



Olin Chlor Alkali chemical plant

Niagara Falls, United States

Installing foundations for high voltage electric pole and lines



The project

A recent expansion at the Olin Chlor Alkali Chemical Plant left the Olin Corporation in need of new electrical distribution lines throughout the facilities. Keller provided a turnkey service installing the new high voltage electric pole foundations.

The challenge

The plant's facilities were to stay fully operational meaning work had to be completed in and around an active plant that included existing low overhead, high voltage electric lines and existing structures. In addition to active plant concerns, the presence of hard dolomite limestone earth conditions were undesirable.

The solution

Extreme caution was taken while working under the low overhead, high voltage electric lines and during the intermediate mobilisations through the active plant. Six 72 in. and 84”f caissons were installed for the pole foundations. The average caisson length was 27 ft with 15 ft to 20 ft rock sockets. Multiple spotters were used to ensure that no one was injured and no damage occurred to the existing plant. The very hard dolomite limestone was pre-drilled prior to Keller’s large diameter auger drilling, which ultimately decreased the overall time spent on the project. Permanent casing, full length rebar cages, and grounding were also installed.

Project facts

Owner(s)

OLIN Corporation

Keller business unit(s)

Keller North America

Main contractor(s)

N/A

Solutions

Heavy foundations

Markets

Industrial

Techniques

Bored piles / drilled shafts