

Industrial Horizontal Tieback – St. Thomas, Ontario

February 1997

The Problem:

- Large process pits approximately 6 m (20 ft) deep x 35 m (120 ft) long necessitated additional horizontal support for the process pit walls
- Highly loaded floors directly above the process pits



The Solution:

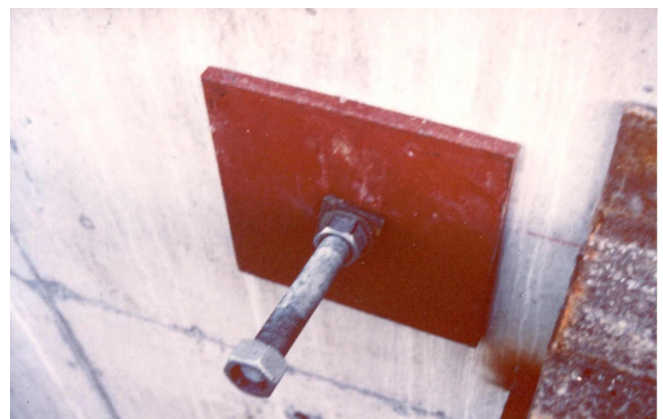
- **Chance® Tieback Anchors** were determined to be the most economical and time saving solution
- It was critical to install the Helical Anchors into the very stiff to hard silty clay layer to achieve the required tension load needed for each anchor to support the walls

Product Used: (150) SS-175 Chance® Helical Tieback Anchors
Four helix configuration, installed 5 to 15 degrees from horizontal

Length: 10 m (33 ft)

Loads: 170 KN (38 kips) allowable load (340 KN ultimate load)

Termination: Threaded termination with face plate
Helical anchors were pre-loaded to 30 to 40% of the design load prior to backfilling
After backfilling, anchors were pre-loaded to approximately 80% of working load



Geotechnical Engineer: Atkinson, Davies Inc., London ON
Structural Engineer: Frank Anrep & Associates
Chance® Helical Pier Installer: EBS Engineering and Construction Limited