

Canal Revetment Walls



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Revetment walls are permanent structures located along the canal frontage of land. Revetment walls prevent subsidence of the land into the canal and protect it from erosion caused by the canal system's tidal waters and boat wash.

The concrete canal retaining walls have an engineered design life and will require regular inspection and proper maintenance.

Who is responsible for these walls?

Canal walls located in front of private property are the responsibility of the property owner, including maintenance and ultimate replacement.

Canal walls located in front of Council-controlled land such as parks, road reserves or drainage reserves are the responsibility for Council to maintain or eventually replace.

What types of walls exist?

The existing walls vary in profile, height and level relative to tides within the canal systems and include reinforced concrete, mass concrete and flush kerb type structures. These walls may also include integral step iron type ladders for access, vertical joints at regular intervals and weep holes. Should specific details be required for the wall adjacent to your property, it is recommended that you contact Council on the number below.

Photographs of typical walls for the respective systems are shown below.

Minimum recommended maintenance

As a minimum, it is recommended that the following maintenance works be undertaken:

- Regular maintenance inspections;
- Weep hole maintenance; and
- Joint maintenance.

Bribie Gardens



Pacific Harbour



Newport Waterways



What are weep holes?

Small diameter holes are generally cast into the wall during construction to allow for the ongoing free drainage of ground water from the land in order to relieve pressures against the wall. Generally, the landward face of the wall at the weep holes is also covered with a geotextile material to ensure backfill material placed behind the wall does not erode out of these weep holes following rain events, leaving a cavity behind the wall and potentially leading to subsidence in the land above.

How often should these walls be inspected?

Due to the dynamic environment where these walls are located, it is important to inspect the condition of your wall regularly.

Who should undertake the inspections?

The canal property owner should arrange for a suitably qualified professional engineer to assess and report on the structural integrity of their revetment wall including the need to perform any work considered necessary. Development Approval may be required for any work identified.

What can property owners do that can assist in maintaining the wall?

In addition to regular maintenance inspections, the following matters must be considered to ensure that revetment walls are not inadvertently compromised:

- Do not place structures and fill in close proximity to the wall;
- Planting of any vegetation, particularly trees, close to the wall;
- Checking that pools or irrigation systems on the property do not leak;
- Ensuring pool overflows and roof water drainage systems are directed to the street drainage system; and
- Ensuring landscaping improvements on the property do not concentrate storm water flows over the wall, which can lead to scours on the canal bank, particularly at low tide.

What could happen if I do not fix up my revetment wall when required?

Revetment walls can collapse if they are not adequately maintained. Depending on the size and location of the wall, the consequences of falling walls could have severe impacts on nearby structures, people, neighbouring properties and the canal environment.

Apart from any other impacts, the cost of replacing the original wall structure is likely to be high due to the location within the coastal environment.

If property owners have concerns regarding their revetment walls, it is recommended to seek advice from a suitably qualified professional engineer to assess the structural integrity of their revetment wall and undertake repairs if required.

Who maintains the canal in front of the wall?

Council undertakes regular inspections of the canal slope in front of the revetment walls and arranges for works to this area when considered required.

Further information:

Moreton Bay Regional Council is committed to working with local property owners to ensure the long-term viability, safety and amenity of Bribie Gardens, Newport Waterways and Pacific Harbour canal systems.

If you require further information, contact Moreton Bay Regional Council on 3205 0555.

