When you are faced with a project with limited access, material delivery by helicopter, the nearest personnel access is 5 miles (8 km) away, and the closest outside access to the shotcrete placement location is a half mile away, the only solution to handle all of these issues is shotcrete. The Poe Tunnel is a 15 mile (24 km) long tunnel in the foothills of the Sierra Nevada Mountains and is in an area of steep canyons. The tunnel transports water from a forebay on the North Fork of the American River to the Poe Powerhouse where electrical power is generated. The tunnel is almost 20 ft (6 m) in diameter and was constructed in the 1950’s.

The owner, Pacific Gas & Electric (PG&E) regularly inspects their tunnel and during the 2016 inspection found several cracks in the tunnel shotcrete that was cause for concern. In 2016, the General Contractor performed some emergency repairs while a permanent fix was designed and approved. Dees Hennessey, Inc (DHI) was contracted by the General Contractor, Syblon Reid (SRCO) to perform the shotcrete placement for the final repair work. The scope consisted of a new tunnel lining for a length of 90 ft (28 m). Once the SRCO was able to mobilize on the project for the 2019 season it was decided to increase the scope and perform a shotcrete tunnel lining for 180 ft (55 m) of tunnel. This decision was made two weeks before the shotcrete was
The greatest advantage of shotcrete for the project was its flexibility. It provided flexibility in the work sequence, flexibility in the scope of the work, and flexibility to stop and start as needed in response to external factors. By using shotcrete, all formwork was eliminated, and the work sequence could be modified anytime the circumstances changed. This project was done during the winter months, so keeping an eye on the weather was always essential and at times the helicopter would fly up to the point that the rain or wind would start. By using shotcrete, the location of construction joints could be adjusted easily and restarted the next day or whenever the conditions changed.

The difficulties to overcome on the project revolved as the Safety Director.
Jason Myers graduated from California Polytechnic University at San Luis Obispo in 1995, with a bachelor’s degree in Civil Engineering and from Golden Gate University in 2015, with a master’s in Business Administration with an emphasis in Project Management. Jason started out his professional career working for an earth retention subcontractor where he learned the importance of budgeting, scheduling, and client relationships. Also, during this time, he was introduced to the use of shotcrete and its applications. After working for a General Contractor for a couple of years he realized that he enjoyed the tighter knit of working for a subcontractor and the ability to construct projects on a tighter time frame with several going at once. Jason also enjoys the process of handling most of the procedures that go into constructing a project rather than seeing only a small portion of the process. Jason joined Dees Hennessey in 2004 and has been a part owner of the company since 2007. Jason currently serves as the Vice President of Operations as well as the Safety Director.