

Lighting Frankston Plan

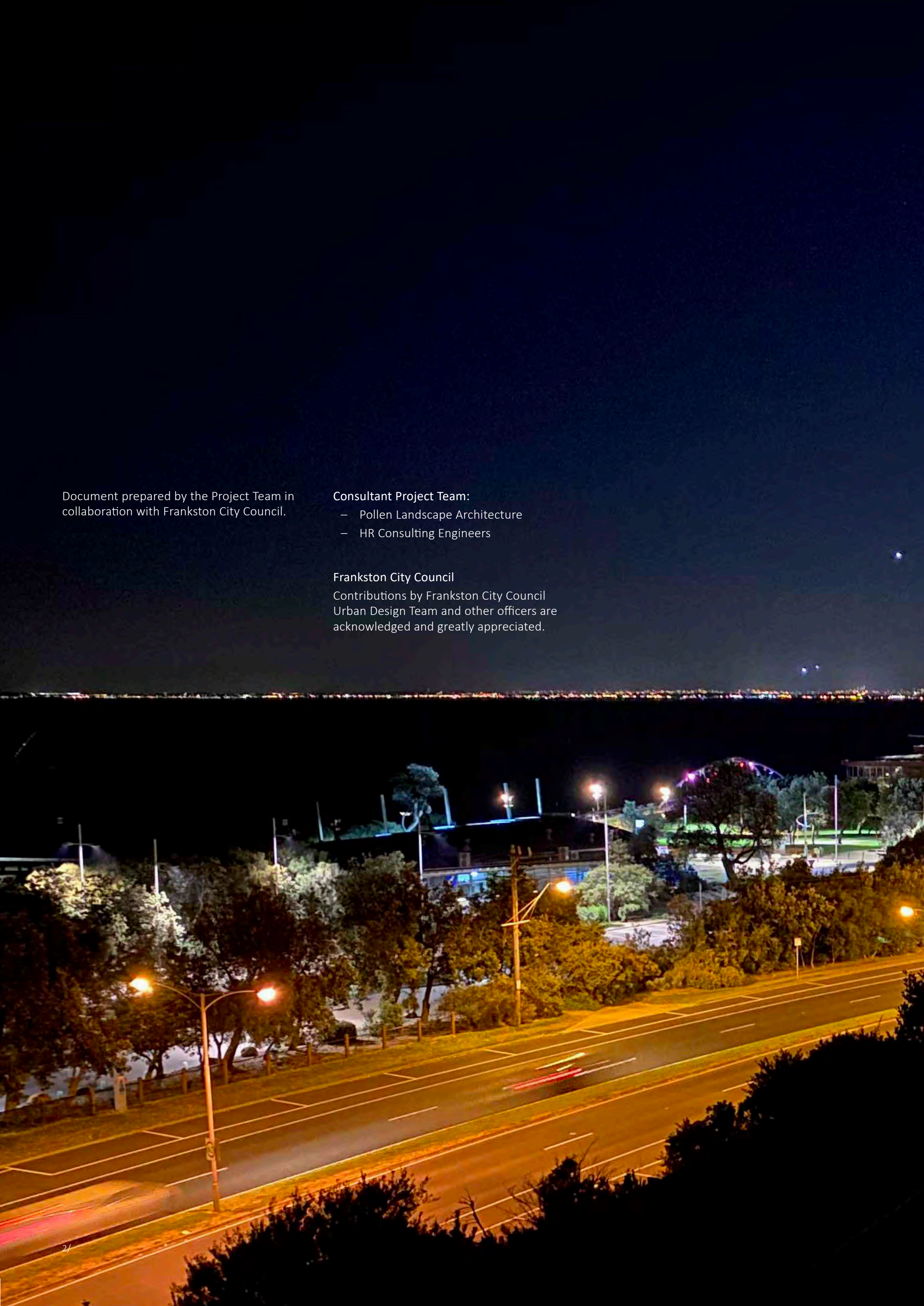
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Lifestyle Capital of Victoria



A nighttime photograph of a coastal road. In the foreground, a multi-lane road is illuminated by streetlights, with some light trails from moving vehicles. A row of trees and bushes separates the road from the background. In the background, across a body of water, a city skyline is visible with various lights and structures, including a prominent bridge or stadium with blue and white lighting.

Document prepared by the Project Team in collaboration with Frankston City Council.

Consultant Project Team:

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Frankston City Council

Contributions by Frankston City Council Urban Design Team and other officers are acknowledged and greatly appreciated.

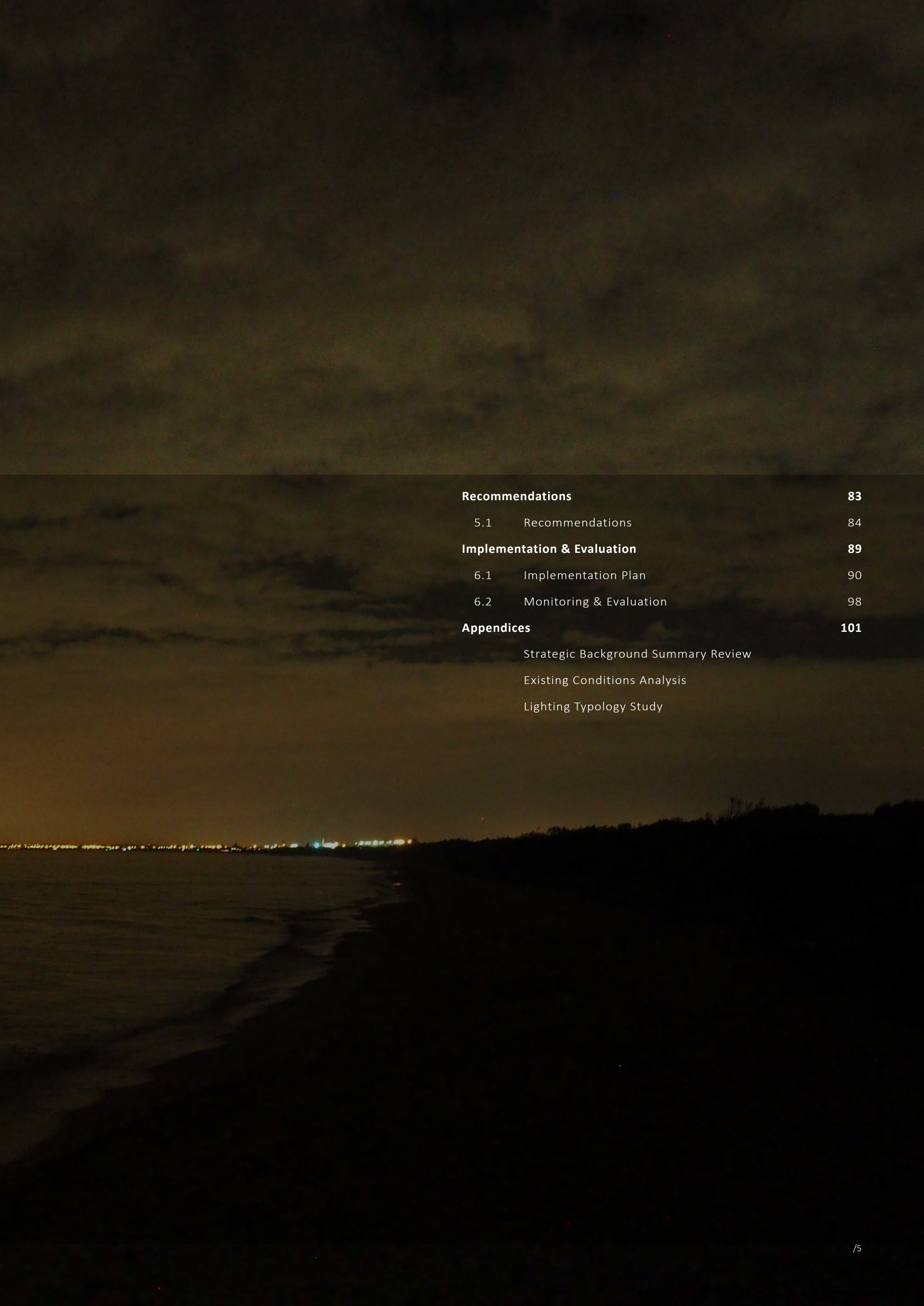
Acknowledgement of Country

Frankston City Council acknowledges the Traditional Custodians of the lands and waters in and around Frankston City, and value and recognise local Aboriginal and Torres Strait Islander cultures, heritage and connection to land as a proud part of a shared identity for Frankston City.

Council pays respect to Elders past and present and recognises their importance in maintaining knowledge, traditions and culture in our community.

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Executive Summary

A Plan for the future

Moving forward with positive and sustainable lighting implementation and contribution to natural darkness

Vision

This plan seeks to complement and help realise the ambitions of revitalisation and investment in the city centre, the attraction of businesses and jobs, increase development of government and commercial offices and the protection of our natural environment by creating a unified strategy for lighting the City's public spaces. The vision is to promote a vibrant community, and economic and cultural activity after dark whilst protecting and enhancing the City's natural environment. This lighting plan recognises the declaration of a climate emergency by the Council in November 2019 and works towards creating a strategy for public space that balances light and dark, sustainable energy production, long-life technology and considers the entire life-cycle of fittings. The project team sought to create a lighting plan that promotes the values of; Community, Respect, Excellence, Accountability, Integrity, Resilience and Sustainability. The vision of this plan is to help build Frankston's identity and sense of place, while fostering creativity and sustainability in the delivery of public spaces that are safe, vibrant, flexible and resilient.

Relevant Section: **1.0 Introduction**

Context

Frankston is a diverse community set in a valuable natural coastal environment. Frankston is known for its rich arts and community scene, growing business with abundant leisure and lifestyle opportunities. This Plan seeks to enhance these strengths and create opportunities to improve on these aspects after dark. A unified lighting strategy would serve Frankston City by extending the public's use of parks, foreshore and urban public space in a safe, comfortable and sustainable manner that develops and shapes the City's nighttime identity. The plan has embedded the outcomes and direction of current and future Council policies, planning framework and design principles to shape and contribute to strategic direction for a vibrant, enriched, active and sustainable City.

Relevant Section: **2.0 Strategic Policy Context**

Approach & Opportunities

The exploration of lighting was done on foot, onsite and from daylight hours through to darkness across the municipality and within diverse settings. The approach to research and exploration was determined and undertaken in collaboration with Council within an engaged process. The approach was to survey the extents, quality and spread of existing public lighting that had been implemented. From this methodology, a documentation process examined these conditions in different ways.

Relevant Section: **3.0 Current State of FCC Lighting** and the Appendices of this document.

Strategy

The approach of the Plan is to be innovative, while understanding it is not necessary to reinvent the wheel. The position of this document sits in amongst the broader group of Frankston City Council strategic policies and documents that have provided the basis for a strategy for lighting.

The proposition is to build a framework for expectations and benchmarks for public lighting, experiences and design; understanding that experiences build upon place identity, community and collective memory. A set of design principles and guidelines frame the creation of seven lighting experience typologies, underpinned by Council's organisational outcomes and strategic direction to build upon a liveable city and lifestyle capital.

Seven Lighting Experience Typologies:

- Active Spirit
- Foreshore Experience
- Navigation & Local Identity
- Luminous City
- Creative Lighting
- Night in Nature
- Safety on the Streets



Each typology is supported by associated overarching Design Principles and Guidelines to varying degrees:

- 1 Functional**
 - Legibility / Orientation
 - Security / Safety
 - Accessibility
- 2 Experience**
 - Character / Identity
 - Heritage
 - Nature
 - Foreshore
- 3 Sustainable**
 - Social
 - Economic
 - Environment

Each typology is underpinned by associated Strategic Outcomes integral to Council:

- Safe Community**
 - 1.4 Safe Design (public realm)
- Community Strength**
 - 2.4 Vibrant Community

- Healthy Community
- 3.4 Active Community

- Sustainable Environment**
- 5.2 Open space and biodiversity
 - 5.4 Responsible Resource Use

- Sustainable Economy**
- 6.3 Viable Investment
 - 6.5 Diverse Economy

Relevant Section: **4.0 Strategic Outcomes**

Recommendations & Delivery

The Lighting Frankston Plan 2020 is intended to be a framework to determine approach and implementation of the vision for lighting within the Frankston City municipality in the short to medium term and beyond. The Plan provides recommendations to achieve its core vision and outcomes.

An Action Plan has been developed for a ten-year strategy of implementation for current and proposed lighting design projects. Associated lighting policy projects will support this Plan in the delivery of consistent, creative and coordinated public lighting works as standalone and supplementary works to other public realm and open space upgrades.

Relevant Section: **5.0 Recommendations / 6.0 Implementation & Evaluation**

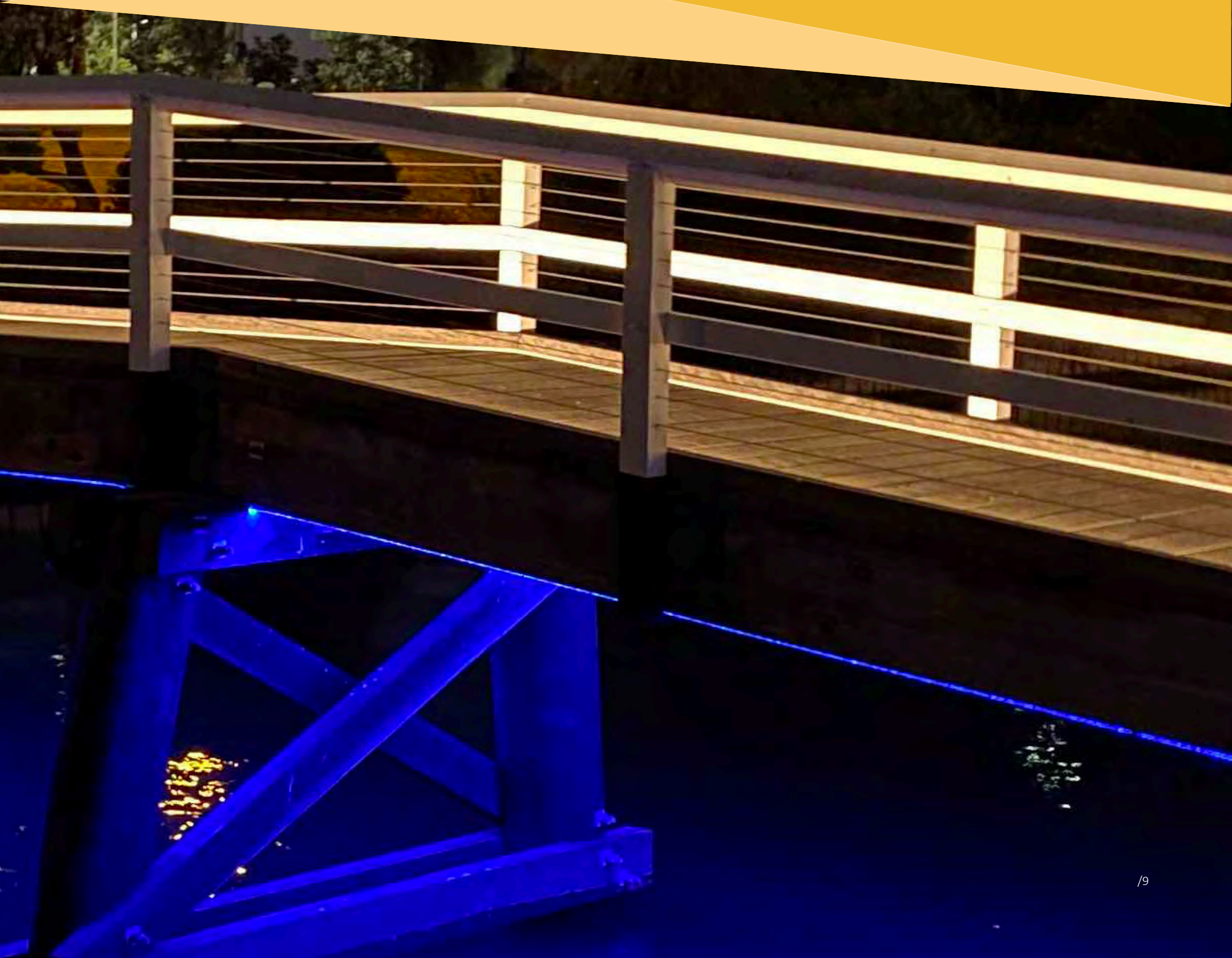
Future

The Plan proposes a contemporary approach to lighting, as more than a simple functional need. The Plan proposes that public lighting can be environmentally considerate, holistic, sustainable and community-minded in its design and implementation, and relationship to people and environments where it is installed. In short, we need to fine-tune the presence of public lighting to create better lighting experiences for human and non-human alike.



Introduction

1.0



1.1 Project Purpose

Long term intent and outcomes

The Lighting Frankston Plan approaches lighting as part of the unique experiences of Frankston City. This Plan aims to develop a strategic plan to unify the City of Frankston as it comes to life after dark.

Vision

The Lighting Frankston Plan shapes the lighting framework of the municipality and work alongside the aims, goals and strategic direction of Frankston City Council to be the 'Lifestyle Capital of Victoria'. The Plan prioritises the declaration of a Climate Emergency by Council in November 2019, with a focus on sustainable developments and climate accountability in project outcomes.

Thinking holistically about how lighting is integrated with other elements of place is essential. The Plan aims to:

- Improve social, environmental and cultural outcomes of lighting whilst plugging into existing policy and research.
- Achieve a balance of light and darkness in the public realm. Council seeks to foster publicly accessible environments that recognises night-time identity, long term maintenance and life-cycle costs, sustainability and standards for lighting to achieve positive outcomes for climate and the community.
- Propose that lighting can reinforce urban and open space design principles as a component of the vision for design and understanding of public spaces.
- Position lighting as part of ongoing public space improvement. Successful lighting illuminates human-scale experiences, shaping the way a community spends its time at night helping to foster a thriving night-time economy and cultural activities.
- Contribute to shaping night-time experiences of Frankston, playing a role in access, orientation and connection for the users of public space. Lighting will be used to express the dynamic, creative and cultural aspects of Frankston while fostering a sense of community safety, comfort and enjoyment of public space at night.

This plan must bring Key Stakeholders and the community along for the journey; allowing for participation and inclusion, providing a visual experience of lighting design alongside practical applications and financial implications.

Through the research and observations undertaken, key issues around lighting for safety, perceived risk, energy use, light pollution and ecological impact have been identified. This framework for public lighting involves practical steps and approach to understanding the value of lighting and the invaluable natural darkness.

A key outcome of this lighting plan is to foster a safe and comfortable environment for both humans and nocturnal ecosystems. This means careful consideration of light and dark spaces, managing and reducing lighting for positive social, economic and sustainable change. **In effect, we must balance human, ecological and economic needs to guide positive change.**

Strategic Purpose

The strategic purpose of the project is to:

- Respond to the declaration of a Climate Emergency by Frankston City Council in November 2019.
- Determine lighting experience typologies that speak to Frankston’s diverse landscapes and considers equity, sustainability, purpose and alignment with FCC’s strategic direction and policies.
- Support Frankston’s vision of being the ‘Lifestyle Capital of Victoria’ through alignment with Outcomes Framework Policy Domains, with principles and guidelines to create considerate lighting landscapes that achieve a balance of light and darkness in public spaces.
- Provide an integrated and consistent approach to public lighting for the municipality that demonstrates the ability to uphold equity, recognises night-time identity, support for future technology and meeting the requirements, objectives and benchmarks for sustainability and lighting standards.
- Address conflicting requirements of stakeholders within project design, development and implementation.

Sustainable Approach

This project adopts a sustainable lighting approach to:

- Ensure that lighting is considered as an important component of the holistic public realm and open space, and not an element dealt with in isolation.
- Contribute to a more conscious and environmentally responsible future by supporting sustainable lighting technology for reduced energy use, replacing existing light sources with improved technology and use of long-life technology to reduce waste and other impacts;
- Support reduction in light pollution, light spill, intrusive lighting by improving technology and consider environmental controls to mitigate the ecological impact on natural environments and wildlife. In short, to be work alongside important industry organisations such as the Australasian Dark-Sky Association and International Dark-Sky Association.
- Redefine human-scale experiences to have a positive impact on social, mental, physical wellbeing, a vibrant city and a supported framework for the night-time economy and shaping night-time experiences.
- Provide an expression of a dynamic, creative, culturally rich and luminous City.
- Propose qualities of lighting to facilitate enjoyment, safety, comfort and pride to contribute to accessible, legible and connected spaces.
- Help to address its value, presence and ability to shape experiences and environments.
- Address requirements for lighting design criteria and technology to become an integrated and coordinated lighting strategy for the City.
- Consider other energy source options and site-based energy generation where appropriate.
- Consider evolving lighting technological advancement, research and change to adapt the provision of lighting towards more environmentally sensitive technology and better public domain outcomes.
- Encourages light fittings and systems that are easily retrofitted (future proof) so they can effortlessly take advantage of rapidly improving technologies.

1.2 Project Scope

Lighting landscapes for the municipality

Existing lighting landscapes provide the present backdrop to the scope of lighting

Public Lighting

The scope of this Plan is within public domain exterior lighting in all Frankston City Council managed spaces and places.

This plan aims to build an understanding of the typologies of existing lighting in Frankston through background analysis, broader research, conducting a series of targeted site visits, and tapping into the pool of existing knowledge held by Council about the successes and failures of lighting in Frankston. **The scope of this project is not to preordain lighting throughout Frankston, but to begin a dialogue about principles and frameworks which will improve and enrich public lighting throughout the area.** The intent is to promote a creative, enriched and sustainable lighting framework for public domain lighting, and guidance for private development in relation to public spaces.

This project team was tasked with building an understanding of lighting design typologies, both already existing within Frankston, and by looking to precedents of lighting nearby and further afield. A series of site visits were lead by Council, to create a baseline understanding of the context, existing public open spaces, and existing lighting.

The project team proposed a set of design criteria to become part of an integrated and coordinated lighting strategy for the City. Policy intent for the project was established in consultation with Council's Project Working Group, to ensure the strategy complements and enhances Councils existing strategic plans and policies; namely Frankston City Council Plan 2017-2021.

The project scope calls for lighting to be integrated into public realm design, with care and thought to the experience and impacts, versatility and appreciation of natural darkness. This means some spaces are not to be lit. The scope of this report is to highlight those areas which may require additional lighting, but conversely to outline areas of natural darkness where lighting should not be added. To understand the ecological importance of dark areas, the project team drew from International Dark Sky Association (IDA) initiatives, a global movement with the aim to 'protect the night sky from light pollution'; to develop precedents for reducing light pollution, light spill, intrusive lighting and improved environmental control.

The scope of the project was also to perform technical analysis, investigating technical requirements and capacity. Alternative energy forms and site-based energy generation were considered by the project team, along with other environmental protection measures allowed by quickly developing technology in the lighting space.

Lastly, the project team sought to address conflicting stakeholder requirements and provide a holistic public lighting framework for the next 10 years and beyond. **The desire is for lighting to be integrated into public realm design, with care and thought to the experience and impacts, versatility and appreciation of what is revealed and what is left in natural darkness.** This plan supports sensitively lit open space and maintaining dark environments at night to protect and uphold the values of the City before us through night and day.

Exclusions

The following represent lighting exclusions, albeit not a finite list:

- Illuminated advertising signs
- Privately owned buildings, property, businesses and tenanted spaces
- Infrastructure lighting associated with public transport, streets, roads and freeways (these projects would be taken in consultation with relevant Authorities)

1.3 The Plan

An outline and overview of the Plan

The Plan is a framework approach to public lighting projects

The Plan is intended to be a framework to assist Council officers, stakeholders, designers, lighting engineers and consultants with developing strategies for the inclusion of public lighting. This relates to public lighting of spaces and features within the local government area and managed by Council only. It is anticipated that this document will be useful for other applications of light and private developments as a guiding document.

The Plan is composed of the following sections:

- Section 1.0 Introduction
- Section 2.0 Strategic Policy Context
- Section 3.0 Current State of FCC Lighting
- Section 4.0 Strategic Outcomes
- Section 5.0 Recommendations
- Section 6.0 Implementation & Evaluation
- Section 7.0 Appendices

Section 1.0 Introduction

This section focuses on detailing the project purpose and project scope of the Plan, and the way to use it.

Section 2.0 Strategic Policy Context

This section draws out the context of lighting in existing Council policy and strategic planning. It also touches on the supplementary influences and stakeholders who will play a role in determining public lighting project outcomes and success.

Section 3.0 Current State of FCC Lighting

This section looks at the profile of the community, explores the existing lighting within public spaces and provides an assessment of its current state.

Section 4.0 Strategic Outcomes

This section focuses on the important alignments and role that public lighting design can have on achieving core municipal objectives and working with the fundamentals of lighting to deliver outcomes that support economic growth, prosperity, community-building, sustainability and resilience.

Section 5.0 Recommendations

This section provides a summary of recommendations for lighting objectives, qualities and outcomes. It also outlines the requirements for lighting to be met and the associated compliance standards and warranties to be met.

Section 6.0 Implementation & Evaluation

This section focuses on the delivery of lighting within a ten-year action plan determined in consultation with Frankston City Council. The subsequent actions to follow are outlined, including further lighting policy focuses, internal and partnered research projects and evaluation processes to determine feasibility, success and opportunity.

Section 7.0 Appendices

This section includes supplementary documents as part of this Plan that provide further detail and documentation of research, analysis and dissection of existing lighting within the municipality.



Strategic Policy Context

2.0

