

Lowe's of Temecula

Temecula, California, USA

Keller installs soil nails to remediate a failing retaining wall protecting a popular home improvement store.



The project

Located behind a Lowe's Home Improvement store, a 15-ft-tall retaining wall began showing signs of deterioration. The 8600 SF wall was originally constructed using soldier piles, precast concrete lagging, and reinforced with tieback anchors. The retained slope consisted of loose caving soils with manufactured backfill. Prompt remediation was needed to prevent the full failure of the wall.

The challenge

The backfill behind the retaining wall contained significant obstructions consisting of cobbles and concrete structures.

The solution

Keller was contracted to install soil nails to stabilize the existing wall. Keller installed two rows of soil nails, 500 nails total, with an average length of 34 ft. The quality control program included installing two sacrificial soil nails that were tested to verify the design assumptions and installation procedures. Because of the cooperative effort between Keller and the general contractor, the home improvement store remained open throughout the construction, and the customer experience was not impacted.

Project facts

Owner(s)

Lowe's Companies, Inc.

Keller business unit(s)

Keller

Main contractor(s)

Reeve-Knight Construction, Inc.

Engineer(s)

R.J. Valentine

Solutions

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Commercial

Techniques

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