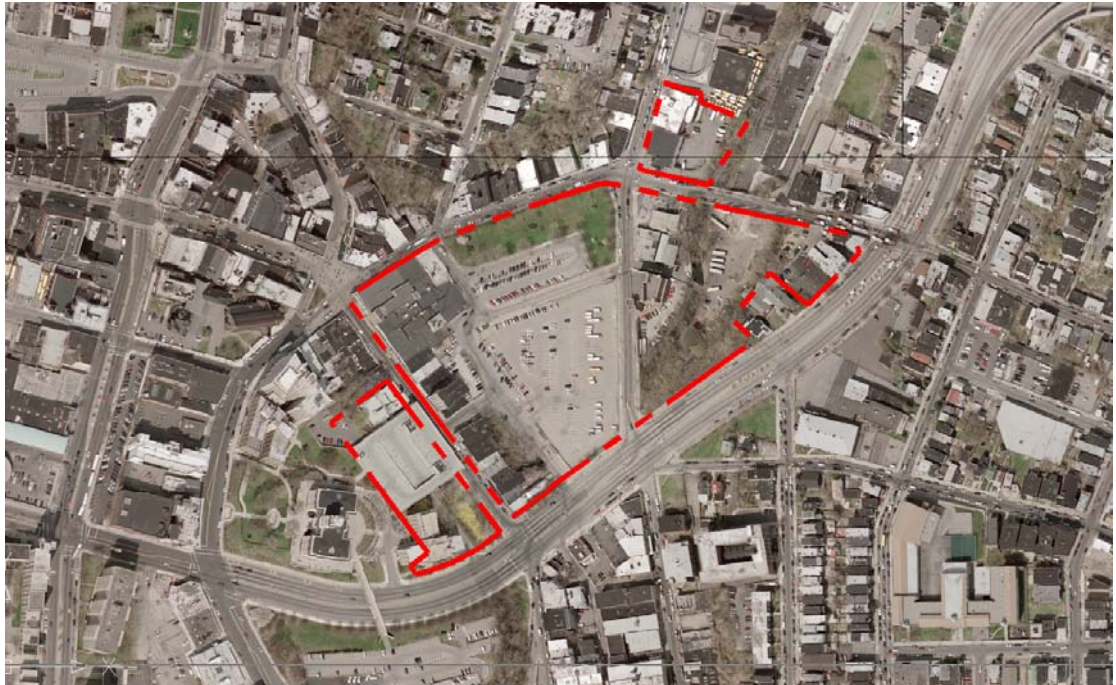


SAW MILL RIVER DAYLIGHTING ANALYSIS AT RIVER PARK CENTER



**Prepared for:
Struever Fidelco Cappelli LLC**

**McLaren Project No. 106100
August 2008**



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1.0 INTRODUCTION

This Report was prepared by McLaren Engineering Group (MEG) to supplement the report contained the Draft Environmental Statement (DEIS) entitled *Saw Mill River Daylighting Analysis* performed by the McLaren Engineering Group, revised March 2008, for the River Park Center Project in Yonkers, New York. This report addresses the new Federal Emergency Management Agency (FEMA) Study on the Saw Mill River (River), entitled *FEMA Flood Insurance Study, Westchester County, New York, All Jurisdictions*, effective September 28, and compares the FEMA River analysis with the proposed River daylighting design.

2.0 SAW MILL RIVER: FEMA STUDY

The Flood Insurance Study of the Saw Mill River was published effective September 28, 2007 by FEMA. Within this study, FEMA describes the existing Saw Mill River and the corresponding tributary area to the River. The report also provides, floodway data, peak flow rates at specific stations along the river, and flood profiles indicating bottom of channel elevations and flood elevations.

The current FIRM Flood Insurance Rate Map of the project site is Map Number 36119C0317F9 dated effective September 28, 2007 (see Figures). This map shows the area within River Park Center as Zone AE; base flood elevations derived from a detailed analysis at selected intervals. The previous Flood Insurance Rate Map for the City of Yonkers (Community Panel Number 360936-0010-C), dated January 21, 1998, identified the River between Anne Street and Elm Street as Zone A; area in which no detailed analyses had been performed, and area in which no established depths or base flood elevations are provided.

2.1.1 METHODOLOGY

The procedure FEMA used to model the Saw Mill River in the referenced FEMA Study was as follows:

“Peak discharges were developed using the USACE HEC-1 Flood Hydrograph computer program (USACE, 1991). This methodology was chosen due to multiple locations along the river where, through HEC-RAS analysis, it was determined that significant in channel storage and routing occurs. Input model parameters such as sub-basin delineation and Time of Concentration calculation were developed using the GIS base map data provided by Westchester County GIS. A storage versus elevation curve was constructed from a preliminary HEC-RAS model to locate areas where significant storage may occur. A Clark hydrograph was used to derive the

runoff hydrograph for each subbasin and was calibrated to match the 1% annual peak discharges calculated by the rational method. From the results of the HEC-1 analysis, drainage area transposition was performed to determine discharges at several points between the Saw Mill River Parkway (Point E, DA=5.14mi²) and East Main Street (Point L, DA=16.63mi²). All of these points were plotted on semi-logarithmic paper to produce a 'Drainage Area versus Drainage' Curve from which discharges at intermediate points can be obtained."

2.1.2 FEMA DATA AND RESULTS

The 2007 FEMA Study provides peak discharge flows at different locations along the Saw Mill River. Table 1 lists the peak discharge at the confluence of the Hudson River.

Table 1
FEMA Saw Mill River Peak Discharge

LOCATION	DRAINAGE AREA	PEAK DISCHARGE (cfs)			
	(sq. miles)	10-YEAR STORM	50-YEAR STORM	100-YEAR STORM	500-YEAR STORM
Upstream of confluence with Hudson River	26.0	890	1,558	1,910	2,890

Source: FEMA Flood Insurance Study, September 2007

The peak discharge rates, as shown in Table 1, were used in the FEMA study for the portion of the existing Saw Mill River between Ann Street and Elm Street. These flows were also used in the daylighting analysis for the proposed River Park Project, as described in Section 3 of this Report.

3.0 SAW MILL RIVER: PROPOSED CONDITIONS

3.1.1 METHODOLOGY

A hydraulic model was developed for the proposed realignment of the Saw Mill River to determine flood elevations with the proposed daylighting of the River within the River Park Center Project. The United States Army Corps of Engineers (USACE) software, Hydraulic Engineering Center River Analysis Software (HEC-RAS) version 3.1.3 was used for the analysis

To create a model of the proposed River, a new river centerline was created based on preliminary plans for the daylighting and realignment of the River within the project limits. Next, representative cross-sections of the River were input into HEC-RAS. A review of the

recent topographic survey prepared for the Project showed the bottom of River elevation at the upstream end of the Elm Street arch structure to be at elevation 56.83 (NGVD29), and the downstream end to be at elevation 57.20 (NGVD29). A review of the FEMA study at the same location showed the bottom of River elevation at the upstream end of the Elm Street arch structure to be at elevation 55.0 (NGVD29) and the downstream end to be at elevation 55.0 (NGVD29). A 1.83-foot discrepancy upstream and a 2.2-foot discrepancy downstream were found between the survey and the FEMA study at the Elm Street arch structure.

Two models were created for the proposed conditions at River Park Center. The first model utilized FEMA bottom of channel elevations at Elm Street immediately upstream and downstream of Elm Street (see Appendix A). By incorporating FEMA elevations at Elm Street in the HEC-RAS model, a representative comparison of the proposed flood elevations to the FEMA peak flow elevations could be obtained. The second model was created using elevations at Elm Street obtained from the topographic survey data (see Appendix B). All cross-sections within the River Park Center project were consistent between both of these models.

Peak flows for specific design storms input into the HEC-RAS models, are based on the peak flows stated in the FEMA Flood Insurance Study at the confluence of the Hudson River (See Table 1).

3.1.2 PROPOSED CONDITIONS

The daylighting of the River Park Center is described in the DEIS as follows:

“The publicly accessible Riverwalk at River Park Center stretches from Elm Street to New Main Street, curving through the site for a distance of approximately 1,100 linear feet. The design creates a continuous open river, which is the centerpiece of the surrounding development. The entire length of the river through the site will be landscaped to include pedestrian pathways, places to rest and view the river, with overlooks and steps along the way. Bridges connect the two sides of the river creating pedestrian loops at either end with a linear connection between them. The river channel, which averages 20 feet across, widens within the two loops and narrows in the connection between them, creating opportunities for different types of ecological habitats. The river bottom will be composed of soil and rock. It will be designed to concentrate the flow during dry times while allowing it to spread in times of greater water flow. Edges will be designed to accommodate seasonal flooding. They will vary from hard-edged vertical

walls to sloped planted areas. At the lower section of the river in the area called "The Meander," the river elevation rises and falls to expose an island as a landscape made of stone. The rocky bottom will also aerate the water. At the area below The Rapids called "The Bend," the edges will again soften to accommodate various water levels."

3.1.3 ANALYSIS RESULTS

A summary of the HEC-RAS analysis of the proposed realignment of the Saw Mill River is shown in Table 2 of this report. A detailed HEC-RAS output for the proposed conditions at River Park Center is contained in Appendix B of this report.

Table 2
Proposed Conditions:
HEC-RAS Model Output

	DESIGN FLOW (CFS)	WATER SURFACE ELEVATION (ft) (NGVD29)	MAIN CHANNEL VELOCITY (ft/s)
Within "Pond" Area (HEC-RAS Station 10 + 37)			
10-YEAR	1,558	51.4	4.7
100-YEAR	1,910	53.7	5.7
Within "Rapid" Area (HEC-RAS Station 14 + 33)			
10-YEAR	1,558	55.0	8.9
100-YEAR	1,910	56.6	11.1
Within "Rapid" Area (HEC-RAS Station 16 + 90)			
10-YEAR	1,558	57.7	8.9
100-YEAR	1,910	59.4	11.3
Downstream Face at Elm Street Bridge (HEC-RAS Station 19 + 34)			
10-YEAR	1,558	60.6	9.9
100-YEAR	1,910	62.7	12.2

The results of the HEC-RAS analysis at Elm Street are summarized in Table 3. The HEC-RAS model with FEMA bottom of channel elevations provide a representative comparison to the FEMA study flood elevations. This analysis indicates that the bottom of channel elevations do have an impact on the flood elevations at the Elm Street arch structure. However, it can be seen that when comparing the peak flood elevation between the existing FEMA study and the proposed conditions model with the FEMA bottom of River elevations, the peak flood elevations are lower for the proposed conditions. Because the existing water elevations have been maintained upstream of the project, at Elm Street, the daylighting of the River will not have an impact upstream of Elm Street.

Table 3
Proposed Conditions:
HEC-RAS Analysis at Elm Street

FLOOD ELEVATION AT ELM STREET -UPSTREAM (NGVD29)

Design Storm	FEMA Flood Elevations*	MEG Proposed Conditions based on FEMA Bottom of Channel	MEG Proposed Conditions based on Field Survey
	(ft)	(ft)	(ft)
10	61.2	61.0	62.0
100	64.5	63.9	64.9

FLOOD ELEVATION AT ELM STREET - DOWNSTREAM (NGVD29)

Design Storm	FEMA Flood Elevations*	MEG Proposed Conditions based on FEMA Bottom of Channel	MEG Proposed Conditions based on Field Survey
	(ft)	(ft)	(ft)
10	60.0	59.5	60.6
100	63.1	61.7	62.7

(*) Source: FEMA FLOOD INSURANCE STUDY, 2007

4.0 CONCLUSION

The proposed daylighting and realignment of the Saw Mill River within the River Park Center Project was analyzed using HEC-RAS software. All improvements will be designed to pass the 10-year and 100-year peak without creating on-site flooding conditions or increasing the flood elevations upstream of the project, at Elm Street

This report is respectfully submitted in accordance with our contract, and is to the best of our knowledge accurate and complete. Any questions regarding its content may be directed to the undersigned at the McLaren Engineering Group.

Respectfully submitted by,

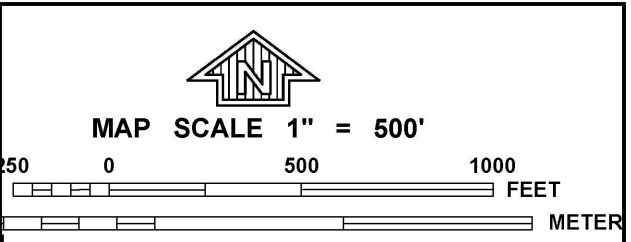
The Office of
McLaren Engineering Group
M.G. McLAREN, P.C.



Steven L. Grogg, P.E.
Chief Site – Civil Division

SLG/cmh/rjk

FIGURES



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0317F

FIRM
FLOOD INSURANCE RATE MAP


for WESTCHESTER COUNTY, NEW YORK
(ALL JURISDICTIONS)

CONTAINS:

COMMUNITY	NUMBER
YONKERS, CITY OF	360936

PANEL 317 OF 426
MAP SUFFIX: F
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

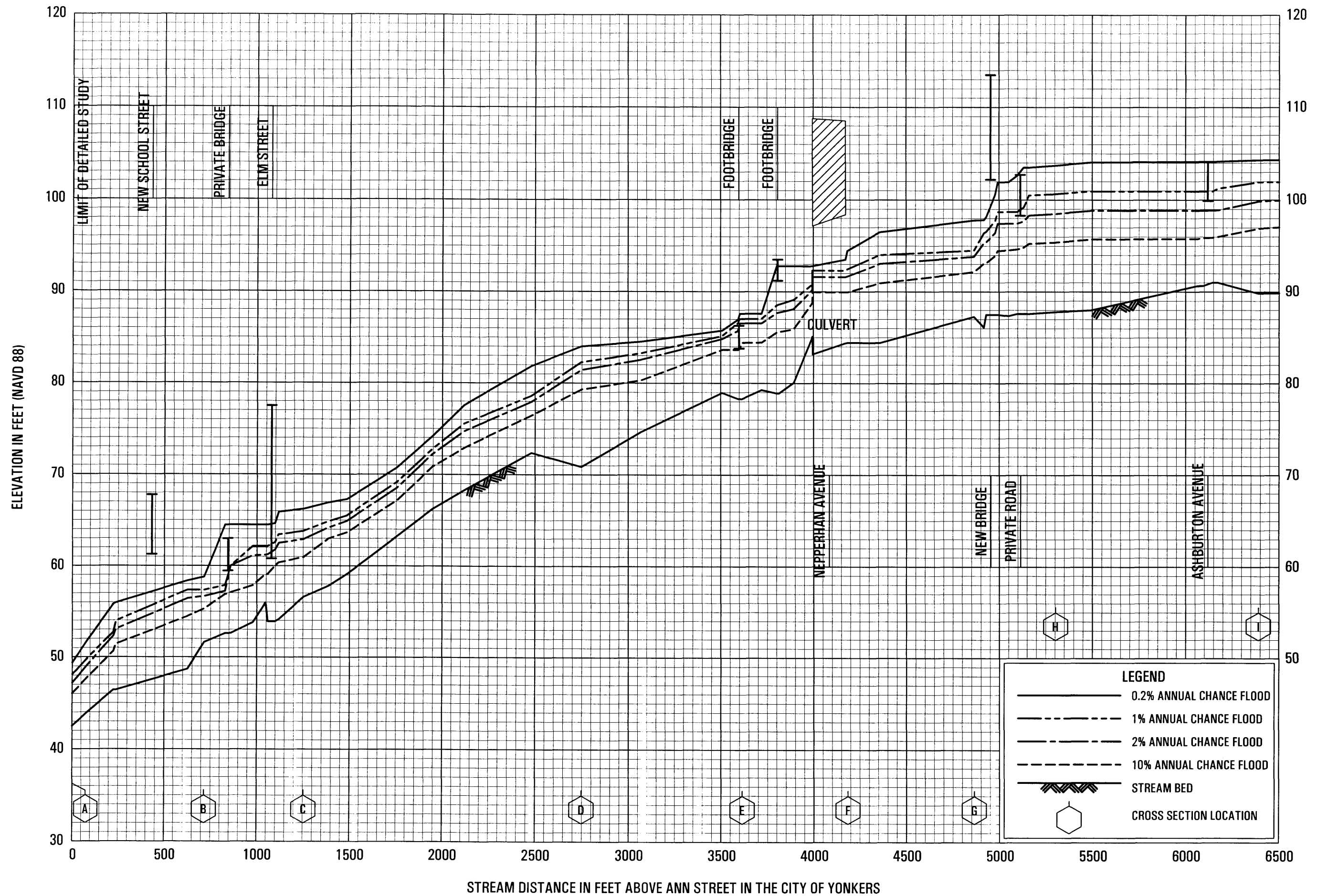
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.


MAP NUMBER
36119C0317F

EFFECTIVE DATE
SEPTEMBER 28, 2007

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

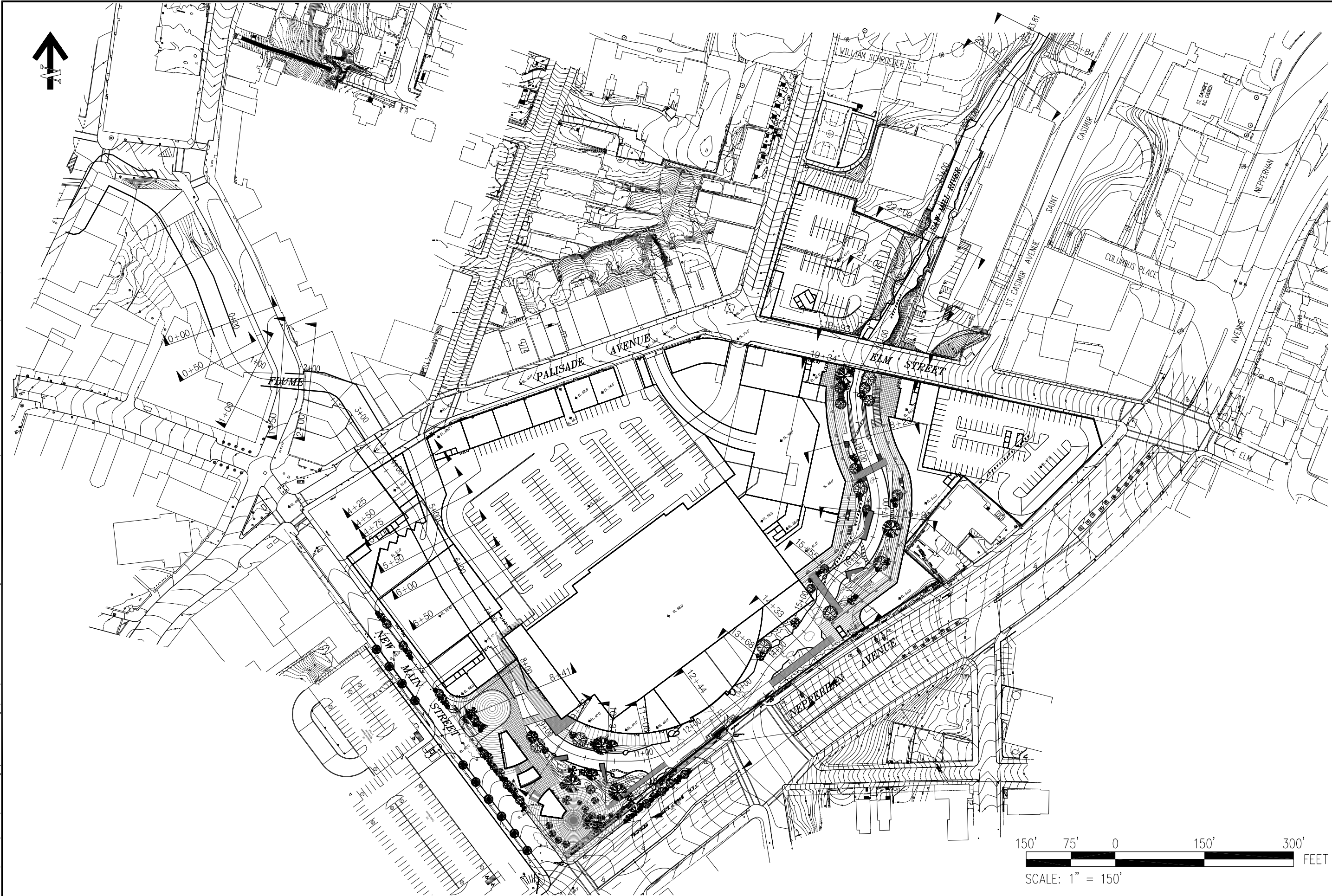


FLOOD PROFILES

SAW MILL RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
 WESTCHESTER COUNTY, NY
 (ALL JURISDICTIONS)

FILE NAME: Q:\Cadd\06\106100\Acad Drawings\HEC-RAS Drawings\DWGS\PROP STREAM ALIGN 7.23.07.dwg PLOT TIME: Wed, 23 Jul 2008 - 5:10pm LAST SAVE: Wed, 23 Jul 2008 - 4:52pm BY: CHumphries



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 <p>McLaren ENGINEERING GROUP</p> <p>E-mail: mngmclaren@mngmclaren.com 100 Snake Hill Road, West Nyack, NY 10994 Tel. (845) 353-6400 Fax. (845) 353-6509</p>		<p>NO.</p> <p>DATE</p> <p>REVISION</p> <p>BY</p>
<p>PROJECT</p> <p>RIVER PARK CENTER</p> <p>YONKERS</p> <p>NEW YORK</p>		
<p>SHEET TITLE</p> <p>HEC-RAS ANALYSIS STREAM ALIGNMENT PROPOSED CONDITIONS</p>		
<p>PROJECT NO. 106100</p> <p>SCALE AS NOTED</p> <p>DATE 7/23/08</p> <p>DRAWN BY CMH</p> <p>CHECKED BY SLG</p> <p>DRAWING NO. 1</p> <p>1 OF 1 SHTS</p>		

APPENDIX A

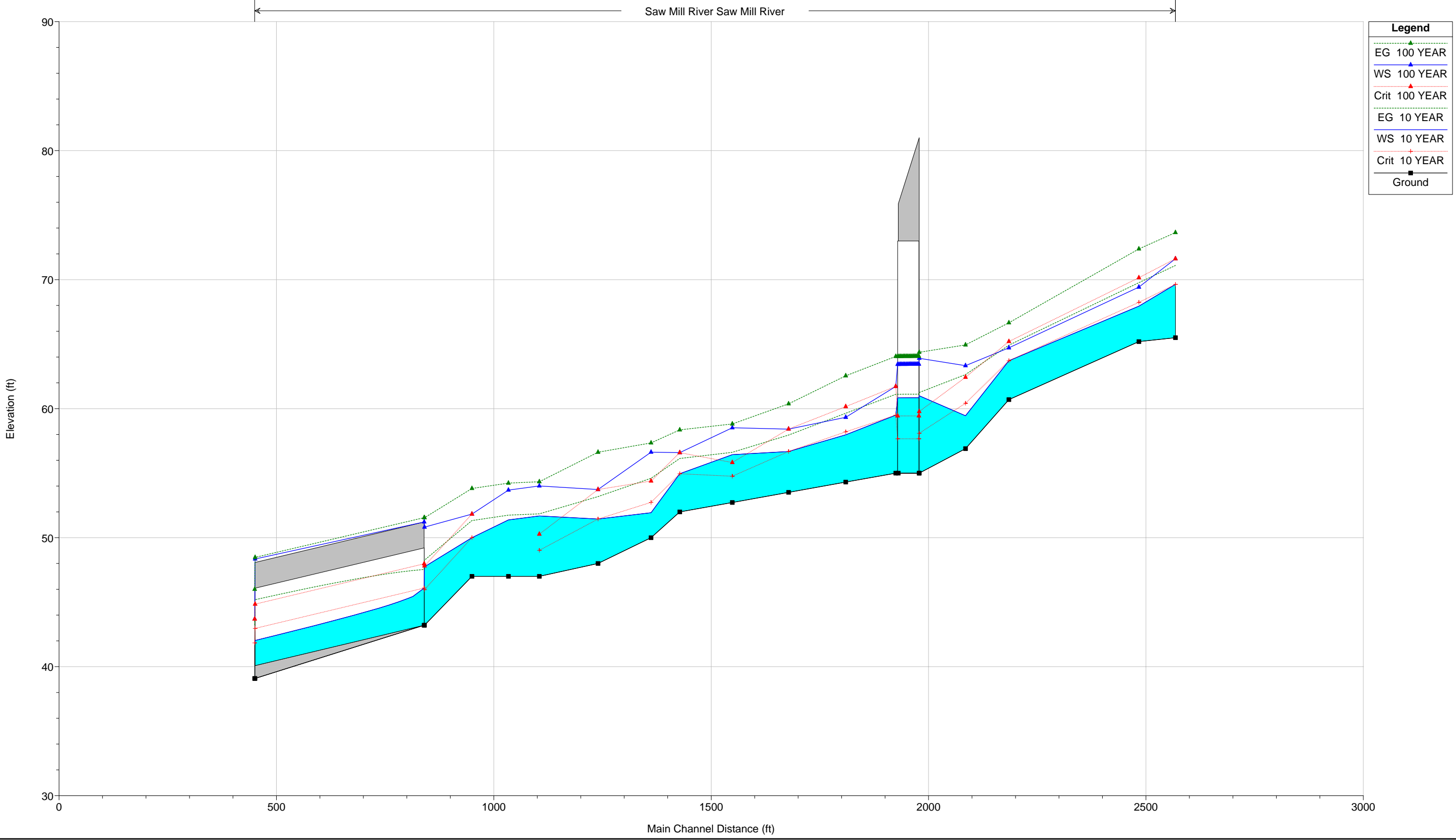
HEC-RAS ANALYSIS PROPOSED CONDITIONS SURVEY DATA & FEMA REPORT CHANNEL ELEVATIONS AT ELM STREET

HEC-RAS Plan: Plan 01 River: Saw Mill River Reach: Saw Mill River

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Saw Mill River	2584	10 YEAR	890.00	65.50	69.64	69.64	71.10	0.010675	10.88	118.35	45.93	0.97
Saw Mill River	2584	100 YEAR	1910.00	65.50	71.62	71.62	73.65	0.009559	13.53	219.41	54.67	0.98
Saw Mill River	2500	10 YEAR	890.00	65.20	67.95	68.24	69.77	0.024713	12.61	97.66	43.87	1.38
Saw Mill River	2500	100 YEAR	1910.00	65.20	69.42	70.15	72.38	0.023110	16.46	170.41	51.77	1.44
Saw Mill River	2200	10 YEAR	890.00	60.70	63.72	63.72	64.92	0.011930	9.36	128.14	99.97	0.97
Saw Mill River	2200	100 YEAR	1910.00	60.70	64.71	65.21	66.66	0.014774	12.70	232.75	105.97	1.14
Saw Mill River	2100	10 YEAR	890.00	56.90	59.45	60.42	62.64	0.044505	14.34	62.08	29.06	1.73
Saw Mill River	2100	100 YEAR	1910.00	56.90	63.33	62.44	64.94	0.006014	10.31	201.07	42.58	0.75
Saw Mill River	1993	10 YEAR	890.00	55.00	61.00	58.10	61.26	0.000993	4.12	234.75	49.53	0.31
Saw Mill River	1993	100 YEAR	1910.00	55.00	63.91	59.78	64.37	0.001048	5.62	390.31	57.35	0.34
Saw Mill River	1992.99		Culvert									
Saw Mill River	1934	10 YEAR	890.00	55.00	59.50	59.50	61.12	0.010405	10.45	89.23	28.42	0.93
Saw Mill River	1934	100 YEAR	1910.00	55.00	61.73	61.73	64.05	0.008590	12.81	160.07	35.05	0.91
Saw Mill River	1823	10 YEAR	890.00	54.31	57.97	58.21	59.65	0.015929	10.41	87.03	34.92	1.10
Saw Mill River	1823	100 YEAR	1910.00	54.31	59.33	60.16	62.55	0.018396	14.60	138.63	40.95	1.26
Saw Mill River	1690	10 YEAR	890.00	53.51	56.68	56.68	57.95	0.013253	9.07	98.88	40.73	1.00
Saw Mill River	1690	100 YEAR	1910.00	53.51	58.41	58.42	60.38	0.010491	11.37	175.62	47.73	0.96
Saw Mill River	1555	10 YEAR	890.00	52.73	56.43	54.76	56.62	0.001385	3.44	262.25	86.39	0.34
Saw Mill River	1555	100 YEAR	1910.00	52.73	58.52	55.82	58.81	0.001159	4.39	452.33	95.70	0.34
Saw Mill River	1433	10 YEAR	890.00	52.00	54.96	54.96	56.14	0.012109	8.91	106.29	47.52	0.97
Saw Mill River	1433	100 YEAR	1910.00	52.00	56.59	56.59	58.36	0.009911	11.11	191.85	57.14	0.95
Saw Mill River	1368	10 YEAR	890.00	50.00	51.94	52.74	54.60	0.044937	13.14	68.00	39.42	1.72
Saw Mill River	1368	100 YEAR	1910.00	50.00	56.63	54.39	57.35	0.002116	6.69	282.06	51.80	0.46
Saw Mill River	1244	10 YEAR	890.00	48.00	51.45	51.45	53.18	0.013228	10.57	84.17	24.42	1.00
Saw Mill River	1244	100 YEAR	1910.00	48.00	53.73	53.73	56.62	0.011163	13.64	140.04	24.42	1.00
Saw Mill River	1108	10 YEAR	890.00	47.00	51.69	49.02	51.85	0.000775	3.25	274.11	61.50	0.26
Saw Mill River	1108	100 YEAR	1910.00	47.00	54.01	50.27	54.34	0.000909	4.61	418.99	62.75	0.31
Saw Mill River	1037	10 YEAR	890.00	47.00	51.38		51.75	0.001858	4.70	183.65	54.03	0.40
Saw Mill River	1037	100 YEAR	1910.00	47.00	53.69		54.23	0.001550	5.70	324.66	69.44	0.39
Saw Mill River	952	10 YEAR	890.00	47.00	50.00	50.00	51.33	0.012129	9.31	96.36	36.57	0.95
Saw Mill River	952	100 YEAR	1910.00	47.00	51.83	51.83	53.82	0.009519	11.34	168.80	42.64	0.91
Saw Mill River	841	10 YEAR	890.00	43.21	47.74	45.97	48.26	0.004270	5.78	154.12	34.03	0.48
Saw Mill River	841	100 YEAR	1910.00	43.21	50.82	47.81	51.55	0.003078	6.93	279.59	42.00	0.44
Saw Mill River	840		Culvert									
Saw Mill River	450	10 YEAR	890.00	39.08	41.84	41.84	43.24	0.020545	9.48	93.88	34.01	1.01
Saw Mill River	450	100 YEAR	1910.00	39.08	43.69	43.69	46.00	0.019301	12.18	156.77	34.02	1.00

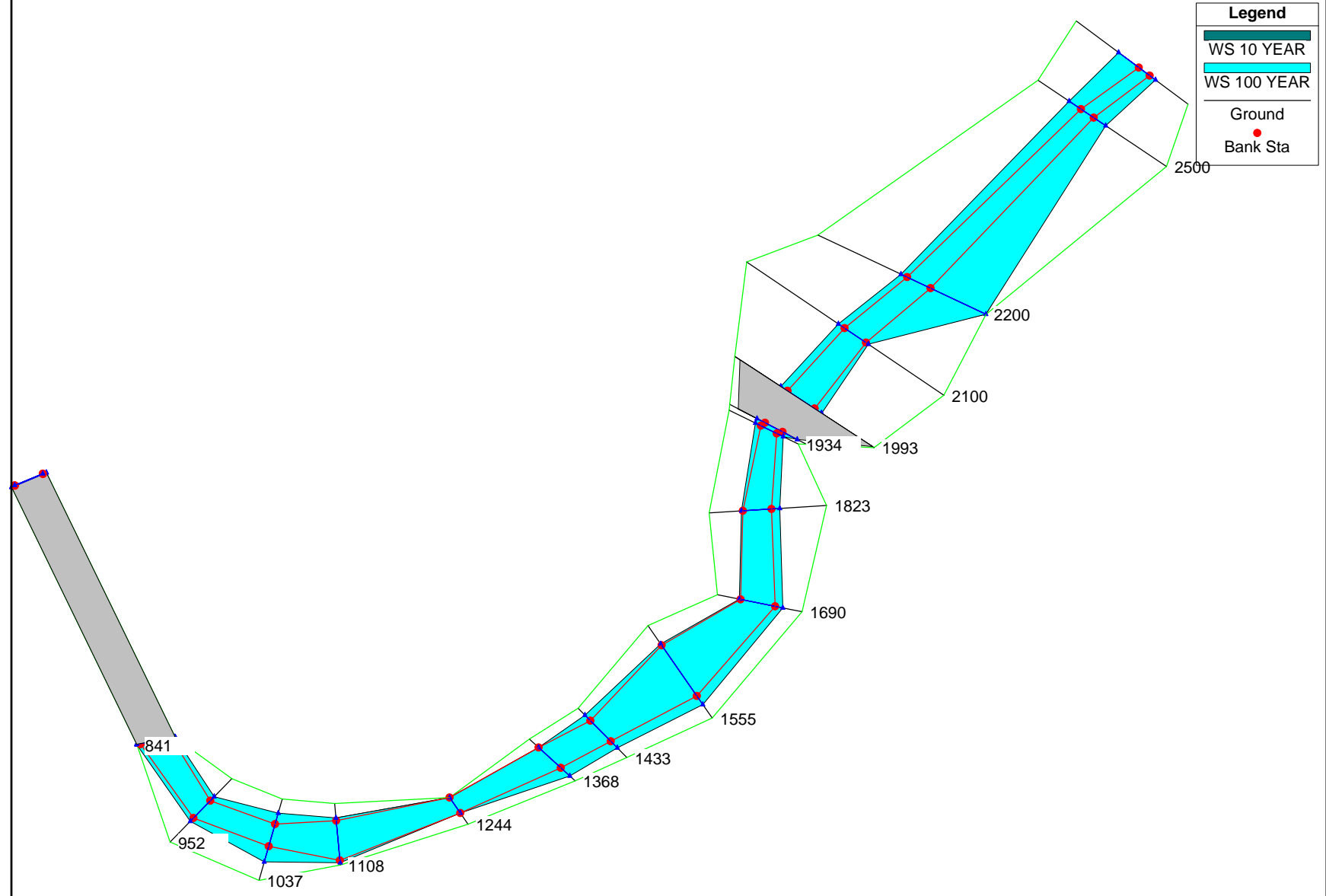
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Geom: Geometric Data Flow: Storm Event Flows RIVER PARK CENTER

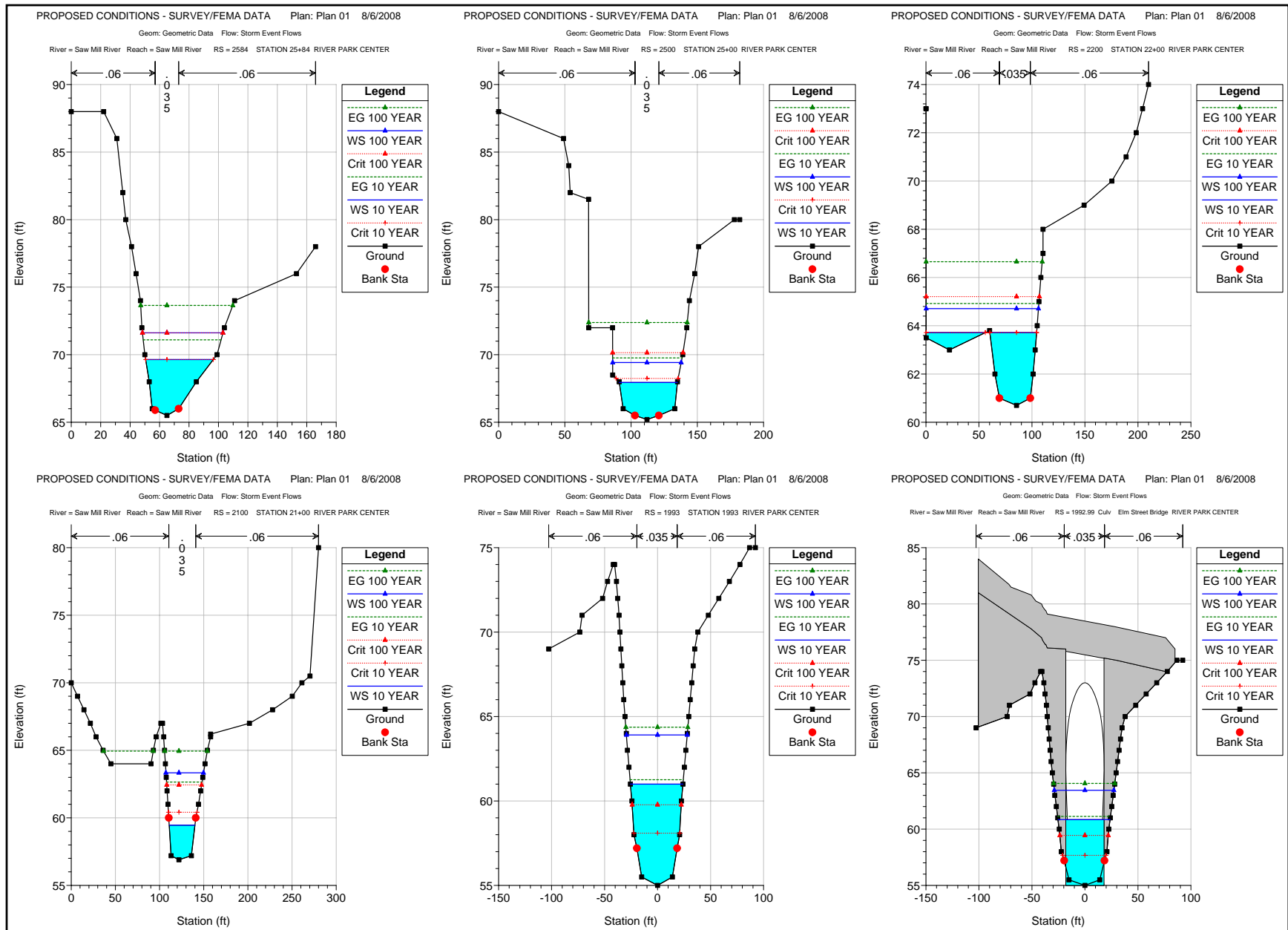
Saw Mill River Saw Mill River

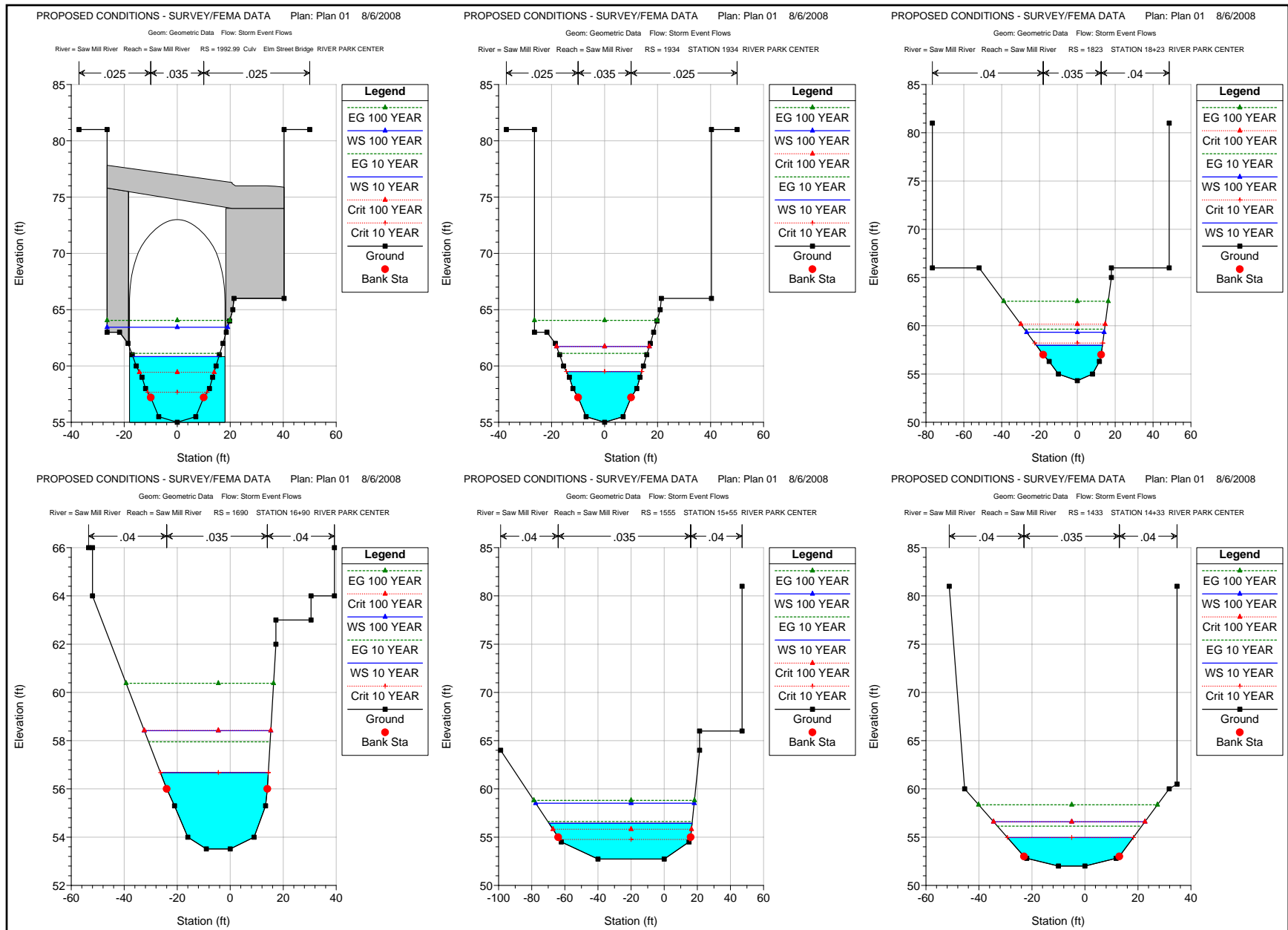


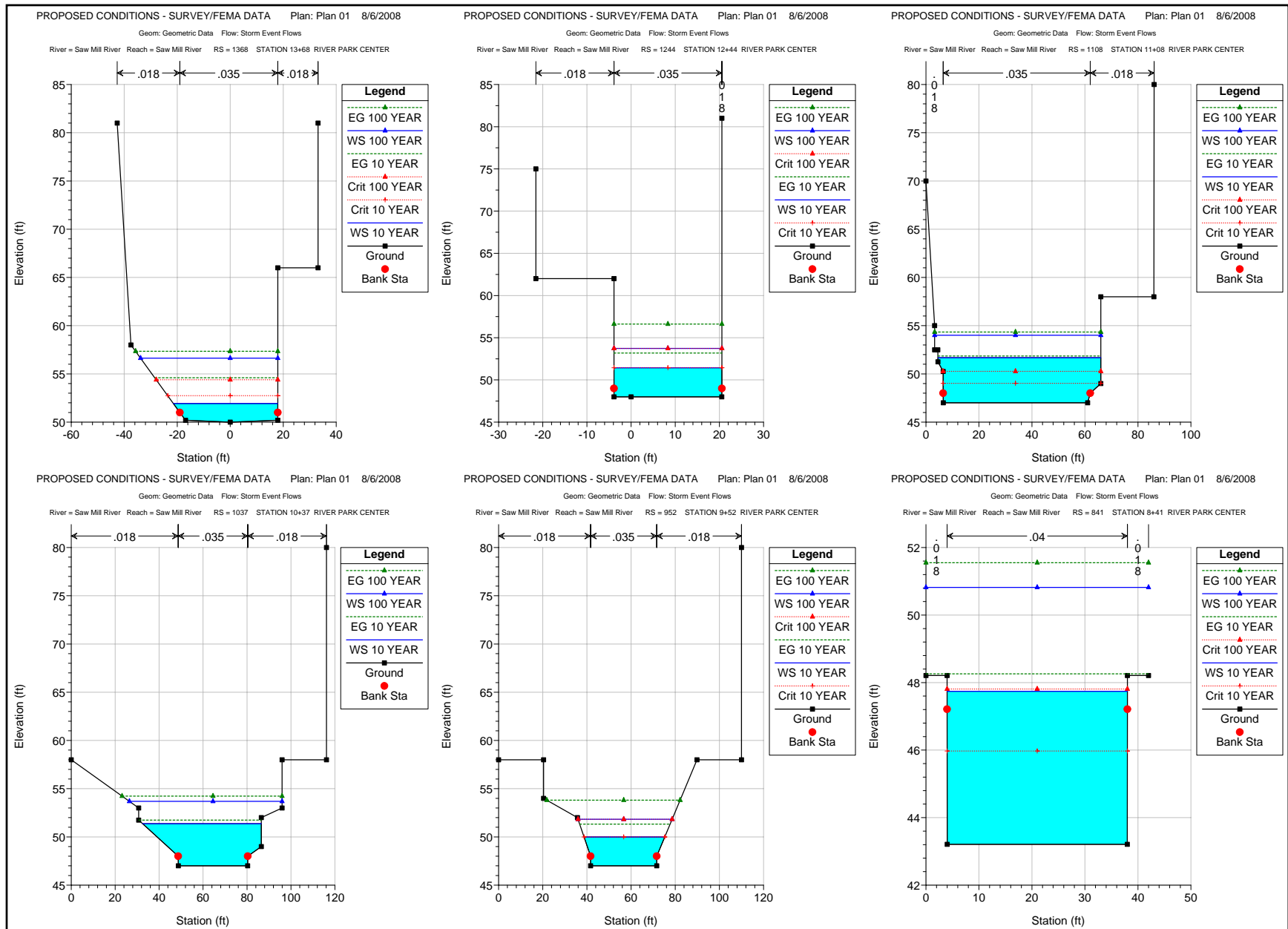
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Geom: Geometric Data Flow: Storm Event Flows RIVER PARK CENTER





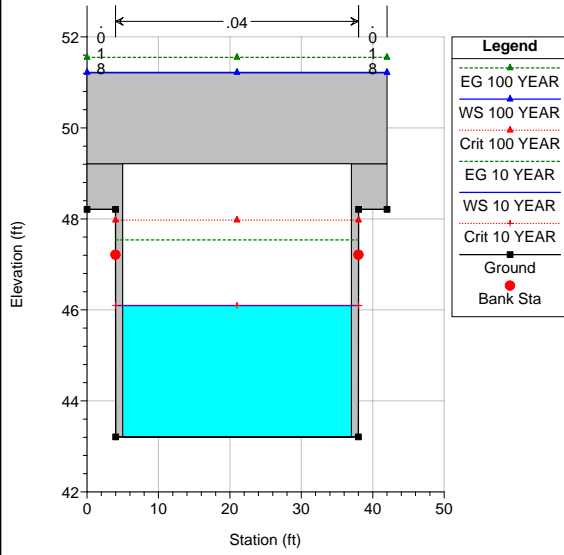




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Geom: Geometric Data Flow: Storm Event Flows

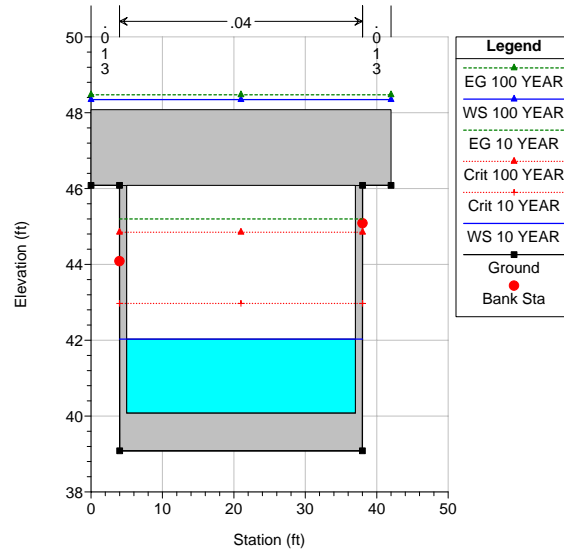
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PROPOSED CONDITIONS - SURVEY/FEMA DATA Plan: Plan 01 8/6/2008

Geom: Geometric Data Flow: Storm Event Flows

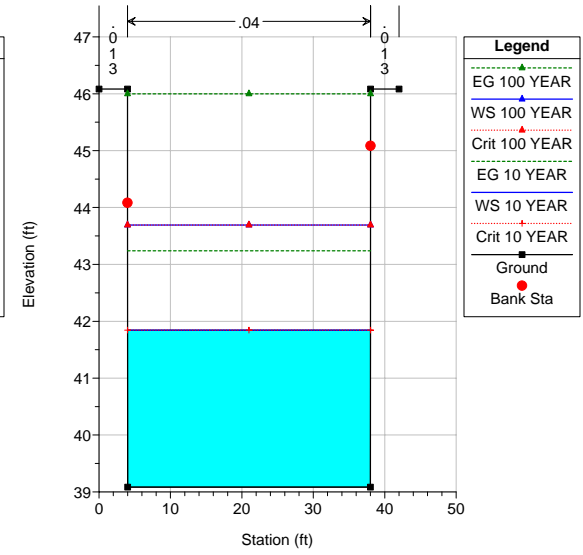
River = Saw Mill River Reach = Saw Mill River RS = 840 Culv ANN ST RIVER PARK CENTER



PROPOSED CONDITIONS - SURVEY/FEMA DATA Plan: Plan 01 8/6/2008

Geom: Geometric Data Flow: Storm Event Flows

River = Saw Mill River Reach = Saw Mill River RS = 450 STATION 4+50 RIVER PARK CENTER



APPENDIX B

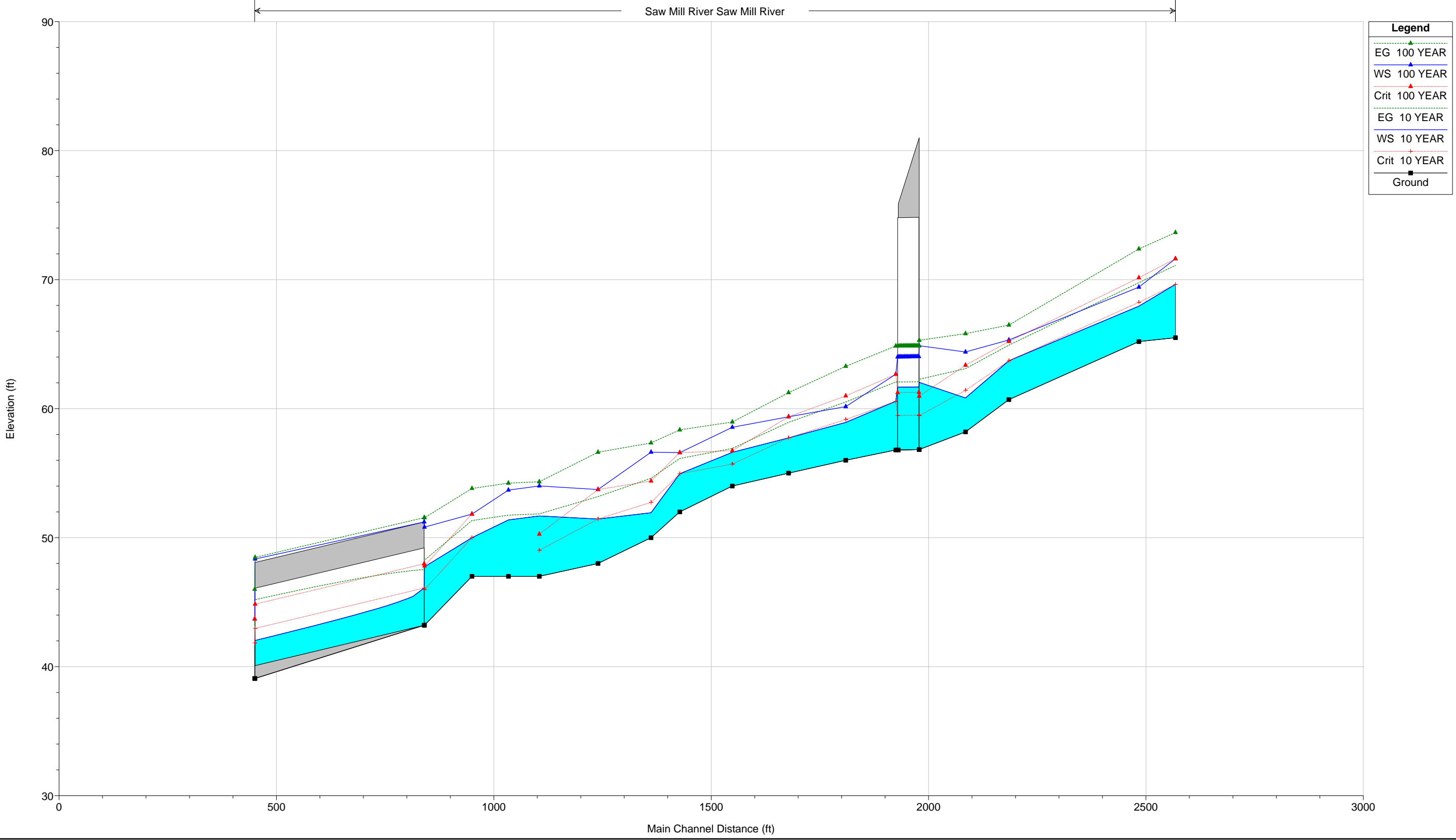
HEC-RAS ANALYSIS PROPOSED CONDITIONS SURVEY DATA

HEC-RAS Plan: Plan 01 River: Saw Mill River Reach: Saw Mill River

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Saw Mill River	2584	10 YEAR	890.00	65.50	69.64	69.64	71.10	0.010675	10.88	118.35	45.93	0.97
Saw Mill River	2584	100 YEAR	1910.00	65.50	71.62	71.62	73.65	0.009559	13.53	219.41	54.67	0.98
Saw Mill River	2500	10 YEAR	890.00	65.20	67.95	68.24	69.77	0.024713	12.61	97.66	43.87	1.38
Saw Mill River	2500	100 YEAR	1910.00	65.20	69.42	70.15	72.38	0.023110	16.46	170.41	51.77	1.44
Saw Mill River	2200	10 YEAR	890.00	60.70	63.72	63.72	64.92	0.011930	9.36	128.14	99.97	0.97
Saw Mill River	2200	100 YEAR	1910.00	60.70	65.32	65.21	66.48	0.007704	10.12	297.81	107.06	0.84
Saw Mill River	2100	10 YEAR	890.00	58.20	60.83	61.42	63.10	0.026543	12.11	74.68	33.97	1.38
Saw Mill River	2100	100 YEAR	1910.00	58.20	64.40	63.37	65.82	0.005208	9.84	236.82	96.40	0.71
Saw Mill River	1993	10 YEAR	890.00	56.83	62.04	59.46	62.28	0.001135	3.95	229.75	52.39	0.32
Saw Mill River	1993	100 YEAR	1910.00	56.83	64.88	60.97	65.30	0.001067	5.23	389.68	59.90	0.33
Saw Mill River	1992.99		Culvert									
Saw Mill River	1934	10 YEAR	890.00	56.80	60.58	60.58	62.07	0.011595	9.89	92.01	31.75	0.96
Saw Mill River	1934	100 YEAR	1910.00	56.80	62.67	62.67	64.85	0.009122	12.19	165.12	38.82	0.93
Saw Mill River	1823	10 YEAR	890.00	56.00	58.94	59.16	60.52	0.015629	10.27	91.54	39.19	1.10
Saw Mill River	1823	100 YEAR	1910.00	56.00	60.16	60.99	63.28	0.019272	14.62	142.96	44.64	1.30
Saw Mill River	1690	10 YEAR	890.00	55.00	57.74	57.74	58.94	0.012691	8.91	103.60	45.00	0.98
Saw Mill River	1690	100 YEAR	1910.00	55.00	59.37	59.37	61.24	0.010484	11.25	182.60	51.60	0.97
Saw Mill River	1555	10 YEAR	890.00	54.00	56.61	55.71	56.92	0.003298	4.45	203.56	87.20	0.50
Saw Mill River	1555	100 YEAR	1910.00	54.00	58.56	56.74	58.97	0.002100	5.22	381.16	95.85	0.44
Saw Mill River	1433	10 YEAR	890.00	52.00	54.96	54.96	56.14	0.012109	8.91	106.29	47.52	0.97
Saw Mill River	1433	100 YEAR	1910.00	52.00	56.59	56.59	58.36	0.009911	11.11	191.85	57.14	0.95
Saw Mill River	1368	10 YEAR	890.00	50.00	51.94	52.74	54.60	0.044937	13.14	68.00	39.42	1.72
Saw Mill River	1368	100 YEAR	1910.00	50.00	56.63	54.39	57.35	0.002116	6.69	282.06	51.80	0.46
Saw Mill River	1244	10 YEAR	890.00	48.00	51.45	51.45	53.18	0.013228	10.57	84.17	24.42	1.00
Saw Mill River	1244	100 YEAR	1910.00	48.00	53.73	53.73	56.62	0.011163	13.64	140.04	24.42	1.00
Saw Mill River	1108	10 YEAR	890.00	47.00	51.69	49.02	51.85	0.000775	3.25	274.11	61.50	0.26
Saw Mill River	1108	100 YEAR	1910.00	47.00	54.01	50.27	54.34	0.000909	4.61	418.99	62.75	0.31
Saw Mill River	1037	10 YEAR	890.00	47.00	51.38		51.75	0.001858	4.70	183.65	54.03	0.40
Saw Mill River	1037	100 YEAR	1910.00	47.00	53.69		54.23	0.001550	5.70	324.66	69.44	0.39
Saw Mill River	952	10 YEAR	890.00	47.00	50.00	50.00	51.33	0.012129	9.31	96.36	36.57	0.95
Saw Mill River	952	100 YEAR	1910.00	47.00	51.83	51.83	53.82	0.009519	11.34	168.80	42.64	0.91
Saw Mill River	841	10 YEAR	890.00	43.21	47.74	45.97	48.26	0.004270	5.78	154.12	34.03	0.48
Saw Mill River	841	100 YEAR	1910.00	43.21	50.82	47.81	51.55	0.003078	6.93	279.59	42.00	0.44
Saw Mill River	840		Culvert									
Saw Mill River	450	10 YEAR	890.00	39.08	41.84	41.84	43.24	0.020545	9.48	93.88	34.01	1.01
Saw Mill River	450	100 YEAR	1910.00	39.08	43.69	43.69	46.00	0.019301	12.18	156.77	34.02	1.00

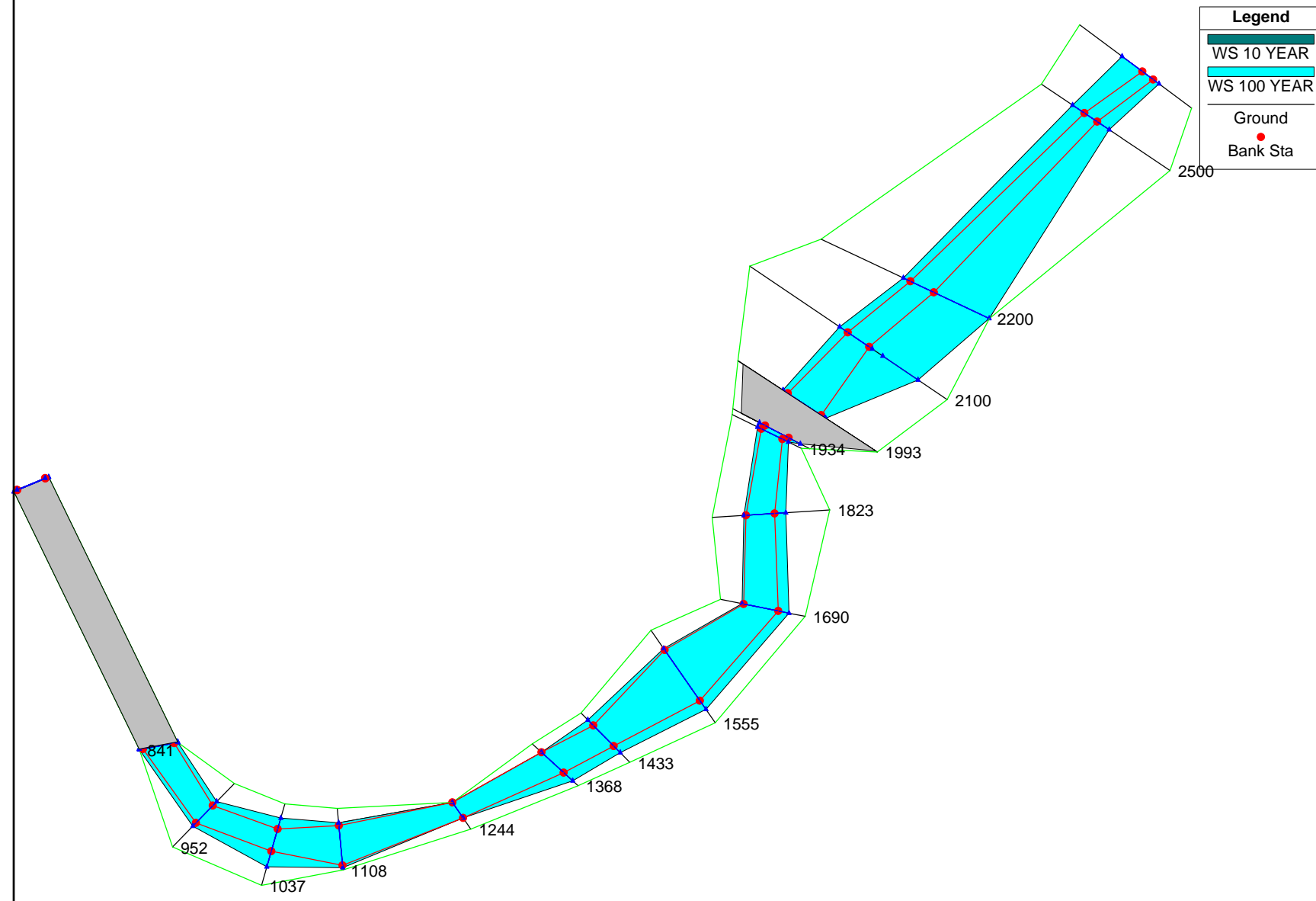
PROPOSED CONDITIONS - SURVEY DATA Plan: Plan 01 8/6/2008
Geom: Geometric Data Flow: Storm Event Flows RIVER PARK CENTER

Saw Mill River Saw Mill River

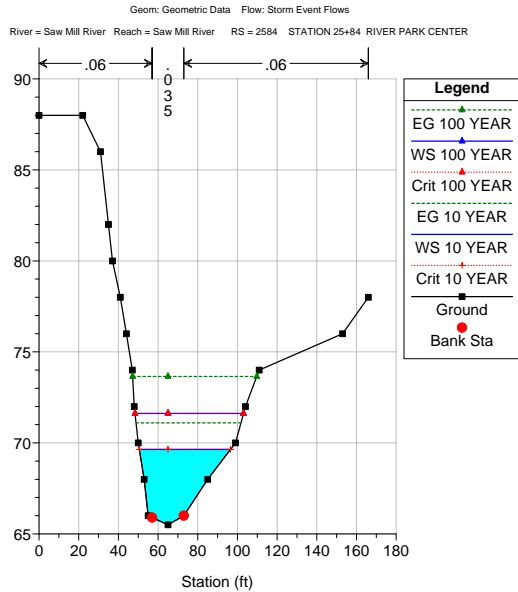


PROPOSED CONDITIONS - SURVEY DATA Plan: Plan 01 8/6/2008

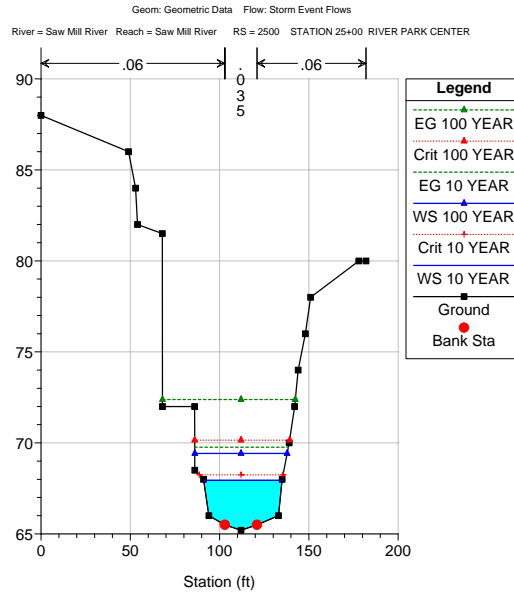
Geom: Geometric Data Flow: Storm Event Flows RIVER PARK CENTER



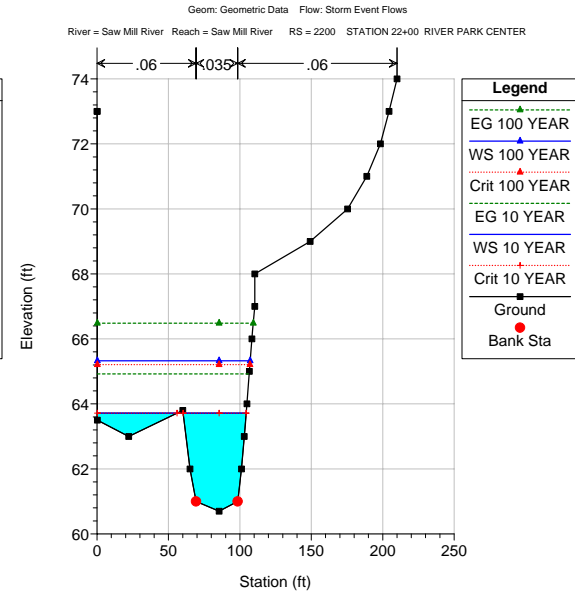
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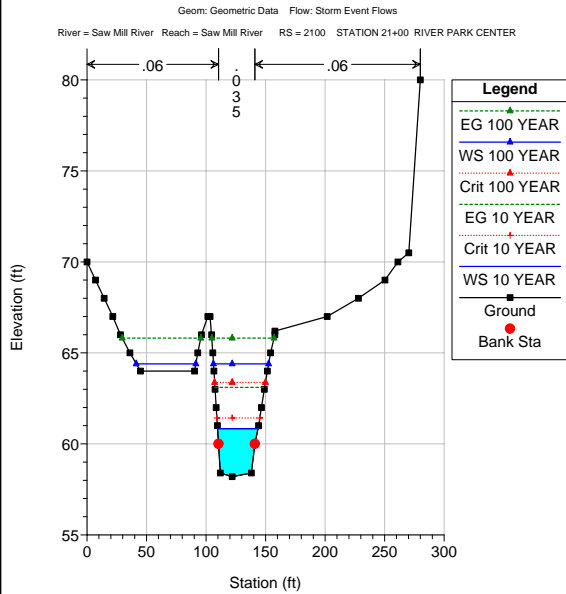
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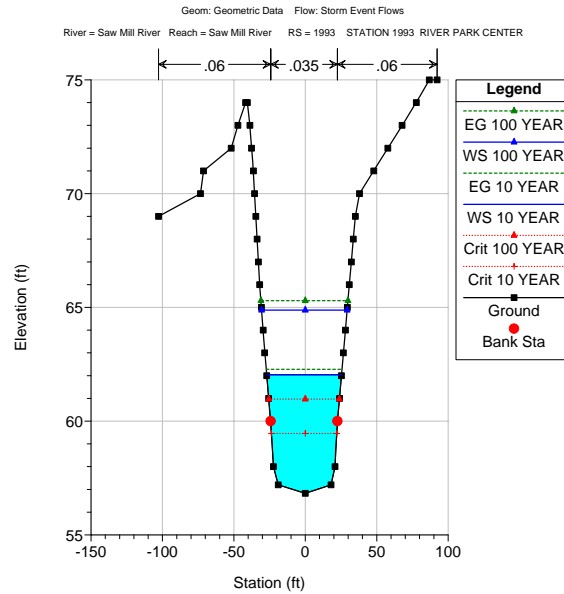
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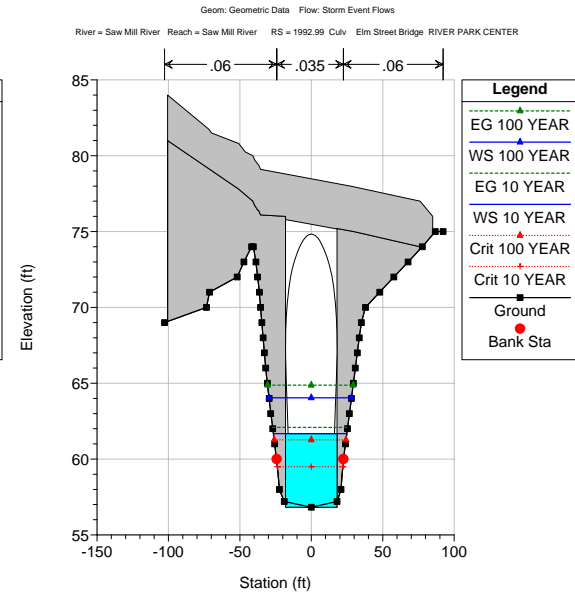
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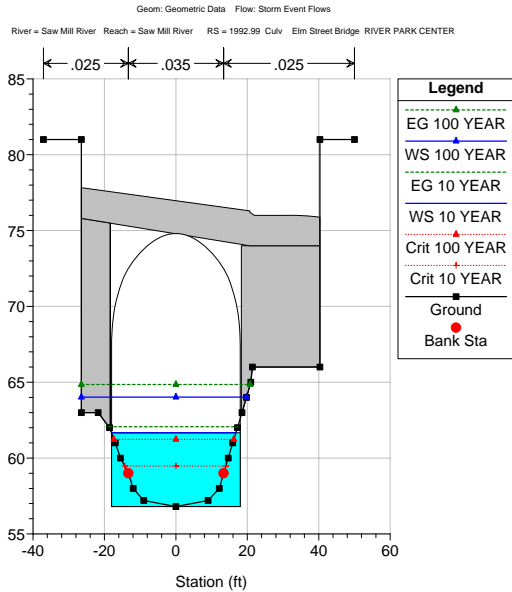
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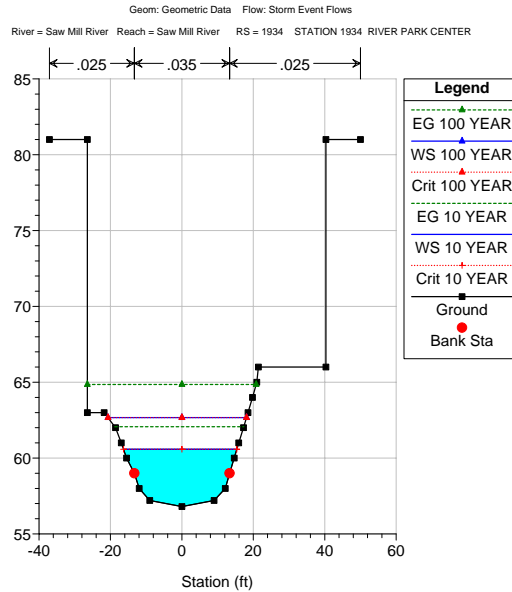
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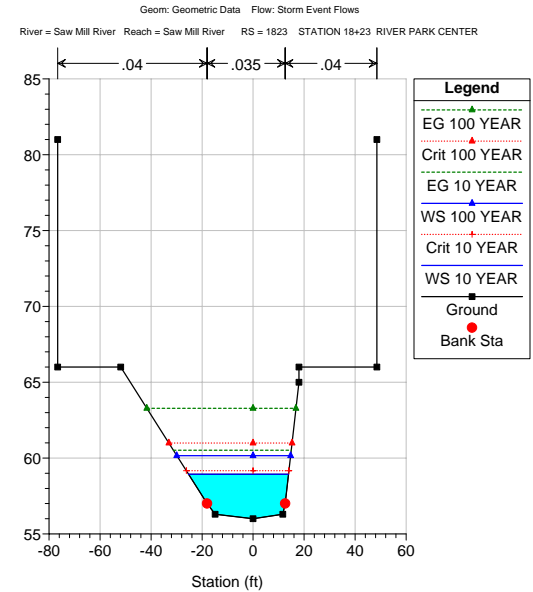
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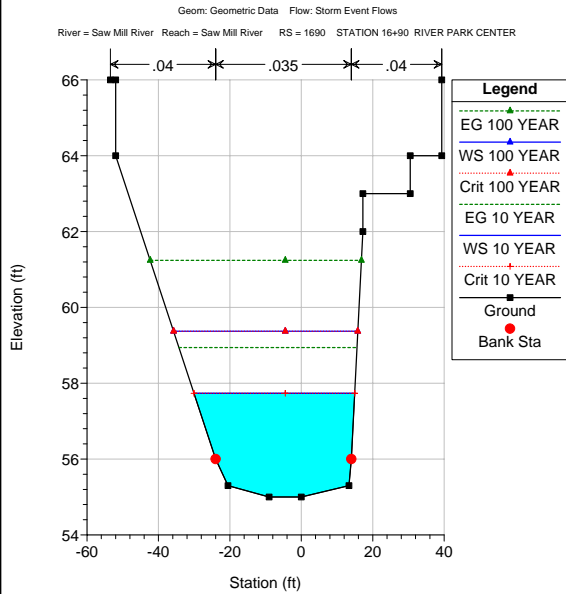
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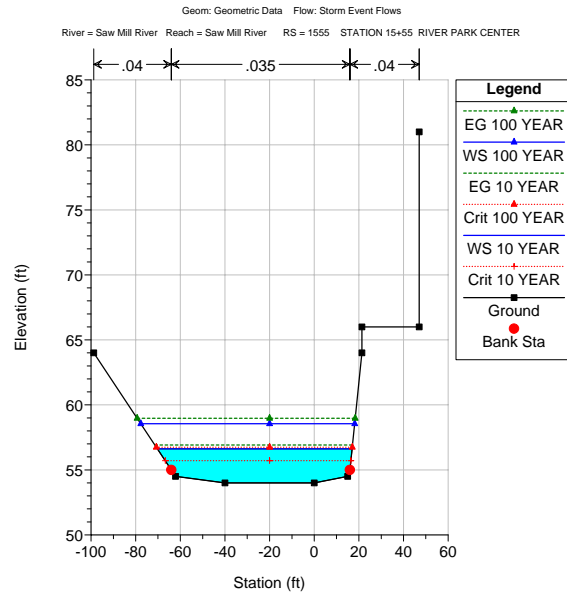
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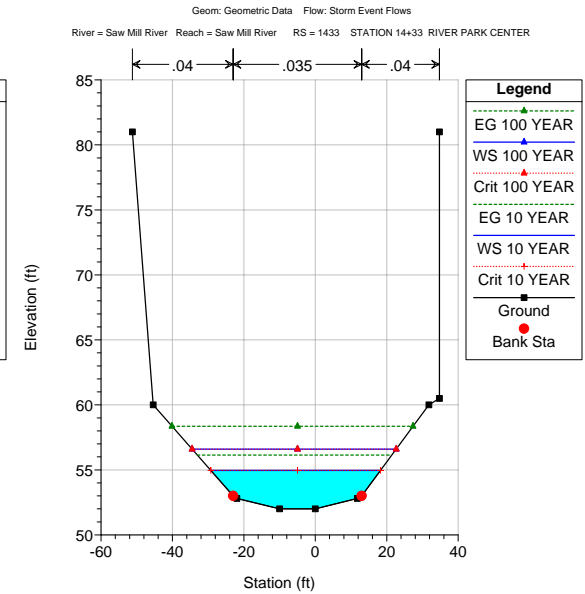
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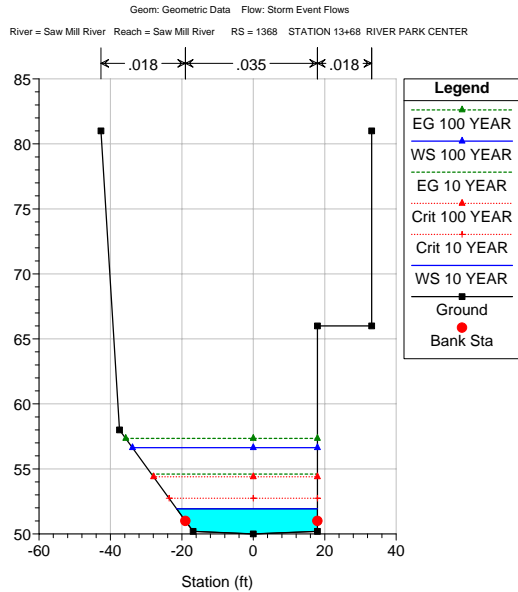
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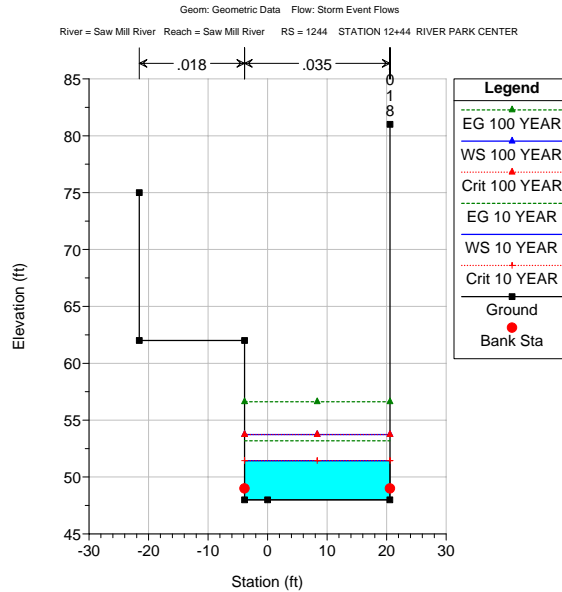
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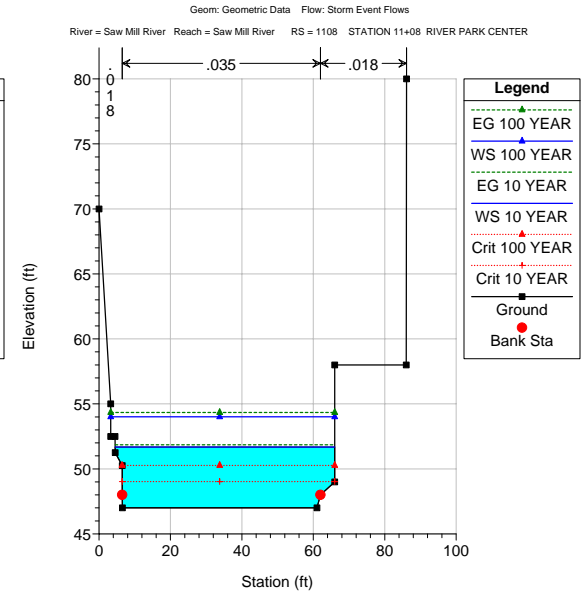
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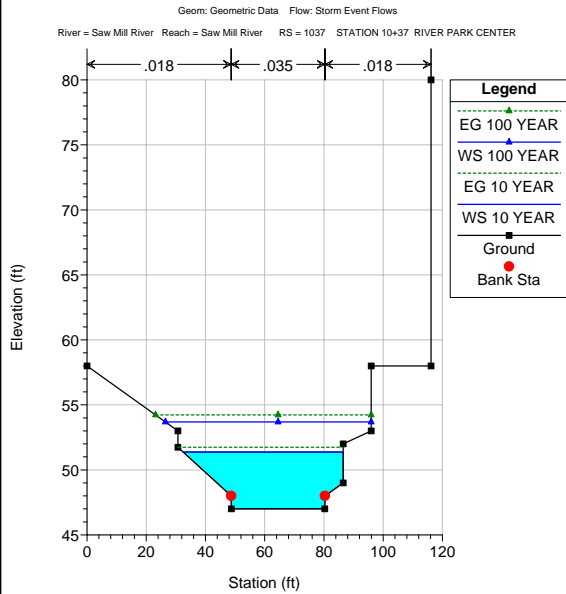
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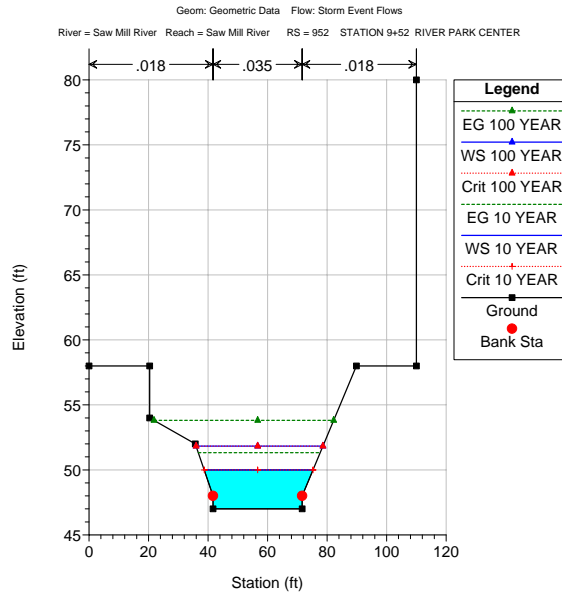
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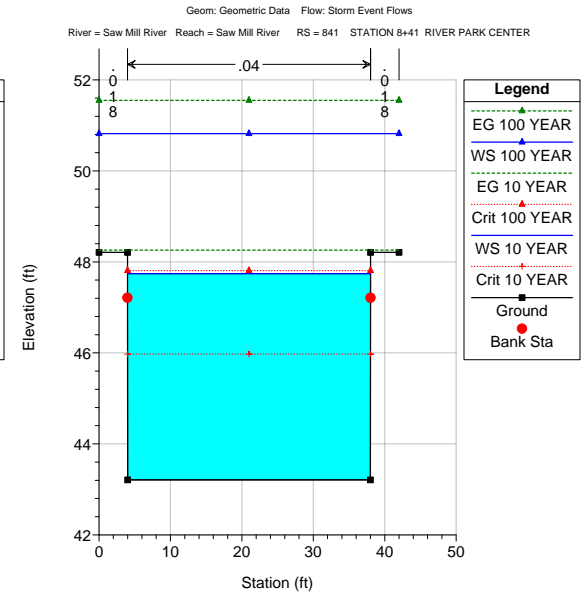
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PROPOSED CONDITIONS - SURVEY DATA Plan: Plan 01 8/6/2008



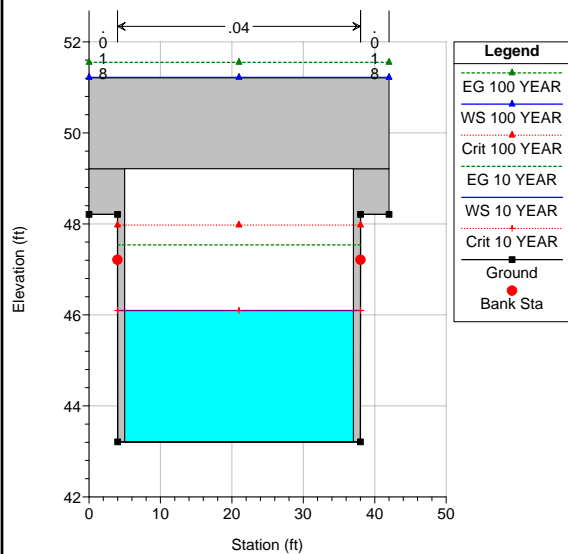
PROPOSED CONDITIONS - SURVEY DATA Plan: Plan 01 8/6/2008



PROPOSED CONDITIONS - SURVEY DATA Plan: Plan 01 8/6/2008

Geom: Geometric Data Flow: Storm Event Flows

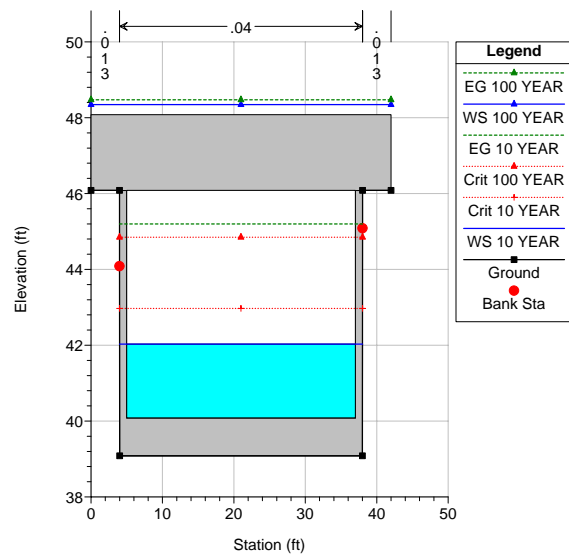
River = Saw Mill River Reach = Saw Mill River RS = 840 Culv ANN ST RIVER PARK CENTER



PROPOSED CONDITIONS - SURVEY DATA Plan: Plan 01 8/6/2008

Geom: Geometric Data Flow: Storm Event Flows

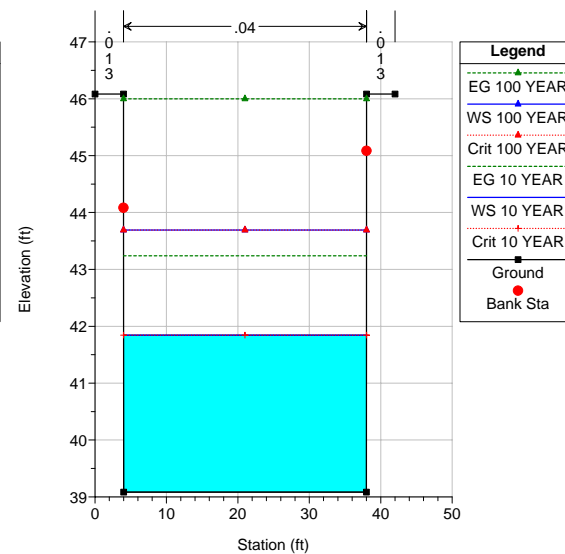
River = Saw Mill River Reach = Saw Mill River RS = 840 Culv ANN ST RIVER PARK CENTER



PROPOSED CONDITIONS - SURVEY DATA Plan: Plan 01 8/6/2008

Geom: Geometric Data Flow: Storm Event Flows

River = Saw Mill River Reach = Saw Mill River RS = 450 STATION 4+50 RIVER PARK CENTER





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