

## A Smarter Stormwater Solution



**Who:** Private homeowner

**Where:** Epsom, Auckland

**Products:** 2x 10,000 litre ENDURO Underground Tanks

**Why:** A private homeowner was adding onto his Epsom home, and for water runoff purposes, he required about 17,000 litres of underground stormwater detention. He had a shallow invert outlet pipe discharging to an existing Onehunga pit, so his engineer originally chose 4 x tubular tanks, each 13 metres long and 650 mm in diameter. While four of them would have done the job in this situation, the cost and installation requirements made them less than desirable, so our homeowner approached Promax in search of a smarter solution. We thrive on a challenge, so we reached into our “toolbox of innovation” and pulled out a rectangular answer from outside the square.

**What:** Using the Promax ENDURO Partial Volume Calculator, we determined that 2x 10,000 litre ENDURO series underground tanks would hold as much water at a shallower invert depth as 4x tubular tanks because a rectangle offers more storage capacity than a tube, inside the same footprint area. With the detention outlet at a shallower invert height as initially required, our stormwater solution was an easier option for our client. In many ways, it was a case of “less is more”, starting with two tanks instead of four. There were other benefits too:

- Less excavation. 13 to 15m<sup>3</sup> less soil to remove from the site with a smaller excavation zone
- Less backfill material. 15 to 20 m<sup>3</sup> less backfill material is used.
- Lower installation costs with only two tanks to install.
- Lower crane hire charges. Only two tanks craned over the house to the installation zone.
- No piling required. Tubular 13-metre tanks would have encroached on the area of influence to the boundary. This would need piles to be sunk at the tank ends to move the tanks outside the neighbouring area of influence. This wasn't an issue with ENDURO tanks.

“We've always done it this way” is a common phrase we've all heard. But, at Promax, convention isn't necessarily the right way. Instead, we believe innovation is the key to superior customer service, and our rectangular ENDURO tanks are proof of that. Contact the Promax team for a better way of doing things.

### Contact Us:

Promax Engineered Plastics Limited  
PO Box 749, Kerikeri 0245, New Zealand  
T: 0800 77 66 29  
E: sales@promax.co.nz