

ABSTRACT

In order to implement the development of a region required the existence of a base map obtained from the result of a terrestriis survey. The survey of terrestriis method is used yo making a situation map which will be used as reference in the development planning, road construction, and other planning. Development of a region, it is necessary to do a plan to know the potential of the mapped area. One way is by creating a Village Map whose function is to display all kinds of Geospatial Information available and can be done development work to advance the area. The purpose of this work is the availability of manuscript maps and digital situation scale 1: 500 Dusun Banyuripan RT 01 / RW 01, Banyuripan Village, Bayat District, Klaten Regency, Central Java Province.

Essentially there are there are various stages in the implementation of measurement work, ranging from preparation, planning, measurement, processing, and depiction. As for the purpose of the work is the formation of a situation map of Hamlet Banyuripan RT 01 / RW 01, Banyuripan Village, Bayat District, Klaten Regency, Central Java Province with 1: 500 scale that has good quality based on terrestrial measurement data using Total Station and Sipat Datar.

The measurement work has been completed with the result of a 1: 500 scale situation map in the area that has been mapped. This is demonstrated by the results of a 9-point control frame measurement with a linear accuracy of 1: 10839.1 and a corner cover error of $0^{\circ} 0'18''$ and a KKV measurement result that has an 8 mm go-through divide. So the results of KKH and KKV measures have met the specified technical specifications. The result of the map test shows the result of the planimetric test that meets the tolerance of 25 samples from 40 samples tested and for the test of altitude obtained 16 samples meet the tolerance of 24 samples that have been tested. So that for aspect of Planimetris and altitude aspect can not fulfill technical specification due to error when doing measurement in field, hence measurement must be done more thorough again in order to get good result and enter the desired criterion.