

## 3.0 PHYSICAL RESOURCES

### 3.1 Soils and Topography

The original landform was an extension of the build up of sand dunes from the adjacent beach. This was considerably modified with earthworks during the construction of the port where a new channel was created for the river. The area of the reserve is located on a natural sand dune. The soils are sandy and free draining. They would dry out in summer.

The ground is flat with little fall, except towards the river and the beach. The surface is relatively even with few hollows and bumps. Most of the area of the Cut is shaded by large trees. Individual trees occur along the foreshore area.

A thick turf of grass could be difficult to maintain with heavy shading, persistent use and the drying effects of the hot dry summers. An example of this occurs on the grass bank of the foreshore along the side of the surf club. A large area of sandy soil is exposed.

### 3.2 Drainage

The land naturally drains although surface water tends to pond where soils have been compacted and ruts formed by vehicle traffic.

**Vegetation** ▶ There are a number of large Morton Bay Figs established in the Cut. A line of Norfolk pines and Radiata Pines generally run along the foreshore. They are accompanied by juvenile Pohutukawa Trees and various native shrubs. A thick screen of vegetation runs along the embankment adjoining the river in the Cut and along the fenced boundary of the camping ground. A hedge of Coprosma runs beside the path from Grey Street to the Surf Club which effectively screens the adjoining grassed area from the sea.

A short length of the camping ground fence next to the tennis court has no screening which allows a direct view of the sea from the adjacent campsites. These sites are popular with campers as are all the sites along this side of the camp because of the greater distance away from the noise generated by the traffic and the railway line on the other side of Awapuni Road. Otherwise the vegetation provides some privacy to the campsites but there is no evidence to suggest this screening is a pre-requisite of staying in the camp.

In places vehicle paths have pushed through the vegetation along the fringes of the Cut. These plants would be resilient to normal use, but cannot cope with this type of abuse. Planned and developed parking places and pedestrian access points along with barriers will effectively protect these plants. The planting in this area has been specifically designed to incorporate salt resistant species [see vegetation list]. Where these plants and trees have been relatively undisturbed they have flourished. In places seedlings abound. In other places pressure of use has effectively stunted the growth. Enhancement planting would be necessary for this vegetation cover to meet its full potential particularly along the river margins of the Cut.

Continuous foot traffic has worn a path on the grassed areas along the foreshore in places exposing the soil. Increased use of this area for pedestrian traffic would require a formed path or boardwalk. Regrassing of the exposed soil on the grass bank will be necessary.

In some places uncontrolled growth has occurred particularly along the eastern fenceline of the camping ground. Some of these trees and associated undergrowth should be removed or trimmed to encourage better use of the reserve.

A number of specimen trees are very old and will require removal at some stage before they fall and cause damage.

The demand for shade would see further planting of appropriate shade trees as necessary, particularly along the foreshore area towards the Surf Club.

One further area needs planting. The open stretch of grass between the Cut and the Waikanae Creek should be planted and protected consistent with the adjoining area. Pedestrian access should be retained to Awapuni Road and to the proposed footbridge across the Creek.

**Climate** ▶ The local climate is very similar to the rest of Gisborne, mild in winter often with hot dry summers. The closeness of the sea modifies the high temperatures but the ground still has a tendency to dry out in summer. There is natural shelter from the large number of established trees and the reserve is shaded from the heat of all day sun. The area adjoining the beach experiences the usual afternoon sea breezes and is exposed to the southerly wind. This can cause sand drift off the beach.