Engineering/Operations/Maintenance

Front Street River Park Stairway

Nominating Agencies: Town of Fairplay

Program Accomplishment: The recently completed Front Street River Park Stairway provides a long awaited pedestrian linkage for residents and visitors of this historic mining town situated along the banks of South Platte River. Prior to construction of the stairway, the steep rocky river bank presented a formidable barrier between the Town's Front Street business district and Fairplays' Beach

Activity Area. The upper end of the stairway is situated in the pleasant Front Street River Park, at the intersection of Ninth Street near the Prunes Memorial. The lower end of the stairway now provides a safe connection for walkers to enjoy outdoor activities along the river including; fishing, picnicking, gold panning and hiking of the trail sys-

tem beyond. The project was funded in part through grants from Park County and State of Colorado Conservation Fund. The project was managed by Tina Darrah, Town Administrator and by Jeff Goble, Public Works Manager.

Excavation, grading, fencing and landscaping for the project was performed by Town of Fairplay Public Works Department staff members. The cast in place reinforced concrete foundations were constructed by Freelance Foundations Inc. of Fairplay. The steel super structure was fabricated by M.K. Custom Fabrication LLC in Parker. Prefabricated sections of the stairway were then trucked from Parker to Fairplay for McNICHOLS final installation. The erection and assembly of the superstructure was performed in



eight days by the General Contractor of the project, Jim Carpenter Construction Inc. of Alma.

A ribbon cutting ceremony at the site was held on May 23, 2012, for the grand opening dedication of the stairway to the public. About 50 people were in attendance, which included elected representatives, town staff members, contractors and town residents.

Innovation: The site is situated an extremely steep river bank, which made construction of the project challenging. Construction layout and staking was accomplished using Trimble global positioning system and robotic surveying equipment. Use of this equipment was essential

to ensure that the cast in place concrete foundations, and connections precisely matched the dimensions of the steel assembles that were pre-fabricated off-site. Town of Fairplay is at an elevation of 9953 feet, and is the fifth highest incorporated municipality in the State. At this high elevation the construction season is relatively short. Therefore the entire superstructure was pre-fabricated and then transported to the site to expedite quick erection of the superstructure. Town staff graded temporary access roads and temporary benches on the steep river bank to permit equipment and materials to reach the remote parts of the site. After completion of the project, the temporary roadways and benches were re-graded and restored to



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their original condition. Additionally, during the design of the structure, the stairway riser heights were reduced, tread depths were increased and additional landings were added to make the walking experience enjoyable for a broad population of pedestrians having a wide range of abilities. Also, Town receives significant snowfall, and perpetual snow removal of the walking surfaces of the structure would be an added burden to town staff. As such, during the design a search was conducted to identify a suitable decking material that would be maintenance-free, have high traction characteristics, and would allow fallen snow to pass though grated openings. After carful consideration, the Town selected galvanized PERF-O GRIP ® decking, manufactured by the McNichols Company, as material that met these objectives.

Achievement: The project was successful in achieving the goals set forth at its inception. Specifically, the construction of a safe, durable, maintenance-free and aesthetic pedestrian stairway to link the Town's business district with the adjacent recreation area. Safety was ensured during design by adhering to all applicable building codes. Durability was achieved through selection maintenancefree materials that included: Coreten weathering steel,

galvanized treads and decking, and composite handrails. Aesthetics were achieved during design through selection of attractive materials, colors and finishes by Town staff.

Transferable: All of the innovative aspects of this project are transferable to other sites having similar challenges. This type of project would be especially well suited for other pedestrian connections traversing steep hillsides at high-altitudes.

Cooperation: A great deal of cooperation was necessary for this project to become a success. Town of Fairplay staff members, elected representatives, County Commissioners, utility providers, neighboring property owners and Town residences all contributed the success of the project. Everyone involved in the project can take great pride in their shared efforts and accomplishments.

Summary: Front Street River Park Stairway has guickly become a new focal point of the community. This much needed pedestrian connection now provides a safe and convenient means of access to the nearby river amenities.

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