



WOOD RODGERS

April 21, 2006

Mr. Dave Price, P.E.
Washoe County
1001 E. 9th Street
Reno, NV 89520

Mr. Price:

As you requested at our meeting on April 10th, 2006, Wood Rodgers has completed additional analysis on the White Creek Reach 3 floodplain to estimate the pre-existing conditions (prior to construction of Wedge and Arrowcreek Parkways) and the approximate amount of flow that Wedge Meadows Unit VI (APN 142-300-01) would have received prior to construction of Wedge Parkway (and the culverts beneath it). This analysis utilizes the Harding Lawson Associates/WRC Inc. (HLA/WRC) HEC-RAS Reach 3 hydraulic model completed for these pre-existing conditions. Just downstream of the HLA/WRC model termination, the flow of Reach 3 splits with a portion going north to the Wedge Meadows Unit VI site and a portion going northeast to Virginia Street. To analyze the split downstream from Wedge Parkway, we extended the HLA/WRC Reach 3 alignment 250 feet with two new cross sections downstream of their pre-existing conditions HEC-RAS model as shown in Figure 3 (this is the post construction figure, the two cross sections Wood Rodgers generated are the same for pre-existing and post-construction).

The pre-existing HLA/WRC cross section alignment is shown in Figure 1 and the HLA/WRC 100-year runoff event (3,000 cubic feet per second {cfs}) flow distribution is shown in Figure 2. Using the flow distribution analysis of the HLA/WRC cross section 1 and our hydraulic analysis of the pre-existing downstream flow paths, we have estimated that approximately 450 cfs would have flowed to the southern boundary of Wedge Meadows Unit VI and the remaining 2550 cfs would have flowed northeast to Virginia Street. Per our extension of the HLA/WRC model, these flows would have been contained in their separate flow paths.

The downstream flow distribution post-construction of Wedge and Arrowcreek Parkways and the culverts beneath them are presented in Figures 3 and 4. Approximately 1250 cfs would now flow to the southern boundary of Wedge Meadows Unit VI in the 100-year event. Similar to pre-existing conditions, the flow split downstream of Wedge Parkway remains contained and separated until well downstream of the Wedge Meadows Unit VI site.

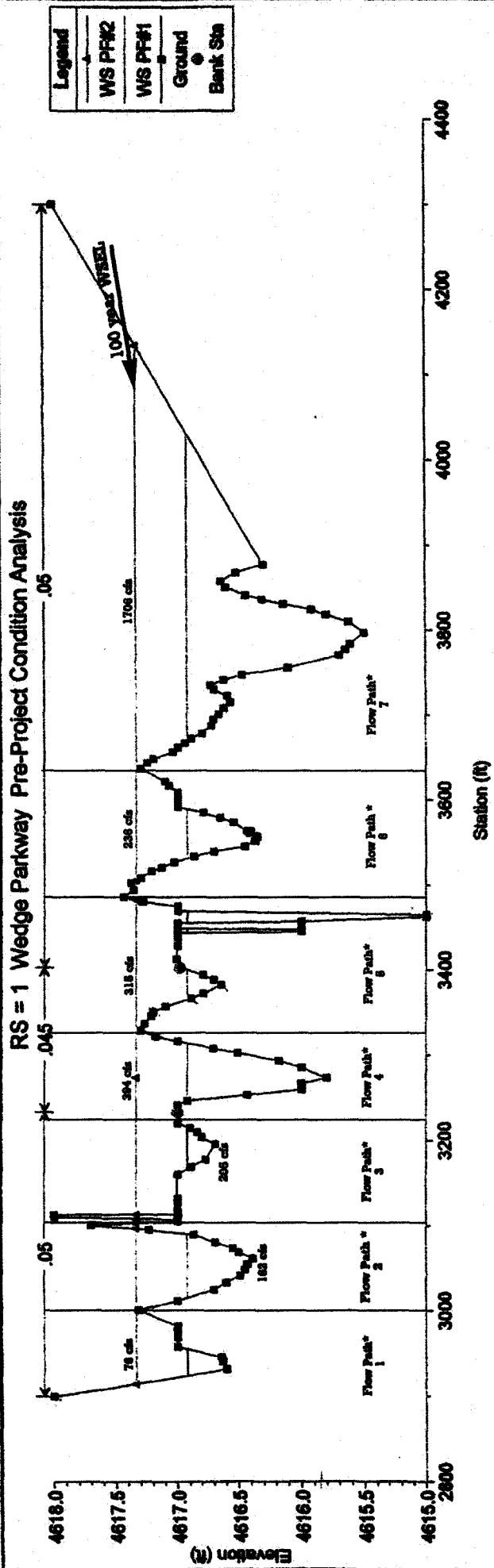
Sincerely,
Wood Rodgers, Inc.


Mary Horvath, P.E., CFM

Senior Hydrologist

Enclosures

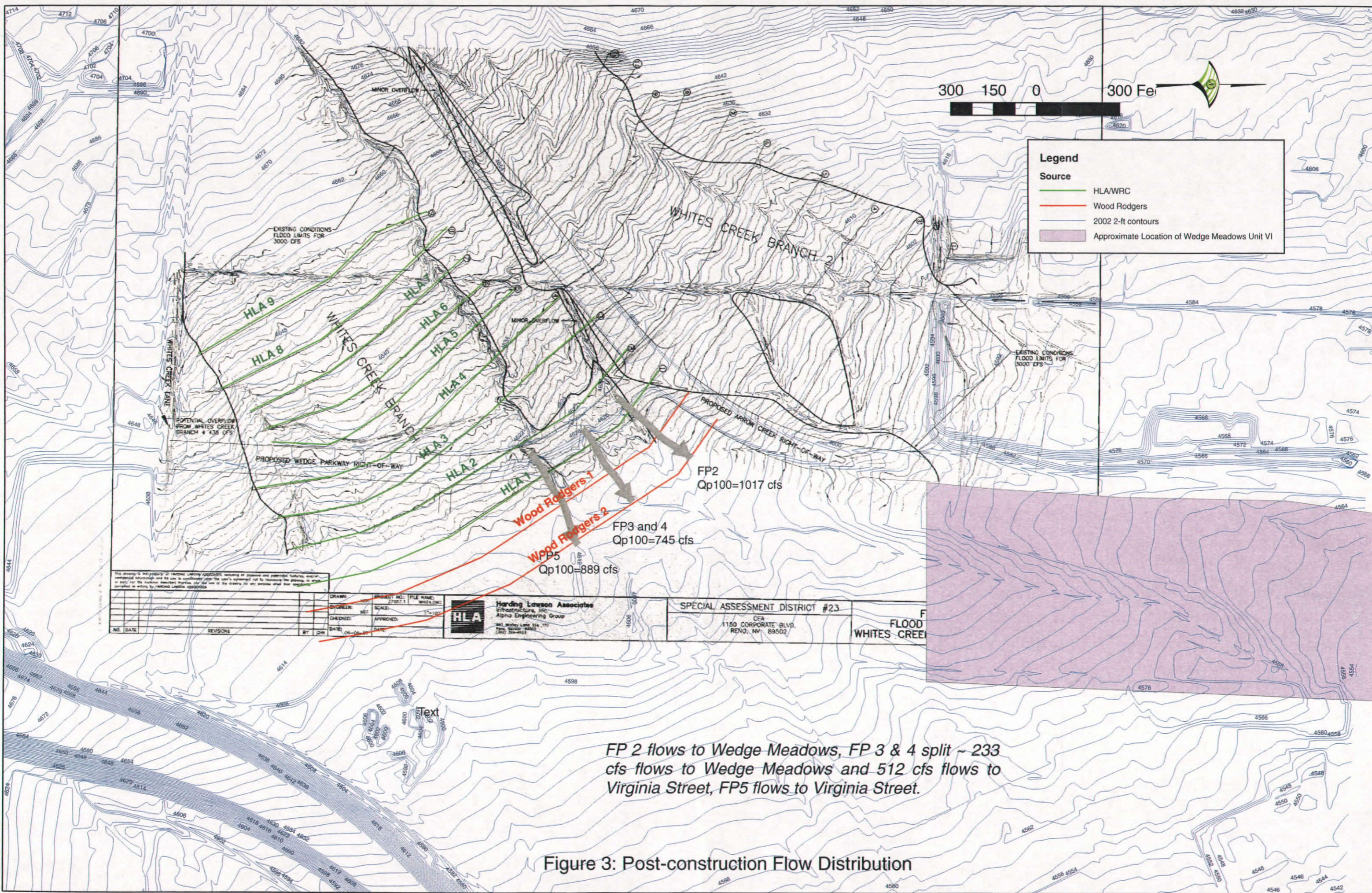
- Figure 1: Pre-existing Flow Distribution
- Figure 2: HLA/WRC Cross Section 1 Flow Distribution
- Figure 3: Post-construction conditions Flow Distribution
- Figure 4: Post-construction WRC Culvert Flow Distribution



(Plotted Looking Downstream)

Figure 2: HLA/WRC Cross Section 1 Flow Distribution in 100 Year Event (3000cfs)

**Flowpaths correspond to Figure 1 flowpaths. Taken from "Wedge Parkway Extension Hydraulic Report, White Creek Branch 3", WRC, 1997. Annotated by Wood Rodgers with flow distribution and flowpaths.*



Legend

Source

- HLA/WRC
- Wood Rodgers
- 2002 2-ft contours
- Approximate Location of Wedge Meadows Unit VI

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NO.	DATE	REVISIONS	BY	CHK

PROJECT NO.:	27257.1
FILE NAME:	WH14.DWG
DATE:	06-04-10
SCALE:	1"=100'

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FLOOD WHITES CREEK

FP 2 flows to Wedge Meadows, FP 3 & 4 split ~ 233 cfs flows to Wedge Meadows and 512 cfs flows to Virginia Street, FP5 flows to Virginia Street.

Figure 3: Post-construction Flow Distribution

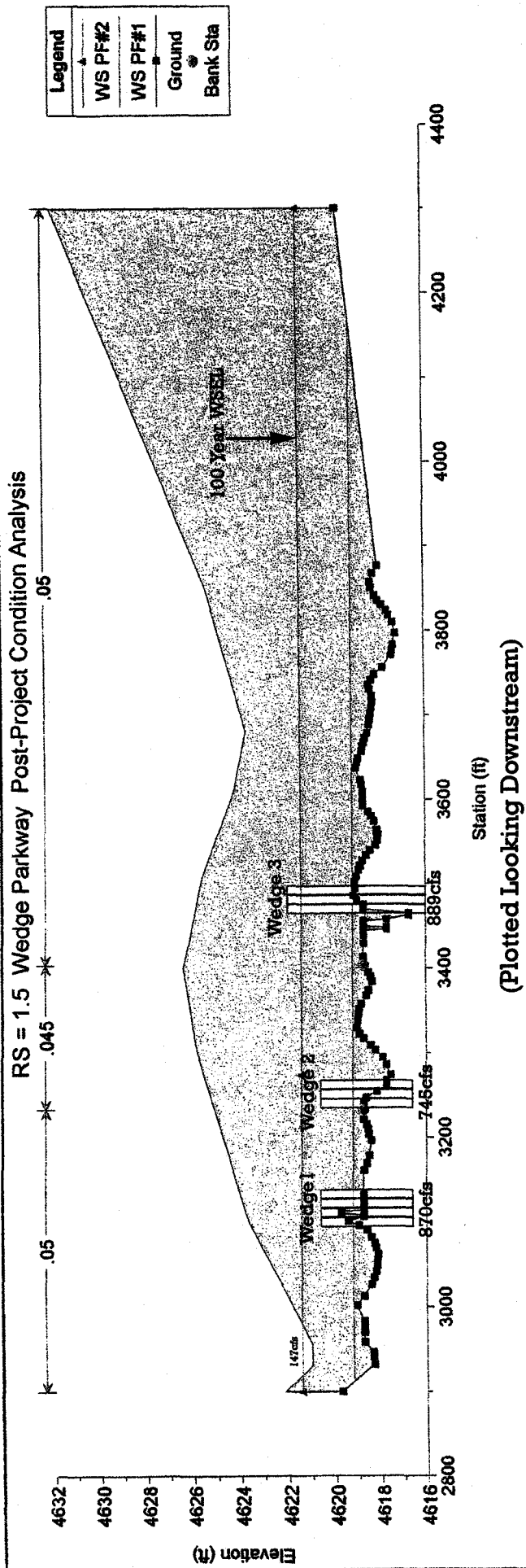


Figure 4: Flow Distribution of Wedge Parkway Culverts based on WRC Analysis of 100 Year Event (3000cfs).

Taken from "Wedge Meadows Parkway Extension Hydraulic Report, Whites Creek Branch 3", WRC, 1997 annotated with flows from WRC's analysis.

- Flow over roadway and culvert Wedge 1 flows to flowpath 2.
- Culvert Wedge 2 flows to flowpaths 3 and 4.
- Culvert Wedge 3 flows to flowpath 5.