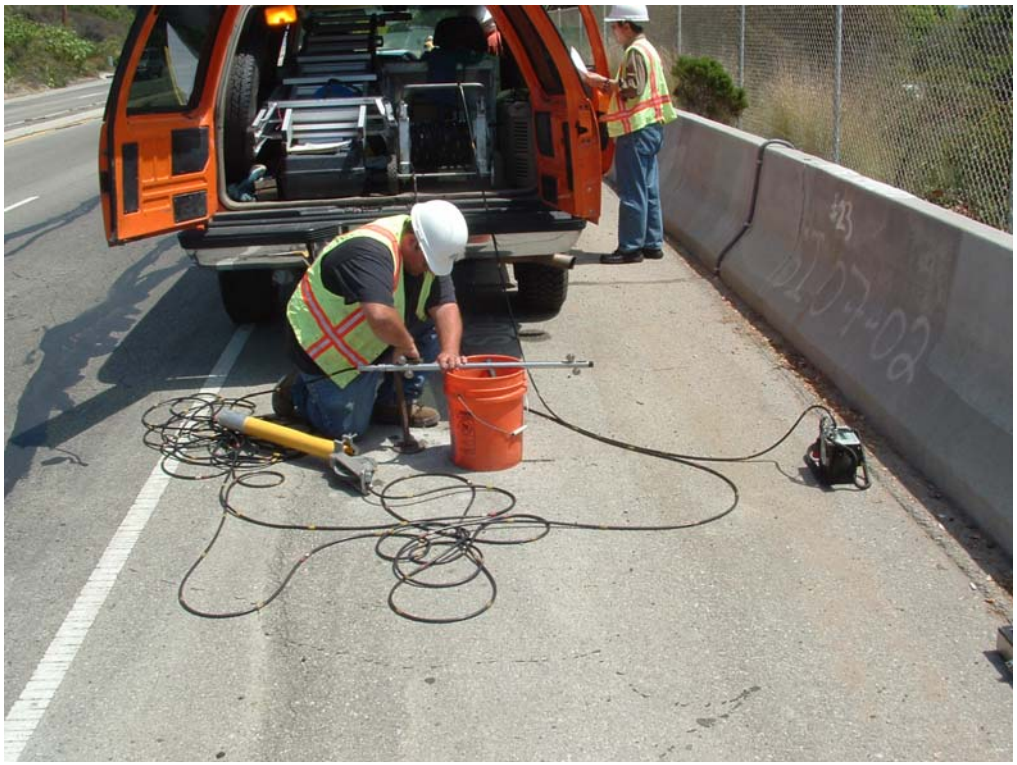
SAAF makes sense, saves money

Inclinometers: an excellent tool in many situations



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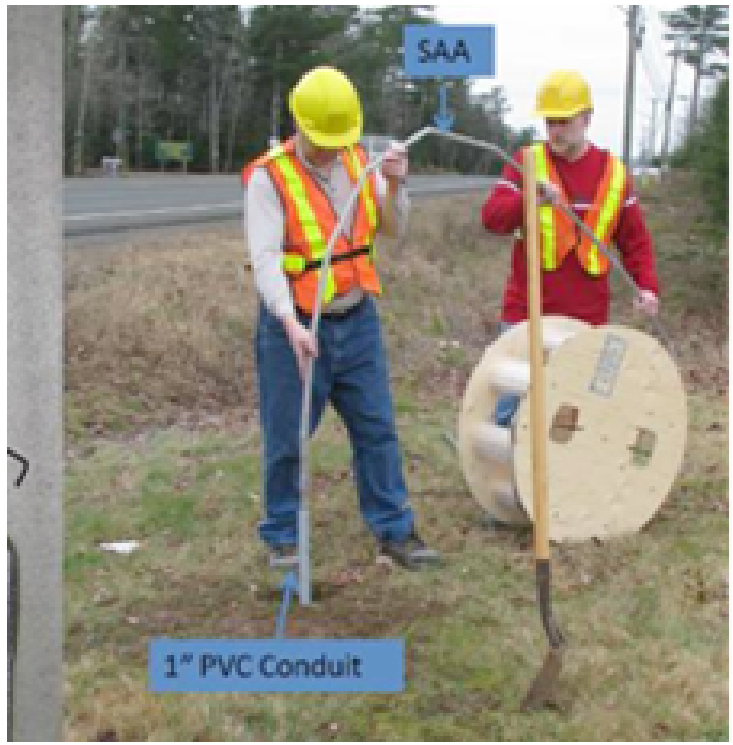

Every instrument has a niche

OK to use manual inclinometers:

- When travel time to the site is short.
- When personnel costs are low.
- When deformations are expected to be small.

OK to use in-place inclinometers (IPIs):

- When deformations are expected to be small.
- When the budget is high enough to sacrifice an array.
- When long gauge lengths are acceptable.

When SAAF has a clear advantage:

- When movement is large.
- When re-deployment is desired.
- When the site is remote.
- When shear planes are to be located accurately.
- When vibration is to be measured also.

Potential savings

In-place inclinometer or SAAF Installation costs

Drilling
casing
grouting
instrumentation

SAAF savings >12:1

$1000/avg. hole due to high cost of SI casing compared to PVC conduit

Manual Inclinometer Reading costs

Travel
Reading time
Diversion of traffic
Safety costs
Error costs
Sheared-off casing/ lost hole

SAAF or IPI can provide substantial savings per reading, and provide enough readings to measure rate accurately.

avg. $5,000/year/hole due to lost holes, traffic diversion, personnel costs

IPI Reading costs

Destruction of instruments/ lost hole.
Inaccuracy from deformed casing.
Cost of NOT reading important slopes.

SAAF can survive 3m (10') deformations and continue to function.

$20,000/hole due to lost equipment.

Synergy

A central earth station with logger, solar power, and wireless cellnet connection makes it possible to feed data from multiple sensors to a central location and deliver data to multiple people rapidly, and anywhere on the internet.

Measurand SAAFs are fully qualified with the Campbell Scientific CR1000 loggers, which provide all these services. The new AIA feature for SAAF makes data collection a very rapid process, even for multiple arrays.

SAA
SAA
SAA
SAA
Piezometers
Crack meters
Extensometers

Approximate cost of an earth station is under $5500. It pays for itself in one year on the basis of saved visits and timely delivery of more comprehensive data.

www.MeasurandGeotechnical.com