

## **AdvanTex® Wastewater Treatment Systems for Marae**

### **A Cost Effective and Environmentally Excellent Solution**

### **New Zealand Examples and Summary of Capital Costs**



A Marae is a sacred meeting point for a community that wishes to gather, rejoice, and learn.

Having a wastewater system that is designed to perform highly despite intermittent usage, as well as making no noise or smell, is critical to honor the Marae environment and community experience.

To cater for highly fluctuating usage seen in a typical Marae, Innoflow has designed a system that uses buffering tanks, which hold, balance and limit flows to the wastewater treatment plant. In this way, a small wastewater system, and a small land application area can be utilised thereby limiting the footprint and capital costs of construction. This also means more land becomes available for other use.

Innoflow has installed and maintained many Marae wastewater systems around New Zealand, and this document shows just a few examples.

The AdvanTex® system provides some key advantages to Marae, including;

- simple, largely passive, and resilient to fluctuating use
- scalable, allowing for system to expand as Marae gets bigger or has plans for future development
- easy retrofit options for sites with existing septic tanks or infrastructure
- very low ongoing operating costs
- high quality components with long warranties (e.g. 5-year warranty on system)
- minimal visual impact and no noise
- produces consistently high quality treated effluent for effective reuse and land irrigation

Please contact Innoflow on +64 9 426 1027 or [info@innoflow.co.nz](mailto:info@innoflow.co.nz) should you require a design and cost for a wastewater system for your Marae.





## Ōtākou Runaka Marae (Dunedin)

Installation date: 2013

### Usage and design summary:

- Occupancy: 50-day guests, 150 overnight guests and general use
- Peak volume over 3-day event: 63,500 L/day
- Buffered volume using a buffered AdvanTex ® system: 10,000 L/day
- Required effluent quality:  
BOD<sub>5</sub> :<20mg/L  
TSS:<30 mg/L
- Land application method:  
highly treated effluent applied to 2,000m<sup>2</sup> pressure compensating dripline field

### Cost of scheme:

Supply of wastewater treatment plant, land application system and grease trap: \$106,500 + GST



## Te Papa O Rotu Marae (Dunedin)

Installation date: 2012

### Usage and design summary:

- Occupancy: weekend visitors, small events, and occasional Tangi
- Peak volume over 3-day event: 20,000 L/day
- Buffered volume using a buffered AdvanTex ® system: 9,590 L/day
- Required effluent quality:  
BOD<sub>5</sub> :<20mg/L  
TSS:<30 mg/L
- Land application method:  
highly treated effluent applied to 1,920m<sup>2</sup> pressure compensating dripline field

### Cost of scheme:

Supply of wastewater treatment plant, land application system and grease trap: \$153,895 + GST



## Waipapa Marae Waitotara (Taranaki)

Installation date: 2009

### Usage and design summary:

- Occupancy: general visitors and 150-person overnight events
- Peak volume over 3-day event: 15,000 L/day
- Buffered volume using a buffered AdvanTex ® system 10,000 L/day
- Required effluent quality:  
BOD5 :<20mg/L  
TSS:<30 mg/L

### Cost of scheme:

Supply and installation of wastewater treatment plant, land application system and grease trap: \$73,485 + GST



## Rewiti Marae (Auckland)

Installation date: 2014

### Usage and design summary:

- Occupancy: 100 day and 60-person overnight guests plus general use
- Peak volume over 3-day event: 23,700 L/day
- Buffered volume using a buffered AdvanTex ® system 6,000 L/day
- Required effluent quality:  
BOD5 :<20mg/L  
TSS:<30 mg/L

### Cost of scheme:

Supply and installation of wastewater treatment plant, land application system and grease trap: \$134,700 + GST



## Umupuia Marae (Auckland)

Installation date: 2011

### Usage and design summary:

- Occupancy: 400 day and 100-person overnight guests plus 3 permanently occupied residential dwellings
- Peak volume over 3-day event: 31,000 L/day
- Buffered volume using a buffered AdvanTex ® system 10,000 L/day
- Required effluent quality:  
BOD5 :<20mg/L  
TSS:<30 mg/L

### Cost of scheme:

Supply and installation of wastewater treatment plant, land application system and grease trap: \$157,123 + GST

## Contact Innoflow for Design and Pricing Information

We can be contacted on +64 9 426 1027 or [info@innoflow.co.nz](mailto:info@innoflow.co.nz)