

ABSTRACT

THE COST-EFFECTIVENESS OF LOCATING SURVEY MONUMENTS WITH GLOBAL POSITIONING SYSTEM HAND-HELD RECEIVERS

The purpose of this thesis is to determine the cost-effectiveness of locating survey monuments with hand-held receivers. During this process, it will be necessary to compare and contrast two different types of technology. This comparison focuses on the procedure used to locate survey monuments in the field. The classical technology is using record information solely, consisting of record maps, field notes, and instrumentation, to locate the monuments. The newer technology is using coordinate values, either collected or calculated, with a hand-held GPS receiver to navigate to the monuments.

It was determined that when hand-held receivers are used to locate coordinated survey monuments, time and money is saved. Data shows that an average of six hours a job can be saved when hand-held receivers are used on appropriate projects. The time saved can be easily translated into money saved depending on the total crew costs.

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August 2003