



LESSONS LEARNED BENEATH THE SURFACE: LEADERSHIP, SAFETY, AND ACCOUNTABILITY IN THE EXCAVATION INDUSTRY

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In the underground construction industry, some of the most important lessons are learned beneath the surface—literally.



Trench and excavation work is some of the most dangerous work performed in construction. Every day, across the country, crews enter excavations to install utilities, repair infrastructure, expand communities, and keep our cities functioning. But unlike many other construction tasks, excavation work can turn deadly in seconds. Soil is unpredictable. Conditions change. Weather impacts stability. One shortcut, one missed inspection, or one moment of complacency can change lives forever.

The reality is simple: the trench does not care how experienced you are.

For many of us who have spent years in the field, we have seen the pressure firsthand. Production schedules tighten. Rain delays projects. Equipment availability becomes limited. Crews feel pressure to move faster. Supervisors juggle deadlines and manpower shortages. And somewhere in the middle of all of it, safety can slowly become viewed as an obstacle instead of the foundation of the job.

That mindset is where danger begins.

Over the last year alone, trench collapses across the country have once again reminded the industry that excavation hazards remain one of construction's deadliest risks. In 2025, multiple workers lost their lives in trench cave-ins throughout the United States, including incidents in Maryland, Arizona, Texas, Connecticut, and South Carolina. OSHA reported at least a dozen trench-collapse fatalities by mid-2025, with many incidents involving trenches between five and eight feet deep. These are depths that are often incorrectly perceived as manageable by crews in the field.

One of the most sobering realities surrounding trench fatalities is how quickly they occur. A cubic yard of soil can weigh as much as a car. When a trench collapses, workers are often buried before they have time to react. Rescue attempts become extremely difficult and dangerous, not only for the victim but also for coworkers and first responders trying to help.

In July 2025, a worker in Goodyear, Arizona became trapped in a trench collapse while working at a construction site. Rescue crews worked for hours before recovering his body. In another incident in Maryland earlier that year, two workers were killed after a retaining wall collapsed into a trench where they were working.

The heartbreaking part is that many of these incidents are preventable.

Protective systems work when they are properly planned, selected, and used. Competent person inspections matter. Soil classification matters. Access and egress matter. Water accumulation matters. Yet many incidents continue to trace back to the same root causes: rushing, underestimating hazards, or believing “nothing will happen.”

Unfortunately, complacency is one of the greatest dangers in our industry.

In excavation work, familiarity can create false confidence. Crews may have performed the same type of installation hundreds of times without incident. A foreman may look at a five-foot trench and believe the risk is low because “it’s a quick job.” An operator may trust that the ground “looks stable.” But excavation hazards are unforgiving because conditions can change instantly. Yesterday’s safe trench can become today’s collapse after overnight rain, vibration from nearby traffic, water intrusion, or disturbed soil conditions.



Experience is valuable, but experience without discipline can become dangerous.

One of the most important lessons learned in the field is that “one size does not fit all.” The safest excavation plan is not always the system crews are most comfortable with or the one they used on the last project. Every excavation presents unique challenges involving soil conditions, depth, utilities, groundwater, surrounding structures, available equipment, and space limitations.

A trench shield that works perfectly on one site may not be the right solution for another. Some projects require engineered systems. Others may require hydraulic shoring, slide rail systems, or modular aluminum systems because of access restrictions or equipment limitations. Proper planning means evaluating conditions before the construction ever begins.

The underground construction industry has also evolved significantly over the years. Today, contractors have access to better engineered systems, stronger training programs, and improved safety awareness than ever before. But even with those advancements, incidents still occur because safety ultimately depends on people making the right decisions under pressure.

That is where leadership becomes critical.

Leadership in excavation safety is not about standing behind a desk quoting regulations. It is built in the field through communication, preparation, accountability, and trust. The best leaders in construction are often the ones who remain calm under pressure, listen to their crews, and refuse to compromise when conditions become unsafe.



Good leaders understand that safety is not the responsibility of one person alone. It requires coordination between operators, laborers, foremen, superintendents, engineers, safety professionals, and equipment providers. Everyone plays a role in identifying hazards and protecting the worker inside the excavation.

One phrase often repeated in safety meetings is that safety is a team sport. In excavation work, that could not be truer.

The competent person conducting inspections plays a critical role. Operators must understand the limitations of equipment around excavations. Crews must feel empowered to speak up if something looks wrong. Supervisors must ensure that production pressure never overrides safe decision-making. And companies must invest in both training and proper protective systems instead of treating them as optional costs.

The strongest safety cultures are built when crews understand not just what the rules are, but why they exist.

Most workers do not remember OSHA standards word-for-word. What they remember are stories. They remember accidents they witnessed. They remember close calls. They remember hearing about workers who never made it home. Those stories become powerful reminders that excavation safety is not theoretical. It is personal.

For many people in the industry, there is a moment that changes how they view excavation safety forever. Sometimes it is witnessing a near miss. Sometimes it is arriving at a site moments after a collapse. Sometimes it is hearing silence on a jobsite after everyone realizes a coworker is trapped underground.

Those moments stay with you.

The excavation industry demands respect because the consequences are real. Every trench entered carries responsibility. Every decision made before work begins matters. The goal is not simply compliance. The goal is and should be ensuring that every worker returns home safely at the end of the day.

The trench teaches lessons quickly. Some lessons cost money. Others cost lives.

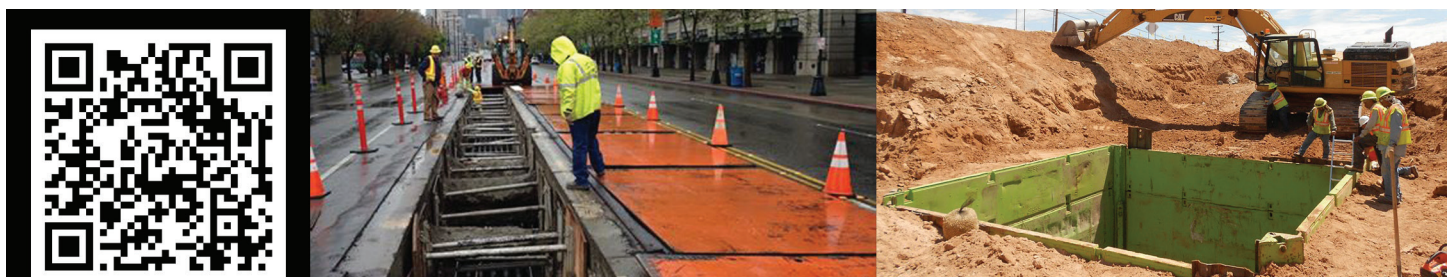
As an industry, we must continue pushing forward through training, planning, communication, and leadership. We must continue developing competent persons who understand not only regulations but real-world hazards. We must continue investing in protective systems that fit the conditions instead of defaulting to familiarity. And most importantly, we must continue building cultures where workers feel responsible not only for themselves, but for each other.



Because beneath the surface of every excavation project lies more than dirt and utilities. Beneath the surface lies trust, accountability, leadership, and the responsibility we all share to protect human life.

And that responsibility begins long before the first bucket hits the ground.

Disclaimer: This document does not provide or address all information, laws, standards, regulations, codes, requirements, and safety procedures applicable to excavations, trench protection, and shoring options. Readers should comply with all such measures.



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