

# Redesigning a stormwater drainage reserve

In 2015, Tauranga City Council engaged Boffa Miskell to prepare an updated comprehensive landscape concept plan for the Papamoa Stormwater Reserve.

This was a refinement of the previously consented concept plan Boffa Miskell prepared in 2004. The 78-hectare reserve is associated with the former alignment of the Wairakei Stream and is contained within a very narrow 15 kilometre drainage area with varying high to low levels of naturalness and urbanisation.

The second stage of the project was to prepare the construction drawing package for implementation that commenced in 2018.

Te Ara O Wairakei Stormwater Reserve, like many other water courses in the country, has a history of channelisation and misunderstanding of function – areas important to rehabilitate and celebrate by improving natural habitats for native species, and provide improved opportunities for park users. Despite its modified state, the reserve also contains several important archaeological features, including a unique swamp pa.

Five key components were incorporated within the design concept: stormwater function; ecological enhancement; recognition of cultural connections and archaeological features; enhancement of recreational opportunities; and improvement of local amenity values.

A key aspect was the long-term and separate engagement with the

five local communities associated with five different sections of the reserve.

This was to ensure that the design responded to the different site conditions for each section, and the community's perceptions of the reserve's positive qualities; and addressing specific concerns regarding reserve management.

The project involved the preparation of a guiding concept plan and vision statement, engagement media and expertise, detailed design for each of the five major reserve sections, resource consent applications and archaeological authorities for the proposed works required to implement the design.

The project has since been implemented successfully with Boffa Miskell playing a key role in supervising the implementation between 2018 and 2021.

During this time, there have been 8.5 hectares of new wetland and lowland shrubland planting created, using over 300,000 plants (6000 planted by the community), 10 kilometres of new shared pathways installed, with wayfinding and interpretation signs along the network.

