



Channel Design

We have been busy working closely with relevant stakeholders – including the Harbourmaster, Northport and North Tugz to figure out the best possible channel design

How did we go about designing the channel?

We commissioned independent experts to come up with a number of possible channel options. These options were then assessed, tested, and narrowed down to a shorter list.

The shortlist was put to the test via simulations that considered a range of operating conditions including arrivals and departures, different weather conditions and night vs. daytime sailing.

A preferred option emerged that ticks all the right boxes:

- ☑ Safest and simplest to navigate – a big improvement for ship pilots and risk reduction
- ☑ Avoids impacting ecologically sensitive, important landscape or natural character areas
- ☑ In line with international best practise channel design character areas

What are the key recommendations?

The preferred option includes some channel deepening, channel re-alignment, relocation of existing aids to navigation (lead lights, buoys and hazard markers) and the addition of a few new aids to navigation.

Some dredging of the entrance to the harbour, the approach to the refinery and around the refinery jetties is needed. The dredged material (mostly sand) will need to be disposed of at carefully selected sites.

The channel will be re-aligned for safety, straightening the current 'S-bend' that ship pilots have to navigate as they pass a rocky hazard at Home Point. Some aids to navigation will be added or re-positioned where necessary and designed to minimise their visual impact.

What will I see that is different?

- ⊕ Replacement of the port entry lead's dayshape with a day/night lead light
- ⊕ Nine existing buoys re-positioned including Fairway buoy
- ⊕ Two new buoys added around Fairway Shoal
- ⊕ A new hazard marker at Home Point
- ⊕ A new set of lead lights at Taurikaura Bay to ensure ships are on the correct line as they pass the rocky outcrop at Home Point.



KEY

- ▲ Current buoys
- ▲ Shifted buoys
- - - Current S-bend track
- New straight track
- New lead lights
- ★ New hazard marker

If you'd like to know more of the nuts and bolts of the channel design, you can get a copy of the independent expert's report [here](#)