COLORADOSCHOOLOF**MINES**

UNCH&LEARN DISASTER STRIKES WHEN A TUNNEL COLLAPSE CAUSES A WATER

BREACH September 25th, 12-1PM

Berthoud Hall Room 241

During the early morning hours on July 17th, an apparent collapse in a tunnel on the Fort Laramie Canal, about one and a half miles south of the town of Fort Laramie, WY, caused water to back up and breach the canal bank upstream of the tunnel. Goshen I.D. personnel responded to water level alarms by investigating the cause, shutting off the water supply at Whalen Dam and requesting the Bureau of Reclamation reduce flows out of Guernsey Reservoir. The Fort Laramie Canal provides irrigation water to approximately 104,000 acres in Wyoming and Nebraska served by the Goshen and Gering-Fort Laramie Irrigation **Districts and the Wright and Murphey Ditch Company. Brierley** Associates was employed by the contractor (SAK) to provide response to this disaster in the form of grouting operation investigation and supervision, overburden load calculations, construction advising, as well as investigation the as-is condition of the tunnel.

Join us to learn more about this project and the response efforts used to repair the tunnel and get the water flowing again.



Melody Clay is an EIT, Civil Geotechnical Engineer for Brierley Associates. She attended Colorado School of Mines and graduated with a B.S. in Civil Engineering in May 2015 and an M.S. in Underground, Construction and Tunneling in May 2018 while working for Brierley. She was hired as a full time Staff engineer post-graduation and has worked on a variety of boring location plans, vicinity maps, mine subsidence investigation, mapping, tunnel feasibility reports, tunnel inspections, emergency tunnel repair, stratigraphy profiles and geotechnical reports.

Bill Zietlow, PE, is a Senior Associate at Brierley Associates. He has worked in

geotechnical engineering for 21 years and specializes in design of earth support systems for tunnels, shafts, road cuts, and temporary excavations such as soil nail, tieback, sheet pile, soldier pile, and micropile walls. He has also designed deep foundations and landslide stabilizations. He primarily provides design services for specialty contractors on design-build projects but has also provided geotechnical designs for public and private owners, primarily on transportation and utility works. He has design, construction observation, geotechnical



investigation, and project management experience on a wide variety of projects and ground conditions across the Western and Midwestern United States.

SEPT 25th, 12-1 PM – BERTHOUD HALL 241 LUNCH WILL BE PROVIDED

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