

MUNICIPALITY OF HENTIES BAY



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05 December 2013

LAND SURVEYOR'S REPORT: COMMENCEMENT OF FIELD WORK - SETTING UP OF NEW EQUIPMENT AND SYSTEMS

On this report it is shortly reviewed the current stage of the regional GIS project considering Henties Bay, what kind of challenges have been faced and what is planned to happen in the near future.

The FIRST task was to create an internal network between our Base and Rover receivers using MTC network connections as both of the receivers use SIM-cards. A computer is used to start the connection of the Base receiver and also to determine the IP-address which the Base receiver and Rover receiver use to communicate with each other. According to our planned schedules this phase should have been completed earlier, but due to Customs (import) problems the equipment was delivered 3 weeks later than expected. Henties Bay Municipality took charge in clearing these Customs physically in Windhoek on 21 and 22 November 2013.



Erastus Nakathila from Omaruru did some work in Henties Bay earlier using the old equipment and was therefore able to assist finding some reference marks which were also needed to set up the equipment. This was done from 25 – 29 November 2013. Light site calibration was executed using these reference marks to show how accurate the internal point database is. To be able to work on a wider range of area and more accurately, a proper site calibration had to be done using trig points (beacons). Some trig points were located approximately 10 kilometers out of town and one on top of the water tower. Using this calibration it was then possible to create a permanent base point, with which it is now possible to work throughout the whole town area.

As always in land surveying there are challenges to overcome. The first challenge faced has to do with the IP address used to communicate between the receivers. Now the SIM-cards use a Dynamic IP addresses, which causes problems if even small cut-offs occur in the network. This can be solved by changing the Dynamic to Static IP address at MTC, and by having a contract number for this.



Base Station (in technical yard)

Now the actual surveying work has started by locating some pegs in areas where it's important to know the exact locations. Once the Land Survey Graduated is appointed the mapping for the GIS database will begin. To continue on the path of creating and maintaining a comprehensive GIS database it is essential for the Municipality to have a Land surveyor who can solely concentrate on this task.

By Juha and Sanna