

Boffa Miskell



M2PP Expressway

02

Multi-disciplinary teamwork underpins highway construction on the Kāpiti Coast.

— SEE PAGE 2

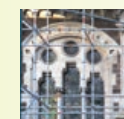


Restoring waterways

05

Innovative approaches to stream restoration has the support of clients, contractors and communities.

— SEE PAGE 5



Creativity in heritage

08

Contemporary design in harmony with heritage is key to developing the Christchurch Arts Centre into a creative hub.

— SEE PAGE 8

winter²⁰¹⁴

35
issue number

Boffa Miskell

news



Editorial:

Our legacy honoured

Queen's Birthday – thanks, Elizabeth, for the sleep-in. Dash to the front gate for the paper to read over breakfast. There it is – headline news – Officers of the New Zealand Order of Merit to Don Miskell and Frank Boffa!

How exciting, how deserved. Two people who have worked together as ground-breaking leaders of New Zealand's landscape architecture profession. And the two people whose names identify this company and whose values, vision, energy and quirks have made Boffa Miskell distinctive and successful.

For over 40 years, Boffa Miskell has been associated with land developments that have led change in New Zealand's infrastructure, its economy, its landscape and the way people live within it. Whilst at times professionally challenging, these developments have also presented opportunities to influence New Zealand's future.

Don and Frank care deeply for the outcomes of their work and making New Zealand a better place. Boffa Miskell remains purposefully a 100% New Zealand owned company, still ingrained

with Don's and Frank's values. I believe this passion and commitment gives us insight and an undefinable edge that continues to manifest in our projects, including those featured in this newsletter.

Our work demonstrates our intuitive ability to connect with, and express those undefined qualities of what it means to be a New Zealander, and highlight our continued contribution of excellence to the evolution of New Zealand's built, economic and social landscape.

Thank you Frank and Don. Savour those moments at your investitures and we will continue on the good work.

Nicola Rykers, Director

Boffa Miskell NEWS

winter ²⁰¹⁴

This newsletter is published by Boffa Miskell Ltd. Back issues are available on www.boffamiskell.co.nz.

COVER: Federal Street, one of the Auckland City CBD shared space upgrades, designed by Boffa Miskell. Photograph by Claire Hamilton.

ILLUSTRATIONS: P2-3, courtesy New Zealand Transport Agency.

Edited by: Shona McCahon.

Designed and produced by: DNA



Receive **Boffa Miskell NEWS** electronically:
email dianne.skelton@boffamiskell.co.nz

High revs on expressway construction

As the 18-kilometre M2PP Expressway forges ahead from MacKays Crossing to Peka Peka on the Kāpiti Coast, a dedicated Boffa Miskell team is working at the Paraparaumu-based M2PP Alliance project office, providing landscape, ecology and urban design input.

The pressure is on to complete, by mid-2017, the construction of the seven-year expressway project. The expressway will form part of the Wellington Northern Corridor, one of the Government's seven 'roads of national significance' (RoNS) being developed by the NZ Transport Agency (NZTA).

Gaining consent

In fact, the pressure has been on since the M2PP Alliance first engaged Boffa Miskell in January 2010 in the tendering process. Boffa Miskell then worked as part of the Alliance in the pre-consent phase to provide ecology, landscape architecture, urban design and cultural advisory services, as well as joint planning services in the preparation of the Assessment of Effects (AEE) for the entire project. The team presented expert evidence at the Board of Inquiry hearing in 2012/2013, including extensive landscape and ecological mitigation proposals.

As Consenting Manager, Boffa Miskell planner Robert Schofield, had overall responsibility for the huge task of preparing the Notice of Requirement and resource consent applications, which included co-ordinating the outcomes of



▲ The common bully (*Gobiomorphus cotidianus*) was the smallest fish species rescued at the Muaupoko Stream diversion by the Waikanae River for translocation.

public consultation and the input of numerous specialists into the route selection and assessments of effects. He also led the extensive planners' conferencing and preparation of consent conditions that paralleled the hearing.

"It was crucial to have a route selection process that would withstand intense scrutiny," Robert recalls. "We used multiple criteria to assess and refine the options, incorporating the results of two major public consultations and addressing the major issues, such as the significant effects on Māori and ecological values.

"The huge concerted effort of the whole M2PP project team enabled the design to be done and approvals obtained in just three years."

Into action

Team collaboration is still strong in the detailed design, specification and construction phase now being carried out by the M2PP Alliance, comprising NZTA, Beca, Fletcher Construction and Higgins Group, supported by Goodmans Contractors, Synergine and Boffa Miskell.

Boffa Miskell is responsible for addressing the complex landscape, ecology and urban design consent conditions through 25 site-specific management plans – all requiring Kāpiti Coast District and Greater Wellington Regional Council certification.

With all disciplines working together at the project office and able to confer directly with the construction crews, design and implementation decisions are rapid and well-informed, according to Boffa Miskell team leader and landscape architect, Bron Faulkner.

"The close working relationships are ideal for integrating our services and optimising the synergies. For instance, the large areas of landscape and ecological mitigation planting have been designed to off-set stream and wetland loss, and contribute to stormwater management, visual amenity, urban form and biodiversity values. That integrated approach will give the community a lasting legacy."

CONTACT: Bron Faulkner bron.faulkner@boffamiskell.co.nz

▼ Ecologist Matiu Park, assisted by Bron Faulkner, undertake fish rescue from the temporary Waikanae Waste Water Treatment Plant stream diversion, which is lined for erosion protection.



Rescue and protect first

With the heavy machinery advancing daily, Boffa Miskell ecologists are having to move fast to keep ahead.

In the office, the ecology component of site-specific environmental management plans must be finalised for certification. On site, temporary and permanent culverts and stream diversions must be designed, checked and signed off for compliance with consent conditions.

Rescuing as much native fauna and flora as possible ahead of site works is a priority. Specific areas of vegetation are checked for presence of threatened bird species before removal and fish are rescued and relocated before watercourses are diverted. The results vary, but as many as 680 fish have been rescued from just 80 metres of one stream.

Boffa Miskell ecologist, Matiu Park, says the rescue operations have boosted awareness and appreciation of the natural values along the M2PP route.

"Having seen what's out there, the crews are really motivated to take care. At the Otaihangā wetlands, for instance, the Goodmans' and Fletchers' construction crew salvaged almost all the wetland plants under the road footprint for later restoration work."

Behind the scenes, Matiu says there's been good overlap between the disciplines, with the ecologists, storm-water engineers, hydro-geologists and landscape architects, working together to ensure detailed design meets habitat requirements, site conditions and amenity objectives.

Key facts

Construction period: 2014-2017

Planting: 145 ha, mostly indigenous eco-sourced

Plants: 1.3 million

Walkway/cycleway/bridleway: 16 km

New wetlands: 5.4 ha in offset mitigation

Stream rehabilitation: 5.2 km in length

▲ Work in progress at Otaihangā (foreground): much of Boffa Miskell's work is in developing a strong spatial and planting framework to help integrate the M2PP Expressway with adjacent areas.

Earthquake recovery projects

As the Government develops momentum on its earthquake recovery plans for Central Christchurch, Boffa Miskell is pleased to be providing a range of services for development of a significant number of the Anchor Projects. Our contribution spans the following:

Anchor Projects in the Central City Recovery Plan

Otakaro / Avon River Park: landscape design leadership, concept and detailed design in association with Opus and Landlab.

East Frame: planning and landscape design of the public realm in association with Opus and Landlab.

Justice and Emergency Service Precinct: cultural, planning, and landscape design.

Convention Centre: landscape/urban design services.

Metro Sports Facility: concept landscape/urban design and cultural services.

Other recovery projects

We are proud to also be involved with the following organisations as part of their recovery:

Christchurch Arts Centre: see page 8.

Lyttelton Port – Recovery Plan: preparation of visualisations for the 'Port Lyttelton Plan, Our Future' document.

Christchurch City Council – Albion Square: detailed design and construction observation of a public square in Lyttelton.

Canterbury Cricket – Hagley Oval: landscape assessment for international cricket venue.

Canterbury University: landscape design services for the registry and library buildings.

CONTACT: Nicola Rykers Nicola.rykers@boffamiskell.co.nz



▲ Visualisations of potential Waterfront redevelopment at Dampier Bay, Lyttelton Port, for public consultation.

Industrial stormwater with a difference

Stormwater management is a key issue in industrial landscapes where extensive hard surfacing results in large volumes of runoff. The issue is compounded where there is limited capacity in downstream water courses, high groundwater levels, and poorly draining soils.

This was the situation facing the Porter Group and Hamilton JV when planning the 130ha Te Rapa Gateway industrial park in the Rotokauri industrial strategic growth node on the north edge of Hamilton. A comprehensive stormwater management plan was required to obtain resource consent.

Mike McLennan from project managers, Integrated Development Services Ltd, engaged Boffa Miskell to assist by providing integrated planning, ecology and landscape services together with Lysaght Consultants' engineering services.

"The growth area is in the headwaters of the Mangaheka Stream which drains via a narrow water course to the Waipa River over 9km to the north, so we advised a catchment-wide approach," explains Boffa Miskell planner Craig Batchelar. "Our clients commissioned ecological, hydrological and urban design assessments, preparation of a restoration vision and consultation, to guide long term improvement of the entire catchment."

The resulting large-scale stormwater system, designed to low impact design principles, will manage stormwater across the new industrial area. It is expected to improve water quality in downstream watercourses compared to pre-development.

Stormwater is directed into an open swale network down the median of the main access road which discharges into a storage basin. There, flow is controlled to prevent downstream from scour. The road corridors are designed to convey and store runoff from up to 100-year rainstorms. The basins and swales are constructed

▼ In June, Hamilton Mayor, Julie Hardaker, opened the Te Rapa Gateway Industrial Park, assisted by Murray Porter (centre) and development manager Mike McLennan (left).



wetlands in which wetland plants will treat the stormwater and remove key contaminants.

Ecologist, Louise Clark, and landscape architect, Morne Hugo, have combined their skills to design a large-scale industrial landscape they say has a completely different look and feel.

"There's a softer edge than is usual for industrial developments because of the large scale of the stormwater wetland and swale system. It will not only treat stormwater but increase biodiversity, while providing an aesthetically pleasing development."

The positive outcomes from the proposals were well received by interested parties, which enabled resource consents to be processed without public notification.

CONTACT: Craig Batchelar craig.batchelar@boffamiskell.co.nz



▼ A departure from traditional kerb, channel and piping: wetland plants will clean stormwater directed into the central swale (pictured) and detention ponds.

Stream health in full flow

Restoring waterways is a very satisfying part of the Boffa Miskell practice.

“We’ve seen emphatic support from clients and contractors, who have taken pride in these stream projects as they have unfolded,” says landscape architect Mark Lewis, “but the best part is seeing community members enjoy and embrace the resulting enhanced environments.”

The implementation of these waterway projects is an all-encompassing design process, involving our ecologists, urban designers, and landscape architects, and working closely with engineers.

In recent years, bioengineering has increasingly replaced hard engineering approaches such as rock-filled reno mattresses and gabion cages. Instead, stable and functioning ecosystems are created, based on natural stream morphologies that can include meanders, pools and runs, riffles, rapids and cascades – depending on the gradient of stream, underlying geology and relationship with the floodplain. This design approach is carried through to implementation, where innovative construction methods often require Boffa Miskell ecologists and landscape architects to be on site, working closely with contractors and engineers to ensure a range of resilient habitats is created for plant and animal stream life.

Three examples of these types of projects are featured here.



La Rosa stream ‘daylighting’

Liberating parts of the Avondale and Parahiku Streams from underground pipes at La Rosa Gardens Reserve in Green Bay was Auckland’s first dedicated stream daylighting project. Boffa Miskell was involved from concept to completion, working closely with Auckland Council Stormwater, EDC Ltd Engineers and HEB construction.

Embraced by the local community, the project recently earned the IPENZ 2014 Arthur Meade Award for the Environment and Sustainability.



Duck Creek re-creation

Duck Creek in Whitby, Wellington, has been shifted 50 metres sideways over a length of one kilometre to make way for a Todd Property Group subdivision. The consent conditions required that the realigned stream look and perform as a natural waterway, with improved ‘Stream Ecological Values’ (SEV).

Having first established the baseline parameters of the existing stream habitat and rescued fish for translocation, Boffa Miskell worked very closely with the surveyors and engineers to map and plan the correct range of water gradients, habitats, banks and substrate along the new channel and flood plain. Much of the detailed design was done with the contractors on site during implementation.

A successful innovation was salvaging the cobbles from the existing stream, complete with their associated invertebrate life, algae and lichens. Their placement in the newly formed channel substantially fast-tracked the colonisation of the realigned stream.

Now, one year on, natural processes have created a stream habitat unrecognisable from a natural one, with fully recolonised aquatic biota and a diversity of fish species that mimics that of the former stream environment.

Oakley Creek restoration

Oakley Creek Te Auaunga in west Auckland has been realigned and restored for over a kilometre as part of the New Zealand Transport Agency’s State Highway 20 Waterview Connection construction project. Boffa Miskell worked closely with the Well Connected Consortium, in particular Tonkin & Taylor engineers and Fletcher’s construction teams, to resolve challenges of variable geology and significant flood flows, and deliver a significantly improved stream environment.

Boffa Miskell is now working with Auckland Council and Aecom engineers to restore the next 1.5 kilometres upstream through Underwood and Walmsley Reserves.



CONTACT: Mark Lewis mark.lewis@boffamiskell.co.nz or Vaughan Keesing vaughan.keesing@boffamiskell.co.nz

Passchendaele remembrance

One of seven poppy shaped gardens being developed at the Passchendaele Memorial Museum 1917, in Belgium, is the New Zealand memorial garden designed by Boffa Miskell.

It was the winning entry in an invited design competition run by the New Zealand based Passchendaele Society to commemorate the 100th anniversary of the Battle of Passchendaele.

Boffa Miskell landscape architect, Cathy Challinor, responded to the brief's three symbolic themes to acknowledge the loss of so many soldiers' lives in the war: remembrance through plant symbolism, remembrance through visual art and remembrance through literature.

"The Passchendaele Society was very receptive to the concept of using symbolism through design elements as a way to evoke the

▼ The poppy-shaped New Zealand memorial garden.



deep commemorative meaning. It is a privilege to work with them on such a special project," Cathy says.

Each theme is expressed as a discrete design element within the garden petals but the design themes also span the whole space to help unify the exhibit. The garden, which will be installed in 2015, will sit alongside those of six other participating countries.

CONTACT: Cathy Challinor cathy.challinor@boffamiskell.co.nz

Ruakura Board of Inquiry Approval

Approval of the proposed Ruakura Development Plan Change was announced in the Board of Inquiry's draft report and decision of 5th August.

The development will see Hamilton's urban area expand significantly on land that was returned to Waikato-Tainui as part of its Treaty of Waitangi settlement.

The introduction of a new inland port along with ultimately over 800ha of industrial, residential and open space land is of such a scale that the benefit to the regional economy is momentous for Hamilton.

Working with Tainui Group Holdings and Chedworth Properties, Boffa Miskell prepared the Plan Change providing planning, landscape, urban design and ecology services in developing the proposal and presenting evidence at the Board of Inquiry hearings.

CONTACT: Peter Hall peter.hall@boffamiskell.co.nz

Partnership in delivering biosecurity services

Under a new partnership agreement with Land Information New Zealand (LINZ), Boffa Miskell is to continue providing biosecurity services to LINZ for another seven years – but with a difference.



▲ Signing the partnership agreement (l to r): LINZ Procurement Manager, Tod Cooper; LINZ Chief Executive, Peter Mersi; Boffa Miskell Chief Executive, Kerry Gupwell; and Boffa Miskell Board Chair, John Goodwin

In addition to continuing the pest control programmes that Boffa Miskell has delivered on LINZ-administered unoccupied lands for the last five years, Boffa Miskell will work collaboratively with LINZ in a newly-formed joint partnership.

According to Crown Property Acting Manager, John Hook, the partnership aligns closely with objectives to ensure the best use of Crown property and to build strategic relationships across the public and private sectors.

"In signing up to a 7-year term, we recognised that the relationship between LINZ and BML is on a strong footing and that we can realise even more benefits by continuing to work together. The partnership signals a much greater focus on outcomes, collaboration and innovation, providing opportunities for more cost effective pest management strategies."

Boffa Miskell biosecurity project manager, Marcus Girvan, says the partnership offers exciting opportunities for both parties to invest in innovation, improve capacity and enhance biosecurity outcomes.

CONTACT: Marcus Girvan marcus.girvan@boffamiskell.co.nz



Hotel and convention centre concepts

SKYCITY Entertainment Group Limited has released concept plans for the New Zealand International Convention Centre (NZICC), a new hotel and a pedestrian laneway proposed for the land it owns between Hobson and Nelson Streets.

Boffa Miskell is proud to be part of the design team for the NZICC and hotel projects, which also includes Warren & Mahoney, Moller Architects and Woods Bagot.

Rachel de Lambert, Boffa Miskell Director of Design, has been appointed Director of Urban Design for the project, which she says is a great opportunity to improve the city for pedestrians and to continue the good work already underway.

"It will boost the urban amenity on the western edge of the city and deliver on some key initiatives signalled in the Auckland Central City Masterplan."

CONTACT: Rachel de Lambert rachel.delambert@boffamiskell.co.nz

Māori heritage appointment

Antoine Coffin, Kaiarataki, Te Hihiri (Strategic Advisor Māori), who is based in our Tauranga office has been appointed to the Māori Heritage Council.



The Council assists Heritage New Zealand Pouhere Taonga in developing and reflecting a bicultural view in the exercise of its powers and functions. It also advocates for the interests of Pouhere Taonga and the council on Māori heritage at any public or Māori forum, and makes decisions about registration listings of archaeological and Māori heritage sites.

Antoine has been working in the area of heritage management for some 17 years now, his focus at present on enabling iwi and hapu to effectively participate in local and regional planning processes and advising clients on methods to preserve heritage values whilst achieving development outcomes.

Ornithology advice

In May, ecologist Dr Leigh Bull, from our Wellington office, was invited to an Auckland Council forum with other leading New Zealand ornithologists, to discuss how to manage northern New Zealand dotterel that are breeding elsewhere from their traditional beach nesting sites.



With increasing pressures on coastal sites, the dotterel are moving inland – even to construction sites where Boffa Miskell has found them breeding on numerous projects.

Leigh says that DOC and Council recognise the important, if sometimes temporary, nature of such sites to the conservation of this threatened-status species.

Those at the forum, who also included DOC, Auckland Council, Auckland Airport, the Ornithological Society of New Zealand and community group representatives, discussed issues and options for managing the non-beach breeding dotterel at these sites.

BM News goes online

We are in the process of developing a new monthly online newsletter. As part of the process we will be contacting you via email, providing more details and asking you to opt in/out of the subscription.

We will continue to publish *Boffa Miskell NEWS*, however we will only be publishing it twice a year rather than our traditional three editions.

Senior appointments

We are pleased to announce the following appointments, which recognise high levels of expertise and leadership within the company.

Senior Principal

Janine Bell, Planning, Auckland

Tim Church, Urban Design, Christchurch

Richard Coles, Planning, Tauranga

Bron Faulkner, Landscape Planning, Wellington

Principal

Eddie Sides, Ecology, Auckland

Shannon Bray, Landscape Planning, Auckland

Stuart Houghton, Urban Design, Auckland

Mark Brown, Landscape Design, Christchurch

Andrew King, Landscape Design, Shanghai

Associate Principal

Chris Punt, Landscape Design, Auckland

Emma Todd, Landscape Design, Auckland

John Carter, Planning, Auckland

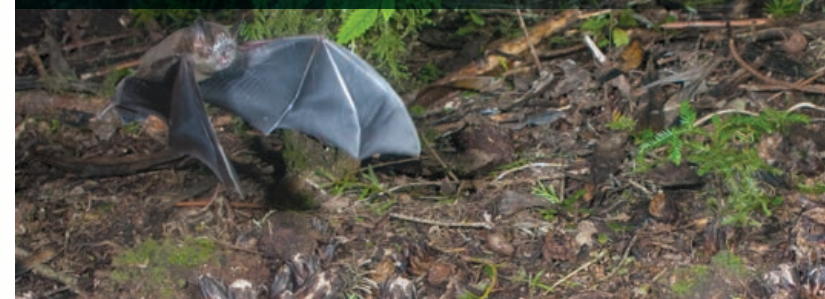
Vanessa Le Grand Jacob, Digital Environmental Solutions, Auckland

Greg Vossler, Planning, Wellington

Pauline Whitney, Planning, Wellington

Rhys Girvan, Landscape Planning, Wellington

▼ A short-tailed bat swoops down to feed on, and pollinate, native wood rose (*Dactylanthus taylorii*) inflorescences (foreground).



Publications

Science research published

Graduate ecologist in our Auckland office, Georgia Cummings, has co-authored an article published in the highly respected international *Journal of Zoology*, based on her masters degree research into the native short-tailed bat, *Mystacina tuberculata*.

The short-tailed bat is the only mammalian pollinator in New Zealand, yet its contribution to pollination of native flora has been little researched. Georgia found evidence that at least two plant species have adapted their flowering times so that they do not have to compete for the bat's pollinating services. This finding supports the recent discovery that the bat is a major pollinator of at least some native plants.

Georgia was interviewed by the *Journal of Zoology*. The podcast is available at the Wiley Online Library.

Think Piece on NZ King Salmon decision

There are important implications for planning in the approach taken by the Supreme Court in its decision on the resource management case between the Environmental Defence Society and NZ King Salmon.

The New Zealand Planning Institute (NZPI) commissioned Boffa Miskell planner Sarah Dawson and Helen Atkins, of environmental law firm Atkins, Holm, Majurey, to prepare a 'Think Piece' on this decision, to assist planners in their day-to-day work. The Think Piece, which focusses on the 'overall judgement' aspect of the decision, provides an overview of the decision before traversing its possible application to policy and plan making involving the *New Zealand Coastal Policy Statement*, other national policy statements, and regional policy statements and plans generally; as well as its application to resource consents.

The Think Piece is available on the NZPI website (www.planning.org.nz).

Christchurch Arts Centre: bringing the past into the future

In restoring New Zealand's largest cluster of category 1 heritage buildings to become a creative hub in central Christchurch, what landscape treatment is appropriate?

This is the fundamental question for landscape architect William Field, who is leading Boffa Miskell's design services on Stage 1 of a seven-year, \$290-million restoration project for the Christchurch Arts Centre Trust. William is part of a wider project team, which has been working to both repair the significant damage sustained in the earthquakes of 2010 and 2011 and to realise the Trust's vision for the Arts Centre – to be the cultural heart and hub for creative entrepreneurs in Christchurch.

The site is renowned for its gothic revival architecture and the attendance at former educational facilities on the site of Sir Ernest Lord Rutherford, Sir Āpirana Ngata and Dame Ngaio Marsh.

"Authenticity of place and respect for the fabric of the site is key," William explains. "A literal approach would be dishonest and fail

to adapt the site for future needs. Instead, we're developing a contemporary reinterpretation of the historic landscape, forms and patterns."

For the landscape concept, William has drawn on his background in fine arts, knowledge of contemporary art and design, and research into the site's historic values, which, he says, provides a rich design context. "There are numerous stories to tell but the challenge is to show restraint. It's tempting to over-design when our objective is to provide an elegant but refined setting for the heritage architecture, whilst inspiring creative endeavour.

"It's about contemporary design forms that are in harmony with heritage and about thinking creatively to integrate practical requirements."

The conceptual design is currently being developed as part of an overall site masterplan by a team which William describes as passionate about respecting the Arts Centre's history while creating an environment that will up-lift and inspire those who visit and use the site in the future.

CONTACT: William Field william.field@boffamiskell.co.nz



▲▼ The gothic architecture encloses many of the spaces on site, providing important cues to site character, materials and patterns for reinterpretation in the restoration design.



Boffa Miskell



WEBSITE: www.boffamiskell.co.nz

EMAIL: info@boffamiskell.co.nz



Receive Boffa Miskell NEWS

electronically: email
dianne.skelton@boffamiskell.co.nz

TAURANGA

Level 2, 116 on Cameron,
cnr Cameron Road and Wharf Street,
TAURANGA 3110
PH: 07-571-5511

AUCKLAND

Level 3, IBM Centre,
82 Wyndham Street,
AUCKLAND 1010
PH: 09-358-2526

WELLINGTON

Level 4,
Huddart Parker Building,
1 Post Office Square,
WELLINGTON 6011
PH: 04-385-9315
FAX: 04-384-3089

CHRISTCHURCH

Ground Floor,
4 Hazeldean Road,
CHRISTCHURCH 8024
PH: 03-366-8891

SHANGHAI

Level 4, Wukang Road,
SHANGHAI 20031
PR CHINA
PH: +86 21 6426 9886
FAX: +86 21 6426 9890