

3.5 Te Kori Scott Point



New Zealand's first fully sustainable sport park, Te Kori Scott Point is designed to meet the needs of an Auckland community of around 20,000 new residents. It provides facilities for sport and active recreation, informal recreation as well as ecological restoration and conservation. This case study highlights the value of integrating spaces and places with the fabric of place, as well as using nature-based solutions to reduce environmental impact and operating costs.

Client/Location:

Auckland Council
Hobsonville, Auckland

Case Study Stage:

Site clearance and forward earthworks completed May 2022

Project due for completion April 2025

Construction Value:

Approx. \$35M

Features:

- New Zealand's first sustainable sport park
- 2 baseball diamonds
- Footpaths / cycleways
- Infrastructure Sustainable Council's 'Leading' rating
- Ecological restoration
- Play area and hard courts
- Natural and artificial turf sport fields
- Provision for a multi-functional building

Sustainability:

Water:

- 36% reduction in water use by implementing a site-wide drainage water capture, treatment, storage and re-use methodology.
- 100% self-sufficient for non-potable water.
- Use of alternative turf types, reducing depth of sub-surface irrigation.

Energy:

- 23% reduction in direct emissions during sport field construction.
- 7% reduction in direct emissions for park maintenance.
- Total project operational GHG emission reduction of 14%.

Materials:

- 5% reduction in embodied GHG emissions.
- Use of drainage cells under No. 1 field to remove aggregate layer.
- Reduce sand carpet thickness on fields 2 and 3.
- Timber bollards instead of aluminium.
- 521m less kerb and channel due to carpark redesign.
- Mulching and hay used to stabilise ground in place of geotextiles.

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For more information, read the ISC reports and Auckland Council reports throughout construction: <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-projects/projects-north-Auckland/Pages/scott-point-sustainable-sports-park.aspx>

Key Metrics:

Climate Zone: 1

Floor Area: N/A 16.4 ha site area

Occupants: N/A

Key Information

The site-wide water capture and re-use strategy is a significant feature of Te Kori Scott Point. Following analysis of water use and potential water sources on site, a system was devised that would require zero supplementation from the town supply. This was achieved with stormwater capture and holding tanks beneath the artificial turf fields, which can be emptied on-demand into a main holding tank. Water capture from hardstand areas also feed into the main holding tank. The main turf field features its own below ground water storage and sub-surface irrigation system, reducing the need for additional irrigation water.

Biodiversity enhancement and carbon offsets were achieved by significant planting around the site. The trees provide habitat for local species while also offsetting the carbon lost when removing trees from the sport field areas. Additionally, the 'at risk' *Epilobium hirtigerum* plant species was transplanted within the site and native copper skink were provided with a safe area on-site. Since works began, the New Zealand dotterel/tūturiwhatu, an endangered shorebird, has nested and successfully reared chicks on the site.

A 90% reduction in construction and demolition waste going to landfill was achieved by completing a thorough inventory of what was existing on-site and identifying alternative waste streams and re-use possibilities for site-won material prior to works commencing. The first phase of construction works achieved 87% diversion with additional efforts being made to further analyse and identify diversion possibilities in subsequent phases to achieve the initial target.