

**Floodplain Modeling for Spring Creek  
At Drake Road, Remington Street and Welch Street, Fort Collins, Colorado**

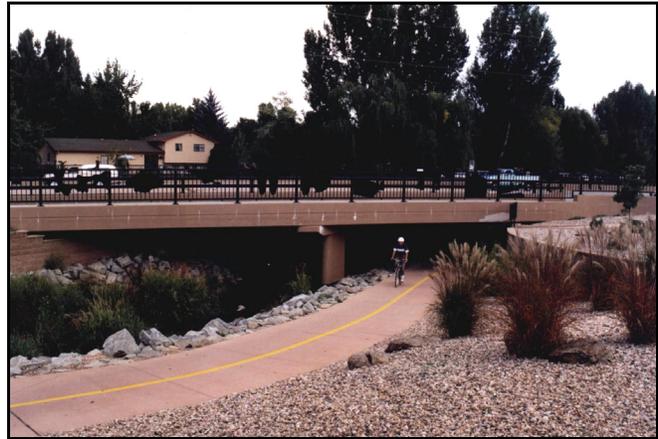
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**ANDERSON CONSULTING ENGINEERS, INC.**  
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Hydraulic analyses, floodplain/floodway modeling and delineation were completed for Spring Creek at three locations pursuant to the recent construction of a bridge at Drake Road, and replacement of the bridges at Remington Street and Welch Street. The hydraulic design of these bridges and the associated channel restoration/stabilization measures had been previously completed by Anderson Consulting Engineers, while previously affiliated with Lidstone & Anderson, Inc.

At Drake Road, ACE staff completed detailed hydraulic analyses of a 2,100-foot reach of Spring Creek, including the new bridge with bicycle/pedestrian trail underpass, a triple box culvert providing a separate trail crossing of the creek, a newly constructed flood control channel, and reconstructed reach of the main stream channel.



**Spring Creek at the Drake Road Bridge**

For the Remington Street project, detailed hydraulic analyses were completed for a 2,200-foot reach of Spring Creek, including the new bridge at Remington Street, and approximately 1,600 feet of reconstructed/ restored channel.

At Welch Street, detailed hydraulic analyses were completed for a 1,800 foot reach of Spring Creek, to identify the hydraulic effects of the new bridge and local channel stabilization measures. In all three locations, flood levels were lowered and the extent of flooding decreased, thereby reducing flooding potential for neighboring properties.

At all three locations, floodplain modeling and delineation of floodplain boundaries were completed. In addition, the 1-foot rise and ½-foot rise floodways were determined and delineated using FEMA and City of Fort Collins standards and procedures. A technical report and related materials were prepared in support of a Letter of Map Revision application to the Federal Emergency Management Agency.



**Spring Creek at the Remington Street Bridge**



**Welch Street Bridge at Spring Creek**