

# McInnis - Birmingham HWY Interchange (Low Headroom)

Piling HP14x117

Alabama, USA

**EML-60** 

# Project Snapshot

- Birmingham Alabama Interchange
- Excavator Mounted Lead EML 60
- · Low Headroom Application

# Project Background

In August 2017, Berminghammer's Louis Fritz, P.Eng was contacted by Timothy McInnis for the purpose of designing a set of purpose built Excavator Mounted Leads (EML). McInnis needed a new lead to install HP14x117 piles as part of a shoring system underneath an existing bridge. This need came to fruition by expediting a drop dead date for the critical CDB bridge to be replaced.

## + Project Description

There were many physical restraints and customer requirements that made the design of this lead system particularily challenging. The entire lead needed to be able to travel under a 20-ft bridge and also be capable of driving piles at least 20-ft long. The lead also needed to be able to slew to correct for uneven ground and most challenging, rotate about the third axis. Finally, for future work, McInnis wanted to take advantage of the large capacity of their 60 ton excavator for a taller version of the system to run with a diesel impact hammer.

### # Results

Berminghammer designed a completely new lead system capable of all of the above and also capable of Vertical Travel, a Berminghammer signature lead trait. The controls for the entire lead system are joystick operated and included in the cab of the excavator.





Louis Fritz
Project Owner
Alabama Department of Transportation

Bermingham Equipment
EML-60 Excavator Mounted Lead



