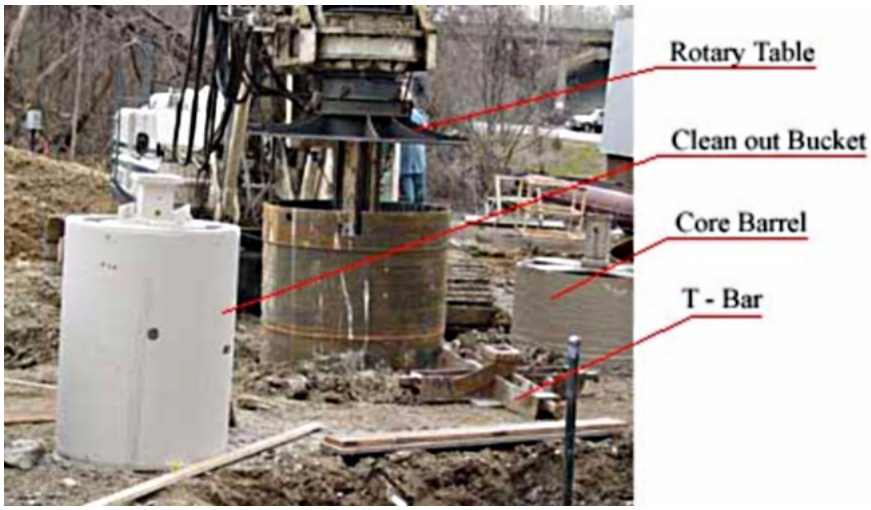

Clean-out Bucket , Rotary Table, T-bar & Core Barrel.

Core Barrel

5.4.4 Materials:

A slurry is sometimes used during drilling. This material is a bentonite or polymer powder that is added to clean water to create a dense fluid. The purpose of this fluid is to support the walls of the excavation. It is mixed thoroughly before being used in the excavation. The slurry is never mixed in the excavation, but only in tanks, and pumped, as it is needed. This will create pressure on the excavation walls preventing caving. Slurries are also effective in stopping water from flowing into the excavation. Bentonite solution should be mixed 24 hours prior to use. Polymers may be used immediately after thorough mixing. Currently, KDOT does not allow slurry in the rock socket because these fluids may reduce skin friction.

A rebar cage is constructed of longitudinal bars and tie bars bent into rings or continuous spirals. Spacers tied to the cage maintain the clearance between the wall of the shaft or rock socket and the rebar cage. These spacers are to be non-metallic circular wheels that roll along the side of the excavation during the installation of the cage. It may be necessary for the contractor to use additional tie wire on these wheels to keep them intact. Bar chairs are not an acceptable substitution because they generally are not rigid enough to maintain proper spacing between the reinforcing