

Manhole Visual Inspection Criteria

The contractor as part of the CCTV inspection will carry out a visual inspection on those manholes associated with the CCTV inspections. The inspection will be visual only to determine its condition in a 1-5 rating as described below.

The contractor is expected to visually check a manhole and mark in the recording sheet attached below. Only the manhole ID and Condition rating (1-5) to be entered in the hardcopy recording sheet. If the condition is '4' or '5' a photograph of the manhole inside view is required. Contractor may take more than one photographs as it sees fit.

The overall condition of the manhole (Index: 1 -5) could be determined based on the typical description given below.

Condition Details: ('1' being Very Good to '5' being Worse)

Condition '1' : Very good, no action needed

- No defects

Condition '2' : Good, minor defects, no impact to performance, no action needed at this time

- Minor cracks in the cone/chimney
- Discolouration of mortar or cone

Condition '3' : Satisfactory, defects to be dealt within the next 5 years

- Minor leaks through manhole rings, cone/chimney, loose mortar or stub-outs
- Subsidence of cover/ring from road grade
- Root infiltration through minor cracks
- Minor corrosion of rungs/ladder steps

Condition '4' : Poor, major defects, need attention in the next 2 years, start planning

- Medium infiltration through joints, cone/chimney, loose mortar or stub-outs
- Cracks (wide enough) leading to structural defects
- Considerable corrosion of rungs/ladder steps
- Minor breaks / cracks in bench or channel

Condition '5' : Worse, major defect need immediate action.

- Offset of cover/rim from the Chimney/cone by more than 5% (by judgement)
- Major infiltration through joints, cone/chimney, loose mortar, or stub-outs
- Large breaks, large amounts of missing mortar or structural defects or partial collapse
- Broken or missing Manhole cover
- Broken rungs/ladder steps
- Broken bench or channel