



Technical Memorandum

To: Tribute (Brookdale) Limited **Date:** October 30, 2023
From: WSP Canada Inc. **Project No:** 221-12931-00
Subject: **Floodplain Study for 1101, 1105 and 1163 Kingston Road**

1 INTRODUCTION

WSP Canada Inc. (WSP) has been retained by Tribute (Brookdale) Limited (the ‘Client’) to conduct a floodplain study to support the Re-Zoning Application for the proposed development located at 1101, 1105 and 1163 Kingston Road (herein called “the site”), City of Pickering in the Regional Municipality of Durham.

The site is partially located within the Pine Creek subwatershed (Frenchman’s Bay watershed) and falls within the jurisdiction of the Toronto and Region Conservation Authority (TRCA). WSP attended the pre-consultation meeting held by City of Pickering on June 20, 2023. Based on the Minutes / Meeting Summary, since the site is located partially within the TRCA’s Regulatory storm floodplain, a TRCA permit may be required prior to the development taking place under Ontario Regulation 166/06 (as amended or superseded). This technical memo documents the floodplain study methodology and presents the study findings.

2 SITE LOCATION

The site is bounded by Kingston Road to the north, Highway 401 to the south, Dixie Road to the west and undeveloped lands and Walnut Lane to the east. The proposed development has an area of 7.74 ha and will be developed in four separate phases with the area for each phase ranging from 1.40 ha to 2.46 ha. The location of the site is shown in **Figure 1** (located at the end of the technical memorandum).

Pine Creek and the cross-sections from the HEC-RAS model as well as the TRCA Regulatory floodlines are also illustrated in **Figure 1**. As shown in **Figure 1**, a small

100 Commerce Valley Drive West
Thornhill, ON
Canada L3T 0A1

T: +1 905 882-1100
F: +1 905 882-0055
wsp.com



portion of the northeast corner (approximately 12 m²) of the proposed development would encroach into the TRCA Regulatory floodplain.

Note that WSP has been retained by Tribute (Liverpool) Limited to provide engineering service to support the Site Plan Application for the proposed Walnut Lane development located north of the site and west of Liverpool Road. The proposed Walnut Lane Road will cross Pine Creek approximately 180 m north of Highway 401. A 36 m span bridge is proposed at this new watercourse crossing. The location of the proposed Walnut Lane Road development is shown in **Figure 1**.

3 TECHNICAL MEETING WITH TRCA

To fully understand the requirements of the TRCA and collect the available background information, WSP further held a technical meeting with the TRCA on October 10, 2023.

During the meeting, TRCA staff indicated that they were aware that WSP had revised the TRCA existing HEC-RAS hydraulic model to the proposed Walnut Lane development conditions. TRCA agreed that the revised HEC-RAS model could be used for the floodplain study of the site. Furthermore, TRCA required three scenarios be simulated for the purpose of this study, as listed below:

- Scenario 1: Existing conditions
- Scenario 2: Proposed development conditions
- Scenario 3: Proposed development plus proposed Walnut Lane development conditions

4 SCENARIO 1 – UPDATED EXISTING CONDITIONS

The existing HEC-RAS hydraulic model received from TRCA was used as the base model to simulate the updated existing conditions for the subject site. As stated above, a small portion of the site encroaches into the Regulatory floodplain. To examine the potential hydraulic impacts of the proposed development, a cross-section at the north edge of the site was added at RS1401 in the HEC-RAS model. No other changes to the model were made. The model was simulated under the 2 – 100 year and Regional flood event.

5 SCENARIO 2 - PROPOSED DEVELOPMENT

To simulate the proposed development conditions, the “obstruction” was used at the left (west) side of RS1401 to represent the blocked flow area, as shown in **Exhibit 1**



(located at the end of the technical memorandum). The model was simulated under the 2 – 100 year and Regional flood event. The comparisons of the 100-year and Regional water surface profiles between Scenario 1 and Scenario 2 were made and are presented in **Exhibit 2** and **Exhibit 3**, respectively. The model results show that minor localized water level increases (generally less than 0.05 m for all flow events) will occur due to the proposed development. The HEC-RAS model results are provided in the **Appendix**. The Regulatory floodlines were modified at the northeast corner of the proposed development, as shown in **Figure 2**.

6 SCENARIO 3 - PROPOSED DEVELOPMENT PLUS PROPOSED WALNUT LANE DEVELOPMENT

Scenario 3 includes the proposed development and a proposed watercourse crossing at Walnut Lane. For the purpose of direct comparison, WSP modified the TRCA's existing HEC-RAS model by adding five cross-sections under the existing conditions. Same as Scenario 1, one cross-section was added at RS1401 for the proposed development. The other four cross -sections were added at RS1442, RS1426.335, RS1395.236 and RS1355 for proper modelling of the proposed watercourse crossing at Walnut Lane. The revised existing condition model was simulated for the 2 – 100 year and Regional flood event.

The revised existing condition model was then updated to reflect the proposed conditions (Scenario 3). Similarly, the “obstruction” was used at the left (west) side of RS1401 to represent the blocked flow area. In addition, a 36 m proposed bridge was coded at RS1417.819. The proposed condition model was simulated under the 2 – 100 year and Regional flood event.

The comparison of the 100-year and Regional water surface profiles between the revised existing conditions and proposed conditions (Scenario 3) was made and are shown in **Exhibit 4** and **Exhibit 5**, respectively. The model results show minor localized water level increases (generally less than 0.05 m for all flow events) due to the proposed development and Walnut Lane development. The HEC-RAS model results are provided in the **Appendix**.

7 CONCLUSION

WSP performed the floodplain study to support the Re-Zoning Application for the proposed development located at 1101, 1105 and 1163 Kingston Road, City of



Pickering. The TRCA existing HEC-RAS model was revised to simulate the below three conditions:

- Scenario 1: Updated existing conditions
- Scenario 2: Proposed development conditions
- Scenario 3: Proposed development plus proposed Walnut Lane development conditions

The model results show the water level increases will be minor (generally less than 0.05 m for all flow events) due to the proposed development and Walnut Lane development. As such, the proposed development will have no negative impacts to adjacent properties.

Prepared by:

A handwritten signature in black ink, appearing to read "guxiaoxu".

Xiaoxu (Iris) Qu, P.Eng.
Senior Project Engineer
Water Resources

Reviewed by:

Albert Zhuge, P.Eng., PMP
Senior Project Manager
Water Resources



Figures and Exhibits

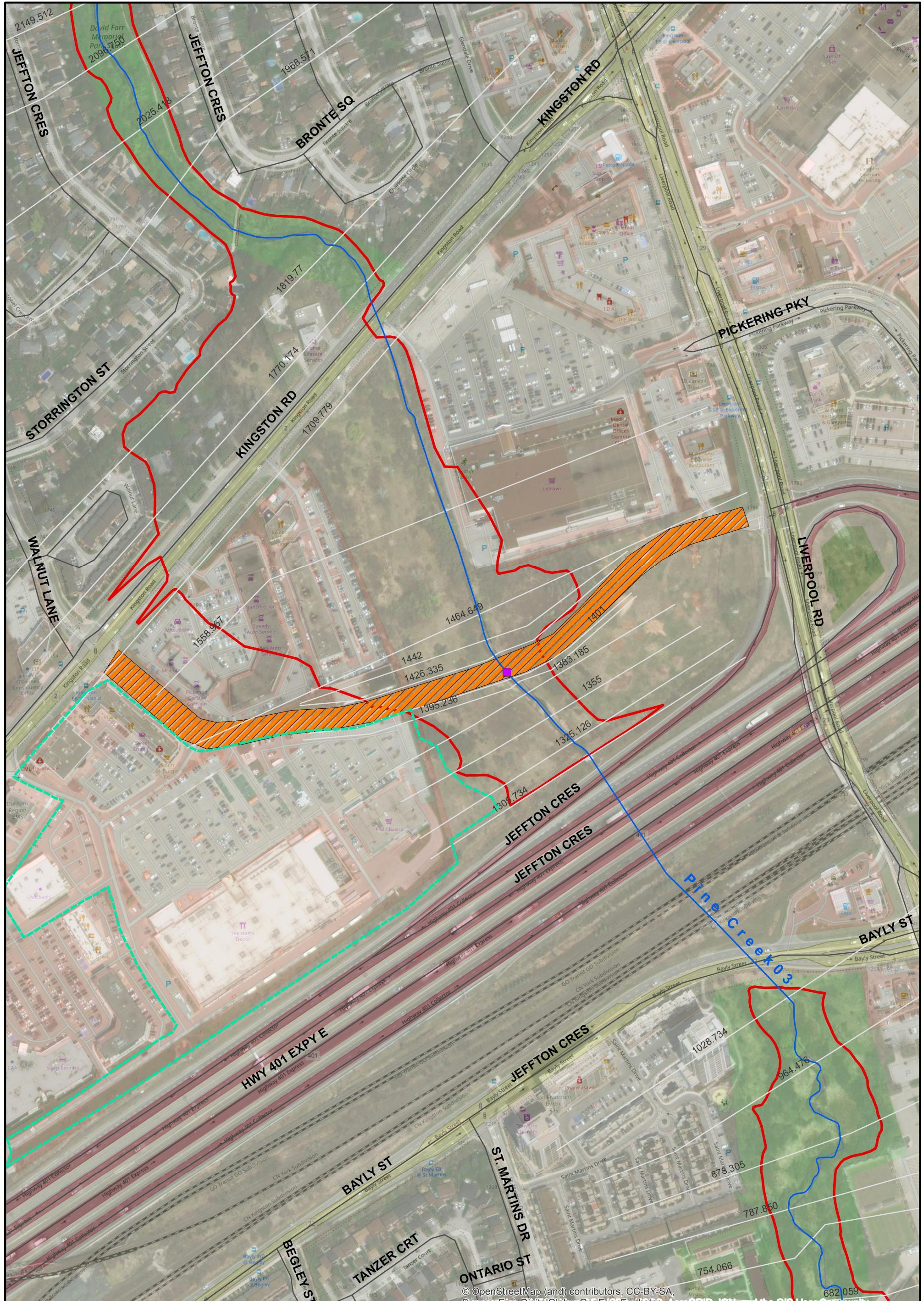


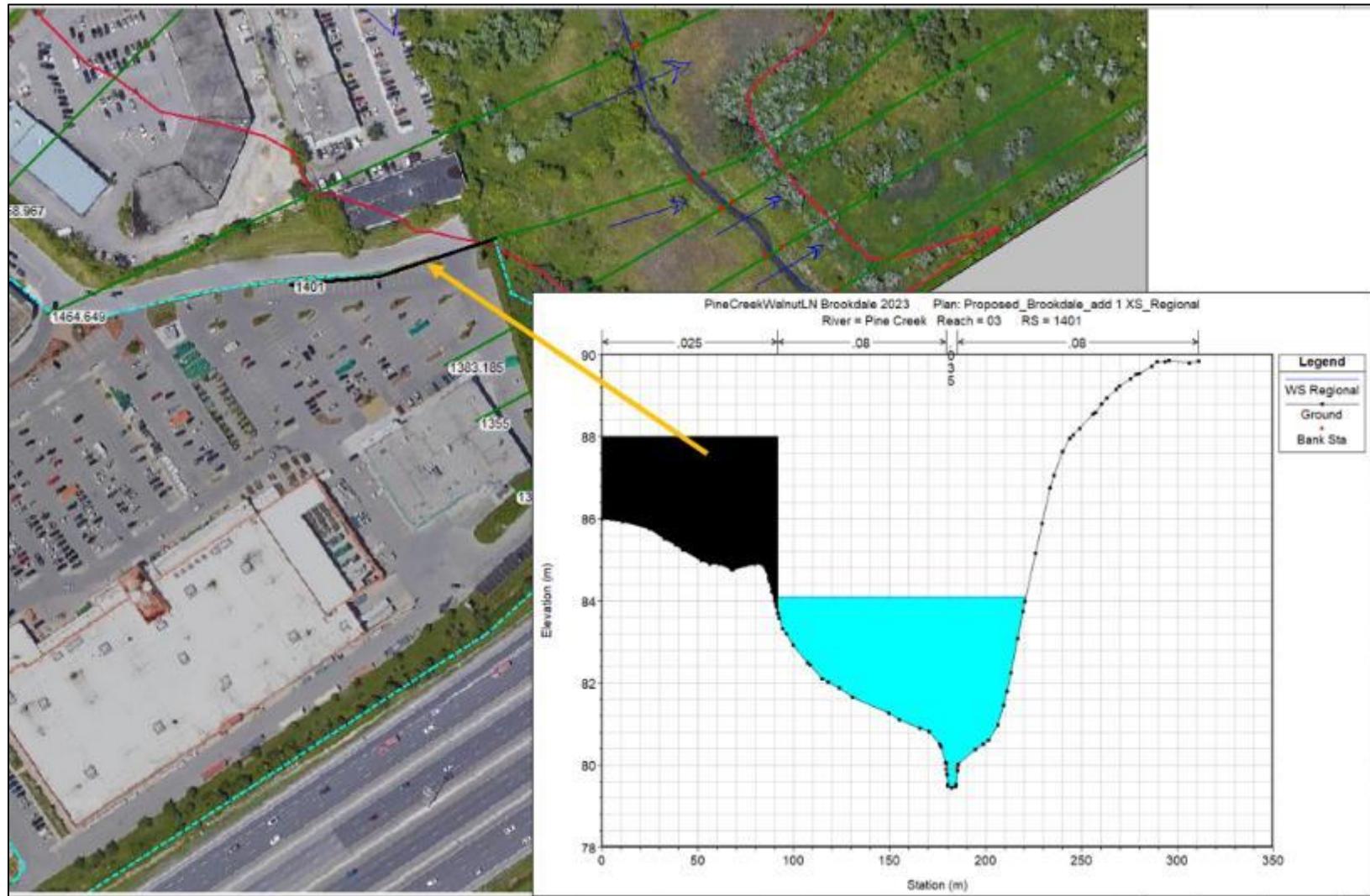
Exhibit 1: Cross-Section RS1401 under Proposed Conditions

Exhibit 2: 100-year Water Surface Comparison – Scenario 1 vs Scenario 2

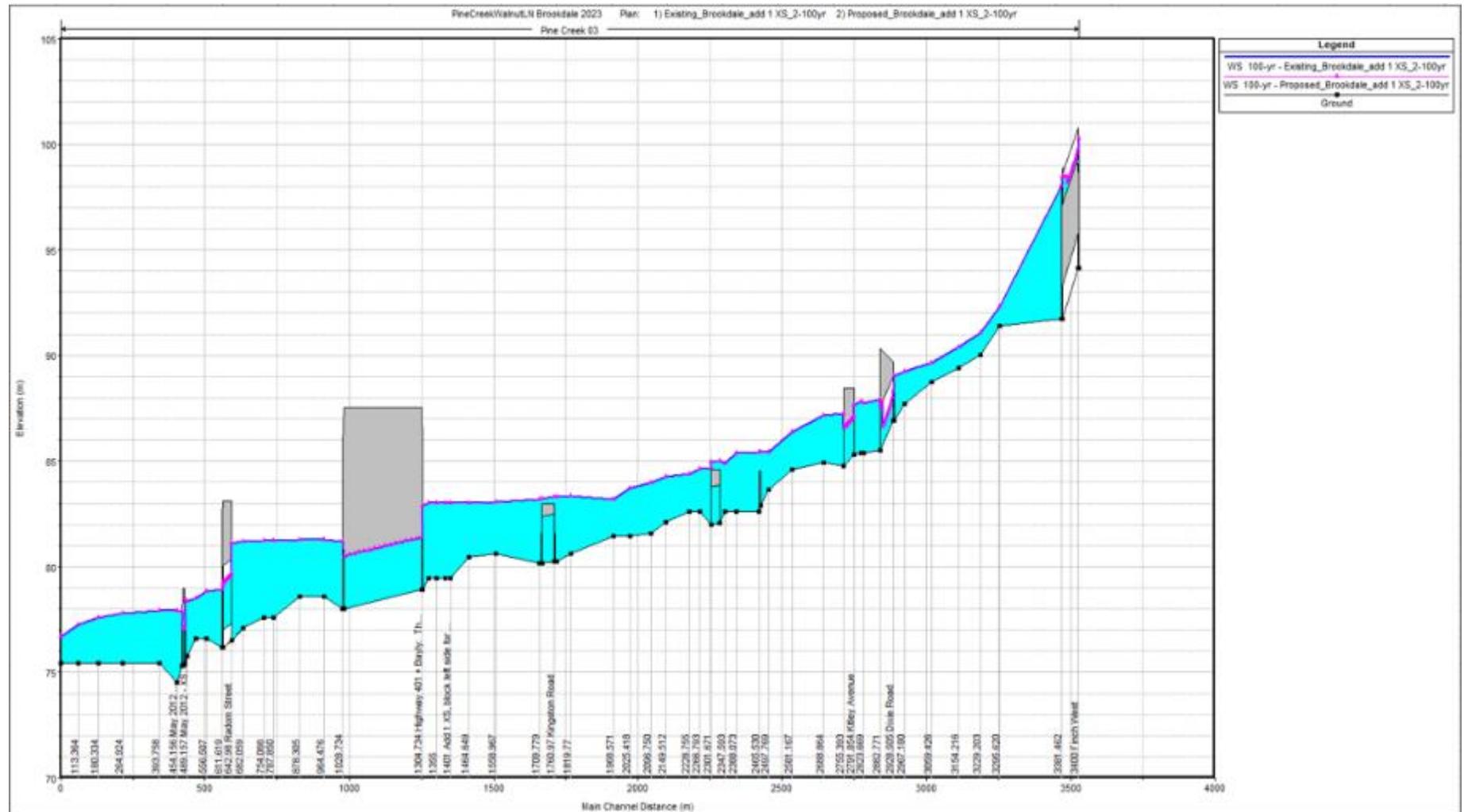
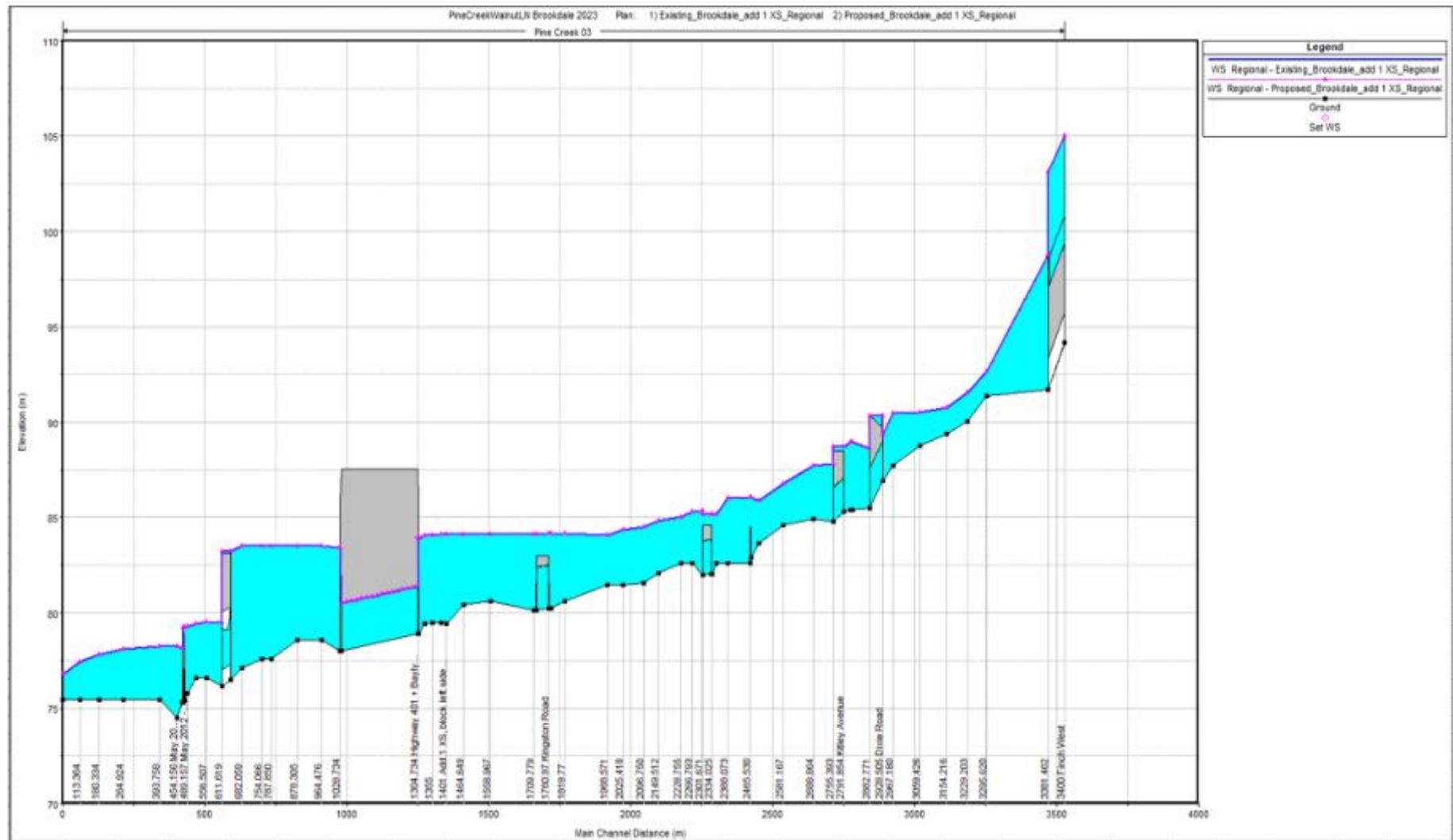
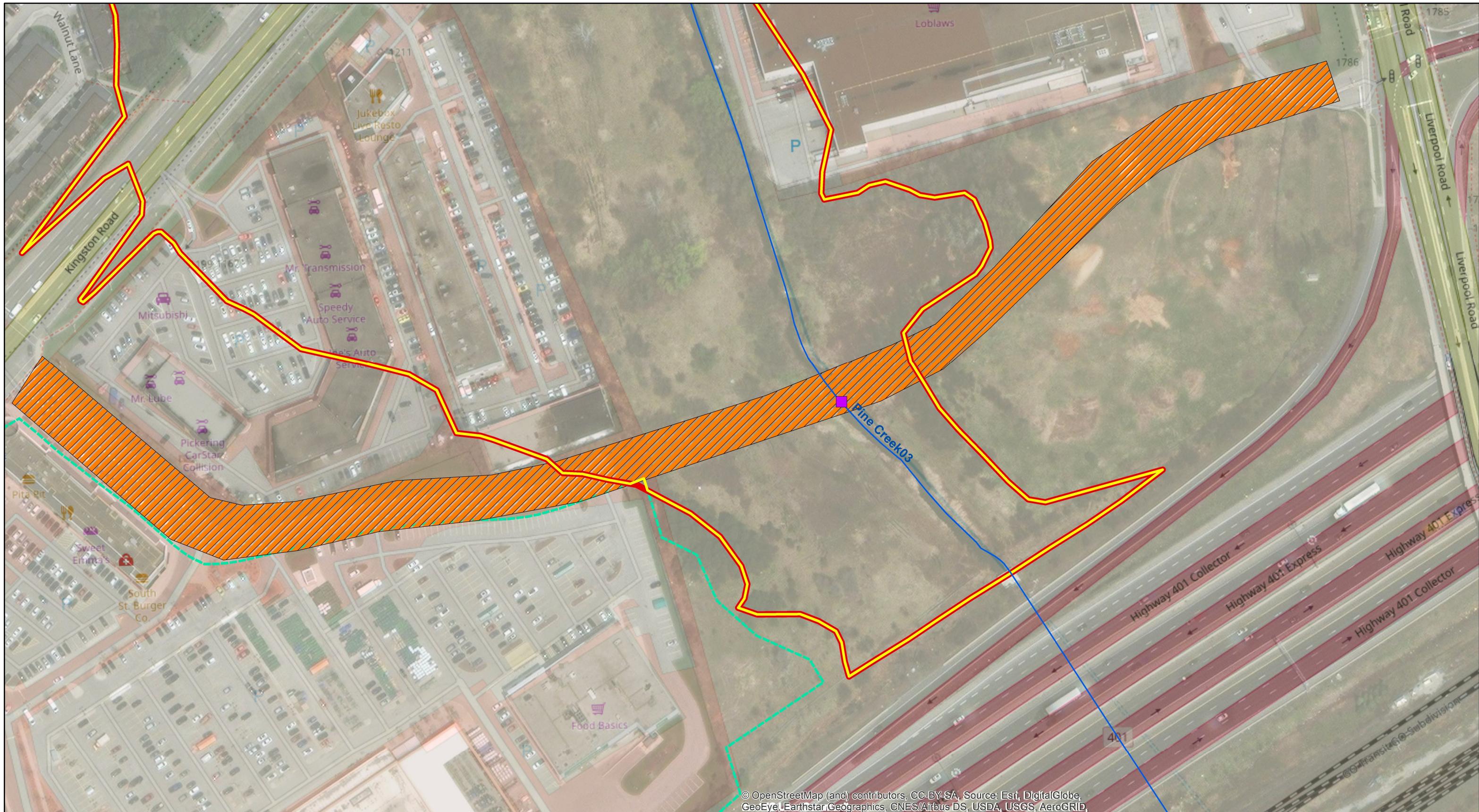


Exhibit 3: Regional Water Surface Comparison – Scenario 1 vs Scenario 2





Legend

Pine Creek_TRCA Model
Regulatory Floodline_TRCA

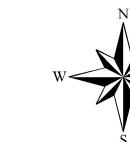
Proposed Site Boundary

Proposed Walnut Lane Development

ProposedCrossing_WalnutLane



0 10 20 40 60 80 Meters



CLIENT
TRIBUTE (BROOKDALE) LIMITED (76588)

TITLE
1101, 1105 and 1163 Kingston Road

Regulatory Floodlines

WSP

Checked A.ZH.	Drawn I.Q.
Date October 2023	Proj. No. 221-12931-00
Scale 1:1,500	Figure No. 2

Exhibit 4: 100-year Water Surface Comparison – Revised Existing vs Scenario 3

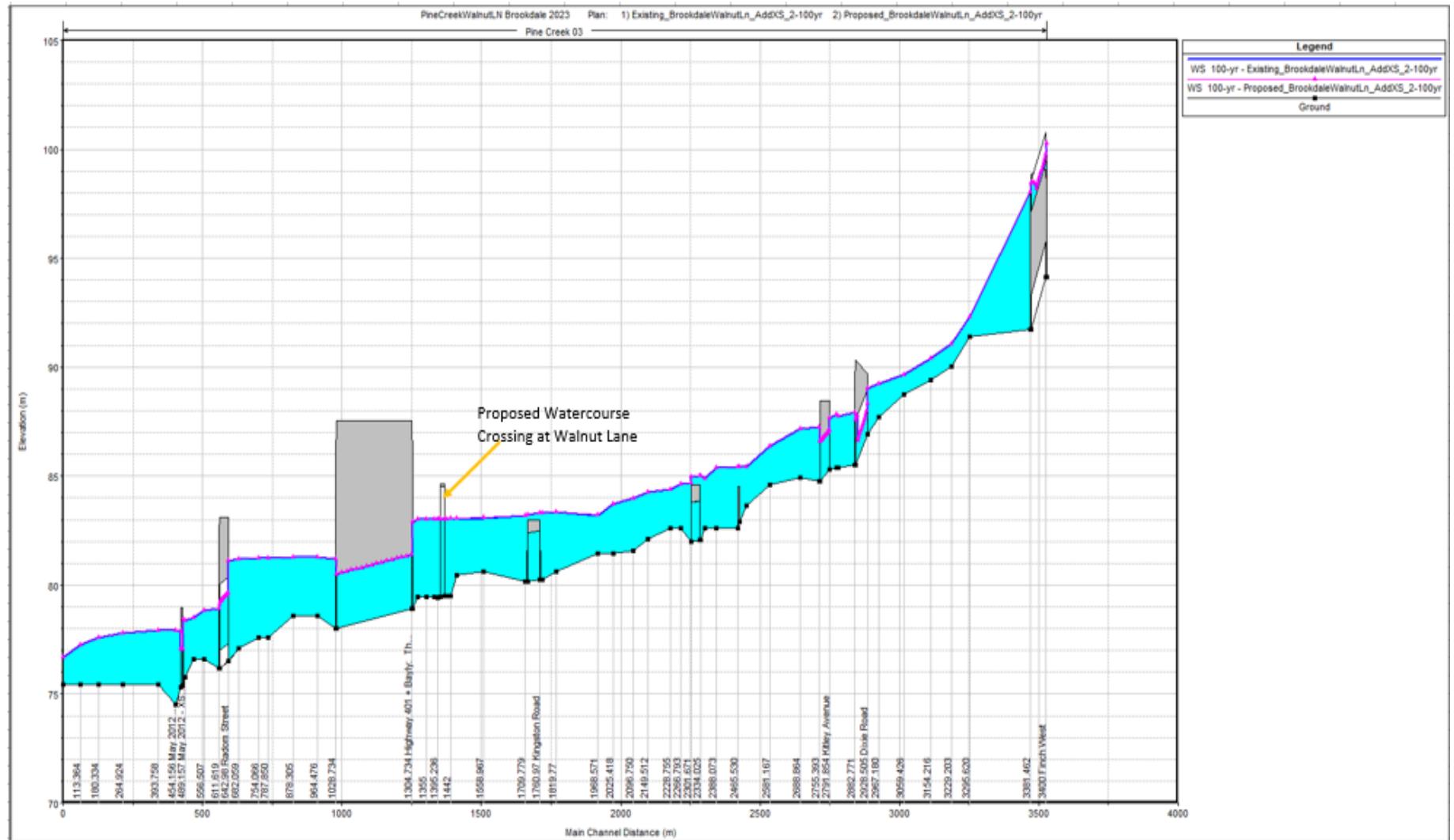
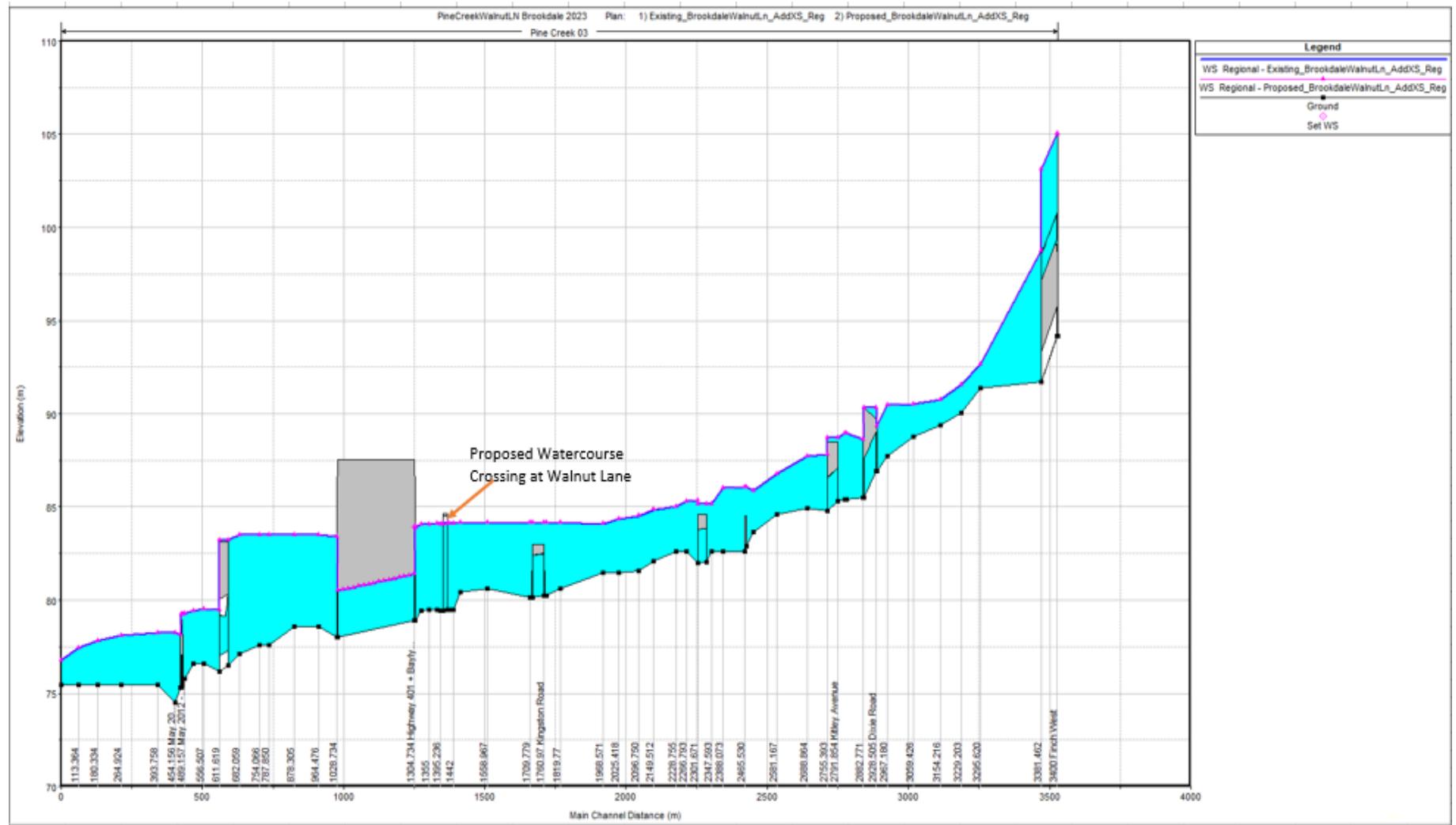


Exhibit 5: Regional Water Surface Comparison – Revised Existing vs Scenario 3





Appendix

HEC-RAS Model Output

2 - 100 Year Water Level Comparison - Scenario 1 vs Scenario 2

HEC-RAS River: Pine Creek Reach: 03

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	3439.853	2-yr	Existing_Brookdale_add 1 XS_2-100yr	1.17	94.15	99.65	99.65	99.78	0.057965	1.61	0.72	2.70	0.99
03	3439.853	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	1.17	94.15	99.65	99.65	99.78	0.057965	1.61	0.72	2.70	0.99
03	3439.853	5-yr	Existing_Brookdale_add 1 XS_2-100yr	2.26	94.15	99.80	99.80	100.00	0.056569	2.01	1.12	2.70	1.00
03	3439.853	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	2.26	94.15	99.80	99.80	100.00	0.056569	2.01	1.12	2.70	1.00
03	3439.853	10-yr	Existing_Brookdale_add 1 XS_2-100yr	3.17	94.15	99.90	99.90	100.16	0.054617	2.24	1.42	2.88	1.00
03	3439.853	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	3.17	94.15	99.90	99.90	100.16	0.054617	2.24	1.42	2.88	1.00
03	3439.853	25-yr	Existing_Brookdale_add 1 XS_2-100yr	4.51	94.15	100.05	100.05	100.36	0.050527	2.46	1.86	3.22	0.99
03	3439.853	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	4.51	94.15	100.05	100.05	100.36	0.050527	2.46	1.86	3.22	0.99
03	3439.853	50-yr	Existing_Brookdale_add 1 XS_2-100yr	5.63	94.15	100.16	100.16	100.50	0.047075	2.59	2.23	3.49	0.98
03	3439.853	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	5.63	94.15	100.16	100.16	100.50	0.047075	2.59	2.23	3.49	0.98
03	3439.853	100-yr	Existing_Brookdale_add 1 XS_2-100yr	6.71	94.15	100.25	100.25	100.62	0.045002	2.70	2.58	3.72	0.97
03	3439.853	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	6.71	94.15	100.25	100.25	100.62	0.045002	2.70	2.58	3.72	0.97
03	3400		Culvert										
03	3381.462	2-yr	Existing_Brookdale_add 1 XS_2-100yr	1.17	91.72	97.51	97.45	97.60	0.029812	1.30	0.90	2.70	0.72
03	3381.462	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	1.17	91.72	97.51	97.45	97.60	0.029812	1.30	0.90	2.70	0.72
03	3381.462	5-yr	Existing_Brookdale_add 1 XS_2-100yr	2.26	91.72	97.68	97.60	97.82	0.030762	1.66	1.36	3.08	0.75
03	3381.462	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	2.26	91.72	97.68	97.60	97.82	0.030762	1.66	1.36	3.08	0.75
03	3381.462	10-yr	Existing_Brookdale_add 1 XS_2-100yr	3.17	91.72	97.80	97.70	97.98	0.030461	1.90	1.67	3.89	0.77
03	3381.462	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	3.17	91.72	97.80	97.70	97.98	0.030461	1.90	1.67	3.89	0.77
03	3381.462	25-yr	Existing_Brookdale_add 1 XS_2-100yr	4.51	91.72	97.84	97.84	98.17	0.049360	2.53	1.78	4.20	0.99
03	3381.462	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	4.51	91.72	97.84	97.84	98.17	0.049360	2.53	1.78	4.20	0.99
03	3381.462	50-yr	Existing_Brookdale_add 1 XS_2-100yr	5.63	91.72	97.94	97.94	98.32	0.047304	2.73	2.06	4.93	1.00
03	3381.462	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	5.63	91.72	97.94	97.94	98.32	0.047304	2.73	2.06	4.93	1.00
03	3381.462	100-yr	Existing_Brookdale_add 1 XS_2-100yr	6.71	91.72	98.04	98.04	98.47	0.045839	2.90	2.31	5.59	1.00
03	3381.462	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	6.71	91.72	98.04	98.04	98.47	0.045839	2.90	2.31	5.59	1.00
03	3295.620	2-yr	Existing_Brookdale_add 1 XS_2-100yr	1.17	91.39	91.66	91.66	91.80	0.024123	1.65	0.71	2.60	1.01
03	3295.620	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	1.17	91.39	91.66	91.66	91.80	0.024123	1.65	0.71	2.60	1.01
03	3295.620	5-yr	Existing_Brookdale_add 1 XS_2-100yr	2.26	91.39	91.81	91.81	92.03	0.023397	2.05	1.10	2.60	1.00
03	3295.620	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	2.26	91.39	91.81	91.81	92.03	0.023397	2.05	1.10	2.60	1.00
03	3295.620	10-yr	Existing_Brookdale_add 1 XS_2-100yr	3.17	91.39	91.92	91.92	92.19	0.023538	2.29	1.38	2.60	1.00
03	3295.620	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	3.17	91.39	91.92	91.92	92.19	0.023538	2.29	1.38	2.60	1.00
03	3295.620	25-yr	Existing_Brookdale_add 1 XS_2-100yr	4.51	91.39	92.22	92.22	92.34	0.037362	1.68	5.65	33.71	0.59
03	3295.620	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	4.51	91.39	92.22	92.22	92.34	0.037362	1.68	5.65	33.71	0.59
03	3295.620	50-yr	Existing_Brookdale_add 1 XS_2-100yr	5.63	91.39	92.27	92.27	92.39	0.037644	1.78	7.39	37.28	0.61
03	3295.620	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	5.63	91.39	92.27	92.27	92.39	0.037644	1.78	7.39	37.28	0.61
03	3295.620	100-yr	Existing_Brookdale_add 1 XS_2-100yr	6.71	91.39	92.31	92.31	92.43	0.037609	1.84	9.07	40.20	0.61
03	3295.620	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	6.71	91.39	92.31	92.31	92.43	0.037609	1.84	9.07	40.20	0.61
03	3229.203	2-yr	Existing_Brookdale_add 1 XS_2-100yr	1.61	90.05	90.55	90.63	90.63	0.007316	1.24	1.30	2.60	0.56
03	3229.203	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	1.61	90.05	90.55	90.63	90.63	0.007316	1.24	1.30	2.60	0.56
03	3229.203	5-yr	Existing_Brookdale_add 1 XS_2-100yr	2.86	90.05	90.73	90.86	90.86	0.008901	1.61	1.98	8.47	0.63
03	3229.203	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	2.86	90.05	90.73	90.86	90.86	0.008901	1.61	1.98	8.47	0.63
03	3229.203	10-yr	Existing_Brookdale_add 1 XS_2-100yr	3.87	90.05	90.82	90.66	90.97	0.009469	1.81	3.09	15.64	0.66
03	3229.203	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	3.87	90.05	90.82	90.66	90.97	0.009469	1.81	3.09	15.64	0.66
03	3229.203	25-yr	Existing_Brookdale_add 1 XS_2-100yr	5.38	90.05	90.92	90.92	91.09	0.009257	1.95	5.21	23.94	0.67
03	3229.203	50-yr	Existing_Brookdale_add 1 XS_2-100yr	6.60	90.05	91.00	91.00	91.15	0.008688	1.99	7.13	29.52	0.65
03	3229.203	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	6.60	90.05	91.00	91.00	91.15	0.008688	1.99	7.13	29.52	0.65
03	3229.203	100-yr	Existing_Brookdale_add 1 XS_2-100yr	7.83	90.05	91.05	91.05	91.20	0.008629	2.06	8.78	33.12	0.66
03	3229.203	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	7.83	90.05	91.05	91.05	91.20	0.008629	2.06	8.78	33.12	0.66
03	3154.216	2-yr	Existing_Brookdale_add 1 XS_2-100yr	2.11	89.40	90.01	89.81	90.10	0.006711	1.31	1.76	14.28	0.54
03	3154.216	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	2.11	89.40	90.01	89.81	90.10	0.006711	1.31	1.76	14.28	0.54
03	3154.216	5-yr	Existing_Brookdale_add 1 XS_2-100yr	3.53	89.40	90.14	89.97	90.25	0.007408	1.56	3.93	19.85	0.58
03	3154.216	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	3.53	89.40	90.14	89.97	90.25	0.007408	1.56	3.93	19.85	0.58
03	3154.216	10-yr	Existing_Brookdale_add 1 XS_2-100yr	4.65	89.40	90.21	90.18	90.32	0.007814	1.70	5.35	22.79	0.60
03	3154.216	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	4.65	89.40	90.21	90.18	90.32	0.007814	1.70	5.35	22.79	0.60
03	3154.216	25-yr	Existing_Brookdale_add 1 XS_2-100yr	6.36	89.40	90.30	90.26	90.42	0.007502	1.80	7.71	26.97	0.60
03	3154.216	50-yr	Existing_Brookdale_add 1 XS_2-100yr	7.70	89.40	90.37	90.31	90.48	0.007306	1.85	9.48	29.71	0.60
03	3154.216	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	7.70	89.40	90.37	90.31	90.48	0.007306	1.85	9.48	29.71	0.60
03	3154.216	100-yr	Existing_Brookdale_add 1 XS_2-100yr	9.10	89.40	90.42	90.36	90.53	0.007276	1.92	11.17	32.10	0.61
03	3154.216	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	9.10	89.40	90.42	90.36	90.53	0.007276	1.92	11.17	32.10	0.61
03	3059.426	2-yr	Existing_Brookdale_add 1 XS_2-100yr	2.74	88.75	89.47	89.23	89.54	0.005363	1.30	4.20	42.90	0.49
03	3059.426	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	2.74	88.75	89.47	89.23	89.54	0.005363	1.30	4.20	42.90	0.49
03	3059.426	5-yr	Existing_Brookdale_add 1 XS_2-100yr	4.38	88.75	89.54	89.54	89.62	0.005975	1.47	8.36	62.87	0.53
03	3059.426	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	4.38	88.75	89.54	89.54	89.62	0.005975	1.47	8.36	62.87	0.53
03	3059.426	10-yr	Existing_Brookdale_add 1 XS_2-100yr	5.64	88.75	89.58	89.58	89.66	0.006259	1.55	11.03	70.28	0.54
03	3059.426	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	5.64	88.75	89.58	89.58	89.66	0.006259	1.55	11.03	70.28	0.54
03	3059.426	25-yr	Existing_Brookdale_add 1 XS_2-100yr	7.59	88.75	89.62	89.62	89.70	0.007381	1.74	13.70	73.29	0.59
03	3059.426	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	7.59	88.75	89.62	89.62	89.70	0.007381	1.74	13.70	73.29	0.59
03	3059.426	50-yr	Existing_Brookdale_add 1 XS_2-100yr	9.09	88.75	89.64	89.64	89.73	0.008219	1.87	15.43	75.17	0.63
03	3059.426	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	9.09	88.75	89.64	89.64	89.73	0.008219	1.87	15.43	75.17	0.63
03	3059.426	100-yr	Existing_Brookdale_add 1 XS_2-100yr	10.70	88.75	89.67	89.67	89.76	0.008932	1.98	17.21	77.07	0.66
03	3059.426	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	10.70	88.75	89.67	89.67	89.76</td					

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q.Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	2929.505	10-yr	Existing_Brookdale_add 1 XS_2-100yr	7.00	86.90	88.23	87.83	88.39	0.004698	1.84	4.51	17.01	0.51
03	2929.505	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	7.00	86.90	88.23	87.83	88.39	0.004698	1.84	4.51	17.01	0.51
03	2929.505	25-yr	Existing_Brookdale_add 1 XS_2-100yr	9.29	86.90	88.56	88.01	88.72	0.003723	1.90	5.92	54.52	0.47
03	2929.505	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	9.29	86.90	88.56	88.01	88.72	0.003723	1.90	5.92	54.52	0.47
03	2929.505	50-yr	Existing_Brookdale_add 1 XS_2-100yr	11.00	86.90	88.78	88.12	88.95	0.003289	1.94	6.90	63.82	0.45
03	2929.505	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.00	86.90	88.78	88.12	88.95	0.003289	1.94	6.90	63.82	0.45
03	2929.505	100-yr	Existing_Brookdale_add 1 XS_2-100yr	12.90	86.90	89.02	88.23	89.19	0.002949	1.99	7.93	71.56	0.44
03	2929.505	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.90	86.90	89.02	88.23	89.19	0.002949	1.99	7.93	71.56	0.44
03	2928.505		Culvert										
03	2882.771	2-yr	Existing_Brookdale_add 1 XS_2-100yr	3.92	85.50	86.73		86.81	0.002314	1.23	3.20	3.85	0.35
03	2882.771	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	3.92	85.50	86.73		86.81	0.002314	1.23	3.20	3.85	0.35
03	2882.771	5-yr	Existing_Brookdale_add 1 XS_2-100yr	5.97	85.50	87.06		87.17	0.002413	1.47	4.07	4.88	0.37
03	2882.771	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	5.97	85.50	87.06		87.17	0.002413	1.47	4.07	4.88	0.37
03	2882.771	10-yr	Existing_Brookdale_add 1 XS_2-100yr	7.49	85.50	87.28		87.41	0.002466	1.62	4.63	5.56	0.39
03	2882.771	25-yr	Existing_Brookdale_add 1 XS_2-100yr	9.90	85.50	87.57		87.74	0.002597	1.84	5.39	6.49	0.41
03	2882.771	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	9.90	85.50	87.57		87.74	0.002597	1.84	5.39	6.49	0.41
03	2882.771	50-yr	Existing_Brookdale_add 1 XS_2-100yr	11.68	85.50	87.73		87.94	0.002834	2.02	5.80	8.79	0.43
03	2882.771	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.68	85.50	87.73		87.94	0.002834	2.02	5.80	8.79	0.43
03	2882.771	100-yr	Existing_Brookdale_add 1 XS_2-100yr	13.69	85.50	87.93		88.17	0.002930	2.17	6.31	12.33	0.44
03	2882.771	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.69	85.50	87.93		88.17	0.002930	2.17	6.31	12.33	0.44
03	2823.669	2-yr	Existing_Brookdale_add 1 XS_2-100yr	4.31	85.40	86.45		86.57	0.006378	1.59	2.72	2.60	0.50
03	2823.669	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	4.31	85.40	86.45		86.57	0.006378	1.59	2.72	2.60	0.50
03	2823.669	5-yr	Existing_Brookdale_add 1 XS_2-100yr	6.50	85.40	86.74		86.92	0.007458	1.87	3.48	2.60	0.52
03	2823.669	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	6.50	85.40	86.74		86.92	0.007458	1.87	3.48	2.60	0.52
03	2823.669	10-yr	Existing_Brookdale_add 1 XS_2-100yr	8.11	85.40	86.93		87.14	0.008157	2.04	3.98	2.60	0.53
03	2823.669	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	8.11	85.40	86.93		87.14	0.008157	2.04	3.98	2.60	0.53
03	2823.669	25-yr	Existing_Brookdale_add 1 XS_2-100yr	10.67	85.40	87.21		87.46	0.008079	2.24	5.23	7.44	0.53
03	2823.669	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	10.67	85.40	87.21		87.46	0.008079	2.24	5.23	7.44	0.53
03	2823.669	50-yr	Existing_Brookdale_add 1 XS_2-100yr	12.55	85.40	87.46	86.73	87.69	0.006386	2.17	7.81	13.14	0.48
03	2823.669	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.55	85.40	87.46	86.73	87.69	0.006386	2.17	7.81	13.14	0.48
03	2823.669	100-yr	Existing_Brookdale_add 1 XS_2-100yr	14.69	85.40	87.76		87.92	0.004294	1.94	12.74	20.55	0.40
03	2823.669	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	14.69	85.40	87.76		87.92	0.004294	1.94	12.74	20.55	0.40
03	2816.869	2-yr	Existing_Brookdale_add 1 XS_2-100yr	4.36	85.40	86.43		86.52	0.003993	1.43	4.63	12.17	0.45
03	2816.869	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	4.36	85.40	86.43		86.52	0.003993	1.43	4.63	12.17	0.45
03	2816.869	5-yr	Existing_Brookdale_add 1 XS_2-100yr	6.56	85.40	86.77		86.83	0.002170	1.28	10.33	21.07	0.35
03	2816.869	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	6.56	85.40	86.77		86.83	0.002170	1.28	10.33	21.07	0.35
03	2816.869	10-yr	Existing_Brookdale_add 1 XS_2-100yr	8.18	85.40	86.99		87.04	0.001479	1.16	15.64	26.84	0.29
03	2816.869	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	8.18	85.40	86.99		87.04	0.001479	1.16	15.64	26.84	0.29
03	2816.869	25-yr	Existing_Brookdale_add 1 XS_2-100yr	10.76	85.40	87.31		87.34	0.000900	1.03	25.45	34.77	0.24
03	2816.869	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	10.76	85.40	87.31		87.34	0.000900	1.03	25.45	34.77	0.24
03	2816.869	50-yr	Existing_Brookdale_add 1 XS_2-100yr	12.65	85.40	87.56		87.57	0.000600	0.91	34.45	38.83	0.20
03	2816.869	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.65	85.40	87.56		87.57	0.000600	0.91	34.45	38.83	0.20
03	2816.869	100-yr	Existing_Brookdale_add 1 XS_2-100yr	14.80	85.40	87.82		87.84	0.000413	0.81	45.49	43.29	0.17
03	2816.869	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	14.80	85.40	87.82		87.84	0.000413	0.81	45.49	43.29	0.17
03	2793.314	2-yr	Existing_Brookdale_add 1 XS_2-100yr	8.21	85.30	86.39	85.85	86.46	0.001882	1.16	7.82	10.84	0.35
03	2793.314	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	8.21	85.30	86.39	85.85	86.46	0.001882	1.16	7.82	10.84	0.35
03	2793.314	5-yr	Existing_Brookdale_add 1 XS_2-100yr	12.83	85.30	86.69	86.06	86.78	0.001952	1.39	10.55	11.86	0.38
03	2793.314	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.83	85.30	86.69	86.06	86.78	0.001952	1.39	10.55	11.86	0.38
03	2793.314	10-yr	Existing_Brookdale_add 1 XS_2-100yr	16.03	85.30	86.88	86.20	86.99	0.001907	1.50	12.35	12.52	0.38
03	2793.314	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	16.03	85.30	86.88	86.20	86.99	0.001907	1.50	12.35	12.52	0.38
03	2793.314	25-yr	Existing_Brookdale_add 1 XS_2-100yr	21.10	85.30	87.17	86.37	87.30	0.001831	1.64	14.99	13.51	0.38
03	2793.314	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.10	85.30	87.17	86.37	87.30	0.001831	1.64	14.99	13.51	0.38
03	2793.314	50-yr	Existing_Brookdale_add 1 XS_2-100yr	24.89	85.30	87.40	86.49	87.54	0.001685	1.70	17.14	16.72	0.37
03	2793.314	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	24.89	85.30	87.40	86.49	87.54	0.001685	1.70	17.14	16.72	0.37
03	2793.314	100-yr	Existing_Brookdale_add 1 XS_2-100yr	28.90	85.30	87.67	86.60	87.81	0.001500	1.73	19.57	18.42	0.36
03	2793.314	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.90	85.30	87.67	86.60	87.81	0.001500	1.73	19.57	18.42	0.36
03	2791.854		Culvert										
03	2755.393	2-yr	Existing_Brookdale_add 1 XS_2-100yr	8.47	84.78	86.37		86.41	0.000590	0.84	10.05	11.61	0.21
03	2755.393	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	8.47	84.78	86.37		86.41	0.000590	0.84	10.05	11.61	0.21
03	2755.393	5-yr	Existing_Brookdale_add 1 XS_2-100yr	13.17	84.78	86.64		86.71	0.000852	1.12	11.72	13.04	0.26
03	2755.393	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.17	84.78	86.64		86.71	0.000852	1.12	11.72	13.04	0.26
03	2755.393	10-yr	Existing_Brookdale_add 1 XS_2-100yr	16.45	84.78	86.79		86.88	0.001022	1.30	12.69	14.33	0.29
03	2755.393	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	16.45	84.78	86.79		86.88	0.001022	1.30	12.69	14.33	0.29
03	2755.393	25-yr	Existing_Brookdale_add 1 XS_2-100yr	21.64	84.78	86.99		87.11	0.001298	1.55	13.92	15.88	0.33
03	2755.393	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.64	84.78	86.99		87.11	0.001298	1.55	13.92	15.88	0.33
03	2755.393	50-yr	Existing_Brookdale_add 1 XS_2-100yr	25.61	84.78	87.12		87.28	0.001496	1.74	14.76	16.80	0.36
03	2755.393	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	25.61	84.78	87.12		87.28	0.001496	1.74	14.76	16.80	0.36
03	2755.393	100-yr	Existing_Brookdale_add 1 XS_2-100yr	29.76	84.78	87.25		87.43	0.001701	1.92	15.54	17.66	0.39
03	2755.393	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	29.76	84.78	87.25		87.43	0.001701	1.92	15.54	17.66	0.39
03	2688.864	2-yr	Existing_Brookdale_add 1 XS_2-100yr	8.91	84.93	86.31		86.35	0.001491	1.15	16.02	20.84	0.31
03	2688.864	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	8.91	84.93	86.31		86.35	0.001491	1.15	16.02	20.84	0.31
03	2688.864	5-yr	Existing_Brookdale_add 1 XS_2-100yr	13.76	84.93	86.57		86.62	0.001607	1.34	21.69	23.06	0.33
03	2688.864	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.76	84.93	86.57		86.62	0.001607	1.34	21.69	23.06	0.33
03</td													

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q.Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	2581.167	25-yr	Existing_Brookdale_add 1 XS_2-100yr	24.11	84.60	86.15	86.13	86.49	0.010678	3.32	15.93	23.82	0.85
03	2581.167	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	24.11	84.60	86.15	86.13	86.49	0.010678	3.32	15.93	23.82	0.85
03	2581.167	50-yr	Existing_Brookdale_add 1 XS_2-100yr	28.92	84.60	86.28	86.24	86.62	0.010237	3.43	19.16	26.36	0.85
03	2581.167	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.92	84.60	86.28	86.24	86.62	0.010237	3.43	19.16	26.36	0.85
03	2581.167	100-yr	Existing_Brookdale_add 1 XS_2-100yr	33.71	84.60	86.37	86.35	86.73	0.010465	3.60	21.77	28.25	0.86
03	2581.167	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	33.71	84.60	86.37	86.35	86.73	0.010465	3.60	21.77	28.25	0.86
03	2497.769	2-yr	Existing_Brookdale_add 1 XS_2-100yr	10.20	83.66	84.97		85.08	0.004169	1.85	11.10	18.92	0.52
03	2497.769	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	10.20	83.66	84.97		85.08	0.004169	1.85	11.10	18.92	0.52
03	2497.769	5-yr	Existing_Brookdale_add 1 XS_2-100yr	15.46	83.66	85.01	84.92	85.24	0.008109	2.65	11.98	19.71	0.73
03	2497.769	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	15.46	83.66	85.01	84.92	85.24	0.008109	2.65	11.98	19.71	0.73
03	2497.769	10-yr	Existing_Brookdale_add 1 XS_2-100yr	19.33	83.66	85.04	85.04	85.37	0.011441	3.19	12.56	20.20	0.87
03	2497.769	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	19.33	83.66	85.04	85.04	85.37	0.011441	3.19	12.56	20.20	0.87
03	2497.769	25-yr	Existing_Brookdale_add 1 XS_2-100yr	25.30	83.66	85.20	85.20	85.56	0.011580	3.44	15.93	22.90	0.89
03	2497.769	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	25.30	83.66	85.20	85.20	85.56	0.011580	3.44	15.93	22.90	0.89
03	2497.769	50-yr	Existing_Brookdale_add 1 XS_2-100yr	30.50	83.66	85.31	85.31	85.70	0.011813	3.65	18.64	24.86	0.91
03	2497.769	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	30.50	83.66	85.31	85.31	85.70	0.011813	3.65	18.64	24.86	0.91
03	2497.769	100-yr	Existing_Brookdale_add 1 XS_2-100yr	35.60	83.66	85.43	85.43	85.82	0.011442	3.76	21.64	26.87	0.90
03	2497.769	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	35.60	83.66	85.43	85.43	85.82	0.011442	3.76	21.64	26.87	0.90
03	2470.847	2-yr	Existing_Brookdale_add 1 XS_2-100yr	10.38	82.89	85.02	83.98	85.03	0.000308	0.70	36.61	36.23	0.15
03	2470.847	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	10.38	82.89	85.02	83.98	85.03	0.000308	0.70	36.61	36.23	0.15
03	2470.847	5-yr	Existing_Brookdale_add 1 XS_2-100yr	15.69	82.89	85.12	84.21	85.14	0.000602	1.01	40.45	42.02	0.22
03	2470.847	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	15.69	82.89	85.12	84.21	85.14	0.000602	1.01	40.45	42.02	0.22
03	2470.847	10-yr	Existing_Brookdale_add 1 XS_2-100yr	19.63	82.89	85.18	84.37	85.21	0.000822	1.20	42.95	43.66	0.25
03	2470.847	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	19.63	82.89	85.18	84.37	85.21	0.000822	1.20	42.95	43.66	0.25
03	2470.847	25-yr	Existing_Brookdale_add 1 XS_2-100yr	25.68	82.89	85.25	84.49	85.30	0.001176	1.46	46.48	45.87	0.30
03	2470.847	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	25.68	82.89	85.25	84.49	85.30	0.001176	1.46	46.48	45.87	0.30
03	2470.847	50-yr	Existing_Brookdale_add 1 XS_2-100yr	31.01	82.89	85.32	84.57	85.38	0.001468	1.67	49.74	47.82	0.34
03	2470.847	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	31.01	82.89	85.32	84.57	85.38	0.001468	1.67	49.74	47.82	0.34
03	2470.847	100-yr	Existing_Brookdale_add 1 XS_2-100yr	36.21	82.89	85.43	84.66	85.49	0.001593	1.79	54.90	50.76	0.36
03	2470.847	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.21	82.89	85.43	84.66	85.49	0.001593	1.79	54.90	50.76	0.36
03	2468.187		Inl Struct										
03	2465.530	2-yr	Existing_Brookdale_add 1 XS_2-100yr	10.42	82.60	84.31		84.33	0.000577	0.83	28.42	29.50	0.20
03	2465.530	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	10.42	82.60	84.31		84.33	0.000577	0.83	28.42	29.50	0.20
03	2465.530	5-yr	Existing_Brookdale_add 1 XS_2-100yr	15.74	82.60	84.61		84.63	0.000609	0.94	37.61	31.88	0.21
03	2465.530	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	15.74	82.60	84.61		84.63	0.000609	0.94	37.61	31.88	0.21
03	2465.530	10-yr	Existing_Brookdale_add 1 XS_2-100yr	19.69	82.60	84.80		84.82	0.000644	1.03	43.66	34.66	0.22
03	2465.530	25-yr	Existing_Brookdale_add 1 XS_2-100yr	25.75	82.60	85.07		85.09	0.000655	1.12	53.94	41.51	0.23
03	2465.530	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	25.75	82.60	85.07		85.09	0.000655	1.12	53.94	41.51	0.23
03	2465.530	50-yr	Existing_Brookdale_add 1 XS_2-100yr	31.11	82.60	85.26		85.29	0.000670	1.19	62.38	45.91	0.23
03	2465.530	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	31.11	82.60	85.26		85.29	0.000670	1.19	62.38	45.91	0.23
03	2465.530	100-yr	Existing_Brookdale_add 1 XS_2-100yr	36.33	82.60	85.42		85.45	0.000684	1.26	70.26	49.56	0.24
03	2465.530	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.33	82.60	85.42		85.45	0.000684	1.26	70.26	49.56	0.24
03	2388.073	2-yr	Existing_Brookdale_add 1 XS_2-100yr	10.94	82.60	84.22		84.25	0.001340	1.21	21.94	32.44	0.30
03	2388.073	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	10.94	82.60	84.22		84.25	0.001340	1.21	21.94	32.44	0.30
03	2388.073	5-yr	Existing_Brookdale_add 1 XS_2-100yr	16.43	82.60	84.52		84.56	0.001242	1.31	33.50	44.09	0.30
03	2388.073	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	16.43	82.60	84.52		84.56	0.001242	1.31	33.50	44.09	0.30
03	2388.073	10-yr	Existing_Brookdale_add 1 XS_2-100yr	20.56	82.60	84.71		84.75	0.001153	1.34	42.56	51.57	0.30
03	2388.073	25-yr	Existing_Brookdale_add 1 XS_2-100yr	26.85	82.60	84.99		85.03	0.000941	1.32	58.96	62.89	0.27
03	2388.073	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	26.85	82.60	84.99		85.03	0.000941	1.32	58.96	62.89	0.27
03	2388.073	50-yr	Existing_Brookdale_add 1 XS_2-100yr	32.58	82.60	85.20		85.23	0.000854	1.33	72.30	70.10	0.26
03	2388.073	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	32.58	82.60	85.20		85.23	0.000854	1.33	72.30	70.10	0.26
03	2388.073	100-yr	Existing_Brookdale_add 1 XS_2-100yr	38.09	82.60	85.37		85.40	0.000795	1.34	84.80	76.23	0.26
03	2388.073	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	38.09	82.60	85.37		85.40	0.000795	1.34	84.80	76.23	0.26
03	2347.593	2-yr	Existing_Brookdale_add 1 XS_2-100yr	11.21	82.60	83.74		84.10	0.012531	2.93	6.01	10.08	0.88
03	2347.593	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.21	82.60	83.74		84.10	0.012531	2.93	6.01	10.08	0.88
03	2347.593	5-yr	Existing_Brookdale_add 1 XS_2-100yr	16.79	82.60	83.99		84.40	0.011965	3.28	8.86	12.41	0.89
03	2347.593	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	16.79	82.60	83.99		84.40	0.011965	3.28	8.86	12.41	0.89
03	2347.593	10-yr	Existing_Brookdale_add 1 XS_2-100yr	21.01	82.60	84.30		84.15	0.007681	3.01	13.19	15.29	0.74
03	2347.593	25-yr	Existing_Brookdale_add 1 XS_2-100yr	27.43	82.60	84.64		84.92	0.005839	2.96	18.97	19.05	0.66
03	2347.593	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.43	82.60	84.64		84.92	0.005839	2.96	18.97	19.05	0.66
03	2347.593	50-yr	Existing_Brookdale_add 1 XS_2-100yr	33.35	82.60	84.80		85.12	0.006310	3.23	22.08	21.75	0.70
03	2347.593	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	33.35	82.60	84.80		85.12	0.006310	3.23	22.08	21.75	0.70
03	2347.593	100-yr	Existing_Brookdale_add 1 XS_2-100yr	39.00	82.60	84.89		84.65	0.007484	3.61	24.09	24.87	0.76
03	2347.593	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	39.00	82.60	84.89		84.65	0.007484	3.61	24.09	24.87	0.76
03	2334.025	2-yr	Existing_Brookdale_add 1 XS_2-100yr	11.30	82.06	83.91		82.71	0.000530	0.88	13.28	16.96	0.21
03	2334.025	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.30	82.06	83.91		82.71	0.000530	0.88	13.28	16.96	0.21
03	2334.025	5-yr	Existing_Brookdale_add 1 XS_2-100yr	16.91	82.06	84.20		82.92	0.000723	1.14	15.45	19.51	0.25
03	2334.025	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	16.91	82.06	84.20		82.92	0.000723	1.14	15.45	19.51	0.25
03	2334.025	10-yr	Existing_Brookdale_add 1 XS_2-100yr	21.16	82.06	84.44		83.06	0.000794	1.28	17.20	21.58	0.26
03	2334.025	25-yr	Existing_Brookdale_add 1 XS_2-100yr	27.62	82.06	84.73		84.52	0.000794	1.28	17.20	21.58	0.26
03	2334.025	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.62	82.06	84.73		84.52	0.000794	1.28	17.20	21.58	0.26
03	2334.025	50-yr	Existing_Brookdale_add 1 XS_2-100yr	33.61	82.06	84.89		84.31	0.001089	1.68	25.		

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q.Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	2301.671	50-yr	Existing_Brookdale_add 1 XS_2-100yr	33.88	81.99	84.54	83.43	84.71	0.001971	1.90	26.67	34.36	0.39
03	2301.671	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	33.88	81.99	84.54	83.43	84.71	0.001971	1.90	26.67	34.36	0.39
03	2301.671	100-yr	Existing_Brookdale_add 1 XS_2-100yr	39.65	81.99	84.67	83.59	84.86	0.002097	2.03	31.25	36.70	0.41
03	2301.671	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	39.65	81.99	84.67	83.59	84.86	0.002097	2.03	31.25	36.70	0.41
03	2266.793	2-yr	Existing_Brookdale_add 1 XS_2-100yr	11.42	82.60	83.83	83.43	83.87	0.002156	1.28	19.93	28.53	0.37
03	2266.793	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.42	82.60	83.83	83.43	83.87	0.002156	1.28	19.93	28.53	0.37
03	2266.793	5-yr	Existing_Brookdale_add 1 XS_2-100yr	17.25	82.60	84.05	83.56	84.09	0.002337	1.49	26.38	31.61	0.39
03	2266.793	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	17.25	82.60	84.05	83.56	84.09	0.002337	1.49	26.38	31.61	0.39
03	2266.793	10-yr	Existing_Brookdale_add 1 XS_2-100yr	21.54	82.60	84.18	83.64	84.23	0.002435	1.61	30.71	33.51	0.41
03	2266.793	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.54	82.60	84.18	83.64	84.23	0.002435	1.61	30.71	33.51	0.41
03	2266.793	25-yr	Existing_Brookdale_add 1 XS_2-100yr	28.11	82.60	84.36	83.75	84.42	0.002525	1.76	37.03	36.12	0.42
03	2266.793	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.11	82.60	84.36	83.75	84.42	0.002525	1.76	37.03	36.12	0.42
03	2266.793	50-yr	Existing_Brookdale_add 1 XS_2-100yr	34.18	82.60	84.51	83.84	84.58	0.002585	1.88	42.54	38.24	0.43
03	2266.793	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	34.18	82.60	84.51	83.84	84.58	0.002585	1.88	42.54	38.24	0.43
03	2266.793	100-yr	Existing_Brookdale_add 1 XS_2-100yr	40.02	82.60	84.64	83.92	84.71	0.002619	1.98	47.70	40.13	0.44
03	2266.793	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	40.02	82.60	84.64	83.92	84.71	0.002619	1.98	47.70	40.13	0.44
03	2228.755	2-yr	Existing_Brookdale_add 1 XS_2-100yr	11.49	82.60	83.59	83.71	83.71	0.007499	2.07	11.89	22.61	0.66
03	2228.755	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.49	82.60	83.59	83.71	83.71	0.007499	2.07	11.89	22.61	0.66
03	2228.755	5-yr	Existing_Brookdale_add 1 XS_2-100yr	17.44	82.60	83.80	83.93	83.93	0.006909	2.26	17.01	25.74	0.66
03	2228.755	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	17.44	82.60	83.80	83.93	83.93	0.006909	2.26	17.01	25.74	0.66
03	2228.755	10-yr	Existing_Brookdale_add 1 XS_2-100yr	21.75	82.60	83.94	84.07	84.07	0.006576	2.36	20.57	27.71	0.65
03	2228.755	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.75	82.60	83.94	84.07	84.07	0.006576	2.36	20.57	27.71	0.65
03	2228.755	25-yr	Existing_Brookdale_add 1 XS_2-100yr	28.39	82.60	84.12	84.26	84.26	0.001655	2.49	25.92	30.43	0.65
03	2228.755	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.39	82.60	84.12	84.26	84.26	0.001655	2.49	25.92	30.43	0.65
03	2228.755	50-yr	Existing_Brookdale_add 1 XS_2-100yr	34.49	82.60	84.27	84.41	84.41	0.005872	2.59	30.67	32.66	0.64
03	2228.755	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	34.49	82.60	84.27	84.41	84.41	0.005872	2.59	30.67	32.66	0.64
03	2228.755	100-yr	Existing_Brookdale_add 1 XS_2-100yr	40.42	82.60	84.40	84.55	84.55	0.005652	2.68	35.17	34.64	0.64
03	2228.755	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	40.42	82.60	84.40	84.55	84.55	0.005652	2.68	35.17	34.64	0.64
03	2149.512	2-yr	Existing_Brookdale_add 1 XS_2-100yr	11.64	82.10	83.34	83.08	83.38	0.002298	1.33	21.62	37.24	0.38
03	2149.512	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.64	82.10	83.34	83.08	83.38	0.002298	1.33	21.62	37.24	0.38
03	2149.512	5-yr	Existing_Brookdale_add 1 XS_2-100yr	17.85	82.10	83.61	83.19	83.65	0.001856	1.36	32.08	41.03	0.35
03	2149.512	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	17.85	82.10	83.61	83.19	83.65	0.001856	1.36	32.08	41.03	0.35
03	2149.512	10-yr	Existing_Brookdale_add 1 XS_2-100yr	22.20	82.10	83.76	83.26	83.80	0.001756	1.41	38.36	43.15	0.35
03	2149.512	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.20	82.10	83.76	83.26	83.80	0.001756	1.41	38.36	43.15	0.35
03	2149.512	25-yr	Existing_Brookdale_add 1 XS_2-100yr	28.97	82.10	83.96	83.35	84.00	0.001691	1.49	47.18	45.95	0.35
03	2149.512	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.97	82.10	83.96	83.35	84.00	0.001691	1.49	47.18	45.95	0.35
03	2149.512	50-yr	Existing_Brookdale_add 1 XS_2-100yr	35.16	82.10	84.12	83.42	84.16	0.001662	1.56	54.64	48.21	0.35
03	2149.512	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	35.16	82.10	84.12	83.42	84.16	0.001662	1.56	54.64	48.21	0.35
03	2149.512	100-yr	Existing_Brookdale_add 1 XS_2-100yr	41.26	82.10	84.26	83.49	84.30	0.001657	1.63	61.46	50.18	0.36
03	2149.512	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	41.26	82.10	84.26	83.49	84.30	0.001657	1.63	61.46	50.18	0.36
03	2096.750	2-yr	Existing_Brookdale_add 1 XS_2-100yr	11.73	81.58	83.11	82.80	83.22	0.003678	1.83	12.80	19.80	0.47
03	2096.750	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.73	81.58	83.11	82.80	83.22	0.003678	1.83	12.80	19.80	0.47
03	2096.750	5-yr	Existing_Brookdale_add 1 XS_2-100yr	18.11	81.58	83.36	83.04	83.50	0.004074	2.13	18.24	23.92	0.51
03	2096.750	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	18.11	81.58	83.36	83.04	83.50	0.004074	2.13	18.24	23.92	0.51
03	2096.750	10-yr	Existing_Brookdale_add 1 XS_2-100yr	22.50	81.58	83.50	83.17	83.65	0.004274	2.29	21.69	26.20	0.53
03	2096.750	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.50	81.58	83.50	83.17	83.65	0.004274	2.29	21.69	26.20	0.53
03	2096.750	25-yr	Existing_Brookdale_add 1 XS_2-100yr	29.36	81.58	83.68	83.33	83.85	0.004544	2.51	26.70	29.19	0.55
03	2096.750	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	29.36	81.58	83.68	83.33	83.85	0.004544	2.51	26.70	29.19	0.55
03	2096.750	50-yr	Existing_Brookdale_add 1 XS_2-100yr	35.60	81.58	83.83	83.47	84.01	0.004644	2.66	31.26	31.68	0.57
03	2096.750	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	35.60	81.58	83.83	83.47	84.01	0.004644	2.66	31.26	31.68	0.57
03	2096.750	100-yr	Existing_Brookdale_add 1 XS_2-100yr	41.82	81.58	83.96	83.58	84.15	0.004781	2.80	35.44	33.79	0.58
03	2096.750	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	41.82	81.58	83.96	83.58	84.15	0.004781	2.80	35.44	33.79	0.58
03	2025.418	2-yr	Existing_Brookdale_add 1 XS_2-100yr	11.86	81.45	82.93	82.62	82.99	0.002597	1.50	17.70	27.72	0.40
03	2025.418	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.86	81.45	82.93	82.62	82.99	0.002597	1.50	17.70	27.72	0.40
03	2025.418	5-yr	Existing_Brookdale_add 1 XS_2-100yr	18.48	81.45	83.17	82.79	83.24	0.002755	1.71	24.84	31.41	0.42
03	2025.418	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	18.48	81.45	83.17	82.79	83.24	0.002755	1.71	24.84	31.41	0.42
03	2025.418	10-yr	Existing_Brookdale_add 1 XS_2-100yr	22.90	81.45	83.30	82.88	83.38	0.002474	1.82	29.21	33.47	0.43
03	2025.418	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.90	81.45	83.30	82.88	83.38	0.002474	1.82	29.21	33.47	0.43
03	2025.418	25-yr	Existing_Brookdale_add 1 XS_2-100yr	29.89	81.45	83.47	83.00	83.56	0.003032	2.00	35.08	36.06	0.45
03	2025.418	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	29.89	81.45	83.47	83.00	83.56	0.003032	2.00	35.08	36.06	0.45
03	2025.418	50-yr	Existing_Brookdale_add 1 XS_2-100yr	36.20	81.45	83.62	83.10	83.72	0.003064	2.11	40.64	38.35	0.46
03	2025.418	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.20	81.45	83.62	83.10	83.72	0.003064	2.11	40.64	38.35	0.46
03	2025.418	100-yr	Existing_Brookdale_add 1 XS_2-100yr	42.57	81.45	83.74	83.19	83.84	0.003209	2.24	45.32	40.17	0.47
03	2025.418	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	42.57	81.45	83.74	83.19	83.84	0.003209	2.24	45.32	40.17	0.47
03	1968.571	2-yr	Existing_Brookdale_add 1 XS_2-100yr	11.97	81.45	82.46	82.46	82.69	0.013363	2.65	8.95	18.86	0.84
03	1968.571	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	11.97	81.45	82.46	82.46	82.69	0.013363	2.65	8.95	18.86	0.84
03	1968.571	5-yr	Existing_Brookdale_add 1 XS_2-100yr	18.76	81.45	82.64	82.64	82.92	0.014532	3.08	12.49	20.91	0.90
03	1968.571	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	18.76	81.45	82.64	82.64	82.92	0.014532	3.08	12.49	20.91	0.90
03	1968.571	10-yr	Existing_Brookdale_add 1 XS_2-100yr	23.22	81.45	82.73	82.73	83.04	0.015404	3.33	14.46	21.98	0.94
03	1968.571	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	23.22	81.45	82.73	82.73	83.					

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	1770.174	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.33	80.24	82.22	80.91	82.26	0.000361	0.86	16.04	51.47	0.19
03	1770.174	5-yr	Existing_Brookdale_add 1 XS_2-100yr	19.77	80.24	82.53	81.17	82.60	0.000565	1.18	19.13	101.28	0.25
03	1770.174	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	19.77	80.24	82.53	81.17	82.60	0.000565	1.18	19.13	101.28	0.25
03	1770.174	10-yr	Existing_Brookdale_add 1 XS_2-100yr	24.34	80.24	82.70	81.31	82.79	0.000663	1.34	20.91	129.85	0.27
03	1770.174	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	24.34	80.24	82.70	81.31	82.79	0.000663	1.34	20.91	129.85	0.27
03	1770.174	25-yr	Existing_Brookdale_add 1 XS_2-100yr	31.76	80.24	83.04	81.52	83.06	0.000259	0.91	118.83	182.35	0.17
03	1770.174	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	31.76	80.24	83.04	81.52	83.06	0.000259	0.91	118.83	182.35	0.17
03	1770.174	50-yr	Existing_Brookdale_add 1 XS_2-100yr	38.35	80.24	83.15	81.69	83.17	0.000281	0.97	138.66	193.45	0.18
03	1770.174	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	38.35	80.24	83.15	81.69	83.17	0.000281	0.97	138.66	193.45	0.18
03	1770.174	100-yr	Existing_Brookdale_add 1 XS_2-100yr	45.27	80.24	83.32	81.85	83.34	0.000249	0.95	172.93	211.27	0.17
03	1770.174	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	45.27	80.24	83.32	81.85	83.34	0.000249	0.95	172.93	211.27	0.17
03	1760.97		Culvert										
03	1709.779	2-yr	Existing_Brookdale_add 1 XS_2-100yr	12.42	80.15	82.20	80.83	82.23	0.000404	0.85	14.53	66.61	0.19
03	1709.779	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.42	80.15	82.20	80.83	82.23	0.000404	0.85	14.53	66.61	0.19
03	1709.779	5-yr	Existing_Brookdale_add 1 XS_2-100yr	19.95	80.15	82.47	81.08	82.54	0.000690	1.21	16.45	127.85	0.25
03	1709.779	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	19.95	80.15	82.47	81.08	82.54	0.000690	1.21	16.45	127.85	0.25
03	1709.779	10-yr	Existing_Brookdale_add 1 XS_2-100yr	24.60	80.15	82.60	81.22	82.70	0.000876	1.42	17.36	157.06	0.29
03	1709.779	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	24.60	80.15	82.60	81.22	82.70	0.000876	1.42	17.36	157.06	0.29
03	1709.779	25-yr	Existing_Brookdale_add 1 XS_2-100yr	32.10	80.15	82.74	81.43	82.78	0.000432	1.04	102.86	191.01	0.21
03	1709.779	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	32.10	80.15	82.74	81.43	82.78	0.000432	1.04	102.86	191.01	0.21
03	1709.779	50-yr	Existing_Brookdale_add 1 XS_2-100yr	38.78	80.15	82.84	81.60	82.87	0.000474	1.11	121.93	212.46	0.22
03	1709.779	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	38.78	80.15	82.84	81.60	82.87	0.000474	1.11	121.93	212.46	0.22
03	1709.779	100-yr	Existing_Brookdale_add 1 XS_2-100yr	45.77	80.15	83.18	81.77	83.20	0.000224	0.83	205.02	255.74	0.15
03	1709.779	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	45.77	80.15	83.18	81.77	83.20	0.000224	0.83	205.02	255.74	0.15
03	1558.967	2-yr	Existing_Brookdale_add 1 XS_2-100yr	12.65	80.60	82.02	81.71	82.09	0.002851	1.62	19.37	34.39	0.43
03	1558.967	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.65	80.60	82.02	81.71	82.09	0.002851	1.62	19.37	34.39	0.43
03	1558.967	5-yr	Existing_Brookdale_add 1 XS_2-100yr	20.41	80.60	82.25	81.93	82.34	0.003308	1.93	28.42	44.71	0.48
03	1558.967	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	20.41	80.60	82.25	81.93	82.34	0.003308	1.93	28.42	44.71	0.48
03	1558.967	10-yr	Existing_Brookdale_add 1 XS_2-100yr	25.24	80.60	82.36	82.01	82.46	0.003513	2.08	33.59	49.68	0.50
03	1558.967	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	25.24	80.60	82.36	82.01	82.46	0.003513	2.08	33.59	49.68	0.50
03	1558.967	25-yr	Existing_Brookdale_add 1 XS_2-100yr	32.93	80.60	82.50	82.16	82.61	0.003838	2.29	40.97	56.02	0.53
03	1558.967	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	32.93	80.60	82.50	82.16	82.61	0.003838	2.29	40.97	56.02	0.53
03	1558.967	50-yr	Existing_Brookdale_add 1 XS_2-100yr	39.86	80.60	82.52	82.27	82.67	0.005277	2.70	42.14	56.96	0.62
03	1558.967	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	39.86	80.60	82.52	82.27	82.67	0.005277	2.70	42.14	56.96	0.62
03	1558.967	100-yr	Existing_Brookdale_add 1 XS_2-100yr	47.02	80.60	83.07	83.12	83.04	0.001529	1.72	88.68	123.30	0.35
03	1558.967	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	47.02	80.60	83.07	83.12	83.04	0.001529	1.72	88.68	123.30	0.35
03	1464.649	2-yr	Existing_Brookdale_add 1 XS_2-100yr	12.79	80.45	81.43	81.43	81.58	0.011588	2.42	13.35	39.34	0.79
03	1464.649	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.79	80.45	81.43	81.43	81.58	0.011588	2.42	13.35	39.34	0.79
03	1464.649	5-yr	Existing_Brookdale_add 1 XS_2-100yr	20.69	80.45	81.56	81.75	81.66	0.013444	2.85	19.16	46.64	0.87
03	1464.649	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	20.69	80.45	81.56	81.75	81.66	0.013444	2.85	19.16	46.64	0.87
03	1464.649	10-yr	Existing_Brookdale_add 1 XS_2-100yr	25.64	80.45	81.63	81.63	81.83	0.014119	3.04	22.56	50.42	0.90
03	1464.649	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	25.64	80.45	81.63	81.63	81.83	0.014119	3.04	22.56	50.42	0.90
03	1464.649	25-yr	Existing_Brookdale_add 1 XS_2-100yr	33.46	80.45	81.73	81.72	81.94	0.014440	3.25	27.99	55.92	0.92
03	1464.649	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	33.46	80.45	81.73	81.72	81.94	0.014440	3.25	27.99	55.92	0.92
03	1464.649	50-yr	Existing_Brookdale_add 1 XS_2-100yr	40.56	80.45	82.14	82.14	82.20	0.003914	2.03	58.41	104.23	0.50
03	1464.649	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	40.56	80.45	82.14	82.14	82.20	0.003914	2.03	58.41	104.23	0.50
03	1464.649	100-yr	Existing_Brookdale_add 1 XS_2-100yr	47.80	80.45	83.03	83.04	83.04	0.000342	0.80	188.30	182.98	0.16
03	1464.649	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	47.80	80.45	83.03	83.04	83.04	0.000342	0.80	188.30	182.98	0.16
03	1401	2-yr	Existing_Brookdale_add 1 XS_2-100yr	12.79	79.45	81.15	81.18	81.18	0.000510	0.87	33.62	54.15	0.22
03	1401	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.79	79.45	81.15	81.18	81.18	0.000510	0.87	33.62	54.15	0.22
03	1401	5-yr	Existing_Brookdale_add 1 XS_2-100yr	20.69	79.45	81.44	81.47	81.47	0.000559	1.01	51.34	68.49	0.23
03	1401	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	20.69	79.45	81.44	81.47	81.47	0.000559	1.01	51.34	68.49	0.23
03	1401	10-yr	Existing_Brookdale_add 1 XS_2-100yr	25.64	79.45	81.57	81.61	81.61	0.000599	1.09	60.90	75.67	0.24
03	1401	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	25.64	79.45	81.57	81.61	81.61	0.000599	1.09	60.90	75.67	0.24
03	1401	25-yr	Existing_Brookdale_add 1 XS_2-100yr	33.46	79.45	81.74	81.78	81.78	0.000667	1.22	73.92	82.98	0.26
03	1401	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	33.46	79.45	81.74	81.78	81.78	0.000667	1.22	73.92	82.98	0.26
03	1401	50-yr	Existing_Brookdale_add 1 XS_2-100yr	40.56	79.45	82.10	82.13	82.13	0.00420	1.07	106.91	97.64	0.21
03	1401	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	40.56	79.45	82.10	82.13	82.13	0.00420	1.07	106.91	97.64	0.21
03	1401	100-yr	Existing_Brookdale_add 1 XS_2-100yr	47.80	79.45	83.02	83.03	83.03	0.000108	0.66	205.98	118.02	0.11
03	1401	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	47.80	79.45	83.02	83.02	83.02	0.000107	0.65	204.27	103.47	0.11
03	1383.185	2-yr	Existing_Brookdale_add 1 XS_2-100yr	12.91	79.46	81.14	81.17	81.17	0.000526	0.86	38.85	64.38	0.22
03	1383.185	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	12.91	79.46	81.14	81.17	81.17	0.000526	0.86	38.85	64.38	0.22
03	1383.185	5-yr	Existing_Brookdale_add 1 XS_2-100yr	20.94	79.46	81.44	81.46	81.46	0.000529	0.97	59.49	75.76	0.22
03	1383.185	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	20.94	79.46	81.44	81.46	81.46	0.000529	0.97	59.49	75.76	0.22
03	1383.185	10-yr	Existing_Brookdale_add 1 XS_2-100yr	25.99	79.46	81.57	81.59	81.59	0.000551	1.03	69.86	79.43	0.23
03	1383.185	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	25.99	79.46	81.57	81.59	81.59	0.000551	1.03	69.86	79.43	0.23
03	1383.185	25-yr	Existing_Brookdale_add 1 XS_2-100yr	33.91	79.46	81.72	81.76	81.76	0.000603	1.14	83.14	82.99	0.24
03	1383.185	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	33.91	79.46	81.72	81.76	81.76	0.000603	1.14	83.14	82.99	0.24
03	1383.185	50-yr	Existing_Brookdale_add 1 XS_2-100yr	41.12	79.46	82.09	82.12	82.12	0.000379	1.00	115.06	90.58	0.20
03	1383.185	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	41.12	79.46	82.09	82.12	82.12	0.000379	1.00	115.06	90.58	0.20
03	1383.185												

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q.Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
03	1325.126	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	26.24	79.45	81.22	81.22	81.52	0.009064	3.16	20.41	37.17	0.76
03	1325.126	25-yr	Existing_Brookdale_add 1 XS_2-100yr	34.23	79.45	81.37	81.37	81.68	0.009304	3.39	26.61	44.81	0.78
03	1325.126	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	34.23	79.45	81.37	81.37	81.68	0.009304	3.39	26.61	44.81	0.78
03	1325.126	50-yr	Existing_Brookdale_add 1 XS_2-100yr	41.54	79.45	82.02		82.09	0.001891	1.86	64.94	69.86	0.37
03	1325.126	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	41.54	79.45	82.02		82.09	0.001891	1.86	64.94	69.86	0.37
03	1325.126	100-yr	Existing_Brookdale_add 1 XS_2-100yr	48.96	79.45	83.00		83.02	0.000324	0.95	141.12	86.62	0.16
03	1325.126	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	48.96	79.45	83.00		83.02	0.000324	0.95	141.12	86.62	0.16
03	1305.734	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.02	78.90	80.12	79.67	80.26	0.003414	1.69	8.39	8.94	0.49
03	1305.734	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.02	78.90	80.12	79.67	80.26	0.003414	1.69	8.39	8.94	0.49
03	1305.734	5-yr	Existing_Brookdale_add 1 XS_2-100yr	21.13	78.90	80.54	79.97	80.73	0.003053	1.95	13.27	17.27	0.49
03	1305.734	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.13	78.90	80.54	79.97	80.73	0.003053	1.95	13.27	17.27	0.49
03	1305.734	10-yr	Existing_Brookdale_add 1 XS_2-100yr	26.28	78.90	80.82	80.14	81.01	0.002593	2.00	16.94	32.55	0.46
03	1305.734	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	26.28	78.90	80.82	80.14	81.01	0.002593	2.00	16.94	32.55	0.46
03	1305.734	25-yr	Existing_Brookdale_add 1 XS_2-100yr	34.28	78.90	81.24	80.40	81.42	0.002089	2.04	22.40	54.24	0.43
03	1305.734	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	34.28	78.90	81.24	80.40	81.42	0.002089	2.04	22.40	54.24	0.43
03	1305.734	50-yr	Existing_Brookdale_add 1 XS_2-100yr	41.60	78.90	81.91	80.62	82.05	0.001179	1.82	31.31	79.75	0.33
03	1305.734	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	41.60	78.90	81.91	80.62	82.05	0.001179	1.82	31.31	79.75	0.33
03	1305.734	100-yr	Existing_Brookdale_add 1 XS_2-100yr	49.04	78.90	82.90	80.77	83.00	0.000571	1.53	44.42	117.09	0.24
03	1305.734	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	49.04	78.90	82.90	80.77	83.00	0.000571	1.53	44.42	117.09	0.24
03	1304.734		Culvert										
03	1028.734	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.32	78.00	79.88	79.94	80.00	0.000878	1.14	11.63	20.26	0.27
03	1028.734	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.32	78.00	79.88	79.94	80.00	0.000878	1.14	11.63	20.26	0.27
03	1028.734	5-yr	Existing_Brookdale_add 1 XS_2-100yr	21.47	78.00	80.04	80.19	80.19	0.001716	1.69	12.67	22.11	0.38
03	1028.734	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.47	78.00	80.04	80.19	80.19	0.001716	1.69	12.67	22.11	0.38
03	1028.734	10-yr	Existing_Brookdale_add 1 XS_2-100yr	26.82	78.00	80.15	80.36	80.24	0.002248	2.01	13.36	23.32	0.44
03	1028.734	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	26.82	78.00	80.15	80.36	80.24	0.002248	2.01	13.36	23.32	0.44
03	1028.734	25-yr	Existing_Brookdale_add 1 XS_2-100yr	35.03	78.00	80.44	80.71	80.71	0.002529	2.31	15.13	26.23	0.47
03	1028.734	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	35.03	78.00	80.44	80.71	80.71	0.002529	2.31	15.13	26.23	0.47
03	1028.734	50-yr	Existing_Brookdale_add 1 XS_2-100yr	42.53	78.00	80.77	81.08	81.08	0.002459	2.48	17.14	27.29	0.48
03	1028.734	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	42.53	78.00	80.77	81.08	81.08	0.002459	2.48	17.14	27.29	0.48
03	1028.734	100-yr	Existing_Brookdale_add 1 XS_2-100yr	50.12	78.00	81.21	81.54	81.54	0.002070	2.52	19.92	28.76	0.45
03	1028.734	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	50.12	78.00	81.21	81.54	81.54	0.002070	2.52	19.92	28.76	0.45
03	964.476	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.39	78.60	79.82	79.84	80.00	0.001925	1.20	25.39	34.64	0.35
03	964.476	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.39	78.60	79.82	79.84	80.00	0.001925	1.20	25.39	34.64	0.35
03	964.476	5-yr	Existing_Brookdale_add 1 XS_2-100yr	21.54	78.60	79.95	80.00	80.00	0.003022	1.61	30.08	35.46	0.44
03	964.476	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.54	78.60	79.95	80.00	80.00	0.003022	1.61	30.08	35.46	0.44
03	964.476	10-yr	Existing_Brookdale_add 1 XS_2-100yr	26.94	78.60	80.05	80.11	80.35	0.003352	1.79	33.78	36.10	0.47
03	964.476	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	26.94	78.60	80.05	80.11	80.35	0.003352	1.79	33.78	36.10	0.47
03	964.476	25-yr	Existing_Brookdale_add 1 XS_2-100yr	35.20	78.60	80.40	80.45	80.45	0.002185	1.66	46.77	38.24	0.40
03	964.476	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	35.20	78.60	80.40	80.45	80.45	0.002185	1.66	46.77	38.24	0.40
03	964.476	50-yr	Existing_Brookdale_add 1 XS_2-100yr	42.74	78.60	80.78	80.82	80.82	0.001414	1.52	61.86	40.59	0.33
03	964.476	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	42.74	78.60	80.78	80.82	80.82	0.001414	1.52	61.86	40.59	0.33
03	964.476	100-yr	Existing_Brookdale_add 1 XS_2-100yr	50.38	78.60	81.26	81.31	81.31	0.000848	1.35	82.70	43.92	0.26
03	964.476	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	50.38	78.60	81.26	81.31	81.31	0.000848	1.35	82.70	43.92	0.26
03	878.305	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.48	78.60	79.40	79.40	79.49	0.001128	2.18	19.35	74.19	0.78
03	878.305	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.48	78.60	79.40	79.49	79.49	0.001128	2.18	19.35	74.19	0.78
03	878.305	5-yr	Existing_Brookdale_add 1 XS_2-100yr	21.65	78.60	79.59	79.64	79.64	0.001640	1.86	33.42	77.25	0.60
03	878.305	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.65	78.60	79.59	79.64	79.64	0.001640	1.86	33.42	77.25	0.60
03	878.305	10-yr	Existing_Brookdale_add 1 XS_2-100yr	27.11	78.60	79.80	79.83	79.83	0.002873	1.46	50.65	83.62	0.42
03	878.305	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.11	78.60	79.80	79.83	79.83	0.002873	1.46	50.65	83.62	0.42
03	878.305	25-yr	Existing_Brookdale_add 1 XS_2-100yr	35.43	78.60	80.33	80.34	80.34	0.000679	0.90	97.55	92.24	0.22
03	878.305	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	35.43	78.60	80.33	80.34	80.34	0.000679	0.90	97.55	92.24	0.22
03	878.305	50-yr	Existing_Brookdale_add 1 XS_2-100yr	43.03	78.60	80.75	80.76	80.76	0.000344	0.74	136.97	94.20	0.16
03	878.305	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	43.03	78.60	80.75	80.76	80.76	0.000344	0.74	136.97	94.20	0.16
03	878.305	100-yr	Existing_Brookdale_add 1 XS_2-100yr	50.71	78.60	81.26	81.27	81.27	0.000182	0.62	186.00	96.62	0.12
03	878.305	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	50.71	78.60	81.26	81.27	81.27	0.000182	0.62	186.00	96.62	0.12
03	787.850	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.57	77.60	79.03	79.07	79.07	0.001791	1.29	25.18	34.63	0.34
03	787.850	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.57	77.60	79.03	79.07	79.07	0.001791	1.29	25.18	34.63	0.34
03	787.850	5-yr	Existing_Brookdale_add 1 XS_2-100yr	21.76	77.60	79.33	79.37	79.37	0.001685	1.42	35.75	36.03	0.35
03	787.850	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.76	77.60	79.33	79.37	79.37	0.001685	1.42	35.75	36.03	0.35
03	787.850	10-yr	Existing_Brookdale_add 1 XS_2-100yr	27.29	77.60	79.64	79.67	79.67	0.001192	1.33	46.97	37.45	0.30
03	787.850	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.29	77.60	79.64	79.67	79.67	0.001192	1.33	46.97	37.45	0.30
03	787.850	25-yr	Existing_Brookdale_add 1 XS_2-100yr	35.68	77.60	80.25	80.28	80.28	0.000603	1.13	70.97	40.34	0.22
03	787.850	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	35.68	77.60	80.25	80.28	80.28	0.000603	1.13	70.97	40.34	0.22
03	787.850	50-yr	Existing_Brookdale_add 1 XS_2-100yr	43.33	77.60	80.70	80.72	80.72	0.000452	1.09	89.35	42.42	0.20
03	787.850	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	43.33	77.60	80.70	80.72	80.72	0.000452	1.09	89.35	42.42	0.20
03	787.850	100-yr	Existing_Brookdale_add 1 XS_2-100yr	51.07	77.60	81.22	81.24	81.24	0.000321	1.02	112.45	44.89	0.17
03	787.850	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	51.07	77.60	81.22	81.24	81.24	0.000321	1.02	112.45	44.89	0.17
03	754.066	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.61	77.60	78.76	78.76	78.94	0.008514	2.45	13.97	35.70	0.73
03	754.066	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.61	77.60	78.76	78.76	78.94	0.008514	2.45	13.97	35.70	0.73
03	754.066	5-yr	Existing_Brookdale_add 1 XS_2-100yr	21.08	77.60	79							

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q.Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	682.059	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	43.68	77.10	80.67		80.68	0.000218	0.83	118.34	47.20	0.14
03	682.059	100-yr	Existing_Brookdale_add 1 XS_2-100yr	51.48	77.10	81.21		81.22	0.000168	0.80	144.26	49.24	0.13
03	682.059	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	51.48	77.10	81.21		81.22	0.000168	0.80	144.26	49.24	0.13
03	644.335	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.73	76.49	78.60	77.65	78.65	0.001003	1.25	18.61	18.83	0.28
03	644.335	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.73	76.49	78.60	77.65	78.65	0.001003	1.25	18.61	18.83	0.28
03	644.335	5-yr	Existing_Brookdale_add 1 XS_2-100yr	21.93	76.49	79.12	77.89	79.19	0.001072	1.50	24.57	23.79	0.30
03	644.335	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.93	76.49	79.12	77.89	79.19	0.001072	1.50	24.57	23.79	0.30
03	644.335	10-yr	Existing_Brookdale_add 1 XS_2-100yr	27.57	76.49	79.46	78.04	79.54	0.001064	1.62	28.44	28.32	0.30
03	644.335	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.57	76.49	79.46	78.04	79.54	0.001064	1.62	28.44	28.32	0.30
03	644.335	25-yr	Existing_Brookdale_add 1 XS_2-100yr	36.06	76.49	80.12	78.24	80.20	0.000855	1.66	35.98	36.81	0.28
03	644.335	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.06	76.49	80.12	78.24	80.20	0.000855	1.66	35.98	36.81	0.28
03	644.335	50-yr	Existing_Brookdale_add 1 XS_2-100yr	43.81	76.49	80.57	78.39	80.66	0.000824	1.76	41.06	41.46	0.28
03	644.335	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	43.81	76.49	80.57	78.39	80.66	0.000824	1.76	41.06	41.46	0.28
03	644.335	100-yr	Existing_Brookdale_add 1 XS_2-100yr	51.63	76.49	81.11	78.55	81.20	0.000730	1.80	47.16	46.69	0.27
03	644.335	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	51.63	76.49	81.11	78.55	81.20	0.000730	1.80	47.16	46.69	0.27
03	642.98		Culvert										
03	611.619	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.76	76.18	78.20		78.27	0.001364	1.42	16.67	26.30	0.32
03	611.619	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.76	76.18	78.20		78.27	0.001364	1.42	16.67	26.30	0.32
03	611.619	5-yr	Existing_Brookdale_add 1 XS_2-100yr	21.97	76.18	78.45		78.57	0.002170	1.93	19.47	28.91	0.41
03	611.619	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	21.97	76.18	78.45		78.57	0.002170	1.93	19.47	28.91	0.41
03	611.619	10-yr	Existing_Brookdale_add 1 XS_2-100yr	27.63	76.18	78.58		78.74	0.002751	2.26	20.93	29.65	0.47
03	611.619	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.63	76.18	78.58		78.74	0.002751	2.26	20.93	29.65	0.47
03	611.619	25-yr	Existing_Brookdale_add 1 XS_2-100yr	36.15	76.18	78.72		78.95	0.003732	2.74	22.56	30.47	0.55
03	611.619	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.15	76.18	78.72		78.95	0.003732	2.74	22.56	30.47	0.55
03	611.619	50-yr	Existing_Brookdale_add 1 XS_2-100yr	43.92	76.18	78.84		79.14	0.004613	3.13	23.89	31.15	0.61
03	611.619	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	43.92	76.18	78.84		79.14	0.004613	3.13	23.89	31.15	0.61
03	611.619	100-yr	Existing_Brookdale_add 1 XS_2-100yr	51.76	76.18	78.92		79.30	0.005708	3.55	24.79	31.60	0.69
03	611.619	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	51.76	76.18	78.92		79.30	0.005708	3.55	24.79	31.60	0.69
03	556.507	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.82	76.60	78.13		78.17	0.001745	1.33	26.54	40.03	0.34
03	556.507	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.82	76.60	78.13		78.17	0.001745	1.33	26.54	40.03	0.34
03	556.507	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.03	76.60	78.38		78.42	0.001854	1.52	36.59	42.35	0.36
03	556.507	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.03	76.60	78.38		78.42	0.001854	1.52	36.59	42.35	0.36
03	556.507	10-yr	Existing_Brookdale_add 1 XS_2-100yr	27.74	76.60	78.50		78.56	0.001994	1.65	42.08	43.57	0.38
03	556.507	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.74	76.60	78.50		78.56	0.001994	1.65	42.08	43.57	0.38
03	556.507	25-yr	Existing_Brookdale_add 1 XS_2-100yr	36.30	76.60	78.65		78.71	0.002310	1.86	48.36	44.92	0.42
03	556.507	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.30	76.60	78.65		78.71	0.002310	1.86	48.36	44.92	0.42
03	556.507	50-yr	Existing_Brookdale_add 1 XS_2-100yr	44.10	76.60	78.77		78.84	0.002503	2.01	53.98	46.09	0.44
03	556.507	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	44.10	76.60	78.77		78.84	0.002503	2.01	53.98	46.09	0.44
03	556.507	100-yr	Existing_Brookdale_add 1 XS_2-100yr	51.98	76.60	78.85		78.94	0.002870	2.21	57.72	46.71	0.47
03	556.507	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	51.98	76.60	78.85		78.94	0.002870	2.21	57.72	46.71	0.47
03	519.899	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.86	76.60	77.74	77.74	77.98	0.010785	2.73	11.15	24.15	0.81
03	519.899	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.86	76.60	77.74	77.74	77.98	0.010785	2.73	11.15	24.15	0.81
03	519.899	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.08	76.60	77.95		78.22	0.011174	3.10	16.89	33.51	0.85
03	519.899	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.08	76.60	77.95		78.22	0.011174	3.10	16.89	33.51	0.85
03	519.899	10-yr	Existing_Brookdale_add 1 XS_2-100yr	27.81	76.60	78.05	78.05	78.34	0.011759	3.34	20.51	38.55	0.89
03	519.899	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.81	76.60	78.05	78.05	78.34	0.011759	3.34	20.51	38.55	0.89
03	519.899	25-yr	Existing_Brookdale_add 1 XS_2-100yr	36.40	76.60	78.21	78.21	78.49	0.010723	3.43	27.13	40.73	0.86
03	519.899	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.40	76.60	78.21	78.21	78.49	0.010723	3.43	27.13	40.73	0.86
03	519.899	50-yr	Existing_Brookdale_add 1 XS_2-100yr	44.22	76.60	78.29	78.29	78.60	0.011881	3.72	30.25	41.22	0.91
03	519.899	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	44.22	76.60	78.29	78.29	78.60	0.011881	3.72	30.25	41.22	0.91
03	519.899	100-yr	Existing_Brookdale_add 1 XS_2-100yr	52.12	76.60	78.48		78.72	0.008723	3.42	38.26	42.46	0.80
03	519.899	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	52.12	76.60	78.48		78.72	0.008723	3.42	38.26	42.46	0.80
03	489.157	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.86	75.78	77.05		77.23	0.006264	1.94	7.62	12.04	0.67
03	489.157	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.86	75.78	77.05		77.23	0.006264	1.94	7.62	12.04	0.67
03	489.157	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.08	75.78	77.28	77.11	77.55	0.006823	2.37	10.82	17.76	0.73
03	489.157	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.08	75.78	77.28	77.11	77.55	0.006823	2.37	10.82	17.76	0.73
03	489.157	10-yr	Existing_Brookdale_add 1 XS_2-100yr	27.81	75.78	77.50	77.25	77.77	0.005346	2.38	15.25	20.99	0.66
03	489.157	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.81	75.78	77.50	77.25	77.77	0.005346	2.38	15.25	20.99	0.66
03	489.157	25-yr	Existing_Brookdale_add 1 XS_2-100yr	36.40	75.78	77.79		78.05	0.004197	2.40	21.56	23.12	0.61
03	489.157	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.40	75.78	77.79		78.05	0.004197	2.40	21.56	23.12	0.61
03	489.157	50-yr	Existing_Brookdale_add 1 XS_2-100yr	44.22	75.78	78.07		78.31	0.003338	2.39	28.71	28.50	0.56
03	489.157	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	44.22	75.78	78.07		78.31	0.003338	2.39	28.71	28.50	0.56
03	489.157	100-yr	Existing_Brookdale_add 1 XS_2-100yr	52.12	75.78	78.37		78.58	0.002474	2.27	37.99	31.87	0.49
03	489.157	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	52.12	75.78	78.37		78.58	0.002474	2.27	37.99	31.87	0.49
03	482.157	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.90	75.40	77.15	75.98	77.18	0.000460	0.80	17.46	16.62	0.19
03	482.157	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.90	75.40	77.15	75.98	77.18	0.000460	0.80	17.46	16.62	0.19
03	482.157	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.12	75.40	77.42	76.19	77.48	0.000722	1.10	20.16	20.20	0.25
03	482.157	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.12	75.40	77.42	76.19	77.48	0.000722	1.10	20.16	20.20	0.25
03	482.157	10-yr	Existing_Brookdale_add 1 XS_2-100yr	27.87	75.40	77.62	76.32	77.70	0.000830	1.25	22.21	21.52	0.27
03	482.157	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.87	75.40	77.62	76.32	77.70	0.000830	1.25	22.21	21.52	0.27
03	482.157	25-yr	Existing_Brookdale_add 1 XS_2-100yr	36.49	75.40	77.85	76.50	77.99	0.000987	1.47	24.79	24.21	0.30
03	482.157	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.49	75.40	77.85	76.50	77.99	0.000987	1.47	24.79	24.21	0.30
03	482.												

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q.Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	472.157	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	52.32	75.30	77.88		78.05	0.001270	1.85	28.47	21.29	0.37
03	454.156	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.92	74.50	77.13		77.14	0.000075	0.40	36.62	21.95	0.09
03	454.156	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.92	74.50	77.13		77.14	0.000075	0.40	36.62	21.95	0.09
03	454.156	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.14	74.50	77.36		77.38	0.000135	0.58	41.93	24.40	0.12
03	454.156	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.14	74.50	77.36		77.38	0.000135	0.58	41.93	24.40	0.12
03	454.156	10-yr	Existing_Brookdale_add 1 XS_2-100yr	27.91	74.50	77.52		77.54	0.000172	0.68	45.91	26.13	0.13
03	454.156	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	27.91	74.50	77.52		77.54	0.000172	0.68	45.91	26.13	0.13
03	454.156	25-yr	Existing_Brookdale_add 1 XS_2-100yr	36.54	74.50	77.68		77.71	0.000239	0.83	50.26	27.91	0.16
03	454.156	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.54	74.50	77.68		77.71	0.000239	0.83	50.26	27.91	0.16
03	454.156	50-yr	Existing_Brookdale_add 1 XS_2-100yr	44.39	74.50	77.81		77.85	0.000300	0.96	53.93	29.27	0.18
03	454.156	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	44.39	74.50	77.81		77.85	0.000300	0.96	53.93	29.27	0.18
03	454.156	100-yr	Existing_Brookdale_add 1 XS_2-100yr	52.32	74.50	77.92		77.98	0.000361	1.09	57.41	30.48	0.20
03	454.156	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	52.32	74.50	77.92		77.98	0.000361	1.09	57.41	30.48	0.20
03	393.758	2-yr	Existing_Brookdale_add 1 XS_2-100yr	13.99	75.45	77.13		77.13	0.000230	0.49	72.44	84.09	0.12
03	393.758	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	13.99	75.45	77.13		77.13	0.000230	0.49	72.44	84.09	0.12
03	393.758	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.23	75.45	77.35		77.36	0.000291	0.60	92.23	89.05	0.14
03	393.758	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.23	75.45	77.35		77.36	0.000291	0.60	92.23	89.05	0.14
03	393.758	10-yr	Existing_Brookdale_add 1 XS_2-100yr	28.05	75.45	77.51		77.52	0.000306	0.64	106.59	91.93	0.14
03	393.758	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.05	75.45	77.51		77.52	0.000306	0.64	106.59	91.93	0.14
03	393.758	25-yr	Existing_Brookdale_add 1 XS_2-100yr	36.74	75.45	77.67		77.68	0.000354	0.73	121.65	93.80	0.16
03	393.758	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	36.74	75.45	77.67		77.68	0.000354	0.73	121.65	93.80	0.16
03	393.758	50-yr	Existing_Brookdale_add 1 XS_2-100yr	44.64	75.45	77.80		77.81	0.000393	0.80	133.94	95.29	0.17
03	393.758	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	44.64	75.45	77.80		77.81	0.000393	0.80	133.94	95.29	0.17
03	393.758	100-yr	Existing_Brookdale_add 1 XS_2-100yr	52.61	75.45	77.92		77.93	0.000427	0.86	145.35	96.66	0.17
03	393.758	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	52.61	75.45	77.92		77.93	0.000427	0.86	145.35	96.66	0.17
03	264.924	2-yr	Existing_Brookdale_add 1 XS_2-100yr	14.13	75.45	77.08		77.09	0.000472	0.68	46.65	48.01	0.17
03	264.924	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	14.13	75.45	77.08		77.09	0.000472	0.68	46.65	48.01	0.17
03	264.924	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.38	75.45	77.29		77.30	0.000658	0.88	57.08	50.34	0.21
03	264.924	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.38	75.45	77.29		77.30	0.000658	0.88	57.08	50.34	0.21
03	264.924	10-yr	Existing_Brookdale_add 1 XS_2-100yr	28.30	75.45	77.44		77.46	0.000726	0.97	64.88	52.04	0.22
03	264.924	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.30	75.45	77.44		77.46	0.000726	0.97	64.88	52.04	0.22
03	264.924	25-yr	Existing_Brookdale_add 1 XS_2-100yr	37.09	75.45	77.59		77.61	0.000899	1.13	72.65	53.68	0.25
03	264.924	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	37.09	75.45	77.59		77.61	0.000899	1.13	72.65	53.68	0.25
03	264.924	50-yr	Existing_Brookdale_add 1 XS_2-100yr	45.07	75.45	77.71		77.73	0.001042	1.26	79.02	54.99	0.27
03	264.924	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	45.07	75.45	77.71		77.73	0.001042	1.26	79.02	54.99	0.27
03	264.924	100-yr	Existing_Brookdale_add 1 XS_2-100yr	53.12	75.45	77.81		77.84	0.001175	1.38	84.96	56.18	0.29
03	264.924	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	53.12	75.45	77.81		77.84	0.001175	1.38	84.96	56.18	0.29
03	180.334	2-yr	Existing_Brookdale_add 1 XS_2-100yr	14.22	75.45	76.94		77.00	0.002732	1.55	25.00	49.94	0.41
03	180.334	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	14.22	75.45	76.94		77.00	0.002732	1.55	25.00	49.94	0.41
03	180.334	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.49	75.45	77.13		77.20	0.002900	1.73	34.74	52.17	0.43
03	180.334	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.49	75.45	77.13		77.20	0.002900	1.73	34.74	52.17	0.43
03	180.334	10-yr	Existing_Brookdale_add 1 XS_2-100yr	28.47	75.45	77.29		77.35	0.002580	1.74	43.18	54.42	0.41
03	180.334	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.47	75.45	77.29		77.35	0.002580	1.74	43.18	54.42	0.41
03	180.334	25-yr	Existing_Brookdale_add 1 XS_2-100yr	37.31	75.45	77.41		77.48	0.003009	1.96	49.69	56.10	0.45
03	180.334	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	37.31	75.45	77.41		77.48	0.003009	1.96	49.69	56.10	0.45
03	180.334	50-yr	Existing_Brookdale_add 1 XS_2-100yr	45.35	75.45	77.50		77.58	0.003353	2.13	55.00	57.43	0.47
03	180.334	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	45.35	75.45	77.50		77.58	0.003353	2.13	55.00	57.43	0.47
03	180.334	100-yr	Existing_Brookdale_add 1 XS_2-100yr	53.45	75.45	77.59		77.68	0.003666	2.29	59.92	58.63	0.50
03	180.334	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	53.45	75.45	77.59		77.68	0.003666	2.29	59.92	58.63	0.50
03	113.364	2-yr	Existing_Brookdale_add 1 XS_2-100yr	14.29	75.45	76.77	76.53	76.81	0.002852	1.46	24.63	43.36	0.41
03	113.364	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	14.29	75.45	76.77	76.53	76.81	0.002852	1.46	24.63	43.36	0.41
03	113.364	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.57	75.45	76.91	76.66	76.98	0.003774	1.80	31.15	45.50	0.48
03	113.364	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.57	75.45	76.91	76.66	76.98	0.003774	1.80	31.15	45.50	0.48
03	113.364	10-yr	Existing_Brookdale_add 1 XS_2-100yr	28.60	75.45	77.02	76.73	77.11	0.005090	2.19	39.84	81.93	0.56
03	113.364	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.60	75.45	77.02	76.73	77.11	0.005090	2.19	39.84	81.93	0.56
03	113.364	25-yr	Existing_Brookdale_add 1 XS_2-100yr	37.49	75.45	77.12	76.82	77.21	0.005395	2.35	47.97	84.01	0.58
03	113.364	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	37.49	75.45	77.12	76.82	77.21	0.005395	2.35	47.97	84.01	0.58
03	113.364	50-yr	Existing_Brookdale_add 1 XS_2-100yr	45.57	75.45	77.19	76.90	77.29	0.005715	2.49	54.30	85.59	0.60
03	113.364	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	45.57	75.45	77.19	76.90	77.29	0.005715	2.49	54.30	85.59	0.60
03	113.364	100-yr	Existing_Brookdale_add 1 XS_2-100yr	53.71	75.45	77.26	76.96	77.37	0.005914	2.60	60.47	87.10	0.62
03	113.364	100-yr	Proposed_Brookdale_add 1 XS_2-100yr	53.71	75.45	77.26	76.96	77.37	0.005914	2.60	60.47	87.10	0.62
03	51.610	2-yr	Existing_Brookdale_add 1 XS_2-100yr	14.36	75.45	76.44	76.44	76.52	0.008335	2.06	26.35	129.79	0.66
03	51.610	2-yr	Proposed_Brookdale_add 1 XS_2-100yr	14.36	75.45	76.44	76.44	76.52	0.008335	2.06	26.35	129.79	0.66
03	51.610	5-yr	Existing_Brookdale_add 1 XS_2-100yr	22.64	75.45	76.51	76.51	76.61	0.010588	2.43	36.00	151.68	0.75
03	51.610	5-yr	Proposed_Brookdale_add 1 XS_2-100yr	22.64	75.45	76.51	76.51	76.61	0.010588	2.43	36.00	151.68	0.75
03	51.610	10-yr	Existing_Brookdale_add 1 XS_2-100yr	28.72	75.45	76.55	76.55	76.65	0.011681	2.62	42.57	164.92	0.80
03	51.610	10-yr	Proposed_Brookdale_add 1 XS_2-100yr	28.72	75.45	76.55	76.55	76.65	0.011681	2.62	42.57	164.92	0.80
03	51.610	25-yr	Existing_Brookdale_add 1 XS_2-100yr	37.66	75.45	76.59	76.59	76.71	0.013468	2.89	50.59	179.79	0.86
03	51.610	25-yr	Proposed_Brookdale_add 1 XS_2-100yr	37.66	75.45	76.59	76.59	76.71	0.013468	2.89	50.59	179.79	0.86
03	51.610	50-yr	Existing_Brookdale_add 1 XS_2-100yr	45.78	75.45	76.63	76.63	76.75	0.014686	3.08	57.54	191.74	0.91
03	51.610	50-yr	Proposed_Brookdale_add 1 XS_2-100yr	45.78	75.45	76.63	76.63	76.75	0.014686	3.08	57.54	191.74	0.91
03	51.610	100-yr	Existing_Brookdale_add 1 XS_2-100yr	53.96	75.45	76.66	76.66	76.79	0.016409	3.31	63.02	200.61</	

Regional Water Level Comparison - Scenario 1 vs Scenario 2

HEC-RAS River: Pine Creek Reach: 03 Profile: Regional													
Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	3439.853	Regional	Existing_Brookdale_add 1 XS_Regional	27.44	94.15	105.00	101.32	105.00	0.000000	0.01	1264.55	444.28	0.00
03	3439.853	Regional	Proposed_Brookdale_add 1 XS_Regional	27.44	94.15	105.00	101.32	105.00	0.000000	0.01	1264.55	444.28	0.00
03	3400		Culvert										
03	3381.462	Regional	Existing_Brookdale_add 1 XS_Regional	27.44	91.72	98.75	98.75	98.75	0.000183	0.47	124.08	207.49	0.08
03	3381.462	Regional	Proposed_Brookdale_add 1 XS_Regional	27.44	91.72	98.75	98.75	98.75	0.000183	0.47	124.08	207.49	0.08
03	3295.620	Regional	Existing_Brookdale_add 1 XS_Regional	27.44	91.39	92.64	92.64	92.83	0.013754	3.02	25.80	62.14	0.86
03	3295.620	Regional	Proposed_Brookdale_add 1 XS_Regional	27.44	91.39	92.64	92.64	92.83	0.013754	3.02	25.80	62.14	0.86
03	3229.203	Regional	Existing_Brookdale_add 1 XS_Regional	29.15	90.05	91.57	91.44	91.67	0.006168	2.31	34.08	56.93	0.60
03	3229.203	Regional	Proposed_Brookdale_add 1 XS_Regional	29.15	90.05	91.57	91.44	91.67	0.006168	2.31	34.08	56.93	0.60
03	3154.216	Regional	Existing_Brookdale_add 1 XS_Regional	31.09	89.40	90.76	90.76	90.98	0.014091	3.23	24.30	43.58	0.88
03	3154.216	Regional	Proposed_Brookdale_add 1 XS_Regional	31.09	89.40	90.76	90.76	90.98	0.014091	3.23	24.30	43.58	0.88
03	3059.426	Regional	Existing_Brookdale_add 1 XS_Regional	33.54	88.75	90.53		90.54	0.000807	0.93	102.14	134.10	0.22
03	3059.426	Regional	Proposed_Brookdale_add 1 XS_Regional	33.54	88.75	90.53		90.54	0.000807	0.93	102.14	134.10	0.22
03	2967.180	Regional	Existing_Brookdale_add 1 XS_Regional	35.92	87.71	90.50		90.50	0.000224	0.66	150.65	117.52	0.13
03	2967.180	Regional	Proposed_Brookdale_add 1 XS_Regional	35.92	87.71	90.50		90.50	0.000224	0.66	150.65	117.52	0.13
03	2929.505	Regional	Existing_Brookdale_add 1 XS_Regional	36.89	86.90	89.32	89.32	90.37	0.014989	4.89	9.23	81.40	1.00
03	2929.505	Regional	Proposed_Brookdale_add 1 XS_Regional	36.89	86.90	89.32	89.32	90.37	0.014989	4.89	9.23	81.40	1.00
03	2928.505		Culvert										
03	2882.771	Regional	Existing_Brookdale_add 1 XS_Regional	38.10	85.50	88.64		89.75	0.009607	4.66	8.17	24.18	0.84
03	2882.771	Regional	Proposed_Brookdale_add 1 XS_Regional	38.10	85.50	88.64		89.75	0.009607	4.66	8.17	24.18	0.84
03	2823.669	Regional	Existing_Brookdale_add 1 XS_Regional	39.62	85.40	88.94		89.01	0.001969	1.73	50.60	41.86	0.29
03	2823.669	Regional	Proposed_Brookdale_add 1 XS_Regional	39.62	85.40	88.94		89.01	0.001969	1.73	50.60	41.86	0.29
03	2816.869	Regional	Existing_Brookdale_add 1 XS_Regional	39.80	85.40	88.97		88.98	0.000345	0.96	104.07	59.15	0.16
03	2816.869	Regional	Proposed_Brookdale_add 1 XS_Regional	39.80	85.40	88.97		88.98	0.000345	0.96	104.07	59.15	0.16
03	2793.314	Regional	Existing_Brookdale_add 1 XS_Regional	55.50	85.30	88.72	87.21	88.94	0.001500	2.22	48.04	112.90	0.38
03	2793.314	Regional	Proposed_Brookdale_add 1 XS_Regional	55.50	85.30	88.72	87.21	88.94	0.001500	2.22	48.04	112.90	0.38
03	2791.854		Culvert										
03	2755.393	Regional	Existing_Brookdale_add 1 XS_Regional	56.45	84.78	87.83	86.79	88.24	0.002838	2.85	24.74	24.86	0.52
03	2755.393	Regional	Proposed_Brookdale_add 1 XS_Regional	56.45	84.78	87.83	86.79	88.24	0.002838	2.85	24.74	24.86	0.52
03	2688.864	Regional	Existing_Brookdale_add 1 XS_Regional	58.11	84.93	87.75		87.90	0.003258	2.74	59.82	58.49	0.52
03	2688.864	Regional	Proposed_Brookdale_add 1 XS_Regional	58.11	84.93	87.75		87.90	0.003258	2.74	59.82	58.49	0.52
03	2581.167	Regional	Existing_Brookdale_add 1 XS_Regional	60.79	84.60	86.80	86.79	87.22	0.010989	4.26	35.55	36.35	0.92
03	2581.167	Regional	Proposed_Brookdale_add 1 XS_Regional	60.79	84.60	86.80	86.79	87.22	0.010989	4.26	35.55	36.35	0.92
03	2497.769	Regional	Existing_Brookdale_add 1 XS_Regional	62.87	83.66	85.89	85.81	86.32	0.010767	4.26	35.53	33.27	0.91
03	2497.769	Regional	Proposed_Brookdale_add 1 XS_Regional	62.87	83.66	85.89	85.81	86.32	0.010767	4.26	35.53	33.27	0.91
03	2470.847	Regional	Existing_Brookdale_add 1 XS_Regional	63.55	82.89	86.06	84.97	86.12	0.001431	1.96	92.51	68.44	0.35
03	2470.847	Regional	Proposed_Brookdale_add 1 XS_Regional	63.55	82.89	86.06	84.97	86.12	0.001431	1.96	92.51	68.44	0.35
03	2468.187		Inl Struct										
03	2465.530	Regional	Existing_Brookdale_add 1 XS_Regional	63.68	82.60	86.07		86.10	0.000767	1.52	106.70	63.78	0.26
03	2465.530	Regional	Proposed_Brookdale_add 1 XS_Regional	63.68	82.60	86.07		86.10	0.000767	1.52	106.70	63.78	0.26
03	2388.073	Regional	Existing_Brookdale_add 1 XS_Regional	65.61	82.60	86.02		86.04	0.000640	1.38	141.69	95.69	0.24
03	2388.073	Regional	Proposed_Brookdale_add 1 XS_Regional	65.61	82.60	86.02		86.04	0.000640	1.38	141.69	95.69	0.24
03	2347.593	Regional	Existing_Brookdale_add 1 XS_Regional	66.62	82.60	85.17	85.17	85.90	0.012632	5.07	32.72	35.23	1.01
03	2347.593	Regional	Proposed_Brookdale_add 1 XS_Regional	66.62	82.60	85.17	85.17	85.90	0.012632	5.07	32.72	35.23	1.01
03	2334.025	Regional	Existing_Brookdale_add 1 XS_Regional	66.96	82.06	85.17	84.18	85.58	0.002925	2.93	33.91	40.16	0.53
03	2334.025	Regional	Proposed_Brookdale_add 1 XS_Regional	66.96	82.06	85.17	84.18	85.58	0.002925	2.93	33.91	40.16	0.53
03	2333.35		Culvert										
03	2301.671	Regional	Existing_Brookdale_add 1 XS_Regional	67.35	81.99	85.34	84.62	85.53	0.001890	2.26	59.62	51.18	0.40
03	2301.671	Regional	Proposed_Brookdale_add 1 XS_Regional	67.35	81.99	85.34	84.62	85.53	0.001890	2.26	59.62	51.18	0.40
03	2266.793	Regional	Existing_Brookdale_add 1 XS_Regional	67.78	82.60	85.32	84.24	85.39	0.002044	2.12	78.24	50.01	0.41
03	2266.793	Regional	Proposed_Brookdale_add 1 XS_Regional	67.78	82.60	85.32	84.24	85.39	0.002044	2.12	78.25	50.01	0.41
03	2228.755	Regional	Existing_Brookdale_add 1 XS_Regional	68.24	82.60	85.00		85.22	0.006215	3.40	58.47	70.84	0.70
03	2228.755	Regional	Proposed_Brookdale_add 1 XS_Regional	68.24	82.60	85.00		85.22	0.006212	3.40	58.49	70.89	0.70
03	2149.512	Regional	Existing_Brookdale_add 1 XS_Regional	69.20	82.10	84.85	83.74	84.91	0.002047	2.13	122.94	168.54	0.41
03	2149.512	Regional	Proposed_Brookdale_add 1 XS_Regional	69.20	82.10	84.85	83.74	84.91	0.002043	2.13	123.04	168.61	0.41
03	2096.750	Regional	Existing_Brookdale_add 1 XS_Regional	69.84	81.58	84.52	83.98	84.74	0.004686	3.20	57.92	50.31	0.60
03	2096.750	Regional	Proposed_Brookdale_add 1 XS_Regional	69.84	81.58	84.52	83.98	84.74	0.004679	3.20	57.97	50.37	0.59
03	2025.418	Regional	Existing_Brookdale_add 1 XS_Regional	70.70	81.45	84.36	83.51	84.46	0.002621	2.37	73.26	50.22	0.44
03	2025.418	Regional	Proposed_Brookdale_add 1 XS_Regional	70.70	81.45	84.36	83.51	84.46	0.002614	2.37	73.33	50.25	0.44
03	1968.571	Regional	Existing_Brookdale_add 1 XS_Regional	71.39	81.45	84.07	83.42	84.25	0.005029	3.06	55.10	40.65	0.60
03	1968.571	Regional	Proposed_Brookdale_add 1 XS_Regional	71.39	81.45	84.07	83.42	84.25	0.005003	3.06	55.22	40.70	0.60
03	1819.77	Regional	Existing_Brookdale_add 1 XS_Regional	71.56	80.60	84.16	82.00	84.16	0.000079	0.50	476.27	328.26	0.08
03	1819.77	Regional	Proposed_Brookdale_add 1 XS_Regional	71.56	80.60	84.16	82.00	84.16	0.000079	0.50	477.08	328.43	0.08

HEC-RAS River: Pine Creek Reach: 03 Profile: Regional (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	1770.174	Regional	Existing_Brookdale_add 1 XS_Regional	73.80	80.24	84.15	82.46	84.15	0.000109	0.74	378.81	290.37	0.12
03	1770.174	Regional	Proposed_Brookdale_add 1 XS_Regional	73.80	80.24	84.15	82.46	84.16	0.000109	0.74	379.54	290.52	0.12
03	1760.97		Culvert										
03	1709.779	Regional	Existing_Brookdale_add 1 XS_Regional	74.11	80.15	84.15	82.38	84.15	0.000064	0.53	471.21	312.62	0.09
03	1709.779	Regional	Proposed_Brookdale_add 1 XS_Regional	74.11	80.15	84.14	82.38	84.15	0.000064	0.53	471.19	312.61	0.09
03	1558.967	Regional	Existing_Brookdale_add 1 XS_Regional	74.90	80.60	84.12		84.13	0.000276	0.92	290.69	239.21	0.16
03	1558.967	Regional	Proposed_Brookdale_add 1 XS_Regional	74.90	80.60	84.12		84.13	0.000276	0.92	290.68	239.21	0.16
03	1464.649	Regional	Existing_Brookdale_add 1 XS_Regional	75.39	80.45	84.11		84.11	0.000094	0.53	420.87	247.86	0.09
03	1464.649	Regional	Proposed_Brookdale_add 1 XS_Regional	75.39	80.45	84.11		84.11	0.000094	0.53	420.86	247.86	0.09
03	1401	Regional	Existing_Brookdale_add 1 XS_Regional	75.39	79.45	84.10		84.11	0.000065	0.62	342.15	131.73	0.09
03	1401	Regional	Proposed_Brookdale_add 1 XS_Regional	75.39	79.45	84.10		84.11	0.000065	0.61	341.71	129.37	0.09
03	1383.185	Regional	Existing_Brookdale_add 1 XS_Regional	75.81	79.46	84.10		84.11	0.000071	0.63	322.81	115.20	0.09
03	1383.185	Regional	Proposed_Brookdale_add 1 XS_Regional	75.81	79.46	84.10		84.11	0.000071	0.63	322.81	115.20	0.09
03	1355	Regional	Existing_Brookdale_add 1 XS_Regional	75.81	79.47	84.10		84.10	0.000059	0.60	338.33	127.13	0.09
03	1355	Regional	Proposed_Brookdale_add 1 XS_Regional	75.81	79.47	84.10		84.10	0.000059	0.60	338.33	127.13	0.09
03	1325.126	Regional	Existing_Brookdale_add 1 XS_Regional	76.11	79.45	84.09		84.10	0.000172	0.83	247.78	108.55	0.12
03	1325.126	Regional	Proposed_Brookdale_add 1 XS_Regional	76.11	79.45	84.09		84.10	0.000172	0.83	247.78	108.55	0.12
03	1305.734	Regional	Existing_Brookdale_add 1 XS_Regional	76.18	78.90	83.95		84.08	0.000595	1.82	58.23	147.88	0.26
03	1305.734	Regional	Proposed_Brookdale_add 1 XS_Regional	76.18	78.90	83.95		84.08	0.000595	1.82	58.23	147.88	0.26
03	1304.734		Culvert										
03	1028.734	Regional	Existing_Brookdale_add 1 XS_Regional	77.20	78.00	83.42		83.69	0.000860	2.30	33.60	45.98	0.32
03	1028.734	Regional	Proposed_Brookdale_add 1 XS_Regional	77.20	78.00	83.42		83.69	0.000860	2.30	33.60	45.98	0.32
03	964.476	Regional	Existing_Brookdale_add 1 XS_Regional	77.44	78.60	83.53		83.54	0.000182	0.94	209.75	76.04	0.14
03	964.476	Regional	Proposed_Brookdale_add 1 XS_Regional	77.44	78.60	83.53		83.54	0.000182	0.94	209.75	76.04	0.14
03	878.305	Regional	Existing_Brookdale_add 1 XS_Regional	77.76	78.60	83.53		83.53	0.000035	0.41	416.70	107.26	0.06
03	878.305	Regional	Proposed_Brookdale_add 1 XS_Regional	77.76	78.60	83.53		83.53	0.000035	0.41	416.70	107.26	0.06
03	787.850	Regional	Existing_Brookdale_add 1 XS_Regional	78.09	77.60	83.51		83.52	0.000102	0.79	228.74	57.16	0.10
03	787.850	Regional	Proposed_Brookdale_add 1 XS_Regional	78.09	77.60	83.51		83.52	0.000102	0.79	228.74	57.16	0.10
03	754.066	Regional	Existing_Brookdale_add 1 XS_Regional	78.21	77.60	83.51		83.52	0.000081	0.71	250.15	59.94	0.09
03	754.066	Regional	Proposed_Brookdale_add 1 XS_Regional	78.21	77.60	83.51		83.52	0.000081	0.71	250.15	59.94	0.09
03	682.059	Regional	Existing_Brookdale_add 1 XS_Regional	78.48	77.10	83.50		83.51	0.000083	0.76	278.69	80.79	0.10
03	682.059	Regional	Proposed_Brookdale_add 1 XS_Regional	78.48	77.10	83.50		83.51	0.000083	0.76	278.69	80.79	0.10
03	644.335	Regional	Existing_Brookdale_add 1 XS_Regional	78.62	76.49	83.24	79.02	83.48	0.001010	2.73	75.25	60.17	0.34
03	644.335	Regional	Proposed_Brookdale_add 1 XS_Regional	78.62	76.49	83.24	79.02	83.48	0.001010	2.73	75.25	60.17	0.34
03	642.98		Culvert										
03	611.619	Regional	Existing_Brookdale_add 1 XS_Regional	78.74	76.18	79.46		80.00	0.006594	4.30	30.91	34.72	0.76
03	611.619	Regional	Proposed_Brookdale_add 1 XS_Regional	78.74	76.18	79.46		80.00	0.006594	4.30	30.91	34.72	0.76
03	556.507	Regional	Existing_Brookdale_add 1 XS_Regional	78.94	76.60	79.53		79.59	0.001780	2.07	90.63	50.74	0.39
03	556.507	Regional	Proposed_Brookdale_add 1 XS_Regional	78.94	76.60	79.53		79.59	0.001780	2.07	90.63	50.74	0.39
03	519.899	Regional	Existing_Brookdale_add 1 XS_Regional	79.08	76.60	79.42		79.51	0.002345	2.32	80.34	46.34	0.44
03	519.899	Regional	Proposed_Brookdale_add 1 XS_Regional	79.08	76.60	79.42		79.51	0.002345	2.32	80.34	46.34	0.44
03	489.157	Regional	Existing_Brookdale_add 1 XS_Regional	79.08	75.78	79.30		79.45	0.001298	2.08	72.74	43.79	0.38
03	489.157	Regional	Proposed_Brookdale_add 1 XS_Regional	79.08	75.78	79.30		79.45	0.001298	2.08	72.74	43.79	0.38
03	482.157	Regional	Existing_Brookdale_add 1 XS_Regional	79.20	75.40	79.23	77.26	79.44	0.001073	2.05	43.00	36.32	0.33
03	482.157	Regional	Proposed_Brookdale_add 1 XS_Regional	79.20	75.40	79.23	77.26	79.44	0.001073	2.05	43.00	36.32	0.33
03	479.157		Culvert										
03	472.157	Regional	Existing_Brookdale_add 1 XS_Regional	79.21	75.30	78.17		78.48	0.002008	2.49	34.41	23.40	0.47
03	472.157	Regional	Proposed_Brookdale_add 1 XS_Regional	79.21	75.30	78.17		78.48	0.002008	2.49	34.41	23.40	0.47
03	454.156	Regional	Existing_Brookdale_add 1 XS_Regional	79.21	74.50	78.25		78.36	0.000571	1.46	68.27	37.33	0.25
03	454.156	Regional	Proposed_Brookdale_add 1 XS_Regional	79.21	74.50	78.25		78.36	0.000571	1.46	68.27	37.33	0.25
03	393.758	Regional	Existing_Brookdale_add 1 XS_Regional	79.54	75.45	78.27		78.28	0.000523	1.04	179.27	100.61	0.20
03	393.758	Regional	Proposed_Brookdale_add 1 XS_Regional	79.54	75.45	78.27		78.28	0.000523	1.04	179.27	100.61	0.20
03	264.924	Regional	Existing_Brookdale_add 1 XS_Regional	80.01	75.45	78.12		78.17	0.001594	1.75	103.02	64.93	0.34
03	264.924	Regional	Proposed_Brookdale_add 1 XS_Regional	80.01	75.45	78.12		78.17	0.001594	1.75	103.02	64.93	0.34
03	180.334	Regional	Existing_Brookdale_add 1 XS_Regional	80.33	75.45	77.83		77.95	0.004658	2.76	74.23	63.36	0.57
03	180.334	Regional	Proposed_Brookdale_add 1 XS_Regional	80.33	75.45	77.83		77.95	0.004658	2.76	74.23	63.36	0.57
03	113.364	Regional	Existing_Brookdale_add 1 XS_Regional	80.57	75.45	77.44	77.24	77.56	0.007073	3.02	75.87	90.77	0.69
03	113.364	Regional	Proposed_Brookdale_add 1 XS_Regional	80.57	75.45	77.44	77.24	77.56	0.007073	3.02	75.87	90.77	0.69
03	51.610	Regional	Existing_Brookdale_add 1 XS_Regional	80.80	75.45	76.76	76.76	76.90	0.018385	3.68	83.68	230.68	1.03
03	51.610	Regional	Proposed_Brookdale_add 1 XS_Regional	80.80	75.45	76.76	76.76	76.90	0.018385	3.68	83.68	230.68	1.03

2 - 100 Year Water Level Comparison - Revised Existing vs Scenario 3

HEC-RAS River: Pine Creek Reach: 03

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	3439.853	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	1.17	94.15	99.65	99.78	0.057965	1.61	0.72	2.70	0.99	
03	3439.853	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	1.17	94.15	99.65	99.78	0.057965	1.61	0.72	2.70	0.99	
03	3439.853	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	2.26	94.15	99.80	100.00	0.056569	2.01	1.12	2.70	1.00	
03	3439.853	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	2.26	94.15	99.80	100.00	0.056569	2.01	1.12	2.70	1.00	
03	3439.853	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	3.17	94.15	99.90	99.90	0.054617	2.24	1.42	2.88	1.00	
03	3439.853	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	3.17	94.15	99.90	99.90	0.054617	2.24	1.42	2.88	1.00	
03	3439.853	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	4.51	94.15	100.05	100.36	0.050527	2.46	1.86	3.22	0.99	
03	3439.853	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	4.51	94.15	100.05	100.36	0.050527	2.46	1.86	3.22	0.99	
03	3439.853	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	5.63	94.15	100.16	100.50	0.047075	2.59	2.23	3.49	0.98	
03	3439.853	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	5.63	94.15	100.16	100.50	0.047075	2.59	2.23	3.49	0.98	
03	3439.853	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	6.71	94.15	100.25	100.62	0.045002	2.70	2.58	3.72	0.97	
03	3439.853	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	6.71	94.15	100.25	100.62	0.045002	2.70	2.58	3.72	0.97	
03	3400		Culvert										
03	3381.462	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	1.17	91.72	97.51	97.45	0.029812	1.30	0.90	2.70	0.72	
03	3381.462	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	1.17	91.72	97.51	97.60	0.029812	1.30	0.90	2.70	0.72	
03	3381.462	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	2.26	91.72	97.68	97.60	0.030762	1.66	1.36	3.08	0.75	
03	3381.462	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	2.26	91.72	97.68	97.60	0.030762	1.66	1.36	3.08	0.75	
03	3381.462	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	3.17	91.72	97.80	97.70	0.030461	1.90	1.67	3.89	0.77	
03	3381.462	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	3.17	91.72	97.80	97.70	0.030461	1.90	1.67	3.89	0.77	
03	3381.462	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	4.51	91.72	97.84	97.84	0.049360	2.53	1.78	4.20	0.99	
03	3381.462	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	4.51	91.72	97.84	97.84	0.049360	2.53	1.78	4.20	0.99	
03	3381.462	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	5.63	91.72	97.94	97.94	0.047304	2.73	2.06	4.93	1.00	
03	3381.462	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	5.63	91.72	97.94	97.94	0.047304	2.73	2.06	4.93	1.00	
03	3381.462	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	6.71	91.72	98.04	98.04	0.045839	2.90	2.31	5.59	1.00	
03	3381.462	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	6.71	91.72	98.04	98.04	0.045839	2.90	2.31	5.59	1.00	
03	3295.620	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	1.17	91.39	91.66	91.66	0.024123	1.65	0.71	2.60	1.01	
03	3295.620	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	1.17	91.39	91.66	91.80	0.024123	1.65	0.71	2.60	1.01	
03	3295.620	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	2.26	91.39	91.81	91.81	0.023397	2.05	1.10	2.60	1.00	
03	3295.620	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	2.26	91.39	91.81	92.03	0.023397	2.05	1.10	2.60	1.00	
03	3295.620	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	3.17	91.39	91.92	91.92	0.023538	2.29	1.38	2.60	1.00	
03	3295.620	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	3.17	91.39	91.92	91.92	0.023538	2.29	1.38	2.60	1.00	
03	3295.620	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	4.51	91.39	92.22	92.22	0.007362	1.68	5.65	33.71	0.59	
03	3295.620	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	4.51	91.39	92.22	92.22	0.007362	1.68	5.65	33.71	0.59	
03	3295.620	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	5.63	91.39	92.27	92.27	0.007644	1.78	7.39	37.28	0.61	
03	3295.620	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	5.63	91.39	92.27	92.27	0.007644	1.78	7.39	37.28	0.61	
03	3295.620	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	6.71	91.39	92.31	92.31	0.007609	1.84	9.07	40.20	0.61	
03	3295.620	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	6.71	91.39	92.31	92.43	0.007609	1.84	9.07	40.20	0.61	
03	3229.203	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	1.61	90.05	90.55	90.63	0.007316	1.24	1.30	2.60	0.56	
03	3229.203	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	1.61	90.05	90.55	90.63	0.007316	1.24	1.30	2.60	0.56	
03	3229.203	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	2.86	90.05	90.73	90.55	0.008901	1.61	1.98	8.47	0.63	
03	3229.203	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	2.86	90.05	90.73	90.86	0.008901	1.61	1.98	8.47	0.63	
03	3229.203	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	3.87	90.05	90.82	90.66	0.009469	1.81	3.09	15.64	0.66	
03	3229.203	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	3.87	90.05	90.82	90.66	0.009469	1.81	3.09	15.64	0.66	
03	3229.203	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	5.38	90.05	90.92	90.92	0.009257	1.95	5.21	23.94	0.67	
03	3229.203	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	5.38	90.05	90.92	90.92	0.009257	1.95	5.21	23.94	0.67	
03	3229.203	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	6.60	90.05	91.00	91.00	0.008688	1.99	7.13	29.52	0.65	
03	3229.203	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	6.60	90.05	91.00	91.00	0.008688	1.99	7.13	29.52	0.65	
03	3229.203	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	7.83	90.05	91.05	91.05	0.008629	2.06	8.78	33.12	0.66	
03	3229.203	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	7.83	90.05	91.05	91.20	0.008629	2.06	8.78	33.12	0.66	
03	3154.216	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	2.11	89.40	90.01	89.81	0.006711	1.31	1.76	14.28	0.54	
03	3154.216	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	2.11	89.40	90.01	89.81	0.006711	1.31	1.76	14.28	0.54	
03	3154.216	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	3.53	89.40	90.14	89.97	0.025074	1.56	3.93	19.85	0.58	
03	3154.216	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	3.53	89.40	90.14	89.97	0.025074	1.56	3.93	19.85	0.58	
03	3154.216	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	4.65	89.40	90.21	90.18	0.007814	1.70	5.35	22.79	0.60	
03	3154.216	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	4.65	89.40	90.21	90.18	0.007814	1.70	5.35	22.79	0.60	
03	3154.216	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	6.36	89.40	90.30	90.26	0.007502	1.80	7.71	26.97	0.60	
03	3154.216	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	6.36	89.40	90.30	90.26	0.007502	1.80	7.71	26.97	0.60	
03	3154.216	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	7.70	89.40	90.37	90.31	0.007306	1.85	9.48	29.71	0.60	
03	3154.216	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	7.70	89.40	90.37	90.48	0.007306	1.85	9.48	29.71	0.60	
03	3154.216	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	9.10	89.40	90.42	90.36	0.007276	1.92	11.17	32.10	0.61	
03	3154.216	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	9.10	89.40	90.42	90.53	0.007276	1.92	11.17	32.10	0.61	
03	3059.426	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	2.74	88.75	89.47	89.23	0.005363	1.30	4.20	42.90	0.49	
03	3059.426	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	2.74	88.75	89.47	89.23	0.005363	1.30	4.20	42.90	0.49	
03	3059.426	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	4.38	88.75	89.54	89.54	0.005975	1.47	8.36	62.87	0.53	
03	3059.426	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	4.38	88.75	89.54	89.54	0.005975	1.47	8.36	62.87	0.53	
03	3059.426	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	5.64	88.75	89.58	89.58	0.006259	1.55	11.03	70.28	0.54	
03	3059.426	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	5.64	88.75	89.58	89.58	0.006259	1.55	11.03	70.28	0.54	
03	3059.426	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	7.59	88.75	89.62	89.62	0.007381	1.74	13.70	73.29	0.59	
03	3059.426	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	7.59	88.75	89.62	89.70	0.007381	1.74	13.70	73.29	0.59	
03	3059.426	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	9.09	88.75	89.64	89.64	0.008219	1.87	15.43	75.17	0.63	
03	3059.426	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	9.09	88.75	89.64	89.73	0.008219	1.87	15.43	75.17	0.63	
03	3059.426	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	10.70	88.75	89.67	89.76	0.008932	1.98	17.21	77.07	0.66	
03	3059.426	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	10.70	88.75	89.67	89.76	0.008932	1.98	17.21	77.07	0.66	
03	2967.180	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	3.36	87.71	88.26	88.26	0.023745	2.34	1.44	2.60	1.01	
03	2967.180	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	3.36	87.71	88.26	88.54	0.023745	2.34	1.44	2.60	1.01	
03													

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	2929.505	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	7.00	86.90	88.23	87.83	88.39	0.004698	1.84	4.51	17.01	0.51
03	2929.505	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	7.00	86.90	88.23	87.83	88.39	0.004698	1.84	4.51	17.01	0.51
03	2929.505	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	9.29	86.90	88.56	88.01	88.72	0.003723	1.90	5.92	54.52	0.47
03	2929.505	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	9.29	86.90	88.56	88.01	88.72	0.003723	1.90	5.92	54.52	0.47
03	2929.505	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.00	86.90	88.78	88.12	88.95	0.003289	1.94	6.90	63.82	0.45
03	2929.505	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.00	86.90	88.78	88.12	88.95	0.003289	1.94	6.90	63.82	0.45
03	2929.505	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.90	86.90	89.02	88.23	89.19	0.002949	1.99	7.93	71.56	0.44
03	2929.505	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.90	86.90	89.02	88.23	89.19	0.002949	1.99	7.93	71.56	0.44
03	2928.505		Culvert										
03	2882.771	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	3.92	85.50	86.73	86.81	0.002314	1.23	3.20	3.85	0.35	
03	2882.771	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	3.92	85.50	86.73	86.81	0.002314	1.23	3.20	3.85	0.35	
03	2882.771	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	5.97	85.50	87.06	87.17	0.002413	1.47	4.07	4.88	0.37	
03	2882.771	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	5.97	85.50	87.06	87.17	0.002413	1.47	4.07	4.88	0.37	
03	2882.771	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	7.49	85.50	87.28	87.41	0.002466	1.62	4.63	5.56	0.39	
03	2882.771	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	7.49	85.50	87.28	87.41	0.002466	1.62	4.63	5.56	0.39	
03	2882.771	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	9.90	85.50	87.57	87.74	0.002597	1.84	5.39	6.49	0.41	
03	2882.771	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	9.90	85.50	87.57	87.74	0.002597	1.84	5.39	6.49	0.41	
03	2882.771	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.68	85.50	87.73	87.94	0.002834	2.02	5.80	8.79	0.43	
03	2882.771	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.68	85.50	87.73	87.94	0.002834	2.02	5.80	8.79	0.43	
03	2882.771	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.69	85.50	87.93	88.17	0.002930	2.17	6.31	12.33	0.44	
03	2882.771	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.69	85.50	87.93	88.17	0.002930	2.17	6.31	12.33	0.44	
03	2823.669	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	4.31	85.40	86.45	86.57	0.006378	1.59	2.72	2.60	0.50	
03	2823.669	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	4.31	85.40	86.45	86.57	0.006378	1.59	2.72	2.60	0.50	
03	2823.669	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	6.50	85.40	86.74	86.92	0.007458	1.87	3.48	2.60	0.52	
03	2823.669	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	6.50	85.40	86.74	86.92	0.007458	1.87	3.48	2.60	0.52	
03	2823.669	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	8.11	85.40	86.93	87.14	0.008157	2.04	3.96	2.60	0.53	
03	2823.669	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	8.11	85.40	86.93	87.14	0.008157	2.04	3.96	2.60	0.53	
03	2823.669	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	10.67	85.40	87.21	87.46	0.008079	2.24	5.23	7.44	0.53	
03	2823.669	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	10.67	85.40	87.21	87.46	0.008079	2.24	5.23	7.44	0.53	
03	2823.669	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.55	85.40	87.46	86.73	0.006386	2.17	7.81	13.14	0.48	
03	2823.669	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.55	85.40	87.46	86.73	0.006386	2.17	7.81	13.14	0.48	
03	2823.669	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	14.69	85.40	87.76	87.92	0.004294	1.94	12.74	20.55	0.40	
03	2823.669	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	14.69	85.40	87.76	87.92	0.004294	1.94	12.74	20.55	0.40	
03	2816.869	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	4.36	85.40	86.43	86.52	0.003993	1.43	4.63	12.17	0.45	
03	2816.869	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	4.36	85.40	86.43	86.52	0.003993	1.43	4.63	12.17	0.45	
03	2816.869	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	6.56	85.40	86.77	86.83	0.002170	1.28	10.33	21.07	0.35	
03	2816.869	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	6.56	85.40	86.77	86.83	0.002170	1.28	10.33	21.07	0.35	
03	2816.869	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	8.18	85.40	86.99	87.04	0.001479	1.16	15.64	26.84	0.29	
03	2816.869	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	8.18	85.40	86.99	87.04	0.001479	1.16	15.64	26.84	0.29	
03	2816.869	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	10.76	85.40	87.31	87.34	0.000900	1.03	25.45	34.77	0.24	
03	2816.869	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	10.76	85.40	87.31	87.34	0.000900	1.03	25.45	34.77	0.24	
03	2816.869	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.65	85.40	87.56	87.57	0.000600	0.91	34.45	38.83	0.20	
03	2816.869	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.65	85.40	87.56	87.57	0.000600	0.91	34.45	38.83	0.20	
03	2816.869	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	14.80	85.40	87.82	87.84	0.000413	0.81	45.49	43.29	0.17	
03	2816.869	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	14.80	85.40	87.82	87.84	0.000413	0.81	45.49	43.29	0.17	
03	2793.314	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	8.21	85.30	86.39	85.85	0.001862	1.16	7.82	10.84	0.35	
03	2793.314	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	8.21	85.30	86.39	86.46	0.001862	1.16	7.82	10.84	0.35	
03	2793.314	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.83	85.30	86.69	86.06	0.001952	1.39	10.55	11.86	0.38	
03	2793.314	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.83	85.30	86.69	86.06	0.001952	1.39	10.55	11.86	0.38	
03	2793.314	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	16.03	85.30	86.88	86.20	0.001907	1.50	12.35	12.52	0.38	
03	2793.314	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	16.03	85.30	86.88	86.20	0.001907	1.50	12.35	12.52	0.38	
03	2793.314	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.10	85.30	87.17	86.37	0.001831	1.64	14.99	13.51	0.38	
03	2793.314	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.10	85.30	87.17	86.37	0.001831	1.64	14.99	13.51	0.38	
03	2793.314	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	24.89	85.30	87.40	86.49	0.001685	1.70	17.14	16.72	0.37	
03	2793.314	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	24.89	85.30	87.40	86.49	0.001685	1.70	17.14	16.72	0.37	
03	2793.314	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	28.90	85.30	87.67	86.60	0.001500	1.73	19.57	18.42	0.36	
03	2793.314	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	28.90	85.30	87.67	87.81	0.001500	1.73	19.57	18.42	0.36	
03	2791.854		Culvert										
03	2755.393	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	8.47	84.78	86.37	86.41	0.000590	0.84	10.05	11.61	0.21	
03	2755.393	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	8.47	84.78	86.37	86.41	0.000590	0.84	10.05	11.61	0.21	
03	2755.393	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.17	84.78	86.64	86.71	0.000852	1.12	11.72	13.04	0.26	
03	2755.393	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.17	84.78	86.64	86.71	0.000852	1.12	11.72	13.04	0.26	
03	2755.393	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	16.45	84.78	86.79	86.88	0.001022	1.30	12.69	14.33	0.29	
03	2755.393	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	16.45	84.78	86.79	86.88	0.001022	1.30	12.69	14.33	0.29	
03	2755.393	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.64	84.78	86.99	87.11	0.001298	1.55	13.92	15.88	0.33	
03	2755.393	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.64	84.78	86.99	87.11	0.001298	1.55	13.92	15.88	0.33	
03	2755.393	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.61	84.78	87.12	87.28	0.001496	1.74	14.76	16.80	0.36	
03	2755.393	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.61	84.78	87.12	87.28	0.001496	1.74	14.76	16.80	0.36	
03	2755.393	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	29.76	84.78	87.25	87.43	0.001701	1.92	15.54	17.66	0.39	
03	2755.393	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	29.76	84.78	87.25	87.43	0.001701	1.92	15.54	17.66	0.39	
03	2688.864	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	8.91	84.93	86.31	86.35	0.001491	1.15	16.02	20.84	0.31	
03	2688.864	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	8.91	84.93	86.31	86.35	0.001491	1.15	16.02	20.84	0.31	
03	2688.864	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.76	84.93	86.57	86.62	0.001607	1.34	21.69	23.06	0.33	
03	2688.864												

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	2581.167	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	24.11	84.60	86.15	86.13	86.49	0.010678	3.32	15.93	23.82	0.85
03	2581.167	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	24.11	84.60	86.15	86.13	86.49	0.010678	3.32	15.93	23.82	0.85
03	2581.167	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	28.92	84.60	86.28	86.24	86.62	0.010237	3.43	19.16	26.36	0.85
03	2581.167	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	28.92	84.60	86.28	86.24	86.62	0.010237	3.43	19.16	26.36	0.85
03	2581.167	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	33.71	84.60	86.37	86.35	86.73	0.010465	3.60	21.77	28.25	0.86
03	2581.167	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	33.71	84.60	86.37	86.35	86.73	0.010465	3.60	21.77	28.25	0.86
03	2497.769	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	10.20	83.66	84.97	85.08	0.004169	1.85	11.10	18.82	0.52	
03	2497.769	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	10.20	83.66	84.97	85.08	0.004169	1.85	11.10	18.82	0.52	
03	2497.769	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	15.46	83.66	85.01	84.92	85.24	0.008109	2.65	11.98	19.71	0.73
03	2497.769	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	15.46	83.66	85.01	84.92	85.24	0.008109	2.65	11.98	19.71	0.73
03	2497.769	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	19.33	83.66	85.04	85.04	85.37	0.011441	3.19	12.56	20.20	0.87
03	2497.769	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	19.33	83.66	85.04	85.04	85.37	0.011441	3.19	12.56	20.20	0.87
03	2497.769	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.30	83.66	85.20	85.20	85.56	0.011580	3.44	15.93	22.90	0.89
03	2497.769	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.30	83.66	85.20	85.20	85.56	0.011580	3.44	15.93	22.90	0.89
03	2497.769	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	30.50	83.66	85.31	85.31	85.70	0.011813	3.65	18.64	24.86	0.91
03	2497.769	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	30.50	83.66	85.31	85.31	85.70	0.011813	3.65	18.64	24.86	0.91
03	2497.769	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	35.60	83.66	85.43	85.43	85.82	0.011442	3.76	21.64	26.87	0.90
03	2497.769	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	35.60	83.66	85.43	85.43	85.82	0.011442	3.76	21.64	26.87	0.90
03	2470.847	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	10.38	82.89	85.02	83.98	85.03	0.000308	0.70	36.61	36.23	0.15
03	2470.847	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	10.38	82.89	85.02	83.98	85.03	0.000308	0.70	36.61	36.23	0.15
03	2470.847	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	15.69	82.89	85.12	84.21	85.14	0.000602	1.01	40.45	42.02	0.22
03	2470.847	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	15.69	82.89	85.12	84.21	85.14	0.000602	1.01	40.45	42.02	0.22
03	2470.847	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	19.63	82.89	85.18	84.37	85.21	0.000822	1.20	42.95	43.66	0.25
03	2470.847	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	19.63	82.89	85.18	84.37	85.21	0.000822	1.20	42.95	43.66	0.25
03	2470.847	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.68	82.89	85.25	84.49	85.30	0.001176	1.46	46.48	45.87	0.30
03	2470.847	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.68	82.89	85.25	84.49	85.30	0.001176	1.46	46.48	45.87	0.30
03	2470.847	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	31.01	82.89	85.32	84.57	85.38	0.001468	1.67	49.74	47.82	0.34
03	2470.847	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	31.01	82.89	85.32	84.57	85.38	0.001468	1.67	49.74	47.82	0.34
03	2470.847	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.21	82.89	85.43	84.66	85.49	0.001593	1.79	54.90	50.76	0.36
03	2470.847	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.21	82.89	85.43	84.66	85.49	0.001593	1.79	54.90	50.76	0.36
03	2468.187		Inl Struct										
03	2465.530	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	10.42	82.60	84.31	84.33	0.000577	0.83	28.42	29.50	0.20	
03	2465.530	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	10.42	82.60	84.31	84.33	0.000577	0.83	28.42	29.50	0.20	
03	2465.530	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	15.74	82.60	84.61	84.63	0.000609	0.94	37.61	31.88	0.21	
03	2465.530	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	15.74	82.60	84.61	84.63	0.000609	0.94	37.61	31.88	0.21	
03	2465.530	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	19.69	82.60	84.80	84.82	0.000644	1.03	43.66	34.66	0.22	
03	2465.530	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	19.69	82.60	84.80	84.82	0.000644	1.03	43.66	34.66	0.22	
03	2465.530	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.75	82.60	85.07	85.09	0.000655	1.12	53.94	41.51	0.23	
03	2465.530	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.75	82.60	85.07	85.09	0.000654	1.12	53.94	41.51	0.23	
03	2465.530	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	31.11	82.60	85.26	85.29	0.000670	1.19	62.38	45.91	0.23	
03	2465.530	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	31.11	82.60	85.26	85.29	0.000670	1.19	62.38	45.91	0.23	
03	2465.530	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.33	82.60	85.42	85.45	0.000684	1.26	70.26	49.56	0.24	
03	2465.530	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.33	82.60	85.42	85.45	0.000684	1.26	70.26	49.56	0.24	
03	2388.073	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	10.94	82.60	84.22	84.25	0.001340	1.21	21.94	32.44	0.30	
03	2388.073	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	10.94	82.60	84.22	84.25	0.001340	1.21	21.94	32.44	0.30	
03	2388.073	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	16.43	82.60	84.52	84.56	0.001242	1.31	33.50	44.09	0.30	
03	2388.073	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	16.43	82.60	84.52	84.56	0.001242	1.31	33.50	44.09	0.30	
03	2388.073	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	20.56	82.60	84.71	84.75	0.001153	1.34	42.56	51.57	0.30	
03	2388.073	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	20.56	82.60	84.71	84.75	0.001153	1.34	42.56	51.57	0.30	
03	2388.073	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	26.85	82.60	84.99	85.03	0.000941	1.32	58.96	62.89	0.27	
03	2388.073	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	26.85	82.60	84.99	85.03	0.000941	1.32	58.96	62.89	0.27	
03	2388.073	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	32.58	82.60	85.20	85.23	0.000854	1.33	72.30	70.10	0.26	
03	2388.073	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	32.58	82.60	85.20	85.23	0.000854	1.33	72.30	70.10	0.26	
03	2388.073	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	38.09	82.60	85.37	85.40	0.000795	1.34	84.80	76.23	0.26	
03	2388.073	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	38.09	82.60	85.37	85.40	0.000795	1.34	84.80	76.24	0.26	
03	2347.593	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.21	82.60	83.74	84.10	0.012531	2.93	6.01	10.08	0.88	
03	2347.593	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.21	82.60	83.74	84.10	0.012531	2.93	6.01	10.08	0.88	
03	2347.593	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	16.79	82.60	83.99	83.99	84.40	0.011965	3.28	8.86	12.41	0.89
03	2347.593	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	16.79	82.60	83.99	83.99	84.40	0.011965	3.28	8.86	12.41	0.89
03	2347.593	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.01	82.60	84.30	84.15	84.62	0.007681	3.01	13.19	15.29	0.74
03	2347.593	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.01	82.60	84.30	84.15	84.62	0.007681	3.01	13.19	15.29	0.74
03	2347.593	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.43	82.60	84.64	84.92	0.005839	2.96	18.97	19.05	0.66	
03	2347.593	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.43	82.60	84.64	84.92	0.005838	2.96	18.97	19.05	0.66	
03	2347.593	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	33.35	82.60	84.80	85.12	0.006310	3.23	22.08	21.75	0.70	
03	2347.593	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	33.35	82.60	84.80	85.12	0.006310	3.23	22.08	21.75	0.70	
03	2347.593	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	39.00	82.60	84.89	84.65	85.28	0.007484	3.61	24.09	24.87	0.76
03	2347.593	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	39.00	82.60	84.89	84.65	85.28	0.007483	3.61	24.10	24.87	0.76
03	2334.025	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.30	82.06	83.91	82.71	83.95	0.000530	0.88	13.28	16.96	0.21
03	2334.025	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.30	82.06	83.91	82.71	83.95	0.000530	0.88	13.28	16.96	0.21
03	2334.025	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	16.91	82.06	84.20	82.92	84.27	0.000723	1.14	15.45	19.51	0.25
03	2334.025	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	16.91	82.06	84.20	82.92	84.27	0.000723	1.14	15.45	19.51	0.25
03	2334.025	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.16	82.06	84.44	83.06	84.52	0.00794	1.			

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl	
03	2301.671	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	33.88	81.99	84.54	83.43	84.71	0.001971	1.90	26.67	34.36	0.39	
03	2301.671	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	33.88	81.99	84.54	83.43	84.71	0.001971	1.90	26.67	34.36	0.39	
03	2301.671	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	39.65	81.99	84.67	83.59	84.86	0.002097	2.03	31.25	36.70	0.41	
03	2301.671	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	39.65	81.99	84.67	83.59	84.86	0.002097	2.03	31.25	36.70	0.41	
03	2266.793	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.42	82.60	83.83	83.43	83.87	0.002156	1.28	19.93	28.53	0.37	
03	2266.793	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.42	82.60	83.83	83.43	83.87	0.002156	1.28	19.93	28.53	0.37	
03	2266.793	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	17.25	82.60	84.05	83.56	84.09	0.002337	1.49	26.38	31.61	0.39	
03	2266.793	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	17.25	82.60	84.05	83.56	84.09	0.002337	1.49	26.38	31.61	0.39	
03	2266.793	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.54	82.60	84.18	83.64	84.23	0.002435	1.61	30.71	33.51	0.41	
03	2266.793	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.54	82.60	84.18	83.64	84.23	0.002435	1.61	30.71	33.51	0.41	
03	2266.793	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	28.11	82.60	84.36	83.75	84.42	0.002525	1.76	37.03	36.12	0.42	
03	2266.793	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	28.11	82.60	84.36	83.75	84.42	0.002524	1.76	37.03	36.12	0.42	
03	2266.793	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	34.18	82.60	84.51	83.84	84.58	0.002585	1.88	42.54	38.24	0.43	
03	2266.793	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	34.18	82.60	84.51	83.84	84.58	0.002585	1.88	42.54	38.24	0.43	
03	2266.793	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	40.02	82.60	84.64	83.92	84.71	0.002619	1.98	47.70	40.13	0.44	
03	2266.793	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	40.02	82.60	84.64	83.92	84.71	0.002619	1.98	47.70	40.13	0.44	
03	2228.755	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.49	82.60	83.59								
03	2228.755	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.49	82.60	83.59								
03	2228.755	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	17.44	82.60	83.80								
03	2228.755	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	17.44	82.60	83.80								
03	2228.755	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.75	82.60	83.94								
03	2228.755	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.75	82.60	83.94								
03	2228.755	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	28.39	82.60	84.12								
03	2228.755	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	28.39	82.60	84.12								
03	2228.755	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	34.49	82.60	84.27								
03	2228.755	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	34.49	82.60	84.27								
03	2228.755	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	40.42	82.60	84.40								
03	2228.755	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	40.42	82.60	84.40								
03	2149.512	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.64	82.10	83.34	83.08	83.38	0.002298	1.33	21.62	37.24	0.38	
03	2149.512	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.64	82.10	83.34	83.08	83.38	0.002298	1.33	21.62	37.24	0.38	
03	2149.512	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	17.85	82.10	83.61	83.19	83.65	0.001856	1.36	32.08	41.03	0.35	
03	2149.512	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	17.85	82.10	83.61	83.19	83.65	0.001856	1.36	32.08	41.03	0.35	
03	2149.512	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.20	82.10	83.76	83.26	83.80	0.001756	1.41	38.36	43.15	0.35	
03	2149.512	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.20	82.10	83.76	83.26	83.80	0.001756	1.41	38.36	43.15	0.35	
03	2149.512	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	28.97	82.10	83.96	83.35	84.00	0.001692	1.49	47.17	45.95	0.35	
03	2149.512	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	28.97	82.10	83.96	83.35	84.00	0.001699	1.49	47.20	45.96	0.35	
03	2149.512	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	35.16	82.10	84.12	83.42	84.16	0.001662	1.56	54.64	48.21	0.35	
03	2149.512	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	35.16	82.10	84.12	83.42	84.16	0.001662	1.56	54.64	48.21	0.35	
03	2149.512	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	41.26	82.10	84.26	83.49	84.30	0.001657	1.63	61.46	50.18	0.36	
03	2149.512	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	41.26	82.10	84.26	83.49	84.30	0.001657	1.63	61.45	50.18	0.36	
03	2096.750	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.73	81.58	83.11	82.80	83.22	0.003678	1.83	12.80	19.80	0.47	
03	2096.750	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.73	81.58	83.11	82.80	83.22	0.003678	1.83	12.80	19.80	0.47	
03	2096.750	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	18.11	81.58	83.36	83.04	83.50	0.004074	2.13	18.24	23.92	0.51	
03	2096.750	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	18.11	81.58	83.36	83.04	83.50	0.004074	2.13	18.24	23.92	0.51	
03	2096.750	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.50	81.58	83.50	83.17	83.65	0.004274	2.29	21.69	26.20	0.53	
03	2096.750	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.50	81.58	83.50	83.17	83.65	0.004274	2.29	21.69	26.20	0.53	
03	2096.750	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	29.36	81.58	83.68	83.33	83.85	0.004549	2.51	26.66	29.19	0.55	
03	2096.750	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	29.36	81.58	83.68	83.33	83.85	0.004531	2.51	26.73	29.21	0.55	
03	2096.750	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	35.60	81.58	83.83	83.47	84.01	0.004644	2.66	31.26	31.68	0.57	
03	2096.750	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	35.60	81.58	83.83	83.47	84.01	0.004645	2.66	31.25	31.67	0.57	
03	2096.750	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	41.82	81.58	83.96	83.58	84.15	0.004781	2.80	35.44	33.79	0.58	
03	2096.750	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	41.82	81.58	83.95	83.58	84.15	0.004784	2.80	35.44	33.79	0.58	
03	2025.418	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.86	81.45	82.93	82.62	82.99	0.002597	1.50	17.70	27.72	0.40	
03	2025.418	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.86	81.45	82.93	82.62	82.99	0.002597	1.50	17.70	27.72	0.40	
03	2025.418	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	18.48	81.45	83.17	82.79	83.24	0.002755	1.71	24.84	31.41	0.42	
03	2025.418	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	18.48	81.45	83.17	82.79	83.24	0.002755	1.71	24.84	31.41	0.42	
03	2025.418	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.90	81.45	83.30	82.88	83.38	0.002823	1.82	29.21	33.47	0.43	
03	2025.418	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.90	81.45	83.30	82.88	83.38	0.002823	1.82	29.21	33.47	0.43	
03	2025.418	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	29.89	81.45	83.47	83.00	83.56	0.003040	2.01	35.05	36.04	0.45	
03	2025.418	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	29.89	81.45	83.47	83.00	83.56	0.003014	2.00	35.17	36.09	0.45	
03	2025.418	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.20	81.45	83.62	83.10	83.72	0.003064	2.11	40.64	38.34	0.46	
03	2025.418	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.20	81.45	83.62	83.10	83.72	0.003066	2.11	40.63	38.34	0.46	
03	2025.418	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	42.57	81.45	83.74	83.19	83.84	0.003209	2.24	45.33	40.17	0.47	
03	2025.418	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	42.57	81.45	83.74	83.19	83.84	0.003212	2.24	45.31	40.16	0.47	
03	1968.571	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	11.97	81.45	82.46	82.46	82.69	0.013363	2.65	8.95	18.86	0.84	
03	1968.571	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	11.97	81.45	82.46	82.46	82.69	0.013363	2.65	8.95	18.86	0.84	
03	1968.571	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	18.76	81.45	82.64	82.64	82.92	0.014532	3.08	12.49	20.91	0.90	
03	1968.571	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	18.76	81.45	82.64	82.64	82.92	0.014532	3.08	12.49	20.91	0.90	
03	1968.571	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	23.22	81.45	82.73	82.73	83.04	0.015404	3.33	14.46	21.98	0.94	
03	1968.571	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	23.22	81.45	82.73	82.73	83.04	0.015404	3.33	14.46	21.98	0.94	
03	1968.571	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	30.30	81.45	82.92	82.86	83.22	0.013343	3.40	18.87	24.17	0.89	
03	1968.571	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	30.30	81.45	82.91	82.86	83.22	0.014069	3.47	18.49	23.99	0.92	
03	1968.571	50-												

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	1770.174	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.33	80.24	82.22	80.91	82.26	0.000361	0.86	16.04	51.47	0.19
03	1770.174	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	19.77	80.24	82.53	81.17	82.60	0.000565	1.18	19.13	101.28	0.25
03	1770.174	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	19.77	80.24	82.53	81.17	82.60	0.000565	1.18	19.13	101.28	0.25
03	1770.174	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	24.34	80.24	82.70	81.31	82.79	0.000663	1.34	20.91	129.85	0.27
03	1770.174	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	24.34	80.24	82.70	81.31	82.79	0.000663	1.34	20.91	129.85	0.27
03	1770.174	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	31.76	80.24	83.04	81.52	83.07	0.000257	0.91	119.35	182.65	0.17
03	1770.174	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	31.76	80.24	83.03	81.52	83.06	0.000264	0.92	117.77	181.73	0.18
03	1770.174	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	38.35	80.24	83.15	81.69	83.17	0.000281	0.97	138.67	193.45	0.18
03	1770.174	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	38.35	80.24	83.15	81.69	83.17	0.000280	0.97	138.75	193.50	0.18
03	1770.174	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	45.27	80.24	83.32	81.85	83.34	0.000249	0.95	172.81	211.21	0.17
03	1770.174	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	45.27	80.24	83.33	81.85	83.35	0.000243	0.94	174.86	212.23	0.17
03	1760.97		Culvert										
03	1709.779	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.42	80.15	82.20	80.83	82.23	0.000404	0.85	14.53	66.61	0.19
03	1709.779	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.42	80.15	82.20	80.83	82.23	0.000404	0.85	14.53	66.60	0.19
03	1709.779	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	19.95	80.15	82.47	81.08	82.54	0.000690	1.21	16.45	127.85	0.25
03	1709.779	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	19.95	80.15	82.47	81.08	82.54	0.000690	1.21	16.45	127.85	0.25
03	1709.779	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	24.60	80.15	82.60	81.22	82.70	0.000876	1.42	17.36	157.06	0.29
03	1709.779	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	24.60	80.15	82.60	81.22	82.70	0.000876	1.42	17.36	157.06	0.29
03	1709.779	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	32.10	80.15	82.75	81.43	82.78	0.000427	1.03	103.66	191.95	0.20
03	1709.779	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	32.10	80.15	82.73	81.43	82.77	0.000445	1.05	101.04	188.82	0.21
03	1709.779	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	38.78	80.15	82.84	81.60	82.87	0.000474	1.11	121.93	212.46	0.22
03	1709.779	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	38.78	80.15	82.84	81.60	82.87	0.000472	1.11	122.09	212.63	0.22
03	1709.779	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	45.77	80.15	83.18	81.77	83.20	0.000225	0.83	204.83	255.71	0.15
03	1709.779	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	45.77	80.15	83.21	81.77	83.22	0.000208	0.80	211.41	256.66	0.15
03	1558.967	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.65	80.60	82.02	81.71	82.09	0.002851	1.62	19.37	34.39	0.43
03	1558.967	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.65	80.60	82.02	81.71	82.09	0.002852	1.62	19.37	34.39	0.43
03	1558.967	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	20.41	80.60	82.25	81.93	82.34	0.003308	1.93	28.42	44.71	0.48
03	1558.967	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	20.41	80.60	82.25	81.93	82.34	0.003308	1.93	28.42	44.71	0.48
03	1558.967	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.24	80.60	82.36	82.01	82.46	0.003513	2.08	33.59	49.68	0.50
03	1558.967	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.24	80.60	82.36	82.01	82.46	0.003513	2.08	33.59	49.68	0.50
03	1558.967	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	32.93	80.60	82.51	82.16	82.61	0.003720	2.26	41.54	56.48	0.52
03	1558.967	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	32.93	80.60	82.48	82.16	82.59	0.004148	2.35	39.58	54.88	0.55
03	1558.967	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	39.86	80.60	82.52	82.27	82.67	0.005276	2.70	42.14	56.96	0.62
03	1558.967	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	39.86	80.60	82.52	82.27	82.67	0.005253	2.69	42.22	57.02	0.62
03	1558.967	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	47.02	80.60	83.07	83.12	83.15	0.001534	1.72	88.55	123.15	0.35
03	1558.967	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	47.02	80.60	83.11	83.15	83.15	0.001390	1.65	92.99	128.05	0.33
03	1464.649	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.79	80.45	81.43	81.43	81.58	0.011588	2.42	13.35	39.34	0.79
03	1464.649	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.79	80.45	81.43	81.43	81.58	0.011588	2.42	13.35	39.34	0.79
03	1464.649	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	20.69	80.45	81.56	81.56	81.75	0.013444	2.85	19.16	46.64	0.87
03	1464.649	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	20.69	80.45	81.56	81.56	81.75	0.013444	2.85	19.16	46.64	0.87
03	1464.649	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.64	80.45	81.63	81.63	81.83	0.014119	3.04	22.56	50.42	0.90
03	1464.649	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.64	80.45	81.63	81.63	81.84	0.014119	3.04	22.56	50.42	0.90
03	1464.649	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	33.46	80.45	82.12	81.72	82.14	0.015488	3.34	27.18	55.13	0.95
03	1464.649	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	33.46	80.45	82.12	81.72	82.14	0.015488	3.34	27.18	55.13	0.95
03	1464.649	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	40.56	80.45	82.13	82.20	82.20	0.003992	2.05	57.88	103.76	0.51
03	1464.649	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	40.56	80.45	82.19	82.24	82.24	0.003237	1.89	63.70	108.90	0.46
03	1464.649	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	47.80	80.45	83.03	83.04	83.04	0.000343	0.80	186.06	182.91	0.16
03	1464.649	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	47.80	80.45	83.07	83.08	83.08	0.000309	0.77	195.31	184.91	0.15
03	1442	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.79	79.50	81.18	81.21	80.99	0.000599	0.91	29.16	48.07	0.23
03	1442	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.79	79.50	81.18	81.21	80.99	0.000700	0.98	29.33	48.16	0.25
03	1442	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	20.69	79.50	81.47	81.51	80.9650	1.06	45.26	65.51	0.25	
03	1442	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	20.69	79.50	81.48	81.52	80.9772	1.16	45.99	66.40	0.27	
03	1442	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.64	79.50	81.61	81.65	80.9671	1.13	55.18	73.52	0.25	
03	1442	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.64	79.50	81.63	81.67	80.9776	1.22	56.54	73.92	0.27	
03	1442	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	33.46	79.50	81.78	81.82	80.9732	1.24	68.69	85.22	0.27	
03	1442	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	33.46	79.50	81.82	81.86	80.9819	1.33	71.78	87.08	0.28	
03	1442	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	40.56	79.50	82.14	82.16	80.9469	1.10	103.21	113.13	0.22	
03	1442	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	40.56	79.50	82.18	82.21	80.9493	1.14	108.57	116.96	0.23	
03	1442	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	47.80	79.50	83.03	83.03	80.9065	0.50	237.52	170.52	0.09	
03	1442	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	47.80	79.50	83.07	83.07	80.9220	0.62	243.70	170.94	0.11	
03	1426.335	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.79	79.49	81.16	81.19	80.9979	1.02	27.58	36.90	0.26	
03	1426.335	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.79	79.49	81.17	80.56	81.20	0.000751	1.00	27.36	32.68	0.25
03	1426.335	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	20.69	79.49	81.45	81.49	80.9096	1.22	38.78	40.38	0.28	
03	1426.335	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	20.69	79.49	81.47	80.80	81.51	0.008666	1.20	37.38	34.52	0.28
03	1426.335	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.64	79.49	81.58	81.63	80.9045	1.36	44.50	47.58	0.30	
03	1426.335	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.64	79.49	81.61	80.90	81.66	0.000950	1.32	42.31	36.02	0.29
03	1426.335	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	33.46	79.49	81.74	81.81	80.9234	1.56	52.86	57.45	0.33	
03	1426.335	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	33.46	79.49	81.74	80.89	81.81	0.000997	1.49	48.58	36.26	0.32
03	1426.335	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	40.56	79.49	82.10	82.15	80.9046	1.43	76.21	83.44	0.28	
03	1426.335	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	40.56	79.49	82.15	81.11	82.20	0.000810	1.42	61.43	36.73	0.28
03	1426.335	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	47.80	79.49	83.02	83.03	80.00180	0.81				

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl	
03	1395.236	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.64	79.43	81.57	80.76	81.63	0.000862	1.28	39.41	30.86	0.28	
03	1395.236	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	33.46	79.43	81.74		81.77	0.000576	1.11	83.46	88.07	0.24	
03	1395.236	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	33.46	79.43	81.74	80.90	81.80	0.001059	1.49	44.44	31.63	0.32	
03	1395.236	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	40.56	79.43	82.11		82.12	0.000361	0.97	117.96	99.96	0.19	
03	1395.236	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	40.56	79.43	82.10	81.01	82.16	0.000836	1.46	56.35	33.36	0.29	
03	1395.236	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	47.80	79.43	83.02		83.03	0.000097	0.61	217.54	116.86	0.10	
03	1395.236	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	47.80	79.43	83.01	81.11	83.05	0.000365	1.18	90.40	47.56	0.20	
03	1383.185	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.91	79.46	81.14		81.17	0.000526	0.86	38.85	64.38	0.22	
03	1383.185	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.91	79.46	81.15	81.17	0.000524	0.86	38.92	64.43	0.22		
03	1383.185	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	20.94	79.46	81.44		81.46	0.000529	0.97	59.49	75.76	0.22	
03	1383.185	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	20.94	79.46	81.44		81.46	0.000528	0.97	59.51	75.77	0.22	
03	1383.185	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.99	79.46	81.57		81.59	0.000551	1.03	69.86	79.43	0.23	
03	1383.185	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.99	79.46	81.57	81.60	0.000550	1.03	69.91	79.45	0.23		
03	1383.185	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	33.91	79.46	81.73		81.76	0.000603	1.14	83.14	82.99	0.24	
03	1383.185	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	33.91	79.46	81.74	81.76	0.000602	1.14	83.22	83.01	0.24		
03	1383.185	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	41.12	79.46	82.10		82.12	0.000379	1.00	115.06	90.58	0.20	
03	1383.185	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	41.12	79.46	82.10	82.12	0.000378	1.00	115.13	90.59	0.20		
03	1383.185	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	48.48	79.46	83.02		83.02	0.000107	0.65	204.27	103.47	0.11	
03	1383.185	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	48.48	79.46	83.02	83.02	0.000107	0.65	204.31	103.47	0.11		
03	1355	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	12.91	79.47	81.13		81.15	0.000354	0.73	38.87	65.30	0.18	
03	1355	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	12.91	79.47	81.13	81.15	0.000354	0.73	38.87	65.30	0.18		
03	1355	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	20.94	79.47	81.42		81.45	0.000391	0.86	59.77	79.21	0.20	
03	1355	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	20.94	79.47	81.42		81.45	0.000391	0.86	59.77	79.21	0.20	
03	1355	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	25.99	79.47	81.56		81.58	0.000417	0.92	70.55	83.86	0.21	
03	1355	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	25.99	79.47	81.56	81.58	0.000417	0.92	70.55	83.86	0.21		
03	1355	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	33.91	79.47	81.72		81.75	0.000462	1.03	84.34	86.82	0.22	
03	1355	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	33.91	79.47	81.72	81.75	0.000462	1.03	84.34	86.82	0.22		
03	1355	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	41.12	79.47	82.09		82.11	0.000291	0.90	118.01	93.43	0.18	
03	1355	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	41.12	79.47	82.09	82.11	0.000291	0.90	118.01	93.43	0.18		
03	1355	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	48.48	79.47	83.01		83.02	0.000086	0.60	211.14	107.90	0.10	
03	1355	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	48.48	79.47	83.01	83.02	0.000086	0.60	211.14	107.90	0.10		
03	1325.126	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.00	79.45	80.80	80.80	81.10	0.009624	2.73	8.99	19.94	0.75	
03	1325.126	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.00	79.45	80.80	80.80	81.10	0.009624	2.73	8.99	19.94	0.75	
03	1325.126	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.11	79.45	81.07	81.07	81.39	0.009730	3.09	15.42	29.62	0.78	
03	1325.126	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.11	79.45	81.07	81.07	81.39	0.009730	3.09	15.42	29.62	0.78	
03	1325.126	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	26.24	79.45	81.22		81.52	0.009064	3.16	20.41	37.17	0.76	
03	1325.126	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	26.24	79.45	81.22	81.52	0.009064	3.16	20.41	37.17	0.76		
03	1325.126	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	34.23	79.45	81.37	81.37	81.68	0.009304	3.39	26.61	44.81	0.78	
03	1325.126	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	34.23	79.45	81.37	81.37	81.68	0.009304	3.39	26.61	44.81	0.78	
03	1325.126	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	41.54	79.45	82.02		82.09	0.001891	1.86	64.94	69.86	0.37	
03	1325.126	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	41.54	79.45	82.02	82.09	0.001891	1.86	64.94	69.86	0.37		
03	1325.126	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	48.96	79.45	83.00		83.02	0.000324	0.95	141.12	86.62	0.16	
03	1325.126	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	48.96	79.45	83.00	83.02	0.000324	0.95	141.12	86.62	0.16		
03	1305.734	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.02	78.90	80.12	79.67	80.26	0.003414	1.69	8.39	8.94	0.49	
03	1305.734	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.02	78.90	80.12	79.67	80.26	0.003414	1.69	8.39	8.94	0.49	
03	1305.734	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.13	78.90	80.54	79.97	80.73	0.003053	1.95	13.27	17.27	0.49	
03	1305.734	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.13	78.90	80.54	79.97	80.73	0.003053	1.95	13.27	17.27	0.49	
03	1305.734	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	26.28	78.90	80.82		80.14	0.002593	2.00	16.94	32.55	0.46	
03	1305.734	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	26.28	78.90	80.82	80.14	0.002593	2.00	16.94	32.55	0.46		
03	1305.734	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	34.28	78.90	81.24		80.40	0.002089	2.04	22.40	54.24	0.43	
03	1305.734	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	34.28	78.90	81.24	80.40	0.002089	2.04	22.40	54.24	0.43		
03	1305.734	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	41.60	78.90	81.91		80.62	0.001179	1.82	31.31	79.75	0.33	
03	1305.734	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	41.60	78.90	81.91	80.62	0.001179	1.82	31.31	79.75	0.33		
03	1305.734	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	49.04	78.90	82.90	80.77	83.00	0.000571	1.53	44.42	117.09	0.24	
03	1305.734	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	49.04	78.90	82.90	80.77	83.00	0.000571	1.53	44.42	117.09	0.24	
03	1304.734		Culvert											
03	1028.734	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.32	78.00	79.88		79.94	0.000878	1.14	11.63	20.26	0.27	
03	1028.734	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.32	78.00	79.88	79.94	0.000878	1.14	11.63	20.26	0.27		
03	1028.734	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.47	78.00	80.04		80.19	0.001716	1.69	12.67	22.11	0.38	
03	1028.734	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.47	78.00	80.04	80.19	0.001716	1.69	12.67	22.11	0.38		
03	1028.734	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	26.82	78.00	80.15		80.36	0.002248	2.01	13.36	23.32	0.44	
03	1028.734	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	26.82	78.00	80.15	80.36	0.002248	2.01	13.36	23.32	0.44		
03	1028.734	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	35.03	78.00	80.44		80.71	0.002529	2.31	15.13	26.23	0.47	
03	1028.734	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	35.03	78.00	80.44	80.71	0.002529	2.31	15.13	26.23	0.47		
03	1028.734	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	42.53	78.00	80.77		81.08	0.002459	2.48	17.14	27.29	0.48	
03	1028.734	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	42.53	78.00	80.77	81.08	0.002459	2.48	17.14	27.29	0.48		
03	1028.734	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	50.12	78.00	81.21		81.54	0.002070	2.52	19.92	28.76	0.45	
03	1028.734	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	50.12	78.00	81.21	81.54	0.002070	2.52	19.92	28.76	0.45		
03	964.476	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.39	78.60	79.82		79.84	0.001925	1.20	25.39	34.64	0.35	
03	964.476	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.39	78.60	79.82	79.84	0.001925	1.20	25.39	34.64	0.35		
03	964.476	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.54	78.60	79.95		80.00	0.003022	1.61	30.08	35.46	0.44	
03	964.476	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.54	78.60	79.95	80.00	0.003022	1.61	30.08	35.46	0.44		
03	964.476	10-yr	Existing_Bro											

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	878.305	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	43.03	78.60	80.75		80.76	0.000344	0.74	136.97	94.20	0.16
03	878.305	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	50.71	78.60	81.26		81.27	0.000182	0.62	186.00	96.62	0.12
03	878.305	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	50.71	78.60	81.26		81.27	0.000182	0.62	186.00	96.62	0.12
03	787.850	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.57	77.60	79.03		79.07	0.001791	1.29	25.18	34.63	0.34
03	787.850	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.57	77.60	79.03		79.07	0.001791	1.29	25.18	34.63	0.34
03	787.850	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.76	77.60	79.33		79.37	0.001685	1.42	35.75	36.03	0.35
03	787.850	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.76	77.60	79.33		79.37	0.001685	1.42	35.75	36.03	0.35
03	787.850	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.29	77.60	79.64		79.67	0.001192	1.33	46.97	37.45	0.30
03	787.850	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.29	77.60	79.64		79.67	0.001192	1.33	46.97	37.45	0.30
03	787.850	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	35.68	77.60	80.25		80.28	0.000603	1.13	70.97	40.34	0.22
03	787.850	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	35.68	77.60	80.25		80.28	0.000603	1.13	70.97	40.34	0.22
03	787.850	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	43.33	77.60	80.70		80.72	0.000452	1.09	89.35	42.42	0.20
03	787.850	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	43.33	77.60	80.70		80.72	0.000452	1.09	89.35	42.42	0.20
03	787.850	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	51.07	77.60	81.23		81.24	0.000321	1.02	112.45	44.89	0.17
03	787.850	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	51.07	77.60	81.23		81.24	0.000321	1.02	112.45	44.89	0.17
03	754.066	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.61	77.60	78.76	78.76	78.94	0.008514	2.45	13.97	35.70	0.73
03	754.066	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.61	77.60	78.76	78.76	78.94	0.008514	2.45	13.97	35.70	0.73
03	754.066	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.08	77.60	79.26		79.31	0.002216	1.58	33.55	41.71	0.39
03	754.066	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.08	77.60	79.26		79.31	0.002216	1.58	33.55	41.71	0.39
03	754.066	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.35	77.60	79.59		79.63	0.001328	1.39	47.89	43.31	0.31
03	754.066	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.35	77.60	79.59		79.63	0.001328	1.39	47.89	43.31	0.31
03	754.066	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	35.77	77.60	80.24		80.26	0.000560	1.09	76.77	46.36	0.21
03	754.066	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	35.77	77.60	80.24		80.26	0.000560	1.09	76.77	46.36	0.21
03	754.066	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	43.44	77.60	80.69		80.70	0.000396	1.01	98.07	48.25	0.18
03	754.066	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	43.44	77.60	80.69		80.70	0.000396	1.01	98.07	48.25	0.18
03	754.066	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	51.20	77.60	81.22		81.23	0.000270	0.93	124.39	50.45	0.16
03	754.066	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	51.20	77.60	81.22		81.23	0.000270	0.93	124.39	50.45	0.16
03	682.059	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.69	77.10	78.67		78.69	0.001072	1.06	31.56	39.41	0.27
03	682.059	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.69	77.10	78.67		78.69	0.001072	1.06	31.56	39.41	0.27
03	682.059	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.88	77.10	79.21		79.22	0.000568	0.96	53.43	41.51	0.21
03	682.059	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.88	77.10	79.21		79.22	0.000568	0.96	53.43	41.51	0.21
03	682.059	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.49	77.10	79.56		79.57	0.000449	0.93	68.14	42.87	0.19
03	682.059	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.49	77.10	79.56		79.57	0.000449	0.93	68.14	42.87	0.19
03	682.059	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	35.96	77.10	80.22		80.23	0.000264	0.83	97.30	45.44	0.15
03	682.059	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	35.96	77.10	80.22		80.23	0.000264	0.83	97.30	45.44	0.15
03	682.059	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	43.68	77.10	80.67		80.68	0.000218	0.83	118.34	47.20	0.14
03	682.059	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	43.68	77.10	80.67		80.68	0.000218	0.83	118.34	47.20	0.14
03	682.059	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	51.48	77.10	81.21		81.22	0.000168	0.80	144.26	49.24	0.13
03	682.059	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	51.48	77.10	81.21		81.22	0.000168	0.80	144.26	49.24	0.13
03	644.335	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.73	76.49	78.60	77.65	78.65	0.001003	1.25	18.61	18.83	0.28
03	644.335	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.73	76.49	78.60	77.65	78.65	0.001003	1.25	18.61	18.83	0.28
03	644.335	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.93	76.49	79.12	77.89	79.19	0.001072	1.50	24.57	23.79	0.30
03	644.335	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.93	76.49	79.12	77.89	79.19	0.001072	1.50	24.57	23.79	0.30
03	644.335	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.57	76.49	79.46	78.04	79.54	0.001064	1.62	28.44	28.32	0.30
03	644.335	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.57	76.49	79.46	78.04	79.54	0.001064	1.62	28.44	28.32	0.30
03	644.335	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.06	76.49	80.12	78.24	80.20	0.000855	1.66	35.98	36.81	0.28
03	644.335	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.06	76.49	80.12	78.24	80.20	0.000855	1.66	35.98	36.81	0.28
03	644.335	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	43.81	76.49	80.57	78.39	80.66	0.000824	1.76	41.06	41.46	0.28
03	644.335	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	43.81	76.49	80.57	78.39	80.66	0.000824	1.76	41.06	41.46	0.28
03	644.335	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	51.63	76.49	81.11	78.55	81.20	0.000730	1.80	47.16	46.69	0.27
03	644.335	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	51.63	76.49	81.11	78.55	81.20	0.000730	1.80	47.16	46.69	0.27
03	642.98		Culvert										
03	611.619	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.76	76.18	78.20		78.27	0.001364	1.42	16.67	26.30	0.32
03	611.619	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.76	76.18	78.20		78.27	0.001364	1.42	16.67	26.30	0.32
03	611.619	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	21.97	76.18	78.45		78.57	0.002170	1.93	19.47	28.91	0.41
03	611.619	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	21.97	76.18	78.45		78.57	0.002170	1.93	19.47	28.91	0.41
03	611.619	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.63	76.18	78.58		78.74	0.002751	2.26	20.93	29.65	0.47
03	611.619	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.63	76.18	78.58		78.74	0.002751	2.26	20.93	29.65	0.47
03	611.619	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.15	76.18	78.72		78.95	0.003732	2.74	22.56	30.47	0.55
03	611.619	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.15	76.18	78.72		78.95	0.003732	2.74	22.56	30.47	0.55
03	611.619	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	43.92	76.18	78.84		79.14	0.004613	3.13	23.89	31.15	0.61
03	611.619	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	43.92	76.18	78.84		79.14	0.004613	3.13	23.89	31.15	0.61
03	611.619	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	51.76	76.18	78.92		79.30	0.005708	3.55	24.79	31.60	0.69
03	611.619	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	51.76	76.18	78.92		79.30	0.005708	3.55	24.79	31.60	0.69
03	556.507	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.82	76.60	78.13		78.17	0.001745	1.33	26.54	40.03	0.34
03	556.507	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.82	76.60	78.13		78.17	0.001745	1.33	26.54	40.03	0.34
03	556.507	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.03	76.60	78.38		78.42	0.001854	1.52	36.59	42.35	0.36
03	556.507	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.03	76.60	78.38		78.42	0.001854	1.52	36.59	42.35	0.36
03	556.507	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.74	76.60	78.50		78.56	0.001994	1.65	42.08	43.57	0.38
03	556.507	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.74	76.60	78.50		78.56	0.001994	1.65	42.08	43.57	0.38
03	556.507	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.30	76.60	78.65		78.71	0.002310	1.86	48.36	44.92	0.42
03	556.507	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.30	76.60	78.65		78.71	0.002310	1.86	48.36	44.92	0.42
03	556.507	50-yr	Existing_BrookdaleWalnutLn_AddXS										

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	489.157	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.86	75.78	77.05		77.23	0.006264	1.94	7.62	12.04	0.67
03	489.157	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.86	75.78	77.05		77.23	0.006264	1.94	7.62	12.04	0.67
03	489.157	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.08	75.78	77.28	77.11	77.55	0.006823	2.37	10.82	17.76	0.73
03	489.157	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.08	75.78	77.28	77.11	77.55	0.006823	2.37	10.82	17.76	0.73
03	489.157	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.81	75.78	77.50	77.25	77.77	0.005346	2.38	15.25	20.99	0.66
03	489.157	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.81	75.78	77.50	77.25	77.77	0.005346	2.38	15.25	20.99	0.66
03	489.157	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.40	75.78	77.79		78.05	0.004197	2.40	21.56	23.12	0.61
03	489.157	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.40	75.78	77.79		78.05	0.004197	2.40	21.56	23.12	0.61
03	489.157	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	44.22	75.78	78.07		78.31	0.003338	2.39	28.71	28.50	0.56
03	489.157	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	44.22	75.78	78.07		78.31	0.003338	2.39	28.71	28.50	0.56
03	489.157	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	52.12	75.78	78.37		78.58	0.002474	2.27	37.99	31.87	0.49
03	489.157	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	52.12	75.78	78.37		78.58	0.002474	2.27	37.99	31.87	0.49
03	482.157	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.90	75.40	77.15	75.98	77.18	0.000460	0.80	17.46	16.62	0.19
03	482.157	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.90	75.40	77.15	75.98	77.18	0.000460	0.80	17.46	16.62	0.19
03	482.157	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.12	75.40	77.42	76.19	77.48	0.000722	1.10	20.16	20.20	0.25
03	482.157	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.12	75.40	77.42	76.19	77.48	0.000722	1.10	20.16	20.20	0.25
03	482.157	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.87	75.40	77.62	76.32	77.70	0.000830	1.25	22.21	21.52	0.27
03	482.157	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.87	75.40	77.62	76.32	77.70	0.000830	1.25	22.21	21.52	0.27
03	482.157	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.49	75.40	77.88	76.50	77.99	0.000967	1.47	24.79	24.21	0.30
03	482.157	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.49	75.40	77.88	76.50	77.99	0.000967	1.47	24.79	24.21	0.30
03	482.157	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	44.33	75.40	78.13	76.66	78.27	0.001054	1.62	27.31	27.95	0.31
03	482.157	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	44.33	75.40	78.13	76.66	78.27	0.001054	1.62	27.31	27.95	0.31
03	482.157	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	52.25	75.40	78.40	76.80	78.56	0.001068	1.74	30.02	30.31	0.32
03	482.157	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	52.25	75.40	78.40	76.80	78.56	0.001068	1.74	30.02	30.31	0.32
03	479.157		Culvert										
03	472.157	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.92	75.30	77.12		77.15	0.000284	0.69	20.07	16.98	0.16
03	472.157	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.92	75.30	77.12		77.15	0.000284	0.69	20.07	16.98	0.16
03	472.157	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.14	75.30	77.35		77.40	0.000489	0.98	22.52	17.85	0.22
03	472.157	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.14	75.30	77.35		77.40	0.000489	0.98	22.52	17.85	0.22
03	472.157	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.91	75.30	77.50		77.57	0.000611	1.15	24.20	18.45	0.25
03	472.157	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.91	75.30	77.50		77.57	0.000611	1.15	24.20	18.45	0.25
03	472.157	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.54	75.30	77.65		77.75	0.000839	1.41	25.86	19.68	0.29
03	472.157	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.54	75.30	77.65		77.75	0.000839	1.41	25.86	19.68	0.29
03	472.157	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	44.39	75.30	77.77		77.91	0.001051	1.63	27.17	20.53	0.33
03	472.157	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	44.39	75.30	77.77		77.91	0.001051	1.63	27.17	20.53	0.33
03	472.157	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	52.32	75.30	77.88		78.05	0.001270	1.85	28.47	21.29	0.37
03	472.157	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	52.32	75.30	77.88		78.05	0.001270	1.85	28.47	21.29	0.37
03	454.156	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.92	74.50	77.13		77.14	0.000075	0.40	36.62	21.95	0.09
03	454.156	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.92	74.50	77.13		77.14	0.000075	0.40	36.62	21.95	0.09
03	454.156	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.14	74.50	77.36		77.38	0.000135	0.58	41.93	24.40	0.12
03	454.156	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.14	74.50	77.36		77.38	0.000135	0.58	41.93	24.40	0.12
03	454.156	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	27.91	74.50	77.52		77.54	0.000172	0.68	45.91	26.13	0.13
03	454.156	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	27.91	74.50	77.52		77.54	0.000172	0.68	45.91	26.13	0.13
03	454.156	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.54	74.50	77.68		77.71	0.000239	0.83	50.26	27.91	0.16
03	454.156	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.54	74.50	77.68		77.71	0.000239	0.83	50.26	27.91	0.16
03	454.156	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	44.39	74.50	77.81		77.85	0.000300	0.96	53.93	29.27	0.18
03	454.156	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	44.39	74.50	77.81		77.85	0.000300	0.96	53.93	29.27	0.18
03	454.156	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	52.32	74.50	77.92		77.98	0.000361	1.09	57.41	30.48	0.20
03	454.156	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	52.32	74.50	77.92		77.98	0.000361	1.09	57.41	30.48	0.20
03	393.758	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	13.99	75.45	77.13		77.13	0.000230	0.49	72.44	84.09	0.12
03	393.758	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	13.99	75.45	77.13		77.13	0.000230	0.49	72.44	84.09	0.12
03	393.758	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.23	75.45	77.35		77.36	0.000291	0.60	92.23	89.05	0.14
03	393.758	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.23	75.45	77.35		77.36	0.000291	0.60	92.23	89.05	0.14
03	393.758	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	28.05	75.45	77.51		77.52	0.000306	0.64	106.59	91.93	0.14
03	393.758	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	28.05	75.45	77.51		77.52	0.000306	0.64	106.59	91.93	0.14
03	393.758	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	36.74	75.45	77.67		77.68	0.000354	0.73	121.65	93.80	0.16
03	393.758	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	36.74	75.45	77.67		77.68	0.000354	0.73	121.65	93.80	0.16
03	393.758	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	44.64	75.45	77.80		77.81	0.000393	0.80	133.94	95.29	0.17
03	393.758	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	44.64	75.45	77.80		77.81	0.000393	0.80	133.94	95.29	0.17
03	393.758	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	52.61	75.45	77.92		77.93	0.000427	0.86	145.35	96.66	0.17
03	393.758	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	52.61	75.45	77.92		77.93	0.000427	0.86	145.35	96.66	0.17
03	264.924	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	14.13	75.45	77.08		77.09	0.000472	0.68	46.65	48.01	0.17
03	264.924	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	14.13	75.45	77.08		77.09	0.000472	0.68	46.65	48.01	0.17
03	264.924	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.38	75.45	77.29		77.30	0.000658	0.88	57.08	50.34	0.21
03	264.924	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.38	75.45	77.29		77.30	0.000658	0.88	57.08	50.34	0.21
03	264.924	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	28.30	75.45	77.44		77.46	0.000726	0.97	64.88	52.04	0.22
03	264.924	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	28.30	75.45	77.44		77.46	0.000726	0.97	64.88	52.04	0.22
03	264.924	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	37.09	75.45	77.59		77.61	0.000899	1.13	72.65	53.68	0.25
03	264.924	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	37.09	75.45	77.59		77.61	0.000899	1.13	72.65	53.68	0.25
03	264.924	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	45.07	75.45	77.71		77.73	0.001042	1.26	79.02	54.99	0.27
03	264.924	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	45.07	75.45	77.71		77.73	0.001042	1.26	79.02	54.99	0.27
03	264.924	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	53.12	75.45	77.81		77.84	0.001175	1.38	84.96	56.18	0.29
03	264.924	100-yr	Proposed_B										

HEC-RAS River: Pine Creek Reach: 03 (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	113.364	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	28.60	75.45	77.02	76.73	77.11	0.005090	2.19	39.84	81.93	0.56
03	113.364	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	28.60	75.45	77.02	76.73	77.11	0.005090	2.19	39.84	81.93	0.56
03	113.364	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	37.49	75.45	77.12	76.82	77.21	0.005395	2.35	47.97	84.01	0.58
03	113.364	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	37.49	75.45	77.12	76.82	77.21	0.005395	2.35	47.97	84.01	0.58
03	113.364	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	45.57	75.45	77.19	76.90	77.29	0.006715	2.49	54.30	85.59	0.60
03	113.364	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	45.57	75.45	77.19	76.90	77.29	0.006715	2.49	54.30	85.59	0.60
03	113.364	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	53.71	75.45	77.26	76.96	77.37	0.006914	2.60	60.47	87.10	0.62
03	113.364	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	53.71	75.45	77.26	76.96	77.37	0.006914	2.60	60.47	87.10	0.62
03	51.610	2-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	14.36	75.45	76.44	76.44	76.52	0.008335	2.06	26.35	129.79	0.66
03	51.610	2-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	14.36	75.45	76.44	76.44	76.52	0.008335	2.06	26.35	129.79	0.66
03	51.610	5-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	22.64	75.45	76.51	76.51	76.61	0.010588	2.43	36.00	151.68	0.75
03	51.610	5-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	22.64	75.45	76.51	76.51	76.61	0.010588	2.43	36.00	151.68	0.75
03	51.610	10-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	28.72	75.45	76.55	76.55	76.65	0.011681	2.62	42.57	164.92	0.80
03	51.610	10-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	28.72	75.45	76.55	76.55	76.65	0.011681	2.62	42.57	164.92	0.80
03	51.610	25-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	37.66	75.45	76.59	76.59	76.71	0.013468	2.89	50.59	179.79	0.86
03	51.610	25-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	37.66	75.45	76.59	76.59	76.71	0.013468	2.89	50.59	179.79	0.86
03	51.610	50-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	45.78	75.45	76.63	76.63	76.75	0.014686	3.08	57.54	191.74	0.91
03	51.610	50-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	45.78	75.45	76.63	76.63	76.75	0.014686	3.08	57.54	191.74	0.91
03	51.610	100-yr	Existing_BrookdaleWalnutLn_AddXS_2-100yr	53.96	75.45	76.66	76.66	76.79	0.016409	3.31	63.02	200.61	0.96
03	51.610	100-yr	Proposed_BrookdaleWalnutLn_AddXS_2-100yr	53.96	75.45	76.66	76.66	76.79	0.016409	3.31	63.02	200.61	0.96

Regional Water Level Comparison - Revised Existing vs Scenario 3

HEC-RAS River: Pine Creek Reach: 03 Profile: Regional

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	3439.853	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	27.44	94.15	105.00	101.32	105.00	0.000000	0.01	1264.55	444.28	0.00
03	3439.853	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	27.44	94.15	105.00	101.32	105.00	0.000000	0.01	1264.55	444.28	0.00
03	3400		Culvert										
03	3381.462	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	27.44	91.72	98.75	98.75	98.75	0.000183	0.47	124.08	207.49	0.08
03	3381.462	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	27.44	91.72	98.75	98.75	98.75	0.000183	0.47	124.08	207.49	0.08
03	3295.620	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	27.44	91.39	92.64	92.64	92.64	0.013754	3.02	25.80	62.14	0.86
03	3295.620	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	27.44	91.39	92.64	92.64	92.64	0.013754	3.02	25.80	62.14	0.86
03	3229.203	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	29.15	90.05	91.57	91.44	91.67	0.006168	2.31	34.08	56.93	0.60
03	3229.203	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	29.15	90.05	91.57	91.44	91.67	0.006168	2.31	34.08	56.93	0.60
03	3154.216	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	31.09	89.40	90.76	90.76	90.98	0.014091	3.23	24.30	43.58	0.88
03	3154.216	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	31.09	89.40	90.76	90.76	90.98	0.014091	3.23	24.30	43.58	0.88
03	3059.426	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	33.54	88.75	90.53		90.54	0.000807	0.93	102.14	134.10	0.22
03	3059.426	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	33.54	88.75	90.53		90.54	0.000807	0.93	102.14	134.10	0.22
03	2967.180	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	35.92	87.71	90.50		90.50	0.000224	0.66	150.65	117.52	0.13
03	2967.180	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	35.92	87.71	90.50		90.50	0.000224	0.66	150.65	117.52	0.13
03	2929.505	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	36.89	86.90	89.32	89.32	90.37	0.014989	4.89	9.23	81.40	1.00
03	2929.505	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	36.89	86.90	89.32	89.32	90.37	0.014989	4.89	9.23	81.40	1.00
03	2928.505		Culvert										
03	2882.771	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	38.10	85.50	88.64		89.75	0.009607	4.66	8.17	24.18	0.84
03	2882.771	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	38.10	85.50	88.64		89.75	0.009607	4.66	8.17	24.18	0.84
03	2823.669	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	39.62	85.40	88.94		89.01	0.001969	1.73	50.60	41.86	0.29
03	2823.669	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	39.62	85.40	88.94		89.01	0.001969	1.73	50.60	41.86	0.29
03	2816.869	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	39.80	85.40	88.97		88.98	0.000345	0.96	104.07	59.15	0.16
03	2816.869	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	39.80	85.40	88.97		88.98	0.000345	0.96	104.07	59.15	0.16
03	2793.314	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	55.50	85.30	88.72	87.21	88.94	0.001500	2.22	48.04	112.90	0.38
03	2793.314	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	55.50	85.30	88.72	87.21	88.94	0.001500	2.22	48.04	112.90	0.38
03	2791.854		Culvert										
03	2755.393	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	56.45	84.78	87.83	86.79	88.24	0.002838	2.85	24.74	24.86	0.52
03	2755.393	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	56.45	84.78	87.83	86.79	88.24	0.002838	2.85	24.74	24.86	0.52
03	2688.864	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	58.11	84.93	87.75		87.90	0.003258	2.74	59.82	58.49	0.52
03	2688.864	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	58.11	84.93	87.75		87.90	0.003258	2.74	59.82	58.49	0.52
03	2581.167	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	60.79	84.60	86.80	86.79	87.22	0.010989	4.26	35.55	36.35	0.92
03	2581.167	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	60.79	84.60	86.80	86.79	87.22	0.010989	4.26	35.55	36.35	0.92
03	2497.769	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	62.87	83.66	85.89	85.81	86.32	0.010767	4.26	35.53	33.27	0.91
03	2497.769	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	62.87	83.66	85.89	85.81	86.32	0.010767	4.26	35.53	33.27	0.91
03	2470.847	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	63.55	82.89	86.06	84.97	86.12	0.001431	1.96	92.51	68.44	0.35
03	2470.847	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	63.55	82.89	86.06	84.97	86.12	0.001431	1.96	92.51	68.44	0.35
03	2468.187		Inl Struct										
03	2465.530	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	63.68	82.60	86.07		86.10	0.000767	1.52	106.70	63.78	0.26
03	2465.530	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	63.68	82.60	86.07		86.10	0.000767	1.52	106.70	63.78	0.26
03	2388.073	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	65.61	82.60	86.02		86.04	0.000640	1.38	141.69	95.69	0.24
03	2388.073	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	65.61	82.60	86.02		86.04	0.000640	1.38	141.69	95.69	0.24
03	2347.593	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	66.62	82.60	85.17	85.17	85.90	0.012632	5.07	32.72	35.23	1.01
03	2347.593	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	66.62	82.60	85.17	85.17	85.90	0.012632	5.07	32.72	35.23	1.01
03	2334.025	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	66.96	82.06	85.17	84.18	85.58	0.002925	2.93	33.91	40.15	0.53
03	2334.025	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	66.96	82.06	85.17	84.18	85.58	0.002925	2.93	33.92	40.19	0.53
03	2333.35		Culvert										
03	2301.671	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	67.35	81.99	85.34	84.62	85.53	0.001890	2.26	59.61	51.18	0.40
03	2301.671	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	67.35	81.99	85.34	84.62	85.53	0.001890	2.26	59.63	51.19	0.40
03	2266.793	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	67.78	82.60	85.32	84.24	85.39	0.002044	2.12	78.24	50.01	0.41
03	2266.793	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	67.78	82.60	85.32	84.24	85.39	0.002043	2.12	78.26	50.02	0.41
03	2228.755	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	68.24	82.60	85.00		85.22	0.006220	3.40	58.45	70.78	0.70
03	2228.755	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	68.24	82.60	85.00		85.22	0.006199	3.39	58.56	71.07	0.70
03	2149.512	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	69.20	82.10	84.85	83.74	84.91	0.002053	2.14	122.79	168.41	0.41
03	2149.512	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	69.20	82.10	84.86	83.74	84.92	0.001991	2.11	124.43	169.71	0.41
03	2096.750	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	69.84	81.58	84.52	83.98	84.74	0.004697	3.20	57.84	50.22	0.60
03	2096.750	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	69.84	81.58	84.54	83.98	84.75	0.004583	3.17	58.68	51.22	0.59
03	2025.418	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	70.70	81.45	84.36	83.51	84.46	0.002632	2.38	73.14	50.18	0.45
03	2025.418	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	70.70	81.45	84.38	83.51	84.48	0.002524	2.34	74.37	50.60	0.44
03	1968.571	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	71.39	81.45	84.06	83.42	84.25	0.005071	3.07	54.91	40.57	0.61
03	1968.571	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	71.39	81.45	84.11	83.42	84.28	0.004671	2.98	56.78	41.34	0.58
03	1819.77	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	71.56	80.60	84.15	82.00	84.16	0.000080	0.50	474.94	327.97	0.08
03	1819.77	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	71.56	80.60	84.19	82.00	84.19	0.000074	0.48	488.13	330.78	0.08

HEC-RAS River: Pine Creek Reach: 03 Profile: Regional (Continued)

Reach	River Sta	Profile	Plan	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	1770.174	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	73.80	80.24	84.14	82.46	84.15	0.000110	0.74	377.63	290.13	0.12
03	1770.174	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	73.80	80.24	84.18	82.46	84.19	0.000102	0.72	389.36	292.55	0.12
03	1760.97		Culvert										
03	1709.779	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	74.11	80.15	84.14	82.38	84.15	0.000065	0.53	470.86	312.55	0.09
03	1709.779	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	74.11	80.15	84.18	82.38	84.18	0.000060	0.52	482.58	314.92	0.08
03	1558.967	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	74.90	80.60	84.12		84.13	0.000277	0.93	290.41	239.15	0.16
03	1558.967	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	74.90	80.60	84.16		84.17	0.000253	0.89	299.82	241.28	0.15
03	1464.649	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	75.39	80.45	84.11		84.11	0.000094	0.53	420.57	247.81	0.09
03	1464.649	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	75.39	80.45	84.15		84.15	0.000088	0.51	430.51	249.45	0.09
03	1442	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	75.39	79.50	84.11		84.11	0.000025	0.37	440.62	211.93	0.06
03	1442	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	75.39	79.50	84.15		84.15	0.000050	0.53	448.63	213.25	0.08
03	1426.335	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	75.39	79.49	84.10		84.11	0.000084	0.66	400.45	229.77	0.10
03	1426.335	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	75.39	79.50	84.12	81.50	84.15	0.000258	1.17	132.22	217.23	0.17
03	1401	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	75.39	79.45	84.10		84.11	0.000065	0.62	342.18	131.74	0.09
03	1401	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	75.39	79.45	84.10	81.45	84.13	0.000256	1.22	125.75	107.66	0.18
03	1395.236	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	75.39	79.43	84.10		84.11	0.000061	0.59	352.04	130.98	0.09
03	1395.236	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	75.39	79.43	84.10	81.44	84.13	0.000269	1.21	179.44	110.00	0.18
03	1383.185	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	75.81	79.46	84.10		84.11	0.000071	0.63	322.81	115.20	0.09
03	1383.185	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	75.81	79.46	84.10		84.11	0.000071	0.63	322.86	115.21	0.09
03	1355	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	75.81	79.47	84.10		84.10	0.000059	0.60	338.33	127.13	0.09
03	1355	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	75.81	79.47	84.10		84.10	0.000059	0.60	338.33	127.13	0.09
03	1325.126	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	76.11	79.45	84.09		84.10	0.000172	0.83	247.78	108.55	0.12
03	1325.126	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	76.11	79.45	84.09		84.10	0.000172	0.83	247.78	108.55	0.12
03	1305.734	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	76.18	78.90	83.95		84.08	0.000595	1.82	58.23	147.88	0.26
03	1305.734	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	76.18	78.90	83.95		84.08	0.000595	1.82	58.23	147.88	0.26
03	1304.734		Culvert										
03	1028.734	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	77.20	78.00	83.42		83.69	0.000860	2.30	33.60	45.98	0.32
03	1028.734	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	77.20	78.00	83.42		83.69	0.000860	2.30	33.60	45.98	0.32
03	964.476	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	77.44	78.60	83.53		83.54	0.000182	0.94	209.75	76.04	0.14
03	964.476	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	77.44	78.60	83.53		83.54	0.000182	0.94	209.75	76.04	0.14
03	878.305	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	77.76	78.60	83.53		83.53	0.000035	0.41	416.70	107.26	0.06
03	878.305	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	77.76	78.60	83.53		83.53	0.000035	0.41	416.70	107.26	0.06
03	787.850	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	78.09	77.60	83.51		83.52	0.000102	0.79	228.74	57.16	0.10
03	787.850	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	78.09	77.60	83.51		83.52	0.000102	0.79	228.74	57.16	0.10
03	754.066	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	78.21	77.60	83.51		83.52	0.000081	0.71	250.15	59.94	0.09
03	754.066	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	78.21	77.60	83.51		83.52	0.000081	0.71	250.15	59.94	0.09
03	682.059	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	78.48	77.10	83.50		83.51	0.000083	0.76	278.69	80.79	0.10
03	682.059	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	78.48	77.10	83.50		83.51	0.000083	0.76	278.69	80.79	0.10
03	644.335	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	78.62	76.49	83.24	79.02	83.48	0.001010	2.73	75.25	60.17	0.34
03	644.335	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	78.62	76.49	83.24	79.02	83.48	0.001010	2.73	75.25	60.17	0.34
03	642.98		Culvert										
03	611.619	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	78.74	76.18	79.46		80.00	0.006594	4.30	30.91	34.72	0.76
03	611.619	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	78.74	76.18	79.46		80.00	0.006594	4.30	30.91	34.72	0.76
03	556.507	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	78.94	76.60	79.53		79.59	0.001780	2.07	90.63	50.74	0.39
03	556.507	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	78.94	76.60	79.53		79.59	0.001780	2.07	90.63	50.74	0.39
03	519.899	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	79.08	76.60	79.42		79.51	0.002345	2.32	80.34	46.34	0.44
03	519.899	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	79.08	76.60	79.42		79.51	0.002345	2.32	80.34	46.34	0.44
03	489.157	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	79.08	75.78	79.30		79.45	0.001298	2.08	72.74	43.79	0.38
03	489.157	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	79.08	75.78	79.30		79.45	0.001298	2.08	72.74	43.79	0.38
03	482.157	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	79.20	75.40	79.23	77.26	79.44	0.001073	2.05	43.00	36.32	0.33
03	482.157	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	79.20	75.40	79.23	77.26	79.44	0.001073	2.05	43.00	36.32	0.33
03	479.157		Culvert										
03	472.157	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	79.21	75.30	78.17		78.48	0.002008	2.49	34.41	23.40	0.47
03	472.157	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	79.21	75.30	78.17		78.48	0.002008	2.49	34.41	23.40	0.47
03	454.156	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	79.21	74.50	78.25		78.36	0.000571	1.46	68.27	37.33	0.25
03	454.156	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	79.21	74.50	78.25		78.36	0.000571	1.46	68.27	37.33	0.25
03	393.758	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	79.54	75.45	78.27		78.28	0.000523	1.04	179.27	100.61	0.20
03	393.758	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	79.54	75.45	78.27		78.28	0.000523	1.04	179.27	100.61	0.20
03	264.924	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	80.01	75.45	78.12		78.17	0.001594	1.75	103.02	64.93	0.34
03	264.924	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	80.01	75.45	78.12		78.17	0.001594	1.75	103.02	64.93	0.34
03	180.334	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	80.33	75.45	77.83		77.95	0.004658	2.76	74.23	63.36	0.57
03	180.334	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	80.33	75.45	77.83		77.95	0.004658	2.76	74.23	63.36	0.57
03	113.364	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	80.57	75.45	77.44	77.24	77.56	0.007073	3.02	75.87	90.77	0.69
03	113.364	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	80.57	75.45	77.44	77.24	77.56	0.007073	3.02	75.87	90.77	0.69

HEC-RAS River: Pine Creek Reach: 03 Profile: Regional (Continued)

Reach	River Sta	Profile	Plan										
				Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chl
03	51.610	Regional	Existing_BrookdaleWalnutLn_AddXS_Reg	80.80	75.45	76.76	76.76	76.90	0.018385	3.68	83.68	230.68	1.03
03	51.610	Regional	Proposed_BrookdaleWalnutLn_AddXS_Reg	80.80	75.45	76.76	76.76	76.90	0.018385	3.68	83.68	230.68	1.03