Berry Bros. General Contractors, Inc. Standard Operating Procedures for Trenching

Before starting work, the Trenching standards require employers to do the following: Determine the approximate location(s) of utility installations — including sewer, telephone, fuel, electric, and water lines. One common industry practice is to call 811, the "Call Before You Dig" number, to establish the location of any underground utility installations in the work area.

Trenching and Excavation Safety: Contact and notify the utility companies or owners involved to inform them of the proposed work within established or customary local response times. Ask the utility companies or owners to establish the location of underground installations prior to the start of excavation work. If they cannot respond within 48 hours (unless the period required by state or local law is longer) or cannot establish the exact location of the utility installations, employers may proceed with caution, which includes using detection equipment or other acceptable means to locate utility installations. Determine the exact location of underground installations by safe and acceptable means when excavation operations approach the approximate location of the installations. Ensure that while the excavation is open, underground installations are protected. Inspect trenches at the start of each shift. Inspect trenches following a rainstorm or other water intrusion. Inspect trenches after any occurrence that could have changed conditions in the trench.

Efficient Rockwheel Operation

Rockwheels are becoming more popular in areas where rock formations are prevalent. While they are the preferred attachment in these situations, contractors may not be achieving optimal performance if the wheel is not set up and operated properly.

If running the rockwheel too fast, you are not getting the optimum torque required for the most efficient cutting in rock. Cutter patterns are critical for optimum productivity, while the number of teeth in the cutter pattern depends on the type of rock or concrete you're cutting. Choose the correct carbide size for better rock penetration.

In more solid rock, it's generally more productive to use a shorter gauge tooth and more teeth. Cobble, or small-to-large rocks, found in compressed soil conditions generally get the best productivity with a longer gauge tooth and less teeth to help pull the cobble out of the trench.

Widths and depths are dictated by the product being installed and how much cover is needed. If contractors have more jobs in tougher conditions and the requirements are deeper and wider, a larger unit may be justified. If they have easier digging conditions and shallower product requirements, they may want to have a smaller unit and rent a larger unit as needed.

Another consideration to reduce teeth wear and breakage from additional vibration is to use foam-filled tires. This adds weight low to the ground and reduces the bounce and creasing of air or fluid-filled tires.

Operators need to follow a few daily maintenance rules to achieve optimal efficiency:

- Replace pockets if they're broken or worn where the tooth will not have the correct cutting angle for maximum production.
- Replace missing pockets for even tooth wear.
- Check all hardware for loose or missing bolts around the motor area. Make sure you replace the bolts with the appropriate hardened bolt.
- Refer to the equipment manufacturer's manual for specific information about the rockwheel attachment.

Any time the hole or trench is to be unattended it must be barricaded and/or covered to prevent unauthorized entry which could result in injury.