Planning Panels Victoria

Melbourne Planning Scheme Amendment C278melb
Sunlight to Parks

Panel Report

Planning and Environment Act 1987

1 June 2021

VICTORIA State Government

How will this report be used?

This is a brief description of how this report will be used for the benefit of people unfamiliar with the planning system. If you have concerns about a specific issue you should seek independent advice.

The planning authority must consider this report before deciding whether or not to adopt the Amendment.
[section 27(1) of the *Planning and Environment Act 1987* (the PE Act)]

For the Amendment to proceed, it must be adopted by the planning authority and then sent to the Minister for Planning for approval.

The planning authority is not obliged to follow the recommendations of the Panel, but it must give its reasons if it does not follow the recommendations. [section 31(1) of the PE Act, and regulation 9 of the *Planning and Environment Regulations 2015*]

If approved by the Minister for Planning a formal change will be made to the planning scheme. Notice of approval of the Amendment will be published in the Government Gazette. [section 37 of the PE Act]

Planning and Environment Act 1987

Panel Report pursuant to section 25 of the PE Act

Melbourne Planning Scheme Amendment C278melb

1 June 2021

Sarah Carlisle, Chair

Annabel Paul, Member

Nicola Ward, Member

Planning Panels Victoria

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Glossary and abbreviations

AFL	Australian Football League
AHD	Australian Height Datum
Central City	the Hoddle Grid, Docklands and Southbank, shown pink in Figure 1
Council	Melbourne City Council
DDO	Design and Development Overlay
DDO[number]	Design and Development Overlay Schedule [number]
DPO	Development Plan Overlay
DPO[number]	Development Plan Overlay Schedule [number]
Hodyl Report	*Sunlight Access to Public Parks Modelling Analysis Report*, Hodyl + Co, February 2018
MCC	Melbourne Cricket Club and Melbourne Cricket Ground Trust
MCG	Melbourne Cricket Ground
NEIC	National Employment and Innovation Cluster
NSW road noise policy	*NSW Environment, Climate Change & Water, Road Noise Policy 2011*
OSS	*Open Space Strategy, Planning for Future Growth*, City of Melbourne, June 2012
OSS Technical Report	*City of Melbourne Open Space Strategy Technical Report,* Thompson Berrill Landscape Design and others, June 2019
PD[number]	Panel Document [number]
PE Act	*Planning and Environment Act 1987*
PPN59	*Planning Practice Note 59: The Role of Mandatory Provisions in Planning Schemes*
PPN70	*Planning Practice Note 70: Open Space Strategies*, June 2015
PPSP	Protect Park Street Precinct Inc
SUZ1	Special Use Zone Schedule 1
VCAT	Victorian Civil and Administrative Tribunal
VPA	Victorian Planning Authority
VPP	Victoria Planning Provisions
VRC	Victoria Racing Club

Overview

Amendment summary	
The Amendment	Melbourne Planning Scheme Amendment C278melb
Common name	Sunlight to Parks
Brief description	- Amends Clause 22.02 (Sunlight to Public Spaces Policy) to protect winter sunlight access across the day to public parks outside Docklands, the Hoddle Grid and Southbank - Introduces a new Design and Development Overlay Schedule 8 to protect winter sunlight access to public parks outside the Hoddle Grid, Southbank and Docklands - Amends Clause 21.17 (Reference Documents) to include the *Sunlight Access to Public Parks Modelling Analysis Report*, February 2018 by Hodyl + Co
Subject land	All land within the municipality, excluding the Hoddle Grid, Southbank and Docklands (see Figure 1)
Planning Authority	Melbourne City Council
Authorisation	26 October 2018
Exhibition	1 August 2019 to 5 September 2019 (inclusive)
Submissions	Number of submissions: 168, plus 10 late submissions. See Appendix A Support: 92 Oppose: 25 Request changes: 61

Panel process	
The Panel	Sarah Carlisle (Chair), Annabel Paul and Nicola Ward
Directions Hearing	- 27 February 2020 - 22 June 2020 by video conference - 17 September 2020 by video conference
Panel Hearing	Over 13 days between 9 and 29 March 2021, by videoconference
Site inspections	Unaccompanied on 2 and 7 April and 25 June 2020, and 4 March 2021
Parties to the Hearing	See Appendix B
Citation	Melbourne PSA C278melb [2021] PPV
Date of this Report	1 June 2021

Executive summary

Melbourne Planning Scheme Amendment C278melb (the Amendment) seeks to introduce new planning scheme controls to protect winter sunlight access to the municipality's public parks that are located outside the Central City (the Hoddle Grid, Southbank and Docklands).

Specifically, the Amendment proposes to:

- amend Clause 22.02 (Sunlight to Public Spaces) to (among other things) introduce protection to parks from overshadowing at the winter solstice
- apply a new Design and Development Overlay Schedule 8 (DDO8) to land on which development could overshadow the parks
- amend Clause 21.17 (Reference Documents) to reference the *Sunlight Access to Public Parks Modelling Analysis Report,* Hodyl + Co, February 2018 (the Hodyl Report).

The DDO8 contains mandatory controls prohibiting additional shadow on parks at the winter solstice, generally between 10am and 3pm for 'Type 1 parks', being. parks in low rise areas with good levels of existing sunlight access. A modified approach applies to:

- parks in growth areas (Type 2 parks), which can be overshadowed by 'allowable shadow' based on the scale of development allowed on the surrounding land
- certain parks which are already subject to existing shadow between 10am and 3pm (Type 3 parks), which have reduced hours of protection.

The Amendment represents a fundamental shift in the policy basis for overshadowing controls in the Melbourne Planning Scheme. Key changes are:

- a shift from the currently largely equinox based controls outside the Central City to winter solstice based controls
- an expansion of the hours of protection (most controls currently provide protection between 11am and 2pm, whereas the Amendment proposes expanding the hours of protection to 10am to 3pm)
- a shift from largely discretionary controls to mandatory controls
- a shift from the current 'hierarchical' approach, whereby some parks are offered higher protection than others, to a 'flat' approach where all parks are treated equally regardless of their size and function.

The vast majority of submissions supported the principle of protecting sunlight access to parks. A significant majority supported the way the Amendment frames those protections, including the policy shifts outlined above. There were, however, also submissions that expressed concerns over the Amendment, including its strategic justification and the way in which the new DDO8 controls are proposed to operate.

Issues of concern

Several submitters expressed concern over the impact of the Amendment on the development potential of growth areas, in particular City North and the Parkville National Employment and Innovation Cluster (NEIC). They submitted that the Amendment fails to strike the right balance between policy that encourages growth and development intensification of these areas, and the protection of sunlight access to parks.

Submissions raised specific concerns related to:

- the 'flat' approach of treating all parks the same and providing the same level of protection irrespective of the size and function of the park
- the absence of a park specific analysis of the impacts of shadow
- the shift from equinox protection to winter solstice protection
- the increased hours of protection
- the shift to mandatory overshadowing controls
- the use of Vitamin D levels as a justification for the Amendment.

Other submissions raised concerns about the development impact on specific sites, or the development impact on structures and facilities within parks.

Strategic justification

On balance, the Panel considers that the Amendment is strategically justified. Parks are a precious public resource. Land for new parks is becoming increasingly expensive to acquire, and existing parks are having to work harder as the municipality's population grows and usage rates increase. Sunlight is crucial to protect the health and ecology of the parks, and make them places people want to visit and spend time in.

Balancing growth and development intensification in areas identified for change while protecting solar access to parks in those areas is a complex task. The Amendment seeks to address this challenge by allowing additional shadow over Type 2 parks (those in growth areas) which is defined by the street wall or building height controls that apply on the surrounding land. The Panel considers that this is an appropriate response. Further consideration should be given to whether allowable shadow should also apply to Type 3 parks, given that (at least on some interfaces) they are also located in growth areas.

It is clear that the Amendment will restrict the development capacity of some (potentially many) sites in areas designated for growth or urban renewal, including the Parkville NEIC and City North, but the Panel is not persuaded that the Amendment strikes the wrong balance. No evidence was presented that established that the development capacity of those areas will be restricted to the point where the policy objectives for these areas may not be achieved. Further, a high quality public realm with high amenity parks is a critical 'success factor' in delivering on the policy objectives for these areas, particularly the Parkville NEIC.

In terms of overall development capacity in the municipality, while the DDO8 area is relatively widespread, the Panel is satisfied on the basis of the evidence that any development capacity lost as a result of the application of the DDO8 can be displaced to other areas within the municipality.

The Amendment should apply to areas that have been designated for future growth where the strategic planning is yet to be undertaken or completed, such as Arden, Macaulay and Dynon. Parks in those areas should be protected in the interim, and those protections can be revisited as part of the strategic planning for those areas if it is considered strategically justified at the time.

Specific concerns

The Panel supports the shift in the policy basis for protecting sunlight to parks from a hierarchical approach, based on the park's perceived importance and function, to a flat approach. While the municipality's parks will maintain their different roles, sunlight to a small local park is just as important as to a larger, state significant park. For many, the most important parks are those closest to where they live or work.

The Panel does not consider that a park specific approach to the design of overshadowing controls is warranted. A park specific approach does not recognise that parks change over time. Protections designed to suit a park on the basis of the way it is used now may not suit the way it is used in future. Parks increase in size, improvements and facilities are added, plantings change and usage rates and patterns change. The Panel considers that it is important to maintain as much flexibility as possible to allow parks to evolve and adapt to the increasing pressures they face from the municipality's rapidly growing population.

The Panel supports the shift to winter based controls. Winter sun access plays an important role in providing high amenity in Melbourne's parks year round, and in ensuring park health. The move to winter sunlight protection is supported by high level policy, as well as community sentiment.

The Panel supports the proposed hours of protection. They reflect a more holistic understanding of how people use parks for diverse reasons and through the day. People who wish to access sunlight in parks and the amenity and warmth it provides should be able to do so when it is convenient for them, provided it does not result in an unreasonable impact on development potential. The shortened hours of protection for Type 3 parks are a reasonable and sensible response to the existing shadow conditions in those parks.

The Panel supports mandatory controls. There is a high test to justify mandatory controls, and the Panel considers that they are justified in this instance. The primary need for mandatory controls relates to the risk that discretion would allow cumulative impacts of shadow to slowly build over time to an unacceptable outcome – a death by a thousand cuts. Once sunlight access is lost, it is lost forever.

Part of the rationale for the Amendment is the public health benefits of increased Vitamin D levels in the population resulting from additional sunlight exposure. Public health and wellbeing benefits are a legitimate consideration in the rationale for the Amendment. While the Amendment will not avoid the need for certain segments of the population to take a Vitamin D supplement in winter, sunlight may provide some benefits in relation to Vitamin D levels. Sunlight also provides other health and wellbeing benefits, especially in the cooler months.

Development within parks

The DDO8 is not proposed to (and should not) apply to development within parks. It is, however, appropriate for the policy in Clause 22.02 to apply to development within parks. The Panel was not persuaded that specific exemptions from the policy (for example for major sporting facilities like the MCG, Punt Road Oval and Ikon Park) are justified. While those types of facilities clearly deliver substantial public benefits including their contribution to our economy, it is appropriate for those benefits to be weighed against the impact the development will have on sunlight access in the park.

Geographic application of the DDO8

Submissions raised several concerns in relation to the proposed geographic application of the DDO8. The Panel has found:

- the Amendment should not be extended to Docklands in general or to Ron Barassi Senior Park in particular
- properties within the DDO10, properties within the DDO48 and the Showgrounds should be removed from the DDO8 area

- properties in a residential zone and properties subject to a Heritage Overlay should remain in the DDO8 area
- the Amendment should not extend to medians or other areas of open space not identified as a public park within the Public Park and Recreation Zone.

Specific sites

Many submissions were made in relation to specific sites. On the whole, the Panel has concluded that no changes to the Amendment are warranted in light of these submissions, other than as follows:

- The DDO8 should provide for allowable shadow from development on the University's main campus on surrounding Type 2 parks. Before adopting the Amendment, Council should undertake further strategic work or built form modelling to determine an appropriate extent of allowable shadow and adjust the DDO8 accordingly.
- An additional exemption should be added to the DDO8 for temporary buildings and works on the Flemington Racecourse site.
- Weedon Reserve should be retained in the Amendment, but reclassified from a Type 1 park to a Type 2 park.
- Fitzroy Gardens should be retained in the Amendment, but the definition of allowable shadow should be adjusted to more clearly define the extent of allowable shadow over the northern part of Fitzroy Gardens.
- Flagstaff Gardens should be retained in the Amendment, but should be reclassified from a Type 1 park to a Type 3 (West) park with hours of protection from 12pm to 3pm.
- A specific exemption for use and development in accordance with the Commonwealth Games Village incorporated document is not required, as buildings and works carried out in accordance with the incorporated document are already exempt from the other provisions in the Planning Scheme (including the DDO8).

General concerns and drafting issues

Some sites will be subject to overlapping and inconsistent overshadowing controls under the DDO8 and other existing precinct wide DDOs. While this is not ideal, it does not fundamentally undermine the Amendment and is not a reason to delay the Amendment. Where sites are subject to overlapping controls, inconsistencies would be resolved in favour of the later, more specific and more stringent overshadowing controls in the DDO8 over the more general controls in a precinct wide DDO. That said, inconsistencies and overlaps should be resolved by a further amendment as a matter of priority.

T-intersections adjacent to a Type 2 park will create a 'notch' out of the allowable shadow, by virtue of there being no street wall height or building height requirement applying within the road reserve. The Panel was not, however, persuaded that the notch effect was an unintended consequence or a 'problem' than needs to be fixed.

The Panel does not consider that transitional provisions are justified. The Amendment has been through an extensive and lengthy public consultation process that commenced some years ago, and applicants have had ample opportunity for their development proposal to be considered under the current policy and controls.

The Panel has identified some minor drafting changes that it considers will improve the clarity of the provisions.

Consolidated recommendations

Based on the reasons set out in this Report, the Panel recommends:

Before adopting the Amendment

1. **Before adopting the Amendment, undertake further modelling to understand the impacts of allowing allowable shadow on Type 3 parks, and consider adjusting the controls in Table 1 of the Design and Development Overlay Schedule 8 accordingly.**
2. **Before adopting the Amendment, undertake further strategic work or built form modelling to determine an appropriate extent of allowable shadow from development on the University of Melbourne main campus, and adjust the definition of allowable shadow in the Design and Development Overlay Schedule 8 accordingly. The further work should take account of street wall heights in the surrounding City North area and the plans for the Metro station forecourt area at the northern end of University Square.**

Adopt with changes

3. **Adopt Amendment C278melb to the Melbourne Planning Scheme as exhibited, subject to the following changes:**
   a) **the Part A changes outlined in Document PD42**
   b) **the Part C changes shown in Document PD88**
   c) **the further changes outlined in the specific recommendations in this report.**
4. **Amend the Part C version of Clause 22.02 to delete the text under the heading 'Public Parks Outside the Hoddle Grid and Southbank' and replace it with:**

   Development outside a public park must not cast additional shadow on any public park at key times and dates identified in the planning scheme.

   Development within a public park should not unreasonably reduce the amenity of the public park by casting additional shadow on the park between 10.00 am and 3.00 pm on 21 June. Before deciding on an application for development within a public park that casts additional shadow on the park, the responsible authority must consider the benefits the facility would provide in that location to park users and/or the broader community.
5. **Amend Clause 2.0 of the Part C version of the Design and Development Overlay Schedule 8 to replace the definition of 'allowable shadow' with the following:**

   Allowable shadow means the shadow that would be cast on the park between 10am and 3pm on June 21 by:
   - **street walls built to the street wall height requirement on land near the park;**
   - **if no street wall height requirement applies, buildings built to the maximum building height requirement on land near the park;**
   - **in respect of Fitzroy Gardens, a street wall fronting Albert Street built to a height of 24 metres.**

   Refer to Figure 1 below.
6. **Amend Clause 2.0 of the Part C version of the Design and Development Overlay Schedule 8 by deleting the definition of 'land abutting a park'.**

7. **Amend Clause 2.0 of the Part C version of the Design and Development Overlay Schedule 8 to replace the final dot point under 'Buildings and works for which no permit is required' with:**
    - **Buildings and works on land within the Special Use Zone, Schedule 1 that are erected for a period of no more than 6 months.**
8. **Amend Table 1 in the Design and Development Overlay Schedule 8 to specify hours of protection for Type 3 (West) parks (ie Flagstaff Gardens) of 12pm to 3pm.**
9. **Amend the mapping of the Design and Development Overlay Schedule 8 to:**
    a) **remove the properties identified in Figure 12 in this Report**
    b) **remove the properties identified in Figure 14 in this Report**
    c) **remove Showgrounds land**
    d) **make any adjustments required in light of Appendix A Map 2 of Mr Smith's witness statement (Document PD45).**

Further recommendations

The Panel makes the following further recommendations:

10. **Council should prepare a further amendment to resolve overlapping and inconsistent overshadowing controls across different parts of the Planning Scheme as a matter of priority.**

1 Introduction

1.1 The Amendment

(i) Amendment description

The purpose of the Amendment is to introduce new planning scheme controls to protect winter sunlight access to the municipality's public parks that are located outside the Central City (the Hoddle Grid, Southbank and Docklands).

Specifically, the Amendment proposes to:

- amend Clause 22.02 (Sunlight to Public Spaces) to (among other things) introduce protection to parks outside the Hoddle Grid, Southbank and Docklands from overshadowing at the winter solstice
- apply a new Design and Development Overlay Schedule 8 (DDO8) to land on which development could overshadow the parks
- amend Clause 21.17 (Reference Documents) to reference the *Sunlight Access to Public Parks Modelling Analysis Report,* Hodyl + Co, February 2018 (the Hodyl Report).

The DDO8 contains mandatory controls prohibiting additional shadow on parks at the winter solstice, generally between 10am and 3pm. A tailored approach applies to:

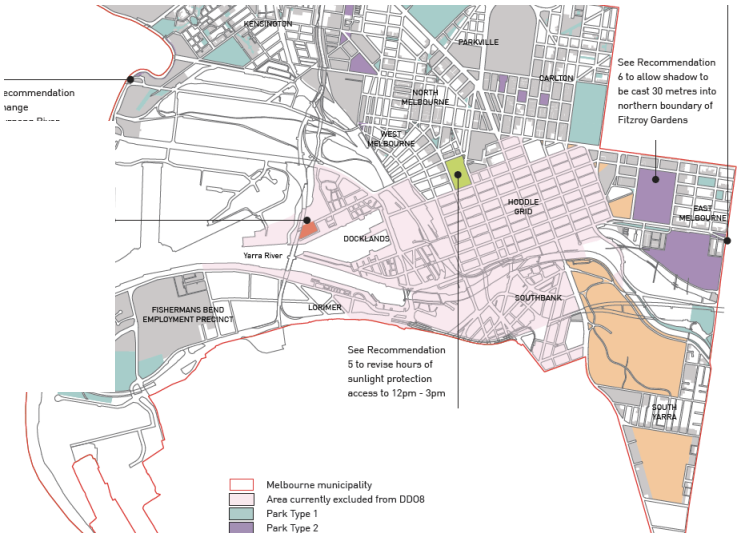
- parks which are already subject to existing shadow, which have reduced hours of protection
- parks in growth areas, which can be overshadowed by 'allowable shadow' based on the scale of development allowed on the surrounding land.

Chapter 3 describes in detail the analysis underpinning the Amendment (including the modelling and the Hodyl Report), and the fundamental concepts on which the DDO8 is based.

(ii) The subject land

The Amendment applies to the whole of the municipality, save for the land in the Central City (shown in pink in Figure 1).

Figure 1 Map showing land excluded from the Amendment



Source: Extracted from Ms Hodyl's evidence (Document PD52)

1.2 Summary of issues raised in submissions

Council received 168 submissions in response to the exhibition of the Amendment, plus an additional 10 late submissions which it referred to the Panel. The Panel considered all 178 submissions.

Ninety one submissions fully supported the Amendment. Twenty five submissions opposed the Amendment, while 61 requested changes.

The majority of submissions, including those requesting changes, supported the principle of protecting parks from being overshadowed in winter. Concerns raised included:

- the impact of the controls on the development potential of specific sites and growth precincts, in particular City North and the Parkville National Employment and Innovation Cluster (NEIC)
- the 'flat' approach of treating all parks the same and providing the same level of protection irrespective of the size and function of the park
- the absence of a park specific analysis of the impacts of shadow
- the shift from equinox protection to winter solstice protection
- the increased hours of protection
- the shift to mandatory overshadowing controls
- the use of Vitamin D levels as a justification for the Amendment.

1.3 Part A changes

Council proposed three changes to the Amendment in response to submissions, which it outlined in its Part A submission (Document PD42) (referred to in this Report as the Part A changes):

- remove Haymarket Roundabout (given its primary function is to control traffic, not as open space)
- reclassify Flagstaff Gardens as a Type 3 park (with reduced hours of protection), consistent with other parks at the edge of the Central City such as Fawkner Park and Domain Parklands, rather than a Type 1 park as exhibited
- remove the Royal Society of Victoria property (due to it being privately owned, not public open space).

Apart from the treatment of Flagstaff Gardens, the Part A changes were uncontested, and are supported by the Panel. Flagstaff Gardens is dealt with in Chapter 9.10.

1.4 Part C changes

Council proposed further changes to the Amendment shortly before the conclusion of the Hearing (Document PD88), which are referred to in this Report as the Part C versions (although they were tabled in advance of the Part C submission). These included:

- amend the DDO8 to:
  - add definitions of 'maximum building height requirement' and 'street wall height requirement'
  - amend the definitions of 'existing shadow' and 'allowable shadow'
  - add a further exemption for temporary buildings and works on land within the Flemington Racecourse
  - make various minor changes for improved clarity

- amend Clause 22.02 to:
  - clarify the application of the policy to development within parks, and set out considerations to be taken into account when assessing a permit application for development within a park that would cast additional shadow on the park
- amend the DDO8 mapping to remove:
  - properties south-east of the Queen Victoria Market that are subject to the DDO10 that applies to the Central City
  - properties around Lygon Street which are subject to a mandatory maximum height of 10.5 metres under the DDO48 that applies to Central Carlton North.

The Panel has reviewed the Part C changes and generally supports them, except where specifically stated otherwise in this report.

1.5 Procedural issues

(i) Recusal of Member Nervegna

The Panel was originally constituted as Ms Carlisle, Ms Ward and Ms Nervegna. At the first Directions Hearing on 27 February 2020 a declaration was made on behalf of Ms Nervegna (who was not in attendance) that she had sat on two past VCAT matters that dealt with overshadowing to public spaces in the City of Melbourne. One was one of the four VCAT cases reviewed in the Hodyl Report. The other involved a party who was a submitter to the Amendment. She was also sitting on a matter currently (at the time) before VCAT involving another submitter to the Amendment.[1]

The Panel invited further submissions from the parties after allowing them some time to review the VCAT decisions. The Panel received requests from three parties that Ms Nervegna recuse herself from the Panel on the basis of perceived bias, given each of the three cases involved some consideration of shadow impacts. Ms Nervegna recused herself shortly after, and the Panel was reconstituted to comprise Ms Carlisle, Ms Ward and Ms Paul.

(ii) Request for production of documents

On 18 March 2020 the Panel received a request from the University of Melbourne that the Panel direct Council to produce background documents referenced in the Hodyl Report.[2] Council agreed to provide the documents to the University of Melbourne, and accordingly no direction was necessary.

(iii) Adjournments

The Hearing was originally set down to commence on Tuesday 14 April 2020 with a face to face Hearing. On 23 March 2020, the Panel wrote to the parties attaching draft Directions for completing the Hearing through the exchange of written submissions and evidence, given that a face to face hearing was not possible as a result of COVID-19 restrictions on public gatherings.

On 25 March 2020, the Panel received a request from Council that the Hearing be adjourned until such time as a face to face Hearing could be conducted. Several parties supported the request.

[1] Dexus Property Group Ltd v Minister for Planning [2017] VCAT 619; 63 Exhibition Street Pty Ltd v Minister for Planning [2018] VCAT 861; Nuvolink Pty Ltd v Melbourne CC and others

[2] Document PD7

The Panel wrote to the parties on 31 March 2020 vacating the Hearing dates and indicating that a second Directions Hearing would be convened when further advice was available from the Victorian Government and health authorities about COVID-19 and the resumption of public gatherings.

The second Directions Hearing was held on 22 June 2020 by video conference. The Panel issued revised Directions and a Timetable on 23 June 2020, setting the Hearing down to commence on 12 October 2020.

On 26 August 2020 Council wrote to the Panel requesting a third Directions Hearing be convened, to discuss the implications of the then recent announcement by the Victorian Government that the state of emergency associated with COVID-19 would be extended. Council indicated that it did not want to delay the Amendment any further, and sought Directions to facilitate the Hearing proceeding electronically if a face to face Hearing would not be possible in October.

On 2 September 2020 the Panel wrote to the parties attaching draft Directions to facilitate an electronic Hearing to proceed on the listed October 2020 dates. Several parties objected to the Hearing proceeding electronically, and the Panel convened a third Directions Hearing on 17 September 2020 to discuss the future conduct of the matter.

Following the third Directions Hearing, the Panel adjourned the Hearing to March 2021, and issued Directions to facilitate an electronic Hearing given the uncertainty surrounding the resumption of public gatherings. The Hearing went ahead electronically from 9 March 2021.

1.6 Limitations

Several submissions (including four of the late submissions) related to a proposed development at 699 Park Street Brunswick which is in the City of Moreland. A permit was issued at the direction of VCAT. To the extent that these submissions were about that development, they are outside the scope of the Amendment. The Panel has however considered these submissions in the context of the overshadowing of Princes Park. See Chapter 9.8.

East Melbourne Group Inc submitted that allowable heights in East Melbourne and Jolimont should be reduced to protect the low scale heritage streetscapes in the area. This issue is outside the scope of the Amendment. The Panel has however considered the submission insofar as it related to overshadowing of Fitzroy Gardens and Yarra Park. See Chapter 9.9.

1.7 The Panel's approach

The Panel has assessed the Amendment against the principles of net community benefit and sustainable development, as set out in Clause 71.02-3 (Integrated decision making) of the Planning Scheme.

The Panel considered all written submissions made in response to the exhibition of the Amendment, observations from site visits, and submissions, evidence and other material presented to it during the Hearing. It has reviewed a large volume of material, and has had to be selective in referring to the more relevant or determinative material in the Report. All submissions and materials have been considered by the Panel in reaching its conclusions, regardless of whether they are specifically mentioned in the Report.

This Report deals with the issues under the following headings:

- Planning context

- Fundamental underpinnings and concepts
- Strategic justification
- Economic effects
- Mandatory controls
- Hours of protection
- Development within parks
- Site and park specific issues
- Drafting and technical issues.

2 Planning context

2.1 Planning policy framework

Council submitted that the Amendment is supported by various clauses in the Planning Policy Framework, which the Panel has summarised below.

(i) Victorian planning objectives

The Amendment supports State policy objectives in section 4 of the *Planning and Environment Act 1987* (the PE Act) to:

- provide for the fair, orderly economic and sustainable use, and development of land
- provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity
- secure a pleasant, efficient and safe working, living and recreational environmental for all Victorians and visitors to Victoria
- balance the present and future interests of all Victorians.

(ii) Clause 15 (Built Form Environment and Heritage)

The Amendment supports Clause 15 by promoting excellence in the built environment and creating places that:

- are enjoyable, engaging and comfortable to be in
- accommodate people of all abilities, ages and cultures
- contribute positively to local character and a sense of place
- enhance the functions, amenity and safety of the public realm.

The Amendment supports achieving neighbourhoods that foster healthy and active living and community wellbeing (Clause 15.01 – 4S Healthy Neighbourhoods) through:

- seeking to design neighbourhoods that foster community inclusion and make it easy for people of all ages and abilities to live healthy lives and engage in regular physical activity by providing high amenity in public spaces for active recreation and leisure.

(iii) Clause 19 (Infrastructure)

The Amendment supports establishing, managing and improving a diverse and integrated network of public open space that meets the needs of the community (Clause 19.02-6S Open Space) through seeking to:

- improve the quality of open space and ensure its long term protection
- ensure that urban open space provides for nature conservation, recreation, formal and informal sport, social interaction, opportunities to connect with nature and peace and solitude.

The Amendment supports strengthening the integrated metropolitan open space network (Clause 19.02-6R Open Space – Metropolitan Melbourne).

(iv) Clause 21 (the Municipal Strategic Statement)

The Municipal Strategic Statement states:

> The City's assets include its historic precincts, streetscapes and buildings, the public spaces and activities along the Yarra River corridor including the Sports and Entertainment Precinct, Southbank cultural precinct and river promenade, its ring of parks and gardens, well established, diverse and easily accessible business districts, and its attractive residential areas (Clause 21.01-1).

Clause 21.03 (Vision)

The Amendment supports Clause 21.03 by seeking to:

- continue protection of the health of ecological systems and biodiversity
- provide an attractive and liveable built environment in parts of the city where development will intensify
- manage the city so that it is responsive to climate change.

Clause 21.06 (Built Environment and Heritage)

The Amendment responds to the policy direction that "*Public and private open spaces should be able to support a range of uses including physical movement, communal exercising, social interaction, quiet enjoyment and connections to that natural environment*".

Clause 21.06-1 (Urban Design)

The Amendment responds to the following Objective and Strategies in Clause 21.06-1:

> To increase the vitality, amenity, comfort, safety and distinctive City experience of the public realm. (Objective 5)
>
> Protect Melbourne's distinctive physical character and in particular, maintain the importance of…the network of parks and gardens. (Strategy 1.1)
>
> Ensure that the scale, bulk and quality of new development supports a high-quality public realm. (Strategy 5.2)
>
> Ensure that development maximises solar access in public open spaces and creates microclimatic conditions for high level of pedestrian comfort. (Strategy 5.9)

Clause 21.06-3 (Sustainable Development)

The Amendment responds to the following Objective and Strategy in Clause 21.06-3:

> To make the built environment resilient to heatwaves, water shortages, extreme storm events and sea level rise. (Objective 2)
>
> Design new buildings, streets and public spaces to minimise their contribution to the urban heat island effect and to contribute to urban cooling. (Strategy 2.1)

Clause 21.10 (Infrastructure)

Clause 21.10 includes the following policy direction:

> Growth and development in the municipality will require a matching provision of infrastructure. The expansion and upgrading … of facilities and public open spaces will be required to service the growth of residents, work and visitor populations. Key to this planning is to facilitate the efficient use of existing infrastructure, reinforce those key elements and play for future needs and requirements.

Clause 21.10-2 deals with Open Space. It includes the following objectives and strategies:

> To maintain, enhance and increase Melbourne's public open space network and promote greening of the City. (Objective 1)
>
> - Ensure parks, gardens, waterways and open spaces remain a prominent element of the City's structure and character. (Strategy 1.2)

- Support the maintenance and creation of a variety of public open space to meet the needs of the growing population for formal and informal outdoor recreation. (Strategy 1.4)
- Ensure that development in and surrounding the City's parks and gardens does not adversely impact on the solar access, recreational, cultural heritage, environmental and aesthetic values, or amenity, of the open space. (Strategy 1.5)
- Protect heritage significant trees and landscapes in parks and heritage areas. (Strategy 1.6)

To provide a diversity of uses in parks where consistent with Park Master plans. (Objective 2)

- Protect and enhance the biodiversity and habitat value of the City's parks, gardens, open space and waterways. (Strategy 2.2)
- Discourage activities, buildings and works that are not specifically related to the park and its use and that lead to the alienation of the park. (Strategy 2.4)

Clause 21.15 and Clause 21.16

Council submitted the Amendment supports place-based policies in Clause 21.15 (Proposed Urban Renewal Areas) and Clause 21.16 (Other Local Areas). Council's Part A submission contains the detail and is not repeated here.

(v) Clause 22 (Local Planning Policies)

Clause 22.01 (Urban Design with the Capital City Zone)

Clause 22.01 identifies 'sunlight' and 'public realm amenity' as attributes that contribute to the amenity, liveability and economic prosperity of the Central City.

Clause 22.02 (Sunlight to Public Spaces)

The Amendment responds directly to Clause 22.02 and extends its application. The policy basis for the Amendment is set out in the Clause:

> A fundamental feature of Melbourne's character, liveability, comfort and attractiveness is its ability to offer sunlight to its streets and public spaces at the times of the year when the intensity of pedestrian activity is highest.
>
> The policy recognises that sunlight contributes to the amenity and useability of public space, public health and wellbeing and supports trees and other plants.
>
> The policy provides guidance for the consideration of the impact of additional overshadowing on the amenity quality and usability of the public space (Clause 22.02).

The Amendment seeks to achieve the Objectives of Clause 22.02:

- To achieve a comfortable and enjoyable public realm.
- To ensure new buildings and works allow good sunlight access to public spaces.
- To ensure that overshadowing from new buildings or works does not result in significant loss of sunlight and diminish the enjoyment of public spaces for pedestrians.
- To protect, and where possible increase the level of sunlight to public spaces during the times of the year when the intensity of use is at its highest.
- To create and enhance public spaces to provide sanctuary, visual pleasure and a range of recreation and leisure opportunities.

2.2 Policies relating to City North and the Parkville NEIC

Various policies and strategies in the Planning Scheme and in Plan Melbourne support Melbourne as a 'Knowledge City' and apply to the City North precinct surrounding the University of Melbourne and the Parkville National Employment and Innovation Cluster (NEIC). These include:

- facilitate the development of the NEICs by ensuring they maximise investment opportunities for the location of knowledge intensive firms and jobs (Clause 17.01-R)
- objectives of growth, knowledge and urban renewal in the City North Structure Plan (Clause 21.14-1).

One of the key issues in dispute was whether the Amendment strikes the right balance between the various policies listed in Chapter 2.1, and the policies supporting the development of the knowledge precinct and the Parkville NEIC and the growth identified for City North. This policy tension is discussed in detail in Chapters 4 and 5.

2.3 Plan Melbourne

Plan Melbourne 2017-2050 sets out strategic directions to guide Melbourne's development to 2050, to ensure it becomes more sustainable, productive and liveable as its population approaches 8 million. It is accompanied by a separate implementation plan that is regularly updated and refreshed every five years.

Plan Melbourne is structured around seven Outcomes, which set out the aims of the plan. The Outcomes are supported by Directions and Policies, which outline how the Outcomes will be achieved.

Outcomes that are particularly relevant to the protection of parks are set out in Table 1.

Table 1: Relevant parts of Plan Melbourne relating to parks

Outcome	Directions
4 Melbourne is a distinctive and liveable city	4.1 Create more great public spaces across Melbourne
5 Melbourne is a city of inclusive, vibrant and healthy neighbourhoods	5.1 Create a city of 20 minutes neighbourhoods which offer high quality public realm and open space 5.2 Create neighbourhoods that support safe communities and healthy lifestyles 5.3 Deliver social infrastructure to support strong communities 5.4 Deliver local parks and green neighbourhoods in collaboration with communities by developing networks of accessible, high quality open spaces
6 Melbourne is a sustainable and resilient city	6.4 Make Melbourne cooler and greener

Plan Melbourne identifies a number of NEICs (including Parkville), which are:

> … areas are to be developed as places with a concentration of linked businesses and institutions providing a major contribution to the Victorian economy, with excellent transport links and potential to accommodate significant future growth in jobs and in some instances housing.

It also identifies a number of Health and Education Precincts, the purpose of which is to support health and education services that are well served by public transport in a range of locations across Melbourne. These include the Parkville Medical, Bioscience and Education Precinct which partially overlaps with the Parkville NEIC. Plan Melbourne states:

> Their specialised economic functions will be reinforced, and they should provide opportunity for ancillary health and education services, retail, commercial and accommodation uses.

The Melbourne Metro project will deliver a new metro station in Parkville, on the northern edge of University Square (one of the protected parks).

Outcomes, Directions and Policies that are particularly relevant to the Parkville NEIC and the knowledge city are set out in Table 2.

Table 2: Relevant parts of Plan Melbourne relating to the Parkville NEIC

Outcome	Directions and Policies
1 Melbourne is a productive city that attracts investment, supports innovation and creates jobs	1.1 Create a city structure that strengthens Melbourne's competitiveness for jobs and investment 1.1.3 Facilitate the development of NEICs 1.1.4 Support the significant employment and servicing role of health and education precincts across Melbourne 1.1.5 Support major transport gateways as important locations for employment and economic activity 1.3 Create development opportunities at urban renewal precincts across Melbourne 1.3.2 Plan for new development and investment opportunities on the existing and planned transport network

The Plan Melbourne 5 Year Implementation Plan includes a number of actions relevant to the Parkville NEIC:

- prepare long-term land use and infrastructure plans for NEICs[3] that will:
  - develop a shared vision and desired outcomes statement
  - define its specialised activities and capacity to expand over time
  - identify constraints on employment and business growth, and the preconditions necessary to facilitate investment
  - define the planning boundary
  - evaluate whether existing planning controls provide effective planning frameworks
- develop business investment strategies for the NEICs
- review planning provisions for health and education precincts to support their continued effective operation and their future growth and expansion
- implement further improvements across the metropolitan bus and tram network including improving connections to and between NEICs and urban renewal precincts.

[3] Parkville will be led by the Victorian Planning Authority, and is yet to formally commence.

2.4 Planning scheme provisions

A common zone and overlay purpose is to implement the Municipal Planning Strategy and the Planning Policy Framework.

(i) Zones

The Amendment applies to land in multiple zones.

(ii) Overlays

Built form overlays

The proposed DDO8 interacts with various existing Development Plan Overlays (DPOs) and DDOs which contain built form requirements (mandatory and discretionary), varied shadow controls (mandatory and discretionary) for parks and public spaces, and protections for emergency flight path airspace for nearby hospitals. The key overlays are summarised in Table 3.

Table 3: Key built form controls that interact with DDO8

Overlay	Area/Precinct	Relevant controls
DPO8	Carlton Housing Precincts	Contains general principles and objectives for built form, but no specific building height limits
DDO10	General Development Area – Built Form Requirements	Building heights, street wall heights and overshadowing of parks
DPO11	Queen Victoria Market Precinct	Overshadowing of Flagstaff Gardens
DDO21	Wellington Parade and Clarendon Street (East Melbourne)	Building heights and equinox overshadowing of Yarra Park and Fitzroy Gardens
DDO40 and DDO60		Overshadowing controls relating to the Shrine of Remembrance and surrounds
DDO45	Swanston Street	Overshadowing controls relating to Lincoln Square
DDO48	Central Carlton North	Building heights and street wall heights
DDO61	City North	Street edge/wall height (Table 1) and Sunlight to Public Places (Table 2)
DDO63	Macaulay Urban Renewal area, Kensington and North Melbourne	Building heights, street wall heights
DDO65 and DDO66	Areas surrounding the hospitals, including University of Melbourne main campus	Hospital Emergency Medical Service Flight Path Protection

Heritage Overlay

The Panel took submissions and heard evidence on the interaction of the proposed DDO8 with the Heritage Overlay applied to properties north of Grattan Street within the University main campus, south of Grattan Street adjacent to University Square, and in Carlton.

2.5 Ministerial Direction 11

The Explanatory Report discusses how the Amendment meets the relevant requirements of Ministerial Direction 11 (Strategic Assessment of Amendments) and *Planning Practice Note 46: Strategic Assessment Guidelines*, August 2018 (PPN46). That discussion is not repeated here.

2.6 Council strategies and reports

(i) Open Space Strategy and Technical Report

Council's *Open Space Strategy, Planning for Future Growth* June 2012 (OSS) provides the overarching framework and strategic direction for open space planning across the municipality. A key objective is to provide open space within walking distance to the community, particularly in areas of forecast population growth.

The OSS sets out key directions:

- maintain and expand a quality open space network
- provide distributed open space within easy walking distance
- improve community health and wellbeing
- mitigate the urban heat island effect and environmental improvements.

The OSS notes the need to upgrade and maintain open space to ensure quality can be maintained. Supporting health and wellbeing, increasing biodiversity, improving stormwater quality and mitigating the urban heat island effect are all benefits of green open space identified in the OSS.

The OSS is supported by the *City of Melbourne Open Space Strategy Technical Report,* Thompson Berrill Landscape Design and others, June 2019 (the OSS Technical Report) which provides the technical research, definitions, analysis and recommendations that underpin the OSS.

(ii) Urban Forest Strategy

The City of Melbourne U*rban Forest Strategy 2012-2032* sets a target of 40 percent tree canopy cover by 2030 on public managed land. The Strategy sets directions on greening the city for adaptation to climate change, mitigating the urban heat island effect, healthy ecosystems and a water sensitive city.

(iii) Nature in the City Strategy

The *City of Melbourne Nature in the City Strategy* (2017) sets directions to create and maintain healthy ecosystems and thriving biodiversity in the city in the context of population growth, urban densification, increase in invasive species and climate change. Priorities include:

- improve ecosystem health and biodiversity
- develop a more ecologically connected urban landscape.

2.7 Structure Plans

Structure Plans have been developed for several of the urban renewal areas that are within the proposed DDO8 area, which are summarised in Table 4. The amendment that implemented the Structure Plan (where relevant) is provided in brackets.

Table 4: Summary of relevant Structure Plans

Structure Plan	Relevant aspects
City North Structure Plan 2012 (C196)	**Principle 2** – Create a liveable local neighbourhood City North becomes an active precinct with good, high quality public open spaces that cultivate active public life and support community wellbeing.
Arden Macaulay Structure Plan 2012 (C190 Part 1 and Part 2))	**Principle 6** – Regenerate the public realm Create 'great streets' for people by establishing built form controls that provide sunlight to the street in winter, shade in summer and do not create windy conditions Key Direction 4 – Upgrade the Moonee Ponds Creek parkland corridor and establish five new parks
Macaulay Refresh	**Objective 13** – Create a network of high quality open spaces in Macaulay. Design recommendations include 'to ensure that new development does not cast any additional shadow over Buncle Street Reserve, Canning Street and Macaulay Road Reserve, North Melbourne Recreation Reserve, Gardiner Reserve and Robertson Street Reserve from 10am to 3pm on 21 June…'
Arden Urban Renewal Precinct Structure Plan	Ensure new development does not cast any additional shadow to that cast by buildings built to the maximum street wall to the new neighbourhood park in Arden Central from 11am to 2pm from 21 June to 22 September. Ensure new development does not cast any additional shadow to that cast by buildings built to the maximum street wall to Clayton Reserve, North Melbourne Recreation Reserve and the new open space park I Arden North from 11am to 2pm on 22 September.
West Melbourne Structure Plan (C309/C385)	Development must not overshadow Flagstaff Gardens between 11am and 2pm on 22 September and 22 June.

2.8 Other recent Amendments

(i) Amendment C270 – Central City Built Form Review

Amendment C270 was prepared by the Minister for Planning and applies to land generally within the Hoddle Grid and Southbank. The amendment introduced permanent built form provisions with a new Design and Development Overlay Schedule 10 (DDO10) to address impacts of development in the Central City, including increased overshadowing of public spaces.

The DDO10 applies a tiered system of mandatory and discretionary overshadowing controls to protect parks and other public spaces within the Central City. First tier public parks and spaces are protected by a mandatory requirement for 'no additional shadow' between:

- 11am and 2pm at 22 June for the Yarra River Corridor
- 11am and 3pm from 22 April to 22 September for Federation Square, City Square, State Library Forecourt, Shrine of Remembrance and its northern forecourt

- 12pm and 2pm from 22 April to 22 September for Bourke Street Mall south of the tram tracks and Boyd Park.

Other parks and spaces generally have discretionary protection with a mixture of winter and equinox based controls, and varying hours of protection. Discretion is guided by a test of whether the shadow would unreasonably prejudice the amenity of the space.

Clause 22.02 affords all remaining parks and public spaces with protection at the September equinox between 11am and 2pm.

(ii) Amendment C245 – Queen Victoria Market

Amendment C245 (approved in August 2017) introduced a revised framework of planning controls to implement the principles of the Master Plan for the future of the Queen Victoria Market and its surrounds, and rezoned the existing carpark land at the market as a new public open space.

Clause 3 in the Development Plan Overlay Schedule 11 (DPO11) applies discretionary overshadowing controls:

> New development should not cast a shadow across the Flagstaff Gardens or the proposed public open space in Figure 1 between 11am and 2pm on 22 June, unless the Responsible Authority consider the overshadowing will not significantly prejudice the amenity of the open space.

(iii) Amendment C309/C385 – West Melbourne Structure Plan

Amendment C385 is with the Minister for Planning for approval under section 20(4) of the PE Act, after consideration by a Panel as Amendment C309. Amendment C385 proposes to amend DDO33 to guide future development in West Melbourne. The DDO33 currently includes a discretionary requirement not to overshadow Flagstaff Gardens between 11am and 2pm on 22 September and 22 June. The C309 Panel did not recommend any changes to this control.

3 Fundamental underpinnings and concepts

3.1 Modelling

The Amendment is supported by spatial modelling.

(i) Modelling of existing shadow impacts (as at 2015)

The Amendment and the Hodyl Report were informed by modelling which demonstrates the extent of existing shadow across Melbourne's parks:

- a 3D sunlight study undertaken by Harrison & White in 2016 (referred to throughout the proceedings and in this Report as the 'red map')
- later modelling undertaken in-house by Council's GIS team (referred to as the 'blue' and 'grey' maps).

The red, blue and grey maps show the shadows cast by existing development on the municipality's parks on 21 June. They were based on data contained in 3D files extracted from the 2015 3D 'city model' dataset describing all the permanent built structures in the municipality as at May 2015.

The red map shows shadows cast between 9am and 4pm, whereas the blue and grey maps show shadows cast between 10am and 3pm.

Importantly, all these maps in their static form show the aggregate of all shadows cast during the relevant time periods on 21 June. They do not isolate the shadow experienced at a particular point in the day, or demonstrate the way in which a shadow moves across a particular park. In this sense, they do not represent shadow in the way that a park user would experience the shadow, or reflect the user's ability to move into a different (sunny) part of the park as the shadow moves across the park.

The red map is a fixed output of the Harrison & White study, and could not be manipulated to show anything other than the aggregate shadow across an entire day. On the other hand, the blue and grey maps produced dynamic outputs that could be manipulated to show the shadow impact on a park at a particular time (or increments of time) during the day. They also showed how shadow moves across the park throughout the day. Council demonstrated this at the Hearing, and provided the maps online to the Panel so that it could itself check the status of shadows across a particular park at a particular time or period of the day.[4] The Panel found these extremely helpful in understanding the impact of shadows on particular parks.

(ii) Modelling that informed the DDO8 area

Council explained that identifying the area to which the DDO8 is to apply was challenging. Ideally, the controls would only be applied to those properties that, if developed, would actually cause overshadowing of the parks. This was not possible because it is not possible to predict the likely form of development on every site due to (among other things) a mix of mandatory and discretionary built form controls, the absence of any relevant built form controls on some sites, and the potential for future subdivisions, amalgamations and demolitions.

[4] Links are contained in Council's Part A submission, Document PD42.

For this reason, the Hodyl Report (discussed in the next section) proposed applying the DDO8 to the whole municipality. However, Council determined that this was not practical or reasonable, given the DDO8 would introduce an additional permit requirement to a very large number of properties that in reality have no prospect of ever causing overshadowing to a public park.

Council therefore undertook GIS modelling to identify properties that have the potential to overshadow parks, based on the intersection of two 'volumes':

- the 'park solar volume' for each park, which identified the airspace around a park that needs to be preserved in order to prevent further overshadowing between the relevant hours of protection on 21 June
- the 'maximum developable volume' for each property, defined by extending the property boundaries up to the 'maximum developable height' for each property.

If the maximum developable volume extends into the park solar volume (as shown in Figure 2 below), the DDO8 is applied.

Figure 2 **Figure showing how the maximum developable volume of a property can extend into a park's solar volume**



Source: Figure 5.4 from Mr Smith's Expert Witness Statement

Maximum developable height

The 'maximum developable height' for each property was determined using the following principles:

- if a mandatory height control applies, that height was applied
- if a mandatory height control applies but the property is in residential zone, 30 percent was added to the height to account for non-residential development that is not subject to the mandatory height limits

- if a discretionary height control applies or if no height control applies, the maximum height was assumed to be 320 metres.[5]

Council submitted that this was a conservative approach as it does not take into account discretionary height limits, setbacks or other planning restrictions that might affect the developable extent of a property.

Council recognised that it is 'fanciful' to expect a 320 metre tall building would be built in most places outside the Central City, but adopting any other assumed height of development would necessarily be arbitrary and would risk missing future buildings that may be constructed above the assumed height, and that would extend into a park solar volume. Council submitted:

> The trade-off is that applying a 320m cap means that a permit will be triggered under DDO8 for development proposals that will not overshadow a park on the winter solstice. Council notes however, that this has been accounted for in the drafting of DDO8, as Clause 5.0 Application Requirements includes the "as appropriate, to the satisfaction of the responsible authority" limitation explained earlier.

Model re-run

Dan Smith gave expert evidence in relation to GIS and modelling on behalf of Council and explained that the modelling used to determine the DDO8 area was initially run in May 2019, before exhibition of the Amendment. The modelling was run again in March 2020. Mr Smith's witness statement appends the map outputs for both runs.[6]

The 2020 re-run identified certain properties that were initially thought to have the potential to overshadow, but in fact do not. Other properties were initially assessed as having no overshadowing potential, but in fact do.

(iii) Development capacity modelling

Council undertook further modelling to identify a subset of properties within the DDO8 area that could lose development potential by reason of the DDO8 – in other words, those properties which, if developed to the maximum allowable height, would extend into the park solar volumes (and would be prevented from doing so by the mandatory controls in the DDO8).

The development capacity modelling was based on a more realistic set of height assumptions than the 'maximum developable height' that was used to inform the DDO8 area:

- if a mandatory height control applies, that height was applied
- if a mandatory height control applies but the property is in residential zone, 30 percent was added to the height to account for non-residential development
- if a discretionary height control applies, 30 percent was added to the height to account for discretion or uncertainty
- where no height control applies, and the property is within the Capital City Zone or Docklands Zone[7], the maximum height was set at 80 metres
- where no height control exists for properties outside of the Capital City Zone or the Docklands Zone, the maximum height was set at 40 metres.

[5] 320 metres is the approximate height of Australia 108 (115-131 City Road and 70 Southbank Boulevard), which at the time of modelling was the highest approved built structure in the municipality.

[6] Document PD45

[7] Land in the Docklands Zone was subsequently excluded from the Amendment. See Chapter 10.3.

This modelling was used to produce the 'Property Height Reduction at Boundary' map.[8] This map was provided to Dr Spiller, who then further 'sieved' this set of properties to identify the properties in the DDO8 area that were considered 'developable' when assessing the impact of the DDO8 on overall development capacity within the municipality (see Chapter 5.1 for more detail).

(iv) 2020 comparative modelling

Finally, Council undertook comparative 2015 to 2020 modelling using updated aerial imagery to identify changes in built form and shadow impacts since 2015 as shown on the red, blue and grey maps. The key purpose of this modelling was to aid the Panel's understanding.

3.2 The Hodyl Report

The Amendment is underpinned by the Hodyl Report, which described its objective as:

> The overall objective of this study is to establish appropriate sunlight levels for public parks across the remaining areas within the municipality (outside of the Hoddle Grid and Southbank area).

The Hodyl Report included parks in Docklands, although Docklands is excluded from the Amendment (see Chapter 9.11 for more detail).

The Hodyl Report asks the following key questions:

- What levels of access to sunlight do people need to lead healthy, active lives?
- What are the appropriate policy settings to meet people's needs?
- How can the provision of good sunlight access be balanced with the need to accommodate development intensification to support population growth?

The Report analysed the existing shadow impacts on parks based on the red, blue and grey maps, and categorised the municipality's parks into three groups:

- 133 'naturally protected' parks where sunlight access is high (generally in low-rise residential areas with heights under 4 storeys)
- 24 'vulnerable' parks where partial overshadowing has occurred or is likely based on existing height controls (generally in growth/urban renewal areas where heights of 4 storeys and above are allowed)
- 6 'lost' parks where significant winter overshadowing already occurs.

The Report set five key priorities, considered case studies of other cities and municipalities, and recommended a revised policy position in relation to overshadowing of Melbourne's parks.

The starting point for the revised policy position was no additional overshadowing of any parks at the winter solstice beyond the existing shadow. However, modelling undertaken by Hodyl + Co demonstrated that in growth areas, protecting an entire park in winter would often have an unreasonable impact on development of the surrounding land.

The key elements of the revised policy position recommended in the Hodyl Report are:

- revise the current 'tiered approach' to protecting sunlight access to parks to a 'flat' protection policy that maximises winter sunlight to all parks, irrespective of their size, location or function
- apply a mandatory no additional overshadowing protection to parks

[8] Document PD62

- shift from equinox protections to winter solstice protections
- extend the hours of protection from 11am to 2pm, to 10am to 3pm
- reduce the hours of protection for parks that are already significantly overshadowed
- allow some additional shadow over parks in growth areas, based on the scale of development allowed on the surrounding land
- exempt buildings 9 metres or lower in height.

The Hodyl Report made five recommendations, set out in Table 5.

Table 5: Recommendations of the Hodyl Report

No.	Recommendation
Immediate recommendations	
1	Update local policies to reflect the revised policy position. This requires updating the Municipal Strategic Statement and Clause 22.02 Sunlight Access to Public Spaces
2	Introduce a municipality wide Design and Development Overlay that manages sunlight access to open spaces
3	Introduce interim controls for the protection of parks vulnerable to winter overshadowing
Further work	
4	Prioritise investigation of potential locations for future parks that are likely to be subject to overshadowing due to current or proposed height limits.
5	Investigate other sunlight sensitive resources, in particular streets, within the municipality that should be considered for sunlight protection.

3.3 Park types

The DDO8 categorises parks by park type. Each type is subject to a different level of protection from overshadowing. The park types and level of protection are summarised in Table 6.

Park types are based on the Hodyl Report. Park Type 1 generally correlates to the Hodyl Report's 'naturally protected' parks, whereas Park Types 2 and 3 (East and West) are generally parks classified as 'vulnerable' in the Hodyl Report. Only one of the 'lost' parks in the Hodyl Report is subject to the Amendment (Neill Street Reserve in Carlton), as the other five are located in Docklands. Neill Street Reserve is a Type 1 park.

Table 6: Park types and levels of protection in DDO8

Park type	Which parks	Level of protection
1	Parks in low rise areas with good levels of existing sunlight access	No additional shadow beyond the 'existing shadow' between 10am and 3pm on 21 June
2	Parks in growth areas with height limits allowing development over 4 storeys	No additional shadow beyond the 'existing shadow' or 'allowable shadow' (whichever is greater) between 10am and 3pm on 21 June
3 (East)	Parks on the periphery of the Central City that are already surrounded by tall buildings (eg Domain Parklands, Botanical Gardens, Fawkner Park, and parks along Victoria and Spring Street)	No additional shadow beyond the 'existing shadow' between 10am and 2pm on 21 June

Park type	Which parks	Level of protection
3 (West)	Flagstaff Gardens	No additional shadow beyond the 'existing shadow' between 11am and 3pm on 21 June

3.4 Growth areas

Growth areas are areas identified for growth or urban renewal where heights of 4 storeys and above[9] are allowed under the existing planning controls. The modelling in the Hodyl Report demonstrated that often, protecting an entire park in a growth area in winter would have an unreasonable impact on the development potential of the surrounding land. Hence, additional overshadowing (that is, the allowable shadow) is permitted in Type 2 parks (which are generally in growth areas).

3.5 Existing shadow and allowable shadow

Existing shadow means the shadow currently cast on the park by existing buildings and works.

Allowable shadow is the shadow that would be cast by a hypothetical building on land abutting a park with a street wall built:

- to the street wall height nominated in the Planning Scheme, or
- if no street wall height is nominated, the overall building height nominated in the Scheme.

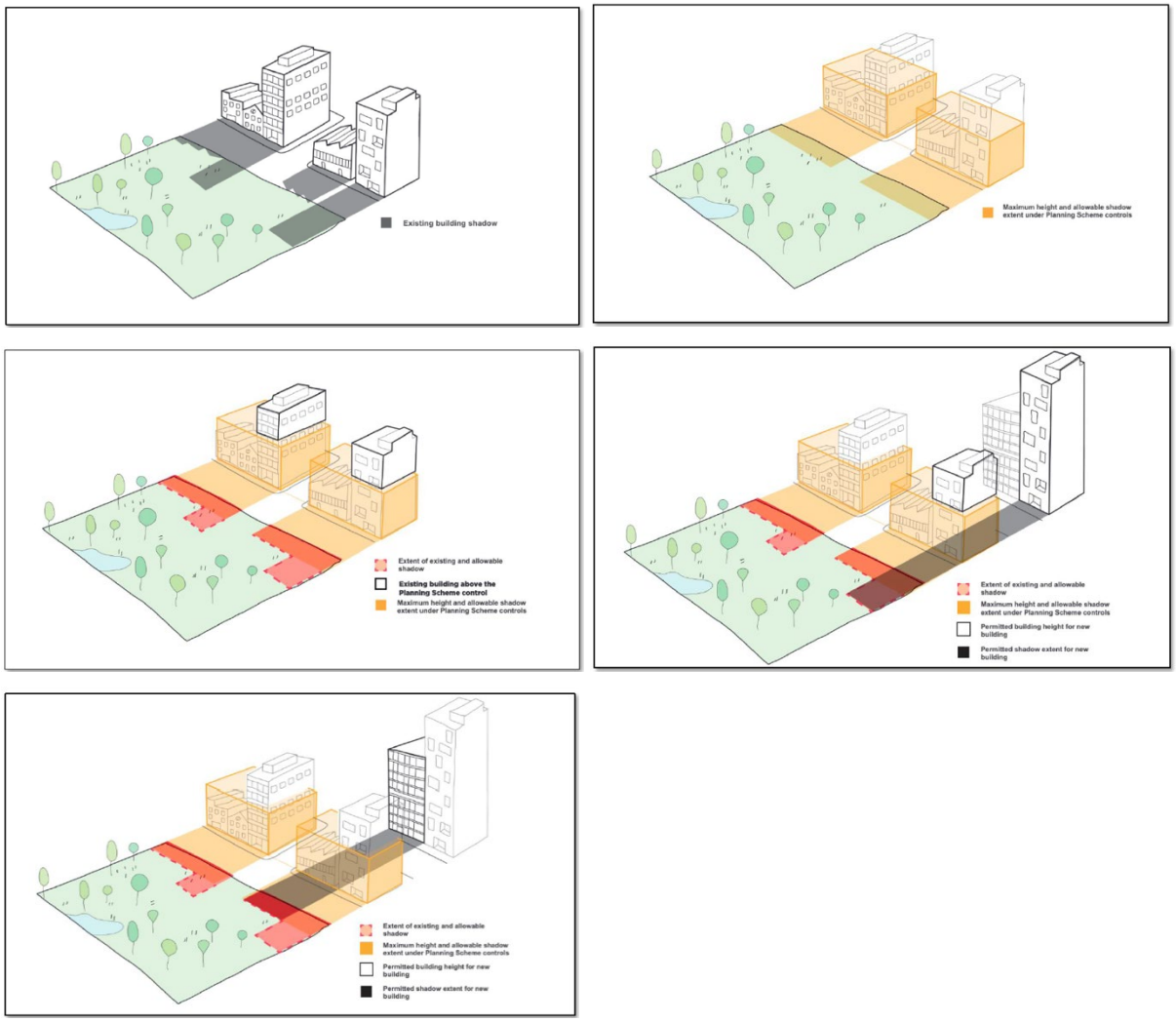
Council explained that a number of growth areas don't currently have any height controls (for example the industrial area in North Melbourne, the University of Melbourne main campus, and parts of the Parkville NEIC). In these areas, the existing shadow will dictate the developable envelope. However, if specific height controls are adopted for these areas in future, those controls will then dictate the allowable shadow (which may exceed the existing shadow).

The existing shadow and allowable shadow are illustrated in Figure 3 below, where:

- existing shadow is shown in grey
- allowable shadow is shown in yellow
- the 'permissible' shadow (ie the combined existing and allowable shadow) is shown in red
- the 'permitted' shadow from new development is shown in grey (in the fourth and fifth images).

[9] Ms Hodyl clarified in her Statement of Evidence that references in the Hodyl Report to low-scale areas being 4 storeys and below was incorrect. Low scale areas are 3 storeys or less. Growth areas are 4 storeys or more.

Figure 3 Illustration of existing and allowable shadow



Source: Council Part A submission

4 Strategic justification

4.1 Relevant policies, strategies and studies

(i) The Open Space Strategy and Technical Report

The OSS and the associated OSS Technical Report describe an open space hierarchy. The Technical Report states:

> The open space hierarchy and classification for this strategy defines the types of open space in the municipality. It is used to document the character, intended use and distribution of the existing open space, and assess what types of open space are required in the future.
>
> The hierarchy describes the level and size of an open space, and the classification defines the character of the space ….
>
> The hierarchy has been assigned to all individual open spaces based on the existing use and in some cases size. The Capital City, State and Regional open space is not necessarily based on size given that these roles can be fulfilled by any size of open space. The other hierarchy types of Municipal, Neighbourhood, Local and Small Local open space are more closely linked to size, as this is about the physical area available to accommodate the different levels of use.

The hierarchy of open space described in the OSS is summarised in Table 7.

Table 7: Hierarchy of open space in the Open Space Strategy

Type of open space	Character and function
Capital City	Iconic open space for activities and events of international, national, state and metropolitan importance such as Birrarung Marr, Federation Square and the Yarra River
State	Open space that is primarily set aside for the whole of the State of Victoria and not integrally linked with the image of Melbourne, including Royal Park, Yarra Par and Goschs Paddock
Regional	Primarily to cater to a broader Melbourne-wide catchment of visitors and the local community such as linear open space along the waterways and Princes Park
Municipal	Open space that is valued and principally visited by City of Melbourne population with facilities of a broader scale than a local or neighbourhood focus, such as JJ Holland Park, North Melbourne Recreation Reserve and Powlett Reserve
Neighbourhood	Within walking distance of home with a diversity of character and facilities that suits groups of people for an extended period of time, such as Argyle Square and Docklands Park
Local	Within easy walking distance of home and providing for at least two activities, such as a playground and open grassed area with seats. Examples include Clayton Reserve and Jolimont Reserve
Small Local	Close to home and provide for single use including rest and relaxation, play, socialising, urban heat mitigation etc

Type of open space	Character and function
Small local link	Provides for improved connectivity between streets and open space reserves

(ii) The Hodyl Report

One of the key recommendations of the Hodyl Report – and a key feature of the Amendment – is to revise the current 'tiered approach' to protecting sunlight access to parks to a 'flat' protection policy that maximises winter sunlight protection for all parks. The Hodyl Report states that this treats all parks as equal and acknowledges that often the most important park is the one closest to where someone lives or works.

(iii) Clause 22.02

The current Sunlight to Public Spaces policy at Clause 22.02 provides for a three tired system of sunlight protection that works together with the applicable DDO. The highest tier relates to key public spaces within the Central City recognised as being of State significance.[10] The second tier relates to a range of other specifically nominated public spaces,[11] while the third tier relates to all other public spaces (with the exception of Docklands and City North where the policy doesn't apply and there are alternative shadow provisions). The level of protection for each Tier is summarised in Table 8.

Table 8: The current approach to tiered protections

Tier	Protection
Tier 1	Mandatory protection of sunlight at the winter solstice (under DDO10)
Tier 2	A range of discretionary controls at the equinox (under the applicable DDOs)
Tier 3	Discretionary protection between 11am and 2pm at the equinox (under Clause 22.02)

(iv) Planning Practice Note 70 – Open Space Strategies

Planning Practice Note 70: Open Space Strategies, June 2015 (PPN70) provides guidance to councils on preparing an Open Space Strategy.

PPN70 provides for background research to determine current and future needs, including classification of open space. It states that the classification system generally covers the catchment (who will use the open space), landscape character (what the open space looks like) and function (the role of the open space). The classification system provides the framework for analysing existing open space, potential future needs, and determining the future open space requirements of the study area.

[10] Tier 1 includes the Yarra River corridor, Federation Square, City Square, State Library Forecourt, Bourke Street Mall, Shrine of Remembrance and its Northern Forecourt and Boyd Park.

[11] Tier 2 includes Parliament Gardens, Treasury Gardens, Flagstaff Gardens, Parliament Steps and Forecourt, Batman Park, Birrarung Marr and others.

4.2 A non-hierarchical approach

(i) The issue

The issue is:

- whether the proposed 'flat' approach to the protection of sunlight to parks is justified.

(ii) Authorisation letter

The letter of authorisation to prepare the Amendment[12] requested that Council consider and finalise a range of matters prior to exhibition, including:

> - **Hierarchy of Parks**. Have regard to the Planning Practice Note 70 Open Space Planning and the City of Melbourne's Open Space Strategy 2012 in finalisation of the amendment for exhibition.

(iii) Evidence and submissions

Council's Part B submission outlined that the central purpose of the Amendment was to change the policy basis for protecting sunlight to parks at Clause 22.02, including removing the existing statement that "*not all public spaces have the same sunlight requirements*". The existing hierarchy in the Central City will remain (as provided for under the DDO10), however outside this area the policy is proposed to be revised to recognise that all parks are of value as the population grows and usage of parks increases.

Council submitted that there was a strong strategic basis for the shift in policy. It stated in its Part A submission that the strategic work and research that underpins the Amendment does not support the continuation of the hierarchical approach to public parks. The Amendment instead seeks to treat all parks as equally important, given the intensification of use across the municipality resulting from population growth, and in recognition that the park closest to where people live or work is often the most important park to them.

Joanna Thompson gave expert evidence in relation to open space planning on behalf of Council. Ms Thompson led the consultant team that prepared the OSS and OSS Technical Report. She confirmed that the hierarchy of spaces in the OSS is used to identify who uses the open space and the purpose for which they use it. It is influenced by a range of factors including size, location, scale and type of facilities, adjoining uses and urban context. It is also used to understand what type of facilities may be appropriate in the future and in designing new open spaces. She stated:

> As the author of the 2012 Strategy I can confirm that the open space hierarchy was not set up to guide different levels of winter sunlight access to public open space. Winter sunlight access to open space is important for all types of open space.

Ms Thompson's evidence was that the smaller size of open space does not reduce its level of importance, as for many, these are the spaces that are more frequently visited because they are close to home or work. She also highlighted that these spaces can be the most accessible to the more vulnerable in the community including young children, older people and those with limited mobility. She stated:

> All public open space irrespective of its role in the network needs winter sunlight to make it attractive to use, maximise its adaptability and function now and in the future and for it to be practical to maintain.

[12] From the Department of Environment, Land, Water and Planning dated 26 October 2018.

Council called David Barnes to give town planning evidence. His evidence was that the Amendment is an example of a "*new and innovative*" planning approach to maintain high amenity levels in parks, within a municipality that has been experiencing very significant levels of urban development and population and employment growth for decades and is expected to continue to do so. While he recognised the Amendment represents a key shift from the existing hierarchical approach that places higher levels of controls on more significant parks, he considered that the Amendment has a high level of strategic justification and will make a valuable contribution to the suite of planning policies and controls currently contained within the Planning Scheme.

Leanne Hodyl gave expert evidence for Council in relation to the Hodyl Report. Her evidence highlighted that the existing tiered policy position generally relates to the frequency of use and perceived importance of the park, and is unrelated to the scale of development adjacent to the park.

The University of Melbourne and Polis Pty Ltd both submitted that a fundamental problem with the Amendment was that it treats all parks as equal. Polis submitted that the problem is compounded by the use of mandatory controls which eliminates the ability for a qualitative assessment of the impact of loss of sunlight from a particular park. Polis highlighted that this flat approach would afford Weedon Reserve, classified under the OSS as 'a significant road reservation', the same protection as other far more significant parks such as Yarra Park or Fitzroy Gardens. The University gave the example of a small local park in Carlton being afforded the same level of protection as the Shrine of Remembrance and its forecourt.

Tim Biles gave urban design evidence for the University of Melbourne, and while not challenging the removal of the hierarchy per se, he considered that the size of parks was important, and that the Amendment's approach to 'mid' size parks (1 hectare plus) should be further examined.

Council responded in its Part C submission that submitters had mischaracterised the flat approach, and confused the concept of treating all parks as equal with the concept of characterising all parks as the same. Council agreed that there are differences in parks, but submitted that in terms of access to winter sunlight, all parks should be treated equally, because whatever the values are that are ascribed to each park, in all cases those values are enhanced by sunlight access throughout the year.

(iv) Discussion

The Panel is persuaded that the shift away from the traditional tiered approach to sunlight protection to a flat approach of protecting all parks equally is strategically sound. While the tiered approach will be retained in the Central City under the DDO10, the change in focus in other parts of the municipality – to design the level of protection around the extent of change envisioned in an area surrounding a park, rather than the perceived importance of a park – is appropriate.

The Panel accepts Ms Thompson's evidence that the hierarchy of parks as outlined in the OSS is to identify a range of park users and to provide for a range of functions and purposes within the municipality's open space network. There is no evidence that the hierarchy in the OSS is based on a consideration of the importance of sunlight access.

With changes to the way people live, including smaller dwelling sizes often with less private open space, and the intensity of development and population growth in inner city areas, it is clear that the most important park to exercise, rest, play or socialise will not necessarily be a state significant

park some distance from people's homes. Rather, the most important parks will be those closest to where people live or work.

There was general agreement that sunlight in parks, particularly in winter, was beneficial to park users, increased a park's amenity and encouraged greater usage of parks. Therefore, while parks will maintain their different roles as identified in the hierarchy of the OSS, sunlight to a small local park is just as important as to a larger, state significant park.

(v) Conclusion

The Panel concludes:

- the 'flat' approach to sunlight protection to parks is justified.

4.3 A park specific approach

(i) The issue

The issue is:

- whether overshadowing controls should be designed using a park specific approach, considering the size of the park, how it is used etc.

(ii) Evidence and submissions

Michael Barlow gave urban planning evidence on behalf of the University of Melbourne. His evidence was that the DDO8 is a "*blunt and inflexible*" planning tool that applies a standardised mandatory approach and in effect assumes each of the park types are of a similar size, are used in the same manner, and possess the same facilities that will be affected by overshadowing. He considered that the appropriate extent of shadowing should be determined having regard to factors such as the role and function of the open space, its size and topography, and the time of the day and year that shadowing occurs.

Mr Barlow supported the notion of having designated areas that were significantly free from winter shadow for most of a day, however he considered that this should relate to protection of key features such as open lawns, play equipment etc. He recommended a more detailed review of each park, with an identification of the extent or percentage of the park that could reasonably be shadowed (such as 50 percent), and identification of which areas could be shadowed across the day. This would in effect create a 'moveable polygon area' that needed to be free from shadow at each hour, and for each park.

Mr Biles considered that the nexus between the size of a park, the way in which different parts of the park are used and the nature of shadow at particular times of the year needs to be clearly understood. His evidence was that larger parks are clearly able to provide more opportunity for sun or shade than smaller parks. He noted that the orientation of a park and its relationship to the surrounding built form will influence shadow.

On this basis, Mr Biles supported no further shadow on smaller parks, but considered that there was no justification for a mandatory control for larger parks because in the main there will only be a marginal impact. He considered that a further review of medium size parks of 1 or more hectares was required. His evidence was that if mandatory controls are to be pursued a more detailed analysis of individual parks and a broadening of park categories is required.

Council criticised the approaches suggested by Mr Biles and Mr Barlow, stating that they were unworkable. Council submitted that Mr Barlow's polygon approach would result in a far more complicated control that would require mapping of each park at each hour to identify the protected space. This detail would need to be included in the Planning Scheme through maps or an incorporated document, which would be unwieldy.

Council submitted that the moveable polygon would relate to the current use of the park only, and could not take account of future upgrades or changes to the park or the way in which it is used, such as changes to the location and type of facilities within the park. Nor could it take account of potential changes in the size of a park in future.

Council used Lincoln Square as an example, and showed that Mr Barlow's suggested approach of ensuring 50 percent of the park remains free from shadow at a particular point in the day could not be achieved based on existing buildings and discretionary building heights for properties around the perimeter.

More critically, Mr Barlow's approach would be inequitable, in that it would lead to a 'first mover' approach (once development of the first few sites had been undertaken and areas outside the polygon were shadowed, there may be little or no development opportunity left given the need to protect the polygon).

(iii) Discussion

There are clearly a number of approaches that could have been taken in reviewing sunlight access to parks. The Panel considers that the approach taken by the Amendment is sound and justified. While there may be circumstances in which parts of a park are protected that may not be significant in the overall context of the park, or parts that are not currently heavily used or used for extended periods of time, this is not necessarily a disbenefit. The Panel considers that this is outweighed by the overall benefit of the proposed approach.

The Panel agrees with Council that the approaches suggested by Mr Biles and Mr Barlow – analysing each park in detail and designing shadow controls accordingly – would likely result in a fairly subjective outcome. The question of what percentage of the park should be shadow free would need to be determined, and opinions would likely vary widely. Opinions on what parts of the park are important to keep shadow free would vary between users and across time. Further, it is difficult to see how it could be said to be a fair and equitable planning outcome to determine a percentage of the park that could be shadowed, that is then eroded by development of the first few sites, leaving little or no development opportunity for remaining sites.

In contrast, the approach taken by the Amendment has sensibly responded to the existing planning controls and the planning policy context for each park. Type 1 parks are in low rise areas where the risk of overshadowing is low, and it is a reasonable response to not allow further shadow on those parks. Type 2 parks are permitted further allowable shadow, determined on the basis of established height controls in the surrounding area. While this will lead to some curtailing of development opportunity on some sites, overall it provides a consistent and equitable level of protection to each park that has a sound and sensible basis.

Further, parks change. Numerous examples were provided to the Panel where Council had made improvements and changes to parks through the acquisition of more land to increase the size of the park, improvements such as fencing, moving or incorporating new facilities such as playgrounds, changes in plantings etc. Making an assessment of the acceptable extent of shadow

and what areas of each park should be protected at a particular point in time does not (and cannot) take account of changed use or development of a park over time or of the way people may use parks in the future.

(iv) Conclusion

The Panel concludes:

- a park specific approach is not warranted.

4.4 Vitamin D as a rationale for the Amendment

(i) The issue

The issue is:

- whether Vitamin D is an appropriate rationale for the Amendment.

(ii) Relevant policies, strategies and studies

Supporting healthy, active living by providing access to winter sunlight was one of the key reasons for the Amendment. The Hodyl Report states:

> While the importance of avoiding overexposure to the sun is well understood, the health impacts of insufficient sunlight exposure is not. Over 50% of Victorians are Vitamin D deficient in winter. This can have significant physical and mental health impacts. Providing people with the opportunity to lead healthy lives means providing them with opportunities to access sunlight and shade as they need. A growing body of health research indicates that access to sunlight in winter is as important as access to shade in summer. This does not diminish the need for individuals to take responsibility for moderating exposure to UV.

The Hodyl Report notes that exposure of unprotected skin to sunlight is one of the principal ways our bodies produce Vitamin D. Vitamin D deficiency is associated with a number of poor physical and mental health outcomes. Vitamin D production requires UVB, and UVB cannot penetrate through glass, sunscreen and most clothing.

(iii) Evidence and submissions

Council called Professor Caryl Nowson to give expert evidence in relation to the links between sunlight and health. She is a nationally and internationally recognised expert in Vitamin D. Her evidence was:

> There is overwhelming evidence that adequate vitamin D status is fundamental for good health, particularly prevention of falls and fractures, maintaining healthy bones and muscle, assisting in fighting viruses/infections, controlling diabetes and may exert a protective effect against developing cancer. There is also emerging evidence that regular short intervals of sun exposure may be protective against some types of melanoma. Furthermore, there is evidence that adequate sunlight exposure has additional health benefits, independent of vitamin D, such as increasing hormones in the body which produce a feeling of well-being and improved mental health similar to exercise.

Professor Nowson's evidence was that the frequency of exposure of bare skin to sunlight is the major determinant of Vitamin D status and most adults are unlikely to obtain more than 5 to 10 percent of their Vitamin D requirement from dietary sources. She stated:

> In summer, adequate vitamin D levels are likely to be maintained by a walk with arms exposed for 6-7 minutes mid-morning or mid-afternoon, on most days, if possible. In

> winter, the task is more difficult, but depending on where in Australia people live, walking outside at lunchtime from 7-30 minutes, with as much bare skin exposed as feasible, most days, is likely to be helpful. People with darker skin are likely to need 3-6 times longer sun exposure.

Professor Nowson recognised that Vitamin D supplements can be taken, however gave evidence that inappropriate doses can cause Vitamin D toxicity. This cannot occur with natural Vitamin D production from sunlight, as the body shuts down Vitamin D production when adequate levels are produced.

Overall Professor Nowson considered that anything that restricts access to sunlight in winter means that we are not making Vitamin D in our bodies and anything that encourages people to experience sunlight is a good thing. She supported the Amendment and considered that it would facilitate access to sunlight and will likely assist people in maintaining adequate Vitamin D levels, particularly during Spring, Autumn and Winter.

In cross examination by the University of Melbourne, Professor Nowson agreed that she didn't think there was evidence linking building height to Vitamin D levels, but maintained the more general notion that providing access to sunlight in winter is a good health outcome.

The University of Melbourne called Professor Ebeling (also an international expert in Vitamin D and osteoporosis and the Chairman of Healthy Bones Australia) to give evidence in relation to Vitamin D. His evidence was largely consistent with that of Professor Nowson, save in respect to Vitamin D supplements.

Professor Ebeling's evidence was that Vitamin D production during winter in Melbourne requires at least 25 minutes of sun exposure to 11 percent of the body's surface area at midday on most days of the week. This would be longer on cloudy days and for individuals with darker skin, where 3 to 6 times as long would be required. His evidence was that it was impractical to expect the population to get the required sun exposure to produce adequate Vitamin D levels in winter in Melbourne. He regarded supplements as a much more practical alternative that is more likely to be successful.

Relying on Professor Ebeling's evidence, the University submitted that the Amendment would likely have negligible, if any, effect on improving the levels of Vitamin D in the population during winter months, and that Vitamin D was not a legitimate rationale for the Amendment.

(iv) Discussion

The evidence of Professor Nowson and Professor Ebeling was largely aligned. The primary difference was that Professor Nowson considered any additional exposure to sunlight in winter to be beneficial (not just for Vitamin D production but also for other health benefits), whereas Professor Ebeling considered that a Vitamin D supplement is more effective.

The experts agreed that not all people can or would get sufficient Vitamin D from sun exposure in winter in Melbourne, even if all parks had full solar access. The weather for parts of winter mean that it is unlikely that people will be exposed to sun for enough time or have enough skin exposed. Some groups of people may get very little or no sun exposure at all in winter, for lifestyle or cultural reasons. Preventing a further decline in sunlight access to parks won't avoid Vitamin D deficiency in winter. It may however assist in maintaining adequate Vitamin D levels for some people.

The Panel accepts that there are other health benefits of sun exposure in winter. Professor Nowson highlighted a range of other health benefits, including a link to reduced risk of melanoma and mental health benefits. Mr Biles stated "*sunlight has a therapeutic influence even on a chilly day"* and "*access to winter sunshine in a park when it is available in winter is important for a variety of reasons but mainly because it makes us happy*". These sentiments are supported by the surveys undertaken as part of the background research underpinning the Amendment and the Hodyl Report that clearly show that people value winter sunlight for a range of reasons, including for general wellbeing.

The Panel is satisfied that providing public places with good access to sunlight in winter is likely to contribute to health and wellbeing, including Vitamin D benefits for some people. While the public health benefits of the Amendment may not be a determining factor, the Panel considers that they are a legitimate matter to consider as part of the overall rationale for the Amendment.

(v) Conclusion

The Panel concludes:

- considering public health and wellbeing benefits as part of the rationale for the Amendment is appropriate
- while the Amendment will not avoid the need for certain segments of the population to take a Vitamin D supplement in winter, protecting good access to sunlight in parks in winter is likely to contribute to health and wellbeing.

4.5 Winter solstice protection

(i) The issue

The issue is:

- whether winter solstice protection of parks (rather than equinox protection) is warranted and strategically justified.

(ii) Relevant policies, strategies and studies

The Hodyl Report recommends winter sunlight protection (rather than equinox protection) on the basis that the modelling analysis referred to in Chapter 3.1 shows that mid and high rise buildings would cast significant shadowing across many parks from 9am to 4pm at the winter solstice. The comparative modelling undertaken by Council in 2020 shows a further significant loss of sunlight access over the past five years, particularly in growth areas such as around Lincoln Square. The modelling also shows that further loss of winter sunlight will occur in areas where new development is to occur in line with preferred heights.

The OSS Technical Report includes guidelines for development adjoining or nearby open space (at page 169). They relate to the September equinox, rather than the winter solstice.

> The open space must receive a minimum of 3 hours of direct sunlight between 9am and 3.00pm during mid-winter and at least 5 hours of direct sunlight between 9am and 3pm on September 22. Where this minimum is not currently met, the development must not create additional overshadowing of the open space.

Appendix A of the OSS Technical Report summarises the community consultation which helped provide the basis for Council's understanding of how the community uses parks and the value placed on winter sunlight.

A number of existing controls in the Planning Scheme apply winter sunlight protection, including DDO10 that applies built form controls in the Hoddle Grid and Southbank. See Chapter 2.8 for more detail.

Council advised it undertook benchmarking of solar controls in cities principally from temperate zones like Melbourne but also looked at Sydney, Parramatta, Perth, Adelaide and Hobart and international locations including Wellington, Auckland, Vancouver, Toronto, New York, Boston and Chicago. The Hodyl Report noted the application of winter sunlight controls varies. Sydney, Brisbane, New York and Port Phillip Council have sunlight access controls for parks in winter. London and Toronto's controls focus on the equinox. The New York shadow assessment provisions refer to the need to "*demonstrate conditions in cold weather when people who do use open spaces rely most heavily on available sunlight for warmth*". The Panel was shown the winter solar carves for the City of Sydney around Hyde Park to illustrate how the controls worked in that city.

(iii) Evidence and submissions

Several submissions expressed concern over the shift from largely equinox protections currently in the Scheme to winter solstice protection access to all parks. Some submissions considered that equinox controls are consistent with best practice and that the proposed winter shadow controls exceed other benchmark cities. Several submitters including the University of Melbourne submitted that seeking to preserve winter sunlight in parks is a reasonable objective, but application of the mandatory DDO8 controls was the issue. Other submissions called for a hierarchical approach, with winter protections applied only to the 'most important' parks and equinox controls applied to local parks.

The University of Melbourne submitted that equinox based shadow controls for parks near its landholdings would continue to strike the right balance between development and shadow protection. It noted that an equinox based control has been the preferred approach of Council for several decades, and submitted that it was unreasonable to change to a 'one-size fits all' winter control instead of a more detailed analysis of the impact on a park-by-park basis involving assessment of winter sunlight controls against other strategic objectives for an area.

Council submitted that the move to winter solstice protection was an evolution of policy, supported by comprehensive strategic work. It submitted there was precedent for winter protections in recent amendments, including Amendment C270 (which introduced the DDO10 which provides winter solstice protection to some parks in the Central City). Council's position, in summary, was that the Amendment is seeking:

> … to preserve sunlight access to public parks as much as possible, in the context of competing built form controls…to maximise the amenity, character, useability, liveability, comfort and attractiveness of public parks for those future generations, as well as current residents and workers in the City.

Council identified a longstanding debate on the merits of winter solstice protection compared with equinox protection. The old format planning scheme (pre-1999) applied winter solstice protection (from 11am to 2pm). Largely equinox controls were introduced with the new format Planning Scheme in 1999[13], and retained on the first five year review of the new format planning scheme in 2004 (Amendment C60). Council's Part A submission notes that the Panels for the new format

[13] Winter solstice controls were retained for some areas such as the Yarra River.

amendment and Amendment C60 were critical of equinox controls for Central City and city fringe parks, preferring winter solstice controls.

Andy Fergus is a former employee of Council who was involved in the background work underpinning the Amendment. He presented to the Panel as a non-expert witness. His statement and presentation to the Panel outlined the community consultation and research that Council undertook that informed the policy shift to protection from overshadowing at the winter solstice. The community consultation revealed the value and importance the community place on winter sunlight in parks. Further, research had found:

- winter sun improves health and wellbeing outcomes
- many Melbournians are deficient in Vitamin D, particularly in winter
- winter sun is essential for chemical processes that ensure healthy plants and waterways in parks.

Mr Fergus also indicated that the research on overshadowing controls in other cities found that solar access to parks and streets is consistently regulated across cities, although solar access priorities differ between climate zones. Height controls are typically integrated with or derived from solar access requirements.

Ms Hodyl's evidence summarised the public consultation findings that contributed to the analysis in the Hodyl Report, including:

- If the sun is out, people want to have the opportunity to enjoy it, including in winter.
- No more sunlight should be lost.
- The degree of sunlight in parks influence people's level of enjoyment and the likelihood of spending time in public places, particularly in winter.

Polis in cross examination of Ms Hodyl suggested that the public consultation was not specific to the parks in question and was too general to be considered as a strategic underpinning of the move to protect winter sun. Council responded that the public consultation enabled a better understanding of how people use parks, the varied time of day, the breadth of different users beyond the assumed 'lunch time city worker' and the values and activities people enjoy when visiting a park, including in winter.

Relying on the evidence of Ms Thompson and Mr Callow (a horticulturalist with Council), Council submitted that winter sun aids in the horticultural management of parks, which is important in the context of climate change and mitigating the urban heat island effect. Maintaining healthy green spaces in winter allows a park to function better in summer.

Ms Thompson's evidence was that the appeal of open space relies on sunlight and the aesthetics it creates. Sunlight creates a warmer micro climate in parks, making them more comfortable and appealing in the colder months and encourages people – especially older persons and children – to be outside and active. Ms Thompson added that increased user pressure on parks requires active management. Open space needs to be healthy, robust and adaptable and winter sunlight is essential for these outcomes. Open grassed areas are important aspects of parks as a place to exercise and relax on and grass needs time over winter to recover from high use in the warmer months.

Mr Callow agreed with Ms Thompson, noting winter sun is needed to support garden beds and canopy trees and allow recovery of grass areas. He indicated in cross examination that the potential impact to trees individually from overshadowing is largely unknown. His evidence confirmed the cooling impact of trees and the contribution they make to addressing the urban

heat island effect. He added that Council's Urban Forest Strategy targets require good access to year-round sunlight to support the rapid and healthy growth of planted canopy trees.

(iv) Discussion

With some exceptions (mainly for Tier 1 parks in the Central City), overshadowing controls protecting public parks in the City of Melbourne currently provide equinox protection, rather than winter protection.

The Panel notes that all parties supported and agreed with the principle that winter sunlight is important for healthy parks and has multiple benefits for people. No party disputed the merits of seeking to protect winter sunlight access to parks – rather they were generally concerned with the mandatory nature of the controls, and the 'flat' approach whereby all parks, irrespective of their size, function or 'importance', are proposed to be afforded winter protection.

Winter sunlight to parks is supported by multiple clauses in the Planning Scheme and Council's policy intent to consider a shift to winter protection is clear from previous amendments.

The public consultation undertaken provided a deeper understanding of the value people placed on parks, the value of winter sunlight in parks and the impact of overshadowing by buildings on people's enjoyment of the park, particularly in the colder months. The Panel agrees with Council that the public consultation is an important underpinning of the policy shift to protection of winter sunlight access, and forms part of the strategic justification of the Amendment. Many submitters articulated how sunlight was critical to their use and enjoyment of Melbourne parks in winter and the attractiveness of neighbourhoods.

On its site visits (which were undertaken in the cooler months), the Panel noted the significant impact of existing overshadowing on some parks, in particular from apartment developments. The Panel observed that the impact of some recent development would result in some parks losing all winter sunlight at certain times of the day. The Panel observed future development sites would clearly add to the existing winter shadows if built to likely heights and to existing controls, as well as adding to the population density in the area (making the park work harder).

Melbourne is experiencing significant densification outside the Central City. The northern, western and eastern parts of the municipality have historically been low-rise, and Council's policy framework for these areas seeks to preserve and support that character while still accommodating some growth. This contrasts with the policy directions that support high-rise buildings in the Central City and the St Kilda Road precinct. Nevertheless, the built form in the older suburbs is also clearly changing, and state planning policy intends for further change to occur in areas earmarked for growth. As development gets higher, shadows get longer, particularly in winter.

The Panel's observations accord with the modelling and research undertaken by Council and the recommendations of the Hodyl Report that support the shift to winter solstice protections. Taller buildings that are being built in traditional low-rise areas around local parks are resulting in shadowing impact on the parks in winter. In some cases (such as Gardiner Reserve), those impacts are significant.

The Panel agrees with Ms Hodyl that local parks play an important role in the everyday lives of people who live, work and study in the nearby area. It does not agree that winter solstice protections should be reserved for only those parks in and around the Central City that have regional and State significance. It is just as important to protect winter sunlight in well-used and well-loved neighbourhood parks as it is to protect the more 'iconic' or 'grand' parks. All parks,

large and small, contribute to Melbourne's liveability and all parks should have protection from the impacts of winter overshadowing.

(v) Conclusions

The Panel concludes:

- Winter sun access plays an important role in providing high amenity in Melbourne's parks year round, and in ensuring park health.
- The move to winter sunlight protection is supported by high level policy, as well as community sentiment.
- The Panel supports the continued policy evolution of extending winter protections to parks outside the Central City, including to smaller local parks.

4.6 General strategic justification

(i) The issue

The issue is:

- whether the Amendment, including the shift in the policy basis for protecting sunlight access to parks, is generally strategically justified.

(ii) Evidence and submissions

Council explained that a key basis for Council's review of sunlight access to public parks is the significant increase in the municipality's population, which has more than tripled since 2001. The scale of development has also significantly increased in many parts of the municipality. While overshadowing controls in these areas have been largely equinox based, more recently there has been an awareness of the importance of sunlight within high density environments and in the winter months. This has been reflected in Amendment C270 (the Central City Built Form Review) and Amendment C245 (the Queen Victoria Market precinct).

Council submitted that winter sunlight protection for certain Central City and city fringe parks was a feature prior to the introduction of the new format Planning Scheme. Since this time, Council has on numerous occasions identified the need to review sunlight protection to parks, culminating in commissioning the Hodyl Report to answer the following questions:

- What levels of sunlight do people need to lead healthy, active lives?
- What are the appropriate policy settings to meet people's needs?
- How can the provision of good sunlight access be balanced with the need to accommodate development intensification to support population growth?

Council explained that the background work for the Amendment included research showing that many residents and workers in the municipality do not get enough sun exposure in winter, particularly those living or working in high-density environments with limited access to private open space.

Council highlighted that it is very difficult to create new parks given high land values, and existing parks therefore need to support the needs of existing and growing residential and working populations. Council submitted that this needs to include sunny and pleasant parks close to where people live and work, that are suitable for a range of activities across the year. Sunlight in winter is a critical component of this objective.

The Hodyl Report undertook research into the importance of sunlight for health and the environment, a review of park usage data, a review of VCAT case studies, and a review of international and Australian policy settings relating to protecting sunlight to parks. It also analysed modelling of the existing impacts of shadow on parks (as at 2015), and undertook further modelling of the impacts of shadow controls on development potential. The key findings were:

- While the importance of avoiding overexposure to the sun is well understood, the health impacts of insufficient sunlight exposure are not, including Vitamin D deficiencies and impacts on physical and mental health.
- There is a tension between development intensification and maintaining winter sunlight to parks. Access to winter sunlight in growth areas is at the greatest risk and yet is where sunlight is most needed.
- An analysis of existing park usage data shows that people use parks in different ways throughout the day.

Submitters spoke to the densification of Melbourne suburbs, the increased population and the lack of backyards in apartments. Submission 13 represents the sentiments of many of the submitters from the community:

> Thinking of the little park nearby between Hawke and Miller Streets, it's used by residents, workers, travellers staying at the several accommodation providers nearby, and people transiting between the bus, rail, tram and shops. People aged between cradle and grave use it to rest, read, eat lunch, picnic, play games, socialise and meet up. There's lots of use by lots of people lots of hours of the day. If the park were shadowed significantly, it wouldn't be used much. The same comments apply to other nearby parks such as between Victoria and Chetwynd Streets.

The University of Melbourne raised concerns with the strategic basis of the Amendment in introducing what it described as 'blunt and mandatory' controls that would inhibit the University's redevelopment opportunities that are expressly encouraged by the Planning Scheme and the vision for the overall Parkville NEIC. It submitted that there was strong strategic support in Plan Melbourne and the Planning Scheme for the University and broader Parkville NEIC and City North urban renewal areas to grow and expand. It submitted that this growth and expansion is crucial to the State's education and innovation economy, and to support the global standing of metropolitan Melbourne as a knowledge city. The University submitted that a proper and balanced assessment of the Amendment must be informed by these broader strategic considerations.

The University submitted that there was not adequate evidence to justify the proposed controls, and submitted that further analytical work should be undertaken to demonstrate a holistic approach to shadow impacts across the year, the impacts of shadow on a park's use and design, the size and functions of affected parks, and the context in which those parks are used. It called for a more nuanced and discretionary approach.

Polis submitted that the Amendment is contrary to a fundamental tenant of planning, namely that a planning decision should be based on both the strategic and physical context of a site and the appropriate application of policy. It pointed to the inconsistencies in how overshadowing issues were dealt with in Amendment C270, for which Ms Hodyl was also the key author of the background document. In Amendment C270, the provisions maintain the hierarchical approach of grading public open spaces and providing different levels of protection depending on the importance of the space. C270 also provides for a mixture of both mandatory and discretionary overshadowing controls. Polis submitted that such a fundamental policy shift, only a few years after C270 was gazetted, undermines the strategic justification for the Amendment.

(iii) Discussion

It is clear that the current planning controls have led to a meaningful loss of sunlight in various parks over time. The Hodyl Report identifies a group of parks in Docklands (as well as a park in Carlton) as 'lost' to winter solar access, and highlights the risk that further parks may be 'lost', or at least subject to significant further overshadowing, with further intensification of development in other parts of the municipality.

It is also evident that the community places a high value on winter sunlight in parks, with the significant majority of submitters supporting the Amendment. This was also highlighted in the feedback of the research and community engagement supporting the Amendment.

The Hodyl Report has tested the basis for the relatively significant policy shift reflected in the Amendment, and outlines a justification for the shift on the basis of:

- significant population and built form change and growth
- increasing recognition of the importance of winter sun in parks
- the finite nature of sunlight that, once lost to overshadowing, cannot be recovered.

The Panel agrees with Mr Barnes that the Hodyl Report is a thorough, well researched document that provides a sound strategic justification for the Amendment.

Overall and on balance, the Panel considers that the Amendment is sound and strategically justified, and will deliver net community benefit and sustainable development. Our parks are a precious and finite resource. They are having to work harder as the population grows. The COVID lockdowns presented a stark illustration of the value we place on our parks, and the variety of ways in which they are used.

Chapter 2 outlines an extensive set of policies that support maintaining a high quality network of open space to support growing populations and communities. Protecting sunlight to parks is a critical part of delivering a high quality open space network. Protecting sunlight to parks will also assist in achieving multiple policy objectives that seek to support a healthy and active population, healthy ecological systems and a high quality public realm. Few submitters challenged the benefits or importance of protecting sunlight access to our parks.

The Panel disagrees with the University's position that there has not been a proper consideration of the impact of the Amendment on broader strategies that support growth in urban renewal areas such as the Parkville NEIC. The approach to allowable shadow in Type 2 parks reflects consideration of these policies. Chapter 5.3 uses the Parkville NEIC and City North as a case study to explore this policy tension in more detail, including whether the Amendment strikes the right policy balance.

(iv) Conclusion and recommendation

The Panel concludes:

- the Amendment is strategically justified, and will deliver a net community benefit.

The Panel recommends:

Adopt Amendment C278melb to the Melbourne Planning Scheme as exhibited, subject to the following changes:

a) the Part A changes outlined in Document PD42
b) the Part C changes shown in Document PD88
c) the further changes outlined in the specific recommendations in this report.

5 Economic effects

5.1 Overall economic effects

(i) The issues

The issues are:

- whether the economic effects of the Amendment have been appropriately considered
- economic impacts on the community.

(ii) Evidence and submissions

Dr Marcus Spiller provided economic evidence on behalf of Council. He undertook a cost benefit analysis of the Amendment, and considered whether the benefits gained by the Victorian community in moving from the current planning controls to those proposed by the Amendment would outweigh the costs incurred to the community. If the benefits outweigh the costs, the Amendment can be said to produce a net community benefit.

Dr Spiller identified the primary cost of the Amendment as the diminished reserve of development capacity at the end of the assessment period (20 years). The benefits related to the value of the protected sunshine to park users, the retained visual amenity and the value of biodiversity and ecological services supported by greater sunlight access. These were measured by a 'willingness to pay' survey, said to reflect what an individual is prepared to give up (or pay) in order to gain a benefit, in this case, increased sunlight to parks. Avoided health costs were noted as a benefit but not quantified or monetised.

Dr Spiller sought to quantify the new residential and non-residential floorspace required over the next 20 years within the Amendment area, and undertook some assumptions about what development sites could accommodate this growth. He assumed certain sites were not developable or would be unlikely to develop – sites less than 200 square metres, sites subject to heritage overlays, sites already developed with floorspace greater than 75 percent of the estimated potential floorspace, sites with more than 5 owners, sites with irregular geometry, parks, and sites currently being developed or subject to a current planning application.[14] From this he estimated that around 10 percent of sites in the municipality (outside the Central City) were developable, with a combined area of 460 hectares.

Based on a series of other assumptions about achievable densities and the like, Dr Spiller concluded that some housing and employment floorspace that would (or could) have been built on particular sites within the DDO8 area would have to be delivered on the next available site. He concluded that while this may represent a financial loss to some owners, it may represent a gain to others, and he concluded that there would be no, or negligible loss to the Melbourne or Victorian communities as a whole.

Dr Spiller's evidence was that the Amendment would, however, reduce development capacity consumed over the next 20 years, with the demand displaced to areas outside the municipality.

[14] This is the 'sieving' exercise that Dr Spiller undertook to filter the properties identified on the 'Property Height Reduction at Boundary' map (Document PD62) down to those considered developable.

The cost of the Amendment relates to the costs of this displacement, and ultimately to the cost of supplying new housing in greenfield areas because of the displacement effect.

Overall Dr Spiller concluded that the Amendment would result in a net community benefit.

The University of Melbourne submitted that Dr Spiller's evidence was unhelpful – firstly, because no variables had been modelled such as a discretionary control or reduced hours of protection, and also because no direct costs of the Amendment such as onerous permit requirements had been allowed for. It also submitted that the quantum of lost development opportunity estimated by Dr Spiller was incorrect and grossly understated[15], and that the analysis failed to give weight to the lost development opportunities within a nationally significant precinct that cannot be replaced on the fringe of Melbourne.

The University also criticised the 'benefit' side of the assessment, given the 'willingness to pay survey' had the caveat that there was no intention to impose a levy, which they submitted leads to an outcome where a person is more inclined to say they would be willing to pay. It was also critical of the questionnaire behind the willingness to pay survey, that did not directly ask whether a person would be willing to pay to preserve winter sunlight to parks. It submitted that respondents were possibly answering on the basis of the need to preserve summer sunlight to parks, given the questionnaire was conducted during summer.

(iii) Discussion

The Panel found the concept of seeking to monetise the largely qualitative benefits provided by sunlight access to parks somewhat novel. While understanding the basis of the approach, seeking to give a dollar value to a qualitative outcome like sunlight, rather than a quantifiable measure like jobs or economic investment, is unusual in planning. The Panel agrees with the University that there were limitations with the willingness to pay surveys.

Overall, however, the Panel accepts Dr Spiller's conclusion that while there will be a loss in development capacity on some sites within the DDO8 area and a nominal decrease in reserve development capacity within the broader area affected by the Amendment, the benefits to parks and the community delivered by the Amendment will outweigh these costs.

The Panel acknowledges the significant policy support for investment and clustering of health and education and associated uses in the Parkville NEIC and City North. However this support is not in the form of increased height of buildings per se, but rather in encouraging co-location and investment and growth, and an acknowledgment that there needs to be a high level of amenity to attract business and workers. As evidenced from the Panel's observations on its site inspections, as well as documents relating to the NEIC, high quality outdoor areas are a critical part of the overall amenity and enjoyment of the precinct, particularly where there are large groups of people working, studying and living. The Panel considers that the Amendment is consistent with these overall objectives.

The Victorian Planning Authority (VPA) advised that future strategic planning work is expected for the Parkville NEIC, and the operation of the DDO8 may be reviewed and changed through this process where strategically justified. The Panel notes that if required and strategically justified at

[15] It noted that the 'Property Height Reduction at Boundary' map (Document PD62) identified many more properties whose development capacity would be impacted than Dr Spiller had identified as developable properties that would be impacted.

that time, the street wall or overall heights in the DDOs that apply to land around public parks in the NEIC could be increased, which in turn would allow for a greater extent of allowable shadow under the DDO8. Alternatively, other sites that would not impact on overshadowing to parks may be identified for further intensification or greater height.

As noted by Council, no other economic evidence was called by any party. There was no economic assessment of the potential loss of development opportunity for the University of Melbourne or within the NEIC more generally, and no evidence that the Amendment would provide an overall unacceptable economic outcome to the community.

Overall, the Panel accepts that the Amendment will result in some loss of development potential on some sites, with a likely economic loss to those owners. However this would be limited to sites adjacent or very close to public parks. There was no evidence presented to the Panel of a widespread impact. There is also likely to be an economic benefit to other sites through displacement of lost capacity.

(iv) Conclusions

The Panel concludes:

- the economic effects of the Amendment have been considered
- the Panel was not persuaded that the economic impacts to the broader community will be unacceptable.

5.2 General impacts on development capacity

(i) Evidence and submissions

Council engaged Mr Beau Fulwood to undertake an analysis of the impacts of the Amendment on development capacity on a number of individual sites. This was in addition to the evidence of Dr Spiller discussed in the previous section, which addressed the economic impacts of the Amendment at a broader community level.

Mr Fulwood was asked to test a number of sites (nominated by Council) in the DDO8 area using built form modelling to:

- compare the maximum built form achievable under:
  - the current planning controls (base case)
  - the proposed DDO8 controls
- determine the high level potential spatial outcomes for a range of typical uses
- understand the potential changes to any shadowing on the nominated public parks.

Mr Fulwood considered that the controls in the DDO8 were straightforward and easy to apply, and their mandatory nature made their interpretation clear.

The testing revealed that sites were impacted to varying degrees. Of the 17 sites tested, 9 were not affected and 8 were affected. Of the affected sites, the degree of impact to the development ranged from a 1 percent to a 28 percent reduction in gross floor area as a result of the DDO8. Sites were impacted in different ways, but the more affected sites tended to:

- be to the north of parks (and therefore impacted parks for longer periods of the day)
- have higher allowable height limits
- not currently be subject to shadow controls.

Mr Fulwood's evidence was that it was difficult to conclude based on the built form testing that one park type over another caused more impact to a development envelope. For example, he was not asked to test many Type 1 parks.

He stated that the controls tended to produce a terraced or 'wedding cake' envelope. His evidence was that wedding cake developments are often not the best urban design or architectural outcome and may not be approved in that form. This could have a further impact on the achievable development envelope beyond what is shown by his built form testing. He noted a number of other limitations of the built form testing:

- it is not exhaustive and does not represent every scenario where a site could be impacted by the DDO8 controls
- each site had several development assumptions applied that resulted in a specific built form outcome, and other development outcomes could result in a different impact
- he only tested office or multi-unit residential outcomes for each site with an assumption that some might have retail or hospitality uses at ground level – other typologies (such as public buildings or hotels) were not considered and could be impacted differently
- in assessing the base case scenario, he was instructed to assume that a discretionary height control was the limit – in other words, the testing did not take account of the possibility of developments being approved that exceed the discretionary limits.

Where relevant, Mr Fulwood's findings in relation to specific sites are discussed in Chapter 9.

5.3 Parks in growth areas (Park Type 2)

(i) The issue

The issue is:

- whether the Amendment strikes the appropriate balance in areas identified for growth, including City North and the Parkville NEIC.

(ii) Policies supporting the University precinct and Parkville NEIC

General policies supporting the Parkville NEIC, City North and the Medical, Bioscience and Education Precinct are discussed in Chapters 2.2 and 2.3.

Plan Melbourne recognises that the seven NEICs are focused on knowledge based businesses that locate close to each other for knowledge and resource sharing, and are distributed on high-capacity transport networks. In the case of Parkville, the Metro train station is being developed on the doorstep of the University of Melbourne. Plan Melbourne recognises that each NEIC will need high levels of amenity to attract business and workers, and that there needs to be investment in knowledge-intensive firms and jobs.

Clause 17.01-1R of the Planning Scheme (Diversified Economy – Metropolitan Melbourne) contains policy around planning for the redevelopment of the Major Urban Renewal Precincts in and around the Central City and to facilitate the development of NEICs to:

- maximise investment opportunities for the location of knowledge intensive firms and jobs
- provide a high level of amenity to attract business and workers
- be supported by good public transport services and integrated walking and cycling paths.

This Clause also seeks to support the employment and servicing role of Health and Education Precincts.

At Clause 21.02-6 (Knowledge City), the Planning Scheme recognises that the University of Melbourne and other tertiary institutions, together with industry, business and hospitals, provide a strong foundation for Melbourne's future growth and success in the global economy. It states:

> Research and learning institutions in the City are crucial to the State's education and innovation economy and the global standing of metropolitan Melbourne as a knowledge city.
>
> Melbourne hosts excellent research institutions in Bioscience and one of Victoria's greatest strengths is the co-location of key education, hospitals, research institutes and industry in the Parkville and Alfred Hospital precincts.

This support for the Knowledge City is reinforced in Clause 21.08, which supports the dense co-location of business, education and medical and research centres to strengthen the City's competitive and innovative capacity. Associated strategies seek to manage the off-site impacts of education and research facilities to protect the character and amenity of adjoining areas.

At Clause 21.14 (Proposed Urban Renewal Areas), City North is recognised as an area in transition with change already underway, including the expansion of the University of Melbourne and other institutions.

(iii) Evidence and submissions

Conflicting submissions highlighted the tension between maintaining current amenity in parks in growth areas, and absorbing growth in those areas.

On one hand, several submitters argued that the controls did not go far enough to protect growth area parks. They opposed any additional overshadowing of these parks, including the allowable shadow. They supported the notion that the DDO8 effectively converts discretionary built form controls that apply in the growth areas under other DDOs into mandatory controls, stating that sunlight is even more important in city neighbourhoods where sunlight is already (and increasingly) reduced by high-rise buildings.

On the other hand, other submissions opposed the proposed approach for Type 2 parks as it would limit development opportunities and potentially prevent growth areas reaching their projected capacity. Some went as far as submitting that the DDO8 would require such significant setbacks and/or reduction in height, it would render future redevelopment unviable.

These submitters raised concerns with the potential loss of housing and commercial floor area resulting from the 'unplanned' mandatory height controls around parks, given ongoing population growth pressures throughout metropolitan Melbourne. Several submitters considered that the Amendment was contrary to broader policies for these areas that are expected to accommodate growth. Many considered that the way in which the DDO8 effectively converts discretionary built form controls in other DDOs into mandatory controls was unfair and unjustified.

Some submitters considered that because city shaping urban renewal precincts such as Arden, the Parkville NEIC and Dynon are subject to the same or similar planning considerations as other high density areas such as the Hoddle Grid and Southbank, they should be excluded from DDO8 to allow specific solutions to be developed, as had been done for the Central City under DDO10.

Others specifically referred to the overshadowing controls in the Macaulay Precinct (Amendment C190 Part 1), the City North Precinct (Amendment C196) and the Central City (Amendment C270). They

noted that the DDO8 will impose more onerous overshadowing controls than those applied in these recent amendments. They submitted that this was unreasonable in Macaulay and City North, given the strategic work for these precincts was only undertaken in the last few years. They supported the current discretionary shadow controls which they believe adequately protect sunlight to parks and requested that land in these precincts be allowed to be developed in accordance with current (recently approved) built form controls.

Mr Barnes supported the proposed approach to Type 2 parks, stating:

> The use of an 'allowable shadow' provides for a degree of overshadowing to occur on Type 2 Parks. This is an appropriate planning response in 'growth areas', in which taller buildings are anticipated. It provides some allowance for additional overshadowing of parks, beyond the existing situation.

Mr Barnes queried whether the controls for Type 3 parks should also include allowable shadow, as is the case for Type 2 Parks, but made no firm recommendations in this regard.

Ms Hodyl supported the proposed approach to Type 2 parks, noting that it was aligned to the recommendations in the Hodyl Report.

A case study – the University and Parkville NEIC

Perhaps the most pointed example of opposition to the proposed protections for parks in growth areas was the University of Melbourne. The University submitted that the Amendment would impede or frustrate the University's redevelopment opportunities and the vision for the Parkville NEIC "*in circumstances where that redevelopment is expressly and specifically encouraged by the Scheme*". Relying on the evidence of Mr Barlow, it submitted that the Amendment fails to achieve an appropriate balance between protecting sunlight to parks, and unduly inhibiting important redevelopment opportunities in City North and the Parkville NEIC. It submitted that the Amendment:

> … directly challenges the University's objective to maintain and constantly improve its position as a world-leading centre for tertiary education. Any planning amendment which seeks to unreasonably suppress the development of the University or the NEIC is contrary to, and inconsistent with, the Scheme's strong support for the continuing development and intensification of the University's assets given the University's strategic and economic importance to the State…. Unreasonable suppression of development in the NEIC is contrary to the University's interests.

Mr Barlow's evidence was that the Amendment did not achieve an appropriate balance between the need to protect the amenity of parks, and policy objectives supporting the future development of the University and the Parkville NEIC and the growth aspirations for City North.

Mr Barlow considered that the policy framework clearly establishes directives for growth and consolidation of University and related research and industry activities, and encourages more intense built form in City North to accommodate growth. He noted that the flight path DDOs that apply to parts of the University's main campus, and the more recent introduction of further Heritage Overlays within the main campus and sites owned by the University in City North, are likely to further restrict the number of sites available to the University for expansion. He said this "*places greater emphasis on the need to redevelop sites unencumbered by heritage constraints in order to achieve the desired development outcomes of the Parkville NEIC and the broader City North area*".

Mr Barlow's evidence was that the Amendment does not recognise likely effects on development capacity in Parkville and City North, the importance of the location or the relative scarcity of

development sites to accommodate the forecast demand for research and educational facilities. Responding to Dr Spiller's evidence, Mr Barlow considered that while general lost development capacity arising from the application of the DDO8 may be able to be displaced to other parts of the municipality, this was not the case for the City North and Parkville, which is "*Melbourne's premier research, health and education precinct*" where "*one of the key benefits … is the concentration of major research and educational facilities in a focussed location*".

Mr Biles undertook modelling of the amount of sunlight to University Square, Lincoln Square and Princes and Royal Parks (where the University owns a number of nearby sites). He compared the amount of sunlight that the parks would receive at the equinox and the winter solstice under:

- existing conditions
- full buildout in accordance with the current controls[16]
- the DDO8.

He concluded that development capacity would be significantly impacted by the DDO8, for what he regarded as relatively modest gains in sunlight access. For example, to meet the DDO8 requirements, development around University Square would likely be reduced in height by 9 to 10 metres, with additional upper level setbacks required at key locations around the parks. The resulting gains in the amount of the Square in sun would be:

- 17 percent at 10am (under the current controls, 73 percent of the Square would receive direct sun, whereas under the DDO8 around 90 percent would receive direct sun)
- 4 percent at noon (under the current controls, 96 percent of the Square would receive direct sun, whereas under the DDO8 the whole Square would be in sun)
- 23 percent at 3pm (under the current controls, 59 percent of the Square would receive direct sun, whereas under the DDO8 82 percent would receive direct sun).

He provided modelling showing the heights and setbacks that would be required on buildings on the west side of Lincoln Square in order to comply with the DDO8 controls (see Figure 4). His evidence was that the controls would result in "*mediocre*" wedding cake forms (which he regarded as a poor urban design outcome) and impractical floorplates that would have significant implications for the access to and useability of the buildings.

[16] He assumed little or no increases in height on sites that are within a Heritage Overlay, and that development would not exceed discretionary street wall and building limits.

Figure 4 Impact of DDO8 on built form on west side of Lincoln Square

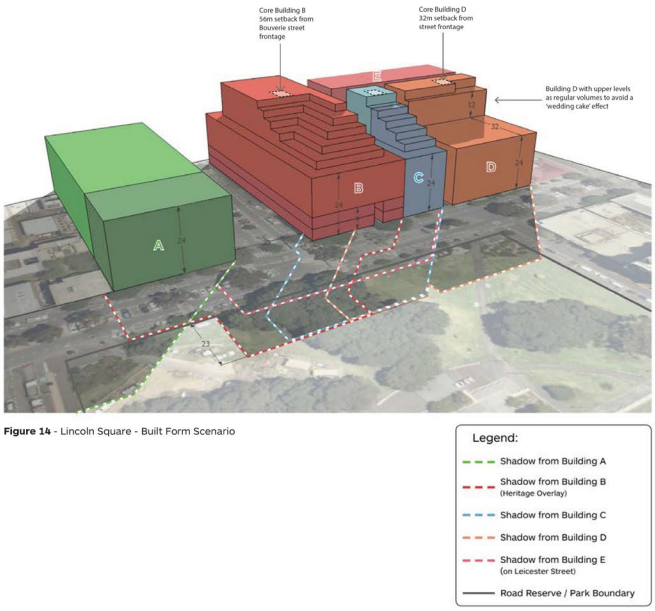


Figure 14 - Lincoln Square - Built Form Scenario

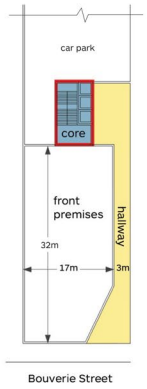


Figure 15 - Building D - Core Location

Source: Mr Biles' witness statement (Document PD58)

In response, Council acknowledged that the University is "*a very important institution to Melbourne generally, and to the City North precinct specifically*", and that its significance "*is recognised in the Melbourne Planning Scheme*". But this is only relevant to the extent that the University's development aspirations and the vision for the Parkville NEIC will actually be unreasonably suppressed if the Amendment is approved. Council submitted:

> In the absence of evidence of unreasonable suppression of development, and consequential net community detriment, there is no basis for the Panel to conclude that there is any conflict between the Amendment and the policy objectives that apply to the University and Parkville NEIC.

Council submitted that the University did not provide any evidence of the amount of floorspace required to achieve the growth ambitions for the University or the Parkville NEIC, or the timeframe over which that floorspace may be needed. Nor did it provide any evidence that supports a submission that the growth ambitions for the NEIC and University cannot be met if the Amendment is approved.

Council submitted that strategic planning for the Parkville NEIC, while at a very early stage, highlights the importance of high quality parks to the amenity of the area, and the achievement of the vision for the Parkville NEIC:

> In Council's submission, protection of amenity in the parks in the Parkville NEIC is important to support optimisation of investment and employment opportunities.

Mr Barlow effectively conceded in cross examination that sunlight in parks was a benefit that influenced the quality of the public realm, and may attract students, workers and researchers to the Parkville NEIC.

Future growth areas

The VPA submitted that caution should be exercised in applying the DDO8 to areas that have been identified for growth, but that are not yet advanced in terms of their strategic planning. It submitted that:

- parks in the Arden Precinct should be removed from the DDO8, as overshadowing protection will form part of the future planning scheme amendment for the draft Arden Structure Plan
- parks in the Dynon Precinct should be removed from the DDO8, as the impact of overshadowing should be considered at a later stage when strategic planning for that precinct is undertaken.

The VPA did not object to the application of the DDO8 to protect the parks in the Parkville NEIC, but foreshadowed that future strategic planning for the Parkville NEIC may revisit the overshadowing controls applied by the DDO8 if it was considered appropriate at that time.

VicTrack owns land in the Arden precinct to which the DDO8 is proposed to apply. It submitted that the land is used for transport purposes and is generally of low amenity. Some of the land is incidental landscaping amongst major roads and infrastructure. VicTrack submitted that it is difficult to understand the rationale for applying the DDO8 to this land, and encumbering land that is clearly needed for transport purposes:

> Controls such as those proposed, well in advance of any real urban renewal plan for Egate and the Dynon precinct, is premature and unreasonably encumbers land that is currently needed for transport purposes.

Council responded that while strategic planning for these precincts advances, it is appropriate for the DDO8 to protect and preserve sunlight amenity to their parks. It pointed out that in some areas (such as Dynon), there are currently no overshadowing controls protecting these parks. If they were excluded from the DDO8, the policy in Clause 22.02 would not apply because there are no "*key times and dates identified in the planning scheme*" for overshadowing protection for those parks. Council submitted that this would leave the parks vulnerable to extensive overshadowing.

(iv) Discussion

Balancing growth and development intensification in areas identified for change while protecting solar access to parks in those areas is clearly complex.

Based on Mr Fulwood's evidence and Dr Spiller's evidence, it is clear that the Amendment will restrict the development capacity of some (potentially many) sites in areas designated for growth or urban renewal.

The Panel generally accepts Dr Spiller's evidence that the lost development capacity (in a global sense) can largely be displaced to other areas within the municipality, for the reasons set out in Chapter 5.1. However Dr Spiller did not specifically consider the impact of lost development capacity on the University's main campus or its landholdings in City North, and where this capacity (or capacity in the Parkville NEIC more broadly) might be replaced.

Mr Fulwood's modelling included two sites owned by the University in City North. It demonstrated that:

- at 200 Leicester Street Carlton[17], achievable floor space would be reduced by 8 percent
- at 163-175 Bouverie Street Carlton, there would be no reduction in floor space.

While these seem like minor impacts, Mr Fulwood only modelled two of the University's sites (none on the main campus), and his base case scenario assumed no exceedance of the

[17] Part owned by the University and part owned by the Melbourne Business School.

discretionary street wall or building height limits. The actual loss in development capacity across the University's landholdings may well be more significant.

However, the Panel was not presented with any evidence that demonstrated that the Amendment would reduce the amount of available floorspace to the extent that it would start to impact on the achievement of the policy objectives for the Parkville NEIC, City North or future expansions of the University. The University's witnesses conceded in cross examination that significant amounts of development capacity remain on other sites owned by the University in the City North area that are outside the DDO8 area, including the City Ford site on the corner of Elizabeth and Pelham Street.

Parks in the Parkville NEIC, particularly those in City North, are doing considerable 'heavy lifting' in meeting the need for high quality open space to support the growing population of residents, workers and students in these areas. They will need to continue to do much of the heavy lifting as the populations in these areas grow. The Panel agrees with Council that it is particularly important that the amenity and quality of these spaces be protected and maintained. Preserving the amenity of these parks will, in turn, facilitate the achievement of some of the policy objectives for these areas.

In relation to future growth areas where the strategic planning is yet to be undertaken or completed, the Panel agrees with Council that it is important to protect and preserve sunlight amenity to their parks, particularly where there are no existing overshadowing controls (like in Dynon). Once the sunlight access to these parks is lost, it is lost forever. The Panel considers that it is important to maintain the quality and amenity of these open spaces to support the future population growth in these areas. It will be a matter for the VPA to consider whether any adjustments might be required to the overshadowing controls, including their application to transport land in the Dynon precinct, when it undertakes the detailed strategic planning that will be required in these areas.

Ultimately, the Panel was not persuaded that the Amendment fails to achieve an appropriate balance between protection of sunlight to the growth area parks and the policy objectives for the growth and development of these areas.

Finally, Mr Barnes queried whether the controls for Type 3 parks should also include allowable shadow, as is the case for Type 2 Parks. This seems sensible, as the Type 3 parks are in (or adjacent to) growth areas where development of 4 storeys or more is allowed. However no modelling was presented to the Panel which demonstrated what, if any, impact the allowable shadow would have on these parks in addition to the existing shadow. The Panel therefore does not have enough information before it to make a recommendation to include allowable shadow for Type 3 parks. Instead, it recommends that Council undertake further modelling to better understand the impacts of allowable shadow on Type 3 parks (or at least those parts of the Type 3 parks that interface with a growth area), and adjust the DDO8 controls accordingly.

(v) Conclusions and recommendation

The Panel concludes:

- The Panel was not persuaded that the Amendment will unduly restrict the development capacity in growth areas including Parkville NEIC and City North to the point where the policy objectives for these areas may not be achieved.

- The Amendment should apply to areas that have been designated for future growth where the strategic planning is yet to be undertaken or completed, such as Arden, Macaulay and Dynon.
- It seems consistent with the principles underpinning the Amendment to include allowable shadow on Type 3 parks as well as Type 2 parks, but more work is required to understand the impact this might have on Type 3 parks. This further work should be undertaken before the Amendment is adopted, and the DDO8 controls adjusted accordingly.

The Panel recommends:

Before adopting the Amendment, undertake further modelling to understand the impacts of allowing allowable shadow on Type 3 parks, and consider adjusting the controls in Table 1 of the Design and Development Overlay Schedule 8 accordingly.

6 Mandatory controls

6.1 The issues

The issues are:

- whether mandatory controls are appropriate
- whether there should be a mixture of mandatory and discretionary controls.

6.2 Relevant policies, strategies and studies

Planning Practice Note 59: The Role of Mandatory Provisions in Planning Schemes

Planning Practice Note 59 (PPN59) provides guidance on when mandatory controls may be appropriate. It states that mandatory provisions are the exception, and that the Victoria Planning Provisions are primarily based on the principles that there should be discretion for most developments, and applications are to be tested against objectives and performance outcomes rather than prescriptive mandatory requirements.

Nevertheless, PPN59 recognises that there will be circumstances where a mandatory provision will provide certainty, and ensure a preferable and efficient outcome. It sets out criteria to assess when mandatory provisions may be appropriate:

- Is the mandatory provision strategically supported?
- Is the mandatory provision appropriate to the majority of proposals?
- Does the mandatory provision provide for the preferred outcome?
- Will the majority of proposals not in accordance with the mandatory provision be clearly unacceptable?
- Will the mandatory provision reduce administrative costs?

6.3 Evidence and submissions

Council submitted that sunlight access to public parks is a finite and highly valued resource, and irreplaceable once lost. It is also vulnerable to cumulative impacts where individual applications are assessed on a site basis that may only have a minor additional shadow, however when combined with multiple applications, the impact is much bigger. The difficulty becomes where to draw the line. Is it appropriate to refuse one application that may only have a minor increase in shadow (one or two percent), but as a result of consecutive decisions over time has reached a point where the overall impact is deemed unacceptable? How is this determined, and is it equitable? Council submitted that if the proposed controls were implemented on a discretionary basis, incremental shadow impacts over time will ultimately undermine the purpose of the Amendment.

Mr Barnes, in giving planning evidence for Council, supported the mandatory controls, stating:

> There is a need for a long term view in terms of protecting the amenity and attractiveness of parks in the central municipality of a major metropolitan area, such as Melbourne. The concept of a 'death by a thousand cuts' has been recognised in previous planning hearings. The overshadowing of parks within areas where planning allows for taller built form, can incrementally lead to cumulative impacts which do not become apparent until well into the future.
>
> …

> Generally the key outcome for a park when discretion exists, is for a greater level of overshadowing than otherwise identified in planning controls. There is no benefit to the amenity or to the ecological values of a park from a discretionary control.
>
> In my opinion, the mandatory form of the controls proposed is appropriate for the overshadowing of parks in the City of Melbourne, outside the Central City.

In contrast, the University of Melbourne highlighted that the basis of PPN59 was to recognise the performance-based approach of the planning system, and that mandatory provisions are exceptional. It submitted that there was no legitimate criticism of the existing discretionary controls, such as those in DDO10 that relate to second tier parks, and that Council had not provided the justification to establish exceptional circumstances. While it accepted that preserving winter sunlight in parks was a reasonable objective in isolation, it did not consider that this justified blunt and mandatory controls that would impede and suppress redevelopment in an area of National significance.

The University of Melbourne submitted that if the Amendment is approved in its current form, some of the most special places in Melbourne will be subject to less stringent controls than parks protected by the DDO8. For example, some will have less hours of protection (Federation Square and others) and some are subject to a discretionary provision to allow for overshadowing which 'does not unreasonably prejudice the amenity of the space' (Parliament Gardens and others).

Mr Barlow's evidence was that the mandatory nature of the controls would 'elevate' overshadowing impact above other development considerations (and opportunities) already established in the strategic policies and detailed planning controls. He considered that the strategic rationale for mandatory winter controls was not made out. Mr Barlow's evidence was that the application of a mandatory winter test was not consistent with the policy approach adopted in other comparable cities interstate and internationally.

6.4 Discussion

The Panel agrees that there is a high test to justify mandatory controls, however, it considers that in this context, mandatory controls are justified. In the Panel's view, the primary need for mandatory controls relates to cumulative impacts of shadow over time.

The background material highlighted the extensive shadow that some parks now experience. The Hodyl Report found that six parks are 'lost' to shadow impacts and 24 are vulnerable to excessive shadow impacts. This is generally the product of cumulative impacts over time.

Using the example of Gardiner Reserve in North Melbourne, it is clear that the discretionary nature of the controls has not protected winter sun to this park. There is now significant overshadowing of Gardiner Reserve in winter, including of the playground. As a result, the amenity and comfort of this park has been significantly eroded. There is the potential for substantial increases in shadow if remaining sites to the west of the park are also developed in accordance with approvals.

The image below shows overshadowing on Gardiner Reserve at 3pm on 21 June, with the grey being the overshadowing from structures built before 2015, pink being overshadowing from structures built between 2015 and 2020, and green being potential overshadowing from structures approved for construction. The increments show the change across the day, with 3pm at the winter solstice being the most extensive shadow.

Figure 5 Cumulative overshadowing on Gardiner Reserve



Another example is the overshadowing to Lincoln Square. When assessing the impact of an individual building on the Square, the argument might be mounted that there would only be a marginal increase, or that given the shadow moves across the Square over the course of the day, the impact is not great. However, when the shadow impacts of other existing buildings are considered, along with the potential of other sites to be redeveloped in accordance with the DDO61 controls, it is evident that significant parts of the Square are or will be lost to shade in winter.

Other parts of the Planning Scheme require cumulative impacts to be considered. For example, a decision guideline in DDO49 to DDO54 that apply to Docklands states:

> The orientation and design of a development and whether it will cause significant overshadowing individually or as part of the cumulative effect on the public realm.

Yet despite this, five of the six parks in Docklands are identified as 'lost' in the Hodyl Report.

This cumulative form of assessment is particularly difficult with discretionary controls. A decision maker would need to weigh up the impact of overshadowing by a proposed development while also having regard to existing shadows, potential new shadows cast by buildings on sites that still had redevelopment opportunities, and the discretion to vary from the height or setback controls. They would need to make a judgment about what extent of shadow over a park at any particular time of the day was reasonable, and try and predict how the shadow impact may influence not only the current use of the park but also future use. This is a fraught and complex exercise.

The Panel considers that, while in some cases a relaxation of the controls may not lead to an adverse or unreasonable outcome, in the majority of cases (and cumulatively) the absence of mandatory controls would likely lead to unacceptable outcomes.

6.5 Conclusion

The Panel concludes:

- mandatory controls are supported.

7 Hours of protection

7.1 The issues

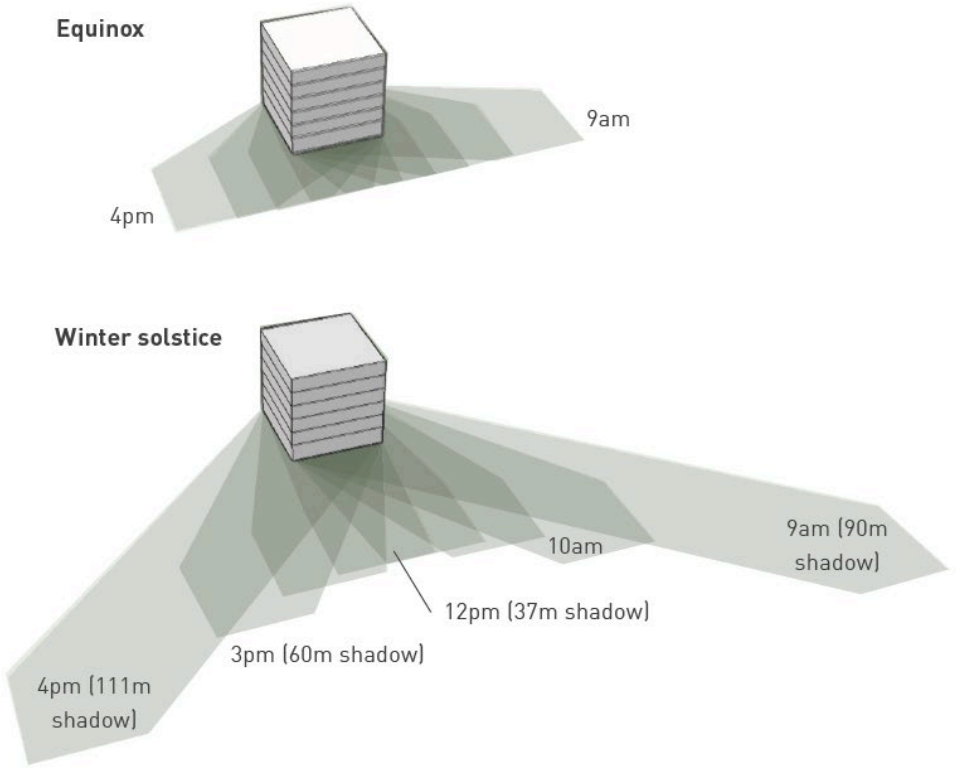
The issues are whether is it reasonable and necessary to:

- extend the hours during which sunlight is protected to 10am to 3pm at the winter solstice (most current controls apply from 11am to 2pm at the equinox)
- modify the proposed hours of protection for Type 3 parks.

7.2 Relevant policies, strategies and studies

The Hodyl Report contains a representation of shadow lengths for a 20 metre high building for the summer solstice, equinox and winter solstice through the day, partially extracted in Figure 6. Mr Biles' evidence referenced the diagram to illustrate the significant difference in shadow length between the equinox and the winter solstice (particularly at either end of the day), and hence the impact of a move to winter solstice controls coupled with the extended hours of protection.

Figure 6 Shadow representation at the equinox compared to the winter solstice



Source: Hodyl Report

7.3 Evidence and submissions

Some submitters supported the extension of hours, indicating they used their local parks in winter throughout the day. Submission 63 advocated extending the hours of sun protection to 4pm to enable school children to access sunlight in winter. Other submitters objected to the extension of hours because they would further limit site development around particular parks.

Council submitted that the hours of sunlight protection proposed were reasonable and informed by the research undertaken for the OSS and the Hodyl Report. Council submitted the modified hours of protection for Type 3 parks recognises the distinct high-rise development of St Kilda Road, the Central City and the area east of Flagstaff Gardens.

Ms Thompson's evidence was that the way parks are used has evolved over the years, and park users seek to access parks and sunlight throughout the day. She stated:

> The five hour period will increase the timeframe over which the open space will be attractive to use and spread the levels of use out to a wider window of time thereby increasing its capacity to accommodate everyone, particularly in the context of forecast growth. ….The 10am to 3pm time period will maximise accessibility for the community whether they are working full time, studying at university, looking after children, retired or working evenings and night shifts.

Further, Ms Thompson indicated that comparative community surveys she undertook for the development of the City of Yarra Open Space Strategy show that the reasons people give for visiting open space are more diverse now than in the past, and these activities (for example dog walking and socialising) are able to be enjoyed through the day. Ms Hodyl supported Ms Thompson's analysis, noting that the park usage data underpinning the recommendations in the Hodyl Report demonstrate that people choose to use parks in different ways throughout the day.

Ms Hodyl spoke to the Harrison & White red map, noting that shadowing can be seen across many parks from 9am to 4pm, with the shadows at 9am to 10am and 3pm to 4 pm having significant impact, noting that the length of shadow between 9am to 10am and 3pm to 4pm in winter is significant, and recommended that these hours should be discounted from the core hours of protection. Her evidence was that the proposed hours of protection being 10am to 3pm represents a balanced response that reflects the peak period of park usage but takes account of the potential impact on development capacity.

Figure 7 Diagram of hours of protection

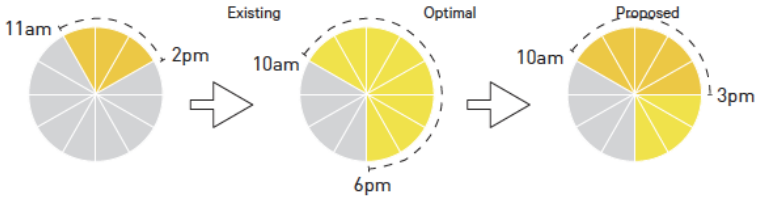


Figure 17 Hours of existing sunlight protection are 11am to 2pm (far left); peak periods of park usage space from 10am to 6pm (centre); taking into account the potential impacts on development capacity, a balanced approach which provides winter sunlight access between 10am and 3pm is proposed.

Source: Ms Hodyl's presentation (Document PD64)

Ms Hodyl added:

> Priority 2 of the [Hodyl] Report is to 'balance development with sunlight'. Park usage will increase as density increases. The relationship is key and this is the paradox of high growth development. The policy focus is the potential scale of the development, rather than the (assumed) usage of the park.
>
> Priority 3 is to 'maximise opportunities for people to access sunlight through the day for a variety of uses'. The application of the objective is to expand the current 11am to 2pm time frame as much as is practical, since this aligns with the health advice of when you can access Vitamin D – hence 10am – 3pm.

Mr Barlow's evidence (for the University of Melbourne) contested the usefulness of the park usage data gathered by Council that informed the Hodyl Report on various grounds. He noted at any rate:

> If this data is to be accepted, it is then difficult to understand why the shadow test commences at 10am (as opposed to 11am or 12pm) as the data indicates there is a significant increase in park usage from 11am rather than 10am.

Under cross examination, Mr Barlow agreed that sunlight between the hours of 11am and 2pm should be protected at the winter solstice, but that consideration could be given in the assessment of permit applications (under a discretionary control) to the 'shoulder' hours of 10am to 11am and 2pm to 3pm, with protection during those hours focused on important areas of a park.

Mr Barlow's written evidence included his analysis of shadow controls in New York, Toronto, London and Sydney. These controls are a mixture of equinox and solstice, and discretionary and mandatory controls, along with variation in hours of protection. Mr Barlow concluded from his analysis that:

> The proposed shadow test is generally more restrictive than the approaches undertaken in the interstate and international examples cited in the Hodyl + Co report given they:
>
> - Are applied at the winter solstice and are mandatory in nature
> - Adopt a relatively long test period covering morning and afternoon hours
> - Do not take into consideration park design, assets or use

Mr Biles' evidence was that the interaction of Melbourne weather, land use and shadow had not been sufficiently examined by Council to understand how and when people use parks in winter. Further, the size of parks is a factor in how they are used, how much sunlight and shadow falls onto a park, and where in a park this interplay occurs. Mr Biles' evidence echoed that of Mr Barlow that the survey material and usage data is not comprehensive, stating:

> The park usage studies while useful in a broad sense do not focus on why sun access is important
>
> - They are not focused on winter usage
> - They rely on Google data which is imperfect and not focused on the issue of winter use
> - They need to be less generic and more purposeful around the subject of winter sunlight.

Mr Biles' evidence was that sun angles have a major influence on the extent of the built form impact of a shadow control. When the sun is lower in the sky at the start and end of the day, particularly in winter, the shadows cast by built form are substantially longer (as demonstrated in Figure 6 above). His evidence included comparative tables of the angle of the sun at different hours of the day. At the winter solstice, the angle of the sun is around 25 degrees at 2pm, but reduces to around 19 degrees at 3pm, casting much longer shadows.

7.4 Discussion

The Panel agrees with Council that the proposed hours of winter sun protection (10am to 3pm) reflect a more holistic understanding of how people use parks for diverse reasons and through the day. People who wish to access sunlight in parks and the amenity and warmth it provides should be able to do so when it is convenient for them, provided it does not result in an unreasonable impact on development potential.

The Panel was not persuaded by evidence and submissions that questioned the validity and usefulness of the survey and park usage data. Nor was it persuaded by the recommendations of Mr Biles and Mr Barlow that Council should undertake more comprehensive analysis of park usage

and assess each park individually to justify the hours of sun protection. Setting aside the cost of that level of engagement and data gathering, such quantitative analysis will never capture the multitude of use by all people of all parks at all relevant times.

The Panel acknowledges Council's submission that areas north of the city near Melbourne and RMIT Universities and the hospitals support significant residential, student and shift worker populations that are able to utilise parks with more flexibility than the 'lunch time worker' populations of the Central City.

The Panel finds that the evidence of Ms Thompson and Ms Hodyl, supported by the community engagement for the OSS and the Hodyl Report, provides adequate insight into the behaviours of park users and what they value about parks. Access to winter sunlight is a feature of the data and feedback obtained through the community engagement. Further, the majority of written submissions to the Amendment clearly demonstrate that the community places value on being able to access winter sunlight in parks across an extended period of time. It is not often that a Council amendment can demonstrate such a high level of community support.

The Panel has considered whether the 10am and 3pm shadow controls are reasonable in light of Mr Barlow's evidence about the 'shoulder' hours and Mr Biles' evidence about sun angles at different times of the day. Mr Fulwood's built form testing (discussed in Chapter 5.2) clearly demonstrated the interplay and tension between building height and winter overshadowing. The Lincoln Square example is included below to illustrate the extent of shadow cast at different times of the day, and demonstrates a particularly long shadow at 10am.

Figure 8 **Extract from Mr Fulwood's built form testing demonstrating the extent of shadow at different times of the day**



Source: Mr Fulwood's built form testing (Document PD49)

The Panel considers that the loss of this extent of sunlight would have a material detriment to the park, contrary to the objectives of the Amendment.

The Panel believes that, notwithstanding the impact on some development sites, any variation to the hours proposed for Type 2 parks on the basis of particular sites or the aspirations of site owners, would undermine the strategic approach the Council has chosen to take (and which the Panel supports). Council's approach is well supported by research, evidence and community sentiment. On balance, the Panel considers that it represents a fair and equitable approach for future development across all Type 2 parks.

The modified hours for Type 3 parks reflects a balanced approach. The approach recognises the proximity of Type 3 parks to the Central City and St Kilda Road, where a higher built form already exists, coupled with the position of the parks relative to this built form. Parts of these parks are already significantly overshadowed in the earlier (Type 3 East) and latter (Type 3 West) times of the day. The Panel agrees it is appropriate to modify the hours of protection for Type 3 parks.

7.5 Conclusion

The Panel concludes:

- the proposed hours of protection for all park types are appropriate.

8 Development within parks

8.1 The issue

The issue is:

- whether the Amendment strikes the appropriate balance in relation to development within parks.

8.2 Evidence and submissions

Several submitters were concerned that the proposed mandatory controls under the DDO8 would apply to development within parks. Others submitted that while the DDO8 appears not to apply to development within parks, the changes to Clause 22.02 would apply. A number of submissions from major sporting venues located in parks requested that Clause 22.02 be amended to exclude developments within parks.

Other submissions did not support excluding development within parks from the policy or the controls, due to the detrimental impact overshadowing could have on biodiversity, habitat and park amenity. These submissions considered that it is imperative to protect parks from intrusion by buildings or other developments within the park boundaries. Examples included the State Netball and Hockey Centre, the Zoo and the Royal Children's Hospital as well as development adjacent to Royal Park such as the multistorey apartments in Parkville Gardens, the Sequiris site in Parkville and the Orygen Youth Mental Health Centre.

Council clarified that the DDO8 will only apply to land outside parks. However, Clause 22.02 does have implications for development within parks. Council noted that Clause 22.02 only provides guidance (not a mandatory requirement), and submitted that it was appropriate for the policy to apply to development within parks as those developments "*equally raise the possibility for unreasonable overshadowing impacts at the winter solstice*".

Both Ms Hodyl and Mr Barnes supported the application of Clause 22.02 to development within parks, but considered that the wording should provide more clarity. Ms Hodyl recommended the following re-drafting:

- Development outside of a public park must not cast additional shadow on any public park at key times and dates identified in the planning scheme.
- Development within a public park should be designed to minimise any negative impact that an increase in overshadowing may have on the use and value of the open space.

Mr Barnes recommended revising the policy to include the following:

> Development on land within the boundaries of a park should not unreasonably reduce the amenity of the park by casting additional shadows on the park between 10.00 am and 3.00 pm on 21 June, to the satisfaction of the Responsible Authority.

The Australian Football League (AFL), Melbourne Cricket Club and Melbourne Cricket Ground Trust (MCC) and Richmond Football Club presented a joint submission to the Panel highlighting the cultural significance of Australian Rules football to the Victorian (and Australian) community, and the critical role played by AFL facilities in parks. They submitted:

> The MCG and Punt Road Oval form part of Yarra Park which is one of the World's most iconic sporting precincts that is connected to vast open spaces in the form of the

> Fitzroy Gardens to the north, Yarra River lineal park, Birrarung Marr, the Botanical Gardens, Domain and Fawkner Park through to Albert Park.

The submission highlighted the Australian Sports Museum which is located in the MCG, and the many other sporting codes that are supported by the MCG and associated facilities including International Cricket, One Day International Games, and Big Bash League Games with an average attendance of around 46,400 people.

They submitted that these major sporting and cultural facilities cast shadows as a result of their function of accommodating large numbers of spectators, providing them with protection from the weather in all four seasons, and providing world class facilities for elite athletes. They submitted that attending and using one of these facilities "*is a central part of the park amenity*", and that "*constraints on the enjoyment and improvement/redevelopment of these facilities would adversely affect the amenity of these parks*". They submitted that suggestions such as those made by Ms Hodyl and Mr Barnes are problematic, because they do not recognise the contribution these facilities make at a local, regional, State and international level:

> In this respect, it is submitted that there ought not be constraint put on these State and Internationally significant facilities such that any redevelopment of these facilities is called upon to yield to localised shadow impacts.
>
> Put simply, the importance of these facilities and their ongoing improvement and redevelopment significantly outweighs any localised shadow impacts that redevelopment may create.

The AFL etc provided options for dealing with key sporting and cultural facilities within parks:

- Option 1 – exclude the operation of Clause 22.02 to buildings within Yarra Park
- Option 2 – acknowledge the special circumstances that apply to major sporting and cultural facilities by adding the following to Clause 22.02:

> **Shadow impacts from Major sporting and cultural facilities within Parks**
>
> Development of major sporting and cultural facilities within public parks which may cause shadow impacts is an expected outcome as part of the provision of facilities that maintain and strengthen Melbourne's distinctiveness as a leading cultural and sporting city with world-class facilities.

Carlton Football Club's submission to the Amendment highlighted the importance of Ikon Park (located in Princes Park) as the home of the Club.[18] Ikon Park is undergoing a major redevelopment which will establish it as the home of the AFL Women's League which the Club submitted "*support[s] broader State and Federal government initiatives targeting matters of diversity, education, health and well-being, equality, inclusion and safety*". The Club submitted that the changes to Clause 22.02 "*may cause unnecessary confusion in relation to the proposed Ikon Park redevelopment*", and (similar to the AFL etc) submitted that Clause 22.02 should specifically exclude listed development within parks including Ikon Park.

In response, Council submitted that the significance of the MCG and other sporting facilities in public parks "*does not mean that development of those facilities should be exempt from the policy in Clause 22.02*". It submitted that the 2006 Commonwealth Games Redevelopment Advisory Committee report (referred to by the AFL etc) highlights the importance of sunlight protection as one of the numerous policies to be balanced when considering developments in parks. It submitted that the Advisory Committee had regard to Clause 22.02, and concluded that despite

[18] Submission 77

the overshadowing of Yarra Park, the redevelopment of the MCG would nevertheless deliver net community benefit. It submitted:

> This is precisely the approach that Council considers to be appropriate where development of facilities within parks is proposed. The importance of sunlight access throughout the year should be one of the factors considered as part of a net community benefit analysis...

Council pointed out that redevelopment of the MCG stands and light towers is specifically exempt from planning requirements under special legislation. If, however, a new facility such as a standalone restaurant were proposed in Yarra Park (or any other park), the policy guidance in Clause 22.02 "*should be a factor in the responsible authority's decision on that permit application*".

In its Part C submission Council proposed the following wording in Clause 22.02:

> Development within a public park should not unreasonably reduce the amenity of the public park by casting additional shadow on the public park on 21 June. Before deciding on an application for development within a public park the responsible authority must consider:
>
> - Whether the facility is a major sports and event venue
> - Whether there is a need for additional facilities
> - Whether facilities can be provided outside the public park.

8.3 Discussion

It is clear that the DDO8 provisions will not apply to development within parks, as the mapping of the DDO8 does not extend to land within parks.

On balance, the Panel considers that the policy in Clause 22.02 should apply to development within parks. The Panel does not support specific exemptions as proposed by the AFL etc and Carlton Football Club.

Firstly, listing exempt developments is problematic as no comprehensive analysis has been undertaken to identify all developments (existing or future) within parks that might be considered suitable for exemption.

Second, much development within parks will not require a permit, and the policy in Clause 22.02 will not come into play. Development undertaken by or on behalf of the public land manager does not require a permit under the Public Park and Recreation Zone. In other cases, development is exempt from a permit by virtue of special legislation (in the case of the MCG) or site specific planning controls (in the case of Ikon Park).

Finally, and perhaps most importantly, development within parks will have an impact on sunlight access in the park, and the Panel agrees with Council that this is a matter that should be considered when assessing any permit application for the development.

The Panel recognises that many of the examples brought to its attention in submissions, such as the Orygen Youth Mental Health centre and the Zoo, deliver significant community benefit. Other examples, such as the major sporting facilities referred to by submitters, contribute significantly to our economy and international profile, and no doubt increase the amenity of the parks in which they are located.

However, this does not mean that the impact of the development on sunlight access in the park should not be considered, or that they should be given special treatment. The Panel agrees with

Council that the impacts of these developments on sunlight should be considered and balanced with the benefits that the facility is likely to deliver. Significant amenity or benefits delivered by a proposed development (such as contributing to the world class sporting facilities on offer at the MCG) would no doubt weigh heavily in its favour in a net community benefit analysis, despite the impacts the development may have on sunlight access.

8.4 Conclusions and recommendations

The Panel concludes:

- The DDO8 does not (and should not) apply to development within parks.
- It is appropriate for the policy in Clause 22.02 to apply to development within parks.
- The Panel is not persuaded that specific exemptions from the policy (for example for the MCG, Punt Road Oval and Ikon Park) are justified.

Various drafting alternatives were put to the Panel dealing with how the policy applies to development within parks. While the Panel understands Council's position that the policy should provide some criteria to guide the exercise of discretion, it agrees with the response of the AFL etc to the Part C controls that the criteria suggested by Council are not overly helpful, and lead to further questions rather than providing clear guidance to a decision maker.

Having considered the alternatives put, the Panel recommends:

Amend the Part C version of Clause 22.02 to delete the text under the heading 'Public Parks Outside the Hoddle Grid and Southbank' and replace it with:

> **Development outside a public park must not cast additional shadow on any public park at key times and dates identified in the planning scheme.**
>
> **Development within a public park should not unreasonably reduce the amenity of the public park by casting additional shadow on the park between 10.00 am and 3.00 pm on 21 June. Before deciding on an application for development within a public park that casts additional shadow on the park, the responsible authority must consider the benefits the facility would provide in that location to park users and/or the broader community.**

9 Site and park specific issues

9.1 The issues

The issues are whether the Amendment appropriately responds to various specific sites and parks raised in submissions and evidence. The sporting facilities in Yarra Park (the MCG and Punt Road Oval) and Princes Park (Ikon Park) are dealt with in Chapter 8.

9.2 University Square and Lincoln Square

(i) What is proposed?

University Square and Lincoln Square are both Type 2 parks.

The University of Melbourne and Melbourne Business School own multiple sites between University and Lincoln Squares, as shown outlined in red in Figure 9.

Figure 9 Melbourne Business School and University of Melbourne sites



Source: Mr Fulwood's built form testing, Document PD49

These properties are subject to the DDO61 (City North) which sets out (varied) discretionary built form requirements, and includes the following Design Requirements in relation to sunlight access:

Figure 10 Design requirements relating to sunlight to public places in DDO61

Sunlight to Public Places	
To ensure that new buildings allow daylight and sunlight penetration to public spaces, and open space throughout the year. To protect sunlight to public spaces. To ensure that overshadowing of public spaces by new buildings or works does not result in significant loss of sunlight.	Buildings and works should not cast a shadow between 11.00 am and 2.00 pm on 22 March and 22 September over public space, public parks and gardens, public squares, major pedestrian routes including streets and lanes, and privately owned plazas open to the public. A permit may only be granted if the overshadowing will not prejudice the amenity of those areas. Maximise the extent of the northerly aspect of public open spaces. Ensures sunlight reaches the lower floors of new developments.

Source: DDO61 Table 2

The DDO41 (Swanston Street) applies to land along Swanson Street where the University owns other properties. The DDO41 contains a similar design objective specific to overshadowing of Lincoln Square.

(ii) Evidence and submissions

The University of Melbourne submitted that the importance of redevelopment opportunities in the City North area is reflected in the use of discretionary built form controls in the DDO61, guided by design objectives and built form outcomes. It noted that the land south of Grattan Street around University Square and Lincoln Square has preferred building heights of 40 metres (east of Berkley Street) or 60 metres (west of Berkley Street) and preferred street wall heights of 24 metres. It submitted that this reflects an expectation of significant development intensification in this area, which the Amendment will unduly restrict.

The University submitted that the equinox controls currently contained in DDO61 and DDO41 provide for a significant (and sufficient) amount of sunlight access to both Squares. It submitted that the Moreton Bay Figs in Lincoln Square cast significant shadow across the park year round, which further reduces the justification for the introduction of more stringent winter solstice protections for this Square. Ms Hodyl and Mr Callow disagreed. Their evidence was that the shadow cast by trees has a very different quality to that cast by a building, and Mr Callow noted the importance of the trees receiving winter sun to maintain good health.

Mr Fulwood's built form testing showed that redevelopment of the properties shown in Figure 9 to the preferred building heights under the DDO61 would produce shadow onto University Square in the morning, and Lincoln Square in the afternoon, and that reductions in heights and increased upper level setbacks (beyond the discretionary requirements in the DDO61) would be needed to comply with the DDO8. He calculated that this would reduce the gross floor area achievable on these sites (collectively) by around 8 percent.

Mr Fulwood's modelling showed what the University describes as a 'sliver' of shadow along the eastern edge of University Square at 10am, which under the mandatory controls would be prohibited. The University submitted that this sliver of shadow would have virtually no meaningful impact on the amenity of University Square, and is a demonstration of the inappropriateness of mandatory controls.

As discussed in Chapter 5.3, Mr Fulwood's and Mr Biles' evidence spoke to the 'wedding cake' effect produced by the DDO8 controls, which Mr Biles noted was particularly evident on the sites in Figure 9 (as demonstrated in his modelling extracted in Figure 4 above). Relying on Mr Biles' evidence, the University submitted that the 18 degree angle of the sun at the winter solstice was a

very acute angle and unlikely to produce workable built form outcomes on the sites in Figure 9. Mr Fulwood and Ms Hodyl were both of the view that a good architect could deal with this constraint, and produce well designed outcomes.

Melbourne Business School objected to the Amendment on multiple grounds, including that it is "*overly restrictive*" and will "*stifle development investment*".[19] Melbourne Business School expressed concern at the lack of transitional provisions, noting that there is a current permit application on foot for a development on the southern portion of the properties shown in Figure 9. Council responded that the proposed building heights shown in the application are substantially greater than preferred heights in the DDO61, and thus the winter overshadowing impact of that development (if approved) would be far greater than the impact shown in Mr Fulwood's modelling.

Andavol is the owner of Rydges on Swanston (201-713 Swanston Street, Carlton) overlooking Lincoln Square. Andavol submitted[20] that Council has recently moved the edge of Lincoln Square further north through the removal of on-street parking bays and extension of the park boundary, and that this change (along with the DDO8) will unreasonably constrain development of its site. It submitted that Amendment C196 (which rezoned land in City North to Capital City Zone Schedule 5 and introduced the DDO61) acknowledges the area as an extension to the Central City. It noted that the DDO61 specifies building heights of 6 to 15 storeys for the A4 precinct (in which its site is located). These limits are discretionary and can be exceeded with good design. Andavol submitted that the Amendment is contrary to the development outcomes anticipated by Amendment C196.

(iii) Discussion

The Panel recognises that Amendment C196, which took effect only 5 or 6 years ago, sets an expectation that the area around University Square and Lincoln Square will see substantial growth and intensification of development. It also recognises that the DDO8 will prevent some sites from reaching their full development potential. However, for the reasons set out in Chapter 5.3, the Panel considers that the Amendment strikes an appropriate balance between the growth expectations for City North and the protection of its parks.

The Panel notes Mr Biles' concerns in relation to the wedding cake effect and its potential to produce poor urban design outcomes. However, as confirmed by Mr Fulwood, it is confident that it is well within the skill and capability of a good architect to work within the constraints imposed by the DDO8, and that good architectural and urban design outcomes can be achieved on these sites. It is to be expected that redevelopment of key sites in this area (including those owned by the University of Melbourne, the Melbourne Business School and Andavol) would require the engagement of good architects as any redevelopment of these sites is likely to involve substantial investment.

(iv) Conclusions

The Panel concludes:

[19] Submission 74
[20] Submission 91

- The restrictions that the DDO8 will place on the development of sites around University Square and Lincoln Square are appropriate, notwithstanding the expectations set by the Planning Scheme for growth and development intensification in City North.
- Good architects will be able to work with the constraints imposed by the DDO8 and produce good architectural and urban design outcomes on sites around University and Lincoln Squares.

9.3 The University main campus

The University's main campus north of Grattan Street is zoned Public Use Zone Schedule 2. It is not subject to preferred or maximum building heights, and street wall height requirements do not apply. Development of any significant height is somewhat constrained through the operation of DDO65 and DDO66, which require a permit for proposals to develop buildings at or above AHD 67.3 and 77.3 metres respectively. These DDOs are associated with the helicopter flight path for the helipads at Royal Melbourne Hospital and the Royal Children's Hospital. Parts of the main campus are also subject to Heritage Overlays.

(i) Evidence and submissions

The University of Melbourne explained that under the Public Use Zone Schedule 2, no permit is required for a range of uses and developments. The DDO8 would apply permit triggers for all development above 9 metres, which the University did not support. The University also noted that despite the parks to the south of the main campus being Type 2 parks, it would not receive the benefit of any allowable shadow, as no street wall height or building height requirements apply to the main campus.

Council responded that it continues to support the planning framework for the University main campus, however where development within the main campus potentially impacts outside the campus then a permit assessment should be required.

(ii) Discussion

The University is clearly an important institution, and its potential for redevelopment and expansion should not be unreasonably curtailed by the planning system. This would be contrary to the many policy statements in the Scheme that support the ongoing growth and expansion of the University.

That said, the Panel agrees that development on the main campus that has the potential to overshadow parks should be subject to a permit application, so that the impacts of shadow can be properly assessed. The Panel supports the application of the DDO8 to those parts of the main campus that have the potential to overshadow the parks to the south, including University Square and (to a lesser extent) Lincoln Square.[21]

There was some discussion at the Hearing around whether the DDO65 and 66 operate as a (proxy) height control and therefore provide allowable shadow for development on the main campus. The experts and the University expressed some doubt that the DDOs would be interpreted as a building height requirement, given they simply state that a permit is required for any development

[21] The Panel notes that the extent of the main campus with overshadowing potential was reduced in the modelling re-run in March 2020 discussed in Chapter 3.1(ii).

above the specified heights. The Panel agrees. DDO65 and DDO66 are not maximum building height requirements.

This results in the position that, should the University seek to redevelop buildings at the southern end of the main campus, it will not have the benefit of any allowable shadow. In effect, the building envelopes of any new development will be restricted by the extent of shadow cast by the existing buildings.

It is something of an anomaly that development on the main campus does not benefit from allowable shadow, whereas development off the main campus (on the University's sites in City North) would benefit from allowable shadow.

The Panel recognises that the absence of allowable shadow may not impact redevelopment opportunities on the main campus as significantly as might first appear, because several of the buildings on the southern part of the campus are subject to individual heritage protections under the Heritage Overlay. This makes the likelihood of redevelopment of those buildings less likely. Nevertheless, there are substantial parts of the main campus that are not subject to a Heritage Overlay, and may well be redeveloped in the coming years. In any event, a Heritage Overlay does not preclude redevelopment.

The Panel is of the view that development on the main campus should benefit from some form of allowable shadow. This might be set by a notional street wall or building height, similar to Ms Hodyl's recommendations for setting the allowable shadow on Fitzroy Gardens (see Chapter 9.9). Alternatively, the extent of allowable shadow might be set by other means.

At the Hearing the Panel explored with Mr Barnes what a suitable notional street wall or building height might be. Mr Barnes suggested a 24 metre street wall height might be suitable, on the understanding that parts of City North south of Grattan Street are subject to a preferred 24 metre street wall height limit under the DDO61, but he conceded that he had not given the matter detailed consideration.

The Panel considers that before adopting the Amendment, Council should undertake further strategic work and/or built form modelling to determine an appropriate extent of allowable shadow from built form on the main campus. The further work should take account of street wall height requirements in the surrounding City North area (as suggested by Mr Barnes), and the plans for the Metro station forecourt area at the northern end of University Square.

(iii) Conclusions and recommendations

The Panel concludes:

- The DDO8 should provide for allowable shadow from development on the University's main campus on surrounding Type 2 parks.
- Before adopting the Amendment, Council should undertake further strategic work and/or built form modelling to determine an appropriate extent of allowable shadow and adjust the DDO8 accordingly.
- The further work should take account of street wall height requirements in the surrounding City North area and the plans for the Metro station forecourt area at the northern end of University Square.

The Panel recommends:

Before adopting the Amendment, undertake further strategic work or built form modelling to determine an appropriate extent of allowable shadow from development on the University of Melbourne main campus, and adjust the definition of allowable shadow in the Design and Development Overlay Schedule 8 accordingly. The further work should take account of street wall heights in the surrounding City North area and the plans for the Metro station forecourt area at the northern end of University Square.

9.4 Weedon Reserve

(i) What is proposed?

As exhibited, Weedon Reserve was nominated as a Type 1 park that would not have allowed for any additional shadow. Following exhibition, and a further recommendation by Ms Hodyl, Council agreed to reclassify Weedon Reserve as a Type 2 park. Land to the north of Weedon Reserve is covered by DDO21 which applies a discretionary 24 metre height limit.

The OSS identifies Weedon Reserve as a 'significant road reservation', and indicates that upgrades are planned to Weedon Reserve as a 'medium term' priority.

(ii) Evidence and submissions

Polis made a permit application for its property at 10 and 12 Wellington Parade and 1071-1081 Hoddle Street. The application sought permission for demolition of the existing buildings and the construction of 9 and 10 storey buildings (33.7 to 35.6 metres in height). At the time of the Hearing, the application was before VCAT and does not have Council's support.

Polis submitted that Weedon Reserve is a low amenity space that should not be protected at all (should be removed from the Amendment). In the alternative, it should be a Type 2 park with discretionary equinox overshadowing controls, or if winter solstice controls are applied, then they should be discretionary.

Polis submitted that Weedon Reserve originally formed part of a road reserve, and remains designated as such in the OSS. There is minimal use of the reserve, limited predominately to pedestrians passing along the frontage where there are tram and bus stops, and people passing through the reserve. It is characterised by high volumes of traffic on the surrounding roads, limiting activities and creating high noise levels, reducing the amenity of the space.

Polis called Charmaine Dunstan to provide a pedestrian and traffic engineering review of conditions around Weedon Reserve, including undertaking pedestrian surveys. From these survey observations it was found that most groups of people passed through the reserve or along its frontages, with only minor use of the reserve for leisure activities such as to eat lunch, take a phone call and 'loiter'. Ms Dunstan's evidence was that the traffic conditions are such that the reserve could not be readily used for active sporting activities because of the risk of conflict with passing traffic, and that the reserve does not appear to have a significant function for passive or active recreation.

Polis called Darren Tardio to present expert acoustic evidence in relation to whether the reserve would be suitable for active or passive recreation given existing noise impacts from traffic. He established that the main source of noise impacting the reserve was from Hoddle Street and the north and south sections of Wellington Parade. Trams on Wellington Parade also contributed to the noise.

Mr Tardio recorded noise levels at various points around Weedon Reserve, and found that they ranged from 60dB(A) to 64dB(A). Across the wider reserve he expected that noise levels would be between 65dB(A) and 71dB(A). This is substantially above the widely accepted threshold of 60dB(A) for active use and 55dB(A) for passive use. He considered that noise at these levels would substantially compromise the amenity of the reserve.

Mr Tardio conceded in cross examination that there would likely be many examples of open areas and recreational spaces across Melbourne that would not meet the threshold, however he noted that this would often be the case at the edges of larger parks, where users could 'escape' the noise by going further into the park. He noted that Weedon Reserve is not large enough to escape the noise.

Polis called Kylie Jordan to give landscape evidence. Her evidence was that the DDO8 was not warranted over Polis' land holdings as there was adequate sunlight and recreational opportunities on nearby high quality open space. Her evidence was that Weedon Reserve is not worthy of protection under the DDO8 due to its lower order status as open space and its transitory context. She also noted that future overshadowing of the reserve would not prevent it from being upgraded or diminish its existing qualities as a transitional 'green' space between Richmond and East Melbourne.

VicTrack also made a submission about Weedon Reserve. The tracks for the Mernda and Hurstbridge lines pass under a small portion of the reserve, and VicTrack owns land to the north that would be partially affected by DDO8. See Figure 11.

Figure 11 VicTrack interests in land in and around Weedon Reserve



Source: VicTrack submission (Submission 103)

Like Polis, VicTrack submitted that Weedon Reserve has poor amenity as a useable park, and is close to larger, high amenity parks and is therefore "*unlikely to be under pressure or demand for use as a park when high amenity options are so close nearby*". It submitted that mandatory

overshadowing controls are not proportional to the role and function of Weedon Reserve and unreasonably limit property rights of adjacent land owners, including VicTrack. It submitted that its land to the north is already covered by DDO21, and that:

> Introduction of an additional DDO schedule which also controls height but less directly, creates a lack of clarity and confusion about planning expectations and objectives. We submit that the existing DDO21 already address overshadowing and if it were deemed inadequate, that existing DDO should be amended instead to streamline the suite of controls applicable to the land.

In response, Council submitted that Weedon Reserve was shown as a reserve in the 1895 Melbourne Metropolitan Board of Works plan, and has been zoned Public Park and Recreation Zone since at least the new format planning scheme in 1999. It noted that it is the only local park within a 300 metre catchment of the properties on the north side of Wellington Parade, and while Yarra Park is also close by, it is a higher order park and not always available for local users (for instance, when it is used to park vehicles when an AFL game is on).

Council submitted that there are many parks adjacent to busy roads that have been upgraded to become safe attractive local parks. Mr Fergus referred to the example of the park next to Fitzroy Pool on Alexander Parade that has been fenced and developed with a playground, and despite the major road interface has become an attractive and well used local park. Council also referred to Eades Park adjacent to King Street, where there is a playground within 25 meres of the site's frontage.

Council submitted that it had recently (in 2018) removed the road status from Weedon Reserve as part of the first steps to regularise its park status and progress its upgrade as outlined in the OSS, which are likely to address issues of traffic and noise, and improve accessibility to the north.

Council also submitted that the current permit application for the Polis land (at just over 35 metres) "*well exceeds*" the DDO height control (a discretionary maximum of 24 metres), and is illustrative of how the current shadow controls fail to adequately protect Weedon Reserve, and risk compromising future improvements and upgrades to the space.

(iii) Discussion

Weedon Reserve is not a typical local park or high amenity space where people gather for quiet respite or active recreation. Rather, it provides green relief between the major roadways of Hoddle Street and Wellington Parade, and a transitory place where people may stop and take a phone call, rest on a park bench along the frontage, wait to catch a tram or bus or briefly gather. Given the large and attractive parks in the immediate vicinity (Yarra Park and Fitzroy Gardens), Weedon Reserve is highly unlikely to be chosen as a place to picnic, take the kids to play or kick a footy. This is evidenced by only 1 percent of respondents from the survey undertaken to inform the OSS saying that they visited this reserve.

On this basis, the Panel understands the position of Polis and VicTrack and would be inclined to agree with those submissions if there weren't documented plans for Weedon Reserve to be upgraded, including plans to address some of its current shortcomings. The OSS clearly identifies Weedon Reserve as a park that requires upgrades to improve its function and use as well as to improve its accessibility to people north of Wellington Parade.[22]

[22] At page 290

Council took the Panel through several examples of recent investments in public parks where capital works have fundamentally changed the nature of the use of the park, and significantly improved the amenity of these areas.[23] Many have involved the acquisition of former roadways to increase the size and connectivity of the park, such as the Errol Street Reserve in North Melbourne, where acquisition of surrounding road reserves has increased the park by approximately 10 times (from 529 square metres to 4,907 square metres), and Eastwood and Rankins Road Reserve where the park has gone from functioning as a roundabout to substantially increasing the size, amenity and function of the space through the acquisition of abutting roads and incorporation into the open space.

The Panel supports the Council's direction to optimise opportunities to enhance the use and amenity of existing parks as it becomes harder and more expensive to create new parks, and as the population and intensity of development in the municipality increases. Weedon Reserve, while currently not a highly used area of public open space, could in time become a valuable part of the open space network.

On this basis the Panel agrees that winter sunlight should be protected to maintain the opportunity for the reserve to become an attractive and useable local park, that would have a different role and function than the surrounding larger areas of public open space.

Finally, the Panel supports the change of Weedon Reserve's designation to a Type 2 park, providing the ability for surrounding sites to develop to the nominated DDO heights.

(iv) Conclusion

The Panel concludes:

- Weedon Reserve should be included in the Amendment as a Type 2 park.

9.5 Argyle Square

(i) What is proposed?

Argyle Square is located in Carlton, bounded by Cardigan Street, Argyle Place North, Lygon Street and Argyle Place South. It is a Type 2 park.

DDO47 (Central Carlton South) applies to the surrounding land, with the following design objectives:

- To maintain the predominant low scale nature of the area
- To ensure development supports high levels of pedestrian amenity related access to sunlight and sky views and a pedestrian friendly scale.

The DDO47 applies a maximum discretionary building height of 4 storeys with floor to floor dimensions of 3.5 metres for residential use and 4 metres for non-residential use. Development seeking to exceed the maximum building height must demonstrate it will continue to achieve the Design Objectives and Build Form Outcomes and local planning policy requirements. The Built Form Outcomes include:

> Development that does not overshadow Argyle Square, Carlton Gardens or the Royal Society of Victoria Gardens between 11am and 2pm on 22nd September and 22 March.

[23] Document PD68

(ii) Submissions

The Carlton Residents Association queried the designation of Argyle Square as a Type 2 park given the DDO47 Design Objective of maintaining the low scale nature of the area. It submitted that while the DDO47 specifies a discretionary height control of 4 storeys, the area should not be considered as a growth area given the design objectives of DDO47. It submitted that the Hodyl Report referred to low-scale areas being 4 storeys or less, and submitted that Argyle Park is already subject to overshadowing. It noted that Council has endorsed the Melbourne Innovation District City North Opportunities Plan[24] which identified opportunities to add to open space on Cardigan Street. For these reasons, the Carlton Residents Association submitted Argyle Park should be designated Park Type 1.

Council responded by confirming that Argyle Square is appropriately nominated as a Type 2 park, as the surrounding land is subject to a discretionary 4 storey height limit. Council referred to Ms Hodyl's clarification in her Expert Witness Statement that the Type 1 classification was applied to parks in low scale areas of 3 storeys or less, and the references in the Hodyl Report to low-scale areas being 4 storeys or less was incorrect – areas 4 storeys and above are growth areas.

(iii) Discussion

The Panel appreciates the submission of the Carlton Residents Association and the desire to protect Argyle Square from further overshadowing. The Panel notes the low scale built form character of Carlton and the strong direction in DDO47 to retain this. However, notwithstanding its reference to low scale, the DDO47 allows heights of 4 storeys (which is a discretionary control). This qualifies as a growth area, and for reasons outlined elsewhere in this Report, the Panel supports the approach taken by Council to assign Park Type 2 to parks in growth areas. It therefore considers that the Type 2 designation for Argyle Square is appropriate.

(iv) Conclusion

The Panel concludes:

- Argyle Square is appropriately designated as a Type 2 park.

9.6 Station Street Park

(i) What is proposed?

Station Street Park is located in Carlton, north of Elgin Street between Canning and Nicholson Streets. It is a Type 1 park. Surrounding land is subject to the DPO8 (Carlton Housing Precincts) which includes general objectives and principles to guide built form, but no height limits.

(ii) Submissions

The Carlton Residents Association queried why Station Street Park is a Type 1 park rather than Type 2. It submitted that the park is located in a growth area and that new buildings in the precinct of 5 to 8 storeys have resulted in extensive overshadowing. The Association included in its

[24] The Melbourne Innovation District City North Opportunities Plan identifies opportunities to enhance the urban realm to encourage innovation and includes commentary on pedestrianising streets such as Cardigan and Pelham Streets and increasing public open spaces

presentation to the Panel[25] photographs of Station Street Park taken on 1 April 2020 around 10.30am to illustrate its point. The photos showed the park in significant shadow at a time of year close to the Autumn equinox.

Council acknowledged that the land around the park has already been developed, and the park is subject to significant overshadowing as a consequence. Its Part C submission identified that the model outputs referred to in the Hodyl Report and the online maps provided for the Panel proceedings do not show any existing shadow (as at May 2015) cast by buildings to the north and north-west of Station Street Park, notwithstanding that the buildings existed at that time. Council advised that this error arose from the photo capture (underlying the modelling), because only a partial recapture was undertaken in 2015 for some areas outside of the central city, including parts of Carlton. The buildings north and north-west of Station Street Park were not picked up through the analytical process.

Council submitted that, notwithstanding the recent mid-rise development in the Carlton Housing Precincts, the area is not a growth area, and the Type 1 designation is appropriate. The DPO8 does not specify heights and the development plan approved by DPO8 was not considered.[26] Council acknowledged that the Carlton Housing Precincts have special status given their use for public housing. Nevertheless, Council considered that Station Street Park should be retained as a Type 1 park.

(iii) Discussion

The land in the Carlton Housing Precincts in the area surrounding Station Street Park is zoned Residential Growth Zone, which contemplates residential development of up to and including 4 storeys although no maximum height limit is set. The DPO8 does not set height limits, but general principles in the DPO8 that guide new built form include:

- Create a composition of varied forms and heights across the precincts that respect the built form character of the surrounding neighbourhood and the heritage buildings and streetscapes.
- Express significant corners with higher buildings built to the boundary.
- Provide an appropriate building height transition between towers and surrounding streets.

Council reiterated in its Part C submission that the driver for the designation of Park Types is not the extent of existing overshadowing but rather the height controls surrounding a particular park and the future development scenarios. If the area is a growth area, a balance must be struck between protecting the park and allowing development, in which case Park Type 2 is the appropriate designation. If development is expected to remain low rise, the more stringent Park Type 1 requirements should apply.

The Panel does not agree with Council that the area around Station Street Park should be considered low-rise. Neither the zone nor the DPO8 limit heights to low-rise (3 storeys or less), and the recent development certainly exceeds the up to 4 storeys contemplated under the Residential Growth Zone. To that extent, it has more of the characteristics of a growth area (suggesting a Type 2 park designation may be appropriate), rather than a low-rise area where Park Type 1 designations are appropriate.

[25] Document PD71

[26] Council's Part C submission also notes this is the case for Keppel Street Park and Reeves Street Park

That said, the Panel agrees with Council (and the Carlton Residents Association) that Station Street Park should be protected from any further overshadowing. No submissions were made by the owners or occupiers of land surrounding Station Street Park, or from the Government in relation to the public housing developed in accordance with the DPO8. In those circumstances, the Panel does not consider it would be appropriate to redesignate the park to a Type 2 park, notwithstanding its context is more akin to that of a growth area.

In any event, whether Station Street Park is a Type 1 park or a Type 2 park is something of a moot point. In effect, the result would be the same. In the absence of any street wall or building height requirements under either the zone or the DPO8, there would be no allowable shadow, so the only shadow that can be cast over the Park is the existing shadow (the same restrictions that apply for Type 1 parks).

(iv) Conclusion

The Panel concludes:

- Station Street Park is appropriately designated as a Type 1 park.

9.7 Flemington Racecourse

(i) What is proposed?

The DDO8 is proposed to apply to the majority of Flemington Racecourse, including the main track and stands. There are a number of Type 1 parks surrounding the Racecourse, including Newmarket Reserve to the east, and Riverside Park and smaller parks associated with the Kensington Banks development to the south east.

(ii) Submissions

Flemington Racecourse is internationally recognised as a world class racing venue. As well as being home to the Melbourne Cup Carnival, it hosts music festivals, exhibitions and expos, conferences and trade shows, which are vital non-racing related sources of income for the Victoria Racing Club (VRC). As a consequence of the wide range of activities undertaken, the Racecourse land is subject to buildings and works across the site on an ongoing basis. Many of the buildings and works associated with events are temporary structures such as marquees, stages and the like.

The Racecourse is zoned Special Use Zone Schedule 1 (SUZ1), under which buildings and works do not require a permit unless they are within 60 metres of the bank of the Maribyrnong River. This area is primarily an existing carpark. Although various overlays apply to the site, exemptions apply under those overlays, and the result is that most buildings and works on the site do not require a permit.

The VRC submitted:

> Where there is potential for shadow impacts to nearby identified parks the VRC agree that a planning approval should be sought.

However, the DDO8 would introduce a permit trigger for all buildings and works over 9 metres, notwithstanding that buildings and works on most parts of the site (even those significantly over 9 metres) have no realistic prospect of overshadowing any park primarily because of the size of the site.

The VRC submitted that Flemington Racecourse is a vital contributor to Melbourne's role as the sporting capital of Australia, a significant contributor to Melbourne, Victoria and Australia's wider economic performance and a critical component of the international sporting and cultural offer. The introduction of a permit trigger under the DDO8 across the entire site will stifle the ability to adapt to the needs of the entertainment industry, make the site less attractive to promoters and event managers, and hamper the site's ability to function in accordance with the purposes of the SUZ1.

In its Part B submission, Council submitted that a significant extent of the Racecourse land is within a park solar volume and development at heights above 55 metres AHD has the potential to cast shadow on protected parks. It is therefore appropriate to apply the DDO8 to the site. It submitted:

> Consistent with the approach taken across the whole of the Amendment area, Council has applied DDO8 to the whole parcel within the title boundary rather than limiting it to the area covered by the Park Solar Volume. Council submits that this practice is consistent with mapping conventions preferred by the Department and use of title boundaries provides greater certainty about the application of controls rather than applying a control over part of a lot.

The VRC explained that the Racecourse land varies in topography from 1 metre AHD to 20 metres AHD. Development of up to 30 metres in height (higher in some parts of the site) could therefore occur without impacting any adjoining park. It submitted that the DDO8 "*should reflect the specific and unique circumstances of the Racecourse rather than the arbitrary 9m height currently included in the draft DDO*". This could be done by:

- a site specific exemption in the DDO8
- an Incorporated Document that confirms that a permit is not required for buildings and works on the Racecourse land if the proposed maximum height is 55 metres AHD or less
- applying the DDO8 to only parts of the site.

Council responded in its Part C submission that it proposes to include an additional site specific exemption for temporary buildings and works related to events on the Racecourse land. It submitted that all other forms of development should be subject to DDO8.

The VRC acknowledged that Council has recognised the unique circumstance of the Racecourse, and that the exemption would reduce red tape for 'usual' activities at the racecourse. While its preferred position remained an exemption for all works under 55 metres AHD, it was generally satisfied with Council's proposed approach.

(iii) Discussion

The Panel acknowledged that Council has taken a pragmatic approach to seek to address the unique circumstances of Flemington Racecourse and the legitimate concerns of the VRC. The Panel supports Council's approach, subject to a minor adjustment to provide clarity in relation to what constitutes 'temporary' buildings and works (given 'temporary' is not defined in the Planning Scheme).

(iv) Conclusion and recommendation

The Panel concludes:

- It supports an additional exemption in the DDO8 for temporary buildings and works on the Flemington Racecourse site, subject to providing greater clarity around what constitutes 'temporary'.

The Panel recommends:

Amend Clause 2.0 of the Part C version of the Design and Development Overlay Schedule 8 to replace the final dot point under 'Buildings and works for which no permit is required' with:

- **Buildings and works on land within the Special Use Zone, Schedule 1 that are erected for a period of no more than 6 months.**

9.8 Princes Park

(i) What is proposed?

Princes Park is bordered by Royal Parade to the west, Park Street to the north and Bowen Crescent to the east. It is a Type 1 park, and houses Ikon Park (home of the Carlton Football Club), a number of open sporting fields and a running track around the perimeter of the park as well as passive open space areas. It is not currently overshadowed, other than by existing structures within the park.

Park Street is the boundary between the municipalities of Melbourne and Moreland, and Bowen Crescent is the boundary between Melbourne and Yarra. The DDO8 is proposed to apply to land to the west of Princes Park (along Royal Parade), but not the land to the north or east of the park as this land is outside the municipal boundary of the City of Melbourne.

Land on the north side of Park Street is subject to two DDOs under the Moreland Planning Scheme, DDO2 (Park Street) and DDO18 (Sydney Road and Upfield Corridor). DDO2 applies a mandatory 9 metre height limit. DDO18 applies a discretionary height limit of between 10.5 metres and 19 metres (for properties fronting Park Street and Sydney Road) and 25 metres (for properties fronting Brunswick Road). Street wall heights of between 8 and 20 metres also apply.

(ii) Submissions

Protect Park Street Precinct Inc (PPSP) is a community group representing some 1,375 residents of Melbourne, Moreland and Yarra. It submitted that Princes Park is one of the most used parks in Melbourne, and is becoming more intensely used by residents from surrounding municipalities including residents of the many recently built apartments in Moreland. PPSP submitted that no new parks have been provided in the south of Moreland to cater for these 'thousands' of new residents.

PPSP supported the Amendment, including the mandatory controls, the extension of hours of protection and the move to winter solstice protections. Its concern was that the Amendment does not take into account the built form allowed under Moreland DDO18:

> PPSP submits that the goal of affording Princes Park greater protection will not be addressed only by C278. … What is required are controls that cross the municipal boundary. PPSP seeks a recommendation from this Panel to that effect.

PPSP recently objected to a proposed development in Park Street north of Princes Park that was the subject of VCAT proceeding *JW Land Development Pty Ltd v Moreland CC.*[27] The proposal was originally 12 storeys, and was reduced to between 3 and 10 storeys. Melbourne City Council objected to the permit application on the basis of overshadowing of Princes Park. Council subsequently withdrew its objection when the plans were amended to reduce the height of the development, and the applicant agreed to a condition that reduced the size of Building B to reduce shadow at 3pm on the winter solstice so that is does not extend over the running track in Princes Park.

While VCAT acknowledged the value of open space in inner areas, and agreed that inner metropolitan parkland should be protected from shadow in winter, it did not support PPSP's position that the height of the proposed development should be further reduced to completely eliminate winter shadow to Princes Park. VCAT referred to the Amendment, stating:

> … there is considerable uncertainty about the final form of the amendment, given there has been no assessment by an independent panel nor consideration by the Minister for Planning. In any event, the provisions of DDO8 would not apply to the review site as Amendment C278 applies only to land covered by the Melbourne Planning Scheme. We agree with the applicant that there are mechanisms for planning scheme amendments to apply to more than one municipality. This has not been sought in relation to Amendment C278.

PPSP submitted that VCAT's decision "*demonstrates the inherent and fundamental problem of the irreconcilable provisions of DDO18 and those outcomes sought by C278 as it relates to Princes Park*", and that the Moreland DDO18 "*will significantly undermine the requirements of C278 as they relate to Princes Park*".

Council responded by noting that it is only the planning authority for the Melbourne Planning Scheme, and cannot prepare an amendment for another municipal area without the express authorisation of the Minister (which it neither sought nor has been granted). Council did not have any discussions with Moreland about cross-boundary overshadowing provisions. Council noted that Moreland City Council's submission indicates that Moreland is undertaking its own project to further investigate solar access to public parks.[28]

Carlton Football Club made submissions about Ikon Park (which is located within Princes Park), which are dealt with in Chapter 8.

(iii) Discussion

Princes Park is clearly a highly valued community asset, and was mentioned in multiple submissions from residents of both Melbourne and Moreland. Many submissions referred specifically to the development in Park Street brought to the Panel's attention by PPSP, and objected to any overshadowing of the park. Submitters referred to the long history of Princes Park, the high level of amenity afforded by the park, pressure caused by its heavy (and increasing) usage levels, and the need to take care of the park.

Controls that apply across municipal boundaries are contemplated by section 6(6) of the PE Act, but only with the consent of the affected municipal councils or the authorisation of the Minister.

[27] [2019] VCAT 617 (interim decision) and [2020] VCAT 354

[28] Submission 178

Neither apply here. It is therefore not appropriate for this Panel to recommend the extension of the controls to land in the municipality of Moreland.

Nor would it be appropriate for the Panel to pre-empt the outcomes of Moreland's own overshadowing project. The Panel encourages PPSP to be involved in the community consultation that will no doubt occur in relation to the Moreland project, and to bring its concerns about Princes Park to the attention of Moreland City Council.

(iv) Conclusion

The Panel concludes:

- It is not appropriate to recommend the extension of the DDO8 to land in Moreland, as the conditions in the Act for controls that apply across municipal boundaries have not been met.

9.9 Fitzroy Gardens

(i) What is proposed?

Fitzroy Gardens is a Type 2 park, bordered by Albert Street East Melbourne to its north. Much of the land on the north side of Albert Street is in the Commercial 1 Zone, and subject to DDO20 and the Heritage Overlay. DDO20 contains overshadowing controls based on the equinox, and a discretionary height limit based on a 22 degree plane from the southern side of Albert Street.

(ii) Evidence and submissions

East Melbourne Group Inc strongly supported the Amendment, but submitted that allowable building heights around Fitzroy Gardens (and Yarra Park) could be reviewed to provide further protection to these parks. East Melbourne Group referred to the tourism value of Fitzroy Gardens as a heritage listed park on the fringe of the city, its value to the local community, its function of hosting multiple key events throughout the year, and the huge numbers of people moving through Fitzroy Gardens on the way to the city, the MCG and other places. It submitted that Fitzroy Gardens and Yarra Park make a significant contribution to the highly significant heritage precinct of East Melbourne and Jolimont, which is characterised by a 'human scale' built environment. It submitted that a reduction in allowable heights would minimise overshadowing of the parks and protect the low scale heritage streetscapes in the area.

Orchard Piper[29] is the agent for the owner of two sites on the north side of Albert Street opposite Fitzroy Gardens, for which a permit application had been lodged. It submitted that the 22 degree plane already provides strong protection from overshadowing of Fitzroy Gardens, and that equinox controls are 'best practice' planning policy in Victoria. It expressed concerns about (among other things) the lack of clarity regarding allowable shadow as it applies to Fitzroy Gardens, as it was unclear whether the 22 degree plane control is a street wall or building height control.

Orchard Piper submitted that there is currently a large, eight storey blank wall to the immediate west of its site. It submitted that leaving this blank wall exposed would be a poor urban design outcome, and that shadow testing had demonstrated that a 10 storey proposal on its site (which

[29] Orchard Piper withdrew from the Hearing after it filed evidence prepared by Mr Barlow. It requested the Panel to consider Mr Barlow's evidence and its original submission.

would hide the blank wall) could comply with the equinox shadow controls in the DDO20, but not the winter controls in the proposed DDO8.

Mr Barlow's evidence for Orchard Piper stated:

> The Fitzroy Gardens … is one of Melbourne's great public assets providing 26 hectares of open space in the centre of Melbourne. It serves many purposes from a tourist destination with a number of attractions, a works depot for the City of Melbourne, open space for relaxation and recreation for residents and city workers to a connection between the CBD and, East Melbourne and Jolimont Station.
>
> The importance of the Gardens is acknowledged in the local policy for East Melbourne and Jolimont (Clause 21.16-2) that includes the policy to:
>
> - Ensure that development does not adversely affect Fitzroy Garden, Treasury Gardens or Yarra Park by minimising the visual impact of buildings and overshadowing of the parks.

His view was that the existing DDOs that apply to land surrounding Fitzroy Gardens "*have worked well since their introduction with the vast majority of the Gardens being free of shadow throughout the year*" and that "*the scale of Fitzroy Gardens ensures that substantial areas of the park are free from shadow caused by nearby buildings at any time of the day – even in June*". He provided geo-location data sourced from Google (based on mobile phone locations) that showed the most heavily used areas of the park are in the central and south western parts of the park (around Captain Cook's Cottage and the Visitor Centre), and the paths including the central east-west path that provides an access route from Treasury Gardens through to East Melbourne. His evidence was that usage patterns changed in winter when the open grassed areas were less heavily used in favour of the paths. Usage rates were also lower in winter. He concluded (his emphasis):

> In this instance whilst only few properties are affected it is evident that there is <u>no need</u> for additional or more stringent controls around the Fitzroy Gardens…

and:

> In the case of the Fitzroy Gardens, I recommend that no change be made to the current controls and that the provisions of Clause 22.02 be revisited to remove the reliance on the winter sunlight test.

Urbis made a submission to the Amendment on its own behalf (not on behalf of any particular client). It submitted that the equinox controls already in place "*have provided successful built form outcomes around sensitive open space areas, including parks of Metropolitan significance such as Fitzroy Gardens (Eastbourne Apartments on Albert Street for example)*". Urbis also raised similar concerns to Orchard Piper regarding whether the 22 degree plane control would be regarded as a street wall or building height control, therefore providing an 'allowable shadow'.

Ms Hodyl's evidence was that the 22 degree plane controls contained in DDO20, while discretionary, are actually marginally more onerous than the controls proposed in DDO8. She noted the permit application for a 39 metre high building lodged by Orchard Piper, and stated that it "*would have a significant overshadowing impact on the park*". She noted that a number of developments on adjacent sites already protrude above the 22 degree angle, and that a permit had recently been granted that would also overshadow Fitzroy Gardens beyond the allowable shadow cast by the 22 degree angle plane.

Ms Hodyl conceded that the 22 degree angle plane makes calculating the allowable shadow more difficult, and considered that a simpler assessment measure is required. She considered that, being a Type 2 park, some overshadowing at the periphery is acceptable, and that "*aligning the extent of overshadowing with the existing context and the potential scale of shadow cast by the*

approved building to the north [which has a 24 metre high street wall] would be a logical position to adopt". Council included this in its Part C controls (in an amended definition of allowable shadow).

(iii) Discussion

Fitzroy Gardens is among Melbourne's most iconic parks. It is heritage listed, a major tourist attraction, and a public asset that is much valued by both the local and broader community. It was among the first of Melbourne's parks to be set aside and laid out in the first half of the nineteenth century. It contains many old and important trees, including heritage listed trees.

The Panel was presented with somewhat contradictory evidence in relation to Fitzroy Gardens. On the one hand, Mr Barlow's evidence was that the existing controls in DDOs surrounding the park are working well in protecting the park from overshadowing, and that there is no need for any further controls. On the other, Ms Hodyl's evidence pointed to several developments that have been approved and constructed above the discretionary 22 degree angle plane and which cast (or will cast) additional winter shadow on the park.

The Panel prefers Ms Hodyl's evidence. It was backed by clear examples, and was able to be tested through cross examination at the Hearing.

The Panel notes Orchard Piper's submission, and acknowledges that mandatory shadow controls may in some cases lead to outcomes such as leaving existing blank side walls on adjacent sites exposed. While it accepts that blank side walls are generally a poor urban design outcome, this does not, in the Panel's view, justify relaxing (or not applying) the DDO8 controls to the north side of Albert Street. Less stringent controls may provide more flexibility to address bad urban design outcomes generated by existing development, but they would also open the door to more overshadowing of this iconic Melbourne park that would in turn decrease its amenity and result in other poor outcomes.

In this regard, the Panel agrees with Council, Ms Hodyl and Mr Barnes that relying on the existing discretionary controls would, over time, risk incremental increases in the amount of shadow cast over Fitzroy Gardens that could cumulatively lead to unacceptable outcomes. Council has already taken a balanced approach to Fitzroy Gardens by designating it as a Type 2 park, and as one of Melbourne's most valued parks the Panel does not consider that it should be subject to any less protection than other Type 2 parks.

The Panel agrees with Ms Hodyl that the allowable shadow controls are difficult to interpret and apply in the context of an angled plane control. There is some doubt as to whether an angled plane control constitutes a street wall or building height control. The Panel endorses Ms Hodyl's approach of converting the allowable shadow to Fitzroy Garden into a shadow based on a notional street wall height. It agrees that 24 metres (being the street wall height of a recently approved development on the north side of Albert Street) is a suitable metric. Council is also supportedive of Ms Hodyl's recommended changes, which it incorporated into the revised definition of allowable shadow in the Part C version of the DDO8.

With regard to East Melbourne Group's submission, it is beyond the scope of this Amendment (and the remit of this Panel) to review the height controls on land surrounding Fitzroy Gardens.

(iv) Conclusion

The Panel concludes:

- Subject to the changes to the definition of allowable shadow included in the Part C controls (which the Panel supports), the protections in DDO8 as they apply to Fitzroy Gardens are appropriate.

9.10 Flagstaff Gardens

(i) What is proposed?

Flagstaff Gardens is bordered by William Street to the east, La Trobe Street to the south, King Street to the west and Dudley Street to the north. The Central City (Hoddle Grid) sits directly east of the Flagstaff Gardens, and the Queen Victoria Market precinct sits to its north east.

The land in the Hoddle Grid is subject to the DDO10, which specifies that a permit must not be granted for building and works which would cast any additional shadow across Flagstaff Gardens and the proposed new public open space within Queen Victoria Market between 11am and 2pm on June 22 "*unless the overshadowing will not unreasonably prejudice the amenity of the space*" (Panel's emphasis).

The land in the Queen Victoria Market precinct is subject to the DPO11, which includes a requirement that (Panel's emphasis):

> New development should not cast a shadow across the Flagstaff Gardens or the proposed public open space…between 11am and 2pm on 22 June, unless the Responsible Authority considers the overshadowing will not significantly prejudice the amenity of the open space. (Panel's emphases).

Council's Part A submission noted that Flagstaff Gardens was not assessed as part of the Hodyl Report because the DDO10 and DPO11 were recently applied to the surrounding land. However Council subsequently nominated and exhibited Flagstaff Gardens as a Type 1 park to ensure that the park was protected.

In response to submissions, Council proposed to change Flagstaff Gardens to a Type 3 (West) park. Flagstaff Gardens is the only park in this (West) category and the modified hours of protection (11am to 3pm) reflect the higher built form of the Central City to the east. (Type 3 (East) parks along St Kilda Road also have shorter hours of protection, but adjusted for the existing shadow cast by the higher built form to the west).

(ii) Evidence and submissions

Council's Part B submission noted the recent introduction of winter solstice overshadowing protection to Flagstaff Gardens and the future open space at the Queen Victoria Market. The Panel Report for Amendment C245 states:

> The Panel agrees that both Flagstaff Gardens and the proposed Queen Victoria Market public open space warrant protection at the winter solstice between 11am and 2pm and that it is appropriate for both DPO11 and DDO14 to include this as a discretionary control.

Ms Hodyl's evidence was that the strategic basis for modifying the times for overshadowing protection of buildings to the east and north east of Flagstaff Gardens was that those buildings are in the Hoddle Grid and the Capital City Zone Schedule 1. Ms Hodyl recommended that the hours of protection for Flagstaff Gardens be further reduced to 12pm to 3pm for this reason.

Council noted in response to Ms Hodyl's recommendation that the (generally) uniform approach to hours of protection reflects the longer hours of park use identified in the Hodyl Report, and is

consistent with the 'flat' approach to park protection that is sought by the Amendment. Council sought direction from the Panel on the issue of hours of protection for Flagstaff Gardens under the DDO8.

Mr Barnes did not suggest modified hours of protection for Flagstaff Gardens, but he did suggest that further consideration be given to whether the controls should be amended to allow for allowable shadow on Type 3 parks (including Flagstaff Gardens) (as discussed in Chapter 5.3).

Some submissions sought extra protection of Flagstaff Gardens, noting:

> This is one of the very few places that still has sunlight through to sunset, and that this park should receive the best possible opportunity for access to sunlight, and views to St James Old Cathedral.

Other submitters raised concerns in relation to the overlapping and inconsistent overshadowing controls applying to Flagstaff Gardens under different existing controls, and now the DDO8. Some said that Flagstaff Gardens should be removed from the Amendment given it is already protected under overshadowing controls recently introduced under other precinct wide DDOs.

The main overlaps in controls protecting Flagstaff Gardens from overshadowing are between:

- the DDO8 and the DDO10 (the University of Melbourne pointed out several properties to the south-east of the Market site which are in the DDO10 and proposed to be included in the DDO8 area)
- the DDO8 and the DPO11 that applies to the Queen Victoria Market precinct
- the DDO8 and the DDO33 (City Fringe).

Council responded that the overlap with properties in the DDO10 was a mapping error, and these properties should be removed from the DDO8.

In relation to the Council owned land in the Queen Victoria Market precinct that is subject to DPO11:

> Council's intention is for DDO8 to apply to that land (which it owns, or will soon own), and apply the more stringent mandatory overshadowing control in DDO8 over the top of the current discretionary control in the DPO11. However, given that Council is the landowner, responsible authority, and likely developer of that land, Council seeks specific guidance from the Panel about the appropriateness of this approach, and the application of the Type 3 West typology to Flagstaff Gardens in that context.

The overlap between DDO8 and DDO33 is dealt with in Chapter 9.12(iii), in the context of the site specific submission from Tract on behalf of Iglu Student Accommodation.

(iii) Discussion

Flagstaff Gardens is an illustration of the issues that can arise where overlapping overshadowing controls are proposed to apply to the same development site, or when inconsistent protections apply to the same park. These issues are discussed in a general sense in Chapter 10.1.

The DDO10 and DPO11 both include discretionary overshadowing controls that protect Flagstaff Gardens between 11am and 2pm – albeit subject to slightly different tests (unreasonable prejudice versus significant prejudice). The DDO8 would apply mandatory controls protecting the park from overshadowing from 11am to 3pm (12pm to 3pm if Ms Hodyl's recommendations are accepted).

The Panel supports removing properties within the DDO10 from the DDO8, as it is consistent with the overall approach taken in excluding land within the Hoddle Grid, and would avoid inconsistent

overshadowing controls applying to the same site under two different DDOs. These properties are identified in Figure 12.

Figure 12 Properties in DDO10 to be removed from the Amendment



Source: Council's Part C submission

Council has sought guidance from the Panel in relation to land in the Queen Victoria Market precinct. This land is identified in Figure 13. By comparing Figure 12 and Figure 13 it can be seen that the DDO8 is proposed to apply to some, but not all, of the land within the DPO11. Land along the south side of Thierry Street and the west side of Queen Street (known as the Munro site) is not proposed to be included in the DDO8. Council did not explain why, but the Panel notes that the Munro site is currently being redeveloped for a substantial mixed use development with a mix of mid-rise buildings and two substantial towers.[30]

Figure 13 Planning controls for the Queen Victoria Market precinct



Source: Melbourne Planning Scheme maps (sourced by the Panel)

30 https://www.melbourne.vic.gov.au/building-and-development/urban-planning/local-area-planning/queen-victoria-market-precinct-renewal-plan/project-planning-framework/Pages/munro-site.aspx

The Queen Victoria Market precinct is zoned Capital City Zone Schedule 1, other than the proposed public park which is located on what is currently a surface carpark servicing the Market. A significant scale of development is envisaged for the precinct under the Capital City Zone Schedule 1. The DPO11 allows for diverse and varied podium heights across the precinct.

One of the strengths of Council's arguments in support of the Amendment has been the consistent strategic approach that has been applied to the designation of park types, and the application of controls dependent on the park type. The Panel agrees with Council that the mandatory overshadowing control for Flagstaff Gardens proposed under the DDO8 best supports its policy position. However, the interaction between the discretionary controls in the DPO11 and the mandatory controls in the DDO8 could create confusion across what is already a complex planning framework applying to the Queen Victoria Market precinct.

In Chapter 10.1, the Panel concludes (in a general sense) that overlapping and inconsistent controls that apply under the DDO8 and other precinct wide DDOs are not ideal, but are not so problematic as to undermine the Amendment or the administration of the Scheme. Consistent with those findings, the Panel considers that on balance, it is appropriate to apply the DDO8 to the Queen Victoria Market precinct, but the inconsistencies in the overshadowing controls between the DPO11 and the DDO8 should be resolved by a further amendment as a matter of priority.

Ms Hodyl's recommendation to shorten the hours of protection for Flagstaff Gardens to 12pm to 3pm (rather than 11am to 3pm) was on the basis of her built form testing that indicated protection at 11am would have unacceptable impacts on the development capacity of the properties to the immediate east of the park, along Queen Street.[31] The Panel considers that it is reasonable, and not necessarily inconsistent with the 'flat' approach adopted by Council, to adjust the hours of protection to reflect the surrounding scale of development. The Panel therefore supports Ms Hodyl's recommendation.

Finally and for completeness, the Panel notes that Flagstaff Gardens is a Type 3 park. The Panel has found that there may be a case for including allowable shadow on Type 3 parks. See Chapter 5.3 for more detail.

(iv) Conclusions and recommendation

The Panel concludes:

- Flagstaff Gardens should be retained in the Amendment as a Type 3 (West) park, but its hours of protection should be reduced to 12pm to 3pm as recommended by Ms Hodyl.
- It may be appropriate to include allowable shadow on Flagstaff Gardens as a Type 3 park (discussed in more detail in Chapter 5.3).
- The DDO8 should be applied to the Queen Victoria Market precinct as proposed, but Council should progress a further amendment to resolve the inconsistencies between the DPO11 and the DDO8 as a matter of priority.
- The sites within the DDO11 that have been included in the DDO8 area by error should be removed from the Amendment.

The Panel recommends:

Amend Table 1 in the Design and Development Overlay Schedule 8 to specify hours of protection for Type 3 (West) parks (ie Flagstaff Gardens) of 12pm to 3pm.

[31] Refer to the analysis on pages 43 to 45 of Ms Hodyl's expert witness statement (Document PD52).

Amend the mapping of the Design and Development Overlay Schedule 8 to remove the properties identified in Figure 12 in this Report.

9.11 Docklands

(i) What is proposed?

The Hodyl Report included Docklands parks. It concluded that other than Ron Barassi Senior Park, the Docklands parks are 'lost' parks. Accordingly, the Hodyl Report did not recommend applying the DDO8 to land in Docklands, except properties that could shadow Ron Barassi Senior Park. The Report recommended that additional shadow to Ron Barassi Senior Park be allowed to a depth of 40 metres from the northern boundary of the park, but prohibited beyond that.

When Council sought authorisation to prepare and exhibit the Amendment, it was proposed that Docklands be included in the Amendment. The conditions of authorisation required the removal of Docklands. This was reflected in the exhibited Amendment.

(ii) The issues

The issues are whether the Amendment should extend to:

- land in Docklands generally, or
- land on which development could overshadow Ron Barassi Senior Park.

(iii) Evidence and submissions

Some submissions called for the extension of the Amendment to Docklands. Submitter 105 pointed to the fact that high rise buildings in New Quay and Banksia have already overshadowed public space in Docklands, and submitted that excluding Docklands would be "*an invitation to ruin more valuable public and waterfront space*". Submitter 106 submitted that daylight and sunshine in this fast growing area is "*vital to the benefit of residents and the many workers and visitors to Docklands*", and that poor early planning has allowed many tall buildings to overshadow public spaces to the detriment of outdoor living. Submitter 107 pointed to the minimal green space provided in most developments in Docklands, and the importance of Ron Barassi Senior Park in Docklands, noting that it was one of very few areas that promote social interaction and sport and recreation in Docklands. She and others submitted that Ron Barassi Senior Park should be protected from further overshadowing.

Ms Hodyl's evidence stated that Ron Barassi Senior Park is the only public park in New Quay with good access to winter sunlight, and that it was important that it be protected to support the wellbeing of people who live and work in this area. She did not support excluding Ron Barassi Senior Park from the Amendment, and considered that the recommendation in her original report "*provides an appropriate balance between protecting winter sunlight and supporting redevelopment and ensures that the overwhelming majority of the park is protected from overshadowing*". She recommended that Ron Barassi Senior Park be included in the Amendment as a Type 4 park with the protections recommended in her original report. She did not consider that the remainder of Docklands parks require inclusion.

Mr Barnes did not address Docklands in detail, but concluded that the controls "*are not intended to and should not apply to land within the Central City, being the Hoddle Grid, Southbank and Docklands*".

Development Victoria made a late submission to the Amendment (Submission 174), which stated that the extension of the Amendment to Docklands:

> … will have serious implications and adversely affect Development Victoria's ability to deliver key development opportunities and urban renewal in the Docklands Precinct and the private sector's ability to deliver their contractual commitments to Development Victoria.

MAB has interests in the New Quay West development in Docklands, which is partially complete. MAB opposed the extension of the Amendment to Docklands, pointing out that:

- no analysis of usage of parks in Docklands has been undertaken
- no cost benefit analysis has been undertaken for the particular circumstances of Docklands generally or of New Quay West in particular
- no notice had been given to persons residing or working in Docklands of any proposal to include any part of Docklands in the Amendment.

Lendlease has significant interests in Docklands. Its submission[32] supported the exclusion of Docklands from the Amendment, but considered that it was unclear whether the policy in Clause 22.02 would apply to development within Dockland that could shadow parks outside Docklands. It submitted that the policy should be amended to clearly exclude this type of development. It also submitted that the Hodyl Report should be amended to remove all references to Docklands, given it will be a reference document in the Scheme.

MAB and Lendlease both pointed to the fact that detailed planning controls and approvals guide and control development within Docklands. MAB explained that the development of New Quay West is subject to a Development Agreement with the then Docklands Authority (now Development Victoria) which enabled the creation of Ron Barassi Senior Park, and it would be inequitable to set the agreement aside by including that park as a protected park under the Agreement.

(iv) Discussion

On one view, submissions about extending the Amendment to Docklands are not 'about the Amendment', as the exhibited Amendment did not include Docklands. The submissions would therefore be beyond the scope of the Panel's remit.

While the Panel acknowledges the submissions calling for protection to be provided to parks and public spaces in Docklands (including Ron Barassi Senior Park), it would not be appropriate to extend the Amendment in the manner requested. No notice has been provided, and including Docklands (or Ron Barassi Senior Park) in the Amendment would be contrary to the conditions of authorisation. If Council considers it appropriate to implement Ms Hodyl's recommendations regarding Ron Barassi Senior Park, it should do so by a separate amendment.

(v) Conclusions

The Panel concludes:

- The Amendment should not be extended to Docklands in general or to Ron Barassi Senior Park in particular.
- If Council considers it appropriate to implement Ms Hodyl's recommendations regarding Ron Barassi Senior Park, it should do so by a separate amendment.

[32] Submission 100

9.12 Other sites

(i) 509 St Kilda Road Melbourne

Wolf Group submitted that the DDO8 would result in the loss of around 5,900 square metres of potential net lettable area on the site at 509 St Kilda Road, Melbourne.[33] It submitted that the site is a strategic site on St Kilda Road, within 1 kilometre of the Anzac Station under construction as part of the Metro project and within 200 metres of the Alfred Hospital. It submitted that the Planning Scheme recognised St Kilda Road as a premier boulevard containing high density residential and office development, and that policy supports higher intensity land use and development in this area.

Wolf Group submitted that the imposition of the DDO8 as a mandatory control was unreasonable as it would impede the ability to meet demand for high quality commercial floor space along the boulevard, and would result in inefficient floor plates and irregular built form which would be at odds with the character of the precinct. Overshadowing to Fawkner Park would be limited to the south westerly area of the park for a limited time of the day and it submitted that there is ample area available elsewhere in Fawkner Park to provide for the reasonable needs of the public.

Wolf Group submitted that instead of being nominated as a Type 3 park, Fawkner Park should be nominated as a Type 2 park to allow for the allowable shadow. The Panel supports further investigation in this regard, as set out in Chapter 5.3. Wolf Group also submitted that the Amendment should maintain flexible development options subject to Council's discretion.

Council noted that this site is within the Commercial 1 Zone, and subject to the Shrine Vista DDO17 and DDO19 (in Area 42 with a maximum height limit of 60 metres) and a floor area ratio of 4:1. It is also subject to the Alfred Hospital flight path protections in the DDO56.

Mr Fulwood modelled a 24,000 square metre office building for the site, which is the maximum floor area ratio for a site of 6,000 square metres. The floor area was contained within a 6 storey building and the shadow at 2pm fell within the existing shadow of the neighbouring development. He therefore concluded that there was no impact on the development capacity of the site as a result of the DDO8.

Wolf Group's submission did not include any modelling or other evidence in support of its claims regarding the impact of the DDO8 on the site. It did not appear before the Panel and did not challenge Mr Fulwood's modelling. It is worth noting the reduced hours of sunlight protection for Park Type 3 (East), being 10am to 2pm rather than 10am to 3pm, and that Mr Fulwood's modelling demonstrated no additional shadowing from a DDO19 compliant development at 2pm. The Panel supports mandatory controls for the reasons set out in Chapter 6.

The Panel does not consider any change to the Amendment is warranted in response to Wolf Group's submission, other than its recommendation in Chapter 5.3 that further modelling be undertaken to understand the impact of allowable shadow on Type 3 parks, and that consideration be given to adjusting the DDO8 controls accordingly.

[33] Submission 118

(ii) Cnr Boundary Road and Macaulay Road North Melbourne

Submission 101 relates to land at 23-37 Boundary Road, 222-232 and 234-244 Macaulay Road North Melbourne. It is located within the Arden-Macaulay Urban Renewal Area. The land is within the DDO63, which has a mandatory street wall height of 20 metres and overall height of 12 storeys. Development on the land has the potential to overshadow Clayton Reserve and the Canning/Macaulay Street Reserve. Submitter 101 indicated an intent to seek a permit for the redevelopment of the land, but no permit application had yet been lodged.

Submitter 101 estimated that the DDO8 would result in a loss of yield in the order of 2,615 square metres of gross floor area on the site, as well as a roof terrace of 732 square metres, which "*will significantly compromise our development*".

The submitter supported the general principle of protecting winter sunlight to parks, but submitted that the Amendment seeks to modify controls affecting an urban renewal area that had only just been implemented. It submitted that overshadowing issues "*have already been robustly considered*" in the recently implemented controls for Arden-Macaulay (Amendment C190, gazetted in 2018), and that the Amendment "*had not considered the broader impacts against other objectives of the renewal precinct*". It noted that the Arden Macaulay built form controls have been implemented on an interim basis, and that it would be inappropriate to introduce a new control that "*diminishes the investment by public and private parties in Arden Macaulay*", without proper assessment of the impacts across the renewal area, when a built form review will soon be undertaken in light of the Metro project.

Submitter 101 also expressed concerns about the policy approach, the mandatory nature of the controls, the lack of a park specific analysis, the 'flat' approach to protection of parks and the extended hours of protection. These issues are addressed elsewhere in this Report.

The Panel has found in Chapter 5.3 that it is appropriate to apply the controls to growth areas where the strategic planning is yet to be undertaken or completed. The Panel considers that it is important to protect and preserve sunlight amenity to parks in these areas while the strategic planning and built form controls are being developed, because once the sunlight access to these parks is lost, it is lost forever. The overshadowing controls can be revisited as part of the strategic planning for the development of permanent built form controls for Arden-Macaulay if it is considered justified at that time.

The Panel does not consider any change to the Amendment is warranted in response to Submission 101.

(iii) 407-415 King Street West Melbourne

Tract made a submission on behalf of Iglu Student Accommodation in relation to 407-415 King Street West Melbourne.[34] The site is in the Mixed Use Zone and subject to DDO33 which includes a 40 metre height limit.[35] The site has a site specific Heritage Overlay 842. The DDO33 includes discretionary overshadowing provisions preventing overshadowing of Flagstaff Gardens between 11am and 2pm on 22 September and 22 June.

The site is currently occupied by a two storey concrete office building. A permit has issued for a residential hotel with a condition to reduce the height to RL 78.8 or a fifteen storey building above

[34] Submission 65

[35] DDO33 is proposed to be amended under Amendment C309/C395, which is awaiting approval.

the existing two storey podium. Plans under the permit have not been endorsed. A live permit amendment application is with Council for change of use to student accommodation with a maximum height of nineteen storeys above the two storey podium, within the building height of RL 78.8 (excluding the parapet). The amended application complies with the overshadowing provision under the DDO33 but not with those proposed under the DDO8.

Tract submitted that Flagstaff Gardens should not be included in the Amendment, as it was out-of-scope in the Hodyl Report. It submitted that the exhibited Amendment incorrectly identified Flagstaff Gardens as a Type 1 park, as the surrounding area is not low-rise. Further, the site is already subject to overshadowing controls under the DDO33, and should not be included within the DDO8 area.

Council responded that VCAT refused a 70 metre proposal on the site in 2017, though found no shadow on of Flagstaff Gardens between 11am and 2pm at 22 September of 22 June.[36] A permit was granted for an 81.6 metre building on site but the amendment application is seeking approval of a taller building on the site.

Mr Fulwood's built form analysis modelled an 11 storey office building on the site, and found a 1 percent impact from the proposed DDO8 as a result of requiring an additional setback of 3.8 metres at the top level to avoid shadow on Flagstaff Gardens at 3pm. Council submitted that this represents a minor impost on the development opportunity contemplated by the DDO33, and that this case illustrates that the exercise of discretion in relation to building heights under a precinct based DDO needs the further qualification of the mandatory DDO8 controls to preserve winter sunlight in parks.

In response to Tract's submission that Flagstaff Gardens should not be included in the Amendment, Council submitted that its protection at the winter solstice is already established by Amendment C245 (that applies to the Queen Victoria Market precinct), and there is no reason to treat it differently to other city fringe parks which are also protected by the Amendment.

The Panel agrees with Council and notes the site has an existing permit. Where permits are in place, they will not be affected as development can proceed in accordance with existing permits. If the existing permit expires, future development proposals on the site should comply with the DDO8 controls.

The Panel does not consider any change to the Amendment is warranted in response to Submission 65.

(iv) 45 Poplar Road Parkville

Sequiris Pty Ltd[37] (a subsidiary of Commonwealth Serum Laboratories) owns a site within the Parkville NEIC that is adjacent to Royal Park (a Type 1 park). Key characteristics include:

- a large site at approximately 11.4 hectares with a number of low rise buildings
- within the Industrial 1 Zone with a small portion subject to a Heritage Overlay
- no built form controls including height or setback restrictions under the current controls.

Sequiris opposes the mandatory controls, in particular the blanket requirement for no additional shadow onto Type 1 parks. Sequiris submitted that given the existing low rise buildings on the site,

[36] DCF 407 King Street Developing Entity v Melbourne CC [2017] VCAT 423
[37] Submission 36

any future redevelopment would require significant setbacks and/or reduction to height to completely avoid overshadowing the park. This could render redevelopment unviable. Sequiris submitted that the Amendment would compromise its future plans and operations, and the renewal of a large redevelopment site near a significant health and medical institution and within the Parkville NEIC.

Council responded that the site sits directly north of the wetlands and playing fields of Royal Park. Given the size and topography of the site, significant redevelopment opportunities are likely to exist on the site which avoid additional shadow to the park. Some limited existing shadow is cast by the current buildings on the site, which may provide further limited opportunity for redevelopment.

The Panel supports Council's position. Council has taken a strategic and considered approach to the identification of the DDO8 area. The site is large and there should be opportunities for redevelopment that can still meet the requirements of the DDO8. Broadly, the Amendment strikes the right balance between policies that support the NEIC, and the protection of sunlight to parks. The Panel was not persuaded that a site specific exemption or exclusion was justified.

The Panel does not consider any change to the Amendment is warranted in response to Submission 36.

(v) 96 Wellington Parade East Melbourne

PSC Insurance made a submission in relation to 96 Wellington Parade, East Melbourne.[38] The site is in the Commercial 1 Zone and the precinct wide Heritage Overlay that applies to East Melbourne and Jolimont. It is also within the DDO21, in Area 4 which has a discretionary height limit of 24 metres.

The site is currently occupied by a 5-6 storey commercial building. The adjacent building at 100 Wellington Parade is a 6 storey commercial building. A current application for a 47 metre residential building has been made for the site at 96 Wellington Parade.

Mr Fulwood undertook built form testing of the site at 100 Wellington Parade, which indicated that that site would not be impacted by the DDO8, but he did not test the property at 96 Wellington Parade.

Council submitted that the current permit application, at almost double the preferred height limit, is another case that illustrates the need for mandatory controls to preserve winter sunlight in parks.

The DDO8 would allow the site to be developed to the current DDO21 maximum height limit (albeit discretionary). While the current planning application has not been tested, it is likely that at roughly double the height of the DDO21 (and roughly double the height of the existing buildings on 96 and 100 Wellington Parade), it would cast additional shadow on Yarra Park and would not be permitted. The Panel agrees that this is an example of a permit application that seeks a large variation from the discretionary DDO height controls, and provides further support for mandatory controls to protect winter sunlight to parks.

No change to the Amendment is required.

[38] Submission 175

(vi) 86-88 and 90-94 Jolimont Street East Melbourne

Beveridge Williams made a submission representing Nuvolink Pty Ltd, the owner of 86-88 and 90-94 Jolimont Street East Melbourne.[39] The site is opposite the section of Yarra Park to the west of the MCG and the cricket nets.

The site is subject to the DDO22 and is within Area 16 which has a discretionary height limit of 12 metres. The DDO22 has a discretionary control requiring no additional overshadowing of Yarra Park between 11am and 2pm on the equinoxes.

Beveridge Williams submitted that this part of Yarra Park has low amenity with limited use for public recreation or as public realm, due to the pedestrian connector bridge (William Barak Bridge). It submitted that a site further to the west at 102-104 Jolimont Street with a street wall height of 9 metres would likely cast shadow onto Yarra Park greater than any future redevelopment at the subject site. Beveridge Williams submitted that a localised assessment would be beneficial instead of the blanket approach proposed by the Amendment.

Mr Fulwood's built form testing for this site shows that in the absence of a street wall height under the DDO22, the allowable shadow is determined by the 12 metre height limit on the site. The site could be developed to 12 metres and Mr Fulwood concluded that the site is not impacted.

The Panel acknowledges that the DDO22 height limit is discretionary. The DDO8 may limit the development potential of the site to the extent that it effectively converts the discretionary height limit into a mandatory height limit. However, for reasons stated elsewhere in this Report, the Panel supports Council's approach, and supports the use of mandatory controls in the DDO8. Based on its observations on its site visits, the Panel does not agree that this section of Yarra Park is low amenity and not deserving of the same level of protection as the rest of the park.

The Panel does not consider any change to the Amendment is warranted in response to Submission 94.

(vii) Commonwealth Games Village

The Commonwealth Games Village is located to the west of Royal Park, between Oak Street and the CityLink Freeway. The site is being developed by Village Park Consortium Pty Ltd (Submitter 92). It submitted that the Commonwealth Games Village is subject to site specific controls contained in the incorporated document titles *The Games Village Project, Parkville, September 2015* and the approved Siting and Design Guidelines and Master Plan. It submitted that the DDO8 should include a specific exemption for use and development carried out in accordance with these documents.

The incorporated document states:

> The controls and provisions in the Melbourne Planning Scheme, other than this incorporated document, do not apply to the subdivision, use or development of the Land for any purpose associated with the Games Village project, except for clauses 54, 55 and 56 of the Melbourne Planning Scheme, which apply only to the extent provided for in this incorporated document.

The DDO8 will therefore not apply to any use or development undertaken in accordance with the incorporated document. A specific exemption is not required.

[39] Submission 94

10 Drafting and technical issues

10.1 Overlapping and inconsistent overshadowing controls

(i) The issues

The issues are:

- some sites subject to an existing precinct wide DDO may be subject to overlapping (and inconsistent) overshadowing controls
- some parks will be provided different levels of protection under different DDOs.

(ii) Evidence and submissions

Mr Barnes gave evidence in relation to what he described as "*a complex array of overshadowing controls*" contained in the Planning Scheme across various different zone schedules, DDO schedules and DPO schedules. He noted that controls in other parts of the Scheme are generally discretionary, based around protection between 11am and 2pm at the equinox, and would in some cases overlap the controls proposed under the DDO8. He stated:

> Existing overshadowing controls should be rationalised in order to simplify the planning scheme, and to remove conflicting controls and ambiguity. Amendment C278 has not done this. Accordingly, there will be situations in which two different overshadowing controls will apply.
>
> Where two sets of controls apply, the planning principle is that the more stringent control will take precedence. In most cases, the more stringent controls will be the DDO8 control.
>
> If the Panel supports this amendment, I believe it should consider making a recommendation that existing overshadowing controls in the planning scheme be rationalised, as a priority.

The University of Melbourne submitted that overlap and inconsistency between the DDO8 and shadow controls in other parts of the Scheme creates confusion, and suggests that the Amendment has not been well thought out. It submitted:

> A thorough and well considered amendment would include the removal, re-wording or rationalisation of these existing aspects of the Scheme. This amendment has not considered this aspect. … It would be fair, reasonable and orderly for an amendment that directly invokes the necessity for such work (by creating inconsistencies within the Scheme) to incorporate that work as part of the Amendment so that the ramifications can be carefully considered.

In addition to the overlapping controls under DDO10 and DDO8 on some sites around Queen Victoria Market (discussed in more detail in Chapter 9.10), the University pointed to other cases where the same park is subject to different levels of protection under different DDOs, depending on where the development site is located:

> How can it be logical that a development proposal [on one site] captured by DDO10 and having a potential impact upon Parliament Gardens or Treasury Gardens is subject to a 4 hour discretionary control pursuant to DDO10, whereas a development proposal [on a different site] captured by DDO8 having a potential impact upon the same parks is subject to a 5 hour mandatory control? This is neither fair nor orderly planning. Inconsistency undermines Schemes and respect for the planning system.

The University submitted that consideration should be given to incorporating the detailed shadow controls proposed under the DDO8 into existing DDO controls to "*create one control that guides*

the scale and extent of development and gives effect to the need to achieve a balanced outcome". Alternatively, the Amendment should be deferred to allow a 'cleaning up process' to avoid duplication and overlapping of shadow controls.

Council acknowledged that it is not ideal to have conflicting overshadowing controls in the Planning Scheme, and that it will be appropriate in due course to remove the conflicting controls from the 'overlapping' precinct wide DDOs.[40]

In the meantime, Council submitted that where a development site is subject to two overlapping shadow controls, one in a precinct wide DDO and another in the DDO8, the DDO8 will 'trump' the existing overshadowing controls in the general precinct wide DDO, and the Planning Scheme "*will need to be read to resolve the inconsistency by preferring the specific mandatory control over the discretionary controls, by reason of section 7(4) of the Act*".

Council submitted that this was another reason for supporting mandatory controls in DDO8:

> In the event that DDO8 imposed a discretionary rather than mandatory control, the responsible authority would be faced with a difficult task in determining which of two discretionary controls ought to be preferred – one protecting sun at the equinox, and the other protecting sun at the winter solstice. That conflict would not be easily resolved. … One can imagine the need to argue before the Tribunal that DDO8 should be preferred because it is later in time; to which the proponent would respond that the earlier, general DDO addressed a broader range of built form considerations, only one of which was overshadowing, and the net community benefit lay in preferring the equinox standard.

Council submitted that the only development sites that are proposed to be subject to overshadowing controls under both the DDO8 and the DDO10 are those identified to the south-east of the Queen Victoria Market (which were included in the DDO8 area in error and will be removed from the Amendment – see Chapter 9.10).

On the issue of inconsistent levels of protection for the same park across different DDOs, Council acknowledged that this is a "*somewhat anomalous outcome*", but that it reflects the different policy context for development sites in the Hoddle Grid and Southbank, where greater development intensification is expected:

> Given the nature of the Central City, there is a fundamental logic to the Central City shadow provisions being different from the balance of the municipality because building heights in the Central City are expected to exceed all other areas.

Council did not support a return to the hierarchical approach reflected in DDO10 (whereby different 'more significant' parks get a higher level of protection) as a means to resolve these inconsistencies, and submitted that ultimately, the Amendment creates greater alignment between the protection of Capital City parks under the DDO10 (which are now protected in winter months, albeit for shorter hours, under DDO10), and parks outside the Central City.

(iii) Discussion

While the Panel agrees that overlapping and inconsistent overshadowing controls are less than ideal, it does not agree with the University of Melbourne that this fundamentally undermines the Amendment.

[40] Examples of where DDO8 will overlap with other precinct wide DDOs include land in City North subject to DDO61, land in East Melbourne subject to DDO21 and land in Arden Macaulay subject to DDO63

Overlapping controls applying to the same development site

The Panel agrees that where one development site is subject to two different DDOs containing inconsistent overshadowing controls, the inconsistency should be rectified. This should be done by removing the overshadowing controls from the precinct wide DDO, so that the DDO8 is the only source of overshadowing controls for those particular sites. The Panel agrees with Mr Barnes that this should be done as a priority.

That said, the Panel does not consider that the introduction of the DDO8 in the meantime would create irreconcilable differences or unresolvable problems with the application and administration of the Scheme. Section 7(4) of the Act requires the Scheme to be read to resolve inconsistencies so far as practicable. While it does not specifically state that a specific mandatory control should be preferred over discretionary controls as Council contended,[41] long standing general principles of interpretation state that later, more specific controls prevail over an earlier more general control. The more stringent control would also take precedence.

On the basis of those principles, the Panel agrees with Council that where a development site is subject to the DDO8 (which deals specifically with overshadowing) and a general precinct wide DDO that includes overshadowing controls among other built form controls, the overshadowing provisions of the DDO8 would be given priority.

Inconsistent protections applying to the same park

Again, ideally the Scheme would provide consistent levels of protection for the same park under different DDOs. However, the Panel does not agree with the University that inconsistencies across different DDOs represents an illogical, unfair or disorderly outcome.

Precinct wide DDOs perform a different function to the DDO8. Overshadowing controls contained in a precinct wide DDO were developed as part of a broader suite of controls that guide development expectations and built form outcomes for a precinct as a whole. They reflect the policy settings for growth and intensification in that precinct, and reflect the policy framework that applied to overshadowing of parks at the time they were developed.

The DDO8, on the other hand, is specifically aimed at protecting parks from overshadowing. It is not precinct based, and it reflects a fundamental shift in the policy approach to the protection of sunlight access to parks.

It is therefore not surprising that there are inconsistencies between overshadowing controls in precinct wide DDOs and those in the DDO8. This should not undermine the Planning Scheme or respect for the planning system.

(iv) Conclusions and recommendation

The Panel concludes:

- While some sites will be subject to overlapping and inconsistent overshadowing controls under the DDO8 and other existing precinct wide DDOs, this is not a reason to delay the Amendment.

[41] Rather, section 7(4)(b)(ii) states that "a specific control over land prevails over any strategic plan, policy statement, code or guideline in the planning scheme" (Panel's emphasis).

- Where sites are subject to the DDO8 and an existing precinct wide DDO, inconsistencies in the overshadowing controls would be resolved in favour of the later, more specific controls in the DDO8.
- While some parks will be subject to different levels of protection under different DDOs, this does not fundamentally undermine the logic or justification for the Amendment.
- That said, inconsistencies and overlaps should be resolved by a further amendment as a matter of priority.

The Panel recommends:

Council should prepare a further amendment to resolve overlapping and inconsistent overshadowing controls across different parts of the Planning Scheme as a matter of priority.

10.2 Geographic application of the DDO8

(i) The issues

The issues are whether the DDO8 should apply to:

- the Showgrounds
- areas in a residential zone and subject to a Heritage Overlay
- land in the DDO48 (Central Carlton North)
- land around green median strips.

(ii) Evidence and submissions

Showgrounds

Submissions made on behalf of Showgrounds Nominees in relation to the Melbourne Showgrounds land sought for the Showgrounds to be excluded from the DDO8. This was on the basis that the closest park, being the Newmarket Reserve, is located about 600 metres to the south-east of the Showgrounds and given this distance, it is extremely unlikely that development on the site would impact this park.

Council in their Part B submission stated:

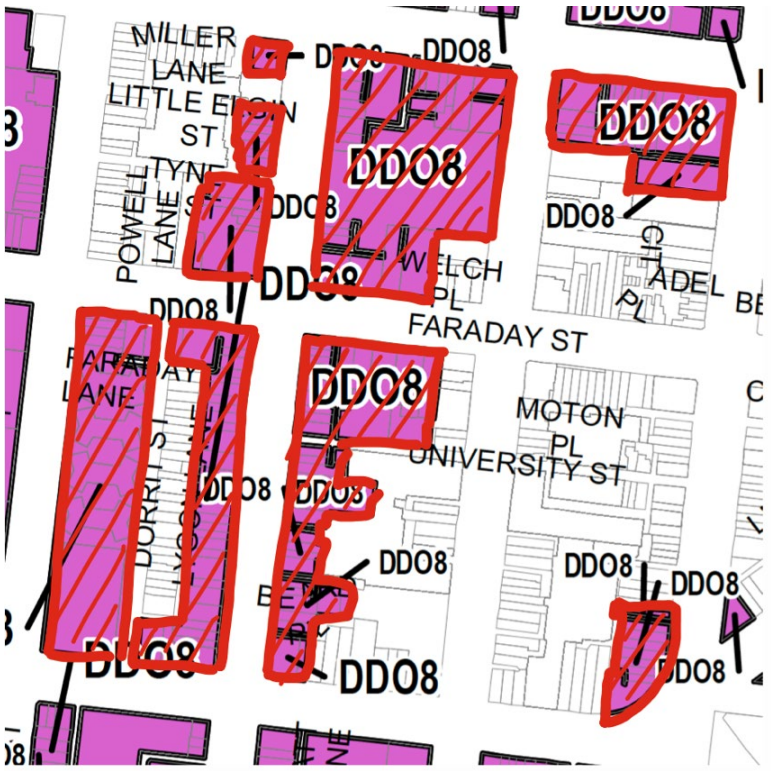
> Council accepts that due to the small area of the Showgrounds land which is within the Park Solar Volume and the extreme height at the edge of the Park Solar Volume of 320 AHD, there is no reasonable prospect of development on the Showgrounds land casting shadow on a protected park. Accordingly, it would not oppose a Panel recommendation that the Showgrounds be excluded from the Amendment based on a judgment that it is impossible for development of the Showgrounds to impact on any protected park.

Land in the DDO48 (Central Carlton North)

The Carlton Residents Association questioned why the land within the DDO48 around Lygon Street had been included within the DDO8, given it was subject to a mandatory height control of 10.5 metres and is well separated from any public park.

Council confirmed that an error in the modelling had occurred, applying the assumption of a maximum developable height of 320 metres to this area rather than the mandatory 10.5 metres. Council confirmed in its Part C submission that those properties shown on the map in Figure 14 below should be removed from the proposed DDO8.

Figure 14 Properties in DDO48 to be removed from the Amendment



Source: Council's Part C submission

Land in a residential zone and subject to a Heritage Overlay

The Carlton Residents Association submitted that it is not clear why the DDO8 would apply to residential areas in Carlton that (in general) currently have a mandatory height limits of 9 metres under the applicable residential zones, since the DDO8 exempts development of 9 metres or less.

The Carlton Residents Association also considered that there was no need to apply the DDO8 to properties within Heritage Overlays surrounding small parks such as the Palmerston-Canning Street Park. While the Association acknowledged that the mandatory heights in the residential zones only applied to dwellings and residential buildings, they considered that given the Heritage Overlay, it was unlikely non-residential development would exceed the 9 metre height exemption. They submitted that if Council applied the 'concealment of additions' provisions of the heritage policy in the Planning Scheme, there would be no need for the DDO8 to apply.

The Association also used the Keppel Street Park as a case study, stating that given the properties abutting the park are single storey in scale and on the Victorian Heritage Register, it is unlikely that additional storeys would be approved on these sites. Accordingly it was most unlikely that the 'no overshadowing test' would ever be triggered.

Council responded that the DDO8 is required to cover non-residential development that might be undertaken. It referred to Mr Smith's evidence regarding the modelling assumptions that allowed for 30 percent higher non-residential development in residential zones, and building heights of up to 320 metres for non-residential zones without height controls (refer to Chapter 3.1 for further detail on the modelling assumptions).

Median strips

The Carlton Residents Association submitted that Carlton's historic median strips and roundabouts should be recognised as important and accessible open spaces and should be included within the protections provided by the DDO8. It questioned why Drummond Street in Carlton North, that has generous grassed medians, had so little DDO8 'coverage' and considered these medians should justify a no additional overshadowing control. The Association submitted that Council should justify why the north side of Elgin Street has been included in the DDO8 area, given it was unlikely that new parks would be created on the south side of the street and the median strips will probably be designed with transport facilities.

Council submitted that the DDO8 was only applied to properties that affect existing parks within the Public Park and Recreation Zone, and not to other areas of open space such as medians. It submitted that properties on the north side of Elgin Street are within the solar volumes of parks to the south, and should therefore be included in the DDO8 area.

(iii) Discussion

In relation to the Showgrounds land, the Panel accepts that it is extremely unlikely that any development within the Showgrounds will cast a shadow on a public park. Only a very small corner of the site was assessed as being within the solar volume of any park and theoretically capable of casting a shadow to a park in winter. Even then, development would have to be around 320 metres to cast any shadow. On this basis, the Panel recommends that this site be removed from the DDO8.

The Panel accepts that there was an error in including properties within the DDO48 in the DDO8 area, and that they should be removed given that there is no prospect that development on these properties will overshadow any public park.

In relation to land in a residential zone and subject to a Heritage Overlay, the Panel agrees with Council that while many of the sites are constrained, there is some opportunity for redevelopment beyond the exempt 9 metre height that could cast shadow beyond the existing shadow. The Panel accepts that there will be cases where the DDO8 will not be triggered by development (for example, where redevelopment of under 9 metres in height is proposed). As the Carlton Residents Association pointed out, most of these properties are included within a Heritage Overlay, so a permit would be required for development in any case. The potential for an additional permit trigger under the DDO8 is considered to be a reasonable outcome to protect the parks, without causing undue burden on property owners. The DDO8 should therefore apply to these areas to ensure that the parks (generally Type 1 parks) are protected.

The Amendment does not apply to medians or other areas of open space not identified as a public park within the Public Park and Recreation Zone, whether or not they accommodate trees or other vegetation. This is explained within the background documents to the Amendment and it is beyond the scope of the Amendment and the Panel's remit to consider these other open spaces.

(iv) Conclusions and recommendation

The Panel concludes:

- The Showgrounds land should be removed from the DDO8.
- Properties within DDO48 as shown on Figure 14 should be removed from the DDO8.

- The DDO8 should remain on sites within residential zones and Heritage Overlays given the potential for redevelopment, including non-residential development that could exceed the 9 metre height limits in the zone.
- It is beyond the scope of the Amendment to extend the DDO8 area to protect median strips and other areas not zoned Public Park and Recreation Zone.

The Panel recommends:

Amend the mapping of the Design and Development Overlay Schedule 8 to:

a) remove Showgrounds land

b) remove the properties identified in Figure 14 in this Report.

10.3 The 'notch effect' created by intersections

(i) What is proposed?

Allowable shadow is defined by the shadow that would be cast by a street wall or (if there is no street wall height requirement) building built to the maximum requirement on land abutting the park.

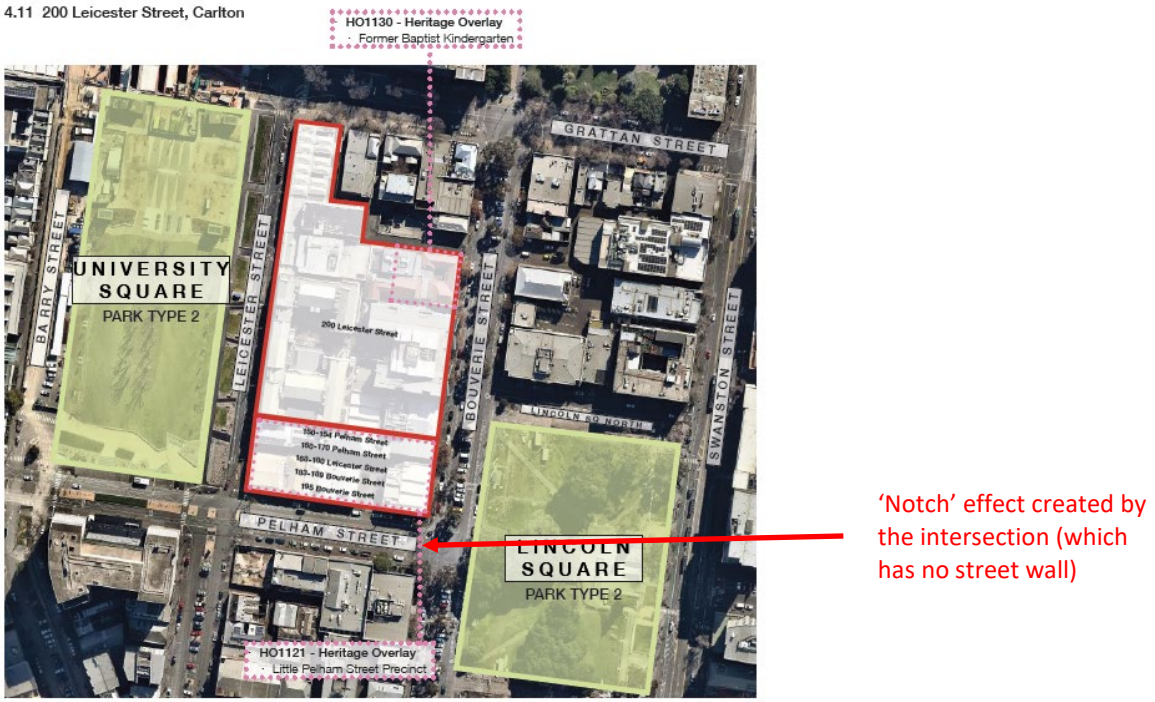
(ii) The issue

The issue is:

- the 'notch effect' created where a park is abutted by an intersection (to which no street wall height or maximum building height requirement applies).

The notch effect is illustrated in Figure 15, which shows the University's site at 233 Bouverie Street/200 Leicester Street Carlton.

Figure 15 Illustration of the 'notch' effect



Source: Panel annotations of an image from Mr Fulwood's evidence

(iii) Submissions

The University of Melbourne explained the 'notch' effect as follows:

> Where street walls fronting or 'abutting' parks are not contiguous, there will be slivers of solar access to these parks at particular times of day when the azimuth of the sun is at certain angles. It would appear that buildings on affected sites will not be able to be built even to the relevant street wall height without offending the proposed control. This is because no 'allowable shadow' will apply at the relevant times. The University's site at 233 Bouverie Street (north-west of Lincoln Square) is a case in point.

Mr Biles described it as follows:

> The intersection of Pelham St to Bouverie means that under the definition of 'allowable shadow' there is no street wall across this intersection. Because the sun at 3pm is not at right angles to the park, the shadow falls across Bouverie Street to the park at an angle of approximately 60 degrees. Building mass set behind the street wall height uses the street wall height to the south to manipulate its mass to fall within the street wall height to meet the terms of 'allowable shadow'.
>
> The analysis in the Hodyl Feb 2021 and SJB Nov 2020 reports appears to ignore this circumstance, overlooking the consequence of the Pelham St intersection.
>
> It is again one of those unintended consequences that get missed when controls are made mandatory.

In cross examination from the University, Mr Fulwood conceded that the Pelham Street/Bouverie Street intersection would create a 'notch' out of the allowable shadow that could be cast by buildings along Bouverie Street to the north of Pelham Street. He conceded that he had not modelled the notch in his built form testing, and as a result, the reduction of development capacity on the sites in Figure 15 would be greater than what he had calculated (at 8 percent).

Council acknowledged the notch effect, but did not concede that it was an unintended consequence. It submitted:

> This will be a sunlight benefit that accrues to the park as a consequence of the break in built form occasioned by adjacent roads, which will have to be taken into account by development proponents in the design of proposed buildings.

(iv) Discussion

The Panel accepts Mr Biles' evidence that because of the angles of the sun, T-intersections abutting parks will limit the amount of allowable shadow that can be cast by developments to the north of the intersection, because they cannot effectively 'borrow' allowable shadow from the street wall heights on sites to the south.

The extent of this effect is not known. None of the experts attempted to quantify the impact of breaks in street wall heights (and allowable shadow) caused by intersections. However based on the modelling that was presented by Mr Fulwood and Mr Biles, the Panel does not anticipate that it would be significant.

Council did not concede that this was an unintended consequence of the way the controls (in particular the definition of allowable shadow) had been drafted. It referred to the benefit that would accrue to the park by having an additional 'slice' of sunlight created by abutting T-intersections.

Neither the University nor any of its experts suggested how this problem might be fixed. In the absence of a clear quantification of the notch effect, how it would impact on development

capacity, or any suggestions as to how it might be addressed, the Panel does not consider that changes to the controls to address the notch effect are justified.

(v) Conclusion

The Panel concludes:

- Changes to the controls to attempt to address the 'notch' effect created by T-intersections abutting parks are not justified.

10.4 Exemptions

(i) What is proposed?

As exhibited the DDO8 provided for the following exemptions:

- buildings and works where the overall building height is 9 metres or less
- buildings and works to an existing building(s) which do not alter the height or setback of any part of an existing building
- buildings and works which would cast a shadow across the Yarra River Corridor caused by unenclosed structures associated with gangways, mooring poles and pontoons constructed by a public land manager.

In the Part C controls, some minor drafting changes were made to these exemptions, and a fourth exemption was added for temporary structures for an event on land within the Special Use Zone Schedule 1 (Flemington Racecourse).

(ii) The issues

The issues are:

- whether the exemptions are appropriate
- whether further exemptions should be added for minor rail works along transport zoned rail corridors.

(iii) Discussion

The exhibited exemptions were uncontested, and are supported by the Panel. The exemption for buildings under 9 metres was backed by modelling analysis that demonstrated that development under 9 metres would be unlikely to cause additional shadowing on parks. This exemption, and the exemption for buildings and works that do not increase the height or setback of an existing building, will allow for minor works without unnecessarily burdensome permit applications being made. Mr Barnes suggested increasing height under the first exemption from 9 metres to 12 metres, but this was not supported by Ms Hodyl as development up to 12 metres could cause shadows on parks.

The minor changes in the Part C version of the controls improve the legibility of the controls, and are supported by the Panel. The Panel also supports the additional exemption relating to temporary structures on Flemington Racecourse, subject to some minor changes in the wording (discussed in Chapter 9.7).

At the first Directions Hearing, Council indicated that it was considering including a further exemption for minor rail works along transport zoned rail corridors. In its Part A submission, it explained that it was no longer pursuing this further exemption, given there is already an

exemption for works of 9 metres or less. Council considered that this would cover minor works along rail corridors, and that works above this height that would have the potential to overshadow parks should be subject to the DDO8 controls. The Panel supports this position.

(iv) Conclusions

The Panel concludes:

- The exemptions as outlined in the Part C controls are appropriate, subject to minor rewording of the exemption for temporary works for Flemington Racecourse.
- A specific exemption for minor works along rail corridors is not warranted.

10.5 Transitional provisions

(i) The issue

The issue is whether the Amendment should include transitional provisions.

(ii) Submissions

Some submissions, including from Orchard Piper, Urbis on its own behalf and Urbis on behalf of a client with land in Arden-Macaulay, raised concerns that the DDO8 does not include transitional provisions for applications lodged but not yet determined when the Amendment is gazetted. They submitted that these applications should be assessed under the Planning Scheme at the time of lodgement. Urbis' submission also stated that existing permits issued before the Amendment is gazetted "*should be honoured*".

Council responded that transitional provisions are not appropriate or required, because:

- in the absence of interim controls, applicants have had ample opportunity for their development proposal to be considered under the current policy and discretionary planning controls
- transitional provisions would delay the application of the controls and has the potential to undermine the purpose of the Amendment, and could have significant implications for parks that are already subject to winter overshadowing
- potential complexity in how the DDO8 will operate in conjunction with the revised Clause 22.02
- the Amendment has been subject to a lengthy assessment process that includes public consultation.

Council provided an example of the difficulties that can arise when transitional provisions are applied. In *63 Exhibition Street Pty Ltd v Minister for Planning*[42] VCAT found that the transitional provisions in the DDO10 meant that the DDO10 was not relevant to consideration of an application for a development that would result in overshadowing of Birrarung Marr at the winter solstice, despite acknowledging that the extent of overshadowing was "*unfortunate and not ideal*".

(iii) Discussion

As at the date of the Part A submission, 14 permit applications were on foot for major developments that could be impacted by the Amendment. Some may have been decided since,

[42] [2020] VCAT 498

and others may have been lodged. The Panel considers that if these permit applications were subject to transitional provisions, there is a risk that further development that overshadows parks at the winter solstice could be approved.

The Panel agrees with Council that transitional provisions are not justified in this case. The Amendment has been through an extensive and lengthy public consultation process that commenced some years ago. The *Sunlight to Public Spaces Policy Review Community Engagement Report* is dated June 2016. The Amendment underwent the statutory exhibition and consultation process, and the Hearing was delayed by several months due to COVID-19. The Panel agrees with Council that applicants have had ample opportunity for their development proposal to be considered under the current policy and controls. It would be neither unfair nor unjust to gazette the Amendment without transitional provisions.

(iv) Conclusion

The Panel concludes:

- Transitional provisions are not justified.

10.6 General drafting matters

(i) Changes to the Objectives in Clause 22.02

Submitter 102 opposed the Amendment as exhibited, and submitted that no changes should be made to Clause 22.02 and overshadowing should be controlled through existing DDOs rather than the proposed DDO8. It was concerned that the changes proposed to the Objectives of Clause 22.02 will have the unintended effect of altering the Objectives relating to public spaces both inside and outside the Central City.

The Amendment only proposes to amend one Objective in Clause 22.02, as follows:

> To protect, and where possible increase the level of winter sunlight access to public spaces ~~during the times of year when the intensity of use is at its highest~~.

The Panel agrees that the Objectives in Clause 22.02 do not distinguish between development within and outside the Central City – they apply across the whole municipality. That said, the Amendment makes no change to the criteria for key public spaces in the Central City specified in the Clause. These provide that development must not cast additional shadow across Tier 1 spaces, and should not cast additional shadow across Tier 2 spaces, at key times and dates identified in the planning scheme. The Amendment does not alter the key times and dates identified in the Planning Scheme for Central City parks. The Objectives (which have general application) would be read in light of the criteria (which have specific application), and should not change the way the criteria are applied to the Central City.

The Panel does not consider any change to the Amendment is warranted in response to Submission 102.

(ii) Definition of allowable shadow

The definition of allowable shadow in the Part C version of the DDO8 reads:

> **Allowable shadow** means the following, as applicable (and as illustrated by Figure 1 below):

- if a street wall height requirement applies to land abutting a park, the shadow that would be cast on the park between 10am and 3pm on June 21, by a street wall built to the street wall height requirement;
- if a street wall height requirement does not apply to land abutting a park, the shadow that would be cast on the park between 10am and 3pm on June 21, by a building built to the maximum building height requirement;
- in respect of Fitzroy Gardens, a shadow that is cast by a street wall fronting Albert Street built to a height of 24 metres.

The Panel considers that the following drafting is simpler and easier to understand, and does not change the meaning of allowable shadow:

> **Allowable shadow** means the shadow that would be cast on the park between 10am and 3pm on June 21 by:
>
> - a street wall built to the street wall height requirement on land abutting the park;
> - if no street wall height requirement applies, a building built to the maximum building height requirement on land abutting the park;
> - in respect of Fitzroy Gardens, a street wall fronting Albert Street built to a height of 24 metres.
>
> Refer to Figure 1 below.

(iii) Definition of land abutting a park

Allowable shadow is calculated by reference to the permitted street wall or building height on 'land abutting a park'. The exhibited and Part A versions of the DDO8 define land abutting a park as:

> … land with a common boundary to a park or land separated from the park by a public street or laneway.

The Part C version includes an amended definition of land abutting a park (Panel's emphasis):

> … land with a boundary to a park or land with a boundary to a road that abuts a park. It includes land on which a building built to the street wall height requirement or the maximum building height requirement (whichever is the lesser) would cast a shadow on a park at any time between 10am and 3pm on 21 June.

During the Hearing, the question arose as to whether the Part A definition would capture allowable shadow from the street wall on the whole site, where only part of the site boundary abuts the park. An example is the University's site at 233 Bouverie Street/200 Leicester Street shown in Figure 15. Only a small portion of the eastern site boundary of the site abuts Lincoln Square. Would the shadow cast by a street wall on that part of the site to the north of Lincoln Square North (which does not directly abut the Square) be allowable?

The Panel understands that the intent of the underlined words added to the Part C definition is to capture the shadow cast by the street wall/building height on those parts of a site that do not directly abut the park. However, on the Panel's reading, it would also apply to sites that may not abut a park at all, but would potentially overshadow the park if developed to the maximum allowable street wall or building height.

The Panel supports this, as it is consistent with the principle underpinning allowable shadow – namely that for Type 2 parks in growth areas, the controls should be tailored to allow additional overshadowing beyond the existing shadow in recognition of the expectation for growth and development intensification for the area (not just for sites that directly abut a park).

If this is the intent, the Panel does not consider that the controls should be framed around land abutting a park, as this may cause confusion in relation to those sites that only partially abut the park, or do not abut the park but may nevertheless create allowable shadow if developed to the maximum street wall or building height requirements. This could be addressed by simple drafting changes:

- substitute 'abutting' with 'near' in the definition of allowable shadow
- delete the definition of land abutting a park, as it is no longer required.

These changes are reflected in the Panel's recommendations below.

(iv) Recommendations

The Panel recommends:

Amend Clause 2.0 of the Part C version of the Design and Development Overlay Schedule 8 to replace the definition of 'allowable shadow' with the following:

> **Allowable shadow means the shadow that would be cast on the park between 10am and 3pm on June 21 by:**
>
> - **street walls built to the street wall height requirement on land near the park;**
> - **if no street wall height requirement applies, buildings built to the maximum building height requirement on land near the park;**
> - **in respect of Fitzroy Gardens, a street wall fronting Albert Street built to a height of 24 metres.**
>
> **Refer to Figure 1 below.**

Amend Clause 2.0 of the Part C version of the Design and Development Overlay Schedule 8 by deleting the definition of 'land abutting a park'.

10.7 Further mapping changes

Council ran the modelling to identify properties with a potential to overshadow parks (described in Chapter 3.1(ii)) in May 2019, before exhibition of the Amendment C278. The modelling was run again in March 2020. The map outputs for both runs are included at Appendix A of Mr Smith's witness statement (Document PD45). The updated (March 2020) modelling identified certain properties with potential to overshadow parks that were not identified in the initial modelling run, and other properties that were initially identified as having the potential to overshadow, but were confirmed in the later modelling run as not having the potential to overshadow. The DDO8 mapping should be updated to take into account the March 2020 modelling contained in Appendix A of Mr Smith's Statement.

The Panel recommends:

Update the Design and Development Overlay Schedule 8 mapping to make any adjustments required in light of Appendix A Map 2 of Mr Smith's witness statement (Document PD45).

Appendix A Submitters to the Amendment

No.	Submitter	No.	Submitter
1	Julie Kirk	32	Samuel Johnston
2	Kelly Southworth	33	Emmy Chung
3	Miranda Williams	34	Rupert Myer
4	Allison Williams	35	Annabel Myer
5	Mathew O'Rourke	36	Seqirus, CSL
6	David Gentle	37	Theo & Edith Nelson
7	Peter May	38	Friends of Moonee Ponds Creek
8	Adel Cheah	39	Friends of Royal Park
9	Christine Robinson	40	Carlton Residents Association
10	David Barber	41	Bernard Grinberg
11	Robyn Phelan	42	Adelaide Badgery
12	Mila Arden	43	Matt Morgan
13	Dr Richard Gould	44	Daniel Malton
14	Dr Brett Scarlett	45	Josephine Waterhouse
15	Kathleen Doerre	46	Lucy Martin
16	Mary Marasco	47	Hafsa Alasmar
17	Lothar Doerre	48	Mandy Mulholland
18	Christopher Doerre	49	Myer Walter
19	Hailey Maloney	50	Dr Sarah Leer
20	Ian Bird	51	Geoffrey Clarke
21	Katrina Foster	52	Gabrielle Harper
22	Mallika Abbott	53	Royal Park Protection Group
23	Olivia Ball	54	Tak Keong Yang
24	Fiona Sofra	55	Paul McLeod
25	Dr Steven Hatzikostas	56	Sophie St George
26	Cath John	57	Kami Ceylan
27	David Wark	58	Jane Shannon
28	Ray Cowling	59	Marg Jungwirth
29	Gary Batemen	60	Mary Kelleher
30	Samuel Johnston	61	Ian Williams
31	Samuel Johnston	62	Anne Phefley

63	Liz Rushen	91	Planning Studio on behalf of Andavol Pty Ltd
64	Polis on behalf of Steve Salamon	92	SJB on behalf of Village Park Consortium
65	Tract on behalf of Iglu Student Accommodation	93	Housing Industry Association
66	Bridget Mc Donnell	94	Beveridge Williams on behalf of Nuvolink Pty Ltd
67	Peter Sandars	95	AFL
68	Sally Laurie	96	East Melbourne Group
69	Fiona Bell	97	Melbourne Cricket Club and the Melbourne Cricket Grounds Trust
70	Jemima Myer	98	Jennifer Mc Donald
71	Christine Robinson	99	Orchard Piper Pty Ltd
72	Graham Howard	100	Lendlease
73	Margaret Farren-Price	101	Urbis
74	Melbourne Business School, University of Melbourne	102	Property Partners on behalf of 63 Exhibition Street Pty Ltd
75	VPA	103	Vic Track
76	QVM Pty Ltd	104	Janet Graham
77	AECOM on behalf of Carlton Football Club	105	Paul Billett
78	Urbanest	106	Linda Dugan
79	Department of Transport	107	Janette Corcoran
80	Tom Harley	108	Ben Ball
81	Sarah Kennedy	109	Les Kitchen
82	Mathilda Harley	110	Urbis
83	The University of Melbourne	111	Karl Hessian
84	Protectors of Public Lands, Victoria	112	Andrew Jay
85	Melbourne South Yarra Residents Group Inc.	113	James Kemp
86	Australian Red Cross	114	Invest Victoria
87	Property Council of Australia (Victorian Division)	115	Bea McNicholas
88	Tract on behalf of Cedar Pacific	116	Cat Woods
89	Richmond Football Club	117	Planning Backlash Inc.
90	Ratio on behalf of the Royal Society of Victoria	118	Wolf Group

119	SJB Planning on behalf of Cricket Australia	149	Penelope Maroulis
120	Urbis on behalf of RMIT	150	John Coyne
121	P Walsh	151	Gina Crabbe
122	John and Judith Lannen	152	Lesley Tipping
123	National Trust	153	Brendan O'Farrell
124	Adrienne Clarke	154	Dr Eveline Fallshaw
125	Protect Park Street Precinct Community Action Group	155	Protect Park Street Precinct Pty Ltd
126	Russell Taylor	156	Christine Croyden
127	Dennis Munari	157	Nick Howden
128	Parkville Association	158	Shirley Frost
129	Dorothy Williams & Charles Colman	159	David James
130	Anna Woodley	160	Eileen Sheridan
131	Ri Scarborough	161	John & Margaret Coyne
132	Suzie Rovas	162	Tanya Piccolotto
133	Steven Brown	163	Adrienne E Clarke
134	Frank Novak	164	Rupert Myer
135	Karen Latimer	165	Valerie Wilson
136	R & J Jarvis	166	Angelo Labriola
137	Debbie Plastow	167	Geoff Hopkins
138	Anne Findlay	168	John Sullivan
139	Dr Henrik Dahl & Dr Jenny Dahl	169	Neil Wilson
140	Jacqueline Taylor	170	Marie Bolduc
141	Hilary Charlesworth & Charles Guest	171	Josh Collins
142	Cate Mills	172	Barbara Collins
143	Rudy Pilotto	173	MAB
144	Royce & Beverley Jackson	174	Development Victoria
145	Victoria Strutt	175	Human Habitats
146	Norman Tickner	176	VRC
147	Dr Ainslie Murdoch	177	RACV
148	Marion Hunt	178	City of Moreland

Appendix B Parties to the Panel Hearing

Submitter	Represented by
Melbourne City Council	Susan Brennan SC and Jordan Wright of Counsel, with Jill Cairnes, with presentations from: - Andy Fergus, former Council officer, on strategic overview - Dan Smith, former Council officer, on GIS and modelling - David Callow, current Council officer, on ecology With expert evidence on: - Strategic planning and urban design from Leanne Hodyl of Hodyl + Co - Open space planning from Joanna Thompson of Thompson Berrill Landscape Design - Town planning from David Barnes of Hansen Partnership - Architecture from Beaudene Fulwood of SJB Architecture - Economics from Dr Marcus Spiller of SGS Economics and Planning - Health from Dr Caryl Nowson of Deakin University
The University of Melbourne	Paul Connor QC and Roshan Chaile of Counsel, instructed by Norton Rose Fulbright, with expert evidence on: - Town planning from Michael Barlow of Urbis - Town planning and urban design from Tim Biles of Ratio Consultants - Vitamin D from Peter Ebeling of Monash University
Victorian Planning Authority	Steve Barclay
The Royal Park Protection Group	Anne Phefley
The Carlton Residents Association	Peter Sanders and Ewan Ogilvy
Protect Park Street Precinct Pty Ltd	Christine Christian AO
Parkville Association Inc	Robert Moore
Cricket Australia	Hugh Smyth
AFL Australia, MCC and MCG, Richmond Football Club	Peter O'Farrell of Counsel
Polis Pty Ltd	John Cicero and Eliza Minney of Best Hooper, with expert evidence on: - Open space from Kylie Jordan of Tract Consultants - Traffic/pedestrian activities from Charmaine Dunstan of Traffix Group - Acoustics from Darren Tardio of Enfield Acoustics
Victoria Racing Club	Laura Thomas of Urbis
Showgrounds Nominees	Laura Thomas of Urbis

Mary Drost OAM	
96 Wellington Parade Pty Ltd	Will Pearce and Joe Fisher of Human Habitats

Appendix C Document list

No.	Date	Description	Provided by
PD1	25/09/19	Further submission on behalf of Royal Park Protection Society	Ms K Oddie
PD2	02/03/20	Panel Directions	PPV
PD3	04/03/20	Referral of six late submissions a) Submission 169 - Neil Wilson b) Submission 170 - Marie Bolduc c) Submission 171 - Josh Collins d) Submission 172 - Barbara Collins e) Submission 173 - MAB f) Submission 174 - Development Victoria	Ms J Cairnes, City of Melbourne
PD4	06/03/20	Response to Panel declaration – Orchard Piper	Ms R Anderson, Rigby Cooke
PD5	06/03/20	Response to Panel declaration – University of Melbourne	Ms V Vilagosh, Norton Rose Fulbright
PD6	06/03/20	Response to Panel declaration – Melbourne Business School	Ms B Phelan, King & Wood Mallesons
PD7	18/03/20	Letter requesting that Panel direct City of Melbourne to produce Requested Material	Ms V Vilagosh, Norton Rose Fulbright
PD8	23/03/20	Letter to parties exploring alternative hearing arrangements due to COVID-19	PPV
PD9	23/03/20	Council email responding to exploration of alternative hearing arrangements and requesting adjournment	PPV
PD10	24/03/20	Correspondence supporting Council's request for adjournment	Ms M Drost
PD11a and PD11b	24/03/20	Objection (in two emails) to Panel Hearing proceeding on the papers – Andavol Pty Ltd	Ms E Barnes, Planning Studio
PD12	25/03/20	Council formal request for adjournment of Panel Hearing	Ms R Hellman, Melbourne City Council
PD13	25/03/20	Objection to Panel Hearing proceeding on the papers – Orchard Piper	Ms R Anderson, Rigby Cooke

No.	Date	Description	Provided by
PD14	25/03/20	Correspondence supporting Council's request for adjournment – AFL and others	Ms L Thomas, Urbis
PD15	25/03/20	Correspondence supporting Council's request for adjournment – Development Victoria	Ms A Johns, Minter Ellison
PD16	26/03/20	Correspondence supporting Council's request for adjournment – University of Melbourne	Ms V Vilagosh
PD17	26/03/20	Correspondence supporting Council's request for adjournment – Wolf International Group	Ms R Lyons, Urbis
PD18	27/03/20	Request for adjournment of Panel Hearing – Melbourne Business School	Ms B Phelan, King & Wood Mallesons
PD19	27/03/20	Request for adjournment of Panel Hearing – Andavol Pty Ltd	Ms E Barnes, Planning Studio
PD20	27/03/20	Correspondence supporting Council's request for adjournment – Cricket Australia	Mr H Smythe, SJB Planning
PD21	27/03/20	Correspondence objecting to adjournment of the Hearing – Polis Pty Ltd	Ms E Minney, Best Hooper
PD22	31/03/20	Letter to parties postponing the Hearing	PPV
PD23	19/06/20	Letter from Melbourne Business School - withdraw from the hearings – 18 06 2020	Ms C Perfect, Melbourne Business School
PD24	23/06/20	Letter to parties – updated timings on Panel Directions	PPV
PD25	01/07/20	Letter from Council - Request for extension of time to circulate parks inspection notes	Mr T Hayes, Melbourne City Council
PD26	03/07/20	Site Inspection Notes from Council in response to Direction 7	Mr T Hayes, Melbourne City Council
PD27	07/08/20	PSC Insurance Pty Ltd Submission	Mr J Fisher, Human Habitats
PD28	11/08/20	Planning application in respect of the land 10-12 Wellington Parade and 1071 Hoddle Street: a) Planning Report b) Waste Management Plan c) Acoustic Report d) Environmentally Sustainable Design e) Traffic Impact Assessment f) Metropolitan Planning Levy Certificate	Ms E Minney, Best Hooper

No.	Date	Description	Provided by
		g) Architectural Plans & UCR (200708)	
PD29	28/08/20	Letter to Panel regarding Video Conferencing Hearing and requesting a Directions Hearing	Mr T Hayes, Melbourne City Council
PD30	02/09/20	Panel Directions - consolidated list of the Panel's Directions to facilitate an electronic hearing.	PPV
PD31	03/09/20	Letter to Panel – concerns in relation to electronic hearing	Ms R Anderson, Rigby Cooke
PD32	15/09/20	Victoria Racing Club (VRC) Submission	Ms L Thomas, Urbis
PD33	15/09/20	Royal Agricultural Society of Victoria (RASV) Submission	Ms L Thomas, Urbis
PD34	16/09/20	Email from Andoval Pty Ltd to Panel on conducting third Directions Hearing by Video	Ms E Barnes, Planning Studio
PD35	16/09/20	Email from Carlton Residents Association Inc to Panel on conducting third Directions Hearing by Video	Mr P Sanders
PD36	16/09/20	Email from Royal Park Protection Group to Panel on conducting third Directions Hearing by Video	Ms A Phefley
PD37	17/09/20	Email from Parkville Association Inc to Panel on conducting third Directions Hearing by Video	Mr R Moore
PD38	17/09/20	Email from Mary Drost OAM to Panel supporting comments on conducting third Directions Hearing by Video	Ms M Drost OAM
PD39	18/09/20	Letter to parties adjourning Hearing to March 2021	PPV
PD40	19/10/20	City of Moreland Submission	Ms J Cairnes, City of Melbourne
PD41	26/10/20	Panel Directions – updated timing for pre-Hearing steps for the Hearing now starting on 9 March 2021	PPV
PD42	09/02/21	Council Part A Submission and supporting documents: a) Spatial modelling maps, referred to at paragraph 7(e) of submission b) Explanation of and web links to GIS modelling outputs relevant to Amendment C278 Sunlight map book showing all parks affected by Amendment C278, referred to at paragraph 6 of the submission	Ms J Baker, City of Melbourne
PD43	22/02/21	Presentation from Andy Fergus, formerly of City of Melbourne, on overview of Amendment C278	Ms J Baker, City of Melbourne
PD44	22/02/21	Statement from Andy Fergus, formerly of City of Melbourne, on	Ms J Baker,

No.	Date	Description	Provided by
		overview of Amendment C278	City of Melbourne
PD45	22/02/21	Presentation from Dan Smith, formerly of City of Melbourne, on spatial modelling undertaken for Amendment C278	Ms J Baker, City of Melbourne
PD46	22/02/21	Statement from David Callow, of City of Melbourne, on horticultural matters	Ms J Baker, City of Melbourne
PD47	22/02/21	Expert witness statement of Carol Nowson, in relation to sunlight and health	Ms J Baker, City of Melbourne
PD48	22/02/21	Expert witness statement of Beaudene Fulwood, of SJB, in relation to built form testing	Ms J Baker, City of Melbourne
PD49	22/02/21	Built Form Testing Study prepared by SJB	Ms J Baker, City of Melbourne
PD50	22/02/21	Expert witness statement of Marcus Spiller, of SGS Economics, in relation to cost benefit analysis	Ms J Baker, City of Melbourne
PD51	22/02/21	Expert witness statement of Joanna Thompson, of Thompson Berill Landscape Design, in relation to open space planning	Ms J Baker, City of Melbourne
PD52	22/02/21	Expert witness statement of Leanne Hodyl, of Hodyl & Co, in relation to urban design	Ms J Baker, City of Melbourne
PD53	22/02/21	Expert witness Statement of David Barnes, of Hansen Partnership, in relation to town planning	Ms J Baker, City of Melbourne
PD54	01/03/21	Expert witness statement of Charmaine Dunstan of Traffix Group on traffic/pedestrian activities	Ms E Minney, Best Hooper
PD55	01/03/21	Expert witness statement of Darren Tardio of Enfield Acoustics Pty Ltd on acoustics	Ms E Minney, Best Hooper
PD56	01/03/21	Expert witness statement of Michael Barlow of Urbis on town planning	Ms R Anderson, Rigby Cooke
PD57	01/03/21	Expert witness statement of Michael Barlow of Urbis on town planning	Ms V Vilagosh, Norton Rose Fulbright
PD58	01/03/21	Expert witness statement of Tim Biles of Ratio on town planning and urban design	Ms V Vilagosh, Norton Rose

No.	Date	Description	Provided by
			Fulbright
PD59	01/03/21	Expert witness statement of Professor Peter Ebeling of Monash University on vitamin D	Ms V Vilagosh, Norton Rose Fulbright
PD60	02/03/21	Expert witness statement of Kylie Jordan of Tract Consultants on open space	Ms E Minney, Best Hooper
PD61	09/03/21	City of Melbourne – Response to expert recommendations and other drafting issues	Ms S Brennan
PD62	12/03/21	City of Melbourne memo detailing maps and data provided by Dan Smith (formerly of Council)	Ms J Baker, City of Melbourne
PD63	12/03/21	CVs for relevant SJB Architects	Ms J Baker, City of Melbourne
PD64	12/3/21	Expert evidence - Presentation of Ms Leanne Hodyl 12/3/21	Ms L Hodyl of Hodyl and Co
PD65	Uploaded 1/3/21	Dr Marcus Spiller expert statement Appendix C Willingness to Pay -produced by Prescience. Presented 15/3/21	Dr M Spiller
PD66	15/3/21	Winter shadow analysis for 10-12 Wellington Parade, 1071-1081 Hoddle Street	Ms T Xerri for Ms E Minney
PD67	17/3/21	City of Melbourne – Part B submission	Ms Baker, City of Melbourne
PD68	17/3/21	Park expansion maps (updated 17/3/21)	Ms Baker, City of Melbourne
PD69	17/3/21	Hodyl & Co - additional views of modelling of Lincoln Sq	Ms Baker, City of Melbourne
PD70	17/3/21	Hodyl & Co - solar angles used for 2018 sunlight modelling report	Ms Baker, City of Melbourne
PD71	17/3/21	Carlton Residents Association Submission and Extracts from Cited Reports (2 documents)	Mr E Ogilvy, Carlton Residents Association
PD72	17/3/21	Plan of Land owned by the University of Melbourne	Ms V Vilagosh, Norton Rose Fulbright
PD73	18/3/21	Presentation of Mr Tim Biles of Ratio	Ms V

No.	Date	Description	Provided by
			Vilagosh, Norton Rose Fulbright
PD74	18/3/21	Email with submission and advising MAB Corporation no longer wishes to be heard	Ms M Franklyn, Best Hooper Lawyers
PD75	18/3/21	Email with submission and advising Andavol Pty Ltd no longer wishes to be heard	Ms E Barnes, Planning Studios
PD76	22/3/21	VPA submission and draft Arden Structure Plan	Mr Steve Barclay, VPA
PD77	22/3/21	Royal Park Protection Society submission	Ms Anne Phefley
PD78	22/3/21	Protect Park Street Precinct submission and supporting documents: a) 699 Park Street Planning Property Report b) VCAT Decisions JW Land Development Pty Ltd vs Moreland (x2) City of Moreland DDO2 and DDO18	Ms Christine Christian AO
PD79	22/3/21	Parkville Association submission	Mr Robert Moore
PD80	23/3/21	Protect Park Street Precinct additional documents concerning proposed development at 699-701 Park Street: a) Shadow path winter solstice submitted to VCAT of proposed development at 699-701 Park Street b) Extent of shadowing of Princes Park c) Hanson 3D shadow analysis of 699-701 Park Street d) Site context – Heritage overlays e) Architectus site context of 699-701 Park Street	Ms Christine Christian AO
PD81	23/3/21	Documents from Council including: a) Documents referred to in Part B submission (26 documents) b) Lincoln Square applications and permits (10 documents) Ms Hodyl's response to Mr Barnes' evidence	Ms Baker, City of Melbourne
PD82	24/3/21	Submission on behalf of Australian Football League, Melbourne Cricket Club & Melbourne Cricket Ground Trust, and Richmond Football Club, and Report of an Advisory Committee on the Commonwealth Games 2006 MCG redevelopment Project (Nov 2001)	Ms L Thomas, Urbis
PD83	24/3/21	Submission of Polis Pty Ltd noting expert witness statements	Ms E Minney,

No.	Date	Description	Provided by
		previously numbered as follows: a) Ms Christine Dunstan (PD 54) b) Mr Darren Tardio (PD 55) c) Ms Kylie Jordan (PD 60); and Winter shadow analysis for 10-12 Wellington Parade and 1071-1081 Hoddle Street (PD 66)	Best Hooper Lawyers
PD84	24/2/21	Presentation of Ms K Jordan on landscape architectural planning	Ms E Minney, Best Hooper Lawyers
PD85	25/2/21	Submission of Victoria Racing Club	Ms L Thomas, Urbis
PD86	25/2/21	Submission of Showgrounds Nominees	Ms L Thomas, Urbis
PD87	26/2/21	Submission of University of Melbourne including: Lincoln Square shadows on aerial photos	Ms V Vilagosh, Norton Rose Fulbright
PD88	26/3/21	Panel draft version of proposed clause 22.02 and Panel draft version of proposed DDO8	Ms Baker, City of Melbourne
PD89	26/3/21	Panel direction email on response time to circulation of Council's Part C controls	PPV
PD90	29/3/21	Submission of 96 Wellington Parade Pty Ltd	Mr J Fisher, Human Habitats
PD91	29/3/21	Part C submission of Melbourne City Council	Ms Baker, City of Melbourne
PD92	29/3/21	VPA response to Panel questions regarding Melbourne Biomedical Precinct	Mr Steve Barclay, VPA
PD93	30/3/21	Victoria Racing Club response to Part C Submission	Ms L Thomas, Urbis
PD94	30/3/21	Australian Football League, Melbourne Cricket Club & Melbourne Cricket Ground Trust and Richmond Football Club response to Part C Submission	Ms L Thomas, Urbis
PD95	1/4/21	Polis Pty Ltd response to Part C Submission	Ms E Minney, Best Hooper Lawyers
PD96	1/4/21	Cricket Australia response to Part C Submission	Hugh Smyth, SJB Planning