



## PROJECT PROFILE

# Vista Ridge

Forensic Geotechnical Investigation and Standard of Care Assessment | Erie, CO



### CLIENT

McDowell Rice Smith & Buchanan, P.C.

### BACKGROUND

The two filings at Vista Ridge included eighty-six single-family homes located near Erie, Colorado. The homes were underlain by Laramie Formation claystone, which has high to very high swell potential. After their initial inspections, the plaintiff's experts alleged that vertical foundation movement was occurring at all of the homes. As a result of these allegations, the plaintiff's team quickly implemented repairs to the homes that were completed during the litigation process. The cost of these repairs, which included full underpinning with deep micropiles and backfilling foundation walls with imported granular material, was approximately twice the value of the homes.

Michael W. West & Associates, Inc. (MWWAI)—now joined with WJE—provided geotechnical engineering and expert witness services in connection with litigation at Vista Ridge Filings 1B-a and 1B-b. MWWAI was retained on behalf of the geotechnical engineer of record for the original construction of the homes.



### SOLUTION

MWWAI provided geotechnical engineering services that included observation of the conditions at the homes, observation of the repairs, evaluation of the plaintiff's experts engineering analyses, completion of a geotechnical investigation, and review of the performance of the "repaired" homes. MWWAI determined that most of the original distress at the homes was relatively minor and was typically caused by improper construction that could have been repaired at a relatively low cost.

The plaintiff's engineering experts failed to determine the actual cause of the distress, instead relying on the results of overly complex and improperly performed hydrogeological and geotechnical analyses to justify the extensive repairs. In addition to being uneconomical and unnecessary, the repairs were experimental, unproven, and ultimately faulty. Many of the "repaired" homes experienced vertical foundation movement with resulting damage and distress. The lawsuits were settled for less than one percent of the cost of the home repairs, including expert and legal fees.