



**VINE DRIVE BRIDGE OVER I-25**  
Fort Collins, CO

#### WHY THIS PROJECT IS RELEVANT

- Creative construction phasing
- Robust, early planning process
- Extensive public outreach
- Concrete and asphalt replacement
- Schedule acceleration
- Leading edge bridge construction

#### PROJECT SIZE

Embankment - 35,000 CY  
Precast Panel Walls - 340 SF  
Drilled Caissons - 2,586 LF  
Precast Retaining Wall - 11,908 SF  
Bridge Concrete CL G- 952 CY  
HMA Paving - 5,482 TN

#### INITIAL/FINAL COST

\$5,181,370/\$5,417,175

#### CHANGE ORDERS

6 owner-initiated change orders

#### CONTRACT SCHEDULE

June 2019-February 2020

#### ACTUAL SCHEDULE

June 2019-December 2019

Built in 1966, the original bridge warranted replacement as part of the Colorado Bridge Enterprise (CBE). Although this project is not related to the larger expansion of I-25 happening from Berthoud to Fort Collins, the new bridge at Vine can accommodate future expanded capacity on I-25 as well as provide increased safety with widened shoulders on Vine, as part of CDOT's Whole System. Whole Safety initiative.

Zak Dirt was contracted by CDOT to construct the Vine Drive Bridge over I-25. The project scope included a new 2-span bridge structure, H-Pile, caissons, precast retaining walls, storm drainage, embankment, paving and guardrail. The project replaced the aging Vine Drive Bridge and also reconstructed roadway approaches and portions of the I-25 frontage road.

The project schedule allowed enough time for construction but because of weather constraints on the HMA Paving, the project had to be accelerated by Zak Dirt to ensure paving operations were complete before winter. This required intense scheduling efforts to make certain resources, manpower and materials were in place to maintain schedule integrity. This plan and vision was communicated to CDOT and the project team partnered together to successfully complete the project two months ahead of schedule. **Because of these efforts, the project received the 2019 CDOT/CCA Project Management Award for Major Structure.**



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#### REFERENCES

#### OWNER/ENGINEER

Justin Pipe  
CDOT  
970-691-1286

#### SELF PERFORM

70%

#### PROJECT TEAM

Ben Jordan  
Mike Sewczak

#### DELIVERY METHOD

Design-Bid-Build requiring heavy  
collaboration with design team

#### NUMBER OF CLAIMS

0

Stakeholder communication was also a big part of the Vine Drive project. Because access was severely limited to adjacent neighborhoods during construction, it was imperative that proper communication take place between the project and its stakeholders. Our management team was able to form relationships with the area residences which allowed them to effectively communicate the project schedule and progress. During construction, Zak Dirt coordinated frontage road closures with emergency services to ensure that access was available in and around the project site. Our team combined the use of technology and personal connection to keep an open line of communication. Zak Dirt believes that much of this project's success was due to the positive relationships it created with the neighboring community. We strive to make every project stakeholder a champion of our construction projects.

The project also featured a new type of concrete, Class G. This was one of the first CDOT projects to feature this new mix design which required Zak Dirt to work very closely with the CDOT engineer and concrete supplier to ensure new quality standards were met. Zak Dirt amended our quality control plan to fit the Class G concrete which included test pours, new finishing techniques and maturity curve testing.