

Project:

Slope Stability Improvements, Area 23, Fort Leavenworth, Kansas

Owner:

Fort Leavenworth Frontier Heritage Communities II LLC (FLFHC)

549 Kearny

Fort Leavenworth, KS 66027

Description:

Several tall MSE walls with block facing were built during the construction of on base housing at Fort Leavenworth. An engineering study, done after one of the wall failed, indicated that the walls did not have a sufficient factor of safety for global stability. The Judy Company was contracted to engineer and install high capacity rock anchors with bearing blocks to increase the factor of safety. It was necessary to construct an MSE wall below the existing walls to create a work platform and enhance stability. Thus, 110 tiebacks were installed at the base of two walls to get the factor of safety to an acceptable level. A series of three vertical walers were also installed on an outside radius of one of the wall to provide additional internal stability to the wall.

The work was done in an active housing area with minimal disturbance to the residents.