

Client Contact:

**Mr. Robert G. Refvem,
P.E.
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Services Provided:

- **Geological and Geotechnical Study**
- **Engineering Evaluation**
- **Bridge and Soil and Rock Slope Stability Recommendations**

Project Summary:

Cesare, Inc. (Cesare) conducted a geological and geotechnical study and engineering evaluation of the 1,400-foot long extension to Main Street. The field investigation consisted of geologic mapping, seismic refraction surveys, and core drilling. Geologic mapping provided information on rock discontinuities for a kinematic analysis. A seismic refraction survey (1,840 linear feet) provided additional information on the depth to bedrock along the cut slope area. Due to limited surface access and steep topography, a helicopter was used to move a portable core drill between drill sites. Seven core holes provided data on

the soil/rock type, the degree of

fracturing in the bedrock, and the depth to competent bedrock. Cesare provided recommendations on bridge foundations and soil and rock slope stability.

