



## The leading geotechnical specialty contractor

- Deep foundations
- Ground improvement
- Groundwater control
- Instrumentation & monitoring
- Liquefaction mitigation
- Releveling structures
- Slope stabilization
- Support of excavation
- Underpinning



Global strength and local focus



**5**  
continents



**40+**  
countries



**10k**  
people



**6k**  
projects/year



## The leading geotechnical specialty contractor

Every day, people around the world live, work, and play on ground prepared by Keller.

Leveraging our full range of techniques, we provide solutions to geotechnical challenges across the entire construction spectrum.

We have the expertise, experience, and product range to respond quickly with the optimum solution, execute it safely, and see it through to a successful conclusion, no matter the size of the project.

## Global strength and local focus

The strongest local construction projects are built on a foundation of connected global experience. Our in-depth knowledge of local markets and ground conditions enables us to understand and respond to specific project challenges.

We harness the power of our global network and knowledge base to safely deliver the optimum solution, no matter the size or location.



## OUR PURPOSE

**Building the foundations for a sustainable future.**

Every day we help create projects that range from prominent structures to routine roads, bridges, and buildings—everything society needs.

## OUR VISION

**To be the leading provider of specialty geotechnical solutions.**

We strive to lead in quality, product range, safety, and service. We are the world leader today, and to maintain our leadership, we always endeavor to improve—to get even better.

## OUR VALUES



### **Integrity**

We always behave with integrity towards our clients, colleagues, and the communities in which we work.



### **Collaboration**

Our teams collaborate across borders and disciplines to bring our clients the best of Keller and build a stronger business for the future.



### **Excellence**

In all that we do, we target excellence. Whether it's safety, engineering, project management, or people development, we strive to deliver to the highest standards.



**65+**  
LOCAL OFFICES  
IN NORTH AMERICA



# EXPERTISE TO GET THE JOB DONE

At Keller, we have the experience to get the job done and the track record to prove it.

Whether large or small, complex or simple, we take the time to understand every subsurface problem and provide the optimal, tailor-made solution. The size of the project is irrelevant to us—what drives us is sharing in our client’s satisfaction of a job well done.

If you want faster and more effective results, ask us to work on your specific problem—we’ve likely solved a similar one before.



## UNIVERSITY OF PORTLAND

Ground improvement, liquefaction mitigation

At the riverfront expansion for the University of Portland, Keller used single axis deep soil mixing and cutter soil mixing to create ground improvement buttresses that supported various structures and limited lateral spreading deformations to within code requirements.

**OWNER:** University of Portland

**MAIN CONTRACTOR:** Keller, main trade partner direct to owner



## THE WHARF

Support of excavation, ground improvement, groundwater control

Keller provided a full foundation package to facilitate excavation of up to three levels of underground parking for five high-rise buildings constructed along the Potomac River waterfront in Washington D.C. Support of excavation included sheet piles, soldier piles, displacement piles, tiebacks, internal bracing, and jet grouting. Rigid inclusions provided ground improvement beneath a portion of one garage. Keller also performed dewatering/water treatment for the project.

**OWNER:** Wharf District Master Developer LLC (dba Hoffman-Madison Waterfront)

**MAIN CONTRACTOR:** Balfour Beatty Construction

## ASTON MARTIN RESIDENCES

Deep foundations, groundwater control, support of excavation

Keller used multiple techniques to create a basement and provide deep foundations for the luxury high-rise building on the Miami River. Techniques included permeation grouting, soil mixing, secant pile walls, tremie seals, jet grouting, and tangent bearing elements, a technique developed by Keller.

**OWNER:** G and G Business Developments LLC

**MAIN CONTRACTOR:** Coastal Construction



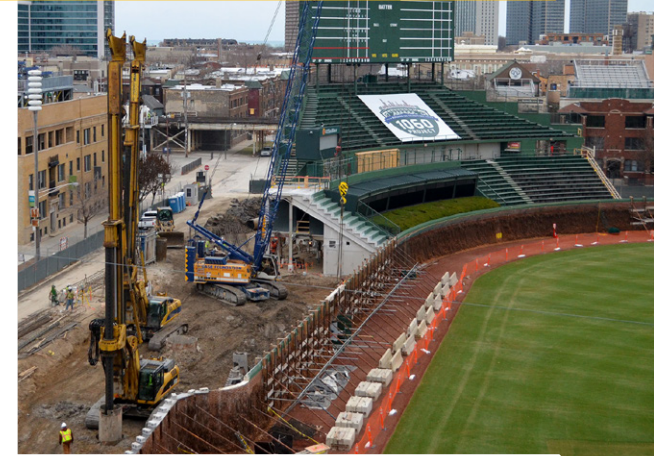
## WRIGLEY FIELD

Support of excavation, deep foundations, underpinning, instrumentation & monitoring

Keller provided a schedule-saving, top-down construction proposal which included multi-technique support of excavation, deep foundations, stadium underpinning, and real-time structural monitoring for an expansion and upgrade to the stadium and facilities.

**OWNER:** Chicago Cubs

**MAIN CONTRACTOR:** Pepper Construction Company



## SHERIDAN LANDSLIDE

Slope stabilization

Keller designed a multi-technique solution to stabilize an 80-ft failing slope, threatening to cause widespread local flooding. The package included a soil nail wall, an anchored soldier pile wall, and a gabion retaining wall, all with sculpted shotcrete facing to create a natural-looking finish.

**OWNER:** City of Sheridan

**MAIN CONTRACTOR:** Keller



## EGLINTON STATION

Support of excavation, underpinning

To construct a new station underneath an existing one in a densely populated area of Toronto, Keller used multiple techniques for complex support of excavation and underpinning. Keller’s shoring system included secant piles, supplemented with jet grouting where utilities could not be relocated, and soil nailing underneath the existing station. Micropiles, drilled caissons, and large needle beams underpinned the existing station to facilitate excavation below.

**OWNER:** Metrolinx

**MAIN CONTRACTOR:** Crosslinx



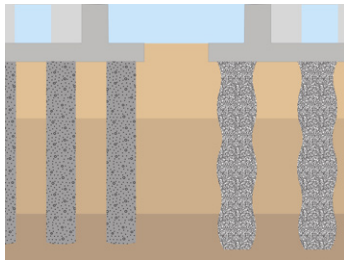


# SOLUTIONS

Keller provides the optimal solution, leveraging our experience and expertise with our comprehensive suite of techniques to get the job done right the first time.



## Ground improvement

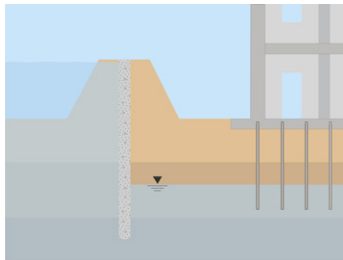


Ground improvement involves modifying soil properties or reinforcing the soil to achieve a designed performance.

### Common uses

- Increase bearing capacity
- Reduce settlement
- Mitigate liquefaction
- Collapse/fill voids
- Stabilize mines/karst
- Compress soils before construction
- Treat expansive or collapsible soils
- Stabilize soft ground

## Groundwater control

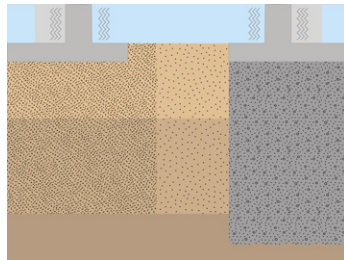


Groundwater control involves the construction of barriers in soil and rock, sealing below-grade structures to restrict the movement of water, dewatering for excavations, or water treatment.

### Common uses

- Provide seepage cutoff below dams and levees
- Prevent migration of contaminants
- Seal concrete joints or cracks in below-grade structures
- Restrict groundwater flow into excavations
- Dewater for excavations
- Water treatment

## Liquefaction mitigation

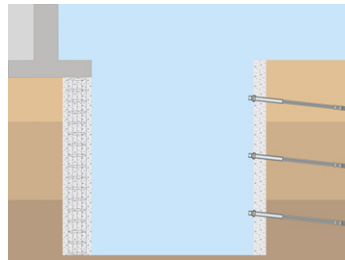


Liquefaction mitigation is achieved by densifying loose granular soils or constructing subsurface reinforcements to resist seismic forces.

### Common uses

- Prevent liquefaction-induced bearing capacity failure
- Control seismic settlement
- Prevent lateral spreading
- Reduce scope of deep foundation elements

## Support of excavation

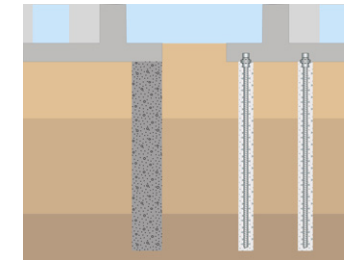


Support of excavation involves retaining soil whose stability is impacted by a man-made excavation or fill. Existing adjacent structures may also require support.

### Common uses

- Support excavations/excavation bracing
- Shore existing adjacent structures
- Laterally support placed fills
- Bulkhead/wharf support and remediation

## Underpinning

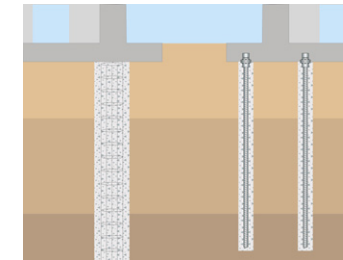


Underpinning provides additional support to existing foundations that are unable to safely support existing or additional planned loads or that experience reduced support.

### Common uses

- Improve weak underlying soils
- Underpin with deep foundation elements

## Deep foundations

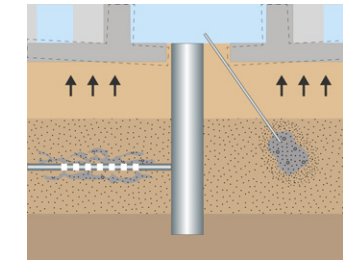


Deep foundations are structural elements that transfer loads through soils with insufficient strength and/or stiffness to underlying competent soils or rock.

### Common uses

- Support new or existing structures
- Support static and seismic loads
- Support compressive, tensile, or lateral loads

## Releveling structures

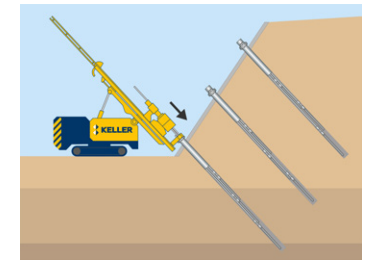


Releveling structures is achieved by either lifting through a direct connection to the structure or by injecting grout at depth to raise both the overlying soil and the structure it supports.

### Common uses

- Reverse settlement experienced by a structure

## Slope stabilization



Slope stabilization involves the strengthening, reinforcing, or supporting of soil slopes to produce a sufficient stability factor of safety.

### Common uses

- Stabilize man-made slopes
- Stabilize natural slopes adversely affected by natural or man-made influences

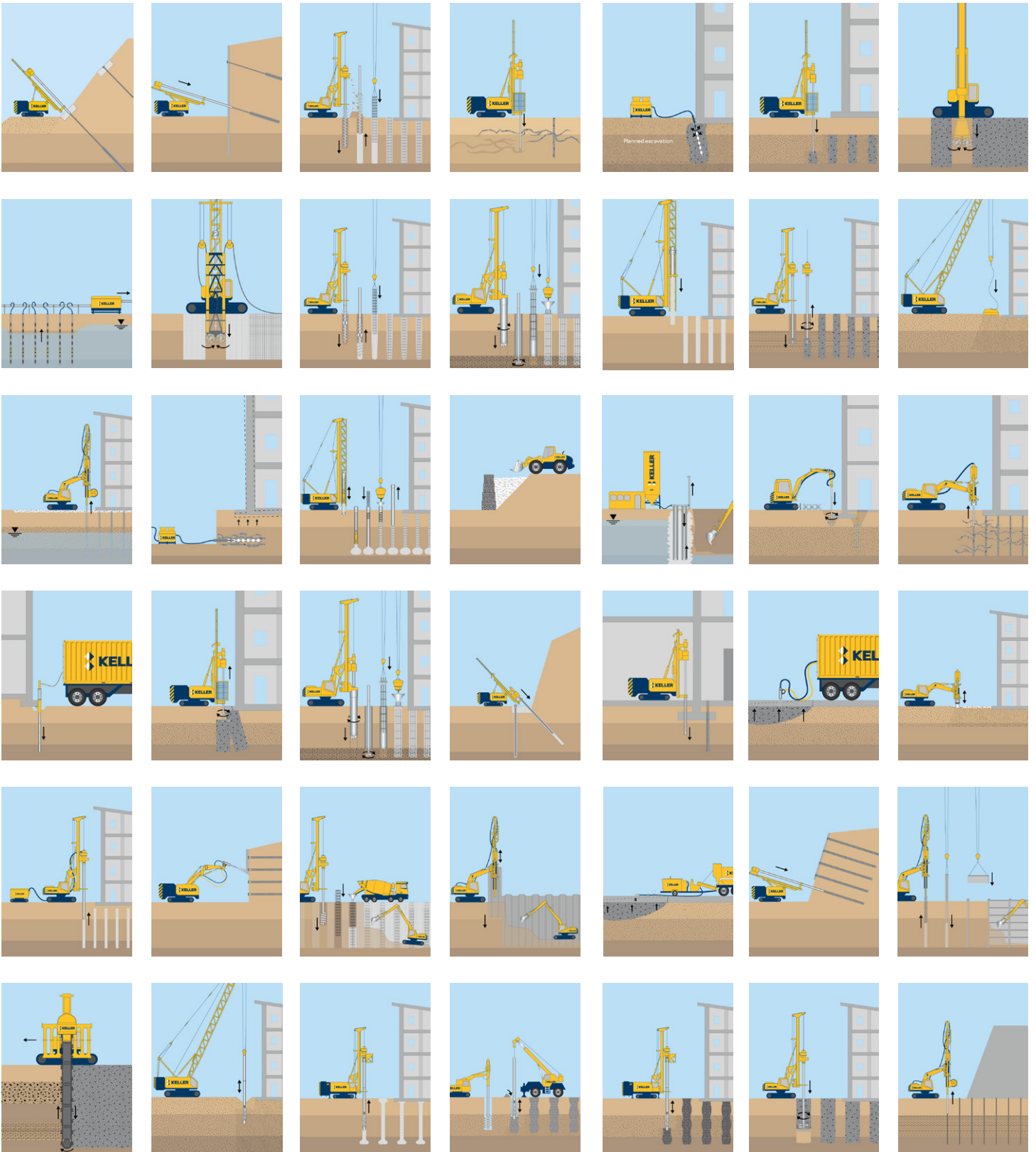
## DESIGN-BUILD

Our decades of research and development have supported design methods in line with fundamental geotechnical engineering theory. Our experience and knowledge lead to the optimal solution for each loading configuration, subsurface condition, and project objective.



# SOLUTIONS MATRIX

The solution to any geotechnical challenge





Keller's team of engineers, project managers, and construction experts are available to provide the optimal solution to your geotechnical challenge.

Contact us today  
US: 800-456-6548  
Canada: 888-846-7858  
[keller-na.com](http://keller-na.com)

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