

Passchendaele Memorial Gardens

New Zealand Garden - Design Response

31 March 2014



Passchendaele Memorial Gardens

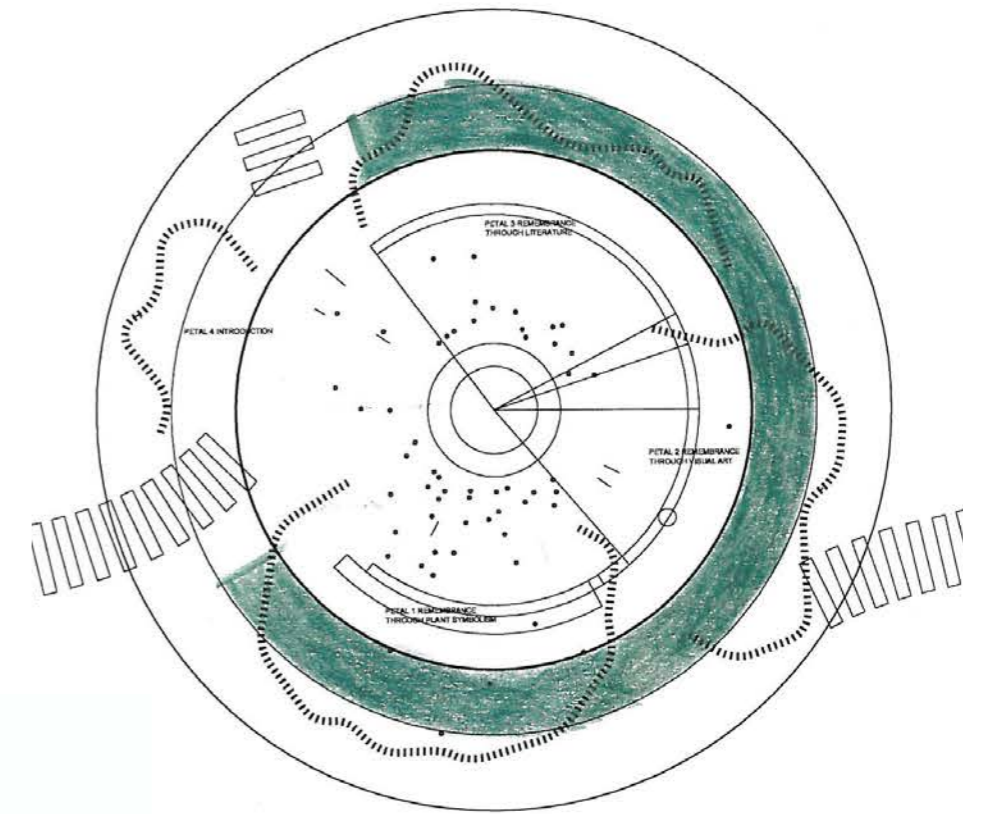
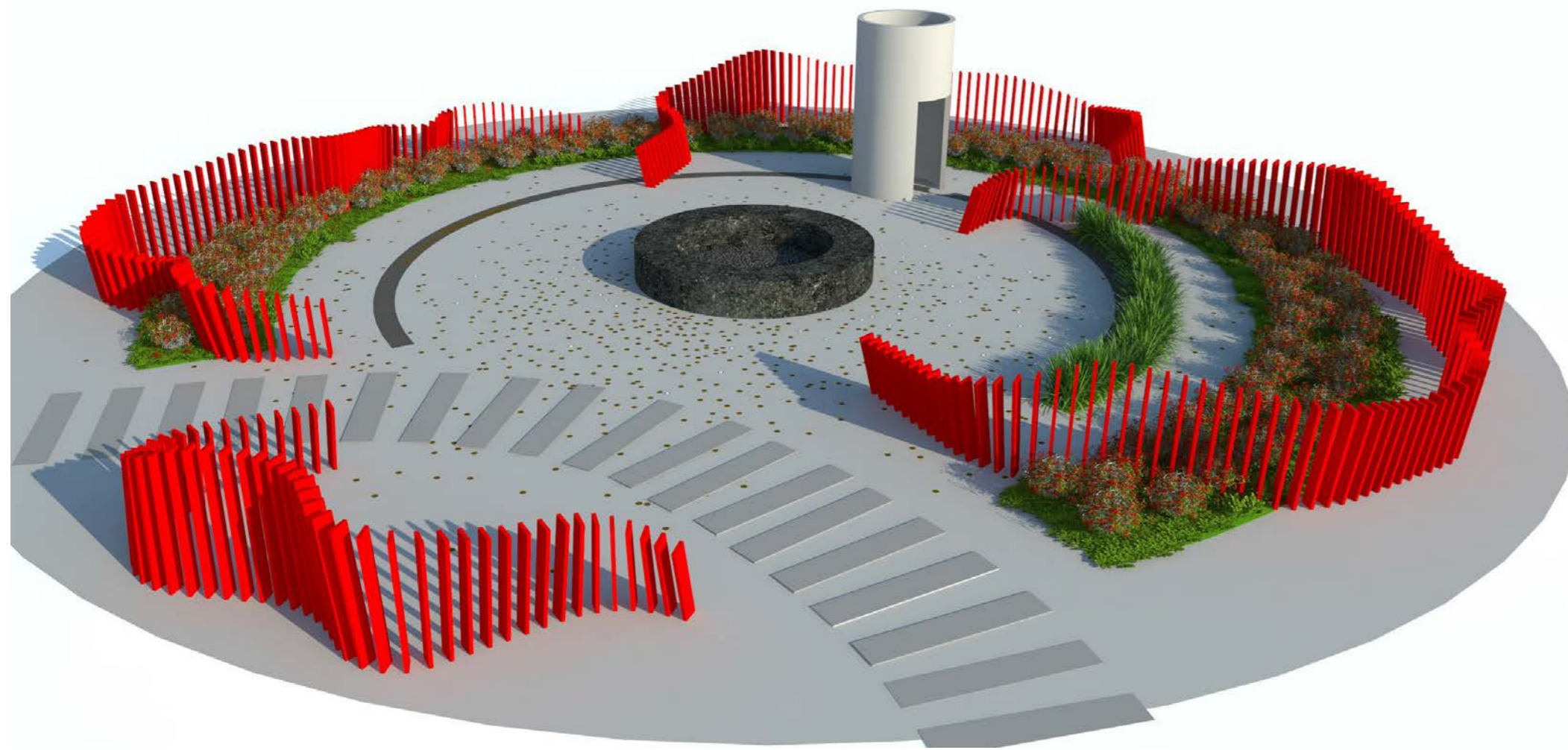
New Zealand Garden - Design Response

This design proposal has been prepared in response to the Passchendaele Memorial Gardens Terms of Agreement document, as provided to Boffa Miskell by the Passchendaele Society.

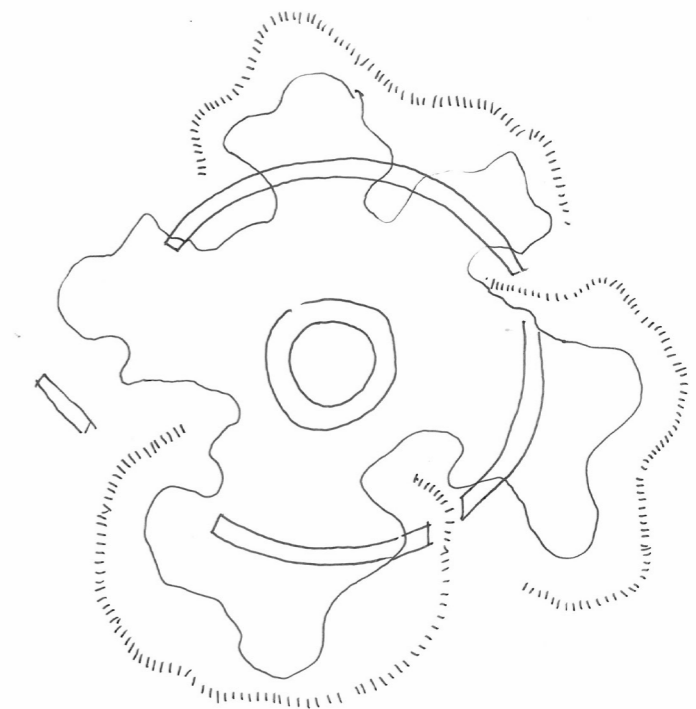
The following pages describe the design response to the themes of remembrance as identified within the terms of agreement as outlined below.

The design response to each of the themes is two-fold: **Unifying (a)** and **Individual (b)**

The **individual** response is a discrete design element that responds to the theme of the individual petal, and the **unified** response spans the whole poppy installation, as a way to unify the space as a single installation, exhibit and experience.



Concept Sketch: The Planting Curve



Concept Sketch: The Stone Arc

Remembrance through Plant Symbolism

(a) Unifying Design Element: The Planting Curve

A spatial organising element
Relates to an expression of the Circle of life
Expresses the individual, unique and iconic flora of New Zealand.

Represents the healing/soothing of spilt blood. Represented in an interwoven tapestry created by ground cover varieties of rātā and manuka running throughout the poppy design. This is expressed as 'The Planting Curve'

Rātā (*Metrosideros carminea*, Northern rata)

Māori legend tells of Tawhaki, a young Maori warrior, who fell to earth from heaven while trying to find help to avenge the death of his father. The crimson flowers of the *Metrosideros* genus are said to represent his blood.

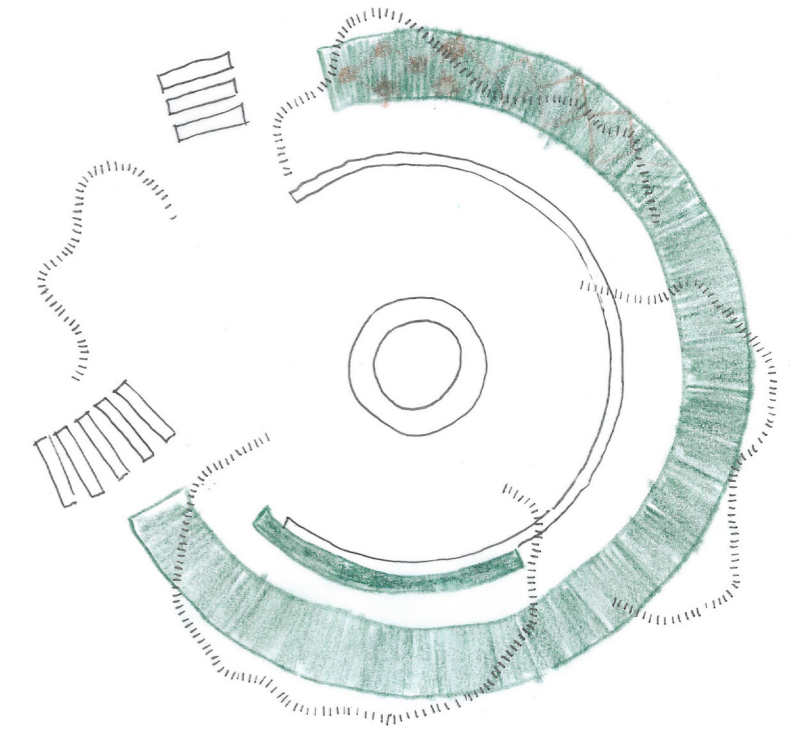
Mānuka (*Leptospermum scoparium*, tea tree, kahikatoa)

The healing qualities of mānuka have been long recognised by Maori. Traditionally used for infusions and topical preparations, the branches were also used for splints. Mānuka is widely renowned for its beneficial medicinal qualities, now commonly recognised in the form of honey made from its nectar.

Together, the ground cover varieties of rātā and manuka create an interwoven tapestry that represents the healing and soothing of spilt blood.

The refined palette of plant species cultivated from species indigenous to Aotearoa - New Zealand have dual significance, selected for their distinctive metaphoric and medicinal values. The selected species have been selected to signify remembrance of sacrifice, the cycle of life and healing, in addition to their traditional healing properties. The system of traditional Māori healing, rongoā, comprises diverse spiritual and physical therapies, including medicinal remedies derived from native plants.

The tolerance of the selected cultivars has been assessed to withstand Belgian climatic conditions, with plants able to perform outside of their natural range.

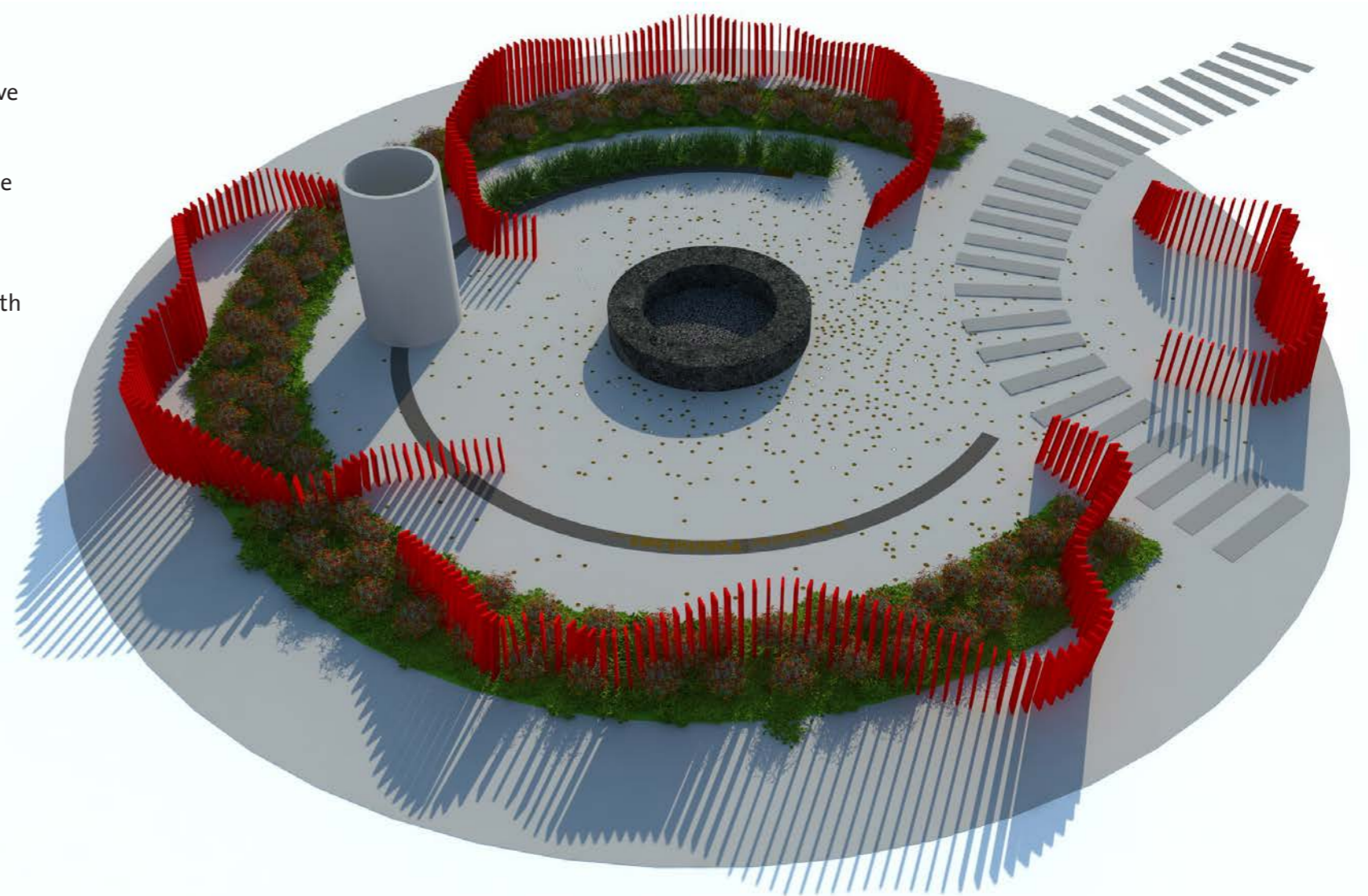


Concept Sketch: The Planting Curve

Rātā



Mānuka



Remembrance through Plant Symbolism

(b) Individual Design Element:

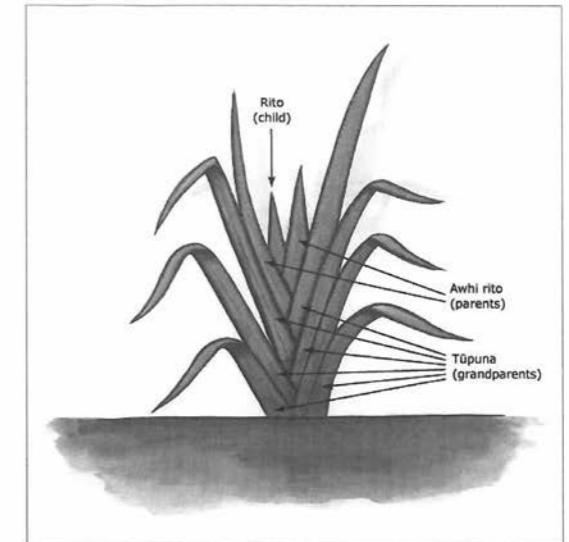
The Flax Swathe

Remembrance of our forebears, sacrifice of others for the generations to come. Represented in a planted swathe of harakeke within Petal 1.

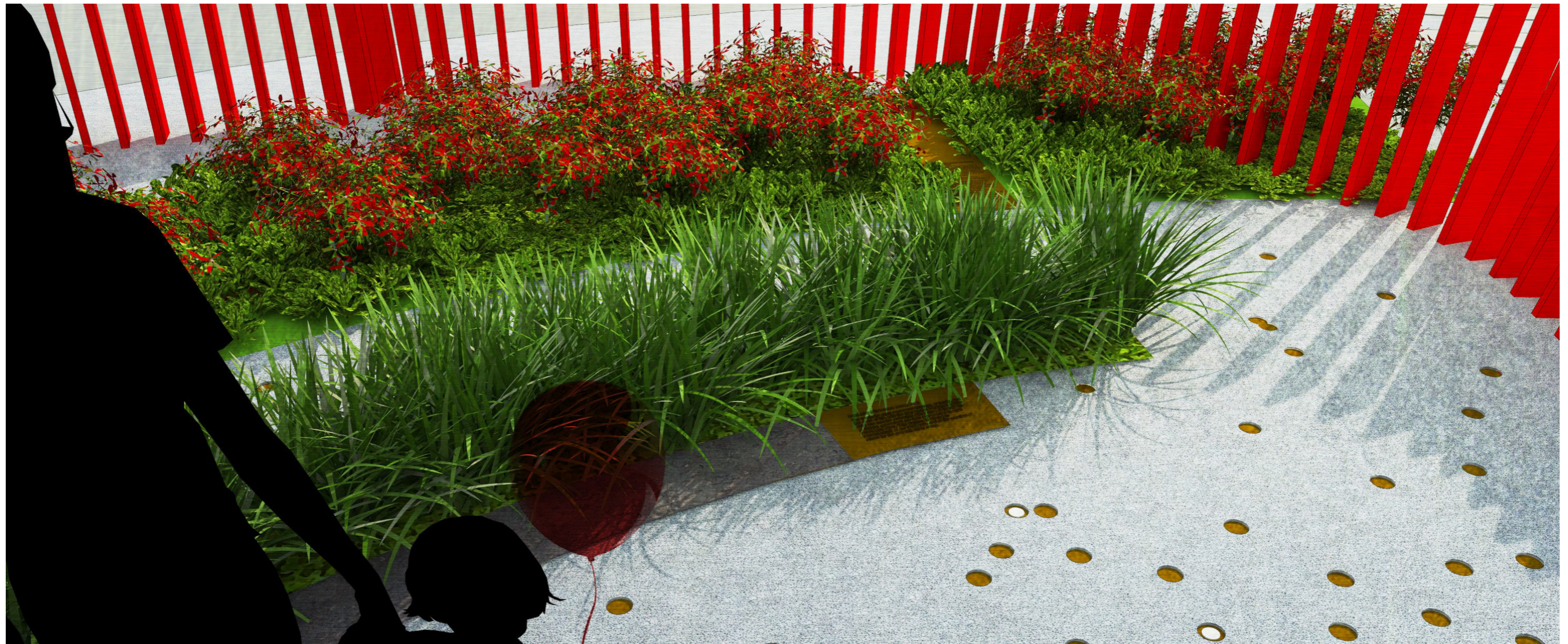
Harakeke (*Phormium tenax*, flax)

The harakeke plant represents whanau, or family, and the circle of life, with the new central leaf blade as the child and parents protecting either side. Generations of tūpuna (ancestors) are then represented in each enveloping layer. This planting is offered in remembrance of our forebears, and of the sacrifice of others for the generations to come.

The tolerance of the selected cultivars has been assessed to withstand Belgian climatic conditions, with plants able to perform outside of their natural range.



Māori liken the flax plant to a family, with the central shoot (rito) representing the baby. The leaves protecting the rito are called the parents (awhi rito or mātua). Only the leaves on the outside of the plant, the grandparents (tūpuna), can be cut, or else the plant will be weakened.



Remembrance through Visual Art

Two themes of remembrance through visual art are expressed in the design; one as the unifying theme element (a) and the other as an Individual element (b). Both of these are expressions of the number of soldiers who fell in the service of their country.

(a) Unifying Design Element: The Bronze Inlays

Two themes of remembrance through visual art are expressed in the design; one as the Individual element (a) and the other as an Integrated element (b) that acts as a unifying theme for the installation. Both of these are expressions of the number of soldiers who fell in the service of their country.

New Zealand's Darkest Hour:

Eight hundred and forty six bronze inlays represent the 846 New Zealand soldiers killed in the first four hours of the Battle of Passchendaele in Belgium on the 12th of October 1917.

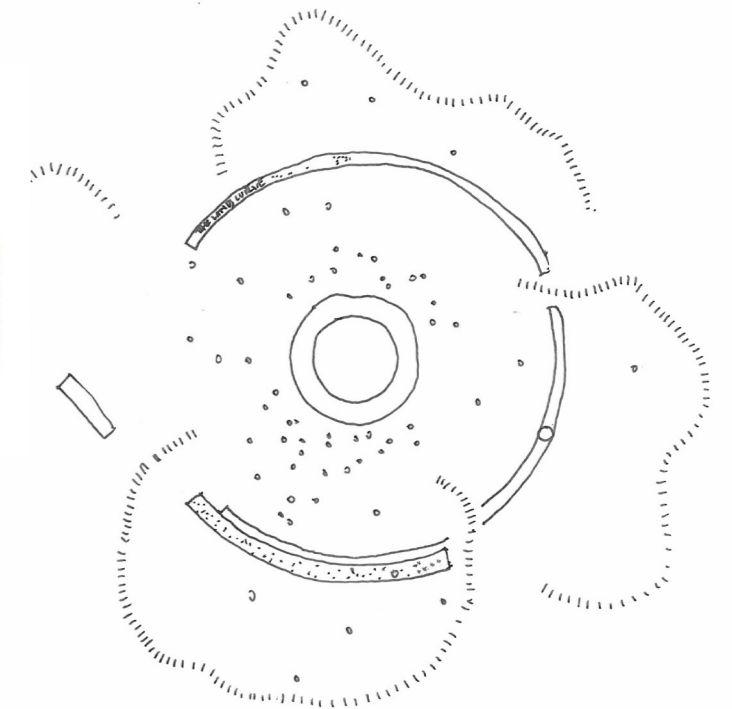
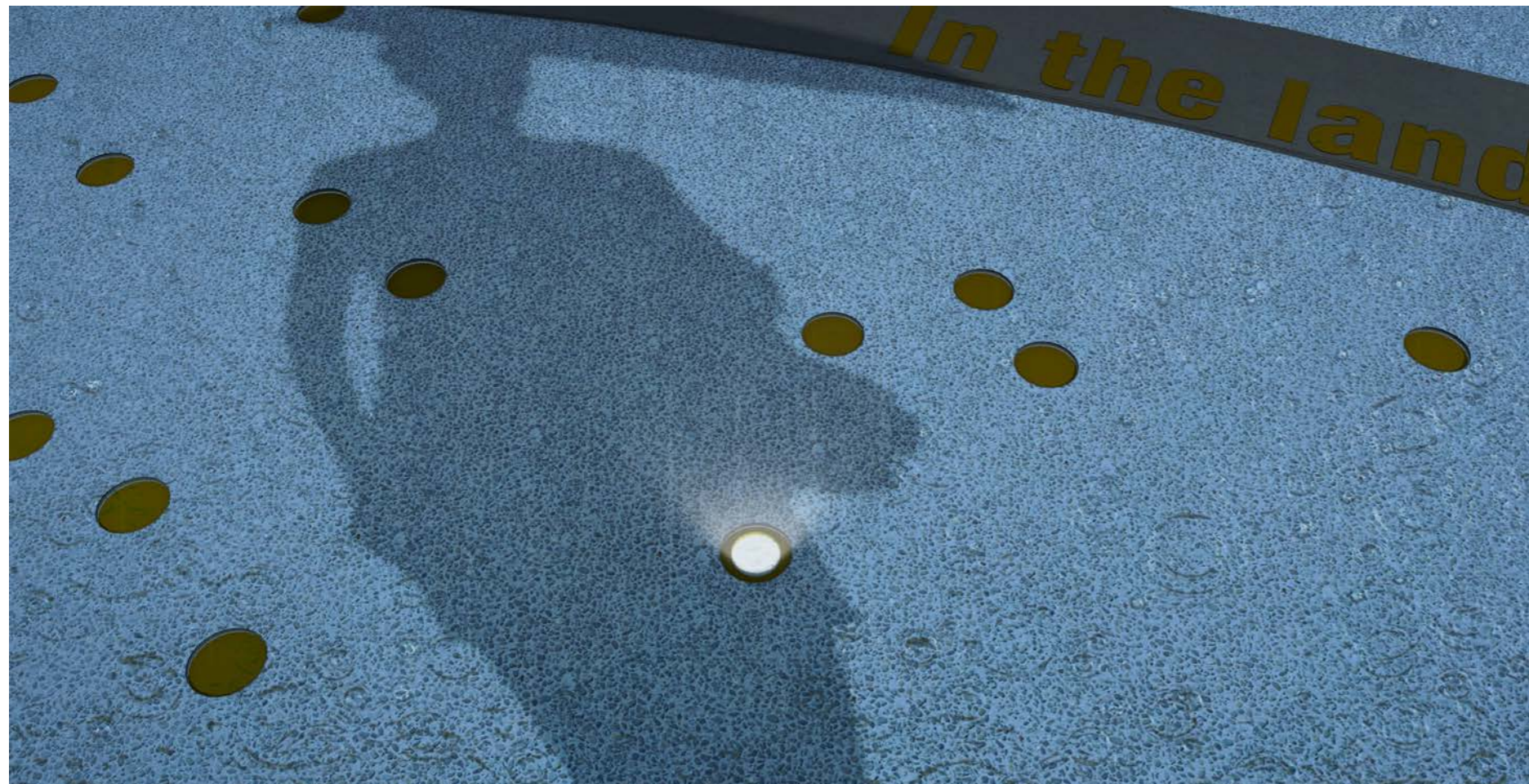
The bronze inlays are scattered over the ground, in the random way that poppy seeds would be disbursed by the wind.

The bronze inlays are pressed into the path surface, to create a shadow and collect water, reflecting light.

The randomness of the placement also represents the chaotic, overwhelming and far-reaching effects of the war on families, communities and countries.

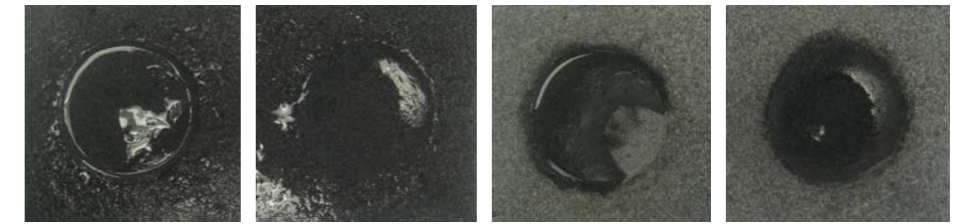
Bronze, long selected as a material of choice for sculpture and statuary, is a warm material of high value and esteem appropriate to the importance and gravity of this memorial.

LED point light sources add another layer of light and reflectivity.



Concept Sketch: The Bronze Inlays

Point lights add light and reflectivity



Imprints into the surface material create shadow and reflection

846

inlays represent the 846 fallen in the first hours of battle

Remembrance through Visual Art

(a) Individual Design Element:

The Memory Column

The Memory Column in Petal 2 tells a story of those who gave their lives for the freedom of others.

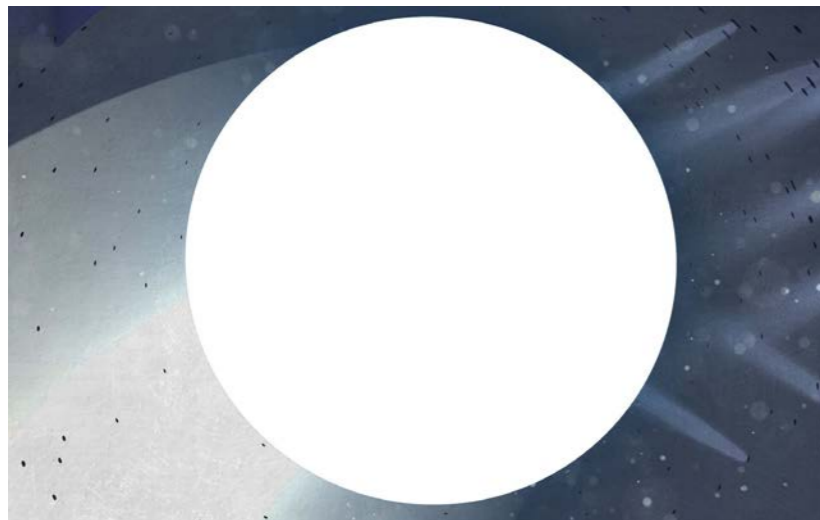
Designed as an installation to be experienced from the inside and the outside, the column is pierced by an array of pinholes. The scale of the column creates a physical presence in the space, and the number of pinholes are used to represent the number of the fallen to give a sense of the impact of the battle of Passchendaele. The random array of the penetrations refer to the chaos of war, and its impact on the lives of so many - lost, remaining and left behind.

The ability to go inside the installation allows the visitor to experience silence, and a sense of isolation from their surroundings and from other people. This is a reference to the sense of isolation and loneliness of the experience of war.

The scale of the door requires visitors to duck or bend low to enter, in a reference to the physical confinement of the trenches. The size of the opening and internal diameter has been designed to allow a wheelchair to enter and turn around.

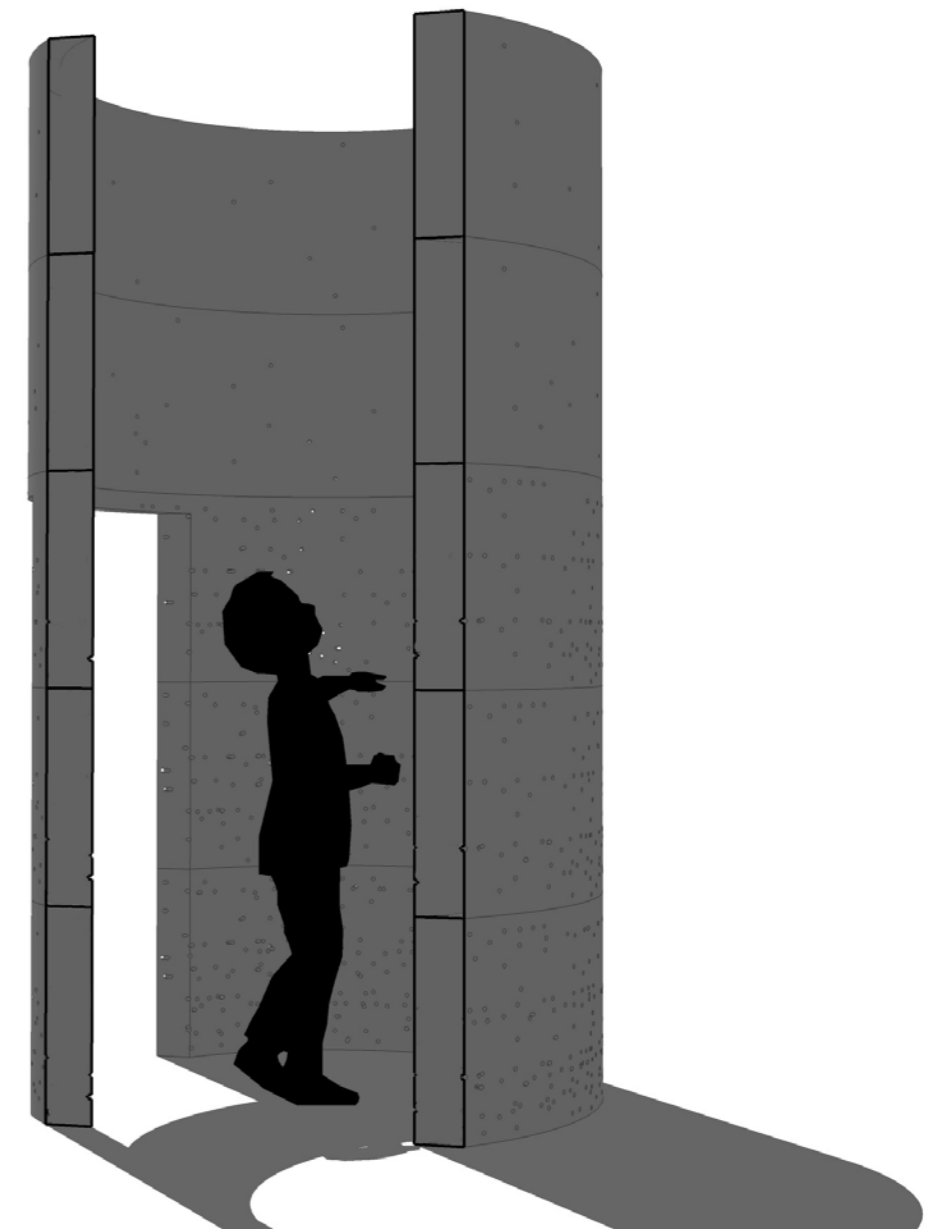
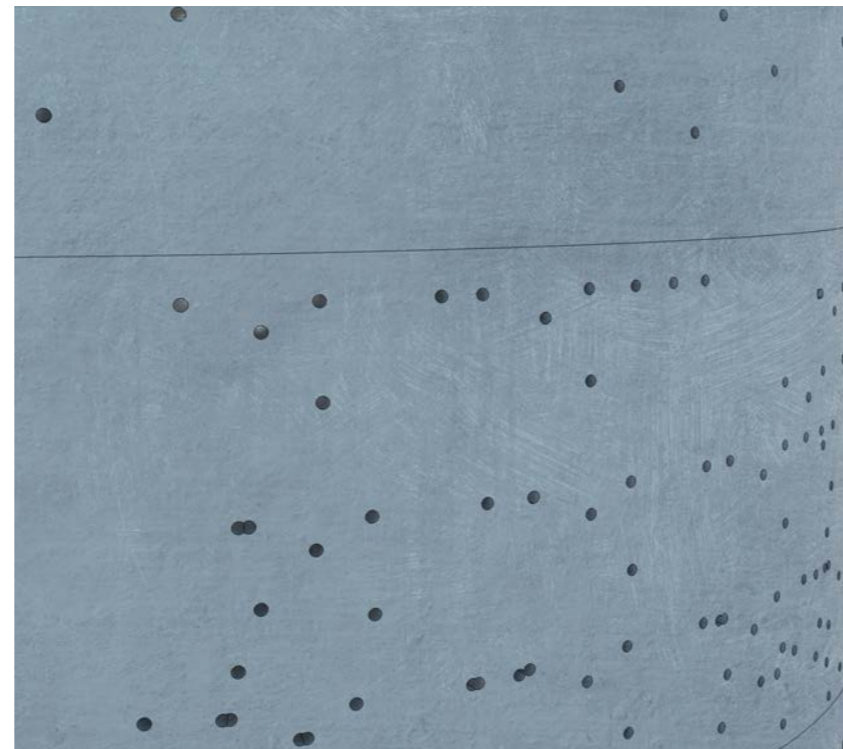
2,700

pinholes represent the 2,700 wounded, dead and missing at the end of the first day



open

the top is open to the sky and the elements to enhance the physical experience of the space



**isolation
aleness
confinement**

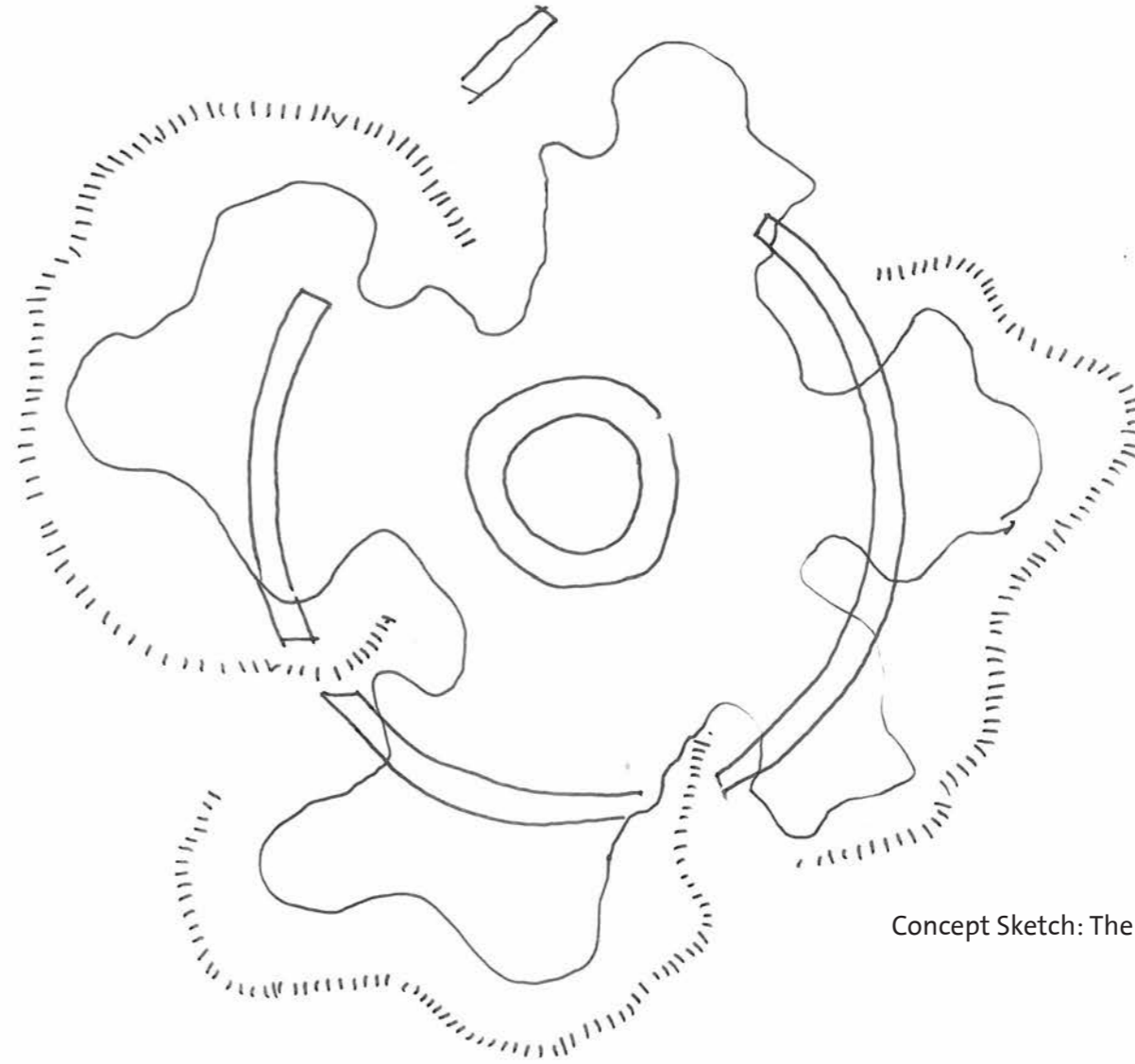
Remembrance through Literature

(a) Unifying Design Element: The Stone Arc

Complements the planting curve, as a medium for communication of the garden themes.

Natural material; of the earth, of New Zealand
Timaru basalt

The design proposes carving the words into pieces of Timaru Basalt, a material of the earth in New Zealand, with a bronze inlay. These materials would complement the bronze inlay installation surrounding the space.



Concept Sketch: The Stone Arc

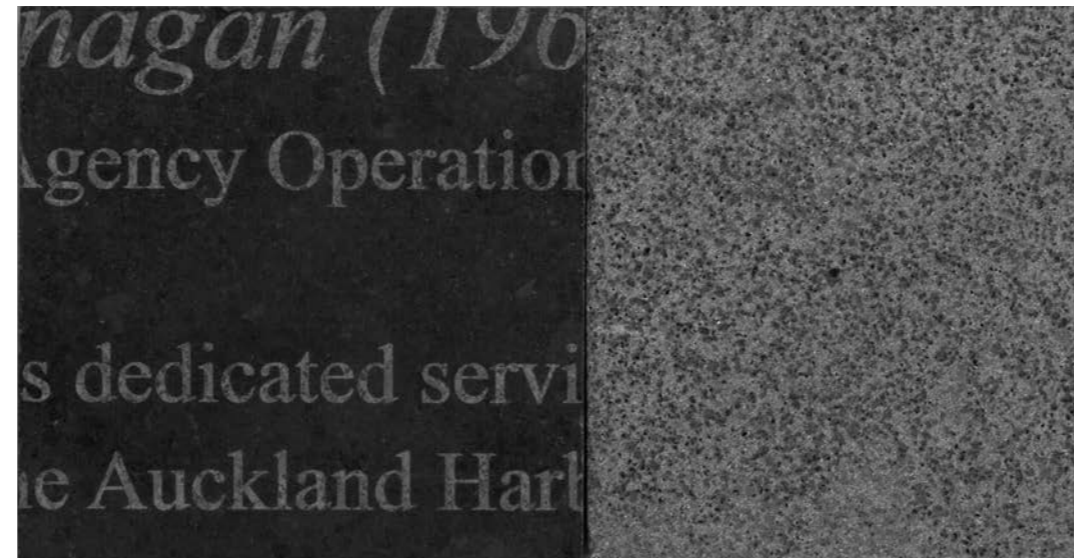
inlaid

Bronze inlaid text is a graphic element as well as a literary piece



engraved

into Timaru basalt stone



Remembrance through Literature

(b) Individual Design Element: The Poem

An excerpt from Memorial Anthem 'Poppies & Pohutukawa', A tribute to Veterans & their Families has been selected to commemorate the Battle of Passchendaele. The words are celebrated for their value as literature, but also as graphic elements that are used define the space and draw the viewer in, literally and figuratively. Emphasising the word Pohutukawa in large text will resonate with Kiwi's away from home, who are visiting this important place, and feel proud of their heritage.

Memorial Anthem: 'Poppies & Pohutukawa'
A tribute to Veterans & their Families

From Flanders fields where poppies grew;
The seeds of our young nation flew
Up from that blood-soaked foreign soil;
Borne on the winds of world turmoil
And settled halfway round the Earth;
To forge our nation at its birth

(Chorus)

And yet in Flanders poppies sigh
While our young men lie still nearby;
Who gave their lives that we may be
Forever safe, forever free;
In the land of the Pohutukawa tree

Since then in growing nationhood
Our warriors have proudly stood;
Many times in foreign lands
Cradling freedom in their hands;
On land, in sky and on the sea
Shaping our identity

(Chorus)

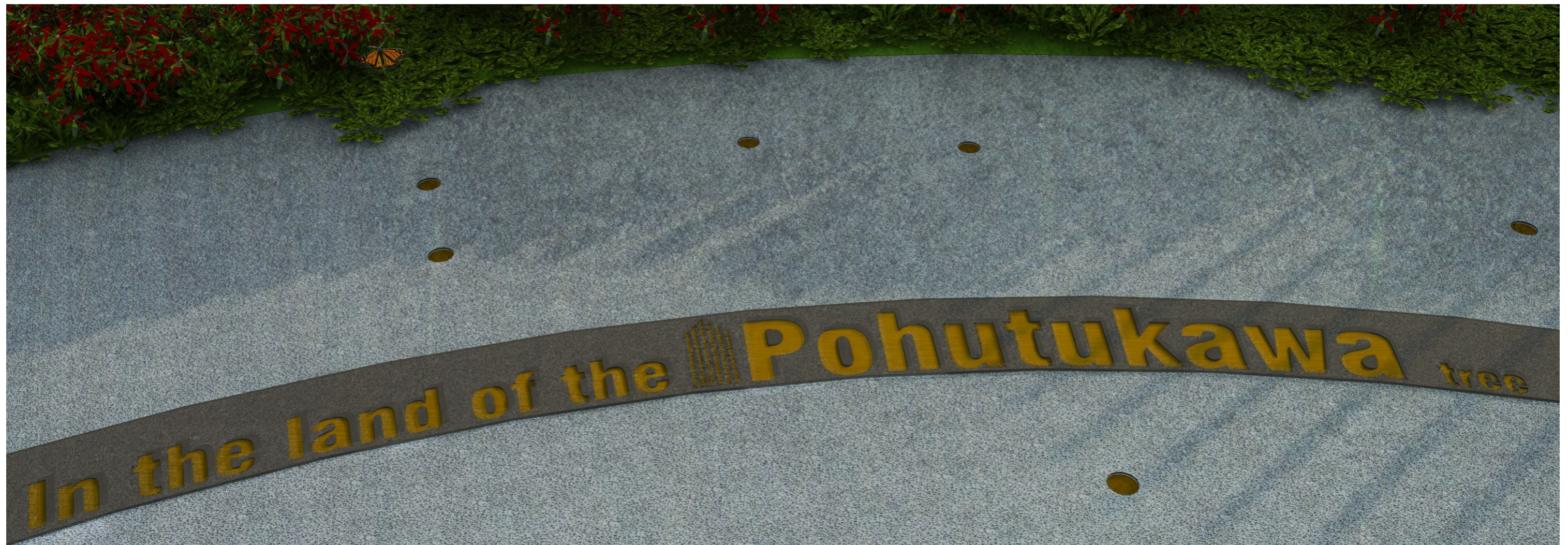
And yet in Flanders poppies sigh
While our young men lie still nearby;
Who gave their lives that we may be
Forever safe, forever free;
In the land of the Pohutukawa tree

And thus our history has been told
How will our future now unfold;

Should we be called in peace and war
To play our part as those before;
Whose memories rest in Tane's bowers
Of red Pohutukawa flowers

(Final Chorus)

And yet in Flanders poppies sigh
While our young men lie still nearby;
Who gave their lives that we may be
Forever safe, forever free;
In the land of the Pohutukawa tree.
Who gave their lives that we may be
Forever safe, forever free;
In the land of the Pohutukawa tree



Methodology

Proposal

We understand that the Passchendaele Society seeks to work with the Passchendaele Memorial Museum 1917 to implement the New Zealand Garden by August 2014. Boffa Miskell would be committed to make this work for this important event.

We believe the way to achieve the time frame is to develop an exhibition style piece comprising prefabricated elements made in New Zealand and shipped to Belgium, and European sourced New Zealand native planting and in-situ surface treatments. If appointed, the Boffa Miskell team would seek to engage immediately with the Belgian company who would be responsible for the continuing care and maintenance of the garden. By working together with the local team the design could be realised in an efficient and practical manner to achieve a special outcome for the New Zealand installation.

Should the Boffa Miskell proposal be selected, the design team would also engage early with specialist consultants for lighting design and structural engineering as outlined below.

To respond to the required time frames, the design team proposes the following project methodology:

Stage 1: Confirm design with client (Passchendaele Society) including any minor amendments

Stage 2: Engage with Belgian company and New Zealand suppliers to confirm design and pricing

Stage 3: Prepare detailed drawings and specifications as required, including specialist lighting design and structural engineering (\$7,500)

Stage 4: Assist in procuring elements to be prefabricated and shipped from New Zealand (stone arc, bronze inlays, Memory Column) including review of shop drawings etc. (\$2,500)

Stage 5: Project management on site in Belgium during the garden build (\$6,000 plus travel and accommodation costs)

Boffa Miskell is grateful for the advice and assistance of Kate Hillier in relation to the project methodology. Should Boffa Miskell be successful in being appointed for this exciting and important project we would like to seek further advice and guidance in relation to the installation of this design.

Design Team

The Boffa Miskell design team would be led by Principal Landscape Architect Cathy Challinor, with additional support as required. Structural engineering would be provided by Jawa Structures and specialist lighting design by Switch Lighting. Details of selected personnel are as follows.



CATHY CHALLINOR
PRINCIPAL, LANDSCAPE ARCHITECT

CONTACT cathy.challinor@boffamiskell.co.nz DDI +64 9 359 5243

Cathy is a landscape architect with 15 years professional experience working on local and international projects. Working in Auckland for the last 5 years, she is responsible for design, documentation and construction aspects of projects. Cathy's areas of expertise are urban and streetscape design, public domain and infrastructure projects. She manages these complex and demanding projects and her team members effectively to achieve good design outcomes. She has demonstrated skills in effective management of multi faceted clients and complex projects of a highly technical nature.

Cathy joined Boffa Miskell in 2007 where she continues her interest in working on streetscape and public domain projects. Her extensive experience combines her creative design approach with her experience in leading the design and documentation phases of her projects. Recently she led the design of the \$25m Fort Street Area Upgrade project in the Auckland CBD, and is a key team member of the Auckland City CBD Streetscape Programme. She is currently involved in the construction phase of the ANZ Centre project, which at a total construction budget of \$76 million is one of the largest refurbishment projects undertaken in Auckland.

Cathy's particular interest is in following a rigorous design approach throughout the project from concept to construction documentation. This process involves iterative design refinement throughout all stages. Cathy enjoys the challenge of meticulous detailed design. She is interested in and committed to working with consultant teams including traffic and civil engineers, urban designers and architects to create quality space. Her philosophies include valuing the public domain, emphasising pedestrian priority, meeting technical requirements and pursuing a good built outcome.

EDUCATION

Bachelor of Landscape Architecture (Hons), University of Canberra

PROFESSIONAL AFFILIATIONS

Associate and Registered Landscape Architect, Australian Institute of Landscape Architects

Associate and Registered Landscape Architect, NZ Institute of Landscape Architects

AREAS OF EXPERTISE

Landscape Architecture
Urban Streetscapes
Public Domain
Infrastructure
Project Management

Project Highlights

Urban Streetscapes

ANZ Centre, Auckland, 2011-ongoing, AMP NZ Office:
This is the largest building and entrance refurbishment project undertaken in Auckland to date. Cathy is leading the developed design, documentation and construction phase services of this \$76 million upgrade to the ANZ Tower and associated public domain. The end result will be a public space that will be of significant contribution to the urban environment of the city.

Albert Street Upgrade, Whitianga, 2011-ongoing, Thames Coromandel District Council:

The upgrade of Albert Street offers a significant opportunity to gain greater pedestrian priority in what used to be the state highway corridor running through the centre of town. As part of the project it is important to design for the seasonal influx of holidaymakers as well as the local population during the low season. Cathy is leading this important project for the Thames Coromandel District Council.

Harbour Bridge Landscape Upgrade (North Side), Auckland, 2008 ongoing:

This landscape upgrade project draws together art elements, cultural references and history in this industrial landscape, NZTA invested in this project as part of the bridge strengthening works and it has grown into a celebration of the natural and cultural history of the area. As part of the design process Cathy also works within the technical parameters of the bridge maintenance and access requirements, as well as the diverse range of stakeholders ranging from local residents, Council officers and elected members as well as mana whenua.

Eastern Viaduct/Te Wero Island Upgrade, 2010-2011, Waterfront Auckland:

As part of the upgrade project of a key pedestrian route linking Quay Street with the recently completed Wynyard Quarter Jellicoe Street upgrade works via the new pedestrian bridge, Cathy conceived of and fully designed the site-specific moveable tree planters. The project also used large scale, bold and colourful ground plane graphics in

conjunction with the movable tree planters to direct pedestrian movement and infer pedestrian priority.

Fort Street Area Upgrade, Auckland, 2008-2009, Auckland City Council:

This large flagship project is one of three CBD projects championing the idea of shared space where by vehicles and pedestrians both share the calmed carriageway environment, providing much needed high quality public spaces for the CBD. Cathy led the analysis and concept design stages of the Fort Street Area Upgrade project for Auckland City Council's \$25 million Fort Street area project.

Auckland CBD Streetscape Upgrade Programme, 2007-2009, Auckland City Council:

Cathy was involved in the design delivery of professional design services on projects within the CBD Streetscape Programme, including design leadership role on the Albert Street and Victoria Street projects.

BACKGROUND

2007 to present	2002 to 2007	1999 to 2002	1997 to 1999	1996 to 1997
Principal Landscape Architect Boffa Miskell Ltd, Auckland	Senior Landscape Architect, HASSELL, Sydney	Landscape Architect, Broadway Malyan, London	Landscape Architect, Edaw, Sydney	Landscape Architect DSB Landscape Architects, Canberra

PROFESSIONAL ACTIVITIES

2008	1999
Associate Member and Registered Landscape Architect, NZ Institute of Landscape Architects	Associate Member and Registered Landscape Architect, Australian Institute of Landscape Architects

Skills

We are a multi-disciplinary company that enjoys collaboration across our internal specialist teams and with the wider project team to achieve best for project outcomes. We are engaged by a diverse range of cultures and ethnic communities. Our internal skill sets include:

Planning, Policy, Master planning,
Landscape Design, Urban Design,
Landscape Planning, Environmental
and Ecological Assessment,
Stakeholder Management/
Community Engagement

Boffa Miskell



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Approach

Our approach is to work collaboratively with our clients to fully understand each project, explore its possibilities and provide creative solutions based on sound knowledge and experience. The projects are often complex and require solutions that integrate environment, economic and social considerations within a statutory framework.

To meet these challenges we bring together a team of professionals with:

- » an integrated environmental view
- » the ability to think creatively
- » leadership and collaboration skills
- » wide-ranging expertise in natural and social sciences, planning and design
- » the ability to act as strategic advisors on large, multi-disciplinary projects

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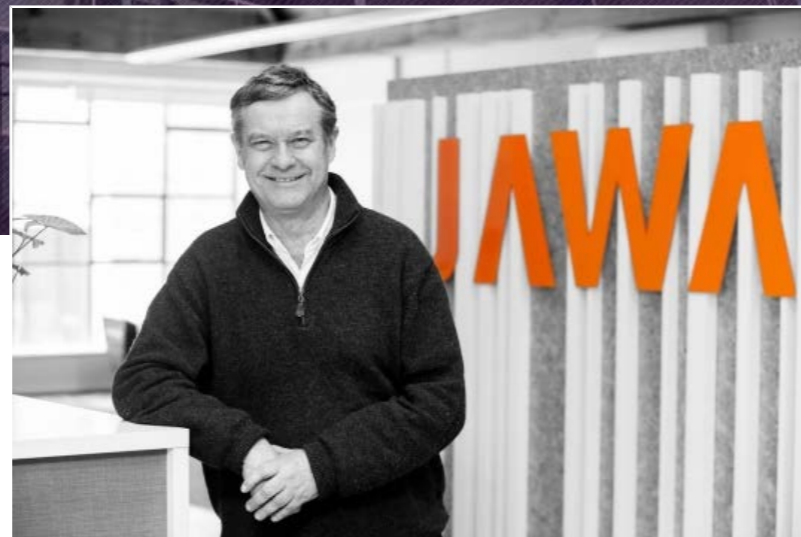
About us



About Us

We are professional structural and civil engineers, led by Rob Walsham. Rob is a New Zealand Chartered Engineer, with more than 30 years of structural and civil engineering experience. JAWA has been operating successfully as an incorporated company since 1999. It's track record is extensive in the Auckland Region and is also based on project experience accumulated by the team through their association with other firms both in NZ and internationally. With a team of 10 structural and civil engineers supported by 3 technicians we are available to quickly commence work on your building project.

If you want an economic and sensible design solution, this is exactly what we'll provide. We don't over design and we'll always be looking for ways you can make savings. Sometimes this means standardising on larger projects and using easy to build details, but often it is simply minimising the materials used and making the most efficient use of each element in the design. We are happy to look at all the options and welcome input from the builder.



ABOUT US

WHAT WE DO

PROJECTS

OUR ENVIRONMENT

CONTACT US

1972
1976
1979
2004

1999-present

1978-1999

1974- 1978

Robert Marshall Walsham
Director

JAWA Structures Ltd

Summary of qualifications

Bachelor of Engineering – University of Canterbury
Registered Engineer – NZ
Chartered Engineer – UK
Chartered Professional Engineer - NZ

Professional experience

JAWA Structures Ltd

Federal Street Shared Space
Westhaven Marina Boardwalk
Viaduct Harbour Public Open Space and Extension
Le Roys Bush and Onepoto Domain walkways.
Hurstmere Green Upgrade
Quay Street Upgrades
Queen Street Upgrade
Khartoum Place – Stages 1 & 2
Vulcan Lane Upgrade
Swanson Street – Stages 1 &2 Upgrades
Lorne Street – Stage 1 Upgrade
O'Connell Street Upgrade
Elliott/Darby Shared Space
Fort Street Shared Space
Kitchener Street Upgrade
Crowne Plaza Upgrade
ANZ Tower Podium Upgrade
Lorne Street – Stage 2 Shared Space
St Patricks Square Upgrade
Okahu Bay Toilets
Waiheke Library
Otuaataua Stonefields Heritage Centre
Countdown Rolleston, Stoddard Road, Lincoln Rd, Whitianga and St Johns
Jet Park Hotel North and South Wing Extensions
Marine Square – Devonport Preliminary Design
Maungawhai Visitors Centre Concept Design
Northern Animal Shelter
North Shore Memorial Park
Whitcoull's Building Seismic Strengthening
Cape Reinga Visitors Centre Civil Works
Saint Kentigern School Jubilee Sports Centre Civil Works.
Auckland Grammar School Gymnasium and Pavilion Civil Works
Royal New Zealand Navy Training School – Whangaparaoa

Ove Arup & Partners

UK, South Africa, Australia, PNG, Hong Kong, NZ

Murray North Partners

Hamilton

Company Profile 2013

Introduction

Switch Lighting Design & Consultancy is run by founder and Design Director Omar Shahab, who has a twelve year background and qualifications in illuminating engineering. Switch has strong international experience working on commercial, residential, hospitality and urban projects in the U.K., Europe, Australasia and the Middle East.

Project Understanding & Design Approach

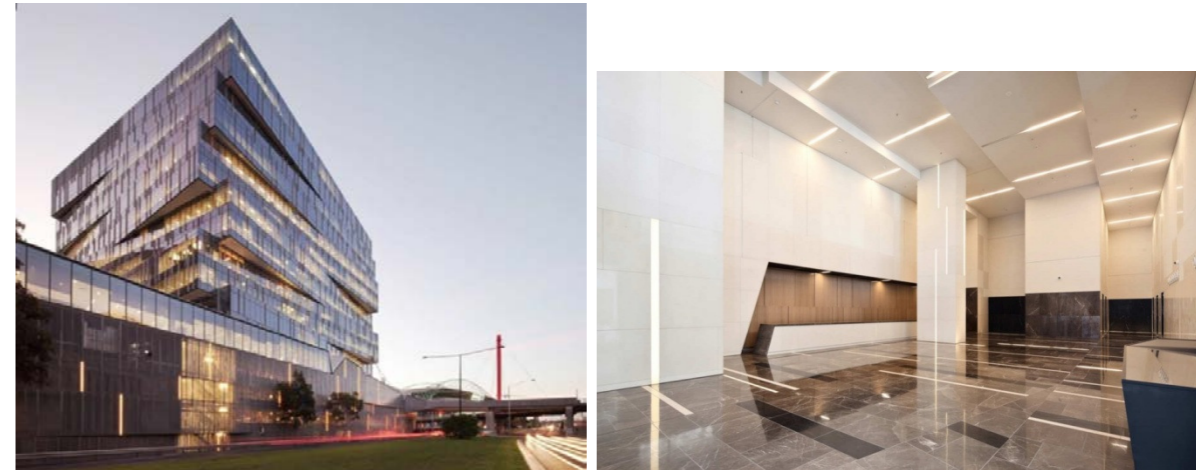
It is in our interest to work alongside the design team to provide the best possible outcome in terms of lighting for any project whether big or small. Our professional and technical approach is to advise on the way in which light is used in order to elicit a positive response from people who use the space. The exact design of the lighting will help create the overall look and feel as well as vitally supporting the architectural, interior and exterior design. The lighting design must successfully combine aesthetics with good visual comfort and safe movement for users, as well as meeting design guidelines and recognised lighting standards where required. Regular communications via email, phone and FTP will be established with the appointed team representatives for issue of documentation and reports and maintaining key project milestones.

Services

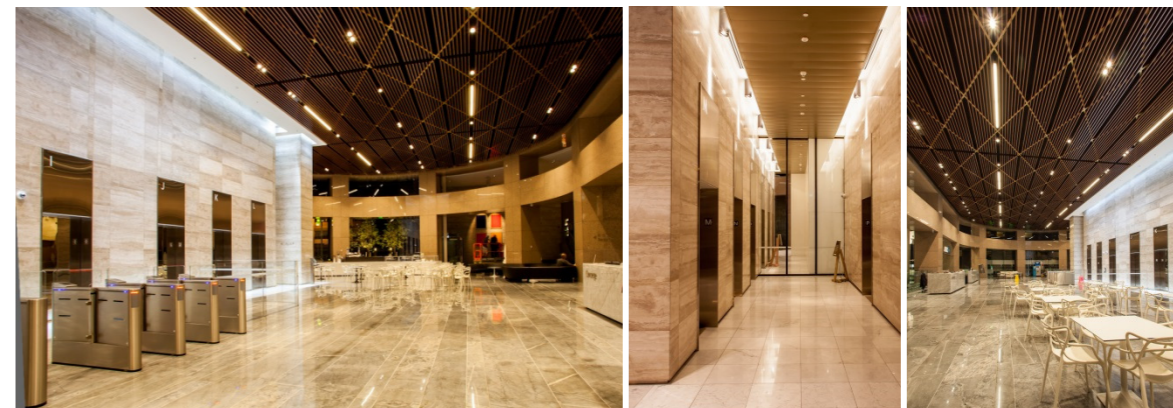
Our specialist lighting services typically cover the following:

- Meet with the project design team to discuss a range of ideas and solutions with the architectural intent and budget, climate and environmental restraints and building requirements in mind.
- Develop and provide sketches/images/data sheets as necessary to demonstrate the proposed lighting concept options. Included with this will be indicative budget estimates of equipment.
- Present and discuss concepts with the project design team and others as required for comment, discussion and approval.

- Shed 5D, Auckland CBD, New Zealand – Commercial & Emergency
- South City Mall, Christchurch, New Zealand – Retail
- St Kilda Sub division, Cambridge, New Zealand – LED street lighting
- Sylvia Park Dining Lane, Auckland, New Zealand – Hospitality exterior
- Tairawhiti Museum, Gisborne, New Zealand – Museum & Emergency
- Te Waka Maori, Auckland, New Zealand – Museum & Hospitality
- The Corner Store, Mt Eden, Auckland, New Zealand – Hospitality
- The Wharf, Northcote Point, Auckland, New Zealand – Hospitality
- Vantage Group Head office, Drake Street, Auckland, New Zealand – High-end commercial offices
- Victoria St lobby, Auckland CBD, New Zealand – Commercial lobby
- Whitianga township redevelopment, Coromandel, New Zealand – Urban and street lighting
- Xu Xu Bar, Britomart Sq, Auckland, New Zealand - Hospitality

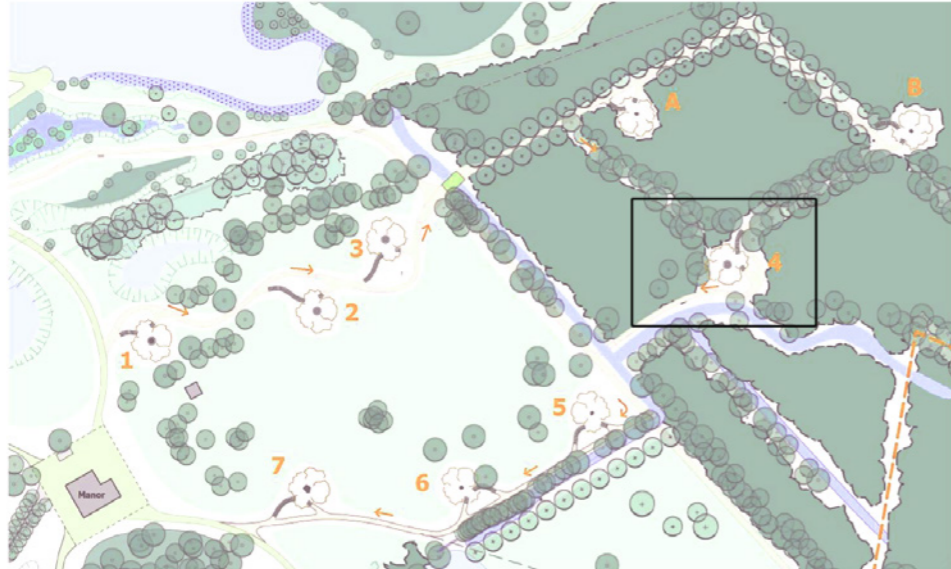


Seven17, Bourke St, Melbourne, Australia – Mixed use commercial development

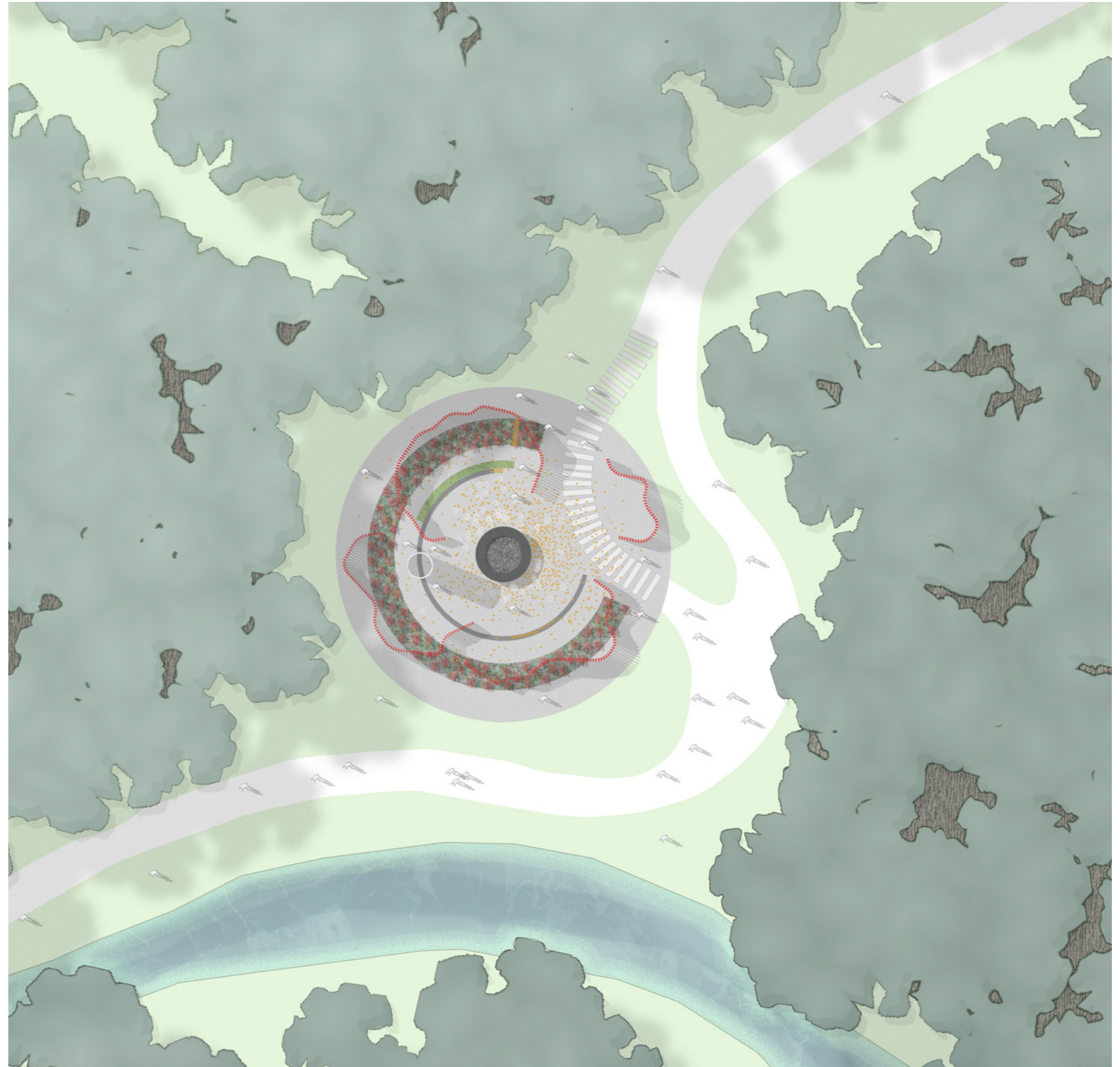


ANZ Centre – High-end commercial offices, Art, retail and exterior

Drawings



Indicative Plan: Memorial Museum Passchendaele 1917
(Not to Scale)



Indicative Plan: New Zealand Garden



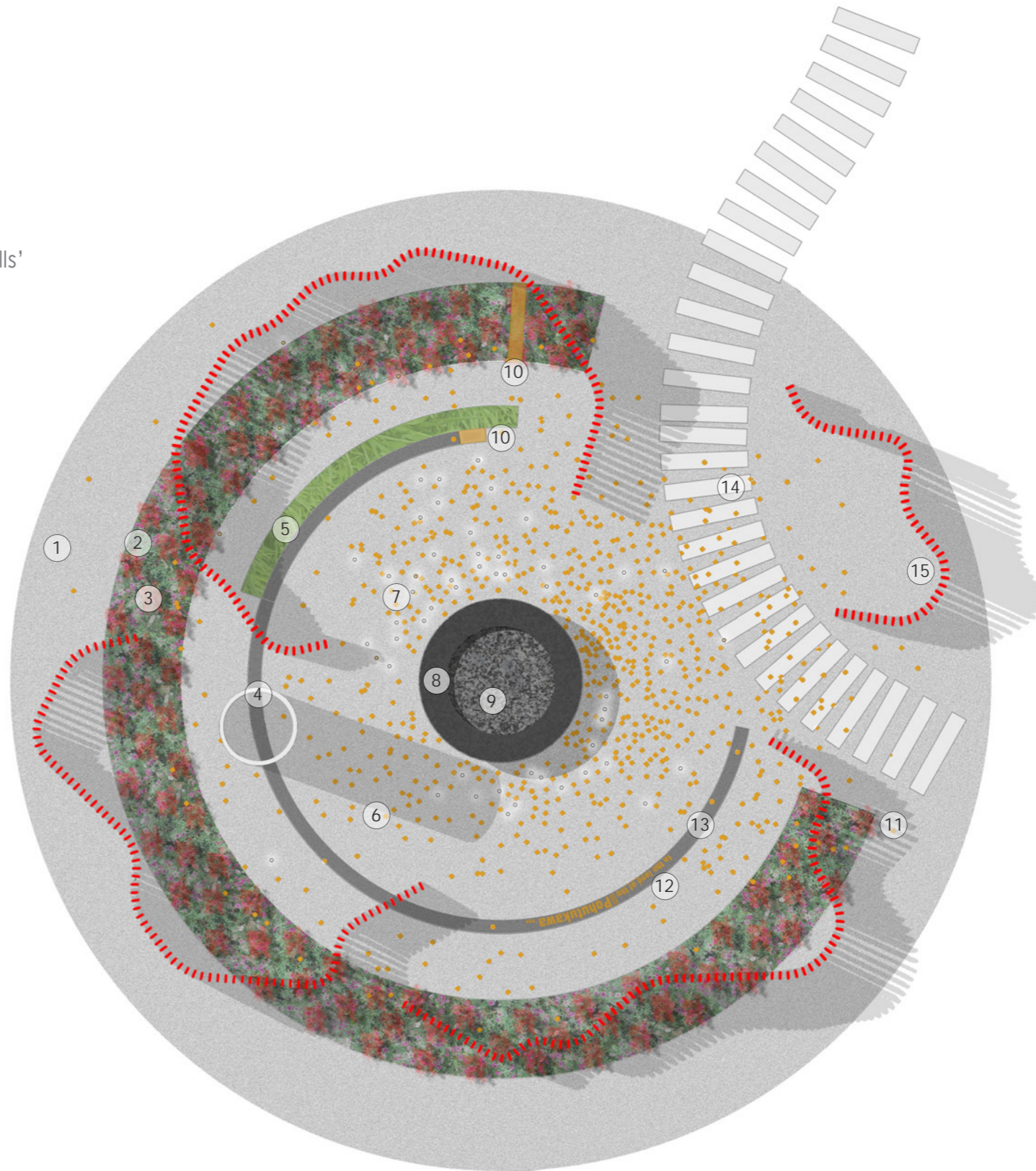
Data Sources:

Projection:



KEY

- ① Insitu Formed Surface with Decorative Finish
- ② Mānuka - Leptospermum scoparium 'Red Falls'
- ③ Rātā - Metrosideros carminea 'Red Carpet'
- ④ Memory Column
- ⑤ Harakeke - Phormium 'Emerald Gem'
- ⑥ Bronze Inlays
- ⑦ Spot LED Lights
- ⑧ Central Seating Element
- ⑨ Black Gravel
- ⑩ Bronze Planting Interpretation Panel
- ⑪ The Planting Curve
- ⑫ Remembrance Poem
- ⑬ The Stone Arc - Timaru Basalt Stone Inlay
- ⑭ Stepping Stone Pathway
- ⑮ Painted Larch Planks



Data Sources:

Projection:





About Boffa Miskell

Boffa Miskell is a 100% employee owned planning and design consultancy established in 1972 in Christchurch. We bring together over 140 professional staff with expertise in planning, ecology, urban design, cultural advisory, landscape architecture, sustainability and digital environment services. Over the past three and a half decades we have built a reputation for innovation and excellence in integrated development and design. During this time we have been associated with a significant number of projects that have led changes in shaping New Zealand's landscape.

www.boffamiskell.co.nz

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f: +64 3 365 7539

shanghai

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f: +86 21 6426 9890