

- C. The survey equipment shall be “stopped” whenever defects are being noted on the coding sheet.
- D. The CCTV monitor display shall incorporate an automatically updated record in metres and tenths of a metre of the metreage of the survey equipment position from the cable calibration point.
- E. The Contractor shall use a suitable metering device which enables the cable length to be accurately measured; this shall be accurate to $\pm 1\%$ or 0.3m whichever is the greater.
- F. The Contractor shall demonstrate that the tolerance is being complied with using one or both of the following methods in conjunction with a linear measurement audit form which shall be completed each day during the survey:
- i. Use of a cable calibration device.
 - ii. Tape measurement of the surface between manholes.
- G. If the Contractor fails to meet the required standard of accuracy the Engineer shall instruct the Contractor to provide a new device to measure the chainage. The Engineer may at his discretion instruct the Contractor to re-survey those lengths of pipe first inspected with the original measuring device using the new measuring device.
- H. At the start of each pipe length being surveyed, the length of pipe from zero chainage up to the cable calibration point shall be recorded and reported in order to obtain a full record of the pipe length.
- I. The meter reading entered on to the data display at the cable calibration point must allow for the distance from the start of the survey to the cable calibration point such that the metreage at the start of the survey is zero. In the case of surveying through a manhole where a new header sheet is required, the metreage shall be set at zero with the camera focused on the outgoing pipe entrance.
- J. The team leader shall be defined as the person responsible for the set up of equipment and the recording of survey data on the approved coding forms as survey work progresses on site.
- K. The team leader shall ensure that the metreage counter starts to register immediately the camera moves. At the start of each manhole length a data generator shall electronically generate and clearly display on the viewing monitor and video recording a record of data in alpha-numeric form containing the following minimum information:
- i. Automatic update of the camera’s metreage position in the pipeline from adjusted zero.
 - ii. Pipe dimensions.
 - iii. Manhole/pipe length reference numbers.