

# UNDERPINNING ANCHORING REPORT

## A CASE HISTORY

Chance Civil Construction Distributor:  
Intech Anchoring Systems, Livonia, Michigan

**Project:** Wall Repair,  
Peterson Farms

**Structural Engineer:**  
Soils and Structures, Muskegon, MI

**Underpinning Contractor:**  
Kent Companies, Grand Rapids, MI

**Background Information:**

Regrading along a 200 ft. side of a tilt-up-wall building resulted in undercutting the grade beam by as much as 2 ft. In less than one day, the grade beam, wall, and roof dropped in places as much as 14" and slid out horizontally as much as 6".

Constructed as a facility to bottle apple cider, 100 ft. x 200 ft. building was 26 ft. high, with 11"-thick concrete walls and roof supports on 50-ft. centers. The 2 ft. x 2 ft. grade beam supporting the wall was of un-reinforced concrete.



Above, building condition upon arrival at the jobsite



**Job Description:**

Kent Companies designed and completed a plan to stabilize and relift the wall.

It provided for installing 39 Atlas Resistance® piers on 5-ft. centers along the entire 200-ft. wall. Each pier was sleeved and grouted to maximize pier shaft stiffness.

**Final Results:**

The wall was lifted and the grade beam was moved laterally to near their original positions.

- 1. Above, excavating to set piers
- 2. Below, lifting grade beam and wall with hydraulic jacks



Torealign beam, 38 CHANCE® helical tieback anchors were installed between Atlas Resistance® piers.



With wall elevation restored and beam straightened, pier holes were filled to final grade.

