



STATE HIGHWAY 119
Boulder County, CO

WHY THIS PROJECT IS RELEVANT

- Creative construction phasing
- Robust, early planning process
- High traffic area
- Extensive public outreach
- Collaboration with engineer
- Bridge, box culvert and bike trail construction

PROJECT SIZE

14 miles of highway repair
2 miles of highway replacement
29,000 LF of guardrail
10-foot wide multi-use trail
66,000+ CY of rock excavation
66,615 hours of roadway flagging
58,000 tons of asphalt

INITIAL/FINAL COST

\$30,306,322/\$31,378,824

CHANGE ORDERS

4 owner initiated to increase scope for unforeseen conditions and redesign

CONTRACT SCHEDULE

April 2019 - December 2020

ACTUAL SCHEDULE

April 2019 - December 2020

This high-profile project focused on repairing the two lane, 14-mile stretch Highway 119 between Boulder and Nederland that was damaged during the September 2013 floods. Initially two separate projects, the final project was undertaken via partnership between the Colorado Department of Transportation and Boulder County. In addition to CDOT and Boulder County, the project included involvement of the State Senator and Governor's offices, multiple local environmental groups, residents of Canyon and two key business owners, Emergency Medical Services as well as the local ski resort and event planners.

The scope of work included resurfacing (13 miles) and complete replacement (2 miles) of the damaged roadway, construction of concrete culverts, two bridge rehabilitations, new signage, replacement of stormwater pipes, rock excavation, concrete and metal guardrail, reconstruction of embankments, extending and reinforcing sections of the Boulder Canyon Trail including construction of two new bike-friendly tunnels under the highway and adding 3,500 feet of length to the trail.

Due to the fact that CDOT and the County bundled the two projects after initial design, traffic control had not been adjusted accordingly. Additionally, it was required that cars could not sit in a queue for longer than 15 minutes or two cycles. These factors required Zak Dirt to rethink the project phasing and traffic control plans to ensure that one lane was open while staying on schedule. Phasing modifications included combining work sites to allow for larger traffic windows and breaking the planned phases down to even smaller phases.

In addition to the constraints of the contract requirements related to traffic, the proximity of the 16' x 10' box culvert to the road required further creativity to ensure proper traffic flow and increase safety. To that end, Zak modified its equipment plan for setting the culvert to



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REFERENCES

OWNER

Joe Burrows
Colorado Department of Transportation
303-546-5958
joseph.burrows@state.co.us

ENGINEER

Mark Lamutt
Jacobs Engineering
720-286-5310 (Direct)
Mark.Lamutt@jacobs.com

SELF PERFORM

53%

PROJECT TEAM

Jesse Sewczak
Mike Sewczak
Dan Sewczak
Nathan Everett

DELIVERY METHOD

Design-Bid-Build requiring heavy
collaboration with design team

NUMBER OF CLAIMS

0

address the limited space in the canyon - selecting a small crane near the road and a forklift set within the work area to place the culvert sections. Originally the culvert was to be set in three phases, however due to Zak's creativity including utilizing GPS and our in-house survey resources as well as the new equipment configuration, Zak was able to set the culvert in two phases to accelerate the schedule, minimize traffic impacts in that area and mitigate safety risks.

Further complicating the traffic constraints was the fact that the only way for EMS to get to residents of the canyon was via Highway 119. Throughout the duration of the project EMS coordinators had Zak's radio frequency to be able to communicate the need for ambulance access which was crucial as an average of two calls a day occurred. This shared frequency allowed us to communicate with flaggers in real time to redirect traffic to flow in the direction of the emergency vehicle.

The Highway 119 project drew attention and desire for input from residents, businesses, EMS and visitors to the ski areas and local events such as Frozer Dead Guy Days as well as a State Senator, Governor Polis (a native of the area) and the Director of the Department of Transportation. To ensure each group was being communicated to and allowed proper channels for input, Zak Dirt developed a comprehensive communication plan that included a special text line, two public town halls meetings hosted by Zak Dirt, information cards provided to all flaggers and crew to provide project information to the public, regular updates to the Senator and Governor's offices and press release support.

Of particular note is the lengths to which Zak Dirt went to assuage concerns of the two local businesses in the canyon, event planners for Frozen Dead Guy Days as well as local environmental groups.