

Coalville City Project Description

Coalville City is a small rural community located in Summit County and is the county seat. Coalville sits between the Weber River and Chalk Creek, with Echo Reservoir nearby. The City is situated in the foothills and includes a fair amount of elevation changes and steeper-than-average slopes. The City has a rural feel, and its historic downtown includes buildings over 100 years old that are still in use. These buildings, in addition to older homes are located along Main Street, which runs the City's length and is the main thorough fare from Hoytsville to Echo.

Over the past ten years, Coalville has made a variety of improvements to Main Street, such as reconstructing the road from the 100 South to the City limits in the north and replacing open storm drain ditches with curb and gutter, which has relieved many flooding issues in the Main Street area. However, the money to rebuild Main Street could only go so far. The City still has areas with no storm drain or has open swales along the road to move the water; they have many issues, including grade changes that create unique challenges for stormwater runoff.

Photo 1 Historic Main Street



Photo 2 Looking South on Main Street from 100 South

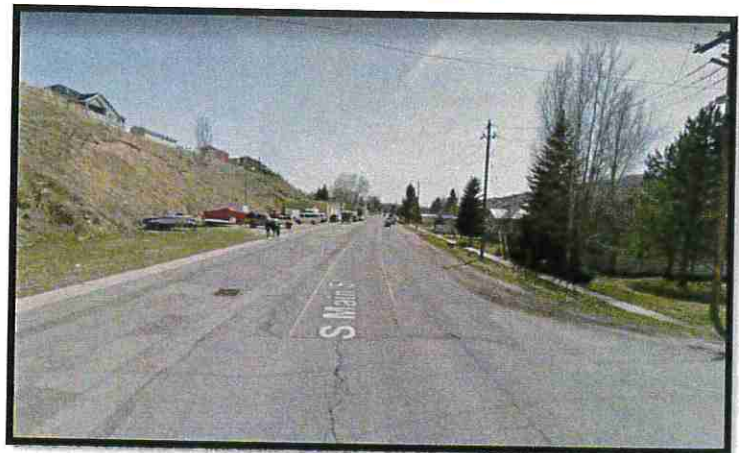


east side of Main Street and then is piped across the road to an open channel swale on the west side of Main Street. This system currently receives runoff from

approximately 70 to 80 acres and dozens of homes and businesses, an amount of runoff that the swale and pipe beneath Main Street cannot accommodate. This often results in the street becoming slick with water or ice, a muddy and soft shoulder, and cracking of the street surface.

One area of significant challenge is the section of Main Street from 100 South to 150 South, which due to limited funds, was not part of the road reconstruction. East of Main Street, there is a hill that rises 80 feet in elevation over approximately 350 feet horizontally (see Photo 3). A significant amount of runoff from rain and snowmelt comes off the hillside, collects in a minor swale on the

Photo 3 Looking South on Main Street at 150 South



The system on the west side of Main Street is a combination of swales and piping flowing to the north on Main Street toward the principal commercial area of the City. This part of the system flows north to 150 South at a very flat slope. At the corner of 150 South and Main Street, the swale turns 90 degrees and tries to flow west (*see Photo 4 below*). This intersection of 150 South and Main Street is a bottleneck and often becomes overburdened with flows spilling into businesses, homes, and yards on the west side of Main Street. In addition, this entire section of Main Street between 100 South and 150 South currently has no curb and gutter and has not yet been fully improved, allowing water to run on top of and along Main Street.

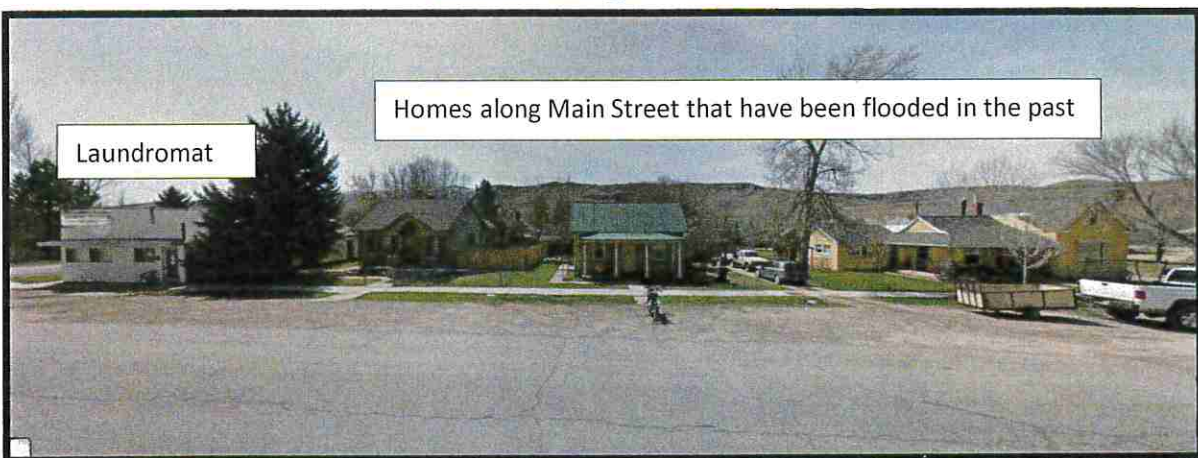
Photo 4 The swale at the intersection of Main Street and 150 South



Main Street, at 100 South and 150 South, is a two-lane road with a wide dirt/gravel shoulder. This shoulder is used as perpendicular parking for residents and businesses along Main Street (*see Photo 5 below*). The shoulder slopes west from the crown in Main Street to the sidewalk. This project would install a storm

drainpipe along the west side of Main Street to connect existing stormwater inlets at 150 South and to direct the water north to 100 South, where it would tie into an existing storm drain line flowing west on 100 South. The purpose of the new pipe is to relieve pressure off of the swale, and a pipe would tie into the swale on

Photo 5 Business and homes along Main Street that have been flooded from water coming off the hill sides, roads, and from the storm water coming from the South



the south side of 150 South, allowing water to flow in two directions. This would relieve the existing bottleneck in the system. In addition to relieving the pressure on the swale, the new pipe would allow for a collection system on the section of Main Street between 100 South and 150 South.

Along with installing new piping, the project will regrade the shoulder to create a surface swale to collect flow from the road and direct it into the new pipe, protecting the homes and businesses along Main Street. Discussions have included the consideration of adding curb and gutter; however, the cost to expand the road is prohibitive at this time, and traffic volumes are not high enough to warrant the expansion. This approach will relieve the flooding issues without unnecessarily triggering more pavement and higher maintenance costs.

BENEFITS OF THE PROJECT

Benefits of the proposed project include:

- **Road Safety:** The Coalville storm drain's primary purpose is to give rainwater and snowmelt a place to go instead of collecting in the streets and potentially flooding homes. Also, by removing this bottleneck within Coalville's storm drain system, it will take the water off the road and help reduce the amount of ice on the streets during mid-winter thaws.
- **Home and Business Protection:** Rainwater and snowmelt that does not have an adequate functional storm drain to flow into, will continue to build up until it finds a place to go. This proposed project will give the water a place to flow so that it does not build up and flow back into homes and businesses along Main Street.
- **Reduced Soil Erosion:** Soil erosion from water can wash away the stability of the road's shoulder. As the water sits for long periods along the shoulder, it begins to break down and erode the shoulder, causing the road's edges to break and crack, which results in costly road maintenance and repairs. Potholes within the shoulder begin to form as water backs up and sits on the shoulders. The proposed project will reduce soil erosion and damage to the shoulder and lessen costly road repairs.