County Department of Transportation (MCDOT) completed a study in 2000 for a proposed new 7-lane bridge approximately 2,700 feet in length. The proposed structure is to convey the post-Roosevelt 100-year design flow of 175,000 cfs with two feet of freeboard, and is to be designed to withstand the pre-Roosevelt 500-year flow of 345,000 cfs. The proposed piers and abutments will be founded on drilled shafts designed to the full scour depth. In order to compensate for future mining operations and resulting headcuts, the MCDOT study recommended increasing the drilled shafts by 20 feet.

1.2.3. Sand and Gravel Mining

1.2.3.1. Historical Sand and Gravel Mining Activities

Between 1969 and 1986, there was extensive sand and gravel mining in the Salt River between Country Club Road and McClintock Drive, which is approximately one mile downstream of the Pima Freeway. The total estimated production for this portion of the Salt River was 58.5 million tons (Li et al., June 1989). Between Alma School Road and McClintock Drive, the channel invert has lowered 20 to 30 feet below the 1952 invert elevation (Simons, Li and Associates, Inc., April 1995), in response to the combined effect of major flood events, channelization, and extensive mining activity.

Several large mining operations were located upstream of Country Club Road crossing the channel and overbanks during the 1960s and early 1970s, prior to the major floods of 1978 to 1980. Two mining operations were documented in old Arizona Highway Department (AHD) Field Reports (Li et al., June 1989). These pits were operated on land leased by the AHD, owed by the U.S. Bureau of Land Management and City of Mesa, respectively. From 1963 to 1966, approximately 83,000 tons were excavated to used as mineral aggregate, aggregate base, and select material for roadway construction projects. A large portion of these pits sustained extensive damage following inundation by river flows and some areas were eventually converted into landfill operations in the early 1980s.

1.2.3.2. Current Sand and Gravel Mining Activities

Currently, there are several active sand- and gravel-mining operations both within the channel and in the overbank areas of the study reach (see Figure 1-2). In-stream mining pits were observed at River Stations 6.4 (approximately one mile downstream of Gilbert Road), 8.0 (approximately 1.5 miles upstream of Gilbert Road), and 10.5 (approximately three miles upstream of Gilbert Road).

Within the study reach, there are two major active mining operations in the overbanks of the Salt River. The off-line pit, located 800 feet downstream of Gilbert Road, is 50 feet deep with a volume of approximately 3,600 acre-feet (~ 5,808,000 yd^3). A four- to eight-foot gravel berm surrounds the upstream edge of the pit (see Photos 23 and 24 in Appendix 1). The off-line pit, located approximately three miles upstream of Gilbert Road, is 35 feet deep with an approximate volume of 1,400 acre-feet (~ 2,259,000 yd^3).

The sand and gravel mining operations may expand in the channel and overbank areas upstream of Gilbert Road. However, specific locations have not been identified.

This study is based upon the current channel geometry and gravel mining operations as shown in Figure 1-2. Additional gravel mining activity upstream, downstream, or within the project reach may significantly change the results of this study.

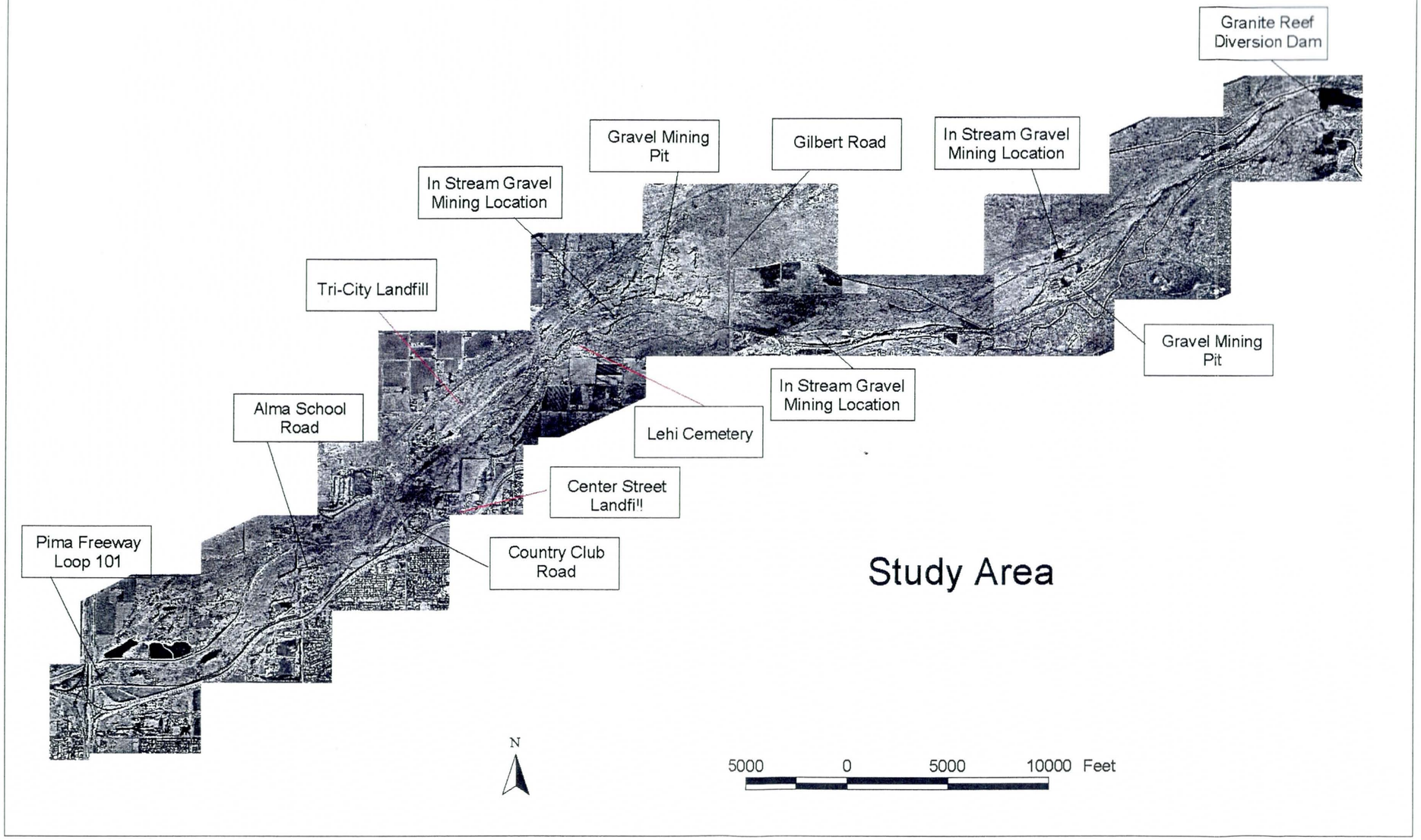

Figure 1-2. Study area with major features identified.

1.3. REPORT OUTLINE

This report documents the hydraulic, sediment, and geomorphic analyses completed for this study. The contents of this report are summarized below:

- The field reconnaissance trips and the data collected and utilized during the study are summarized in Section 2.
- The existing condition hydraulic model and corresponding water surface profiles and inundation areas are presented in Section 3.
- The sediment transport simulations and sensitivity analyses are discussed in Section 4.
- For the future without project condition analysis, the cross section geometry in the hydraulic model was updated using the results of a 50-year sediment transport simulation. The corresponding water surface profiles and inundation areas are included in Section 5.
- The results of the geomorphic analysis are presented in Section 6.
- References are listed in Section 7.

1.4. ACKNOWLEDGEMENTS

This study was authorized under Contract No. DACW09-00-D-0021, Task Order No. 007, for Hydraulic Engineering Services between the U.S. Army Corps of Engineers, Los Angeles District, and WEST Consultants, Inc. (WEST).

Dr. David T. Williams, P.E., as Principal-in-Charge, provided overall guidance and quality assurance. Mr. Dennis L. Richards, P.E., was WEST's Project Manager for this study, and Dr. Selena M. Forman, P.E., was the Assistant Project Manager. Mr. Iwan M. Thomas prepared the terrain data, assisted with the hydraulic model development, and delineated the inundation areas. Dr. Forman performed the sediment transport analysis. Mr. Thomas R. Grindeland, P.E., performed the geomorphic assessment. Mr. Leo R. Kreymborg, P.E., developed computer programs to (1) convert the geometry from the sediment transport model to a format used by the hydraulic model, and (2) construct a new terrain model based upon the geometry changes predicted by the sediment transport model. Mr. Kurtis S. Baron helped develop the hydrologic data and prepared all of the GIS layouts. Dr. Gary E. Freeman, P.E., Esq., Dr. Carlos J. Lopez-Sabater, Mr. James E. Heyen, and Mr. Kenneth D. Puhn assisted with research and technical services during the course of this study. Messrs Brian J. Doeing, P.E., Martin J. Teal, P.E., P.H., and A. Jake Gusman, P.E. performed the quality control reviews. Ms. Mary Dahlke provided clerical assistance.

Ricker-Atkinson-McBee & Associates, Inc., collected and analyzed bed sediment samples throughout the study reach.

Messrs. John C. Onderdonk and Glenn M. Mashburn of the U.S. Army Corps of Engineers, Los Angeles District, provided invaluable assistance in addressing technical questions and acquiring the data necessary for the study.

Messrs. Abel Ramirez Jr., R.G., Morris Paukgana, Dallas D. Enos, and Louis Notah of the Salt River Pima-Maricopa Indian Community (SRPMIC) provided background information and guidance during the field reconnaissance trips.

2. FIELD RECONNAISSANCE & DATA COLLECTION

2.1. FIELD RECONNAISSANCE

Field reconnaissance trips were conducted on March 6, 2002, March 27, 2002, April 3, 2002, and June 24, 2002, to accomplish the following: (1) to observe the general condition of the study reach; (2) to identify and locate bridges, grade controls, gravel mining pits, and other features of interest; and (3) to identify sediment sampling locations. The corresponding photographs are included in Appendix 1. The locations of the photographs are shown in Figure 2-1. The participants of the field trips are listed below:

March 6, 2002: Mr. Dennis L. Richards (WEST), Dr. Selena M. Forman (WEST), Mr. Abel Ramirez Jr. (SRPMIC), and Mr. Morris Paukgana (SRPMIC)

March 27, 2002: Dr. David T. Williams (WEST), Mr. Dennis L. Richards (WEST), Dr. Selena M. Forman (WEST), and Mr. Dallas D. Enos (SRPMIC)

April 2, 2002: Dr. David T. Williams (WEST), Mr. Dennis L. Richards (WEST), Dr. Selena M. Forman (WEST), Mr. John C. Onderdonk (Corps), Mr. Morris Paukgana (SRPMIC), and Mr. Louis Notah (SRPMIC)

June 24, 2002: Dr. David T. Williams (WEST), Mr. Dennis L. Richards (WEST), Dr. Selena M. Forman (WEST), Mr. John C. Onderdonk (Corps), and Mr. Glenn M. Mashburn (Corps)

During the field visit on June 24, 2002, the following issues were resolved:

- It was decided that there would not be flow in the overbank immediately upstream of Gilbert Road because a riprap berm, which was not shown on the mapping, protects the upstream side of the road. In the analysis, it will be assumed that all of the flow passes through the Gilbert Road Bridge opening.

- It was decided that a split flow loop would be used to assess the impacts of the off-line gravel pit that is located 800 feet downstream of Gilbert Road. A qualitative headcut analysis and discussion would be included in the 90 percent report, along with a recommendation for more detailed analysis in future studies conducted during the F4 phase.

- It was decided that the moveable bed limits between River Stations 8.0 and 9.3 be confined to the in-channel mining pit, which contains most of the conveyance. The bank stations will be defined at the same location.

2.2. DATA COLLECTION

The U.S. Army Corps of Engineers, Los Angeles District, (the Corps) provided the following data:

- The 5-, 10-, 20-, 50-, 100-, 200-, and 500-year peak flows for several locations along the Salt River.
- A HEC-DSS file with six-hour hydrographs at Granite Reef Diversion Dam for the period of 1889 through 1993.
- A digital terrain model and corresponding aerial photographs (flown December 28, 2001).

Digital quadrangle maps (1952 to 1964) and the corresponding digital elevation models (DEMs) of the study area were obtained from the U.S. Geological Survey (USGS). The data were used to supplement the overbank terrain data supplied by the Corps.

A HEC-RAS model of the Salt River was obtained from the Flood Control District of Maricopa County (FCDMC). The model was used to determine downstream boundary conditions and to extend the sediment transport model.

Bridge plans were obtained for all structures in the study reach. As-built drawings were not available for the Alma School grade control structure.

Bed sediment samples were collected and analyzed by Ricker-Atkinson-McBee and Associates, Inc.

Reports containing sediment transport analyses performed in conjunction with the bank protection design in the downstream portion of the study reach were reviewed (Simons, Li and Associates, Inc., 1993, 1994, and 1995; Premier Engineering Corporation, 1998).

Aerial photographs from 1935, 1957-58, and 1979 were obtained to aid in the geomorphic analysis.

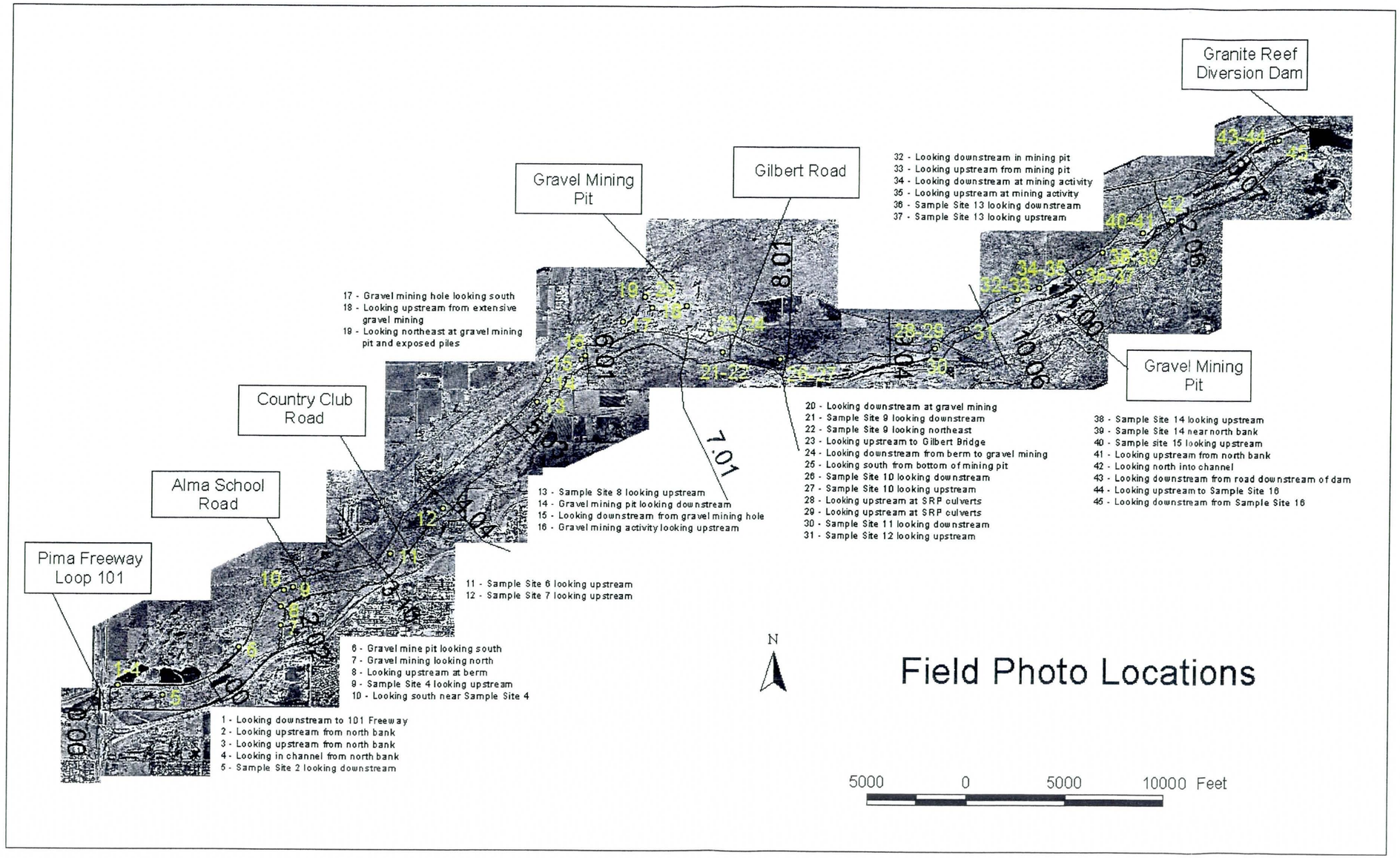

Figure 2-1. Location and description of photographs taken during the field reconnaissance trips.

3. EXISTING CONDITION HYDRAULIC ANALYSIS

3.1. OVERVIEW

A one-dimensional hydraulic model of the Salt River was created using the HEC River Analysis System (HEC-RAS), Version 3.1 Beta (March 2002). The cross section ground points, reach lengths, and bank stations were developed from the terrain data (provided by the Corps and the USGS) using the HEC-GeoRAS extension in ArcView 3.2a (Environmental Systems Research Institute, Inc., 2000). The bank stations and other hydraulic parameters (Manning *n* values, ineffective flow areas, contraction and expansion coefficients) were refined within HEC-RAS.

The HEC-RAS model was debugged until the water surface profiles were fairly smooth and the critical depth solutions eliminated except where appropriate. The water surface profiles were exported to ArcView 3.2a, and the corresponding inundation areas delineated using HEC-GeoRAS. The floodplains were reviewed and smoothed as needed to be consistent with the ground surface elevation contours. The water surface elevations at slackwater areas were modified to reflect a horizontal water surface.

The model inputs and results are summarized in the following sections.

3.2. TERRAIN DATA

Aerial photographs and four-foot contour interval topography (flown in December 2001) for the study reach were provided by the Corps. The extent of this mapping did not contain the 50-, 100-, 200-, and 500-year flows in some of the overbank areas. The mapping was supplemented with terrain data derived from 30-meter DEMs obtained from the USGS. Some of these DEMs reported elevations in whole feet and others in whole meters.

The process for developing the triangulated irregular network (TIN) model, required to develop the HEC-RAS cross sections, is described below:

1. The elevations of the USGS DEMs were converted to feet.

2. Elevation contours were created for each DEM and merged into one shape file.

3. The area covered by the new mapping, provided by the Corps, was subtracted from the USGS DEM contour shape file.

4. The contours from the new mapping (Corps) were added to the USGS DEM contour file to create one coverage of the area. Discontinuities in the contour data were smoothed manually within ArcView.

5. The TIN was created from the contour data.

3.3. DEVELOPMENT OF THE GIS RAS IMPORT FILE

The stream centerline, main channel bank, cross section cut line, and flow path (left overbank, main channel, and right overbank) themes were developed in ArcView. HEC-GeoRAS was used to generate the HEC-RAS geometry import file. These geometric features are discussed in the following sections.

3.3.1. Stream Centerline

Because of the large extent of gravel mining operations in the study reach, the stream centerline is not evident from inspection. HEC-GeoHMS was used to develop a drainage network of the study area. The stream centerline was defined by following the continuous drainage path from Granite Reef Diversion Dam to the downstream limit of the study. The stream centerline is shown in Figure 3-2.

Because the berm surrounding the mining pit downstream of Gilbert Road (referred to as the Gilbert Mining Pit) is not an engineered structure, it was decided that the pit has the potential to capture some or all of the flow from the main channel. Therefore, the pit was modeled as a split flow path in HEC-RAS. The stream centerline for the Gilbert Mining Pit follows the low flow path defined by HEC-GeoHMS. The flow returns to the main channel at a location where there is in-stream mining and low ground between the main channel and the pit. The split flow schematic from HEC-RAS is shown in Figure 3-1.

The berm between the main channel and the off-line mining pit upstream of Gilbert Road is protected by large riprap. It was decided that once this berm is overtopped, the pit would be modeled as an ineffective flow area.

3.3.2. Main Channel Bank Stations

The main channel banks were located to define the portion of the river that conveyed the majority of the flow. These locations do not always correspond to the outerbank levee that borders the Salt River. The main channel banks imported from the ArcView theme were refined within the HEC-RAS model. The refined channel banks for the main channel are shown in Figure 3-2.

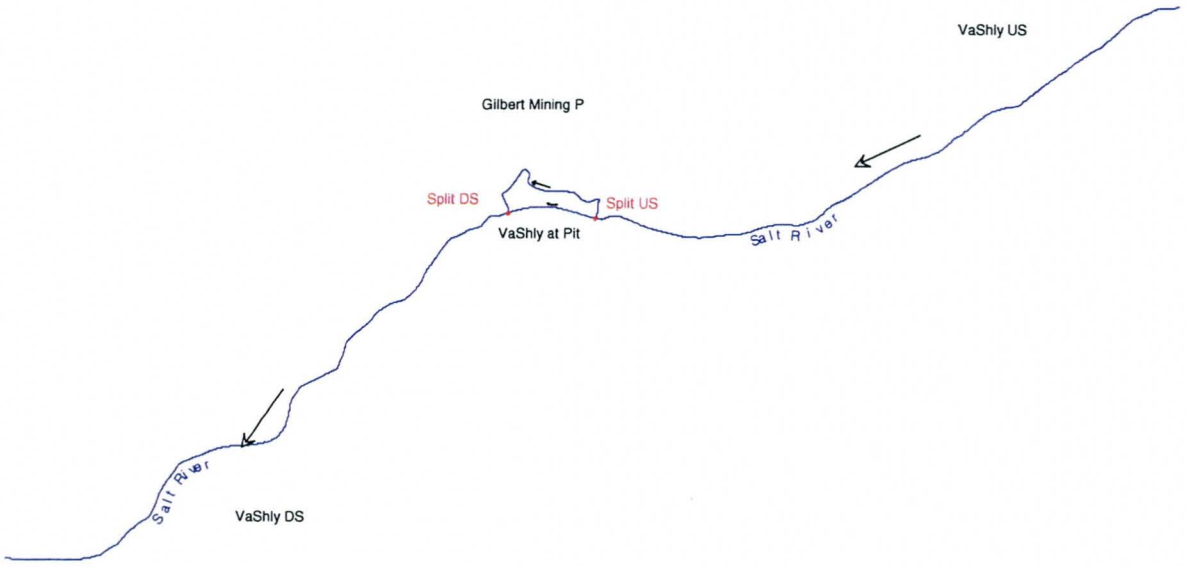

Figure 3-1. River system schematic showing split flow reach for the Gilbert Mining Pit. The river and reach names in the schematic correspond exactly to the names in the HEC-RAS geometry file.

3.3.3. Cross Section Cut Lines

Cross section cut lines were drawn approximately every 500 feet. The cross section spacing is smaller at locations near bridges or where there are significant changes in channel slope, channel shape, or levee limits.

The cross section cut lines are shown on the maps in Appendices 10 through 16. The cross section stationing starts at zero at the downstream limit and increases upstream in river miles based upon the length along the stream centerline. The split flow loop for the Gilbert Pit is between River Stations 6.40 and 7.32 on the main stem.

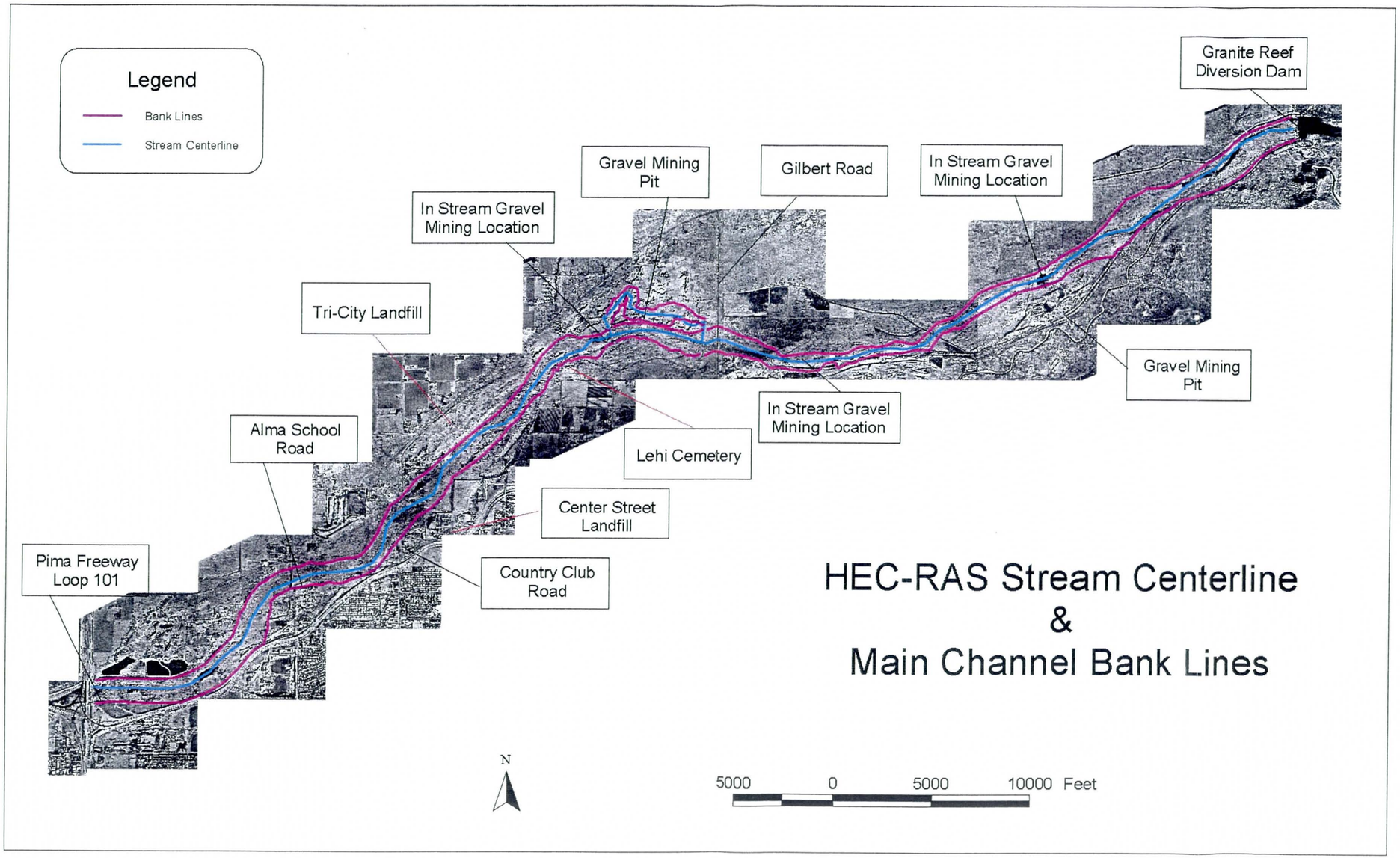

Figure 3-2. Location map with main channel stream centerline and bank stations depicted.

3.3.4. Flow Path Centerlines

The flow path centerlines are used to calculate the downstream reach lengths between cross sections. The stream centerline, which is used to compute the main channel reach lengths, was copied into the flow path centerline theme. The overbank flow paths, used to determine the overbank reach lengths, were defined to approximately correspond to the center of the mass of the flowing water in the overbanks for the larger flood events (50-, 100-, 200-, and 500-year peak flows).

3.4. Other Geometry Inputs

Once the river system schematic and cross section geometry were imported from the GIS file, other geometry inputs needed to be entered: Manning *n* values, bridges, ineffective flow areas, and levees.

3.4.1. Manning *n* Values

The Manning *n* values from the HEC-RAS model provided by the FCDMC were reviewed. In the FCDMC model, the Manning *n* values were 0.035 in the downstream portion of the reach at Pima Freeway (River Station 0.00 in this study) and decreased upstream to a value of 0.028 at Granite Reef Diversion Dam. However, during the field reconnaissance, it was determined that a Manning *n* of 0.028 was too low for the upstream portion of the reach.

Throughout the study reach, the channel contains scattered small bushes except in areas of active sand and gravel mining (see photos in Appendix 1). Between River Stations 12.06 and 13.64, there are scattered small trees on the banks. The bed material is primarily composed of sand, gravel, and cobbles.

Based upon the analysis in *Estimated Manning's Roughness Coefficients for Stream Channels and Flood Plains in Maricopa County, Arizona* (Thomsen and Hjalmarson, April 1991), the Manning *n* value for the Salt River near Granite Reef Diversion Dam varies between 0.043 and 0.033 for the 10- to 100-year peak flows. At 24th Street in Phoenix, the Manning *n* varies between 0.036 and 0.032 for the 10- to 100-year peak flows. Since the vegetation and bed material do not vary significantly along the study reach, a Manning *n* of 0.035, which corresponds to the value used in the FCDMD model at Pima Freeway (River Station 0.00), is applied to the channel throughout the reach for this study. The Manning *n* is not reduced in areas of active gravel mining, where there is currently no vegetation, because the inundation analysis is based upon the assumption of a "fully vegetated" condition as set forth in the Scope of Work. The Manning *n* value at several cross sections was modified during the analysis to produce a smoother water surface profile.

The flow is generally confined to the channel for all flow events except at the following locations: between River Stations 4.04 and 4.31, 4.47 and 5.47, 6.09 and 7.24, and 7.71 and 10.06. At these locations, the bank stations were set inside of the main channel banks to facilitate consistent channel widths and flow distributions. The "overbank" vegetation and

bed material were not different from the defined channel at the locations listed above. Therefore, initially, the Manning *n* values in the overbank at these locations were set at 0.035. These values were adjusted during the analysis (generally increased) to produce a consistent flow distribution in the channel and overbanks of adjacent cross sections. The Manning *n* value varied with streamflow at these locations. A high Manning *n* value of 5 was used to create ineffective flow when the flow was essentially zero in these overbank areas. The high Manning *n* was used in place of the ineffective flow feature in HEC-RAS to maintain consistency between the hydraulic model (HEC-RAS) and sediment transport model (HEC-6T), which has limited ineffective flow modeling options.

A table listing the Manning *n* values for all cross sections and flow events is included in Appendix 2a.

3.4.2. Bridges

There are three bridges located in the study reach: Alma School Road (River Station 2.31), Country Club Road (River Station 3.48), and Gilbert Road (River Station 7.45). As-built plans were obtained and the corresponding bridge deck and pier data were input into the model. For all bridges, the pier width shown on the plans was approximately 0.5 feet larger than the pier width used in the FCDMC model. The energy method was used for both low and high flows. The contraction and expansion coefficients were set to 0.3 and 0.5, respectively, at the cross sections immediately upstream and downstream of the bridges.

The Alma School Road Bridge has two openings. The terrain data indicate that the left side of the channel and the left bridge opening are ineffective flow areas (ponded water) for all flows. Therefore, the ineffective flow option was used to eliminate flow from the left opening, and a multiple opening analysis was not required. This assumption produces higher water surface elevations and larger inundation areas.

The culverts at the low water crossing at River Station 9.61 (Photos 28 and 29 in Appendix 1) were not modeled because they overtop during the 5-year event and would most likely be washed out during higher flows. At this location (River Station 9.61), the channel from River Stations 9.59 and 9.64 was interpolated and the actual road elevation was modeled in the overbanks.

3.4.3. Ineffective Flow Areas and Levees

All cross sections were inspected to identify ineffective flow areas. Since one geometry file was used for all flow events, multiple blocked ineffective flow areas and high Manning *n* values were used to set different ineffective flow areas for the different flows as needed. Levees were modeled in situations where low parts of the cross section could not get wet.

The off-line gravel mining pit upstream of Gilbert Road between River Stations 10.06 and 11.17 was modeled as an ineffective flow area for all flows.

3.5. STEADY FLOW DATA

The steady flow data include the peak flow values for several events and a downstream boundary condition.

3.5.1. Peak Flow Values

The peak flow values used in the hydraulic analysis were provided by the Corps and are listed in Table 3-1. These flows are "post-Roosevelt" flows that represent conditions after the completion of improvements to Roosevelt Dam (Corps, 1996).

Table 3-1. Peak flows used in the hydraulic analysis and inundation area delineation.

Return Period	Flow at CP-40 (upstream limit at River Station 13.64, in cfs)	Flow at CP-109 (River Station 7.55 just upstream of Gilbert Road, in cfs)
5-year	22,000	21,000
10-year	60,000	58,000
20-year	100,000	95,000
50-year	150,000	145,000
100-year	175,000	172,000
200-year	210,000	207,000
500-year	250,000	246,000

3.5.2. Downstream Boundary Condition

The downstream boundary condition was determined using the FCDMC HEC-RAS model. In a long reach between the downstream project limit at the Pima Freeway (Loop 101) Bridge and 10 miles further downstream, hydraulic computations were performed for each of the peak flows using multiple starting water surface elevations. For each of the flows, the computations converged downstream of the project reach for the different starting water surface elevations. The water surface elevation at River Station 224.22 in the FCDMC model, which corresponds to River Station 0.00 in this study, was input as the downstream boundary condition for each of the peak flow events.

3.6. COMPUTATION METHODS

3.6.1. Friction Slope Method

The friction loss between adjacent cross sections is computed as the product of the representative friction slope and the weighted average reach length. There are four methods that can be used to compute the friction slope: average conveyance, average friction slope, geometric mean friction slope, and the harmonic mean friction slope. Generally, any of the methods will produce satisfactory results if the reach lengths are not too long (U.S. Army Corps of Engineers, January 2001), and the default computation method, average conveyance, is satisfactory.

However, because of the abrupt changes in the channel slope at in-stream gravel mining locations, the use of average conveyance produced sharp dips in the water surface profiles. To smooth the water surface profiles, the HEC-RAS program was allowed to select the most appropriate of the four friction slope computation methods on a cross section by cross section basis depending on flow conditions. Generally, the program selected the **average friction slope method**.

3.6.2. Critical Depth Computation Method

The option to compute critical depth at every cross section was selected. Critical depth was computed using the **secant method** (i.e., multiple critical depth search) because many of the cross sections had multiple blocked ineffective flow areas that could create more than one minimum on the specific energy curve.

3.6.3. Split Flow Optimization

The split flow optimization routine was turned on. HEC-RAS optimized the flow split between the main stem and the Gilbert Mining Pit until the energies of the bounding cross sections on each reach downstream of the junction differed by less than the default tolerance of 0.02 feet.

3.7. WATER SURFACE PROFILES

The HEC-RAS model was executed for the 5-, 10-, 20-, 50-, and 100-year events with the discharges listed in Table 3-1. The water surface elevation profiles for the main channel are shown in Figure 3-3 to Figure 3-6. The HEC-RAS Standard Table 1 for each flow event is included in Appendices 2b through 2h. The cross section plots showing the water surface elevations are included in Appendices 2i and 2j. The flow distribution in the main channel and the Gilbert Mining Pit is summarized in Table 3-2 below.

Table 3-2. Existing condition flow distribution between the main channel and the Gilbert Mining Pit.

Return Event	Total Flow (cfs)	Flow in Main Channel (cfs)	Flow in Gilbert Pit (cfs)
5-year	21,000	20,995.8	4.2
10-year	58,000	53,637	4,363
20-year	95,000	86,904	8,096
50-year	145,000	128,592	16,408
100-year	172,000	150,794	21,206
200-year	207,000	179,512	27,488
500-year	246,000	211,659	34,341

The computed water surface is critical at five locations for most of the flow profiles: River Stations 2.12, 6.40, 8.68, and 9.04 on the main stem and River Station 1.17 in the Gilbert Mining Pit. Because there is an abrupt change in the channel slope (from sand and gravel mining) at these locations, the cross sections act as weirs and critical depth is expected. For high flows, the tailwater begins to submerge these "weirs" creating a dip in the water surface profile, which is consistent with subcritical flow theory.

The water surface profile dips at River Station 9.39 for high flows because there is a significant decrease in the channel width causing contraction of the flow (see cross section plots in Appendix 2i).

At Alma School Road, the computed water surface is 0.3 feet higher than the value computed using the FCDMC model. The difference can be attributed to the larger pier width used in this study.

At the Country Club Road Bridge, the computed water surface is four feet higher than the FCDMC model. The elevations in the channel at bounding bridge cross sections are 10 feet lower in this study than the cross sections used in the FCDMC model. In the FCDMC model, the channel elevations at the bounding bridge cross sections are 10 feet higher than the adjacent cross sections in the same model. For subcritical flow, the water surface decreases at a rise in the channel. Therefore, the elevated cross sections in the FCDMC model produce lower water surface. The channel geometry used in this study was derived from terrain data obtained in December 2001. Since this geometry represents the actual conditions in the channel, it is believed that the water surface elevations computed in this study more accurately represent the flow conditions at this time.

At the Gilbert Road Bridge, the computed water surface elevations are two feet higher than the FCDMC model. The ineffective flow areas in this study define a narrower flow width

compared to the FCDMC model for the project reach in the vicinity of the Bridge, therefore, producing higher computed water surface elevations.

3.8. INUNDATION AREAS

The HEC-RAS model results were exported to ArcView and the inundation areas were delineated using HEC-GeoRAS. The resulting inundation areas were inspected and edited to remove spurious polygons and to smooth the jagged edges created by the terrain model. The 5-, 10-, 20-, 50-, 100-, 200-, and 500-year inundation areas are shown in Appendices 7 to 13, respectively. On these maps, the existing condition inundation areas are compared to the future without project condition areas for the same frequency flood.

Outlines of the inundation areas for the different events are shown in Figure 3-7 (5-, 10-, and 20-year peak flow events), Figure 3-8 (20-, 50-, and 100-year peak flow events), and Figure 3-9 (100-, 200-, and 500-year peak flow events). The following areas, which were defined as ineffective flow, were outside of the detailed mapping limits:

- Right overbank upstream of Gilbert Road
- Left overbank upstream and downstream of Gilbert Road
- Left overbank near Country Club Road and the Center Street Landfill
- Right overbank near Country Club Road

The boundaries of the inundation limits in these areas were defined using the terrain data from the 30-meter USGS DEMs. The limits could be refined, possibly narrowed, if more detailed mapping data were available.

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Existing Condition Water Surface Profiles for the Salt River

Sheet 1 of 3 - River Station 0.0 to 4.5

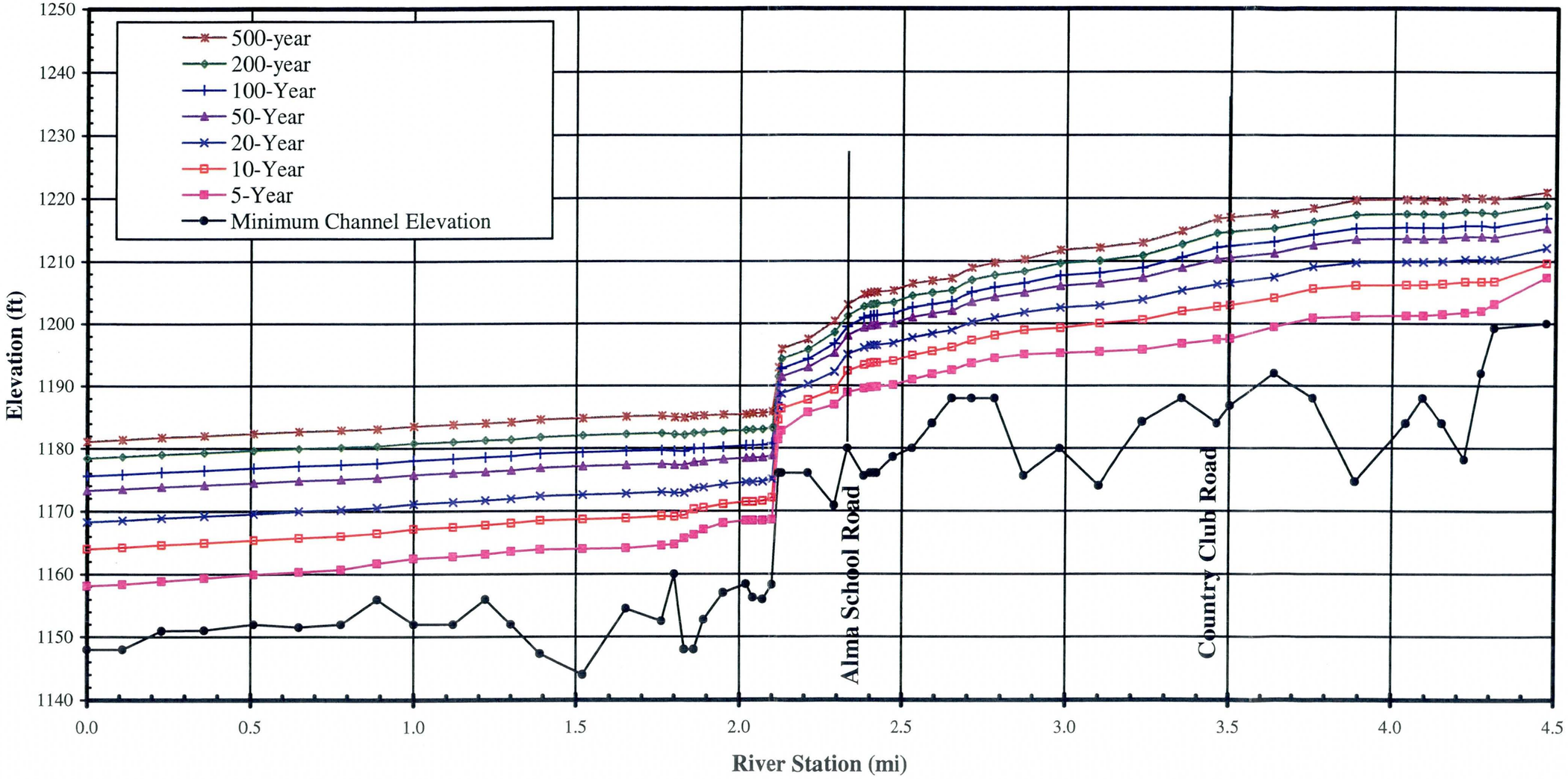

Figure 3-3. Existing condition water surface profiles for the Salt River between River Stations 0.0 and 4.5.

Existing Condition Water Surface Profiles for the Salt River

Sheet 2 of 3 - River Station 4.5 to 9.0

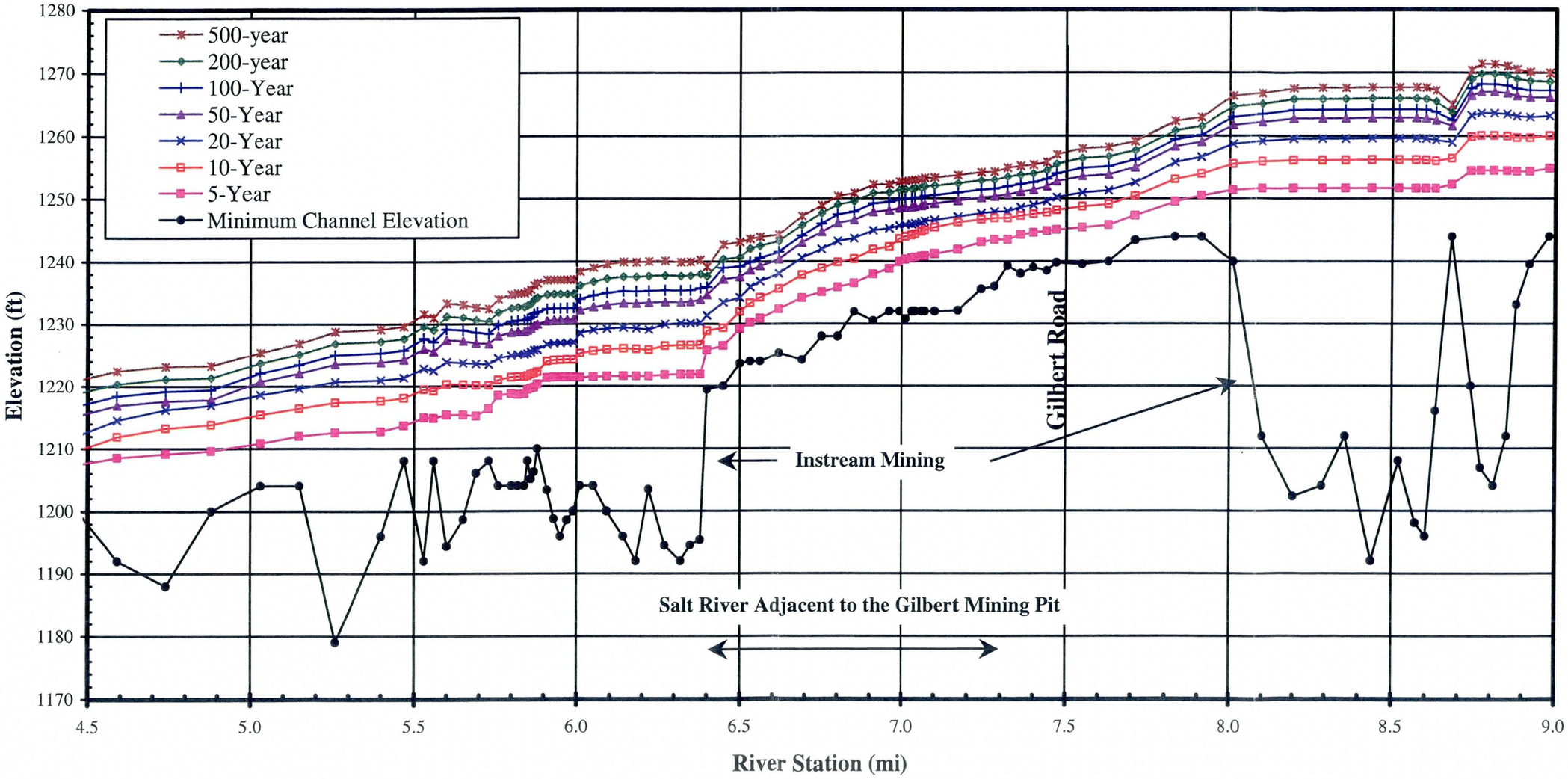

Figure 3-4. Existing condition water surface profiles for the Salt River between River Stations 4.5 and 9.0.

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Existing Condition Water Surface Profiles for the Salt River

Sheet 3 of 3 - River Stations 9.0 to 13.64

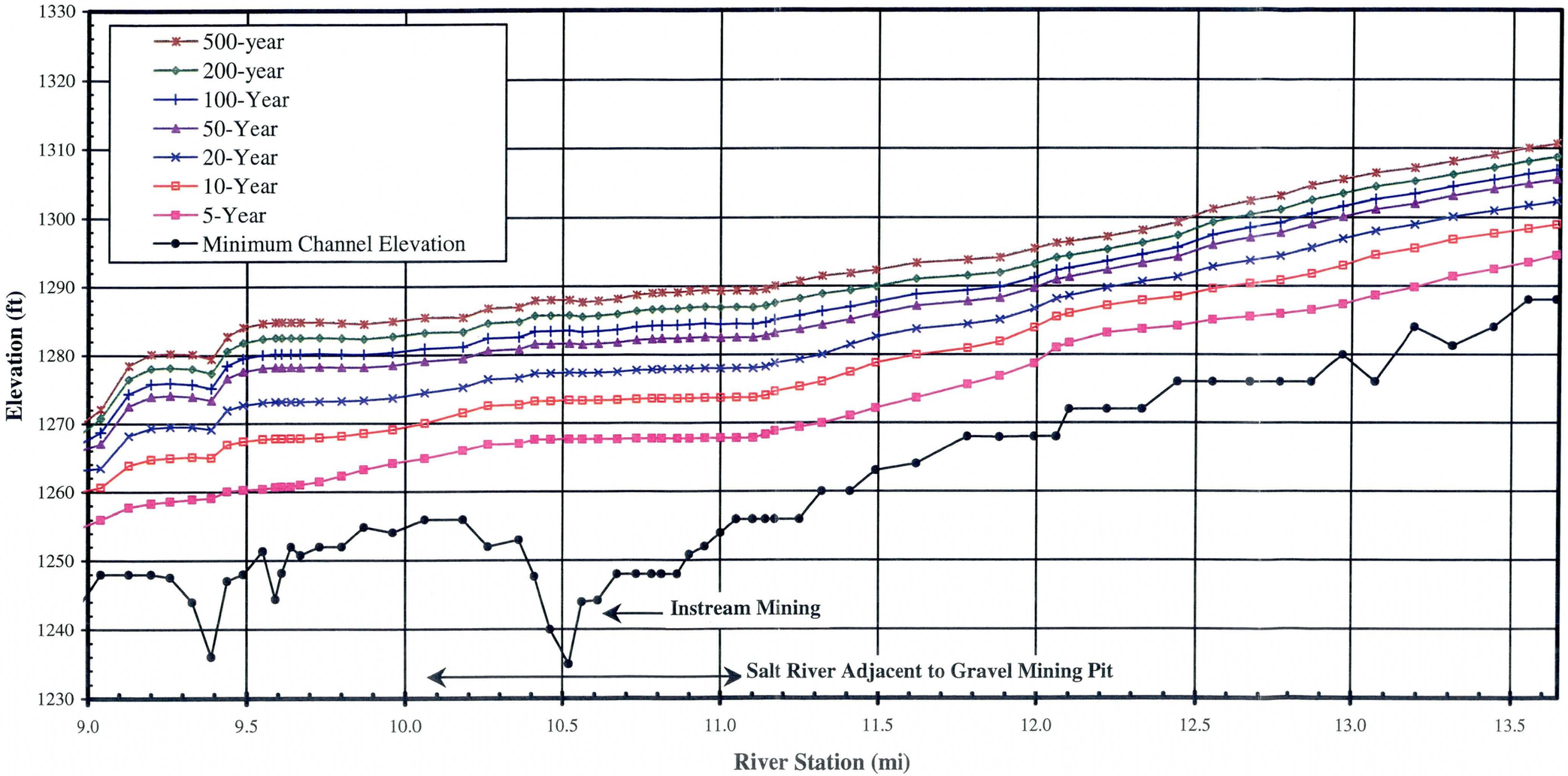

Figure 3-5. Existing condition water surface profiles for the Salt River between River Stations 9.0 and 13.65.

Existing Condition Water Surface Profiles for the Gilbert Mining Pit

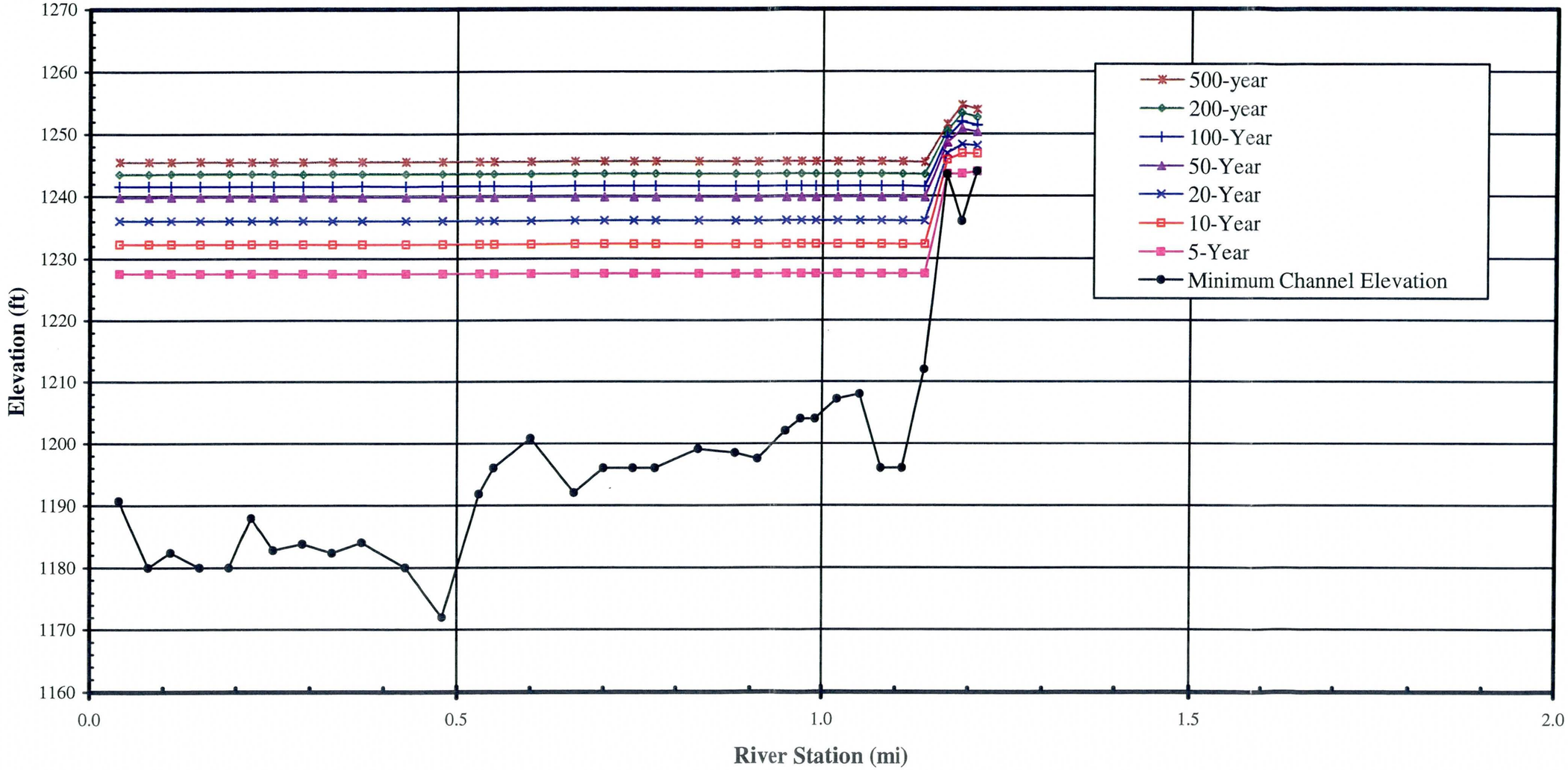

Figure 3-6. Existing condition water surface profiles for the Gilbert Mining Pit.

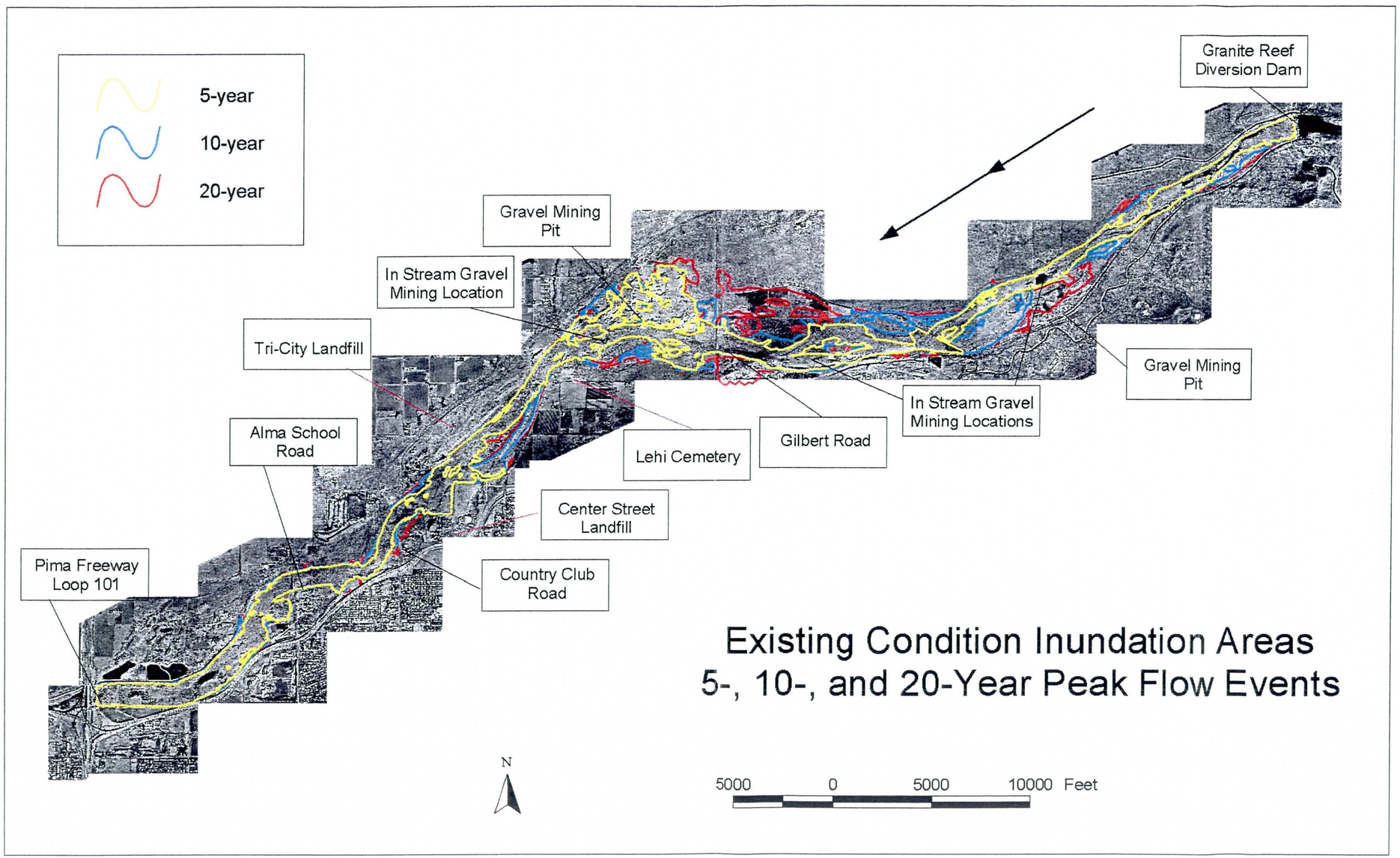

Figure 3-7. Existing condition inundation areas for the 5-, 10-, and 20-year peak flow events.

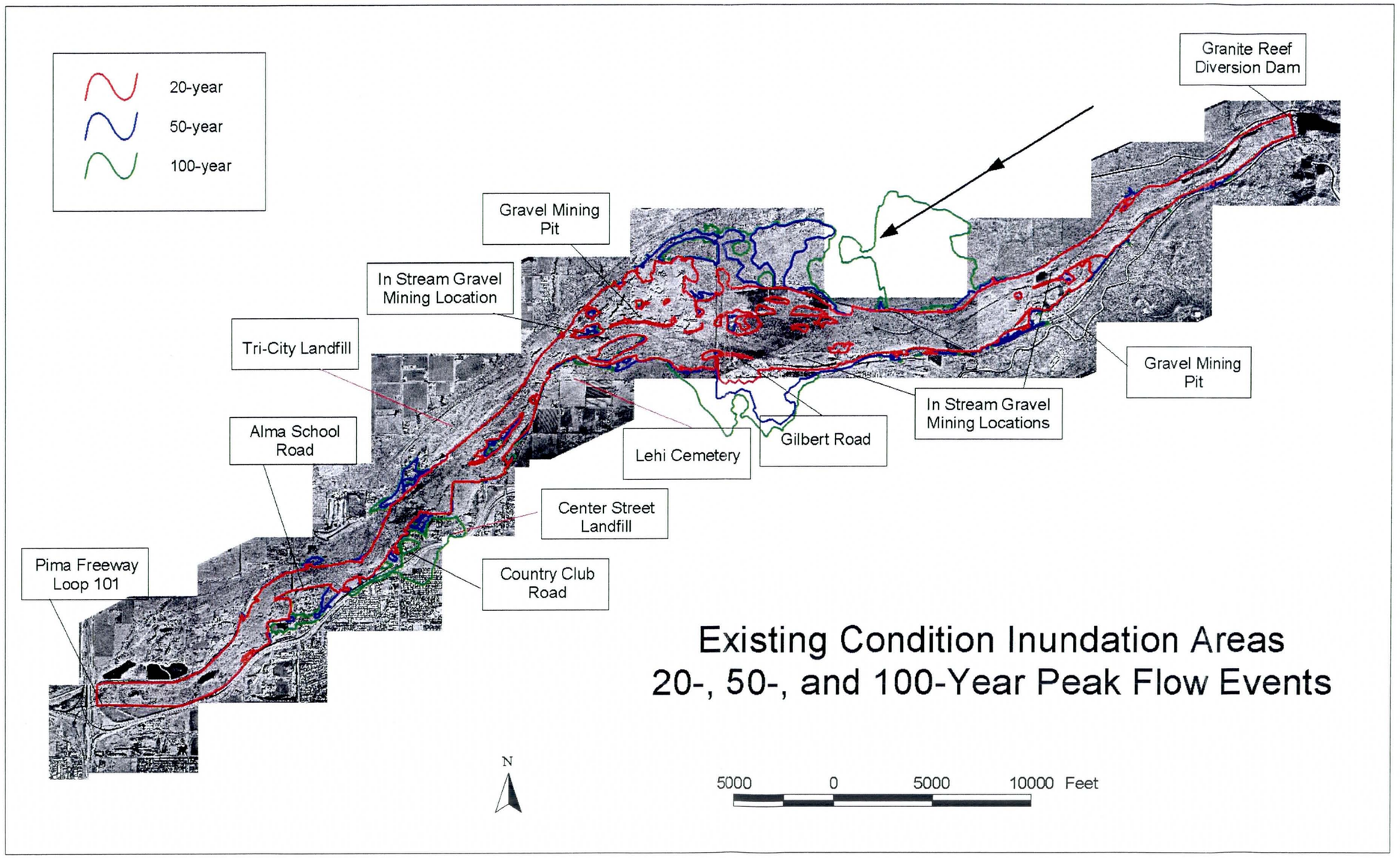

Figure 3-8. Existing condition inundation areas for the 20-, 50-, and 100-year peak flow events.

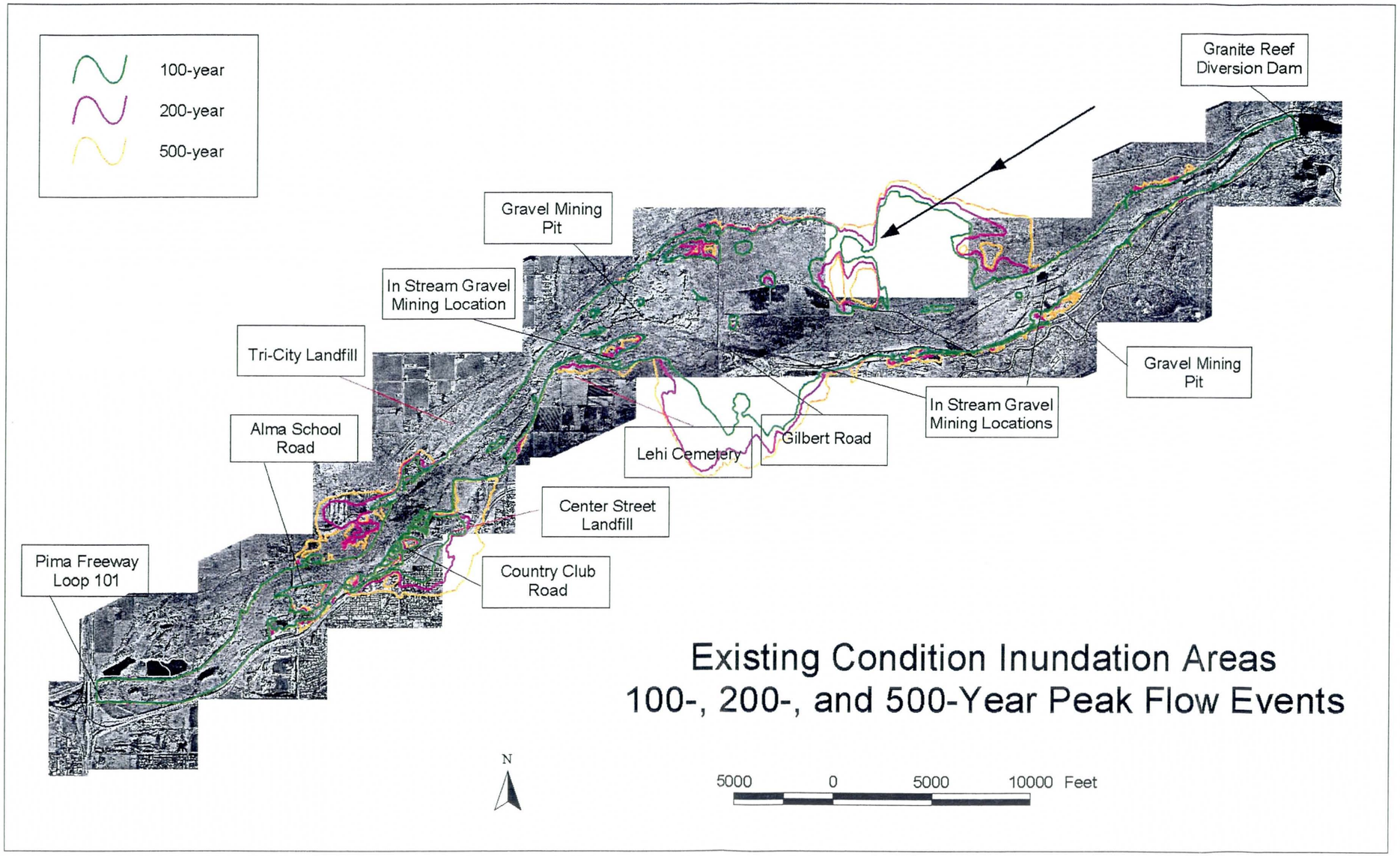

Figure 3-9. Existing condition inundation areas for the 100-, 200-, and 500-year peak flow events.

4. SEDIMENT TRANSPORT ANALYSIS

4.1. OVERVIEW

Sediment transport simulations for the existing conditions were performed using HEC-6T, *Sedimentation in Stream Networks*, Version 5.13.19 (developed by William A. Thomas, MBH Software, Inc., July 9, 2002). HEC-6T is a one-dimensional movable boundary open channel flow numerical code designed to simulate and predict changes in river profiles resulting from scour and/or deposition over long periods of time. The inputs to the HEC-6T model include geometric data (Section 4.2), sediment data (Section 4.3), and hydrologic data (Section 4.4).

Sediment transport simulations were performed using 50- and 105-year hydrographs (Sections 4.5 and 4.6, respectively). To more accurately assess the extent of the headcut from the Gilbert Mining Pit, a portion of the main stem of the Salt River was replaced with the pit geometry, and the 50-year simulation was completed (Section 4.7). The impacts of maintaining\repairing the berm surrounding the Gilbert Mining Pit to sustain flows in the main channel are discussed in Section 4.8. The sensitivity of the model results to the selection of the 50-year flow series (Section 4.9), the failure of the Alma School Road grade control structure (Section 4.10), the inflowing sediment load (Section 4.11), the sediment transport method (Section 4.12), and the Manning *n* values (Section 4.13) were also evaluated. The HEC-6T model inputs and results are described in the following sections.

4.2. GEOMETRIC DATA

The geometric data for HEC-6T include cross section geometry, Manning *n* values, conveyance limits and encroachments, deposition and erosion limits, and depth of the bed sediment reservoir.

The HEC-RAS cross section geometry file was converted to the HEC-6T format using RAS2UNET and subsequently reordering the cross sections from downstream to upstream. The Manning *n* values from the HEC-RAS model were also imported into the HEC-6T geometry. High *n* values, conveyance limits (XL cards), and encroachments (X3 cards) were used to limit the flow areas similar to the multiple blocked ineffective flow areas defined in HEC-RAS.

To minimize the boundary effects of the sediment transport simulations at the downstream limit of the project (Pima Freeway, River Station 0.00), cross sections from the FCDMC model were added to the HEC-RAS geometry for two miles downstream of River Station 0.00. The added cross sections correspond to River Stations 224.12 through 222.17 in the FCDMC model (–2.06 and –0.10 in the HEC-6T model).

HEC-6T does not compute the energy losses across junctions. The program always projects a horizontal water surface elevation across a junction. To account for the energy losses at the junctions in the model, the cross section on the main stem immediately downstream of a

junction was copied to the main stem segment upstream of the junction. The Manning *n* values at the next upstream cross section were increased as needed to match the junction energy loss computed in HEC-RAS.

At the bridges, most of the friction losses result from pier losses. The bridge deck and pier geometries were not coded into the HEC-6T model because the highest water elevations did not contact the bridge decks. Instead, the Manning *n* value at the upstream bounding cross section at each bridge was increased to account for the pier losses.

The hydraulic results of the HEC-6T model, run in fixed-bed mode, were compared to the results of the HEC-RAS model for the 5-, 10-, 20-, 50-, and 100-year peak flows, which cover the range of streamflows used in the simulations. Modifications were made to the HEC-6T model until the differences in the computed water surface elevations were generally less than 0.01 feet and the channel velocity differences were within 0.5 feet per second. At those locations where the flow was at critical depth, larger differences occurred because of the different algorithms used by the HEC-RAS and HEC-6T models to compute critical depth. The critical depth computed using HEC-6T was higher than the value computed by HEC-RAS. The modifications to the HEC-6T model also included the adjustment of Manning *n* values and conveyance limits. The NV record was used to change the Manning *n* value with discharge.

4.2.1. Deposition and Erosion Limits

In general, sediment dynamics tend to be more significant within the active channel, where the bed can either degrade or aggrade in response to erosion or deposition. The overbanks tend to be more stable, but can experience deposition. Generally, the HE cards were used to limit erosion to the area between the bank stations. The movable bed limits were set using the HD card to define the areas of deposition. Since the active flow area is generally limited to the channel, deposition was also limited to the main channel except at several locations where the bank stations were defined inside the outerbanks of the Salt River. During the field trip on June 24, 2002, it was decided that, although there was a secondary flow path in the right overbank, deposition would be limited to the in-stream mining pit, defined by the channel bank stations, between River Stations 8.01 and 8.88 because it conveys the majority of the flow.

In HEC-6T, erosion is limited only by the HE/HD cards and not by the conveyance limits defined on the XL cards.

4.2.2. Bed Sediment Reservoir

Because the gravel mining pits have depths between 20 and 50 feet, the depth of the bed sediment reservoir was initially set to 22 feet, which is approximately half of the maximum pit depth, for most of the cross sections to allow for the potential of headcuts and tailcuts from these pits. The bed sediment reservoir was limited to approximately half of the pit depth based upon the results of Cotton and Ottozawa-Chatupron (1990). Cotton and

Ottozawa-Chatupron (1990) found that headcutting is generally limited to no more than half the excavated depth due to deposition immediately downstream of the pit brink.

There is a grade control at the Alma School Road Bridge. The depth of the bed sediment reservoir was set to 0.001 at the bounding bridge cross sections at River Stations 2.27 and 2.33 to create a hard point simulating the grade control.

4.3. SEDIMENT DATA

The bed gradations, sediment transport method, and inflowing sediment load are part of the sediment data prescribed in HEC-6T. These input parameters are discussed in the following sections.

4.3.1. Bed Gradations

Sixteen locations, shown in Figure 4-1, were identified for bed sediment sampling during the field reconnaissance trips. Two samples were collected at each location. Generally, the sample sites were spaced at 0.5-mile increments except in areas of active gravel mining. Bed sediment samples were not collected at the gravel mining locations because these samples would not be representative of the natural riverbed.

Sample collection and sieve analysis were performed by Ricker, Atkinson, McBee and Associates, Inc. The report summarizing the results is included in Appendix 3. At each site, samples were collected from zero to two feet and from two to six feet below the riverbed surface. The percent of plus 4-inch material was visually estimated during excavation. The gradation of the material less than four inches was determined in the laboratory.

At Sample Sites 5 and 6 (near River Stations 2.53 and 3.23, respectively), approximately 90 percent of the bed material from depths of zero to one foot was larger than four inches. Approximately 20 percent of the bed material from depths one to two feet and two to six feet, at these locations, was larger than four inches. Except at Sample Sites 5 and 6, the percent of material greater than four inches in the zero to two-foot samples was generally the same as the amount in the two to six foot samples. Therefore, an initial active armored layer was not defined in the HEC-6T model.

The bed gradation curves for all size classes are plotted in Appendix 4. The gradations from the two- to six-foot sample depths were coded on the PF records in HEC-6T. On average, the bed material is composed of 30 percent sand, 50 percent gravel, and 20 percent cobbles.

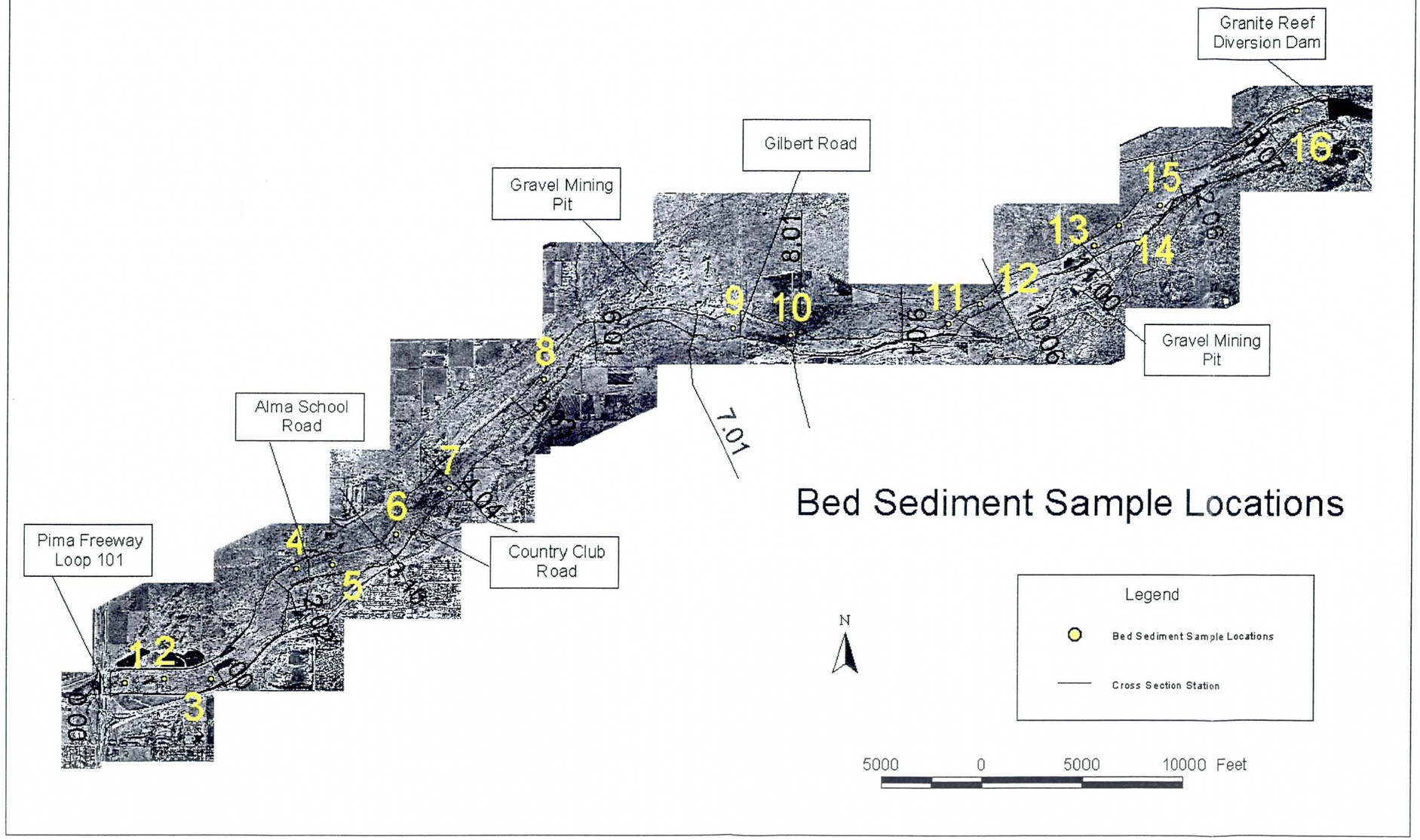

Figure 4-1. Bed sediment sample locations.

4.3.2. Sediment Transport Method

The bed material is composed primarily of sand and gravel. Since sand is the main transport size, and there is a high percentage of gravel in the bed, the Toffaleti, Meyer-Peter, and Muller (TMPM) combination transport method is used in the HEC-6T sediment transport simulations because the method transports gravel as well as sand. This method was also used in the Low Flow Channel Design Analysis for the Rio Salado project (WEST Consultants, Inc., January 2000), which is approximately eight miles downstream of the project reach.

Copeland's solution of the Exner equation (EXNER 7 HEC-6T option) is used in the sediment transport simulations.

4.3.3. Inflowing Sediment Load

The sediment transport model cannot be directly calibrated to historical conditions because detailed historical bed elevation data are not readily available, and the bed elevation changes have been influenced by man-made changes to the Salt River, including sand/gravel mining and channelization. Therefore, the equilibrium bed material load at the upstream limit of the project reach was calculated for a range of discharges up to 200,000 cfs and was used as a basis for the inflowing sediment load for the HEC-6T model.

Although the upstream project limit is at Granite Reef Diversion Dam, the Corps suggested that equilibrium load is a reasonable estimate for the inflowing bed material load because the dam diverts water rather than stores water, and consequently does not significantly reduce the amount of the sediment being transported in the Salt River. There was no evidence of deposition or scour observed downstream of Granite Reef Diversion Dam during the field investigations, which indicates that the assumption of equilibrium load is realistic. The sensitivity of the sediment transport results to the inflowing sediment load is discussed in Section 4.11. Any errors induced by the assumption of equilibrium inflowing load are bracketed by the results presented in Section 4.11.

The equilibrium bed material load calculations were performed between River Stations 12.55 and 13.64. The recirculating option in HEC-6T was used to obtain an initial estimate of the equilibrium bed material load and the corresponding gradation. The recirculating option takes the sediment crossing River Station 12.55 and recirculates it to become the inflowing sediment discharge at River Station 13.64 for the next flow event. This estimate was input to a model with the recirculating option turned off, and a simulation was performed over a period of three years. The initial estimates of the load and the gradation were adjusted until the changes in the bed elevations between River Stations 12.55 and 13.64 were minimized.

The equilibrium bed material load curve is shown in Figure 4-2 and the corresponding gradations in Figure 4-3.

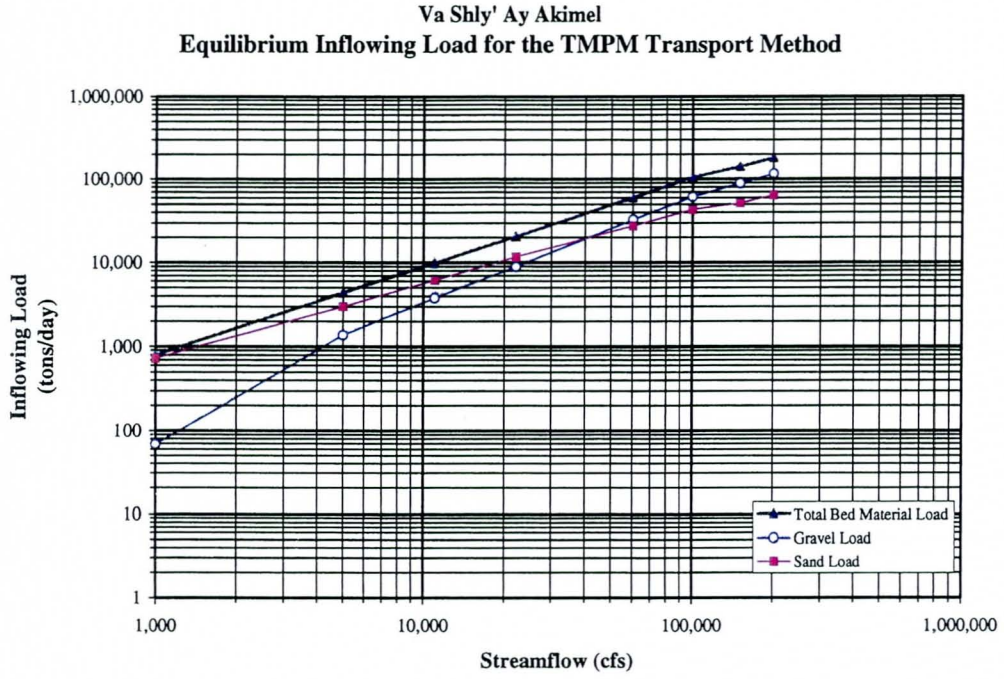

Figure 4-2. Equilibrium bed material load curve calculated using the TMPM transport method.

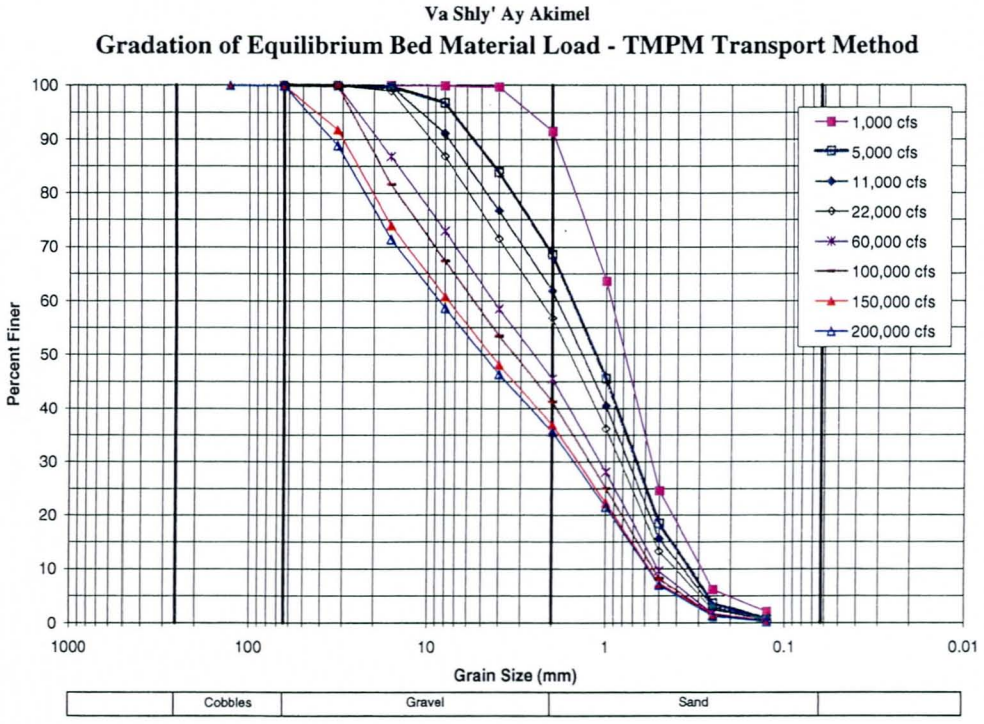

Figure 4-3. Gradations of the equilibrium bed material load, calculated using the TMPM transport method, for several streamflows.

4.4. HYDROLOGIC DATA

The hydrologic data in HEC-6T include hydrographs, downstream rating curve, and other calculation options.

4.4.1. Hydrographs

The Corps provided "hind-cast" flows at Granite Reef Diversion Dam for water years 1889 through 1993. The Corps created these six-hour hydrographs by routing historical hydrographs through the Salt River reservoirs between Roosevelt Dam and Granite Reef Diversion Dam, with the Modified Roosevelt Dam in place (Corps, 1996). The peak flows from these hydrographs are shown in Figure 4-4. The hydrographs are included in Appendix 5. The rising and receding limbs of the hydrographs from the Corps were extended to 1,000 cfs. For the HEC-6T simulations, six-hour time increments were used for the streamflow hydrographs. During dry periods, sediment transport was not computed. Flows below 1,000 cfs were not modeled because no significant sediment transport occurs below this flow rate in the HEC-6T model.

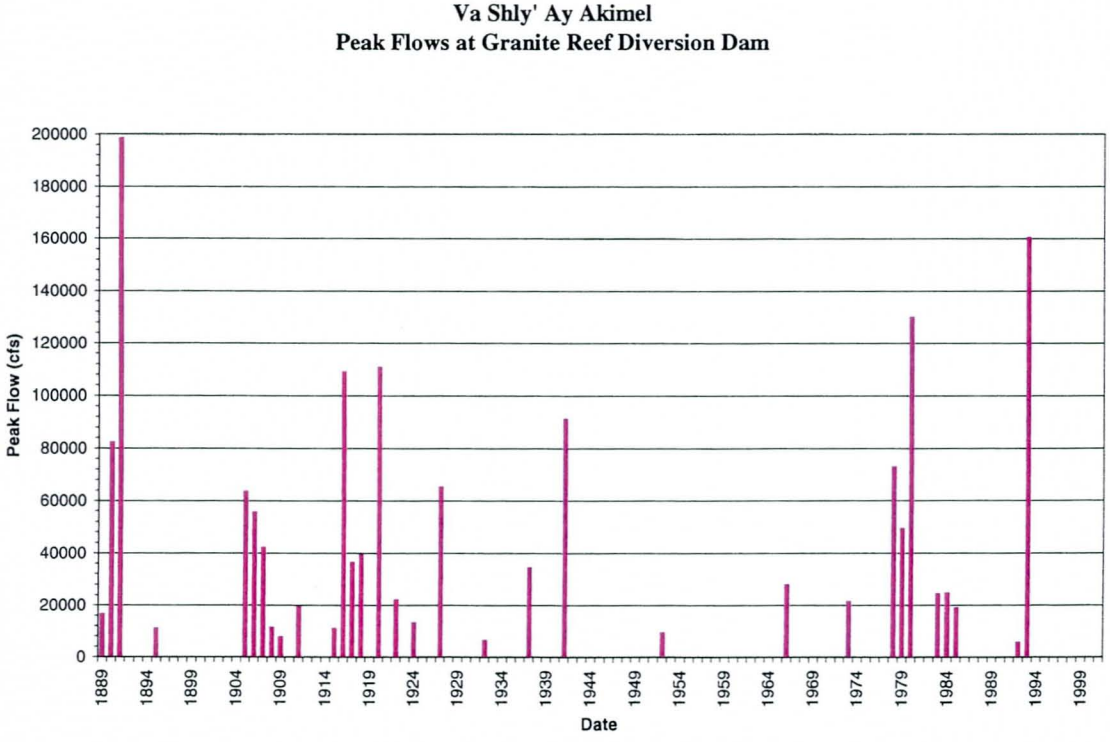

Figure 4-4. Peak flows from Granite Reef Diversion Dam for water years 1889 through 1993.

The hydrographs for water years 1905 through 1954 were used in the 50-year sediment transport simulation. This 50-year flow series has the largest number of moderate to high flow events. A sensitivity analysis of the model results to the selection of the 50-year flow

series was completed (Section 4.9). The differences in the average bed elevations were generally within two feet, except within the Gilbert Mining Pit.

The entire flow series was used, in sequence, for the 105-year simulation.

4.4.2. Rating Curve

The rating curve for the downstream boundary condition at River Station –2.06 in HEC-6T was obtained from the FCDMC HEC-RAS model in the same manner as the starting water surface elevations for the HEC-RAS model (refer to Section 3.5.2).

4.4.3. Computation Options

The supercritical flow option was turned off ($SCRT card) to prevent supercritical velocities, which could produce unrealistic scour depths, from being used in the sediment transport calculations.

The $CL card was used to instruct the program how to distribute the flow between the main stem and the Gilbert Mining Pit. The program calculated the flow distribution that balanced the energy at the junction. The computed flows were output to the *.T17 file. The flow optimization was turned off only for the average bed calculations, and the program used a prescribed flow distribution. This allowed a uniform discharge for each average bed evaluation (see discussion in Section 4.5).

The $SMOOTH command was used to prevent the cross section geometry from becoming irregular (i.e., having spurious spikes) during the simulation. The command instructs HEC-6T to test the slope across the moveable bed versus the angle of repose for sand. An angle of repose is calculated between each set of coordinates using the initial cross section stations and elevations. When the calculated values are less than 0.3, the program assumes the material to be sand and assigns a value of 0.3 as the angle of repose. When the calculated values larger than 0.3, the computed angle of repose is used.

4.5. 50-Year Simulation Results – Base Case

A 50-year sediment transport simulation was completed using the equilibrium bed material load and the TMPM transport methods. This simulation is referred to as the "Base Case" throughout report. The results of the sensitivity analyses are compared to the results of the "Base Case".

The sediment transport results are presented in terms of the average bed elevation. The average bed corresponding to a 150,000 cfs discharge (50-year peak flow) over a very short duration (0.0001 days) was computed at the end of every water year. At the flow split, 135,000 cfs was used to compute the average bed in the main stem between River Stations 6.45 and 7.28, and 15,000 cfs was used to compute the average bed in the Gilbert Mining Pit. Because HEC-6T computes the average bed elevation from only wetted points in a cross section, the high discharge was required for the calculation to ensure that the movable bed for

all cross sections was wet during the average bed calculation. The average bed elevation by decade (10-year increments) is presented in Figure 4-10 through Figure 4-13. The general scour and deposition trends are plotted on the aerial photographs in Figure 4-5. Cross section plots showing the cross section geometry before and after the 50-year simulation are included in Appendix 6.

After the first streamflow greater than 20,000 cfs (April 12, 1905), flow entered the Gilbert Mining Pit, scoured the gravel berm, and formed a headcut. By the end of the next day (April 13, 1905), the pit captured the majority of the total streamflow. The average bed at the end of water year 1905 is shown in Figure 4-6 to Figure 4-9. The erosion of the berm was computed using only HEC-6T algorithms.

During the remainder of the 50-year simulation, the Pit captured all of the flow when the total streamflow was less than 50,000 cfs. The 50-year hydrographs in the Gilbert Mining Pit and the main stem are included in Appendix 7.

At the upstream end of the project reach, between River Stations 11.14 and 13.64, the average bed elevation changed by less than two feet with some scour and deposition that smoothed bed irregularities. The results indicate that this portion of the project reach is in a quasi-equilibrium condition, which may be the result of the equilibrium inflowing load and armoring.

The 5 to 12 feet of deposition that occurred between River Stations 10.36 and 11.14 fills an in-stream mining pit. The 5 to 10 feet of scour between River Stations 8.88 and 10.36 may have resulted from headcuts and tailcuts from the cross sections bounding in-stream mining pits. The 15 to 25 feet of deposition between River Stations 8.10 and 8.85 fills a 35-foot deep in-stream mining pit. The 10 feet of scour between River Stations 7.32 and 8.10, which includes Gilbert Road, may have resulted from a headcut from the Gilbert Mining Pit and a tailcut from the upstream pit between River Stations 8.10 and 8.35. The magnitude of the headcut from the Gilbert Mining Pit is underestimated in this simulation because the junction at the flow split between the main stem and the Gilbert Mining Pit artificially acts as a hinge point in the sediment transport calculations. A more accurate headcut estimate is presented in Section 4.7.

The average bed did not change significantly (less than three feet) between River Stations 6.45 and 7.28 on the main stem because this portion did not experience many flows once the Gilbert Mining Pit became active. The results in this portion of the reach are sensitive to the modeling approach used for the Gilbert Mining Pit. If the Pit did not actively convey flow, more scour would occur as a headcut from the in-stream mining pit between River Stations 6.01 and 6.40 proceeded upstream (see Section 4.8).

Once sediment flows into the Gilbert Mining Pit, it deposits. Figure 4-13 shows the corresponding delta formation within the Gilbert Mining Pit. The flow exiting the Pit and returning to the main channel transported little or no sediment.

There was some deposition and scour, generally within five feet, between River Station 2.33 at Alma School Road and River Station 6.40 where the flow returned to the main channel

from the Gilbert Mining Pit. The changes were small for the following reasons: (1) the sediment supply to this portion of the reach was significantly reduced once the Gilbert Mining Pit captured the flow, and (2) the grade control structure at Alma School Road is a hard point that fixes the elevation at this location.

More than 20 feet of scour occurred between River Stations 2.10 and 2.29, where the headcut from previous sand and gravel mining activities migrated upstream to the grade control structure at Alma School Road. In this study, it is assumed that this grade control structure will remain intact throughout the entire simulation period. However, the toe-down depth of the grade control structure is less than the computed scour depth at that location. Based on this analysis, the grade control could fail, although a more detailed analysis should be performed to confirm the results. The impacts of the failure of the Alma School Road grade control structure on the sediment transport results are discussed in Section 4.10.

The average bed changes are small, generally less than two feet, at the downstream end of the project reach between River Stations 0.00 and 2.10. There is some deposition and scour that smoothes bed irregularities.

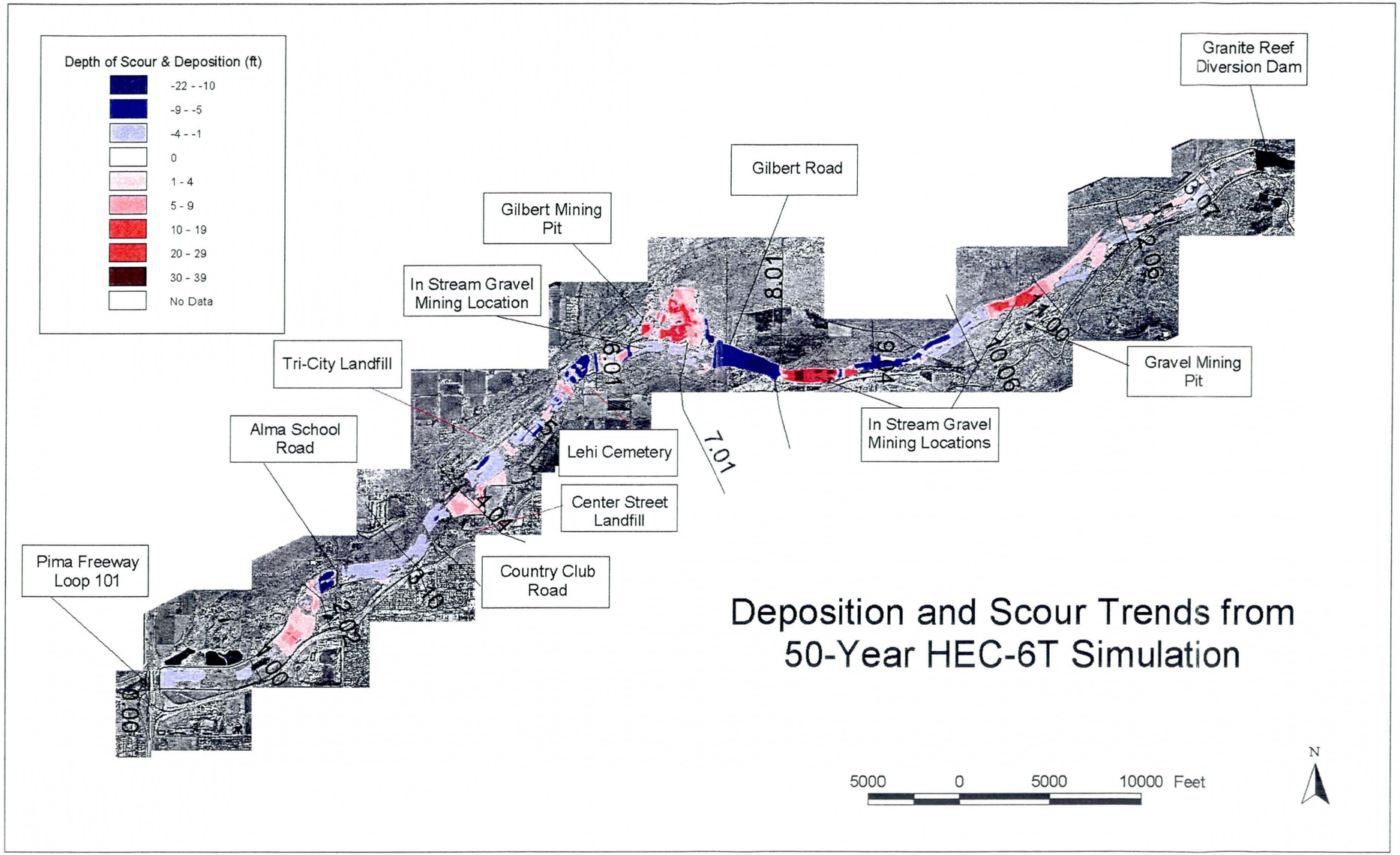

Figure 4-5. Scour and deposition trends along the project reach from the Base Case 50-year HEC-6T simulation.

Va Shly' Ay Akimel
Average Bed Elevation at the End of Water Year 1905
River Stations -2.06 to 3.50

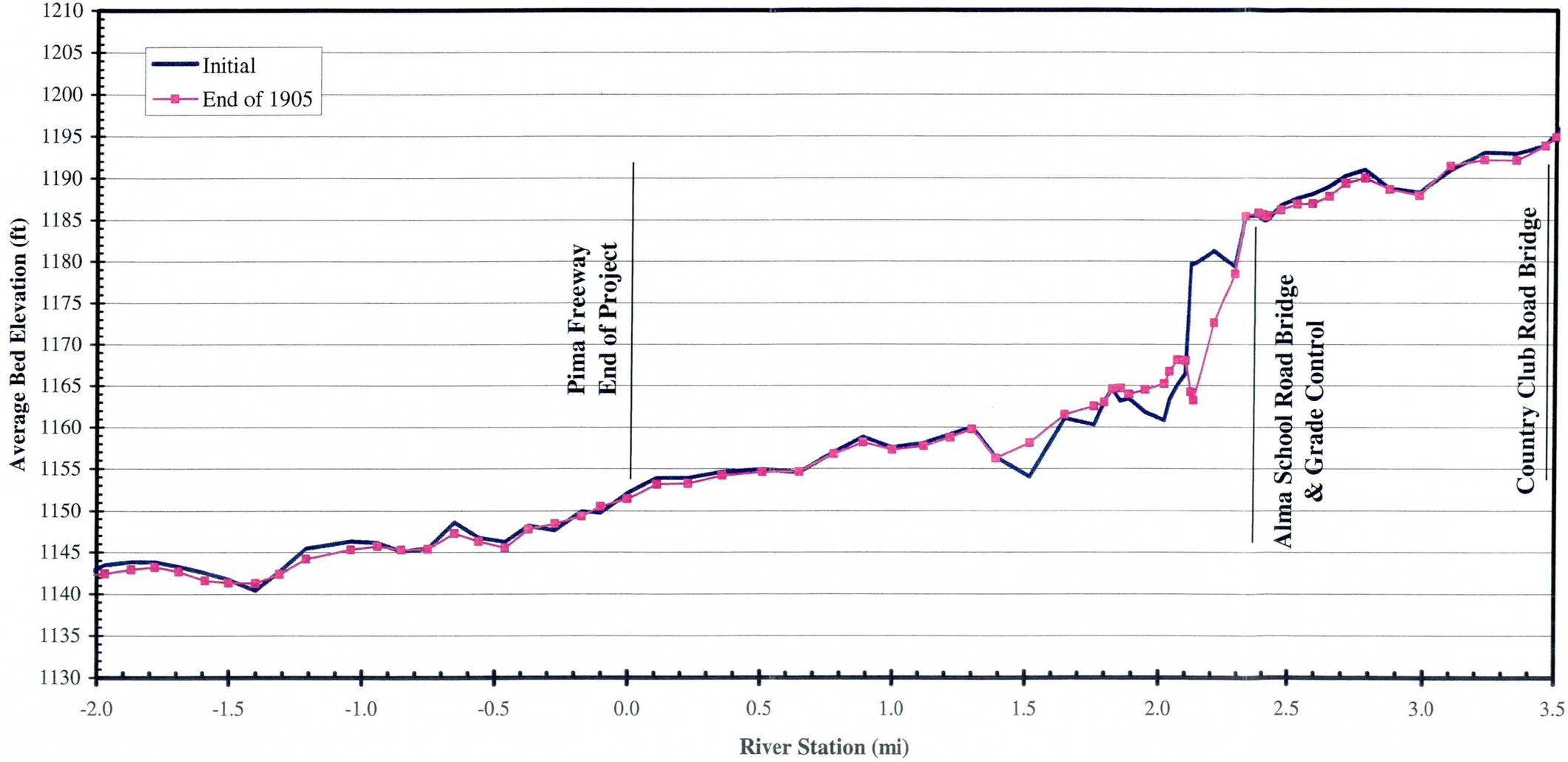

Figure 4-6. Comparison of the average bed elevations for the Base Case sediment transport simulation before and after water year 1905, between River Stations –2.06 and 3.50.

Va Shly' Ay Akimel
Average Bed Elevation at the End of Water Year 1905
River Stations 3.50 to 9.00

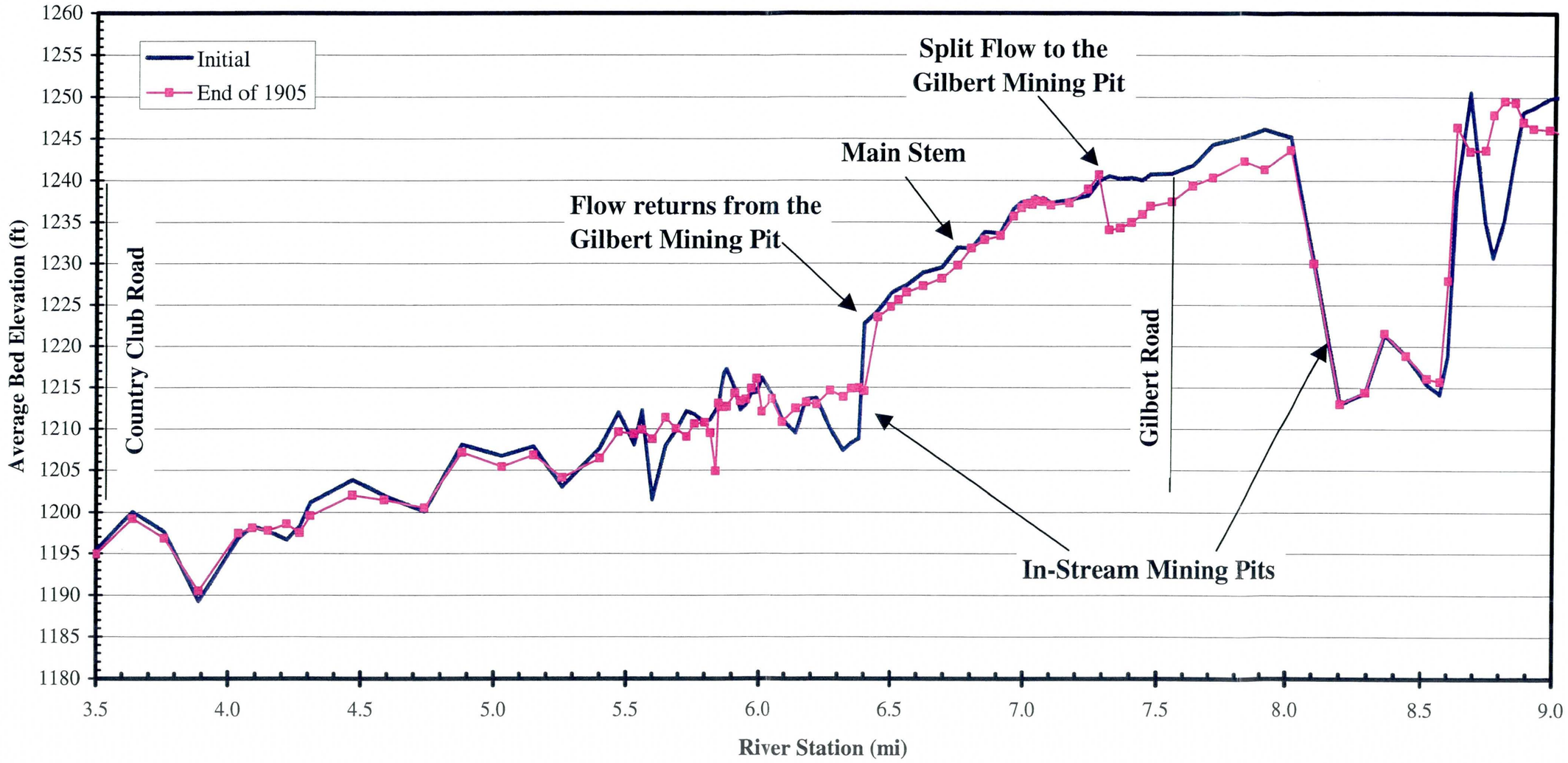

Figure 4-7. Comparison of the average bed elevations for the Base Case sediment transport simulation before and after water year 1905, between River Stations –3.50 and 9.00.

Va Shly' Ay Akimel
Average Bed Elevation at the End of Water Year 1905
River Stations 9.0 to 13.64

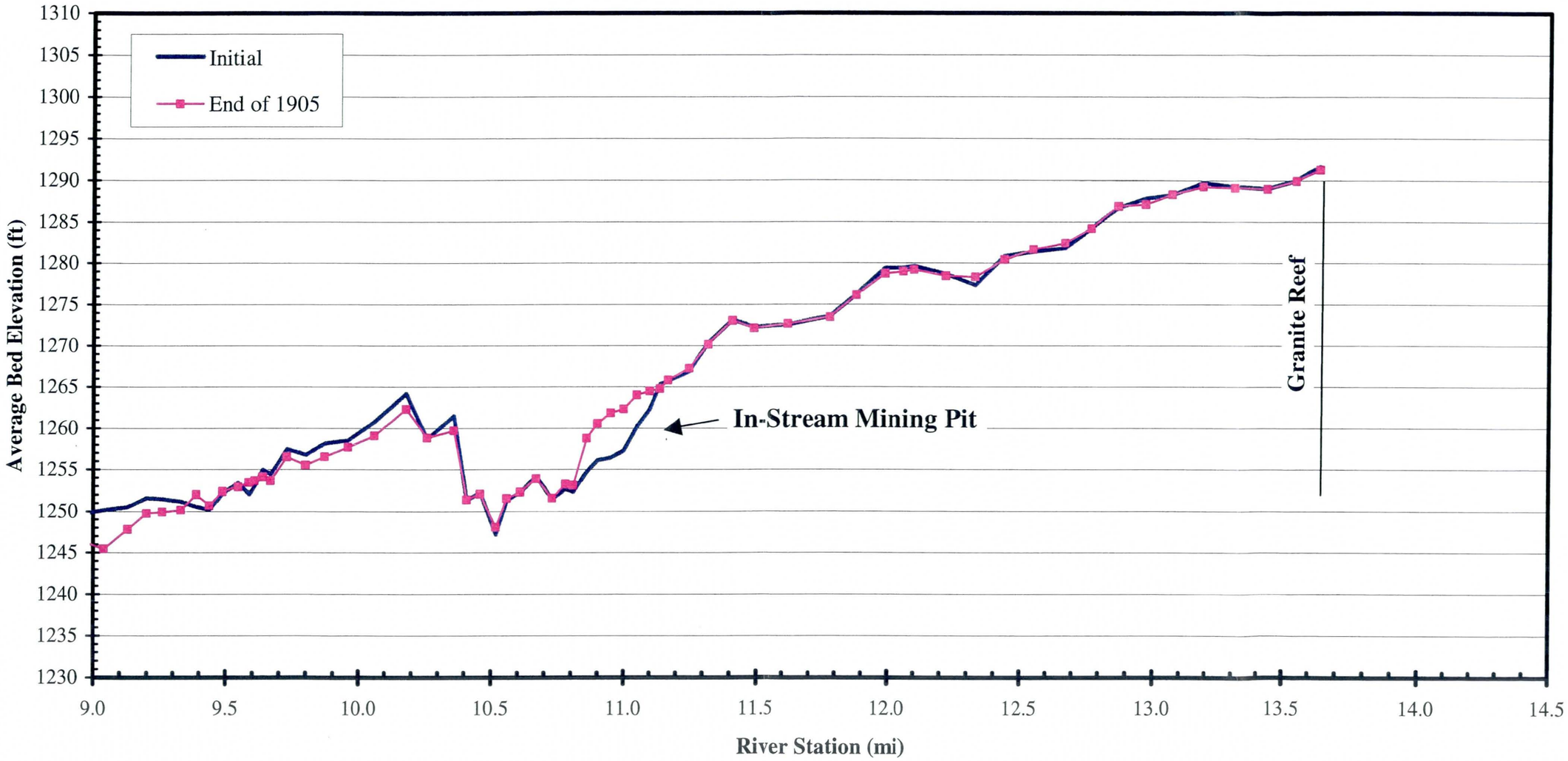

Figure 4-8. Comparison of the average bed elevations for the Base Case sediment transport simulation before and after water year 1905, between River Stations –9.00 and 13.64.

Va Shly' Ay Akimel
Average Bed Elevation at the End of Water Year 1905
Gilbert Mining Pit

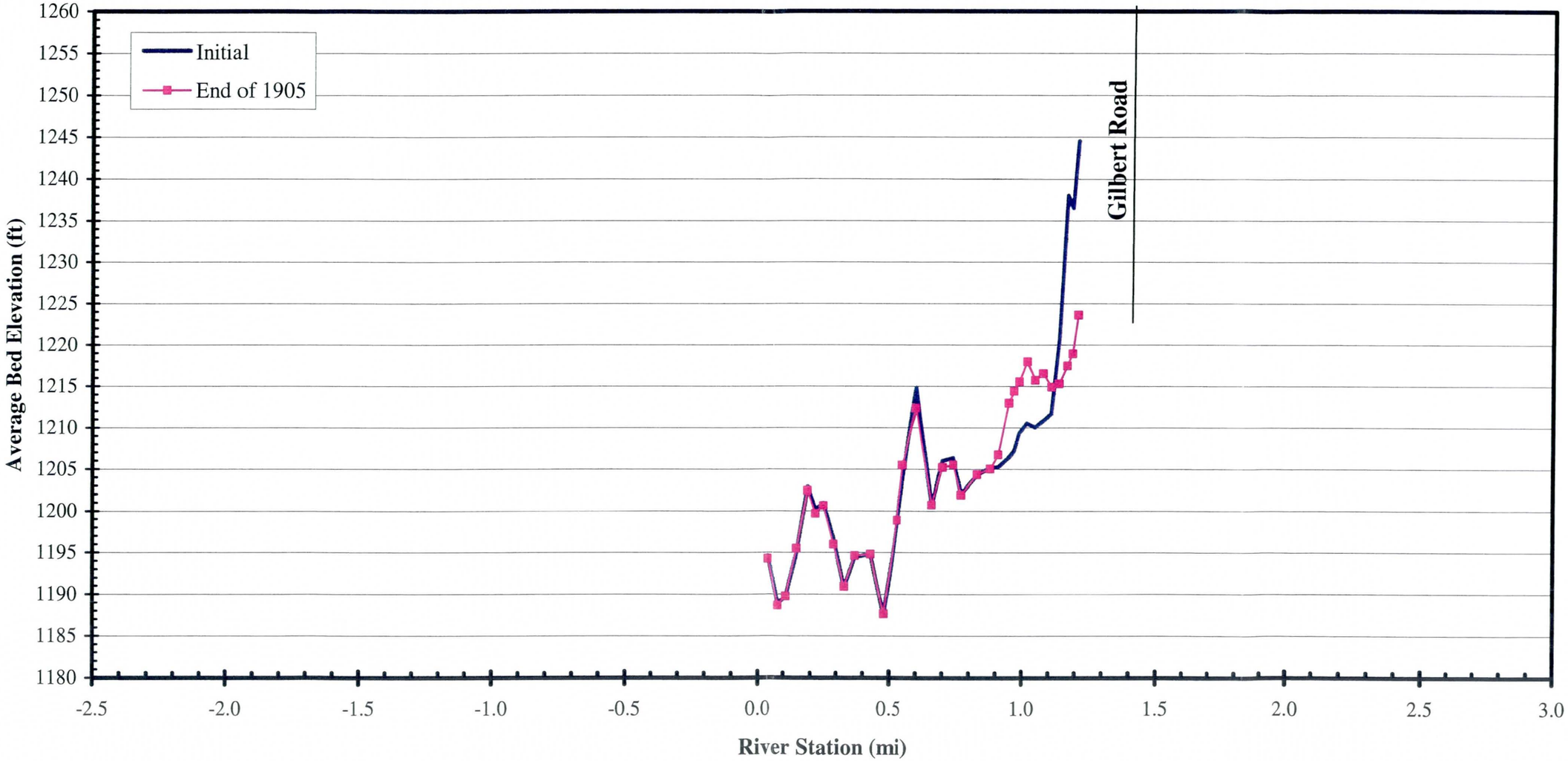

Figure 4-9. Comparison of the average bed elevations for the Base Case sediment transport simulation before and after water year 1905 in the Gilbert Mining Pit.

Va Shly' Ay Akimel
Average Bed Elevation by Decade for the 50-Year Simulation (1905-1954)
River Stations -2.06 to 3.50

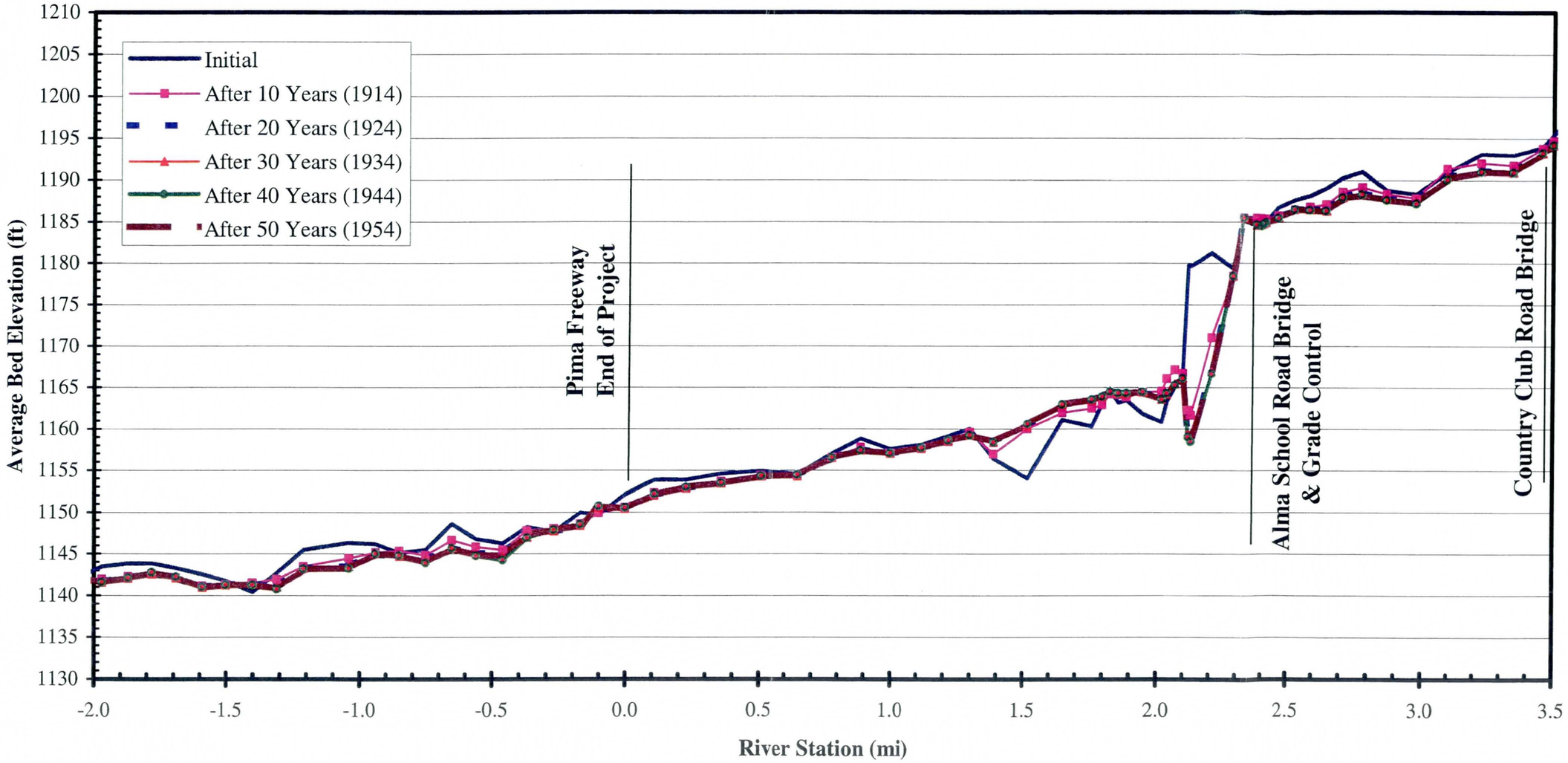

Figure 4-10. Comparison of the average bed elevations at 10-year increments during the Base Case 50-year sediment transport simulations between River Stations –2.06 and 3.50.

Va Shly' Ay Akimel
Average Bed Elevation by Decade for the 50-Year Simulation (1905-1954)
River Stations 3.50 to 9.00

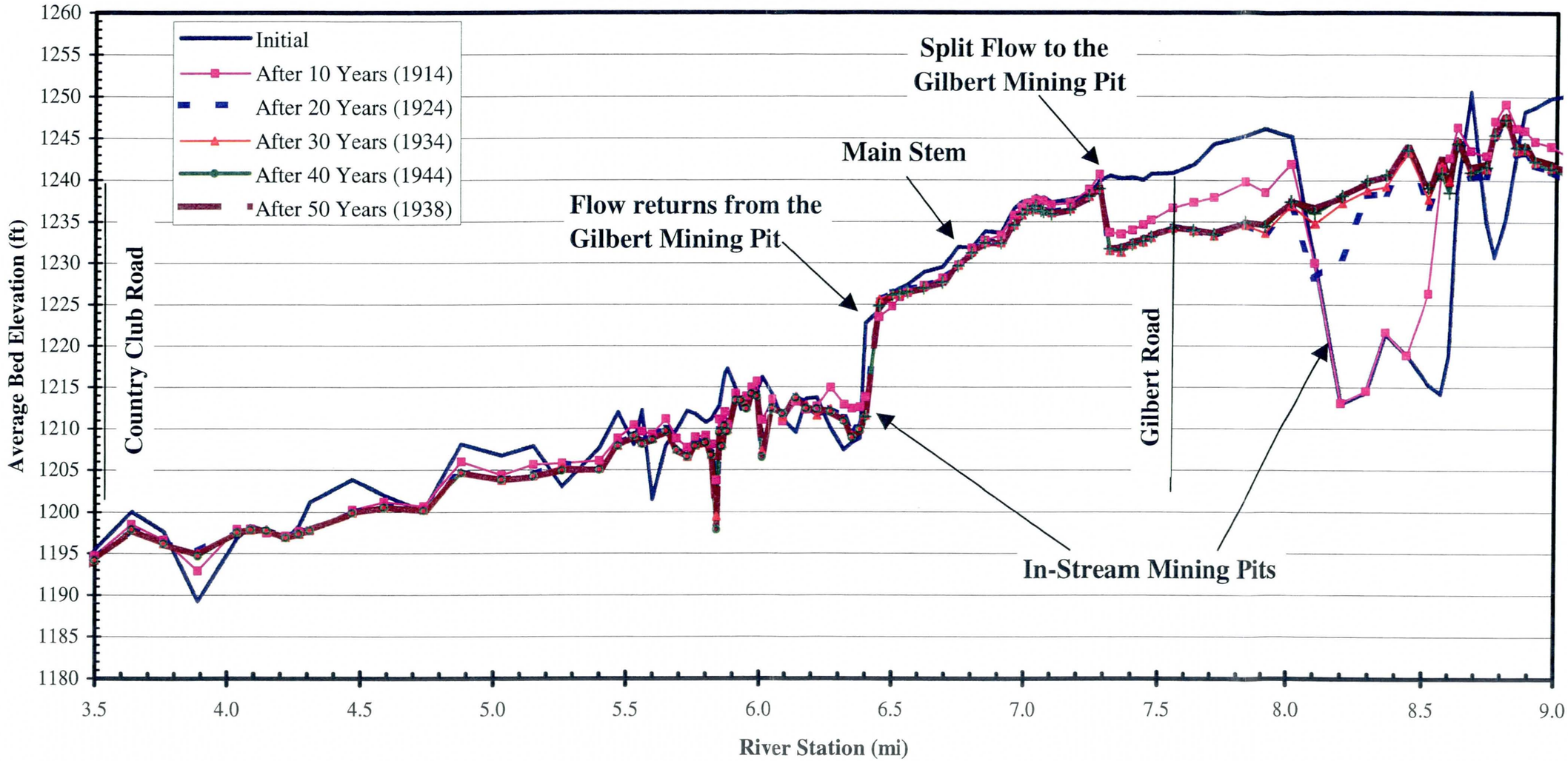

Figure 4-11. Comparison of the average bed elevations at 10-year increments during the Base Case 50-year sediment transport simulations between River Stations 3.5 and 9.0.

Va Shly' Ay Akimel
Average Bed Elevation by Decade for the 50-Year Simulation (1905-1954)
River Stations 9.0 to 13.64

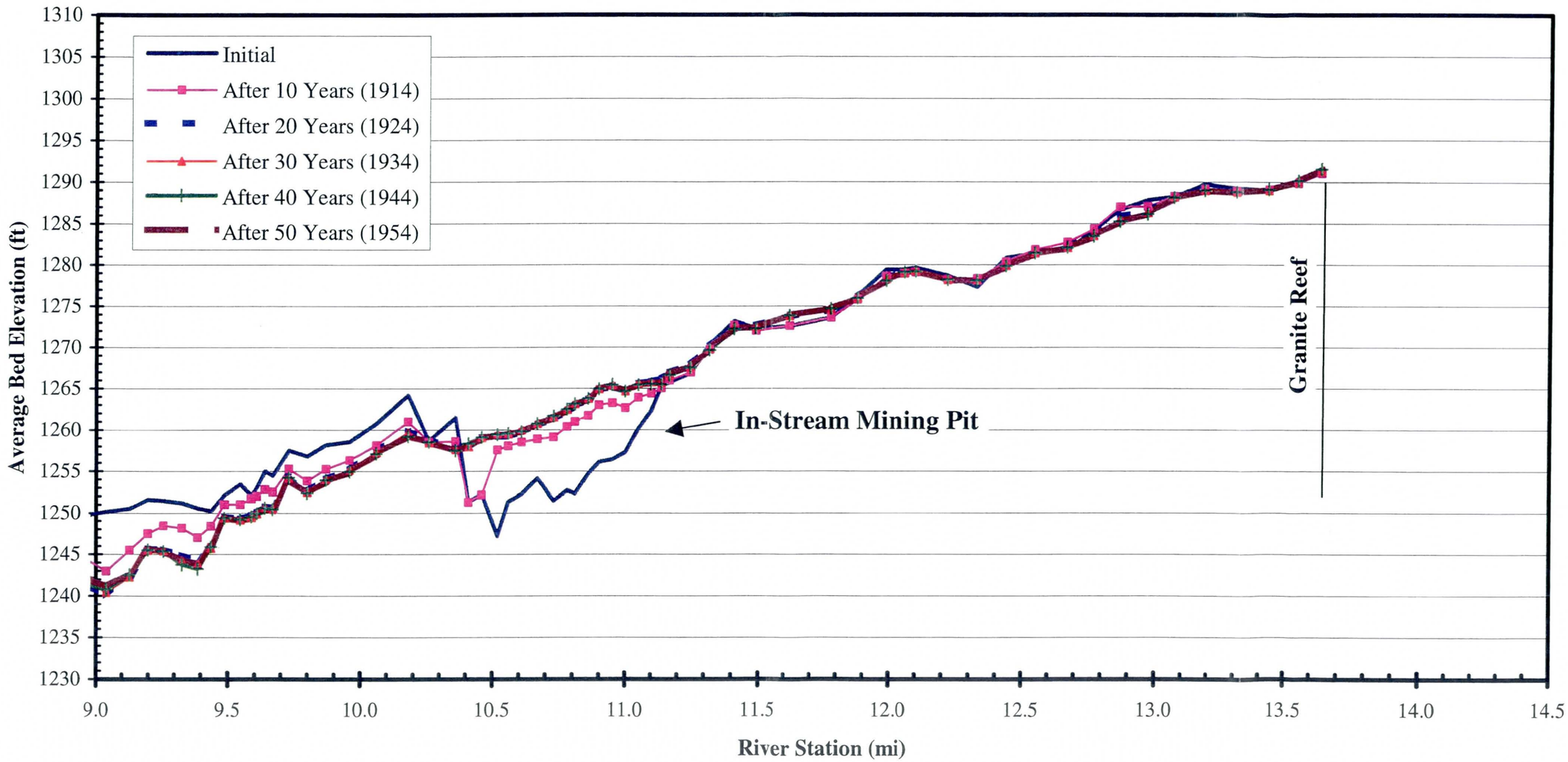

Figure 4-12. Comparison of the average bed elevations at 10-year increments during the Base Case 50-year sediment transport simulations between River Stations 9.0 and 13.64.

Va Shly' Ay Akimel
Average Bed Elevation by Decade for the 50-Year Simulation (1905-1954)
Gilbert Mining Pit

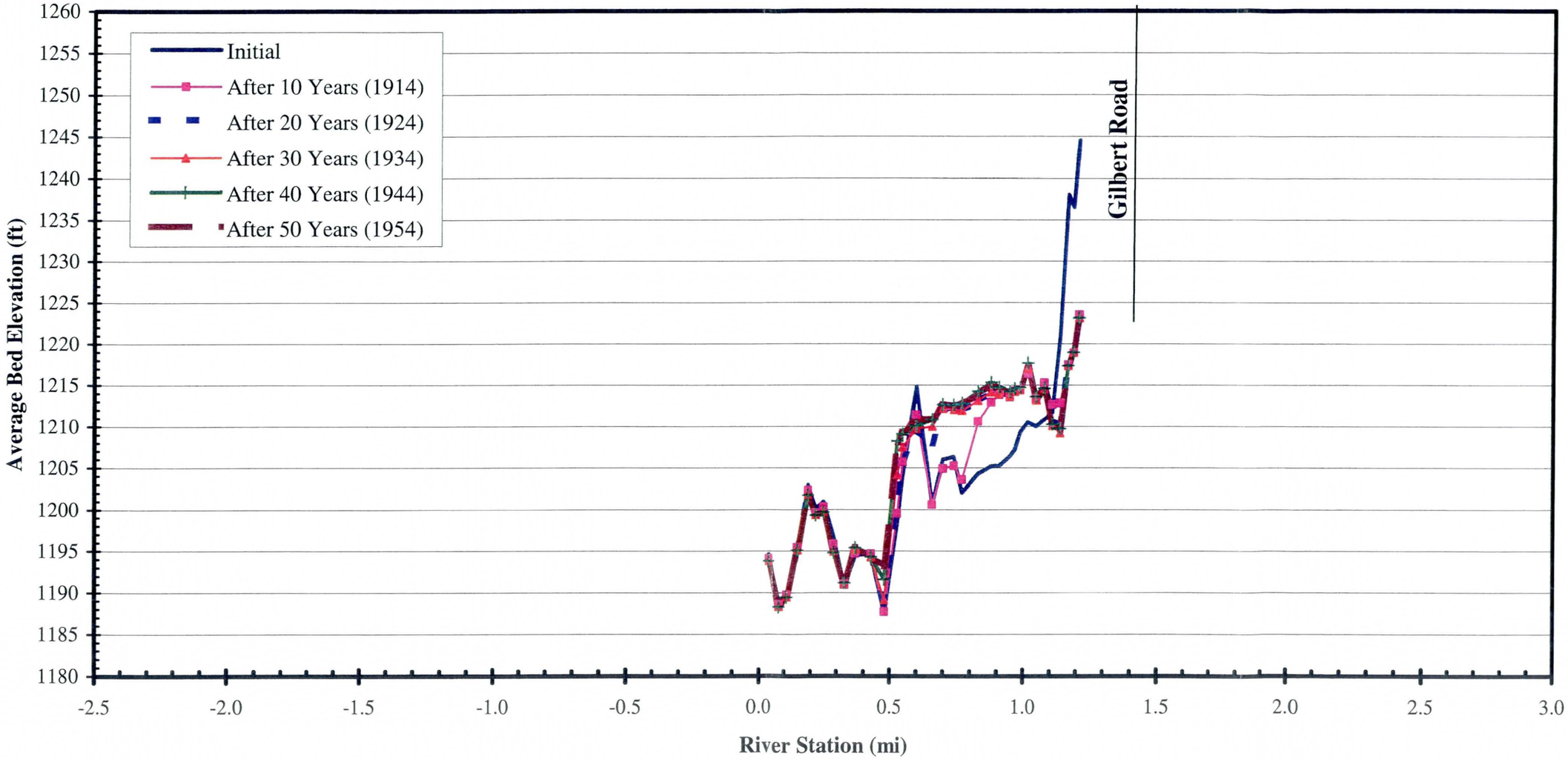

Figure 4-13. Comparison of the average bed elevations at 10-year increments during the Base Case 50-year sediment transport simulations in the Gilbert Mining Pit.

4.6. 105-YEAR SIMULATION RESULTS

A 105-year sediment transport simulation was completed using the equilibrium bed material load, the TMPM transport method, and the flow series shown in Figure 4-4. The sediment transport results are presented in terms of the average bed elevation at the end of 20, 30, 40, 50, and 105 years. The average bed elevations at these times are shown in Figure 4-14 through Figure 4-17. The cross section geometry at the end of the 105-year simulation was saved in a TAPE12 file as well as in HEC-6T T98 format.

Except within the Gilbert Mining Pit, the difference between the average bed at 50 years and at 105 years is generally less than one foot. The delta formation in the Pit continued to travel downstream between the 50- and 105-year time periods.

Va Shly' Ay Akimel
Average Bed Elevations for the 105-Year Simulation (1898-1993)
River Stations -2.06 to 3.50

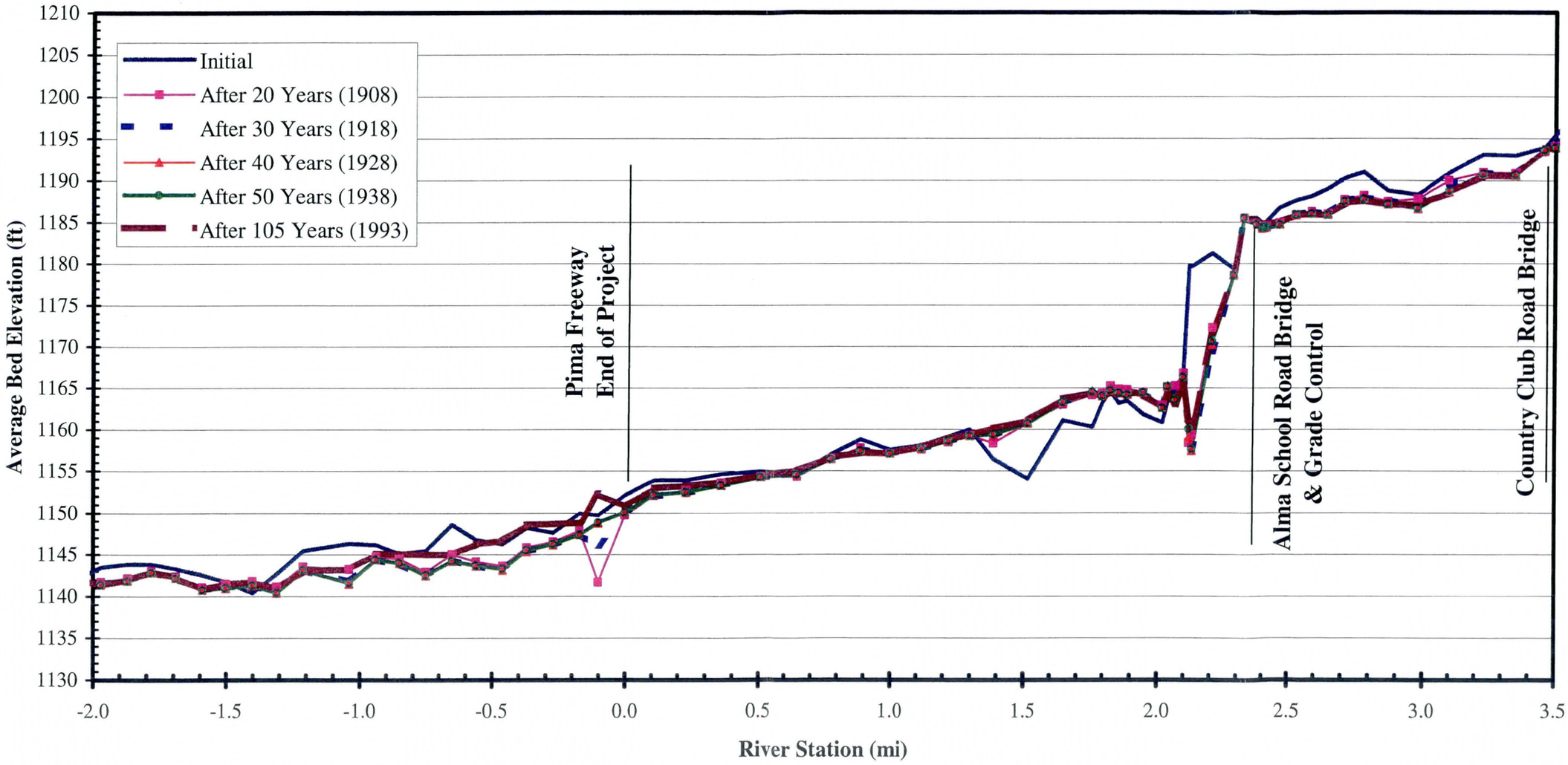

Figure 4-14. Comparison of the average bed elevations at 20, 30, 40, 50, and 105 years during the 105-year sediment transport simulations between River Stations –2.06 and 3.50.

Va Shly' Ay Akimel
Average Bed Elevations for the 105-Year Simulation (1898-1993)
River Stations 3.50 to 9.00

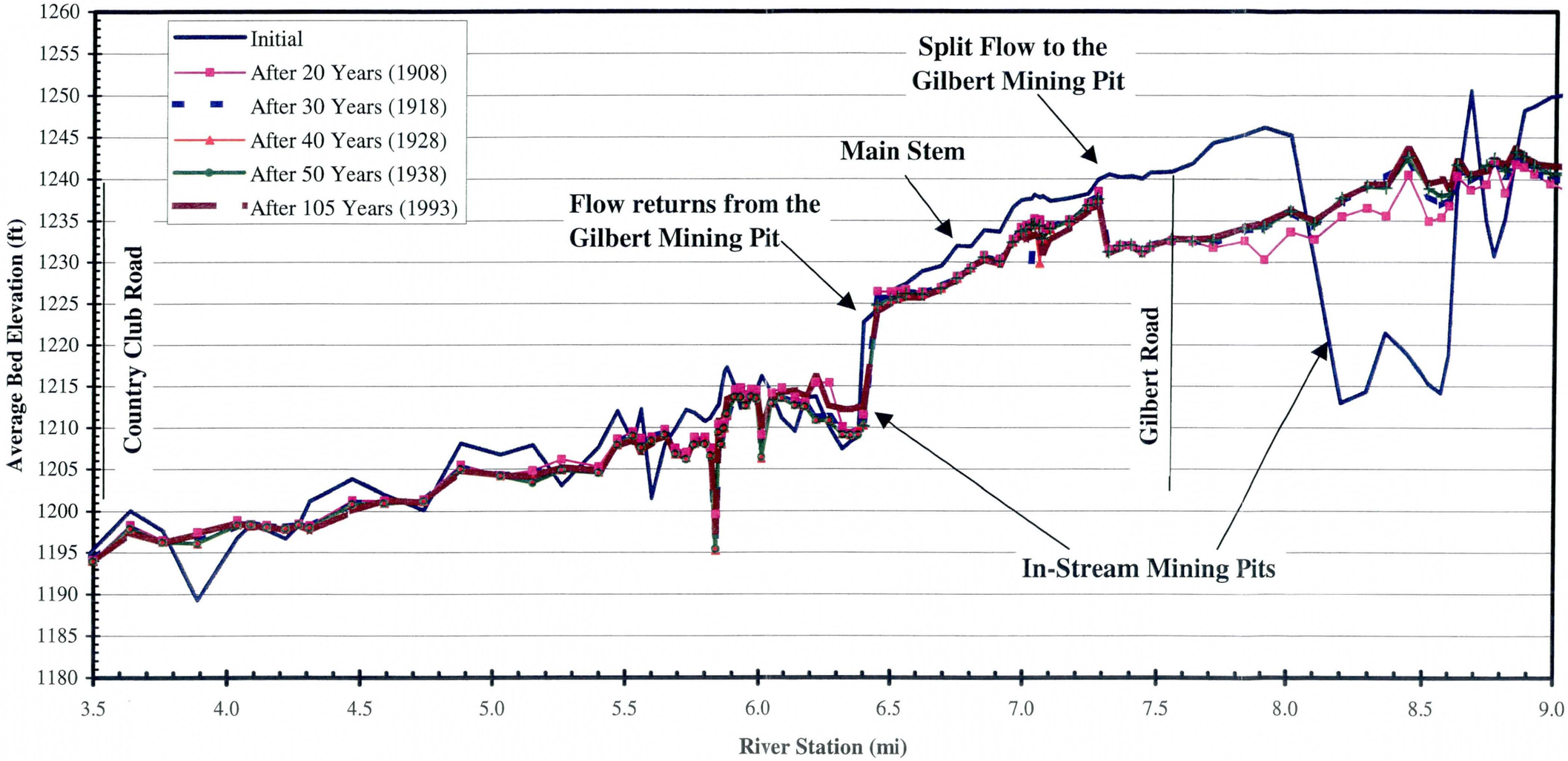

Figure 4-15. Comparison of the average bed elevations at 20, 30, 40, 50, and 105 years during the 105-year sediment transport simulations between River Stations 3.5 and 9.0.

Va Shly' Ay Akimel
Average Bed Elevations for the 105-Year Simulation (1898-1993)
River Stations 9.0 to 13.64

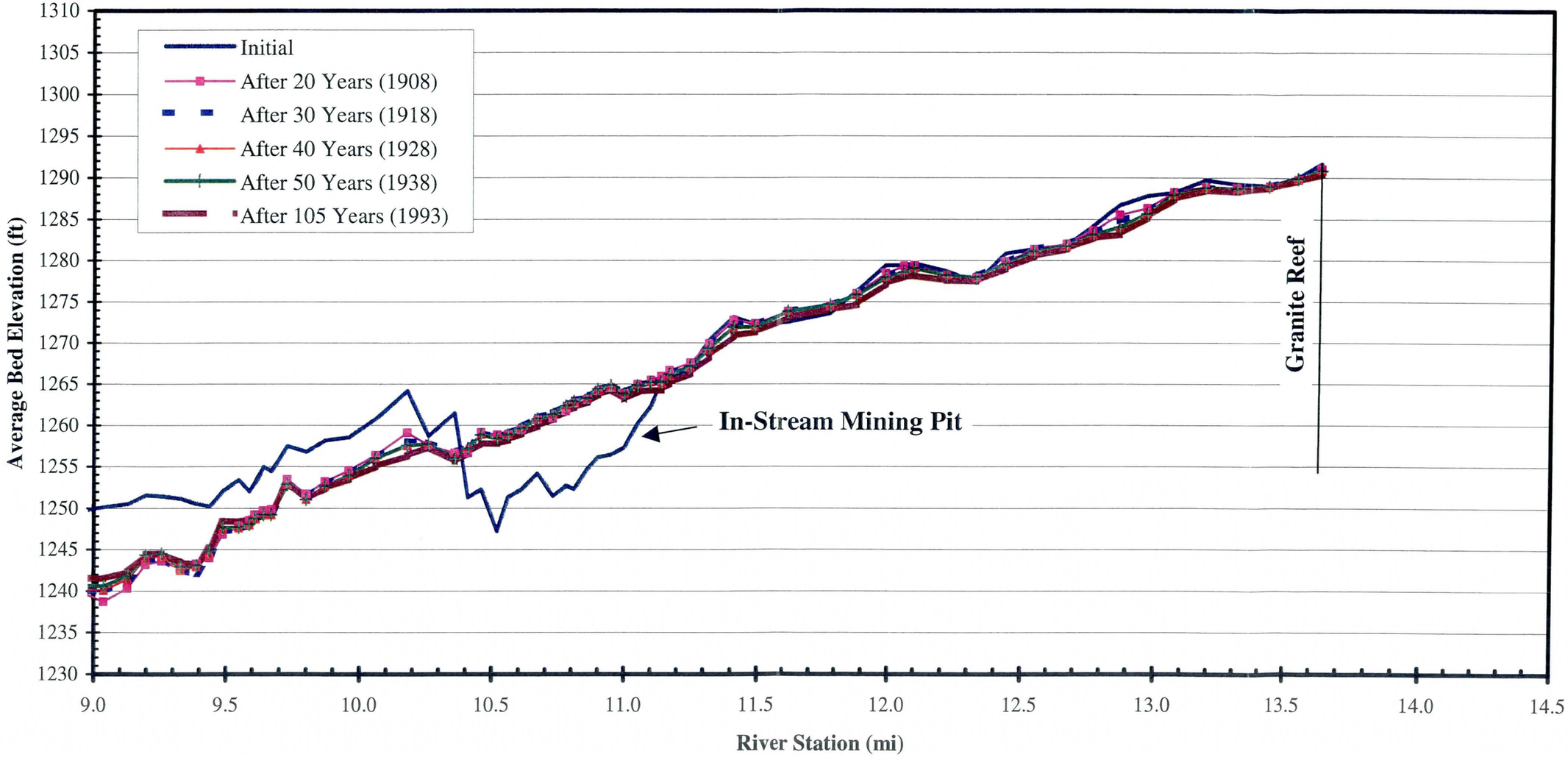

Figure 4-16. Comparison of the average bed elevations at 20, 30, 40, 50, and 105 years during the 105-year sediment transport simulations between River Stations 9.0 and 13.64.

Va Shly' Ay Akimel
Average Bed Elevations for the 105-Year Simulation (1898-1993)
Gilbert Mining Pit

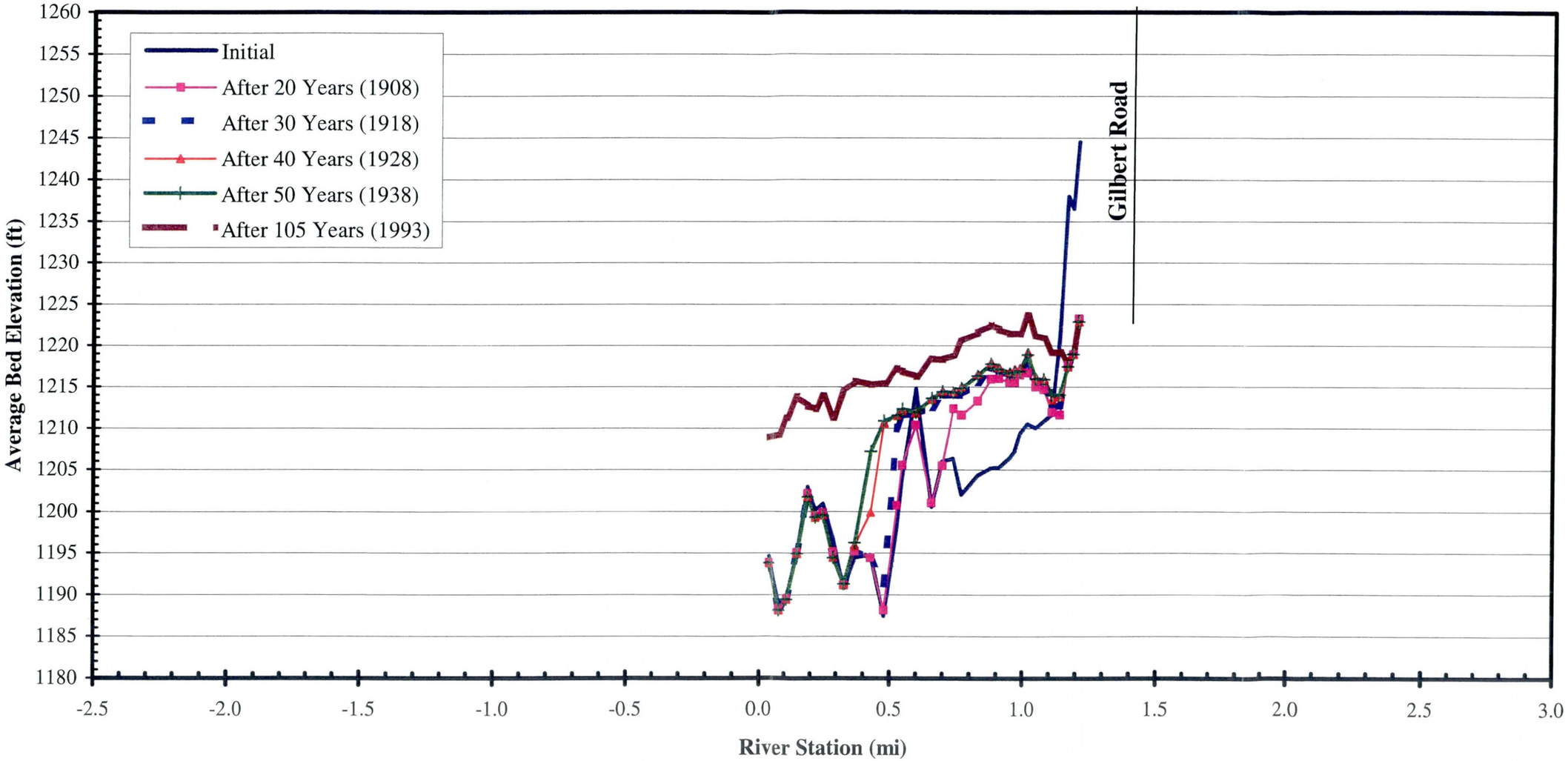

Figure 4-17. Comparison of the average bed elevations at 20, 30, 40, 50, and 105 years during the 105-year sediment transport simulations in the Gilbert Mining Pit.

4.7. GILBERT MINING PIT HEADCUT ESTIMATION

Since the junction at the flow split between the main stem and the Gilbert Mining Pit acts as a hinge point in the sediment transport calculations, the magnitude of the headcut from the Gilbert Mining Pit is underestimated in the Base Case simulation. To more accurately assess the extent of the headcut from the Gilbert Mining Pit, a portion of the main stem of the Salt River was replaced with the Pit geometry, and a 50-year simulation was completed. The flow in the Gilbert Mining Pit portion of the reach was set equal to the computed split flow from the Base Case (see Appendix 7). This simulation is referred to as the "Maximum Headcut" scenario. The average bed elevations for the areas where there are noticeable differences between the Base Case and the Maximum Headcut scenario are shown in Figure 4-18 for the main stem and Figure 4-19 for the Gilbert Mining Pit.

The average bed elevation differences between the Maximum Headcut scenario and the Base Case are negligible downstream of River Station 6.0 and upstream of River Station 10.0. Downstream of the Gilbert Mining Pit, between River Stations 6.0 and 6.4, the Maximum Headcut average bed elevations are one to three feet lower than the Base Case. Within the Gilbert Mining Pit, the delta formation extended further downstream in the Maximum Headcut scenario.

There is an additional six feet of scour at River Station 7.32, which is the cross section on the main stem immediately upstream of the Gilbert Mining Pit. At the downstream face of Gilbert Road (River Station 7.44), there is an additional five feet of scour in the Maximum Headcut scenario for a total scour depth of 12 feet. This scour depth corresponds to long-term degradation only and does not include local scour components (i.e., pier scour and abutment scour).

The average bed elevations for the Maximum Headcut scenario are lower than the Base Case between Gilbert Road and River Station 10.0. The magnitude of the differences decreases with distance moving in the upstream direction.

Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Base Case & Maximum Headcut Scenario
River Stations 5.0 to 10.5

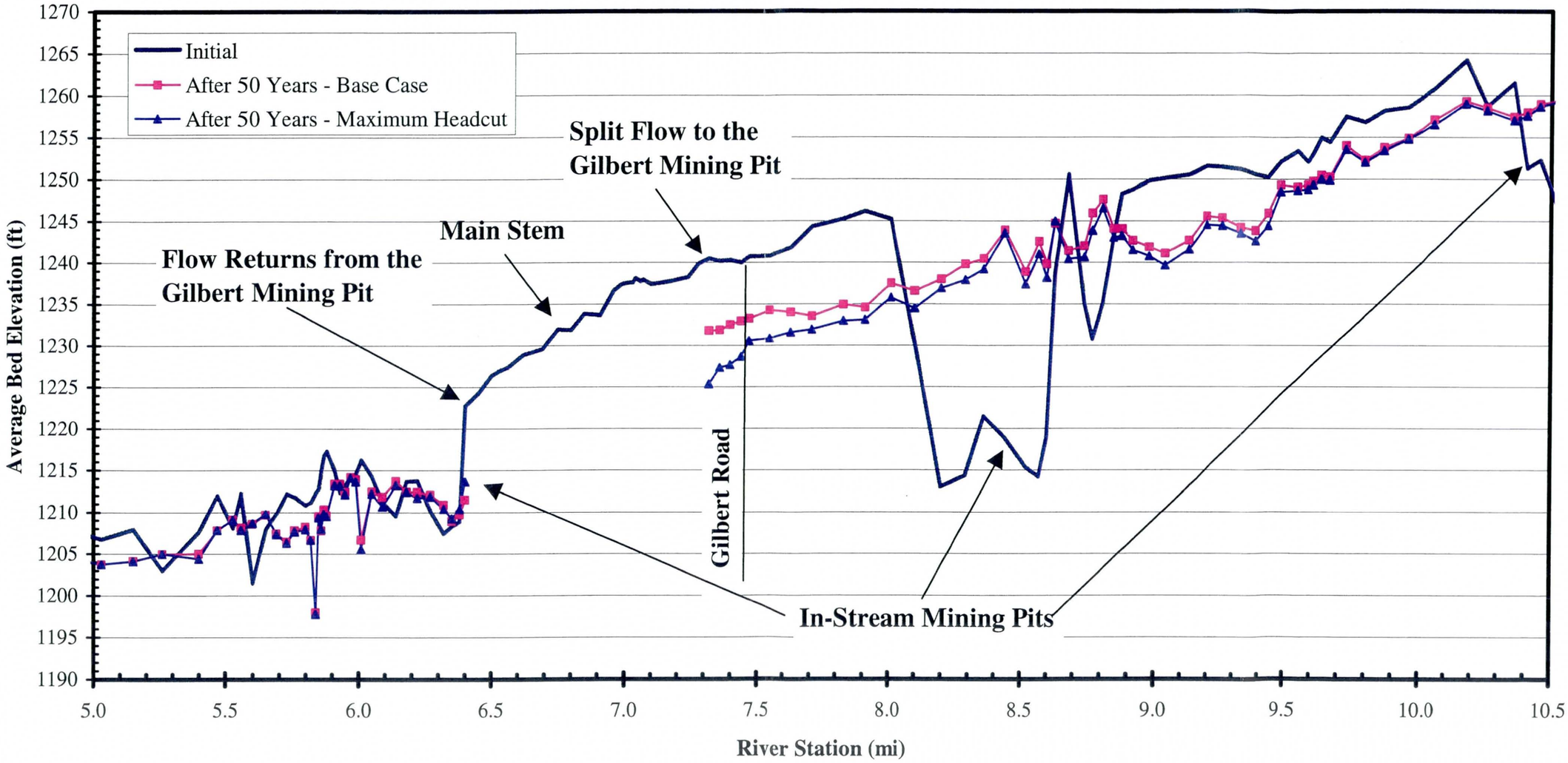

Figure 4-18. Comparison of the Maximum Headcut scenario and the Base Case 50-year average bed elevations between River Stations 5.0 and 10.5.

Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Base Case & Maximum Headcut Scenario
Gilbert Mining Pit

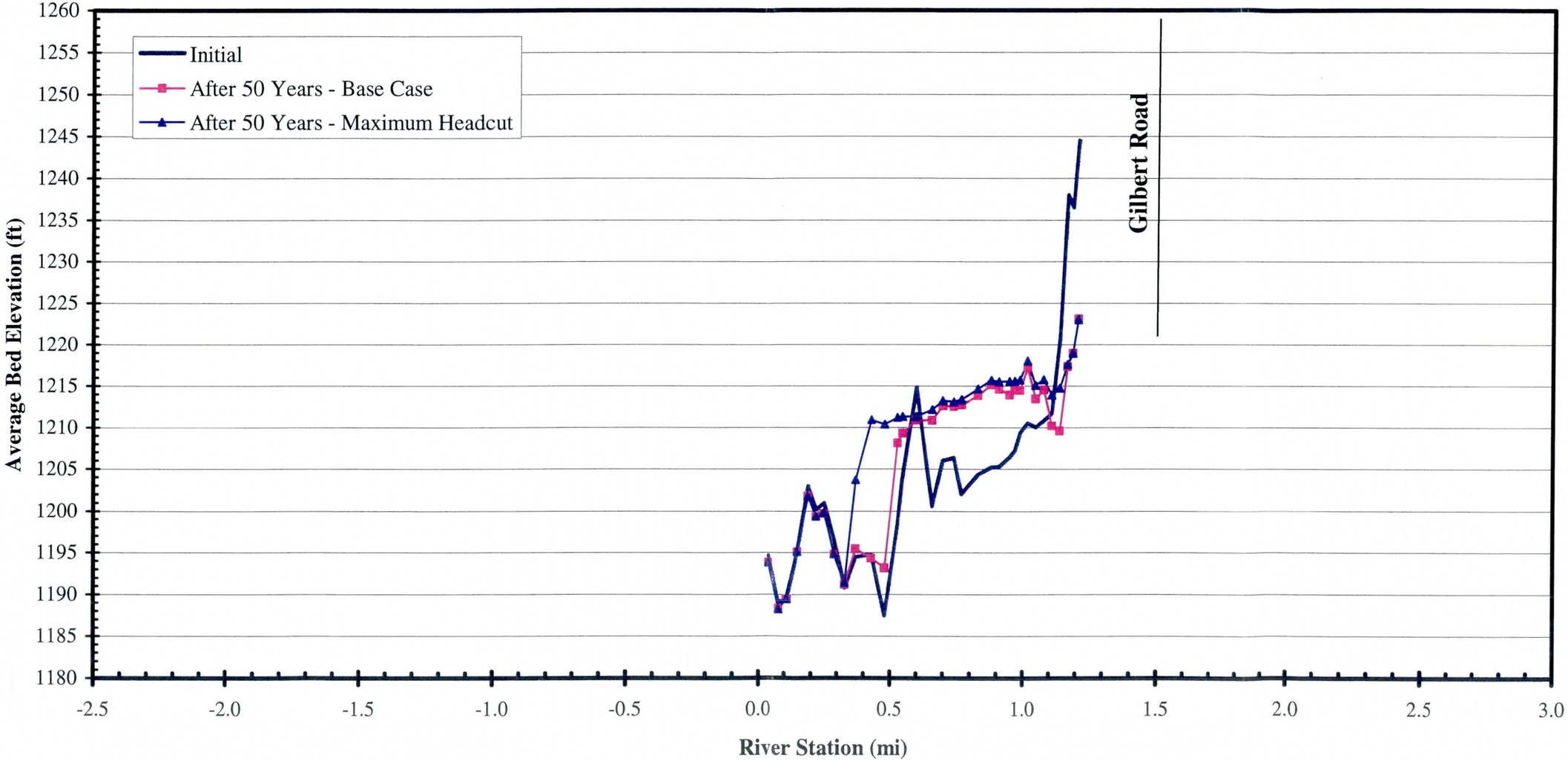

Figure 4-19. Comparison of the Maximum Headcut scenario and the Base Case 50-year average bed elevations in the Gilbert Mining Pit.

4.8. NO BERM EROSION AT THE GILBERT MINING PIT

If measures were taken to maintain the berm surrounding the Gilbert Mining Pit and to limit or prevent berm erosion, the majority of the streamflow would be conveyed in the main channel rather than the Pit. The impacts on the average bed elevations from protecting the berm were analyzed. The three cross sections at the upstream end of the Gilbert Mining Pit (River Stations 1.17, 1.19, and 1.21) were modeled as hard points to prevent erosion. The depth of the bed sediment at these cross sections was reduced from 22 feet to 0.001 foot. The average bed elevations for the areas where there are noticeable differences between the Base Case and the No Berm Erosion Scenario are shown in Figure 4-20 and Figure 4-21.

Upstream of Gilbert Road (River Station 7.45), the differences in the average bed elevations are generally less than one foot. Since flow was sustained in the main channel in the No Berm Erosion Scenario, the headcut from the in-stream mining pit at River Station 6.40 migrated upstream. There was an additional five to ten feet of degradation in the main channel between River Stations 6.45 and 7.28. On the main channel between the Gilbert Mining Pit and Gilbert Road (between River Stations 7.30 and 7.45), the average bed elevations were within one to two feet.

The sediment that was scoured from the main stem between River Stations 6.45 and 7.28 deposited in the in-stream mining pit at River Station 6.40. The average bed elevation increased by five to ten feet between River Stations 6.00 and 6.40). Between River Stations 3.50 and 6.00, the average bed elevation generally increased by one to two feet. The differences in the average bed elevations downstream of River Station 3.50 are less than one foot.

In the No Berm Erosion Scenario, the volume of sediment transported into the pit was small and the average bed did not differ from the initial configuration.

Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - No Berm Erosion at Gilbert Mining Pit
Cross Sections 3.50 to 9.00

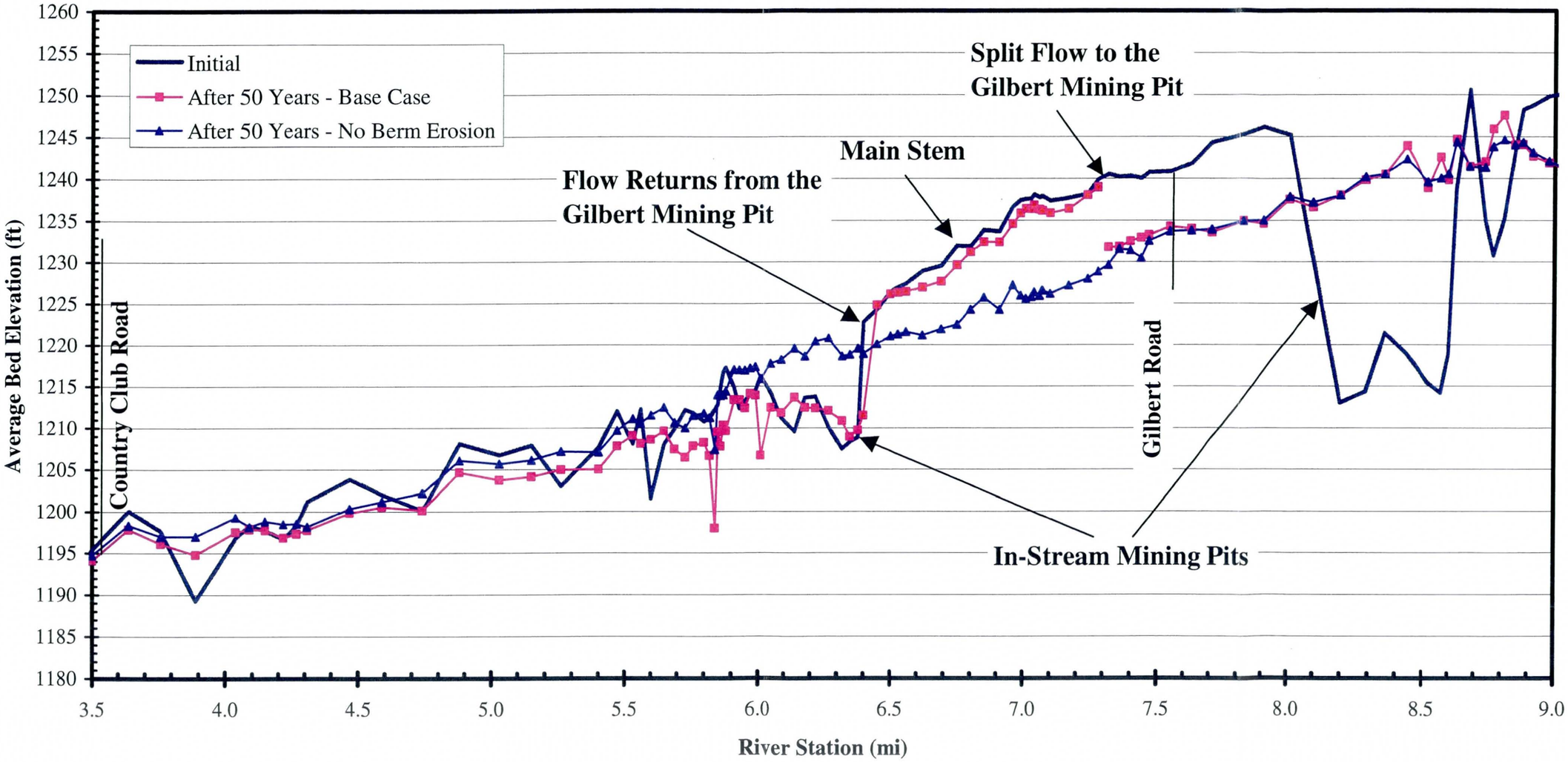

Figure 4-20. Comparison of the No Berm Erosion Scenario and the Base Case 50-year average bed elevations between River Stations –3.5 to 9.0.

Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - No Berm Erosion at Gilbert Mining Pit
Gilbert Mining Pit

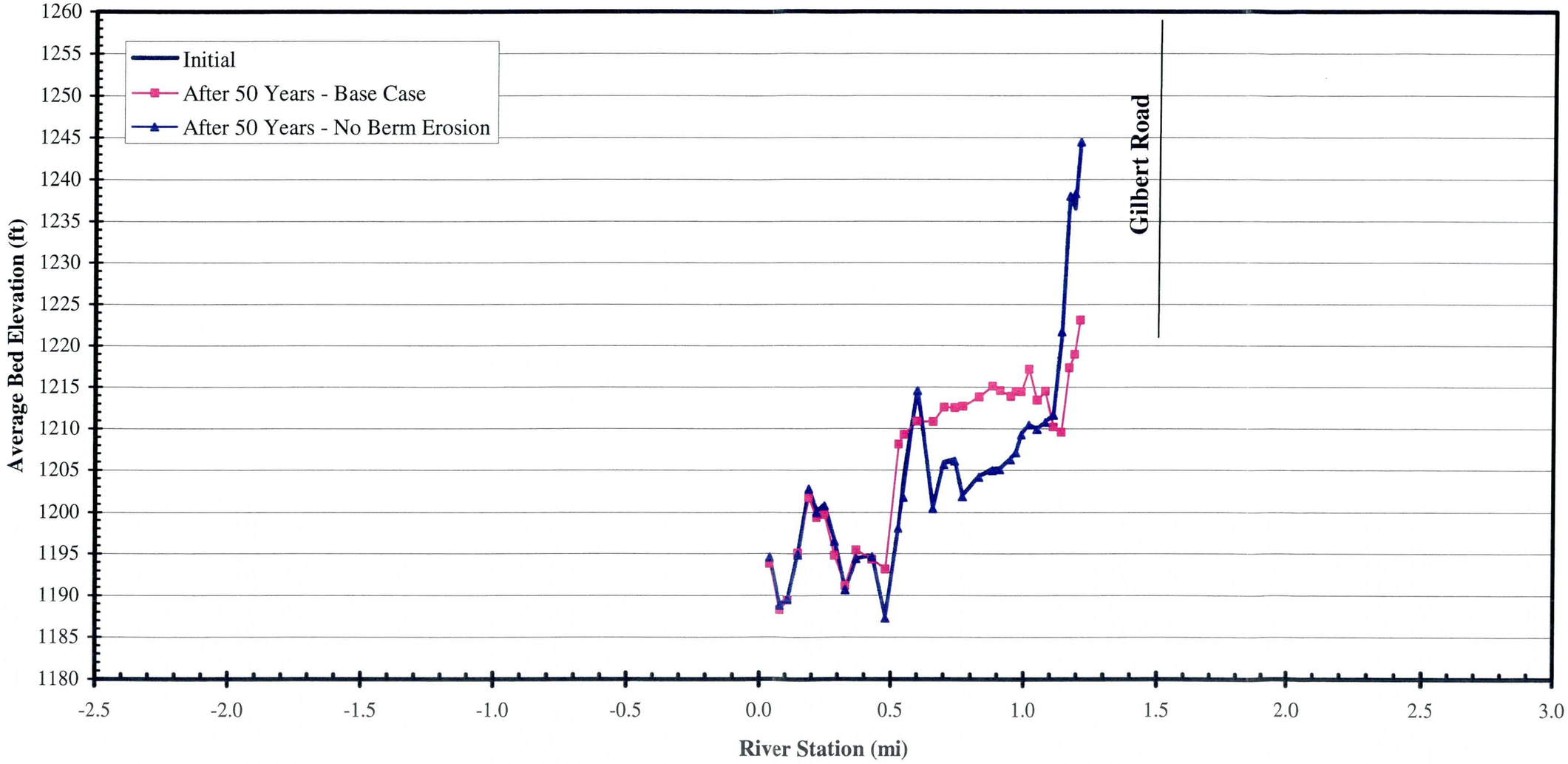

Figure 4-21. Comparison of the No Berm Erosion Scenario and the Base Case 50-year average bed elevations in the Gilbert Mining Pit.

4.9. SENSITIVITY TO THE 50-YEAR FLOW SERIES

In the first 50 years of the period-of-record hydrographs (1889 to 1938, see Figure 4-4), the 100-year event occurs early in the sequence during water year 1891. The impact on the sediment transport results of using the first 50-year flow series with the 100-year event (water years 1889 through 1938) compared to the average flow series used in the Base Case (water years 1905 through 1954) is investigated. A comparison of the average bed elevations at the end of 50 years is included in Appendix 8a.

In general, the average bed elevation differences between the two flow series are less than two feet. Between River Stations 6.45 and 10.36, the average bed elevations from the simulation using the first 50-year flow series are lower than the Base Case. In addition, more deposition occurred within the Gilbert Mining Pit, and the delta formation extended further downstream.

4.10. FAILURE OF THE ALMA SCHOOL GRADE CONTROL STRUCTURE

The Base Case scour depth downstream of the Alma School Road Bridge is greater than the toe-down depth of the associated grade control structure. Based on this analysis, the grade control structure could fail. However, a more detailed analysis should be performed confirm the results.

The impacts on the average bed elevations from the failure of the grade control were analyzed. The depth of the bed sediment reservoir was increased from 0.001 foot to 22 feet at the cross sections bounding the bridge (River Stations 2.29 and 2.33) to allow scour. The average bed elevations for the areas where there are noticeable differences between the Base Case and the Alma School Grade Control Failure Scenario are shown in Figure 4-22.

Between River Stations –1.5 and 1.3, the average bed elevations in the Alma School Grade Control Failure Scenario are slightly higher (less than one foot) than the Base Case. An additional three to six feet of deposition occurs between River Stations 1.3 and 2.10. The scour depths between River Stations 2.12 and 2.21 are five to seven feet smaller than in the Base Case.

In the Alma School Grade Control Failure Scenario, the initial headcut at River Station 2.12, from previous sand and gravel mining activities, continues to migrate upstream to River Station 4.0. There is 13 feet of scour at the upstream face of the Alma School Road Bridge (River Station 2.33). The bed scours five feet at the Country Club Road Bridge (River Station 3.50). These scour depths do not include local scour components.

The difference in the average bed elevations from the Base Case are negligible upstream of River Station 4.0 on the main stem and within the Gilbert Mining Pit.

Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Failure of Alma School Grade Control
River Stations -1.0 to 4.5

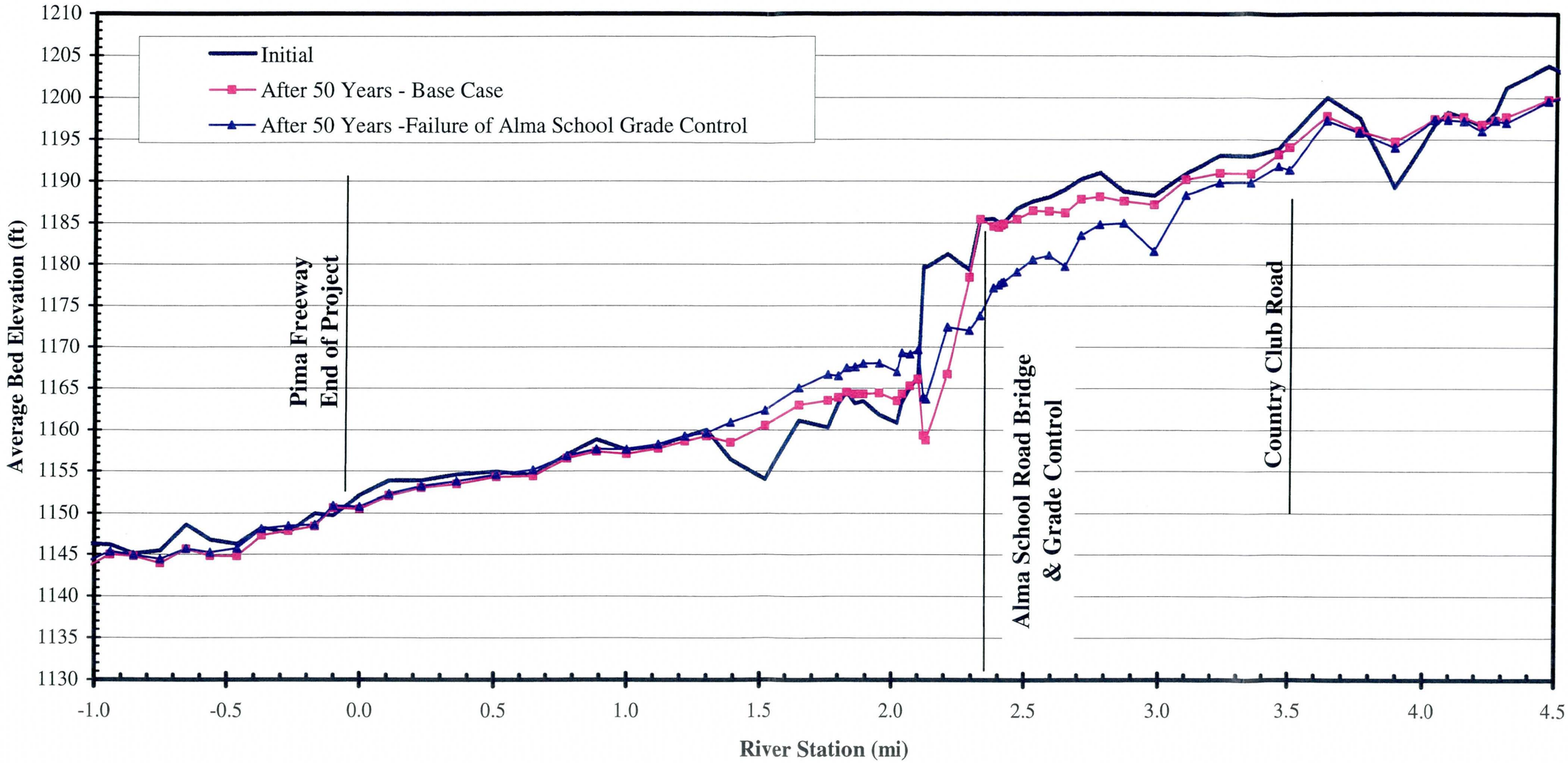

Figure 4-22. Comparison of the Alma School Grade Control Failure Scenario and the Base Case 50-year average bed elevations between River Stations –1.0 to 4.5.

4.11. SENSITIVITY TO INFLOWING SEDIMENT LOAD

A sensitivity analysis was conducted to bracket the sediment transport results to account for the uncertainty in the inflowing sediment load. A comparison of the average bed elevations at the end of the 50-year simulations with 50, 100, and 200 percent of the equilibrium bed material load is included in Appendix 8b.

The differences in the average bed elevations on the main stem downstream of River Station 7.28 are negligible. The differences are small because the Gilbert Mining Pit captures the flow and the sediment flowing from the upstream reach. Since the inflowing sediment deposits in the Gilbert Mining Pit, the changes in the inflowing sediment load do not noticeably affect the Salt River downstream of the Pit.

Upstream of River Station 7.28 and within the Gilbert Mining Pit, the average bed elevations decrease when the inflowing load is decreased by one half (50 percent) and increase when the inflowing load is doubled (200 percent). The differences in the average bed elevations from the Base Case range from two to five feet.

4.12. SENSITIVITY TO TRANSPORT METHOD

The Yang stream power and the Laursen-Copeland methods are used to evaluate the sensitivity of the sediment transport results to the selection of the transport. The inflowing load curves for these methods and a comparison of the average bed elevations at the end of the 50-year simulations with the different transport methods are included in Appendix 8c.

The different transport methods have the same overall scour and deposition trends. In the Salt River downstream of the Gilbert Mining Pit (River Stations downstream of 6.40), the differences in the average bed elevations from the different transport methods is generally less than three feet. In the remaining portion of the main stem, the average bed elevations for the Laursen-Copeland method tend to be three to six feet lower than the Base Case. This additional scour occurs because the Laursen-Copeland method has a larger proportion of gravel transport. The increased scour results in more deposition within the Gilbert Mining Pit. The Laursen-Copeland simulation can be used to estimate the maximum ("worst case") long-term scour.

The Yang stream power method tends to transport more sand than gravel except at high flows (approximately 150,000 cfs or greater). Over the 50-year simulation period, the method does not transport enough material to fill the in-stream gravel mining pits between River Stations 8.10 and 8.88 and between 10.36 and 11.17. Otherwise, upstream of the Gilbert Mining Pit, the average bed elevation with the Yang transport method is generally one to two feet higher than the Base Case.

4.13. SENSITIVITY TO MANNING N

The sensitivity of the sediment transport results to the channel Manning *n* value was assessed. The 50-year sediment transport simulations were performed with a low Manning *n* value of 0.028 and a high Manning *n* value of 0.043 (a Manning *n* of 0.035 is generally used for the cross sections in the Base Case). These low and high values of the Manning *n* bound the range of *n* values computed for the Salt River for the 10- and 100-year peak flow events (Thomsen, B.W. and H.W. Hjalmarson, April 1991). The equilibrium inflowing load was not recomputed for the low and high Manning *n* value scenarios. A comparison of the average bed elevations at the end of the 50-year simulations for the different Manning *n* values is included in Appendix 8d.

In general, the average bed elevations for the low Manning *n* scenario were lower than the average bed elevations in the Base Case, and the elevations for the high Manning *n* scenario were higher than the Base Case. Throughout the entire reach, the average bed elevations for the high Manning *n* scenario were within one to two feet of the Base Case.

In the low Manning *n* scenario, the higher velocities could move more sediment, which caused more degradation throughout the reach compared to the Base Case. The additional sediment transport resulted in more deposition in the Gilbert Mining Pit where the delta formation moved further downstream. There were higher flows in the main stem between River Stations 6.45 and 7.28 that produced two to three feet more scour compared to the Base Case.

5. FUTURE WITHOUT PROJECT HYDRAULIC ANALYSIS

The cross section geometry at the end of the Base Case 50-year sediment transport simulation was imported to HEC-RAS format for the future without project conditions hydraulic analysis. A program was developed that reads the differences in the initial and final channel geometries using the T98 file created by HEC-6T. The cross section elevations in the HEC-RAS geometry file (*.g0* file) were updated where changes occurred. The ineffective flow areas were adjusted to reflect the new flow patterns. The overbank Manning *n* values between River Stations 4.47 and 5.47, 6.09 and 7.24, and 7.71 and 10.06 were adjusted to produce a consistent flow distribution in the channel and overbanks of adjacent cross sections.

5.1. WATER SURFACE PROFILES

The future without project conditions HEC-RAS model was executed for the 5-, 10-, 20-, 50-, 100, 200, and 500-year events with the discharges listed in Table 3-1. The starting water surface elevation at the downstream boundary (River Station 0.00, Pima Freeway) was adjusted using the computed water surface elevations in HEC-6T for the different frequency flows at the end of the 50-year simulation period. The HEC-RAS Standard Output Table 1 for each flow event is included in Appendices 9a through 9g. The water surface elevation profiles for the main channel for the different frequency floods are shown in Appendix 9h. The new flow distribution in the main channel and Gilbert Pit is summarized in Table 5-1. The pit captures all of the flow for the 5-year event, 92 percent for the 10-year event, 77 percent for the 20-year event, 64 percent for the 50-year event, 60 percent for the 100-year event, 54 percent for the 200-year event, and 51 percent for the 500-year event.

Table 5-1. Future without project condition flow distribution between the main channel and the Gilbert Mining Pit.

Return Event	Total Flow (cfs)	Flow in Main Channel (cfs)	Flow in Gilbert Pit (cfs)
5-year	21,000	0	21,000
10-year	58,000	4,659	53,341
20-year	95,000	22,000	73,000
50-year	145,000	52,280	92720
100-year	172,000	69,058	102,942
200-year	207,000	94,703	112,297
500-year	246,000	121,316	124,684

Comparisons of the water surface elevations between the Existing Condition (Base Case at time zero) and Future Without Project Condition are shown in Figure 5-1 through Figure 5-7. Between River Stations 0.00 and 10.95, the water surface elevations in the Future Without Project Condition are less than the Existing Condition for all flow events. The long-term scour that occurred throughout most of the reach caused the decrease in the water surface elevations. Between River Stations 10.95 and 11.99, for the 5- through 50-year peak flow events, the water surface elevations for the Future Without Project Condition are two to 0.5 feet higher, respectively, than the Existing Condition. The deposition at the in-stream mining pit between River Stations 10.36 and 11.14 produced the rise in the water surface elevations. Upstream of River Station 11.99, the water surface elevations in the Future Without Project Condition are less than or equal to the Existing Condition.

The dips that occur in the water surface profiles for the Future Without Project Condition occur at significant changes in the channel width and slope.

5.2. INUNDATION AREAS

A new TIN was generated based upon the modified cross section geometry from the sediment transport analysis. The HEC-RAS model results were exported to ArcView and the inundation areas were delineated using HEC-GeoRAS in the same manner as discussed in Section 3.8. The 5-, 10-, 20-, 50-, 100-, 200-, and 500-year inundation areas for the Future Without Project Condition are compared to the corresponding inundation areas for the Existing Condition in Figure 5-8 through Figure 5-14. In general, the inundation areas for the Future Without Project Condition are smaller than the Existing Condition except between River Stations 10.95 and 11.99 for the 5- through 50-year peak flow events.

Detailed maps (1" = 500 feet) with the contours, cross sections, and inundation areas are included in Appendices 10 through 16. On these maps, the existing condition inundation areas are compared to the future without project condition areas for the same frequency flood.

Va Shly' Ay Akimel
Comparison of Water Surface Elevations for the Existing Condition and Future Without Project Condition
5-Year Flood

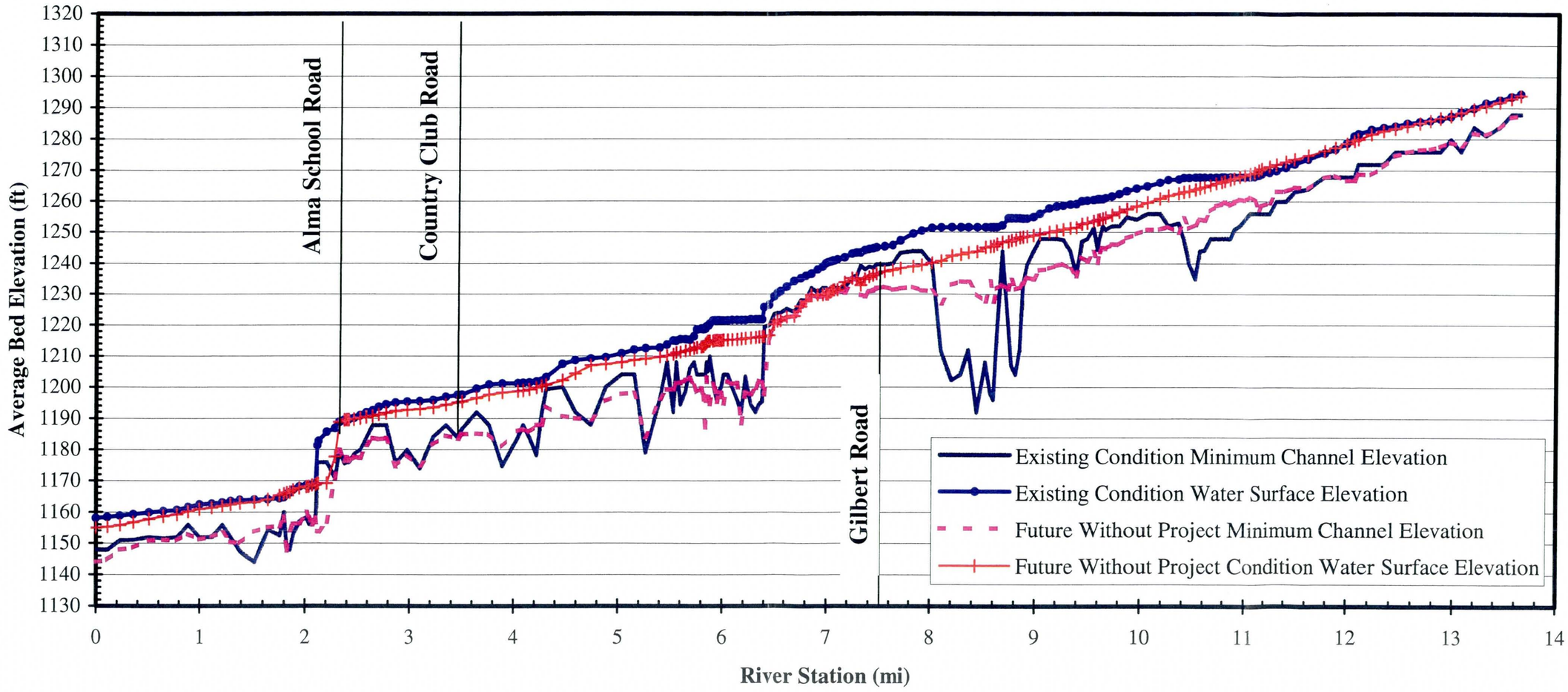

Figure 5-1. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 5-year peak flow.

Va Shly' Ay Akimel
Comparison of Water Surface Elevations for the Existing Condition and Future Without Project Condition
10-Year Flood

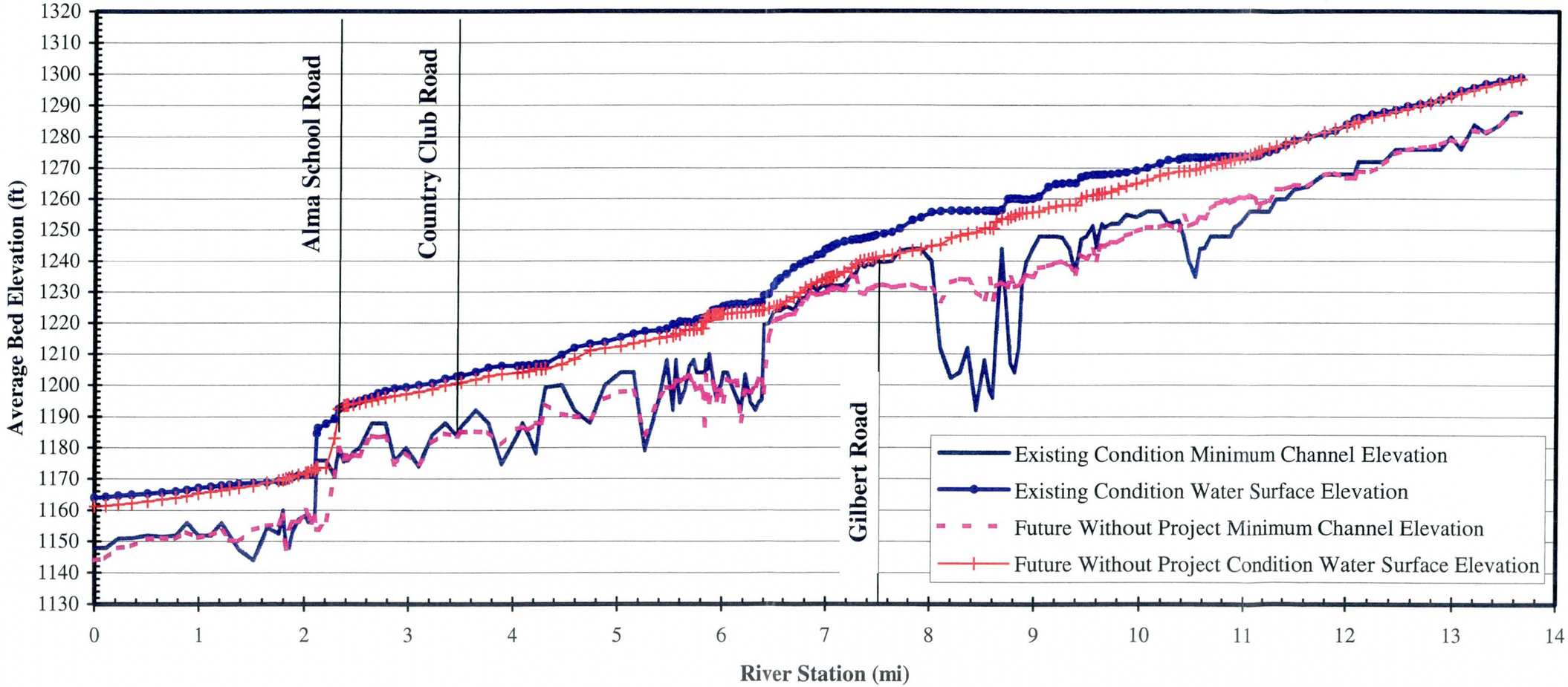

Figure 5-2. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 10-year peak flow.

Va Shly' Ay Akimel
Comparison of Water Surface Elevations for the Existing Condition and Future Without Project Condition
20-Year Flood

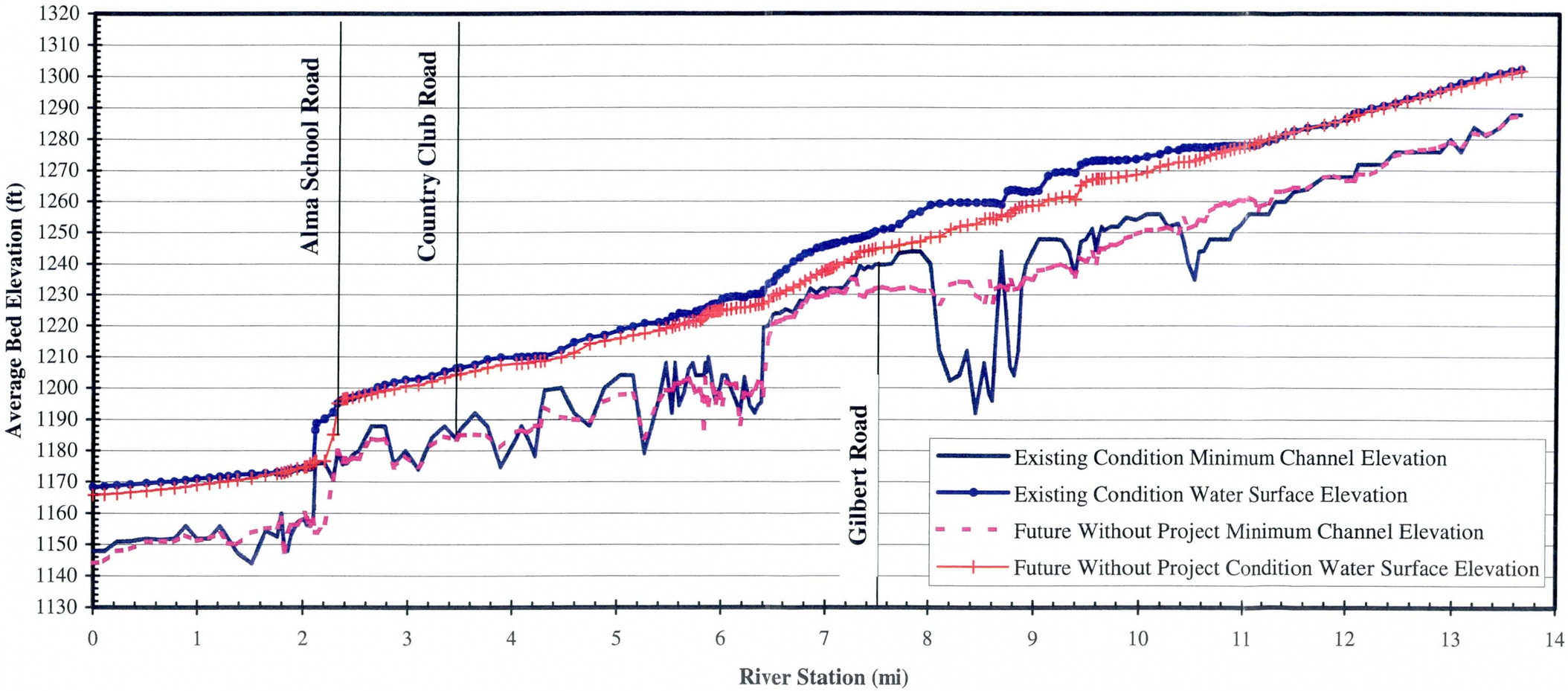

Figure 5-3. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 20-year peak flow.

Va Shly' Ay Akimel
Comparison of Water Surface Elevations for the Existing Condition and Future Without Project Condition
50-Year Flood

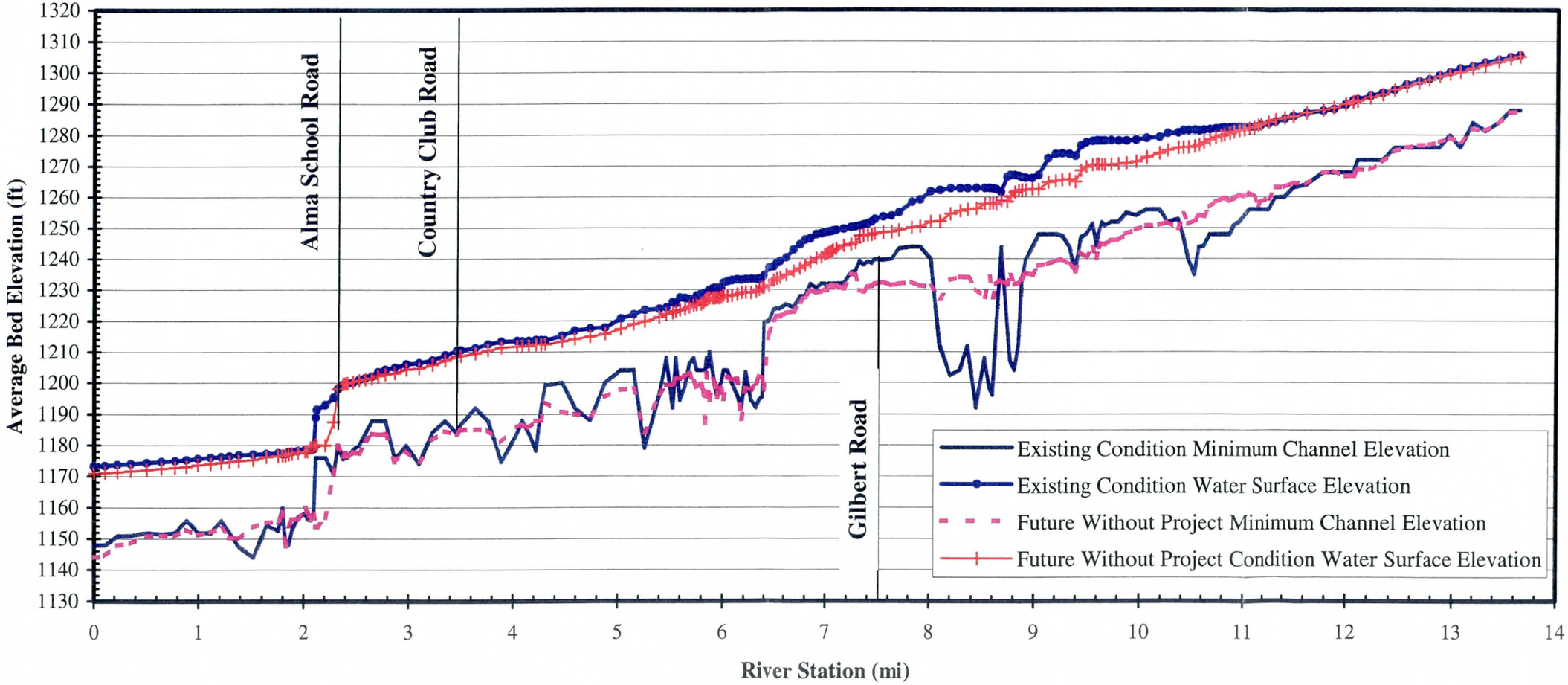

Figure 5-4. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 50-year peak flow.

Va Shly' Ay Akimel
Comparison of Water Surface Elevations for the Existing Condition and Future Without Project Condition
100-Year Flood

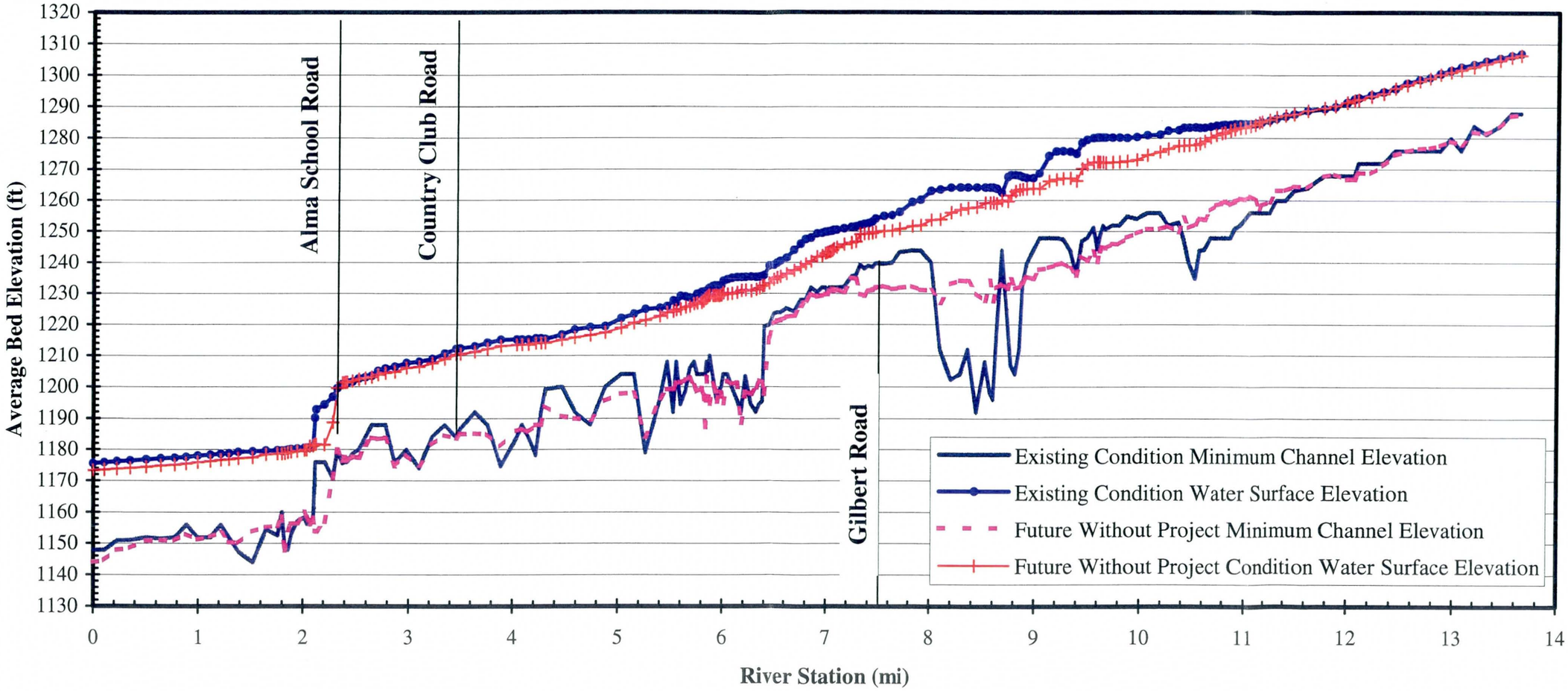

Figure 5-5. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 100-year peak flow.

Va Shly' Ay Akimel
Comparison of Water Surface Elevations for the Existing Condition and Future Without Project Condition
200-Year Flood

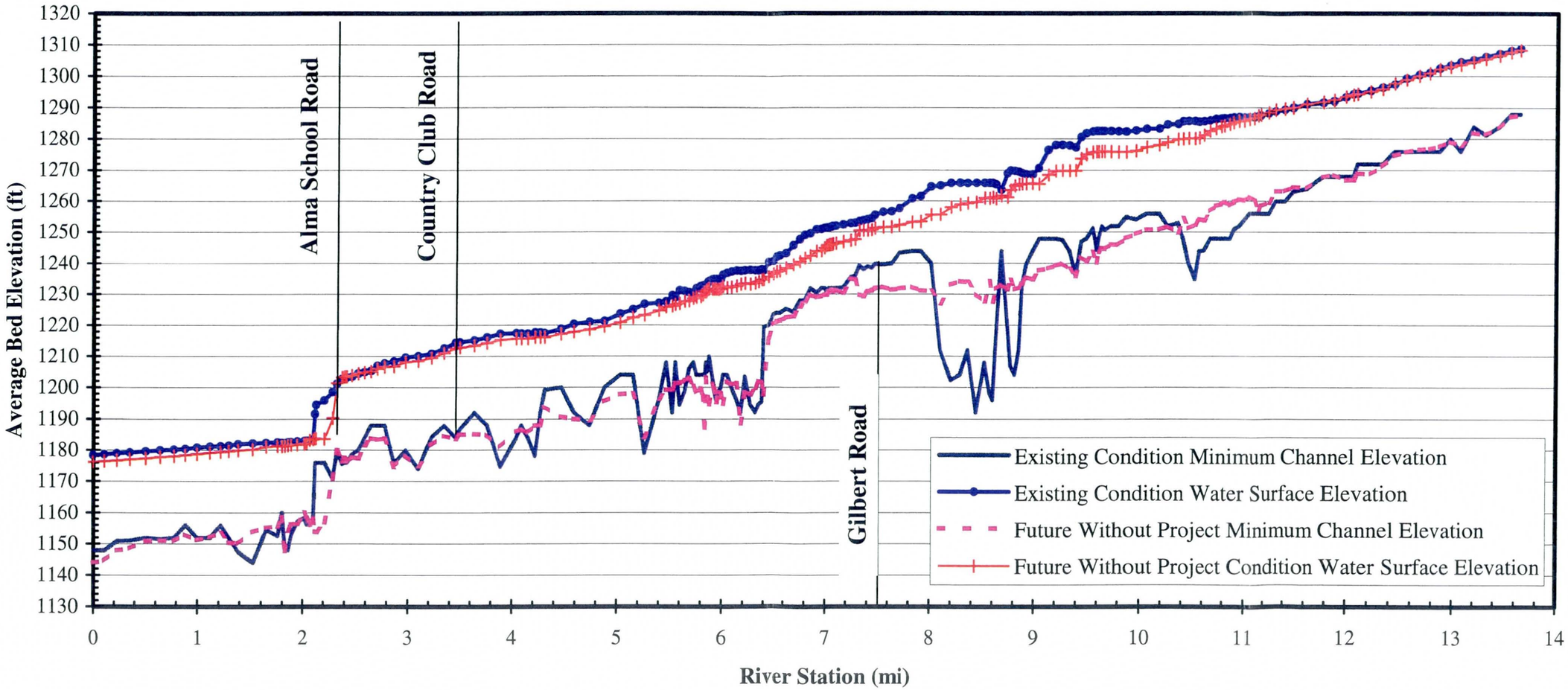

Figure 5-6. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 200-year peak flow.

Va Shly' Ay Akimel
Comparison of Water Surface Elevations for the Existing Condition and Future Without Project Condition
500-Year Flood

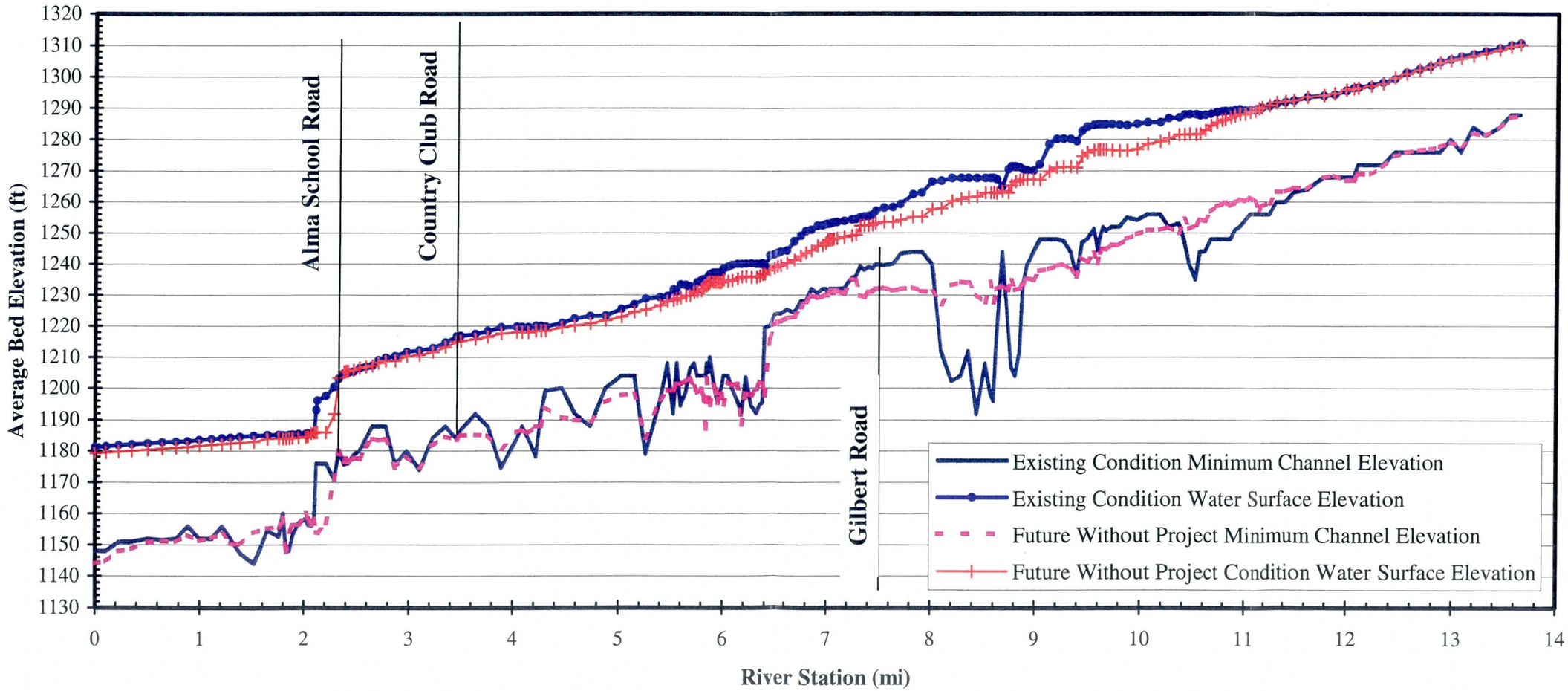

Figure 5-7. Comparison of water surface elevations for the Future Without Project Condition and the Existing Condition along the main stem of the Salt River for the 500-year peak flow.

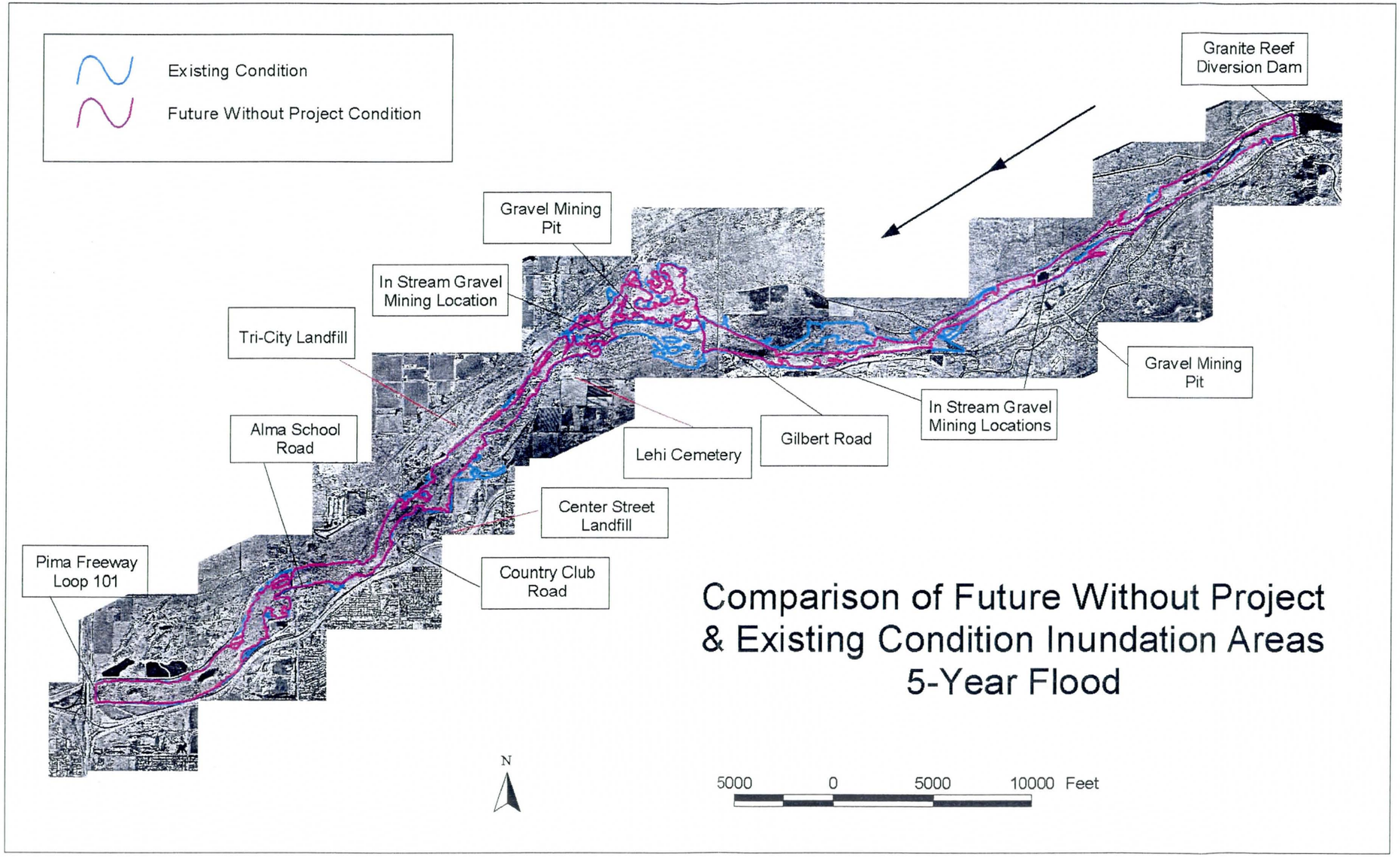

Figure 5-8. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 5-year peak flow.

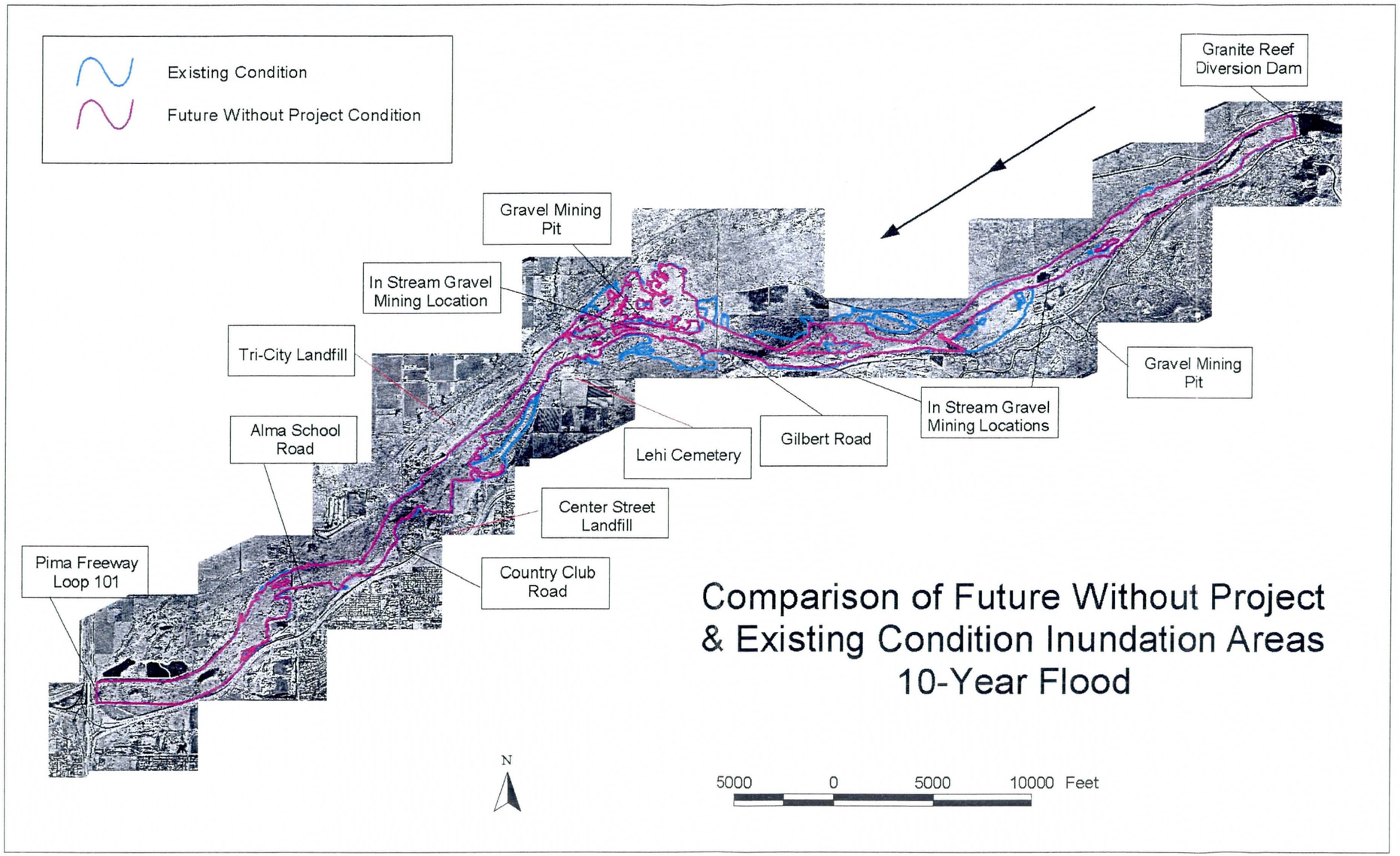

Figure 5-9. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 10-year peak flow.

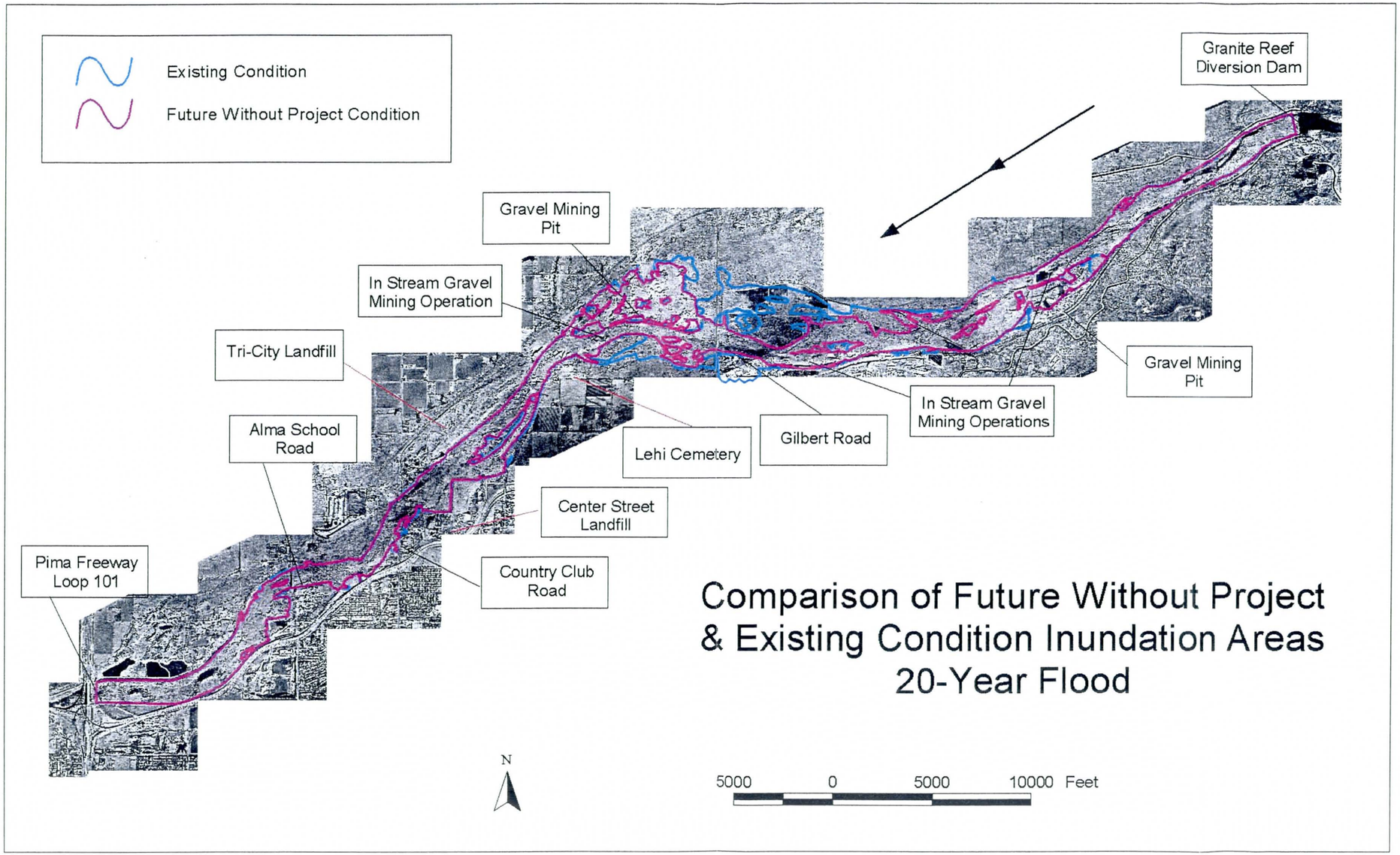

Figure 5-10. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 20-year peak flow.

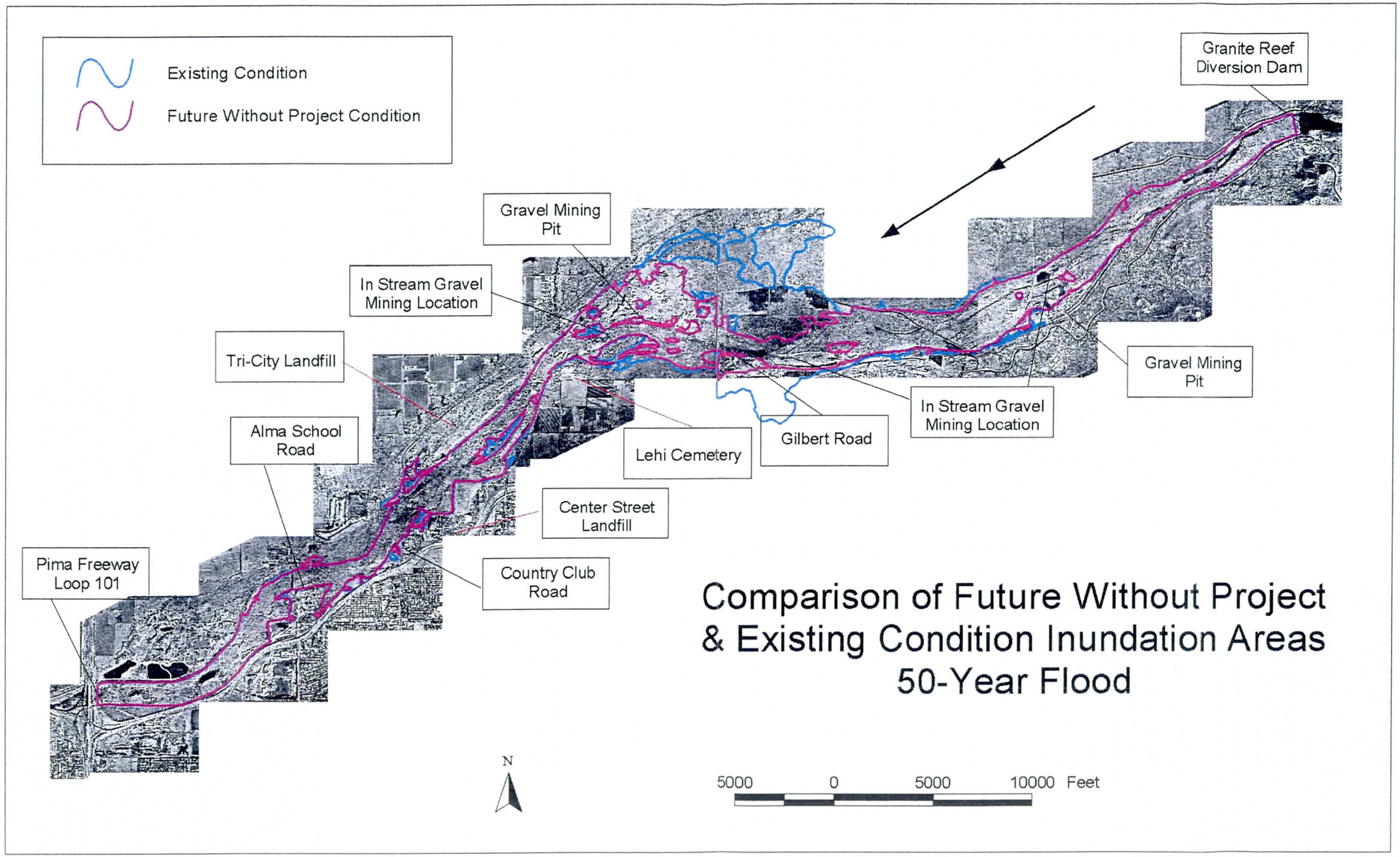

Figure 5-11. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 50-year peak flow.

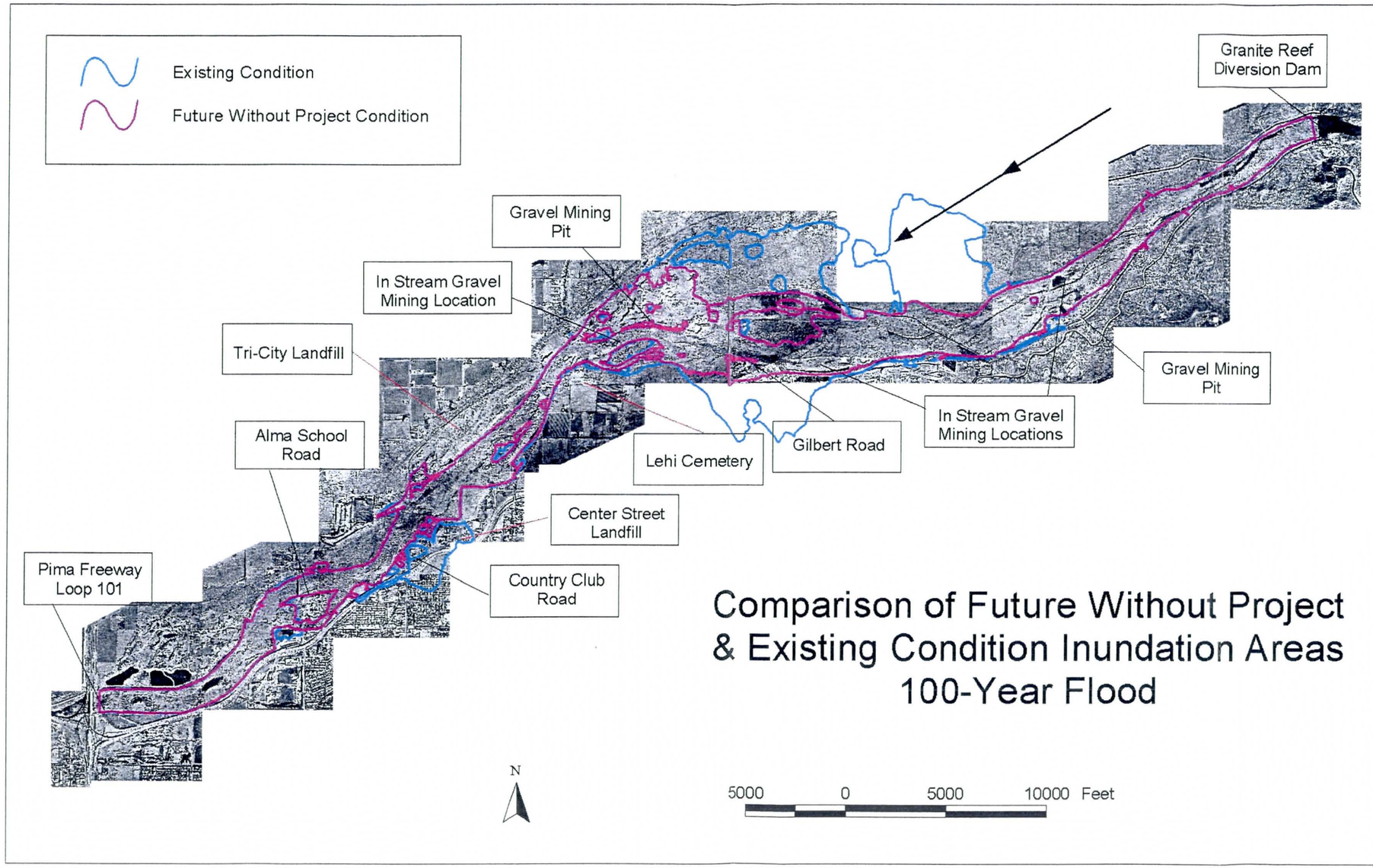

Figure 5-12. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 100-year peak flow.

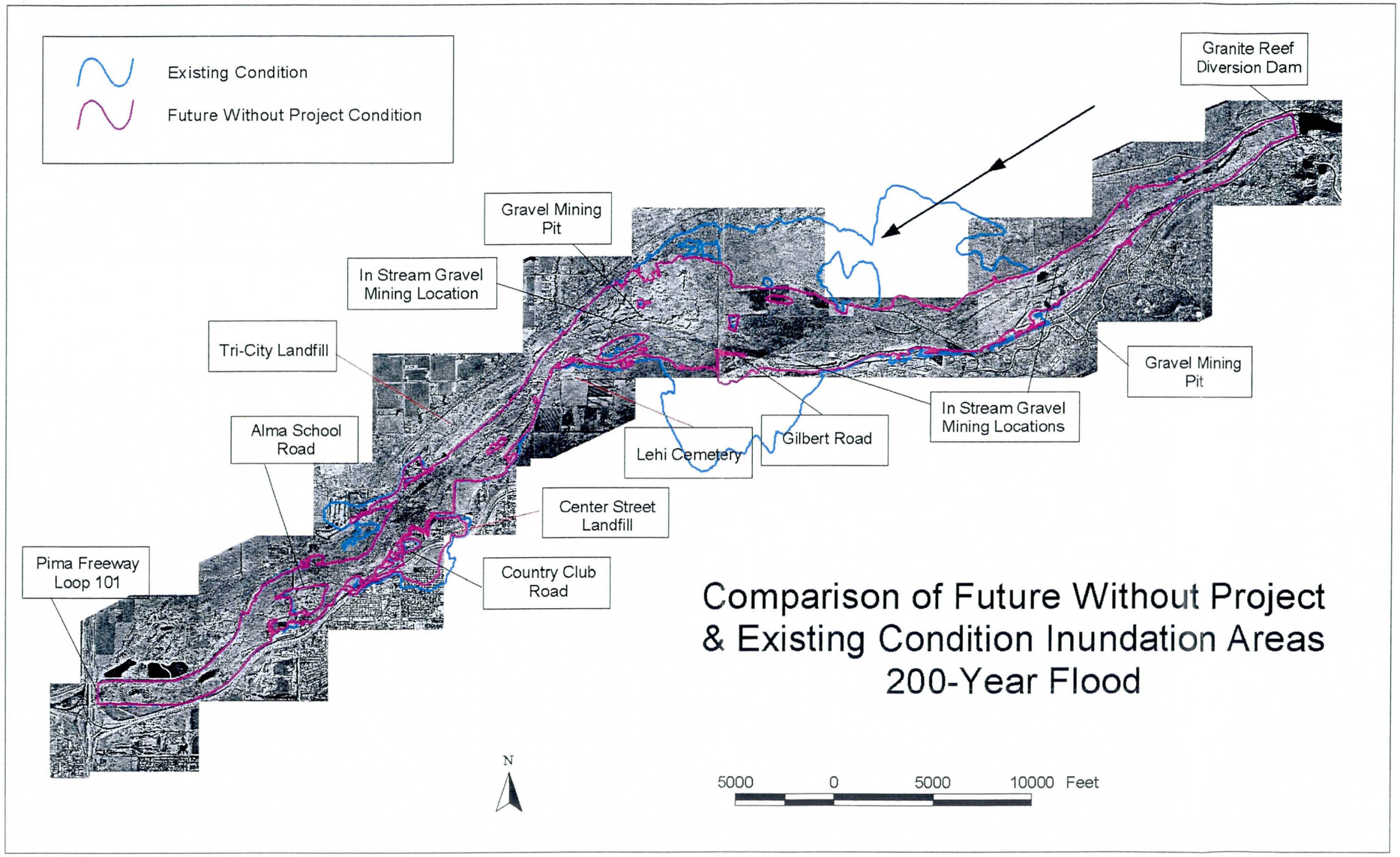

Figure 5-13. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 200-year peak flow.

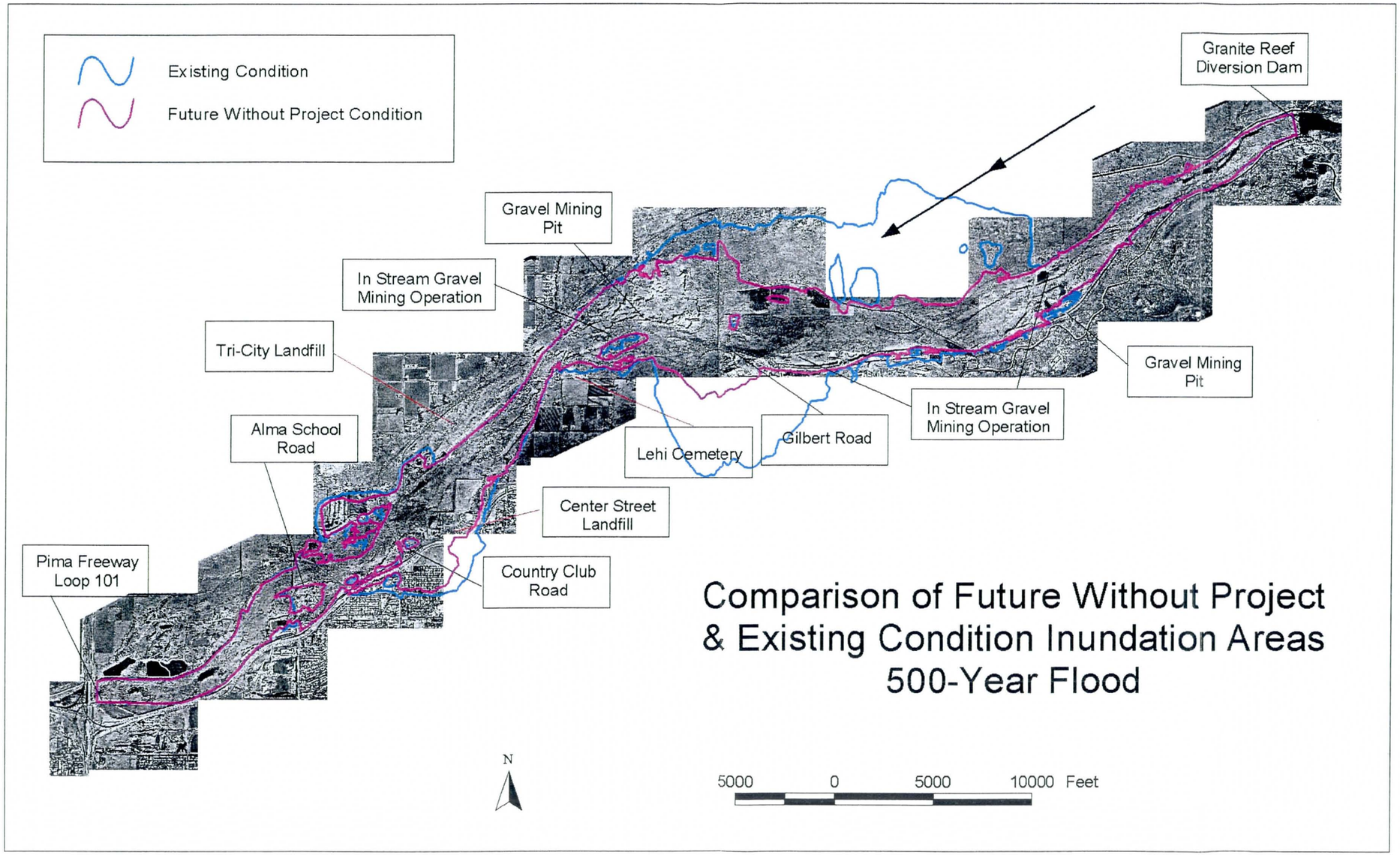

Figure 5-14. Comparison of inundation areas for the Future Without Project Condition and the Existing Condition on the Salt River for the 500-year peak flow.

6. GEOMORPHIC ANALYSIS

A geomorphic analysis was conducted to define historic changes in river morphology and to describe expected short- and long-term future river characteristics. The analysis included both qualitative and quantitative elements. The principal objective of the geomorphic analysis was to evaluate lateral migration potential and aggradation/degradation conditions.

6.1. HISTORICAL BASIN DEVELOPMENT

Euro-American colonization of the Salt River Valley began in 1865 with the establishment of Camp (later Fort) McDowell at a location upstream of the junction of the Verde and Salt Rivers. By 1867, permanent settlement of the Phoenix area had begun. This included development of water diversions and canal systems for irrigation.

Prior to statehood in 1912, stream flow rates along the Salt River were sufficient to support dense riparian vegetation, fish and wildlife, and extensive prehistoric irrigation systems. Stream gage records indicate that the Lower Salt River experienced perennial flow. By the time of statehood, numerous irrigation diversions, impoundments, and canals existed along and upstream of the lower Salt River. Granite Reef Diversion Dam was constructed in 1908 and Roosevelt Dam was completed in 1911. Since completion of upstream the dams and diversions on the Salt and Verde Rivers, the study reach has experienced significant periods of little or no flow.

The Salt River channel before 1912 was substantially different from its current condition. The stream channel at statehood has been described as having a compound form, formed in deep alluvial deposits, with dense riparian vegetation. The relatively unstable low flow channel shifted periodically within a more stable floodplain channel. The streambed at that time was composed of sandy, silty material, which together with perennial flow supported healthy communities of riparian vegetation. The records of early explorers, early maps, and photographs indicate that the low flow river channel had an average depth of two to three feet and a width up to 200 feet during the early period of historic development. Early land surveyors measured an average channel width of nearly 700 feet within the study area.

The pre-1912 channel is believed to have been relatively stable. Reportedly, early settlers were able to clear out ancient Hohokam culture canals for modern use. The age of the canals and their proximity to the river channel implies that associated channel conditions persisted over several centuries. It has been concluded (CH2M Hill et al, 1996) that the pre-1912 channel characteristics most likely represent long-term equilibrium conditions for the river channel.

6.2. HISTORIC FLOOD EVENTS

A graphical summary of historic flood events over the period 1889 through 2001 is shown in Figure 4-4. A tabulation of the ten largest flood peaks during the period of record is provided

in Table 6-1. As described previously and illustrated in the figure, upstream dams have reduced the frequency of flood peaks in the study area.

Table 6-1. Summary of the ten largest peak discharges in the period 1889 to 2001.

Rank	Peak Discharge (cfs)	Date
1	198,513	1891
2	160,451	1993
3	129,933	1980
4	110,716	1920
5	108,978	1916
6	91,101	1941
7	82,183	1890
8	72,901	1978
9	65,197	1927
10	63,535	1905

6.3. BED MATERIAL SIZE CHARACTERISTICS

Data on bed material size characteristics within the study reach were examined to develop an understanding of the sources, sinks, and variability of sediment through the study area. Size data for surface (zero to two-foot depth) and subsurface (two- to six-foot depth) samples taken throughout the study area (see Section 4.3.1) were collected and evaluated. A comparison of the surface and subsurface bed material sizes finer than 85 percent, 50 percent, and 15 percent by weight for each sample taken are shown in Figure 6-1. The bed material in the study area is predominantly gravel (2 to 64 mm). The coarsest bed material sediments are primarily cobble-sized material (64 to 256 mm) and the finest bed material is sand-sized (0.0625 to 2 mm). Overall, the median sediment sizes are found in the vicinity of the widest historic channel sections (River Stations 7.5 to 8.0).

Generally, the surface samples of the bed material are slightly coarser than subsurface samples. This reflects the armoring of the surface material caused by the differential in transport rates between various sediment sizes and the resultant winnowing of fine sediment sizes from the surface. However, overall surface and subsurface sediment size characteristics are very similar.

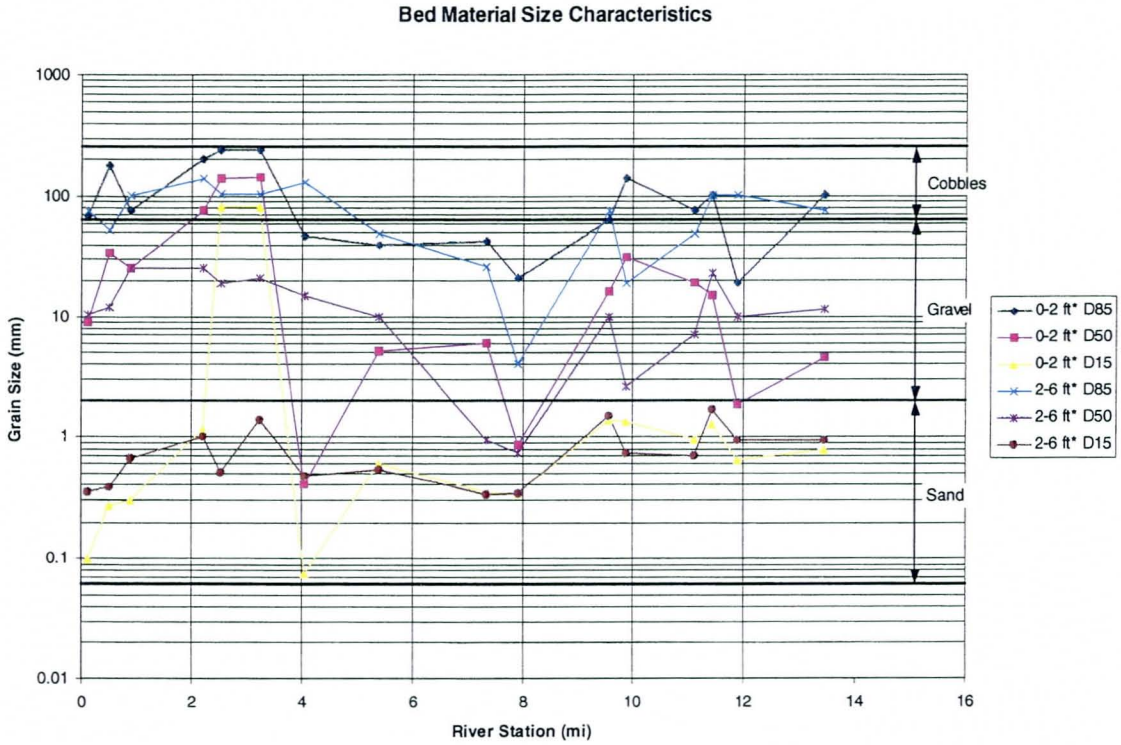

Figure 6-1. Study reach bed material size characteristics.

6.4. AERIAL PHOTOGRAPHY EVALUATION

Historic aerial photography of the study area was evaluated to identify significant changes in the location and form of the river channel. Aerial photographs of the study area are available for the years 1935, 1957, 1979, 1992, and 2002. The 1992 year photographs were found to have very poor resolution of the channel conditions and are therefore not used to define channel bank locations. The remaining four sets of aerial photographs represent channel conditions at intervals of about 22 years over a total period of 67 years.

In general, the available record of aerial photographs represents a period of significant change along the Salt River. At the beginning of the period of record, the Salt River was very broad, flood regulation was limited, and little human encroachment on the river corridor existed. By the end of the period of the record, a wide variety of extensive human influences is seen to be acting on the channel. These influences include significant upstream water regulation and flow diversion, widespread lateral encroachment on the river by human development, several road crossings, and extensive gravel mining. A summary of the influences observed from the comparison of historic aerial photographs is presented in Table 6-2.

Table 6-2. Summary of observations from historical aerial photography comparison.

Year	Location		Description
	From (RM)	To (RM)	
1935			Water supply canal located in left (south) overbank. Diversion (not shown in available photos) assumed to be Granite Reef Dam.
			Areas adjacent to channel and islands contain significant vegetation.
			Development near channel is primarily agricultural fields.
			Crossings of channel consist of unimproved roads.
			No significant gravel mining is evident near the channel.
	9.2	11.6	Possible levee located along left (south) bank.
1957			Water supply canals located in both left and right overbank. Diversion point for canals is Granite Reef Dam.
			Vegetation along channel and on islands is less prominent, especially in upstream half of study reach.
			Urban development in overbank is evident but the region is still primarily agricultural.
			Road crossings of channel are still unimproved.
			Gravel mining operations begin to develop along the river.
	2.5		Gravel mining is observed on left bank.
	3.2		Gravel mining is observed on both the left and right banks.
	7.5		Small gravel mining operation observed on left bank and in main channel.
	9.0	11.6	Possible levee located along the left (south) bank.
1979			Vegetation along channel is very sparse throughout the reach.
			Gravel mining operations along the river continue to develop.
			Water supply canals still exist in left and right overbanks.
			Extensive urban development is now seen in overbank areas.
			Road crossings of river are now being developed as bridges.
	1.3		Gravel pit observed along left bank.
	1.8		Gravel pit observed along right bank.
	2.2	2.6	Gravel mining operation expands from river mile 2.2 and 2.6.
	3.2		Continued gravel mining at river mile 3.2.
	4.0		Gravel mining observed along right bank.
	4.9		Gravel mining observed along right bank.
	7.5		Continued gravel mining along the left bank.
1992	0		Pima Freeway crossing constructed
	0	2.7	Levee along left (south) bank adjacent to highway
	1.3	2.5	Gravel mining operation along right and left banks.
	3.2		Continued gravel mining at river mile 3.2.
	4.0		Continued gravel mining along right bank.

	4.0	4.5	Levee along left (south) bank.
	7.0		Gravel mining observed along right bank.
	7.5		Continued gravel mining along the left bank.
	9.0		Gravel mining observed along left bank.
	9.65		Canal built across channel between 1979 and 1992.
2002	0	2.2	Levee on left (south) bank.
	0	2.3	Levee on right (north) bank.
	0.5	2.5	Gravel mining operation along right and left banks.
	2.2	3.5	Potential channel incision.
	3.4		Gravel mining along left bank.
	4.0		Continued gravel mining along right bank.
	4.0	4.5	Levee along left (south) bank.
	4.1	6.1	Levee along right (north) bank. Discontinuous levee continues along channel side of gravel pit.
	5.2	7.3	Gravel mining in channel and along right bank.
	8.3	11.5	Levee along left (south) bank. The levee is associated with a gravel mining operation and appears to be discontinuous in certain locations.
	9.0	9.6	Levee along right (north) bank.
	10.0	11.4	Levee along right (north) bank.
	7.5	11.1	Gravel mining in channel and along left bank.

6.4.1. Vegetation

The riparian vegetation along the Salt River through the study area is sparse. The apparent density of vegetation is observed to decrease through time. In the 1935 aerial photographs, riparian vegetation was widespread and very apparent on islands and floodplain areas next to the channel. A diminished by still significant amount of riparian vegetation was also noted in the 1957 photographs. After the high flow in 1978, which was the eighth highest recorded peak discharge, large areas of vegetation were significantly thinned or removed in the 1979 aerial photos as compared to the 1957 photos. In the 2002 photographs, very little vegetation exists along the floodplain or on islands within the channel and extensive human development in areas along the channel is apparent.

6.4.2. Lateral Migration

The historical bank locations were delineated on each set of aerial photographs. The delineation of bank locations was complicated by the ephemeral conditions of flow, sparse riparian vegetation, and braided channel form. The historically broad channel areas, numerous secondary channels, and significant human influence on the channel also influenced the identification of bank lines along the river. It is also noted that the delineation

of the channel bank locations is also fundamentally affected by the relative quality of the available sets of photography.

For comparison, the identified historical bank locations were superimposed on the 2002 aerial photography as shown in Figure 6-2. The historical aerial photos and corresponding bank lines from 1935, 1957 to 1958, and 1979 are shown in Figure 6-3 through Figure 6-5, respectively. Larger scale maps are included in Appendix 17. In general, the channel in 1935 was not significantly influenced by human activities other than flow diversion. The channel in 1935 has a braided planform. It was very broad, had numerous secondary channels, large islands, and significant riparian vegetation. Similarly, in 1957, significant human encroachment on the channel had not yet occurred. The 1957 channel was also not yet significantly influenced by human encroachment. In general, the bank locations of the 1935 and 1957 channels are very similar. Differences are attributed to vegetation changes and the continuously changing nature of braided channels. The 1979 channel bank locations are also similar to those observed in 1935 and 1957. Although changes in the location of the banks occurred between 1957 and 1979, the general location of the banks are similar to those observed in either 1957 or 1935. By 2002 significant encroachment of the channel had occurred. Extensive gravel mining was observed along significant portions of the river and significant portions of the river had been channelized or leveed.

No overall trend in the direction or rate of channel migration is apparent from the evaluation of historic aerial photographs. Consistent with a braided channel system the bank locations of the channel were found to vary significantly but within the general range indicated by the earliest recorded channel conditions (year 1935). Generally, in 2002 the variability in channel bank location is being constrained by several human influences. The construction of levees, road crossings, canals, and gravel mining operations has significantly reduced the potential for significant channel migration.

The extensive levee systems along the study reach pose physical barriers to the migration potential of the river. Significant migration of the river in the vicinity of existing levees would only be expected if the levees were to fail during a flood. The potential for levee overtopping and/or failure during any flood is a function of the involved hydraulic conditions and the specific design, construction, and operation/maintenance characteristics of the levee. From a hydrologic probability basis, it can be expected that the design criteria of all levees along the river will be exceeded at some point in the future. However, the risk of levee failure and associated channel migration may only be significant for extreme flood events. In general, it would be expected that levees providing flood protection to permanent development are designed and maintained to withstand frequently occurring floods and damaged levees would be repaired. Levees built along the river for other purposes may be designed to lesser standards and have a higher risk of failure and potential river migration. From a practical standpoint, existing flood control levees represent boundaries to the channel migration corridor for the river that will be maintained over the foreseeable future.

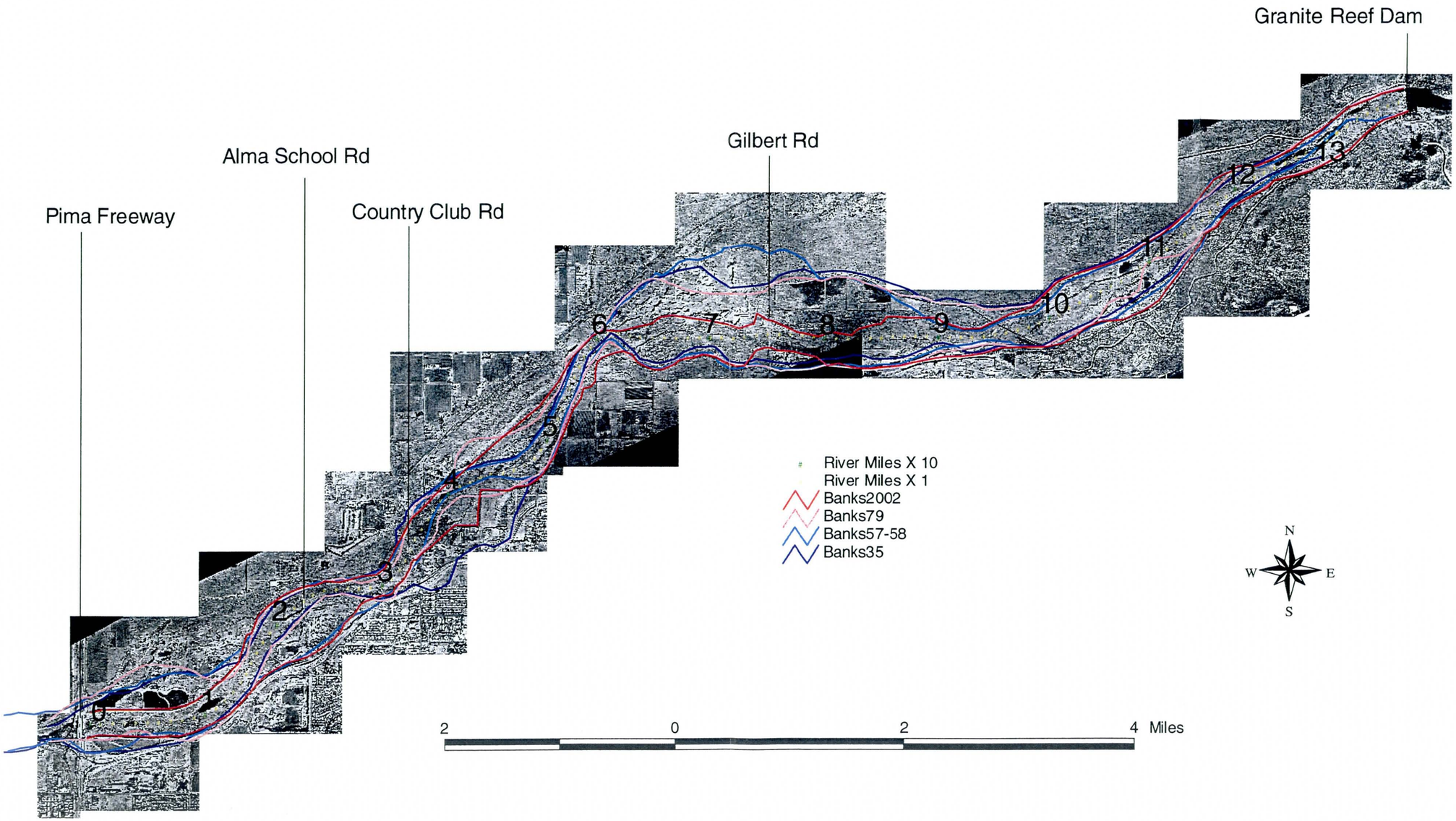

Figure 6-2. Historic channel bank locations superimposed on 2002 imagery.

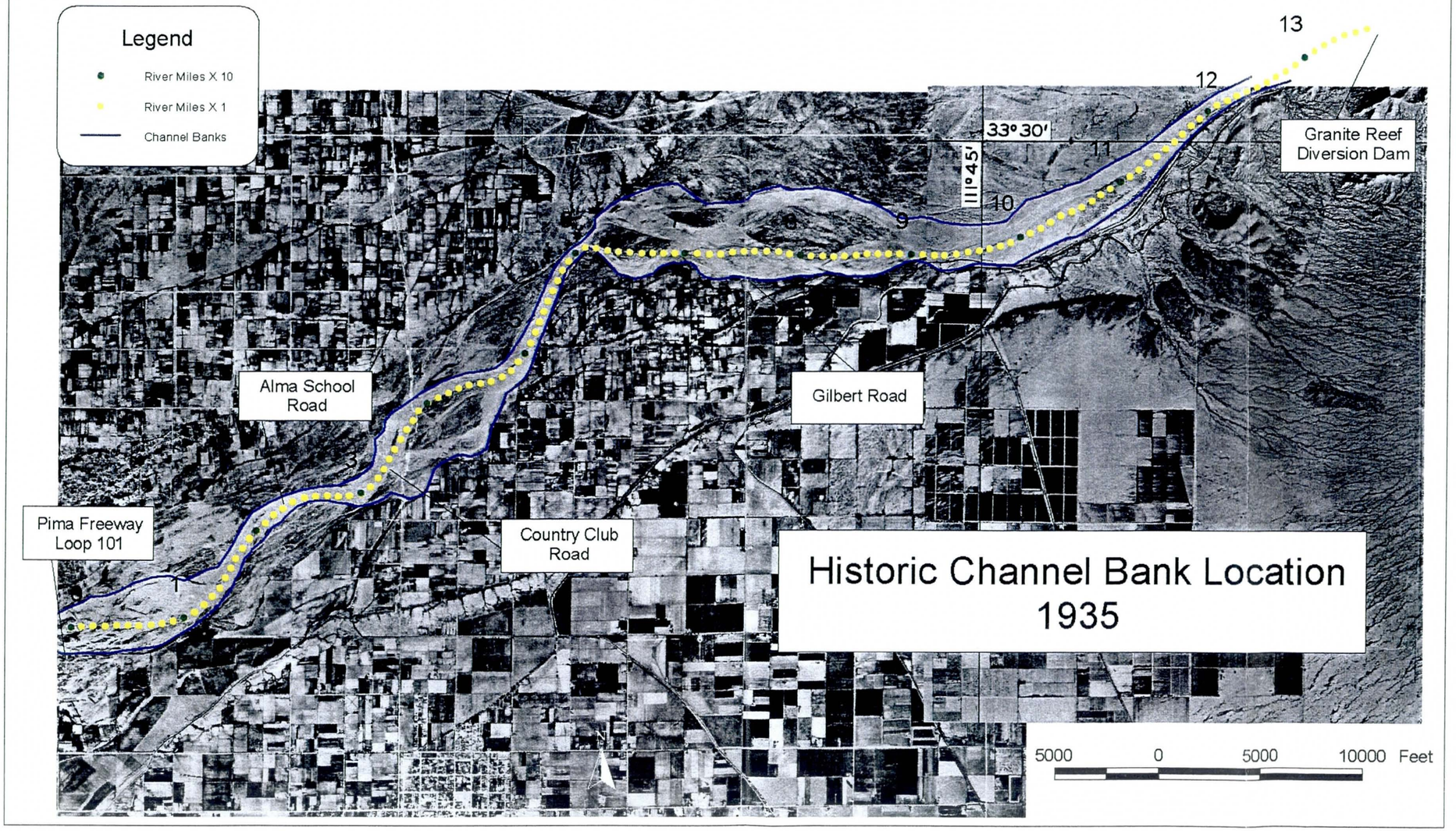

Figure 6-3. Aerial photographs and channel bank locations from 1935.

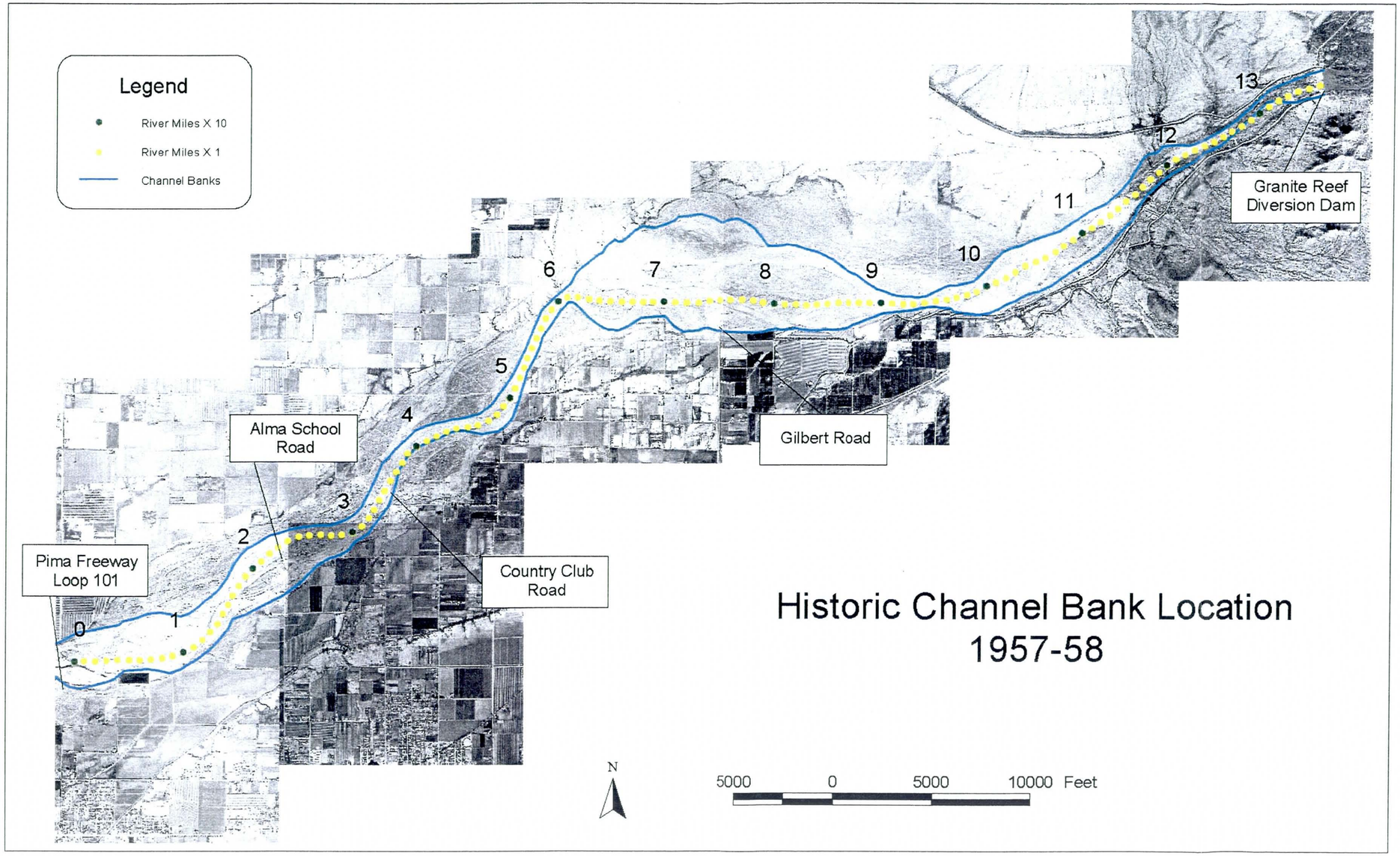

Figure 6-4. Aerial photographs and channel bank locations from 1957 and 1958.

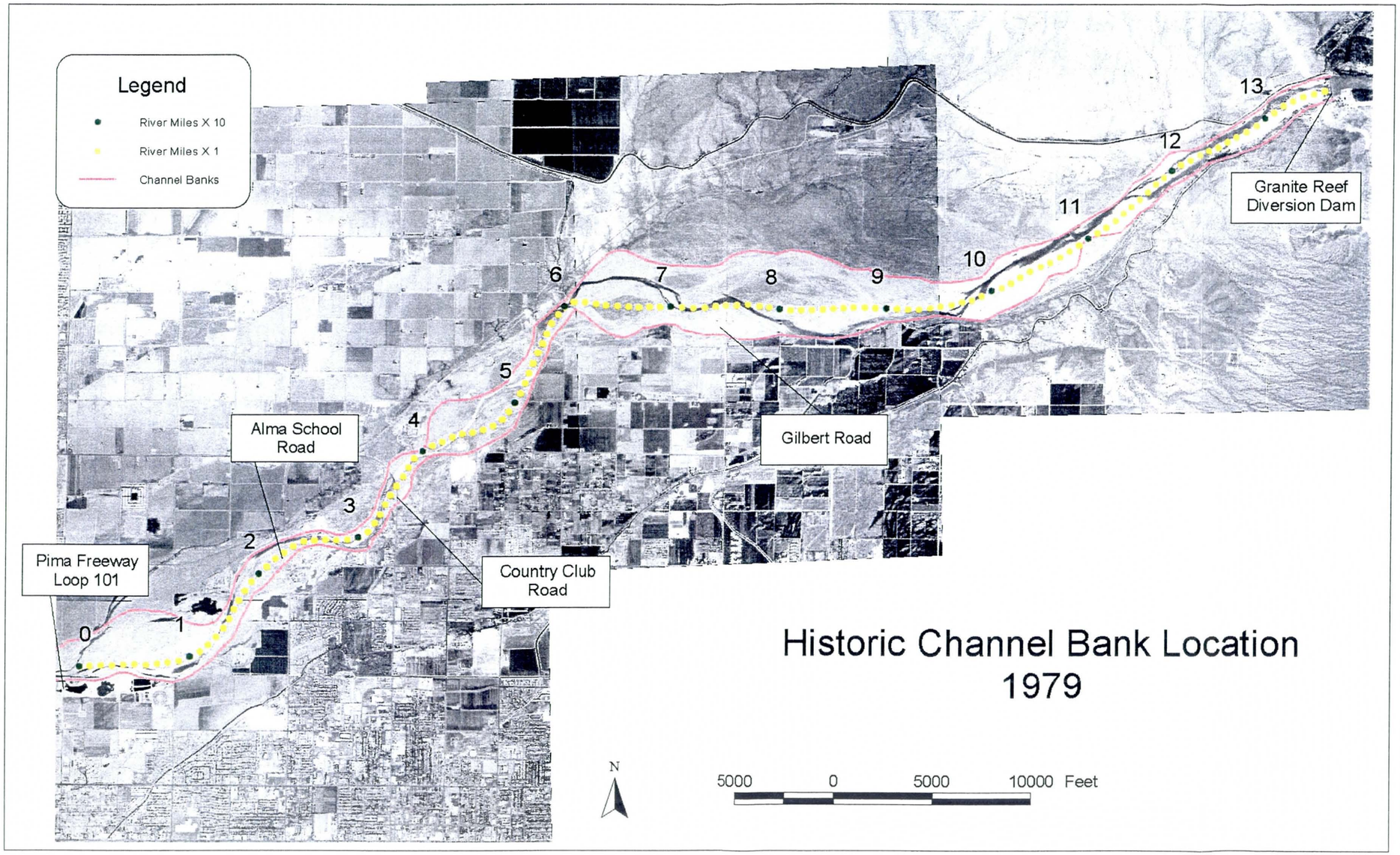

Figure 6-5. Aerial photographs and channel bank locations from 1979.

6.4.3. Encroachment

The study area has been significantly affected by human encroachment. A large extent of the channel has been constrained by the construction of levees with the study area. Within the approximate 13.7-mile long study reach, about 12.2 miles of levee exist along the right and left banks of the stream. This represents about 45 percent of the total bank length in the study reach.

A number of crossings of the Salt River have also been constructed with the study area. A summary of the significant crossing structures is shown in Table 6-3. Significant river training or control structures are associated with each crossing. Accordingly, the crossings constrict the potential width of the channel.

Table 6-3. River crossings within the study area.

Location (River Mile)	Description
0	Pima Freeway
2.3	Alma School Road (includes a drop structure)
3.5	Country Club Road
7.5	Gilbert Road
9.65	Canal
13.7	Granite Reef Dam

6.4.4. Gravel Mining

Extensive gravel mining activities have occurred throughout much of the Salt River study area. As itemized in Table 6-1, early gravel mining in the study reach was first observed in 1957 and has grown tremendously through the year 2002. Gravel mining has significantly affected both the planform and profile of the Salt River channel. The extraction of sediment from the channel has altered the sediment budget of the river system.

In general, the excavation of pits both within and directly adjacent to the river channel may result in impacts to geomorphic characteristics, sediment transport, hydraulics, and hydrology. The impacts may occur upstream, locally, and downstream of the gravel mining location. The specific nature of the impacts will be dependent on the location and conditions of the excavation and the hydrologic sequence under which the river accesses the mined area.

6.5. CHANNEL RESPONSE TO FLOOD EVENTS

As shown in Table 6-1, the period represented by the available aerial photography (1935 to 2002) includes four of the ten largest recorded flood peaks. It includes flood peaks in 1993 (2nd largest), 1980 (3rd largest), 1941 (6th largest), and 1978 (8th largest). Other than the 1979 set of photos, the available photography does not well represent the short-term response of the channel to major floods. The other years of aerial photography all occurred six or more years after a significant flood event.

As seen in the 1979, photos the high flow event in 1978 removed substantial amounts of vegetation in and around the channel. Typical of a braided river planform, the extent of the channel in the 1979 photos is somewhat different than that observed in 1957 but still within the general channel migration zone observed in other historic time frames.

The affect of the 1978 flood event on specific gravel mining operations is not apparent from the photographs. However, it would be expected that significant changes to sediment transport conditions, local channel slopes and aggradation/degradation patterns would occur where the river enters deep gravel mining pits.

6.6. CHANNEL CHARACTERISTICS

Historic aerial photography of the study area was evaluated to identify significant changes in the location and form of the river channel.

6.6.1. Channel Planform and Profile

Visual analysis of the river based on aerial photography from 1935, 1957-58, 1979, 1992, and 2002 indicates that the channel has a braided planform. Further analysis of the channel planform based on the channel slope as defined from 2002 HEC-RAS data and the dominant discharge (assumed to be 21,000 cfs, the 5-year flow event from 2002 HEC-RAS data) also indicates a braided planform based on the Lane (1957) relationship. Slopes were calculated using the channel profile shown in Figure 6-6. The historic profile data is from 1988 mapping. The historic profile is of the main channel and ignores the topography of the gravel pits. The historic profile is consistent with the 2002 HEC-RAS profile.

Of particular note is the influence of gravel mining on the erosion and planform evolution of the channel. Gravel pits in the channel effectively act as a reach of zero slope and serve to trap sediment. By lowering the local base level for channel reaches upstream of gravel pits, the channel slope upstream of gravel pits is increased and headcutting may occur as evident by Figure 6-6. Downstream of the gravel pits, sediment supply to the channel is reduced due to the trapping of sediments within the pits. In order to meet sediment transport capacity, the downstream channel may erode its bed to reduce its slope and corresponding sediment transport capacity. According to Lane (1957), as the slope is reduced the channel would transition form a braided to intermediate planform condition.

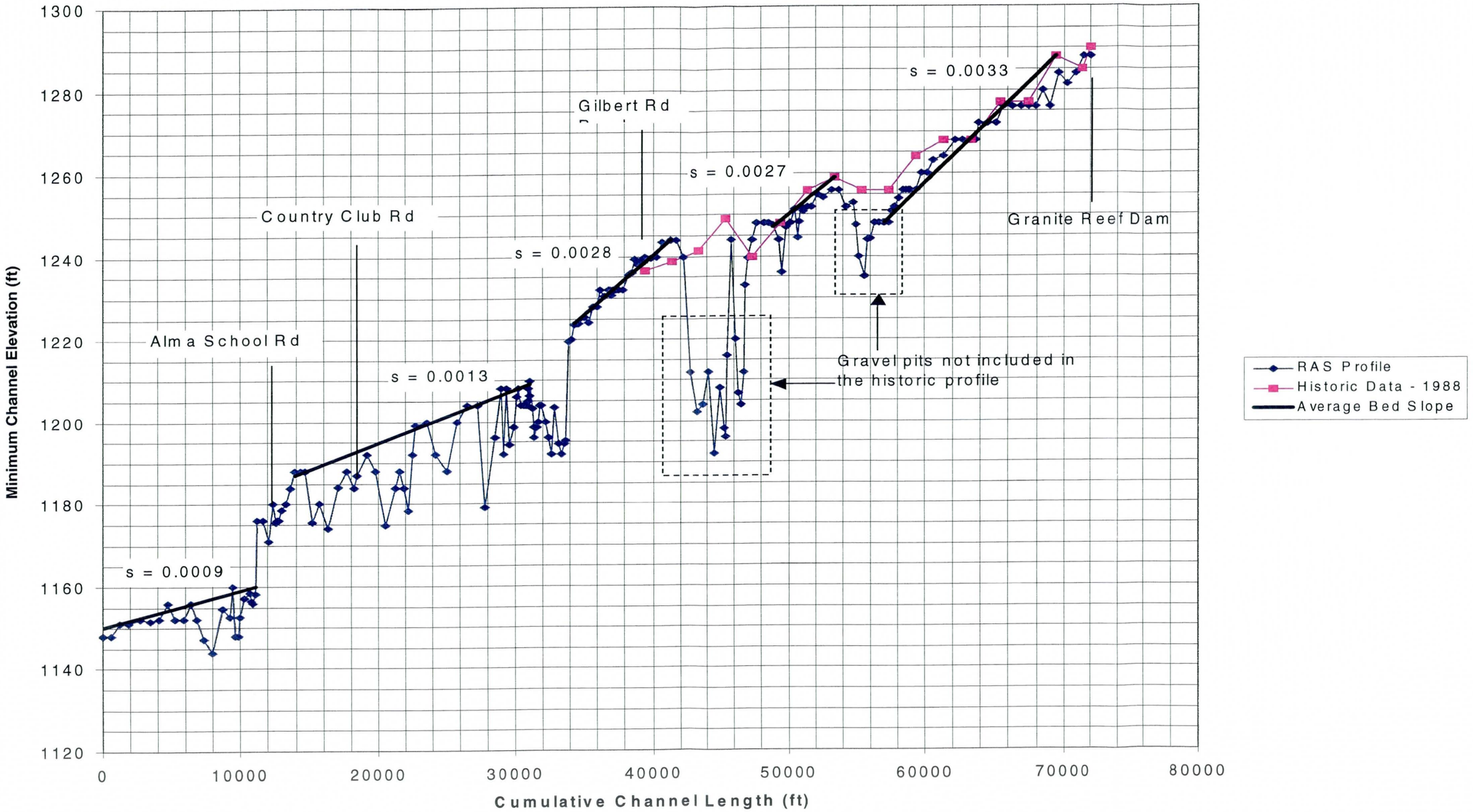

Figure 6-6. Salt River Profile.

6.6.2. Width/Depth Ratio

Width/depth ratios along the study reach are shown in Figure 6-7 and were calculated using the 2002 HEC-RAS model results for 5-, 10-, and 100-year discharges. For each flow event, the width/depth ratio is large, as would be expected for a braided channel. The lowest width/depth ratios correspond to areas of extensive development, typically gravel mining, in and around the channel. As flow increases, the width/depth ratio generally decreases. At higher flows, the channel fills up enough to have a distinct flow path. As the channel becomes more and more constricted due to increased development, the width/depth ratio will decrease, leading to change in channel morphology.

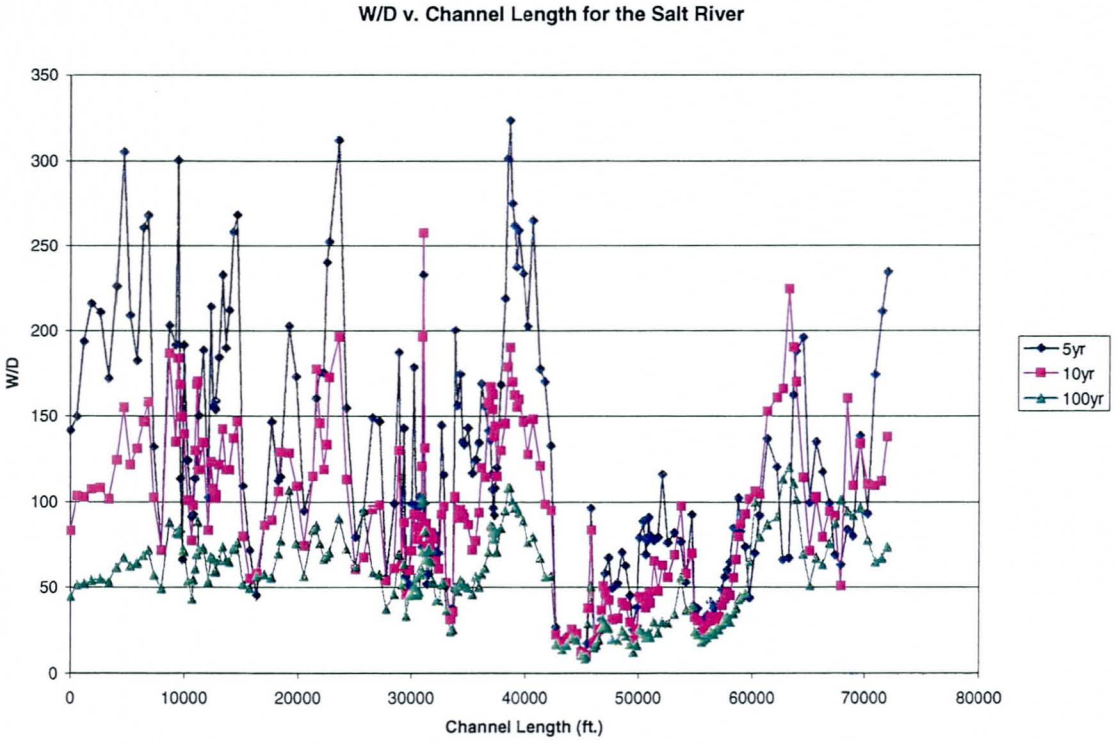

Figure 6-7. Width-depth ratio for 5-, 10-, and 100-year floods.

6.7. Sediment Aggradation/Degradation Potential

Short-term channel response to current gravel mining activities in the channel may result in degradation upstream and downstream of the gravel pits and aggradation in the gravel pits. Upstream of the gravel pits, headcutting occurs due to the reduction of the local base level.

Aggradation occurs at the gravel pits because the pits act as sediment traps. Degradation occurs downstream of the gravel pits due to the reduction of sediment transport through the gravel pits.

Long-term channel responses are entirely dependent on future development in and around the channel. With no additional gravel mining, the channel will reach a state of equilibrium only after all the gravel pits are accessed through the natural migration of the river system. Aggradation and degradation will continue to occur as long as gravel mining operations exist in the vicinity of the channel.

As encroachment further confines the channel, the degradation potential increases. By reducing the width/depth ratio, velocity in the channel increases leading to a greater potential for sediment transport. If the banks of the channel are confined and not allowed to erode and migrate, degradation of the bed will occur.

6.8. SUMMARY

In the previous sections, an evaluation of the geomorphic characteristics of the Salt River study area was presented. This included an evaluation of flow records, bed material size characteristics, channel geometry, and historic aerial photography. The characteristics of historic channel planform and profile conditions were evaluated.

The record of historic conditions indicates progressive and increasing human influence on the channel system. Specifically, encroachment and gravel mining are affecting the study area. Impacts have occurred to both the planform and profile of the river. In the short term, gravel mining in the river will cause degradation upstream and downstream of the gravel pits and aggradation in the gravel pits. Long-term channel responses are entirely dependent on future development in and around the channel. With no additional gravel mining, the channel will reach a state of equilibrium only after all the gravel pits are accessed through the natural migration of the river system or restoration activities have been conducted.

7. REFERENCES

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APPENDIX 1

FIELD PHOTOGRAPHS AND LOG

FIELD PHOTOGRAPHS

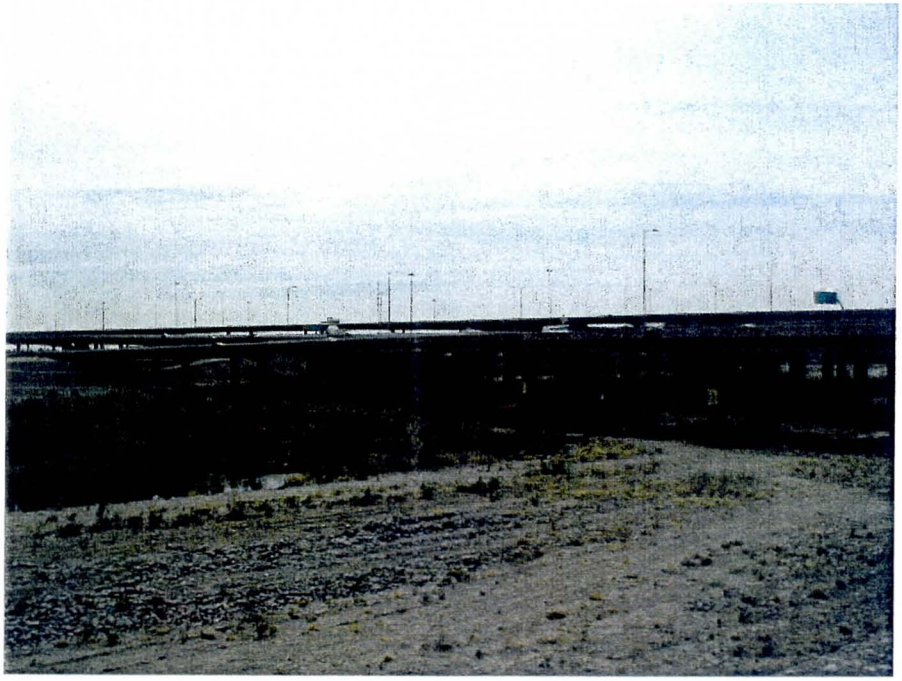


Photo 1. Salt River, north bank, looking downstream to the Pima Freeway (Loop 101), which is the downstream limit of the project (03/06/02).

Photo 2. Salt River, north bank at the Pima Freeway (Loop 101), looking upstream (03/06/02).

Photo 3. Salt River, looking upstream from the north bank near the Pima Freeway (Loop 101, 03/27/02).

Photo 4. Salt River, north bank near the Pima Freeway (Loop 101), looking in channel at Sample Site 1, which is on the inside of the "V" where two roads intersect (03/27/02).

Photo 5. Salt River at Sample Site 2, looking downstream (03/27/02).

Photo 6. Gravel mining pit in the Salt River, looking from north bank to the south bank (03/27/02).

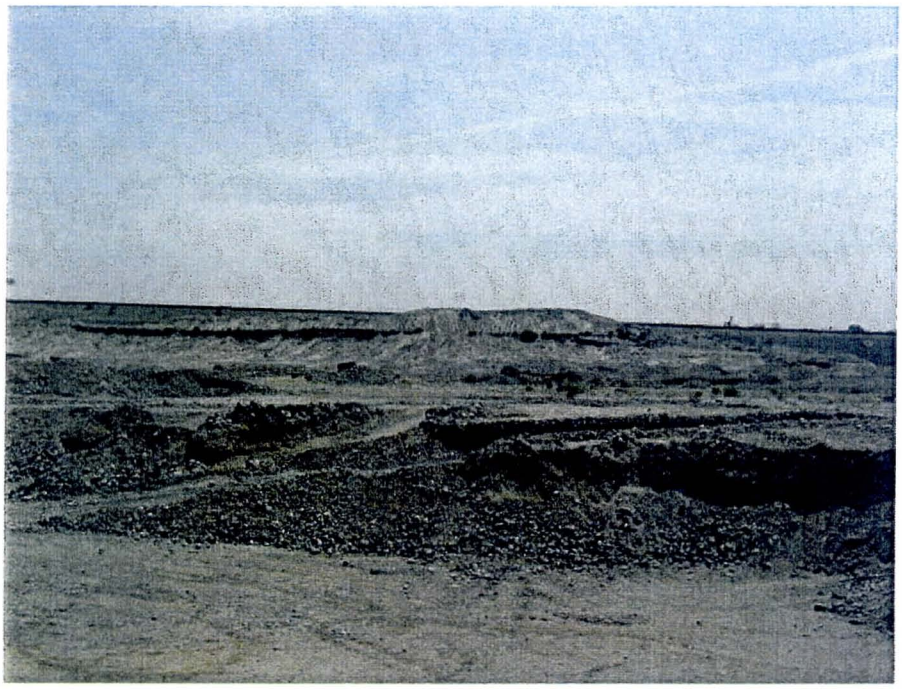


Photo 7. Gravel mining in the Salt River, looking north towards a berm (03/27/02). This is an ineffective flow area.

Photo 8. In Salt River looking upstream at berm, which causes ineffective flow to the south (right) (03/27/02).

Photo 9. In Salt River at Sample Site 4, looking upstream to Alma School Road Bridge (03/27/02).

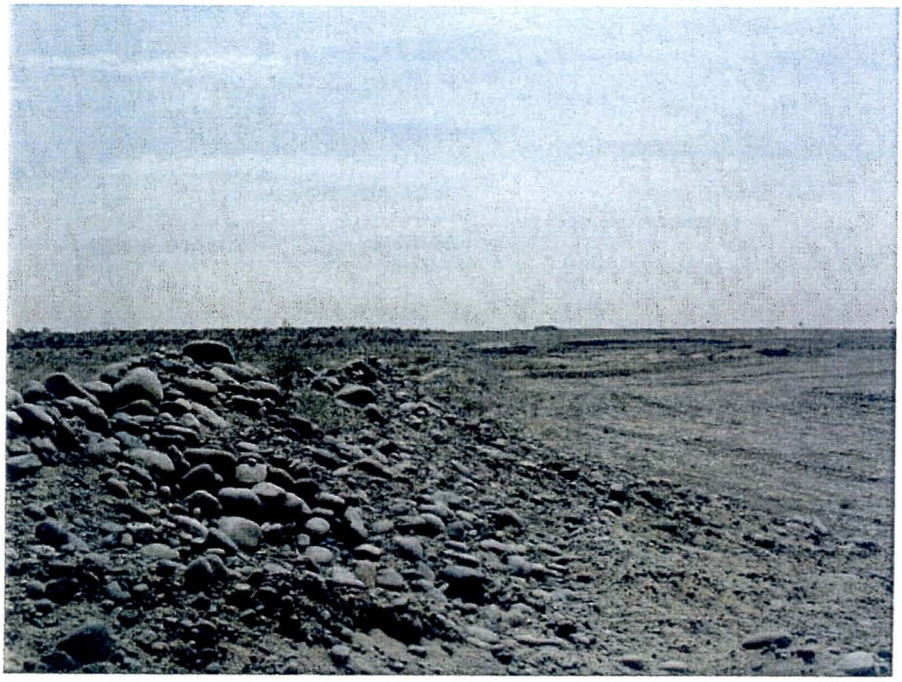


Photo 10. Looking south at berm between gravel mining activity (downstream, right) and Sample Site 4 (upstream, left) (03/27/02).

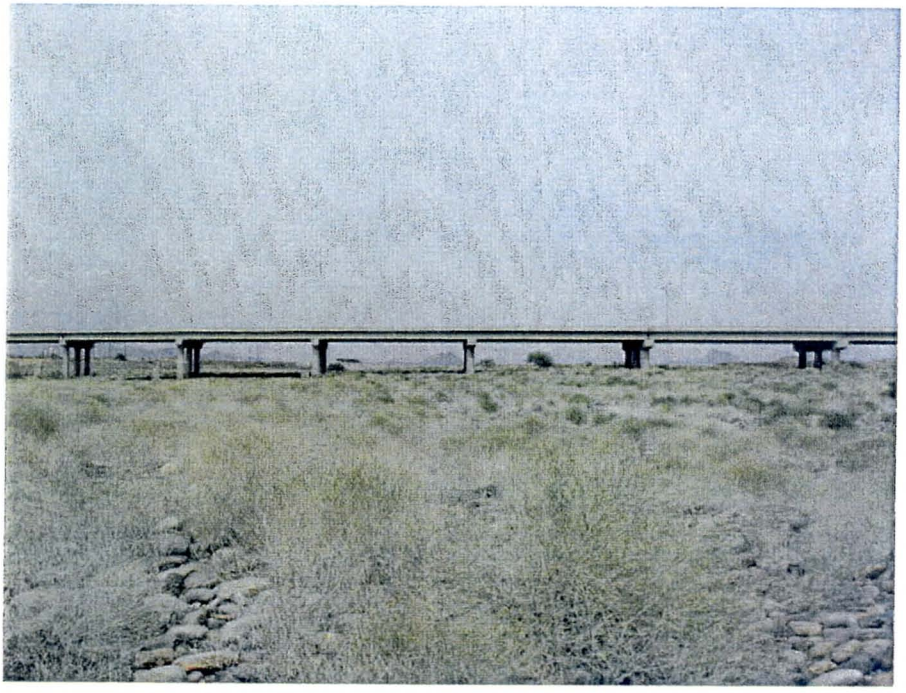


Photo 11. In Salt River at Sample Site 6, looking upstream to Country Club Road Bridge (03/27/02).

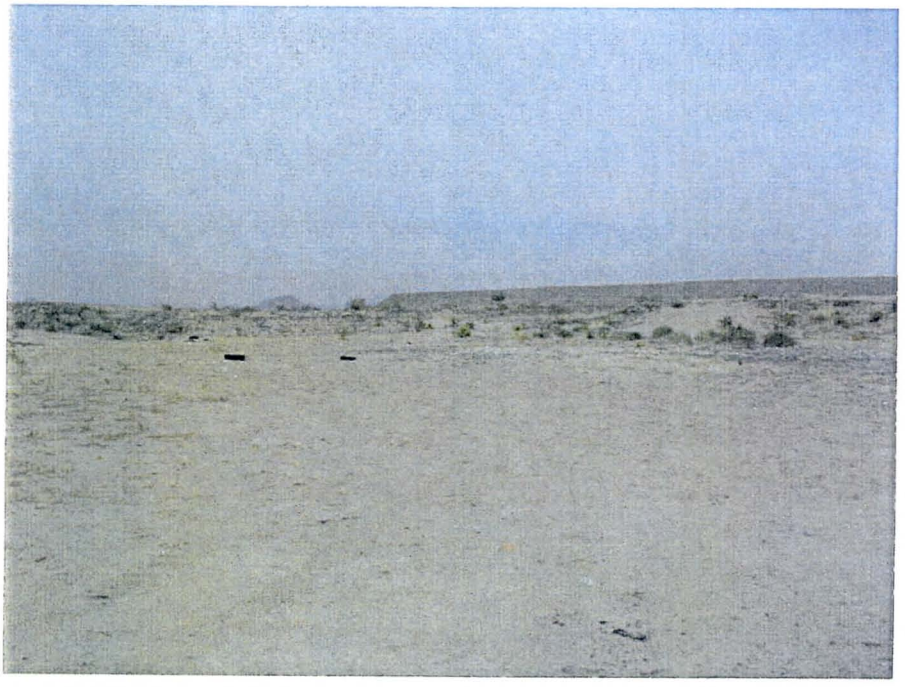


Photo 12. In Salt River at Sample Site 7 near Center Street Landfill, looking upstream near an ineffective flow area (03/27/02).

Photo 13. In Salt River looking upstream at Sample Site 8, which will be taken from the terrace where Selena is standing (03/27/02). Significant gravel mining is occurring in this area.

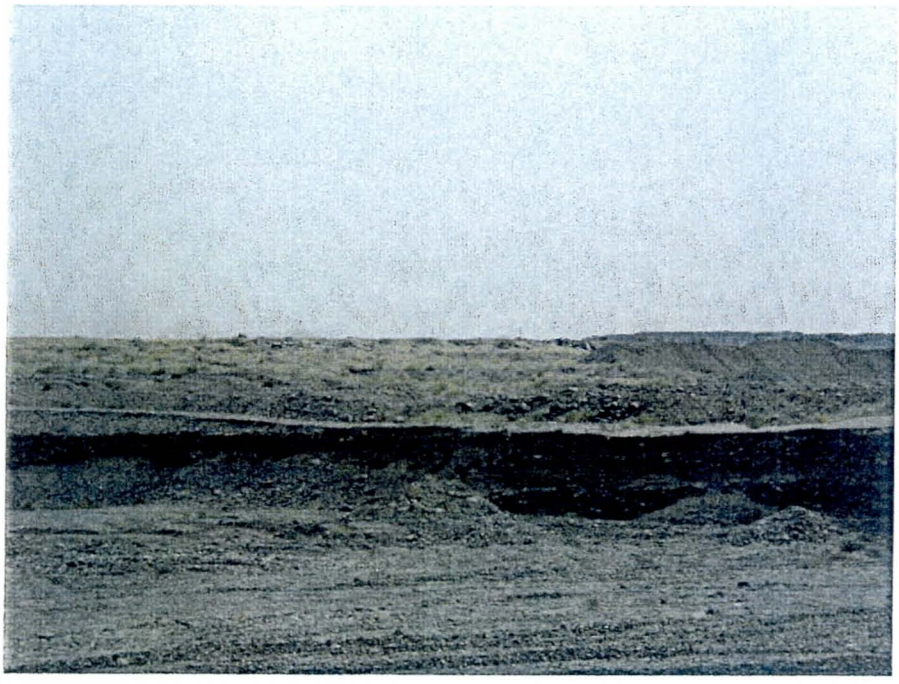


Photo 14. Gravel mining pit in the Salt River, looking downstream from the north side of the channel (03/27/02).

Photo 15. In Salt River, looking downstream from a large gravel mining hole that extends both upstream and downstream (03/27/02).

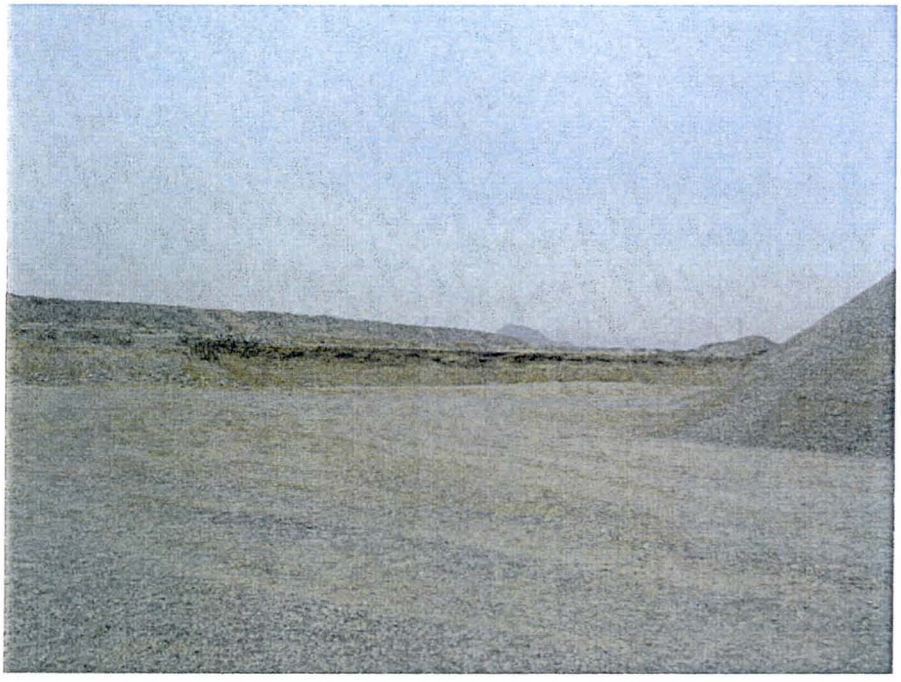


Photo 16. In Salt River, looking upstream at gravel mining activity (03/27/02).

Photo 17. In Salt River, looking south at gravel mining hole (03/27/02).

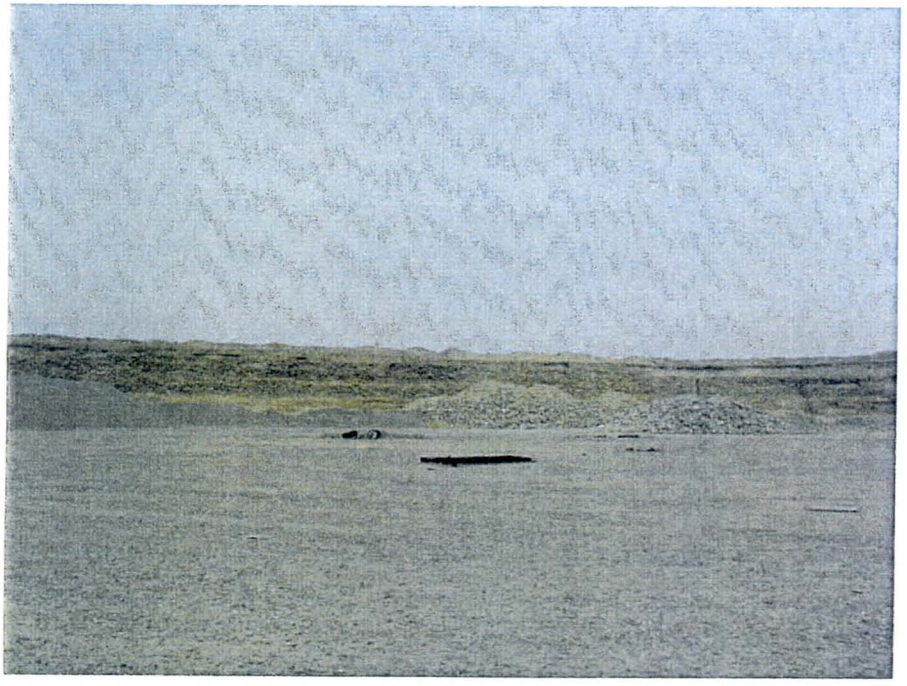


Photo 18. In Salt River, looking upstream from the upstream limit of the Gilbert Mining Pit (03/27/02).

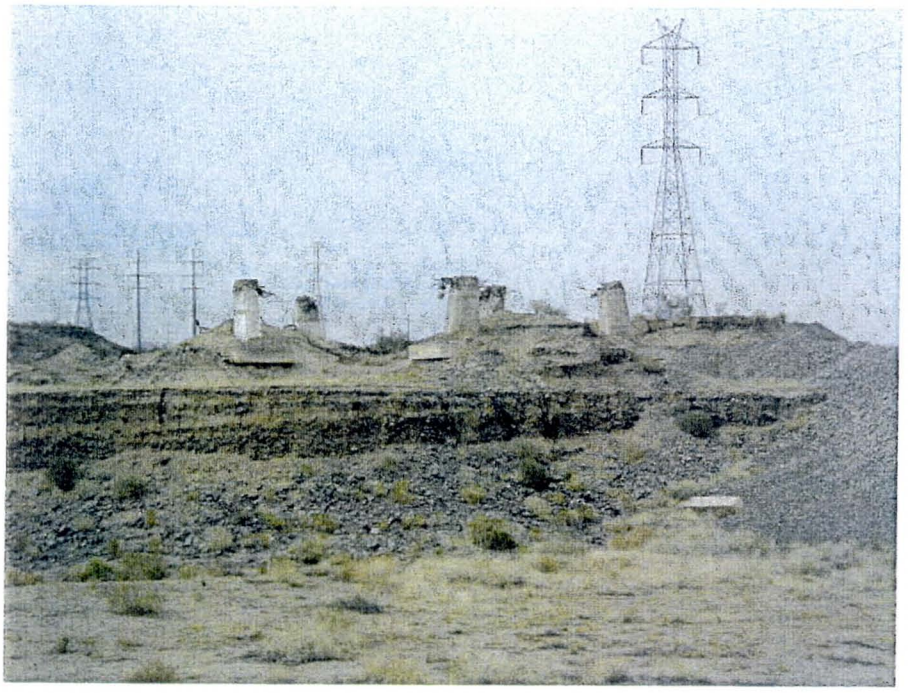


Photo 19. In Salt River at gravel mining area, looking northeast at gravel mining pit and exposed piles (03/27/02).

Photo 20. In Salt River, looking downstream at gravel mining location (03/27/02).

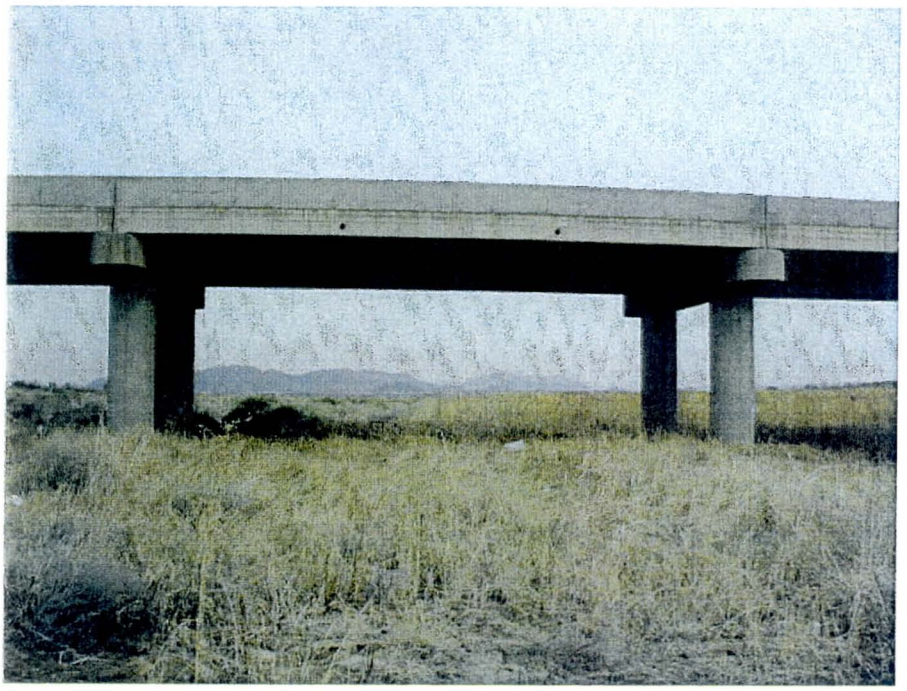


Photo 21. In Salt River at Sample Site 9, looking upstream at Gilbert Road Bridge (03/27/02).

Photo 22. In Salt River at Sample Site 9, looking northeast at Gilbert Road Bridge (03/27/02).

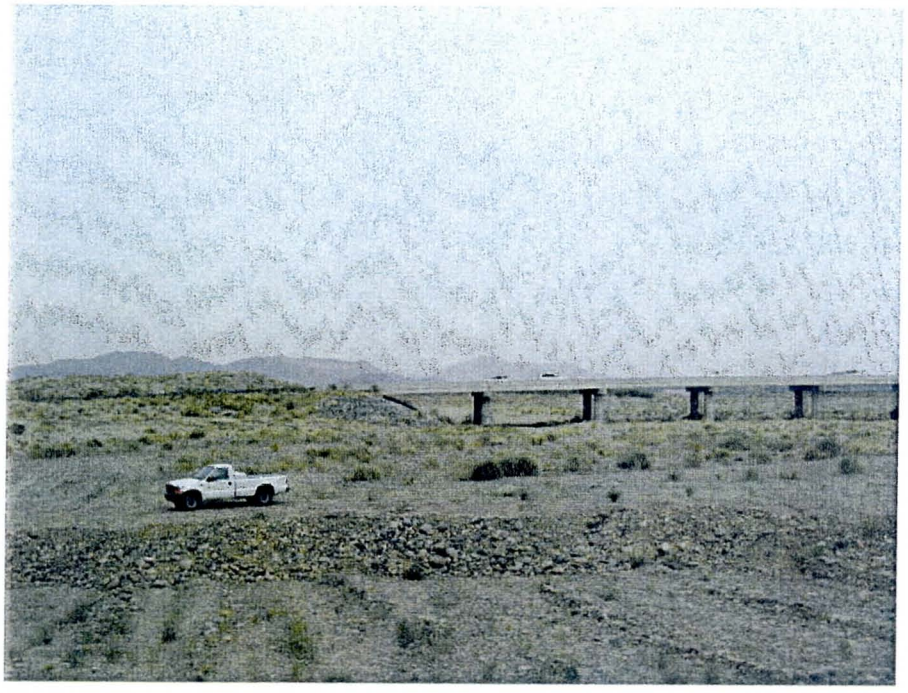


Photo 23. In Salt River, looking upstream to Gilbert Road Bridge from berm at the upstream limit of the Gilbert Mining Pit (03/27/02).

Photo 24. In Salt River, looking downstream from berm to the Gilbert Mining Pit (03/27/02).

Photo 25. Looking south from bottom of mining pit in Salt River (04/03/02).

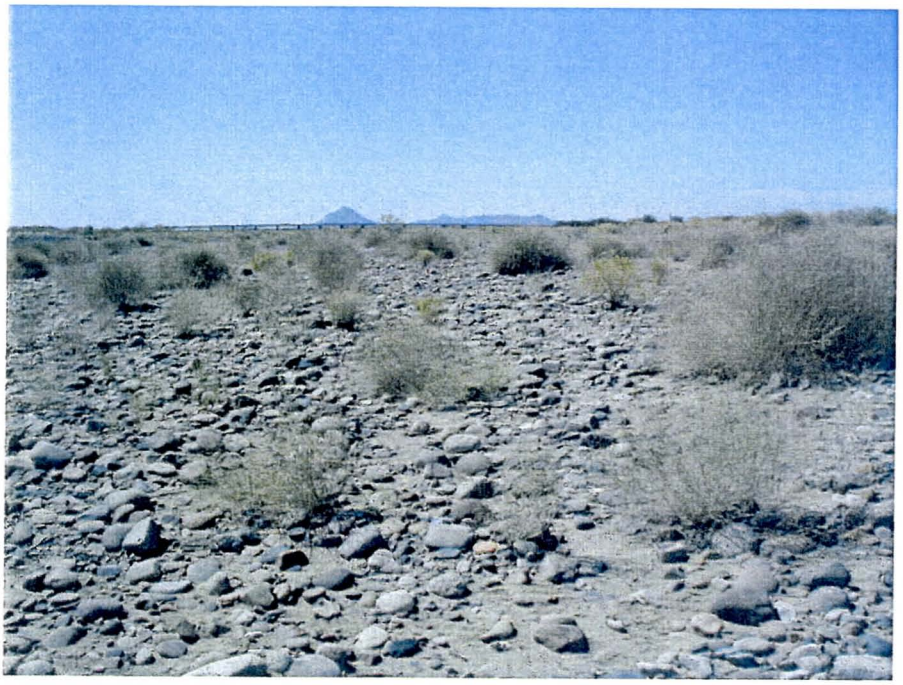


Photo 26. In Salt River at Sample Site 10, looking downstream at Gilbert Road Bridge (04/03/02).

Photo 27. In Salt River at Sample Site 10, looking upstream (04/03/02).

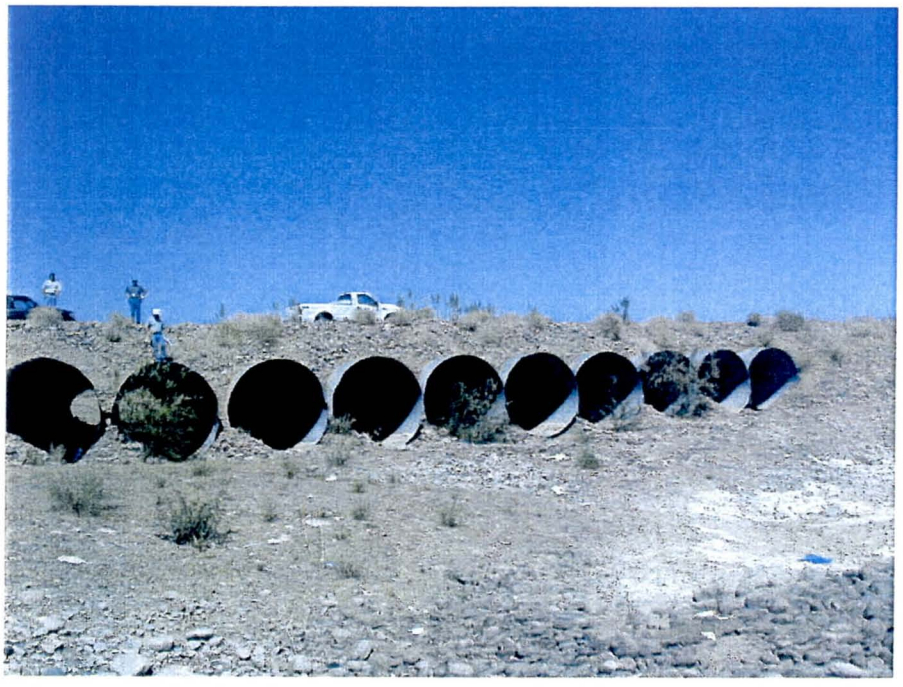


Photo 28. In Salt River, looking upstream at SRP culverts (04/03/02).

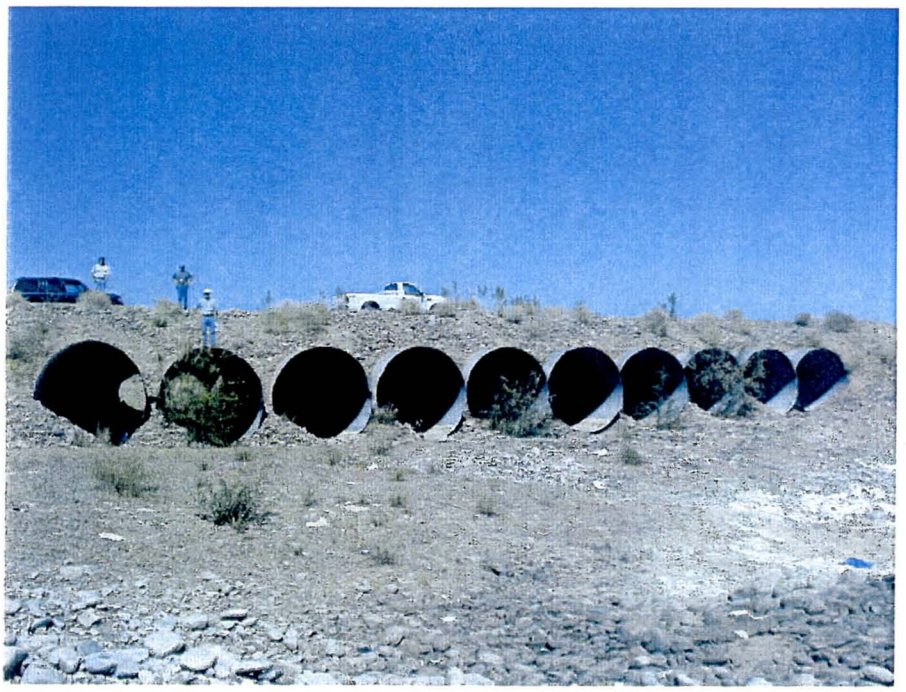


Photo 29. In Salt River, looking upstream at SRP culverts (04/03/02).

Photo 30. In Salt River at Sample Site 11, looking downstream (SRP culverts are upstream) (04/03/02).

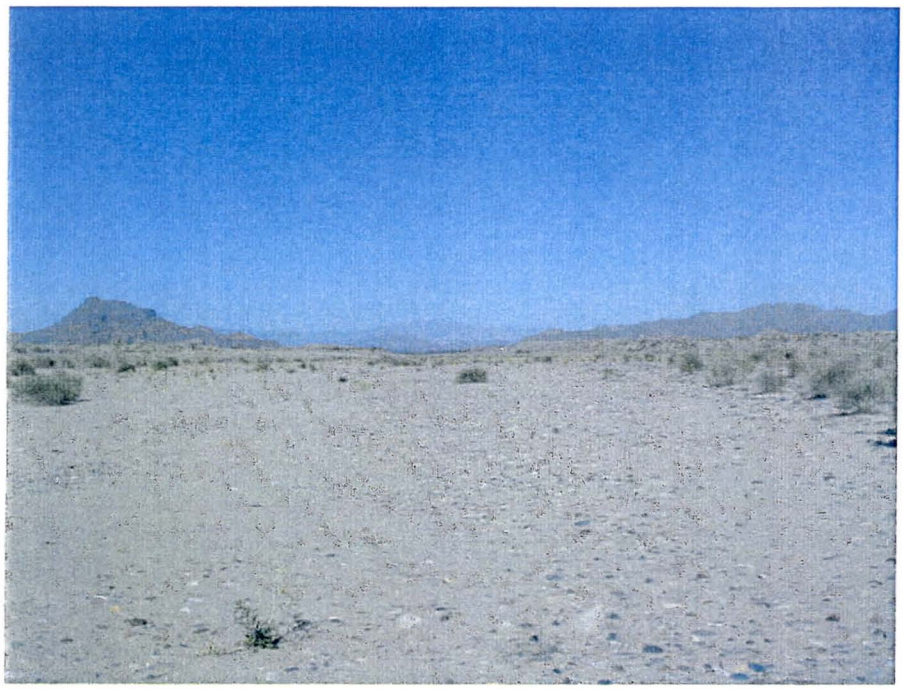


Photo 31. In Salt River at Sample Site 12, looking upstream (04/03/02).

Photo 32. In Salt River, looking downstream in mining pit (04/03/02).

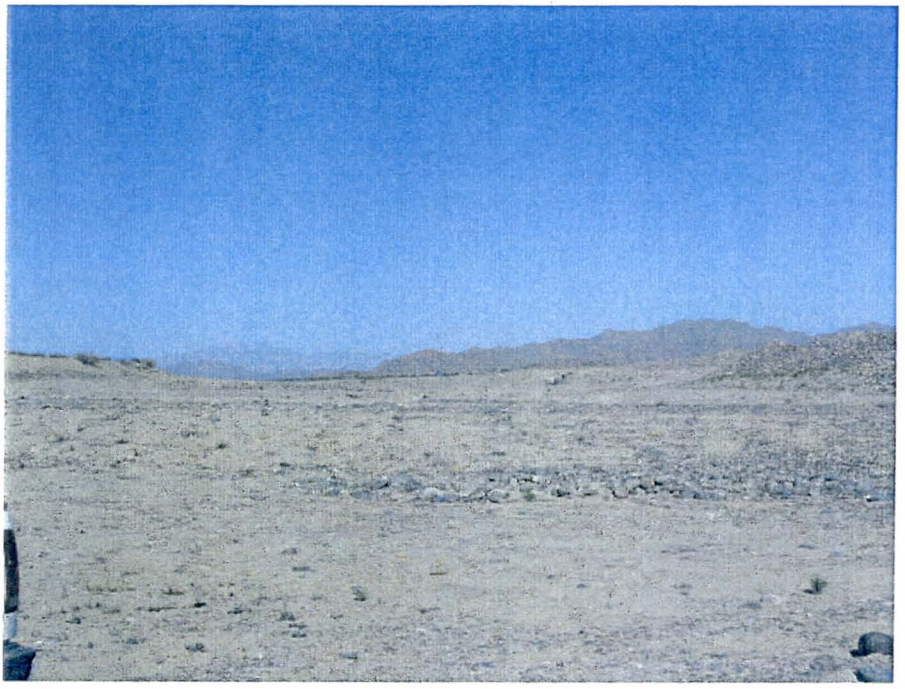


Photo 33. In Salt River, looking upstream from mining pit (04/03/02).

Photo 34. In Salt River, looking downstream at mining activity (04/03/02).

Photo 35. In Salt River, looking upstream at mining activity (04/03/02).

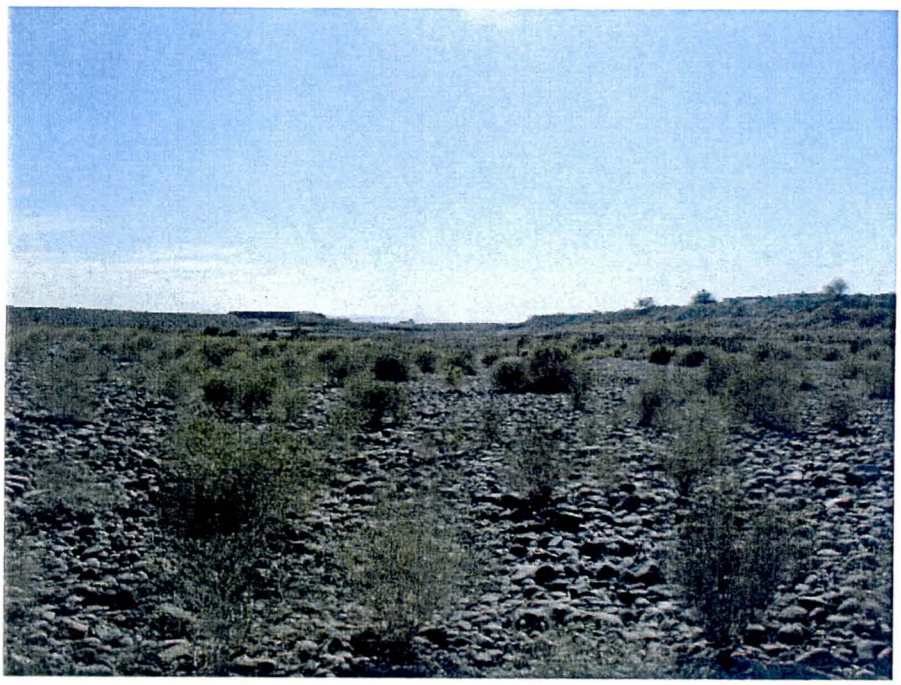


Photo 36. In Salt River at Sample Site 13, looking downstream (04/03/02).

Photo 37. In Salt River at Sample Site 13, looking upstream (04/03/02).

Photo 38. In Salt River at Sample Site 14 near north bank, looking upstream (04/03/02).

Photo 39. In Salt River at Sample Site 14 near north bank, looking upstream (04/03/02).

Photo 40. In Salt River at Sample Site 15, looking upstream (04/03/02). Fine bed material on top.

Photo 41. Looking upstream from north bank near Sample Site 15 (04/03/02).

Photo 42. From south bank, looking north into the Salt River channel (04/03/02).

Photo 43. Looking upstream within the Salt River to Granite Reef Diversion and Sample Site 16 (04/03/02).

Photo 44. Looking upstream to the Granite Reef Diversion Dam and Sample Site 16 in the Salt River (04/03/02).

Photo 45. In Salt River, looking downstream from Sample Site 16 (04/03/02).

APPENDIX 2

EXISTING CONDITION HEC-RAS MODEL RESULTS

2a. Manning n values
2b. 5-Year Standard Table 1
2c. 10-Year Standard Table 1
2d. 20-Year Standard Table 1
2e. 50-Year Standard Table 1
2f. 100-Year Standard Table 1
2g. 200-Year Standard Table 1
2h. 500-Year Standard Table 1
2i. Cross Section Plots for the Salt River
2j. Cross Section Plots for the Gilbert Mining Pit
2k. Aerial Photographs and Inundation Areas

APPENDIX 2a

MANNING *n* VALUES

HEC-RAS Plan: extended

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	0.00	5yr	21000.00		0.035	
Salt River	VaShly DS	0.00	10yr	58000.00		0.035	
Salt River	VaShly DS	0.00	20yr	95000.00		0.035	
Salt River	VaShly DS	0.00	50yr	145000.00		0.035	
Salt River	VaShly DS	0.00	100yr	172000.00		0.035	
Salt River	VaShly DS	0.00	200yr	207000.00		0.035	
Salt River	VaShly DS	0.00	500yr	246000.00		0.035	
Salt River	VaShly DS	0.11	5yr	21000.00		0.035	
Salt River	VaShly DS	0.11	10yr	58000.00		0.035	
Salt River	VaShly DS	0.11	20yr	95000.00		0.035	
Salt River	VaShly DS	0.11	50yr	145000.00		0.035	
Salt River	VaShly DS	0.11	100yr	172000.00		0.035	
Salt River	VaShly DS	0.11	200yr	207000.00		0.035	
Salt River	VaShly DS	0.11	500yr	246000.00		0.035	
Salt River	VaShly DS	0.23	5yr	21000.00		0.035	
Salt River	VaShly DS	0.23	10yr	58000.00		0.035	
Salt River	VaShly DS	0.23	20yr	95000.00		0.035	
Salt River	VaShly DS	0.23	50yr	145000.00		0.035	
Salt River	VaShly DS	0.23	100yr	172000.00		0.035	
Salt River	VaShly DS	0.23	200yr	207000.00		0.035	
Salt River	VaShly DS	0.23	500yr	246000.00		0.035	
Salt River	VaShly DS	0.36	5yr	21000.00		0.035	
Salt River	VaShly DS	0.36	10yr	58000.00		0.035	
Salt River	VaShly DS	0.36	20yr	95000.00		0.035	
Salt River	VaShly DS	0.36	50yr	145000.00		0.035	
Salt River	VaShly DS	0.36	100yr	172000.00		0.035	
Salt River	VaShly DS	0.36	200yr	207000.00		0.035	
Salt River	VaShly DS	0.36	500yr	246000.00		0.035	
Salt River	VaShly DS	0.51	5yr	21000.00		0.035	
Salt River	VaShly DS	0.51	10yr	58000.00		0.035	
Salt River	VaShly DS	0.51	20yr	95000.00		0.035	
Salt River	VaShly DS	0.51	50yr	145000.00		0.035	
Salt River	VaShly DS	0.51	100yr	172000.00		0.035	
Salt River	VaShly DS	0.51	200yr	207000.00		0.035	
Salt River	VaShly DS	0.51	500yr	246000.00		0.035	
Salt River	VaShly DS	0.65	5yr	21000.00		0.035	
Salt River	VaShly DS	0.65	10yr	58000.00		0.035	
Salt River	VaShly DS	0.65	20yr	95000.00		0.035	
Salt River	VaShly DS	0.65	50yr	145000.00		0.035	
Salt River	VaShly DS	0.65	100yr	172000.00		0.035	
Salt River	VaShly DS	0.65	200yr	207000.00		0.035	
Salt River	VaShly DS	0.65	500yr	246000.00		0.035	
Salt River	VaShly DS	0.78	5yr	21000.00		0.035	
Salt River	VaShly DS	0.78	10yr	58000.00		0.035	
Salt River	VaShly DS	0.78	20yr	95000.00		0.035	
Salt River	VaShly DS	0.78	50yr	145000.00		0.035	
Salt River	VaShly DS	0.78	100yr	172000.00		0.035	
Salt River	VaShly DS	0.78	200yr	207000.00		0.035	
Salt River	VaShly DS	0.78	500yr	246000.00		0.035	
Salt River	VaShly DS	0.89	5yr	21000.00		0.035	
Salt River	VaShly DS	0.89	10yr	58000.00		0.035	
Salt River	VaShly DS	0.89	20yr	95000.00		0.035	
Salt River	VaShly DS	0.89	50yr	145000.00		0.035	
Salt River	VaShly DS	0.89	100yr	172000.00		0.035	
Salt River	VaShly DS	0.89	200yr	207000.00		0.035	
Salt River	VaShly DS	0.89	500yr	246000.00		0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	1.80	5yr	21000.00		0.035	
Salt River	VaShly DS	1.80	10yr	58000.00		0.035	
Salt River	VaShly DS	1.80	20yr	95000.00		0.035	
Salt River	VaShly DS	1.80	50yr	145000.00		0.035	
Salt River	VaShly DS	1.80	100yr	172000.00		0.035	
Salt River	VaShly DS	1.80	200yr	207000.00		0.035	
Salt River	VaShly DS	1.80	500yr	246000.00		0.035	
Salt River	VaShly DS	1.83	5yr	21000.00		0.035	
Salt River	VaShly DS	1.83	10yr	58000.00		0.035	
Salt River	VaShly DS	1.83	20yr	95000.00		0.035	
Salt River	VaShly DS	1.83	50yr	145000.00		0.035	
Salt River	VaShly DS	1.83	100yr	172000.00		0.035	
Salt River	VaShly DS	1.83	200yr	207000.00		0.035	
Salt River	VaShly DS	1.83	500yr	246000.00		0.035	
Salt River	VaShly DS	1.86	5yr	21000.00		0.035	
Salt River	VaShly DS	1.86	10yr	58000.00		0.035	
Salt River	VaShly DS	1.86	20yr	95000.00		0.035	
Salt River	VaShly DS	1.86	50yr	145000.00		0.035	
Salt River	VaShly DS	1.86	100yr	172000.00		0.035	
Salt River	VaShly DS	1.86	200yr	207000.00	0.035	0.035	
Salt River	VaShly DS	1.86	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	1.89	5yr	21000.00		0.080	
Salt River	VaShly DS	1.89	10yr	58000.00		0.035	
Salt River	VaShly DS	1.89	20yr	95000.00		0.035	
Salt River	VaShly DS	1.89	50yr	145000.00		0.035	
Salt River	VaShly DS	1.89	100yr	172000.00		0.035	
Salt River	VaShly DS	1.89	200yr	207000.00		0.035	
Salt River	VaShly DS	1.89	500yr	246000.00		0.035	
Salt River	VaShly DS	1.95	5yr	21000.00		0.035	
Salt River	VaShly DS	1.95	10yr	58000.00		0.035	
Salt River	VaShly DS	1.95	20yr	95000.00		0.035	
Salt River	VaShly DS	1.95	50yr	145000.00		0.035	
Salt River	VaShly DS	1.95	100yr	172000.00		0.035	
Salt River	VaShly DS	1.95	200yr	207000.00		0.035	
Salt River	VaShly DS	1.95	500yr	246000.00		0.035	
Salt River	VaShly DS	2.02	5yr	21000.00		0.035	
Salt River	VaShly DS	2.02	10yr	58000.00		0.035	
Salt River	VaShly DS	2.02	20yr	95000.00		0.035	
Salt River	VaShly DS	2.02	50yr	145000.00		0.035	
Salt River	VaShly DS	2.02	100yr	172000.00		0.035	
Salt River	VaShly DS	2.02	200yr	207000.00		0.035	
Salt River	VaShly DS	2.02	500yr	246000.00		0.035	
Salt River	VaShly DS	2.04	5yr	21000.00		0.035	
Salt River	VaShly DS	2.04	10yr	58000.00		0.035	
Salt River	VaShly DS	2.04	20yr	95000.00		0.035	
Salt River	VaShly DS	2.04	50yr	145000.00		0.035	
Salt River	VaShly DS	2.04	100yr	172000.00		0.035	
Salt River	VaShly DS	2.04	200yr	207000.00		0.035	
Salt River	VaShly DS	2.04	500yr	246000.00		0.035	
Salt River	VaShly DS	2.07	5yr	21000.00		0.035	
Salt River	VaShly DS	2.07	10yr	58000.00		0.035	
Salt River	VaShly DS	2.07	20yr	95000.00		0.035	
Salt River	VaShly DS	2.07	50yr	145000.00		0.035	
Salt River	VaShly DS	2.07	100yr	172000.00		0.035	
Salt River	VaShly DS	2.07	200yr	207000.00		0.035	
Salt River	VaShly DS	2.07	500yr	246000.00		0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	2.10	5yr	21000.00		0.035	
Salt River	VaShly DS	2.10	10yr	58000.00		0.035	
Salt River	VaShly DS	2.10	20yr	95000.00		0.035	
Salt River	VaShly DS	2.10	50yr	145000.00		0.035	
Salt River	VaShly DS	2.10	100yr	172000.00		0.035	
Salt River	VaShly DS	2.10	200yr	207000.00		0.035	
Salt River	VaShly DS	2.10	500yr	246000.00		0.035	
Salt River	VaShly DS	2.12	5yr	21000.00		0.035	
Salt River	VaShly DS	2.12	10yr	58000.00		0.035	
Salt River	VaShly DS	2.12	20yr	95000.00		0.035	
Salt River	VaShly DS	2.12	50yr	145000.00		0.035	
Salt River	VaShly DS	2.12	100yr	172000.00		0.035	
Salt River	VaShly DS	2.12	200yr	207000.00		0.035	
Salt River	VaShly DS	2.12	500yr	246000.00		0.035	
Salt River	VaShly DS	2.13	5yr	21000.00		0.035	
Salt River	VaShly DS	2.13	10yr	58000.00		0.035	
Salt River	VaShly DS	2.13	20yr	95000.00		0.035	
Salt River	VaShly DS	2.13	50yr	145000.00		0.035	
Salt River	VaShly DS	2.13	100yr	172000.00		0.035	
Salt River	VaShly DS	2.13	200yr	207000.00		0.035	
Salt River	VaShly DS	2.13	500yr	246000.00		0.035	
Salt River	VaShly DS	2.21	5yr	21000.00		0.035	
Salt River	VaShly DS	2.21	10yr	58000.00		0.035	
Salt River	VaShly DS	2.21	20yr	95000.00		0.035	
Salt River	VaShly DS	2.21	50yr	145000.00		0.035	
Salt River	VaShly DS	2.21	100yr	172000.00		0.035	
Salt River	VaShly DS	2.21	200yr	207000.00		0.035	
Salt River	VaShly DS	2.21	500yr	246000.00		0.035	
Salt River	VaShly DS	2.29	5yr	21000.00		0.035	
Salt River	VaShly DS	2.29	10yr	58000.00		0.035	
Salt River	VaShly DS	2.29	20yr	95000.00		0.035	
Salt River	VaShly DS	2.29	50yr	145000.00		0.035	
Salt River	VaShly DS	2.29	100yr	172000.00		0.035	
Salt River	VaShly DS	2.29	200yr	207000.00		0.035	
Salt River	VaShly DS	2.29	500yr	246000.00		0.035	
Salt River	VaShly DS	2.31		Bridge			
Salt River	VaShly DS	2.33	5yr	21000.00		0.035	
Salt River	VaShly DS	2.33	10yr	58000.00		0.035	
Salt River	VaShly DS	2.33	20yr	95000.00		0.035	
Salt River	VaShly DS	2.33	50yr	145000.00		0.035	
Salt River	VaShly DS	2.33	100yr	172000.00		0.035	
Salt River	VaShly DS	2.33	200yr	207000.00		0.035	
Salt River	VaShly DS	2.33	500yr	246000.00		0.035	
Salt River	VaShly DS	2.38	5yr	21000.00		0.035	
Salt River	VaShly DS	2.38	10yr	58000.00		0.035	
Salt River	VaShly DS	2.38	20yr	95000.00		0.035	
Salt River	VaShly DS	2.38	50yr	145000.00		0.035	
Salt River	VaShly DS	2.38	100yr	172000.00		0.035	
Salt River	VaShly DS	2.38	200yr	207000.00		0.035	
Salt River	VaShly DS	2.38	500yr	246000.00		0.035	0.035
Salt River	VaShly DS	2.40	5yr	21000.00		0.035	
Salt River	VaShly DS	2.40	10yr	58000.00		0.035	
Salt River	VaShly DS	2.40	20yr	95000.00		0.035	
Salt River	VaShly DS	2.40	50yr	145000.00		0.035	
Salt River	VaShly DS	2.40	100yr	172000.00		0.035	0.035
Salt River	VaShly DS	2.40	200yr	207000.00		0.035	0.035

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	2.40	500yr	246000.00		0.035	0.035
Salt River	VaShly DS	2.41	5yr	21000.00		0.035	
Salt River	VaShly DS	2.41	10yr	58000.00		0.035	
Salt River	VaShly DS	2.41	20yr	95000.00		0.035	
Salt River	VaShly DS	2.41	50yr	145000.00		0.035	
Salt River	VaShly DS	2.41	100yr	172000.00		0.035	0.035
Salt River	VaShly DS	2.41	200yr	207000.00		0.035	0.035
Salt River	VaShly DS	2.41	500yr	246000.00		0.035	0.035
Salt River	VaShly DS	2.42	5yr	21000.00		0.035	
Salt River	VaShly DS	2.42	10yr	58000.00		0.035	
Salt River	VaShly DS	2.42	20yr	95000.00		0.035	
Salt River	VaShly DS	2.42	50yr	145000.00		0.035	
Salt River	VaShly DS	2.42	100yr	172000.00		0.035	
Salt River	VaShly DS	2.42	200yr	207000.00		0.035	
Salt River	VaShly DS	2.42	500yr	246000.00		0.035	0.035
Salt River	VaShly DS	2.47	5yr	21000.00		0.035	
Salt River	VaShly DS	2.47	10yr	58000.00		0.035	
Salt River	VaShly DS	2.47	20yr	95000.00		0.035	
Salt River	VaShly DS	2.47	50yr	145000.00		0.035	
Salt River	VaShly DS	2.47	100yr	172000.00		0.035	
Salt River	VaShly DS	2.47	200yr	207000.00		0.035	
Salt River	VaShly DS	2.47	500yr	246000.00		0.035	
Salt River	VaShly DS	2.53	5yr	21000.00		0.035	
Salt River	VaShly DS	2.53	10yr	58000.00		0.035	
Salt River	VaShly DS	2.53	20yr	95000.00		0.035	
Salt River	VaShly DS	2.53	50yr	145000.00		0.035	
Salt River	VaShly DS	2.53	100yr	172000.00		0.035	
Salt River	VaShly DS	2.53	200yr	207000.00		0.035	
Salt River	VaShly DS	2.53	500yr	246000.00		0.035	
Salt River	VaShly DS	2.59	5yr	21000.00		0.035	
Salt River	VaShly DS	2.59	10yr	58000.00		0.035	
Salt River	VaShly DS	2.59	20yr	95000.00		0.035	
Salt River	VaShly DS	2.59	50yr	145000.00		0.035	
Salt River	VaShly DS	2.59	100yr	172000.00		0.035	
Salt River	VaShly DS	2.59	200yr	207000.00		0.035	
Salt River	VaShly DS	2.59	500yr	246000.00		0.035	
Salt River	VaShly DS	2.65	5yr	21000.00		0.035	
Salt River	VaShly DS	2.65	10yr	58000.00		0.035	
Salt River	VaShly DS	2.65	20yr	95000.00		0.035	
Salt River	VaShly DS	2.65	50yr	145000.00		0.035	
Salt River	VaShly DS	2.65	100yr	172000.00		0.035	
Salt River	VaShly DS	2.65	200yr	207000.00	0.035	0.035	
Salt River	VaShly DS	2.65	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	2.71	5yr	21000.00		0.035	
Salt River	VaShly DS	2.71	10yr	58000.00		0.035	
Salt River	VaShly DS	2.71	20yr	95000.00		0.035	
Salt River	VaShly DS	2.71	50yr	145000.00		0.035	
Salt River	VaShly DS	2.71	100yr	172000.00		0.035	0.035
Salt River	VaShly DS	2.71	200yr	207000.00		0.035	0.035
Salt River	VaShly DS	2.71	500yr	246000.00		0.035	0.035
Salt River	VaShly DS	2.78	5yr	21000.00		0.035	
Salt River	VaShly DS	2.78	10yr	58000.00	0.035	0.035	
Salt River	VaShly DS	2.78	20yr	95000.00	0.035	0.035	
Salt River	VaShly DS	2.78	50yr	145000.00	0.035	0.035	
Salt River	VaShly DS	2.78	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	2.78	200yr	207000.00	0.035	0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	2.78	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	2.87	5yr	21000.00		0.035	
Salt River	VaShly DS	2.87	10yr	58000.00		0.035	
Salt River	VaShly DS	2.87	20yr	95000.00		0.035	
Salt River	VaShly DS	2.87	50yr	145000.00		0.035	
Salt River	VaShly DS	2.87	100yr	172000.00		0.035	
Salt River	VaShly DS	2.87	200yr	207000.00		0.035	
Salt River	VaShly DS	2.87	500yr	246000.00		0.035	
Salt River	VaShly DS	2.98	5yr	21000.00		0.035	
Salt River	VaShly DS	2.98	10yr	58000.00		0.035	
Salt River	VaShly DS	2.98	20yr	95000.00		0.035	
Salt River	VaShly DS	2.98	50yr	145000.00	0.035	0.035	
Salt River	VaShly DS	2.98	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	2.98	200yr	207000.00	0.035	0.035	
Salt River	VaShly DS	2.98	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	3.10	5yr	21000.00		0.035	
Salt River	VaShly DS	3.10	10yr	58000.00		0.035	
Salt River	VaShly DS	3.10	20yr	95000.00		0.035	
Salt River	VaShly DS	3.10	50yr	145000.00		0.035	
Salt River	VaShly DS	3.10	100yr	172000.00		0.035	
Salt River	VaShly DS	3.10	200yr	207000.00		0.035	
Salt River	VaShly DS	3.10	500yr	246000.00		0.035	
Salt River	VaShly DS	3.23	5yr	21000.00		0.035	
Salt River	VaShly DS	3.23	10yr	58000.00		0.035	
Salt River	VaShly DS	3.23	20yr	95000.00		0.035	
Salt River	VaShly DS	3.23	50yr	145000.00		0.035	
Salt River	VaShly DS	3.23	100yr	172000.00		0.035	
Salt River	VaShly DS	3.23	200yr	207000.00		0.035	
Salt River	VaShly DS	3.23	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	3.35	5yr	21000.00		0.035	
Salt River	VaShly DS	3.35	10yr	58000.00		0.035	
Salt River	VaShly DS	3.35	20yr	95000.00		0.035	
Salt River	VaShly DS	3.35	50yr	145000.00		0.035	
Salt River	VaShly DS	3.35	100yr	172000.00		0.035	
Salt River	VaShly DS	3.35	200yr	207000.00		0.035	
Salt River	VaShly DS	3.35	500yr	246000.00		0.035	
Salt River	VaShly DS	3.46	5yr	21000.00		0.035	
Salt River	VaShly DS	3.46	10yr	58000.00		0.035	
Salt River	VaShly DS	3.46	20yr	95000.00		0.035	
Salt River	VaShly DS	3.46	50yr	145000.00	0.035	0.035	
Salt River	VaShly DS	3.46	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	3.46	200yr	207000.00	0.035	0.035	
Salt River	VaShly DS	3.46	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly DS	3.48		Bridge			
Salt River	VaShly DS	3.50	5yr	21000.00		0.035	
Salt River	VaShly DS	3.50	10yr	58000.00		0.035	
Salt River	VaShly DS	3.50	20yr	95000.00		0.035	
Salt River	VaShly DS	3.50	50yr	145000.00		0.035	
Salt River	VaShly DS	3.50	100yr	172000.00		0.035	
Salt River	VaShly DS	3.50	200yr	207000.00		0.035	
Salt River	VaShly DS	3.50	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly DS	3.64	5yr	21000.00		0.035	
Salt River	VaShly DS	3.64	10yr	58000.00		0.035	
Salt River	VaShly DS	3.64	20yr	95000.00		0.035	
Salt River	VaShly DS	3.64	50yr	145000.00		0.035	

HEC-RAS Plan: extended (Continued)

River.	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	3.64	100yr	172000.00		0.035	
Salt River	VaShly DS	3.64	200yr	207000.00		0.035	
Salt River	VaShly DS	3.64	500yr	246000.00		0.035	
Salt River	VaShly DS	3.76	5yr	21000.00		0.035	
Salt River	VaShly DS	3.76	10yr	58000.00		0.035	
Salt River	VaShly DS	3.76	20yr	95000.00		0.035	
Salt River	VaShly DS	3.76	50yr	145000.00	5.000	0.035	
Salt River	VaShly DS	3.76	100yr	172000.00	5.000	0.035	
Salt River	VaShly DS	3.76	200yr	207000.00	5.000	0.035	
Salt River	VaShly DS	3.76	500yr	246000.00	5.000	0.035	
Salt River	VaShly DS	3.89	5yr	21000.00		0.035	
Salt River	VaShly DS	3.89	10yr	58000.00	0.035	0.035	
Salt River	VaShly DS	3.89	20yr	95000.00	0.035	0.035	
Salt River	VaShly DS	3.89	50yr	145000.00	0.035	0.035	
Salt River	VaShly DS	3.89	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	3.89	200yr	207000.00	0.035	0.035	
Salt River	VaShly DS	3.89	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	4.04	5yr	21000.00		0.035	
Salt River	VaShly DS	4.04	10yr	58000.00	0.035	0.035	
Salt River	VaShly DS	4.04	20yr	95000.00	0.035	0.035	
Salt River	VaShly DS	4.04	50yr	145000.00	0.035	0.035	
Salt River	VaShly DS	4.04	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	4.04	200yr	207000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.04	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.09	5yr	21000.00		0.035	
Salt River	VaShly DS	4.09	10yr	58000.00	0.035	0.035	
Salt River	VaShly DS	4.09	20yr	95000.00	0.035	0.035	
Salt River	VaShly DS	4.09	50yr	145000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.09	100yr	172000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.09	200yr	207000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.09	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.15	5yr	21000.00		0.035	
Salt River	VaShly DS	4.15	10yr	58000.00		0.035	
Salt River	VaShly DS	4.15	20yr	95000.00		0.035	
Salt River	VaShly DS	4.15	50yr	145000.00		0.035	0.035
Salt River	VaShly DS	4.15	100yr	172000.00		0.035	0.035
Salt River	VaShly DS	4.15	200yr	207000.00		0.035	0.035
Salt River	VaShly DS	4.15	500yr	246000.00		0.035	0.035
Salt River	VaShly DS	4.22	5yr	21000.00		0.035	
Salt River	VaShly DS	4.22	10yr	58000.00	0.035	0.035	
Salt River	VaShly DS	4.22	20yr	95000.00	0.035	0.035	
Salt River	VaShly DS	4.22	50yr	145000.00	0.035	0.035	
Salt River	VaShly DS	4.22	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	4.22	200yr	207000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.22	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.27	5yr	21000.00		0.035	
Salt River	VaShly DS	4.27	10yr	58000.00	0.035	0.035	
Salt River	VaShly DS	4.27	20yr	95000.00	0.035	0.035	
Salt River	VaShly DS	4.27	50yr	145000.00	0.035	0.035	
Salt River	VaShly DS	4.27	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	4.27	200yr	207000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.27	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly DS	4.31	5yr	21000.00		0.035	
Salt River	VaShly DS	4.31	10yr	58000.00	0.035	0.035	
Salt River	VaShly DS	4.31	20yr	95000.00	0.035	0.035	
Salt River	VaShly DS	4.31	50yr	145000.00	0.035	0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	4.31	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	4.31	200yr	207000.00	0.035	0.035	
Salt River	VaShly DS	4.31	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	4.47	5yr	21000.00	5.000	0.035	
Salt River	VaShly DS	4.47	10yr	58000.00	5.000	0.035	
Salt River	VaShly DS	4.47	20yr	95000.00	0.850	0.035	
Salt River	VaShly DS	4.47	50yr	145000.00	0.490	0.035	
Salt River	VaShly DS	4.47	100yr	172000.00	0.410	0.035	
Salt River	VaShly DS	4.47	200yr	207000.00	0.371	0.035	
Salt River	VaShly DS	4.47	500yr	246000.00	0.400	0.035	
Salt River	VaShly DS	4.59	5yr	21000.00	5.000	0.066	
Salt River	VaShly DS	4.59	10yr	58000.00	5.000	0.059	
Salt River	VaShly DS	4.59	20yr	95000.00	0.280	0.057	
Salt River	VaShly DS	4.59	50yr	145000.00	0.130	0.035	
Salt River	VaShly DS	4.59	100yr	172000.00	0.132	0.035	
Salt River	VaShly DS	4.59	200yr	207000.00	0.140	0.035	
Salt River	VaShly DS	4.59	500yr	246000.00	0.172	0.035	
Salt River	VaShly DS	4.74	5yr	21000.00	5.000	0.091	
Salt River	VaShly DS	4.74	10yr	58000.00	5.000	0.083	
Salt River	VaShly DS	4.74	20yr	95000.00	0.290	0.079	
Salt River	VaShly DS	4.74	50yr	145000.00	0.087	0.035	
Salt River	VaShly DS	4.74	100yr	172000.00	0.092	0.035	
Salt River	VaShly DS	4.74	200yr	207000.00	0.100	0.035	
Salt River	VaShly DS	4.74	500yr	246000.00	0.130	0.035	
Salt River	VaShly DS	4.88	5yr	21000.00	5.000	0.035	
Salt River	VaShly DS	4.88	10yr	58000.00	5.000	0.035	
Salt River	VaShly DS	4.88	20yr	95000.00	0.270	0.035	
Salt River	VaShly DS	4.88	50yr	145000.00	0.150	0.035	
Salt River	VaShly DS	4.88	100yr	172000.00	0.140	0.035	
Salt River	VaShly DS	4.88	200yr	207000.00	0.130	0.035	
Salt River	VaShly DS	4.88	500yr	246000.00	0.170	0.035	
Salt River	VaShly DS	5.03	5yr	21000.00		0.035	
Salt River	VaShly DS	5.03	10yr	58000.00	5.000	0.035	
Salt River	VaShly DS	5.03	20yr	95000.00	0.220	0.035	
Salt River	VaShly DS	5.03	50yr	145000.00	0.155	0.035	
Salt River	VaShly DS	5.03	100yr	172000.00	0.150	0.035	
Salt River	VaShly DS	5.03	200yr	207000.00	0.160	0.035	
Salt River	VaShly DS	5.03	500yr	246000.00	0.192	0.035	
Salt River	VaShly DS	5.15	5yr	21000.00	5.000	0.035	
Salt River	VaShly DS	5.15	10yr	58000.00	5.000	0.035	
Salt River	VaShly DS	5.15	20yr	95000.00	0.250	0.035	
Salt River	VaShly DS	5.15	50yr	145000.00	0.190	0.035	
Salt River	VaShly DS	5.15	100yr	172000.00	0.178	0.035	
Salt River	VaShly DS	5.15	200yr	207000.00	0.170	0.035	
Salt River	VaShly DS	5.15	500yr	246000.00	0.212	0.035	
Salt River	VaShly DS	5.26	5yr	21000.00	5.000	0.035	
Salt River	VaShly DS	5.26	10yr	58000.00	5.000	0.035	
Salt River	VaShly DS	5.26	20yr	95000.00	0.195	0.035	
Salt River	VaShly DS	5.26	50yr	145000.00	0.161	0.035	
Salt River	VaShly DS	5.26	100yr	172000.00	0.154	0.035	
Salt River	VaShly DS	5.26	200yr	207000.00	0.157	0.035	
Salt River	VaShly DS	5.26	500yr	246000.00	0.190	0.035	0.035
Salt River	VaShly DS	5.40	5yr	21000.00		0.035	
Salt River	VaShly DS	5.40	10yr	58000.00	5.000	0.035	
Salt River	VaShly DS	5.40	20yr	95000.00	0.035	0.035	
Salt River	VaShly DS	5.40	50yr	145000.00	0.035	0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	5.40	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	5.40	200yr	207000.00	0.035	0.035	
Salt River	VaShly DS	5.40	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly DS	5.47	5yr	21000.00		0.035	
Salt River	VaShly DS	5.47	10yr	58000.00		0.035	
Salt River	VaShly DS	5.47	20yr	95000.00	0.035	0.035	
Salt River	VaShly DS	5.47	50yr	145000.00	0.035	0.035	
Salt River	VaShly DS	5.47	100yr	172000.00	0.035	0.035	
Salt River	VaShly DS	5.47	200yr	207000.00	0.035	0.035	
Salt River	VaShly DS	5.47	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	5.53	5yr	21000.00		0.035	
Salt River	VaShly DS	5.53	10yr	58000.00		0.035	
Salt River	VaShly DS	5.53	20yr	95000.00		0.035	
Salt River	VaShly DS	5.53	50yr	145000.00		0.035	
Salt River	VaShly DS	5.53	100yr	172000.00		0.035	
Salt River	VaShly DS	5.53	200yr	207000.00		0.035	
Salt River	VaShly DS	5.53	500yr	246000.00		0.035	
Salt River	VaShly DS	5.56	5yr	21000.00		0.035	
Salt River	VaShly DS	5.56	10yr	58000.00		0.035	
Salt River	VaShly DS	5.56	20yr	95000.00		0.035	
Salt River	VaShly DS	5.56	50yr	145000.00		0.035	
Salt River	VaShly DS	5.56	100yr	172000.00		0.035	
Salt River	VaShly DS	5.56	200yr	207000.00		0.035	
Salt River	VaShly DS	5.56	500yr	246000.00		0.035	
Salt River	VaShly DS	5.60	5yr	21000.00		0.035	
Salt River	VaShly DS	5.60	10yr	58000.00		0.035	
Salt River	VaShly DS	5.60	20yr	95000.00		0.035	
Salt River	VaShly DS	5.60	50yr	145000.00		0.035	
Salt River	VaShly DS	5.60	100yr	172000.00		0.035	
Salt River	VaShly DS	5.60	200yr	207000.00		0.035	
Salt River	VaShly DS	5.60	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	5.65	5yr	21000.00		0.035	
Salt River	VaShly DS	5.65	10yr	58000.00		0.035	
Salt River	VaShly DS	5.65	20yr	95000.00		0.035	
Salt River	VaShly DS	5.65	50yr	145000.00		0.035	
Salt River	VaShly DS	5.65	100yr	172000.00		0.035	
Salt River	VaShly DS	5.65	200yr	207000.00		0.035	
Salt River	VaShly DS	5.65	500yr	246000.00		0.035	
Salt River	VaShly DS	5.69	5yr	21000.00		0.035	
Salt River	VaShly DS	5.69	10yr	58000.00		0.035	
Salt River	VaShly DS	5.69	20yr	95000.00		0.035	
Salt River	VaShly DS	5.69	50yr	145000.00		0.035	
Salt River	VaShly DS	5.69	100yr	172000.00		0.035	
Salt River	VaShly DS	5.69	200yr	207000.00		0.035	
Salt River	VaShly DS	5.69	500yr	246000.00		0.035	
Salt River	VaShly DS	5.73	5yr	21000.00		0.035	
Salt River	VaShly DS	5.73	10yr	58000.00		0.035	
Salt River	VaShly DS	5.73	20yr	95000.00		0.035	
Salt River	VaShly DS	5.73	50yr	145000.00		0.035	
Salt River	VaShly DS	5.73	100yr	172000.00		0.035	
Salt River	VaShly DS	5.73	200yr	207000.00		0.035	
Salt River	VaShly DS	5.73	500yr	246000.00		0.035	
Salt River	VaShly DS	5.76	5yr	21000.00		0.035	
Salt River	VaShly DS	5.76	10yr	58000.00		0.035	
Salt River	VaShly DS	5.76	20yr	95000.00		0.035	
Salt River	VaShly DS	5.76	50yr	145000.00		0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	5.76	100yr	172000.00		0.035	
Salt River	VaShly DS	5.76	200yr	207000.00		0.035	
Salt River	VaShly DS	5.76	500yr	246000.00		0.035	
Salt River	VaShly DS	5.80	5yr	21000.00		0.035	
Salt River	VaShly DS	5.80	10yr	58000.00		0.035	
Salt River	VaShly DS	5.80	20yr	95000.00		0.035	
Salt River	VaShly DS	5.80	50yr	145000.00		0.035	
Salt River	VaShly DS	5.80	100yr	172000.00		0.035	
Salt River	VaShly DS	5.80	200yr	207000.00		0.035	0.035
Salt River	VaShly DS	5.80	500yr	246000.00		0.035	0.035
Salt River	VaShly DS	5.82	5yr	21000.00		0.035	
Salt River	VaShly DS	5.82	10yr	58000.00		0.035	
Salt River	VaShly DS	5.82	20yr	95000.00		0.035	
Salt River	VaShly DS	5.82	50yr	145000.00		0.035	
Salt River	VaShly DS	5.82	100yr	172000.00		0.035	
Salt River	VaShly DS	5.82	200yr	207000.00	0.035	0.035	
Salt River	VaShly DS	5.82	500yr	246000.00	0.035	0.035	
Salt River	VaShly DS	5.84	5yr	21000.00		0.035	
Salt River	VaShly DS	5.84	10yr	58000.00		0.035	
Salt River	VaShly DS	5.84	20yr	95000.00		0.035	
Salt River	VaShly DS	5.84	50yr	145000.00		0.035	
Salt River	VaShly DS	5.84	100yr	172000.00		0.035	
Salt River	VaShly DS	5.84	200yr	207000.00		0.035	0.035
Salt River	VaShly DS	5.84	500yr	246000.00		0.035	0.035
Salt River	VaShly DS	5.85	5yr	21000.00		0.020	
Salt River	VaShly DS	5.85	10yr	58000.00		0.035	
Salt River	VaShly DS	5.85	20yr	95000.00		0.035	
Salt River	VaShly DS	5.85	50yr	145000.00		0.035	
Salt River	VaShly DS	5.85	100yr	172000.00		0.035	
Salt River	VaShly DS	5.85	200yr	207000.00		0.035	
Salt River	VaShly DS	5.85	500yr	246000.00		0.035	
Salt River	VaShly DS	5.86	5yr	21000.00		0.035	
Salt River	VaShly DS	5.86	10yr	58000.00		0.100	
Salt River	VaShly DS	5.86	20yr	95000.00		0.100	
Salt River	VaShly DS	5.86	50yr	145000.00		0.100	
Salt River	VaShly DS	5.86	100yr	172000.00		0.100	
Salt River	VaShly DS	5.86	200yr	207000.00		0.100	
Salt River	VaShly DS	5.86	500yr	246000.00		0.100	
Salt River	VaShly DS	5.87	5yr	21000.00		0.090	
Salt River	VaShly DS	5.87	10yr	58000.00		0.035	
Salt River	VaShly DS	5.87	20yr	95000.00		0.035	
Salt River	VaShly DS	5.87	50yr	145000.00		0.035	
Salt River	VaShly DS	5.87	100yr	172000.00		0.035	
Salt River	VaShly DS	5.87	200yr	207000.00		0.035	
Salt River	VaShly DS	5.87	500yr	246000.00		0.035	
Salt River	VaShly DS	5.88	5yr	21000.00		0.100	
Salt River	VaShly DS	5.88	10yr	58000.00		0.050	
Salt River	VaShly DS	5.88	20yr	95000.00		0.055	
Salt River	VaShly DS	5.88	50yr	145000.00		0.035	0.035
Salt River	VaShly DS	5.88	100yr	172000.00		0.035	0.035
Salt River	VaShly DS	5.88	200yr	207000.00		0.035	0.035
Salt River	VaShly DS	5.88	500yr	246000.00		0.035	0.035
Salt River	VaShly DS	5.91	5yr	21000.00		0.035	
Salt River	VaShly DS	5.91	10yr	58000.00		0.035	
Salt River	VaShly DS	5.91	20yr	95000.00		0.035	
Salt River	VaShly DS	5.91	50yr	145000.00		0.035	0.035

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	5.91	100yr	172000.00		0.035	0.035
Salt River	VaShly DS	5.91	200yr	207000.00	0.035	0.035	0.035
Salt River	VaShly DS	5.91	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly DS	5.93	5yr	21000.00		0.035	
Salt River	VaShly DS	5.93	10yr	58000.00		0.035	
Salt River	VaShly DS	5.93	20yr	95000.00		0.035	
Salt River	VaShly DS	5.93	50yr	145000.00		0.035	0.035
Salt River	VaShly DS	5.93	100yr	172000.00		0.035	0.035
Salt River	VaShly DS	5.93	200yr	207000.00	0.035	0.035	0.035
Salt River	VaShly DS	5.93	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly DS	5.95	5yr	21000.00		0.035	
Salt River	VaShly DS	5.95	10yr	58000.00		0.075	
Salt River	VaShly DS	5.95	20yr	95000.00		0.075	
Salt River	VaShly DS	5.95	50yr	145000.00		0.075	
Salt River	VaShly DS	5.95	100yr	172000.00		0.075	
Salt River	VaShly DS	5.95	200yr	207000.00		0.075	
Salt River	VaShly DS	5.95	500yr	246000.00		0.075	
Salt River	VaShly DS	5.97	5yr	21000.00		0.035	
Salt River	VaShly DS	5.97	10yr	58000.00		0.035	
Salt River	VaShly DS	5.97	20yr	95000.00		0.035	
Salt River	VaShly DS	5.97	50yr	145000.00		0.035	
Salt River	VaShly DS	5.97	100yr	172000.00		0.035	
Salt River	VaShly DS	5.97	200yr	207000.00		0.035	
Salt River	VaShly DS	5.97	500yr	246000.00		0.035	
Salt River	VaShly DS	5.99	5yr	21000.00		0.035	
Salt River	VaShly DS	5.99	10yr	58000.00		0.035	
Salt River	VaShly DS	5.99	20yr	95000.00		0.035	
Salt River	VaShly DS	5.99	50yr	145000.00		0.035	
Salt River	VaShly DS	5.99	100yr	172000.00		0.035	
Salt River	VaShly DS	5.99	200yr	207000.00		0.035	
Salt River	VaShly DS	5.99	500yr	246000.00		0.035	
Salt River	VaShly DS	6.01	5yr	21000.00		0.035	
Salt River	VaShly DS	6.01	10yr	58000.00		0.200	
Salt River	VaShly DS	6.01	20yr	95000.00		0.200	
Salt River	VaShly DS	6.01	50yr	145000.00		0.200	
Salt River	VaShly DS	6.01	100yr	172000.00		0.200	
Salt River	VaShly DS	6.01	200yr	207000.00		0.200	0.035
Salt River	VaShly DS	6.01	500yr	246000.00		0.200	0.035
Salt River	VaShly DS	6.05	5yr	21000.00		0.035	
Salt River	VaShly DS	6.05	10yr	58000.00		0.035	
Salt River	VaShly DS	6.05	20yr	95000.00		0.035	
Salt River	VaShly DS	6.05	50yr	145000.00		0.035	
Salt River	VaShly DS	6.05	100yr	172000.00		0.035	
Salt River	VaShly DS	6.05	200yr	207000.00		0.035	
Salt River	VaShly DS	6.05	500yr	246000.00		0.035	
Salt River	VaShly DS	6.09	5yr	21000.00		0.035	
Salt River	VaShly DS	6.09	10yr	58000.00	5.000	0.035	
Salt River	VaShly DS	6.09	20yr	95000.00	5.000	0.035	
Salt River	VaShly DS	6.09	50yr	145000.00	0.044	0.035	
Salt River	VaShly DS	6.09	100yr	172000.00	0.034	0.035	
Salt River	VaShly DS	6.09	200yr	207000.00	0.027	0.035	0.035
Salt River	VaShly DS	6.09	500yr	246000.00	0.025	0.038	0.038
Salt River	VaShly DS	6.14	5yr	21000.00		0.035	
Salt River	VaShly DS	6.14	10yr	58000.00	5.000	0.035	
Salt River	VaShly DS	6.14	20yr	95000.00	5.000	0.035	
Salt River	VaShly DS	6.14	50yr	145000.00	0.035	0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly DS	6.14	100yr	172000.00	0.029	0.035	
Salt River	VaShly DS	6.14	200yr	207000.00	0.025	0.035	
Salt River	VaShly DS	6.14	500yr	246000.00	0.025	0.039	0.039
Salt River	VaShly DS	6.18	5yr	21000.00		0.035	
Salt River	VaShly DS	6.18	10yr	58000.00		0.035	
Salt River	VaShly DS	6.18	20yr	95000.00		0.035	
Salt River	VaShly DS	6.18	50yr	145000.00	0.035	0.035	
Salt River	VaShly DS	6.18	100yr	172000.00	0.031	0.035	
Salt River	VaShly DS	6.18	200yr	207000.00	0.028	0.035	
Salt River	VaShly DS	6.18	500yr	246000.00	0.025	0.035	
Salt River	VaShly DS	6.22	5yr	21000.00		0.035	
Salt River	VaShly DS	6.22	10yr	58000.00		0.035	
Salt River	VaShly DS	6.22	20yr	95000.00		0.035	
Salt River	VaShly DS	6.22	50yr	145000.00	0.031	0.035	
Salt River	VaShly DS	6.22	100yr	172000.00	0.027	0.035	
Salt River	VaShly DS	6.22	200yr	207000.00	0.025	0.039	
Salt River	VaShly DS	6.22	500yr	246000.00	0.025	0.040	
Salt River	VaShly DS	6.27	5yr	21000.00		0.035	
Salt River	VaShly DS	6.27	10yr	58000.00		0.035	
Salt River	VaShly DS	6.27	20yr	95000.00		0.035	
Salt River	VaShly DS	6.27	50yr	145000.00	0.025	0.040	
Salt River	VaShly DS	6.27	100yr	172000.00	0.025	0.044	
Salt River	VaShly DS	6.27	200yr	207000.00	0.025	0.047	
Salt River	VaShly DS	6.27	500yr	246000.00	0.025	0.045	
Salt River	VaShly DS	6.32	5yr	21000.00		0.035	
Salt River	VaShly DS	6.32	10yr	58000.00		0.035	
Salt River	VaShly DS	6.32	20yr	95000.00	5.000	0.035	
Salt River	VaShly DS	6.32	50yr	145000.00	0.025	0.051	
Salt River	VaShly DS	6.32	100yr	172000.00	0.025	0.047	
Salt River	VaShly DS	6.32	200yr	207000.00	0.025	0.047	
Salt River	VaShly DS	6.32	500yr	246000.00	0.025	0.039	
Salt River	VaShly DS	6.35	5yr	21000.00		0.035	
Salt River	VaShly DS	6.35	10yr	58000.00		0.035	
Salt River	VaShly DS	6.35	20yr	95000.00	5.000	0.035	
Salt River	VaShly DS	6.35	50yr	145000.00	0.025	0.053	
Salt River	VaShly DS	6.35	100yr	172000.00	0.025	0.048	
Salt River	VaShly DS	6.35	200yr	207000.00	0.025	0.045	
Salt River	VaShly DS	6.35	500yr	246000.00	0.025	0.041	
Salt River	VaShly DS	6.38	5yr	21000.00		0.035	
Salt River	VaShly DS	6.38	10yr	58000.00		0.035	
Salt River	VaShly DS	6.38	20yr	95000.00	5.000	0.035	
Salt River	VaShly DS	6.38	50yr	145000.00	0.025	0.064	
Salt River	VaShly DS	6.38	100yr	172000.00	0.025	0.060	
Salt River	VaShly DS	6.38	200yr	207000.00	0.025	0.052	
Salt River	VaShly DS	6.38	500yr	246000.00	0.025	0.051	
Salt River	VaShly DS	6.40	5yr	21000.00		0.035	0.035
Salt River	VaShly DS	6.40	10yr	58000.00		0.035	0.035
Salt River	VaShly DS	6.40	20yr	95000.00	5.000	0.035	0.035
Salt River	VaShly DS	6.40	50yr	145000.00	0.035	0.035	0.035
Salt River	VaShly DS	6.40	100yr	172000.00	0.035	0.035	0.035
Salt River	VaShly DS	6.40	200yr	207000.00	0.035	0.035	0.035
Salt River	VaShly DS	6.40	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly at Pit	6.45	5yr	20995.59		0.035	
Salt River	VaShly at Pit	6.45	10yr	53637.00		0.035	
Salt River	VaShly at Pit	6.45	20yr	86904.00	5.000	0.035	
Salt River	VaShly at Pit	6.45	50yr	128592.00	0.074	0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly at Pit	6.45	100yr	150794.00	0.049	0.035	
Salt River	VaShly at Pit	6.45	200yr	179441.80	0.059	0.035	0.035
Salt River	VaShly at Pit	6.45	500yr	211659.00	0.062	0.035	0.035
Salt River	VaShly at Pit	6.50	5yr	20995.59		0.035	
Salt River	VaShly at Pit	6.50	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.50	20yr	86904.00	5.000	0.035	
Salt River	VaShly at Pit	6.50	50yr	128592.00	0.080	0.035	
Salt River	VaShly at Pit	6.50	100yr	150794.00	0.067	0.035	0.035
Salt River	VaShly at Pit	6.50	200yr	179441.80	0.089	0.035	0.035
Salt River	VaShly at Pit	6.50	500yr	211659.00	0.074	0.035	0.035
Salt River	VaShly at Pit	6.53	5yr	20995.59	5.000	0.035	
Salt River	VaShly at Pit	6.53	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.53	20yr	86904.00	5.000	0.035	
Salt River	VaShly at Pit	6.53	50yr	128592.00	0.108	0.035	
Salt River	VaShly at Pit	6.53	100yr	150794.00	0.086	0.035	0.035
Salt River	VaShly at Pit	6.53	200yr	179441.80	0.085	0.035	0.035
Salt River	VaShly at Pit	6.53	500yr	211659.00	0.064	0.035	0.035
Salt River	VaShly at Pit	6.56	5yr	20995.59	5.000	0.035	
Salt River	VaShly at Pit	6.56	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.56	20yr	86904.00	5.000	0.035	
Salt River	VaShly at Pit	6.56	50yr	128592.00	0.110	0.035	
Salt River	VaShly at Pit	6.56	100yr	150794.00	0.086	0.035	0.035
Salt River	VaShly at Pit	6.56	200yr	179441.80	0.094	0.035	0.035
Salt River	VaShly at Pit	6.56	500yr	211659.00	0.069	0.035	0.035
Salt River	VaShly at Pit	6.62	5yr	20995.59	5.000	0.035	
Salt River	VaShly at Pit	6.62	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.62	20yr	86904.00	5.000	0.035	
Salt River	VaShly at Pit	6.62	50yr	128592.00	0.160	0.035	0.035
Salt River	VaShly at Pit	6.62	100yr	150794.00	0.125	0.035	0.035
Salt River	VaShly at Pit	6.62	200yr	179441.80	0.110	0.035	0.035
Salt River	VaShly at Pit	6.62	500yr	211659.00	0.084	0.035	0.035
Salt River	VaShly at Pit	6.69	5yr	20995.59	5.000	0.035	
Salt River	VaShly at Pit	6.69	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.69	20yr	86904.00	5.000	0.035	0.035
Salt River	VaShly at Pit	6.69	50yr	128592.00	0.197	0.035	0.035
Salt River	VaShly at Pit	6.69	100yr	150794.00	0.149	0.035	0.035
Salt River	VaShly at Pit	6.69	200yr	179441.80	0.151	0.035	0.035
Salt River	VaShly at Pit	6.69	500yr	211659.00	0.122	0.035	0.035
Salt River	VaShly at Pit	6.75	5yr	20995.59	5.000	0.035	
Salt River	VaShly at Pit	6.75	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.75	20yr	86904.00	5.000	0.035	
Salt River	VaShly at Pit	6.75	50yr	128592.00	0.166	0.035	0.035
Salt River	VaShly at Pit	6.75	100yr	150794.00	0.130	0.035	0.035
Salt River	VaShly at Pit	6.75	200yr	179441.80	0.161	0.035	0.035
Salt River	VaShly at Pit	6.75	500yr	211659.00	0.132	0.035	0.035
Salt River	VaShly at Pit	6.80	5yr	20995.59		0.035	
Salt River	VaShly at Pit	6.80	10yr	53637.00		0.035	
Salt River	VaShly at Pit	6.80	20yr	86904.00	0.035	0.035	
Salt River	VaShly at Pit	6.80	50yr	128592.00	0.135	0.035	0.035
Salt River	VaShly at Pit	6.80	100yr	150794.00	0.116	0.035	0.035
Salt River	VaShly at Pit	6.80	200yr	179441.80	0.134	0.035	0.035
Salt River	VaShly at Pit	6.80	500yr	211659.00	0.112	0.035	0.035
Salt River	VaShly at Pit	6.85	5yr	20995.59	5.000	0.035	
Salt River	VaShly at Pit	6.85	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.85	20yr	86904.00	0.035	0.035	
Salt River	VaShly at Pit	6.85	50yr	128592.00	0.107	0.035	0.035

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total (cfs)	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
Salt River	VaShly at Pit	6.85	100yr	150794.00	0.097	0.035	0.035
Salt River	VaShly at Pit	6.85	200yr	179441.80	0.097	0.035	0.035
Salt River	VaShly at Pit	6.85	500yr	211659.00	0.084	0.035	0.035
Salt River	VaShly at Pit	6.91	5yr	20995.59		0.035	
Salt River	VaShly at Pit	6.91	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.91	20yr	86904.00	0.035	0.035	0.035
Salt River	VaShly at Pit	6.91	50yr	128592.00	0.057	0.035	0.035
Salt River	VaShly at Pit	6.91	100yr	150794.00	0.053	0.035	0.035
Salt River	VaShly at Pit	6.91	200yr	179441.80	0.046	0.035	0.035
Salt River	VaShly at Pit	6.91	500yr	211659.00	0.041	0.035	0.035
Salt River	VaShly at Pit	6.96	5yr	20995.59		0.035	
Salt River	VaShly at Pit	6.96	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.96	20yr	86904.00	0.055	0.035	
Salt River	VaShly at Pit	6.96	50yr	128592.00	0.055	0.035	
Salt River	VaShly at Pit	6.96	100yr	150794.00	0.055	0.035	
Salt River	VaShly at Pit	6.96	200yr	179441.80	0.055	0.035	
Salt River	VaShly at Pit	6.96	500yr	211659.00	0.055	0.035	
Salt River	VaShly at Pit	6.99	5yr	20995.59		0.035	
Salt River	VaShly at Pit	6.99	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	6.99	20yr	86904.00	0.035	0.035	
Salt River	VaShly at Pit	6.99	50yr	128592.00	0.035	0.035	
Salt River	VaShly at Pit	6.99	100yr	150794.00	0.035	0.035	
Salt River	VaShly at Pit	6.99	200yr	179441.80	0.035	0.035	
Salt River	VaShly at Pit	6.99	500yr	211659.00	0.035	0.035	
Salt River	VaShly at Pit	7.01	5yr	20995.59		0.035	
Salt River	VaShly at Pit	7.01	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	7.01	20yr	86904.00	0.035	0.035	
Salt River	VaShly at Pit	7.01	50yr	128592.00	0.035	0.035	
Salt River	VaShly at Pit	7.01	100yr	150794.00	0.035	0.035	
Salt River	VaShly at Pit	7.01	200yr	179441.80	0.035	0.035	
Salt River	VaShly at Pit	7.01	500yr	211659.00	0.035	0.035	
Salt River	VaShly at Pit	7.03	5yr	20995.59		0.035	
Salt River	VaShly at Pit	7.03	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	7.03	20yr	86904.00	0.035	0.035	
Salt River	VaShly at Pit	7.03	50yr	128592.00	0.035	0.035	
Salt River	VaShly at Pit	7.03	100yr	150794.00	0.035	0.035	
Salt River	VaShly at Pit	7.03	200yr	179441.80	0.035	0.035	
Salt River	VaShly at Pit	7.03	500yr	211659.00	0.035	0.035	
Salt River	VaShly at Pit	7.04	5yr	20995.59		0.035	
Salt River	VaShly at Pit	7.04	10yr	53637.00	5.000	0.039	
Salt River	VaShly at Pit	7.04	20yr	86904.00	0.035	0.039	
Salt River	VaShly at Pit	7.04	50yr	128592.00	0.035	0.039	
Salt River	VaShly at Pit	7.04	100yr	150794.00	0.035	0.039	
Salt River	VaShly at Pit	7.04	200yr	179441.80	0.035	0.039	
Salt River	VaShly at Pit	7.04	500yr	211659.00	0.035	0.039	
Salt River	VaShly at Pit	7.06	5yr	20995.59		0.035	
Salt River	VaShly at Pit	7.06	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	7.06	20yr	86904.00	0.035	0.035	
Salt River	VaShly at Pit	7.06	50yr	128592.00	0.035	0.035	
Salt River	VaShly at Pit	7.06	100yr	150794.00	0.035	0.035	
Salt River	VaShly at Pit	7.06	200yr	179441.80	0.035	0.035	
Salt River	VaShly at Pit	7.06	500yr	211659.00	0.035	0.035	
Salt River	VaShly at Pit	7.07	5yr	20995.59		0.035	
Salt River	VaShly at Pit	7.07	10yr	53637.00	5.000	0.035	0.035
Salt River	VaShly at Pit	7.07	20yr	86904.00	0.035	0.035	0.035
Salt River	VaShly at Pit	7.07	50yr	128592.00	0.035	0.035	0.035

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly at Pit	7.07	100yr	150794.00	0.035	0.035	0.035
Salt River	VaShly at Pit	7.07	200yr	179441.80	0.035	0.035	0.035
Salt River	VaShly at Pit	7.07	500yr	211659.00	0.035	0.035	0.035
Salt River	VaShly at Pit	7.10	5yr	20995.59		0.035	
Salt River	VaShly at Pit	7.10	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	7.10	20yr	86904.00	0.035	0.035	
Salt River	VaShly at Pit	7.10	50yr	128592.00	0.035	0.035	
Salt River	VaShly at Pit	7.10	100yr	150794.00	0.035	0.035	
Salt River	VaShly at Pit	7.10	200yr	179441.80	0.035	0.035	
Salt River	VaShly at Pit	7.10	500yr	211659.00	0.035	0.035	
Salt River	VaShly at Pit	7.17	5yr	20995.59		0.035	
Salt River	VaShly at Pit	7.17	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	7.17	20yr	86904.00	0.035	0.035	
Salt River	VaShly at Pit	7.17	50yr	128592.00	0.035	0.035	0.035
Salt River	VaShly at Pit	7.17	100yr	150794.00	0.035	0.035	0.035
Salt River	VaShly at Pit	7.17	200yr	179441.80	0.035	0.035	0.035
Salt River	VaShly at Pit	7.17	500yr	211659.00	0.035	0.035	0.035
Salt River	VaShly at Pit	7.24	5yr	20995.59		0.035	
Salt River	VaShly at Pit	7.24	10yr	53637.00	5.000	0.035	
Salt River	VaShly at Pit	7.24	20yr	86904.00	0.035	0.035	
Salt River	VaShly at Pit	7.24	50yr	128592.00	0.035	0.035	0.035
Salt River	VaShly at Pit	7.24	100yr	150794.00	0.035	0.035	0.035
Salt River	VaShly at Pit	7.24	200yr	179441.80	0.035	0.035	0.035
Salt River	VaShly at Pit	7.24	500yr	211659.00	0.035	0.035	0.035
Salt River	VaShly at Pit	7.28	5yr	20995.59		0.035	
Salt River	VaShly at Pit	7.28	10yr	53637.00		0.035	
Salt River	VaShly at Pit	7.28	20yr	86904.00		0.035	0.035
Salt River	VaShly at Pit	7.28	50yr	128592.00		0.035	0.035
Salt River	VaShly at Pit	7.28	100yr	150794.00		0.035	0.035
Salt River	VaShly at Pit	7.28	200yr	179441.80		0.035	0.035
Salt River	VaShly at Pit	7.28	500yr	211659.00		0.035	0.035
Salt River	VaShly US	7.32	5yr	21000.00		0.035	
Salt River	VaShly US	7.32	10yr	58000.00		0.035	0.181
Salt River	VaShly US	7.32	20yr	95000.00	0.035	0.035	0.145
Salt River	VaShly US	7.32	50yr	145000.00	0.035	0.035	0.120
Salt River	VaShly US	7.32	100yr	172000.00	0.035	0.035	0.105
Salt River	VaShly US	7.32	200yr	207000.00	0.035	0.035	0.100
Salt River	VaShly US	7.32	500yr	246000.00	0.035	0.035	0.097
Salt River	VaShly US	7.36	5yr	21000.00		0.035	
Salt River	VaShly US	7.36	10yr	58000.00		0.035	0.080
Salt River	VaShly US	7.36	20yr	95000.00	0.035	0.035	0.090
Salt River	VaShly US	7.36	50yr	145000.00	0.035	0.035	0.100
Salt River	VaShly US	7.36	100yr	172000.00	0.035	0.035	0.100
Salt River	VaShly US	7.36	200yr	207000.00	0.035	0.035	0.100
Salt River	VaShly US	7.36	500yr	246000.00	0.035	0.035	0.100
Salt River	VaShly US	7.40	5yr	21000.00		0.035	
Salt River	VaShly US	7.40	10yr	58000.00		0.035	0.045
Salt River	VaShly US	7.40	20yr	95000.00	0.035	0.035	0.090
Salt River	VaShly US	7.40	50yr	145000.00	0.035	0.035	0.100
Salt River	VaShly US	7.40	100yr	172000.00	0.035	0.035	0.100
Salt River	VaShly US	7.40	200yr	207000.00	0.035	0.035	0.100
Salt River	VaShly US	7.40	500yr	246000.00	0.035	0.035	0.100
Salt River	VaShly US	7.44	5yr	21000.00		0.035	
Salt River	VaShly US	7.44	10yr	58000.00		0.035	
Salt River	VaShly US	7.44	20yr	95000.00		0.035	
Salt River	VaShly US	7.44	50yr	145000.00	0.035	0.035	0.035

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	7.44	100yr	172000.00	0.035	0.035	0.035
Salt River	VaShly US	7.44	200yr	207000.00	0.035	0.035	0.035
Salt River	VaShly US	7.44	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly US	7.45		Bridge			
Salt River	VaShly US	7.47	5yr	21000.00		0.035	
Salt River	VaShly US	7.47	10yr	58000.00		0.035	
Salt River	VaShly US	7.47	20yr	95000.00		0.035	
Salt River	VaShly US	7.47	50yr	145000.00	0.035	0.035	0.035
Salt River	VaShly US	7.47	100yr	172000.00	0.035	0.035	0.035
Salt River	VaShly US	7.47	200yr	207000.00	0.035	0.035	0.035
Salt River	VaShly US	7.47	500yr	246000.00	0.035	0.035	0.035
Salt River	VaShly US	7.55	5yr	21000.00		0.035	
Salt River	VaShly US	7.55	10yr	58000.00		0.035	
Salt River	VaShly US	7.55	20yr	95000.00		0.035	
Salt River	VaShly US	7.55	50yr	145000.00		0.035	
Salt River	VaShly US	7.55	100yr	172000.00		0.035	
Salt River	VaShly US	7.55	200yr	207000.00	0.035	0.035	
Salt River	VaShly US	7.55	500yr	246000.00	0.035	0.035	
Salt River	VaShly US	7.63	5yr	22000.00		0.035	
Salt River	VaShly US	7.63	10yr	60000.00		0.035	
Salt River	VaShly US	7.63	20yr	100000.00		0.035	
Salt River	VaShly US	7.63	50yr	150000.00		0.035	0.035
Salt River	VaShly US	7.63	100yr	175000.00		0.035	0.035
Salt River	VaShly US	7.63	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	7.63	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	7.71	5yr	22000.00		0.035	
Salt River	VaShly US	7.71	10yr	60000.00		0.035	
Salt River	VaShly US	7.71	20yr	100000.00		0.035	0.035
Salt River	VaShly US	7.71	50yr	150000.00		0.035	0.065
Salt River	VaShly US	7.71	100yr	175000.00	0.035	0.035	0.072
Salt River	VaShly US	7.71	200yr	210000.00	0.035	0.035	0.075
Salt River	VaShly US	7.71	500yr	250000.00	0.035	0.035	0.075
Salt River	VaShly US	7.83	5yr	22000.00		0.035	
Salt River	VaShly US	7.83	10yr	60000.00		0.035	0.035
Salt River	VaShly US	7.83	20yr	100000.00	0.035	0.035	0.120
Salt River	VaShly US	7.83	50yr	150000.00	0.035	0.035	0.115
Salt River	VaShly US	7.83	100yr	175000.00	0.035	0.035	0.110
Salt River	VaShly US	7.83	200yr	210000.00	0.035	0.035	0.107
Salt River	VaShly US	7.83	500yr	250000.00	0.035	0.035	0.100
Salt River	VaShly US	7.91	5yr	22000.00		0.035	
Salt River	VaShly US	7.91	10yr	60000.00		0.035	0.155
Salt River	VaShly US	7.91	20yr	100000.00		0.035	0.175
Salt River	VaShly US	7.91	50yr	150000.00		0.035	0.160
Salt River	VaShly US	7.91	100yr	175000.00		0.035	0.155
Salt River	VaShly US	7.91	200yr	210000.00		0.035	0.146
Salt River	VaShly US	7.91	500yr	250000.00		0.035	0.140
Salt River	VaShly US	8.01	5yr	22000.00		0.035	
Salt River	VaShly US	8.01	10yr	60000.00		0.035	0.055
Salt River	VaShly US	8.01	20yr	100000.00	0.035	0.035	0.074
Salt River	VaShly US	8.01	50yr	150000.00	0.035	0.035	0.112
Salt River	VaShly US	8.01	100yr	175000.00	0.035	0.035	0.107
Salt River	VaShly US	8.01	200yr	210000.00	0.035	0.035	0.100
Salt River	VaShly US	8.01	500yr	250000.00	0.035	0.035	0.094
Salt River	VaShly US	8.10	5yr	22000.00	0.035	0.035	0.130
Salt River	VaShly US	8.10	10yr	60000.00	0.035	0.035	0.110

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	8.10	20yr	100000.00	0.035	0.035	0.084
Salt River	VaShly US	8.10	50yr	150000.00	0.035	0.035	0.094
Salt River	VaShly US	8.10	100yr	175000.00	0.035	0.035	0.091
Salt River	VaShly US	8.10	200yr	210000.00	0.035	0.035	0.087
Salt River	VaShly US	8.10	500yr	250000.00	0.035	0.035	0.084
Salt River	VaShly US	8.20	5yr	22000.00		0.035	0.045
Salt River	VaShly US	8.20	10yr	60000.00	0.035	0.035	0.035
Salt River	VaShly US	8.20	20yr	100000.00	0.035	0.035	0.035
Salt River	VaShly US	8.20	50yr	150000.00	0.035	0.035	0.040
Salt River	VaShly US	8.20	100yr	175000.00	0.035	0.035	0.040
Salt River	VaShly US	8.20	200yr	210000.00	0.035	0.035	0.039
Salt River	VaShly US	8.20	500yr	250000.00	0.035	0.035	0.039
Salt River	VaShly US	8.29	5yr	22000.00		0.035	0.036
Salt River	VaShly US	8.29	10yr	60000.00		0.035	0.036
Salt River	VaShly US	8.29	20yr	100000.00	0.035	0.035	0.035
Salt River	VaShly US	8.29	50yr	150000.00	0.035	0.035	0.035
Salt River	VaShly US	8.29	100yr	175000.00	0.035	0.035	0.035
Salt River	VaShly US	8.29	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	8.29	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	8.36	5yr	22000.00		0.035	0.035
Salt River	VaShly US	8.36	10yr	60000.00		0.035	0.036
Salt River	VaShly US	8.36	20yr	100000.00	0.035	0.035	0.037
Salt River	VaShly US	8.36	50yr	150000.00	0.035	0.035	0.041
Salt River	VaShly US	8.36	100yr	175000.00	0.035	0.035	0.041
Salt River	VaShly US	8.36	200yr	210000.00	0.035	0.035	0.041
Salt River	VaShly US	8.36	500yr	250000.00	0.035	0.035	0.040
Salt River	VaShly US	8.44	5yr	22000.00		0.035	0.055
Salt River	VaShly US	8.44	10yr	60000.00		0.035	0.055
Salt River	VaShly US	8.44	20yr	100000.00		0.035	0.051
Salt River	VaShly US	8.44	50yr	150000.00		0.035	0.050
Salt River	VaShly US	8.44	100yr	175000.00		0.035	0.048
Salt River	VaShly US	8.44	200yr	210000.00		0.035	0.046
Salt River	VaShly US	8.44	500yr	250000.00	0.035	0.035	0.045
Salt River	VaShly US	8.52	5yr	22000.00		0.035	0.040
Salt River	VaShly US	8.52	10yr	60000.00	0.035	0.035	0.039
Salt River	VaShly US	8.52	20yr	100000.00	0.035	0.035	0.046
Salt River	VaShly US	8.52	50yr	150000.00	0.035	0.035	0.067
Salt River	VaShly US	8.52	100yr	175000.00	0.035	0.035	0.065
Salt River	VaShly US	8.52	200yr	210000.00	0.035	0.035	0.058
Salt River	VaShly US	8.52	500yr	250000.00	0.035	0.035	0.056
Salt River	VaShly US	8.57	5yr	22000.00		0.035	0.049
Salt River	VaShly US	8.57	10yr	60000.00	0.035	0.035	0.050
Salt River	VaShly US	8.57	20yr	100000.00	0.035	0.035	0.047
Salt River	VaShly US	8.57	50yr	150000.00	0.035	0.035	0.047
Salt River	VaShly US	8.57	100yr	175000.00	0.035	0.035	0.048
Salt River	VaShly US	8.57	200yr	210000.00	0.035	0.035	0.045
Salt River	VaShly US	8.57	500yr	250000.00	0.035	0.035	0.045
Salt River	VaShly US	8.60	5yr	22000.00		0.035	0.041
Salt River	VaShly US	8.60	10yr	60000.00	0.035	0.035	0.055
Salt River	VaShly US	8.60	20yr	100000.00	0.035	0.035	0.055
Salt River	VaShly US	8.60	50yr	150000.00	0.035	0.035	0.055
Salt River	VaShly US	8.60	100yr	175000.00	0.035	0.035	0.053
Salt River	VaShly US	8.60	200yr	210000.00	0.035	0.035	0.052
Salt River	VaShly US	8.60	500yr	250000.00	0.035	0.035	0.052
Salt River	VaShly US	8.63	5yr	22000.00		0.035	0.062
Salt River	VaShly US	8.63	10yr	60000.00		0.035	0.139

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	8.63	20yr	100000.00		0.035	0.132
Salt River	VaShly US	8.63	50yr	150000.00		0.035	0.109
Salt River	VaShly US	8.63	100yr	175000.00		0.035	0.104
Salt River	VaShly US	8.63	200yr	210000.00	0.035	0.035	0.100
Salt River	VaShly US	8.63	500yr	250000.00	0.035	0.035	0.097
Salt River	VaShly US	8.68	5yr	22000.00		0.035	1.400
Salt River	VaShly US	8.68	10yr	60000.00		0.035	1.140
Salt River	VaShly US	8.68	20yr	100000.00		0.035	0.690
Salt River	VaShly US	8.68	50yr	150000.00		0.035	0.470
Salt River	VaShly US	8.68	100yr	175000.00		0.035	0.400
Salt River	VaShly US	8.68	200yr	210000.00		0.035	0.340
Salt River	VaShly US	8.68	500yr	250000.00	0.035	0.035	0.290
Salt River	VaShly US	8.74	5yr	22000.00		0.025	0.080
Salt River	VaShly US	8.74	10yr	60000.00		0.025	0.135
Salt River	VaShly US	8.74	20yr	100000.00		0.025	0.120
Salt River	VaShly US	8.74	50yr	150000.00		0.035	0.160
Salt River	VaShly US	8.74	100yr	175000.00		0.035	0.146
Salt River	VaShly US	8.74	200yr	210000.00	0.035	0.035	0.133
Salt River	VaShly US	8.74	500yr	250000.00	0.035	0.035	0.124
Salt River	VaShly US	8.77	5yr	22000.00		0.035	0.059
Salt River	VaShly US	8.77	10yr	60000.00		0.035	0.110
Salt River	VaShly US	8.77	20yr	100000.00		0.035	0.116
Salt River	VaShly US	8.77	50yr	150000.00		0.035	0.119
Salt River	VaShly US	8.77	100yr	175000.00		0.035	0.108
Salt River	VaShly US	8.77	200yr	210000.00	0.035	0.035	0.098
Salt River	VaShly US	8.77	500yr	250000.00	0.035	0.035	0.090
Salt River	VaShly US	8.81	5yr	22000.00		0.035	0.046
Salt River	VaShly US	8.81	10yr	60000.00		0.035	0.111
Salt River	VaShly US	8.81	20yr	100000.00		0.035	0.125
Salt River	VaShly US	8.81	50yr	150000.00		0.035	0.135
Salt River	VaShly US	8.81	100yr	175000.00	0.035	0.035	0.124
Salt River	VaShly US	8.81	200yr	210000.00	0.035	0.035	0.113
Salt River	VaShly US	8.81	500yr	250000.00	0.035	0.035	0.103
Salt River	VaShly US	8.85	5yr	22000.00		0.035	0.054
Salt River	VaShly US	8.85	10yr	60000.00		0.035	0.160
Salt River	VaShly US	8.85	20yr	100000.00		0.035	0.200
Salt River	VaShly US	8.85	50yr	150000.00		0.035	0.199
Salt River	VaShly US	8.85	100yr	175000.00	0.035	0.035	0.181
Salt River	VaShly US	8.85	200yr	210000.00	0.035	0.035	0.161
Salt River	VaShly US	8.85	500yr	250000.00	0.035	0.035	0.145
Salt River	VaShly US	8.88	5yr	22000.00		0.035	0.200
Salt River	VaShly US	8.88	10yr	60000.00		0.035	0.320
Salt River	VaShly US	8.88	20yr	100000.00		0.035	0.390
Salt River	VaShly US	8.88	50yr	150000.00		0.035	0.340
Salt River	VaShly US	8.88	100yr	175000.00		0.035	0.300
Salt River	VaShly US	8.88	200yr	210000.00		0.035	0.260
Salt River	VaShly US	8.88	500yr	250000.00		0.035	0.229
Salt River	VaShly US	8.92	5yr	22000.00		0.035	0.360
Salt River	VaShly US	8.92	10yr	60000.00		0.035	0.380
Salt River	VaShly US	8.92	20yr	100000.00		0.035	0.569
Salt River	VaShly US	8.92	50yr	150000.00		0.035	0.433
Salt River	VaShly US	8.92	100yr	175000.00		0.035	0.380
Salt River	VaShly US	8.92	200yr	210000.00	0.035	0.035	0.325
Salt River	VaShly US	8.92	500yr	250000.00	0.035	0.035	0.285
Salt River	VaShly US	8.98	5yr	22000.00		0.035	0.350
Salt River	VaShly US	8.98	10yr	60000.00		0.035	0.412

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	8.98	20yr	100000.00		0.035	0.343
Salt River	VaShly US	8.98	50yr	150000.00		0.035	0.316
Salt River	VaShly US	8.98	100yr	175000.00		0.035	0.288
Salt River	VaShly US	8.98	200yr	210000.00		0.035	0.258
Salt River	VaShly US	8.98	500yr	250000.00		0.035	0.234
Salt River	VaShly US	9.04	5yr	22000.00		0.035	0.590
Salt River	VaShly US	9.04	10yr	60000.00		0.035	0.440
Salt River	VaShly US	9.04	20yr	100000.00		0.035	0.307
Salt River	VaShly US	9.04	50yr	150000.00		0.035	0.299
Salt River	VaShly US	9.04	100yr	175000.00		0.035	0.286
Salt River	VaShly US	9.04	200yr	210000.00		0.035	0.280
Salt River	VaShly US	9.04	500yr	250000.00	0.035	0.035	0.261
Salt River	VaShly US	9.13	5yr	22000.00		0.035	0.280
Salt River	VaShly US	9.13	10yr	60000.00		0.035	0.212
Salt River	VaShly US	9.13	20yr	100000.00		0.035	0.213
Salt River	VaShly US	9.13	50yr	150000.00	0.035	0.035	0.271
Salt River	VaShly US	9.13	100yr	175000.00	0.035	0.035	0.253
Salt River	VaShly US	9.13	200yr	210000.00	0.035	0.035	0.232
Salt River	VaShly US	9.13	500yr	250000.00	0.035	0.035	0.211
Salt River	VaShly US	9.20	5yr	22000.00		0.035	
Salt River	VaShly US	9.20	10yr	60000.00		0.035	0.052
Salt River	VaShly US	9.20	20yr	100000.00		0.035	0.071
Salt River	VaShly US	9.20	50yr	150000.00		0.035	0.165
Salt River	VaShly US	9.20	100yr	175000.00		0.035	0.160
Salt River	VaShly US	9.20	200yr	210000.00	0.035	0.035	0.150
Salt River	VaShly US	9.20	500yr	250000.00	0.035	0.035	0.140
Salt River	VaShly US	9.26	5yr	22000.00		0.035	
Salt River	VaShly US	9.26	10yr	60000.00		0.035	0.065
Salt River	VaShly US	9.26	20yr	100000.00		0.035	0.085
Salt River	VaShly US	9.26	50yr	150000.00	0.035	0.035	0.186
Salt River	VaShly US	9.26	100yr	175000.00	0.035	0.035	0.181
Salt River	VaShly US	9.26	200yr	210000.00	0.035	0.035	0.171
Salt River	VaShly US	9.26	500yr	250000.00	0.035	0.035	0.161
Salt River	VaShly US	9.33	5yr	22000.00		0.035	
Salt River	VaShly US	9.33	10yr	60000.00		0.035	0.110
Salt River	VaShly US	9.33	20yr	100000.00		0.035	0.125
Salt River	VaShly US	9.33	50yr	150000.00	0.035	0.035	0.251
Salt River	VaShly US	9.33	100yr	175000.00	0.035	0.035	0.243
Salt River	VaShly US	9.33	200yr	210000.00	0.035	0.035	0.229
Salt River	VaShly US	9.33	500yr	250000.00	0.035	0.035	0.212
Salt River	VaShly US	9.39	5yr	22000.00		0.035	
Salt River	VaShly US	9.39	10yr	60000.00		0.035	0.130
Salt River	VaShly US	9.39	20yr	100000.00		0.035	0.149
Salt River	VaShly US	9.39	50yr	150000.00		0.035	0.285
Salt River	VaShly US	9.39	100yr	175000.00		0.035	0.277
Salt River	VaShly US	9.39	200yr	210000.00	0.035	0.035	0.258
Salt River	VaShly US	9.39	500yr	250000.00	0.035	0.035	0.238
Salt River	VaShly US	9.44	5yr	22000.00		0.035	5.000
Salt River	VaShly US	9.44	10yr	60000.00		0.035	0.138
Salt River	VaShly US	9.44	20yr	100000.00		0.035	0.157
Salt River	VaShly US	9.44	50yr	150000.00		0.035	0.330
Salt River	VaShly US	9.44	100yr	175000.00		0.035	0.305
Salt River	VaShly US	9.44	200yr	210000.00	0.035	0.035	0.278
Salt River	VaShly US	9.44	500yr	250000.00	0.035	0.035	0.252
Salt River	VaShly US	9.49	5yr	22000.00		0.035	5.000
Salt River	VaShly US	9.49	10yr	60000.00		0.035	0.122

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	9.49	20yr	100000.00	0.035	0.035	0.129
Salt River	VaShly US	9.49	50yr	150000.00	0.035	0.035	0.262
Salt River	VaShly US	9.49	100yr	175000.00	0.035	0.035	0.238
Salt River	VaShly US	9.49	200yr	210000.00	0.035	0.035	0.213
Salt River	VaShly US	9.49	500yr	250000.00	0.035	0.035	0.191
Salt River	VaShly US	9.55	5yr	22000.00		0.035	5.000
Salt River	VaShly US	9.55	10yr	60000.00	0.035	0.035	0.105
Salt River	VaShly US	9.55	20yr	100000.00	0.035	0.035	0.104
Salt River	VaShly US	9.55	50yr	150000.00	0.035	0.035	0.210
Salt River	VaShly US	9.55	100yr	175000.00	0.035	0.035	0.187
Salt River	VaShly US	9.55	200yr	210000.00	0.035	0.035	0.165
Salt River	VaShly US	9.55	500yr	250000.00	0.035	0.035	0.146
Salt River	VaShly US	9.59	5yr	22000.00		0.035	5.000
Salt River	VaShly US	9.59	10yr	60000.00	0.035	0.035	0.098
Salt River	VaShly US	9.59	20yr	100000.00	0.035	0.035	0.084
Salt River	VaShly US	9.59	50yr	150000.00	0.035	0.035	0.189
Salt River	VaShly US	9.59	100yr	175000.00	0.035	0.035	0.168
Salt River	VaShly US	9.59	200yr	210000.00	0.035	0.035	0.156
Salt River	VaShly US	9.59	500yr	250000.00	0.035	0.035	0.129
Salt River	VaShly US	9.61	5yr	22000.00		0.035	
Salt River	VaShly US	9.61	10yr	60000.00	0.035	0.035	0.065
Salt River	VaShly US	9.61	20yr	100000.00	0.035	0.035	0.066
Salt River	VaShly US	9.61	50yr	150000.00	0.035	0.035	0.178
Salt River	VaShly US	9.61	100yr	175000.00	0.035	0.035	0.158
Salt River	VaShly US	9.61	200yr	210000.00	0.035	0.035	0.139
Salt River	VaShly US	9.61	500yr	250000.00	0.035	0.035	0.123
Salt River	VaShly US	9.64	5yr	22000.00		0.035	
Salt River	VaShly US	9.64	10yr	60000.00	0.035	0.035	0.035
Salt River	VaShly US	9.64	20yr	100000.00	0.035	0.035	0.048
Salt River	VaShly US	9.64	50yr	150000.00	0.035	0.035	0.148
Salt River	VaShly US	9.64	100yr	175000.00	0.035	0.035	0.133
Salt River	VaShly US	9.64	200yr	210000.00	0.035	0.035	0.118
Salt River	VaShly US	9.64	500yr	250000.00	0.035	0.035	0.106
Salt River	VaShly US	9.67	5yr	22000.00	0.035	0.035	
Salt River	VaShly US	9.67	10yr	60000.00	0.035	0.035	0.035
Salt River	VaShly US	9.67	20yr	100000.00	0.035	0.035	0.042
Salt River	VaShly US	9.67	50yr	150000.00	0.035	0.035	0.138
Salt River	VaShly US	9.67	100yr	175000.00	0.035	0.035	0.124
Salt River	VaShly US	9.67	200yr	210000.00	0.035	0.035	0.110
Salt River	VaShly US	9.67	500yr	250000.00	0.035	0.035	0.098
Salt River	VaShly US	9.73	5yr	22000.00		0.035	
Salt River	VaShly US	9.73	10yr	60000.00	0.035	0.035	
Salt River	VaShly US	9.73	20yr	100000.00	0.035	0.035	0.035
Salt River	VaShly US	9.73	50yr	150000.00	0.035	0.035	0.047
Salt River	VaShly US	9.73	100yr	175000.00	0.035	0.035	0.044
Salt River	VaShly US	9.73	200yr	210000.00	0.035	0.035	0.041
Salt River	VaShly US	9.73	500yr	250000.00	0.035	0.035	0.037
Salt River	VaShly US	9.80	5yr	22000.00		0.035	
Salt River	VaShly US	9.80	10yr	60000.00	0.035	0.035	
Salt River	VaShly US	9.80	20yr	100000.00	0.035	0.035	0.035
Salt River	VaShly US	9.80	50yr	150000.00	0.035	0.035	0.035
Salt River	VaShly US	9.80	100yr	175000.00	0.035	0.035	0.035
Salt River	VaShly US	9.80	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	9.80	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	9.87	5yr	22000.00		0.035	
Salt River	VaShly US	9.87	10yr	60000.00	0.035	0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	9.87	20yr	100000.00	0.035	0.035	0.035
Salt River	VaShly US	9.87	50yr	150000.00	0.035	0.035	0.035
Salt River	VaShly US	9.87	100yr	175000.00	0.035	0.035	0.035
Salt River	VaShly US	9.87	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	9.87	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	9.96	5yr	22000.00	0.035	0.035	
Salt River	VaShly US	9.96	10yr	60000.00	0.035	0.035	
Salt River	VaShly US	9.96	20yr	100000.00	0.035	0.035	0.035
Salt River	VaShly US	9.96	50yr	150000.00	0.035	0.035	0.035
Salt River	VaShly US	9.96	100yr	175000.00	0.035	0.035	0.035
Salt River	VaShly US	9.96	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	9.96	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.06	5yr	22000.00		0.035	
Salt River	VaShly US	10.06	10yr	60000.00	0.035	0.035	
Salt River	VaShly US	10.06	20yr	100000.00	0.035	0.035	
Salt River	VaShly US	10.06	50yr	150000.00	0.035	0.035	0.035
Salt River	VaShly US	10.06	100yr	175000.00	0.035	0.035	0.035
Salt River	VaShly US	10.06	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	10.06	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.18	5yr	22000.00		0.035	
Salt River	VaShly US	10.18	10yr	60000.00		0.035	
Salt River	VaShly US	10.18	20yr	100000.00		0.035	
Salt River	VaShly US	10.18	50yr	150000.00		0.035	
Salt River	VaShly US	10.18	100yr	175000.00		0.035	0.035
Salt River	VaShly US	10.18	200yr	210000.00		0.035	0.035
Salt River	VaShly US	10.18	500yr	250000.00		0.035	0.035
Salt River	VaShly US	10.26	5yr	22000.00		0.035	
Salt River	VaShly US	10.26	10yr	60000.00		0.035	
Salt River	VaShly US	10.26	20yr	100000.00	0.035	0.035	
Salt River	VaShly US	10.26	50yr	150000.00	0.035	0.035	0.035
Salt River	VaShly US	10.26	100yr	175000.00	0.035	0.035	0.035
Salt River	VaShly US	10.26	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	10.26	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.36	5yr	22000.00		0.035	
Salt River	VaShly US	10.36	10yr	60000.00	0.035	0.035	
Salt River	VaShly US	10.36	20yr	100000.00	0.035	0.035	
Salt River	VaShly US	10.36	50yr	150000.00	0.035	0.035	0.035
Salt River	VaShly US	10.36	100yr	175000.00	0.035	0.035	0.035
Salt River	VaShly US	10.36	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	10.36	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.41	5yr	22000.00		0.035	
Salt River	VaShly US	10.41	10yr	60000.00	0.035	0.035	
Salt River	VaShly US	10.41	20yr	100000.00	0.035	0.035	
Salt River	VaShly US	10.41	50yr	150000.00	0.035	0.035	0.035
Salt River	VaShly US	10.41	100yr	175000.00	0.035	0.035	0.035
Salt River	VaShly US	10.41	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	10.41	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.46	5yr	22000.00		0.035	
Salt River	VaShly US	10.46	10yr	60000.00	0.035	0.035	
Salt River	VaShly US	10.46	20yr	100000.00	0.035	0.035	
Salt River	VaShly US	10.46	50yr	150000.00	0.035	0.035	0.035
Salt River	VaShly US	10.46	100yr	175000.00	0.035	0.035	0.035
Salt River	VaShly US	10.46	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	10.46	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.52	5yr	22000.00		0.035	
Salt River	VaShly US	10.52	10yr	60000.00	0.035	0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	10.52	20yr	100000.00	0.035	0.035	
Salt River	VaShly US	10.52	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	10.52	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.52	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	10.52	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.56	5yr	22000.00		0.035	
Salt River	VaShly US	10.56	10yr	60000.00		0.035	
Salt River	VaShly US	10.56	20yr	100000.00		0.035	
Salt River	VaShly US	10.56	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	10.56	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.56	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	10.56	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.61	5yr	22000.00		0.035	
Salt River	VaShly US	10.61	10yr	60000.00		0.035	
Salt River	VaShly US	10.61	20yr	100000.00	0.035	0.035	
Salt River	VaShly US	10.61	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	10.61	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.61	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	10.61	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.67	5yr	22000.00		0.035	
Salt River	VaShly US	10.67	10yr	60000.00		0.035	
Salt River	VaShly US	10.67	20yr	100000.00	0.035	0.035	
Salt River	VaShly US	10.67	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	10.67	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.67	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	10.67	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.73	5yr	22000.00		0.035	
Salt River	VaShly US	10.73	10yr	60000.00		0.035	
Salt River	VaShly US	10.73	20yr	100000.00		0.035	
Salt River	VaShly US	10.73	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	10.73	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.73	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	10.73	500yr	250000.00	0.035	0.035	
Salt River	VaShly US	10.78	5yr	22000.00		0.035	
Salt River	VaShly US	10.78	10yr	60000.00		0.035	
Salt River	VaShly US	10.78	20yr	100000.00		0.035	
Salt River	VaShly US	10.78	50yr	150000.00		0.035	
Salt River	VaShly US	10.78	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.78	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	10.78	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.81	5yr	22000.00		0.035	
Salt River	VaShly US	10.81	10yr	60000.00		0.035	
Salt River	VaShly US	10.81	20yr	100000.00		0.035	
Salt River	VaShly US	10.81	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	10.81	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.81	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	10.81	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.86	5yr	22000.00		0.035	
Salt River	VaShly US	10.86	10yr	60000.00		0.035	
Salt River	VaShly US	10.86	20yr	100000.00		0.035	
Salt River	VaShly US	10.86	50yr	150000.00		0.035	
Salt River	VaShly US	10.86	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.86	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	10.86	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	10.90	5yr	22000.00		0.035	
Salt River	VaShly US	10.90	10yr	60000.00		0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	10.90	20yr	100000.00		0.035	
Salt River	VaShly US	10.90	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	10.90	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.90	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	10.90	500yr	250000.00	0.035	0.035	
Salt River	VaShly US	10.95	5yr	22000.00		0.035	
Salt River	VaShly US	10.95	10yr	60000.00		0.035	
Salt River	VaShly US	10.95	20yr	100000.00		0.035	
Salt River	VaShly US	10.95	50yr	150000.00		0.035	
Salt River	VaShly US	10.95	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	10.95	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	10.95	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	11.00	5yr	22000.00		0.035	
Salt River	VaShly US	11.00	10yr	60000.00		0.035	
Salt River	VaShly US	11.00	20yr	100000.00		0.035	
Salt River	VaShly US	11.00	50yr	150000.00		0.035	
Salt River	VaShly US	11.00	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	11.00	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	11.00	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	11.05	5yr	22000.00		0.035	
Salt River	VaShly US	11.05	10yr	60000.00		0.035	
Salt River	VaShly US	11.05	20yr	100000.00		0.035	
Salt River	VaShly US	11.05	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	11.05	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	11.05	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	11.05	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	11.10	5yr	22000.00		0.035	
Salt River	VaShly US	11.10	10yr	60000.00		0.035	
Salt River	VaShly US	11.10	20yr	100000.00		0.035	
Salt River	VaShly US	11.10	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	11.10	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	11.10	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	11.10	500yr	250000.00	0.035	0.035	
Salt River	VaShly US	11.14	5yr	22000.00		0.060	
Salt River	VaShly US	11.14	10yr	60000.00		0.060	
Salt River	VaShly US	11.14	20yr	100000.00		0.060	
Salt River	VaShly US	11.14	50yr	150000.00	0.035	0.060	
Salt River	VaShly US	11.14	100yr	175000.00	0.035	0.060	
Salt River	VaShly US	11.14	200yr	210000.00	0.035	0.060	
Salt River	VaShly US	11.14	500yr	250000.00	0.035	0.060	
Salt River	VaShly US	11.17	5yr	22000.00		0.035	
Salt River	VaShly US	11.17	10yr	60000.00		0.035	
Salt River	VaShly US	11.17	20yr	100000.00		0.035	
Salt River	VaShly US	11.17	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	11.17	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	11.17	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	11.17	500yr	250000.00	0.035	0.035	
Salt River	VaShly US	11.25	5yr	22000.00		0.035	
Salt River	VaShly US	11.25	10yr	60000.00		0.035	
Salt River	VaShly US	11.25	20yr	100000.00	0.035	0.035	
Salt River	VaShly US	11.25	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	11.25	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	11.25	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	11.25	500yr	250000.00	0.035	0.035	
Salt River	VaShly US	11.32	5yr	22000.00		0.035	
Salt River	VaShly US	11.32	10yr	60000.00		0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	11.32	20yr	100000.00		0.035	
Salt River	VaShly US	11.32	50yr	150000.00	0.035	0.035	
Salt River	VaShly US	11.32	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	11.32	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	11.32	500yr	250000.00	0.035	0.035	
Salt River	VaShly US	11.41	5yr	22000.00		0.035	
Salt River	VaShly US	11.41	10yr	60000.00		0.035	
Salt River	VaShly US	11.41	20yr	100000.00		0.035	
Salt River	VaShly US	11.41	50yr	150000.00		0.035	
Salt River	VaShly US	11.41	100yr	175000.00		0.035	
Salt River	VaShly US	11.41	200yr	210000.00		0.035	
Salt River	VaShly US	11.41	500yr	250000.00		0.035	
Salt River	VaShly US	11.49	5yr	22000.00		0.035	
Salt River	VaShly US	11.49	10yr	60000.00		0.035	
Salt River	VaShly US	11.49	20yr	100000.00		0.035	
Salt River	VaShly US	11.49	50yr	150000.00		0.035	
Salt River	VaShly US	11.49	100yr	175000.00		0.035	
Salt River	VaShly US	11.49	200yr	210000.00		0.035	
Salt River	VaShly US	11.49	500yr	250000.00		0.035	
Salt River	VaShly US	11.62	5yr	22000.00		0.035	
Salt River	VaShly US	11.62	10yr	60000.00		0.035	
Salt River	VaShly US	11.62	20yr	100000.00		0.035	
Salt River	VaShly US	11.62	50yr	150000.00		0.035	
Salt River	VaShly US	11.62	100yr	175000.00	0.035	0.035	
Salt River	VaShly US	11.62	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	11.62	500yr	250000.00	0.035	0.035	
Salt River	VaShly US	11.78	5yr	22000.00		0.035	
Salt River	VaShly US	11.78	10yr	60000.00		0.035	
Salt River	VaShly US	11.78	20yr	100000.00		0.035	
Salt River	VaShly US	11.78	50yr	150000.00		0.035	
Salt River	VaShly US	11.78	100yr	175000.00		0.035	
Salt River	VaShly US	11.78	200yr	210000.00		0.035	
Salt River	VaShly US	11.78	500yr	250000.00		0.035	
Salt River	VaShly US	11.88	5yr	22000.00		0.035	
Salt River	VaShly US	11.88	10yr	60000.00		0.035	
Salt River	VaShly US	11.88	20yr	100000.00		0.035	
Salt River	VaShly US	11.88	50yr	150000.00		0.035	
Salt River	VaShly US	11.88	100yr	175000.00		0.035	
Salt River	VaShly US	11.88	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	11.88	500yr	250000.00	0.035	0.035	
Salt River	VaShly US	11.99	5yr	22000.00		0.035	
Salt River	VaShly US	11.99	10yr	60000.00		0.035	
Salt River	VaShly US	11.99	20yr	100000.00		0.035	
Salt River	VaShly US	11.99	50yr	150000.00		0.035	
Salt River	VaShly US	11.99	100yr	175000.00		0.035	
Salt River	VaShly US	11.99	200yr	210000.00		0.035	0.035
Salt River	VaShly US	11.99	500yr	250000.00		0.035	0.035
Salt River	VaShly US	12.06	5yr	22000.00		0.035	
Salt River	VaShly US	12.06	10yr	60000.00		0.035	
Salt River	VaShly US	12.06	20yr	100000.00		0.035	
Salt River	VaShly US	12.06	50yr	150000.00		0.035	
Salt River	VaShly US	12.06	100yr	175000.00		0.035	
Salt River	VaShly US	12.06	200yr	210000.00	0.035	0.035	
Salt River	VaShly US	12.06	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	12.10	5yr	22000.00		0.035	
Salt River	VaShly US	12.10	10yr	60000.00		0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	12.10	20yr	100000.00		0.035	
Salt River	VaShly US	12.10	50yr	150000.00		0.035	
Salt River	VaShly US	12.10	100yr	175000.00		0.035	
Salt River	VaShly US	12.10	200yr	210000.00		0.035	
Salt River	VaShly US	12.10	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	12.22	5yr	22000.00		0.035	
Salt River	VaShly US	12.22	10yr	60000.00		0.035	
Salt River	VaShly US	12.22	20yr	100000.00		0.035	
Salt River	VaShly US	12.22	50yr	150000.00		0.035	
Salt River	VaShly US	12.22	100yr	175000.00		0.035	
Salt River	VaShly US	12.22	200yr	210000.00		0.035	
Salt River	VaShly US	12.22	500yr	250000.00		0.035	
Salt River	VaShly US	12.33	5yr	22000.00		0.035	
Salt River	VaShly US	12.33	10yr	60000.00		0.035	
Salt River	VaShly US	12.33	20yr	100000.00		0.035	
Salt River	VaShly US	12.33	50yr	150000.00		0.035	
Salt River	VaShly US	12.33	100yr	175000.00		0.035	
Salt River	VaShly US	12.33	200yr	210000.00	0.035	0.035	0.035
Salt River	VaShly US	12.33	500yr	250000.00	0.035	0.035	0.035
Salt River	VaShly US	12.44	5yr	22000.00		0.035	
Salt River	VaShly US	12.44	10yr	60000.00		0.035	
Salt River	VaShly US	12.44	20yr	100000.00		0.035	
Salt River	VaShly US	12.44	50yr	150000.00		0.035	
Salt River	VaShly US	12.44	100yr	175000.00		0.035	
Salt River	VaShly US	12.44	200yr	210000.00		0.035	0.035
Salt River	VaShly US	12.44	500yr	250000.00		0.035	0.035
Salt River	VaShly US	12.55	5yr	22000.00		0.035	
Salt River	VaShly US	12.55	10yr	60000.00		0.035	
Salt River	VaShly US	12.55	20yr	100000.00		0.035	
Salt River	VaShly US	12.55	50yr	150000.00		0.035	
Salt River	VaShly US	12.55	100yr	175000.00		0.035	
Salt River	VaShly US	12.55	200yr	210000.00		0.035	
Salt River	VaShly US	12.55	500yr	250000.00		0.035	0.035
Salt River	VaShly US	12.67	5yr	22000.00		0.035	
Salt River	VaShly US	12.67	10yr	60000.00		0.035	
Salt River	VaShly US	12.67	20yr	100000.00		0.035	
Salt River	VaShly US	12.67	50yr	150000.00		0.035	
Salt River	VaShly US	12.67	100yr	175000.00		0.035	
Salt River	VaShly US	12.67	200yr	210000.00		0.035	
Salt River	VaShly US	12.67	500yr	250000.00		0.035	
Salt River	VaShly US	12.77	5yr	22000.00		0.035	
Salt River	VaShly US	12.77	10yr	60000.00		0.035	
Salt River	VaShly US	12.77	20yr	100000.00		0.035	
Salt River	VaShly US	12.77	50yr	150000.00		0.035	
Salt River	VaShly US	12.77	100yr	175000.00		0.035	
Salt River	VaShly US	12.77	200yr	210000.00		0.035	
Salt River	VaShly US	12.77	500yr	250000.00		0.035	
Salt River	VaShly US	12.87	5yr	22000.00		0.035	
Salt River	VaShly US	12.87	10yr	60000.00		0.035	
Salt River	VaShly US	12.87	20yr	100000.00		0.035	
Salt River	VaShly US	12.87	50yr	150000.00		0.035	
Salt River	VaShly US	12.87	100yr	175000.00		0.035	
Salt River	VaShly US	12.87	200yr	210000.00		0.035	
Salt River	VaShly US	12.87	500yr	250000.00		0.035	
Salt River	VaShly US	12.97	5yr	22000.00		0.035	
Salt River	VaShly US	12.97	10yr	60000.00		0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Salt River	VaShly US	12.97	20yr	100000.00		0.035	
Salt River	VaShly US	12.97	50yr	150000.00		0.035	
Salt River	VaShly US	12.97	100yr	175000.00		0.035	
Salt River	VaShly US	12.97	200yr	210000.00		0.035	
Salt River	VaShly US	12.97	500yr	250000.00		0.035	
Salt River	VaShly US	13.07	5yr	22000.00		0.035	
Salt River	VaShly US	13.07	10yr	60000.00		0.035	
Salt River	VaShly US	13.07	20yr	100000.00		0.035	
Salt River	VaShly US	13.07	50yr	150000.00		0.035	
Salt River	VaShly US	13.07	100yr	175000.00		0.035	
Salt River	VaShly US	13.07	200yr	210000.00		0.035	
Salt River	VaShly US	13.07	500yr	250000.00		0.035	
Salt River	VaShly US	13.19	5yr	22000.00		0.035	
Salt River	VaShly US	13.19	10yr	60000.00		0.035	
Salt River	VaShly US	13.19	20yr	100000.00		0.035	
Salt River	VaShly US	13.19	50yr	150000.00		0.035	
Salt River	VaShly US	13.19	100yr	175000.00		0.035	
Salt River	VaShly US	13.19	200yr	210000.00		0.035	
Salt River	VaShly US	13.19	500yr	250000.00		0.035	
Salt River	VaShly US	13.31	5yr	22000.00		0.035	
Salt River	VaShly US	13.31	10yr	60000.00		0.035	
Salt River	VaShly US	13.31	20yr	100000.00		0.035	
Salt River	VaShly US	13.31	50yr	150000.00		0.035	
Salt River	VaShly US	13.31	100yr	175000.00		0.035	
Salt River	VaShly US	13.31	200yr	210000.00		0.035	
Salt River	VaShly US	13.31	500yr	250000.00		0.035	
Salt River	VaShly US	13.44	5yr	22000.00		0.035	
Salt River	VaShly US	13.44	10yr	60000.00		0.035	
Salt River	VaShly US	13.44	20yr	100000.00		0.035	
Salt River	VaShly US	13.44	50yr	150000.00		0.035	
Salt River	VaShly US	13.44	100yr	175000.00		0.035	
Salt River	VaShly US	13.44	200yr	210000.00		0.035	
Salt River	VaShly US	13.44	500yr	250000.00		0.035	
Salt River	VaShly US	13.55	5yr	22000.00		0.035	
Salt River	VaShly US	13.55	10yr	60000.00		0.035	
Salt River	VaShly US	13.55	20yr	100000.00		0.035	
Salt River	VaShly US	13.55	50yr	150000.00		0.035	
Salt River	VaShly US	13.55	100yr	175000.00		0.035	
Salt River	VaShly US	13.55	200yr	210000.00		0.035	
Salt River	VaShly US	13.55	500yr	250000.00		0.035	
Salt River	VaShly US	13.64	5yr	22000.00		0.035	
Salt River	VaShly US	13.64	10yr	60000.00		0.035	
Salt River	VaShly US	13.64	20yr	100000.00		0.035	
Salt River	VaShly US	13.64	50yr	150000.00		0.035	
Salt River	VaShly US	13.64	100yr	175000.00		0.035	
Salt River	VaShly US	13.64	200yr	210000.00		0.035	
Salt River	VaShly US	13.64	500yr	250000.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.04	5yr	4.41	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.04	10yr	4363.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.04	20yr	8096.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.04	50yr	16408.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.04	100yr	21206.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.04	200yr	27558.19	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.04	500yr	34341.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.08	5yr	4.41	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.08	10yr	4363.00	0.035	0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Gilbert Mining P	Gilbert Mining P	0.08	20yr	8096.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.08	50yr	16408.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.08	100yr	21206.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.08	200yr	27558.19	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.08	500yr	34341.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.11	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.11	10yr	4363.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.11	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.11	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.11	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.11	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.11	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.15	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.15	10yr	4363.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.15	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.15	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.15	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.15	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.15	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.19	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.19	10yr	4363.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.19	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.19	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.19	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.19	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.19	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.22	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.22	10yr	4363.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.22	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.22	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.22	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.22	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.22	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.25	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.25	10yr	4363.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.25	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.25	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.25	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.25	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.25	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.29	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.29	10yr	4363.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.29	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.29	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.29	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.29	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.29	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.33	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.33	10yr	4363.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.33	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.33	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.33	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.33	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.33	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.37	5yr	4.41		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.37	10yr	4363.00	0.035	0.035	0.035

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Gilbert Mining P	Gilbert Mining P	0.37	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.37	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.37	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.37	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.37	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.43	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.43	10yr	4363.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.43	20yr	8096.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.43	50yr	16408.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.43	100yr	21206.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.43	200yr	27558.19	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.43	500yr	34341.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.48	5yr	4.41		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.48	10yr	4363.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.48	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.48	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.48	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.48	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.48	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.53	5yr	4.41	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.53	10yr	4363.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.53	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.53	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.53	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.53	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.53	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.55	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.55	10yr	4363.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.55	20yr	8096.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.55	50yr	16408.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.55	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.55	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.55	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.60	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.60	10yr	4363.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.60	20yr	8096.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.60	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.60	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.60	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.60	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.66	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.66	10yr	4363.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.66	20yr	8096.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.66	50yr	16408.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.66	100yr	21206.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.66	200yr	27558.19	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.66	500yr	34341.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.70	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.70	10yr	4363.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.70	20yr	8096.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.70	50yr	16408.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.70	100yr	21206.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.70	200yr	27558.19		0.035	
Gilbert Mining P	Gilbert Mining P	0.70	500yr	34341.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.74	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.74	10yr	4363.00		0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Gilbert Mining P	Gilbert Mining P	0.74	20yr	8096.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.74	50yr	16408.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.74	100yr	21206.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.74	200yr	27558.19		0.035	
Gilbert Mining P	Gilbert Mining P	0.74	500yr	34341.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.77	5yr	4.41		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.77	10yr	4363.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.77	20yr	8096.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.77	50yr	16408.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.77	100yr	21206.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.77	200yr	27558.19		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.77	500yr	34341.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.83	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.83	10yr	4363.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.83	20yr	8096.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.83	50yr	16408.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.83	100yr	21206.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.83	200yr	27558.19	0.000	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.83	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.88	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	0.88	10yr	4363.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.88	20yr	8096.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.88	50yr	16408.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.88	100yr	21206.00		0.035	
Gilbert Mining P	Gilbert Mining P	0.88	200yr	27558.19	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.88	500yr	34341.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.91	5yr	4.41		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.91	10yr	4363.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.91	20yr	8096.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.91	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.91	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.91	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.91	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.95	5yr	4.41		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.95	10yr	4363.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.95	20yr	8096.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.95	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.95	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.95	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.95	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	0.97	5yr	4.41	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.97	10yr	4363.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.97	20yr	8096.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.97	50yr	16408.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.97	100yr	21206.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.97	200yr	27558.19	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.97	500yr	34341.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	0.99	5yr	4.41		0.035	0.000
Gilbert Mining P	Gilbert Mining P	0.99	10yr	4363.00		0.035	0.000
Gilbert Mining P	Gilbert Mining P	0.99	20yr	8096.00		0.035	0.000
Gilbert Mining P	Gilbert Mining P	0.99	50yr	16408.00		0.035	0.000
Gilbert Mining P	Gilbert Mining P	0.99	100yr	21206.00		0.035	0.000
Gilbert Mining P	Gilbert Mining P	0.99	200yr	27558.19		0.035	0.000
Gilbert Mining P	Gilbert Mining P	0.99	500yr	34341.00		0.035	0.000
Gilbert Mining P	Gilbert Mining P	1.02	5yr	4.41	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.02	10yr	4363.00	0.035	0.035	

HEC-RAS Plan: extended (Continued)

River	Reach	River Sta	Profile	Q Total	Mann Wtd Left	Mann Wtd Chnl	Mann Wtd Rght
				(cfs)			
Gilbert Mining P	Gilbert Mining P	1.02	20yr	8096.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.02	50yr	16408.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.02	100yr	21206.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.02	200yr	27558.19	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.02	500yr	34341.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.05	5yr	4.41	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.05	10yr	4363.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.05	20yr	8096.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.05	50yr	16408.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.05	100yr	21206.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.05	200yr	27558.19	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.05	500yr	34341.00	0.035	0.035	
Gilbert Mining P	Gilbert Mining P	1.08	5yr	4.41		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.08	10yr	4363.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.08	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.08	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.08	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.08	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.08	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.11	5yr	4.41		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.11	10yr	4363.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.11	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.11	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.11	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.11	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.11	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.14	5yr	4.41		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.14	10yr	4363.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.14	20yr	8096.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.14	50yr	16408.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.14	100yr	21206.00		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.14	200yr	27558.19		0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.14	500yr	34341.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.17	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	1.17	10yr	4363.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.17	20yr	8096.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.17	50yr	16408.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.17	100yr	21206.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.17	200yr	27558.19		0.035	
Gilbert Mining P	Gilbert Mining P	1.17	500yr	34341.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.19	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	1.19	10yr	4363.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.19	20yr	8096.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.19	50yr	16408.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.19	100yr	21206.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.19	200yr	27558.19		0.035	
Gilbert Mining P	Gilbert Mining P	1.19	500yr	34341.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.21	5yr	4.41		0.035	
Gilbert Mining P	Gilbert Mining P	1.21	10yr	4363.00		0.035	
Gilbert Mining P	Gilbert Mining P	1.21	20yr	8096.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.21	50yr	16408.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.21	100yr	21206.00	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.21	200yr	27558.19	0.035	0.035	0.035
Gilbert Mining P	Gilbert Mining P	1.21	500yr	34341.00	0.035	0.035	0.035

APPENDIX 2b

5-YEAR STANDARD TABLE 1

HEC-RAS Plan: extended Profile: 5yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	5yr	21000.00	1148.00	1158.16	1152.98	1158.31	0.000403	3.09	6790.60	980.50	0.21
Salt River	VaShly DS	0.11	5yr	21000.00	1148.00	1158.44	1154.11	1158.66	0.000687	3.72	5639.58	918.97	0.26
Salt River	VaShly DS	0.23	5yr	21000.00	1150.96	1158.91	1155.20	1159.09	0.000645	3.41	6163.81	1092.64	0.25
Salt River	VaShly DS	0.36	5yr	21000.00	1151.05	1159.37	1156.27	1159.57	0.000774	3.56	5906.75	1129.81	0.27
Salt River	VaShly DS	0.51	5yr	21000.00	1152.00	1159.94	1156.56	1160.11	0.000632	3.32	6332.81	1155.44	0.25
Salt River	VaShly DS	0.65	5yr	21000.00	1151.50	1160.34	1155.37	1160.47	0.000371	2.86	7350.35	1124.60	0.20
Salt River	VaShly DS	0.78	5yr	21000.00	1152.00	1160.73	1157.34	1160.97	0.001021	3.90	5384.01	1103.52	0.31
Salt River	VaShly DS	0.89	5yr	21000.00	1156.00	1161.72	1160.28	1162.14	0.002678	5.19	4042.90	1110.75	0.48
Salt River	VaShly DS	1.00	5yr	21000.00	1152.00	1162.51	1157.46	1162.66	0.000516	3.08	6817.76	1194.01	0.23
Salt River	VaShly DS	1.12	5yr	21000.00	1152.00	1162.82	1156.57	1162.98	0.000519	3.22	6529.19	1106.57	0.23
Salt River	VaShly DS	1.22	5yr	21000.00	1156.00	1163.19	1160.49	1163.41	0.000995	3.81	5517.67	1250.17	0.31
Salt River	VaShly DS	1.30	5yr	21000.00	1152.00	1163.63	1161.01	1163.89	0.001271	4.05	5178.99	1177.99	0.34
Salt River	VaShly DS	1.39	5yr	21000.00	1147.32	1163.95	1155.28	1164.02	0.000134	2.11	9946.36	1186.08	0.12
Salt River	VaShly DS	1.52	5yr	21000.00	1144.00	1164.03	1148.90	1164.07	0.000041	1.57	13394.71	1015.06	0.07
Salt River	VaShly DS	1.65	5yr	21000.00	1154.51	1164.17	1160.60	1164.42	0.000779	3.98	5277.62	1250.36	0.28
Salt River	VaShly DS	1.76	5yr	21000.00	1152.50	1164.58	1160.73	1164.84	0.000728	4.05	5182.67	1278.15	0.28
Salt River	VaShly DS	1.80	5yr	21000.00	1160.00	1164.78	1164.16	1165.85	0.006787	8.30	2529.35	1098.66	0.77
Salt River	VaShly DS	1.83	5yr	21000.00	1148.00	1165.75	1162.69	1166.45	0.002236	6.68	3144.06	692.58	0.48
Salt River	VaShly DS	1.86	5yr	21000.00	1148.00	1166.32	1156.39	1166.64	0.000582	4.55	4618.55	631.97	0.26
Salt River	VaShly DS	1.89	5yr	21000.00	1152.71	1167.19	1165.43	1167.98	0.016204	7.13	2945.21	1005.03	0.55
Salt River	VaShly DS	1.95	5yr	21000.00	1157.05	1168.21	1164.09	1168.59	0.000894	4.94	4249.46	1314.72	0.31
Salt River	VaShly DS	2.02	5yr	21000.00	1158.36	1168.57	1163.02	1168.84	0.000514	4.19	5010.61	1720.94	0.24
Salt River	VaShly DS	2.04	5yr	21000.00	1156.31	1168.57	1163.75	1168.95	0.000765	4.95	4238.72	1706.70	0.30
Salt River	VaShly DS	2.07	5yr	21000.00	1156.00	1168.57	1165.89	1169.28	0.002025	6.77	3100.15	1691.82	0.46
Salt River	VaShly DS	2.10	5yr	21000.00	1158.27	1168.73	1167.11	1169.85	0.003895	8.48	2475.69	1672.84	0.62
Salt River	VaShly DS	2.12	5yr	21000.00	1176.00	1181.49	1181.49	1183.89	0.010704	12.43	1690.12	2041.49	1.00
Salt River	VaShly DS	2.13	5yr	21000.00	1176.00	1182.87	1182.16	1184.55	0.006750	10.41	2016.88	2277.52	0.81
Salt River	VaShly DS	2.21	5yr	21000.00	1176.00	1185.81	1184.38	1186.69	0.003956	7.51	2795.03	2184.67	0.61
Salt River	VaShly DS	2.29	5yr	21000.00	1170.86	1187.00	1177.83	1187.13	0.000271	2.89	7270.85	1091.97	0.18
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	5yr	21000.00	1180.00	1188.94	1187.02	1189.48	0.002956	5.89	3564.55	873.21	0.51
Salt River	VaShly DS	2.38	5yr	21000.00	1175.59	1189.61	1185.20	1189.91	0.001131	4.45	4720.62	855.71	0.33
Salt River	VaShly DS	2.40	5yr	21000.00	1176.00	1189.78	1186.05	1190.07	0.001000	4.25	4938.16	873.44	0.32
Salt River	VaShly DS	2.41	5yr	21000.00	1176.00	1189.83	1186.19	1190.11	0.000985	4.23	4960.34	873.77	0.31
Salt River	VaShly DS	2.42	5yr	21000.00	1176.00	1189.86	1186.55	1190.15	0.001082	4.35	4828.38	874.22	0.33
Salt River	VaShly DS	2.47	5yr	21000.00	1178.61	1190.18	1188.25	1190.70	0.002587	5.82	3610.07	815.37	0.49
Salt River	VaShly DS	2.53	5yr	21000.00	1180.00	1191.06	1189.37	1191.56	0.002861	5.70	3685.15	1191.36	0.50
Salt River	VaShly DS	2.59	5yr	21000.00	1184.00	1191.92	1189.50	1192.35	0.001983	5.23	4015.47	1529.52	0.43
Salt River	VaShly DS	2.65	5yr	21000.00	1187.99	1192.57	1191.06	1193.12	0.003008	5.95	3531.33	864.92	0.52
Salt River	VaShly DS	2.71	5yr	21000.00	1188.00	1193.69	1192.16	1194.13	0.002598	5.36	3920.55	1302.80	0.48
Salt River	VaShly DS	2.78	5yr	21000.00	1188.00	1194.52	1192.87	1194.92	0.002281	5.05	4156.34	1148.50	0.45
Salt River	VaShly DS	2.87	5yr	21000.00	1175.62	1195.14	1185.00	1195.33	0.000463	3.48	6042.63	811.82	0.22
Salt River	VaShly DS	2.98	5yr	21000.00	1180.00	1195.35	1187.49	1195.57	0.000331	3.70	5670.85	765.15	0.20
Salt River	VaShly DS	3.10	5yr	21000.00	1174.02	1195.56	1184.70	1195.73	0.000220	3.27	6428.70	539.47	0.17
Salt River	VaShly DS	3.23	5yr	21000.00	1184.27	1195.91	1191.94	1196.39	0.001378	5.55	3781.25	570.63	0.38
Salt River	VaShly DS	3.35	5yr	21000.00	1188.00	1196.88	1193.95	1197.23	0.001315	4.78	4393.36	802.07	0.36
Salt River	VaShly DS	3.46	5yr	21000.00	1184.00	1197.51	1191.31	1197.71	0.000508	3.63	5792.56	829.71	0.23
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	5yr	21000.00	1186.84	1197.65	1193.49	1197.99	0.001037	4.65	4514.91	719.11	0.33
Salt River	VaShly DS	3.64	5yr	21000.00	1192.00	1199.50	1198.38	1200.26	0.004457	6.97	3014.44	781.80	0.63
Salt River	VaShly DS	3.76	5yr	21000.00	1188.00	1200.94	1196.92	1201.16	0.000782	3.77	5569.53	1265.80	0.28
Salt River	VaShly DS	3.89	5yr	21000.00	1174.66	1201.20	1183.69	1201.27	0.000081	2.10	9986.23	1397.23	0.10
Salt River	VaShly DS	4.04	5yr	21000.00	1184.00	1201.29	1191.03	1201.36	0.000147	2.23	9425.89	1823.84	0.13
Salt River	VaShly DS	4.09	5yr	21000.00	1188.00	1201.32	1196.34	1201.52	0.000654	3.59	5842.65	1557.05	0.26
Salt River	VaShly DS	4.15	5yr	21000.00	1184.00	1201.52	1194.71	1201.75	0.000726	3.80	5523.43	1463.41	0.27
Salt River	VaShly DS	4.22	5yr	21000.00	1178.19	1201.76	1188.12	1201.96	0.000553	3.57	5882.11	1392.30	0.24
Salt River	VaShly DS	4.27	5yr	21000.00	1192.00	1202.02	1200.70	1202.68	0.003619	6.49	3234.66	1049.04	0.57
Salt River	VaShly DS	4.31	5yr	21000.00	1199.24	1203.17	1203.10	1204.54	0.011429	9.38	2238.53	909.95	0.96
Salt River	VaShly DS	4.47	5yr	21000.00	1200.00	1207.43	1205.88	1207.80	0.002301	4.87	6032.46	1849.77	0.45
Salt River	VaShly DS	4.59	5yr	21000.00	1192.00	1208.60	1204.01	1208.70	0.000915	2.60	8258.68	1749.09	0.17
Salt River	VaShly DS	4.74	5yr	21000.00	1188.00	1209.21	1202.87	1209.28	0.000583	2.02	10518.31	1471.51	0.11
Salt River	VaShly DS	4.88	5yr	21000.00	1200.00	1209.64	1205.61	1210.14	0.001416	5.71	3874.38	784.10	0.39
Salt River	VaShly DS	5.03	5yr	21000.00	1204.00	1210.92	1208.47	1211.38	0.001742	5.44	3861.75	802.75	0.41
Salt River	VaShly DS	5.15	5yr	21000.00	1204.00	1212.07	1209.54	1212.57	0.001906	5.66	3726.94	1000.75	0.43
Salt River	VaShly DS	5.26	5yr	21000.00	1179.01	1212.63	1194.52	1212.74	0.000124	2.66	8019.73	984.69	0.13
Salt River	VaShly DS	5.40	5yr	21000.00	1196.00	1212.82	1204.39	1213.08	0.000686	4.10	5123.39	711.28	0.27
Salt River	VaShly DS	5.47	5yr	21000.00	1208.00	1213.77	1213.24	1214.96	0.007392	8.75	2399.25	698.33	0.80
Salt River	VaShly DS	5.53	5yr	21000.00	1192.00	1215.03	1199.33	1215.15	0.000164	2.77	7578.55	728.42	0.14
Salt River	VaShly DS	5.56	5yr	21000.00	1208.00	1214.97	1212.90	1215.49	0.002184	5.81	3615.45	718.52	0.46
Salt River	VaShly DS	5.60	5yr	21000.00	1194.35	1215.49	1200.14	1215.57	0.000076	2.30	9123.11	878.98	0.10
Salt River	VaShly DS	5.65	5yr	21000.00	1198.67	1215.46	1204.44	1215.63	0.000172	3.24	6486.47	732.79	0.15
Salt River	VaShly DS	5.69	5yr	21000.00	1206.01	1215.28	1212.19	1216.02	0.001908	6.93	3030.56	720.75	0.45
Salt River	VaShly DS	5.73	5yr	21000.00	1208.00	1216.48	1216.48	1218.58	0.010938	11.62	1806.46	758.14	0.99
Salt River	VaShly DS	5.76	5yr	21000.00	1204.00	1218.60	1214.90	1219.25	0.001465	6.47	3243.58	775.86	0.40
Salt River	VaShly DS	5.80	5yr	21000.00	1204.00	1218.88	1213.71	1219.47	0.000995	6.13	3427.31	818.79	0.34
Salt River	VaShly DS	5.82	5yr	21000.00	1204.00	1218.74	1215.47	1219.77	0.002203	8.16	2575.04	861.12	0.50
Salt River	VaShly DS	5.84	5yr	21000.00	1204.00	1218.85	1215.75	1220.07	0.002727	8.88	2364.70	813.93	0.54
Salt River	VaShly DS	5.85	5yr	21000.00	1208.00	1219.56	1214.10	1220.17	0.000328	6.28	3345.25	868.47	0.35
Salt River	VaShly DS	5.86	5yr	21000.00	1205.11	1219.73	1213.89	1220.22	0.000828	5.61	3742.08	743.73	0.31
Salt River	VaShly DS	5.87	5yr	21000.00	1206.22	1219.89	1215.23	1220.44	0.007489	5.99	3504.18	1050.00	0.36
Salt River	VaShly DS	5.88	5yr	21000.00	1209.96	1220.41	1218.22	1221.43	0.030818	8.09	2596.59	1396.07	0.61
Salt River	VaShly DS	5.91	5yr	21000.00	1203.31	1221.45	1211.11	1221.56	0.000129	2.66	7903.16	1397.72	0.13
Salt River	VaShly DS	5.93	5yr	21000.00	1198.79	1221.53	1205.43	1221.58	0.000044	1.75	11968.20	1163.89	0.08
Salt River	VaShly DS	5.95	5yr	21000.00	1196.00	1221.53	1204.39	1221.58	0.000043	1.79	11754.27	948.67	0.08
Salt River	VaShly DS	5.97	5yr	21000.00	1198.59	1221.53	1206.40	1221.59	0.000070	2.08	10095.32	920.51	0.10
Salt River	VaShly DS	5.99	5yr	21000.00	1200.00	1221.52	1208.58	1221.61	0.000107	2.29	9151.65	1000.94	0.12
Salt River	VaShly DS	6.01	5yr	21000.00	1204.00	1221.49	1210.65	1221.64	0.000251	3.12	6723.91	869.18	0.17

HEC-RAS Plan: extended Profile: 5yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	5yr	21000.00	1204.00	1221.57	1211.03	1221.68	0.000152	2.67	7873.45	1057.43	0.14
Salt River	VaShly DS	6.09	5yr	21000.00	1200.00	1221.65	1208.37	1221.72	0.000092	2.13	9875.45	1180.49	0.11
Salt River	VaShly DS	6.14	5yr	21000.00	1196.00	1221.69	1202.25	1221.73	0.000043	1.62	12932.47	1434.53	0.08
Salt River	VaShly DS	6.18	5yr	21000.00	1192.00	1221.67	1208.61	1221.81	0.000342	2.98	7057.20	1712.46	0.19
Salt River	VaShly DS	6.22	5yr	21000.00	1203.46	1221.67	1212.34	1221.93	0.000567	4.09	5140.46	1480.28	0.25
Salt River	VaShly DS	6.27	5yr	21000.00	1194.49	1221.90	1202.20	1221.98	0.000079	2.28	9202.30	1115.41	0.10
Salt River	VaShly DS	6.32	5yr	21000.00	1192.00	1221.94	1201.49	1222.00	0.000057	2.08	10077.15	927.68	0.09
Salt River	VaShly DS	6.35	5yr	21000.00	1194.53	1221.94	1203.23	1222.02	0.000073	2.25	9317.36	858.51	0.10
Salt River	VaShly DS	6.38	5yr	21000.00	1195.40	1221.95	1202.78	1222.03	0.000076	2.29	9162.47	1442.56	0.10
Salt River	VaShly DS	6.40	5yr	21000.00	1219.48	1225.83	1225.83	1227.43	0.012113	10.15	2070.55	2124.82	1.00
Salt River	VaShly at Pit	6.45	5yr	20995.80	1220.01	1226.58	1226.58	1228.19	0.011971	10.20	2059.22	631.74	1.00
Salt River	VaShly at Pit	6.50	5yr	20995.80	1223.66	1229.26	1228.50	1230.29	0.005987	8.14	2578.16	657.89	0.72
Salt River	VaShly at Pit	6.53	5yr	20995.80	1224.00	1230.30	1228.99	1231.18	0.004158	7.51	2874.94	673.55	0.62
Salt River	VaShly at Pit	6.56	5yr	20995.80	1224.00	1230.94	1229.57	1231.81	0.004095	7.48	2890.41	686.21	0.62
Salt River	VaShly at Pit	6.62	5yr	20995.80	1225.32	1232.43	1231.50	1233.51	0.005746	8.35	2565.47	725.95	0.72
Salt River	VaShly at Pit	6.69	5yr	20995.80	1224.24	1234.24	1232.40	1234.95	0.002828	6.74	3235.05	693.27	0.52
Salt River	VaShly at Pit	6.75	5yr	20995.80	1228.00	1235.13	1233.21	1235.78	0.002632	6.46	3279.21	676.43	0.50
Salt River	VaShly at Pit	6.80	5yr	20995.80	1228.00	1235.91	1233.87	1236.51	0.002487	6.20	3386.65	674.59	0.49
Salt River	VaShly at Pit	6.85	5yr	20995.80	1231.97	1236.59	1235.72	1237.61	0.005909	8.11	2592.98	746.21	0.72
Salt River	VaShly at Pit	6.91	5yr	20995.80	1230.46	1238.00	1235.95	1238.75	0.002654	6.95	3020.76	1258.53	0.51
Salt River	VaShly at Pit	6.96	5yr	20995.80	1232.00	1238.91	1238.07	1240.21	0.006001	9.17	2290.36	1268.45	0.75
Salt River	VaShly at Pit	6.99	5yr	20995.80	1232.00	1240.03	1237.88	1240.83	0.002681	7.19	2919.34	1396.90	0.52
Salt River	VaShly at Pit	7.01	5yr	20995.80	1230.78	1240.42	1237.46	1241.09	0.001827	6.54	3210.05	1380.86	0.44
Salt River	VaShly at Pit	7.03	5yr	20995.80	1232.00	1240.61	1237.17	1241.21	0.001520	6.21	3380.56	1313.07	0.41
Salt River	VaShly at Pit	7.04	5yr	20995.80	1232.00	1240.70	1237.16	1241.33	0.001558	6.37	3294.57	1193.16	0.41
Salt River	VaShly at Pit	7.06	5yr	20995.80	1232.00	1240.89	1236.95	1241.46	0.001310	6.07	3458.79	1221.81	0.38
Salt River	VaShly at Pit	7.07	5yr	20995.80	1232.00	1240.96	1237.62	1241.59	0.001668	6.35	3308.84	1170.37	0.42
Salt River	VaShly at Pit	7.10	5yr	20995.80	1232.00	1241.28	1238.19	1241.89	0.001674	6.26	3351.77	1372.33	0.42
Salt River	VaShly at Pit	7.17	5yr	20995.80	1232.14	1241.99	1240.03	1242.76	0.002799	7.05	2979.47	1566.76	0.53
Salt River	VaShly at Pit	7.24	5yr	20995.80	1235.58	1243.18	1240.21	1243.50	0.001156	4.58	4581.58	1890.41	0.34
Salt River	VaShly at Pit	7.28	5yr	20995.80	1236.00	1243.57	1241.85	1244.07	0.002683	5.66	3712.78	1941.33	0.49
Salt River	VaShly US	7.32	5yr	21000.00	1239.34	1243.54	1242.41	1244.10	0.003880	6.02	3485.96	2046.15	0.57
Salt River	VaShly US	7.36	5yr	21000.00	1238.07	1244.32	1242.23	1244.63	0.001583	4.42	4748.84	2089.82	0.38
Salt River	VaShly US	7.40	5yr	21000.00	1239.06	1244.68	1242.14	1244.92	0.001185	3.92	5357.17	2082.30	0.33
Salt River	VaShly US	7.44	5yr	21000.00	1238.53	1244.96	1241.88	1245.12	0.000667	3.25	6460.44	2095.41	0.25
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	5yr	21000.00	1239.83	1245.15	1242.58	1245.36	0.000988	3.69	5697.38	1443.69	0.30
Salt River	VaShly US	7.55	5yr	21000.00	1239.60	1245.53	1242.43	1245.71	0.000746	3.42	6147.02	1416.49	0.27
Salt River	VaShly US	7.63	5yr	22000.00	1240.00	1245.91	1243.76	1246.30	0.001783	4.97	4423.63	956.33	0.41
Salt River	VaShly US	7.71	5yr	22000.00	1243.41	1247.43	1246.70	1248.27	0.006055	7.38	2979.18	1031.64	0.71
Salt River	VaShly US	7.83	5yr	22000.00	1244.00	1249.62	1247.21	1250.04	0.001809	5.19	4236.66	1548.98	0.41
Salt River	VaShly US	7.91	5yr	22000.00	1244.00	1250.53	1248.81	1251.15	0.002993	6.34	3469.71	1815.21	0.53
Salt River	VaShly US	8.01	5yr	22000.00	1240.00	1251.46	1245.60	1251.65	0.000506	3.46	6361.70	1441.90	0.23
Salt River	VaShly US	8.10	5yr	22000.00	1212.00	1251.64	1223.41	1251.69	0.000031	1.76	14759.26	1391.38	0.07
Salt River	VaShly US	8.20	5yr	22000.00	1202.29	1251.69	1207.41	1251.70	0.000003	0.76	31250.21	1465.83	0.02
Salt River	VaShly US	8.29	5yr	22000.00	1204.00	1251.69	1209.38	1251.70	0.000002	0.68	34499.68	1650.33	0.02
Salt River	VaShly US	8.36	5yr	22000.00	1212.00	1251.69	1217.85	1251.70	0.000003	0.79	29488.75	1551.77	0.02
Salt River	VaShly US	8.44	5yr	22000.00	1192.00	1251.69	1204.82	1251.70	0.000002	0.73	33582.07	1702.60	0.02
Salt River	VaShly US	8.52	5yr	22000.00	1208.00	1251.69	1215.63	1251.70	0.000006	1.13	21446.08	1643.18	0.03
Salt River	VaShly US	8.57	5yr	22000.00	1198.17	1251.68	1205.50	1251.71	0.000008	1.32	18894.32	1325.46	0.04
Salt River	VaShly US	8.60	5yr	22000.00	1196.00	1251.68	1207.43	1251.71	0.000012	1.49	16622.89	1278.58	0.04
Salt River	VaShly US	8.63	5yr	22000.00	1216.00	1251.66	1226.68	1251.73	0.000041	2.17	11812.62	1053.33	0.08
Salt River	VaShly US	8.68	5yr	22000.00	1244.00	1252.31	1252.31	1254.40	0.010970	11.78	4670.31	1454.31	1.00
Salt River	VaShly US	8.74	5yr	22000.00	1220.00	1254.54	1231.92	1254.61	0.000022	2.15	13102.46	1498.57	0.06
Salt River	VaShly US	8.77	5yr	22000.00	1206.87	1254.59	1216.42	1254.62	0.000013	1.38	18592.58	1568.41	0.05
Salt River	VaShly US	8.81	5yr	22000.00	1204.00	1254.59	1220.10	1254.63	0.000024	1.65	15120.95	1558.24	0.06
Salt River	VaShly US	8.85	5yr	22000.00	1212.00	1254.55	1227.08	1254.66	0.000103	2.68	9401.94	1488.74	0.12
Salt River	VaShly US	8.88	5yr	22000.00	1233.08	1254.44	1244.92	1254.81	0.000706	4.97	5991.10	1472.37	0.29
Salt River	VaShly US	8.92	5yr	22000.00	1239.59	1254.45	1250.34	1255.10	0.001656	6.57	4987.48	1362.17	0.42
Salt River	VaShly US	8.98	5yr	22000.00	1244.00	1254.95	1253.23	1256.13	0.003983	8.82	3709.40	936.91	0.63
Salt River	VaShly US	9.04	5yr	22000.00	1248.00	1256.06	1254.36	1257.39	0.003808	9.38	3887.80	741.30	0.63
Salt River	VaShly US	9.13	5yr	22000.00	1248.00	1257.80	1253.76	1258.34	0.001164	5.93	4773.00	665.29	0.36
Salt River	VaShly US	9.20	5yr	22000.00	1248.00	1258.34	1253.67	1258.74	0.000934	5.10	4313.64	550.88	0.32
Salt River	VaShly US	9.26	5yr	22000.00	1247.57	1258.62	1253.70	1259.10	0.001088	5.57	3952.99	525.91	0.35
Salt River	VaShly US	9.33	5yr	22000.00	1244.00	1258.94	1253.09	1259.60	0.001337	6.50	3385.67	391.08	0.39
Salt River	VaShly US	9.39	5yr	22000.00	1236.00	1259.12	1252.12	1260.13	0.001652	8.05	2732.83	263.40	0.44
Salt River	VaShly US	9.44	5yr	22000.00	1247.05	1260.10	1252.56	1260.41	0.000446	4.48	5066.17	981.86	0.23
Salt River	VaShly US	9.49	5yr	22000.00	1248.00	1260.30	1254.58	1260.52	0.000445	3.75	6018.88	1250.62	0.22
Salt River	VaShly US	9.55	5yr	22000.00	1251.37	1260.43	1256.55	1260.83	0.001051	5.04	4572.10	2339.85	0.34
Salt River	VaShly US	9.59	5yr	22000.00	1244.40	1260.71	1254.61	1260.99	0.000576	4.27	5475.58	2680.54	0.26
Salt River	VaShly US	9.61	5yr	22000.00	1248.20	1260.76	1255.43	1261.11	0.000841	4.79	4588.57	1129.21	0.30
Salt River	VaShly US	9.64	5yr	22000.00	1252.00	1260.76	1257.75	1261.38	0.001969	6.33	3478.04	1151.61	0.45
Salt River	VaShly US	9.67	5yr	22000.00	1250.78	1261.04	1257.50	1261.61	0.001591	6.03	3706.96	1231.26	0.41
Salt River	VaShly US	9.73	5yr	22000.00	1252.00	1261.55	1258.17	1262.26	0.002083	6.74	3263.70	1055.15	0.47
Salt River	VaShly US	9.80	5yr	22000.00	1252.00	1262.37	1259.55	1263.09	0.002182	6.82	3227.30	1017.64	0.48
Salt River	VaShly US	9.87	5yr	22000.00	1254.92	1263.29	1260.68	1263.93	0.002402	6.42	3425.24	1124.92	0.49
Salt River	VaShly US	9.96	5yr	22000.00	1254.13	1264.22	1260.24	1264.71	0.001288	5.65	3899.53	1319.49	0.37
Salt River	VaShly US	10.06	5yr	22000.00	1256.00	1264.92	1261.55	1265.67	0.001825	6.92	3179.59	1227.21	0.45
Salt River	VaShly US	10.18	5yr	22000.00	1256.00	1266.09	1262.48	1266.91	0.002215	7.28	3023.95	1599.98	0.49
Salt River	VaShly US	10.26	5yr	22000.00	1252.00	1266.96	1257.55	1267.17	0.000242	3.66	6014.16	1930.18	0.18
Salt River	VaShly US	10.36	5yr	22000.00	1253.00	1267.10	1262.53	1267.67	0.001289	6.03	3647.52	1821.05	0.38
Salt River	VaShly US	10.41	5yr	22000.00	1247.67	1267.68	1251.67	1267.74	0.000042	1.92	11449.30	1951.51	0.08
Salt River	VaShly US	10.46	5yr	22000.00	1240.00	1267.69	1250.31	1267.75	0.000051	1.99	11080.62	1848.49	0.06
Salt River	VaShly US	10.52	5yr	22000.00	1234.97	1267.73	1243.99	1267.76	0.000020	1.56	14131.41	1404.35	0.06
Salt River	VaShly US	10.56	5yr	22000.00	1244.00	1267.71	1250.89	1267.78	0.000049	2.06	10694.66	1337.85	0.08
Salt River	VaShly US	10.61	5yr	22000.00	1244.20	1267.72	1251.87	1267.79	0.000054	2.10	10458.05	1318.29	0.09
Salt River	VaShly US	10.67	5yr	22000.00	1248.00	1267.74	1253.39	1267.82	0.000070	2.20	10020.37	1175.00	0.10

HEC-RAS Plan: extended Profile: 5yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	5yr	22000.00	1248.00	1267.79	1251.86	1267.83	0.000037	1.78	12355.77	1415.79	0.07
Salt River	VaShly US	10.78	5yr	22000.00	1248.00	1267.80	1251.70	1267.84	0.000035	1.71	12879.98	1646.79	0.07
Salt River	VaShly US	10.81	5yr	22000.00	1248.00	1267.81	1251.67	1267.85	0.000034	1.69	12992.75	1621.76	0.07
Salt River	VaShly US	10.86	5yr	22000.00	1248.00	1267.81	1254.03	1267.87	0.000055	1.93	11374.74	1517.88	0.09
Salt River	VaShly US	10.90	5yr	22000.00	1250.83	1267.82	1255.14	1267.88	0.000062	1.96	11226.64	1433.83	0.09
Salt River	VaShly US	10.95	5yr	22000.00	1252.00	1267.83	1256.08	1267.89	0.000065	1.95	11255.44	1161.61	0.09
Salt River	VaShly US	11.00	5yr	22000.00	1254.01	1267.83	1258.68	1267.93	0.000131	2.49	8833.53	1095.11	0.13
Salt River	VaShly US	11.05	5yr	22000.00	1256.00	1267.86	1260.47	1268.01	0.000295	3.16	6958.10	1359.92	0.19
Salt River	VaShly US	11.10	5yr	22000.00	1256.00	1267.88	1262.40	1268.15	0.000625	4.21	5228.62	885.74	0.26
Salt River	VaShly US	11.14	5yr	22000.00	1256.00	1268.35	1265.68	1268.96	0.006189	6.30	3490.79	757.14	0.46
Salt River	VaShly US	11.17	5yr	22000.00	1256.00	1268.89	1265.36	1269.39	0.001373	5.66	3884.56	566.60	0.38
Salt River	VaShly US	11.25	5yr	22000.00	1256.00	1269.44	1265.05	1270.08	0.001761	6.38	3446.68	503.72	0.43
Salt River	VaShly US	11.32	5yr	22000.00	1260.00	1270.00	1266.20	1270.91	0.002034	7.66	2873.03	355.54	0.47
Salt River	VaShly US	11.41	5yr	22000.00	1260.00	1271.08	1267.68	1271.94	0.002558	7.45	2952.28	454.64	0.52
Salt River	VaShly US	11.49	5yr	22000.00	1263.04	1272.20	1268.97	1272.92	0.001979	6.83	3219.24	637.09	0.46
Salt River	VaShly US	11.62	5yr	22000.00	1264.00	1273.73	1271.01	1274.32	0.002178	6.16	3569.85	750.45	0.46
Salt River	VaShly US	11.78	5yr	22000.00	1268.00	1275.66	1273.29	1276.50	0.002779	7.39	2977.00	725.91	0.53
Salt River	VaShly US	11.88	5yr	22000.00	1267.94	1276.89	1273.68	1277.88	0.002288	8.01	2745.65	521.43	0.50
Salt River	VaShly US	11.99	5yr	22000.00	1268.00	1278.74	1277.43	1280.39	0.005879	10.29	2137.81	378.92	0.76
Salt River	VaShly US	12.06	5yr	22000.00	1268.00	1281.09	1278.29	1281.79	0.002479	6.71	3276.62	921.10	0.50
Salt River	VaShly US	12.10	5yr	22000.00	1272.00	1281.83	1279.82	1282.44	0.002528	6.27	3506.90	949.67	0.49
Salt River	VaShly US	12.22	5yr	22000.00	1272.00	1283.24	1280.72	1283.56	0.001341	4.52	4864.00	977.15	0.36
Salt River	VaShly US	12.33	5yr	22000.00	1272.00	1283.78	1278.82	1284.00	0.000496	3.69	5960.13	770.06	0.23
Salt River	VaShly US	12.44	5yr	22000.00	1276.00	1284.25	1280.77	1284.73	0.001835	5.59	3935.78	728.94	0.42
Salt River	VaShly US	12.55	5yr	22000.00	1276.00	1285.13	1280.63	1285.41	0.000811	4.26	5165.94	779.06	0.29
Salt River	VaShly US	12.67	5yr	22000.00	1276.00	1285.61	1280.91	1285.92	0.000807	4.43	4964.70	701.64	0.29
Salt River	VaShly US	12.77	5yr	22000.00	1276.00	1286.00	1281.71	1286.46	0.001105	5.47	4025.51	526.91	0.35
Salt River	VaShly US	12.87	5yr	22000.00	1276.00	1286.56	1281.85	1287.03	0.001044	5.46	4026.28	504.66	0.34
Salt River	VaShly US	12.97	5yr	22000.00	1280.00	1287.40	1285.22	1288.27	0.002910	7.48	2941.54	496.22	0.54
Salt River	VaShly US	13.07	5yr	22000.00	1276.00	1288.69	1284.15	1289.12	0.001110	5.27	4172.86	577.85	0.35
Salt River	VaShly US	13.19	5yr	22000.00	1284.00	1289.89	1288.07	1290.66	0.003474	7.06	3118.08	657.64	0.57
Salt River	VaShly US	13.31	5yr	22000.00	1281.30	1291.49	1287.87	1291.95	0.001332	5.44	4046.01	613.91	0.37
Salt River	VaShly US	13.44	5yr	22000.00	1284.00	1292.54	1289.71	1292.94	0.001666	5.06	4346.83	870.20	0.40
Salt River	VaShly US	13.55	5yr	22000.00	1288.00	1293.58	1291.33	1293.95	0.001698	4.86	4529.27	978.22	0.40
Salt River	VaShly US	13.64	5yr	22000.00	1288.00	1294.58	1293.02	1295.10	0.002888	5.77	3810.75	944.72	0.51
Gilbert Mining P	Gilbert Mining P	0.04	5yr	4.20	1190.68	1227.59	1190.88	1227.59	0.000000	0.00	12089.57	1473.80	0.00
Gilbert Mining P	Gilbert Mining P	0.08	5yr	4.20	1180.00	1227.59	1184.06	1227.59	0.000000	0.00	13065.44	1578.59	0.00
Gilbert Mining P	Gilbert Mining P	0.11	5yr	4.20	1182.38	1227.59	1182.45	1227.59	0.000000	0.00	17280.94	1611.06	0.00
Gilbert Mining P	Gilbert Mining P	0.15	5yr	4.20	1180.00	1227.59	1180.06	1227.59	0.000000	0.00	16415.52	1003.20	0.00
Gilbert Mining P	Gilbert Mining P	0.19	5yr	4.20	1180.00	1227.59	1180.19	1227.59	0.000000	0.00	11799.22	930.11	0.00
Gilbert Mining P	Gilbert Mining P	0.22	5yr	4.20	1188.00	1227.59	1188.27	1227.59	0.000000	0.00	12695.76	629.56	0.00
Gilbert Mining P	Gilbert Mining P	0.25	5yr	4.20	1182.77	1227.59	1183.02	1227.59	0.000000	0.00	12900.96	423.94	0.00
Gilbert Mining P	Gilbert Mining P	0.29	5yr	4.20	1183.78	1227.59	1183.90	1227.59	0.000000	0.00	10329.10	348.93	0.00
Gilbert Mining P	Gilbert Mining P	0.33	5yr	4.20	1182.37	1227.59	1182.50	1227.59	0.000000	0.00	22726.89	713.52	0.00
Gilbert Mining P	Gilbert Mining P	0.37	5yr	4.20	1184.00	1227.59	1184.06	1227.59	0.000000	0.00	24938.20	1515.57	0.00
Gilbert Mining P	Gilbert Mining P	0.43	5yr	4.20	1180.00	1227.59	1180.09	1227.59	0.000000	0.00	18921.89	2004.44	0.00
Gilbert Mining P	Gilbert Mining P	0.48	5yr	4.20	1172.00	1227.59	1172.27	1227.59	0.000000	0.00	23349.18	1686.43	0.00
Gilbert Mining P	Gilbert Mining P	0.53	5yr	4.20	1191.79	1227.59	1192.03	1227.59	0.000000	0.00	22487.01	1610.90	0.00
Gilbert Mining P	Gilbert Mining P	0.55	5yr	4.20	1196.00	1227.59	1196.05	1227.59	0.000000	0.00	16417.48	1264.96	0.00
Gilbert Mining P	Gilbert Mining P	0.60	5yr	4.20	1200.85	1227.59	1201.09	1227.59	0.000000	0.00	6936.22	1112.20	0.00
Gilbert Mining P	Gilbert Mining P	0.66	5yr	4.20	1192.00	1227.59	1192.07	1227.59	0.000000	0.00	19496.61	1429.83	0.00
Gilbert Mining P	Gilbert Mining P	0.70	5yr	4.20	1196.00	1227.59	1196.03	1227.59	0.000000	0.00	14078.20	1706.79	0.00
Gilbert Mining P	Gilbert Mining P	0.74	5yr	4.20	1196.00	1227.59	1196.04	1227.59	0.000000	0.00	15655.67	1944.12	0.00
Gilbert Mining P	Gilbert Mining P	0.77	5yr	4.20	1196.00	1227.59	1196.04	1227.59	0.000000	0.00	24167.68	2114.34	0.00
Gilbert Mining P	Gilbert Mining P	0.83	5yr	4.20	1199.07	1227.59	1199.27	1227.59	0.000000	0.00	24862.55	2154.17	0.00
Gilbert Mining P	Gilbert Mining P	0.88	5yr	4.20	1198.45	1227.59	1198.56	1227.59	0.000000	0.00	24956.31	2429.05	0.00
Gilbert Mining P	Gilbert Mining P	0.91	5yr	4.20	1197.53	1227.59	1197.66	1227.59	0.000000	0.00	19865.17	2257.83	0.00
Gilbert Mining P	Gilbert Mining P	0.95	5yr	4.20	1202.08	1227.59	1202.21	1227.59	0.000000	0.00	16008.35	2546.65	0.00
Gilbert Mining P	Gilbert Mining P	0.97	5yr	4.20	1204.00	1227.59	1204.03	1227.59	0.000000	0.00	15441.83	3241.79	0.00
Gilbert Mining P	Gilbert Mining P	0.99	5yr	4.20	1204.00	1227.59	1204.05	1227.59	0.000000	0.00	13245.68	3278.89	0.00
Gilbert Mining P	Gilbert Mining P	1.02	5yr	4.20	1207.21	1227.59	1207.30	1227.59	0.000000	0.00	14464.67	3254.76	0.00
Gilbert Mining P	Gilbert Mining P	1.05	5yr	4.20	1208.00	1227.59	1208.04	1227.59	0.000000	0.00	11782.07	2923.72	0.00
Gilbert Mining P	Gilbert Mining P	1.08	5yr	4.20	1196.00	1227.59	1196.23	1227.59	0.000000	0.00	9167.34	1639.31	0.00
Gilbert Mining P	Gilbert Mining P	1.11	5yr	4.20	1196.00	1227.59	1196.90	1227.59	0.000000	0.00	6137.12	1187.36	0.00
Gilbert Mining P	Gilbert Mining P	1.14	5yr	4.20	1212.00	1227.59	1212.08	1227.59	0.000000	0.00	2743.71	795.94	0.00
Gilbert Mining P	Gilbert Mining P	1.17	5yr	4.20	1243.53	1243.65	1243.65	1243.69	0.046794	1.59	2.64	577.86	1.04
Gilbert Mining P	Gilbert Mining P	1.19	5yr	4.20	1236.00	1243.69	1236.02	1243.69	0.000000	0.00	1616.14	822.31	0.00
Gilbert Mining P	Gilbert Mining P	1.21	5yr	4.20	1244.00	1244.05	1244.03	1244.05	0.007010	0.45	9.41	542.94	0.37

APPENDIX 2c

10-YEAR STANDARD TABLE 1

HEC-RAS Plan: extended Profile: 10yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	10yr	58000.00	1148.00	1164.04	1155.82	1164.36	0.000401	4.54	12777.10	1028.43	0.23
Salt River	VaShly DS	0.11	10yr	58000.00	1148.00	1164.29	1157.28	1164.67	0.000569	4.90	11838.60	1107.08	0.26
Salt River	VaShly DS	0.23	10yr	58000.00	1150.96	1164.68	1157.68	1165.00	0.000473	4.57	12682.83	1141.30	0.24
Salt River	VaShly DS	0.36	10yr	58000.00	1151.05	1165.00	1158.47	1165.34	0.000521	4.70	12346.58	1152.29	0.25
Salt River	VaShly DS	0.51	10yr	58000.00	1152.00	1165.41	1158.72	1165.74	0.000485	4.57	12697.05	1171.35	0.24
Salt River	VaShly DS	0.65	10yr	58000.00	1151.50	1165.78	1157.95	1166.06	0.000384	4.25	13642.69	1177.03	0.22
Salt River	VaShly DS	0.78	10yr	58000.00	1152.00	1166.06	1160.28	1166.46	0.000700	5.06	11461.34	1193.66	0.29
Salt River	VaShly DS	0.89	10yr	58000.00	1156.00	1166.55	1162.50	1167.10	0.001250	5.95	9744.12	1228.86	0.37
Salt River	VaShly DS	1.00	10yr	58000.00	1152.00	1167.22	1160.94	1167.55	0.000538	4.61	12572.20	1236.56	0.25
Salt River	VaShly DS	1.12	10yr	58000.00	1152.00	1167.55	1161.04	1167.89	0.000592	4.69	12357.17	1272.43	0.27
Salt River	VaShly DS	1.22	10yr	58000.00	1156.00	1167.88	1162.69	1168.26	0.000732	4.94	11735.32	1311.51	0.29
Salt River	VaShly DS	1.30	10yr	58000.00	1152.00	1168.19	1163.45	1168.62	0.000913	5.26	11023.81	1320.64	0.32
Salt River	VaShly DS	1.39	10yr	58000.00	1147.32	1168.63	1158.57	1168.83	0.000255	3.63	15964.53	1278.22	0.18
Salt River	VaShly DS	1.52	10yr	58000.00	1144.00	1168.81	1151.98	1168.96	0.000138	3.14	18471.83	1149.35	0.14
Salt River	VaShly DS	1.65	10yr	58000.00	1154.51	1168.98	1163.22	1169.29	0.000663	4.48	12937.55	1553.80	0.27
Salt River	VaShly DS	1.76	10yr	58000.00	1152.50	1169.31	1163.49	1169.61	0.000485	4.36	13294.71	1364.89	0.24
Salt River	VaShly DS	1.80	10yr	58000.00	1160.00	1169.24	1167.01	1170.04	0.002265	7.14	8127.09	1221.23	0.49
Salt River	VaShly DS	1.83	10yr	58000.00	1148.00	1169.48	1167.51	1170.62	0.003479	8.56	6774.65	1067.07	0.60
Salt River	VaShly DS	1.86	10yr	58000.00	1148.00	1170.36	1163.57	1171.06	0.001672	6.68	8676.84	1137.95	0.43
Salt River	VaShly DS	1.89	10yr	58000.00	1152.71	1170.58	1168.51	1171.31	0.001724	6.88	8426.20	1174.51	0.44
Salt River	VaShly DS	1.95	10yr	58000.00	1157.05	1171.16	1167.54	1171.77	0.001093	6.31	9197.58	1415.94	0.36
Salt River	VaShly DS	2.02	10yr	58000.00	1158.36	1171.51	1166.50	1172.16	0.000987	6.49	8936.49	1752.98	0.35
Salt River	VaShly DS	2.04	10yr	58000.00	1156.31	1171.51	1167.48	1172.39	0.001710	7.52	7709.02	1797.80	0.44
Salt River	VaShly DS	2.07	10yr	58000.00	1156.00	1171.62	1169.63	1173.01	0.003816	9.47	6126.65	1831.73	0.64
Salt River	VaShly DS	2.10	10yr	58000.00	1158.27	1172.14	1171.04	1173.77	0.005591	10.24	5663.74	1916.96	0.75
Salt River	VaShly DS	2.12	10yr	58000.00	1176.00	1184.65	1184.65	1187.21	0.010359	12.85	4515.22	2522.01	1.00
Salt River	VaShly DS	2.13	10yr	58000.00	1176.00	1186.41	1184.59	1187.69	0.003229	9.09	6377.37	2528.25	0.59
Salt River	VaShly DS	2.21	10yr	58000.00	1176.00	1187.80	1186.91	1189.15	0.003760	9.33	6218.90	2230.07	0.63
Salt River	VaShly DS	2.29	10yr	58000.00	1170.86	1189.41	1182.53	1190.00	0.000915	6.19	9372.84	1309.65	0.33
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	10yr	58000.00	1180.00	1192.42	1190.05	1193.60	0.002954	8.71	6657.52	1109.50	0.57
Salt River	VaShly DS	2.38	10yr	58000.00	1175.59	1193.38	1189.28	1194.17	0.001584	7.13	8135.78	935.71	0.43
Salt River	VaShly DS	2.40	10yr	58000.00	1176.00	1193.66	1189.27	1194.39	0.001381	6.85	8464.68	931.93	0.40
Salt River	VaShly DS	2.41	10yr	58000.00	1176.00	1193.72	1189.29	1194.44	0.001356	6.82	8509.44	931.74	0.40
Salt River	VaShly DS	2.42	10yr	58000.00	1176.00	1193.77	1189.48	1194.51	0.001422	6.90	8403.68	933.55	0.41
Salt River	VaShly DS	2.47	10yr	58000.00	1178.61	1194.07	1191.22	1195.11	0.002460	8.16	7107.26	929.36	0.52
Salt River	VaShly DS	2.53	10yr	58000.00	1180.00	1194.94	1192.15	1195.85	0.002245	7.67	7560.23	1778.79	0.50
Salt River	VaShly DS	2.59	10yr	58000.00	1184.00	1195.64	1192.52	1196.60	0.002179	7.85	7386.54	1695.40	0.49
Salt River	VaShly DS	2.65	10yr	58000.00	1187.99	1196.24	1193.69	1197.39	0.002759	8.58	6762.92	895.37	0.55
Salt River	VaShly DS	2.71	10yr	58000.00	1188.00	1197.40	1194.48	1198.28	0.002153	7.54	7693.33	1333.32	0.49
Salt River	VaShly DS	2.78	10yr	58000.00	1188.00	1198.16	1195.15	1198.96	0.001978	7.18	8105.65	1343.53	0.46
Salt River	VaShly DS	2.87	10yr	58000.00	1175.62	1199.00	1191.07	1199.60	0.000911	6.24	9287.46	859.70	0.33
Salt River	VaShly DS	2.98	10yr	58000.00	1180.00	1199.36	1191.49	1200.22	0.000894	7.42	7821.77	793.82	0.34
Salt River	VaShly DS	3.10	10yr	58000.00	1174.02	1200.08	1190.46	1200.71	0.000700	6.38	9094.81	790.17	0.30
Salt River	VaShly DS	3.23	10yr	58000.00	1184.27	1200.65	1196.17	1201.79	0.001920	8.54	6791.90	849.73	0.48
Salt River	VaShly DS	3.35	10yr	58000.00	1188.00	1202.04	1196.87	1202.72	0.001135	6.60	8789.31	899.81	0.37
Salt River	VaShly DS	3.46	10yr	58000.00	1184.00	1202.79	1195.20	1203.27	0.000668	5.60	10352.04	1363.47	0.29
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	10yr	58000.00	1186.84	1202.99	1197.15	1203.59	0.001064	6.24	9293.07	1235.49	0.36
Salt River	VaShly DS	3.64	10yr	58000.00	1192.00	1204.17	1201.22	1205.28	0.002750	8.48	6838.74	957.03	0.55
Salt River	VaShly DS	3.76	10yr	58000.00	1188.00	1205.64	1199.86	1206.14	0.000812	5.66	10249.03	1505.05	0.31
Salt River	VaShly DS	3.89	10yr	58000.00	1174.66	1206.18	1188.26	1206.26	0.000060	2.28	25731.06	1874.64	0.09
Salt River	VaShly DS	4.04	10yr	58000.00	1184.00	1206.23	1196.67	1206.39	0.000213	3.21	18394.20	2159.98	0.16
Salt River	VaShly DS	4.09	10yr	58000.00	1188.00	1206.26	1199.58	1206.55	0.000592	4.18	13573.98	2058.23	0.26
Salt River	VaShly DS	4.15	10yr	58000.00	1184.00	1206.41	1200.29	1206.80	0.000751	4.99	11614.08	1717.11	0.29
Salt River	VaShly DS	4.22	10yr	58000.00	1178.19	1206.72	1195.74	1206.98	0.000382	3.94	14292.99	1468.82	0.22
Salt River	VaShly DS	4.27	10yr	58000.00	1192.00	1206.76	1204.01	1207.21	0.000921	5.42	10740.90	1248.14	0.32
Salt River	VaShly DS	4.31	10yr	58000.00	1199.24	1206.79	1205.19	1207.88	0.003400	7.89	7010.12	1159.52	0.58
Salt River	VaShly DS	4.47	10yr	58000.00	1200.00	1209.71	1207.98	1210.78	0.003583	8.32	10425.44	1956.03	0.60
Salt River	VaShly DS	4.59	10yr	58000.00	1192.00	1212.00	1205.33	1212.36	0.001660	4.86	13327.27	1926.28	0.27
Salt River	VaShly DS	4.74	10yr	58000.00	1188.00	1213.32	1204.01	1213.58	0.001377	4.09	15487.77	1840.49	0.18
Salt River	VaShly DS	4.88	10yr	58000.00	1200.00	1213.91	1209.98	1214.99	0.001783	8.36	8171.78	1014.99	0.46
Salt River	VaShly DS	5.03	10yr	58000.00	1204.00	1215.49	1211.43	1216.33	0.001588	7.34	9008.41	1224.00	0.43
Salt River	VaShly DS	5.15	10yr	58000.00	1204.00	1216.52	1212.76	1217.40	0.001723	7.52	8967.03	1231.20	0.45
Salt River	VaShly DS	5.26	10yr	58000.00	1179.01	1217.43	1203.95	1217.80	0.000377	4.87	13532.87	1241.51	0.22
Salt River	VaShly DS	5.40	10yr	58000.00	1196.00	1217.68	1211.11	1218.38	0.000954	6.73	8719.81	805.98	0.34
Salt River	VaShly DS	5.47	10yr	58000.00	1208.00	1218.15	1217.00	1219.65	0.004255	9.82	5903.70	876.44	0.67
Salt River	VaShly DS	5.53	10yr	58000.00	1192.00	1219.59	1205.13	1219.98	0.000440	5.02	11563.36	847.49	0.24
Salt River	VaShly DS	5.56	10yr	58000.00	1208.00	1219.33	1215.81	1220.45	0.002219	8.49	6828.96	774.61	0.50
Salt River	VaShly DS	5.60	10yr	58000.00	1194.35	1220.42	1204.25	1220.59	0.000122	3.35	17335.58	890.68	0.13
Salt River	VaShly DS	5.65	10yr	58000.00	1198.67	1220.35	1208.77	1220.73	0.000364	4.92	11785.16	906.95	0.22
Salt River	VaShly DS	5.69	10yr	58000.00	1206.01	1220.25	1216.46	1221.00	0.001141	6.96	8335.37	770.43	0.37
Salt River	VaShly DS	5.73	10yr	58000.00	1208.00	1220.22	1218.51	1221.47	0.002681	9.00	6447.00	772.29	0.55
Salt River	VaShly DS	5.76	10yr	58000.00	1204.00	1221.12	1219.23	1221.88	0.001308	7.01	8278.57	837.52	0.39
Salt River	VaShly DS	5.80	10yr	58000.00	1204.00	1221.52	1218.57	1222.08	0.000815	5.99	9678.68	867.99	0.32
Salt River	VaShly DS	5.82	10yr	58000.00	1204.00	1221.60	1220.31	1222.17	0.000861	6.01	9644.55	889.89	0.32
Salt River	VaShly DS	5.84	10yr	58000.00	1204.00	1221.64	1220.61	1222.29	0.001042	6.44	9002.37	858.23	0.35
Salt River	VaShly DS	5.85	10yr	58000.00	1208.00	1221.75	1219.26	1222.36	0.001033	6.28	9231.25	916.43	0.35
Salt River	VaShly DS	5.86	10yr	58000.00	1205.11	1222.03	1218.74	1223.18	0.021430	8.58	6756.54	960.14	0.54
Salt River	VaShly DS	5.87	10yr	58000.00	1206.22	1222.18	1219.85	1223.66	0.004632	9.74	5952.50	1220.51	0.69
Salt River	VaShly DS	5.88	10yr	58000.00	1209.96	1222.39	1221.73	1224.17	0.014303	10.69	5427.01	1473.11	0.82
Salt River	VaShly DS	5.91	10yr	58000.00	1203.31	1224.09	1214.81	1224.49	0.000601	5.07	11449.83	1600.10	0.27
Salt River	VaShly DS	5.93	10yr	58000.00	1198.79	1224.30	1209.28	1224.55	0.000252	4.06	14271.40	1429.55	0.18
Salt River	VaShly DS	5.95	10yr	58000.00	1196.00	1224.34	1208.84	1224.61	0.001141	4.18	13870.66	1279.54	0.19
Salt River	VaShly DS	5.97	10yr	58000.00	1198.59	1224.37	1210.68	1224.72	0.000362	4.75	12205.55	1126.25	0.22
Salt River	VaShly DS	5.99	10yr	58000.00	1200.00	1224.38	1212.95	1224.79	0.000420	5.10	11361.75	1262.84	0.24
Salt River	VaShly DS	6.01	10yr	58000.00	1204.00	1225.42	1215.16	1225.99	0.022707	6.06	9567.06	1310.65	0.30

HEC-RAS Plan: extended Profile: 10yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	10yr	58000.00	1204.00	1225.76	1214.87	1226.18	0.000470	5.17	11218.25	1384.50	0.25
Salt River	VaShly DS	6.09	10yr	58000.00	1200.00	1226.04	1212.46	1226.27	0.000227	3.89	15464.88	1416.30	0.18
Salt River	VaShly DS	6.14	10yr	58000.00	1196.00	1226.16	1207.28	1226.32	0.000134	3.25	18200.79	1708.68	0.14
Salt River	VaShly DS	6.18	10yr	58000.00	1192.00	1226.06	1218.42	1226.47	0.000562	5.17	11220.66	1925.83	0.27
Salt River	VaShly DS	6.22	10yr	58000.00	1203.46	1225.96	1219.08	1226.77	0.001202	7.19	8061.75	1736.17	0.38
Salt River	VaShly DS	6.27	10yr	58000.00	1194.49	1226.59	1207.73	1226.93	0.000281	4.68	12399.50	1470.27	0.20
Salt River	VaShly DS	6.32	10yr	58000.00	1192.00	1226.70	1207.42	1227.00	0.000199	4.45	13043.95	1017.24	0.17
Salt River	VaShly DS	6.35	10yr	58000.00	1194.53	1226.69	1209.24	1227.04	0.000243	4.75	12208.00	1048.31	0.19
Salt River	VaShly DS	6.38	10yr	58000.00	1195.40	1226.74	1208.13	1227.09	0.000260	4.74	12231.39	1619.13	0.19
Salt River	VaShly DS	6.40	10yr	58000.00	1219.48	1228.94	1228.94	1232.07	0.009710	14.20	4085.40	2205.06	1.00
Salt River	VaShly at Pit	6.45	10yr	53637.00	1220.01	1231.87	1229.41	1233.22	0.003038	9.31	5760.58	721.61	0.58
Salt River	VaShly at Pit	6.50	10yr	53637.00	1223.66	1232.49	1231.27	1234.49	0.005352	11.36	4782.15	806.44	0.75
Salt River	VaShly at Pit	6.53	10yr	53637.00	1224.00	1233.53	1232.03	1235.40	0.004818	11.00	5283.67	833.94	0.72
Salt River	VaShly at Pit	6.56	10yr	53637.00	1224.00	1234.36	1232.66	1236.11	0.004330	10.64	5485.51	818.27	0.69
Salt River	VaShly at Pit	6.62	10yr	53637.00	1225.32	1235.71	1234.57	1237.89	0.005623	11.85	5184.00	867.91	0.78
Salt River	VaShly at Pit	6.69	10yr	53637.00	1224.24	1237.90	1235.36	1239.46	0.003172	10.03	6315.71	1018.32	0.60
Salt River	VaShly at Pit	6.75	10yr	53637.00	1228.00	1239.03	1236.10	1240.36	0.002681	9.26	6387.83	1079.04	0.55
Salt River	VaShly at Pit	6.80	10yr	53637.00	1228.00	1239.99	1236.79	1241.09	0.002363	8.41	6375.94	1377.16	0.52
Salt River	VaShly at Pit	6.85	10yr	53637.00	1231.97	1240.47	1238.69	1241.96	0.004147	9.77	5793.51	1652.85	0.66
Salt River	VaShly at Pit	6.91	10yr	53637.00	1230.46	1242.00	1239.13	1242.69	0.001440	6.65	9399.41	1625.97	0.40
Salt River	VaShly at Pit	6.96	10yr	53637.00	1232.00	1242.42	1241.16	1244.01	0.005524	10.14	8189.73	1653.51	0.74
Salt River	VaShly at Pit	6.99	10yr	53637.00	1232.00	1243.67	1241.31	1244.67	0.003061	8.02	9845.88	1675.49	0.56
Salt River	VaShly at Pit	7.01	10yr	53637.00	1230.78	1244.05	1241.00	1245.00	0.002821	7.82	9834.42	1815.84	0.54
Salt River	VaShly at Pit	7.03	10yr	53637.00	1232.00	1244.23	1240.70	1245.20	0.002824	7.93	9872.15	1778.23	0.54
Salt River	VaShly at Pit	7.04	10yr	53637.00	1232.00	1244.41	1240.99	1245.46	0.003980	8.23	9647.72	1763.35	0.58
Salt River	VaShly at Pit	7.06	10yr	53637.00	1232.00	1244.81	1240.76	1245.73	0.002447	7.72	10272.23	1753.34	0.51
Salt River	VaShly at Pit	7.07	10yr	53637.00	1232.00	1245.07	1241.39	1245.92	0.002247	7.40	10868.78	1713.99	0.49
Salt River	VaShly at Pit	7.10	10yr	53637.00	1232.00	1245.49	1241.64	1246.27	0.001733	7.09	10988.10	1722.35	0.44
Salt River	VaShly at Pit	7.17	10yr	53637.00	1232.14	1246.32	1243.03	1246.81	0.000995	5.60	11690.58	1860.44	0.34
Salt River	VaShly at Pit	7.24	10yr	53637.00	1235.58	1246.78	1242.66	1247.17	0.000784	4.98	11724.31	1933.45	0.30
Salt River	VaShly at Pit	7.28	10yr	53637.00	1236.00	1246.97	1244.25	1247.54	0.001503	6.05	8863.05	1978.65	0.40
Salt River	VaShly US	7.32	10yr	58000.00	1239.34	1247.33	1244.80	1247.84	0.001540	5.99	13005.19	2847.71	0.40
Salt River	VaShly US	7.36	10yr	58000.00	1238.07	1247.69	1244.46	1248.14	0.001200	5.62	12354.59	3064.93	0.36
Salt River	VaShly US	7.40	10yr	58000.00	1239.06	1247.91	1244.42	1248.39	0.001219	5.72	10750.44	3110.76	0.37
Salt River	VaShly US	7.44	10yr	58000.00	1238.53	1248.15	1243.86	1248.62	0.001019	5.51	10517.27	3050.18	0.34
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	10yr	58000.00	1239.83	1248.50	1244.64	1249.03	0.001227	5.88	9871.87	2120.35	0.37
Salt River	VaShly US	7.55	10yr	58000.00	1239.60	1249.01	1244.60	1249.50	0.001005	5.57	10405.85	2331.42	0.34
Salt River	VaShly US	7.63	10yr	60000.00	1240.00	1249.36	1246.27	1250.28	0.002124	7.70	7795.07	1528.41	0.49
Salt River	VaShly US	7.71	10yr	60000.00	1243.41	1250.54	1249.32	1252.18	0.005080	10.29	5833.33	2553.14	0.72
Salt River	VaShly US	7.83	10yr	60000.00	1244.00	1253.19	1250.07	1254.13	0.002178	7.84	7989.66	3334.87	0.49
Salt River	VaShly US	7.91	10yr	60000.00	1244.00	1254.07	1251.69	1255.39	0.003087	9.38	7826.14	2660.67	0.59
Salt River	VaShly US	8.01	10yr	60000.00	1240.00	1255.65	1249.38	1256.09	0.000729	5.48	12196.99	2566.54	0.30
Salt River	VaShly US	8.10	10yr	60000.00	1212.00	1255.98	1233.13	1256.20	0.000115	3.83	20497.09	2434.88	0.13
Salt River	VaShly US	8.20	10yr	60000.00	1202.29	1256.18	1211.08	1256.23	0.000013	1.80	37437.42	2995.46	0.05
Salt River	VaShly US	8.29	10yr	60000.00	1204.00	1256.19	1212.96	1256.23	0.000011	1.62	41443.38	2490.98	0.04
Salt River	VaShly US	8.36	10yr	60000.00	1212.00	1256.20	1221.00	1256.25	0.000017	1.83	36653.05	2971.11	0.05
Salt River	VaShly US	8.44	10yr	60000.00	1192.00	1256.21	1212.44	1256.25	0.000013	1.71	41488.50	3214.01	0.05
Salt River	VaShly US	8.52	10yr	60000.00	1208.00	1256.22	1219.70	1256.27	0.000014	1.89	37584.30	2738.12	0.05
Salt River	VaShly US	8.57	10yr	60000.00	1198.17	1256.22	1211.68	1256.28	0.000018	2.09	36041.63	1941.88	0.06
Salt River	VaShly US	8.60	10yr	60000.00	1196.00	1256.21	1213.84	1256.29	0.000029	2.52	31131.49	1847.97	0.07
Salt River	VaShly US	8.63	10yr	60000.00	1216.00	1256.08	1232.08	1256.38	0.000243	4.48	18828.64	1801.94	0.18
Salt River	VaShly US	8.68	10yr	60000.00	1244.00	1256.52	1256.52	1259.89	0.010287	15.17	10915.65	2057.84	1.03
Salt River	VaShly US	8.74	10yr	60000.00	1220.00	1259.93	1237.15	1260.24	0.000079	4.57	20941.71	1957.40	0.16
Salt River	VaShly US	8.77	10yr	60000.00	1206.87	1260.14	1224.48	1260.27	0.000054	3.03	26822.12	2112.50	0.10
Salt River	VaShly US	8.81	10yr	60000.00	1204.00	1260.12	1226.17	1260.30	0.000094	3.47	23010.52	2252.02	0.12
Salt River	VaShly US	8.85	10yr	60000.00	1212.00	1260.02	1236.10	1260.40	0.000331	5.09	16556.63	2451.41	0.22
Salt River	VaShly US	8.88	10yr	60000.00	1233.08	1259.78	1253.08	1260.71	0.001319	7.94	12383.05	2013.18	0.41
Salt River	VaShly US	8.92	10yr	60000.00	1239.59	1259.78	1255.44	1261.14	0.002061	9.62	11079.56	1870.31	0.51
Salt River	VaShly US	8.98	10yr	60000.00	1244.00	1260.10	1257.66	1262.24	0.003565	12.10	8910.40	1882.78	0.66
Salt River	VaShly US	9.04	10yr	60000.00	1248.00	1260.71	1258.96	1263.85	0.004819	14.66	7373.02	1379.82	0.77
Salt River	VaShly US	9.13	10yr	60000.00	1248.00	1263.88	1257.76	1265.07	0.001338	9.00	9685.91	1353.01	0.42
Salt River	VaShly US	9.20	10yr	60000.00	1248.00	1264.76	1257.67	1265.51	0.000853	7.13	9537.40	1369.01	0.34
Salt River	VaShly US	9.26	10yr	60000.00	1247.57	1264.98	1258.33	1265.86	0.001027	7.74	9111.96	1468.94	0.37
Salt River	VaShly US	9.33	10yr	60000.00	1244.00	1265.13	1259.37	1266.45	0.001490	9.50	8249.18	1504.23	0.44
Salt River	VaShly US	9.39	10yr	60000.00	1236.00	1265.03	1261.47	1267.28	0.002416	12.54	7307.49	1667.87	0.57
Salt River	VaShly US	9.44	10yr	60000.00	1247.05	1266.98	1256.99	1267.72	0.000619	7.11	11875.43	2208.97	0.30
Salt River	VaShly US	9.49	10yr	60000.00	1248.00	1267.46	1257.87	1267.87	0.000398	5.25	15035.52	2695.08	0.23
Salt River	VaShly US	9.55	10yr	60000.00	1251.37	1267.76	1260.10	1268.01	0.000306	4.38	17992.27	3785.54	0.20
Salt River	VaShly US	9.59	10yr	60000.00	1244.40	1267.86	1258.71	1268.07	0.000243	4.15	19510.78	4167.22	0.18
Salt River	VaShly US	9.61	10yr	60000.00	1248.20	1267.87	1259.72	1268.12	0.000316	4.53	17001.12	4071.95	0.21
Salt River	VaShly US	9.64	10yr	60000.00	1252.00	1267.87	1261.78	1268.19	0.000470	5.03	14443.75	3920.69	0.25
Salt River	VaShly US	9.67	10yr	60000.00	1250.78	1267.88	1261.89	1268.26	0.000533	5.53	13311.46	3605.58	0.27
Salt River	VaShly US	9.73	10yr	60000.00	1252.00	1268.00	1262.90	1268.54	0.000974	6.35	10452.45	2303.42	0.35
Salt River	VaShly US	9.80	10yr	60000.00	1252.00	1268.24	1263.68	1268.98	0.001154	7.35	9083.67	2495.05	0.38
Salt River	VaShly US	9.87	10yr	60000.00	1254.92	1268.62	1264.61	1269.46	0.001411	7.61	8249.60	2293.46	0.41
Salt River	VaShly US	9.96	10yr	60000.00	1254.13	1269.15	1264.35	1270.21	0.001612	8.43	7626.25	1936.43	0.45
Salt River	VaShly US	10.06	10yr	60000.00	1256.00	1270.08	1266.01	1271.32	0.002124	8.96	6762.38	2248.37	0.50
Salt River	VaShly US	10.18	10yr	60000.00	1256.00	1271.57	1267.89	1272.64	0.002175	8.29	7234.08	2304.30	0.50
Salt River	VaShly US	10.26	10yr	60000.00	1252.00	1272.62	1261.75	1272.98	0.000370	4.84	12394.24	2380.03	0.22
Salt River	VaShly US	10.36	10yr	60000.00	1253.00	1272.75	1267.28	1273.38	0.000658	6.35	9550.21	2405.75	0.33
Salt River	VaShly US	10.41	10yr	60000.00	1247.67	1273.28	1255.18	1273.47	0.000106	3.49	17477.84	2421.31	0.13
Salt River	VaShly US	10.46	10yr	60000.00	1240.00	1273.28	1254.78	1273.52	0.000146	3.97	15923.15	2416.93	0.15
Salt River	VaShly US	10.52	10yr	60000.00	1234.97	1273.38	1248.97	1273.56	0.000079	3.40	17739.25	1895.59	0.11
Salt River	VaShly US	10.56	10yr	60000.00	1244.00	1273.33	1255.45	1273.62	0.000157	4.27	14038.68	1770.81	0.16
Salt River	VaShly US	10.61	10yr	60000.00	1244.20	1273.37	1256.11	1273.66	0.000168	4.32	13884.16	1584.66	0.16
Salt River	VaShly US	10.67	10yr	60000.00	1248.00	1273.42	1257.92	1273.71	0.000192	4.36	13754.52	1467.74	0.17

HEC-RAS Plan: extended Profile: 10yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	10yr	60000.00	1248.00	1273.56	1255.22	1273.77	0.000115	3.67	16354.85	1752.45	0.13
Salt River	VaShly US	10.78	10yr	60000.00	1248.00	1273.60	1255.00	1273.79	0.000105	3.51	17089.40	1778.53	0.13
Salt River	VaShly US	10.81	10yr	60000.00	1248.00	1273.63	1254.98	1273.82	0.000104	3.47	17304.29	1764.56	0.13
Salt River	VaShly US	10.86	10yr	60000.00	1248.00	1273.65	1257.38	1273.87	0.000147	3.78	15869.38	1620.07	0.15
Salt River	VaShly US	10.90	10yr	60000.00	1250.83	1273.68	1258.61	1273.90	0.000153	3.75	15990.26	1503.68	0.15
Salt River	VaShly US	10.95	10yr	60000.00	1252.00	1273.72	1259.06	1273.93	0.000155	3.69	16243.74	1233.38	0.15
Salt River	VaShly US	11.00	10yr	60000.00	1254.01	1273.70	1261.75	1274.01	0.000257	4.50	13326.75	1162.99	0.19
Salt River	VaShly US	11.05	10yr	60000.00	1256.00	1273.73	1264.19	1274.15	0.000428	5.19	11571.24	1688.99	0.24
Salt River	VaShly US	11.10	10yr	60000.00	1256.00	1273.75	1266.17	1274.35	0.000779	6.21	9656.22	1423.23	0.31
Salt River	VaShly US	11.14	10yr	60000.00	1256.00	1274.08	1269.39	1275.09	0.005214	8.08	7427.75	1040.15	0.46
Salt River	VaShly US	11.17	10yr	60000.00	1256.00	1274.63	1269.09	1275.57	0.001696	7.77	7724.23	820.46	0.45
Salt River	VaShly US	11.25	10yr	60000.00	1256.00	1275.34	1270.33	1276.34	0.001922	8.01	7493.53	833.81	0.47
Salt River	VaShly US	11.32	10yr	60000.00	1260.00	1276.08	1272.88	1277.41	0.002990	9.24	6493.67	812.20	0.58
Salt River	VaShly US	11.41	10yr	60000.00	1260.00	1277.47	1272.90	1278.72	0.002823	8.95	6701.14	843.60	0.56
Salt River	VaShly US	11.49	10yr	60000.00	1263.04	1278.82	1273.70	1279.64	0.001589	7.24	8286.64	931.32	0.43
Salt River	VaShly US	11.62	10yr	60000.00	1264.00	1280.01	1274.86	1280.49	0.001010	5.57	10778.15	1283.35	0.34
Salt River	VaShly US	11.78	10yr	60000.00	1268.00	1281.00	1278.11	1281.69	0.001651	6.67	8993.52	1227.41	0.43
Salt River	VaShly US	11.88	10yr	60000.00	1267.94	1282.00	1278.92	1283.10	0.003208	8.41	7135.93	1087.67	0.58
Salt River	VaShly US	11.99	10yr	60000.00	1268.00	1284.02	1282.42	1285.29	0.004351	9.03	6645.75	1303.38	0.66
Salt River	VaShly US	12.06	10yr	60000.00	1268.00	1285.59	1282.32	1286.38	0.002035	7.11	8436.22	1363.96	0.47
Salt River	VaShly US	12.10	10yr	60000.00	1272.00	1286.13	1282.79	1286.90	0.002030	7.04	8517.54	1202.88	0.47
Salt River	VaShly US	12.22	10yr	60000.00	1272.00	1287.22	1283.17	1287.94	0.001429	6.81	8813.26	1003.92	0.40
Salt River	VaShly US	12.33	10yr	60000.00	1272.00	1287.95	1281.72	1288.60	0.000915	6.49	9249.10	810.79	0.34
Salt River	VaShly US	12.44	10yr	60000.00	1276.00	1288.54	1284.88	1289.54	0.002048	8.01	7493.60	878.16	0.48
Salt River	VaShly US	12.55	10yr	60000.00	1276.00	1289.69	1284.18	1290.41	0.001114	6.80	8818.97	835.29	0.37
Salt River	VaShly US	12.67	10yr	60000.00	1276.00	1290.42	1284.53	1291.13	0.001237	6.76	8870.49	916.31	0.38
Salt River	VaShly US	12.77	10yr	60000.00	1276.00	1290.92	1285.74	1292.08	0.001889	8.64	6940.52	934.92	0.48
Salt River	VaShly US	12.87	10yr	60000.00	1276.00	1291.82	1286.18	1292.97	0.001555	8.61	6970.10	594.97	0.44
Salt River	VaShly US	12.97	10yr	60000.00	1280.00	1293.09	1289.47	1294.32	0.003110	8.92	6726.79	1176.93	0.58
Salt River	VaShly US	13.07	10yr	60000.00	1276.00	1294.61	1288.28	1295.32	0.001353	6.75	8895.00	987.89	0.40
Salt River	VaShly US	13.19	10yr	60000.00	1284.00	1295.58	1291.71	1296.49	0.002179	7.68	7817.14	1024.00	0.49
Salt River	VaShly US	13.31	10yr	60000.00	1281.30	1296.90	1291.59	1297.58	0.001289	6.62	9068.34	1000.32	0.39
Salt River	VaShly US	13.44	10yr	60000.00	1284.00	1297.76	1292.88	1298.40	0.001179	6.41	9356.66	1012.37	0.37
Salt River	VaShly US	13.55	10yr	60000.00	1288.00	1298.47	1293.86	1299.10	0.001159	6.33	9475.28	1031.02	0.37
Salt River	VaShly US	13.64	10yr	60000.00	1288.00	1299.08	1295.61	1299.87	0.001842	7.14	8401.65	1076.86	0.45
Gilbert Mining P	Gilbert Mining P	0.04	10yr	4363.00	1190.68	1232.38	1193.91	1232.38	0.000000	0.32	13868.03	1583.87	0.01
Gilbert Mining P	Gilbert Mining P	0.08	10yr	4363.00	1180.00	1232.38	1186.81	1232.38	0.000000	0.30	14761.87	1660.41	0.01
Gilbert Mining P	Gilbert Mining P	0.11	10yr	4363.00	1182.38	1232.38	1185.04	1232.38	0.000000	0.22	19547.94	1822.70	0.01
Gilbert Mining P	Gilbert Mining P	0.15	10yr	4363.00	1180.00	1232.38	1183.89	1232.38	0.000000	0.23	18966.77	1815.06	0.01
Gilbert Mining P	Gilbert Mining P	0.19	10yr	4363.00	1180.00	1232.38	1186.00	1232.39	0.000001	0.31	14552.14	1162.27	0.01
Gilbert Mining P	Gilbert Mining P	0.22	10yr	4363.00	1188.00	1232.38	1191.72	1232.39	0.000000	0.29	14941.13	1130.21	0.01
Gilbert Mining P	Gilbert Mining P	0.25	10yr	4363.00	1182.77	1232.39	1186.03	1232.39	0.000000	0.29	15012.89	908.83	0.01
Gilbert Mining P	Gilbert Mining P	0.29	10yr	4363.00	1183.78	1232.39	1187.03	1232.39	0.000001	0.37	11837.80	590.50	0.01
Gilbert Mining P	Gilbert Mining P	0.33	10yr	4363.00	1182.37	1232.39	1185.54	1232.39	0.000000	0.17	25670.08	782.78	0.00
Gilbert Mining P	Gilbert Mining P	0.37	10yr	4363.00	1184.00	1232.39	1188.48	1232.39	0.000000	0.16	28824.92	1557.63	0.00
Gilbert Mining P	Gilbert Mining P	0.43	10yr	4363.00	1180.00	1232.39	1185.72	1232.39	0.000000	0.20	21624.06	2185.43	0.01
Gilbert Mining P	Gilbert Mining P	0.48	10yr	4363.00	1172.00	1232.39	1178.55	1232.39	0.000000	0.17	26639.66	2324.50	0.00
Gilbert Mining P	Gilbert Mining P	0.53	10yr	4363.00	1191.79	1232.39	1196.36	1232.40	0.000000	0.17	26843.76	2204.17	0.01
Gilbert Mining P	Gilbert Mining P	0.55	10yr	4363.00	1196.00	1232.40	1199.44	1232.40	0.000000	0.22	19603.55	1595.25	0.01
Gilbert Mining P	Gilbert Mining P	0.60	10yr	4363.00	1200.85	1232.40	1206.91	1232.40	0.000003	0.48	9125.80	1464.45	0.02
Gilbert Mining P	Gilbert Mining P	0.66	10yr	4363.00	1192.00	1232.40	1195.58	1232.40	0.000000	0.19	22792.03	1835.35	0.01
Gilbert Mining P	Gilbert Mining P	0.70	10yr	4363.00	1196.00	1232.40	1197.97	1232.40	0.000000	0.26	16811.77	1944.69	0.01
Gilbert Mining P	Gilbert Mining P	0.74	10yr	4363.00	1196.00	1232.41	1198.18	1232.41	0.000000	0.23	18946.99	2107.04	0.01
Gilbert Mining P	Gilbert Mining P	0.77	10yr	4363.00	1196.00	1232.41	1199.11	1232.41	0.000000	0.15	28588.01	2170.04	0.00
Gilbert Mining P	Gilbert Mining P	0.83	10yr	4363.00	1199.07	1232.41	1201.14	1232.41	0.000000	0.15	29822.96	2202.16	0.00
Gilbert Mining P	Gilbert Mining P	0.88	10yr	4363.00	1198.45	1232.42	1200.51	1232.42	0.000000	0.15	30035.62	2566.01	0.00
Gilbert Mining P	Gilbert Mining P	0.91	10yr	4363.00	1197.53	1232.42	1201.93	1232.42	0.000000	0.18	24001.70	2337.11	0.01
Gilbert Mining P	Gilbert Mining P	0.95	10yr	4363.00	1202.08	1232.42	1204.67	1232.42	0.000000	0.22	19563.74	3006.77	0.01
Gilbert Mining P	Gilbert Mining P	0.97	10yr	4363.00	1204.00	1232.42	1205.89	1232.43	0.000000	0.23	19272.72	3371.68	0.01
Gilbert Mining P	Gilbert Mining P	0.99	10yr	4363.00	1204.00	1232.43	1207.41	1232.43	0.000001	0.26	16760.77	3295.22	0.01
Gilbert Mining P	Gilbert Mining P	1.02	10yr	4363.00	1207.21	1232.43	1209.08	1232.43	0.000000	0.23	18469.21	3286.43	0.01
Gilbert Mining P	Gilbert Mining P	1.05	10yr	4363.00	1208.00	1232.43	1210.52	1232.43	0.000001	0.29	15159.28	2958.80	0.01
Gilbert Mining P	Gilbert Mining P	1.08	10yr	4363.00	1196.00	1232.44	1206.44	1232.44	0.000001	0.37	11758.75	1693.32	0.01
Gilbert Mining P	Gilbert Mining P	1.11	10yr	4363.00	1196.00	1232.44	1210.59	1232.44	0.000003	0.55	7968.74	1199.36	0.02
Gilbert Mining P	Gilbert Mining P	1.14	10yr	4363.00	1212.00	1232.43	1216.33	1232.45	0.000021	1.07	4075.83	1111.60	0.05
Gilbert Mining P	Gilbert Mining P	1.17	10yr	4363.00	1243.53	1245.94	1245.94	1246.90	0.014251	7.85	555.71	946.73	1.00
Gilbert Mining P	Gilbert Mining P	1.19	10yr	4363.00	1236.00	1246.96	1238.47	1247.02	0.000088	1.84	2372.32	1065.47	0.10
Gilbert Mining P	Gilbert Mining P	1.21	10yr	4363.00	1244.00	1246.90	1246.32	1247.56	0.007040	6.48	672.96	657.61	0.73

APPENDIX 2d

20-YEAR STANDARD TABLE 1

HEC-RAS Plan: extended Profile: 20yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	20yr	95000.00	1148.00	1168.38	1157.86	1168.85	0.000401	5.51	17253.93	1034.63	0.24
Salt River	VaShly DS	0.11	20yr	95000.00	1148.00	1168.63	1159.23	1169.13	0.000497	5.70	16654.45	1116.60	0.26
Salt River	VaShly DS	0.23	20yr	95000.00	1150.96	1168.98	1159.46	1169.43	0.000431	5.39	17614.28	1151.00	0.24
Salt River	VaShly DS	0.36	20yr	95000.00	1151.05	1169.27	1160.19	1169.74	0.000462	5.49	17290.31	1163.60	0.25
Salt River	VaShly DS	0.51	20yr	95000.00	1152.00	1169.64	1160.42	1170.09	0.000439	5.37	17678.04	1183.27	0.25
Salt River	VaShly DS	0.65	20yr	95000.00	1151.50	1170.00	1159.84	1170.40	0.000370	5.10	18623.29	1188.04	0.23
Salt River	VaShly DS	0.78	20yr	95000.00	1152.00	1170.23	1161.99	1170.75	0.000577	5.76	16492.90	1217.11	0.28
Salt River	VaShly DS	0.89	20yr	95000.00	1156.00	1170.58	1164.31	1171.22	0.000860	6.46	14716.04	1238.81	0.33
Salt River	VaShly DS	1.00	20yr	95000.00	1152.00	1171.14	1162.63	1171.60	0.000492	5.45	17439.65	1246.19	0.26
Salt River	VaShly DS	1.12	20yr	95000.00	1152.00	1171.44	1163.01	1171.91	0.000522	5.48	17343.10	1285.35	0.26
Salt River	VaShly DS	1.22	20yr	95000.00	1156.00	1171.73	1164.80	1172.22	0.000602	5.65	16802.71	1321.78	0.28
Salt River	VaShly DS	1.30	20yr	95000.00	1152.00	1171.96	1165.18	1172.51	0.000713	5.93	16021.88	1329.99	0.30
Salt River	VaShly DS	1.39	20yr	95000.00	1147.32	1172.40	1160.66	1172.73	0.000287	4.57	20803.28	1286.83	0.20
Salt River	VaShly DS	1.52	20yr	95000.00	1144.00	1172.62	1154.40	1172.89	0.000189	4.14	22922.04	1185.39	0.17
Salt River	VaShly DS	1.65	20yr	95000.00	1154.51	1172.78	1165.28	1173.17	0.000521	5.01	18965.92	1606.38	0.26
Salt River	VaShly DS	1.76	20yr	95000.00	1152.50	1173.04	1166.51	1173.46	0.000467	5.21	18242.07	1505.78	0.25
Salt River	VaShly DS	1.80	20yr	95000.00	1160.00	1172.91	1168.31	1173.79	0.001431	7.51	12652.37	1281.29	0.42
Salt River	VaShly DS	1.83	20yr	95000.00	1148.00	1172.95	1169.42	1174.21	0.002279	8.99	10568.27	1173.66	0.52
Salt River	VaShly DS	1.86	20yr	95000.00	1148.00	1173.63	1167.72	1174.54	0.001383	7.65	12425.78	1195.79	0.41
Salt River	VaShly DS	1.89	20yr	95000.00	1152.71	1173.80	1168.97	1174.77	0.001533	7.88	12062.35	1310.34	0.43
Salt River	VaShly DS	1.95	20yr	95000.00	1157.05	1174.27	1169.51	1175.21	0.001157	7.78	12206.98	1455.69	0.39
Salt River	VaShly DS	2.02	20yr	95000.00	1158.36	1174.61	1169.81	1175.66	0.001147	8.25	11511.19	1775.61	0.39
Salt River	VaShly DS	2.04	20yr	95000.00	1156.31	1174.62	1169.68	1175.90	0.001738	9.07	10469.41	1860.88	0.47
Salt River	VaShly DS	2.07	20yr	95000.00	1156.00	1174.70	1171.84	1176.44	0.003050	10.61	8953.20	1910.65	0.60
Salt River	VaShly DS	2.10	20yr	95000.00	1158.27	1175.09	1173.01	1177.01	0.003834	11.11	8552.14	1969.00	0.66
Salt River	VaShly DS	2.12	20yr	95000.00	1176.00	1186.69	1186.69	1190.20	0.009326	15.03	6318.85	2553.97	1.00
Salt River	VaShly DS	2.13	20yr	95000.00	1176.00	1188.79	1186.25	1190.72	0.003550	11.15	8520.19	2593.25	0.64
Salt River	VaShly DS	2.21	20yr	95000.00	1176.00	1190.27	1187.97	1192.21	0.003640	11.18	8493.87	2449.32	0.65
Salt River	VaShly DS	2.29	20yr	95000.00	1170.86	1192.25	1185.74	1193.24	0.001142	7.98	11908.14	1420.89	0.39
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	20yr	95000.00	1180.00	1195.07	1192.06	1196.77	0.002886	10.47	9076.56	1229.74	0.59
Salt River	VaShly DS	2.38	20yr	95000.00	1175.59	1196.19	1191.46	1197.39	0.001716	8.80	10795.91	1021.63	0.46
Salt River	VaShly DS	2.40	20yr	95000.00	1176.00	1196.50	1191.37	1197.63	0.001520	8.53	11131.34	946.30	0.44
Salt River	VaShly DS	2.41	20yr	95000.00	1176.00	1196.57	1191.40	1197.69	0.001494	8.50	11179.85	1061.73	0.44
Salt River	VaShly DS	2.42	20yr	95000.00	1176.00	1196.62	1191.58	1197.76	0.001550	8.58	11073.96	958.56	0.44
Salt River	VaShly DS	2.47	20yr	95000.00	1178.61	1196.89	1193.30	1198.37	0.002355	9.75	9746.47	974.80	0.53
Salt River	VaShly DS	2.53	20yr	95000.00	1180.00	1197.80	1193.98	1199.08	0.002054	9.08	10467.00	2077.51	0.50
Salt River	VaShly DS	2.59	20yr	95000.00	1184.00	1198.42	1194.55	1199.82	0.002180	9.49	10012.82	1928.02	0.52
Salt River	VaShly DS	2.65	20yr	95000.00	1187.99	1198.96	1195.74	1200.61	0.002698	10.30	9219.38	910.47	0.57
Salt River	VaShly DS	2.71	20yr	95000.00	1188.00	1200.24	1196.32	1201.48	0.002009	8.94	10630.56	1355.37	0.49
Salt River	VaShly DS	2.78	20yr	95000.00	1188.00	1201.00	1196.95	1202.11	0.001809	8.46	11264.42	1403.20	0.47
Salt River	VaShly DS	2.87	20yr	95000.00	1175.62	1201.81	1195.24	1202.82	0.001158	8.10	11733.24	957.67	0.39
Salt River	VaShly DS	2.98	20yr	95000.00	1180.00	1202.61	1194.59	1203.34	0.000635	6.88	13808.55	831.43	0.30
Salt River	VaShly DS	3.10	20yr	95000.00	1174.02	1202.95	1193.43	1204.01	0.001252	8.25	11509.95	887.34	0.40
Salt River	VaShly DS	3.23	20yr	95000.00	1184.27	1203.85	1199.03	1205.36	0.002192	9.85	9647.87	872.39	0.52
Salt River	VaShly DS	3.35	20yr	95000.00	1188.00	1205.35	1199.06	1206.36	0.001198	8.08	11760.13	980.81	0.40
Salt River	VaShly DS	3.46	20yr	95000.00	1184.00	1206.34	1197.85	1207.01	0.000726	6.52	14563.24	1649.28	0.31
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	20yr	95000.00	1186.84	1206.55	1200.04	1207.41	0.001015	7.43	12781.05	1267.11	0.36
Salt River	VaShly DS	3.64	20yr	95000.00	1192.00	1207.48	1203.36	1208.90	0.002213	9.58	9919.00	1172.26	0.52
Salt River	VaShly DS	3.76	20yr	95000.00	1188.00	1209.13	1201.89	1209.80	0.000914	6.57	14456.71	1901.82	0.34
Salt River	VaShly DS	3.89	20yr	95000.00	1174.66	1209.82	1191.38	1209.96	0.000091	3.08	31325.88	2461.59	0.12
Salt River	VaShly DS	4.04	20yr	95000.00	1184.00	1209.89	1198.52	1210.12	0.000246	3.79	24981.96	2496.63	0.18
Salt River	VaShly DS	4.09	20yr	95000.00	1188.00	1209.90	1202.04	1210.27	0.000485	4.80	19500.12	2097.73	0.25
Salt River	VaShly DS	4.15	20yr	95000.00	1184.00	1209.97	1202.49	1210.50	0.000667	5.82	16311.33	1782.45	0.29
Salt River	VaShly DS	4.22	20yr	95000.00	1178.19	1210.29	1202.19	1210.68	0.000401	4.87	19088.66	1508.55	0.23
Salt River	VaShly DS	4.27	20yr	95000.00	1192.00	1210.30	1204.01	1210.91	0.000797	6.31	15207.05	1276.21	0.32
Salt River	VaShly DS	4.31	20yr	95000.00	1199.24	1210.23	1206.81	1211.39	0.002083	8.42	11026.78	1175.52	0.49
Salt River	VaShly DS	4.47	20yr	95000.00	1200.00	1212.16	1209.58	1213.53	0.002948	9.48	15236.51	1964.05	0.58
Salt River	VaShly DS	4.59	20yr	95000.00	1192.00	1214.59	1207.19	1215.18	0.001948	6.22	17917.47	2226.77	0.31
Salt River	VaShly DS	4.74	20yr	95000.00	1188.00	1216.26	1204.66	1216.73	0.001871	5.51	19728.63	1944.23	0.23
Salt River	VaShly DS	4.88	20yr	95000.00	1200.00	1216.94	1212.20	1218.45	0.001961	9.94	11768.11	1480.92	0.59
Salt River	VaShly DS	5.03	20yr	95000.00	1204.00	1218.67	1213.60	1219.83	0.001538	8.71	13198.24	1421.35	0.44
Salt River	VaShly DS	5.15	20yr	95000.00	1204.00	1219.66	1214.83	1220.87	0.001646	8.90	13186.35	1449.70	0.46
Salt River	VaShly DS	5.26	20yr	95000.00	1179.01	1220.75	1207.59	1221.37	0.000508	6.39	18018.24	1444.07	0.27
Salt River	VaShly DS	5.40	20yr	95000.00	1196.00	1221.01	1213.84	1222.10	0.001111	8.46	11517.61	870.64	0.39
Salt River	VaShly DS	5.47	20yr	95000.00	1208.00	1221.39	1218.62	1223.16	0.003218	10.67	8911.86	961.50	0.61
Salt River	VaShly DS	5.53	20yr	95000.00	1192.00	1222.90	1209.92	1223.56	0.000625	6.52	14580.99	939.54	0.29
Salt River	VaShly DS	5.56	20yr	95000.00	1208.00	1222.55	1218.15	1224.10	0.002293	9.97	9531.14	871.31	0.53
Salt River	VaShly DS	5.60	20yr	95000.00	1194.35	1223.96	1207.46	1224.29	0.000191	4.63	20504.12	901.27	0.17
Salt River	VaShly DS	5.65	20yr	95000.00	1198.67	1223.82	1212.12	1224.49	0.000496	6.56	14486.03	939.08	0.27
Salt River	VaShly DS	5.69	20yr	95000.00	1206.01	1223.66	1217.37	1224.82	0.001252	8.65	10982.96	783.34	0.41
Salt River	VaShly DS	5.73	20yr	95000.00	1208.00	1223.58	1219.65	1225.28	0.002365	10.48	9064.33	784.20	0.54
Salt River	VaShly DS	5.76	20yr	95000.00	1204.00	1224.57	1220.01	1225.69	0.001323	8.48	11196.88	855.77	0.41
Salt River	VaShly DS	5.80	20yr	95000.00	1204.00	1225.04	1220.11	1225.91	0.000889	7.45	12757.43	879.78	0.34
Salt River	VaShly DS	5.82	20yr	95000.00	1204.00	1225.15	1220.31	1226.00	0.000913	7.41	12817.98	901.81	0.35
Salt River	VaShly DS	5.84	20yr	95000.00	1204.00	1225.18	1220.61	1226.13	0.001141	7.83	12131.67	922.53	0.38
Salt River	VaShly DS	5.85	20yr	95000.00	1208.00	1225.32	1221.01	1226.21	0.001043	7.57	12552.06	982.26	0.37
Salt River	VaShly DS	5.86	20yr	95000.00	1205.11	1225.59	1221.37	1226.69	0.013033	8.41	11291.37	1048.01	0.44
Salt River	VaShly DS	5.87	20yr	95000.00	1206.22	1225.88	1223.01	1226.86	0.001781	7.92	11998.31	1345.13	0.46
Salt River	VaShly DS	5.88	20yr	95000.00	1209.96	1225.98	1223.51	1227.04	0.005575	8.26	11496.12	1568.66	0.50
Salt River	VaShly DS	5.91	20yr	95000.00	1203.31	1226.81	1217.56	1227.28	0.000616	5.50	17265.04	1653.17	0.28
Salt River	VaShly DS	5.93	20yr	95000.00	1198.79	1226.99	1212.15	1227.35	0.000361	4.83	19676.70	1478.83	0.22
Salt River	VaShly DS	5.95	20yr	95000.00	1196.00	1227.04	1211.83	1227.46	0.001957	5.21	18216.94	1356.96	0.24
Salt River	VaShly DS	5.97	20yr	95000.00	1198.59	1227.06	1213.76	1227.63	0.000578	6.08	15627.53	1180.49	0.28
Salt River	VaShly DS	5.99	20yr	95000.00	1200.00	1227.10	1216.71	1227.70	0.000686	6.21	15288.25	1342.68	0.30
Salt River	VaShly DS	6.01	20yr	95000.00	1204.00	1228.59	1218.85	1229.39	0.031864	7.16	13262.66	1426.31	0.36

HEC-RAS Plan: extended Profile: 20yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	20yr	95000.00	1204.00	1229.06	1217.69	1229.61	0.000540	5.97	15925.79	1458.12	0.27
Salt River	VaShly DS	6.09	20yr	95000.00	1200.00	1229.30	1215.48	1229.73	0.000319	5.23	19296.41	1557.16	0.22
Salt River	VaShly DS	6.14	20yr	95000.00	1196.00	1229.49	1210.53	1229.80	0.000203	4.44	22464.15	1889.46	0.17
Salt River	VaShly DS	6.18	20yr	95000.00	1192.00	1229.33	1221.00	1230.01	0.000671	6.63	14339.53	2043.78	0.30
Salt River	VaShly DS	6.22	20yr	95000.00	1203.46	1229.12	1222.51	1230.39	0.001444	9.05	10498.63	2050.96	0.43
Salt River	VaShly DS	6.27	20yr	95000.00	1194.49	1229.99	1211.96	1230.62	0.000417	6.39	14862.20	1833.13	0.25
Salt River	VaShly DS	6.32	20yr	95000.00	1192.00	1230.13	1211.45	1230.73	0.000328	6.23	15596.40	1405.10	0.23
Salt River	VaShly DS	6.35	20yr	95000.00	1194.53	1230.12	1213.32	1230.80	0.000393	6.61	14648.73	1466.83	0.25
Salt River	VaShly DS	6.38	20yr	95000.00	1195.40	1230.21	1212.00	1230.87	0.000402	6.53	14714.97	1909.58	0.25
Salt River	VaShly DS	6.40	20yr	95000.00	1219.48	1231.39	1231.39	1235.73	0.008735	16.72	5708.44	2312.51	1.00
Salt River	VaShly at Pit	6.45	20yr	86904.00	1220.01	1233.46	1231.57	1235.92	0.004400	12.57	7302.79	1001.84	0.72
Salt River	VaShly at Pit	6.50	20yr	86904.00	1223.66	1234.26	1233.52	1237.60	0.006729	14.69	6297.07	905.42	0.88
Salt River	VaShly at Pit	6.53	20yr	86904.00	1224.00	1235.97	1234.33	1238.69	0.005030	13.24	7542.96	1032.22	0.77
Salt River	VaShly at Pit	6.56	20yr	86904.00	1224.00	1236.86	1234.94	1239.42	0.004441	12.86	7793.01	1276.60	0.73
Salt River	VaShly at Pit	6.62	20yr	86904.00	1225.32	1238.12	1236.95	1241.31	0.005788	14.32	7563.37	1046.01	0.82
Salt River	VaShly at Pit	6.69	20yr	86904.00	1224.24	1240.63	1237.76	1242.97	0.003390	12.31	9352.93	1492.93	0.65
Salt River	VaShly at Pit	6.75	20yr	86904.00	1228.00	1242.01	1238.42	1243.93	0.002700	11.12	9904.77	1594.79	0.58
Salt River	VaShly at Pit	6.80	20yr	86904.00	1228.00	1243.28	1238.97	1244.62	0.001930	9.42	9595.20	1753.60	0.49
Salt River	VaShly at Pit	6.85	20yr	86904.00	1231.97	1243.72	1241.07	1245.16	0.002539	9.87	9285.83	1675.16	0.55
Salt River	VaShly at Pit	6.91	20yr	86904.00	1230.46	1245.00	1240.22	1245.67	0.001025	6.85	13529.87	1693.47	0.36
Salt River	VaShly at Pit	6.96	20yr	86904.00	1232.00	1245.33	1242.00	1246.19	0.002053	8.12	12497.43	1665.02	0.49
Salt River	VaShly at Pit	6.99	20yr	86904.00	1232.00	1245.78	1241.66	1246.45	0.001446	6.63	13181.83	1804.31	0.40
Salt River	VaShly at Pit	7.01	20yr	86904.00	1230.78	1245.90	1241.79	1246.62	0.001598	6.96	12776.08	1819.97	0.42
Salt River	VaShly at Pit	7.03	20yr	86904.00	1232.00	1246.01	1242.14	1246.74	0.001631	7.07	12732.50	1782.54	0.43
Salt River	VaShly at Pit	7.04	20yr	86904.00	1232.00	1246.12	1242.27	1246.88	0.002068	6.96	12419.35	1767.77	0.43
Salt River	VaShly at Pit	7.06	20yr	86904.00	1232.00	1246.28	1242.02	1247.02	0.001671	7.24	12656.85	1757.80	0.44
Salt River	VaShly at Pit	7.07	20yr	86904.00	1232.00	1246.47	1242.32	1247.15	0.001538	6.91	13273.80	1719.30	0.42
Salt River	VaShly at Pit	7.10	20yr	86904.00	1232.00	1246.68	1242.78	1247.41	0.001511	7.25	12872.88	1743.66	0.42
Salt River	VaShly at Pit	7.17	20yr	86904.00	1232.14	1247.23	1243.03	1247.93	0.001326	6.90	13006.66	1903.65	0.40
Salt River	VaShly at Pit	7.24	20yr	86904.00	1235.58	1247.73	1244.51	1248.42	0.001251	6.74	13054.40	1943.05	0.38
Salt River	VaShly at Pit	7.28	20yr	86904.00	1236.00	1247.98	1245.20	1249.12	0.002537	8.58	10131.11	2007.26	0.53
Salt River	VaShly US	7.32	20yr	95000.00	1239.34	1248.09	1245.50	1249.15	0.002812	8.67	14475.10	4621.83	0.56
Salt River	VaShly US	7.36	20yr	95000.00	1238.07	1248.73	1245.37	1249.67	0.002078	8.06	14491.09	4138.43	0.49
Salt River	VaShly US	7.40	20yr	95000.00	1239.06	1249.10	1246.08	1250.14	0.002160	8.38	12630.78	3994.21	0.50
Salt River	VaShly US	7.44	20yr	95000.00	1238.53	1249.66	1245.42	1250.56	0.001570	7.63	12450.88	3231.89	0.43
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	20yr	95000.00	1239.83	1250.27	1246.25	1251.23	0.001686	7.85	12102.83	3523.14	0.45
Salt River	VaShly US	7.55	20yr	95000.00	1239.60	1251.02	1246.23	1251.86	0.001342	7.36	12902.83	5261.88	0.40
Salt River	VaShly US	7.63	20yr	100000.00	1240.00	1251.34	1248.31	1252.96	0.002823	10.21	9790.62	3223.95	0.58
Salt River	VaShly US	7.71	20yr	100000.00	1243.41	1252.63	1251.40	1255.18	0.005442	12.81	7871.91	3822.36	0.78
Salt River	VaShly US	7.83	20yr	100000.00	1244.00	1255.84	1252.30	1257.27	0.002267	9.70	12072.31	4503.71	0.53
Salt River	VaShly US	7.91	20yr	100000.00	1244.00	1256.66	1254.14	1258.65	0.003256	11.57	11440.38	4439.76	0.63
Salt River	VaShly US	8.01	20yr	100000.00	1240.00	1258.77	1251.73	1259.45	0.000808	6.83	17333.09	4501.63	0.33
Salt River	VaShly US	8.10	20yr	100000.00	1212.00	1259.21	1237.67	1259.62	0.000196	5.41	25498.02	4424.41	0.18
Salt River	VaShly US	8.20	20yr	100000.00	1202.29	1259.57	1214.06	1259.67	0.000025	2.68	42762.06	4661.03	0.07
Salt River	VaShly US	8.29	20yr	100000.00	1204.00	1259.60	1215.60	1259.68	0.000021	2.41	47012.40	4611.16	0.06
Salt River	VaShly US	8.36	20yr	100000.00	1212.00	1259.60	1223.52	1259.70	0.000032	2.69	43891.65	4430.82	0.08
Salt River	VaShly US	8.44	20yr	100000.00	1192.00	1259.62	1218.33	1259.71	0.000026	2.52	48651.08	3972.31	0.07
Salt River	VaShly US	8.52	20yr	100000.00	1208.00	1259.63	1223.04	1259.73	0.000029	2.79	45686.97	3879.04	0.07
Salt River	VaShly US	8.57	20yr	100000.00	1198.17	1259.62	1216.78	1259.74	0.000036	3.08	42491.80	2918.37	0.08
Salt River	VaShly US	8.60	20yr	100000.00	1196.00	1259.60	1218.99	1259.77	0.000058	3.67	37506.57	2731.95	0.10
Salt River	VaShly US	8.63	20yr	100000.00	1216.00	1259.38	1236.48	1259.90	0.000372	6.10	24627.11	2268.80	0.23
Salt River	VaShly US	8.68	20yr	100000.00	1244.00	1259.01	1259.01	1263.42	0.009600	17.67	15022.20	2324.55	1.05
Salt River	VaShly US	8.74	20yr	100000.00	1220.00	1263.29	1241.40	1263.89	0.000143	6.51	26096.45	2173.64	0.21
Salt River	VaShly US	8.77	20yr	100000.00	1206.87	1263.67	1228.73	1263.94	0.000104	4.36	34650.90	2459.03	0.13
Salt River	VaShly US	8.81	20yr	100000.00	1204.00	1263.65	1231.08	1263.99	0.000160	4.90	31355.75	2513.72	0.16
Salt River	VaShly US	8.85	20yr	100000.00	1212.00	1263.50	1242.52	1264.15	0.000473	6.83	25075.21	2604.51	0.26
Salt River	VaShly US	8.88	20yr	100000.00	1233.08	1263.15	1256.78	1264.54	0.001508	9.92	21465.29	2462.36	0.45
Salt River	VaShly US	8.92	20yr	100000.00	1239.59	1263.04	1258.92	1265.08	0.002315	12.00	21414.22	2365.01	0.56
Salt River	VaShly US	8.98	20yr	100000.00	1244.00	1263.21	1260.67	1266.39	0.003939	15.00	14578.41	1959.99	0.72
Salt River	VaShly US	9.04	20yr	100000.00	1248.00	1263.49	1263.06	1268.50	0.006050	18.83	11413.20	1561.14	0.90
Salt River	VaShly US	9.13	20yr	100000.00	1248.00	1268.24	1261.31	1269.95	0.001437	11.02	15295.65	2753.54	0.46
Salt River	VaShly US	9.20	20yr	100000.00	1248.00	1269.38	1261.00	1270.43	0.000863	8.58	14342.12	3553.68	0.35
Salt River	VaShly US	9.26	20yr	100000.00	1247.57	1269.57	1261.97	1270.80	0.001025	9.31	14128.05	3874.38	0.39
Salt River	VaShly US	9.33	20yr	100000.00	1244.00	1269.56	1263.43	1271.48	0.001579	11.63	12410.13	3804.85	0.48
Salt River	VaShly US	9.39	20yr	100000.00	1236.00	1269.18	1265.62	1272.52	0.002792	15.63	11153.74	3370.12	0.63
Salt River	VaShly US	9.44	20yr	100000.00	1247.05	1271.94	1261.05	1273.07	0.000722	8.92	17595.63	5050.33	0.33
Salt River	VaShly US	9.49	20yr	100000.00	1248.00	1272.68	1260.66	1273.24	0.000398	6.31	22562.13	5725.77	0.25
Salt River	VaShly US	9.55	20yr	100000.00	1251.37	1273.07	1262.16	1273.38	0.000251	4.89	27501.58	6820.67	0.19
Salt River	VaShly US	9.59	20yr	100000.00	1244.40	1273.19	1262.03	1273.43	0.000194	4.50	29394.65	7119.41	0.17
Salt River	VaShly US	9.61	20yr	100000.00	1248.20	1273.19	1262.91	1273.47	0.000236	4.80	26405.02	7002.73	0.19
Salt River	VaShly US	9.64	20yr	100000.00	1252.00	1273.20	1263.97	1273.51	0.000299	5.06	23918.14	6834.49	0.21
Salt River	VaShly US	9.67	20yr	100000.00	1250.78	1273.20	1264.43	1273.57	0.000340	5.52	21812.57	6475.55	0.22
Salt River	VaShly US	9.73	20yr	100000.00	1252.00	1273.27	1265.63	1273.73	0.000503	5.98	19318.56	4862.75	0.27
Salt River	VaShly US	9.80	20yr	100000.00	1252.00	1273.33	1266.22	1274.00	0.000687	7.20	16127.17	2984.69	0.31
Salt River	VaShly US	9.87	20yr	100000.00	1254.92	1273.45	1266.65	1274.36	0.000934	7.98	13609.97	2387.81	0.36
Salt River	VaShly US	9.96	20yr	100000.00	1254.13	1273.77	1267.73	1274.91	0.001198	8.99	12357.54	2755.87	0.41
Salt River	VaShly US	10.06	20yr	100000.00	1256.00	1274.51	1269.07	1275.63	0.001318	8.89	12476.51	2395.94	0.42
Salt River	VaShly US	10.18	20yr	100000.00	1256.00	1275.28	1270.55	1276.69	0.001901	9.54	10480.95	2511.52	0.49
Salt River	VaShly US	10.26	20yr	100000.00	1252.00	1276.48	1265.20	1277.11	0.000483	6.36	15729.57	2456.99	0.26
Salt River	VaShly US	10.36	20yr	100000.00	1253.00	1276.64	1268.51	1277.55	0.000881	7.73	13329.49	2543.68	0.35
Salt River	VaShly US	10.41	20yr	100000.00	1247.67	1277.31	1258.05	1277.67	0.000172	4.87	21105.63	2527.82	0.17
Salt River	VaShly US	10.46	20yr	100000.00	1240.00	1277.32	1258.37	1277.74	0.000220	5.37	19939.21	2502.28	0.19
Salt River	VaShly US	10.52	20yr	100000.00	1234.97	1277.44	1252.62	1277.81	0.000142	4.90	20791.92	2240.60	0.16
Salt River	VaShly US	10.56	20yr	100000.00	1244.00	1277.34	1258.62	1277.91	0.000264	6.06	16503.58	2440.82	0.21
Salt River	VaShly US	10.61	20yr	100000.00	1244.20	1277.40	1259.16	1277.98	0.000277	6.08	16477.64	2033.70	0.21
Salt River	VaShly US	10.67	20yr	100000.00	1248.00	1277.51	1261.04	1278.08	0.000300	6.04	16588.82	1848.35	0.22

HEC-RAS Plan: extended Profile: 20yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	20yr	100000.00	1248.00	1277.75	1257.92	1278.17	0.000189	5.17	19347.43	1796.93	0.18
Salt River	VaShly US	10.78	20yr	100000.00	1248.00	1277.83	1257.67	1278.21	0.000172	4.94	20253.29	1833.71	0.17
Salt River	VaShly US	10.81	20yr	100000.00	1248.00	1277.88	1257.68	1278.24	0.000169	4.87	20546.70	1831.68	0.17
Salt River	VaShly US	10.86	20yr	100000.00	1248.00	1277.89	1260.10	1278.31	0.000222	5.19	19274.34	1746.56	0.19
Salt River	VaShly US	10.90	20yr	100000.00	1250.83	1277.96	1261.15	1278.36	0.000226	5.10	19623.52	1566.66	0.19
Salt River	VaShly US	10.95	20yr	100000.00	1252.00	1278.03	1261.47	1278.42	0.000222	4.98	20073.90	1276.74	0.19
Salt River	VaShly US	11.00	20yr	100000.00	1254.01	1277.98	1264.22	1278.54	0.000348	5.99	16683.39	1208.25	0.23
Salt River	VaShly US	11.05	20yr	100000.00	1256.00	1278.02	1266.79	1278.71	0.000515	6.64	15063.61	1819.11	0.27
Salt River	VaShly US	11.10	20yr	100000.00	1256.00	1278.02	1269.08	1278.92	0.000810	7.63	13110.24	1662.70	0.34
Salt River	VaShly US	11.14	20yr	100000.00	1256.00	1278.28	1272.31	1279.61	0.004539	9.26	10795.73	1653.38	0.45
Salt River	VaShly US	11.17	20yr	100000.00	1256.00	1278.77	1272.62	1280.01	0.001433	8.94	11179.82	1211.81	0.43
Salt River	VaShly US	11.25	20yr	100000.00	1256.00	1279.36	1273.89	1280.66	0.001600	9.16	10916.06	1066.57	0.45
Salt River	VaShly US	11.32	20yr	100000.00	1260.00	1280.04	1275.83	1281.58	0.002666	9.96	10044.22	1377.42	0.56
Salt River	VaShly US	11.41	20yr	100000.00	1260.00	1281.50	1276.98	1282.78	0.002572	9.08	11016.00	1267.59	0.54
Salt River	VaShly US	11.49	20yr	100000.00	1263.04	1282.65	1276.46	1283.63	0.001532	7.95	12585.51	1196.69	0.43
Salt River	VaShly US	11.62	20yr	100000.00	1264.00	1283.76	1277.30	1284.39	0.000837	6.40	15633.40	1312.09	0.33
Salt River	VaShly US	11.78	20yr	100000.00	1268.00	1284.49	1279.40	1285.39	0.001326	7.60	13156.89	1410.89	0.41
Salt River	VaShly US	11.88	20yr	100000.00	1267.94	1285.16	1281.86	1286.54	0.002448	9.44	10597.32	1158.60	0.54
Salt River	VaShly US	11.99	20yr	100000.00	1268.00	1286.77	1284.62	1288.24	0.003470	9.75	10260.77	1331.02	0.62
Salt River	VaShly US	12.06	20yr	100000.00	1268.00	1288.21	1284.49	1289.24	0.002001	8.13	12298.75	1385.15	0.48
Salt River	VaShly US	12.10	20yr	100000.00	1272.00	1288.66	1284.94	1289.80	0.002142	8.56	11683.25	1282.06	0.50
Salt River	VaShly US	12.22	20yr	100000.00	1272.00	1289.81	1285.18	1291.00	0.001704	8.75	11424.20	1017.94	0.46
Salt River	VaShly US	12.33	20yr	100000.00	1272.00	1290.68	1284.13	1291.86	0.001284	8.69	11503.87	837.79	0.41
Salt River	VaShly US	12.44	20yr	100000.00	1276.00	1291.41	1287.35	1292.95	0.002217	9.95	10049.40	901.57	0.53
Salt River	VaShly US	12.55	20yr	100000.00	1276.00	1292.86	1286.55	1294.02	0.001439	8.61	11617.62	936.86	0.43
Salt River	VaShly US	12.67	20yr	100000.00	1276.00	1293.80	1287.26	1294.87	0.001324	8.29	12068.64	967.19	0.41
Salt River	VaShly US	12.77	20yr	100000.00	1276.00	1294.47	1289.08	1295.78	0.001903	9.18	10890.93	983.43	0.49
Salt River	VaShly US	12.87	20yr	100000.00	1276.00	1295.63	1289.54	1296.87	0.002227	8.95	11179.34	1181.68	0.51
Salt River	VaShly US	12.97	20yr	100000.00	1280.00	1296.95	1292.95	1298.10	0.002042	8.60	11629.96	1221.40	0.49
Salt River	VaShly US	13.07	20yr	100000.00	1276.00	1298.07	1291.74	1298.99	0.001532	7.71	12977.55	1295.59	0.43
Salt River	VaShly US	13.19	20yr	100000.00	1284.00	1299.02	1294.21	1300.14	0.001934	8.49	11780.06	1212.96	0.48
Salt River	VaShly US	13.31	20yr	100000.00	1281.30	1300.18	1294.48	1301.19	0.001337	8.04	12431.01	1050.65	0.41
Salt River	VaShly US	13.44	20yr	100000.00	1284.00	1301.07	1295.08	1302.03	0.001209	7.83	12773.54	1043.80	0.39
Salt River	VaShly US	13.55	20yr	100000.00	1288.00	1301.82	1295.88	1302.74	0.001178	7.71	12970.67	1062.67	0.39
Salt River	VaShly US	13.64	20yr	100000.00	1288.00	1302.39	1297.66	1303.46	0.001606	8.30	12047.42	1110.13	0.44
Gilbert Mining P	Gilbert Mining P	0.04	20yr	8096.00	1190.68	1236.16	1194.93	1236.16	0.000001	0.53	15268.98	1595.94	0.01
Gilbert Mining P	Gilbert Mining P	0.08	20yr	8096.00	1180.00	1236.16	1188.11	1236.16	0.000001	0.51	16082.52	1672.21	0.01
Gilbert Mining P	Gilbert Mining P	0.11	20yr	8096.00	1182.38	1236.16	1185.93	1236.16	0.000001	0.38	21422.66	1838.22	0.01
Gilbert Mining P	Gilbert Mining P	0.15	20yr	8096.00	1180.00	1236.16	1184.97	1236.16	0.000001	0.39	21395.98	1927.80	0.01
Gilbert Mining P	Gilbert Mining P	0.19	20yr	8096.00	1180.00	1236.16	1188.05	1236.16	0.000001	0.50	16834.85	1195.63	0.02
Gilbert Mining P	Gilbert Mining P	0.22	20yr	8096.00	1188.00	1236.16	1192.89	1236.16	0.000001	0.49	16775.51	1138.52	0.01
Gilbert Mining P	Gilbert Mining P	0.25	20yr	8096.00	1182.77	1236.16	1187.15	1236.16	0.000001	0.48	16792.83	999.82	0.01
Gilbert Mining P	Gilbert Mining P	0.29	20yr	8096.00	1183.78	1236.16	1188.58	1236.16	0.000002	0.62	13612.19	935.90	0.02
Gilbert Mining P	Gilbert Mining P	0.33	20yr	8096.00	1182.37	1236.16	1186.74	1236.16	0.000000	0.29	28271.54	923.57	0.01
Gilbert Mining P	Gilbert Mining P	0.37	20yr	8096.00	1184.00	1236.16	1189.67	1236.16	0.000000	0.26	32030.53	1596.97	0.01
Gilbert Mining P	Gilbert Mining P	0.43	20yr	8096.00	1180.00	1236.16	1187.11	1236.16	0.000000	0.34	23903.09	2246.50	0.01
Gilbert Mining P	Gilbert Mining P	0.48	20yr	8096.00	1172.00	1236.16	1179.63	1236.16	0.000000	0.28	29380.35	2400.41	0.01
Gilbert Mining P	Gilbert Mining P	0.53	20yr	8096.00	1191.79	1236.16	1197.43	1236.17	0.000000	0.28	30308.04	2531.02	0.01
Gilbert Mining P	Gilbert Mining P	0.55	20yr	8096.00	1196.00	1236.16	1200.82	1236.17	0.000001	0.37	22338.46	2014.06	0.01
Gilbert Mining P	Gilbert Mining P	0.60	20yr	8096.00	1200.85	1236.16	1208.68	1236.17	0.000005	0.74	11189.51	1697.42	0.03
Gilbert Mining P	Gilbert Mining P	0.66	20yr	8096.00	1192.00	1236.17	1196.49	1236.17	0.000000	0.32	25432.71	2001.54	0.01
Gilbert Mining P	Gilbert Mining P	0.70	20yr	8096.00	1196.00	1236.17	1198.91	1236.17	0.000001	0.42	19128.25	2049.63	0.01
Gilbert Mining P	Gilbert Mining P	0.74	20yr	8096.00	1196.00	1236.17	1199.10	1236.17	0.000001	0.37	21604.72	2119.40	0.01
Gilbert Mining P	Gilbert Mining P	0.77	20yr	8096.00	1196.00	1236.17	1199.92	1236.17	0.000000	0.25	32065.94	2192.66	0.01
Gilbert Mining P	Gilbert Mining P	0.83	20yr	8096.00	1199.07	1236.17	1201.73	1236.17	0.000000	0.24	33739.73	2272.70	0.01
Gilbert Mining P	Gilbert Mining P	0.88	20yr	8096.00	1198.45	1236.17	1201.01	1236.17	0.000000	0.24	34039.00	2588.42	0.01
Gilbert Mining P	Gilbert Mining P	0.91	20yr	8096.00	1197.53	1236.17	1202.96	1236.17	0.000001	0.30	27252.60	2375.37	0.01
Gilbert Mining P	Gilbert Mining P	0.95	20yr	8096.00	1202.08	1236.17	1205.32	1236.17	0.000001	0.36	22363.79	3043.78	0.01
Gilbert Mining P	Gilbert Mining P	0.97	20yr	8096.00	1204.00	1236.17	1206.68	1236.17	0.000001	0.37	22299.11	3463.00	0.01
Gilbert Mining P	Gilbert Mining P	0.99	20yr	8096.00	1204.00	1236.17	1208.75	1236.17	0.000001	0.42	19479.56	3346.50	0.01
Gilbert Mining P	Gilbert Mining P	1.02	20yr	8096.00	1207.21	1236.17	1209.70	1236.17	0.000001	0.37	21562.88	3311.46	0.01
Gilbert Mining P	Gilbert Mining P	1.05	20yr	8096.00	1208.00	1236.17	1211.43	1236.17	0.000002	0.46	17764.37	2993.77	0.02
Gilbert Mining P	Gilbert Mining P	1.08	20yr	8096.00	1196.00	1236.17	1209.77	1236.17	0.000003	0.59	13846.26	1780.05	0.02
Gilbert Mining P	Gilbert Mining P	1.11	20yr	8096.00	1196.00	1236.16	1212.37	1236.18	0.000007	0.86	9400.92	1222.07	0.03
Gilbert Mining P	Gilbert Mining P	1.14	20yr	8096.00	1212.00	1236.15	1217.96	1236.19	0.000036	1.55	5238.59	1153.20	0.07
Gilbert Mining P	Gilbert Mining P	1.17	20yr	8096.00	1243.53	1246.93	1246.93	1248.37	0.012449	9.61	842.32	1755.41	1.00
Gilbert Mining P	Gilbert Mining P	1.19	20yr	8096.00	1236.00	1248.41	1239.70	1248.55	0.000197	2.97	2721.38	2960.76	0.16
Gilbert Mining P	Gilbert Mining P	1.21	20yr	8096.00	1244.00	1248.17	1247.48	1249.12	0.006332	7.84	1032.69	2345.44	0.73

APPENDIX 2e

50-YEAR STANDARD TABLE 1

HEC-RAS Plan: extended Profile: 50yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	50yr	145000.00	1148.00	1173.30	1160.10	1173.95	0.000403	6.48	22383.62	1053.18	0.25
Salt River	VaShly DS	0.11	50yr	145000.00	1148.00	1173.55	1161.70	1174.21	0.000454	6.54	22178.61	1127.42	0.26
Salt River	VaShly DS	0.23	50yr	145000.00	1150.96	1173.89	1161.49	1174.49	0.000402	6.23	23293.15	1162.12	0.25
Salt River	VaShly DS	0.36	50yr	145000.00	1151.05	1174.16	1162.17	1174.78	0.000423	6.30	23010.57	1176.55	0.25
Salt River	VaShly DS	0.51	50yr	145000.00	1152.00	1174.51	1162.36	1175.10	0.000405	6.18	23467.29	1197.02	0.25
Salt River	VaShly DS	0.65	50yr	145000.00	1151.50	1174.84	1161.88	1175.39	0.000356	5.94	24413.54	1200.74	0.23
Salt River	VaShly DS	0.78	50yr	145000.00	1152.00	1175.06	1164.15	1175.71	0.000498	6.46	22458.39	1246.11	0.27
Salt River	VaShly DS	0.89	50yr	145000.00	1156.00	1175.33	1166.20	1176.09	0.000661	7.03	20627.70	1250.63	0.31
Salt River	VaShly DS	1.00	50yr	145000.00	1152.00	1175.81	1164.57	1176.41	0.000448	6.21	23345.26	1276.57	0.26
Salt River	VaShly DS	1.12	50yr	145000.00	1152.00	1176.09	1165.14	1176.69	0.000458	6.21	23340.45	1294.96	0.26
Salt River	VaShly DS	1.22	50yr	145000.00	1156.00	1176.34	1166.06	1176.96	0.000505	6.33	22922.13	1332.80	0.27
Salt River	VaShly DS	1.30	50yr	145000.00	1152.00	1176.53	1167.06	1177.20	0.000575	6.56	22118.86	1341.16	0.28
Salt River	VaShly DS	1.39	50yr	145000.00	1147.32	1176.94	1162.96	1177.40	0.000296	5.44	26670.60	1297.17	0.21
Salt River	VaShly DS	1.52	50yr	145000.00	1144.00	1177.18	1157.18	1177.58	0.000225	5.10	28418.34	1224.65	0.19
Salt River	VaShly DS	1.65	50yr	145000.00	1154.51	1177.35	1166.87	1177.82	0.000411	5.50	26346.61	1620.12	0.24
Salt River	VaShly DS	1.76	50yr	145000.00	1152.50	1177.54	1166.51	1178.08	0.000441	5.92	24652.22	1778.55	0.25
Salt River	VaShly DS	1.80	50yr	145000.00	1160.00	1177.39	1170.21	1178.36	0.001011	7.91	18335.32	1338.35	0.37
Salt River	VaShly DS	1.83	50yr	145000.00	1148.00	1177.37	1171.46	1178.68	0.001586	9.18	15801.93	1284.37	0.45
Salt River	VaShly DS	1.86	50yr	145000.00	1148.00	1177.83	1170.70	1178.92	0.001097	8.37	17316.70	1232.63	0.38
Salt River	VaShly DS	1.89	50yr	145000.00	1152.71	1177.96	1171.05	1179.10	0.001173	8.58	16903.23	1337.74	0.40
Salt River	VaShly DS	1.95	50yr	145000.00	1157.05	1178.26	1170.52	1179.52	0.001088	9.01	16100.71	1487.62	0.39
Salt River	VaShly DS	2.02	50yr	145000.00	1158.36	1178.50	1170.59	1180.00	0.001178	9.82	14767.46	1803.55	0.41
Salt River	VaShly DS	2.04	50yr	145000.00	1156.31	1178.55	1172.19	1180.20	0.001564	10.31	14066.05	1903.79	0.47
Salt River	VaShly DS	2.07	50yr	145000.00	1156.00	1178.59	1174.17	1180.66	0.002317	11.53	12580.81	1937.91	0.55
Salt River	VaShly DS	2.10	50yr	145000.00	1158.27	1178.90	1175.19	1181.05	0.002683	11.78	12311.18	1994.39	0.59
Salt River	VaShly DS	2.12	50yr	145000.00	1176.00	1189.02	1189.02	1193.62	0.008511	17.21	8425.08	2584.49	1.00
Salt River	VaShly DS	2.13	50yr	145000.00	1176.00	1191.47	1188.69	1194.17	0.003608	13.18	11002.26	2626.36	0.68
Salt River	VaShly DS	2.21	50yr	145000.00	1176.00	1192.98	1190.25	1195.66	0.003620	13.15	11025.69	2523.47	0.68
Salt River	VaShly DS	2.29	50yr	145000.00	1170.86	1195.35	1188.20	1196.85	0.001343	9.84	14738.35	1619.36	0.43
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	50yr	145000.00	1180.00	1198.11	1194.36	1200.41	0.002800	12.18	11901.80	1420.20	0.60
Salt River	VaShly DS	2.38	50yr	145000.00	1175.59	1199.40	1193.78	1201.08	0.001803	10.41	13934.08	1170.51	0.49
Salt River	VaShly DS	2.40	50yr	145000.00	1176.00	1199.71	1193.69	1201.33	0.001612	10.21	14198.00	962.65	0.47
Salt River	VaShly DS	2.41	50yr	145000.00	1176.00	1199.79	1193.70	1201.40	0.001587	10.18	14239.81	1198.73	0.47
Salt River	VaShly DS	2.42	50yr	145000.00	1176.00	1199.83	1193.88	1201.47	0.001633	10.25	14142.30	988.74	0.47
Salt River	VaShly DS	2.47	50yr	145000.00	1178.61	1200.09	1195.57	1202.09	0.002274	11.33	12795.52	1207.61	0.55
Salt River	VaShly DS	2.53	50yr	145000.00	1180.00	1201.05	1196.09	1202.77	0.001924	10.51	13797.48	2283.80	0.51
Salt River	VaShly DS	2.59	50yr	145000.00	1184.00	1201.59	1196.87	1203.51	0.002144	11.09	13069.59	2099.01	0.53
Salt River	VaShly DS	2.65	50yr	145000.00	1187.99	1202.07	1198.07	1204.31	0.002627	12.01	12072.71	1446.33	0.59
Salt River	VaShly DS	2.71	50yr	145000.00	1188.00	1203.51	1198.46	1205.16	0.001884	10.31	14068.36	1380.67	0.50
Salt River	VaShly DS	2.78	50yr	145000.00	1188.00	1204.28	1198.98	1205.74	0.001669	9.72	14965.53	1478.90	0.47
Salt River	VaShly DS	2.87	50yr	145000.00	1175.62	1204.98	1197.76	1206.52	0.001356	9.96	14555.00	1020.07	0.44
Salt River	VaShly DS	2.98	50yr	145000.00	1180.00	1206.07	1197.96	1207.21	0.000897	8.56	16964.56	1027.80	0.36
Salt River	VaShly DS	3.10	50yr	145000.00	1174.02	1206.51	1196.82	1208.00	0.001377	9.79	14806.60	1106.40	0.44
Salt River	VaShly DS	3.23	50yr	145000.00	1184.27	1207.37	1202.26	1209.37	0.002087	11.37	12755.52	1001.34	0.53
Salt River	VaShly DS	3.35	50yr	145000.00	1188.00	1208.97	1201.53	1210.41	0.001269	9.60	15099.67	1186.35	0.42
Salt River	VaShly DS	3.46	50yr	145000.00	1184.00	1210.40	1200.55	1211.11	0.000617	6.82	21534.42	2628.05	0.30
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	50yr	145000.00	1186.84	1210.59	1202.26	1211.43	0.000801	7.36	19699.16	2609.28	0.33
Salt River	VaShly DS	3.64	50yr	145000.00	1192.00	1211.35	1205.95	1212.69	0.001889	9.29	15609.31	2924.56	0.49
Salt River	VaShly DS	3.76	50yr	145000.00	1188.00	1212.58	1204.08	1213.51	0.000906	7.72	18842.05	3236.39	0.35
Salt River	VaShly DS	3.89	50yr	145000.00	1174.66	1213.49	1195.03	1213.73	0.000126	3.96	37228.73	3630.61	0.14
Salt River	VaShly DS	4.04	50yr	145000.00	1184.00	1213.58	1200.68	1213.91	0.000265	4.53	31824.61	3778.77	0.19
Salt River	VaShly DS	4.09	50yr	145000.00	1188.00	1213.56	1203.43	1214.06	0.000462	5.61	25580.68	2909.86	0.25
Salt River	VaShly DS	4.15	50yr	145000.00	1184.00	1213.58	1204.69	1214.31	0.000661	6.87	21109.98	2052.24	0.30
Salt River	VaShly DS	4.22	50yr	145000.00	1178.19	1213.94	1204.01	1214.51	0.000439	5.93	24034.59	1538.87	0.25
Salt River	VaShly DS	4.27	50yr	145000.00	1192.00	1213.92	1205.63	1214.75	0.000782	7.40	19884.26	1307.65	0.33
Salt River	VaShly DS	4.31	50yr	145000.00	1199.24	1213.79	1208.70	1215.20	0.001686	9.39	15229.76	1188.01	0.47
Salt River	VaShly DS	4.47	50yr	145000.00	1200.00	1215.31	1211.40	1216.91	0.002305	10.34	21423.92	1974.82	0.54
Salt River	VaShly DS	4.59	50yr	145000.00	1192.00	1216.94	1209.55	1217.87	0.000940	7.86	22346.16	2339.16	0.36
Salt River	VaShly DS	4.74	50yr	145000.00	1188.00	1217.65	1206.99	1218.52	0.000711	7.64	21896.89	2086.21	0.32
Salt River	VaShly DS	4.88	50yr	145000.00	1200.00	1217.87	1214.95	1220.59	0.003385	13.49	13150.27	1510.53	0.76
Salt River	VaShly DS	5.03	50yr	145000.00	1204.00	1220.81	1215.99	1222.65	0.002028	11.08	16522.47	1708.56	0.52
Salt River	VaShly DS	5.15	50yr	145000.00	1204.00	1222.12	1217.16	1223.95	0.001989	11.05	16885.53	1550.26	0.52
Salt River	VaShly DS	5.26	50yr	145000.00	1179.01	1223.60	1211.27	1224.63	0.000703	8.26	22151.93	1454.93	0.32
Salt River	VaShly DS	5.40	50yr	145000.00	1196.00	1223.89	1216.59	1225.61	0.001435	10.64	14100.40	915.63	0.45
Salt River	VaShly DS	5.47	50yr	145000.00	1208.00	1224.32	1221.01	1226.69	0.003042	12.38	11787.28	1005.23	0.62
Salt River	VaShly DS	5.53	50yr	145000.00	1192.00	1226.13	1214.91	1227.18	0.000807	8.20	17676.46	975.81	0.34
Salt River	VaShly DS	5.56	50yr	145000.00	1208.00	1225.65	1221.02	1227.81	0.002432	11.79	12298.62	912.99	0.57
Salt River	VaShly DS	5.60	50yr	145000.00	1194.35	1227.49	1211.49	1228.07	0.000279	6.12	23710.14	912.30	0.21
Salt River	VaShly DS	5.65	50yr	145000.00	1198.67	1227.36	1215.95	1228.32	0.000679	7.89	18370.64	949.78	0.32
Salt River	VaShly DS	5.69	50yr	145000.00	1206.01	1227.03	1219.77	1228.79	0.001446	10.63	13644.21	794.52	0.45
Salt River	VaShly DS	5.73	50yr	145000.00	1208.00	1226.91	1222.20	1229.30	0.002407	12.40	11693.66	794.86	0.57
Salt River	VaShly DS	5.76	50yr	145000.00	1204.00	1228.14	1221.02	1229.74	0.001414	10.15	14283.39	985.20	0.44
Salt River	VaShly DS	5.80	50yr	145000.00	1204.00	1228.71	1220.11	1229.98	0.000995	9.06	16001.77	908.61	0.38
Salt River	VaShly DS	5.82	50yr	145000.00	1204.00	1228.84	1220.31	1230.09	0.001002	8.97	16167.50	977.61	0.38
Salt River	VaShly DS	5.84	50yr	145000.00	1204.00	1228.88	1220.75	1230.22	0.001190	9.30	15587.15	1043.60	0.40
Salt River	VaShly DS	5.85	50yr	145000.00	1208.00	1229.06	1221.01	1230.31	0.001115	8.96	16183.45	1103.00	0.39
Salt River	VaShly DS	5.86	50yr	145000.00	1205.11	1229.32	1223.01	1230.75	0.012074	9.60	15104.36	1141.53	0.44
Salt River	VaShly DS	5.87	50yr	145000.00	1206.22	1229.79	1223.77	1230.90	0.001346	8.47	17116.49	1460.25	0.42
Salt River	VaShly DS	5.88	50yr	145000.00	1209.96	1230.02	1224.66	1230.99	0.001254	8.00	18468.22	1640.51	0.40
Salt River	VaShly DS	5.91	50yr	145000.00	1203.31	1230.57	1220.52	1231.15	0.000540	6.14	23967.83	1738.13	0.27
Salt River	VaShly DS	5.93	50yr	145000.00	1198.79	1230.69	1215.13	1231.20	0.000391	5.79	25277.72	1600.29	0.24
Salt River	VaShly DS	5.95	50yr	145000.00	1196.00	1230.72	1215.08	1231.34	0.002241	6.33	22921.70	1416.15	0.26
Salt River	VaShly DS	5.97	50yr	145000.00	1198.59	1230.74	1217.21	1231.56	0.000717	7.26	19982.17	1421.44	0.32
Salt River	VaShly DS	5.99	50yr	145000.00	1200.00	1230.79	1219.62	1231.63	0.000736	7.34	19750.44	1484.20	0.32
Salt River	VaShly DS	6.01	50yr	145000.00	1204.00	1232.26	1223.01	1233.37	0.032319	8.46	17147.46	1493.70	0.37

HEC-RAS Plan: extended Profile: 50yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	50yr	145000.00	1204.00	1232.80	1221.10	1233.62	0.000608	7.28	19919.76	1507.55	0.30
Salt River	VaShly DS	6.09	50yr	145000.00	1200.00	1233.15	1219.26	1233.76	0.000367	6.34	23878.14	1791.97	0.24
Salt River	VaShly DS	6.14	50yr	145000.00	1196.00	1233.40	1214.43	1233.85	0.000245	5.46	27751.38	2122.49	0.20
Salt River	VaShly DS	6.18	50yr	145000.00	1192.00	1233.36	1223.24	1233.97	0.000436	6.38	23759.21	2436.10	0.25
Salt River	VaShly DS	6.22	50yr	145000.00	1203.46	1233.46	1225.63	1234.06	0.000422	6.27	23976.17	2280.75	0.25
Salt River	VaShly DS	6.27	50yr	145000.00	1194.49	1233.55	1218.05	1234.18	0.000457	6.45	23057.56	2304.53	0.23
Salt River	VaShly DS	6.32	50yr	145000.00	1192.00	1233.53	1215.46	1234.49	0.000981	7.97	18722.86	1744.23	0.27
Salt River	VaShly DS	6.35	50yr	145000.00	1194.53	1233.59	1217.13	1234.65	0.001242	8.40	17737.37	2064.09	0.29
Salt River	VaShly DS	6.38	50yr	145000.00	1195.40	1233.90	1216.23	1234.92	0.001743	8.18	17933.48	2212.06	0.29
Salt River	VaShly DS	6.40	50yr	145000.00	1219.48	1234.70	1234.70	1239.43	0.006484	17.76	8647.16	2568.89	0.91
Salt River	VaShly at Pit	6.45	50yr	128592.00	1220.01	1237.18	1234.14	1239.66	0.003042	12.87	11111.40	1203.39	0.63
Salt River	VaShly at Pit	6.50	50yr	128592.00	1223.66	1237.58	1236.30	1240.97	0.005037	15.03	9670.14	1438.73	0.79
Salt River	VaShly at Pit	6.53	50yr	128592.00	1224.00	1238.69	1236.85	1241.83	0.004390	14.51	10441.44	1303.23	0.74
Salt River	VaShly at Pit	6.56	50yr	128592.00	1224.00	1239.36	1237.54	1242.50	0.004265	14.52	10580.65	1361.47	0.74
Salt River	VaShly at Pit	6.62	50yr	128592.00	1225.32	1240.44	1239.41	1244.39	0.005683	16.28	10110.32	1442.54	0.84
Salt River	VaShly at Pit	6.69	50yr	128592.00	1224.24	1243.05	1240.49	1246.09	0.003577	14.32	12394.19	1544.27	0.69
Salt River	VaShly at Pit	6.75	50yr	128592.00	1228.00	1244.76	1241.15	1247.13	0.002851	12.63	13559.45	1775.56	0.61
Salt River	VaShly at Pit	6.80	50yr	128592.00	1228.00	1246.22	1241.37	1247.82	0.001781	10.54	16794.61	1823.58	0.49
Salt River	VaShly at Pit	6.85	50yr	128592.00	1231.97	1246.67	1242.98	1248.26	0.002130	10.72	16479.05	1688.15	0.53
Salt River	VaShly at Pit	6.91	50yr	128592.00	1230.46	1247.96	1241.90	1248.73	0.000926	7.60	20489.63	1701.89	0.35
Salt River	VaShly at Pit	6.96	50yr	128592.00	1232.00	1248.21	1243.36	1249.17	0.001609	8.70	17669.75	1692.79	0.45
Salt River	VaShly at Pit	6.99	50yr	128592.00	1232.00	1248.55	1243.22	1249.38	0.001217	7.36	17608.60	1814.94	0.39
Salt River	VaShly at Pit	7.01	50yr	128592.00	1230.78	1248.65	1243.43	1249.53	0.001334	7.69	17160.82	1843.74	0.41
Salt River	VaShly at Pit	7.03	50yr	128592.00	1232.00	1248.74	1243.42	1249.62	0.001344	7.74	17129.94	1794.01	0.41
Salt River	VaShly at Pit	7.04	50yr	128592.00	1232.00	1248.83	1243.75	1249.74	0.001686	7.63	16834.59	1802.32	0.41
Salt River	VaShly at Pit	7.06	50yr	128592.00	1232.00	1248.95	1243.80	1249.85	0.001449	8.08	17033.47	1847.96	0.43
Salt River	VaShly at Pit	7.07	50yr	128592.00	1232.00	1249.15	1244.41	1249.96	0.001319	7.68	17954.27	1820.70	0.41
Salt River	VaShly at Pit	7.10	50yr	128592.00	1232.00	1249.30	1243.77	1250.21	0.001325	8.00	17022.81	1857.65	0.41
Salt River	VaShly at Pit	7.17	50yr	128592.00	1232.14	1249.76	1244.62	1250.69	0.001271	7.90	16697.80	1964.75	0.40
Salt River	VaShly at Pit	7.24	50yr	128592.00	1235.58	1250.23	1244.84	1251.17	0.001244	7.84	16568.56	2223.94	0.40
Salt River	VaShly at Pit	7.28	50yr	128592.00	1236.00	1250.41	1246.80	1251.88	0.002295	9.73	13265.98	2328.31	0.53
Salt River	VaShly US	7.32	50yr	145000.00	1239.34	1250.69	1246.27	1251.94	0.002309	9.56	19776.70	5329.99	0.53
Salt River	VaShly US	7.36	50yr	145000.00	1238.07	1251.12	1246.84	1252.38	0.002059	9.46	19401.16	5614.51	0.51
Salt River	VaShly US	7.40	50yr	145000.00	1239.06	1251.44	1247.51	1252.92	0.002254	10.03	16349.38	5204.92	0.53
Salt River	VaShly US	7.44	50yr	145000.00	1238.53	1252.00	1247.27	1253.36	0.001792	9.37	15476.32	6580.42	0.48
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	50yr	145000.00	1239.83	1252.83	1248.09	1254.22	0.001794	9.44	15363.17	6929.01	0.48
Salt River	VaShly US	7.55	50yr	145000.00	1239.60	1253.68	1248.10	1254.91	0.001470	8.92	16249.05	7242.99	0.44
Salt River	VaShly US	7.63	50yr	150000.00	1240.00	1253.92	1250.45	1256.09	0.002851	11.91	12988.31	6172.66	0.60
Salt River	VaShly US	7.71	50yr	150000.00	1243.41	1255.08	1253.98	1258.20	0.004900	14.40	11713.39	5380.53	0.78
Salt River	VaShly US	7.83	50yr	150000.00	1244.00	1258.37	1254.65	1260.27	0.002341	11.38	17202.22	9002.75	0.55
Salt River	VaShly US	7.91	50yr	150000.00	1244.00	1259.10	1256.54	1261.76	0.003407	13.62	17375.33	7651.95	0.67
Salt River	VaShly US	8.01	50yr	150000.00	1240.00	1261.77	1254.07	1262.65	0.000844	7.97	28185.24	10111.88	0.35
Salt River	VaShly US	8.10	50yr	150000.00	1212.00	1262.21	1242.08	1262.85	0.000284	6.96	36566.66	9577.30	0.22
Salt River	VaShly US	8.20	50yr	150000.00	1202.29	1262.76	1217.24	1262.94	0.000042	3.59	54706.36	7929.27	0.09
Salt River	VaShly US	8.29	50yr	150000.00	1204.00	1262.82	1218.45	1262.96	0.000034	3.22	58791.86	7268.26	0.08
Salt River	VaShly US	8.36	50yr	150000.00	1212.00	1262.81	1226.23	1262.98	0.000051	3.55	54575.69	6767.87	0.10
Salt River	VaShly US	8.44	50yr	150000.00	1192.00	1262.85	1221.46	1263.01	0.000042	3.36	60013.93	6037.71	0.09
Salt River	VaShly US	8.52	50yr	150000.00	1208.00	1262.86	1226.63	1263.03	0.000046	3.71	61524.18	5031.05	0.09
Salt River	VaShly US	8.57	50yr	150000.00	1198.17	1262.85	1222.19	1263.06	0.000059	4.09	52096.61	4551.08	0.10
Salt River	VaShly US	8.60	50yr	150000.00	1196.00	1262.81	1224.60	1263.09	0.000093	4.82	46455.53	4181.64	0.13
Salt River	VaShly US	8.63	50yr	150000.00	1216.00	1262.50	1241.26	1263.28	0.000494	7.60	32654.55	3790.87	0.27
Salt River	VaShly US	8.68	50yr	150000.00	1244.00	1261.66	1261.66	1266.75	0.008506	19.39	22644.07	2682.71	1.02
Salt River	VaShly US	8.74	50yr	150000.00	1220.00	1266.44	1245.87	1267.40	0.000417	8.41	36406.10	3417.65	0.26
Salt River	VaShly US	8.77	50yr	150000.00	1206.87	1267.05	1233.23	1267.49	0.000157	5.68	45716.37	3495.03	0.17
Salt River	VaShly US	8.81	50yr	150000.00	1204.00	1267.03	1236.27	1267.56	0.000229	6.28	42977.38	3507.44	0.20
Salt River	VaShly US	8.85	50yr	150000.00	1212.00	1266.82	1251.54	1267.77	0.000597	8.41	36069.19	3273.68	0.30
Salt River	VaShly US	8.88	50yr	150000.00	1233.08	1266.38	1260.09	1268.23	0.001632	11.69	32485.37	2533.20	0.48
Salt River	VaShly US	8.92	50yr	150000.00	1239.59	1266.17	1261.51	1268.85	0.002496	14.10	31304.41	2418.91	0.60
Salt River	VaShly US	8.98	50yr	150000.00	1244.00	1266.15	1264.43	1270.35	0.004243	17.62	22602.80	2249.75	0.77
Salt River	VaShly US	9.04	50yr	150000.00	1248.00	1267.08	1267.08	1273.22	0.005865	21.33	19108.43	2130.41	0.91
Salt River	VaShly US	9.13	50yr	150000.00	1248.00	1272.57	1265.24	1274.75	0.001468	12.70	29081.25	5536.54	0.48
Salt River	VaShly US	9.20	50yr	150000.00	1248.00	1273.95	1263.96	1275.25	0.000861	9.82	29265.29	6353.57	0.37
Salt River	VaShly US	9.26	50yr	150000.00	1247.57	1274.10	1264.92	1275.63	0.001006	10.66	29308.14	6177.85	0.40
Salt River	VaShly US	9.33	50yr	150000.00	1244.00	1273.94	1266.82	1276.38	0.001613	13.45	28243.45	5988.65	0.50
Salt River	VaShly US	9.39	50yr	150000.00	1236.00	1273.39	1269.95	1277.52	0.002927	17.95	27460.85	5568.50	0.66
Salt River	VaShly US	9.44	50yr	150000.00	1247.05	1276.63	1264.58	1278.13	0.000803	10.54	40032.78	7031.75	0.36
Salt River	VaShly US	9.49	50yr	150000.00	1248.00	1277.61	1263.33	1278.32	0.000396	7.27	47994.43	7968.67	0.25
Salt River	VaShly US	9.55	50yr	150000.00	1251.37	1278.09	1263.60	1278.46	0.000229	5.43	55582.83	8826.06	0.19
Salt River	VaShly US	9.59	50yr	150000.00	1244.40	1278.23	1263.88	1278.51	0.000173	4.90	60246.14	9053.74	0.17
Salt River	VaShly US	9.61	50yr	150000.00	1248.20	1278.23	1264.84	1278.55	0.000204	5.18	55300.32	8865.76	0.18
Salt River	VaShly US	9.64	50yr	150000.00	1252.00	1278.25	1266.01	1278.58	0.000240	5.34	49518.70	8714.23	0.20
Salt River	VaShly US	9.67	50yr	150000.00	1250.78	1278.24	1266.36	1278.63	0.000274	5.80	44823.72	8314.13	0.21
Salt River	VaShly US	9.73	50yr	150000.00	1252.00	1278.31	1267.61	1278.73	0.000334	5.86	31224.24	7427.16	0.23
Salt River	VaShly US	9.80	50yr	150000.00	1252.00	1278.27	1268.43	1278.97	0.000512	7.40	23389.12	6647.53	0.28
Salt River	VaShly US	9.87	50yr	150000.00	1254.92	1278.27	1269.02	1279.29	0.000740	8.52	19121.76	4296.03	0.33
Salt River	VaShly US	9.96	50yr	150000.00	1254.13	1278.53	1270.68	1279.71	0.000891	9.30	18364.01	4619.31	0.37
Salt River	VaShly US	10.06	50yr	150000.00	1256.00	1279.13	1272.30	1280.24	0.000938	9.02	18769.27	3422.65	0.37
Salt River	VaShly US	10.18	50yr	150000.00	1256.00	1279.49	1273.05	1281.19	0.001620	10.47	14321.02	2737.85	0.47
Salt River	VaShly US	10.26	50yr	150000.00	1252.00	1280.71	1268.82	1281.63	0.000544	7.70	19585.88	3107.25	0.29
Salt River	VaShly US	10.36	50yr	150000.00	1253.00	1280.89	1271.08	1282.06	0.000642	8.85	17505.99	3055.10	0.35
Salt River	VaShly US	10.41	50yr	150000.00	1247.67	1281.64	1261.12	1282.21	0.000228	6.17	25104.35	2786.86	0.20
Salt River	VaShly US	10.46	50yr	150000.00	1240.00	1281.66	1261.78	1282.30	0.000276	6.62	24386.40	2832.23	0.22
Salt River	VaShly US	10.52	50yr	150000.00	1234.97	1281.75	1255.91	1282.37	0.000206	6.37	24183.85	2495.86	0.19
Salt River	VaShly US	10.56	50yr	150000.00	1244.00	1281.59	1261.83	1282.54	0.000371	7.82	19178.63	2668.10	0.25
Salt River	VaShly US	10.61	50yr	150000.00	1244.20	1281.69	1262.33	1282.63	0.000378	7.78	19359.04	2593.73	0.25
Salt River	VaShly US	10.67	50yr	150000.00	1248.00	1281.86	1263.96	1282.77	0.000393	7.63	19723.82	2156.33	0.26

HEC-RAS Plan: extended Profile: 50yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	50yr	150000.00	1248.00	1282.20	1260.81	1282.89	0.000260	6.63	22679.10	2068.60	0.21
Salt River	VaShly US	10.78	50yr	150000.00	1248.00	1282.33	1260.47	1282.95	0.000247	6.32	23731.01	1913.01	0.20
Salt River	VaShly US	10.81	50yr	150000.00	1248.00	1282.40	1260.52	1283.00	0.000234	6.22	24126.35	1899.39	0.20
Salt River	VaShly US	10.86	50yr	150000.00	1248.00	1282.42	1262.98	1283.08	0.000286	6.52	22996.93	1823.79	0.22
Salt River	VaShly US	10.90	50yr	150000.00	1250.83	1282.53	1263.84	1283.15	0.000287	6.35	23639.80	1713.24	0.22
Salt River	VaShly US	10.95	50yr	150000.00	1252.00	1282.63	1264.10	1283.22	0.000276	6.18	24271.13	1553.08	0.21
Salt River	VaShly US	11.00	50yr	150000.00	1254.01	1282.54	1266.84	1283.38	0.000418	7.38	20323.45	1404.47	0.26
Salt River	VaShly US	11.05	50yr	150000.00	1256.00	1282.59	1269.44	1283.57	0.000562	7.94	18914.47	1865.12	0.30
Salt River	VaShly US	11.10	50yr	150000.00	1256.00	1282.58	1271.88	1283.80	0.000806	8.88	16907.88	1830.12	0.35
Salt River	VaShly US	11.14	50yr	150000.00	1256.00	1282.81	1275.07	1284.37	0.003701	10.09	14990.93	1776.57	0.43
Salt River	VaShly US	11.17	50yr	150000.00	1256.00	1283.20	1275.36	1284.71	0.001216	9.91	15471.80	1667.95	0.42
Salt River	VaShly US	11.25	50yr	150000.00	1256.00	1283.75	1276.43	1285.23	0.001271	9.89	15879.78	1540.56	0.42
Salt River	VaShly US	11.32	50yr	150000.00	1260.00	1284.38	1278.56	1285.81	0.001594	9.79	16205.60	1413.87	0.46
Salt River	VaShly US	11.41	50yr	150000.00	1260.00	1285.18	1280.36	1286.59	0.001842	9.53	15737.65	1309.30	0.48
Salt River	VaShly US	11.49	50yr	150000.00	1263.04	1286.02	1279.32	1287.28	0.001383	9.01	16643.21	1212.26	0.43
Salt River	VaShly US	11.62	50yr	150000.00	1264.00	1287.18	1279.11	1288.03	0.000857	7.41	20247.83	1438.55	0.34
Salt River	VaShly US	11.78	50yr	150000.00	1268.00	1287.84	1281.35	1289.02	0.001235	8.72	17195.18	1434.26	0.41
Salt River	VaShly US	11.88	50yr	150000.00	1267.94	1288.37	1283.86	1290.10	0.002212	10.56	14198.16	1436.80	0.53
Salt River	VaShly US	11.99	50yr	150000.00	1268.00	1289.80	1286.39	1291.49	0.002682	10.44	14366.22	1384.94	0.57
Salt River	VaShly US	12.06	50yr	150000.00	1268.00	1291.01	1286.51	1292.34	0.001828	9.26	16200.78	1402.27	0.48
Salt River	VaShly US	12.10	50yr	150000.00	1272.00	1291.38	1286.96	1292.89	0.002050	9.87	15192.16	1301.38	0.51
Salt River	VaShly US	12.22	50yr	150000.00	1272.00	1292.45	1287.30	1294.20	0.001923	10.61	14131.28	1031.62	0.51
Salt River	VaShly US	12.33	50yr	150000.00	1272.00	1293.43	1286.71	1295.25	0.001625	10.84	13838.98	863.41	0.48
Salt River	VaShly US	12.44	50yr	150000.00	1276.00	1294.34	1289.73	1296.49	0.002414	11.77	12742.65	946.69	0.57
Salt River	VaShly US	12.55	50yr	150000.00	1276.00	1296.07	1289.08	1297.68	0.001610	10.19	14726.08	1003.05	0.47
Salt River	VaShly US	12.67	50yr	150000.00	1276.00	1297.13	1290.13	1298.61	0.001405	9.78	15343.78	1235.74	0.44
Salt River	VaShly US	12.77	50yr	150000.00	1276.00	1297.83	1292.51	1299.53	0.001884	10.47	14327.72	1295.95	0.50
Salt River	VaShly US	12.87	50yr	150000.00	1276.00	1299.05	1293.98	1300.54	0.001869	9.78	15336.10	1242.79	0.49
Salt River	VaShly US	12.97	50yr	150000.00	1280.00	1300.15	1295.13	1301.59	0.001813	9.62	15594.67	1265.17	0.48
Salt River	VaShly US	13.07	50yr	150000.00	1276.00	1301.21	1294.57	1302.41	0.001412	8.78	17077.75	1315.98	0.43
Salt River	VaShly US	13.19	50yr	150000.00	1284.00	1302.06	1296.89	1303.50	0.001828	9.63	15568.79	1270.82	0.49
Salt River	VaShly US	13.31	50yr	150000.00	1281.30	1303.17	1296.72	1304.59	0.001523	9.57	15679.97	1127.18	0.45
Salt River	VaShly US	13.44	50yr	150000.00	1284.00	1304.16	1297.33	1305.52	0.001309	9.37	16016.96	1060.27	0.42
Salt River	VaShly US	13.55	50yr	150000.00	1288.00	1304.99	1297.99	1306.29	0.001261	9.15	16390.91	1091.80	0.42
Salt River	VaShly US	13.64	50yr	150000.00	1288.00	1305.58	1299.79	1307.01	0.001550	9.61	15607.27	1122.50	0.45
Gilbert Mining P	Gilbert Mining P	0.04	50yr	16408.00	1190.68	1239.89	1196.72	1239.91	0.000003	0.99	16655.26	1612.73	0.03
Gilbert Mining P	Gilbert Mining P	0.08	50yr	16408.00	1180.00	1239.89	1190.16	1239.91	0.000003	0.95	17389.68	1686.66	0.02
Gilbert Mining P	Gilbert Mining P	0.11	50yr	16408.00	1182.38	1239.90	1187.49	1239.91	0.000002	0.71	23280.10	1854.30	0.02
Gilbert Mining P	Gilbert Mining P	0.15	50yr	16408.00	1180.00	1239.90	1186.62	1239.91	0.000002	0.71	23872.84	1947.50	0.02
Gilbert Mining P	Gilbert Mining P	0.19	50yr	16408.00	1180.00	1239.90	1191.37	1239.91	0.000004	0.90	19105.51	1200.71	0.03
Gilbert Mining P	Gilbert Mining P	0.22	50yr	16408.00	1188.00	1239.90	1194.90	1239.91	0.000003	0.89	18593.51	1146.13	0.02
Gilbert Mining P	Gilbert Mining P	0.25	50yr	16408.00	1182.77	1239.90	1189.14	1239.91	0.000004	0.88	18639.38	1011.54	0.02
Gilbert Mining P	Gilbert Mining P	0.29	50yr	16408.00	1183.78	1239.90	1191.20	1239.91	0.000006	1.12	15467.94	942.76	0.03
Gilbert Mining P	Gilbert Mining P	0.33	50yr	16408.00	1182.37	1239.91	1188.81	1239.92	0.000001	0.54	30887.95	956.51	0.01
Gilbert Mining P	Gilbert Mining P	0.37	50yr	16408.00	1184.00	1239.91	1192.38	1239.92	0.000001	0.48	35222.10	1611.12	0.01
Gilbert Mining P	Gilbert Mining P	0.43	50yr	16408.00	1180.00	1239.91	1189.28	1239.92	0.000002	0.63	26202.90	2262.98	0.02
Gilbert Mining P	Gilbert Mining P	0.48	50yr	16408.00	1172.00	1239.91	1181.32	1239.92	0.000001	0.53	32195.68	2433.11	0.01
Gilbert Mining P	Gilbert Mining P	0.53	50yr	16408.00	1191.79	1239.92	1199.35	1239.92	0.000001	0.51	33789.04	2573.73	0.01
Gilbert Mining P	Gilbert Mining P	0.55	50yr	16408.00	1196.00	1239.91	1202.26	1239.92	0.000002	0.66	25225.96	2196.53	0.02
Gilbert Mining P	Gilbert Mining P	0.60	50yr	16408.00	1200.85	1239.90	1211.83	1239.93	0.000012	1.25	13745.51	2148.76	0.04
Gilbert Mining P	Gilbert Mining P	0.66	50yr	16408.00	1192.00	1239.92	1197.71	1239.93	0.000001	0.58	28111.87	2190.00	0.02
Gilbert Mining P	Gilbert Mining P	0.70	50yr	16408.00	1196.00	1239.92	1200.47	1239.93	0.000003	0.76	21481.28	2084.29	0.02
Gilbert Mining P	Gilbert Mining P	0.74	50yr	16408.00	1196.00	1239.92	1200.69	1239.93	0.000002	0.68	24300.09	2162.74	0.02
Gilbert Mining P	Gilbert Mining P	0.77	50yr	16408.00	1196.00	1239.93	1201.13	1239.93	0.000001	0.46	35584.71	2224.59	0.01
Gilbert Mining P	Gilbert Mining P	0.83	50yr	16408.00	1199.07	1239.93	1202.69	1239.93	0.000001	0.44	37704.16	2366.50	0.01
Gilbert Mining P	Gilbert Mining P	0.88	50yr	16408.00	1198.45	1239.93	1201.91	1239.93	0.000001	0.43	38121.45	2630.05	0.01
Gilbert Mining P	Gilbert Mining P	0.91	50yr	16408.00	1197.53	1239.93	1204.61	1239.93	0.000001	0.54	30546.88	2457.61	0.02
Gilbert Mining P	Gilbert Mining P	0.95	50yr	16408.00	1202.08	1239.93	1206.39	1239.93	0.000002	0.65	25203.49	3091.56	0.02
Gilbert Mining P	Gilbert Mining P	0.97	50yr	16408.00	1204.00	1239.93	1208.20	1239.94	0.000002	0.66	25340.44	3518.54	0.02
Gilbert Mining P	Gilbert Mining P	0.99	50yr	16408.00	1204.00	1239.93	1209.89	1239.94	0.000003	0.74	22211.49	3388.34	0.02
Gilbert Mining P	Gilbert Mining P	1.02	50yr	16408.00	1207.21	1239.93	1210.85	1239.94	0.000003	0.66	24674.52	3361.06	0.02
Gilbert Mining P	Gilbert Mining P	1.05	50yr	16408.00	1208.00	1239.93	1212.79	1239.94	0.000004	0.81	20386.13	3032.13	0.03
Gilbert Mining P	Gilbert Mining P	1.08	50yr	16408.00	1196.00	1239.92	1212.29	1239.94	0.000007	1.03	16071.67	1978.63	0.03
Gilbert Mining P	Gilbert Mining P	1.11	50yr	16408.00	1196.00	1239.91	1214.33	1239.95	0.000017	1.51	10991.84	1266.16	0.05
Gilbert Mining P	Gilbert Mining P	1.14	50yr	16408.00	1212.00	1239.88	1220.49	1239.98	0.000075	2.53	6486.97	1173.80	0.10
Gilbert Mining P	Gilbert Mining P	1.17	50yr	16408.00	1243.53	1248.68	1248.68	1250.96	0.010752	12.11	1355.26	3265.77	1.00
Gilbert Mining P	Gilbert Mining P	1.19	50yr	16408.00	1236.00	1250.87	1241.91	1251.25	0.000418	4.95	3317.02	3632.83	0.24
Gilbert Mining P	Gilbert Mining P	1.21	50yr	16408.00	1244.00	1250.39	1249.26	1251.87	0.005144	9.77	1680.74	3208.60	0.72

APPENDIX 2f

100-YEAR STANDARD TABLE 1

HEC-RAS Plan: extended Profile: 100yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	100yr	172000.00	1148.00	1175.65	1161.16	1176.39	0.000403	6.92	24865.44	1059.02	0.25
Salt River	VaShly DS	0.11	100yr	172000.00	1148.00	1175.90	1162.70	1176.65	0.000442	6.92	24838.37	1132.59	0.26
Salt River	VaShly DS	0.23	100yr	172000.00	1150.96	1176.24	1162.44	1176.92	0.000394	6.61	26033.96	1167.97	0.25
Salt River	VaShly DS	0.36	100yr	172000.00	1151.05	1176.51	1163.09	1177.20	0.000411	6.67	25779.23	1182.87	0.25
Salt River	VaShly DS	0.51	100yr	172000.00	1152.00	1176.85	1163.32	1177.51	0.000395	6.55	26276.76	1203.65	0.25
Salt River	VaShly DS	0.65	100yr	172000.00	1151.50	1177.18	1162.87	1177.80	0.000352	6.32	27225.03	1206.86	0.23
Salt River	VaShly DS	0.78	100yr	172000.00	1152.00	1177.39	1165.10	1178.10	0.000471	6.78	25365.96	1251.38	0.27
Salt River	VaShly DS	0.89	100yr	172000.00	1156.00	1177.63	1167.11	1178.46	0.000608	7.31	23523.83	1262.04	0.30
Salt River	VaShly DS	1.00	100yr	172000.00	1152.00	1178.10	1165.47	1178.76	0.000429	6.55	26270.00	1282.53	0.25
Salt River	VaShly DS	1.12	100yr	172000.00	1152.00	1178.36	1166.06	1179.03	0.000436	6.54	26290.49	1299.72	0.26
Salt River	VaShly DS	1.22	100yr	172000.00	1156.00	1178.60	1167.04	1179.28	0.000474	6.63	25943.18	1338.21	0.27
Salt River	VaShly DS	1.30	100yr	172000.00	1152.00	1178.78	1167.93	1179.50	0.000532	6.84	25139.55	1346.67	0.28
Salt River	VaShly DS	1.39	100yr	172000.00	1147.32	1179.18	1164.15	1179.70	0.000297	5.82	29576.37	1302.26	0.22
Salt River	VaShly DS	1.52	100yr	172000.00	1144.00	1179.42	1158.59	1179.89	0.000237	5.52	31179.41	1241.55	0.19
Salt River	VaShly DS	1.65	100yr	172000.00	1154.51	1179.61	1167.84	1180.12	0.000377	5.73	30000.71	1625.86	0.24
Salt River	VaShly DS	1.76	100yr	172000.00	1152.50	1179.77	1167.27	1180.36	0.000410	6.19	28173.44	1825.14	0.25
Salt River	VaShly DS	1.80	100yr	172000.00	1160.00	1179.60	1171.14	1180.62	0.000899	8.11	21218.77	1409.36	0.36
Salt River	VaShly DS	1.83	100yr	172000.00	1148.00	1179.57	1172.53	1180.90	0.001327	9.28	18541.71	1308.88	0.42
Salt River	VaShly DS	1.86	100yr	172000.00	1148.00	1179.95	1171.69	1181.12	0.001000	8.68	19820.91	1252.81	0.38
Salt River	VaShly DS	1.89	100yr	172000.00	1152.71	1180.05	1172.22	1181.28	0.001056	8.89	19357.52	1817.43	0.39
Salt River	VaShly DS	1.95	100yr	172000.00	1157.05	1180.28	1171.58	1181.69	0.001045	9.50	18096.95	1920.41	0.39
Salt River	VaShly DS	2.02	100yr	172000.00	1158.36	1180.48	1171.77	1182.18	0.001175	10.47	16430.68	2174.82	0.42
Salt River	VaShly DS	2.04	100yr	172000.00	1156.31	1180.55	1173.36	1182.37	0.001475	10.80	15922.46	2278.99	0.46
Salt River	VaShly DS	2.07	100yr	172000.00	1156.00	1180.58	1175.28	1182.78	0.002070	11.91	14443.09	2318.57	0.54
Salt River	VaShly DS	2.10	100yr	172000.00	1158.27	1180.87	1176.21	1183.13	0.002325	12.06	14265.25	2395.12	0.56
Salt River	VaShly DS	2.12	100yr	172000.00	1176.00	1190.15	1190.15	1195.29	0.008219	18.19	9455.71	2597.61	1.00
Salt River	VaShly DS	2.13	100yr	172000.00	1176.00	1192.78	1189.83	1195.85	0.003607	14.06	12230.30	2706.03	0.69
Salt River	VaShly DS	2.21	100yr	172000.00	1176.00	1194.29	1191.36	1197.34	0.003603	14.03	12261.06	2551.86	0.69
Salt River	VaShly DS	2.29	100yr	172000.00	1170.86	1196.83	1189.36	1198.60	0.001424	10.68	16108.13	1704.50	0.45
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	100yr	172000.00	1180.00	1199.53	1195.51	1202.15	0.002793	12.98	13247.92	1459.13	0.61
Salt River	VaShly DS	2.38	100yr	172000.00	1175.59	1200.93	1194.89	1202.85	0.001828	11.11	15479.41	1457.79	0.50
Salt River	VaShly DS	2.40	100yr	172000.00	1176.00	1201.23	1194.80	1203.10	0.001642	10.97	15723.70	1369.57	0.48
Salt River	VaShly DS	2.41	100yr	172000.00	1176.00	1201.30	1194.76	1203.17	0.001627	10.96	15702.73	1334.07	0.48
Salt River	VaShly DS	2.42	100yr	172000.00	1176.00	1201.35	1194.98	1203.24	0.001670	11.02	15605.43	1281.83	0.48
Salt River	VaShly DS	2.47	100yr	172000.00	1178.61	1201.60	1196.64	1203.86	0.002259	12.06	14258.16	1308.05	0.55
Salt River	VaShly DS	2.53	100yr	172000.00	1180.00	1202.61	1197.12	1204.54	0.001889	11.17	15391.56	2315.17	0.51
Salt River	VaShly DS	2.59	100yr	172000.00	1184.00	1203.11	1197.96	1205.28	0.002134	11.82	14550.57	2203.38	0.54
Salt River	VaShly DS	2.65	100yr	172000.00	1187.99	1203.55	1199.21	1206.09	0.002605	12.78	13457.50	1466.39	0.59
Salt River	VaShly DS	2.71	100yr	172000.00	1188.00	1205.08	1199.50	1206.93	0.001831	10.92	15771.27	1414.61	0.50
Salt River	VaShly DS	2.78	100yr	172000.00	1188.00	1205.87	1199.95	1207.51	0.001621	10.28	16772.76	1529.27	0.47
Salt River	VaShly DS	2.87	100yr	172000.00	1175.62	1206.51	1198.96	1208.32	0.001429	10.79	15943.47	1046.02	0.45
Salt River	VaShly DS	2.98	100yr	172000.00	1180.00	1207.72	1199.57	1209.05	0.000943	9.28	18661.41	1154.07	0.37
Salt River	VaShly DS	3.10	100yr	172000.00	1174.02	1208.16	1198.88	1209.87	0.001412	10.50	16386.43	1258.23	0.45
Salt River	VaShly DS	3.23	100yr	172000.00	1184.27	1209.00	1203.41	1211.27	0.002074	12.09	14223.65	1486.72	0.54
Salt River	VaShly DS	3.35	100yr	172000.00	1188.00	1210.69	1202.68	1212.33	0.001317	10.28	16730.09	2233.95	0.44
Salt River	VaShly DS	3.46	100yr	172000.00	1184.00	1212.26	1201.69	1213.07	0.000606	7.23	24084.32	3400.64	0.30
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	100yr	172000.00	1186.84	1212.46	1203.35	1213.40	0.000775	7.77	22134.10	4068.12	0.33
Salt River	VaShly DS	3.64	100yr	172000.00	1192.00	1213.14	1207.07	1214.54	0.001648	9.51	18081.53	3555.13	0.46
Salt River	VaShly DS	3.76	100yr	172000.00	1188.00	1214.26	1205.15	1215.31	0.000894	8.23	21135.08	3460.01	0.36
Salt River	VaShly DS	3.89	100yr	172000.00	1174.66	1215.26	1196.81	1215.55	0.000139	4.37	40109.27	3928.54	0.15
Salt River	VaShly DS	4.04	100yr	172000.00	1184.00	1215.36	1201.72	1215.74	0.000268	4.86	35167.27	4045.64	0.20
Salt River	VaShly DS	4.09	100yr	172000.00	1188.00	1215.33	1204.84	1215.90	0.000453	5.98	28556.76	3315.16	0.26
Salt River	VaShly DS	4.15	100yr	172000.00	1184.00	1215.32	1205.63	1216.16	0.000657	7.34	23429.25	2291.27	0.31
Salt River	VaShly DS	4.22	100yr	172000.00	1178.19	1215.69	1204.21	1216.35	0.000453	6.41	26428.14	1553.97	0.26
Salt River	VaShly DS	4.27	100yr	172000.00	1192.00	1215.66	1206.55	1216.61	0.000775	7.88	22177.75	1323.02	0.33
Salt River	VaShly DS	4.31	100yr	172000.00	1199.24	1215.50	1209.64	1217.04	0.001573	9.85	17274.54	1194.58	0.46
Salt River	VaShly DS	4.47	100yr	172000.00	1200.00	1216.91	1212.27	1218.60	0.002070	10.67	24589.41	1980.26	0.52
Salt River	VaShly DS	4.59	100yr	172000.00	1192.00	1218.48	1210.56	1219.53	0.000941	8.39	25335.46	2348.29	0.36
Salt River	VaShly DS	4.74	100yr	172000.00	1188.00	1219.23	1208.13	1220.23	0.000817	8.23	24599.23	2253.17	0.34
Salt River	VaShly DS	4.88	100yr	172000.00	1200.00	1219.45	1217.27	1222.22	0.003130	13.65	15601.05	1577.49	0.72
Salt River	VaShly DS	5.03	100yr	172000.00	1204.00	1222.13	1217.09	1224.24	0.002089	11.92	18809.69	1766.43	0.54
Salt River	VaShly DS	5.15	100yr	172000.00	1204.00	1223.48	1218.32	1225.57	0.002035	11.85	19029.91	1599.59	0.53
Salt River	VaShly DS	5.26	100yr	172000.00	1179.01	1225.08	1213.08	1226.30	0.000776	9.07	24303.01	1460.32	0.34
Salt River	VaShly DS	5.40	100yr	172000.00	1196.00	1225.43	1218.04	1227.40	0.001625	11.43	15597.48	989.36	0.48
Salt River	VaShly DS	5.47	100yr	172000.00	1208.00	1225.87	1222.13	1228.48	0.002876	13.00	13360.83	1026.41	0.62
Salt River	VaShly DS	5.53	100yr	172000.00	1192.00	1227.75	1217.11	1228.99	0.000873	8.93	19269.08	993.66	0.36
Salt River	VaShly DS	5.56	100yr	172000.00	1208.00	1227.22	1222.25	1229.65	0.002438	12.51	13747.41	935.18	0.58
Salt River	VaShly DS	5.60	100yr	172000.00	1194.35	1229.22	1213.79	1229.94	0.000319	6.80	25292.47	918.03	0.23
Salt River	VaShly DS	5.65	100yr	172000.00	1198.67	1229.07	1217.51	1230.22	0.000725	8.60	19999.33	954.47	0.33
Salt River	VaShly DS	5.69	100yr	172000.00	1206.01	1228.67	1221.04	1230.73	0.001516	11.50	14950.64	857.36	0.47
Salt River	VaShly DS	5.73	100yr	172000.00	1208.00	1228.53	1223.46	1231.25	0.002438	13.24	12992.54	807.53	0.58
Salt River	VaShly DS	5.76	100yr	172000.00	1204.00	1229.87	1222.21	1231.71	0.001427	10.88	15801.59	1003.79	0.45
Salt River	VaShly DS	5.80	100yr	172000.00	1204.00	1230.48	1221.07	1231.96	0.001032	9.78	17587.43	940.01	0.39
Salt River	VaShly DS	5.82	100yr	172000.00	1204.00	1230.62	1221.28	1232.07	0.001032	9.66	17804.69	1009.65	0.39
Salt River	VaShly DS	5.84	100yr	172000.00	1204.00	1230.67	1221.93	1232.21	0.001193	9.95	17279.70	1053.30	0.41
Salt River	VaShly DS	5.85	100yr	172000.00	1208.00	1230.87	1222.00	1232.29	0.001107	9.56	17988.88	1107.44	0.40
Salt River	VaShly DS	5.86	100yr	172000.00	1205.11	1231.13	1223.92	1232.72	0.011654	10.12	16990.01	1154.34	0.44
Salt River	VaShly DS	5.87	100yr	172000.00	1206.22	1231.68	1224.69	1232.87	0.001201	8.76	19641.71	1465.48	0.40
Salt River	VaShly DS	5.88	100yr	172000.00	1209.96	1231.94	1225.52	1232.95	0.001083	8.19	21467.80	1680.36	0.38
Salt River	VaShly DS	5.91	100yr	172000.00	1203.31	1232.46	1222.00	1233.10	0.000517	6.47	26957.80	1820.20	0.27
Salt River	VaShly DS	5.93	100yr	172000.00	1198.79	1232.56	1216.65	1233.15	0.000399	6.22	27928.38	1779.37	0.24
Salt River	VaShly DS	5.95	100yr	172000.00	1196.00	1232.58	1216.60	1233.30	0.002272	6.79	25330.63	1441.94	0.27
Salt River	VaShly DS	5.97	100yr	172000.00	1198.59	1232.59	1218.81	1233.52	0.000708	7.73	22248.23	1443.76	0.32
Salt River	VaShly DS	5.99	100yr	172000.00	1200.00	1232.64	1221.15	1233.59	0.000724	7.82	21992.80	1495.26	0.32
Salt River	VaShly DS	6.01	100yr	172000.00	1204.00	1234.06	1224.47	1235.32	0.032020	9.02	19078.93	1585.71	0.38

HEC-RAS Plan: extended Profile: 100yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	100yr	172000.00	1204.00	1234.63	1223.26	1235.58	0.000630	7.86	21892.73	1781.66	0.31
Salt River	VaShly DS	6.09	100yr	172000.00	1200.00	1235.04	1220.73	1235.73	0.000379	6.79	26140.80	2010.43	0.25
Salt River	VaShly DS	6.14	100yr	172000.00	1196.00	1235.31	1217.81	1235.82	0.000257	5.87	30360.85	2234.30	0.20
Salt River	VaShly DS	6.18	100yr	172000.00	1192.00	1235.27	1224.32	1235.95	0.000435	6.77	26472.47	2460.46	0.26
Salt River	VaShly DS	6.22	100yr	172000.00	1203.46	1235.37	1227.14	1236.04	0.000425	6.65	26738.35	2400.97	0.25
Salt River	VaShly DS	6.27	100yr	172000.00	1194.49	1235.46	1219.84	1236.18	0.000583	6.94	25397.01	2501.63	0.24
Salt River	VaShly DS	6.32	100yr	172000.00	1192.00	1235.40	1217.67	1236.52	0.000911	8.64	20628.18	1937.52	0.29
Salt River	VaShly DS	6.35	100yr	172000.00	1194.53	1235.44	1218.97	1236.68	0.001110	9.11	19620.67	2298.22	0.31
Salt River	VaShly DS	6.38	100yr	172000.00	1195.40	1235.73	1218.38	1236.93	0.001649	8.87	19611.08	2470.91	0.30
Salt River	VaShly DS	6.40	100yr	172000.00	1219.48	1235.97	1235.97	1241.13	0.006281	18.66	9843.60	2609.67	0.91
Salt River	VaShly at Pit	6.45	100yr	150794.00	1220.01	1239.03	1235.29	1241.41	0.002532	12.75	13107.95	1398.11	0.59
Salt River	VaShly at Pit	6.50	100yr	150794.00	1223.66	1239.26	1237.38	1242.55	0.004206	14.97	11587.51	1533.71	0.74
Salt River	VaShly at Pit	6.53	100yr	150794.00	1224.00	1239.99	1237.89	1243.31	0.004146	15.03	11908.83	1417.61	0.73
Salt River	VaShly at Pit	6.56	100yr	150794.00	1224.00	1240.61	1238.64	1243.94	0.004070	15.08	12038.31	1456.69	0.73
Salt River	VaShly at Pit	6.62	100yr	150794.00	1225.32	1241.58	1240.67	1245.79	0.005498	16.99	11443.56	1460.48	0.84
Salt River	VaShly at Pit	6.69	100yr	150794.00	1224.24	1244.17	1241.64	1247.50	0.003732	15.15	13835.96	1593.89	0.71
Salt River	VaShly at Pit	6.75	100yr	150794.00	1228.00	1246.09	1242.34	1248.58	0.002895	13.10	15586.44	1912.68	0.62
Salt River	VaShly at Pit	6.80	100yr	150794.00	1228.00	1247.56	1242.48	1249.26	0.001728	11.02	18876.79	1830.19	0.49
Salt River	VaShly at Pit	6.85	100yr	150794.00	1231.97	1248.01	1243.96	1249.68	0.002005	11.12	18557.07	1705.28	0.52
Salt River	VaShly at Pit	6.91	100yr	150794.00	1230.46	1249.31	1242.60	1250.14	0.000893	7.93	22791.53	4549.46	0.35
Salt River	VaShly at Pit	6.96	100yr	150794.00	1232.00	1249.52	1244.09	1250.57	0.001535	9.12	19753.37	3810.74	0.45
Salt River	VaShly at Pit	6.99	100yr	150794.00	1232.00	1249.87	1244.01	1250.77	0.001157	7.74	19720.42	4892.46	0.39
Salt River	VaShly at Pit	7.01	100yr	150794.00	1230.78	1249.96	1244.42	1250.91	0.001251	8.02	19272.87	4898.14	0.40
Salt River	VaShly at Pit	7.03	100yr	150794.00	1232.00	1250.04	1244.63	1251.00	0.001267	8.09	19242.26	4911.69	0.40
Salt River	VaShly at Pit	7.04	100yr	150794.00	1232.00	1250.13	1244.86	1251.11	0.001569	7.95	19003.48	4936.82	0.40
Salt River	VaShly at Pit	7.06	100yr	150794.00	1232.00	1250.24	1245.01	1251.22	0.001362	8.42	19268.04	4948.97	0.42
Salt River	VaShly at Pit	7.07	100yr	150794.00	1232.00	1250.44	1245.04	1251.32	0.001232	7.99	20356.18	4886.09	0.40
Salt River	VaShly at Pit	7.10	100yr	150794.00	1232.00	1250.57	1245.29	1251.56	0.001263	8.34	19027.03	4853.61	0.41
Salt River	VaShly at Pit	7.17	100yr	150794.00	1232.14	1251.00	1245.30	1252.03	0.001243	8.35	18505.20	3866.55	0.40
Salt River	VaShly at Pit	7.24	100yr	150794.00	1235.58	1251.46	1245.56	1252.52	0.001230	8.32	18297.15	3388.04	0.40
Salt River	VaShly at Pit	7.28	100yr	150794.00	1236.00	1251.61	1247.59	1253.23	0.002196	10.23	14816.50	2868.02	0.53
Salt River	VaShly US	7.32	100yr	172000.00	1239.34	1252.02	1247.56	1253.32	0.002062	9.81	22501.18	7483.48	0.51
Salt River	VaShly US	7.36	100yr	172000.00	1238.07	1252.38	1248.31	1253.77	0.001970	9.96	22004.40	7389.06	0.50
Salt River	VaShly US	7.40	100yr	172000.00	1239.06	1252.66	1248.65	1254.32	0.002216	10.66	18290.30	7619.42	0.53
Salt River	VaShly US	7.44	100yr	172000.00	1238.53	1253.17	1248.17	1254.76	0.001845	10.12	17038.08	7887.71	0.49
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	100yr	172000.00	1239.83	1254.10	1249.00	1255.69	0.001808	10.13	16986.78	9752.49	0.49
Salt River	VaShly US	7.55	100yr	172000.00	1239.60	1254.97	1249.05	1256.41	0.001508	9.62	17887.19	9991.17	0.45
Salt River	VaShly US	7.63	100yr	175000.00	1240.00	1255.22	1251.45	1257.55	0.002695	12.38	14715.56	8132.02	0.60
Salt River	VaShly US	7.71	100yr	175000.00	1243.41	1256.26	1255.06	1259.56	0.004600	14.90	13646.71	7527.13	0.76
Salt River	VaShly US	7.83	100yr	175000.00	1244.00	1259.50	1255.62	1261.58	0.002331	12.00	19519.54	10340.73	0.56
Salt River	VaShly US	7.91	100yr	175000.00	1244.00	1260.18	1257.53	1263.10	0.003420	14.39	19759.46	9278.29	0.68
Salt River	VaShly US	8.01	100yr	175000.00	1240.00	1263.05	1255.21	1264.00	0.000848	8.40	31643.63	10578.85	0.35
Salt River	VaShly US	8.10	100yr	175000.00	1212.00	1263.48	1244.89	1264.22	0.000320	7.58	39910.84	9835.36	0.23
Salt River	VaShly US	8.20	100yr	175000.00	1202.29	1264.11	1218.70	1264.32	0.000049	3.98	58276.22	9061.47	0.10
Salt River	VaShly US	8.29	100yr	175000.00	1204.00	1264.17	1219.74	1264.34	0.000040	3.56	62718.57	8266.07	0.09
Salt River	VaShly US	8.36	100yr	175000.00	1212.00	1264.17	1227.44	1264.37	0.000059	3.90	58520.68	8189.07	0.11
Salt River	VaShly US	8.44	100yr	175000.00	1192.00	1264.22	1222.90	1264.40	0.000049	3.70	63994.21	7781.38	0.10
Salt River	VaShly US	8.52	100yr	175000.00	1208.00	1264.22	1228.26	1264.43	0.000055	4.11	65400.55	6350.91	0.10
Salt River	VaShly US	8.57	100yr	175000.00	1198.17	1264.21	1224.70	1264.46	0.000069	4.53	55804.10	5740.66	0.11
Salt River	VaShly US	8.60	100yr	175000.00	1196.00	1264.17	1227.10	1264.50	0.000108	5.27	50183.26	5086.62	0.14
Salt River	VaShly US	8.63	100yr	175000.00	1216.00	1263.83	1243.36	1264.71	0.000535	8.17	36050.39	4110.76	0.29
Salt River	VaShly US	8.68	100yr	175000.00	1244.00	1262.58	1262.58	1268.01	0.008500	20.34	24908.72	2737.29	1.03
Salt River	VaShly US	8.74	100yr	175000.00	1220.00	1267.60	1248.55	1268.72	0.000478	9.21	39209.45	3914.95	0.28
Salt River	VaShly US	8.77	100yr	175000.00	1206.87	1268.31	1235.24	1268.82	0.000181	6.23	48747.34	3918.17	0.18
Salt River	VaShly US	8.81	100yr	175000.00	1204.00	1268.28	1238.61	1268.90	0.000261	6.87	46071.03	4026.43	0.21
Salt River	VaShly US	8.85	100yr	175000.00	1212.00	1268.05	1254.90	1269.14	0.000656	9.10	38948.13	3737.31	0.32
Salt River	VaShly US	8.88	100yr	175000.00	1233.08	1267.58	1261.51	1269.63	0.001713	12.47	35349.22	3355.54	0.50
Salt River	VaShly US	8.92	100yr	175000.00	1239.59	1267.32	1262.14	1270.30	0.002620	15.04	34054.41	2652.48	0.62
Salt River	VaShly US	8.98	100yr	175000.00	1244.00	1267.26	1265.67	1271.89	0.004427	18.75	25057.71	2628.29	0.79
Salt River	VaShly US	9.04	100yr	175000.00	1248.00	1268.76	1268.76	1275.16	0.005647	22.05	22656.34	3045.70	0.91
Salt River	VaShly US	9.13	100yr	175000.00	1248.00	1274.35	1266.33	1276.69	0.001462	13.35	32955.07	6441.22	0.48
Salt River	VaShly US	9.20	100yr	175000.00	1248.00	1275.80	1265.25	1277.20	0.000863	10.30	33335.06	7422.42	0.37
Salt River	VaShly US	9.26	100yr	175000.00	1247.57	1275.93	1266.30	1277.58	0.001001	11.21	33538.64	7380.53	0.40
Salt River	VaShly US	9.33	100yr	175000.00	1244.00	1275.76	1268.56	1278.32	0.001583	14.03	32940.78	7249.47	0.50
Salt River	VaShly US	9.39	100yr	175000.00	1236.00	1275.16	1272.25	1279.49	0.002948	18.73	31732.82	6314.92	0.67
Salt River	VaShly US	9.44	100yr	175000.00	1247.05	1278.47	1266.16	1280.12	0.000837	11.19	44780.83	8214.83	0.37
Salt River	VaShly US	9.49	100yr	175000.00	1248.00	1279.55	1264.49	1280.32	0.000398	7.65	53595.12	8831.67	0.26
Salt River	VaShly US	9.55	100yr	175000.00	1251.37	1280.06	1264.54	1280.46	0.000225	5.67	61817.47	9796.74	0.19
Salt River	VaShly US	9.59	100yr	175000.00	1244.40	1280.21	1264.70	1280.51	0.000169	5.09	66902.36	10053.04	0.17
Salt River	VaShly US	9.61	100yr	175000.00	1248.20	1280.21	1265.65	1280.54	0.000197	5.36	61645.53	10049.81	0.18
Salt River	VaShly US	9.64	100yr	175000.00	1252.00	1280.23	1266.82	1280.58	0.000228	5.49	55678.91	9996.68	0.19
Salt River	VaShly US	9.67	100yr	175000.00	1250.78	1280.22	1267.39	1280.62	0.000260	5.96	50346.31	9542.57	0.21
Salt River	VaShly US	9.73	100yr	175000.00	1252.00	1280.28	1268.54	1280.72	0.000307	5.98	35221.65	8737.81	0.22
Salt River	VaShly US	9.80	100yr	175000.00	1252.00	1280.21	1269.82	1280.96	0.000487	7.64	26266.46	8183.30	0.28
Salt River	VaShly US	9.87	100yr	175000.00	1254.92	1280.18	1270.40	1281.28	0.000715	8.90	21319.83	7534.35	0.33
Salt River	VaShly US	9.96	100yr	175000.00	1254.13	1280.45	1272.19	1281.67	0.000827	9.52	21060.78	7414.93	0.36
Salt River	VaShly US	10.06	100yr	175000.00	1256.00	1281.01	1273.26	1282.15	0.000854	9.19	21528.02	6890.88	0.36
Salt River	VaShly US	10.18	100yr	175000.00	1256.00	1281.24	1274.11	1283.09	0.001542	10.94	16116.45	5201.57	0.47
Salt River	VaShly US	10.26	100yr	175000.00	1252.00	1282.48	1269.60	1283.54	0.000568	8.29	21449.39	4593.82	0.30
Salt River	VaShly US	10.36	100yr	175000.00	1253.00	1282.66	1272.68	1283.98	0.000841	9.38	19259.52	3104.39	0.36
Salt River	VaShly US	10.41	100yr	175000.00	1247.67	1283.46	1262.52	1284.14	0.000252	6.75	26946.68	3925.38	0.21
Salt River	VaShly US	10.46	100yr	175000.00	1240.00	1283.49	1263.28	1284.23	0.000299	7.16	26401.32	4121.57	0.23
Salt River	VaShly US	10.52	100yr	175000.00	1234.97	1283.57	1257.34	1284.32	0.000237	7.03	25633.57	2569.89	0.21
Salt River	VaShly US	10.56	100yr	175000.00	1244.00	1283.36	1263.27	1284.52	0.000421	8.62	20314.68	2701.55	0.27
Salt River	VaShly US	10.61	100yr	175000.00	1244.20	1283.49	1263.83	1284.62	0.000425	8.55	20580.90	2668.42	0.27
Salt River	VaShly US	10.67	100yr	175000.00	1248.00	1283.69	1265.31	1284.77	0.000435	8.34	21059.38	2380.87	0.27

HEC-RAS Plan: extended Profile: 100yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	100yr	175000.00	1248.00	1284.09	1262.11	1284.91	0.000293	7.28	24135.98	2248.93	0.23
Salt River	VaShly US	10.78	100yr	175000.00	1248.00	1284.24	1261.78	1284.98	0.000279	6.92	25286.97	1988.90	0.22
Salt River	VaShly US	10.81	100yr	175000.00	1248.00	1284.31	1261.80	1285.04	0.000262	6.82	25721.59	1968.79	0.21
Salt River	VaShly US	10.86	100yr	175000.00	1248.00	1284.34	1264.28	1285.13	0.000315	7.11	24600.04	1851.66	0.23
Salt River	VaShly US	10.90	100yr	175000.00	1250.83	1284.47	1265.01	1285.21	0.000311	6.89	25412.34	1804.22	0.23
Salt River	VaShly US	10.95	100yr	175000.00	1252.00	1284.58	1265.25	1285.28	0.000299	6.71	26110.36	1884.41	0.22
Salt River	VaShly US	11.00	100yr	175000.00	1254.01	1284.47	1267.98	1285.46	0.000448	8.00	21892.12	1780.46	0.27
Salt River	VaShly US	11.05	100yr	175000.00	1256.00	1284.53	1270.60	1285.66	0.000584	8.52	20575.55	1884.23	0.31
Salt River	VaShly US	11.10	100yr	175000.00	1256.00	1284.51	1273.02	1285.89	0.000815	9.45	18543.09	1842.12	0.35
Salt River	VaShly US	11.14	100yr	175000.00	1256.00	1284.74	1276.30	1286.44	0.003499	10.48	16779.64	1798.48	0.42
Salt River	VaShly US	11.17	100yr	175000.00	1256.00	1285.13	1276.51	1286.76	0.001154	10.32	17402.08	1741.22	0.41
Salt River	VaShly US	11.25	100yr	175000.00	1256.00	1285.71	1277.53	1287.25	0.001164	10.15	18158.08	1564.40	0.41
Salt River	VaShly US	11.32	100yr	175000.00	1260.00	1286.35	1279.73	1287.77	0.001343	9.79	19035.63	1450.28	0.43
Salt River	VaShly US	11.41	100yr	175000.00	1260.00	1287.01	1281.21	1288.45	0.001616	9.63	18167.70	1348.48	0.46
Salt River	VaShly US	11.49	100yr	175000.00	1263.04	1287.71	1280.83	1289.07	0.001289	9.36	18698.81	1220.14	0.42
Salt River	VaShly US	11.62	100yr	175000.00	1264.00	1288.85	1279.96	1289.79	0.000822	7.75	22589.70	1508.59	0.34
Salt River	VaShly US	11.78	100yr	175000.00	1268.00	1289.45	1282.19	1290.75	0.001179	9.14	19149.51	1446.51	0.41
Salt River	VaShly US	11.88	100yr	175000.00	1267.94	1289.93	1284.77	1291.78	0.002081	10.89	16066.40	1523.56	0.52
Salt River	VaShly US	11.99	100yr	175000.00	1268.00	1291.29	1287.21	1293.05	0.002377	10.64	16446.71	1407.60	0.55
Salt River	VaShly US	12.06	100yr	175000.00	1268.00	1292.38	1287.24	1293.83	0.001736	9.65	18132.78	1418.72	0.48
Salt River	VaShly US	12.10	100yr	175000.00	1272.00	1292.71	1287.84	1294.37	0.001967	10.34	16929.18	1311.85	0.51
Salt River	VaShly US	12.22	100yr	175000.00	1272.00	1293.70	1288.28	1295.70	0.001973	11.35	15422.26	1038.01	0.52
Salt River	VaShly US	12.33	100yr	175000.00	1272.00	1294.69	1287.86	1296.82	0.001748	11.72	14934.90	875.11	0.50
Salt River	VaShly US	12.44	100yr	175000.00	1276.00	1295.68	1290.80	1298.09	0.002469	12.47	14028.19	971.38	0.58
Salt River	VaShly US	12.55	100yr	175000.00	1276.00	1297.49	1290.31	1299.31	0.001632	10.83	16158.35	1013.82	0.48
Salt River	VaShly US	12.67	100yr	175000.00	1276.00	1298.57	1291.23	1300.26	0.001436	10.41	16805.89	1257.94	0.45
Salt River	VaShly US	12.77	100yr	175000.00	1276.00	1299.28	1293.28	1301.17	0.001846	11.03	15870.71	1310.91	0.50
Salt River	VaShly US	12.87	100yr	175000.00	1276.00	1300.58	1294.93	1302.17	0.001857	10.12	17294.49	1325.47	0.49
Salt River	VaShly US	12.97	100yr	175000.00	1280.00	1301.64	1296.01	1303.20	0.001722	10.00	17494.18	1287.25	0.48
Salt River	VaShly US	13.07	100yr	175000.00	1276.00	1302.66	1296.31	1303.98	0.001361	9.21	18994.34	1324.81	0.43
Salt River	VaShly US	13.19	100yr	175000.00	1284.00	1303.47	1297.86	1305.04	0.001771	10.07	17376.65	1296.07	0.48
Salt River	VaShly US	13.31	100yr	175000.00	1281.30	1304.54	1297.70	1306.14	0.001566	10.15	17248.56	1159.18	0.46
Salt River	VaShly US	13.44	100yr	175000.00	1284.00	1305.53	1298.29	1307.09	0.001344	10.01	17481.84	1067.64	0.44
Salt River	VaShly US	13.55	100yr	175000.00	1288.00	1306.41	1298.92	1307.88	0.001284	9.76	17938.13	1099.38	0.43
Salt River	VaShly US	13.64	100yr	175000.00	1288.00	1306.99	1300.69	1308.60	0.001536	10.17	17202.39	1127.97	0.46
Gilbert Mining P	Gilbert Mining P	0.04	100yr	21206.00	1190.68	1241.62	1197.61	1241.65	0.000005	1.23	17297.91	1652.16	0.03
Gilbert Mining P	Gilbert Mining P	0.08	100yr	21206.00	1180.00	1241.63	1191.16	1241.65	0.000004	1.19	17995.72	1724.23	0.03
Gilbert Mining P	Gilbert Mining P	0.11	100yr	21206.00	1182.38	1241.64	1188.24	1241.65	0.000003	0.89	24142.10	1887.67	0.02
Gilbert Mining P	Gilbert Mining P	0.15	100yr	21206.00	1180.00	1241.64	1187.46	1241.65	0.000003	0.88	25022.50	1969.23	0.02
Gilbert Mining P	Gilbert Mining P	0.19	100yr	21206.00	1180.00	1241.63	1192.83	1241.65	0.000006	1.10	20159.24	1202.94	0.03
Gilbert Mining P	Gilbert Mining P	0.22	100yr	21206.00	1188.00	1241.63	1195.89	1241.65	0.000005	1.10	19437.15	1149.52	0.03
Gilbert Mining P	Gilbert Mining P	0.25	100yr	21206.00	1182.77	1241.64	1190.14	1241.65	0.000005	1.09	19496.34	1091.12	0.03
Gilbert Mining P	Gilbert Mining P	0.29	100yr	21206.00	1183.78	1241.63	1192.45	1241.66	0.000008	1.38	16328.90	945.23	0.04
Gilbert Mining P	Gilbert Mining P	0.33	100yr	21206.00	1182.37	1241.65	1189.46	1241.66	0.000001	0.67	32103.86	966.37	0.02
Gilbert Mining P	Gilbert Mining P	0.37	100yr	21206.00	1184.00	1241.66	1193.01	1241.66	0.000001	0.60	36705.54	1614.86	0.02
Gilbert Mining P	Gilbert Mining P	0.43	100yr	21206.00	1180.00	1241.65	1190.26	1241.66	0.000002	0.78	27278.28	2272.71	0.02
Gilbert Mining P	Gilbert Mining P	0.48	100yr	21206.00	1172.00	1241.66	1182.09	1241.66	0.000001	0.66	33509.37	2441.79	0.02
Gilbert Mining P	Gilbert Mining P	0.53	100yr	21206.00	1191.79	1241.66	1200.08	1241.66	0.000001	0.62	35418.86	2588.31	0.02
Gilbert Mining P	Gilbert Mining P	0.55	100yr	21206.00	1196.00	1241.66	1202.91	1241.67	0.000003	0.81	26620.40	2283.72	0.02
Gilbert Mining P	Gilbert Mining P	0.60	100yr	21206.00	1200.85	1241.64	1213.23	1241.68	0.000016	1.49	15134.68	2518.58	0.05
Gilbert Mining P	Gilbert Mining P	0.66	100yr	21206.00	1192.00	1241.67	1198.31	1241.68	0.000002	0.72	29375.46	2600.72	0.02
Gilbert Mining P	Gilbert Mining P	0.70	100yr	21206.00	1196.00	1241.67	1201.18	1241.68	0.000005	0.94	22660.76	2444.78	0.03
Gilbert Mining P	Gilbert Mining P	0.74	100yr	21206.00	1196.00	1241.67	1201.42	1241.68	0.000003	0.83	25573.95	2300.85	0.02
Gilbert Mining P	Gilbert Mining P	0.77	100yr	21206.00	1196.00	1241.68	1201.69	1241.68	0.000001	0.57	37234.02	2364.42	0.02
Gilbert Mining P	Gilbert Mining P	0.83	100yr	21206.00	1199.07	1241.68	1203.17	1241.68	0.000001	0.54	39561.68	2527.62	0.02
Gilbert Mining P	Gilbert Mining P	0.88	100yr	21206.00	1198.45	1241.68	1202.35	1241.68	0.000001	0.53	40052.67	2657.88	0.02
Gilbert Mining P	Gilbert Mining P	0.91	100yr	21206.00	1197.53	1241.68	1205.16	1241.69	0.000002	0.66	32092.32	2575.66	0.02
Gilbert Mining P	Gilbert Mining P	0.95	100yr	21206.00	1202.08	1241.68	1206.92	1241.69	0.000003	0.80	26541.48	3211.55	0.02
Gilbert Mining P	Gilbert Mining P	0.97	100yr	21206.00	1204.00	1241.68	1208.74	1241.69	0.000003	0.80	26755.21	3547.75	0.02
Gilbert Mining P	Gilbert Mining P	0.99	100yr	21206.00	1204.00	1241.68	1210.46	1241.69	0.000004	0.90	23482.22	3408.66	0.03
Gilbert Mining P	Gilbert Mining P	1.02	100yr	21206.00	1207.21	1241.68	1211.40	1241.69	0.000004	0.80	26122.22	3428.02	0.03
Gilbert Mining P	Gilbert Mining P	1.05	100yr	21206.00	1208.00	1241.68	1213.31	1241.69	0.000006	0.99	21605.71	3167.84	0.03
Gilbert Mining P	Gilbert Mining P	1.08	100yr	21206.00	1196.00	1241.67	1213.03	1241.70	0.000010	1.25	17130.94	2088.62	0.04
Gilbert Mining P	Gilbert Mining P	1.11	100yr	21206.00	1196.00	1241.66	1215.25	1241.71	0.000024	1.83	11761.60	1464.70	0.06
Gilbert Mining P	Gilbert Mining P	1.14	100yr	21206.00	1212.00	1241.60	1221.74	1241.74	0.000096	2.99	7080.44	1271.30	0.12
Gilbert Mining P	Gilbert Mining P	1.17	100yr	21206.00	1243.53	1249.53	1249.53	1252.23	0.010275	13.18	1608.57	3345.46	1.00
Gilbert Mining P	Gilbert Mining P	1.19	100yr	21206.00	1236.00	1252.04	1242.99	1252.58	0.000531	5.89	3599.78	4352.98	0.27
Gilbert Mining P	Gilbert Mining P	1.21	100yr	21206.00	1244.00	1251.47	1250.12	1253.22	0.004840	10.63	1996.93	3460.01	0.72

APPENDIX 2g

200-YEAR STANDARD TABLE 1

HEC-RAS Plan: extended Profile: 200yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	200yr	207000.00	1148.00	1178.45	1162.42	1179.31	0.000410	7.43	27854.28	1077.48	0.26
Salt River	VaShly DS	0.11	200yr	207000.00	1148.00	1178.72	1163.89	1179.56	0.000432	7.38	28031.91	1138.77	0.26
Salt River	VaShly DS	0.23	200yr	207000.00	1150.96	1179.06	1163.63	1179.83	0.000387	7.06	29330.29	1175.18	0.25
Salt River	VaShly DS	0.36	200yr	207000.00	1151.05	1179.32	1164.30	1180.10	0.000402	7.11	29112.79	1190.42	0.25
Salt River	VaShly DS	0.51	200yr	207000.00	1152.00	1179.65	1164.48	1180.41	0.000386	6.98	29664.52	1211.61	0.25
Salt River	VaShly DS	0.65	200yr	207000.00	1151.50	1179.98	1164.04	1180.69	0.000348	6.76	30620.72	1214.05	0.24
Salt River	VaShly DS	0.78	200yr	207000.00	1152.00	1180.19	1166.26	1180.99	0.000446	7.17	28878.64	1257.63	0.26
Salt River	VaShly DS	0.89	200yr	207000.00	1156.00	1180.41	1168.22	1181.32	0.000563	7.65	27049.19	1277.38	0.29
Salt River	VaShly DS	1.00	200yr	207000.00	1152.00	1180.85	1166.61	1181.60	0.000411	6.94	29812.19	1288.58	0.25
Salt River	VaShly DS	1.12	200yr	207000.00	1152.00	1181.11	1167.20	1181.85	0.000416	6.93	29867.24	1305.53	0.26
Salt River	VaShly DS	1.22	200yr	207000.00	1156.00	1181.34	1168.14	1182.10	0.000444	6.99	29624.99	1344.92	0.26
Salt River	VaShly DS	1.30	200yr	207000.00	1152.00	1181.51	1169.00	1182.31	0.000492	7.18	28826.97	1352.98	0.27
Salt River	VaShly DS	1.39	200yr	207000.00	1147.32	1181.90	1165.36	1182.50	0.000298	6.25	33125.17	1308.59	0.22
Salt River	VaShly DS	1.52	200yr	207000.00	1144.00	1182.14	1160.41	1182.70	0.000250	5.98	34588.69	1264.07	0.20
Salt River	VaShly DS	1.65	200yr	207000.00	1154.51	1182.34	1168.86	1182.90	0.000348	6.00	34475.04	1642.16	0.23
Salt River	VaShly DS	1.76	200yr	207000.00	1152.50	1182.49	1168.35	1183.13	0.000378	6.48	32722.47	1933.70	0.24
Salt River	VaShly DS	1.80	200yr	207000.00	1160.00	1182.30	1172.26	1183.38	0.000795	8.35	24804.70	1560.16	0.34
Salt River	VaShly DS	1.83	200yr	207000.00	1148.00	1182.25	1173.76	1183.63	0.001116	9.44	21917.92	1663.87	0.40
Salt River	VaShly DS	1.86	200yr	207000.00	1148.00	1182.55	1172.86	1183.82	0.000897	9.02	22944.01	1797.05	0.36
Salt River	VaShly DS	1.89	200yr	207000.00	1152.71	1182.64	1173.37	1183.97	0.000947	9.24	22402.17	1883.79	0.37
Salt River	VaShly DS	1.95	200yr	207000.00	1157.05	1182.82	1172.90	1184.38	0.001079	10.00	20695.81	2058.63	0.40
Salt River	VaShly DS	2.02	200yr	207000.00	1158.36	1182.96	1173.21	1184.90	0.001149	11.17	18537.52	2270.10	0.42
Salt River	VaShly DS	2.04	200yr	207000.00	1156.31	1183.08	1174.82	1185.07	0.001370	11.32	18291.41	2385.82	0.45
Salt River	VaShly DS	2.07	200yr	207000.00	1156.00	1183.09	1176.64	1185.45	0.001823	12.32	16806.54	2427.93	0.51
Salt River	VaShly DS	2.10	200yr	207000.00	1158.27	1183.37	1177.55	1185.74	0.001983	12.35	16758.02	2492.81	0.53
Salt River	VaShly DS	2.12	200yr	207000.00	1176.00	1191.53	1191.53	1197.32	0.007911	19.31	10722.03	2613.63	1.00
Salt River	VaShly DS	2.13	200yr	207000.00	1176.00	1194.35	1191.21	1197.89	0.003612	15.09	13715.43	2738.29	0.70
Salt River	VaShly DS	2.21	200yr	207000.00	1176.00	1195.86	1192.70	1199.38	0.003590	15.05	13753.74	2586.32	0.70
Salt River	VaShly DS	2.29	200yr	207000.00	1170.86	1198.61	1190.80	1200.72	0.001509	11.65	17773.50	1744.69	0.47
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	200yr	207000.00	1180.00	1201.20	1196.88	1204.22	0.002829	13.95	14837.15	1512.22	0.63
Salt River	VaShly DS	2.38	200yr	207000.00	1175.59	1202.75	1196.20	1204.96	0.001858	11.94	17339.83	1578.10	0.51
Salt River	VaShly DS	2.40	200yr	207000.00	1176.00	1203.03	1196.13	1205.21	0.001673	11.85	17623.92	1481.36	0.49
Salt River	VaShly DS	2.41	200yr	207000.00	1176.00	1203.09	1196.18	1205.28	0.001670	11.87	17493.82	1441.68	0.49
Salt River	VaShly DS	2.42	200yr	207000.00	1176.00	1203.15	1196.34	1205.36	0.001720	11.93	17350.05	1341.33	0.50
Salt River	VaShly DS	2.47	200yr	207000.00	1178.61	1203.40	1198.05	1206.00	0.002256	12.93	16010.39	1434.37	0.56
Salt River	VaShly DS	2.53	200yr	207000.00	1180.00	1204.46	1198.42	1206.68	0.001862	11.96	17308.11	2393.76	0.52
Salt River	VaShly DS	2.59	200yr	207000.00	1184.00	1204.95	1199.30	1207.43	0.002156	12.65	16363.46	2374.71	0.55
Salt River	VaShly DS	2.65	200yr	207000.00	1187.99	1205.36	1200.59	1208.25	0.002568	13.66	15173.41	1632.66	0.60
Salt River	VaShly DS	2.71	200yr	207000.00	1188.00	1206.99	1200.76	1209.08	0.001765	11.63	17882.14	1455.21	0.50
Salt River	VaShly DS	2.78	200yr	207000.00	1188.00	1207.80	1201.17	1209.65	0.001572	10.93	18982.69	1614.54	0.47
Salt River	VaShly DS	2.87	200yr	207000.00	1175.62	1208.37	1200.43	1210.51	0.001511	11.73	17643.55	1149.68	0.47
Salt River	VaShly DS	2.98	200yr	207000.00	1180.00	1209.72	1200.51	1211.28	0.000981	10.07	20882.38	2520.59	0.39
Salt River	VaShly DS	3.10	200yr	207000.00	1174.02	1210.15	1201.69	1212.13	0.001431	11.31	18309.03	2856.86	0.46
Salt River	VaShly DS	3.23	200yr	207000.00	1184.27	1210.95	1204.89	1213.55	0.002064	12.93	16003.47	3945.10	0.55
Salt River	VaShly DS	3.35	200yr	207000.00	1188.00	1212.74	1204.10	1214.64	0.001351	11.04	18748.48	4195.37	0.45
Salt River	VaShly DS	3.46	200yr	207000.00	1184.00	1214.50	1203.10	1215.41	0.000597	7.72	27157.48	4244.67	0.30
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	200yr	207000.00	1186.84	1214.70	1204.69	1215.76	0.000752	8.25	25077.80	5117.67	0.33
Salt River	VaShly DS	3.64	200yr	207000.00	1192.00	1215.30	1208.87	1216.80	0.001443	9.81	21107.38	3897.35	0.45
Salt River	VaShly DS	3.76	200yr	207000.00	1188.00	1216.31	1206.46	1217.52	0.000878	8.82	23954.46	3702.92	0.36
Salt River	VaShly DS	3.89	200yr	207000.00	1174.66	1217.43	1201.35	1217.78	0.000153	4.83	43634.04	4124.38	0.16
Salt River	VaShly DS	4.04	200yr	207000.00	1184.00	1217.54	1203.51	1217.97	0.000269	5.24	39447.13	4377.74	0.20
Salt River	VaShly DS	4.09	200yr	207000.00	1188.00	1217.49	1205.92	1218.14	0.000443	6.39	32203.49	3672.15	0.26
Salt River	VaShly DS	4.15	200yr	207000.00	1184.00	1217.44	1206.73	1218.41	0.000651	7.89	26266.69	2959.48	0.31
Salt River	VaShly DS	4.22	200yr	207000.00	1178.19	1217.83	1205.25	1218.61	0.000463	6.95	29426.16	2056.58	0.27
Salt River	VaShly DS	4.27	200yr	207000.00	1192.00	1217.79	1207.67	1218.87	0.000761	8.43	25092.19	1473.60	0.34
Salt River	VaShly DS	4.31	200yr	207000.00	1199.24	1217.61	1210.78	1219.30	0.001510	10.30	19867.06	1243.79	0.46
Salt River	VaShly DS	4.47	200yr	207000.00	1200.00	1218.91	1213.33	1220.72	0.001846	11.06	28566.33	1987.00	0.50
Salt River	VaShly DS	4.59	200yr	207000.00	1192.00	1220.42	1211.76	1221.61	0.000931	8.97	29102.23	2359.65	0.37
Salt River	VaShly DS	4.74	200yr	207000.00	1188.00	1221.18	1209.64	1222.34	0.000863	8.86	28304.52	2420.74	0.36
Salt River	VaShly DS	4.88	200yr	207000.00	1200.00	1221.36	1218.41	1224.24	0.002882	13.97	18929.25	2271.52	0.68
Salt River	VaShly DS	5.03	200yr	207000.00	1204.00	1223.74	1218.48	1226.20	0.002154	12.90	21716.09	1839.89	0.55
Salt River	VaShly DS	5.15	200yr	207000.00	1204.00	1225.15	1219.70	1227.57	0.002082	12.81	21777.41	1675.55	0.54
Salt River	VaShly DS	5.26	200yr	207000.00	1179.01	1226.87	1215.38	1228.36	0.000859	10.03	26925.10	1466.30	0.36
Salt River	VaShly DS	5.40	200yr	207000.00	1196.00	1227.23	1219.70	1229.53	0.001691	12.36	17402.61	1012.06	0.50
Salt River	VaShly DS	5.47	200yr	207000.00	1208.00	1227.67	1223.48	1230.59	0.002756	13.78	15229.35	1048.13	0.62
Salt River	VaShly DS	5.53	200yr	207000.00	1192.00	1229.65	1218.02	1231.14	0.000945	9.77	21177.38	1010.90	0.38
Salt River	VaShly DS	5.56	200yr	207000.00	1208.00	1229.07	1223.75	1231.84	0.002445	13.36	15493.91	956.96	0.59
Salt River	VaShly DS	5.60	200yr	207000.00	1194.35	1231.26	1215.63	1232.16	0.000368	7.62	27174.10	1039.66	0.25
Salt River	VaShly DS	5.65	200yr	207000.00	1198.67	1231.09	1218.17	1232.47	0.000780	9.44	21933.69	960.02	0.35
Salt River	VaShly DS	5.69	200yr	207000.00	1206.01	1230.65	1222.58	1233.04	0.001715	12.39	16703.13	875.84	0.50
Salt River	VaShly DS	5.73	200yr	207000.00	1208.00	1230.48	1225.00	1233.61	0.002474	14.20	14580.61	824.56	0.59
Salt River	VaShly DS	5.76	200yr	207000.00	1204.00	1231.93	1223.68	1234.08	0.001446	11.75	17614.98	1026.49	0.46
Salt River	VaShly DS	5.80	200yr	207000.00	1204.00	1232.59	1222.49	1234.34	0.001071	10.62	19496.44	1117.05	0.40
Salt River	VaShly DS	5.82	200yr	207000.00	1204.00	1232.76	1222.69	1234.46	0.001063	10.47	19793.39	1206.30	0.40
Salt River	VaShly DS	5.84	200yr	207000.00	1204.00	1232.81	1223.40	1234.59	0.001198	10.72	19309.78	1215.90	0.42
Salt River	VaShly DS	5.85	200yr	207000.00	1208.00	1233.05	1223.35	1234.68	0.001103	10.27	20156.52	1282.11	0.40
Salt River	VaShly DS	5.86	200yr	207000.00	1205.11	1233.32	1225.27	1235.10	0.011612	10.70	19341.11	1406.76	0.45
Salt River	VaShly DS	5.87	200yr	207000.00	1206.22	1233.96	1225.85	1235.25	0.001080	9.12	22691.22	1698.22	0.39
Salt River	VaShly DS	5.88	200yr	207000.00	1209.96	1234.26	1226.55	1235.33	0.000934	8.40	25124.82	2044.50	0.36
Salt River	VaShly DS	5.91	200yr	207000.00	1203.31	1234.75	1223.50	1235.46	0.000495	6.86	30602.80	2139.61	0.27
Salt River	VaShly DS	5.93	200yr	207000.00	1198.79	1234.83	1218.59	1235.52	0.000406	6.70	31178.52	2093.69	0.25
Salt River	VaShly DS	5.95	200yr	207000.00	1196.00	1234.84	1218.52	1235.67	0.002299	7.32	28261.64	1728.97	0.28
Salt River	VaShly DS	5.97	200yr	207000.00	1198.59	1234.83	1221.04	1235.90	0.000694	8.28	25004.48	1690.77	0.32
Salt River	VaShly DS	5.99	200yr	207000.00	1200.00	1234.88	1222.77	1235.97	0.000710	8.37	24717.26	1762.29	0.33
Salt River	VaShly DS	6.01	200yr	207000.00	1204.00	1236.25	1226.58	1237.69	0.031656	9.66	21433.62	1959.62	0.38

HEC-RAS Plan: extended Profile: 200yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	200yr	207000.00	1204.00	1236.84	1224.73	1237.97	0.000651	8.52	24294.72	2065.96	0.32
Salt River	VaShly DS	6.09	200yr	207000.00	1200.00	1237.32	1222.22	1238.12	0.000385	7.27	28913.55	2190.44	0.25
Salt River	VaShly DS	6.14	200yr	207000.00	1196.00	1237.62	1219.17	1238.22	0.000267	6.32	33534.71	2427.79	0.21
Salt River	VaShly DS	6.18	200yr	207000.00	1192.00	1237.58	1225.66	1238.35	0.000429	7.17	29770.48	2674.99	0.26
Salt River	VaShly DS	6.22	200yr	207000.00	1203.46	1237.70	1228.67	1238.44	0.000506	7.03	30348.93	2647.82	0.25
Salt River	VaShly DS	6.27	200yr	207000.00	1194.49	1237.80	1222.13	1238.63	0.000703	7.44	28865.70	2934.99	0.25
Salt River	VaShly DS	6.32	200yr	207000.00	1192.00	1237.73	1220.50	1239.01	0.000956	9.34	23473.54	2800.04	0.30
Salt River	VaShly DS	6.35	200yr	207000.00	1194.53	1237.76	1221.78	1239.17	0.001029	9.82	22575.23	2943.97	0.32
Salt River	VaShly DS	6.38	200yr	207000.00	1195.40	1238.03	1222.09	1239.38	0.001304	9.58	22677.21	2746.23	0.31
Salt River	VaShly DS	6.40	200yr	207000.00	1219.48	1237.67	1237.67	1243.11	0.005796	19.38	11789.57	2858.00	0.89
Salt River	VaShly at Pit	6.45	200yr	179441.80	1220.01	1241.89	1236.52	1244.04	0.001895	12.34	18567.72	2028.94	0.52
Salt River	VaShly at Pit	6.50	200yr	179441.80	1223.66	1242.08	1238.69	1244.84	0.002848	13.97	17366.80	1792.97	0.63
Salt River	VaShly at Pit	6.53	200yr	179441.80	1224.00	1242.50	1239.16	1245.41	0.003018	14.37	16654.25	1638.09	0.64
Salt River	VaShly at Pit	6.56	200yr	179441.80	1224.00	1242.85	1239.91	1245.94	0.003210	14.80	16429.12	1564.73	0.66
Salt River	VaShly at Pit	6.62	200yr	179441.80	1225.32	1243.49	1241.94	1247.50	0.004556	16.90	14933.61	1487.74	0.78
Salt River	VaShly at Pit	6.69	200yr	179441.80	1224.24	1245.81	1243.00	1249.19	0.004346	15.47	17778.94	1873.89	0.75
Salt River	VaShly at Pit	6.75	200yr	179441.80	1228.00	1247.71	1243.65	1250.28	0.002654	13.51	21026.43	1920.66	0.61
Salt River	VaShly at Pit	6.80	200yr	179441.80	1228.00	1249.12	1243.74	1250.92	0.001666	11.52	24155.77	5022.42	0.49
Salt River	VaShly at Pit	6.85	200yr	179441.80	1231.97	1249.60	1245.01	1251.32	0.001856	11.48	22552.28	5236.97	0.51
Salt River	VaShly at Pit	6.91	200yr	179441.80	1230.46	1250.86	1243.62	1251.75	0.000850	8.24	25472.92	6566.87	0.35
Salt River	VaShly at Pit	6.96	200yr	179441.80	1232.00	1251.00	1244.97	1252.19	0.001501	9.71	22134.16	6465.98	0.45
Salt River	VaShly at Pit	6.99	200yr	179441.80	1232.00	1251.38	1244.85	1252.40	0.001125	8.23	22180.99	6958.30	0.39
Salt River	VaShly at Pit	7.01	200yr	179441.80	1230.78	1251.47	1245.24	1252.53	0.001199	8.48	21729.98	6992.24	0.40
Salt River	VaShly at Pit	7.03	200yr	179441.80	1232.00	1251.55	1245.42	1252.62	0.001216	8.56	21743.27	6991.24	0.40
Salt River	VaShly at Pit	7.04	200yr	179441.80	1232.00	1251.64	1245.70	1252.72	0.001465	8.31	21532.04	7004.09	0.40
Salt River	VaShly at Pit	7.06	200yr	179441.80	1232.00	1251.76	1245.81	1252.82	0.001259	8.74	21934.99	6981.79	0.41
Salt River	VaShly at Pit	7.07	200yr	179441.80	1232.00	1251.97	1245.81	1252.92	0.001136	8.28	23200.35	6849.95	0.39
Salt River	VaShly at Pit	7.10	200yr	179441.80	1232.00	1252.05	1246.08	1253.16	0.001220	8.79	21370.65	7356.06	0.40
Salt River	VaShly at Pit	7.17	200yr	179441.80	1232.14	1252.45	1246.16	1253.63	0.001226	8.89	20630.65	7057.68	0.41
Salt River	VaShly at Pit	7.24	200yr	179441.80	1235.58	1252.91	1246.44	1254.12	0.001226	8.90	20341.73	6929.02	0.41
Salt River	VaShly at Pit	7.28	200yr	179441.80	1236.00	1253.02	1248.53	1254.84	0.002116	10.84	16673.59	6575.74	0.53
Salt River	VaShly US	7.32	200yr	207000.00	1239.34	1254.01	1248.64	1255.34	0.001705	9.93	26576.80	11277.42	0.48
Salt River	VaShly US	7.36	200yr	207000.00	1238.07	1254.29	1249.28	1255.74	0.001710	10.23	25949.16	10972.82	0.48
Salt River	VaShly US	7.40	200yr	207000.00	1239.06	1254.49	1249.72	1256.28	0.001994	11.09	21206.34	10817.94	0.52
Salt River	VaShly US	7.44	200yr	207000.00	1238.53	1254.88	1249.26	1256.67	0.001774	10.76	19309.32	10611.71	0.49
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	200yr	207000.00	1239.83	1255.84	1250.12	1257.64	0.001741	10.79	19209.00	11161.09	0.49
Salt River	VaShly US	7.55	200yr	207000.00	1239.60	1256.69	1250.17	1258.34	0.001492	10.31	20104.96	11631.61	0.46
Salt River	VaShly US	7.63	200yr	210000.00	1240.00	1256.92	1253.14	1259.44	0.002519	12.94	17028.24	10914.77	0.59
Salt River	VaShly US	7.71	200yr	210000.00	1243.41	1257.83	1256.34	1261.31	0.004184	15.44	16297.79	10152.77	0.74
Salt River	VaShly US	7.83	200yr	210000.00	1244.00	1260.93	1257.24	1263.26	0.002342	12.82	22444.96	11475.92	0.57
Salt River	VaShly US	7.91	200yr	210000.00	1244.00	1261.57	1259.26	1264.80	0.003410	15.31	22847.70	10017.73	0.69
Salt River	VaShly US	8.01	200yr	210000.00	1240.00	1264.68	1256.51	1265.72	0.000850	8.92	36041.88	10961.08	0.36
Salt River	VaShly US	8.10	200yr	210000.00	1212.00	1265.09	1246.83	1265.96	0.000363	8.33	44155.77	10175.24	0.25
Salt River	VaShly US	8.20	200yr	210000.00	1202.29	1265.81	1220.62	1266.07	0.000059	4.46	62793.88	9405.98	0.11
Salt River	VaShly US	8.29	200yr	210000.00	1204.00	1265.89	1221.48	1266.10	0.000049	3.99	67710.33	8946.56	0.10
Salt River	VaShly US	8.36	200yr	210000.00	1212.00	1265.89	1229.07	1266.13	0.000070	4.36	63510.32	8696.09	0.12
Salt River	VaShly US	8.44	200yr	210000.00	1192.00	1265.94	1224.78	1266.16	0.000059	4.12	69037.27	8278.90	0.11
Salt River	VaShly US	8.52	200yr	210000.00	1208.00	1265.95	1230.42	1266.20	0.000064	4.55	70343.23	7699.99	0.11
Salt River	VaShly US	8.57	200yr	210000.00	1198.17	1265.95	1227.92	1266.24	0.000081	5.01	60549.75	6409.94	0.12
Salt River	VaShly US	8.60	200yr	210000.00	1196.00	1265.90	1230.37	1266.29	0.000126	5.83	54972.61	6083.69	0.15
Salt River	VaShly US	8.63	200yr	210000.00	1216.00	1265.51	1246.28	1266.52	0.000581	8.89	40948.45	5594.89	0.30
Salt River	VaShly US	8.68	200yr	210000.00	1244.00	1263.74	1263.74	1269.62	0.008488	21.50	27837.43	3099.82	1.05
Salt River	VaShly US	8.74	200yr	210000.00	1220.00	1269.06	1251.57	1270.39	0.000554	10.21	42785.31	5398.81	0.31
Salt River	VaShly US	8.77	200yr	210000.00	1206.87	1269.90	1237.85	1270.51	0.000212	6.92	52568.14	5607.23	0.20
Salt River	VaShly US	8.81	200yr	210000.00	1204.00	1269.86	1241.79	1270.60	0.000301	7.60	49974.42	5090.50	0.23
Salt River	VaShly US	8.85	200yr	210000.00	1212.00	1269.61	1257.52	1270.87	0.000722	9.94	42608.50	4532.96	0.34
Salt River	VaShly US	8.88	200yr	210000.00	1233.08	1269.10	1262.17	1271.39	0.001801	13.41	38979.11	3980.41	0.52
Salt River	VaShly US	8.92	200yr	210000.00	1239.59	1268.80	1263.57	1272.11	0.002744	16.14	37578.68	3691.91	0.64
Salt River	VaShly US	8.98	200yr	210000.00	1244.00	1268.65	1267.15	1273.81	0.004629	20.11	28171.85	3188.69	0.82
Salt River	VaShly US	9.04	200yr	210000.00	1248.00	1270.79	1270.79	1277.51	0.005594	22.99	27011.83	4770.83	0.91
Salt River	VaShly US	9.13	200yr	210000.00	1248.00	1276.49	1268.18	1279.05	0.001473	14.19	37646.44	7658.24	0.49
Salt River	VaShly US	9.20	200yr	210000.00	1248.00	1278.06	1267.30	1279.58	0.000862	10.91	38304.54	8213.65	0.38
Salt River	VaShly US	9.26	200yr	210000.00	1247.57	1278.17	1268.47	1279.97	0.001003	11.90	38694.28	8243.95	0.41
Salt River	VaShly US	9.33	200yr	210000.00	1244.00	1278.02	1271.34	1280.68	0.001535	14.65	38827.55	8263.31	0.50
Salt River	VaShly US	9.39	200yr	210000.00	1236.00	1277.35	1274.01	1281.86	0.002909	19.58	37094.73	7773.39	0.68
Salt River	VaShly US	9.44	200yr	210000.00	1247.05	1280.65	1268.49	1282.49	0.000886	12.03	50545.28	8944.15	0.39
Salt River	VaShly US	9.49	200yr	210000.00	1248.00	1281.86	1266.13	1282.70	0.000407	8.16	60263.14	9320.91	0.26
Salt River	VaShly US	9.55	200yr	210000.00	1251.37	1282.42	1265.68	1282.85	0.000225	6.00	69276.45	10050.82	0.20
Salt River	VaShly US	9.59	200yr	210000.00	1244.40	1282.57	1265.73	1282.90	0.000172	5.41	74844.68	10322.30	0.17
Salt River	VaShly US	9.61	200yr	210000.00	1248.20	1282.58	1266.69	1282.93	0.000194	5.62	69236.53	10323.69	0.18
Salt River	VaShly US	9.64	200yr	210000.00	1252.00	1282.58	1267.87	1282.96	0.000220	5.72	63033.23	10272.58	0.19
Salt River	VaShly US	9.67	200yr	210000.00	1250.78	1282.58	1268.44	1283.01	0.000250	6.20	56960.33	10031.45	0.21
Salt River	VaShly US	9.73	200yr	210000.00	1252.00	1282.63	1270.03	1283.11	0.000290	6.19	39997.25	9285.45	0.22
Salt River	VaShly US	9.80	200yr	210000.00	1252.00	1282.52	1271.04	1283.36	0.000477	8.05	29710.19	8783.89	0.28
Salt River	VaShly US	9.87	200yr	210000.00	1254.92	1282.41	1271.73	1283.72	0.000742	9.67	24026.74	8080.02	0.35
Salt River	VaShly US	9.96	200yr	210000.00	1254.13	1282.76	1273.51	1284.06	0.000779	9.88	24387.12	7765.40	0.35
Salt River	VaShly US	10.06	200yr	210000.00	1256.00	1283.30	1274.48	1284.51	0.000794	9.52	24875.32	7642.62	0.35
Salt River	VaShly US	10.18	200yr	210000.00	1256.00	1283.39	1275.48	1285.46	0.001469	11.57	18513.15	6584.11	0.47
Salt River	VaShly US	10.26	200yr	210000.00	1252.00	1284.66	1270.22	1285.92	0.000601	9.04	23863.91	6161.37	0.31
Salt River	VaShly US	10.36	200yr	210000.00	1253.00	1284.84	1274.29	1286.38	0.000858	10.11	21413.79	4501.99	0.37
Salt River	VaShly US	10.41	200yr	210000.00	1247.67	1285.71	1264.33	1286.55	0.000284	7.50	29332.23	4761.09	0.23
Salt River	VaShly US	10.46	200yr	210000.00	1240.00	1285.76	1265.21	1286.64	0.000328	7.87	28960.75	4819.23	0.24
Salt River	VaShly US	10.52	200yr	210000.00	1234.97	1285.81	1259.26	1286.76	0.000277	7.90	27454.66	4297.16	0.23
Salt River	VaShly US	10.56	200yr	210000.00	1244.00	1285.55	1265.21	1287.00	0.000487	9.67	21833.19	3275.63	0.29
Salt River	VaShly US	10.61	200yr	210000.00	1244.20	1285.70	1265.75	1287.12	0.000485	9.56	22196.87	3253.12	0.29
Salt River	VaShly US	10.67	200yr	210000.00	1248.00	1285.96	1267.08	1287.29	0.000494	9.28	22724.01	2666.62	0.29

HEC-RAS Plan: extended Profile: 200yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	200yr	210000.00	1248.00	1286.42	1263.85	1287.45	0.000334	8.14	25955.37	2325.41	0.24
Salt River	VaShly US	10.78	200yr	210000.00	1248.00	1286.61	1263.46	1287.53	0.000318	7.71	27303.70	2195.61	0.24
Salt River	VaShly US	10.81	200yr	210000.00	1248.00	1286.70	1263.48	1287.59	0.000302	7.60	27752.96	2002.93	0.23
Salt River	VaShly US	10.86	200yr	210000.00	1248.00	1286.73	1265.95	1287.70	0.000352	7.89	26611.39	1860.27	0.25
Salt River	VaShly US	10.90	200yr	210000.00	1250.83	1286.89	1266.52	1287.79	0.000344	7.61	27641.68	1862.79	0.24
Salt River	VaShly US	10.95	200yr	210000.00	1252.00	1287.03	1266.77	1287.88	0.000330	7.39	28469.47	1900.34	0.24
Salt River	VaShly US	11.00	200yr	210000.00	1254.01	1286.88	1269.59	1288.08	0.000488	8.80	23879.14	1796.38	0.29
Salt River	VaShly US	11.05	200yr	210000.00	1256.00	1286.96	1272.11	1288.29	0.000616	9.28	22667.40	1912.65	0.32
Salt River	VaShly US	11.10	200yr	210000.00	1256.00	1286.92	1274.59	1288.54	0.000838	10.21	20605.25	1868.94	0.37
Salt River	VaShly US	11.14	200yr	210000.00	1256.00	1287.17	1277.78	1289.06	0.003345	11.04	19033.88	1820.08	0.42
Salt River	VaShly US	11.17	200yr	210000.00	1256.00	1287.58	1277.97	1289.37	0.001102	10.88	19856.12	1762.03	0.41
Salt River	VaShly US	11.25	200yr	210000.00	1256.00	1288.20	1278.97	1289.84	0.001068	10.51	21074.74	1596.90	0.40
Salt River	VaShly US	11.32	200yr	210000.00	1260.00	1288.89	1281.69	1290.31	0.001130	9.86	22763.27	1484.61	0.41
Salt River	VaShly US	11.41	200yr	210000.00	1260.00	1289.41	1282.32	1290.90	0.001375	9.79	21456.82	1376.47	0.44
Salt River	VaShly US	11.49	200yr	210000.00	1263.04	1289.96	1282.00	1291.45	0.001191	9.79	21457.23	1233.48	0.41
Salt River	VaShly US	11.62	200yr	210000.00	1264.00	1291.08	1281.05	1292.12	0.000771	8.16	25727.83	1521.70	0.34
Salt River	VaShly US	11.78	200yr	210000.00	1268.00	1291.60	1283.38	1293.04	0.001115	9.65	21766.86	1463.30	0.40
Salt River	VaShly US	11.88	200yr	210000.00	1267.94	1292.01	1285.99	1294.00	0.001863	11.32	18559.00	1579.27	0.51
Salt River	VaShly US	11.99	200yr	210000.00	1268.00	1293.28	1288.29	1295.12	0.002049	10.88	19407.74	1543.61	0.52
Salt River	VaShly US	12.06	200yr	210000.00	1268.00	1294.26	1288.26	1295.84	0.001635	10.08	20846.93	1476.84	0.47
Salt River	VaShly US	12.10	200yr	210000.00	1272.00	1294.53	1288.98	1296.36	0.001849	10.86	19333.00	1327.82	0.50
Salt River	VaShly US	12.22	200yr	210000.00	1272.00	1295.39	1289.57	1297.71	0.002004	12.22	17186.56	1046.83	0.53
Salt River	VaShly US	12.33	200yr	210000.00	1272.00	1296.37	1289.40	1298.91	0.001872	12.79	16446.28	1021.70	0.52
Salt River	VaShly US	12.44	200yr	210000.00	1276.00	1297.45	1292.22	1300.20	0.002488	13.31	15799.44	1029.72	0.59
Salt River	VaShly US	12.55	200yr	210000.00	1276.00	1299.33	1291.91	1301.43	0.001662	11.64	18040.65	1029.40	0.49
Salt River	VaShly US	12.67	200yr	210000.00	1276.00	1300.46	1292.62	1302.41	0.001475	11.21	18732.67	1286.44	0.46
Salt River	VaShly US	12.77	200yr	210000.00	1276.00	1301.18	1294.64	1303.31	0.001803	11.74	17895.04	1326.70	0.51
Salt River	VaShly US	12.87	200yr	210000.00	1276.00	1302.56	1296.15	1304.28	0.001709	10.53	19937.42	1351.95	0.48
Salt River	VaShly US	12.97	200yr	210000.00	1280.00	1303.52	1297.16	1305.24	0.001652	10.54	19930.91	1314.27	0.48
Salt River	VaShly US	13.07	200yr	210000.00	1276.00	1304.51	1297.41	1306.00	0.001327	9.79	21456.29	1340.39	0.43
Salt River	VaShly US	13.19	200yr	210000.00	1284.00	1305.27	1299.10	1307.03	0.001700	10.64	19739.85	1314.82	0.48
Salt River	VaShly US	13.31	200yr	210000.00	1281.30	1306.30	1299.02	1308.14	0.001599	10.87	19313.81	1188.05	0.48
Salt River	VaShly US	13.44	200yr	210000.00	1284.00	1307.29	1299.59	1309.11	0.001395	10.85	19359.87	1077.04	0.45
Salt River	VaShly US	13.55	200yr	210000.00	1288.00	1308.21	1300.22	1309.93	0.001318	10.54	19930.00	1109.11	0.44
Salt River	VaShly US	13.64	200yr	210000.00	1288.00	1308.81	1301.91	1310.66	0.001533	10.90	19257.24	1135.08	0.47
Gilbert Mining P	Gilbert Mining P	0.04	200yr	27558.19	1190.68	1243.62	1198.69	1243.66	0.000007	1.53	18039.59	1655.82	0.04
Gilbert Mining P	Gilbert Mining P	0.08	200yr	27558.19	1180.00	1243.63	1192.46	1243.66	0.000006	1.48	18695.12	1727.26	0.04
Gilbert Mining P	Gilbert Mining P	0.11	200yr	27558.19	1182.38	1243.64	1189.19	1243.66	0.000004	1.11	25137.06	1891.94	0.03
Gilbert Mining P	Gilbert Mining P	0.15	200yr	27558.19	1180.00	1243.65	1188.44	1243.67	0.000004	1.09	26352.53	1974.55	0.03
Gilbert Mining P	Gilbert Mining P	0.19	200yr	27558.19	1180.00	1243.65	1194.58	1243.67	0.000008	1.35	21380.16	1205.52	0.04
Gilbert Mining P	Gilbert Mining P	0.22	200yr	27558.19	1188.00	1243.65	1197.00	1243.67	0.000007	1.36	20414.23	1154.00	0.04
Gilbert Mining P	Gilbert Mining P	0.25	200yr	27558.19	1182.77	1243.65	1191.34	1243.67	0.000007	1.35	20488.59	1097.42	0.04
Gilbert Mining P	Gilbert Mining P	0.29	200yr	27558.19	1183.78	1243.65	1193.91	1243.69	0.000011	1.70	17330.23	947.87	0.04
Gilbert Mining P	Gilbert Mining P	0.33	200yr	27558.19	1182.37	1243.68	1190.24	1243.69	0.000002	0.84	33519.70	969.47	0.02
Gilbert Mining P	Gilbert Mining P	0.37	200yr	27558.19	1184.00	1243.70	1193.76	1243.70	0.000002	0.74	38441.63	1619.32	0.02
Gilbert Mining P	Gilbert Mining P	0.43	200yr	27558.19	1180.00	1243.70	1191.40	1243.71	0.000003	0.97	28545.32	2284.93	0.02
Gilbert Mining P	Gilbert Mining P	0.48	200yr	27558.19	1172.00	1243.70	1182.97	1243.71	0.000002	0.82	35054.96	2451.73	0.02
Gilbert Mining P	Gilbert Mining P	0.53	200yr	27558.19	1191.79	1243.71	1200.66	1243.72	0.000002	0.77	37343.55	2607.78	0.02
Gilbert Mining P	Gilbert Mining P	0.55	200yr	27558.19	1196.00	1243.71	1203.81	1243.73	0.000004	1.00	28287.86	2332.82	0.03
Gilbert Mining P	Gilbert Mining P	0.60	200yr	27558.19	1200.85	1243.70	1214.47	1243.75	0.000021	1.77	16798.85	2680.03	0.06
Gilbert Mining P	Gilbert Mining P	0.66	200yr	27558.19	1192.00	1243.74	1199.01	1243.75	0.000003	0.89	30907.79	2853.62	0.02
Gilbert Mining P	Gilbert Mining P	0.70	200yr	27558.19	1196.00	1243.74	1202.00	1243.76	0.000007	1.14	24089.68	2779.63	0.03
Gilbert Mining P	Gilbert Mining P	0.74	200yr	27558.19	1196.00	1243.74	1202.32	1243.76	0.000005	1.02	27103.39	2461.99	0.03
Gilbert Mining P	Gilbert Mining P	0.77	200yr	27558.19	1196.00	1243.75	1202.34	1243.76	0.000002	0.70	39196.92	2463.23	0.02
Gilbert Mining P	Gilbert Mining P	0.83	200yr	27558.19	1199.07	1243.76	1203.75	1243.77	0.000002	0.66	41774.73	2587.60	0.02
Gilbert Mining P	Gilbert Mining P	0.88	200yr	27558.19	1198.45	1243.77	1202.88	1243.78	0.000002	0.65	42379.30	2680.76	0.02
Gilbert Mining P	Gilbert Mining P	0.91	200yr	27558.19	1197.53	1243.77	1205.79	1243.78	0.000003	0.81	33939.96	2780.22	0.02
Gilbert Mining P	Gilbert Mining P	0.95	200yr	27558.19	1202.08	1243.77	1207.55	1243.79	0.000004	0.98	28166.40	3265.66	0.03
Gilbert Mining P	Gilbert Mining P	0.97	200yr	27558.19	1204.00	1243.77	1209.38	1243.79	0.000005	0.98	28450.20	3555.57	0.03
Gilbert Mining P	Gilbert Mining P	0.99	200yr	27558.19	1204.00	1243.77	1211.13	1243.79	0.000006	1.10	25007.12	3425.81	0.03
Gilbert Mining P	Gilbert Mining P	1.02	200yr	27558.19	1207.21	1243.78	1212.07	1243.79	0.000005	0.98	27858.79	3456.43	0.03
Gilbert Mining P	Gilbert Mining P	1.05	200yr	27558.19	1208.00	1243.78	1213.94	1243.80	0.000007	1.21	23073.79	3280.66	0.04
Gilbert Mining P	Gilbert Mining P	1.08	200yr	27558.19	1196.00	1243.78	1213.91	1243.81	0.000014	1.52	18420.25	2205.81	0.05
Gilbert Mining P	Gilbert Mining P	1.11	200yr	27558.19	1196.00	1243.76	1216.38	1243.83	0.000032	2.21	12697.56	1537.22	0.07
Gilbert Mining P	Gilbert Mining P	1.14	200yr	27558.19	1212.00	1243.69	1223.37	1243.88	0.000120	3.53	7809.59	1359.80	0.13
Gilbert Mining P	Gilbert Mining P	1.17	200yr	27558.19	1243.53	1250.59	1250.59	1253.76	0.009646	14.30	1927.50	3438.93	1.00
Gilbert Mining P	Gilbert Mining P	1.19	200yr	27558.19	1236.00	1253.41	1244.28	1254.17	0.000669	7.01	3930.42	4884.15	0.31
Gilbert Mining P	Gilbert Mining P	1.21	200yr	27558.19	1244.00	1252.74	1251.16	1254.84	0.004625	11.64	2369.19	4451.95	0.72

APPENDIX 2h

500-YEAR STANDARD TABLE 1

HEC-RAS Plan: extended Profile: 500yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	500yr	246000.00	1148.00	1181.20	1163.74	1182.19	0.000425	7.97	30848.05	1100.71	0.27
Salt River	VaShly DS	0.11	500yr	246000.00	1148.00	1181.48	1165.16	1182.45	0.000435	7.88	31209.03	1155.75	0.27
Salt River	VaShly DS	0.23	500yr	246000.00	1150.96	1181.84	1164.85	1182.72	0.000391	7.54	32624.17	1191.29	0.25
Salt River	VaShly DS	0.36	500yr	246000.00	1151.05	1182.10	1165.54	1182.99	0.000400	7.58	32435.76	1197.90	0.26
Salt River	VaShly DS	0.51	500yr	246000.00	1152.00	1182.44	1165.67	1183.30	0.000384	7.44	33050.34	1219.40	0.25
Salt River	VaShly DS	0.65	500yr	246000.00	1151.50	1182.77	1165.28	1183.58	0.000349	7.23	34010.33	1221.17	0.24
Salt River	VaShly DS	0.78	500yr	246000.00	1152.00	1182.97	1167.47	1183.87	0.000434	7.60	32387.86	1263.69	0.26
Salt River	VaShly DS	0.89	500yr	246000.00	1156.00	1183.19	1169.41	1184.19	0.000531	8.04	30610.17	1284.09	0.29
Salt River	VaShly DS	1.00	500yr	246000.00	1152.00	1183.62	1167.78	1184.47	0.000401	7.37	33388.87	1294.65	0.26
Salt River	VaShly DS	1.12	500yr	246000.00	1152.00	1183.87	1168.38	1184.71	0.000405	7.35	33486.14	1311.54	0.26
Salt River	VaShly DS	1.22	500yr	246000.00	1156.00	1184.10	1169.25	1184.94	0.000427	7.38	33336.91	1351.79	0.26
Salt River	VaShly DS	1.30	500yr	246000.00	1152.00	1184.25	1170.13	1185.14	0.000467	7.56	32549.44	1358.98	0.27
Salt River	VaShly DS	1.39	500yr	246000.00	1147.32	1184.64	1166.56	1185.33	0.000301	6.70	36716.85	1314.93	0.22
Salt River	VaShly DS	1.52	500yr	246000.00	1144.00	1184.88	1162.20	1185.53	0.000260	6.46	38079.02	1276.91	0.21
Salt River	VaShly DS	1.65	500yr	246000.00	1154.51	1185.12	1169.89	1185.74	0.000329	6.30	39055.81	1655.88	0.23
Salt River	VaShly DS	1.76	500yr	246000.00	1152.50	1185.25	1169.51	1185.95	0.000353	6.78	37423.88	1961.47	0.24
Salt River	VaShly DS	1.80	500yr	246000.00	1160.00	1185.04	1173.44	1186.20	0.000719	8.63	28510.53	1828.08	0.33
Salt River	VaShly DS	1.83	500yr	246000.00	1148.00	1184.97	1176.03	1186.43	0.000984	9.69	25378.93	1772.48	0.38
Salt River	VaShly DS	1.86	500yr	246000.00	1148.00	1185.22	1174.11	1186.60	0.000828	9.41	26168.71	1834.70	0.36
Salt River	VaShly DS	1.89	500yr	246000.00	1152.71	1185.30	1174.61	1186.74	0.000870	9.63	25538.54	1951.06	0.37
Salt River	VaShly DS	1.95	500yr	246000.00	1157.05	1185.45	1174.30	1187.13	0.001058	10.41	23622.32	2203.79	0.40
Salt River	VaShly DS	2.02	500yr	246000.00	1158.36	1185.49	1174.74	1187.68	0.001134	11.88	20698.90	2414.71	0.43
Salt River	VaShly DS	2.04	500yr	246000.00	1156.31	1185.64	1176.31	1187.83	0.001305	11.87	20727.95	2541.62	0.45
Salt River	VaShly DS	2.07	500yr	246000.00	1156.00	1185.64	1178.05	1188.18	0.001676	12.80	19224.54	2563.75	0.50
Salt River	VaShly DS	2.10	500yr	246000.00	1158.27	1185.93	1178.92	1188.44	0.001769	12.72	19336.05	2619.63	0.51
Salt River	VaShly DS	2.12	500yr	246000.00	1176.00	1192.98	1192.98	1199.44	0.007633	20.40	12060.56	2681.56	1.00
Salt River	VaShly DS	2.13	500yr	246000.00	1176.00	1196.02	1192.65	1200.03	0.003586	16.07	15307.84	2773.45	0.71
Salt River	VaShly DS	2.21	500yr	246000.00	1176.00	1197.51	1194.14	1201.51	0.003571	16.05	15323.49	2647.90	0.71
Salt River	VaShly DS	2.29	500yr	246000.00	1170.86	1200.44	1192.26	1202.91	0.001587	12.61	19500.82	2121.96	0.49
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	500yr	246000.00	1180.00	1203.02	1198.32	1206.43	0.002807	14.82	16603.29	1703.10	0.63
Salt River	VaShly DS	2.38	500yr	246000.00	1175.59	1204.69	1197.69	1207.19	0.001853	12.70	19375.55	2613.45	0.52
Salt River	VaShly DS	2.40	500yr	246000.00	1176.00	1204.97	1197.56	1207.45	0.001674	12.66	19766.26	2230.54	0.50
Salt River	VaShly DS	2.41	500yr	246000.00	1176.00	1205.03	1197.58	1207.53	0.001679	12.71	19578.37	1898.81	0.50
Salt River	VaShly DS	2.42	500yr	246000.00	1176.00	1205.07	1197.76	1207.61	0.001740	12.79	19295.70	1909.82	0.51
Salt River	VaShly DS	2.47	500yr	246000.00	1178.61	1205.31	1199.47	1208.25	0.002235	13.75	17893.37	1950.78	0.57
Salt River	VaShly DS	2.53	500yr	246000.00	1180.00	1206.41	1199.75	1208.92	0.001837	12.73	19322.61	2605.05	0.52
Salt River	VaShly DS	2.59	500yr	246000.00	1184.00	1206.88	1200.72	1209.68	0.002187	13.42	18337.00	2612.00	0.56
Salt River	VaShly DS	2.65	500yr	246000.00	1187.99	1207.25	1202.00	1210.51	0.002522	14.51	16992.52	1727.75	0.61
Salt River	VaShly DS	2.71	500yr	246000.00	1188.00	1208.99	1202.09	1211.33	0.001700	12.31	20141.14	2145.40	0.50
Salt River	VaShly DS	2.78	500yr	246000.00	1188.00	1209.80	1202.44	1211.88	0.001530	11.57	21297.45	2538.53	0.47
Salt River	VaShly DS	2.87	500yr	246000.00	1175.62	1210.33	1201.93	1212.80	0.001660	12.62	19498.72	2699.31	0.50
Salt River	VaShly DS	2.98	500yr	246000.00	1180.00	1211.82	1200.51	1213.62	0.001006	10.82	23268.47	3772.55	0.40
Salt River	VaShly DS	3.10	500yr	246000.00	1174.02	1212.22	1203.44	1214.50	0.001443	12.10	20334.32	4208.20	0.47
Salt River	VaShly DS	3.23	500yr	246000.00	1184.27	1212.99	1206.37	1215.93	0.002056	13.75	17921.30	5612.96	0.55
Salt River	VaShly DS	3.35	500yr	246000.00	1188.00	1214.86	1205.60	1217.02	0.001363	11.79	20863.08	5694.32	0.46
Salt River	VaShly DS	3.46	500yr	246000.00	1184.00	1216.81	1204.50	1217.84	0.000588	8.20	30370.44	6106.94	0.30
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	500yr	246000.00	1186.84	1217.02	1206.07	1218.20	0.000728	8.73	28210.09	6620.18	0.33
Salt River	VaShly DS	3.64	500yr	246000.00	1192.00	1217.57	1209.97	1219.16	0.001285	10.12	24296.48	5513.05	0.43
Salt River	VaShly DS	3.76	500yr	246000.00	1188.00	1218.47	1208.17	1219.84	0.000861	9.39	26931.88	5336.43	0.36
Salt River	VaShly DS	3.89	500yr	246000.00	1174.66	1219.70	1203.01	1220.12	0.000166	5.30	47337.66	5417.07	0.17
Salt River	VaShly DS	4.04	500yr	246000.00	1184.00	1219.82	1203.51	1220.31	0.000268	5.61	44023.00	5019.81	0.21
Salt River	VaShly DS	4.09	500yr	246000.00	1188.00	1219.75	1206.89	1220.48	0.000432	6.80	36034.17	4497.28	0.26
Salt River	VaShly DS	4.15	500yr	246000.00	1184.00	1219.67	1207.89	1220.77	0.000644	8.42	29249.36	4406.57	0.32
Salt River	VaShly DS	4.22	500yr	246000.00	1178.19	1220.08	1206.35	1220.97	0.000469	7.48	32654.04	4730.48	0.27
Salt River	VaShly DS	4.27	500yr	246000.00	1192.00	1220.02	1208.85	1221.23	0.000743	8.95	28205.22	3559.97	0.34
Salt River	VaShly DS	4.31	500yr	246000.00	1199.24	1219.82	1211.99	1221.65	0.001400	10.78	22620.16	3346.62	0.45
Salt River	VaShly DS	4.47	500yr	246000.00	1200.00	1221.00	1214.49	1222.98	0.001704	11.57	32727.00	2883.28	0.49
Salt River	VaShly DS	4.59	500yr	246000.00	1192.00	1222.48	1213.03	1223.85	0.000931	9.61	33109.44	2567.11	0.38
Salt River	VaShly DS	4.74	500yr	246000.00	1188.00	1223.24	1211.08	1224.58	0.000875	9.52	32327.33	2428.91	0.36
Salt River	VaShly DS	4.88	500yr	246000.00	1200.00	1223.34	1219.74	1226.42	0.002701	14.45	22520.36	2295.08	0.66
Salt River	VaShly DS	5.03	500yr	246000.00	1204.00	1225.46	1219.95	1228.34	0.002223	13.95	25083.40	1983.12	0.57
Salt River	VaShly DS	5.15	500yr	246000.00	1204.00	1226.92	1221.23	1229.75	0.002140	13.84	24759.33	1688.20	0.56
Salt River	VaShly DS	5.26	500yr	246000.00	1179.01	1228.80	1217.00	1230.61	0.000944	11.05	29767.39	1499.42	0.39
Salt River	VaShly DS	5.40	500yr	246000.00	1196.00	1229.17	1221.46	1231.85	0.001756	13.39	19563.89	1217.67	0.51
Salt River	VaShly DS	5.47	500yr	246000.00	1208.00	1229.66	1224.90	1232.87	0.002592	14.45	17349.73	1078.88	0.61
Salt River	VaShly DS	5.53	500yr	246000.00	1192.00	1231.67	1219.77	1233.41	0.001001	10.59	23234.86	1091.77	0.39
Salt River	VaShly DS	5.56	500yr	246000.00	1208.00	1231.04	1225.29	1234.14	0.002415	14.14	17398.35	1025.60	0.59
Salt River	VaShly DS	5.60	500yr	246000.00	1194.35	1233.38	1217.51	1234.48	0.000416	8.44	29146.15	1149.98	0.27
Salt River	VaShly DS	5.65	500yr	246000.00	1198.67	1233.18	1219.80	1234.82	0.000829	10.27	23949.30	1013.98	0.36
Salt River	VaShly DS	5.69	500yr	246000.00	1206.01	1232.71	1224.18	1235.44	0.001902	13.24	18578.12	987.33	0.53
Salt River	VaShly DS	5.73	500yr	246000.00	1208.00	1232.50	1226.58	1236.05	0.002491	15.13	16261.01	839.34	0.61
Salt River	VaShly DS	5.76	500yr	246000.00	1204.00	1234.06	1225.22	1236.54	0.001465	12.62	19490.41	1190.73	0.47
Salt River	VaShly DS	5.80	500yr	246000.00	1204.00	1234.77	1223.98	1236.80	0.001106	11.46	21478.76	1340.30	0.42
Salt River	VaShly DS	5.82	500yr	246000.00	1204.00	1234.96	1224.15	1236.93	0.001086	11.27	21880.76	1402.12	0.41
Salt River	VaShly DS	5.84	500yr	246000.00	1204.00	1235.01	1225.07	1237.06	0.001201	11.50	21401.88	1418.94	0.43
Salt River	VaShly DS	5.85	500yr	246000.00	1208.00	1235.28	1224.86	1237.16	0.001102	10.99	22393.48	1498.54	0.41
Salt River	VaShly DS	5.86	500yr	246000.00	1205.11	1235.58	1226.70	1237.55	0.011247	11.27	21830.28	1675.68	0.45
Salt River	VaShly DS	5.87	500yr	246000.00	1206.22	1236.29	1227.03	1237.70	0.000995	9.53	25819.50	1974.92	0.38
Salt River	VaShly DS	5.88	500yr	246000.00	1209.96	1236.64	1228.01	1237.78	0.000833	8.68	28865.47	2350.25	0.35
Salt River	VaShly DS	5.91	500yr	246000.00	1203.31	1237.10	1225.61	1237.90	0.000476	7.25	34380.24	2451.71	0.27
Salt River	VaShly DS	5.93	500yr	246000.00	1198.79	1237.16	1220.43	1237.96	0.000409	7.19	34535.66	2375.55	0.26
Salt River	VaShly DS	5.95	500yr	246000.00	1196.00	1237.16	1220.40	1238.12	0.002328	7.86	31287.46	2007.61	0.28
Salt River	VaShly DS	5.97	500yr	246000.00	1198.59	1237.13	1222.99	1238.34	0.000687	8.84	27819.92	2077.75	0.33
Salt River	VaShly DS	5.99	500yr	246000.00	1200.00	1237.17	1224.47	1238.42	0.000703	8.95	27499.57	2115.94	0.33
Salt River	VaShly DS	6.01	500yr	246000.00	1204.00	1238.49	1227.91	1240.13	0.031142	10.29	23895.57	2300.76	0.39

HEC-RAS Plan: extended Profile: 500yr (Continued)

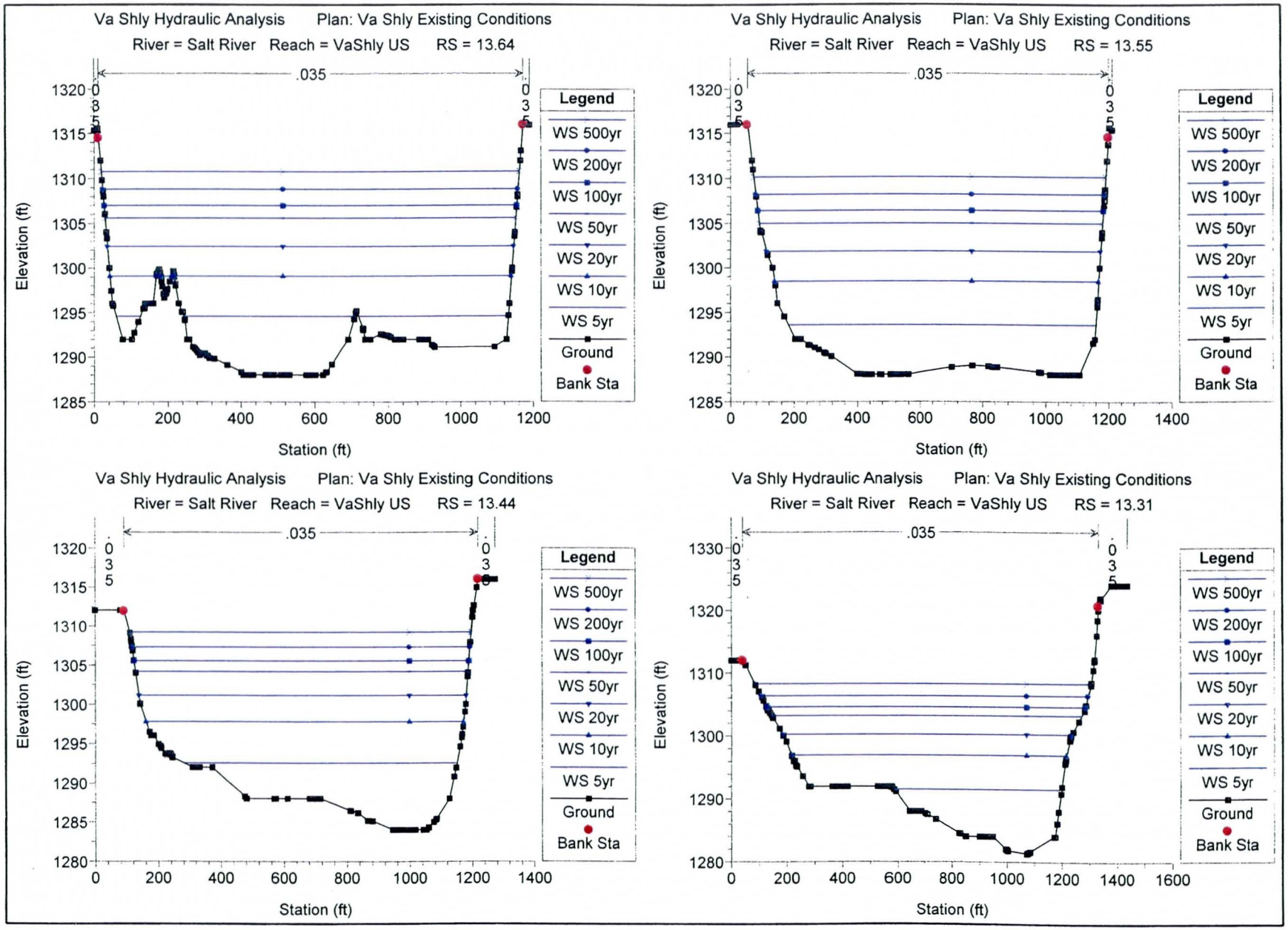
River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	500yr	246000.00	1204.00	1239.10	1227.01	1240.41	0.000671	9.19	26762.05	2411.95	0.33
Salt River	VaShly DS	6.09	500yr	246000.00	1200.00	1239.65	1223.61	1240.59	0.000457	7.72	31774.32	2631.42	0.26
Salt River	VaShly DS	6.14	500yr	246000.00	1196.00	1240.02	1220.62	1240.71	0.000339	6.72	36841.25	2778.39	0.22
Salt River	VaShly DS	6.18	500yr	246000.00	1192.00	1239.99	1227.06	1240.84	0.000417	7.52	33210.93	2934.31	0.26
Salt River	VaShly DS	6.22	500yr	246000.00	1203.46	1240.12	1230.27	1240.94	0.000517	7.38	34292.37	3033.57	0.26
Salt River	VaShly DS	6.27	500yr	246000.00	1194.49	1240.20	1224.76	1241.11	0.000657	7.90	32800.34	3232.19	0.26
Salt River	VaShly DS	6.32	500yr	246000.00	1192.00	1239.99	1222.58	1241.44	0.000705	10.04	26479.61	2915.55	0.31
Salt River	VaShly DS	6.35	500yr	246000.00	1194.53	1240.02	1223.84	1241.62	0.000904	10.58	25816.28	3305.85	0.33
Salt River	VaShly DS	6.38	500yr	246000.00	1195.40	1240.31	1224.44	1241.82	0.001297	10.26	26156.62	3324.21	0.33
Salt River	VaShly DS	6.40	500yr	246000.00	1219.48	1239.17	1239.17	1245.04	0.005640	20.34	13700.17	2991.40	0.89
Salt River	VaShly at Pit	6.45	500yr	211659.00	1220.01	1242.77	1237.85	1245.37	0.002178	13.65	20239.68	2138.97	0.56
Salt River	VaShly at Pit	6.50	500yr	211659.00	1223.66	1243.14	1240.00	1246.16	0.002958	14.85	19215.72	1951.39	0.64
Salt River	VaShly at Pit	6.53	500yr	211659.00	1224.00	1243.69	1240.64	1246.69	0.002953	14.91	18605.19	1750.35	0.65
Salt River	VaShly at Pit	6.56	500yr	211659.00	1224.00	1243.99	1241.06	1247.20	0.003178	15.40	18218.65	1631.51	0.67
Salt River	VaShly at Pit	6.62	500yr	211659.00	1225.32	1244.33	1243.38	1248.99	0.005052	18.40	16269.12	1755.48	0.83
Salt River	VaShly at Pit	6.69	500yr	211659.00	1224.24	1247.31	1245.16	1250.72	0.003927	15.80	20726.46	1988.33	0.73
Salt River	VaShly at Pit	6.75	500yr	211659.00	1228.00	1249.01	1245.44	1251.76	0.002635	14.20	23524.02	5116.32	0.61
Salt River	VaShly at Pit	6.80	500yr	211659.00	1228.00	1250.46	1244.90	1252.40	0.001679	12.16	26623.43	7237.75	0.50
Salt River	VaShly at Pit	6.85	500yr	211659.00	1231.97	1250.94	1245.57	1252.80	0.001831	12.04	24898.70	7834.49	0.51
Salt River	VaShly at Pit	6.91	500yr	211659.00	1230.46	1252.25	1244.60	1253.23	0.000837	8.61	27894.86	8238.88	0.35
Salt River	VaShly at Pit	6.96	500yr	211659.00	1232.00	1252.33	1245.90	1253.70	0.001545	10.44	24256.51	8046.67	0.46
Salt River	VaShly at Pit	6.99	500yr	211659.00	1232.00	1252.74	1245.70	1253.91	0.001137	8.81	24411.58	8224.33	0.40
Salt River	VaShly at Pit	7.01	500yr	211659.00	1230.78	1252.83	1246.09	1254.05	0.001207	9.05	23953.81	8166.46	0.41
Salt River	VaShly at Pit	7.03	500yr	211659.00	1232.00	1252.92	1246.27	1254.13	0.001219	9.12	23997.03	8091.13	0.41
Salt River	VaShly at Pit	7.04	500yr	211659.00	1232.00	1253.01	1246.57	1254.23	0.001456	8.83	23818.49	8119.37	0.40
Salt River	VaShly at Pit	7.06	500yr	211659.00	1232.00	1253.14	1246.62	1254.33	0.001240	9.24	24362.51	8037.30	0.41
Salt River	VaShly at Pit	7.07	500yr	211659.00	1232.00	1253.37	1246.61	1254.43	0.001112	8.73	25813.85	7920.92	0.39
Salt River	VaShly at Pit	7.10	500yr	211659.00	1232.00	1253.42	1246.95	1254.68	0.001235	9.38	23532.96	7724.53	0.41
Salt River	VaShly at Pit	7.17	500yr	211659.00	1232.14	1253.81	1247.07	1255.18	0.001257	9.55	22617.38	7440.92	0.42
Salt River	VaShly at Pit	7.24	500yr	211659.00	1235.58	1254.28	1247.36	1255.68	0.001262	9.59	22276.65	7316.47	0.42
Salt River	VaShly at Pit	7.28	500yr	211659.00	1236.00	1254.37	1249.53	1256.44	0.002115	11.57	18443.10	7134.96	0.54
Salt River	VaShly US	7.32	500yr	246000.00	1239.34	1254.97	1249.59	1256.58	0.001889	10.93	28535.58	12057.90	0.51
Salt River	VaShly US	7.36	500yr	246000.00	1238.07	1255.27	1250.25	1257.04	0.001910	11.30	27965.58	11584.89	0.51
Salt River	VaShly US	7.40	500yr	246000.00	1239.06	1255.46	1250.78	1257.67	0.002240	12.28	22761.71	11426.74	0.56
Salt River	VaShly US	7.44	500yr	246000.00	1238.53	1255.89	1250.44	1258.11	0.002003	11.96	20668.55	11296.73	0.53
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	500yr	246000.00	1239.83	1257.11	1251.27	1259.28	0.001874	11.81	20845.26	12164.65	0.51
Salt River	VaShly US	7.55	500yr	246000.00	1239.60	1258.07	1251.37	1260.04	0.001590	11.26	21941.88	12349.64	0.48
Salt River	VaShly US	7.63	500yr	250000.00	1240.00	1258.30	1254.55	1261.18	0.002587	13.91	18956.02	11966.26	0.61
Salt River	VaShly US	7.71	500yr	250000.00	1243.41	1259.22	1257.62	1263.05	0.004110	16.34	18635.54	11613.08	0.75
Salt River	VaShly US	7.83	500yr	250000.00	1244.00	1262.43	1258.49	1265.00	0.002329	13.59	25527.47	11678.01	0.58
Salt River	VaShly US	7.91	500yr	250000.00	1244.00	1262.99	1260.54	1266.57	0.003437	16.30	25996.52	10726.83	0.70
Salt River	VaShly US	8.01	500yr	250000.00	1240.00	1266.38	1257.81	1267.52	0.000857	9.47	40639.68	11341.60	0.36
Salt River	VaShly US	8.10	500yr	250000.00	1212.00	1266.78	1248.85	1267.78	0.000406	9.09	48610.70	10748.62	0.27
Salt River	VaShly US	8.20	500yr	250000.00	1202.29	1267.59	1222.68	1267.91	0.000070	4.97	67515.95	10169.42	0.12
Salt River	VaShly US	8.29	500yr	250000.00	1204.00	1267.69	1223.29	1267.94	0.000057	4.44	72935.98	9547.96	0.11
Salt River	VaShly US	8.36	500yr	250000.00	1212.00	1267.68	1230.81	1267.98	0.000081	4.82	68734.84	9295.15	0.12
Salt River	VaShly US	8.44	500yr	250000.00	1192.00	1267.75	1226.72	1268.02	0.000069	4.57	74318.20	9237.67	0.12
Salt River	VaShly US	8.52	500yr	250000.00	1208.00	1267.76	1232.75	1268.06	0.000075	5.05	75511.21	7933.41	0.12
Salt River	VaShly US	8.57	500yr	250000.00	1198.17	1267.75	1231.32	1268.10	0.000095	5.55	65479.48	7699.98	0.13
Salt River	VaShly US	8.60	500yr	250000.00	1196.00	1267.69	1233.78	1268.15	0.000145	6.43	59951.15	7553.48	0.16
Salt River	VaShly US	8.63	500yr	250000.00	1216.00	1267.26	1254.44	1268.41	0.000623	9.60	45680.69	6507.65	0.32
Salt River	VaShly US	8.68	500yr	250000.00	1244.00	1264.95	1264.93	1271.23	0.008350	22.60	30920.89	4204.44	1.05
Salt River	VaShly US	8.74	500yr	250000.00	1220.00	1270.48	1255.07	1272.06	0.000641	11.28	46272.58	7012.87	0.33
Salt River	VaShly US	8.77	500yr	250000.00	1206.87	1271.48	1240.65	1272.20	0.000246	7.65	56377.35	7780.19	0.21
Salt River	VaShly US	8.81	500yr	250000.00	1204.00	1271.44	1244.98	1272.31	0.000342	8.35	53868.17	6680.39	0.24
Salt River	VaShly US	8.85	500yr	250000.00	1212.00	1271.16	1259.64	1272.60	0.000791	10.81	46250.52	5907.56	0.36
Salt River	VaShly US	8.88	500yr	250000.00	1233.08	1270.61	1263.56	1273.16	0.001897	14.38	42597.12	5084.03	0.54
Salt River	VaShly US	8.92	500yr	250000.00	1239.59	1270.25	1265.44	1273.94	0.002874	17.32	41077.12	4864.69	0.66
Salt River	VaShly US	8.98	500yr	250000.00	1244.00	1270.04	1268.64	1275.75	0.004858	21.53	31271.12	4602.04	0.85
Salt River	VaShly US	9.04	500yr	250000.00	1248.00	1272.11	1272.11	1279.66	0.006218	24.77	29871.45	5349.93	0.97
Salt River	VaShly US	9.13	500yr	250000.00	1248.00	1278.51	1270.62	1281.32	0.001512	15.11	42068.85	8410.17	0.50
Salt River	VaShly US	9.20	500yr	250000.00	1248.00	1280.19	1269.13	1281.86	0.000879	11.61	43007.97	8787.87	0.38
Salt River	VaShly US	9.26	500yr	250000.00	1247.57	1280.28	1270.35	1282.27	0.001030	12.68	43571.47	8774.15	0.42
Salt River	VaShly US	9.33	500yr	250000.00	1244.00	1280.18	1273.22	1282.96	0.001510	15.30	44481.95	8778.12	0.50
Salt River	VaShly US	9.39	500yr	250000.00	1236.00	1279.45	1275.79	1284.15	0.002874	20.49	42304.21	8373.55	0.68
Salt River	VaShly US	9.44	500yr	250000.00	1247.05	1282.76	1270.66	1284.78	0.000923	12.85	56483.17	9396.05	0.40
Salt River	VaShly US	9.49	500yr	250000.00	1248.00	1284.08	1267.81	1285.01	0.000421	8.71	66674.12	9879.20	0.27
Salt River	VaShly US	9.55	500yr	250000.00	1251.37	1284.68	1266.87	1285.16	0.000228	6.35	76437.32	10421.15	0.20
Salt River	VaShly US	9.59	500yr	250000.00	1244.40	1284.86	1266.77	1285.21	0.000170	5.64	82547.45	10575.26	0.17
Salt River	VaShly US	9.61	500yr	250000.00	1248.20	1284.86	1267.80	1285.24	0.000195	5.92	76549.84	10574.15	0.19
Salt River	VaShly US	9.64	500yr	250000.00	1252.00	1284.87	1268.96	1285.27	0.000217	6.00	70170.52	10550.82	0.19
Salt River	VaShly US	9.67	500yr	250000.00	1250.78	1284.86	1269.59	1285.32	0.000247	6.49	63350.70	10369.96	0.21
Salt River	VaShly US	9.73	500yr	250000.00	1252.00	1284.90	1271.10	1285.42	0.000278	6.43	44609.79	9624.39	0.22
Salt River	VaShly US	9.80	500yr	250000.00	1252.00	1284.75	1272.13	1285.69	0.000483	8.56	33041.01	9225.31	0.29
Salt River	VaShly US	9.87	500yr	250000.00	1254.92	1284.61	1273.20	1286.07	0.000747	10.28	26853.34	8430.89	0.35
Salt River	VaShly US	9.96	500yr	250000.00	1254.13	1285.00	1274.89	1286.42	0.000762	10.37	27583.92	8009.82	0.36
Salt River	VaShly US	10.06	500yr	250000.00	1256.00	1285.53	1275.74	1286.86	0.000768	9.97	28144.57	8088.76	0.35
Salt River	VaShly US	10.18	500yr	250000.00	1256.00	1285.52	1277.08	1287.83	0.001440	12.29	20884.96	7350.51	0.47
Salt River	VaShly US	10.26	500yr	250000.00	1252.00	1286.83	1271.92	1288.31	0.000641	9.85	26258.61	7260.99	0.33
Salt River	VaShly US	10.36	500yr	250000.00	1253.00	1287.00	1275.82	1288.79	0.000892	10.93	23542.63	5344.91	0.38
Salt River	VaShly US	10.41	500yr	250000.00	1247.67	1287.96	1266.33	1288.99	0.000319	8.29	31727.79	5766.48	0.24
Salt River	VaShly US	10.46	500yr	250000.00	1240.00	1288.03	1267.21	1289.08	0.000361	8.62	31522.69	6157.48	0.25
Salt River	VaShly US	10.52	500yr	250000.00	1234.97	1288.05	1261.38	1289.23	0.000322	8.85	29287.65	6017.28	0.25
Salt River	VaShly US	10.56	500yr	250000.00	1244.00	1287.72	1267.27	1289.52	0.000558	10.79	23410.56	5749.18	0.32
Salt River	VaShly US	10.61	500yr	250000.00	1244.20	1287.92	1267.77	1289.66	0.000551	10.63	23864.31	5777.68	0.31
Salt River	VaShly US	10.67	500yr	250000.00	1248.00	1288.22	1268.99	1289.86	0.000558	10.29	24402.89	3177.38	0.31

HEC-RAS Plan: extended Profile: 500yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	500yr	250000.00	1248.00	1288.77	1265.69	1290.04	0.000379	9.06	27784.75	2749.07	0.26
Salt River	VaShly US	10.78	500yr	250000.00	1248.00	1289.01	1265.27	1290.14	0.000356	8.55	29399.91	2519.08	0.25
Salt River	VaShly US	10.81	500yr	250000.00	1248.00	1289.11	1265.27	1290.21	0.000340	8.43	29843.54	2417.43	0.25
Salt River	VaShly US	10.86	500yr	250000.00	1248.00	1289.14	1267.73	1290.33	0.000392	8.73	28679.27	2335.84	0.26
Salt River	VaShly US	10.90	500yr	250000.00	1250.83	1289.34	1268.25	1290.43	0.000380	8.38	29917.70	2277.29	0.26
Salt River	VaShly US	10.95	500yr	250000.00	1252.00	1289.49	1268.41	1290.52	0.000361	8.12	30877.89	2149.66	0.25
Salt River	VaShly US	11.00	500yr	250000.00	1254.01	1289.31	1271.11	1290.76	0.000533	9.67	25918.71	1869.60	0.30
Salt River	VaShly US	11.05	500yr	250000.00	1256.00	1289.39	1273.78	1290.98	0.000652	10.11	24786.37	2042.51	0.33
Salt River	VaShly US	11.10	500yr	250000.00	1256.00	1289.35	1276.22	1291.24	0.000875	11.04	22697.11	1936.10	0.38
Salt River	VaShly US	11.14	500yr	250000.00	1256.00	1289.61	1279.53	1291.75	0.003281	11.69	21315.08	1851.00	0.42
Salt River	VaShly US	11.17	500yr	250000.00	1256.00	1290.06	1279.54	1292.06	0.001075	11.50	22360.54	1793.16	0.41
Salt River	VaShly US	11.25	500yr	250000.00	1256.00	1290.75	1281.09	1292.51	0.001006	10.95	24068.97	1614.72	0.40
Salt River	VaShly US	11.32	500yr	250000.00	1260.00	1291.51	1282.96	1292.95	0.000989	10.00	26673.63	1505.74	0.39
Salt River	VaShly US	11.41	500yr	250000.00	1260.00	1291.92	1283.50	1293.49	0.001195	10.03	24930.37	1387.51	0.42
Salt River	VaShly US	11.49	500yr	250000.00	1263.04	1292.38	1283.24	1294.00	0.001111	10.22	24456.18	1248.79	0.41
Salt River	VaShly US	11.62	500yr	250000.00	1264.00	1293.49	1282.22	1294.63	0.000727	8.59	29121.84	1584.02	0.33
Salt River	VaShly US	11.78	500yr	250000.00	1268.00	1293.93	1284.61	1295.53	0.001055	10.16	24617.39	1492.86	0.40
Salt River	VaShly US	11.88	500yr	250000.00	1267.94	1294.28	1287.31	1296.42	0.001678	11.74	21321.73	1601.77	0.49
Salt River	VaShly US	11.99	500yr	250000.00	1268.00	1295.54	1289.47	1297.42	0.001751	11.03	22982.00	1634.37	0.49
Salt River	VaShly US	12.06	500yr	250000.00	1268.00	1296.35	1289.37	1298.04	0.001500	10.44	23999.87	1579.94	0.46
Salt River	VaShly US	12.10	500yr	250000.00	1272.00	1296.55	1290.17	1298.54	0.001719	11.34	22136.40	1558.47	0.49
Salt River	VaShly US	12.22	500yr	250000.00	1272.00	1297.26	1290.95	1299.90	0.002023	13.05	19155.89	1222.82	0.54
Salt River	VaShly US	12.33	500yr	250000.00	1272.00	1298.20	1291.02	1301.15	0.001924	13.81	18366.23	1239.06	0.54
Salt River	VaShly US	12.44	500yr	250000.00	1276.00	1299.34	1293.77	1302.43	0.002470	14.12	17796.31	1081.49	0.60
Salt River	VaShly US	12.55	500yr	250000.00	1276.00	1301.30	1293.58	1303.69	0.001723	12.42	20216.10	1163.89	0.50
Salt River	VaShly US	12.67	500yr	250000.00	1276.00	1302.46	1294.12	1304.70	0.001515	12.00	20828.46	1316.11	0.48
Salt River	VaShly US	12.77	500yr	250000.00	1276.00	1303.19	1296.21	1305.60	0.001767	12.46	20065.63	1343.56	0.51
Salt River	VaShly US	12.87	500yr	250000.00	1276.00	1304.67	1297.41	1306.53	0.001592	10.95	22829.84	1384.08	0.48
Salt River	VaShly US	12.97	500yr	250000.00	1280.00	1305.55	1298.39	1307.45	0.001573	11.05	22632.15	1339.37	0.47
Salt River	VaShly US	13.07	500yr	250000.00	1276.00	1306.52	1298.58	1308.18	0.001300	10.34	24178.36	1369.01	0.43
Salt River	VaShly US	13.19	500yr	250000.00	1284.00	1307.24	1300.38	1309.18	0.001620	11.19	22337.96	1329.30	0.48
Salt River	VaShly US	13.31	500yr	250000.00	1281.30	1308.21	1300.47	1310.29	0.001618	11.57	21614.86	1222.59	0.48
Salt River	VaShly US	13.44	500yr	250000.00	1284.00	1309.18	1300.99	1311.29	0.001435	11.68	21405.76	1088.32	0.46
Salt River	VaShly US	13.55	500yr	250000.00	1288.00	1310.15	1301.61	1312.14	0.001343	11.32	22089.58	1119.43	0.45
Salt River	VaShly US	13.64	500yr	250000.00	1288.00	1310.76	1303.20	1312.86	0.001525	11.64	21474.73	1142.60	0.47
Gilbert Mining P	Gilbert Mining P	0.04	500yr	34341.00	1190.68	1245.57	1199.73	1245.63	0.000010	1.84	18764.02	1660.25	0.05
Gilbert Mining P	Gilbert Mining P	0.08	500yr	34341.00	1180.00	1245.58	1193.64	1245.63	0.000009	1.78	19378.51	1730.30	0.04
Gilbert Mining P	Gilbert Mining P	0.11	500yr	34341.00	1182.38	1245.60	1190.11	1245.63	0.000005	1.33	26111.30	1895.29	0.03
Gilbert Mining P	Gilbert Mining P	0.15	500yr	34341.00	1180.00	1245.61	1189.45	1245.63	0.000005	1.30	27649.58	1979.76	0.03
Gilbert Mining P	Gilbert Mining P	0.19	500yr	34341.00	1180.00	1245.60	1196.23	1245.64	0.000010	1.59	22566.48	1208.02	0.04
Gilbert Mining P	Gilbert Mining P	0.22	500yr	34341.00	1188.00	1245.60	1198.07	1245.64	0.000010	1.62	21364.09	1157.97	0.04
Gilbert Mining P	Gilbert Mining P	0.25	500yr	34341.00	1182.77	1245.60	1192.53	1245.64	0.000010	1.61	21453.90	1104.67	0.04
Gilbert Mining P	Gilbert Mining P	0.29	500yr	34341.00	1183.78	1245.59	1195.34	1245.65	0.000015	2.01	18294.83	950.70	0.05
Gilbert Mining P	Gilbert Mining P	0.33	500yr	34341.00	1182.37	1245.64	1191.05	1245.66	0.000003	1.00	34885.21	972.65	0.02
Gilbert Mining P	Gilbert Mining P	0.37	500yr	34341.00	1184.00	1245.64	1194.50	1245.66	0.000002	0.88	40099.80	1625.17	0.02
Gilbert Mining P	Gilbert Mining P	0.43	500yr	34341.00	1180.00	1245.64	1192.57	1245.66	0.000005	1.17	29754.06	2296.83	0.03
Gilbert Mining P	Gilbert Mining P	0.48	500yr	34341.00	1172.00	1245.65	1183.85	1245.66	0.000003	0.99	36528.35	2467.89	0.02
Gilbert Mining P	Gilbert Mining P	0.53	500yr	34341.00	1191.79	1245.65	1201.25	1245.66	0.000003	0.92	39177.99	2626.04	0.02
Gilbert Mining P	Gilbert Mining P	0.55	500yr	34341.00	1196.00	1245.64	1204.65	1245.67	0.000006	1.18	29868.97	2443.49	0.03
Gilbert Mining P	Gilbert Mining P	0.60	500yr	34341.00	1200.85	1245.62	1215.68	1245.68	0.000025	2.03	18360.57	2770.82	0.06
Gilbert Mining P	Gilbert Mining P	0.66	500yr	34341.00	1192.00	1245.67	1199.72	1245.69	0.000004	1.07	32360.21	2936.52	0.03
Gilbert Mining P	Gilbert Mining P	0.70	500yr	34341.00	1196.00	1245.66	1202.86	1245.69	0.000009	1.35	25429.70	3004.30	0.04
Gilbert Mining P	Gilbert Mining P	0.74	500yr	34341.00	1196.00	1245.67	1203.19	1245.69	0.000006	1.20	28630.69	3099.32	0.03
Gilbert Mining P	Gilbert Mining P	0.77	500yr	34341.00	1196.00	1245.69	1202.99	1245.70	0.000003	0.84	41049.02	3076.88	0.02
Gilbert Mining P	Gilbert Mining P	0.83	500yr	34341.00	1199.07	1245.69	1204.32	1245.70	0.000002	0.78	43890.25	3136.93	0.02
Gilbert Mining P	Gilbert Mining P	0.88	500yr	34341.00	1198.45	1245.69	1203.39	1245.70	0.000002	0.77	44588.14	3196.49	0.02
Gilbert Mining P	Gilbert Mining P	0.91	500yr	34341.00	1197.53	1245.69	1206.42	1245.70	0.000004	0.96	35632.08	3313.79	0.03
Gilbert Mining P	Gilbert Mining P	0.95	500yr	34341.00	1202.08	1245.68	1208.17	1245.70	0.000006	1.16	29648.52	3729.71	0.03
Gilbert Mining P	Gilbert Mining P	0.97	500yr	34341.00	1204.00	1245.68	1210.00	1245.70	0.000006	1.16	29995.21	3789.31	0.03
Gilbert Mining P	Gilbert Mining P	0.99	500yr	34341.00	1204.00	1245.68	1211.81	1245.71	0.000008	1.30	26391.93	3651.26	0.04
Gilbert Mining P	Gilbert Mining P	1.02	500yr	34341.00	1207.21	1245.69	1212.74	1245.71	0.000007	1.16	29438.00	3720.12	0.03
Gilbert Mining P	Gilbert Mining P	1.05	500yr	34341.00	1208.00	1245.68	1214.59	1245.71	0.000010	1.42	24398.34	3466.38	0.04
Gilbert Mining P	Gilbert Mining P	1.08	500yr	34341.00	1196.00	1245.67	1214.77	1245.72	0.000018	1.79	19602.32	3101.26	0.05
Gilbert Mining P	Gilbert Mining P	1.11	500yr	34341.00	1196.00	1245.64	1217.32	1245.74	0.000040	2.59	13533.99	2571.97	0.08
Gilbert Mining P	Gilbert Mining P	1.14	500yr	34341.00	1212.00	1245.55	1224.77	1245.80	0.000143	4.06	8469.97	2193.63	0.15
Gilbert Mining P	Gilbert Mining P	1.17	500yr	34341.00	1243.53	1251.63	1251.63	1255.27	0.009171	15.31	2243.61	3606.33	1.00
Gilbert Mining P	Gilbert Mining P	1.19	500yr	34341.00	1236.00	1254.71	1245.56	1255.73	0.000803	8.09	4245.83	4936.67	0.34
Gilbert Mining P	Gilbert Mining P	1.21	500yr	34341.00	1244.00	1253.97	1252.19	1256.43	0.004486	12.59	2728.59	4885.87	0.73

APPENDIX 2i

CROSS SECTION PLOTS FOR THE SALT RIVER


Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 13.64
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 13.55
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 13.44
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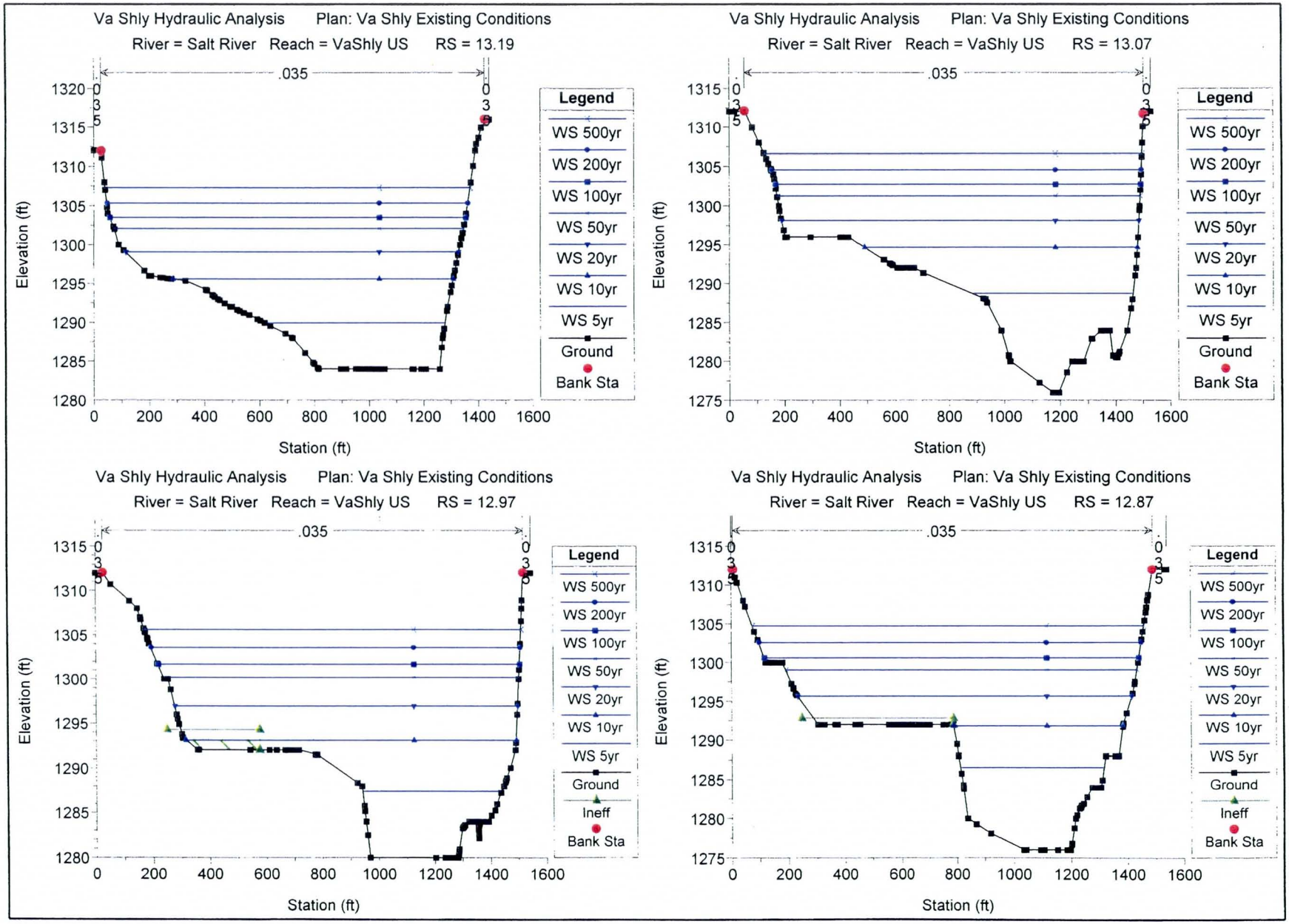
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 13.31
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Elevation (ft)
Station (ft)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Legend
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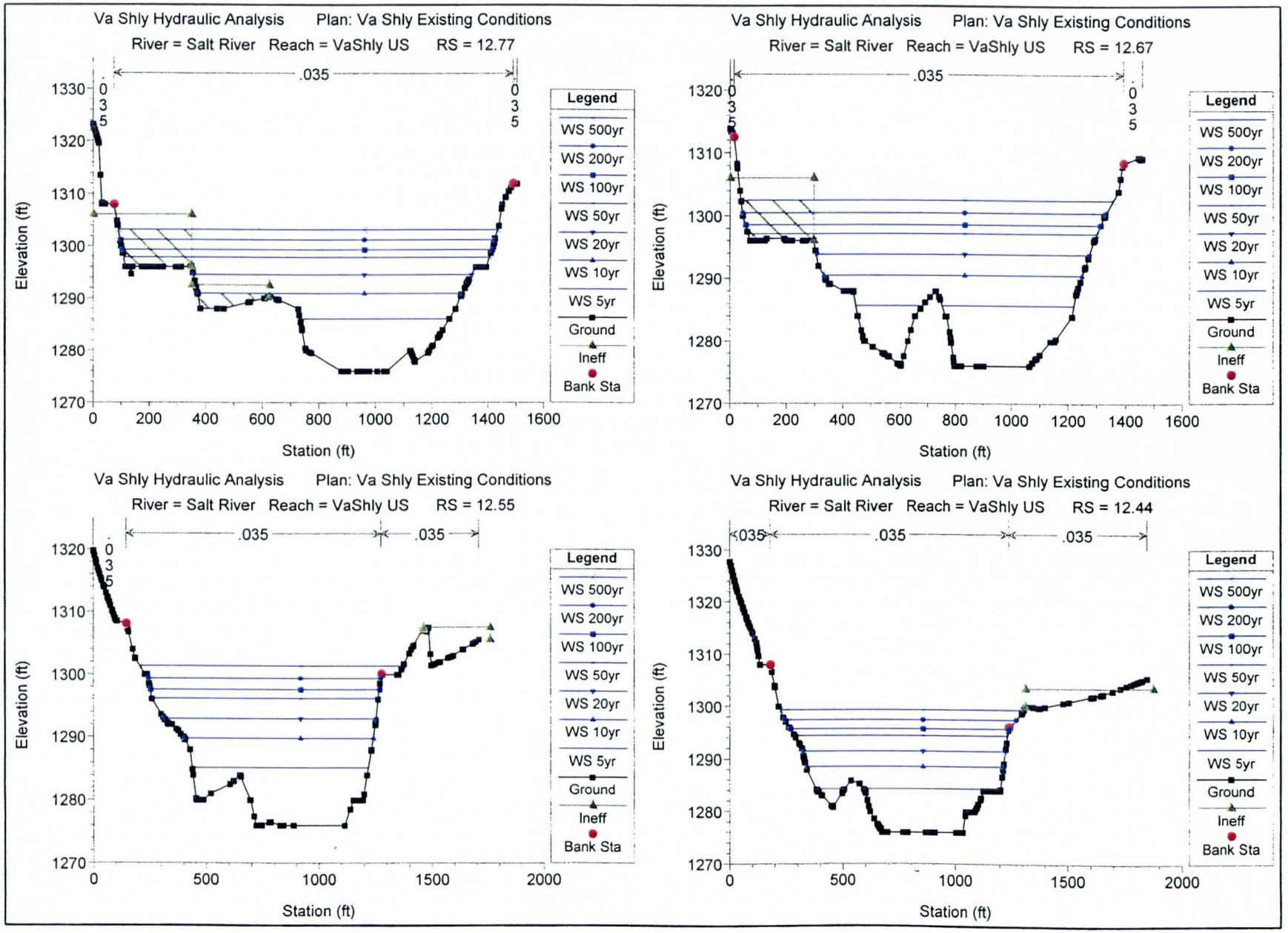
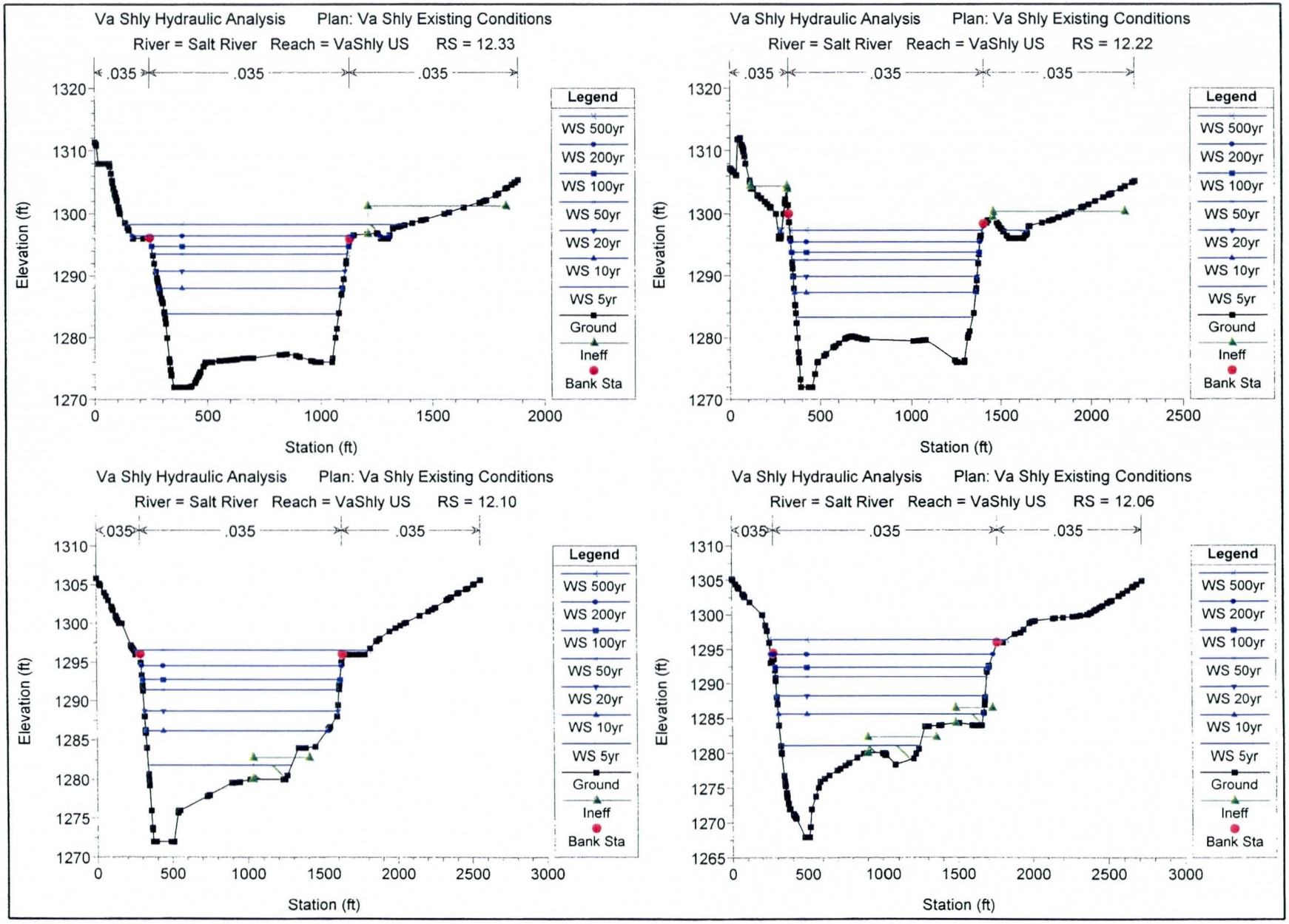
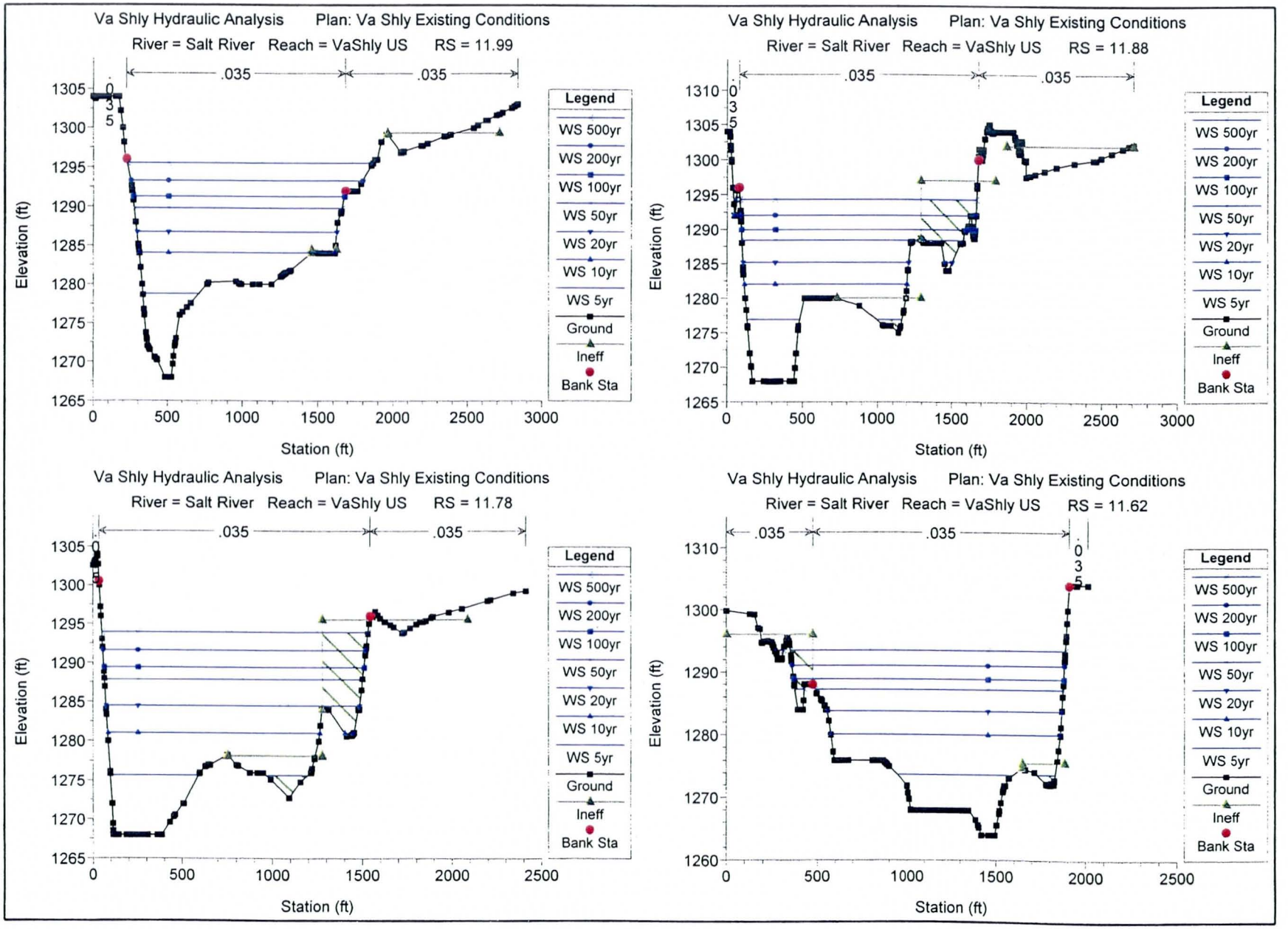
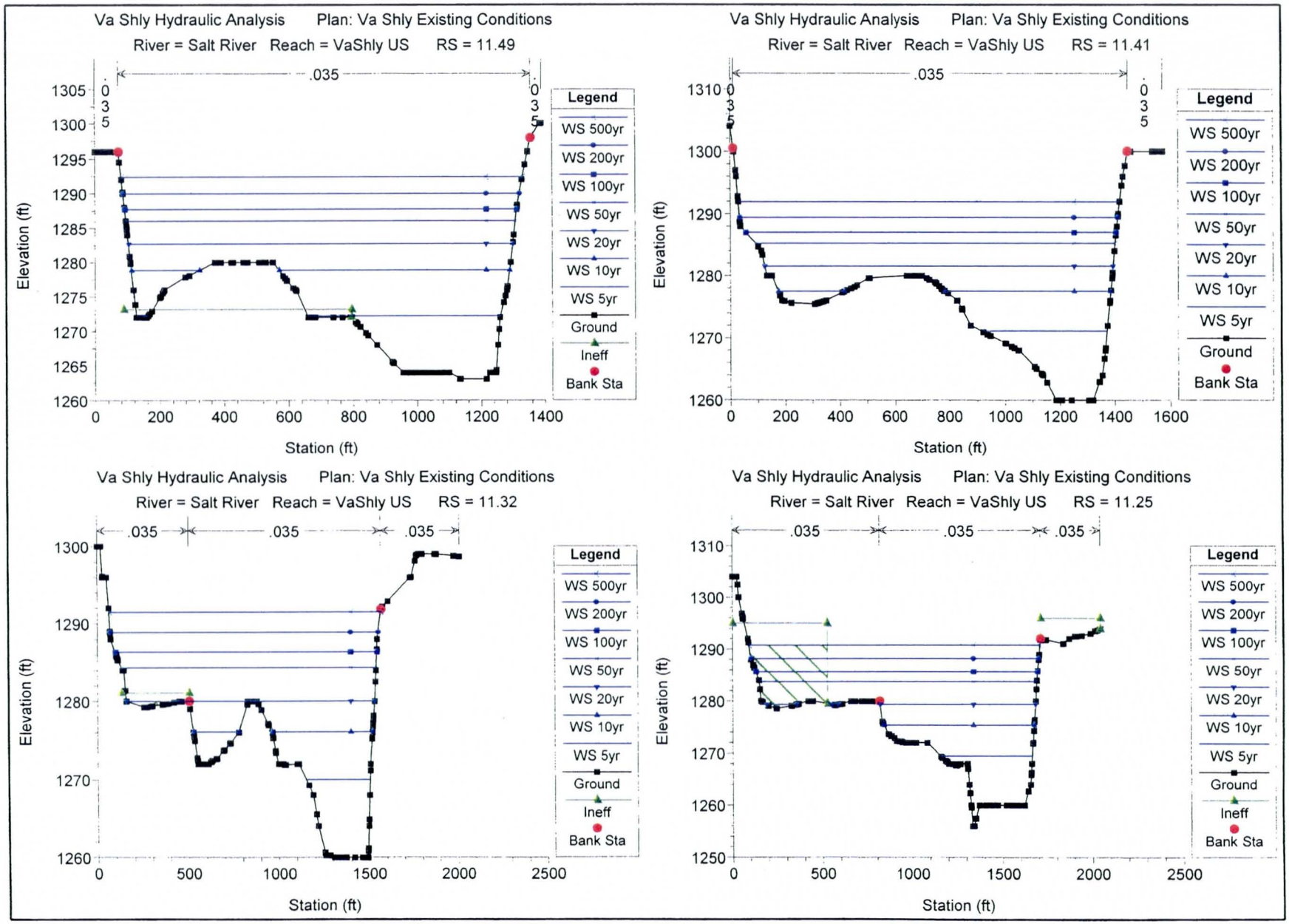
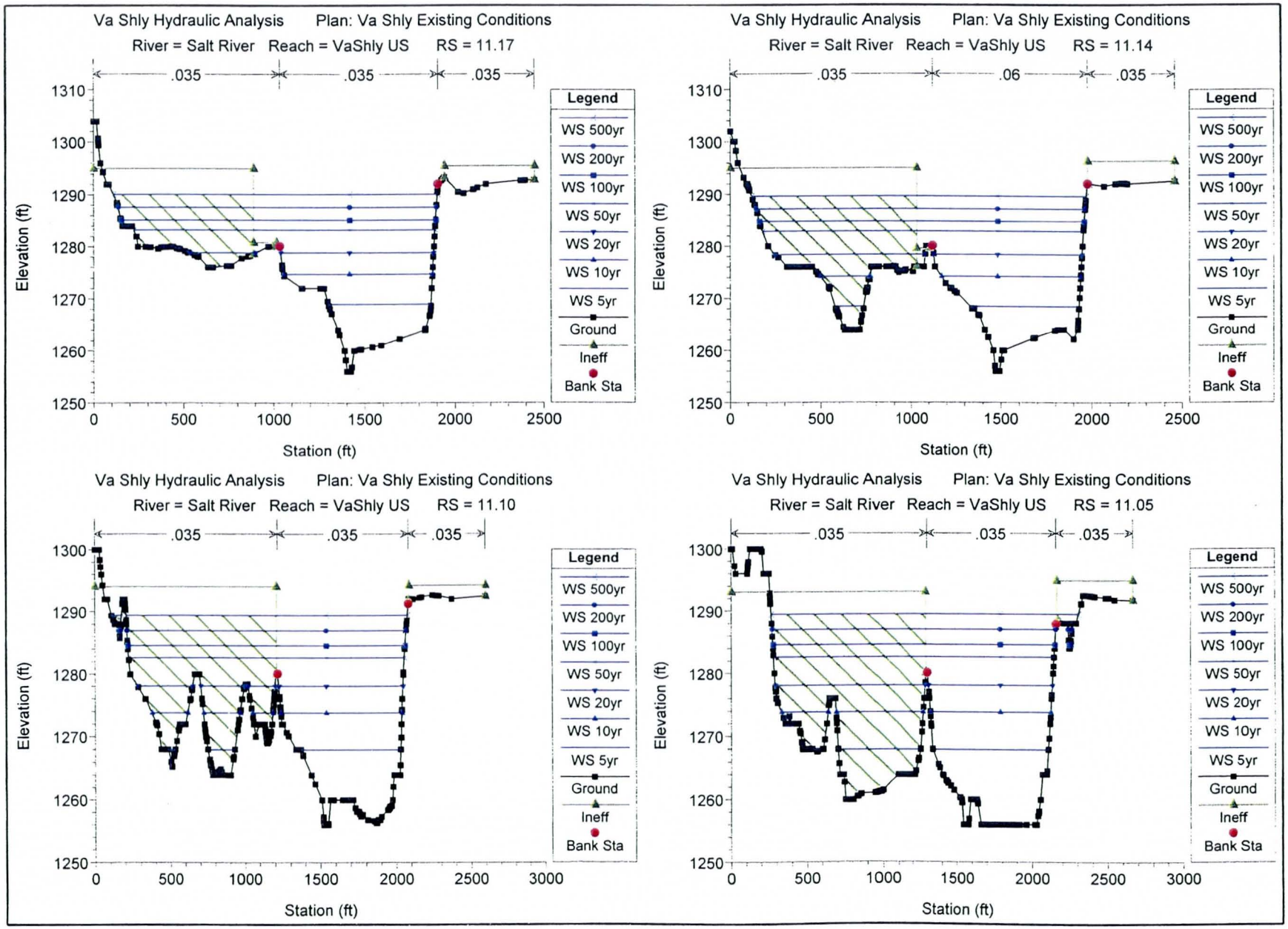
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 13.07
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.97
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.87
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

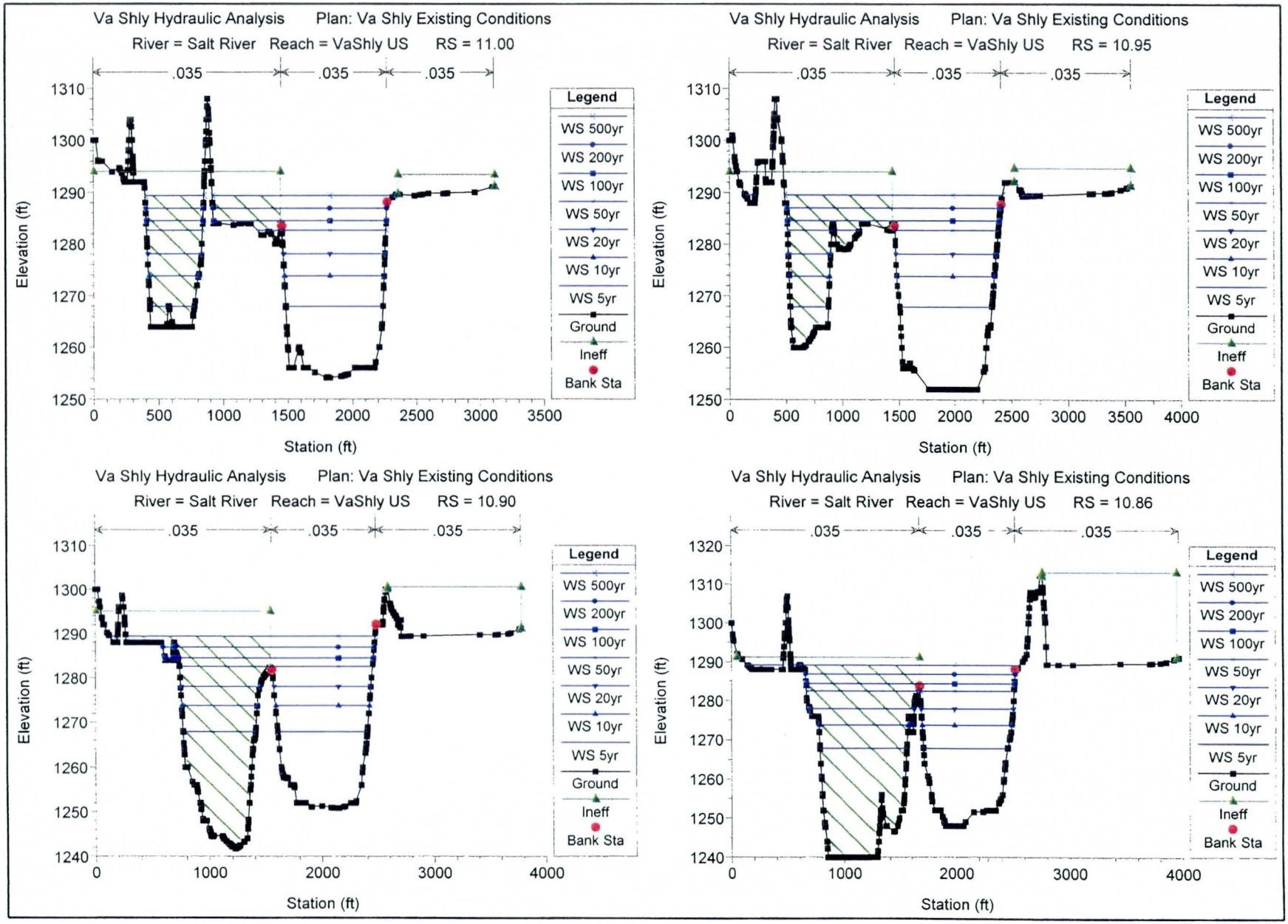

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.77
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.67
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.55
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.44
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

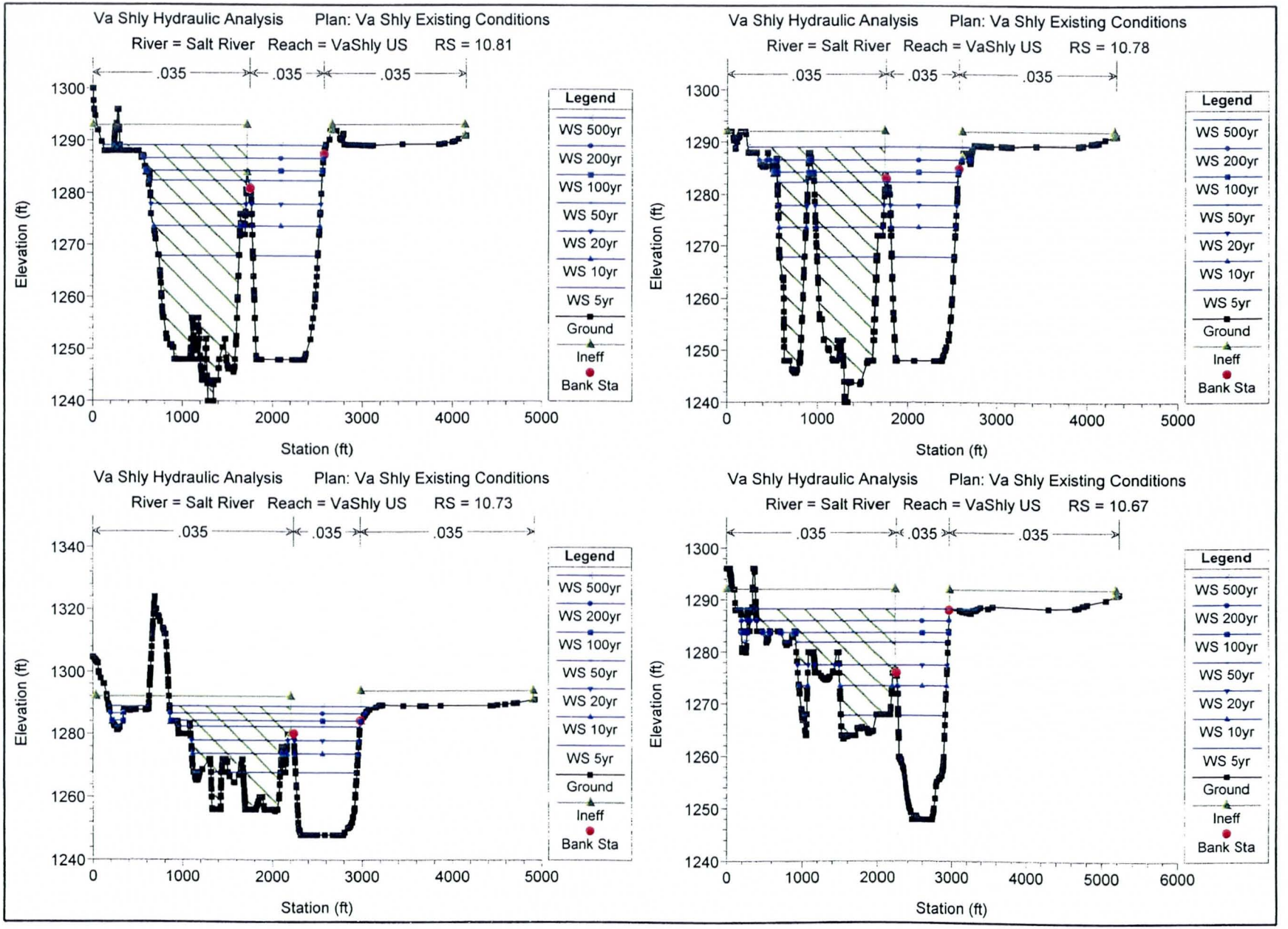

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.33
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.22
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.10
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 12.06
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

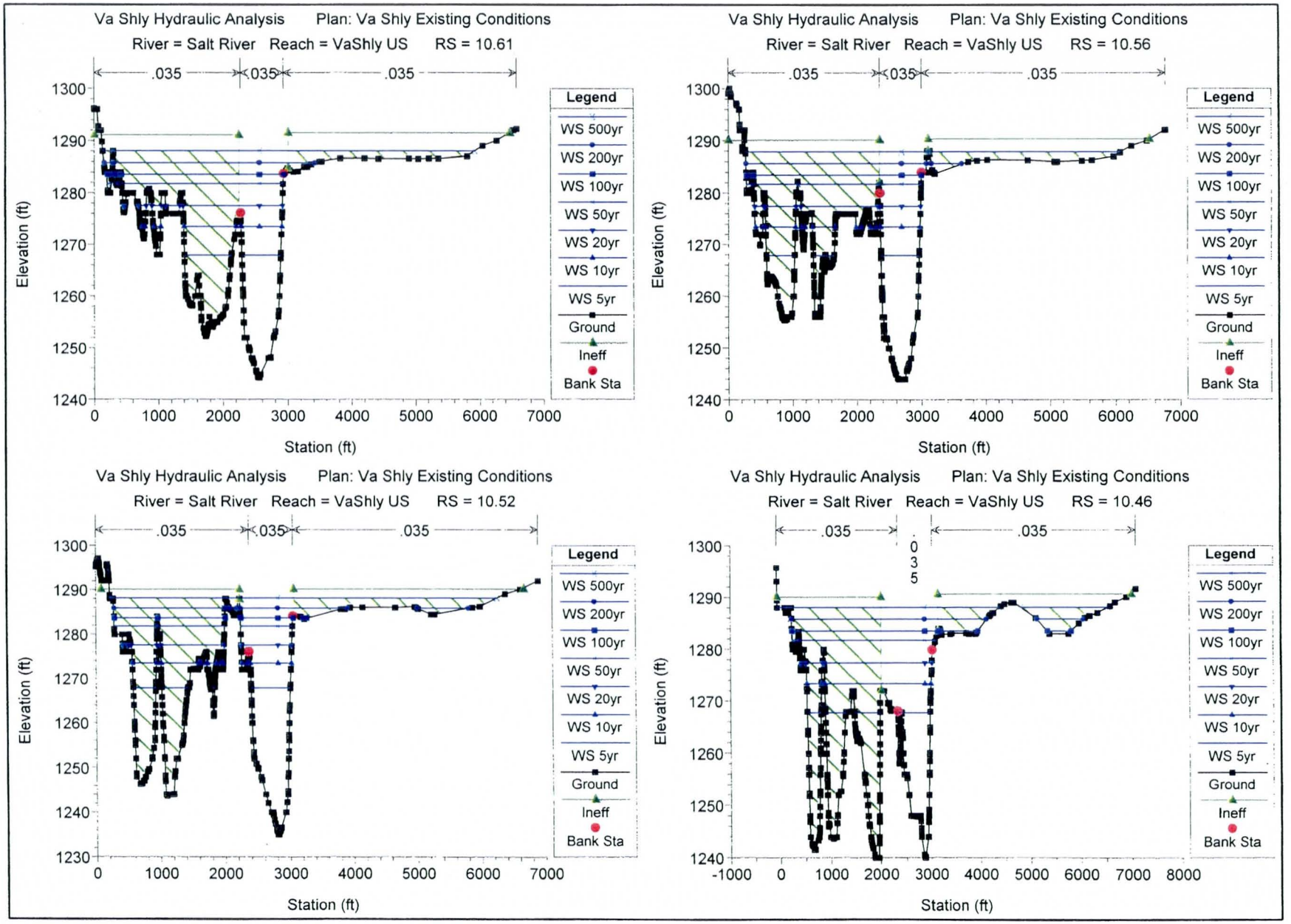

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.99
.035
.035
0
3
5
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.88
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.78
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.62

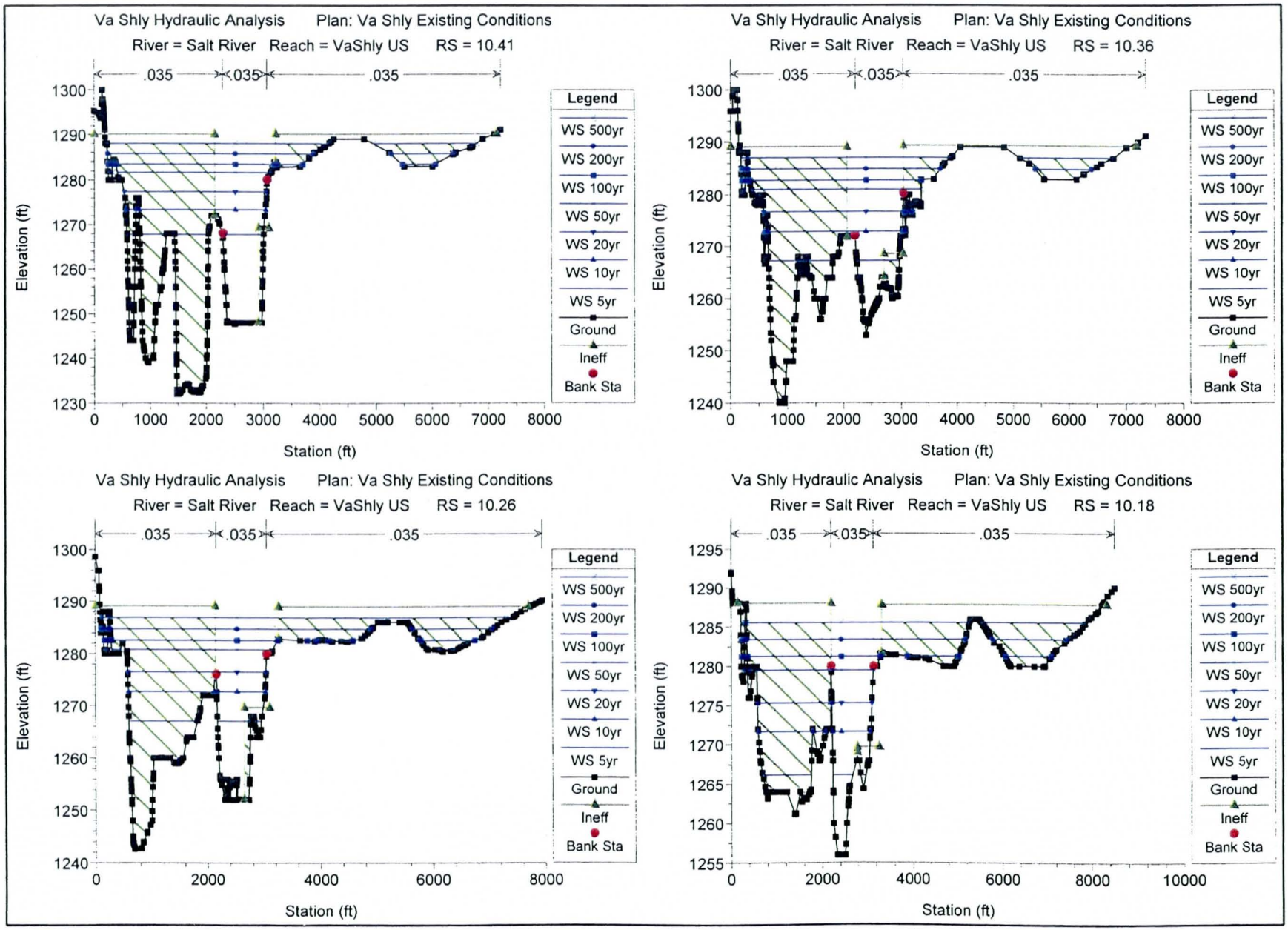

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.49
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.41
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.32
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.25
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

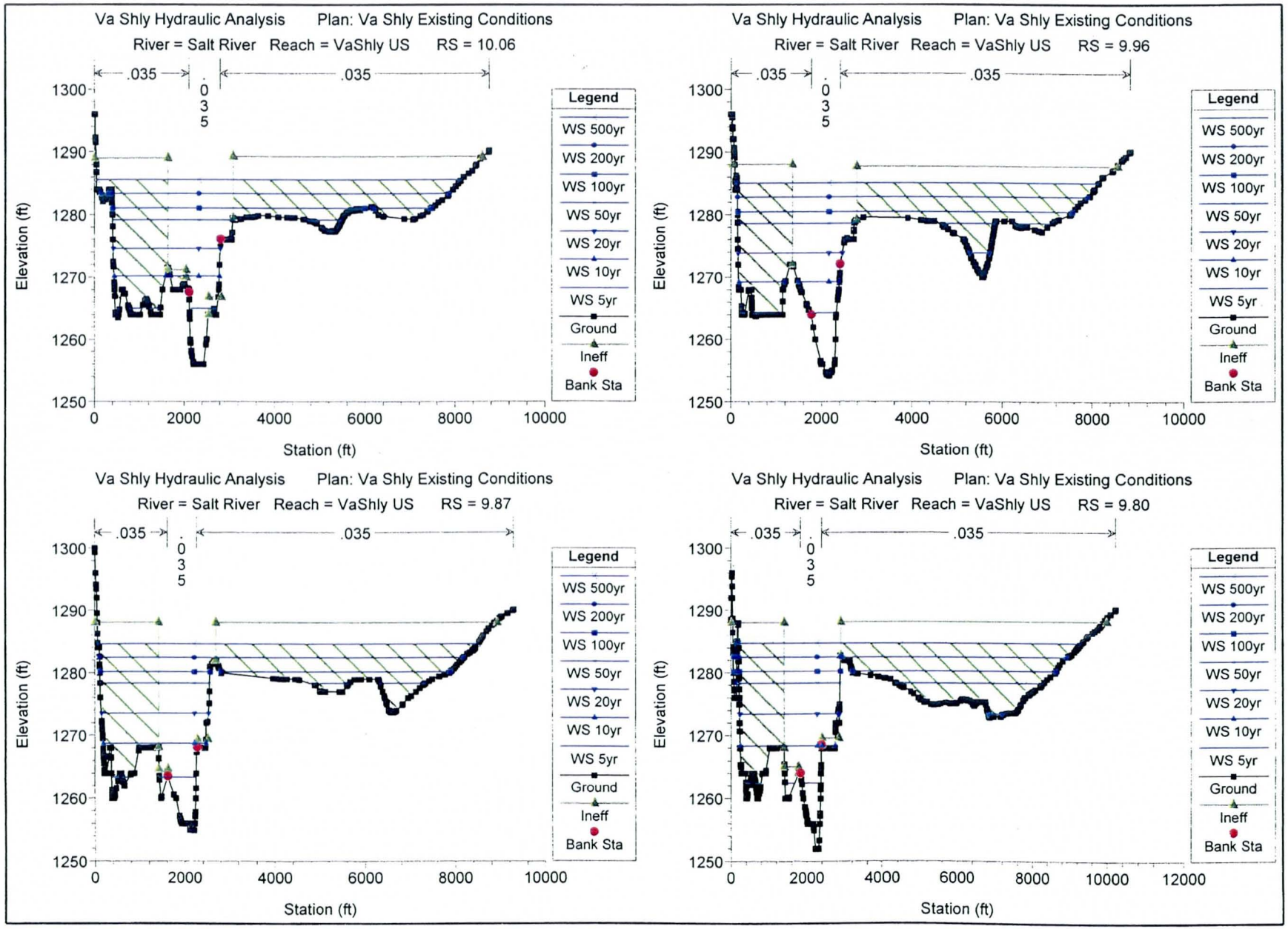

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.17
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.14
.035 .06 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.10
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.05
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

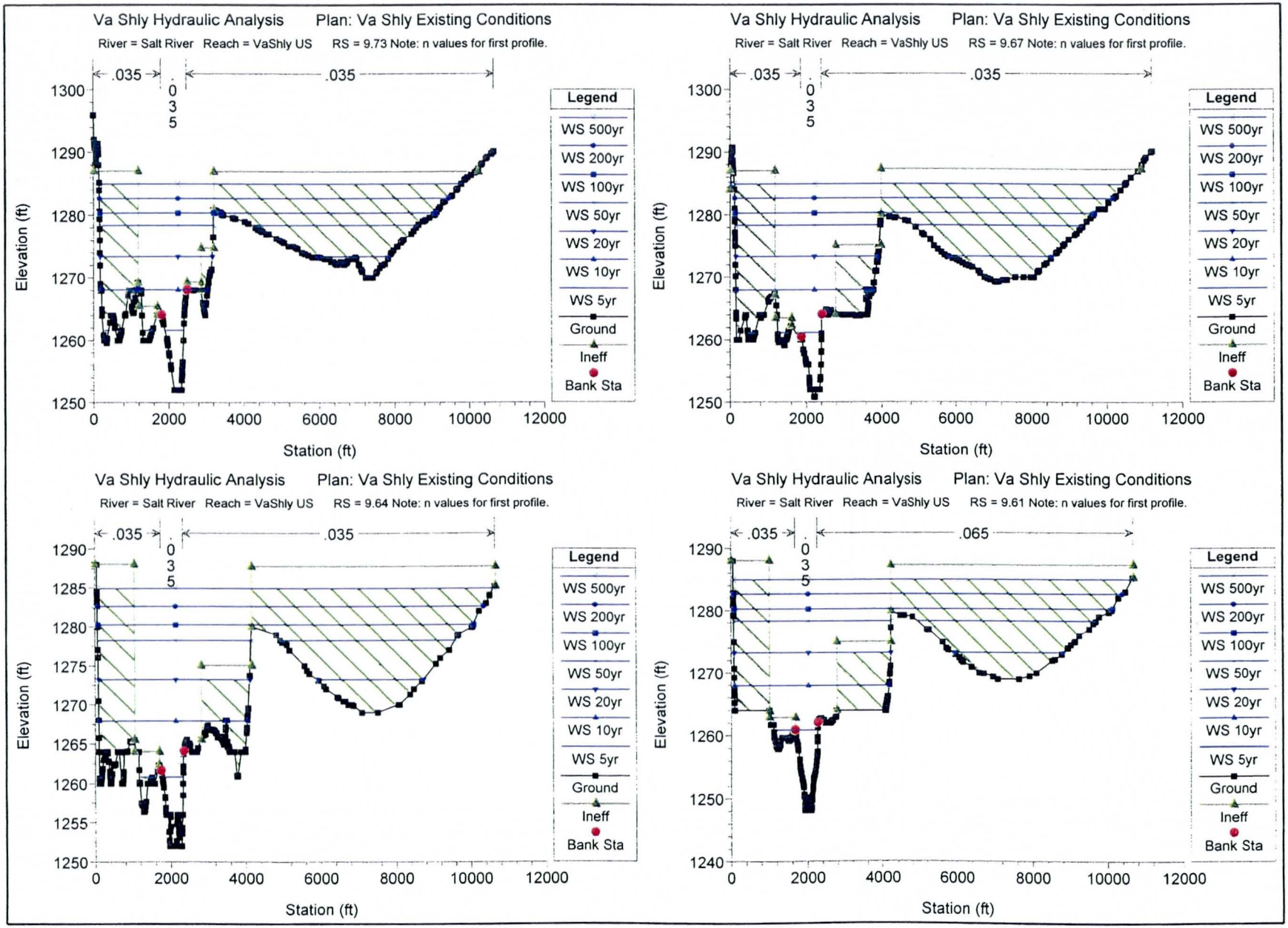

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 11.00
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.95
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.90
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.86
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

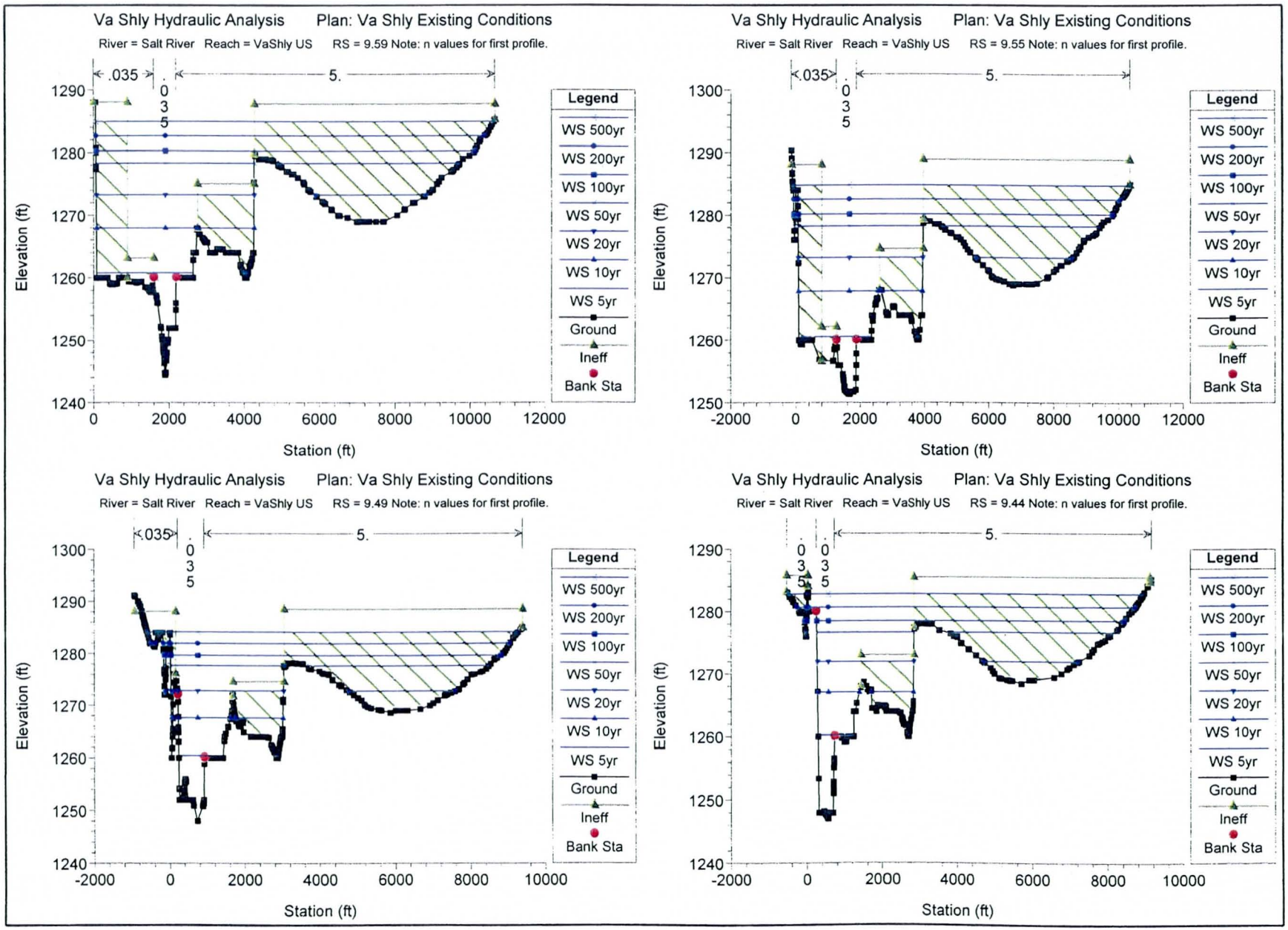

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.81
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.78
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.73
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.67
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

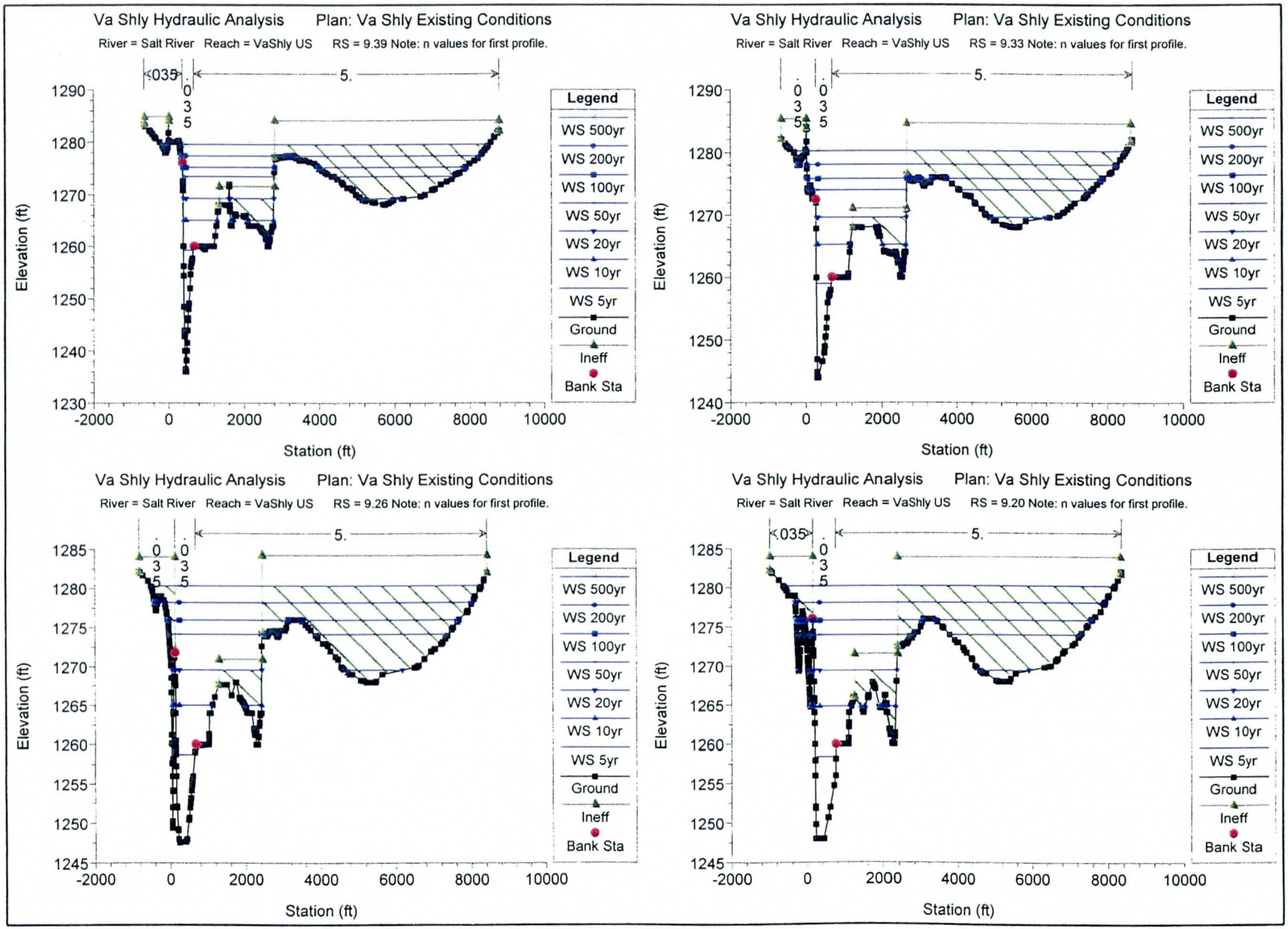

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.61
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.56
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.52
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.46

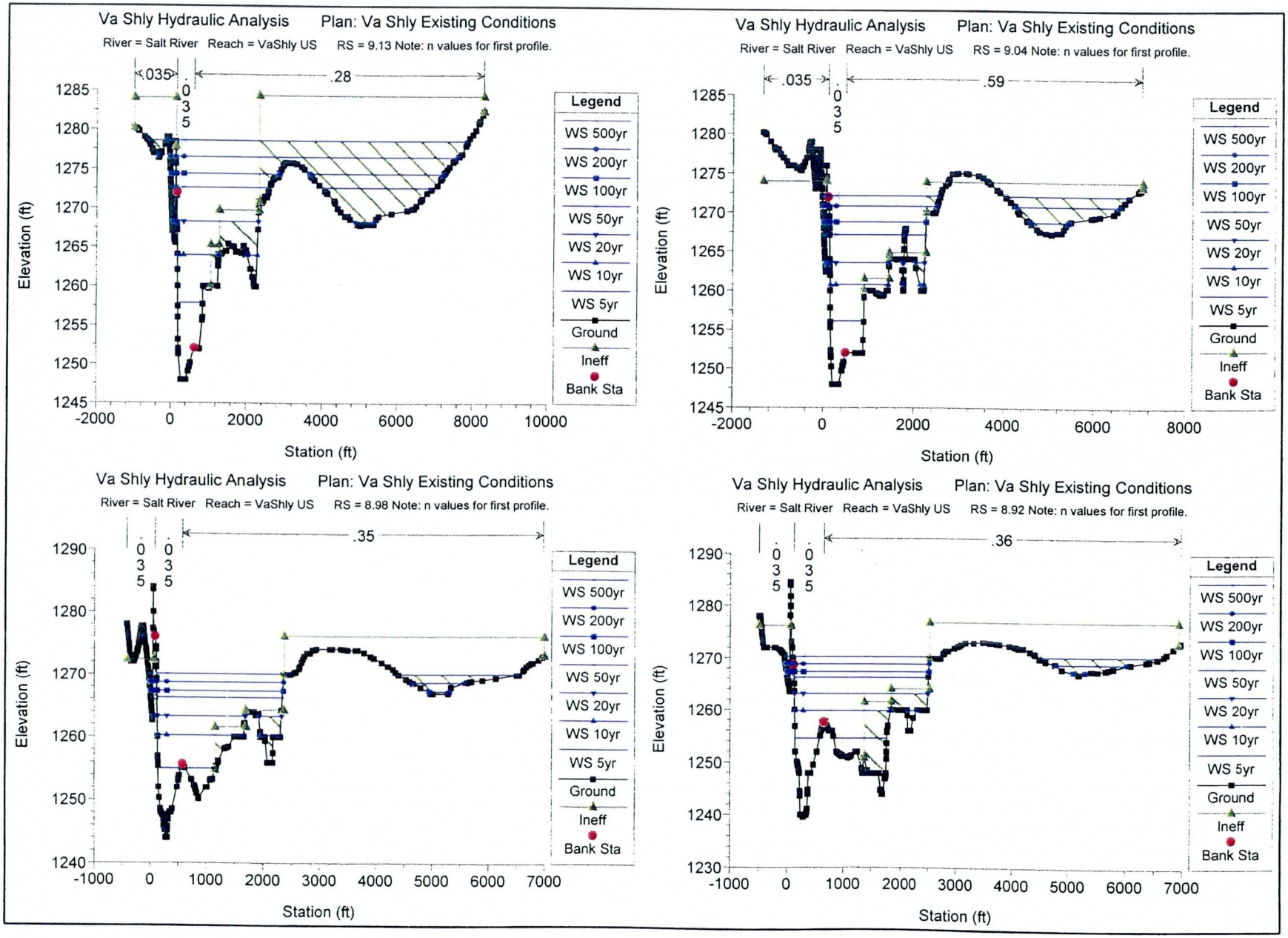

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.41
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.36
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.26
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.18
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

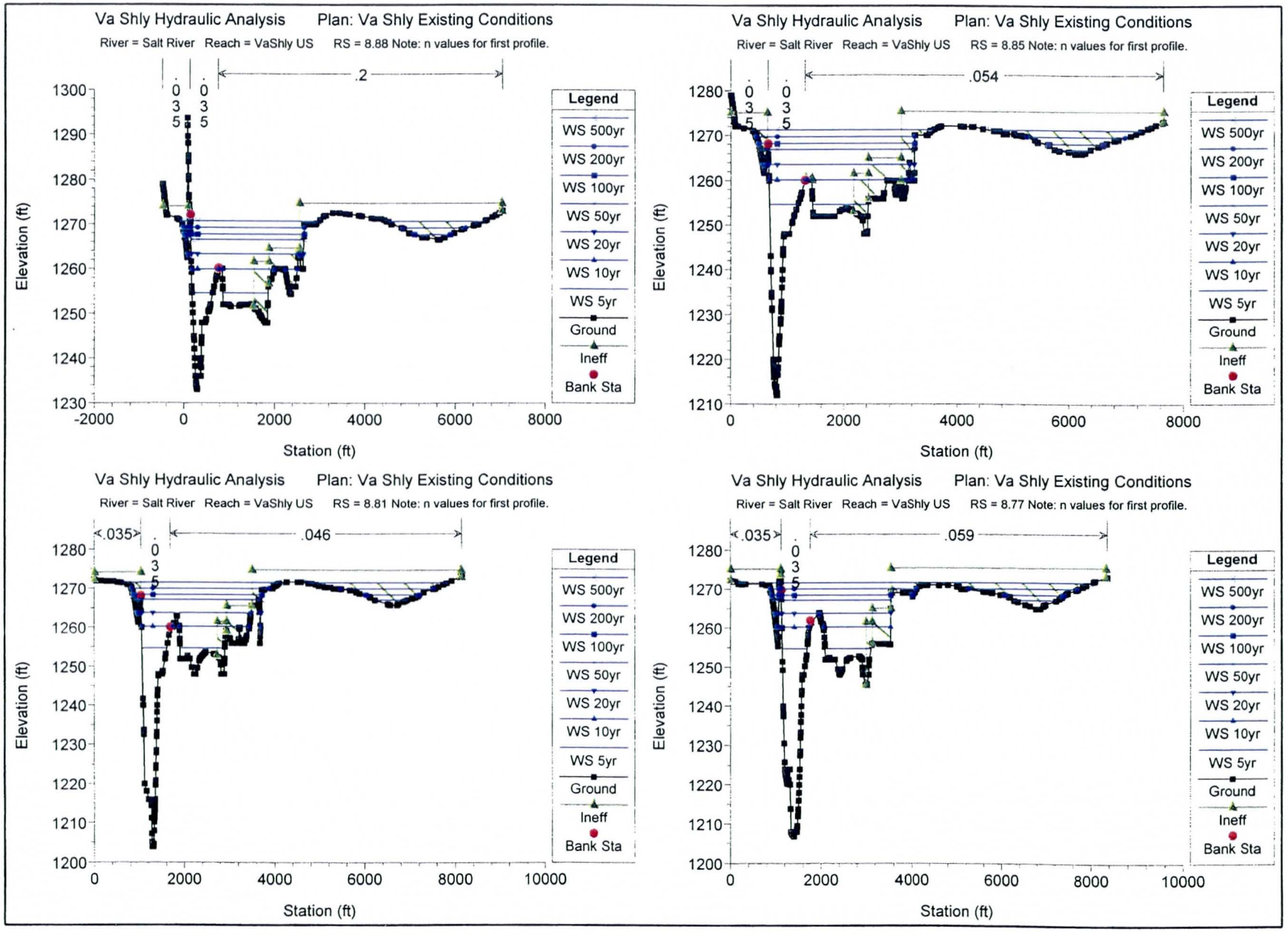

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 10.06
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.96
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.87
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.80

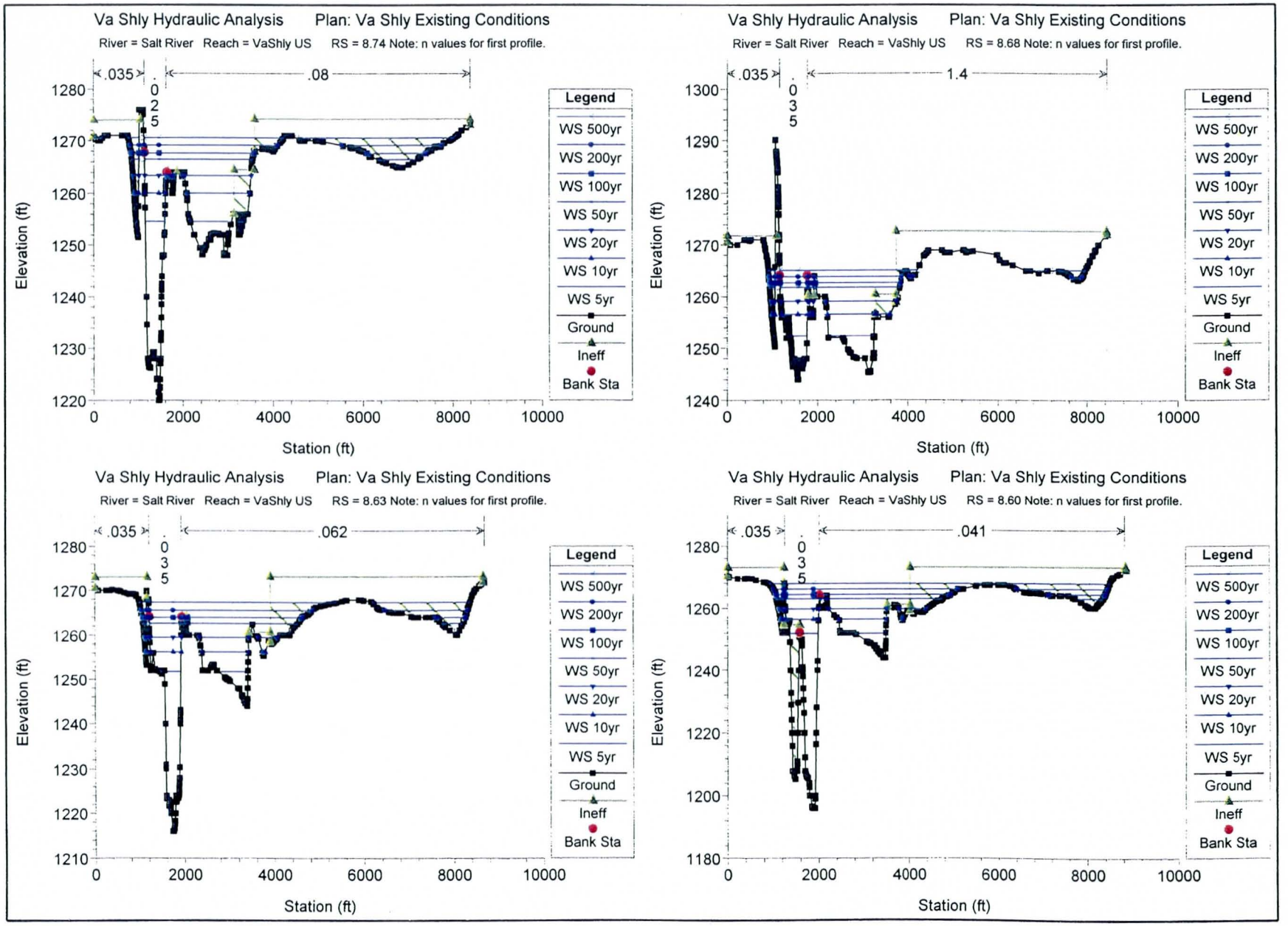

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.73 Note: n values for first profile.
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.67 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.64 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.61 Note: n values for first profile.
.065

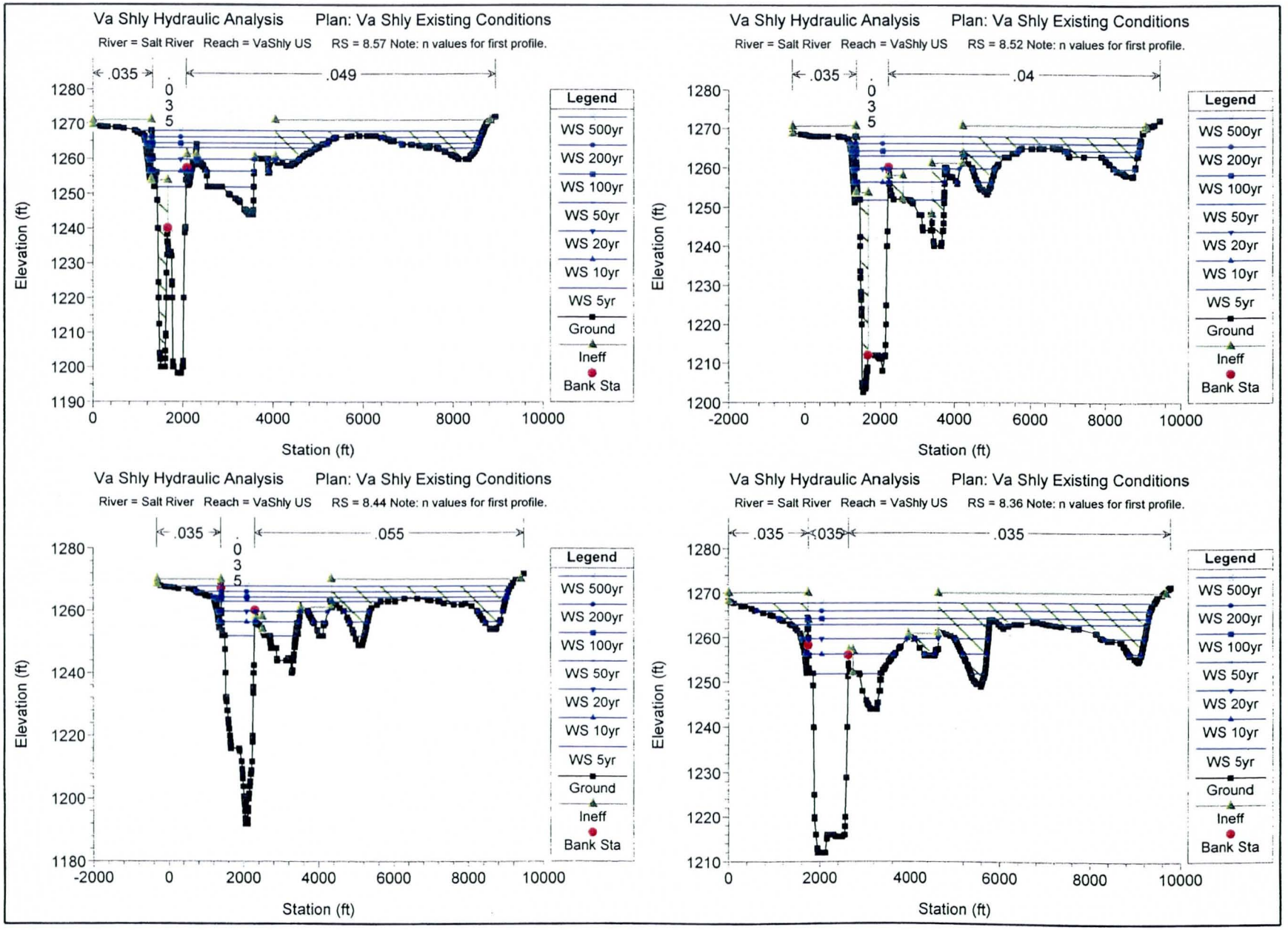

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.59 Note: n values for first profile.
.035
.
0
3
5
5.
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.55 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.49 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.44 Note: n values for first profile.

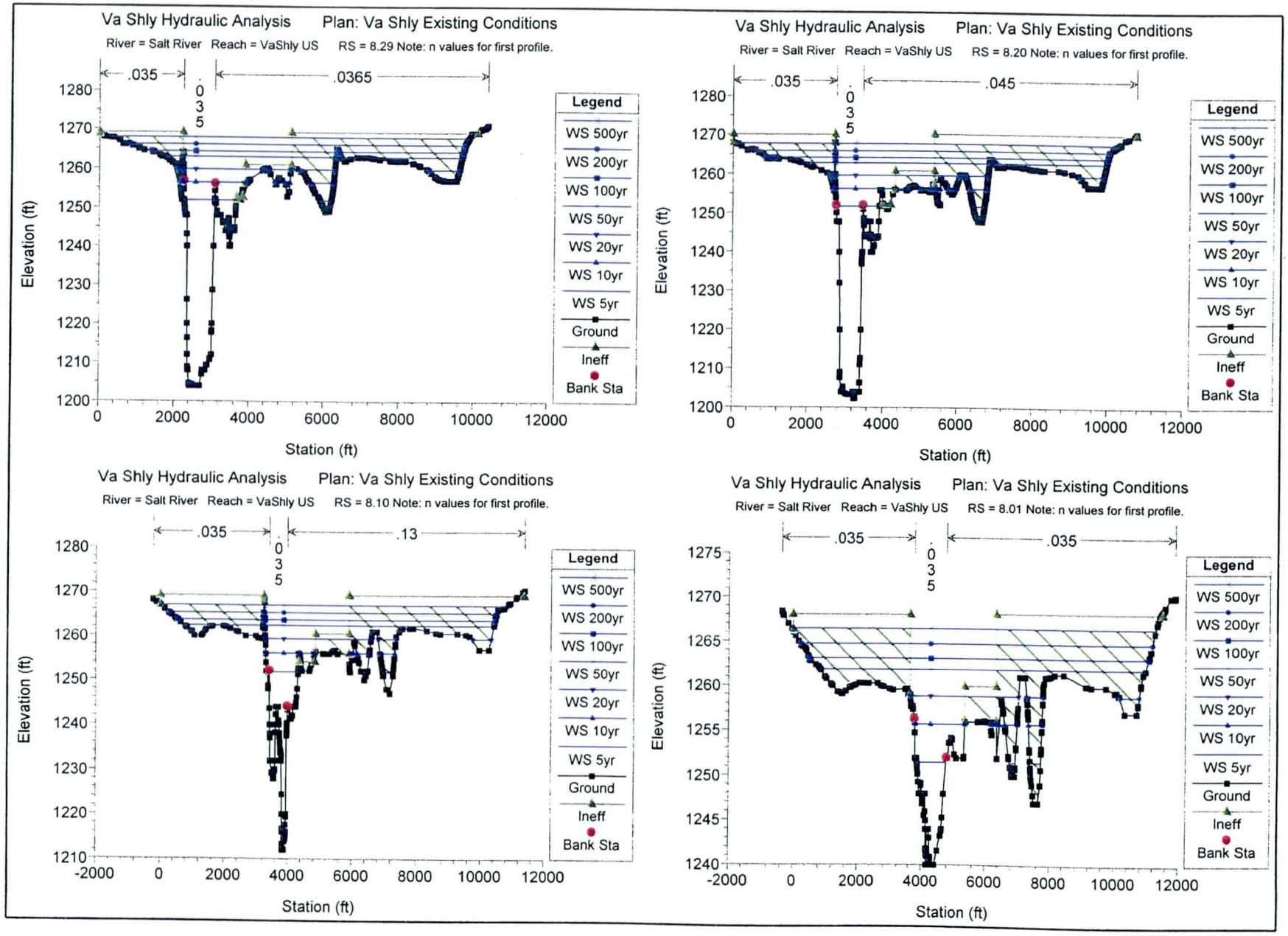

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.39 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.33 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.26 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.20 Note: n values for first profile.
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

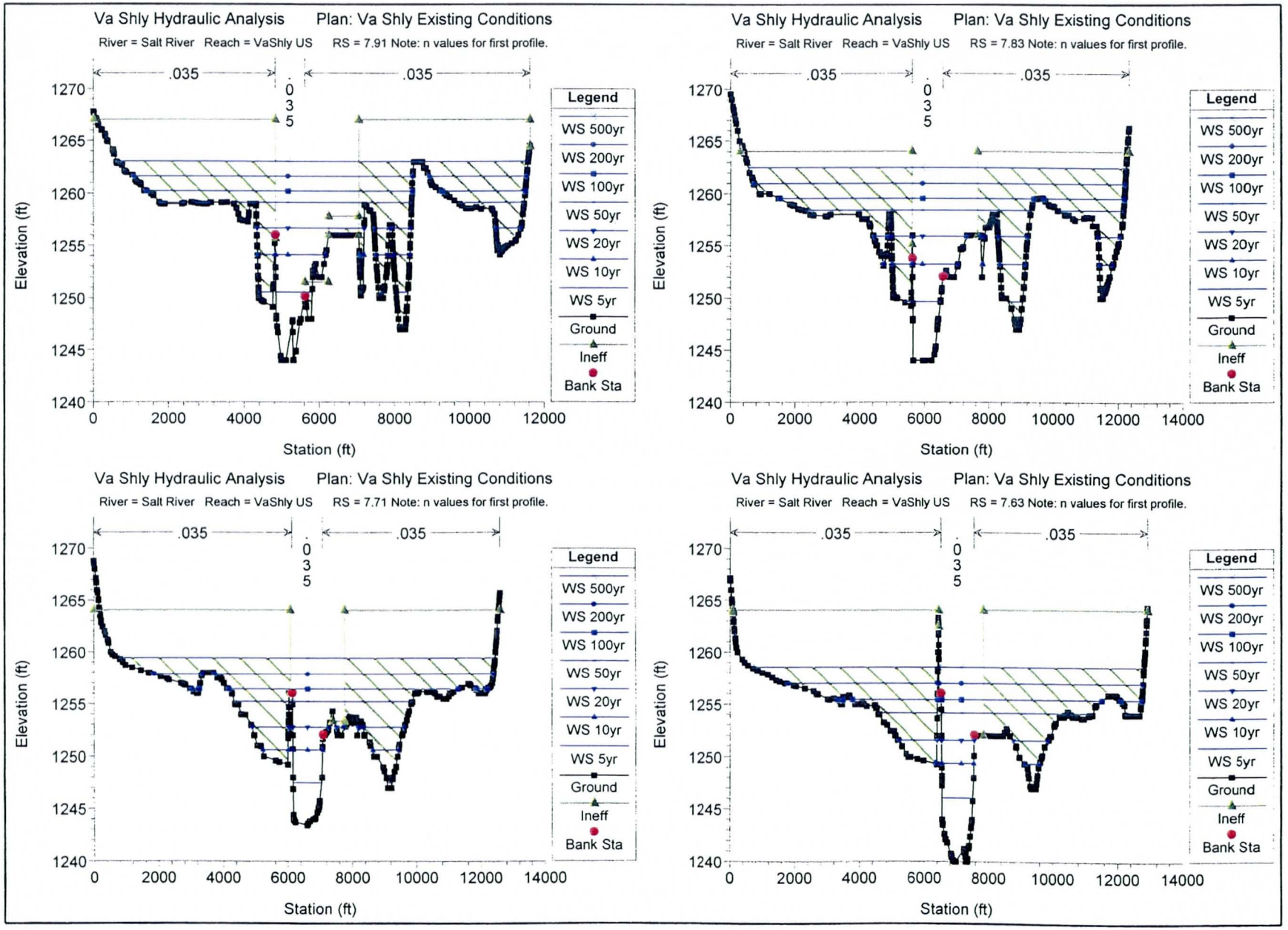

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.13 Note: n values for first profile.
.035
.035
.28
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 9.04 Note: n values for first profile.
.035
.035
.59
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.98 Note: n values for first profile.
.035
.035
.35
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.92 Note: n values for first profile.
.035
.035
.36
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

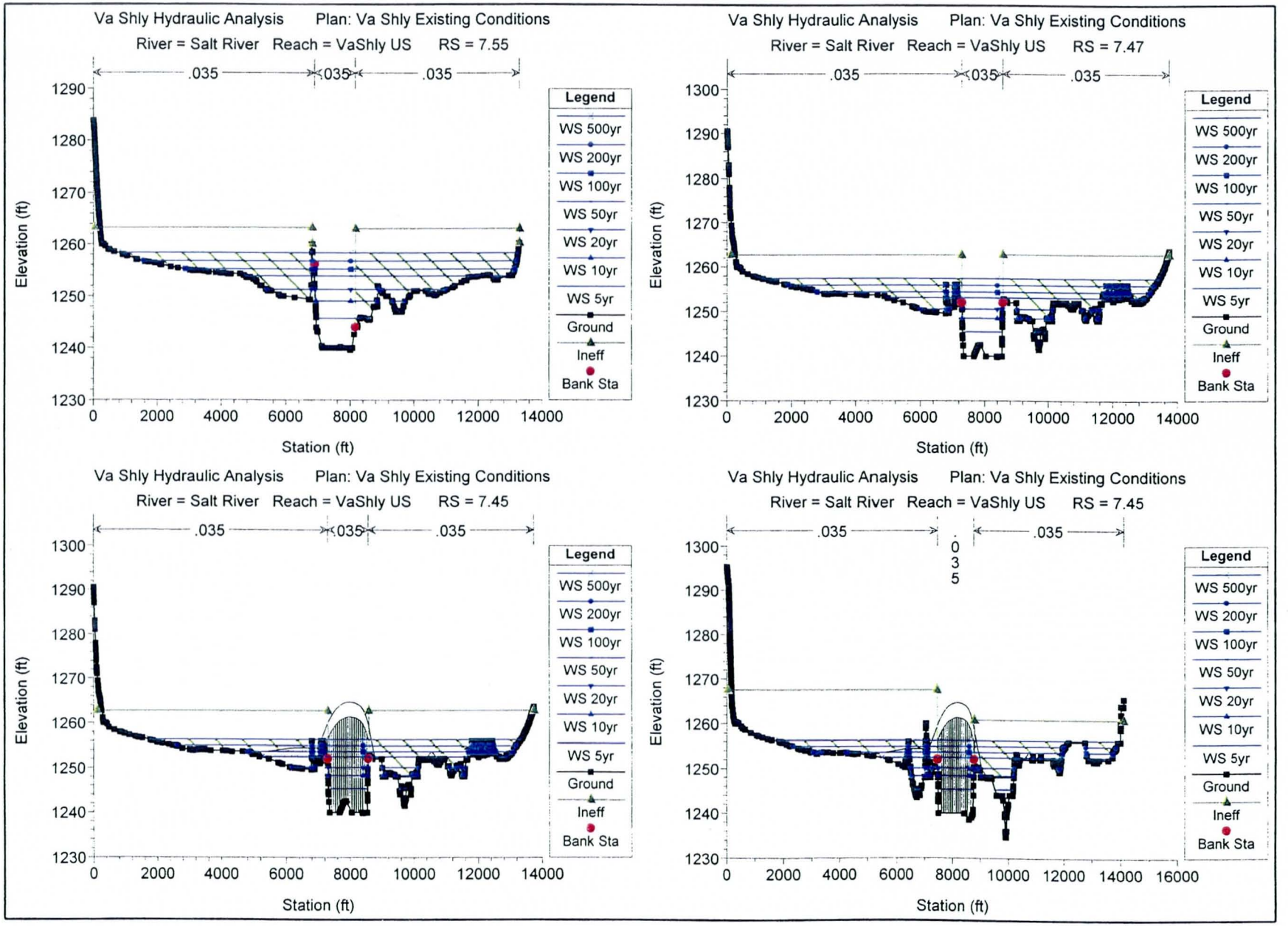

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.88 Note: n values for first profile.
.035
.035
.2
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.85 Note: n values for first profile.
.035
.035
.054
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.81 Note: n values for first profile.
.035
.035
.046
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.77 Note: n values for first profile.
.035
.035
.059
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

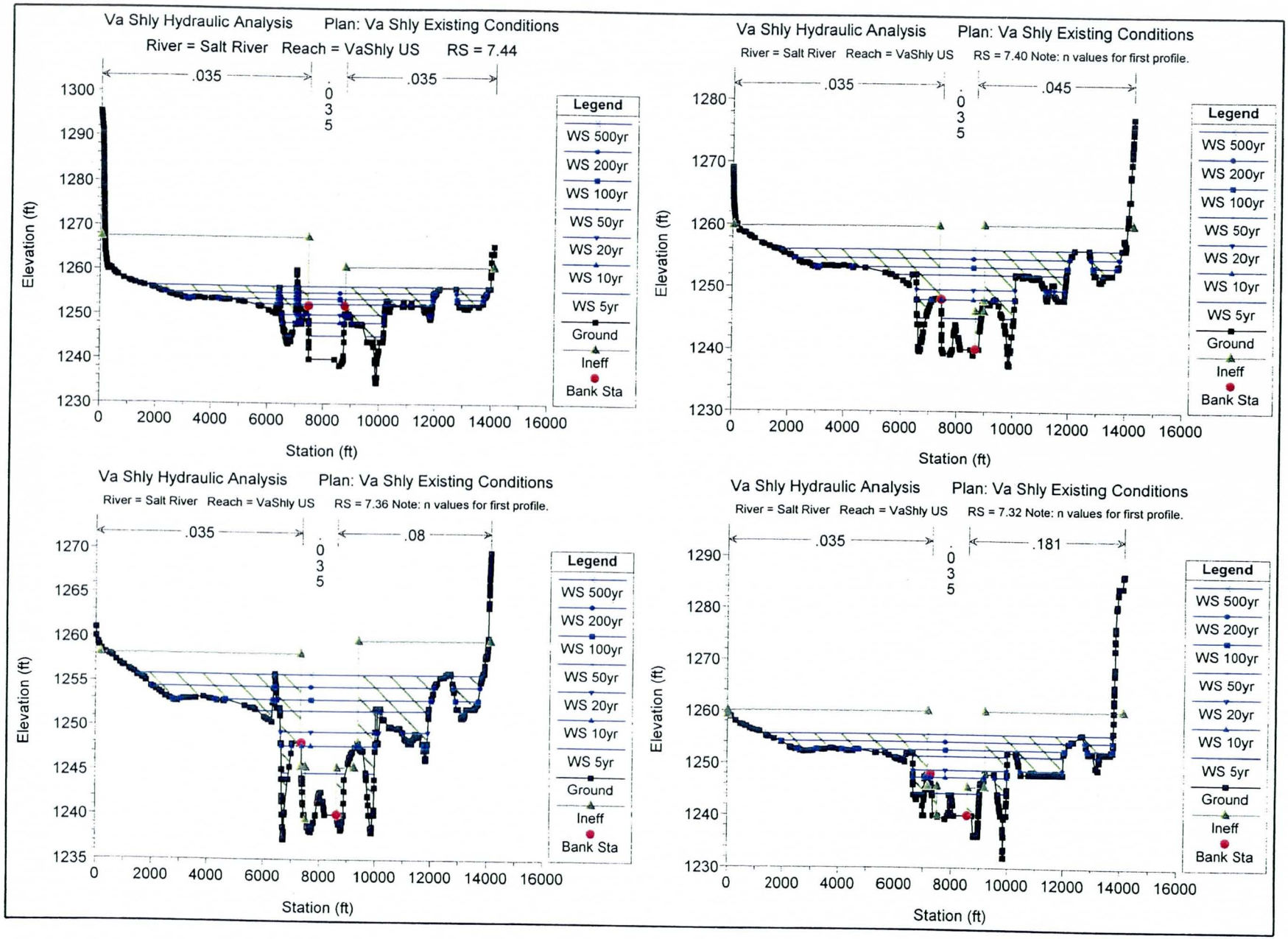

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.74 Note: n values for first profile.
.035
.025
.08
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.68 Note: n values for first profile.
.035
.035
1.4
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.63 Note: n values for first profile.
.035
.035
.062
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.60 Note: n values for first profile.
.035
.035
.041
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

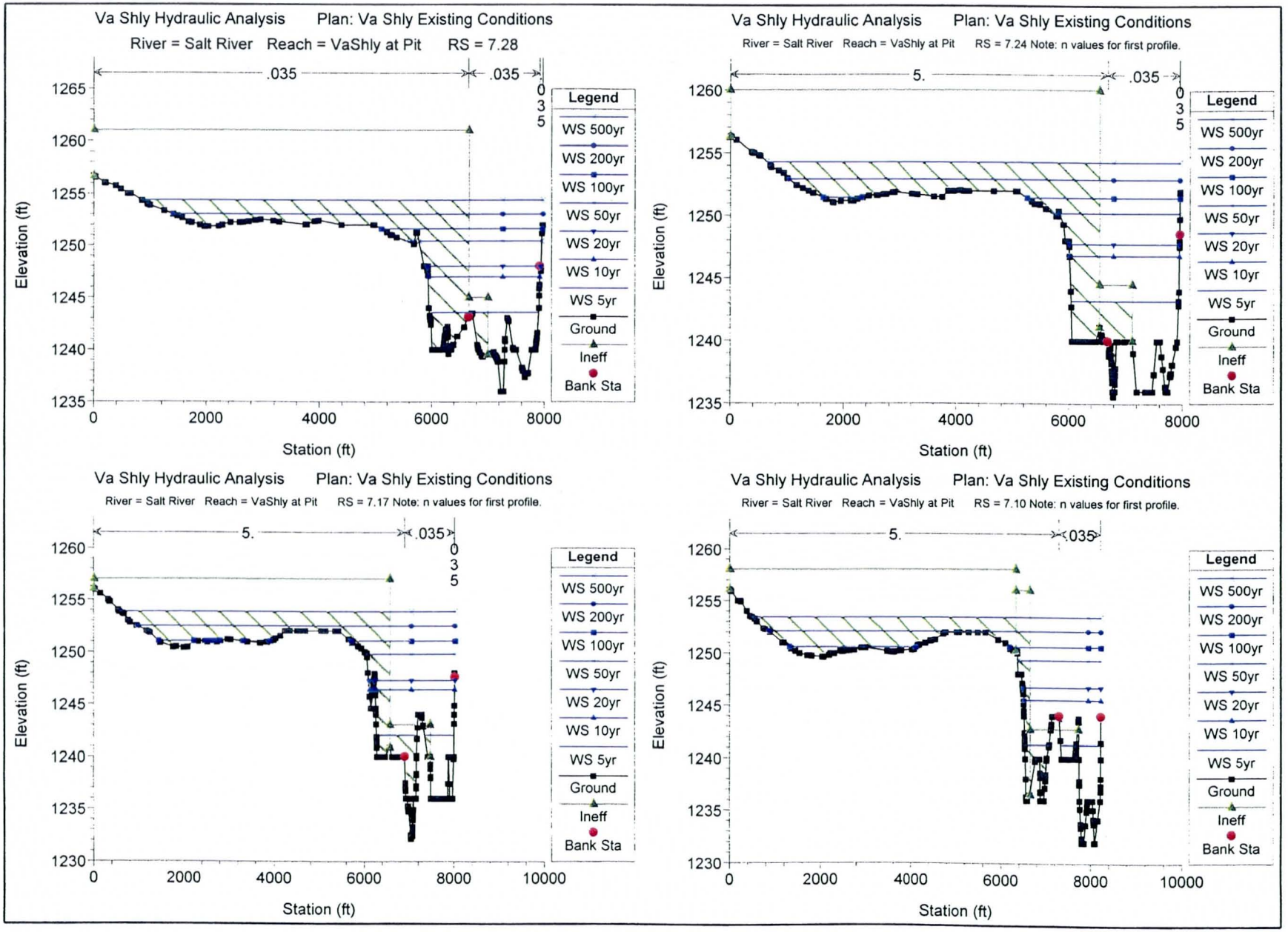

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.57 Note: n values for first profile.
.035
.035
.049
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.52 Note: n values for first profile.
.035
.035
.04
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.44 Note: n values for first profile.
.035
.035
.055
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.36 Note: n values for first profile.
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

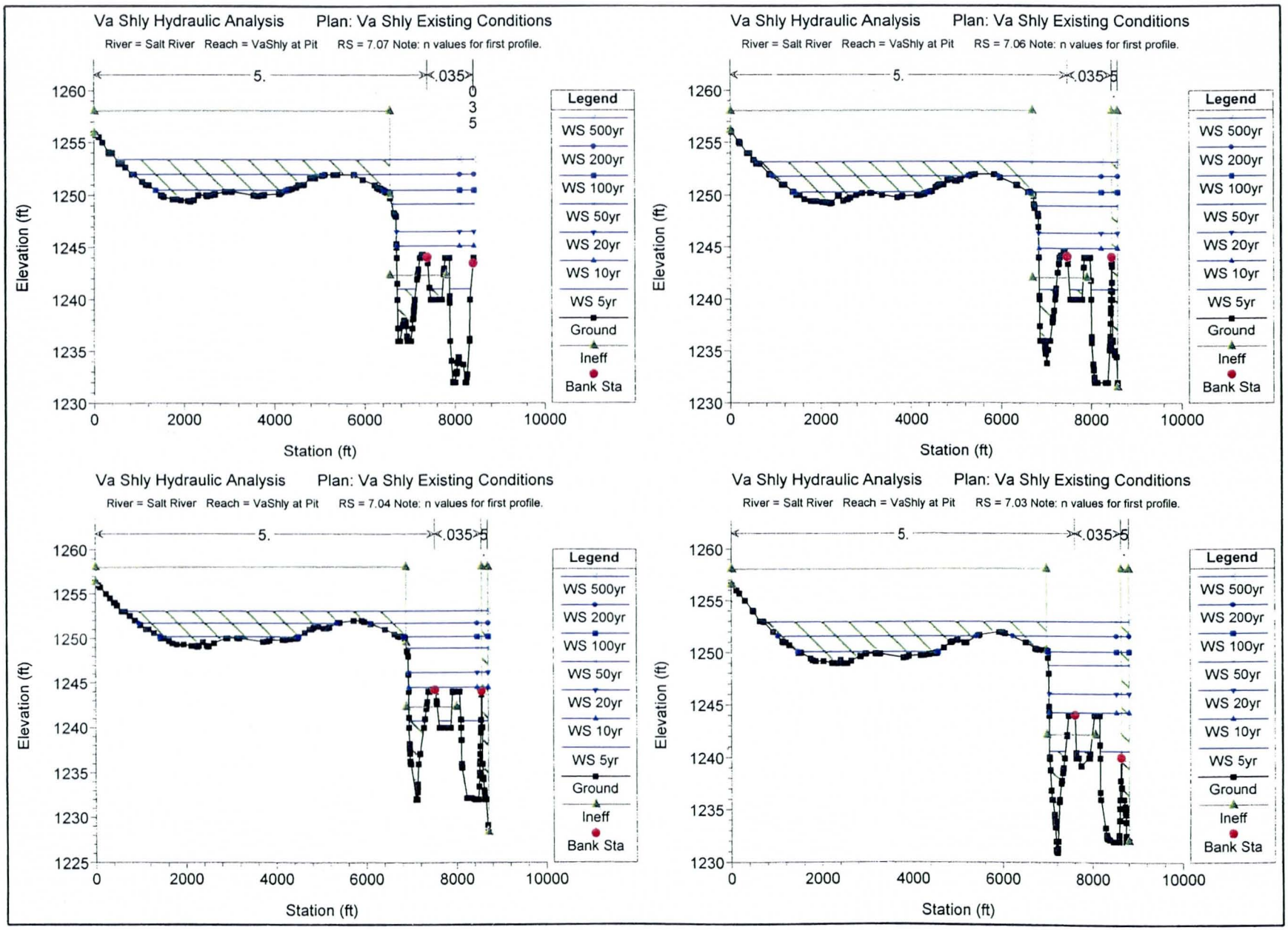

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.29 Note: n values for first profile.
.035
.035
.0365
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.20 Note: n values for first profile.
.035
.035
.045
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.10 Note: n values for first profile.
.035
.035
.13
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 8.01 Note: n values for first profile.
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

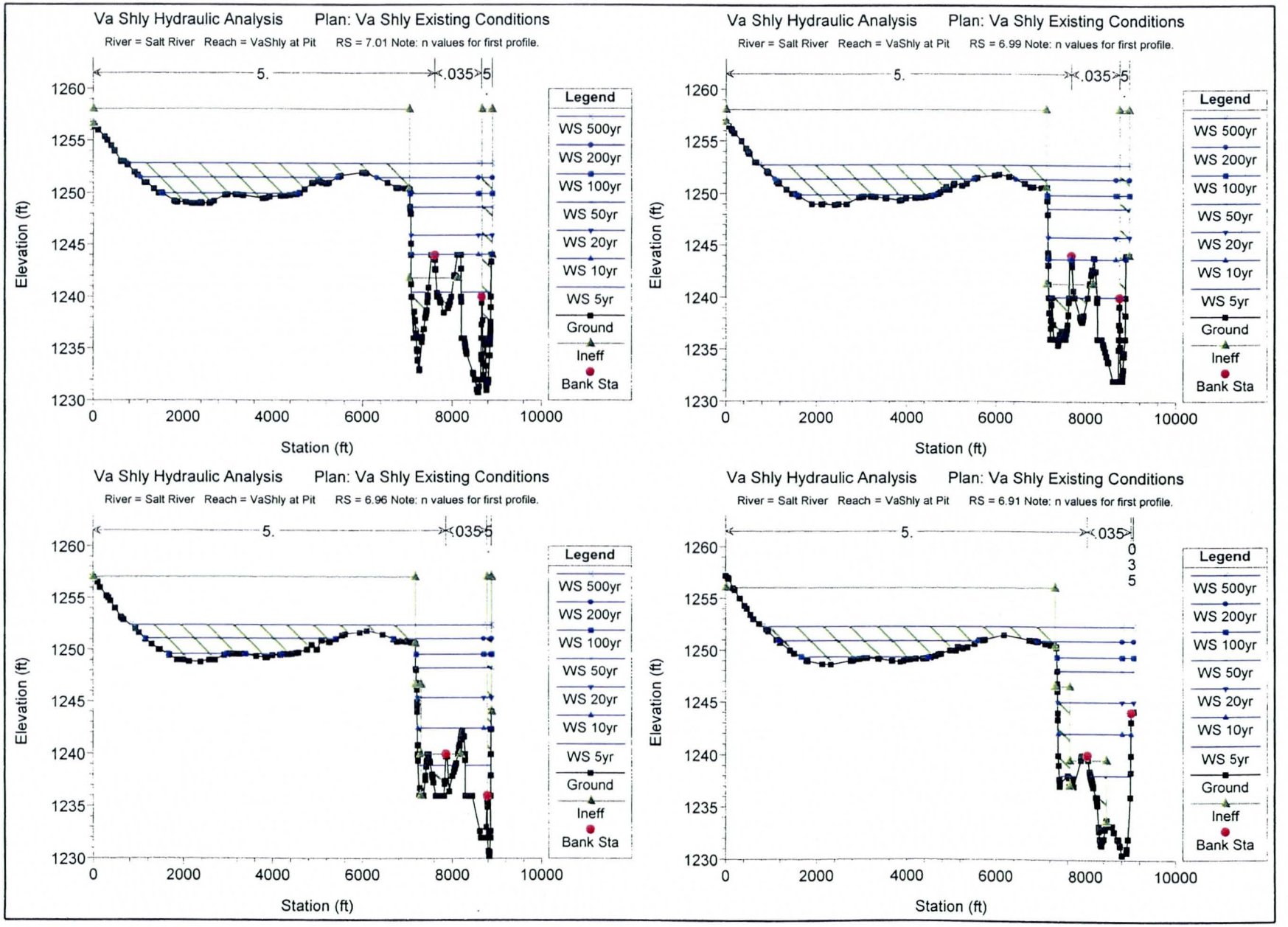

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.91 Note: n values for first profile.
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.83 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.71 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.63 Note: n values for first profile.

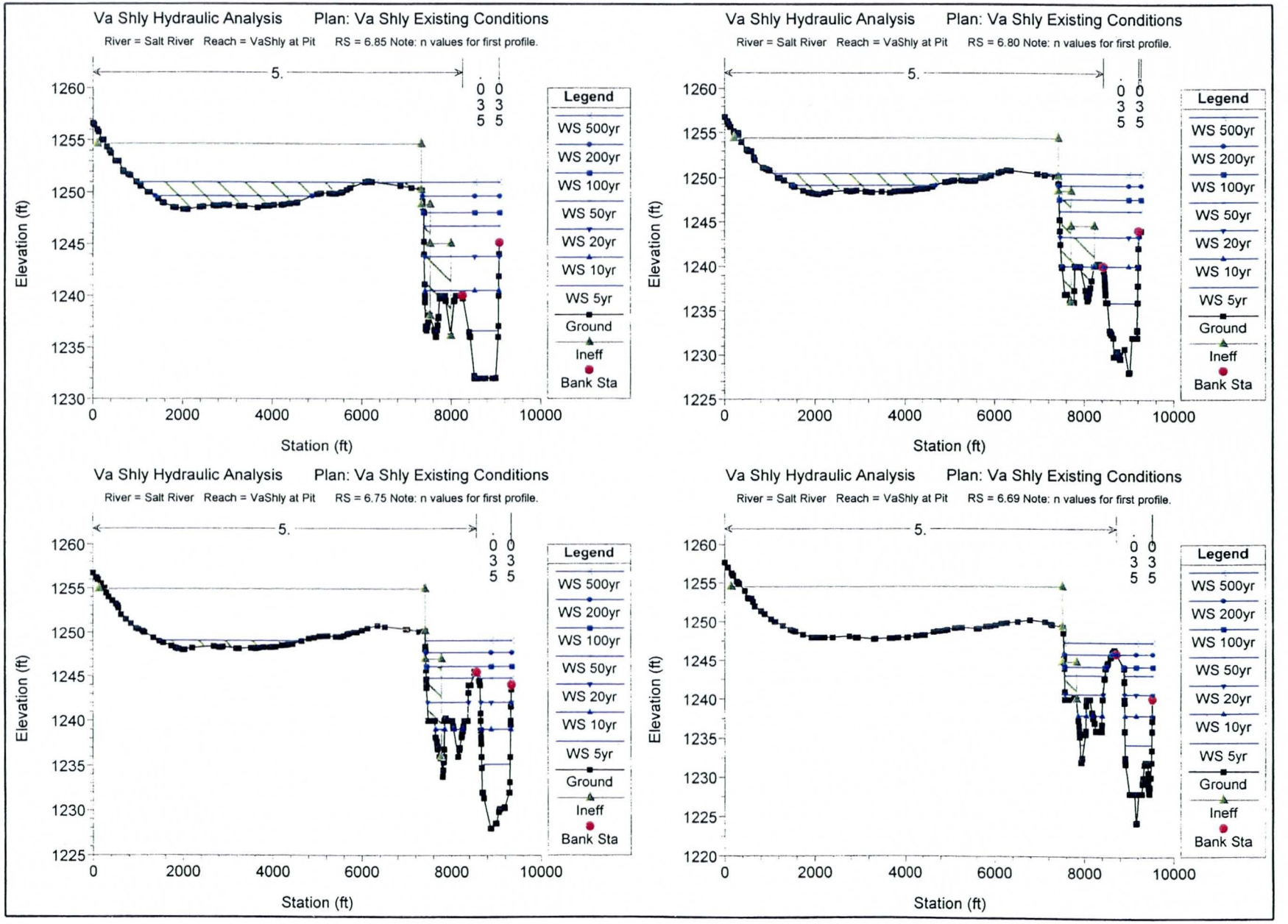

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.55
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.47
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.45
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.45
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

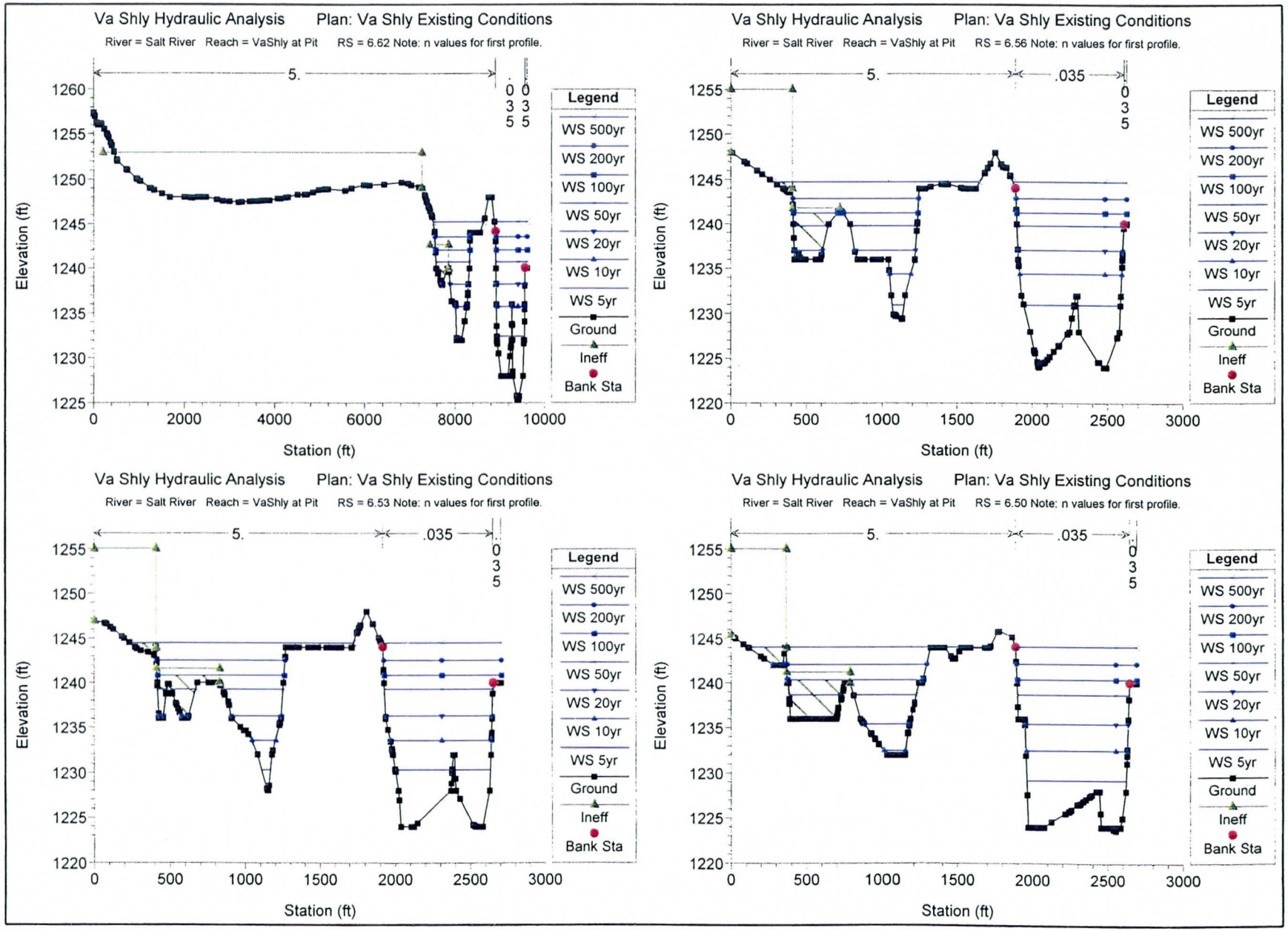

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.44
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.40 Note: n values for first profile.
.035
.035
.045
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.36 Note: n values for first profile.
.035
.035
.08
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly US RS = 7.32 Note: n values for first profile.
.035
.035
.181
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

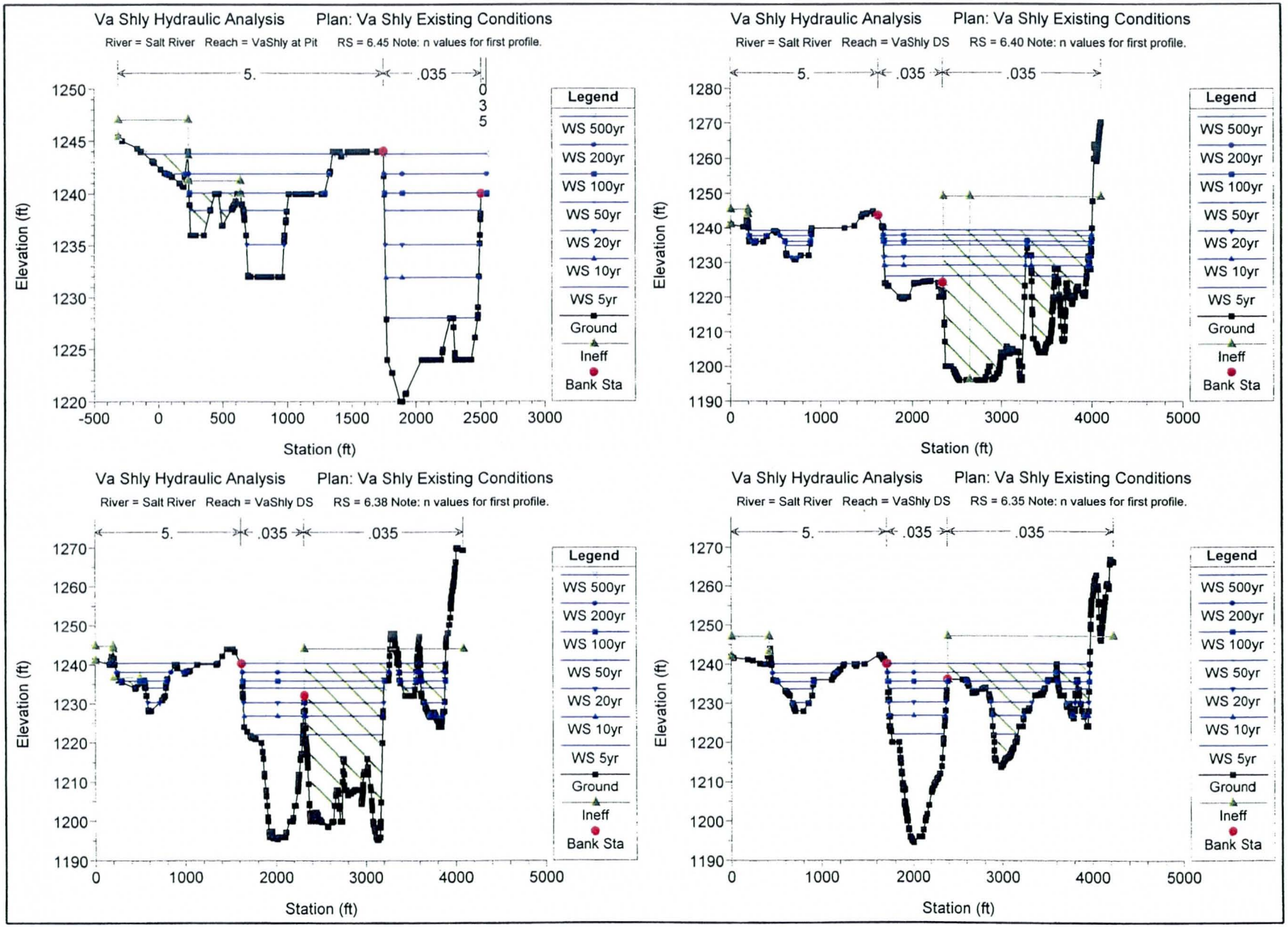

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 7.28
.035
.035
0
3
5
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 7.24 Note: n values for first profile.
5.
.035
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 7.17 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 7.10 Note: n values for first profile.

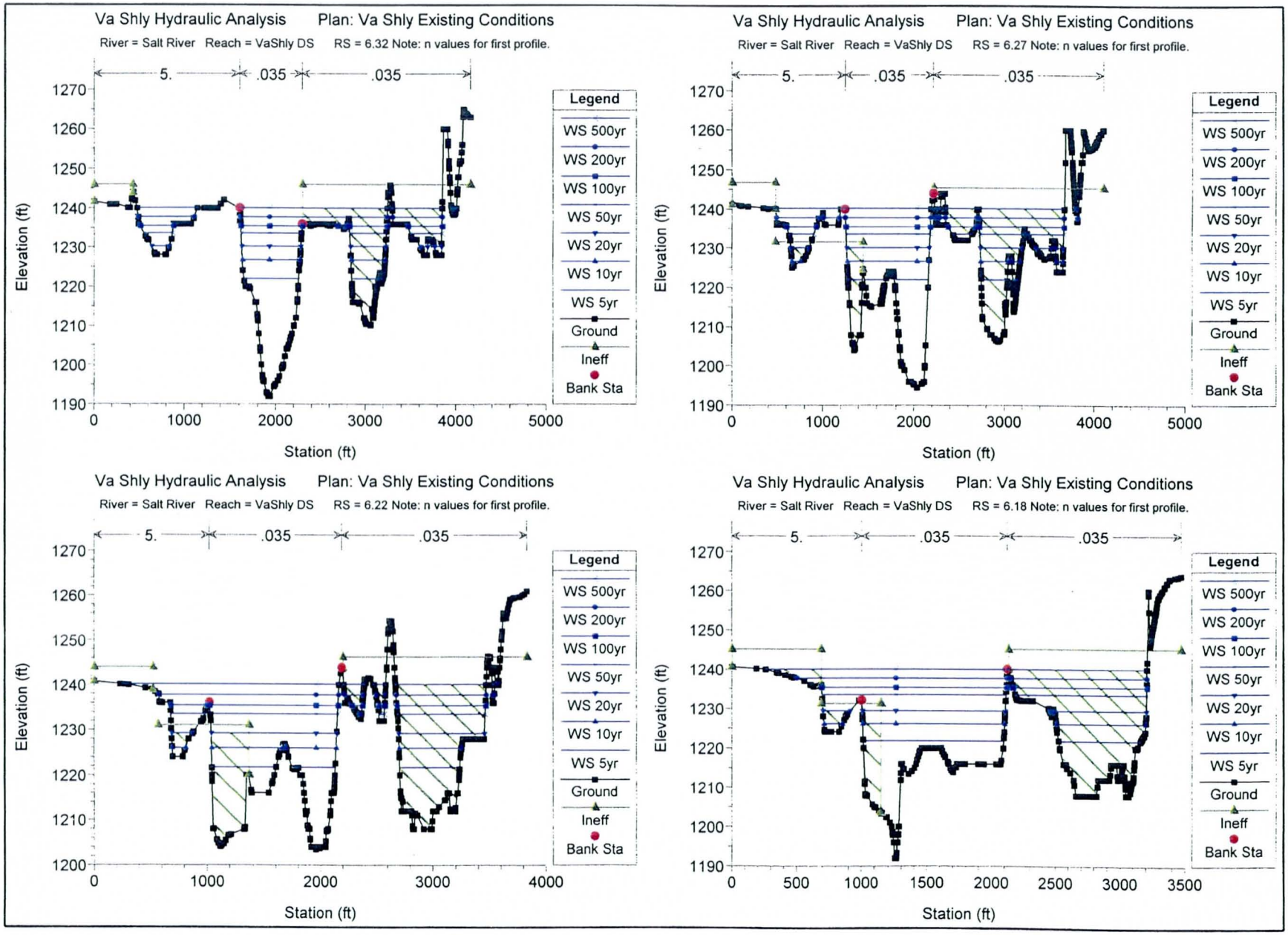

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 7.07 Note: n values for first profile.
5. .035 0 3 5
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 7.06 Note: n values for first profile.
5. .035 5
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 7.04 Note: n values for first profile.
5. .035 5
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 7.03 Note: n values for first profile.
5. .035 5
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

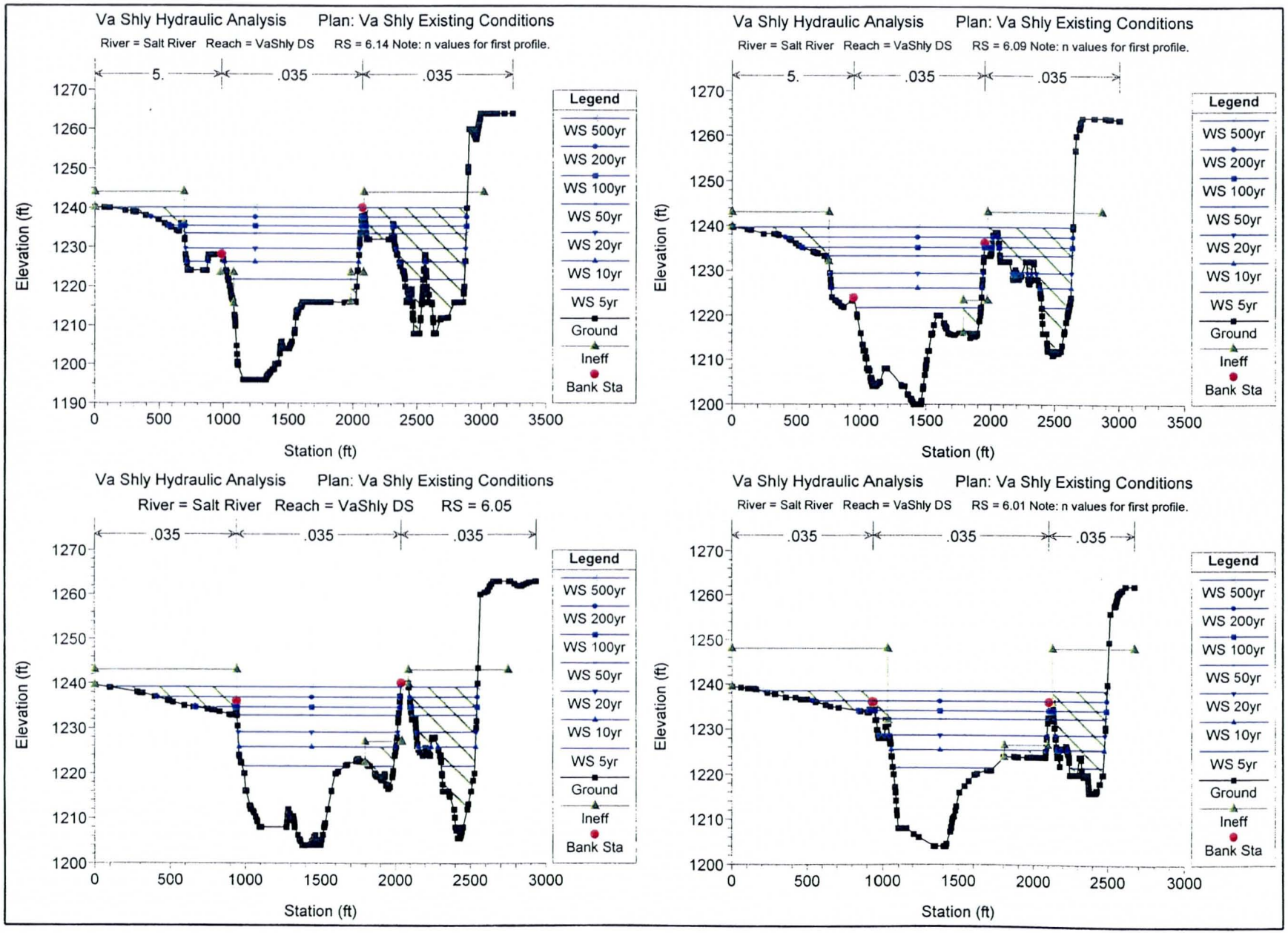

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 7.01 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.99 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.96 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.91 Note: n values for first profile.
5.
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
1260
1255
1250
1245
1240
1235
1230
0
2000
4000
6000
8000
10000

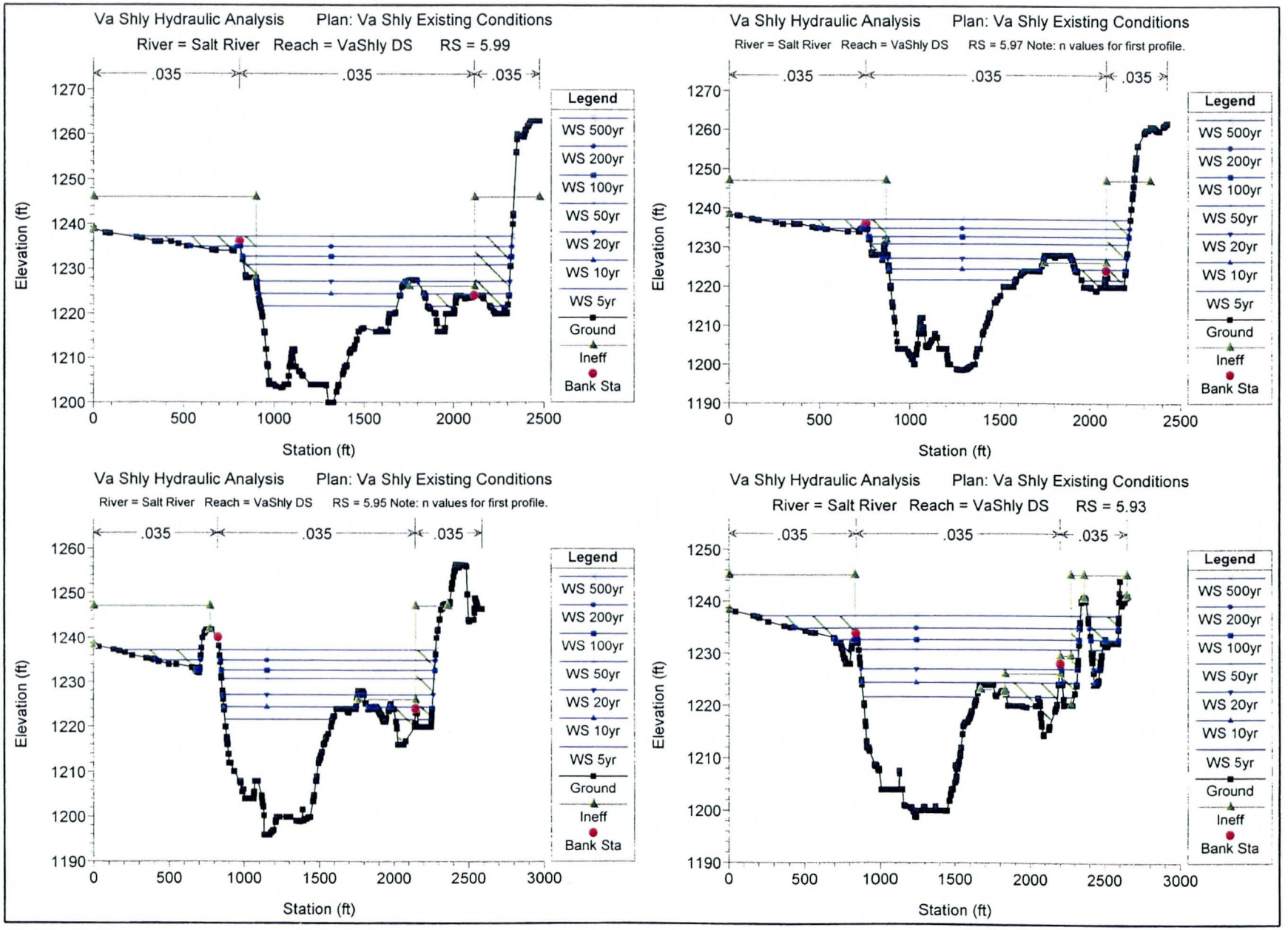

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.85 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.80 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.75 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.69 Note: n values for first profile.
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

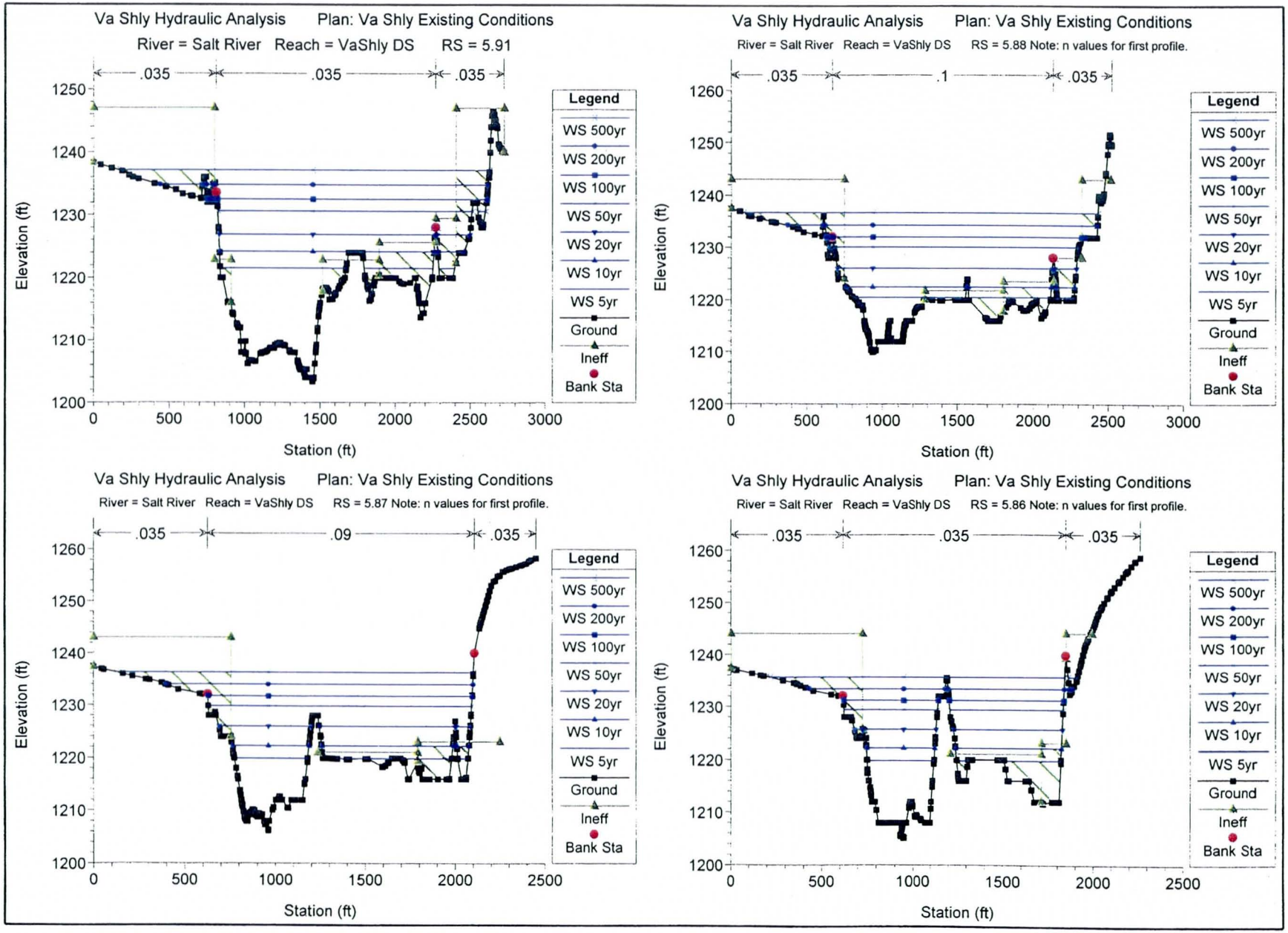

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.62 Note: n values for first profile.
5. .035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.56 Note: n values for first profile.
5. .035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.53 Note: n values for first profile.
5. .035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.50 Note: n values for first profile.
5. .035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

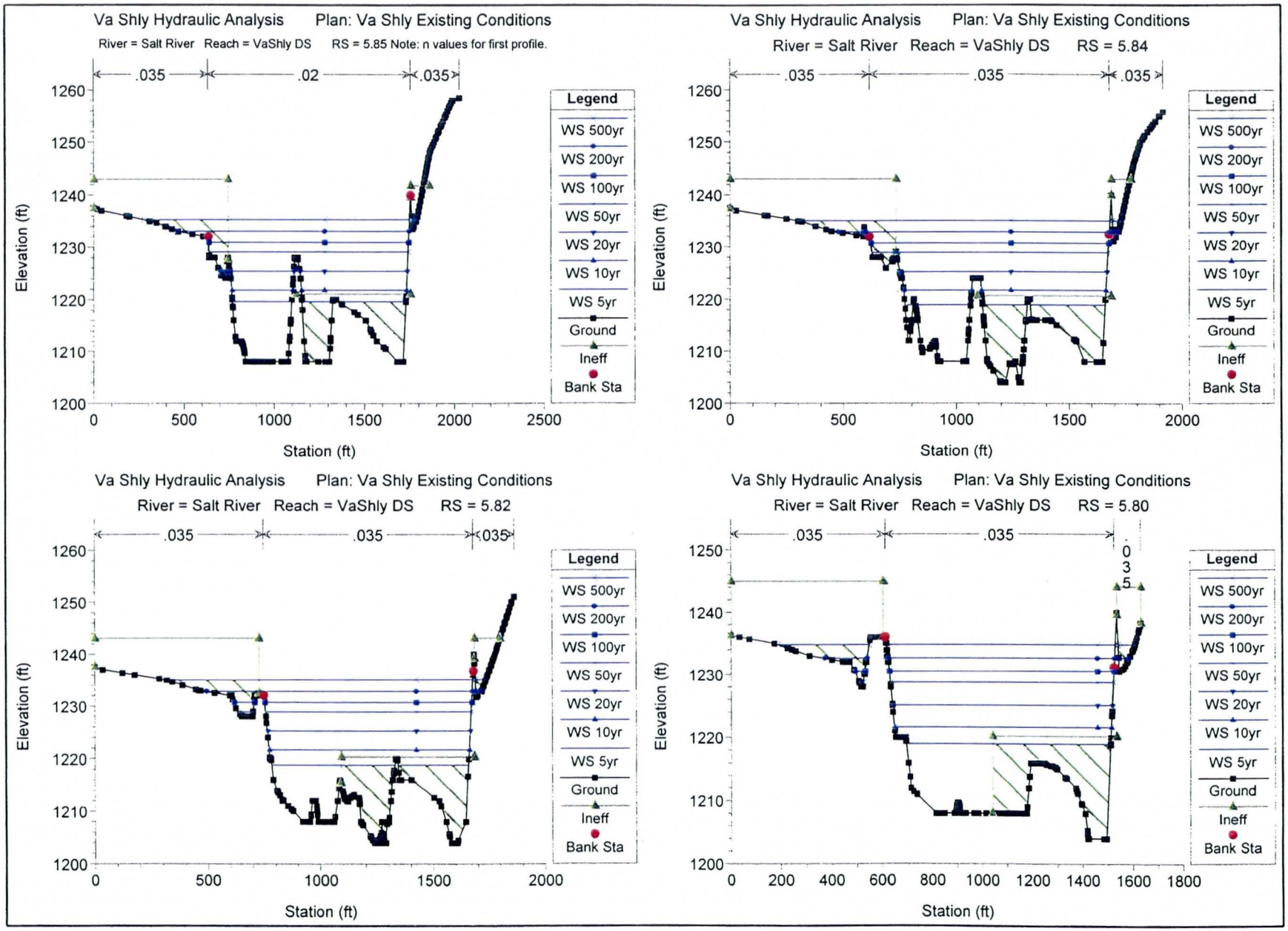

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly at Pit RS = 6.45 Note: n values for first profile.
5. .035
0
3
5
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.40 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.38 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.35 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

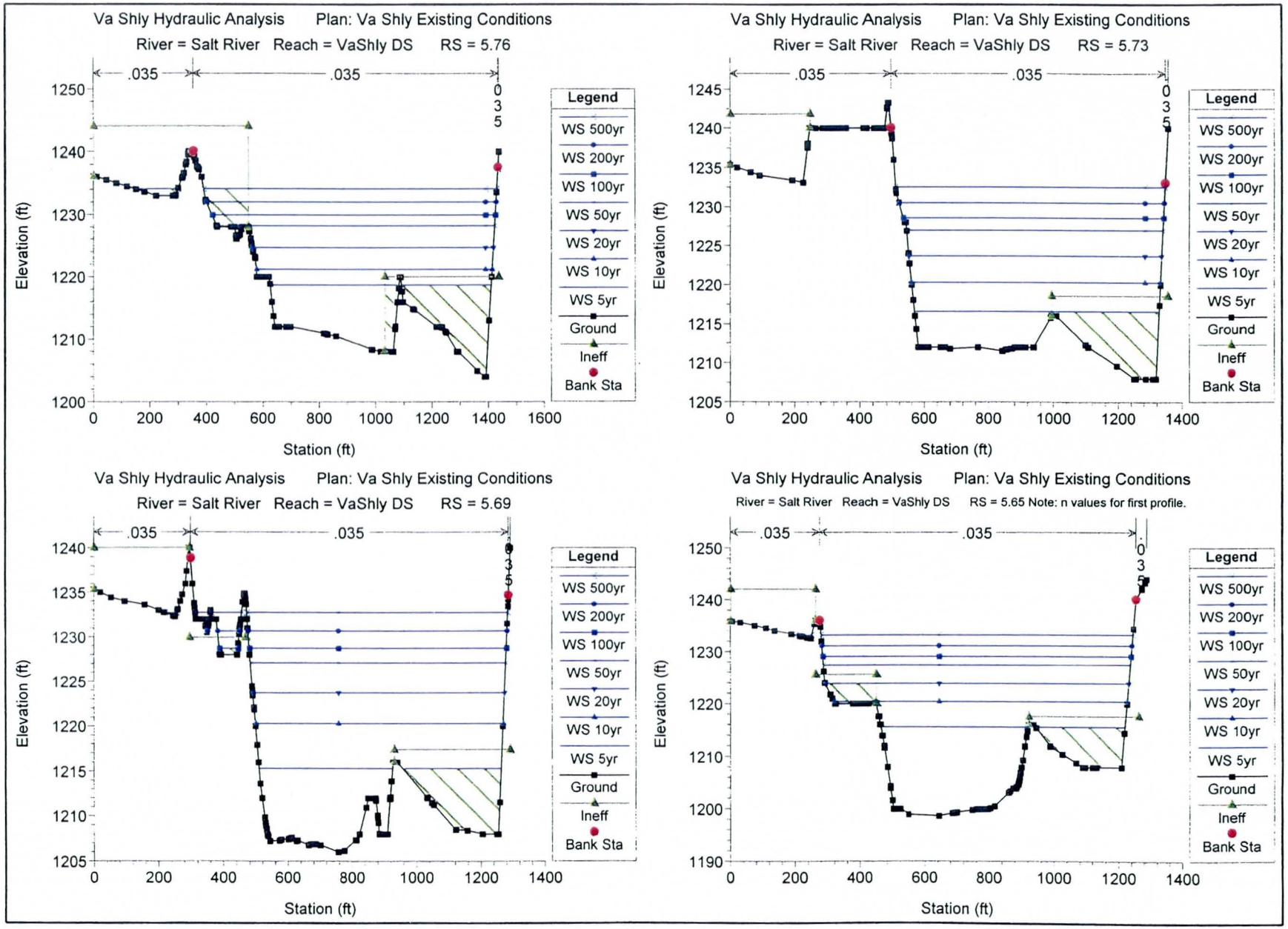

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.32 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.27 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.22 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.18 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

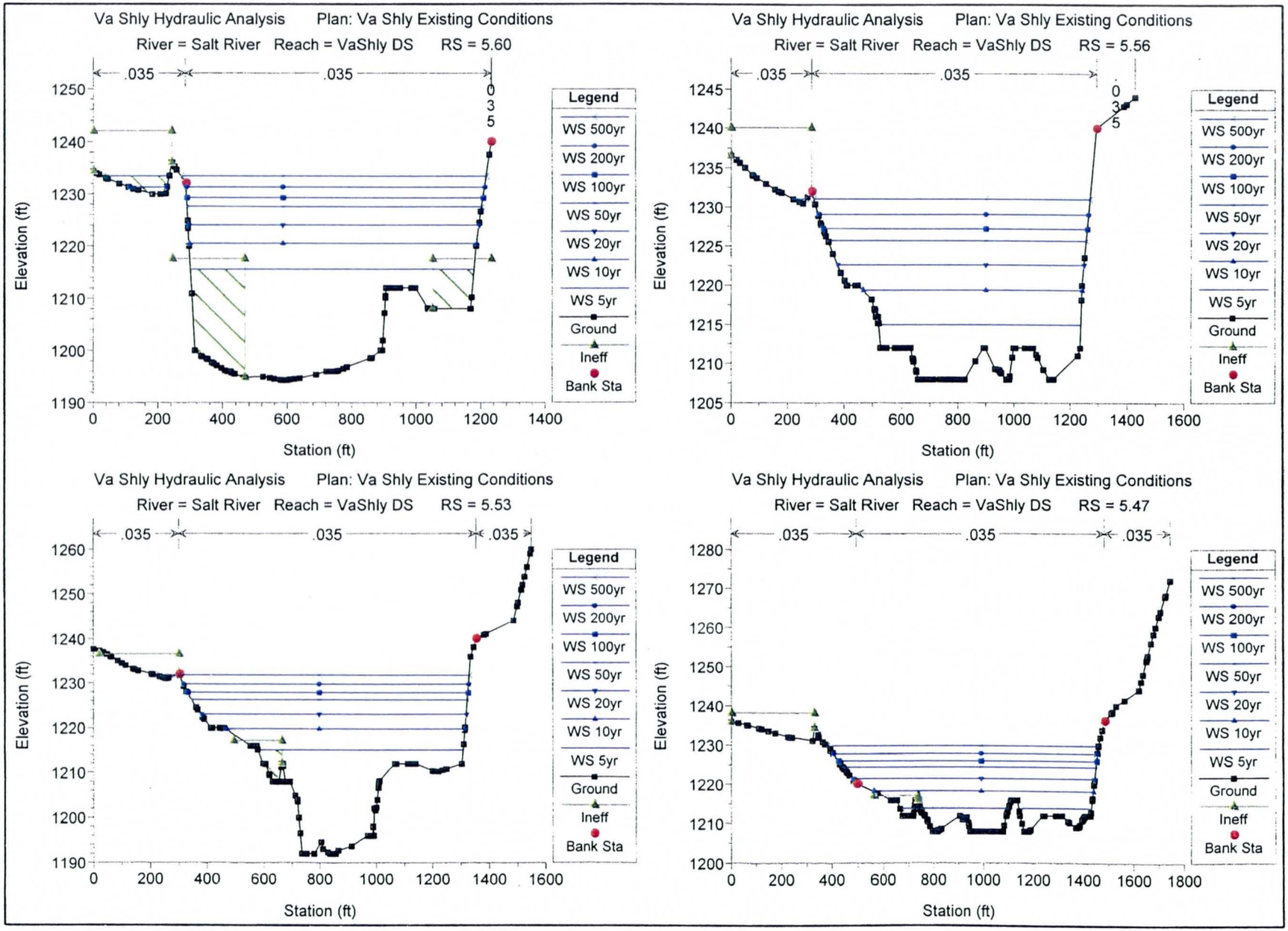

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.14 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.09 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.05
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 6.01 Note: n values for first profile.
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

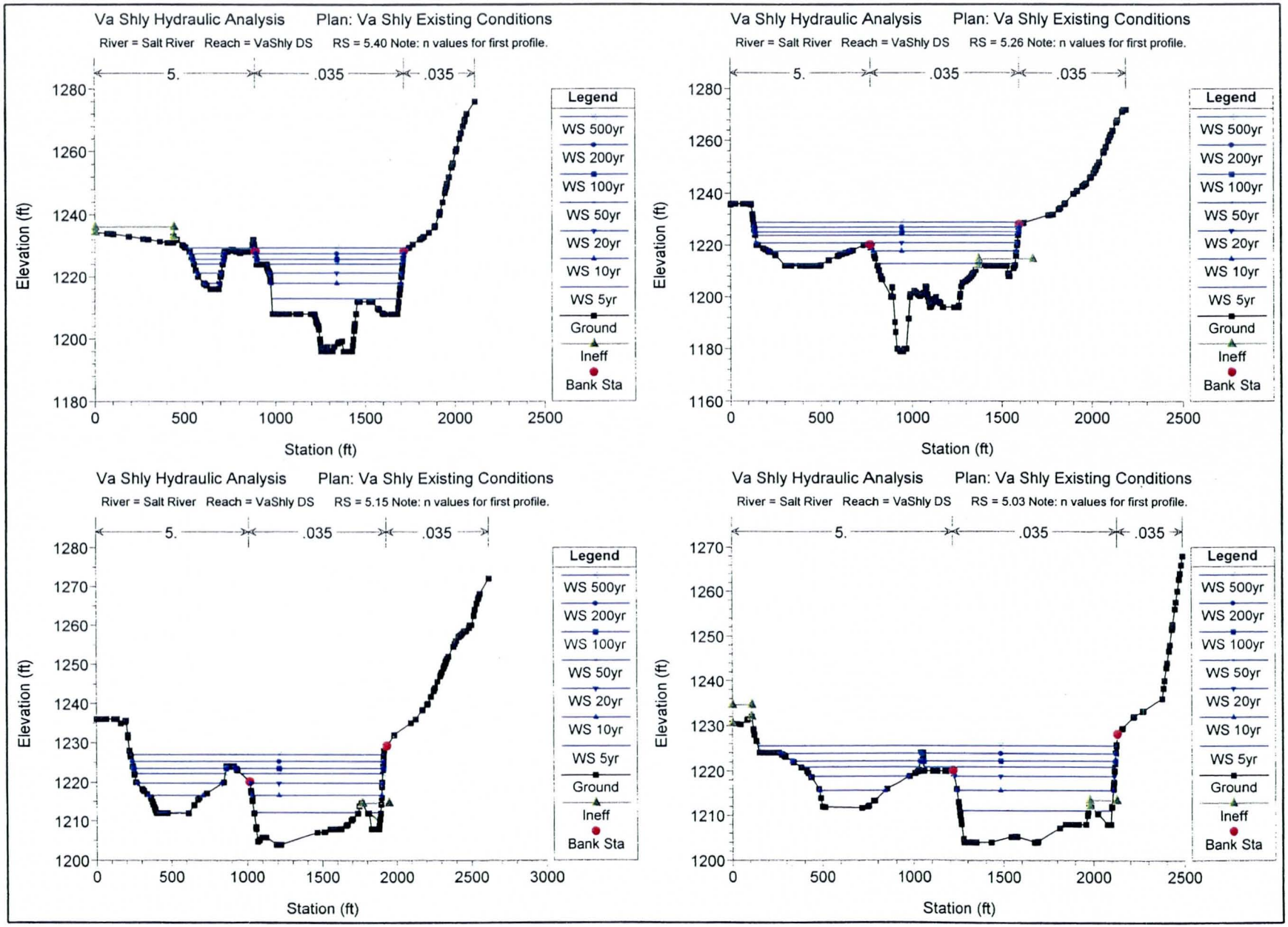

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.99
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.97 Note: n values for first profile.
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.95 Note: n values for first profile.
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.93
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

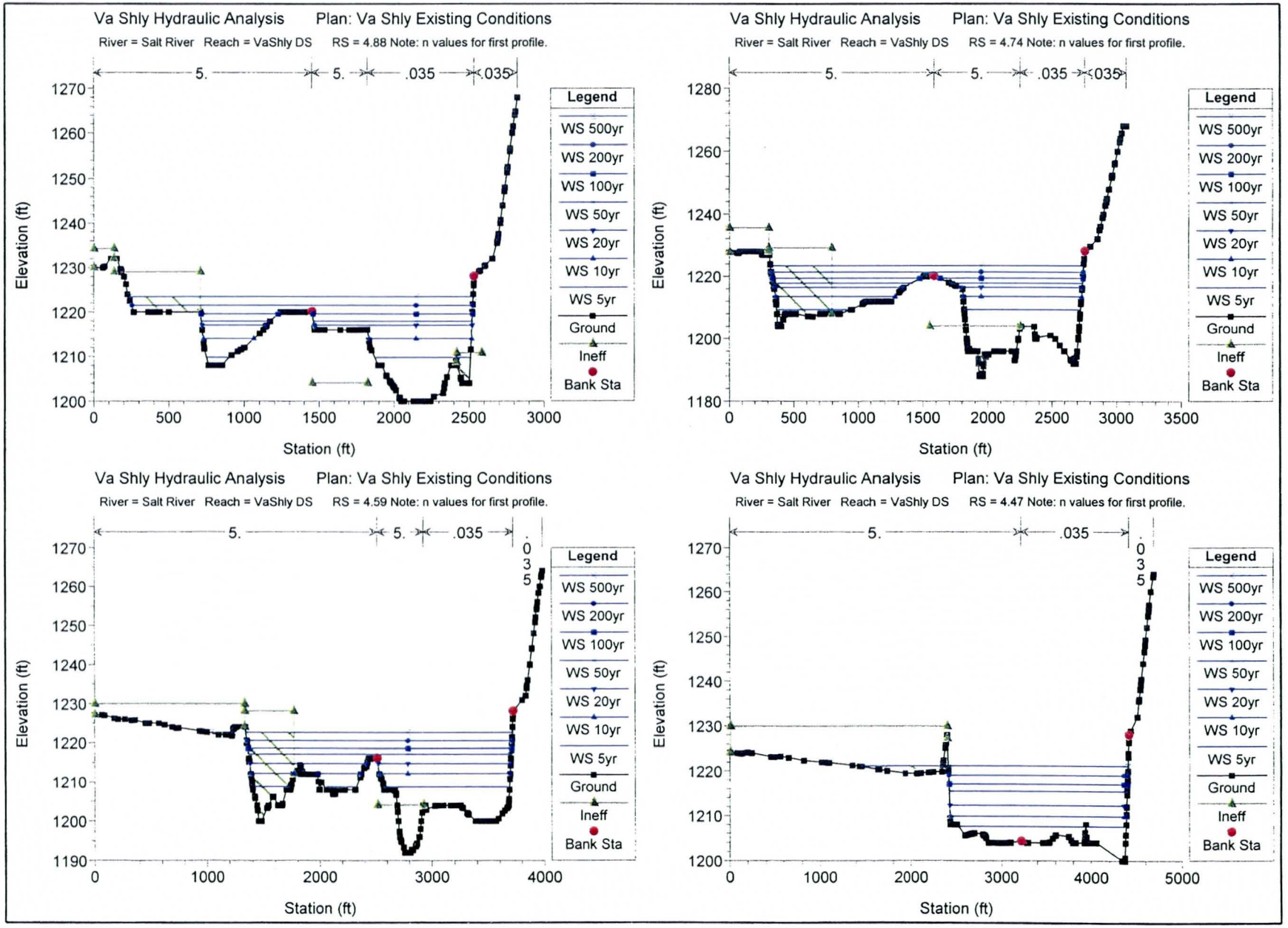

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.91
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.88 Note: n values for first profile.
.035 .1 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.87 Note: n values for first profile.
.035 .09 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.86 Note: n values for first profile.
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

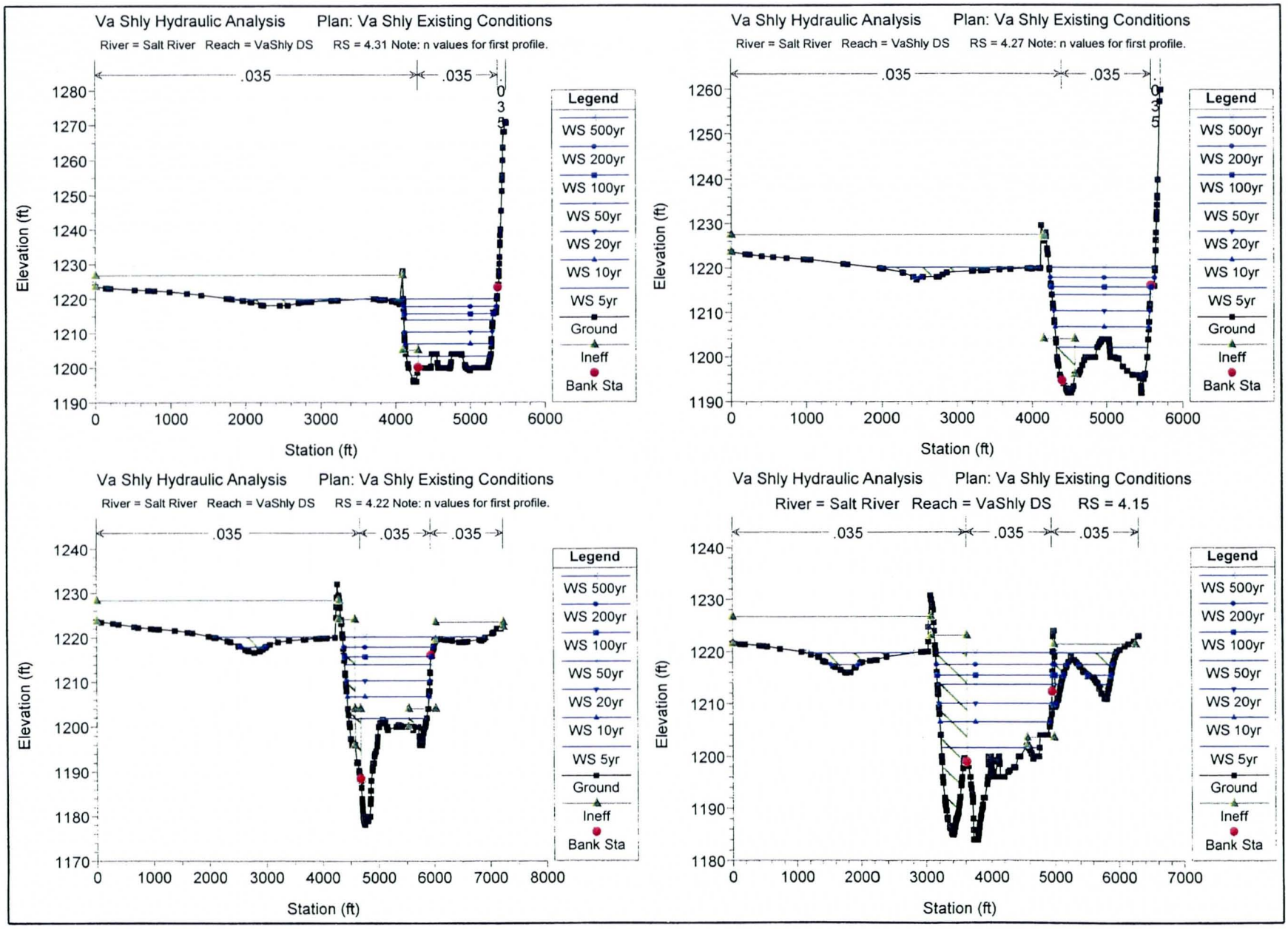

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.85 Note: n values for first profile.
.035
.02
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.84
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.82
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.80
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

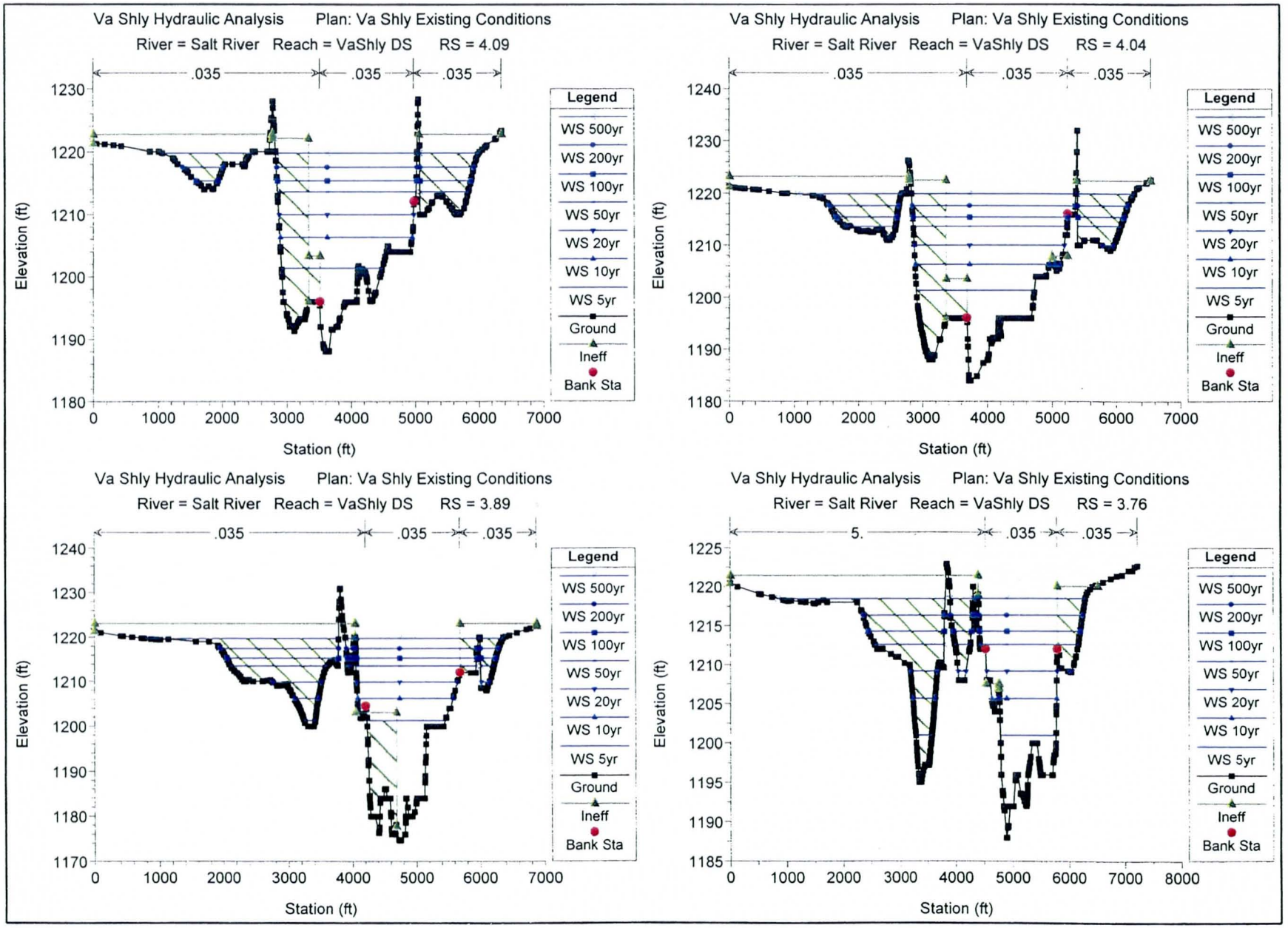

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.76
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.73
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.69
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.65 Note: n values for first profile.

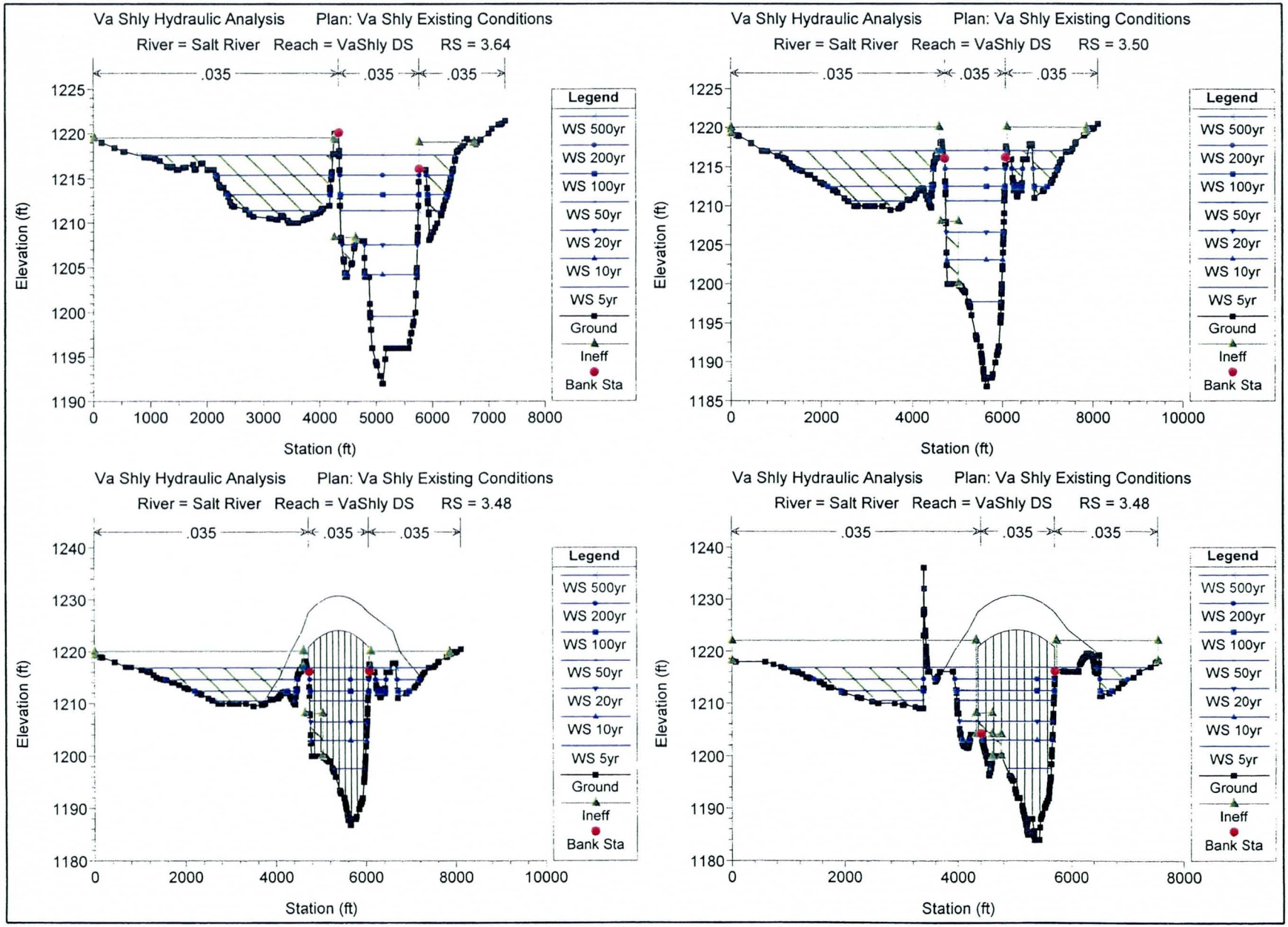

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.60
.035
.035
0
3
5
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.56
.035
.035
0
3
5
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.53
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.47
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

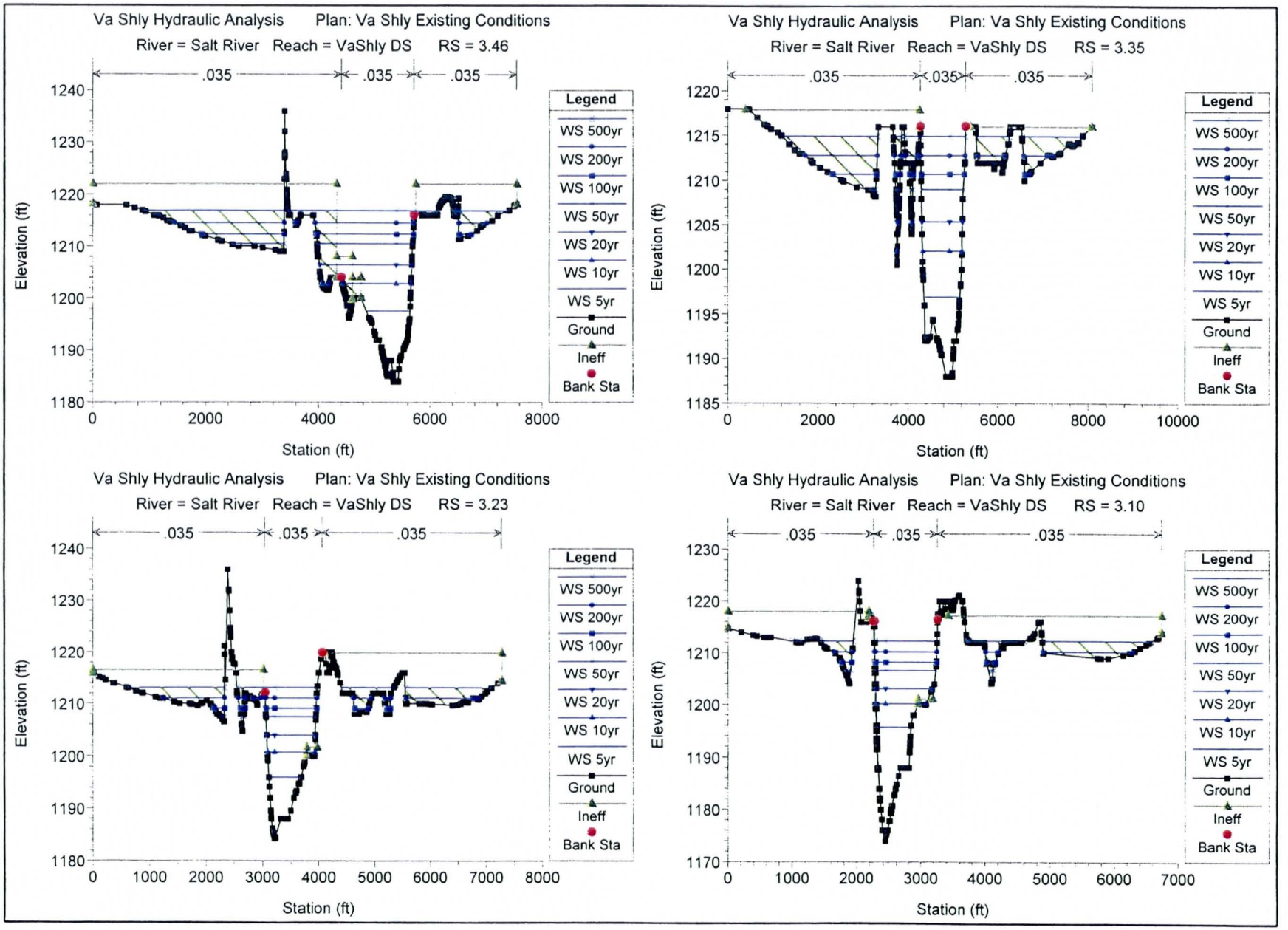

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.40 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.26 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.15 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 5.03 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

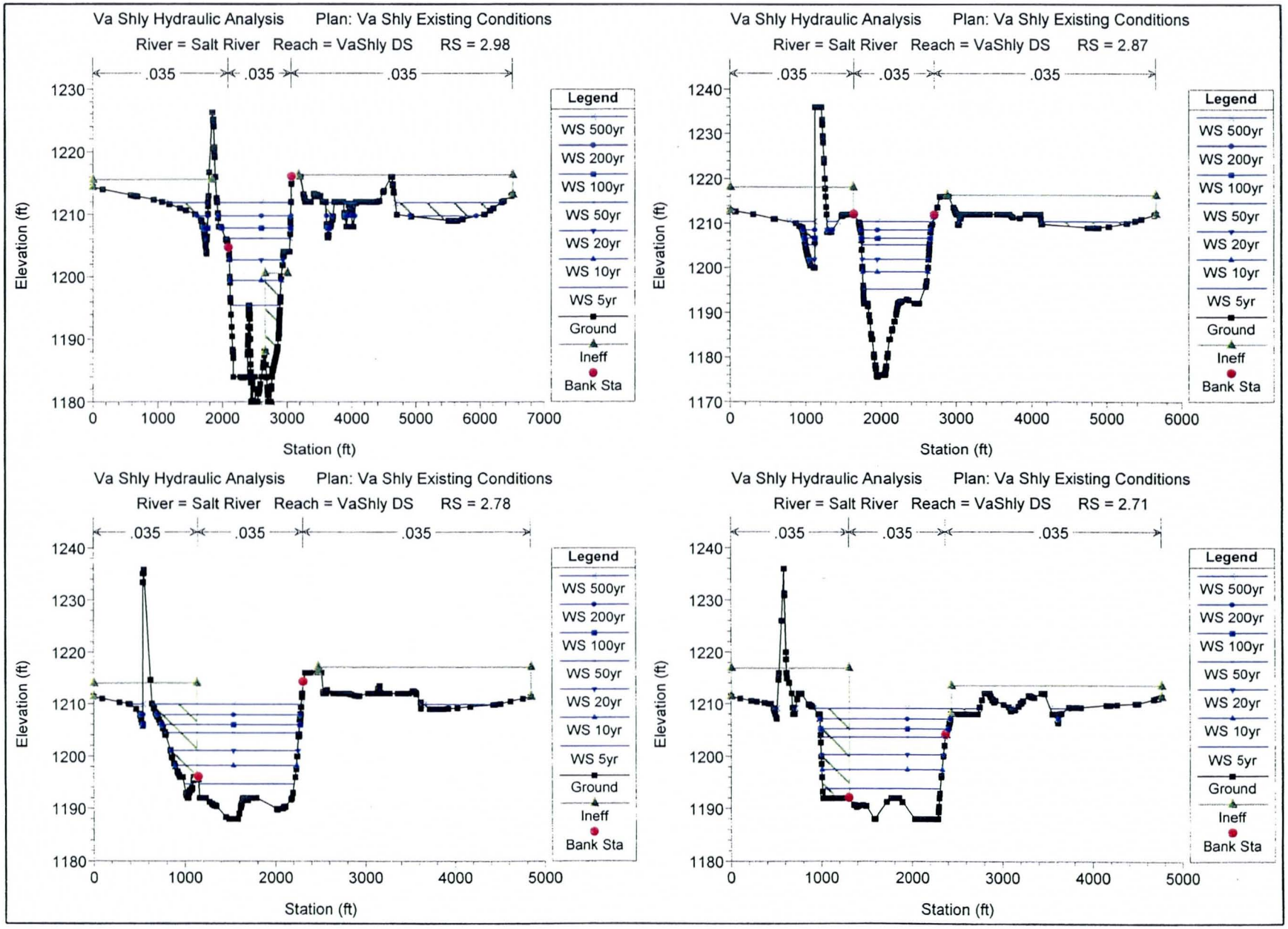

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.88 Note: n values for first profile.
5. 5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.74 Note: n values for first profile.
5. 5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.59 Note: n values for first profile.
5. 5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.47 Note: n values for first profile.
5. .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

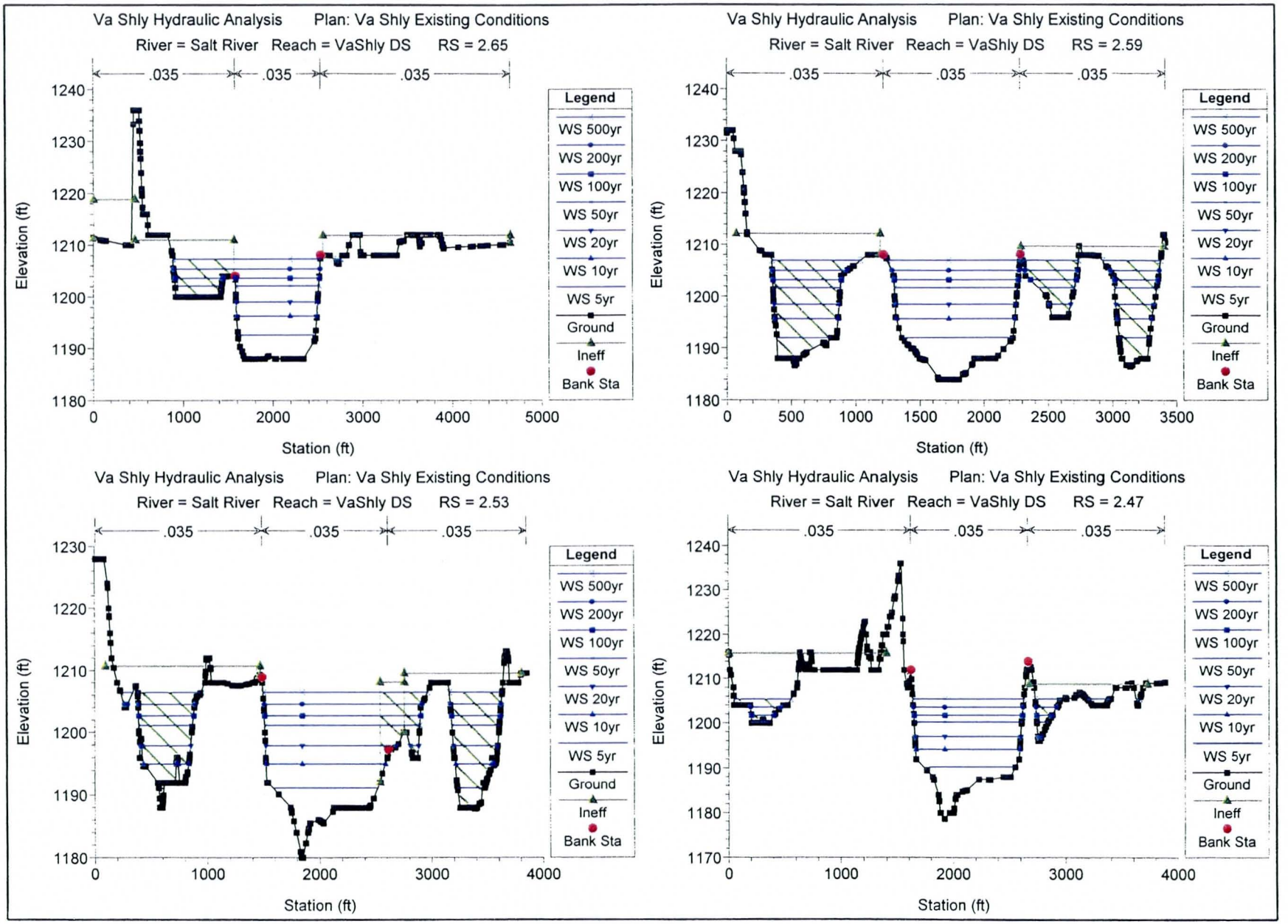

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.31 Note: n values for first profile.
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.27 Note: n values for first profile.
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.22 Note: n values for first profile.
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.15
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

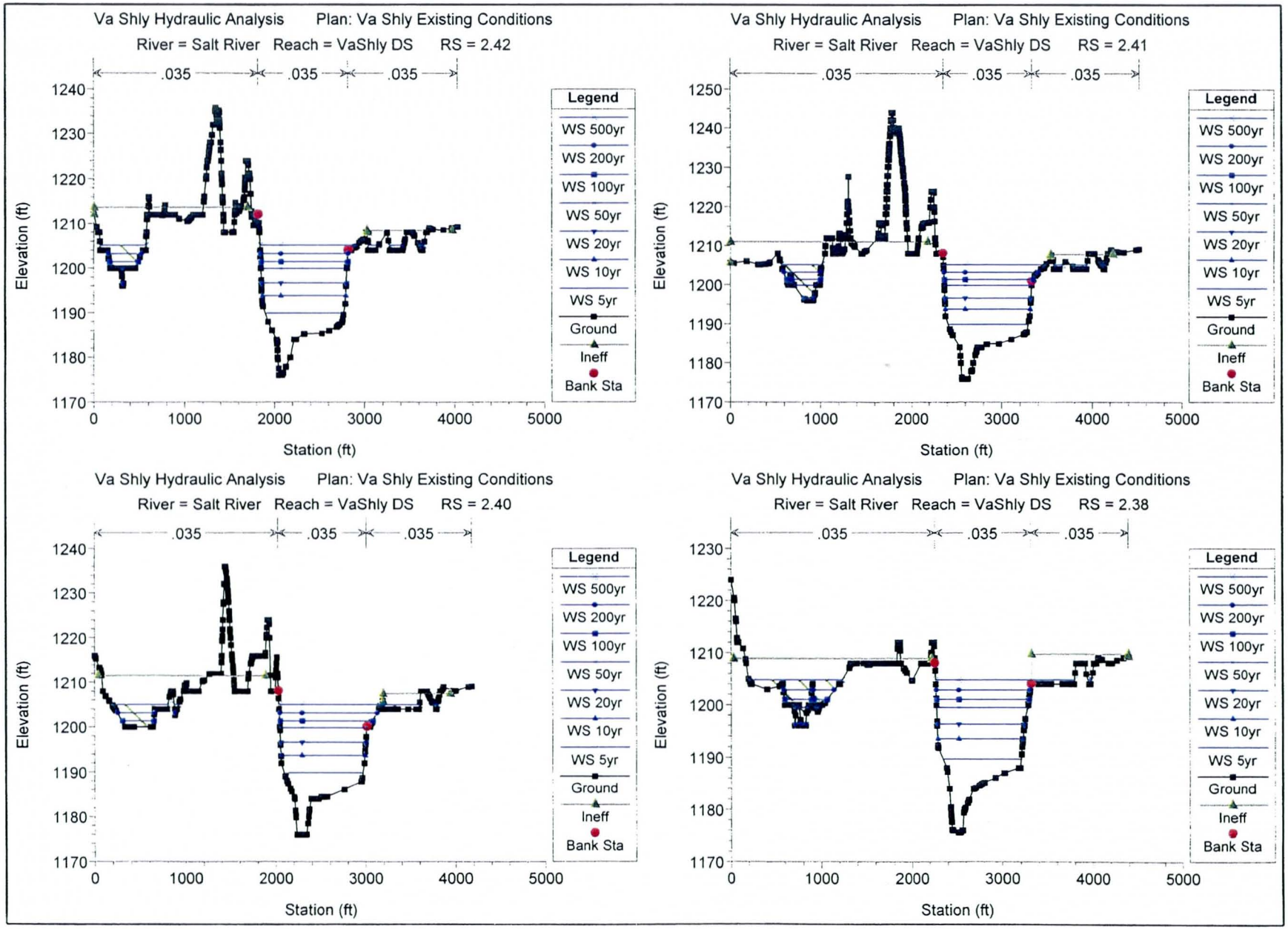

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.09
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 4.04
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.89
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.76
5.
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

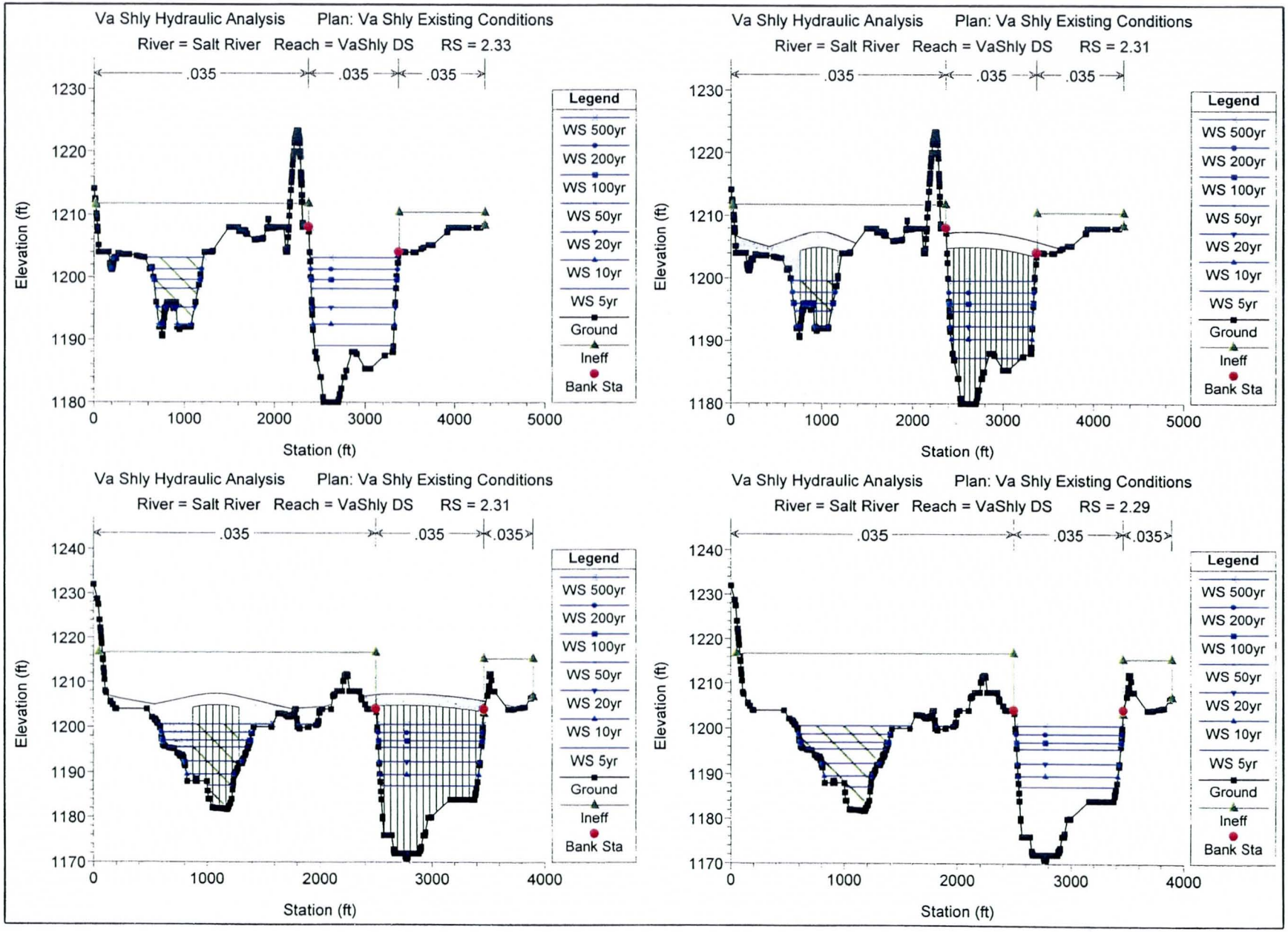

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.64
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.50
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.48
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.48
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

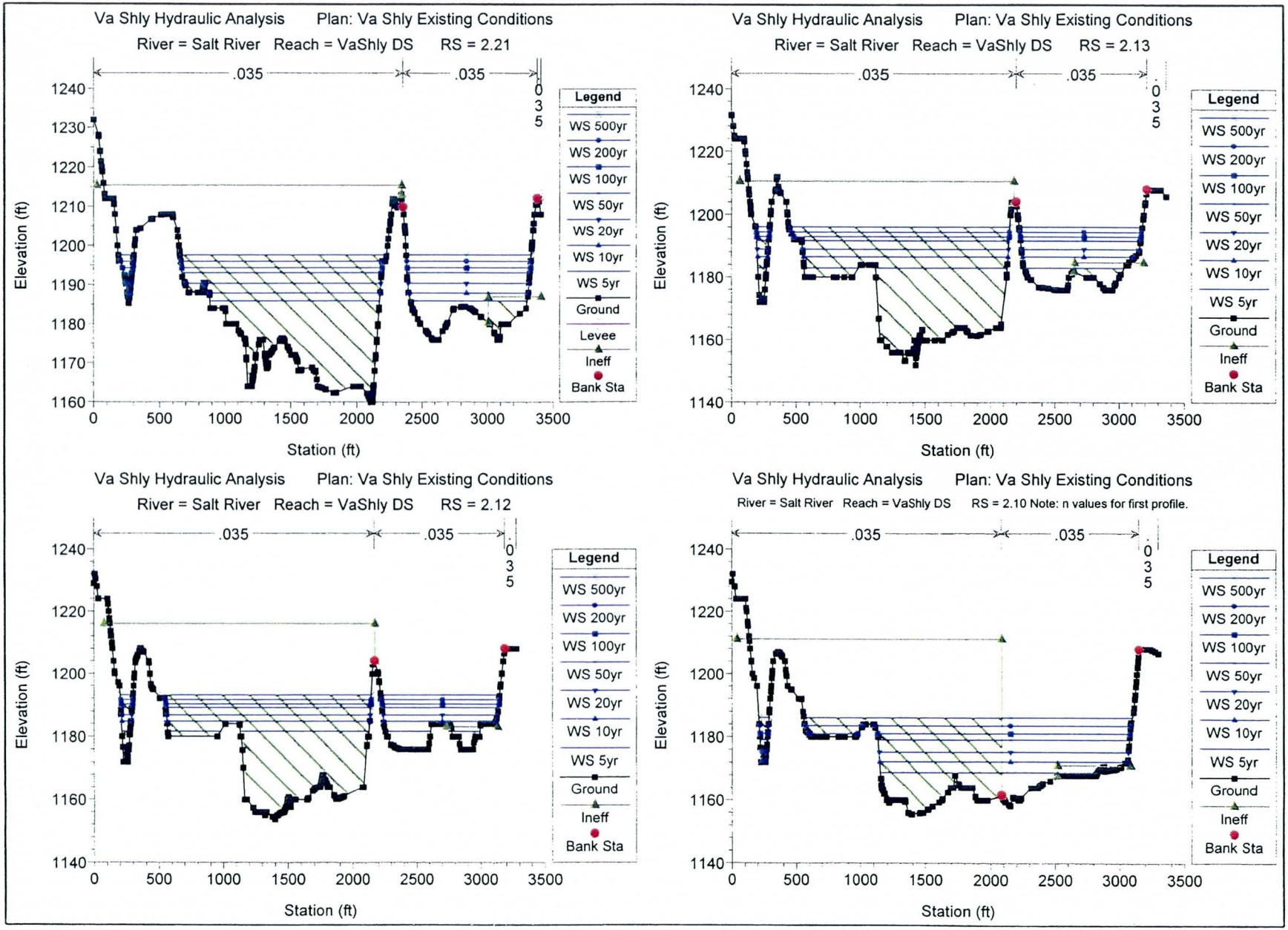

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.46
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.35
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.23
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 3.10
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

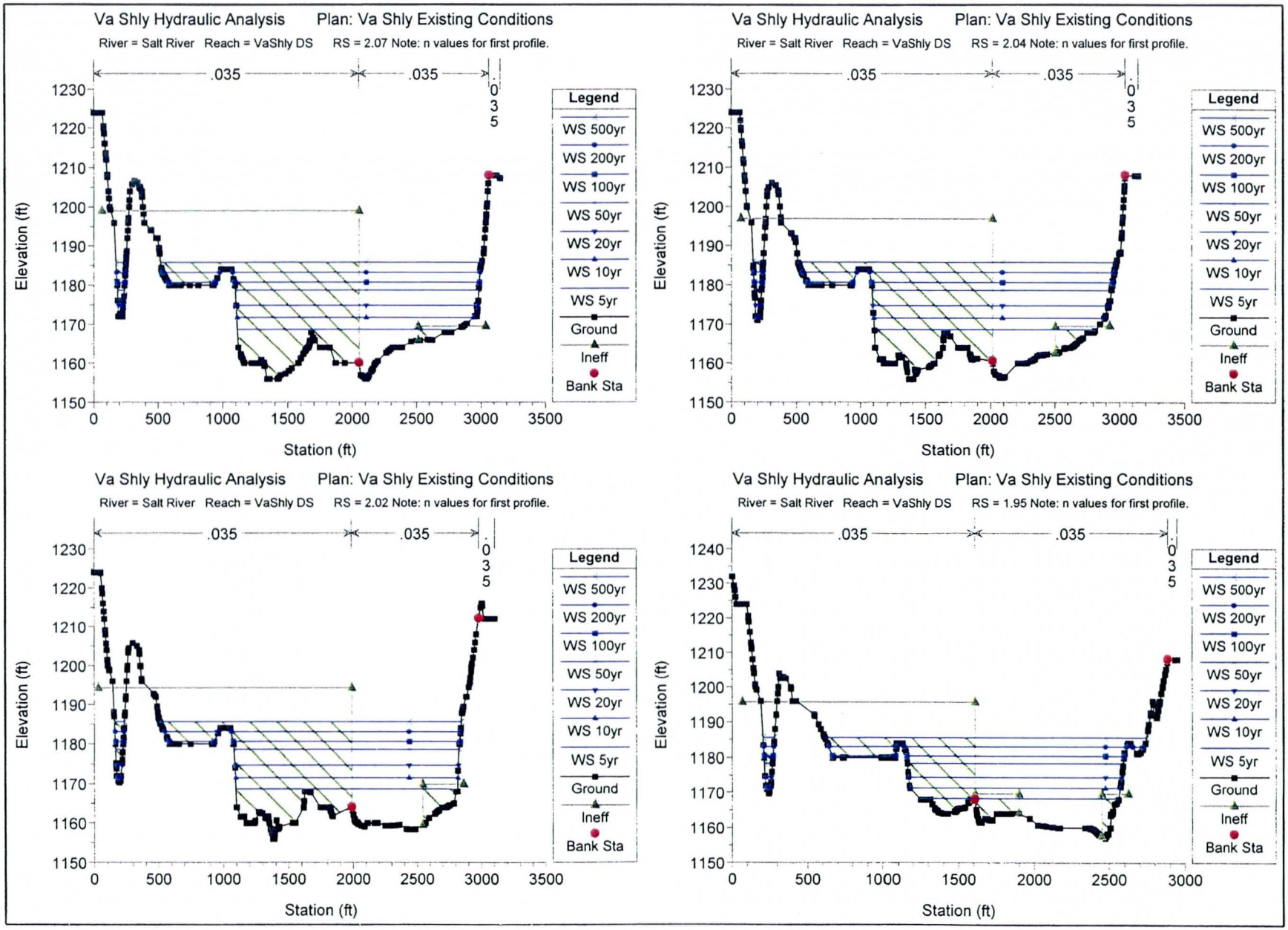

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.98
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.87
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.78
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.71
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

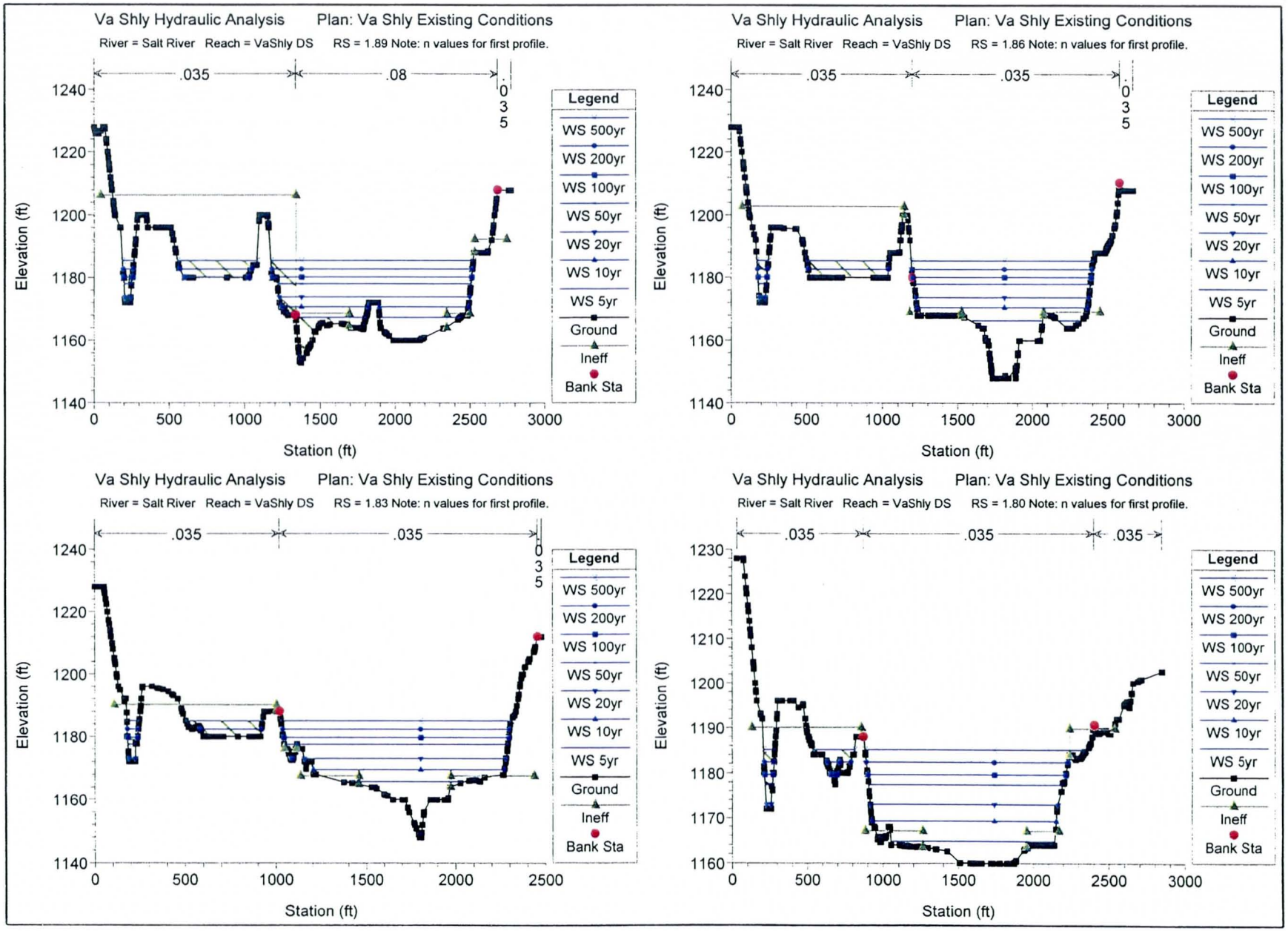

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.65
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.59
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.53
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.47
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

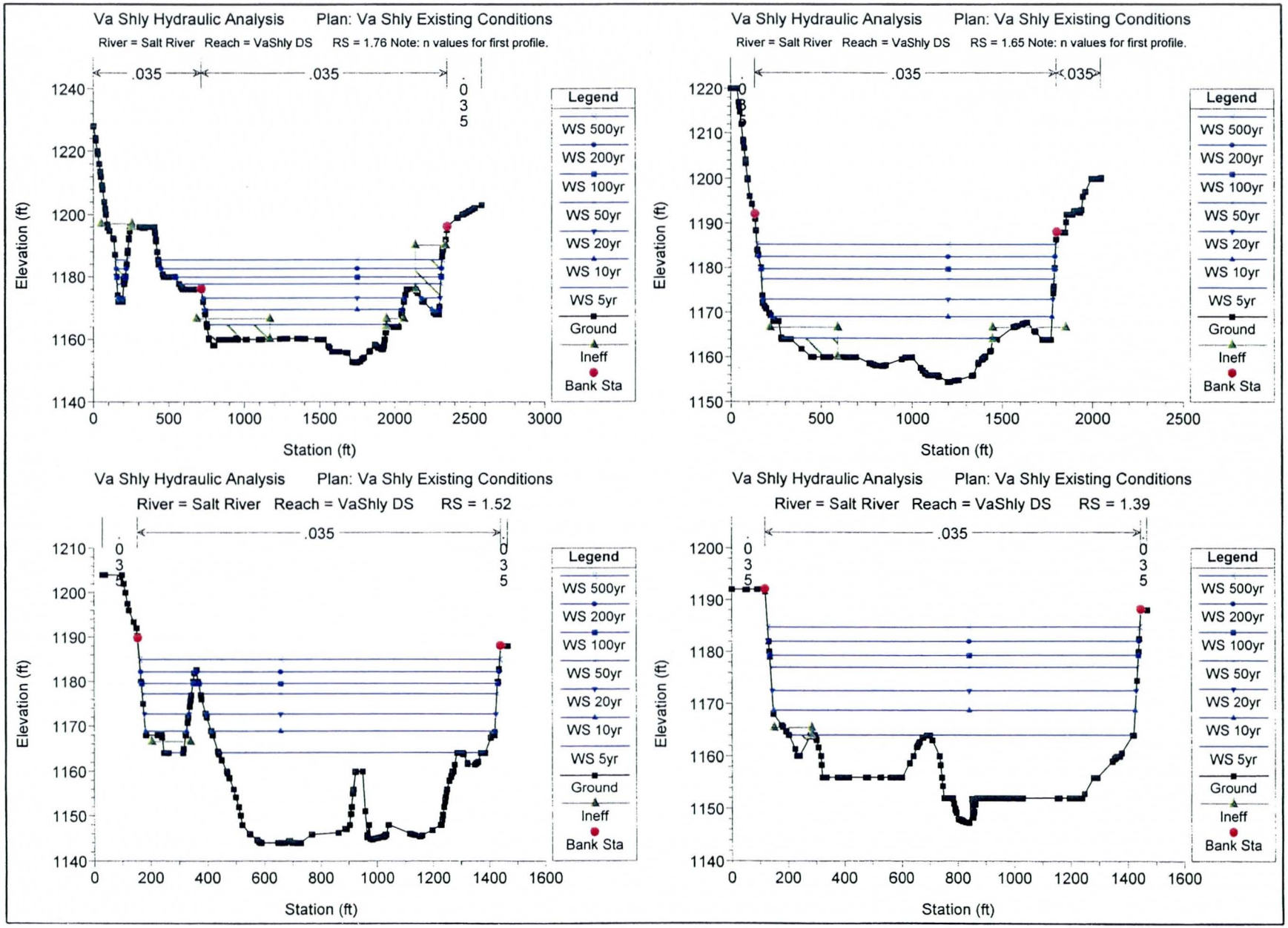

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.42
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.41
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.40
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.38
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

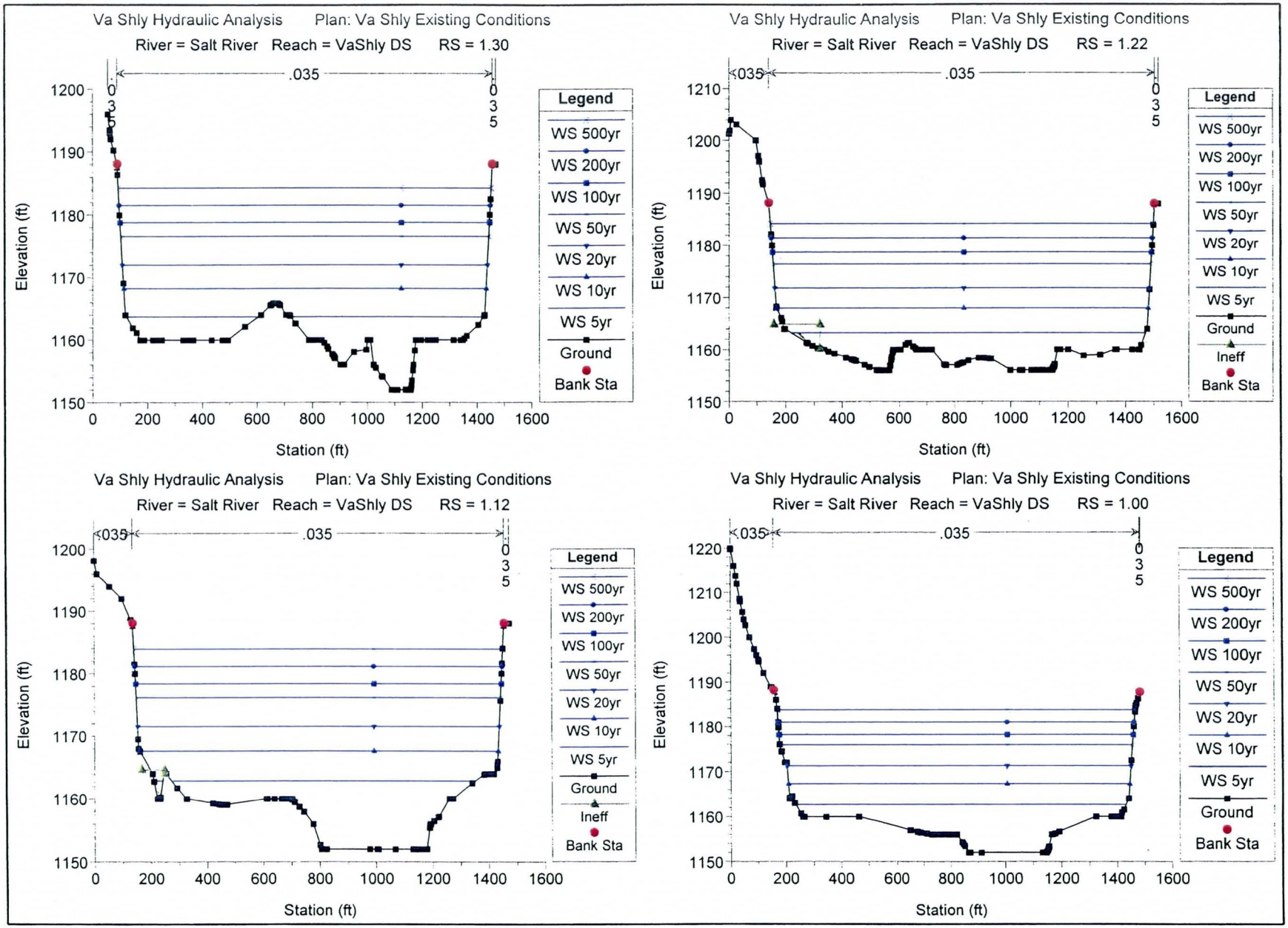

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.33
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.31
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.31
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.29
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

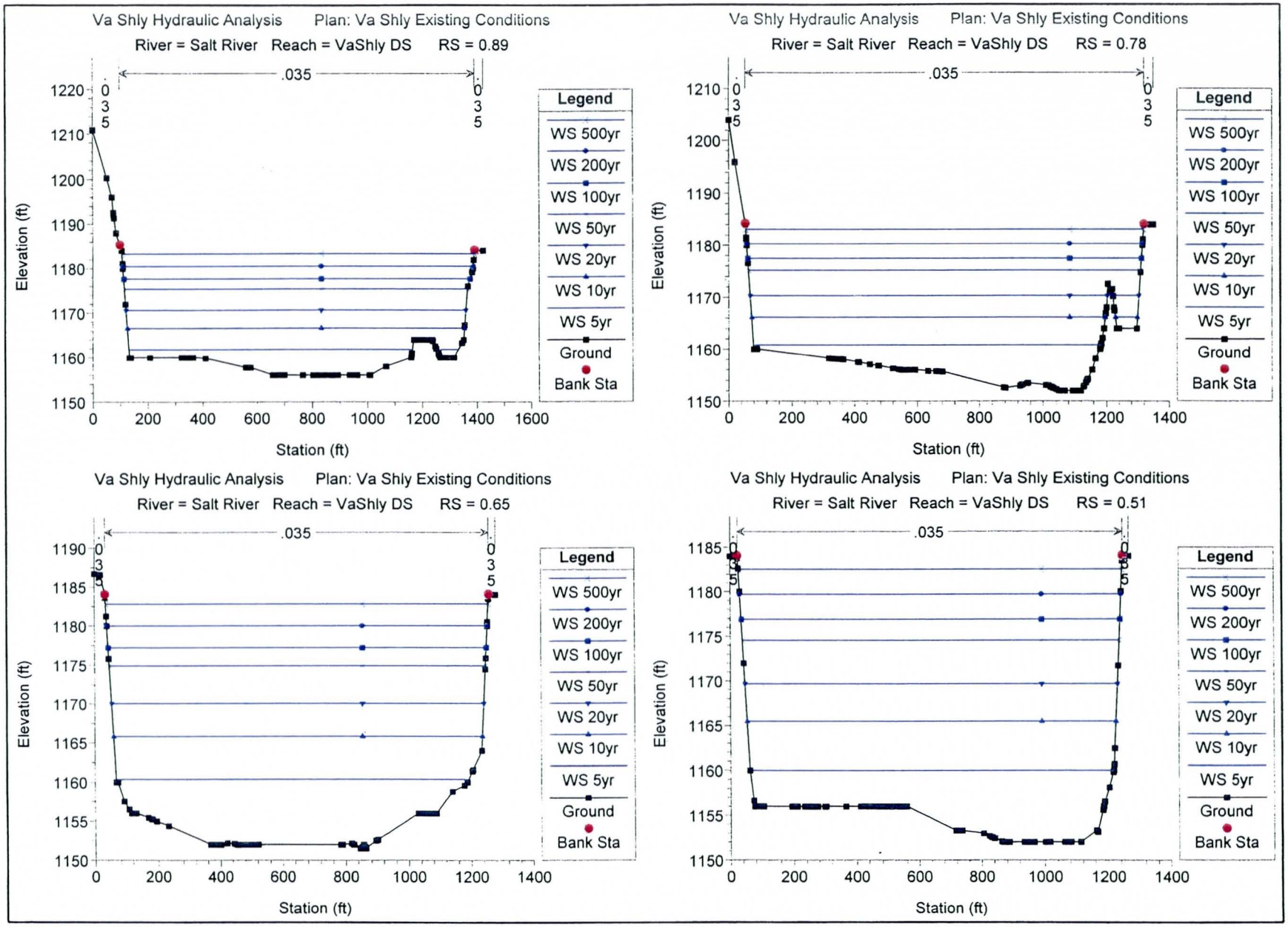

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.21
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Levee
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.13
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.12
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.10 Note: n values for first profile.

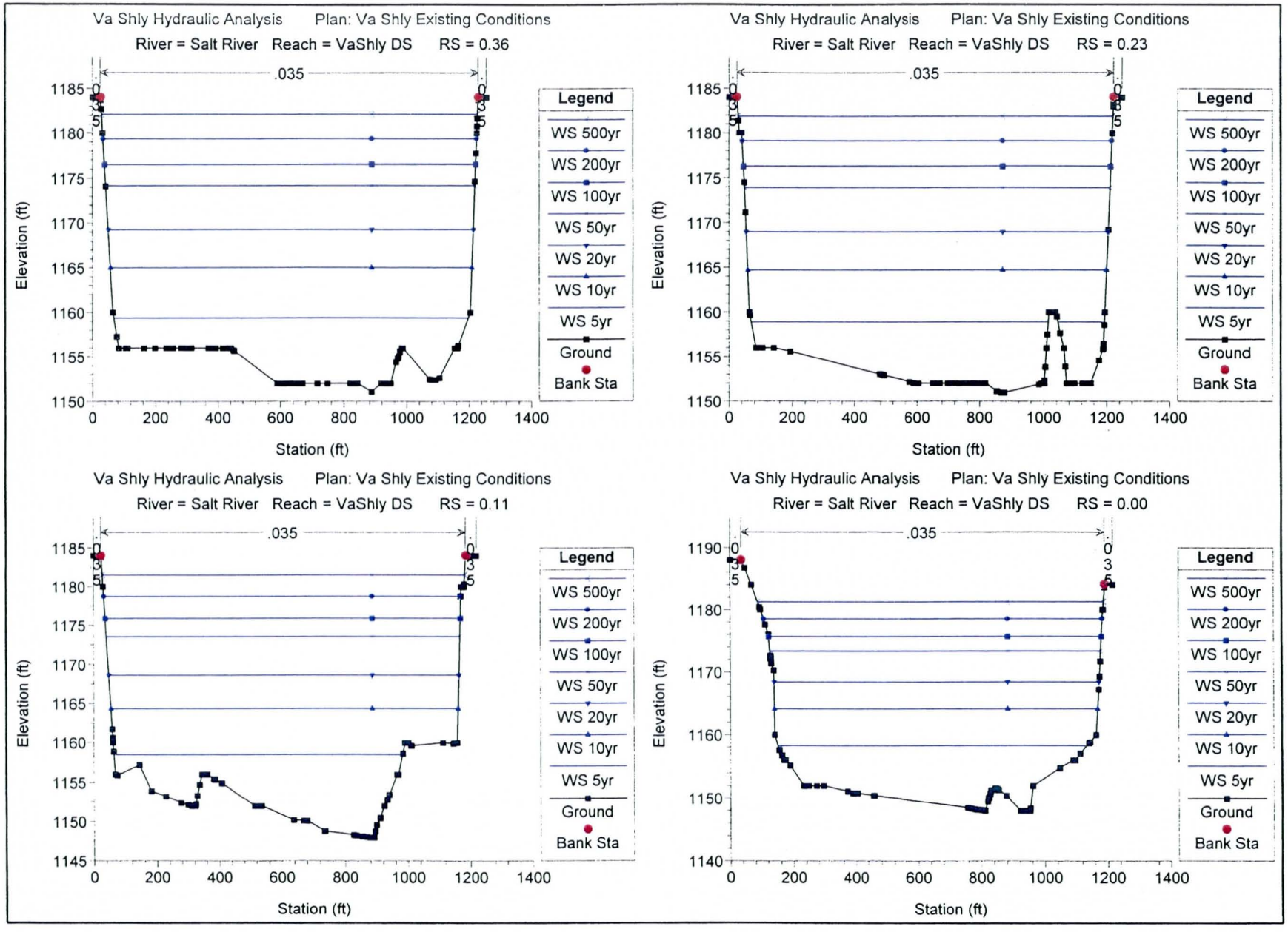

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.07 Note: n values for first profile.
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.04 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 2.02 Note: n values for first profile.
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.95 Note: n values for first profile.


Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.89 Note: n values for first profile.
.035
.08
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.86 Note: n values for first profile.
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.83 Note: n values for first profile.
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.80 Note: n values for first profile.
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)


Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.76 Note: n values for first profile.
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.65 Note: n values for first profile.
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.52
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.39
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

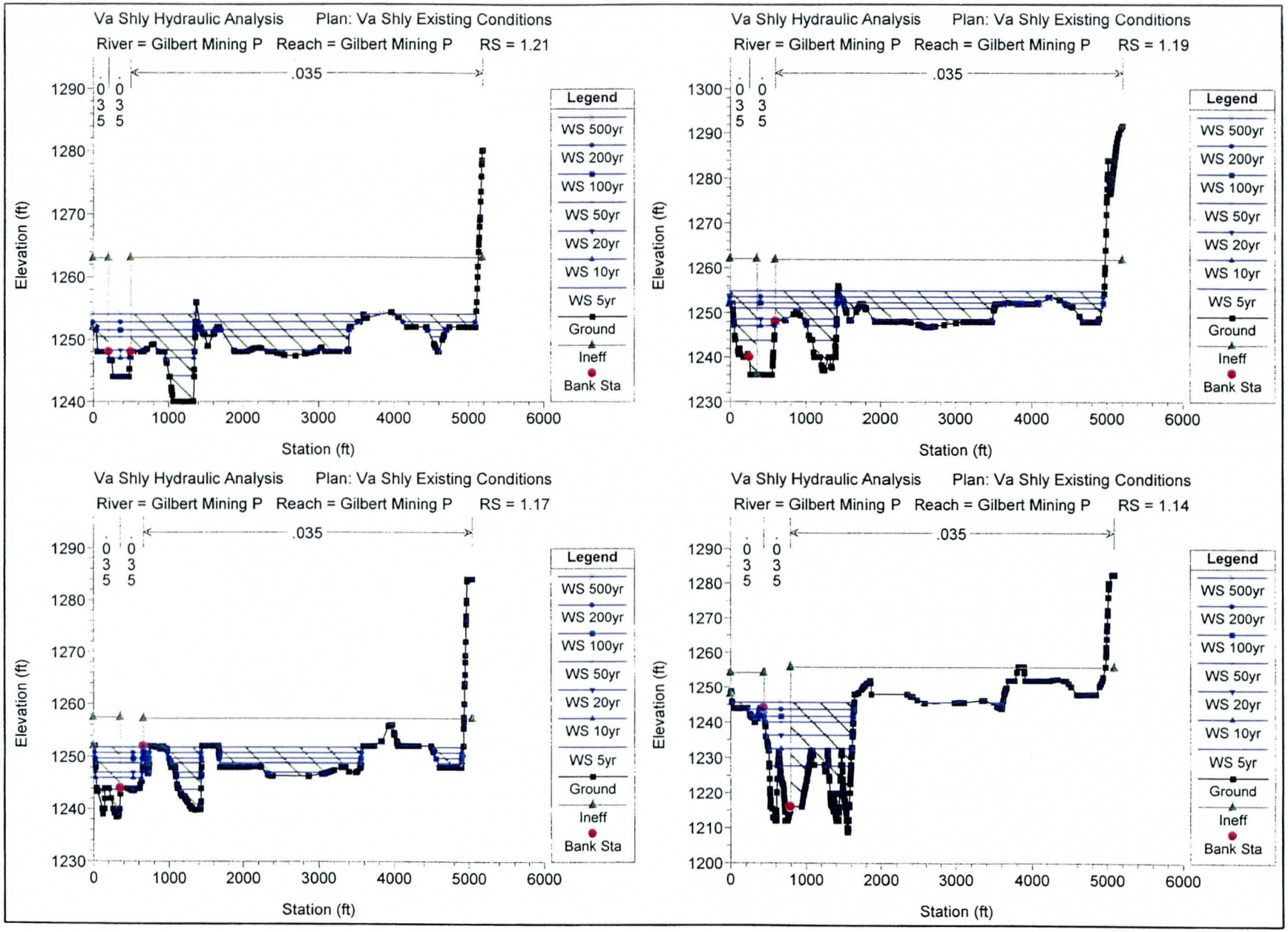

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.30
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.22
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.12
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 1.00
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta

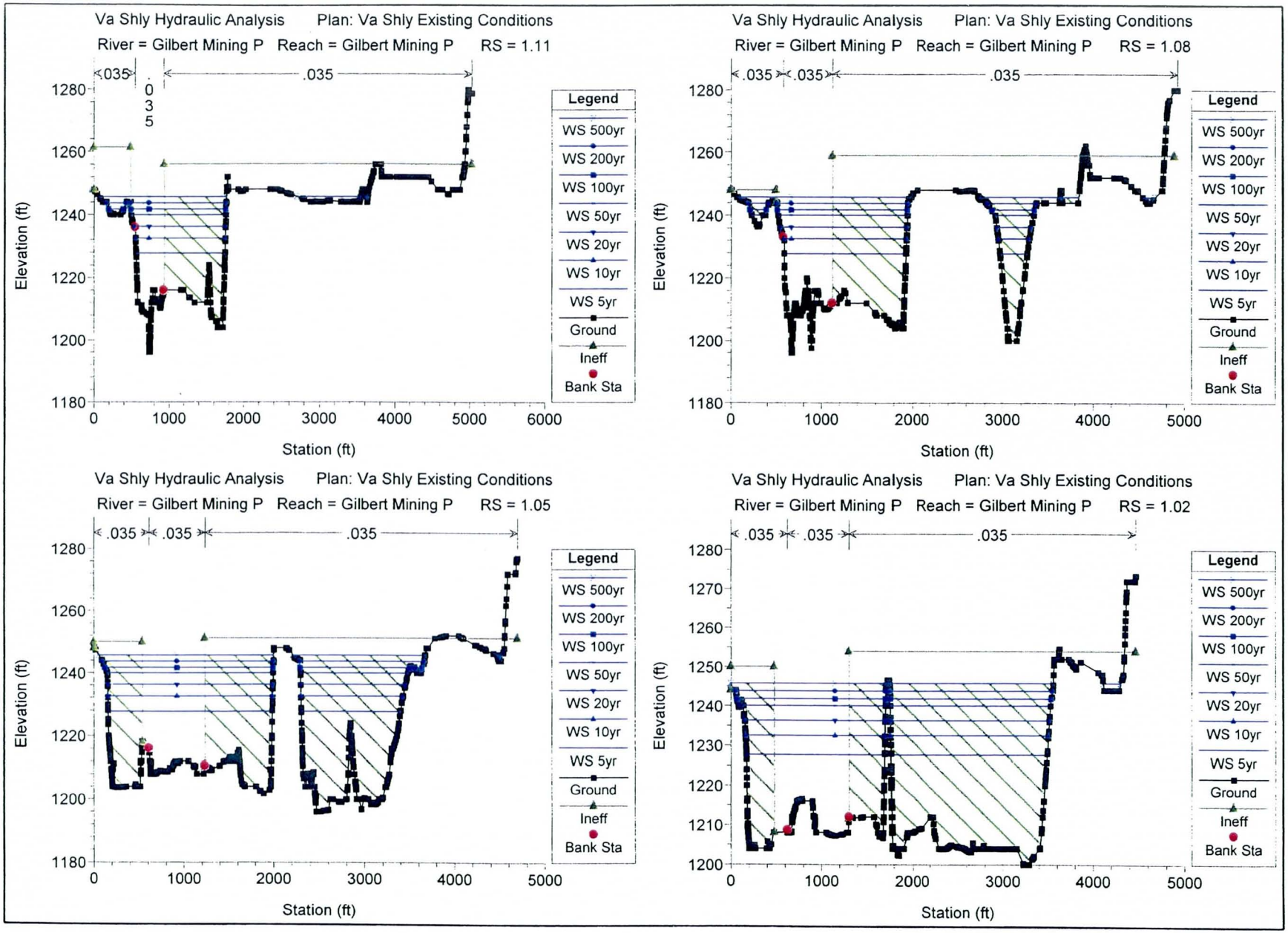

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 0.89
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 0.78
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 0.65
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 0.51
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta

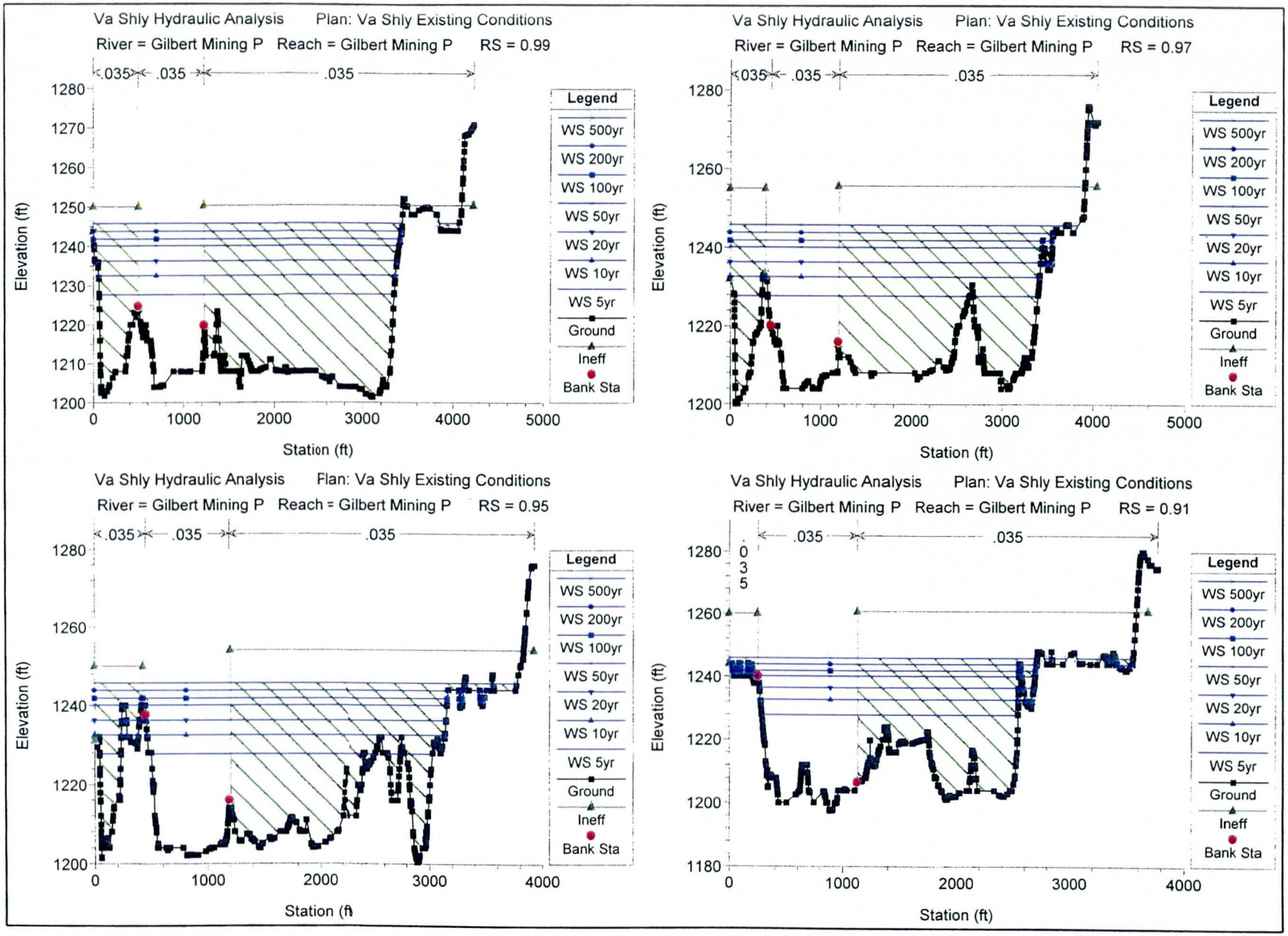

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 0.36
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 0.23
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 0.11
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Salt River Reach = VaShly DS RS = 0.00
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Bank Sta

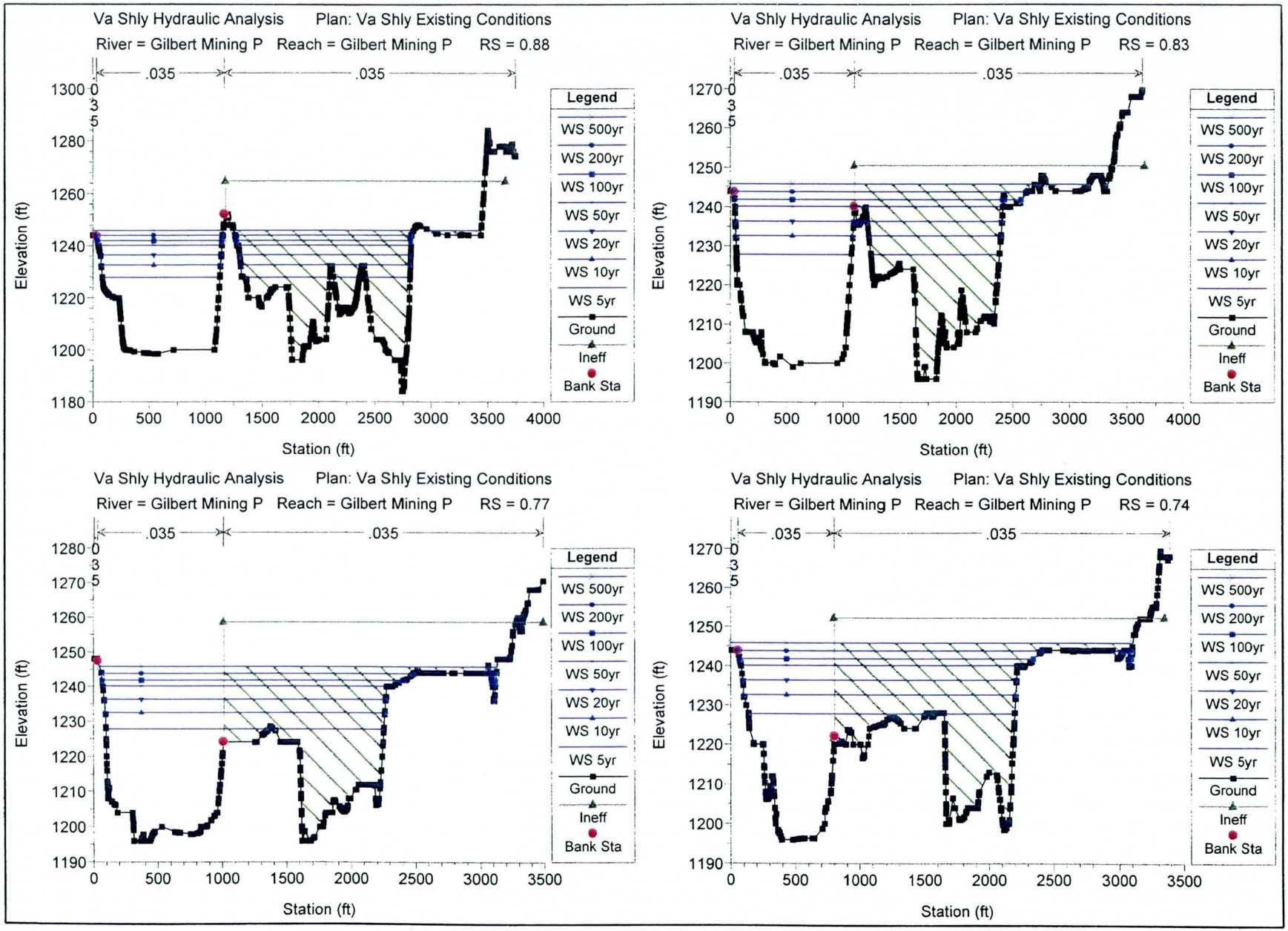
APPENDIX 2j

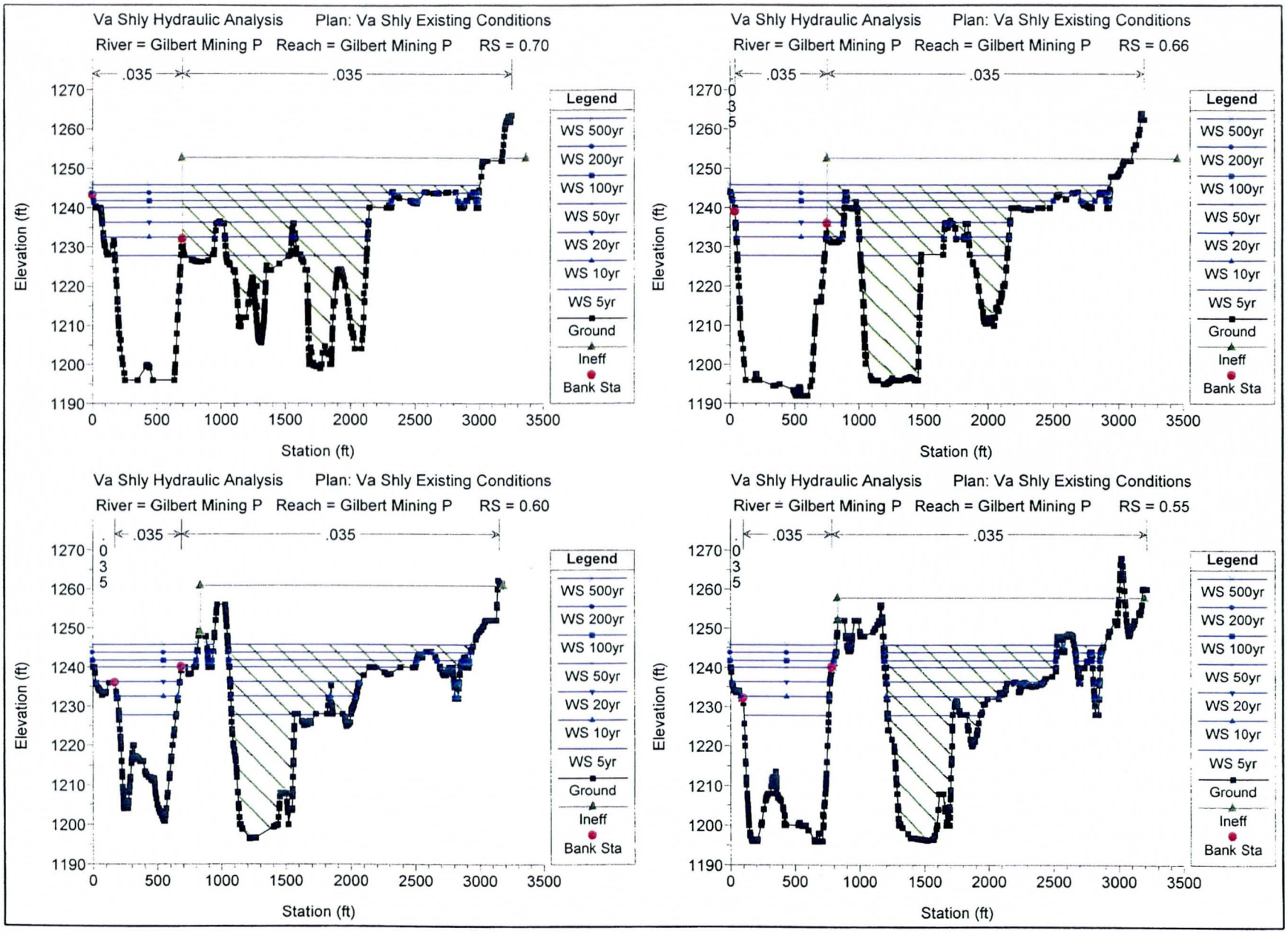
CROSS SECTION PLOTS FOR THE GILBERT MINING PIT

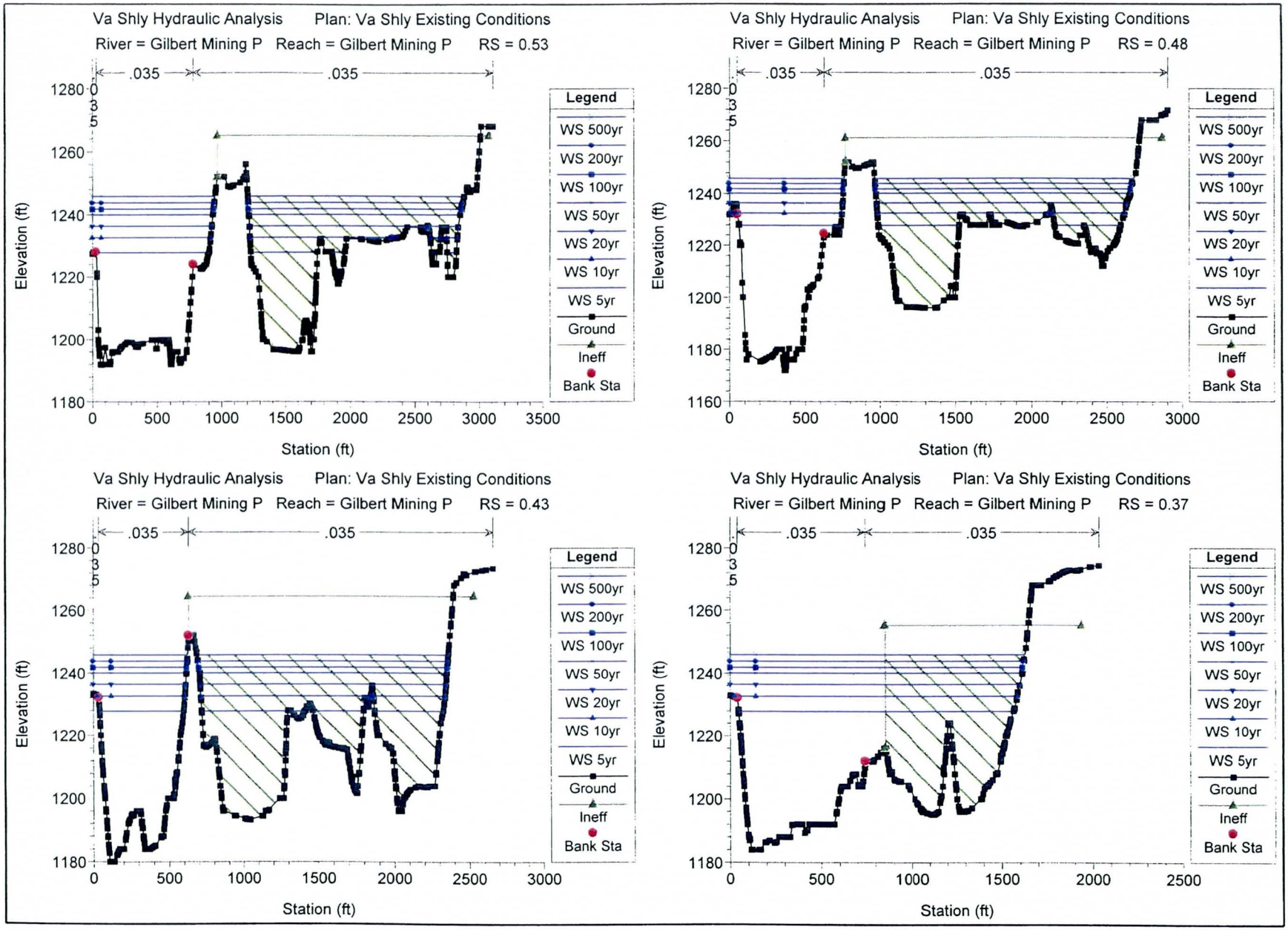

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.21
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.19
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.17
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.14

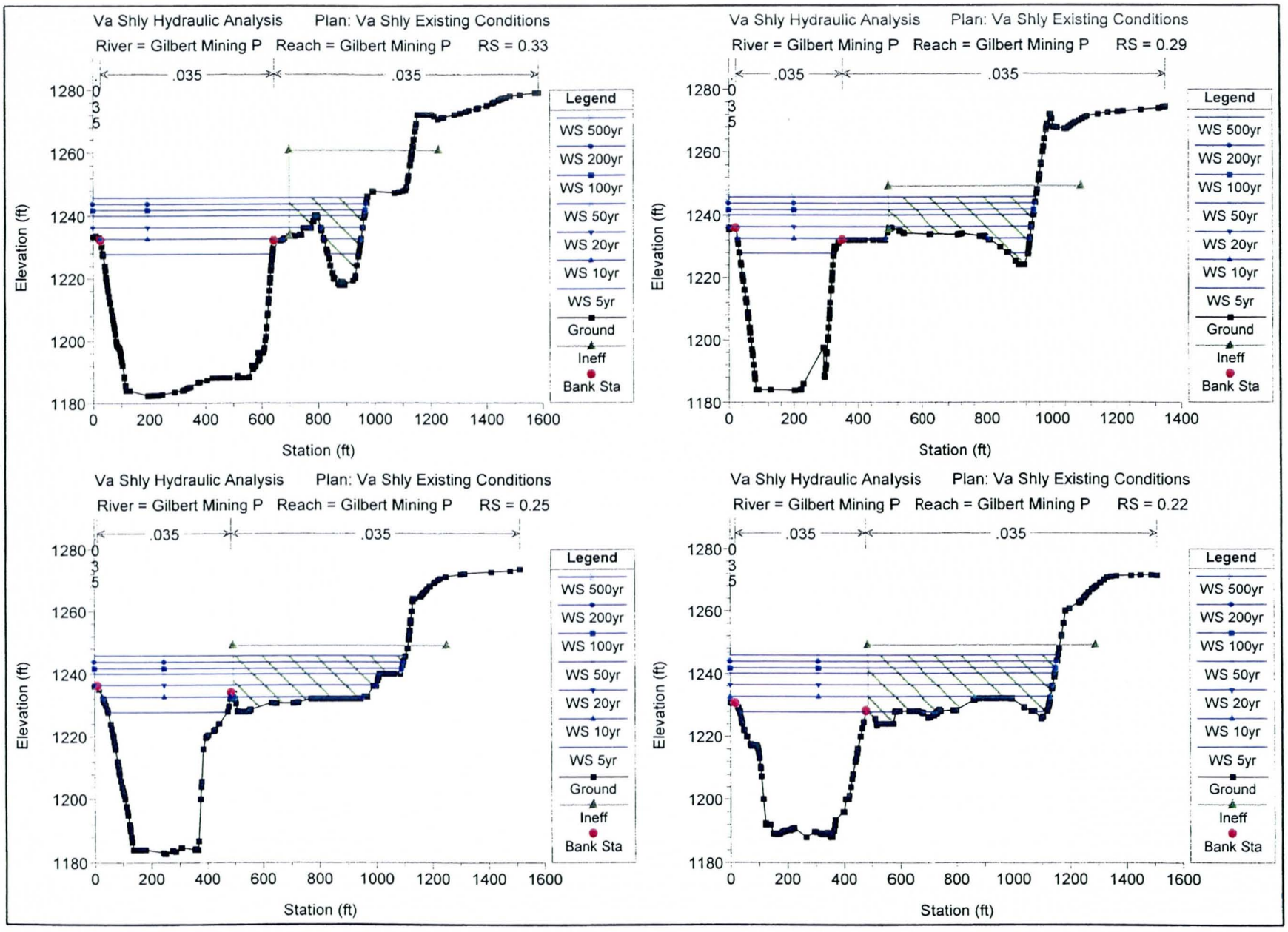

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.11
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.08
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.05
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.02
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

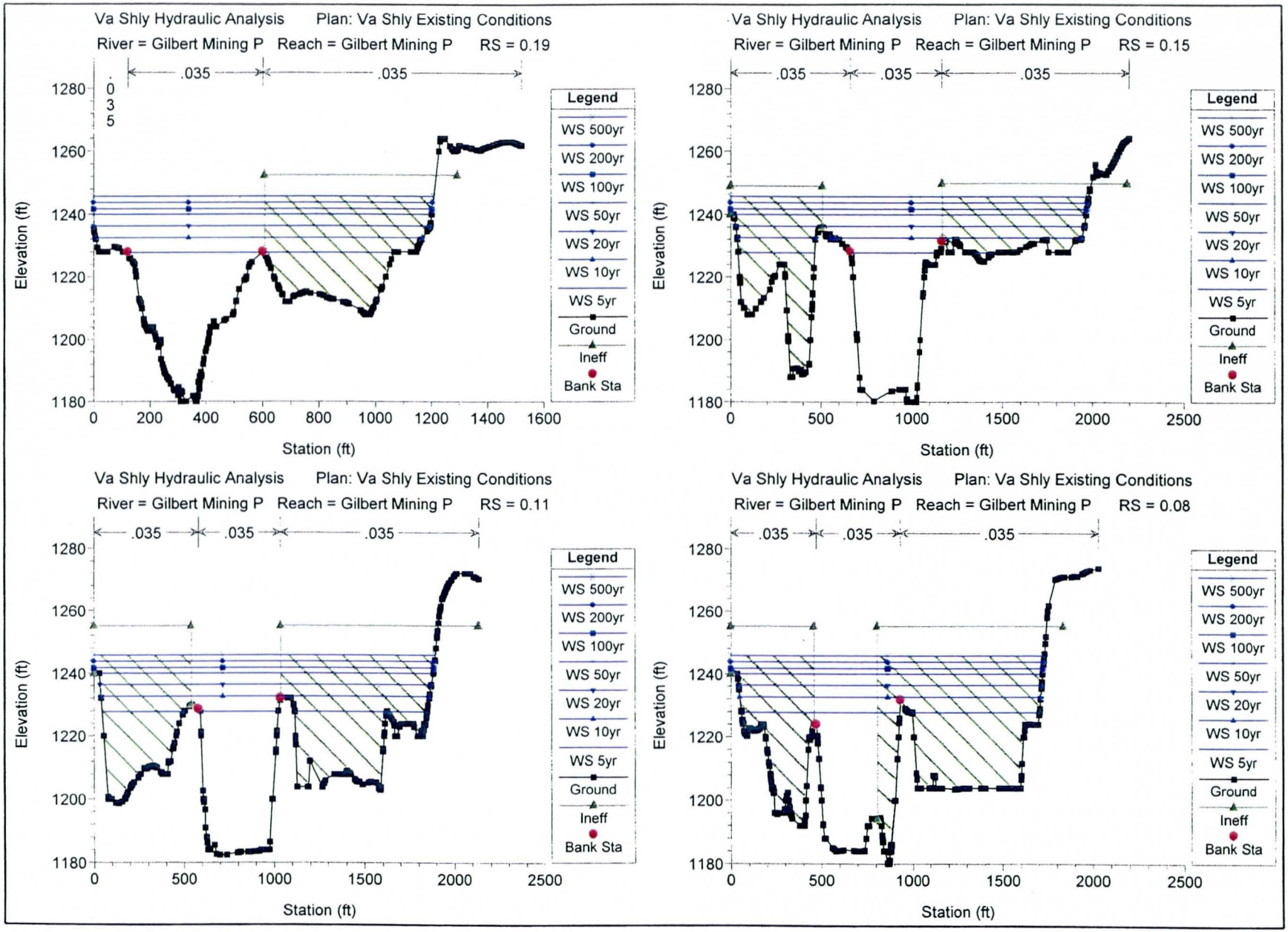

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.99
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.97
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.95
.035 .035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.91
.035 .035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta

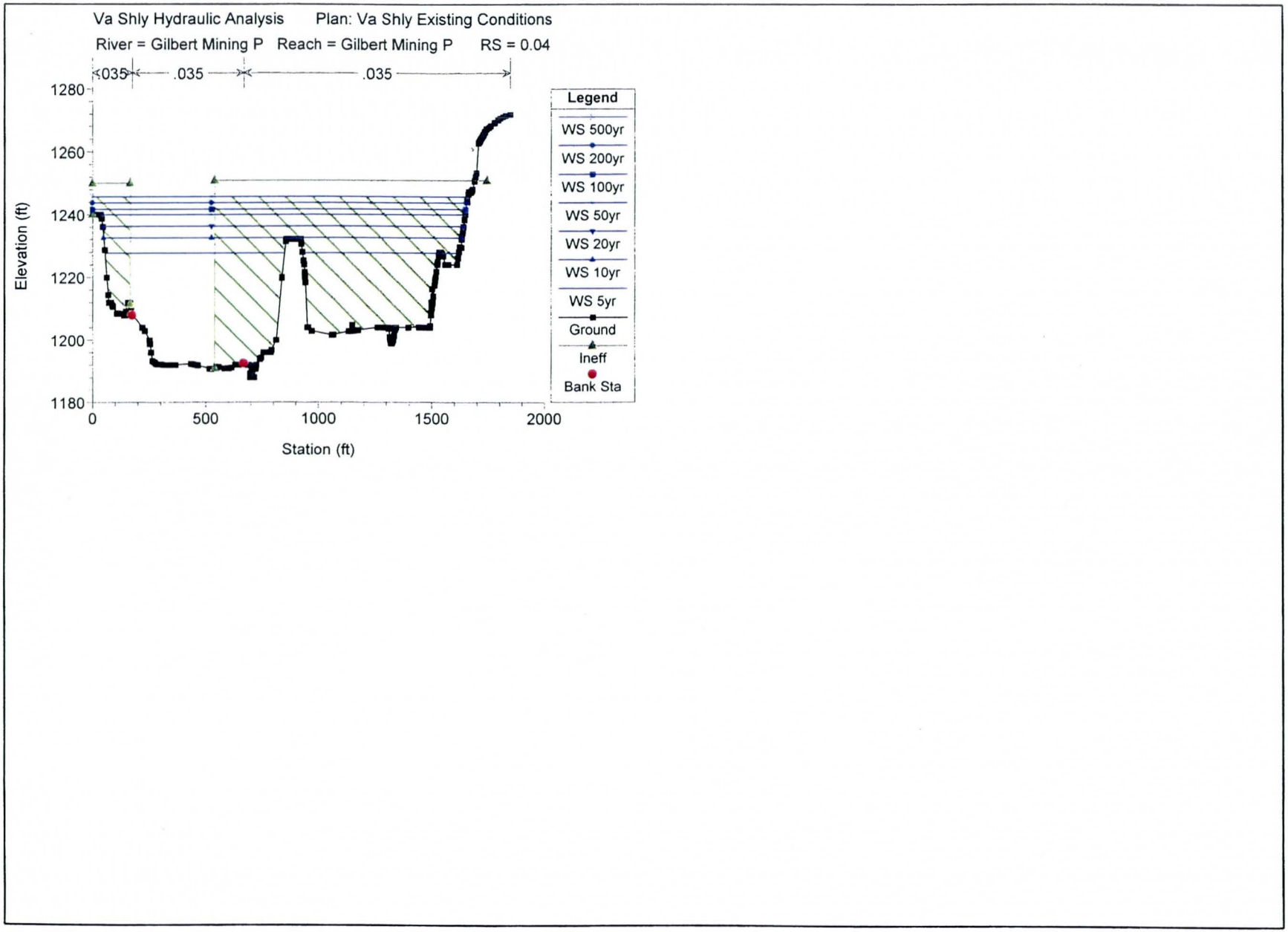

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.88
.035
.035
0
3
5
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.83
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.77
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.74


Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.70
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.66
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.60
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.55


Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.53
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.48
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.43
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.37

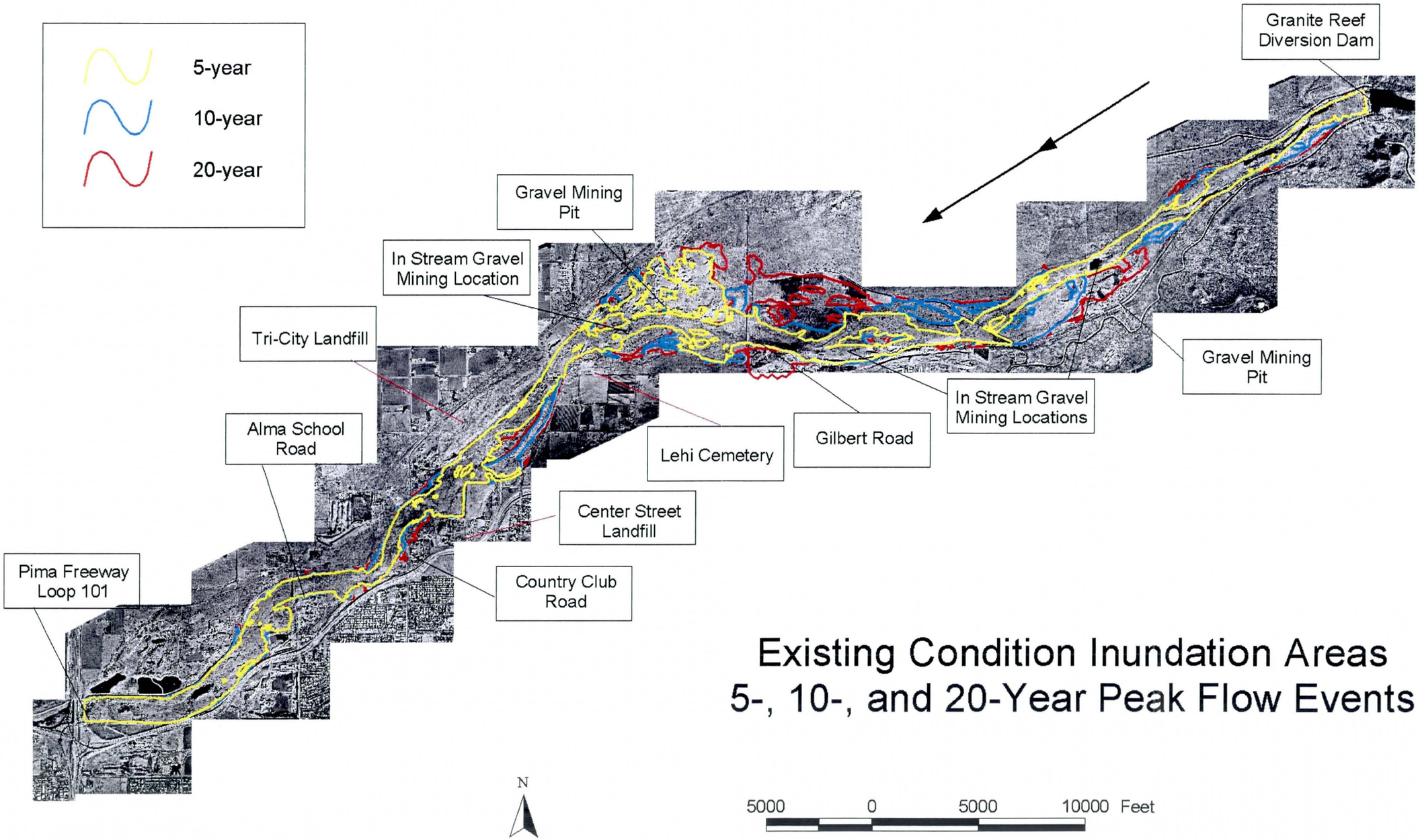

Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.33
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.29
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.25
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.22


Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.19
.035
.035
.035
Elevation (ft)
Station (ft)
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.15
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.11
Va Shly Hydraulic Analysis Plan: Va Shly Existing Conditions
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.08

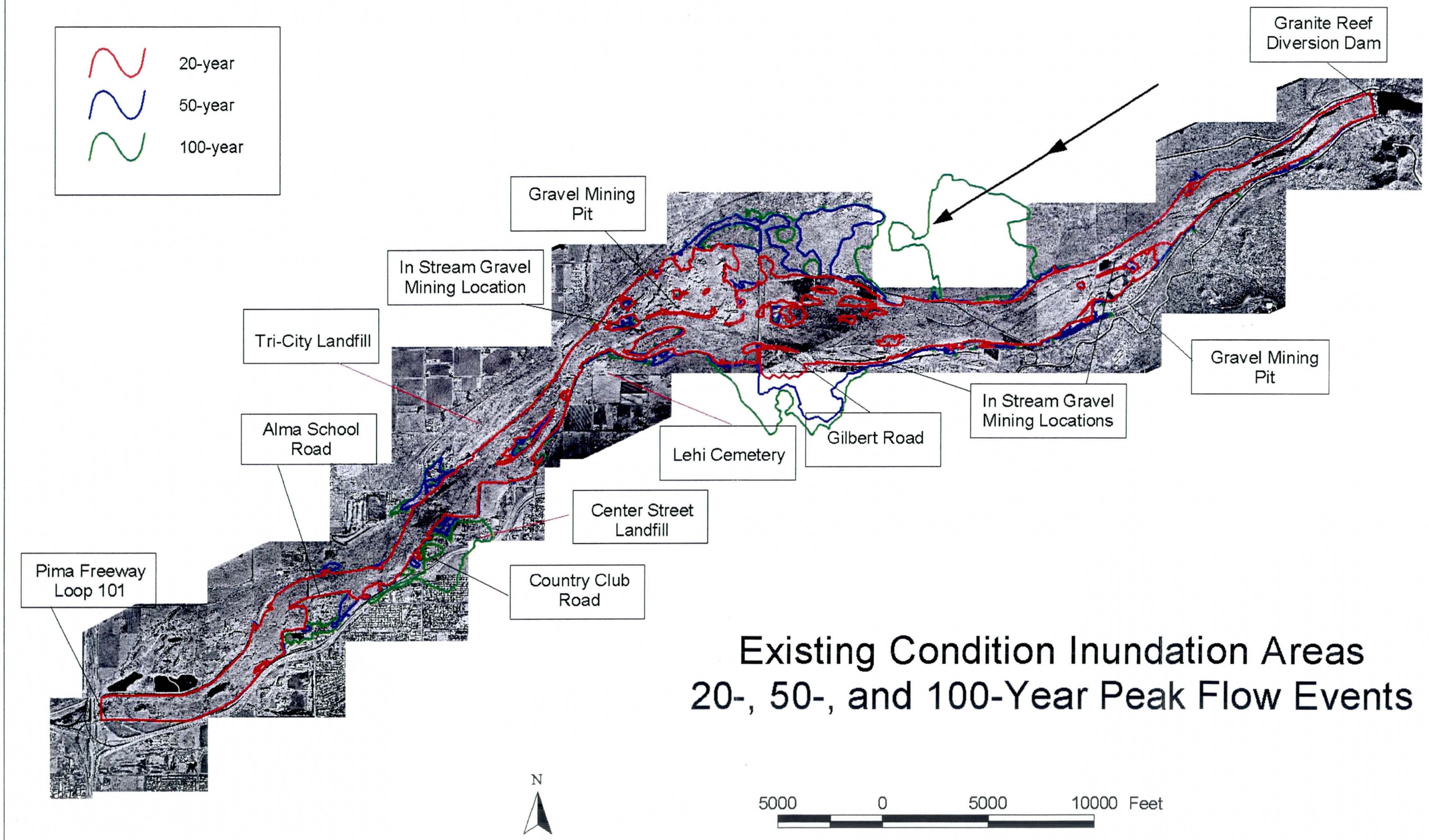

Va Shly Hydraulic Analysis
Plan: Va Shly Existing Conditions
River = Gilbert Mining P
Reach = Gilbert Mining P
RS = 0.04
.035
.035
.035
Legend
WS 500yr
WS 200yr
WS 100yr
WS 50yr
WS 20yr
WS 10yr
WS 5yr
Ground
Ineff
Bank Sta
Elevation (ft)
1280
1260
1240
1220
1200
1180
0
500
1000
1500
2000
Station (ft)

APPENDIX 2k

AERIAL PHOTOGRAPHS WITH INUNDATION AREAS



Existing Condition Inundation Areas
5-, 10-, and 20-Year Peak Flow Events



Existing Condition Inundation Areas
20-, 50-, and 100-Year Peak Flow Events

100-year
200-year
500-year

Granite Reef Diversion Dam

Gravel Mining Pit

In Stream Gravel Mining Location

Tri-City Landfill

Alma School Road

Lehi Cemetery

Gilbert Road

In Stream Gravel Mining Locations

Gravel Mining Pit

Center Street Landfill

Pima Freeway Loop 101

Country Club Road

Existing Condition Inundation Areas
100-, 200-, and 500-Year Peak Flow Events

N

5000 0 5000 10000 Feet

APPENDIX 3

STREAM BED SAMPLING & TESTING REPORT

Stream Bed Sampling and Testing
Vashly' Ay Akimel Project
Salt River Pima – Maricopa Indian Community
Maricopa County, Arizona
R.A.M. Project No. G07361

For:
West Consultants, Inc.
2151 East Broadway Road, Suite 116
Tempe, Arizona 85282-1705

◆◆◆

By:
Ricker-Atkinson-McBee & Associates, Inc.
2105 South Hardy Drive, Suite 13
Tempe, Arizona 85282

R·A·M

RICKER • ATKINSON • McBEE & ASSOCIATES, INC.

Geotechnical Engineering • Construction Materials Testing

West Consultants, Inc.
2151 East Broadway Road, Suite 116
Tempe, Arizona 85282-1705

May 24, 2002

Attention: Dennis Richards

Subject: Stream Bed Sampling and Testing
Vashly' Ay Akimel Project
Salt River Pima – Maricopa Indian Community
Maricopa County, Arizona

R.A.M. Project No. G07361

At your request this firm excavated sixteen test pits at the location shown on the attached photomosaic. The test pits were excavated to a depth of 6 feet and bulk representative samples of the minus 4-inch material obtained. In addition, the percent of plus 4-inch material was visually estimated during excavation and presented below along with any additional notes. Two samples (32 total) were obtained from each test and returned to our laboratory where grain-size distribution was mechanically determined and Atterberg Limits performed on each sample. The results of the laboratory testing are attached.

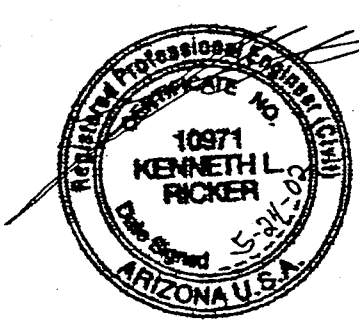
Test Pit	Depth (feet)	Estimated % Plus 4"	Notes
1	0-2	10	
1	2-6	15	Water at 5 feet
2	0-2	35	
2	2-6	10	
3	0-2	15	
3	2-6	20	
4	0-1	50	
4	1-2	20	
4	2-6	25	
5	0-1	90	
5	1-2	30	
5	2-6	20	
6	0-1	90	
6	1-2	20	
6	2-6	20	
7	0-2	20	
7	2-6	25	
8	0-2	5	
8	2-6	10	
9	0-2	10	

Test Pit	Depth (feet)	Estimated % Plus 4"	Notes
9	2-6	5	
10	0-2	0	
10	2-6	0	
11	0-2	10	
11	2-6	15	
12	0-2	25	
12	2-6	15	
13	0-2	15	
13	0-2	10	Wet below 5 feet
14	0-2	20	
14	2-6	20	
15	6-2	15	
15	2-6	20	
16	0-2	20	
16	2-6	15	Water below 4.5 feet

If you have any question, please do not hesitate to call.

Respectfully submitted,

RICKER, ATKINSON, MCBEE & ASSOCIATES, INC.



By: Kenneth L. Ricker, P.E.

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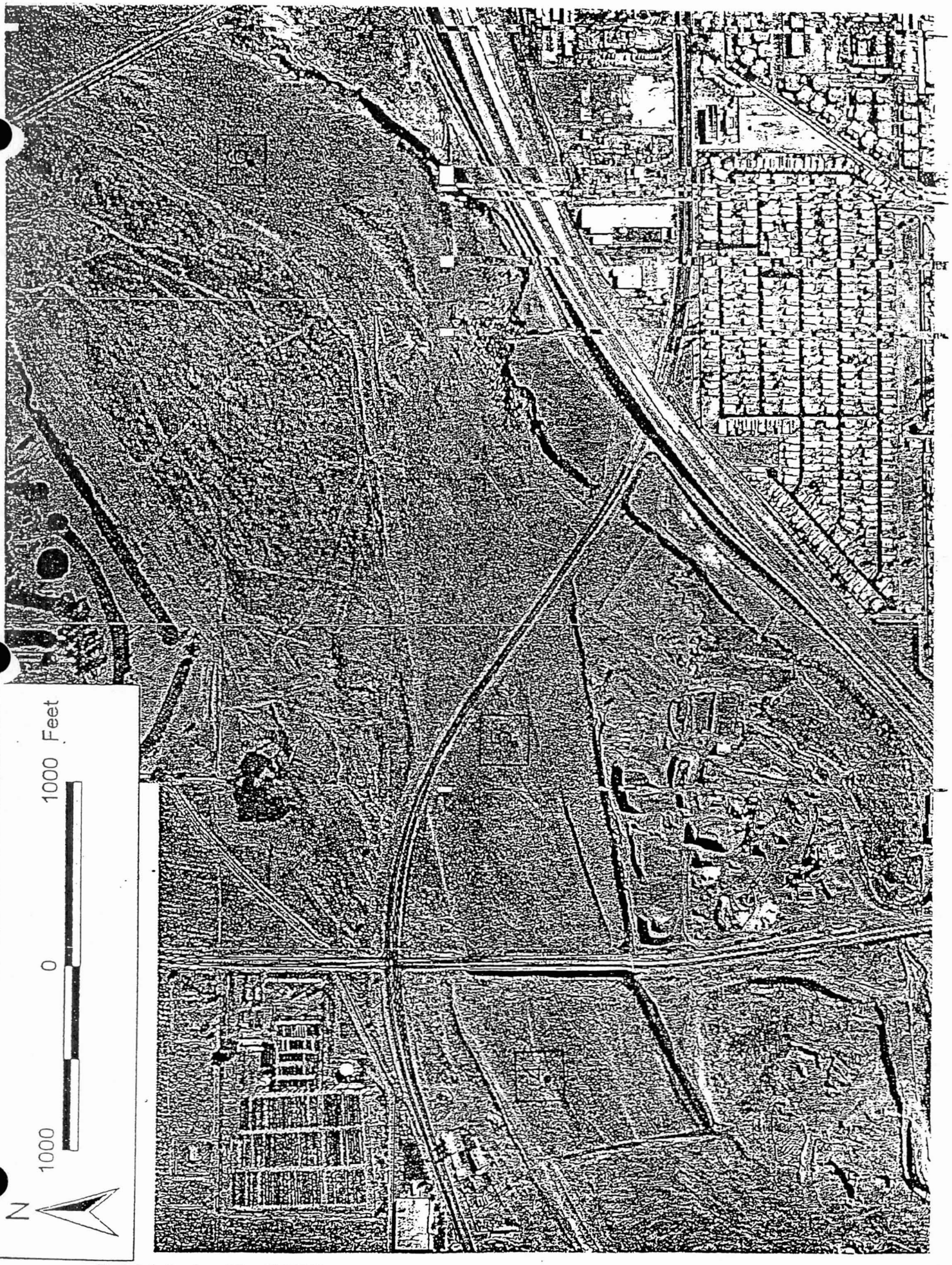
Copies to: Addressee (5)
SRP-MIC/Attn: Debra Frein (1)

R.A.M. Project No. G07361



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R.A.M. Project No. G07361

LABORATORY TEST RESULTS

Date: 23-May-02

SAMPLE SOURCE: As noted below

TESTING PERFORMED: Sieve Analysis, Percent Passing No. 200 Sieve, Atterberg Limits (ASTM C136, D1140, D4318)

SAMPLED BY: RAM/Miller

RESULTS:

Sample	Atterberg Limits		Sieve Size - Accumulative Percent Passing											Soil
Source	LL	PI	200	100	50	30	16	8	4	3/4"	1"	2"	3"	Class.*
1 @ 0'-2'	40	20	15	19	25	33	39	43	47	66	70	80	100	GC
1 @ 2'-6'	37	17	9.2	12	15	21	28	34	40	66	71	94	100	GW-GC
2 @ 0'-2'	27	6	12	18	24	32	38	41	44	60	67	88	96	GP-GM/GC
2 @ 2'-6'	N/A	NP	4.4	7	12	26	35	38	41	61	69	93	100	GP
3 @ 0'-2'	N/A	NP	4.2	9	17	24	27	28	29	51	57	83	100	GP
3 @ 2'-6'	N/A	NP	2.8	6	13	18	22	24	26	52	60	88	100	GP
4 @ 0'-2'	N/A	NP	0.3	1	2	12	30	41	45	64	72	86	100	GP
4 @ 2'-6'	N/A	NP	0.3	1	2	10	24	33	37	58	67	95	100	GP
5 @ 0'-2'	N/A	NP	1.4	3	6	13	21	29	35	61	68	91	100	GP
5 @ 2'-6'	N/A	NP	5.7	8	13	20	29	36	39	63	69	95	100	GP
6 @ 0'-2'	N/A	NP	1.9	3	6	12	22	31	37	63	71	93	96	GP
6 @ 2'-6'	N/A	NP	1.9	3	5	10	17	24	32	60	66	82	100	GW
7 @ 0'-2'	N/A	NP	19	32	53	74	81	84	87	98	100			SM
7 @ 2'-6'	N/A	NP	4.0	8	14	23	29	38	44	70	76	94	100	GP
8 @ 0'-2'	N/A	NP	2.9	4	7	16	34	45	51	71	78	95	100	GP
8 @ 2'-6'	N/A	NP	2.1	3	5	12	27	38	43	67	70	96	100	GP
9 @ 0'-2'	N/A	NP	2.8	5	13	28	39	48	53	71	78	99	100	GP
9 @ 2'-6'	N/A	NP	2.3	5	12	37	60	70	74	86	89	97	100	SP
10 @ 0'-2'	N/A	NP	0.4	2	11	39	60	69	73	83	88	98	100	SP
10 @ 2'-6'	N/A	NP	0.2	1	10	41	68	80	87	100				SP
11 @ 0'-2'	N/A	NP	0.5	1	1	3	14	33	43	58	64	87	100	GP
11 @ 2'-6'	N/A	NP	0.5	1	2	5	13	28	45	70	78	95	100	GP
12 @ 0'-2'	N/A	NP	0.3	0.4	1	3	18	35	41	53	58	84	100	GP
12 @ 2'-6'	N/A	NP	1.1	2	5	12	29	56	78	100				SP
13 @ 0'-2'	N/A	NP	3.9	5	7	12	20	28	35	59	67	86	100	GP
13 @ 2'-6'	N/A	NP	2.3	3	5	12	28	42	49	73	78	95	100	GP
14 @ 0'-2'	N/A	NP	0.4	1	2	6	17	30	42	66	72	96	100	GP
14 @ 2'-6'	N/A	NP	0.2	0.3	1	4	12	24	36	58	65	87	100	GP

NP = Non-Plastic

* Unified Soil Classification System

R.A.M. Project No. G07361

LABORATORY TEST RESULTS

Date: 23-May-02

SAMPLE SOURCE: As noted below

TESTING PERFORMED: Sieve Analysis, Percent Passing No. 200 Sieve, Atterberg Limits (ASTM C136, D1140, D4318)

SAMPLED BY: RAM/Miller

RESULTS:

Sample	Atterberg Limits		Sieve Size - Accumulative Percent Passing											Soil
Source	LL	PI	200	100	50	30	16	8	4	3/4"	1"	2"	3"	Class.*
15 @ 0'-2'	N/A	NP	0.4	1	2	13	44	67	81	100				SP
15 @ 2'-6'	N/A	NP	0.5	1	3	9	24	37	45	65	71	96	100	GP
16 @ 0'-2'	N/A	NP	0.3	1	1	9	31	50	63	79	82	90	100	SP
16 @ 2'-6'	N/A	NP	0.8	1	2	8	22	34	43	67	74	97	100	GP

NP = Non-Plastic

* Unified Soil Classification System

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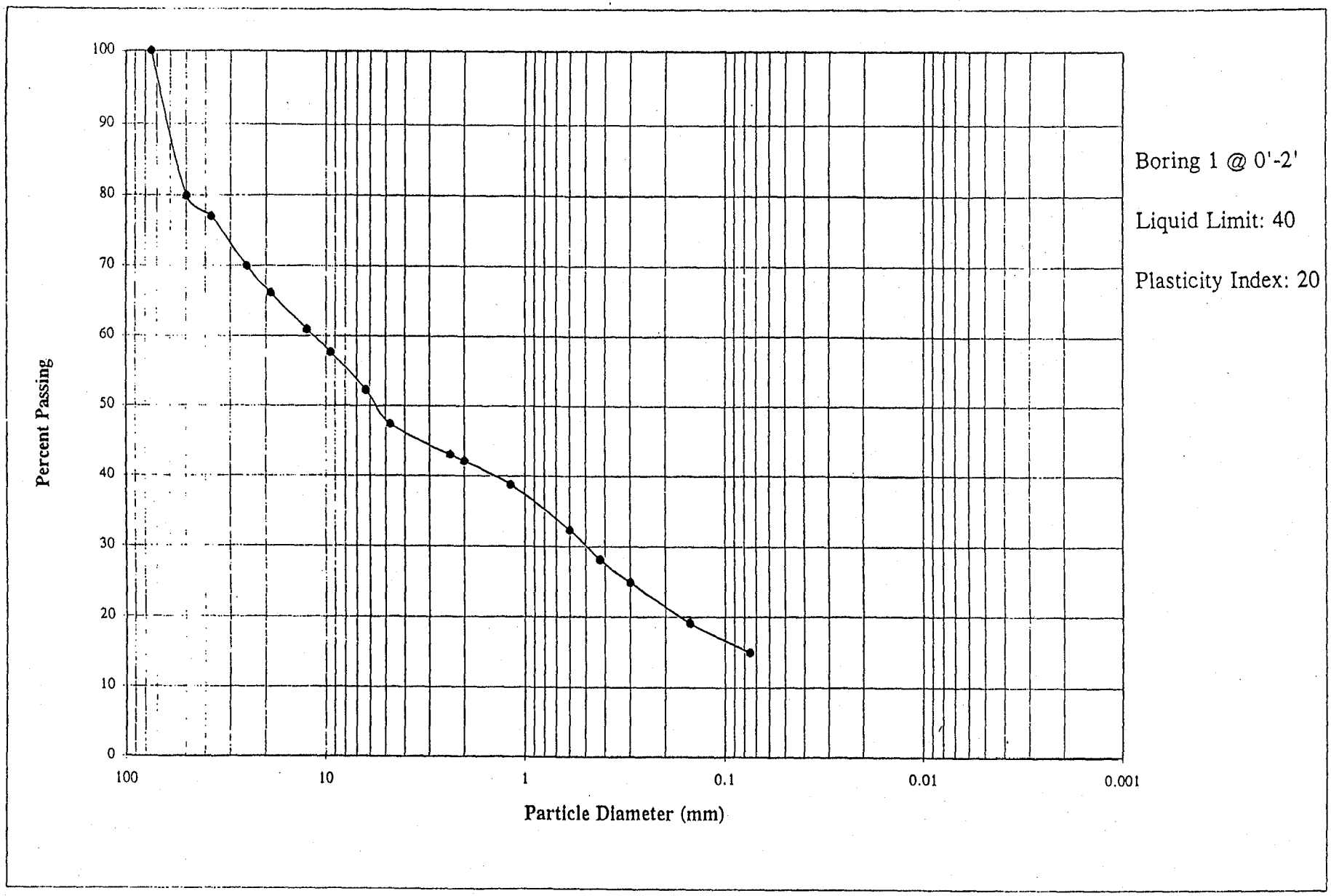

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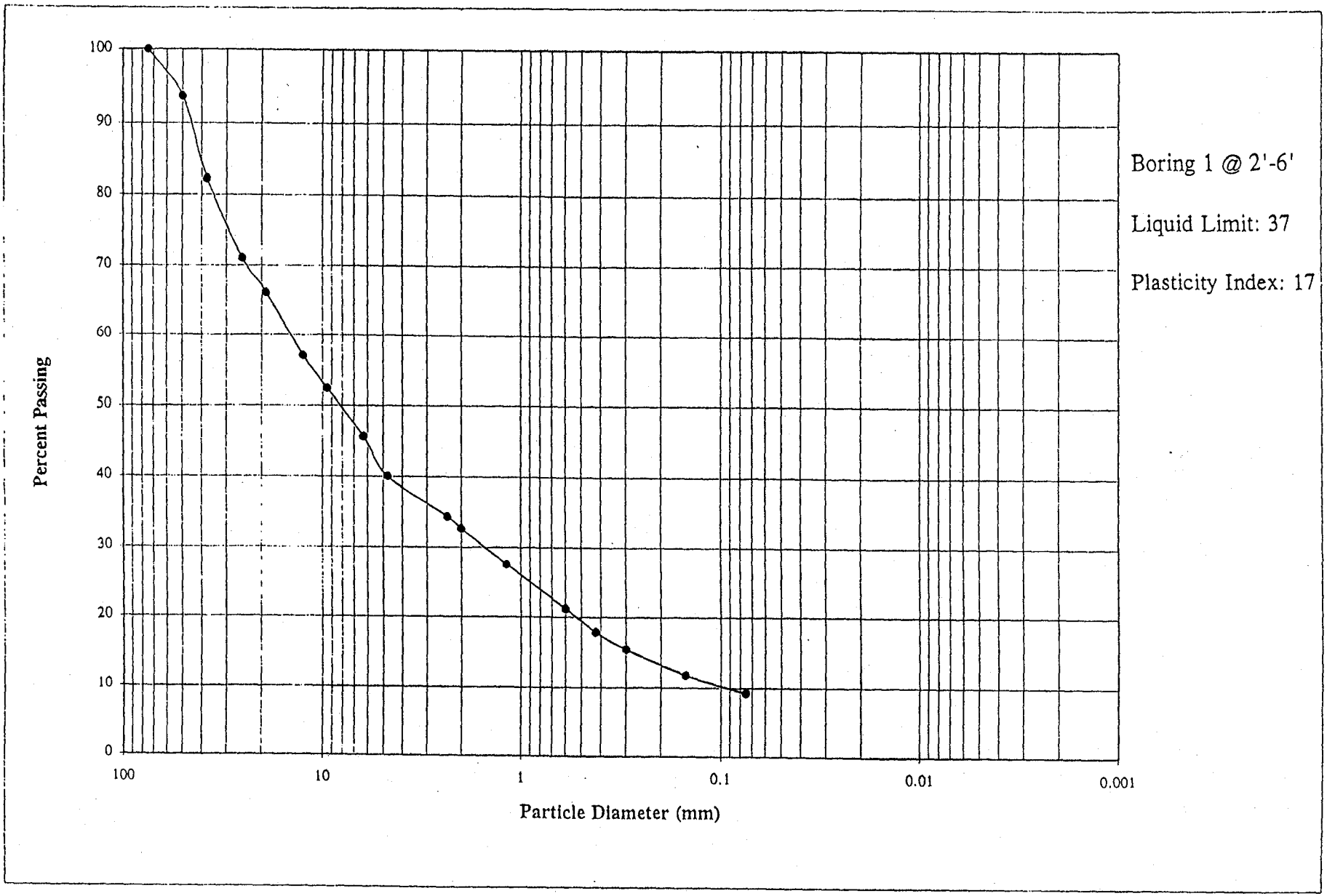

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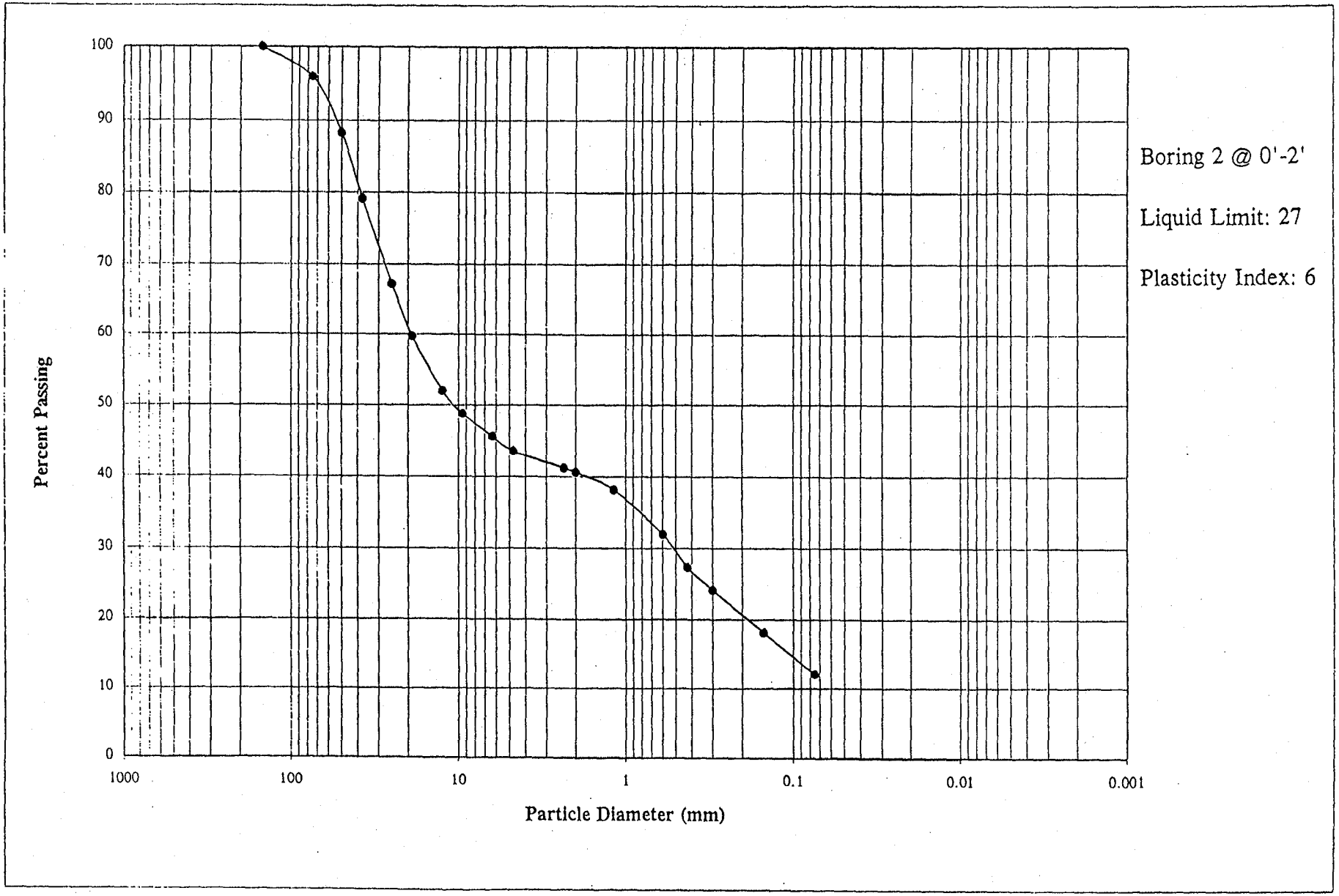

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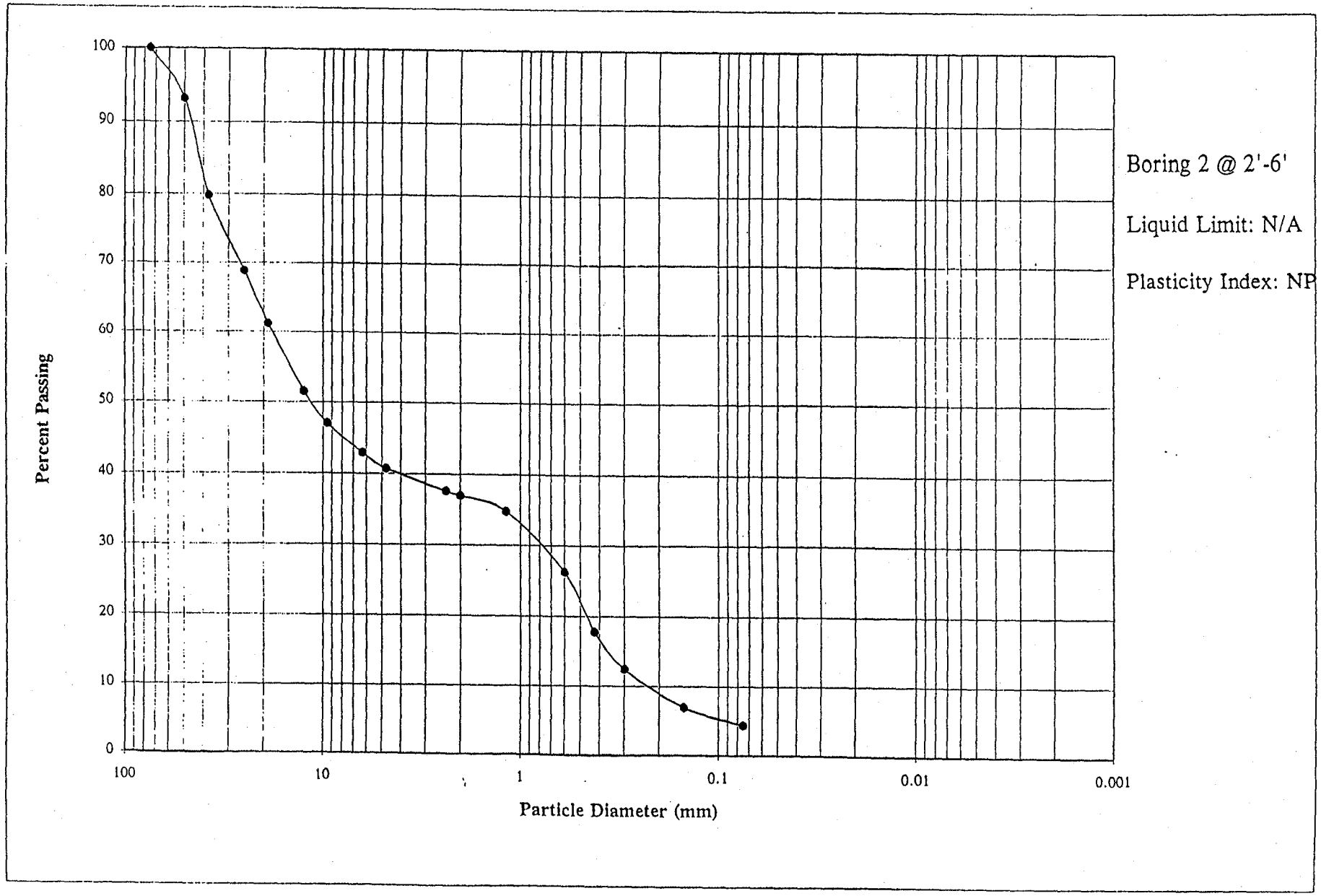

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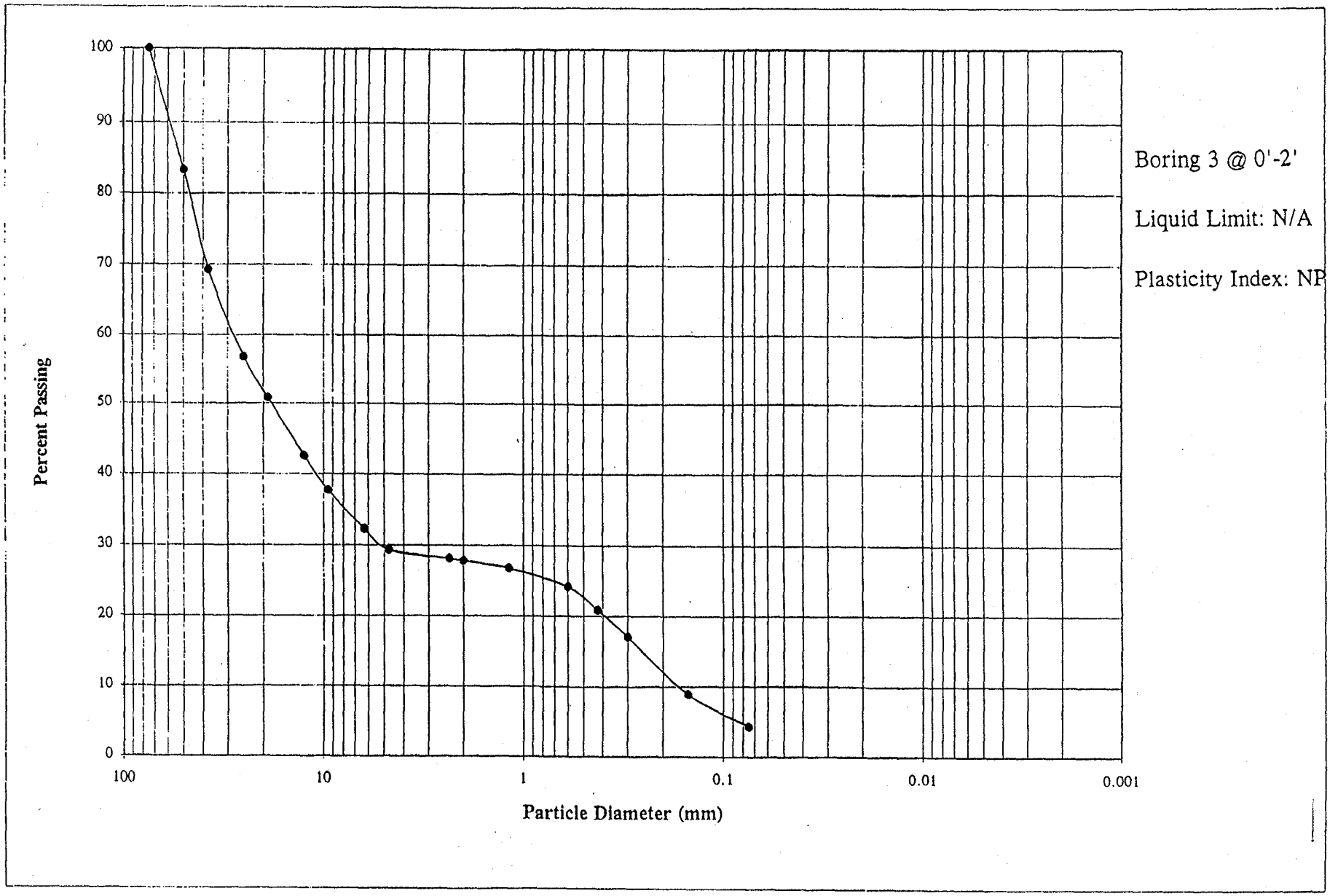

Boring 3 @ 0'-2'

Liquid Limit: N/A

Plasticity Index: NP

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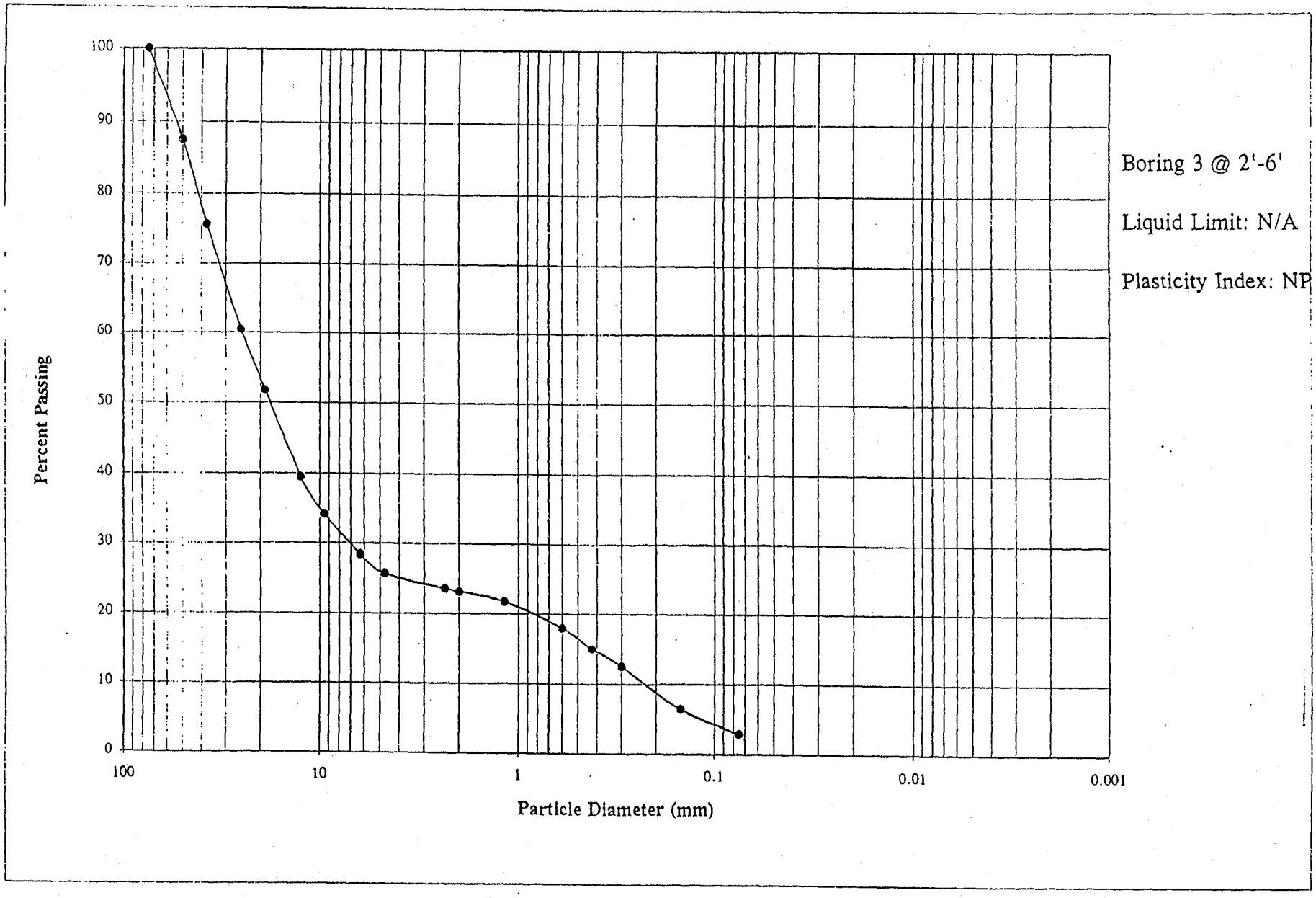

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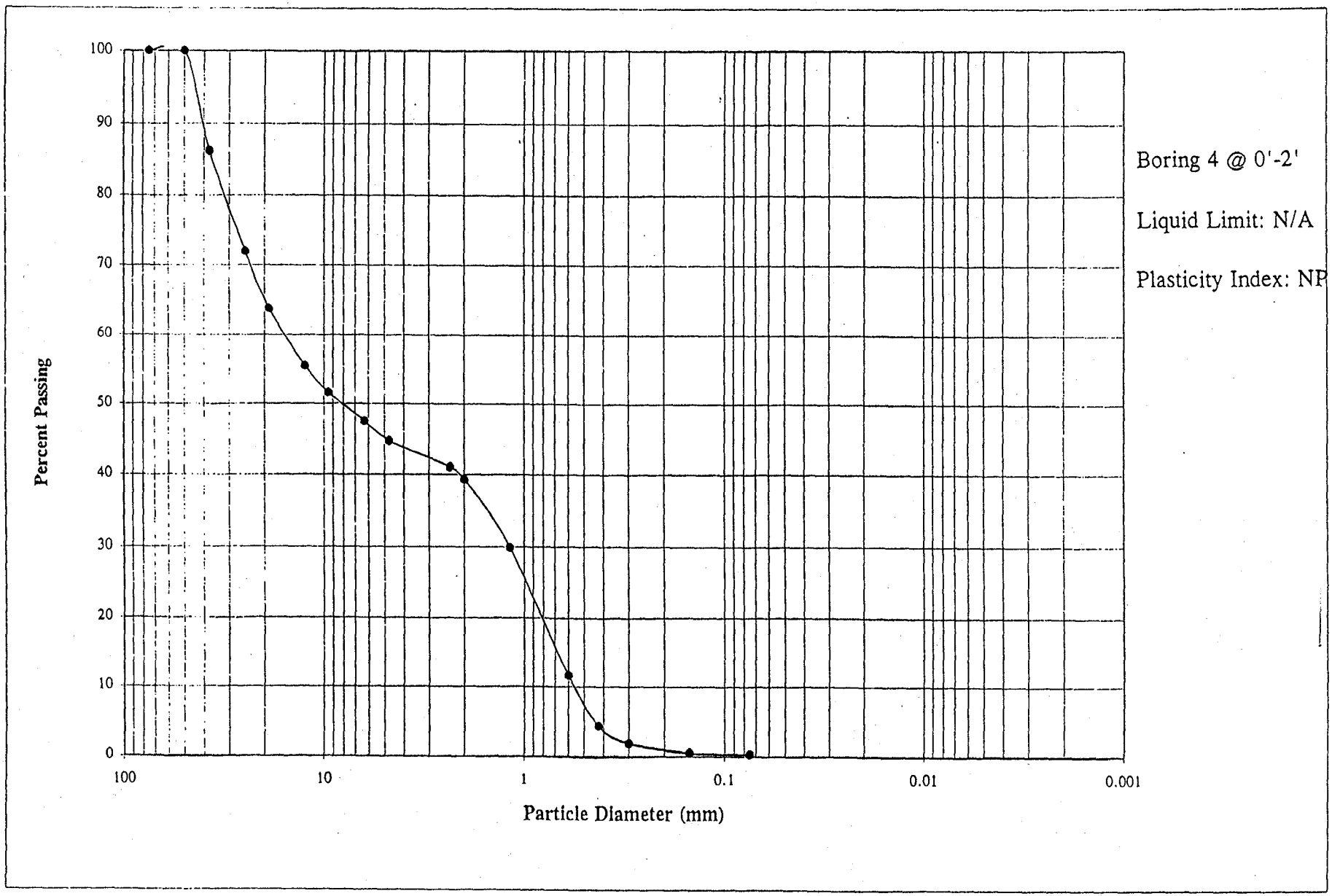

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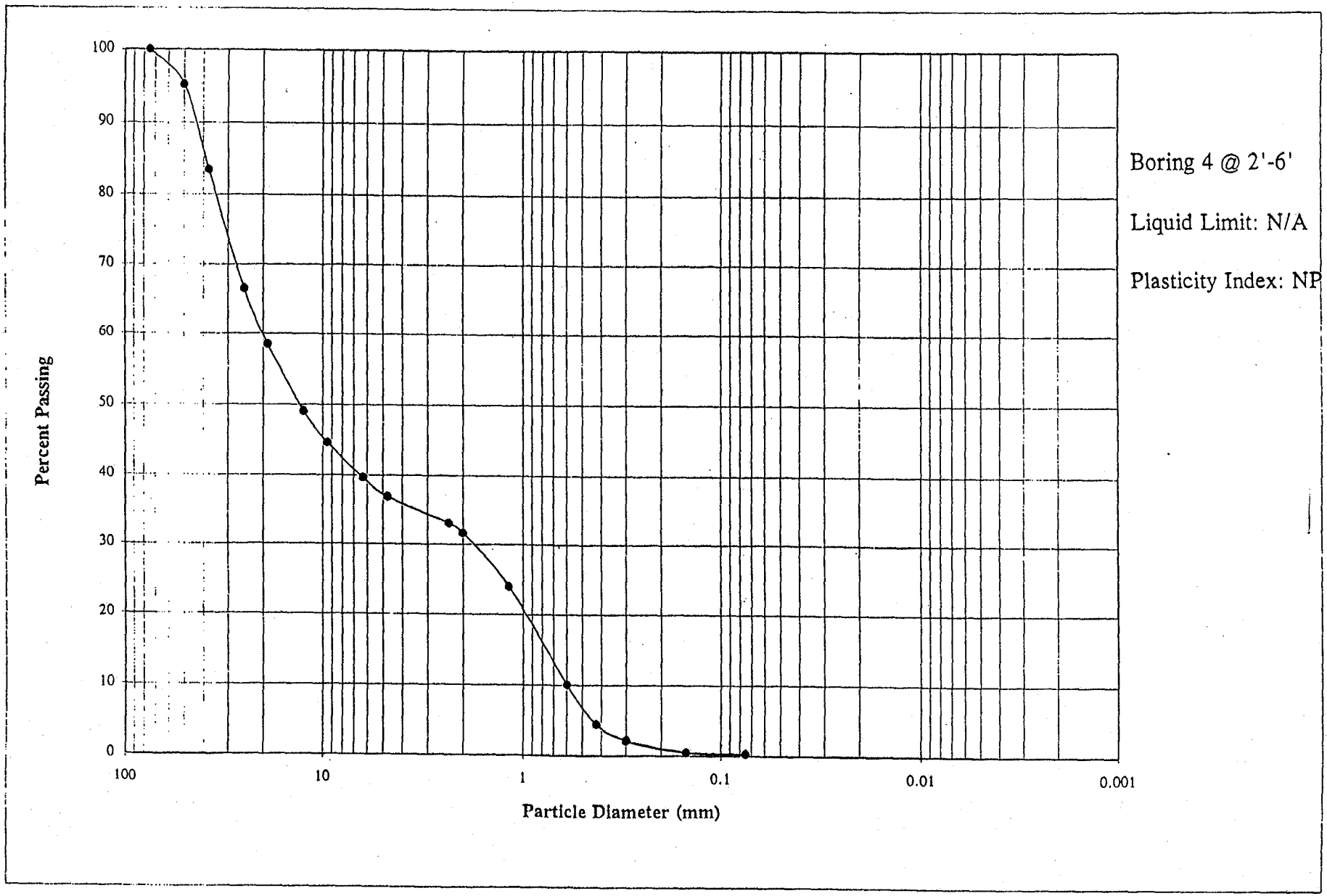

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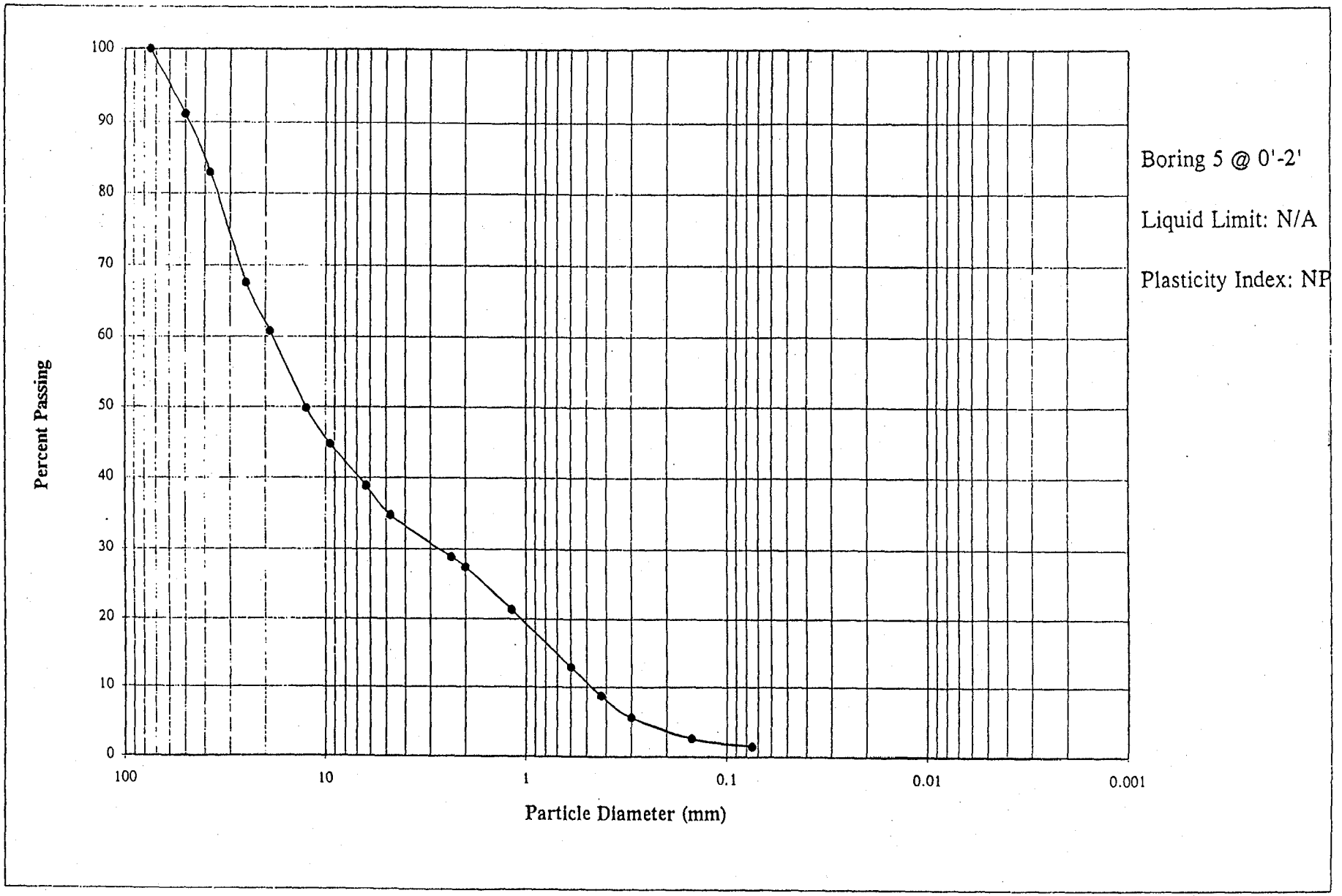

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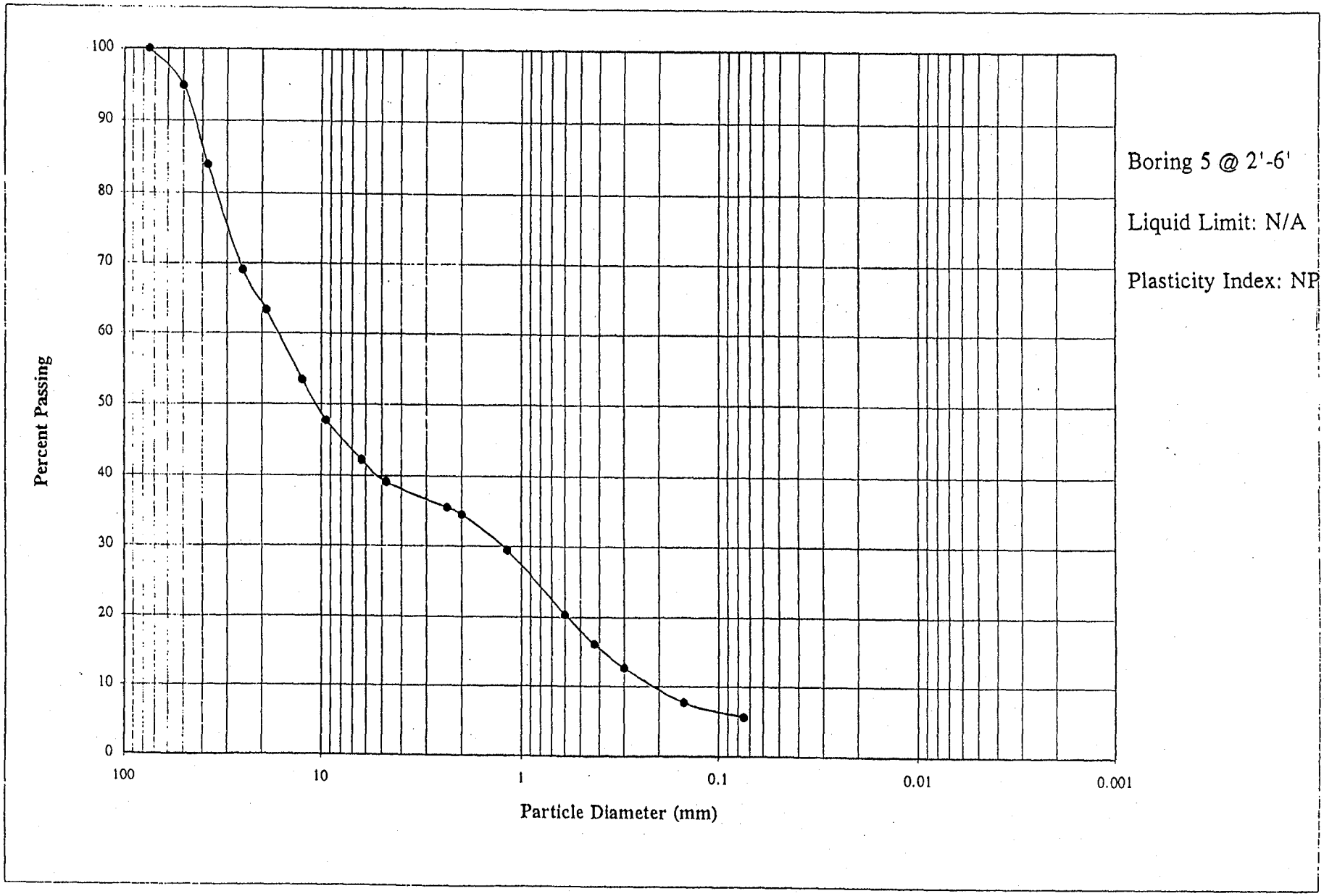

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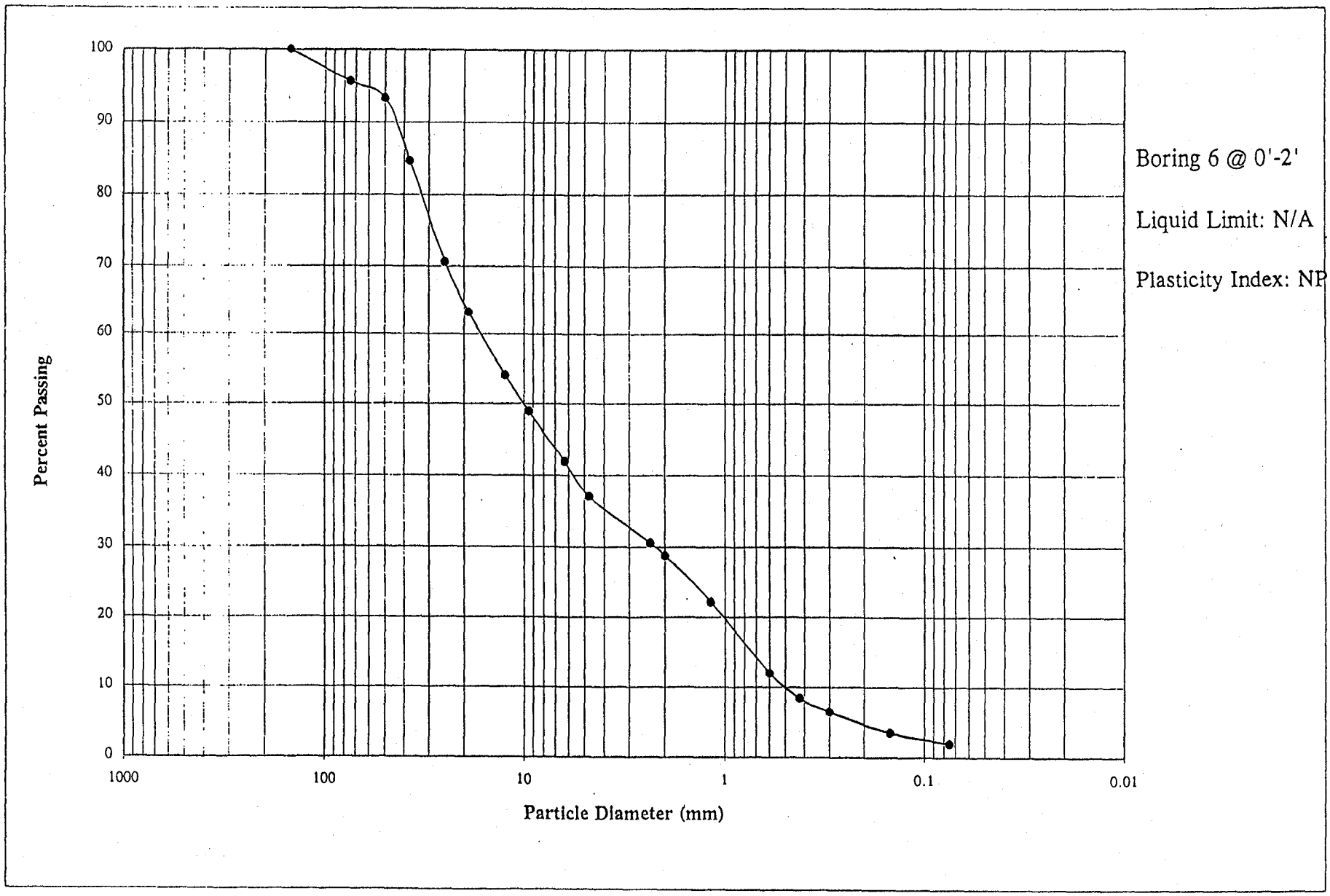

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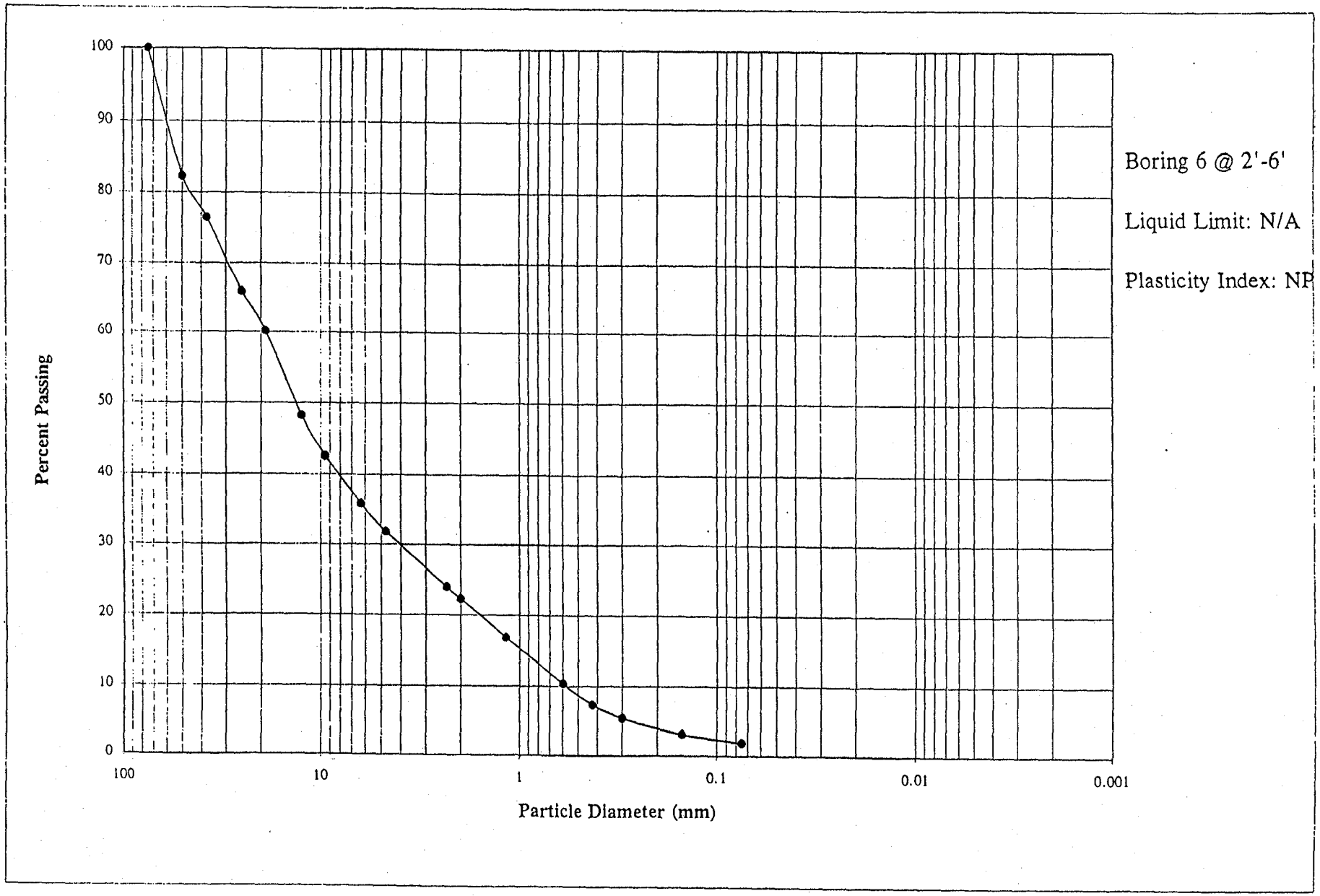

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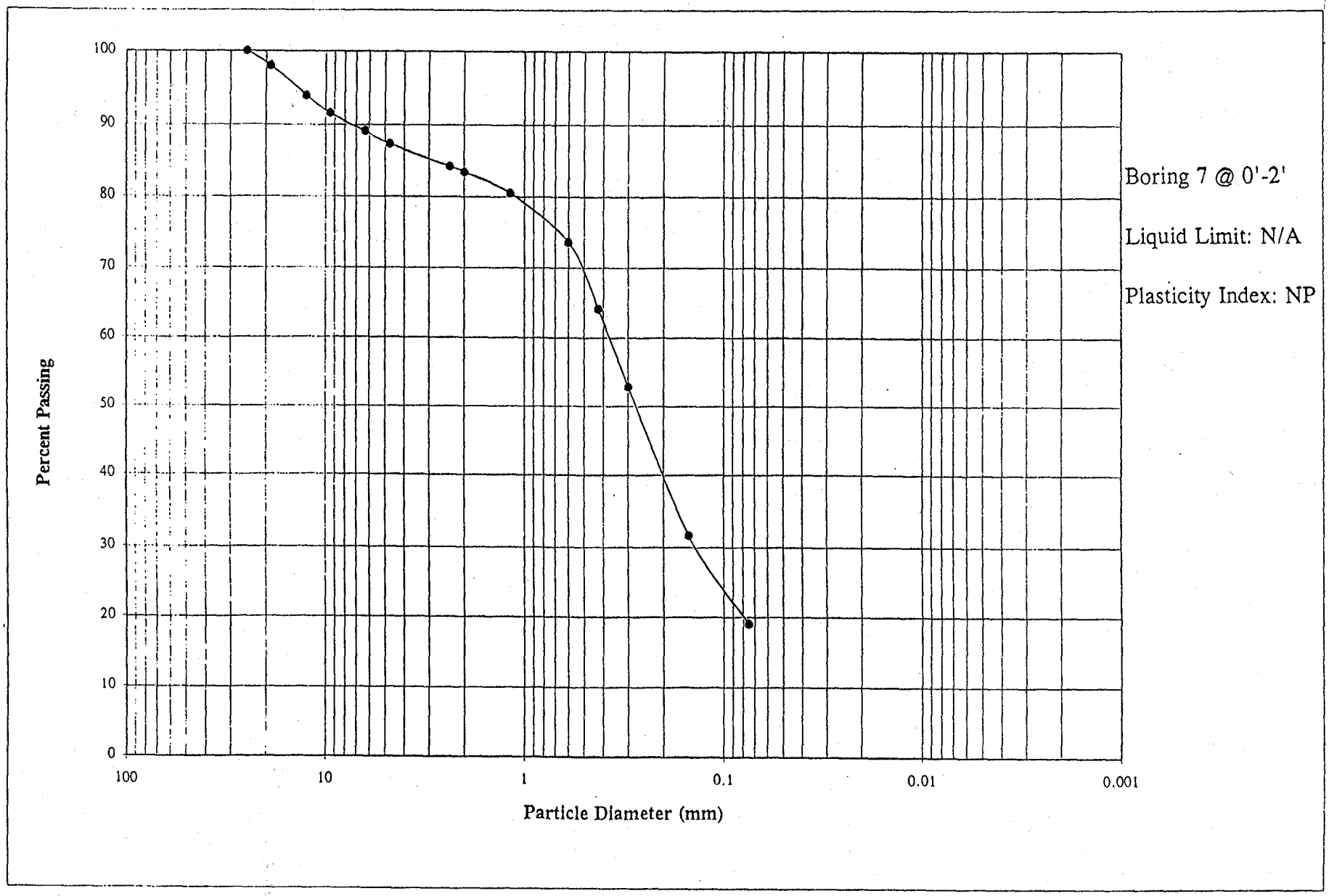

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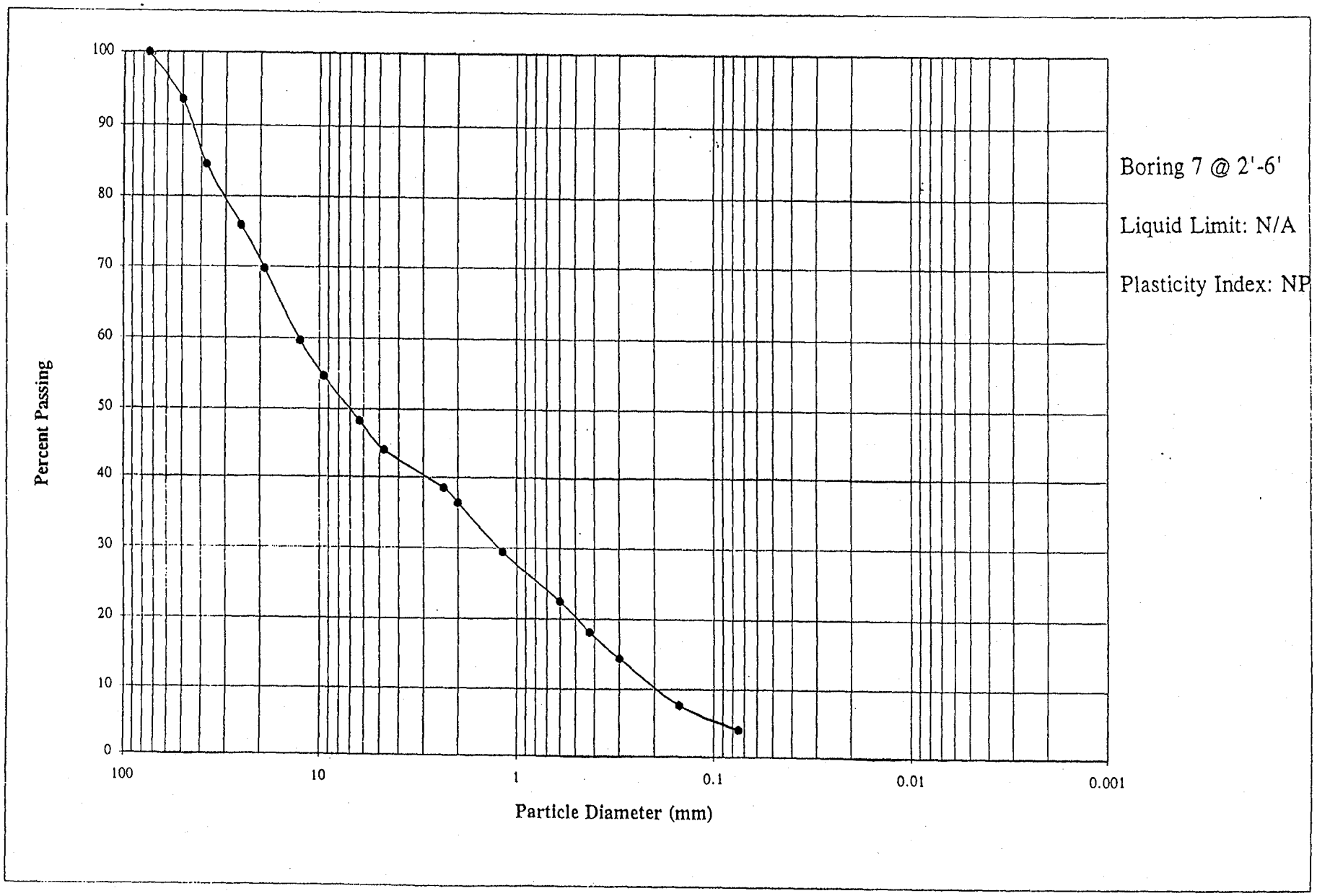

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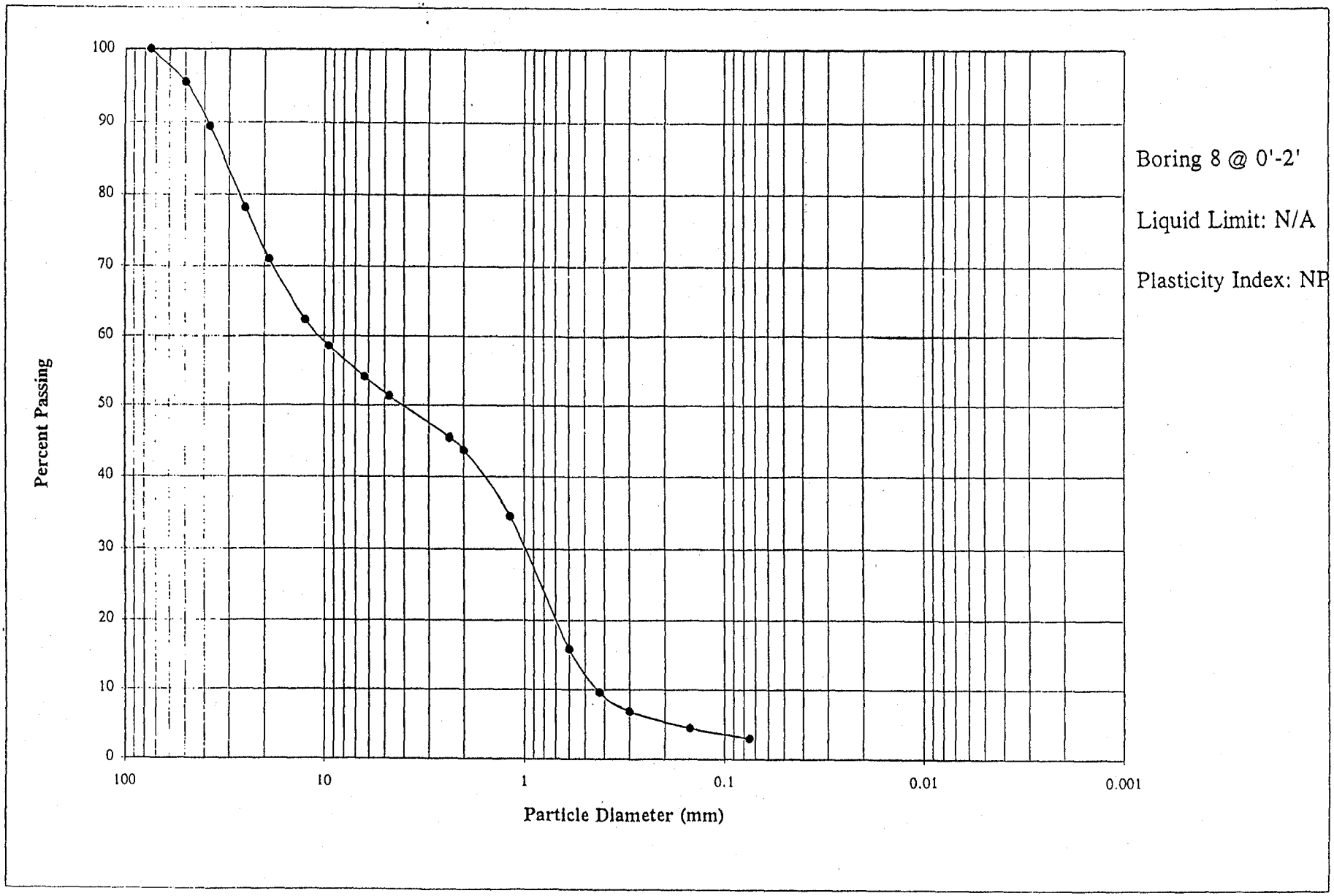

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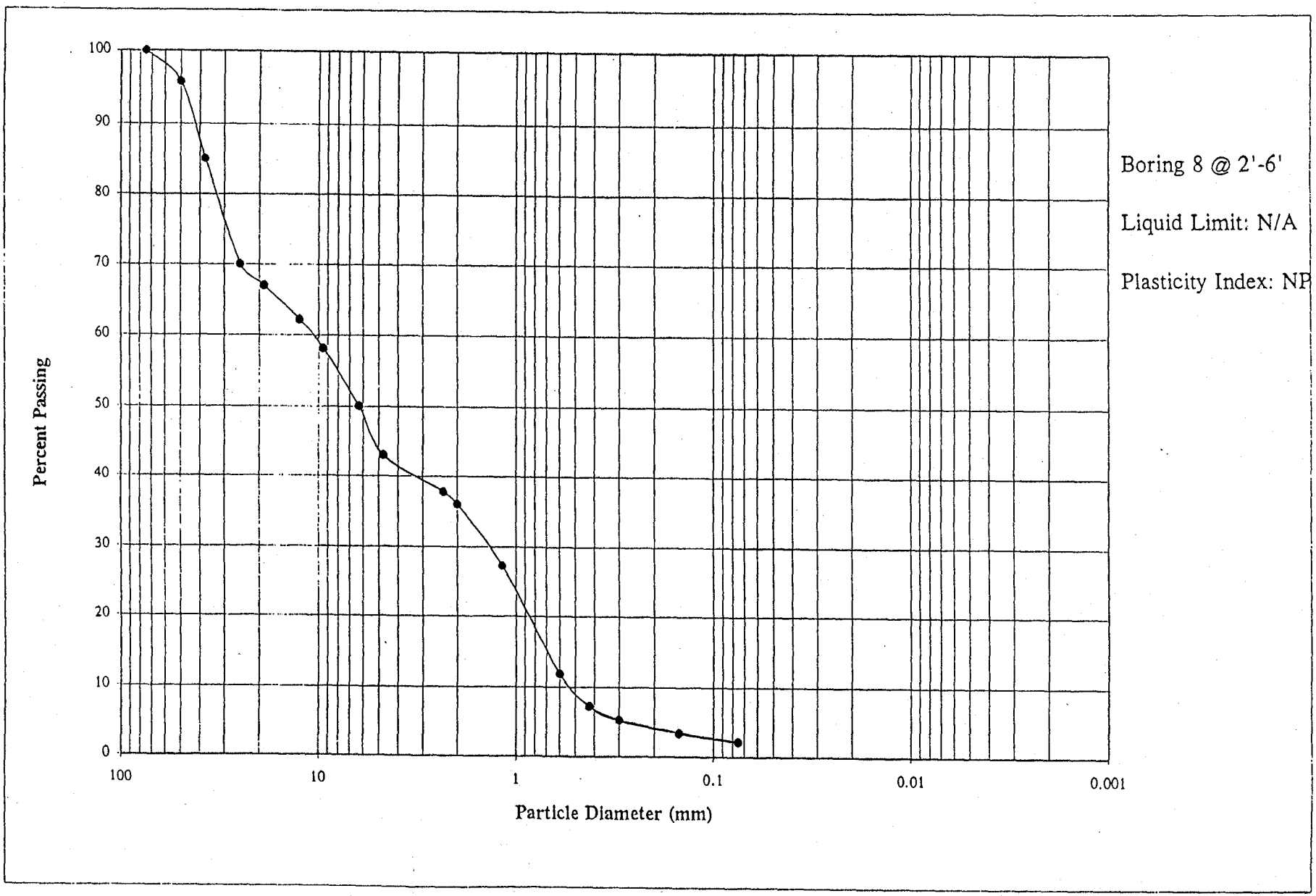

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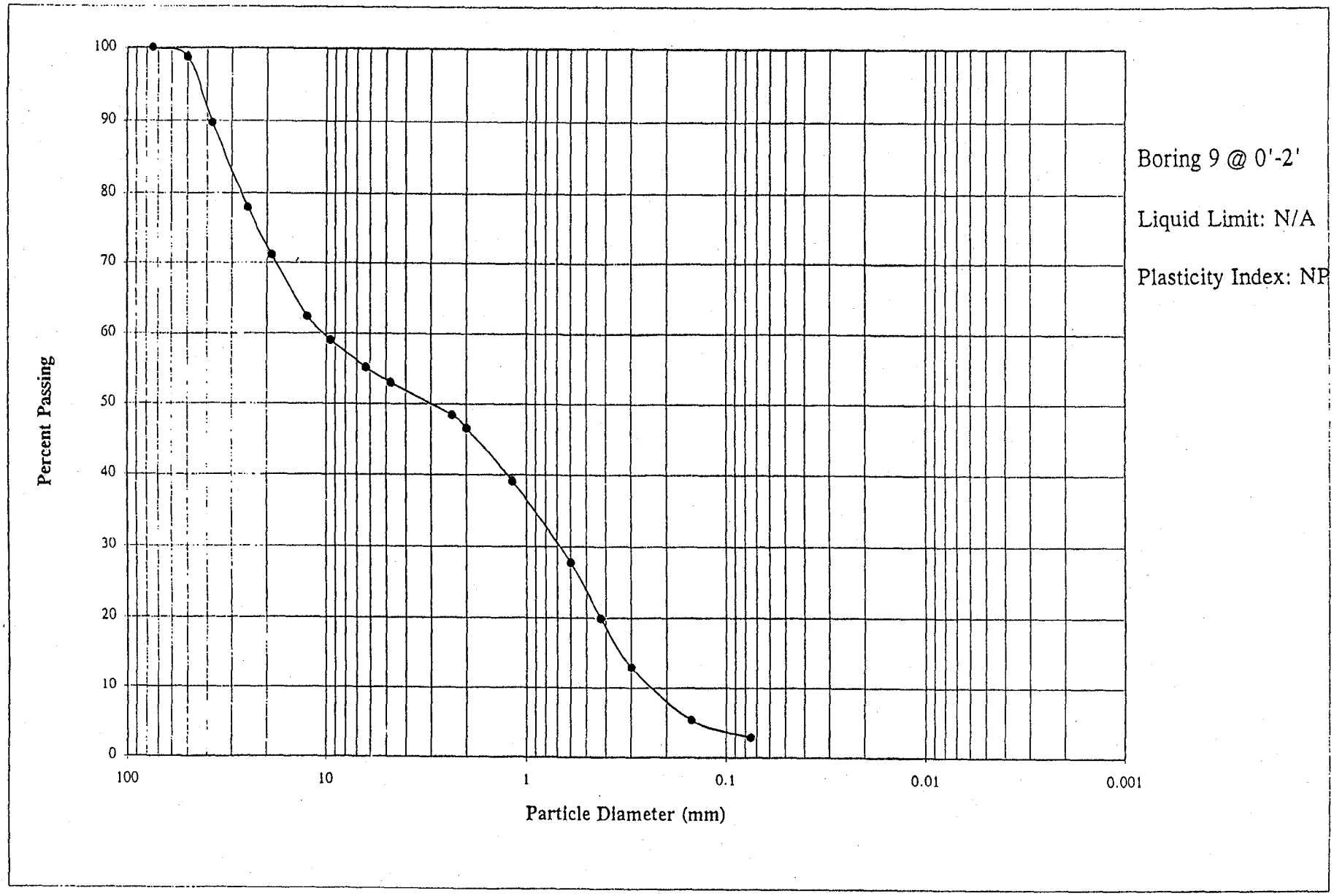

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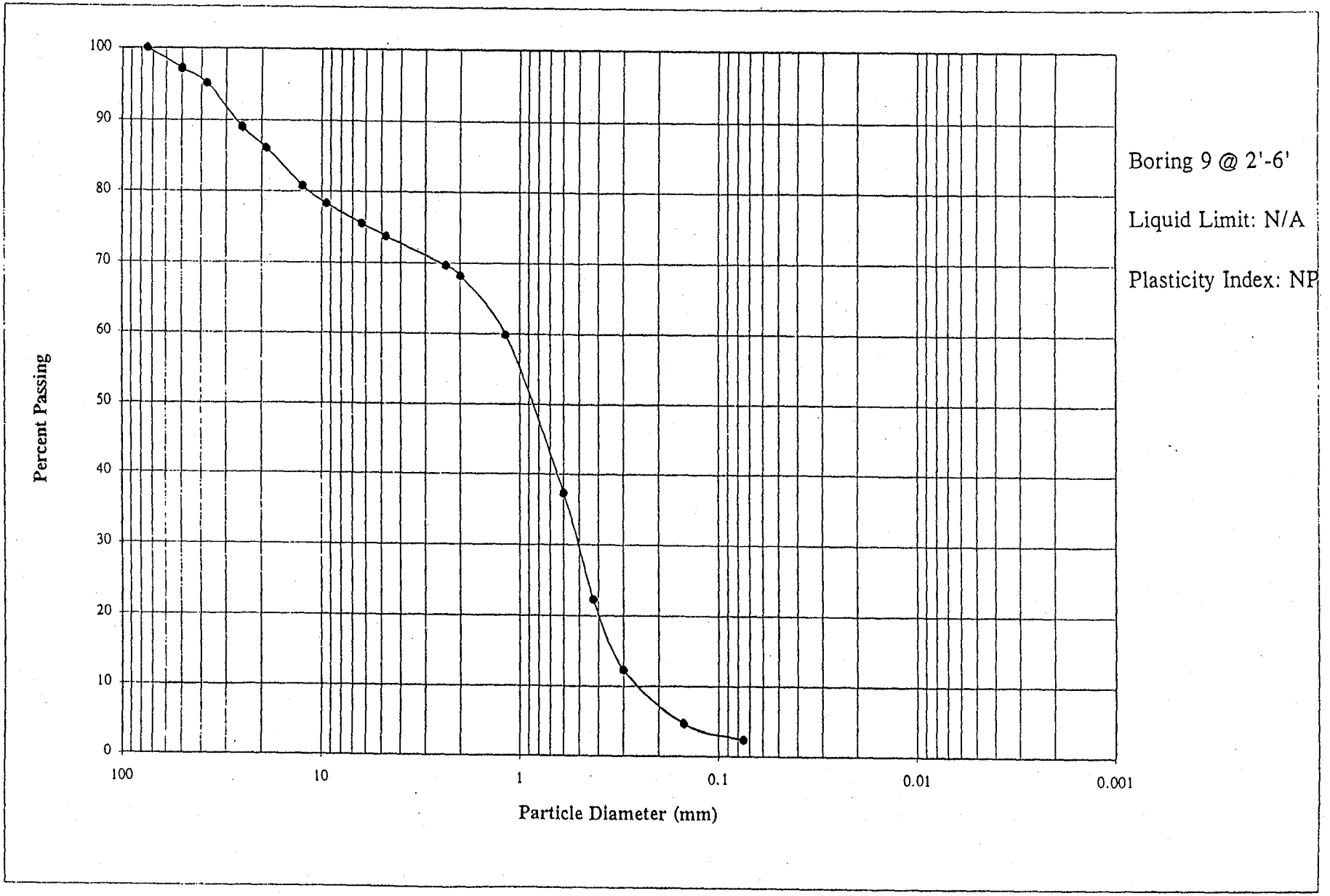

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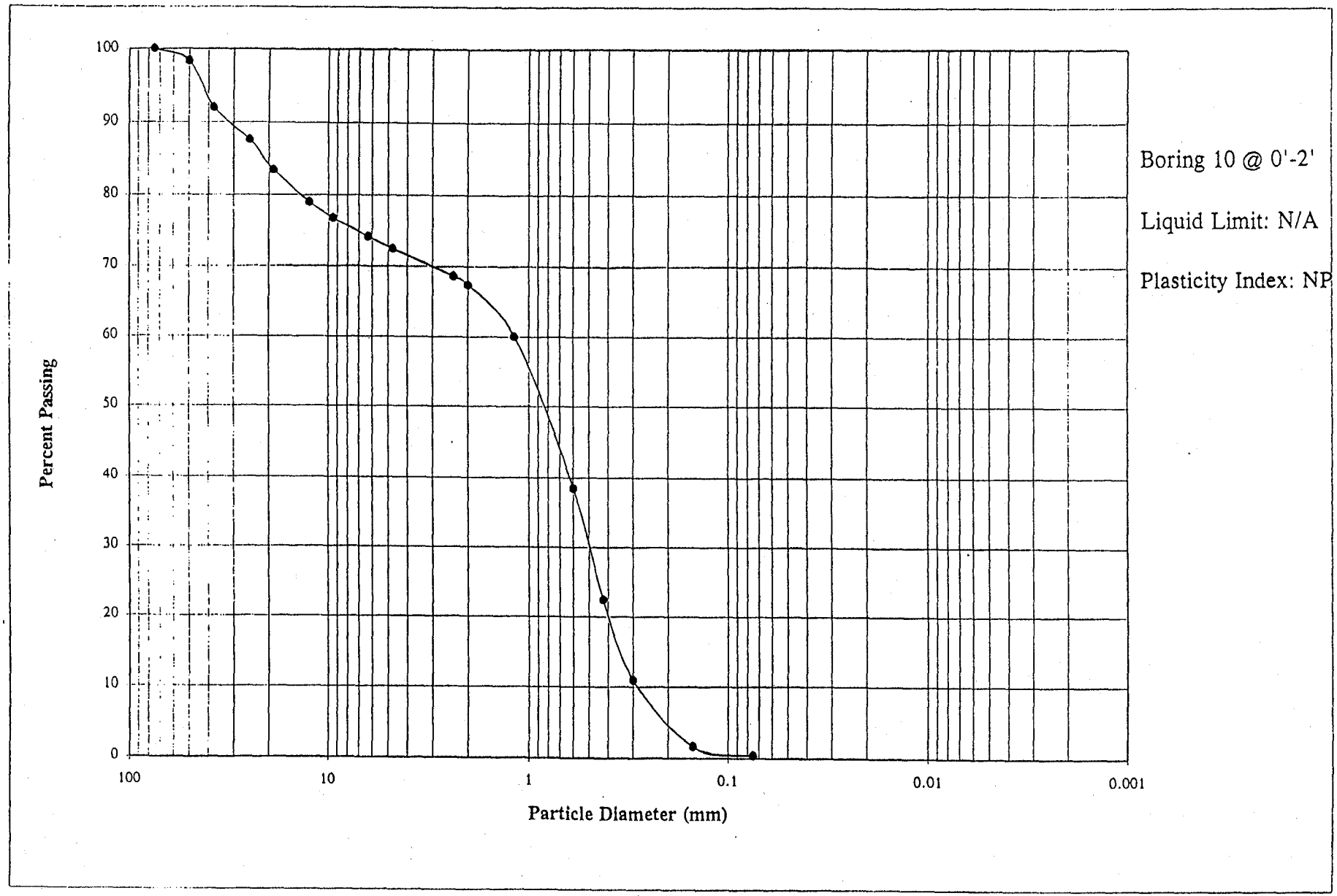

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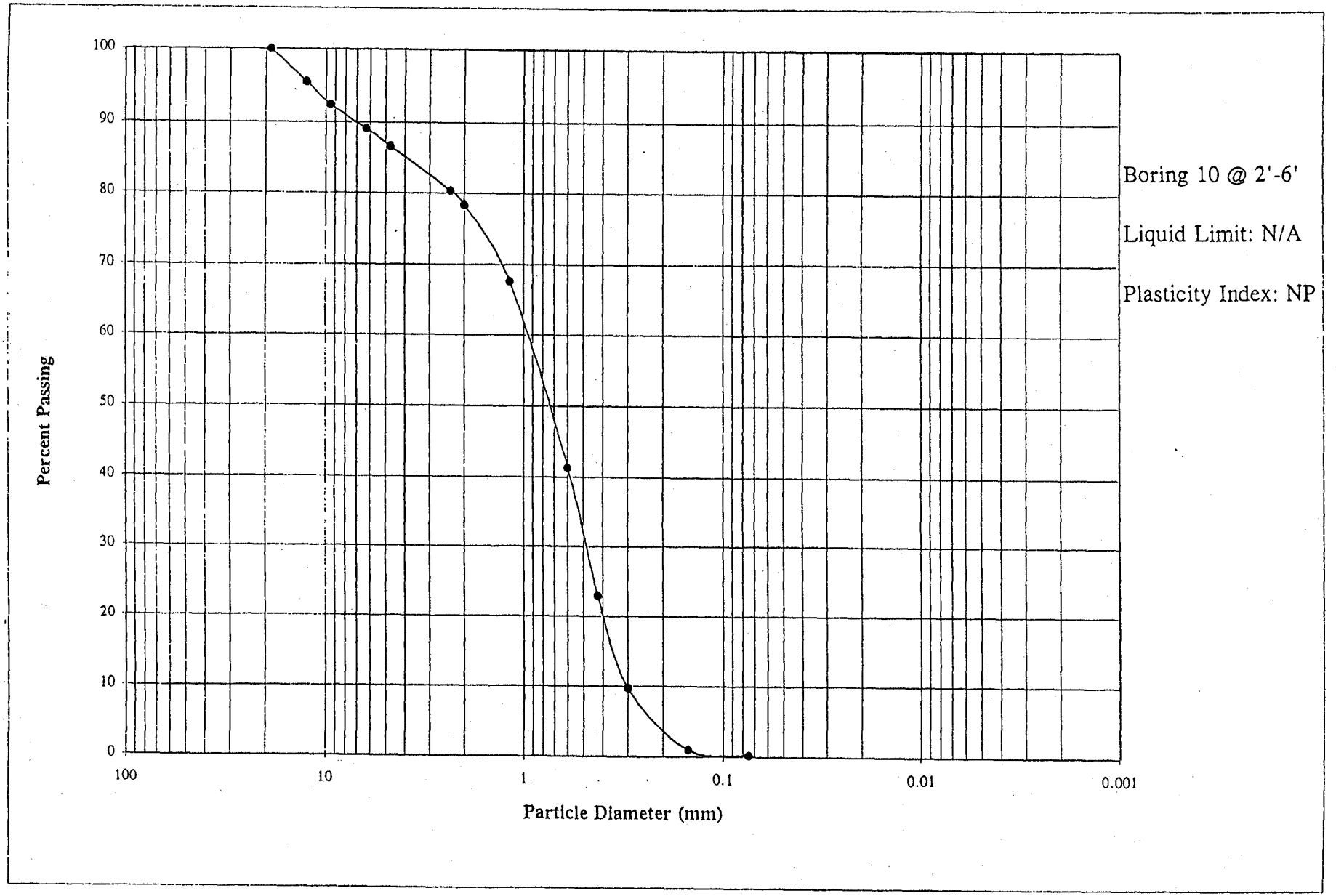

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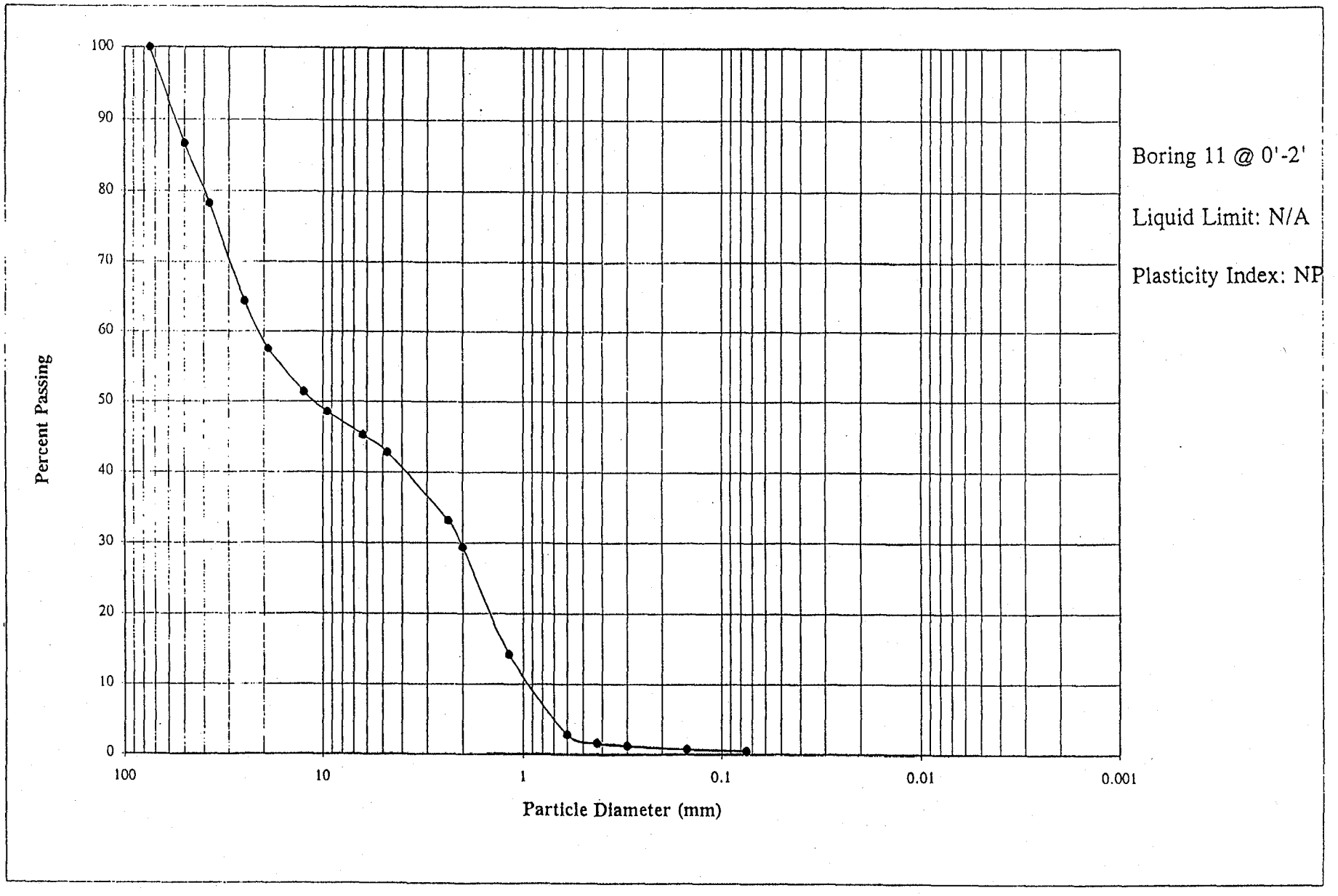

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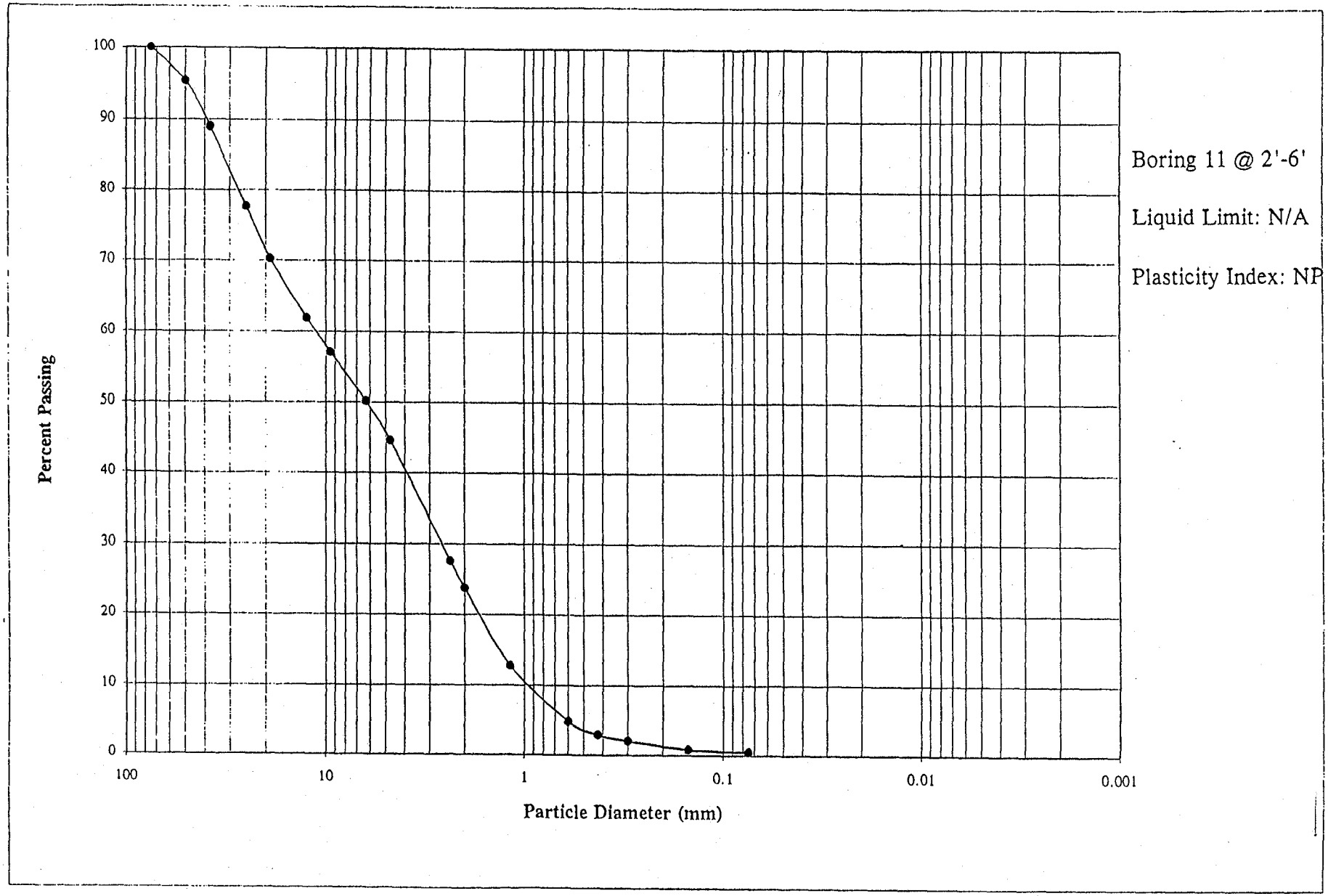

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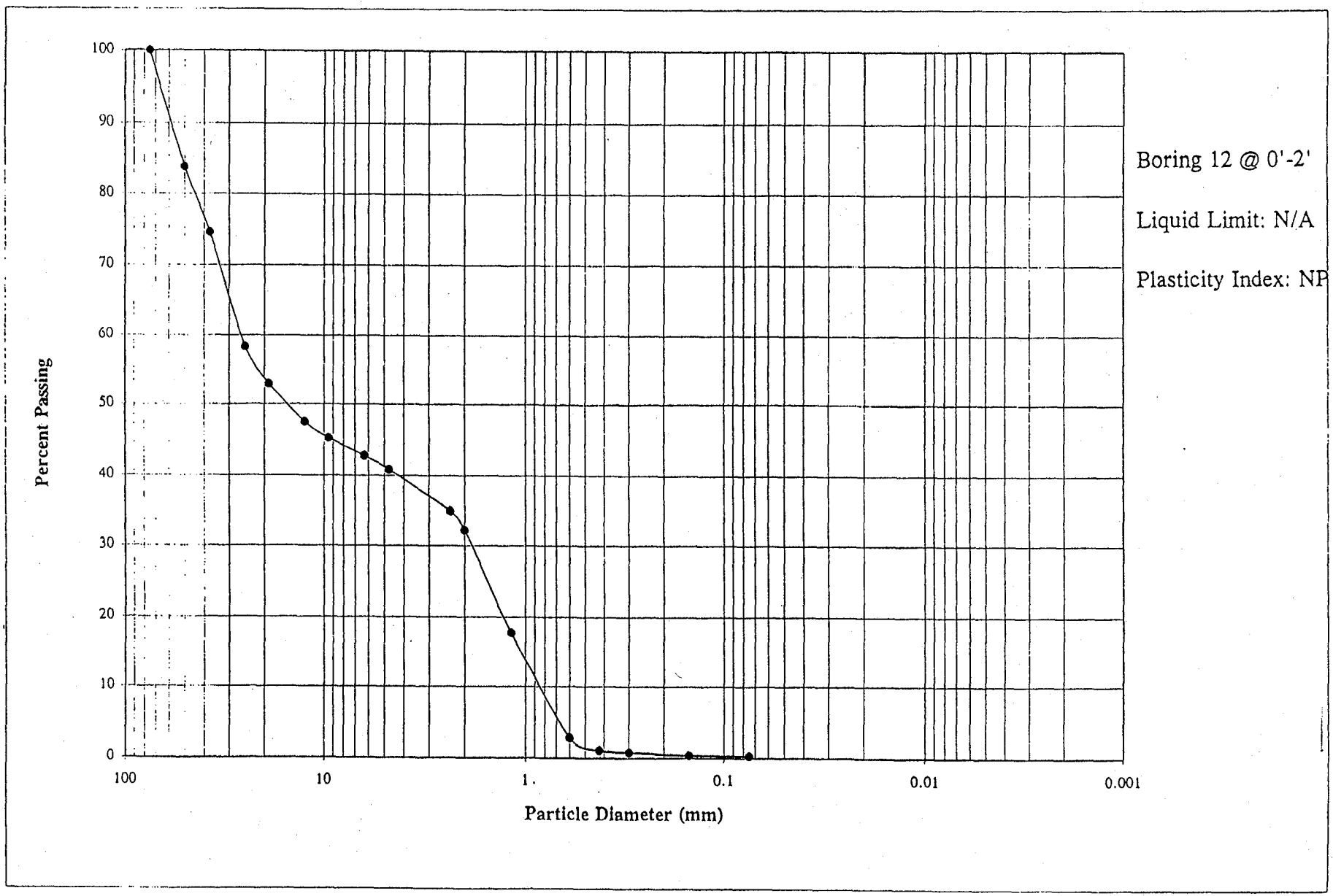

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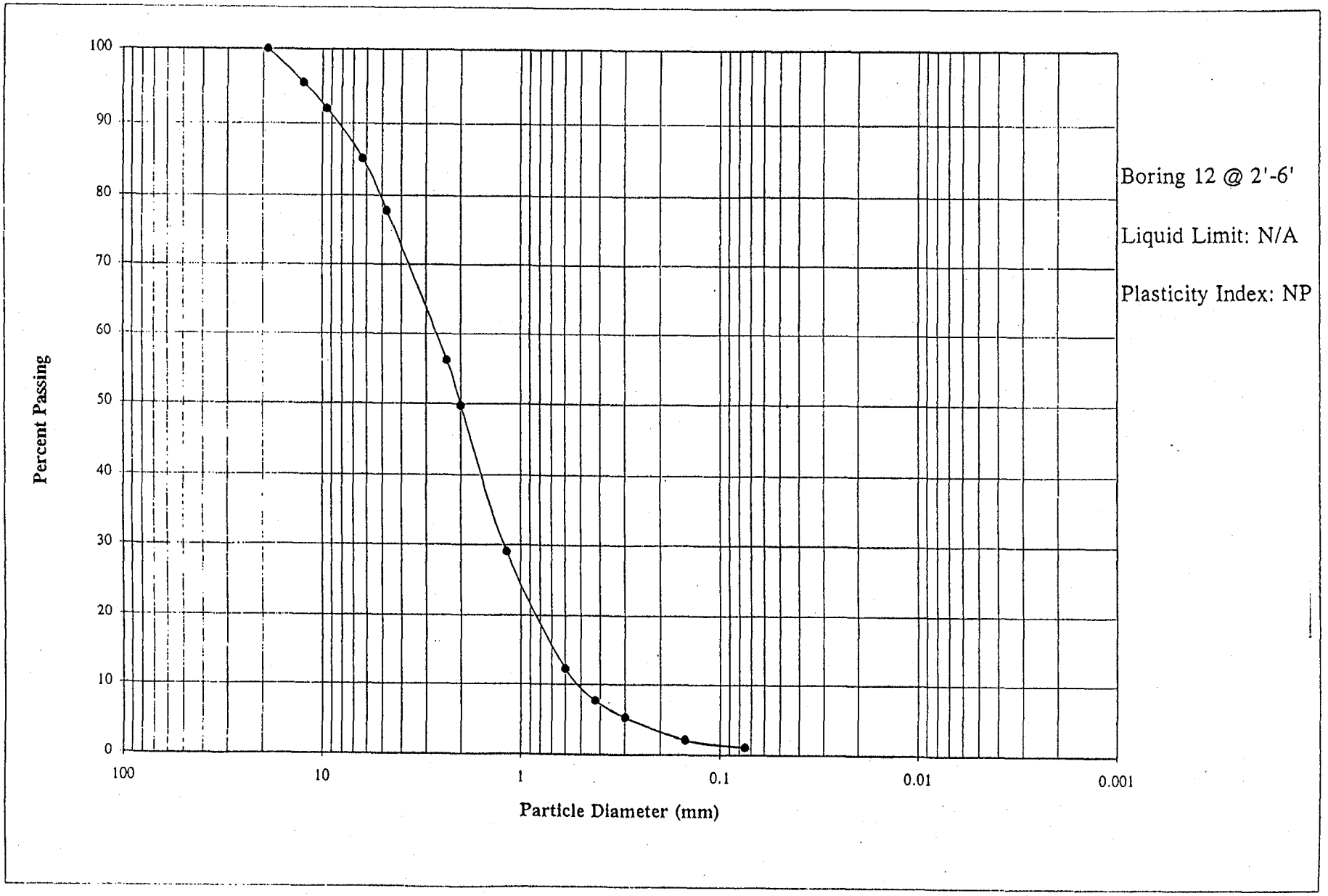

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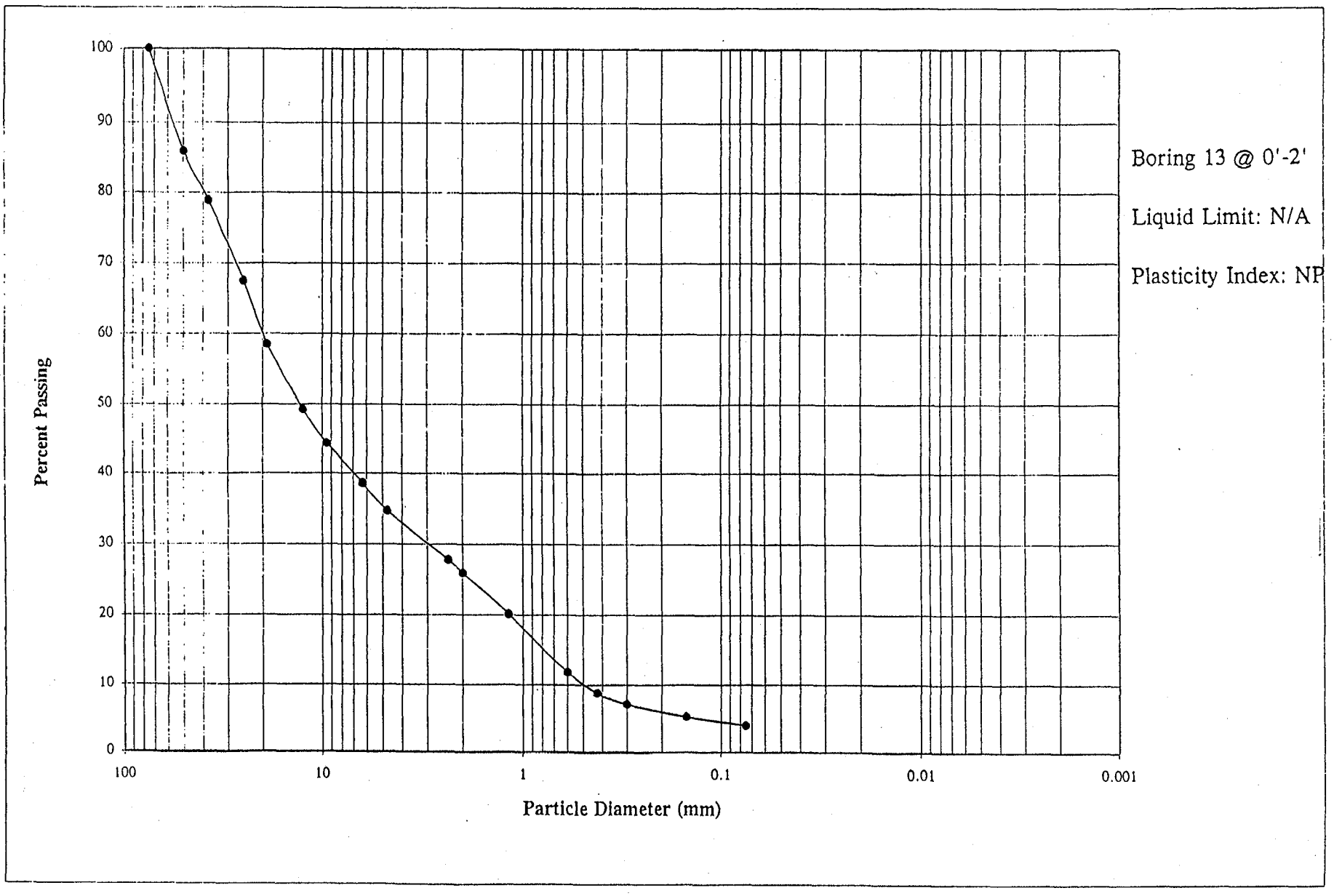

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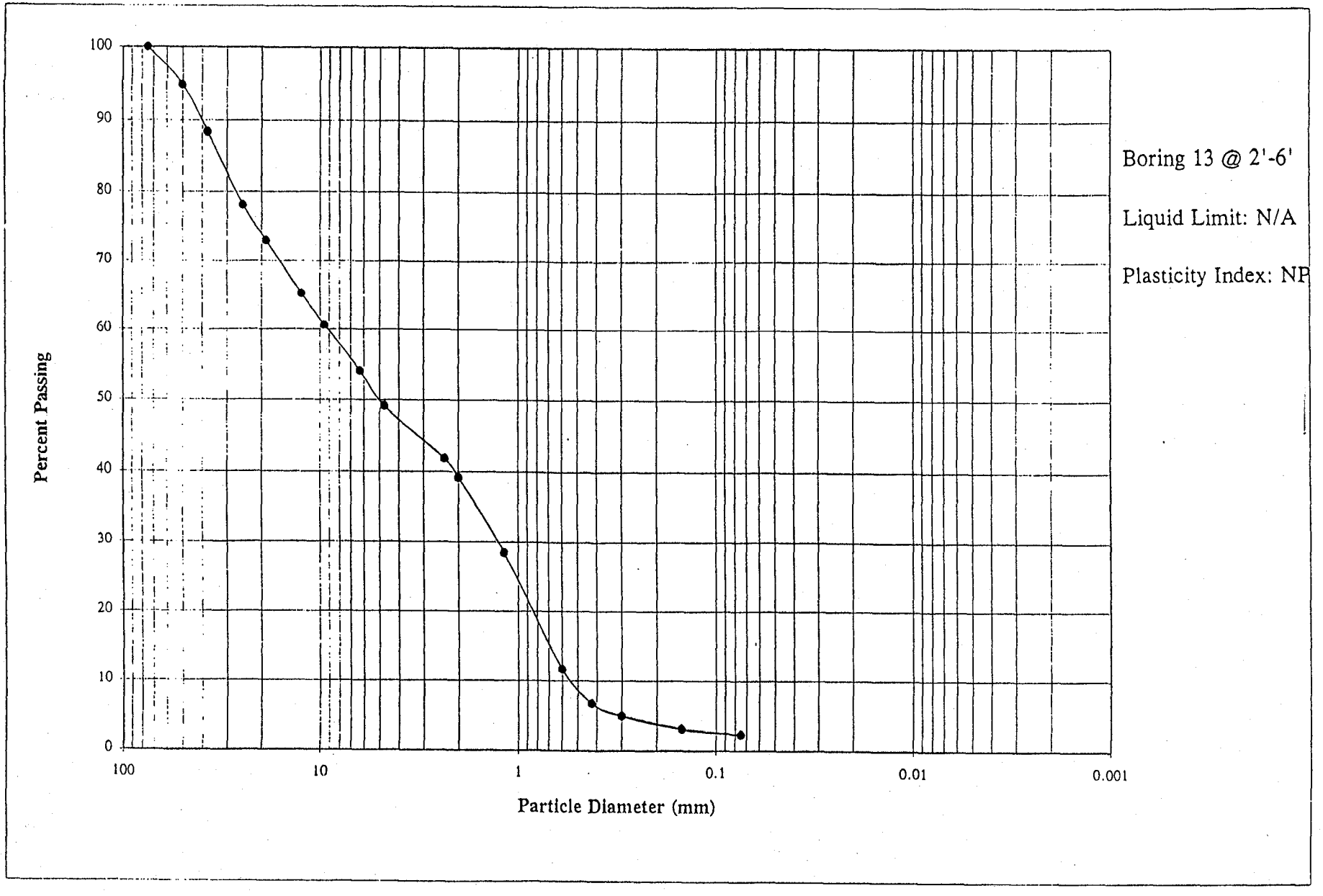

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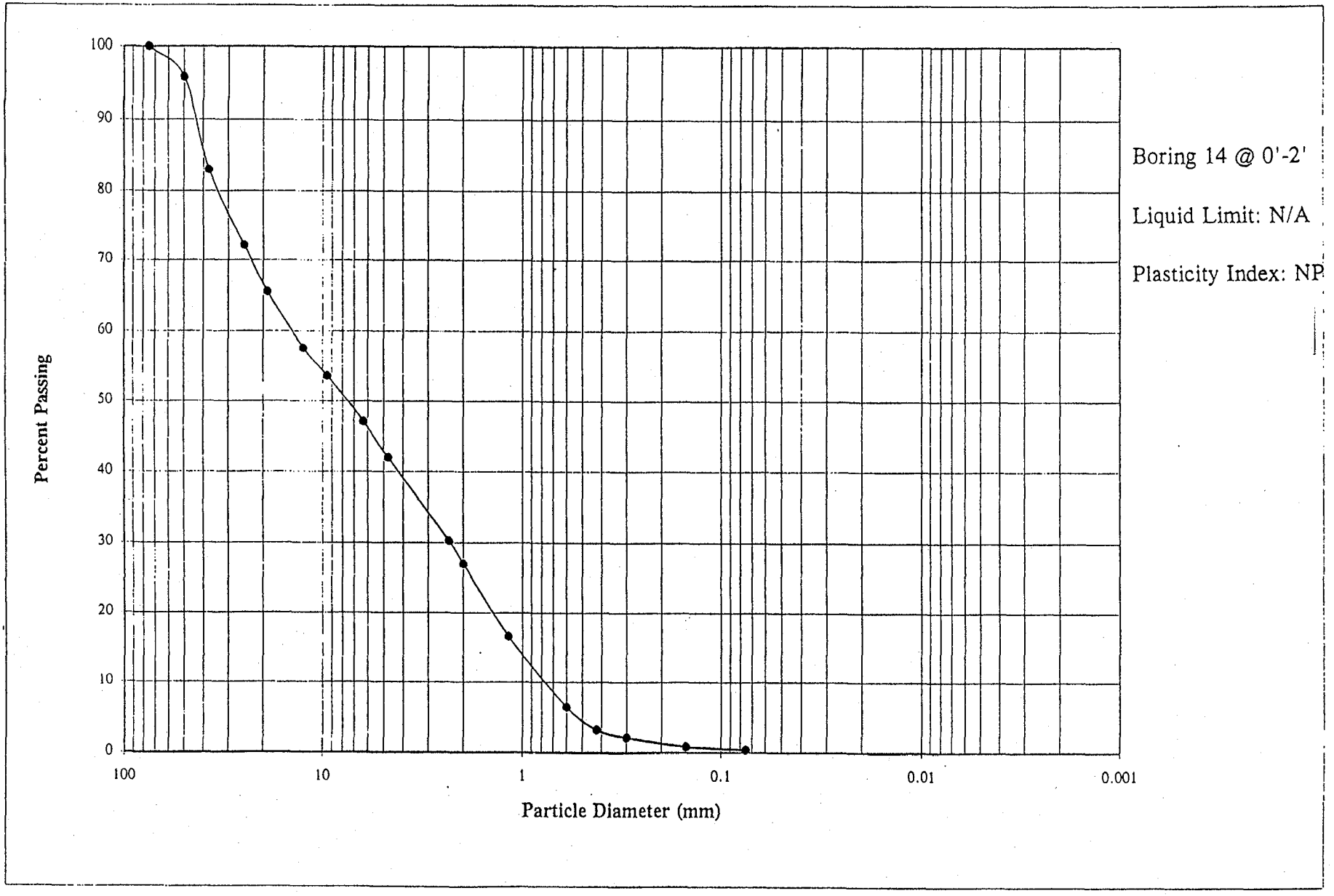

Boring 14 @ 0'-2'

Liquid Limit: N/A

Plasticity Index: NP

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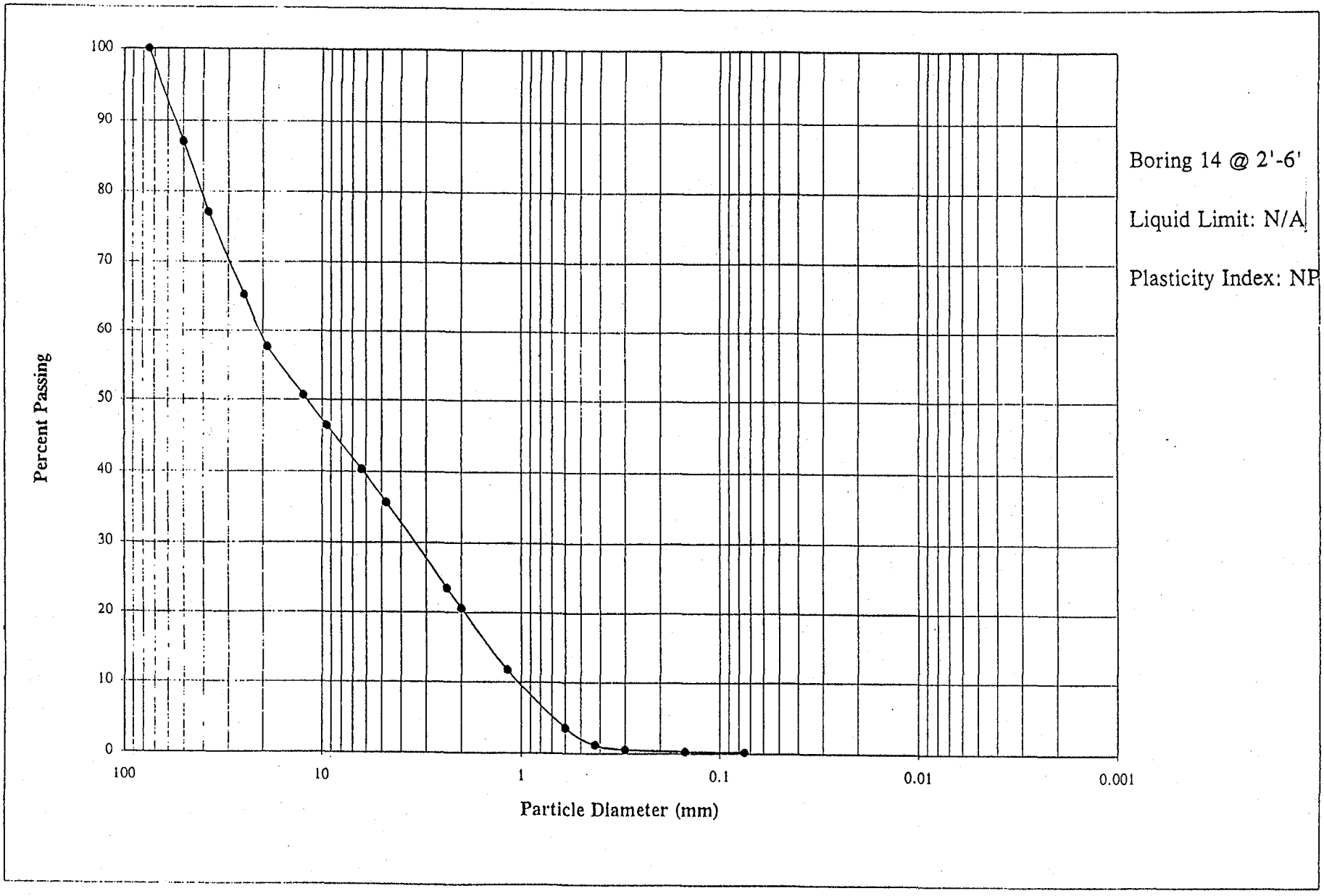

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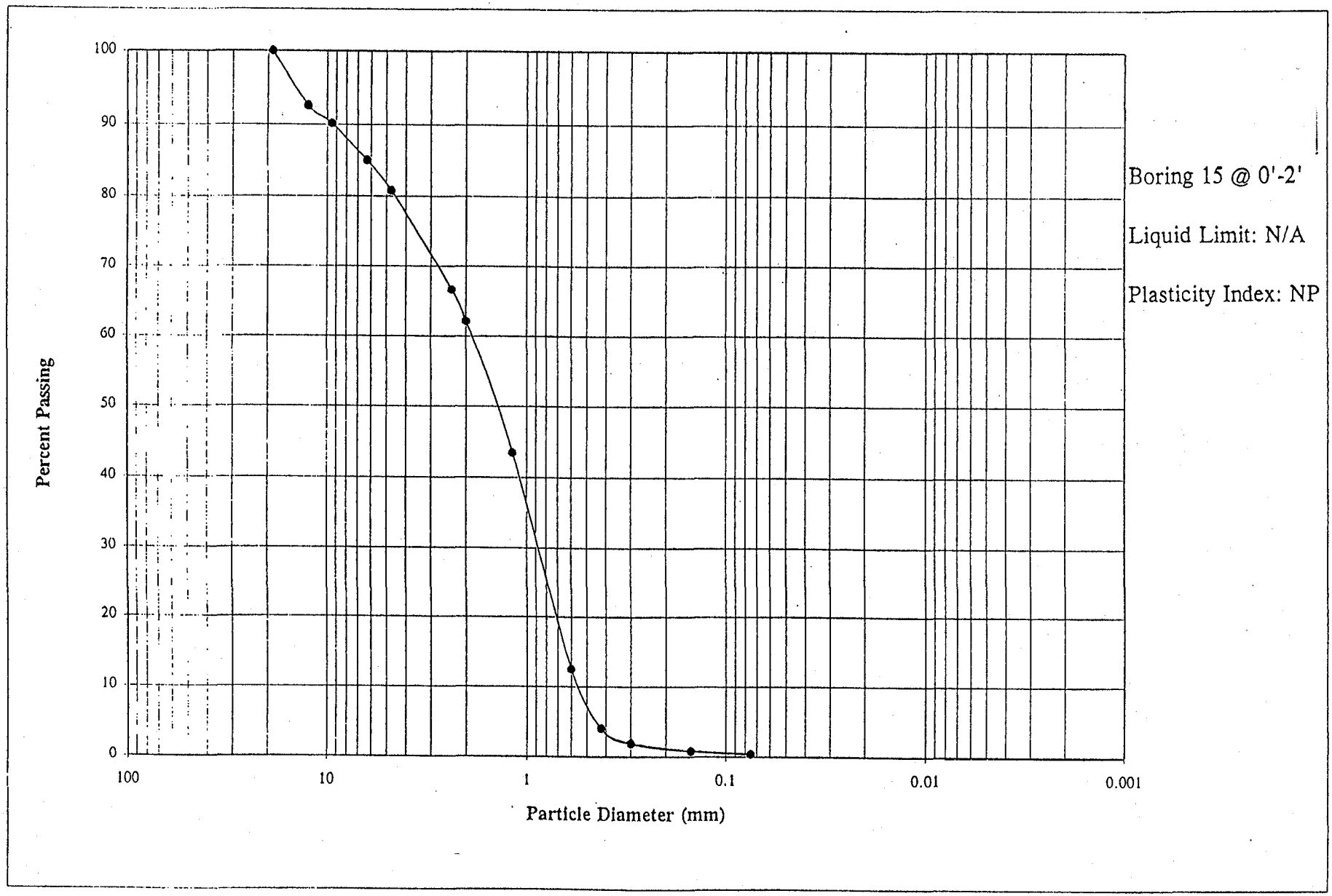

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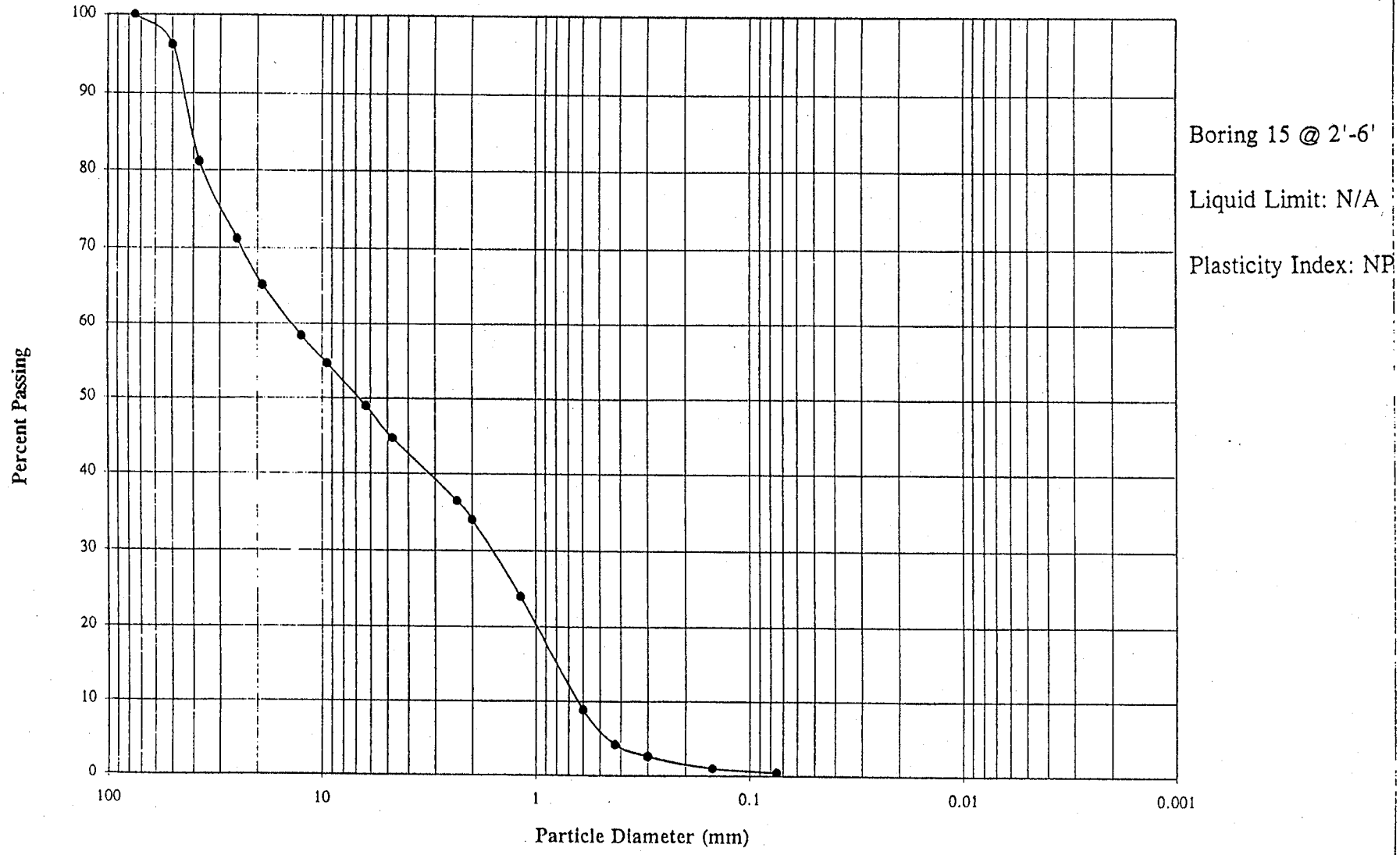
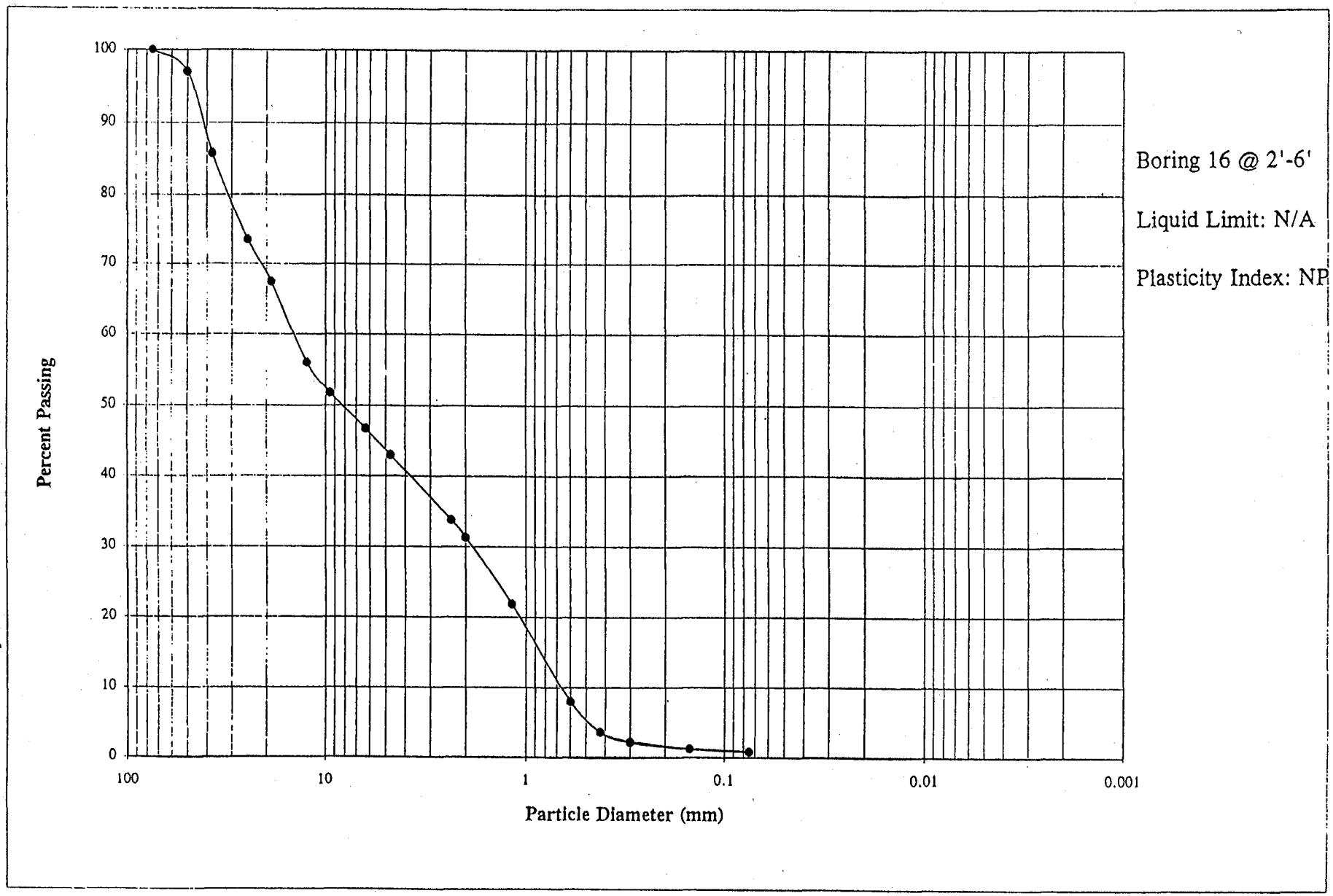


Boring 15 @ 2'-6'

Liquid Limit: N/A

Plasticity Index: NP

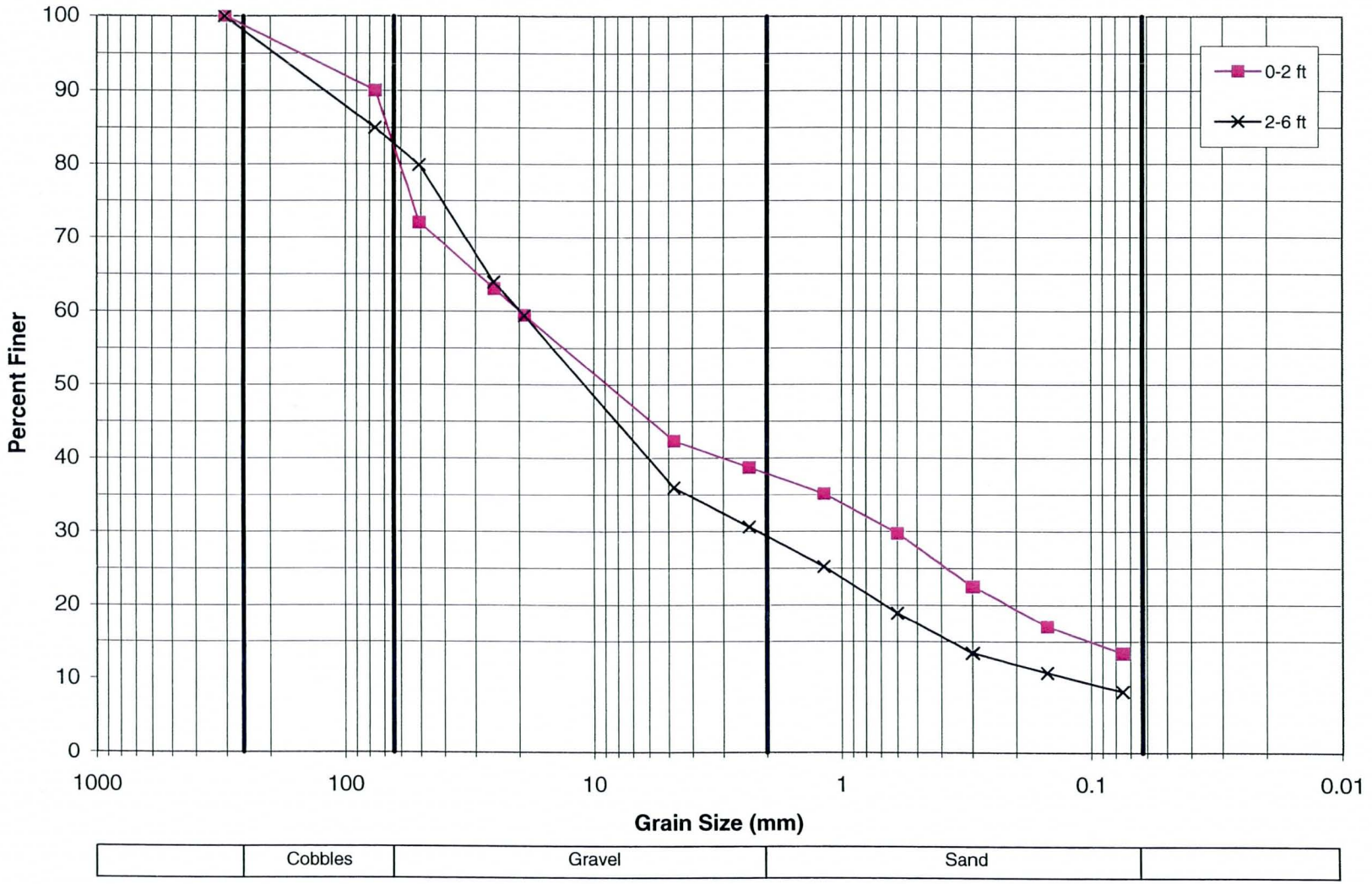
R.A.M. Project No. G07361



APPENDIX 4

BED MATERIAL GRADATION CURVES

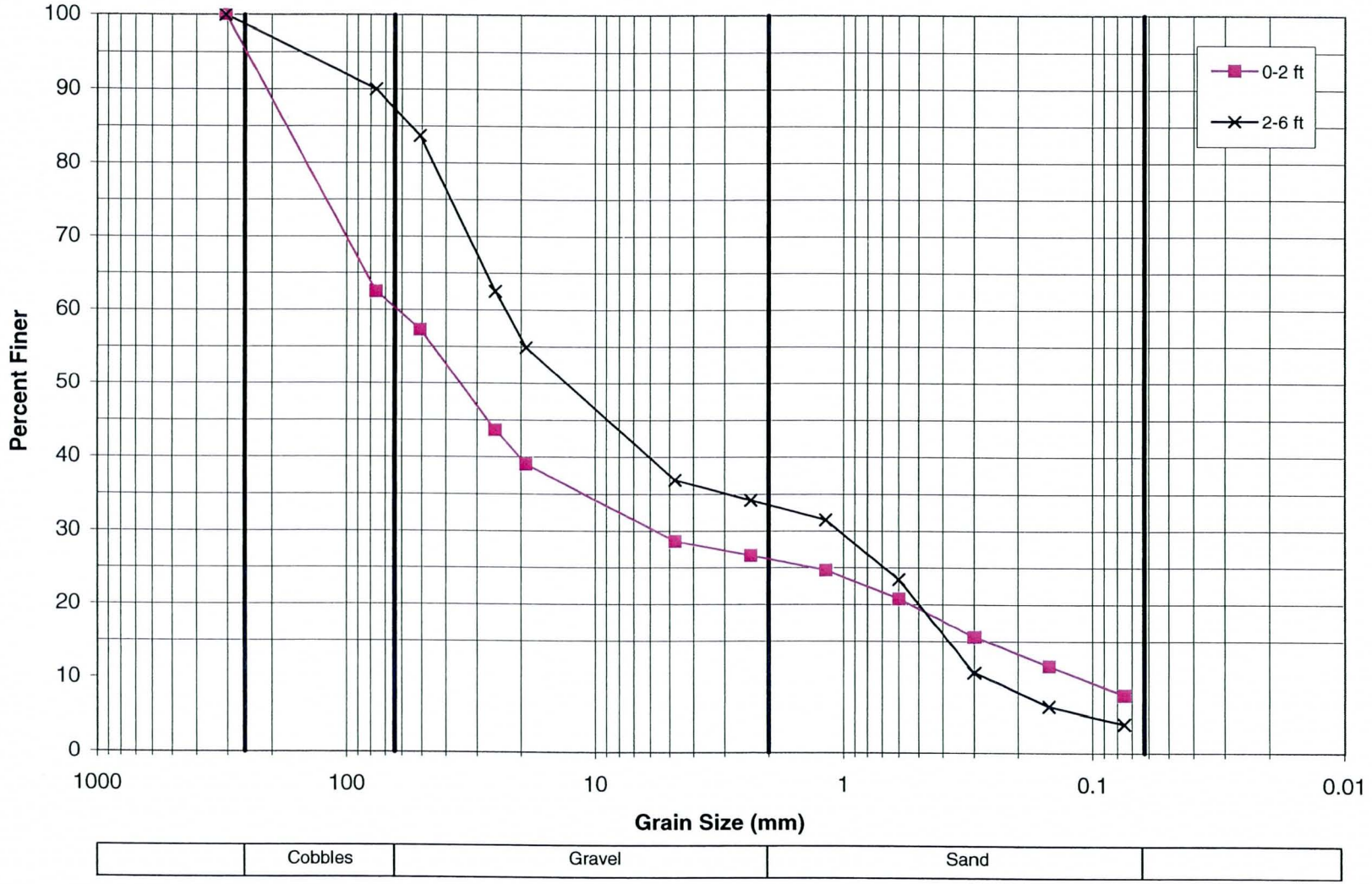
Va Shly' Ay Akimel
Bed Gradation at Sample Site 1 near Cross Section 0.11



Prepared by SMF

vash pf records
9/30/2003

Va Shly' Ay Akimel
Bed Gradation at Sample Site 2 near Cross Section 0.51



Prepared by SMF

vash pf records
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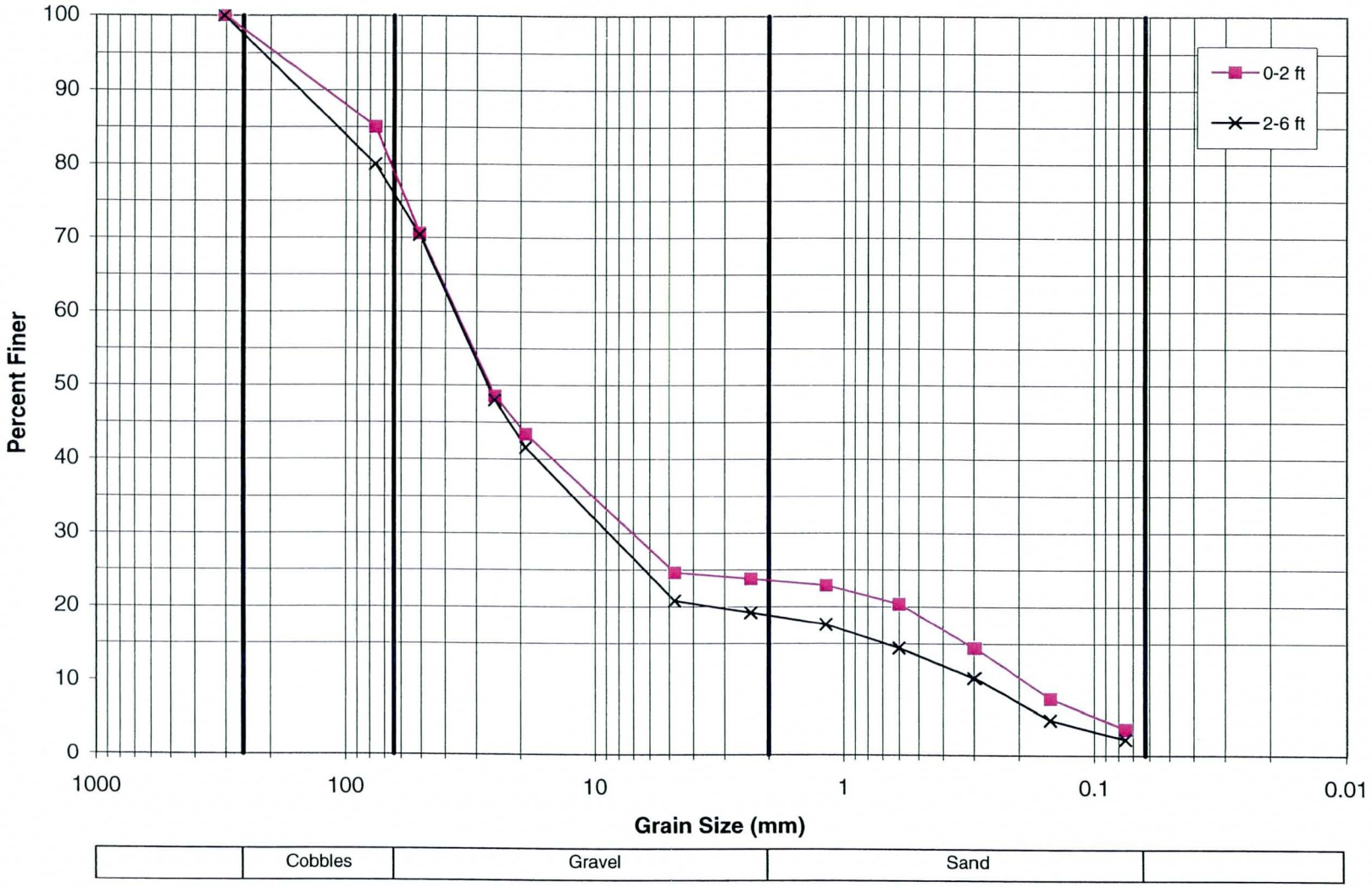
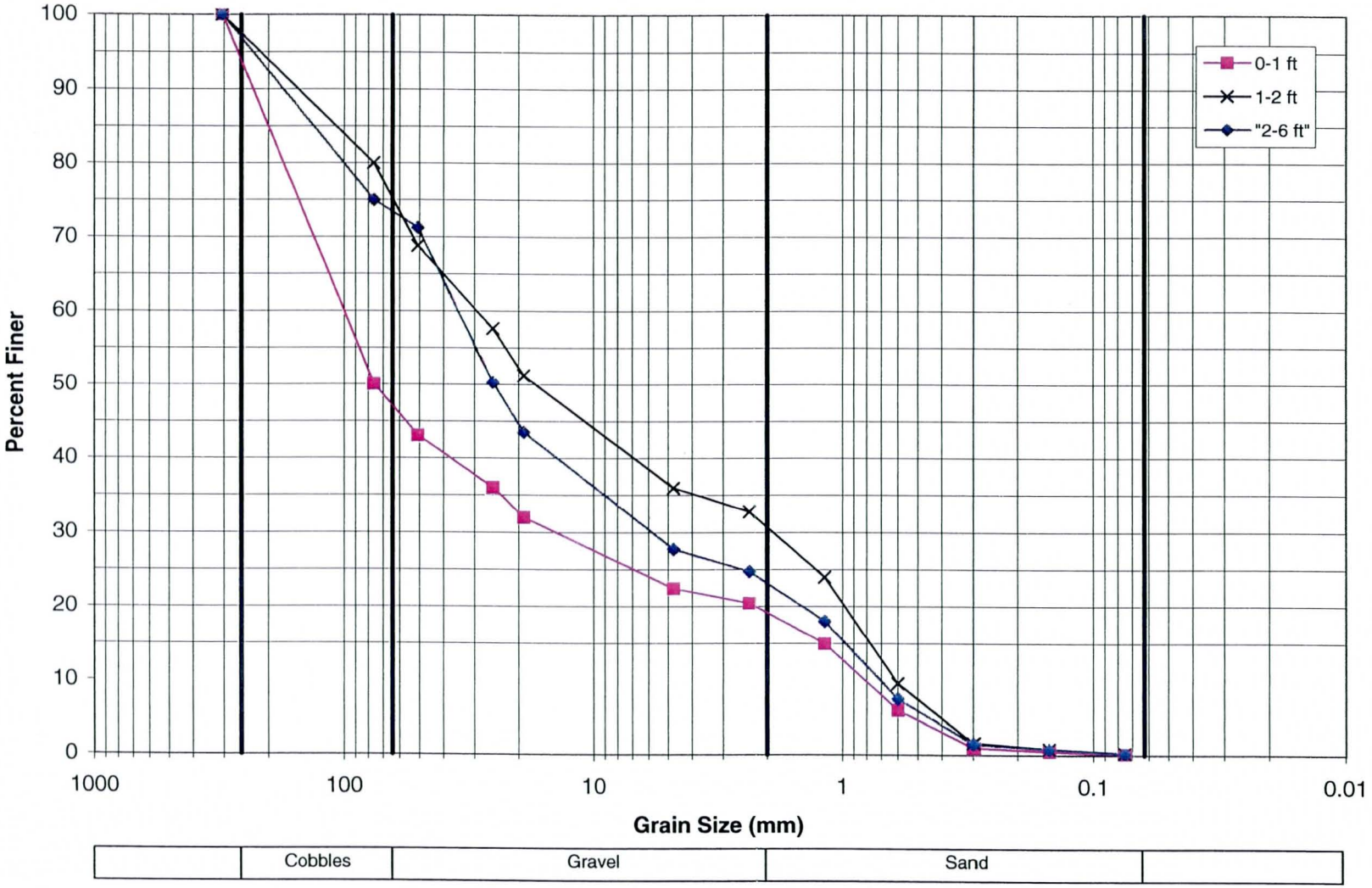
Va Shly' Ay Akimel
Bed Gradation at Sample Site 3 near Cross Section 0.89



Prepared by SMF

vash pf records
9/30/2003

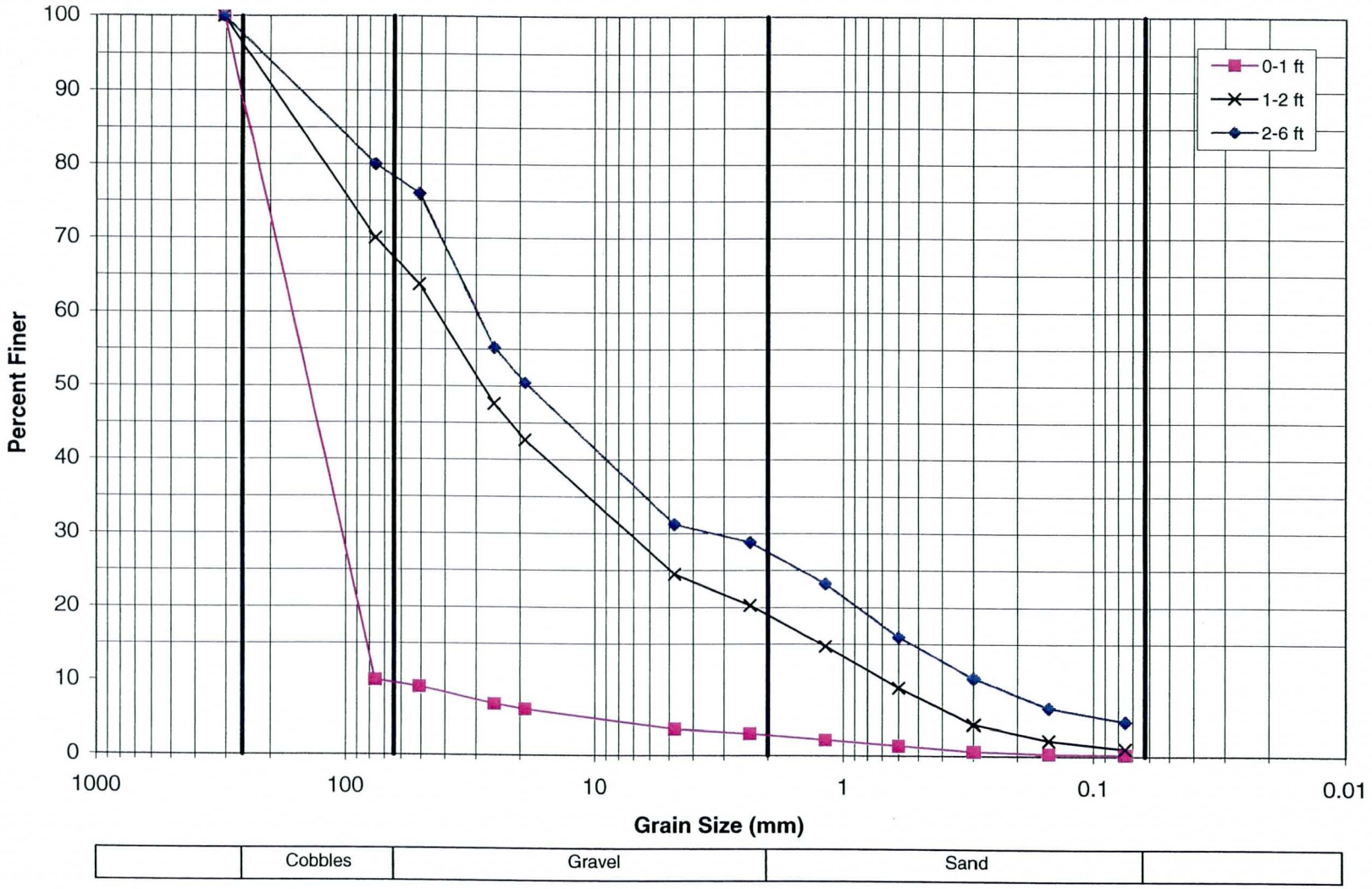
Va Shly' Ay Akimel
Bed Gradation at Sample Site 4 near Cross Section 2.21



Prepared by SMF

vash pf records
9/30/2003

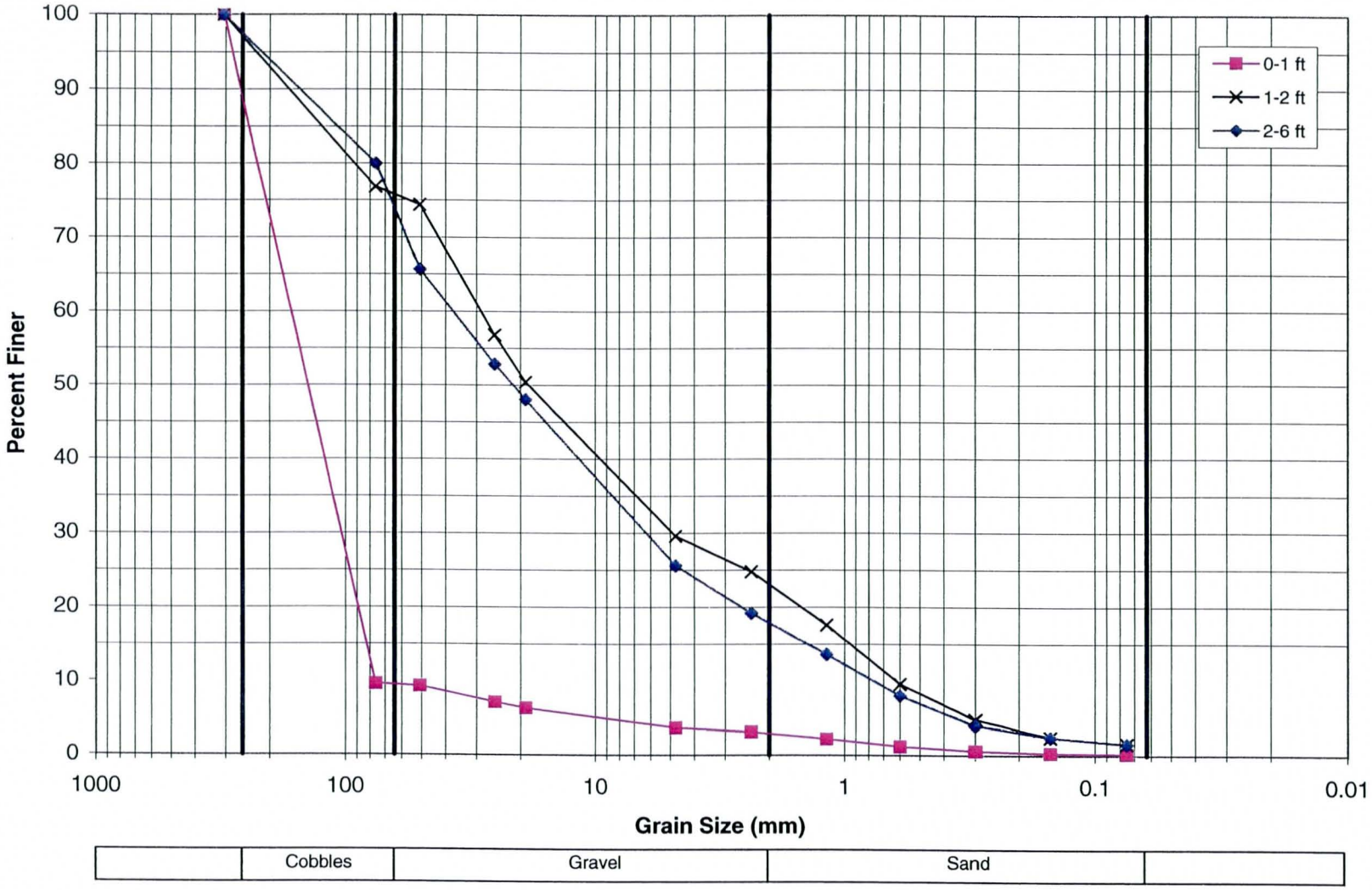
Va Shly' Ay Akimel
Bed Gradation at Sample Site 5 near Cross Section 2.53



Prepared by SMF

vash pf records
9/30/2003

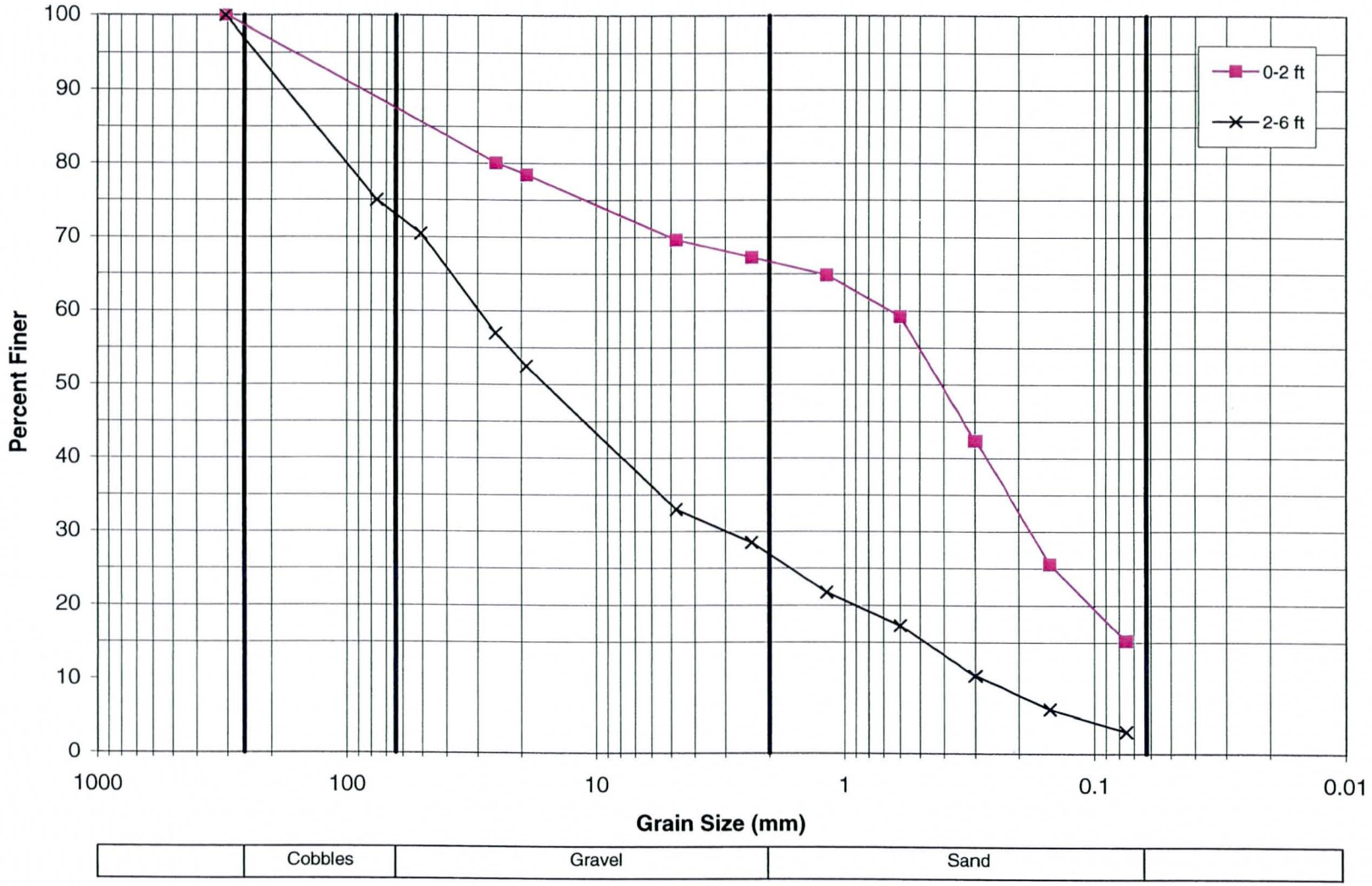
Va Shly' Ay Akimel
Bed Gradation at Sample Site 6 near Cross Section 3.23



Prepared by SMF

vash pf records
9/30/2003

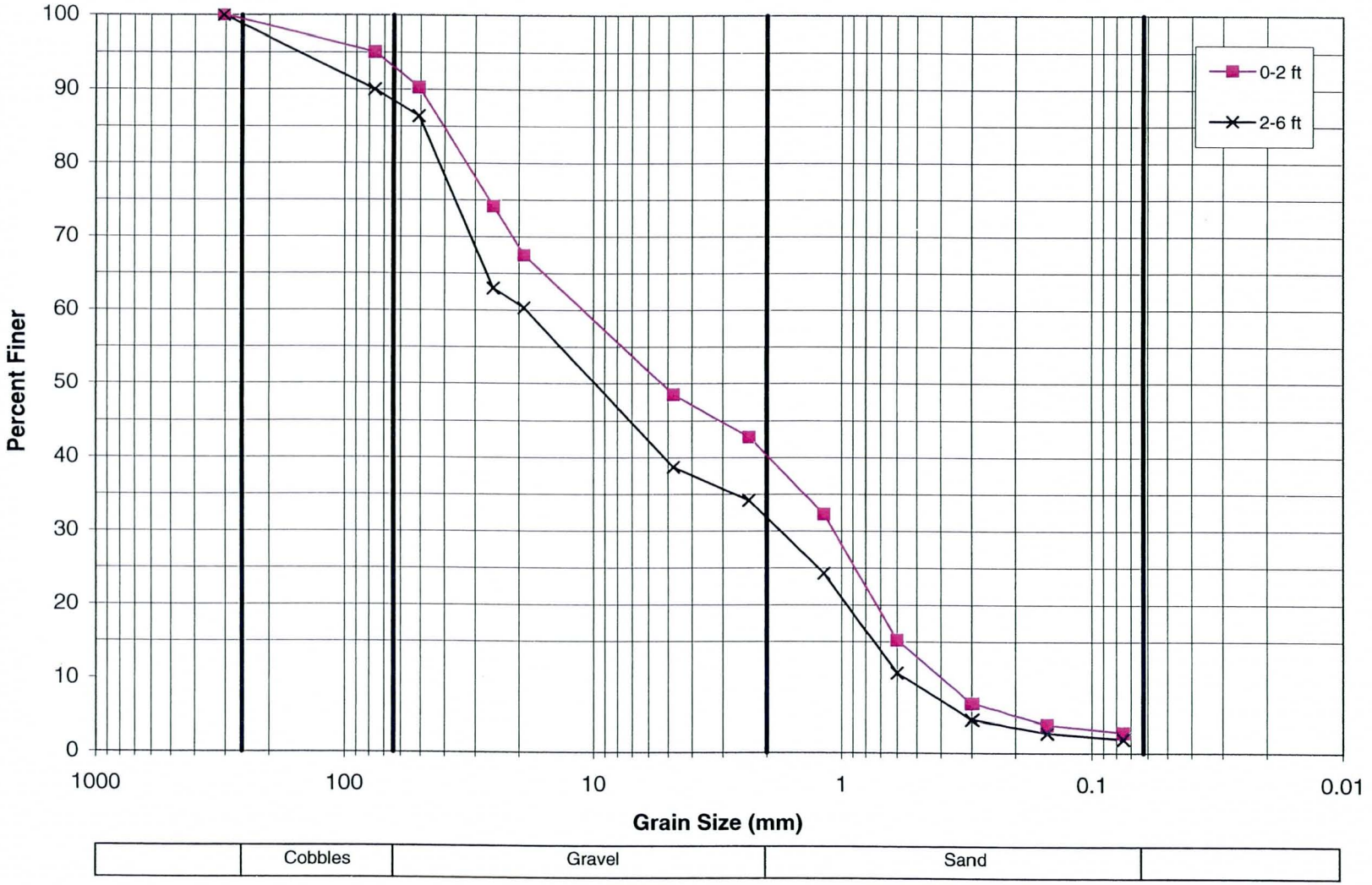
Va Shly' Ay Akimel
Bed Gradation at Sample Site 7 near Cross Section 4.04



Prepared by SMF

vash pf records
9/30/2003

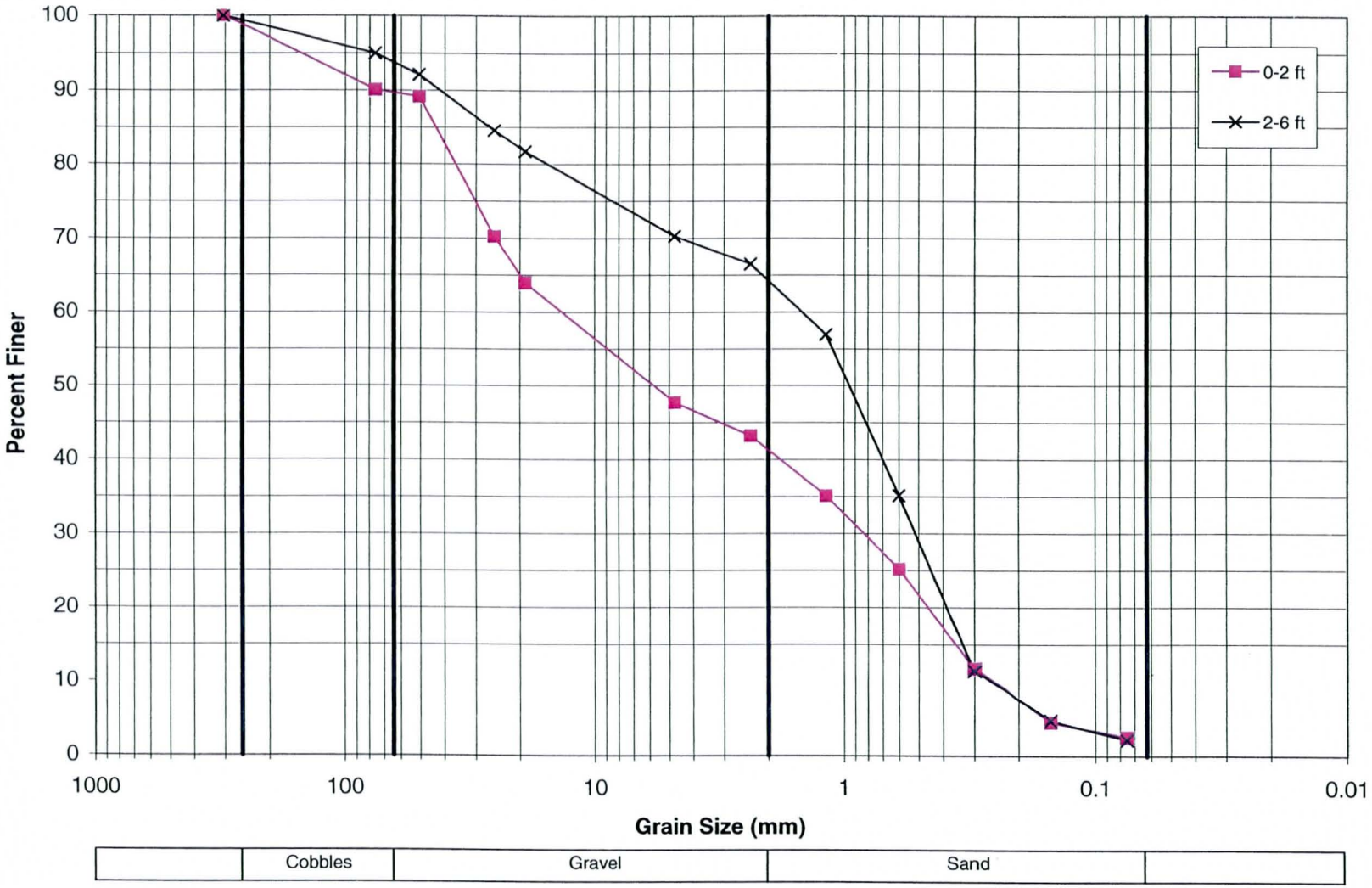
Va Shly' Ay Akimel
Bed Gradation at Sample Site 8 near Cross Section 5.40



Prepared by SMF

vash pf records
9/30/2003

Va Shly' Ay Akimel
Bed Gradation at Sample Site 9 near Cross Section 7.36



Prepared by SMF

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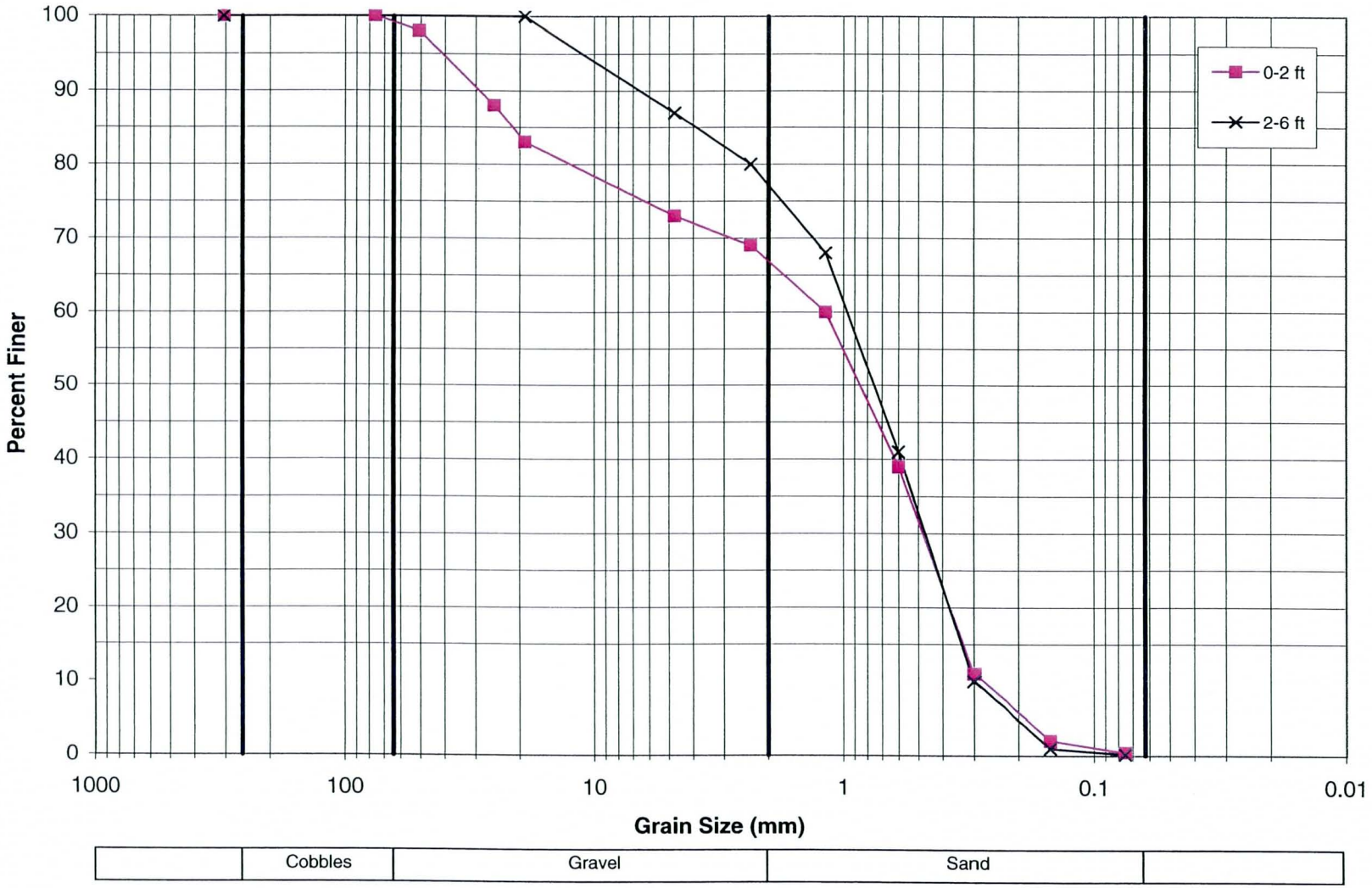
9/30/2003

Va Shly' Ay Akimel
Bed Gradation at Sample Site 10 near Cross Section 7.91



Prepared by SMF

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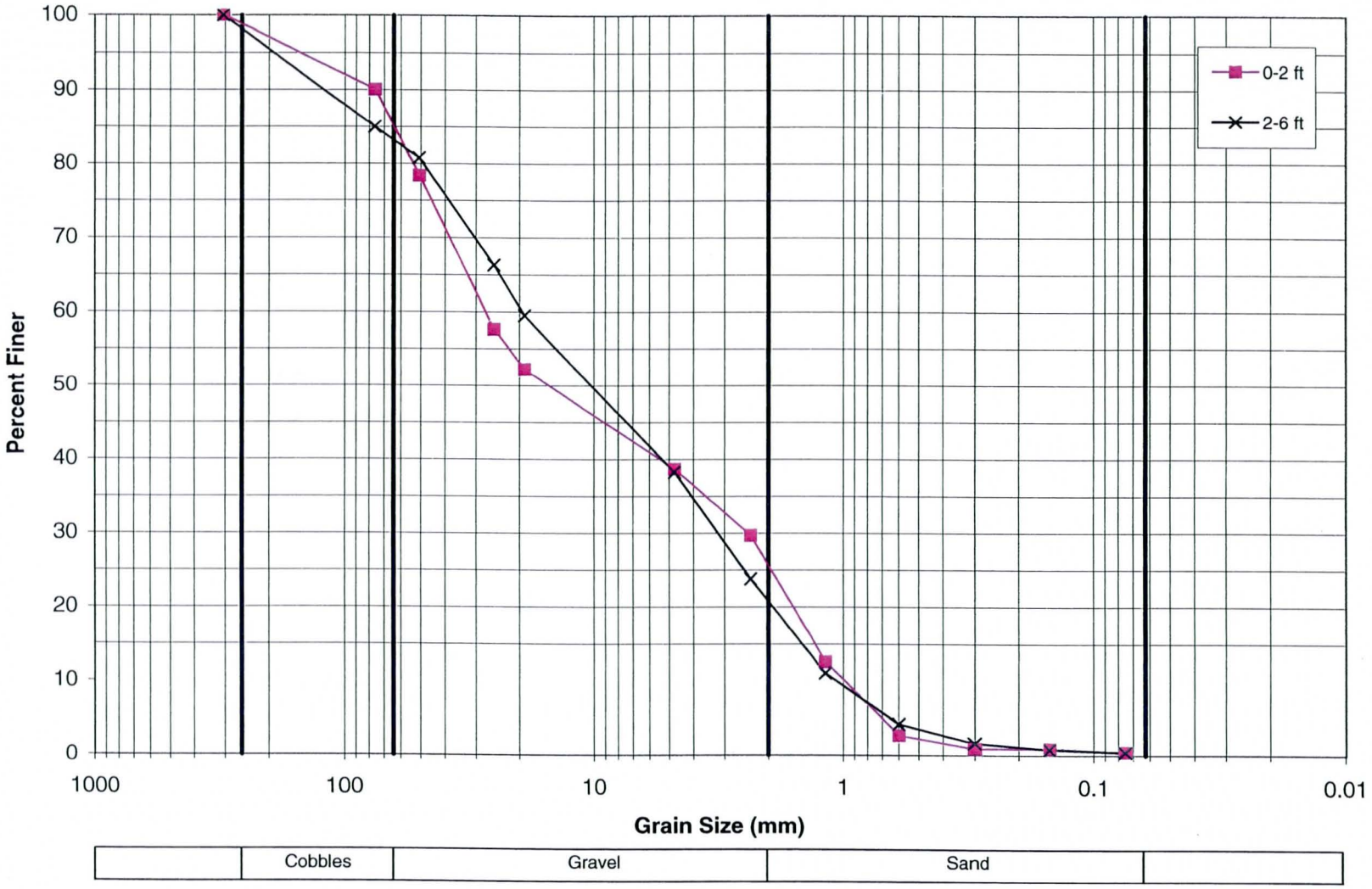
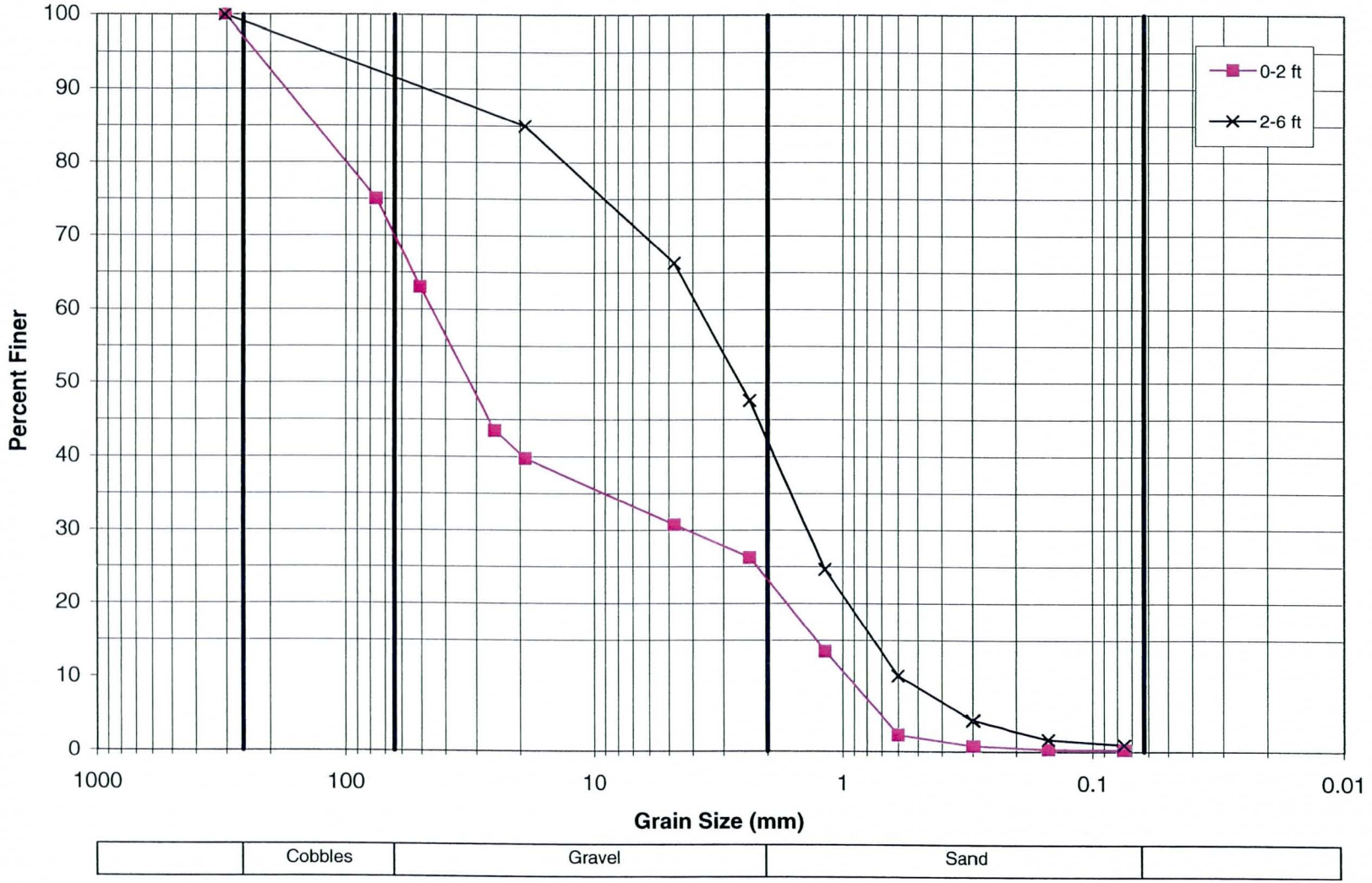
Va Shly' Ay Akimel
Bed Gradation at Sample Site 11 near Cross Section 9.55



Prepared by SMF

vash pf records
9/30/2003

Va Shly' Ay Akimel
Bed Gradation at Sample Site 12 near Cross Section 9.87



Prepared by SMF

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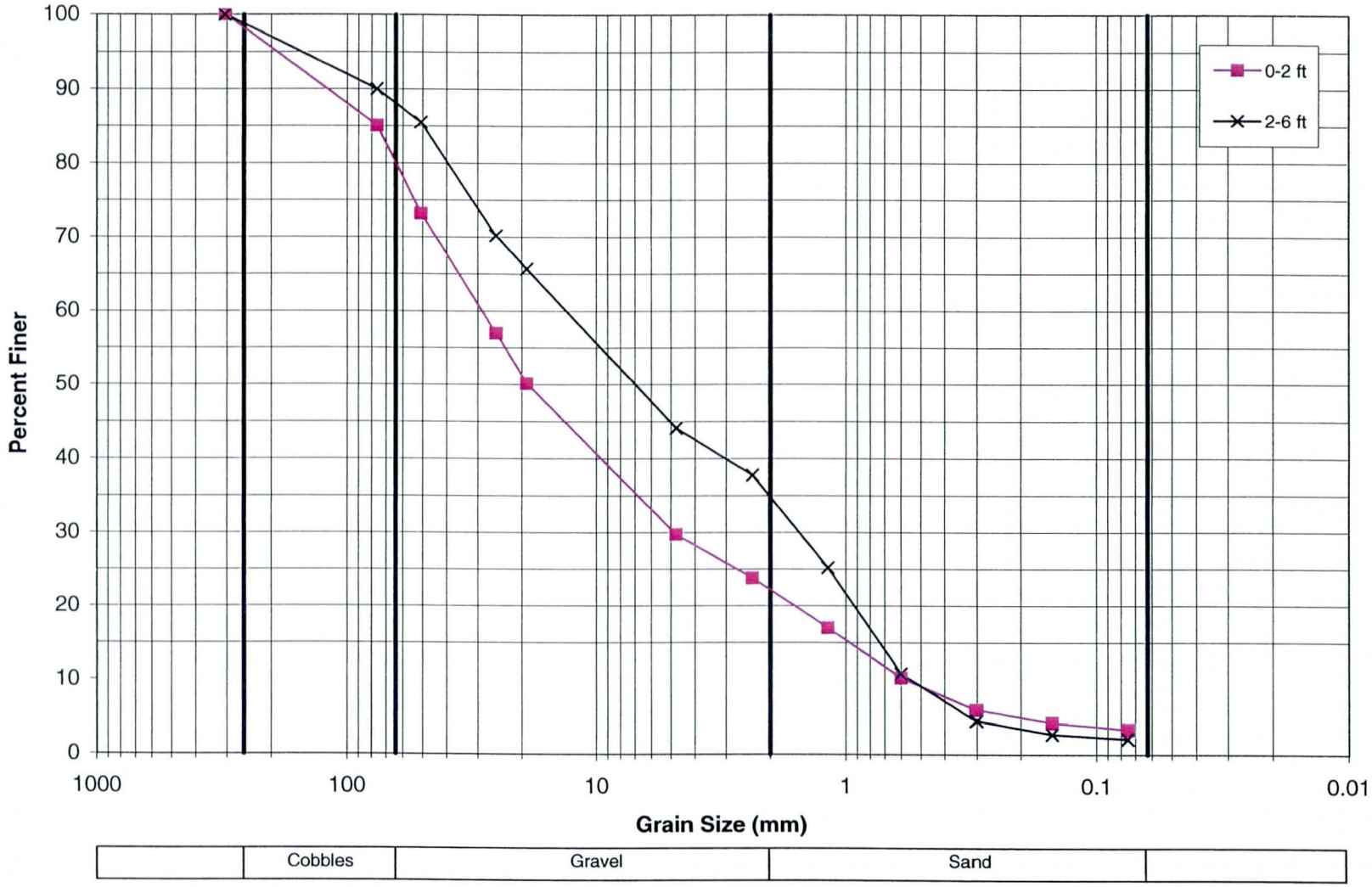
Va Shly' Ay Akimel
Bed Gradation at Sample Site 13 near Cross Section 11.10



Prepared by SMF

vash pf records
9/30/2003

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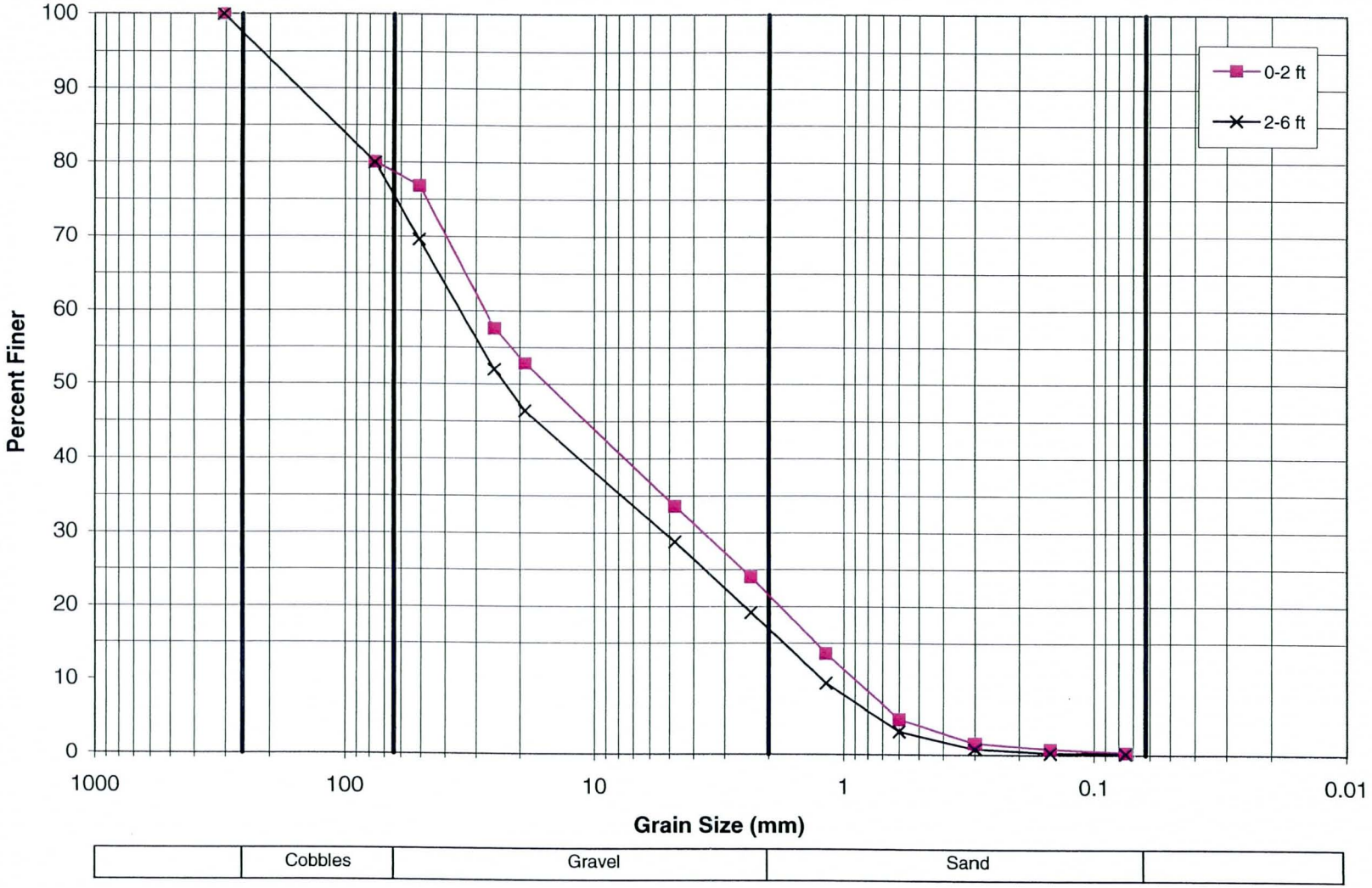
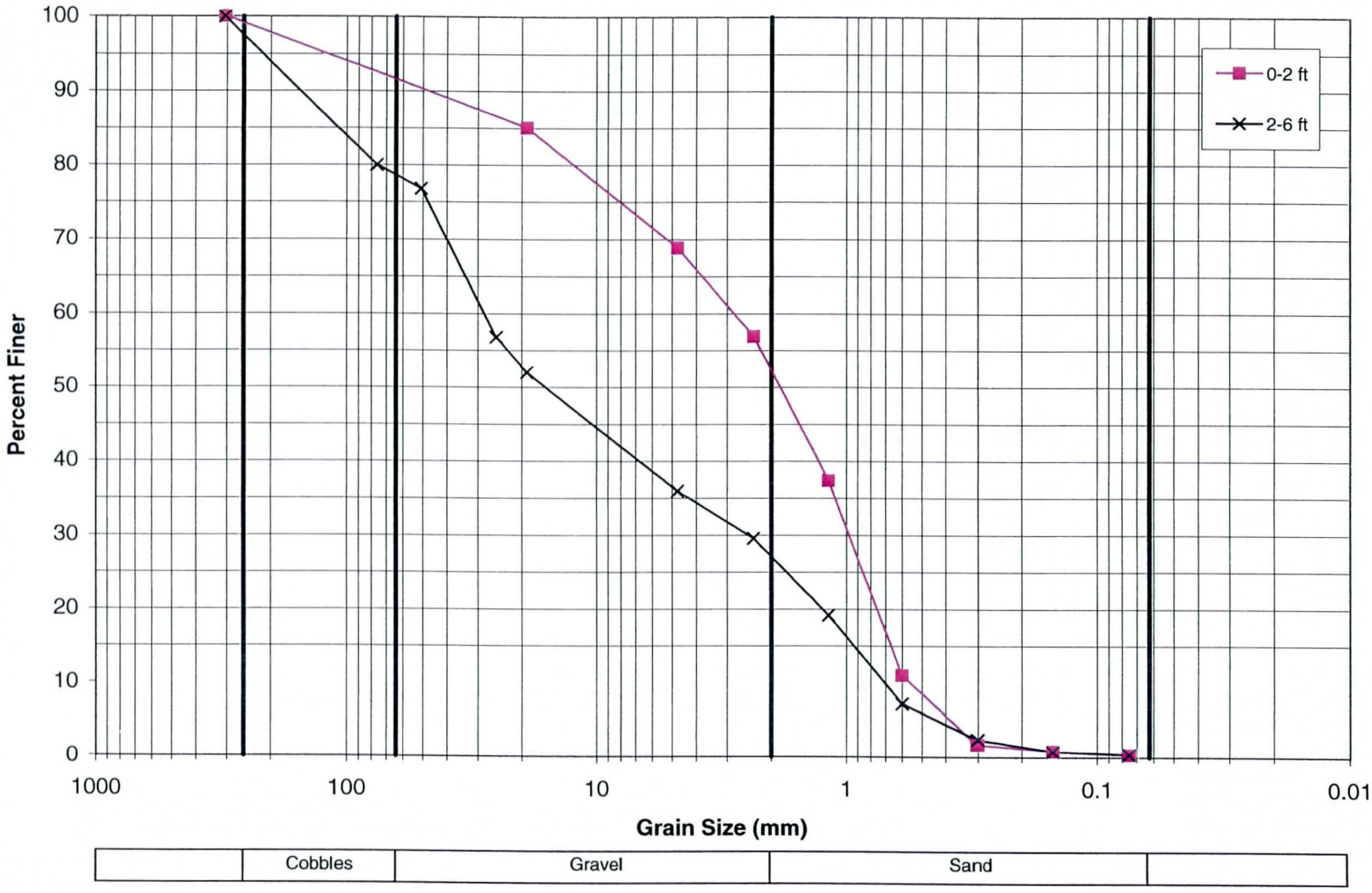
Bed Gradation at Sample Site 14 near Cross Section 11.41



Prepared by SMF

vash pf records
9/30/2003

Va Shly' Ay Akimel
Bed Gradation at Sample Site 15 near Cross Section 11.88



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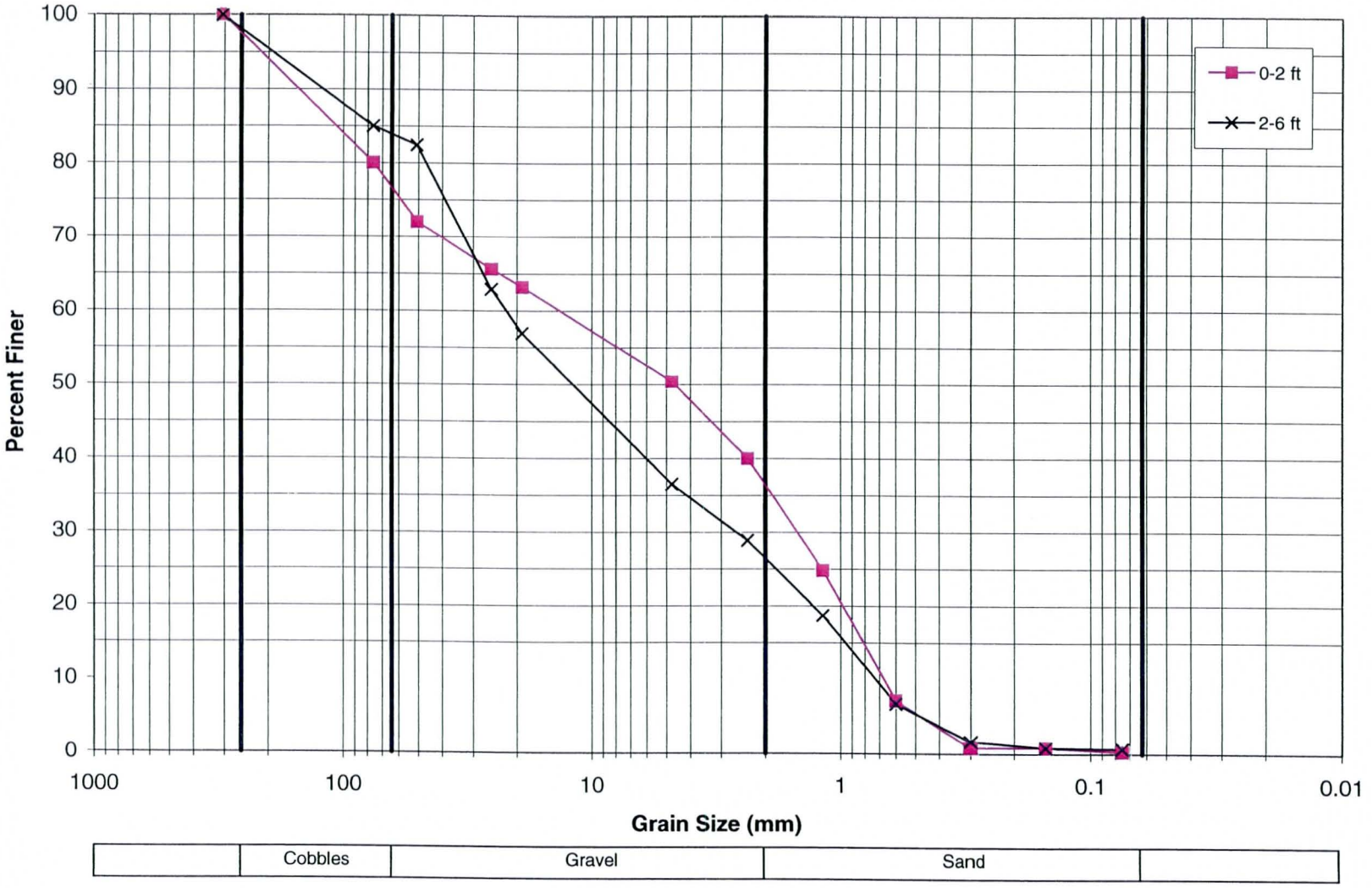
9/30/2003

Va Shly' Ay Akimel
Bed Gradation at Sample Site 16 near Cross Section 13.44



Prepared by SMF

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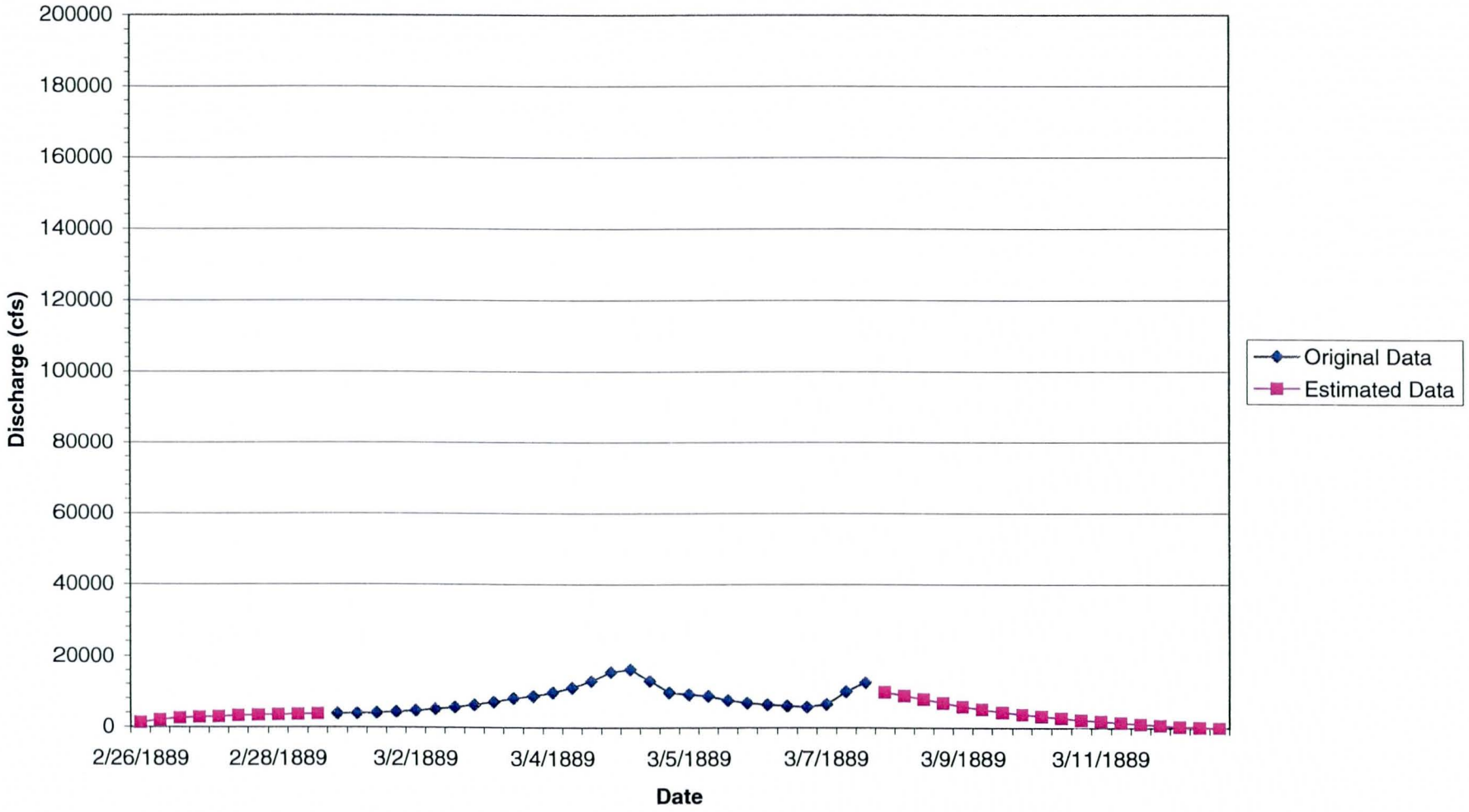
APPENDIX 5

HYDROGRAPHS FROM GRANITE REEF DIVERSION DAM

Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1889



Prepared by SMF

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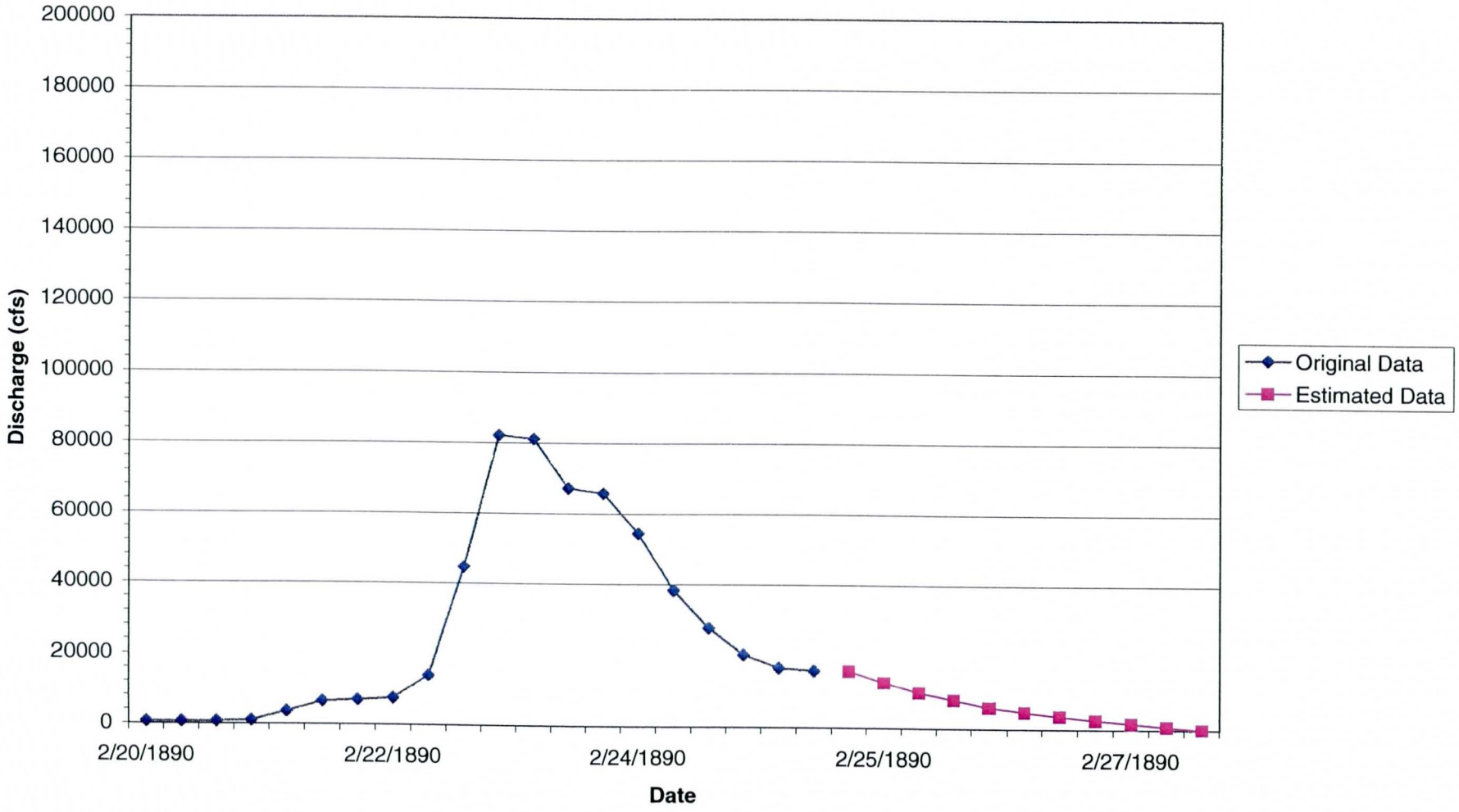
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1890



Prepared by SMF

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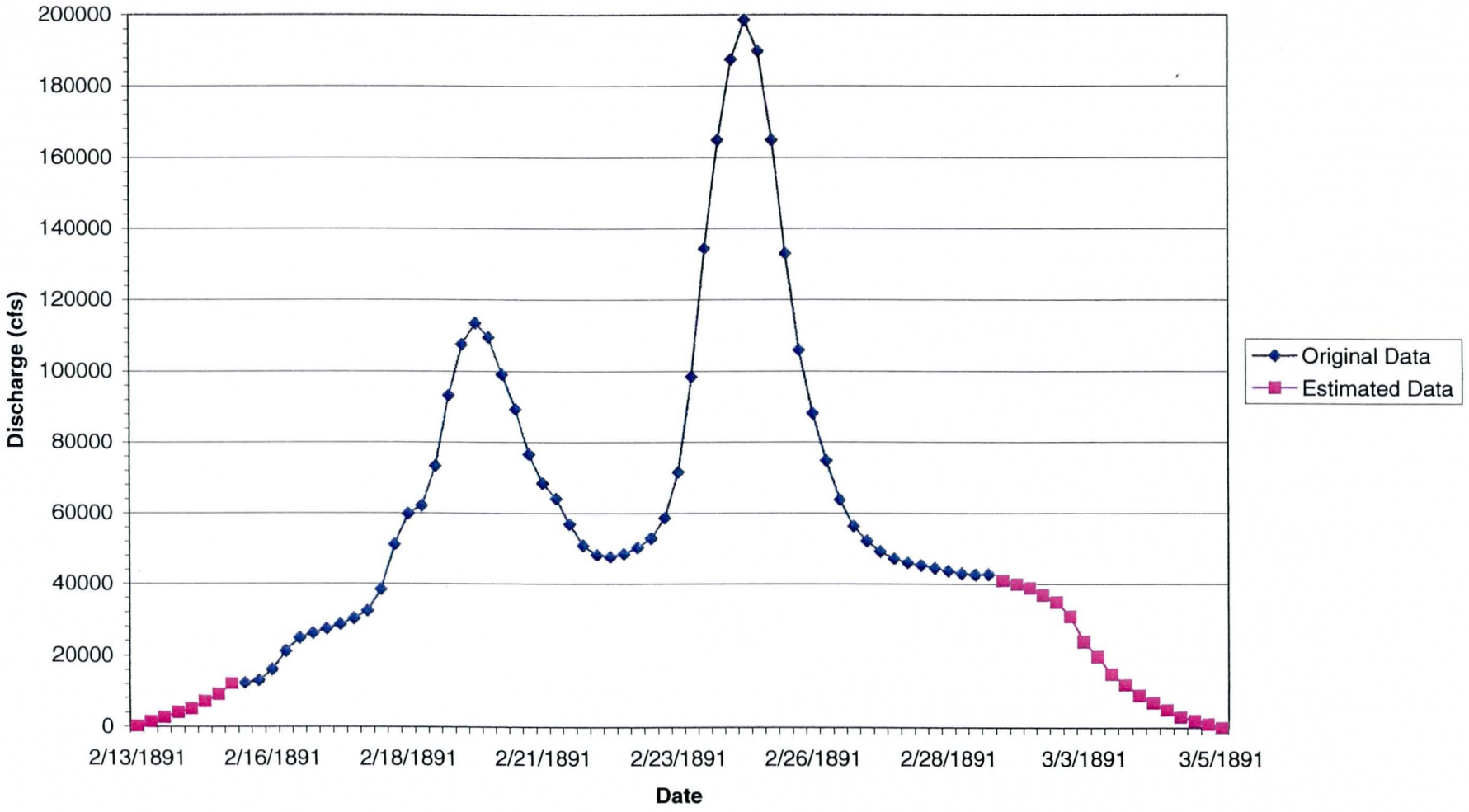
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1891



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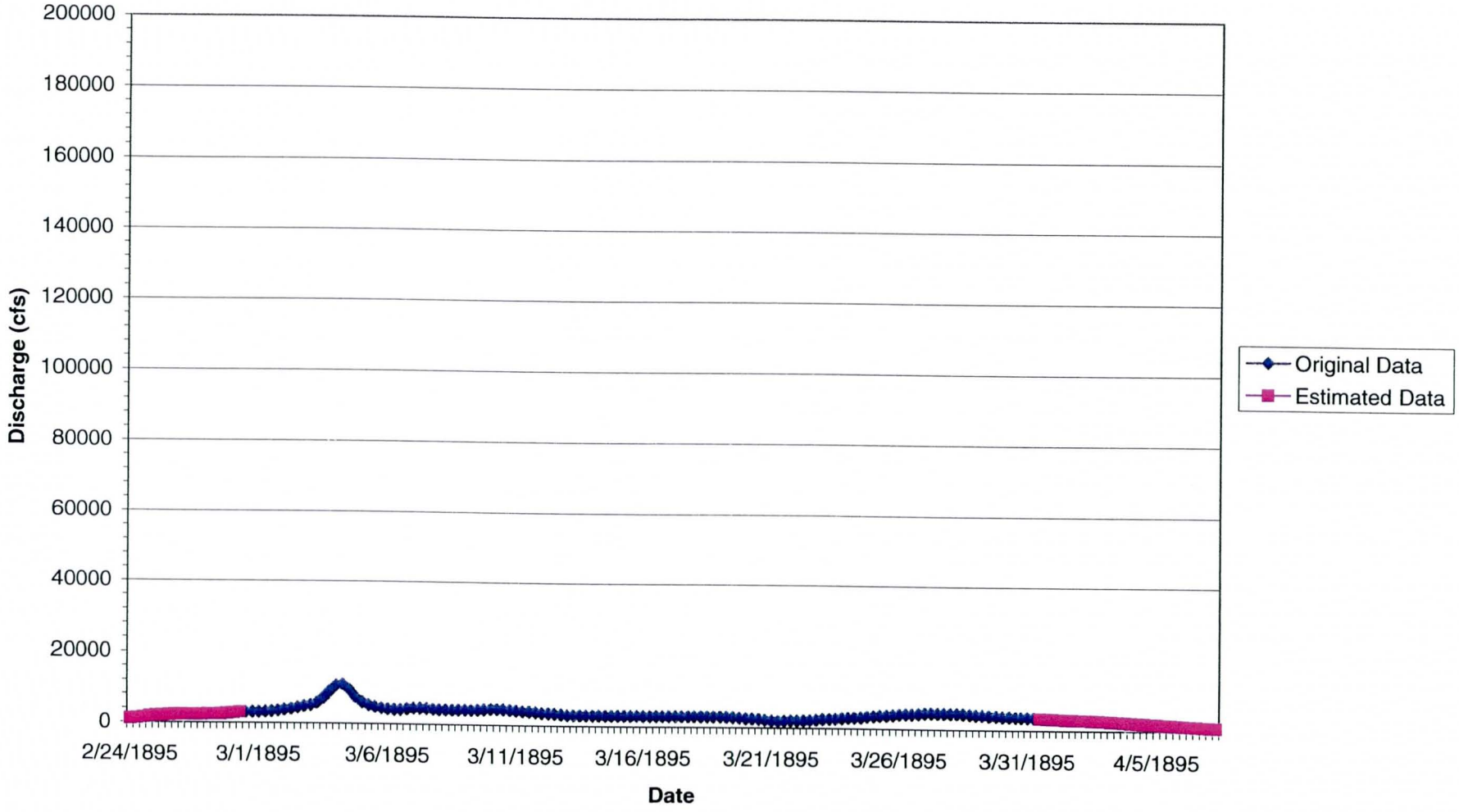
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1895



Prepared by SMF

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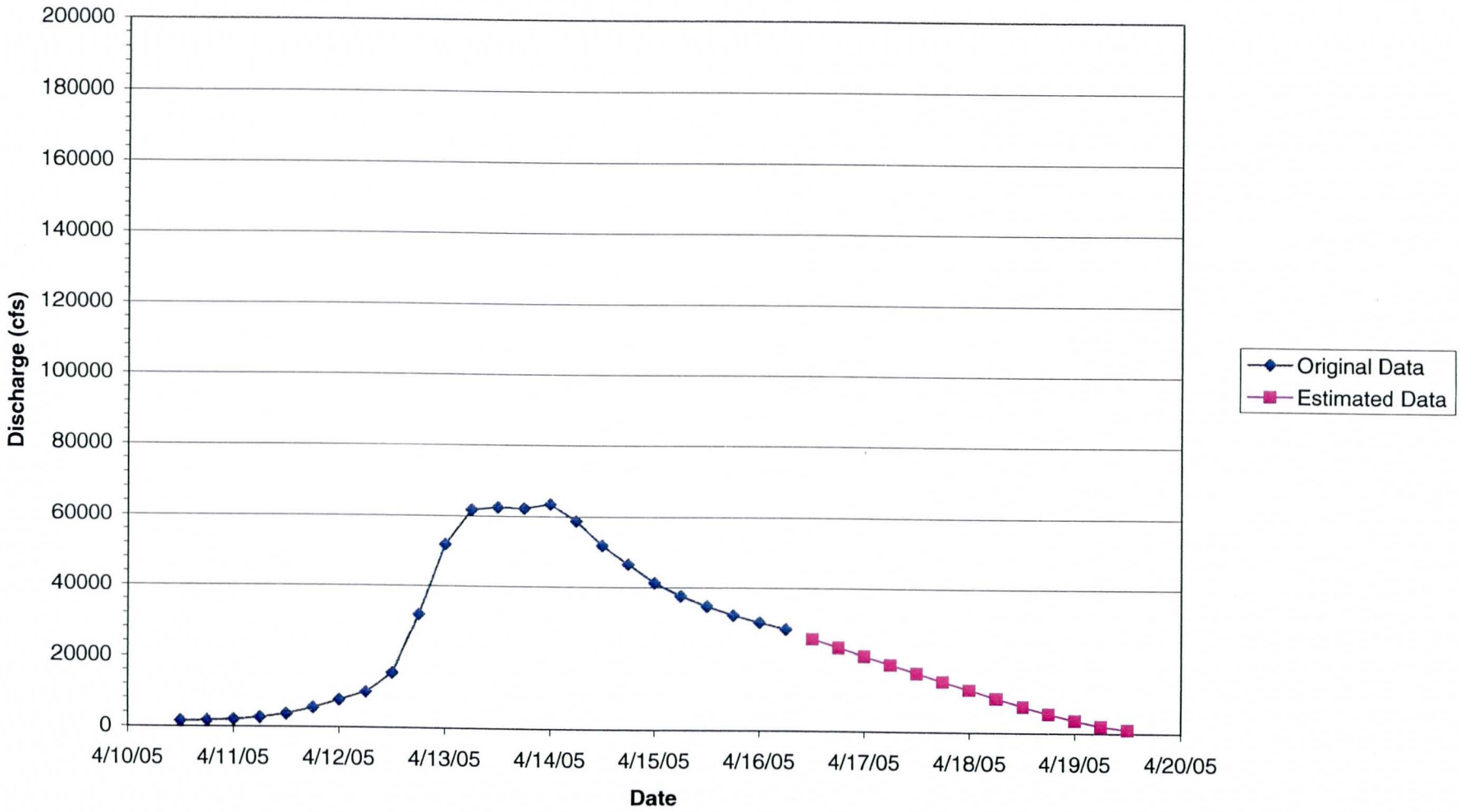
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1905



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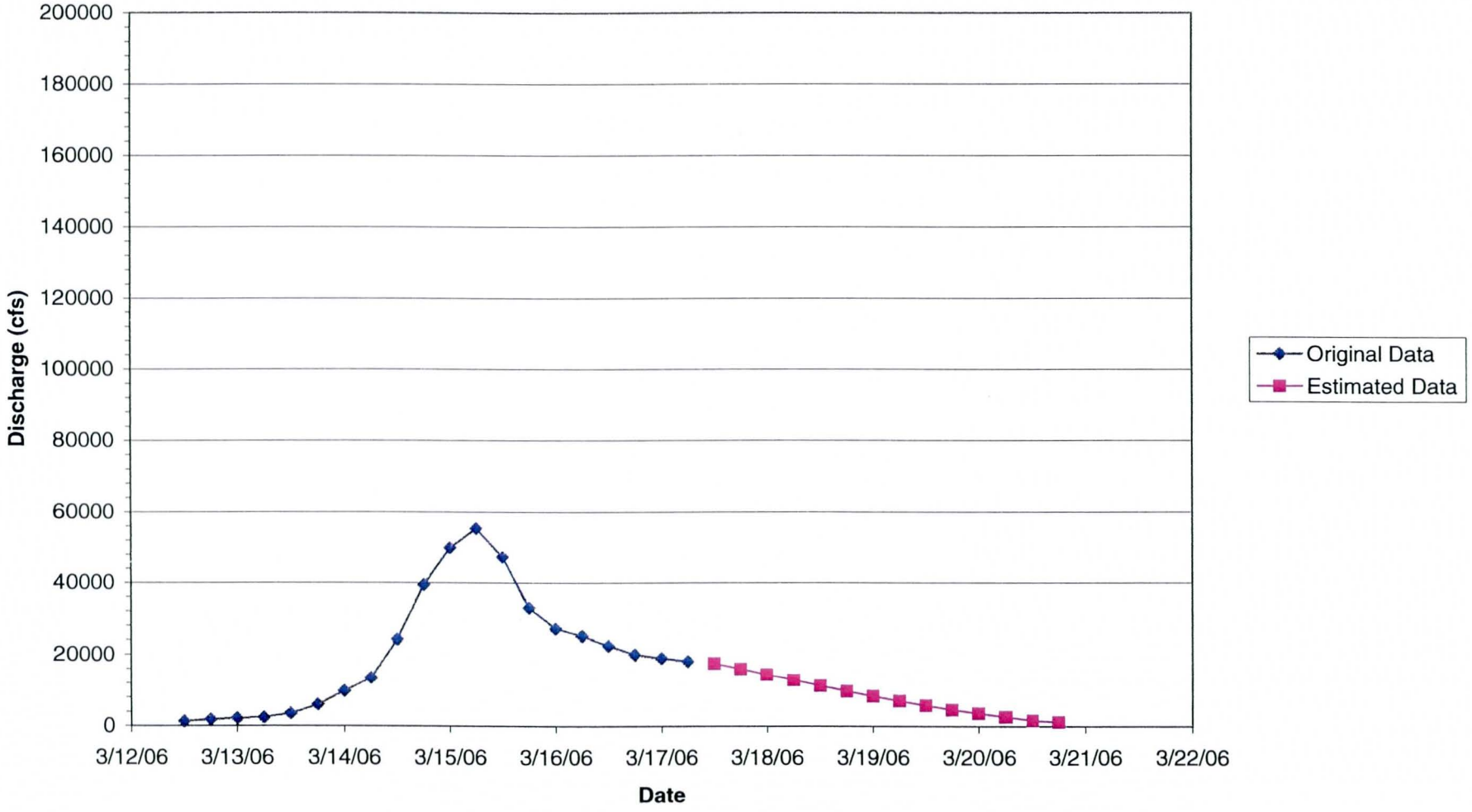
9/30/2003

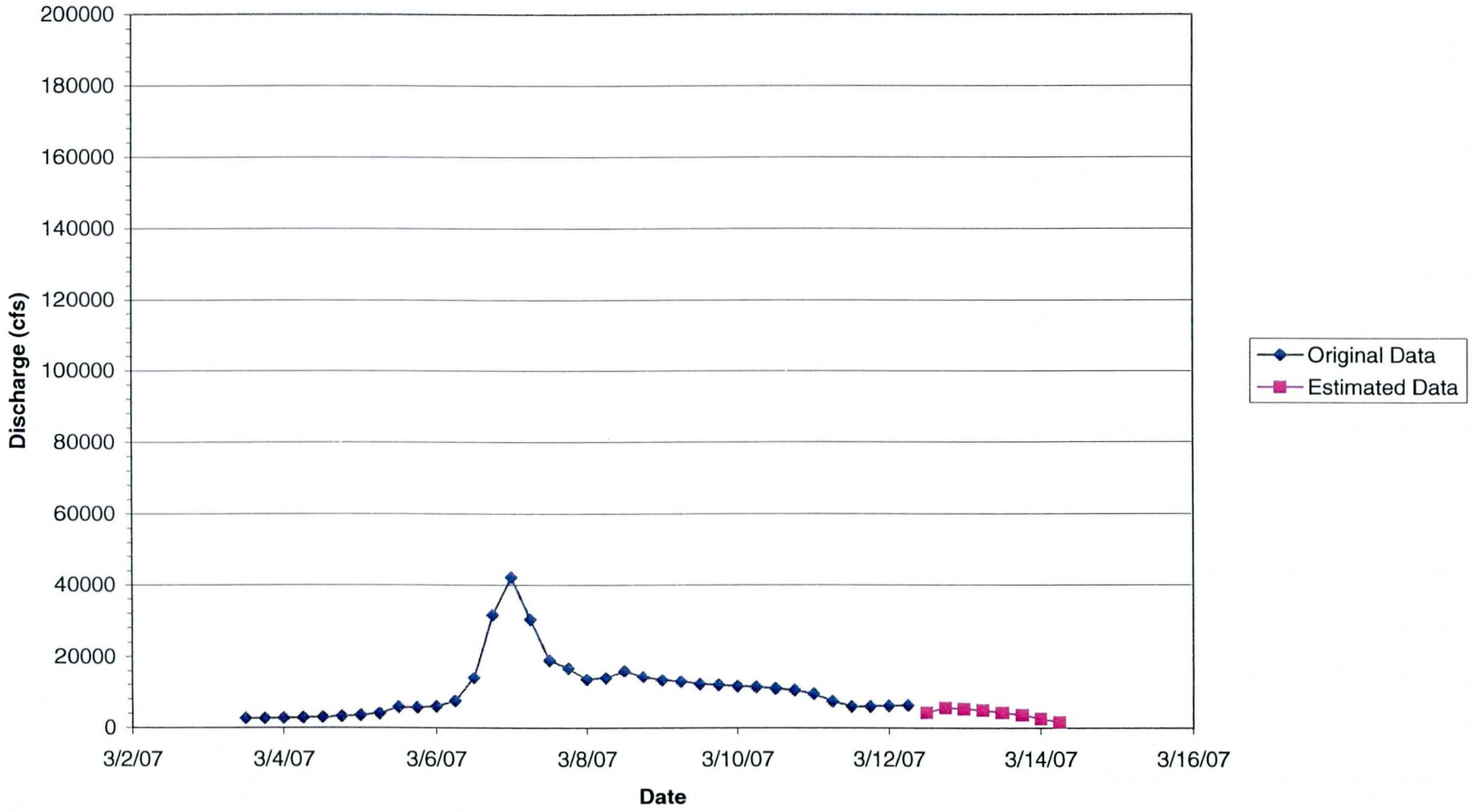
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1906



Prepared by SMF

vash hydrographs
9/30/2003

Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1907



Prepared by SMF

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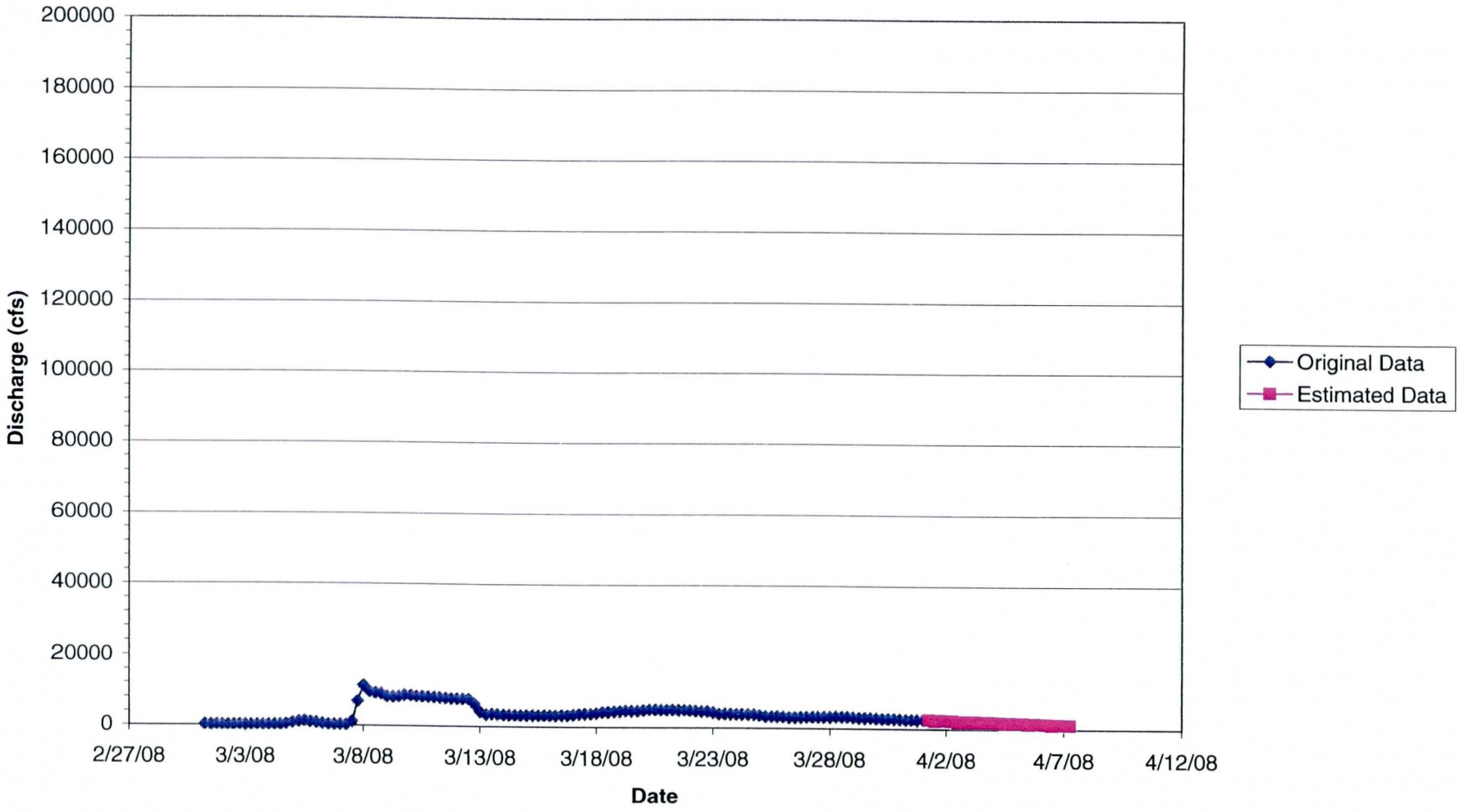
9/30/2003

Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1908



Prepared by SMF

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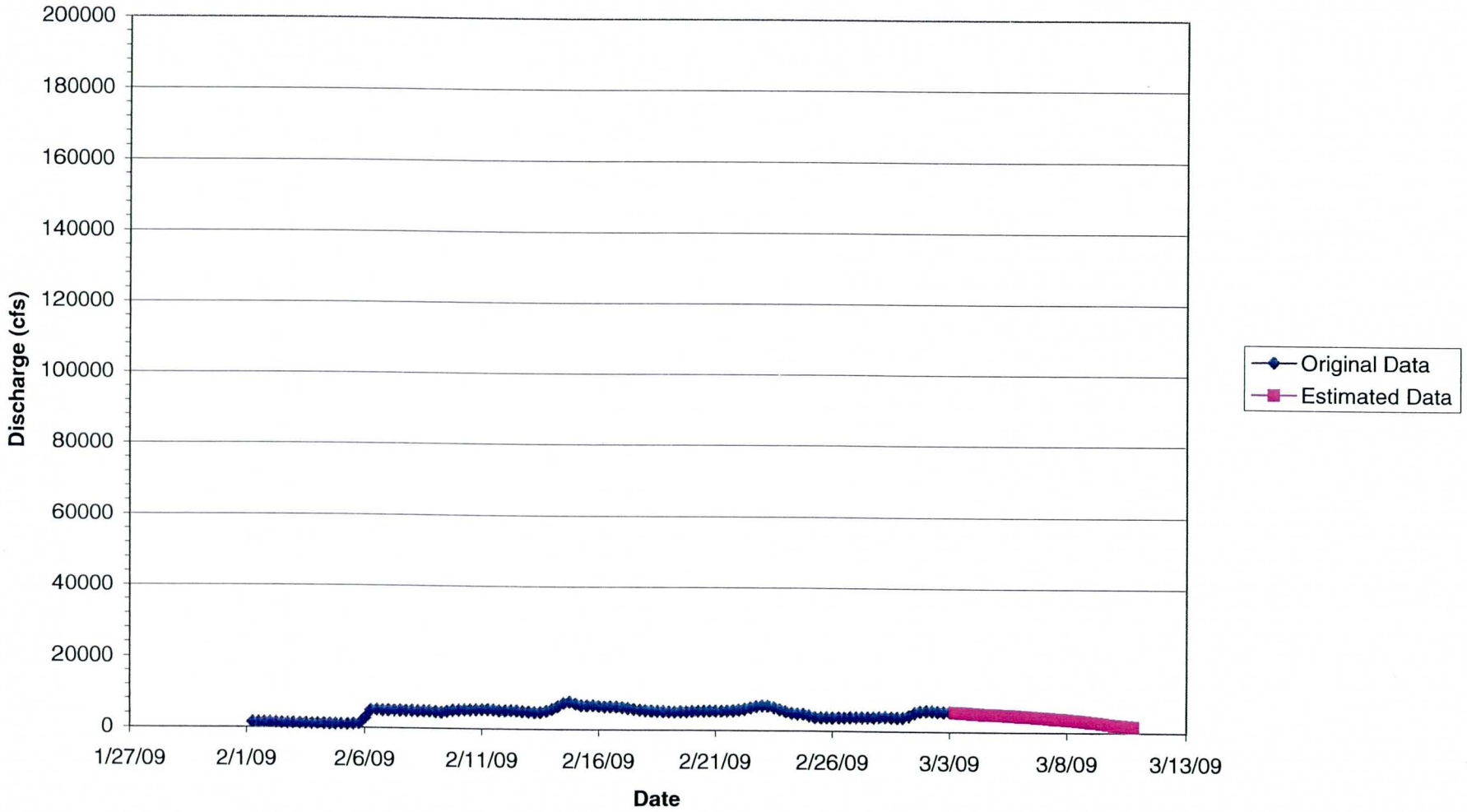
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1909



Prepared by SMF

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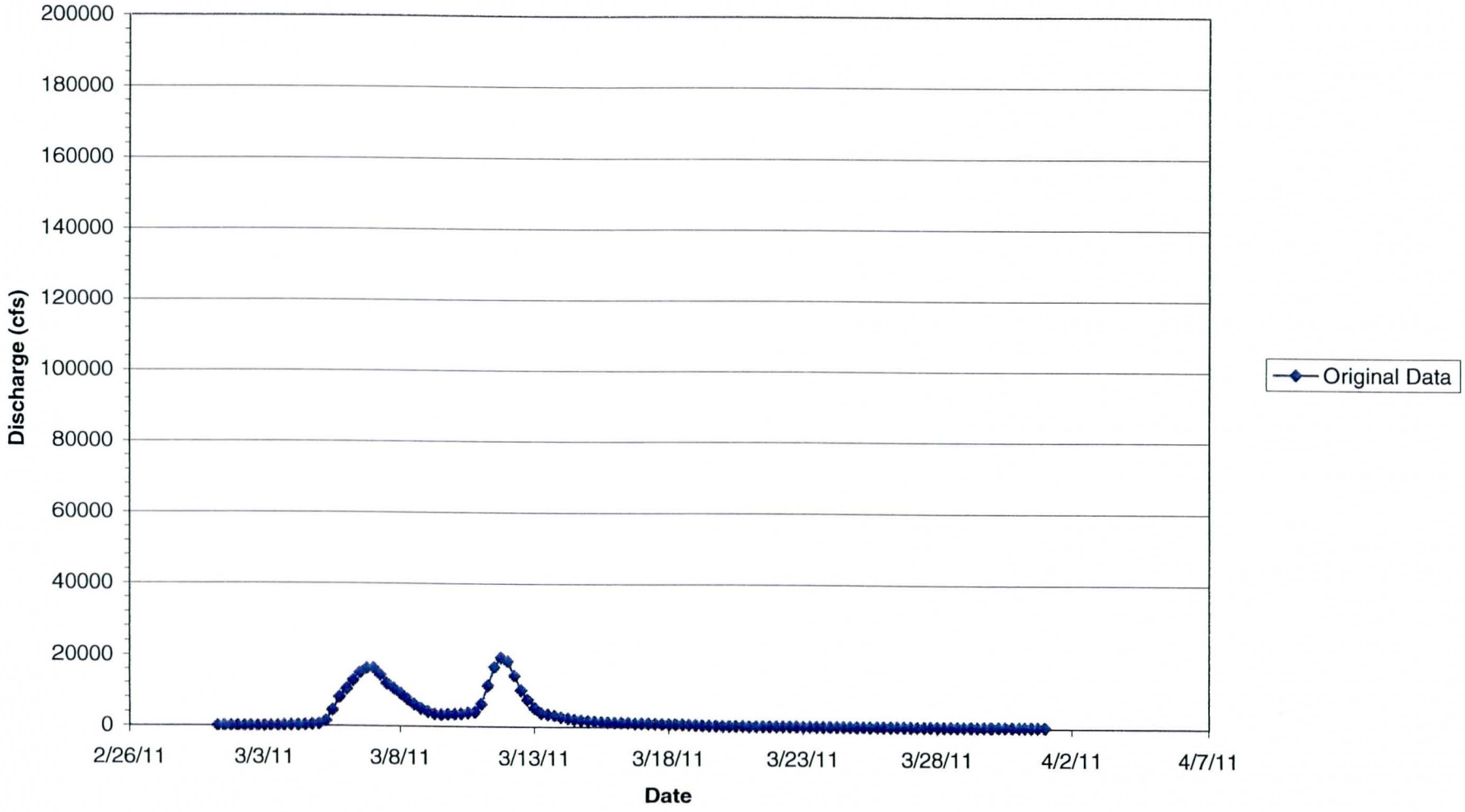
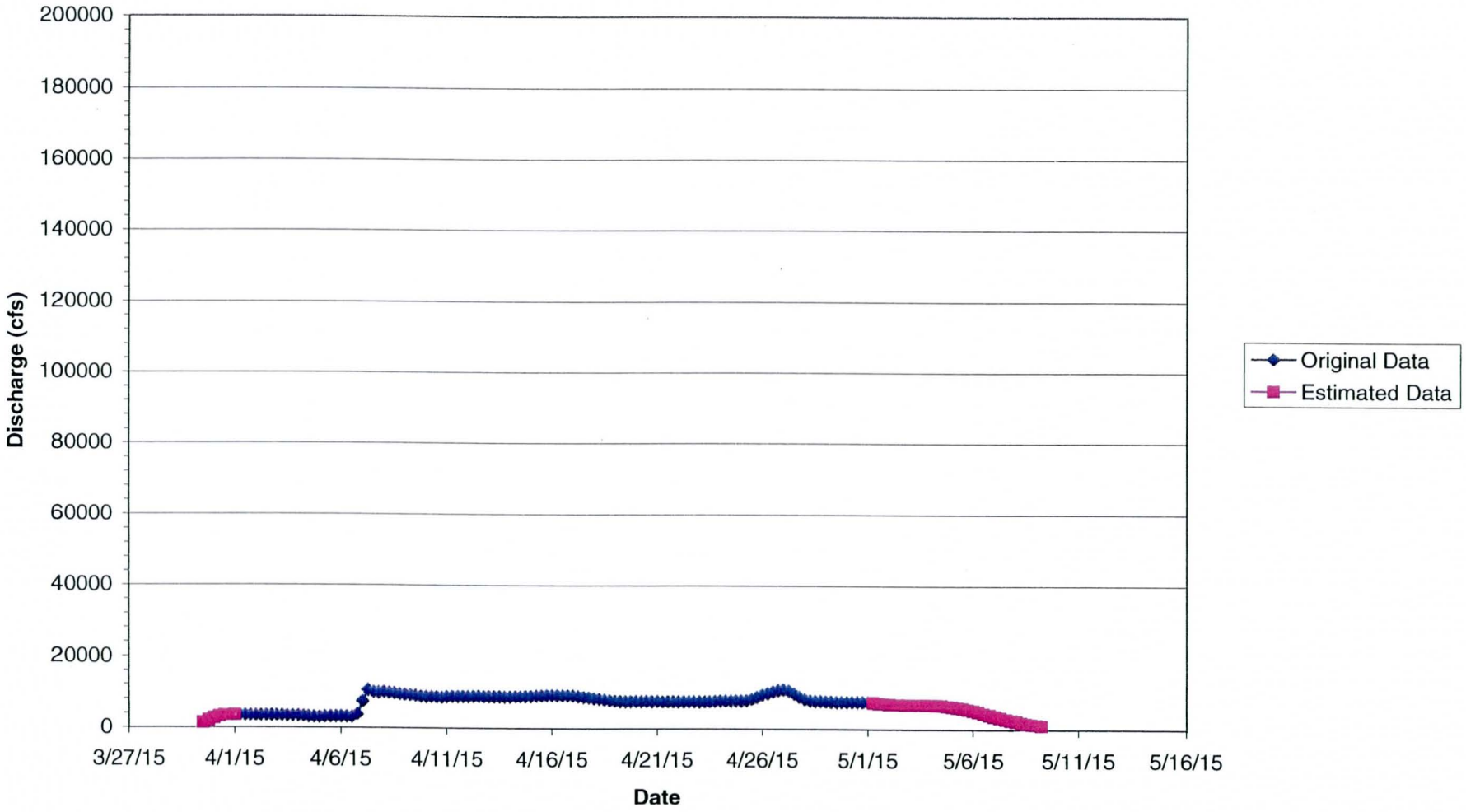
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1911



Prepared by SMF

Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1915



Prepared by SMF

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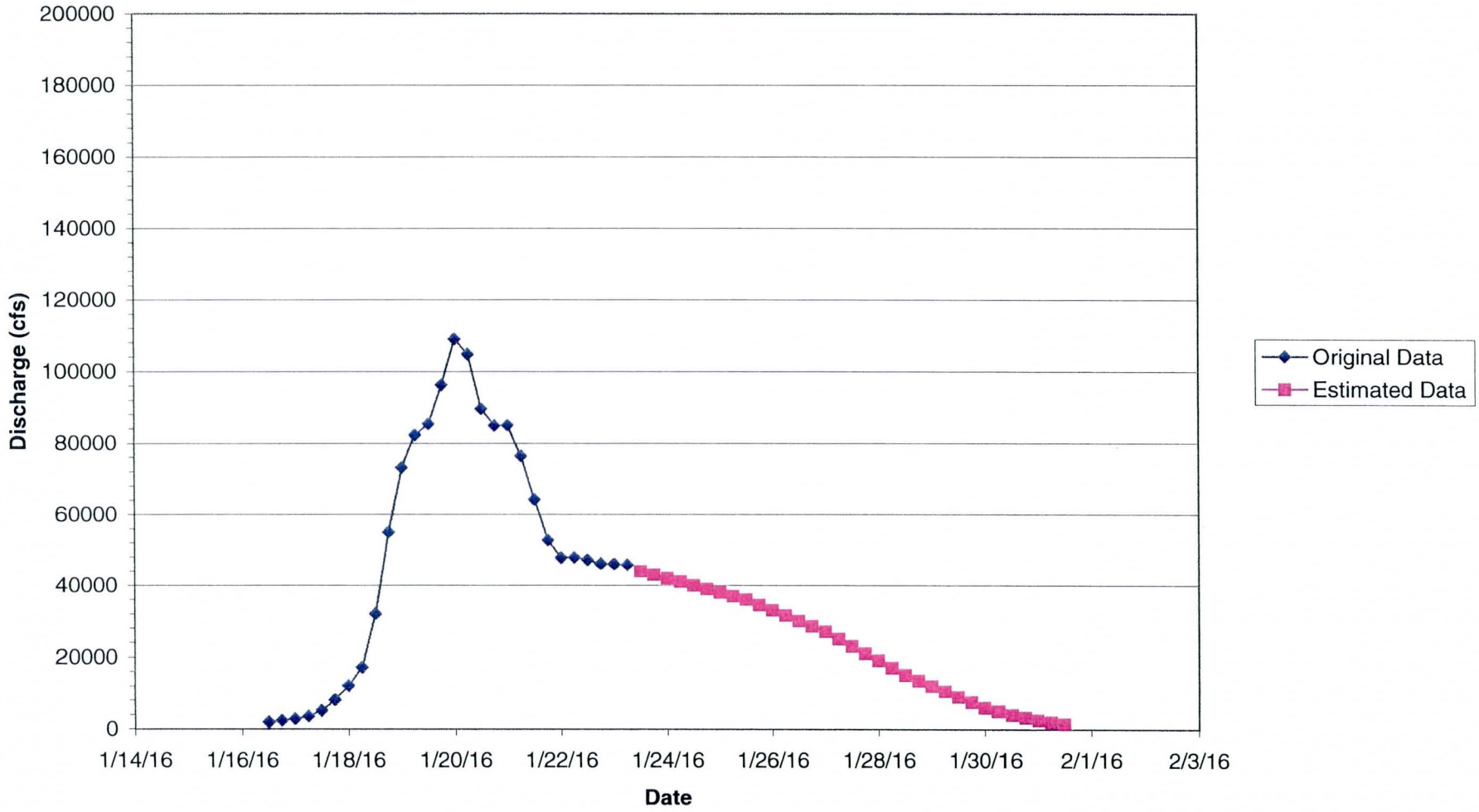
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1916



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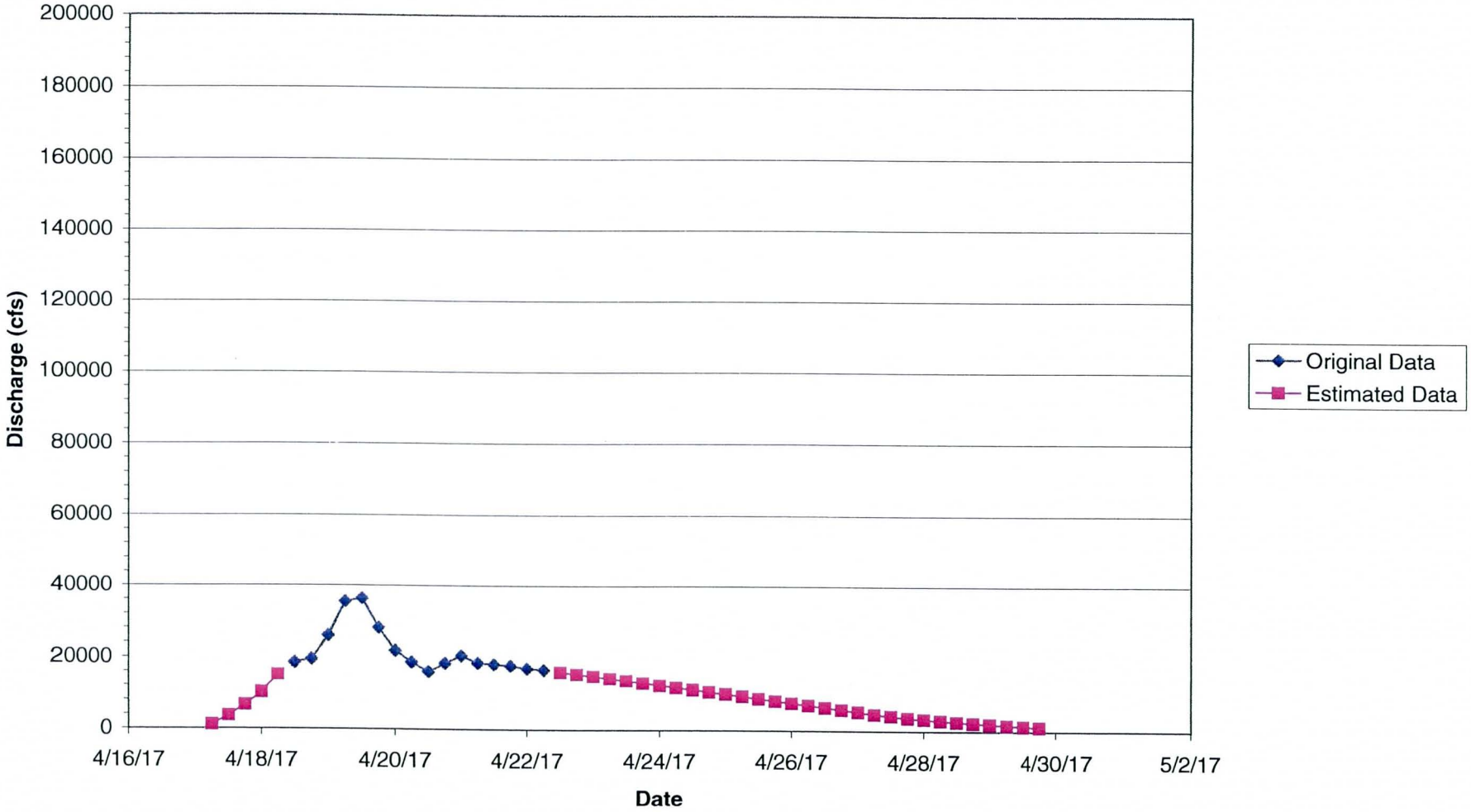
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1917



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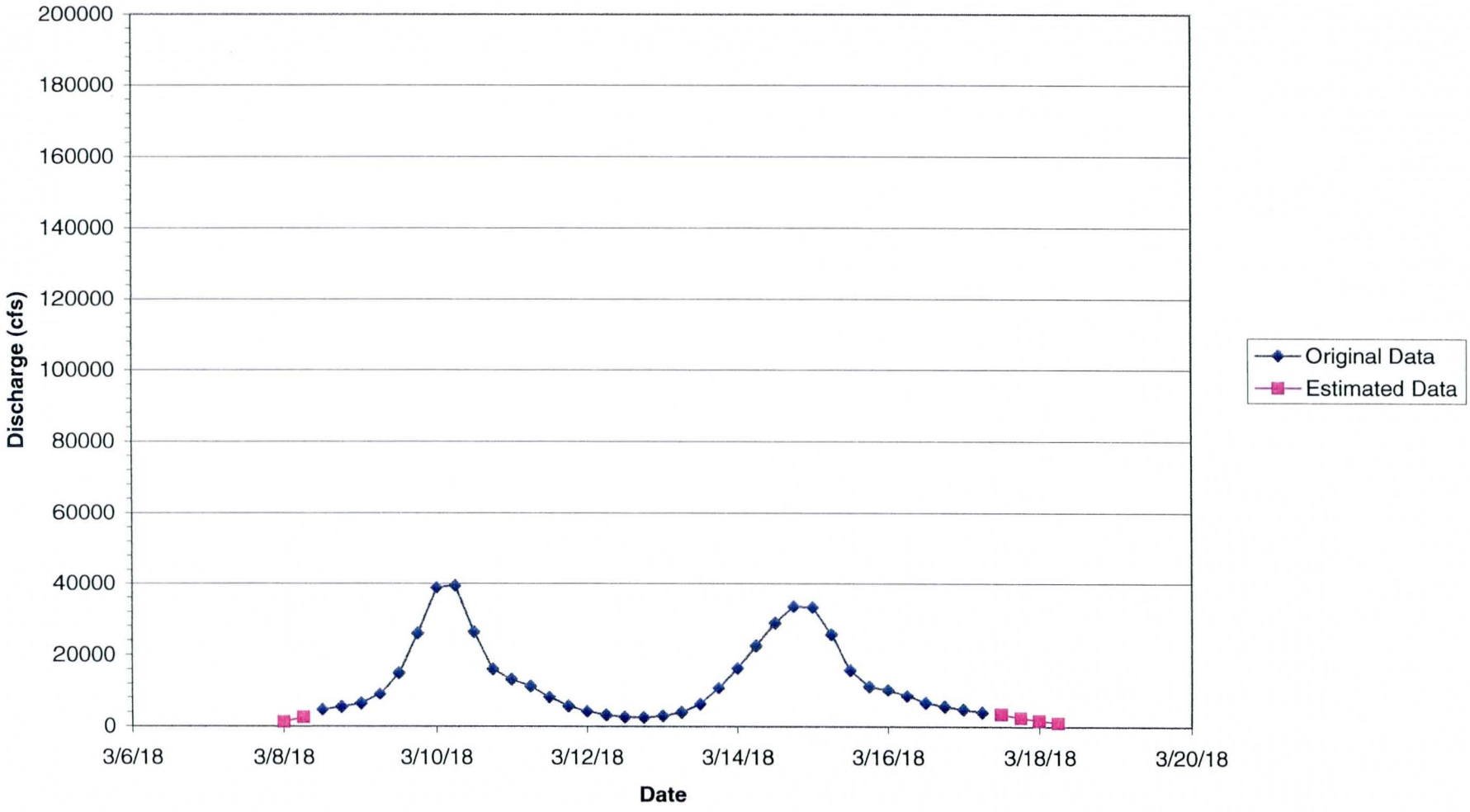
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1918



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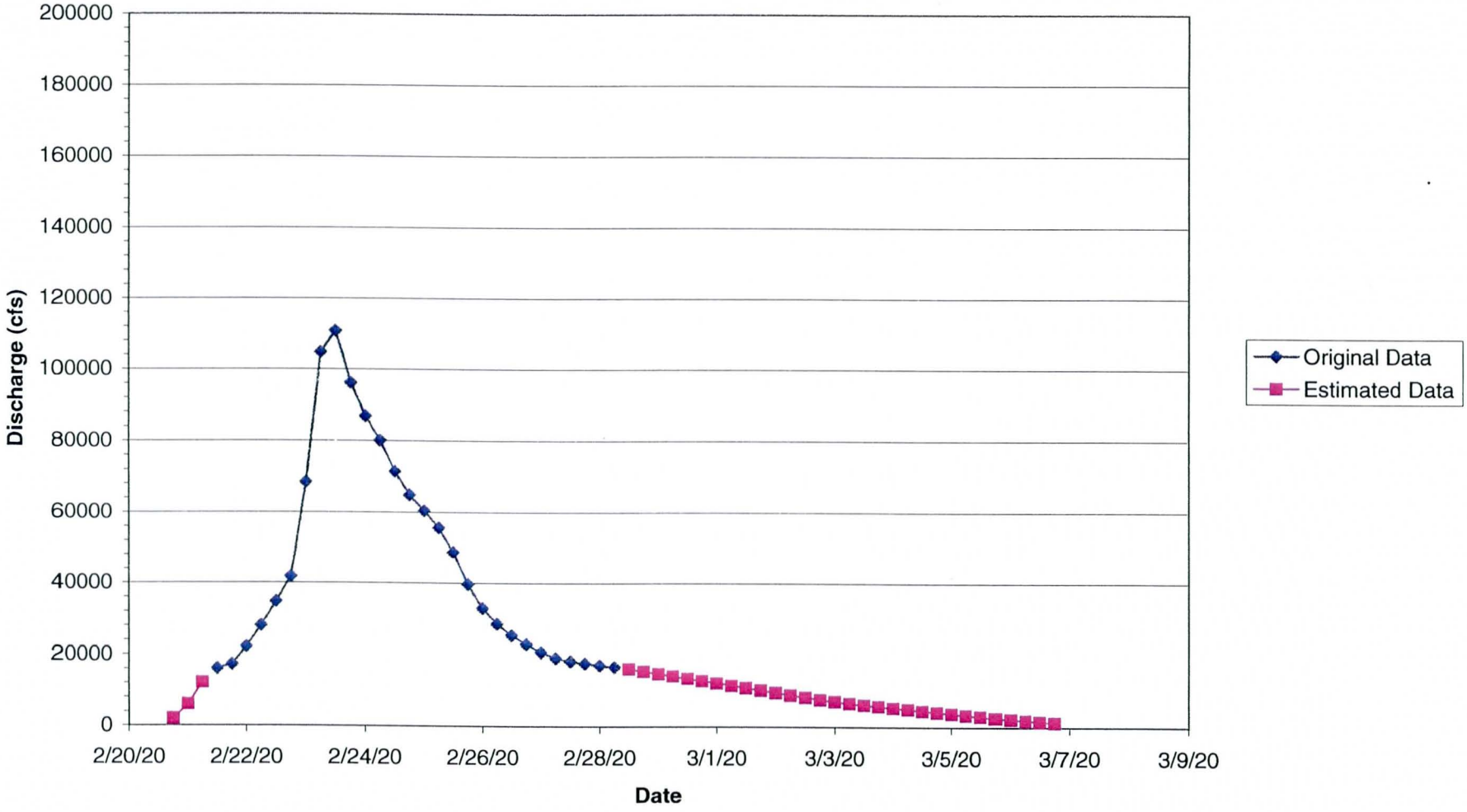
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1920



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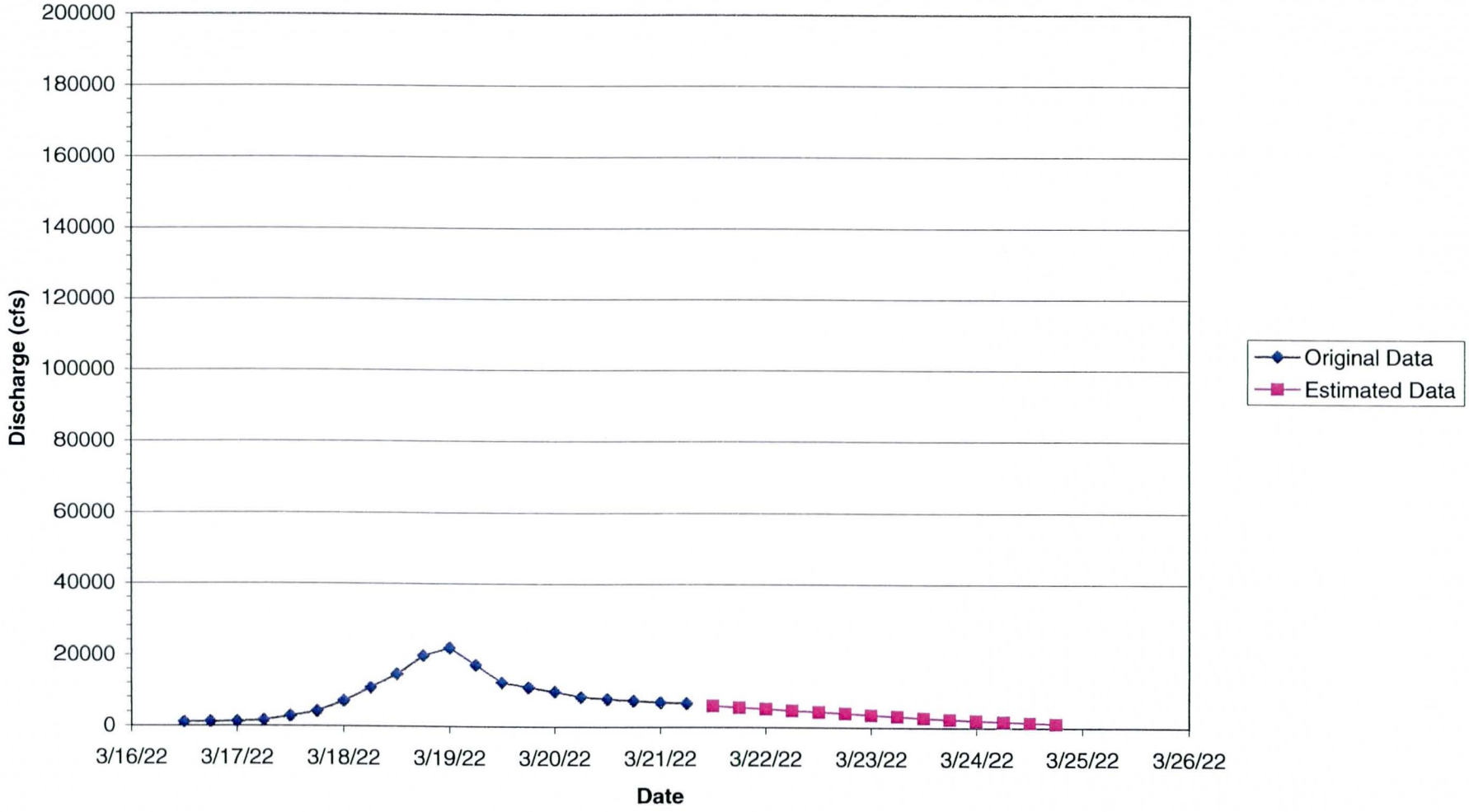
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1922



Prepared by SMF

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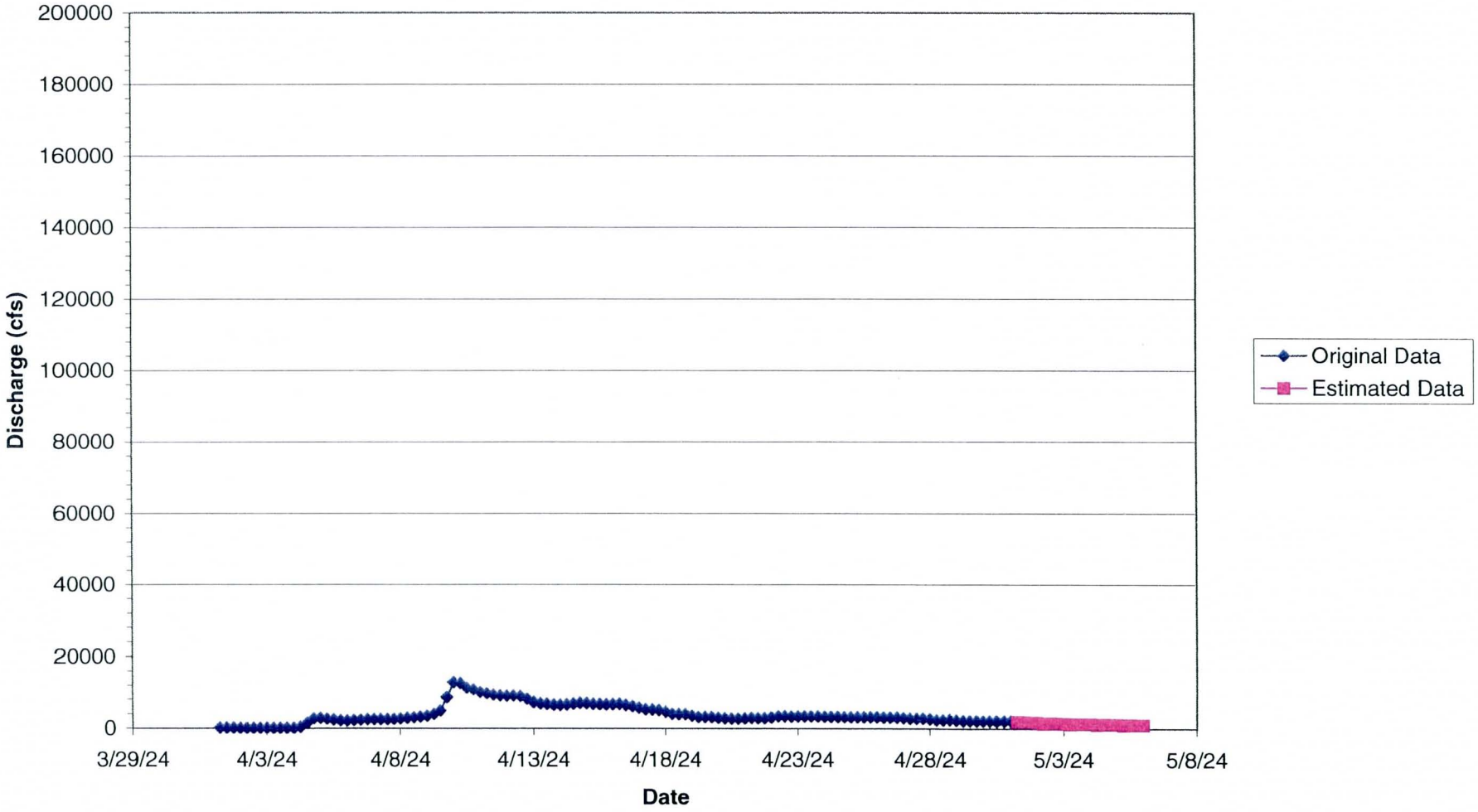
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1924



Prepared by SMF

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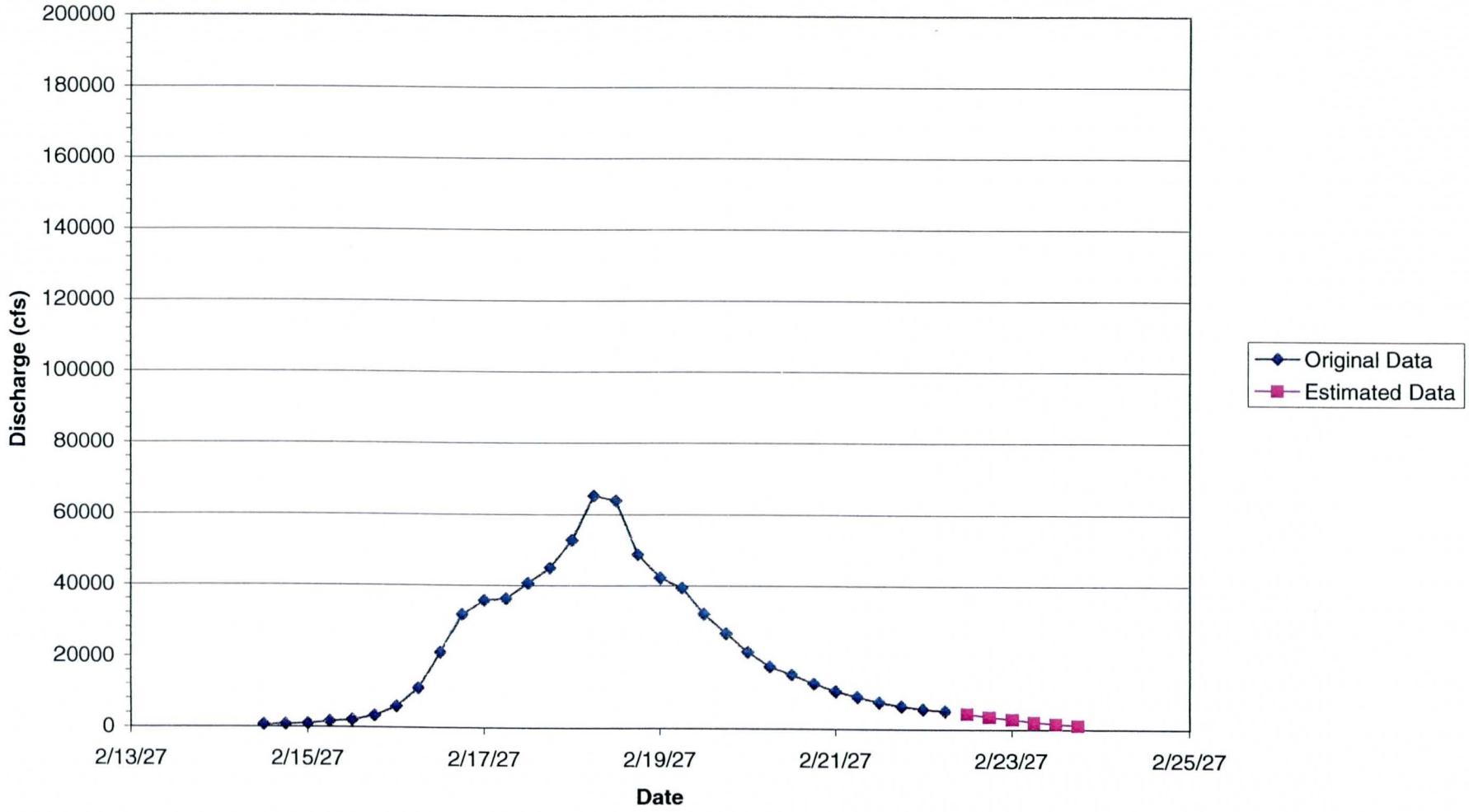
9/30/2003

Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1927



Prepared by SMF

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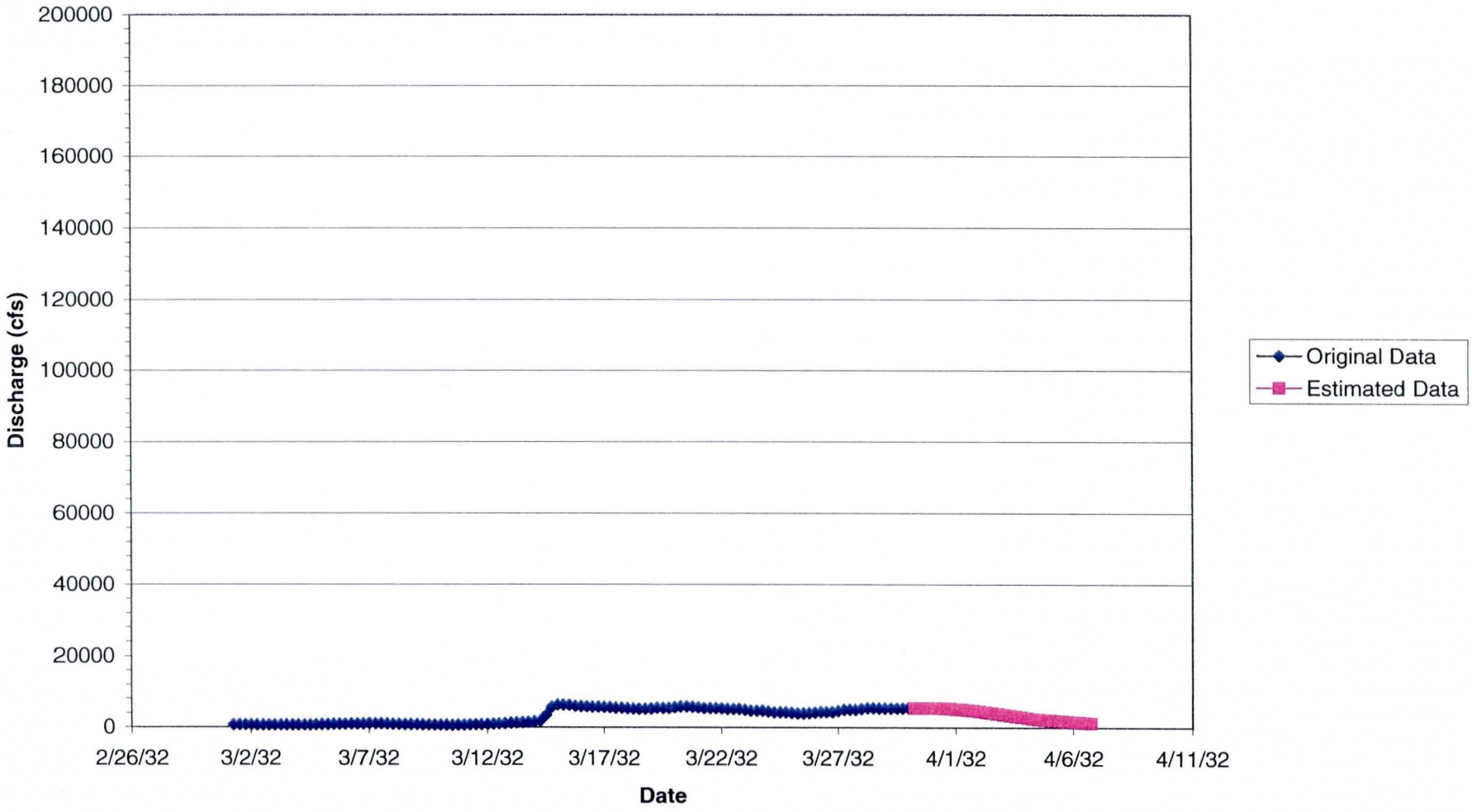
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1932



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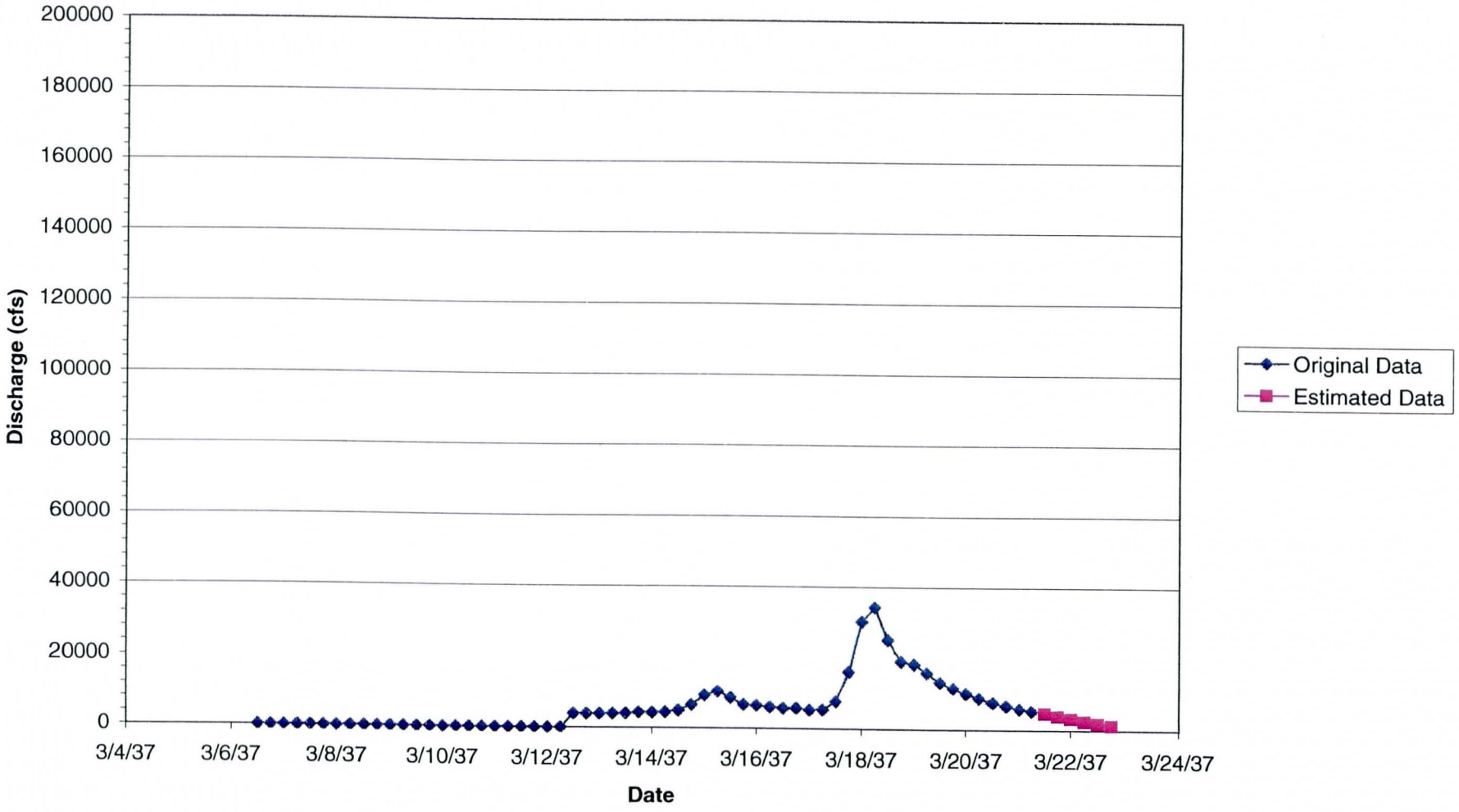
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1937



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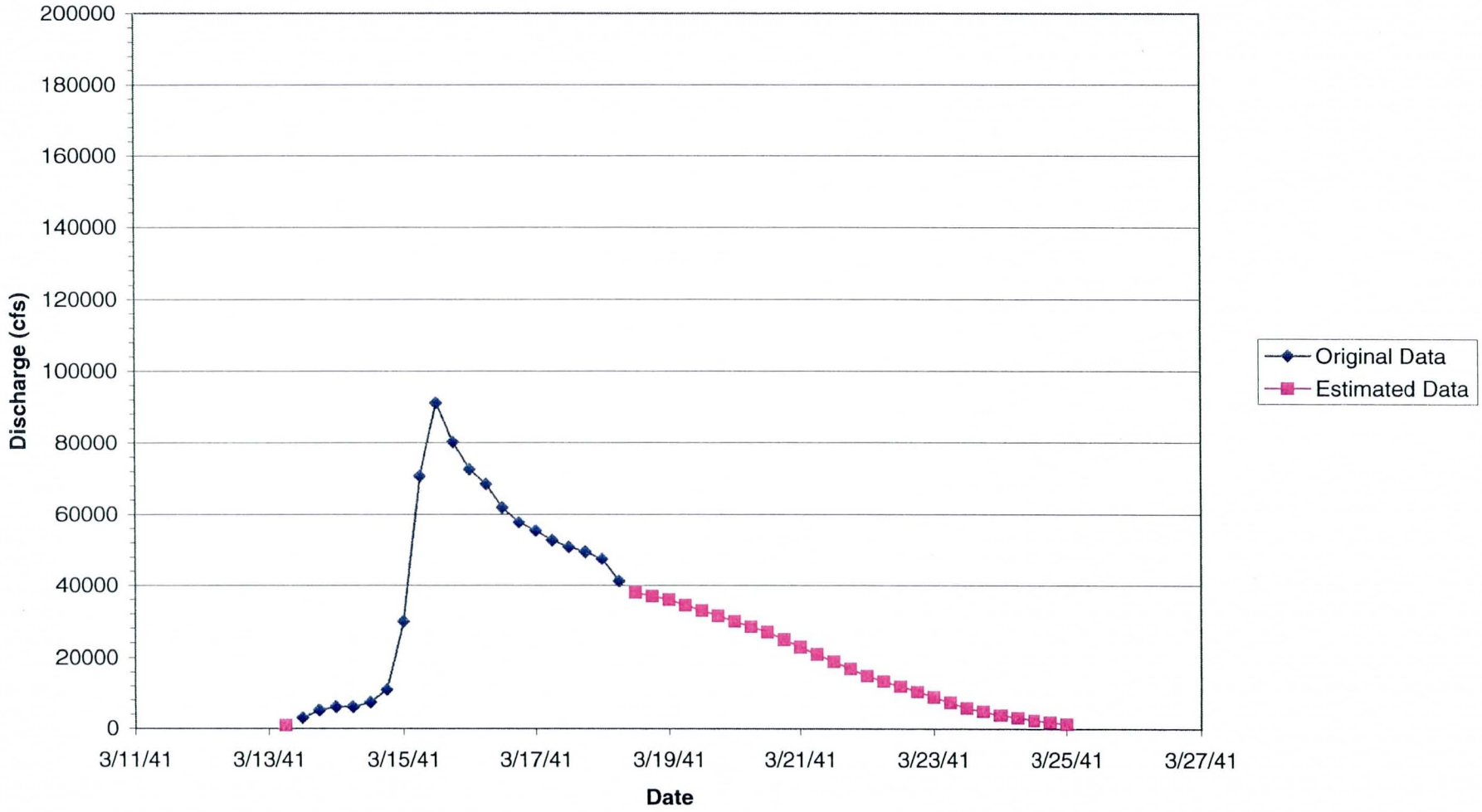
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1941



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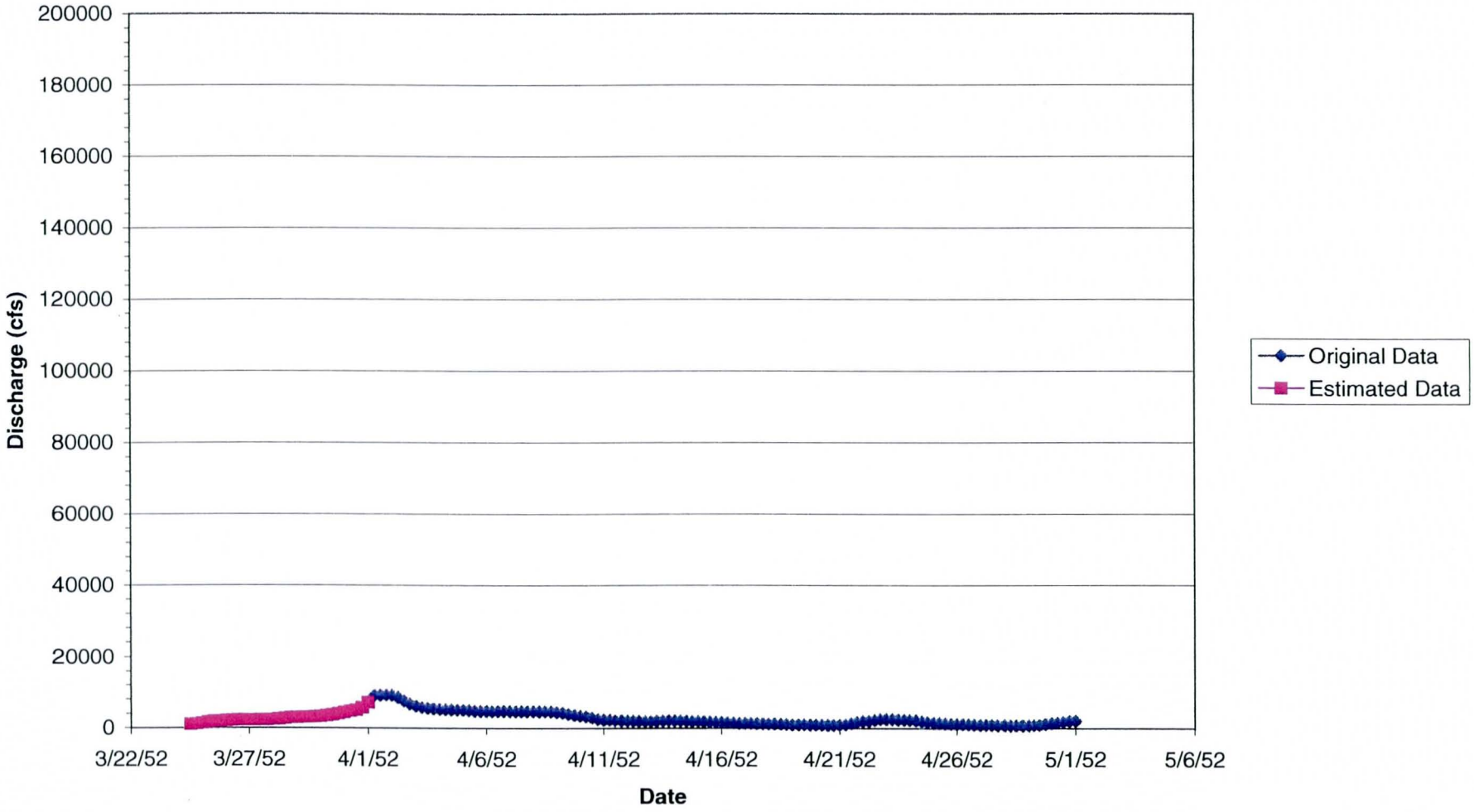
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1952



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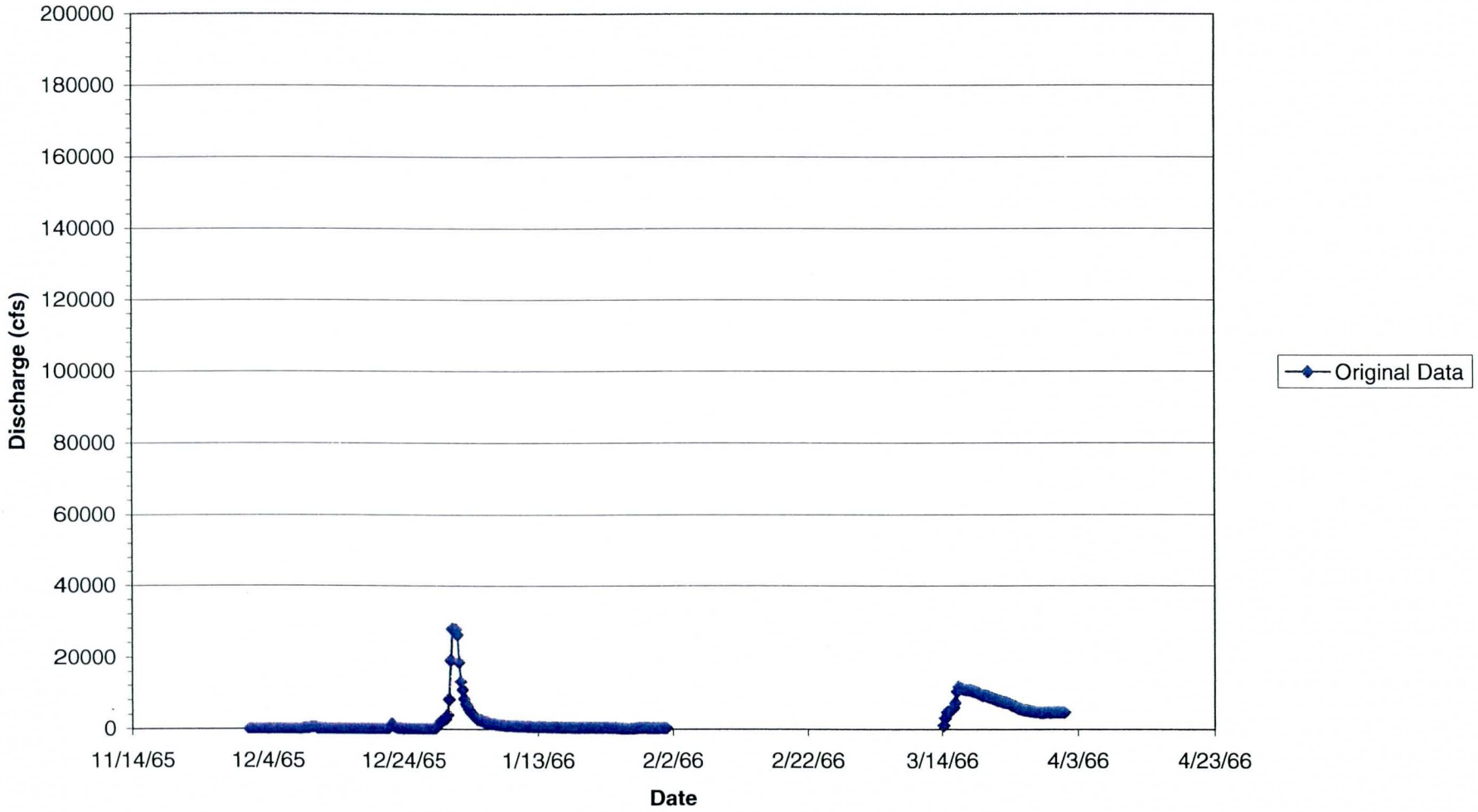
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1966



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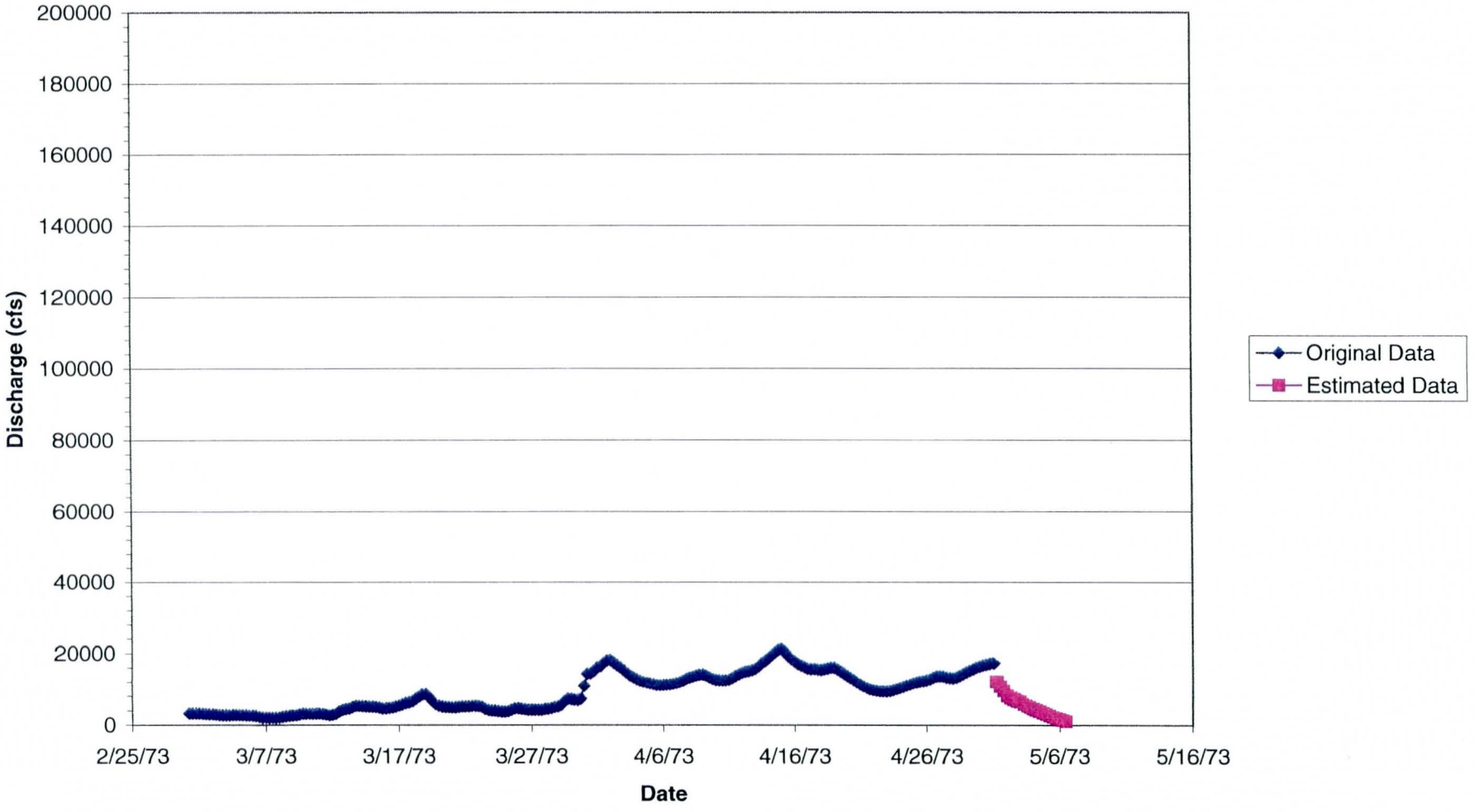
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1973



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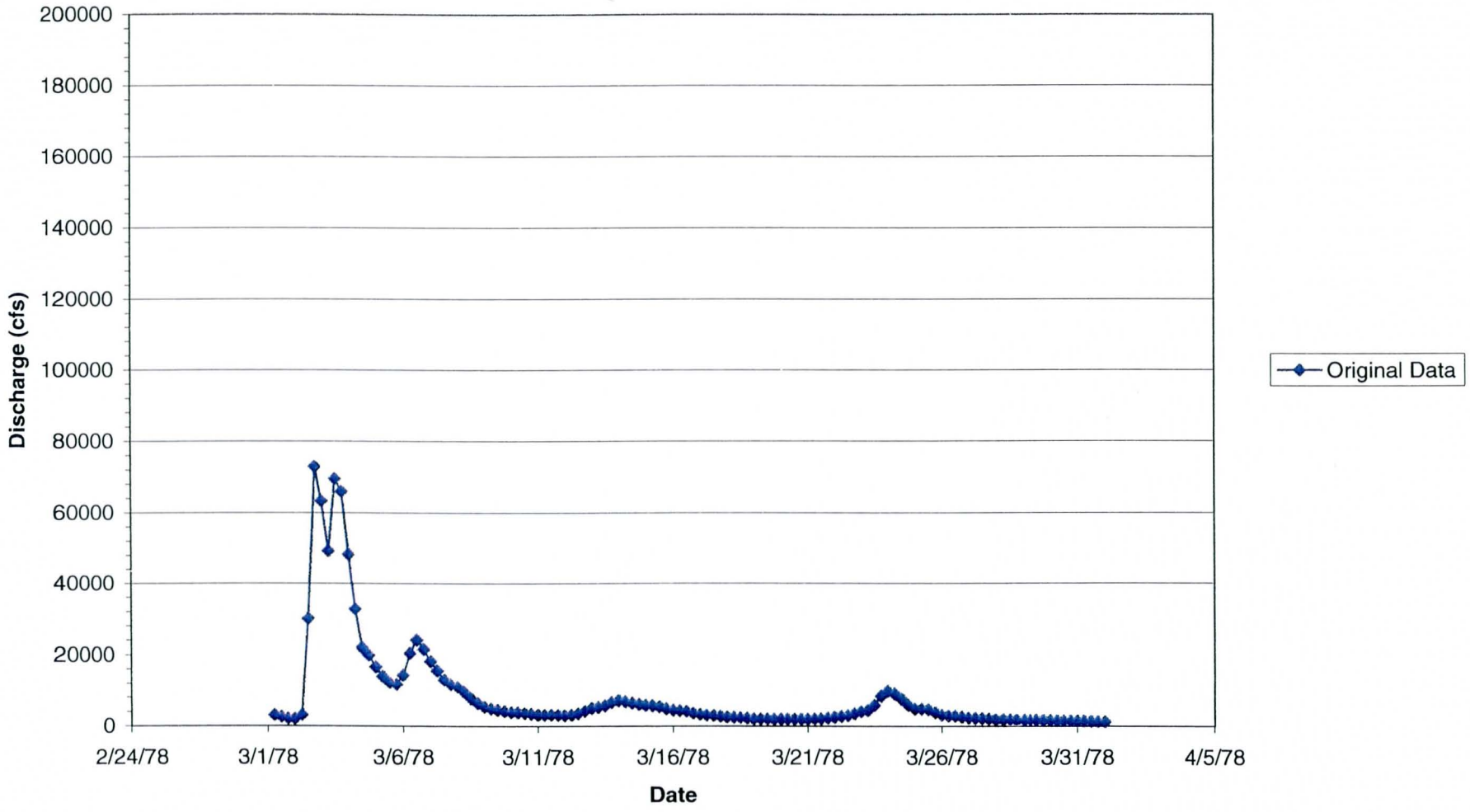
Hydrograph at Granite Reef Diversion Dam
Water Year 1978



Prepared by SMF

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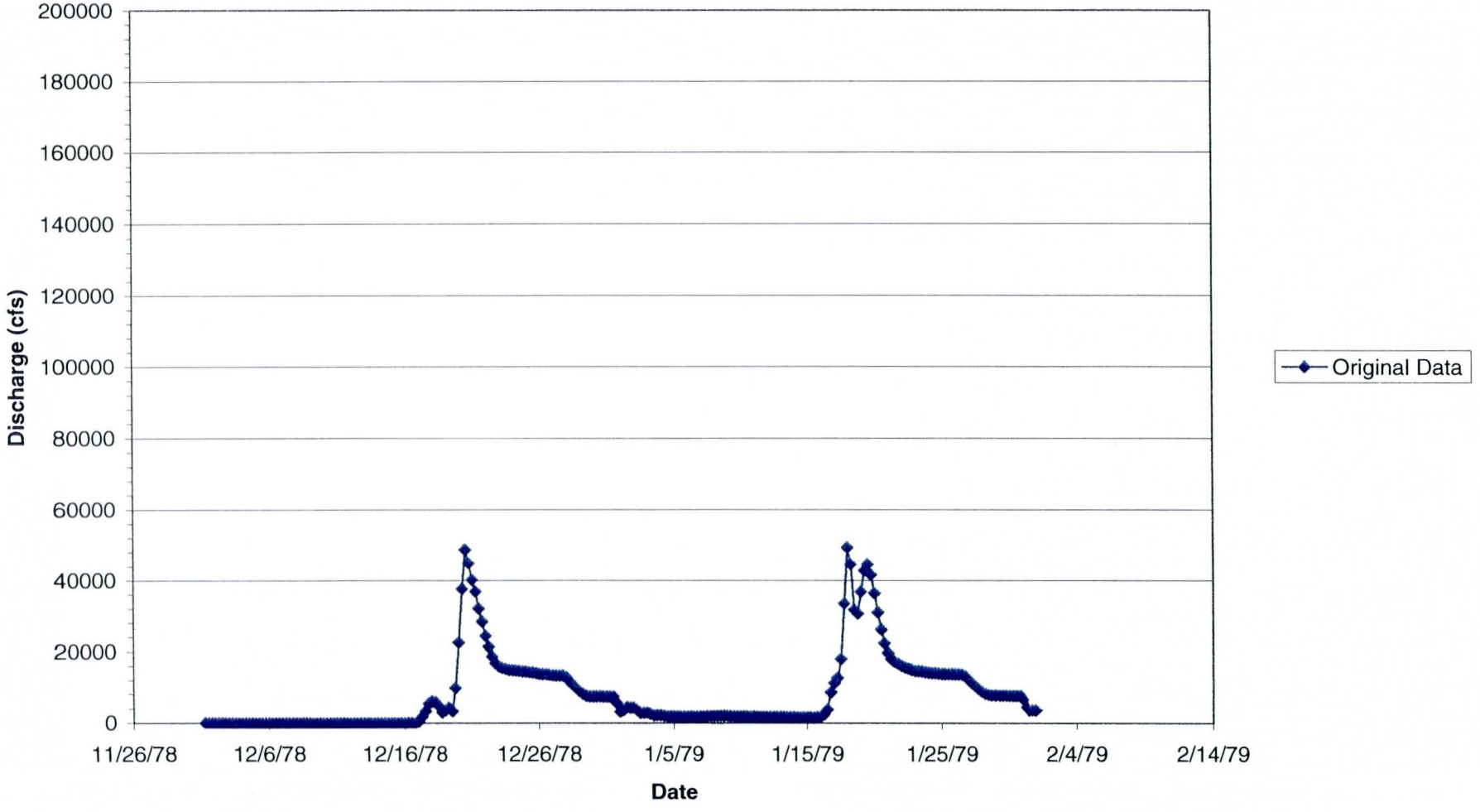
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1979



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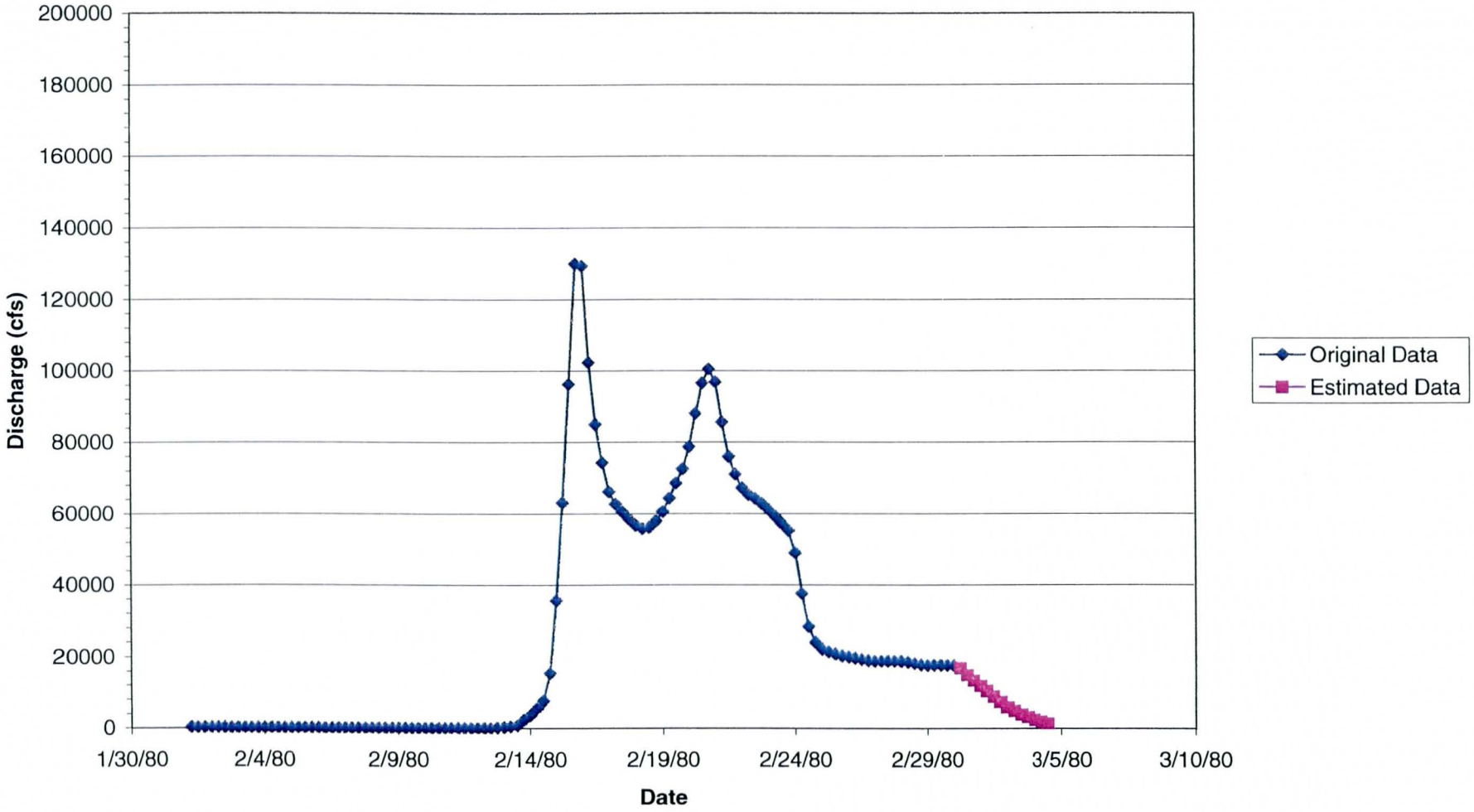
Hydrograph at Granite Reef Diversion Dam
Water Year 1980



Prepared by SMF

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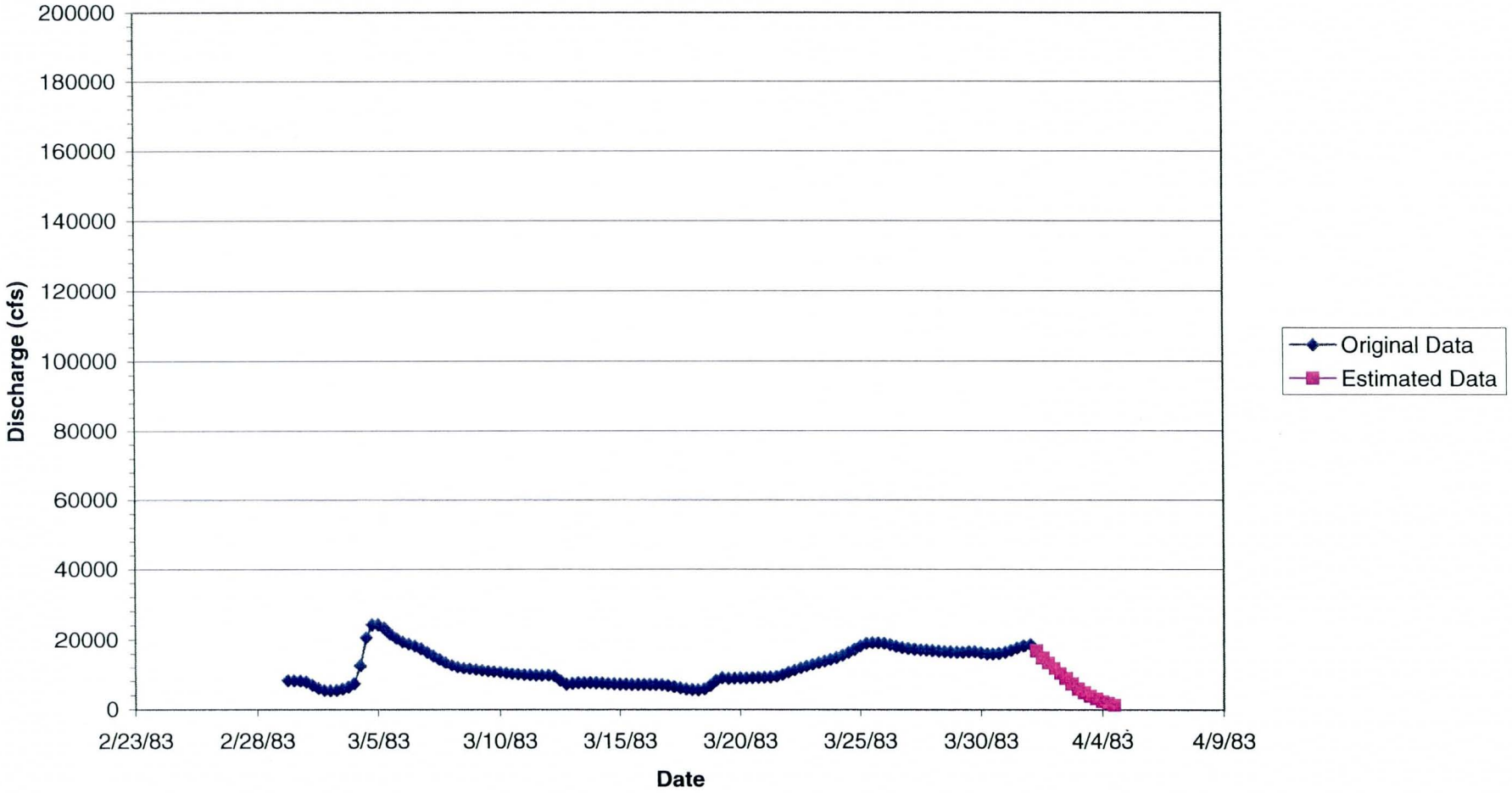
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1983



Prepared by SMF

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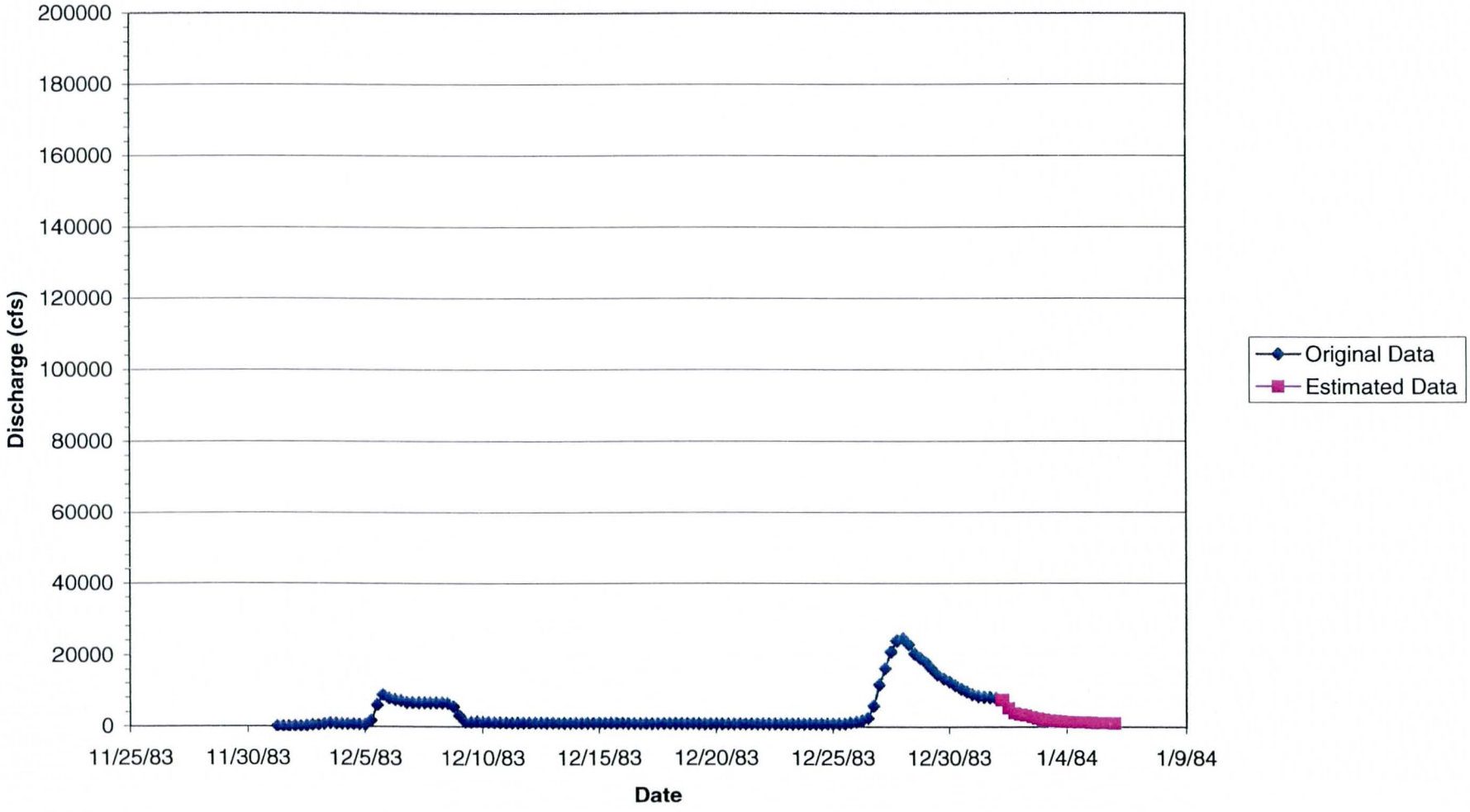
9/30/2003

Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1984



Prepared by SMF

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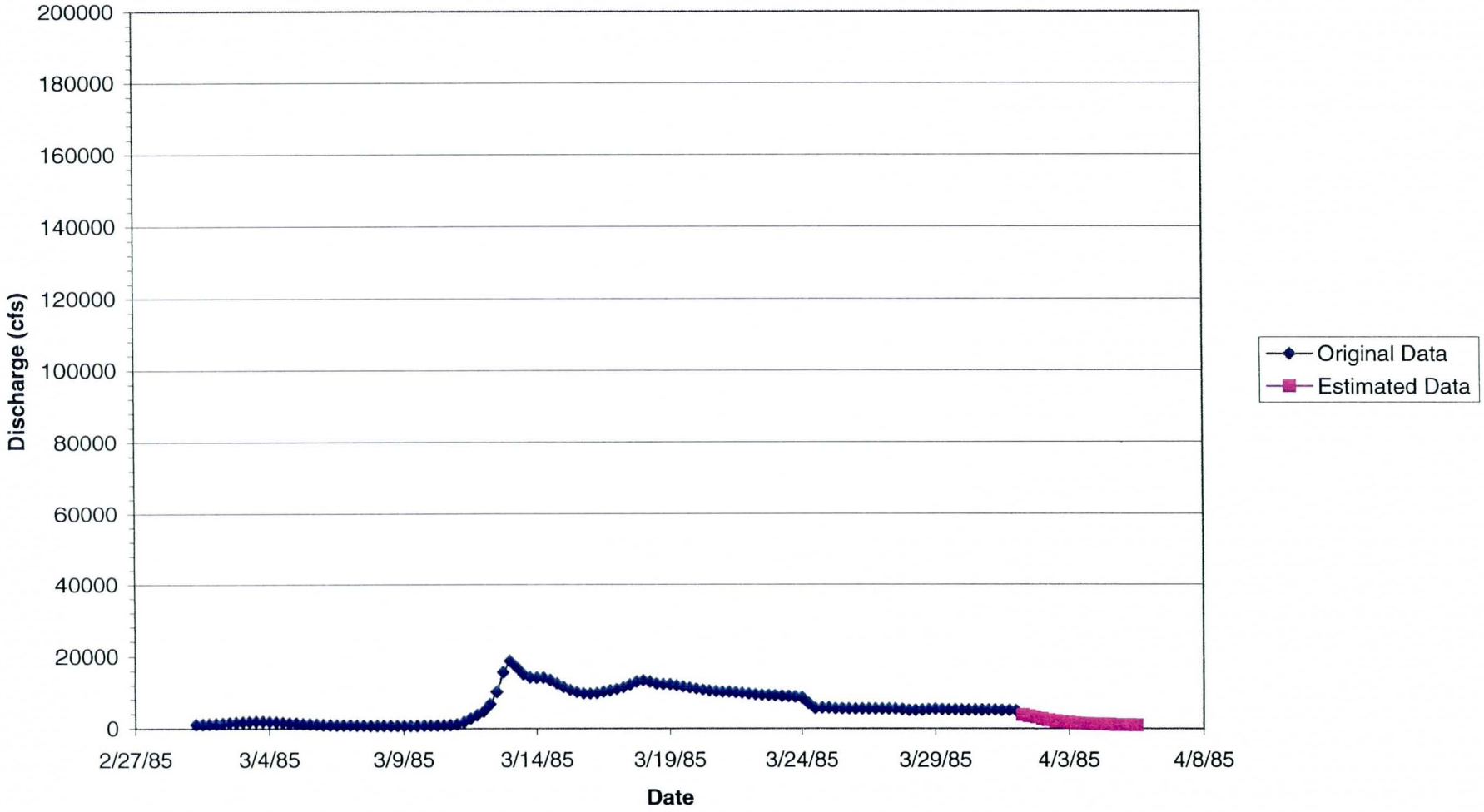
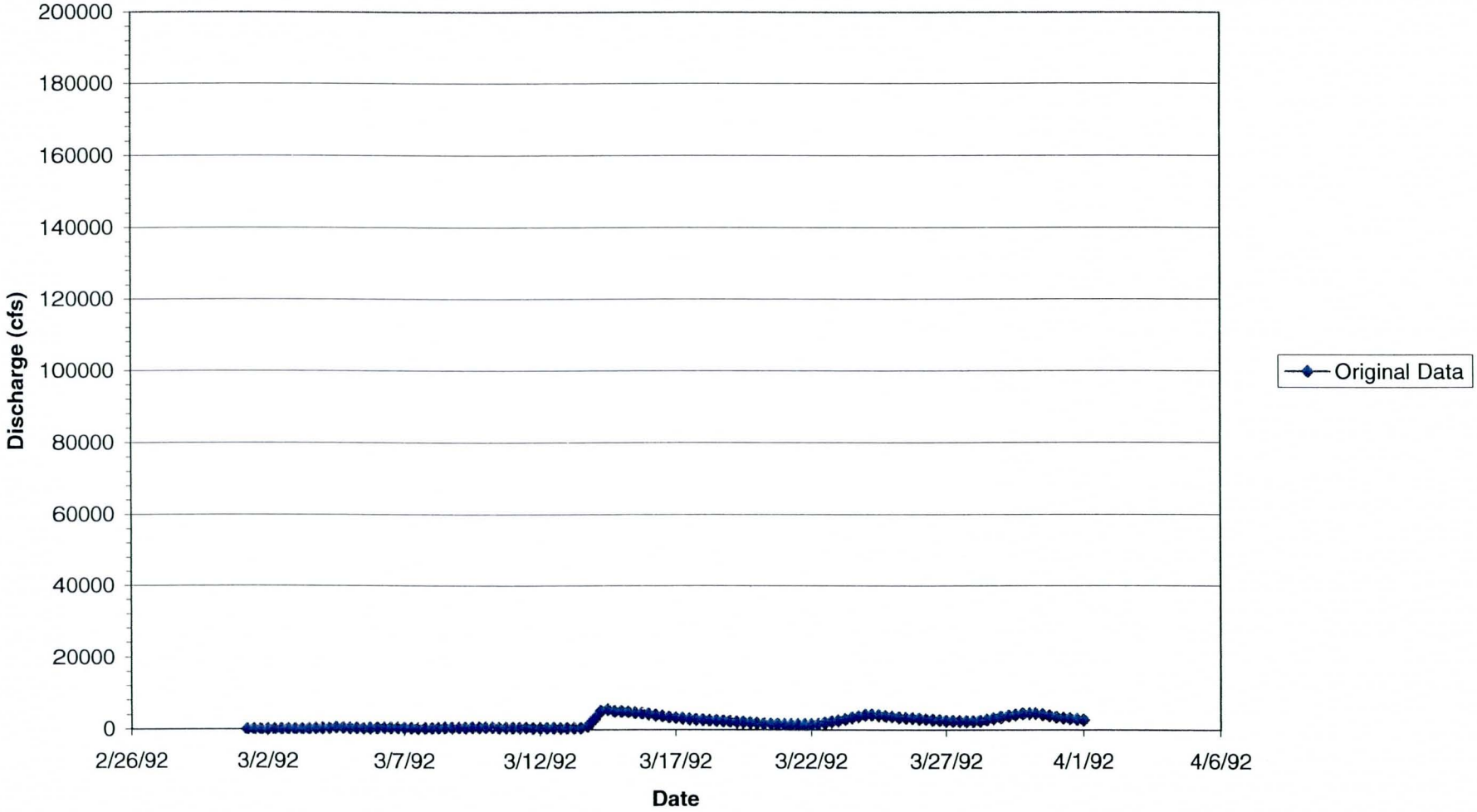
Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1985



Prepared by SMF

vash hydrographs
9/30/2003

Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1992



Prepared by SMF

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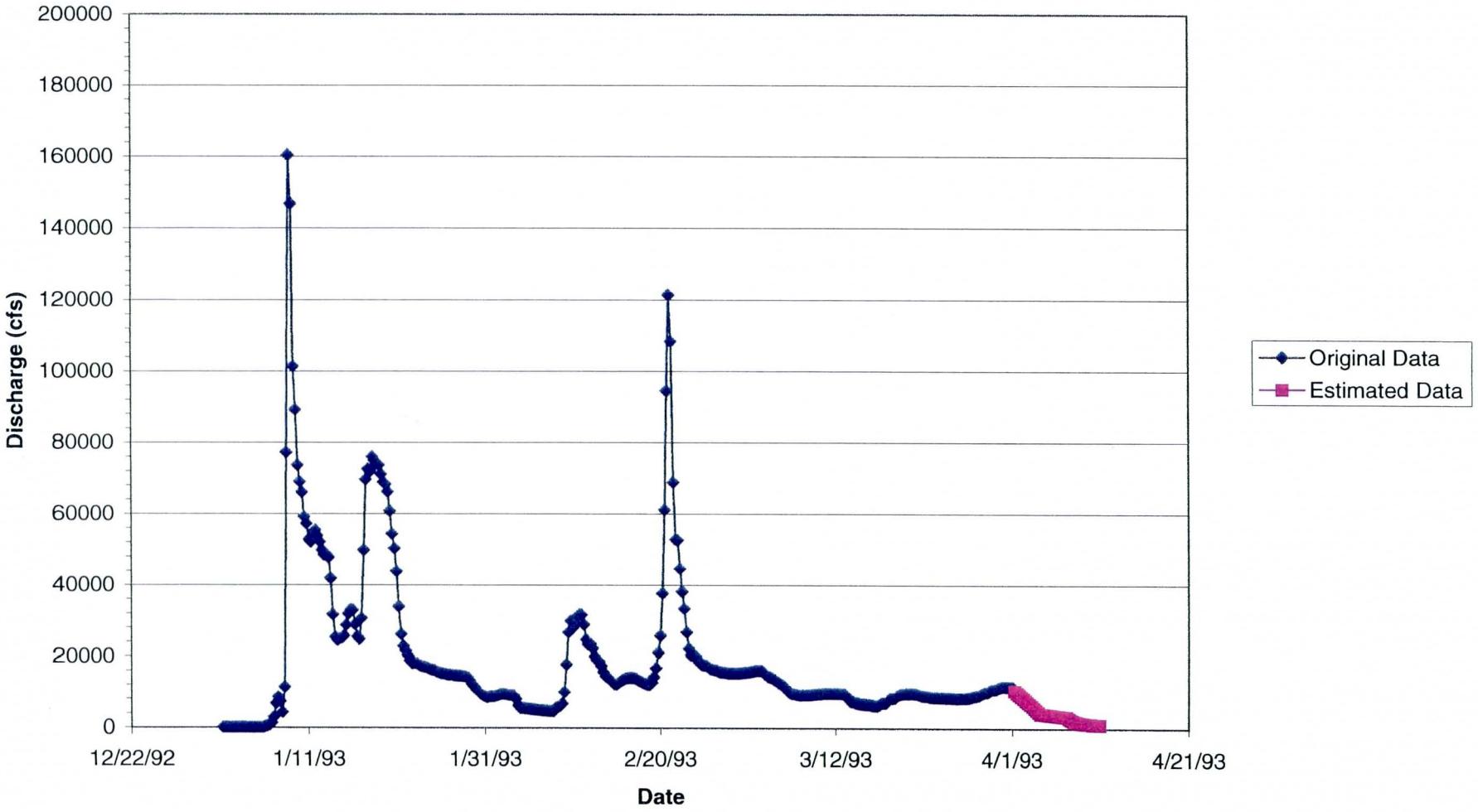
9/30/2003

Va Shly' Ay Akimel
Hydrograph at Granite Reef Diversion Dam
Water Year 1993



Prepared by SMF

vash hydrographs
9/30/2003

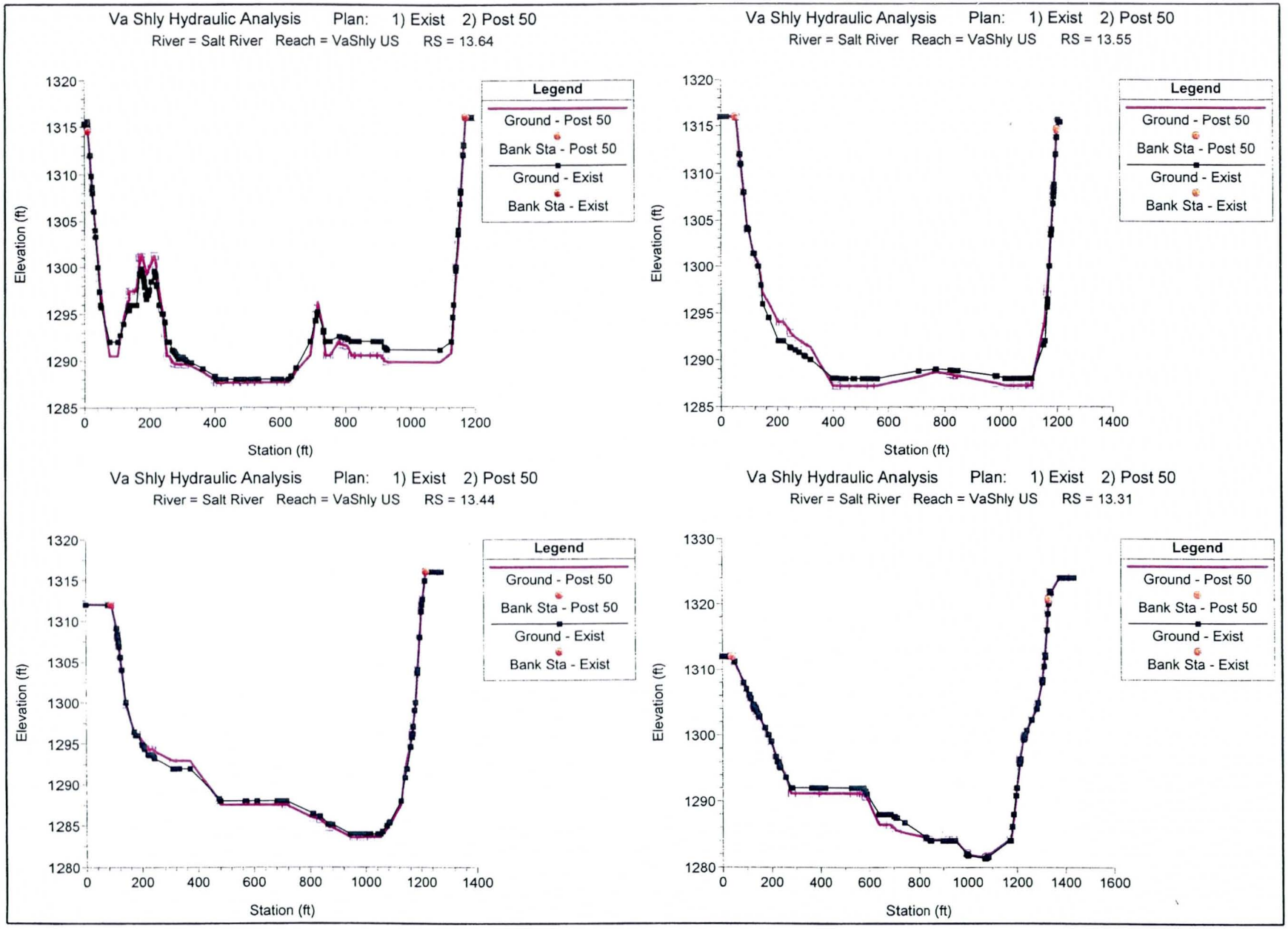
APPENDIX 6

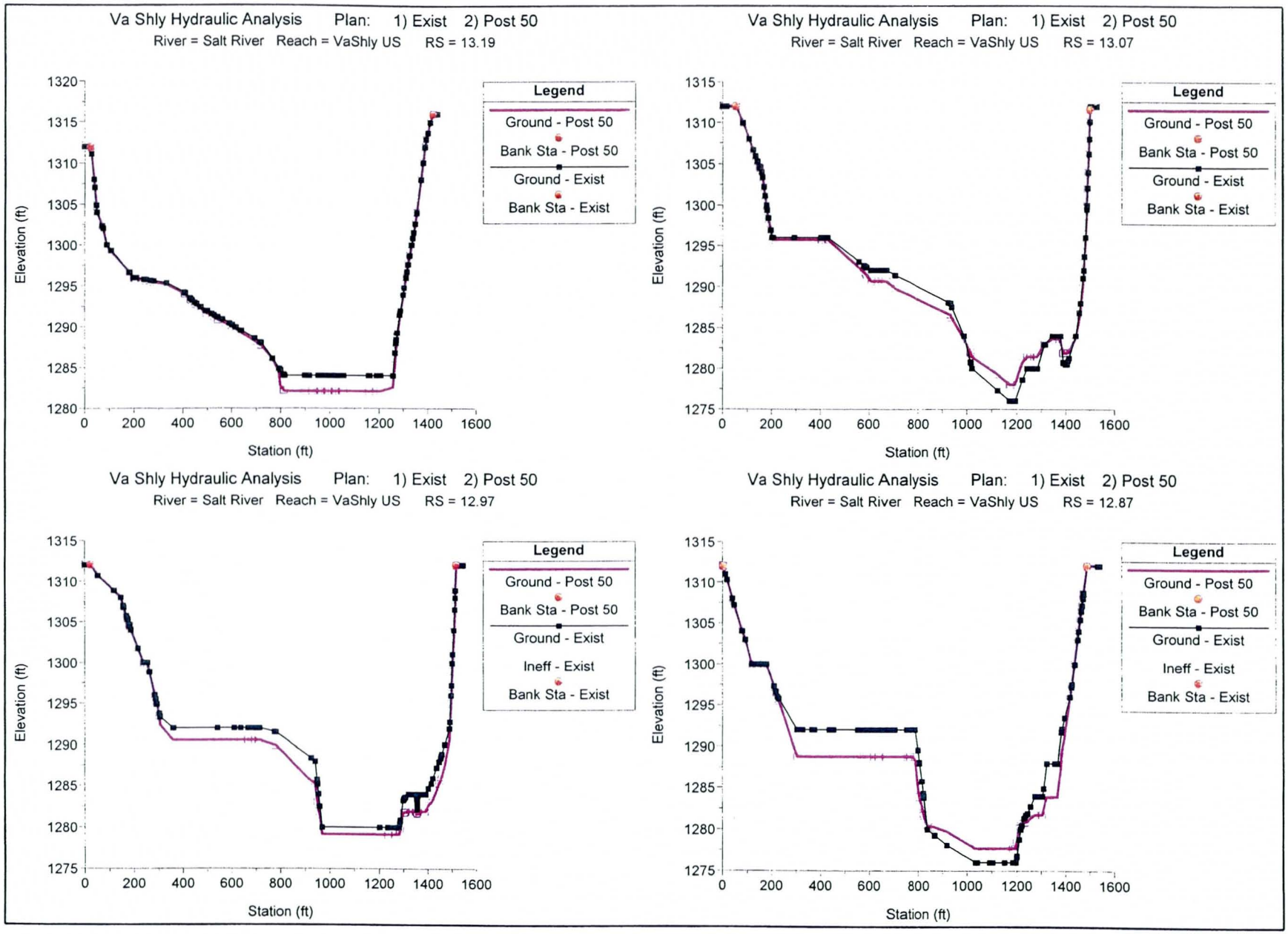
COMPARISON OF CROSS SECTION GEOMETRY BEFORE & AFTER BASE CASE 50-YEAR HEC-6T SIMULATION

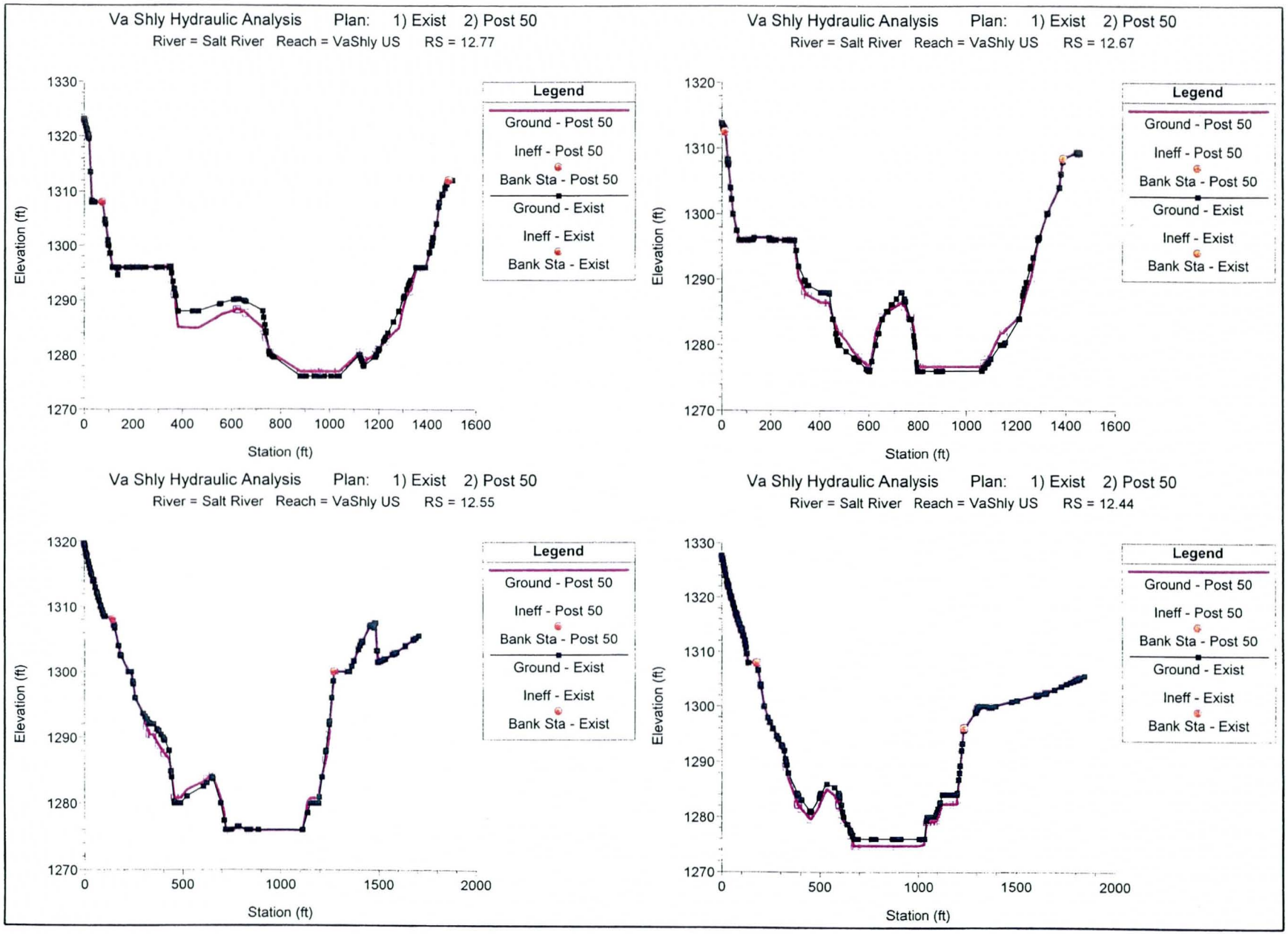
6a. Cross Section Plots for the Salt River
6b. Cross Section Plots for the Gilbert Mining Pit

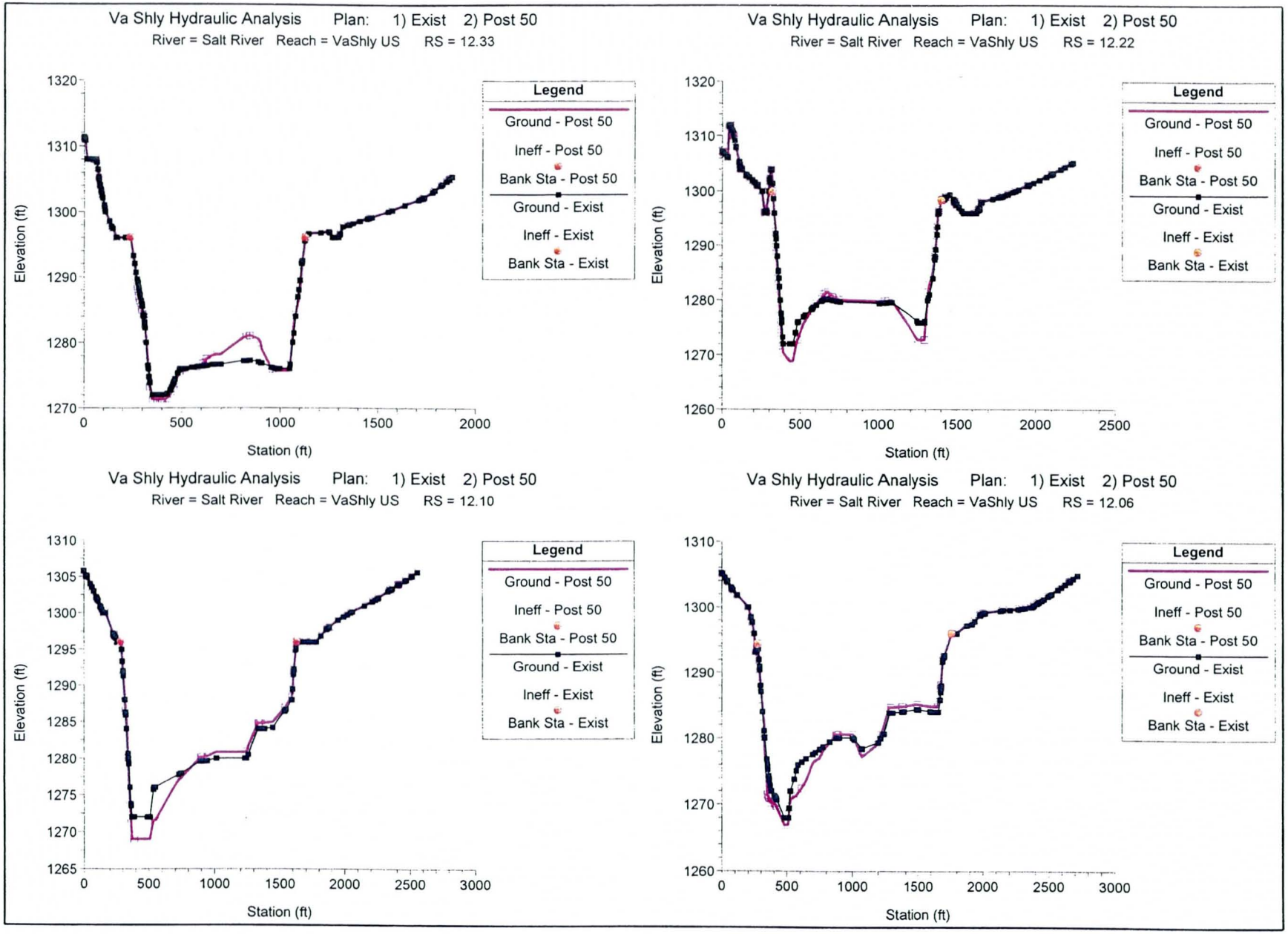
APPENDIX 6a

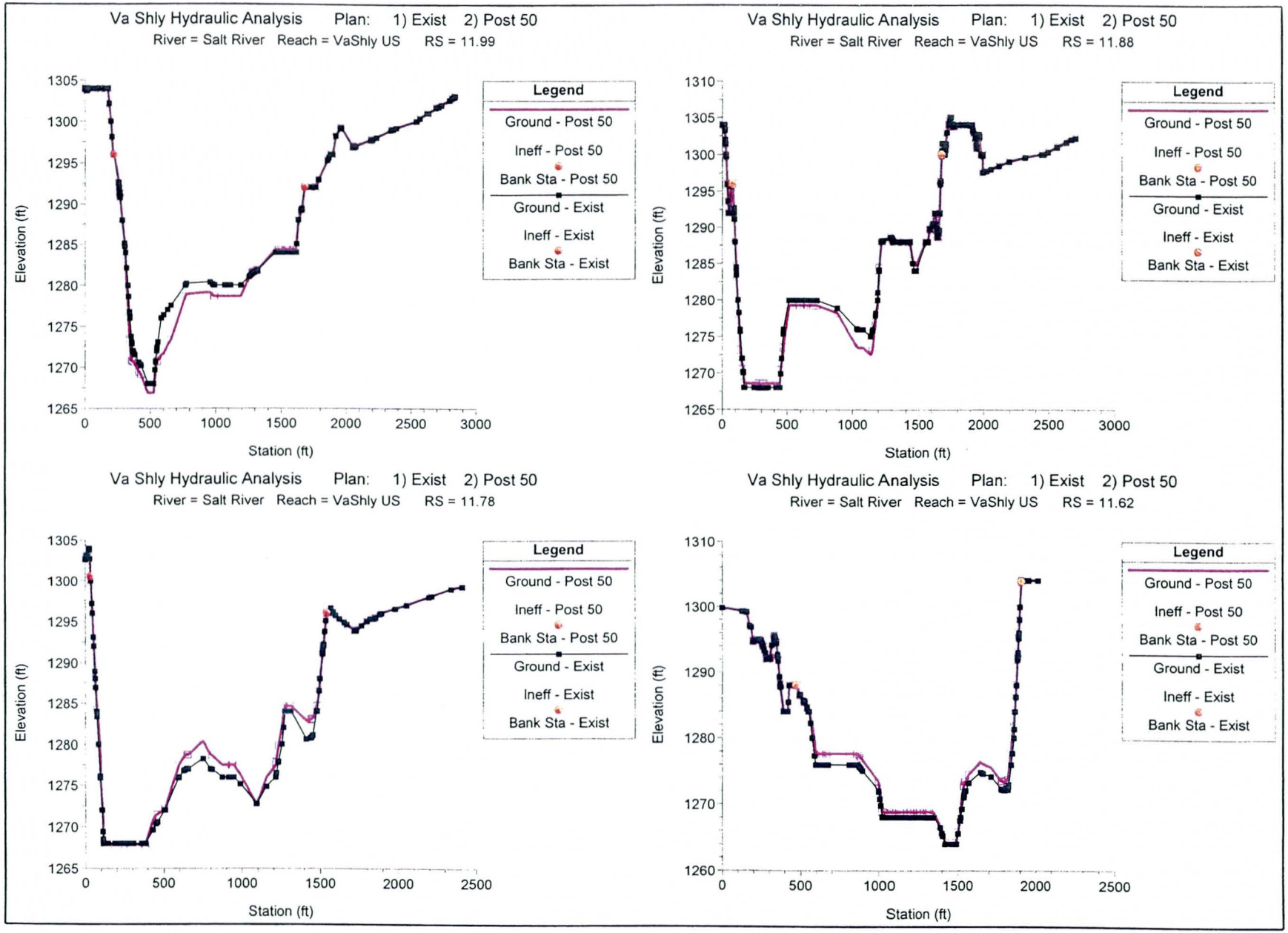
CROSS SECTION PLOTS FOR THE SALT RIVER

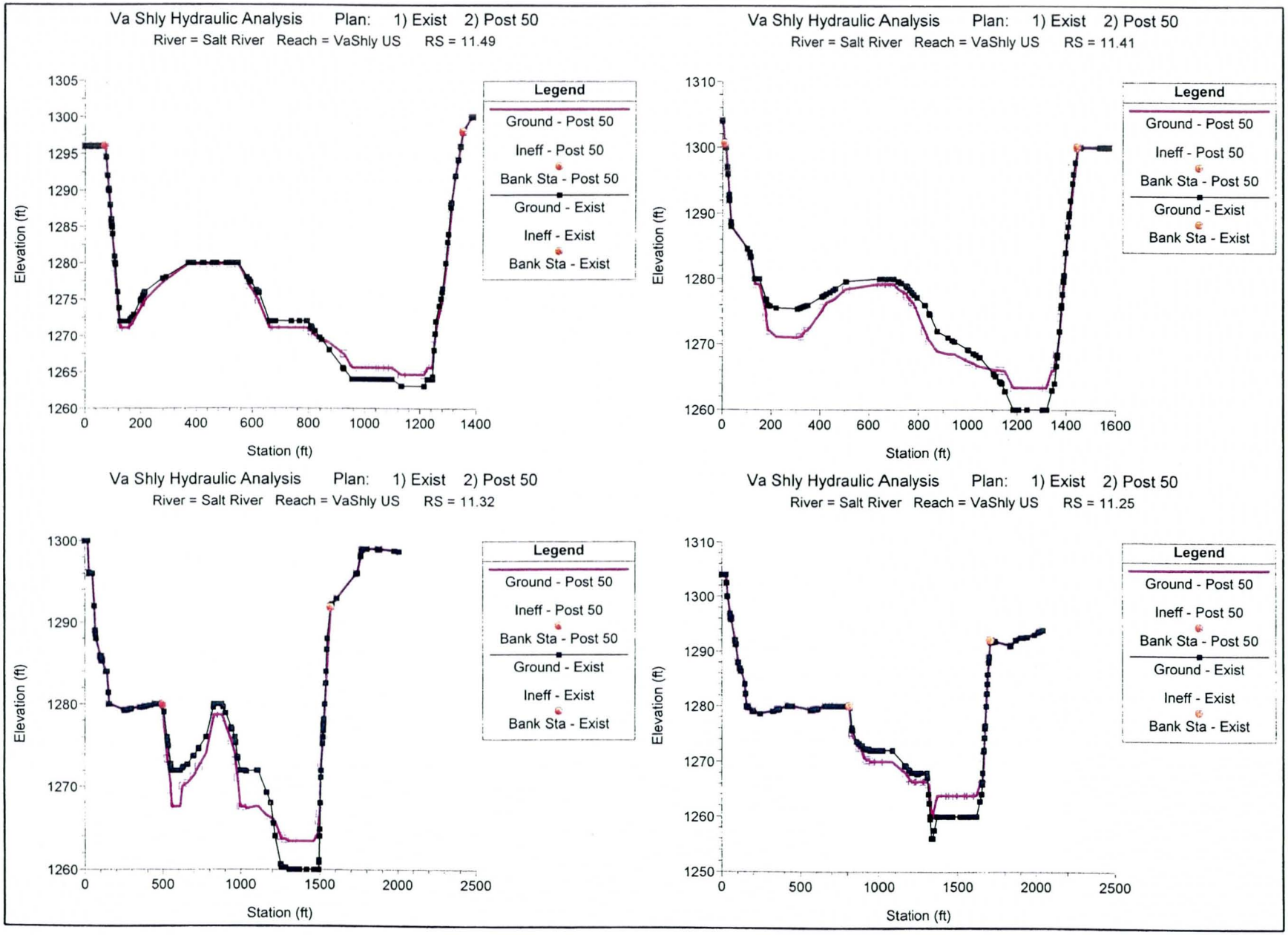

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 13.64
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 13.55
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 13.44
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 13.31
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist

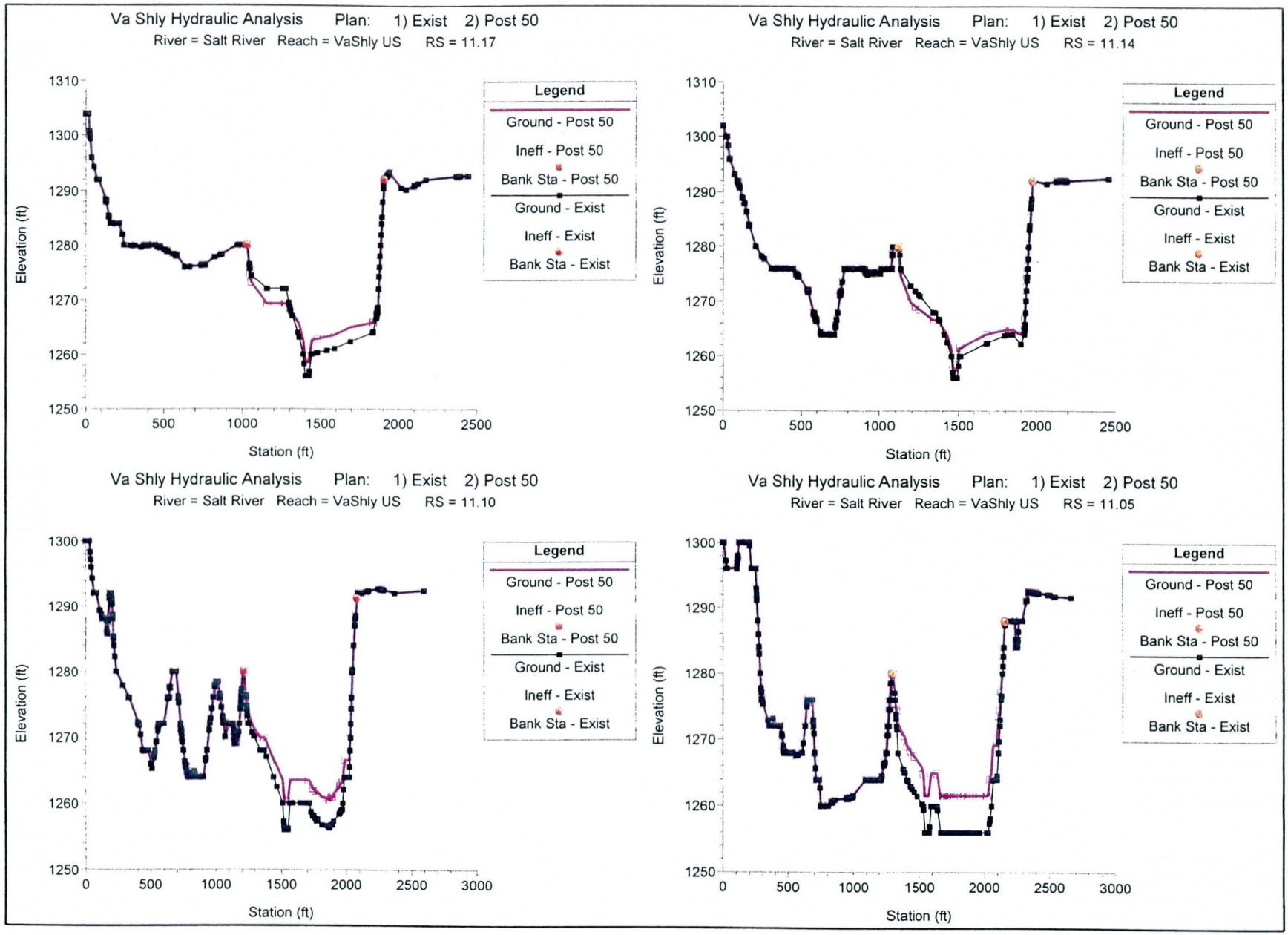

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 13.19
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 13.07
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.97
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.87
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

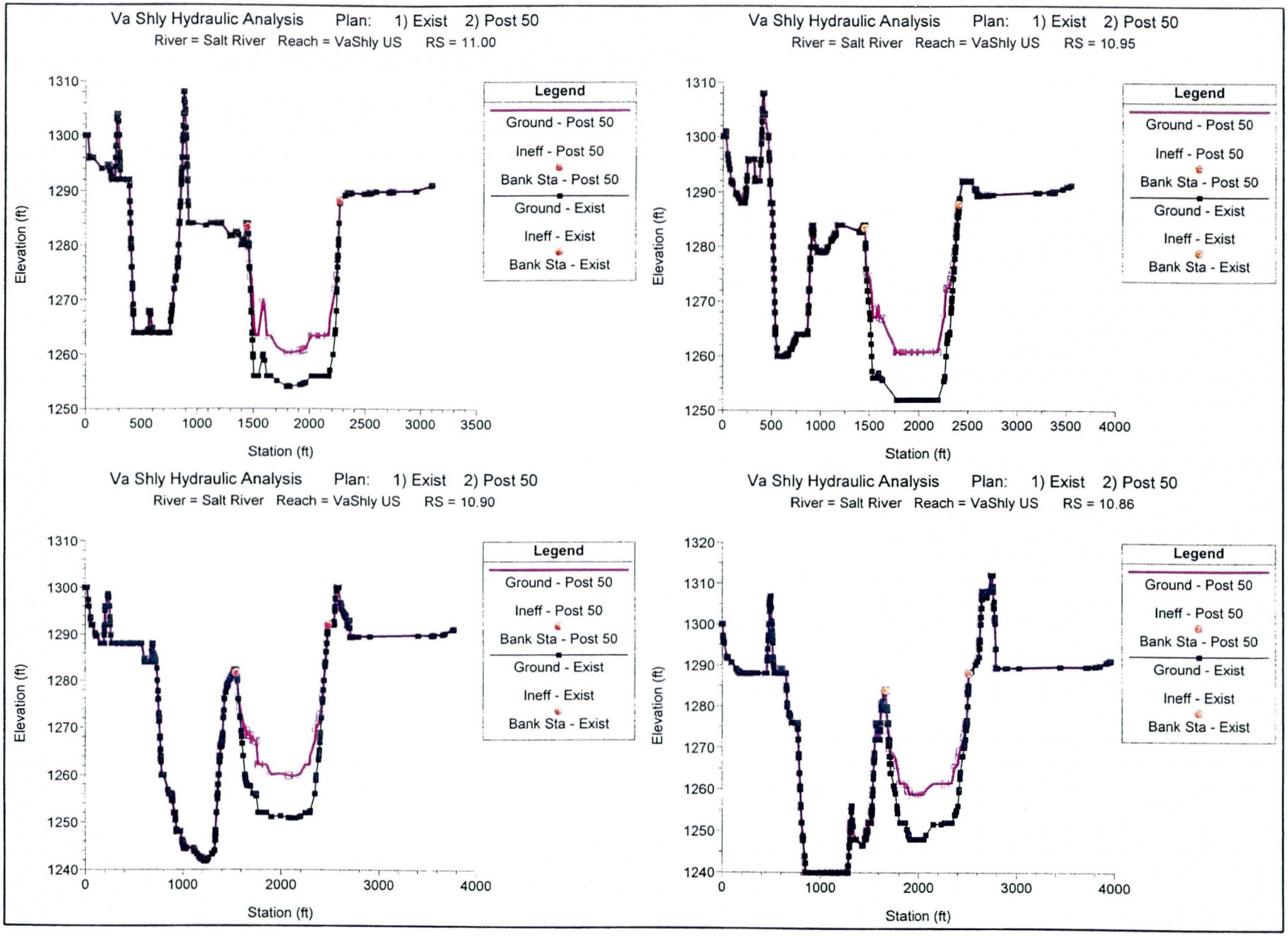

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.77
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.67
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.55
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.44
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

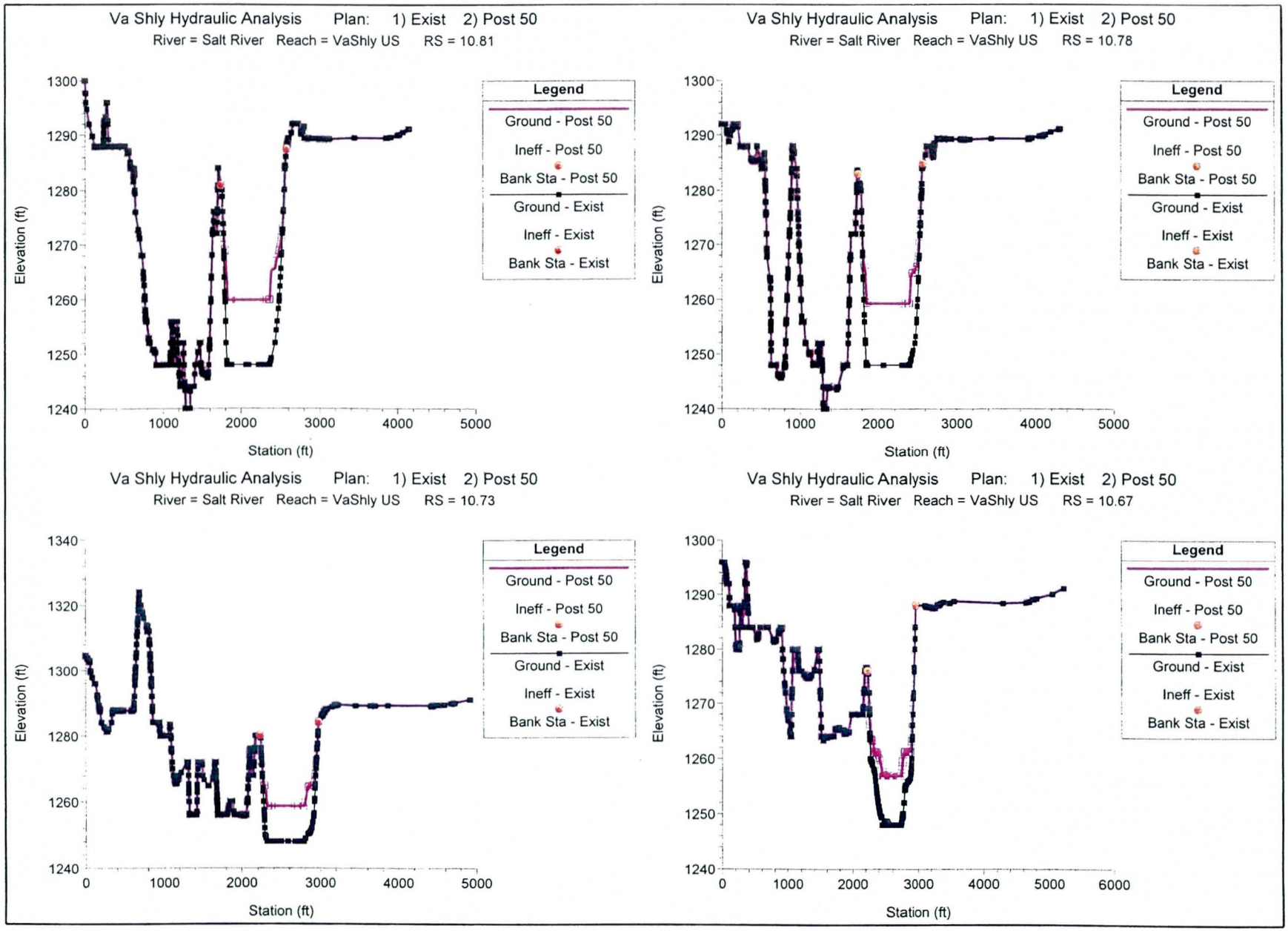

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.33
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.22
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.10
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 12.06
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

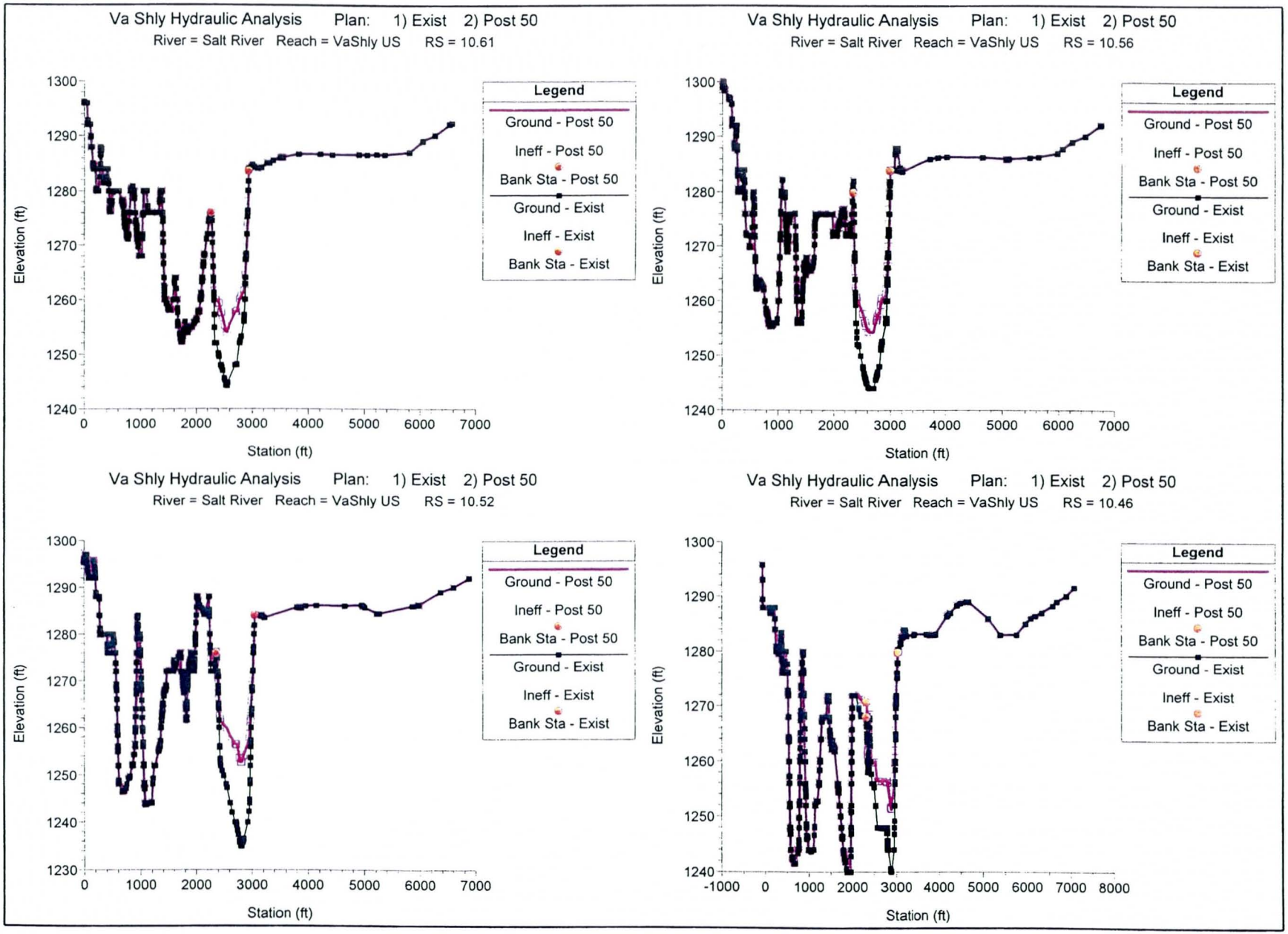

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.99
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.88
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.78
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.62
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

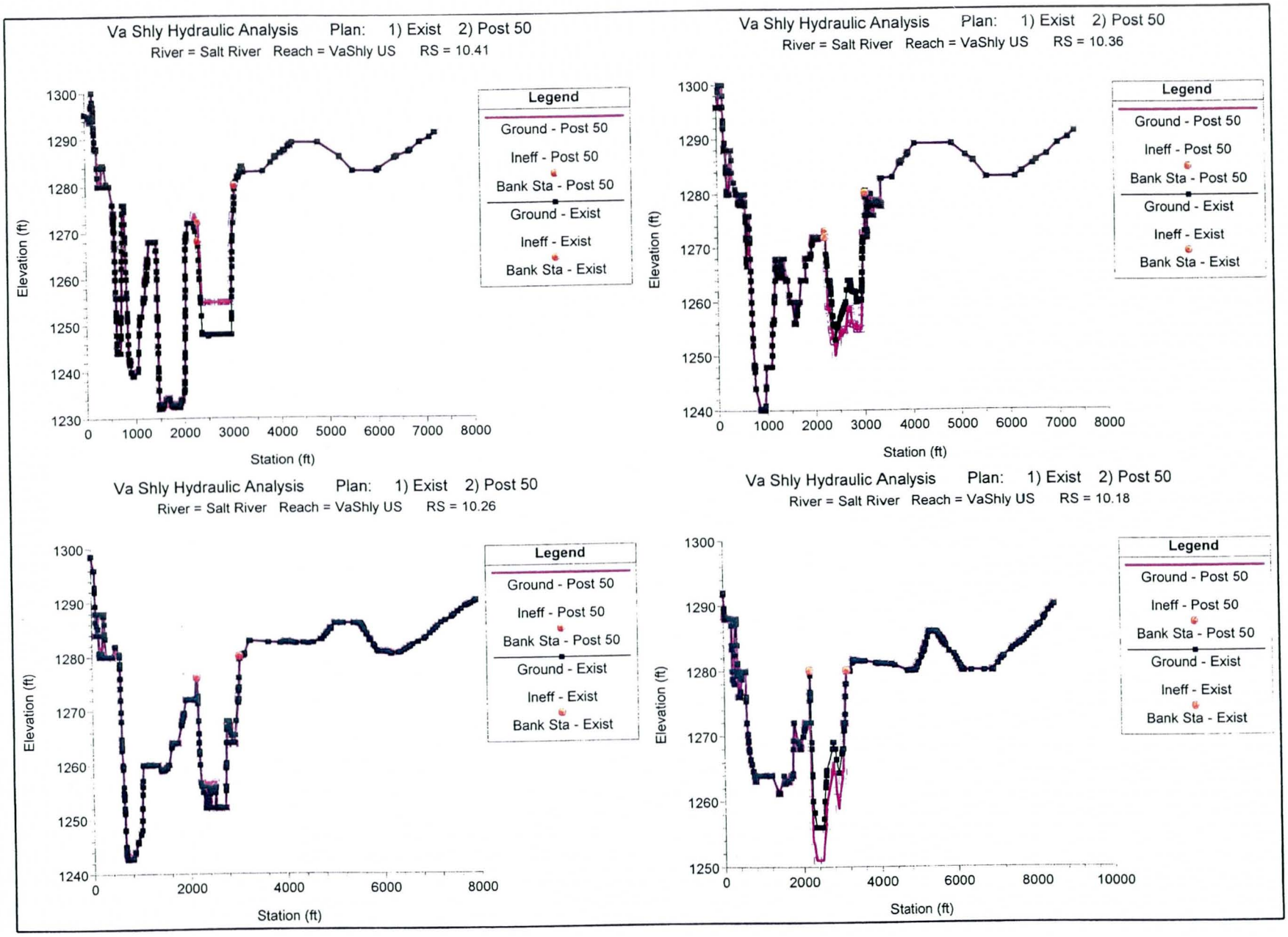

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.49
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.41
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.32
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.25
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

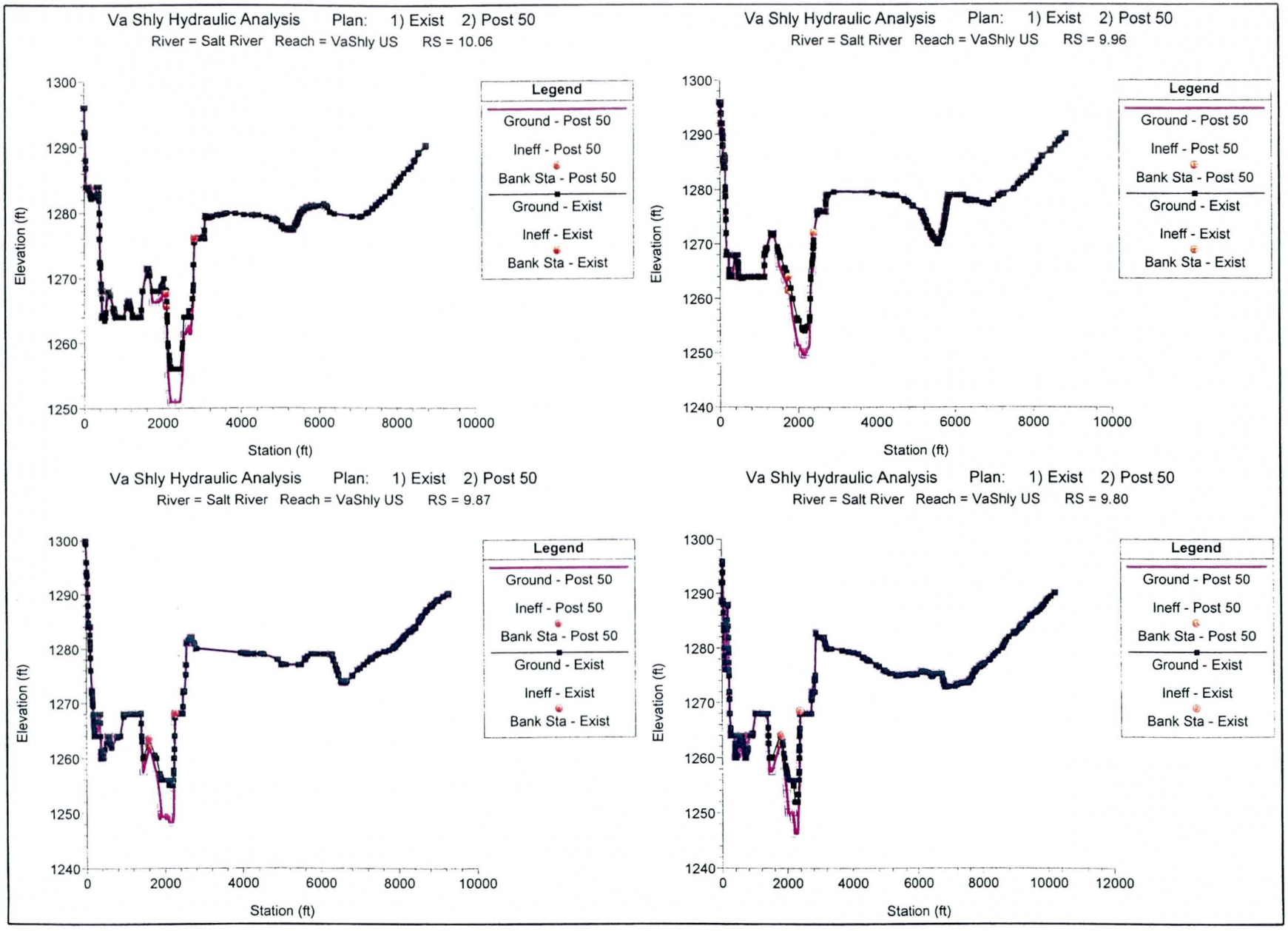

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.17
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.14
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.10
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.05
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

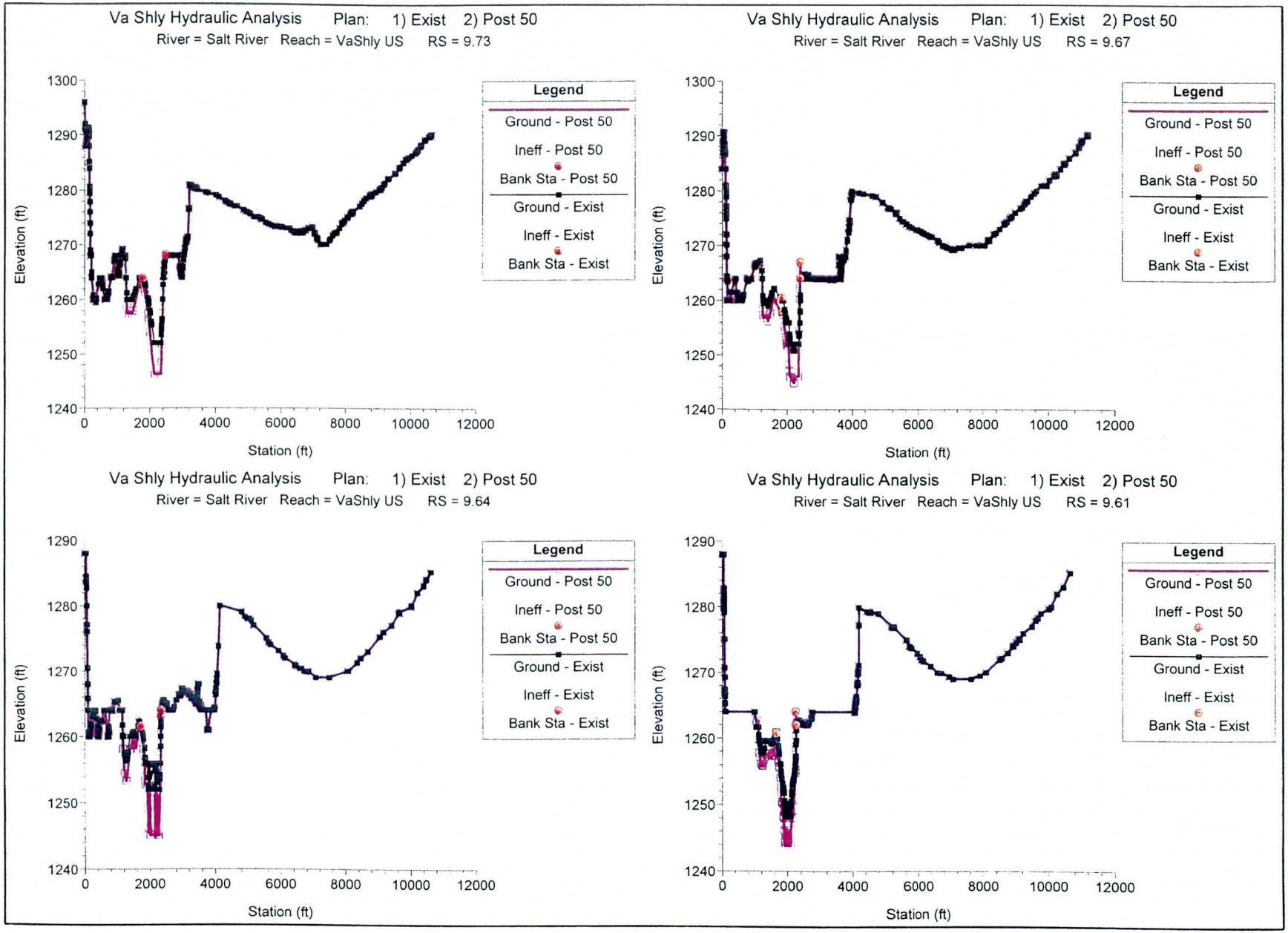

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 11.00
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.95
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.90
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.86
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

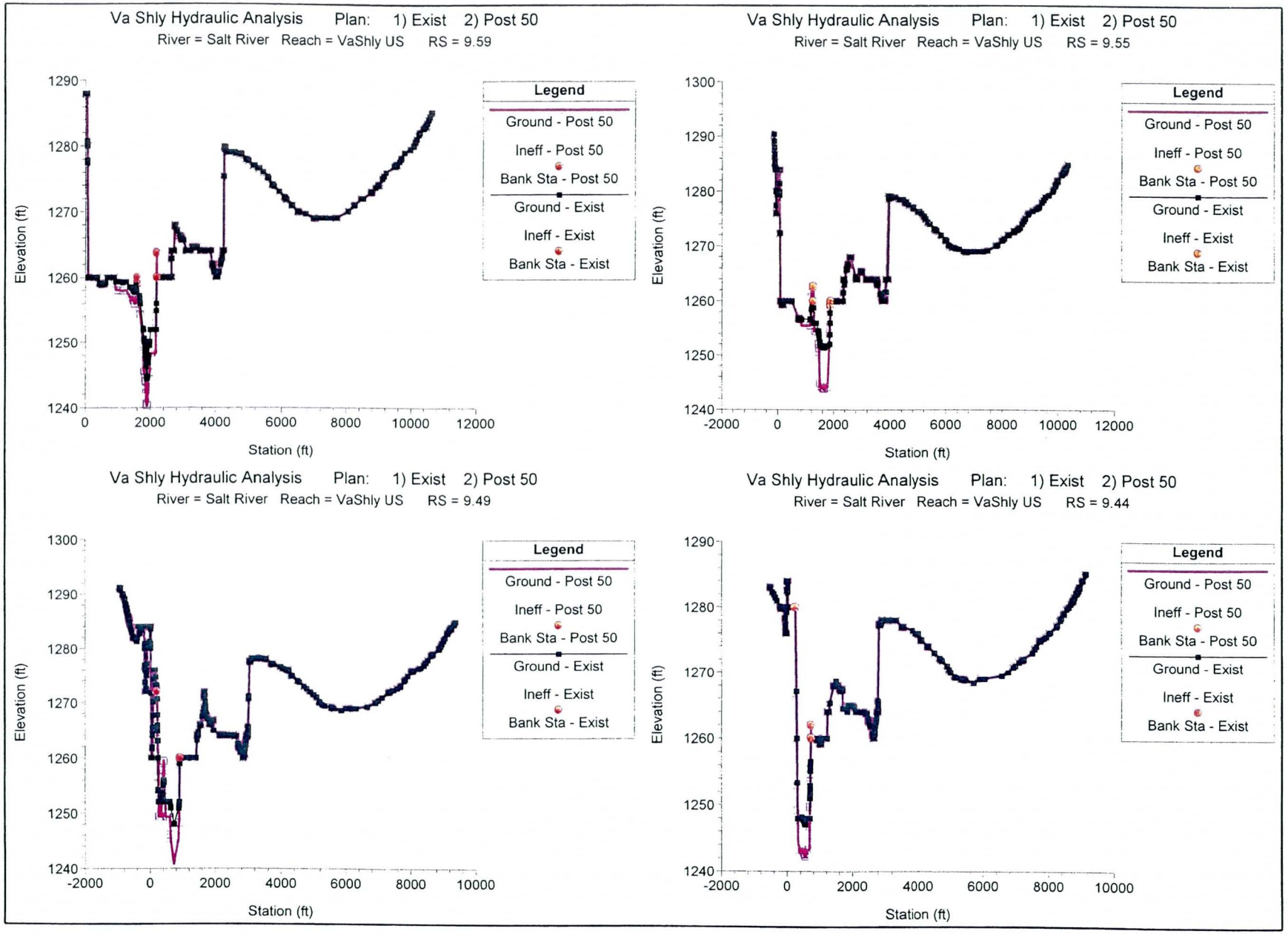

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.81
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.78
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.73
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.67
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

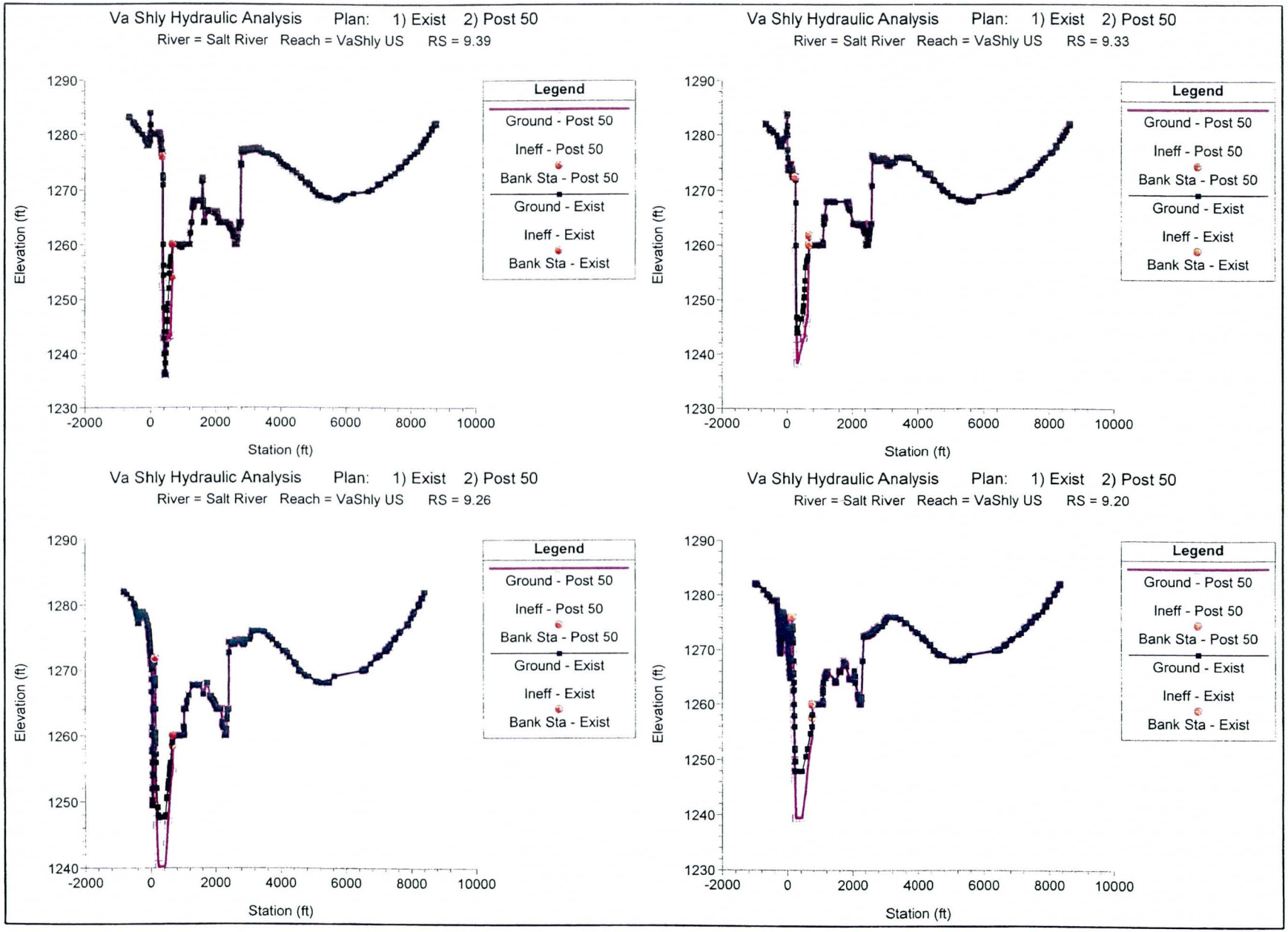

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.61
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.56
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.52
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.46
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

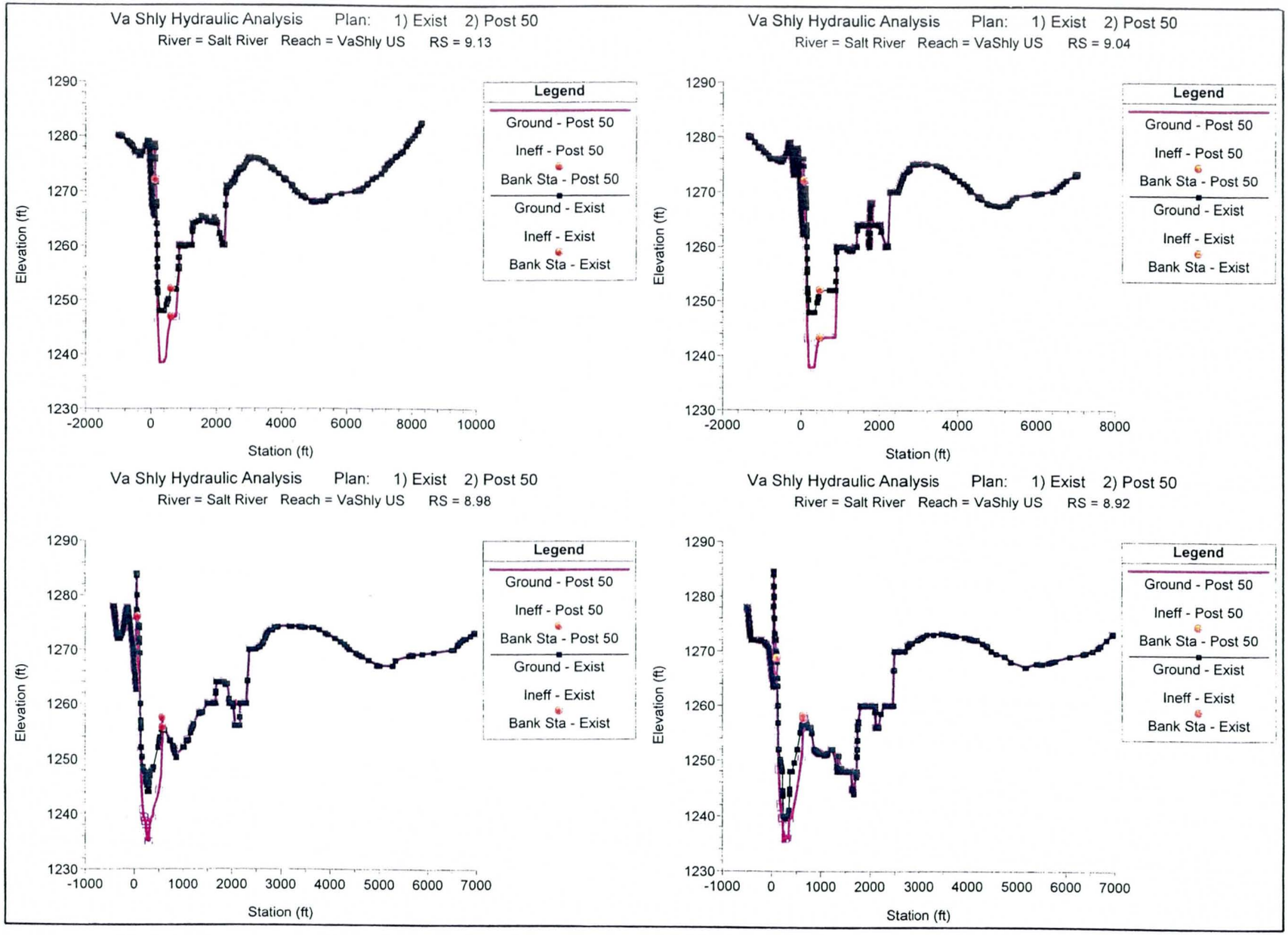

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.41
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.36
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.26
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.18
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

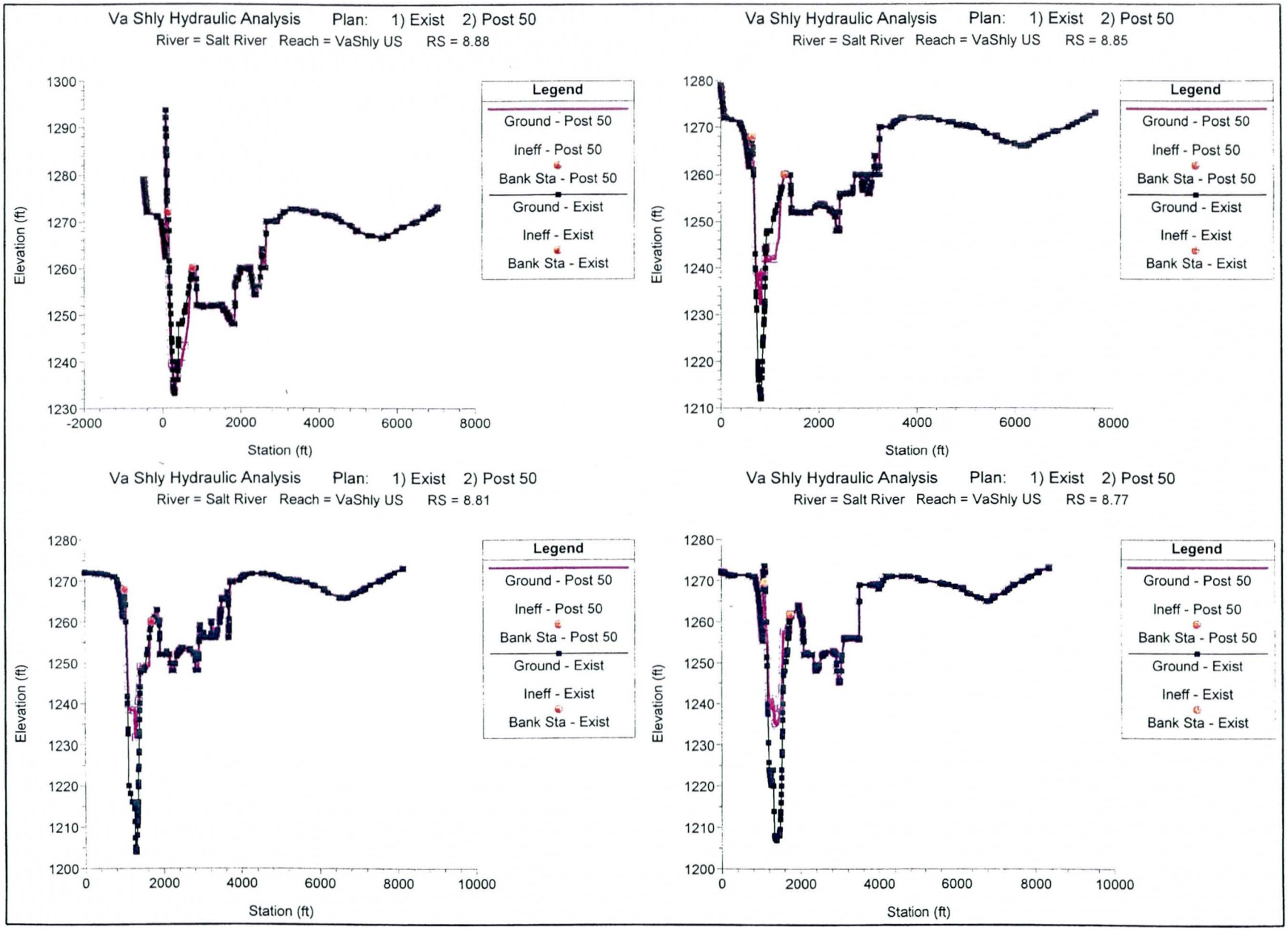

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 10.06
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.96
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.87
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.80
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

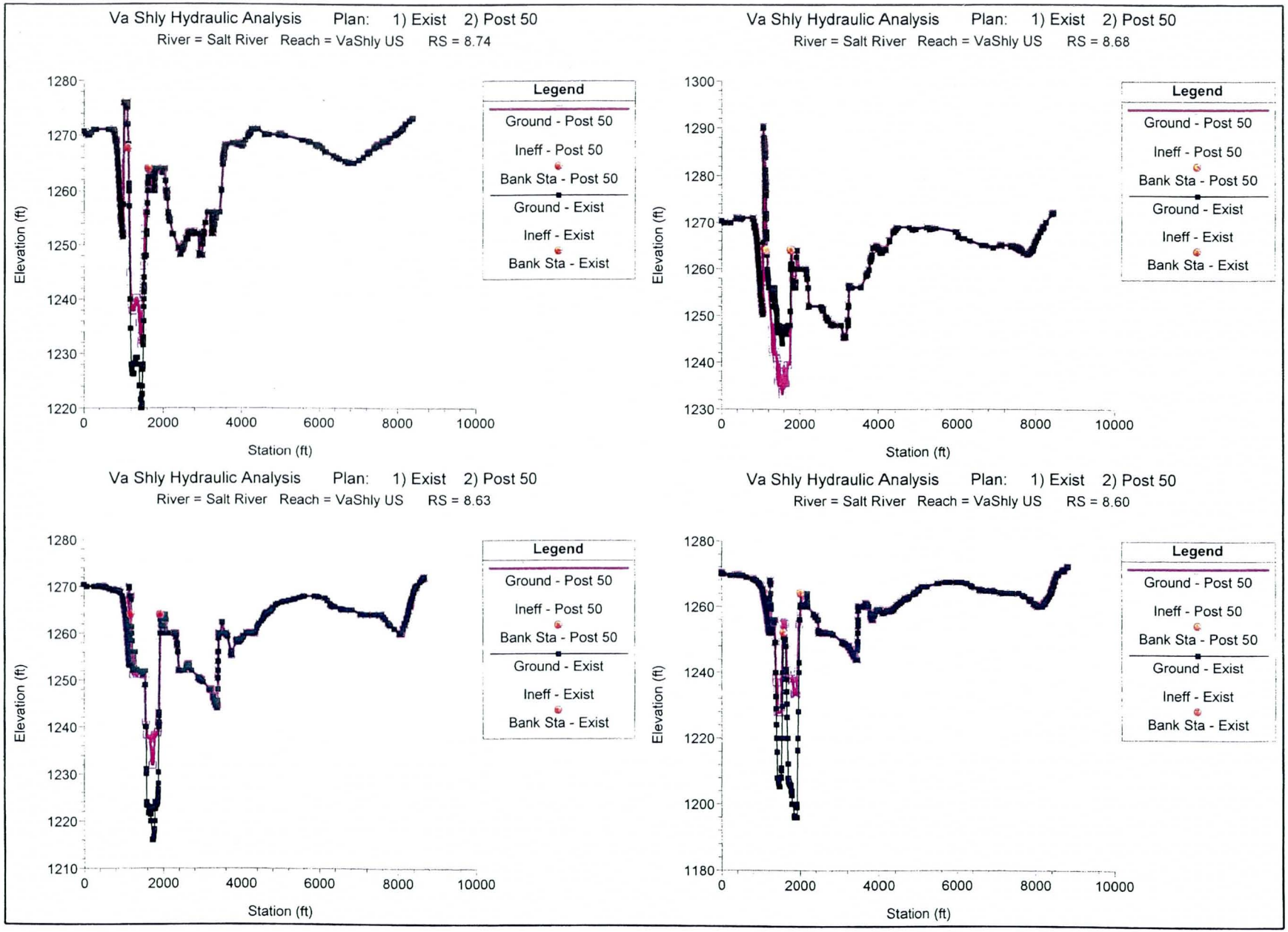

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.73
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.67
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.64
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.61
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Elevation (ft)
Station (ft)
1300
1290
1280
1270
1260
1250
1240
0
2000
4000
6000
8000
10000
12000

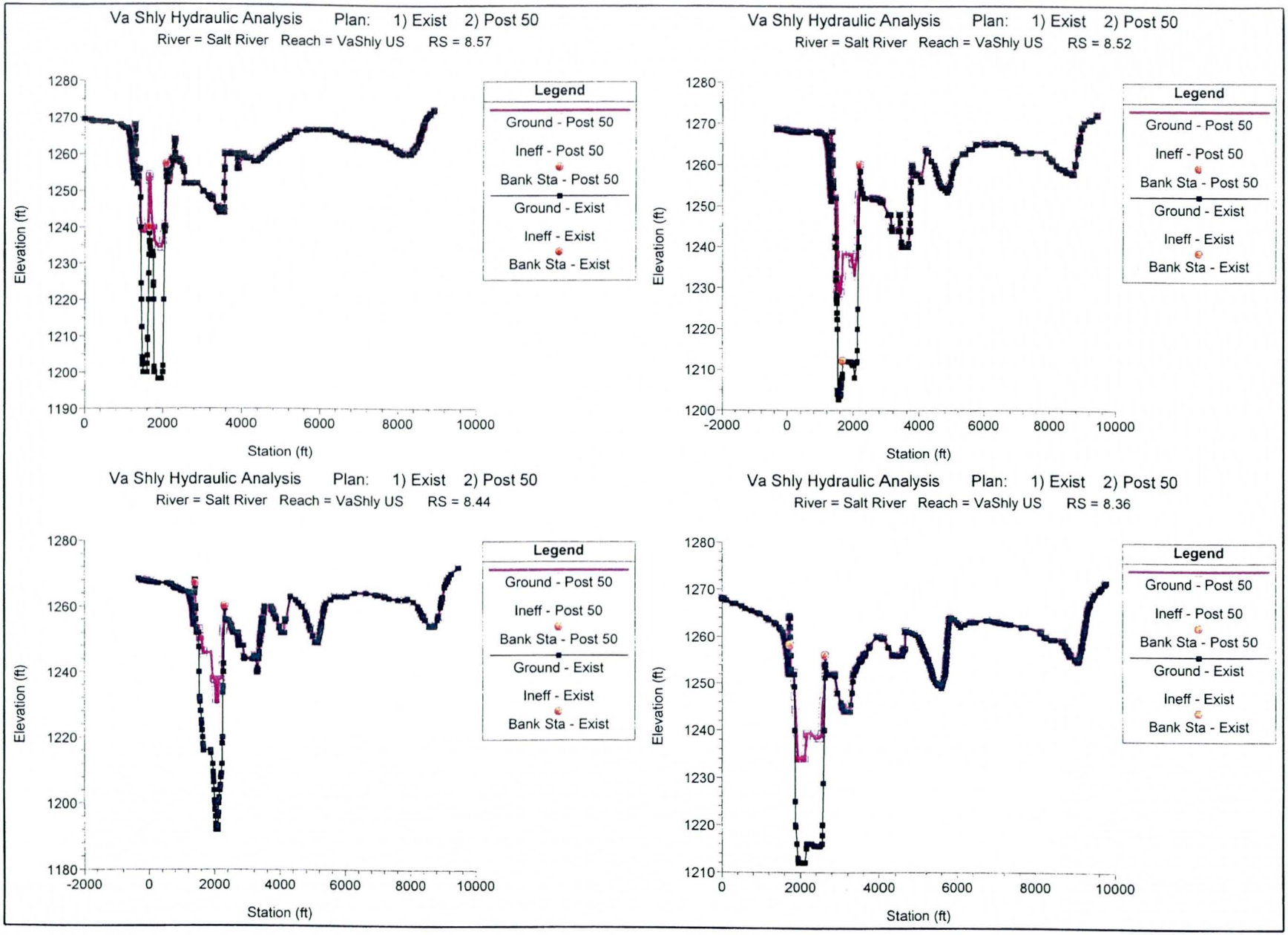

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.59
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.55
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.49
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.44
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

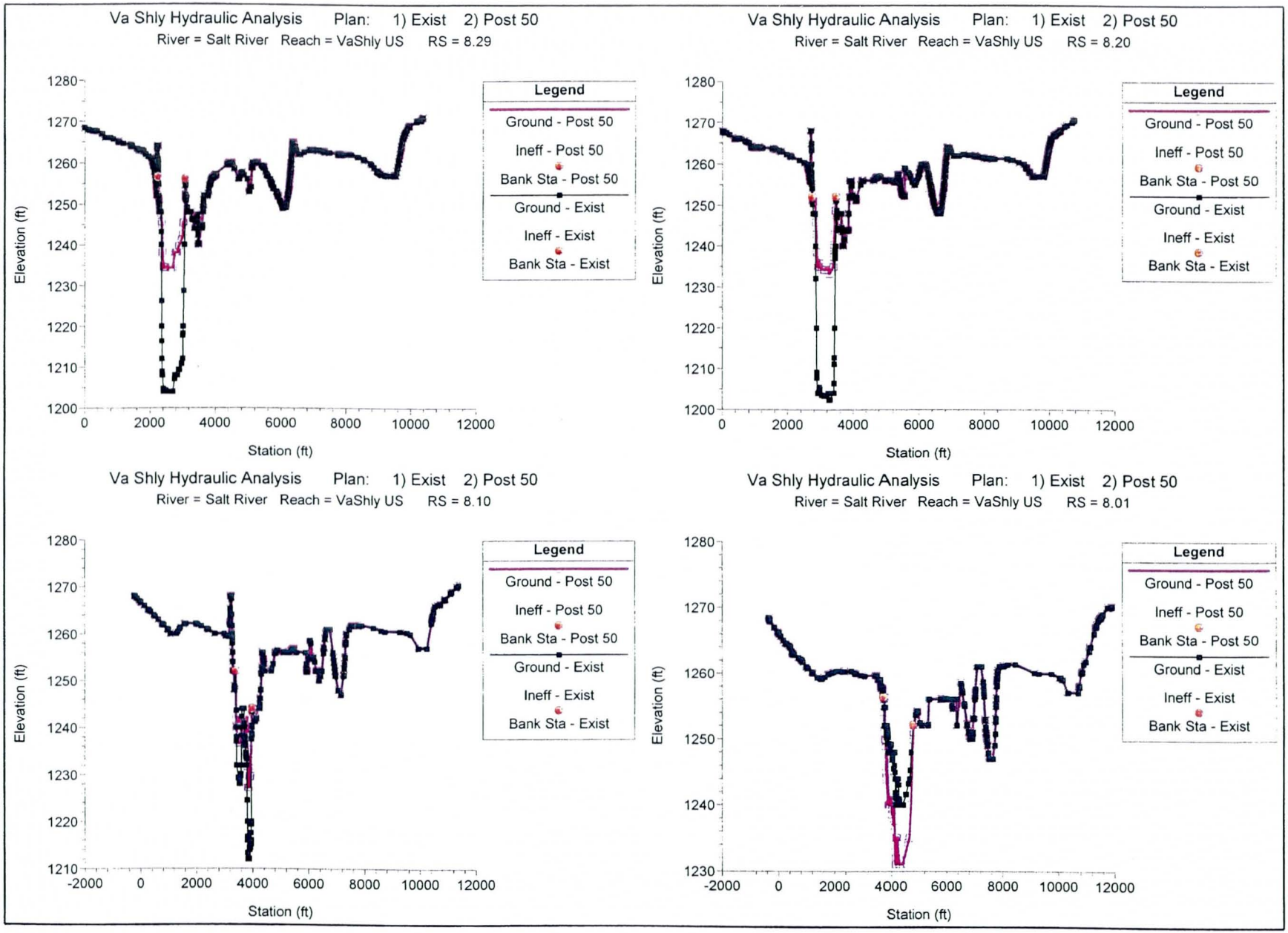

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.39
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.33
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.26
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.20

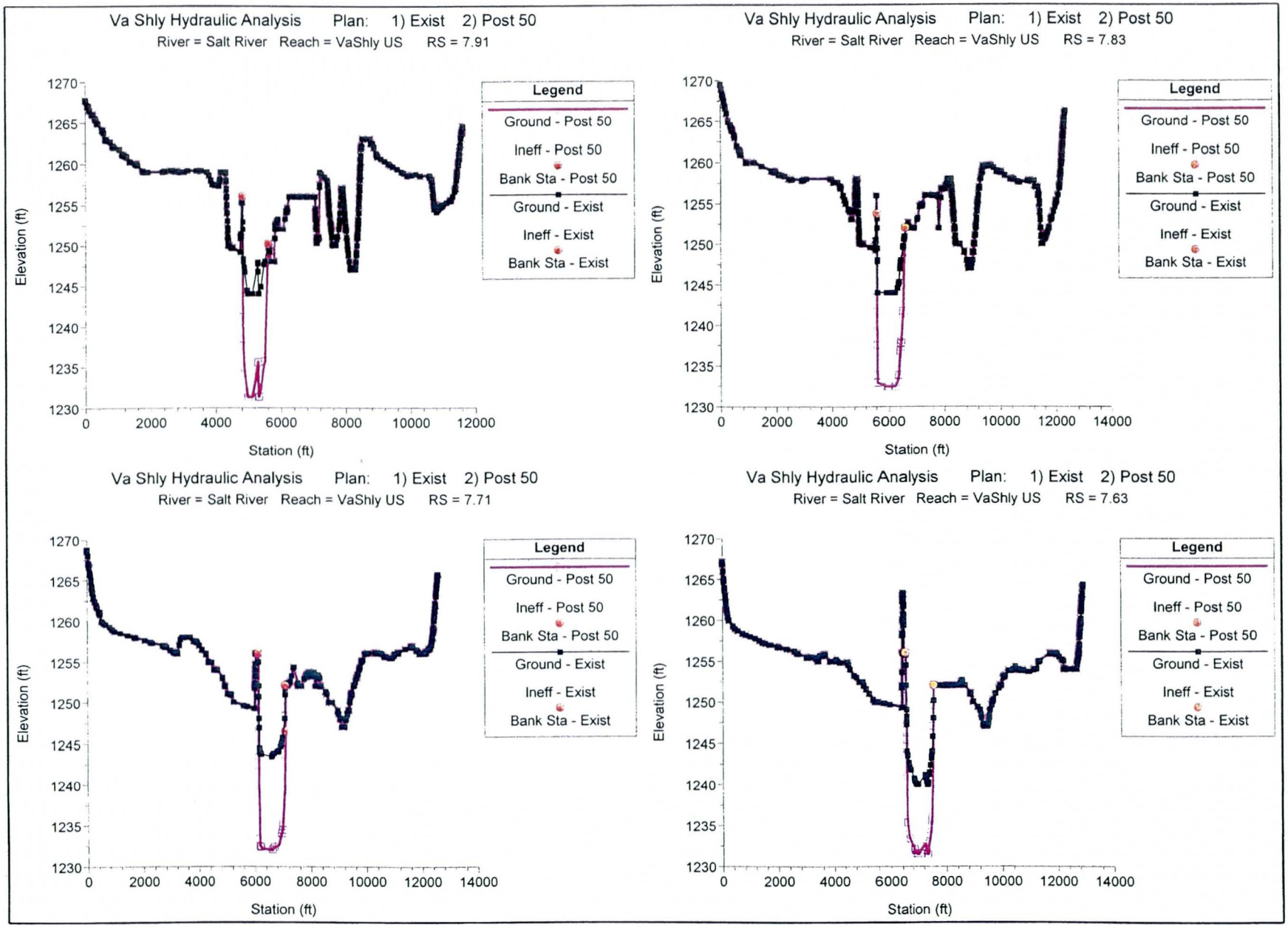

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.13
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 9.04
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.98
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.92
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

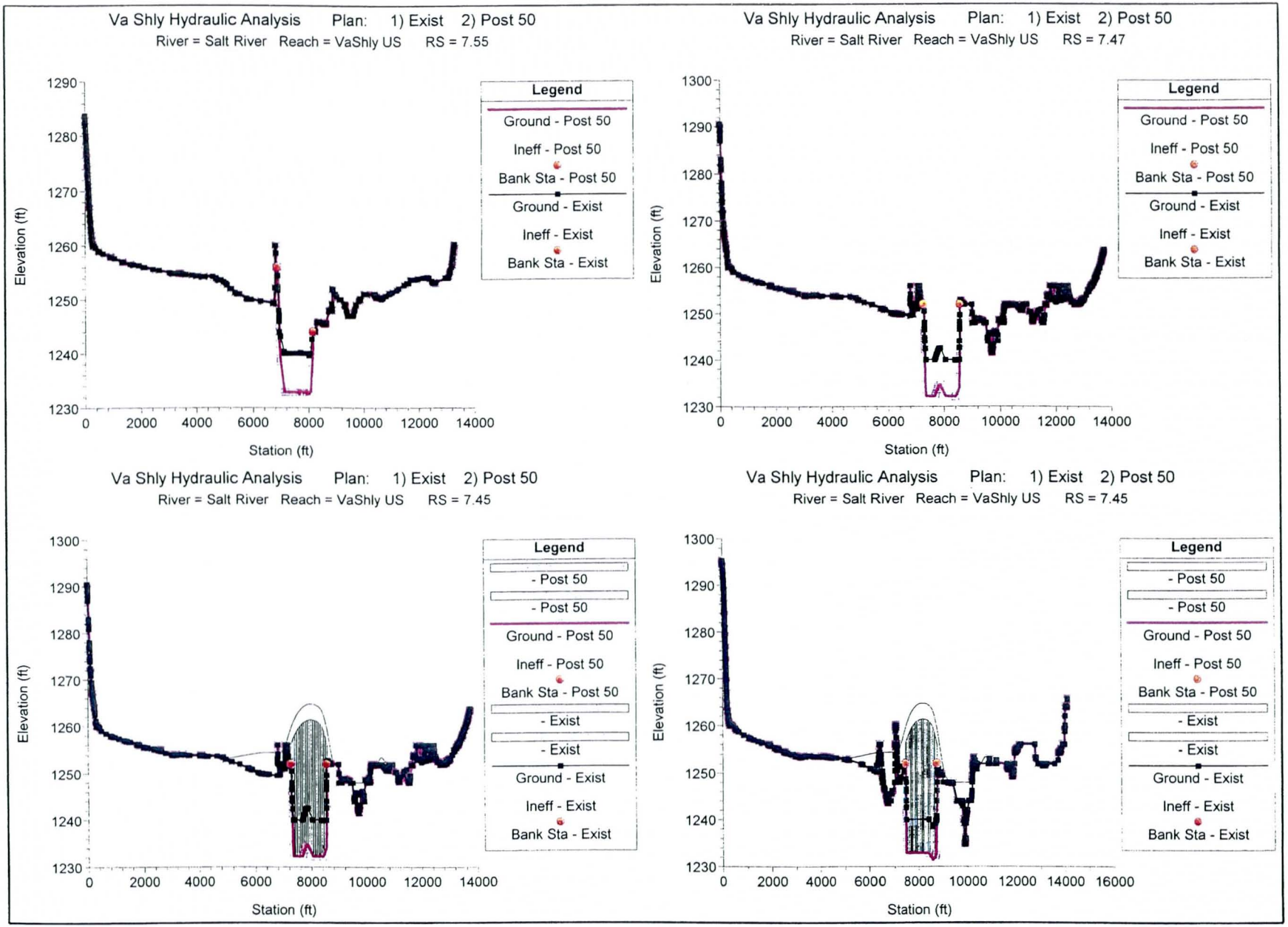

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.88
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.85
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.81
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.77
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

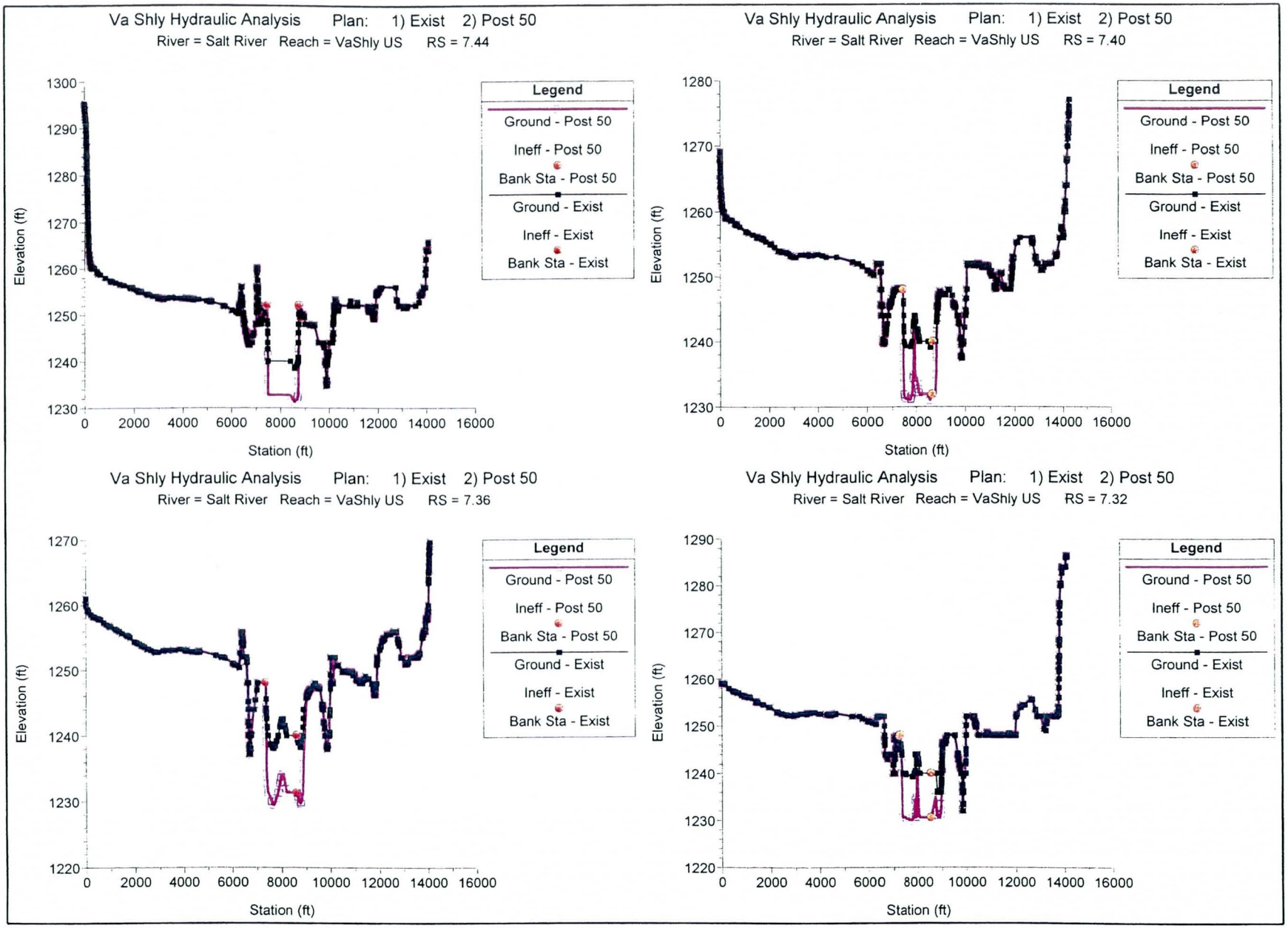

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.74
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.68
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.63
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.60
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

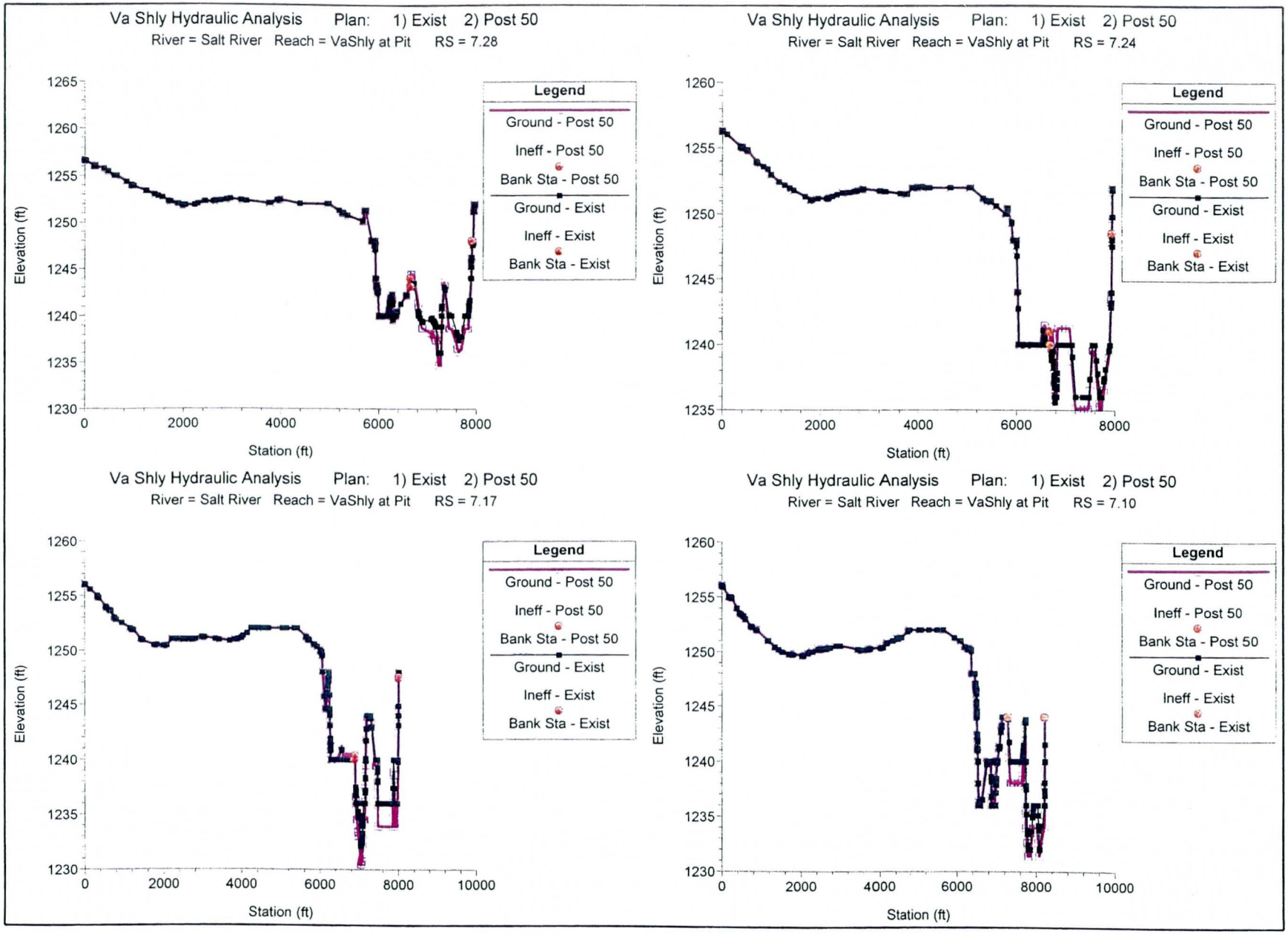

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.57
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.52
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.44
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.36
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

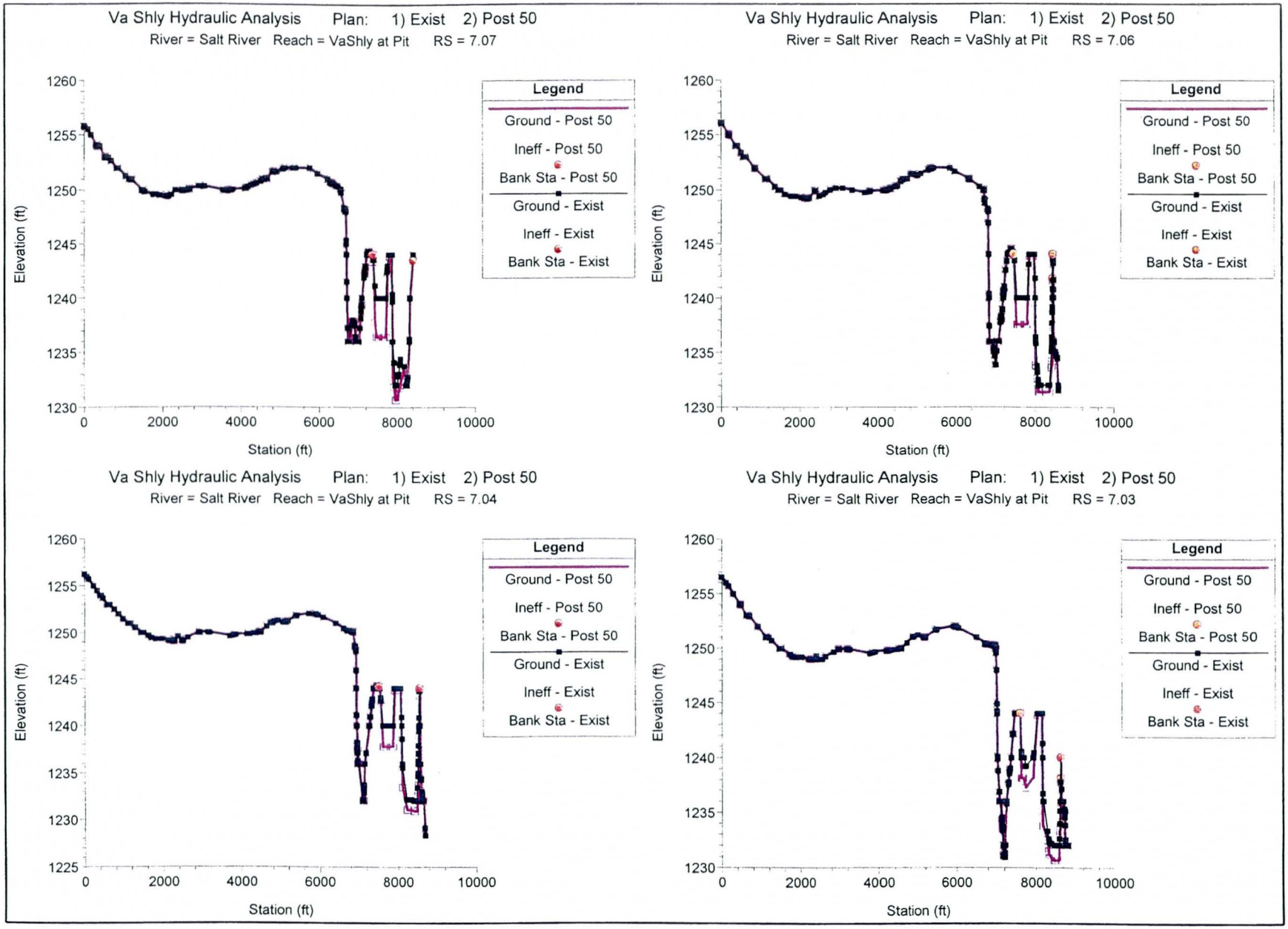

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.29
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.20
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.10
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 8.01
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

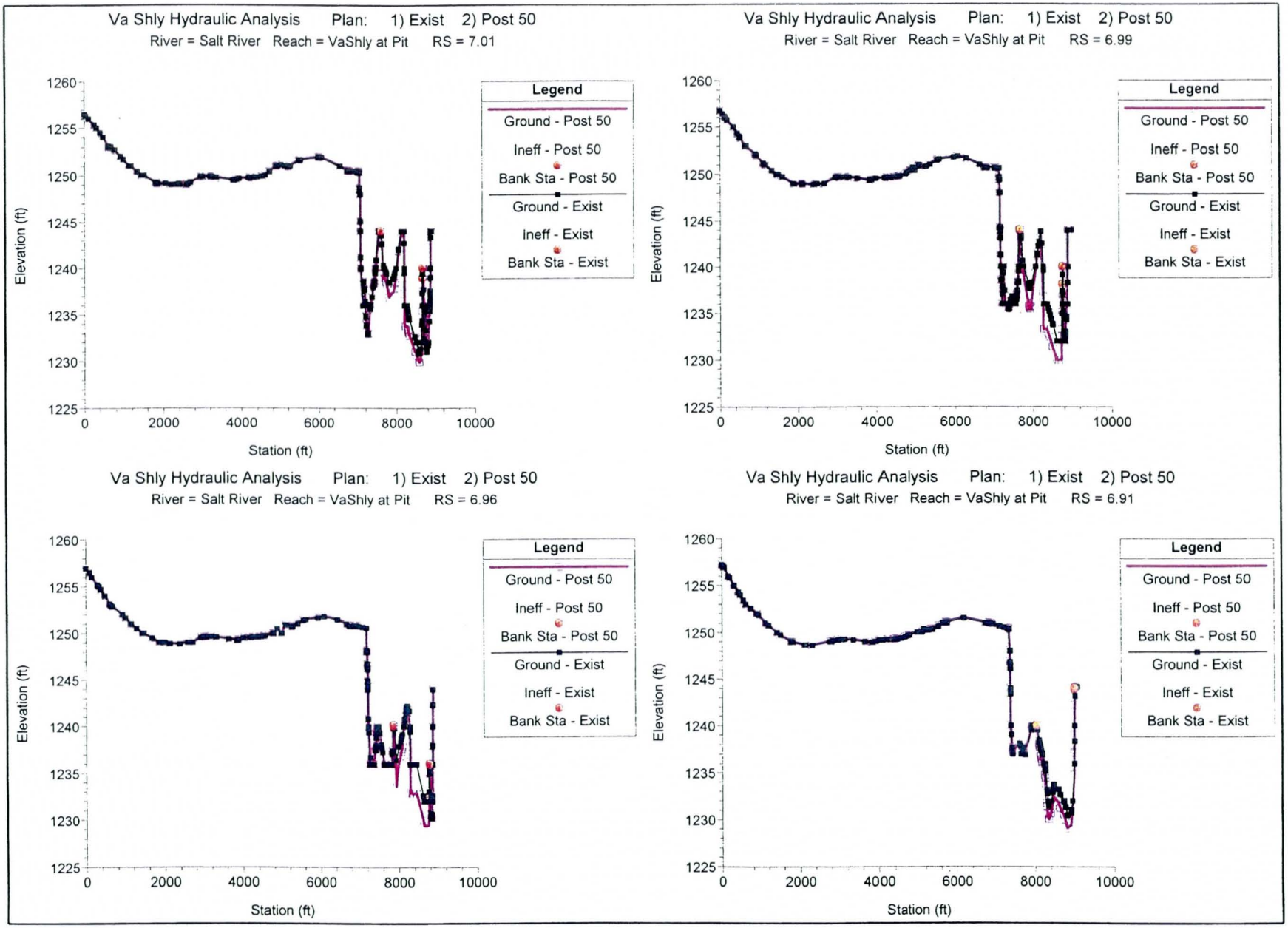

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.91
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.83
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.71
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.63
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Elevation (ft)
Station (ft)

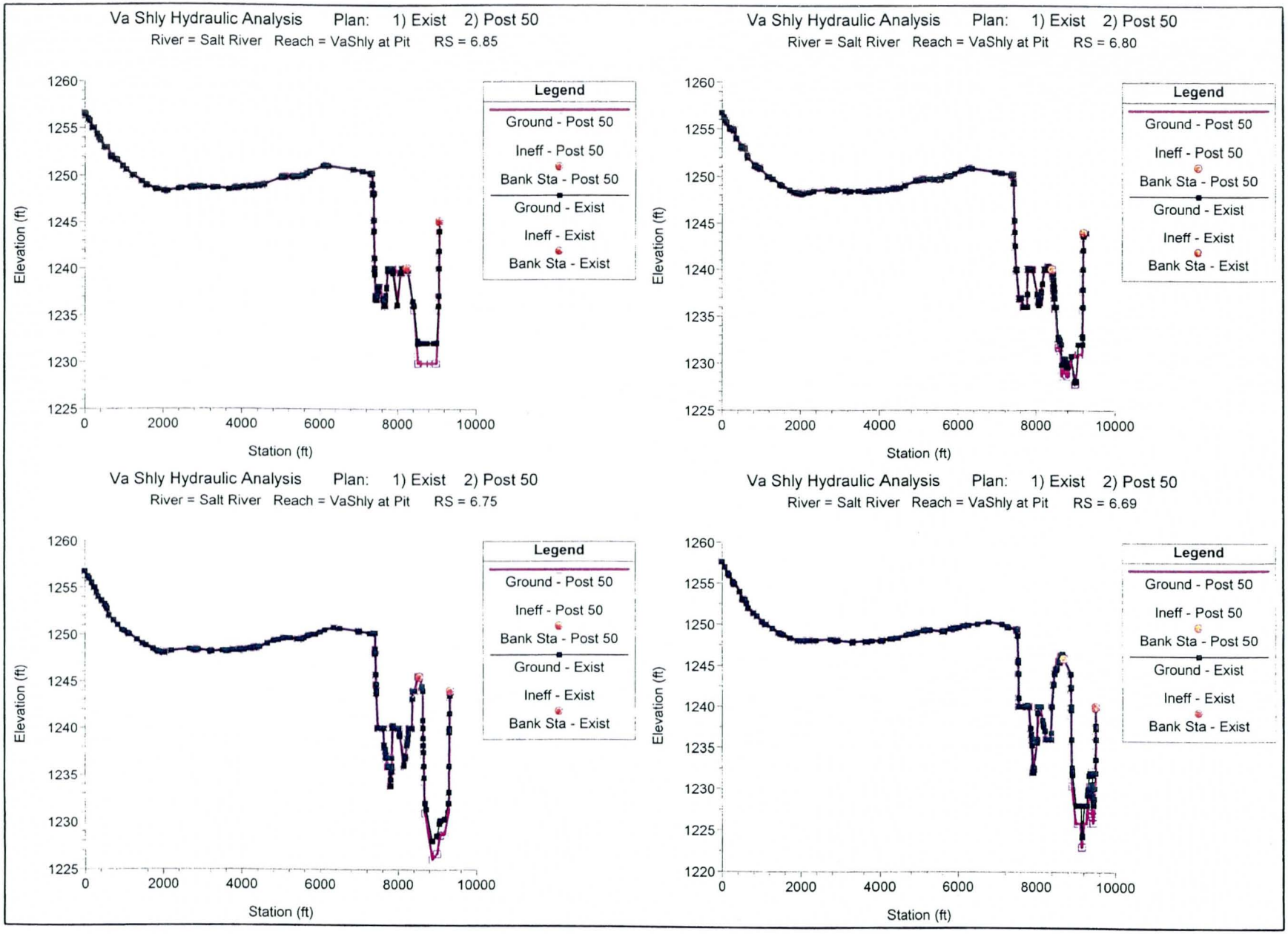

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.55
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.47
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.45
Elevation (ft)
Station (ft)
Legend
- Post 50
- Post 50
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
- Exist
- Exist
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.45
Elevation (ft)
Station (ft)
Legend
- Post 50
- Post 50
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
- Exist
- Exist
Ground - Exist
Ineff - Exist
Bank Sta - Exist

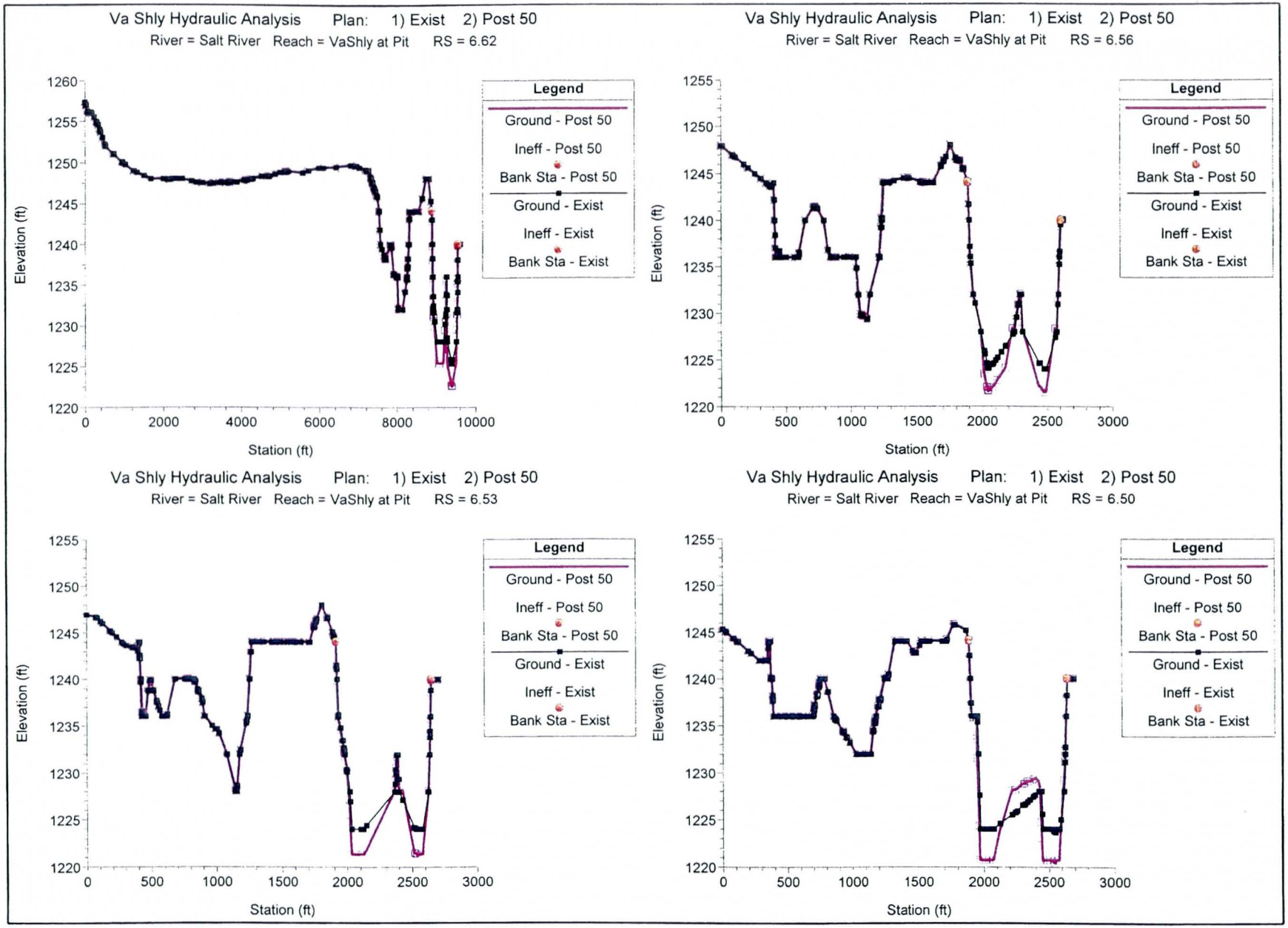

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.44
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.40
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.36
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly US RS = 7.32
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

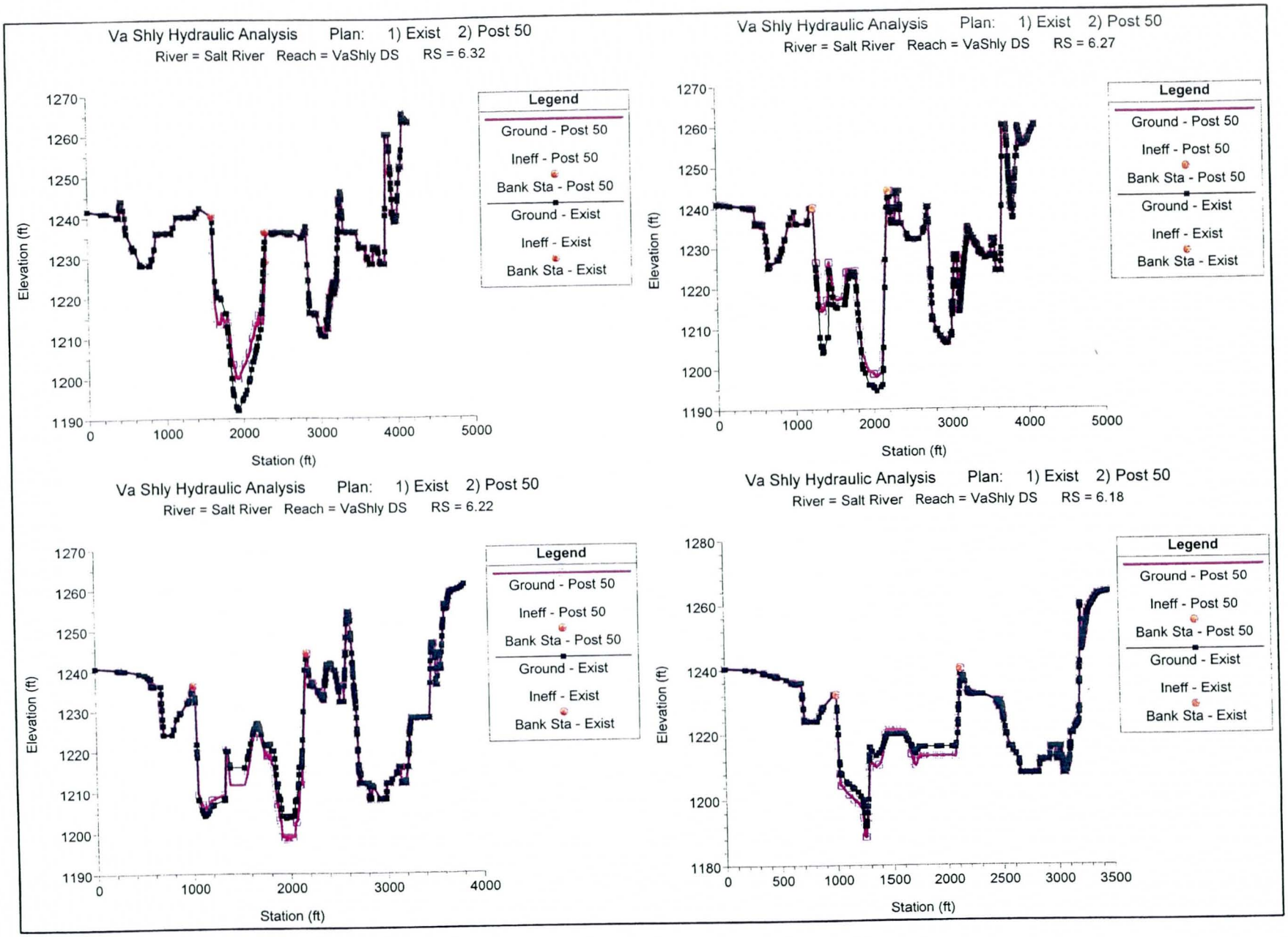

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 7.28
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 7.24
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 7.17
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 7.10
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

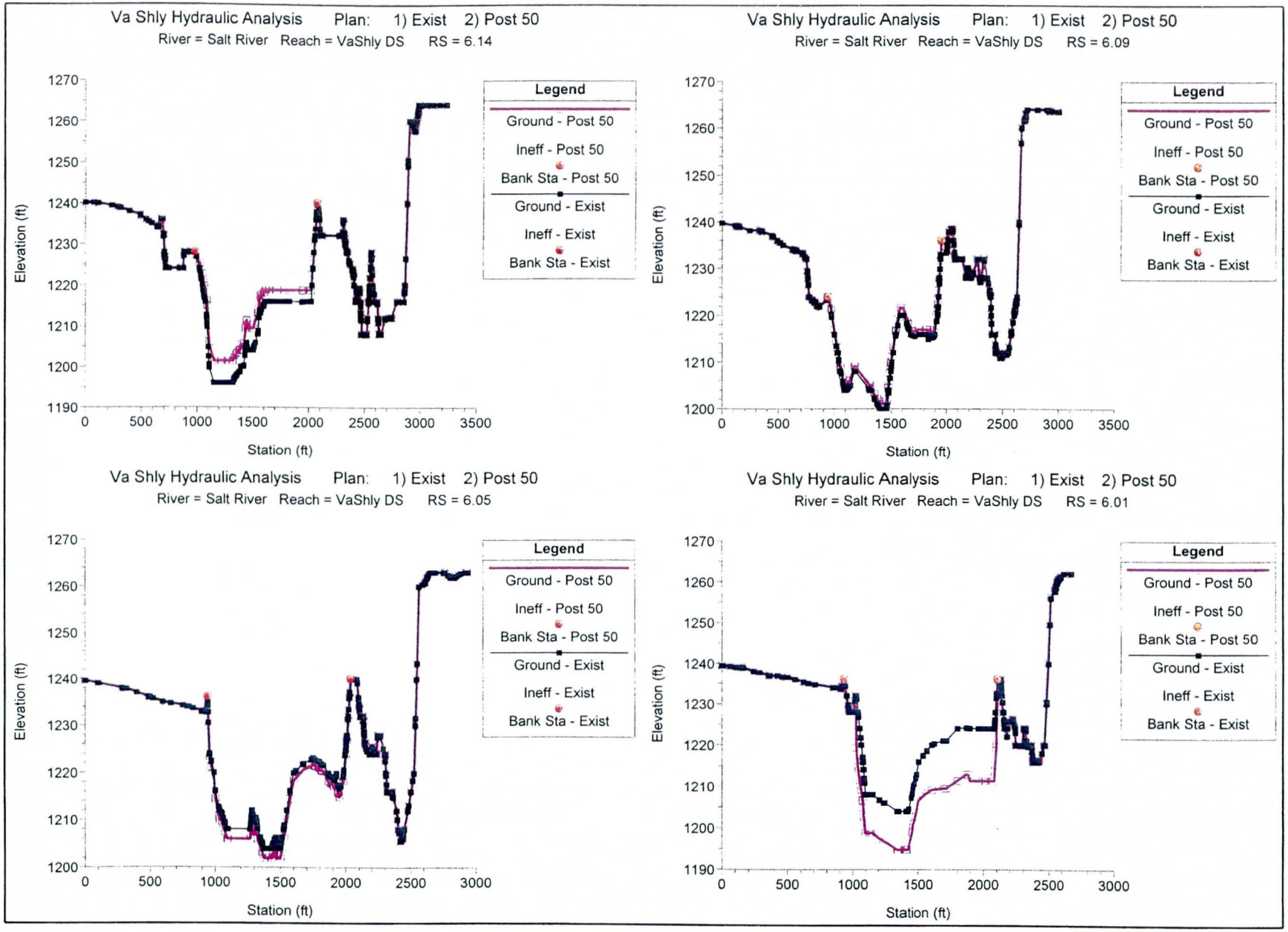

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 7.07
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 7.06
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 7.04
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 7.03
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

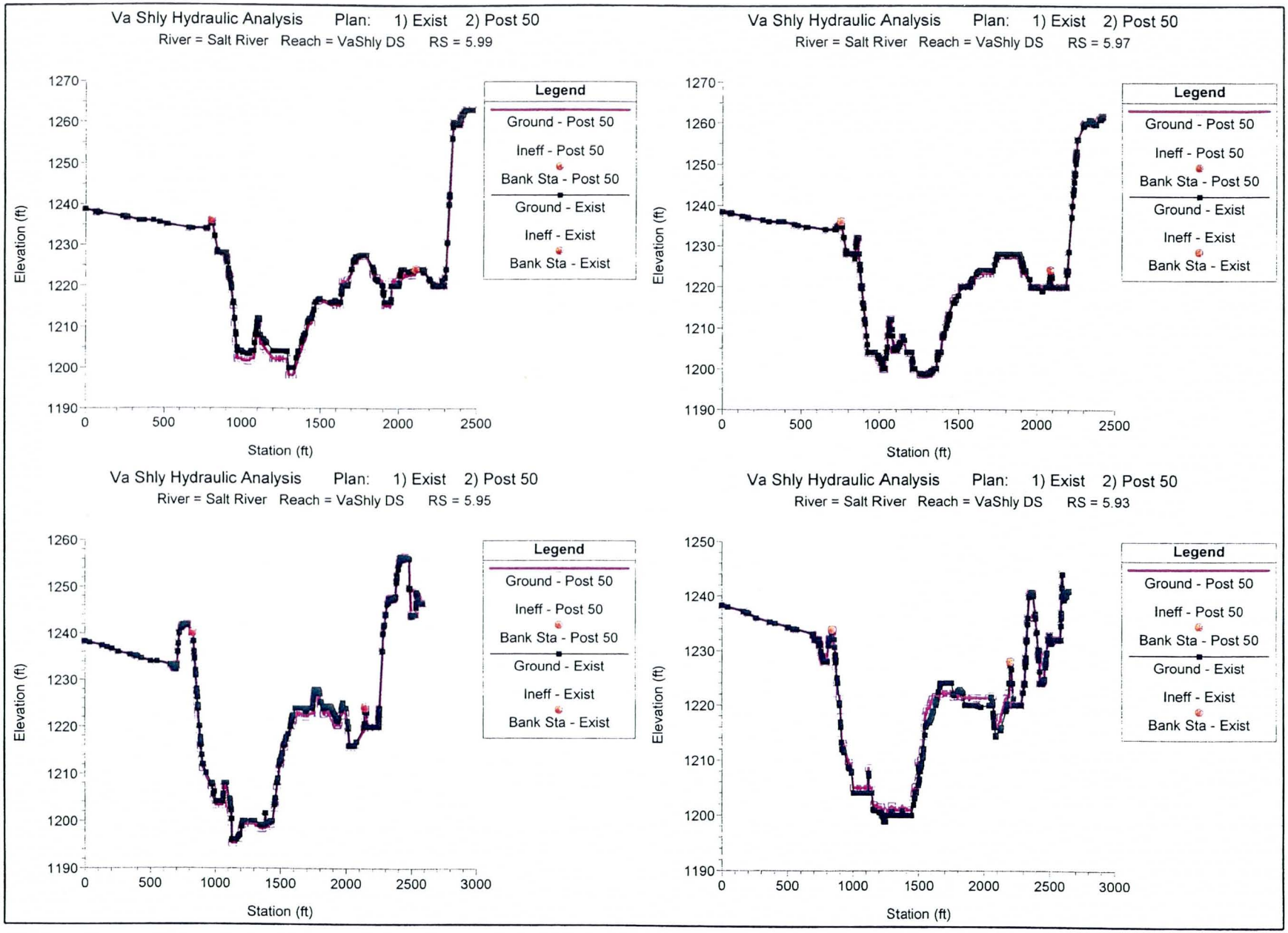

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 7.01
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.99
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.96
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.91
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Elevation (ft)
Station (ft)
1260
1255
1250
1245
1240
1235
1230
1225
0
2000
4000
6000
8000
10000

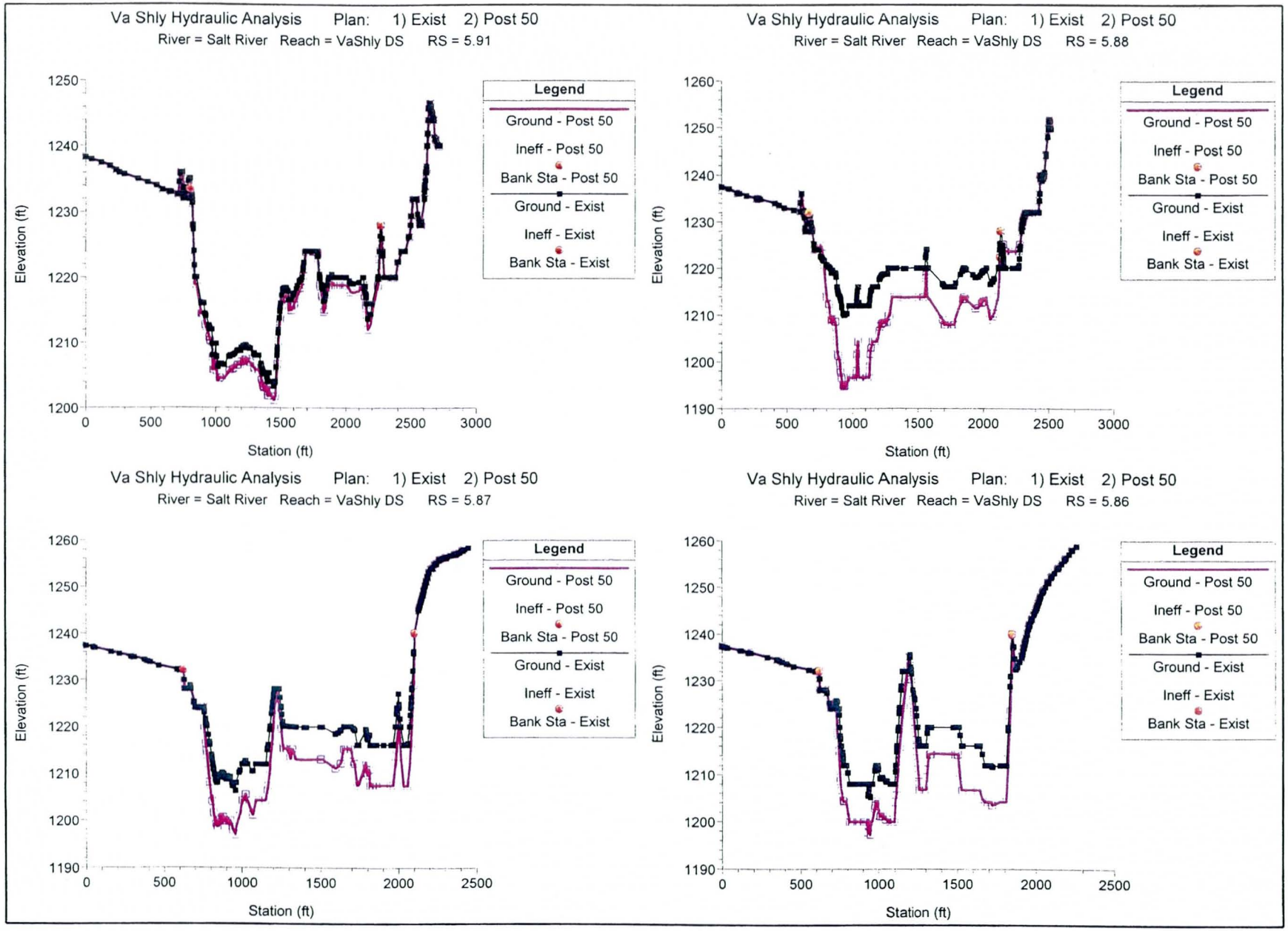

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.85
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.80
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.75
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.69
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

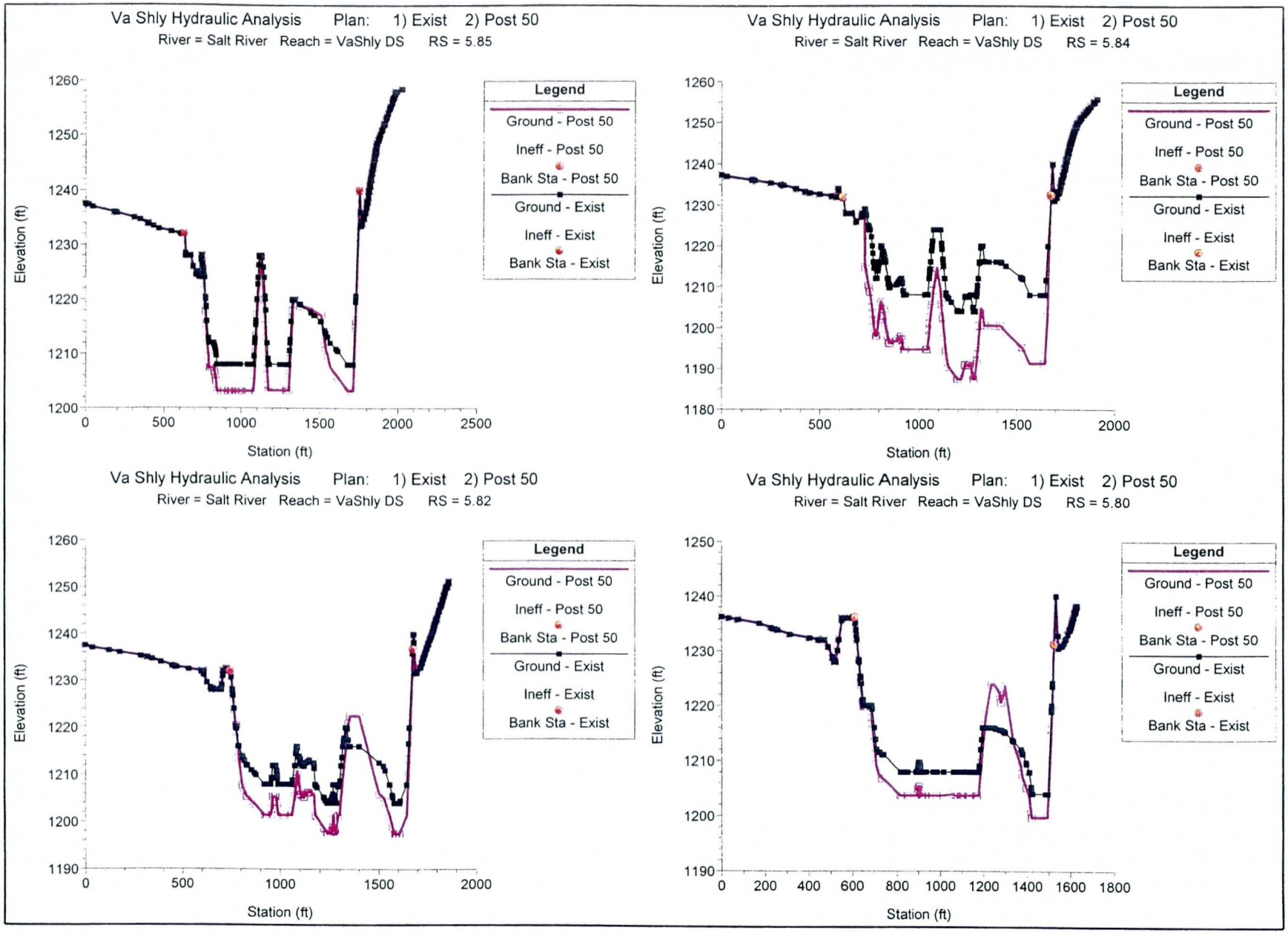

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.62
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.56
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.53
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly at Pit RS = 6.50
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

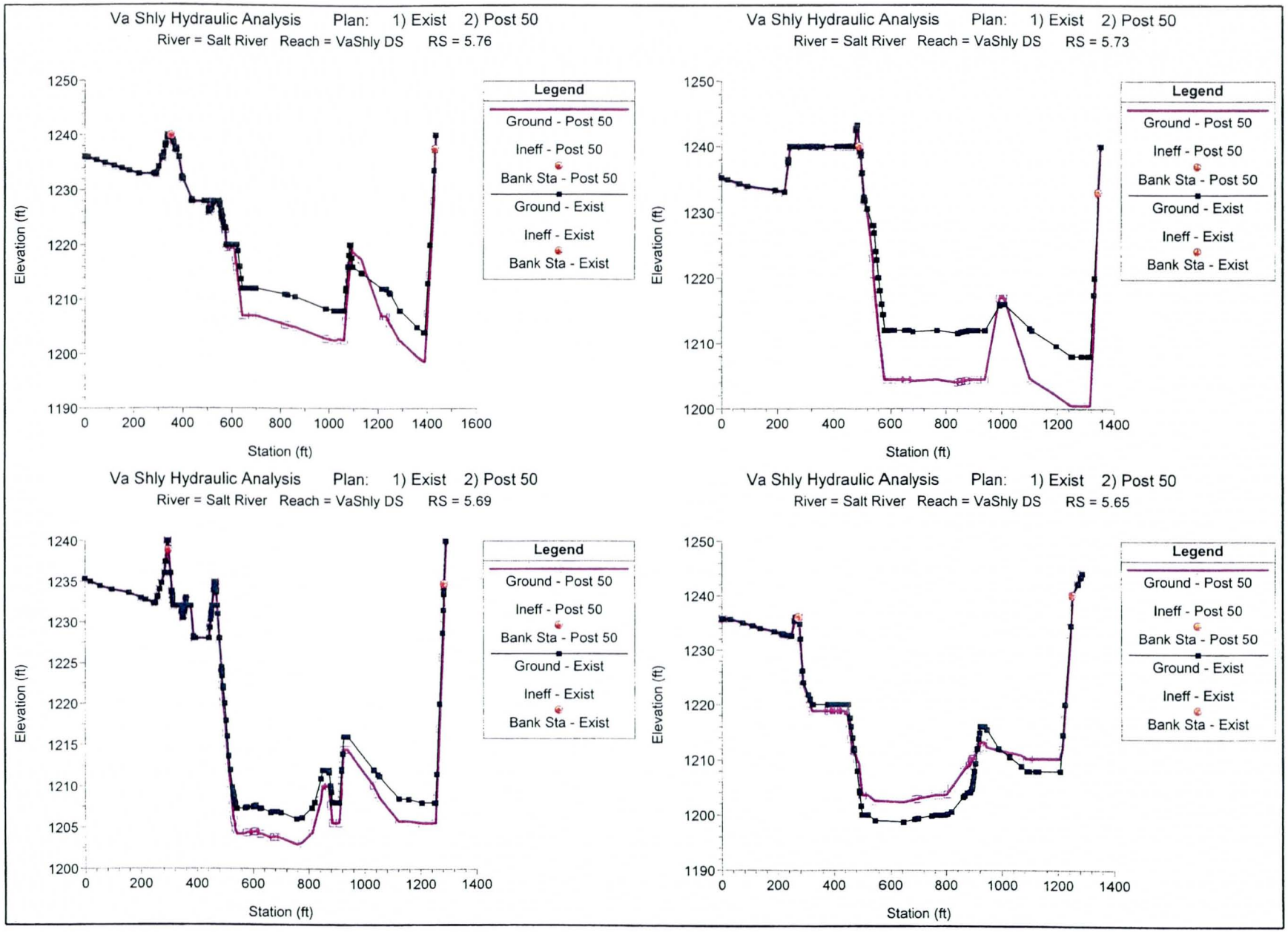

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 6.32
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 6.27
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 6.22
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 6.18
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

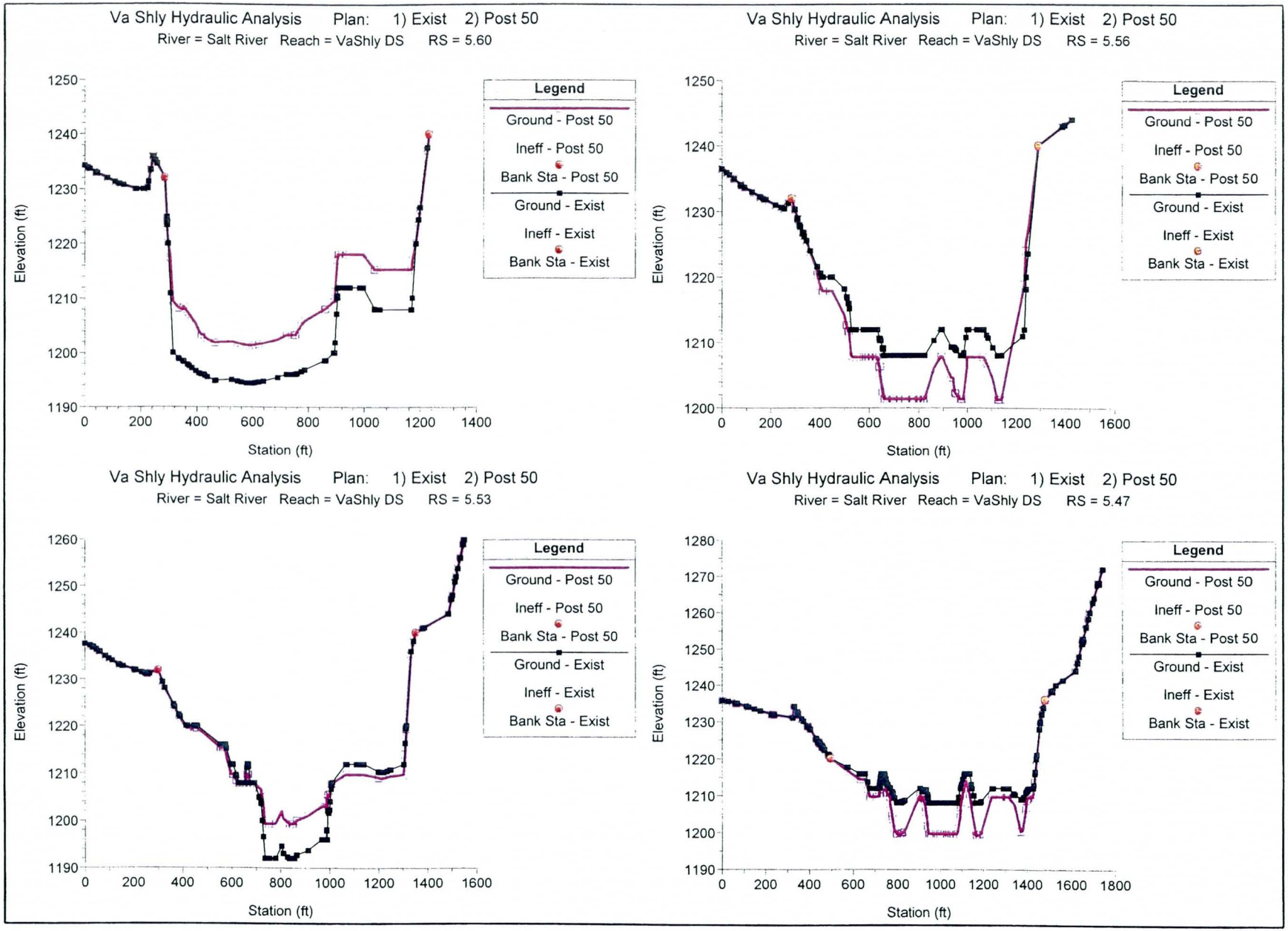

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 6.14
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 6.09
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 6.05
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 6.01
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

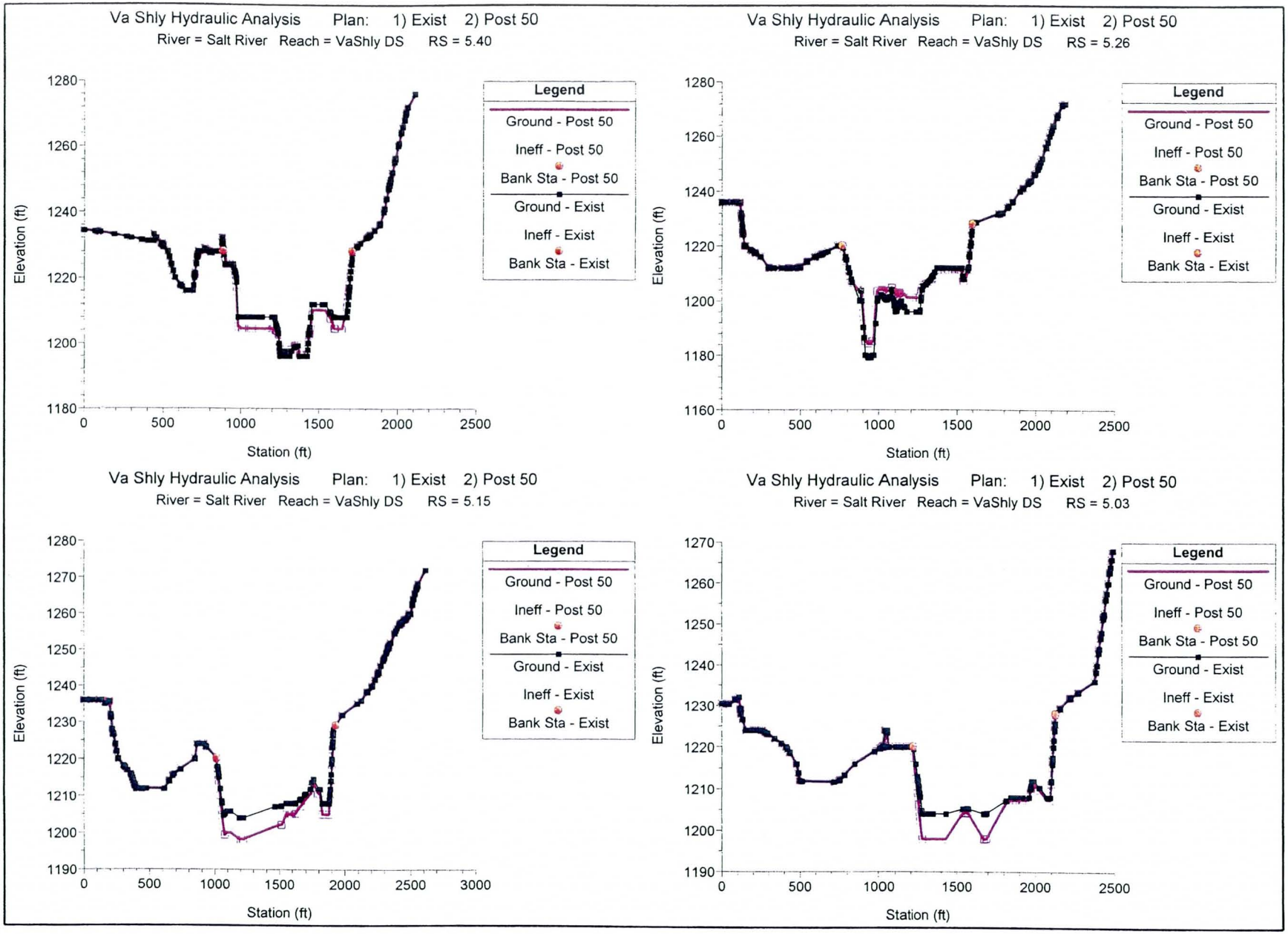

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.99
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.97
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.95
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.93
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

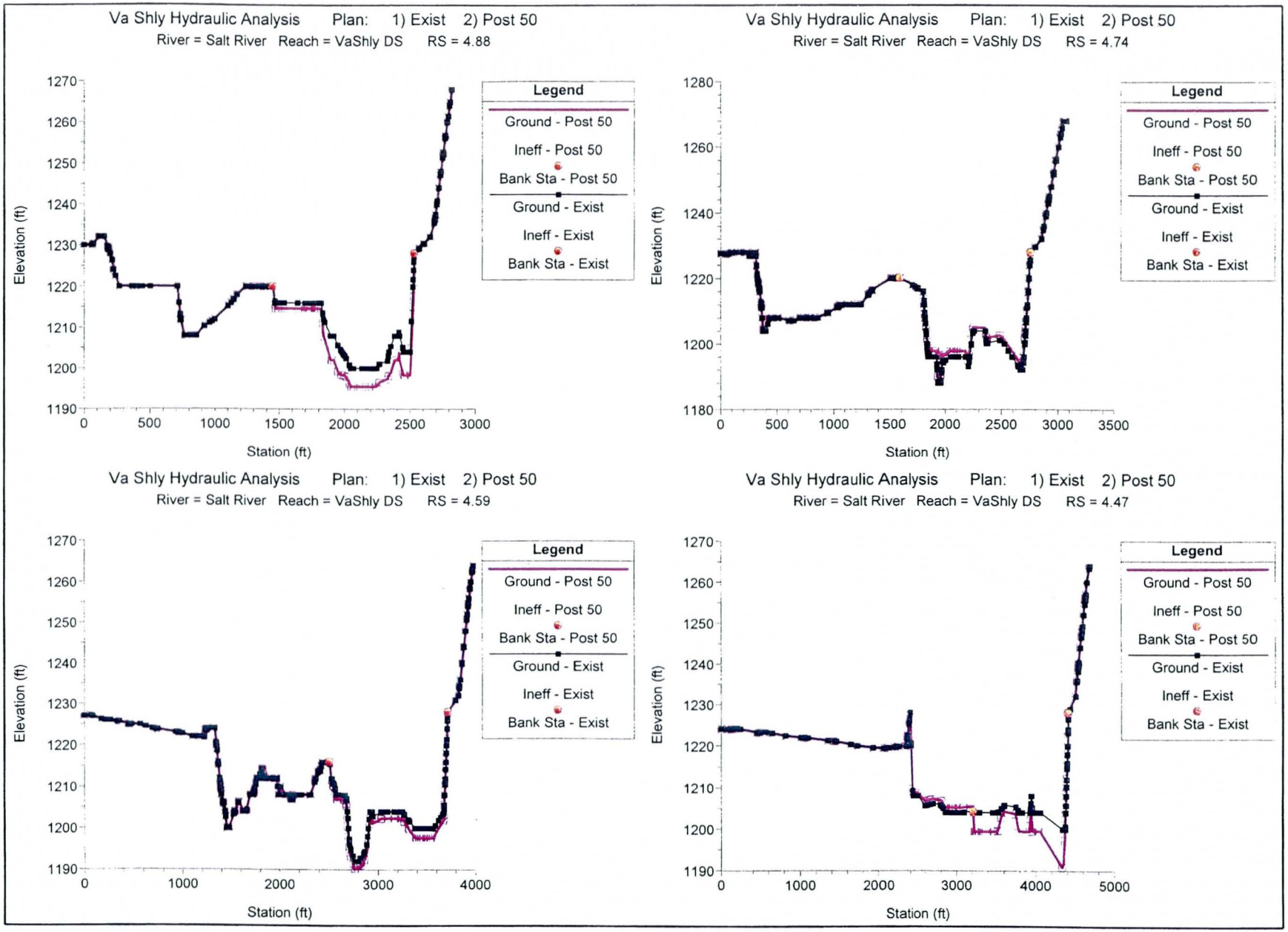

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.91
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.88
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.87
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.86
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

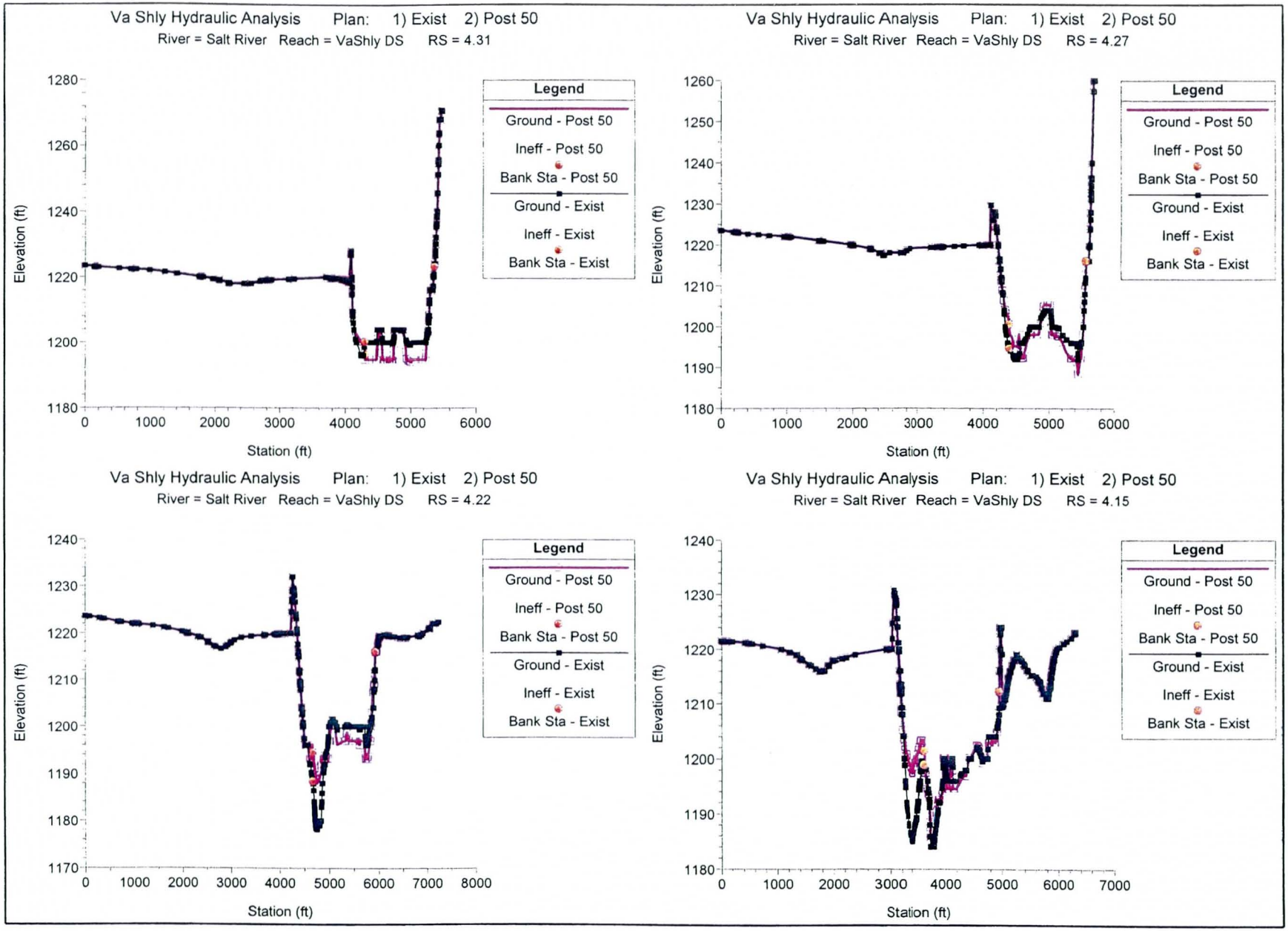

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.85
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.84
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.82
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.80
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

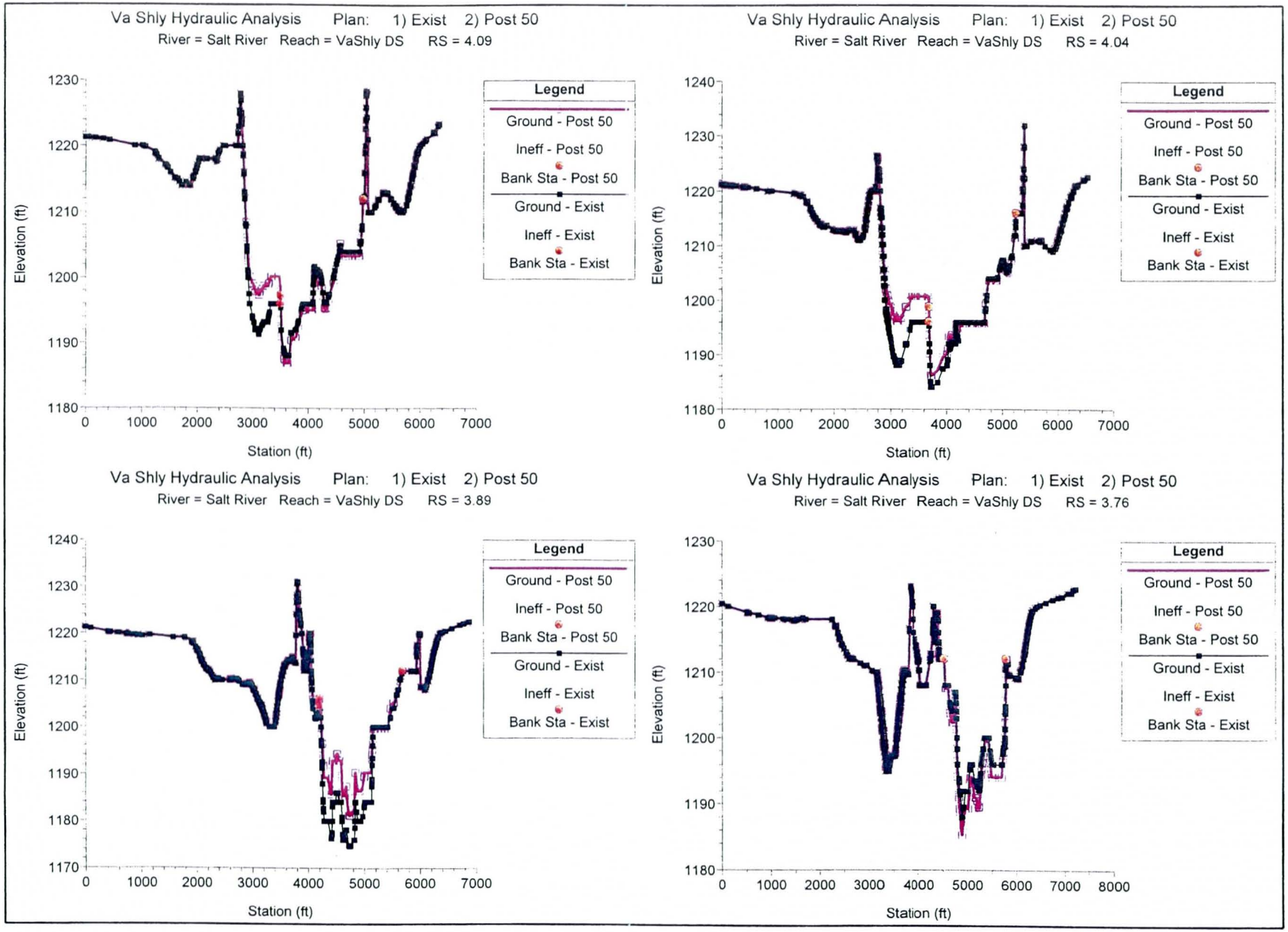

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.76
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.73
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.69
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.65
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

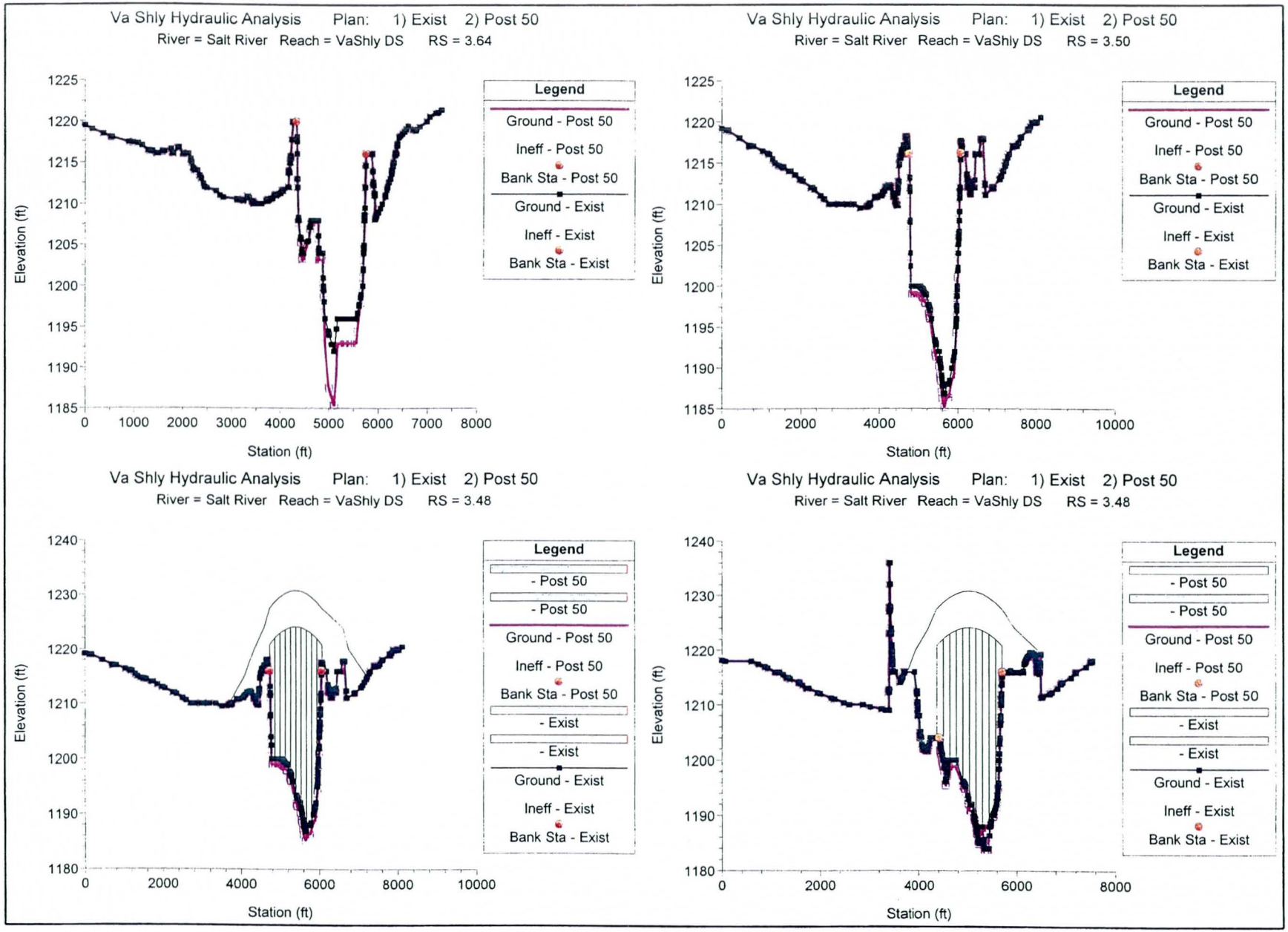

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.60
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.56
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.53
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.47
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

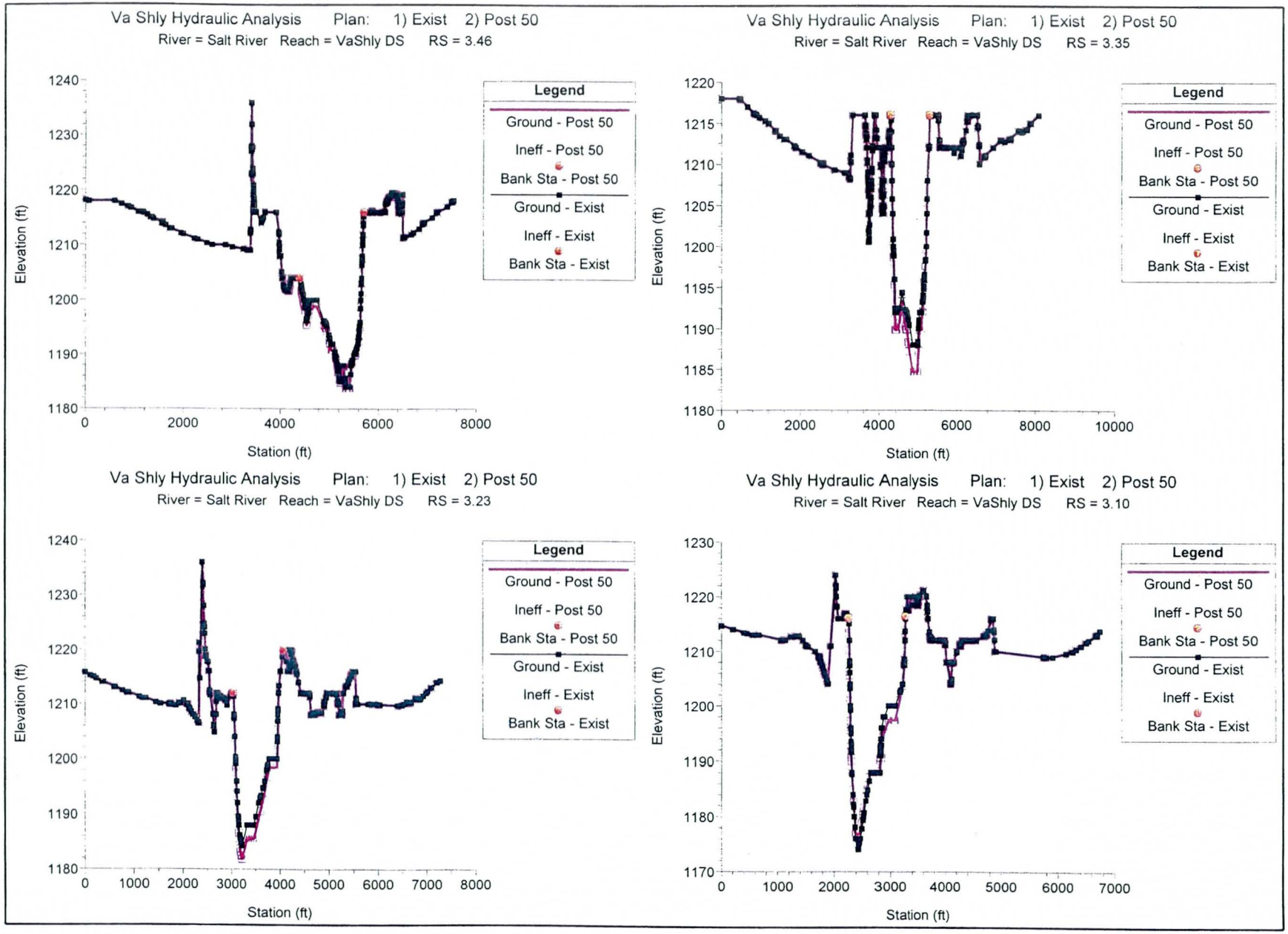

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.40
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.26
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.15
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 5.03
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

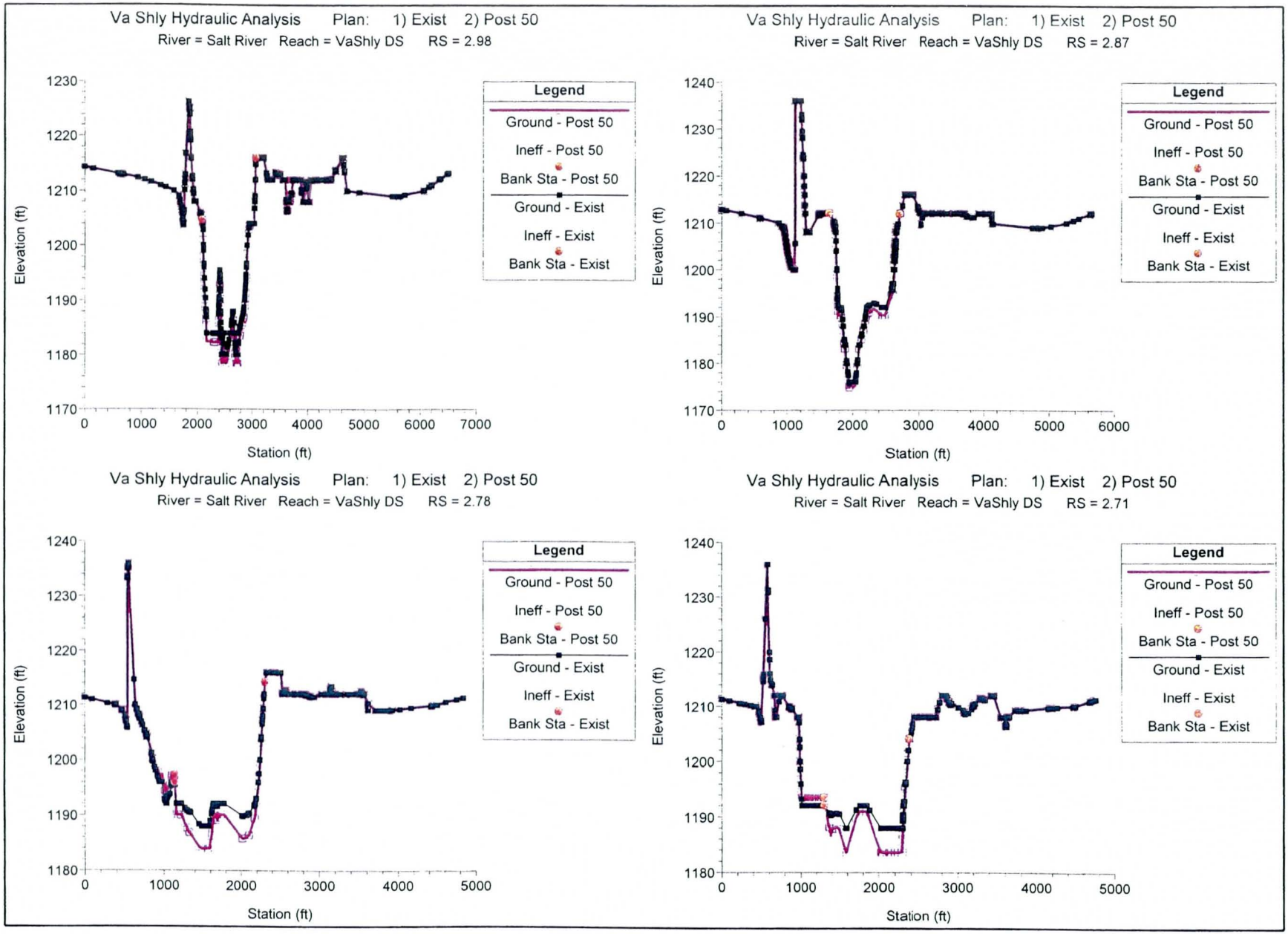

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.88
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.74
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.59
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.47
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

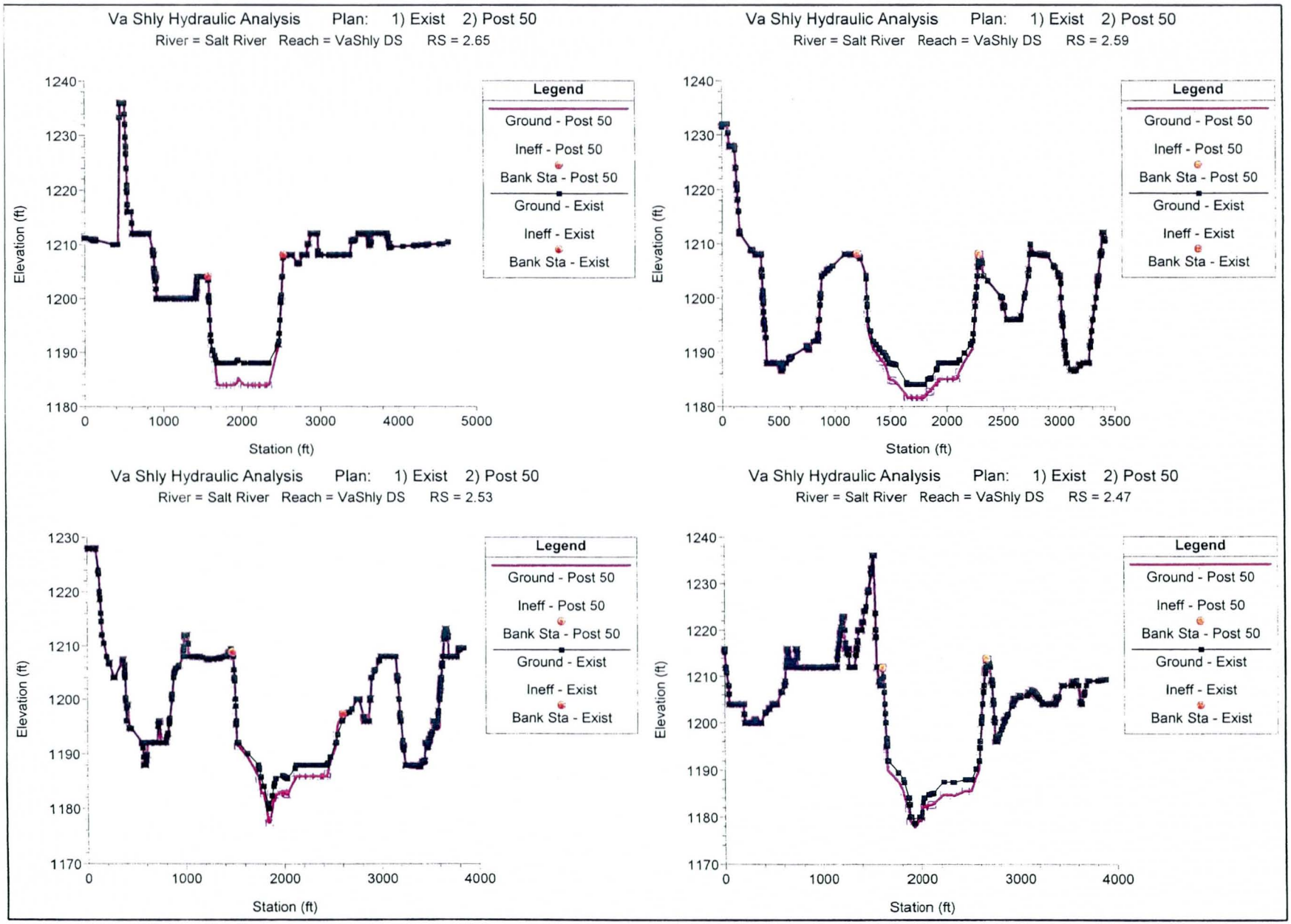

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.31
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.27
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.22
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.15
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

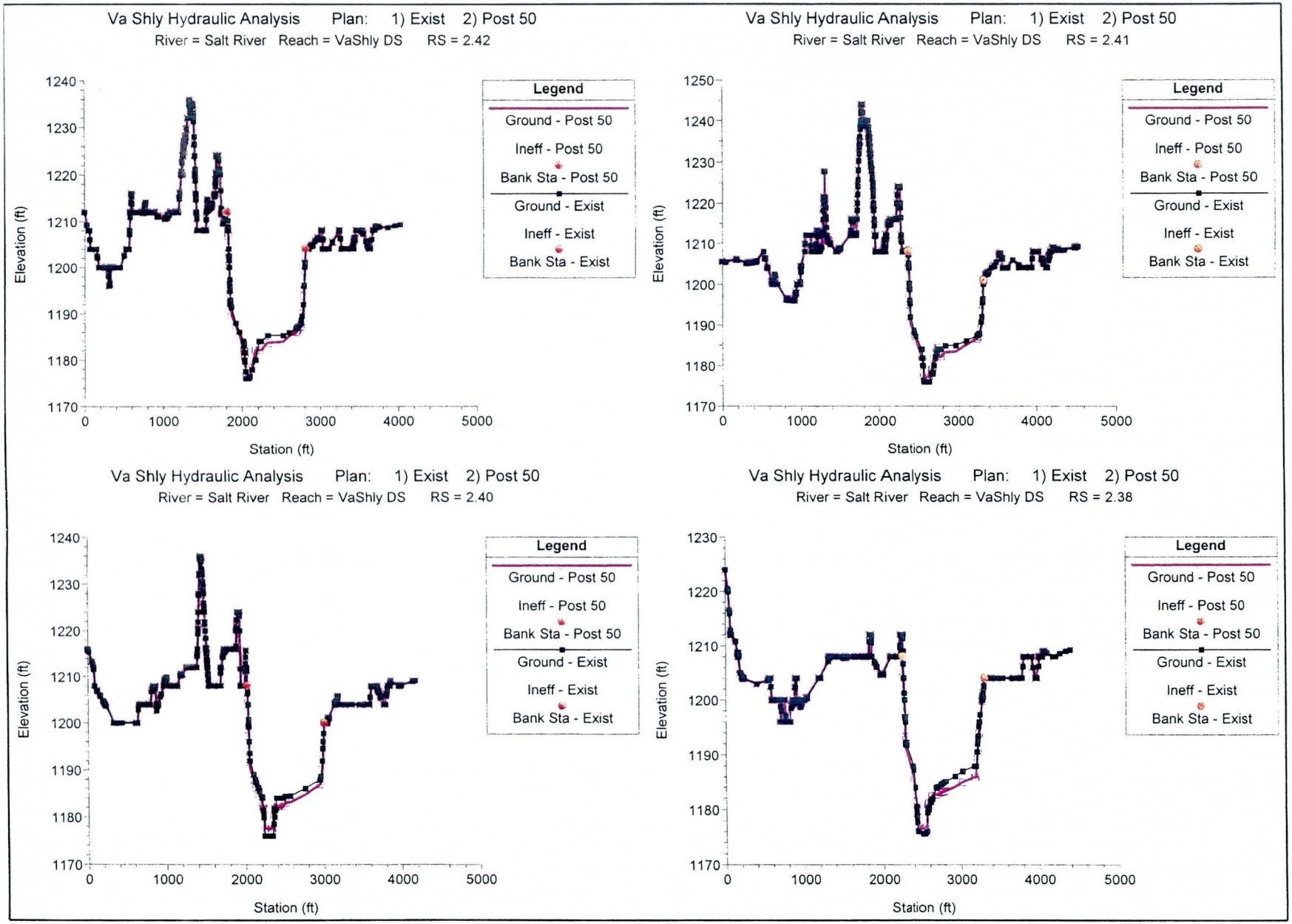

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.09
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 4.04
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.89
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.76
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

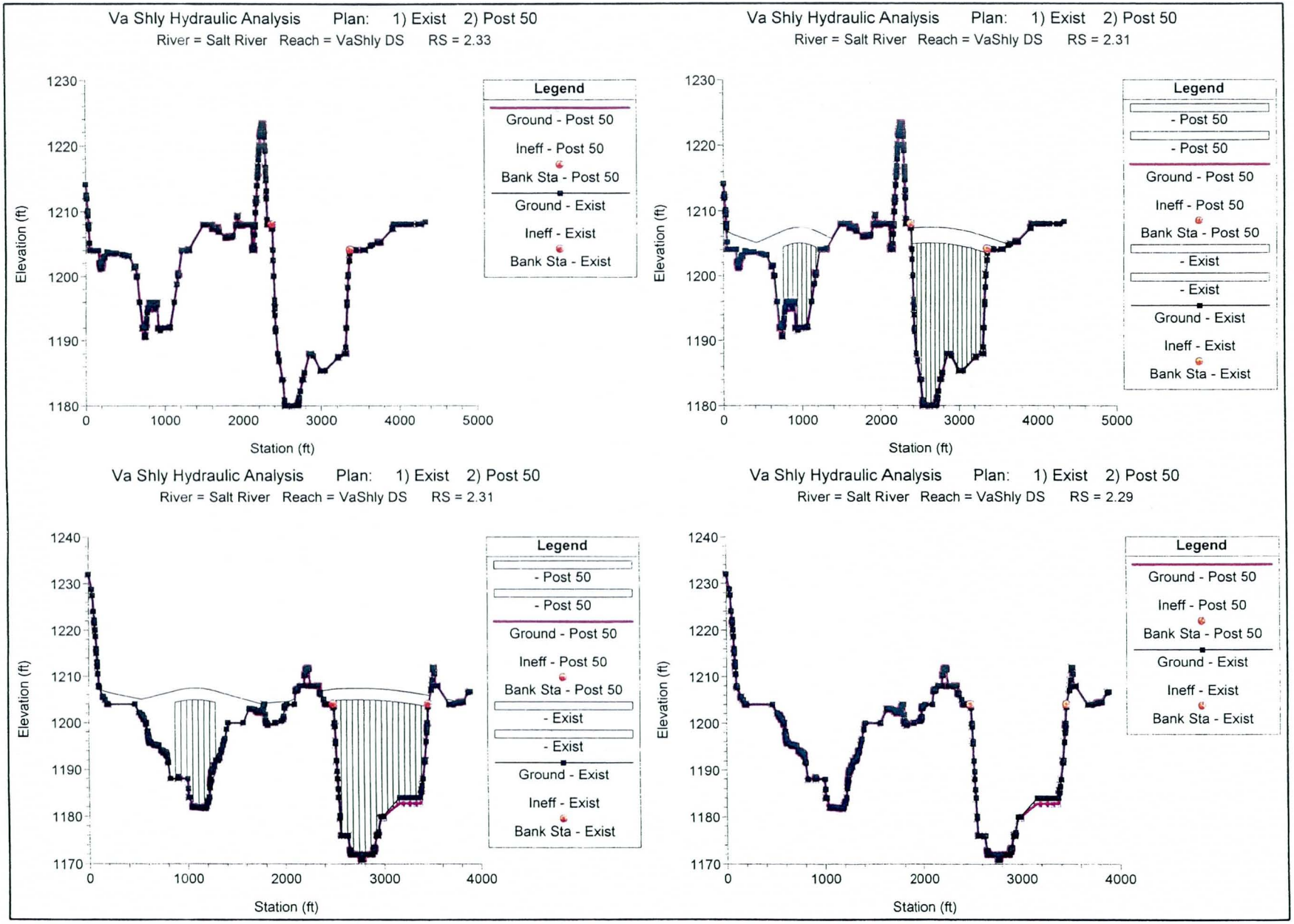

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.64
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.50
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.48
Elevation (ft)
Station (ft)
Legend
- Post 50
- Post 50
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
- Exist
- Exist
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.48
Elevation (ft)
Station (ft)
Legend
- Post 50
- Post 50
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
- Exist
- Exist
Ground - Exist
Ineff - Exist
Bank Sta - Exist

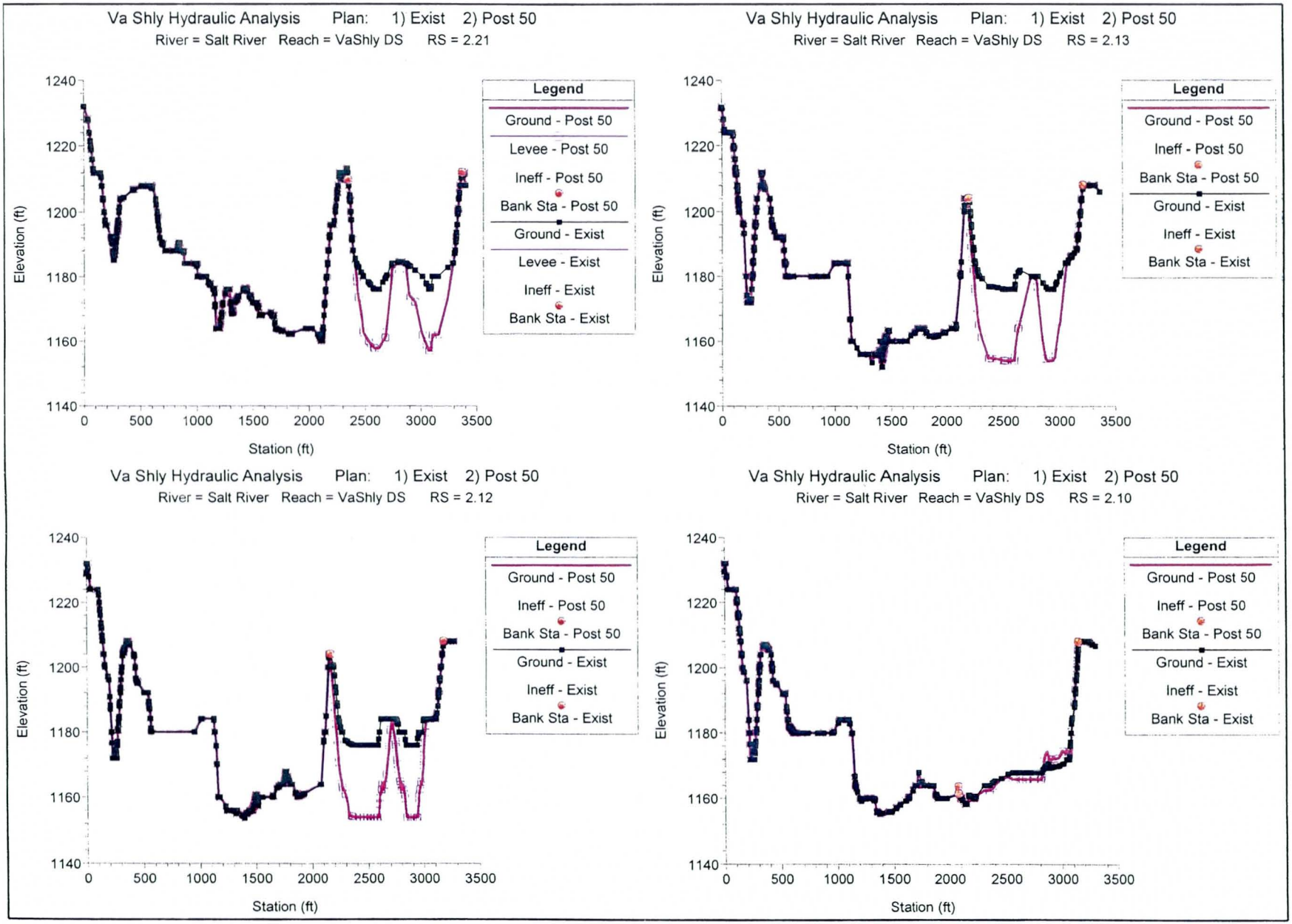

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.46
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.35
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.23
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 3.10
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

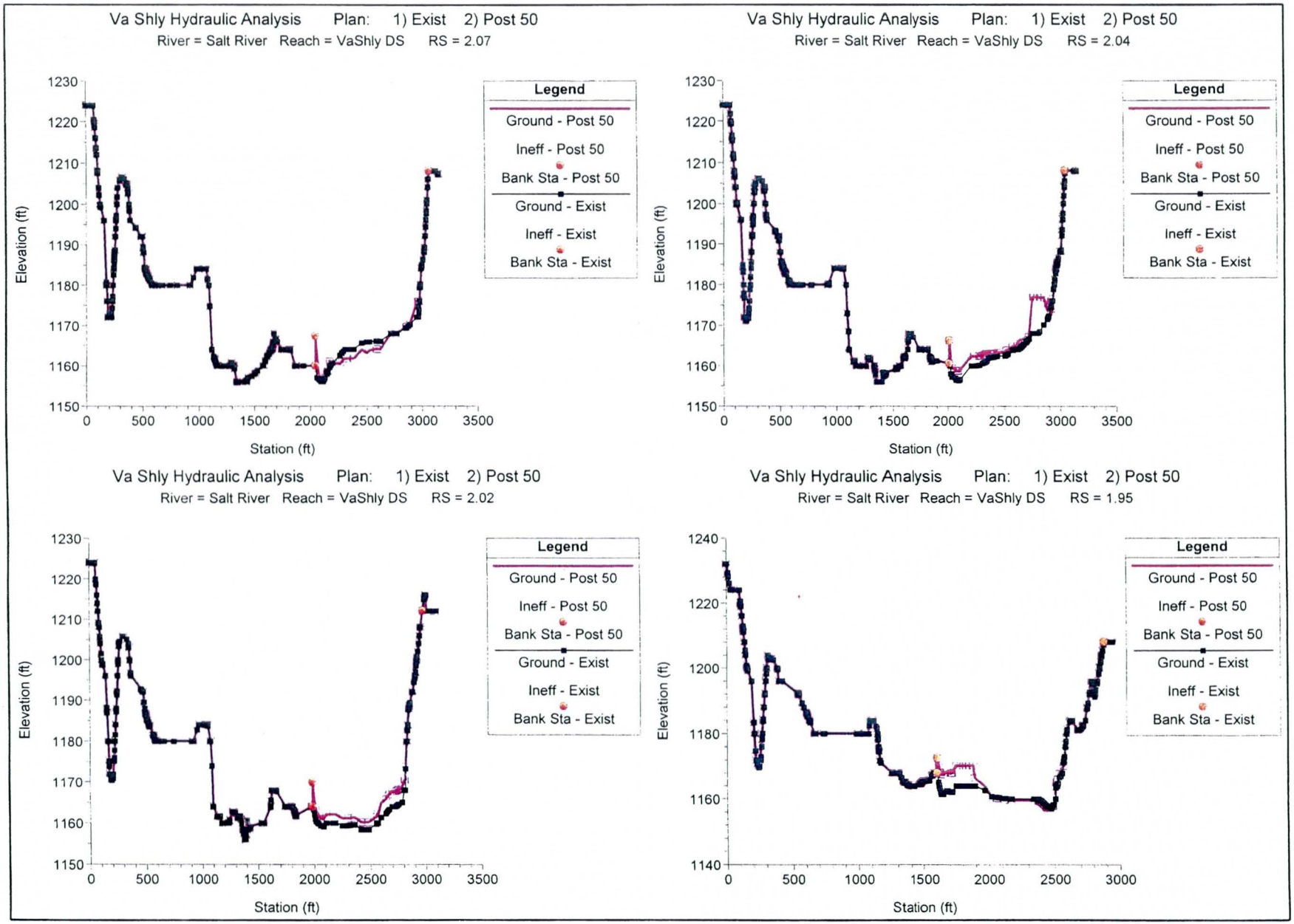

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.98
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.87
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.78
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.71
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

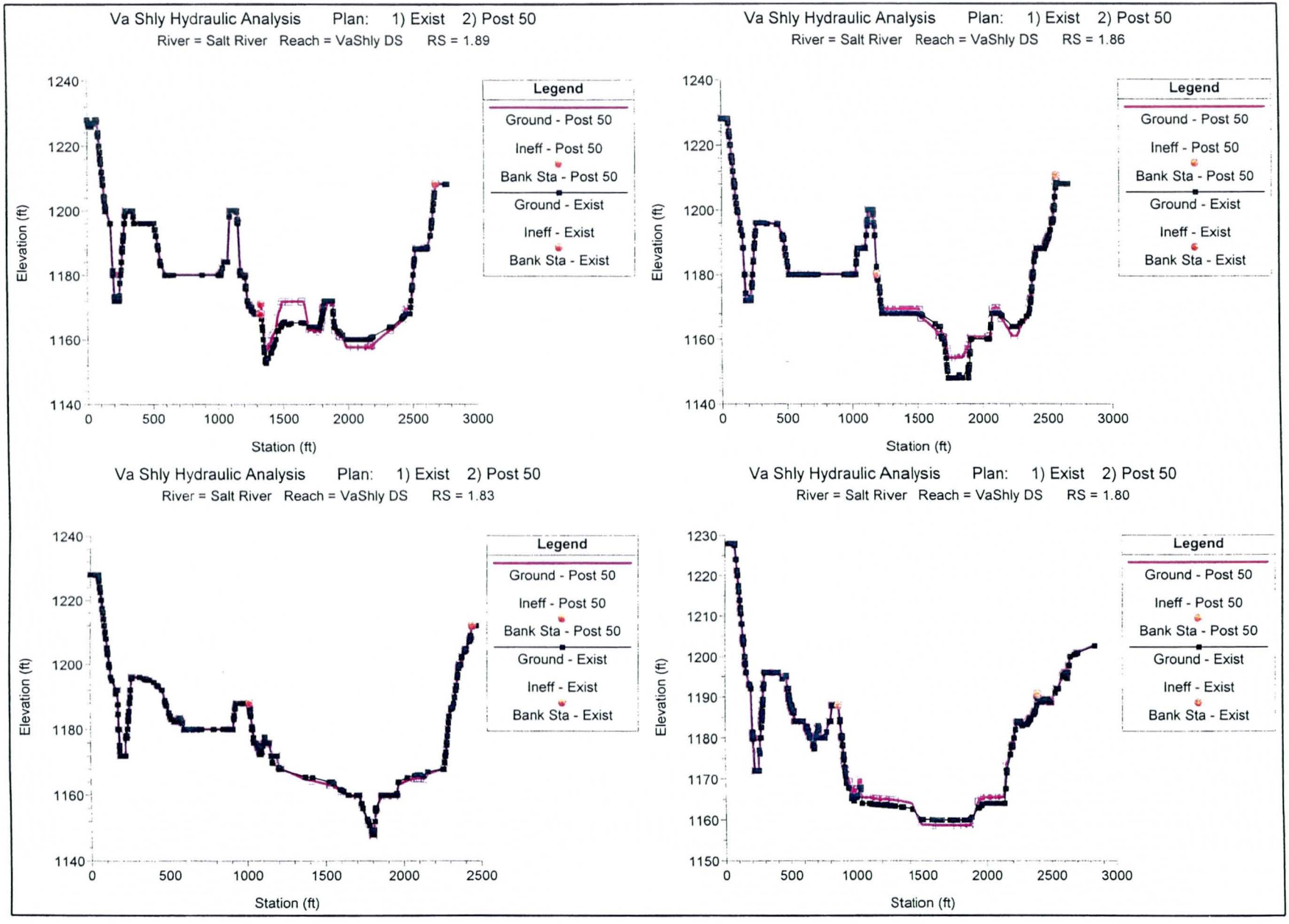

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.65
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.59
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.53
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.47
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

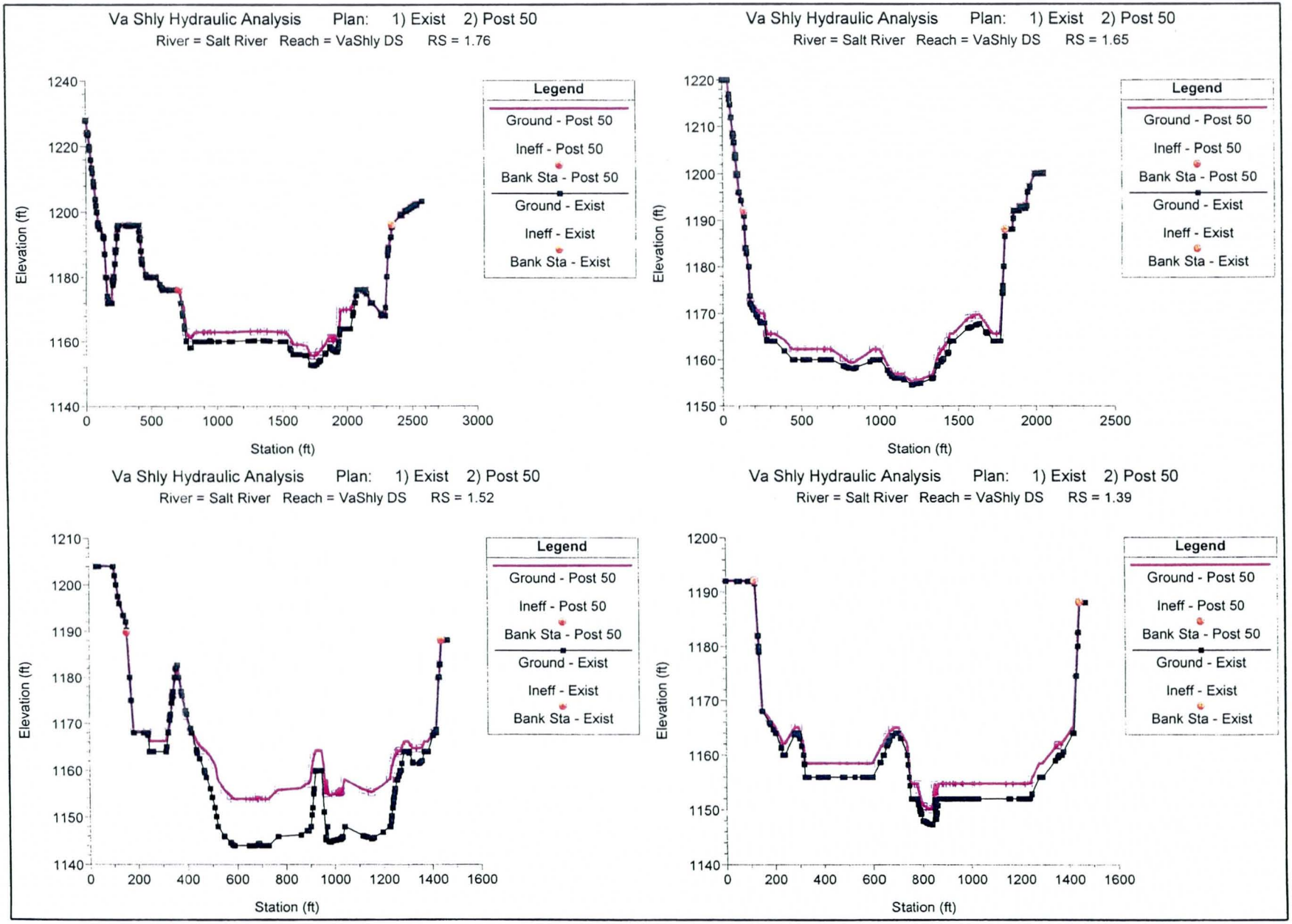

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.42
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.41
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.40
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.38
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

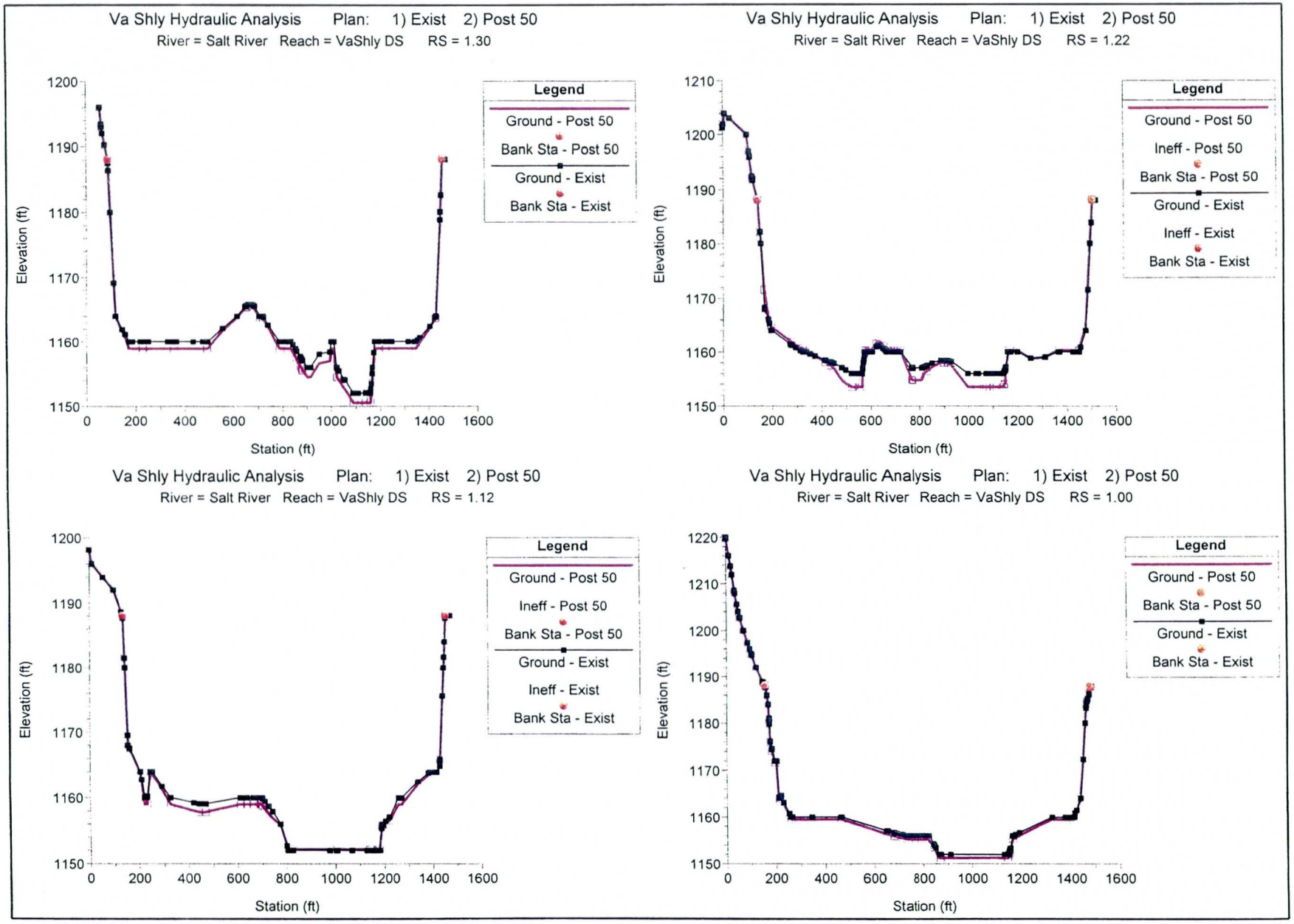

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.33
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.31
Elevation (ft)
Station (ft)
Legend
- Post 50
- Post 50
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
- Exist
- Exist
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.31
Elevation (ft)
Station (ft)
Legend
- Post 50
- Post 50
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
- Exist
- Exist
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.29
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

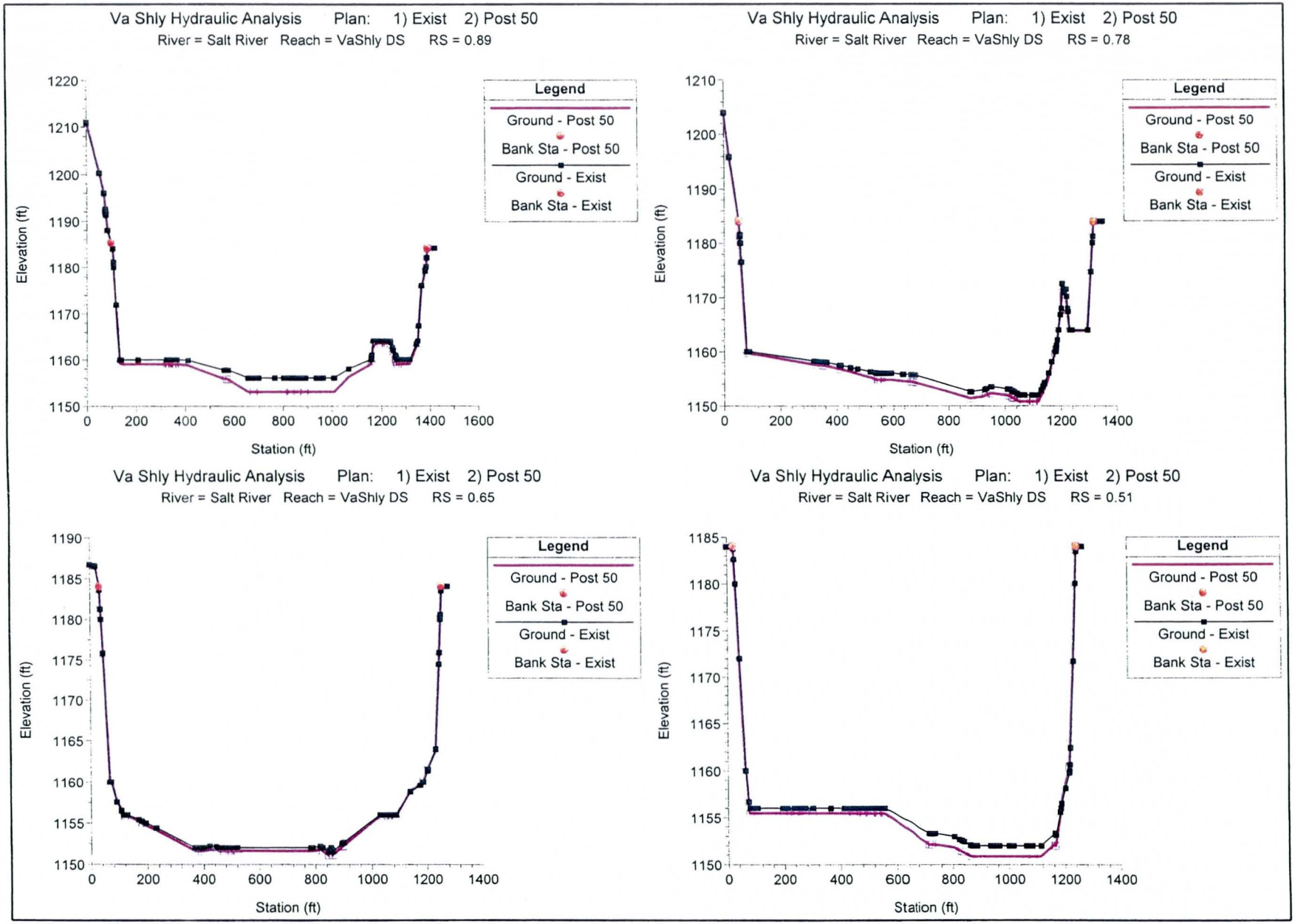

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.21
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Levee - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Levee - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.13
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.12
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.10
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

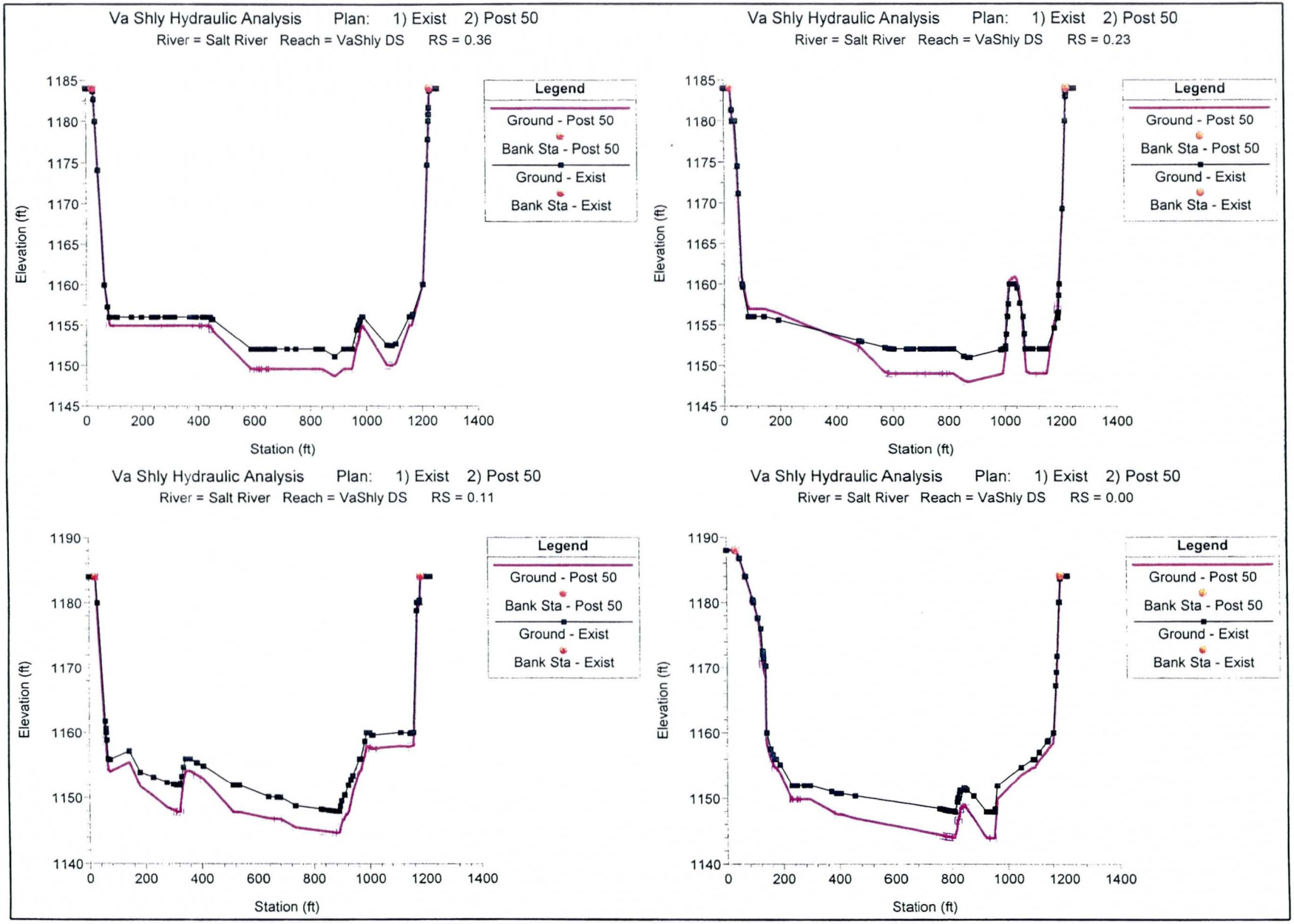

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.07
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.04
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 2.02
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.95
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist


Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.89
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.86
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.83
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.80
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist


Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.76
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.65
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.52
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.39
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist


Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.30
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.22
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.12
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 1.00
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist

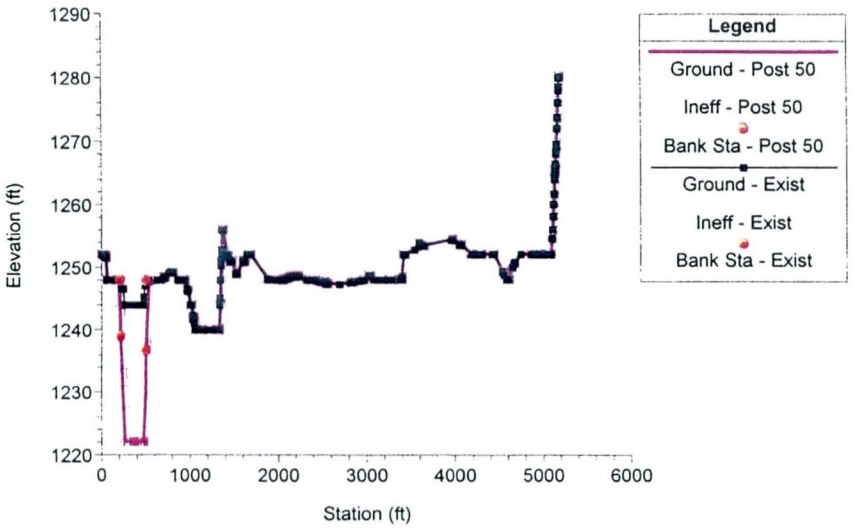

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 0.89
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 0.78
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 0.65
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 0.51
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist


Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 0.36
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 0.23
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 0.11
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Salt River Reach = VaShly DS RS = 0.00
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Bank Sta - Post 50
Ground - Exist
Bank Sta - Exist

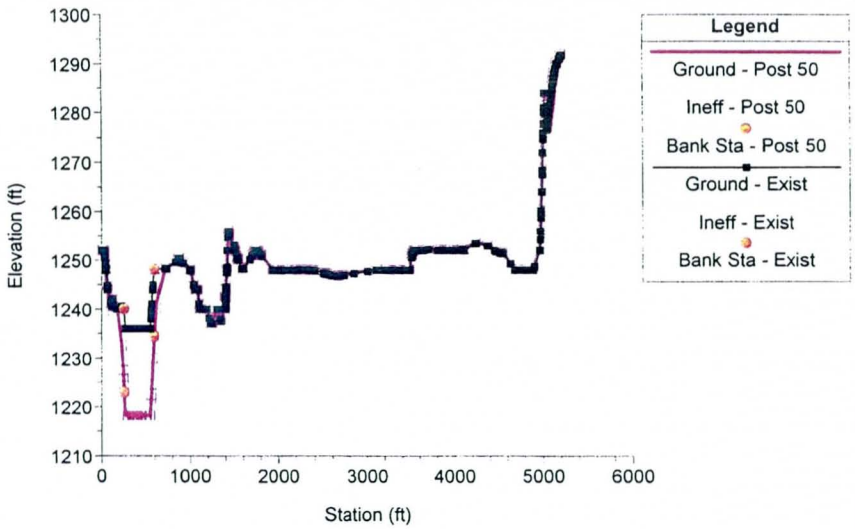
APPENDIX 6b

CROSS SECTION PLOTS FOR THE GILBERT MINING PIT

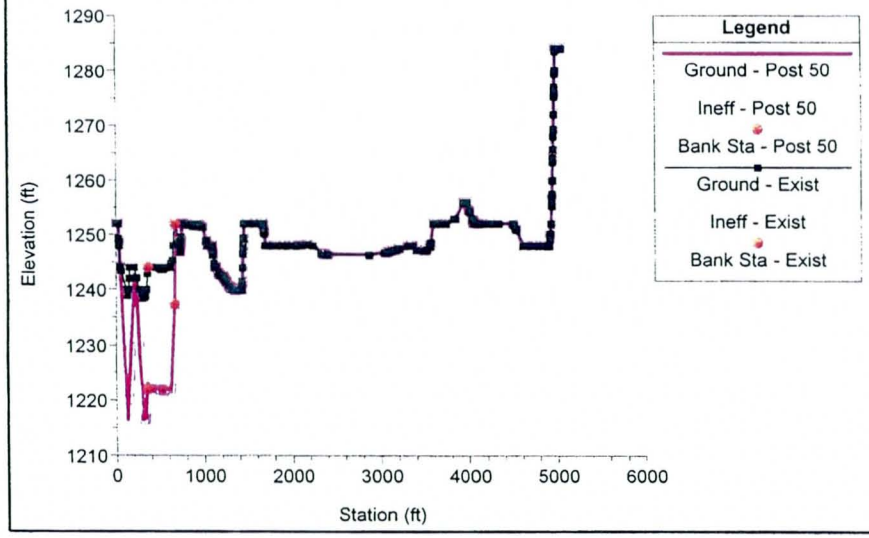
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.21



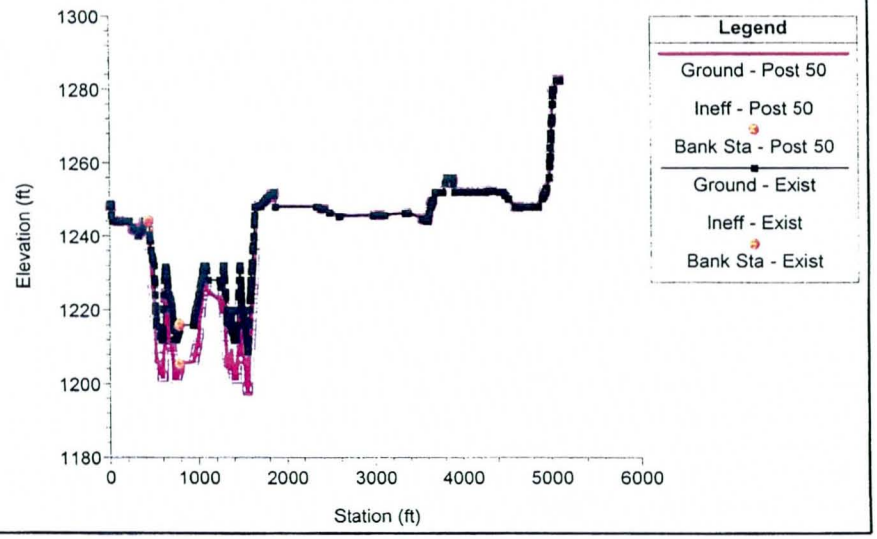
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.19



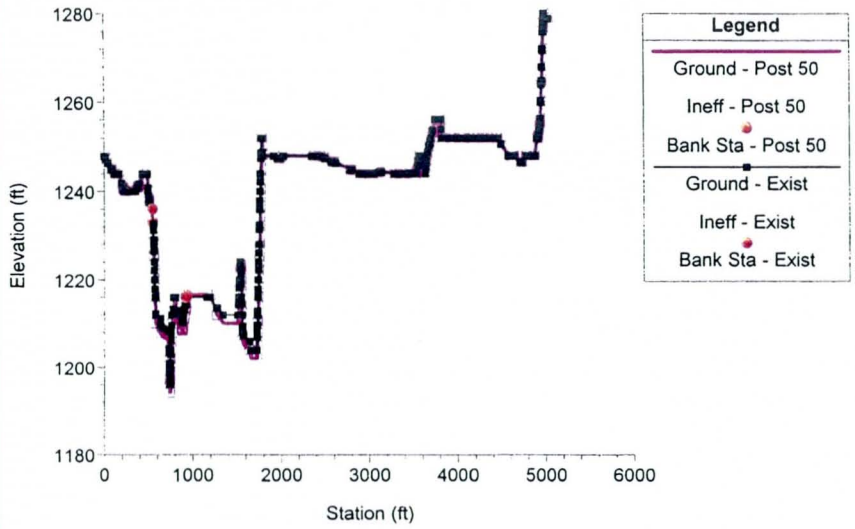
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.17



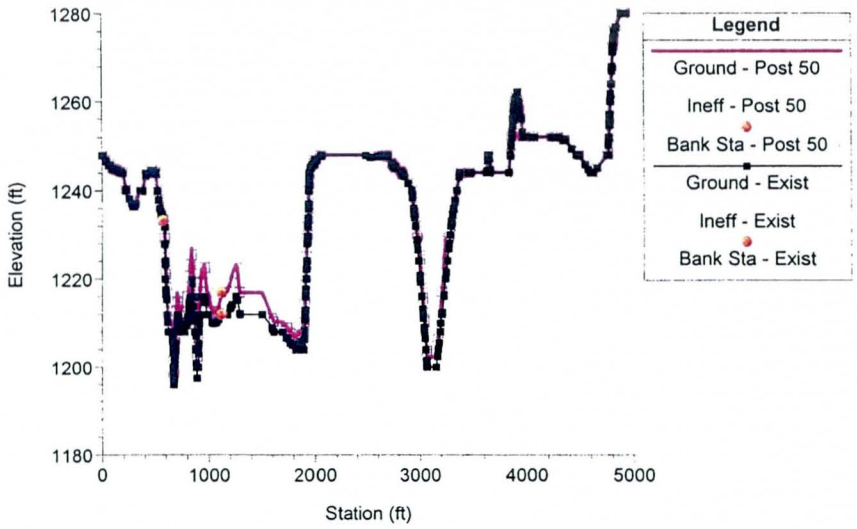
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.14



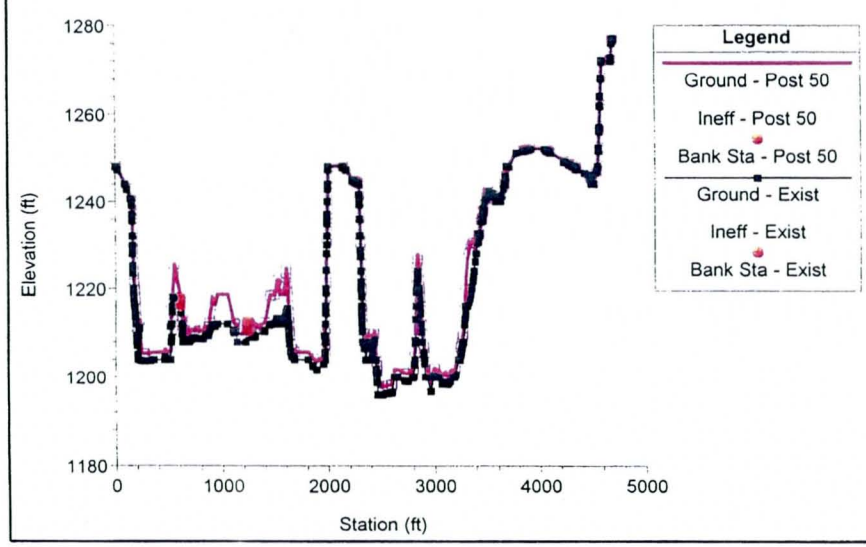
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.11



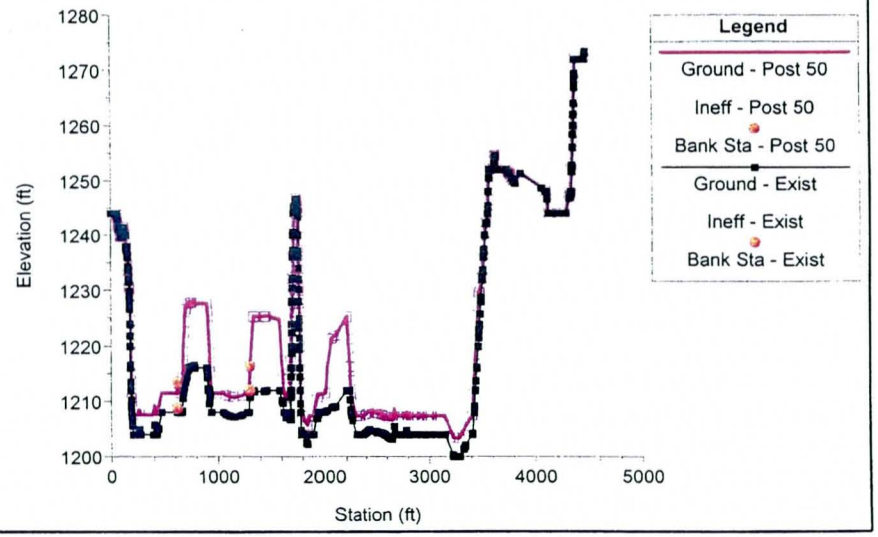
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.08

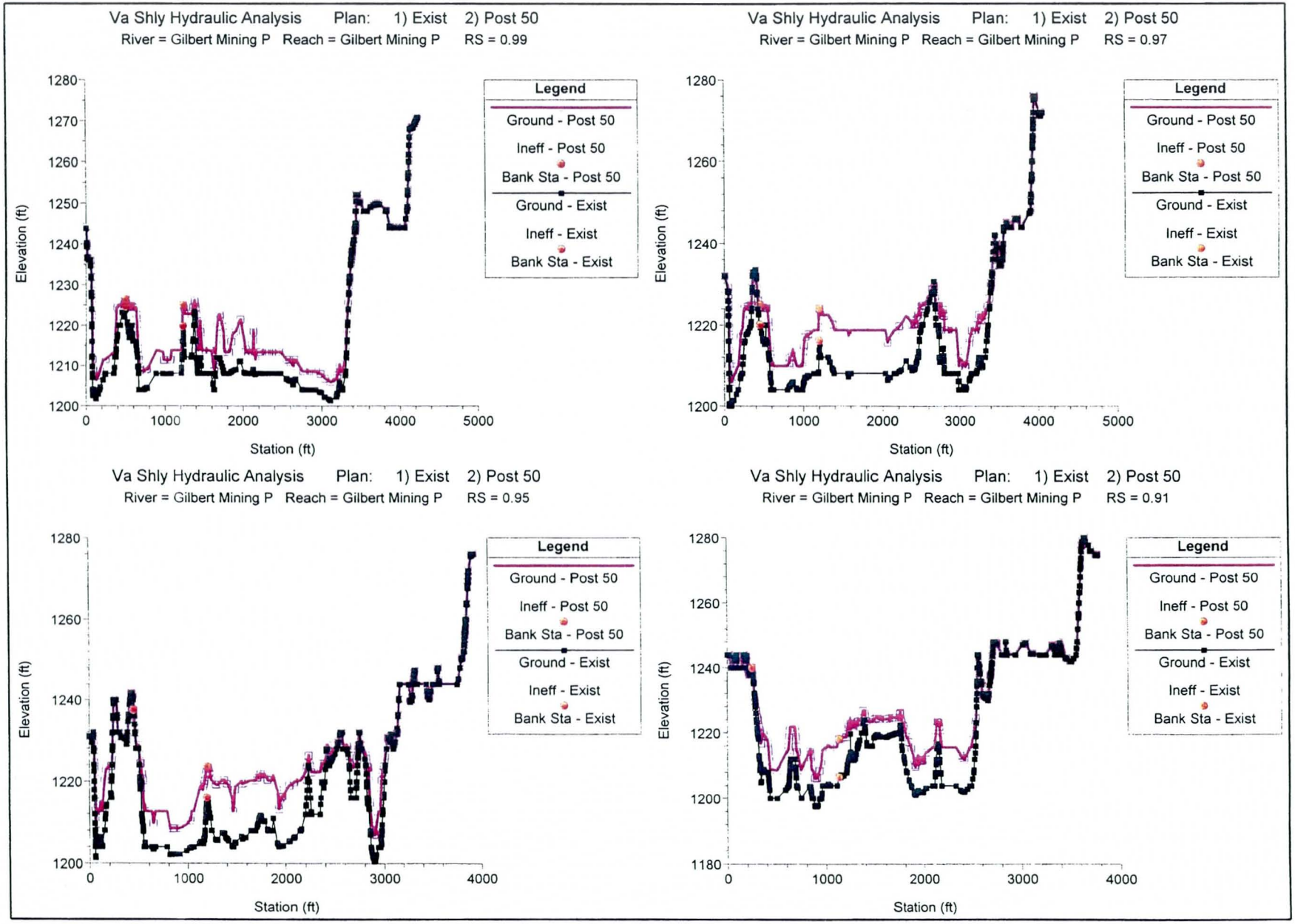


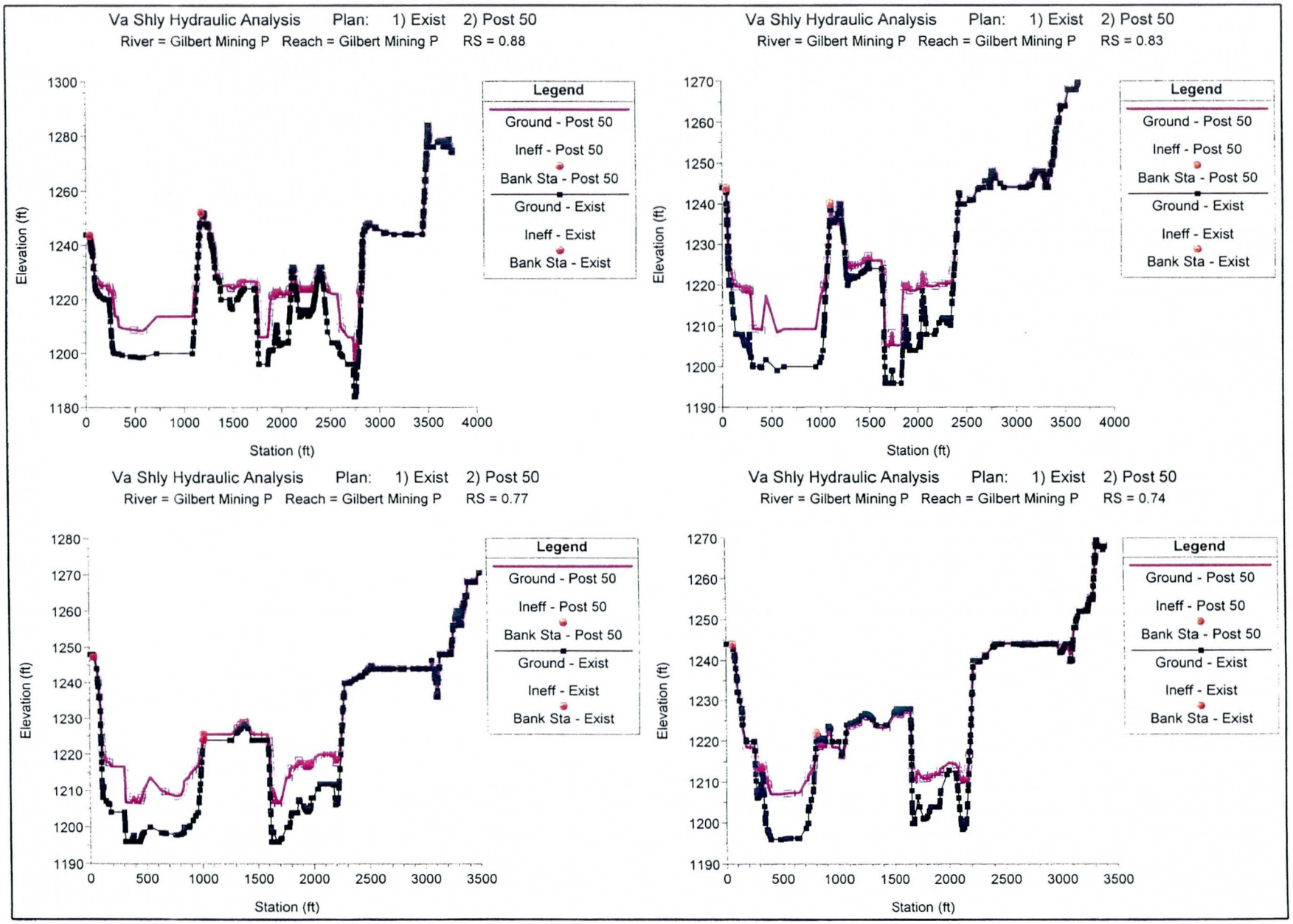
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.05

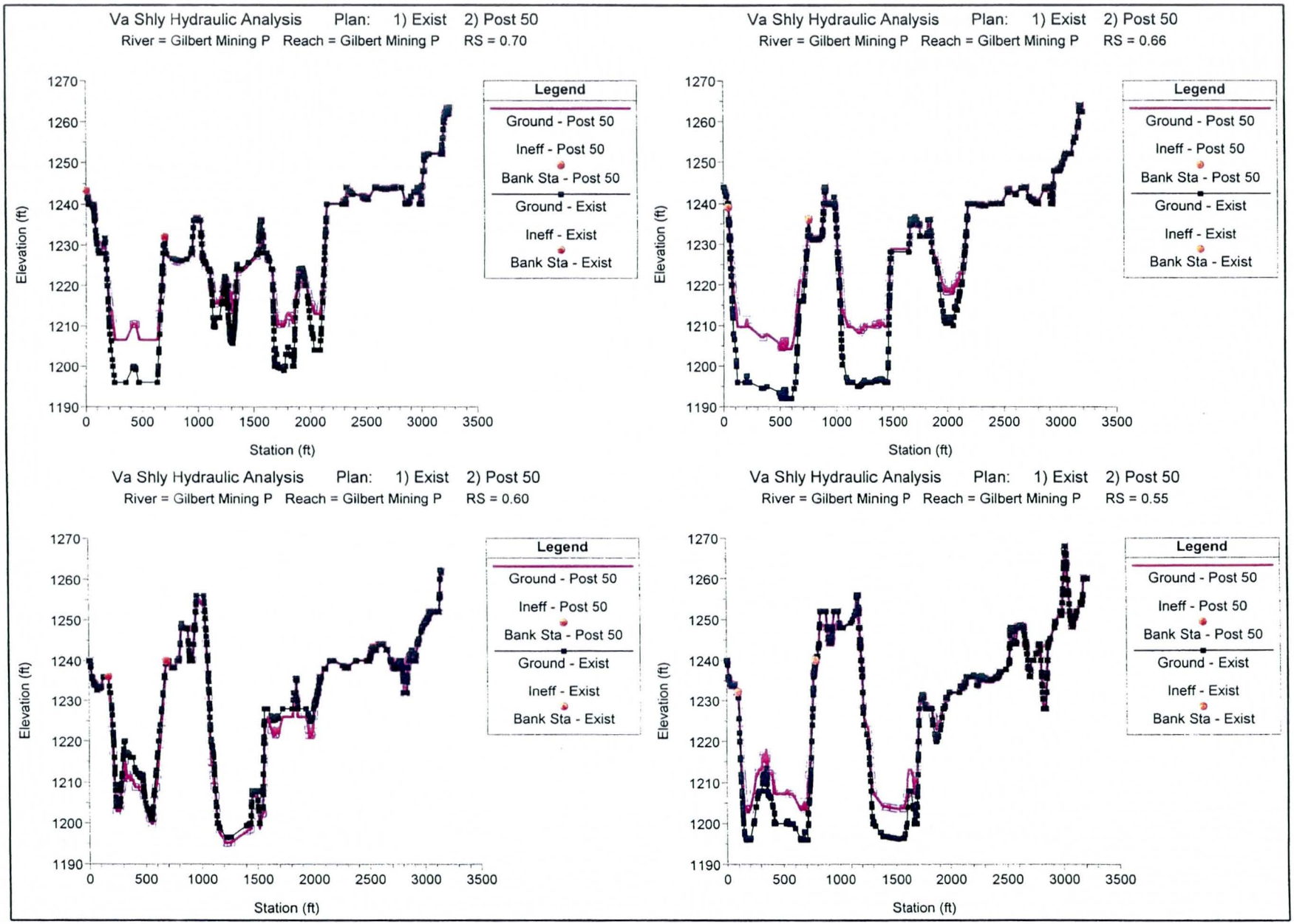


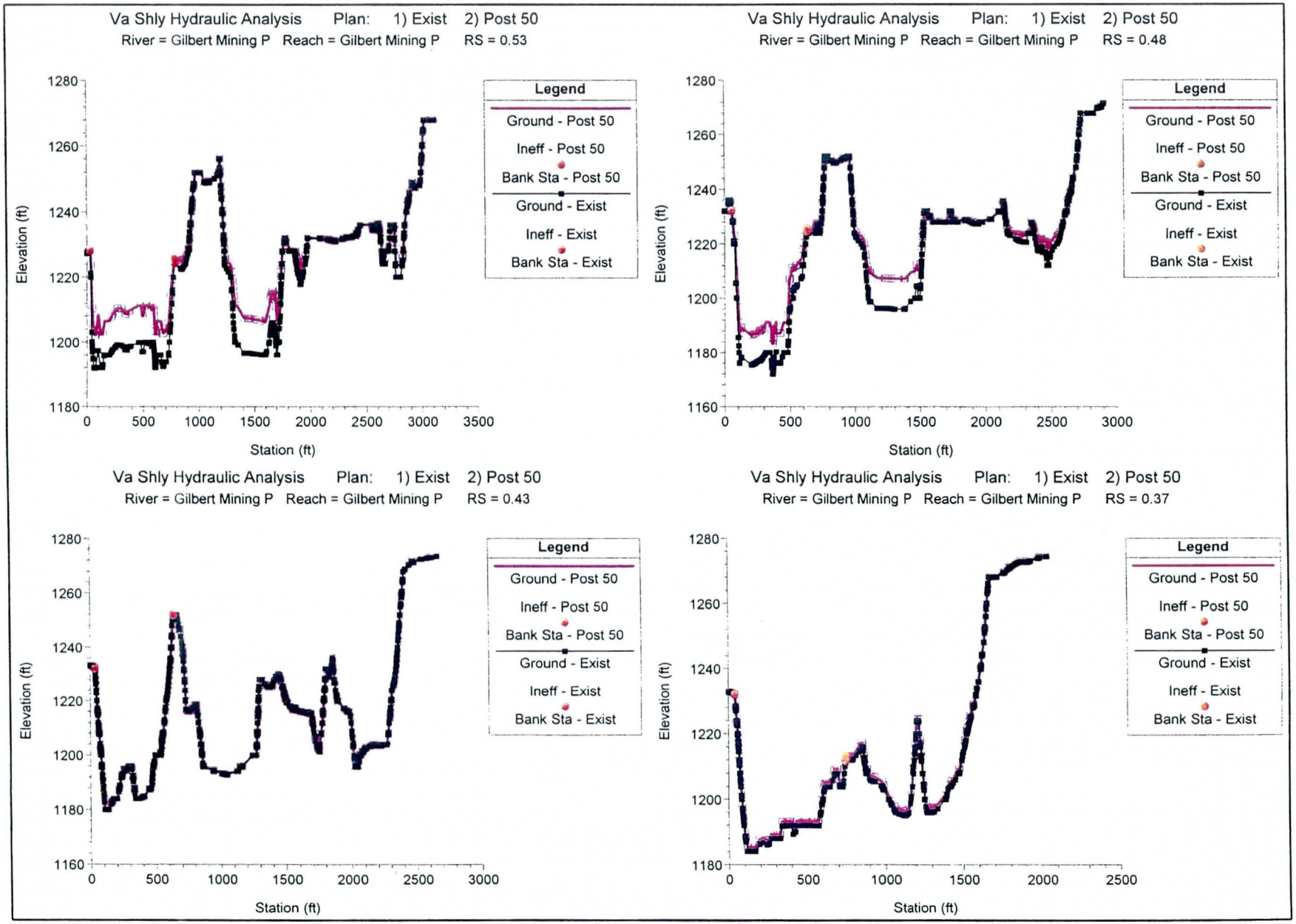
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 1.02



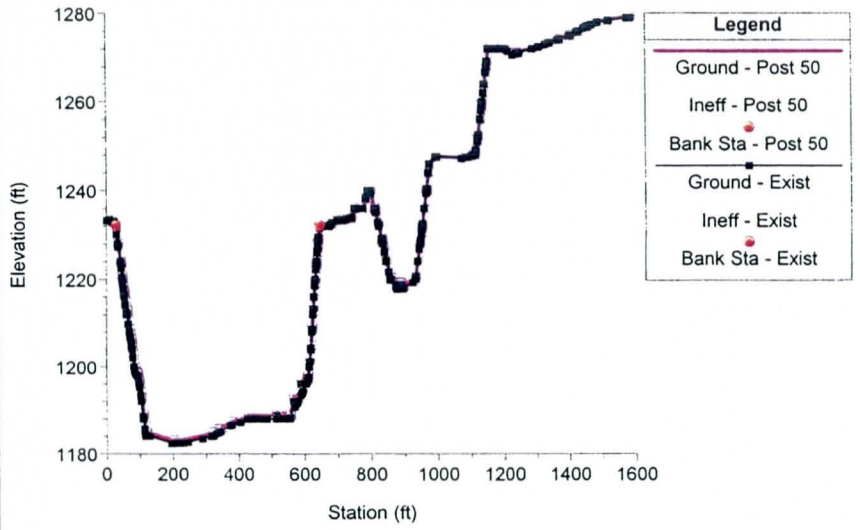

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.99
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.97
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.95
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.91
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist


Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.88
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.83
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.77
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.74
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

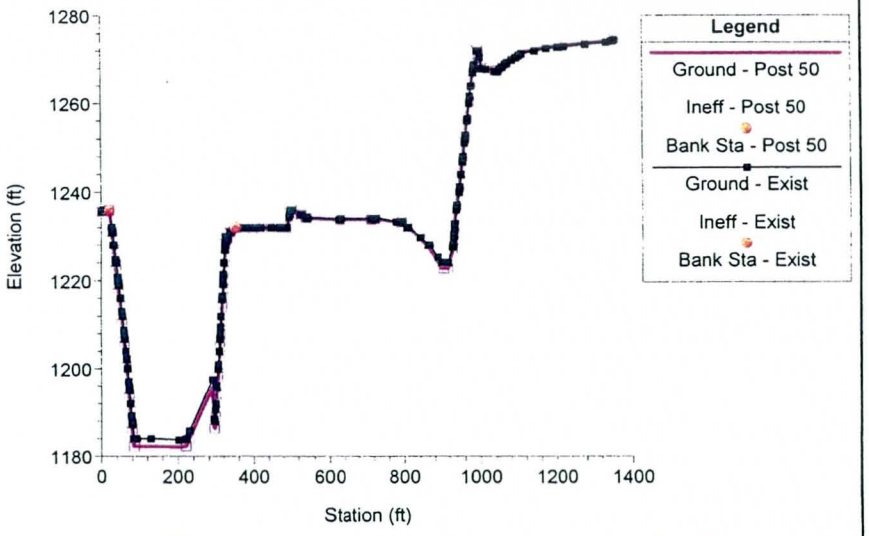

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.70
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.66
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.60
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.55
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Elevation (ft)
Station (ft)
1190
1200
1210
1220
1230
1240
1250
1260
1270
0
500
1000
1500
2000
2500
3000
3500


Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.53
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.48
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.43
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.37
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

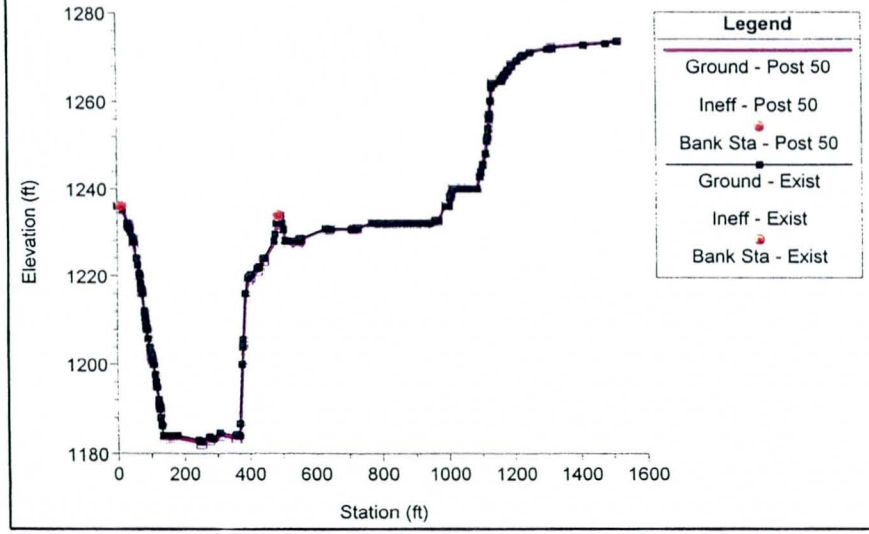
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.33



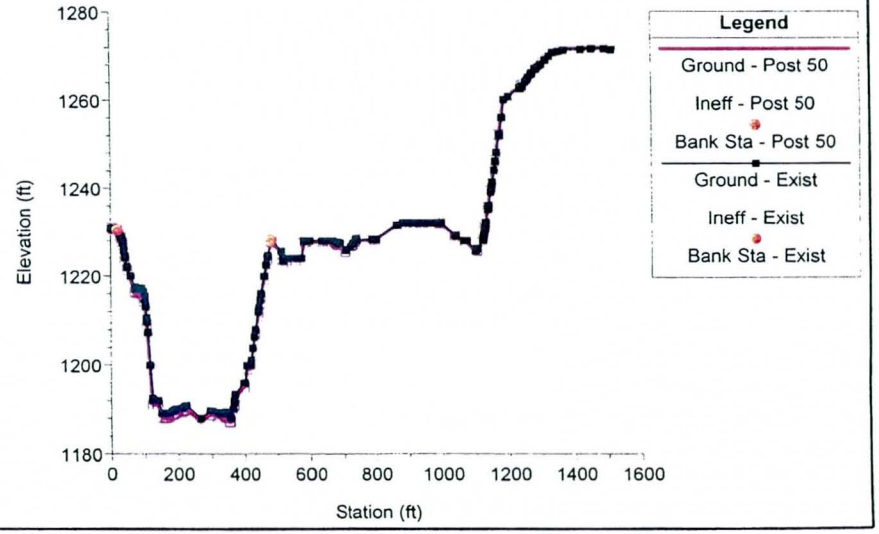
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.29

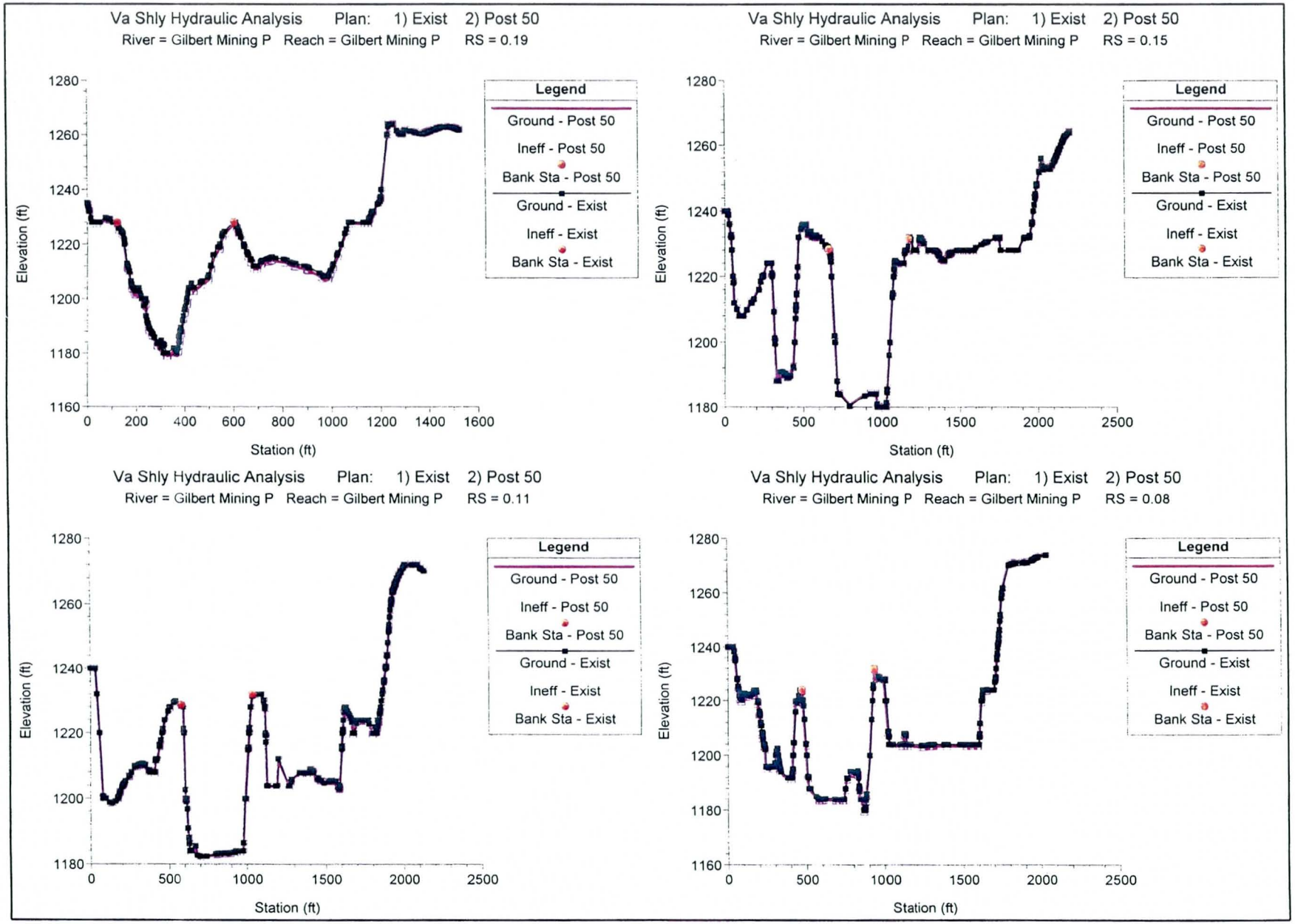


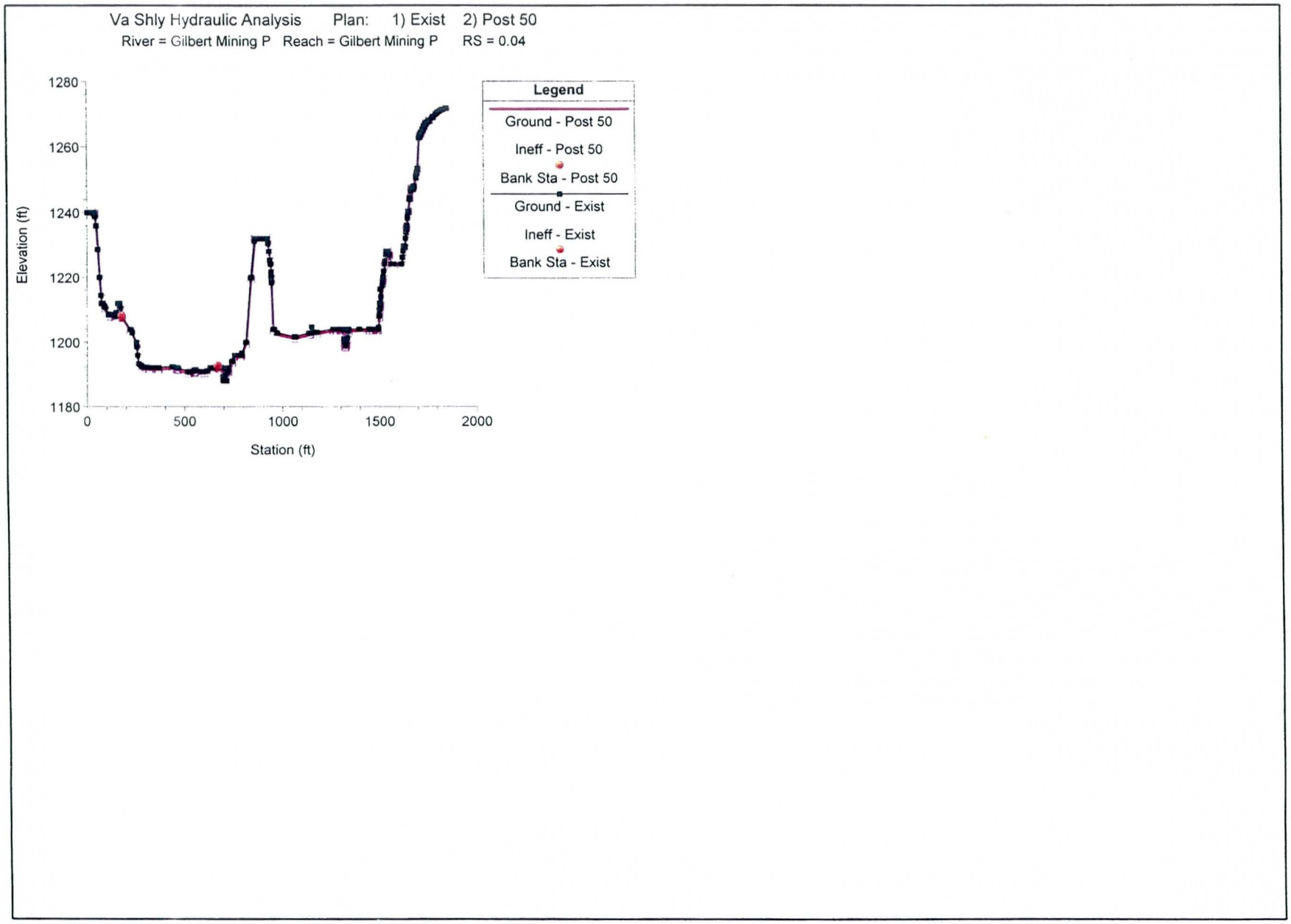
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.25



Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.22



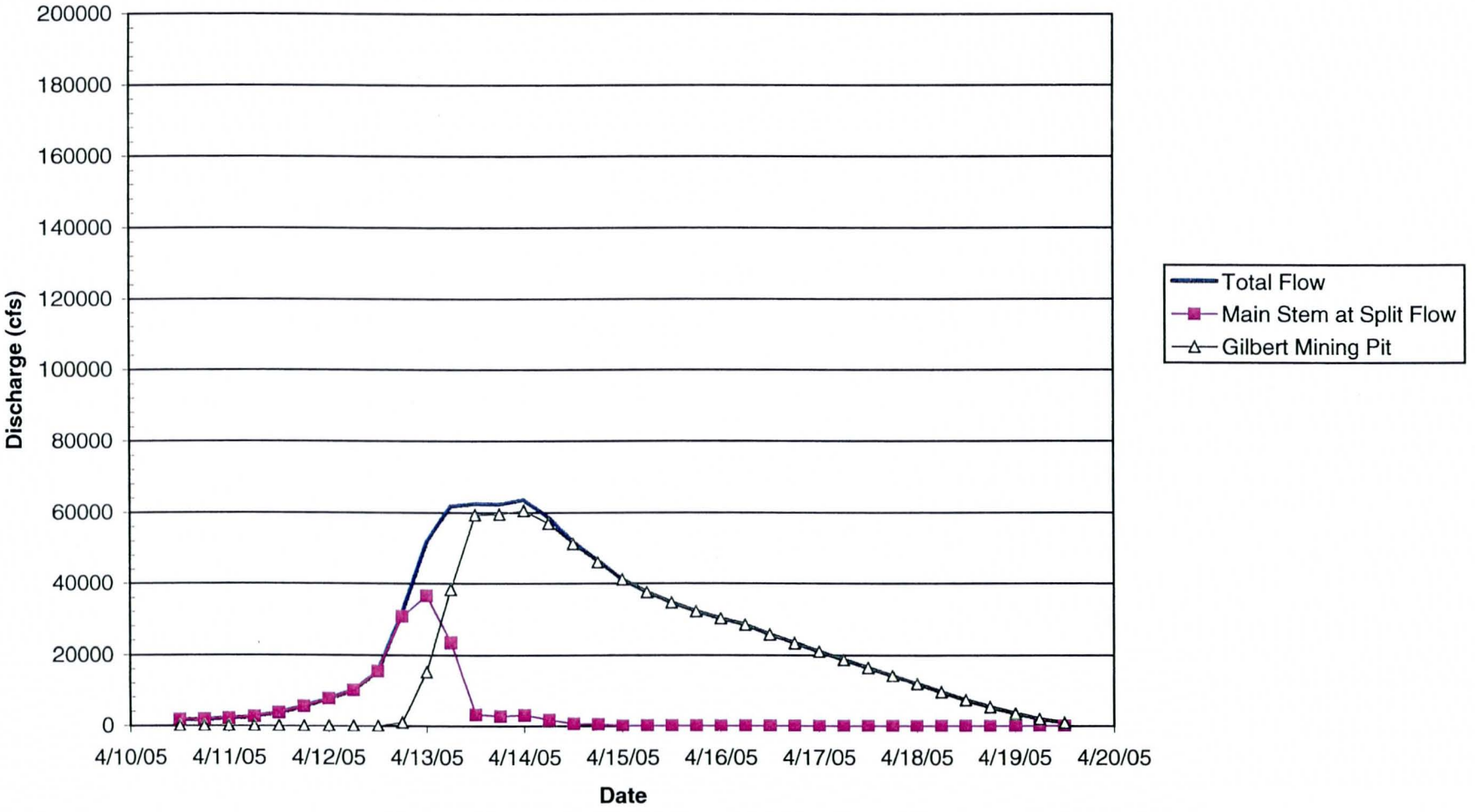

Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.19
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.15
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.11
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist
Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.08
Elevation (ft)
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist


Va Shly Hydraulic Analysis Plan: 1) Exist 2) Post 50
River = Gilbert Mining P Reach = Gilbert Mining P RS = 0.04
Elevation (ft)
1280
1260
1240
1220
1200
1180
0
500
1000
1500
2000
Station (ft)
Legend
Ground - Post 50
Ineff - Post 50
Bank Sta - Post 50
Ground - Exist
Ineff - Exist
Bank Sta - Exist

APPENDIX 7

SPLIT FLOW HYDROGRAPHS FROM THE BASE CASE HEC-6T ANALYSIS

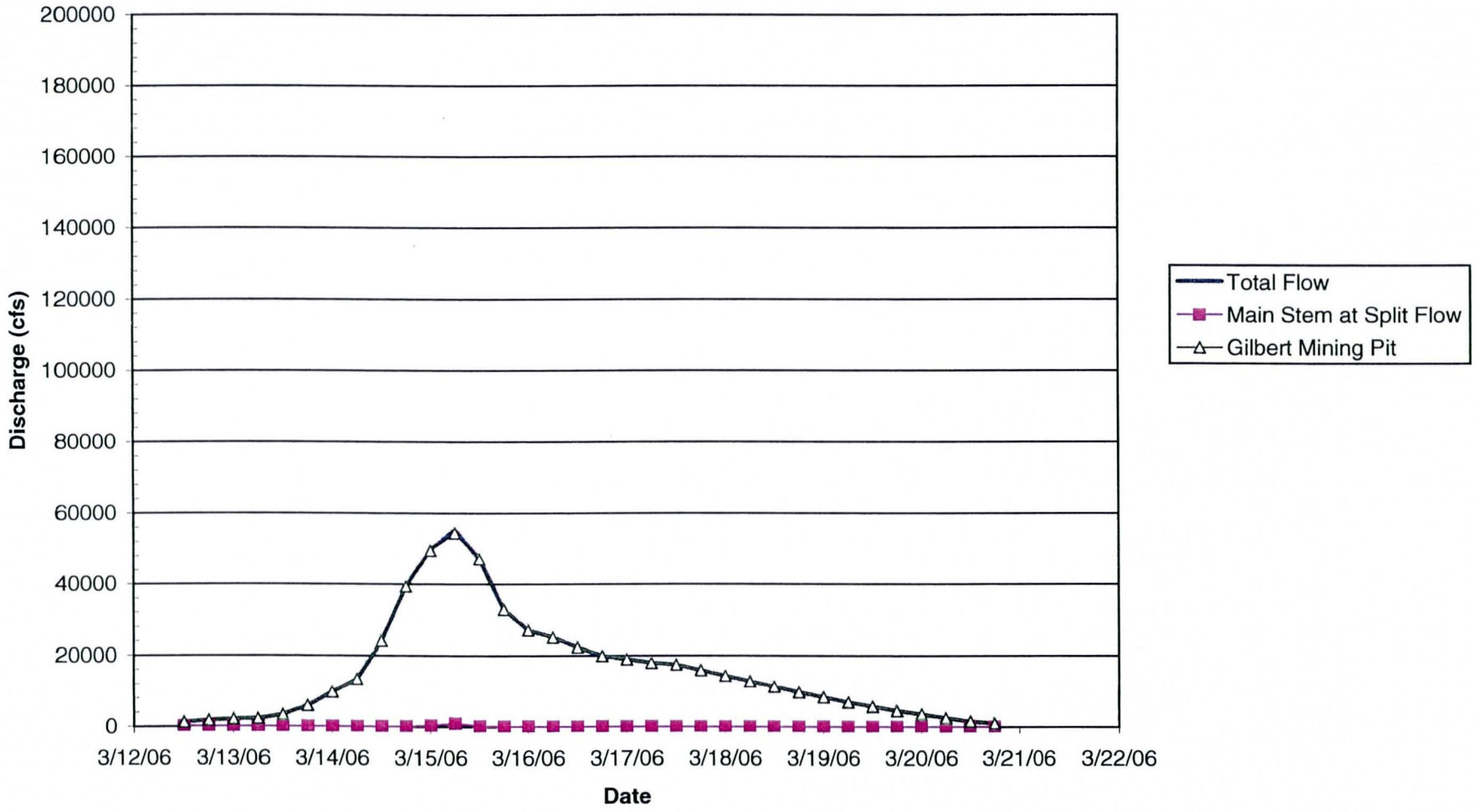
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1905



Prepared by SMF

split flow hydrograph
9/30/2003

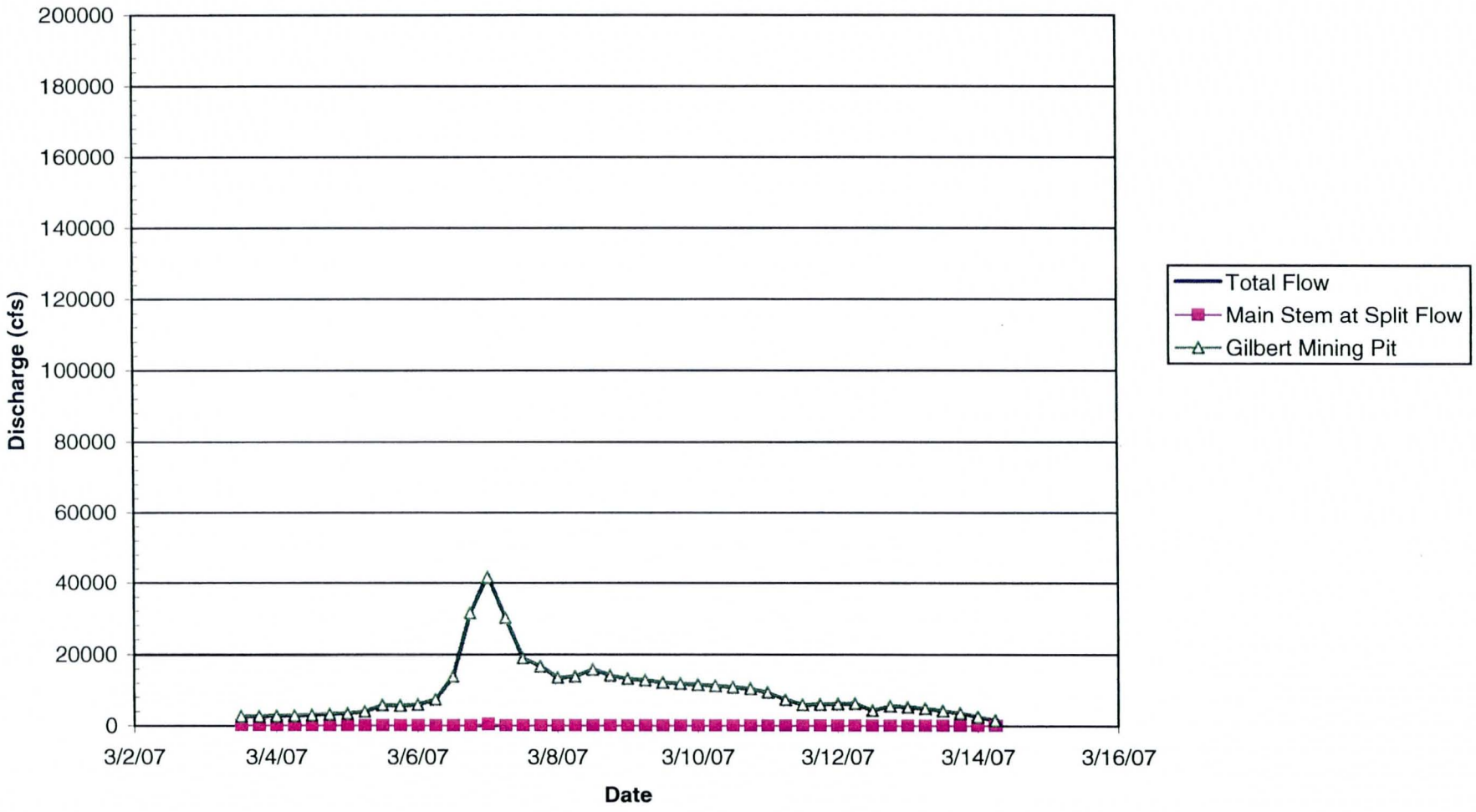
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1906



Prepared by SMF

split flow hydrograph
9/30/2003

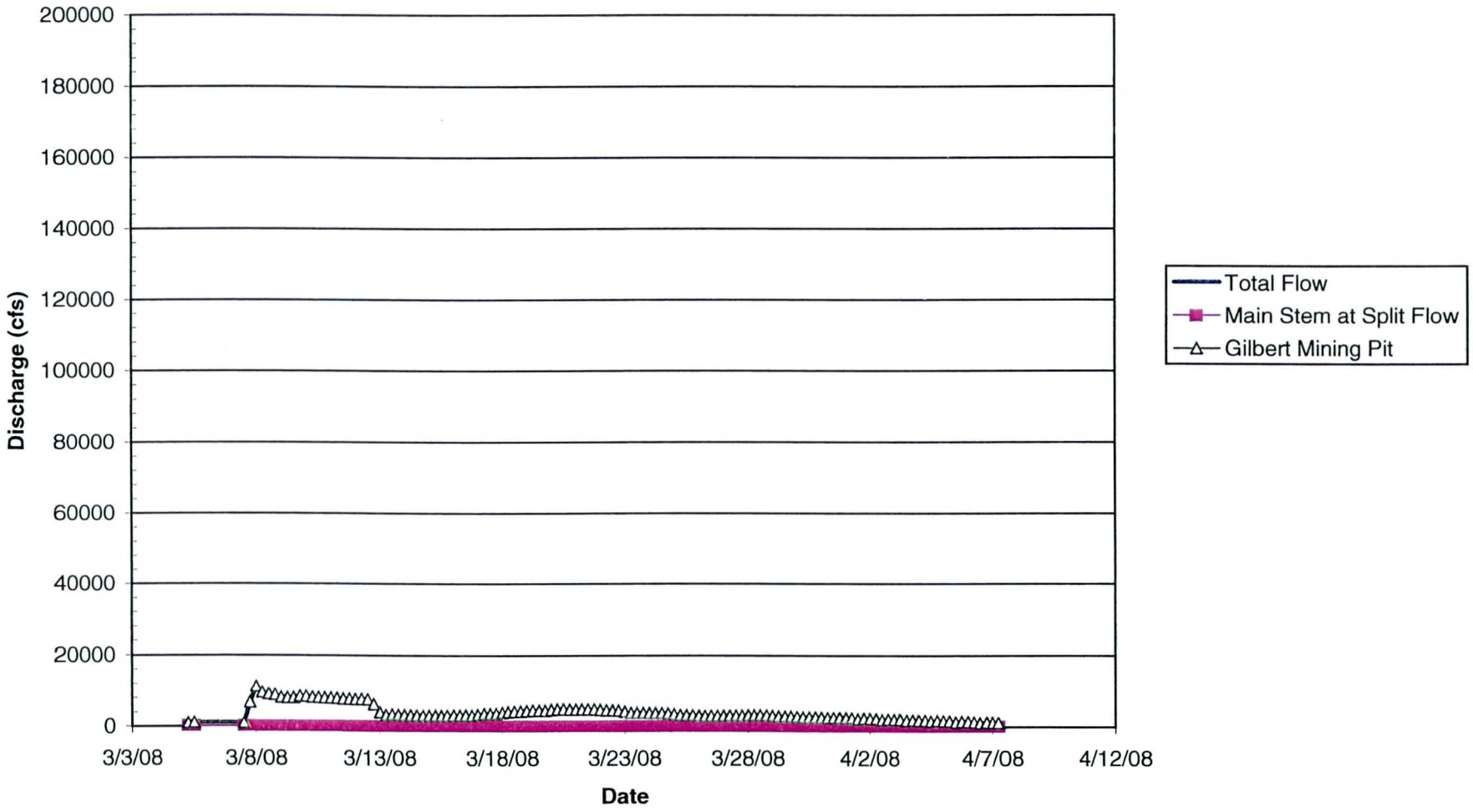
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1907



Prepared by SMF

split flow hydrograph
9/30/2003

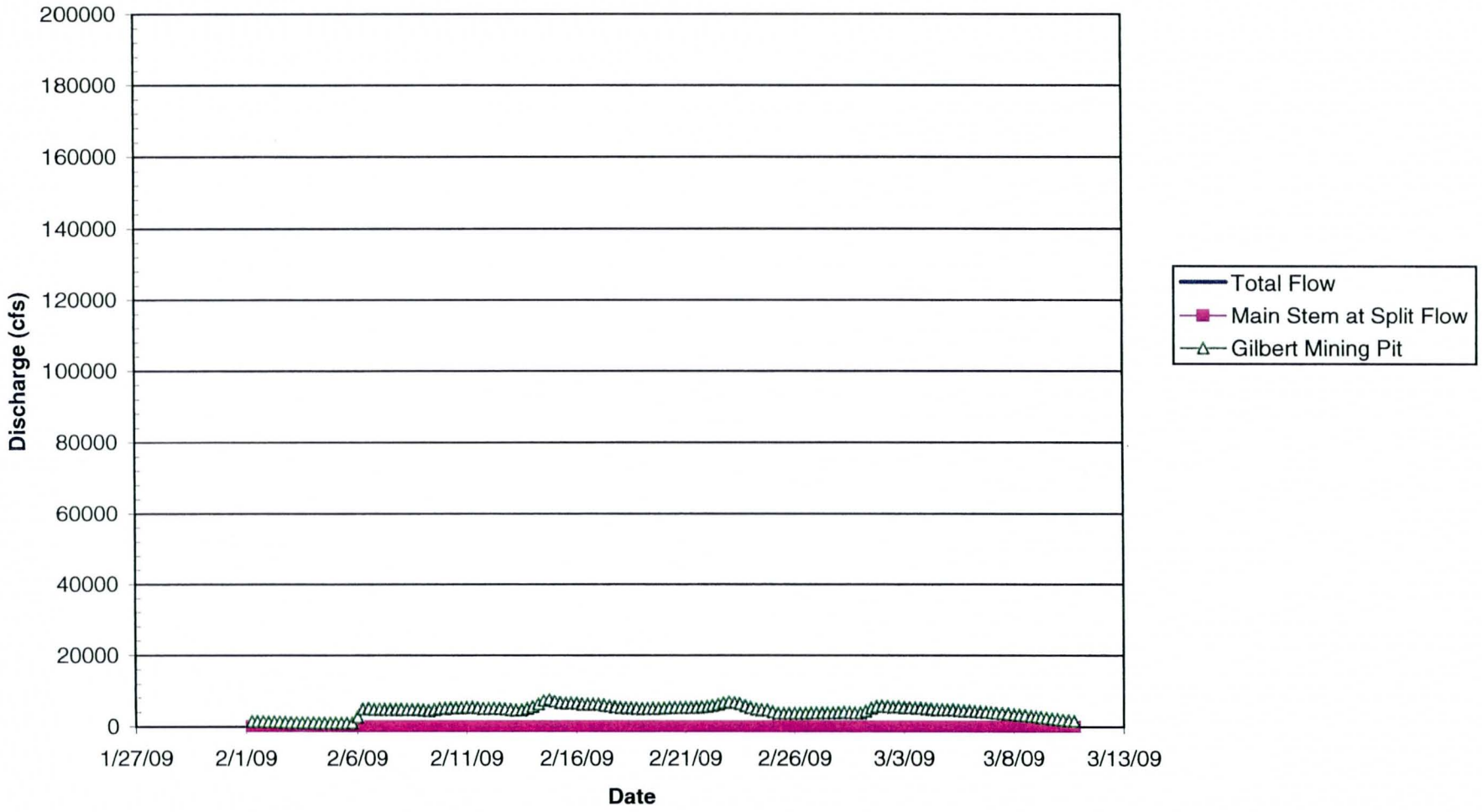
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1908



Prepared by SMF

split flow hydrograph
9/30/2003

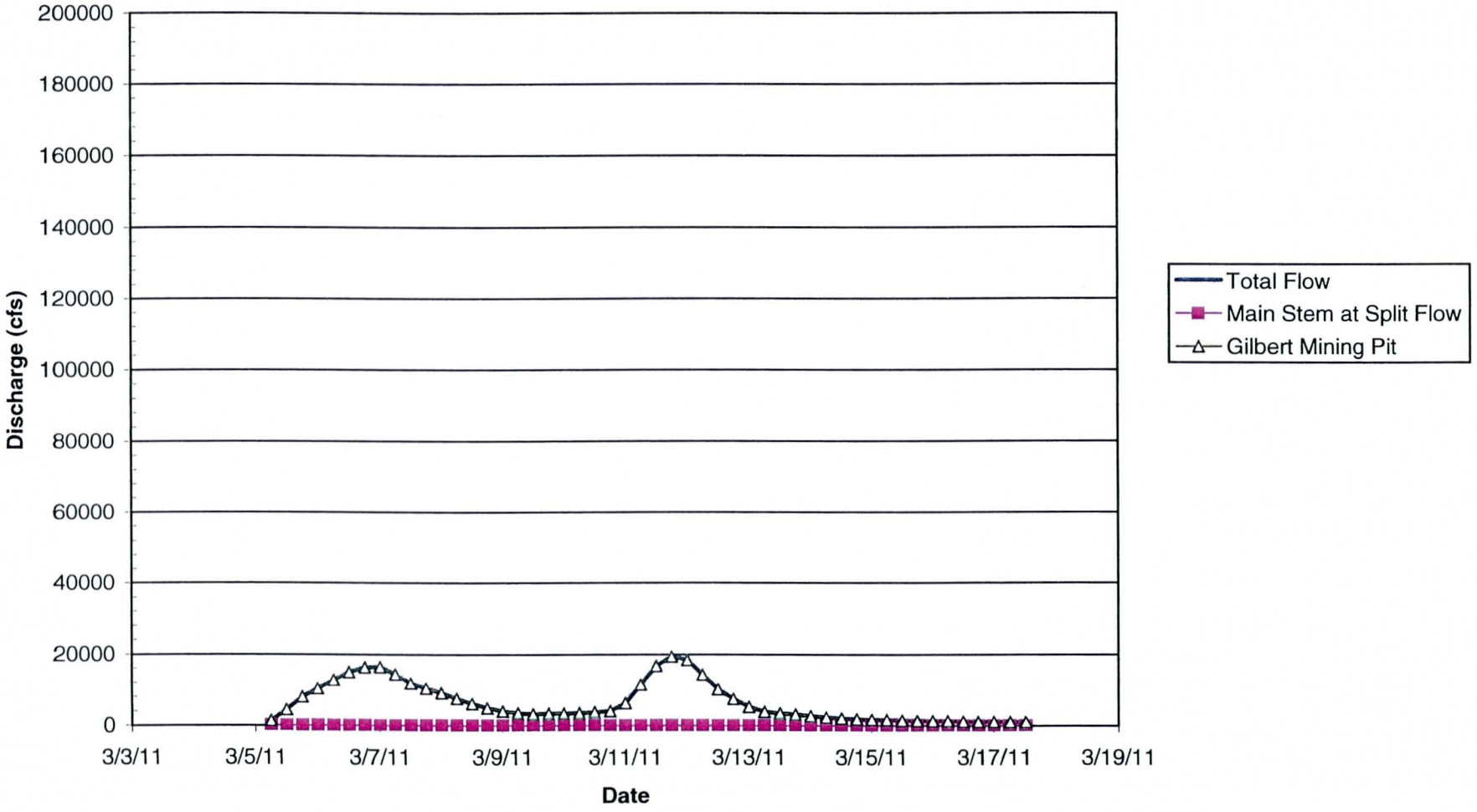
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1909



Prepared by SMF

split flow hydrograph
9/30/2003

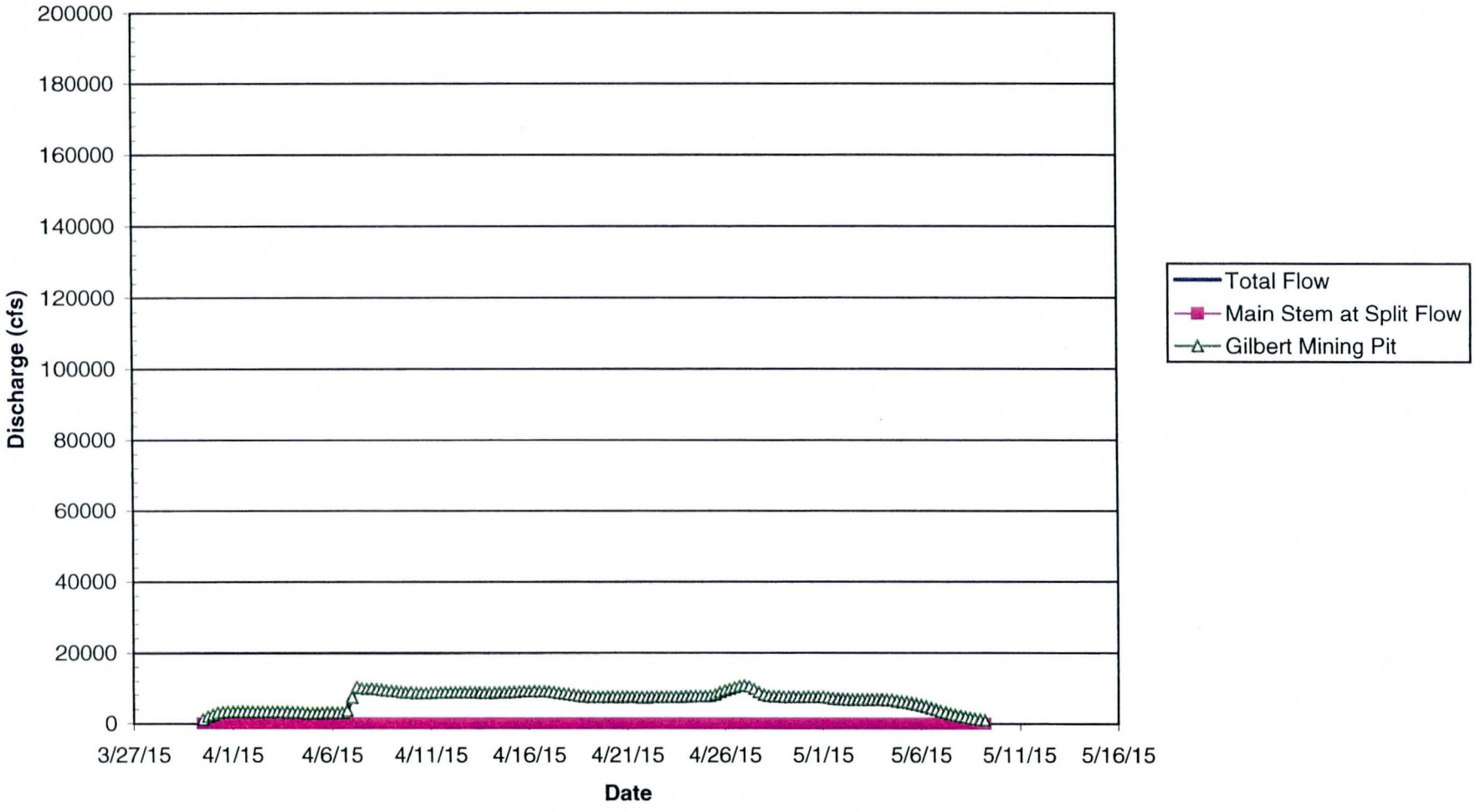
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1911



Prepared by SMF

split flow hydrograph
9/30/2003

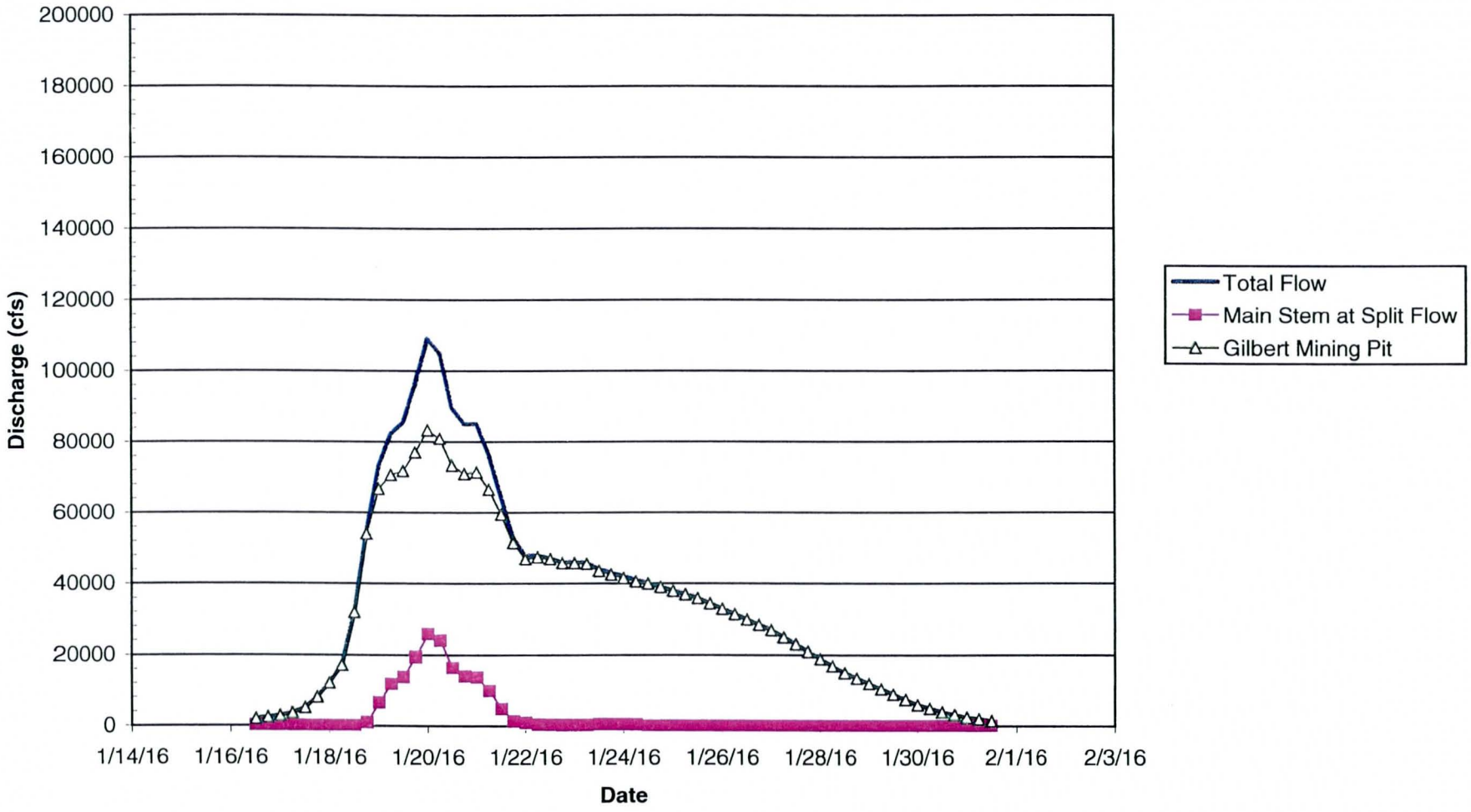
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1915



Prepared by SMF

split flow hydrograph
9/30/2003

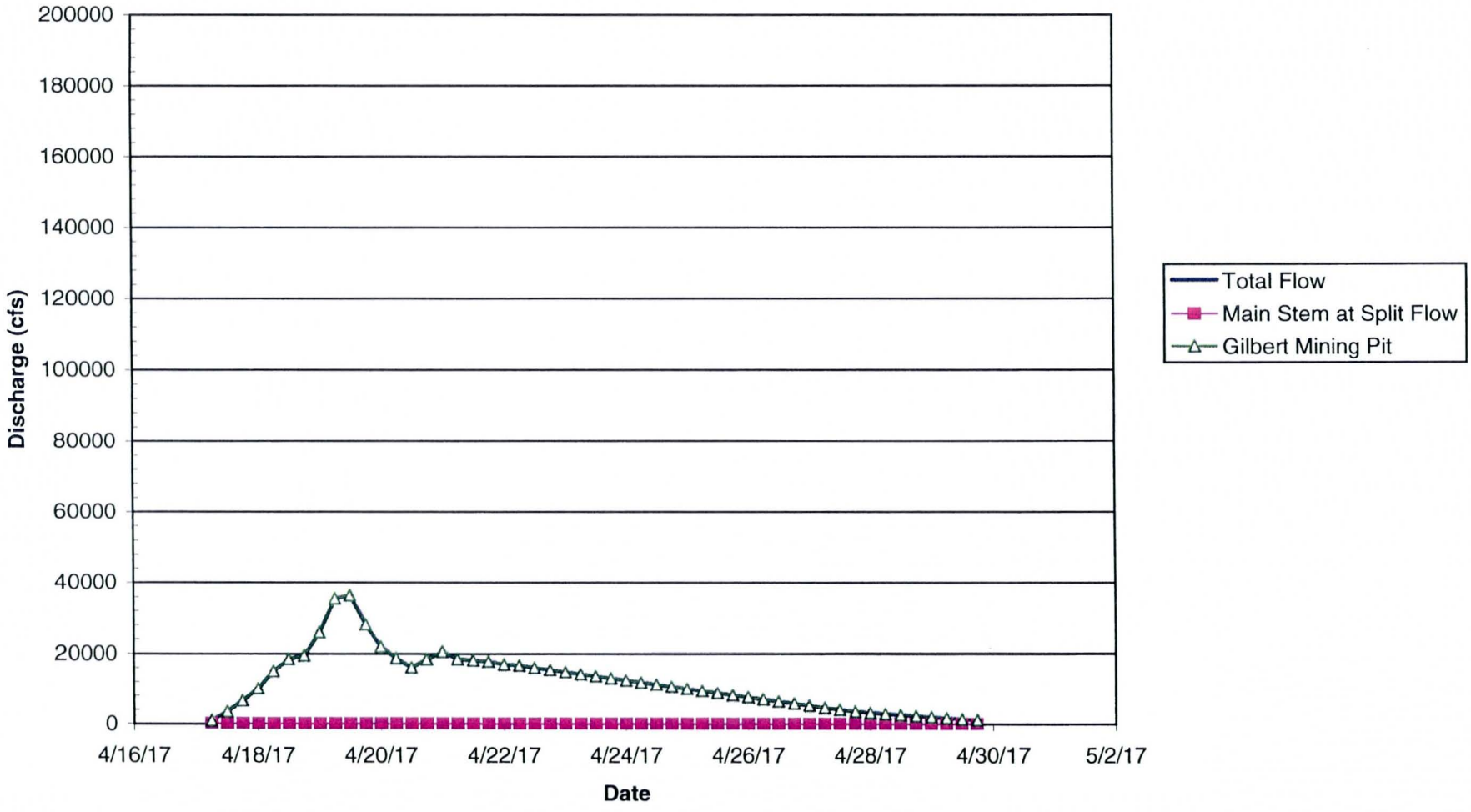
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1916



Prepared by SMF

split flow hydrograph
9/30/2003

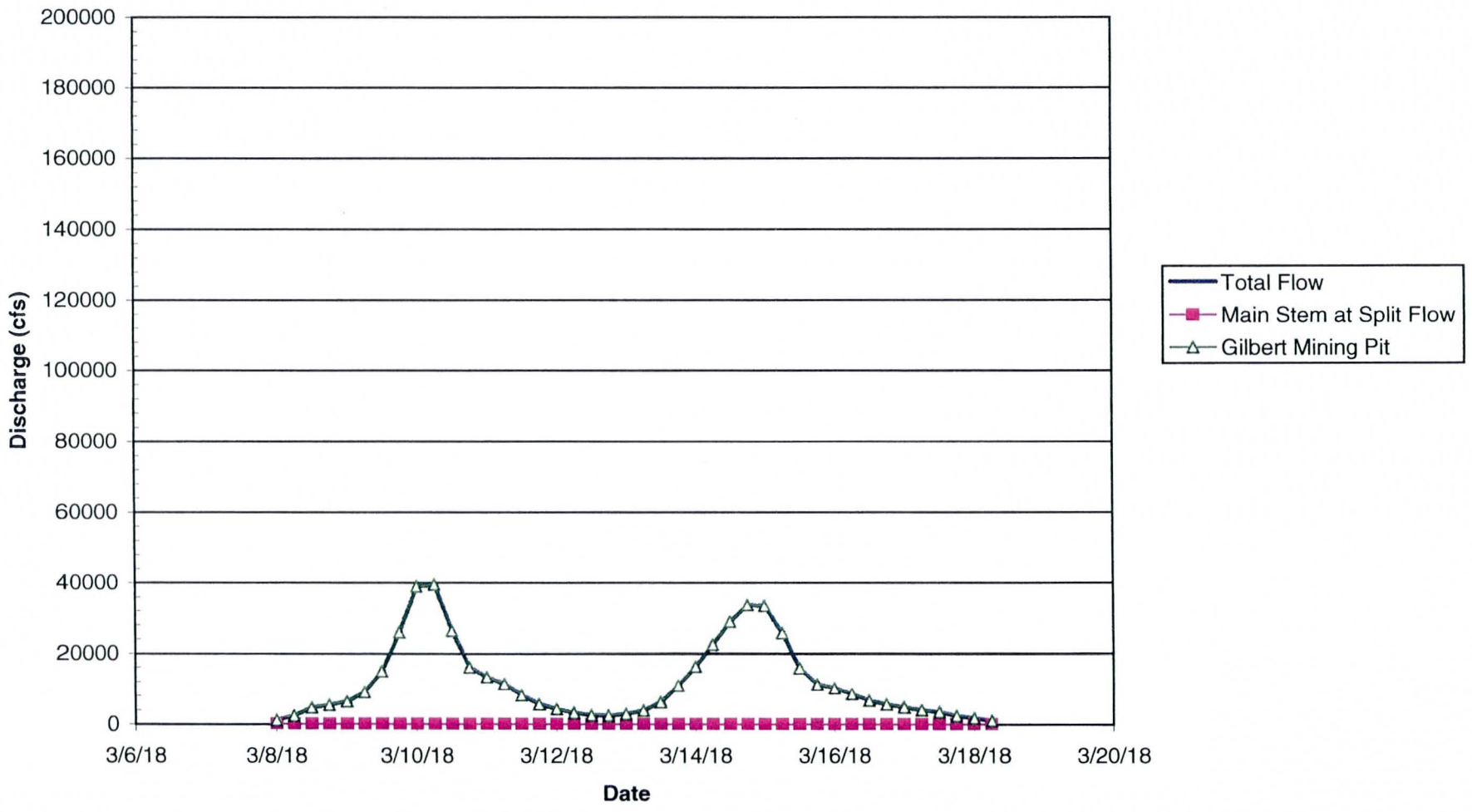
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1917



Prepared by SMF

split flow hydrograph
9/30/2003

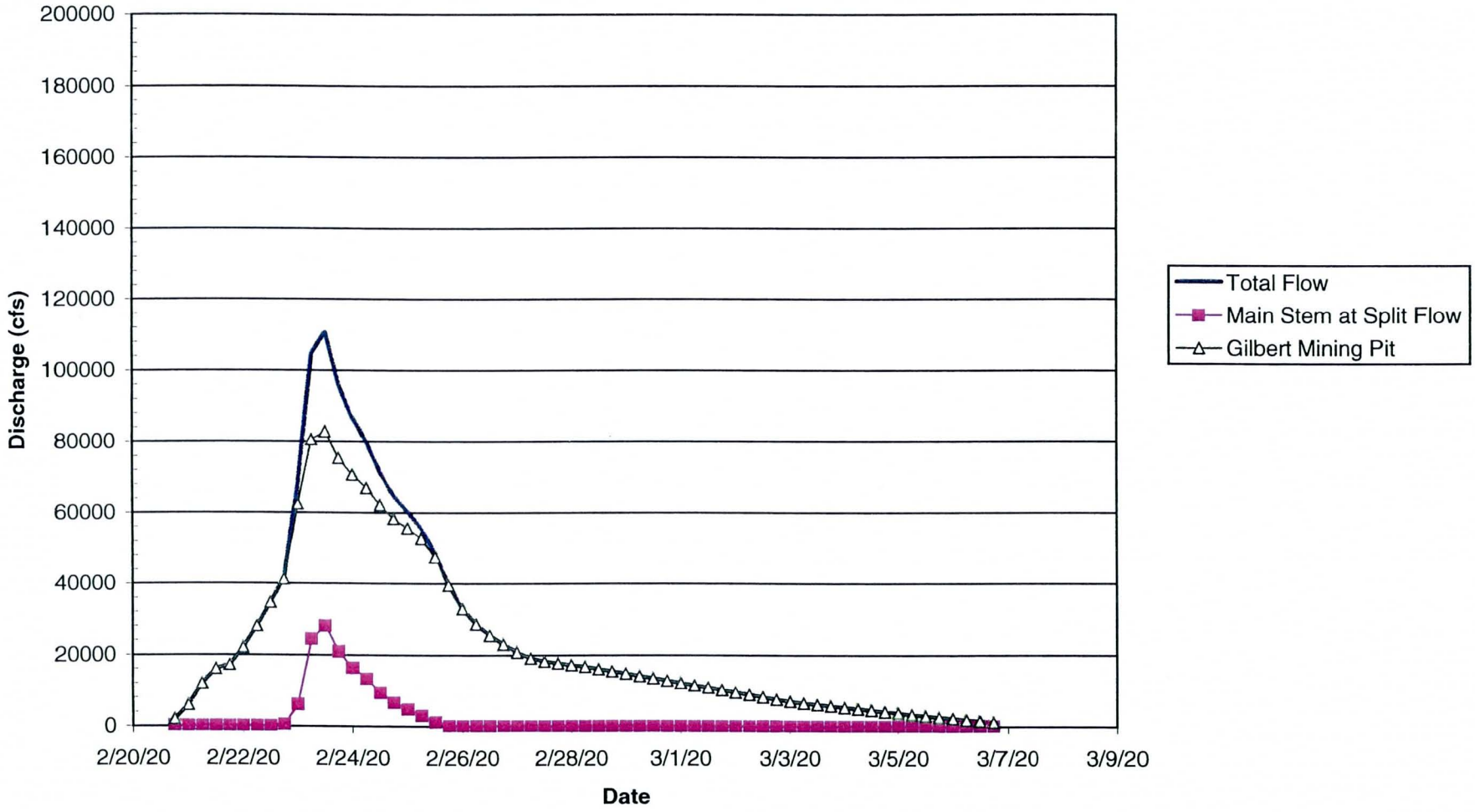
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1918



Prepared by SMF

split flow hydrograph
9/30/2003

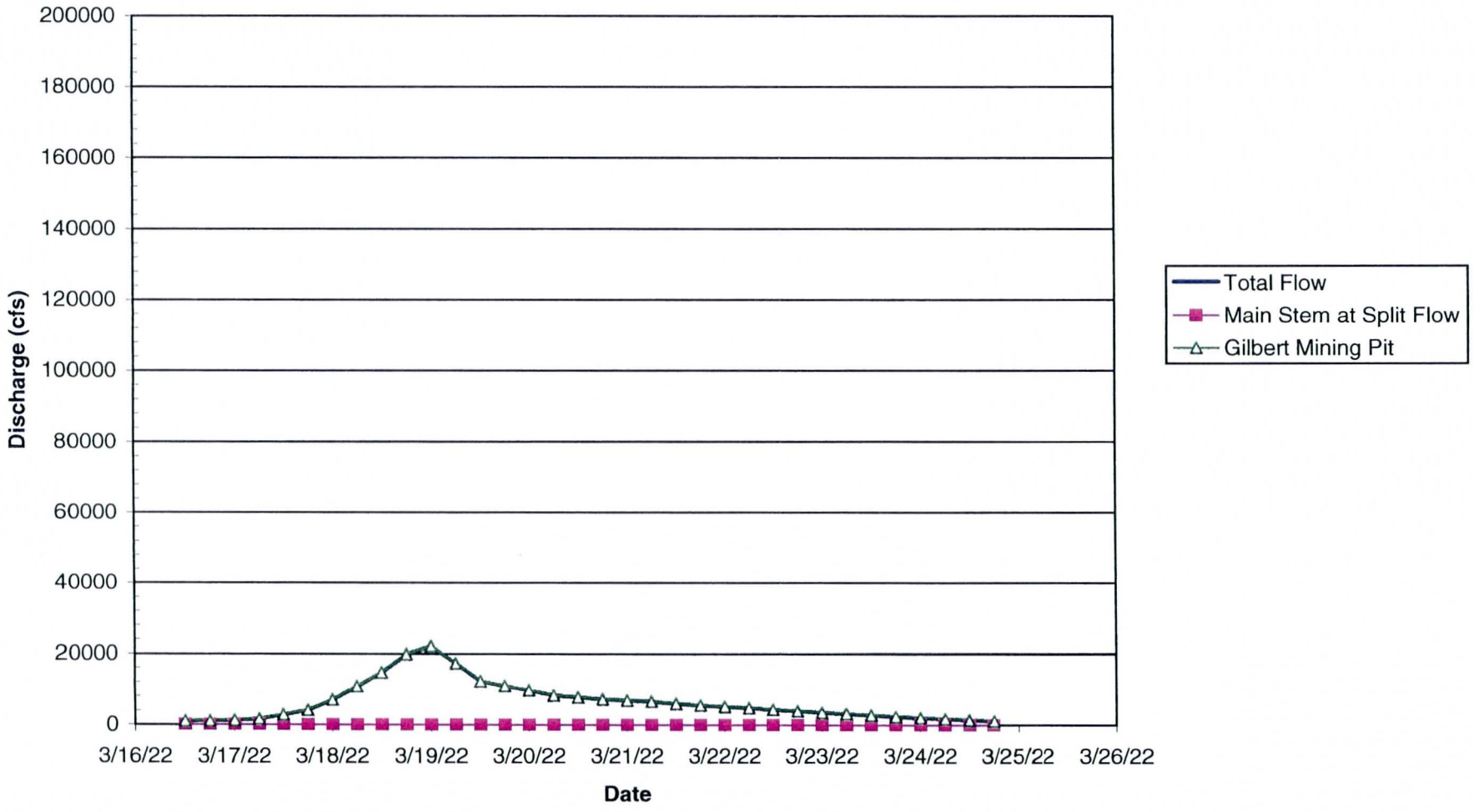
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1920



Prepared by SMF

split flow hydrograph
9/30/2003

Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1922



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split flow hydrograph
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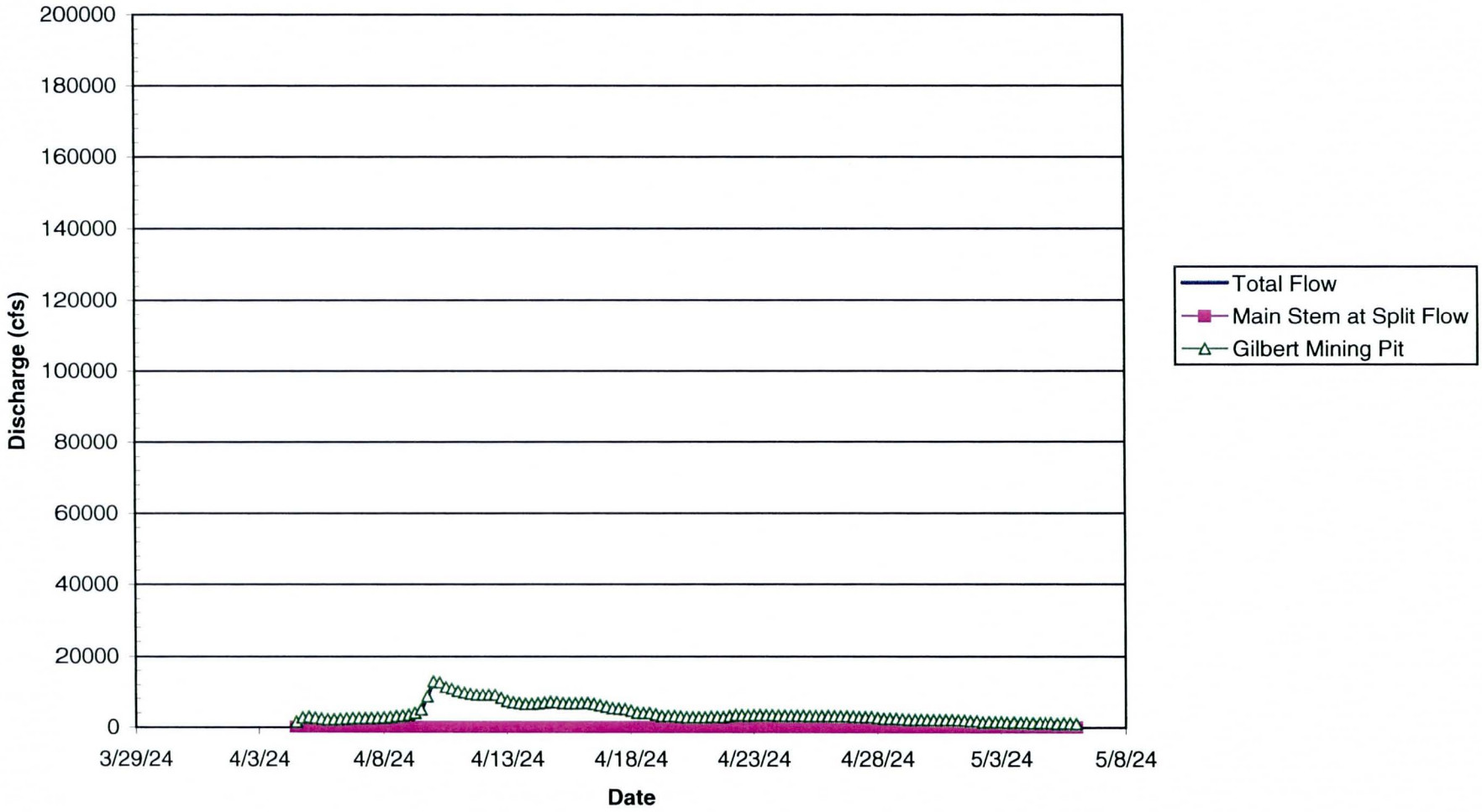
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1924



Prepared by SMF

split flow hydrograph
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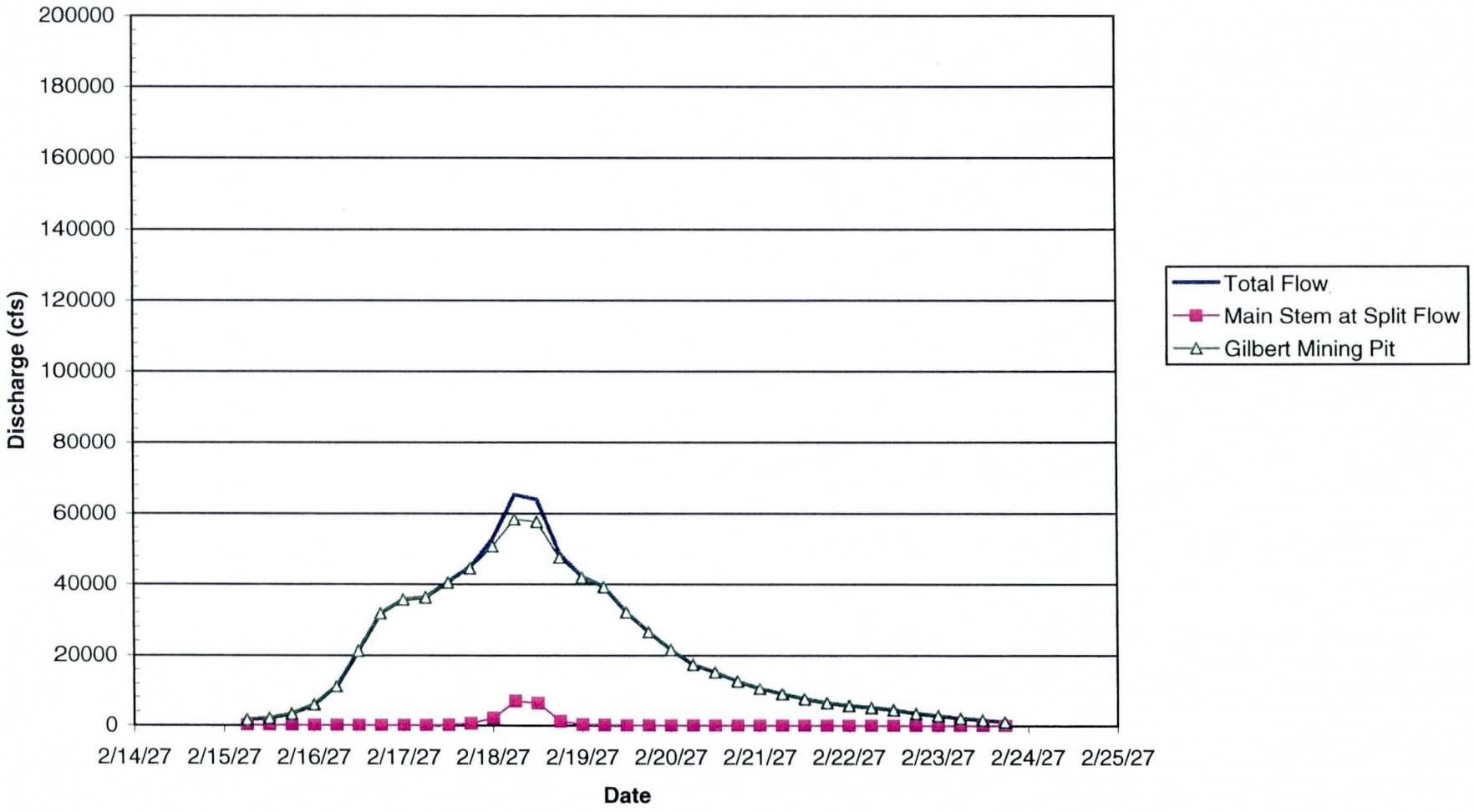
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1927



Prepared by SMF

split flow hydrograph
9/30/2003

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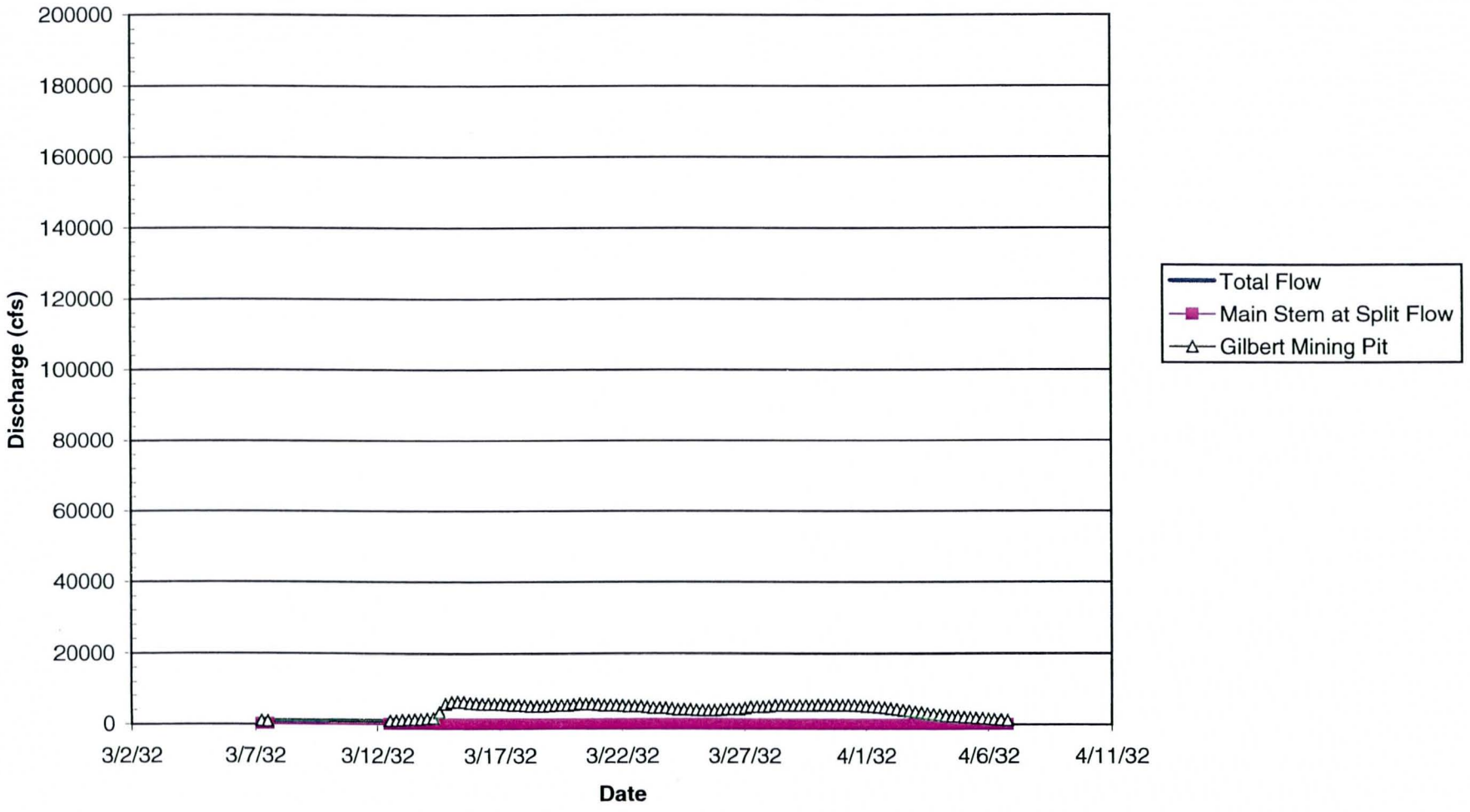
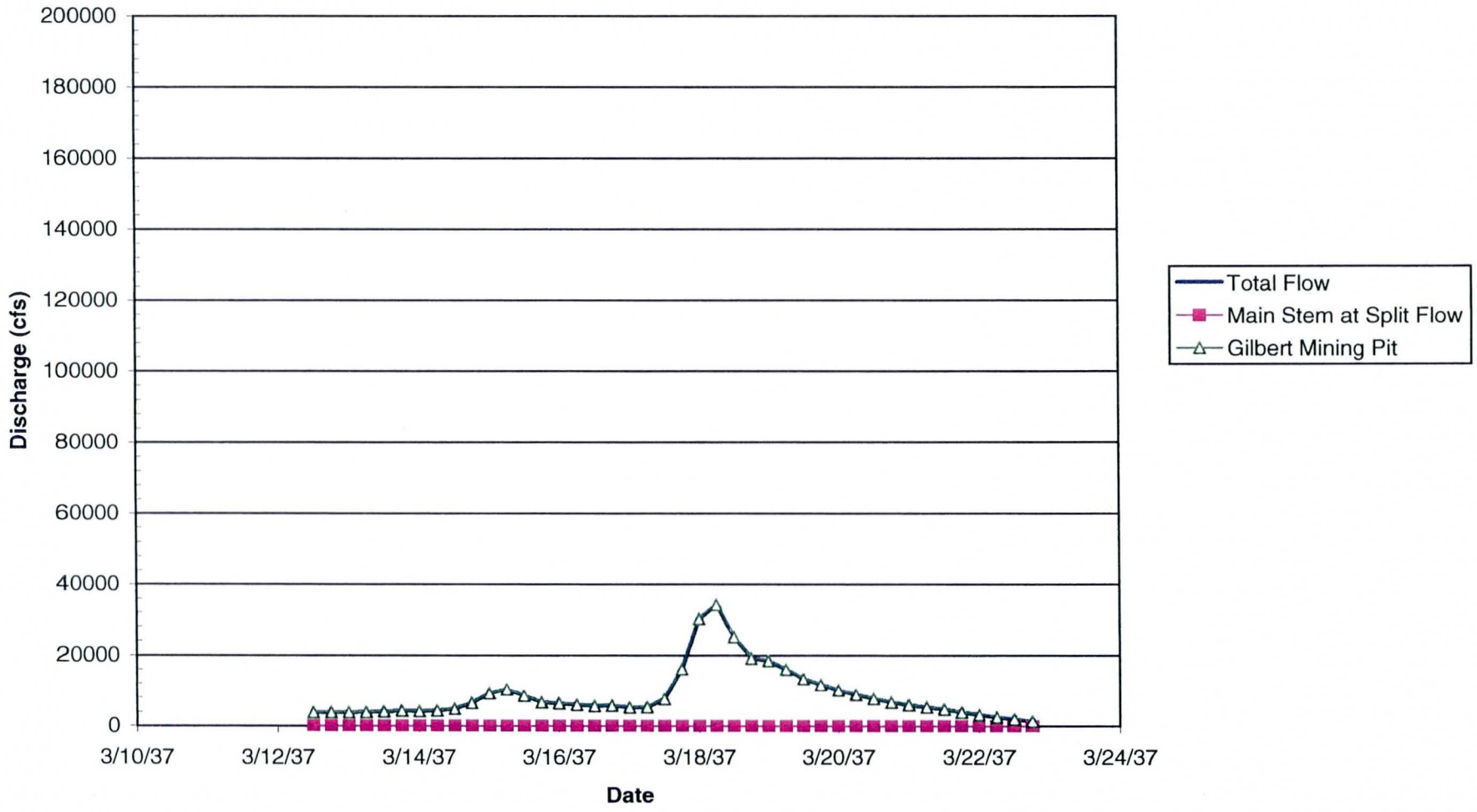
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1932



Prepared by SMF

split flow hydrograph
9/30/2003

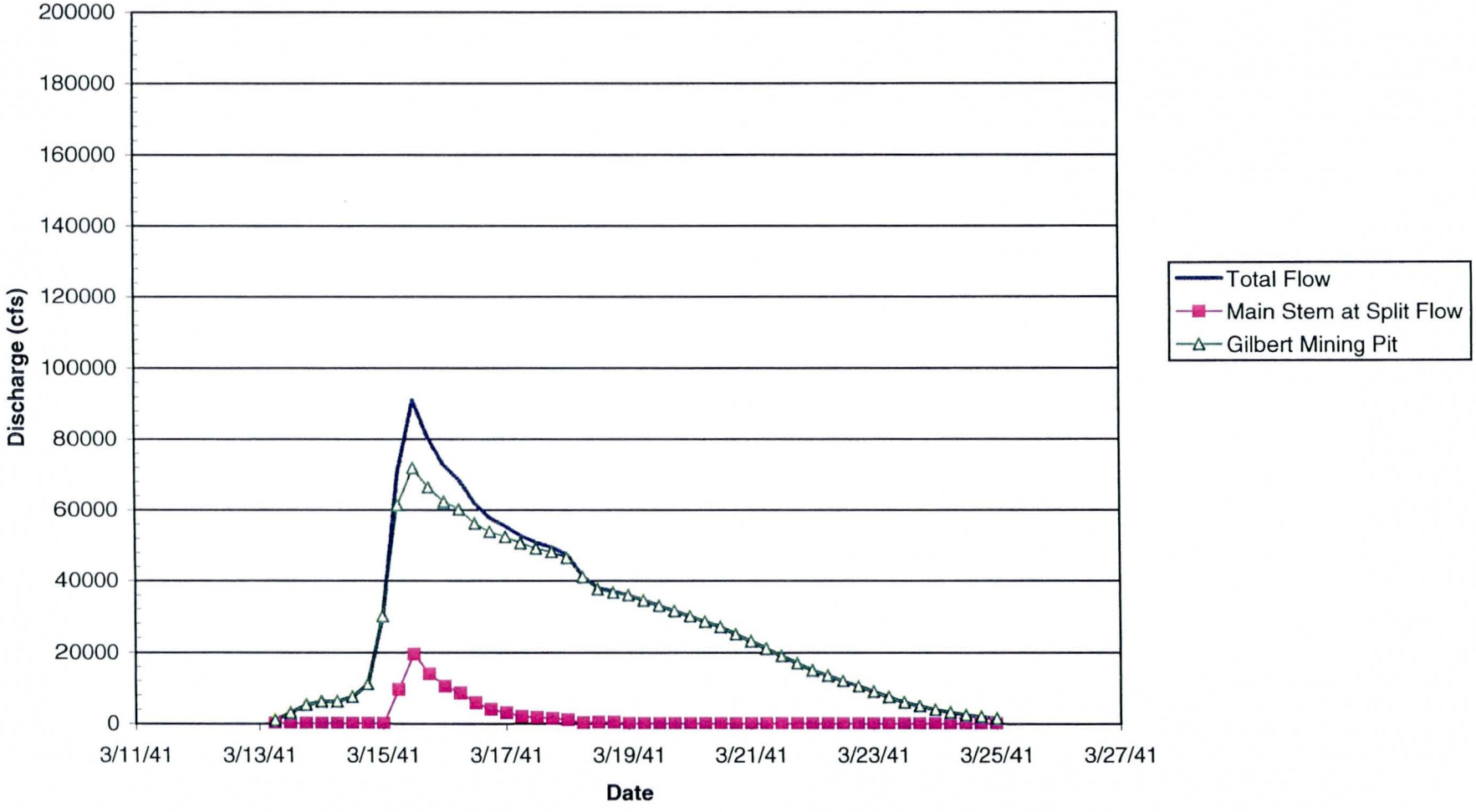
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1937



Prepared by SMF

split flow hydrograph
9/30/2003

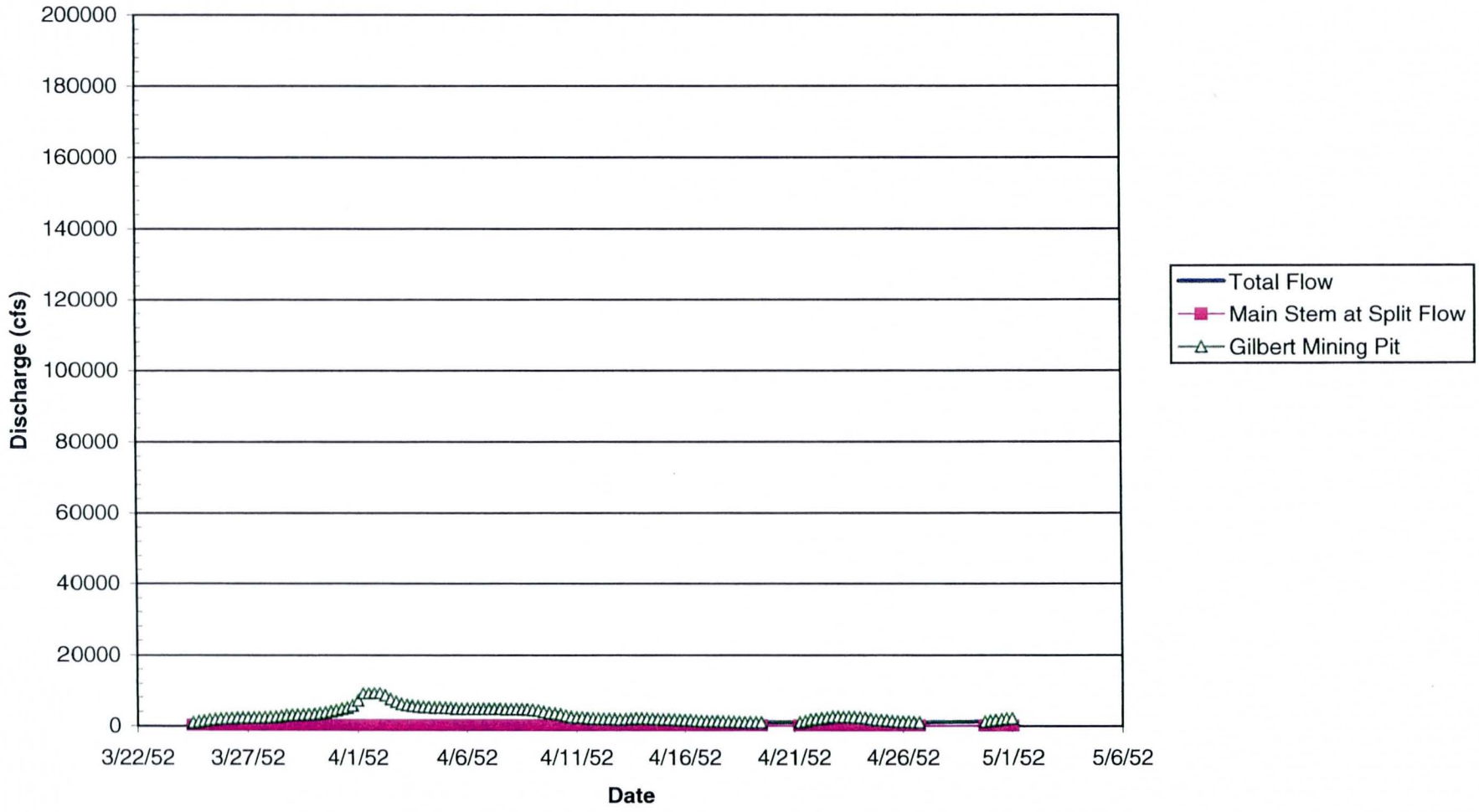
Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1941



Prepared by SMF

split flow hydrograph
9/30/2003

Va Shly' Ay Akimel
Hydrographs between the Main Stem and the Gilbert Mining Pit
Water Year 1952



Prepared by SMF

split flow hydrograph
9/30/2003

APPENDIX 8

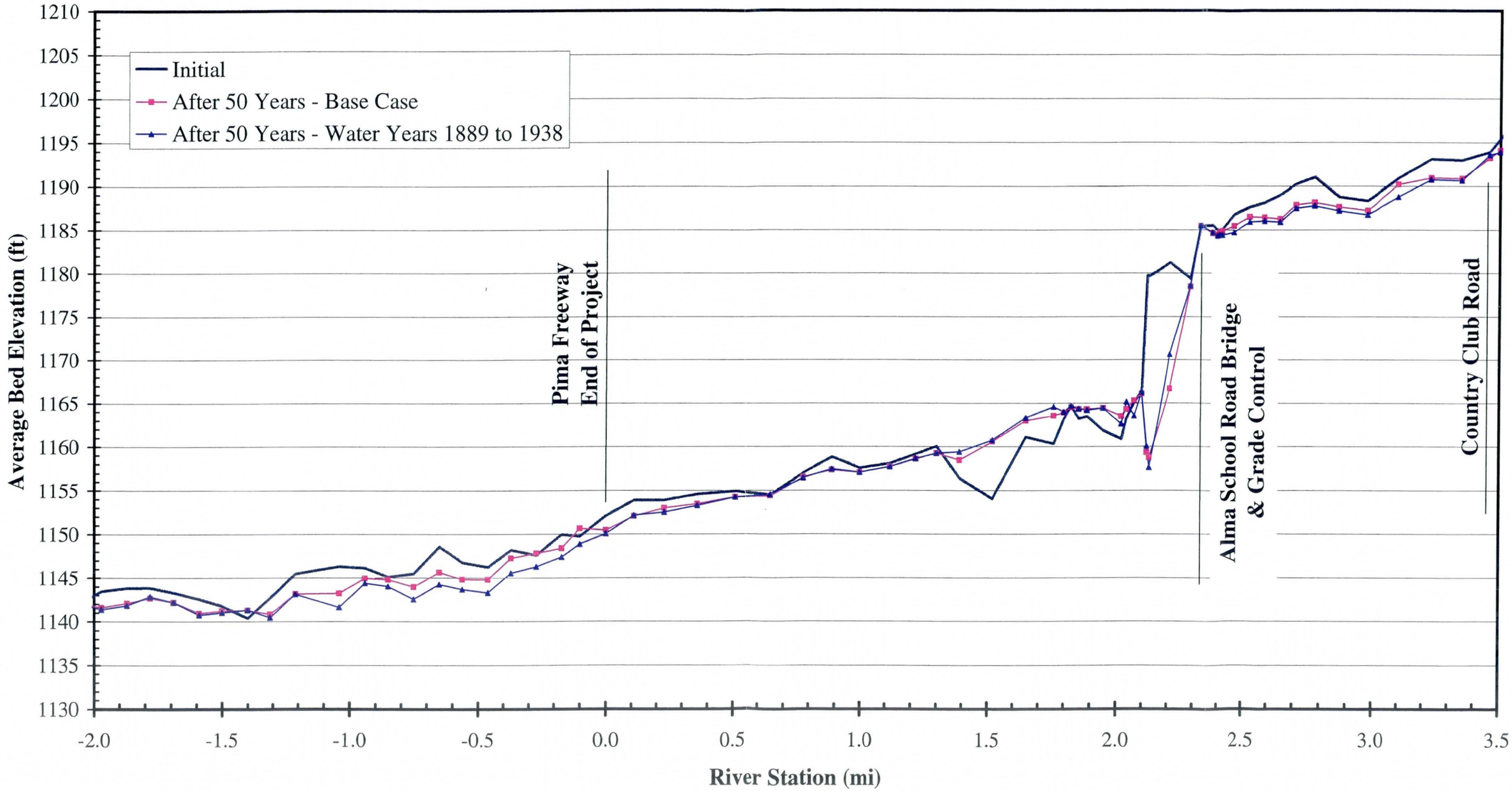
AVERAGE BED ELEVATION COMPARISONS FOR HEC-6T SENSITIVITY ANALYSES

8a. Sensitivity to 50-Year Flow Series
8b. Sensitivity to Inflowing Sediment Load
8c. Sensitivity to Transport Method
8d. Sensitivity to Manning n

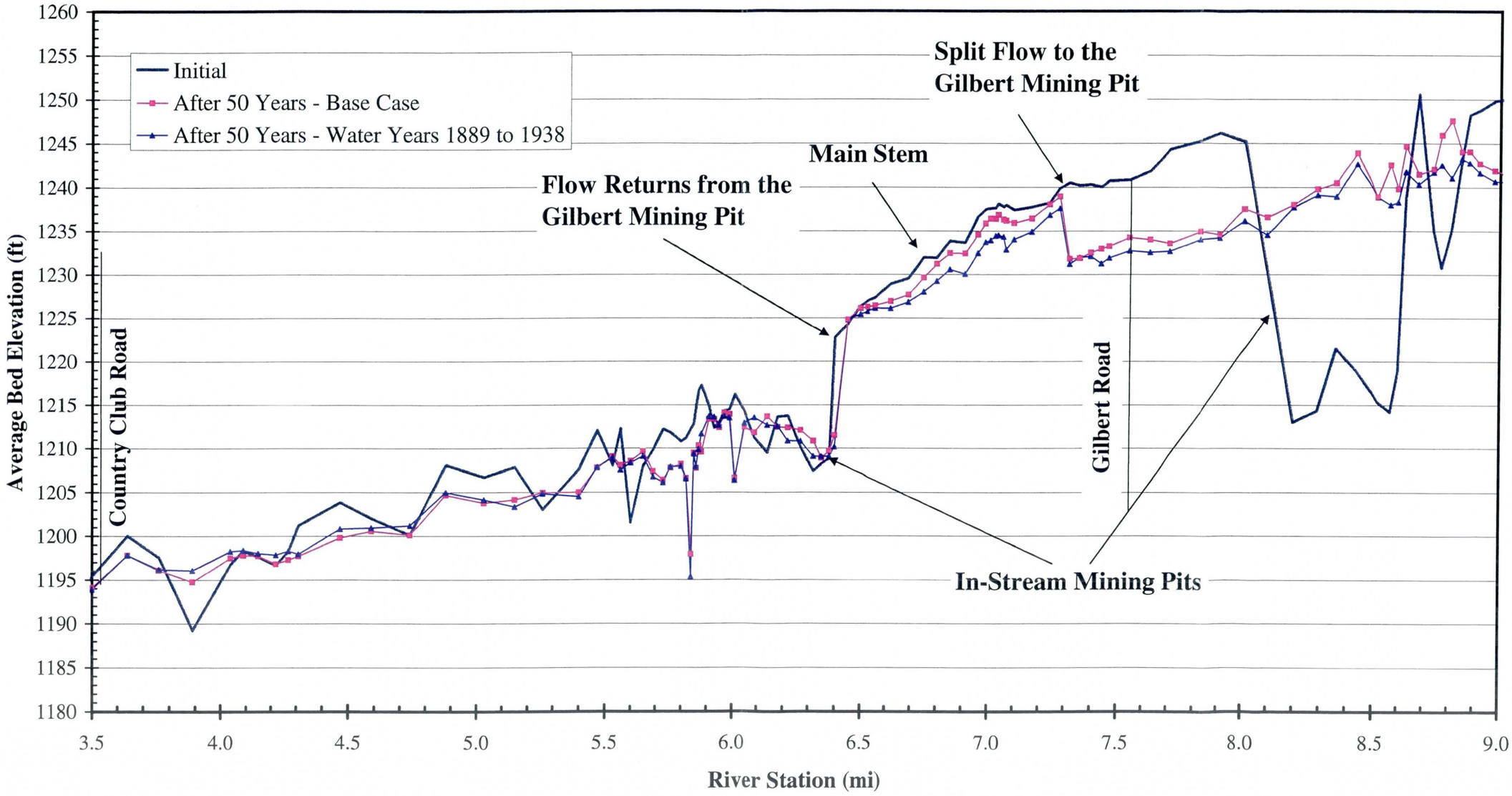
APPENDIX 8a

SENSITIVITY TO 50-YEAR FLOW SERIES

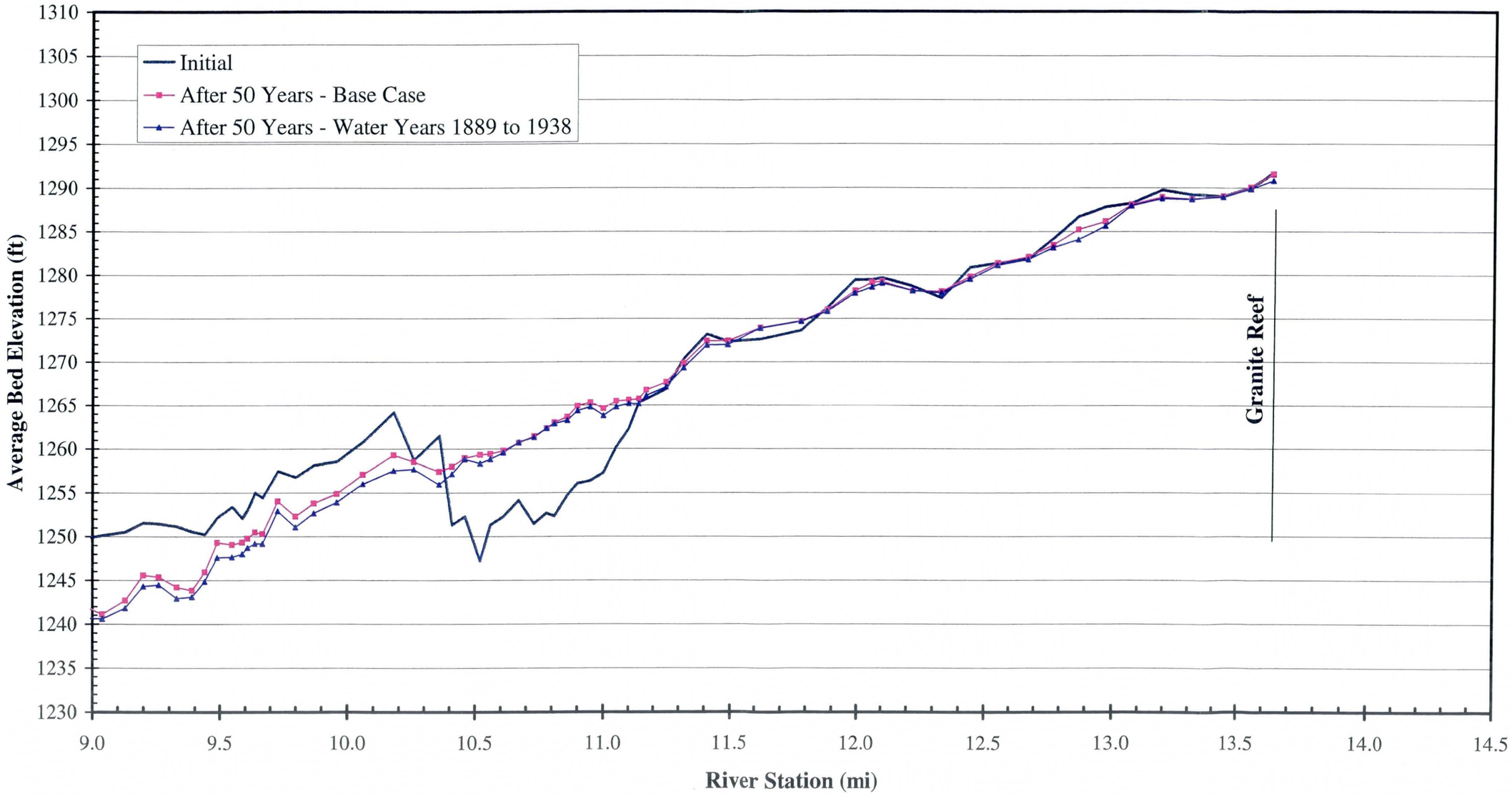
Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to 50-Year Flow Series
River Stations -2.06 to 3.50



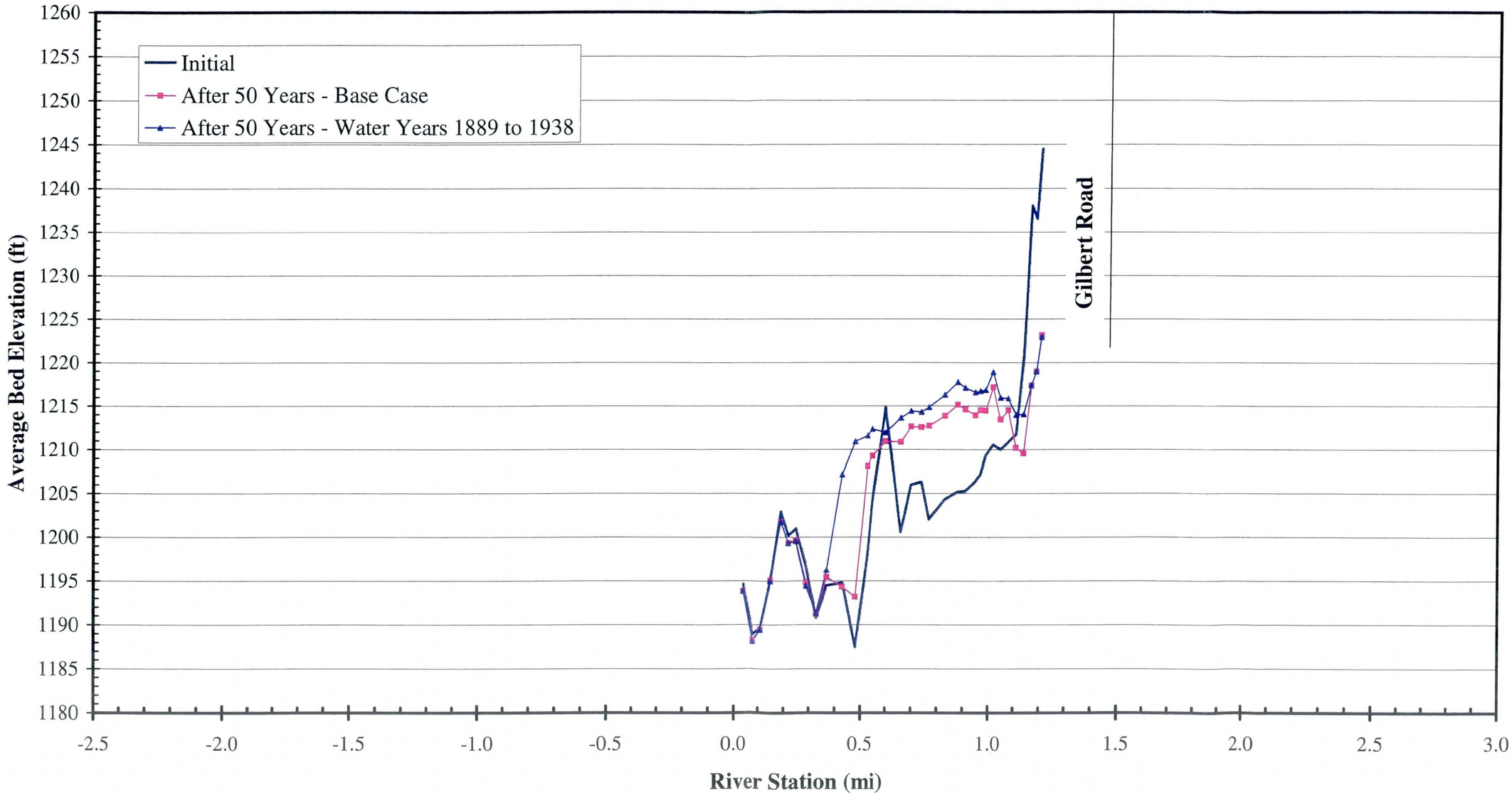
Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to 50-Year Flow Series
River Stations 3.50 to 9.00



Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to 50-Year Flow Series
River Stations 9.00 to 13.64



Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to 50-Year Flow Series
Gilbert Mining Pit



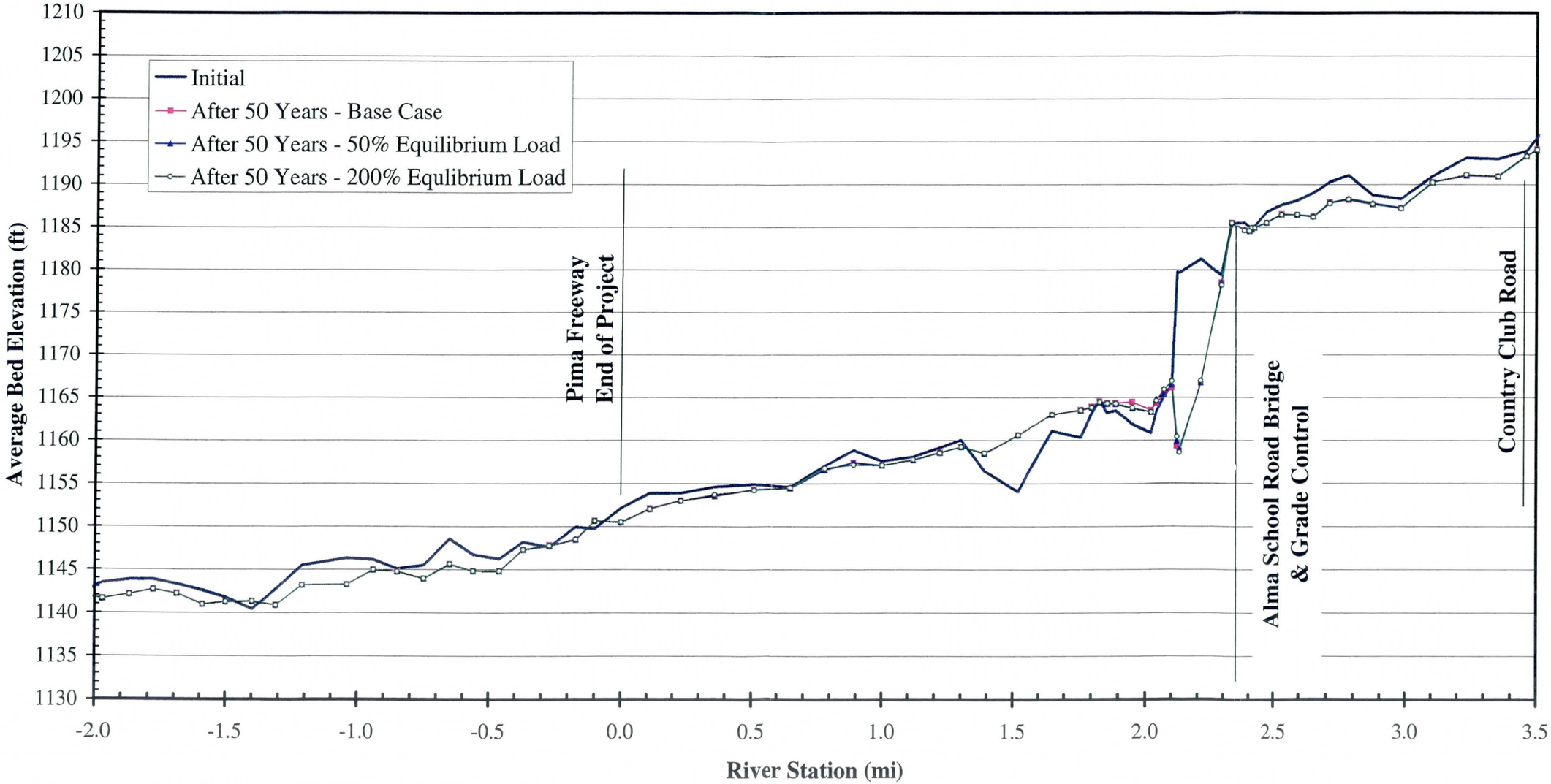
APPENDIX 8b

SENSITIVITY TO INFLOWING SEDIMENT LOAD

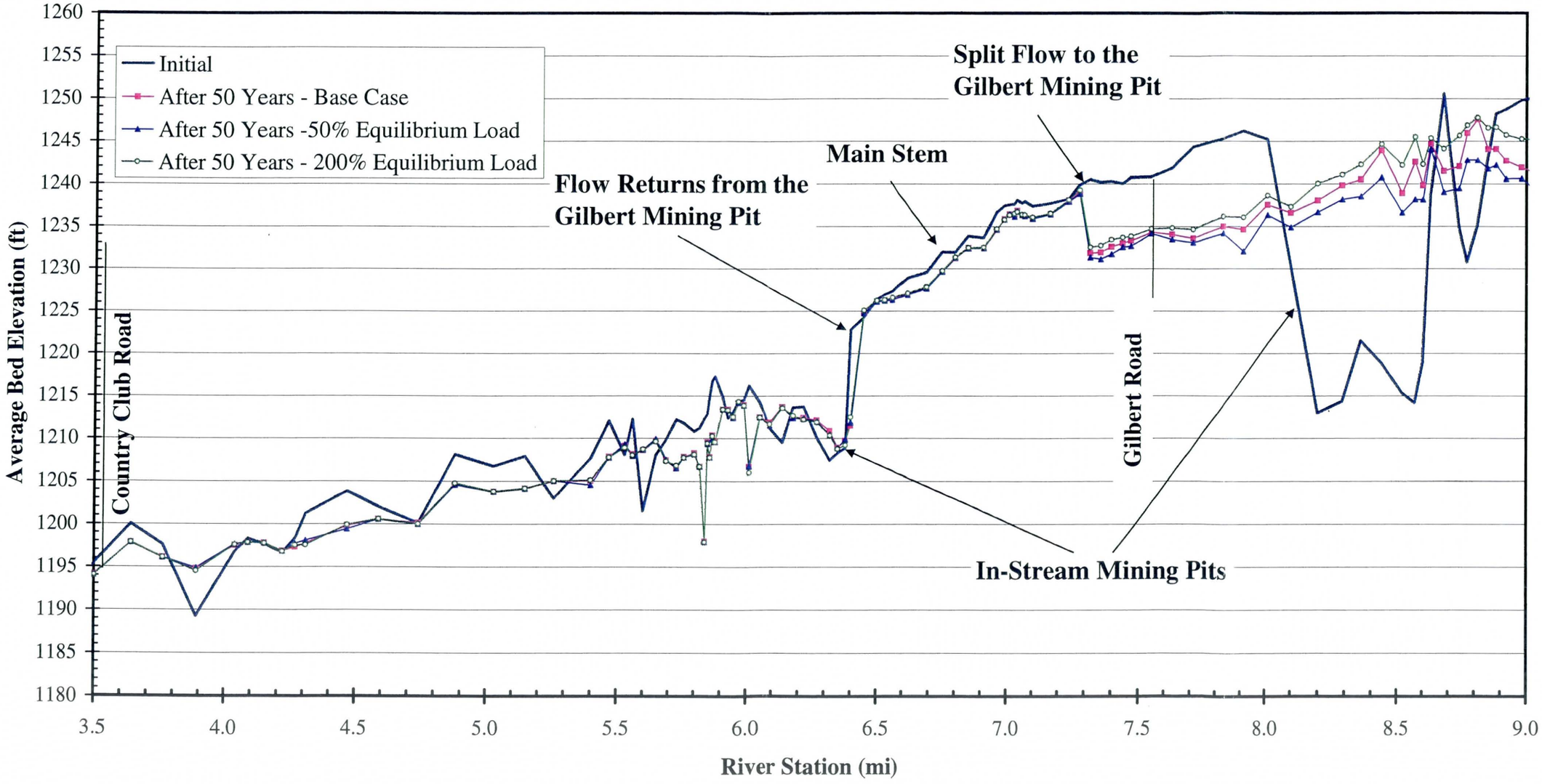
Va Shly' Ay Akimel

Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Inflowing Sediment Load

River Stations -2.06 to 3.50



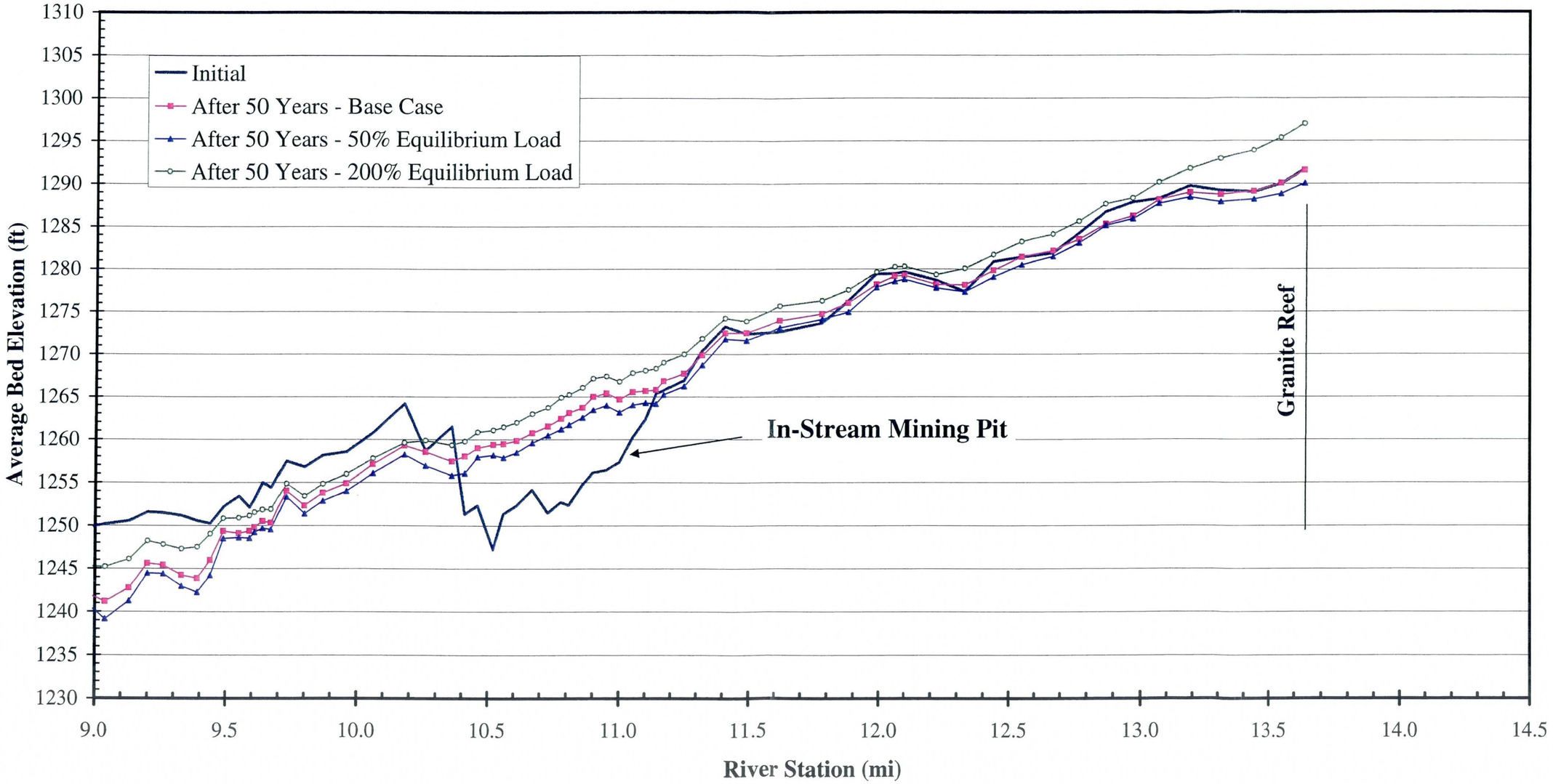
Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Inflowing Sediment Load
River Stations 3.50 to 9.00



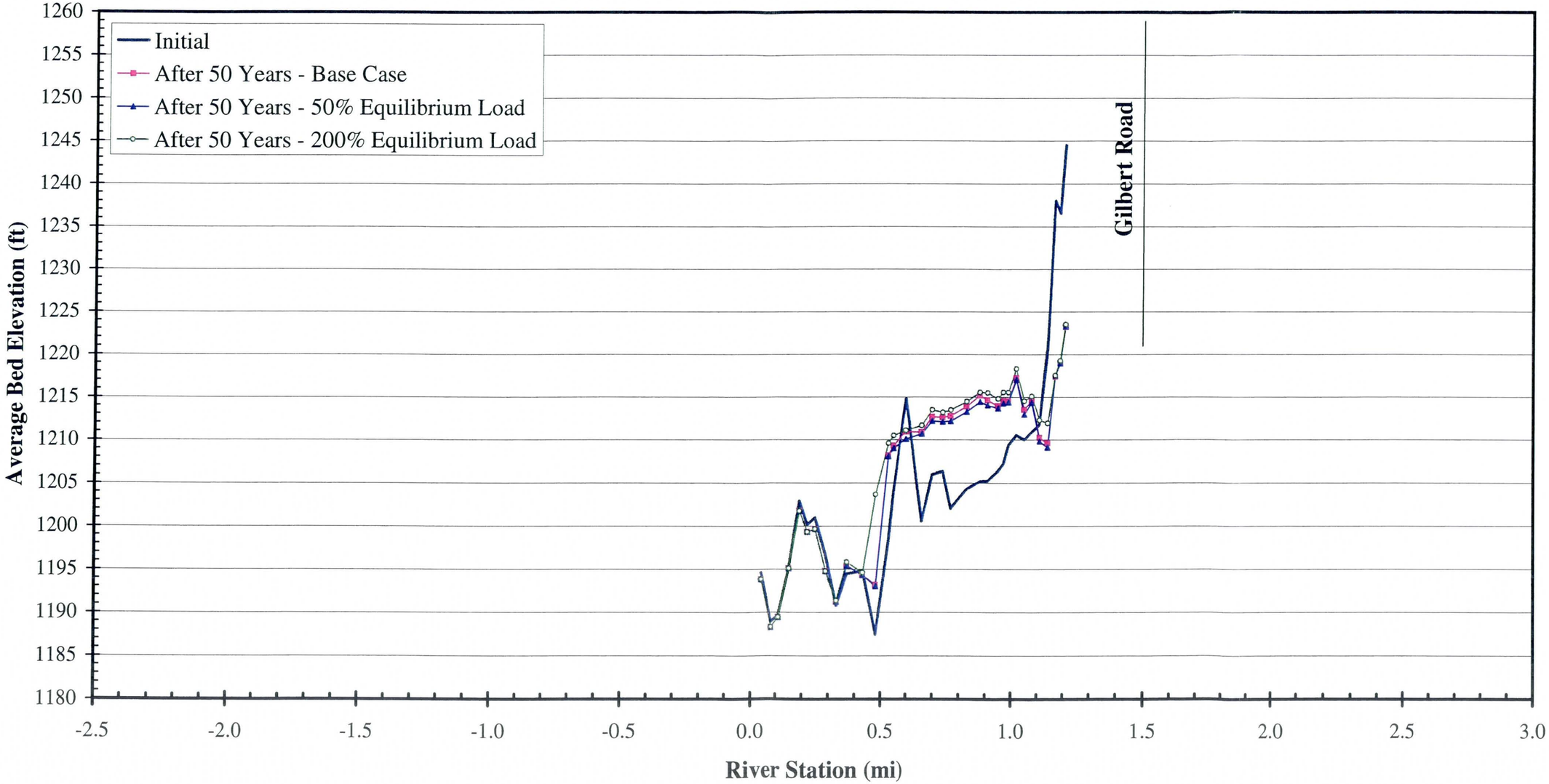
Va Shly' Ay Akimel

Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Inflowing Sediment Load

River Stations 9.00 to 13.64



Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Inflowing Sediment Load
Gilbert Mining Pit

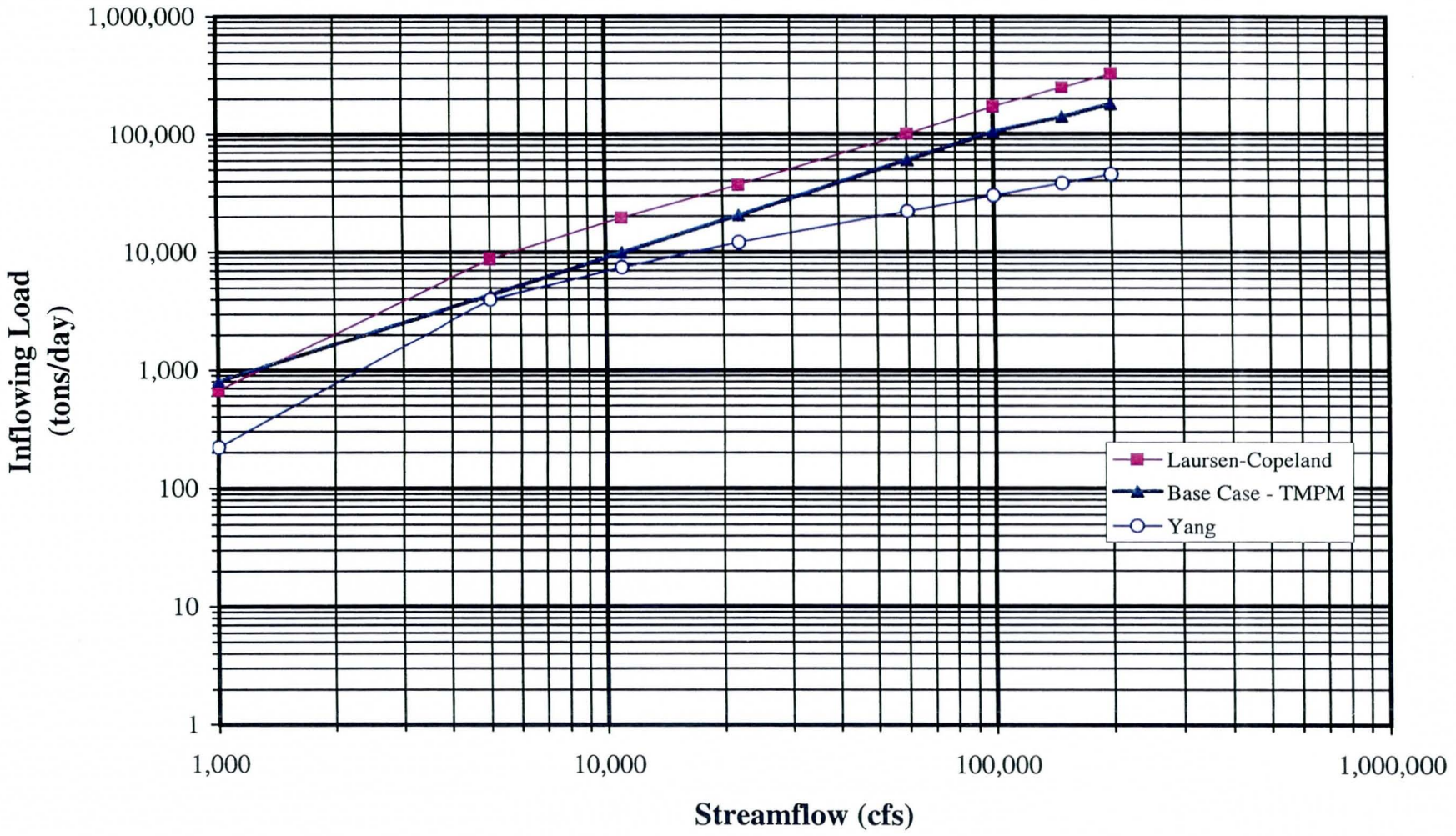


APPENDIX 8c

SENSITIVITY TO TRANSPORT METHOD

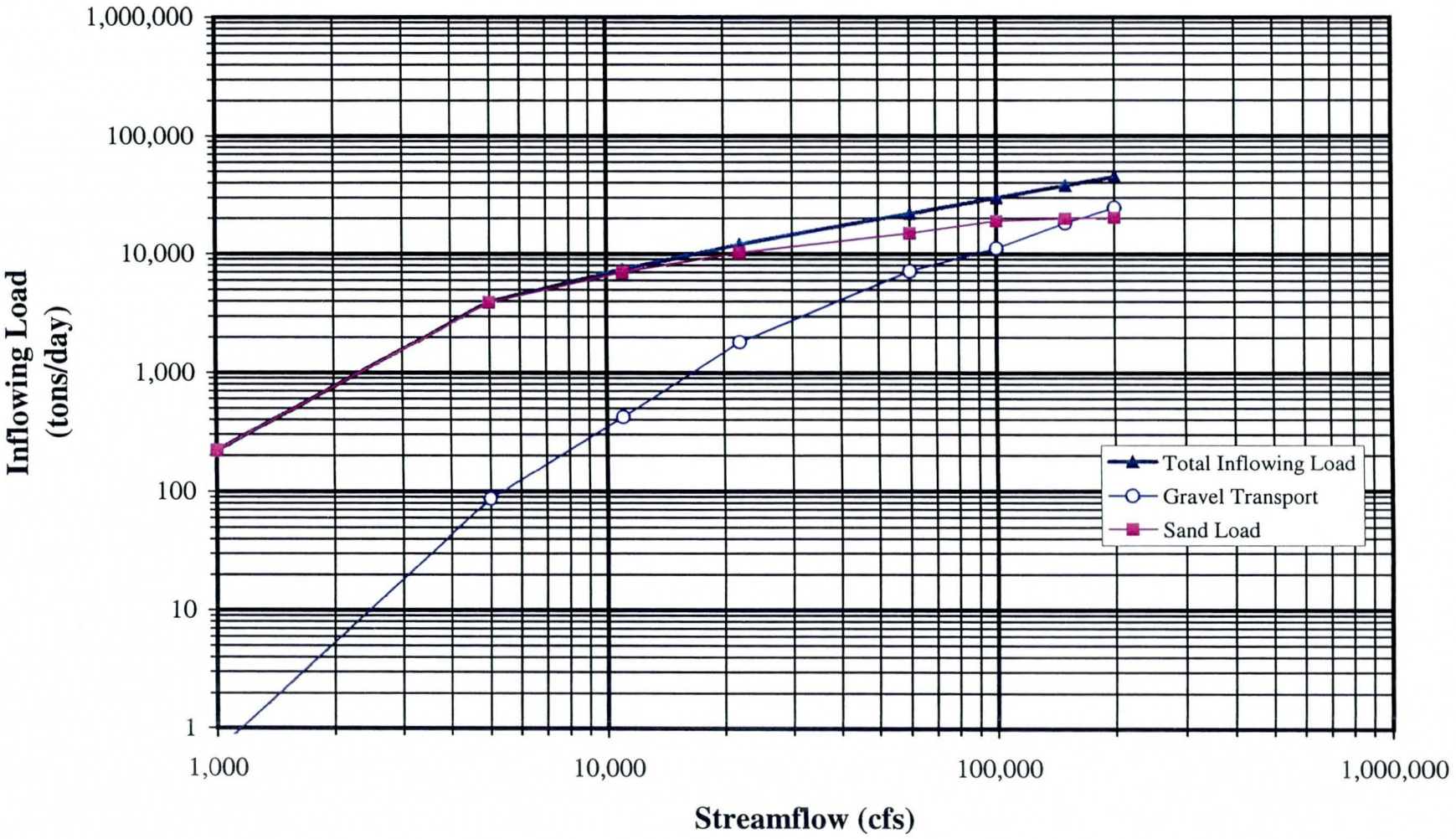
Va Shly' Ay Akimel

Comparison of Total Equilibrium Inflowing Load for Different Transport Methods



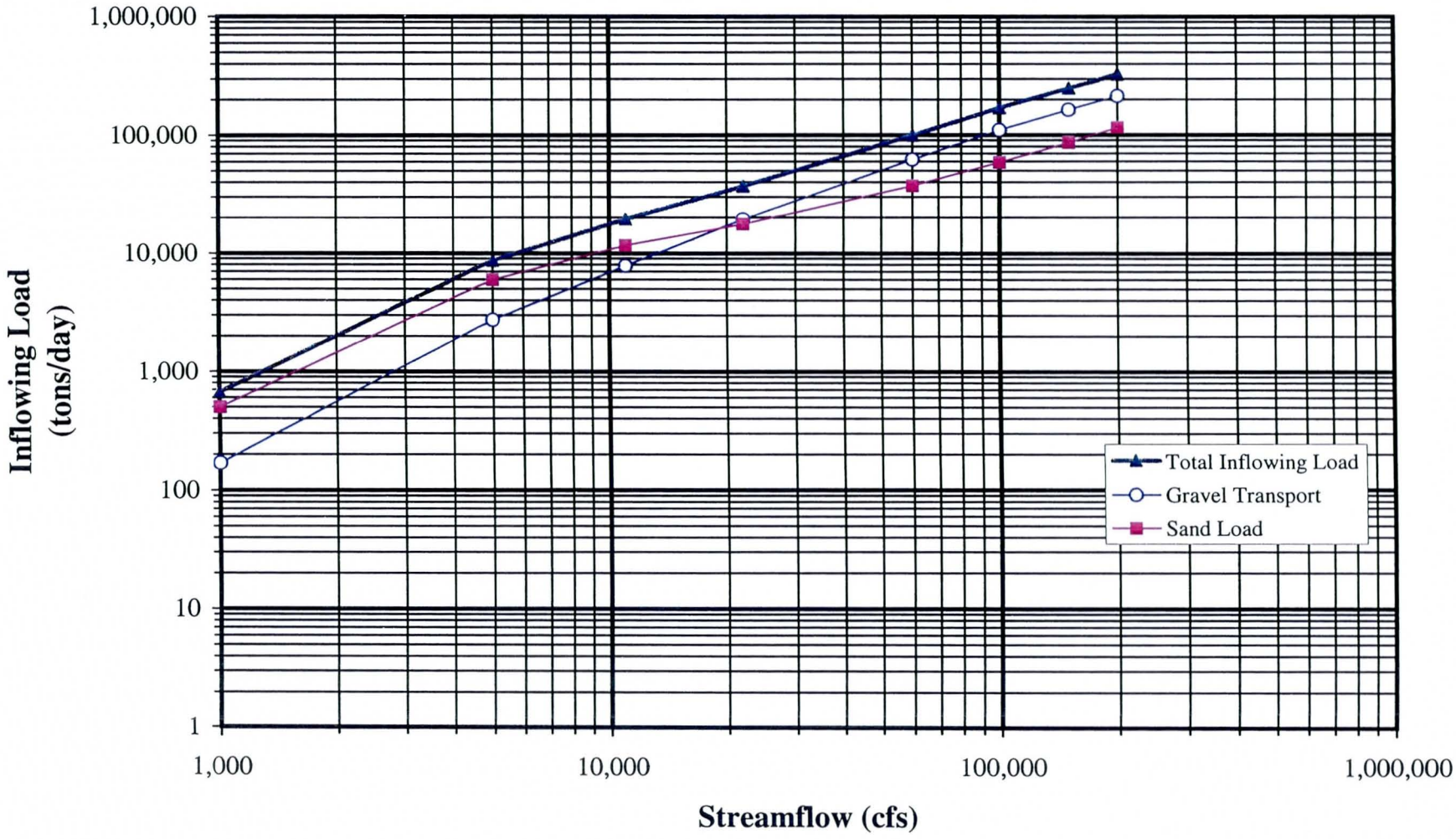
Va Shly' Ay Akimel

Equilibrium Inflowing Load for the Yang Transport Method

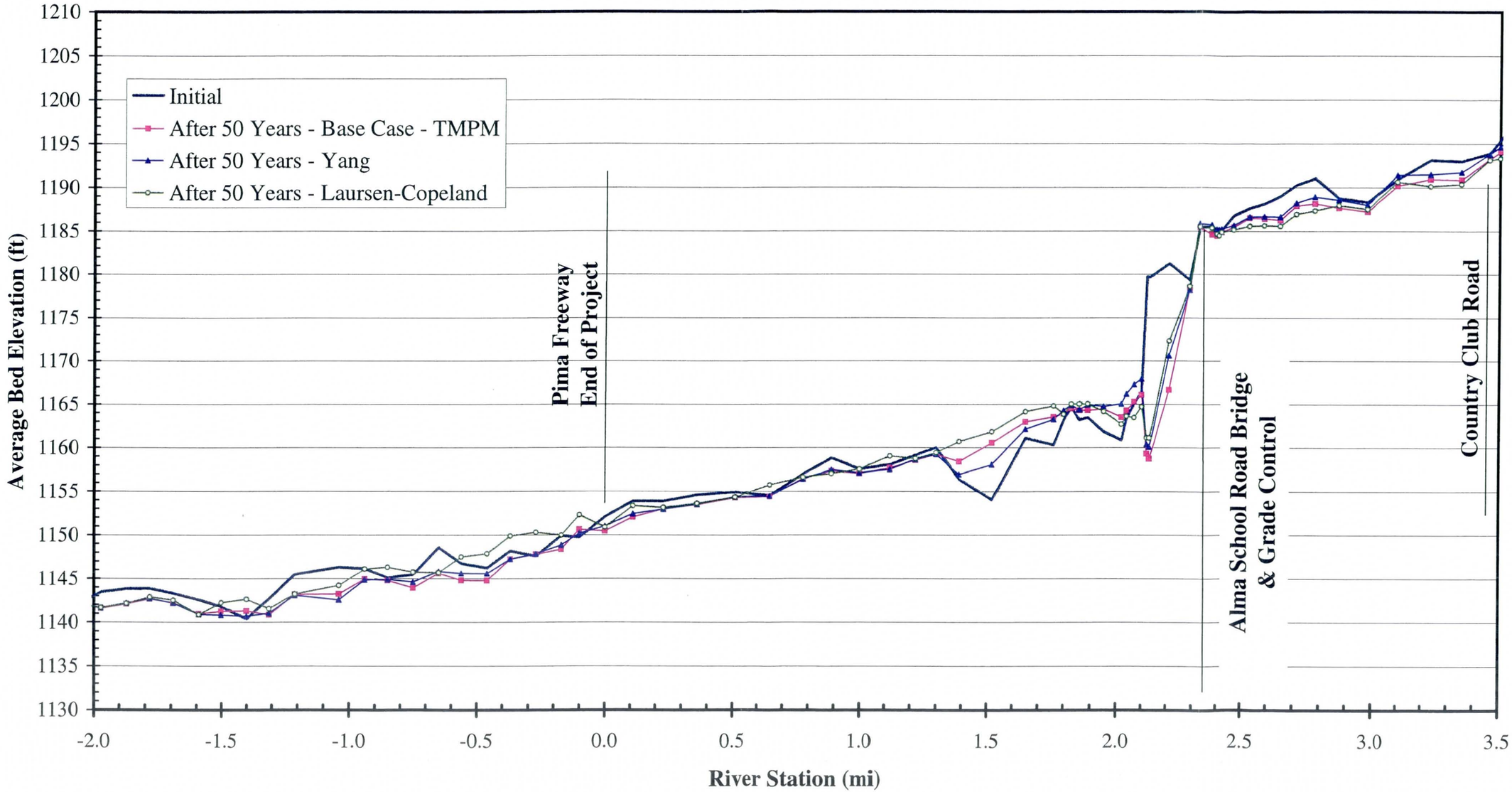


Va Shly' Ay Akimel

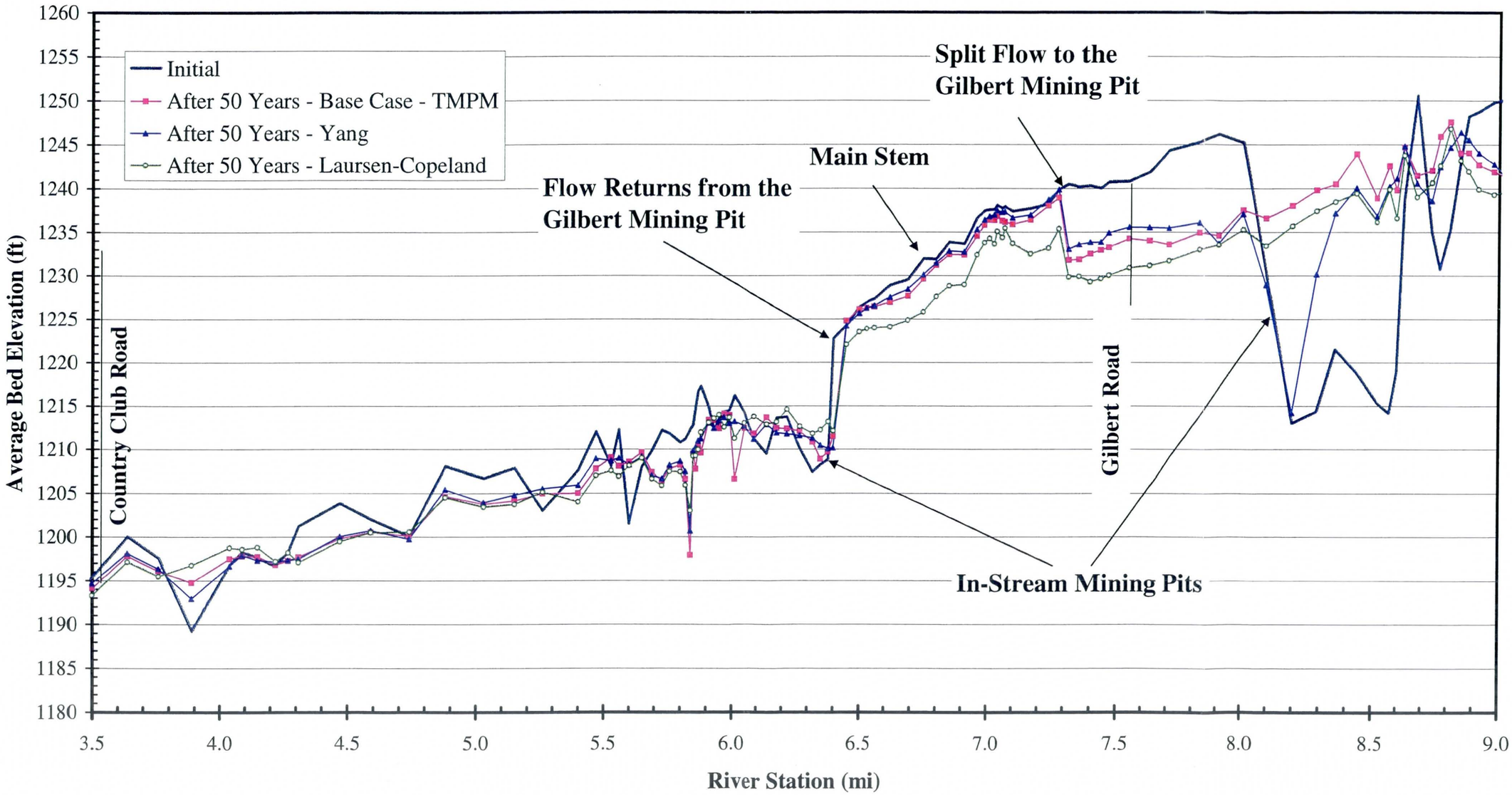
Equilibrium Inflowing Load for the Laursen-Copeland Transport Method



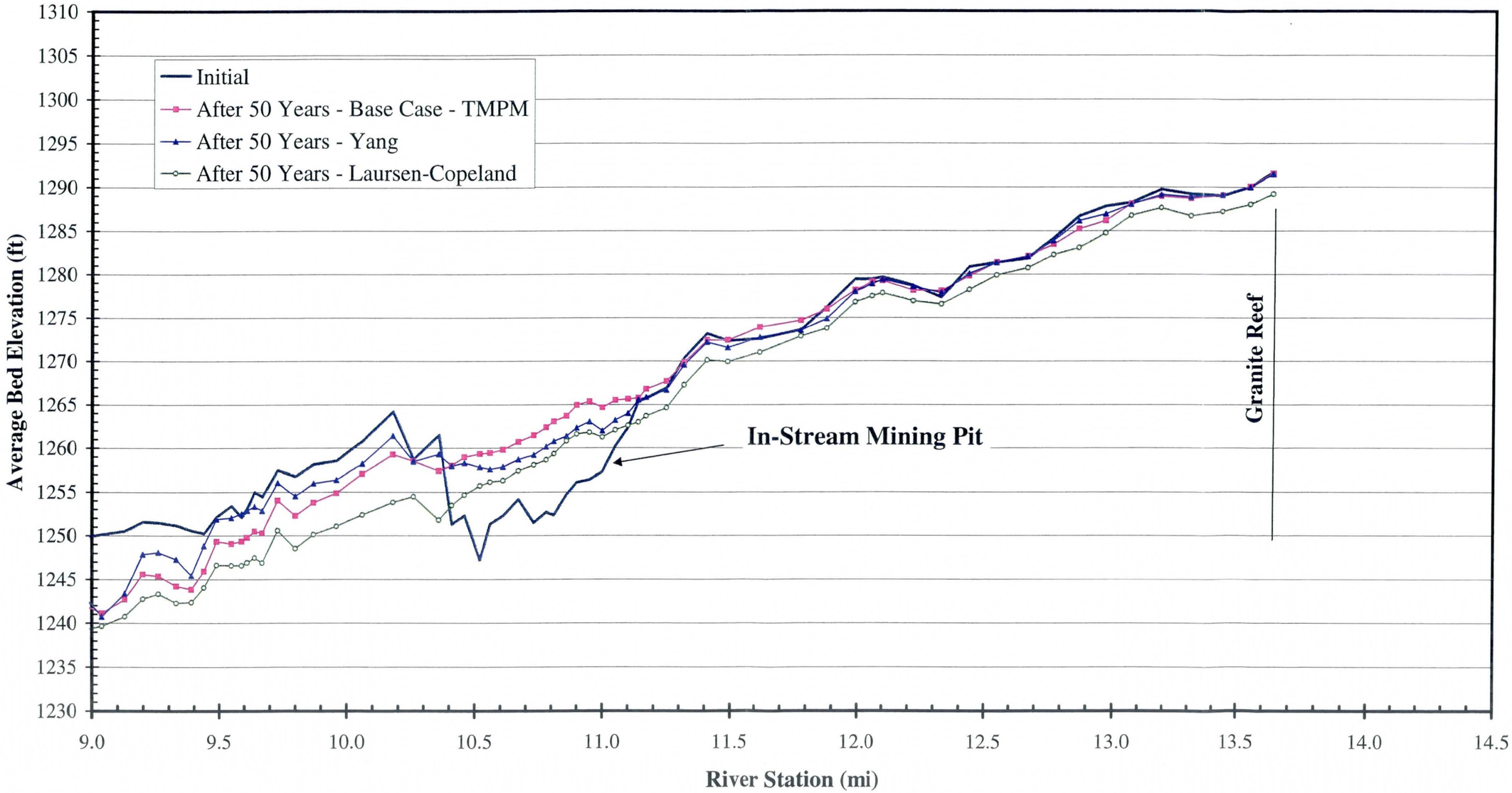
Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Transport Method
River Stations -2.06 to 3.50



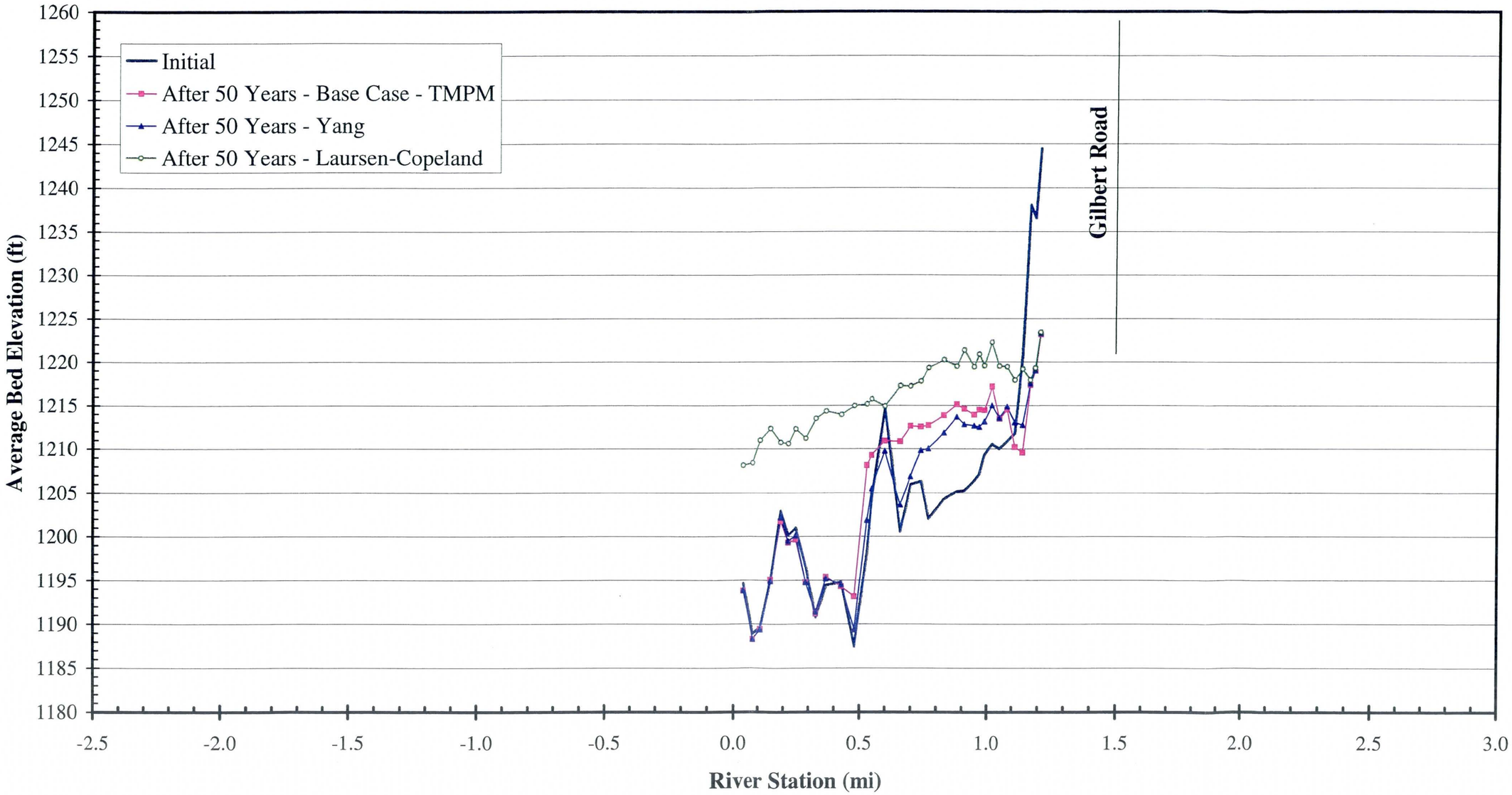
Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Transport Method
River Stations 3.50 to 9.00



Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Transport Method
River Stations 9.00 to 13.64



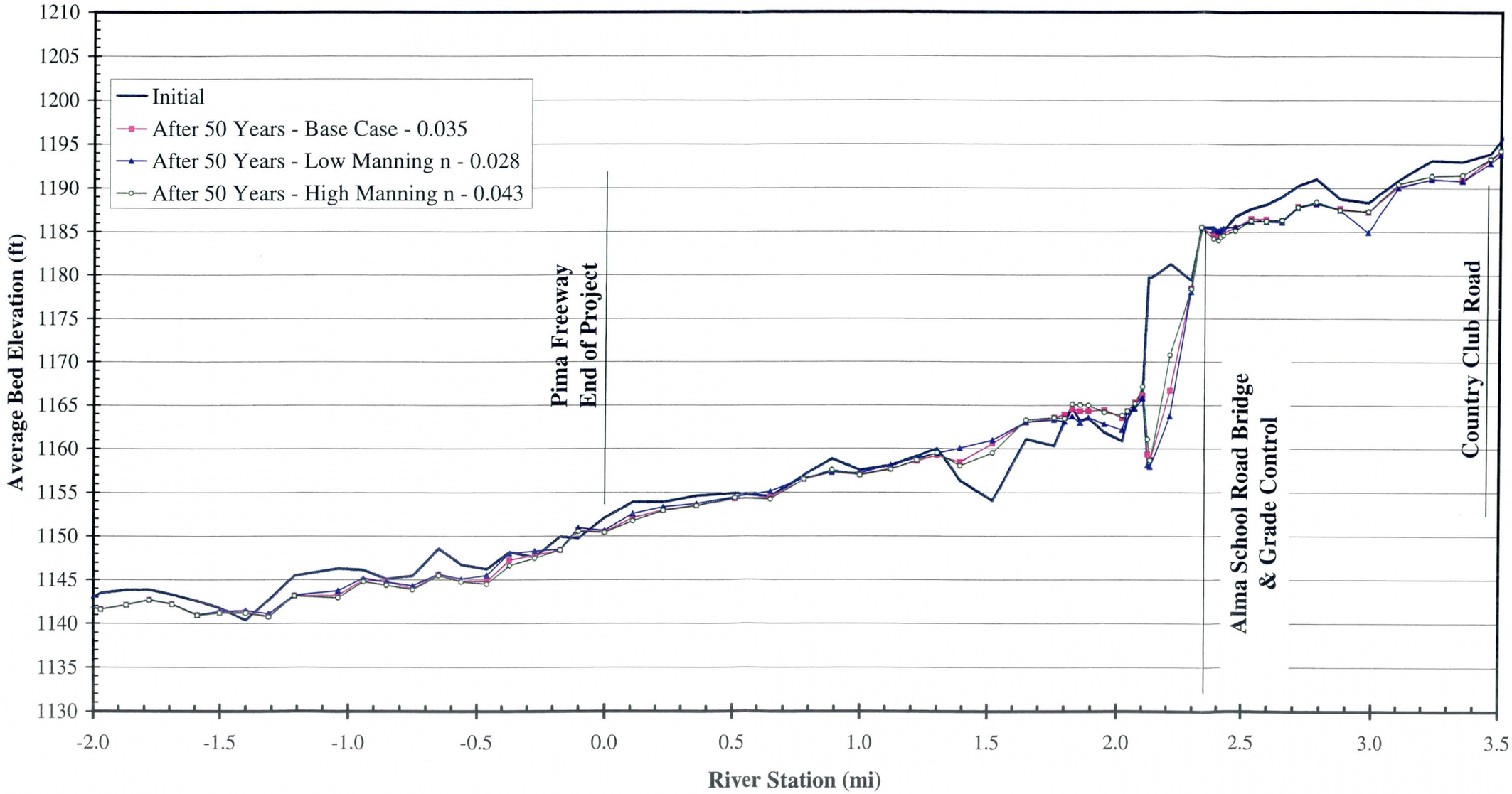
Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Transport Method
Gilbert Mining Pit



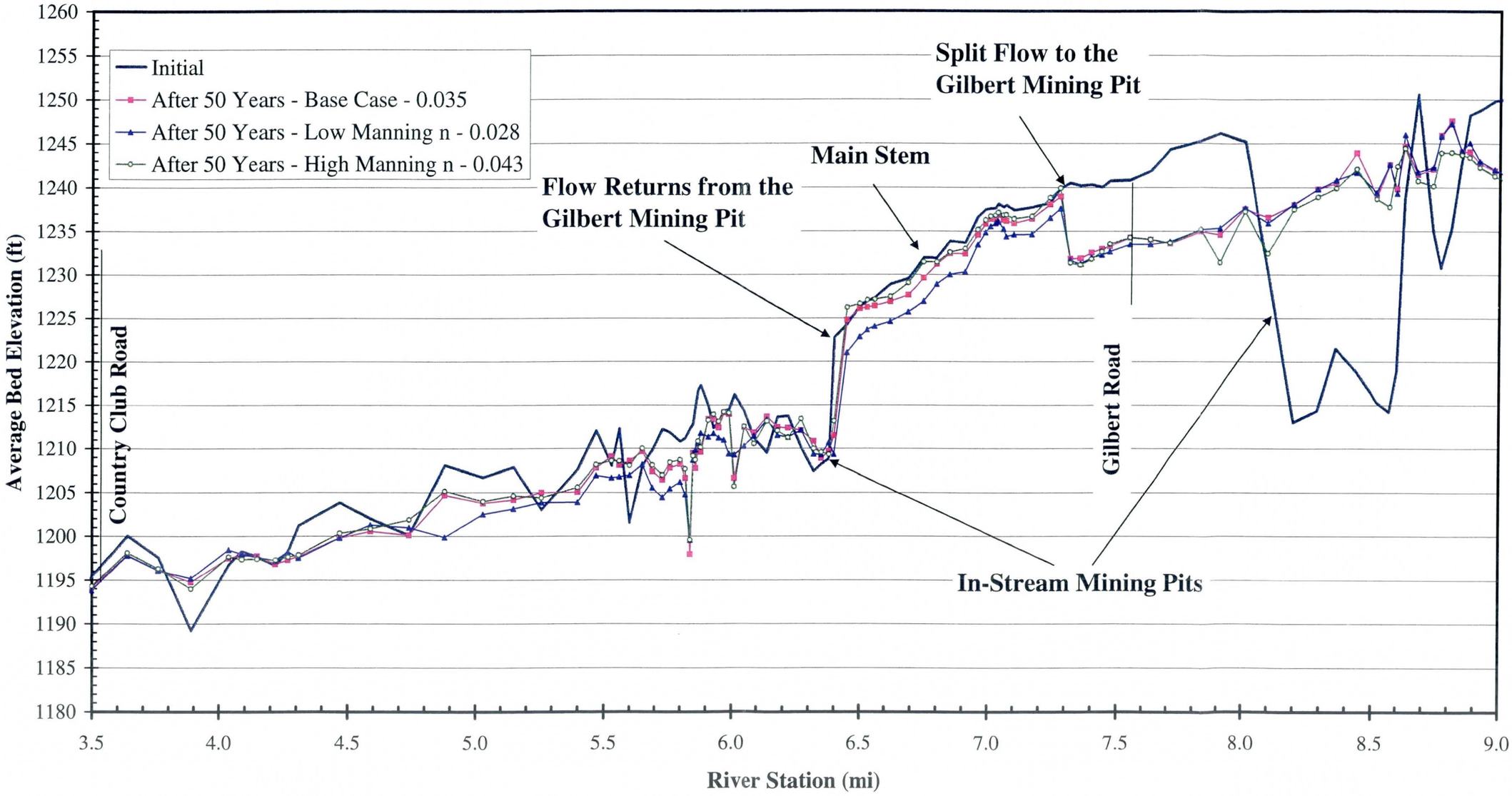
APPENDIX 8d

SENSITIVITY TO MANNING N

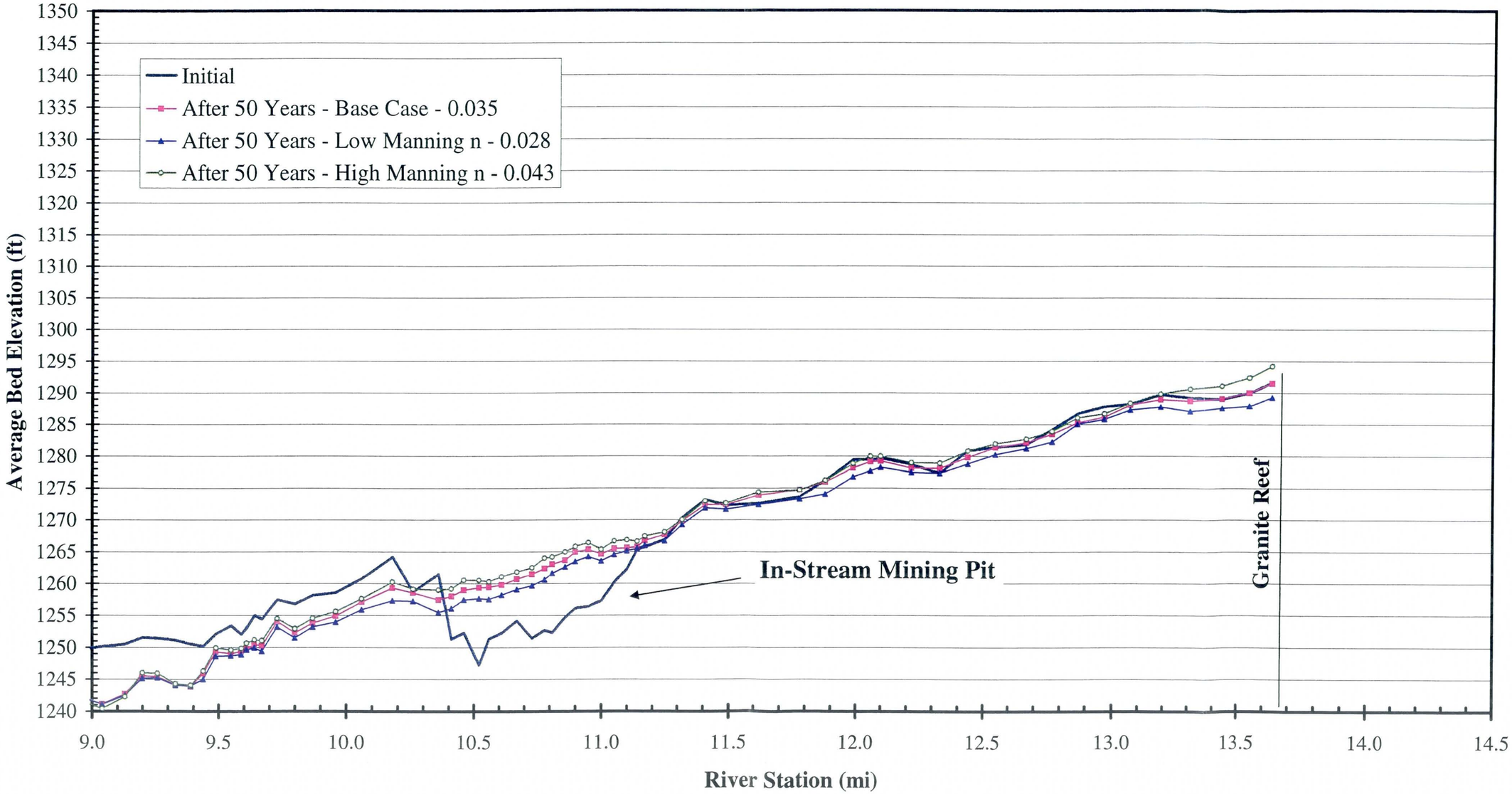
Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Manning *n*
River Stations -2.06 to 3.50



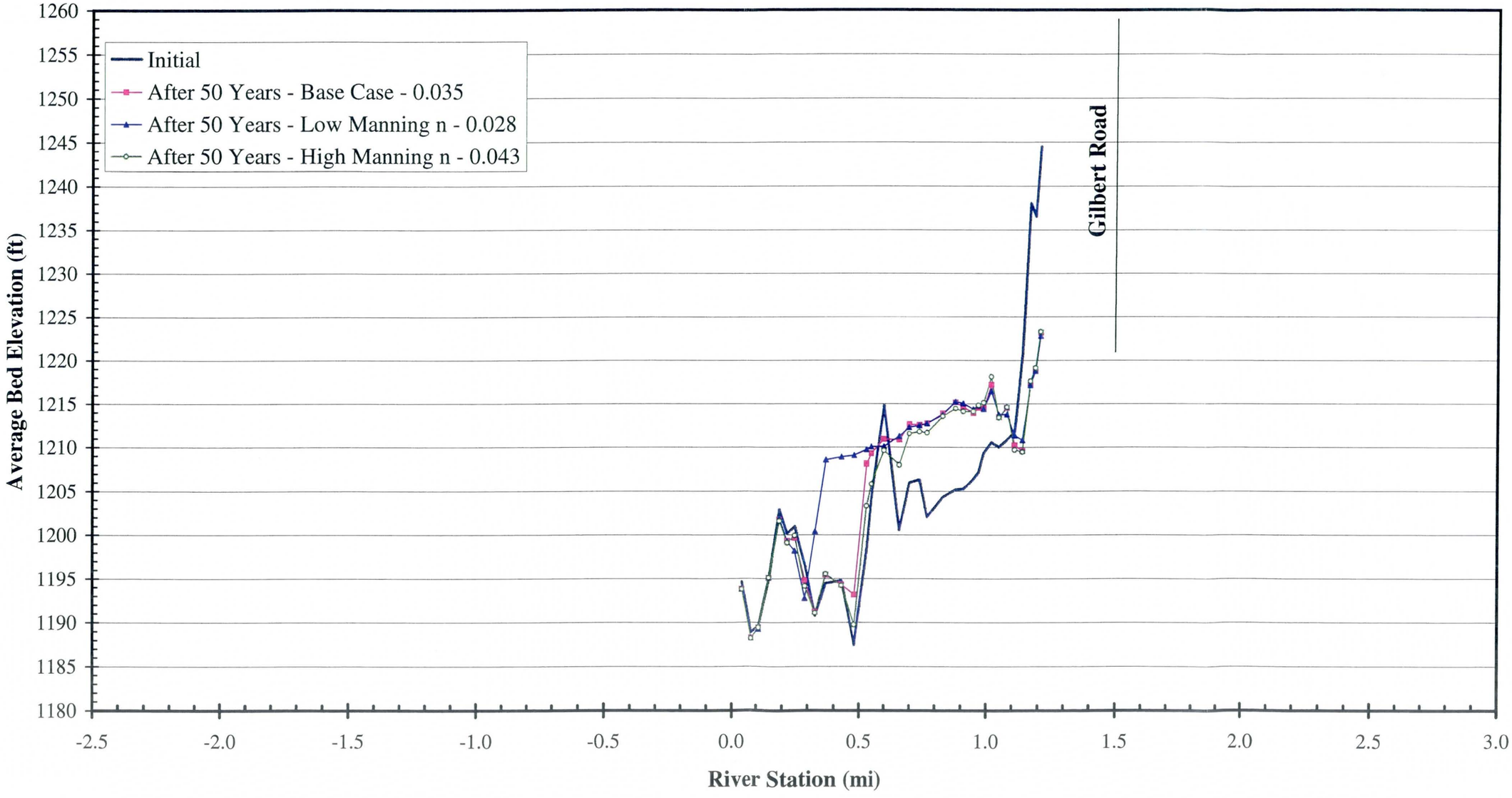
Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Manning *n*
River Stations 3.50 to 9.00



Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Manning *n*
River Stations 9.00 to 13.64



Va Shly' Ay Akimel
Comparison of Average Bed Elevations at the End of 50 Years - Sensitivity to Manning *n*
Gilbert Mining Pit



APPENDIX 9

FUTURE WITHOUT PROJECT HEC-RAS MODEL RESULTS

9a. 5-Year Standard Table 1
9b. 10-Year Standard Table 1
9c. 20-Year Standard Table 1
9d. 50-Year Standard Table 1
9e. 100-Year Standard Table 1
9f. 200-Year Standard Table 1
9g. 500-Year Standard Table 1
9h. Water Surface Profiles for the 5-, 10-, 20-, 50-, 100-, 200-, and 500-Year Peak Flows

APPENDIX 9a

5-YEAR STANDARD TABLE 1

HEC-RAS Plan: Post 50 Profile: 5yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	5yr	21000.00	1143.99	1155.03	1149.42	1155.19	0.000419	3.19	6591.12	934.15	0.21
Salt River	VaShly DS	0.11	5yr	21000.00	1144.67	1155.32	1150.47	1155.55	0.000712	3.79	5542.58	903.22	0.27
Salt River	VaShly DS	0.23	5yr	21000.00	1147.96	1155.89	1152.48	1156.21	0.001277	4.52	4645.78	898.47	0.35
Salt River	VaShly DS	0.36	5yr	21000.00	1148.61	1156.81	1153.57	1157.08	0.001294	4.19	5008.25	1099.34	0.35
Salt River	VaShly DS	0.51	5yr	21000.00	1150.89	1157.87	1155.23	1158.16	0.001470	4.31	4870.91	1128.63	0.37
Salt River	VaShly DS	0.65	5yr	21000.00	1151.13	1158.71	1155.00	1158.90	0.000724	3.58	5859.02	1053.81	0.27
Salt River	VaShly DS	0.78	5yr	21000.00	1150.83	1159.32	1156.10	1159.61	0.001305	4.29	4896.32	1046.44	0.35
Salt River	VaShly DS	0.89	5yr	21000.00	1153.10	1160.25	1157.46	1160.59	0.001898	4.71	4459.74	1096.75	0.41
Salt River	VaShly DS	1.00	5yr	21000.00	1151.27	1161.07	1156.74	1161.27	0.000838	3.59	5854.48	1173.46	0.28
Salt River	VaShly DS	1.12	5yr	21000.00	1152.15	1161.55	1156.72	1161.76	0.000765	3.66	5739.75	1067.80	0.27
Salt River	VaShly DS	1.22	5yr	21000.00	1153.46	1162.06	1158.73	1162.32	0.001228	4.06	5166.13	1187.82	0.34
Salt River	VaShly DS	1.30	5yr	21000.00	1150.51	1162.56	1159.78	1162.81	0.001177	4.04	5194.23	1119.03	0.33
Salt River	VaShly DS	1.39	5yr	21000.00	1150.03	1163.00	1157.99	1163.17	0.000534	3.32	6323.35	1039.55	0.23
Salt River	VaShly DS	1.52	5yr	21000.00	1153.77	1163.35	1158.73	1163.60	0.000653	4.00	5250.94	734.41	0.26
Salt River	VaShly DS	1.65	5yr	21000.00	1155.27	1164.15	1161.70	1164.58	0.002002	5.31	3958.38	1044.27	0.43
Salt River	VaShly DS	1.76	5yr	21000.00	1155.56	1165.40	1163.80	1165.98	0.002855	6.12	3433.34	1178.41	0.51
Salt River	VaShly DS	1.80	5yr	21000.00	1158.65	1165.95	1163.08	1166.48	0.002088	5.83	3603.28	1091.97	0.45
Salt River	VaShly DS	1.83	5yr	21000.00	1147.74	1166.24	1162.47	1166.76	0.001393	5.80	3623.00	856.57	0.38
Salt River	VaShly DS	1.86	5yr	21000.00	1154.19	1166.48	1162.62	1167.01	0.001465	5.80	3620.94	725.29	0.39
Salt River	VaShly DS	1.89	5yr	21000.00	1156.29	1167.13	1163.55	1167.57	0.006378	5.37	3908.13	781.99	0.36
Salt River	VaShly DS	1.95	5yr	21000.00	1156.57	1167.77	1163.68	1168.19	0.001060	5.20	4037.79	931.17	0.34
Salt River	VaShly DS	2.02	5yr	21000.00	1160.11	1168.23	1164.77	1168.60	0.001197	4.91	4277.85	1665.36	0.35
Salt River	VaShly DS	2.04	5yr	21000.00	1158.56	1168.32	1165.58	1168.80	0.001575	5.54	3792.49	1615.57	0.40
Salt River	VaShly DS	2.07	5yr	21000.00	1156.21	1168.69	1164.99	1169.04	0.001178	4.72	4449.56	1694.89	0.34
Salt River	VaShly DS	2.10	5yr	21000.00	1158.18	1168.83	1166.70	1169.32	0.002056	5.63	3732.22	1676.80	0.44
Salt River	VaShly DS	2.12	5yr	21000.00	1153.95	1169.27	1158.63	1169.39	0.000172	2.80	7511.55	1595.33	0.15
Salt River	VaShly DS	2.13	5yr	21000.00	1153.90	1169.26	1159.23	1169.41	0.000209	3.08	6811.89	1553.74	0.16
Salt River	VaShly DS	2.21	5yr	21000.00	1156.97	1169.31	1164.56	1169.76	0.001060	5.42	3874.80	1150.29	0.34
Salt River	VaShly DS	2.29	5yr	21000.00	1170.86	1177.84	1177.84	1180.06	0.010769	11.96	1755.73	391.32	1.00
Salt River	VaShly DS	2.31		Bndge									
Salt River	VaShly DS	2.33	5yr	21000.00	1180.00	1188.95	1187.02	1189.48	0.002954	5.89	3565.08	873.22	0.51
Salt River	VaShly DS	2.38	5yr	21000.00	1176.44	1189.60	1185.21	1189.81	0.000622	3.65	5746.89	893.80	0.25
Salt River	VaShly DS	2.40	5yr	21000.00	1177.52	1189.69	1185.46	1189.90	0.000686	3.74	5619.72	910.32	0.27
Salt River	VaShly DS	2.41	5yr	21000.00	1177.08	1189.72	1185.52	1189.93	0.000696	3.76	5590.70	907.63	0.27
Salt River	VaShly DS	2.42	5yr	21000.00	1176.40	1189.74	1185.62	1189.96	0.000725	3.79	5535.94	912.59	0.27
Salt River	VaShly DS	2.47	5yr	21000.00	1177.74	1189.93	1186.07	1190.18	0.000848	3.97	5284.04	915.41	0.29
Salt River	VaShly DS	2.53	5yr	21000.00	1177.40	1190.21	1187.03	1190.51	0.001177	4.39	4788.09	1164.36	0.34
Salt River	VaShly DS	2.59	5yr	21000.00	1181.61	1190.59	1186.78	1190.87	0.000988	4.23	4960.91	1445.44	0.31
Salt River	VaShly DS	2.65	5yr	21000.00	1183.93	1190.88	1187.14	1191.14	0.000859	4.13	5082.66	839.53	0.30
Salt River	VaShly DS	2.71	5yr	21000.00	1183.50	1191.26	1188.34	1191.59	0.001544	4.63	4535.46	978.77	0.38
Salt River	VaShly DS	2.78	5yr	21000.00	1183.83	1191.77	1189.20	1192.09	0.001537	4.52	4646.10	1037.15	0.38
Salt River	VaShly DS	2.87	5yr	21000.00	1174.74	1192.37	1184.06	1192.66	0.000887	4.30	4886.49	777.46	0.30
Salt River	VaShly DS	2.98	5yr	21000.00	1178.35	1192.76	1185.84	1193.02	0.000438	4.05	5189.30	756.76	0.23
Salt River	VaShly DS	3.10	5yr	21000.00	1174.85	1193.04	1185.54	1193.32	0.000551	4.28	4904.45	548.39	0.25
Salt River	VaShly DS	3.23	5yr	21000.00	1181.67	1193.55	1189.37	1194.00	0.001231	5.39	3896.22	564.89	0.36
Salt River	VaShly DS	3.35	5yr	21000.00	1184.67	1194.43	1191.14	1194.79	0.001298	4.84	4337.24	768.62	0.36
Salt River	VaShly DS	3.46	5yr	21000.00	1183.72	1195.14	1191.15	1195.48	0.001050	4.71	4463.12	704.41	0.33
Salt River	VaShly DS	3.48		Bndge									
Salt River	VaShly DS	3.50	5yr	21000.00	1185.13	1195.42	1191.72	1195.82	0.001266	5.09	4121.84	664.66	0.36
Salt River	VaShly DS	3.64	5yr	21000.00	1185.28	1196.59	1194.22	1197.08	0.001966	5.63	3727.86	718.95	0.44
Salt River	VaShly DS	3.76	5yr	21000.00	1185.23	1197.64	1194.17	1198.17	0.001489	5.83	3602.37	1031.86	0.40
Salt River	VaShly DS	3.89	5yr	21000.00	1181.01	1198.33	1190.13	1198.57	0.000341	3.92	5352.59	918.21	0.21
Salt River	VaShly DS	4.04	5yr	21000.00	1186.07	1198.77	1193.51	1198.96	0.000627	3.49	6020.69	1278.90	0.25
Salt River	VaShly DS	4.09	5yr	21000.00	1186.77	1198.93	1195.30	1199.26	0.001143	4.60	4569.90	1080.77	0.34
Salt River	VaShly DS	4.15	5yr	21000.00	1185.73	1199.30	1196.12	1199.75	0.001682	5.34	3929.93	861.67	0.40
Salt River	VaShly DS	4.22	5yr	21000.00	1188.00	1199.89	1197.31	1200.32	0.001706	5.25	3996.53	1264.57	0.41
Salt River	VaShly DS	4.27	5yr	21000.00	1188.10	1200.39	1197.21	1200.77	0.001522	4.94	4247.65	972.34	0.38
Salt River	VaShly DS	4.31	5yr	21000.00	1193.87	1200.70	1197.76	1201.09	0.001394	5.02	4179.23	809.07	0.37
Salt River	VaShly DS	4.47	5yr	21000.00	1190.75	1202.19	1200.34	1202.63	0.002285	5.29	3970.78	938.36	0.45
Salt River	VaShly DS	4.59	5yr	21000.00	1190.04	1204.41	1199.27	1204.61	0.003627	3.61	5811.54	1158.45	0.26
Salt River	VaShly DS	4.74	5yr	21000.00	1189.62	1206.98	1200.18	1207.12	0.002713	2.98	7044.42	951.29	0.19
Salt River	VaShly DS	4.88	5yr	21000.00	1195.43	1207.46	1200.85	1207.70	0.000440	3.94	5335.17	671.23	0.23
Salt River	VaShly DS	5.03	5yr	21000.00	1197.77	1208.01	1203.64	1208.37	0.001181	4.85	4331.30	746.06	0.35
Salt River	VaShly DS	5.15	5yr	21000.00	1198.09	1208.69	1203.93	1209.01	0.000837	4.54	4621.13	717.44	0.30
Salt River	VaShly DS	5.26	5yr	21000.00	1184.07	1209.13	1199.62	1209.49	0.000817	4.81	4366.08	565.82	0.30
Salt River	VaShly DS	5.40	5yr	21000.00	1196.34	1209.77	1205.46	1210.13	0.000943	4.79	4383.34	612.22	0.32
Salt River	VaShly DS	5.47	5yr	21000.00	1199.26	1210.20	1205.64	1210.67	0.001592	5.49	3825.93	684.66	0.40
Salt River	VaShly DS	5.53	5yr	21000.00	1199.29	1210.66	1206.62	1211.30	0.002637	6.43	3267.82	711.48	0.50
Salt River	VaShly DS	5.56	5yr	21000.00	1201.24	1211.26	1207.15	1211.61	0.001038	4.75	4419.39	676.51	0.33
Salt River	VaShly DS	5.60	5yr	21000.00	1201.31	1211.32	1207.55	1211.95	0.001492	6.37	3297.69	585.19	0.41
Salt River	VaShly DS	5.65	5yr	21000.00	1202.22	1211.75	1208.08	1212.41	0.001712	6.52	3221.18	686.57	0.43
Salt River	VaShly DS	5.69	5yr	21000.00	1202.94	1212.05	1209.13	1212.89	0.002258	7.33	2863.02	677.88	0.49
Salt River	VaShly DS	5.73	5yr	21000.00	1200.44	1212.54	1208.97	1213.21	0.001602	6.59	3184.96	704.24	0.42
Salt River	VaShly DS	5.76	5yr	21000.00	1198.50	1212.85	1209.51	1213.56	0.001687	6.75	3111.38	693.01	0.43
Salt River	VaShly DS	5.80	5yr	21000.00	1199.64	1213.07	1209.40	1213.89	0.001701	7.27	2887.88	669.58	0.44
Salt River	VaShly DS	5.82	5yr	21000.00	1197.44	1213.23	1208.75	1214.06	0.001490	7.33	2866.44	737.94	0.42
Salt River	VaShly DS	5.84	5yr	21000.00	1187.25	1213.92	1202.06	1214.17	0.000265	4.01	5235.77	930.15	0.19
Salt River	VaShly DS	5.85	5yr	21000.00	1203.05	1214.39	1209.18	1215.05	0.023112	6.51	3224.70	697.06	0.36
Salt River	VaShly DS	5.86	5yr	21000.00	1197.04	1214.85	1205.81	1215.13	0.000334	4.21	4986.61	963.97	0.21
Salt River	VaShly DS	5.87	5yr	21000.00	1196.82	1214.88	1206.39	1215.15	0.000357	4.18	5021.67	1114.36	0.21
Salt River	VaShly DS	5.88	5yr	21000.00	1194.54	1214.99	1203.17	1215.17	0.000223	3.36	6249.57	1300.72	0.17
Salt River	VaShly DS	5.91	5yr	21000.00	1201.09	1215.00	1208.90	1215.25	0.000482	3.97	5293.08	707.79	0.23
Salt River	VaShly DS	5.93	5yr	21000.00	1199.72	1215.15	1206.35	1215.29	0.000219	3.05	6894.44	633.96	0.16
Salt River	VaShly DS	5.95	5yr	21000.00	1195.30	1215.20	1203.67	1215.31	0.000135	2.64	7957.92	633.83	0.13
Salt River	VaShly DS	5.97	5yr	21000.00	1198.44	1215.18	1206.23	1215.36	0.000263	3.39	6197.35	557.59	0.18
Salt River	VaShly DS	5.99	5yr	21000.00	1198.12	1215.19	1206.69	1215.40	0.000323	3.63	5788.93	589.46	0.20
Salt River	VaShly DS	6.01	5yr	21000.00	1194.75	1215.35	1201.41	1215.42	0.000092	2.19	9601.64	1049.64	0.11

HEC-RAS Plan: Post 50 Profile: 5yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	5yr	21000.00	1201.88	1215.28	1208.91	1215.53	0.000463	3.97	5286.54	733.03	0.23
Salt River	VaShly DS	6.09	5yr	21000.00	1201.00	1215.37	1209.41	1215.68	0.000590	4.45	4720.52	658.49	0.26
Salt River	VaShly DS	6.14	5yr	21000.00	1201.32	1215.52	1207.56	1215.80	0.000441	4.26	4929.03	705.23	0.23
Salt River	VaShly DS	6.18	5yr	21000.00	1188.55	1215.65	1205.13	1215.99	0.001062	4.69	4479.79	1313.15	0.33
Salt River	VaShly DS	6.22	5yr	21000.00	1198.32	1215.81	1207.19	1216.16	0.000698	4.76	4411.27	1273.87	0.28
Salt River	VaShly DS	6.27	5yr	21000.00	1197.76	1215.98	1205.46	1216.27	0.000309	4.33	4844.44	696.52	0.20
Salt River	VaShly DS	6.32	5yr	21000.00	1199.77	1216.12	1208.97	1216.47	0.000928	4.78	4390.44	853.26	0.31
Salt River	VaShly DS	6.35	5yr	21000.00	1202.10	1216.31	1209.65	1216.56	0.000526	4.08	5142.57	744.76	0.24
Salt River	VaShly DS	6.38	5yr	21000.00	1201.42	1216.39	1209.36	1216.67	0.000570	4.19	5013.80	1420.74	0.25
Salt River	VaShly DS	6.40	5yr	21000.00	1197.72	1216.46	1208.40	1216.77	0.000653	4.46	4715.25	1735.81	0.27
Salt River	VaShly at Pit	6.45	5yr	0.01	1216.16	1216.80	1216.19	1216.80	0.000000	0.00	19.43	43.41	0.00
Salt River	VaShly at Pit	6.50	5yr	0.01	1220.36	1220.39	1220.39	1220.39	0.004441	0.17	0.06	4.15	0.25
Salt River	VaShly at Pit	6.53	5yr	0.01	1221.34	1221.37	1221.37	1221.37	0.000001	0.00	3.51	136.38	0.00
Salt River	VaShly at Pit	6.56	5yr	0.01	1221.47	1221.50	1221.50	1221.50	0.000061	0.03	0.36	14.38	0.03
Salt River	VaShly at Pit	6.62	5yr	0.01	1222.55	1222.58	1222.58	1222.58	0.000031	0.02	0.47	17.46	0.02
Salt River	VaShly at Pit	6.69	5yr	0.01	1222.97	1223.00	1223.00	1223.00	0.008034	0.20	0.05	4.04	0.32
Salt River	VaShly at Pit	6.75	5yr	0.01	1226.09	1226.12	1226.12	1226.12	0.000067	0.03	0.37	17.05	0.03
Salt River	VaShly at Pit	6.80	5yr	0.01	1227.73	1227.76	1227.76	1227.76	0.000671	0.08	0.12	5.57	0.10
Salt River	VaShly at Pit	6.85	5yr	0.01	1229.81	1229.84	1229.84	1229.84	0.004268	0.15	0.07	4.98	0.24
Salt River	VaShly at Pit	6.91	5yr	0.01	1229.03	1229.84	1229.06	1229.84	0.000000	0.00	83.91	150.06	0.00
Salt River	VaShly at Pit	6.96	5yr	0.01	1229.37	1229.84	1229.39	1229.84	0.000000	0.00	61.19	140.64	0.00
Salt River	VaShly at Pit	6.99	5yr	0.01	1229.94	1229.96	1229.96	1229.96	0.000002	0.00	2.43	117.78	0.01
Salt River	VaShly at Pit	7.01	5yr	0.01	1229.89	1229.96	1229.91	1229.96	0.000001	0.01	1.30	21.56	0.01
Salt River	VaShly at Pit	7.03	5yr	0.01	1230.67	1230.70	1230.70	1230.70	0.000001	0.00	3.49	130.82	0.00
Salt River	VaShly at Pit	7.04	5yr	0.01	1230.92	1230.94	1230.94	1230.94	0.000005	0.01	1.46	108.44	0.01
Salt River	VaShly at Pit	7.06	5yr	0.01	1231.36	1231.39	1231.39	1231.39	0.000000	0.00	7.94	281.15	0.00
Salt River	VaShly at Pit	7.07	5yr	0.01	1230.65	1231.39	1230.67	1231.39	0.000000	0.00	52.95	97.71	0.00
Salt River	VaShly at Pit	7.10	5yr	0.01	1231.41	1231.44	1231.44	1231.44	0.000003	0.01	1.61	59.30	0.01
Salt River	VaShly at Pit	7.17	5yr	0.01	1230.40	1233.93	1233.93	1233.93	0.000000	0.00	7.32	530.56	0.00
Salt River	VaShly at Pit	7.24	5yr	0.01	1235.15	1235.18	1235.18	1235.18	0.000000	0.00	9.15	309.94	0.00
Salt River	VaShly at Pit	7.28	5yr	0.01	1234.69	1235.18	1234.72	1235.18	0.000000	0.00	24.80	56.80	0.00
Salt River	VaShly US	7.32	5yr	21000.00	1229.87	1232.95	1232.95	1234.18	0.013092	8.91	2356.23	1414.32	1.00
Salt River	VaShly US	7.36	5yr	21000.00	1229.41	1234.96	1233.56	1235.41	0.003062	5.39	3895.74	1503.79	0.51
Salt River	VaShly US	7.40	5yr	21000.00	1230.97	1235.59	1234.07	1235.99	0.002614	5.09	4128.59	1309.99	0.47
Salt River	VaShly US	7.44	5yr	21000.00	1231.22	1236.17	1234.56	1236.49	0.002066	4.58	4583.45	1303.58	0.42
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	5yr	21000.00	1231.96	1236.65	1234.78	1236.95	0.001704	4.37	4800.30	1216.30	0.39
Salt River	VaShly US	7.55	5yr	21000.00	1232.43	1237.33	1235.27	1237.65	0.001714	4.55	4616.83	1108.74	0.39
Salt River	VaShly US	7.63	5yr	22000.00	1231.48	1237.93	1235.17	1238.24	0.001219	4.48	4906.01	931.91	0.34
Salt River	VaShly US	7.71	5yr	22000.00	1231.90	1238.48	1235.28	1238.77	0.001035	4.34	5073.00	895.65	0.32
Salt River	VaShly US	7.83	5yr	22000.00	1232.46	1239.11	1235.76	1239.43	0.001067	4.52	4868.06	826.07	0.33
Salt River	VaShly US	7.91	5yr	22000.00	1231.30	1239.55	1236.20	1239.94	0.001186	5.01	4394.24	691.58	0.35
Salt River	VaShly US	8.01	5yr	22000.00	1231.01	1240.24	1236.63	1240.67	0.001543	5.24	4201.25	750.21	0.39
Salt River	VaShly US	8.10	5yr	22000.00	1227.11	1240.93	1238.94	1242.01	0.003724	8.35	2634.38	447.49	0.61
Salt River	VaShly US	8.20	5yr	22000.00	1233.14	1242.55	1238.31	1242.95	0.000960	5.12	4300.20	657.05	0.32
Salt River	VaShly US	8.29	5yr	22000.00	1234.21	1243.03	1239.50	1243.48	0.001385	5.39	4078.02	726.24	0.38
Salt River	VaShly US	8.36	5yr	22000.00	1233.96	1243.58	1240.52	1244.01	0.001371	5.26	4180.91	680.49	0.37
Salt River	VaShly US	8.44	5yr	22000.00	1230.19	1243.98	1241.16	1245.11	0.002700	8.53	2578.31	384.04	0.54
Salt River	VaShly US	8.52	5yr	22000.00	1227.75	1245.29	1241.38	1245.87	0.001276	6.08	3619.75	1174.11	0.38
Salt River	VaShly US	8.57	5yr	22000.00	1234.23	1245.57	1241.52	1246.34	0.001536	7.03	3130.01	751.85	0.42
Salt River	VaShly US	8.60	5yr	22000.00	1227.61	1245.59	1242.53	1246.78	0.002520	8.75	2513.32	601.56	0.53
Salt River	VaShly US	8.63	5yr	22000.00	1231.84	1246.34	1241.96	1247.07	0.001372	6.83	3222.99	471.00	0.40
Salt River	VaShly US	8.68	5yr	22000.00	1233.08	1246.94	1242.29	1247.42	0.001048	5.59	3932.28	590.32	0.34
Salt River	VaShly US	8.74	5yr	22000.00	1231.64	1247.11	1243.12	1247.91	0.001608	7.16	3073.58	351.92	0.43
Salt River	VaShly US	8.77	5yr	22000.00	1234.72	1247.54	1242.90	1248.18	0.001219	6.43	3423.69	484.33	0.38
Salt River	VaShly US	8.81	5yr	22000.00	1231.64	1247.68	1243.37	1248.53	0.001618	7.41	2967.60	322.34	0.43
Salt River	VaShly US	8.85	5yr	22000.00	1232.30	1248.36	1244.23	1248.86	0.001219	5.69	3864.13	572.46	0.36
Salt River	VaShly US	8.88	5yr	22000.00	1233.54	1248.54	1243.81	1249.07	0.001168	5.83	3773.06	554.03	0.36
Salt River	VaShly US	8.92	5yr	22000.00	1235.52	1248.72	1244.14	1249.32	0.001338	6.20	3547.65	778.17	0.39
Salt River	VaShly US	8.98	5yr	22000.00	1234.94	1249.11	1244.59	1249.71	0.001244	6.20	3547.27	417.77	0.38
Salt River	VaShly US	9.04	5yr	22000.00	1237.83	1249.46	1245.01	1250.12	0.001230	6.62	5664.32	750.16	0.38
Salt River	VaShly US	9.13	5yr	22000.00	1238.40	1250.15	1245.34	1250.68	0.001045	5.83	4277.36	602.65	0.35
Salt River	VaShly US	9.20	5yr	22000.00	1239.36	1250.56	1245.85	1251.14	0.001317	6.14	3584.41	448.92	0.38
Salt River	VaShly US	9.26	5yr	22000.00	1240.07	1250.97	1246.33	1251.59	0.001321	6.31	3487.11	426.29	0.39
Salt River	VaShly US	9.33	5yr	22000.00	1238.28	1251.43	1247.13	1252.10	0.001360	6.58	3342.20	384.18	0.39
Salt River	VaShly US	9.39	5yr	22000.00	1235.91	1251.59	1248.20	1252.79	0.002390	8.76	2511.14	285.29	0.52
Salt River	VaShly US	9.44	5yr	22000.00	1242.19	1252.73	1248.00	1253.31	0.001110	6.10	3608.27	399.06	0.36
Salt River	VaShly US	9.49	5yr	22000.00	1240.69	1253.06	1250.04	1253.65	0.001775	6.18	3558.45	550.40	0.43
Salt River	VaShly US	9.55	5yr	22000.00	1243.76	1253.59	1249.67	1254.31	0.001875	6.80	3237.36	454.08	0.45
Salt River	VaShly US	9.59	5yr	22000.00	1240.32	1254.00	1250.72	1254.70	0.001916	6.71	3278.06	474.71	0.45
Salt River	VaShly US	9.61	5yr	22000.00	1243.87	1254.21	1251.24	1255.02	0.002278	7.22	3048.53	450.09	0.49
Salt River	VaShly US	9.64	5yr	22000.00	1245.06	1254.51	1251.47	1255.37	0.002704	7.44	2955.51	552.77	0.52
Salt River	VaShly US	9.67	5yr	22000.00	1244.78	1254.82	1251.61	1255.69	0.002480	7.49	2937.43	438.33	0.51
Salt River	VaShly US	9.73	5yr	22000.00	1246.24	1255.60	1252.45	1256.48	0.002266	7.54	2917.46	403.45	0.49
Salt River	VaShly US	9.80	5yr	22000.00	1246.16	1256.53	1253.73	1257.42	0.002560	7.59	2899.43	435.11	0.52
Salt River	VaShly US	9.87	5yr	22000.00	1248.17	1257.51	1254.15	1258.26	0.002005	6.94	3170.70	463.17	0.46
Salt River	VaShly US	9.96	5yr	22000.00	1249.51	1258.47	1255.69	1259.25	0.002321	7.07	3112.65	483.24	0.49
Salt River	VaShly US	10.06	5yr	22000.00	1250.89	1259.67	1256.49	1260.49	0.002038	7.29	3016.35	405.01	0.47
Salt River	VaShly US	10.18	5yr	22000.00	1250.99	1260.93	1257.27	1261.70	0.001950	7.06	3115.86	515.00	0.46
Salt River	VaShly US	10.26	5yr	22000.00	1251.97	1261.83	1257.71	1262.40	0.001245	6.05	3636.63	1546.02	0.37
Salt River	VaShly US	10.36	5yr	22000.00	1249.97	1262.50	1258.89	1263.15	0.001600	6.47	3401.70	1454.07	0.42
Salt River	VaShly US	10.41	5yr	22000.00	1254.59	1263.10	1258.60	1263.46	0.000806	4.82	4566.79	1807.25	0.30
Salt River	VaShly US	10.46	5yr	22000.00	1251.29	1263.28	1260.18	1263.82	0.001647	5.92	3719.12	1675.57	0.41
Salt River	VaShly US	10.52	5yr	22000.00	1252.59	1263.82	1260.78	1264.39	0.001742	6.09	3611.98	1286.71	0.42
Salt River	VaShly US	10.56	5yr	22000.00	1254.28	1264.24	1261.10	1264.78	0.001538	5.89	3737.30	1107.25	0.40
Salt River	VaShly US	10.61	5yr	22000.00	1253.95	1264.61	1261.50	1265.15	0.001599	5.92	3718.26	1266.41	0.41
Salt River	VaShly US	10.67	5yr	22000.00	1256.89	1265.19	1262.46	1265.74	0.001845	5.95	3695.00	941.14	0.43

HEC-RAS Plan: Post 50 Profile: 5yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	5yr	22000.00	1258.56	1265.80	1262.54	1266.31	0.001683	5.71	3854.18	1253.30	0.41
Salt River	VaShly US	10.78	5yr	22000.00	1259.27	1266.19	1263.03	1266.69	0.001659	5.64	3897.98	1567.85	0.41
Salt River	VaShly US	10.81	5yr	22000.00	1259.82	1266.50	1263.58	1267.04	0.001812	5.91	3724.79	1514.67	0.43
Salt River	VaShly US	10.86	5yr	22000.00	1258.71	1266.97	1264.07	1267.49	0.001736	5.78	3805.36	1414.32	0.42
Salt River	VaShly US	10.90	5yr	22000.00	1259.75	1267.37	1264.55	1267.93	0.001969	6.03	3647.15	1274.01	0.44
Salt River	VaShly US	10.95	5yr	22000.00	1260.76	1267.88	1264.91	1268.38	0.001863	5.69	3869.20	1047.13	0.43
Salt River	VaShly US	11.00	5yr	22000.00	1260.20	1268.33	1265.48	1268.82	0.001664	5.61	3918.82	1015.49	0.41
Salt River	VaShly US	11.05	5yr	22000.00	1261.52	1268.84	1265.94	1269.38	0.001876	5.86	3755.19	1360.94	0.43
Salt River	VaShly US	11.10	5yr	22000.00	1260.08	1269.26	1266.28	1269.78	0.001728	5.76	3817.46	964.93	0.42
Salt River	VaShly US	11.14	5yr	22000.00	1257.45	1270.02	1267.09	1270.48	0.004903	5.39	4078.47	922.93	0.41
Salt River	VaShly US	11.17	5yr	22000.00	1258.53	1270.52	1267.81	1271.05	0.002178	5.82	3779.17	748.29	0.46
Salt River	VaShly US	11.25	5yr	22000.00	1259.69	1271.31	1268.48	1271.90	0.001858	6.14	3585.12	764.70	0.44
Salt River	VaShly US	11.32	5yr	22000.00	1263.36	1272.01	1269.11	1272.63	0.001806	6.31	3488.77	712.61	0.43
Salt River	VaShly US	11.41	5yr	22000.00	1263.36	1272.85	1269.88	1273.44	0.001774	6.15	3579.34	740.05	0.43
Salt River	VaShly US	11.49	5yr	22000.00	1264.61	1273.68	1270.58	1274.22	0.001834	5.88	3743.65	722.17	0.43
Salt River	VaShly US	11.62	5yr	22000.00	1264.20	1274.88	1271.63	1275.40	0.001716	5.80	3790.10	723.23	0.42
Salt River	VaShly US	11.78	5yr	22000.00	1267.86	1276.36	1273.38	1277.08	0.002097	6.85	3213.92	664.26	0.47
Salt River	VaShly US	11.88	5yr	22000.00	1268.50	1277.36	1274.18	1278.28	0.002187	7.69	2861.35	644.17	0.49
Salt River	VaShly US	11.99	5yr	22000.00	1266.83	1278.72	1275.29	1279.48	0.002004	6.98	3153.13	662.03	0.46
Salt River	VaShly US	12.06	5yr	22000.00	1266.90	1279.57	1275.80	1280.23	0.001919	6.51	3380.03	696.17	0.45
Salt River	VaShly US	12.10	5yr	22000.00	1268.99	1280.08	1276.52	1280.74	0.002100	6.50	3384.90	551.91	0.46
Salt River	VaShly US	12.22	5yr	22000.00	1268.81	1281.71	1278.56	1282.17	0.002439	5.46	4030.19	954.57	0.47
Salt River	VaShly US	12.33	5yr	22000.00	1271.34	1282.76	1279.18	1283.13	0.001207	4.85	4531.68	755.08	0.35
Salt River	VaShly US	12.44	5yr	22000.00	1274.73	1283.48	1279.72	1283.88	0.001435	5.10	4317.27	763.29	0.38
Salt River	VaShly US	12.55	5yr	22000.00	1275.93	1284.33	1280.54	1284.74	0.001475	5.14	4281.66	763.58	0.38
Salt River	VaShly US	12.67	5yr	22000.00	1276.65	1285.22	1281.64	1285.67	0.001524	5.36	4106.53	703.74	0.39
Salt River	VaShly US	12.77	5yr	22000.00	1276.88	1285.97	1282.44	1286.48	0.001537	5.77	3810.49	717.19	0.40
Salt River	VaShly US	12.87	5yr	22000.00	1277.67	1286.76	1283.24	1287.24	0.001343	5.55	3960.98	586.06	0.38
Salt River	VaShly US	12.97	5yr	22000.00	1279.11	1287.58	1284.12	1288.10	0.001616	5.77	3815.53	613.28	0.41
Salt River	VaShly US	13.07	5yr	22000.00	1278.01	1288.46	1285.36	1289.01	0.002001	5.94	3701.44	667.41	0.44
Salt River	VaShly US	13.19	5yr	22000.00	1282.08	1289.66	1286.27	1290.15	0.001642	5.62	3911.27	659.84	0.41
Salt River	VaShly US	13.31	5yr	22000.00	1281.42	1290.70	1287.65	1291.21	0.001590	5.74	3830.35	611.53	0.40
Salt River	VaShly US	13.44	5yr	22000.00	1283.61	1291.85	1289.26	1292.32	0.001758	5.47	4024.79	747.27	0.42
Salt River	VaShly US	13.55	5yr	22000.00	1287.19	1292.99	1290.69	1293.41	0.001887	5.18	4246.24	901.26	0.42
Salt River	VaShly US	13.64	5yr	22000.00	1287.63	1293.96	1292.08	1294.42	0.002259	5.41	4063.93	921.00	0.45
Gilbert Mining P	Gilbert Mining P	0.04	5yr	20999.99	1189.85	1216.72	1196.74	1216.82	0.000055	2.52	8362.08	1339.46	0.09
Gilbert Mining P	Gilbert Mining P	0.08	5yr	20999.99	1179.35	1216.75	1190.47	1216.83	0.000031	2.18	9633.14	1275.90	0.07
Gilbert Mining P	Gilbert Mining P	0.11	5yr	20999.99	1182.14	1216.79	1187.99	1216.83	0.000017	1.64	12814.47	1283.66	0.05
Gilbert Mining P	Gilbert Mining P	0.15	5yr	20999.99	1180.10	1216.79	1187.50	1216.84	0.000019	1.77	11889.59	702.29	0.06
Gilbert Mining P	Gilbert Mining P	0.19	5yr	20999.99	1178.66	1216.76	1191.46	1216.87	0.000076	2.67	7873.39	753.26	0.10
Gilbert Mining P	Gilbert Mining P	0.22	5yr	20999.99	1186.92	1216.79	1194.77	1216.88	0.000055	2.43	8629.12	384.46	0.09
Gilbert Mining P	Gilbert Mining P	0.25	5yr	20999.99	1181.98	1216.81	1189.33	1216.89	0.000036	2.28	9213.13	319.92	0.07
Gilbert Mining P	Gilbert Mining P	0.29	5yr	20999.99	1181.95	1216.79	1190.56	1216.91	0.000054	2.69	7805.83	272.88	0.09
Gilbert Mining P	Gilbert Mining P	0.33	5yr	20999.99	1183.04	1216.89	1190.11	1216.92	0.000012	1.31	16031.74	575.36	0.04
Gilbert Mining P	Gilbert Mining P	0.37	5yr	20999.99	1185.24	1216.89	1194.22	1216.92	0.000018	1.38	15422.99	1400.21	0.05
Gilbert Mining P	Gilbert Mining P	0.43	5yr	20999.99	1179.91	1216.89	1190.13	1216.93	0.000020	1.59	13229.83	1603.01	0.06
Gilbert Mining P	Gilbert Mining P	0.48	5yr	20999.99	1183.06	1216.89	1193.13	1216.94	0.000031	1.79	11709.18	945.97	0.07
Gilbert Mining P	Gilbert Mining P	0.53	5yr	20999.99	1202.03	1216.86	1210.58	1217.03	0.000342	3.32	6316.61	1131.57	0.20
Gilbert Mining P	Gilbert Mining P	0.55	5yr	20999.99	1203.21	1216.86	1210.18	1217.10	0.000514	3.95	5315.27	1051.18	0.24
Gilbert Mining P	Gilbert Mining P	0.60	5yr	20999.99	1199.67	1216.87	1211.42	1217.35	0.000918	5.56	3776.00	888.50	0.32
Gilbert Mining P	Gilbert Mining P	0.66	5yr	20999.99	1204.07	1217.33	1211.01	1217.57	0.000438	3.92	5363.21	999.26	0.23
Gilbert Mining P	Gilbert Mining P	0.70	5yr	20999.99	1206.48	1217.35	1211.71	1217.72	0.000705	4.91	4280.86	923.27	0.29
Gilbert Mining P	Gilbert Mining P	0.74	5yr	20999.99	1206.94	1217.52	1212.42	1217.87	0.000803	4.81	4366.26	1103.70	0.30
Gilbert Mining P	Gilbert Mining P	0.77	5yr	20999.99	1206.46	1217.76	1212.85	1218.04	0.000851	4.19	5010.62	1121.06	0.29
Gilbert Mining P	Gilbert Mining P	0.83	5yr	20999.99	1208.33	1218.02	1212.89	1218.25	0.000576	3.87	5428.04	934.76	0.25
Gilbert Mining P	Gilbert Mining P	0.88	5yr	20999.99	1208.45	1218.16	1214.55	1218.42	0.000806	4.11	5108.06	1148.55	0.29
Gilbert Mining P	Gilbert Mining P	0.91	5yr	20999.99	1206.13	1218.27	1214.41	1218.68	0.001383	5.16	4072.19	1326.30	0.37
Gilbert Mining P	Gilbert Mining P	0.95	5yr	20999.99	1208.41	1218.49	1214.63	1218.90	0.001140	5.14	4081.65	988.80	0.35
Gilbert Mining P	Gilbert Mining P	0.97	5yr	20999.99	1209.76	1218.54	1214.76	1219.08	0.001640	5.90	3557.80	1050.45	0.41
Gilbert Mining P	Gilbert Mining P	0.99	5yr	20999.99	1208.61	1218.79	1215.37	1219.25	0.001257	5.40	3892.09	2595.52	0.36
Gilbert Mining P	Gilbert Mining P	1.02	5yr	20999.99	1210.66	1219.07	1214.84	1219.42	0.000846	4.72	4445.64	2475.06	0.30
Gilbert Mining P	Gilbert Mining P	1.05	5yr	20999.99	1209.65	1219.17	1215.20	1219.65	0.001574	5.56	3785.88	2616.45	0.40
Gilbert Mining P	Gilbert Mining P	1.08	5yr	20999.99	1198.40	1219.40	1215.39	1220.03	0.001744	6.40	3282.08	1351.54	0.41
Gilbert Mining P	Gilbert Mining P	1.11	5yr	20999.99	1194.11	1219.75	1213.23	1220.21	0.000821	5.43	3875.33	1156.19	0.29
Gilbert Mining P	Gilbert Mining P	1.14	5yr	20999.99	1201.44	1219.80	1211.41	1220.38	0.000735	6.12	3429.76	804.52	0.30
Gilbert Mining P	Gilbert Mining P	1.17	5yr	20999.99	1221.53	1227.69	1227.69	1230.49	0.010120	13.43	1563.12	442.33	1.00
Gilbert Mining P	Gilbert Mining P	1.19	5yr	20999.99	1218.15	1229.96	1225.07	1231.04	0.001592	8.32	2523.43	350.12	0.44
Gilbert Mining P	Gilbert Mining P	1.21	5yr	20999.99	1222.00	1229.56	1228.58	1231.77	0.006131	11.91	1762.85	257.10	0.80

APPENDIX 9b

10-YEAR STANDARD TABLE 1

HEC-RAS Plan: Post 50 Profile: 10yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	10yr	58000.00	1143.99	1161.28	1152.51	1161.60	0.000394	4.52	12840.00	1026.84	0.23
Salt River	VaShly DS	0.11	10yr	58000.00	1144.67	1161.53	1153.91	1161.90	0.000555	4.86	11924.08	1105.23	0.26
Salt River	VaShly DS	0.23	10yr	58000.00	1147.96	1161.90	1155.77	1162.33	0.000741	5.25	11053.17	1133.81	0.30
Salt River	VaShly DS	0.36	10yr	58000.00	1148.61	1162.41	1156.69	1162.81	0.000689	5.12	11325.31	1145.45	0.29
Salt River	VaShly DS	0.51	10yr	58000.00	1150.89	1162.97	1157.92	1163.42	0.000840	5.40	10735.49	1163.50	0.31
Salt River	VaShly DS	0.65	10yr	58000.00	1151.13	1163.60	1157.65	1164.00	0.000696	5.10	11375.12	1168.77	0.29
Salt River	VaShly DS	0.78	10yr	58000.00	1150.83	1164.10	1159.20	1164.61	0.001018	5.69	10198.07	1182.17	0.34
Salt River	VaShly DS	0.89	10yr	58000.00	1153.10	1164.76	1160.63	1165.32	0.001282	6.00	9660.25	1226.11	0.38
Salt River	VaShly DS	1.00	10yr	58000.00	1151.27	1165.47	1160.30	1165.89	0.000794	5.19	11172.50	1232.73	0.30
Salt River	VaShly DS	1.12	10yr	58000.00	1152.15	1165.96	1160.56	1166.39	0.000860	5.28	10976.98	1251.97	0.31
Salt River	VaShly DS	1.22	10yr	58000.00	1153.46	1166.45	1161.83	1166.90	0.000975	5.41	10715.41	1292.36	0.33
Salt River	VaShly DS	1.30	10yr	58000.00	1150.51	1166.86	1162.24	1167.33	0.001054	5.50	10550.39	1317.68	0.34
Salt River	VaShly DS	1.39	10yr	58000.00	1150.03	1167.35	1161.20	1167.75	0.000749	5.05	11484.86	1259.43	0.29
Salt River	VaShly DS	1.52	10yr	58000.00	1153.77	1167.88	1161.85	1168.47	0.001179	6.18	9387.44	1067.31	0.37
Salt River	VaShly DS	1.65	10yr	58000.00	1155.27	1168.84	1164.74	1169.34	0.001314	5.72	10133.66	1410.83	0.38
Salt River	VaShly DS	1.76	10yr	58000.00	1155.56	1169.53	1166.51	1170.12	0.001374	6.19	9369.71	1249.03	0.39
Salt River	VaShly DS	1.80	10yr	58000.00	1158.65	1169.76	1167.01	1170.53	0.002105	7.04	8242.59	1197.29	0.47
Salt River	VaShly DS	1.83	10yr	58000.00	1147.74	1170.07	1167.51	1170.88	0.001997	7.24	8011.22	1070.03	0.47
Salt River	VaShly DS	1.86	10yr	58000.00	1154.19	1170.40	1166.93	1171.30	0.002554	7.62	7613.59	1126.35	0.52
Salt River	VaShly DS	1.89	10yr	58000.00	1156.29	1170.78	1167.12	1171.60	0.001643	7.26	7984.77	1002.67	0.43
Salt River	VaShly DS	1.95	10yr	58000.00	1156.57	1171.34	1167.47	1172.23	0.002015	7.58	7655.12	1418.75	0.47
Salt River	VaShly DS	2.02	10yr	58000.00	1160.11	1172.00	1168.09	1172.96	0.001864	7.86	7380.22	1757.26	0.46
Salt River	VaShly DS	2.04	10yr	58000.00	1158.56	1172.08	1169.52	1173.26	0.002191	8.71	6659.61	1671.04	0.51
Salt River	VaShly DS	2.07	10yr	58000.00	1156.21	1172.76	1168.48	1173.61	0.001626	7.40	7840.42	1833.08	0.43
Salt River	VaShly DS	2.10	10yr	58000.00	1158.18	1172.88	1169.57	1174.00	0.002517	8.47	6847.71	1812.17	0.53
Salt River	VaShly DS	2.12	10yr	58000.00	1153.95	1173.66	1163.11	1174.13	0.000472	5.53	10481.42	1669.48	0.25
Salt River	VaShly DS	2.13	10yr	58000.00	1153.90	1173.63	1163.58	1174.20	0.000596	6.05	9580.06	1684.19	0.28
Salt River	VaShly DS	2.21	10yr	58000.00	1156.97	1173.68	1168.98	1175.01	0.002208	9.25	6268.07	1445.28	0.51
Salt River	VaShly DS	2.29	10yr	58000.00	1170.86	1183.15	1183.15	1185.80	0.010191	13.07	4438.50	1008.79	1.00
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	10yr	58000.00	1180.00	1192.42	1190.05	1193.60	0.002954	8.71	6657.75	1109.54	0.57
Salt River	VaShly DS	2.38	10yr	58000.00	1176.44	1193.51	1188.17	1194.10	0.001006	6.19	9363.38	946.19	0.35
Salt River	VaShly DS	2.40	10yr	58000.00	1177.52	1193.64	1188.45	1194.25	0.001021	6.23	9302.87	941.31	0.35
Salt River	VaShly DS	2.41	10yr	58000.00	1177.08	1193.69	1188.48	1194.29	0.001029	6.25	9283.33	939.96	0.35
Salt River	VaShly DS	2.42	10yr	58000.00	1176.40	1193.72	1188.60	1194.34	0.001046	6.28	9236.55	939.90	0.35
Salt River	VaShly DS	2.47	10yr	58000.00	1177.74	1193.99	1189.06	1194.62	0.001112	6.41	9049.89	936.49	0.36
Salt River	VaShly DS	2.53	10yr	58000.00	1177.40	1194.35	1189.95	1195.01	0.001303	6.51	8905.85	1686.32	0.39
Salt River	VaShly DS	2.59	10yr	58000.00	1181.61	1194.76	1189.99	1195.44	0.001247	6.62	8760.39	1687.08	0.38
Salt River	VaShly DS	2.65	10yr	58000.00	1183.93	1195.11	1190.08	1195.79	0.001148	6.62	8767.93	887.41	0.37
Salt River	VaShly DS	2.71	10yr	58000.00	1183.50	1195.58	1191.39	1196.24	0.001332	6.54	8871.39	1320.23	0.39
Salt River	VaShly DS	2.78	10yr	58000.00	1183.83	1196.04	1191.90	1196.66	0.001283	6.32	9171.99	1173.11	0.38
Salt River	VaShly DS	2.87	10yr	58000.00	1174.74	1196.60	1191.63	1197.35	0.001276	6.94	8355.86	849.79	0.39
Salt River	VaShly DS	2.98	10yr	58000.00	1178.35	1197.16	1189.87	1198.07	0.001008	7.69	7541.26	792.13	0.36
Salt River	VaShly DS	3.10	10yr	58000.00	1174.85	1197.88	1190.97	1198.73	0.001149	7.40	7836.40	800.61	0.38
Salt River	VaShly DS	3.23	10yr	58000.00	1181.67	1198.73	1193.56	1199.75	0.001613	8.11	7150.32	846.99	0.44
Salt River	VaShly DS	3.35	10yr	58000.00	1184.67	1199.93	1194.40	1200.59	0.001086	6.55	8858.31	872.85	0.36
Salt River	VaShly DS	3.46	10yr	58000.00	1183.72	1200.59	1194.68	1201.23	0.001067	6.46	8982.54	1198.70	0.36
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	10yr	58000.00	1185.13	1200.93	1195.41	1201.61	0.001296	6.64	8737.81	1223.09	0.39
Salt River	VaShly DS	3.64	10yr	58000.00	1185.28	1201.89	1197.32	1202.73	0.001477	7.34	7905.35	826.93	0.42
Salt River	VaShly DS	3.76	10yr	58000.00	1185.23	1202.95	1198.10	1203.52	0.001031	6.10	9511.14	1389.63	0.35
Salt River	VaShly DS	3.89	10yr	58000.00	1181.01	1203.64	1194.66	1203.87	0.000296	3.84	15094.62	1492.93	0.19
Salt River	VaShly DS	4.04	10yr	58000.00	1186.07	1203.93	1197.48	1204.28	0.000666	4.84	12527.51	2014.63	0.28
Salt River	VaShly DS	4.09	10yr	58000.00	1186.77	1204.13	1198.64	1204.60	0.001256	5.56	10654.89	1988.69	0.37
Salt River	VaShly DS	4.15	10yr	58000.00	1185.73	1204.49	1199.77	1205.07	0.001472	6.14	9453.69	1684.07	0.40
Salt River	VaShly DS	4.22	10yr	58000.00	1188.00	1205.04	1200.35	1205.39	0.000612	4.66	12350.99	1430.81	0.27
Salt River	VaShly DS	4.27	10yr	58000.00	1188.10	1205.12	1200.62	1205.67	0.001031	5.96	9824.37	1121.03	0.35
Salt River	VaShly DS	4.31	10yr	58000.00	1193.87	1205.30	1200.81	1206.01	0.001620	6.89	8660.68	1136.93	0.42
Salt River	VaShly DS	4.47	10yr	58000.00	1190.75	1206.69	1202.92	1207.35	0.001599	6.54	9437.36	1591.11	0.42
Salt River	VaShly DS	4.59	10yr	58000.00	1190.04	1208.38	1203.30	1208.90	0.003021	5.82	10101.82	1739.54	0.34
Salt River	VaShly DS	4.74	10yr	58000.00	1189.62	1211.16	1203.75	1211.60	0.003675	5.35	11340.06	1587.50	0.27
Salt River	VaShly DS	4.88	10yr	58000.00	1195.43	1211.91	1204.83	1212.54	0.000719	6.33	9805.12	950.82	0.31
Salt River	VaShly DS	5.03	10yr	58000.00	1197.77	1212.57	1207.83	1213.46	0.001441	7.56	7871.87	1135.19	0.42
Salt River	VaShly DS	5.15	10yr	58000.00	1198.09	1213.49	1207.77	1214.32	0.001223	7.29	8313.14	1119.55	0.39
Salt River	VaShly DS	5.26	10yr	58000.00	1184.07	1214.24	1208.07	1215.07	0.001381	7.29	8478.06	1057.68	0.40
Salt River	VaShly DS	5.40	10yr	58000.00	1196.34	1215.18	1209.07	1215.96	0.001111	7.09	8186.16	717.23	0.37
Salt River	VaShly DS	5.47	10yr	58000.00	1199.26	1215.58	1210.59	1216.52	0.001480	7.77	7465.35	834.22	0.42
Salt River	VaShly DS	5.53	10yr	58000.00	1199.29	1215.88	1211.92	1217.07	0.001937	8.75	6630.48	771.33	0.48
Salt River	VaShly DS	5.56	10yr	58000.00	1201.24	1216.61	1210.84	1217.38	0.001157	7.04	8235.01	757.45	0.38
Salt River	VaShly DS	5.60	10yr	58000.00	1201.31	1216.42	1211.94	1218.05	0.002846	10.23	5671.77	749.06	0.58
Salt River	VaShly DS	5.65	10yr	58000.00	1202.22	1217.82	1212.64	1218.62	0.001269	7.18	8083.48	776.87	0.39
Salt River	VaShly DS	5.69	10yr	58000.00	1202.94	1217.85	1213.65	1219.09	0.001870	8.92	6502.20	768.94	0.48
Salt River	VaShly DS	5.73	10yr	58000.00	1200.44	1217.85	1213.36	1219.58	0.002280	10.58	5482.43	787.40	0.54
Salt River	VaShly DS	5.76	10yr	58000.00	1198.50	1218.24	1213.82	1220.07	0.002224	10.85	5345.26	783.56	0.54
Salt River	VaShly DS	5.80	10yr	58000.00	1199.64	1218.31	1214.28	1220.67	0.002687	12.33	4703.78	720.20	0.59
Salt River	VaShly DS	5.82	10yr	58000.00	1197.44	1218.38	1214.18	1221.05	0.002812	13.11	4423.97	794.14	0.61
Salt River	VaShly DS	5.84	10yr	58000.00	1187.25	1220.43	1207.88	1221.32	0.000601	7.60	7636.25	941.17	0.29
Salt River	VaShly DS	5.85	10yr	58000.00	1203.05	1220.97	1214.40	1222.76	0.035070	10.75	5397.13	932.73	0.48
Salt River	VaShly DS	5.86	10yr	58000.00	1197.04	1222.08	1210.53	1222.93	0.000628	7.37	7866.41	1025.16	0.30
Salt River	VaShly DS	5.87	10yr	58000.00	1196.82	1222.19	1211.01	1222.96	0.000594	7.08	8190.64	1292.35	0.29
Salt River	VaShly DS	5.88	10yr	58000.00	1194.54	1222.50	1209.38	1223.01	0.000368	5.76	10077.70	1354.84	0.23
Salt River	VaShly DS	5.91	10yr	58000.00	1201.09	1222.55	1212.64	1223.09	0.000472	5.88	9861.71	1440.79	0.26
Salt River	VaShly DS	5.93	10yr	58000.00	1199.72	1222.79	1210.20	1223.15	0.000341	4.78	12126.92	1393.97	0.22
Salt River	VaShly DS	5.95	10yr	58000.00	1195.30	1222.89	1208.15	1223.18	0.000285	4.36	13299.40	1200.82	0.20
Salt River	VaShly DS	5.97	10yr	58000.00	1198.44	1222.85	1210.52	1223.27	0.000427	5.23	11088.23	1007.10	0.24
Salt River	VaShly DS	5.99	10yr	58000.00	1198.12	1222.90	1211.06	1223.31	0.000441	5.18	11190.92	1183.85	0.24
Salt River	VaShly DS	6.01	10yr	58000.00	1194.75	1223.14	1205.91	1223.35	0.000141	3.71	15624.36	1296.40	0.15

HEC-RAS Plan: Post 50 Profile: 10yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	10yr	58000.00	1201.88	1223.03	1212.77	1223.50	0.000583	5.52	10499.43	1263.95	0.27
Salt River	VaShly DS	6.09	10yr	58000.00	1201.00	1223.16	1213.45	1223.66	0.000631	5.66	10316.14	1313.98	0.28
Salt River	VaShly DS	6.14	10yr	58000.00	1201.32	1223.36	1212.62	1223.82	0.000606	5.41	10726.12	1442.69	0.28
Salt River	VaShly DS	6.18	10yr	58000.00	1188.55	1223.51	1215.24	1223.96	0.000635	5.37	10803.96	1760.41	0.28
Salt River	VaShly DS	6.22	10yr	58000.00	1198.32	1223.52	1214.30	1224.15	0.000755	6.35	9127.33	1569.38	0.31
Salt River	VaShly DS	6.27	10yr	58000.00	1197.76	1223.65	1210.98	1224.35	0.000686	6.72	8627.47	1073.29	0.30
Salt River	VaShly DS	6.32	10yr	58000.00	1199.77	1223.96	1215.22	1224.56	0.000622	6.18	9382.70	1023.79	0.29
Salt River	VaShly DS	6.35	10yr	58000.00	1202.10	1224.10	1213.93	1224.63	0.000503	5.86	9903.64	990.32	0.26
Salt River	VaShly DS	6.38	10yr	58000.00	1201.42	1224.19	1213.57	1224.72	0.000519	5.82	9966.99	1561.57	0.26
Salt River	VaShly DS	6.40	10yr	58000.00	1197.72	1224.22	1214.91	1224.83	0.000606	6.27	9269.18	2083.14	0.29
Salt River	VaShly at Pit	6.45	10yr	4659.00	1216.16	1224.75	1221.41	1225.06	0.001299	4.46	1044.63	209.00	0.35
Salt River	VaShly at Pit	6.50	10yr	4659.00	1220.36	1225.20	1222.94	1225.40	0.001284	3.63	1283.90	345.77	0.33
Salt River	VaShly at Pit	6.53	10yr	4659.00	1221.34	1225.48	1223.91	1225.73	0.002249	4.06	1146.73	398.92	0.42
Salt River	VaShly at Pit	6.56	10yr	4659.00	1221.47	1225.84	1224.65	1226.17	0.003161	4.62	1009.19	374.50	0.50
Salt River	VaShly at Pit	6.62	10yr	4659.00	1222.55	1226.99	1226.11	1227.32	0.003794	4.61	1011.27	431.49	0.53
Salt River	VaShly at Pit	6.69	10yr	4659.00	1222.97	1228.38	1227.44	1228.71	0.003698	4.60	1013.62	425.95	0.53
Salt River	VaShly at Pit	6.75	10yr	4659.00	1226.09	1229.75	1229.15	1230.13	0.005598	4.94	942.48	485.34	0.63
Salt River	VaShly at Pit	6.80	10yr	4659.00	1227.73	1231.40	1230.74	1231.74	0.005823	4.69	992.74	568.77	0.63
Salt River	VaShly at Pit	6.85	10yr	4659.00	1229.81	1232.34	1231.27	1232.55	0.002434	3.69	1261.51	538.57	0.43
Salt River	VaShly at Pit	6.91	10yr	4659.00	1229.03	1233.10	1231.96	1233.34	0.002688	3.90	1194.32	695.65	0.45
Salt River	VaShly at Pit	6.96	10yr	4659.00	1229.37	1233.85	1232.27	1234.07	0.002209	3.73	1248.29	575.60	0.41
Salt River	VaShly at Pit	6.99	10yr	4659.00	1229.94	1234.18	1232.66	1234.40	0.002105	3.72	1252.73	546.93	0.40
Salt River	VaShly at Pit	7.01	10yr	4659.00	1229.89	1234.41	1232.98	1234.65	0.002328	3.91	1191.08	642.59	0.42
Salt River	VaShly at Pit	7.03	10yr	4659.00	1230.67	1234.59	1232.96	1234.80	0.001778	3.65	1277.79	614.31	0.38
Salt River	VaShly at Pit	7.04	10yr	4659.00	1230.92	1234.72	1233.04	1234.92	0.001541	3.56	1308.22	648.93	0.35
Salt River	VaShly at Pit	7.06	10yr	4659.00	1231.36	1234.85	1233.30	1235.07	0.001852	3.77	1235.08	525.94	0.39
Salt River	VaShly at Pit	7.07	10yr	4659.00	1230.65	1234.98	1233.73	1235.24	0.002358	4.05	1150.36	416.90	0.43
Salt River	VaShly at Pit	7.10	10yr	4659.00	1231.41	1235.44	1234.40	1235.68	0.002603	3.96	1176.61	474.93	0.44
Salt River	VaShly at Pit	7.17	10yr	4659.00	1230.40	1236.40	1235.41	1236.66	0.002874	4.07	1145.52	719.37	0.46
Salt River	VaShly at Pit	7.24	10yr	4659.00	1235.15	1237.68	1236.90	1237.96	0.004065	4.23	1100.64	622.67	0.53
Salt River	VaShly at Pit	7.28	10yr	4659.00	1234.69	1238.94	1238.39	1239.24	0.006120	4.37	1065.54	820.87	0.63
Salt River	VaShly US	7.32	10yr	58000.00	1229.87	1240.09	1235.36	1240.66	0.001057	6.05	9591.16	1886.64	0.35
Salt River	VaShly US	7.36	10yr	58000.00	1229.41	1240.35	1235.85	1240.88	0.001029	5.83	9941.07	1858.83	0.35
Salt River	VaShly US	7.40	10yr	58000.00	1230.97	1240.57	1236.31	1241.09	0.001113	5.82	9973.43	1601.62	0.35
Salt River	VaShly US	7.44	10yr	58000.00	1231.22	1240.86	1236.55	1241.33	0.001018	5.52	10501.16	1396.56	0.34
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	10yr	58000.00	1231.96	1241.18	1236.84	1241.67	0.001026	5.59	10369.37	1240.78	0.34
Salt River	VaShly US	7.55	10yr	58000.00	1232.43	1241.61	1237.58	1242.17	0.001274	6.04	9599.51	1204.47	0.38
Salt River	VaShly US	7.63	10yr	60000.00	1231.48	1242.04	1237.73	1242.76	0.001349	6.81	8811.09	963.67	0.40
Salt River	VaShly US	7.71	10yr	60000.00	1231.90	1242.67	1237.98	1243.37	0.001236	6.73	8919.67	929.55	0.38
Salt River	VaShly US	7.83	10yr	60000.00	1232.46	1243.42	1238.67	1244.18	0.001324	6.98	8593.33	891.42	0.40
Salt River	VaShly US	7.91	10yr	60000.00	1231.30	1243.90	1239.34	1244.89	0.001611	8.00	7502.67	734.88	0.44
Salt River	VaShly US	8.01	10yr	60000.00	1231.01	1244.89	1240.53	1245.74	0.001605	7.43	8074.80	878.97	0.43
Salt River	VaShly US	8.10	10yr	60000.00	1227.11	1245.35	1243.71	1247.25	0.003898	11.30	5690.36	837.26	0.67
Salt River	VaShly US	8.20	10yr	60000.00	1233.14	1247.50	1241.91	1248.44	0.001295	7.95	8670.88	964.06	0.41
Salt River	VaShly US	8.29	10yr	60000.00	1234.21	1248.23	1243.14	1249.05	0.001451	7.43	9170.80	1244.74	0.42
Salt River	VaShly US	8.36	10yr	60000.00	1233.96	1248.81	1243.66	1249.57	0.001253	7.15	9302.65	1156.71	0.39
Salt River	VaShly US	8.44	10yr	60000.00	1230.19	1249.25	1247.20	1250.93	0.003711	10.66	8093.83	1386.25	0.65
Salt River	VaShly US	8.52	10yr	60000.00	1227.75	1250.56	1245.47	1251.89	0.001623	9.48	7990.18	1479.17	0.46
Salt River	VaShly US	8.57	10yr	60000.00	1234.23	1250.77	1246.41	1252.65	0.002336	11.28	7212.85	1203.99	0.55
Salt River	VaShly US	8.60	10yr	60000.00	1227.61	1250.50	1248.52	1253.46	0.003876	14.18	5555.36	1050.30	0.70
Salt River	VaShly US	8.63	10yr	60000.00	1231.84	1252.68	1246.86	1254.05	0.002652	9.64	8672.90	1532.29	0.55
Salt River	VaShly US	8.68	10yr	60000.00	1233.08	1253.64	1246.53	1254.53	0.001067	7.74	11562.29	1605.10	0.37
Salt River	VaShly US	8.74	10yr	60000.00	1231.64	1253.56	1248.09	1255.17	0.001832	10.44	7768.92	1344.47	0.49
Salt River	VaShly US	8.77	10yr	60000.00	1234.72	1254.18	1247.71	1255.50	0.001380	9.44	8711.37	1422.50	0.43
Salt River	VaShly US	8.81	10yr	60000.00	1231.64	1254.75	1250.06	1255.83	0.001606	8.53	8955.74	1592.75	0.45
Salt River	VaShly US	8.85	10yr	60000.00	1232.30	1255.26	1248.31	1256.11	0.001006	7.60	9427.28	1543.17	0.36
Salt River	VaShly US	8.88	10yr	60000.00	1233.54	1255.39	1248.46	1256.31	0.001079	7.88	9535.67	1600.90	0.38
Salt River	VaShly US	8.92	10yr	60000.00	1235.52	1255.53	1249.05	1256.54	0.001211	8.30	9180.11	1460.34	0.40
Salt River	VaShly US	8.98	10yr	60000.00	1234.94	1255.81	1249.27	1256.96	0.001252	8.82	8213.43	1070.34	0.41
Salt River	VaShly US	9.04	10yr	60000.00	1237.83	1255.94	1249.70	1257.54	0.001576	10.41	10591.90	766.17	0.47
Salt River	VaShly US	9.13	10yr	60000.00	1238.40	1257.16	1249.96	1258.20	0.001037	8.40	8772.97	670.70	0.38
Salt River	VaShly US	9.20	10yr	60000.00	1239.36	1257.58	1250.85	1258.64	0.001259	8.27	7256.47	560.51	0.40
Salt River	VaShly US	9.26	10yr	60000.00	1240.07	1257.94	1251.32	1259.11	0.001383	8.70	6899.64	555.36	0.42
Salt River	VaShly US	9.33	10yr	60000.00	1238.28	1258.23	1251.88	1259.75	0.001552	9.90	6058.53	413.12	0.46
Salt River	VaShly US	9.39	10yr	60000.00	1235.91	1257.96	1254.10	1260.79	0.002999	13.50	4445.62	310.31	0.63
Salt River	VaShly US	9.44	10yr	60000.00	1242.19	1260.23	1252.58	1261.46	0.001173	8.91	6732.79	989.31	0.40
Salt River	VaShly US	9.49	10yr	60000.00	1240.69	1260.98	1253.82	1261.76	0.000976	7.08	8491.10	1295.77	0.35
Salt River	VaShly US	9.55	10yr	60000.00	1243.76	1261.21	1254.99	1262.19	0.001212	7.93	7588.69	2337.74	0.40
Salt River	VaShly US	9.59	10yr	60000.00	1240.32	1261.44	1255.13	1262.46	0.001276	8.10	7403.82	2741.59	0.40
Salt River	VaShly US	9.61	10yr	60000.00	1243.87	1261.56	1255.80	1262.67	0.001496	8.48	7079.46	1154.77	0.43
Salt River	VaShly US	9.64	10yr	60000.00	1245.06	1261.71	1256.24	1262.92	0.001755	8.86	6778.40	1423.00	0.46
Salt River	VaShly US	9.67	10yr	60000.00	1244.78	1262.00	1256.62	1263.13	0.001491	8.72	7371.05	1544.38	0.44
Salt River	VaShly US	9.73	10yr	60000.00	1246.24	1262.40	1257.36	1263.84	0.002220	9.62	6234.62	1352.85	0.52
Salt River	VaShly US	9.80	10yr	60000.00	1246.16	1263.22	1258.41	1264.65	0.001993	9.61	6280.05	1301.03	0.50
Salt River	VaShly US	9.87	10yr	60000.00	1248.17	1264.22	1258.95	1265.35	0.001670	8.51	7052.72	1415.61	0.45
Salt River	VaShly US	9.96	10yr	60000.00	1249.51	1264.94	1259.99	1266.16	0.001790	8.95	6947.96	1553.18	0.47
Salt River	VaShly US	10.06	10yr	60000.00	1250.89	1266.01	1261.09	1267.30	0.002168	9.10	6594.24	1465.26	0.51
Salt River	VaShly US	10.18	10yr	60000.00	1250.99	1267.56	1262.34	1268.45	0.001579	7.54	7958.74	1950.44	0.43
Salt River	VaShly US	10.26	10yr	60000.00	1251.97	1268.31	1261.94	1269.02	0.001019	6.73	8914.73	2058.05	0.35
Salt River	VaShly US	10.36	10yr	60000.00	1249.97	1268.87	1263.21	1269.45	0.000687	6.11	9825.52	2029.99	0.30
Salt River	VaShly US	10.41	10yr	60000.00	1254.59	1268.99	1262.10	1269.67	0.000794	6.62	9066.59	2095.69	0.32
Salt River	VaShly US	10.46	10yr	60000.00	1251.29	1269.02	1263.82	1270.08	0.001549	8.27	7255.06	1972.10	0.44
Salt River	VaShly US	10.52	10yr	60000.00	1252.59	1269.47	1264.49	1270.64	0.001631	8.65	6934.31	1497.71	0.45
Salt River	VaShly US	10.56	10yr	60000.00	1254.28	1269.87	1264.68	1271.01	0.001541	8.56	7013.05	1399.39	0.44
Salt River	VaShly US	10.61	10yr	60000.00	1253.95	1270.25	1265.12	1271.38	0.001546	8.51	7052.71	1445.37	0.44
Salt River	VaShly US	10.67	10yr	60000.00	1256.89	1270.87	1265.86	1271.90	0.001517	8.18	7336.08	1419.33	0.43

HEC-RAS Plan: Post 50 Profile: 10yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	10yr	60000.00	1258.56	1271.42	1266.31	1272.38	0.001411	7.87	7619.90	1640.69	0.42
Salt River	VaShly US	10.78	10yr	60000.00	1259.27	1271.78	1266.70	1272.70	0.001387	7.69	7800.44	1692.20	0.41
Salt River	VaShly US	10.81	10yr	60000.00	1259.82	1272.02	1267.18	1273.01	0.001590	7.97	7531.14	1719.88	0.44
Salt River	VaShly US	10.86	10yr	60000.00	1258.71	1272.48	1267.57	1273.41	0.001539	7.75	7737.39	1589.48	0.43
Salt River	VaShly US	10.90	10yr	60000.00	1259.75	1272.84	1268.29	1273.80	0.001697	7.85	7645.50	1468.47	0.45
Salt River	VaShly US	10.95	10yr	60000.00	1260.76	1273.28	1268.51	1274.17	0.001531	7.57	7920.83	1169.42	0.43
Salt River	VaShly US	11.00	10yr	60000.00	1260.20	1273.63	1268.78	1274.56	0.001503	7.75	7742.13	1139.47	0.43
Salt River	VaShly US	11.05	10yr	60000.00	1261.52	1274.10	1269.60	1275.05	0.001659	7.85	7645.51	1684.37	0.44
Salt River	VaShly US	11.10	10yr	60000.00	1260.08	1274.49	1269.95	1275.42	0.001642	7.77	7724.11	1460.60	0.44
Salt River	VaShly US	11.14	10yr	60000.00	1257.45	1275.19	1270.43	1276.04	0.004190	7.42	8090.69	1146.31	0.41
Salt River	VaShly US	11.17	10yr	60000.00	1258.53	1275.58	1271.38	1276.49	0.001643	7.65	7846.34	833.64	0.44
Salt River	VaShly US	11.25	10yr	60000.00	1259.69	1276.27	1272.08	1277.18	0.001682	7.64	7855.96	849.21	0.44
Salt River	VaShly US	11.32	10yr	60000.00	1263.36	1276.98	1272.83	1277.86	0.001752	7.51	7985.06	913.20	0.45
Salt River	VaShly US	11.41	10yr	60000.00	1263.36	1277.80	1273.60	1278.68	0.001902	7.51	7988.53	973.80	0.46
Salt River	VaShly US	11.49	10yr	60000.00	1264.61	1278.61	1274.37	1279.49	0.001861	7.55	7943.71	944.07	0.46
Salt River	VaShly US	11.62	10yr	60000.00	1264.20	1280.02	1275.71	1280.67	0.001619	6.46	9290.27	1261.00	0.42
Salt River	VaShly US	11.78	10yr	60000.00	1267.86	1281.46	1278.11	1282.24	0.001972	7.07	8484.40	1162.81	0.46
Salt River	VaShly US	11.88	10yr	60000.00	1268.50	1282.47	1280.01	1283.24	0.001808	7.06	8497.40	1094.16	0.45
Salt River	VaShly US	11.99	10yr	60000.00	1266.83	1283.56	1279.96	1284.48	0.002429	7.69	7802.61	1105.07	0.51
Salt River	VaShly US	12.06	10yr	60000.00	1266.90	1284.40	1280.73	1285.29	0.001929	7.57	7922.50	963.70	0.47
Salt River	VaShly US	12.10	10yr	60000.00	1268.99	1284.94	1281.44	1285.86	0.002477	7.69	7799.90	1119.50	0.51
Salt River	VaShly US	12.22	10yr	60000.00	1268.81	1286.31	1282.47	1287.08	0.001586	7.03	8531.84	999.75	0.42
Salt River	VaShly US	12.33	10yr	60000.00	1271.34	1287.14	1282.58	1288.02	0.001516	7.53	7969.97	815.67	0.42
Salt River	VaShly US	12.44	10yr	60000.00	1274.73	1288.05	1283.60	1288.89	0.001534	7.33	8184.37	880.88	0.42
Salt River	VaShly US	12.55	10yr	60000.00	1275.93	1288.95	1284.51	1289.82	0.001605	7.47	8031.21	869.89	0.43
Salt River	VaShly US	12.67	10yr	60000.00	1276.65	1289.99	1285.52	1290.82	0.001665	7.31	8203.83	942.23	0.44
Salt River	VaShly US	12.77	10yr	60000.00	1276.88	1290.86	1286.42	1291.69	0.001677	7.31	8207.32	949.05	0.44
Salt River	VaShly US	12.87	10yr	60000.00	1277.67	1291.86	1286.90	1292.62	0.001836	7.01	8563.74	1130.12	0.45
Salt River	VaShly US	12.97	10yr	60000.00	1279.11	1292.94	1288.11	1293.69	0.001917	6.95	8627.02	1189.45	0.46
Salt River	VaShly US	13.07	10yr	60000.00	1278.01	1293.80	1289.40	1294.63	0.001739	7.32	8202.28	974.44	0.44
Salt River	VaShly US	13.19	10yr	60000.00	1282.08	1294.88	1290.17	1295.72	0.001727	7.36	8147.66	953.10	0.44
Salt River	VaShly US	13.31	10yr	60000.00	1281.42	1296.02	1291.80	1296.76	0.001430	6.87	8729.56	983.11	0.41
Salt River	VaShly US	13.44	10yr	60000.00	1283.61	1296.98	1292.35	1297.72	0.001511	6.93	8653.21	1003.35	0.42
Salt River	VaShly US	13.55	10yr	60000.00	1287.19	1297.89	1293.47	1298.58	0.001348	6.65	9021.97	1022.36	0.39
Salt River	VaShly US	13.64	10yr	60000.00	1287.63	1298.56	1294.68	1299.32	0.001638	7.01	8559.79	1031.23	0.43
Gilbert Mining P	Gilbert Mining P	0.04	10yr	53341.00	1189.85	1224.56	1201.66	1224.91	0.000131	4.76	11271.87	1439.42	0.15
Gilbert Mining P	Gilbert Mining P	0.08	10yr	53341.00	1179.35	1224.64	1195.86	1224.93	0.000092	4.35	12279.06	1563.10	0.13
Gilbert Mining P	Gilbert Mining P	0.11	10yr	53341.00	1182.14	1224.79	1192.15	1224.96	0.000053	3.30	16182.09	1544.85	0.09
Gilbert Mining P	Gilbert Mining P	0.15	10yr	53341.00	1180.10	1224.79	1191.99	1224.98	0.000072	3.54	15087.57	886.41	0.11
Gilbert Mining P	Gilbert Mining P	0.19	10yr	53341.00	1178.66	1224.70	1199.26	1225.06	0.000194	4.83	11053.33	879.06	0.17
Gilbert Mining P	Gilbert Mining P	0.22	10yr	53341.00	1186.92	1224.78	1199.74	1225.09	0.000142	4.47	11919.81	498.43	0.15
Gilbert Mining P	Gilbert Mining P	0.25	10yr	53341.00	1181.98	1224.81	1194.65	1225.11	0.000128	4.42	12072.52	402.32	0.14
Gilbert Mining P	Gilbert Mining P	0.29	10yr	53341.00	1181.95	1224.74	1196.83	1225.18	0.000167	5.32	10032.60	326.24	0.16
Gilbert Mining P	Gilbert Mining P	0.33	10yr	53341.00	1183.04	1225.12	1193.67	1225.23	0.000034	2.56	20856.07	694.51	0.08
Gilbert Mining P	Gilbert Mining P	0.37	10yr	53341.00	1185.24	1225.14	1197.59	1225.24	0.000038	2.49	21985.53	1494.88	0.08
Gilbert Mining P	Gilbert Mining P	0.43	10yr	53341.00	1179.91	1225.12	1195.42	1225.26	0.000054	3.03	17615.20	1894.41	0.09
Gilbert Mining P	Gilbert Mining P	0.48	10yr	53341.00	1183.06	1225.12	1197.09	1225.29	0.000076	3.31	16118.07	1525.76	0.11
Gilbert Mining P	Gilbert Mining P	0.53	10yr	53341.00	1202.03	1225.08	1213.52	1225.37	0.000258	4.34	12285.63	1377.42	0.19
Gilbert Mining P	Gilbert Mining P	0.55	10yr	53341.00	1203.21	1225.04	1214.04	1225.44	0.000367	5.08	10492.66	1186.84	0.22
Gilbert Mining P	Gilbert Mining P	0.60	10yr	53341.00	1199.67	1224.87	1215.71	1225.72	0.000779	7.40	7207.20	1132.00	0.33
Gilbert Mining P	Gilbert Mining P	0.66	10yr	53341.00	1204.07	1225.52	1214.25	1225.92	0.000371	5.12	10427.91	1343.10	0.23
Gilbert Mining P	Gilbert Mining P	0.70	10yr	53341.00	1206.48	1225.44	1215.50	1226.09	0.000573	6.47	8243.94	1405.06	0.28
Gilbert Mining P	Gilbert Mining P	0.74	10yr	53341.00	1206.94	1225.74	1216.14	1226.22	0.000490	5.56	9598.83	1819.22	0.26
Gilbert Mining P	Gilbert Mining P	0.77	10yr	53341.00	1206.46	1226.02	1216.18	1226.31	0.000330	4.34	12298.88	1985.05	0.21
Gilbert Mining P	Gilbert Mining P	0.83	10yr	53341.00	1208.33	1226.15	1215.88	1226.41	0.000313	4.11	12983.62	2111.21	0.20
Gilbert Mining P	Gilbert Mining P	0.88	10yr	53341.00	1208.45	1226.20	1216.96	1226.51	0.000408	4.44	12011.01	2168.14	0.23
Gilbert Mining P	Gilbert Mining P	0.91	10yr	53341.00	1206.13	1226.22	1218.02	1226.63	0.000532	5.17	10319.41	2217.35	0.26
Gilbert Mining P	Gilbert Mining P	0.95	10yr	53341.00	1208.41	1226.24	1217.84	1226.77	0.000610	5.83	9168.96	2355.25	0.28
Gilbert Mining P	Gilbert Mining P	0.97	10yr	53341.00	1209.76	1226.27	1218.96	1226.85	0.000802	6.13	8717.20	3141.31	0.32
Gilbert Mining P	Gilbert Mining P	0.99	10yr	53341.00	1208.61	1226.34	1218.44	1226.95	0.000832	6.27	8504.84	3256.37	0.32
Gilbert Mining P	Gilbert Mining P	1.02	10yr	53341.00	1210.66	1226.53	1217.85	1227.07	0.000582	5.82	9091.95	3022.57	0.28
Gilbert Mining P	Gilbert Mining P	1.05	10yr	53341.00	1209.65	1226.59	1219.24	1227.19	0.000680	6.22	8749.35	2827.24	0.30
Gilbert Mining P	Gilbert Mining P	1.08	10yr	53341.00	1198.40	1226.54	1219.63	1227.49	0.001294	7.85	6799.47	1576.64	0.39
Gilbert Mining P	Gilbert Mining P	1.11	10yr	53341.00	1194.11	1226.62	1217.85	1227.69	0.001034	8.32	6425.13	1194.04	0.35
Gilbert Mining P	Gilbert Mining P	1.14	10yr	53341.00	1201.44	1226.49	1217.34	1228.06	0.001412	10.03	5316.68	1120.14	0.43
Gilbert Mining P	Gilbert Mining P	1.17	10yr	53341.00	1221.53	1232.59	1232.59	1237.61	0.008284	17.97	2967.86	499.49	1.00
Gilbert Mining P	Gilbert Mining P	1.19	10yr	53341.00	1218.15	1235.29	1230.91	1238.37	0.002863	14.09	3785.50	392.48	0.63
Gilbert Mining P	Gilbert Mining P	1.21	10yr	53341.00	1222.00	1234.83	1233.83	1239.22	0.006279	16.82	3170.63	277.39	0.88

APPENDIX 9c

20-YEAR STANDARD TABLE 1

HEC-RAS Plan: Post 50 Profile: 20yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	20yr	95000.00	1143.99	1165.85	1154.76	1166.31	0.000379	5.41	17548.00	1033.56	0.23
Salt River	VaShly DS	0.11	20yr	95000.00	1144.67	1166.08	1156.22	1166.57	0.000466	5.60	16978.16	1115.25	0.25
Salt River	VaShly DS	0.23	20yr	95000.00	1147.96	1166.38	1157.95	1166.92	0.000571	5.88	16153.86	1145.47	0.28
Salt River	VaShly DS	0.36	20yr	95000.00	1148.61	1166.77	1158.43	1167.30	0.000552	5.81	16350.88	1157.36	0.27
Salt River	VaShly DS	0.51	20yr	95000.00	1150.89	1167.21	1159.62	1167.78	0.000647	6.05	15692.88	1176.24	0.29
Salt River	VaShly DS	0.65	20yr	95000.00	1151.13	1167.71	1159.52	1168.24	0.000583	5.86	16213.09	1182.31	0.28
Salt River	VaShly DS	0.78	20yr	95000.00	1150.83	1168.10	1161.04	1168.73	0.000785	6.34	14981.11	1208.86	0.32
Salt River	VaShly DS	0.89	20yr	95000.00	1153.10	1168.58	1162.38	1169.26	0.000927	6.61	14368.54	1235.41	0.34
Salt River	VaShly DS	1.00	20yr	95000.00	1151.27	1169.16	1161.95	1169.72	0.000689	6.04	15733.99	1242.04	0.30
Salt River	VaShly DS	1.12	20yr	95000.00	1152.15	1169.58	1162.48	1170.16	0.000742	6.10	15582.40	1281.78	0.31
Salt River	VaShly DS	1.22	20yr	95000.00	1153.46	1169.99	1163.55	1170.59	0.000809	6.20	15327.79	1309.65	0.32
Salt River	VaShly DS	1.30	20yr	95000.00	1150.51	1170.33	1164.12	1170.94	0.000858	6.28	15137.83	1326.50	0.33
Salt River	VaShly DS	1.39	20yr	95000.00	1150.03	1170.75	1163.26	1171.31	0.000709	6.00	15821.60	1282.51	0.30
Salt River	VaShly DS	1.52	20yr	95000.00	1153.77	1171.22	1164.47	1172.02	0.001144	7.17	13252.22	1176.18	0.38
Salt River	VaShly DS	1.65	20yr	95000.00	1155.27	1172.20	1166.63	1172.80	0.001056	6.21	15300.45	1599.17	0.35
Salt River	VaShly DS	1.76	20yr	95000.00	1155.56	1172.73	1167.46	1173.50	0.001260	7.04	13498.82	1477.82	0.39
Salt River	VaShly DS	1.80	20yr	95000.00	1158.65	1172.90	1168.63	1173.85	0.001648	7.86	12087.84	1271.47	0.44
Salt River	VaShly DS	1.83	20yr	95000.00	1147.74	1173.09	1168.83	1174.18	0.001814	8.40	11314.90	1171.35	0.47
Salt River	VaShly DS	1.86	20yr	95000.00	1154.19	1173.38	1169.01	1174.54	0.002066	8.63	11014.44	1193.86	0.49
Salt River	VaShly DS	1.89	20yr	95000.00	1156.29	1173.71	1168.64	1174.83	0.001975	8.49	11193.92	1311.44	0.48
Salt River	VaShly DS	1.95	20yr	95000.00	1156.57	1174.26	1169.58	1175.53	0.001934	9.06	10481.14	1458.28	0.49
Salt River	VaShly DS	2.02	20yr	95000.00	1160.11	1174.83	1170.52	1176.31	0.002003	9.76	9733.01	1776.50	0.50
Salt River	VaShly DS	2.04	20yr	95000.00	1158.56	1174.84	1171.00	1176.69	0.002628	10.92	8700.36	1731.27	0.57
Salt River	VaShly DS	2.07	20yr	95000.00	1156.21	1175.85	1170.86	1177.10	0.001695	8.98	10584.83	1895.26	0.46
Salt River	VaShly DS	2.10	20yr	95000.00	1158.18	1176.02	1171.82	1177.47	0.002449	9.67	9829.10	1983.91	0.54
Salt River	VaShly DS	2.12	20yr	95000.00	1153.95	1176.76	1166.20	1177.63	0.000709	7.49	12684.33	1734.53	0.32
Salt River	VaShly DS	2.13	20yr	95000.00	1153.90	1176.71	1166.76	1177.73	0.000894	8.11	11714.68	1750.04	0.35
Salt River	VaShly DS	2.21	20yr	95000.00	1156.97	1176.71	1172.22	1178.77	0.002648	11.52	8246.85	1687.00	0.58
Salt River	VaShly DS	2.29	20yr	95000.00	1170.86	1185.25	1185.25	1188.90	0.009184	15.32	6200.10	1062.68	1.00
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	20yr	95000.00	1180.00	1195.07	1192.06	1196.77	0.002885	10.46	9078.18	1229.89	0.59
Salt River	VaShly DS	2.38	20yr	95000.00	1176.44	1196.41	1190.28	1197.36	0.001172	7.82	12149.27	1032.72	0.39
Salt River	VaShly DS	2.40	20yr	95000.00	1177.52	1196.57	1190.53	1197.53	0.001172	7.87	12078.10	955.41	0.39
Salt River	VaShly DS	2.41	20yr	95000.00	1177.08	1196.62	1190.58	1197.58	0.001175	7.89	12047.40	1067.13	0.39
Salt River	VaShly DS	2.42	20yr	95000.00	1176.40	1196.66	1190.66	1197.63	0.001190	7.91	12009.46	963.03	0.39
Salt River	VaShly DS	2.47	20yr	95000.00	1177.74	1196.96	1191.13	1197.96	0.001240	8.02	11851.21	982.46	0.40
Salt River	VaShly DS	2.53	20yr	95000.00	1177.40	1197.38	1192.05	1198.36	0.001308	7.92	11990.00	2017.04	0.41
Salt River	VaShly DS	2.59	20yr	95000.00	1181.61	1197.78	1192.13	1198.82	0.001329	8.17	11629.11	1907.77	0.41
Salt River	VaShly DS	2.65	20yr	95000.00	1183.93	1198.15	1192.20	1199.21	0.001288	8.27	11491.53	906.74	0.41
Salt River	VaShly DS	2.71	20yr	95000.00	1183.50	1198.73	1193.32	1199.68	0.001294	7.84	12118.56	1347.85	0.40
Salt River	VaShly DS	2.78	20yr	95000.00	1183.83	1199.22	1193.72	1200.09	0.001211	7.52	12658.54	1363.00	0.39
Salt River	VaShly DS	2.87	20yr	95000.00	1174.74	1199.68	1193.93	1200.84	0.001413	8.63	11014.12	872.00	0.43
Salt River	VaShly DS	2.98	20yr	95000.00	1178.35	1200.65	1192.96	1201.41	0.000657	7.00	13578.10	817.59	0.30
Salt River	VaShly DS	3.10	20yr	95000.00	1174.85	1200.99	1193.94	1202.26	0.001652	9.03	10515.07	872.00	0.46
Salt River	VaShly DS	3.23	20yr	95000.00	1181.67	1202.16	1196.44	1203.52	0.001848	9.37	10135.21	867.73	0.48
Salt River	VaShly DS	3.35	20yr	95000.00	1184.67	1203.44	1196.69	1204.42	0.001111	7.93	11973.22	928.76	0.38
Salt River	VaShly DS	3.46	20yr	95000.00	1183.72	1204.29	1197.31	1205.10	0.001008	7.21	13172.16	1631.49	0.36
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	20yr	95000.00	1185.13	1204.59	1198.28	1205.52	0.001140	7.72	12300.62	1255.03	0.38
Salt River	VaShly DS	3.64	20yr	95000.00	1185.28	1205.48	1199.65	1206.61	0.001498	8.56	11100.41	1094.91	0.44
Salt River	VaShly DS	3.76	20yr	95000.00	1185.23	1206.58	1199.92	1207.39	0.000960	7.21	13184.69	1584.26	0.35
Salt River	VaShly DS	3.89	20yr	95000.00	1181.01	1207.44	1197.81	1207.79	0.000355	4.70	20409.01	1965.06	0.22
Salt River	VaShly DS	4.04	20yr	95000.00	1186.07	1207.74	1199.32	1208.16	0.000544	5.30	18638.06	2290.97	0.26
Salt River	VaShly DS	4.09	20yr	95000.00	1186.77	1207.88	1201.13	1208.38	0.000811	5.78	16682.24	2080.32	0.31
Salt River	VaShly DS	4.15	20yr	95000.00	1185.73	1208.04	1202.22	1208.75	0.001083	6.74	14103.57	1745.98	0.36
Salt River	VaShly DS	4.22	20yr	95000.00	1188.00	1208.54	1202.60	1209.02	0.000589	5.56	16952.96	1480.86	0.28
Salt River	VaShly DS	4.27	20yr	95000.00	1188.10	1208.59	1202.75	1209.31	0.000979	6.83	14110.31	1261.91	0.35
Salt River	VaShly DS	4.31	20yr	95000.00	1193.87	1208.71	1203.30	1209.61	0.001309	7.76	12598.33	1168.73	0.40
Salt River	VaShly DS	4.47	20yr	95000.00	1190.75	1209.83	1204.99	1210.72	0.001358	7.57	15288.40	1958.10	0.41
Salt River	VaShly DS	4.59	20yr	95000.00	1190.04	1211.35	1205.16	1212.14	0.002870	7.11	14514.33	1911.78	0.37
Salt River	VaShly DS	4.74	20yr	95000.00	1189.62	1214.21	1206.16	1214.96	0.004136	6.94	15430.02	1869.59	0.32
Salt River	VaShly DS	4.88	20yr	95000.00	1195.43	1215.14	1207.67	1216.18	0.000951	8.17	13291.63	1431.06	0.43
Salt River	VaShly DS	5.03	20yr	95000.00	1197.77	1215.99	1210.18	1217.14	0.001419	8.58	12364.37	1253.49	0.43
Salt River	VaShly DS	5.15	20yr	95000.00	1198.09	1216.95	1210.42	1217.98	0.001181	8.14	13086.56	1267.48	0.39
Salt River	VaShly DS	5.26	20yr	95000.00	1184.07	1217.56	1211.02	1218.81	0.001477	8.97	12281.40	1252.14	0.44
Salt River	VaShly DS	5.40	20yr	95000.00	1196.34	1218.56	1211.89	1219.80	0.001282	8.93	10818.20	829.02	0.41
Salt River	VaShly DS	5.47	20yr	95000.00	1199.26	1219.23	1213.12	1220.37	0.001535	8.57	11082.53	923.48	0.44
Salt River	VaShly DS	5.53	20yr	95000.00	1199.29	1219.57	1214.40	1220.91	0.001909	9.29	10224.64	901.89	0.49
Salt River	VaShly DS	5.56	20yr	95000.00	1201.24	1220.07	1213.31	1221.22	0.001353	8.61	11039.35	845.74	0.42
Salt River	VaShly DS	5.60	20yr	95000.00	1201.31	1220.31	1216.07	1221.55	0.001647	8.94	10620.84	890.05	0.46
Salt River	VaShly DS	5.65	20yr	95000.00	1202.22	1220.71	1215.31	1222.02	0.001518	9.20	10329.79	919.79	0.45
Salt River	VaShly DS	5.69	20yr	95000.00	1202.94	1221.18	1216.21	1222.32	0.001228	8.60	11043.07	780.87	0.40
Salt River	VaShly DS	5.73	20yr	95000.00	1200.44	1221.65	1216.77	1222.51	0.000777	7.43	12783.70	796.61	0.33
Salt River	VaShly DS	5.76	20yr	95000.00	1198.50	1221.27	1217.18	1223.10	0.002157	10.88	8735.61	845.65	0.53
Salt River	VaShly DS	5.80	20yr	95000.00	1199.64	1221.63	1218.08	1223.45	0.001773	10.84	8766.48	806.66	0.49
Salt River	VaShly DS	5.82	20yr	95000.00	1197.44	1222.37	1218.40	1223.64	0.001011	9.05	10492.58	848.53	0.38
Salt River	VaShly DS	5.84	20yr	95000.00	1187.25	1223.16	1212.07	1223.76	0.000298	6.21	15291.40	943.05	0.21
Salt River	VaShly DS	5.85	20yr	95000.00	1203.05	1223.41	1218.44	1224.92	0.026909	9.84	9650.97	952.75	0.42
Salt River	VaShly DS	5.86	20yr	95000.00	1197.04	1223.68	1214.19	1225.05	0.001076	9.39	10115.18	1037.34	0.39
Salt River	VaShly DS	5.87	20yr	95000.00	1196.82	1223.90	1214.54	1225.12	0.001044	8.86	10721.33	1303.60	0.38
Salt River	VaShly DS	5.88	20yr	95000.00	1194.54	1224.40	1212.73	1225.20	0.000623	7.15	13279.98	1531.25	0.30
Salt River	VaShly DS	5.91	20yr	95000.00	1201.09	1224.49	1215.39	1225.33	0.000827	7.37	12886.98	1613.17	0.34
Salt River	VaShly DS	5.93	20yr	95000.00	1199.72	1224.67	1213.05	1225.42	0.000627	6.98	13609.19	1447.96	0.30
Salt River	VaShly DS	5.95	20yr	95000.00	1195.30	1224.86	1211.14	1225.48	0.000516	6.32	15039.28	1333.26	0.27
Salt River	VaShly DS	5.97	20yr	95000.00	1198.44	1224.79	1213.62	1225.66	0.000864	7.48	12700.40	1140.98	0.34
Salt River	VaShly DS	5.99	20yr	95000.00	1198.12	1224.87	1214.13	1225.73	0.000782	7.45	12760.01	1289.56	0.33
Salt River	VaShly DS	6.01	20yr	95000.00	1194.75	1225.35	1210.25	1225.81	0.000267	5.48	17335.92	1349.31	0.20

HEC-RAS Plan: Post 50 Profile: 20yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	20yr	95000.00	1201.88	1225.13	1215.59	1226.07	0.000938	7.75	12260.09	1358.38	0.36
Salt River	VaShly DS	6.09	20yr	95000.00	1201.00	1225.36	1217.17	1226.32	0.000989	7.86	12512.58	1404.68	0.37
Salt River	VaShly DS	6.14	20yr	95000.00	1201.32	1225.71	1215.86	1226.56	0.000890	7.39	13121.39	1690.04	0.35
Salt River	VaShly DS	6.18	20yr	95000.00	1188.55	1225.95	1217.63	1226.77	0.000897	7.24	13367.96	1925.21	0.34
Salt River	VaShly DS	6.22	20yr	95000.00	1198.32	1225.90	1217.61	1227.09	0.001265	8.73	11079.35	1767.64	0.41
Salt River	VaShly DS	6.27	20yr	95000.00	1197.76	1226.15	1215.12	1227.46	0.001376	9.18	10375.33	1409.27	0.43
Salt River	VaShly DS	6.32	20yr	95000.00	1199.77	1226.69	1218.10	1227.81	0.000954	8.49	11188.96	1048.06	0.37
Salt River	VaShly DS	6.35	20yr	95000.00	1202.10	1226.90	1216.93	1227.93	0.000802	8.11	11714.04	1094.32	0.34
Salt River	VaShly DS	6.38	20yr	95000.00	1201.42	1227.08	1217.27	1228.07	0.000790	7.99	11890.14	1657.91	0.33
Salt River	VaShly DS	6.40	20yr	95000.00	1197.72	1227.11	1217.74	1228.25	0.000945	8.58	11093.31	2135.39	0.36
Salt River	VaShly at Pit	6.45	20yr	22000.00	1216.16	1227.82	1227.19	1229.12	0.006931	9.15	2404.32	574.76	0.79
Salt River	VaShly at Pit	6.50	20yr	22000.00	1220.36	1229.57	1226.62	1230.28	0.003132	6.79	3237.72	664.63	0.54
Salt River	VaShly at Pit	6.53	20yr	22000.00	1221.34	1230.15	1227.30	1230.72	0.001932	6.08	3687.50	668.51	0.44
Salt River	VaShly at Pit	6.56	20yr	22000.00	1221.47	1230.41	1228.01	1231.11	0.002629	6.75	3304.26	659.62	0.51
Salt River	VaShly at Pit	6.62	20yr	22000.00	1222.55	1231.28	1229.03	1232.04	0.002871	6.99	3145.48	580.10	0.53
Salt River	VaShly at Pit	6.69	20yr	22000.00	1222.97	1232.37	1230.59	1233.13	0.003019	7.01	3144.58	626.95	0.54
Salt River	VaShly at Pit	6.75	20yr	22000.00	1226.09	1233.33	1231.81	1234.13	0.003494	7.21	3052.31	626.26	0.58
Salt River	VaShly at Pit	6.80	20yr	22000.00	1227.73	1234.39	1233.25	1235.31	0.004607	7.71	2854.28	650.94	0.65
Salt River	VaShly at Pit	6.85	20yr	22000.00	1229.81	1235.44	1233.76	1236.24	0.003438	7.18	3064.83	625.39	0.57
Salt River	VaShly at Pit	6.91	20yr	22000.00	1229.03	1236.40	1234.65	1237.28	0.003260	7.54	2918.44	838.47	0.57
Salt River	VaShly at Pit	6.96	20yr	22000.00	1229.37	1237.33	1235.26	1238.19	0.002837	7.45	2953.70	1129.17	0.54
Salt River	VaShly at Pit	6.99	20yr	22000.00	1229.94	1237.78	1235.62	1238.62	0.002740	7.36	2987.87	1169.08	0.53
Salt River	VaShly at Pit	7.01	20yr	22000.00	1229.89	1238.04	1235.99	1238.96	0.002958	7.71	2851.78	1101.02	0.55
Salt River	VaShly at Pit	7.03	20yr	22000.00	1230.67	1238.31	1235.97	1239.17	0.002623	7.45	2951.28	1197.59	0.52
Salt River	VaShly at Pit	7.04	20yr	22000.00	1230.92	1238.48	1236.03	1239.36	0.002537	7.52	2925.19	1108.18	0.51
Salt River	VaShly at Pit	7.06	20yr	22000.00	1231.36	1238.68	1236.33	1239.59	0.002667	7.65	2875.51	1149.57	0.53
Salt River	VaShly at Pit	7.07	20yr	22000.00	1230.65	1238.88	1236.67	1239.80	0.002814	7.71	2853.17	1106.61	0.54
Salt River	VaShly at Pit	7.10	20yr	22000.00	1231.41	1239.50	1237.03	1240.27	0.002309	7.02	3133.05	1176.07	0.49
Salt River	VaShly at Pit	7.17	20yr	22000.00	1230.40	1240.38	1238.08	1241.13	0.002486	6.93	3172.96	1378.05	0.50
Salt River	VaShly at Pit	7.24	20yr	22000.00	1235.15	1241.56	1239.42	1242.06	0.002143	5.66	3888.78	1868.36	0.45
Salt River	VaShly at Pit	7.28	20yr	22000.00	1234.69	1242.17	1240.57	1242.78	0.003144	6.25	3518.88	1611.74	0.53
Salt River	VaShly US	7.32	20yr	95000.00	1229.87	1243.77	1237.20	1244.54	0.000945	7.05	13467.48	2154.57	0.35
Salt River	VaShly US	7.36	20yr	95000.00	1229.41	1244.03	1237.56	1244.74	0.000868	6.75	14067.85	2155.59	0.34
Salt River	VaShly US	7.40	20yr	95000.00	1230.97	1244.26	1237.98	1244.93	0.000897	6.57	14464.88	2048.25	0.34
Salt River	VaShly US	7.44	20yr	95000.00	1231.22	1244.52	1238.16	1245.12	0.000813	6.26	15179.77	2063.81	0.32
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	20yr	95000.00	1231.96	1244.82	1238.46	1245.45	0.000834	6.37	14919.35	1439.26	0.33
Salt River	VaShly US	7.55	20yr	95000.00	1232.43	1245.15	1239.32	1245.87	0.001012	6.83	13899.42	1344.55	0.36
Salt River	VaShly US	7.63	20yr	100000.00	1231.48	1245.40	1239.80	1246.46	0.001344	8.28	12074.78	979.81	0.42
Salt River	VaShly US	7.71	20yr	100000.00	1231.90	1246.01	1240.15	1247.08	0.001285	8.29	12055.53	942.67	0.41
Salt River	VaShly US	7.83	20yr	100000.00	1232.46	1246.78	1241.00	1247.93	0.001388	8.60	11629.27	911.32	0.42
Salt River	VaShly US	7.91	20yr	100000.00	1231.30	1247.20	1241.94	1248.76	0.001821	10.03	9970.51	916.97	0.49
Salt River	VaShly US	8.01	20yr	100000.00	1231.01	1248.45	1242.95	1249.67	0.001556	8.85	11300.28	1146.88	0.45
Salt River	VaShly US	8.10	20yr	100000.00	1227.11	1248.74	1246.49	1251.03	0.003218	12.65	8597.95	1049.40	0.64
Salt River	VaShly US	8.20	20yr	100000.00	1233.14	1251.06	1245.32	1252.29	0.001605	9.37	12251.93	1384.44	0.46
Salt River	VaShly US	8.29	20yr	100000.00	1234.21	1251.98	1246.15	1252.93	0.001244	8.25	14072.85	1675.43	0.40
Salt River	VaShly US	8.36	20yr	100000.00	1233.96	1252.49	1246.62	1253.42	0.001273	8.11	13853.45	1940.93	0.41
Salt River	VaShly US	8.44	20yr	100000.00	1230.19	1252.86	1249.79	1254.58	0.002988	11.18	13187.43	2044.57	0.60
Salt River	VaShly US	8.52	20yr	100000.00	1227.75	1254.50	1249.03	1255.16	0.000697	6.89	17538.37	2458.18	0.30
Salt River	VaShly US	8.57	20yr	100000.00	1234.23	1254.52	1250.88	1255.61	0.001393	8.93	15363.54	1816.93	0.42
Salt River	VaShly US	8.60	20yr	100000.00	1227.61	1254.72	1252.26	1255.82	0.001220	8.94	15039.03	1684.63	0.40
Salt River	VaShly US	8.63	20yr	100000.00	1231.84	1254.30	1252.55	1256.50	0.003947	12.65	11322.14	1694.18	0.69
Salt River	VaShly US	8.68	20yr	100000.00	1233.08	1255.77	1250.43	1257.23	0.001636	10.31	14925.30	1664.44	0.47
Salt River	VaShly US	8.74	20yr	100000.00	1231.64	1255.30	1253.58	1258.11	0.001556	14.31	10018.52	1535.51	0.64
Salt River	VaShly US	8.77	20yr	100000.00	1234.72	1256.28	1251.97	1258.51	0.002208	12.76	11471.00	1865.72	0.55
Salt River	VaShly US	8.81	20yr	100000.00	1231.64	1257.46	1253.33	1259.01	0.001926	10.59	12800.88	1952.30	0.50
Salt River	VaShly US	8.85	20yr	100000.00	1232.30	1258.07	1251.47	1259.37	0.001398	9.70	13072.56	1993.82	0.44
Salt River	VaShly US	8.88	20yr	100000.00	1233.54	1258.25	1252.72	1259.64	0.001440	10.03	13000.35	1881.14	0.45
Salt River	VaShly US	8.92	20yr	100000.00	1235.52	1258.42	1253.25	1259.95	0.001562	10.53	12583.10	1784.78	0.47
Salt River	VaShly US	8.98	20yr	100000.00	1234.94	1258.75	1253.57	1260.52	0.001640	11.31	11227.43	1428.05	0.48
Salt River	VaShly US	9.04	20yr	100000.00	1237.83	1258.83	1252.91	1261.33	0.002169	13.52	12816.69	772.92	0.56
Salt River	VaShly US	9.13	20yr	100000.00	1238.40	1260.65	1253.06	1262.20	0.001276	10.56	11303.81	1160.39	0.43
Salt River	VaShly US	9.20	20yr	100000.00	1239.36	1261.00	1254.46	1262.84	0.001624	10.88	9194.98	991.65	0.48
Salt River	VaShly US	9.26	20yr	100000.00	1240.07	1261.44	1255.17	1263.46	0.001758	11.41	8809.55	1031.09	0.50
Salt River	VaShly US	9.33	20yr	100000.00	1238.28	1261.64	1255.65	1264.41	0.002216	13.35	7488.48	978.39	0.56
Salt River	VaShly US	9.39	20yr	100000.00	1235.91	1260.71	1258.42	1266.20	0.004674	18.83	5732.63	915.97	0.80
Salt River	VaShly US	9.44	20yr	100000.00	1242.19	1265.24	1256.30	1267.18	0.001314	11.17	8950.14	2117.30	0.44
Salt River	VaShly US	9.49	20yr	100000.00	1240.69	1266.47	1256.88	1267.51	0.000815	8.16	12329.85	2548.25	0.34
Salt River	VaShly US	9.55	20yr	100000.00	1243.76	1267.15	1258.02	1267.79	0.000552	6.85	16171.35	3725.99	0.28
Salt River	VaShly US	9.59	20yr	100000.00	1240.32	1267.36	1258.46	1267.91	0.000490	6.48	17734.73	4139.23	0.27
Salt River	VaShly US	9.61	20yr	100000.00	1243.87	1267.38	1259.15	1268.01	0.000592	6.94	16565.29	4061.58	0.29
Salt River	VaShly US	9.64	20yr	100000.00	1245.06	1267.42	1259.74	1268.11	0.000688	7.27	15964.26	3910.78	0.31
Salt River	VaShly US	9.67	20yr	100000.00	1244.78	1267.46	1260.58	1268.21	0.000731	7.64	15280.91	3536.48	0.32
Salt River	VaShly US	9.73	20yr	100000.00	1246.24	1267.63	1261.12	1268.54	0.001087	8.18	13604.94	2250.04	0.38
Salt River	VaShly US	9.80	20yr	100000.00	1246.16	1267.87	1261.83	1269.01	0.001174	9.12	12245.04	1857.44	0.40
Salt River	VaShly US	9.87	20yr	100000.00	1248.17	1268.23	1262.24	1269.49	0.001334	9.26	11358.19	2290.06	0.43
Salt River	VaShly US	9.96	20yr	100000.00	1249.51	1268.67	1263.41	1270.31	0.001771	10.56	10189.22	1913.23	0.49
Salt River	VaShly US	10.06	20yr	100000.00	1250.89	1269.61	1264.91	1271.49	0.002167	11.04	9164.24	2226.52	0.53
Salt River	VaShly US	10.18	20yr	100000.00	1250.99	1271.37	1266.01	1272.61	0.001459	8.94	11191.75	2305.81	0.44
Salt River	VaShly US	10.26	20yr	100000.00	1251.97	1272.13	1265.34	1273.20	0.001126	8.31	12033.02	2369.56	0.39
Salt River	VaShly US	10.36	20yr	100000.00	1249.97	1272.77	1266.01	1273.71	0.000853	7.79	12945.84	2399.77	0.34
Salt River	VaShly US	10.41	20yr	100000.00	1254.59	1272.88	1264.95	1273.99	0.000976	8.46	11861.88	2337.06	0.37
Salt River	VaShly US	10.46	20yr	100000.00	1251.29	1272.89	1266.73	1274.46	0.001599	10.11	10241.78	2409.06	0.46
Salt River	VaShly US	10.52	20yr	100000.00	1252.59	1273.30	1267.42	1275.08	0.001804	10.71	9334.14	1803.16	0.49
Salt River	VaShly US	10.56	20yr	100000.00	1254.28	1273.71	1267.63	1275.49	0.001705	10.70	9344.49	1803.08	0.48
Salt River	VaShly US	10.61	20yr	100000.00	1253.95	1274.18	1268.03	1275.90	0.001688	10.52	9504.09	1646.65	0.48
Salt River	VaShly US	10.67	20yr	100000.00	1256.89	1274.94	1268.60	1276.47	0.001532	9.91	10095.42	1566.00	0.46

HEC-RAS Plan: Post 50 Profile: 20yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	20yr	100000.00	1258.56	1275.55	1268.96	1276.95	0.001396	9.50	10521.00	1776.01	0.44
Salt River	VaShly US	10.78	20yr	100000.00	1259.27	1275.95	1269.31	1277.27	0.001336	9.20	10872.97	1808.72	0.43
Salt River	VaShly US	10.81	20yr	100000.00	1259.82	1276.19	1269.98	1277.55	0.001470	9.37	10674.98	1821.15	0.44
Salt River	VaShly US	10.86	20yr	100000.00	1258.71	1276.65	1270.31	1277.93	0.001399	9.06	11042.47	1725.83	0.43
Salt River	VaShly US	10.90	20yr	100000.00	1259.75	1277.00	1271.02	1278.26	0.001482	9.01	11100.21	1547.58	0.44
Salt River	VaShly US	10.95	20yr	100000.00	1260.76	1277.42	1271.01	1278.60	0.001407	8.71	11486.26	1268.56	0.43
Salt River	VaShly US	11.00	20yr	100000.00	1260.20	1277.68	1271.45	1278.99	0.001427	9.18	10893.20	1205.97	0.44
Salt River	VaShly US	11.05	20yr	100000.00	1261.52	1278.14	1272.23	1279.44	0.001497	9.16	10911.68	1818.01	0.44
Salt River	VaShly US	11.10	20yr	100000.00	1260.08	1278.48	1272.61	1279.77	0.001472	9.12	10965.73	1705.91	0.44
Salt River	VaShly US	11.14	20yr	100000.00	1257.45	1279.13	1272.87	1280.34	0.003927	8.84	11315.91	1680.85	0.42
Salt River	VaShly US	11.17	20yr	100000.00	1258.53	1279.49	1273.78	1280.74	0.001463	8.97	11145.14	1309.23	0.44
Salt River	VaShly US	11.25	20yr	100000.00	1259.69	1280.11	1274.53	1281.36	0.001494	8.96	11253.36	1524.83	0.44
Salt River	VaShly US	11.32	20yr	100000.00	1263.36	1280.86	1275.19	1281.97	0.001547	8.45	11836.57	1382.44	0.44
Salt River	VaShly US	11.41	20yr	100000.00	1263.36	1281.73	1276.11	1282.70	0.001620	7.89	12677.63	1272.73	0.44
Salt River	VaShly US	11.49	20yr	100000.00	1264.61	1282.39	1276.92	1283.44	0.001705	8.20	12193.43	1198.36	0.45
Salt River	VaShly US	11.62	20yr	100000.00	1264.20	1283.61	1278.45	1284.42	0.001234	7.20	13898.23	1307.64	0.39
Salt River	VaShly US	11.78	20yr	100000.00	1267.86	1284.69	1280.25	1285.71	0.001662	8.13	12299.14	1407.87	0.45
Salt River	VaShly US	11.88	20yr	100000.00	1268.50	1285.52	1281.06	1286.63	0.001686	8.43	11863.04	1155.02	0.45
Salt River	VaShly US	11.99	20yr	100000.00	1266.83	1286.61	1282.74	1287.75	0.002252	8.57	11674.46	1328.45	0.51
Salt River	VaShly US	12.06	20yr	100000.00	1266.90	1287.50	1283.06	1288.59	0.002173	8.35	11969.12	1375.22	0.50
Salt River	VaShly US	12.10	20yr	100000.00	1268.99	1287.99	1283.90	1289.18	0.002247	8.74	11448.18	1262.03	0.51
Salt River	VaShly US	12.22	20yr	100000.00	1268.81	1289.20	1284.53	1290.38	0.001698	8.74	11445.09	1018.33	0.46
Salt River	VaShly US	12.33	20yr	100000.00	1271.34	1290.05	1285.00	1291.49	0.001816	9.64	10371.65	837.86	0.48
Salt River	VaShly US	12.44	20yr	100000.00	1274.73	1291.20	1286.06	1292.48	0.001653	9.10	10992.03	904.13	0.46
Salt River	VaShly US	12.55	20yr	100000.00	1275.93	1292.19	1286.92	1293.48	0.001750	9.10	10984.75	942.72	0.47
Salt River	VaShly US	12.67	20yr	100000.00	1276.65	1293.32	1288.22	1294.52	0.001613	8.77	11399.06	972.77	0.45
Salt River	VaShly US	12.77	20yr	100000.00	1276.88	1294.18	1289.19	1295.36	0.001634	8.74	11440.46	991.88	0.45
Salt River	VaShly US	12.87	20yr	100000.00	1277.67	1295.22	1290.46	1296.22	0.001557	8.03	12448.21	1182.33	0.44
Salt River	VaShly US	12.97	20yr	100000.00	1279.11	1296.12	1291.69	1297.12	0.001616	8.03	12448.55	1215.08	0.44
Salt River	VaShly US	13.07	20yr	100000.00	1278.01	1296.97	1292.04	1298.10	0.002117	8.51	11748.41	1288.18	0.50
Salt River	VaShly US	13.19	20yr	100000.00	1282.08	1298.23	1292.94	1299.33	0.001839	8.43	11858.31	1186.91	0.47
Salt River	VaShly US	13.31	20yr	100000.00	1281.42	1299.33	1293.89	1300.40	0.001445	8.28	12070.64	1034.86	0.43
Salt River	VaShly US	13.44	20yr	100000.00	1283.61	1300.28	1294.97	1301.35	0.001468	8.31	12035.94	1040.51	0.43
Salt River	VaShly US	13.55	20yr	100000.00	1287.19	1301.20	1295.64	1302.20	0.001342	8.04	12441.14	1056.35	0.41
Salt River	VaShly US	13.64	20yr	100000.00	1287.63	1301.86	1296.78	1302.92	0.001593	8.28	12081.86	1108.12	0.44
Gilbert Mining P	Gilbert Mining P	0.04	20yr	73000.00	1189.85	1227.84	1204.18	1228.38	0.000175	5.87	12491.42	1481.61	0.18
Gilbert Mining P	Gilbert Mining P	0.08	20yr	73000.00	1179.35	1227.95	1198.18	1228.41	0.000129	5.45	13437.64	1602.70	0.15
Gilbert Mining P	Gilbert Mining P	0.11	20yr	73000.00	1182.14	1228.18	1194.17	1228.45	0.000079	4.14	17644.36	1649.79	0.12
Gilbert Mining P	Gilbert Mining P	0.15	20yr	73000.00	1180.10	1228.18	1194.21	1228.48	0.000107	4.38	16684.29	1365.32	0.13
Gilbert Mining P	Gilbert Mining P	0.19	20yr	73000.00	1178.66	1228.06	1203.87	1228.58	0.000261	5.79	12650.27	1088.39	0.20
Gilbert Mining P	Gilbert Mining P	0.22	20yr	73000.00	1186.92	1228.17	1202.12	1228.63	0.000189	5.44	13419.75	835.47	0.18
Gilbert Mining P	Gilbert Mining P	0.25	20yr	73000.00	1181.98	1228.20	1197.30	1228.66	0.000180	5.41	13492.30	477.25	0.17
Gilbert Mining P	Gilbert Mining P	0.29	20yr	73000.00	1181.95	1228.08	1199.63	1228.76	0.000238	6.64	11002.03	367.38	0.19
Gilbert Mining P	Gilbert Mining P	0.33	20yr	73000.00	1183.04	1228.68	1195.43	1228.83	0.000047	3.17	22995.75	722.31	0.09
Gilbert Mining P	Gilbert Mining P	0.37	20yr	73000.00	1185.24	1228.71	1199.29	1228.85	0.000049	3.01	24856.23	1521.00	0.09
Gilbert Mining P	Gilbert Mining P	0.43	20yr	73000.00	1179.91	1228.67	1197.72	1228.89	0.000073	3.73	19584.03	2069.81	0.11
Gilbert Mining P	Gilbert Mining P	0.48	20yr	73000.00	1183.06	1228.67	1199.08	1228.92	0.000097	4.01	18456.66	1995.32	0.13
Gilbert Mining P	Gilbert Mining P	0.53	20yr	73000.00	1202.03	1228.64	1214.83	1229.00	0.000251	4.85	15326.47	1716.26	0.19
Gilbert Mining P	Gilbert Mining P	0.55	20yr	73000.00	1203.21	1228.57	1215.64	1229.08	0.000365	5.71	12792.49	1361.46	0.23
Gilbert Mining P	Gilbert Mining P	0.60	20yr	73000.00	1199.67	1228.32	1217.65	1229.39	0.000798	8.31	8788.46	1369.55	0.34
Gilbert Mining P	Gilbert Mining P	0.66	20yr	73000.00	1204.07	1229.11	1215.85	1229.61	0.000363	5.69	12837.79	1616.12	0.23
Gilbert Mining P	Gilbert Mining P	0.70	20yr	73000.00	1206.48	1228.99	1217.32	1229.81	0.000623	7.23	10093.54	1846.39	0.30
Gilbert Mining P	Gilbert Mining P	0.74	20yr	73000.00	1206.94	1229.36	1217.74	1229.93	0.000449	6.07	12022.88	2080.51	0.25
Gilbert Mining P	Gilbert Mining P	0.77	20yr	73000.00	1206.46	1229.68	1217.89	1230.02	0.000278	4.66	15655.77	2160.91	0.20
Gilbert Mining P	Gilbert Mining P	0.83	20yr	73000.00	1208.33	1229.81	1217.31	1230.11	0.000259	4.37	16712.48	2168.55	0.19
Gilbert Mining P	Gilbert Mining P	0.88	20yr	73000.00	1208.45	1229.85	1218.18	1230.19	0.000321	4.62	15802.04	2474.17	0.21
Gilbert Mining P	Gilbert Mining P	0.91	20yr	73000.00	1206.13	1229.84	1219.54	1230.30	0.000430	5.46	13386.54	2262.98	0.24
Gilbert Mining P	Gilbert Mining P	0.95	20yr	73000.00	1208.41	1229.82	1219.50	1230.43	0.000543	6.24	11722.43	2738.66	0.27
Gilbert Mining P	Gilbert Mining P	0.97	20yr	73000.00	1209.76	1229.86	1220.40	1230.49	0.000607	6.38	11531.57	3298.16	0.29
Gilbert Mining P	Gilbert Mining P	0.99	20yr	73000.00	1208.61	1229.90	1219.98	1230.57	0.000645	6.58	11092.28	3284.95	0.30
Gilbert Mining P	Gilbert Mining P	1.02	20yr	73000.00	1210.66	1230.08	1219.37	1230.68	0.000616	5.79	11939.74	3251.74	0.28
Gilbert Mining P	Gilbert Mining P	1.05	20yr	73000.00	1209.65	1230.13	1220.68	1230.80	0.000569	6.65	11212.52	2880.01	0.28
Gilbert Mining P	Gilbert Mining P	1.08	20yr	73000.00	1198.40	1229.99	1221.56	1231.10	0.001108	8.45	8636.28	1660.55	0.37
Gilbert Mining P	Gilbert Mining P	1.11	20yr	73000.00	1194.11	1229.94	1219.92	1231.34	0.001081	9.51	7688.61	1201.46	0.37
Gilbert Mining P	Gilbert Mining P	1.14	20yr	73000.00	1201.44	1229.71	1220.12	1231.77	0.001537	11.52	6334.38	1156.80	0.46
Gilbert Mining P	Gilbert Mining P	1.17	20yr	73000.00	1221.53	1234.98	1234.98	1241.09	0.007843	19.84	3678.67	528.32	1.00
Gilbert Mining P	Gilbert Mining P	1.19	20yr	73000.00	1218.15	1237.45	1233.77	1241.91	0.003484	16.94	4308.37	447.13	0.71
Gilbert Mining P	Gilbert Mining P	1.21	20yr	73000.00	1222.00	1237.09	1236.41	1242.80	0.006682	19.17	3808.24	287.64	0.93

APPENDIX 9d

50-YEAR STANDARD TABLE 1

HEC-RAS Plan: Post 50 Profile: 50yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	50yr	145000.00	1143.99	1170.99	1157.18	1171.61	0.000374	6.33	22893.42	1051.51	0.24
Salt River	VaShly DS	0.11	50yr	145000.00	1144.67	1171.22	1158.85	1171.85	0.000418	6.38	22739.48	1126.56	0.25
Salt River	VaShly DS	0.23	50yr	145000.00	1147.96	1171.48	1160.05	1172.15	0.000482	6.58	22031.66	1158.10	0.27
Salt River	VaShly DS	0.36	50yr	145000.00	1148.61	1171.82	1160.44	1172.48	0.000472	6.52	22222.97	1171.13	0.26
Salt River	VaShly DS	0.51	50yr	145000.00	1150.89	1172.18	1161.59	1172.88	0.000532	6.72	21577.20	1191.10	0.28
Salt River	VaShly DS	0.65	50yr	145000.00	1151.13	1172.60	1161.62	1173.27	0.000498	6.58	22023.55	1195.22	0.27
Salt River	VaShly DS	0.78	50yr	145000.00	1150.83	1172.92	1163.04	1173.67	0.000631	6.94	20883.66	1241.86	0.30
Salt River	VaShly DS	0.89	50yr	145000.00	1153.10	1173.29	1164.47	1174.09	0.000704	7.17	20211.90	1247.14	0.31
Salt River	VaShly DS	1.00	50yr	145000.00	1151.27	1173.76	1163.95	1174.46	0.000584	6.75	21493.58	1266.84	0.29
Salt River	VaShly DS	1.12	50yr	145000.00	1152.15	1174.11	1164.62	1174.82	0.000607	6.77	21411.19	1291.41	0.29
Salt River	VaShly DS	1.22	50yr	145000.00	1153.46	1174.45	1165.47	1175.17	0.000651	6.84	21199.01	1324.87	0.30
Salt River	VaShly DS	1.30	50yr	145000.00	1150.51	1174.71	1166.08	1175.45	0.000683	6.91	20978.18	1337.36	0.31
Salt River	VaShly DS	1.39	50yr	145000.00	1150.03	1175.05	1165.60	1175.76	0.000617	6.79	21353.04	1293.05	0.29
Salt River	VaShly DS	1.52	50yr	145000.00	1153.77	1175.40	1167.34	1176.38	0.000961	7.95	18246.67	1212.55	0.36
Salt River	VaShly DS	1.65	50yr	145000.00	1155.27	1176.32	1168.53	1177.00	0.000753	6.61	21939.54	1617.84	0.32
Salt River	VaShly DS	1.76	50yr	145000.00	1155.56	1176.66	1169.40	1177.58	0.001051	7.68	18943.72	1763.05	0.37
Salt River	VaShly DS	1.80	50yr	145000.00	1158.65	1176.75	1170.62	1177.88	0.001307	8.55	16951.40	1330.69	0.41
Salt River	VaShly DS	1.83	50yr	145000.00	1147.74	1176.84	1170.90	1178.18	0.001529	9.30	15599.68	1278.29	0.45
Salt River	VaShly DS	1.86	50yr	145000.00	1154.19	1177.08	1171.67	1178.47	0.001646	9.47	15307.08	1225.05	0.46
Salt River	VaShly DS	1.89	50yr	145000.00	1156.29	1177.33	1171.29	1178.70	0.001600	9.41	15407.94	1332.70	0.46
Salt River	VaShly DS	1.95	50yr	145000.00	1156.57	1177.67	1172.31	1179.38	0.001816	10.49	13819.37	1485.19	0.49
Salt River	VaShly DS	2.02	50yr	145000.00	1160.11	1178.10	1172.95	1180.20	0.002067	11.63	12465.54	1800.82	0.53
Salt River	VaShly DS	2.04	50yr	145000.00	1158.56	1178.15	1173.67	1180.61	0.003080	12.59	11512.64	1904.75	0.63
Salt River	VaShly DS	2.07	50yr	145000.00	1156.21	1179.35	1173.25	1181.06	0.001683	10.47	13855.14	1942.90	0.48
Salt River	VaShly DS	2.10	50yr	145000.00	1158.18	1179.54	1174.84	1181.38	0.002082	10.87	13343.45	2006.64	0.52
Salt River	VaShly DS	2.12	50yr	145000.00	1153.95	1180.12	1169.33	1181.54	0.000975	9.55	15176.40	2196.36	0.38
Salt River	VaShly DS	2.13	50yr	145000.00	1153.90	1180.06	1170.21	1181.68	0.001277	10.20	14220.52	2234.09	0.43
Salt River	VaShly DS	2.21	50yr	145000.00	1156.97	1180.01	1175.68	1182.95	0.002958	13.77	10532.49	1866.39	0.63
Salt River	VaShly DS	2.29	50yr	145000.00	1170.86	1187.66	1187.66	1192.44	0.008521	17.54	8264.93	1103.18	1.00
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	50yr	145000.00	1180.00	1198.11	1194.38	1200.41	0.002796	12.18	11906.85	1420.33	0.60
Salt River	VaShly DS	2.38	50yr	145000.00	1176.44	1199.71	1192.52	1201.08	0.001301	9.41	15402.36	1192.26	0.42
Salt River	VaShly DS	2.40	50yr	145000.00	1177.52	1199.87	1192.80	1201.27	0.001278	9.51	15248.92	966.45	0.42
Salt River	VaShly DS	2.41	50yr	145000.00	1177.08	1199.92	1192.84	1201.33	0.001286	9.54	15199.46	1205.52	0.42
Salt River	VaShly DS	2.42	50yr	145000.00	1176.40	1199.97	1192.93	1201.38	0.001297	9.55	15176.09	992.94	0.42
Salt River	VaShly DS	2.47	50yr	145000.00	1177.74	1200.29	1193.40	1201.73	0.001335	9.64	15047.27	1222.25	0.43
Salt River	VaShly DS	2.53	50yr	145000.00	1177.40	1200.80	1194.18	1202.16	0.001312	9.37	15482.63	2279.64	0.42
Salt River	VaShly DS	2.59	50yr	145000.00	1181.61	1201.17	1194.50	1202.64	0.001388	9.73	14896.01	2072.69	0.44
Salt River	VaShly DS	2.65	50yr	145000.00	1183.93	1201.54	1194.61	1203.07	0.001392	9.93	14596.80	1440.02	0.44
Salt River	VaShly DS	2.71	50yr	145000.00	1183.50	1202.27	1195.46	1203.57	0.001268	9.16	15825.74	1373.48	0.42
Salt River	VaShly DS	2.78	50yr	145000.00	1183.83	1202.79	1195.77	1203.97	0.001157	8.72	16668.38	1445.91	0.40
Salt River	VaShly DS	2.87	50yr	145000.00	1174.74	1203.13	1196.44	1204.78	0.001507	10.32	14053.14	991.06	0.46
Salt River	VaShly DS	2.98	50yr	145000.00	1178.35	1204.35	1196.28	1205.52	0.000930	8.67	16729.88	957.85	0.36
Salt River	VaShly DS	3.10	50yr	145000.00	1174.85	1204.77	1197.51	1206.45	0.001656	10.41	13935.11	988.29	0.48
Salt River	VaShly DS	3.23	50yr	145000.00	1181.67	1205.88	1199.50	1207.69	0.001757	10.82	13405.34	911.64	0.49
Salt River	VaShly DS	3.35	50yr	145000.00	1184.67	1207.23	1199.25	1208.60	0.001155	9.40	15423.25	1031.67	0.41
Salt River	VaShly DS	3.46	50yr	145000.00	1183.72	1208.48	1199.89	1209.32	0.000788	7.37	19907.04	1691.75	0.33
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	50yr	145000.00	1185.13	1208.74	1200.74	1209.64	0.000887	7.61	19044.96	1284.99	0.35
Salt River	VaShly DS	3.64	50yr	145000.00	1185.28	1209.52	1202.19	1210.74	0.001608	8.88	16327.84	1476.44	0.45
Salt River	VaShly DS	3.76	50yr	145000.00	1185.23	1210.57	1202.11	1211.53	0.000951	7.85	18481.13	2484.12	0.36
Salt River	VaShly DS	3.89	50yr	145000.00	1181.01	1211.47	1202.22	1211.94	0.000372	5.51	26754.61	3080.61	0.23
Salt River	VaShly DS	4.04	50yr	145000.00	1186.07	1211.80	1201.48	1212.28	0.000488	5.62	26408.07	3116.70	0.26
Salt River	VaShly DS	4.09	50yr	145000.00	1186.77	1211.87	1203.84	1212.48	0.000633	6.31	23236.35	2582.59	0.29
Salt River	VaShly DS	4.15	50yr	145000.00	1185.73	1211.93	1204.49	1212.81	0.000899	7.53	19257.71	1938.70	0.35
Salt River	VaShly DS	4.22	50yr	145000.00	1188.00	1212.40	1204.01	1213.06	0.000576	6.50	22167.94	1526.80	0.28
Salt River	VaShly DS	4.27	50yr	145000.00	1188.10	1212.42	1204.34	1213.34	0.000879	7.77	19017.95	1299.49	0.35
Salt River	VaShly DS	4.31	50yr	145000.00	1193.87	1212.49	1205.75	1213.63	0.001148	8.73	17042.49	1183.89	0.40
Salt River	VaShly DS	4.47	50yr	145000.00	1190.75	1213.49	1206.92	1214.59	0.001163	8.48	22478.69	1972.36	0.40
Salt River	VaShly DS	4.59	50yr	145000.00	1190.04	1214.26	1207.50	1215.37	0.001181	8.52	19510.13	2217.32	0.40
Salt River	VaShly DS	4.74	50yr	145000.00	1189.62	1215.04	1208.49	1216.54	0.001422	9.89	16623.79	1893.17	0.44
Salt River	VaShly DS	4.88	50yr	145000.00	1195.43	1215.86	1209.77	1217.90	0.001843	11.55	14324.75	1457.20	0.60
Salt River	VaShly DS	5.03	50yr	145000.00	1197.77	1217.45	1213.00	1219.50	0.002246	11.56	14259.67	1348.68	0.55
Salt River	VaShly DS	5.15	50yr	145000.00	1198.09	1219.05	1213.38	1220.76	0.001661	10.58	15894.58	1410.32	0.48
Salt River	VaShly DS	5.26	50yr	145000.00	1184.07	1219.89	1214.39	1221.89	0.001983	11.45	15370.24	1396.09	0.52
Salt River	VaShly DS	5.40	50yr	145000.00	1196.34	1221.25	1214.61	1223.22	0.001681	11.33	13117.57	878.28	0.48
Salt River	VaShly DS	5.47	50yr	145000.00	1199.26	1222.24	1215.95	1223.92	0.001735	10.41	13948.77	976.13	0.48
Salt River	VaShly DS	5.53	50yr	145000.00	1199.29	1222.60	1217.11	1224.52	0.002102	11.14	13016.20	939.21	0.53
Salt River	VaShly DS	5.56	50yr	145000.00	1201.24	1223.14	1216.14	1224.88	0.001617	10.61	13668.75	873.07	0.47
Salt River	VaShly DS	5.60	50yr	145000.00	1201.31	1223.44	1217.51	1225.25	0.001792	10.80	13420.49	900.62	0.49
Salt River	VaShly DS	5.65	50yr	145000.00	1202.22	1223.80	1217.70	1225.81	0.001766	11.37	12757.41	944.42	0.50
Salt River	VaShly DS	5.69	50yr	145000.00	1202.94	1224.40	1219.54	1226.17	0.001464	10.68	13578.48	789.79	0.45
Salt River	VaShly DS	5.73	50yr	145000.00	1200.44	1225.05	1219.61	1226.41	0.000971	9.35	15504.09	806.95	0.38
Salt River	VaShly DS	5.76	50yr	145000.00	1198.50	1225.25	1219.94	1226.62	0.001085	9.40	15427.88	866.79	0.39
Salt River	VaShly DS	5.80	50yr	145000.00	1199.64	1225.43	1220.01	1226.83	0.001164	9.51	15247.72	883.79	0.40
Salt River	VaShly DS	5.82	50yr	145000.00	1197.44	1225.94	1220.01	1226.96	0.000727	8.13	17827.26	908.36	0.32
Salt River	VaShly DS	5.84	50yr	145000.00	1187.25	1226.63	1216.63	1227.05	0.000179	5.21	27807.45	966.61	0.17
Salt River	VaShly DS	5.85	50yr	145000.00	1203.05	1226.77	1222.21	1227.85	0.018171	8.34	17379.78	1030.10	0.35
Salt River	VaShly DS	5.86	50yr	145000.00	1197.04	1227.20	1218.50	1227.94	0.000515	6.89	21030.42	1120.26	0.27
Salt River	VaShly DS	5.87	50yr	145000.00	1196.82	1227.41	1218.54	1227.98	0.000457	6.09	23800.18	1415.93	0.25
Salt River	VaShly DS	5.88	50yr	145000.00	1194.54	1227.51	1216.31	1228.01	0.000375	5.68	25545.31	1596.41	0.23
Salt River	VaShly DS	5.91	50yr	145000.00	1201.09	1227.41	1218.41	1228.19	0.000825	7.10	20423.12	1662.28	0.33
Salt River	VaShly DS	5.93	50yr	145000.00	1199.72	1227.44	1216.08	1228.32	0.000910	7.54	19238.57	1487.97	0.35
Salt River	VaShly DS	5.95	50yr	145000.00	1195.30	1227.57	1214.37	1228.40	0.000783	7.30	19849.97	1403.23	0.33
Salt River	VaShly DS	5.97	50yr	145000.00	1198.44	1227.42	1217.06	1228.66	0.001231	8.95	16199.51	1212.87	0.41
Salt River	VaShly DS	5.99	50yr	145000.00	1198.12	1227.67	1218.09	1228.79	0.001198	8.49	17081.91	1411.58	0.40
Salt River	VaShly DS	6.01	50yr	145000.00	1194.75	1228.35	1213.15	1228.90	0.000305	5.92	24512.16	1450.18	0.22

HEC-RAS Plan: Post 50 Profile: 50yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	50yr	145000.00	1201.88	1228.05	1218.89	1229.21	0.001060	8.66	16751.23	1452.68	0.38
Salt River	VaShly DS	6.09	50yr	145000.00	1201.00	1228.25	1220.24	1229.51	0.001115	9.03	17007.59	1499.34	0.40
Salt River	VaShly DS	6.14	50yr	145000.00	1201.32	1228.59	1220.81	1229.80	0.001135	8.83	17247.84	1878.26	0.40
Salt River	VaShly DS	6.18	50yr	145000.00	1188.55	1229.19	1220.38	1230.03	0.000657	7.34	20543.22	2035.21	0.31
Salt River	VaShly DS	6.22	50yr	145000.00	1198.32	1229.35	1221.25	1230.15	0.000624	7.19	20880.21	2064.98	0.30
Salt River	VaShly DS	6.27	50yr	145000.00	1197.76	1229.12	1220.68	1230.71	0.001866	10.10	14801.21	1785.68	0.45
Salt River	VaShly DS	6.32	50yr	145000.00	1199.77	1229.60	1221.06	1231.48	0.002824	11.03	13384.88	1394.35	0.44
Salt River	VaShly DS	6.35	50yr	145000.00	1202.10	1230.11	1220.00	1231.82	0.002511	10.48	14114.25	1526.03	0.40
Salt River	VaShly DS	6.38	50yr	145000.00	1201.42	1230.77	1220.39	1232.35	0.003322	10.08	14645.11	1960.04	0.39
Salt River	VaShly DS	6.40	50yr	145000.00	1197.72	1230.91	1220.97	1232.68	0.001162	10.69	13587.50	2250.71	0.42
Salt River	VaShly at Pit	6.45	50yr	52280.00	1216.16	1231.53	1230.18	1233.38	0.005332	10.92	4785.92	719.26	0.75
Salt River	VaShly at Pit	6.50	50yr	52280.00	1220.36	1233.05	1230.48	1234.41	0.002977	9.37	5725.02	843.43	0.58
Salt River	VaShly at Pit	6.53	50yr	52280.00	1221.34	1233.69	1230.35	1234.90	0.002444	8.85	6341.33	845.94	0.53
Salt River	VaShly at Pit	6.56	50yr	52280.00	1221.47	1233.99	1231.23	1235.36	0.002944	9.39	5963.56	808.36	0.58
Salt River	VaShly at Pit	6.62	50yr	52280.00	1222.55	1234.91	1232.25	1236.39	0.003043	9.75	5836.34	838.99	0.59
Salt River	VaShly at Pit	6.69	50yr	52280.00	1222.97	1236.02	1233.34	1237.50	0.002976	9.76	5691.33	892.15	0.58
Salt River	VaShly at Pit	6.75	50yr	52280.00	1226.09	1236.97	1234.49	1238.43	0.003160	9.72	5547.31	864.18	0.60
Salt River	VaShly at Pit	6.80	50yr	52280.00	1227.73	1237.93	1235.99	1239.43	0.003838	9.83	5321.09	1118.41	0.64
Salt River	VaShly at Pit	6.85	50yr	52280.00	1229.81	1238.90	1236.67	1240.31	0.003687	9.53	5574.86	1236.05	0.63
Salt River	VaShly at Pit	6.91	50yr	52280.00	1229.03	1240.34	1237.63	1241.06	0.001600	6.80	8363.81	1620.00	0.42
Salt River	VaShly at Pit	6.96	50yr	52280.00	1229.37	1240.69	1238.42	1242.01	0.003520	9.22	7609.91	1539.13	0.61
Salt River	VaShly at Pit	6.99	50yr	52280.00	1229.94	1241.44	1238.82	1242.53	0.003001	8.36	8366.60	1516.00	0.56
Salt River	VaShly at Pit	7.01	50yr	52280.00	1229.89	1241.71	1239.23	1242.93	0.003476	8.86	7859.98	1492.80	0.60
Salt River	VaShly at Pit	7.03	50yr	52280.00	1230.67	1242.05	1239.29	1243.17	0.002934	8.51	8314.96	1426.91	0.56
Salt River	VaShly at Pit	7.04	50yr	52280.00	1230.92	1242.20	1239.49	1243.41	0.003026	8.82	8107.63	1322.02	0.57
Salt River	VaShly at Pit	7.06	50yr	52280.00	1231.36	1242.53	1239.78	1243.66	0.002716	8.53	8348.06	1349.58	0.55
Salt River	VaShly at Pit	7.07	50yr	52280.00	1230.65	1242.96	1240.07	1243.86	0.002177	7.62	9263.09	1381.78	0.49
Salt River	VaShly at Pit	7.10	50yr	52280.00	1231.41	1243.38	1240.18	1244.25	0.002128	7.48	9143.25	1535.98	0.48
Salt River	VaShly at Pit	7.17	50yr	52280.00	1230.40	1244.36	1241.13	1244.90	0.001215	5.89	10204.51	1756.00	0.37
Salt River	VaShly at Pit	7.24	50yr	52280.00	1235.15	1244.86	1241.81	1245.44	0.001594	6.11	9106.44	1914.20	0.41
Salt River	VaShly at Pit	7.28	50yr	52280.00	1234.69	1245.28	1242.95	1246.00	0.002297	6.81	7674.80	1968.25	0.48
Salt River	VaShly US	7.32	50yr	145000.00	1229.87	1247.56	1239.32	1248.18	0.000602	6.54	27466.53	2881.02	0.29
Salt River	VaShly US	7.36	50yr	145000.00	1229.41	1247.66	1239.53	1248.33	0.000633	6.75	25943.39	3053.78	0.30
Salt River	VaShly US	7.40	50yr	145000.00	1230.97	1247.72	1239.93	1248.56	0.000824	7.46	21543.58	3030.61	0.34
Salt River	VaShly US	7.44	50yr	145000.00	1231.22	1247.88	1239.94	1248.74	0.000828	7.43	19513.91	2640.48	0.34
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	50yr	145000.00	1231.96	1248.25	1240.34	1249.13	0.000843	7.53	19251.27	2041.85	0.34
Salt River	VaShly US	7.55	50yr	145000.00	1232.43	1248.56	1241.31	1249.56	0.000992	8.02	18074.46	2263.64	0.37
Salt River	VaShly US	7.63	50yr	150000.00	1231.48	1248.72	1242.01	1250.20	0.001395	9.76	15365.74	1321.35	0.44
Salt River	VaShly US	7.71	50yr	150000.00	1231.90	1249.34	1242.41	1250.86	0.001344	9.87	15204.32	1544.97	0.43
Salt River	VaShly US	7.83	50yr	150000.00	1232.46	1250.15	1243.38	1251.76	0.001482	10.18	14735.12	2258.16	0.45
Salt River	VaShly US	7.91	50yr	150000.00	1231.30	1250.48	1244.63	1252.71	0.002011	11.99	12506.46	1823.11	0.53
Salt River	VaShly US	8.01	50yr	150000.00	1231.01	1252.10	1245.40	1253.69	0.001558	10.13	14811.23	1862.13	0.46
Salt River	VaShly US	8.10	50yr	150000.00	1227.11	1252.26	1249.02	1254.97	0.002795	13.88	11805.88	1812.29	0.62
Salt River	VaShly US	8.20	50yr	150000.00	1233.14	1254.62	1248.00	1256.10	0.001448	10.39	16297.25	1932.34	0.45
Salt River	VaShly US	8.29	50yr	150000.00	1234.21	1255.56	1248.97	1256.68	0.001115	9.08	19042.32	2325.22	0.40
Salt River	VaShly US	8.36	50yr	150000.00	1233.96	1256.04	1249.14	1257.12	0.001130	8.93	19619.34	2922.88	0.40
Salt River	VaShly US	8.44	50yr	150000.00	1230.19	1256.38	1252.32	1258.12	0.002572	11.55	19374.89	3247.29	0.57
Salt River	VaShly US	8.52	50yr	150000.00	1227.75	1257.84	1253.51	1258.71	0.000776	8.08	22872.53	3106.62	0.33
Salt River	VaShly US	8.57	50yr	150000.00	1234.23	1257.86	1253.51	1259.20	0.001412	10.09	21397.70	2133.46	0.44
Salt River	VaShly US	8.60	50yr	150000.00	1227.61	1258.07	1252.26	1259.43	0.001429	10.18	21018.90	2130.93	0.44
Salt River	VaShly US	8.63	50yr	150000.00	1231.84	1257.71	1255.29	1260.04	0.003262	13.37	17223.38	1964.59	0.65
Salt River	VaShly US	8.68	50yr	150000.00	1233.08	1258.85	1253.98	1260.75	0.001859	12.10	19983.74	2307.10	0.51
Salt River	VaShly US	8.74	50yr	150000.00	1231.64	1258.55	1257.01	1262.06	0.003661	16.42	14729.87	1911.00	0.71
Salt River	VaShly US	8.77	50yr	150000.00	1234.72	1260.30	1257.64	1262.76	0.002858	13.76	18779.41	2120.40	0.62
Salt River	VaShly US	8.81	50yr	150000.00	1231.64	1261.58	1256.31	1263.28	0.001701	11.43	21133.82	2358.75	0.49
Salt River	VaShly US	8.85	50yr	150000.00	1232.30	1262.12	1255.67	1263.62	0.001376	10.72	21804.34	2544.11	0.44
Salt River	VaShly US	8.88	50yr	150000.00	1233.54	1262.28	1255.88	1263.89	0.001450	11.11	22535.01	2443.09	0.46
Salt River	VaShly US	8.92	50yr	150000.00	1235.52	1262.40	1255.99	1264.22	0.001503	11.87	23535.32	2370.11	0.47
Salt River	VaShly US	8.98	50yr	150000.00	1234.94	1262.62	1257.35	1264.83	0.001695	13.03	17394.58	1949.24	0.50
Salt River	VaShly US	9.04	50yr	150000.00	1237.83	1262.53	1255.52	1265.79	0.002399	15.86	17099.88	1516.49	0.60
Salt River	VaShly US	9.13	50yr	150000.00	1238.40	1264.77	1256.31	1266.75	0.001339	12.21	15945.81	1852.35	0.46
Salt River	VaShly US	9.20	50yr	150000.00	1239.36	1265.23	1257.67	1267.24	0.001189	10.72	13414.41	1565.77	0.42
Salt River	VaShly US	9.26	50yr	150000.00	1240.07	1265.62	1258.49	1267.66	0.001295	11.31	13111.01	1592.00	0.44
Salt River	VaShly US	9.33	50yr	150000.00	1238.28	1265.77	1259.65	1268.36	0.001724	13.46	11838.03	1555.98	0.51
Salt River	VaShly US	9.39	50yr	150000.00	1235.91	1265.00	1264.91	1269.75	0.003507	18.77	9499.41	1684.78	0.72
Salt River	VaShly US	9.44	50yr	150000.00	1242.19	1268.65	1260.25	1270.53	0.001226	11.87	15563.07	2766.94	0.44
Salt River	VaShly US	9.49	50yr	150000.00	1240.69	1269.82	1259.99	1270.81	0.000720	8.54	20558.72	4428.67	0.33
Salt River	VaShly US	9.55	50yr	150000.00	1243.76	1270.45	1261.20	1271.04	0.000449	6.91	25720.36	5672.02	0.26
Salt River	VaShly US	9.59	50yr	150000.00	1240.32	1270.63	1261.54	1271.14	0.000384	6.40	27404.21	5998.47	0.24
Salt River	VaShly US	9.61	50yr	150000.00	1243.87	1270.61	1262.24	1271.22	0.000455	6.80	24770.37	5871.95	0.26
Salt River	VaShly US	9.64	50yr	150000.00	1245.06	1270.57	1263.08	1271.33	0.000520	7.08	22893.25	5657.02	0.28
Salt River	VaShly US	9.67	50yr	150000.00	1244.78	1270.50	1263.42	1271.45	0.000569	7.51	21267.61	5157.66	0.29
Salt River	VaShly US	9.73	50yr	150000.00	1246.24	1270.62	1265.39	1271.80	0.001152	9.47	18448.24	3251.78	0.41
Salt River	VaShly US	9.80	50yr	150000.00	1246.16	1270.80	1265.00	1272.34	0.001295	10.72	16160.87	2531.84	0.44
Salt River	VaShly US	9.87	50yr	150000.00	1248.17	1271.12	1265.05	1272.92	0.001528	11.17	14484.04	2315.60	0.47
Salt River	VaShly US	9.96	50yr	150000.00	1249.51	1271.57	1267.02	1273.89	0.002087	12.69	12999.46	2392.69	0.55
Salt River	VaShly US	10.06	50yr	150000.00	1250.89	1273.04	1267.89	1275.04	0.001878	11.84	14045.43	2384.81	0.51
Salt River	VaShly US	10.18	50yr	150000.00	1250.99	1274.32	1268.08	1276.15	0.001736	10.87	13803.16	2514.23	0.49
Salt River	VaShly US	10.26	50yr	150000.00	1251.97	1275.23	1267.39	1276.85	0.001353	10.21	14692.91	2420.00	0.44
Salt River	VaShly US	10.36	50yr	150000.00	1249.97	1276.08	1266.50	1277.47	0.001016	9.52	16159.87	2531.62	0.39
Salt River	VaShly US	10.41	50yr	150000.00	1254.59	1276.18	1267.16	1277.84	0.001226	10.39	14759.63	2507.19	0.42
Salt River	VaShly US	10.46	50yr	150000.00	1251.29	1276.26	1269.71	1278.33	0.001713	11.80	13579.52	2463.57	0.49
Salt River	VaShly US	10.52	50yr	150000.00	1252.59	1276.50	1270.48	1279.13	0.002133	13.06	11686.94	2216.40	0.55
Salt River	VaShly US	10.56	50yr	150000.00	1254.28	1276.93	1270.70	1279.65	0.002073	13.22	11342.33	2438.74	0.55
Salt River	VaShly US	10.61	50yr	150000.00	1253.95	1277.60	1271.09	1280.14	0.001946	12.81	11737.31	2050.50	0.53
Salt River	VaShly US	10.67	50yr	150000.00	1256.89	1278.61	1271.51	1280.79	0.001666	11.86	12681.24	1884.65	0.49

HEC-RAS Plan: Post 50 Profile: 50yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	50yr	150000.00	1258.56	1279.32	1271.77	1281.32	0.001507	11.33	13244.94	1811.15	0.47
Salt River	VaShly US	10.78	50yr	150000.00	1259.27	1279.83	1272.04	1281.66	0.001403	10.86	13809.42	1859.87	0.45
Salt River	VaShly US	10.81	50yr	150000.00	1259.82	1280.09	1272.73	1281.95	0.001489	10.94	13714.65	1853.98	0.46
Salt River	VaShly US	10.86	50yr	150000.00	1258.71	1280.61	1273.04	1282.33	0.001377	10.51	14274.65	1794.16	0.44
Salt River	VaShly US	10.90	50yr	150000.00	1259.75	1281.02	1273.64	1282.66	0.001403	10.28	14589.41	1650.19	0.45
Salt River	VaShly US	10.95	50yr	150000.00	1260.76	1281.46	1273.77	1282.98	0.001308	9.90	15148.81	1493.07	0.43
Salt River	VaShly US	11.00	50yr	150000.00	1260.20	1281.62	1274.11	1283.39	0.001419	10.69	14028.93	1280.35	0.45
Salt River	VaShly US	11.05	50yr	150000.00	1261.52	1282.12	1274.85	1283.84	0.001432	10.53	14260.90	1863.06	0.45
Salt River	VaShly US	11.10	50yr	150000.00	1260.08	1282.44	1275.17	1284.16	0.001415	10.52	14268.35	1829.50	0.45
Salt River	VaShly US	11.14	50yr	150000.00	1257.45	1283.17	1275.43	1284.70	0.003592	9.98	15148.14	1782.35	0.42
Salt River	VaShly US	11.17	50yr	150000.00	1258.53	1283.48	1276.20	1285.07	0.001329	10.16	15111.58	1673.10	0.43
Salt River	VaShly US	11.25	50yr	150000.00	1259.69	1284.15	1276.94	1285.62	0.001277	9.88	15931.38	1544.32	0.43
Salt River	VaShly US	11.32	50yr	150000.00	1263.36	1284.97	1277.77	1286.13	0.001139	8.83	17990.44	1430.21	0.40
Salt River	VaShly US	11.41	50yr	150000.00	1263.36	1285.56	1279.12	1286.68	0.001281	8.52	17610.72	1320.36	0.41
Salt River	VaShly US	11.49	50yr	150000.00	1264.61	1286.03	1279.57	1287.30	0.001403	9.04	16587.52	1214.77	0.43
Salt River	VaShly US	11.62	50yr	150000.00	1264.20	1287.16	1280.27	1288.16	0.001122	8.03	18677.85	1438.58	0.39
Salt River	VaShly US	11.78	50yr	150000.00	1267.86	1288.05	1282.22	1289.35	0.001462	9.17	16355.40	1435.69	0.44
Salt River	VaShly US	11.88	50yr	150000.00	1268.50	1288.79	1283.08	1290.23	0.001700	9.64	15557.87	1489.30	0.47
Salt River	VaShly US	11.99	50yr	150000.00	1266.83	1289.90	1285.15	1291.24	0.001828	9.30	16129.14	1387.24	0.48
Salt River	VaShly US	12.06	50yr	150000.00	1266.90	1290.61	1285.71	1291.93	0.001796	9.21	16281.07	1399.70	0.48
Salt River	VaShly US	12.10	50yr	150000.00	1268.99	1290.97	1286.35	1292.46	0.002011	9.82	15270.38	1298.57	0.50
Salt River	VaShly US	12.22	50yr	150000.00	1268.81	1292.02	1286.69	1293.72	0.001834	10.46	14335.52	1029.84	0.49
Salt River	VaShly US	12.33	50yr	150000.00	1271.34	1292.87	1287.57	1295.01	0.002118	11.75	12760.81	858.61	0.54
Salt River	VaShly US	12.44	50yr	150000.00	1274.73	1294.33	1288.45	1296.15	0.001817	10.80	13888.05	947.39	0.50
Salt River	VaShly US	12.55	50yr	150000.00	1275.93	1295.47	1289.52	1297.22	0.001819	10.60	14146.12	993.47	0.50
Salt River	VaShly US	12.67	50yr	150000.00	1276.65	1296.66	1290.56	1298.28	0.001616	10.21	14690.54	1229.18	0.47
Salt River	VaShly US	12.77	50yr	150000.00	1276.88	1297.56	1291.45	1299.13	0.001652	10.07	14901.11	1293.45	0.47
Salt River	VaShly US	12.87	50yr	150000.00	1277.67	1298.71	1292.49	1299.96	0.001407	9.00	16671.61	1237.91	0.43
Salt River	VaShly US	12.97	50yr	150000.00	1279.11	1299.51	1293.62	1300.78	0.001436	9.03	16619.61	1246.00	0.44
Salt River	VaShly US	13.07	50yr	150000.00	1278.01	1300.24	1294.50	1301.60	0.001745	9.38	15996.67	1310.42	0.47
Salt River	VaShly US	13.19	50yr	150000.00	1282.08	1301.30	1295.86	1302.73	0.001782	9.59	15646.01	1261.71	0.48
Salt River	VaShly US	13.31	50yr	150000.00	1281.42	1302.37	1296.14	1303.86	0.001611	9.79	15316.59	1108.29	0.46
Salt River	VaShly US	13.44	50yr	150000.00	1283.61	1303.39	1297.23	1304.88	0.001520	9.81	15293.20	1056.58	0.45
Salt River	VaShly US	13.55	50yr	150000.00	1287.19	1304.37	1297.83	1305.77	0.001404	9.46	15849.82	1088.74	0.44
Salt River	VaShly US	13.64	50yr	150000.00	1287.63	1305.06	1298.98	1306.48	0.001540	9.58	15649.70	1121.76	0.45
Gilbert Mining P	Gilbert Mining P	0.04	50yr	92720.00	1189.85	1232.18	1206.40	1232.86	0.000189	6.61	14102.92	1584.37	0.19
Gilbert Mining P	Gilbert Mining P	0.08	50yr	92720.00	1179.35	1232.30	1200.29	1232.90	0.000147	6.23	14958.12	1660.40	0.17
Gilbert Mining P	Gilbert Mining P	0.11	50yr	92720.00	1182.14	1232.60	1196.10	1232.95	0.000092	4.72	19775.38	1824.27	0.13
Gilbert Mining P	Gilbert Mining P	0.15	50yr	92720.00	1180.10	1232.60	1196.25	1232.97	0.000116	4.90	19112.70	1826.24	0.14
Gilbert Mining P	Gilbert Mining P	0.19	50yr	92720.00	1178.66	1232.48	1206.80	1233.08	0.000247	6.23	15246.77	1164.13	0.20
Gilbert Mining P	Gilbert Mining P	0.22	50yr	92720.00	1186.92	1232.56	1204.26	1233.12	0.000198	6.00	15495.22	1130.95	0.18
Gilbert Mining P	Gilbert Mining P	0.25	50yr	92720.00	1181.98	1232.60	1199.72	1233.16	0.000201	6.00	15443.83	927.86	0.18
Gilbert Mining P	Gilbert Mining P	0.29	50yr	92720.00	1181.95	1232.42	1202.16	1233.29	0.000299	7.51	12413.60	594.09	0.22
Gilbert Mining P	Gilbert Mining P	0.33	50yr	92720.00	1183.04	1233.18	1197.01	1233.38	0.000053	3.60	25808.81	816.55	0.10
Gilbert Mining P	Gilbert Mining P	0.37	50yr	92720.00	1185.24	1233.23	1200.82	1233.40	0.000051	3.33	28545.56	1584.64	0.10
Gilbert Mining P	Gilbert Mining P	0.43	50yr	92720.00	1179.91	1233.18	1199.49	1233.45	0.000081	4.19	22147.35	2219.75	0.12
Gilbert Mining P	Gilbert Mining P	0.48	50yr	92720.00	1183.06	1233.18	1200.88	1233.48	0.000101	4.42	21582.46	2338.92	0.13
Gilbert Mining P	Gilbert Mining P	0.53	50yr	92720.00	1202.03	1233.17	1216.06	1233.54	0.000197	4.93	19455.22	2275.76	0.18
Gilbert Mining P	Gilbert Mining P	0.55	50yr	92720.00	1203.21	1233.08	1217.16	1233.62	0.000300	5.87	15802.99	1609.48	0.21
Gilbert Mining P	Gilbert Mining P	0.60	50yr	92720.00	1199.67	1232.80	1219.43	1233.91	0.000665	8.48	10930.08	1489.49	0.32
Gilbert Mining P	Gilbert Mining P	0.66	50yr	92720.00	1204.07	1233.58	1217.33	1234.10	0.000297	5.82	15918.98	1862.40	0.22
Gilbert Mining P	Gilbert Mining P	0.70	50yr	92720.00	1206.48	1233.46	1218.95	1234.28	0.000528	7.27	12746.03	1961.80	0.28
Gilbert Mining P	Gilbert Mining P	0.74	50yr	92720.00	1206.94	1233.80	1219.50	1234.39	0.000355	6.13	15113.78	2111.81	0.23
Gilbert Mining P	Gilbert Mining P	0.77	50yr	92720.00	1206.46	1234.12	1219.09	1234.46	0.000211	4.70	19731.01	2178.55	0.18
Gilbert Mining P	Gilbert Mining P	0.83	50yr	92720.00	1208.33	1234.23	1218.61	1234.53	0.000191	4.36	21284.92	2220.46	0.17
Gilbert Mining P	Gilbert Mining P	0.88	50yr	92720.00	1208.45	1234.26	1219.28	1234.58	0.000224	4.53	20468.49	2576.94	0.18
Gilbert Mining P	Gilbert Mining P	0.91	50yr	92720.00	1206.13	1234.22	1220.74	1234.67	0.000309	5.40	17162.54	2356.39	0.21
Gilbert Mining P	Gilbert Mining P	0.95	50yr	92720.00	1208.41	1234.18	1220.84	1234.78	0.000398	6.21	14958.23	3024.97	0.24
Gilbert Mining P	Gilbert Mining P	0.97	50yr	92720.00	1209.76	1234.22	1221.73	1234.82	0.000417	6.26	15018.21	3414.57	0.25
Gilbert Mining P	Gilbert Mining P	0.99	50yr	92720.00	1208.61	1234.23	1221.38	1234.89	0.000453	6.51	14235.30	3308.28	0.26
Gilbert Mining P	Gilbert Mining P	1.02	50yr	92720.00	1210.66	1234.41	1220.75	1234.96	0.000407	5.69	15668.90	3299.92	0.24
Gilbert Mining P	Gilbert Mining P	1.05	50yr	92720.00	1209.65	1234.39	1221.98	1235.07	0.000425	6.67	14188.35	2977.72	0.25
Gilbert Mining P	Gilbert Mining P	1.08	50yr	92720.00	1198.40	1234.21	1223.47	1235.33	0.000843	8.50	10916.62	1731.90	0.33
Gilbert Mining P	Gilbert Mining P	1.11	50yr	92720.00	1194.11	1234.03	1221.81	1235.59	0.000953	10.02	9264.49	1213.66	0.36
Gilbert Mining P	Gilbert Mining P	1.14	50yr	92720.00	1201.44	1233.73	1222.60	1236.01	0.001387	12.12	7651.15	1176.67	0.45
Gilbert Mining P	Gilbert Mining P	1.17	50yr	92720.00	1221.53	1237.19	1237.19	1244.24	0.007425	21.31	4351.21	554.13	1.00
Gilbert Mining P	Gilbert Mining P	1.19	50yr	92720.00	1218.15	1238.94	1236.17	1245.06	0.004298	19.86	4669.32	548.49	0.80
Gilbert Mining P	Gilbert Mining P	1.21	50yr	92720.00	1222.00	1238.73	1238.73	1246.01	0.007459	21.64	4289.73	297.42	0.99

APPENDIX 9e

100-YEAR STANDARD TABLE 1

HEC-RAS Plan: Post 50 Profile: 100yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	100yr	172000.00	1143.99	1173.40	1158.31	1174.11	0.000374	6.76	25434.81	1057.50	0.24
Salt River	VaShly DS	0.11	100yr	172000.00	1144.67	1173.64	1159.83	1174.35	0.000406	6.75	25466.01	1131.87	0.25
Salt River	VaShly DS	0.23	100yr	172000.00	1147.96	1173.89	1161.09	1174.63	0.000459	6.93	24825.49	1163.59	0.26
Salt River	VaShly DS	0.36	100yr	172000.00	1148.61	1174.21	1161.38	1174.94	0.000451	6.87	25032.93	1177.64	0.26
Salt River	VaShly DS	0.51	100yr	172000.00	1150.89	1174.55	1162.54	1175.32	0.000500	7.05	24412.74	1197.84	0.28
Salt River	VaShly DS	0.65	100yr	172000.00	1151.13	1174.95	1162.61	1175.69	0.000474	6.92	24840.59	1201.37	0.27
Salt River	VaShly DS	0.78	100yr	172000.00	1150.83	1175.25	1164.17	1176.07	0.000580	7.23	23784.57	1247.20	0.29
Salt River	VaShly DS	0.89	100yr	172000.00	1153.10	1175.59	1165.39	1176.45	0.000641	7.45	23083.16	1253.10	0.31
Salt River	VaShly DS	1.00	100yr	172000.00	1151.27	1176.02	1164.87	1176.79	0.000547	7.06	24378.50	1278.30	0.28
Salt River	VaShly DS	1.12	100yr	172000.00	1152.15	1176.35	1165.56	1177.13	0.000563	7.07	24312.41	1296.15	0.29
Salt River	VaShly DS	1.22	100yr	172000.00	1153.46	1176.67	1166.37	1177.45	0.000598	7.12	24144.56	1330.87	0.29
Salt River	VaShly DS	1.30	100yr	172000.00	1150.51	1176.91	1166.93	1177.71	0.000625	7.19	23920.71	1342.79	0.30
Salt River	VaShly DS	1.39	100yr	172000.00	1150.03	1177.21	1166.55	1178.00	0.000579	7.12	24154.20	1298.08	0.29
Salt River	VaShly DS	1.52	100yr	172000.00	1153.77	1177.52	1168.57	1178.58	0.000886	8.26	20832.95	1227.97	0.35
Salt River	VaShly DS	1.65	100yr	172000.00	1155.27	1178.43	1169.49	1179.14	0.000659	6.79	25346.96	1623.23	0.30
Salt River	VaShly DS	1.76	100yr	172000.00	1155.56	1178.70	1170.50	1179.65	0.000911	7.87	22131.24	1803.50	0.35
Salt River	VaShly DS	1.80	100yr	172000.00	1158.65	1178.73	1171.52	1179.94	0.001178	8.81	19521.63	1381.43	0.40
Salt River	VaShly DS	1.83	100yr	172000.00	1147.74	1178.82	1171.93	1180.21	0.001404	9.45	18210.51	1303.83	0.44
Salt River	VaShly DS	1.86	100yr	172000.00	1154.19	1179.00	1172.66	1180.49	0.001485	9.79	17576.50	1244.62	0.45
Salt River	VaShly DS	1.89	100yr	172000.00	1156.29	1179.22	1172.88	1180.70	0.001447	9.76	17617.67	1347.34	0.44
Salt River	VaShly DS	1.95	100yr	172000.00	1156.57	1179.46	1173.38	1181.35	0.001722	11.04	15586.48	1499.54	0.49
Salt River	VaShly DS	2.02	100yr	172000.00	1160.11	1179.80	1174.13	1182.18	0.002038	12.38	13897.47	1813.25	0.54
Salt River	VaShly DS	2.04	100yr	172000.00	1158.56	1179.89	1175.19	1182.55	0.002819	13.10	13129.12	1918.00	0.61
Salt River	VaShly DS	2.07	100yr	172000.00	1156.21	1181.06	1174.46	1182.98	0.001655	11.13	15450.17	2340.20	0.48
Salt River	VaShly DS	2.10	100yr	172000.00	1158.18	1181.25	1175.90	1183.28	0.001968	11.42	15058.68	2421.06	0.52
Salt River	VaShly DS	2.12	100yr	172000.00	1153.95	1181.74	1170.78	1183.44	0.001097	10.47	16425.28	2259.71	0.40
Salt River	VaShly DS	2.13	100yr	172000.00	1153.90	1181.69	1171.77	1183.59	0.001376	11.07	15543.63	2292.62	0.45
Salt River	VaShly DS	2.21	100yr	172000.00	1156.97	1181.57	1177.18	1184.95	0.003076	14.75	11662.78	1891.47	0.65
Salt River	VaShly DS	2.29	100yr	172000.00	1170.86	1188.85	1188.85	1194.16	0.008204	18.49	9304.23	1298.12	1.00
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	100yr	172000.00	1180.00	1199.60	1195.50	1202.19	0.002751	12.92	13309.80	1460.90	0.61
Salt River	VaShly DS	2.38	100yr	172000.00	1176.44	1201.31	1193.72	1202.89	0.001338	10.11	17019.25	1482.00	0.44
Salt River	VaShly DS	2.40	100yr	172000.00	1177.52	1201.46	1193.89	1203.09	0.001309	10.24	16866.88	1386.56	0.43
Salt River	VaShly DS	2.41	100yr	172000.00	1177.08	1201.51	1193.96	1203.15	0.001322	10.28	16739.66	1345.72	0.43
Salt River	VaShly DS	2.42	100yr	172000.00	1176.40	1201.56	1194.05	1203.21	0.001333	10.29	16716.29	1289.85	0.44
Salt River	VaShly DS	2.47	100yr	172000.00	1177.74	1201.90	1194.49	1203.56	0.001369	10.36	16602.99	1326.14	0.44
Salt River	VaShly DS	2.53	100yr	172000.00	1177.40	1202.44	1195.22	1204.00	0.001314	10.02	17171.54	2312.80	0.43
Salt River	VaShly DS	2.59	100yr	172000.00	1181.61	1202.80	1195.57	1204.49	0.001409	10.43	16487.18	2182.75	0.45
Salt River	VaShly DS	2.65	100yr	172000.00	1183.93	1203.16	1195.77	1204.93	0.001428	10.68	16108.78	1461.89	0.45
Salt River	VaShly DS	2.71	100yr	172000.00	1183.50	1203.96	1196.50	1205.44	0.001257	9.76	17628.79	1384.15	0.42
Salt River	VaShly DS	2.78	100yr	172000.00	1183.83	1204.51	1196.80	1205.84	0.001136	9.27	18617.07	1481.37	0.40
Salt River	VaShly DS	2.87	100yr	172000.00	1174.74	1204.78	1197.65	1206.69	0.001539	11.07	15533.63	1018.62	0.47
Salt River	VaShly DS	2.98	100yr	172000.00	1178.35	1206.09	1197.90	1207.45	0.000963	9.35	18411.61	1030.04	0.38
Salt River	VaShly DS	3.10	100yr	172000.00	1174.85	1206.50	1199.41	1208.40	0.001647	11.05	15568.07	1109.52	0.48
Salt River	VaShly DS	3.23	100yr	172000.00	1181.67	1207.58	1201.15	1209.64	0.001752	11.52	14932.87	1024.85	0.50
Salt River	VaShly DS	3.35	100yr	172000.00	1184.67	1209.00	1200.45	1210.57	0.001196	10.08	17069.98	1193.46	0.42
Salt River	VaShly DS	3.46	100yr	172000.00	1183.72	1210.39	1201.02	1211.31	0.000749	7.74	22505.62	2626.58	0.33
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	100yr	172000.00	1185.13	1210.65	1201.84	1211.65	0.000843	8.00	21509.28	2639.43	0.35
Salt River	VaShly DS	3.64	100yr	172000.00	1185.28	1211.35	1203.72	1212.65	0.001421	9.13	18845.30	2925.32	0.44
Salt River	VaShly DS	3.76	100yr	172000.00	1185.23	1212.31	1203.19	1213.38	0.000930	8.33	20686.04	3194.66	0.36
Salt River	VaShly DS	3.89	100yr	172000.00	1181.01	1213.27	1203.01	1213.80	0.000376	5.90	29658.93	3602.27	0.24
Salt River	VaShly DS	4.04	100yr	172000.00	1186.07	1213.61	1202.54	1214.13	0.000462	5.90	29783.29	3788.42	0.26
Salt River	VaShly DS	4.09	100yr	172000.00	1186.77	1213.65	1204.63	1214.33	0.000600	6.63	26222.84	2912.64	0.29
Salt River	VaShly DS	4.15	100yr	172000.00	1185.73	1213.67	1205.40	1214.66	0.000867	7.97	21575.33	2057.33	0.35
Salt River	VaShly DS	4.22	100yr	172000.00	1188.00	1214.15	1204.01	1214.91	0.000579	6.97	24546.07	1541.21	0.29
Salt River	VaShly DS	4.27	100yr	172000.00	1188.10	1214.16	1205.66	1215.19	0.000864	8.25	21287.16	1314.86	0.35
Salt River	VaShly DS	4.31	100yr	172000.00	1193.87	1214.20	1206.75	1215.48	0.001121	9.24	19078.06	1190.56	0.40
Salt River	VaShly DS	4.47	100yr	172000.00	1190.75	1215.20	1207.94	1216.41	0.001111	8.92	25862.16	1978.25	0.39
Salt River	VaShly DS	4.59	100yr	172000.00	1190.04	1215.94	1208.57	1217.17	0.001140	8.97	22610.23	2254.13	0.40
Salt River	VaShly DS	4.74	100yr	172000.00	1189.62	1216.69	1209.68	1218.37	0.001502	10.53	19064.66	1990.77	0.46
Salt River	VaShly DS	4.88	100yr	172000.00	1195.43	1217.59	1211.19	1219.72	0.001795	11.84	16888.37	1512.11	0.57
Salt River	VaShly DS	5.03	100yr	172000.00	1197.77	1219.04	1214.11	1221.31	0.002186	12.22	16485.55	1450.45	0.55
Salt River	VaShly DS	5.15	100yr	172000.00	1198.09	1220.63	1214.81	1222.57	0.001676	11.29	18202.95	1498.05	0.49
Salt River	VaShly DS	5.26	100yr	172000.00	1184.07	1221.45	1215.65	1223.72	0.001998	12.24	17617.64	1446.97	0.53
Salt River	VaShly DS	5.40	100yr	172000.00	1196.34	1222.81	1215.93	1225.08	0.001770	12.21	14506.96	902.66	0.50
Salt River	VaShly DS	5.47	100yr	172000.00	1199.26	1223.91	1217.27	1225.81	0.001708	11.07	15597.48	1000.89	0.48
Salt River	VaShly DS	5.53	100yr	172000.00	1199.29	1224.25	1218.29	1226.41	0.002078	11.79	14582.77	957.11	0.53
Salt River	VaShly DS	5.56	100yr	172000.00	1201.24	1224.75	1217.54	1226.77	0.001678	11.39	15095.13	890.10	0.49
Salt River	VaShly DS	5.60	100yr	172000.00	1201.31	1225.07	1218.86	1227.14	0.001798	11.55	14894.63	905.65	0.50
Salt River	VaShly DS	5.65	100yr	172000.00	1202.22	1225.68	1218.90	1227.65	0.001766	11.28	15245.06	949.38	0.50
Salt River	VaShly DS	5.69	100yr	172000.00	1202.94	1225.94	1219.54	1228.04	0.001561	11.62	14799.09	794.87	0.47
Salt River	VaShly DS	5.73	100yr	172000.00	1200.44	1226.67	1219.61	1228.30	0.001054	10.23	16818.49	813.08	0.40
Salt River	VaShly DS	5.76	100yr	172000.00	1198.50	1226.91	1220.91	1228.52	0.001148	10.19	16873.53	890.41	0.41
Salt River	VaShly DS	5.80	100yr	172000.00	1199.64	1227.10	1220.44	1228.74	0.001213	10.28	16731.20	888.88	0.42
Salt River	VaShly DS	5.82	100yr	172000.00	1197.44	1227.66	1220.01	1228.88	0.000778	8.87	19400.51	913.32	0.34
Salt River	VaShly DS	5.84	100yr	172000.00	1187.25	1228.46	1218.67	1228.99	0.000207	5.82	29537.77	1041.95	0.18
Salt River	VaShly DS	5.85	100yr	172000.00	1203.05	1228.58	1222.21	1229.83	0.019038	8.97	19164.61	1104.47	0.36
Salt River	VaShly DS	5.86	100yr	172000.00	1197.04	1229.06	1220.51	1229.93	0.000544	7.47	23014.46	1177.00	0.28
Salt River	VaShly DS	5.87	100yr	172000.00	1196.82	1229.32	1220.46	1229.98	0.000461	6.52	26364.26	1469.18	0.26
Salt River	VaShly DS	5.88	100yr	172000.00	1194.54	1229.45	1218.00	1230.01	0.000369	6.02	29084.00	1632.10	0.23
Salt River	VaShly DS	5.91	100yr	172000.00	1201.09	1229.38	1219.88	1230.16	0.000711	7.17	24386.06	1714.69	0.31
Salt River	VaShly DS	5.93	100yr	172000.00	1199.72	1229.37	1217.53	1230.29	0.000823	7.76	22373.92	1566.01	0.34
Salt River	VaShly DS	5.95	100yr	172000.00	1195.30	1229.43	1215.90	1230.36	0.000758	7.73	22246.74	1411.44	0.33
Salt River	VaShly DS	5.97	100yr	172000.00	1198.44	1229.28	1218.74	1230.63	0.001314	9.33	18444.20	1405.07	0.42
Salt River	VaShly DS	5.99	100yr	172000.00	1198.12	1229.53	1219.44	1230.76	0.001117	8.89	19336.95	1476.31	0.39
Salt River	VaShly DS	6.01	100yr	172000.00	1194.75	1230.21	1214.40	1230.87	0.000331	6.49	26507.90	1471.99	0.23

HEC RAS Plan: Past 50 Profile: 100yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	100yr	172000.00	1201.88	1229.88	1220.73	1231.19	0.001044	9.20	18697.73	1464.66	0.39
Salt River	VaShly DS	6.09	100yr	172000.00	1201.00	1230.06	1221.77	1231.50	0.001106	9.63	19148.32	1597.88	0.40
Salt River	VaShly DS	6.14	100yr	172000.00	1201.32	1230.42	1221.91	1231.78	0.001104	9.36	19720.83	1900.45	0.40
Salt River	VaShly DS	6.18	100yr	172000.00	1188.55	1231.05	1222.20	1232.01	0.000670	7.89	23019.47	2181.75	0.31
Salt River	VaShly DS	6.22	100yr	172000.00	1198.32	1231.22	1222.79	1232.14	0.000637	7.73	23375.46	2132.17	0.31
Salt River	VaShly DS	6.27	100yr	172000.00	1197.76	1230.98	1222.44	1232.76	0.002219	10.72	16867.85	1908.39	0.45
Salt River	VaShly DS	6.32	100yr	172000.00	1199.77	1231.37	1222.50	1233.60	0.002533	11.98	14958.55	1523.88	0.46
Salt River	VaShly DS	6.35	100yr	172000.00	1202.10	1231.85	1221.51	1233.90	0.002230	11.48	15631.09	1716.74	0.43
Salt River	VaShly DS	6.38	100yr	172000.00	1201.42	1232.49	1221.90	1234.39	0.003184	11.05	16149.23	2150.78	0.41
Salt River	VaShly DS	6.40	100yr	172000.00	1197.72	1232.62	1222.54	1234.74	0.001258	11.71	14970.52	2545.53	0.44
Salt River	VaShly at Pit	6.45	100yr	69058.00	1216.16	1233.34	1231.47	1235.33	0.004228	11.34	6449.91	1000.54	0.69
Salt River	VaShly at Pit	6.50	100yr	69058.00	1220.36	1234.56	1231.68	1236.26	0.002980	10.44	7068.34	927.66	0.59
Salt River	VaShly at Pit	6.53	100yr	69058.00	1221.34	1235.24	1231.67	1236.76	0.002553	9.89	7744.42	971.54	0.55
Salt River	VaShly at Pit	6.56	100yr	69058.00	1221.47	1235.55	1232.56	1237.23	0.002952	10.42	7259.46	856.29	0.59
Salt River	VaShly at Pit	6.62	100yr	69058.00	1222.55	1236.45	1233.54	1238.29	0.003139	10.91	7193.62	990.29	0.61
Salt River	VaShly at Pit	6.69	100yr	69058.00	1222.97	1237.58	1234.60	1239.44	0.003029	10.92	7166.83	1002.13	0.60
Salt River	VaShly at Pit	6.75	100yr	69058.00	1226.09	1238.59	1235.72	1240.37	0.003095	10.71	6929.52	1041.66	0.61
Salt River	VaShly at Pit	6.80	100yr	69058.00	1227.73	1239.60	1237.16	1241.31	0.003515	10.51	6569.10	1325.01	0.63
Salt River	VaShly at Pit	6.85	100yr	69058.00	1229.81	1240.51	1237.91	1242.13	0.003421	10.20	7084.64	1653.43	0.62
Salt River	VaShly at Pit	6.91	100yr	69058.00	1229.03	1241.98	1239.00	1242.84	0.001511	7.45	10586.13	1628.16	0.42
Salt River	VaShly at Pit	6.96	100yr	69058.00	1229.37	1242.29	1240.01	1243.78	0.003493	9.78	9897.07	1652.94	0.62
Salt River	VaShly at Pit	6.99	100yr	69058.00	1229.94	1243.09	1240.05	1244.29	0.002864	8.79	10735.26	1642.16	0.56
Salt River	VaShly at Pit	7.01	100yr	69058.00	1229.89	1243.32	1240.67	1244.67	0.003204	9.32	10030.87	1615.07	0.59
Salt River	VaShly at Pit	7.03	100yr	69058.00	1230.67	1243.58	1240.62	1244.88	0.002792	9.19	10290.70	1500.43	0.56
Salt River	VaShly at Pit	7.04	100yr	69058.00	1230.92	1243.70	1240.83	1245.13	0.002993	9.60	9962.64	1409.32	0.58
Salt River	VaShly at Pit	7.06	100yr	69058.00	1231.36	1244.08	1241.01	1245.40	0.003204	9.25	10347.95	1600.95	0.59
Salt River	VaShly at Pit	7.07	100yr	69058.00	1230.65	1244.61	1241.51	1245.63	0.002208	8.14	11771.39	1712.33	0.50
Salt River	VaShly at Pit	7.10	100yr	69058.00	1231.41	1244.98	1241.65	1246.00	0.001961	8.13	11566.79	1719.55	0.48
Salt River	VaShly at Pit	7.17	100yr	69058.00	1230.40	1245.98	1242.51	1246.63	0.001147	6.45	12558.49	1844.42	0.37
Salt River	VaShly at Pit	7.24	100yr	69058.00	1235.15	1246.44	1242.87	1247.11	0.001395	6.55	11317.44	1930.31	0.40
Salt River	VaShly at Pit	7.28	100yr	69058.00	1234.69	1246.79	1243.99	1247.60	0.001931	7.22	9568.23	1977.71	0.46
Salt River	VaShly US	7.32	100yr	172000.00	1229.87	1249.20	1240.36	1249.88	0.000593	6.92	30760.54	4961.49	0.29
Salt River	VaShly US	7.36	100yr	172000.00	1229.41	1249.29	1240.49	1250.04	0.000637	7.22	29264.38	4393.58	0.30
Salt River	VaShly US	7.40	100yr	172000.00	1230.97	1249.34	1240.87	1250.28	0.000822	7.97	24087.99	4019.72	0.34
Salt River	VaShly US	7.44	100yr	172000.00	1231.22	1249.49	1240.89	1250.47	0.000835	7.97	21587.62	3190.58	0.34
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	100yr	172000.00	1231.96	1249.89	1241.25	1250.90	0.000846	8.06	21329.62	3177.10	0.35
Salt River	VaShly US	7.55	100yr	172000.00	1232.43	1250.20	1242.23	1251.34	0.000992	8.56	20086.68	3761.50	0.37
Salt River	VaShly US	7.63	100yr	175000.00	1231.48	1250.33	1243.01	1251.98	0.001381	10.30	16988.13	2755.68	0.44
Salt River	VaShly US	7.71	100yr	175000.00	1231.90	1250.93	1243.43	1252.64	0.001339	10.47	16719.25	2679.17	0.44
Salt River	VaShly US	7.83	100yr	175000.00	1232.46	1251.74	1244.44	1253.54	0.001493	10.78	16238.96	2563.54	0.46
Salt River	VaShly US	7.91	100yr	175000.00	1231.30	1252.02	1245.86	1254.52	0.002004	12.71	14415.76	2177.09	0.54
Salt River	VaShly US	8.01	100yr	175000.00	1231.01	1253.77	1246.51	1255.48	0.001475	10.54	17141.33	2182.53	0.46
Salt River	VaShly US	8.10	100yr	175000.00	1227.11	1253.94	1250.13	1256.64	0.002519	14.09	14053.85	2109.05	0.60
Salt River	VaShly US	8.20	100yr	175000.00	1233.14	1256.15	1249.25	1257.69	0.001379	10.76	19088.09	2979.05	0.45
Salt River	VaShly US	8.29	100yr	175000.00	1234.21	1257.04	1249.93	1258.25	0.001086	9.47	21113.09	3212.29	0.40
Salt River	VaShly US	8.36	100yr	175000.00	1233.96	1257.56	1250.13	1258.67	0.001066	9.20	22902.47	3459.03	0.39
Salt River	VaShly US	8.44	100yr	175000.00	1230.19	1257.86	1253.21	1259.59	0.002303	11.69	22565.11	3575.61	0.55
Salt River	VaShly US	8.52	100yr	175000.00	1227.75	1259.24	1253.51	1260.17	0.000792	8.49	27595.14	3765.09	0.33
Salt River	VaShly US	8.57	100yr	175000.00	1234.23	1259.25	1253.53	1260.67	0.001378	10.53	24083.33	2817.81	0.44
Salt River	VaShly US	8.60	100yr	175000.00	1227.61	1259.45	1253.20	1260.90	0.001422	10.63	23719.21	2713.86	0.44
Salt River	VaShly US	8.63	100yr	175000.00	1231.84	1259.11	1256.08	1261.47	0.003011	13.65	19716.20	2242.69	0.63
Salt River	VaShly US	8.68	100yr	175000.00	1233.08	1260.11	1255.13	1262.17	0.001921	12.76	22136.76	2598.71	0.52
Salt River	VaShly US	8.74	100yr	175000.00	1231.64	1259.76	1258.18	1263.54	0.003757	17.28	16532.39	1951.66	0.73
Salt River	VaShly US	8.77	100yr	175000.00	1234.72	1261.71	1258.39	1264.26	0.002869	14.22	21194.68	2246.82	0.63
Salt River	VaShly US	8.81	100yr	175000.00	1231.64	1262.97	1257.54	1264.78	0.001681	11.95	23718.03	2488.81	0.49
Salt River	VaShly US	8.85	100yr	175000.00	1232.30	1263.51	1257.03	1265.12	0.001383	11.25	24262.61	2603.80	0.45
Salt River	VaShly US	8.88	100yr	175000.00	1233.54	1263.67	1257.27	1265.39	0.001461	11.67	24908.01	2481.75	0.47
Salt River	VaShly US	8.92	100yr	175000.00	1235.52	1263.75	1257.71	1265.75	0.001551	12.58	25843.56	2380.31	0.48
Salt River	VaShly US	8.98	100yr	175000.00	1234.94	1263.96	1258.60	1266.40	0.001780	13.87	19486.18	2061.07	0.52
Salt River	VaShly US	9.04	100yr	175000.00	1237.83	1263.81	1256.92	1267.43	0.002571	16.95	18774.49	1597.08	0.63
Salt River	VaShly US	9.13	100yr	175000.00	1238.40	1266.29	1257.67	1268.45	0.001386	12.91	17638.77	2165.52	0.47
Salt River	VaShly US	9.20	100yr	175000.00	1239.36	1266.80	1259.14	1268.94	0.001190	11.22	15060.71	2027.88	0.43
Salt River	VaShly US	9.26	100yr	175000.00	1240.07	1267.18	1260.13	1269.36	0.001301	11.89	14772.42	1955.85	0.45
Salt River	VaShly US	9.33	100yr	175000.00	1238.28	1267.26	1261.42	1270.11	0.001776	14.24	13226.98	1664.54	0.52
Salt River	VaShly US	9.39	100yr	175000.00	1235.91	1266.36	1266.25	1271.60	0.003673	19.96	10757.15	2080.20	0.74
Salt River	VaShly US	9.44	100yr	175000.00	1242.19	1270.39	1261.96	1272.42	0.001240	12.46	17578.60	4436.77	0.44
Salt River	VaShly US	9.49	100yr	175000.00	1240.69	1271.65	1261.25	1272.70	0.000700	8.88	23208.14	5150.53	0.33
Salt River	VaShly US	9.55	100yr	175000.00	1243.76	1272.31	1262.16	1272.92	0.000419	7.05	29042.50	6424.03	0.26
Salt River	VaShly US	9.59	100yr	175000.00	1240.32	1272.48	1263.09	1273.01	0.000354	6.49	30833.29	6804.77	0.24
Salt River	VaShly US	9.61	100yr	175000.00	1243.87	1272.45	1263.18	1273.09	0.000414	6.87	28017.75	6691.61	0.25
Salt River	VaShly US	9.64	100yr	175000.00	1245.06	1272.40	1263.97	1273.19	0.000464	7.09	26151.05	6500.14	0.27
Salt River	VaShly US	9.67	100yr	175000.00	1244.78	1272.30	1264.04	1273.32	0.000512	7.54	24143.46	5964.40	0.28
Salt River	VaShly US	9.73	100yr	175000.00	1246.24	1272.44	1265.53	1273.61	0.001007	9.48	21528.01	4049.24	0.39
Salt River	VaShly US	9.80	100yr	175000.00	1246.16	1272.54	1265.99	1274.13	0.001206	10.97	18543.94	2569.00	0.43
Salt River	VaShly US	9.87	100yr	175000.00	1248.17	1272.76	1266.15	1274.72	0.001484	11.68	16273.98	2373.97	0.47
Salt River	VaShly US	9.96	100yr	175000.00	1249.51	1273.20	1268.04	1275.65	0.001998	13.16	14744.73	2701.40	0.54
Salt River	VaShly US	10.06	100yr	175000.00	1250.89	1274.67	1269.21	1276.75	0.001768	12.15	15975.99	2397.64	0.51
Salt River	VaShly US	10.18	100yr	175000.00	1250.99	1275.74	1269.19	1277.83	0.001777	11.60	15083.50	2526.27	0.50
Salt River	VaShly US	10.26	100yr	175000.00	1251.97	1276.69	1268.57	1278.55	0.001413	10.97	15972.04	2458.21	0.45
Salt River	VaShly US	10.36	100yr	175000.00	1249.97	1277.62	1267.73	1279.20	0.001055	10.19	17665.16	2565.59	0.40
Salt River	VaShly US	10.41	100yr	175000.00	1254.59	1277.70	1268.45	1279.59	0.001275	11.13	16139.54	2535.02	0.44
Salt River	VaShly US	10.46	100yr	175000.00	1251.29	1277.82	1271.17	1280.08	0.001711	12.40	15141.62	2521.54	0.50
Salt River	VaShly US	10.52	100yr	175000.00	1252.59	1277.94	1271.91	1280.95	0.002214	13.98	12808.32	2260.26	0.57
Salt River	VaShly US	10.56	100yr	175000.00	1254.28	1278.33	1272.03	1281.52	0.002218	14.32	12222.59	2465.23	0.57
Salt River	VaShly US	10.61	100yr	175000.00	1253.95	1279.10	1272.47	1282.05	0.002038	13.78	12754.32	2172.81	0.55
Salt River	VaShly US	10.67	100yr	175000.00	1256.89	1280.23	1272.75	1282.72	0.001713	12.68	13851.31	2078.52	0.50

HEC RAS Plan: Past 50 Profile: 100yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	100yr	175000.00	1258.56	1281.00	1273.04	1283.27	0.001541	12.09	14505.63	1996.55	0.48
Salt River	VaShly US	10.78	100yr	175000.00	1259.27	1281.56	1273.27	1283.63	0.001461	11.55	15152.86	1896.60	0.46
Salt River	VaShly US	10.81	100yr	175000.00	1259.82	1281.83	1273.95	1283.92	0.001502	11.59	15109.20	1885.74	0.47
Salt River	VaShly US	10.86	100yr	175000.00	1258.71	1282.38	1274.23	1284.30	0.001372	11.12	15735.23	1823.66	0.45
Salt River	VaShly US	10.90	100yr	175000.00	1259.75	1282.81	1274.80	1284.63	0.001373	10.81	16202.24	1715.68	0.45
Salt River	VaShly US	10.95	100yr	175000.00	1260.76	1283.26	1275.00	1284.94	0.001275	10.41	16816.11	1671.59	0.43
Salt River	VaShly US	11.00	100yr	175000.00	1260.20	1283.38	1275.34	1285.37	0.001418	11.33	15448.55	1446.89	0.46
Salt River	VaShly US	11.05	100yr	175000.00	1261.52	1283.90	1276.00	1285.81	0.001403	11.10	15786.92	1871.11	0.45
Salt River	VaShly US	11.10	100yr	175000.00	1260.08	1284.21	1276.31	1286.13	0.001393	11.11	15769.42	1840.71	0.45
Salt River	VaShly US	11.14	100yr	175000.00	1257.45	1284.98	1276.55	1286.66	0.003487	10.45	16826.07	1803.25	0.42
Salt River	VaShly US	11.17	100yr	175000.00	1258.53	1285.29	1277.30	1287.01	0.001274	10.62	16922.73	1743.32	0.43
Salt River	VaShly US	11.25	100yr	175000.00	1259.69	1285.99	1278.04	1287.54	0.001194	10.20	18075.76	1568.89	0.42
Salt River	VaShly US	11.32	100yr	175000.00	1263.36	1286.82	1279.02	1288.02	0.001028	9.02	20670.78	1463.95	0.38
Salt River	VaShly US	11.41	100yr	175000.00	1263.36	1287.33	1280.12	1288.52	0.001188	8.75	19991.09	1358.90	0.40
Salt River	VaShly US	11.49	100yr	175000.00	1264.61	1287.75	1280.93	1289.11	0.001296	9.37	18673.86	1220.86	0.42
Salt River	VaShly US	11.62	100yr	175000.00	1264.20	1288.83	1281.12	1289.91	0.001045	8.33	21018.61	1508.50	0.38
Salt River	VaShly US	11.78	100yr	175000.00	1267.86	1289.62	1283.11	1291.05	0.001382	9.58	18268.61	1447.88	0.44
Salt River	VaShly US	11.88	100yr	175000.00	1268.50	1290.31	1283.98	1291.89	0.001605	10.07	17380.92	1538.29	0.47
Salt River	VaShly US	11.99	100yr	175000.00	1266.83	1291.40	1285.96	1292.83	0.001690	9.60	18231.22	1409.59	0.47
Salt River	VaShly US	12.06	100yr	175000.00	1266.90	1292.04	1286.76	1293.46	0.001674	9.56	18299.50	1410.44	0.47
Salt River	VaShly US	12.10	100yr	175000.00	1268.99	1292.35	1287.27	1293.98	0.001906	10.25	17078.28	1308.81	0.50
Salt River	VaShly US	12.22	100yr	175000.00	1268.81	1293.31	1287.65	1295.25	0.001870	11.17	15672.04	1035.32	0.51
Salt River	VaShly US	12.33	100yr	175000.00	1271.34	1294.14	1288.71	1296.61	0.002228	12.63	13860.40	870.20	0.56
Salt River	VaShly US	12.44	100yr	175000.00	1274.73	1295.76	1289.53	1297.80	0.001874	11.47	15255.71	972.96	0.51
Salt River	VaShly US	12.55	100yr	175000.00	1275.93	1296.95	1290.70	1298.90	0.001818	11.20	15629.07	1010.85	0.50
Salt River	VaShly US	12.67	100yr	175000.00	1276.65	1298.15	1291.58	1299.96	0.001622	10.81	16181.37	1251.76	0.48
Salt River	VaShly US	12.77	100yr	175000.00	1276.88	1299.06	1292.49	1300.81	0.001624	10.61	16488.02	1308.62	0.47
Salt River	VaShly US	12.87	100yr	175000.00	1277.67	1300.28	1293.42	1301.65	0.001436	9.38	18658.42	1321.42	0.44
Salt River	VaShly US	12.97	100yr	175000.00	1279.11	1301.08	1294.48	1302.46	0.001392	9.40	18609.02	1280.74	0.43
Salt River	VaShly US	13.07	100yr	175000.00	1278.01	1301.77	1296.16	1303.24	0.001614	9.71	18014.03	1319.48	0.46
Salt River	VaShly US	13.19	100yr	175000.00	1282.08	1302.75	1296.87	1304.31	0.001711	10.00	17493.07	1283.62	0.48
Salt River	VaShly US	13.31	100yr	175000.00	1281.42	1303.78	1297.15	1305.44	0.001646	10.35	16903.12	1143.36	0.47
Salt River	VaShly US	13.44	100yr	175000.00	1283.61	1304.80	1298.22	1306.49	0.001530	10.42	16788.54	1063.71	0.46
Salt River	VaShly US	13.55	100yr	175000.00	1287.19	1305.81	1298.77	1307.38	0.001410	10.05	17415.95	1096.35	0.44
Salt River	VaShly US	13.64	100yr	175000.00	1287.63	1306.50	1299.98	1308.09	0.001522	10.14	17265.30	1127.58	0.46
Gilbert Mining P	Gilbert Mining P	0.04	100yr	102942.00	1189.85	1234.21	1207.44	1234.95	0.000196	6.96	14852.81	1590.64	0.19
Gilbert Mining P	Gilbert Mining P	0.08	100yr	102942.00	1179.35	1234.32	1201.33	1235.00	0.000156	6.61	15565.63	1666.63	0.17
Gilbert Mining P	Gilbert Mining P	0.11	100yr	102942.00	1182.14	1234.66	1196.90	1235.05	0.000097	4.99	20798.46	1832.36	0.13
Gilbert Mining P	Gilbert Mining P	0.15	100yr	102942.00	1180.10	1234.67	1197.24	1235.08	0.000119	5.14	20434.79	1883.58	0.14
Gilbert Mining P	Gilbert Mining P	0.19	100yr	102942.00	1178.66	1234.55	1207.85	1235.18	0.000242	6.44	16492.20	1183.11	0.20
Gilbert Mining P	Gilbert Mining P	0.22	100yr	102942.00	1186.92	1234.61	1205.31	1235.22	0.000199	6.27	16490.88	1135.57	0.19
Gilbert Mining P	Gilbert Mining P	0.25	100yr	102942.00	1181.98	1234.64	1200.90	1235.26	0.000210	6.28	16401.99	963.83	0.19
Gilbert Mining P	Gilbert Mining P	0.29	100yr	102942.00	1181.95	1234.45	1203.40	1235.40	0.000310	7.88	13360.58	869.27	0.22
Gilbert Mining P	Gilbert Mining P	0.33	100yr	102942.00	1183.04	1235.27	1197.77	1235.50	0.000056	3.80	27267.83	891.06	0.10
Gilbert Mining P	Gilbert Mining P	0.37	100yr	102942.00	1185.24	1235.33	1201.56	1235.52	0.000052	3.49	30336.40	1593.34	0.10
Gilbert Mining P	Gilbert Mining P	0.43	100yr	102942.00	1179.91	1235.27	1200.72	1235.57	0.000084	4.41	23421.21	2239.44	0.12
Gilbert Mining P	Gilbert Mining P	0.48	100yr	102942.00	1183.06	1235.28	1201.76	1235.60	0.000101	4.61	23106.71	2375.13	0.13
Gilbert Mining P	Gilbert Mining P	0.53	100yr	102942.00	1202.03	1235.28	1216.64	1235.66	0.000181	4.99	21393.31	2363.22	0.17
Gilbert Mining P	Gilbert Mining P	0.55	100yr	102942.00	1203.21	1235.18	1217.81	1235.74	0.000279	5.98	17324.51	1790.06	0.21
Gilbert Mining P	Gilbert Mining P	0.60	100yr	102942.00	1199.67	1234.88	1220.30	1236.03	0.000620	8.60	12060.83	1602.73	0.31
Gilbert Mining P	Gilbert Mining P	0.66	100yr	102942.00	1204.07	1235.66	1218.02	1236.21	0.000278	5.92	17385.51	1941.02	0.21
Gilbert Mining P	Gilbert Mining P	0.70	100yr	102942.00	1206.48	1235.54	1219.75	1236.37	0.000479	7.34	14030.23	1992.73	0.27
Gilbert Mining P	Gilbert Mining P	0.74	100yr	102942.00	1206.94	1235.88	1220.15	1236.47	0.000324	6.21	16582.45	2118.26	0.23
Gilbert Mining P	Gilbert Mining P	0.77	100yr	102942.00	1206.46	1236.19	1219.64	1236.54	0.000192	4.75	21658.79	2192.96	0.17
Gilbert Mining P	Gilbert Mining P	0.83	100yr	102942.00	1208.33	1236.31	1219.38	1236.61	0.000172	4.39	23456.12	2277.31	0.16
Gilbert Mining P	Gilbert Mining P	0.88	100yr	102942.00	1208.45	1236.33	1219.83	1236.65	0.000198	4.54	22686.10	2590.42	0.17
Gilbert Mining P	Gilbert Mining P	0.91	100yr	102942.00	1206.13	1236.28	1221.33	1236.74	0.000275	5.43	18956.76	2376.83	0.21
Gilbert Mining P	Gilbert Mining P	0.95	100yr	102942.00	1208.41	1236.24	1221.51	1236.84	0.000357	6.25	16498.67	3044.75	0.23
Gilbert Mining P	Gilbert Mining P	0.97	100yr	102942.00	1209.76	1236.28	1222.38	1236.88	0.000365	6.26	16683.18	3465.95	0.24
Gilbert Mining P	Gilbert Mining P	0.99	100yr	102942.00	1208.61	1236.27	1222.07	1236.94	0.000401	6.55	15722.94	3351.51	0.25
Gilbert Mining P	Gilbert Mining P	1.02	100yr	102942.00	1210.66	1236.46	1221.45	1237.01	0.000352	5.71	17435.77	3315.00	0.23
Gilbert Mining P	Gilbert Mining P	1.05	100yr	102942.00	1209.65	1236.43	1222.64	1237.11	0.000382	6.72	15605.60	2996.46	0.25
Gilbert Mining P	Gilbert Mining P	1.08	100yr	102942.00	1198.40	1236.22	1224.17	1237.36	0.000754	8.56	12068.94	1781.36	0.32
Gilbert Mining P	Gilbert Mining P	1.11	100yr	102942.00	1194.11	1235.99	1222.74	1237.63	0.000904	10.28	10036.71	1223.14	0.36
Gilbert Mining P	Gilbert Mining P	1.14	100yr	102942.00	1201.44	1235.66	1224.09	1238.05	0.001332	12.40	8301.38	1186.67	0.44
Gilbert Mining P	Gilbert Mining P	1.17	100yr	102942.00	1221.53	1238.20	1238.20	1245.77	0.007269	22.07	4663.85	563.60	1.00
Gilbert Mining P	Gilbert Mining P	1.19	100yr	102942.00	1218.15	1239.38	1237.45	1246.59	0.004915	21.56	4775.69	575.26	0.86
Gilbert Mining P	Gilbert Mining P	1.21	100yr	102942.00	1222.00	1239.81	1239.81	1247.58	0.007270	22.38	4613.20	302.10	0.99

APPENDIX 9f

200-YEAR STANDARD TABLE 1

HEC-RAS Plan: Post 50 Profile: 200yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	200yr	207000.00	1143.99	1175.29	1159.59	1177.11	0.000376	7.26	28504.04	1067.60	0.25
Salt River	VaShly DS	0.11	200yr	207000.00	1144.67	1175.54	1161.04	1177.34	0.000396	7.20	28759.66	1138.25	0.25
Salt River	VaShly DS	0.23	200yr	207000.00	1147.96	1176.78	1162.29	1177.62	0.000439	7.34	28205.73	1171.02	0.26
Salt River	VaShly DS	0.36	200yr	207000.00	1148.61	1177.09	1162.57	1177.91	0.000431	7.28	28440.54	1185.44	0.26
Salt River	VaShly DS	0.51	200yr	207000.00	1150.89	1177.42	1163.70	1178.28	0.000472	7.43	27858.83	1205.98	0.27
Salt River	VaShly DS	0.65	200yr	207000.00	1151.13	1177.79	1163.78	1178.63	0.000450	7.32	28269.38	1208.44	0.27
Salt River	VaShly DS	0.78	200yr	207000.00	1150.83	1178.08	1165.35	1178.97	0.000534	7.58	27321.78	1253.57	0.29
Salt River	VaShly DS	0.89	200yr	207000.00	1153.10	1178.39	1166.49	1179.33	0.000588	7.78	26612.88	1267.98	0.30
Salt River	VaShly DS	1.00	200yr	207000.00	1151.27	1178.79	1165.99	1179.65	0.000508	7.41	27929.99	1284.49	0.28
Salt River	VaShly DS	1.12	200yr	207000.00	1152.15	1179.10	1166.70	1179.96	0.000521	7.42	27881.90	1301.91	0.28
Salt River	VaShly DS	1.22	200yr	207000.00	1153.46	1179.39	1167.46	1180.25	0.000547	7.45	27782.17	1338.24	0.29
Salt River	VaShly DS	1.30	200yr	207000.00	1150.51	1179.61	1168.01	1180.49	0.000569	7.51	27561.29	1349.19	0.29
Salt River	VaShly DS	1.39	200yr	207000.00	1150.03	1179.88	1167.70	1180.75	0.000540	7.49	27628.37	1304.17	0.29
Salt River	VaShly DS	1.52	200yr	207000.00	1153.77	1180.15	1169.79	1181.30	0.000812	8.59	24087.38	1249.55	0.34
Salt River	VaShly DS	1.65	200yr	207000.00	1155.27	1181.04	1170.61	1181.80	0.000574	6.99	29610.80	1634.33	0.29
Salt River	VaShly DS	1.76	200yr	207000.00	1155.56	1181.26	1171.62	1182.25	0.000776	8.05	26310.59	1917.73	0.34
Salt River	VaShly DS	1.80	200yr	207000.00	1158.65	1181.25	1172.68	1182.52	0.001037	9.07	22834.46	1518.79	0.39
Salt River	VaShly DS	1.83	200yr	207000.00	1147.74	1181.30	1173.22	1182.77	0.001217	9.71	21322.92	1648.94	0.42
Salt River	VaShly DS	1.86	200yr	207000.00	1154.19	1181.43	1173.85	1183.02	0.001306	10.11	20480.64	1783.28	0.43
Salt River	VaShly DS	1.89	200yr	207000.00	1156.29	1181.61	1174.03	1183.21	0.001287	10.13	20432.34	1857.38	0.43
Salt River	VaShly DS	1.95	200yr	207000.00	1156.57	1181.77	1174.72	1183.85	0.001676	11.57	17891.65	1994.75	0.49
Salt River	VaShly DS	2.02	200yr	207000.00	1160.11	1182.01	1175.57	1184.69	0.001959	13.13	15769.40	2233.61	0.54
Salt River	VaShly DS	2.04	200yr	207000.00	1158.56	1182.14	1177.30	1185.01	0.002516	13.58	15238.42	2345.03	0.59
Salt River	VaShly DS	2.07	200yr	207000.00	1156.21	1183.24	1176.00	1185.41	0.001591	11.83	17504.67	2433.06	0.48
Salt River	VaShly DS	2.10	200yr	207000.00	1158.18	1183.45	1177.19	1185.68	0.001823	11.99	17270.91	2505.93	0.51
Salt River	VaShly DS	2.12	200yr	207000.00	1153.95	1183.80	1172.45	1185.83	0.001223	11.45	18074.04	2344.89	0.43
Salt River	VaShly DS	2.13	200yr	207000.00	1153.90	1183.75	1173.70	1185.99	0.001438	12.00	17249.81	2356.44	0.46
Salt River	VaShly DS	2.21	200yr	207000.00	1156.97	1183.62	1178.95	1187.43	0.003266	15.66	13215.85	1959.73	0.68
Salt River	VaShly DS	2.29	200yr	207000.00	1170.86	1190.31	1190.31	1196.24	0.007834	19.53	10596.92	1344.35	1.00
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	200yr	207000.00	1180.00	1201.44	1196.89	1204.37	0.002698	13.74	15063.71	1553.64	0.61
Salt River	VaShly DS	2.38	200yr	207000.00	1176.44	1203.26	1195.09	1205.10	0.001372	10.88	19031.59	1747.09	0.45
Salt River	VaShly DS	2.40	200yr	207000.00	1177.52	1203.42	1195.23	1205.30	0.001328	11.04	18943.54	1510.57	0.44
Salt River	VaShly DS	2.41	200yr	207000.00	1177.08	1203.45	1195.30	1205.37	0.001349	11.12	18701.97	1461.36	0.45
Salt River	VaShly DS	2.42	200yr	207000.00	1176.40	1203.50	1195.39	1205.43	0.001370	11.13	18606.01	1354.60	0.45
Salt River	VaShly DS	2.47	200yr	207000.00	1177.74	1203.85	1195.85	1205.79	0.001401	11.18	18515.53	1469.88	0.45
Salt River	VaShly DS	2.53	200yr	207000.00	1177.40	1204.43	1196.49	1206.23	0.001313	10.76	19229.84	2391.30	0.44
Salt River	VaShly DS	2.59	200yr	207000.00	1181.61	1204.78	1196.95	1206.74	0.001445	11.22	18442.77	2357.47	0.46
Salt River	VaShly DS	2.65	200yr	207000.00	1183.93	1205.14	1197.16	1207.20	0.001456	11.52	17980.86	1630.09	0.47
Salt River	VaShly DS	2.71	200yr	207000.00	1183.50	1206.03	1197.79	1207.72	0.001233	10.43	19883.55	1430.40	0.43
Salt River	VaShly DS	2.78	200yr	207000.00	1183.83	1206.60	1198.06	1208.11	0.001116	9.89	20993.18	1560.03	0.41
Salt River	VaShly DS	2.87	200yr	207000.00	1174.74	1206.78	1199.11	1208.99	0.001572	11.93	17346.12	1051.93	0.48
Salt River	VaShly DS	2.98	200yr	207000.00	1178.35	1208.20	1199.01	1209.79	0.000991	10.13	20608.30	1273.49	0.39
Salt River	VaShly DS	3.10	200yr	207000.00	1174.85	1208.59	1201.01	1210.74	0.001631	11.78	17572.63	1292.84	0.49
Salt River	VaShly DS	3.23	200yr	207000.00	1181.67	1209.63	1202.61	1211.99	0.001744	12.33	16785.02	1583.26	0.51
Salt River	VaShly DS	3.35	200yr	207000.00	1184.67	1211.12	1201.88	1212.94	0.001239	10.83	19109.46	2487.51	0.43
Salt River	VaShly DS	3.46	200yr	207000.00	1183.72	1212.69	1203.01	1213.72	0.000713	8.18	25648.03	3573.95	0.33
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	200yr	207000.00	1185.13	1212.95	1203.19	1214.06	0.000802	8.45	24507.67	4333.38	0.34
Salt River	VaShly DS	3.64	200yr	207000.00	1185.28	1213.59	1205.08	1214.97	0.001257	9.43	21943.72	3613.85	0.42
Salt River	VaShly DS	3.76	200yr	207000.00	1185.23	1214.43	1204.48	1215.65	0.000899	8.87	23589.37	3479.24	0.36
Salt River	VaShly DS	3.89	200yr	207000.00	1181.01	1215.46	1203.01	1216.07	0.000377	6.35	33217.84	3943.33	0.24
Salt River	VaShly DS	4.04	200yr	207000.00	1186.07	1215.81	1204.31	1216.39	0.000436	6.21	33924.42	4090.62	0.25
Salt River	VaShly DS	4.09	200yr	207000.00	1186.77	1215.84	1205.61	1216.59	0.000565	7.00	29899.63	3405.58	0.29
Salt River	VaShly DS	4.15	200yr	207000.00	1185.73	1215.81	1206.46	1216.92	0.000831	8.48	24425.76	2356.79	0.35
Salt River	VaShly DS	4.22	200yr	207000.00	1188.00	1216.29	1204.81	1217.17	0.000580	7.49	27479.56	1587.90	0.30
Salt River	VaShly DS	4.27	200yr	207000.00	1188.10	1216.29	1206.82	1217.45	0.000841	8.78	24112.89	1372.98	0.35
Salt River	VaShly DS	4.31	200yr	207000.00	1193.87	1216.31	1207.92	1217.75	0.001136	9.78	21611.54	1238.42	0.40
Salt River	VaShly DS	4.47	200yr	207000.00	1190.75	1217.34	1209.12	1218.66	0.001040	9.37	30102.84	1986.15	0.39
Salt River	VaShly DS	4.59	200yr	207000.00	1190.04	1218.03	1209.83	1219.37	0.001074	9.44	26655.77	2346.83	0.39
Salt River	VaShly DS	4.74	200yr	207000.00	1189.62	1218.77	1211.09	1220.61	0.001619	11.05	22490.82	2205.18	0.48
Salt River	VaShly DS	4.88	200yr	207000.00	1195.43	1219.72	1212.95	1221.95	0.001698	12.15	20210.06	1597.97	0.55
Salt River	VaShly DS	5.03	200yr	207000.00	1197.77	1221.00	1215.55	1223.51	0.002098	12.92	19600.41	1716.92	0.55
Salt River	VaShly DS	5.15	200yr	207000.00	1198.09	1222.55	1215.77	1224.74	0.001662	12.06	21151.00	1567.70	0.49
Salt River	VaShly DS	5.26	200yr	207000.00	1184.07	1223.33	1217.17	1225.91	0.002002	13.11	20342.55	1454.12	0.54
Salt River	VaShly DS	5.40	200yr	207000.00	1196.34	1224.75	1217.72	1227.35	0.001958	13.12	16320.74	976.69	0.53
Salt River	VaShly DS	5.47	200yr	207000.00	1199.26	1225.95	1218.80	1228.11	0.001668	11.81	17675.25	1029.45	0.49
Salt River	VaShly DS	5.53	200yr	207000.00	1199.29	1226.27	1220.05	1228.70	0.002038	12.51	16541.46	978.56	0.54
Salt River	VaShly DS	5.56	200yr	207000.00	1201.24	1226.73	1219.30	1229.06	0.001746	12.26	16880.52	918.65	0.50
Salt River	VaShly DS	5.60	200yr	207000.00	1201.31	1227.06	1220.29	1229.44	0.001798	12.40	16699.33	911.93	0.51
Salt River	VaShly DS	5.65	200yr	207000.00	1202.22	1227.70	1220.46	1229.95	0.001738	12.06	17168.13	954.89	0.50
Salt River	VaShly DS	5.69	200yr	207000.00	1202.94	1227.89	1219.98	1230.38	0.001641	12.66	16355.31	801.28	0.49
Salt River	VaShly DS	5.73	200yr	207000.00	1200.44	1228.71	1219.61	1230.66	0.001131	11.20	18481.77	820.78	0.42
Salt River	VaShly DS	5.76	200yr	207000.00	1198.50	1229.00	1222.52	1230.90	0.001193	11.06	18710.14	1000.31	0.42
Salt River	VaShly DS	5.80	200yr	207000.00	1199.64	1229.20	1222.41	1231.12	0.001249	11.13	18602.79	918.30	0.43
Salt River	VaShly DS	5.82	200yr	207000.00	1197.44	1229.82	1220.01	1231.27	0.000825	9.68	21373.82	1000.21	0.35
Salt River	VaShly DS	5.84	200yr	207000.00	1187.25	1230.73	1221.48	1231.39	0.000238	6.53	31685.25	1054.78	0.20
Salt River	VaShly DS	5.85	200yr	207000.00	1203.05	1230.81	1222.38	1232.26	0.019212	9.68	21384.94	1109.41	0.37
Salt River	VaShly DS	5.86	200yr	207000.00	1197.04	1231.34	1223.01	1232.37	0.000573	8.13	25475.30	1194.38	0.30
Salt River	VaShly DS	5.87	200yr	207000.00	1196.82	1231.66	1223.01	1232.42	0.000459	7.01	29511.96	1473.28	0.26
Salt River	VaShly DS	5.88	200yr	207000.00	1194.54	1231.82	1220.07	1232.45	0.000366	6.46	32774.38	1677.04	0.24
Salt River	VaShly DS	5.91	200yr	207000.00	1201.09	1231.75	1223.81	1232.60	0.000646	7.48	28134.82	1759.49	0.31
Salt River	VaShly DS	5.93	200yr	207000.00	1199.72	1231.71	1219.48	1232.73	0.000761	8.14	25687.92	1637.07	0.33
Salt River	VaShly DS	5.95	200yr	207000.00	1195.30	1231.75	1217.81	1232.80	0.000724	8.20	25250.94	1420.82	0.33
Salt River	VaShly DS	5.97	200yr	207000.00	1198.44	1231.59	1221.04	1233.06	0.001189	9.73	21270.31	1432.18	0.41
Salt River	VaShly DS	5.99	200yr	207000.00	1198.12	1231.82	1221.30	1233.18	0.001034	9.36	22115.24	1490.53	0.39
Salt River	VaShly DS	6.01	200yr	207000.00	1194.75	1232.49	1215.98	1233.29	0.000358	7.15	28959.38	1501.72	0.24

HEC-RAS Plan: Post 50 Profile: 200yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	200yr	207000.00	1201.88	1232.13	1222.86	1233.63	0.001020	9.81	21108.92	1503.46	0.39
Salt River	VaShly DS	6.09	200yr	207000.00	1201.00	1232.33	1223.36	1233.91	0.001056	10.16	21850.21	1768.00	0.40
Salt River	VaShly DS	6.14	200yr	207000.00	1201.32	1232.70	1223.28	1234.18	0.001036	9.82	22812.23	2114.43	0.39
Salt River	VaShly DS	6.18	200yr	207000.00	1188.55	1233.32	1223.53	1234.41	0.000661	8.41	26205.30	2435.95	0.32
Salt River	VaShly DS	6.22	200yr	207000.00	1198.32	1233.51	1224.74	1234.55	0.000765	8.23	26604.46	2290.27	0.31
Salt River	VaShly DS	6.27	200yr	207000.00	1197.76	1233.29	1225.50	1235.23	0.002456	11.26	19541.45	2275.37	0.45
Salt River	VaShly DS	6.32	200yr	207000.00	1199.77	1233.60	1224.25	1236.15	0.002543	12.87	17121.30	1770.26	0.47
Salt River	VaShly DS	6.35	200yr	207000.00	1202.10	1234.07	1223.38	1236.43	0.002037	12.42	17750.99	2290.40	0.44
Salt River	VaShly DS	6.38	200yr	207000.00	1201.42	1234.64	1223.61	1236.85	0.002522	12.00	18101.61	2330.47	0.42
Salt River	VaShly DS	6.40	200yr	207000.00	1197.72	1234.73	1224.43	1237.21	0.001321	12.70	16930.47	2577.16	0.45
Salt River	VaShly at Pit	6.45	200yr	94703.00	1216.16	1235.61	1233.25	1237.74	0.003430	11.87	8753.64	1028.69	0.65
Salt River	VaShly at Pit	6.50	200yr	94703.00	1220.36	1236.60	1233.43	1238.58	0.003031	11.45	9103.44	1388.97	0.61
Salt River	VaShly at Pit	6.53	200yr	94703.00	1221.34	1237.28	1233.45	1239.09	0.002498	10.93	9851.74	1192.58	0.56
Salt River	VaShly at Pit	6.56	200yr	94703.00	1221.47	1237.56	1234.26	1239.55	0.002849	11.49	9341.53	1301.55	0.60
Salt River	VaShly at Pit	6.62	200yr	94703.00	1222.55	1238.38	1235.36	1240.62	0.003146	12.18	9170.87	1095.53	0.63
Salt River	VaShly at Pit	6.69	200yr	94703.00	1222.97	1239.51	1236.47	1241.78	0.003085	12.26	9198.49	1110.59	0.62
Salt River	VaShly at Pit	6.75	200yr	94703.00	1226.09	1240.61	1237.56	1242.72	0.003005	11.81	9064.58	1565.89	0.61
Salt River	VaShly at Pit	6.80	200yr	94703.00	1227.73	1241.70	1238.77	1243.60	0.003057	11.23	10341.46	1734.53	0.61
Salt River	VaShly at Pit	6.85	200yr	94703.00	1229.81	1242.47	1239.63	1244.31	0.003041	11.02	11205.42	1666.88	0.61
Salt River	VaShly at Pit	6.91	200yr	94703.00	1229.03	1243.95	1239.51	1244.98	0.001448	8.25	13282.02	1637.54	0.43
Salt River	VaShly at Pit	6.96	200yr	94703.00	1229.37	1244.18	1241.27	1245.85	0.003018	10.51	12675.78	1661.44	0.60
Salt River	VaShly at Pit	6.99	200yr	94703.00	1229.94	1244.98	1241.49	1246.30	0.002531	9.36	13684.88	1802.13	0.54
Salt River	VaShly at Pit	7.01	200yr	94703.00	1229.89	1245.82	1241.15	1246.55	0.001418	7.12	13904.92	1819.80	0.41
Salt River	VaShly at Pit	7.03	200yr	94703.00	1230.67	1245.92	1240.94	1246.65	0.001408	7.19	13950.13	1782.33	0.41
Salt River	VaShly at Pit	7.04	200yr	94703.00	1230.92	1246.02	1241.09	1246.78	0.001812	7.12	13622.82	1767.54	0.41
Salt River	VaShly at Pit	7.06	200yr	94703.00	1231.36	1246.13	1241.39	1246.91	0.001519	7.47	13629.91	1757.35	0.42
Salt River	VaShly at Pit	7.07	200yr	94703.00	1230.65	1246.35	1241.51	1247.02	0.001244	6.94	14770.07	1718.87	0.39
Salt River	VaShly at Pit	7.10	200yr	94703.00	1231.41	1246.51	1242.15	1247.26	0.001321	7.40	13989.84	1736.96	0.40
Salt River	VaShly at Pit	7.17	200yr	94703.00	1230.40	1246.99	1243.03	1247.72	0.001201	7.05	14026.98	1892.27	0.38
Salt River	VaShly at Pit	7.24	200yr	94703.00	1235.15	1247.45	1244.51	1248.32	0.001606	7.57	12726.76	1940.42	0.44
Salt River	VaShly at Pit	7.28	200yr	94703.00	1234.69	1247.80	1245.01	1248.98	0.002407	8.74	10836.89	1997.00	0.52
Salt River	VaShly US	7.32	200yr	207000.00	1229.87	1250.55	1241.62	1251.38	0.000656	7.65	33511.95	5244.28	0.31
Salt River	VaShly US	7.36	200yr	207000.00	1229.41	1250.64	1241.70	1251.56	0.000709	8.00	32047.30	5199.54	0.32
Salt River	VaShly US	7.40	200yr	207000.00	1230.97	1250.68	1242.07	1251.84	0.000916	8.84	26223.23	4559.95	0.37
Salt River	VaShly US	7.44	200yr	207000.00	1231.22	1250.84	1241.99	1252.06	0.000936	8.87	23334.75	3739.55	0.37
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	200yr	207000.00	1231.96	1251.33	1242.38	1252.57	0.000935	8.94	23156.62	4474.02	0.37
Salt River	VaShly US	7.55	200yr	207000.00	1232.43	1251.67	1243.38	1253.05	0.001085	9.45	21905.13	5750.66	0.40
Salt River	VaShly US	7.63	200yr	210000.00	1231.48	1251.77	1244.34	1253.78	0.001530	11.38	18449.06	3474.97	0.47
Salt River	VaShly US	7.71	200yr	210000.00	1231.90	1252.42	1244.77	1254.51	0.001475	11.59	18185.18	3691.05	0.47
Salt River	VaShly US	7.83	200yr	210000.00	1232.46	1253.32	1245.83	1255.48	0.001603	11.81	18260.99	3393.87	0.48
Salt River	VaShly US	7.91	200yr	210000.00	1231.30	1253.55	1247.45	1256.57	0.002181	14.00	16251.26	2588.69	0.57
Salt River	VaShly US	8.01	200yr	210000.00	1231.01	1255.72	1247.93	1257.58	0.001415	11.09	20172.56	2580.60	0.45
Salt River	VaShly US	8.10	200yr	210000.00	1227.11	1255.81	1251.68	1258.75	0.002473	14.95	16693.85	2410.02	0.60
Salt River	VaShly US	8.20	200yr	210000.00	1233.14	1258.08	1250.70	1259.77	0.001344	11.37	22126.64	4245.06	0.45
Salt River	VaShly US	8.29	200yr	210000.00	1234.21	1258.97	1251.04	1260.32	0.001060	10.02	23828.68	4258.00	0.40
Salt River	VaShly US	8.36	200yr	210000.00	1233.96	1259.45	1251.49	1260.74	0.001091	9.96	26816.32	4352.86	0.40
Salt River	VaShly US	8.44	200yr	210000.00	1230.19	1259.80	1254.51	1261.56	0.002043	11.90	26572.30	4009.78	0.53
Salt River	VaShly US	8.52	200yr	210000.00	1227.75	1261.07	1253.51	1262.13	0.000837	9.22	39190.50	4388.13	0.35
Salt River	VaShly US	8.57	200yr	210000.00	1234.23	1261.01	1254.69	1262.69	0.001450	11.50	28430.44	3844.62	0.46
Salt River	VaShly US	8.60	200yr	210000.00	1227.61	1261.29	1255.20	1262.92	0.001465	11.42	28826.39	3662.12	0.46
Salt River	VaShly US	8.63	200yr	210000.00	1231.84	1260.92	1257.27	1263.50	0.002876	14.36	24303.22	3292.05	0.63
Salt River	VaShly US	8.68	200yr	210000.00	1233.08	1261.81	1256.47	1264.20	0.002040	13.86	28233.45	2686.31	0.54
Salt River	VaShly US	8.74	200yr	210000.00	1231.64	1261.33	1259.88	1265.71	0.004043	18.77	21073.09	2036.66	0.76
Salt River	VaShly US	8.77	200yr	210000.00	1234.72	1263.70	1259.64	1266.47	0.002728	14.94	27942.82	2461.80	0.62
Salt River	VaShly US	8.81	200yr	210000.00	1231.64	1264.97	1259.18	1266.98	0.001677	12.74	31573.93	2562.85	0.50
Salt River	VaShly US	8.85	200yr	210000.00	1232.30	1265.51	1258.85	1267.32	0.001413	12.08	32170.01	2672.76	0.46
Salt River	VaShly US	8.88	200yr	210000.00	1233.54	1265.65	1259.25	1267.61	0.001495	12.55	33309.03	2523.69	0.48
Salt River	VaShly US	8.92	200yr	210000.00	1235.52	1265.69	1259.64	1268.00	0.001626	13.63	33415.57	2415.51	0.50
Salt River	VaShly US	8.98	200yr	210000.00	1234.94	1265.88	1260.40	1268.71	0.001902	15.08	25746.37	2253.83	0.55
Salt River	VaShly US	9.04	200yr	210000.00	1237.83	1265.60	1258.86	1269.88	0.002842	18.57	23020.30	2108.47	0.67
Salt River	VaShly US	9.13	200yr	210000.00	1238.40	1268.57	1259.82	1270.99	0.001442	13.92	24989.16	2897.09	0.48
Salt River	VaShly US	9.20	200yr	210000.00	1239.36	1269.80	1261.05	1271.54	0.001092	11.62	23688.53	4061.62	0.42
Salt River	VaShly US	9.26	200yr	210000.00	1240.07	1270.02	1263.17	1271.99	0.001225	12.46	23330.37	4376.13	0.44
Salt River	VaShly US	9.33	200yr	210000.00	1238.28	1269.92	1265.07	1272.80	0.001753	15.14	21641.21	4249.25	0.52
Salt River	VaShly US	9.39	200yr	210000.00	1235.91	1269.97	1269.97	1275.14	0.003202	20.41	21548.00	4203.65	0.70
Salt River	VaShly US	9.44	200yr	210000.00	1242.19	1273.82	1264.23	1275.90	0.001151	12.97	34589.31	5823.62	0.43
Salt River	VaShly US	9.49	200yr	210000.00	1240.69	1275.14	1262.94	1276.17	0.000607	9.10	43020.00	6600.99	0.31
Salt River	VaShly US	9.55	200yr	210000.00	1243.76	1275.82	1263.44	1276.37	0.000345	7.03	51295.32	7635.36	0.24
Salt River	VaShly US	9.59	200yr	210000.00	1240.32	1276.01	1263.80	1276.44	0.000283	6.37	55519.09	8005.91	0.22
Salt River	VaShly US	9.61	200yr	210000.00	1243.87	1276.02	1264.52	1276.50	0.000324	6.70	51109.78	7950.89	0.23
Salt River	VaShly US	9.64	200yr	210000.00	1245.06	1276.04	1265.10	1276.55	0.000351	6.83	46340.08	7880.86	0.24
Salt River	VaShly US	9.67	200yr	210000.00	1244.78	1276.05	1265.21	1276.61	0.000382	7.22	42503.02	7484.35	0.25
Salt River	VaShly US	9.73	200yr	210000.00	1246.24	1276.00	1266.74	1276.86	0.000621	8.36	30135.64	6290.86	0.31
Salt River	VaShly US	9.80	200yr	210000.00	1246.16	1275.87	1267.34	1277.31	0.000908	10.53	23381.61	5430.78	0.38
Salt River	VaShly US	9.87	200yr	210000.00	1248.17	1275.93	1267.58	1277.82	0.001188	11.57	19866.18	2937.45	0.43
Salt River	VaShly US	9.96	200yr	210000.00	1249.51	1276.26	1269.58	1278.56	0.001552	12.86	18265.94	3258.62	0.49
Salt River	VaShly US	10.06	200yr	210000.00	1250.89	1277.45	1271.31	1279.44	0.001439	11.99	19636.99	2865.38	0.47
Salt River	VaShly US	10.18	200yr	210000.00	1250.99	1278.18	1270.64	1280.47	0.001672	12.13	17318.41	2651.86	0.49
Salt River	VaShly US	10.26	200yr	210000.00	1251.97	1279.06	1270.13	1281.16	0.001366	11.63	18096.64	2469.61	0.45
Salt River	VaShly US	10.36	200yr	210000.00	1249.97	1280.02	1269.28	1281.79	0.001032	10.82	20027.65	3025.88	0.40
Salt River	VaShly US	10.41	200yr	210000.00	1254.59	1280.06	1270.12	1282.19	0.001253	11.82	18300.42	2691.82	0.44
Salt River	VaShly US	10.46	200yr	210000.00	1251.29	1280.24	1273.68	1282.63	0.001587	12.82	17590.14	2759.51	0.49
Salt River	VaShly US	10.52	200yr	210000.00	1252.59	1280.17	1273.75	1283.53	0.002171	14.84	14560.87	2475.36	0.57
Salt River	VaShly US	10.56	200yr	210000.00	1254.28	1280.44	1273.90	1284.17	0.002292	15.50	13551.57	2629.46	0.59
Salt River	VaShly US	10.61	200yr	210000.00	1253.95	1281.32	1274.28	1284.72	0.002056	14.81	14256.88	2553.98	0.56
Salt River	VaShly US	10.67	200yr	210000.00	1256.89	1282.55	1274.54	1285.40	0.001714	13.58	15532.73	2244.37	0.51

HEC-RAS Plan: Post 50 Profile: 200yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	200yr	210000.00	1258.56	1283.36	1274.69	1285.95	0.001529	12.93	16328.26	2132.12	0.49
Salt River	VaShly US	10.78	200yr	210000.00	1259.27	1283.97	1274.88	1286.31	0.001462	12.28	17104.75	1950.81	0.47
Salt River	VaShly US	10.81	200yr	210000.00	1259.82	1284.25	1275.54	1286.60	0.001456	12.31	17111.68	1968.14	0.47
Salt River	VaShly US	10.86	200yr	210000.00	1258.71	1284.80	1275.80	1286.97	0.001337	11.83	17759.27	1853.28	0.45
Salt River	VaShly US	10.90	200yr	210000.00	1259.75	1285.28	1276.34	1287.29	0.001304	11.40	18458.34	1824.55	0.45
Salt River	VaShly US	10.95	200yr	210000.00	1260.76	1285.73	1276.50	1287.60	0.001215	10.98	19168.15	1890.95	0.43
Salt River	VaShly US	11.00	200yr	210000.00	1260.20	1285.78	1276.90	1288.04	0.001384	12.07	17411.97	1789.21	0.46
Salt River	VaShly US	11.05	200yr	210000.00	1261.52	1286.32	1277.52	1288.47	0.001353	11.77	17869.66	1905.98	0.45
Salt River	VaShly US	11.10	200yr	210000.00	1260.08	1286.61	1277.80	1288.77	0.001354	11.81	17818.00	1860.97	0.45
Salt River	VaShly US	11.14	200yr	210000.00	1257.45	1287.42	1278.02	1289.29	0.003329	11.00	19101.27	1826.63	0.42
Salt River	VaShly US	11.17	200yr	210000.00	1258.53	1287.73	1278.77	1289.62	0.001203	11.15	19380.05	1765.14	0.43
Salt River	VaShly US	11.25	200yr	210000.00	1259.69	1288.47	1279.50	1290.12	0.001092	10.56	20982.16	1599.15	0.41
Salt River	VaShly US	11.32	200yr	210000.00	1263.36	1289.32	1280.24	1290.56	0.000903	9.21	24381.00	1493.70	0.37
Salt River	VaShly US	11.41	200yr	210000.00	1263.36	1289.75	1281.23	1291.01	0.001048	9.01	23314.81	1381.67	0.39
Salt River	VaShly US	11.49	200yr	210000.00	1264.61	1290.08	1282.07	1291.56	0.001179	9.75	21536.31	1234.27	0.41
Salt River	VaShly US	11.62	200yr	210000.00	1264.20	1291.12	1282.23	1292.29	0.000942	8.67	24230.45	1521.92	0.37
Salt River	VaShly US	11.78	200yr	210000.00	1267.86	1291.78	1284.28	1293.35	0.001279	10.05	20898.99	1464.76	0.43
Salt River	VaShly US	11.88	200yr	210000.00	1268.50	1292.40	1285.21	1294.13	0.001481	10.56	19894.81	1583.14	0.46
Salt River	VaShly US	11.99	200yr	210000.00	1266.83	1293.48	1287.04	1295.00	0.001502	9.90	21329.10	1551.29	0.45
Salt River	VaShly US	12.06	200yr	210000.00	1266.90	1294.04	1287.80	1295.57	0.001547	9.92	21174.79	1469.00	0.46
Salt River	VaShly US	12.10	200yr	210000.00	1268.99	1294.29	1288.49	1296.07	0.001756	10.70	19631.41	1325.83	0.49
Salt River	VaShly US	12.22	200yr	210000.00	1268.81	1295.11	1288.95	1297.33	0.001875	11.98	17536.07	1044.83	0.52
Salt River	VaShly US	12.33	200yr	210000.00	1271.34	1295.87	1290.18	1298.76	0.002324	13.65	15381.24	886.05	0.58
Salt River	VaShly US	12.44	200yr	210000.00	1274.73	1297.67	1290.92	1300.00	0.001896	12.25	17174.13	1036.84	0.52
Salt River	VaShly US	12.55	200yr	210000.00	1275.93	1298.88	1292.03	1301.09	0.001800	11.93	17595.62	1026.14	0.51
Salt River	VaShly US	12.67	200yr	210000.00	1276.65	1300.08	1292.91	1302.16	0.001628	11.57	18153.41	1280.84	0.49
Salt River	VaShly US	12.77	200yr	210000.00	1276.88	1301.02	1293.80	1303.00	0.001592	11.30	18578.17	1325.64	0.48
Salt River	VaShly US	12.87	200yr	210000.00	1277.67	1302.32	1294.61	1303.82	0.001351	9.82	21375.98	1348.72	0.43
Salt River	VaShly US	12.97	200yr	210000.00	1279.11	1303.07	1295.64	1304.59	0.001343	9.92	21175.64	1309.28	0.43
Salt River	VaShly US	13.07	200yr	210000.00	1278.01	1303.72	1297.25	1305.33	0.001507	10.20	20593.35	1331.27	0.46
Salt River	VaShly US	13.19	200yr	210000.00	1282.08	1304.63	1298.14	1306.35	0.001640	10.54	19929.71	1310.07	0.48
Salt River	VaShly US	13.31	200yr	210000.00	1281.42	1305.59	1298.49	1307.49	0.001664	11.04	19013.14	1176.53	0.48
Salt River	VaShly US	13.44	200yr	210000.00	1283.61	1306.60	1299.52	1308.56	0.001554	11.22	18716.25	1073.38	0.47
Salt River	VaShly US	13.55	200yr	210000.00	1287.19	1307.65	1300.07	1309.46	0.001424	10.80	19444.19	1106.12	0.45
Salt River	VaShly US	13.64	200yr	210000.00	1287.63	1308.35	1301.32	1310.17	0.001510	10.85	19356.97	1133.24	0.46
Gilbert Mining P	Gilbert Mining P	0.04	200yr	112297.00	1189.85	1236.66	1208.25	1237.45	0.000191	7.16	15762.40	1599.83	0.19
Gilbert Mining P	Gilbert Mining P	0.08	200yr	112297.00	1179.35	1236.77	1202.23	1237.49	0.000156	6.84	16520.87	1674.52	0.17
Gilbert Mining P	Gilbert Mining P	0.11	200yr	112297.00	1182.14	1237.13	1197.85	1237.54	0.000096	5.15	22024.49	1842.61	0.13
Gilbert Mining P	Gilbert Mining P	0.15	200yr	112297.00	1180.10	1237.14	1198.13	1237.57	0.000114	5.24	22063.94	1933.41	0.14
Gilbert Mining P	Gilbert Mining P	0.19	200yr	112297.00	1178.66	1237.03	1208.75	1237.67	0.000221	6.48	17998.60	1196.88	0.19
Gilbert Mining P	Gilbert Mining P	0.22	200yr	112297.00	1186.92	1237.07	1206.22	1237.70	0.000189	6.39	17685.11	1140.45	0.18
Gilbert Mining P	Gilbert Mining P	0.25	200yr	112297.00	1181.98	1237.10	1201.96	1237.73	0.000202	6.39	17594.76	1002.32	0.19
Gilbert Mining P	Gilbert Mining P	0.29	200yr	112297.00	1181.95	1236.90	1204.48	1237.88	0.000299	8.02	14543.00	937.42	0.22
Gilbert Mining P	Gilbert Mining P	0.33	200yr	112297.00	1183.04	1237.74	1198.40	1237.98	0.000055	3.92	28988.47	938.31	0.10
Gilbert Mining P	Gilbert Mining P	0.37	200yr	112297.00	1185.24	1237.80	1202.20	1238.00	0.000050	3.56	32439.96	1603.20	0.10
Gilbert Mining P	Gilbert Mining P	0.43	200yr	112297.00	1179.91	1237.74	1201.47	1238.05	0.000083	4.53	24928.21	2253.74	0.12
Gilbert Mining P	Gilbert Mining P	0.48	200yr	112297.00	1183.06	1237.75	1202.54	1238.08	0.000097	4.68	24945.67	2412.98	0.13
Gilbert Mining P	Gilbert Mining P	0.53	200yr	112297.00	1202.03	1237.76	1217.17	1238.13	0.000157	4.94	23684.89	2556.21	0.16
Gilbert Mining P	Gilbert Mining P	0.55	200yr	112297.00	1203.21	1237.66	1218.38	1238.20	0.000246	5.93	19205.51	2116.73	0.20
Gilbert Mining P	Gilbert Mining P	0.60	200yr	112297.00	1199.67	1237.37	1221.04	1238.47	0.000536	8.45	13616.67	1737.23	0.29
Gilbert Mining P	Gilbert Mining P	0.66	200yr	112297.00	1204.07	1238.09	1218.63	1238.63	0.000244	5.88	19112.92	2028.77	0.20
Gilbert Mining P	Gilbert Mining P	0.70	200yr	112297.00	1206.48	1237.97	1220.46	1238.78	0.000410	7.22	15544.18	2072.42	0.26
Gilbert Mining P	Gilbert Mining P	0.74	200yr	112297.00	1206.94	1238.28	1220.73	1238.87	0.000282	6.14	18301.17	2130.66	0.21
Gilbert Mining P	Gilbert Mining P	0.77	200yr	112297.00	1206.46	1238.59	1220.10	1238.93	0.000166	4.70	23896.07	2213.60	0.16
Gilbert Mining P	Gilbert Mining P	0.83	200yr	112297.00	1208.33	1238.69	1220.12	1238.98	0.000147	4.32	25970.23	2344.22	0.15
Gilbert Mining P	Gilbert Mining P	0.88	200yr	112297.00	1208.45	1238.72	1220.30	1239.03	0.000168	4.44	25266.66	2615.93	0.16
Gilbert Mining P	Gilbert Mining P	0.91	200yr	112297.00	1206.13	1238.66	1222.02	1239.11	0.000234	5.34	21037.75	2428.43	0.19
Gilbert Mining P	Gilbert Mining P	0.95	200yr	112297.00	1208.41	1238.61	1222.11	1239.20	0.000303	6.15	18288.22	3071.19	0.22
Gilbert Mining P	Gilbert Mining P	0.97	200yr	112297.00	1209.76	1238.65	1222.96	1239.23	0.000304	6.13	18605.78	3509.79	0.22
Gilbert Mining P	Gilbert Mining P	0.99	200yr	112297.00	1208.61	1238.64	1222.67	1239.28	0.000337	6.44	17442.91	3378.31	0.23
Gilbert Mining P	Gilbert Mining P	1.02	200yr	112297.00	1210.66	1238.82	1222.04	1239.35	0.000291	5.60	19470.40	3334.95	0.21
Gilbert Mining P	Gilbert Mining P	1.05	200yr	112297.00	1209.65	1238.77	1223.20	1239.44	0.000327	6.63	17242.41	3020.46	0.23
Gilbert Mining P	Gilbert Mining P	1.08	200yr	112297.00	1198.40	1238.57	1224.86	1239.66	0.000637	8.42	13449.12	1908.82	0.30
Gilbert Mining P	Gilbert Mining P	1.11	200yr	112297.00	1194.11	1238.29	1223.55	1239.93	0.000809	10.29	10991.69	1257.89	0.34
Gilbert Mining P	Gilbert Mining P	1.14	200yr	112297.00	1201.44	1237.95	1225.22	1240.33	0.001196	12.36	9084.09	1194.53	0.42
Gilbert Mining P	Gilbert Mining P	1.17	200yr	112297.00	1221.53	1239.11	1239.11	1247.13	0.007128	22.72	4942.76	571.90	1.00
Gilbert Mining P	Gilbert Mining P	1.19	200yr	112297.00	1218.15	1239.78	1238.51	1248.03	0.005466	23.04	4873.55	599.88	0.90
Gilbert Mining P	Gilbert Mining P	1.21	200yr	112297.00	1222.00	1240.77	1240.77	1248.97	0.007094	22.99	4905.63	584.74	0.99

APPENDIX 9g

500-YEAR STANDARD TABLE 1

HEC-RAS Plan: Post 50 Profile: 500yr

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	0.00	500yr	246000.00	1143.99	1179.22	1160.92	1180.16	0.000383	7.77	31653.81	1084.88	0.25
Salt River	VaShly DS	0.11	500yr	246000.00	1144.67	1179.48	1162.32	1180.39	0.000393	7.66	32125.15	1150.10	0.26
Salt River	VaShly DS	0.23	500yr	246000.00	1147.96	1179.73	1163.54	1180.66	0.000426	7.77	31664.20	1178.93	0.26
Salt River	VaShly DS	0.36	500yr	246000.00	1148.61	1180.03	1163.82	1180.95	0.000418	7.70	31934.34	1193.19	0.26
Salt River	VaShly DS	0.51	500yr	246000.00	1150.89	1180.35	1164.93	1181.30	0.000452	7.83	31400.86	1214.21	0.27
Salt River	VaShly DS	0.65	500yr	246000.00	1151.13	1180.71	1165.03	1181.64	0.000434	7.74	31799.79	1215.90	0.27
Salt River	VaShly DS	0.78	500yr	246000.00	1150.83	1180.98	1166.57	1181.96	0.000501	7.94	30968.34	1259.50	0.28
Salt River	VaShly DS	0.89	500yr	246000.00	1153.10	1181.27	1167.63	1182.29	0.000547	8.12	30287.12	1279.48	0.29
Salt River	VaShly DS	1.00	500yr	246000.00	1151.27	1181.65	1167.15	1182.59	0.000479	7.78	31612.19	1290.71	0.28
Salt River	VaShly DS	1.12	500yr	246000.00	1152.15	1181.94	1167.88	1182.89	0.000489	7.79	31590.88	1307.75	0.28
Salt River	VaShly DS	1.22	500yr	246000.00	1153.46	1182.22	1168.57	1183.16	0.000510	7.79	31577.39	1347.26	0.28
Salt River	VaShly DS	1.30	500yr	246000.00	1150.51	1182.42	1169.14	1183.38	0.000527	7.84	31363.06	1355.28	0.29
Salt River	VaShly DS	1.39	500yr	246000.00	1150.03	1182.67	1168.88	1183.63	0.000509	7.87	31270.47	1310.62	0.28
Salt River	VaShly DS	1.52	500yr	246000.00	1153.77	1182.90	1171.05	1184.14	0.000752	8.93	27556.48	1272.24	0.34
Salt River	VaShly DS	1.65	500yr	246000.00	1155.27	1183.80	1171.62	1184.61	0.000511	7.21	34140.24	1650.20	0.28
Salt River	VaShly DS	1.76	500yr	246000.00	1155.56	1183.98	1172.81	1185.00	0.000667	8.20	30914.69	1953.05	0.32
Salt River	VaShly DS	1.80	500yr	246000.00	1158.65	1183.92	1173.89	1185.26	0.000923	9.31	26424.06	1694.68	0.37
Salt River	VaShly DS	1.83	500yr	246000.00	1147.74	1183.94	1174.47	1185.49	0.001071	9.97	24667.68	1751.31	0.40
Salt River	VaShly DS	1.86	500yr	246000.00	1154.19	1184.04	1175.10	1185.72	0.001158	10.42	23614.29	1815.67	0.41
Salt River	VaShly DS	1.89	500yr	246000.00	1156.29	1184.19	1175.27	1185.89	0.001153	10.48	23470.38	1938.41	0.41
Salt River	VaShly DS	1.95	500yr	246000.00	1156.57	1184.31	1176.09	1186.52	0.001656	11.92	20634.27	2183.59	0.49
Salt River	VaShly DS	2.02	500yr	246000.00	1160.11	1184.42	1177.12	1187.38	0.001858	13.81	17819.25	2395.40	0.53
Salt River	VaShly DS	2.04	500yr	246000.00	1158.56	1184.60	1178.74	1187.65	0.002255	14.00	17565.85	2518.21	0.57
Salt River	VaShly DS	2.07	500yr	246000.00	1156.21	1185.61	1177.44	1188.02	0.001528	12.45	19760.38	2563.38	0.48
Salt River	VaShly DS	2.10	500yr	246000.00	1158.18	1185.84	1178.55	1188.26	0.001677	12.49	19699.00	2624.55	0.50
Salt River	VaShly DS	2.12	500yr	246000.00	1153.95	1186.10	1174.37	1188.42	0.001399	12.21	20152.03	2574.69	0.46
Salt River	VaShly DS	2.13	500yr	246000.00	1153.90	1186.04	1175.67	1188.59	0.001526	12.82	19192.78	2533.96	0.48
Salt River	VaShly DS	2.21	500yr	246000.00	1156.97	1186.02	1180.79	1190.04	0.003353	16.08	15295.97	2195.79	0.69
Salt River	VaShly DS	2.29	500yr	246000.00	1170.86	1191.80	1191.80	1198.40	0.007585	20.62	11930.29	1384.13	1.00
Salt River	VaShly DS	2.31		Bridge									
Salt River	VaShly DS	2.33	500yr	246000.00	1180.00	1203.33	1198.32	1206.62	0.002652	14.55	16905.10	1798.34	0.62
Salt River	VaShly DS	2.38	500yr	246000.00	1176.44	1205.28	1196.50	1207.38	0.001390	11.63	21150.98	2703.77	0.46
Salt River	VaShly DS	2.40	500yr	246000.00	1177.52	1205.43	1196.66	1207.59	0.001340	11.82	21198.87	2299.42	0.45
Salt River	VaShly DS	2.41	500yr	246000.00	1177.08	1205.46	1196.72	1207.66	0.001367	11.93	20897.33	2152.79	0.46
Salt River	VaShly DS	2.42	500yr	246000.00	1176.40	1205.50	1196.80	1207.72	0.001395	11.95	20684.43	1965.71	0.46
Salt River	VaShly DS	2.47	500yr	246000.00	1177.74	1205.86	1197.29	1208.09	0.001433	12.00	20501.91	2141.35	0.47
Salt River	VaShly DS	2.53	500yr	246000.00	1177.40	1206.48	1197.83	1208.54	0.001319	11.52	21354.28	2613.74	0.45
Salt River	VaShly DS	2.59	500yr	246000.00	1181.61	1206.83	1198.37	1209.06	0.001502	11.98	20531.80	2606.02	0.47
Salt River	VaShly DS	2.65	500yr	246000.00	1183.93	1207.17	1198.69	1209.54	0.001478	12.36	19941.20	1722.11	0.48
Salt River	VaShly DS	2.71	500yr	246000.00	1183.50	1208.16	1199.12	1210.07	0.001209	11.11	22269.59	1921.81	0.43
Salt River	VaShly DS	2.78	500yr	246000.00	1183.83	1208.75	1199.36	1210.46	0.001102	10.51	23468.08	1675.82	0.41
Salt River	VaShly DS	2.87	500yr	246000.00	1174.74	1208.85	1200.61	1211.39	0.001616	12.78	19251.40	1182.43	0.50
Salt River	VaShly DS	2.98	500yr	246000.00	1178.35	1210.39	1199.01	1212.21	0.001006	10.85	23063.98	3066.21	0.40
Salt River	VaShly DS	3.10	500yr	246000.00	1174.85	1210.74	1202.59	1213.17	0.001604	12.51	19667.94	3074.00	0.49
Salt River	VaShly DS	3.23	500yr	246000.00	1181.67	1211.75	1204.00	1214.43	0.001745	13.14	18720.25	4601.00	0.51
Salt River	VaShly DS	3.35	500yr	246000.00	1184.67	1213.32	1203.38	1215.40	0.001260	11.56	21277.63	4776.08	0.44
Salt River	VaShly DS	3.46	500yr	246000.00	1183.72	1215.06	1203.75	1216.20	0.000686	8.62	28910.07	4556.33	0.33
Salt River	VaShly DS	3.48		Bridge									
Salt River	VaShly DS	3.50	500yr	246000.00	1185.13	1215.33	1204.58	1216.56	0.000772	8.90	27639.19	5328.99	0.34
Salt River	VaShly DS	3.64	500yr	246000.00	1185.28	1215.92	1206.55	1217.40	0.001134	9.76	25200.25	3979.29	0.41
Salt River	VaShly DS	3.76	500yr	246000.00	1185.23	1216.65	1205.83	1218.03	0.000870	9.42	26649.53	3737.09	0.36
Salt River	VaShly DS	3.89	500yr	246000.00	1181.01	1217.75	1203.01	1218.45	0.000376	6.78	36956.70	4158.51	0.24
Salt River	VaShly DS	4.04	500yr	246000.00	1186.07	1218.13	1205.37	1218.77	0.000411	6.52	38537.51	4446.81	0.25
Salt River	VaShly DS	4.09	500yr	246000.00	1186.77	1218.13	1206.60	1218.96	0.000535	7.37	33771.28	4113.51	0.29
Salt River	VaShly DS	4.15	500yr	246000.00	1185.73	1218.05	1207.62	1219.30	0.000799	8.98	27428.48	3231.34	0.35
Salt River	VaShly DS	4.22	500yr	246000.00	1188.00	1218.54	1205.95	1219.55	0.000574	8.01	30664.66	2273.97	0.30
Salt River	VaShly DS	4.27	500yr	246000.00	1188.10	1218.52	1207.99	1219.83	0.000813	9.29	27207.71	1860.72	0.35
Salt River	VaShly DS	4.31	500yr	246000.00	1193.87	1218.53	1209.20	1220.12	0.001089	10.30	24365.36	1768.19	0.40
Salt River	VaShly DS	4.47	500yr	246000.00	1190.75	1219.56	1210.32	1221.00	0.000985	9.82	34513.43	2216.46	0.39
Salt River	VaShly DS	4.59	500yr	246000.00	1190.04	1220.21	1211.13	1221.67	0.001018	9.90	30885.37	2359.69	0.39
Salt River	VaShly DS	4.74	500yr	246000.00	1189.62	1220.91	1212.71	1222.88	0.001598	11.47	26489.33	2419.49	0.48
Salt River	VaShly DS	4.88	500yr	246000.00	1195.43	1221.83	1216.08	1224.19	0.001629	12.58	23981.26	2284.62	0.53
Salt River	VaShly DS	5.03	500yr	246000.00	1197.77	1222.96	1216.99	1225.74	0.002043	13.66	23054.82	1803.34	0.55
Salt River	VaShly DS	5.15	500yr	246000.00	1198.09	1224.49	1217.23	1226.96	0.001662	12.85	24284.94	1672.65	0.50
Salt River	VaShly DS	5.26	500yr	246000.00	1184.07	1225.23	1218.80	1228.15	0.002015	14.00	23119.48	1460.86	0.55
Salt River	VaShly DS	5.40	500yr	246000.00	1196.34	1226.66	1219.53	1229.62	0.002003	14.02	18212.88	1003.84	0.55
Salt River	VaShly DS	5.47	500yr	246000.00	1199.26	1227.93	1220.34	1230.39	0.001668	12.62	19740.04	1053.42	0.50
Salt River	VaShly DS	5.53	500yr	246000.00	1199.29	1228.24	1221.57	1230.99	0.002043	13.30	18491.31	999.31	0.55
Salt River	VaShly DS	5.56	500yr	246000.00	1201.24	1228.67	1220.85	1231.36	0.001825	13.16	18686.87	944.95	0.52
Salt River	VaShly DS	5.60	500yr	246000.00	1201.31	1229.00	1221.75	1231.75	0.001833	13.32	18475.21	918.36	0.52
Salt River	VaShly DS	5.65	500yr	246000.00	1202.22	1229.69	1222.06	1232.27	0.001743	12.90	19076.24	960.35	0.51
Salt River	VaShly DS	5.69	500yr	246000.00	1202.94	1229.81	1221.63	1232.75	0.001735	13.74	17898.60	870.71	0.51
Salt River	VaShly DS	5.73	500yr	246000.00	1200.44	1230.73	1219.95	1233.05	0.001218	12.21	20149.25	830.03	0.44
Salt River	VaShly DS	5.76	500yr	246000.00	1198.50	1231.08	1224.45	1233.30	0.001237	11.97	20548.49	1021.70	0.44
Salt River	VaShly DS	5.80	500yr	246000.00	1199.64	1231.30	1224.76	1233.53	0.001293	12.01	20486.25	979.83	0.44
Salt River	VaShly DS	5.82	500yr	246000.00	1197.44	1231.97	1222.09	1233.70	0.000875	10.53	23365.79	1035.48	0.37
Salt River	VaShly DS	5.84	500yr	246000.00	1187.25	1233.01	1221.48	1233.83	0.000270	7.27	33848.19	1249.06	0.21
Salt River	VaShly DS	5.85	500yr	246000.00	1203.05	1233.05	1224.17	1234.73	0.019541	10.41	23626.72	1283.87	0.38
Salt River	VaShly DS	5.86	500yr	246000.00	1197.04	1233.65	1223.72	1234.85	0.000605	8.78	28004.39	1448.34	0.31
Salt River	VaShly DS	5.87	500yr	246000.00	1196.82	1234.03	1223.77	1234.91	0.000462	7.52	32703.93	1709.53	0.27
Salt River	VaShly DS	5.88	500yr	246000.00	1194.54	1234.22	1223.51	1234.94	0.000365	6.89	36558.97	2038.24	0.24
Salt River	VaShly DS	5.91	500yr	246000.00	1201.09	1234.15	1223.81	1235.08	0.000603	7.81	31956.72	2042.55	0.30
Salt River	VaShly DS	5.93	500yr	246000.00	1199.72	1234.10	1221.58	1235.21	0.000722	8.54	29085.09	1989.54	0.33
Salt River	VaShly DS	5.95	500yr	246000.00	1195.30	1234.12	1219.72	1235.29	0.000702	8.69	28315.75	1652.60	0.33
Salt River	VaShly DS	5.97	500yr	246000.00	1198.44	1233.94	1223.57	1235.55	0.001102	10.19	24147.46	1451.98	0.40
Salt River	VaShly DS	5.99	500yr	246000.00	1198.12	1234.15	1223.18	1235.66	0.000978	9.86	24943.63	1631.43	0.38
Salt River	VaShly DS	6.01	500yr	246000.00	1194.75	1234.82	1217.60	1235.77	0.000385	7.82	31459.16	1753.45	0.25

HEC-RAS Plan: Post 50 Profile: 500yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly DS	6.05	500yr	246000.00	1201.88	1234.43	1224.37	1236.12	0.001007	10.43	23583.71	1738.58	0.39
Salt River	VaShly DS	6.09	500yr	246000.00	1201.00	1234.68	1225.03	1236.41	0.001197	10.68	24659.71	1970.71	0.40
Salt River	VaShly DS	6.14	500yr	246000.00	1201.32	1235.13	1224.82	1236.72	0.001208	10.26	26113.80	2221.44	0.39
Salt River	VaShly DS	6.18	500yr	246000.00	1188.55	1235.75	1225.04	1236.95	0.000646	8.89	29661.70	2516.66	0.32
Salt River	VaShly DS	6.22	500yr	246000.00	1198.32	1235.95	1227.31	1237.10	0.000794	8.69	30154.32	2448.20	0.31
Salt River	VaShly DS	6.27	500yr	246000.00	1197.76	1235.65	1227.71	1237.76	0.002155	11.80	22431.57	2517.76	0.44
Salt River	VaShly DS	6.32	500yr	246000.00	1199.77	1235.67	1226.09	1238.59	0.001850	13.88	19252.72	2044.01	0.49
Salt River	VaShly DS	6.35	500yr	246000.00	1202.10	1236.06	1225.27	1238.83	0.001810	13.50	19856.62	2880.46	0.46
Salt River	VaShly DS	6.38	500yr	246000.00	1201.42	1236.65	1225.43	1239.23	0.002558	13.03	20009.60	2650.81	0.44
Salt River	VaShly DS	6.40	500yr	246000.00	1197.72	1236.73	1226.38	1239.61	0.001413	13.77	18831.52	2805.68	0.48
Salt River	VaShly at Pit	6.45	500yr	121316.00	1216.16	1237.91	1234.72	1240.12	0.002836	12.21	11166.10	1278.10	0.60
Salt River	VaShly at Pit	6.50	500yr	121316.00	1220.36	1238.69	1235.01	1240.84	0.002702	12.05	11433.71	1504.59	0.59
Salt River	VaShly at Pit	6.53	500yr	121316.00	1221.34	1239.27	1235.09	1241.30	0.002374	11.72	12018.51	1353.91	0.56
Salt River	VaShly at Pit	6.56	500yr	121316.00	1221.47	1239.51	1235.79	1241.75	0.002694	12.30	11537.69	1367.79	0.59
Salt River	VaShly at Pit	6.62	500yr	121316.00	1222.55	1240.24	1237.13	1242.81	0.003067	13.17	11218.71	1439.73	0.63
Salt River	VaShly at Pit	6.69	500yr	121316.00	1222.97	1241.31	1238.19	1243.95	0.003064	13.35	11372.64	1507.56	0.64
Salt River	VaShly at Pit	6.75	500yr	121316.00	1226.09	1242.50	1239.21	1244.89	0.002896	12.69	11492.31	1606.22	0.62
Salt River	VaShly at Pit	6.80	500yr	121316.00	1227.73	1243.61	1240.28	1245.71	0.002772	11.91	13233.30	1757.80	0.60
Salt River	VaShly at Pit	6.85	500yr	121316.00	1229.81	1244.33	1241.14	1246.35	0.002753	11.68	14090.79	1678.99	0.59
Salt River	VaShly at Pit	6.91	500yr	121316.00	1229.03	1245.82	1240.42	1246.99	0.001378	8.89	15923.72	1695.85	0.43
Salt River	VaShly at Pit	6.96	500yr	121316.00	1229.37	1245.97	1242.59	1247.80	0.002680	11.11	15329.17	1667.54	0.58
Salt River	VaShly at Pit	6.99	500yr	121316.00	1229.94	1246.77	1242.78	1248.20	0.002197	9.82	16549.59	1807.00	0.52
Salt River	VaShly at Pit	7.01	500yr	121316.00	1229.89	1247.61	1242.27	1248.44	0.001259	7.53	16753.79	1823.73	0.40
Salt River	VaShly at Pit	7.03	500yr	121316.00	1230.67	1247.70	1242.08	1248.52	0.001253	7.59	16812.95	1786.69	0.40
Salt River	VaShly at Pit	7.04	500yr	121316.00	1230.92	1247.79	1242.31	1248.63	0.001581	7.48	16491.86	1771.63	0.40
Salt River	VaShly at Pit	7.06	500yr	121316.00	1231.36	1247.88	1242.53	1248.75	0.001344	7.86	16475.34	1762.83	0.41
Salt River	VaShly at Pit	7.07	500yr	121316.00	1230.65	1248.10	1242.55	1248.85	0.001127	7.35	17778.74	1736.22	0.38
Salt River	VaShly at Pit	7.10	500yr	121316.00	1231.41	1248.22	1243.15	1249.08	0.001225	7.86	16705.69	1851.34	0.39
Salt River	VaShly at Pit	7.17	500yr	121316.00	1230.40	1248.65	1243.30	1249.51	0.001173	7.67	16444.51	1950.46	0.39
Salt River	VaShly at Pit	7.24	500yr	121316.00	1235.15	1249.08	1244.57	1250.10	0.001529	8.20	15015.07	2041.53	0.44
Salt River	VaShly at Pit	7.28	500yr	121316.00	1234.69	1249.37	1245.77	1250.76	0.002252	9.45	12865.52	2139.36	0.52
Salt River	VaShly US	7.32	500yr	246000.00	1229.87	1252.32	1242.87	1253.27	0.000672	8.22	37127.55	8173.93	0.32
Salt River	VaShly US	7.36	500yr	246000.00	1229.41	1252.40	1242.93	1253.46	0.000729	8.61	35685.30	7420.01	0.33
Salt River	VaShly US	7.40	500yr	246000.00	1230.97	1252.42	1243.25	1253.77	0.000943	9.54	29002.47	7349.82	0.38
Salt River	VaShly US	7.44	500yr	246000.00	1231.22	1252.58	1243.14	1254.01	0.000975	9.61	25607.89	7164.41	0.38
Salt River	VaShly US	7.45		Bridge									
Salt River	VaShly US	7.47	500yr	246000.00	1231.96	1253.13	1243.55	1254.58	0.000966	9.66	25461.35	7247.70	0.38
Salt River	VaShly US	7.55	500yr	246000.00	1232.43	1253.48	1244.57	1255.09	0.001117	10.18	24166.04	6932.28	0.41
Salt River	VaShly US	7.63	500yr	250000.00	1231.48	1253.53	1245.75	1255.87	0.001595	12.29	20708.02	5353.16	0.49
Salt River	VaShly US	7.71	500yr	250000.00	1231.90	1254.19	1246.22	1256.63	0.001547	12.57	20844.70	5084.86	0.49
Salt River	VaShly US	7.83	500yr	250000.00	1232.46	1255.13	1247.32	1257.64	0.001649	12.75	20989.08	4195.59	0.50
Salt River	VaShly US	7.91	500yr	250000.00	1231.30	1255.28	1249.11	1258.81	0.002287	15.18	18605.78	3263.06	0.59
Salt River	VaShly US	8.01	500yr	250000.00	1231.01	1257.69	1249.44	1259.88	0.001469	12.01	23331.66	4190.02	0.47
Salt River	VaShly US	8.10	500yr	250000.00	1227.11	1257.93	1253.83	1260.93	0.002277	15.38	19957.72	4158.39	0.59
Salt River	VaShly US	8.20	500yr	250000.00	1233.14	1260.27	1252.00	1261.87	0.001193	11.48	29806.52	5058.01	0.43
Salt River	VaShly US	8.29	500yr	250000.00	1234.21	1260.93	1252.34	1262.35	0.000951	10.11	26585.82	5325.43	0.38
Salt River	VaShly US	8.36	500yr	250000.00	1233.96	1261.49	1253.28	1262.73	0.000947	9.93	31312.05	5517.28	0.38
Salt River	VaShly US	8.44	500yr	250000.00	1230.19	1261.78	1255.37	1263.44	0.001723	11.80	30709.59	4916.55	0.50
Salt River	VaShly US	8.52	500yr	250000.00	1227.75	1262.95	1253.51	1263.96	0.000758	9.26	44472.02	5059.70	0.34
Salt River	VaShly US	8.57	500yr	250000.00	1234.23	1262.93	1255.82	1264.45	0.001245	11.34	34638.74	4578.34	0.43
Salt River	VaShly US	8.60	500yr	250000.00	1227.61	1263.05	1256.01	1264.69	0.001391	11.71	33634.33	4258.90	0.45
Salt River	VaShly US	8.63	500yr	250000.00	1231.84	1262.82	1258.20	1265.16	0.002424	14.12	29062.12	3877.75	0.59
Salt River	VaShly US	8.68	500yr	250000.00	1233.08	1263.48	1257.97	1265.78	0.001946	14.07	32395.47	2977.27	0.54
Salt River	VaShly US	8.74	500yr	250000.00	1231.64	1262.99	1261.39	1267.24	0.003834	19.07	24253.84	2139.75	0.75
Salt River	VaShly US	8.77	500yr	250000.00	1234.72	1265.27	1260.81	1267.95	0.002534	15.18	31691.44	2686.90	0.61
Salt River	VaShly US	8.81	500yr	250000.00	1231.64	1266.51	1261.01	1268.44	0.001572	12.92	35366.83	3199.53	0.49
Salt River	VaShly US	8.85	500yr	250000.00	1232.30	1266.99	1261.51	1268.76	0.001359	12.35	35623.44	3352.08	0.46
Salt River	VaShly US	8.88	500yr	250000.00	1233.54	1267.16	1260.85	1269.01	0.001413	12.73	36907.62	3129.92	0.47
Salt River	VaShly US	8.92	500yr	250000.00	1235.52	1267.21	1261.51	1269.38	0.001536	13.81	37038.56	2584.56	0.49
Salt River	VaShly US	8.98	500yr	250000.00	1234.94	1267.25	1262.97	1270.14	0.001941	15.76	28796.26	2633.62	0.56
Salt River	VaShly US	9.04	500yr	250000.00	1237.83	1267.14	1260.10	1271.23	0.002749	18.90	26248.07	2151.84	0.66
Salt River	VaShly US	9.13	500yr	250000.00	1238.40	1269.85	1262.94	1272.31	0.001471	14.50	27740.92	4136.57	0.49
Salt River	VaShly US	9.20	500yr	250000.00	1239.36	1271.09	1264.00	1272.86	0.001087	11.98	26498.34	4678.20	0.42
Salt River	VaShly US	9.26	500yr	250000.00	1240.07	1271.27	1265.04	1273.34	0.001263	13.05	26202.73	4799.93	0.45
Salt River	VaShly US	9.33	500yr	250000.00	1238.28	1271.37	1267.06	1274.03	0.001643	15.17	25072.98	4784.07	0.51
Salt River	VaShly US	9.39	500yr	250000.00	1235.91	1271.09	1271.09	1276.00	0.003186	20.89	24228.12	4595.29	0.70
Salt River	VaShly US	9.44	500yr	250000.00	1242.19	1274.74	1266.61	1276.73	0.001163	13.29	36973.76	6128.78	0.44
Salt River	VaShly US	9.49	500yr	250000.00	1240.69	1275.88	1264.72	1276.98	0.000665	9.71	45147.96	6788.17	0.33
Salt River	VaShly US	9.55	500yr	250000.00	1243.76	1276.63	1264.74	1277.18	0.000353	7.26	53871.07	8126.70	0.24
Salt River	VaShly US	9.59	500yr	250000.00	1240.32	1276.80	1264.96	1277.26	0.000299	6.68	58189.85	8450.07	0.22
Salt River	VaShly US	9.61	500yr	250000.00	1243.87	1276.81	1265.76	1277.31	0.000341	7.01	53656.67	8322.86	0.24
Salt River	VaShly US	9.64	500yr	250000.00	1245.06	1276.83	1266.43	1277.37	0.000377	7.21	48763.23	8231.31	0.25
Salt River	VaShly US	9.67	500yr	250000.00	1244.78	1276.83	1266.54	1277.44	0.000404	7.58	44676.15	7847.72	0.26
Salt River	VaShly US	9.73	500yr	250000.00	1246.24	1276.66	1267.47	1277.79	0.000783	9.57	31474.61	6644.08	0.35
Salt River	VaShly US	9.80	500yr	250000.00	1246.16	1276.49	1268.70	1278.37	0.001153	12.07	24284.59	5718.71	0.43
Salt River	VaShly US	9.87	500yr	250000.00	1248.17	1276.53	1269.57	1279.03	0.001520	13.32	20555.24	3081.36	0.49
Salt River	VaShly US	9.96	500yr	250000.00	1249.51	1276.98	1271.47	1279.94	0.001921	14.62	19256.25	3438.53	0.55
Salt River	VaShly US	10.06	500yr	250000.00	1250.89	1278.59	1272.95	1281.00	0.001630	13.24	21301.55	3182.93	0.50
Salt River	VaShly US	10.18	500yr	250000.00	1250.99	1279.36	1272.33	1282.23	0.001965	13.57	18417.31	2732.65	0.54
Salt River	VaShly US	10.26	500yr	250000.00	1251.97	1280.42	1271.80	1283.03	0.001567	12.98	19352.69	2836.34	0.49
Salt River	VaShly US	10.36	500yr	250000.00	1249.97	1281.59	1270.98	1283.75	0.001153	11.96	21582.04	3074.66	0.43
Salt River	VaShly US	10.41	500yr	250000.00	1254.59	1281.62	1272.00	1284.21	0.001399	13.07	19774.69	2785.87	0.47
Salt River	VaShly US	10.46	500yr	250000.00	1251.29	1281.86	1275.45	1284.67	0.001701	13.95	19300.94	2840.33	0.51
Salt River	VaShly US	10.52	500yr	250000.00	1252.59	1281.64	1276.01	1285.73	0.002436	16.39	15726.87	2495.91	0.61
Salt River	VaShly US	10.56	500yr	250000.00	1254.28	1281.84	1275.86	1286.49	0.002640	17.31	14443.50	2678.09	0.64
Salt River	VaShly US	10.61	500yr	250000.00	1253.95	1283.00	1276.19	1287.13	0.002273	16.33	15403.18	2651.70	0.60
Salt River	VaShly US	10.67	500yr	250000.00	1256.89	1284.49	1276.33	1287.89	0.001838	14.81	16957.03	2643.14	0.54

HEC-RAS Plan: Post 50 Profile: 500yr (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Salt River	VaShly US	10.73	500yr	250000.00	1258.56	1285.43	1276.47	1288.47	0.001609	14.03	17938.02	2292.94	0.51
Salt River	VaShly US	10.78	500yr	250000.00	1259.27	1286.15	1276.59	1288.86	0.001515	13.23	18941.08	2149.53	0.49
Salt River	VaShly US	10.81	500yr	250000.00	1259.82	1286.44	1277.22	1289.15	0.001508	13.24	18976.04	1998.91	0.49
Salt River	VaShly US	10.86	500yr	250000.00	1258.71	1287.02	1277.38	1289.54	0.001368	12.74	19631.81	1861.33	0.47
Salt River	VaShly US	10.90	500yr	250000.00	1259.75	1287.57	1277.91	1289.87	0.001306	12.18	20579.60	1878.10	0.45
Salt River	VaShly US	10.95	500yr	250000.00	1260.76	1288.05	1278.06	1290.18	0.001213	11.71	21427.10	1964.08	0.44
Salt River	VaShly US	11.00	500yr	250000.00	1260.20	1288.04	1278.53	1290.65	0.001413	12.99	19278.76	1805.60	0.47
Salt River	VaShly US	11.05	500yr	250000.00	1261.52	1288.63	1279.15	1291.10	0.001356	12.60	19877.78	2032.65	0.46
Salt River	VaShly US	11.10	500yr	250000.00	1260.08	1288.93	1279.40	1291.40	0.001370	12.65	19808.31	1925.48	0.46
Salt River	VaShly US	11.14	500yr	250000.00	1257.45	1289.79	1279.76	1291.93	0.003287	11.67	21329.14	1855.36	0.42
Salt River	VaShly US	11.17	500yr	250000.00	1258.53	1290.15	1280.77	1292.25	0.001172	11.79	21820.66	1795.61	0.43
Salt River	VaShly US	11.25	500yr	250000.00	1259.69	1290.95	1281.60	1292.73	0.001035	11.03	23899.61	1616.12	0.40
Salt River	VaShly US	11.32	500yr	250000.00	1263.36	1291.86	1282.17	1293.15	0.000820	9.47	28185.79	1508.55	0.36
Salt River	VaShly US	11.41	500yr	250000.00	1263.36	1292.22	1282.42	1293.58	0.000952	9.35	26744.18	1394.53	0.38
Salt River	VaShly US	11.49	500yr	250000.00	1264.61	1292.49	1283.30	1294.10	0.001102	10.19	24523.49	1249.50	0.41
Salt River	VaShly US	11.62	500yr	250000.00	1264.20	1293.51	1283.43	1294.78	0.000870	9.06	27600.52	1584.44	0.36
Salt River	VaShly US	11.78	500yr	250000.00	1267.86	1294.07	1285.51	1295.80	0.001200	10.55	23697.57	1512.28	0.42
Salt River	VaShly US	11.88	500yr	250000.00	1268.50	1294.63	1286.50	1296.54	0.001382	11.07	22619.42	1605.39	0.45
Salt River	VaShly US	11.99	500yr	250000.00	1266.83	1295.74	1288.21	1297.34	0.001337	10.17	24939.08	1642.84	0.44
Salt River	VaShly US	12.06	500yr	250000.00	1266.90	1296.23	1288.93	1297.86	0.001407	10.24	24467.14	1571.33	0.45
Salt River	VaShly US	12.10	500yr	250000.00	1268.99	1296.41	1289.65	1298.33	0.001613	11.13	22544.31	1549.82	0.48
Salt River	VaShly US	12.22	500yr	250000.00	1268.81	1297.08	1290.32	1299.60	0.001872	12.75	19607.09	1213.11	0.52
Salt River	VaShly US	12.33	500yr	250000.00	1271.34	1297.76	1291.77	1301.07	0.002328	14.62	17301.67	1188.77	0.59
Salt River	VaShly US	12.44	500yr	250000.00	1274.73	1299.69	1292.45	1302.31	0.001891	13.01	19325.14	1089.49	0.53
Salt River	VaShly US	12.55	500yr	250000.00	1275.93	1300.92	1293.58	1303.41	0.001826	12.67	19799.90	1152.53	0.52
Salt River	VaShly US	12.67	500yr	250000.00	1276.65	1302.13	1294.36	1304.49	0.001643	12.32	20295.62	1311.29	0.49
Salt River	VaShly US	12.77	500yr	250000.00	1276.88	1303.09	1295.23	1305.33	0.001564	12.01	20816.65	1342.73	0.48
Salt River	VaShly US	12.87	500yr	250000.00	1277.67	1304.50	1295.90	1306.13	0.001281	10.27	24349.22	1381.57	0.43
Salt River	VaShly US	12.97	500yr	250000.00	1279.11	1305.20	1296.86	1306.88	0.001290	10.42	23994.09	1336.21	0.43
Salt River	VaShly US	13.07	500yr	250000.00	1278.01	1305.82	1298.43	1307.59	0.001431	10.68	23416.16	1358.95	0.45
Salt River	VaShly US	13.19	500yr	250000.00	1282.08	1306.66	1299.50	1308.56	0.001550	11.06	22610.20	1325.06	0.47
Salt River	VaShly US	13.31	500yr	250000.00	1281.42	1307.56	1299.91	1309.68	0.001665	11.71	21357.25	1211.64	0.49
Salt River	VaShly US	13.44	500yr	250000.00	1283.61	1308.54	1300.89	1310.78	0.001571	12.02	20799.91	1084.18	0.48
Salt River	VaShly US	13.55	500yr	250000.00	1287.19	1309.62	1301.48	1311.69	0.001434	11.56	21630.97	1116.60	0.46
Salt River	VaShly US	13.64	500yr	250000.00	1287.63	1310.32	1302.63	1312.40	0.001499	11.57	21602.84	1140.91	0.47
Gilbert Mining P	Gilbert Mining P	0.04	500yr	124684.00	1189.85	1239.01	1209.29	1239.88	0.000197	7.53	16635.71	1609.08	0.20
Gilbert Mining P	Gilbert Mining P	0.08	500yr	124684.00	1179.35	1239.12	1203.41	1239.93	0.000164	7.23	17343.95	1683.51	0.18
Gilbert Mining P	Gilbert Mining P	0.11	500yr	124684.00	1182.14	1239.53	1198.79	1239.98	0.000100	5.43	23214.89	1852.74	0.14
Gilbert Mining P	Gilbert Mining P	0.15	500yr	124684.00	1180.10	1239.55	1199.22	1240.01	0.000115	5.47	23656.89	1945.81	0.14
Gilbert Mining P	Gilbert Mining P	0.19	500yr	124684.00	1178.66	1239.43	1209.97	1240.11	0.000215	6.67	19458.51	1200.11	0.19
Gilbert Mining P	Gilbert Mining P	0.22	500yr	124684.00	1186.92	1239.46	1207.43	1240.15	0.000190	6.67	18846.30	1145.29	0.19
Gilbert Mining P	Gilbert Mining P	0.25	500yr	124684.00	1181.98	1239.49	1203.28	1240.18	0.000202	6.66	18774.46	1010.23	0.19
Gilbert Mining P	Gilbert Mining P	0.29	500yr	124684.00	1181.95	1239.28	1205.90	1240.33	0.000300	8.34	15724.25	941.69	0.22
Gilbert Mining P	Gilbert Mining P	0.33	500yr	124684.00	1183.04	1240.17	1199.32	1240.43	0.000057	4.12	30683.39	964.04	0.10
Gilbert Mining P	Gilbert Mining P	0.37	500yr	124684.00	1185.24	1240.24	1203.07	1240.45	0.000051	3.72	34514.63	1611.84	0.10
Gilbert Mining P	Gilbert Mining P	0.43	500yr	124684.00	1179.91	1240.16	1202.36	1240.51	0.000085	4.75	26420.64	2264.66	0.12
Gilbert Mining P	Gilbert Mining P	0.48	500yr	124684.00	1183.06	1240.18	1203.54	1240.54	0.000096	4.87	26774.44	2434.55	0.13
Gilbert Mining P	Gilbert Mining P	0.53	500yr	124684.00	1202.03	1240.20	1217.85	1240.58	0.000146	5.01	25956.47	2576.18	0.16
Gilbert Mining P	Gilbert Mining P	0.55	500yr	124684.00	1203.21	1240.10	1219.13	1240.65	0.000232	6.02	21097.45	2235.79	0.19
Gilbert Mining P	Gilbert Mining P	0.60	500yr	124684.00	1199.67	1239.81	1222.03	1240.90	0.000490	8.48	15311.66	2136.23	0.28
Gilbert Mining P	Gilbert Mining P	0.66	500yr	124684.00	1204.07	1240.50	1219.41	1241.06	0.000227	5.98	20836.27	2487.43	0.20
Gilbert Mining P	Gilbert Mining P	0.70	500yr	124684.00	1206.48	1240.38	1221.35	1241.21	0.000408	7.30	17077.02	2328.90	0.26
Gilbert Mining P	Gilbert Mining P	0.74	500yr	124684.00	1206.94	1240.69	1221.44	1241.29	0.000262	6.22	20041.18	2256.10	0.21
Gilbert Mining P	Gilbert Mining P	0.77	500yr	124684.00	1206.46	1241.00	1220.74	1241.35	0.000153	4.77	26163.48	2319.56	0.16
Gilbert Mining P	Gilbert Mining P	0.83	500yr	124684.00	1208.33	1241.11	1220.75	1241.40	0.000134	4.37	28523.97	2511.95	0.15
Gilbert Mining P	Gilbert Mining P	0.88	500yr	124684.00	1208.45	1241.13	1220.93	1241.44	0.000151	4.47	27913.07	2652.66	0.16
Gilbert Mining P	Gilbert Mining P	0.91	500yr	124684.00	1206.13	1241.07	1222.62	1241.52	0.000211	5.39	23155.22	2560.62	0.19
Gilbert Mining P	Gilbert Mining P	0.95	500yr	124684.00	1208.41	1241.01	1222.84	1241.60	0.000273	6.22	20108.12	3179.86	0.21
Gilbert Mining P	Gilbert Mining P	0.97	500yr	124684.00	1209.76	1241.05	1223.58	1241.63	0.000271	6.16	20546.14	3539.87	0.21
Gilbert Mining P	Gilbert Mining P	0.99	500yr	124684.00	1208.61	1241.03	1223.46	1241.69	0.000303	6.50	19179.83	3403.42	0.22
Gilbert Mining P	Gilbert Mining P	1.02	500yr	124684.00	1210.66	1241.22	1222.81	1241.74	0.000257	5.64	21533.52	3416.41	0.20
Gilbert Mining P	Gilbert Mining P	1.05	500yr	124684.00	1209.65	1241.15	1223.93	1241.84	0.000298	6.71	18902.88	3139.76	0.22
Gilbert Mining P	Gilbert Mining P	1.08	500yr	124684.00	1198.40	1240.94	1225.69	1242.05	0.000572	8.49	14876.79	2050.78	0.29
Gilbert Mining P	Gilbert Mining P	1.11	500yr	124684.00	1194.11	1240.62	1224.57	1242.33	0.000761	10.52	12007.96	1424.51	0.33
Gilbert Mining P	Gilbert Mining P	1.14	500yr	124684.00	1201.44	1240.25	1226.51	1242.72	0.001144	12.61	9881.83	1220.77	0.42
Gilbert Mining P	Gilbert Mining P	1.17	500yr	124684.00	1221.53	1240.28	1240.28	1248.87	0.006950	23.51	5303.17	714.77	1.00
Gilbert Mining P	Gilbert Mining P	1.19	500yr	124684.00	1218.15	1240.56	1239.86	1249.98	0.005939	24.63	5061.70	770.63	0.95
Gilbert Mining P	Gilbert Mining P	1.21	500yr	124684.00	1222.00	1242.04	1242.04	1250.75	0.006837	23.70	5298.66	612.04	0.98

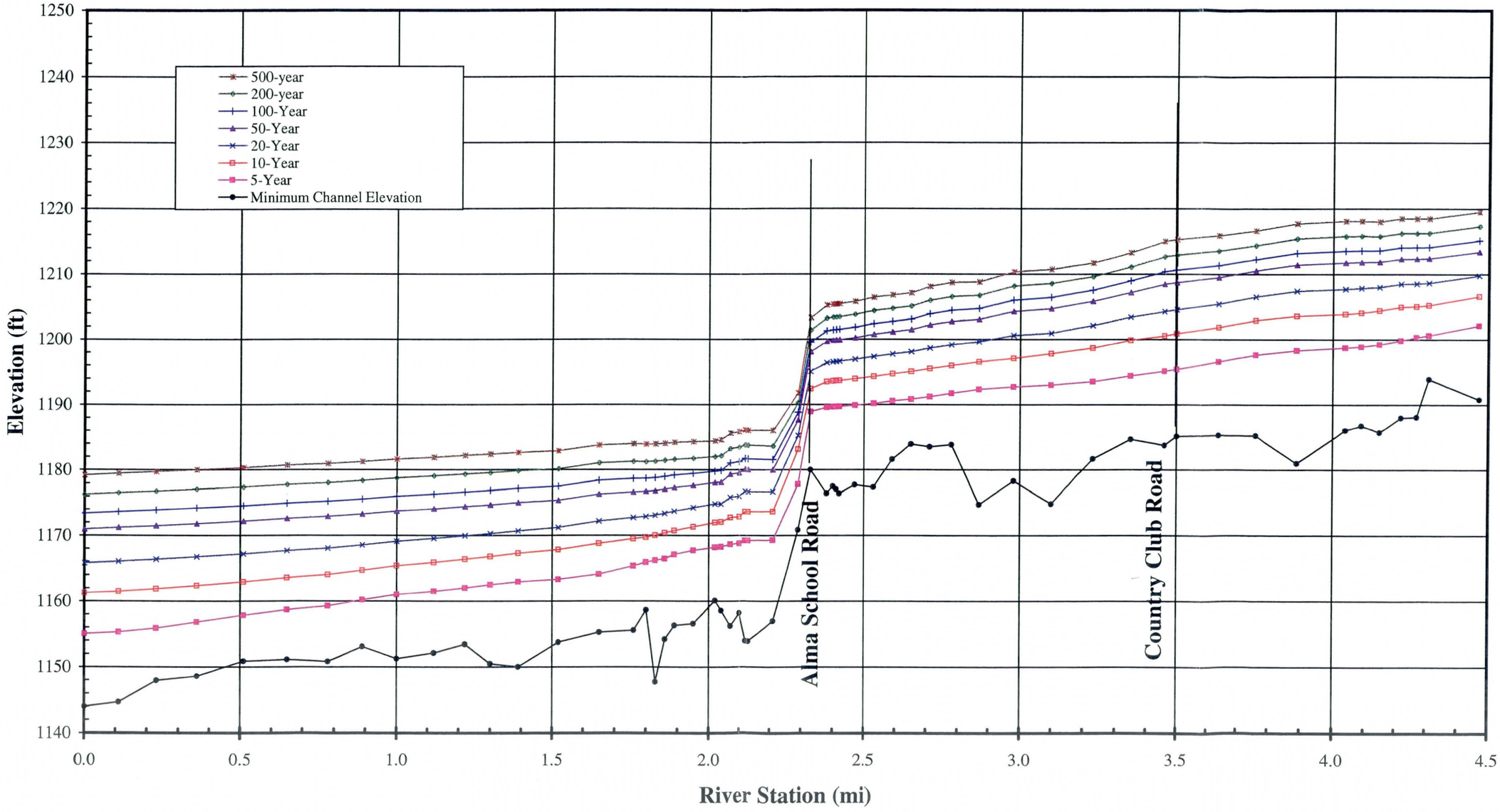
APPENDIX 9h

WATER SURFACE PROFILES FOR THE 5-, 10-, 20-, 50-, 100-, 200-, AND 500-YEAR PEAK FLOWS

Va Shly' Ay Akimel

Future Without Project Water Surface Profiles for the Salt River

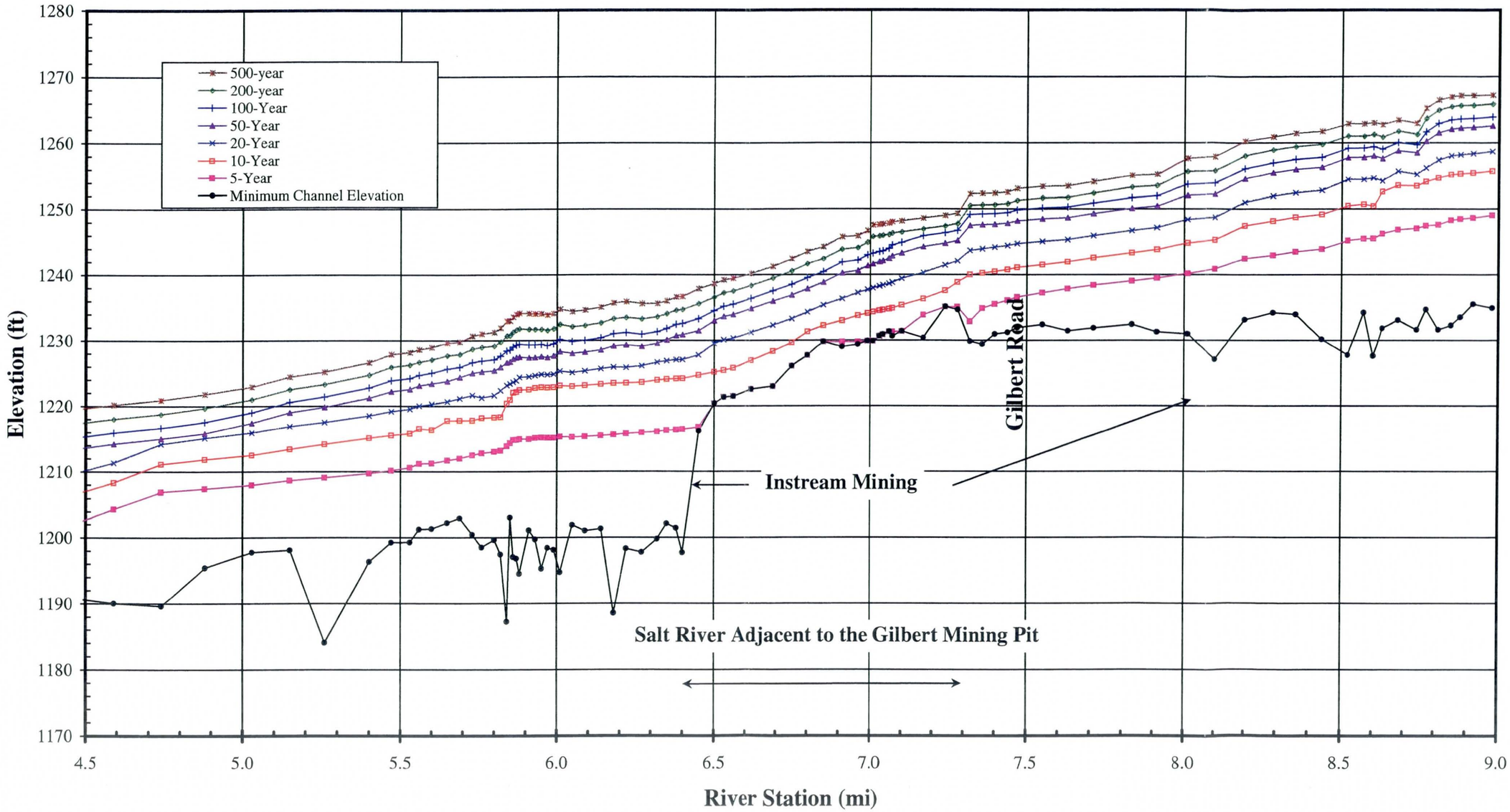
Sheet 1 of 3 - River Station 0.0 to 4.5



Va Shly' Ay Akimel

Future Without Project Water Surface Profiles for the Salt River

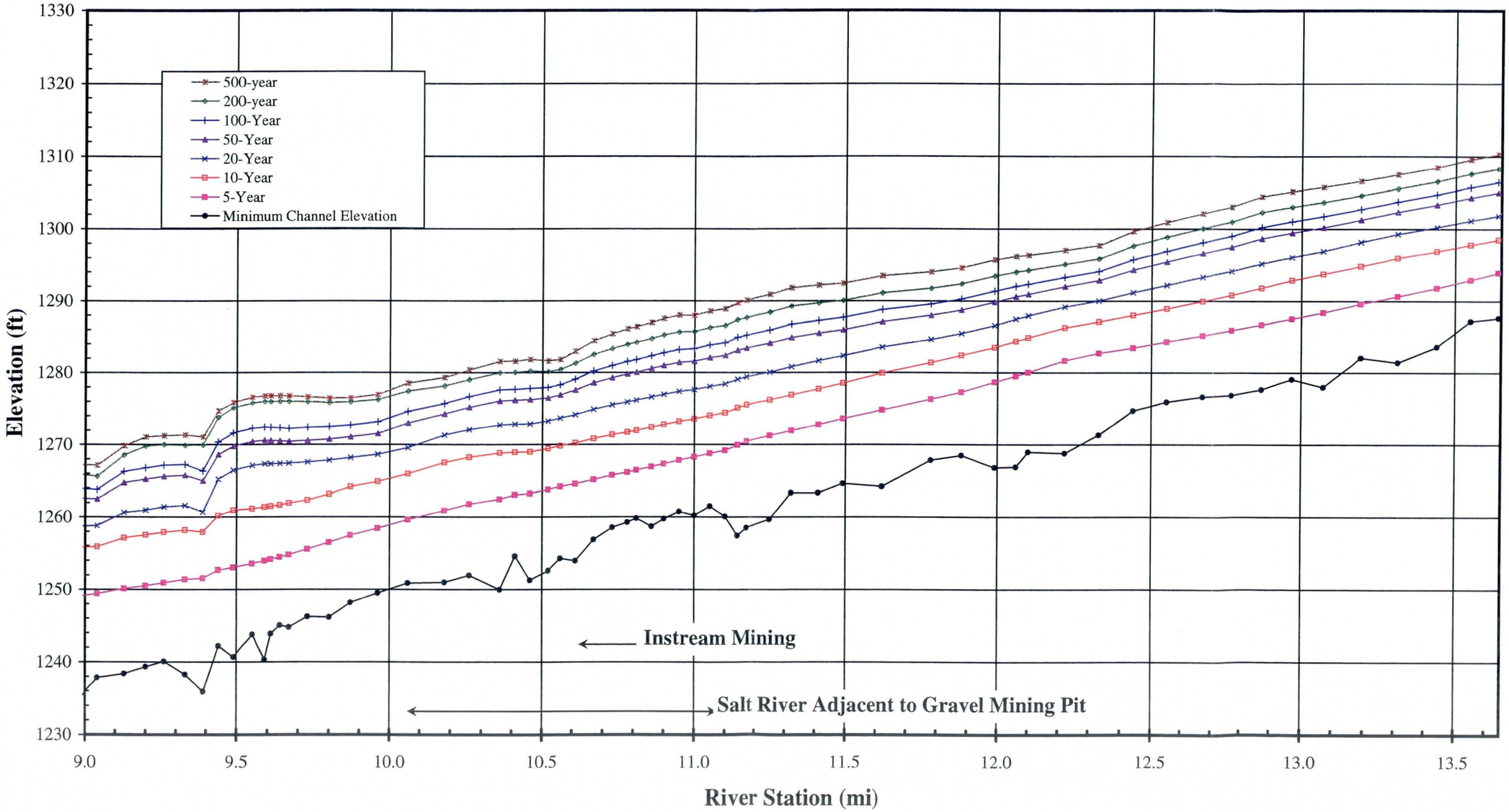
Sheet 2 of 3 - River Station 4.5 to 9.0

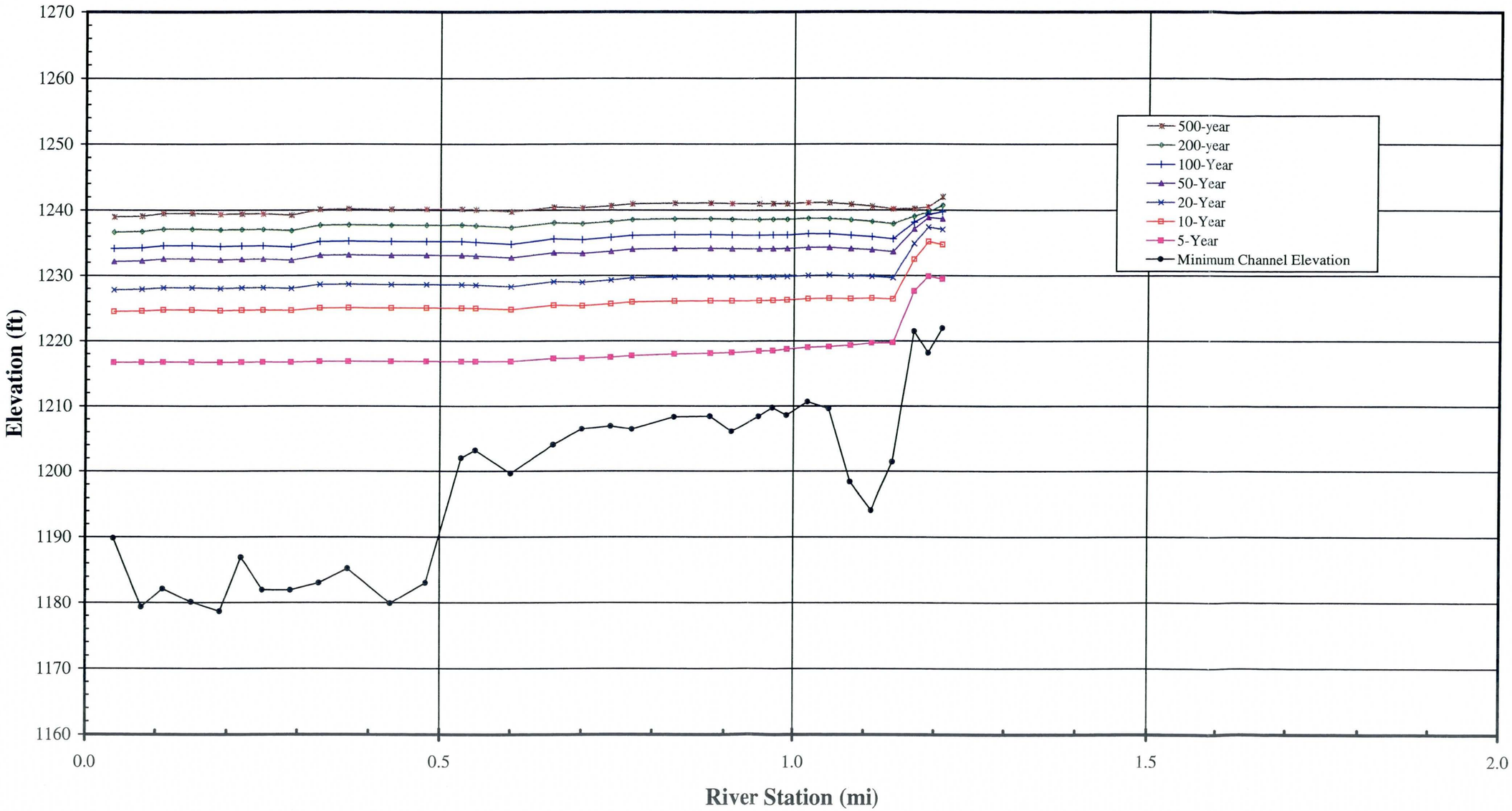


Va Shly' Ay Akimel

Future Without Project Water Surface Profiles for the Salt River

Sheet 3 of 3 - River Stations 9.0 to 13.64



Va Shly' Ay Akimel

Future Without Project Water Surface Profiles for the Gilbert Mining Pit