**TASMANIA DEPARTMENT OF MINES**
**UNPUBLISHED REPORT 1979/59**

# Inspection of a dam site near Swan Bay, East Tamar

*by W. L. Matthews*

An inspection of an area on the *Landfall* property, about two kilometres southwest of Swan Bay, was made at the request of the Rivers and Water Supply Commission. The landowner was proposing to construct a large storage of water on a tributary of Saltwater Creek. It is unknown whether the correct part of the property was examined, as a dam has already been constructed but the valley in which it is situated does not form a tributary of Saltwater Creek (fig. 1). Although it was not possible to contact the landowner, as far as could be ascertained it is unlikely that he requires another dam in the area.

The dam is situated in a valley underlain by plastic brown and grey mottled Tertiary clay. Sandy soil occurs on the low ridges adjacent to the dam and basalt boulders derived from outcrop on top of Gaunts Hill to the south extend almost to top water level on the southern side of the dam. The slopes surrounding the dam are relatively smooth, suggesting a fairly stable recent history except for a small area near the southern end of the storage where there are some small hummocks which are probably due to very old landslips. When the dam is full, the water will lap against the toe of this slope. No recent movement has taken place and the volume of material that previously moved near the dam is small. Reactivation of the old movement would probably have little effect on the dam except to reduce the storage volume a little as any movement is likely to be comparatively slow. If material further upslope moved into the dam area it could produce problems, in particular reduced storage capacity. Such a movement, although possible, does not appear very likely.

An inspection of the dam itself reveals cracks along the crest which extend up to about one metre from the edge on the downstream side. This may be due to slight subsidence of superficial material or the cracks may extend deeper. If the latter is the case, it may be necessary to lower the batter.

*[18 July 1979]*

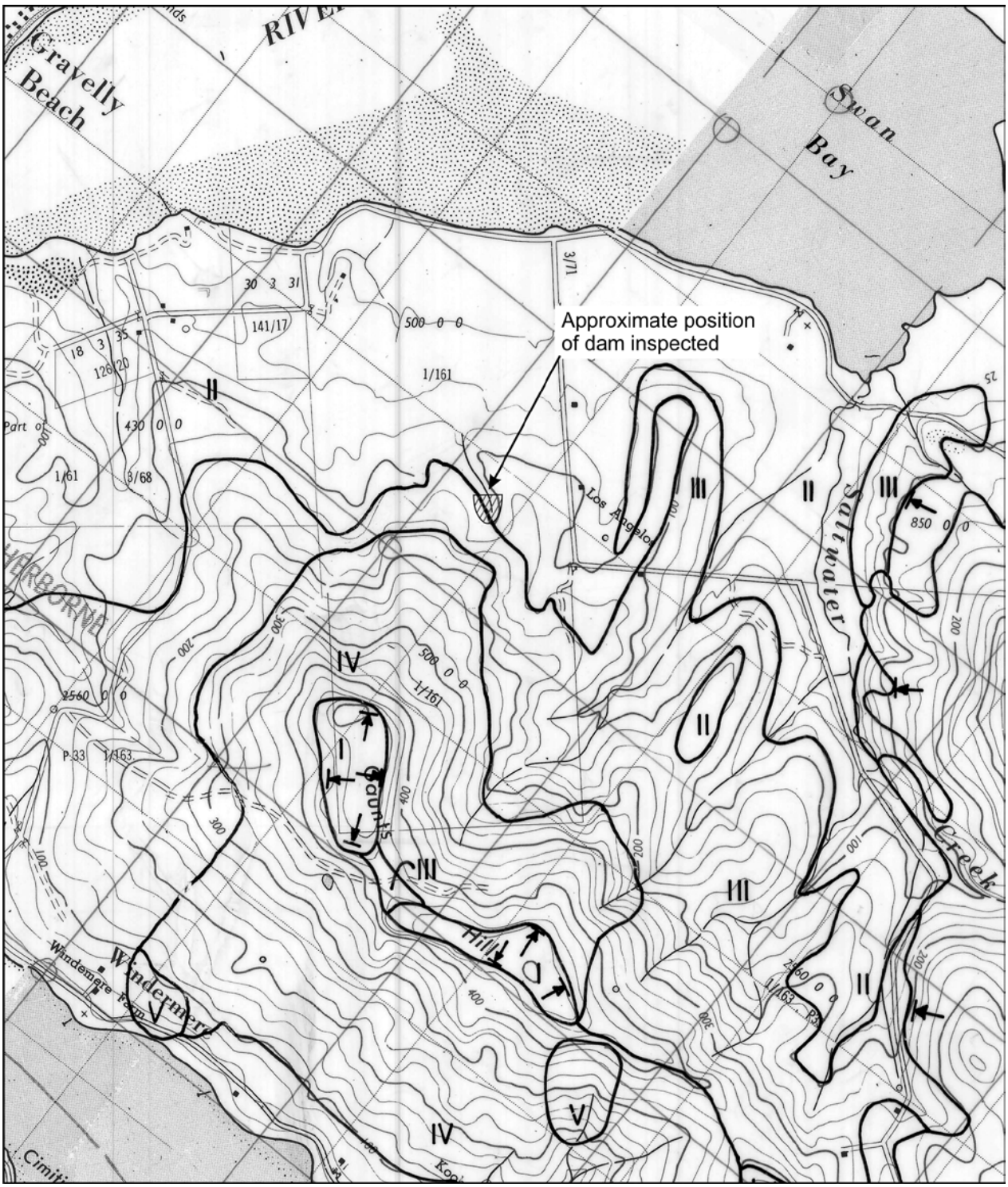


**Figure 1**

*Location of dam inspected*