

12.13	Final Draft Sunshine Energy Park Vision Plan
Directorate	Infrastructure and City Services
Director	Chris Leivers
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Attachment(s)	1. Sunshine Energy Park Draft Vision Plan [12.13.1 - 28 pages] 2. GHD Report - Sunshine Energy Park Vision Plan Review - May 2024 [12.13.2 - 41 pages] 3. Sunshine Energy Park Draft Vision - Community Feedback [12.13.3 - 1 page] 4. Sunshine Energy Park Draft Vision - Key Stakeholder Feedback Report [12.13.4 - 58 pages] 5. CONFIDENTIAL REDACTED - Sunshine Energy Park Draft Vision Plan - Business Proposals Received [12.13.5 - 28 pages] 6. Sunshine Energy Park Draft Vision Plan - Gender Impact Assessment Report [12.13.6 - 3 pages]

Purpose

For Council to receive the community and stakeholder feedback on the Draft Sunshine Energy Park Vision and to consider adopting the Final Draft Sunshine Energy Park Vision Plan, at **Attachment 1**.

Officer Recommendation

That Council:

- a. **Notes that on the 13 December 2022 Council endorsed the Draft Sunshine Energy Park Vision Plan, for community consultation and requested to receive a further report outlining any submissions made on the Draft Sunshine Energy Park Vision Plan and present a Final Draft Sunshine Energy Park Vision Plan for consideration for adoption.**
- b. **Notes that an independent technical review of the Final Draft Vision Plan has been undertaken by the engineering firm GHD (provided in Attachment 2) which confirms that the Final Draft Vision Plan is feasible and will guide the future implementation process.**
- c. **Notes the community feedback (provided in Attachment 3) and stakeholder feedback (provided in Attachment 4) received and that this report summaries and discusses the main items for consideration raised in the submissions.**
- d. **Notes that unsolicited proposals were received by local business and organisations with ideas for partnerships in line with the Draft Vision and that these will be considered in future, as part of an open process, via an Expressions of Interest process, or similar, to realise Councils Vision for the site (see Confidential Attachment 5).**
- e. **Notes the Gender Impact Assessment Report (see Attachment 6) undertaken which has informed the updated Final Draft Vision Plan.**

- f. Notes that the development of the Draft Sunshine Energy Park Vision Plan builds on the Transforming Brimbank – Sunshine Priority Precinct Vision 2050 adopted by Council in April 2021, Brimbank Advocacy Plan adopted by Council in March 2022 and the Sports Facility Development Plan adopted in October 2023.**
- g. Having considered feedback received as part of the consultation process for the draft Sunshine Energy Park Vision Plan and the independent technical review, adopts the Final Sunshine Energy Park Vision Plan (see Attachment 1).**
- h. Notes that the full implementation of the Final Sunshine Energy Park Vision Plan will not be able to be funded by Council alone and will rely on developing business cases for a staged implementation and forming partnerships with Governments, community groups and private sector as appropriate.**
- i. Notes that officers will actively explore external funding opportunities for a staged implementation through grants, partnerships and business case development and the Council will consider funding for implementation of the Final Sunshine Energy Park Vision Plan in future budget processes and Council reports as appropriate.**
- j. Notes that a formal expression of interests for partnership and leasing opportunities may be undertaken in the future, following the relevant statutory processes.**
- k. Writes to those who provided written submission thanking them for their feedback on the draft Sunshine Energy Park Vision Plan and advising of Council's decision.**
- l. Writes to Stakeholders that can help with the realisation of the Vision for Sunshine Energy Park to inform them of Councils endorsement and to invite them to work with Council to deliver on the Vision.**

Background

The Draft Sunshine Energy Park Vision Plan (the Vision Plan) covers the land parcels 528B, 570 and 570A Ballarat Road, Albion, 27A Carrington Drive, Albion and 62, 137, 137A Denton Ave, St Albans which collectively is 74 hectares of Council owned land.

The Wurundjeri are the Traditional Custodians of Sunshine Energy Park.

Sunshine Energy Park (the Park) is situated within the Sunshine Priority Precinct, the Sunshine National Employment and Innovation Cluster and the Albion Quarter Structure Plan boundary and is positioned to become a state significant destination and community hub.

The Draft Vision Plan provides Council with a framework to enable the site to be the 'central park' for Brimbank and Melbourne's west in the future and will enable the development of further feasibility studies and business cases for various aspects of the Draft Vision Plan.

The site is a closed landfill with some of the land currently being leased by community groups and clubs.

The Sunshine Energy Park site was quarried for basalt from around 1900, following this the worked-out quarry pits were reclaimed by landfilling from the late-1960s until the late-1980s under licence. Capping works occurred progressively during operation and to a final landform after closure. Additional civil works commenced in 2012 which included the works to import soil to create a water shedding profile and improve drainage. Aftercare of the landfill continues, including environmental monitoring, settlement monitoring and control of residual landfill gas. The Closed Sunshine Landfills are now suitable for recreation and community use after extensive rehabilitation works and aftercare management, which will continue into the future.

The park's name relates to an energy production scheme that operated on the site in the 1990's which used the landfill gas to generate electricity for export to the State network. While this power generation scheme has since finished, the name Sunshine Energy Park still resonates with the vision and ambitions articulated for the transformation of the Park in the Final Draft Vision Plan.

A Future Use Feasibility Assessment was undertaken by GHD in 2019 which guided the development of the Preliminary Draft Vision Plan 2022. The Preliminary Draft Vision Plan was also informed by Council's key strategic drivers including the Aboriginal Heritage Strategy, Climate Emergency Plan, the Sports Development Plan and Transforming Brimbank – Sunshine Priority Precinct Vision 2050.

On 13 December 2022 Council endorsed the Draft Vision Plan for the purposes of consultation and key stakeholder engagement.

Community and stakeholder engagement processes were undertaken between 1 June and 1 November 2023 inviting feedback via the Your Say web page and through information sessions and meetings. The timing of the engagement was coordinated to be undertaken at the same time as Department of Transport and Planning's engagement on the Albion Quarter Structure Plan. A summary discussion of the feedback and key considerations raised are discussed in the body of this report.

Matters for Consideration

Options

The Draft Vision Plan has been prepared following engagement and technical assessments:

Option 1: (Officer Recommendation): the Draft Vision Plan be adopted to guide the planning, design, maintenance and ongoing feasibility and advocacy work for Sunshine Energy Park.

Option 2: Do not adopt the Draft Vision Plan and plan for maintenance of the site only, noting this approach would not enable any community access to the site.

Analysis

The Draft Vision Plan covers three land parcels which combined equates to a total of 74 hectares of Council owned land. It outlines the community's and stakeholder's aspirations and embeds shared objectives for the parkland for the next 30 years.

The Vision Plan aims to establish the park as a vibrant community landmark that nurtures connection to Country, supports sports, recreation, education, and environmental sustainability. Its location within the Sunshine Priority Precinct provides

an opportunity to create a destination of local, regional, and state significance, thereby enhancing liveability and fostering community cohesion.

Core Pillars

Three core pillars have guided the development of the Sunshine Energy Park Vision Plan.

These core pillars have been distilled from community feedback and existing Council policy, including Brimbank City Council's Climate Emergency Plan, Reconciliation Action Plan, Health and Well-Being Plan, Sports Development Plan, Biodiversity Strategy and Council Plan. In particular, the Sunshine Priority Precinct Vision 2050 outlines key aspirational outcomes for what the Sunshine CBD and Sunshine Priority Precinct could look like in 2050 including Sunshine Energy Park. According to the Sunshine Priority Precinct Vision 2050, "Sunshine Energy Park is transformed into one of the western region's premium parks."

The three core pillars are:

- Caring for Country
- Sustainable Innovation
- Inclusive Wellbeing

The vision for the parkland is as follows:

"Sunshine Energy Park will be a catalyst for Sunshine's renewal, embedding a high-performing urban parkland at its core that inspires community well-being, biodiversity, and environmental innovation."

The Precincts

The Final Draft Vision Plan outlines 8 precincts which deliver on the core pillars and vision:

1. Cultural and Ecological Precinct
2. Community Club Precinct
3. Sustainability Precinct
4. Outdoor Sporting Precinct
5. Play Precinct
6. Cycling Precinct
7. Stadium Precinct
8. Water Management

Evolution of the project

The extent of the Final Draft Vision Plan has been broadened to include the parklands (137A Denton Ave) on the north side of the M80 Western Ring Road, following engagement with stakeholder within the Sunshine Hospital precinct.

The increase of the Energy Park parkland to the northern side of the M80 brings Sunshine Energy Park closer to the Sunshine Hospital precinct, which creates better opportunities for hospital staff, patients and visitors. The Park is 1km walking distance from Sunshine Hospital. Including this open space into the Energy Park precinct will enable Council to deliver on the objective of Caring for Country by increasing and protecting habitat through an endorsed Plan.

Zoning and Overlays

All parcels are zoned PPRZ except for 570 Ballarat Road (IN1Z) and the following overlays exist over the site: DCPO2, EAO, ESO6 (only part of 137A Denton Ave).

The Vision Plan includes a children's playground which will trigger the requirement for an environmental audit under the Environmental Audit Overlay (EAO). Given the precinct approach and staged implementation of development, an environmental audit could potentially be limited to the extent of the playground, or any other sensitive use proposed. Council may also voluntarily commence an environmental audit for any other precincts or undertake these as requested by the Planning Authority.

Technical Assessments

In 2019 Council engaged GHD to undertake a preliminary technical assessment of future use options for the Sunshine Energy Park. The options assessment consisted of a high-level study to inform the planning for future use, assessing environmental, geotechnical, statutory planning and urban development constraints associated with potential uses for SEP. The options assessment examined three broad future uses:

- Low impact use – solar park or open recreational parkland with no buildings or deep human inhabited underground confined spaces.
- Medium impact use – formal sports fields/sports facilities with limited enclosed structures or underground confined spaces, such as clubrooms and a small grandstand.
- High impact use – extensive built form with extensive enclosed structures or deep underground confined spaces, such as enclosed sports stadium, mixed use industrial, commercial or residential properties

When the Draft Vision Plan was prepared in 2022 for the purposes of community and stakeholder engagement it was done so in consideration of the guidance provided in the 2019 Technical Assessment.

In 2024 Council engaged GHD to undertake a review (see **Attachment 2**) of the Final Draft Vision Plan against the recommendations provided in the 2019 Technical Assessment.

The review included:

- Review the proposed Vision Plan proposals against recommendations provided in the 2019 Technical Assessment.
- Comparison of timeframes for end use scenarios presented in the 2019 Technical Assessment against proposed development and settlement monitoring data to date.
- Review of Vision Plan proposals against settlement monitoring and environmental data to date which has been collected by GHD subsequent to the 2019 Technical Assessment.
- Identifications of additional broad environmental and geotechnical risks which may have become apparent since the 2019 Technical Assessment based on data collected by GHD in subsequent investigations.
- Comment on the Environmental Audit Overlay (EAO) requirements which have been applied to the subject site subsequent to the 2019 Technical Assessment.

The recommendations from the in the Vision Plan Review 2024 (GHD) are that:

- The Vision Plan is reviewed as it develops, and geotechnical and environmental advice is sought during each phase of the development.
- Settlement monitoring should continue to allow ongoing trends to be monitored and assessed to better inform decision making processes.

The recommendations for the proposals outside of the 'landfill area':

- Development outside the 'landfill area' can proceed with appropriate design for all land use scenarios (low, medium and high) however all buildings are likely to require landfill gas protection measures.

The recommendations for the proposals within the 'landfill area':

Low impact uses (e.g. cycle precinct, dog park, artwork, car park):

- Low impact development can progress with careful design and ground improvement measures to accommodate ongoing settlement and environmental controls.

Medium impact uses (e.g. play precinct, small pavilions, sports fields):

- The Vision Plan includes one medium impact scenario (play precinct). This is considered medium impact due to geotechnical (settlement) and not environmental factors - however can proceed with appropriate design.

High impact uses: (e.g. stadium, operations centre):

- The Vision Plan does not include any high impact scenarios within the 'landfill area'. This was based on information from 2019 Draft TAR and supported by Vision Plan Review 2024 which advised these uses should not progress for 20 – 30 years.

Solar Farm

A feasibility study and the business case for the Solar Farm is finalised. The business case indicates establishing the solar farm in Sunshine Energy Park is technically feasible but not economically viable with current technologies. Exploring different business models and alternative technologies in conjunction with solar can be further investigated. Creating a smaller solar system that's expandable for onsite generation can also be considered in future study.

Stanford Street Operations Centre

The Vision Plan includes an Operation Centre, and this allows for a future potential relocation of the Stanford Street Operations Centre to Sunshine Energy Park. This would provide a more centralised location for the Operations Centre and allow development of active travel connections at the current site in Stanford Street, Sunshine. Initial feasibility work has been undertaken that indicates that the relocation is feasible, with further specific technical assessment work required. Whilst possible and desirable, as per all elements of the Vision, the implementation of this element would be subject to prioritisation and budget capacity.

Resource Recovery Centre

A feasibility study for the relocation of the Stanford Street Depot in Sunshine and the development of a Resource Recovery Centre in Sunshine Energy Park was completed in June 2023. While the feasibility study indicated that both the depot relocation and the development of a resource recovery centre were technically feasible, further work is required to determine if either option is financially viable or fits in with the other components of the Sunshine Energy Park Vision Plan.

As part of the evaluation of the feasibility report, officers determined that the reference to a Resource Recovery Centre, which is a very particular operations outcome, is too specific at this stage, and instead the objective for a 'Sustainability Hub' should instead be referred to, which could encompass a number of different sustainability outcomes, depending on feasibility, funding and fit.

Remediation and Ongoing Monitoring of the Closed Landfill site

The Closed Sunshine Landfills had ceased accepting waste by 1990, with landfill capping occurring progressively during operation and to a final landform after closure.

Landfill gas extraction and power generation infrastructure was established at Sunshine Energy Park following the closure of the landfill operation. A landfill gas power station commenced operation in 1992, with electricity exported to the State network. Gas generation rates were later found to be significantly lower than forecast, and power generation became financially unviable.

In 2002, the generators were converted to run on natural gas and used to target peak payment periods while the site flare continued to manage landfill gas emissions. Power generation ceased altogether in 2009, and the generators were removed. Since 2010, Council has coordinated with the EPA and initiated numerous environmental and health investigations. In 2013, an environmental audit was completed for the closed Sunshine Landfills, which led to the preparation of aftercare management plans implemented by Council.

Council commissioned civil works starting in 2012 to import soil to the closed landfill to create a water shedding profile and improve drainage. This work has shaped the existing landscape and surface levels at the site today.

Aftercare for the Closed Sunshine Landfills will continue into the future, involving environmental monitoring, settlement monitoring and control of residual landfill gas. Landfill gas management infrastructure may need to be expanded to mitigate risks to new sensitive development such as buildings and structures. Environmental infrastructure will need to be retained for the long-term to manage risk and be integrated with precinct design. Landfill gas generation is directly linked to the biodegradation of the waste mass, therefore, environmental risks and geotechnical constraints for medium/high impact buildings on the landfill area should diminish and stabilise together over time.

The Closed Sunshine Landfills are now suitable for recreation and community use after extensive rehabilitation works and aftercare management, which will continue into the future.

Implementation

The Vision Plan represents aspirations and possibilities for this future parkland. Over the next 30 years each precinct will take its own path to implementation as partnerships and funding opportunities are explored. The size and ambition of this Vision requires significant collaboration between all stakeholders of this land to explore how the Vision can be realised.

The implementation plan has been informed by the 2019 Technical Assessment and 2024 Technical Review undertaken by GHD. Expert geotechnical and environmental advice will be sought during each phase of the development.

Indicative Cost Estimate

Consulting engineering firm WT Partnerships Pty Ltd were engaged to prepare an Opinion of Probable Costs (OPC) for the full implementation of the Draft SEP Vision Plan. The cost to implement the plan is estimated at \$500,000,000 which is comparable to the redevelopment of the Caulfield Racecourse which is a project of similar scale and complexity.

Council will not be able to fund this transformation and, as previously mentioned, further feasibility and business cases are needed for all of the above zones to enable future advocacy with Private and Public stakeholders such as governments and developers.

Advocacy

The Sunshine Priority Precinct Vision 2050, outlines what the Sunshine CBD and Sunshine Priority Precinct could look like in 2050, including a transformed Sunshine Energy Park into the Western Regions' premium park.

The Brimbank Advocacy Plan (2022) list Transforming Brimbank as a Gold priority for Brimbank, which includes Sunshine Energy Park.

The Advocacy Plan states that Council is seeking the following advocacy outcomes for Sunshine Energy Park:

- *Funding for the delivery of Sunshine Energy Park, subject to the adoption of the Sunshine Energy Park Vision Plan.*
- *Government delivery of key connections into the new park across State Government assets such as motorways, railway lines and roads. – This will connect key destinations such as Sunshine CBD, Sunshine Hospital Precinct and Development Victoria's Cairnlea and LUMA sites.*
- *Delivery of a new state significant indoor stadium and other facilities in the precinct for sport and events.*
- *Government investment in a new solar energy farm at Sunshine Energy Park.*
- *Government investment for a new environmental community space, similar to CERES, which includes a resource recovery centre.*
- *Government investment for new sports and recreation fields and facilities.*
- *Renewal and treatment of Jones Creek and Stony Creek, including using integrated*

Subject to Council adoption of the Final Draft Vision Plan and consideration through the Annual Budget process for the development of business cases, advocacy approaches will be able to be considered to seek external funding.

Community Engagement

Community and Key Stakeholder Engagement commenced on 21 June 2023, and the final engagement meeting was undertaken on 1 November 2023. Engagement with the community involved face to face engagement, Your Say page, media posts and flier and letter delivery. Engagement was undertaken with 46 key stakeholders.

Feedback Summary

Below is a summary of the engagement process undertaken:

Type	Time	Methods
Broad community feedback	21 June – 31 Aug 23	Your Say, flier, media In-person information sessions
Targeted Stakeholders Feedback - Adjacent properties + tenants	June – Aug 2023	Your Say, flier, media In-person information

- Organisations with interest - Gov. Departments + agencies - Ministers + Local Members		sessions
Unsolicited Business Proposal	June – Aug 2023	Via email
Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation	Nov 2021 – Nov 2023	Online information session (15/9/2023) Onsite meeting (1/11/2023)
BATSICC	Nov 2021 – Oct 2023	Online information session (23/11/21) Onsite meeting (6/10/2023)
Brimbank Youth Council	19 July 23	workshop (5-7pm)

Community feedback

There were 66 responses to a series of questions relating to the Draft Vision Plan on the project's Your Say page as outlined in **Attachment 3**. 74% of respondents stated that the draft Vision Plan will meet the needs and aspirations of the community.

Key Stakeholders (Government Departments, Adjoining Property Owners and Potential Funding Partners)

Invitations to online information sessions on the Vision Plan were sent to 60 identified key stakeholders. There were subsequently individual meetings held key stakeholders who were interested in having further discussions, these were held with the following key stakeholder – a full consultation report is at **Attachment 4** this report also includes the 13 written submissions received from the following organisations:

1. Albion and Ardeer Community Club Inc
2. Australian Unity – Sunshine Private Hospital
3. BikeWest
4. Brimbug
5. Cadence
6. Friends of Kororoit Creek
7. Henkell Brothers
8. Islamic Guidance Society of Australia / Khalid bin Al-Waleed Mosque
9. NBL
10. Tennis Victoria
11. Victoria University
12. Volleyball Victoria
13. Western Pigeon Federation of Victoria

The community clubs who currently use the site were approached for feedback on the Vision Plan.

Across the engagement process, there was strong support for elements within the vision that address:

- Walking, cycling, and public transport connections
- Environment sustainability
- Community gathering and social cohesion
- Health and wellbeing
- Supporting sports in Brimbank
- SEP as a destination
- Potential partnerships

The implementation of the Sunshine Energy Park Vision Plan would require ongoing consultation and engagement with stakeholders specific for each precinct.

Unsolicited Business Proposals

Submissions were received from several companies interested in establishing within Sunshine Energy Park (see **Confidential Attachment 5**).

It is recommended that following the adoption of the Final Vision Plan, that Council undertake a formal EOI to explore any opportunities for partnerships, investment and/or leasing arrangement which align with the vision and achieve appropriate community outcomes.

Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation feedback

Officers met with the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation at an Online information session (15/9/2023) and an Onsite meeting (1/11/2023). Council officers have shown the Wurundjeri Elders who attended these meetings how their feedback has been incorporated, they have indicated that they are supportive and have agreed to prepare a formal foreword for the Vision Plan from the Traditional Owners.

Feedback provided related to continuing to work together and meeting Country, activate the park with events, interpreting the park's history through events, signage and artwork, and seeking to restore the site's local fauna and flora.

Council officers are working with the Wurundjeri to investigate the possibility of the Wurundjeri Elders who attended the meetings on Country to provide a foreword to the Final Draft Vision Plan. They have given in principle support and the wording is being developed for inclusion in the final plan.

BATSICC Feedback

Officers met with the Brimbank Aboriginal and Torres Strait Islander Consultative Committee (BATSICC) on 23/11/21 and at an onsite meeting on 6/10/2023. At the meeting on site, the Committee indicated that they were supportive of the project and wanted to ensure that Wurundjeri engagement be undertaken in the planning design and implementation of the project. Other feedback included exploring opportunities to interpret the park's history through artworks in consultation with the Wurundjeri and providing spaces for cultural gatherings and ceremonies.

Brimbank Youth Council Feedback

The BYC were asked to consider their overall thoughts on the Vision Plan as a whole and there was overall support for the plan and the core pillars guiding the design. The group overall felt that the Vision Plan meets the needs and aspirations of the community.

Recommended Officer Changes

Following analysis of feedback received, a summary of the key changes that has been made to the Preliminary Vision Plan:

Recommendation 1: Expansion of the park area to incorporate the parkland situated on the northern side of the Western Ring Road into the Vision Plan to increase the SEP precinct from 54 hectares to 74 hectares.

Recommendation 2: Include mention of the adequate provision of car parking facilities to cater to the needs of activities on the northern portion of the site.

Recommendation 3: Relocate playground from the southern area to the northern area of park.

Recommendation 4: Enhance the amount of Mountain Bike facilities shown in the Vision Plan including long circular trails.

Recommendation 5: Remove reference to a proposed wetland, as it was shown over or close to over landfill area. Instead, it is proposed that this area is transformed into a Conservation and Wildlife Area adjacent to Jones Creek.

Recommendation 6: Provision for private companies through formal EOI process - taking into consideration submissions already received.

Recommendation 7: Opportunity to establish a dog park within the park.

Recommendation 8: Provide better access to the existing clubrooms within the park which will continue to operate as part of the park's Community Use Hub in their current location.

The project internal working group has been consulted throughout the project and has been consulted on this list of proposed changes; the group includes representatives from the following departments: Urban Design (project lead); Transforming Brimbank; Leisure and Community Facilities; Strategic Planning; Contaminated Land; Climate Emergency and Environment; Parks Services and Connected Communities.

Draft Sports Facility Development Plan

The Draft Sports Facility Development Plan consultation was undertaken concurrently with the Energy Park Vision Plan engagement and the feedback and recommendations for both are in alignment. Of relevance was strong support for indoor courts, outdoor courts and more sporting facilities to meet community need.

Gender Impact Assessment Report

The Sunshine Energy Park Draft Vision Plan Gender Impact Assessment Report (**Attachment 6**) makes recommendations to achieve a more equitable public open space facility. Some of the recommendations relate to the detail design phase of the project, these below relate to the positioning of features and have been included in the recommended changes to the Vision Plan:

- Playground facilities should be within a reasonable distance and visible from all playing fields
- Provide additional walking paths and outdoor fitness equipment in the final design as mountain bike riding is generally more popular with men than women.
- Inclusion of CTEP principles into design of parkland, in relation to elements such as lighting, with the safety of woman and children in mind

Resource And Risk Implications

Subject to Council's adoption of the Final Draft Sunshine Energy Park Vision Plan, funding for business case development of each precinct of the Vision Plan will be considered in future Annual Budget processes.

Community: potential impact on community, including public trust and customer service impact

- The Sunshine Energy Park Vision presents a Vision for a significant and unique public space that presents opportunities for increased participation, inclusion, activity and wellbeing, by unlocking and developing a site that is currently inaccessible to the community

Environmental: impacts on environmental sustainability, including water/waste management, climate change, and contaminated land

- Yes - The Draft Energy Park Vision Plan has the potential to create a new biodiverse urban park that focusses on heatwave mitigation and create a social/environmental sustainability hub.

Financial: significant financial impacts

- Yes - Council will not be able to fund the implementation of the Draft SEP Vision Plan and will need to seek funding partners over a 30-year period to realise the vision.

Regulatory: legal, legislative or regulatory implications including the rights/obligations of stakeholders

- Yes - SEP is closed landfill site and all future works will need to comply with EPA requirements.

Safety: health, safety or duty of care impacts

- Yes - SEP is a closed landfill site and can be repurposed to ensure the health and safety of all users.

Legislation/Council Plan/Policy Context

This report supports the Council Plan 2021-2025 strategic direction and objective of:

1. People and Community - A welcoming, safe and supported community - An inclusive place for all

- Wellbeing and Belonging - Responsive services that support mental and physical wellbeing
- Pride and Participation - Community and cultural connections built through social and artistic expression

2. Places and Spaces - Liveable and connected neighbourhoods that support healthy and sustainable futures - A green place for all

- Liveable and Connected - Inviting and liveable spaces and facilities, connected so people can get around
- Sustainable and Green - Protect natural environments for current and future generations

3. Opportunity and Prosperity - A future focused, transforming city where all have opportunities to learn and earn - A prosperous place for all

- Growing and Transforming - Optimise community opportunities through infrastructure innovation and investment
- Earning and Learning - Everyone has access to education, training and lifelong learning to support their aspirations.

This report complies with the Council Plan 2021-2025, Brimbank Climate Emergency Plan, Sunshine Priority Precinct Vision 2050 and Brimbank's Sports Facility Development Plan.

Council officers contributing to the preparation and approval of this report, have no conflicts of interests to declare.



SUNSHINE ENERGY PARK VISION PLAN

REVISED DRAFT
APRIL 2024

ACKNOWLEDGMENT OF COUNTRY

Brimbank City Council respectfully acknowledges and recognises the Wurundjeri and Bunurong Peoples as the Traditional Custodians of this land and waterways, and pays respect to their Elders, past, present and future.

Council also acknowledges local Aboriginal and Torres Strait Islander residents of Brimbank and their Elders for their ongoing contribution to the diverse culture of our community.

The City of Brimbank holds great significance as a historical trading and gathering hub for the Traditional Custodians. This region boasts a profound Aboriginal cultural and physical heritage.

Within the municipality, there are 427 documented sites of cultural heritage significance, as recorded in the Victorian Aboriginal Heritage Register, under the stewardship of Aboriginal Victoria and the Aboriginal Heritage Act 2006. These places, landscapes, and objects embody the intricate and evolving way of life of Aboriginal peoples over thousands of years.

A MESSAGE FROM THE WURUNDJERI WOI-WURRUNG

The journey of the land from its ancestral roots to its current state as a potential community park is a poignant reflection of its resilience and the enduring connection between the Wurundjeri People and their Country. The transformation from a basalt quarry to a landfill, and now into a space for healing and communal gathering, symbolises a profound shift towards restoration and renewal.

The involvement of Wurundjeri Elders Aunty Julianne and Aunty Gail in the development of the park's vision is a testament to the importance of Indigenous voices in shaping the future of the land. By sharing their stories and aspirations, they ensure that the vision for the park is grounded in a deep respect for the land's history and the cultural significance it holds for the Wurundjeri People.

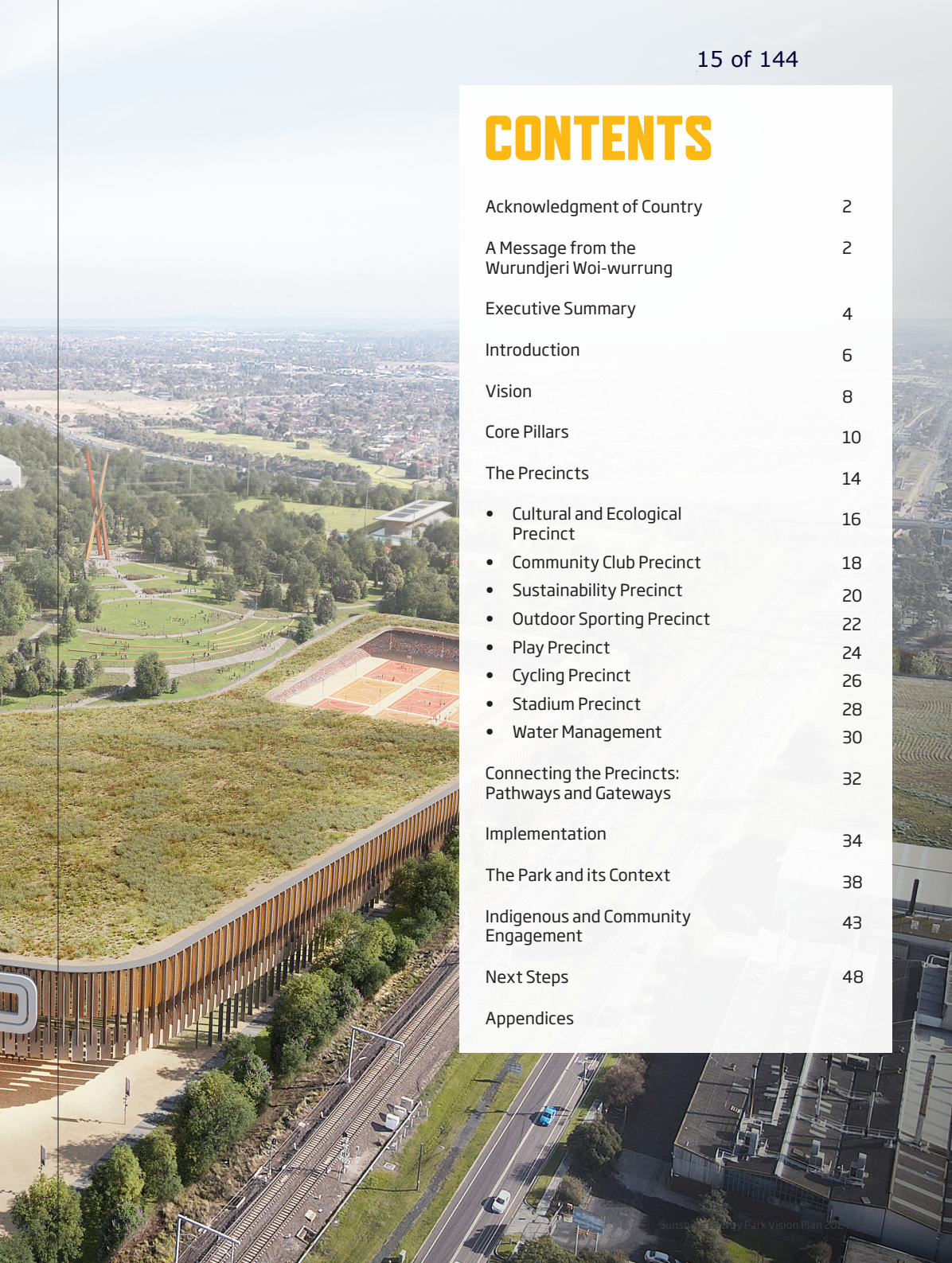
The emphasis on storytelling as a means of connecting visitors to the land's past is a powerful approach. Through interpretive signage and artistic expressions, visitors can gain insight into the rich tapestry of history and culture woven into the landscape. These stories serve not only to educate but also to inspire a sense of stewardship and responsibility for the land and its ongoing care.

In essence, the Sunshine Energy Park represents a convergence of sustainability, cultural preservation, and environmental stewardship. It serves as a beacon of hope for the future, demonstrating how communities can come together to honour the past while building a brighter tomorrow for generations to come.



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EXECUTIVE SUMMARY

The Sunshine Energy Park Vision Plan delineates the transformation of the 74-hectare site into a dynamic, future-focused urban parkland. Brimbank City Council is committed to establishing the park as a vibrant community landmark that nurtures connection to Country and

supports sports, recreation, education, and environmental sustainability. Nestled within the Sunshine Priority Precinct, this vision aspires to create a destination of local, regional, and state significance, thereby enhancing liveability and fostering community cohesion.

"Sunshine Energy Park will be a catalyst for Sunshine's renewal, embedding a high-performing urban parkland at its core that inspires community well-being, biodiversity, and environmental innovation."

Precincts

The Vision Plan is divided into interconnecting precincts which respond to the various needs of the community. This approach will allow for the development of the site in stages.

- | | |
|------------------------------------|--------------------|
| 1 Cultural and Ecological Precinct | 5 Play Precinct |
| 2 Community Club Precinct | 6 Cycling Precinct |
| 3 Sustainability Precinct | 7 Stadium Precinct |
| 4 Outdoor Sporting Precinct | 8 Water Management |



Attachment 12.13.1

Core Pillars

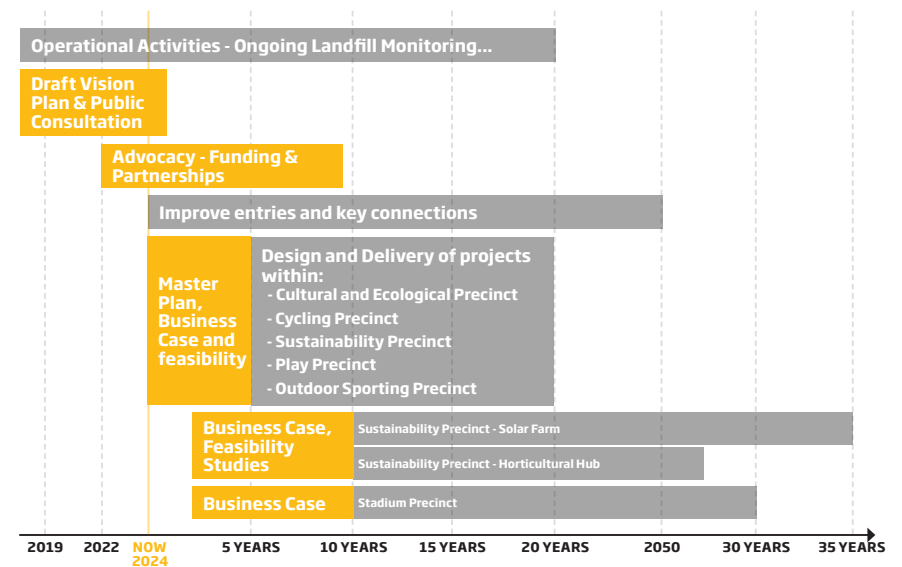
Three core pillars have guided the development of the Sunshine Energy Park Vision Plan. These core pillars have been distilled from the voice of the community and policy, including Brimbank City Council's Climate Emergency Plan, Reconciliation Action Plan, Health and Well-Being Plan, Sports Development Plan, Biodiversity Strategy and Council Plan.



Implementation

The Vision Plan represents aspirations and possibilities for this future parkland. Over the next 30 years each precinct will take its own path to implementation as partnerships and funding opportunities are explored. The size and ambition of this Vision requires significant collaboration between all stakeholders of this land to explore how the Vision can be realised.

Timeline [subject to funding]



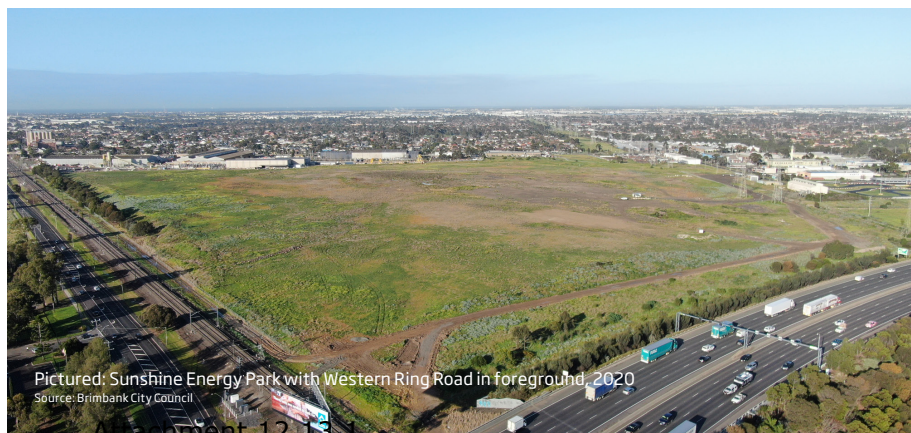
Relevant approvals including possible planning approvals may be required throughout the timeframe.

INTRODUCTION

The Sunshine Energy Park Vision Plan outlines the transformation of the 74-hectare site into a vibrant, future-focused urban parkland. Brimbank City Council aims to establish the Sunshine Energy Park as an active community landmark that fosters connection to Country, supports sports, recreation, education, and environmental sustainability. Positioned within the Sunshine Priority Precinct, this vision seeks to create a key destination with local, regional, and state significance, enhancing liveability and community cohesion.

HISTORY OF THE SITE

Originally a volcanic plain grassland, the site held deep significance for its Traditional Custodians, the Wurundjeri People. It subsequently became a basalt quarry, contributing to Melbourne's expansion, before transitioning into a landfill site and later a gas extraction and energy production site, which gave the park its present name. This historical trajectory presents an opportunity to rehabilitate and reimagine the site as a significant open space and an ongoing environmental and cultural asset for the community.



SUNSHINE ENERGY PARK TODAY

Sunshine Energy Park, currently not fully accessible to the public, holds significant cultural and ecological value. Enclosed by key transport arteries and industrial areas, it is also strategically adjacent to the expanding residential districts of Brimbank. Positioned centrally between key railway stations and within the projected pathway of the Melbourne Airport Railway Line, the park is emerging as an essential asset for the community.

The park is surrounded by significant developments and community hubs. These include the Health and Wellbeing & Education Precinct, which offers a blend of medical and educational facilities, the Sunshine CBD that promises economic vibrancy, and the Sunshine Station that connects people and places with networks of green, pedestrian-focused streets.

The park's geographical position, bordered by Jones Creek to the west and Stony Creek to the east, places it within the catchment of Kororoit Creek. The future parkland's location highlights the importance of revitalising its environmental integrity ensuring it contributes to the sustainable development and ecological health of the region.



THE POTENTIAL

In line with Council's Sunshine Priority Precinct Vision 2050, the vision for Sunshine Energy Park leverages its strategic location and rich history to establish a parkland that addresses the needs of the community and current environmental challenges. It aims to act as a catalyst for long lasting, positive change.

To achieve this vision, the site has been divided into interconnecting precincts that foster a diverse range of activities, allowing for phased development. Each precinct underscores feasible opportunities for capital projects and provides a roadmap for future business case development, subject to Council's budget approvals. These efforts will facilitate future advocacy, attract external funding, and foster engagement with key stakeholders.

This document sets out a vision for Sunshine Energy Park that acknowledges its history, responds to its strategic location within the Sunshine Priority Precinct, restores ecology and restores its connection to the natural systems that surround it. The park's future as a vibrant, inclusive, and sustainable space represents a significant opportunity to deliver wide-ranging benefits, from health and wellbeing to social, environmental, and economic outcomes, aligning with Brimbank's broader aspirations for growth and community development.

LOCAL CONTEXT

Sunshine Energy Park will maximise the benefits from significant government investment.



Modified diagram of Department of Transport and Planning, Sunshine Precinct Opportunity Statement Document November 2021, Figure 2

Legend

- Sunshine Precinct - 1600m radius of stations
- Indicative Sunshine NEIC (Boundary as per Draft Western Metro Region)
- Waterway
- Road network
- Open Space
- Railway
- Railway Station
- Sunshine Metropolitan Activity Centre
- Albion Quarter Structural Plan Study Area
- Sunshine Energy Park

Attachment 12.13.1



Sunshine Health Wellbeing & Education Precinct

The Sunshine Health, Wellbeing and Education Precinct (SHWEP) is the premier location for health facilities, wellbeing and education serving the western region. It will become a mixed-use precinct that capitalises on the hospital with a mix of health, wellbeing and education use and supporting residential development for workers.



Sunshine CBD

Sunshine Central Business District will be thriving and diverse civic hub, with a network of bustling streets and public spaces framed with distinctive buildings. Increased housing, shops and services will support an active day-and-night economy, and strengthen existing cultural and community ties. The new CBD will establish Sunshine as the centre of Melbourne's west.



Sunshine Station

Sunshine Station will become an integrated part of a renewed Sunshine. It will be surrounded by and connect new homes, workplaces and shops via a network of green, pedestrian-focused streets and public spaces. As a place for residents, workers, students and tourists, the station will become a hive of activity and civic life.



New Community

Development Victoria is creating new neighbourhoods in Sunshine North and Cairnlea within walking distance of Sunshine Energy Park. The development of Sunshine Energy Park will benefit future residents in the area.



Albion Quarter

The Albion Quarter provides an opportunity to support the next generation of jobs, innovation and services in Melbourne. Improving amenity, connectivity and integration with the train station will see Albion transformed into a new centre in Melbourne's west.

VISION

Sunshine Energy Park will be a catalyst for Sunshine's renewal, embedding a high-performing urban parkland at its core that inspires community well-being, biodiversity, and environmental innovation.

Sunshine Energy Park will become a vibrant urban parkland that demonstrates ecological resilience.

The Park will be planned around eight interconnected precincts, each with a diverse character, offering a range of activities that take full advantage of each area's unique features. These precincts will be linked by a comprehensive network of walking and cycling paths, as well as a series of new entry points that will stitch it back into the Sunshine Precinct.

The design will prioritise inclusivity, employing gender-sensitive planning to ensure a safe and welcoming environment for everyone, celebrating all aspects of human and cultural diversity. With family-friendly amenities scattered throughout, it will address the varied interests and needs of the community.

Collaboration with the Wurundjeri Elders will guide the incorporation of Indigenous values and narratives into the park's design. Local wildlife motifs will animate children's play areas, and spaces for learning and signs will narrate the area's history and the community's aspirations for the future. Art installations and thoughtfully designed landscapes will serve as mediums for storytelling, functioning as platforms for environmental education, highlighting the commitment to 'healing the land' and sustainable living.

01. Conservation and Wildlife Area
02. Existing Club Rooms (new entry from Carrington Drive)
03. Operation Centre
04. Enclosed Dog Park
05. At Grade Car Park
06. Sustainability Hub
07. Sport Fields and Pavilion
08. All Ages and Abilities Play
09. Pump and BMX Tracks
10. Mountain Bike Tracks
11. Sports Fields (Solar Farm interim use)
12. Stadium
13. Landmark Artwork
14. Park Entry Point (for Pedestrians and Cyclists)

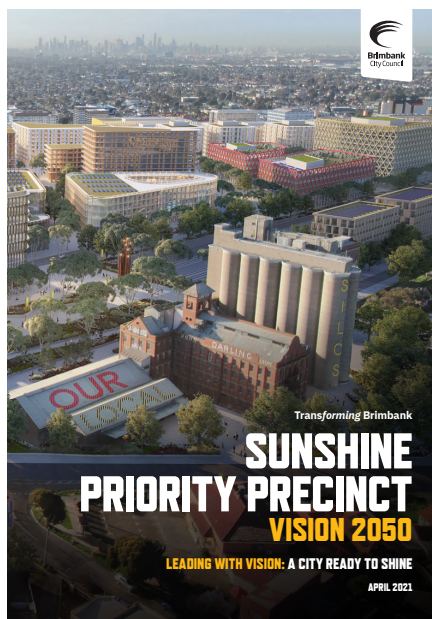


CORE PILLARS

The vision for Sunshine Energy Park is supported by three Core Pillars. These Pillars, in conjunction with Council Strategies, embody Council's commitment to cultural integrity, environmental resilience, community vitality, and future-focused innovation.

In particular, the Sunshine Priority Precinct Vision 2050 outlines key aspirational outcomes for what the Sunshine CBD and Sunshine Priority Precinct could look like in 2050 including Sunshine Energy Park.

According to the Sunshine Priority Precinct Vision 2050, "Sunshine Energy Park is transformed into one of the western region's premium parks."



Caring For Country

Acknowledging the land's history and fostering its regeneration with a focus on ecological restoration and cultural appreciation.

- Partner with the Traditional Custodians, incorporating their perspectives to celebrate and learn from the site's Indigenous history.
- Shift the narrative around the site's past as a landfill into a tool for education and deeper understanding of environmental care.
- Monitor and manage local ecosystems to protect and increase biodiversity.

"We cultivated our land, but in a way different from the white man. We endeavoured to live with the land; they seemed to live off it. I was taught to preserve, never to destroy."

Aboriginal Elder, Tom Dysta - Aboriginal Cultural Heritage Strategy 2018-2023

"Protect existing biodiversity and increase the diversity and sustainability of fauna habitat and remnant vegetation, encouraging community awareness, engagement and acceptance of Brimbank's natural environment."

Brimbank Biodiversity Strategy 2012 - 2022



Sustainable Innovation

Committing to a resilient parkland through sustainable practices, energy innovation, and circular economic principles that benefit the Brimbank community.

- Promote parkland resilience through renewable energy, innovative circular economy practices, and utility-cost reduction, exemplifying the principles of Council's Climate Emergency Plan.
- Develop community partnerships for sustainability projects and green-resource utilisation, supporting local and regional economies.
- Create educational opportunities around green living, promoting resource conservation and responsible consumption.

"The Circular Economy is about recognising that the goods and services we use have a big environmental impact, and so we need to choose wisely, design out waste and pollution, keep products and materials in use, and regenerate natural systems."

Brimbank Climate Emergency Plan



Inclusive Wellbeing

Creating an accessible and versatile space that supports community health, invites engagement, and offers opportunities for learning and employment.

- Provide recreational and cultural facilities that respond to Brimbank's dynamic community profile, supporting active and healthy lifestyles.
- Design around accessibility and diversity, nurturing social bonds and cultural richness, reflective of Brimbank's Reconciliation Action Plan.
- Establishing pathways for youth-focused programs and job creation, reinforcing the park's role in fostering community engagement and economic vitality.

"Places and Spaces are important for wellbeing and a sustainable future. Our community strongly values neighbourhoods that are green, where they can connect with others, and access facilities and services. Together We are Brimbank provides opportunities to enhance our places and spaces for current and future generations."

Together We Are Brimbank
Council Plan 2021-2025

VISION: THE PRECINCTS



Attachment 12.13.1

THE PRECINCTS



1 - Cultural and Ecological Precinct

Anchoring the park's commitment to Aboriginal cultural heritage and habitat, this precinct balances the preservation of indigenous grasslands with the celebration of local culture through art installations and a hilltop lookout that offers panoramic views and a space for reflection and communal gathering.

2 - Community Club Precinct

This precinct serves as the social heart of the park, supporting a cluster of existing community clubs that offer spaces for shared interests and social interaction.

3 - Sustainability Precinct

Key features include a Resource Recovery Centre, aimed at reducing waste through recycling and repurposing initiatives, and a Solar Farm that underlines the park's shift towards renewable energy sources. It's a hub for learning and innovation, demonstrating practical applications of sustainable practices.

4 - Outdoor Sporting Precinct

With state-of-the-art sports fields and facilities, this precinct is positioned to become a vibrant community asset, supporting local sports groups and offering ample opportunities for community events and activities.

5 - Play Precinct

The Precinct includes all-abilities playgrounds, a skate park, and dog-friendly areas. It's a space that invites the community to enjoy the outdoors, engage in healthy activities, and connect with each other.

6 - Cycling Precinct

Designed to fuel active lifestyles and sportsmanship, the Cycling Precinct features mountain bike trails and a pump track, cementing the park's role as a premier destination for outdoor sports.

7 - Stadium Precinct

Envisioned as a multipurpose venue, the Stadium Precinct is designed to host a range of sporting and community events, providing a modern space for gatherings and competitions that support the local and regional economies.

8 - Water Management

Efforts in Stony, Jones, and Kororoit Creeks focus on restoring natural habitats, enhancing stormwater management, and building a strong ecosystem that supports the park's diverse flora and fauna.

Attachment 12.13.1



CULTURAL AND ECOLOGICAL PRECINCT



OVERVIEW

The Cultural and Ecological Precinct include the conservation and habitat corridor connection to Jones Creek located on northern land of the West Ring Road (M80), and woodlands and grassland connecting other precincts in the park, and space for cultural gathering nodes.

These proposed habitat restoration and natural experience areas will provide a variety of habitat to support biodiversity and connect with the Jones Creek cycling and walking trails to offer opportunities for recreation.

Attachment 12.13.1

DELIVERING THE VISION

The Cultural and Ecological Precinct offers the opportunity to engage with Traditional Custodians and Community Groups to tangibly deliver the Core Pillar of Caring for Country. It includes enhancing the park's connection to the local waterways, increasing biodiversity, opportunities to create artworks and to provide interpretation of the site.

KEY PROJECTS:

- **Native Grassland Setting:** Re-establishment of vegetation to protect and enhance existing habitat corridors and increase biodiversity
- **Hilltop Lookout:** Creation of a hilltop lookout to take advantage of the views to Melbourne and the surrounding mountain ranges, replaced by the developing Sunshine Town Centre in the foreground.
- **Cultural gathering nodes and signage:** The creation of cultural gathering nodes and signage that narrate the site's history and ecological story,
- **Landmark Artworks:** Major public artworks that stand as a prominent and identifiable symbol within the precinct.
- **Connective Trails:** A network of trails and boardwalks that facilitate exploration and connection within the park's diverse natural landscapes.

CASE STUDY: YUNGGORENDI MANDE CULTURAL GATHERING SPACE

The Yunggorendi Mande Cultural Gathering Space at Flinders University is a significant project that has been in planning for over 30 years. The design, crafted through extensive collaboration with the Kaurna community, including Kaurna Elder Uncle Lewis O'Brien, teaching staff, and students, emphasises minimal impact on the land to reinforce the healing of Country. The construction required innovative approaches due to the steep slopes of the university campus, which resulted in a native landscape setting with structural solutions that allow the natural landscape to continue undisturbed beneath the constructed areas.

The project exemplifies community and environmental stewardship, evidenced by the donation of over 200 bush food plants, enriching the cultural significance of the space. The Yunggorendi Mande Cultural Gathering Space serves as an outdoor teaching and learning area, hosts cultural ceremonies, and provides a vital place for Indigenous and non-Indigenous communities to come together.





COMMUNITY CLUB PRECINCT



OVERVIEW

Sunshine Energy Park will be home to a series of community clubs, supporting a variety of activities and fostering community engagement. Currently, a number of local clubs including The Deer Park Social Bicycle Club, Western Region Pigeon Club, and Melbourne Off Road Radio Car Club, have expressed their enthusiasm about being involved in shaping the vision for the future of the park.

These community-oriented clubs are keen to sustain their presence on the site, contributing both with activity and passive surveillance that enhances the overall atmosphere. To support this collaborative effort, this vision plan proposes to enhance access and interfaces along Carrington Drive. This improvement will benefit both the existing clubs within Sunshine Energy Park and other community clubs located on the western boundary of the park.

Attachment 12.13.1

DELIVERING THE VISION

With a focus on strengthening community bonds, this precinct underpins SEP's vision of a connected and engaged community. It provides a dedicated space for local clubs and groups, enhancing community ownership and engagement, and fostering a sense of belonging through shared activities and events.

KEY PROJECTS:

- **Carrington Drive Access:** Infrastructure upgrades to improve access and functionality, enhancing the ease of travel for club members and visitors within the precinct.
- **Layout Enhancements:** Redesign of the precinct's layout to better serve community clubs, especially those situated along the park's western boundary, fostering integration and collaboration.
- **Club Engagement:** Active involvement with local clubs to bolster their activities and ensure their ongoing participation and presence in the park.





SUSTAINABILITY PRECINCT



OVERVIEW

The Sustainability Precinct is set to demonstrate the shift towards a circular economy by nurturing small-scale initiatives that support this sustainable transition.

This precinct is planned to evolve into an innovative sustainability hub that provides educational and communal facilities. These will serve schools, local businesses, and other groups, fostering sustainable living behaviours and facilitating the local sharing economy and reuse of resources.

DELIVERING THE VISION

Through projects like the Resource Recovery Centre and the Solar Farm, This precinct directly advances the Sunshine Energy Park's vision by operationalising sustainability and innovation on the ground. These initiatives demonstrate a practical commitment to ecological restoration, resource conservation, and the generation of renewable energy. They serve as foundational steps in creating a sustainable environment that respects the land and offers educational opportunities for the community to engage in green practices.

KEY PROJECTS:

- **Standford Street Operations Centre (SSOC):** Relocating the SSOC to expand its footprint and include new amenities, which is critical for enhancing operational efficiency and offering training opportunities within the park.
- **Sustainability & Circular Economy Community Hub:** An expanded centre at Sunshine Energy Park is under consideration, intended to act as a centralised recycling drop-off point for a wide range of materials. Potential features include a Repair Café and Recycled Goods Shop, aiming to foster community involvement and provide training opportunities, especially for young people, in line with council sustainability goals.
- **Horticulture Hub:** A raised beds space designed for community gardens and food-growing partnerships, aligning with the Council Plan's Health and Wellbeing Priorities to improve mental wellbeing, support healthy eating and physical activity, and promote economic and social inclusion.
- **Solar Farm:** A feasibility study and the business case for the Solar Farm is completed. The business case indicates establishing the solar farm in Sunshine Energy Park is technically feasible but not economically viable with current technologies. Exploring different business models and alternative technologies in conjunction with solar can be further investigated. Creating a smaller solar system that's expandable for onsite generation can also be considered in future study.



CASE STUDY: CERES

CERES Community Environment Park in Melbourne is an exemplar of sustainable urban renewal, transforming a landfill site into a flourishing ecological and educational space. At its heart, the Horticulture Hub, embodies principles of environmental stewardship and community engagement. Through hands-on workshops, community gardening, and a market that supports local, organic farmers, CERES cultivates both land and societal health. It champions biodiversity, water conservation, and renewable practices, offering a living blueprint for the Sustainability Precinct.





OUTDOOR SPORTING PRECINCT



OVERVIEW

The Outdoor Sporting Precinct at Sunshine Energy Park is set to cater to the growing demand for multi-purpose sporting fields and pavilions. It's been identified as the future home of the Regional Multi-Sports facility, which will serve the local community's increasing sporting needs. This precinct will be designed for both structured sports and casual recreational activities such as walking, jogging, picnicking, and children's play. It will provide extensive open grass areas and a network of cycling and walking trails that connect to surrounding neighbourhoods, accommodating a wide range of activities.

DELIVERING THE VISION

This precinct aims to make the Sunshine Energy Park a sporting destination, driving regional sports tourism and fostering inclusivity through the provision of varied sporting facilities.

It's structured to offer equitable sports access, drawing in diverse demographics and facilitating community cohesion through active participation.

KEY PROJECTS:

- **Multi-Purpose Sporting Fields:** To accommodate a variety of sports and meet the rising demand for participation, with a special focus on creating opportunities for female participation.
- **Regional Multi-Sports Facility:** To provide a central hub for local sports events and activities.
- **Informal Recreation Spaces:** Creation of spaces throughout the park for activities like walking, jogging, and picnicking, catering to diverse community preferences for leisure and physical activity.

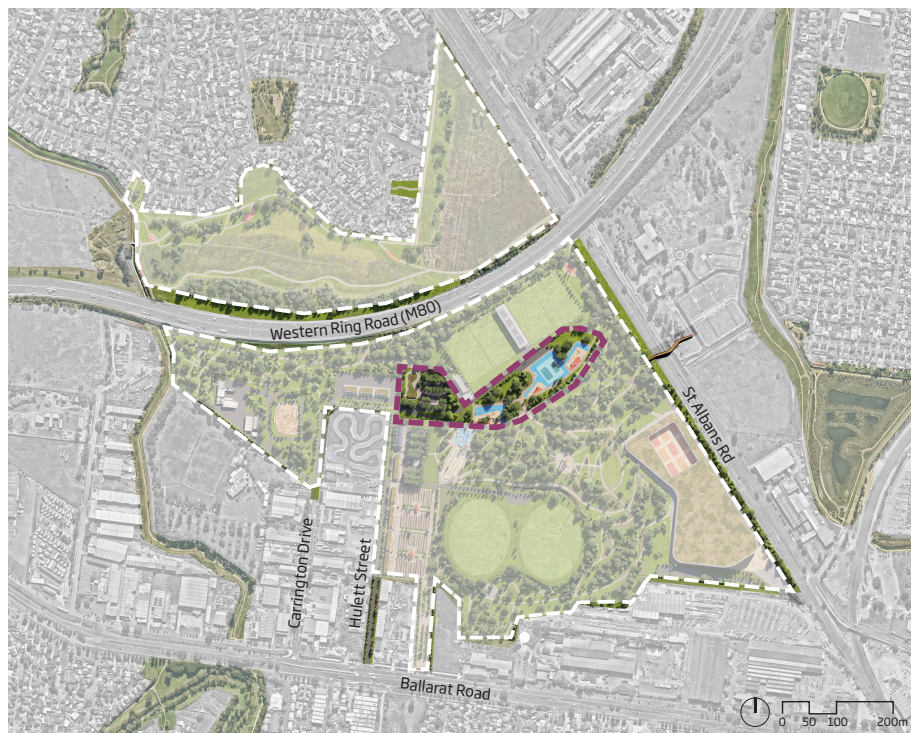
CASE STUDY: ALBERT PARK, VICTORIA

Albert Park in Melbourne stands as an exemplar of how urban parks can support community sports and recreation. It serves as a major sporting hub, housing the Melbourne Sports and Aquatic Centre and around 20 sporting fields that support approximately 42 sporting clubs, offering activities such as AFL, baseball, cricket, frisbee, and many more. Its facilities accommodate a wide range of sports for all ages and abilities, encouraging both social and competitive play.

Additionally, Albert Park recently celebrated the opening of a shared-use sporting pavilion at Oval One, a development designed to support greater access to sports facilities for local clubs, with a special emphasis on increasing sports participation among women and girls. This pavilion includes female-friendly change rooms, community spaces, and a spectator area, highlighting inclusivity and community participation.



PLAY PRECINCT



OVERVIEW

The Play Precinct is a dynamic area within Sunshine Energy Park designed for active leisure and community interaction. Strategically positioned to bridge multiple precincts, it offers a range of outdoor activities that encourage social interaction and physical engagement.

DELIVERING THE VISION

By offering a diverse range of interactive and inclusive recreational spaces, this precinct directly supports community wellbeing. It's about creating environments that encourage active lifestyles, social connection, and a cohesive community fabric.



KEY PROJECTS:

- **Inclusive Play Spaces:** Varied and interactive environments where people of all ages can engage in imaginative and physical play, complementing the park's natural landscapes.
- **Skate Park:** A dedicated zone designed for skaters of all skill levels, incorporating various elements for both street and transition style skateboarding.
- **Outdoor Courts:** Multi-use game areas marked for sports like basketball and netball, serving as a social hub for friendly competition and community-building activities.
- **Dog Park:** A secure, engaging area for dogs of all sizes to play and socialise, equipped with agility obstacles and safe enclosures, fostering a pet-friendly community space.



CASE STUDY: SUNVALE COMMUNITY PARK

Sunvale Community Park in Sunshine is a vibrant and welcoming space for the community. It's known for its engaging play spaces that cater to all ages. These include: areas for skateboarding and scooting, as well as interactive water features, lush green spaces for relaxation or sports, shelters, and BBQ facilities. The park also incorporates artworks that reflect the local culture and stories, promoting a sense of community and participation. It's a destination for play, community events and family gatherings, and a key meeting place for Melbourne's western suburbs families.



CYCLING PRECINCT



OVERVIEW

The Cycling Precinct at Sunshine Energy Park leverages the natural topography to create a premier destination for cycling enthusiasts while promoting inclusivity and accessibility. This precinct is designed to make the most of the park's varied landscapes, offering challenging routes for experienced riders and safer, gender-sensitive facilities that encourage participation from typically underrepresented groups, such as women in mountain biking.

DELIVERING THE VISION

This precinct is designed to position SEP as a hub for active transport and recreation. It's a strategic move towards fostering a cycling culture that is inclusive and expansive, contributing to the park's accessibility while promoting healthy living and reducing vehicular traffic impacts.

Attachment 12.13.1

KEY PROJECTS:

- **Integrated Trail Network:** A network of cycling trails branching out from the Cycling Precinct to various parts of the park, ensuring seamless connectivity for cyclists.
- **Mountain Bike Trails:** Challenging trails capitalising on the park's natural terrain, aimed at attracting both local and regional mountain biking enthusiasts.
- **Pump Track and BMX Track:** Dynamic, skill-building tracks designed for various ability levels, located adjacent to Hulett Street for easy access and extending the appeal of the park to a broader audience.
- **Gender-Sensitive Facilities:** Equitably designed spaces that promote safety and comfort for everyone.



CASE STUDY: THE HILL MOUNTAIN BIKE PARK (WADAWURRUNG COUNTRY)

The Hill Mountain Bike Park in Geelong serves as a pioneering example of an urban bike park designed to cater to riders of all abilities, setting a benchmark for such facilities across Australia. It has transformed a greenfield urban site into a multi-purpose area that offers an array of tracks suitable for varying levels of experience, from beginners to advanced riders. The park includes cross-country trails, a skills track, a pump track, and a BMX track, all aimed at safely progressing riding skills for a diverse group of users.

Additionally, Geelong City Council's approach to assessing the gender impact on mountain biking facilities highlights the importance of inclusive planning. This assessment led to the realisation that both boys and girls participate equally in mountain biking activities until around the age of 13, at which point there is a significant drop in participation among girls due to social and structural gender stereotypes.

STADIUM PRECINCT



OVERVIEW

A key drawcard of the Sunshine Energy Park, the Stadium Precinct will accommodate both a state-significant stadium and facilities that address local and regional sporting requirements. This area is positioned to enhance the visitor economy and support the growth of professional sports teams in Melbourne's west.

DELIVERING THE VISION

The stadium precinct is envisioned as a landmark that embodies community spirit. It leverages the park's location to enhance visitor experience and symbolises the growth and vitality of the western region.



KEY PROJECTS:

- **State Significant Stadium:** A versatile venue capable of hosting major events, serving as a home for professional sports, concerts, conferences as well as regional and community events.
- **Indoor Sports Facilities:** Courts for high-demand sports like basketball and netball, and spaces for badminton, volleyball, table tennis, and futsal, ensuring facilities meet the community's broad sporting needs.
- **Green Infrastructure:** Innovative design incorporating green roofs and walls to support biodiversity and meld the stadium's presence into the natural landscape of the park.
- **Improved Pedestrian Connectivity:** Careful planning to create pedestrian links to Albion Station, facilitating convenient access for visitors and encouraging sustainable transport options.



CASE STUDY: COMMBANK STADIUM, PARRAMATTA

This project was part of a larger vision for transforming Parramatta into a significant city hub, promising enhanced amenities, employment opportunities, and overall economic activity. The redevelopment was carefully considered to minimise the impact on local businesses and to provide long-term benefits to the city beyond the construction period.

The stadium is now a 30,000-seat venue with steep grandstands, designed to bring fans close to the action and host a variety of sports, entertainment, cultural, community, and business events, creating a vibrant atmosphere and contributing significantly to the local economy and community spirit.

It was the first stadium in the world to achieve LEED v4 Gold certification for sustainability by the US Green Building Council, reflecting its high performance in areas such as innovation, water savings, energy efficiency, and sustainable material use during construction.

Features include the use of over 4,500 tonnes of Australian steel sourced within 18km of the stadium, over 90 percent waste diversion from landfill, and the inclusion of a 260,000-litre rainwater tank for water efficiency.



WATER MANAGEMENT PRECINCT



OVERVIEW

Surrounded by Jones Creek, Kororoit Creek, Stony Creek, and the Upper Stony Creek Wetlands, the Sunshine Energy Park stands as a critical area for the ecological preservation of the region and water-sensitive urban design.

DELIVERING THE VISION

Centrally positioned amongst vital waterways, the SEP is crucial for ecological regeneration. It's a proactive approach towards climate adaptation, ensuring SEP serves as a blueprint for harmonising urban development with natural water systems, crucial for sustainable urban planning.

Attachment 12.13.1

KEY PROJECTS:

- **Stormwater Management:** An efficient site stormwater management system can effectively shed runoff from the cap and minimise the amount rainwater percolates through to the waste mass.
- **Integrated Water Management:** Embedding the principles of integrated water management into the design of each element within Sunshine Energy Park and utilising storm-water that is harvested in the Upper Stony Creek Wetland to irrigate Sunshine Energy Park.
- **Stony Creek Transformation:** A revitalisation initiative that transforms the area into thriving wetlands, enhancing biodiversity and creating a climate-resilient ecosystem.
- **Jones Creek and Kororoit Creek Rehabilitation:** Projects aimed at restoring these crucial waterways to health, supporting local wildlife, and providing peaceful green spaces for community recreation.



CASE STUDY: FRESHKILLS PARK, NEW YORK CITY

The Freshkills Park, once the world's largest landfill, is now a landmark project demonstrating sustainable water and resource management in an urban park setting. The transformation of Freshkills from landfill to parkland involved innovative strategies to manage and utilise water resources, aiming to restore natural habitats and support recreational areas.

ecological connectivity and provided new recreational opportunities for kayaking and fishing, making the site a model for urban ecological restoration. Freshkills Park's development includes the use of native plant species in its landscaping, which requires less irrigation, thus conserving water resources.

The park's design incorporates extensive stormwater management systems to control runoff and improve water quality, essential for the revitalisation of the site's creeks and wetlands. These systems not only prevent pollution from entering nearby water bodies but also create habitats for local wildlife, contributing to the park's biodiversity.

A significant part of Freshkills' water management strategy is the restoration of natural waterways, which were previously contaminated or rerouted. Rehabilitating these streams and wetlands, allowed





CONNECTING THE PRECINCTS: PATHWAYS AND GATEWAYS



To realise the vision for Sunshine Energy Park, integrating the park with the surrounding community through accessible entry points and safe pathways for pedestrians and cyclists is critical.

This plan identifies the opportunity of extending Hulett Street towards Carrington Drive as part of creating a welcoming gateway into the park. Hulett Street's improvement will be an exemplar of Brimbank's Creating Streets For People Policy. It will be a people focussed place which demonstrates Water Sensitive Urban Design (WSUD) principles, design excellence and include extensive shade tree planting for a cooler and greener environment.

The creation of new linkages is essential to bridge existing barriers such as the railway line and St Albans Road. These connections would not only enhance access to the park but also bind it more closely with upcoming urban developments like LUMA and Cairnlea, promoting the park as a dynamic community space.



ALBION QUARTER

The redevelopment of Albion Station is set to play a key role as the urban gateway to Sunshine Energy Park. This crucial redevelopment aims to provide an integrated interface that uplifts both the new park and the evolving Albion Quarter. With the anticipated growth in residential and working populations, the reimagined Albion Station will become a hub of activity, significantly contributing to the park's accessibility and appeal.

The structure planning process for Albion Station and the broader Albion Quarter is advancing.

The success of this structure planning is vital for ensuring the timely delivery of a cohesive and revitalised Albion area, which will complement and enhance the park's development and its contribution to the Brimbank community's well-being.



DELIVERING THE VISION

 Caring For Country	Stony, Jones, and Kororoit Creeks Rehabilitation	Ecological Corridor	Cultural Gathering Nodes	Landmark Artworks	Connective Trails		
 Inclusive Wellbeing	Community Clubs	Parklands	Inclusive Playspaces	Skate Park	Outdoor Courts	Dog Park	Multi-Sport Facilities
Informal Recreation Spaces	Mountain Bike Tracks	Pump Track	BMX Track	Indoor Sport Courts	Sporting Fields	State Significant Stadium	
 Sustainable Innovation	Sustainability & Circular Economy Community Hub	Operations Centre	Horticulture Hub	Solar Farm	Improved Pedestrian Connectivity	Green Infrastructure	

Attachment 12.13.1

IMPLEMENTATION



Attachment 12.13.1

SHARED OBJECTIVES AND JOINT OPPORTUNITY

The Sunshine Energy Park Vision is informed by Council's strategies and policies, which recognise the park as a culturally significant place and a major environmental asset. The Vision also acknowledges its obligations to meet the objectives set out in Victorian Government legislation and policies.

STATE STRATEGIES AND INITIATIVES

Victorian Government strategies, initiatives and frameworks related to Sunshine Energy Park and surrounding area include:

- Climate Change Act 2017
- Melbourne Water's Healthy Waterways Strategy 2018
- Gender Equality Act 2020
- Victorian Infrastructure Plan 2021
- DEECA's environmental policy statement (2019)
- Sport and Recreation Victoria's Active Victoria 2022-2026
- Environment Protection Authority Victoria Strategic Plan 2022-27
- Victorian Wildlife Rehabilitation Guidelines
- Priority Precincts and National Employment and Innovation Cluster (NEICs) - Sunshine
- Sport and Recreation Victoria's Change Our Game, increase leadership and participation by women and girls.

COUNCIL POLICIES

Council-adopted strategies and policies provide clear direction and aspiration for Brimbank City Council to address critical challenges both now and in the future. Council's policy context is a key driver for the development of Sunshine Energy Park, and the Vision must consider and respond to the planned direction of services and infrastructure, community services, and advocacy.

- Together We are Brimbank Plan 2021
- Reconciliation Action Plan
- Climate Emergency Plan
- Sunshine Priority Precinct Vision 2050
- Sport Facility Development Plan 2023
- Indoor Sports Facilities Feasibility Study 2020
- Natural Heritage Strategy 1997
- Biodiversity Strategy 2012-22
- Habitat Connectivity Plan 2018-23
- Aboriginal Cultural Heritage Strategy 2018-23
- Industrial Land Strategy 2018-2030
- Creating Better Parks 2016
- Cycling and Walking Strategy 2016
- Activity Centre Strategy 2018
- Sunshine Town Centre Structure Plan 2014
- Urban Forest Strategy 2016-2046
- Economic Development Strategy
- Community Services and Infrastructure Plan 2018-2038
- Creating Streets For People (2022)
- Brimbank Planning Scheme

PROPOSED IMPLEMENTATION PLAN TIMELINE [SUBJECT TO FUNDING]

ADVOCACY AND DELIVERY

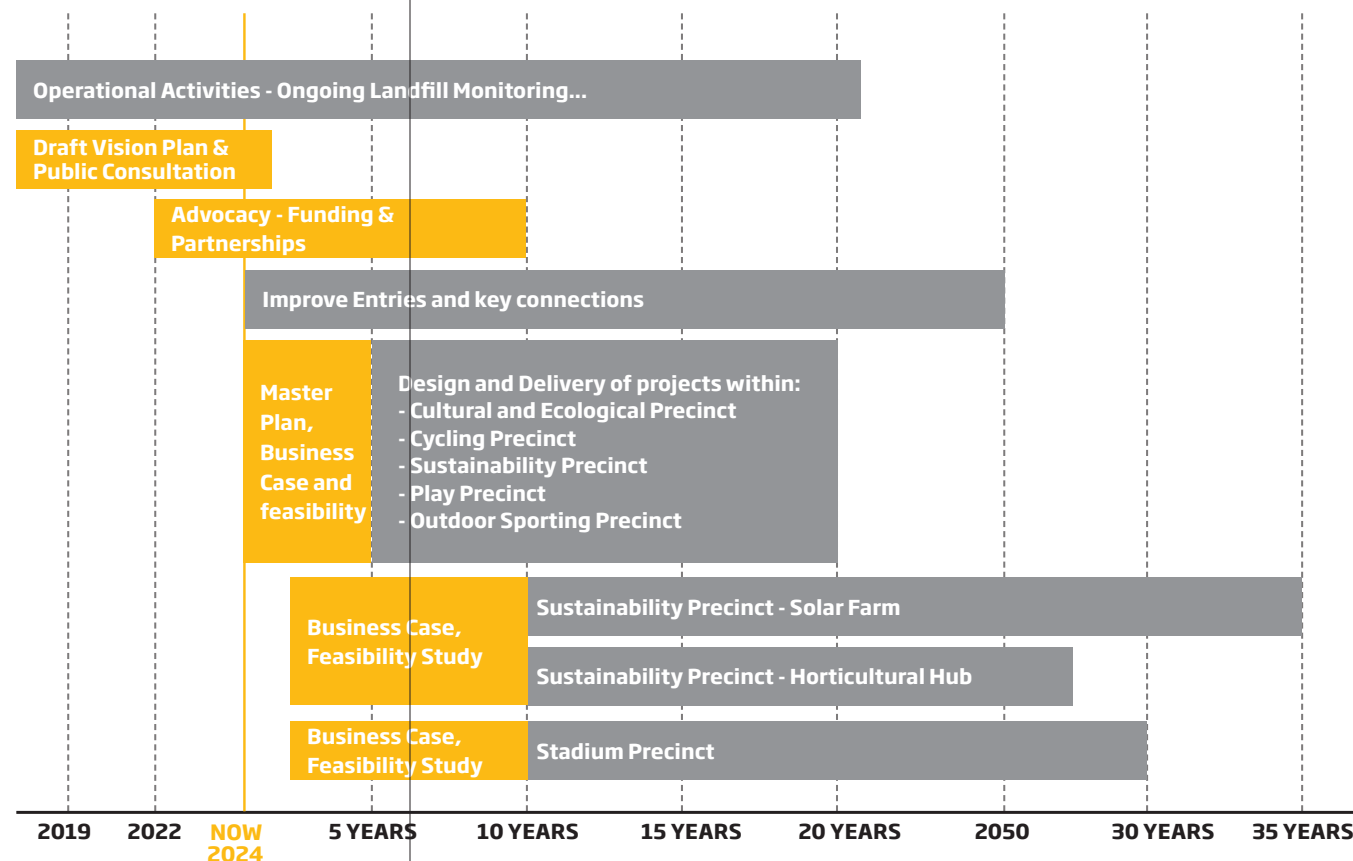
The Sunshine Energy Park Vision Plan represents the aspirations and possibilities for this new community space.

The size and ambition of this space is unique and cannot be delivered in a traditional manner. Significant work is required between Council, potential partners and the community to explore how the vision can be realised.

It is expected that over the next 30 years, each opportunity will take its own path to implementation as partnerships and funding opportunities are explored.

As private investment in housing, commercial development and associated services continue to grow across Sunshine and Albion, developer contributions will play a critical role in funding the development of Sunshine Energy Park.

Council will undertake further work to develop business cases and advocacy approaches (subject to Council annual budgets) for each zone to support external funding opportunities and partnerships with State and Federal Governments. Business cases for each zone will further explore feasibility, planning requirements and detailed costings.



Relevant approvals including possible planning approvals may be required throughout the timeframe.

THE PARK AND CONTEXT

Attachment 12/13.1

THE PARK AND ITS CONTEXT

SITE HISTORY

WURUNDJERI LAND

In pre-colonial times, the site was an open grassland of the Victorian volcanic basalt plains, home to the Wurundjeri and Bunurong peoples. For the Traditional Custodians, the lands in the City of Brimbank have always been significant trading and meeting places.

EXTRACTION

In the early 1900s, the site was the Albion Basalt Quarry. Basalt quarried here contributed to the construction and growth of Melbourne and the surrounding areas.

LANDFILL

From the late 1960s to the late 1980s, the site operated as two separate stages of domestic garbage and industrial/construction waste landfill. The two landfills comprised a number of exhausted quarry pits with the deepest area thought to be approximately 28 metres below the original landfill cap level, which was installed relatively flat. This combined landfills area is known today as the Closed Sunshine Landfills and includes Sunshine Energy Park.



REMEDIATION AND ONGOING MONITORING

The Closed Sunshine Landfills, which include the site of Sunshine Energy Park and Carrington Drive Reserve, had ceased accepting waste by 1990, with landfill capping occurring progressively during operation and to a final land-form after closure.

Landfill gas extraction and power generation infrastructure was established at Sunshine Energy Park following the closure of the landfill operation. A landfill gas power station commenced operation in 1992, with electricity exported to the State network. Gas generation rates were later found to be significantly lower than forecast, and power generation became financially unviable.

In 2002, the generators were converted to run on natural gas and used to target peak payment periods while the site flare continued to manage landfill gas emissions. Power generation ceased altogether in 2009, and the generators were removed.

Since 2010, Council has coordinated with the EPA and initiated numerous environmental and health investigations. In 2013, an environmental audit was completed for the closed Sunshine Landfills, which led to the preparation of aftercare management plans implemented by Council.

Council commissioned civil works in 2012 to import soil to the closed landfill to create a water-shedding profile and improve drainage. This work has shaped the existing landscape and surface levels at the site today. Aftercare for the Closed Sunshine Landfills will continue into the future, involving environment monitoring and control of residual landfill gas.



WURUNDJERI LAND
-60,000



BASALT QUARRY
OPENED
EARLY 1900'S



LANDFILL
LATE-1960'S-1990

CLOSURE OF
LANDFILL AND
CAPPING WORKS
1990

ADDITIONAL CIVIL
WORKS
2012

FUTURE USE
FEASIBILITY
ASSESSMENT (GHD)
2019

Feasibility and future use possibilities outlined within technical assessment report. The site identified as potential option for regional sports and indoor sports facilities and in Transforming Brimbank 2050 priorities.

VISION PLAN
2024

VISION PLAN REVIEW
(GHD)
2024



FUTURE USE ASSESSMENT

In 2019, Brimbank City Council engaged GHD Pty Ltd (GHD) to undertake a preliminary study of future use options for Sunshine Energy Park. The purpose of the high-level study was to inform future use planning and assessed environmental, geotechnical, statutory planning and urban development/strategic planning constraints, opportunities and requirements associated with three broad potential future uses for the site. The broad future uses were:

- **Low impact use** – solar park or open recreational parkland with no buildings or underground confined spaces
- **Medium impact use** – formal sports fields/sports facilities with limited enclosed structures or underground confined spaces, such as clubrooms and a small grandstand
- **High impact use** – extensive built form with extensive enclosed structures or deep underground confined spaces, such as enclosed sports stadium, mixed use industrial, commercial or residential properties

In 2022 to 2024, the Council developed a draft Vision Plan for Sunshine Energy Park which documents the planned transformations to the site involving the creation of a 74-hectare urban parkland.

The draft Vision Plan was prepared with consideration of the guidance provided in the Draft Technical Assessment Report 2019, and was reviewed and supported by Vision Plan Review 2024 prepared by GHD.



PLANNING CONTROLS

The site is zoned Public Park and Recreation (PPRZ) which recognises the area is for public recreation and open space.

An Environmental Audit Overlay (EAO) applies to land that formed part of and/or adjoins the closed Sunshine Landfills, which include Sunshine Energy Park and Carrington Drive Reserve. The EAO provides appropriate notice to landowners that the land may be potentially contaminated as a result of those past activities and subsequent site remediation and require an environmental audit to be completed prior to the commencement of any new sensitive use (playgrounds, residential, child care centre, pre-school centre or primary school) or buildings and works associated with a sensitive use. The outcomes of an environmental audit will inform any building design and management controls necessary to protect human health and may restrict future development of properties within the overlay. The cost and time to undertake an environmental audit and potential remediation of land may impact the viability and types of future use and development.

The planning scheme also applies other considerations for use and development. This includes the need to consider threshold distances for certain types of uses which may have an amenity impact to the surrounding area.

FEASIBILITY OF CONSTRUCTION

Feasibility and detailed design will be required for development of the site, including foundation design, gas barrier and ventilation infrastructure as necessary.

Buildings will be located on landfill-free areas where possible. High impact uses of the landfill area would likely commence once the site has stabilised. Landfill areas subject to settlement can be developed for low impact and open space uses with minimal constraint.

Cut and fill for sporting fields in clean fill soil is possible, and likely, but stormwater will need to be managed to prevent ponding.

Where large flat areas are required for ovals and other community infrastructure additional clean fill would need to be imported to the site. The integrity of the landfill cap will need to be maintained.

FUTURE GOODS RAIL LINE

The Western Goods Line (WIFT) proposal is currently in development by the State Government and includes exploring an option of the future rail line extending through the Sunshine Energy Park site.

This proposal is under consideration by the State Government with no decision currently being made on further assessment of the option.

EXISTING SITE ELEMENTS

TRANSMISSION LINES

There are a large High Voltage power lines running North West through the western edge of the site. These are expected to stay in place and the functions below these will be in line with the relevant requirements including no permanent buildings or structures and no tree plantings. Other smaller low voltage power lines will be investigated for being relocated underground as part of the development of the site.

CLUBROOMS

There are a number of clubs who currently have their clubrooms within Sunshine Energy Park. These clubs bring activity and passive surveillance to the site and these will be encouraged to continue their presence on the site. Alternative locations may be sought for their clubrooms to gain better access and interfaces with the park. The remainder of the park is largely underutilised.

GAS MANAGEMENT SYSTEM

A gas extraction system is being investigated to manage residual landfill gas. Infrastructure will be fenced and made safe. A temporary gas flare is currently in operation. There are also monitoring wells on the site that monitor the settlement of the landfill which will be used in the planning and design of aspects of the site development.

ROCK LINED SWALES

There are large rock lined swales around the landfill cap which direct stormwater away from the site to ensure water does not infiltrate into the waste and generate leachate which can impact groundwater.

TREE PLANTINGS

There are tree plantings around the edges of Sunshine Energy Park which establish an urban forest for greening, cooling and habitat.

BUILDING PREVIOUSLY USED FOR ENERGY PRODUCTION

There is a large building on the site that was built in the early 1990s as a power station for the generation of electricity from landfill gas. The building is currently vacant despite having several tenants over the past 15 years. This site is being investigated as being a potential site for a resource recovery centre.

THE PARK AND ITS SURROUNDINGS

Sunshine Energy Park is located in the middle of a number of key biodiversity corridors. Its regeneration has the potential to establish the site as a key habitat node within the greater ecological network of Brimbank and the Western Region. It lies in between two waterways, Jones Creek to the west and Stony Creek to the east which represents a great opportunity for water harvesting treatment and greater community connection to these natural systems.

LOCAL CONTEXT MAP



LEGEND

ENVIRONMENT

- Watercourses
- Parks & Gardens
- Existing Vegetations
- EVC Plain
- Railway Corridor

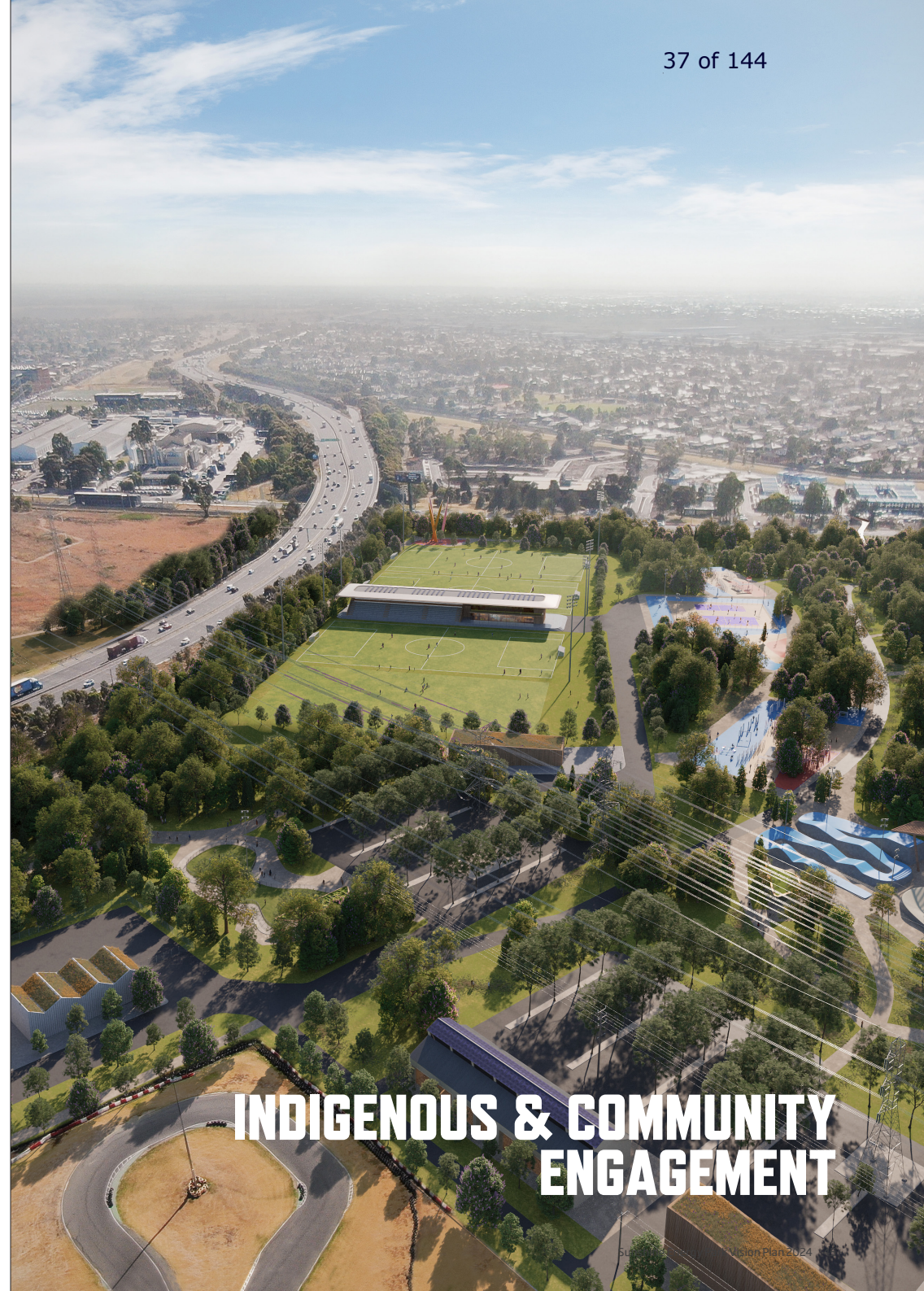
LAND

- Industry
- Activity
- Commercial
- Service Reserve
- Residential
- Public Use

ACCESSIBILITY AND MOVEMENT

- Existing Entry Points
- Walking & Cycling Path
- Main Roads

Attachment 12-13-1



INDIGENOUS & COMMUNITY
ENGAGEMENT

INDIGENOUS AND COMMUNITY ENGAGEMENT

TRADITIONAL CUSTODIANS

The Wurundjeri and Bunurong people are the custodians of the land in the Port Phillip Bay region, including parts of our current City of Brimbank, for over 65,000 years before European settlement.

The Victorian Aboriginal Heritage Council determined the northern part of Brimbank as Wurundjeri Land and the southern part as Bunurong Land.

The north of Brimbank lies within the area occupied by the Kurung-Jang-Balluk and Marin-Balluk clans of the Wurundjeri people also known as the Woivurrung language group, who form part of the larger Kulin Nation. Other groups who occupied the land in the area include the Yalukit-Willam and Marpeang-Bulluk clans.

RECONCILIATION ACTION PLAN

Brimbank City Council adopted its Reconciliation Statement of Commitment in April 2012 which laid the foundation for the first Reconciliation Action Plan (RAP) (2013-2017). Both the Statement of Commitment and the RAP have contributed to our reconciliation journey.

The Innovative Reconciliation Action Plan 2019-2021 is Council's second RAP. It outlines priority actions around key three themes and strategic directions are:

RELATIONSHIPS

Building and maintaining strong, meaningful and respectful relationships with Aboriginal and Torres Strait Islander community and network groups.

RESPECT

Demonstrating respect to the people and the culture of Aboriginal and Torres Strait Islander as commitment towards reconciliation.

OPPORTUNITIES

Working in partnership with other relevant stakeholders to ensure that Aboriginal and Torres Strait Islander people have equal access to local opportunities.

The Council has an important role in the identification and preservation of Aboriginal cultural heritage through our planning mechanisms and in the ongoing management of our significant cultural heritage sites.

ENGAGE MEANINGFULLY

Council has been involving Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation and The Brimbank Aboriginal and Torres Strait Islander Consultative Committee (BATSICC) in the preparation of vision and design process for Sunshine Energy Park (SEP) since 2021.

The stories and cultural values in the Sunshine Energy Park, and the feedback on the Draft Vision Plan, were sought via the conversations and involvement through different communication methods:

MEETING ON COUNTRY



- Wurundjeri & Brimbank City Council regular meetings
- SEP project information meetings
- Ongoing engagement

ONLINE MEETINGS



- with Wurundjeri
- with BATSIC
- Continue meeting on Country

WHAT WE HEARD

WURUNDJERI WOI WURRUNG CULTURAL HERITAGE ABORIGINAL CORPORATION

- Continue to work together on the project and meet On Country when possible
- Activate site with events
- Interpretative signage about the site's history
- Space to lie on grass and look at sky
- Protect and encourage local fauna
- Artworks around the site by Aboriginal artists
- Reference to animals through art and play equipment

BRIMBANK ABORIGINAL AND TORRES STRAIT ISLANDER CONSULTATIVE COMMITTEE

- Priority is to meet with the Wurundjeri
- Space for bush tucker and other community planting opportunities
- Consider importance of connection to water and waterways
- Provide culturally safe gathering spaces, fire pits and spaces for ceremonies
- Consider artworks and re-naming - to be led by Wurundjeri
- Create a bush in the city for opportunity to be On Country in an urban area
- Many opportunities for interpretation and education



Pictured: Five Elements
Source: Brimbank City Council

COMMUNITY AND STAKEHOLDERS

YOURSAY BRIMBANK AND KEY STAKEHOLDERS WORKSHOPS

In December 2022, Council endorsed for consultation a Draft Vision Plan for Sunshine Energy Park (SEP). It is a long-term Draft Vision that, once approved, will require partnerships and investment from government, business and community to bring this to life over the next 30 years.

A comprehensive stakeholder engagement program ran from 21 June to 31 August 2023 alongside broad community engagement.

The engagement program sought feedback on the Draft Vision Plan and to identify ideas and potential opportunities from the following:

- Properties (landowners and tenants) adjacent to SEP and the Albion Quarter Precinct
- Properties (landowners and tenants) adjacent to SEP only
- Stakeholders, both local and outside the City of Brimbank with a potential interest in SEP
- Advisors - organisations and government with experience of similar projects or related expertise
- Government departments and agencies
- Elected government officials
- Brimbank Youth Council
- General community

FORMAL WRITTEN STATEMENTS FROM:



86 CONTACTED TARGETED STAKEHOLDERS

46 PARTICIPATED

14 WRITTEN STATEMENTS

A RANGE OF METHODS WERE USED TO PROMOTE THE CONSULTATION:



Social media posts



Your Say Brimbank



One on one meeting



Direct emails and phone calls to stakeholders



Face to face workshops



Flyer mail drop to over 500 owner/occupiers within or adjacent to the Sunshine Energy Park

DRAFT SUNSHINE ENERGY PARK VISION PLAN

Council has a vision for Sunshine Energy Park – a 54 hectare closed landfill located in Albion. We want to know what you think of this plan.

Hội đồng Thành phố có kế hoạch phát triển Sunshine Energy Park trong tương lai – một bãi rác đã đóng cửa, rộng 54 hecta, nằm ở Albion. Chúng tôi muốn biết quý vị nghĩ gì về kế hoạch này.

Ang Council ay may pangarap para sa Sunshine Energy Park - isang 54 hektaryang saradong landfill na matatagpuan sa Albion. Gusto naming malaman kung ano ang palagay mo sa planong ito.

İ-Kunsilli ghandu vizyonı ghas-Sunshine Energy Park – landfill maghluq ta' 54 ettaru il jinsab f'Albion. Nixtequ nkunu nafu x'tahseb dvar dan il-plan.

The plan is based on the following principles:

- AN INCLUSIVE PRECINCT THAT SUPPORTS LIVEABILITY
- SHOWCASING THE SHIFT FROM LINEAR TO CIRCULAR ECONOMY
- CARING FOR COUNTRY

To view the plan and have your say:

Visit yoursay.brimbank.vic.gov.au

Attend an in-person information session:

Monday 7 August	Wednesday 9 August	Brimbank City Council Community and Civic Centre – Level 6, 301, Hampshire Road Sunshine (Wurundjeri Country)
11.30am-1.30pm	5-7pm	

To RSVP send your name, phone number and session to urbandesign@brimbank.vic.gov.au by **Monday 31 July**

Consultation closes **Friday 11 August 2023**

For more information, contact Council's Urban Design team on **9249 4000**

WHAT WE HEARD

KEY STAKEHOLDERS STRONGLY SUPPORT FOR ELEMENTS THAT ADDRESS:

- Walking, cycling, and public transport connections
- Environment sustainability
- Community gathering and social cohesion
- Health and wellbeing
- Supporting sports in Brimbank
- SEP as a destination
- Potential partnerships

MOST COMMON TOPICS FROM COMMUNITY:

- More balance between sporting and passive recreation
- Opportunity for a dog park
- Ensure adequate car parking for facilities
- Opportunities to locate solar on roof of buildings not take up open space
- Provide more passive open space
- Need active transport connections into the park

74% The draft Vision Plan will meet the needs and aspirations of the community.

EXCITING
COMPREHENSIVE
WELL PLANNED
INNOVATION
TRANSFORMATIVE
CLEVER IMPRESSIVE FANTASTIC
BRILLIANT IDEA REMARKABLE
POSITIVE

"It's truly exciting. Great multi-purposing of the site. Great inclusivity. Great vision. Bring it on - can't happen soon enough. Thanks to everyone involved with this ambitious plan. It will really give the Sunshine area a great public open space, which everyone will be able to access, use and enjoy."

"The Energy Park appears to be a fantastic opportunity for more green space in the West! The variety of precincts within the Park and the new indoor space will be much appreciated by local residents."

"It is an ambitious and yet achievable plan which will benefit the local community and generations to come." It will provide job opportunities for all ages and will become a destination"

NEXT STEPS

Achieving the successful completion of Sunshine Energy Park depends on collaborative efforts and securing investments from relevant partners.

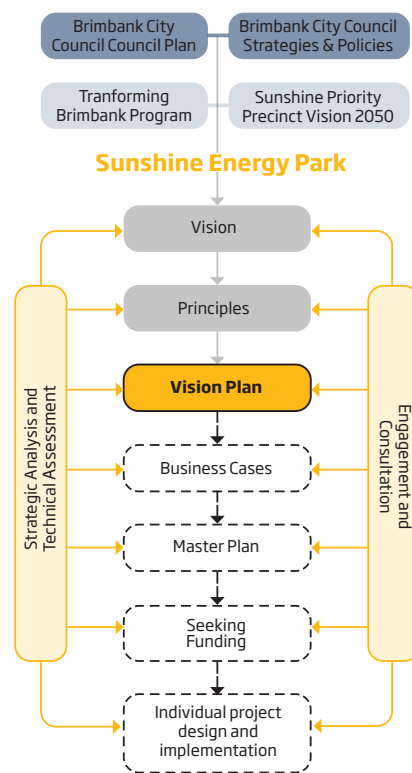
It will be critical to orchestrate the efforts of various landowners and administrators. Brimbank City Council will engage with government bodies, the private sector, and community members across a broad spectrum of strategic projects. Such collaboration will ensure the design and development of Sunshine Energy Park align with surrounding infrastructure and areas, leading to unified and forward-thinking benefits for the city. Additionally, the aim will be to secure support for ongoing research, dialogue, and involvement. This approach will facilitate the identification of new opportunities and challenges as the initiative progresses.

The Vision Plan acts as a crucial instrument for cooperation, outlining both high-level goals and actionable steps. It has enabled interactions with government bodies and interested parties and will continue to foster these relationships as it advances through subsequent planning and design phases.

Feedback and input collected will be scrutinised to determine and align with key priorities and opportunities. A Partnership and Funding Strategy, integrating feedback from stakeholders, will be developed and ratified in collaboration with partnering entities. This strategy will include commitments for funding and serve as an essential component of Sunshine Energy Park's business cases. This document will detail the methods by which Brimbank City Council plans to jointly realise the ambitions of Sunshine Energy Park over the next 20-50 years.

Brimbank City Council and Partners:

- Traditional Custodians
- The Victorian Government
- State Government agencies including:
 - Development Victoria
 - Parks Victoria
 - Melbourne Water
 - VicTrack
- Representative body of affiliated sport clubs
- Community Groups
- Property owners



Attachment 12.13.1



BRIMBANK CITY COUNCIL

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131 450

LOCAL CALL COSTS APPLY



Vision Plan Review

Sunshine Energy Park

Brimbank City Council

14 May 2024

Project name		Sunshine Energy Park - Settlement Monitoring					
Document title		Vision Plan Review Sunshine Energy Park					
Project number		12613973					
File name		12613973_REP000_Sunshine_Energy_Park-Vision_Plan_Review.docx					
Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S3	A (DRAFT)	D. Hewawasamge T. Duncan	M. Lazzaro J.Throssell		M. Lazzaro		5 April 2024
S3	B (DRAFT)	D. Hewawasamge T. Duncan	M. Lazzaro J.Throssell		M. Lazzaro		8 May 2024
S3	0	D. Hewawasamge T. Duncan	M. Lazzaro J.Throssell		M. Lazzaro		14 May 2024

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Appendix A	Figures
Appendix B	Revised Draft Vision Plan

1. Introduction

1.1 Background

In 2019 Brimbank City Council (the Council) engaged GHD to undertake a preliminary technical assessment of future use options for the Sunshine Energy Park (SEP) (herein referred to as the Draft TAR) [1]. The options assessment consisted of a high-level study to inform the planning for future use, assessing environmental, geotechnical, statutory planning and urban development constraints associated with potential uses for SEP. The options assessment examined three broad future uses:

- Low impact use – solar park or open recreational parkland with no buildings or underground confined spaces.
- Medium impact use – formal sports fields/sports facilities with limited enclosed structures or underground confined spaces, such as clubrooms and a small grandstand.
- High impact use – extensive built form with extensive enclosed structures or deep underground confined spaces, such as enclosed sports stadium, mixed use industrial, commercial or residential properties

The Draft TAR [1] identified settlement as a key geotechnical constraint for planned development at the SEP site and as such identified settlement monitoring to be a 'minimum required activity' regardless of future use options adopted. In 2019 GHD installed nine extensometers across the SEP site to monitor settlement with the results presented in a separate GHD report [2].

In 2022 the Council developed a draft Vision Plan [3] for SEP which documents the planned transformations to the site involving the creation of a 54-hectare urban parkland. It is understood that the Vision Plan was prepared with consideration of the guidance provided in the Draft TAR.

The draft Vision Plan divided Sunshine Energy Park into different zones based on the proposed future land use. The original draft Vision Plan was issued publicly in December 2022 and included details of the vision including description of the interconnecting zones. The zones within the draft Vision Plan include new connections to the park, expansion of Hulett Street, mountain bike trails, a hilltop lookout, solar farm, an indoor stadium and outdoor sports fields, a playground and wetlands. The draft Vision Plan was revised in December 2023 (Revision 4, [4]) and April 2024 [5], and included modification to the zones and expansion of the plan to include an additional zone to the north of the Western Ring Road (M80).

These zones presented on the revised draft Vision Plans [5] & [4] are summarized in Table 1 with the description provided based on content within the draft Vision Plan [3].

A copy of the April 2024 Vision Plan is presented in Appendix B.

Table 1 Revised Draft Vision [5] Plan Summary

Area ID	Use Scenario	Description
1	Conservation and Wildlife Area	Revegetation, hilltop look-out, cultural gathering nodes using natural materials, signage, trails and boardwalks
2	Existing Club Rooms (new entry from Carrington Drive)	Re-aligned and sealed access road to existing buildings
3	Operations Centre	Office buildings, sheds for machinery, sealed car parks and hard stand areas
4	Enclosed Dog Park	Fenced area with seating, drinking fountain, shelter, agility equipment, rocks and logs and gravel pathways
5	At Grade Car Park	Sealed car park with line-marking
6	Sustainability Hub	Small scale recycling for household items that can be re-purposed or have components that can be recycled. Could include cafes, shops, raised food growing beds and a spaces for training and education.
7	Sport Fields and Pavilion	Multi-purpose sporting fields and pavilions.
8	All Ages and Abilities Play Precinct	Large playground for all ages and abilities, multi-use courts, skate park, drinking fountains, seating and shade structures
9	Pump and BMX Tracks	Pump track is an undulating dirt track. BMX track is an undulating asphalt track
10	Mountain Bike Tracks	Mountain bike trails that are accessible to people with all riding abilities. The trails will connect to Hulett Street and trail network throughout the park
11	Sports Fields (Solar Farm interim use)	Plan indicates the sports fields will not include a grandstand or pavilion and the area may be utilised for solar farms in the interim timeframe.
12	Stadium	Development of a multipurpose indoor stadium for regional and local benefits.
13	Landmark Artwork	Large artwork that has requirement for footings
14	Park Entry Point	Connecting Sunshine Energy Park to surrounding neighbourhoods. Connections will need to be made over barriers including railway line, St Albans Road and Western Ring Road. Neighbourhoods.

1.2 Purpose

The purpose of this report is to provide Council a document which assesses the draft TAR timeframes and determines if improvement works and developments can be undertaken on the site.

This report only considers the environmental and geotechnical aspect in assessing and commenting on the proposed use scenario and associated timeframes.

1.3 Scope of work

The scope of work completed was outlined in the GHD prepared proposal, submitted to the Council on 16 January 2024 and allowed for a high-level review of the proposed development against recommendations provided in the draft TAR.

The high-level review includes:

- Incorporation of settlement monitoring data and comments on current settlement rates of the landfill mass.
- Review of settlement monitoring and environmental data collected subsequent to the Draft TAR and compare data trends to the recommendations outlined in the Draft TAR regarding proposed development locations and expected development timelines.
- Identification of key additional geotechnical and environmental risks which may have become apparent based on data collected subsequent to the Draft TAR.

The scope of work includes the preparation of a report (This Report) documenting the outcomes of the review including:

- Review the proposed development locations against recommendations provided in the Draft TAR.
- Compare timeframes for end use scenarios presented in the Draft TAR against proposed development and settlement monitoring data to date.
- Review of proposed development locations against settlement monitoring and environmental data to date which has been collected by GHD subsequent to the Draft TAR.
- Identify additional broad environmental and geotechnical risks which may have become apparent since the Draft TAR based on data collected by GHD in subsequent investigations.
- Comment on the Environmental Audit Overlay (EAO) requirements which have been applied to the subject site subsequent to the TAR.

1.4 Limitations

This report: has been prepared by GHD for Brimbank City Council and may only be used and relied on by Brimbank City Council for the purpose agreed between GHD and Brimbank City Council as set out in section 1.3 of this report.

GHD otherwise disclaims responsibility to any person other than Brimbank City Council arising in connection with this report. GHD disclaims responsibility to any person other than Brimbank City Council arising in connection with this Report. Any use of, or reliance on, the Report by any third party is at the risk of that party. GHD also excludes implied warranties and conditions, to the extent legally permissible. The services undertaken by GHD in connection with preparing the Report were limited to those specifically detailed in the Report and are subject to the scope limitations set out in the Report.

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The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

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Your use of this Report is entirely at your own risk and responsibility.

2. Site Setting

The following section provides a brief summary of the history and site details of SEP. Numerous environmental investigations have taken place regarding the former landfill, with much of the information presented in the site's Framework Rehabilitation Plan and Aftercare Management Plan [6], Technical Assessment Report [4] and associated monitoring reports. These reports should be referred to for further and detailed information on SEP.

2.1 Site Zoning

The site falls within the greater area associated with the Sunshine National Employment and Innovation Cluster and is bounded to the north by the Western Ring Road and to the east by the Sydenham rail line. The site and surrounds are subject to the provisions of the Brimbank Planning Scheme, with current site zoning for the site associated with parks and recreational uses (Public Parks and Recreation Zone (PPRZ) and a small portion zoned for Public Uses (PUZ6), associated with Local Government purposes.

Industrial land uses zoned Industrial 1 Zone (IN1Z) surround the site to the south and to the east across the Sydenham rail line, which is subject to the Public Use Zone 4 (PUZ4). Typically, the IN1Z zone provides for a wide range of industrial uses (with associated amenity considerations). Land within the Industrial 3 Zone (IN3Z) is located to the west of the site. One of the purposes of the IN3Z is to provide a buffer between the IN1Z and IN2Z and the surrounding community.

Mixed Uses (MUZ) associated with the former City West Water site lies to east across the rail line. Residential uses generally lie further afield of the site and the Sunshine Metropolitan Activity Centre (Activity Centre Zone (ACZ)) is located to the south, which plays a strategically important role in providing good access to major retail, community, government, entertainment, cultural and transport services. Major roads (Road Zone Category 1 (RD1Z)) are located in proximity to the site, including the Western Ring Road adjacent to the north, St Albans Road to the east of the rail line and Ballarat Road further afield to the south.

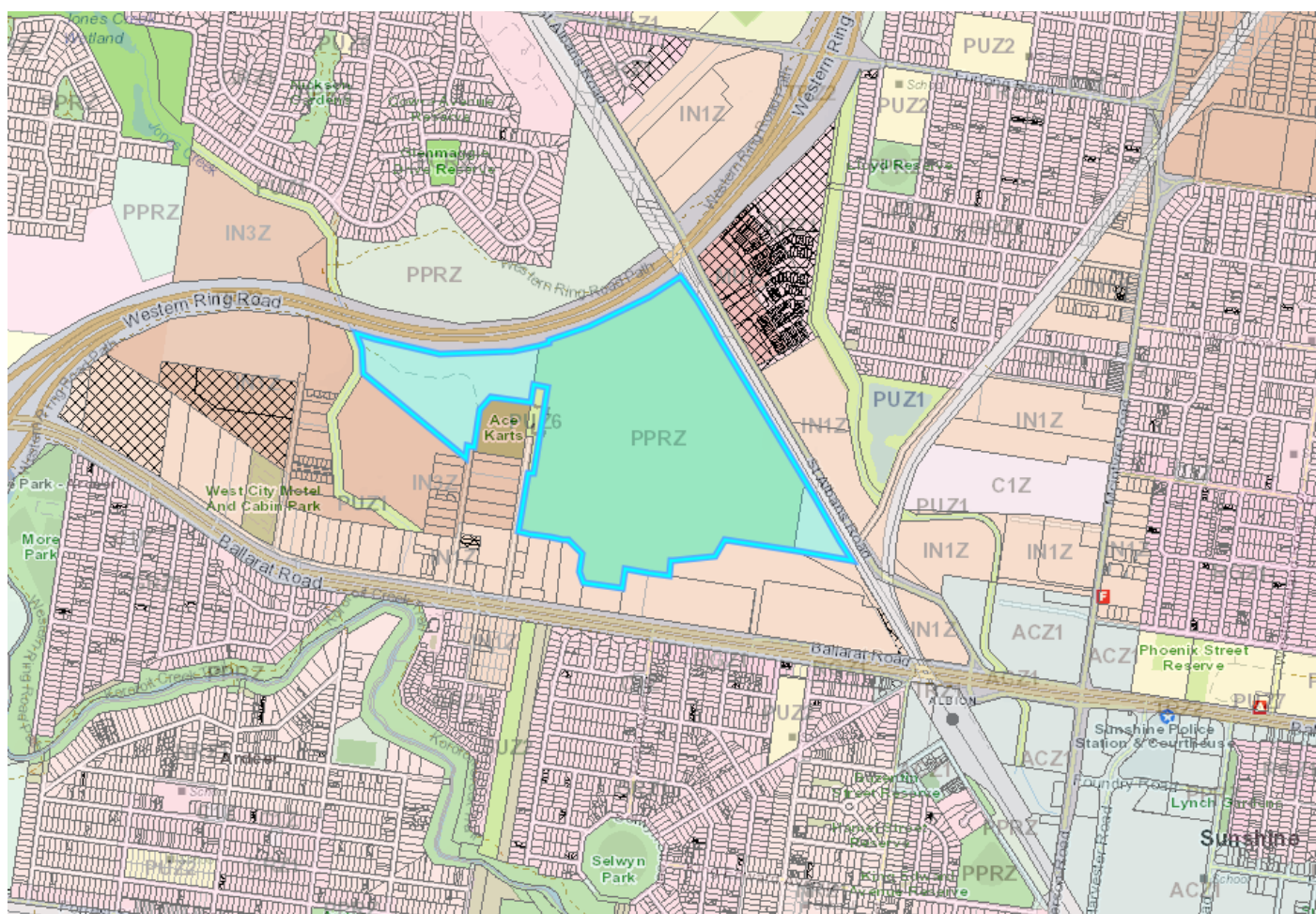


Figure 1 Site and surrounding zoning

2.2 Site History and Details

SEP is the site of the former Hulett Street Landfill. The site covers an area of approximately 40 ha, with the landfill occupying approximately 22 ha. Prior to landfilling, the site operated as part of the Albion Quarry, a worked out basalt quarry. The quarry opened in 1860 and is set within the extensive sheet flow basalt of the Newer Volcanics, with rock thickness across the site expected to be in excess of 40 m.

The landfill operated between 1977 and the late-1980s under EPA Waste Discharge License No. HS1275, issued on 23 October 1977. The license was revoked by EPA on 4 February 1990. The license allowed for the disposal of domestic garbage, solid putrescible waste (other than domestic garbage) and solid inert insoluble waste. Disposal of hazardous wastes and liquids was prohibited.

The quarrying operations worked out three voids or holes, referred to as Quarry Hole No. 5, 6 and 7. The main landfill is known to have operated in Quarry 6. The smaller quarry holes (5 and 7) are understood to have received mainly construction wastes. Quarry hole 6 was by far the largest, having accepted an estimated 3.5 to 4 million cubic meters of waste.

While the depth of the main landfill is unknown, the drilling of two leachate bores found waste from the previous top of cap (i.e. prior to soil filling above the landfill cap – refer to section 2.3 below) to depths of approximately 28 meters. Underlying this, the natural geology was found to be slightly weathered basalt. The landfill site is understood to be unlined, without an engineered barrier.

Following its closure, the landfilled waste was capped with material reported as “clay rich soils” of varying thickness, ranging from 0.25 meters to 1.4 meters. It is expected that little quality control would have been applied during the cap installation as was common practice at the time. Due to the effects of settlement of the underlying waste mass, the landfill cap prior to the soil filling works was relatively flat, resulting in poor stormwater runoff.



Figure 2 **Site plan**

2.3 Soil Filling Works

In 2015, Council contracted the service of clean soil fill at the site in order to build a domed final surface, thereby aiding stormwater drainage from the site. Based on the approved filling plan, approximately 468,000 cubic meters of fill was to be placed to achieve the design contours. This would increase the height of the site to a maximum of approximately seven meters above the pre-soil filling levels, sloping at a grade of 5% to the edges of the site.

Extensive rock fill has been encountered along the eastern boundary of the site, in an area where extensive excavation is required to achieve the design contours. Due to the high cost, Council decided to retain the rock fill in its present location. This required the filling plan to be modified and will likely limit future use of this part of the site to open recreational parkland or similar.

2.4 Landfill Gas Extraction

Landfill gas extraction and power generation infrastructure was established at SEP following the closure of the landfill operation. A landfill gas power station commenced operation in 1992, with the objective of generating electricity from landfill gas collected from SEP and another former landfill to the north (now known as Carrington Drive Reserve). Unfortunately, gas generation rates were too low to make power generation financially viable, and in 1998 Council notified EPA of their intent to close the power station.

The landfill gas engines were removed from the power station in 2009. Extraction (from vertical extraction wells) and flaring of landfill gas from the site continued until sometime in 2011 when the gas flare was severely vandalized so that it was no longer operational.

The gas extraction system is still present onsite, with many of the vertical wells having been extended and protected during the soil filling works. However, the flow and header lines are no longer serviceable and would need to be reconstructed to service the remaining functional vertical walls.

According to the site's Aftercare and Management Plan, landfill gas extraction is to recommence following the completion of soil filling works. For this reason, the extraction system, including wells, will need to be maintained, as well as the groundwater, leachate and landfill gas monitoring infrastructure across the site.

2.5 Environmental Impacts

Landfill gas generation

As the waste mass continues to decompose, landfill gas (largely comprising of methane and carbon dioxide) will continue to be generated. Gas can migrate offsite via diffusion (concentration differences) and advection (pressure differences). As the landfill is unlined, landfill gas within the waste mass needs to be managed to prevent it migrating either directly out of the cap, or laterally in the subsurface.

If methane and carbon dioxide accumulate in confined spaces, they can pose a toxicity, asphyxiation or even an explosive risk (methane only).

As outlined in the TAR the two key pathways for gas migration to impact on any future development at SEP are via direct gas migration from the cap, or by migrating beyond the extent of the landfill then entering a penetration or pathway (such as a conduit or underground structure) where landfill gas can accumulate. Methane and carbon dioxide can also dissolve in groundwater and migrate offsite via leachate, however this is not expected to be a main pathway within the confines of SEP.

Although the landfill closed almost 34 years ago, landfill gas is still being generated at SEP, and this is expected to continue for decades, albeit at a declining rate. The peak rate of landfill gas generation is expected to have occurred shortly after closure.

A landfill gas generation model prepared by GHD for an earlier site investigation (GHD 2012) indicated that landfill gas the generation rate is in decline and will be reaching near negligible amount by 2050. The model suggested that biodegradation of the waste will continue for another 20 to 30 years. Although it is noted that gas generation can rise intermittently. A former operational staff member of Brimbank City Council who was interviewed as part of an earlier investigation, explained that the gas generation would often spike after a few days of heavy rainfall. This was considered to be due to the cap being permeable, at least in parts of the site. Furthermore, sections of the waste mass are expected to be compartmentalised, the effect of which is that gas generation could be occurring at different rates across the landfill. This was observed during earlier drilling works by GHD, when a pressurised pocket of landfill gas was penetrated with a bore drilling rig, sending gas and leachate well beyond the ground surface.

Leachate generation

The landfill is described in the 2023 Audit report as being a 'sub-watertable' landfill, meaning that the waste mass intersects the groundwater. Groundwater inflows from up and cross gradient into the landfill are therefore a major source of leachate generation, as outlined in the GHD 2014 report. This is considered to be the primary leachate generation mechanism for the site.

If rainwater percolates through cover and capping material, it can collect contaminants as it passes through the waste mass, becoming leachate. Leachate generation from rainfall can be managed by maintaining a low permeability cap or geosynthetic clay liner (GCL) and an efficient stormwater management system that effectively sheds runoff from the cap, minimising the amount that percolates through to the waste mass. Vegetation also assists in reducing infiltration. Grasses, trees and shrubs can greatly increase the evapotranspiration rate of a landfill cap.

Groundwater and leachate monitoring is ongoing at and around SEP.

Stormwater management

As noted above, an effective stormwater management system is important to reduce leachate generation. Furthermore, it can prevent damage to the cap such as gulying, erosion or scouring. The current stormwater management system at the Site was constructed in mid-2021 and the site was revegetated with grasses in 2022. The current construction of the landfill has created a fill dome with additional fill placed on top of the capping material. This mitigates rainfall infiltration through the cap and into the waste mass, however given the slope

increases stormwater runoff at the perimeter of the dome profile. This should be considered when implementing aspects of the Draft Vision Plan in areas which are near the dome perimeter.

Land settlement

As detailed in the TAR over time as the waste mass decomposes and compacts, the landfill will settle, often unevenly. Placement of a load, such as a structure or the soil filling works undertaken at the SEP, can increase the rate of settlement in an area of a landfill relative to other areas. This is known as differential settlement.

Landfill settlement (particularly differential settlement, where waste depth changes or interfaces with natural ground such as at the edge of the soil filling works at SEP) will have significant impacts on gas and leachate infrastructure requirements, surface and sub-surface drainage requirements, how construction interfaces with foundations, and how sub-surface services are incorporated into the cap.

Capping / soil material on site

In 2015 Council engaged Earth Solutions Group (ESG) to import, compact and contour surficial fill soils which comprised approximately 500,000 m³ of clean fill material across the site. The soils have been tested by additional investigations by Prensa and DRC Environmental to confirm that the soil is clean fill.

Other soils which are present on site (capping soils, surrounding soils and dumped material) may require further assessment to determine if the on-site soil may impact the future use of the site.

2.6 EHS Support Environmental Audit

In 2023 EHS Support completed an Environmental Audit of the site which assessed the risk to the environment by the former landfill (document reference: Environmental Audit Report – Sunshine Energy Park, 570A and 528B Ballarat Road, Albion, VIC, EPA Reference ID: EA001086 (EHS Support, 2023)). The Audit was completed to comply with the Post Closure Pollution Abatement Notice (PCPAN) (PCPAN Notice ID: 90007761) issued on 23 June 2017 and comprised a review of the GHD 2014 Aftercare Management Plan. A number of recommendations were made with associated timeframes primarily related to ongoing monitoring of the site.

The TAR was completed prior to the 2020 Audit was completed therefore the outcomes of the Audit need to be taken into account and align with the proposed future uses of the Site.

2.7 Environmental Audit Overlay

An Environmental Audit Overlay (EAO) is a planning tool applied by local councils and other planning authorities to identify sites that have known, identified or reasonably suspected contamination or potential contamination. Under the Victoria Planning Provisions an EAO indicates an environmental audit is required prior to that land being used for a 'sensitive use' (i.e. such as developing housing, building a primary or secondary school, an early childhood center and children's playground).

For sites proposed for a sensitive use, either of the following will need to be undertaken (EPA 2023):

- A Preliminary risk screen assessment (PRSA) to determine if an environmental audit is required or
- Environmental audit to determine if the land is suitable for the proposed use.

An EAO has been applied to the SEP site. Given that the use of the site includes a children's playground as proposed in the Vision Plan, there will be a requirement to undertake an Environmental Audit in order to confirm that the land is suitable for the intended use, noting the Audit could potentially be limited to the extent of the playground or any other sensitive use. Given the historical land use, the data gaps on soil quality, the risks associated with landfill gas and the proposed future land use it is considered likely that an Environmental Audit will be required.

2.8 Duty to Manage

For any future developments at the site, Council will still need to manage the site under the 'Duty to Manage' framework outlined in Section 39(2) of the [Environment Protection Act 2017](#) (the Act). The duty to manage contaminated land (duty to manage) – requires a person in management or control of contaminated land to minimise risks of harm to human health and the environment from the contaminated land so far as reasonably practicable.

Minimising risks of harm to human health and the environment from contaminated land includes (but is not limited to) carrying out any of the following—

(a) identification of any contamination that the person knows or ought reasonably to know of;

(b) investigation and assessment of the contamination;

(c) provision and maintenance of reasonably practicable measures to minimise risks of harm to human health and the environment from the contamination, including undertaking clean up activities where reasonably practicable;

(d) provision of adequate information to any person that the person in management or control of the contaminated land reasonably believes may be affected by the contamination, including—

(i) sufficient information to identify the contamination; and

(ii) the results of investigation and assessment referred to in paragraph (b);

(iii) the risks of harm to human health and the environment from the contamination

(e) provision of adequate information to enable any person who is reasonably expected to become a person in management or control of the contaminated land to comply with the duty to manage contaminated land.

3. Environmental trends

The environmental monitoring at the site is generally completed in accordance with the Environmental Monitoring Program (EMP) contained in Appendix G of the Framework Rehabilitation Plan and Aftercare Management Plan (RAMP) [6], approved by the EPA-appointed Environmental Auditor, Mr Ken Mival.

Below is a summary of the environmental monitoring trends from 2019 when the TAR was developed to the most recent round of environmental monitoring (September 2023). Where appropriate, a brief discussion on the overall LFG trends is also included.

3.1 Landfill Gas

3.1.1 Subsurface landfill gas monitoring

Assessment levels

The 2021 environment protection regulations specify action levels for methane gas only (Schedule 3 of the Environment Protection Regulations 2021). Prior to 1 July 2021, action levels for subsurface geology were specified in the Landfill BPEM for both methane and carbon dioxide. Following the change in assessment levels, the LFG monitoring results was assessed against the following action levels:

- Subsurface geology – perimeter monitoring bores approximately 20 m from the edge of the waste mass:
1.0% v/v above background for methane (Schedule 3 of the Environment Protection Regulations 2021)
- 1.5% v/v above background for carbon dioxide (Landfill BPEM).

In-waste bores (LB02 and LB03)

Table 2 below shows the concentration ranges (% v/v) for methane and carbon dioxide for the in-waste LFG monitoring bores. It should be noted that the concentrations are taken from the stabilised gas concentration measurements.

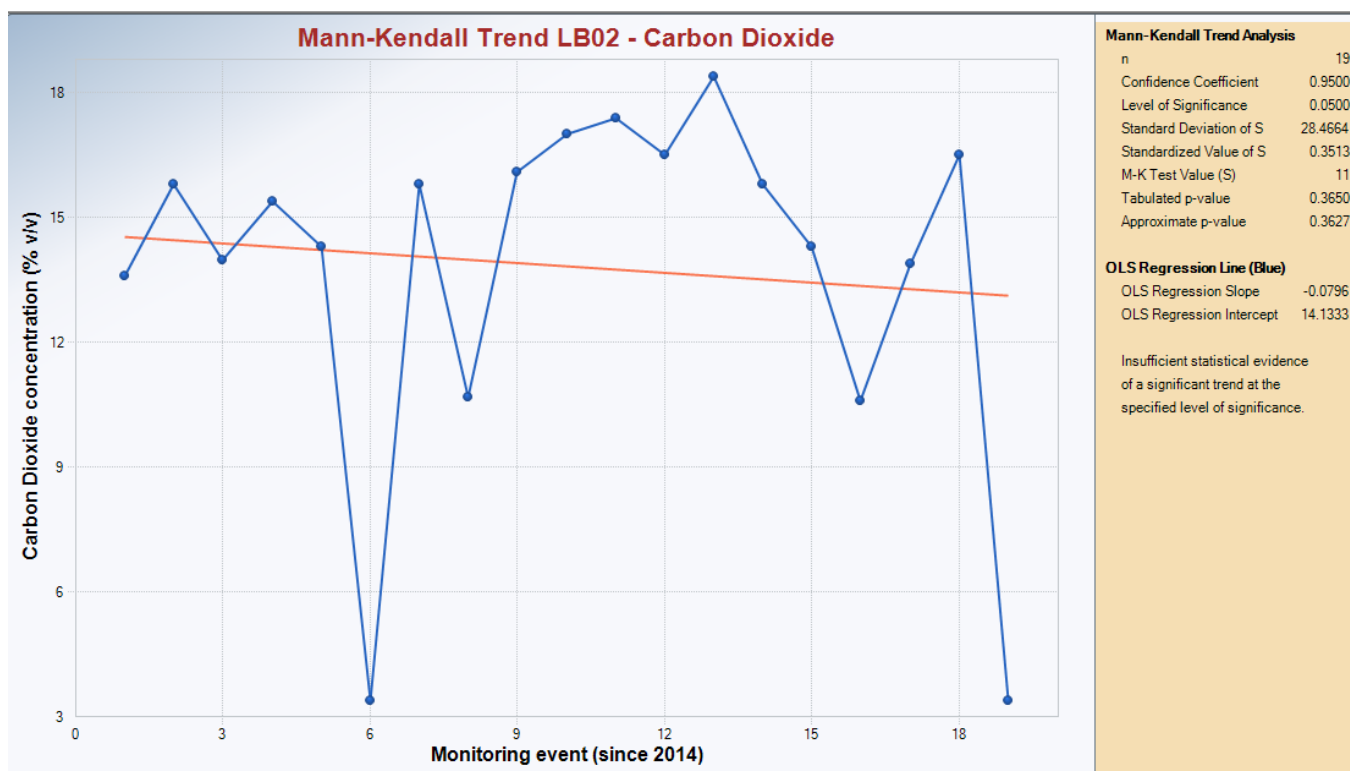
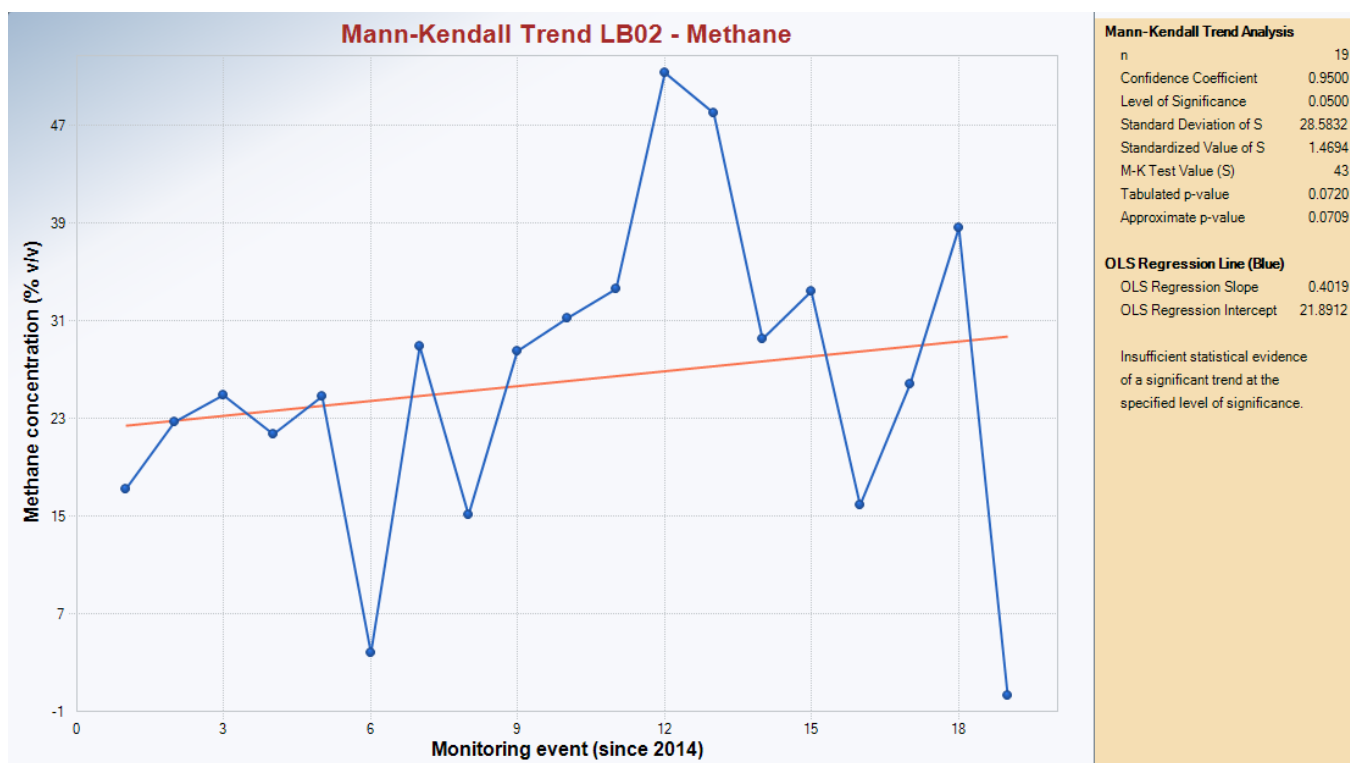
Table 2 Subsurface landfill gas concentration ranges for in-waste bores

LFG Bore	2014 – 2019 concentration ranges (% v/v)		2020 – 2023 concentration ranges (% v/v)		Trends identified
	Methane	Carbon Dioxide	Methane	Carbon Dioxide	
LB02	3.6 – 28.8	2.9 – 15.3	15.7 – 51.2	10.1 – 16.9	Increase in methane concentrations Generally consistent carbon dioxide concentrations
LB03	30.3 – 83.0	0.9 - 16.3	67.8 – 91.2	11.2 - 16.9	Increase in methane concentrations

Flow rates in the in-waste bores were negligible, with flow rates recorded at 0.0 L/hr in all monitoring events between 2020 to 2023.

To assess the overall trend of methane generation within the waste mass, a Mann-Kendall trend analysis was undertaken for LB02 and LB03 for the available dataset. LB02 has reported no statistically significant trend for methane or carbon dioxide concentrations. LB03 reported a statistically increasing significant trend for methane concentrations and a statistically decreasing significant trend for carbon dioxide. The increasing trend for methane is expected to be influenced by an abnormally low methane concentration in March 2017 (30.3% v/v), while the remainder of the monitoring events reported concentrations generally around 70 – 80% v/v.

The 2023 audit report (EHS Support, 2023) details that peak methane generation occurred around 1990. The LFG generation modelling which was undertaken suggests that the LFG generation is decreasing at the site. This is consistent with the National Greenhouse and Energy Reporting (NGER) Method 1 methane generation model for LFG generation in landfills. Therefore the lack of statistically significant decreasing trends present for LB02 and LB03 can be attributed to the relatively short monitoring timeframe (10 years) compared to the LFG generation decrease expected over time (decades).





Perimeter bores – Southern, Eastern and Western Boundary Bores

There are eighteen (18) perimeter bores located on Site:

- GB2 is located at the Go-Kart Track, installed approximately 110 m west of the waste extent
- GW115 is located at 570 Ballarat Road, installed approximately south 50 m of the waste extent
- GB18 is located on the eastern boundary of the Site, installed approximately 120 m of the waste extent
- GW107, GW108 and GB19 to GB29 are located on the southern boundary of the Site, installed either in waste, or within 50 m of the waste extent
- GB30 and GB31 are located on the western boundary of the Site, installed within 60 m of the waste extent

Whilst not installed directly into the waste mass, GW108 is understood to be located in what is likely a former haul road between the two former quarry holes (Quarry Hole 5 and Quarry Hole 6) which were landfilled with waste.

Southern Boundary (GW107, GW108 and GB19 to GB29) & GW115

Table 3 below shows the concentration ranges (% v/v) for methane and carbon dioxide for the southern boundary LFG monitoring bores. It should be noted that the concentrations are taken from the stabilised gas concentration measurements.

Table 3 *Subsurface landfill gas concentration ranges for southern boundary bores*

LFG Bore	2011 – 2019 concentration ranges (% v/v)		2020 – 2023 concentration ranges (% v/v)		Trends identified
	Methane	Carbon Dioxide	Methane	Carbon Dioxide	
GW107	0.0 - 0.1	0.0 - 9.3	3.6 - 7.0	8.1 - 18.0	Increase in both methane and carbon dioxide concentrations
GW108	4.9 - 22.6	10.8 - 18.1	1.7 - 19.2	2.0 - 17.5	Slight decrease in methane concentrations Generally consistent carbon dioxide concentrations
GB19	0.0 - 0.1	1.3 - 2.8	0.0 - 0.2	0.8 - 4.1	Generally consistent methane and carbon dioxide concentrations
GB20	0.0 - 0.1	1.7 - 1.9	0.0 - 0.2	1.8 - 4.4	Generally consistent methane and carbon dioxide concentrations
GB21	0.0 - 0.1	11.4 - 12.0	0.0 - 0.3	4.4 - 14.9	Generally consistent methane and carbon dioxide concentrations
GB22	2.3 - 2.8	8.1 - 8.4	0.0 - 3.1	2.8 - 10.9	Generally consistent methane and carbon dioxide concentrations
GB23	0.0 - 0.2	0.7 - 3.5	0.0 - 0.4	1.3 - 6.8	Generally consistent methane and carbon dioxide concentrations
GB24	0.2 - 0.3	1.0 - 4.9	0.0 - 2.4	2.7 - 11.5	Slight increase in carbon dioxide concentrations Generally consistent methane concentrations
GB25	0.0 - 0.0	1.9 - 2.6	0.0 - 0.2	2.2 - 9.2	Increase in carbon dioxide concentrations Generally consistent methane concentrations
GB26	0.0 - 0.0	0.8 - 2.3	0.0 - 0.2	1.2 - 5.3	Generally consistent methane and carbon dioxide concentrations
GB27	0.0 - 0.0	2.2 - 2.3–	0.0 - 0.–	0.5 - 6.2	Slight increase in carbon dioxide concentrations Generally consistent methane concentrations
GB28	0.0 - 0.0	2.7 - 9.2	0.0 - 0.3	3.0 - 8.5	Generally consistent methane and carbon dioxide concentrations
GB29	0.0 - 0.0	0.5 - 0.9	0.0 - 0.4	0.7 - 1.9	Generally consistent methane and carbon dioxide concentrations
GW115	0.0 - 8.0	0.9 - 9.3	0.0 - 0.0	4.5 - 6.8	Generally consistent methane and carbon dioxide concentrations

Flow rates for the southern perimeter landfill gas bores were all negligible (0 – 0.1 L/hr) during the 2020 to 2023 monitoring periods.

Given the location of GW108, Mann-Kendall trend analysis was undertaken to identify if any statistically significant trends in LFG generation could be identified. The analysis determined that there was a statistically significant decreasing trend in methane concentrations, while carbon dioxide concentrations remained steady. This is consistent with the NGER LFG generation model for the age of the landfill.



Eastern Boundary (GB18)

Table 4 below shows the concentration ranges (% v/v) for methane and carbon dioxide for the eastern boundary LFG monitoring bore. It should be noted that the concentrations are taken from the steady measurements.

Table 4 Subsurface landfill gas concentration ranges for eastern boundary bores

LFG Bore	2019 concentration ranges (% v/v)		2020 – 2023 concentration ranges (% v/v)		Trends identified
	Methane	Carbon Dioxide	Methane	Carbon Dioxide	
GB18	0.0 - 0.0	2.8 - 3.7	0.0 - 0.2	0.2 - 5.2	Generally consistent methane and carbon dioxide concentrations

Flow rates for GB18 was negligible, with no flow (0.0 L/hr) recorded.

Western Boundary (GB2, GB30 and GB31)

Table 5 below shows the concentration ranges (% v/v) for methane and carbon dioxide for the western boundary LFG monitoring bores. It should be noted that the concentrations are taken from the steady measurements.

Table 5 Subsurface landfill gas concentration ranges for western boundary bores

LFG Bore	2012 – 2019 concentration ranges (% v/v)		2020 – 2023 concentration ranges (% v/v)		Trends identified
	Methane	Carbon Dioxide	Methane	Carbon Dioxide	
GB2	0.0 - 7.7	0.2 - 14.0	0.0 - 0.0	0.0 - 3.9	Decrease in carbon dioxide concentrations Generally consistent methane concentrations
GB30	0.0 - 0.0	1.3 - 2.5	0.0 - 0.1	2.6 - 6.3	Generally consistent methane and carbon dioxide concentrations
GB31	0.0 - 0.0	1.6 - 2.6	0.0 - 0.2	1.8 - 13.7	Slight increase in carbon dioxide concentrations Generally consistent methane concentrations

Flow rates for the western perimeter landfill gas bore have historically been all negligible, with no flow (0.0 L/hr) recorded.

3.1.2 Surface and penetrations emissions

Monitoring network

Surface methane emissions monitoring is undertaken annually across accessible capped areas of the Site.

In accordance with EPA Publication 1684, methane concentrations are monitored continuously along 50 m transects at a height of 50 mm above ground level. For the purposes of this assessment, the entire landfilled area is considered to have a final cap. A number of riser pipes, constructed as part of the landfill gas collection system, were also assessed and considered as penetrations.

Assessment levels

Surface emissions monitoring results are assessed against the methane action levels specified in Schedule 3 of the Environment Protection Regulations 2021 for landfill surface final covers and penetrations, as follows:

- 100 ppm within 50 mm of the landfill surface of the final cap
- 100 ppm within 50 mm of penetrations through the final cap

Prior to the gazettal of the Environment Protection Regulations 2021, action levels for surface methane emissions were specified in the Landfill BPEM (the same as those specified in the Environment Protection Regulations 2021). EPA Publication 1684 notes the following regarding compliance with the Landfill BPEM action levels, “EPA will accept an average of the surface emissions data to be used for reporting compliance where the maximum concentration below is not exceeded:

- Final cap, a mean of 100 ppm with no individual result exceeding 200 ppm

Surface methane and penetration emissions results

In the most recent 2023 monitoring event no methane surface emission or penetration exceedances above the action levels were recorded. It was noted that methane was generally elevated (between 10 – 40 ppm) across the

top of the cap. This continues to highlight the effectiveness of the additional soil cover in 2021 on the existing landfill cap in mitigating the vertical migration of LFG to the surface, either as a barrier or acting as an attenuation pathway for biodegradation.

3.1.3 Buildings and underground services monitoring

Building monitoring was completed with accessible buildings on the western and southern perimeters of the Site.

The following buildings were monitored:

- St John's Building (570A Hulett Street)
- Railway Club Buildings (570A Hulett Street)
- Power Plant Building (570A Hulett Street)
- Sunshine Roofing (Corner Hulett Street and Ballarat Road)
- Red Hot Car Sales (572 – 574 Ballarat Road)
- Nick Daniel's BBQ (4 Hulett Street)
- Lamb Engineering (2 Hulett Street)
- Infrabuild Reinforcing (528 Ballarat Road)
- Infrabuild Steel (528 Ballarat Road)
- Westkon Precast (528A Ballarat Road)

Consistently in recent years (2020 to 2023) no exceedances of the Environment Protection Regulations 2021 action level for buildings have been recorded. Monitoring results indicate that ambient concentrations of methane (i.e., < 5 ppm) have been recorded in recent years.

Underground service pits (such as Telstra pits) and stormwater drains were also monitored around the perimeter of the former landfill. All monitored pits and services along Hulett Street were at ambient methane concentrations.

3.2 Assessment of subsurface landfill gas risks

Based on the high concentrations of methane and carbon dioxide recorded in the in-waste leachate bores LB02 and LB03, it appears that the waste in quarry hole 6 is still generating high concentrations of landfill gases. Of note is the negligible flow rates recorded in the bores. This suggests that, although high concentrations of landfill gas are being generated, the rate of generation is still low. An LFG Risk Assessment undertaken by GHD in 2020 assessed the LFG risk to the western and southern boundary properties which are off-site at SEP. This determined that the risk was 'low' however noted that an additional LFG risk assessment would be required should the site be developed in the future. An additional LFG risk assessment should be considered prior to developments at the site.

The placement of the additional soil (i.e., soil cover) on the existing landfill cap is expected to be restricting the upwards or direct emission of landfill gas (in particular, methane) to the surface and, thereby, potentially promoting lateral subsurface migration.

However, historically there is no clear evidence that this is occurring in the southern, western, or eastern perimeter bores. While elevated methane is still being consistently detected in GW108, this to be expected given that GW108 is located over a haul road and is not considered a perimeter bore. Many bores installed within the waste mass, or in close proximity to it (<20 metres) along the southern boundary, have recorded potentially elevated carbon dioxide, but have typically not recorded methane in recent years.

It is also noted that the soil filling works do not extend the entire length of the landfill cap to the southern boundary. It is therefore possible that, while the additional cover material is forcing landfill gas to migrate laterally, it is 'leaking' out of other areas of the landfill cap. These 'leaks' would be expected to be at very low rates as elevated emissions were not detected along the edges of the soil filling areas in recent years surface methane emissions monitoring (refer to 3.1.2).

Overall, in the absence of methane, the risks of carbon dioxide are relatively limited – toxicity and asphyxiation risks from the displacement of oxygen in a building. However, for this to occur, regular high concentrations and large volumes of carbon dioxide would need to migrate into a building or confined space. Based on the recorded

flow rates and gas concentrations along and beyond the landfill boundaries, this is unlikely to be a significant risk currently at the Site.

As landfill gas will be an ongoing risk at the site, proposed control measures (such as vapour barriers and gas alarms) for future land use which may realise an elevated risk of landfill gas (high impact use scenarios) are required. These have been outlined in the TAR and are to be implemented in buildings and structures where landfill gas can accumulate such as in enclosed spaces. The continued monitoring and suggested timeframes of developments will assist in mitigating the landfill gas risks.

3.3 Groundwater and leachate

Groundwater and leachate monitoring is ongoing at and around SEP. A previous hydrogeological study concluded that the risk of potential impacts to the most likely groundwater beneficial uses (primary contact recreation, ecosystem protection) is considered to be low (GHD 2014). However, ongoing monitoring is required to verify this, and detect any sudden changes in groundwater or leachate quality.

Groundwater

The potential for leachate impacts to groundwater can be assessed by considering the Mulvey Ratio (ratio of cations). Groundwater exhibits elevated concentrations of the cations Mg^{2+} , Ca^{2+} and Na^{+} whereas leachate is dominated by K^{+} and NH_4^{+} . The addition of the dominant leachate cations divided by the sum of the dominant groundwater cations is the Landfill/Natural (L/N) ratio, commonly referred to as the Mulvey Ratio (Mulvey and Brisbane, 1996).

$$\frac{L}{N} ratio = \frac{(K^{+} + NH_4^{+})}{(Mg^{+} + Ca^{+} + Na^{+})} \times 100$$

Natural groundwaters are expected to exhibit L/N ratios of around one, whereas leachate exhibits ratios greater than 10. Leachate breakthrough during the anaerobic phase will be evidenced by an increasing trend in L/N ratios in groundwater. Plate 1 below shows the Mulvey Ratios of groundwater bores and leachate bores within the monitoring network. Which demonstrates that with the exception of GW107 spiking in mid-2022 the leachate impacts to groundwater have remained relatively consistent over time. The Mulvey Ratio for leachate bores LB02 and LB03 could not be calculated from 2020 onward as the bores were reported as dry. The leachate bores have historically reported significantly higher L/N ratios than that of groundwater. It should be noted that while there has not been a significant increasing trend, there has also not been a decrease in Mulvey ratios either.

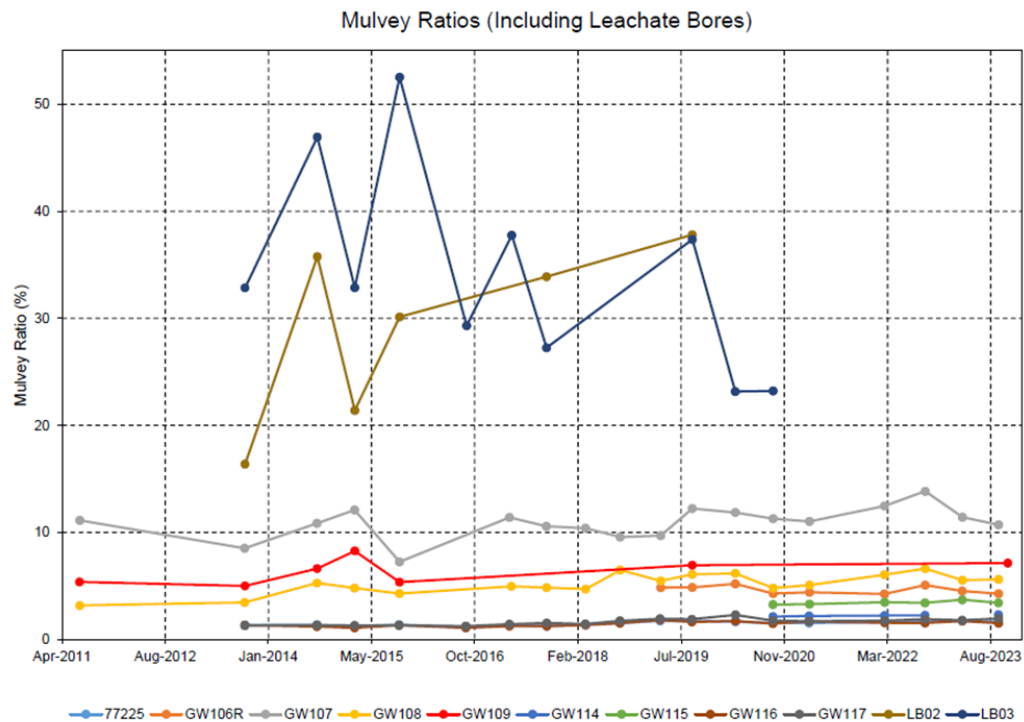
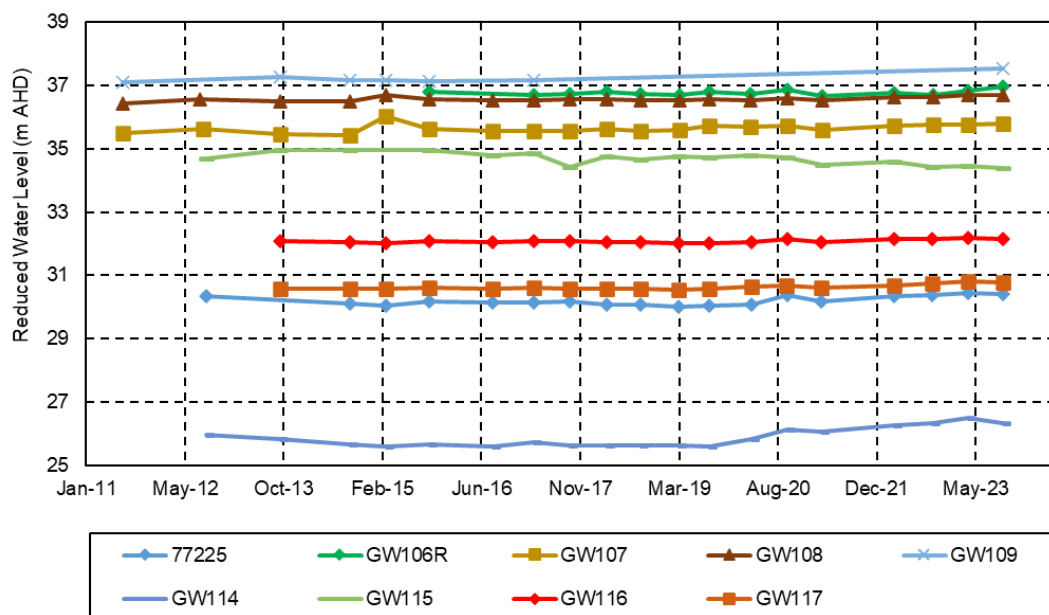


Plate 1 *Historical Mulvey Ratios – Groundwater bores and leachate bores*

Groundwater water levels over time in monitoring bores screened in the Upper Basalt Aquifer (UBA) are shown in Plate 2. Groundwater levels measured at the site since the TAR was finalised are generally consistent with historical water levels.

Plate 2 *Groundwater levels, 2011- 2023 (Upper Basalt Aquifer)*



Groundwater environmental values and quality

According to monitoring data collected from the upgradient UBA bore GW114 which is considered representative of background water quality, the UBA is placed in Segment E. The protected environmental values for the UBA include:

- Water dependent ecosystems and species
- Agriculture and irrigation (stock watering)
- Water-based recreation (primary contact recreation)
- Traditional owner cultural values
- Buildings and structures
- Geothermal properties

The background salinity of groundwater and current use of the site indicates that only the water dependent ecosystems and species, water-based recreation (primary contact recreation) and the buildings and structures environmental values have the potential to be realised.

While in the future buildings and structures may be constructed on the site it is also important to consider vapour risks from hydrocarbon contamination in groundwater. A comparison of groundwater data from 2020 onwards indicates that while there are detections of the F1 and F2 TRH fractions (associated with vapour risks) in some groundwater wells, these are below the NEPM 2013 HSL residential (A/B), recreational (C) and commercial / industrial vapour intrusion (D) guidelines.

A comparison to the AS2159 (2009) Piling Design and Installation assessment criteria reports some exceedances of the guideline for chloride in GW107, GW108, GW115, GW117 and LB03. While these exceedances may not preclude the placement of footings and pilings, further investigation is likely required to determine if additional control measures are needed.

Leachate levels

In recent monitoring events both leachate bores have been unable to be gauged due to the landscaping works undertaken on the cap of the site. The standpipe for both bores has also been extended, making comparisons to historical data difficult. When able to be monitored again both bores have reported depths which are significantly less than the original installation depth, indicating that the bores may be blocked. LB02 and LB03 were installed 31 m bgl and 29.6 m bgl respectively, whereas the 2024 March gauging results reported depths of 13.448 m bTOC and 13.856 m bTOC respectively. Because of this leachate levels have not been able to be accurately assessed.

While unable to be assessed, the landfill cap may be effectively reducing the rate of infiltration of water into the landfill, reducing the volume of leachate. Noting that the leachate impact on groundwater does not appear to be decreasing (as shown in Plate 1, it is expected that leachate is still being generated by the landfill.

Groundwater and leachate considerations

While risk to future and current groundwater environmental values of the site is considered low, in general future land use scenarios should aim to limit the generation of leachate. As outlined in the TAR this can include:

- Not allowing water to pool / accumulate on the capping material
- Maintaining a low permeability cap
- Efficient stormwater management systems
- Planting of vegetation to reduce infiltration

Currently the leachate and groundwater quality does not indicate a risk from vapour intrusion however some locations do exceed the AS2159 (2009) Piling Design and Installation threshold for chloride. Further assessment may be required to determine if control measures are needed, however it is possible that piles and foundations may not intersect the water table.

4. Environmental review of Vision Plan

As outlined in section 2, the Vision Plan has divided Sunshine Energy Park into sections based on the proposed future land use.

As outlined in the draft TAR [1] the potential broad future uses for the Site included:

- **Low impact use** — solar park or open recreational parkland with no buildings or deep human inhabited underground confined spaces.
- **Medium impact use** — formal sports fields/sports facilities with limited enclosed structures or underground confined spaces (basement structures), such as clubrooms and a small grandstand.
- **High impact use** — extensive built form with extensive enclosed structures or deep underground confined spaces (basement structures, underground car parks), such as enclosed sports stadium, mixed use industrial, commercial, or residential properties.

The environmental considerations outlined in the TAR for each of the impact use categories are outlined below.

Low impact use:

- The anticipated settlement of the landfill prior to establishment of any activity must be evaluated for on-landfill uses only.
- Ground mounted solar panels may require excavation into the cover system and placement of structural supports. Solar panels pre-installed on racks or pads could be considered as one way of minimising penetration of the cap. It should be noted that the additional cover material which has been placed on the cap may be a sufficient mitigation measure for minimising penetration of the cap.
- Due to the shading effect of solar panels, it is likely that vegetation cannot be established on that part of the site occupied by the solar farm. Alternative arrangements will therefore be required to minimise stormwater infiltration and prevent erosion of the capped surface.
- Below ground buildings and structures are not recommended due to potential vapour risks.
- Buildings on the landfill areas (such as toilet blocks or storage sheds) should have constant ventilation, and not be designed for long-term occupation. Alternatively, buildings such as a demountable can be used, where there is airspace between the landfill surface and the floor of the building (i.e. no connected pathway for surface emissions to migrate directly into the building).
- Underground service pits and trenches can be installed, however any conduits should be have airtight seals, or be vented. Any penetrations passing above the former landfill or around its perimeter and into buildings should be completely sealed.
- Access to landfill gas extraction infrastructure, and all monitoring infrastructure must be maintained (if operational and required to reduce the risk and / or monitor LFG).
- Automated watering systems need to be programmed correctly, to avoid pools of water accumulating on the landfill cap. Drought tolerant species should be encouraged and watering minimised.

Medium impact use (noting that all of the low impact use considerations also apply):

- Ongoing landfill gas extraction and flaring if deemed necessary based on an LFG risk assessment and modelling.
- Buildings on the landfill (club rooms, toilet blocks, storage sheds, etc) should be designed with appropriate gas protection measures and alarm systems that will trigger when unacceptable levels of landfill gas are detected.
- Vapour barriers or airspace between the building floors and top of landfill cap would also be required for buildings on and adjacent to the landfill. Alternatively, buildings can be constructed with underfloor venting to cut out any gas migration pathway from the surface.
- Concrete cast slabs with damp proof membranes or gas resistant membranes, used in conjunction with active or passive venting can also be used. It is noted that over large areas, these measures may be cost prohibitive.
- Landfill Gas Management Plans should be prepared based on the site uses, and occupiers must be educated on the risks and what actions to avoid (i.e. avoid digging into the cap without gas detectors or

protection measures, understand actions if methane detectors alarm, be aware of establishing confined spaces such as enclosed marquees on the former landfill areas, etc).

- Constructing a landfill gas cut-off trench around the perimeter of the landfill (which based on the depth of landfilling would be cost prohibitive)
- Completely sealing underground structures, and implementing active venting of air
- Installation of activated carbon filters in any landfill gas venting systems.

High impact use (noting that all of the medium impact use considerations also apply):

- Any piling or foundations, and all joints located on the landfilled area must be completely sealed.
- The design of buildings must include extra precautions to ensure that explosive or oxygen depleted conditions do not develop within the enclosed spaces of the buildings due to landfill gas accumulation. As noted above, such measures would include:
 - Reinforced concrete cast in-situ floor slab (suspended, non-suspended or raft)
 - Proprietary gas resistant membrane and actively ventilated or positively pressurised underfloor sub-space with monitoring facility
 - In ground venting wells and reduction of gas regime
 - If the cap is penetrated during any activity that creates connectivity to the waste mass, then some form of seal will be required to prevent potential landfill gas migration.
 - Continuous monitoring of LFG using methane and other problematic gases (e.g. hydrogen sulphide) sensors will be required within and underneath building structures. These should be set to provide an alarm when a specific threshold (e.g. the protection of human health) is reached.
 - Any construction works would need to include a thorough and rigorous construction quality assurance procedure with experienced contractors.
 - If irrigation will be part of the development, this would potentially increase infiltration into the waste mass resulting in increased gas production, settlement, and groundwater impacts. A water balance analyses would be required to inform on the design of a 'smart' irrigation system capable of accounting for irrigation and rainfall to maintain a healthy grass surface.

Table 4 outlines the proposed use scenarios in the revised draft Vision Plan and associated impact category along with considerations for implementing the scenario. It should be noted that the above considerations should still be included when determining future options for the site.

It should be noted that buildings constructed should align with the relevant LFG guidelines and standards which include but are not limited to:

- Ciria C665 – Assessing risks posed by hazardous ground gases to buildings
- British Standard (BS) 8485:2015 + A1:2019 – Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings.

Table 4 Environmental review of revised draft Vision Plan

Use scenario	Environmental data impact on scenario since TAR	Location of scenario complies with TAR	Additional considerations / risks (aside from those outlined in the TAR)	Timeframe considerations
Low Impact Uses				
Conservation and Wildlife Area	No change since TAR.	Yes, complies with low impact use scenario	All low impact use scenario considerations outlined in the TAR This should be considered as this may impact the integrity of the capping material and contribute to leachate generation in the future. Native vegetation should be planted in place of introduced species where possible. Footings for any fences, gates or structure minimise penetration into the landfill capping material. A construction environmental management plan (CEMP) should be implemented during the construction of all use scenarios. The plan should add focus regarding maintaining the integrity of the capping material, as low impact use scenarios are generally located on top of the waste mass. The play precinct can be justified as low impact providing there are no enclosed spaces for LFG to accumulate. An Audit requirement will be triggered for use of the All Ages and Abilities Play Precinct. Footings for any fences, gates or structure minimise penetration into the landfill capping material.	Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
Enclosed Dog Park	No change since TAR.	Yes, complies with low impact use scenario		Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
At Grade Car Park	No change since TAR.	Yes, complies with low impact use scenario		Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
Pump and BMX Tracks	No change since TAR.	Yes, complies with low impact use scenario		Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
Mountain Bike Tracks	No change since TAR.	Yes, complies with low impact use scenario		Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
Sports Fields (Interim Solar Farm Use)	No change since TAR.	Yes, complies with low impact use scenario		Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
Park Entrance Point for Pedestrians and Cyclists	No change since TAR.	Yes, complies with low impact use scenario		Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
Existing Club Rooms (new entry from Carrington Drive)	No change since TAR.	Yes, complies with low impact use scenario		Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
All Ages and Abilities Play Precinct	No change since TAR.	Generally complies with low impact use scenario. As it located within the waste mass footprint, if any structures should be constructed to be well ventilated and not have areas where LFG can accumulate.		Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
Landmark Artwork	No change since TAR.	Yes, complies with low impact use scenario		Works can proceed with appropriate low impact use controls implemented – considered low environmental risk
Medium Impact Uses				
Sports Field and Pavilion	No change since TAR.	Yes, complies with medium impact use scenario.	All medium impact use scenario considerations outlined in the TAR. Footings for any fences, gates or structure minimise penetration into the landfill capping material. A construction environmental management plan (CEMP) should be implemented during the construction of all use scenarios. The plan should add focus regarding maintaining the integrity of the capping material, as medium impact use scenarios are generally located on top of the waste mass.	Works can proceed with appropriate medium impact use controls implemented – considered low environmental risk
High Impact Uses				
Service Delivery and Operations Centre Precinct	No change since TAR.	Complies with high impact use scenario assuming that appropriate design controls and considerations are implemented.	All high impact use scenario considerations outlined in the TAR A construction environmental management plan (CEMP) should be implemented during the construction of all use scenarios. The plan should add focus regarding maintaining the integrity of the capping material, as some sections of the high impact use scenarios are located on top of the waste mass.	Works can proceed with appropriate high impact use controls implemented – considered medium environmental risk given adjacency of buildings to landfill area. Extensive monitoring and risk management measures required.
Sustainability Hub	No change since TAR.	Complies with high impact use scenario assuming that appropriate design controls and considerations are implemented.		Works can proceed with appropriate high impact use controls implemented – considered medium environmental risk given location adjacency of buildings to landfill area. Extensive monitoring and risk management measures required.
Stadium	No change since TAR.	Complies with high impact use scenario assuming that appropriate design controls and considerations are implemented.		Works can proceed with appropriate high impact use controls implemented – considered medium environmental risk given adjacency of stadium to landfill area. Extensive monitoring and risk management measures required.
Ace Karts Expanded Building and Car Park	No change since TAR.	Complies with high impact use scenario assuming that appropriate design controls and considerations are implemented.		Works can proceed with appropriate high impact use controls implemented – considered medium environmental risk given location in landfill area. Extensive monitoring and risk management measures required.

5. Geotechnical considerations

The following sections provide a summary of the draft TAR [1] and incorporates the settlement monitoring results in the discussion on settlement effects. The details of the settlement monitoring instrumentation and comprehensive monitoring results are presented in a separate GHD report [2].

5.1 Geotechnical context

The SEP covers an area of approximately 40 ha with the landfill occupying approximately 22 ha. The extents of the landfill area have been established over several phases of investigations, including work completed by GHD and others. For the purpose of Section 5 and Section 6 of this report, the area underlain by landfill will be identified as 'landfill area' and the relatively undisturbed area around the landfill will be known as 'landfill-free area'.

A transition zone between the landfill and landfill-free area is of particular importance as it defines the boundary between the two areas and also presents unique engineering challenges. This area will be referred to the 'transition area'. The width of the 'transition area' depends on the nature of the landfill edge (i.e., depth of landfill, rock batter slope profile and rock structure) and the type of development being proposed. As a general guide, the area within 10 m of the landfill crest would be considered as part of the 'transition area'.

5.2 'Landfill-free area'

The area nominated as landfill-free is not considered to be undisturbed or natural and is likely to have undergone some modification in the past, such as filling or excavation. Limitations and restrictions for development of the landfill-free area are likely to be similar to that of areas underlain by residual basaltic soils and basalt (and possible fill); which are commonplace across the western and northern suburban areas of Melbourne.

As a minimum, consideration will need to be given to the following for development in the landfill-free areas:

- The composition and engineering properties of the existing, historic or recently placed, fill is to be established to assess any limitations or potential bearing/settlement issues. Placed fill (controlled, or not) will undergo a period of self-consolidation and this must be considered in the design of any structure.
- The residual clays of the basaltic Newer Volcanics are sensitive to moisture and have the propensity to shrink or swell under varying moisture conditions. Any development will need to consider the effects of reactive clays and foundations will need to be designed to accommodate the effects of highly reactive clays. Measures can be adopted (as advised in Australian Standard AS 2870–2011) which can aid to mitigate the effects associated with reactive soils.
- Basalt rock provides a generally suitable foundation strata; however, can be highly variable in both weathering and strength and challenging to excavate by conventional means.
- The proximity of any structure or development to the edge of the landfill (transition area) needs to be carefully considered, including the effects of loading a buried, man-made basalt 'cliff'. This consideration is of particularly relevance to the proposed stadium structure (Area ID 12Table 1).

5.3 'Landfill area'

In general terms, the composition of landfill is expected to be characterised by extreme variability and present a number of geotechnical engineering risks including, but not limited to, heterogeneous ground, weak ground, obstructions and settlement.

Settlement

Settlement, in particular differential settlement, is amongst the most challenging geotechnical issue to quantify and address when dealing with landfill sites. Settlement in landfill is caused by rearrangement of the waste material (primary settlement), creep due to self-weight (creep or secondary settlement) and biodegradation.

In 2019 a total of nine magnetic extensometers were installed across the SEP site (denoted as EXT01 to EXT09 inclusive) for the purpose of monitoring the on-going deformation of the landfill mass. In 2024 GHD has prepared a settlement monitoring report [2] documenting the installation of the extensometers and also presenting the settlement monitoring data to the 14 February 2024. Reference should be made to the settlement monitoring report which provides commentary on the nature of the on-going movement and recommendations for further monitoring.

The settlements recorded are limited to the landfill area to the south of the Western Ring Road (M80) and east of Hulett Street, also known as Quarry Hole No.6.

The following is a summary of the settlement monitoring results for the period between 2019 and February 2024:

- A total of nine extensometers (EXT01 to EXT09) have been installed across the Quarry Hole No.6 landfill extents; with spacing ranging from approximately 80 to 200 metres and depth of installation ranging from approximately 18 to 35 m. A plan showing the location of the extensometers, landfill extents and total settlement between 2019 and February 2024 is shown as Figure 1 in Appendix A.
- The extensometers were installed to monitor the deformation of the landfill mass and were anchored into the underlying basaltic rock. A key assumption of the interpretation of results is that the landfill mass is compressible, and the basalt rock is incompressible (i.e., all the settlement occurs within the landfill mass). The settlement recorded is expected to be comprised of two components – primary and creep consolidation settlement, and biodegradation. Primary settlement will occur under the landfill mass self-weight and following and a stress increase (i.e., after the placement of additional fill).
- Site filling was occurring during the installation and is assumed to be largely responsible for the settlement monitored to date. The site filling commenced in 2012 and was completed by end of 2021 with up to 9 to 10 m of fill placed within the central portion of the site.
- Surface settlement recorded across the site, as of 14 February 2024, range from 70 mm to 341 mm, with an average surface settlement of 166 mm. The maximum settlement of 341 mm has been recorded at EXT09 within the central portion of the site.
- Settlement recorded is greatest towards the middle of the landfill area and decrease along the edges. The maximum values correlate to the greatest thicknesses of placed fill. This confirms that the settlement is largely a function of the recently placed fill material.
- In general, the settlement increases with vertical height above the bottom datum (i.e., upper-most anchor is observed to be settling the most).
- Compression rates to up to 10 to 25 mm per month were recorded over the observation period from the July 2019 (commencement of monitoring) to 2020/21. This high rate of settlement is inferred to be associated with the on-going filling and is considered to be an immediate response to the load increase. Current settlement rates are up to 2 mm per month and are inferred to be settlement associated with biodegradation and potentially on-going creep settlement.

The discussion contained in Section 6 is provided based on the measured settlement trends. It is important that monitoring continues to validate the conclusions and confirm the rate of settlement.

6. Geotechnical review of Vision Plan

The draft TAR [1] consisted of a high-level study to inform the planning for future use, assessing environmental, geotechnical, statutory planning and urban development constraints associated with potential uses for the SEP. The options assessment examined three broad future uses:

- Low impact use – solar park or open recreational parkland with no buildings or underground confined spaces.
- Medium impact use – formal sports fields/sports facilities with limited enclosed structures or underground confined spaces, such as clubrooms and a small grandstand.
- High impact use – extensive building form with extensive enclosed structures or deep underground confined spaces, such as enclosed sports stadium, mixed use industrial, commercial or residential properties.

Sections 6.1 to 6.3 outlines the proposed use scenarios in the revised draft Vision Plan [5] with considerations for implementing the scenario.

6.1 Development in ‘landfill-free’ and ‘transition’ areas

In general, development can progress on the areas outside of the ‘landfill area’ with careful consideration given to the transition zones. The landfill (quarry) wall forms a buried cliff structure which has been buttressed by landfill waste. Developing within the transition zone will need to consider the stability of the ‘cliff’ and potential impacts to structures positioned close to the cliff-edge. Geotechnical investigations and assessment will need to be completed to inform the development and engineering strategy within the transition zone.

6.2 Low impact use in ‘landfill area’

The settlement monitoring results to date indicate the landfill mass is continuing to settle, albeit at a reduced rate. Low impact uses are considered to generally be use scenarios which are insensitive to settlement and can accommodate a reasonable magnitude of total and differential settlement.

Lightweight structures or pavements can be managed through suitable design, site preparation and regular maintenance. Ground improvement may be implemented to improve the performance of the structure and reduce the maintenance needs.

Table 5 presents a high-level review of the low impact uses indicated in the revised draft Vision Plan against recommendations presented in the draft TAR with incorporation and consideration of settlement data collected to date.

6.3 Medium and High impact use in 'landfill area'

The settlement monitoring results indicate the landfill mass is continuing to settle at a reduced rate. An interpretation of the data and associated plots (refer [2]) indicate that the landfill mass may be transitioning into a longer period of secondary settlement with on-going biodegradation.

The landfill mass continues to settle with current rates of settlement of up to 2 mm per month and it is inferred that the on-going movement is generally associated with either creep movement or biodegradation. Medium to high impact uses are considered to be structures and facilities that are sensitive to ground deformation and may suffer performance and functionality issues under excessive movement. The following should be considered in planning for medium and high impact uses within the 'landfill area':

- It is generally recommended that no buildings are built on the landfill area until biodegradation has ceased, unless the entire landfill mass can be bypassed by piling (in some areas the depth through the capping material and landfill to bedrock would be over 30 metres). A landfill gas generation model prepared by GHD in 2012 indicated that landfill gas generation was in decline with the model suggesting that biodegradation of the waste will continue for a period of 20 to 30 years (or about 2040 from the date of the modelling). This date may be revised as gas monitoring continues.
- Following cessation of biodegradation (estimated to be in the next 20 to 30 years at this stage) structures and buildings (light or heavy) can be constructed provided the effects of immediate and creep settlement is incorporated into the design. Immediate and creep settlement will occur following the application of additional load on the landfill mass, and ground improvement or deep piling is likely to be required to mitigate settlement issues. The settlement monitoring results indicate deformation of over 300 mm can be expected under loading equivalent to approximately 9 m of surcharge fill (approximately 180 to 200 kPa of applied pressure).
- Heavily loaded buildings will require piling into the underlying natural strata, which may be over 30 m deep. Bored or driven piles through landfill is particularly challenging and obstructions may cause significant construction issues. The composition of the landfill may also present issues with lateral stability of the piles. Long, slender piles with poor lateral support may be subject to buckling or lateral instability and is considered unlikely that the landfill mass will provide sufficient lateral support. The effects of corrosion and accelerated structural deterioration will be an issue for any part of the structure (including piles or ground beams) penetrating into the landfill mass.
- Any structures within the 'landfill area' should be designed with input from a suitably experience geotechnical engineer with particular experience in designing for landfill conditions.

Table 5 presents a high-level review of the medium to high impact uses indicated in the revised draft Vision Plan against recommendations presented in the draft TAR with incorporation and consideration of settlement data collected to date.

Area ID	Use scenario	Location of scenario complies with draft TAR?	Considerations / risks if developed prior to stabilisation of settlement	Timeframe considerations
Low impact use				
01	Conservation and Wildlife Area	YES , complies with low impact use scenario. The proposed Conservation and Wildlife Area is located within the landfill area north of Western Ring Road (M80) and within the central area of Quarry Hole No.1.	Settlement monitoring has not been conducted in this area and the magnitude of on-going settlement is not known.	Works can proceed with appropriate design and allowances for on-going settlement, including ground improvement measures.
04	Enclosed Dog Park	YES , complies with low impact use scenario. The proposed enclosed dog is located on the central north area of the landfill area and straddles the 'transition' area.	Settlement monitoring has not been conducted in this area and the magnitude of on-going settlement is not known. Foundations will need to be designed for movement. Light-weight flexible structures are anticipated.	Works can proceed with appropriate design and allowances for on-going settlement, including ground improvement measures.
05	At Grade Car Park	YES , complies with low impact use scenario. The proposed car park is outside the landfill area and partially located within a transition zone.	Car park is outside extent of landfill and conventional design principles apply. The 'transition zone' is unlikely to impact the performance of the carpark provided an offset from the landfill edge is maintained (nominally 5 to 10 m)	Works can proceed with appropriate design and allowances for on-going settlement, including ground improvement measures.
08	All Ages and Abilities Play Precinct	YES , complies with low impact use scenario. The proposed location is on the northern extent of the Quarry Hole No.6.	Settlement will occur at the location of these facilities. The proposed uses are likely to be tolerable to differential movement. Use scenarios will be subject to on-going movement of minimum 2 mm per month (approx. 25 mm per year ²) on the provision that the load on the landfill mass is not increased. Regular maintenance of surfaces (paved) and drainage may be required.	Works can proceed with appropriate design and allowances for on-going settlement, including ground improvement measures.
09	Pump and BMX Tracks	YES , complies with low impact use scenario. The proposed location is on the western extent of the Quarry Hole No.6.	Settlement will occur at the location of these facilities. The proposed uses are likely to be tolerable to differential movement. Use scenarios will be subject to on-going movement of minimum 2 mm per month (approx. 25 mm per year ²) on the provision that the load on the landfill mass is not increased. Regular maintenance of surfaces (paved) and drainage may be required.	Works can proceed with appropriate design and allowances for on-going settlement, including ground improvement measures.
10	Mountain Bike Tracks	YES , complies with low impact use scenario. The proposed location is in the central area of Quarry Hole No.6.		Works can proceed with appropriate design and allowances for on-going settlement, including ground improvement measures.
11	Sports Fields (Interim Solar Farm Use)	YES , complies with low impact use scenario. The proposed location is in the southern area Quarry Hole No.6.	Sports field will be subject to on-going movement of minimum 2 mm per month (approx. 25 mm per year ²) on the provision that the load on the landfill mass is not increased. As the waste approaches biological stabilization (predicted to be about 2040) the creep component of settlement will tend to slow down. Further monitoring will be required to understand the long-term settlement behaviour. Dependent on load and sensitivity to movement, solar farm can potentially be supported on controlled fill layer or designed to tolerate the expected long-term movement.	Works can proceed with appropriate design and allowances for on-going settlement, including ground improvement measures. Design must account for the expected settlement, and appropriate ground improvement techniques should be undertaken to provide a stable foundation for new solar farms.
13	Landmark Artwork	YES , complies with low impact use scenario. The proposed location is in the central area of Quarry Hole No.6.	Dependent on load and sensitivity to movement, the Landmark Artwork can potentially be supported on controlled fill layer (shallow ground improvement). The artwork supports should be designed to tolerate settlement over its design life.	Works can proceed with appropriate design and allowances for on-going settlement, including ground improvement measures. Design must account for the expected settlement, and appropriate ground improvement techniques should be undertaken to provide a stable foundation for landmark artwork.
Medium to High Impact Use				
14	Park Entrance Point for Pedestrians and Cyclists	YES , all entrance points are located outside the extent of the landfill areas.	Outside extent of landfill and conventional design principles apply. Additional considerations needed for development within the transition area (nominally 10 to 15 m from the landfill edge).	Works can proceed with appropriate design.
07	Sports Field and Pavilion	YES , complies with medium impact use scenario. The pavilion and majority of the fields are located outside the northern extent of the Quarry Hole No.6 landfill.	Outside extent of landfill and conventional design principles apply. Additional considerations needed for development within the transition area (nominally 10 to 15 m from the landfill edge).	Works can proceed with appropriate design. Lightweight structures within the 'transition zone' (such as light poles and goals) are likely to be acceptable, subject to geotechnical investigation and assessment and design.
03	Operations Centre	YES , main buildings and sheds are indicated to be located outside the extent of the 'landfill area'.	Outside extent of landfill and conventional design principles apply. Additional considerations needed for development within the transition area (nominally 10 to 15 m from the landfill edge).	Works can proceed with appropriate design. Suitable design needed for development within the transition area (nominally 10 to 15 m from the landfill edge).
06	Sustainability Hub	YES , main buildings are indicated to be located outside the extent of the 'landfill area'. The proposed Sustainability Hub straddles the 'transition areas' of Quarry Hole No.6 and No.5.	Largely outside extent of landfill and conventional design principles apply. Additional considerations needed for development within the transition area (nominally 10 to 15 m from the landfill edge).	Works can proceed with appropriate design measures and consideration. Design will need to consider the 'basalt cliff' within the 'transition area'.
12	Stadium	YES , stadium is located outside the extent of the landfill areas. The proposed Stadium is near the 'transition area' of Quarry Hole No.6.	The structure is anticipated to be heavily loaded and sensitive to settlement. Position the structure entirely outside the landfill area and within the 'landfill-free area' and design using conventional principles. Position footings outside the 'transition zone'. The width of the 'transition zone' will need to be determined from further geotechnical investigations and/or geophysical surveys. The effects of loading near the crest of the buried basalt 'cliff' will need to be considered in the design.	Works can proceed with appropriate design measures and consideration. Design will need to consider the 'basalt cliff' within the 'transition area'.

Table notes:

² Estimated monthly and yearly settlement rates are provided based on the settlement monitoring report prepared by GHD [2]. Rates may be adjusted (up or down) based on continued monitoring.

7. Closing remarks

This report included a high-level review of the revised draft Vision Plan ([4] & [5]) in comparison to the recommendations outlined in the draft TAR [1] and with consideration of the most recent geotechnical and environmental data.

The settlement monitoring report [2] indicates that the landfill mass compressed under the application of the clean fill loading. The data trends indicate that primary settlement has likely ceased under the applied load, and the landfill mass has entered a phase of secondary (creep) settlement along with ongoing the biodegradation settlement. It is important to note that any additional load will induce a new phase of immediate and primary settlement.

Sections 4 and 6 of the report provides an environmental and geotechnical review of the revised draft Vision Plan. The review indicates that the revised draft Vision Plan either complies or partially complies with the draft TAR.

Development outside the 'landfill area' (i.e., within the transition zone or 'landfill-free area') can proceed with appropriate design including careful consideration of the impacts of developing at the edge the buried quarry wall.

Low impact development can progress across the 'landfill area' provided the impacts of on-going biodegradation and possible addition primary settlement are considered in the design. Designs may need to incorporate shallow ground improvement to limit the impacts associated with differential settlement.

Medium to high impact scenarios should be limited to the areas outside the landfill extents (i.e., within the 'landfill-free area'). Development of medium to high impact scenarios, where development is not tolerable to differential settlement, within the 'landfill area' should not progress until biodegradation has ceased, which is anticipated to be in approximately 20 to 30 years (approximately 2040 subject to confirmation). Settlement monitoring of the landfill mass should continue to allow on-going evaluation of the landfill mass and determination of the cessation of biodegradation.

It is recommended that the Vision Plan is reviewed as it develops, and geotechnical and environmental advice is sought during each phase of the development.

8. References

- [1] GHD, "Sunshine Energy Park - Draft Technical Assessment Report," GHD, Melbourne, Australia , 2019.
- [2] GHD Limited, "Sunshine Energy Park - Settlement Monitoring Report," GHD, Melbourne, Australia, 2024.
- [3] Brimbank City Council, "Sunshine Energy Park Vision Plan (DRAFT)," Brimbank City Council, Melbourne, Australia , December 2022.
- [4] Brimbank City Council, "Sunshine Energy Park Revised Draft Vision Plan - December 2023.Rev4," Brimbank, Victoria , 2023.
- [5] Brimbank City Council, "Sunshine Energy Park Draft Vision Plan April 2024," Brimbank City Council, 2024.
- [6] Brimbank City Council, "Framework Rehabilitation Plan and Aftercare Management Plan (RAMP)," Brimbank City Council, Melbourne, Australia, 2104.

Appendices

Appendix A

Figures



Legend

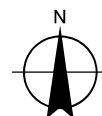
- Extensometer
- Site Boundary (digitised 22/03/2024)
- Inferred Quarry Extent (digitised 12.13.2)

Maximum Measured Settlement (As at February 2024) clipped to inferred quarry extent.

High : 341.088
Low : 42.418

Paper Size ISO A4
0 50 100
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 55



Brimbank City Council
Sunshine Energy Park
Settlement Monitoring

Project No. 12613973
Revision No. C
Date 22/03/2024

Extensometer Location Plan

FIGURE 1

Data source: . Created by: jreid6

Appendix B

Revised Draft Vision Plan

**Sunshine Energy Park
Draft Vision Plan
April 2024**

- 01. Conservation and Wildlife Area
- 02. Existing Club Rooms
(new entry from Carrington Drive)
- 03. Operation Centre
- 04. Enclosed Dog Park
- 05. At Grade Car Park
- 06. Sustainability Hub
- 07. Sport Fields and Pavilion
- 08. All Ages and Abilities Play
- 09. Pump and BMX Tracks
- 10. Mountain Bike Tracks
- 11. Sports Fields (Solar Farm interim use)
- 12. Stadium
- 13. Landmark Artwork
- 14. Park Entry Point
(for Pedestrians and Cyclists)

--- Approximate Landfill Extent



Attachment 12.13.2
0 50 100 200m





SUNSHINE ENERGY PARK DRAFT VISION PLAN**Summarised feedback from community**

Consultation: June - August 2023

Number of responses: 66

Topic	Summarised comments	Officer response
Site access and walking, cycling and public transport connections	1. Provide sufficient carparking for visitors to the park. 2. Pedestrian connections to neighboring residential areas are essential including linkages cross rail corridor and St Albans Road are important. 3. Consider an electric shuttle bus and/or bike hire from main Brimbank City centres to visit site.	1. Carparking allocation will be guided by planning scheme 2. Connections are shown on the Vision Plan and further analysis and feasibility will be included in future stages 3. The connections to and from SEP from major will be determined through structure planning work for this precinct.
Environment sustainability	1. More urban forest and solar farms, less sports facilities, 2. Ensure the design addresses and responds to challenges of the climate change. 3. Concern about the maintenance required to maintain the park to designed outcome. 4. Restoration of original vegetation in western suburbs before European settlement. 5. Stormwater harvesting system for park maintenance use. 6. Consider creating more conservation spaces	1. The Draft Vision Plan includes areas of urban forest and a solar farm. 2. The design of each precinct within the vision plan will consider climate, the carbon footprint and longevity of materials. 3. Management plans will be prepared after design phase. The ongoing maintenance budget will be negotiated as part of funding agreements with funding partners. 4. Planting strategies will be included in next phase of design 5. The neighbouring Upper Stony Creek Wetland which harvests stormwater has been designed to irrigate SEP 6. Increase the precinct to incorporate more space for conservation
Community gathering and social cohesion	1. Concerns about the feasibility of installing community gardens. 2. Space and program for education purpose. 3. Request safety cameras and lighting for night time use .	1. The community gardens proposal would be subject to business case and feasibility study to determine viability. The beds would be above ground. 2. The Sustainability Hub is proposed to have this function 3. Crime Prevention Through Environmental Design assessments will be undertaken for each precinct in the design phase
Health and wellbeing	1. Health hazard of having sports facilities and other community gathering activities over tipping site.	1. The site has been cleared by EPA as being safe for use for recreational purpose. Further detailed technical investigation will be conducted for each proposed activities.
Supporting sports in Brimbank	1. Need more balance between sporting and passive recreation. 2. Ensure balance between private sports clubs and community in utilising public land and public facilities. 3. Need grounds for women and girls football	1. The Sports Development Plan indicates that there is a need for more ovals and sporting facilities. More space for passive recreation can be created by increasing the precinct to the north. 2. The land is zoned PPRZ which means that the land must be available for public use - leases would be possible but would need to meet the objectives of the Vision Plan. 3. GIA has identified the needs for spaces for sports programs for women and girls
SEP as a destination	1. Provide destination playgrounds, water play, outdoor fitness stations and gardens. 2. Provide a destination Mountain Bike track and a pump track. 3. Provide a dog park. 4. Provide public toilets. 5. Provide outdoor stage for community events. 6. Include a sculpture park.	1. The Vision Plan includes a flagship scale playground - this level of playground would need to include fitness equipment, water play and plantings as guided by Creating Better Parks Strategy and Plan 2. The Mountain Bike tracks can be expanded to create a more significant destination and include a pump track - the feasibility and design of this facility would be investigated as part of this precinct 3. The Creating Better Parks Strategy guides the distribution of dog parks in BCC - a dog park can be considered for this location 4. Public toilets provision is guided by Brimbank Public Toilet Strategy, and would provide recommendations to provide toilets in high use areas. Preference would be for public toilets to located in facilities such as the Stadium and Sustainability Hub and in area where there is passive surveillance and ease of maintenance access. 5&6. To be considered in detail design phase.
Potential partnerships	1. Private enterprise should not have priority access to public land. 2. Funding partners are required for project of this scale.	1. Proposal submitted by external organisations will be considered as part of a formal EOI process 2. The majority of the Vision Plan can only be implemented with the committed of funding partners and the vision is likely to take up to 30 years to be implemented

Draft Sunshine Energy Park Vision Plan

Stakeholder Engagement Findings Report

16 October 2023



Prepared for:
BRIMBANK CITY COUNCIL

Prepared by:
Sarah Bishop, Letitia Duncan and Angela Walter
ACTIVATE CONSULTING

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Activate Consulting respectfully acknowledges and recognises the Kulin Nation, including the Wurundjeri, Bunurong and Boon Wurrung Peoples as the Traditional Owners of the land and waterways in the City of Brimbank and pays respect to their Elders past, present and future.

Activate also acknowledges local Aboriginal and Torres Strait Islander residents of Brimbank and their Elders for their ongoing contribution to the diverse culture of the community.



The Five Elements

Located in Sunvale Community Park, Sunshine
Artists: Lee-Anne Clarke and Mandi Barton, 2019

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1. EXECUTIVE SUMMARY

Sunshine and Albion are set to significantly transform over the next few decades.

The Victorian Government has identified Sunshine as a state priority precinct and has committed to significant infrastructure and development investments in this area. This investment includes the redevelopment of Sunshine and Albion Stations, and the renewal and transformation of Albion Quarter.

To leverage infrastructure and development investments to achieve meaningful and generational change for the local community, in 2021 Brimbank City Council endorsed the Sunshine Priority Precinct Vision 2050. It's a bold plan to support Sunshine as the 'Capital of Melbourne's West'.

One of the 15 key priorities in the precinct vision is to transform the closed Sunshine landfills and former quarry into 54 hectares of new parklands, known as Sunshine Energy Park (SEP).

In December 2022, Council endorsed for consultation a Draft Vision Plan for SEP. The draft vision plan highlights opportunities for extensive tree planting, a solar farm, walking and cycling tracks, a sustainability hub, new sportsgrounds and stadium, new play spaces and an extensive urban forest and wetland system.

It is a long-term Draft Vision that, once approved, will require partnerships and investment from government, business and community to bring this to life over the next 30 years.

A comprehensive stakeholder engagement program ran from 21 June to 31 August 2023 alongside broad community engagement. The targeted stakeholder engagement program sought feedback on the Draft Vision Plan and to identify ideas and potential opportunities from the following stakeholder groups:

- Type 1 – properties (landowners and tenants) adjacent to SEP and the Albion quarter precinct
- Type 2 – properties (landowners and tenants) adjacent to SEP only
- Type 3 – stakeholders, both local and outside the City of Brimbank with a potential interest in SEP
- Advisors - organisations and government with experience of similar projects or related expertise
- Government departments and agencies
- Elected government officials.

This report presents the findings of the stakeholder engagement program.

Approximately 49 stakeholder organisations/ individual stakeholders participated in the targeted engagement program which included formal written submissions as well as meetings and informal interactions – including phone calls, in-person discussions and meetings, email enquiries and general feedback from stakeholder information sessions.

Key findings

Overall Sentiment

The overall sentiment about the draft vision for SEP was very positive. The majority of stakeholders commented that the vision would bring a range of benefits to Sunshine and Brimbank including open green spaces; a focus on the environment and sustainability; improved social cohesion; and much-needed sporting facilities and spaces for people to be active.

Many stakeholders commented on how SEP could play a critical role in the transformation of the area and Albion Quarter and contribute to Sunshine becoming the capital of Melbourne's west.

Some of the words used by stakeholders to describe the vision included:

- Positive
- Transformative
- Exciting
- Brilliant idea
- Clever
- Strategic
- Impressive
- Comprehensive
- Innovative
- Well-planned
- Remarkable
- Fantastic

The below outlines the key themes that emerged from stakeholder feedback.

Walking, cycling and public transport connections

The most frequent topic raised by stakeholders was the importance of improved and new connections to SEP including walking paths, cycling paths and connections to public transport and key destinations within the area. This was seen as an essential factor for the success of SEP, ensuring easy access for everyone. It was also considered important for people to be able to access SEP without a car and ease pressure on parking, especially if there are large sporting events.

Environmental sustainability

The next most frequent topic raised by stakeholders involved support for SEP's environmental and sustainability focus. There were many positive comments about the solar farm, sustainability hub, circular economy, green spaces, wetlands and green roof on the sports stadium and the contribution these could make to local wildlife, climate resilience and minimising waste. There were some questions and concerns raised about gardening and growing produce under powerlines, and the location of the wetlands.

Community gathering and social cohesion

Many stakeholders commented on the benefits SEP would have on community building and creating a space for people to meet, gather and connect. Some stakeholders felt SEP provided an opportunity for culturally enriching events and spaces and a place for people to come together and learn.

Health and wellbeing

Many stakeholders pointed to the overall health and wellbeing benefits SEP could provide in relation to being in nature, being active in open space, and having a place to relax, socialise and enjoy.

SEP Stadium and sporting destination

Potential partners and local stakeholders were very interested in the sports facilities proposed for SEP and how this could be used to nurture sport participation in Brimbank. The proposed stadium was of particular interest and a range of opportunities and partnerships proposed to create a successful multi-purpose facility including spaces for sports like basketball, tennis, netball, volleyball and badminton. Stakeholders also embraced the idea of using the stadium for other community purposes like hosting conventions and exhibitions and cultural opportunities including musical performances.

SEP as a destination

Some stakeholders mentioned that SEP provided a great opportunity for Sunshine and Brimbank as it could create a destination, attracting not only community but visitors to the local area, contributing to the visitor economy. Having a facility like this in Sunshine would also help contribute to attracting investment and attracting and retaining talent for employment opportunities in the local area.

Potential partnerships

Potential partnerships were raised with a several stakeholders including Victoria University, Basketball Victoria, NBL, Sunshine Private Hospital, Sunshine Hospital, Volleyball Victoria as well as community groups like Bike West.

2. PROJECT AND ENGAGEMENT OVERVIEW

Project background

Sunshine and Albion are set to significantly transform over the next few decades.

The Victorian Government has identified Sunshine as Melbourne's only combined national employment and innovation cluster, metropolitan activity centre, state priority precinct, and transport superhub. Its Precinct Opportunity Statement states that 'Sunshine will become the centre of Melbourne's West', with a target to almost triple the existing residential and employee population. This is being supported with significant investment in infrastructure, such as the already committed redevelopment of Sunshine and Albion Stations.

To leverage infrastructure and development investments to achieve meaningful and generational change for the local community, in 2021 Brimbank City Council endorsed the Sunshine Priority Precinct Vision 2050. It's a bold plan to support Sunshine as the 'Capital of Melbourne's West' with strong support from the community, education and business sectors.

For more information on the Transforming Brimbank vision and projects visit:

www.brimbank.vic.gov.au/council/transforming-brimbank

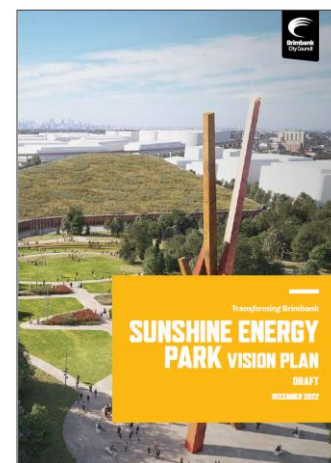
One of 15 key priorities of the Sunshine Priority Precinct Vision 2050 is to transform the closed Sunshine landfills and former quarry into a 54-hectare urban parkland and community asset in the heart of Sunshine – called Sunshine Energy Park (SEP).

Combined with the State Government's redevelopment of Albion Station, and the identified future renewal of Albion Quarter, the area will transform from what is currently primarily industrial use to a vibrant mixed-use precinct for innovation, jobs and housing.

In December 2022, Council endorsed for consultation a Draft Vision Plan for SEP which highlights opportunities for:

- extensive tree planting
- a solar farm
- cycling and walking tracks
- sustainability hub
- sports fields and stadium
- play spaces, and
- an extensive urban forest and wetland system.

It is a long-term Draft Vision that, once approved, will require partnerships and investment from government, business and community to bring to life over the next 30 years.



As such, Brimbank City Council implemented a comprehensive engagement program to seek feedback on the Draft Vision Plan and identify ideas and potential opportunities. This engagement program consisted of two streams: broad community engagement and targeted stakeholder engagement. The feedback will be used to help inform a Final Draft Vision Plan.

This report presents the findings of the stakeholder engagement program.

Engagement purpose and objectives

Brimbank City Council's overall engagement program aimed to engage the community and key stakeholders in the development of the Sunshine Energy Park (SEP) Vision Plan to ensure this once in a generation opportunity reflects the needs and aspirations of current and future communities.

The stakeholder engagement also aimed to generate general awareness about the broader transformation of the precinct, encourage stakeholders (particularly surrounding landowners) to think about their longer-term plans, and explore potential opportunities.

The objectives of the stakeholder engagement component were to:

- reach, inform and engage key identified stakeholders on the Draft SEP Vision Plan
- gather feedback on the Draft Vision Plan and identify any potential collaboration opportunities to realise shared goals
- raise awareness and generate interest in the overall transformation of the Albion precinct (including SEP, Albion Quarter, Albion station) – a sense of optimism and opportunity
- provide a positive engagement experience with key identified stakeholders to build trusted, ongoing relationships
- document/capture useful input and feedback to help inform the final SEP Vision Plan and demonstrate stakeholder sentiment around the Draft Vision.

Engagement approach

The engagement program ran from 21 June to 11 August 2023. An extended timeframe was provided to allow for the school holiday period and so a series of in-person meetings could be held with stakeholders. This section describes the stakeholder engagement component only which ran until 31 August.

The [Draft Sunshine Energy Park Vision Plan](#) document was the primary engagement resource used with stakeholders, however a short [explainer video](#) was also produced to help capture attention and generate initial interest.

As shown in Table 2.1, stakeholders were grouped into broad categories based on their relationship to the SEP site, broader Albion precinct and/or purpose of engagement.

Table 2.1 Broad stakeholder categories

Category	Description
Type 1 – Properties (land owners and tenants) adjacent to SEP and the Albion quarter precinct	Commercial and industrial land and businesses in the area within the Albion Quarter Structure Plan (either side of Albion Station, including areas of significant development potential north of Ballarat Road). These are stakeholders that may be directly impacted by, or interested in, changes at SEP and/or the future transformation of the Albion Quarter.
Type 2 – Properties (land owners and tenants) adjacent to SEP only	Mainly commercial and industrial land and businesses, but also some residential properties in the areas surrounding SEP. It also included current community tenants using buildings on the SEP site. These are stakeholders that may be directly impacted by, or interested in, changes at SEP.
Type 3 – Stakeholders, both local and outside the City of Brimbank, with a potential interest in SEP	Key stakeholders involved in the Sunshine Priority Precinct Vision 2050 process, identified potential partner organisations, traditional owner groups and local community interest groups. These are stakeholders that may have a direct interest in changes or

Category	Description
	opportunities at SEP.
Advisors	Other organisations which have successfully implemented elements of the Draft SEP Vision Plan in their own locations. These are stakeholders that may be able to share valuable insights and learnings to Council that influence elements of the Draft Vision Plan.
Government departments and agencies	Victorian Government departments and agencies relevant to the SEP site or identified opportunities on the site. These are stakeholders that may be potential partners, funders or collaborators on projects on the SEP site in the future.
Elected government officials	Ministers and local members of State and Federal Government relevant to the Draft SEP Vision Plan by either location or portfolio. These are stakeholders that may be potential partners, funders or collaborators on projects on the SEP site in the future.

Advisors, Government departments and agencies and Elected government officials were contacted individually, informed of the Draft SEP Vision Plan and direct meetings were held where relevant.

Type 1, 2 and 3 stakeholder groups were written to (via email and/or mail), invited to attend an online information session and/or a direct meeting. Segmenting the Type 1, 2 and 3 stakeholder groups enabled the engagement process and information to be targeted to their particular circumstances and information needs. For example, representatives from the Department of Transport and Planning attended information sessions and meetings for Type 1 stakeholders so they were able to discuss and answer questions about the Albion Station redevelopment and future transformation of Albion Quarter all in the one forum.

Throughout the engagement period feedback was captured in two ways:

- Formal written statements – via email or post
- Meetings and informal interactions – including phone calls, in-person discussions and meetings, email enquiries and general feedback at information sessions.

All participants were encouraged to submit formal written statements.

3. WHO WE HEARD FROM

Approximately 49 stakeholder organisations/ individual stakeholders participated in the engagement.

Stakeholder reach and participation

A total of 86 stakeholder organisations/ individual stakeholders were directly contacted via email, mail or phone. A further 319 letters were sent to surrounding residents. In total, approximately 49 participated in the engagement, and 18 formal written statements were received. These are outlined in Table 2.2 below.

Table 2.2 Engagement methods and participation

Engagement Methods	Participation Count
Formal written statement submitted	18 stakeholders (13 approved to share publicly)
Stakeholder Information sessions: - Type 1 stakeholders – 12 July - Type 2 stakeholders – 20 July - Type 3 stakeholders – 24 July - Type 3 stakeholders – 26 July	16 stakeholder groups represented (22 individuals attended)
Stakeholder meetings - Type 1 stakeholders - Type 2 stakeholders - Type 3 stakeholders	26 stakeholder groups represented (51 individuals participated)
Stakeholder enquiries and discussions via phone or email only	3 stakeholder groups represented (3 individuals)
Meetings with Advisors	2 advisor organisations represented
Meetings with Government departments and agencies	3 departments/ agencies represented
Meetings with Elected government officials	7 Plus, upcoming meetings were scheduled with approx. 6 additional elected officials at time of reporting – not included in total below.
Total <i>*Some stakeholders participated in more than one activity and submitted a formal written statement.</i>	73 Approx 49* stakeholder organisations/ individual stakeholders (with some participating in multiple engagement activities)

Formal written statements

Of the 18 stakeholders that provided formal written statements, the following 13 have given permission for their submission to be made public:

- Albion & Ardeer Community Club Inc
- Australian Unity – Sunshine Private Hospital
- BikeWest
- Brimbug
- Cadence
- Friends of Kororoit Creek

- Henkell Brothers
- Islamic Guidance Society of Australia / Khalid bin Al-Waleed Mosque (Albion Mosque)
- NBL
- Tennis Victoria
- Victoria University
- Volleyball Victoria
- Western Pigeon Federation of Victoria

4. FORMAL WRITTEN STATEMENTS

This section presents the 13 written statements approved to be shared publicly and an assessment of each against the following categories:

- A. Stakeholder support for the Draft Vision
- B. Stakeholder recommended changes to the Draft Vision
- C. Stakeholder feedback for consideration in the implementation of the Vision

Statements have been presented verbatim.

4.1 Albion and Ardeer Community Club Inc

Statement

Brimbank City Council

Many tks for forwarding information about the Council vision proposals, for Sunshine Energy Park.

AACC strongly supports the proposals and vision. Importantly, the proposals appear to be supportive, and well connected. to the Council adopted 'Vision 2050' transformation advocacy, which, as you will be aware, the local community strongly supports.

As we know, the State Government has committed to a reconstruction of the Albion Railway Station, and, for one thing, we see that it very important that these works do connect to the Energy Park area, and that a Draft Vision for the Park can greatly assist in integrated planning for the area, including the 'Albion Quarter' proposed urban redevelopment.

We see the key elements being, therefore: 1. A strong commitment to heritage protection and enhancement, particularly the John Darling Mill site ... 2. Preventing commuter traffic from a focus on the westside of Albion Station ... (while supporting car-parking on the east side) ... 3. Revitalisation, beautification and enhancement of Stony Creek, in the area ...eg the Steve Bracks vision for a Green Corridor, from Silo/Energy Park in the north, to Silo in the south.... 4 High quality non-vehicular access northwest from the Station to Energy Park ... (eg facilitation bike and suchlike traffic towards Sunshine City Centre).

Happy to discuss, if that would assist ... cheers,

Assessment

A. Stakeholder support for the Draft Vision
Strong support for the vision, it's connection to Sunshine Priority Precinct Vision 2050, and role it can play in achieving integrated planning for the area.
B. Stakeholder recommended changes to the Draft Vision
C. Stakeholder Feedback for consideration in the implementation of the Vision
- Create good connections between Albion Park Station and SEP. - Ensure a strong commitment to heritage protection and enhancement. - Consider the creation of a green corridor from SEP to the Silo in the south. - Plan for high-quality, non-vehicular access northwest from the station to SEP.

4.2 Australian Unity – Sunshine Private Hospital

Statement

Thank you for the opportunity for the Australian Unity Healthcare team to participate with the Engagement Team in considering the master planning of the Sunshine Energy Park. (SEP)

As discussed the proposal could contribute positively to the health and wellbeing of the wider community as well as being an important place for recreation and relaxation for the staff, patients and visitors to the Sunshine Private Hospital.

We encourage Council to consider connecting the SEP to established or proposed walk and cycle ways, to ensure that there is sufficient parking for visitors, and to consider ways to integrate FOGO waste streams with the community gardens.

The Sunshine Private Hospital is currently serviced by a 2 MW substation with capacity to expand to a 4 MW substation. As part of our commitment to pursuing a net zero future we would be interested in participating with Council as an end-user in the proposed solar energy generation within the SEP.

Brimbank's diverse cultural heritage could also be reflected by using part of the park for a permanent Sculpture Park which could commission pieces to be used in public places or displayed within the SEP. An example of this is the McClelland Gallery and Sculpture Park at Langwarrin within the City of Frankston.

Finally we applaud Council and its staff for seeking to improve Sunshine with the innovative proposal.

Assessment

A. Stakeholder support for the Draft Vision
Strong support for the draft vision, praising it as an innovative proposal and pleased that it will contribute positively to the health and wellbeing of the community and to hospital staff, patients and visitors.
B. Stakeholder recommended changes to the Draft Vision
- Consider connecting the SEP to established or proposed walking and cycling paths, to ensure that there is sufficient parking for visitors. - Consider ways to integrate FOGO waste streams with the community gardens. - Consider a Sculpture Park within SEP to reflect Brimbank's diverse cultural heritage.
C. Stakeholder Feedback for consideration in the implementation of the Vision
Consider Sunshine Private Hospital as an end-user in the proposed solar energy generation within the SEP.

4.3 BikeWest

Statement

BikeWest's submission is a 12-page report (see Appendix 6.1). Below is an excerpt from the submission relating specifically to Sunshine Energy Park.

Sunshine Energy Park

The Sunshine Energy Park (SEP) Vision Plan proposes mountain bike trails to allow for mountain biking as well as a pump track. BikeWest strongly endorses this proposal as it aligns with our previous collaborate work with Maribyrnong Council on their recently adopted Bike Sports Strategy with a strong focus on local places for local people. This does not preclude visitors from further afield but facilitates local use as a starting point. Survey data by BikeWest about Quarry Park indicates visitors come from all parts of Melbourne including international backpackers who hire bikes and travel to Quarry Park. Given the ease of access from Albion train station we envisage the SEP attracting visitors from many parts of Melbourne including international visitors.

The Sunshine Energy Park Vision Plan also correctly that currently mountain bike riding is a heavily male dominated sport. This is also observed at Quarry Park and something BikeWest is attempting to address in collaboration with Westside Cycle Club and local schools and we are pleased to see Brimbank Council acknowledge the issue. BikeWest hopes that Brimbank Council will take this opportunity to collaborate with both BikeWest and Westside Cycle Club. BikeWest is also assisting the facilitation of a pilot program by the US high school mountain bike organisation, NICA. This project should be launched in the west of Melbourne in 2024 (#MoreKidsOnBikes). Future mountain bike trails in Sunshine would help expand this program (<https://nationalmtb.org/>)

The proposed pump track also presents the opportunity to include a broad range of users due to their inherently flexible design and appeal. The pump track at Quarry Park is in constant use throughout the year. In the UK most local governments are installing pump tracks and the experience of Velosolutions with their Wishawhill Wood pump track provides a perfect example of tapping into latent demand (<https://www.youtube.com/watch?v=n4auyR3mjTs>)

The design of the trails may take cues from the world's best practice urban bike park, the Tom Dumoulin Bike Park. The Tom Dumoulin Bike Park (TDBP) is an innovative, high-quality, world-class facility designed to cater for road cyclists, mountain bikers and BMX riders, for all ages and abilities. The park occupies an area of 6 hectares with different surface types making it possible for riders to tackle tracks with different levels of technical difficulty. It offers an ideal way of gaining experience and perfecting skills in a safe, innovative environment. The innovative design means that a total of fifty different courses can be set out, six of which can be ridden on simultaneously. Over 2000 people regularly use this park at the same time. While the TDBP occupies a larger area than that proposed for the mountain bike trails and pump track, a smaller version drawing upon the flexible design would greatly add to the flexibility and benefit of the trails.

Sustainability Hub

BikeWest is also very excited to see Brimbank Council's focus on sustainability and the circular economy. This presents another opportunity for collaboration with both BikeWest and the Inner West Community Bike Hub (IWCBH). BikeWest works closely with the IWCBH on bicycle maintenance programs for school students (Footscray High School) and promoting reuse, refurbishment and recycling of bikes. The IWCBH promotes social inclusion as well through the sale of cheap, high quality bikes and has donated over 300 bikes to refugees. BikeWest recommends strongly that Brimbank Council approach the IWCBH to discuss what opportunities exist for the establishment of a new bike hub in the SEP.

Summary

BikeWest is excited by the opportunities presented in the Sunshine Energy Park Vision Plan and strongly

endorses the inclusion of the mountain bike trails, pump track and sustainability hub (resource recovery centre). Given our expertise and experience in developing the Maribyrnong Bike Sports Strategy we look forward to colaboarting with Brimbank Council to help see their vision come to fruition.

Assessment

A. Stakeholder support for the Draft Vision
Strong support for the draft vision in particular the mountain bike trails, pump track and sustainability hub (resource recovery centre).
B. Stakeholder recommended changes to the Draft Vision
Consider a bike hub as part of the sustainability centre (in collaboration with BikeWest and the Inner West Community Bike Hub (IWCBH).
C. Stakeholder Feedback for consideration in the implementation of the Vision
- Consider collaborating with BikeWest and Westside Cycle Club in future SEP projects, including a pilot mountain bike project already underway in Brimbank (#MoreKidsOnBikes). - Consider best practice design of urban bike parks when designing for SEP (e.g. The Tom Dumoulin Bike Park) and take into account research and studies from around the world to ensure a bike park and pump track design that will be heavily utilised and accommodate a range of riders of all ages and abilities.

4.4 Brimbug

Statement

On behalf of Brimbug, and following the Zoom presentation, I would say that the vision plan for the Sunshine Energy park would be a great asset to Brimbank and our surrounding communities and we fully support the concept.

From a cycling prospective, it is imperative that a well plan bike connection from the Western Ring Road, Stony creek, Jones creek and Kororiot creek paths are established and improved, so as many people can come, visit and play at the Park without the use of cars with a good connection to public transport.

The inclusion of a BMX track amongst other sporting activities, will attract young riders and create a culture to become a cyclists in a safe environment.

Assessment

A. Stakeholder support for the Draft Vision
Strong support for the draft vision stating it would create a great asset for Brimbank and surrounding communities as well as culture of learning to ride in a safe environment.
B. Stakeholder recommended changes to the Draft Vision
C. Stakeholder Feedback for consideration in the implementation of the Vision
Consider planning good bike connections from the Western Ring Road, Stony Creek, Jones Creek and Kororoit Creek to SEP, so people can access the park by riding or via public transport and without the need for a car.

4.5 Cadence

Statement

I am writing to express my support for the Sunshine Energy Park Vision Plan, which is currently open for public consultation.

The comprehensive vision outlined for this 54-hectare urban parkland is impressive. It encompasses a wide array of opportunities ranging from cultural heritage and ecological restoration to community engagement and sustainable development.

The deliberate integration of features that promote connection to Country, sports, recreation, education, events, recycling, energy production, horticulture, habitat creation and social interaction is a testament to the careful consideration of community needs and aspirations.

Furthermore, the park's strategic location, adjacent to major sporting corridors, residential areas, employment centres, and educational institutions, positions Sunshine Energy Park as a central contributor to the goal of making Sunshine the capital of Melbourne's west.

The park's adjacency to the Albion Quarter offers a unique opportunity to enhance pedestrian connectivity within the precinct, spanning the rail corridor, and regionally through an upgraded and re-built Albion Station. These connections will play a pivotal role in shaping the park's identity and its seamless integration

into the community fabric.

In today's context, accessibility by rail is a crucial aspect for any major sporting precinct. It's paramount that the development of Sunshine Energy Park includes highly visible, safe, and visually appealing links to Albion Station.

I am pleased to endorse the visionary plan put forward for Sunshine Energy Park and I commend the efforts of Council in creating a space that is both environmentally sustainable and culturally enriching.

This project carries the potential to make a substantial contribution to the overall health, well-being, social cohesion, and economic prosperity of the Brimbank community and beyond.

As this vision continues to evolve, I eagerly anticipate its ongoing engagement with stakeholders, its pursuit to securing funding, and ultimately effecting the transformation that will resonate for generations to come.

Thank you for Council's dedication to creating a brighter, more sustainable future for the Brimbank community.

Assessment

A. Stakeholder support for the Draft Vision
- Strong support for the draft vision stating it is visionary, impressive and considers the community's needs and aspirations along with its strategic location, enabling it to contribute to making Sunshine the Capital of Melbourne's West. - Other supporting comments include: - The project will make a substantial contribution to the overall health, well-being, social cohesion, and economic prosperity of the Brimbank community and beyond - The plan integrates features that promote connection to Country, sports, recreation, education, events, recycling, energy production, horticulture, habitat creation and social interaction.
B. Stakeholder recommended changes to the Draft Vision
C. Stakeholder Feedback for consideration in the implementation of the Vision
- Enhance pedestrian connectivity within the precinct, spanning the rail corridor, and regionally through an upgraded and re-built Albion Station. - Ensure SEP includes highly visible, safe, and visually appealing links to Albion Station.

4.6 Friends of Kororoit Creek

Statement

Thank you for the opportunity to give our feedback on the Sunshine Energy Park – an exciting project! As discussed in our meetings – some written feedback on the points we went over.

The FOKC would like the SEP to be conservation led:

- Retaining or creating “wild” spaces within the development – with no paths, less manicuring – to provide stress free habitat for wildlife. Careful surveying of what flora and fauna is currently present in the space. More trees along paths to shade people.
- We’d love to see the wetlands be as big and useful as possible – making sure they are in the best position in the development. A wetland would be a fantastic draw for nature lovers, birdwatchers, and a haven for local wildlife like many of our endangered bird and frog species.
- The roof of the large arena to be utilised as a conservation space – a grassland with indigenous grasses and wildflowers providing habitat for local insect and bird populations. We discussed whether it would be viable in a space that size to release any lizard species - where they would be relatively protected and could be monitored closely. Could borrow the idea from the Friends of Iramoo and have the plantings grouped in a way that create an animal or cool pattern from above.
- The Ceres style area could be a great opportunity to provide a space for local environmental friends group to have a base - meeting rooms, storage, nursery to raise plants and run workshops. An Indigenous designed information area with a special place for Smoking Ceremonies and Welcome to Country.
- Educational signage in multiple languages, events and workshops about local species and environments that people need to understand the importance of more clearly e.g. - possums, bats, grasslands, containing cats, snakes and their vital role in the ecosystem, the Climate Emergency etc.
- Enhancing and restoring the sections of Jones Creek adjacent to the site – our waterways are a huge asset. People should be encouraged to cycle and walk along Kororoit Creek and Jones Creek to get to the park. It would be brilliant to restore and enhance the section of Stony Creek that runs from Anderson Rd in central Sunshine up towards the SEP site – this would be a fantastic way to travel to and from the site. Cities and towns that make the most of and celebrate their waterways are the best cities and towns!
- Could there be an electric shuttle bus and/or bike hire from main Brimbank city centres to the park? Particularly for big sporting events. Parking needs to be looked at so that the residents of Albion and Sunshine aren’t inundated with cars.
- Deep engagement with the Wurundjeri Woi-Wurrung Cultural Heritage Aboriginal Corporation, Brimbank City Council Conservation team and Melbourne Water and continued engagement with local environmental and cultural groups.

Assessment

A. Stakeholder support for the Draft Vision
Support for the draft vision stating it is an exciting project with a range of opportunities for the environment and nature.
B. Stakeholder recommended changes to the Draft Vision
- Consider retaining or creating “wild” spaces within SEP – with no paths, less manicuring – to provide stress free habitat for wildlife. Careful surveying of what flora and fauna is currently present in the space. - Plant more trees along paths within SEP to provide shade. - Consider creating a conservation space on the roof of the large arena with indigenous grasses and wildflowers to provide habitat for local insect (lizards) and bird populations. - Consider creating spaces/ meeting rooms for local environmental friends groups (at the resource recovery centre) for meetings, storage, nursery to raise plants and run workshops. - Consider the inclusion of an Indigenous designed information area with a special place for Smoking Ceremonies and Welcome to Country. - Consider educational signage in multiple languages in SEP. - Consider spaces to host events and workshops that educate people about local species and the environment. - Consider enhancing and restoring the sections of Jones Creek adjacent to the site and Stony Creek that runs from Anderson Road in central Sunshine to encourage people to cycle and walk to SEP. - Consider an electric shuttle bus and/or bike hire from main Brimbank city centres to the park, particularly for big sporting events to reduce the number of people coming to SEP by car.
C. Stakeholder Feedback for consideration in the implementation of the Vision
- Take a conservation-led approach to SEP. - Consider enlarging the wetlands, making it a drawcard for visitors and a habitat for local wildlife/ endangered species. - Ensure deep engagement with the Wurundjeri Woi-Wurrung Cultural Heritage Aboriginal Corporation, Brimbank City Council Conservation team, Melbourne Water and continued engagement with local environmental and cultural groups.

4.7 Henkell Brothers

Statement

As a stakeholder in the Sunshine area, by way of our commercial land holdings, we were very pleased to see the vision for the Sunshine Energy Park.

The repositioning of the Sunshine area has been a hot topic of conversation for a number of years with much attention given to the public transport links and development of the commercial business district. However the true strengths of a community are in its ability to give back and the Sunshine Energy Park precinct is something that can only propel the community forward. The creation of much needed, ascetically pleasing community space and sporting facilities will be a very welcome addition. And to be able to create it on a parcel of land that has long been underutilised is a very clever and strategic move.

Assessment

A. Stakeholder support for the Draft Vision
• Strong support for the draft vision stating it is clever and strategic and will create much-needed ascetically pleasing community space and sporting facilities in traditionally underutilised land.
B. Stakeholder recommended changes to the Draft Vision
C. Stakeholder Feedback for consideration in the implementation of the Vision

4.8 Islamic Guidance Society of Australia / Khalid bin Al-Waleed Mosque (Albion Mosque)

Statement

We, at the Islamic Guidance Society of Australia (IGSA) welcome the new initiative, The Sunshine Energy Park (SEP) in Albion. Having it Nestled right next door to our mosque and centre will offer a refreshing and engaging experience within our community, the Brimbank community at large. This park has the potential to be a dynamic fusion of recreational spaces and sustainability initiatives.

The well-planned pathways, lush greenery, and thoughtful design, together will be creating an ideal backdrop for both relaxation and outdoor pursuits. The park's emphasis on green technologies and renewable resources underscores its dedication to much needed ecological mindfulness. There is no doubt that SEP will be setting an impressive example of uniting the beauty of nature with forward-thinking approaches. The local community, including institutions like ours, will effectively utilise SEP's open spaces as a serene location for community gatherings, events and outdoor activities. Albion (Khalid bin Al-Waleed) Mosque will consider using the park for religious observances, providing a peaceful setting for prayers or gatherings during peak seasons such as our annual Festivals; Eid El-Fitr and Eid ul-Adha congregational sermons. Additionally, the park's sustainable focus aligns well with the values of our community stewardship that both our faith and mosque promote. This collaboration could involve educational programs on environmental awareness and energy conservation. Overall, SEP presents a valuable space for the local community to come together, celebrate and engage in meaningful activities.

Assessment

A. Stakeholder support for the Draft Vision
Strong support for the draft vision and its overall direction in relation to creating a space for community to relax, enjoy nature, come together, celebrate and be sustainable 'uniting the beauty of nature with forward-thinking approaches'.
B. Stakeholder recommended changes to the Draft Vision
C. Stakeholder Feedback for consideration in the implementation of the Vision
- Consider collaboration to deliver educational programs on environmental awareness and energy conservation. - Support the local community, including Albion Mosque, to utilise SEP's open spaces for community gatherings, events, religious events and outdoor activities.

4.9 NBL

Statement

The National Basketball League (NBL) provides its support for the Draft Vision and development of Sunshine Energy Park (SEP). The NBL was privileged to receive a briefing on the SEP Draft Vision from the engagement team at Brimbank City Council and stands ready to partner with Council and/or the State in capacities including but not limited to provision of indoor and/or outdoor basketball or netball court surface materials as well as the fulfilment of elite and semi-elite basketball content at the newly developed basketball courts and show court.

As indicated in Basketball Victoria's most recent Facilities Masterplan document, the State of Victoria needs more indoor basketball and multi-use high-ball courts to meet rapidly rising demand for basketball, especially in Melbourne's western metropolitan growth corridors.

Furthermore, NBL audience data demonstrates that the Sunshine region is home to a very significant number of registered basketball families and players, and that these numbers have grown by a minimum of 5% annually for the past 12 successive years.

The NBL provides its strong support for the development of SEP, and is pleased to be consulted for further information should it be required, and be considered for future partnership opportunities.

Assessment

A. Stakeholder support for the Draft Vision
Strong support for the draft vision in particular sporting opportunities or potential partnerships in relation to the presented as part of the sporting complex / courts within SEP.
B. Stakeholder recommended changes to the Draft Vision
C. Stakeholder Feedback for consideration in the implementation of the Vision
- Consider further consultation or potential opportunities with the NBL in delivering court surface materials as well as the fulfilment of elite and semi-elite basketball content. - Consider the growing popularity of basketball, especially in Melbourne's western metropolitan growth corridors.

4.10 Tennis Victoria

Statement

Tennis Victoria sees the option for 4 or more multi-lined (eg. Tennis & Netball) acrylic (cushioned) courts within the proposed indoor multi-sport stadium as a great opportunity to continue the work in Brimbank City Council to create safe, inclusive and thriving Victorian tennis communities, enabling more people to play more often. A strategic focus of Tennis Victoria is to optimize the use, management and access to facilities, thereby creating a sustainable future for venues.

We suggest that if the venue is to be managed/staffed, that it does not become a venue with a home club, rather a venue that can be booked for casual and social play, and specific recreation groups. If the venue is to be staffed, renting of equipment (balls and racquets of varying compression levels and sizes) would reduce barriers to participation and provide a truly accessible tennis option for the community.

This indoor tennis venue may particularly allow for engagement from the Blind and Low Vision Tennis Community, who currently have limited appropriate participation spaces. Many players who participate in blind and low vision tennis currently train outdoors which provide less suitable conditions due to wind, glare/light and noise.

As the council is already well across, the benefits of the Tennis Australia Book-A-Court system has seen the accessibility of casual tennis participation grow significantly in recent years. Once seen as a “members only” sport, the opening of courts to non-members, and the ability to book your court online and play your own way has seen more people come to our game. We see the potential for the venue to be on the same platform as all other tennis venues (ClubSpark), and linked to the national Play.Tennis website, as a key consideration for systems setup at the venue.

We see the inclusion of tennis courts as part of this broader facility plan as a compliment to the Thriving Tennis Community that currently exists in Brimbank City Council thanks to the efforts of council staff and budgeted investment, community participation and interest, and of course, the tireless work of club volunteers and coaches who bring our sport to life everyday.

Assessment

A. Stakeholder support for the Draft Vision
B. Stakeholder recommended changes to the Draft Vision
Consider 4 or more multi-lined (eg. Tennis & Netball) acrylic (cushioned) courts within the proposed indoor multi-sport stadium.
C. Stakeholder Feedback for consideration in the implementation of the Vision
- Consider creating a staffed venue that allows for casual and social play where people can hire equipment to increase accessibility to the space and reduce barriers. - Consider using the Book-A-Court system to further support and encourage casual and social play.

4.11 Victoria University

Statement

Thank you for the invitation to provide feedback and input in response to Council's release of the draft Sunshine Energy Park Vision Plan, 2022.

I would like to commend the Council for taking the initiative to outline a bold vision for the transformation of Sunshine Energy Park. As a major industrial site with proximity to the soon to be redeveloped Albion Station, and being located close to the Sunshine Priority Precinct, the site has potential to become a major open space and environmental asset for the communities of Brimbank and Melbourne's west and to be a destination of local, regional and state significance.

We have appreciated the opportunities to meet with Council staff and representatives of the relevant Government departments to discuss the vision for Sunshine Energy Park and to consider the relationship between the future Park and Victoria University, which we consider to be one of great potential.

I confirm that VU supports the directions outlined in the Energy Park Vision Plan with many aspects consistent with VU's aspirations for the region. Further feedback is provided in the Attachment to this letter (see Appendix 6.2).

In line with our recently renewed MOU partnership, we seek to collaborate with Council to realise the full potential of the Sunshine Energy Park over the coming years.

Assessment

A. Stakeholder support for the Draft Vision
Strong support for the draft vision, stating SEP had the potentially to become a major open space and environmental asset for Brimbank and Melbourne's west and to be a destination of local, regional and state significance.
B. Stakeholder recommended changes to the Draft Vision
C. Stakeholder Feedback for consideration in the implementation of the Vision
Continue to partner with Victoria University in local project including the delivery of SEP.

4.12 Volleyball Victoria

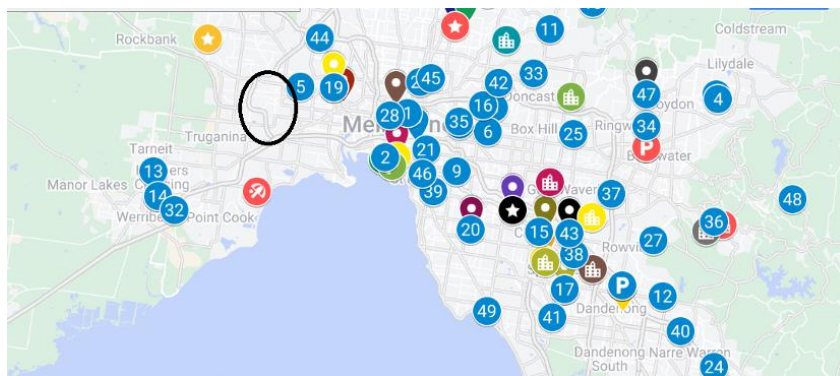
Statement

Volleyball Victoria's submission is an 11-page slide pack (see Appendix 6.3). Below is an excerpt from the submission relating specifically to growth of Volleyball in Victoria, the Volleyball gap in western metro region, the opportunity in Brimbank and Sunshine Energy Park.

Growth of Volleyball in Victoria

- Victorian State League team entries have increased 22% in 2023 from the previous year, and a whopping 88% from 2019 pre-covid numbers.
- School based participation has also risen significantly.
 - 1-day Indoor Victorian Schools Cup event has grown 71%, from 139 team entries pre-covid (2019), to 238 entries in 2023.
 - 1-day Victorian Beach Schools Cup event has risen 80% from 178 in 2019 to 322 in 2022.
- Registration for the 2023 Victorian State Youth Beach trials have risen 62% from the previous year,
- Athletes trailing for Victorian Indoor Youth State representation have risen 45% from 2022.
- Volleyball is now ranked as the 4th most participated sport in Victorian Secondary Schools in 2022 (up from 9th prior to Covid in 2019). (source: SSV)

Volleyball Gap in Western Metro Region



- A gap exists across the western metro region.
 - Volleyball Victoria developing a Western Region Growth Strategy to unlock the potential for the sport.
 - Why – limited access, and organised opportunities
- Facilities – community-based affiliates - structured services
 - VVI – advocating for a strategic foundation for places to play grass roots programs, facility advocacy, capacity building through new affiliates
 - LG – development of fit for purpose facilities to support recreational play, training, competition

Brimbank Opportunity and Volleyball Demand

- Fill the GAP - majority of existing volleyball services found in neighbouring LGA areas – Altona, Maribyrnong, Braybrook, Footscray.
 - Desperate need to address barriers to play & unlock interest & potential across the Western suburbs through additional volleyball services and accredited operators
- Active affiliation being sort by existing groups across the LGA (Derrimut Knights & Aegies Gym teams)
 - VVI could provide tools to support the implementation of governance and operational structures for new affiliates
 - Support needed by LG to help new affiliates access suitable venues for competition and training purposes + seek grass roots funding to building capacity, compliance & strengthen community delivery
- Increasing volleyball options align with the “Community Vision 2040, Council Plan 2021-2025 & Health & Wellbeing Municipal Plan 2021-2025 strategic directions to encourage “healthy lifestyles”, ensure that “services & facilities” are responsive to community needs, and recognise and celebrate the LGA “culture & diversity”, through leadership, services, development funding, partnerships and advocacy.

- Registered VVI members currently travel on average 15-20km to access VVI competition and training
- Support needed for emerging affiliates through
 - access to infrastructure
 - capacity building, governance and compliance support and mentoring
- Local demand for greater access to more courts and competition pathways
 - Derrimut Knights Volleyball Club
 - Aegis Gym Volleyball Club
- Surrounding VVI affiliates supporting the inner west are at capacity OR resource constrained
 - Western Region Volleyball Club – Maribyrnong, Braybrook College, Caroline Springs and Melton venues – wait list and trials
 - Volley Friends United Melbourne – MSAC and Altona Sports Centre – limited and poor facility access

Sunshine Energy Park

- Opportunity to unlock interest in volleyball and diversify recreational options that more accurately reflect the local community
 - Indoor & outdoor solutions incorporating multi-sports design. ie Traditional Sports + Volleyball + Foot volley + Newcomb + Speak Takraw etc.
 - Local solutions help support integration, strengthen social cohesion and networking through a shared interest, as well we address barriers to sport such as cost, transport, culture, language as noted in the Vic Sports “Youth Sports Participation Strategy”, Regional Priority Precinct
 - Show court potential to host state, national and international competition
 - Currently no suitable location in the inner west to host Victorian State League or National/International volleyball competition.
- Development of transport links
 - Help address transport and travel barrier to play especially amongst the youth

Assessment

A. Stakeholder support for the Draft Vision
• Support for the sporting opportunities and potential partnerships in relation to the sporting complex / stadium within SEP. • Support for the development of transport links to help address transport and travel barriers to sport, especially amongst youth.
B. Stakeholder recommended changes to the Draft Vision
C. Stakeholder Feedback for consideration in the implementation of the Vision
• Consider further consultation or potential opportunities with Volleyball Victoria to close the current gap in volleyball facilities in the western Melbourne region. • Consider the growing popularity of Volleyball in Victoria, especially in schools (now 4th most played sport in Victorian Secondary Schools).

4.13 Western Pigeon Federation of Victoria

Statement

The WPF executive committee thoroughly enjoyed meeting you both. We particularly liked your enthusiasm and passion for improving the Western suburbs bringing a world-class sporting and community hub was encouraging and we are proud to support such a remarkable initiative.

Furthermore, we would be delighted to an extended an invitation to you, the council, and the planning committee to view our processes and procedure in preparing the thoroughbreds of the sky to get ready for a race on a basketing night which is now conducted on a Thursday evening at around 6:30PM.

Collectively our members are of the opinion that the initiatives you have shown us with a purpose-built facility for the WPF to help us remain on the site were well received and encouraging. To that end, we would be very happy to support your proposal.

We believe our presence on the site in the areas that you nominated and possibly Plan B if the wetlands area is not supported by our climate we could be moved to the top left-hand corner to help eradicate "rif raf" to that end space; providing security and prudential oversight to the area.

We have provided photos of the Western Pigeon Federation of Victoria in full swing basketing on Friday 18 August 2023 for our race from Hillston approx. 500km North of Melbourne in central NSW.



As you can see, we utilise both buildings and the car park in their entirety.

The larger building is used for our members to basket the racing pigeons and the smaller building is used to house the transporter and specially designed units to hold the bird.

The car park is quite full, and our members require close access to be able to carry their special purpose transporting baskets from their cars to the building.

The Western Pigeon Federation of Victoria is seen as the "AFL House" of the Western Region catering for organisation as far out as Bacchus Marsh, Geelong, and the Macedon Ranges. We work closely with other Victoria Racing Pigeon Organisations who often visit our building and also support the Melbourne Pigeon Society which show cases exotic pigeons and hold their annual show in out building.

We believe our outreaching boundary will support and encourage people to visit the area if the vision becomes a reality.

Please don't hesitate to reach out further either to me, <name removed for privacy> or <name removed for privacy> should you need any further clarification on a particular point about specific needs.

We look forward to working with you and seeing your plans come into reality.

Assessment

A. Stakeholder support for the Draft Vision
• Strong support for the draft vision stating it would be a world-class sporting and community hub with particular support for a purpose built WPF facility on the site.
B. Stakeholder recommended changes to the Draft Vision
• Consider a purpose built WPF facility on the site in the areas nominated or possibly at the top left-hand corner of the site.
C. Stakeholder Feedback for consideration in the implementation of the Vision
• Current car park is usually full on event days. • Members require close access from their cars to the building to be able to carry their special purpose pigeon transporting baskets. • The WPF hosts visitors from other racing clubs and supports events run by the Melbourne Pigeon Society.

5. OVERALL FINDINGS

As noted in Section 2, throughout the engagement period feedback was captured in two ways:

- Formal written statements – via email or post
- Meetings and informal interactions – including phone calls, in-person discussions and meetings, email enquiries and general feedback at information sessions.

All participants were encouraged to submit formal written statements, however many did not.

To give the fullest understanding of the stakeholder engagement, this Overall Findings section will report on insights from both the formal written statements and the meetings and informal interactions. These are reported separately so a clear distinction can be made between the two.

Please note: the outcomes and findings from engagement with Elected government officials and Advisors will be reported separately by Brimbank City Council officers.

5.1 Type 1 - Properties (land owners and tenants) adjacent to SEP and the Albion quarter precinct

	Written statements (n= 3)	Meetings and informal interactions
Sentiment	• Potential to make a substantial contribution to the overall health, well-being, social cohesion, and economic prosperity of the Brimbank community and beyond. • The creation of much needed, aesthetically pleasing community space and sporting facilities will be a very welcome addition. And to be able to create it on a parcel of land that has long been underutilised is a very clever and strategic move. • Creating a space that is both environmentally sustainable and culturally enriching. • An impressive and comprehensive vision, encompassing a wide array of opportunities. • A careful consideration of community needs and aspirations. • Central contributor to the goal of making Sunshine the capital of Melbourne's west. • The site has potential to become a major open space and environmental asset for the communities of Brimbank and Melbourne's west and to be a destination of local, regional and state significance.	• Positive and excited about what is planned. • View SEP as a vital part of transforming Sunshine into the CBD of the west. • Strong support for: ○ Sustainability and environment aspects of SEP ○ Training and education pathways for sport at SEP ○ Community spaces – a place for people in the west to gather ○ Use of stadium as a convention venue and for cultural activities ○ The green space on top of the stadium. • A sense of optimism about the impact this will have on the area. • Enthusiastic to be involved in planning for the future. • Ready and waiting for change to happen.
Issues identified	• It's paramount that the development of Sunshine Energy Park includes highly visible, safe, and visually appealing links to Albion Station.	• Ease of movement and connections, including pedestrian and cycling, is critical for the success of SEP. • Identified SEP's safe and easy integration with public transport as key for activating this area and needed for major sports facilities. • Consider it vital that the Albion Station platform extends underneath Ballarat Road to enable easy pedestrian connections through SEP. • Concern about the current "appeal" of Sunshine but that SEP could be used to improve this. • Uncertainty around funding and

	Written statements (n= 3)	Meetings and informal interactions
		delivery of state and federal transport projects (including the Airport Rail link). Concern around growing food and tending to gardens under powerlines.
Opportunities identified	- A unique opportunity to enhance pedestrian connectivity within the precinct. - The relationship between the future park and Victoria University has great potential.	- Opportunity of SEP to help activate the broader area - Mentioned that SEP would help attract people to the area including: - Residents - Staff (attracting and retaining) - Investors - Visitors (visitor economy) - Opportunity to think outside of the square with people movement through this area, including scooters, trams and moving walkways. - Creating an east-west pedestrian connection with Albion Station would connect SEP through Albion Quarter to Victoria University. - The creation of a mass transport 'metro loop' that travels along the southern border of SEP, connecting the stadium to all the other critical place components of the broader Sunshine Priority Precinct. - Possible opportunity for SEP to partner with Victoria University's sports and exercise science disciplines and leverage existing sporting partnerships of Victoria University's. - Possible opportunities for the SEP stadium to be used as a convention venue for local organisations such as Victoria University. - Opportunity to expand/partner with Ace Karts to activate the area surrounding their current operations. - Opportunity for local education providers to leverage the sports grounds and facilities in SEP. - The walking, cycling and public transport connection improvements identified as part of SEP will support surrounding landowners to transition/activate their land.
Other		Some scepticism about State and Local Government commitments to projects

	Written statements (n= 3)	Meetings and informal interactions
		in this area. • Victoria University has a strong interest in electric vehicles/ sustainable transport. Their industry partners are currently looking for collaboration opportunities to develop a prototype charging station, as well as how to manufacture and service those type of vehicles.

5.2 Type 2 - Properties (land owners and tenants) adjacent to SEP only

	Written statements (n= 3)	Meetings and informal interactions
Sentiment	- The proposal could contribute positively to the health and wellbeing of the wider community as well as being an important place for recreation and relaxation. - Seeking to improve Sunshine with this innovative proposal. - This park has the potential to be a dynamic fusion of recreational spaces and sustainability initiatives. - The well-planned pathways, lush greenery, and thoughtful design, together will be creating an ideal backdrop for both relaxation and outdoor pursuits. - The park's emphasis on green technologies and renewable resources underscores its dedication to much needed ecological mindfulness. - SEP presents a valuable space for the local community to come together, celebrate and engage in meaningful activities. - Improving the western suburbs and bringing a world-class sporting and community hub... we are proud to support such a remarkable initiative.	- Positive and supportive of the draft vision plan and the opportunities this presents. - Cautiously optimistic for what can be achieved at this space. - Many stakeholders were keen to be involved. - Many were keen for Council to make it happen.
Issues identified		- The need to improve connections to the park – pedestrian, cycling and public transport. - Interested in the impacts of growing food and tending to gardens under power lines and what the recommendations are. - The need to review parking in the area – striking the right balance. - Traffic movement concerns in the area through Carrington Drive and Hulett Street. - Ensuring existing SEP tenants are included and involved in the plans. - If moved, the new location of the Western Federation Pigeon Club would need vehicle access for a semi-trailer to

	Written statements (n= 3)	Meetings and informal interactions
		transport their birds and parking nearby for their members, who regularly carry heavy crates with their birds in. Concern was raised regarding the proposed location of the wetlands - and discussed avoiding creating the wetlands near former landfill.
Opportunities identified	- Consider connecting the SEP to established or proposed walk and cycle ways, to ensure that there is sufficient parking for visitors. - Consider ways to integrate FOGO waste streams with the community gardens. - Brimbank's diverse cultural heritage could also be reflected by using part of the park for a permanent Sculpture Park. - Sunshine Private Hospital would be interested in participating with Council as an end-user in the proposed solar energy generation within the SEP. - Could involve educational programs on environmental awareness and energy conservation. - Utilise SEP's open spaces as a serene location for community gatherings, events and outdoor activities. - Opportunity to relocate Western Pigeon Federation to the top left hand corner of SEP and create a purpose-built facility; providing security and prudential oversight to the area.	- To provide holistic health and wellbeing opportunities at SEP – aligning with the hospital and education precinct goals. - Create additional outdoor spaces for community to gather including – BBQs, picnics and recreational sport. - Mentioned that SEP would help attract people to the area including: - Residents - Staff (attracting and retaining) - Investors - Visitors (visitor economy) - Improving the people movement options and creating points of interest and destinations on the paths between the key areas. - Creating a sustainable precinct – through shared use of energy produced in the solar farm and the possibility of shared food waste at the Sustainability Hub. - Keen for traffic improvements in Hulett Street and Carrington Drive. - The pigeon club would welcome a drive-in facility as part of the draft vision plan for SEP. Possibly even a turning circle and a pit that the semi could reverse into - allowing the truck to be filled at ground level. This would allow for a smaller footprint for the club. - Opportunity to explore the energy creation aspects (solar panel farm) and the food waste opportunities at the Sustainability Hub for the hospitals. - Having somewhere for their patients to go outside and be in nature would be wonderful for their mental health.

5.3 Type 3 - Stakeholders – local and outside of Brimbank with a potential interest in SEP

Local community groups	Written statements (n= 5)	Meetings and informal interactions
Sentiment	• Strong support for the vision and it's connection to Sunshine Priority Precinct Vision 2050. • Strongly endorses the inclusion of mountain bike trails, pump track and Sustainability Hub. • Excited to see Brimbank Council's focus on sustainability and the circular economy. • The vision plan for the Sunshine Energy Park would be a great asset to Brimbank and our surrounding communities and we fully support the concept. • The inclusion of a BMX track amongst other sporting activities, will attract young riders and create a culture to become a cyclists in a safe environment. • An exciting project!	• Positivity that what's proposed will cater to a variety of needs. • Excited that caring for country and local waterways is a driving value of the draft vision plan.
Issues identified	• It is very important that the Albion Station has good connection to SEP. • Need to establish high-quality, non-vehicular access northwest from the station to SEP. • it is imperative that a well planned bike connection from the Western Ring Road, Stony Creek, Jones Creek and Kororoit Creek paths are established and improved, so as many people can come, visit and play at the Park without the use of cars with a good connection to public transport. • Particularly for big sporting events. Parking needs to be looked at so that the residents of Albion and Sunshine aren't inundated with cars.	• Public transport connections are critical for participation levels. • Ease of walking/cycling to the parklands is needed. • Some parking is also needed. • Love the green roof on the stadium, but fear this is probably the first thing that would go if there were funding cuts. Would be great to make this non-negotiable. • Questioned the location of the wetlands on the draft vision.
Opportunities identified	• The vision for SEP can greatly assist in integrated planning for the area and the proposed urban	• Would be great to do surveys to see what wildlife are currently calling SEP home.

Local community groups	Written statements (n= 5)	Meetings and informal interactions
	development of Albion Quarter. • Strong commitment to heritage protection and enhancement. • Creation of a green corridor from SEP to the Silo in the south. • SEP has the potential to attract visitors from many parts of Melbourne, including international students. • Opportunity for collaboration with both BikeWest and the Inner West Community Bike Hub (IWCBH) and discuss what opportunities exist for the establishment of a new bike hub in the SEP. • Opportunity to collaborate with both BikeWest and Westside Cycle Club ongoing. • Retaining or creating “wild” spaces within the development. • Careful surveying of what flora and fauna is currently present in the space. • More trees along paths to shade people. • The wetlands be as big and useful as possible – making sure they are in the best position in the development. • The roof of the large arena to be utilised as a conservation space – a grassland with indigenous grasses and wildflowers providing habitat for local insect and bird populations – and possibly lizard species. • Group plants in a way that create an animal or cool pattern from above. • The Ceres style area could be a great opportunity to provide a space for local environmental friends group to have a base - meeting rooms, storage, nursery to raise plants and run workshops.	• Would be wonderful to include Jones Creek (current drain) as part of the plan and naturalise this. This could become a walkway/path to SEP. • Loved the idea of the Sustainability Hub and thought this could become a gathering space for local friends of groups - for collaboration and education opportunities. • Would also be wonderful to incorporate wildlife habitat onto the grassed roof of the stadium - and incorporate wilderness and grasslands into the vision.

Local community groups	Written statements (n= 5)	Meetings and informal interactions
	- An Indigenous designed information area with a special place for Smoking Ceremonies and Welcome to Country. - Educational signage in multiple languages, events and workshops about local species and the environment. - Enhancing and restoring the sections of Jones Creek adjacent to the site... People should be encouraged to cycle and walk along Kororoit Creek and Jones Creek to get to the park. - Restore and enhance the section of Stony Creek that runs from Anderson Road in central Sunshine up towards the SEP site – this would be a fantastic way to travel to and from the site. - Could there be an electric shuttle bus and/or bike hire from main Brimbank city centres to the park? - Deep engagement with the Wurundjeri Woi-Wurrung Cultural Heritage Aboriginal Corporation, Brimbank City Council Conservation team and Melbourne Water and continued engagement with local environmental and cultural groups.	

Potential Partners	Written statements (n= 4)	Meetings and informal interactions
Sentiment	- Thrilled at the inclusion of a Sustainability Hub. - Support the Draft Vision and development of SEP.	- Excited and encouraging of the vision and proposed stadium facilities. - A few of the potential partners were keen to explore opportunities to collaborative – and were open to multiuse facilities.
Issues identified		- Public transport connections are critical for their participants - Ease of walking/cycling to the

		parklands is needed • Some parking is also needed • Identified the need to plan the size, location, seating capacity and logistics for the stadium / sportsgrounds to meet the requirements of each sport – and to map this out early in the process.
Opportunities identified	• The NBL... stands ready to partner with Council and/or the State in capacities including but not limited to provision of indoor and/or outdoor basketball or netball court surface materials as well as the fulfilment of elite and semi-elite basketball content at the newly developed basketball courts and show court. • Tennis Victoria sees the option for 4 or more multi-lined (eg. Tennis & Netball) acrylic (cushioned) courts within the proposed indoor multi-sport stadium. • This indoor tennis venue may particularly allow for engagement from the Blind and Low Vision Tennis Community, who currently have limited appropriate participation spaces. Many players who participate in blind and low vision tennis currently train outdoors which provide less suitable conditions due to wind, glare/light and noise. • Volleyball Victoria sees the opportunity to unlock interest in volleyball and diversify recreational options that more accurately reflect the local community. • Show court potential to host state, national and international competition. <There is> Currently no suitable location in the inner west to host Victorian State League or National/International volleyball competition.	• It would be good to offer indoor tennis courts for those with low or no vision. Currently they must travel into the city to play indoors. • Could use Rebound Ace (a cushioned indoor sports surface) for the indoor tennis courts – which would work for netball too – as a multi-lined facility. • There's an opportunity to include pop-up Paddle tennis courts to activate the space (these can be hired e.g. Australian Open uses them). • Generally, basketball works well with badminton and volleyball, as they all have similar flooring needs. • Basketball Victoria is happy to work together on a multipurpose facility - possibly with netball, badminton and/or volleyball. Gymnastics can also work well with these sports. • Three on three street basketball is very popular and could be used to activate this space. • Volleyball doesn't currently have a fit for purpose venue in western Melbourne. • Would be great to have recreational volleyball courts near picnic and toilet facilities - for community and family gatherings. • Two volleyball courts can fit in the space required for one basketball/ netball court. • You can fit 2-3 badminton courts on a basketball court. • Badminton is popular during the day - so this might work well with sharing courts with other sports that are more active in the evenings.

Other	• Victoria needs more indoor basketball and multi-use high-ball courts to meet rapidly rising demand for basketball, especially in Melbourne's western metropolitan growth corridors. • Volleyball is experiencing a boom in participation.... Volleyball Victoria membership has more than doubled in the past 5 years. • Volleyball is now ranked as the 4th most participated sport in Victorian Secondary Schools (in 2022 – up from 9th in 2019). • A gap in volleyball facilities exists across the western metro region (of Melbourne). • Surrounding VVI (Volleyball Victoria) affiliates supporting the inner west are at capacity (with waitlists and trial) or resource constrained.	• Stadiums with 8 courts and upwards can host regional basketball competitions and national championships - which draw big crowds. • Basketball Victoria's junior competition attracts crowds of 5000 to stadiums across Melbourne on Friday nights. • Volleyball's popularity in Australia has grown significantly post-covid. Growth has increased across recreational, social and competitive volleyball. Team entries are up 88% on pre-covid numbers. • Volleyball is low contact and low risk – and is increasingly popular with schools. • Volleyball is being used as a gateway for sports participation post-covid and attracting kids that don't feel confident playing AFL or rugby. • Volleyball has low entry costs, so is great for all of the community to join in. • Badminton is also popular with international students and retirees.
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5.4 Government departments and agencies

	Meetings and informal interactions
Sentiment	• Positive about the health and wellbeing improvement of having quality open space near the hospital - for staff, visitors and patients. • Health benefits of open space well known and there is a lack of open space in the hospital precinct. • SEP vision supports the community and using the wetlands to support irrigation needs of the park (incl. Sporting fields) is consistent with community's desire to make open space drought proof.
Issues identified	• Keen for there to be better outcomes of the staff of both hospitals in terms of safety getting to and from the hospitals.
Opportunities identified	• Opportunities to improve the active transport options and public transport for hospital staff. • Opportunities to improve staff wellbeing (and also patients and visitors) by having an open space asset such as SEP close by.

6. APPENDICIES

6.1 BikeWest Submission



Sunshine Energy Park Vision Plan Submission

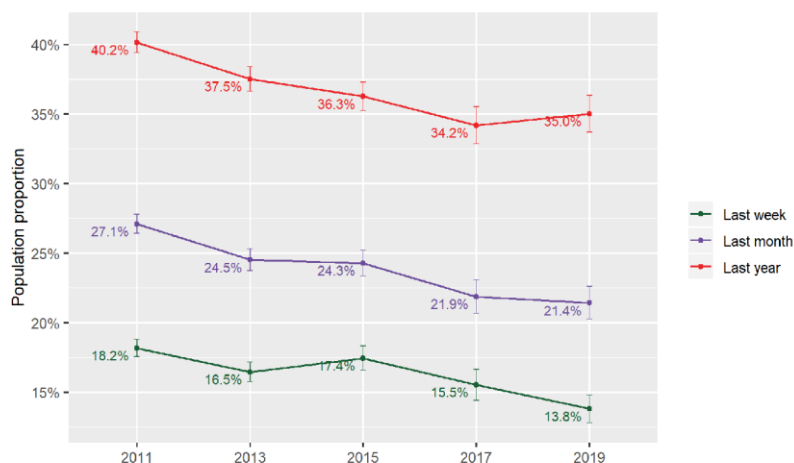
Prepared by

BikeWest

Introduction

Cycling in Australia is in an extended period of decline and has been trending downwards for many decades, especially road and track cycling. While there have been some notable successes in the sport of cycling, eg Phil Anderson and Cadel Evans, in terms of participation, cycling as an organised sport is in poor health as evidenced by the very low participation numbers (Figure 1).

Figure 1: Cycling participation trend¹



There are many reasons for this, disjointed and poorly aligned governance being one, but a lack of easily accessible facilities is another major factor. This is highlighted by the plight of velodromes in the west of Melbourne. Over the past century, velodromes have been removed from Hanson Reserve, West Footscray, Yarraville Oval, Yarraville, Western Reserve, Footscray, Loft Reserve Newport, and Williamstown Cricket Ground, Williamstown. Currently, there are no velodromes between Brunswick and Geelong for a population forecast to be the size of Adelaide by 2041 (Figure 2).

¹ Austroads 2019 Australian Cycling Participation: Results of the 2019 National Cycling Participation Survey

Figure 2: Velodromes in Melbourne



While track cycling has decreased in popularity over the past few decades leading to the removal of velodromes becoming a self-fulfilling prophecy, these have been superseded to some extent by MTB trails and riding. However these trails are usually 1-4 hours drives away from the west of Melbourne making them inaccessible for the majority of the population if they do not have access to a car. Given approximately 25% of the population of Victoria do not have a driver's licence², this makes access to these venues especially difficult as they are far from population centres. This is especially the case for young people.

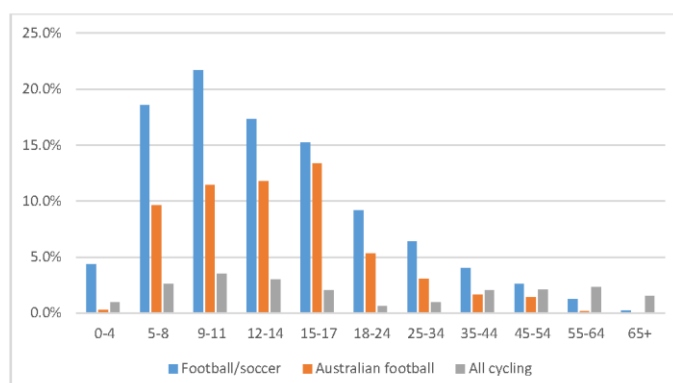
A lack of local safe places to ride has led to situation where 1 in 3 kids do not know how to cycle. Currently the only public cycling specific facilities between Brunswick and Geelong include the highly successful Quarry Park MTB trails in Footscray, the Brimbank Bicycle Education Centre in Green Gully and the dilapidated, poorly designed and hence poorly used BMX track in Altona.

This lack of facilities effectively provides an insurmountable barrier to large sections of the community from getting on their bikes. This culminates in many of the issues with infrastructure and inclusive programs that can encourage more people of all ages, abilities and genders to take up cycling and enjoy its many benefits are not available to a large section of the population.

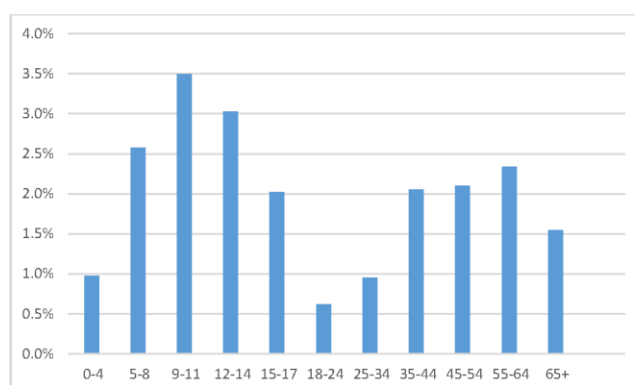
Why Cycling?

While there are many different sports available to the general public, considerable evidence suggests there is a significant latent demand for cycling due to the popularity of cycling among younger and older age groups. This age profile differs from other sports where barriers to participation do not exist due to the easy access to local facilities. The peak participation in organised/structured cycling occurs in the 10-17 age bracket with a gradual decline through the twenties, thirties and forties (Figure 3).

² https://www.bitre.gov.au/sites/default/files/is_084.pdf

Figure 3: Participation Age Profile: Soccer, Australian Football and Cycling³

Cycling has both a lower participation rate than football and Australian football as well as a very different age profile. The low participation rates for organised cycling of those in their twenties, thirties and forties indicates enormous potential for growth should the barriers be overcome (Figure 4)

Figure 4: Cycling Age Profile Participation Rates⁴

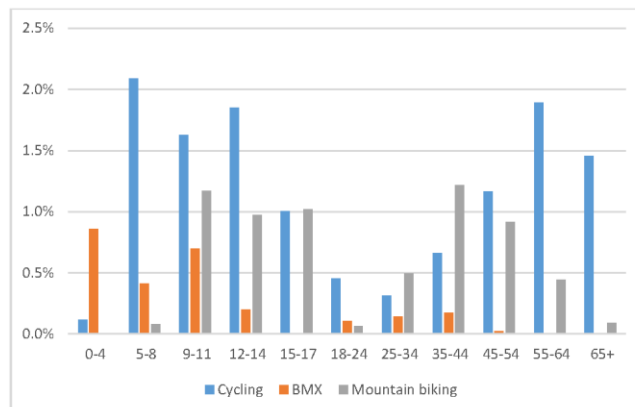
Cycling participation rates are more complicated due to the various sub disciplines including road cycling, BMX and Mountain biking. As expected BMX is more popular under the age of twelve, while MTB is more popular with teens and those in their forties. Road cycling is more popular among the over 55 age group leading to the common term, MAMIL (middle aged man in lycra). Due the preponderance of MAMILs, significant portions of the population perpetuates the myth that they

³ AusPlay: How Australians' participation in sport and physical activity is adapting to COVID-normal — July 2022 update

⁴ ibid

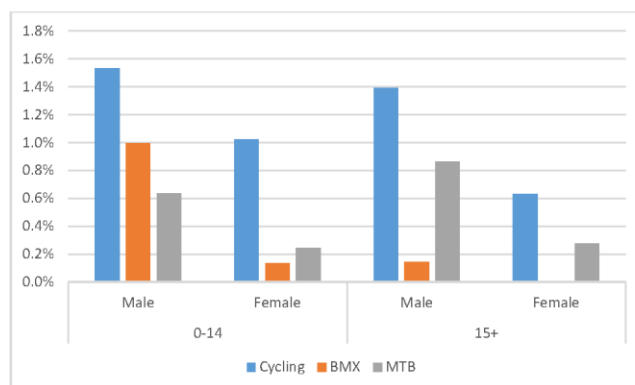
are the only people who cycle or who would like to cycle. This has become a self-fulfilling prophecy where MAMILs are the few people who have the money to invest in expensive equipment and sufficiently high level of risk tolerance to cycle in dangerous settings. This is indicative of failure of cycling governing bodies over decades as well as local and state governments to provide appropriate facilities and programs to reduce the barriers of entry to cycling for other age groups (Figure 5).

Figure 5: Road Cycling, BMX and MTB participation rates⁵



Cycling has higher participation rates for males than females across all the different sub-disciplines for both 14 and under and over 15 age groups. This is another indicator of failure of cycling authorities as there is no reason for participation rates for males and females to be similar as is the case in northern European countries (Figure 6).

Figure 6: Cycling Participation Rates: Male and Female⁶



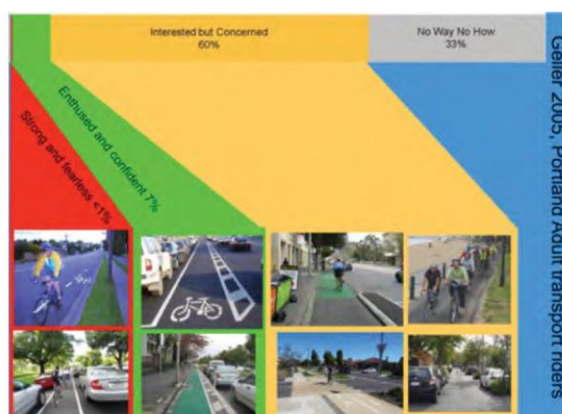
⁵ AusPlay: How Australians' participation in sport and physical activity is adapting to COVID-normal — July 2022 update

⁶ Ibid

Latent Demand

As implied, considerable amounts of research suggests there is large latent demand for cycling. A study in Portland, Oregon, concluded two thirds of the population would cycle more if they felt comfortable, safe, and cycling were easy and convenient⁷. Geller⁸ identified four types of cyclists, ranging from the “strong and fearless”, the “enthused and confident”, the “interested but concerned,” and the “no way no how” (Figure 7). This conclusion is supported by the experience of Seville, Spain which introduced extensive cycling facilities which have led to a boom in cycling⁹ and recently in Melbourne where 75-79% of people Brimbank indicated they would cycle if it was safe to do so¹⁰. While some of these studies refer to active transport, the general trend is the same. There is significant latent demand for children, especially girls, as well as community members in their twenties, thirties and forties.

Figure 7: Level of Interest in Cycling in the population (Geller, 2005 p39)



This suggests there exists an enormous potential to increase the number of cyclists if they felt confident and safe and infrastructure made it easy and convenient.

Health and Physical Activity

Low levels of physical activity are a major risk factor for ill health and mortality from all causes and contribute to excess weight and obesity leading to the diseases such as cardiovascular disease, Type 2 diabetes, some musculoskeletal conditions and some cancers. Being physically active improves

⁷ GELLER, R. The Importance of Cycling: What Portland can do to Maximize its Potential. 2005. Portland Office of Transportation www.portlandonline.com/transportation.

⁸ Ibid

⁹ WALKER, P. 2015. How Seville transformed itself into the cycling capital of southern Europe. The Guardian, 29 January

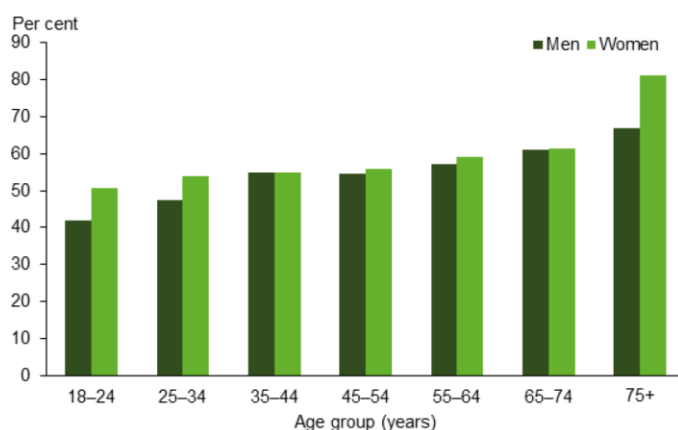
¹⁰ Pearson, L., Dipnall, J., Gabbe, B., Braaf, S., White, S., Backhouse, M. and Beck, B., 2022. The potential for bike riding across entire cities: quantifying spatial variation in interest in bike riding. Journal of Transport & Health, 24, p.101290.

mental and musculoskeletal health and reduces risk factors such as overweight and obesity, high blood pressure and high blood cholesterol¹¹.

Currently more than 1 in 2 people aged 18 and over (56%) do not meet physical activity guidelines with a higher proportion of women (58%) than men (53%) not meeting their physical activity guidelines¹².

Physical inactivity increases with age (Figure 8). For those aged 18–24, 42% of men and 51% of women do not meet physical activity guidelines. For those aged 75 and over, 67% of men and 81% of women do not meet physical activity guidelines.

Figure 8: Physical Inactivity among Australians¹³



Overall 9 out of 10 young Australians do not move enough¹⁴. The Department of Health recommends children aged 5–18 should do 60 minutes of exercise everyday with more activity the better¹⁵. Options for increasing physical activity generally focus on increasing the amount of walking and joining exercise groups or gyms¹⁶. A much neglected option in Australia has been to increase physical activity through cycling¹⁷.

¹¹ AIHW. 2017. Overweight and Obesity [Online]. Canberra: Australian Institute of Health and Welfare. Available: <http://www.aihw.gov.au/overweight-and-obesity/>

¹² AIHW. 2017. Overweight and Obesity [Online]. Canberra: Australian Institute of Health and Welfare. Available: <http://www.aihw.gov.au/overweight-and-obesity/>

¹³ Ibid

¹⁴ ABS. 2013. Australian Health Survey: Physical Activity 2011–2012 [Online]. Canberra: Australian Bureau of Statistics. Available: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4364.0.55.0042011-12?OpenDocument>

¹⁵ DOH 2014. Make Your Move - Sit Less. Be Active for Life. In: DEPARTMENT OF HEALTH, A. G. (ed.). Canberra: Australian Government.

¹⁶ Ibid

¹⁷ HOLLAND, J. 2011. A Missed Opportunity? Bicycle Route Infrastructure in Growth Areas. Planning News, 37, 21–24.

Numerous studies have documented the many health benefits generated by cycling in terms of reduced risk for cardiovascular diseases, stroke, cancer, and type 2 diabetes, and consequently mortality¹⁸¹⁹.

Cycling is mainly an aerobic activity, which means that your heart, blood vessels and lungs all get a workout. People who cycle will breathe deeper, perspire and experience increased body temperature, which will improve your overall fitness level. The specific health benefits of regular cycling include:

- increased cardiovascular fitness
- increased muscle strength and flexibility
- improved joint mobility
- decreased stress levels
- improved posture and coordination
- strengthened bones
- decreased body fat levels
- prevention or management of disease
- reduced anxiety and depression²⁰ (DHHS, 2017)

A meta- analysis of the extant literature on the health benefits of cycling was undertaken by both Oja et al. (2011) and the World Health Organization WHO (2014). Both studies found a strong inverse relationship between all-cause mortality and cycling as a form of physical activity.

Cycling has the potential to encourage²¹ moderate and vigorous intensity exercise, an option not available to walking. As the Australian Health Guidelines state, some physical activity each week should be moderate or vigorous in intensity. Vigorous intensity physical activity generally provides increased health benefits²². However, the AMA emphasise that it is important to recognise that some of the largest gains in health and wellbeing are made by people who shift from being physical inactive (sedentary) to moderate amounts of physical activity as illustrated in Figure 9. This suggests sedentary people who take up bicycle riding for the first time are likely to derive the most benefit. These are the cyclists identified as “Interested but Concerned” and make up 60% of the population.

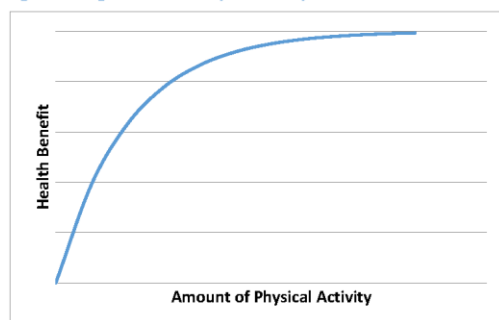
¹⁸ BÖRJESSON, M. & ELIASSON, J. 2012. The benefits of cycling: Viewing cyclists as travellers rather than non-motorists. In: PARKIN, J. (ed.) Cycling and sustainability Bingley, UK: : Emerald Group Publishing.

¹⁹ DEENIHAN, G. & CAULFIELD, B. 2014. Estimating the health economic benefits of cycling. *Journal of Transport & Health*, 1, 141-149.

²⁰

²¹ SAHLQVIST, S., SONG, Y. & OGILVIE, D. 2012. Is active travel associated with greater physical activity? The contribution of commuting and noncommuting active travel to total physical activity in adults. *Preventive Medicine*, 55, 206-211.

²² AMA 2014. AMA Position Statement Physical Activity. Australian Medical Association.

Figure 9: Marginal Benefit of Physical Activity²³

Demand for Cycling in Brimbank

The City of Brimbank is forecast to increase by 18% from 2021 to 2041, to over 231,000. This will lead to an increase in latent demand for cycling even with unchanged participation rates. However, without addressing this latent demand this will leave an increasing number of young people and women effectively excluded from cycling due to the lack of suitable cycling facilities and clubs.

The reasons for an increasing number of children and women not cycling are complex, but the levels of cycling among children and women will not change unless women, children and their parents feel they are safe, and they have the skills to build their confidence. The only way this will change is through investment in facilities and education programs aimed at these groups.

Urgent action is needed to establish safe cycling infrastructure and programs that will support more people of all ages to get on their bikes with the main issues being:

- the dearth of bicycle facilities in Brimbank and the western suburbs more broadly;
- the increasing popularity of cycling among some age groups and cultural groups which is not translating into the younger generation or women taking up cycling;
- the latent demand for cycling suggested to be up to 75-79% of the population would cycle if it was safe and they felt confident²⁴;
- the lack of physical activity of people especially children and associated health costs, and
- the increasing population in Brimbank

Structured and Unstructured Sport

The difference between Structured and Unstructured Sport is structured sport is part of a formal competition, is played on a formal sports space, and has a club or overarching controlling entity involved. Unstructured sport (including cycling) is an informal version of that. Unstructured sport can

²³ WEN, C. P., WAI, J. P. M., TSAI, M. K., YANG, Y. C., CHENG, T. Y. D., LEE, M. C., CHAN, H. T., TSAO, C. K., TSAI, S. P. & WU, X. 2011. Minimum amount of physical activity for reduced mortality and extended life expectancy: a prospective cohort study. *The Lancet*, 378, 1244-1253.

²⁴ Pearson, L., Dipnall, J., Gabbe, B., Braaf, S., White, S., Backhouse, M. and Beck, B., 2022. The potential for bike riding across entire cities: quantifying spatial variation in interest in bike riding. *Journal of Transport & Health*, 24, p.101290.

take place on a formal sports space, but not be part of a competition. Unstructured sport can include cycling, such as downhill or cross-country MTB, but when conducted as a competition it is structured sport. It is essentially any activity that can be a structured sport but is outside a competition, which may or may not be undertaken on the formal sport space

Unstructured sport is increasing with Australians are embracing a more mixed approach to getting active. In 2021, fewer people are getting active exclusively through sporting clubs or organised venues. Instead Australians are more likely to supplement club or venue use with more unstructured activities that can be done in a COVID-safe way.

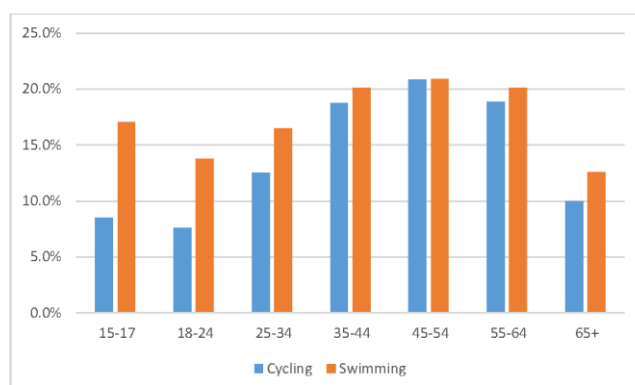
Physically-distanced or home-based activities are being sustained or increasing with the experience from Covid showing massive increases in cycling with infrastructure unable to cope with the increase leading to conflict with pedestrians on Shared User Paths.

There is growing evidence that the new participation “normal” includes a greater mix of organised sport and the types of activities that can be done in a physically-distanced way.

Australians are not abandoning club sport – there are indications players are returning – and clubs will continue to play an important part in the mix of activities.

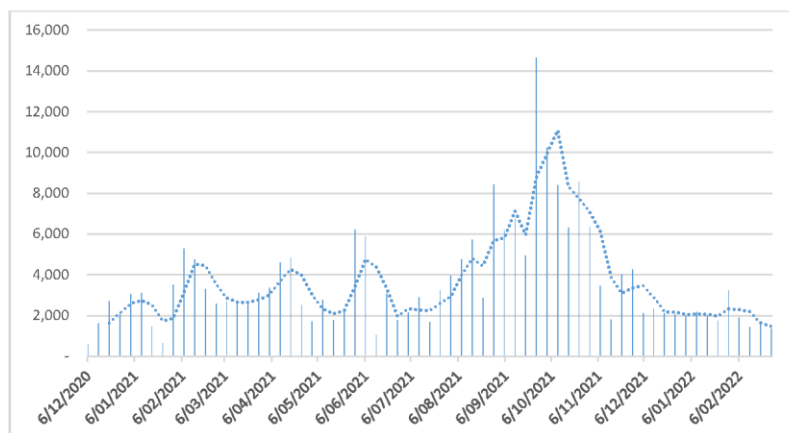
When unstructured cycling is included in participation rates, cycling has relatively similar rate as swimming. This participation rate highlights the potential for cycling, as with poor cycling facility provision is considered when compared to swimming provision. With good provision cycling provision rates, especially unstructured cycling would dramatically increase.

Figure 10: Unstructured Swimming and Cycling Rates²⁵



Evidence of the popularity of unstructured cycling in local settings is shown by the usage rates at Quarry Park MTB trails in Footscray.

²⁵ AusPlay: How Australians' participation in sport and physical activity is adapting to COVID-normal — July 2022 update

Figure 11: Quarry Park Weekly Usage Totals²⁶

Key Issues

Local provision of cycling facilities is key to the success of bike sports in Brimbank as well as providing programs for these facilities in conjunction with schools and supporting local clubs.

Another key issue is the expected backlash from local park user groups as any change in park usage or shared areas inevitably provokes a NIMBY backlash. Council need to be prepared in advance of this backlash with strong evidence of support from the direct local community as well as the wider Brimbank community.

Key Opportunities

Despite Brimbank being a middle ring city local government area, there are many underutilised public areas as well as opportunities for provision of small cycling facilities such as pump tracks. The proposed Sunshine Energy Park is a key example.

Sunshine Energy Park

The Sunshine Energy Park (SEP) Vision Plan proposes mountain bike trails to allow for mountain biking as well as a pump track. BikeWest strongly endorses this proposal as it aligns with our previous collaborate work with Maribyrnong Council on their recently adopted Bike Sports Strategy with a strong focus on local places for local people. This does not preclude visitors from further afield but facilitates local use as a starting point. Survey data by BikeWest about Quarry Park indicates visitors come from all parts of Melbourne including international backpackers who hire bikes and travel to Quarry Park. Given the ease of access from Albion train station we envisage the SEP attracting visitors from many parts of Melbourne including international visitors.

²⁶ Maribyrnong Council data

The Sunshine Energy Park Vision Plan also correctly that currently mountain bike riding is a heavily male dominated sport. This is also observed at Quarry Park and something BikeWest is attempting to address in collaboration with Westside Cycle Club and local schools and we are pleased to see Brimbank Council acknowledge the issue. BikeWest hopes that Brimbank Council will take this opportunity to collaborate with both BikeWest and Westside Cycle Club. BikeWest is also assisting the facilitation of a pilot program by the US high school mountain bike organisation, NICA. This project should be launched in the west of Melbourne in 2024 (#MoreKidsOnBikes). Future mountain bike trails in Sunshine would help expand this program (<https://nationalmtb.org/>)

the proposed pump track also presents the opportunity to include a broad range of users due to their inherently flexible design and appeal. The pump track at Quarry Park is in constant use throughout the year. In the UK most local governments are installing pump tracks and the experience of Velosolutions with their Wishawhill Wood pump track provides a perfect example of tapping into latent demand (<https://www.youtube.com/watch?v=n4auyR3mITs>)

The design of the trails may take cues from the world's best practice urban bike park, the Tom Dumoulin Bike Park. The Tom Dumoulin Bike Park (TDBP) is an innovative, high-quality, world-class facility designed to cater for road cyclists, mountain bikers and BMX riders, for all ages and abilities. The park occupies an area of 6 hectares with different surface types making it possible for riders to tackle tracks with different levels of technical difficulty. It offers an ideal way of gaining experience and perfecting skills in a safe, innovative environment. The innovative design means that a total of fifty different courses can be set out, six of which can be ridden on simultaneously. Over 2000 people regularly use this park at the same time. While the TDBP occupies a larger area than that proposed for the mountain bike trails and pump track, a smaller version drawing upon the flexible design would greatly add to the flexibility and benefit of the trails.

Sustainability Hub

BikeWest is also very excited to see Brimbank Council's focus on sustainability and the circular economy. This presents another opportunity for collaboration with both BikeWest and the Inner West Community Bike Hub (IWCBH). BikeWest works closely with the IWCBH on bicycle maintenance programs for school students (Footscray High School) and promoting reuse, refurbishment and recycling of bikes. The IWCBH promotes social inclusion as well through the sale of cheap, high quality bikes and has donated over 300 bikes to refugees. BikeWest recommends strongly that Brimbank Council approach the IWCBH to discuss what opportunities exist for the establishment of a new bike hub in the SEP.

Summary

BikeWest is excited by the opportunities presented in the Sunshine Energy Park Vision Plan and strongly endorses the inclusion of the mountain bike trails, pump track and sustainability hub (resource recovery centre). Given our expertise and experience in developing the Maribyrnong Bike Sports Strategy we look forward to collaborating with Brimbank Council to help see their vision come to fruition.

6.2 Victoria University Submission

**VICTORIA
UNIVERSITY**

THE NEW WAY TO DO UNI

Sunshine Energy Park - Engagement Team
Brimbank City Council
Brimbank Community and Civic Centre - 301 Hampshire Road, Sunshine
www.brimbank.vic.gov.au

Attention: Sarah Bishop, Activate Consulting
Aidan Mullen, Executive Manager Transforming Brimbank
Sarah Price, Precinct Delivery Manager (Sunshine)

31 August 2023

Dear Sarah Bishop,

Re: Response to Follow-up request - Sunshine Energy Park and Albion Quarter Structure Plan (Email, 3 August 2023)

Thank you for your email acknowledging the many opportunities to integrate and complement the Victoria University (VU) site and programming in both the Vision Plan for Sunshine Energy Park and the Albion Quarter Structure Plan.

I am pleased to provide more information on the VU Masterplan, proposals for the vacant parcel of land in between the Campus and Sydney Tools, and data insights on travel modes and destinations for students.

- **VU Masterplan**

The Sunshine Campus will be the central focus for skills, future jobs and innovation in Paramedicine and future trades industries for Melbourne's West, located at the interchange of key state and regional transport networks. Therefore two particular initiatives for investment are a current priority for VU:

 - **The Centre of Excellence in Paramedicine**

Victoria University aims to build a new Centre of Excellence in Paramedicine at its Sunshine Campus. The Centre will be a state of the art training and leadership hub supporting students and paramedics and aims to be operational by the end of 2026. The Victorian Government allocated \$10 million towards the project in 2023/24 State Budget and Victoria University is currently completing a business case in collaboration with key stakeholders, including Ambulance Victoria.

PO Box 14428, Melbourne VIC 8001 AUSTRALIA
+61 3 9919 4000 www.vu.edu.au

Victoria University ABN 83776954731
CRICOS Provider No. 00124K (Melbourne),
02475D (Sydney), RTO 3113

- **Brimbank Tech School**

The Victorian Government has provided funding for a Brimbank Tech School and has selected Victoria University to host the tech school at our Sunshine Campus. The school will welcome students from across 16 secondary schools in the Brimbank local government area. The school will be a place of local innovation and support high levels of student engagement and achievement in STEM-related disciplines. Its aim is to offer students real world experiences, fostering the types of problem-based learning skills required in future-focused industries.

Tech schools develop strong connections with partner schools, industry, community and local government, promoting dialogue about how to effectively engage students in STEM disciplines and future career pathways. These connections also support teacher professional learning.

A feasibility study has been completed for the project and accepted by the Department of Education. The preferred site of the school is adjacent to residential buildings on its east side, with access to a pedestrian footpath on its west side adjacent Fordham Building (F), linking the building to the rest of the campus. The site provides the building with high visibility from Ballarat Road, offering opportunities to showcase learning spaces through visual connections between the footpath and internal lab spaces.

• **Vacant land between VU and Sydney Tools**

The vacant land between VU and Sydney tools is noted as Green Wedge in the Whole of Institution masterplan

With respect to the green wedge (Phoenix Reserve) the masterplan notes development over it and the Sydney Tool land parcel. However there are no current plans or funding to progress work at this stage.

• **Data insights on travel modes and destinations for students**

2023 Base Data relating to staff and students at VU's Sunshine Campus indicate:

- There are 4,527 students enrolled on Sunshine Campus in 2023
- All students are enrolled in TAFE/VET courses
- College of Trades 85%, College of Health and Community 12%, students are enrolled in College of Education Skills & Jobs 3%.

In 2022, a total of 4,843 students attended the Sunshine Campus for all or part of their course. Those students are drawn from the following LGAs:

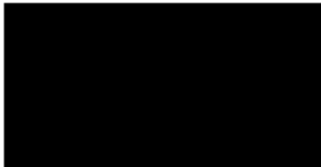
LOCAL GOVERNMENT AREA	NO. OF STUDENTS
Melton (C)	1091
Brimbank (C)	732
Wyndham (C)	634
Hume (C)	486
Moonee Valley (C)	335
Hobsons Bay (C)	274
Maribyrnong (C)	224
Macedon Ranges (S)	159
Moreland (C)	109
Moorabool (S)	100
Whittlesea (C)	99
Not Available	78
Greater Geelong (C)	66
Melbourne (C)	48
Darebin (C)	45
Mitchell (S)	24
Banyule (C)	23
Casey (C)	23
Other	293
Grand Total	4843

Road and rail networks have a key influence on the students' mode of transport. Data related to student modes of travel may be skewed to reflect influences of a 'new normal' resulting from COVID and subsequent lock downs, but 2021 data relating to student travel indicates:

- Student travel to Sunshine Campus by car, as driver, was 80%
- Student travel to Sunshine Campus by train was 20%

We hope this information assists in informing the finalisation of the Vision Plan, and helps provide a compelling case for potential funding and partnerships to bring the vision to life. VU supports the directions outlined in the energy park Vision Plan (*please see attached document 'VUSupport for_Energy Park draft Vision Brimbank CC'*) with many aspects consistent with VU's aspirations for the region and we look forward to continuing to collaborate with Council.

Kind regards,



Precincts, Communities and Government Relations

Victoria University

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6.3 Volleyball Victoria Submission



Volleyball Victoria Pathways to Play



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Context

- Volleyball consistently features in the **top 5** most popular sports globally.
- Locally volleyball is experiencing a boom in participation, across all versions of the sport, in both competitive and social patterns of play.
- Interest emerging across a wide range of **culturally, linguistically diverse (CALD) communities, growth corridors, socioeconomic demographics, and geographic locations** across the state of Victoria.
- Volleyball is often reported as the most **gender equal** sport in (Victoria and Australia)
- Volleyball requires **low levels of equipment**, is **non-contact**, and offers **inclusive** and **welcoming** environment
- Growth is increasing the **demand for access** to all forms of play - Indoor & Beach – **Recreational, Social and Competitive**
- Both forms of volleyball are Olympic sports, with today's youth perfectly placed to compete for the **2023 Brisbane Olympics**, or follow collegiate scholarships or professional careers overseas

What is needed;

- Infrastructure and Access - partner with government bodies
- Operational & Governance support – VVI & partners
- Pathways – Grassroots through to competitive - VVI, VA & partners



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Growth



Volleyball in Victoria – recent participation data analysis;

- Volleyball Victoria (VV) membership data has **more than doubled** in the past 5 years.
- Victorian State League team entries have **increased 22%** in 2023 from the previous year, and a whopping **88% from 2019 pre-covid** numbers.
- School based participation has also risen significantly.
 - 1-day Indoor Victorian Schools Cup** event has **grown 71%**, from 139 team entries pre-covid (2019), to 238 entries in 2023.
 - 1-day Victorian Beach Schools Cup** event has **risen 80%** from 178 in 2019 to 322 in 2022.
- Registration for the 2023 Victorian State Youth Beach trials have **risen 62%** from the previous year,
- Athletes training for Victorian Indoor Youth State representation have **risen 45%** from 2022.
- Volleyball is now ranked as the **4th most participated sport** in Victorian Secondary Schools in 2022 (up from 9th prior to Covid in 2019). (source: SSV)

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Equity & Inclusion

Secondary

Rank & Sport	Total	Boys	Girls
1 Basketball	36,879	58%	42%
2 Australian Football	31,676	87%	13%
3 Netball	30,540	27%	73%
4 Volleyball	28,790	49%	51%
5 Football	25,859	66%	34%
6 Track & Field	17,496	53%	47%
7 Cricket	14,028	74%	26%
8 Tennis	13,884	60%	40%
9 Badminton	12,348	55%	45%
10 Cross Country	10,182	55%	45%

"Volleyball brings people together, regardless of any differences in language, ability, culture and beliefs".

- Significant multicultural interest at recreational, social & competitive levels of play across the globe = strong volleyball literacy and interest across multicultural groups in Australia.
- Volleyball consistently reported as one of the most gender equal sports in Australia
- Strong and active inclusion principles and profile
 - All abilities – sitting volleyball, standing Beach Volleyball, Volleyball for seniors,
 - Appeal across broad student and community spectrum – there is a place for **EVERYONE** to play
 - Inclusive and fair play clubs pathways and delivery
 - [Melbourne Spikers Volleyball Club](#) – LGBTQIA+ volleyball club providing 35+ yrs of volleyball access regardless of sexual orientation or gender identity

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Brimbank Community

Top Ten Overseas Countries of Birth

	Number	% of total population	Change 2016 - 2021 (persons)
Vietnam	25,391	13.0	▲ 3,696
India	8,209	4.2	▼ 1,075
Philippines	5,759	3.0	▲ 13
Malta	4,086	2.1	▼ 438
North Macedonia	3,033	1.6	▼ 42
Italy	2,819	1.4	▼ 372
New Zealand	2,601	1.3	▼ 672
China	2,202	1.1	▼ 193
Croatia	2,035	1.0	▼ 250
Greece	2,031	1.0	▼ 191

- A colourful and diverse multicultural hub
- 48.2% people born overseas (2022)
- Wide range of culturally, linguistically diverse (CALD) communities, growth corridors, socioeconomic demographics
- Reputation for affordability attracting, first homeowners, migrants, and refugees
- There is a need to offer a creative range of culturally relevant recreational pursuits to activate overarching health & well-being outcomes for the LGA
- Volleyball is a high profile, top tier sport in each of the top 3 overseas Countries of Birth for Brimbank
- Volleyballs strong growth & familiarity offer an important opportunity to both physically activate the community and retain youth within the sporting sphere

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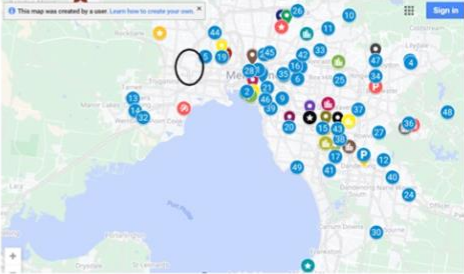


Volleyball Gap

- A GAP exists across the western metro region.
 - VVI developing a Western Region Growth Strategy to unlock the potential for the sport.
 - WHY – limited access, and organised opportunities

FACILITIES – COMMUNITY BASED AFFILIATES – STRUCTURED SERVICES

- VVI – advocating for a strategic foundation for places to play
 - grass roots programs, facility advocacy, capacity building through new affiliates
- LG – development of fit for purpose facilities to support recreational play, training, competition



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Brimbank Opportunity

- Fill the GAP – majority of existing volleyball services found in neighbouring LGA areas – Altona, Maribyrnong, Braybrook, Footscray.
 - Desperate need to address barriers to play & unlock interest & potential across the Western suburbs through additional volleyball services and accredited operators
- Active affiliation being sort by exiting groups across the LGA (Derrimut Knights & Aegies Gym teams)
 - VVI could provide tools to support the implementation of governance and operational structures for new affiliates
 - Support needed by LG to help new affiliates access suitable venues for competition and training purposes + seek grass roots funding to building capacity, compliance & strengthen community delivery
- Increasing volleyball options align with the “Community Vision 2040, Council Plan 2021-2025 & Health & Wellbeing Municipal Plan 2021-2025 strategic directions to encourage “healthy lifestyles”, ensure that “services & facilities” are responsive to community needs, and recognise and celebrate the LGA “culture & diversity”, through leadership, services, development funding, partnerships and advocacy.

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Volleyball Demand

Registered VVI members currently travel on average 15-20km to access VVI competition and training

Support needed for emerging affiliates through

- access to infrastructure
- capacity building, governance and compliance support and mentoring

Local demand for greater access to more courts and competition pathways

- Derrimut Knights Volleyball Club
- Aegis Gym Volleyball Club

Surrounding VVI affiliates supporting the inner west are at capacity OR resource constrained

- Western Region Volleyball Club – Maribyrnong, Braybrook College, Caroline Springs and Melton venues – wait list and trials
- Volley Friends United Melbourne – MSAC and Altona Sports Centre – limited and poor facility access



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Strategic Development

Strategic multisport design & development of high ball assets to capture the growing opportunities presented by volleyball.

Indoor

- Consideration of choice of flooring
- Court positioning = 2 volleyball courts for every 1 basketball/netball court with perpendicular set up
- Court marking and adequate run of space – volleyball, like tennis is played beyond the court boundaries
- Lighting design suitable for sport played high in the air
- Post hole installed, purchase and storage of quality equipment
- Ability to host high-level national and international competition - media master planning, fixed and flexible seating, universal design and treatment rooms, adequate transport & car parking, referee stands

Outdoor

- Grass and sand courts offering significant outdoor recreational community benefit

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SEP Opportunity

- Opportunity to unlock interest in volleyball and a diversify recreational options that more accurately reflect the local community
 - Indoor & outdoor solutions incorporating multi-sports design. ie Traditional Sports + Volleyball + Foot volley + Newcomb + Speak Takraw etc.
 - Local solutions help support integration, strengthen social cohesion and networking through a shared interest, as well we address barriers to sport such as cost, transport, culture, language as noted in the Vic Sports "Youth Sports Participation Strategy", Regional Priority Precinct
 - Show court potential to host state, national and international competition
 - Currently no suitable location in the inner west to host, Victorian State League or National/International volleyball competition.
- Development of transport links
 - Help address transport and travel barrier to play especially amongst the youth

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Brimbank Opportunity

"A transformed BRIMBANK that is beautiful, thriving, healthy and connected"



Using a shared enjoyment of sport to assimilate and facilitate social wellbeing and belonging

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Gender Impact Assessment Report

Name of policy, program or service	Sunshine Energy Park Vision
Step 1: Discuss The Issues Summary of the gender issues which were considered	Participation • Women and girls participate less in formal sport and recreation – need to research what sport and recreation activities will attract women and girls • Need to explore who mountain biking appeals to and who will benefit more from this feature Demographics • Need to understand the gender and intersectional demographics of the surrounding area Access and Inclusion • Need to consider how to make facilities accessible and inclusive to women and girls and gender diverse people • Consider location of facilities and other amenities like parks/playgrounds • Inclusion of CTEP principles into design of parkland, into elements such as lighting, with the safety of woman and children in mind
Step 2: Gather Evidence Outline of the evidence you have gathered based on internal data, desktop research and/or stakeholder engagement	<u>Participation</u> • Geelong City Council undertook a gender impact assessment on its Armstrong Creek Playground. Council undertook a literature review and found that mountain biking is more popular with girls than they thought. They consulted with local mountain biking organisations to discuss membership, types of events and participation rates. It became clear that boys and girls participate equally in mountain biking activities and competitions up to the age of approximately 13. It is not until then that participation drops off dramatically for girls and remains unequal amongst adults, due to both social and structural gender stereotypes. • Studies repeatedly show that males dominate the field of mountain biking • A 2010 survey by the IMBA (International Mountain Biking Association) showed that 60% of women believed that the perception of mountain biking as “hard-core” was deterring women from participating • Women and girls currently participate more in activities that are not provided in sports facilities, such as recreational walking and outdoor gym/fitness <u>WHISE - Creating Safe and Inclusive Public Spaces for Women</u> • Mixed use areas where people can walk, play, eat and exercise at different times of the day ensure that the area is used at all times. • For example, a playground area that also incorporates fitness equipment can be used by early morning walkers, by parents with small children during the day, by teenagers doing sport after school and in the early evening. <u>Access and Inclusion</u> • Research shows that many women and girls do not feel comfortable participating in traditional sporting and physical activity spaces. Careful consideration of the placement of facilities, creating gender-sensitive and safe spaces, consideration of formal and/or informal on-site child-care and targeted programming is essential to this Vision <u>Gender Equity in Design Guidelines – City of Whittlesea</u> Site Planning

	• Playground facilities should be within a reasonable distance and visible from all playing fields. Consider including clear lines of sight to social / multipurpose spaces in the pavilion to assist with passive surveillance and supervision. • Where there are multiple playing fields, all users and spectators should have ease of access to change facilities, social / multipurpose space and other amenities. • Women aged 15 years and older who speak a language other than English at home tend to participate less often in physical activity. There is a greater percentage of women who have low proficiency in English, than there are men, in the surrounding three suburbs of Albion, North Sunshine and St Albans South. Providing culturally appropriate spaces, programming and communications (including signage) needs to be considered. • There are more older women than men (over 70 years) in the surrounding suburbs of Albion, North Sunshine and St Albans South and their needs should be considered in final designs • There is a larger percentage of women with a disability (than men) in the surrounding three suburbs of Albion, North Sunshine and St Albans South (and greater than the Brimbank average) and their needs should be considered in final designs • Over 6.5% of the households in Sunshine North and St Albans South are single parent families with children under the age of 15, compared with 6% in Brimbank overall and 4.4% in Greater Melbourne, and there needs to be consideration of low-cost and no-cost access options to spaces and activities.
Step 3: Make a Recommendation Recommendation of how the policy, program or service will meet the needs of people of different genders and/or promote gender equality	1. Recommended that these considerations are highlighted in the final Vision document The reimagining of Sunshine Energy Park will have significant health, wellbeing, social, environmental, economic and cultural outcomes, and in order to ensure that these are realised by all parts of community the diversity, age and gender demographics of the Brimbank community has been considered. For example, • Research shows that many women and girls do not feel comfortable participating in traditional sporting and physical activity spaces. Careful consideration of the placement of facilities, creating gender-sensitive and safe spaces, consideration of formal and/or informal on-site child-care and targeted programming is essential to this Vision • Women and girls currently participate more in activities that are not provided in sports facilities, such as recreational walking and outdoor gym/fitness, and this is considered in the Vision • Women aged 15 years and older who speak a language other than English at home tend to participate less often in physical activity. There is a greater percentage of women who have low proficiency in English, than there are men, in the surrounding three suburbs of Albion, North Sunshine and St Albans South. Providing culturally appropriate spaces, programming and communications (including signage) needs to be considered. 2. Playground facilities should be within a reasonable distance and visible from all playing fields. Consider including clear lines of sight to social / multipurpose spaces in the pavilion to assist with passive surveillance and supervision.

- | | |
|--|--|
| | <ol style="list-style-type: none">3. Where there are multiple playing fields, all users and spectators should have ease of access to change facilities, social / multipurpose space and other amenities.4. Final design should focus on equitable allocation of facilities and activities that benefit women and men equally. Given that men will predominantly benefit from mountain biking trails it is suggested that additional walking paths and outdoor fitness equipment are included in the final design.5. Consideration should be made on the gendered outcomes around the provision of mountain biking tracks. Women participate significantly less in this activity than men and therefore there needs to be consideration of either (or both) of programming for women's participation or alternative fitness activities preferred by women (such outdoor gym equipment). |
|--|--|