

City of Melbourne Submission to East West Link Assessment Committee

November 2013

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Executive summary

The East West Link is a declared project under the *Major Projects Transport Facilitation Act 2009* (Vic). Under this act the Minister for Planning is required to give planning approval for the proposal which the Linking Melbourne Authority (LMA) is proposing in its Reference Design following the process of public consultation set out in the act.

Accordingly the Minister has appointed an Assessment Committee to advise him on the LMA's Reference Design for the proposed East West Link and to consider submissions from the public on the LMA's Comprehensive Impact Statement (CIS) about their Reference Design.

This is the Melbourne City Council's submission to the East West Link Assessment Committee in response to LMA's CIS which was released for public exhibition on 31 October 2013. In the course of the developing its submission the City of Melbourne received a large number of submissions from the public about the proposed East West Link. These have been used to inform this submission and have been appended to this submission

1.1 Objectives

The primary objectives of this submission are to assist the Assessment Committee to assess the CIS in accordance with the Major Transport Projects Facilitation Act, to consider the alignment, design and performance requirements for the project and to make recommendations for appropriate conditions.

The second objective is to ensure the Committee fully appreciates the impact that the proposed project will have on the City of Melbourne's assets and operations and future planning for the municipality and on the community who live, work and play in the city.

1.2 Key issues

1.2.1 Part B of the East West Link – Eastern section

The CIS does not set out a sufficiently strong rationale for design of Part B of the East West Link – Eastern section. Nor does it give sufficient weight to the negative impacts of the proposed design. It does not provide sufficient explanation for the need for the full additional elevated roadway parallel to the existing CityLink. It does not sufficiently examine whether the existing CityLink infrastructure can provide the required traffic function for this section of the full East West Link for the longer term, particularly in the context of a long term integrated transport strategy that includes improvements to the heavy and light rail network.

The CIS does not appropriately address the project's negative impact on the future urban renewal of Arden-Macaulay proposed by the City of Melbourne

and in the Victorian Government's Plan Melbourne. The CIS significantly underestimates the related degradation of the Moonee Ponds Creek open space corridor that runs through the heart of the Arden-Macaulay urban renewal area.

The CIS argues for a tunnel under Fitzroy and Carlton for Part A of the East West Link and for a tunnel under Footscray for the Western section to minimise the surface impacts in those valued urban locations. However this rationale is ignored in considering the impacts of the viaduct proposed for Part B in Arden-Macaulay which runs through an area planned to become an intensive high quality mixed use urban renewal area. The CIS also does not make the case for Part B providing the connectivity benefits Arden-Macaulay will require.

The CIS gives undue emphasis on the existing degraded condition of the Moonee Ponds Creek and the current land uses. It does not take adequate account of the proposed future urban development potential of the area and the need to improve the area's amenity rather than further degrade it. In particular it does not give sufficient priority to the vision of the Moonee Ponds Creek corridor set out in the City of Melbourne's Municipal Strategic Statement and Open Space Strategy as a highly valued recreational, movement and habitat corridor threading through the high density urban renewal areas of Arden-Macaulay, E-Gate and Docklands.

The City of Melbourne considers that the full East West Link transport function can be achieved without a significant portion of the proposed extra viaduct of Part B running along Moonee Ponds Creek adjacent to the existing CityLink viaduct. On this basis the statutory reservation of land for a future viaduct would not be required. This reservation would promote urban blight, stunt investment in the area's urban renewal in the private and public realm, reduce the economic benefits that it will deliver and further degrade the Moonee Ponds Creek and the open space around it.

1.2.2 The need for the northbound ramps of the Elliott Avenue interchange

The north/east facing ramps at the Elliott Avenue interchange are unnecessary and represent a risk to the good management of traffic through Royal Park to the north of Macarthur Road. The additional direct access to the Zoo and recreational facilities is outweighed by the likely inducement of significant additional traffic volumes around the Zoo which experience heavy pedestrian traffic during school holidays and special events.

Removal of this ramp will reduce some the intrusive impact of this portal on Royal Park including noise, light spill, creating a barrier to movement and loss of parkland and trees.

1.2.3 Impact on Royal Park

The CIS does not adequately address the impact of the project on Royal Park especially Manningham Reserve and the proposed Elliot Ave interchange. The City of Melbourne's preference would be that the project would not have any



negative impact on Royal Park. Of particular concern is the inadequate estimate of the area of open space that will be lost or permanently degraded and alienated from a range of park uses and the inadequate assessment of the impact of noise, light spill, tree loss and other impacts on the park. The permanent loss of usable open space in Royal Park will be 9.3ha or 6 per cent of 160ha, not 1.3 ha or 1 per cent as noted in the CIS.

The City of Melbourne proposes that the design of the interchange between the proposed East West Link and CityLink be reviewed to reduce the impact on the community in West Parkville and the Manningham Reserve area of Royal Park, which includes the Trin Warren Tam-bore wetlands and Ross Straw Field. The City of Melbourne proposes three initial design options for reducing the project's impact on Manningham Reserve and West Parkville. These are presented in Section 4.

While the reference design aims to use tunnelling as much as possible through Royal Park to minimise impacts, three potential construction methods are proposed to be used in the park. They include more extensive cut and cover, but the impacts of these alternative construction methods have not been thoroughly evaluated.

1.2.4 Noise

The project has been designed to meet VicRoads policy on traffic noise which does not require the protection of open recreational space. The policy sets a external noise limit of 63 dB LA10(18h) for new roads to protect the inside of noise sensitive buildings. World Health Organisation (WHO) guidelines identify that noise levels of 55dB LAeq(16h) can create serious annoyance for people in outdoor areas and 50dB LAeq(16h) noise can create moderate annoyance. Noise levels near Elliott Avenue in Royal Park are predicted to be as high as 70 dB LAeq(16h). The city's public realm of parks, places and local streetscapes is very important in urban areas for human health. Given the amount of activity that occurs in Melbourne's parks, places and streets, the noise impacts of the project need to be significantly reduced.

1.2.5 Impact on sport and recreation

The CIS does not adequately address the project's impact on sporting activity, recreation and open space. The provision of alternative sporting facilities does not consider the future demand identified in City of Melbourne strategies for providing sport and recreation facilities. There is very limited consideration of the large volume of informal unstructured recreation that occurs in Royal Park and how this will be impacted and how it can be ameliorated or compensated.

1.2.6 Opportunities to provide water security

One of the legacy opportunities offered by the project is to deliver water security for the parks and gardens in the north half of the municipality. The project could link the Trin Warren Tam-bore wetland and water storage system, located at the western end of the proposed road tunnel to Dights Falls which is near the eastern end of the tunnel with a new water pipe. This could transfer one gigalitre of water each year from the now unused water allocation of the former Amcor factory at Alphington to the Royal Park storage facility.

1.2.7 Approvals

The Incorporated plan that forms part of the planning scheme amendment and the conditions in the Environmental Management Framework should be strengthened and tightened to ensure that delivery of the project to the highest standards is ensured.

1.3 Recommendation

The Melbourne City Council requests that the Assessment Committee require the Linking Melbourne Authority to revise the CIS to take into account the matters raised in this submission and recommend to the Minister for Planning that the project be changed in accordance with this submission.

2 Proposed alignment and design changes

This section summarises the changes to the alignment and design of the East West Link that the City of Melbourne proposes will deliver better outcomes for both the municipality and metropolitan Melbourne and align more effectively with the policy objectives of the City of Melbourne and Victorian Government.

These changes are:

- Re-casting the strategy for East West Link Part B;
- Reducing the impacts of the western portal on Royal Park and West Parkville through three possible options: Wetland Option, Earth Mound Option and Alternative Ramp Alignment Option;
- Reducing the impacts of the Elliot Avenue Portal on Royal Park;
- Providing Royal Park sporting and recreational facilities for current and future demand.

2.1 Re-cast the strategy for East West Link Part B

The CIS underestimates the adverse impacts of the East West Link Part B CityLink-Port of Melbourne viaduct on the Arden-Macaulay urban renewal area and the Moonee Ponds Creek open space corridor. The CIS has not been sufficiently strategic in identifying the right infrastructure requirements for this transport corridor. Therefore the City of Melbourne proposes that Part B as proposed in the reference design should not proceed and land should not be reserved for it.

2.1.1 Use the existing CityLink viaduct for the East West Link.

Modifying the design of Part B to remove a significant section of the proposed additional viaduct would recover approximately 44.2 ha¹ more of urban renewal and 2.82 ha² more of high quality public open space along the Moonee Ponds Creek. The Linking Melbourne Authority's traffic modelling shows the existing CityLink connection alone - without Part B - will provide adequate capacity for the East West Link connection until at least until 2031.

The capacity of CityLink could be progressively improved using state-of-the-art road/traffic management technology.

Noise barriers should be added to the existing CityLink viaduct to reduce amenity degradation in Arden-Macaulay.

¹ The approximate area of the Arden-Macaulay area to the west of the CityLink viaduct.

² Ch4, p28. Includes 0.11 ha permanently acquired and 2.71ha under the elevated roadway.

2.1.2 Improve Arden-Macaulay's local road network and remove the Arden Street Ramps

The Arden Street ramps only provide access to the proposed East West Link. They do not provide access to CityLink. The first opportunity to leave East West Link for a driver using the ramps would be Hoddle Street. Instead, in place of these ramps, the local road network should be augmented to provide access from Arden-Macaulay to the existing CityLink ramps at Dynon Road and Racecourse Road to provide Arden-Macaulay with full and convenient north-south access to both CityLink and East West Link Part A. This would include improvements for travel northwards along Boundary Road and southwards along Arden/Lloyd/Dynon roads to make these roads safe and attractive for local trips but also accessible for external trips. Local area traffic management measures should be provided in Arden-Macaulay to discourage excessive through traffic. (See **Error! Reference source not found.**)

2.1.3 Grade-separate the Arden Street / Upfield Rail Line level crossing.

As proposed in the Reference Design, the Arden Street crossing of the Upfield rail line should be grade separated to improve the traffic access between the high intensity southern section of Arden-Macaulay, Dynon Road and the Access to CityLink. This should be done when Arden Station is constructed and the urban renewal of Arden-Macaulay is underway.

2.1.4 Upgrade the Arden-Macaulay section of the Upfield Rail line.

When the Arden Street grade separation is being constructed the stations at Flemington Bridge and Macaulay should be upgraded and pedestrian and cycle bridges/tunnels built across the line to improve local east-west walking and cycling connectivity.

2.1.5 If needed in the very long term allow for a tunnel link connection.

If and when there are real capacity constraints on this East West Link that cannot be better resolved by other transport solutions, a road tunnel (similar to the tunnel proposed in the East West Link Needs Assessment³, known as the Eddington Report) can be constructed from Royal Park to the port. The tunnel design for Part A in Royal Park will need to incorporate this future option.

Figure 1 below shows the indicative location of a future tunnel link connection. The context of the Part B of the East West Link is shown in Figure 2, with tunnel sections under Fitzroy, Carlton and Footscray.

³ Investing in Transport, East West Link Needs Assessment , Sir Rod Eddington 2008

Figure 1: Tunnel link connection

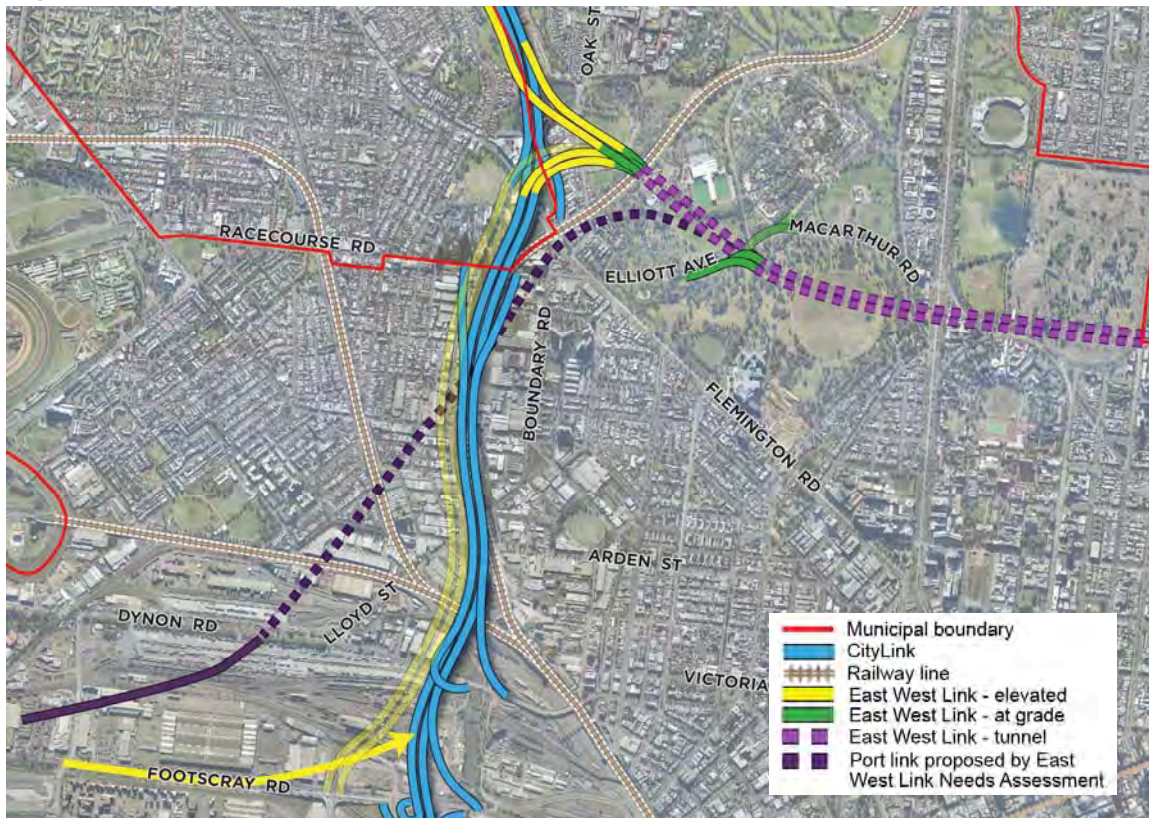
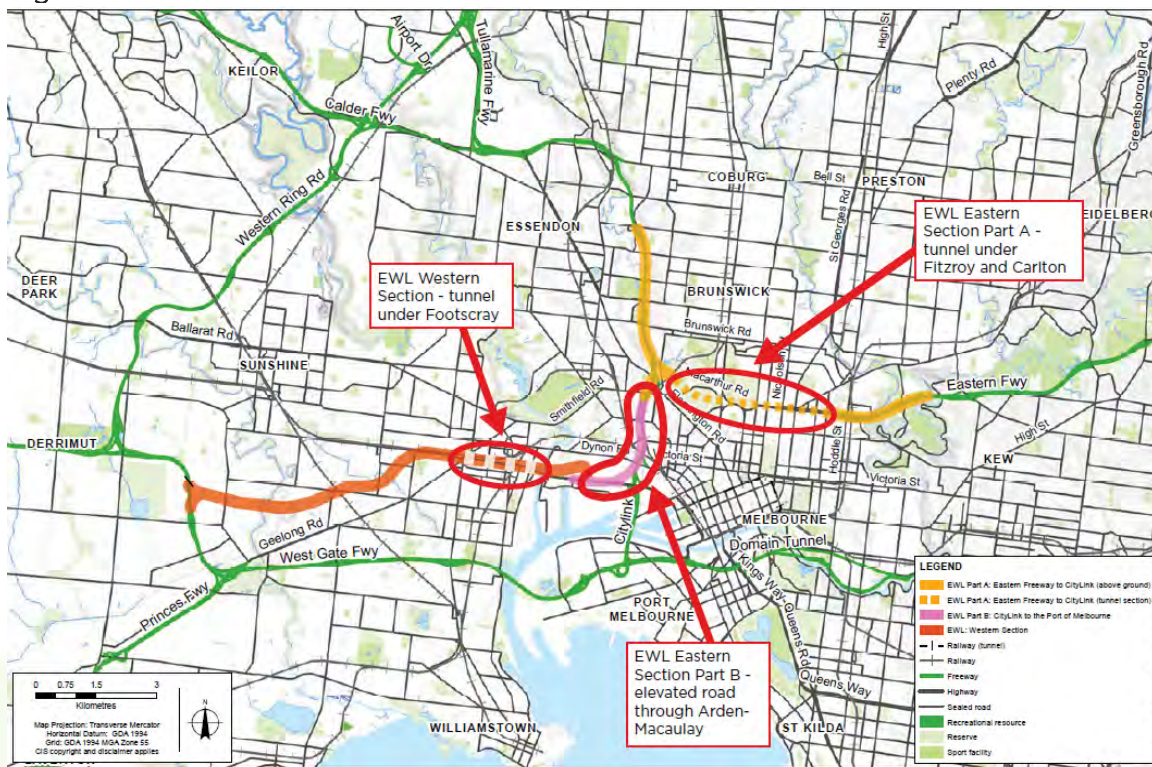


Figure 2: Full East West Link



Reduce the impacts of the western portal on Royal Park and West Parkville

The CIS underestimates the impact of the alienation of parkland and trees in Royal Park and on the West Parkville neighbourhood from the Royal Park western portal. Therefore the design should be revised to significantly reduce these impacts and compensate for them.

2.2.1 Minimise the loss of dwellings.

Modifications should be investigated for the Royal Park western portal to reduce the loss of dwellings in West Parkville caused by the Reference Design.

2.2.2 Minimise the alienation of the public realm from road traffic noise.

Noise from the interchange ramps should be contained using substantial acoustic barriers to reduce noise from traffic on the ramps to no more than 55dba in West Parkville's public realm - the streets, parks and places.

2.2.3 Recover lost or alienated parkland

The City of Melbourne has proposed three options to recover parkland that would be lost or alienated by the project and reduce the loss of residential dwellings west of Manningham Street/Oak Street. Given the short time available to develop them, the proposals are preliminary and a final design may incorporate aspects of each of the different options.

These proposals are as follows.

2.2.3.1 Wetland Option

This option includes a significant area of wetland and habitat situated beneath the freeway flyovers which cross the current Ross Straw Field and Manningham Reserve area. The flyovers would be in sound tubes to minimise the spill of noise. It would be designed to also function as a 40 megalitre irrigation storage to service the parkland and street trees in the municipality's north west sector. The wetland and storage would be fed by the local catchment and a pipeline incorporated in the East West Link Part A from the Yarra River at Dights Falls as part of a distributed water network providing water security to the municipality's parkland and urban forest.



Figure 3: Visualisation of the reference design
Figure 4: Visualisation of the wetland option



The benefits of this option include:

- Wetland recreation opportunities such as boardwalks, nature walks,
- Creating a new 40 megalitre irrigation storage to provide water security for parkland and street trees in the municipality's north west sector.
- High quality noise tube providing strong control of the road noise to provide a comfortable acoustic setting for residents and park users
- Enhanced biodiversity and habitat
- Reuse of land that would otherwise be significantly affected by freeway flyovers
- It may retain some of the remnant vegetation on the escarpment and skink habitat depending on construction impacts.

- It creates a significant landscape feature.

Issues that may be raised about this option include:

- It does not replace lost sports fields.
- It does not take advantage of a potential land bridge over the Upfield Rail Line to expand land for passive recreation in Royal Park.
- It provides limited recreational value.
- Significant water storage would also be able to be provided by other options.
- Does not contribute to preventing the removal of 55 dwellings in West Parkville

2.2.3.2 Earth Mound Option

This option involves burying the ramps from the interchange between the Upfield Line and Manningham Road to form a new area of parkland over the interchange and melding with a broad land bridge over the Upfield Rail Line cutting. This would provide some compensation for the loss of the Ross Straw Field and lessen some of the historic intrusion and severance of parkland caused by the Upfield rail line. This would also incorporate a 40 megalitre irrigation storage to service the irrigation of parkland and street trees in the municipality's north west sector. Feed this reservoir with the local catchment and a pipeline incorporated in the East West Link Part A from the Yarra River at Dights Falls as part of a distributed water network providing water security to the municipality's parkland and urban forest.

Figure 5: Visualisation of the reference design



Figure 6: Visualisation of the earth mound option



The benefits of this option include:

- Some compensation for the loss of the Ross Straw Field and Manningham Reserve open space and
- repair some of the historic intrusion and severance of parkland caused by the Upfield rail line with a generous land bridge across the cutting.
-
- It would incorporate a 40 megalitre irrigation storage to service the to provide water security for parkland and street trees in the municipality's north west sector
- High quality noise tube providing strong control of the road noise to provide a comfortable acoustic setting for residents and park users

- Reduction of the truck traffic impacts during construction by retaining a large amount of the spoil from the tunnelling on site.
- The mound may be able to be designed to accommodate additional sports fields.

Issues that may be raised about this option include:

- Possible loss of the remnant vegetation and skink habitat
- Loss of the natural escarpment formed by the former water course of the Moonnee Ponds Creek and significant change to landforms including abutting Manningham Street and Oak Street.
- Does not prevent the loss of 55 dwellings in West Parkville

2.2.3.3 Alternative ramp alignment option

This option, shown in Figure 6 below, redesigns the western interchange to bury the north facing ramps under Ross Straw Field and provides new south facing ramps. The southbound ramp would follow the alignment of the Upfield Rail Line southwards to join CityLink. The northbound ramp would rise over CityLink and curve around the north side of Ross Straw Field going underground at the base of the escarpment northeast of the current baseball diamond.

This option can also incorporate the mounding/wetlands landscape treatments and the noise control tubes around the road ramps.

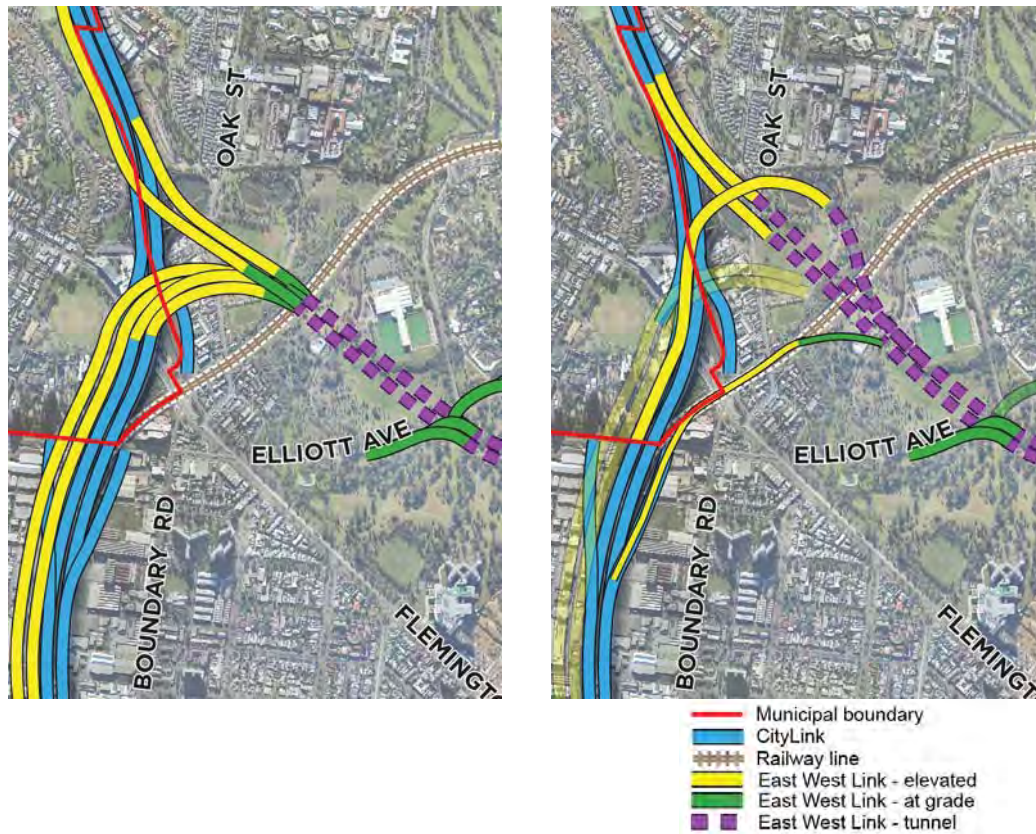
The benefits of this option include:

- Saving 55 residential dwellings by removing the flyovers which cross Manningham Street/Oak Street and maintaining West Parkville as a contiguous residential area.
- Saving the playground in Manningham Reserve
- It may retain some of the remnant vegetation on the escarpment and skink habitat depending on construction impacts.
- Significantly reducing the loss of land in Ross Straw Field

Issues that may be raised about this option include:

- It will have a significant impact on the Urban Camp due to the need for cut and cover construction for the southbound ramp to CityLink.
- It will create a second elevated structure over the Trin Warren Tam-boore wetlands.

Figure 6: Western portal: Reference design (left) and alternative ramp alignment option (right)



(A three dimensional image of the alternative ramp alignment option is being developed and will be inserted later.)

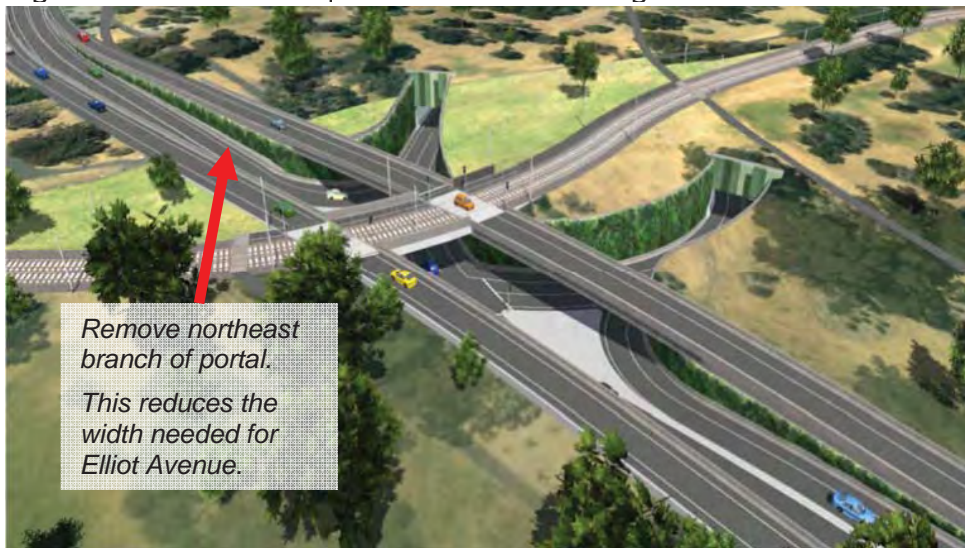
2.3 Reduce the impacts of the Elliot Avenue Portal on Royal Park

The CIS underestimates the alienation of parkland in Royal Park from the Elliot Avenue portal. To reduce its impacts the design should be revised.

2.3.1 Delete the northeast branch of the portal

The northeast portal does not provide a critical traffic function and is likely to induce traffic to travel into Royal Park from the north. Other roads already provide adequate access to the Zoo and sporting facilities in this area of Royal Park. The proposed realignment of the tram line will have a particularly significant impact. The City of Melbourne estimates that 42 trees will be lost in this area due to the realignment of the tram possibly including some that were donated by Baron von Mueller to the Acclimatisation Society in the 1870s and a 1920s Moreton Bay Fig.

Figure 7: Elliot Avenue portal: Reference design



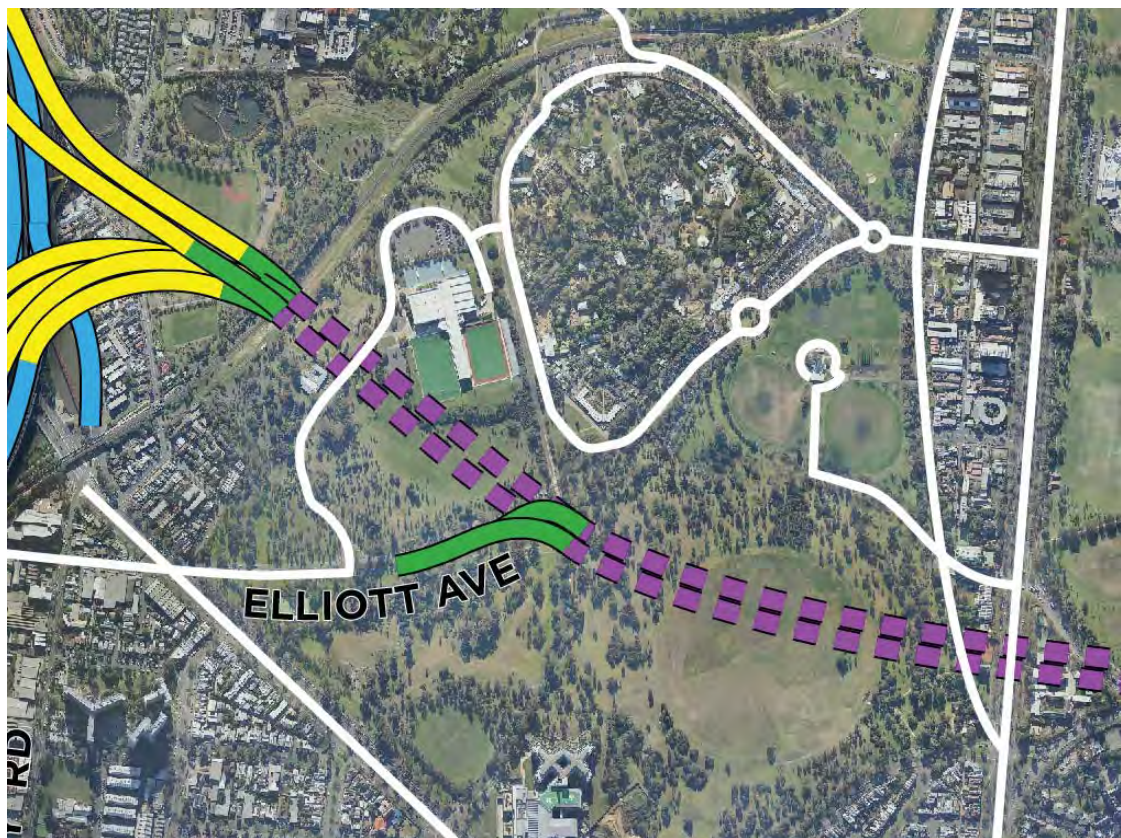
Source: Chapter 10, page 18

2.3.2 Repair parkland alienated by Macarthur Road by discontinuing the road

The through traffic role of Macarthur Road would be substantially replaced by the East West Link Part A tunnel. Macarthur Road would be discontinued and a Local Area Traffic Management plan devised to accommodate local traffic access on existing local roads to and within Royal Park. Removing the road would allow the parkland either side to be joined and will redeem the area of parkland historically alienated by the road. The return of Macarthur Road to parkland would add 0.35 hectares of park and would substantially improve the qualities of the adjoining parkland.

Further enhancements to the park could be achieved by other changes. These would need significant further discussion and analysis. The section of Elliott Avenue from the front entrance of the Melbourne Zoo to the tram crossing could be returned to parkland while a new, low speed park road could be constructed along the western side of the zoo adjacent to the tram line. This would link all the parking areas servicing the zoo and the State Hockey and Netball Centre allowing greater flexibility for major crowds at both venues and providing access to the zoo from Brens Drive.

Figure 8: Melbourne Zoo and SNHC local access



2.3.3 Minimize the impacts of the Elliot Avenue portal southwest ramp on parkland

The southwest portal and the road down to the intersection with Flemington Road should be designed so that it has less negative impact on Royal Park than does the existing road in terms of loss of trees and parkland, noise, safety, light spill and visual intrusion.

Note that because the southwest ramp of the Elliot Avenue portal allows traffic to exit the East West Link before it joins to CityLink, its retention in the design is integral to the City of Melbourne's proposal that the East West Link Part B viaduct be permanently deleted from the project.

2.4 Provide Royal Park sporting and recreational facilities for current and future demand

The CIS does not adequately address the project's temporary and permanent impact on sporting activity, recreation and open space including for the anticipated future demand. Therefore the project must include a concrete plan and commitment to meeting this need.

The City Of Melbourne has identified the need to address the impacts of sporting facilities in Royal Park to meet the needs for recreational facilities in Royal Park displaced by the project. These are shown below. Short term projects include upgrades for Flemington Road Oval, Walker Oval and Princes Park South. Other projects include upgrades of Poplar Oval, conversion of Crawford Oval to a synthetic surface and upgrading the Old Grass Hockey Fields for multipurpose use.

Figure 7: Sport and recreation short term needs



Figure 8: Sport and recreation other needs



3 Public consultation

The City of Melbourne has completed significant public consultation in relation to the East West Link. This included:

- receiving public submissions to its Council meeting on 27 August 2013;
- holding a public meeting on 8 October 2013 at the Melbourne Town Hall attended by more than 200 people;
- facilitating public discussion through its Participate Melbourne website;
- providing a venue at the Melbourne Town Hall for the LMA information session on the project on 13 November 2013.

The City of Melbourne undertook to provide, where possible, all comments received from the public to the East West Link Assessment Committee, to the Linking Melbourne Authority and to the State Government.

City of Melbourne communications have emphasised that the submission the Council has received are not a substitute for people making their own submission to the Assessment Committee if they wish to convey their views into the East West Link assessment process. This has included notification on the Participate Melbourne website and verbal advice at public meetings.

3.1.1 Submissions to 27 August 2013 Melbourne City Council meeting

Council received a significant number of submissions to its 27 August 2013 council meeting at which a preliminary officer assessment of the impacts of East West Link was presented. Where those submissions are already in the public domain, they have been attached to this submission. In cases where they have not been made public, Council will endeavour seek permission from submitters to forward them to the Assessment Committee or forward the content of the submissions but without the personal information of the submitters.

3.1.2 Submissions from professional organisations and other groups

These have been attached to this submission.

3.1.3 Material from Participate Melbourne website

This material was submitted to Participate Melbourne, a publicly available website so no privacy issues arise. It is attached to this submission.

3.1.4 Notes from public meeting, 8 October 2013

The recorded notes of the public meeting held on 8 October 2013, including notes of spoken comment during the meeting and written “post-it” notes on made on map displays, contain no personal information and thus raise no privacy issues. These are attached to this submission.

4 Traffic, public transport, cycling and pedestrians

4.1 Traffic performance of roads connecting to the project – Part A

4.1.1 Assessment of CIS

4.1.1.1 *Elliot Avenue Interchange and Western Portal –CityLink/Brunswick Road Interchange*

While the CIS has assessed the 2031 road network capacity restraints for both the base case without the East West Link (figure 15) and with the East West Link constructed (including Part A (Hoddle Street to CityLink) and Part B (Hoddle Street to Port) (figure 17)), it does not appear to have assessed what the network capacity restraints would be if only Project A of the East West Link was constructed.

The CIS does however assess both the percentage traffic volume change between the 2031 base case conditions (figure 18) and the 2031 conditions with Project A and Project B constructed; and the percentage differences between Project A being constructed compared to Project A and Project B being constructed. These percentage differences only seem to be of significance in Laurens Street and Arden Street in North Melbourne; and in Lloyd Street and Elizabeth/Eastwood Street in Kensington where the volume changes would not be as pronounced as the percentage changes in the figure tend to suggest due to the relatively low traffic volume base in the Kensington Streets.

The traffic volumes expected to use Part B are 10,000 to 20,000 vehicles per day initially, increasing to 60,000 vehicles per day when the East West Link – Western Section is constructed.

While the CIS assessment predicts traffic volumes on the majority of roads connecting to and adjoining the project and points out where mitigation works will need to be undertaken, it does not describe these works in detail nor highlight what impact these works would have on increasing the likelihood of traffic using the adjoining local road network to avoid increased delays on the arterial roads. It also does not address the impact on public transport operations along the roads leading to and through the sections of road requiring mitigation works. The CIS is also silent on what impact these mitigation works may have on the connecting and adjoining bicycle and pedestrian networks.

The East West Link has recently been redesigned to reduce congestion at the Flemington Road/Elliot Avenue/Racecourse Road intersection by constructing a new northbound off ramp at Ormond Road. The press release accompanying this announcement indicates that the volume of traffic accessing Elliot Ave from the tunnel will be reduced by approximately 50 per cent. While this measure will reduce congestion it does not reduce the need for traffic generated in Ascot Vale, Moonee Ponds and Brunswick still having to use the Flemington Road/Elliot Avenue intersection to access the East West tunnel via

the Elliot Avenue interchange. This is reflected in the predicted increases in traffic volumes along the arterial roads such as Racecourse Road, Mt Alexander Road and more worryingly on local streets such as Oak Street and Poplar Road, although it is not known if the predicted increases are still as shown in Linking Melbourne Authority East West Link - Eastern Section Traffic Impact Assessment, Figure 18, following the recent announcement of the Ormond Road off ramp.

The CIS predicts traffic volumes will be reduced in Elliott Avenue (North) and The Avenue as traffic accessing the Zoo, State Netball and Hockey Centre and businesses and institutions in the Parkville area from the east will no longer have to travel along Macarthur Road or Walker Street to access the area. However given the lack of a southbound access ramp onto CityLink at Brunswick Street, there is a strong possibility that traffic will be attracted to Oak Street/ Poplar Road and Elliot Avenue (North) to access the East West Link. Similarly while the Ormond Road northbound ramp will reduce the need for traffic bound for Ascot Vale, Brunswick and Moonee Ponds to egress the Link at Elliott Avenue there may still be a clear advantage for traffic to use these local streets to save time or toll fees.

An assessment of the approximate cost of the measures required to maintain local amenity given forecast increases in traffic is detailed below. The full cost would be approximately \$5 million.

Kensington, south of Racecourse Rd west of Moonee Ponds Creek and north of Macaulay Road.

- Cost - \$300,000
- Measures - road humps, channelization, 40km/h speed limits.

Kensington, south of Macaulay Road west of Moonee Ponds Creek and north of Arden Street

- Cost - \$210,000
- Measures - street closure and modifications for local circulation, 40km/h speed limit

Kensington, south of Arden Street

- Cost - \$50,000
- Measures - Bike lane protection

Parkville/Parkville Gardens

- Cost - \$325,000
- Measures - medians, road humps, 40km/h speed limit

West Melbourne/North Melbourne

- Cost - \$200,000
- Measures - road closure

North Melbourne Arden Street

- Cost - \$4,000,000
- Measures - physically separated bicycle lanes incorporating landscaped outer separators.

Carlton

- Cost - \$100,000
- Measures - Road Humps, 40km/h speed limit

4.1.2 Proposed conditions and performance requirements

4.1.2.1 *Elliot Avenue Interchange and Western Portal –CityLink/Brunswick Road Interchange*

The CIS should highlight the need for the introduction of detailed mitigation works on the arterial and local road network in Royal Park and in Kensington south of Racecourse Road to ensure through traffic accessing or egressing the Elliot Avenue Interchange does not gain any travel time advantage by using the local street network such as Stubbs Street, Rankins Road, Eastwood Street, Macaulay Road and Kensington Road in Kensington and Elliot Avenue (North) and Poplar Road in Parkville.

The CIS should highlight the need for the introduction of detailed mitigation works to ensure increased traffic on the arterial road network generated by the Elliott Avenue Interchange does not increase tram travel times along Mt Alexander Road, Racecourse Road or Flemington Road.

The CIS should model the impact the interchanges will have on tram travel times and pedestrian crossing times through the adjacent signalised intersections in Racecourse Road, Mt Alexander Road and Flemington Road.

The CIS should state that there will not be any detrimental impact on pedestrian accessibility and safety across the signalised intersections in Elliot Avenue, Mt Alexander Road, Racecourse Road and Flemington Road in the vicinity of these interchanges.

4.1.3 Proposed changes to alignment or design

4.1.3.1 *Elliot Avenue Interchange and Western Portal –CityLink/Brunswick Road Interchange*

The north/east facing ramps at the Elliott Avenue Interchange represent a significant risk to the management of traffic through Royal Park to the north of Macarthur Road. While the modelling projects reduced traffic volumes along Elliott Avenue (North) the risk is quite significant (Refer paragraph 3.1.1.above) and the ability to have direct access to the Zoo and surrounding parkland and institutions is outweighed by the possibility of attracting significant traffic volumes past the front entrance to the Zoo and along Poplar Road past the Zoo car parking areas. These areas experience heavy pedestrian traffic during school holidays and special events held at the Zoo. The Elliot Avenue north-east facing ramps should not be constructed.



The need to maintain a freeway standard connection between East West Link Part A and CityLink is essential to the project's safety and efficiency and consequently the need to ensure maximum gradients of 4 per cent and minimum radii of 250 metres to achieve a V80km/h continuous flow design limits the opportunity to consider alignments that have less impact on parkland and housing. This submission has identified areas where improvements can be made.

The City of Melbourne has developed three alternatives to the reference design for the western portal area. The aims of these alternatives include reducing the loss of dwellings in West Parkville, reducing noise from elevated freeway structures, maintaining or increasing the amount of public open space, protecting habitat, promoting water security for the municipality by increasing storage of water, improving walking connections in Royal Park across the Upfield Rail Line. It is important to note that these options are concepts that have been developed in an attempt to improve community outcomes for the project. They have not been subject to detailed design or rigorous testing.

The first two options involve keeping the existing ramps in place. The first includes creating a new habitat and recreational wetland below the ramps and expanding water storage. The second involves burying the ramps between the Upfield Rail Line and Manningham Road to form a new area of parkland. The design could include underground water storage to enhance water security.

The third option introduces a new ramp design with a southbound ramp sitting over the Upfield Rail Line joining CityLink south of the Racecourse Road on-ramp. The northbound ramp from CityLink to East West Link would skirt the north side of Ross Straw Field and avoid the need to purchase residential properties west of Manningham Street. The ramps connecting East West Link to CityLink to and from the north would remain underground across Ross Straw Field up to approximately Manningham Road. This would reduce the project's impact on Ross Straw Field. Details of these options are provided in the appendices to this submission.

4.2 Public transport connectivity – Part A

4.2.1 Assessment of CIS

The CIS refers to opportunities to improve public transport as a result of reduced traffic volumes on arterial and local roads both in the vicinity of the tunnel and along other parts of the metropolitan road network.

While this is very relevant there is no mention made of the negative impacts increased traffic will have on tram services where the modeling indicates there will be increased traffic volumes. Some of the increases on streets such as Nicholson Street and Rathdowne Street will be quite modest and have little impact on bus or tram movements. However there are sections of Mt Alexander Road, Racecourse Road and Flemington Road in the vicinity of the Elliot Avenue/Racecourse Road/Flemington Road, the Boundary Road/Racecourse Road and the Flemington Road/Boundary Road/Mt Alexander Road intersections where traffic congestion will increase as a result of the East West Link and the travel times of the tram services travelling along

these routes could be significantly increased without appropriate mitigation works.

The construction of the Elliott Avenue interchange and consequent realignment of Tram Route 55 through Royal Park must not have any impact on the travel time of or passenger accessibility to the tram route.

The CIS refers to the opportunity to improve bus services along the Doncaster Area Rapid Transit route, along Johnston Street and Grattan Streets. The CIS also generally refers to opportunities to improve north south public transport services that cross Alexandra Parade due to the ability to reallocate traffic signal 'green' time to the north south streets crossing Alexandra Avenue as a consequence of reduced traffic volumes on Alexandra Avenue. While these references are supported they need to be extended to all north south public transport routes crossing the Alexandra Parade, Princes Street, Cemetery Road East, Cemetery Road West and Macarthur Road route as traffic volumes will be reduced across the entire link not just Alexandra Parade.

4.2.2 Proposed conditions and performance requirements

The CIS should recognise the impacts of increased traffic volumes on critical public transport routes and specify that no deterioration of public transport service levels will be tolerated.

4.2.3 Proposed changes to alignment or design

The proposed north facing off ramp at Ormond Road is supported as it reduces congestion at the critical intersections of Elliot Avenue/Racecourse Road/Flemington Road, Boundary Road/Racecourse Road and Flemington Road/Boundary Road/Mt Alexander Road. It does this by reducing the volume of vehicles exiting the Elliot Avenue interchange by an estimated 50 per cent.

A reciprocal south facing ramp off Brunswick Road as this could also reduce the volume of traffic accessing the tunnels via the Elliot Avenue interchange by approximately 50 per cent. This would then lead to further reductions in congestion at the nearby Flemington Road, Racecourse Road and Mt Alexander Road intersections, which in turn would enhance tram travel times along these streets and further improvements in tram travel times along these streets.

However, given that there appear to be technical difficulties with constructing this due to the spacing of on- and off-ramps, then the introduction of a traffic management plan is necessary to ensure Parkville Gardens and Parkville residents are protected from increased AM peak period traffic using the Brunswick Road/Fleming/Park/Oak/Manningham/Church Streets 'rat run' must be part of the Reference Design.

While it is recognised that the recent proposal to realign Mt Alexander Road north of its current connection across the Moonee Ponds Creek to Flemington Road will also reduce congestion by improving the progression of traffic to Flemington Road/Elliot Avenue from Mt Alexander Road, this new alignment



could have the unintended effect of increasing the attractiveness of the Oak/Manningham/Church Street AM 'rat run'.

4.3 Cycling connectivity – Part A

4.3.1 Assessment of CIS

The CIS does not anticipate any adverse impacts for the overall bicycle network due to the East West Link and in fact it states that conditions are likely to improve with fewer vehicles travelling along Alexandra Parade and along the north south streets crossing Alexandra Parade.

Apart from stating that traffic signal timing is increased for the north south streets, the CIS does not detail how these improvements could be made and as is the case with the CIS Commentary on Public Transport service upgrades the specific referencing to Alexandra Parade is considered too narrow a focus for improving on and off road cycling facilities across the project area.

4.3.2 Proposed conditions and performance requirements

The CIS should identify opportunities to install on road bike lanes along Alexandra Parade, Princes Street and Cemetery Road East and West. It should also identify the need to provide a quality cycle link along the alignment of Macarthur Road between the extremely busy Royal Parade bicycle route and the shared paths within Royal Park. No replacement for the current on-road bike lanes on Elliot Avenue west of the tram line is proposed.

The CIS should recommend the inclusion of the realignment of the heavily used Capital City Trail at Flemington Bridge Station within the project. This would allow the elimination of the significant 'switchback' path that currently exits at the Flemington Bridge Station thereby providing a significantly improved connection between the Moonee Ponds Creek bike path and the Capital City Trail which has experienced a significant growth in bicycle usage following construction of the Manningham Bridge by the City of Melbourne some four years ago.

The CIS also needs to state that the bike lanes and paths in the vicinity of the Elliot Avenue interchange and the Capital City Trail in the vicinity of the Western Portal will not be impacted by the construction of either of these interchanges. The on-road bike lane in Elliott Avenue should be upgraded with physical separation to increase safety for cyclists given the projected increase in traffic volumes. It should be connected to the off-road network at the interchange.

4.3.3 Proposed changes to alignment or design

The project should incorporate new and upgraded on and off road bicycle facilities along the east west route of Alexandra Avenue, Princes Street, Cemetery Road East and West and Macarthur Road, in addition to realigning the Capital City Trail connection to the Moonee Ponds Creek path at Flemington Bridge Station.

4.4 Pedestrian connectivity – Part A

4.4.1 Assessment of CIS

The CIS makes general references to improved road safety outcomes for pedestrians as a result of there being lower vehicle volumes in Alexandra Parade and the local street networks, while vehicles travelling in the tunnel do not have to interact with pedestrians.

The CIS refers to opportunities to improve pedestrian facilities within Royal Park by redesigning public transport networks, stops and routes to improve safety amenity and accessibility. The CIS also refers to opportunities to improve pedestrian facilities along Alexandra Parade.

4.4.2 Proposed conditions and performance requirements

In addition to improving spaces for the movement and congregation of people, the CIS should also require the project to improve the safety of pedestrians by reducing waiting times at intersections along the many streets that will experience reduced traffic volumes ensuring the traffic signal cycles are reduced. This will in turn reduce the illegal and risky movements pedestrians undertake to cross busy arterial roads that currently operate on long traffic signal cycles which creates significant and in some pedestrians' minds intolerable delays.

The CIS also needs to state that the pedestrian paths and shared paths in the vicinity of the Elliot Avenue interchange and the Capital City Trail in the vicinity of the Western Portal will not be impacted by the construction of either of these interchanges.

4.4.3 Proposed changes to alignment or design

The CIS should state that the Capital City Trail shared path connection to the Moonee Ponds Creek path at Flemington Bridge Station should be realigned to remove the existing 'switchback' connection between the two paths.

It should also state that, as per the Royal Park Master Plan, a pedestrian connection should be created across the railway line in the vicinity of the urban camp and that Macarthur Road be converted to provide for bicycles and pedestrians but closed to motor vehicles.

4.5 Construction traffic – Part A

The Eastern Section Traffic Impact Assessment document indicates that the tunnelling construction phase of the project will generate the greatest construction traffic volumes and that it is likely that construction of the tunnel between the western portal and Smith Street will commence at the western end.

The Assessment document lists four potential haulage route options, namely:

- Option 1: Oak Street, Park Street and Brunswick Road to CityLink



- Option 2: Oak Street, Manningham Street, Church Street and Flemington Road to CityLink
- Option 3: Construct the north facing ramps connecting the tunnel directly to CityLink
- Option 4: Construct a temporary track through Royal Park connecting to Brens drive and Elliot Avenue.

Given the tunnelling works are expected to take between three and four years to complete and works are expected to be undertaken over 360 (12 hour) days of the year, the only option acceptable to the City of Melbourne is the construction of the ramps directly to CityLink.

Given that traffic generated by the tunnelling and construction activities is equivalent to 700 equivalent light vehicle movements per hour or 8400 equivalent light vehicles per day, the use of the existing road network would have a significant impact on the ability of Oak Street/Manningham Street and or Park Street to serve its intended function of providing local access. The inconvenience in noise and vibration to residents/institutions and businesses would also be significant if not intolerable.

The 700 equivalent light vehicle movements in an hour is not only an extremely high number of vehicles to cater for on the local Manningham/ Oak Street link, which already experiences high levels of peak hour traffic generated by local and 'rat running' commuters, it will also have an extremely significant negative impact on the condition of these roads as one loaded truck will cause the same amount of damage to the road pavement as 10,000 cars travelling over the same road. The estimated number of 19 tonne trucks using the road to access the tunnel is estimated to be 3,200 truck movements per day.

The use of Royal Park to connect to Brens Drive which is a local park road is an unacceptable option for construction traffic as it would not only degrade Royal Park but would affect access for visitors to the Urban Camp and State Netball and Hockey Centre.

The parking needs of 500 staff per shift, two shifts per day at the Royal Park/ western portal work precinct, necessitates the establishment of an off-site car park from which workers can be transported by private bus to the work site. If workers are allowed or required to park close to the work site then the parking amenity of local residents and visitors to the Zoo and the State Netball and Hockey Centre will be adversely affected. The City of Melbourne will be forced to introduce very restrictive on and off street parking restrictions which will result in workers receiving numerous parking fines over the duration of the works, while attendances at the Zoo and SNHC Centre will be reduced.

4.6 Traffic performance of roads connecting to the project - Part B

4.6.1 Assessment of CIS - Strategic issues

4.6.1.1 Limited Strategic Context of the Full East West Link

The CIS defines the Eastern Section project as part of a bigger East West Link road project for an 18 kilometre freeway-standard road connecting the Eastern Freeway to CityLink and the Port of Melbourne area and extending to the Western Ring Road.”⁴

The CIS acknowledges that this full East West Link Road project is proposed in Sir Rod Eddington’s study, Investing in Transport - the East West Link Needs Assessment (EWLNA), released in 2008⁵. The CIS advises that after further investigation following the release of the East West Link Needs Assessment, the Victorian Government determined that a freeway-standard east west road link would address many of the problems associated with Melbourne’s poor east west connectivity and would deliver substantial transport, economic, business and amenity benefits for Melbourne and Victoria.⁶

Linking Melbourne Authority developed a proposal for the East West Link Western Section known as WestLink. This was subject to limited stakeholder consultation in 2010 but not subject to full CIS consultative process. No statutory reservations have been made for this project.

Whilst the CIS invokes the rationale of the full East West Link Road project as the strategic justification of the Eastern Section - and particularly for Part B - it provides very little information about the modelling of the long term future demand and the performance of the western section and there appears to be no information available in the public domain about the post EWLNA/WestLink proposal.

4.6.1.2 Arden-Macaulay access requirements

The southern half of the Arden-Macaulay urban renewal area is proposed to be developed from around 2025 as a high density business, education and residential area centred on the new Arden Station.

It will require good commuter access for its workers and students. Arden Station on the proposed Melbourne Metro rail line will provide this with a high speed rail connection to the central city at City North and in the Hoddle Grid and to Footscray central and the Western metro area.

⁴ East West Link Comprehensive Impact Statement Summary Report, p3.

⁵ Ibid., p2.

⁶ Ibid., p2.

The businesses in this area will also require good road and public transport access to and from other businesses in the metropolitan area to enable them to transact business during the working day.

4.6.1.3 CityLink

The key connections for Arden-Macaulay businesses are to the high density business corridor in the inner and middle south east metropolitan area, to Melbourne Airport and for the future to the inner and middle western metro area.

For travel by motor vehicle, these important connections for businesses would be provided by the existing local CityLink entry and exit ramps at Dynon Road and Racecourse Road this is shown in Figure 9**Error! Reference source not found.**. The local road network connections to these will need to be designed to enable convenient access to these ramps.

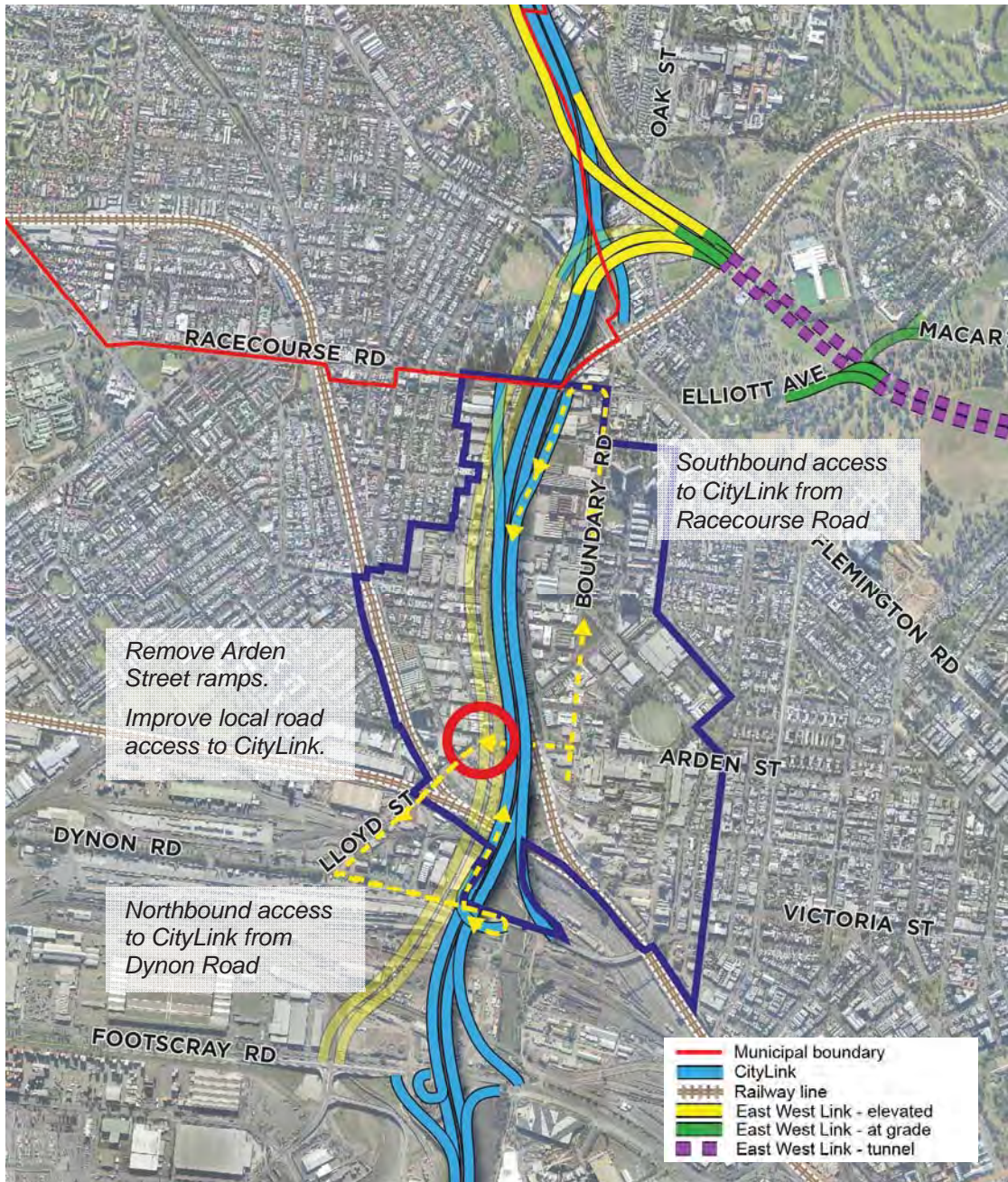
Whilst the CIS acknowledges the Arden-Macaulay urban renewal area it fails to demonstrate how the proposed Part B has been designed to service and support the proposed urban renewal and fails to properly account for the disruption and blight the proposed viaduct will impose on the future urban renewal of the area.

The CIS implies that the project is being designed to meet the connectivity needs of the Arden-Macaulay urban renewal area. It says that “The development of the Arden-Macaulay area is expected to lead the transformation of this part of Melbourne from largely Commercial/industrial uses into a contemporary mixed-use, inner urban neighbourhood. By providing much improved connectivity to this area the project would facilitate this transformation” and that “... the project makes provision for improved access to this precinct via future ramps at Arden Street. The Structure Plan envisages a new train station (Arden Station) in the area as part of Melbourne Metro. The delivery of these two projects - along with improvements to cycling connections - would provide high levels of access to the area, helping to attract residents and businesses”

But if the project was designed to meet the connectivity needs of Arden-Macaulay, the CIS should set out the analytical basis for the East West link Part B being the infrastructure solution to Arden-Macaulay urban renewal area’s connectivity requirements.

However the CIS provides very little analysis of the connectivity needs for the Arden-Macaulay urban renewal area, the connectivity currently available to the area and the infrastructure that would therefore be required. There is no assessment of the connectivity afforded to the area by the existing CityLink. In the CIS Section 5.2 Regional Benefits – Improved regional connectivity the Arden-Macaulay area is not mentioned.

Figure 9: Access to CityLink from Arden-Macaulay



4.6.1.4 Arden Street ramps provide limited value

The proposed Arden ramps will only provide high speed road access to the north eastern metropolitan corridor via the Eastern Freeway. The ramps will not provide high speed access into the high density employment corridor in inner and middle the south east metropolitan corridor via CityLink and Monash Freeway. The ramps will also not provide a direct connection to Melbourne Airport.

4.6.1.5 Grade Separation of the Arden Street level crossing is Valuable

Whilst the ramps proposed in the reference design will have a limited value, LMA's proposal also includes a proposed grade separation of the Arden Street level crossing. This would be achieved by a Combination of a partial lowering the Upfield rail line and bridging across at Arden Street.

This grade separation will enable travel time savings by road between the high intensity southern section of Arden-Macaulay and Dynon Road and the local ramps to CityLink and a future connection to the Westlink section of east west link.

Provision should be made for this future Arden Street grade separation and improvements to the Lloyd Street and Boundary road connections to Arden Central.

4.6.2 Assessment of CIS – Local issues

4.6.2.1 Part B Viaduct, Arden Street ramps and Footscray Road Interchange

Given that the initial relatively low traffic volumes expected to use the Part B viaduct link between the Western Portal and Footscray Road is 10,000 to 20,000 vehicles per day and the detrimental impact the viaduct link will have on Royal Park, residential properties along the project and the Moonee Ponds Creek it is considered that the link should not be constructed.

The Part B viaduct road (CityLink/Parkville to Footscray Road) will not improve access to the Port from the west across the Yarra River where the levels of congestion on the West Gate Freeway at Bolte Bridge and Footscray Road at Shepherd Bridge are predicted to increase. Traffic volumes on Footscray Road at Shepherd Bridge are predicted to increase by up to 10 per cent necessitating traffic improvements to Shepherds Bridge to increase the capacity of traffic able to travel along Footscray Road between Whiteman Street and Sims Street.

While the CIS states the traffic volumes generated by the construction of the Footscray Road interchange can be accommodated along Footscray Road in the vicinity of the interchange, the construction of Part B will increase truck traffic volumes on the arterial and local road networks in Footscray.

The reference design has Arden Street both being widened to two traffic lanes between proposed north facing ramps connecting Arden Street to the

proposed Part B viaduct and Langford Street and grade separated from the Upfield rail line.

The City of Melbourne considers the connection of Arden Street to the viaduct will provide limited connectivity benefits to Arden-Macaulay and create a potential 'rat run' through North Melbourne for vehicles travelling to and from the western part of the Central Business District to the Eastern Freeway. The connection should not be considered as part of the reference design.

The Eastern Section Traffic Impact Assessment's Figure 18 shows that Arden Street's traffic volumes, east of the rail line will increase by approximately 10 to 20 per cent, the Arden Street text on page 76 of the Assessment indicates that this section of Arden Street will experience a reduced degree of congestion. While this statement gives the impression that the length of Arden Street, east of the ramps, will not be affected by the ramp connection, it is considered that the only section of Arden Street east of the ramps to experience reduced congestion will be the section between the ramps and Langford Street as a result of the widening to two lanes in each direction and the grade separation between rail and road.

Figure 18 of the CIS also indicates a significant 20 to 30 per cent increase in Elizabeth Street and Eastwood Street volumes which is unacceptable and attributable to the Arden Street ramps. This increase is unacceptable in a mixed use area that has relatively narrow streets and was once the subject of extensive 'rat running' traffic movements avoiding congestion on the alternative Macaulay Road route.

The construction of the Arden Street ramps should not form part of the current Reference Design and a decision on whether to construct the ramps should be delayed until the Arden-Macaulay Urban renewal area is close to full development. The recently released Plan Melbourne indicates that a minor increase to CityLink capacity will suffice for a period of 10-15 years. At this time, it may be appropriate to consider connecting Part A with the Port area via a tunnel.

The benefits of any connection to the East West viaduct are outweighed by the potential adverse impact this connection would have on the successful Kensington and the North and West Melbourne Traffic Management Plans that have resulted in a significant reduction in through traffic using these suburbs as an alternative to the busy arterial road network adjacent to the CBD.

4.6.3 Proposed conditions and performance requirements

4.6.3.1 Arden Street Ramps

The proposed truncation of Bruce Street at Barrett Street to allow for the construction of the Arden Street ramps needs to recognise the access requirements of vehicles particularly articulated vehicles accessing Allied Mills and other properties in this mixed use area. Any revised access conditions also need to ensure that there is no reduction in the existing Local Area Traffic Management Plan's ability to prevent 24 hour-a-day 'rat running' traffic avoiding the more congested Macaulay Road route to infiltrate this area.



Maintenance of Langford Street's access requirements onto Arden Street also needs to be assessed before Arden Street is grade separated from the rail line.

The City of Melbourne has plans to upgrade Arden Streets' amenity, landscaping and bicycle route role by introducing landscaped bicycle lane separation islands along both sides of the street between Langford Street and the Wreckyn/Arden/Courtney/Chetwynd Streets roundabout. This upgrade will result in Arden Street having only one traffic lane in each direction and will lead to congestion along the street if it is connected to the East West Link viaduct.

The City of Melbourne's plans to upgrade Arden Street should not be linked or made conditional upon any decision to construct ramps to the East West Link.

The reference design needs to note that the City of Melbourne has plans to close Laurens Street at Spencer Street/Dynon Road, having regard to the predicted Traffic Impact assessment indicating a 10-20 per cent increase in Laurens Street traffic volumes after the construction of the East West Link.

4.6.4 Proposed changes to alignment or design

The CIS assessed a number of alternative alignments in order to reduce the impact of the Part B viaduct link between the Western Portal and Footscray Road will have on Royal Park, residential properties along the project and the Moonee Ponds Creek. They include the west side of CityLink - Reference Design, east side of CityLink, double stack CityLink, widen CityLink, increase carrying capacity of existing CityLink roadway and tunnel, Parkville to port.

Given the initial low use of the new viaduct road, it is considered that increasing the carrying capacity of the existing CityLink roadway would result in very significant cost savings, no impact on Kensington residents, no impact on Moonee Ponds Creek, no impact on Arden-Macaulay urban renewal area and could eventually be replaced with a tunnel from Parkville to the port.

It is considered that Part B of the Eastern Link not proceed at this stage of the project.

Realignment of the Western Portal to either run to the east of CityLink, or double stacking on CityLink or the Upfield Rail Line would result in either greater degradation of Royal Park's open space or be technically impossible due to increased gradients and elevations.

4.6.4.1 Arden Street Ramps

The Arden Street ramps are not required in the immediate future and should not be considered while there is any possibility they could increase traffic volumes throughout North Melbourne.

4.7 Public transport connectivity – Part B

4.7.1 Assessment of CIS

4.7.1.1 Arden Street Ramps

The construction of the Arden Street ramps would lead to increased congestion along Arden Street which would in turn adversely impact on the travel time of Bus Routes 401 and 402. This should be noted in the CIS and the impacts investigated.

4.8 Cycling connectivity – Part B

4.8.1 Assessment of CIS

4.8.1.1 Footscray Road interchange

The construction of the Footscray Road interchange should not compromise the operation the heavily used Footscray road bicycle path that carries more than 600 bicycles per hour in the AM peak period. This link has experienced strong growth in recent years and this is expected to continue supported by City of Melbourne and state government policy and programs.

4.8.1.2 Arden Street ramps

The proposed construction the Arden Street ramps must not be allowed to prevent the construction of physically separated bicycle lanes along Arden Street between Langford Street and Wreckyn Street.

4.9 Pedestrian connectivity – Part B

4.9.1 Assessment of CIS

4.9.1.1 Arden Street ramps

The construction of the Arden Street ramps will lead to increased traffic volumes along Arden Street and adjoining streets.

4.9.2 Proposed conditions and performance requirements

4.9.2.1 Arden Street ramps

The traffic signal cycle times along Arden Street and adjoining streets should not be extended to accommodate increased traffic volumes as this will lead to increased delays to pedestrians which often results in increased crashes between pedestrians and vehicles as many pedestrians become much more impatient when confronted with lengthy waiting times inner suburban areas. The development of the southern section of Arden-Macaulay as an intensive, mixed use urban renewal area will require traffic signal arrangements that are conducive to high pedestrian permeability. This means short and frequent traffic signal cycles and many crossing points



4.10 Construction traffic – Part B

The construction of the viaduct between Racecourse Road and Footscray Road is expected to be constructed on-site with some elements constructed off site and transported to the site when required.

Access to the site will be via the surrounding roads such as CityLink, Racecourse Road, Macaulay Road, Stubbs Street and Boundary Road with the construction of an internal road to facilitate internal site movements.

Temporary closures of intersecting roads such as Macaulay Road, Arden Street, and Dynon Road will be required when the construction of the viaduct crosses these roads.

Construction of the viaduct within the Melbourne Freight terminal will disrupt rail operations.

The construction of the Footscray Road interchange will also involve closures of Footscray Road.

All these closures will need to be carried in accordance with City of Melbourne and VicRoads conditions with coordination with other authorities and advance notification to all affected road users and property occupiers essential to construction of this viaduct.

5 Infrastructure

5.1 Infrastructure – Part A

5.1.1 Assessment of CIS

The CIS has not adequately assessed the project's impact on the City of Melbourne's road reserve infrastructure.

5.1.1.1 Coordinating road authority

Pursuant to the Road Management Act 2004 (the Act), the City of Melbourne is the Municipal Council responsible as the Co-ordinating Road Authority for the management of municipal roads in the municipal district. Under the Act, the City of Melbourne is also the Responsible Road Authority responsible for management of the footpaths, nature strips and medians on arterial roads in the municipal district.

Works on municipal roads and footpaths, nature strips and medians on arterial roads must be carried out in accordance with City of Melbourne policies and engineering standards.

The CIS does not adequately recognise or address the City of Melbourne in its capacity neither as the Coordinating Road Authority for municipal roads nor as the Responsible Road Authority for road reserve infrastructure on arterial roads.

Part A of the East West Link project impacts on Council's road reserve infrastructure in Elliot Avenue (arterial road) at the planned interchange and either side between Macarthur Road and Flemington Road, the proposed Manningham Street (municipal road) road widening and its proposed use as the truck route for disposal of the tunnel excavation material and at the proposed Flemington Road / Elliot Avenue / Racecourse Road / Boundary Road (all arterial roads) intersection upgrade and road widening. These areas are shown in maps 1, 2 and 3 in Appendix 1: Road reserve infrastructure.

In addition, any municipal roads that are identified to require local area traffic management treatments to protect the amenity of the local street network impacted by increased traffic resulting from either Part A of the East West Link project or traffic avoiding the East West Link tolls will require works to be undertaken which will impact on the road reserve infrastructure in those municipal roads. These works should be recognised in the CIS and the costs of these road reserve infrastructure works should be borne by the Linking Melbourne Authority.

In general, Council's road reserve infrastructure that is impacted at these locations to varying degrees includes roadway, kerb and channel, footpath, drainage network including drains, pits and open channels, streets furniture and signage assets.



5.1.1.2 Best practice engineering standards

The CIS also does not recognise or mention any best practice engineering design standards and does not fully recognise policies and strategies related to the road reserve infrastructure impacted by Part A of the East West Link project. In particular, the CIS does not reference any City of Melbourne engineering design / urban design standards and infrastructure materials, standard plans and specifications, design standards, CAD standards and “as constructed” plan standards and asset data and information requirements. The CIS does not adequately recognise relevant City of Melbourne strategies including Total Water Mark – City as a Catchment, Zero Net Emissions, Climate Adaption and Change Strategy, WSUD guidelines as they apply to the management and maintenance of the Council’s road reserve infrastructure.

The CIS should recognise the City of Melbourne’s roles and responsibilities for the management of the road reserve infrastructure that is impacted by Part A of the East West Link project.

Separately, the supporting structural system of the elevated road section of the Precinct 3 Royal Park (Western portal) will potentially have a significant impact on the Council’s Royal Park and Trin Warren Tam-boore wetlands and underground storage tanks and treatment facility. More details are included in Section 11: Surface water).

A range of park assets are situated in the proposed LMA project area, including seats, bollards, a pavilion, playground, bar bequest and the like. Appendix 1 details these assets.

5.1.2 Proposed conditions and performance requirements

5.1.2.1 Roads, kerb and channels, footpaths and nature strips

The CIS shall include the following conditions and performance requirements for City of Melbourne roads, kerb and channel, footpaths and nature strips:

- All City of Melbourne road reserve infrastructure impacted by the East West Link project Part A must be reconstructed/constructed in accordance with the Council’s Engineering design standards. All road reserve infrastructure works must be carried out to the satisfaction of the Com.
- All altered portions of road (including the provision of footpaths, public lighting, street trees, pavement marking and signage) must be constructed in accordance with plans and specifications first approved by the Com.
- Prior to the Commencement of construction, plans and specifications of all road reserve infrastructure works and associated works must be submitted to and approved by the City of Melbourne including:
 - Dust control during construction;
 - Road pavement design, including kerb and channels, footpaths, nature strips and street trees;
 - Traffic management / signage / line marking; and
 - Manoeuvrability for service vehicles during construction phase of the project.

5.1.2.2 Street lighting

The CIS shall include the following conditions and performance requirements for City of Melbourne street lighting infrastructure.

All existing street lighting infrastructure impacted by Part A of the East West Link project must be removed / designed in accordance with the following requirements and constructed to the satisfaction of the responsible Electrical Distributor and the City of Melbourne. :

Roadways should comply with AS1158 category V3 requirements.

Transport terminals, interchanges and service areas with mixed pedestrian and high night time vehicle movement should comply with AS1158 category P6 requirements.

Public spaces with pedestrian movement should comply with AS1158 category P6 requirements.

Footpaths approaching the activity centres should comply with AS1158 category P1 requirements.

All public lighting must be unmetered and energy efficient.

5.1.2.3 Drainage

The CIS shall include the following conditions and performance requirements for City of Melbourne drainage infrastructure:

- All existing City of Melbourne stormwater drainage system impacted by Part A of the East West Link project must be upgraded for storms of up to 1 in 20 years ARI. The works must be undertaken to the satisfaction of the Com;
- The CIS must demonstrate that the project will not increase flood levels and frequency of flooding during construction and operation of the East West Link Project Part A. This especially applies to the discharge of groundwater and stormwater run-off from the Tunnel and Western Portal that is proposed to be discharged into the Council's storm water system;
- A stormwater drainage system, incorporating water sensitive road design, must be constructed for Part A of the East West Link project and provisions made to connect this system to the Council's drainage network. All works must be carried out to the satisfaction of the Com; and
- A 500mm no go clearance zone shall apply for new drainage infrastructure planned to be built for Part A of the East West Link project that is planned to be handed over to the City of Melbourne to allow for the future upgrading and maintaining of these City of Melbourne's drainage assets.

5.1.2.4 Engineering designs standards and asset management information

The CIS shall include the following conditions and performance requirements for City of Melbourne Engineering Design Standards and Asset Management Information:

- On Completion of the project, City of Melbourne will require digital (AutoCAD or GIS) and PDF versions of all design and “as constructed” drawings on a CD or DVD as well as two hard copies of these drawings. Works involving road, footpaths and drainage works shall include drawings showing long-sections and cross-sections of the proposed works at appropriate scales (all levels to Australian Height Datum). Reference to City of Melbourne CAD Drawing Standards: are available online at the Council's website:
<http://www.melbourne.vic.gov.au/ParkingTransportandRoads/Roads/EngineeringStandards/Pages/AsBuiltDrawings.aspx>
- An inventory of as built asset data for items in the public domain shall be provided in a Microsoft Excel spread sheet format. The data shall list all assets constructed as part of the contract by location with quantities and construction costs for each asset under the care and management of Com;
- Operation and maintenance manuals for infrastructure in the public domain shall be of sufficient detail to enable the works to be operated and maintained as intended in the design. The manuals shall include but not be limited to:
 - Warranty details for all items covered by a manufacturer's or supplier's warranty.
 - Maintenance details for protective coating systems and special finishes, including recommended cleaning procedures, procedures for repairs to damage and specifications of all protective coatings.
 - Details of interim maintenance contracts (landscaping, etc.)
 - Details of all electrical and mechanical systems, including operating instructions, maintenance requirements, supplier contact details and part numbers.
 - Any special maintenance procedures for structures, including access for inspection and maintenance. Life cycle maintenance regime including what to maintain and when.
 - Notification procedure in-case of claims under the defects liability provisions of the contract.
 - Training of our maintenance crews/contractors is also to be undertaken.

5.1.3 Proposed changes to alignment or design

5.1.3.1 Elliott Avenue

The CIS shows proposed significant construction activities in Elliott Avenue between Macarthur Road and Flemington Road which impacts on the Council's road reserve infrastructure. The CIS should better detail the proposed scope of works at this location to enable the City of Melbourne to make a more informed Engineering judgment of the impact on the Council's road reserve infrastructure.

The Council's existing 525mm diameter storm water drain located within the proposed open cut section of Elliott Avenue must be relocated / upgraded to the satisfaction of the Com.

5.1.3.2 *Manningham Street and Oak Street*

The CIS shows proposed construction activities in Manningham Street and Oak Street. The CIS should better detail the proposed scope of works at this location to enable the City of Melbourne to make a more informed Engineering judgment of the impact on the Council's road reserve infrastructure.

5.1.3.3 *Flemington Road, Racecourse Road and Boundary Road*

The CIS shows significant construction activities in Flemington Road, Elliot Avenue, Racecourse Road and Boundary Road. The CIS should better detail the proposed scope of works at this location to enable the City of Melbourne to make a more informed Engineering judgment of the impact on the Council's road reserve infrastructure and street trees.

5.1.3.4 *Park assets*

All City of Melbourne park assets need to be protected, or if they require removal, offered back to the City of Melbourne in the first instance.

5.2 Infrastructure - Part B

5.2.1 Assessment of CIS

The CIS has not adequately assessed the project's impact on the City of Melbourne's road reserve infrastructure.

Pursuant to the Road Management Act 2004 (the Act), the City of Melbourne is the Municipal Council responsible as the Co-ordinating Road Authority for the management of municipal roads in the municipal district. Under the Act, the City of Melbourne is also the Responsible Road Authority responsible for management of the footpaths, nature strips and medians on arterial roads in the municipal district.

Works on municipal roads and footpaths, nature strips and medians on arterial roads must be carried out in accordance with City of Melbourne policies and engineering standards.

The CIS does not adequately recognise or address the City of Melbourne in its capacity neither as the Coordinating Road Authority for municipal roads nor as the Responsible Road Authority for road reserve infrastructure on arterial roads.

Part B of the East West Link East West Link project impacts on Council's road reserve infrastructure in Arden Street (municipal road) at the planned on / off ramps and the associated intersection upgrade with Lloyd Street (municipal road) and proposed widening between Elizabeth Street (western end) to Laurens Street (eastern end) including the Arden Street Bridge (City of Melbourne bridge asset) along Footscray Road (arterial) road between the current elevated section (eastern end) and Dock Link Road (western end). These areas are shown in maps 4 and 5 in Appendix 1: Road reserve infrastructure.



In addition, any municipal roads that are identified to require local area traffic management treatments to protect the amenity of the local street network impacted by increased traffic resulting from either Part B of the East West Link project or traffic avoiding the East West Link tolls will require works to undertaken which will impact on the road reserve infrastructure in those municipal roads. These works should be included in the CIS and the costs of these road reserve infrastructure works should be borne by the Linking Melbourne Authority.

In general, Council's road reserve infrastructure that is impacted at these locations to varying degrees includes roadway, kerb and channel, footpath, drainage network including drains, pits, open channels and pumping stations, streets furniture and signage assets.

The CIS also does not recognise or mention any best practice engineering design standards and does not fully recognise policies and strategies related to the road reserve infrastructure impacted by Part B of the East West Link project. In particular, the CIS does not reference any City of Melbourne engineering design / urban design standards and infrastructure materials, standard plans and specifications, design standards, CAD standards and "as constructed" plan standards and asset data and information requirements. The CIS does not adequately recognise relevant City of Melbourne strategies including Total Water Mark - City as a Catchment, Zero Net Emissions, Climate Adaption and Change Strategy, WSUD guidelines as they apply to the management and maintenance of the Council's road reserve infrastructure.

It is recommended that the CIS should recognise the City of Melbourne's roles and responsibilities for the management of the road reserve infrastructure that is impacted by Part B of the East West Link project.

Separately, the supporting structural system of the proposed elevated road section along the western alignment of the Moonee Ponds Creek may impact on the Council's drainage infrastructure including three pumping stations located in Stubbs Street and bent Street (Kensington) and associated out fall drains into Moonee Ponds Creek. This drainage system provides local flood protection to the residential and industrial properties on the western side of Moonee Ponds Creek. The supporting Melbourne Water levee banks which run along both side of Moonee Ponds Creek provide 100 year ARI flood protection to the catchment of Moonee Ponds Creek and Part B of the East West Link project should not in any way Compromise the integrity of this flood protection system. The CIS should fully recognize all drainage infrastructures along the Moonee Ponds Creek catchment between Racecourse Road and Arden Street and ensure appropriate mitigation and treatment measures are put in place to ensure that the drainage system and associated drainage infrastructure are fully protected and preserved during the project to ensure its full continuation beyond the Completion of Part B of the East West Link project.

The CIS indicates a proposed lowering of the Upfield Railway line in the vicinity of the Arden Street exit ramps. The CIS is unclear on what impact the lowering of the railway line will have on the Council's road reserve infrastructure in Arden Street east of Moonee Ponds Creek. This area is also is subject to

flooding and these proposed works could increase flood levels and the frequency of flooding in the area.

5.2.2 Proposed conditions and performance requirements

5.2.2.1 Roads, kerb and channels, footpaths and nature strips

The CIS shall include the following conditions and performance requirements for City of Melbourne roads, kerb and channel, footpaths and nature strips:

- All City of Melbourne road reserve infrastructure impacted by the East West Link project Part B must be reconstructed/constructed in accordance with the Council's Engineering design standards. All road reserve infrastructure works must be carried out to the satisfaction of the Com.
- The proposed lowering of the Upfield Railway line in the vicinity of the Arden Street exit ramps shall not have any adverse impact on the Council's road reserve infrastructure located east of Moonee Ponds Creek.
- All altered portions of road (including the provision of footpaths, public lighting, street trees, pavement marking and signage) must be constructed in accordance with plans and specifications first approved by the Com.

Prior to the Commencement of construction, plans and specifications of all road reserve infrastructure works and associated works must be submitted to and approved by the City of Melbourne including:

- Dust control during construction;
- Road pavement design, including kerb and channels, footpaths, nature strips and street trees;
- Traffic management / signage / line marking; and
- Manoeuvrability for service vehicles during construction phase of the project.

5.2.2.2 Street lighting

The CIS must address the following conditions and performance requirements for City of Melbourne street lighting infrastructure:

- All existing street lighting infrastructure impacted by Part B of the East West Link project must be removed / designed in accordance with the following requirements and constructed to the satisfaction of the responsible Electrical Distributor and the Com:
- Roadways to Comply with AS1158 category V3 requirements;
- At transport terminals, interchanges and service areas with mixed pedestrian and high night time vehicle movement to Comply with AS1158 category P6 requirements;
- At public spaces with pedestrian movement to Comply with AS1158 category P6 requirements;
- For footpaths approaching the activity centres to Comply with AS1158 category P1 requirements; and
- All public lighting must be unmetered and energy efficient.

5.2.2.3 Drainage

The CIS should include the following conditions and performance requirements for City of Melbourne drainage infrastructure:

- All existing City of Melbourne storm water drainage system impacted by Part B of the East West Link project must be upgraded for storms of up to 1 in 20 years ARI. The works must be undertaken to the satisfaction of the Com;
- The CIS must demonstrate that the project will not increase flood levels and frequency of flooding during construction and operation of the East West Link Project part B. This especially applies to the discharge of storm water run-off from the elevated road over Moonee Ponds Creek that is proposed to be discharged into the Council's storm water system;
- A storm water drainage system, incorporating water sensitive road design, must be constructed for Part B of the East West Link project and provisions made to connect this system to the Council's drainage network. All works must be carried out to the satisfaction of the Com; and
- A 500mm no go clearance zone shall apply for new drainage infrastructure planned to be built for Part B of the East West Link project that is planned to be handed over to the City of Melbourne to allow for the future upgrading and maintaining of these City of Melbourne's drainage assets.

The City of Melbourne pumping stations and associated outfall drains which connect into the Moonee Ponds Creek in Stubbs Street (two locations) and Bent Street shall not be damaged or interfered with by the construction of Part B of the East West Link project.

5.2.2.4 Bridge

The CIS should include the following conditions and performance requirements for City of Melbourne bridge infrastructure:

- The existing Arden Street Bridge is a City of Melbourne asset and is also subject to a heritage overlay. Any works undertaken on the Bridge as part B of the East West Link project will require consultation with Heritage Victoria and the Com.
- The proposed widening of the existing Arden Street Bridge to accommodate two lanes vehicles lanes in each direction with associated bicycle lanes and footpaths will require the bridge to be reconstructed. These works should be recognized in the CIS and incorporated into Part B of the East West Link project.
- The new bridge should be constructed in accordance with AS5100 and VicRoads bridge design standards. The design load capacity of the bridge shall be suitable to accommodate the future placement and removal of the 165 tonne transformers in operation at the nearby SP Ausnet West Melbourne terminal station. Traffic lanes shall be 3.5 metres wide, bicycle lanes shall be 1.5 metres wide and footpaths shall be 2.5 metres wide. The design of the bridge shall be approved by the City of Melbourne prior to its construction and handed over to the City of Melbourne upon its Completion.
- The new bridge shall not adversely impact on the existing flood inundation of the Moonee Ponds Creek catchment between Racecourse Road and

Arden Street. Flood modeling of Moonee Ponds Creek shall be undertaken to the satisfaction of the City of Melbourne and Melbourne Water.

5.2.2.5 Engineering designs standards and asset management information

The CIS shall include the following conditions and performance requirements for City of Melbourne Engineering Design Standards and Asset Management Information:

- On Completion of the project, City of Melbourne will require digital (AutoCAD or GIS) and PDF versions of all design and “as constructed” drawings on a CD or DVD as well as two hard copies of these drawings. Works involving road, footpaths and drainage works shall include drawings showing long-sections and cross-sections of the proposed works at appropriate scales (all levels to Australian Height Datum). Reference to City of Melbourne CAD Drawing Standards: are available online at the Council’s website:
<http://www.melbourne.vic.gov.au/ParkingTransportandRoads/Roads/EngineeringStandards/Pages/AsBuiltDrawings.aspx>
- An inventory of as built asset data for items in the public domain shall be provided in a Microsoft Excel spread sheet format. The data shall list all assets constructed as part of the contract by location with quantities and construction costs for each asset under the care and management of Com;
- Operation and maintenance manuals for infrastructure in the public domain shall be of sufficient detail to enable the works to be operated and maintained as intended in the design. The manuals shall include but not be limited to:
 - Warranty details for all items covered by a manufacturer’s or supplier’s warranty.
 - Maintenance details for protective coating systems and special finishes, including recommended cleaning procedures, procedures for repairs to damage and specifications of all protective coatings.
 - Details of interim maintenance contracts (landscaping, etc.)
 - Details of all electrical and mechanical systems, including operating instructions, maintenance requirements, supplier contact details and part numbers.
 - Any special maintenance procedures for structures, including access for inspection and maintenance. Life cycle maintenance regime including what to maintain and when.
 - Notification procedure in-case of claims under the defects liability provisions of the contract.
 - Training of our maintenance crews/contractors is also to be undertaken.

On Completion of the project, City of Melbourne will require digital (AutoCAD or GIS) and PDF versions of all design and “as constructed” drawings on a CD or DVD as well as two hard copies of these drawings. Works involving road, footpaths and drainage works shall include drawings showing long-sections and cross-sections of the proposed works at appropriate scales (all levels to Australian Height Datum). Please refer to City of Melbourne CAD Drawing Standards.



City of Melbourne standards for CAD drawings are available online at City of Melbourne website:
<http://www.melbourne.vic.gov.au/ParkingTransportandRoads/Roads/EngineeringStandards/Pages/AsBuiltDrawings.aspx>

An inventory of as built asset data for items in the public domain is to be provided in a Microsoft Excel spread sheet format. The data shall list all assets constructed as part of the contract by location with quantities and construction costs for each asset under the care and management of Com.

Operation and maintenance manuals for infrastructure in the public domain shall be of sufficient detail to enable the works to be operated and maintained as intended in the design. The manuals shall include but not be limited to:

- Warranty details for all items covered by a manufacturer's or supplier's warranty.
- Maintenance details for protective coating systems and special finishes, including recommended cleaning procedures, procedures for repairs to damage and specifications of all protective coatings.
- Details of interim maintenance contracts (landscaping, etc.)
- Details of all electrical and mechanical systems, including operating instructions, maintenance requirements, supplier contact details and part numbers.
- Any special maintenance procedures for structures, including access for inspection and maintenance. Life cycle maintenance regime including what to maintain and when.
- Notification procedure in-case of claims under the defects liability provisions of the contract.
- Training of our maintenance crews/contractors is also to be undertaken.

5.2.3 Proposed changes to alignment or design

5.2.3.1 Arden Street

The CIS shows significant construction activities in Arden Street including road widening, new bridge and possible railway line lowering. The CIS should better detail the proposed scope of works at this location to enable the City of Melbourne to make a more informed Engineering judgment of the impact on the Council's road reserve infrastructure.

5.2.3.2 Moonee Ponds creek

The CIS shows proposed construction activities associated with the elevated road structure along the western alignment of Moonee Ponds Creek. The CIS should better detail the proposed scope of works at this location to enable the City of Melbourne to make a more informed Engineering judgment of the impact on the Council's drainage infrastructure in this vicinity along the Moonee Ponds Creek.

5.2.3.3 Footscray Road

The CIS shows significant construction activities in Footscray Road. The CIS should better detail the proposed scope of works at this location to enable the

City of Melbourne to make a more informed Engineering judgment of the impact on the Council's road reserve infrastructure.

6 Land use

6.5 Land use assessment – Part A

6.5.1 Assessment of CIS

6.5.1.1 Residential uses

The alignment runs through medium density residential neighbourhoods. The City of Melbourne agrees that putting the road in a tunnel is the least impact option for Part A Compared to a surface or elevated viaduct option. As the CIS notes “...road tunnels are being increasingly used to provide much-needed transport infrastructure. At the same time tunnels can improve local amenity by moving traffic underground and allowing Communities to make better use of areas above the tunnel.”⁷

The alignment runs through a section of West Parkville to the west of Manningham/Oak Streets. This will result in the loss of 55 residential properties. There will also be significant impacts on a number of other properties which will not be acquired near the alignment including the Elderly Chinese Home, 17 flats and four town houses. The alignment will split this West Parkville community into two, isolating the properties in the northern section.

6.5.1.2 Commercial uses

The City of Melbourne agrees that the proposed Part A will “...support an expanded Melbourne central city, giving businesses based in the city’s core better access to clients, customers and skilled labour. Access would be improved to the expanding Parkville Knowledge Precinct, an area that is vitally important to building a strong innovation economy from Melbourne and Victoria.”⁸

6.5.1.3 Open space

The reference design will have much more significant impacts on open space than what is outlined in the CIS in both Part A and Part B of the project. The CIS also does not take into account the need to provide for future open space needs as outlined in the City of Melbourne Open Space Strategy 2012. It will have significant impacts on Royal Park, the environs of the Moonee Ponds Creek and the City of Melbourne’s ability to provide an adequate quantity of open space for a growing population.

The project will see significant short and long term disruption, loss of open space and major impacts on the many community and environmental values open space provides including; formal sport use and active recreation, informal

⁷ Comprehensive Impact Statement Summary Report p6.

⁸ Ibid p6

recreation, social connectedness, community health and wellbeing, climate change adaptation and the capacity to cool the city, biodiversity, cultural heritage and character, tourism and space for events and the arts.

6.5.1.4 Royal Park

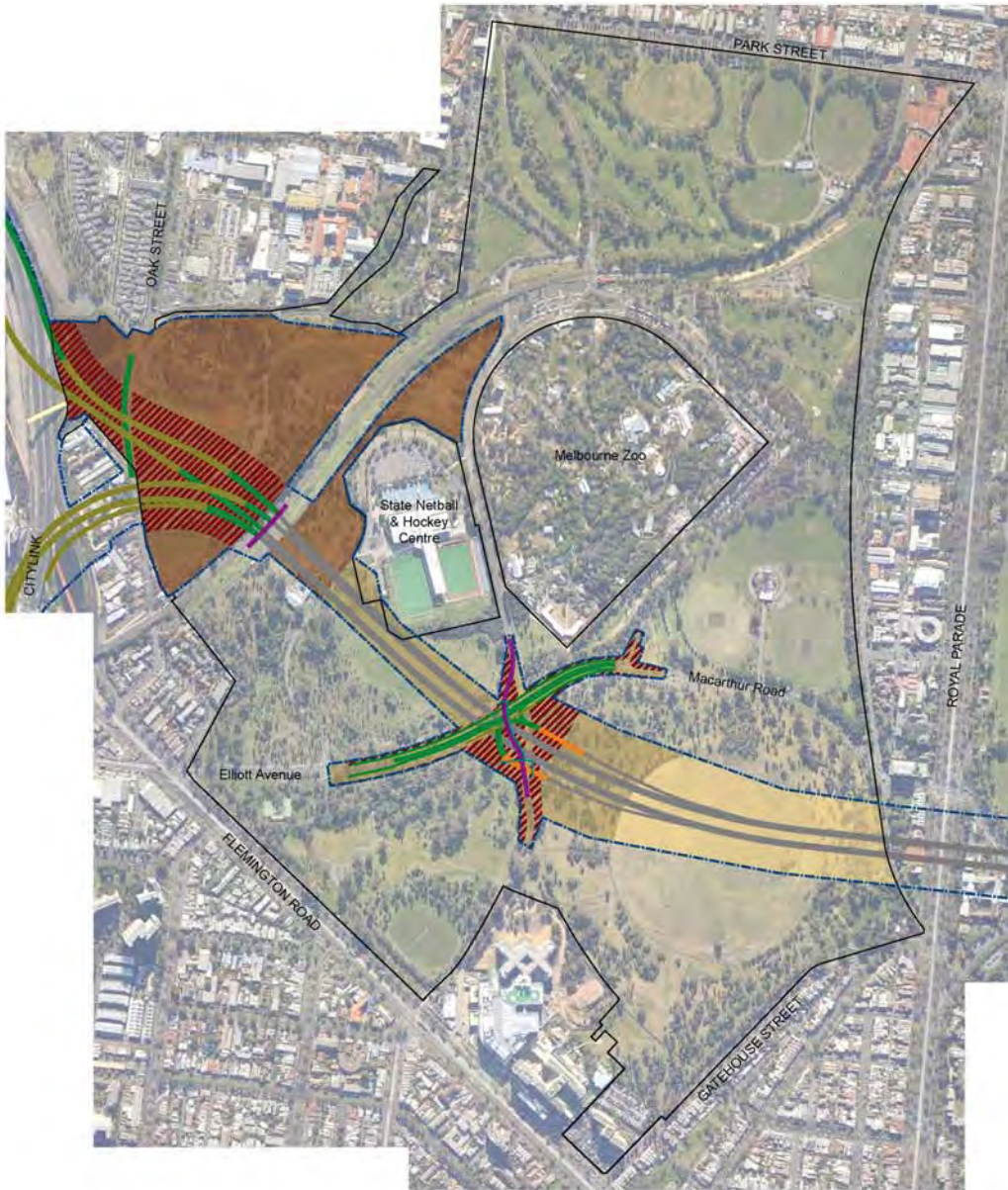
Royal Park was gazetted “for all times hereafter maintained and used as a Public Park” in 1876- which has been its continuous purpose from that time, (137 years). It has never been gazetted or identified for road reserve purposes, and is essentially the same area gazetted in 1876. The City of Melbourne was appointed Committee of Management for the park in 1934, which means that all management, uses, planning, and infrastructure are the responsibility of the City.

In the City of Melbourne Open Space Strategy it is designated a “State Level” park, with the purpose of “Open space that is primarily set aside and managed for the whole of the State of Victoria”.

The potential impact on open space in Royal Park is shown in Figure 10 below and is based on assessment of the reference design:

	Area (hectares)	Percentage of Royal Park
East West Link reference design area	43.1	27
Temporary construction area	22.8	14
Potential variance for cut and cover from grassland circle to Elliot Avenue	7.5	5
Potential variance for cut and cover from Elliot Avenue to Upfield railway	11.6	7
Potential variance for cut and cover from The Avenue to the Elliot Avenue portal	7.8	5
Permanent loss of usable open space	9.3	6
Total area of Royal Park (approx.)	160	100

Figure 10: Potential impact on open space provision in Royal Park



Open Space Disruption and Loss

Permanent Loss of Usable Open Space is defined as public open space that will be permanently closed to public access, or where recreational opportunities will be severely compromised.

It includes areas taken up by new roads, and areas within 50 metres of new high speed motorways, elevated roadways, ramps and cuttings.

The areas have been calculated based on LMA's Reference Design Maps released in July 2013.

Royal Park OSD&L V2 Nov 2013

	Royal Park (excl: Zoo & SHNC) 160 ha (approx)		Likely Construction Area (Cut & Cover) Elliott Avenue Interchange 11.6 ha (7% of 160 ha)
	LMA Project Boundary* (Dwg EWL-DES-SK-1593A) 43.1 ha (27% of 160 ha)		Possible Construction Area Circle Grassland Extent of Disruption Unknown 7.8 ha (5% of 160 ha)
	LMA Temporary Construction Area. Return to Open Space. Significant Disruption. (Dwg EWL-DES-SK-1593A) 22.8 ha (14% of 160 ha)		Permanent Loss Usable Open Space 9.3 ha (6% of 160 ha)

The City of Melbourne's assessment of open space lost to the project is 9.3 hectares or 6 per cent of 160 hectares. This is based on an approximate 50 metre buffer each side of the proposed roadway and associated infrastructure and slightly larger offsets around the Elliot Ave interchange. Land this close to major road infrastructure is considered encumbered and offers a far diminished quality and usability as public open space.

The CIS notes that permanent reduction in parkland in Royal Park as a result of the project would be '1.3 hectares (or a loss of 0.8 per cent of the total project area) of the park's total area of 170 hectares'. These figures refer to 'actual open space loss directly related to the road reserve and hard infrastructure. The broader permanent landscape impacts would potentially include a small loss of amenity and flexibility, and a change to the landscape setting.' The figure of 0.8 per cent is arrived at by including space under flyovers and the small parcels of landscaped areas adjacent to interchanges that are predominantly intended as landscape buffers to soften visual impact. These are likely to be returned to Council as unusable open space with increased maintenance costs. It is unrealistic to argue that these areas have recreational potential equivalent to the current recreation and open space provision in Royal Park.

The cost for the City of Melbourne to purchase land in Parkville to replace 9.3 hectares of lost open space is estimated at approximately \$207M. In a recent assessment of the City of Melbourne's top 20 most valuable properties Royal Park emerged as the most valuable with a valuation (*based on 20 per cent of actual market value due to its status as Crown Land permanently reserved as parkland) of approximately \$308M.

The CIS does not assess whether there will be further permanent encumbrances as a result of using cut and cover techniques and the final location and depth of underground infrastructure. The City of Melbourne Open Space Strategy Technical Report (adopted by Council July 2012) outlines criteria for the way development should interface with open space (section 6.5 pp. 115-117). Relevant points that need to be included in an assessment of what constitutes functional, unencumbered public open space include:

- Design is to be compatible with and enhance where possible the recreational, ecological, social and cultural values of the open space.
- Built form and landscape treatments should maintain the open space ecological processes and biodiversity values and allow opportunities to enhance these values.
- Design of built form and landscape treatment should be Compatible with the heritage values of the open space.
- Landscape treatments should be Compatible with the landscape character. (refer also appendix 11, Guidelines for landscaping)

The CIS notes that after construction, noise levels in parts of Ross Straw Field(Manningham Reserve) will be higher and that the only recreation uses that will be appropriate will be "noise-tolerant" ones such as solo cycling or jogging. This means that other activities, such as picnicking, walking and talking, playing sport or listening to natural sounds such as bird calls will be alienated.



The CIS states that the project will have impacts on Royal Park but that there will be 'opportunities to deliver enduring outcomes for the park to retain and enhance its character'. Royal Park has been managed by the City of Melbourne for many years as a high quality public open space. In the past 15 years Council has spent more than \$22 million on capital improvements and renewals to the park. The City of Melbourne was awarded an Australian Institute of Landscape Architects (AILA) award for exemplary stewardship of the park in 2010. The project provides opportunities to deliver significant benefits to Royal Park however the current impact of the reference design is a significantly degradation of the park.

The CIS states that 'additional detailed investigations separate to the CIS would lead to a review of the Royal Park Master Plan and the preparation of supporting business cases for consideration by the Victoria Government'. The City of Melbourne would support the process of developing a new Master Plan based on enhancing and building on the original Master Plan including expanding the park, increasing the number of trees and addressing previous incursions into the park and their negative impacts such as Macarthur Road, the Upfield Train line and others.

The CIS does not adequately cover the extensive use of Royal Park for informal (not sporting) recreation and how the impacts on this use will be managed. (refer also appendix 2, Current recreation uses by precinct - Royal Park and appendix 9 Report: Bicycle and pedestrian count data, 2013 - Royal Park)

In 2012 the City of Melbourne participated in the 'Green Flag' program, an internationally recognised award program for excellence in park management. In 2012 the Fitzroy Gardens was awarded a Green Flag and in 2013 Royal Park was assessed by a panel of international and local judges. They will make their assessment soon and their report can be made available to the Assessment Committee when released.

The CIS shows that there will be significant impacts on Royal Park. One of the ways to compensate for this could be the removal of Macarthur. The CIS should note this as a potential measure to ameliorate the loss of open space and provide for the project to investigate this option and, if feasible, deliver it as part of the project.

6.5.2 Proposed conditions and performance requirements

The calculation of loss of open space should be revised in the CIS to reflect a full assessment of loss of functionality and recreational value (as per the City of Melbourne Open Space Strategy 2012) rather than an assessment of the area required for permanent road related infrastructure.

The CIS should note that land for functions associated with ongoing road management including noise, access, visual amenity, ventilation, and emergency management should be considered separately to returned open space. The CIS should require the adoption of the City of Melbourne guidelines for landscape development above subsurface structures which are included in Appendix 11. The CIS should require that the City of Melbourne be consulted on the planning and design intention for all areas that are returned as open space.

The project should recognise and Compensate for the loss of future open space provision opportunities and the capacity to provide essential Community infrastructure to a growing population as a result of the project on a local, regional and state level.

The CIS should include performance requirements for the delivery of functional, unencumbered public open space. These include issues relating to amenity and function as well as the characteristics and values of open space.

The CIS should include performance requirements to minimise dwelling losses by assessing all possible alternative alignments.

6.5.2.1 *Amenity and function of open space*

- Design and layout of the site is to provide passive surveillance of open space (this will be difficult underneath road flyovers)
- Design of the built form and site use should at a minimum maintain the amenity, function, and use of open space. Factors that could degrade open space amenity, function, and use include noise above 55 dbA (excessive for a park setting not a road setting), light spill, traffic movements, car parking demand, wind effects or overshadowing,
- Open space must receive a minimum of 3 hours of direct sunlight between 9am and 3pm during the mid-winter and at least 5 hours of direct sunlight between 9am and 3pm on September 22.

6.5.2.2 *Characteristics and values of open spaces*

- Design is to be compatible with and enhance where possible the recreational, ecological, social and cultural values of the open space.
- Built form and landscape treatments should maintain the ecological processes and biodiversity values of the open space and allow for opportunities to enhance these values.
- Design of built form and landscape treatment should be compatible with the heritage values of the open space.
- Landscape treatments should be compatible with the landscape character

6.6 Land use assessment – Part B

6.6.1 Assessment of CIS

6.6.1.1 *Impact on Arden-Macaulay*

The City of Melbourne’s Municipal Strategic Statement (2013) and its Arden-Macaulay Structure Plan (2012) both designate Arden-Macaulay for urban renewal as a high density mixed use precinct with a high quality of urban amenity for the residents, workers and visitors who will use it.

The Victorian Government’s Plan Melbourne also identifies Arden-Macaulay as part of the expanding Central City. Direction 1.4 of Plan is to “plan for the expanded central city to become Australia’s largest Commercial and residential centre by 2040”. The expanded Central City, including Arden-Macaulay is shown below in Figure 11.



In the Plan the Central Subregion will “accommodate at least one million jobs and nearly one million people by 2050⁹. The Complete Arden-Macaulay urban renewal area has the development capacity to provide up to 24,048 additional jobs and 12,661 additional dwellings¹⁰. This concentration of jobs will deliver agglomeration benefits to the economy.

The proposed Part B alignment runs through the urban renewal area where there will soon be high density residential neighbourhoods, local service centres and heavily used recreational public open space. Putting the road in an elevated viaduct will be a significant impact on the amenity of the area. If a road link is required a tunnel is the most appropriate option. As the CIS notes “...road tunnels are being increasingly used to provide much-needed transport infrastructure. At the same time tunnels can improve local amenity by moving traffic underground and allowing Communities to make better use of areas above the tunnel.”¹¹

The CIS understates the importance of Arden-Macaulay as an extension of the Central city and urban renewal area. The CIS does recognise that the Arden-Macaulay Structure Plan “seeks to develop the area as a dense, mixed-use inner city suburb”¹². It also recognises that “the design of the elevated roadway and associated entry/exit ramps (notably Arden Street) must not only integrate with existing conditions, but fully consider the area’s future outlook and prospects as a mixed use, inner urban neighbourhood”¹³.

⁹ Victorian Government, 2013, page 35

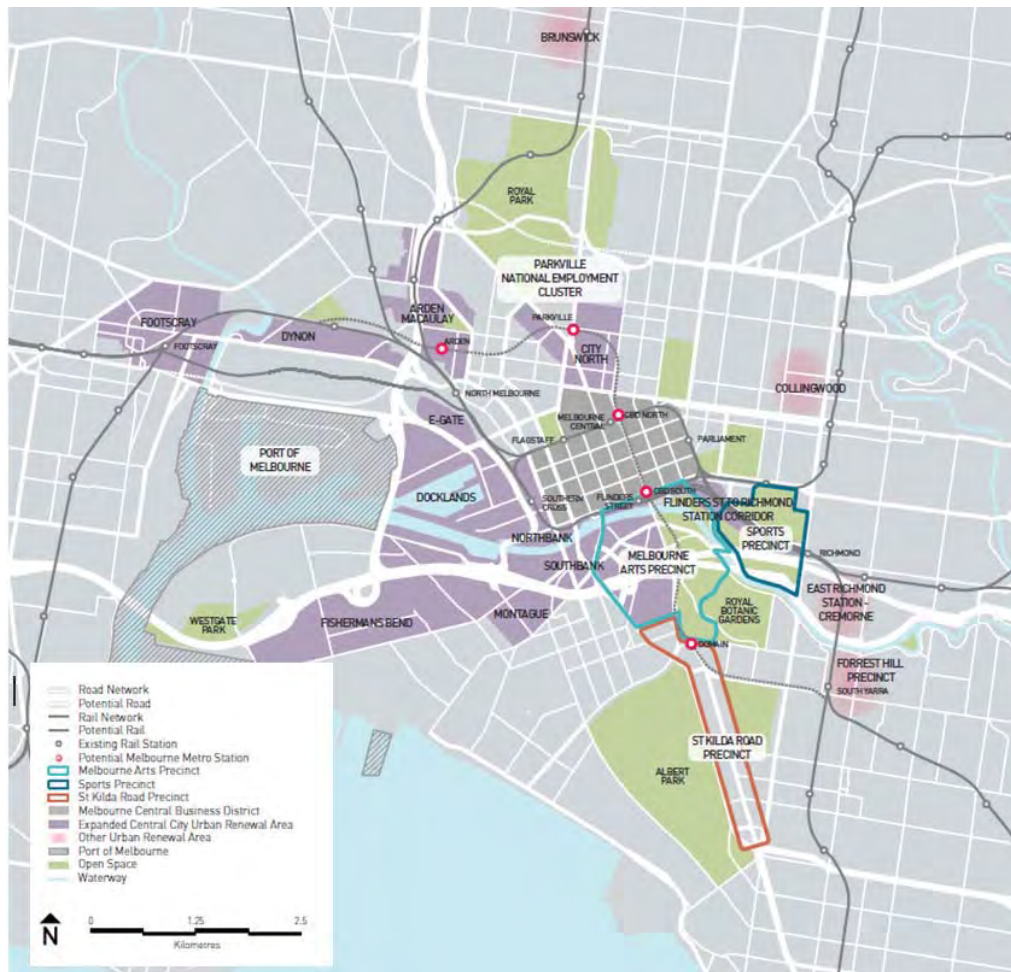
¹⁰ EDG Research, 2013, page 31

¹¹ Comprehensive Impact Statement Summary Report p6.

¹² Chapter 8, page 18

¹³ Chapter 8, page 19

Figure 11: The expanded Central City from Plan Melbourne 2013



Source: State of Victoria, 2013

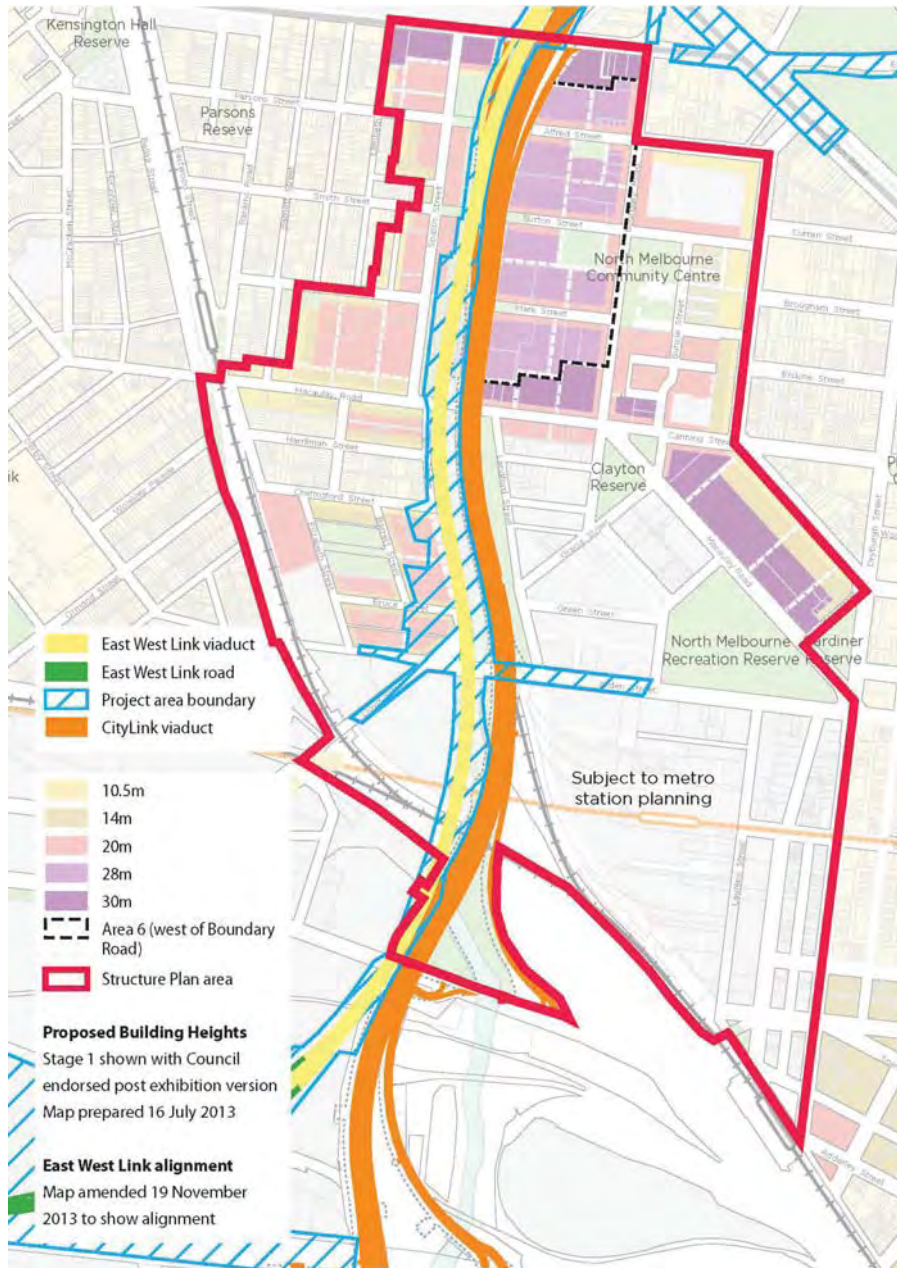
The CIS does not adequately address the impact that Part B will have on the future Arden-Macaulay urban renewal area. Impacts on community access are discussed in relation to maintaining local connectivity during construction¹⁴. The Arden-Macaulay Structure Plan includes a pedestrian bridge at Sutton Street and new north-south pedestrian connections along the east side of CityLink to improve pedestrian access to and across Moonee Ponds Creek. The CIS does not recognise adequately that a second viaduct along Moonee Ponds Creek will further separate Kensington and North Melbourne by increasing the physical barrier between them.

The CIS also does not discuss the impact of Part B on the development potential of land in Arden-Macaulay. Figure 12 shows height limits proposed under C190 and the location of properties relative to the East West Link alignment.

The CIS argues for a tunnel under Fitzroy and Carlton for Part A of the East West Link and for a tunnel under Footscray for the Western section to minimise the surface impacts in those valued urban locations. However this rationale is ignored in considering the impacts of the viaduct proposed for Part B in Arden-Macaulay which runs through an area planned to become an intensive high quality mixed use urban renewal area. The CIS also does not make the case for Part B providing the connectivity benefits Arden-Macaulay will require.

¹⁴ Chapter 8, page 19; chapter 16, page 23

Figure 12: Arden-Macaulay Structure Plan area, height limits proposed under C190 and East West Link project area



LMA requested that the independent panel reviewing planning scheme amendment C190 defer consideration of land affected by the project boundary (on the west of the CityLink viaduct as part of the C190 process¹⁵. Even though the viaduct is on the west of CityLink, part B will also compromise the potential

¹⁵ Chapter 8, page 4

future amenity of land to the east of CityLink by reducing the overall economies of scale of this important area.

On the west of the CityLink viaduct, Part B will require the acquisition of 13 residential and 12 Commercial properties for project structures and construction laydown / depot areas (in three small groups of land off Stubbs Street and Bent Street)¹⁶. The CIS assesses the impacts on existing businesses that are planned to be acquired¹⁷. The CIS does not assess the impact on future businesses that would develop following a planning scheme amendment. The CIS should be revised to assess these impacts.

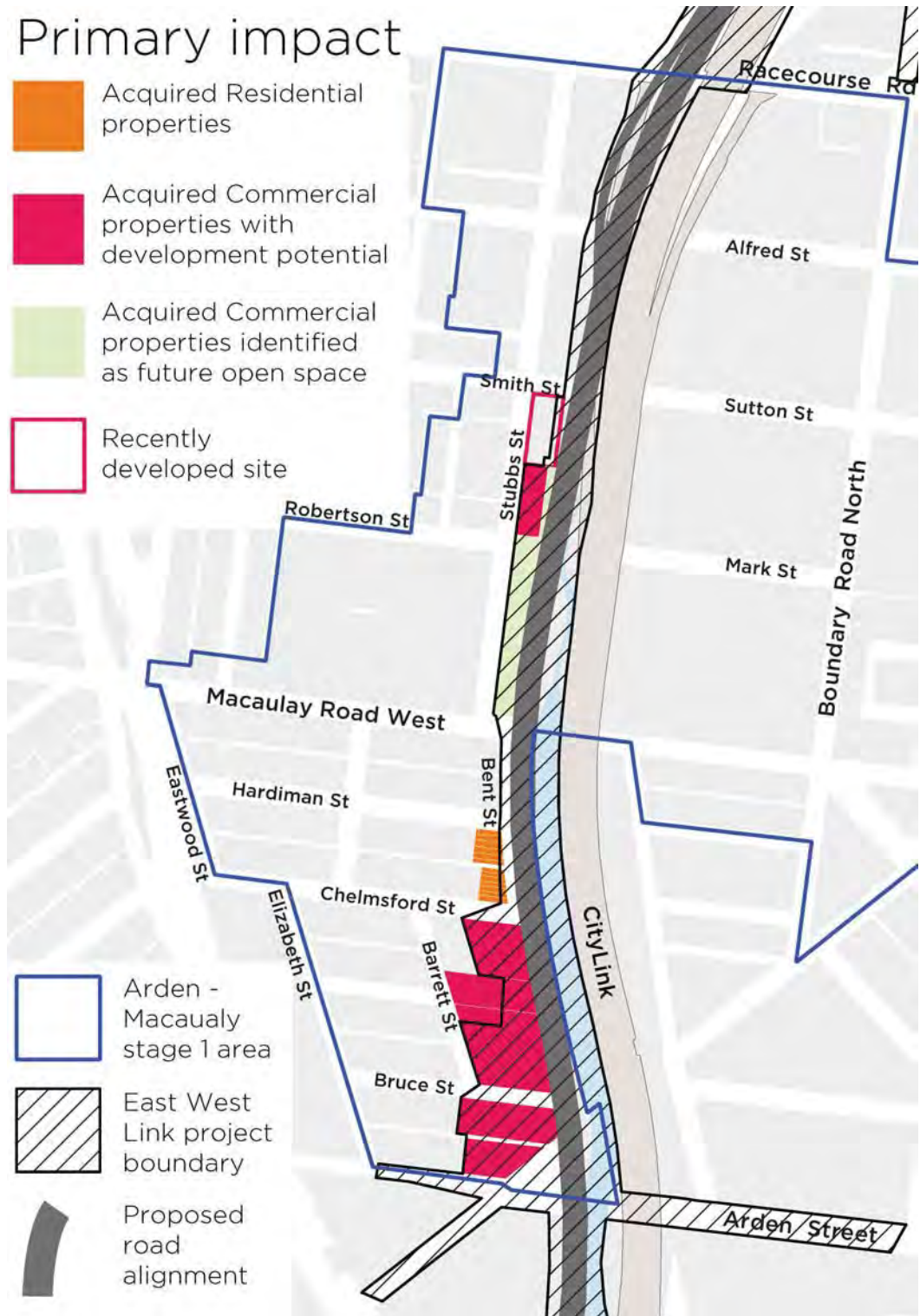
The uncertainty of the delivery date and design of Part B have already had an impact on the progression of the Arden-Macaulay Urban Renewal Area with Planning Scheme Amendment C190 delayed from August 2013 until September 2014. This includes all areas in Stage 1 of the rezoning (outlined below). This equates to approximately 12,000 new residents and 10,700 new jobs. This has created uncertainty for landowners, businesses and residents in Kensington and North Melbourne and delayed significant private sector investment and development in the area.

The acquisition of 13 commercial properties proposed will remove development capacity from the area. According to the proposed development controls (heights and setbacks), this equates to the loss in the order of 500 residents and 300 jobs from the Arden-Macaulay area. While this will only marginally diminish the capacity of the area to accommodate growth, it could create further secondary and tertiary impacts that have not been considered sufficiently in the CIS. These are outlined below.

¹⁶ Chapter 4, page 25

¹⁷ Chapter 16, page 25

Figure 13: Arden-Macaulay primary impacts



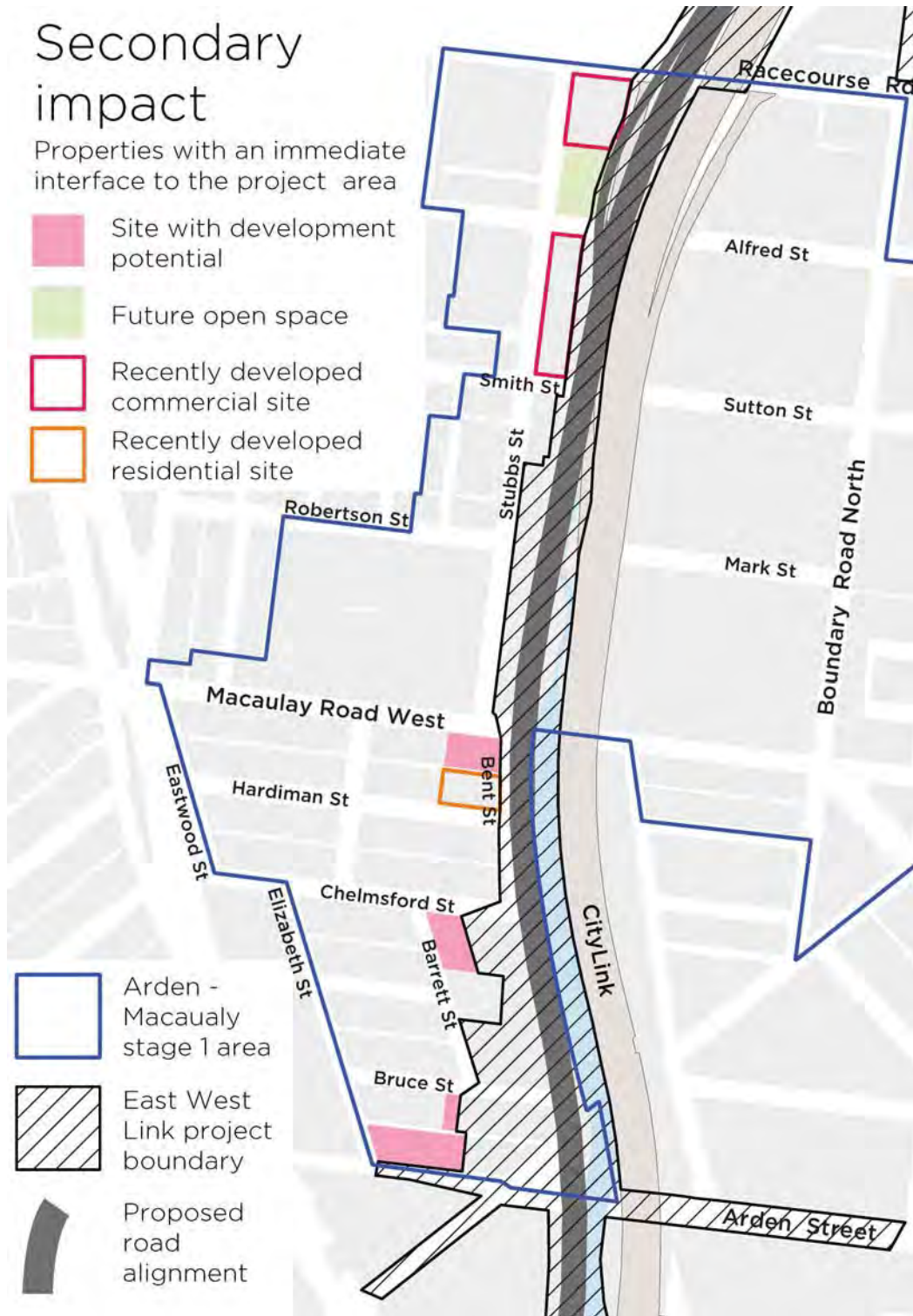
An elevated freeway will have secondary impacts on the area. It will negatively affect the amenity of properties immediately adjacent to those being acquired

(see map below). This equates to an additional 9 properties and in the order of 150 residents and 200 jobs, further creating doubt on the future urban renewal of the western side of the Moonee Ponds Creek. If Part B is delivered at a later date and reserved through planning overlays as proposed in the CIS, it is unlikely that investment in these properties will occur - either for expanded industrial uses (as the current zoning allows) or future mixed use (as the rezoning will remain on hold until confirmation of the Part B design). This will potentially paralyse the future of this area, creating a neglected part of the city. This is at odds with the intent of the Arden-Macaulay Structure Plan and the desire of Plan Melbourne to create an expanded central city. This has not been adequately assessed in the CIS.

As a result the south-western quadrant will have a reduced capacity for renewal. Creating an isolated pocket of mixed use development does not support the intention of the structure plan for this area to evolve into a vibrant, mixed use inner city precinct centred on a new open space. It also brings into question the location and size of the park currently proposed for the Fink Street properties. This park is located to provide the necessary open space for future residents and workers in the western Arden-Macaulay area. The provision of open space in the Arden-Macaulay area is critical and the location, size and quality of these spaces have been carefully considered in the structure plan. The potential loss of amenity to this park due to increased noise, poor visual amenity and loss of connectivity to an expanded and enhanced creek corridor as illustrated in the structure plan open space vision needs to be considered.

More generally, the elevated freeway will have amenity impacts (noise, visual amenity, light spill) on the local streets west of the Moonee Ponds Creek. This could diminish the quality of the public realm and compromise the experience of future residents and workers. This has not been adequately assessed in the CIS.

Figure 14: Arden-Macaulay secondary impacts

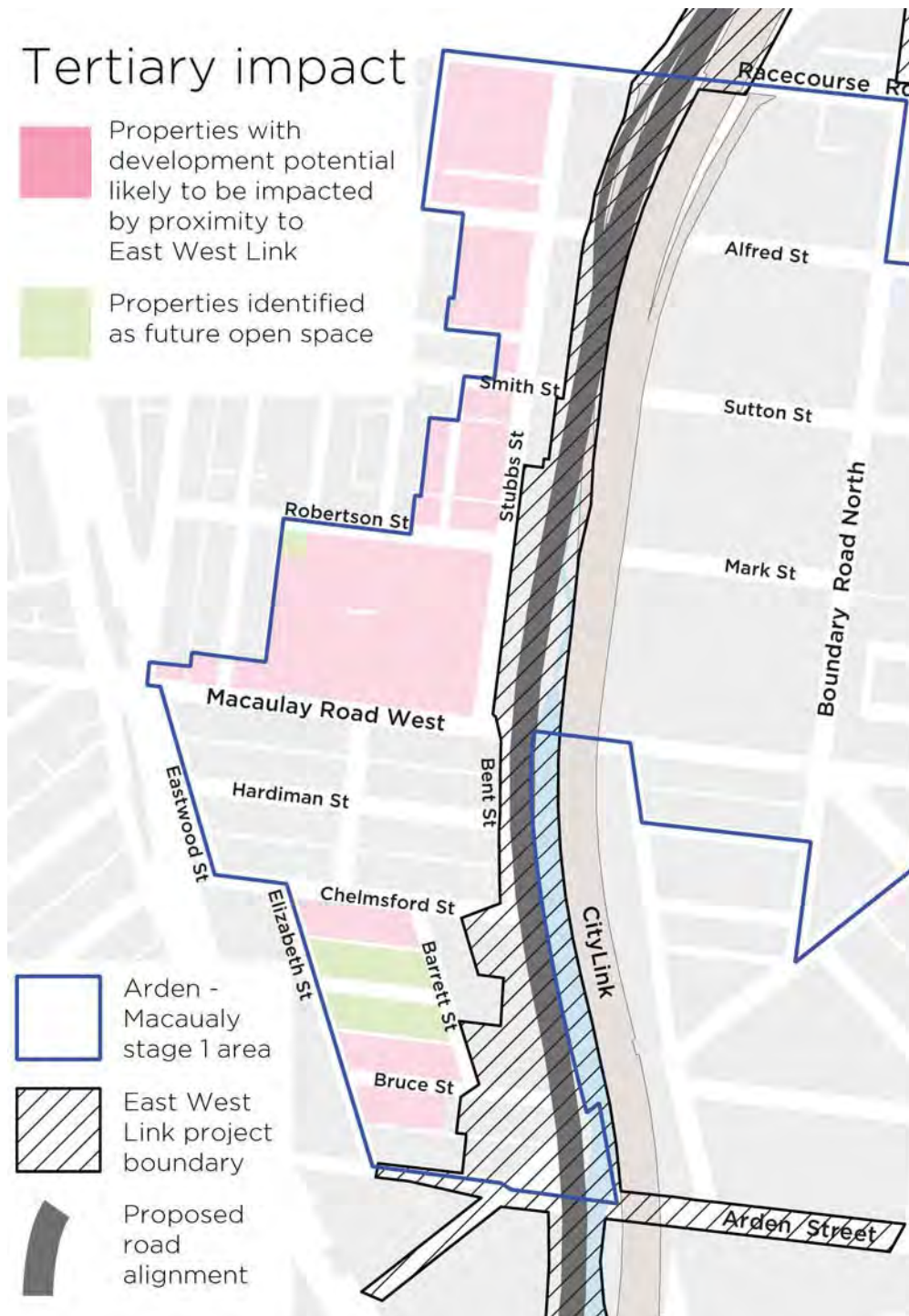


Planning Scheme Amendment C190 has already been delayed 12 months as outlined above due to the uncertainty of the design and delivery of the

elevated freeway and its impacts on future land use and built form in the areas west of the Moonee Ponds Creek. The indirect impacts have resulted in the delay, or potential removal, of this western area from the Arden-Macaulay urban renewal area until a future unknown date. This equates to a total of approximately 3,000 residents and 1,800 jobs.

Uncertainty on the future of the north-west and south-west quadrants of Arden-Macaulay could have further indirect impacts, including the delay of the establishment of the proposed Macaulay local centre. The viability of this local centre was assessed in the preparation of the Structure Plan which assumed the redevelopment of the western side of the Moonee Ponds Creek. A potential loss of 3,000 residents and 1,800 workers could impact the viability of the local centre. In effect, excising the areas west of Moonee Ponds Creek from the urban renewal area could therefore compromise the success of the whole Arden-Macaulay area.

Figure 15; Arden-Macaulay tertiary impacts



6.6.1.2 Servicing Arden-Macaulay

As already noted in this submission, the CIS fails to demonstrate how the proposed Part B has been designed to service and support the proposed urban renewal and fails to properly account for the disruption and blight the proposed viaduct will impose on the future urban renewal of the area.

The CIS includes no analysis of the connectivity needs for the Arden-Macaulay urban renewal area, the connectivity currently available to the area and the infrastructure that would therefore be required. There is no assessment of the connectivity afforded to the area by the existing CityLink. In the CIS Section 5.2 Regional Benefits – Improved regional connectivity the Arden-Macaulay area is not mentioned and there is no evidence that Part B and the Arden Street ramps are the infrastructure solution to Arden-Macaulay urban renewal area's connectivity requirements.

6.6.1.3 Open space

Loss of open space in Flemington/Debneys Park will increase usage and demand on open space Royal Park and Kensington/North Melbourne. Both the City of Melbourne's Open Space Strategy and the Arden-Macaulay Structure Plan recognise the potential to improve the Moonee Ponds Creek linear open space for Community use, pedestrian and cyclist connectivity, habitat and biodiversity values. The proposed design removes the future capacity for this important space to provide for and support the City's future open space, recreation, habitat and biodiversity values.

The CIS describes the Moonee Ponds Creek area as “an already degraded area”¹⁸. The City of Melbourne agrees that the Moonee Ponds Creek is exposed to noise impacts from rail infrastructure, the West Melbourne terminal station and CityLink, and a generally reduced amenity. However, the CIS does not adequately recognise the potential role of the Moonee Ponds Creek as a future open space asset in Arden-Macaulay.

The project description states that 0.11 hectares of land along the Moonee Ponds Creek Linear Reserve will be permanently affected (while 5.41 hectares will be temporarily affected during construction)¹⁹. This figure does not include 2.71 hectares of land under the proposed elevated roadway – this land will be severely compromised as an open space asset. A visualisation of the impact is shown below in Figure 16.

¹⁸ Chapter 10, page 30

¹⁹ Chapter 4, page 28

Figure 16: Impact of East West Link on lower Moonee Ponds Creek



Source: Kensington Association, 2013

The CIS notes that no additional noise mitigation measures are required in precinct 5 Port Connection²⁰ as the VicRoads Traffic Noise Reduction Policy, the CityLink Concession Deed – Project Scope and Technical Requirements, or the State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade) No. N-1 (SEPP N-1) do not apply.

The CIS does not adequately assess noise impacts on open space in the Moonee Ponds Creek Linear Reserve. This is a significant oversight as noise impacts have the potential to compromise the amenity of open space along the creek, shared paths and surrounding local streets. Appendix J of the CIS states that the operational noise target of 60dB LA10(18h) (18 hour average traffic noise level) will not be exceeded at ground level (page 83). The measured noise limit at 33 Alfred Street, North Melbourne of 58 dB LA10 “suggests that the LA10(18h) noise level is likely to be under CityLink’s noise limit of 63dB” (page 82). World Health Organisation guidelines identify that

²⁰ Appendix J, page 94

noise levels of 55dB LAeq(16h) create serious annoyance for outdoor living areas (used as a proxy for open space) and 50dB LAeq(16h) create moderate annoyance²¹.

6.6.2 Proposed changes to current design

The key change to the project design should be the removal of the Part B viaduct and the Arden Street ramps.

The design should also include recognition of and commensurate compensation for the loss of future open space provision opportunities and the capacity to provide essential community infrastructure to a growing population as a result of the project on a local, regional and state level.

Consult the City of Melbourne on the planning and design intention for all areas that are returned as open space.

²¹ WHO, 1999, page xv

7 Recreation

7.1 Recreation – Part A

7.1.1 Assessment of CIS

The assessment of the impacts on recreation opportunities and participation, sport participation and provision, access within and to parkland / open space is missing from the CIS. The Social Impact Assessment technical report refers primarily to the loss of the sports fields in Ross Straw Field, but does not address the loss of parkland for recreation and sport east of the Upfield railway line during or post construction. Use in the whole corridor will be compromised or removed.

The East West Link will have a major impact upon the active and passive use of Royal Park. This includes permanent and temporary loss of open space, dislocation of sporting clubs, effect on passive use and the dramatic change on the environment or setting which is enjoyed by people.

In relation to formal sport and recreation there will be 10 clubs comprising about 1000 individuals weekly who will be permanently and directly affected by the removal of Ross Straw Field and the temporary removal of the area adjacent to the State Netball and Hockey Centre (SNHC) (aka “old grass hockey pitch” area) as permanent multi-sport venues.

Permanent relocation will be required for many clubs and activities. The impact upon sport in the precinct needs to be considered, not just the Ross Straw Field area. There will be flow on impacts across the rest of Council’s sport areas, particularly in Royal and Princes Park.

In addition to the lack of research on the impact on recreation and sporting participation, the Social Impact Assessment Report limits its analysis to the population living adjacent to the Ross Straw Field and CityLink corridor and fails to consider the impact on the high numbers of other users of the park whose participation experience will be also be affected. Many residents, for example, in North Melbourne and Parkville, enjoy passive recreation in the area east of the Upfield rail line and the grassland circle.

7.1.1.1 Chapter 2 Benefits for Victoria and Melbourne

Over the last 30 years the City of Melbourne has made significant investments in upgrading and maintaining Royal Park. What is there today is based on the recommendations of the 1984 (followed by the 1997) Master Plan, The design principles of horizon, woodland, grass and sky underpin the landscape presentation in many areas of the Park. The Manningham Reserve Area is managed to achieve active recreation and biodiversity outcomes (skinks, birds, plants, wetlands) as well as organised sport.

The CIS refers to the land use and amenity benefits from the project and implies that there will be improvements to aspects of Royal Park (primarily



Ross Straw Field) resulting from the disruption of the project. While there is a stated commitment to reinstate affected areas of the park there is an implication that the existing sporting groups will be able to return to the grounds they are currently using. In fact, the current reference design indicates there will be very limited opportunity for any formal activity space in this area.

7.1.1.2 Chapter 8 Land Use and Community Facilities

The CIS contains a blurred distinction between 'significant temporary disturbance' and 'acquisition of public land' as well as specific referral to cut and cover at western end of Royal Park. Any disturbance to the park setting must be minimized and an open acknowledgement of the areas permanently removed and the direct impact this will have upon a number of sporting clubs and recreational activities.

This chapter refers to the creation of 'new' public spaces in Royal Park but doesn't acknowledge that these would be in a freeway flyover setting and would not actually be additional public space or parkland. It is highly unlikely these areas will be suitable for any organized sport, particularly the existing types. The level of noise will make much social activity very difficult in this setting.

Section 8.6 mentions disruption to active transport links (cycle paths, pedestrian paths etc.) along Elliott Avenue and through Royal Park and that this would be reinstated once construction was completed. The CIS does not indicate what will happen during construction and what alternate routes will be provided.

The CIS does not acknowledge the other affected area of the project (adjacent to the SNHC) where there is a substantial amount of sport played, particularly in summer. The CIS also does not address recreation in the area of the Elliott Avenue portal or the area east of the Upfield Rail line. The CIS should be revised to include consideration of these impacts.

7.1.1.3 Chapter 16 Social and Business

The CIS does not cover the social impacts of the 10 community sporting clubs that are directly affected by the project area in the short or long term. Nor does it cover the social impact upon passive recreation users of the areas affected by the project in Royal Park.

The CIS describes a process and possible solution aimed at ameliorating the negative impact on access to sporting fields. However limited detail is provided. While there is goodwill among the parties - including City of Melbourne and State agencies - to provide solutions, the process is not guaranteed to deliver replacement facilities.

7.1.1.4 Appendix P Social Impact Assessment

The social impact of the project upon the western end of Royal Park in particular and the park as a whole more generally will be significant. There will be permanent loss of multipurpose sports fields, a playground, open space, existing tree stock, existing pedestrian and cycle paths as well as a detrimental

effect upon the amenity of the area and the experience to be had while visiting it.

The CIS provides a limited description of the park. Considering the size and very high levels of different use this park attracts, the CIS should be amended to include a better developed version of this section. The park has a variety of areas with different character, but all areas are used by people, for recreation ranging from organised sport to passive recreation participation. These include bushy areas as well as the more 'landscaped' areas. Information provided by the City of Melbourne to assist with the development of the Social Impact Assessment (SIA) has been included in the Appendix of the SIA, but not worked into the report. This is particularly evident where the report notes only one sports club (see page 59) when there are currently 40 sports clubs using Royal Park. The report also does not draw on the information in Appendix pp. 151 – 154 which profiles the range of uses and users, visitor experiences and values across the total park. This is a significant omission from the CIS. (refer appendix 2, Current recreation uses by precinct - Royal Park)

Often, very large parks are referred to in segmented ways. This diminishes the importance of the total park. Royal Park has value because it is so large and can support so many activities. The size enables a growth in activities because there are more opportunities in comparison with a smaller park offering a limited range of sports. Having more clubs in one location, for example, enables sharing of ideas, sharing of resources, and offers pathways for players who may start as a junior in one club, but be able to move to other clubs as their skills develop. Royal Park is a park where juniors can play, but international level sport is also played. This is not something that happens in any other park in the City of Melbourne. This value is missing from the CIS.

The impact on the Capital City trail is poorly documented and addressed. This is a significant cycling and commuter trail. (refer appendix 9, Report: Bicycle and pedestrian count data, 2013 - Royal Park)

Additionally, the social impact is not described for any of the recreation and sport participants. The SIA states the 'social impact' will identify the people who might experience a social impact, and describe the potential impacts, their likelihood, extent and magnitude. But there is no description or assessment of the impact on the people who will lose access to the park during and post construction. Many people will experience a loss of a place for physical activity, to take children to play, to walk a dog, for picnics or to read.

The history of Royal Park as described in the Social Impact Assessment is not detailed enough and does not raise the relevant history for assessment. It does not mention that Royal Park was set aside by Governor Latrobe as part of a network of parklands. It was permanently reserved for public parkland in 1876.

Further, the use of the park for a military camp is used to suggest that the "history demonstrates how the use and function of the park has changed over time". This is incorrect. Most of the City of Melbourne's parks were used for military functions during the wars, but were then return to parkland. As permanently reserved parkland, Royal Park has always been a park.



7.1.1.5 Section 3 Legislation, Policy and Guidelines

Regional and local plans and strategies do not mention Councils' Parks Policy or Urban Forest Strategy. Both have related elements to social impact.

The SIA states that Plan Melbourne supports the East West Link, but does not provide an analysis of the context for the other policy documents. These should be provided.

The SIA has a summary including: "Common Goals of these plans and strategies that relate to the proposed East West Link and which were considered in the preparation of this SIA". The summary does not include:

- Increase tree canopy (which has a public health benefit)
- No net loss of public open space.

The CIS has inadequate information on the Wurundjeri people and their relationship to the land.

The CIS should more strongly acknowledge the high levels of use of Royal Park especially Ross Straw Field. In an on line survey conducted by LMA with 1900 respondents, the majority considered access to important community facilities as good. More than half of the survey respondents living in Parkville & Travancore reported using Ross Straw Field at least twice a month and 23.2 per cent used it daily. (The area referred to is likely Manningham Reserve). The SIA needs to highlight that the construction of the East West Link will mean these people will lose access to parkland and investigate the impacts of this.

The community profile of Precinct 3 shows it is home to the highest proportion of families with children of all the project precincts and large numbers of social housing dwellings. While the report notes that "vulnerable households may be more heavily affected by negative impacts such as property acquisition or changes to neighbourhood amenity", it does not give sufficient emphasis the impact on this population of losing access to quality parkland in this area. The CIS should include addressing how these local residents will have access to quality parkland in other parts of the park.

In an area with the highest proportion of families with children, a new local playground needs to be provided within walking distance for during the construction period. The CIS should specific how this will be achieved.

The CIS should also recognise and respond to the high proportion of people from CALD Communities in this area and their park needs should be considered.

The CIS does not assess what will be the social impact on current users of more extensive use of cut and cover in Royal Park as part of the project. This is likely to have a high level of social impact on the current users. This is not referred to in the report.

The SIA does not outline the social impact of loss of parkland. i.e. the holistic sense of wellbeing that parkland provides.

The SIA states that the children's playground in Ross Straw Field (Manningham Reserve) would be acquired for the main works site but would be reinstated once the project was constructed. There is no other playground in the area. If Manningham Street is closed, residents could not walk to the playground in Parkville gardens. Loss of a local playground for at least 5 years is an unacceptable loss. A local playground needs to be provided to replace this playground. Consideration for its location will include good walking access for local residents and location away from the noise and disruption of construction. After construction there will need to be provision of a new location for a local playground within planning for the reinstatement of the total area.

The SIA incorrectly states (p59 - 61) that "directly adjacent to the VBA Baseball Ross Straw Field is the Vaha hockey fields site on Oak St in Parkville" The area has been used for baseball, soccer and cricket for many years, but not hockey.

The SIA does not recognise the significance of the Capital City Trail in Precinct Three. The City of Melbourne has provided data on the use of the trail Precinct Three. The CIS should be amended to recognise this and assess its impact.

The SIA's assessment of attractors in the park does not describe significant attractors in Royal Park, such as the Grasslands circle, Australian Native Garden, and former nursery site. These will be impacted by the project. The nursery site is proposed to be used during construction and the amenity of the Grasslands circle will be affected by the proximity of works, with the final impact unclear until the final project design is released.

The SIA does not mention passive recreation in the area around the Elliot avenue portal, including the recreation space between the SNHC and Elliott Avenue. The CIS should be amended to recognise this and assess its impact. Only one sports club is mentioned in the community resource attractors, the Parkville District Cricket Club. However all the other clubs that use the Ross Straw Field and the former grass hockey fields area will be affected are not described. They include the Mercantile Cricket Association, Kensington / Flemington Junior Sports Club, Social Sport (AFL 9s), Melbourne Oz Tag, Archi Soccer, University of Melbourne Baseball Club, Asylum Seeker Resource Centre (soccer) Other regular users of the area include the Park Ranger Education program, a yoga studio, Royal Park Tennis Club and other passive recreation users such as walkers, cyclists, dog walkers, playground users, wetlands visitors and more.

The SIA does not mention the more than 1000 sports participants who use the Ross Straw Field each week. The detail provided by the City of Melbourne prior to the preparation of the SIA is included in the appendix (pp. 144 - 150), but the information should be summarised or referenced in the report. It does not appear that the information has been used in the assessment. The CIS should be amended to recognise this and assess its impact.

The SIA suggests that "a commercial yoga studio at Ross Straw Field in Royal Park would also need to be acquired." The CIS should be corrected to note that the yoga organisation is one user group of the pavilion. The group has an



allocation, i.e., a rental agreement to use the building at certain times, which is similar to the sports clubs. It will not be 'acquired' from them, but they will need to find an alternative venue to rent.

The SIA notes that three quarters of the houses and units to be acquired in Precinct Three are occupied by renters. It notes that "the large number of people renting properties in Manningham Street might reduce the potential for social impacts as renters typically have less emotional attachment to their residence and a shorter average length of stay." While the veracity and tone of this comment is questionable, the issue of access to open space and the importance of parkland amenity is the same for all residents within the city.

In the SIA's discussion of community values, attitudes and issues for Precinct Three (p 63 - 64), there is a limited description of the area close to Ross Straw Field. The document mainly focuses on the corridor along the CityLink. It does not consider the residents all around Royal Park who will be affected, and does not appear to consider the Parkville Gardens residents. It also does not measure or report on the possible impact to residents who walk to parkland areas east of the Upfield Railway Line or Elliott Avenue and what they value and how they will be impacted. The CIS should be amended to cover these issues.

The SIA notes (p66) that "Some residences in the section of Manningham St between the proposed on and off ramps are small and modest dwellings that lack private outdoor open space. Residents here would potentially experience an adverse social impact from changes to Ross Straw Field." This should be amended to say that these residents will definitely experience an adverse social impact. Many of these residents have already expressed their anxiety publicly during the City of Melbourne's public meeting on the project held on 8 October 2013. The notes of that meeting are appended to this submission.

The SIA makes no mention of social impact of loss of other areas of parkland east of the Upfield Railway Line and near the grasslands circle. These areas are extremely popular for walking, cycling, picnics and exercising dogs off leash (among other things). There is also no mention of the social impact on the Urban Camp, the Melbourne Zoo and the animals (other than an early reference in the front of the report).

There is no mention of the social impact on the Royal Children's Hospital and the families who visit the hospital and go out into the park for respite, and staff who use the park.

There is no mention of the social impact on children in grades 5/6 at St Michaels Primary School, which is located in North Melbourne opposite Royal Park on Flemington Road near the Royal Children's Hospital. These children come with the park rangers to the wetlands and other parts of the park weekly as part of an education program. This program has been so successful that teachers have reported improvement in behaviour, in learning, and the children have had positive experiences of nature - such as climbing trees for the first time. The CIS should be amended to note this and assess the project's impact on this program.

The SIA Comments on local access and Community networks (p67). It notes that “access to Brens Drive in Royal Park and key pedestrian and cycling access routes would be maintained to Community facilities if possible.” Should Brens Drive be disrupted, it would result in loss of access to the SNHC and the Urban Camp. The CIS should note that the City of Melbourne does not support developing an alternative access route through another part of the park to these facilities.

It should also note that there will be a significant social impact of using the Trin Warren Tam-boore wetlands as a lay down area during construction, which would mean that these would no longer be a recreational area. The water from the wetlands provides all the irrigation for all the sports fields in the Royal Park. Therefore the loss of the wetlands water would have a more far reaching impact on a greater number of people than is recognised.

The SIA notes that increased noise levels would limit activity in Ross Straw Field to “noise tolerant uses” even after the proposed mitigations are in place. The proposed mitigations are clearly not adequate. It notes that there would also be some increase in local traffic noise on Elliott Avenue near the EW Link eastern section ramps. There are likely to be significant social impacts of noise on the park users. The change in noise from a quiet park area to a noisy park area will have an impact on the recreation experience for individuals. This is not well described and no recommendations are given that could change this.

The SIA’s assessment of visual amenity (p70) notes that the proposed elevated structures would be large, visually dominant and discordant with the existing parkland setting and residential character of the area. However it only assesses the Ross Straw Field area, not the area east of the Upfield Rail Line or Elliot avenue portal – or the visual impact on the grasslands circle – and the social impact on visitors to that area. The area is currently a mature landscape, habitat for many birds, and provides a rich visual and sensory experience for the recreation. The portal and vent stack will significantly impact on this experience, but the report does not assess it or report on it.

The SIA assesses the social impact of visual amenity and noise, vibration and air quality to residents of Manningham Street as moderate but does not indicate why this rating is selected. On face value it would appear that this is a more than moderate impact.

Appendix A of the SIA includes only limited extracts from legislation. There is no reference to parks. The references to the City of Melbourne documents (p122) that were key documents for the Arden-Macaulay planning does not include the Open Space Strategy.

Appendix E (pp. 144 – 154) of the SIA incorrectly states the size of Royal Park as 188ha. Royal Park is currently 166.32 ha.

Noise and vibration levels at the Urban Camp have not been assessed. The CIS should assess this. Both the portal exit and the ventilation stack are within 125 metres of the Urban Camp.

7.1.2 Proposed conditions and performance requirements

The CIS should include a condition or performance requirement to replace all lost sports facilities to the City of Melbourne's contracted standards.

A mitigation strategy for all dislocated sporting clubs must be addressed to ensure that all affected clubs have an alternative home in both the short term and on a permanent basis. While discussions between LMA, state government and Council have been ongoing no concrete solution has yet been proposed for Council to consider. The mitigation strategy must include a 'like for like' replacement of facilities for all sporting clubs as well as ensure that there is some capacity within the park network for future community growth and demand. Detailed specifications for how areas reinstated for open space and sport post construction will be delivered to ensure that areas are fit for purpose must also be clearly addressed.

The CIS should require the relocation of the Manningham Street playground at the start of the project, and that this be undertaken in conjunction with Council officers. The playground is currently well used by local West Parkville residents, as well as Royal Park users. A suitable location must be sought that is within walking distance for residents. Additionally, even though it has recently been upgraded, the playground may not be able to be "relocated" so a new playground may be required.

The CIS should require that the Capital City Trail and other shared paths stay open and viable during the construction phase.

The CIS should require that parkland space being provided to replace lost land and reduced amenity is ideally found adjacent to Royal Park. It should also require affected areas to be reinstated post construction works to a standard and use approved by the City of Melbourne and consistent with the principles of the Royal Park Master Plan.

The provision of adequate water to maintain sporting fields is crucial. This is currently provided by the wetlands catchment system. The CIS should require that this system is maintained and operating throughout and beyond the project to ensure that the sports fields and golf course in Royal Park are able to be continually irrigated and thereby used to their maximum potential.

The performance requirements for the project's impact on noise in Ross Straw Field should be increased to allow uses other than noise-tolerant ones in this part of the park.

7.2 Recreation – Part B

7.2.1 Assessment of CIS

A key recreational value of Moonee Ponds Creek is as a regional shared trail. The Capital City Trail runs parallel to the creek and it connects the Yarra River and the City to Royal Park and onto the northern suburbs. For bicycle and pedestrian movement it is as important as the Yarra Main trail. The VicRoads counter located on Footscray Road, 200 metres south east of the CityLink off-

ramp recorded 3,200 bike riders every 24 hours (2013)²². This counter records bicycles from both Footscray Road and the Capital City Trail, with the recorded numbers showing it is the most heavily used bike route in Metropolitan Melbourne.

At a local level, current local informal recreational activities along the west side of Moonee Ponds Creek (the open side) include dog walking, fishing, and bird watching. The creek is the only waterway within the Kensington and Arden-Macaulay area. As part of the urban renewal plans for Arden-Macaulay, it is planned that new local open spaces be created on the west side of the Moonee Ponds Creek, primarily between Racecourse Road and Macaulay Road to enhance the current provision and provide better access to local open space for the forecast increase in residential population. As this land is now in the project area, there is the potential for approximately 0.1 hectare of land permanently acquired plus 2.71 hectares under the elevated roadway²³ of future open space provision to be lost through this project, should Part B proceed. The City of Melbourne would like to see this provided elsewhere in the urban renewal area.

In the City of Melbourne Open Space Strategy, objectives for the Moonee Ponds Creek include: increasing the width of open space on the west side to include a walking and cycling path, and to develop links from the capital city trail east at Macaulay Road and Racecourse Road, which will improve links both to the trail but also to public transport stops. While these links are not specifically precluded as part of the East West Link design, it is important that they be remembered in the detailed design.

The CIS gives undue emphasis on the existing degraded condition of the Moonee Ponds Creek and the current land uses. It does not take adequate account of the proposed future urban development potential of the area and the need to improve the area's amenity rather than further degrade it. In particular it does not give sufficient priority to the vision of the Moonee Ponds Creek corridor set out in the City of Melbourne's Municipal Strategic Statement and Open Space Strategy as a highly valued recreational, movement and habitat corridor threading through the high density urban renewal areas of Arden-Macaulay, E-Gate and Docklands.

7.2.2 Proposed conditions and performance requirements

The key change to the project design should be the removal of the Part B viaduct and the Arden Street ramps.

There is an opportunity for the project's main works site, the location of the Melbourne Wholesale Fruit and Vegetable Market, to become a substantial open space and sport and recreation site at the conclusion of the project.

²² VicRoads, 2013 page 2

²³ Chapter 10, page 2

8 Visual impact

8.1 Visual Impact - Part A

8.1.1 Assessment of CIS

The CIS concludes that the EW link would affect the urban landscape and visual amenity of a number of residences, businesses and Community resources, public parks, and movement corridors. These impacts range from being of no significance to being of high significance.

Long term project impacts of 'major to high significance' including permanent changes to views and urban character in the City of Melbourne include:

- Major interchange at Elliot Avenue in Royal Park.
- Alternative construction techniques for cut and cover in Royal Park.
- Western Portal and major above ground infrastructure within Royal Park at Ross Straw Field and Trin Warren Tam-boore Wetlands.
- Elevated Roadway structures over the west bank of the Moonee Ponds Creek
- Elliot Ave interchange:

8.1.1.1 Elliott Avenue interchange

The proposed Elliot Ave interchange would see a change from park land drive landscape character to a multi levelled roadway and interchange. This would have a major significant impact including extensive loss of mature vegetation, light spill, new fences and barriers, higher impact road signage for the intersection approach.

The impact rating is 'Major Significance'. The statement that new road infrastructure - considered to be out of scale and discernible - at Elliot Avenue could be partly mitigated by minimising vegetation loss and re-establishing a setting that integrates with the existing landscape character of the park is unrealistically hopeful. The interchange will have a lasting significant visual impact from key use areas and travel routes (road, tram, cycle) within Royal Park.

8.1.1.2 Elliott Avenue and Flemington Road

The statement in the CIS that intersection modifications on Flemington Road and Mt Alexander Road would widen these roadways 'beyond the widths that could be recognised as 'world class tree lined boulevards' as outlined in the City of Melbourne Tree Policy warrants more explanation as to the extent of proposed changes including reductions in medians for tree planting and potential removal of existing heritage elm boulevards.

Expansion of left hand turn lanes from Elliot Avenue to Flemington Road represent an additional excision of Royal Park and loss of open space. This would be in addition to the 9.3ha previously assessed.

8.1.1.3 Ross Straw Field

This is a 'Major Significance' impact. The assessment states this impact could be reduced with appropriate measures however this lacks detail. It will be a profound visual impact and given the landscape character, proposed land uses and topography will be very difficult to ameliorate.

Note that this site is proposed here as the 'main construction and storage zone' although the extent and visual impact of this occupation is unknown.

This site is used for more than active recreation – a wide range of informal recreational activities and environmental education programs will be displaced. The CIS should note that there will be a much higher level of lighting, fencing and signage in the area.

8.1.1.4 Royal Park Wetlands

The placement of pylons and footings within the wetlands storage pond would have a significant visual impact and the capacity for this to be ameliorated is not explained however it is inferred that there could be a reduction in impact.

The CIS notes a possible variation for cut and cover construction in Precinct 3 Royal Park. This would be a major significant impact and is likely to result in the loss of:

- The Australian Native Garden area including ponds near Gatehouse Street;
- The northern half of the grassland circle and pathway including the most valuable area of native grassland;
- Mature vegetation (not quantified) around Elliott Avenue;
- The Women's recreation centre south of the SHNC;
- The remanent escarpment below the Upfield Line.

The most significant visual impacts of the project on the local urban landscape and visual environment are those caused by proposed new road infrastructure in Royal Park and along the Moonee Ponds Creek. These are the most sensitive landscapes to change on the project corridor that are recipients of the most significant visual impacts and have the least capacity to absorb or accommodate change.

The assessment that 'the impacts would be reduced over time with the establishment of landscape planting and other elements' is overly optimistic. While tree planting will reduce some visual impact, the scale of the infrastructure is vastly different to the capacity for the landscape to absorb the proposed change and for the future land use and topography to accommodate enough tree planting and landscaping to reduce the significant visual impact.

Assessment of key travel routes and use areas within Royal Park is limited. Key views of the project from both use areas and vehicular, pedestrian and cycle routes should be mapped and assessed for impact in detail.

From some key park use areas and views (such as the Hilltop looking over the Western Portal; the Grassland Circle looking down onto the Elliot Ave interchange; views from various parts of the regionally significant main trail –



the Capital City Trail) visual impact will be major with very limited capacity for the landscape to absorb change due to the topography. This requires additional assessment and recommendations.

The assessment notes and recognises the landscape character vision for Royal Park as outlined in the 1998 Royal Park Master Plan and acknowledges that the proposed project land use changes of the project contravenes this vision.

8.1.2 Proposed conditions and performance requirements

The project should be proactively redesigned to minimise visual impact, in particular:

- Ross straw field and the western portal in Royal Park;
- Removal of the northern exit in the Elliot Ave Interchange;
- A Commitment to minimise cut and cover construction throughout Royal Park.

8.2 Visual Impact - Part B

8.2.1 Assessment of CIS

8.2.1.1 Moonee Ponds Creek

It is noted that the impacts of an elevated roadway would not result in qualities that would meet the standards for open space as per the City of Melbourne OSS 2012. - 'the resultant corridor would be for a primary movement and drainage value'.

The cumulative impacts of various road and waterway infrastructure projects are noted as adding to the already greatly reduced values of the corridor in terms of natural light, vegetation, biodiversity, and open space amenity.

The specific proposal to widen the intersection at the corner of Flemington Road and Elliot Avenue will result in the loss of the boulevard effect in this section of Flemington Road.

8.2.2 Proposed changes to alignment or design

Removal of the viaduct on the western side of the Moonee Ponds Creek Corridor to enable the creek's future potential as a regionally significant biodiversity and recreational corridor to be realised to support a growing population.

9 Urban design framework

9.1 Urban design framework – Part A

9.1.1 Assessment of CIS

Under “Project Elements – Principles and Benchmarks, 1.1.6, the CIS calls for the project to “contribute to a redefined and heightened gateway experience”. This is questionable and has potential to be a flawed strategy. The existing Melbourne CityLink Gateway offers a significant contribution to the urban design experience of this major gateway into the city from the north. It has integrity and is of an iconic nature. Its status and impact could be lessened by ‘redefining’ or ‘heightening’ the experience. The experience of entering or exiting the East West Link tunnel is a quite different order of significance to that experienced as you enter (or exit) from the city.

The City of Melbourne supports the initiative to “Protect and enhance public view-lines and vistas where appropriate” (1.1.7). Consideration should be given to minimising the visual impact of elevated road structures/sound walls etc. to, as much as possible, lessen the impact of the structures on views and vistas from the public realm in the project area. Sound walls, for instance, should, where appropriate, be transparent to allow for minimal interruption to views and vistas.

9.1.1.1 Alexandra Parade

The Urban Design Framework highlights design opportunities (p25) including the potential to rationalise Alexandra Parade East and maximise green space such as linear or pocket parks to form a landscape buffer. The City of Melbourne supports this concept. These initiatives will enhance the proposed urban renewal opportunities on adjacent development sites and will encourage upgrading of many of the existing, currently blighted properties that front onto the current heavily congested streets.

9.1.1.1 Design images

There are a number of design images throughout the CIS (Figures 6-11, 6-12, 6-13, 8-14, 8-16, 8-18, 8-20, 8-21, 8-22, 8-23, 8-24, 10-6, 10-7 and others) which have been produced by Urban Circus in a 3D Computer model. It is assumed that these have been produced to provide a general overview of the spatial impact of the project and are useful for Comparing existing against future impacts. However, the nature of these images is such that they should not in any way be seen as an acceptable standard of detailed design resolution of the project.

For example Figure 10-10 (p21, Chapter 10 of the CIS) shows a view over Ross Straw Field towards East West Link Portal. The portal is very crude in its resolution exposing large areas of what appears to be concrete walls. Compared, say, to the exemplar image Fig. 16 (Kan-etsu Tunnel, Japan) in the LMA’s Urban Design Framework, the portal shown in Fig. 8-16 would not be an acceptable design solution in the key location in Royal Park. Equally, the two-



tone green sound walls shown on all the images are very crude and would benefit from a more subtle approach to colour.

Figure 8-22 again shows very crude concrete structures which we would expect to see resolved to a high standard of detailed design to achieve performance requirements as per the CIS and as expressed in Section 12 of this Appendix.

9.1.2 Proposed conditions and performance requirements

9.1.2.1 Open Space

The project should be required to ensure that there be no net loss of open space due to the project.

9.1.2.2 Third party signage

The project should be required to ensure that Commercial “third party” signage not be permitted. This would include any proposed “billboard” signage on or adjacent to any infrastructure associated with East West Link.

9.1.2.3 Alexandra Parade/Macarthur Road urban design framework

Given the 20-30 per cent reduction in vehicle numbers in Alexandra Parade and through to Macarthur Road in Royal Park, the Urban Design Framework should require a reduction from three to two through lanes in Alexandra Parade (with additional left turn and right turn lanes).

It will be important to immediately introduce these modifications when the LMA tunnel opens. If this is not undertaken the tendency over time will be to encourage more vehicle movements in the area to take the “spare” capacity within the at grade road network.

Other performance requirements should be that:

- clearways should be removed in Princes Street; that more generous spaces provided for walking, cycling, landscaping, street trading/kerbside cafes etc.;
- Alexandra Parade/Princes St/Cemetery Road should be reconfigured as a tree lined boulevard with civic qualities that create this space as a place for people rather than one dominated by private motor vehicles and freight;
- Opportunities be taken to improve north-south pedestrian and cycle links throughout the length of Alexandra Parade, Princes Street, Cemetery Road, at all cross street junctions and including streets such as Drummond Street that currently allow for no crossing for pedestrians and bikes.

9.1.2.4 Other urban design opportunities

The project should require that all streets in the City of Melbourne with anticipated reductions in traffic as a result of the project should be studied to assess opportunities to improve the public realm including footpath widening, bike paths, increased space for street tree planting. This includes Flemington Road and Haymarket Roundabout which should be reconfigured to improve civic qualities/public realm as befits an important boulevard entry into the city,

including incorporation of safe cycling and increased opportunity for tree planting.

9.2 Urban design framework – Part B

9.2.1 Assessment of CIS

9.2.1.1 Gateway designs

As already noted in this submission, the City of Melbourne does not support the construction of an elevated viaduct as part of Part B of the project. However, given that the CIS covers Part B of the project's Eastern Section, the Urban Design Framework should require a high quality urban design solution for any elevated road infrastructure to be built adjacent to the existing CityLink Gateway. This should be sympathetic to the design integrity of the existing Gateway design but not attempt to compete with the existing work. Any sound wall treatments in this area should be consistent with and Complimentary to the existing 'sound tube' created as part of the existing Gateway.

9.2.1.2 Elevated structures

The City of Melbourne supports minimising “the extent and impact of elevated road structures where possible”.

Transparent panels are identified as appropriate for abutting residential property but they would also be appropriate to minimise impacts on existing views/vistas, for instance in Royal Park.

A higher grade of noise barriers/tubes should also be deployed to elevated ramps at the such as those illustrated in the CIS Urban Design Framework to provide superior noise control and incorporate planting and elements such as photovoltaic.

9.2.2 Proposed conditions and performance requirements

As already noted, the project should be required to ensure that there be no net loss of open space due to the project and that Commercial “third party” signage not be permitted.

9.2.3 Proposed changes to alignment or design

As already noted in this submission, a significant part of the Part B viaduct should be removed from the design and replaced with other measures to achieve the traffic function.

A higher grade of noise barriers should be deployed to the road ramps at the Western Portal such as those illustrated in the CIS to provide superior noise control and incorporate planting and elements such as photovoltaic.



10 Cultural heritage

The proposed East West Link – Eastern Section project extends through an area of Melbourne that is important in the early development of metropolitan Melbourne and is highly valued for its heritage. It is all generally subject to statutory heritage controls, whether included in the Victorian Heritage Register (VHR) or Heritage Inventory (HI) under the Heritage Act or as Heritage Overlay (HO) places in local planning schemes under the Planning and Environment Act.

10.1 Cultural Heritage – Part A

10.1.1 Assessment of CIS

10.1.1.1 Precinct 2 – Tunnel

A series of VHR-registered places are included within the project boundary in this precinct. All are above the proposed tunnel and not directly affected. These include the Melbourne General Cemetery, the former Parkville Police Station and former College Church, both on Royal Parade, and Royal Parade itself – all of which are included in the VHR. Because of the nature of the area being imposed on by the project a prime objective of all conditions of approval should be to minimise its impact in every possible sense.

10.1.2 Precinct 3 Royal Park

The CIS has not adequately addressed the project’s cultural heritage impact on Royal Park (Precinct 3), due to the limited scope and approach to the assessment.

The CIS assessment relies wholly on what is described and listed in either the Victorian Heritage Register, Heritage Inventory or Heritage Overlay. The information in these databases can be old, incomplete, or both, so the CIS assessment is only as good as the data base information. This issue is acknowledged in section 4.2 Technical investigations –Historical Heritage Report, however it is not carried over into the CIS impacts for Heritage. The additional research for Royal Park noted in 9.2.2 is confined to the inclusion of three additional historic maps without any further analysis.

Apart from specifically registered elements such as Anzac Hall, the only current listings for Royal Park as a whole in these data bases is in the HI for archaeological potential, and as part of the Parkville HO in the local planning scheme. These listings in no way reflect the real cultural values in the Park.

Identifying the level and type of cultural heritage significance is usually developed using a number of criteria, including scientific, social, aesthetic, historical and archaeological significance. The City of Melbourne recently Completed a study “The Cultural and Historic Significance of Royal Park” identifies features of the park which would meet all these criteria at a State

Level. Many of these features are intertwined with the proposed project area. The report is included in appendix 7.

A satisfactory assessment of impact on cultural heritage cannot be made until all these matters are assessed by the methodology usually adopted for heritage places.

A number of important heritage values present in the area around the proposed Elliot Avenue interchange which the City of Melbourne is aware of which have not been assessed addressed, include:

- its integrity as a substantial tract of open parkland;
- the presence of landscape features and significant trees associated with significant phases of development such as the Acclimatisation Society, the World War Two use and the 1984 Master Plan.
- Social significance associated with sport and recreation.

The Urban Design Framework as proposed is not a sufficient response to managing the impacts which the proposed design. The City of Melbourne has recently been notified that a nomination has been made to Heritage Victoria to include Royal Park on the Victoria Heritage Register. This process of assessment and consideration will take some months; however, the outcome of this process will require a re-assessment of the formal heritage values in the Park.

The enlargement and additional ramp proposed at the intersection of Flemington Road and Elliot Avenue will involve the removal of 66 trees, including, along Flemington Road a large number of English and Dutch Elms and a lemon scented gum which is listed on the National Trust Significant Tree Register. A significant tree assessment report is included in appendix 5. Maps showing the impacts on Flemington Road and Elliot Avenue are shown in appendices 5 and 6.

The project boundary in the vicinity of the proposed Elliot Avenue portals shows two extensions to accommodate the proposed re-alignment of the tram line around the portal. Within these extension areas are some trees of high significance to Royal Park. These include *Eucalyptus cladocaylx* (sugar gum) and *Pinus radiata*, (Monterey pine) which are likely to have been donated by Baron Von Mueller to the Acclimatisation Society in the 1870's and *Ficus macrophylla* (Morton Bay fig) planted in the 1920's, post construction of the tram line.

It is noted that the CIS heritage performance requirements recommend significant trees should be protected. These trees would rate as "high value" from a historic point of view. Under the current design, these trees will have to be removed or seriously compromised. Every effort should be made to retain and protect these trees.



10.1.3 Proposed conditions and performance requirements

10.1.3.1 Precinct 2 – Tunnel

Where the tunnel is under heritage assets, the structural integrity of buildings must be assessed prior to construction, reassessed after construction and returned to its original state. This step is included in the CIS. However the impact of vibrations the operation of the freeway needs to be monitored and tested at regular periods possibly every 5 or 10 years.

10.1.3.2 Precinct 3 – Royal Park

Because the values are under-assessed, the risk management assessment is also under-assessed played (4.4 Risk Assessment).

HH008 impact pathway seems to assume only one approach to construction will occur (underground tunnelling across most of the Park, apart from the portal exit at Elliot Avenue) whereas it is clear in the wider CIS document that at least three construction options are being considered. The heritage impact will therefore differ depending on which construction option is adopted. If a cut and cover technique is used between Elliot Avenue and the proposed western portal, then Anzac Hall (H1747 and part of the Urban Camp Complex), currently rated as outside of the project area and exposed to little impact, will actually be significantly impacted, as will a landscape area of high value (1984) and individual significant trees (WW2)

HH011 impact pathway (which is titled as the western portal, but describes activity occurring around the Elliot avenue portal) also assumes that there will be no cut and cover except for at Elliot Avenue and to 200m east. However it is possible that cut and cover could commence at The Avenue. Were this to occur there would be significant impact on the Australian Native Garden, the grassland circle and individual significant trees.

In the Western portal area, historic features which will disappear as part of the project, such as the railway cutting (Geological historic site) and Ross Straw field (social significance) are not mentioned, and therefore there are no performance requirements listed in the CIS. This should be rectified.

The impact on the cultural heritage values of Royal Park will be significant. Consultants Lovell Chen comment that the “proposed works in Royal Park are likely to be extensive and would have an adverse impact on the visual and aesthetic qualities of the park. Some of the works could be partly mitigated by landscape remediation works including a replanting program. Other works would result in a permanent change and the impact could not be mitigated.”

The construction of the western portal would result in the effective excision of an area of parkland that would no longer read as part of the park as a whole.

Given the significant impact of the freeway on removal of vegetation, loss of parkland and imposition of a large piece of infrastructure in the park, the impacts should be minimised by the final design demonstrating how it will minimise loss of vegetation and parkland and how it will visually mediate the impact of the structure.

The project should be required to adopt the City of Melbourne Standard Tree Protection Requirements.

In addition to the proposed measures in the CIS and use of the Tree Protection requirements, some reduction on tree impact could be achieved through design amendments. If the No. 55 Tram line did not require rerouting, but remained on the current alignment, a large number of trees may be able to be retained.

10.1.3.3 For the area from the railway line to CityLink (Royal Park West):

Proposed conditions should include adoption of the City of Melbourne standard Tree Protection Requirements and the removal or reduction in size of all the works areas on the top of the hilltop and the nursery site, and in Manningham Reserve.

10.1.4 Proposed changes to alignment or design

10.1.4.1 Elliot Avenue area:

Proposed changes to the design should include the removal of the northern ramps of the Elliott Avenue portal and a review of the design pending the outcome of the assessment of Royal Park for inclusion on the Victorian Heritage Register, to ensure identified heritage values are protected.

10.1.4.2 For the area from the railway line to CityLink (Royal Park West):

Proposed changes to the design should include a review of western portal exit design to maximise the retention of as much as possible of the geological significant site in a way that is publically accessible and can continue to be used for teaching purposes- for example the “pick marks” and the contrasting layers of rock.

10.1.5 Proposed changes to alignment or design

Avoiding the alignment change of the No. 55 tram route would reduce the significant negative impact on historic and culturally important trees in this location.

10.2 Cultural Heritage – Part B

Precinct 5 is an area with a long industrial history. There are a number of industrial Complexes which are within or near the project boundary, including the former Burge Bros factory in Racecourse Road (VHR listed) and the former Limb Scurry & Limb, Alfred Lawrence Laboratories and works in Barrett Street (proposed HO place), both in Kensington. There is also a Victorian and Edwardian residential HO precinct, the Kensington Precinct, on the western edge of the project boundary. A HO precinct focused on the Moonee Ponds Creek is proposed under the Planning Scheme Amendment C207 and areas of this proposed precinct fall within the project boundary. A large HI (archaeological) site is located at the southern end of the precinct.

Precinct 5 is an urban renewal area where the remaining heritage will form an important aspect of the emerging character. As the proposal is for an above

ground link in this area, it can and should be designed to avoid removal of any heritage assets.

The City of Melbourne is currently proposing a planning scheme amendment - C207 Arden-Macaulay Heritage Review - which makes recommendations to introduce new individual heritage overlays and heritage precincts, remove individual places from the heritage overlay, modify existing heritage overlays (such as adding or deleting properties from a precinct); and to change the existing heritage grading of places. The CIS has not taken this information into account.

11 Surface water

11.1 Surface water – Part A

11.1.1 Assessment of CIS

The CIS states that Compliance with best practice construction controls for managing sediment, stormwater, spills and dewatering activities will be undertaken. However, in our experience, earthworks are not always undertaken to this standard, and with insufficient supervision and Compliance enforcement. Polluted water run-off can have a significant negative impact on downstream waterways and drainage lines, and in a project of this size could be substantial.

Given that is proposed that the western exit point for the tunnel, and the entrance point for tunnel boring will be in the Manningham reserve area, it is critical that the surface water management issues are well managed.

In this section of the project, the impact of the proposed link on the Wetland and water storage system in Royal Park is the most critical matter (Trin Warren Tam-boore). His issue is not explored I detail in the CIS.

Constructed in 2005 with funding in association with the Commonwealth Games, the Trin Warren Tam-boore wetlands have been the recipient of numerous awards, the subject of many articles and a much visited site by those interested in stormwater harvesting and water quality programs, urban wetlands, bird observing, environmental education as well as general park visitors. (refer appendix 6, List of awards and key articles, Irrigation diagram - Trin Warren Tam-boore wetlands, Royal Park)

The wetlands sits at the western end of the Brunswick creek which flows through Royal Park from Brunswick catchment and is a tributary of the Moonee Ponds Creek. The wetlands Complex is made up of a number of elements and was designed to meet multiple objectives, including recreation and environmental education experiences, bird habitat, stormwater cleansing and stormwater collection and re-use.

The Complex covers an area of 8 ha and incorporates more than 10,000 plants in the wetland and the surrounding fringe riparian landscape.

There are a number of distinct Components:

- East of Oak Street, a treatment pond and associated planting which cleans the creek stormwater and also contains a bird hide, bridges, interpretive signs, planting and paths for park users
- The 13.4 ML capacity Storage pond, situated between Oak St and the CityLink freeway wall. Pipes under Oak Street gravity feed water from the treatment pond to the storage pond. A shed containing UV filters is situated at the south end of the storage pond.



- A second set of pipes connect the storage pond to further 4.8 ML of storage tanks under Ross Straw field. The storage system is all interconnected. Any remaining cleaned water flows through to Port Phillip Bay.
- There is a further pipe and pump which takes water up to the balancing tanks on the north side of the zoo and other storage tanks in the area. From here the water is connected to irrigation systems for the golf course, playing fields, Royal Parade and the ornamental pond in Princes Park.

This system is able deliver 160 megalitres of fit-for-purpose water each year, which represents 18 per cent of our annual irrigation requirement. The full 300 to 400 Million litres of annual run-off is treated to best practice stormwater quality improvement standards and provides significant clean water value to the inner Melbourne catchment.

Under the current design the two north flyover connections to CityLink pass directly over the southern portion of the storage pond, necessitating the construction of at least one pylon in the pond. Other pylons would be over Ross Straw Field, where the storage tanks are situated.

The whole wetlands Complex is currently included as a works area in the LMA design. It is unclear what purpose the current treatment wetland and open storage pond would be put to during the construction [period]. It is also unclear how changes to levels on Oak Street will affect the water distribution system.

The project provides an opportunity to significantly expand the capacity of this water storage, cleaning and re-use system by building a pipeline from Dights Falls along the tunnel alignment and reusing water no longer required by Amcor at its Alphington site. This could provide a significant amount of the water needs for Melbourne's open spaces via a distributed water reuse network including watering trees, median islands, parks etc and significantly increase Melbourne's water security. One option may be to use some of land underneath the proposed elevated freeway structures in Ross Straw Field to store water and create an expanded wetland and biodiversity area with recreation opportunities. This would also require significant sound protection such as surrounding the freeway ramps with architectural sound tubes.

11.1.2 Proposed conditions and performance requirements

It is noted that the wetlands are included in the Water licensing as a performance matter, however there are no proposed conditions associated with their protection or management during construction, other than allowing Melbourne Water access for maintenance.

The stormwater harvesting system is inside the nominated project works area. The project should provide City Of Melbourne with access to the system so that City Of Melbourne can continue to irrigate parks and gardens using stormwater. An alternative would be to fund the cost of converting the irrigation system to use potable water.

The treatment pond and associated surrounding area should ideally be taken out of the works area and remain under the City of Melbourne management.

For general stormwater quality, biodiversity and landscape integrity reasons it is important that this pond and the associated landscaping keeps intact and functioning while construction works are underway.

The storage pond needs to be protected from project impacts as much as possible. Its use as a discharge point for the project is not supported. This impact should be acknowledged rather than brushed off with the statement that unlikely to be affected provided that supporting structures are located clear of these features and their related services.

Evidence also needs to be provided that shading from the flyovers will not permanently affect plant growth and therefore nutrient uptake in the storage pond. Between the flyovers and the existing sound wall, parts of the storage pond and surrounding landscape planting will likely be in shaded for the majority of the day, therefore negatively impacting their viability.

11.1.3 Proposed changes to alignment or design

Re-organise the proposed works areas so that the treatment pond is outside the construction area, and remains with the City of Melbourne for the duration of the project. This area is shown in appendix 4.

Clearly the current water storage and re-use capacity will be affected by the works both during construction and in the long term. The current tanks under Ross Straw field should be re-located at the start of the project, or else protected and remain where they are.

Provide details of the water management discharge for construction activities.

Work with the City of Melbourne in the re-construction of the area so that the capacity of the water quality cleaning, storm water collection and re-use system is reinstated and even expanded.

11.2 Surface water – Part B

11.2.1 Assessment of CIS

11.2.1.1 Moonee Ponds Creek

The CIS notes (p5, chapter 13) that the project offers the opportunity to restore and enhance the Moonee Ponds Creek and provides an opportunity to improve public amenity by reconfiguring it as an urban waterway and movement corridor. However no detail is provided as to what these improvements could be. The CIS should detail the improvements proposed. The proposal for a viaduct along the Moonee Ponds Creek appears likely to degrade the environment further including reducing the amount of sunlight reaching the creek with impacts on water quality.

The project will also impact permanently on the long term vision to upgrade the Moonee ponds creek to a quality open space link to Docklands (see Recreation)



12 Native vegetation and biodiversity

12.1 Native vegetation and biodiversity – Part A

12.1.1 Assessment of CIS

12.1.1.1 Biodiversity

The CIS states that the area generally contains no significant ecological value. It acknowledges Royal Park contains some values in a modified state.

The risk assessment records the consequence of biodiversity loss as minor at the bioregional scale but this does not reflect the major consequence it will have for biodiversity at the local scale.

Included within the project boundary is Royal Park West which is the most ecologically diverse area within the Com. It includes the following areas:

12.1.1.2 Remnant woodland

The most significant area of remnant grassy woodland (EVC 175) remaining within the Com. It should also be noted that this remnant vegetation site has also been identified as of high archaeological sensitivity due to the potential to contain Aboriginal cultural materials.

12.1.1.3 Trin Warren Tam-boore wetland

The wetlands comprise a treatment wetland and a storage wetland. Together they provide significant habitat and have the highest levels of bird diversity recorded within the Com. This includes a number of species recorded under the Flora & Fauna Guarantee Act (FFG Act).

12.1.1.4 Population of White's Skink (*Liopholis whitii*)

A population of White's Skink is present in the remnant grassy woodland and an adjacent grassland area. While not listed as a threatened species, the population was identified as of high regional significance by an amphibian expert in 1999. The City of Melbourne has been proactively managing this population to ensure that it remains stable and survives since that time.

12.1.1.5 Birds

The CIS suggests the project would not have a significant impact on FFG Act-listed Communities, species or habitats. It refers to just two species listed under the FFG Act; the Swift Parrot and the Grey-headed Flying Fox, but in fact there are more present in the area.

The City of Melbourne has been Commissioning regular bird surveys from qualified ecologists since 2007. These studies show significantly more flora and fauna species present than those observed in the field by the consultants to LMA, who did not undertake any rigorous studies or field observations as part of the assessment. Our Bird surveys show that a total of 152 bird species have

been recorded in Royal Park, including 59 species listed as migratory under the EPBC Act and six listed under the FFG Act. Details of species recorded are contained in Appendix 8.

The CIS does not assess the impact of the project on the population of White's skink (*Liopholis whitii*). The population is at particular threat as it's located entirely within the project boundary and specifically, the temporary construction area. Our advice is that the current skink colony while small, is viable, however including the whole colony in the proposed construction zone render it unviable and probably lost to the area. (refer appendix 10, Report White's Skink Survey, 2010 - Royal Park)

The performance requirements advocate for fencing of no-go zones to protect biodiversity values. These no-go zones are not defined in the CIS so it is not currently possible to know if this is an effective measure.

Royal Park is managed as a 'dark park', so that sky and possibly stars can be seen. This means that lighting is kept to a minimum, glare and light spill is controlled. Five species of nocturnal microbat have been recorded in the park. The CIS has not considered the massive increase in light spill from the project construction and operation on nocturnal wildlife, or the continuation of the "dark park" concept.

The disconnection of a relatively connected landscape through the introduction of road overpasses and portals will have an impact on the local fauna in the area.

12.1.1.6 Vegetation

In describing tree loss within Royal Park, a very narrow focus has been taken.

The CIS states that vegetation within the project boundary in Royal Park includes 96 native trees. The CIS states the 93 scattered trees generally have a low value for most fauna species, however bird surveys of Royal Park show a significant number of native birds utilise the park's vegetation.

The assessment is limited to the biodiversity value provided by 'native' scattered trees, which are not listed or described in detail. As such, it significantly under-represents the number of trees which may be removed and the impact of the loss. It also does not include an assessment of the trees in the area around the intersection of Elliot Avenue and Flemington Road where an additional lane is to be added. This is a recent addition to the project design.

There is no consideration of the significant contribution trees within the project boundary make to the city through their amenity value, the provision of ecosystem services or the mitigation of the urban heat island effect. Some trees in the park also have high cultural and heritage significance due to size, species, age or historical association. The City of Melbourne considers that the assessment method used for trees in the CIS is not a suitable one for assessing impact in an inner-urban area. The City of Melbourne uses a completely different method to assess tree value and impacts, based on the calculation of an amenity value formula. This formula has been used by the City of Melbourne



since 1997 to assess amenity impacts as a result of tree removals and it is current Council policy that Compensation be paid for loss of any trees, using this formula. The funds from these payments are used to deliver greening initiatives (including tree planting) via the City of Melbourne's Urban Forest and Open Space strategies.

According to the City of Melbourne records, the total number of trees within the "benchmark" above ground works boundary or the construction area in Royal Park is in the order of 4,713 trees. If cut and cover techniques are used through Royal Park, and the widening of Flemington Road occurs, the total number of trees potentially impacted increases to 5,350. The assessed amenity value, using the standard City of Melbourne formula is \$18.7 million. The CIS does not address the issue of Compensating for tree loss at all.

In the Flemington Road area, there are a further 66 trees affected, including one which is on the National Trust Significant Tree Register, and trees that form part of the Elm boulevard on Flemington Road.

The Risk Assessment states the project will require the removal of up to 93 scattered locally native trees in Royal Park. It suggests the loss could be as low as 11 trees. This seems entirely inaccurate.

The proposed road widening and portal interchange at Elliott Avenue will have a significant impact, with a potential for 378 trees expected to be lost. The amenity value of these trees is \$5.89 million.

The performance requirements advocate for fencing of no-go zones for the protection of large scattered trees and minimising the removal of mature trees and remnant vegetation.

The CIS does not define these no-go zones so it is not currently possible to know if this is an effective measure for tree protection.

12.1.2 Proposed conditions and performance requirements

The treatment wetland, skink habitat and all parts of the remnant grassy woodland (other than the area directly affected by the construction works) should be removed from the project boundary. A proposed protection area is shown in appendix 4 (Royal Park West Habitat Protection Areas)

In general the no-go zones referred to in the CIS should be defined and should include most of the remnant grassy woodland, the skink site, and the treatment wetland of the Trin Warren Tam-boore wetlands.

The storage wetland should be within the project boundary only to the extent and only for the time required to construct the flyovers.

The CIS should include performance requirements to specifically protect the White's skink population. It should ensure Royal Park has a viable population of White's skink during and following construction.

The CIS should include performance requirements to protect all FFG Act-listed wildlife recorded in Royal Park.

The project should include rehabilitation of areas following construction so that the current flora and fauna values can again be recognised as now. Rehabilitation works should be to the standards required by the Com, and consistent with the objectives of the Royal Park Master Plan.

Light spill during construction and operation should be minimised to ensure Royal Park remains a 'dark park'.

The no-go zones should be defined in conjunction with the City of Melbourne and should be in line with Council's tree protection policies.

Specific measure should be undertaken to identify and protect all trees of particular value, not just the ones described in the CIS.

The City of Melbourne should be compensated for the loss of any trees in accordance with Council's tree amenity value assessments.

The project should include rehabilitation of areas following construction. Rehabilitation works should be to the standards required by the Com, which includes soil depth, tree choice and design.

Some trees within or adjacent to the project area are highly significance either in their individual state, or as with Flemington Road, a major tree-lined boulevard.

12.1.3 Proposed changes to alignment or design

The project should be reviewed to reduce the major impacts on biodiversity and trees in Royal Park.

Modifications that keep the No. 55 tram on its current alignment, and a reduction in the size of the Elliot Avenue portal would also reduce impacts.

All works within Royal Park should keep cut and cover techniques to a minimum.

12.2 Native vegetation and Biodiversity – Part B

12.2.1 Assessment of CIS

There will be a loss of 52 trees on Arden Street and 406 on Footscray Road, if the design as proposed is implemented. These trees have a combined amenity value of \$1,85 million.

Along the Moonee Ponds Creek corridor there will be a loss of vegetation and trees, but the amount is unknown.

12.2.2 Proposed conditions and performance requirements

Tree replacement and enhancement should occur along the affected areas of Arden St and Footscray Road.

Standard City of Melbourne Tree protection requirements should be adhered to.

13 Bibliography

City of Melbourne, 2012, *Transport Strategy*

VicRoads, 2013, *Bicycle Data Report (2005-2013)*. Accessed 21 November 2013 from <http://www.vicroads.vic.gov.au/NR/rdonlyres/886E02A1-2AE2-4CB3-AD3B-1D345FFC826A/O/BicycleNetworkReportAug2013.pdf>

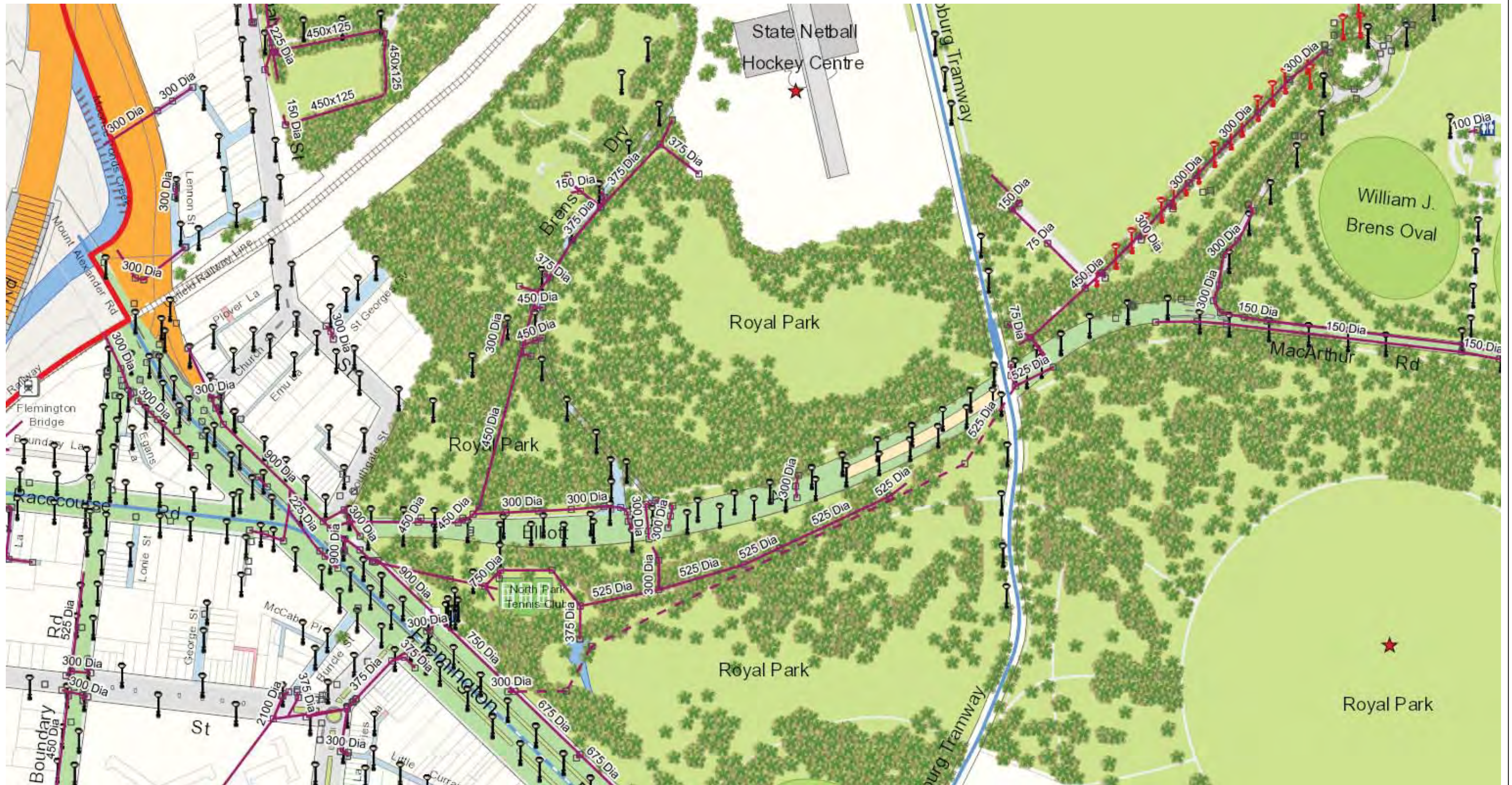
The State of Victoria, Department of Transport, Planning and Local Infrastructure 2013, *Plan Melbourne: Metropolitan Planning Strategy*

World Health Organisation, 1999, *Guidelines for Community Noise*. Accessed 21 November 2013 from http://www.persona.uk.com/bexhill/Core_docs/CD-09/CD-09-41.pdf

14 Appendices



Map 1: East West Link Project - Royal Park & Elliot Avenue



Approx. Scale 1:3500

The City of Melbourne does not warrant the accuracy, currency or completeness of information in this product. Any person using or relying upon such information does so on the basis that the City of Melbourne shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.





Map 2: East West Link Project - Royal Park & Manningham Street



- | | | | | | | | |
|----------------------------|-----------------|---------------|------------|-----------------------------------|--------------------|---------------------|---------------------------|
| Visitor Information Centre | Police Station | Arterial | Freeway | Tram Route With Platform Stops | Municipal Boundary | Parks | Tennis Court |
| Information Hub | Railway Station | Citylink | Port Roads | City Circle Tram Route With Stops | Property | Walking Path | Tennis Court (Clay) |
| Places of Worship | Hospital | Citylink 2 | Private | Bus Route | Marina | Trees | Tennis Court (Hard Court) |
| Major Building | Rail/Footbridge | Council Major | Railway | Railway Underground | Ovals | River/Water Feature | |
| Citylink Tunnel | Council Minor | | | | | | |

Approx. Scale 1:3500

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Map 3: East West Link Project - Flemington Road



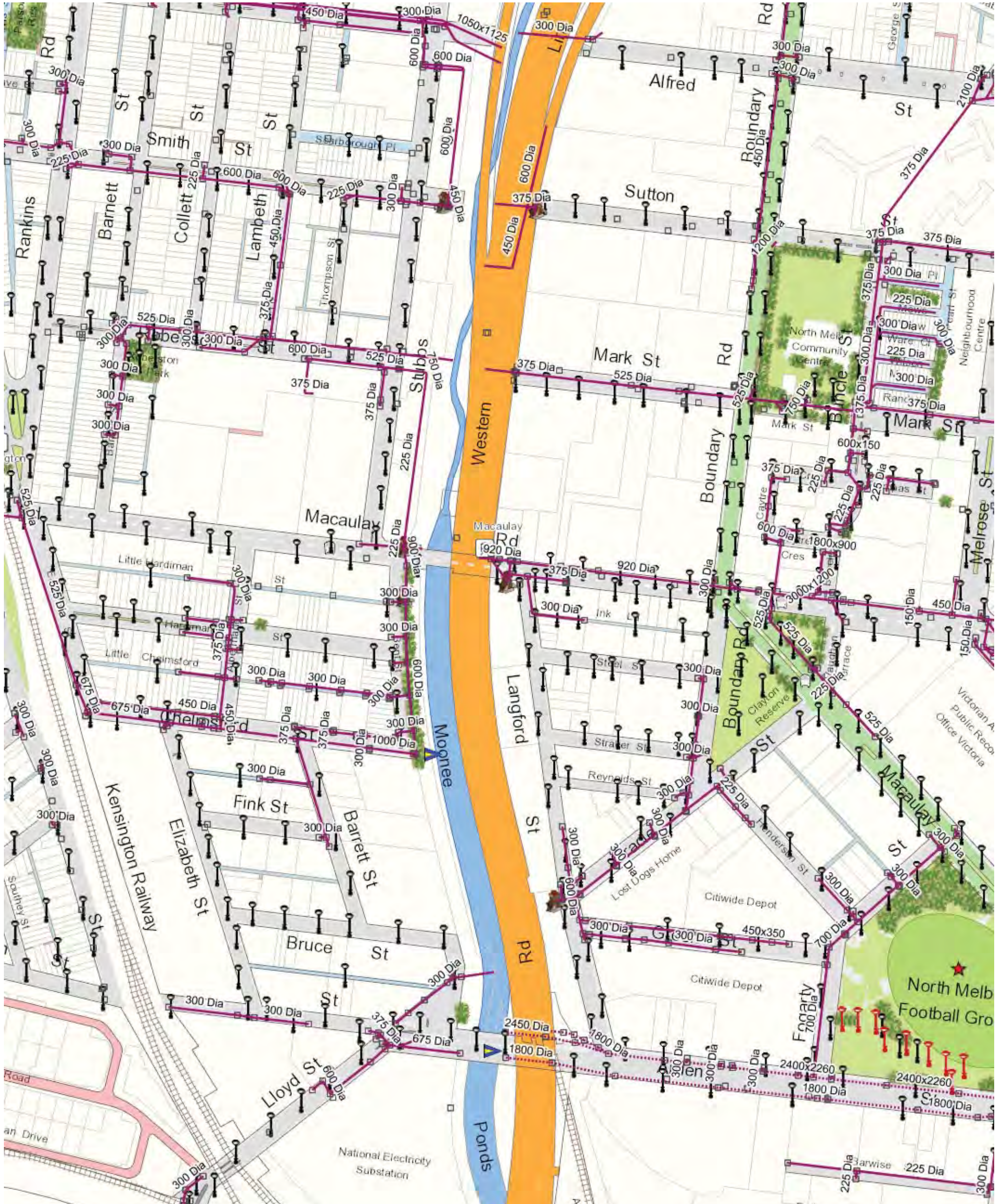
- | | | | | | | | |
|----------------------------|-------------------|-----------------|-----------------|-----------------------------------|--------------------|---------------------|---------------------------|
| Visitor Information Centre | Places of Worship | Citylink Tunnel | Council Minor | Tram Route With Platform Stops | Property | Parks | Tennis Court |
| Information Hub | Police Station | Arterial | Freeway | City Circle Tram Route With Stops | Marina | Walking Path | Tennis Court (Clay) |
| Toilet (Accessible) | Railway Station | Citylink 2 | Port Roads | Railway | Municipal Boundary | Trees | Tennis Court (Hard Court) |
| Toilet | Hospital | Council Major | Rail/Footbridge | Railway Underground | Bus Route | River/Water Feature | |

Approx. Scale 1:2000

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Map 4: East West Link Project - Arden Street and Moonee Ponds Creek

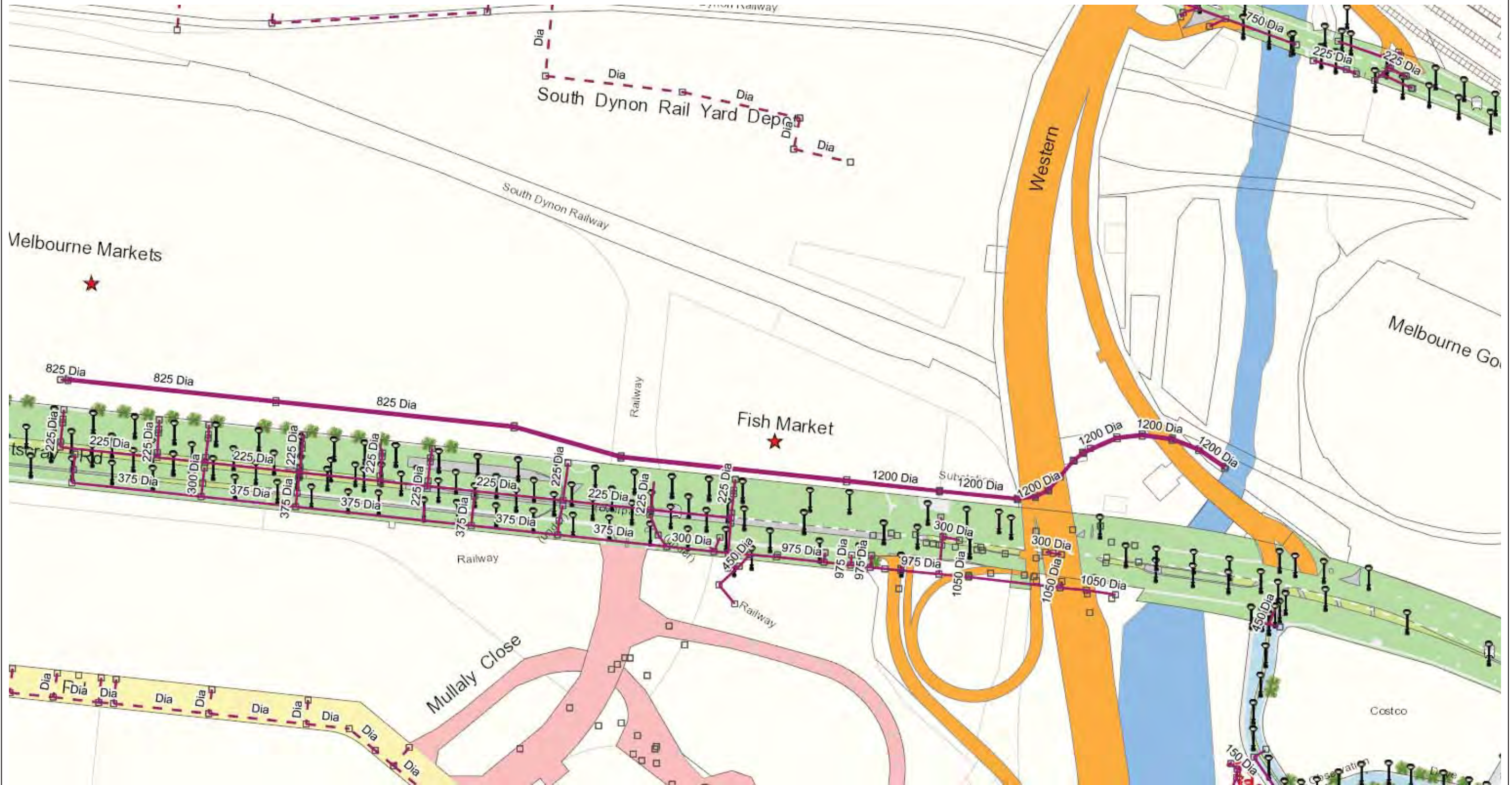


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Map 5: East West Link Project - Footscray Road Interchange



Approx. Scale 1:3500

- Visitor Information Centre
- Information Hub
- Places of Worship
- Major Building
- Police Station
- Railway Station
- Hospital
- Rail/Footbridge
- Citylink Tunnel
- Arterial
- Citylink
- Citylink 2
- Council Major
- Council Minor
- Freeway
- Port Roads
- Private
- Railway
- Railway Underground
- Municipal Boundary
- Property
- Marina
- Ovals
- Parks
- Walking Path
- Trees
- River/Water Feature
- Tennis Court
- Tennis Court (Clay)
- Tennis Court (Hard Court)
- Tram Route With Platform Stops
- City Circle Tram Route With Stops
- Bus Route

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City Of Melbourne Park Assets

Project Footprint - total LMA area, including works area from The Avenue to City Link

	Area (ha)	Length (m)	Number	
Water Tanks	0.85		4.8ML	A number of tanks co-located.
Footpath and carparks	2.28	17847.7	68	
Playground Equipment			6	1 combination Unit, 1 Carousel spin pole, 1 Balance Steps, 1 Playground Equipment, 1 Spring Rider seat, 1 Steel Swing
Outdoor Furniture			142	19 Aluminium pole, 3 Barbeque, 38 Bollard, 1 Drinking Fountain, 4 Hoops, 1 Horse trough, 6 Litter Bin, 6 Picnic Setting, 24 Seat, 6 Steel Angle, 33 Steel Pillar, 1 Steel Pole Single)
Lighting			2	2 owned by City Of Melbourne
Controller			3	All active, 1 Irrinet and 2 Manual
Toilet			1	
Pumps			3	1 stormwater, 2 Irrigation
Drainage Pipes		4263.3	115	
Litter Trap			1	Stormwater
Pavilion	0.0324		1	Ross Straw Field Pavilion

Amendment Area (end of Elliot Ave and Flemington rd)

	Number	
Footpath	1	505 m length, 414 m ² west end of Elliot Ave
Outdoor Furniture	25	Bollards, 6 Tree Protection, 2 Steel/Enamel and metal dome, 13 Wooden Post; 2 seats, 1 aluminum pole, 1 steel pillar

ROYAL PARK 2013

City of Melbourne

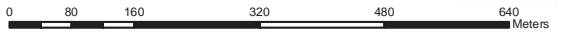
RESPONSIBILITIES & ACKNOWLEDGEMENTS

GIS Team Leader, Property Services: David Hassett

GIS Compilation & Cartography: Marc Milinkovic

Published by City of Melbourne, November 2013

PO Box 1603, Melbourne, Victoria 3001 Australia.



MAPS OF OPEN SPACE AND TREE IMPACT

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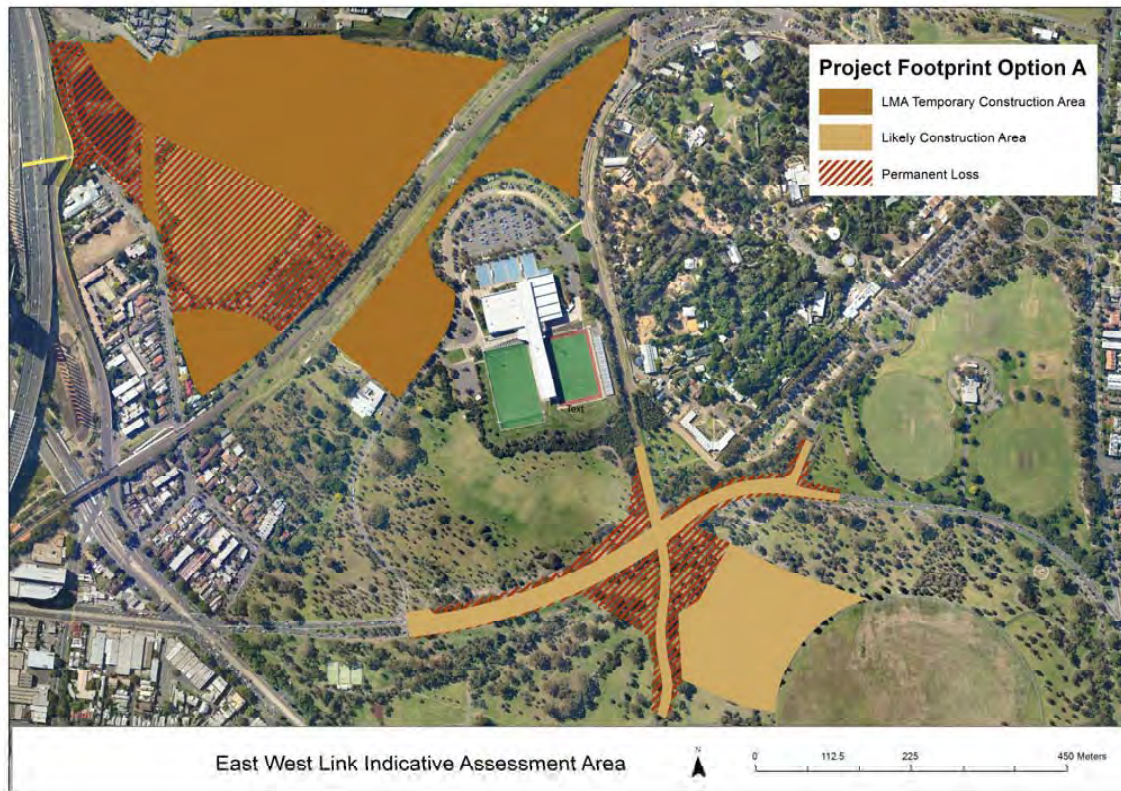
Amenity value calculated according to City of Melbourne standard methodology



MAPS OF OPEN SPACE AND TREE IMPACT

ROYAL PARK: CURRENT NUMBER AND AMENITY VALUE OF TREES UNDER VARIOUS CONSTRUCTIONS OPTIONS

Option A: Baseline project



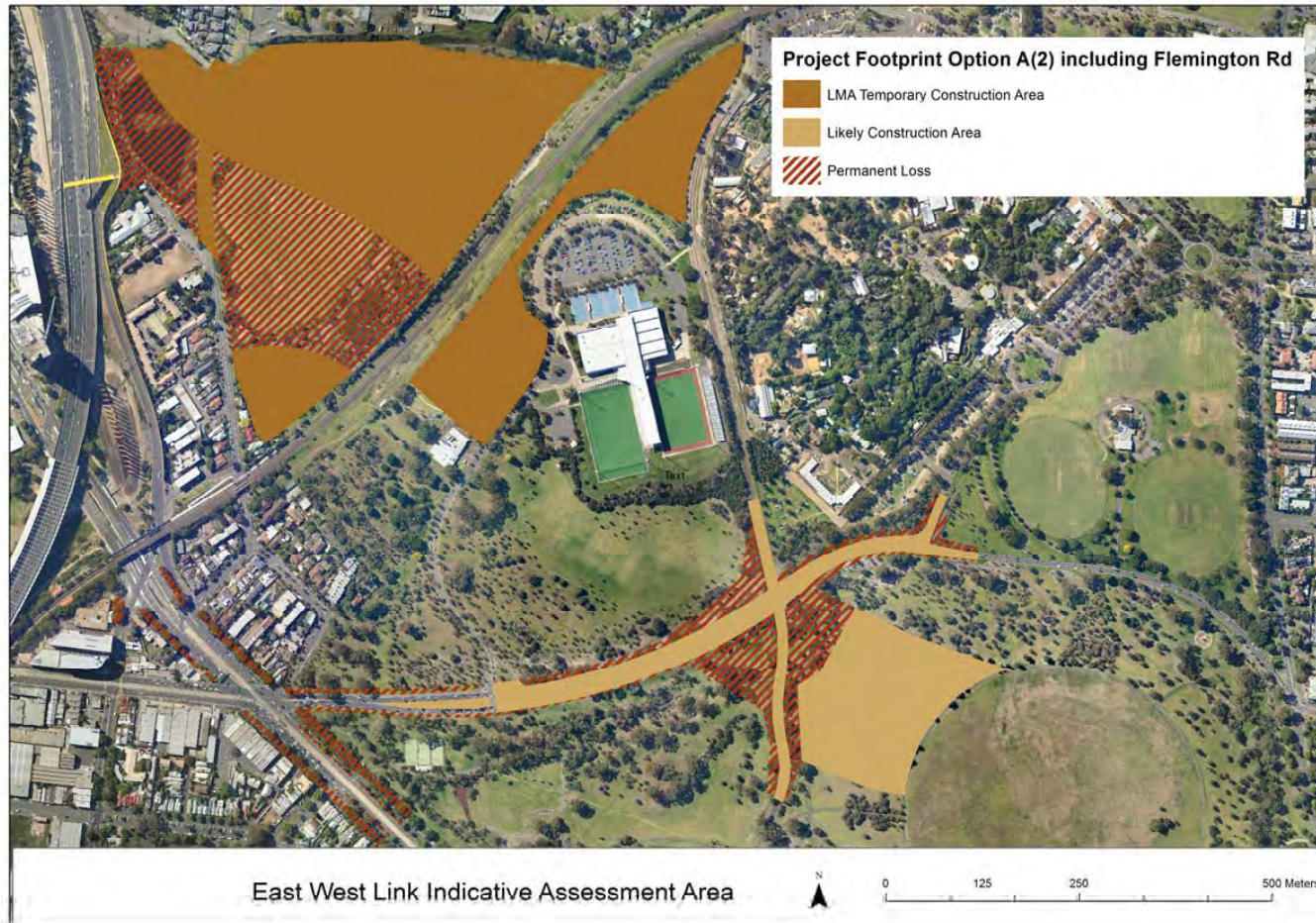
MAPS OF OPEN SPACE AND TREE IMPACT

Option A	Royal Park West			Portal to Railway			Portal			Portal to The Avenue		
	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)
LMA Temporary Construction Area	1783	2.19	\$3,732,270.4	1039	1.17	\$1,779,403.9	0	0	\$0.0	0	0	\$0.0
Permanent Loss	683	1.15	\$1,036,906.2	0	0	\$0.0	378	2.81	\$5,889,557.6	0	0	\$0.0
Likely Construction Area(Elliot Ave)	0	0	\$0.0	0	0	\$0.0	830	3.22	\$3,160,314.6	0	0	\$0.0
Possible Construction	0	0	\$0.0	264	0.45	\$519,766.5	0	0	\$0.0	309	0.62	\$209,502.0
Total	2466	3.34	\$4,769,176.6	1303	1.62	\$2,299,170.4	1208	6.03	\$9,049,872.2	309	0.62	\$209,502.0

	Number of trees	Canopy Area (ha)	Amenity Value (\$)
LMA Temporary Construction Area	2822	3.36	5,511,674.30
Permanent Loss	1061	3.96	6,926,460.00
Likely Construction Area(Elliot Ave)	830	3.22	3,160,314.60
Total	4713	10.54	\$15,598,448.90

MAPS OF OPEN SPACE AND TREE IMPACT

Option A(2): Baseline project + rest of Elliot Ave + Flemington Rd



MAPS OF OPEN SPACE AND TREE IMPACT

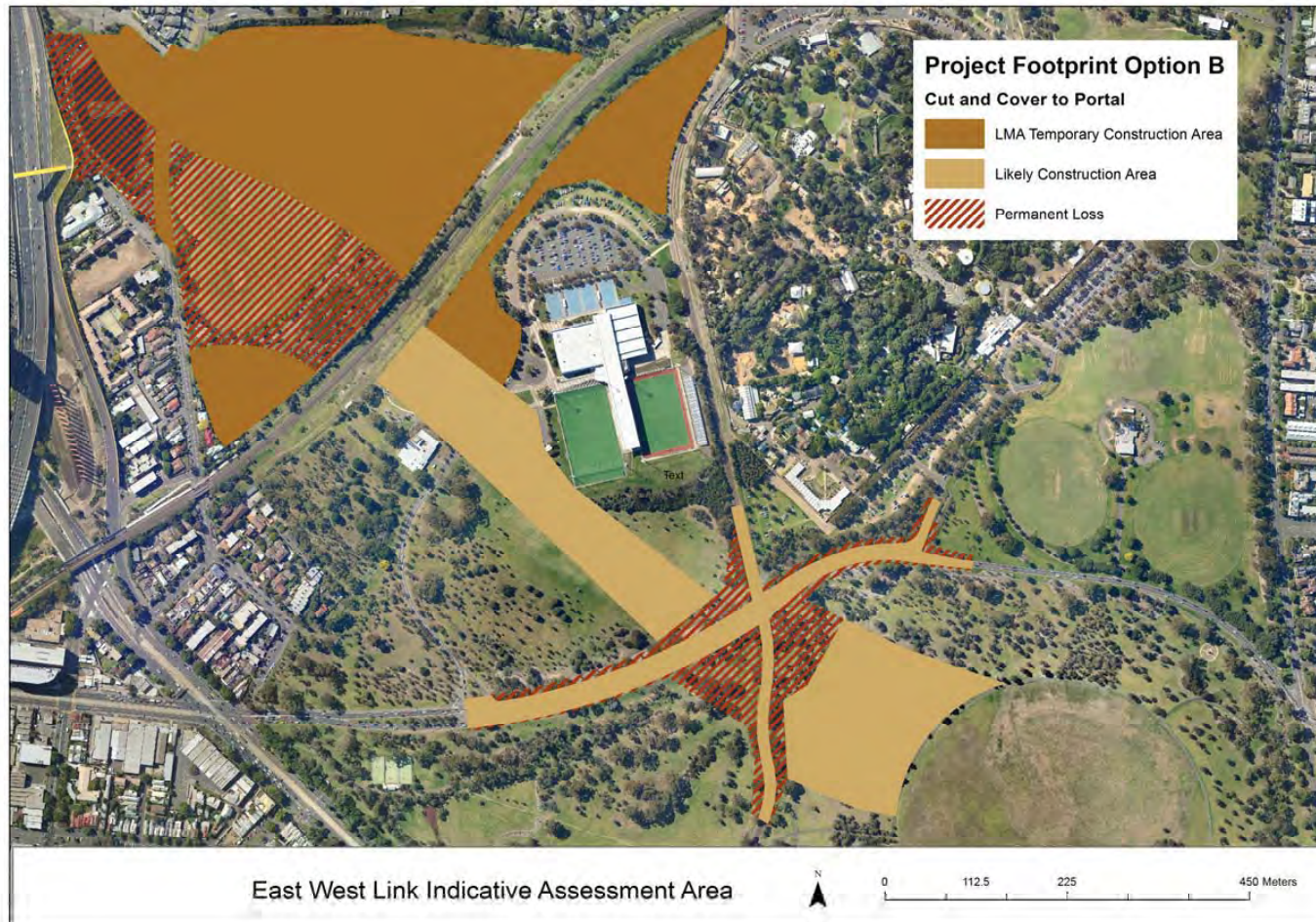
Option A (2) (Option A + amendments)	Royal Park West			Portal to Railway			Portal			Portal to The Avenue			Flemington Rd Section		
	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)
LMA Temporary Construction Area	1783	2.19	\$3,732,270	1039	1.17	\$1,779,403	0	0	\$0.0	0	0	\$0.0	0	0	\$0.0
Permanent Loss	683	1.15	\$1,036,906	0	0	\$0.0	389	3.01	\$5,934,927	0	0	\$0.0	66	0.92	\$2,592,997
Likely Construction Area	0	0	\$0.0	0	0	\$0.0	850	3.23	\$3,237,914	0	0	\$0.0	0	0	\$0.0
Possible Construction	0	0	\$0.0	264	0.45	\$519,766	0	0	\$0.0	309	0.62	\$209,502	0	0	\$0.0
Total	2466	3.34	\$4,769,176	1303	1.62	\$2,299,170	1239	6.2434	\$9,172,842	309	0.62	\$209,502	66	0.92	\$2,592,997

	Number of trees	Canopy Area (ha)	Amenity Value (\$)
LMA Temporary Construction Area	2822	3.36	5,511,674.00
Permanent Loss	1138	5.08	6,971,833.00
Likely Construction Area	850	3.23	3,237,914.00
Total	4810	11.67	\$15,721,421.00



MAPS OF OPEN SPACE AND TREE IMPACT

Option B: Cut and cover between Elliot Avenue portal to railway line (using baseline project)



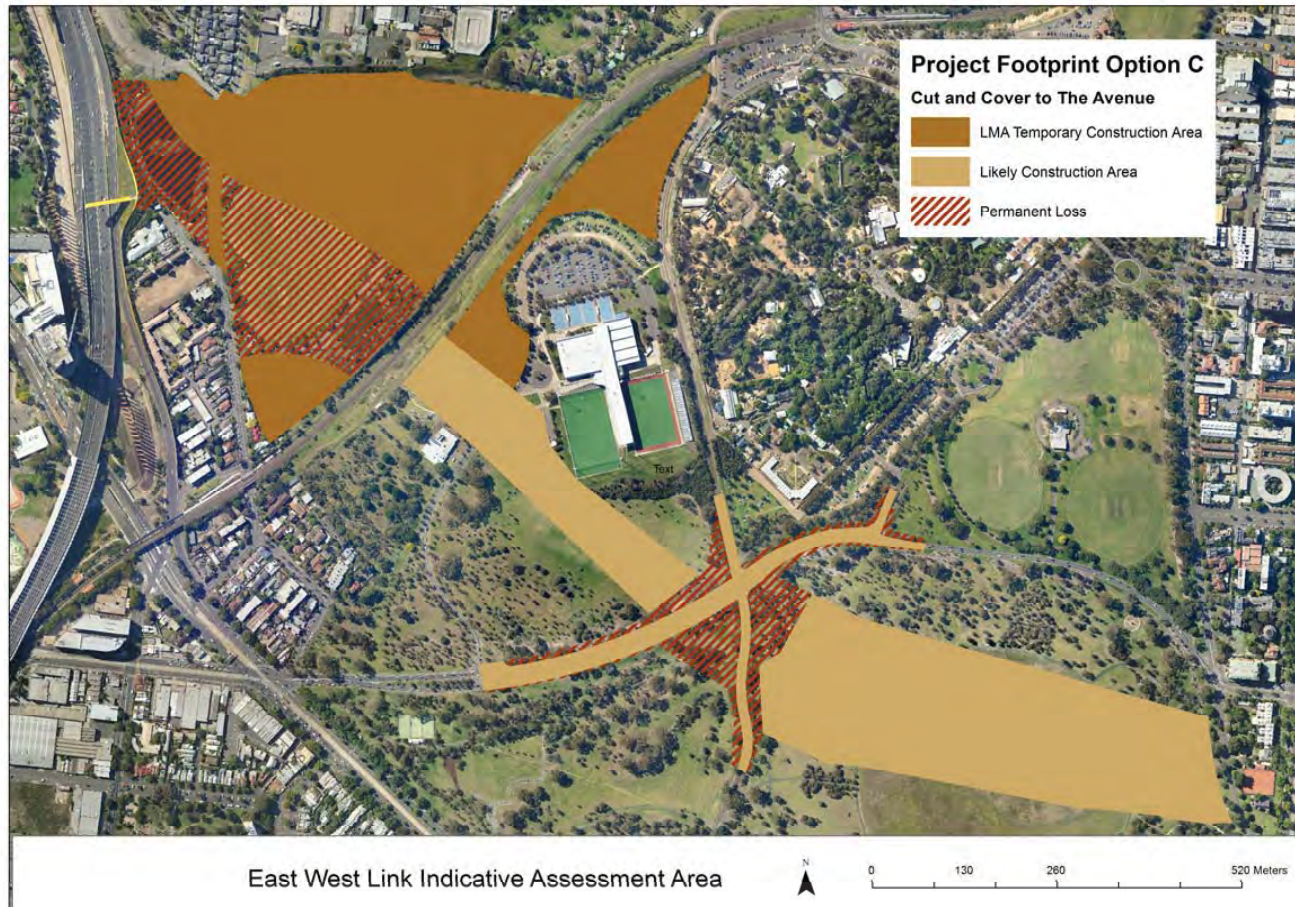
MAPS OF OPEN SPACE AND TREE IMPACT

Option B (Cut & Cover Elliot Ave to railway)	Royal Park West			Portal to Railway			Portal			Portal to The Avenue		
	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)
LMA Temporary Construction Area	1783	2.19	\$3,732,270.4	899	0.96	\$1,587,712.6	0	0	\$0.0	0	0	\$0.0
Permanent Loss	683	1.15	\$1,036,906.2	0	0	\$0.0	378	2.81	\$5,889,557.6	0	0	\$0.0
Likely Construction Area	0	0	\$0.0	404	0.67	\$744,344.6	830	3.22	\$3,160,314.6	0	0	\$0.0
Possible Construction	0	0	\$0.0	0	0	\$0.0	0	0	\$0.0	309	0.62	\$209,502.0
Total	2466	3.34	\$4,769,176.6	1303	1.63	\$2,332,057.2	1208	6.03	\$9,049,872.2	309	0.62	\$209,502.0

	Number of trees	Canopy Area (ha)	Amenity Value (\$)
LMA Temporary Construction Area	2682	3.15	5,319,983.00
Permanent Loss	1061	3.96	6,926,463.80
Likely Construction Area	1234	3.89	3,904,659.20
Total	4977	11	\$16,151,106.00

MAPS OF OPEN SPACE AND TREE IMPACT

Option C: Cut and cover from railway to The Avenue (using baseline project)



MAPS OF OPEN SPACE AND TREE IMPACT

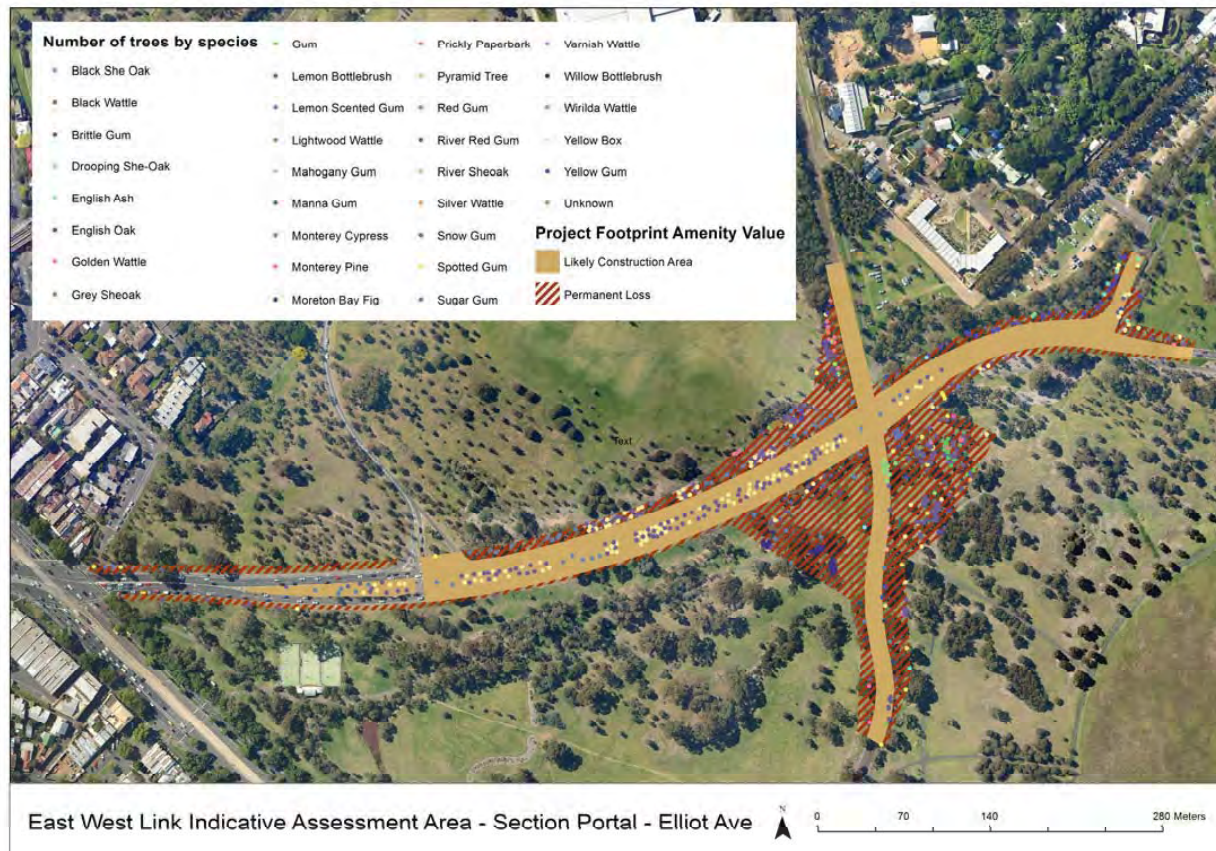
Option C (Cut & Cover to The Avenue)	Royal Park West			Portal to Railway			Portal			Portal to The Avenue		
	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)	Number of Trees	Canopy Area (ha)	Amenity Value (\$)
LMA Temporary Construction Area	1783	2.19	\$3,732,270.4	899	0.96	\$1,587,712.6	0	0	\$0.0	0	0	\$0.0
Permanent Loss	683	1.15	\$1,036,906.2	0	0	\$0.0	378	2.81	\$5,889,557.6	0	0	\$0.0
Likely Construction Area	0	0	\$0.0	404	0.67	\$744,344.6	830	3.22	\$3,160,314.6	309	0.62	\$209,502.0
Possible Construction	0	0	\$0.0	0	0	\$0.0	0	0	\$0.0	0	0	\$0.0
Total	2466	3.34	\$4,769,176.6	1303	1.63	\$2,332,057.2	1208	6.03	\$9,049,872.2	309	0.62	\$209,502.0

	Number of trees	Canopy Area (ha)	Amenity Value (\$)
LMA Temporary Construction Area	2682	3.15	5,319,983.00
Permanent Loss	1061	3.96	6,926,463.80
Likely Construction Area	1543	4.51	4,114,161.20
Possible Construction	0	0	0
Total	5286	11.62	\$16,327,721.30

MAPS OF OPEN SPACE AND TREE IMPACT

DETAILED MAPS OF PROJECT FOOTPRINT AREAS WITH SPECIES BEEN AFFECTED

Portal section and Elliot Avenue



MAPS OF OPEN SPACE AND TREE IMPACT

Tree Species	Number of trees
Black She Oak	1
Black Wattle	2
Brittle Gum	1
Drooping She-Oak	7
English Ash	2
English Oak	1
Golden Wattle	15
Grey She Oak	14
Gum	2
Lemon Bottlerush	16
Lemon Scented Gum	9
Lightwood Wattle	9
Mahogany Gum	2
Manna Gum	3
Monterey Cypress	1
Monterrey Pine	2
Moreton Bay Fig	4
Prickly Paperbark	1
Pyramid Tree	3
Red Gum	2
River Red Gum	292
River She Oak	18
Silver Wattle	1
Snow Gum	2
Spotted Gum	17
Sugar Gum	48
Varnish Wattle	1
Willow Bottlebrush	46
Wirilda Wattle	12
Yellow Box	122
Yellow Gum	39
Unknown	6
TOTAL	701
Likely Construction Area Amenity Value (\$)	1,636,198.56
Permanent Loss Area Amenity Value (\$)	5,948,520.04
TOTAL AMENITY VALUE (\$)	7,584,718.60



CITY OF MELBOURNE

MAPS OF OPEN SPACE AND TREE IMPACT

Flemington Road

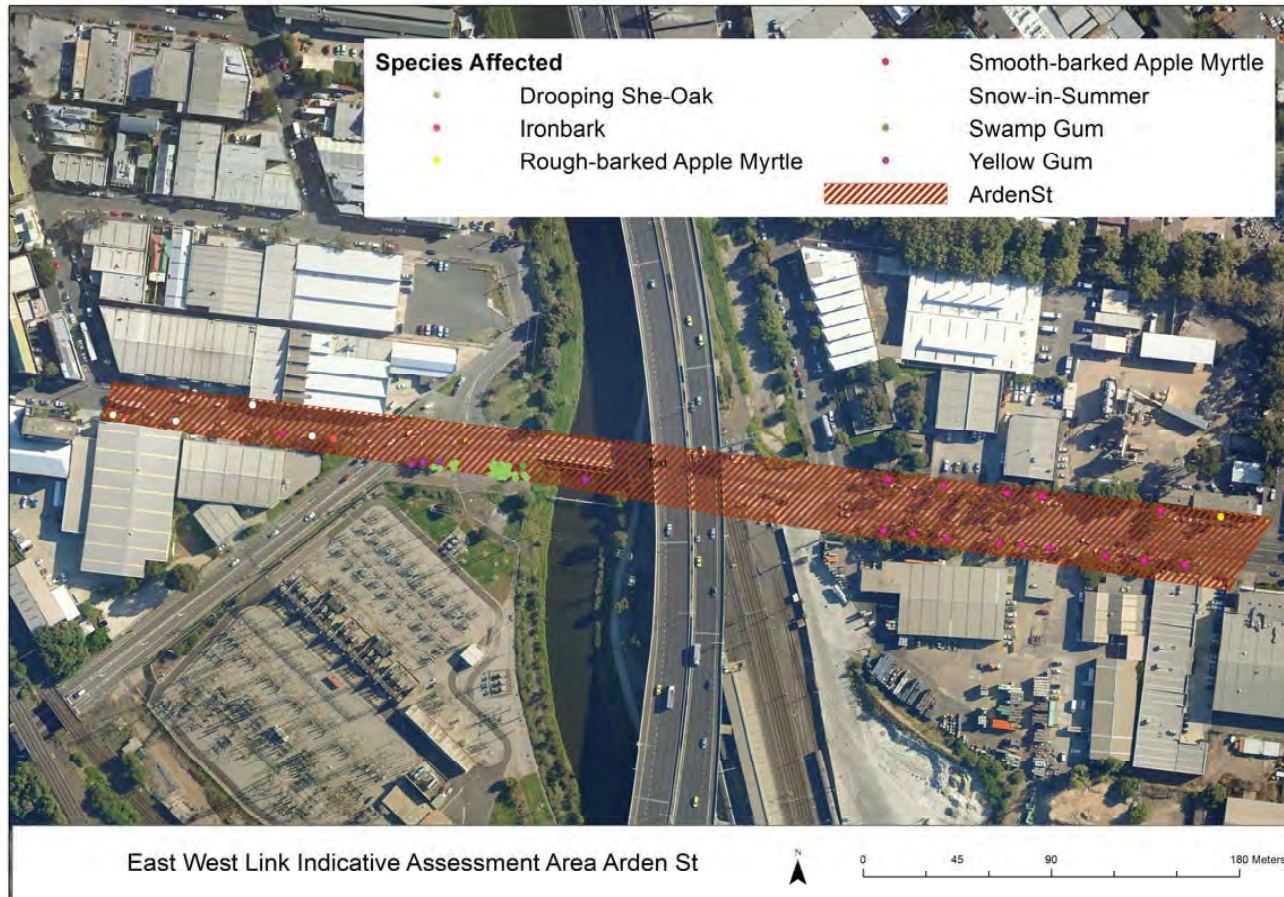


MAPS OF OPEN SPACE AND TREE IMPACT

Tree Species	Number of trees
Brush Box	5
English Elms	16
Green Leaf Elm	38
Lemon Scented Gum	5
London Plane	2
TOTAL	66
Amenity Value (\$)	2,592,997.00

MAPS OF OPEN SPACE AND TREE IMPACT

Arden Street

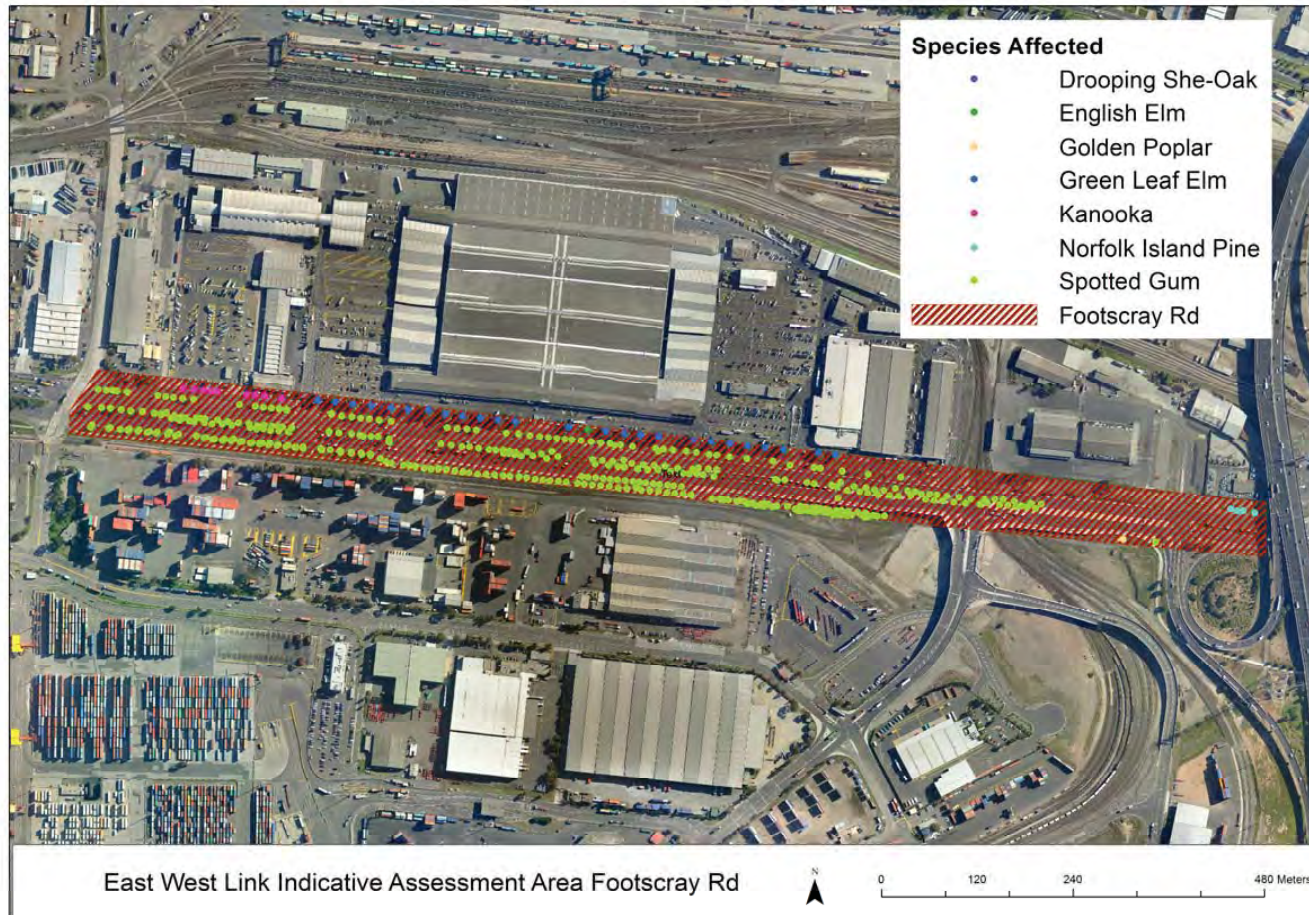


MAPS OF OPEN SPACE AND TREE IMPACT

Tree Species	Number of trees
Dropping She-Oak	24
Ironbark	2
Rough-barked Apple Myrtle	1
Smooth-barked Apple Myrtle	16
Snow in Summer	4
Swamp Gum	1
Yellow Gum	4
TOTAL	51
Amenity Value (\$)	239,937.00

MAPS OF OPEN SPACE AND TREE IMPACT

Footscray Road



MAPS OF OPEN SPACE AND TREE IMPACT

Tree Species	Number of trees
Dropping She-Oak	1
English Elm	1
Golden Poplar	1
Green Leaf Elm	25
Kanooka	9
Norfolk Island Pine	4
Spotted Gum	365
TOTAL	406
Amenity Value (\$)	1,609,179.30



Royal Park West

Habitat Protection Area proposed by the City of Melbourne



Approx. Scale 1:2000

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Sport and recreation short term needs



Sport and recreation other projects



TRIN WARREN TAM-BOORE WETLANDS, ROYAL PARK

AWARDS

- 2007 – Parks and Leisure Australia National Award. Water conservation and Management –Water fro an Active Future in a Dry City.
- 2008 - AILA Victoria - Award for Land Management in Landscape Architecture (City of Melbourne, Rush Wright Associates & Ecological Engineering)
http://www.aila.org.au/victoria/awards2008/trin_warren.htm
- 2010 – AILA National Award – The wetlands is one of the projects that contribute to the City of Melbourne’s national AILA Award for Landscape Stewardship
<http://www.aila.org.au/theaila/RoyalPark/default.htm>

INTERNATIONAL RECOGNITION (SELECTION)

- 2013 – Feature Article *_Paisea Landscape Architecture_ Waterscapes* Spanish Landscape Architecture magazine
- 2008 - ‘Scape, Dutch Landscape Architecture & Urban Design magazine as one of a number of Australian projects responding to the drought
- Eco landscape - Chinese Architecture Publication
- 2011 - Landezine online magazine
<http://www.landezine.com/index.php/2011/04/royal-park-wetland-by-rush-wright-landscape-architecture/>
- 2012 - SuDS Wales, Sustainable Drainage Systems
<http://www.sudswales.com/wp-content/uploads/2012/02/WaterSmartCities.pdf>

EDUCATION

- 2013 - University of Melbourne VEIL project
<http://www.sustainablemelbourne.com/models/royal-park-stormwater/>
- 2008 - Building a Water Sensitive City: Conference Paper to the 2008 Ecocity World Summit by Tony Wong, Rebekah Brown and Peter Breen
http://www.alchemicalnursery.org/index2.php?option=com_docman&task=doc_view&gid=175&Itemid=27



TRIN WARREN TAM-BOORE WETLANDS, ROYAL PARK

CITY OF MELBOURNE PARK RANGER EDUCATION PROGRAM (TERM TIME)

This park ranger education program for schools is based around two modules; water and habitat. Spaces in Royal Park West are activated as an outdoor classroom.

A module is delivered in 5 sessions lasting 2 hours each over a school term. The entire water module will not be able run without access to the Royal Park wetlands.

The habitat module cannot be delivered without access to the wetlands and skink habitat.

Our Education Program consists of 40 X 2 hours sessions per year with Primary schools and early learning centres with 30 kids per session on average. These programs are aligned with AusVELS and the Victorian Early Years Development Framework.

Our priority is to work with the more socially or economically disadvantaged schools in the municipality. For example 90% of the children from the primary school involved in the program in 2012/13 are from a non-English speaking background, with many coming from public housing and lower socio-economic backgrounds. The school itself has an extremely small, paved playground and the use of Royal Park West as an outdoor classroom has provided tangible and significant benefits to the children's wellbeing and behaviour.

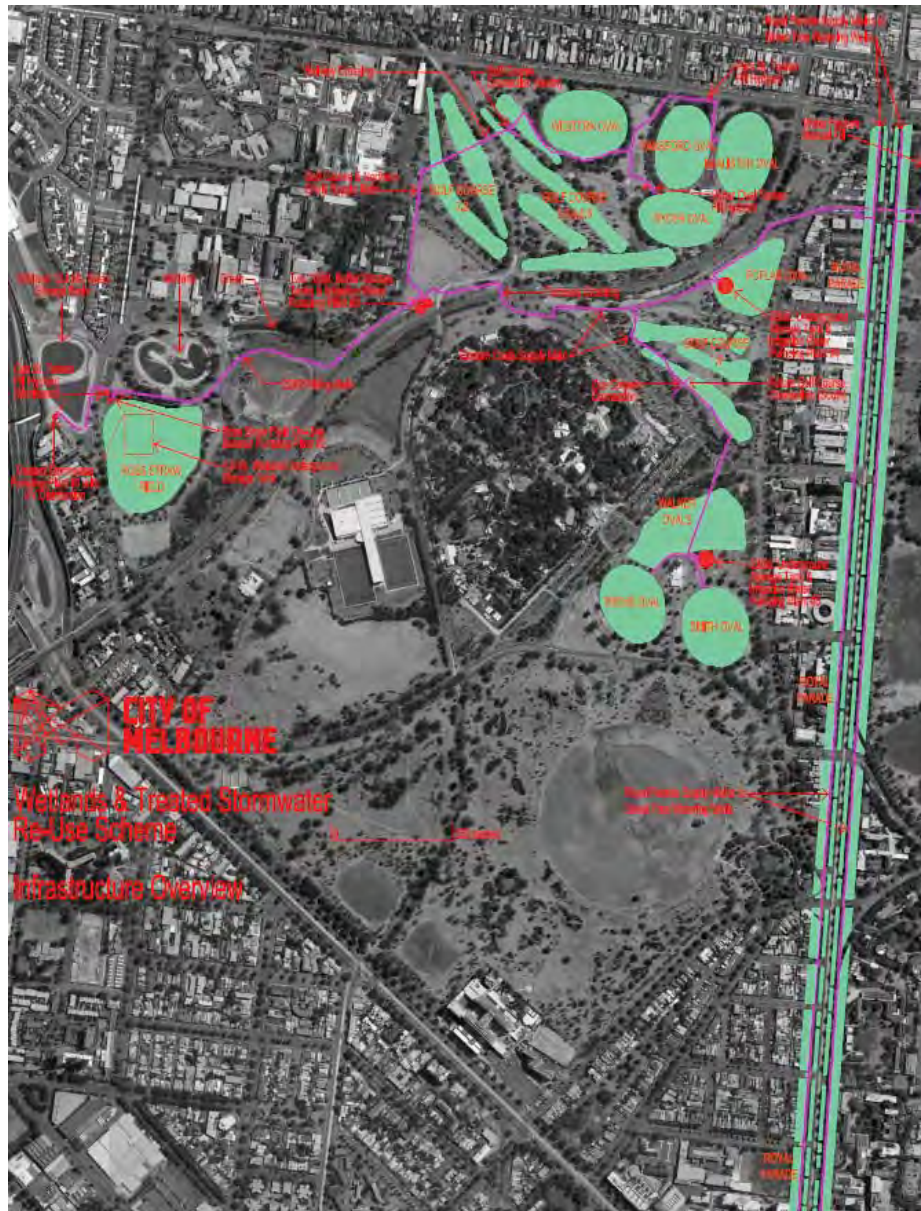
CITY OF MELBOURNE JUNIOR RANGER PROGRAM (SCHOOL HOLIDAYS)

In 2013, Junior Range programs were delivered to 400 children and their families in Royal Park. The majority of Junior Ranger programs have been designed and written around activities in the wetlands and skink habitat and cannot be replicated in other parks or areas of Royal Park.



TRIN WARREN TAM-BOORE WETLANDS, ROYAL PARK

STORMWATER IRRIGATION SYSTEM (CURRENT LAYOUT)



Cultural and Historic Significance of Royal Park

Prepared for the City of Melbourne

by Christina Dyson

September 2013

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Introduction

This Statement of Significance considers the cultural heritage values of Royal Park with a particular focus on the designed landscape. The assessment of significance was commissioned in July 2013 by the City of Melbourne on the basis that it would be based largely on the results and findings of the author's own doctoral research which is focussed on the post-WWII layers of development within Royal Park, in particular the Australian Native Garden in the south-eastern corner of Royal Park and the 1984 Master Plan. The principle objective for this Statement of Significance was to provide an assessment of the level(s) of significance and to identify key elements that provide evidence of that significance.

For historical background from the mid-nineteenth through to the mid-twentieth centuries this report draws on primary research as well as existing historical reports, studies, and notes. The chronology of historical events presented in this report as supporting information to the Statement of Significance identifies key events in the evolution of Royal Park. More substantial detail can be found elsewhere in existing historical investigations and notes. These include Kellaway and Summerton (2003), Georgina Whitehead (1998), Richard Aitken for the National Trust of Australia (Victoria) (NT File L10019, 2 May 1997), and WA Sanderson (1932)). Documentary, map, pictorial, and oral sources have also been utilised, as well as relevant registers at Heritage Victoria (the Victorian Heritage Register and Victorian Heritage Inventory). Community-based online heritage resources have also been useful. Other sources may bring to light additional historical information.

A comprehensive analysis of the physical context of the park was undertaken, with particular attention to the aspects of the park which most strongly reflect the design intent and philosophy of the 1984 Master Plan by the Laceworks Landscape Collaborative.

Professional opinions on Royal Park were sought from academics, landscape designers, and historians of twentieth century Australian design and landscape design, for additional evidence supporting an assessment of the significance of Royal Park against Criteria E and F (aesthetic significance) of the Victorian Heritage Register criteria. These included Bruce Mackenzie, Professor James Weirick, Professor Harriet Edquist, Jane Shepherd, Dr Andrew Saniga, and Kate Redwood. While not all who were approached responded, the responses received (3 out of 6) proved valuable in that they confirmed those respondents' earlier published critical acclaim for the Laceworks Landscape Collaborative 1984 Master Plan concept and 1985 Landscape Development Plan.¹

Professional opinion about the significance of Royal Park is also expressed in a recent position statement, prepared by the Australian Institute of Landscape Architects (AILA) Victorian Chapter in

response to the information on the East West Link project recently released by the Linking Melbourne Authority. The AILA position statement expresses concern about the impacts of the East West Link on existing and future open space and the long term quality of our inner city.²

Later twentieth century heritage is poorly represented on heritage registers. This is especially the case for designed landscapes and gardens. Docomomo Australia has begun to slowly remedy the issue with Australia's twentieth century built heritage, but there is a significant lag for landscape. Primary references for comparative analysis therefore have come from within the landscape architecture profession (Australian and international articles and texts on mid- to late-twentieth century landscape design), from peers and colleagues, and from the AILA.

No comprehensive assessment of individual plantings has been undertaken. However, information on significant trees undertaken separately by the City of Melbourne is included.

Aboriginal heritage is confined to existing studies. In the preparation of this report a recent study by Andrew Long & Associates, 'Royal Park, Parkville: An Aboriginal Archaeological and Historical Heritage Study' (June 2002) has been reviewed. Further, more recent due diligence has been undertaken by Council (2013) on two sites identified of possible significance in the Andrew Long report which fall within the East west link area. This investigation concluded that the one artefact that was found in the remnant vegetation site was a secondary deposit; that is, not in the original location and potentially part of digging or soil transfer around the area.³

Social significance is also confined to existing sources and identification of potential for social significance.

I wish to acknowledge the assistance of the following people in researching this report: Angela Hill, Ian Shears, Mary Chapman, Eamonn Fennessy and Cathy Kiss, (Urban Landscapes, City of Melbourne), Brian Stafford, Ronald Jones, Kate Redwood, Bruce Mackenzie, Harriet Edquist, Andrew Saniga, Colin McDonald, Michael Smith, and Ian Moad.

Statement of significance

The significance of Royal Park is complex and multi-layered and this is reflected in the structure of the statement of significance that follows.

What is significant?

The full extent of Royal Park set aside in the mid-nineteenth century and formally granted in 1876 (as shown on Map A, see Appendix 1). Features within and uses of the park that provide evidence of Royal Park's continued use as recreational parkland for passive and active recreation are also significant, but only insofar as they do not adversely impact upon elements of greater significance.

The stone cairn near Macarthur Road erected in Royal Park in 1890, some 200 yards (c.182m) from the supposed departure point of the 1860 Exploration Expedition by Robert O'Hara Burke and William Wills. It replaced an earlier and more informal memorial provided by an 'Explorers' Tree'.

The Royal Melbourne Zoological Gardens (Melbourne Zoo) and remnant plantings in Royal Park (south) associated with the long and continued use of the entire area of Royal Park from 1861 by the Melbourne Zoological Society and the Acclimatisation Society of Victoria for acclimatisation purposes.

Royal Park's association with both the Australian and American armies during WWII. Anzac Hall is already separately classified on the Victorian Heritage Register (VHR) as having State significance. This classification includes the vernacular sentry boxes, stone walling, and steps. Plantings and landscaping associated with Anzac Hall and military use of Royal Park should be included as part of the acknowledged significance of Anzac Hall.

Significant trees and plantings from the different historical phases of Royal Park include:

- Trees associated with the Acclimatisation Society of Victoria. Many of these trees represent the location of former plantations, pathways or fenced areas set aside as farm animal enclosures, planted between c1862–1900. *Eucalyptus cladocaylx*, *Eucalyptus camaldulensis* and *Pinus radiata* species are commonly noted
- Other trees which add significant landscape value. These trees are mature and healthy specimens, estimated to be planted between c1900–1940. *Ficus macrophylla*, *Eucalyptus maculata* are common examples
- Trees associated with WWII occupation of the site by the Australian and American military. These trees are in the vicinity of Anzac Hall and are remnants of the former layout.
- Remnant vegetation sites at Brens Drive and Royal Park west of Grassy Red Gum Woodland

These are shown on Map B (see Appendix 1).

Features and uses associated with Royal Park's long standing history of active recreational use, including the Brunswick Cricket Club (first permissive occupancy by 1882, which then lapsed before being reinstated in c.1890), the Royal Park Golf Course (c.1904), the Women's Dressing Pavilion (1937), the Ross Straw Field (c.1970), linear planting patterns (avenue plantings along drives and linear plantings around sporting fields), and improvements associated with and inspired by the 1956 Olympics.

Historical associations of Royal Park with locally and nationally significant Victorians and Victorian sporting groups who have played leading roles in developing some of the nation's sporting events and games, including cricket, athletics, and baseball. These include the Poplar Oval, the William J Brens Oval, the HG Smith Oval, Ross Straw Field.

The sign 'Royal Park' (painted metal finish on brick pedestal), at the entrance to Royal Park at Flemington Road and Elliott Avenue, commissioned in 1961.

The Australian Native Garden designed by Melbourne-based landscape designer Grace E Fraser (1921–2010) in 1974 and officially opened in 1977.

The layer of development in Royal Park associated with the 1984 Master Plan competition entry for Royal Park and the Royal Park Landscape Development Plan (1985), both prepared by the Laceworks Landscape Collaborative. The implementation of the 1984 Master Plan has been gradual and continues to evolve. Evidence of the design intent, principles, and philosophy of the 1984 Master Plan is particularly strong in certain areas which strongly reflect the intent of the design as a landscape analogy; of earth and sky, of the horizon, of unseen expanses beyond the horizon, of grassland, woodland, and wetland. These areas are shown on Map C (see Appendix 1). Map C attempts to show landscape elements and spatial experiences associated with the 1984 Master Plan which were contrived and challenging to create yet intended to seem 'spontaneous and casual' (1984 Master Plan) and are difficult to map in two dimensions. These elements and spatial experiences include the creation of voids in the process of editing and clarifying the landscape with the objective of revealing existing native trees and evoking a natural landscape, earthworks and contour planning undertaken to sculpt level changes to better evoke a natural landscape, contrasting areas of open and enclosed space throughout the Park to create distinct spatial experiences, the intent for Royal Park to be a bold expression of the earth, sky, horizon, and distance to complement the built fabric of Royal Park's urban context and the other cultivated city gardens and streetscapes of the City, and enhanced use for passive in addition to active recreation.

The documentation and drawings (in a private collection) for the design concept by Brian Stafford, Ron Jones, and, from 1985, with artist Maggie May (c1943–2000) which articulate and illustrate the concept.

Recent landscaping works along the southern side of the Capital City Trail, to the south and west of the State Netball & Hockey Centre, on the former Royal Park West nursery site, and in the north of Royal Park, are sympathetic to the 1984 Master plan concept. The planting along The Avenue perimeter, much of which pre-dates the 1984 Master Plan contributes strongly to the significance of the 1984 Master Plan layer.

How is it significant?

Royal Park has local historical significance to the City of Melbourne. Features within and uses of Royal Park that relate to the Park's continued use as recreational parkland contribute to this aspect of the Park's significance. (Criterion A)

Royal Park is of local historical significance for its direct association with explorers Robert O'Hara Burke (1821-1861) and William John Wills (1834–1861), who departed from Royal Park on their Australian exploring expedition in 1860. (Criterion H)

'The Royal Melbourne Zoological Gardens are of social, historic, architectural, aesthetic and scientific significance to the State of Victoria.' (VHR H1075) Remnant plantings throughout Royal Park (south) associated with use of the wider park area by the Acclimatisation Society of Victoria are also historically significant to the State of Victoria.

Anzac Hall and its associated elements have previously been listed for their historical and social (and architectural) significance to the State of Victoria (already listed.)

Sporting features within and uses of Royal Park associated with nationally significant Victorians and Victorian sporting groups who have played leading roles in developing some of the nation's sporting events and games, including the Brunswick Cricket Club (established in the late nineteenth century), Julius Lockington 'Judy' Patching (athletics) and Ross Straw (baseball) are of historical significance to Victoria. (Criterion A) The William J Brens Oval, the HG Smith Oval, and the Australian Native Garden are of local historical significance. (Criterion A)

The 1961 sign at the Elliott Avenue entrance to Royal Park off Flemington Road is of local historical significance. (Criterion A)

The Australian Native Garden within Royal Park has local historical and aesthetic significance. The Australian Native Garden has associative significance to Victoria for its direct historical associations

with prominent Melbourne landscape designer Grace Fraser and Australian test cricketer Colin C McDonald, later a Councillor for Melbourne City Council. (Criteria A, D, E, H.)

The layer of development associated with the 1984 Master Plan is of aesthetic significance to the State of Victoria. Areas and features which clearly demonstrate the intent and design principles of the 1984 Master Plan concept and 1985 Landscape Development Plan are of exceptional value to this aspect of the Park's overall significance. (Criteria E and F) The documentation and drawings (in a private collection) for the design concept by Brian Stafford and Ron Jones for the 1984 Master Plan, and, from 1985, by artist Maggie May (c1943–2000) which articulate and illustrate the concept are also of exceptional value.

Why is it significant?

Royal Park is historically significant to the development of Melbourne as part of the original vision for the city by the Melbourne Corporation (from 1844) and the colonial administration which resulted in the reservation of a large tract of land in North Melbourne along with areas set aside for parks and gardens around the city for use as places of public recreation and amusement, by Governor La Trobe. Although the original boundaries have been incrementally modified by subdivision at the Park's edges, and reservation of land for road, railway, and tramway, Royal Park remains largely intact as formally gazetted in 1876 and continues to function as a substantial tract of open parkland for public recreation as originally intended. These initial mid-nineteenth century steps eventuated in a system of public parks and gardens which have become a significant part of how Melbourne as a city has fashioned its identity as a civilised city in a national and international context. The majority of these parks are designed with a formal aesthetic and reflect Australia's English and European heritage, and use predominantly exotic species—although from the nineteenth century, indigenous trees were retained and trees native to Australia were beginning to be trialled by gardens' curators from the early twentieth.⁴ The qualities celebrated in Melbourne's other parks and gardens were not cultivated in Royal Park and consequently Royal Park did not feature in this self-fashioned aspect of the city's identity. Somewhat serendipitously however, this marginalisation inadvertently protected the ostensibly natural landscape character of Royal Park until the right set of circumstances combined for this to be determined an acceptable aesthetic for urban parkland.

Royal Park earned national status for its direct association with the Burke and Wills exploration expedition which departed from Royal Park in 1860, in spite of the fact that the majority of the expedition, nationalistic and celebratory episodes, and criticism occurred outside the Park. (Criteria H and A) Royal Park is featured in mid-nineteenth century works of art that record the nationally

celebrated event by prominent artists working in Australia at that time; including by artist William Strutt (1825–1915), 'The parting cheer: Richard [sic] O'Hara Burke at the head of the exploring expedition leaving Royal Park 20th Aug. 1860'⁵, and by Nicholas Chevalier (1828–1902), *Memorandum of the Start of the Exploring Expedition*, MJM Carter Collection 1993, Art Gallery of South Australia. While the event gained national recognition and Burke and Wills have gained status as national heroes, the cairn is one of a suite of memorials constructed from 1860 across Australia with substantially the same association. Burke and Wills also occupy a long-entrenched and ambivalent place in Australia's history and formulation of national identity. They were elevated to the status of myth for their perceived success while later also criticised for having failed to come to terms with the Australian environment. The presence of the Cairn in the context of a designed landscape that attempts to symbolise c.125 years of attempts by non-Aboriginal Australians to know and come to terms with Australian landscapes (resulting from the 1984 Master Plan) exemplifies Australia's cultural ambivalence towards, and diversity of views about, the success/failure of the expedition which continue to co-exist in the present-day.

Remnant plantings in Royal Park (south) provide evidence of the use of the entire area of Royal Park from 1861 by the Melbourne Zoological Society and the Acclimatisation Society of Victoria for acclimatisation purposes.

The Anzac Hall and elements and spaces associated with the military use of Royal Park are significant for their association with Australia's involvement in the Second World War. Areas of Royal Park (south), including along Flemington Road, were used as a staging camp for US troops en route to the Pacific. After the war these areas became the principal demobilisation centre for all Victorian service personnel and were later used by the Housing Commission of Victoria for emergency housing. Royal Park (north of Kendall Avenue) was in continuous use as a sporting and recreation precinct during this time.

The Brunswick Cricket Club (c.1882), the Royal Park Golf Course (c.1904), the Women's Dressing Pavilion (1937), the Ross Straw Field (c.1970), and improvements associated with and inspired by the 1956 Olympics are historically significant to Victoria for the evidence they provide of Royal Park's long standing history of active recreational use and association with major national and international sporting events (including the 1938 Empire Games in Sydney, the 1956 Olympic Games in Melbourne, the Melbourne 2006 Commonwealth Games) which have shaped and reflect the passion and enthusiasm for sport among Australian society.

The significance of the Women's Dressing Pavilion is already recognised on the Victorian Heritage Register (H 1585) for its significant role in the advancement of women's athletics in Australia from the 1930s and into the 1950s and 1960s. Royal Park is historically significant for its association with Julius Lockington 'Judy' Patching (1917–2009). Patching was a significant figure in the development of athletics in Australia to international and Olympic competition levels. Patching had a long involvement in the Australian Olympic movement from 1947, and was a starter at the 1956 Melbourne Olympics and played a pivotal role during a time in which Melbourne was the hub city of world sport and at a time during the 1950s when 'thousands of athletes' would be gathered at Royal Park. From the 1960s, these roles were undertaken by Patching in an honorary capacity while he was Superintendent of Recreation at the City of Melbourne (under Town Clerk, Francis Rogan).

The Ross Straw Field, Manningham Street, Royal Park is historically significant as the first dedicated baseball field created in Australia (c.1970). Prominent Australian baseball player, coach, captain, and later administrator, Ross Straw, a major figure in Australian, international, and Olympic baseball (Straw coached and captain the 1956 Olympic Baseball team), was instrumental in efforts to create the field in Royal Park.

The William J Brens Oval, the HG Smith Oval, and the Australian Native Garden are historically significant for their associations with locally significant Victorians who have played leading roles in the development of the City of Melbourne's parks and gardens for active and passive recreational use. These include City of Melbourne Councillors HG Smith (Lord Mayor 1931–34), William J Brens (Lord Mayor 1952–53 and long standing member and chair of the Parks, Gardens and Recreations Committee), and Colin C McDonald (Australian Test cricketer, world cricket's No. 1 ranking batsman in 1959, City of Melbourne Councillor (1968–197?), and member and chair of the City of Melbourne, Parks, Gardens and Recreations Committee). The significance of the historical associations of the Ryder, McAlister and Ransford ovals requires further research.

The sign at the entrance to Royal Park at Flemington Road and Elliott Avenue is significant for its association with the City's conscious attempts to refashion its identity as sporting and modern in the wake of the 1956 Olympics.

The Australian Native Garden, Royal Park, Melbourne was the first defined and professionally designed area of public parkland within the City of Melbourne 'devoted exclusively to the growing of Australian flora'⁶ at a time when all other parks within this local government area were described as 'developed in the pure English pattern of landscape design'.⁷ The Australian Native Garden is neither as large nor as early as other similar native plant gardens elsewhere in Australia of the 1960s and

1970s, which shared the objective of displaying the uniqueness and beauty of the Australian flora to visitors. While the Australian Native Garden was developed later and with more modest goals than comparable contemporary examples, it represented an important step for the City of Melbourne. While seeming modest and tentative relative to the later 1984 Royal Park Master Plan, the semi-formal Australian plant garden with sweeping lawns, serpentine pathways, densely planted garden beds, rock work, interconnecting pools, and specimen trees designed by Grace Fraser and implemented by Council is important for having paved the way for the acceptability by Council and the local community of the more daring design that followed. The Australian Native Garden is significant for its direct association with two prominent Victorians: landscape designer Grace Fraser and Australian test cricketer Colin C McDonald. A survey of landscape architects conducted in 1999 by the Australian Institute of Landscape Architects indicates that Grace Fraser's work in Victoria was important for having influenced a number of contemporary practicing landscape architects, in particular for how her design work combined a conservation ethic. From the late 1960s to the 1970s McDonald was a Councillor for Melbourne City Council and member and sometime Chair of Council's Parks, Gardens and Recreations Committee. McDonald was responsible for first proposing that a garden devoted to growing Australian flora be considered by the Parks and Gardens Committee of Melbourne City Council.

Royal Park as a whole is significant for its design philosophy and its physical expression of the 1984 competition winning Master Plan concept by the Laceworks Landscape Collaborative (Brian Stafford and Ron Jones), which continues to be gradually implemented.

The design is acclaimed for its bold expression of the earth, sky, horizon, and distance to complement the built fabric of Royal Park's urban context and the other cultivated city gardens and streetscapes of the City. The contrast of open and enclosed space throughout Royal Park and the juxtaposition of the more intimate spaces of the neighbourhood parks (the Australian Native Garden, the Billabong, for example [the neighbourhood park in the north of Royal Park, Park Street, appears not to have been developed]) with the larger-scaled spaces (the Grassland, for instance), accentuate the natural landform and convey a sense of the power, vastness, spareness, and the openness of the Australian landscape. The relationship between these two distinct kinds of spatial experiences is important.

For its time, the 1984 Master Plan's approach of editing and clarifying the landscape with the objective of revealing existing native trees and evoking a natural landscape, the earthworks and contour planning undertaken to sculpt level changes to better evoke a natural landscape, was unusual in its simplicity (relative to the other competition finalists and when compared

internationally with new directions in post-modernist landscape architecture such as the Parc de la Villette in Paris (1983) and perceived locally as daring. The 1984 Master Plan has parallels to the English landscape design of Lancelot 'Capability' Brown, in its simplicity, in allowing the land form to speak over and above the planting detail, which was to be subordinate to the overall landform and landscape experience, and use of plants more as a back up to the overall concept, not the focus. Parallels can also be seen in the work of Frederick Law Olmsted (1822–1903) in Central Park, New York (with Calvert Vaux, from 1857), and with Hampstead Heath in London, through its use of boundless open space and attempt to evoke a natural landscape at the edge of a metropolis, and with Olmsted's linear system of parks in Boston and Brookline, Massachusetts (the Emerald Necklace, c.1878). The 1984 Master Plan conceived Royal Park as part of a larger integrated metropolitan park system, as a symbolic and actual 'continuity of landscape through the city and inner suburbs' and linking the Maribyrnong and Yarra river valleys.

The design is highly acclaimed nationally by the Australian Institute of Landscape Architects, members of the landscape design profession and professional peers, as evidenced by published critical recognition from the mid-1980s in the journal *Landscape Australia*, when the competition winner was announced, and a critical review of the design in 1992 by Harriet Edquist and Vanessa Bird (Edquist 1994). In 2010, Royal Park was the subject of high professional acclaim by the Australian Institute of Landscape Architects when the City of Melbourne was awarded for its stewardship of Royal Park as a nationally significant landscape. In the award citation, the design for Royal Park—which originated in the 1984 Master Plan—and its philosophy are considered 'pivotal in the emergence of a local landscape consciousness', embrace of the indigenous environment, and realisation of a distinctively Australian design vocabulary.

The 1984 Master Plan concept for Royal Park is significant for its attempt to express, in a non-figurative way, aspects of Victoria's environmental history and the formulation of an Australian identity related to landscape. Themes it addresses are the shifting understanding and appreciation of the natural environment, and the historical and ongoing dynamic relationship between people and the land over time—from Burke and Wills' ill-fated expedition through 'all subsequent attempts to know and come to terms with Australian landscapes'.

Potential for social significance

Royal Park, its natural and rural landscape character, its juxtaposition with the surrounding city, and space for passive recreation have potential for social significance at a local level demonstrated by the long-standing, committed, and continued action to protect Royal Park by local community

environmental action groups in the later part of the twentieth century.⁸ (This value has not been formally investigated or tested.)

The sporting facilities, pavilions, and playing fields in Royal Park, and the Park's historical association with significant people and events in Australia's sporting history have potential for local and/or state social significance to the sporting groups who have long used Royal Park for active recreation purposes. This could include but should not be limited to the areas in the north of the Park, north of Elliott Avenue and Macarthur Road, the Manningham Street Reserve, Poplar Oval and the Women's Dressing Pavilion, the Royal Park Golf Course, and the State Netball and Hockey Centre for its role in the Melbourne 2006 XVIII Commonwealth Games. (This value has not been formally investigated or tested.)

Integrity

The integrity of Royal Park is high. As already noted above, although the original boundaries have been incrementally modified by subdivision at the Park's edges, and the reservation of land for road, railways, and tramway, Royal Park remains largely extant and continues to function as a substantial tract of open parkland for public recreation as originally intended and articulated in the 1876 Grant.

The integrity of the 1984 Master Plan concept is also high. However, as a dynamic and evolving landscape, and due to the large scale of the site and the incremental investment by Council, Royal Park according to the 1984 Master Plan concept is not yet fully formed and continues to evolve.

Areas where the integrity of this 1984 Master Plan layer of development is lower or less evident include:

- the immediate vicinity of the State Netball & Hockey Centre and two associated pitches and carpark, including the view from the No55 Tram.
- Narrow strip of land between the railway line and the McPherson Baseball field (over-grown, exotic grasses); likely to be railway/Department of Infrastructure land.
- The Royal Children's Hospital, Flemington Road.

Supporting information

Historical notes¹

Royal Park

1835–1862: The area that would become known as Royal Park was managed by the Lands Department.

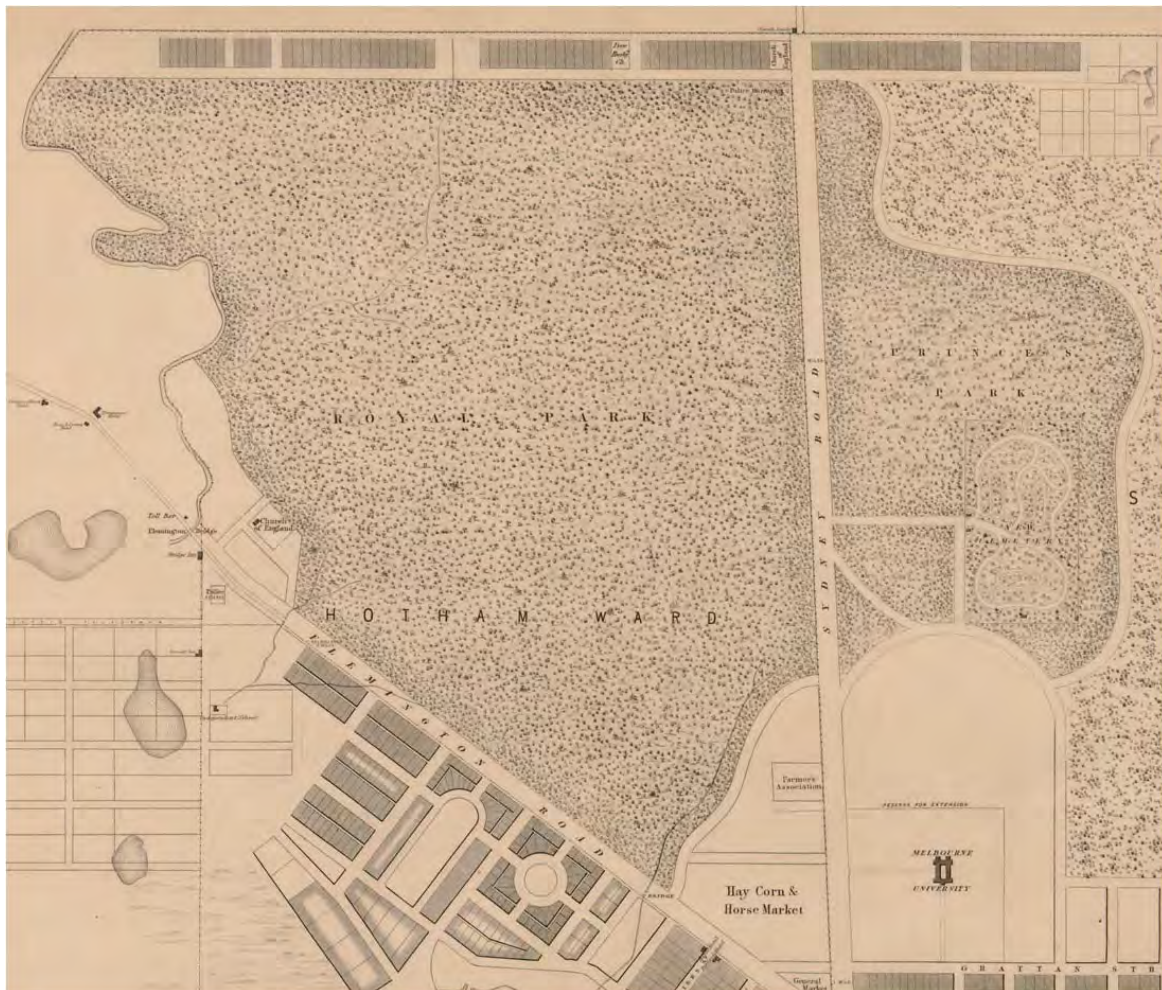
*1838: Land north of the Melbourne town reserved (for a distance of approximately 18 miles north of the town reserve boundary of Victoria Parade) surveyed by Robert Hoddle into one mile squares; the land between Melbourne and Brunswick remained largely undeveloped, perhaps a conscious decision to leave space for township expansion.⁹

*1850: Council application for reservation of an area of 2560 acres or four square miles taking in the present Royal Park, Princes Park and the Melbourne General Cemetery, application apparently not approved by La Trobe until 5 May 1859, the eve of his departure from the colony; 'La Trobe had previously argued to Gipps that the loss to the government from reserving parkland would be partly offset by the enhanced value of allotments fronting the park. Rather than allow the owners of the farmlands north of Brunswick Road to reap the financial benefits of the park frontage, it seems to have been decided to layout the new east-west line of Parkside (later Park Street) and to sell the strip of land between this and Brunswick Street in normal residential allotments.'¹⁰

1850s: The Walmsley House, one of 36 prefabricated iron houses brought from England to Victoria by Victoria's colonial government. Presumed to have been the home of Frank Meaker from 1862. Meaker was employed by the Acclimatisation Society of Victoria as a Bailiff or Ranger for Royal Park and later for the Zoo. [VHR: H1946]

*1855: Kearney's plan shows Royal Park, with three chain reservations for Flemington Road (east of the bridge over Moonee Ponds Creek) and Sydney Road (south of Brunswick Road); a reserve now occupied by South Parkville (with a large site for a 'Hay, Corn & Horse Market' and a smaller one for the 'Farmers Association'); and the nucleus of West Parkville (although these allotments were not sold until later).

¹ * Denotes material drawn from the National Trust of Australia (Victoria) file on Royal Park, L10019. Notes prepared by Richard Aitken, May 1997.



Detail of the 1855 Kearney plan of Melbourne and suburbs, showing Royal Park (already named) bounded by Flemington Road and the site used by the Farmers' Association and the Hay, Corn & Horse Market to the south, the Moonee Ponds Creek to the west, what is now Park Street to the north, and Sydney Road (now Royal Parade) to the east. 'Melbourne and its suburbs [cartographic material], compiled by James Kearney, draughtsman; engraved by David Tulloch and James D. Brown, [Melbourne], Andrew Clarke, Surveyor General, 1855'
The University of Melbourne, Maps of Melbourne Collection

1860: Royal Park used as the departure point for the Burke and Wills expedition. Commemoration of the event in Royal Park began as early as 1860, when a fence was placed around a tree growing near the place of departure. This tree became known as the 'Burke and Wills tree.'¹¹

*1858: Experimental Farm on 142 acres set aside in 1858 at the north-west corner of the site; plan prepared December 1859, farm leased and eventually abandoned for institutional purposes.

1861: Formation of Zoological Society in 1857; reconstituted in 1858 as a committee appointed to administer the Zoological Gardens (then located in Richmond opposite the Botanic Gardens); committee disbands in 1861 in favour of the newly formed Acclimatisation Society of Victoria; Zoological Gardens moves to present site in Royal Park in 1860; trustees enclosed an area of a little

over 20 hectares near the centre as a zoological gardens. In 1861 the whole park area of about 223 hectares at Royal Park was used by the Acclimatisation Society of Victoria to accommodate its herd of alpaca llamas as well as some camels and antelopes which the government had placed in its



The start of the historical exploring expedition by Burke and Wills in 1860, departing from Royal Park, Melbourne. Photograph from the picture by N. Chevalier (1828–1902), from c.1890. State Library of Victoria, H18241

charge. Resistance to the permanent reservation of the land for Acclimatisation purposes, led by EG Fitzgibbin, the Town Clerk of Melbourne, was successful, and represented the first of a series of battles to prevent the whittling away of the parkland of Royal Park.¹²

1862: 50 acres of Royal Park enclosed by the Acclimatisation Society's for the Zoological Gardens (now Melbourne Zoo).¹³

1863: 9 July 1863. W Watson, Sec to the Board of Agriculture requested that the land known as the Experimental Farm be permanently reserved and a grant issued to trustees with power to lease the land.¹⁴

1863: Lease of the Farm was granted to Josiah Mitchell until 1 April 1870. Leasehold covered 130 acres. Mitchell, the lessee, had to carry out a certain amount of experimental farming on the property.¹⁵ Josiah Mitchell fulfilled his requirements as a lessee, as revealed by Paul Fox's research (2004).¹⁶ Josiah Mitchell gave up possession of the Experimental Farm in 10 April 1875.¹⁷

*1868: Land excised from Royal Park along Sydney Road for villa allotments (east of The Avenue).¹⁸

*1870: Land west of Manningham Road sold, following a long period of use on leasehold basis. [no ref provided in NT notes, NT File: L10019]

*1874–75: Industrial School erected in Royal Park.¹⁹

1875: 10 April 1875. Josiah Mitchell gave up possession of the Experimental Farm.²⁰

*1875–78: Land between Park Street and Gatehouse Street, South Parkville, surveyed and sold.²¹

1876: 6 November 1876, Royal Park grant officially gazetted: ‘that said land hereby granted and the buildings for the time be thereon shall be at all times hereafter maintained and used as a Public Park.’²²

1882: Permissive occupancy by the Brunswick Cricket Club—northeast section of reservation.²³

*1882: Industrial School buildings and site transferred to Immigrants’ Aid Society to be used as a benevolent home.²⁴

*1884: Upfield railway line opened (as far as Coburg) with current route north of the zoo after proposed route south of the zoo had been abandoned. [no ref provided in NT notes, NT File: L10019]

1890: Fence was removed from the Explorer’s Tree and a stone cairn is erected 200 yards east of the tree, close to Macarthur Road, with ‘a suitable inscription as a memorial of the event.’²⁵

c.1890s: First lease/reservation to Brunswick Cricket Club in the northern section of Royal Park.

1904: On 17 August 1904, the Royal Park Golf Club applied and was formally accepted to become a registered club with the Victorian Golf Association. By 1906 a clubhouse and greens were constructed. The Club’s history (1950) states that the grounds were originally larger than the present-day, making a circuit of the Zoo and continuing over the Moonee Ponds Creek.²⁶

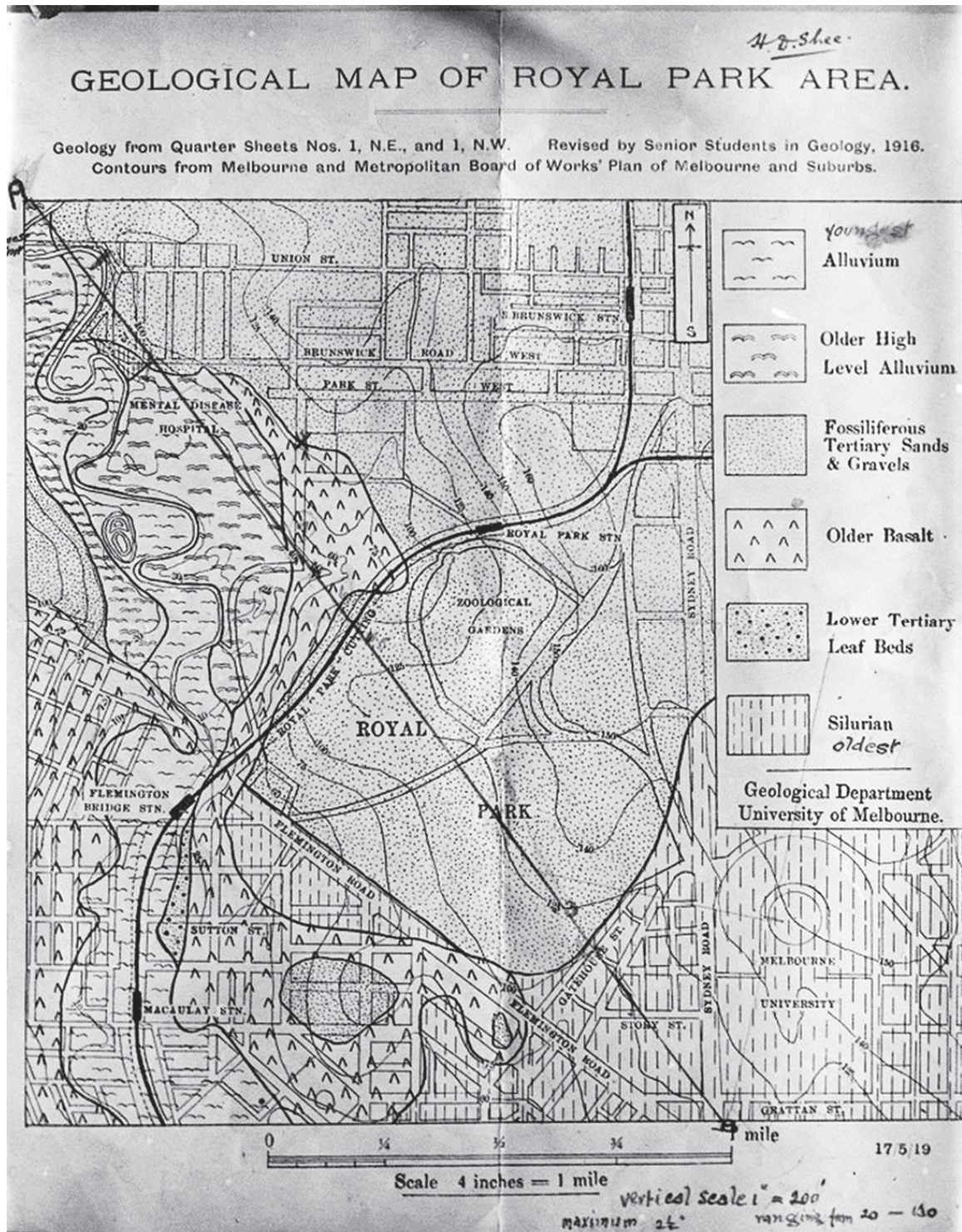
*1905–7: Royal Park Psychiatric Hospital erected.²⁷

*1914–18: part of Royal Park used for military camp.²⁸

*1926: Tram line to Brunswick through Royal Park (not gazetted).

1935: Golden Wynch Elm over the Walmsley House planted [VHR: H1946]

*1936–41: Royal Melbourne Hospital constructed.²⁹



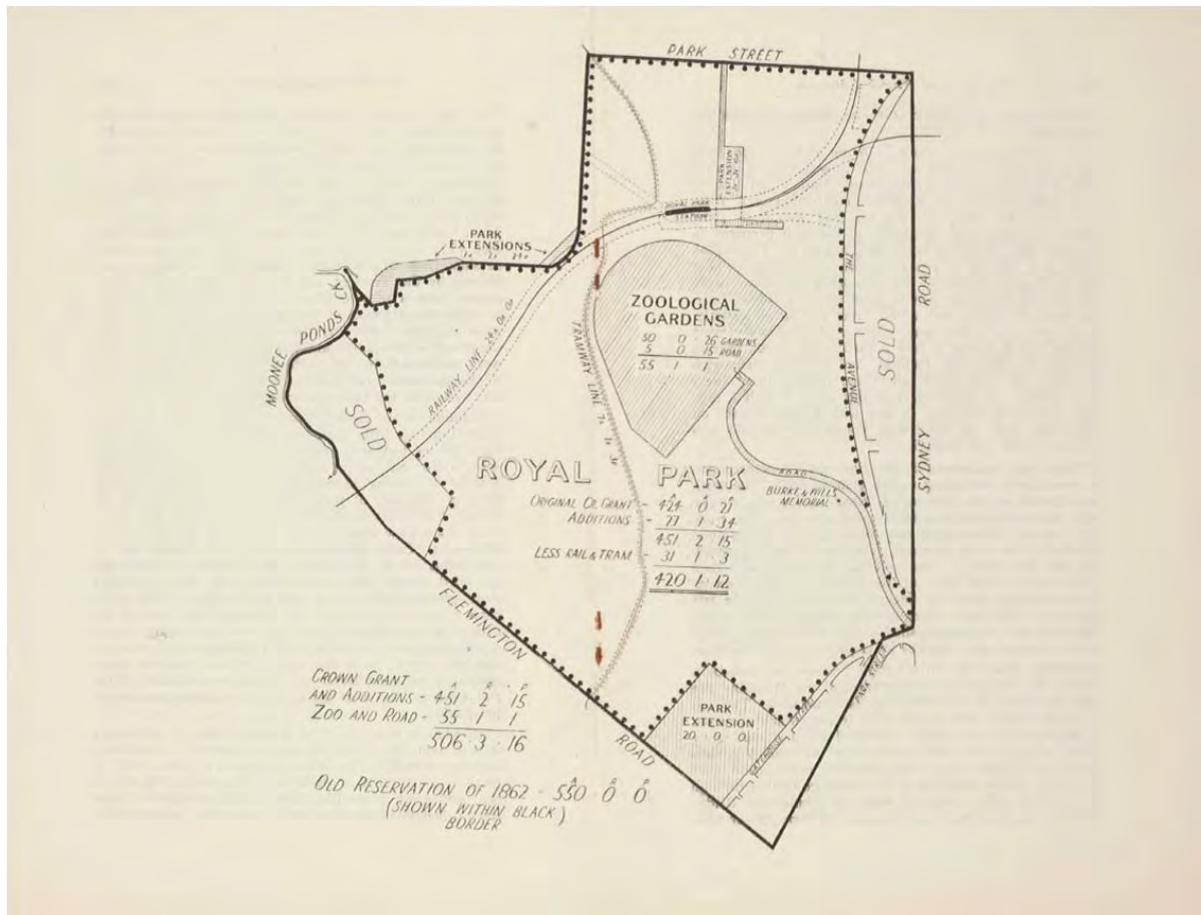
1916 Geological survey of Royal Park. (Courtesy City of Melbourne)
 State Library of Victoria, H84.461/161



Left: The cairn erected in Royal Park in 1890 to mark the approximate spot from which the expedition left Melbourne. 'Burke and Wills monument, Royal Park', c.1898. Glass lantern slide with hand colouring. Note on label adhered to slide mount: Colored by T.W. Cameron, 110 Lygon St, Carlton, Victoria. Right: A gathering at the cairn to mark the 1905 anniversary of the Burke and Wills expedition, photograph by TW Cameron.

State Library of Victoria, MS13867/8 and 10381/170477

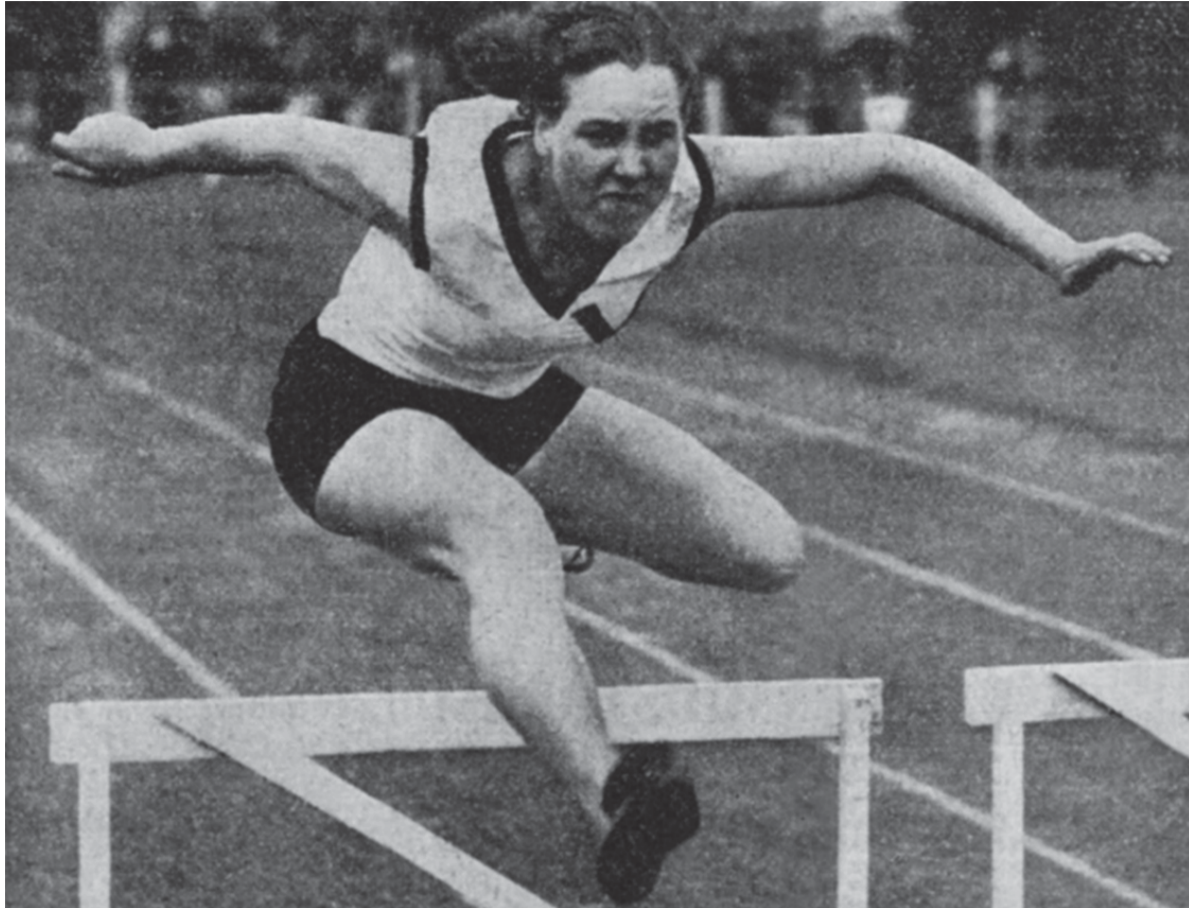
1934–37: '... in March, 1934, men employed by the Council on work in return for sustenance were engaged in sieving soil removed from the Queen Victoria Market to Royal Park, alongside what was then a Park maintenance depot at the corner of Gatehouse Street and The Avenue, Parkville (now the Australian Native Garden). The object of the work was to retrieve whatever human remains were in the soil.'³⁰ Complaints were made to Council that bones recently exhumed from the Victoria Market site from the Old Melbourne Cemetery (1837-1922) were being dumped by Council on the City Council's spoils heap near the Parkwood Presbyterian Church (possibly the former College Church) in close proximity to the former Council depot at the rear of The Lodge on the corner of Gatehouse Street and The Avenue (now the Australian Native Garden).



Analysis of the boundaries, subdivision and reservation of land for roadways, railway and tramway of Royal Park by historian WA Sanderson, 1932.³¹

1935–36: the cottage now known as Southgate Lodge, 2A Manningham Street, Parkville, in the southwest corner of Royal Park was purchased by Council and moved to its current site from 32 Pitt Street, Flemington. A construction date for the building is estimated as c.1920. [Not individually listed and not recommended for listing in Heritage Alliance report (2011)]³²

1937: Women’s Dressing Pavilion, also known as Poplar Oval Pavilion, constructed by the City of Melbourne for the ‘express purpose of providing facilities for women.’ At the same time, ‘a cinder running track over sown with grass, a hurdle track and a high jump pit were also created on the adjoining oval.’ In December 1937, these facilities were the location of the Australian Women’s Athletic Championships, from which athletes were selected for the Empire Games in Sydney, 1938, where a number of Australian women won medals for athletics. [Listed on the Victorian Heritage Register 2007 (H 1585).]



Photograph showing 'Miss I Grant (Victoria) skimming the hurdles and dashing to win the first heat of the 90 yard hurdles championship at the Australian Women's Athletics Championships at Royal Park.' (*The Argus*, Thursday, 9 December 1937) Grant went on to take second place in this event in the 1938 British Empire Games.

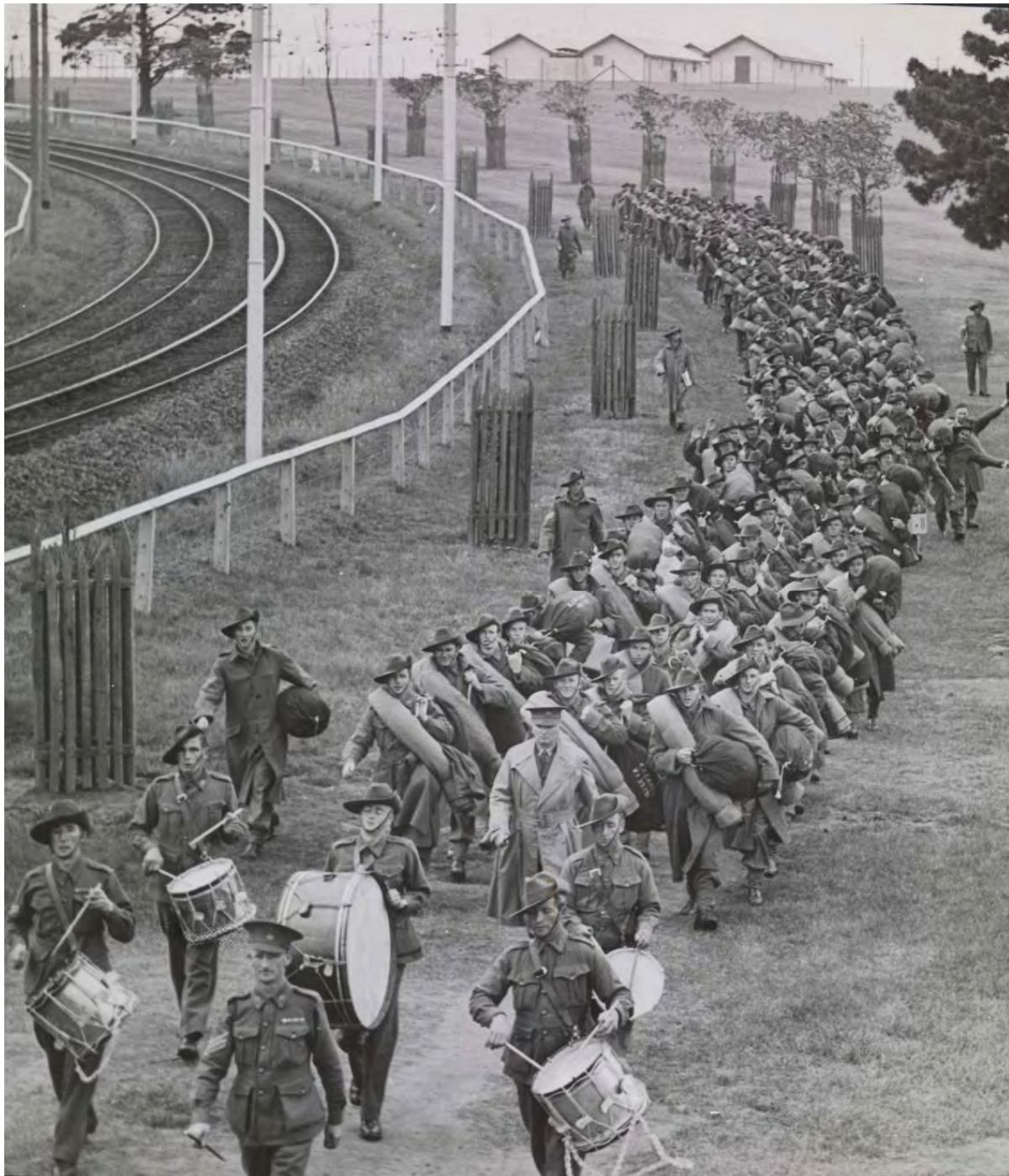
State Library of Victoria [Courtesy City of Melbourne]

*1939–45: Part of Royal Park (south) used for a military camp. Former army drill hall now used as an urban camp providing low cost accommodation to schools, community groups and sporting groups.³³

1940–41: Anzac Hall and associated landscaping works and sentry boxes constructed. It is presumed the stone walling along the Brens Drive frontage to Anzac Hall, and gate piers at Brens Drive, and some of the exotic vegetation on the opposite side of Brens Drive to Anzac Hall which was formerly used as a parade ground, date from this period.

*1950: Children's Hospital site excised from Royal Park. [Gazetted 1950, p.1743]

1955/56: During the financial year 1955/1956, an area of approximately 350 acres of Royal Park (south) was handed back to Melbourne City Council, ending a fifteen year period of intensive use of Royal Park by the Military and the Housing Commission of Victoria. The Park was not fully vacated by the military until 1961.³⁴



The 17th Brigade in early 1940 marching alongside the tram tracks towards the Royal Park railway station on their way via troop ship to overseas service. (Royal Park, Melbourne, c.1940)
State Library of Victoria, Argus Collection, H98.101/2056

1957: Works began to remedy the deteriorated park environment. Early works were focused on the 'conversion' of Royal Park 'to an outstanding sporting area. Rotary hoeing of the whole area totalling 480 acres was commenced and 500 trees planted. It was hoped that by the end of 1957 the area would be cleaned and reinstated as parkland.'³⁵

1955–68: Early programmes of works tabled/discussed at the Parks and Gardens Committee meetings in relation to Royal Park from 1955 reflects a national preoccupation with sport, and sporting facilities and space for active recreation. These kinds of facilities formed the major part of all Committee discussions relating to Royal Park until 1968. Works included renewal of sporting and recreation facilities, and from the Council minutes, while a longer-term plan or vision for the landscape and recreation facilities is alluded to in the 1961/62 Annual Report, the considerations recorded at PGR Committee meetings suggests much of the early activity was reactive, responding to requests for new buildings and facilities and grounds from different community and sporting groups. The project of reclamation and renewal as outlined in the 1961/62 Annual Report is ambitious in scope and unequivocally sport focused, reflecting an enduring interest in sport in anticipation of and associated with the wake of the 1956 Melbourne Olympics. 'Catering for people of all ages including keen athletic types, the parks and gardens administration must take into the changing fashions in sport ... the Royal Park project is the single biggest reclamation project the Parks and Gardens Committee has ever carried out, and after five years' work it is now nearing completion. It will include a full-sized cricket and football ground, two junior grounds, plus 19 cricket pitches, 14 football ovals, eight soccer fields, three baseball fields, two children's playgrounds, 47 basketball courts, 10 hockey fields and a general tree planting and long-range beautification scheme.'³⁶

1961: Reflecting a new phase of Council's interest in promoting an identity for the city of Melbourne as a modern city, through its Parks Gardens and Recreations Committee, a modern 'decorative feature' was commissioned and placed at the Elliott Avenue entrance to Royal Park from Flemington Road in 1961.³⁷

*1968: Tullamarine Freeway constructed.

c.1970: Ross Straw Field created, Manningham Reserve, Royal Park—the first purpose built baseball field in Australia. Ross Straw, a prominent figure in Australian, international, and Olympic baseball (Straw coached and captained the 1956 Olympic Baseball team), as a player, coach, captain, and later administrator, was instrumental in leading efforts to create the field in Royal Park.³⁸

1976: Royal Park Landscape Utilisation Study prepared by City of Melbourne. This study caused considerable community outrage, owing to proposals to increase commercial activity within Royal Park to fund on the basis that this would provide the necessary funds for more intensive horticultural development.

1977: Royal Park Master Plan prepared by Frank Keenan and MCC landscape architects. Material for consultation sent out 22 February 1977 including to the National Trust.³⁹ This report was finalised in 1979. In the contemporary literature, this document continues to be referred to as the 1977 Master Plan. Works were not undertaken taken in accordance with the recommendations of this Master Plan.

1982: Royal Park and Brunswick cricket clubs merge to become Royal Park—Brunswick Cricket Club.

1982: 'City "road" plan leaked', *The Melbourne Times*, 10 February 1982, about proposals to upgrade Melbourne's east-west traffic corridor.

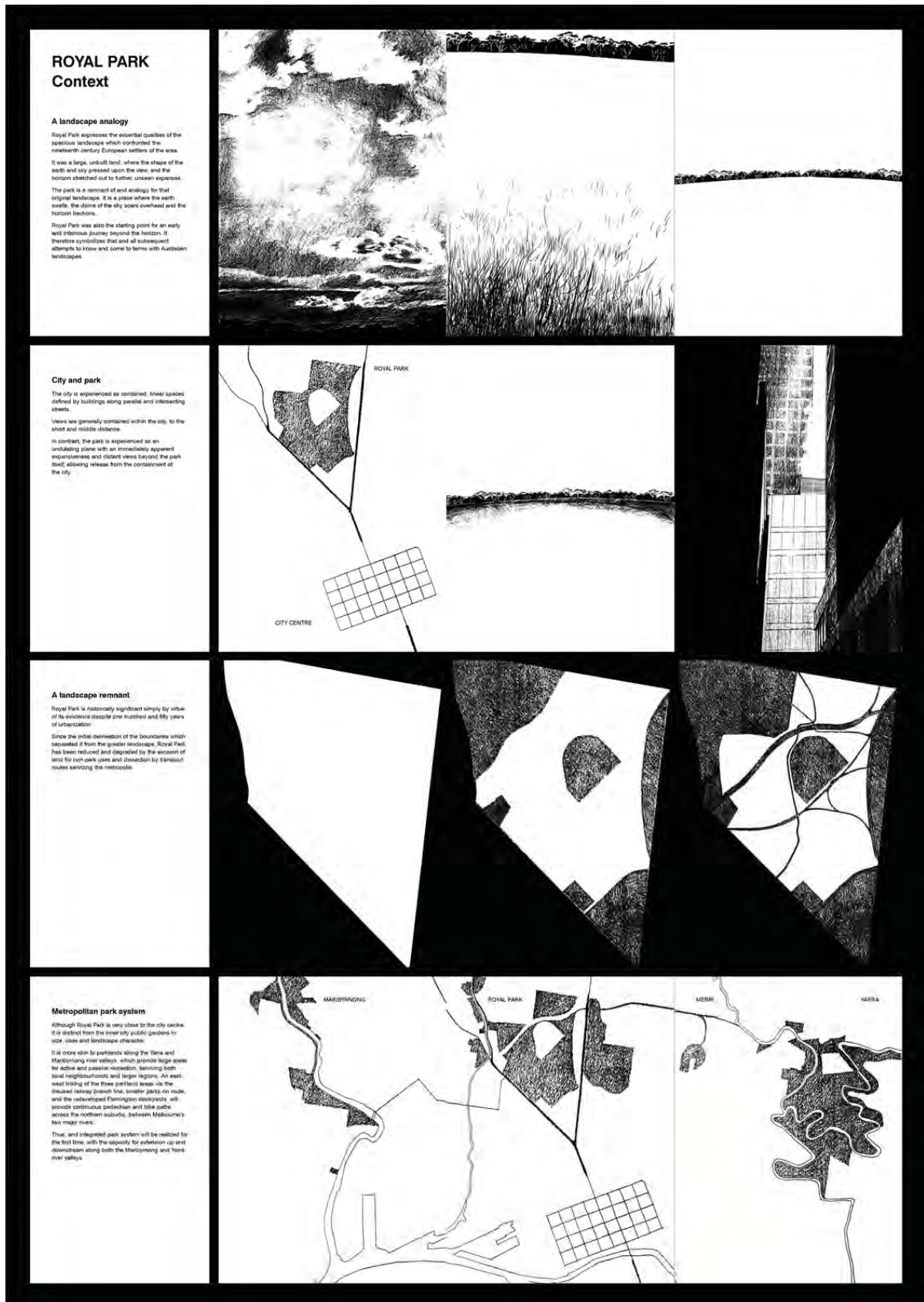
1982: National Trust classification for Royal Park prepared (partial area only: area west of No55 Tram and south of Upfield Railway, bounded otherwise to south and east by Gatehouse Avenue, excluding former Children's Hospital, and The Avenue). Not recommended for listing or recording by Landscape Classification Committee.⁴⁰

*1984: International design competition held to select consultants for preparation of a master plan for Royal Park, successful design prepared by Laceworks Landscape Collaborative.⁴¹

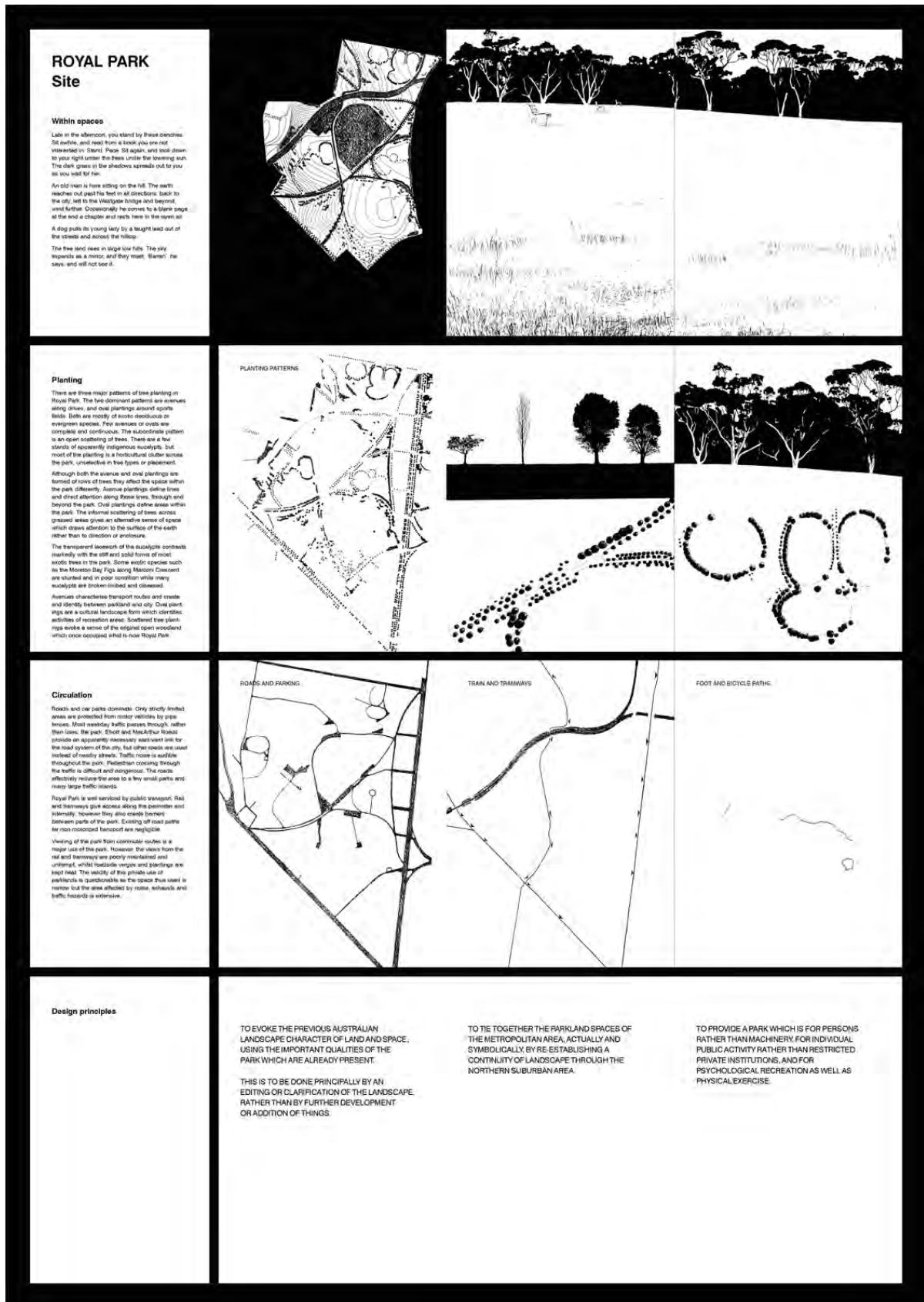
1984: Laceworks Landscape Collaborative, Submission for Stage I of the Royal Park Master Plan Design Competition, 29 June 1984.

1984: Laceworks Landscape Collaborative, Submission for Stage II of the Royal Park Master Plan Design Competition, sponsored by the Melbourne City Council. Includes evocative drawings by artist Maggie May. Presentation is in report format (A4). Bound in is a copy of the Design Concept: Stage I Submission, which appears to be photocopied sections of the larger competition panels (x3).

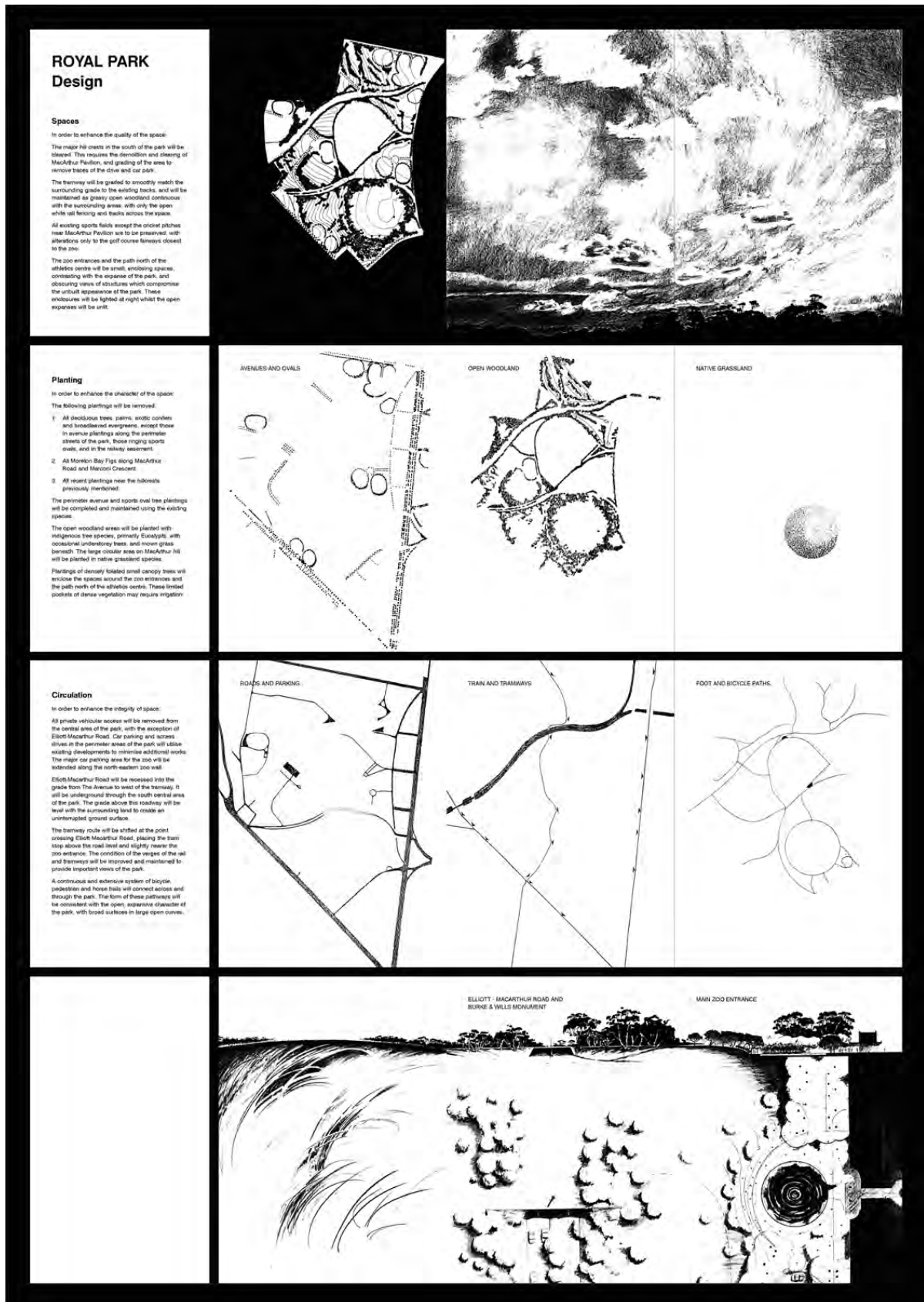
1984: Laceworks Landscape Collaborative, Royal Park Master Plan Design Competition: Stage 2: Supplementary Information, 26 November 1984. Information provided under Clauses 12 and 13 of the Instructions to Participants.



1984 Master Plan competition, Phase I competition winning entry, A2 Panel 1 of 3, prepared by Laceworks Landscape Collaborative (Brian Stafford and Ron Jones).
 Courtesy Ron Jones



1984 Master Plan competition, Phase I competition winning entry, A2 Panel 2 of 3, prepared by Laceworks Landscape Collaborative (Brian Stafford and Ron Jones).
 Courtesy Ron Jones



1984 Master Plan competition, Phase I competition winning entry, A2 Panel 3 of 3, prepared by Laceworks Landscape Collaborative (Brian Stafford and Ron Jones).
 Courtesy Ron Jones



Competition winning team, Laceworks Landscape Collaborative (Brian Stafford and Ron Jones), photographed by *The Age*, 1984 (Melbourne). The same image was published in a *Landscape Australia* report on the Royal Park Competition, *Landscape Australia*, 2/85, pp. 134–140; p. 135. Courtesy Ron Jones

1985: Laceworks' Landscape Collaborative, Royal Park Landscape Development Plan. This plan builds upon and details the design principles and landscape character established for Royal Park by the Landscape Master Plan competition held by the Melbourne City Council during 1984. Produced during a twenty week period; progressively reviewed by the project steering committee. Project staff and consultants included:

LACEWORKS LANDSCAPE COLLABORATIVE

B Stafford
R Jones
K Taylor
M May
A Rado
R Sim
P Simons
R Mitcheltree
L Fraser
A Paget
S Slee
J Shepherd
J Morton Landscape Architect
G Shepherd Shepherds Environmental Services
R Adair Land Protection Service

MAUNSELL & PARTNERS PTY LTD

D Bowers
P Woods
E Rogers
D Odgers

SIMPSON KOTZMAN AUSTRALIA PTY LTD

Mechanical and Electrical Sub-consultants
Quantity Surveyors

BEATTIE PROWSE PTY LTD

R Hunt

Other people involved in the project from the 1985 Landscape Development stage included:

PROJECT STEERING COMMITTEE

Cr M Cameron
Ms C Bull
Mr B Mackenzie

PROJECT COORDINATOR

Mr B Cartwright

MELBOURNE CITY COUNCIL STAFF

Mr Penry-Williams
Mr P Harrison
Mr E Dalziel
Mr G Mustow

Mr P Yau
Mr J Malcolm
Mr B Boston
Mr J Brown
Mr B Bester
Mr J Brown [sic]

New RMIT graduate Kevin Taylor was employed by the LLC office to assist in the preparation of the Landscape Development Plan working mainly on the original plant lists. Others of the LLC team and RMIT students of Stafford and Jones went on to become successful teachers of landscape architecture and practicing landscape architects. In later documentation stages RMIT graduates Perry Lethlean and Amanda Kimmins worked with Brian Stafford on projects at the Flemington Road end of Royal Park. Lethlean later worked for Jones (when later working for Melbourne City Council) on the areas around the Zoo (including the carparking). Lethlean and the late Kevin Taylor went on to establish successful landscape architecture practices in Melbourne, designing nationally significant landscapes. Kimmins currently works with Hassell in Shanghai.⁴² Over a number of years Bruce Cartwright, as the Project Coordinator at Melbourne City Council, played a significant role in the works associated with the 1984 Master Plan concept. This information invites speculation that the 1984 Royal Park Master Plan influenced a generation of Victorian-trained landscape architects and students who went on to establish highly regarded careers and practice. Further research would be necessary to assess this notion.

1985–1986: City of Melbourne, Royal Park Landscape Development Plan (undated). Succinct 4pp pamphlet (single folded A3 sheet) explaining the Royal Park Landscape Development Plan, 1985.

1986: Royal Park Landscape Development Plan, Response Submissions, May 1986. Public submissions, mostly received April 1985, responding to the 1985 Landscape Development Plan, exhibited by Council in 1985. Submissions are from interested groups/stakeholders whose work, lives, or sporting use brought them into frequent contact with Royal Park and its surrounds (members of neighbouring health professions, the hospital, university, institutions, residents, and sporting groups). The submissions can be summarised as follows: the Royal Park Master Plan was 1) Popular overall with local residents, 2) unpopular to local businesses, for reasons of changes to traffic circulation/access and parking, and 3) unpopular with sporting groups for perceived reduction in active recreation spaces/facilities and concerns about parking.



Royal Park, Stage II, Earthworks for the Hilbert Mound and the large pool (now known as the Billabong) located at the corner of Flemington Road and Elliott Avenue. November 1989.
Bruce Cartwright



Sourcing the stone from Tooborac for the pool, February 1990. Left to right: Hank King, Gordon Ford, Brian Stafford.
Bruce Cartwright



Royal Park: Stage II. Placement of the boulders for the pool, March 1990.
Bruce Cartwright



Royal Park: Stage II. Reinstating rockwork for the pool, April 1991.
Bruce Cartwright

*1987: Laceworks Landscape Collaborative Landscape development plan adopted by Council as a long-term development plan for Royal Park.⁴³ The sequence of development unfolded as follows:

- the ovals on Flemington Road, tennis court at the corner of Elliott Avenue and Flemington Road (c1986–89)
- design and construction of the Billabong on Flemington Road, a large pool designed by Brian Stafford who commissioned Gordon Ford to place the large boulders surrounding it (1987–91). Earthworks for the pond, 1989. Sourcing the boulders from a large paddock ‘thick with granite boulders near a quarry in Tooborac’, February 1990. The large rocks were intended as sitting rocks and stepping stones. Planting water lilies, June 1990. One challenge associated with the pool’s implementation was that planting was undertaken in winter resulting in failure of plants to establish.⁴⁴
- sports pavilion on hilltop (Grasslands) demolished, enabling implementation of the Grassland, or ‘the circle’, to commence (Stage 3, 1990–1997)
- Bluestone kerbing, Flemington Road (1990)
- impetus for resolving the Zoo carparks was pushed through from above, by Elizabeth Proust as CEO, City of Melbourne, 1990–c1995.
- the planting along the south side of Elliott Avenue continuing up the hill towards the Grassland and curving around the top (north) edge of the Grasslands occurred in the 1990s.
- c.1995: area along Gatehouse Street (southwest of Australian Native Garden).
- According to Charles Pinnuck, the casuarinas to the west of the Grasslands date from around 2001.

1990: Maunsell Pty Ltd with Laceworks Landscape Collaborative, Royal Park Traffic Management Study, November 1990. Provides the new road framework for the Royal Park Landscape Development Plan, 1985.

1992: ‘Our Melbourne’ a community photography project, includes photographs of Royal Park with captions that demonstrate the importance of the Park’s spaciousness and of its rural and natural landscape qualities in contrast to the city, to the local community who use the park. The interpretive label for a photograph by Timothy Cleary (aged 15–25) reads: ‘Even very close to the city, there is no shortage of space and greenery.’ Colour print. (Asset ref: 1087181). The interpretive label for a photograph by Jillian Gibb (aged 26–60) reads: ‘Sunday is a busy day at Royal Park. People play sport, fly kites, stroll, picnic and walk their dogs. This girl playing with her dogs in this expansive park with the city in the background, captures the city/country spirit.’ Colour print (Asset ref: 1087185).⁴⁵



Royal Park, Stage 2: Clarifying and editing the landscape of exotic trees (including willows) to reveal the indigenous and native trees and landforms—before, during and after. No date (before 1991). Bruce Cartwright



Works associated with Royal Park, Stage 3, for the hilltop (Grasslands), December 1990—removal of sporting fields.
Bruce Cartwright



Works associated with Royal Park stage 3 (new planting as part of the woodland surrounding the grasslands), April 1997.
Bruce Cartwright



Community planting activity for Arbor Week 1990 and (bottom right) on the south side of the new State Netball & Hockey Centre (woodland, horizon) in 2001.
Courtesy Bruce Cartwright and City of Melbourne

1993: By 1993, contour planning and considerable landscape grading for sensitive incorporation of level sporting fields near Flemington Road while retaining a sense of the natural landscape, was completed.⁴⁶

*1997: Review of Royal Park Master Plan.⁴⁷

1998: 'Royal Park plan creates space and controversy' *The Age*, 19 Feb 1998. Public expressions of concern about plans for Royal Park being solely to pave the way for 2006 Commonwealth Games.⁴⁸

1999: Royal Park: Cultural Heritage Study, prepared by Georgina Whitehead for the City of Melbourne, 1999 (not adopted by Council).⁴⁹

2005: Creation of Trin Warren Tambore (the wetlands and stormwater re-use system in Royal Park west) as part of the Commonwealth Games

2005: State Hockey Netball Centre (Commonwealth Games)

2007–2011: The new Royal Children’s Hospital constructed on Flemington Road at the intersection with the No.55 Tram route.

2010: Critical recognition of the aesthetic/design merit of the 1984 Master Plan by the landscape architecture profession and discipline. The AILA national award for sustainable settlement green infrastructure and landscape principles. Awarded November 2012 for Royal Park to ‘The City of Melbourne for the stewardship of Royal Park as a nationally significant landscape’.⁵⁰

2012: Return to Royal Park project commences public consultation for the return of part of the site of the former Children’s Hospital site, corner of Flemington Road and Gatehouse Street, Parkville, to public parkland (part of Royal Park).

Australian Native Garden

1968: motion by Cr Colin McDonald, ‘that PGRC [Parks, Gardens and Recreations Committee] develop a parkland area for growing Australian flora.’⁵¹

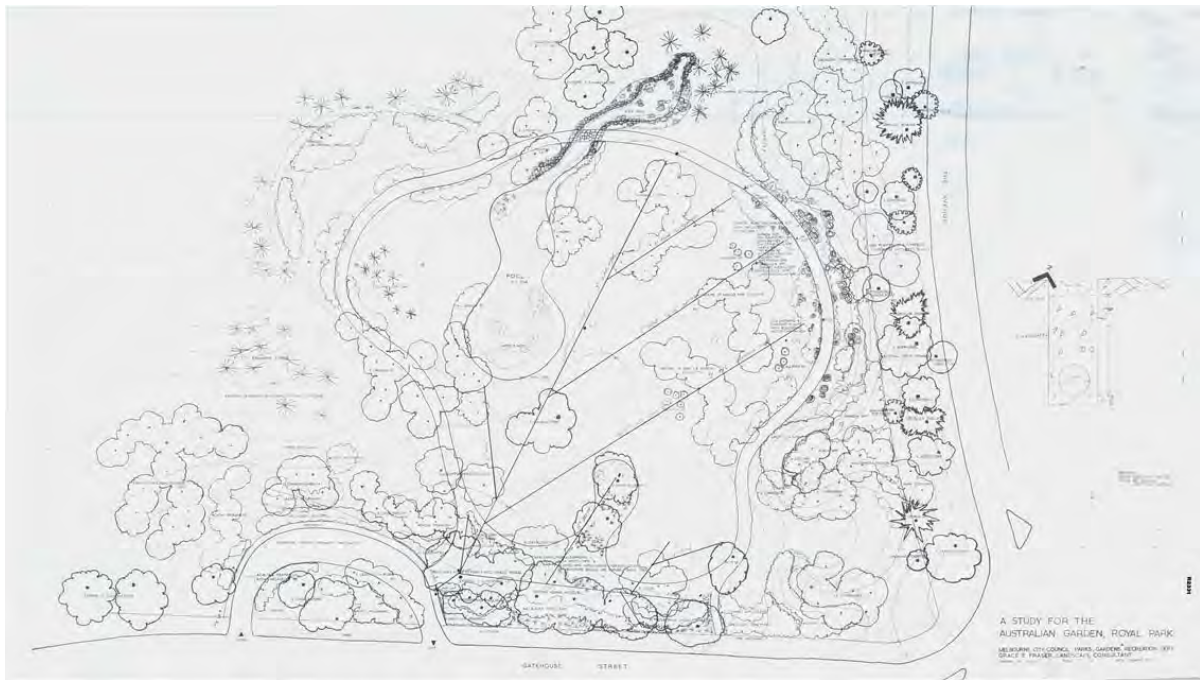
1968: June, Director of Parks, Frank Keenan submitted a request to the Town Clerk, recommending ‘that Mr I Moad, Landscape Designer, Parks and Gardens Dept., be sent to Perth for a study tour of Kings Park to ascertain the requirements for establishment of a native garden in Royal Park.’⁵² Moad was flown to Perth, Kings Park, that year.

c1972: demolition of former nursery and works depot at the rear of the Lodge (intersection of Gatehouse Street, The Avenue, and Royal Parade), in preparation for the development of the Australian Native Garden.⁵³

1973: appointment of Miss Grace as a landscape consultant approved, for the preparation of a preliminary report and basic layout proposal for the development of an Australian Native Garden in Royal Park. At the very same meeting, before the preliminary report had been prepared, let alone sighted, further finance for Fraser’s engagement to be extended and commence preparation of detailed plans for the native garden was also approved—by Councillor McDonald, then Chair of the committee.⁵⁴



The former Royal Park Nursery and Maintenance Works depot on the site where the Australian Native Garden was established (demolished c.1972). Taken by Frank Keenan (or family member), Director of Parks and Gardens, City of Melbourne.
Courtesy Charles Pinnuck, SERCO



Landscape designer Grace Fraser's concept for the Australian Native Garden (detail) 'Study for the Australian Native Garden, Royal Park', dated 1974—March 1974, Grace E Fraser', Drawing No: 521/5 Melbourne City Council, Parks, Gardens, Recreations Dept. Courtesy City of Melbourne



A perspective drawing of the Australian Native Garden by Peter Lees, 1974. Courtesy City of Melbourne

1974: detailed in her drawing 'Study for the Australian Native Garden, Royal Park', dated 1974.⁵⁵ A semi-formal aesthetic, with picturesque (sweeping areas of lawn, conceal/reveal views through openings in dense garden bed plantings, serpentine pathways, specimen trees) and gardenesque elements (individual plants, many grouped according to genera). Density of tree plantings thins at transition from ANG to open hilltop (now Grassland area of 1984 MP). The design incorporates existing mature plantings (including River Red Gums along Gatehouse Street and mature trees along The Avenue boundary. Also, *Schinus molle* at Gatehouse Street entry retained. Bluestone for pools (not apparent on site) apparently sourced from the Jolimont Crew/Depot.⁵⁶

1974: Peter Lees perspective drawing of the proposed ANG.⁵⁷

1977: November, Wednesday, 30th 'official opening of the Australian Native Garden'.⁵⁸ [Successful reception of the Australian Native Garden is evidenced in subsequent expressions of public opinion reflecting a desire for the future character of Royal Park to be unified by a canopy and sprinkled with pockets of native bushland and for a 'natural bushland' character⁵⁹. See also, in *The Age*, 'Royal Park: plea for environment'⁶⁰; in *The Melbourne Times*, 'Royal Park: make it Australian'⁶¹.

2001: Australian Native Garden Vegetation Management Plan (Australian Landscape Management), renewal and restoration of the Australian Native Garden, in consultation with Grace Fraser. Paul Thompson was engaged to provide advice on planting.⁶²

Analysis of physical context

This section provides an analysis area by area of the current physical environment of Royal Park according to the following divisions:

- Royal Park (south): south of Elliott Avenue and Macarthur Road thoroughfare, including the Australian Native Garden in the southeast corner of Royal Park at the intersection of The Avenue and Gatehouse Street.
- Royal Park (west): west of Elliott Avenue and southwest of Zoo
- Royal Park (west west): west of Capital City Trail, Manningham Street Reserve and Wetlands
- Royal Park (east): east from Zoological Gardens to The Avenue
- Royal Park (north): north of Capital City Trail/Upfield Railway to Park Street

The photographs were taken in June–July 2013 by Christina Dyson. Attention was focussed on key areas and plantings which reflect the principles and intent of the 1984 Master plan, the Australian Native Garden, boundaries (presentation of the Park to passers-by), buildings and other elements which provide evidence of the different phases in the history of Royal Park.

Royal Park (south): south of Elliott Avenue and Macarthur Road thoroughfare

The Grassland located in this area is associated with the 1984 Master Plan. This area strongly reflects the principles of the Master Plan; in particular its grassland and woodland concepts (open and enclosed surrounding space) and the principal of the horizon meeting the sky. (See below for two other areas in Royal Park which reflect this same theme and principle, arguably equally strongly although from a smaller surface area—in Royal Park (west); and Royal Park (north).)



The Grassland ('the circle')



Approaching the Grassland from Elliott Avenue/No55 Tram crossing.



South of Elliott Avenue, west of Grasslands, pathway down to tennis courts.



Woodland edge to Grassland at Macarthur Road, and the Burke and Wills cairn.



Transition between ANG and the 'circle': looking in from the 'circle'

Royal Park (southeast): Australian Native Garden



The Australian Native Garden, located in the southeast corner of Royal Park at the intersection of The Avenue and Gatehouse Street. Looking out, towards grassland/'circle', and Gatehouse Street entry (below).



The Australian Native Garden, showing boulders and rock work, paths, sweeping lawns and specimen trees, garden beds.



The Walmsley House, Caretaker's Lodge, and Substation (far right).



Flemington Road

Gatehouse Street

Flemington Road face (earth moulding to create natural appearing grades/contours, line of elms), former location of immigration camps 1946–1956); and Gatehouse Street plantings.



Billabong, designed by Brian Stafford and implemented with assistance with the rock work by Gordon Ford.

Royal Park (west): west of Elliott Avenue and southwest of Zoo (RP_W)

The area south/southeast of the State Netball & Hockey Centre, including Brens Drive and below to Elliott Avenue—reflects the horizon meeting the sky quality similar to the Grassland ('the circle') though less intensively as the open space is much smaller. Open grassland shown (Row 1) with woodland plantings (c1990s and 2001–2002)⁶³ in the rows below, which occur to the southwest down to Manningham Street and Elliott Avenue (Row 2) and the east to Elliott Avenue and screening the No55 Tram line and SN&HC (Row 3).



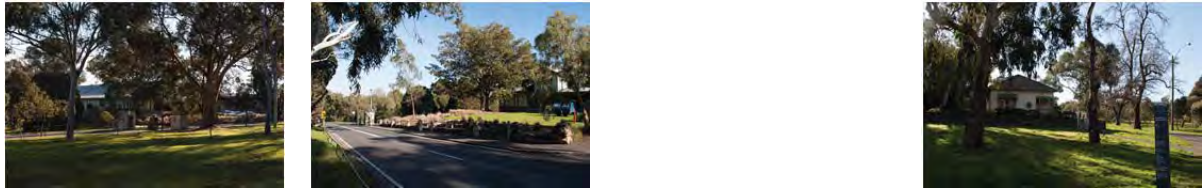
Gateway to Royal Park, commissioned in 1961, located at the corner of Flemington Road and Elliott Avenue.



Former Royal Park West nursery site: view from lower Nursery looking uphill [southwest], cycle path along west edge; view looking back down the former terraced slopes, north east.



Brens Drive Grassy Woodland Remnant.



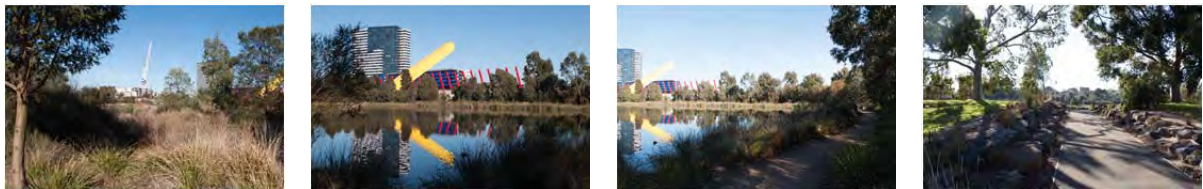
Anzac Hall (rubble stone walls and gate piers) and potentially associated plantings on opposite side of Brens Drive. Far right: Southgate Lodge.

Royal Park (west west): west of Capital City Trail, Manningham Street Reserve and Wetlands



Other EVC-15 located to east of this pathway.

Manningham Street reserve, Ross Straw Field.



Trin Warren Tam-Boore (opened in 2006 in association with the Commonwealth Games).

Royal Park (east): east from Zoological Gardens to The Avenue



Royal Park, east of Poplar Road; views from north RP across railway cutting to Poplar Pavilion (Women’s Dressing Pavilion), and sporting fields.



Mature sugar gums line The Avenue boundary to the eastern sporting fields east of the Zoo, indicating the landscape character beyond its edges.



HG Smith Oval



WG Brens Oval



Women's Dressing Pavilion



Adjoining oval (Poplar Oval)

Royal Park (north): north of Capital City Trail/Upfield Railway to Park Street



McAllister Oval from Park Street



Strong horizon feel also exists at the Ryder Oval and woodland surrounds.



Ransford Oval, Dressing sheds, views through new planting to golf course.



Park Street boundary, No 55 Tram through golf course, and McPherson Baseball field.



Railway (at Park Street) then Royal Park Station and associated landscape.

Analysis of heritage status

Cultural heritage values

As identified by Kellaway and Summerton, it is difficult to obtain precise information about the early reservation of Royal Park, due to the nature of the Reserve Files (Kellaway and Summerton 2003, p. 2) While this confirms the experience of my research, Kellaway and Summerton (echoing Rex Swanson 1984) confirm that the early history of Royal Park was associated with pioneer attempts in the 1840s or earlier to establish public parkland in the vicinity of Melbourne. Those attempts predated the separation of the Port Phillip District (as Victoria was then known) from the mother colony of NSW.' (p29) Their research also confirms the significance of Governor's La Trobe's involvement in and support of the creation of substantial parklands', even though precise details have proven difficult to substantiate. (p29) The Melbourne Town Council (est 1842) played a leading role in the campaign for Melbourne's public parklands, particularly Royal Park. (p29)

Kellaway and Summerton confirm that the particular importance of Royal Park 'has always been its provision of recreational parkland for neighbouring areas north-west of the Melbourne township. This continues to be a major fact in its historic, social and cultural significance.' [Kellaway and Summerton 2003, p. 30.]

Major Parcels of land classified on statutory and non-statutory heritage registers (including date of classification where known) are:

Royal Park: listed on Victorian Heritage Inventory for the following reasons: its importance as an early Aboriginal camping ground; as a remnant of a much larger parcel of land set aside for recreation by Governor La Trobe in 1854; and for its association in Australia's involvement in WWII, used as an army camp by American troops, Camp Pell, and later for the Housing Commission of Victoria as a temporary housing settlement during a period of housing shortages and a rapidly expanded population after WWII. (Heritage Inventory Number: H7822–2311)

The Aboriginal significance of Royal Park is addressed in Andrew Long & Associates, 'Royal Park, Parkville: An Aboriginal Archaeological and Historical Heritage Study' (June 2002).

Royal Park: Investigated but considered 'not worthy of Classification or Recording', by the National Trust Landscape Classification Committee, 18 March 1982. (NT File: L10019)

The Walmsley House: listed on the VHR 12 July 2001 (H1946). Classified by the National Trust 05/06/2000 (B6887).

Royal Melbourne Zoological Gardens: Listed on the VHR (H1074). Also Classified by the National Trust (G13008).

Women's Dressing Pavilion: Listed on the Victorian Heritage Register 2007 (H 1585). Part of the historical significance of the Women's Dressing Pavilion, also known as Poplar Oval Pavilion and its associated facilities is associated with the rise in prominence of women athletes in Australia, and the rising success of women in athletics, seen at the 1938 Empire Games in Sydney. These successful women athletes for the Empire Games were selected 'after representing their states at the Australian Women's Athletic Championships held at the new Poplar Oval facilities in December 1937.'

Anzac Hall, Brens Drive, Parkville Melbourne. Listed on the VHR (H1747). For its association with WWII, its architectural values, and for the 'vernacular stone sentry boxes, gateposts, stairs and retaining wall, while typical of army landscaping, are rare survivors in the context of this public park.' It is also listed on the Vic. War Heritage Inventory (HO898).

Royal Park (layer of development relating to the 1984 Master Plan and 1985 Landscape Development Plan by Laceworks Landscape Collaborative) In 1994, academics Edquist and Bird, commented that 'Royal Park is, along with Harry Howard and Associates' Sculpture Gardens at the National Gallery in Canberra, widely considered the most important Australian landscape design of its time.'⁶⁴

In 1986, praise for the 1984/5 Royal Park master plan appeared in *Landscape Australia*; Bruce Mackenzie celebrated the concept's innovative use of abstract landscape images 'inherent in the present landscape character of the Park'; and upheld its innovation as an example to inspire a wider culture of relevant design solutions and thus ensure that a persistent discipline of and identity for landscape architecture can be discerned in Australia. (Bruce Mackenzie, 'Nothing more relevant than relevance: Part 2 of Artistry, relevance and the landscape architect', in *Landscape Australia*, 1/86, pp. 31–33.)

Royal Park: Awarded by the Australian Institute of Landscape Architects to The City of Melbourne for the stewardship of ROYAL PARK as nationally significant landscape, which is considered 'pivotal in the emergence of a local landscape consciousness and embracing appreciation of the indigenous environment.' Further:

'The Institute commends Melbourne City Council for the vision and stewardship of Royal Park that has been pivotal in the emergence of a local landscape consciousness and embracing appreciation of

the indigenous environment.

As a landscape, Royal Park expresses the true nature of Australia and the special qualities of its natural sense of place and underlies a design ethos which our profession now promotes and respects.

AILA commends the extensive review process implemented by Melbourne City Council that maintains extensive public consultation and has built upon the principles established by the winning entry in the 1984 Royal Park Master Plan Design Competition.' Awarded in November 2010.

Upfield Railway: Part of the Upfield Railway Line from Park Street to Coburg Station is listed by the National Trust (B5973) Classified: 22/05/1989. Not further investigated as part of this research.

Upfield Line Railway Precinct (Sections in Moreland City only) listed on VHR H0952.

Inner Circle Railway: Classified by the National Trust in 14 August 1991 (local), 'including "the entire route from Royal Park to Rushall and the Fitzroy Branch line including The Avenue and Royal Parade bridges ... and other remnants of the line as associated structures may be identified." From this it can be assumed that Royal Park station and the formation and earth works from here eastwards are part of the classification.' (NT file 5436). [Source: Richard Aitken, Draft historical notes, 2 May 1997, NT File: L10019.]

Former Royal Park Hospital Precinct, off Oak Street and Cade Way, Parkville, Melbourne. Heritage Inventory number: H7822-0370. Not investigated as part of this research.

Royal Children's Hospital (former now demolished). New hospital not classified and not investigated.

Dental Hospital: no individual classification. Not further investigated.

Former Parkville Police Station Complex, 153-155 Royal Parade. [Victoria Government Gazette No. G39 12 October 1988 p.3091] VHR H1545 (HO316). Not investigated as part of this research.

The Former Royal Park Psychiatric Hospital (Hospital for the Insane): constructed initially between 1906 and 1913. Victorian Heritage Register (VHR) H2062. Not investigated as part of this research.

Royal Parade, 10/11/1980, includes a triangular section of Royal Park opposite College Crescent. [NT UCC File.] See also Victorian Heritage Register (VHR) H2198 which does not include section of Royal Park.

Natural values

Grassy Woodland EVC 175—Brens Drive Grassy Woodland (RP_W)

Grassy Woodland EVC 175—beside the railway cutting above Manningham Reserve (RP_W)

White Skink habitat (regional significance)

Bird surveys x 6 identify significant species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) and the Victorian *Flora and Fauna Guarantee Act 1998* (FFG Act)

Geological significance—two sites are registered with the Geological Society of Victoria: ML69 ‘The Railway Cutting’ (behind the Ross Straw Field) and another near Royal Park Station. Refer also Darragh, T. A. ‘Geology of Royal Park by GB Pritchard’, *Victorian Naturalist* 91 (8), 1974, pp. 223–235.

Natural values of Royal Park are also confirmed in two reports prepared by Ecological Horticulture Pty Ltd [Whitehead 1999, p. 40]:

- Vegetation of the Brens Drive Site and an Evaluation of Native Grassland Establishment and Management Techniques, Royal Park, City of Melbourne, Victoria. Prepared for the City of Melbourne, 1991.
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Comparative analysis

Royal Park

Larger scale land use planning and the evocation of a natural aesthetic.

The 1984 Master Plan concept for Royal Park by Laceworks Landscape Collaborative has parallels to the English landscape garden of Lancelot 'Capability' Brown, in its simplicity, in allowing the land form to speak over and above the planting detail, which was to be subordinate to the overall landform and landscape experience, and in its use of plants more as a back up to the overall concept, not the focus.

Parallels can also be seen between Royal Park and the work of Frederick Law Olmsted (1822–1903), in Central Park, New York (with Calvert Vaux, from 1857), in the use of boundless open space and attempt to evoke a natural landscape at the edge of a metropolis (although Olmsted's 'generic' nature differs from the indigenous landscape analogy of Royal Park). Olmsted's linear system of parks in Boston and Brookline, Massachusetts (the Emerald Necklace, c.1878) is reflected in the conception of Royal Park as part of a larger integrated metropolitan park system expressed in the Master Plan as a 'continuity of landscape through the city and inner suburbs', linking the Maribyrnong and Yarra river valleys.⁶⁵

There are also parallels between Royal Park and Hampstead Heath (in close proximity to the centre of London (6km)), which is recognised as being nationally significant for the ostensibly 'natural' character of its landscape and valued as a rare piece of countryside in the city. Despite pressures associated with its proximity to the centre of London during the nineteenth and twentieth centuries, Hampstead Heath has retained its broad expanses and natural landscape character. Elevated areas within the Heath provide extensive views to the west and north of London. The natural qualities of the designed landscape are, among other aspects, recognised as nationally significant in a Grade II listing by English Heritage.⁶⁶

Although perceived locally as daring, for some challenging, and different relative to the other competition entries and the design of other parks and gardens within the City of Melbourne, internationally it was otherwise relative conservative when compared with new directions in post-modernist landscape architecture such as the Parc de la Villette in Paris (1983). Parc de la Villette emphasised objects in the landscape and making explicit the hand of the designer and in these respects is the antithesis of the 1984 Master Plan concept.

The legacies of historic designed landscape and new directions in later twentieth century landscape architecture were familiar territory for the designers of the Royal Park Master Plan.

Smaller scale contemporary projects that draw on regional characteristics (natural and cultural), reference indigenous land forms, and are concerned with creating spaces and places for people.

Illoura Reserve: (formerly Peacock Point), East Balmain, Sydney, designed by Bruce Mackenzie from 1970 (responds to the Sydney Harbour foreshore ecology and landforms and its maritime heritage without preserving artefacts, erecting monuments, or contriving to copy or resurrect past forms, with strong consideration of land use needs. Similarly allows the site to express itself.) It is highly acclaimed and recognised as a significant landscape by the AILA. Illoura Reserve is also registered by the National Trust of Australia (NSW), considered a 'seminal work of Urban Park Design'.⁶⁷

Yurulbin Reserve, Birchgrove: (formerly Long-Nose Point), Louisa Road, Birchgrove, Sydney, designed by Bruce Mackenzie, 1972. Responds to the local (Sydney Harbour foreshore) ecology and landforms and its maritime heritage with strong consideration of land use needs. It is highly acclaimed and recognised as a significant landscape by the AILA. Yurulbin Reserve is also listed by the National Trust of Australia (NSW) [NT S8786]

While similarities can be observed between Bruce Mackenzie's Sydney harbour foreshore parks, they were not a direct influence on the designers of the 1984 Royal Park Master Plan, who only later came to know and admire them.

Smaller scale native plant garden, indigenous plantings, modernist aesthetic

National Gallery of Australia Sculpture Garden, by Harry Howard and Associates (commissioned in 1982). To repeat the earlier opinion expressed by Edquist and Bird: 'Royal Park is, along with Harry Howard and Associates' Sculpture Gardens at the National Gallery in Canberra, widely considered the most important Australian landscape design of its time.'⁶⁸ Although the NGA Sculpture Garden and Royal Park differ in terms of scale, intended purpose, and aesthetic, they share conscious attempts to symbolically evoke (1) the natural landscape of their regional context and (2) a connection between the indigenous environment and nation. The design team for the landscaping of the Sculpture Garden consisted of the principal designers Colin Madigan (EMTB) and Harry Howard, along with Barbara Buchanan (Harry Howard and Associates), Roger Vidler (EMTB) and James Mollison (Gallery Director). The Sculpture Garden at the National Gallery of Australia is included on

the National Heritage List, as part of the High Court High Court - National Gallery Precinct, Parkes Place, Parkes, ACT, Australia. (NHL Place Id: 105745)

Australian Native Garden

The Australian Native Garden is comparable to the Canberra Botanic Gardens, Canberra, ACT, and Kings Park Botanic Garden, Perth, Western Australia, which opened at a similar era (through the 1960s and 1970s) as gardens with a predominant to exclusive focus on the display of Australian flora. The Australian Native Garden was neither as large nor as early as the other two examples. In 1968, when the idea for the Australian Native Garden was first proposed, the Botanic Garden for West Australian native plants in King's Park, Perth, had been officially open for three years. Works had begun during 1962 and the garden opened in 1965, yet by 1964 publicity about the garden's development and collection was widely circulating in the eastern states (including Director JS Beard's *Descriptive Catalogue of WA plants* and in the SGAP journal *Australian Plants*). By 1968 information about the Australia-wide collecting activity for the Canberra Botanical Gardens was circulating in the popular press—especially in Canberra and nationally within specifically interested groups such as the SGAP. The Canberra Botanic Gardens (now the Australian National Botanic Gardens) were officially opened in 1970. The Kings Park Botanic Garden and the Canberra Botanic Gardens are roughly comparable in size, and differ from the Australian Native Garden for their scientific and research goals alongside public education and appreciation of Australian flora through display. The three gardens share the goal as a way to display the unique Australian flora to visitors to Australia. In Melbourne, the Maranoa Gardens in suburban Balwyn was developed considerably earlier, between 1901 and 1926 by John Middleton Watson, as a private garden dedicated to the growing of Australasian plants. It first opened to the public in 1919 and had a significant influence on the native plant movement in particular through the Field Naturalists Club of Victoria and later the Society for Growing Australian plants. It was acquired by Council on Watson's death in 1926, from which time the focus became Australian flora.⁶⁹ A similar garden/local park designed by Robert Boyle was developed in Preston which followed a similar model of a municipal botanic garden for Australian plants, suggests the Australian Native Garden reflected and successfully met a broader public need.⁷⁰

The Australian Native Garden followed other suburban native plant gardens created by local councils, often in partnership with grass roots organisations such as the Society for Growing Australian Plants (SGAP). Kuring-gai Wildflower Garden (1965), in St Ives, a suburb in the northern suburbs of Sydney (North Shore) was created by 1965 by the northern Sydney section of the SGAP with Kuring-gai Council, at the instigation of the group's then president, John Wrigley. Wrigley later became the first curator of the Canberra Botanic Gardens (1967–1981). With the Australian Native

Garden, the Kuring-gai Wildflower Garden shared the goal of showcasing Australian plants, with an initial goal of local flora and those which botanist Joseph Banks had encountered in 1770.

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Appendices

Appendix 1: Significance of Royal Park

Appendix 7: Report: Cultural and historic significance of Royal Park





Map A.
Area of Local Significance



Appendix 7: Report: Cultural and historic significance of Royal Park



Map C.
Area of State Significance
associated with the 1984
masterplan (excludes Zoo & SN&HC)

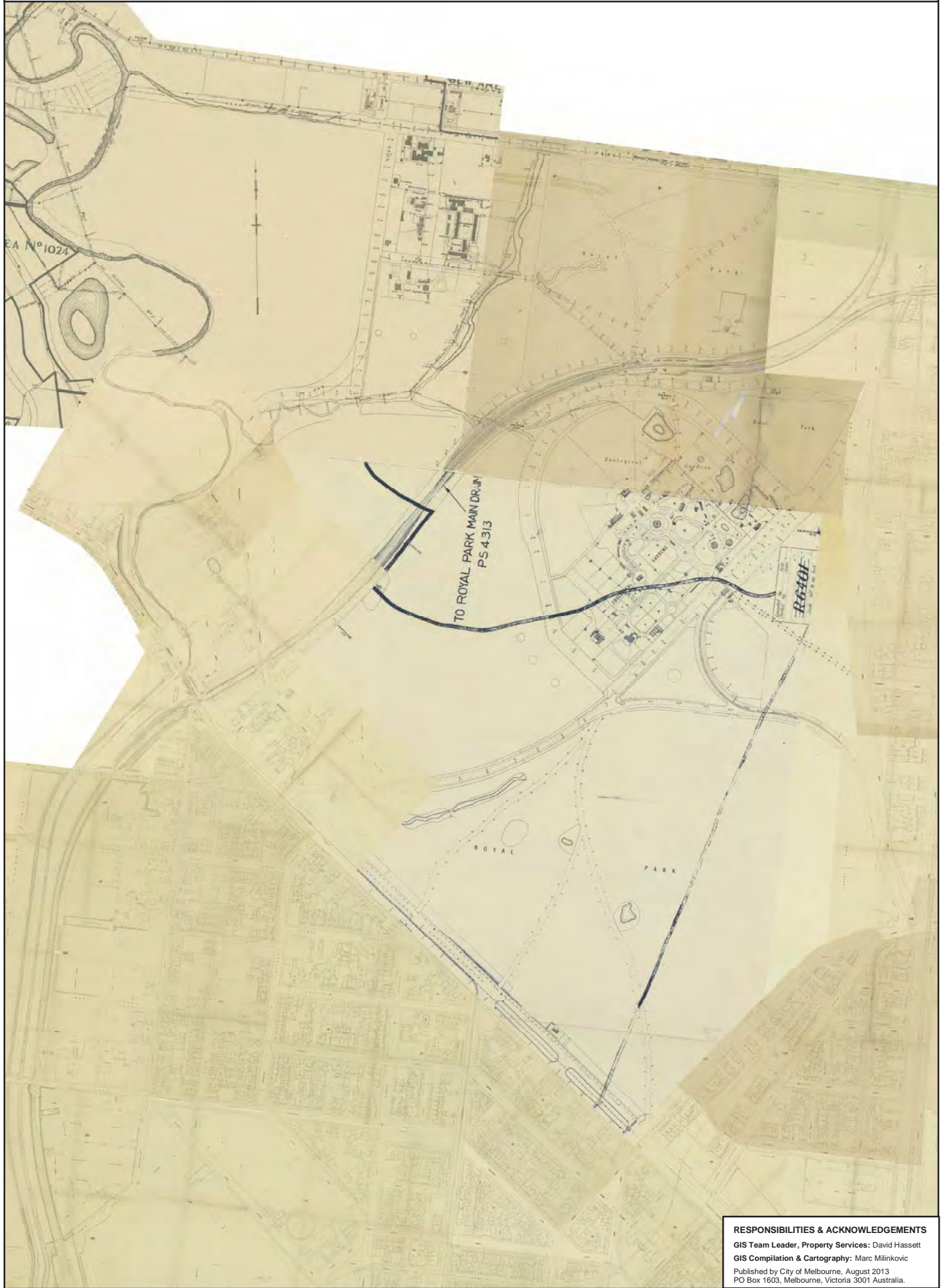
-  Areas of Exceptional Value
-  Areas of Contributory Value

Appendix 2: Maps and photographs

1895 MMBW map

1945 aerial photograph of Royal Park

ROYAL PARK MMBW MAP 1895
CITY OF MELBOURNE



RESPONSIBILITIES & ACKNOWLEDGEMENTS
GIS Team Leader, Property Services: David Hassett
GIS Compilation & Cartography: Marc Milinkovic
Published by City of Melbourne, August 2013
PO Box 1603, Melbourne, Victoria 3001 Australia.



ROYAL PARK 1945 AERIAL



Approx. Scale 1:10000

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Notes

¹ Responses received from Bruce Mackenzie and Harriet Edquist: Bruce Mackenzie: 'I have recently published a fairly substantial review and promotion, of the indigenous qualities of our Australian landscape, and its ecology as it relates to Australian conditions. The book expresses all I have to say along these lines and in conjunction with past published articles it is about as much as I can offer. The book by the way was a pleasure to be involved with and I am delighted to have had such a close relationship with a great many likeminded enthusiasts for this subject. Brian Stafford was one of them of course.' [Email correspondence with Christina Dyson, dated 13 July 2013.] Harriet Edquist: 'I certainly support increased heritage recognition for Royal Park. However I have had almost nothing to do with it since editing the book so don't feel at all able to provide useful support. I would be very happy however for you to use the book and my words as evidence of the parks significance if that would help your report.' [Email correspondence to Christina Dyson, dated 15 July 2013]

² http://www.aila.org.au/victoria/news/docs/east-west_link_statement.pdf

³ Angela Hill, pers. comm., email correspondence to Christina Dyson, 5 August 2013.

⁴ Rex Swanson (1984) and VPRS 242/0/130 (ii) G files, 'Report for financial year ending June 30th 1886', Curator Melbourne Parks and Gardens, Bickford.

⁵ State Library of Victoria, H1663.

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⁷ This comment is recorded in the minutes of the Parks, Gardens and Recreations Committee meeting of 17 April 1968, presumably taken from a section of a report presented to the committee prepared by Frank Keenan, Director of Parks, Gardens and Recreations (Keenan's report was also dated 17 April 1968, as recorded in the minutes. Unable to locate original report.) Melbourne City Council, Parks, Gardens and Recreations Committee, Minute Book, 13 Sept. 1967–28 July 1971, Meeting date: 17 April 1968. VPRS 8945/P2/254, p. 63.

⁸ See for example some of the photographs and interpretive panels from the 'Our Melbourne' community photography project, c.1992.

⁹ Miles Lewis, 'Parkville—Historical Background', in Jacobs Lewis Vines, 'Parkville Historic Area Study', April 1979, pp.9–10.

¹⁰ Lewis, op. cit. p. 11; VPP C.40/1864–65 also records 'Parks on the north of the city, comprising such portion of 2560 acres, as the City Council should desire, promised by letter of 30th September, 1850 and enumerated as the Royal Park and Prince's Park by letter [from Surveyor-General] of 28th October, 1856'.

¹¹ Sanderson 1932, p. 113.

¹² Sara Maroske and Francine Gilfedder, 'Breaking the silence: the aviary in the Melbourne Botanic Gardens and the acclimatisation of song birds, 1857–61', Australian Garden History, 6 (2) September/October 1994, pp.7–11, 15.

¹³ Sanderson 1932, p. 115.

¹⁴ 'Josiah Mitchell Case' notes, dated 30 December 1874 in Land Reserve File RS 259, in Kellaway and Summerton, 2003, p. 15.

¹⁵ Kellaway and Summerton 2003, p. 15.

¹⁶ Paul Fox, 'Josiah Mitchell: subtitle' in *Clearings: Six colonial gardeners and their landscapes*, The Miegunyah Press, Melbourne University Publishing, Carlton, Victoria, 2004, pp. 145–179

¹⁷ Kellaway and Summerton 2003, p. 23.

¹⁸ CPO P/A M381.

¹⁹ Alan Willingham, AHC citation M/07/10; PWD Drawing 1.132.

²⁰ Kellaway and Summerton 2003, p. 23.

²¹ CPO P/A M385 (G); J 31 (B).

²² Copy, 'Grant: Royal Park', 6 November 1876 (Courtesy City of Melbourne)

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²⁴ Stephen Murray-Smith to National Trust, 8 October 1970, NT file 2536.

²⁵ Sanderson 1932, p. 113.

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- ²⁷ Jacobs Lewis Vines, 'Parkville Historic Area Study', 1979, pp. 156–157.
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- ³¹ Sanderson, WA, 'Royal Park', *The Victorian Historical Magazine*, May 1932, pp. 109–139; opp. P. 123.
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- ³⁴ PROV VPRS 8911/P0001/86 City of Melbourne Council Proceedings 1955–56. The Annual Report of The Melbourne City Council for the Municipal Year 1955–56), p. 11.
- ³⁵ PROV VPRS 8911/P0001/86 City of Melbourne Council Proceedings 1956–57, Annual Report of the Melbourne City Council for the Municipal Year 1956–57, p. 18.
- ³⁶ PROV VPRS 8911/P0001/86 City of Melbourne Council Proceedings 1961–62: Melbourne City Council Annual Report 1961–62 [bound into back of volume], np.
- ³⁷ VPRS 8911/P0001/86 City of Melbourne Council Proceedings 1960–61. p. 655 Schedule to accompany report No. 78 of the Parks, Gardens and Recreations committee, submitted with the 24th order of the Day on 15th May, 1961. Specification No. 4821. Pounds 997/10/- including 100 pound s provision to be charged to loan. Recommended Tender: W. J. Townsend.
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- ³⁹ NT File: L10019.
- ⁴⁰ NT File: L10019.
- ⁴¹ *Royal Park Masterplan Review, Issues Paper*, April 1997, p. 7.
- ⁴² Brian Stafford, pers. comm., interview with Christina Dyson, 18 July 2013.
- ⁴³ *Royal Park Masterplan Review, Issues Paper*, April 1997, p. 7.
- ⁴⁴ Gordon Ford with Gwen Ford, *Gordon Ford: the natural Australian garden*, Bloomings Books, Hawthorn, Victoria, 1999, p. 92–93. See also Slides by Bruce Cartwright of sourcing the boulders and putting them into place, c.1989, Courtesy of the City of Melbourne. Brian Stafford, pers. comm., interview with Christina Dyson, 18 July 2013.
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⁵⁹ Although, the *Age* and *Melbourne Times* report a balance of views about the future desired character for Royal Park. The opposing view is for an English style landscape. But the headlines push the Australian angle, and the content reveals the Australian preference is linked to an environmental conscious—a ‘dry’ Australian park versus the more traditional English ‘green’. (The *Melbourne Times*, 8.12.76)

⁶⁰ *The Age*, 28.10.76.

⁶¹ *The Melbourne Times*, 8.12.76.

⁶² Charles Pinnuck (Operations Manager, Serco Australia—City of Melbourne OSFMS Region 2), pers. comm., Interview with Christina Dyson, 21 May 2013.

⁶³ Charles Pinnuck (Operations Manager, Serco Australia—City of Melbourne OSFMS Region 2), pers. comm., Interview with Christina Dyson, 21 May 2013; and Charles Pinnuck, email correspondence with Christina Dyson, 21 May 2013)

⁶⁴ Harriet Edquist and Vanessa Bird (eds), *The Culture of Landscape Architecture*, Edge Publishing in association with the Dept. of Planning, Policy and Landscape, RMIT, Melbourne, 1994, pp. 166–174; p. 167. [Selected papers from the Edge Too Conference, held in Melbourne, 1992]

⁶⁵ Turner 1996, pp. 179, 208–214; and Ron Jones, ‘A Pathway to Royal Park: Nature and Place in Design’, MS RMIT lecture, 19 July 2013.

⁶⁶ City of London, ‘Statement of Significance: Hampstead Heath’, Online: <http://www.cityoflondon.gov.uk/things-to-do/green-spaces/hampstead-heath/heritage/Documents/Statement%20of%20Significance.pdf>

⁶⁷ NT S8566 and Bruce Mackenzie, *Design with Landscape*, BruceMackenzieDesign, Sydney, 2011, pp. 40–53.

⁶⁸ [Edquist and Bird (eds), 1994, p. 167.]

⁶⁹ Richard Aitken, *The Oxford Companion to Australian Gardens*, 2002, p. 399.

⁷⁰ I am grateful to Angela Hill for alerting me to this similar garden.

⁷¹ Michael Smith, pers. comm., conversation with Christina Dyson, 29 October 2011.

⁷² City of Melbourne, Town Clerk’s Register of Inwards Correspondence. VPRS 8907/P1/59 (68/528/57).

Bird Survey at Royal Park: Part 4 – George Appleby

Bird Survey at Royal Park, Parkville: Part 4



**George Appleby,
Consultant Ecologist**

June 2011



Bird Survey at Royal Park: Part 4 – George Appleby

Bird Survey at Royal Park, Parkville: Part 4

June 2011

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1 INTRODUCTION

1.1 Project Background

George Appleby was commissioned by the City of Melbourne in March 2011 to undertake a fourth series of bird surveys at thirteen monitoring sites in Royal Park, Parkville. Previous surveys occurred in February-March 2007, November-December 2007 and June 2009. The monitoring sites were established to allow monitoring of bird populations, human usage and management works within Royal Park.

Additional records collected during fieldwork and from other sources were included to inform analysis of the monitoring results.

The scope of works proposed by the City of Melbourne included:

- conduct two twenty minute bird surveys in each of the thirteen established survey sites.
- produce a report and spreadsheet which:
 - provides a species list identifying the National, State, and Regional status of birds observed at each site.
 - provides, where possible, gross density estimates of bird species observed within Royal Park;
 - analyses and compares the results with the previous surveys;
 - based on survey results, discusses any additional species, trends or processes threatening bird communities in the park and recommend management actions to improve habitat value.

1.2 Aims

The aims of this report are to:

- provide a fourth series of bird surveys at 13 monitoring sites within Royal Park;
- to update the description of the avifauna in the whole of Royal Park; and
- note any significant trends in species or habitats.

1.3 Study Site

The study site occurs in the City of Melbourne and occupies the majority of Parkville. Royal Park is bound by The Avenue, Royal Parade, Gatehouse Street, Flemington Road, Manningham Street, Oak Street and Park Street and the Citylink tollway, with some inclusions of residences, Melbourne Zoo, health institutions and industrial sites. Major transport routes such as Elliott Avenue (south-west)-Macarthur Road, a tram line and the Upfield railway bisect the park. The Park is mainly surrounded by residential areas, as well as the Royal Children's Hospital and CSL Limited. Within the park itself, there are several main features, including:

- indoor and outdoor sporting facilities (e.g. the State Netball and Hockey Centre and a golf course);
- amenity plantings of native and exotic trees, shrubs and understorey species;
- recreated natural habitats including wetlands, a grassland and grassy

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- woodlands; and
- conservation of remnant and regrowth native vegetation.

The 13 bird monitoring sites within the Park are shown in Figure 2 and are described in Appendix 4.

Royal Park is in the transition between two bioregions, the Gippsland Plain and the Victorian Volcanic Plain (DSE 2011), and includes variable geology of Silurian, Tertiary and Quaternary sediments and Tertiary Older Volcanics (DSE 2011).

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2 METHODS

Bird taxonomy is consistent with Christides & Boles (2008). Conservation status follows DSEWPC (2011) and DSE (2007). An asterisk denotes introduced species.

2.1 Data

Previous records of birds in Royal Park were drawn from a variety of sources:

- Victorian Biodiversity Atlas (VBA);
- a report by Bartram (1999) that included the Zoo;
- three series of surveys by Practical Ecology at 13 monitoring sites (Appleby 2007, 2008; Henry 2009);
- numerous surveys by the Friends of Royal Park in West Royal Park; and
- incidental observations by private birdwatchers (e.g. as posted on B-a 2011, EB 2011)

The current study is the fourth series of surveys at 13 monitoring sites established in 2007 (Appleby 2007). Following Appleby (2008), the survey techniques used were:

- two 20 minute bird surveys (broadly following Loyn 1986) were undertaken at each site, once in the morning and once in the afternoon; and
- sites were surveyed in random order but with consecutive sites generally being the nearest sites.

Regarding the latter technique, it was considered that “sites are far enough apart, and subjected to many intrusions and disturbance, that surveying in one site would have little effect on the bird community within nearby sites” and that “any disturbance from human activities (other than bird surveying) that may result in birds moving between sites cannot be practically controlled.”

Incidental bird observations (i.e. those collected at any time and any method outside the 20 minute surveys at monitoring sites) were also recorded for this project. Other incidental observations and more comprehensive data that were collected by other sources for the 13 monitoring sites and Royal Park in general were noted. All of this additional information was not analysed more extensively due to differences between the standard 20 minute survey used for this project and methods used by other sources.

Previous and new records were used to compile lists of bird species for Royal Park as a whole (including wild birds at the Melbourne Zoo) and for the monitoring sites.

Gross densities for a sample of bird species (outlined in Appendix 5) were calculated for all 13 monitoring sites. The criteria used for choosing sample species were:

- representatives of a range of ecological requirements;
- sufficient records for meaningful analysis;
- known or suspected potential for management problems; and
- potential to indicate changes in habitat condition and success of management works.

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One group of species not chosen for density analysis were raptors; these birds have wide ranges and have been recorded relatively infrequently at monitoring sites.

2.2 Interpretation of results

Results of the current monitoring surveys at each site were interpreted in terms of:

- diversity; and
- new species.

The combined results of previous and the current monitoring surveys were used to calculate gross densities of a limited range of species at the survey sites.

2.3 Limitations

Optimal periods to record bird diversity and numbers in an area are generally during the peak breeding season, during migrations or regular movements, when peak food availabilities occur and when habitats are climatically most contrasting. Accordingly, suitable survey regimes could occur every three months to cover a range of conditions. However, peak breeding times and favourable habitat conditions are variable and do not necessarily coincide with surveys.

Densities of a range of bird species are problematic to calculate and interpret in locations such as Royal Park due to:

- temporary occurrences at a site by opportunistic or vagrant species;
- many species mainly being recorded aerially; and
- visitation to highly localised resources such as water or temporary abundant flowering of an individual tree.

To mitigate some of these problems with density calculation, a sample of species was chosen according to criteria listed in section 2.1.

Part of one monitoring site established in March 2007 (Site 13: Royal Children's Hospital Woodland) was closed to public access later in 2007 as part of the construction of the new Royal Children's Hospital. Monitoring surveys in November-December 2007 and June 2009 covered the reduced site, while the survey undertaken in March 2011 covered an expanded site with the intention to restore an area more comparable with the original site. Accordingly, interpretation of the results of these surveys should be done with care, noting that three different sized areas with largely common area have been used.

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3 RESULTS**3.1 Diversity at monitoring sites**

The diversity of birds recorded within the monitoring sites in Royal Park has increased overall with new species having been recorded at every site. A summary of surveys undertaken in March 2011 is presented in Table 1.

At most sites, a number of species were only recorded as flying over: some of these species were clearly in transit and may or may not be expected to use the site itself. For example, a cormorant flying over a dry land site with no waterways or roost trees is unlikely to use the site, whereas lorikeets flying over the same site could use the habitat present for roosting, breeding or foraging at another time of year or time of day. In addition, a small number of species such as swallows, martins, swifts and raptors are primarily aerial foragers and may be attracted to habitat at a site without landing there.

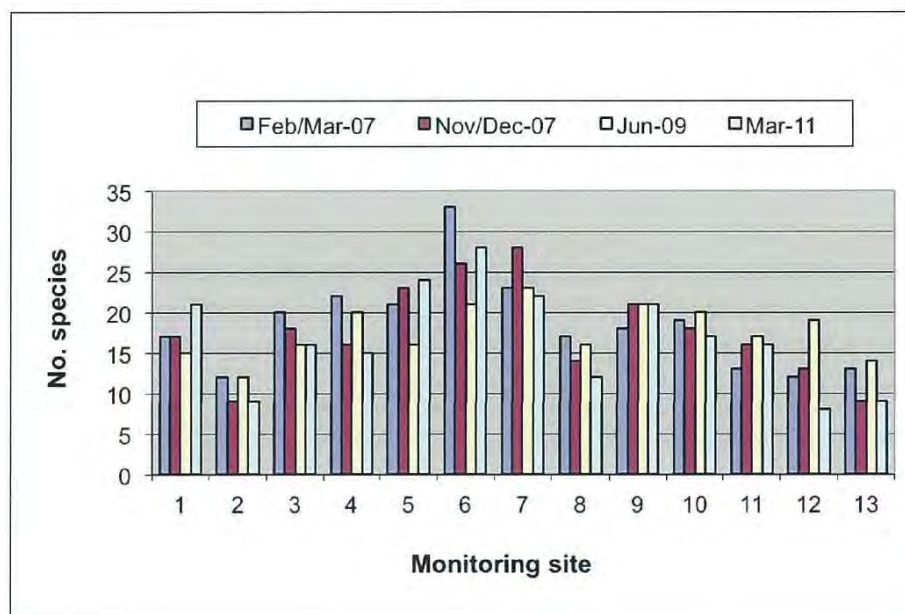
Table 1. Bird diversity at monitoring sites, Royal Park

Site no.	Site name	March 2011	Total for site 2007-2011
1	Australian Native Garden	21	33
2	Grassland	9	24
3	Elliott Avenue Bushland	16	33
4	Escarpment Bushland	15	49
5	Storage Wetland	24	39
6	Treatment Wetland	28	52
7	Creeklines	22 (+2 ⁱ)	56
8	Golf Course	12	32
9	Former Nursery	21	31
10	Zoo Frontage	17	30
11	The Avenue	16 (+1 ⁱ)	24
12	Macarthur Road Woodland	8 (+1 ⁱ)	28
13	Royal Children's Hospital Woodland ⁱⁱ	9	21

i Additional species only recorded incidentally

ii Site redefined in March 2011 due to loss of area to hospital redevelopment, so previous surveys apply to different areas.

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Figure 1. Bird diversity at monitoring sites.

Note: Species only recorded incidentally are excluded from these totals.

3.2 New species at monitoring sites

A summary of the new bird species recorded at the 13 monitoring sites during the 2011 survey period is presented in Table 2. Records were derived from on site during the 20 minute surveys and incidentally.

As with previous surveys, the new species recorded at each site were countered by absences of a number of previously recorded species. This apparent “turnover” of species at each site can be explained by differences in seasonal conditions between surveys at Royal Park and conditions elsewhere in each species range.

Table 2. New species recorded within monitoring sites.

Site no.	Site name	No. new species
1	Australian Native Garden	5
2	Grassland	4
3	Elliott Avenue Bushland	2
4	Escarpment Bushland	1
5	Storage Wetland	3
6	Treatment Wetland	3
7	Creeklines	3 (+2 ⁱ)
8	Golf Course	1
9	Former Nursery	2
10	Zoo Frontage	2
11	The Avenue	4
12	Macarthur Road Woodland	3 (+1 ⁱ)
13	Royal Children’s Hospital Woodland ⁱⁱ	1

ⁱ Additional species recorded incidentally.

ⁱⁱ Site redefined in June 2011 after redevelopment of the Royal Children’s Hospital.

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The occurrences of new species recorded at each site are outlined below.

1 Australian Native Garden

- Brown Thornbill *Acanthiza pusilla* – several seen or heard in dense medium shrub plantings;
- Superb Fairy Wren *Malurus cyaneus* – a small group seen in dense medium shrubs and on adjacent lawns;
- Spotted Pardalote *Pardalotus punctatus* – one bird seen in dense medium shrubs together with the previous two species;
- Grey Fantail *Rhipidura albiscapa* – one recorded in dense tall shrubs; probably the same individual noted at the adjacent Grassland site less than an hour before;
- Song Thrush *Turdus philomelos* – one bird found in well watered garden area, a favoured habitat of this uncommon introduced species of scattered occurrence mainly in urban areas.

The good diversity of vegetation structure, variety of plants and the ornamental pond at the Australian Native Garden is likely to have attracted these species to this site.

2 Grassland

- Grey Butcherbird *Cracticus torquatus* - flew a substantial distance over exotic grassland and the Grassland site from the direction of the Zoo to the single large River Red Gum on site;
- Black-shouldered Kite *Elanus axillaris* – disturbed from a roost in the large River Red Gum and later observed hunting over the grassland on site;
- Grey Fantail – recorded roosting in the large River Red Gum and probably the same individual moved to forage in tall shrubs in the adjacent Australian Native Garden;
- Musk Lorikeet *Glossopsitta concinna* - recorded flying over; unlikely to use habitat on site except the large River Red Gum (potentially for roosting and seasonal flowering).

3 Elliott Avenue Bushland

- Australian Wood Duck *Chenonetta jubata* – one dead bird seen snagged on wood at the entrance to a probable nest hollow; nest sites in large eucalypts away from water are typical of this species;
- Little Lorikeet *G. pusilla* – found in a flowering Sugar Gum, a favourite tree on site of the frequently co-occurring Rainbow and Musk Lorikeets; Little Lorikeets should use this site more regularly due to its flowering resources.

4 Escarpment Bushland

- Rock Dove *Columba livia* - recorded flying over; most of the habitat on site is too dense for this species.

5 Storage Wetland

- Little Pied Cormorant *Microcarbo melanoleucos* – seen flying at site, possibly flushed from a perch; recorded several times at adjacent Treatment Wetland,

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so expected to occur more often here.

- Grey Fantail – heard in dense planted shrubs and trees.
- White-browed Scrubwren *Sericornis frontalis* – recorded in dense planting of groundcover, shrubs and trees.

6 Treatment Wetland

- Little Wattlebird *Anthochaera chrysoptera* – using planted eucalypts and bloodwoods in association with other honeyeater species.
- New Holland Honeyeater *Phylidonyris pyrrhoptera* – as for above species.
- White-browed Scrubwren – occurring in planted low shrubs and groundcover.

7 Creeklines

- Australian Reed Warbler *Acrocephalus australis* – occurring in a dense reedbed, as expected by seasonal presence at the nearby Treatment and Storage Wetlands; incidentally recorded.
- Eurasian Coot *Fulica atra* – seen on the sedimentation pond.
- Purple Swamphen *Porphyrio porphyrio* – seen in and adjacent to the sedimentation pond.
- Grey Fantail – recorded in the remnant River Red Gums and exotic trees along the creekline adjacent to the skink habitat, an area that attracts a number of less common passerines visiting Royal Park.
- Pied Currawong *Strepera graculina* – incidentally heard from the vicinity of the confluence of the two creeks; occurs irregularly and in small numbers at Royal Park, and could be expected to occur in any woodland area and adjacent habitats.

The occurrence of the first three species appears to be part of a trend of waterbirds well established at the Treatment and Storage Wetlands moving into adjacent habitats.

8 Golf Course

- Red-rumped Parrot *Psephotus haematonotus* – a species that favours grassland and grassy woodland, and frequently seen elsewhere in the golf course and around the nearby Zoo, so overdue in being recorded at this site.

9 Former Nursery

- Eastern Spinebill *Acanthorhynchus tenuirostris* – seen moving along the edge of the site alongside the railway, a corridor used by many birds that favour forest, woodland and shrub habitat.
- Galah *Eolophus roseicapilla* – recorded flying over the site; another record of this species during an apparent influx to Royal Park in March 2011.

10 Zoo Frontage

- Galah – as per comment for Site 9.
- Rock Dove – recorded foraging in the front car park, as might be expected for a species usually found in association with human structures and artificial food sources.

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11 The Avenue

- Galah – large numbers of this species were foraging on the adjacent oval, possibly constituting the bulk of birds at Royal Park at the time; birds disturbed from the oval to on-site and could also roost in the tall eucalypts on-site and elsewhere in Royal Park.
- Grey Butcherbird – recorded in tall planted Sugar Gums and plantings of dense groundcover, shrubs and small trees.
- Australian Hobby *Falco longipennis* – observed briefly on a hunting flight across the site.
- Little Lorikeet – as with many records at Royal Park, recorded with Musk and Rainbow Lorikeets where strong flowering of Sugar Gums occurs.

12 Macarthur Road Woodland

- Galah – recorded flying over this site; see comment under Site 11.
- Mistletoebird *Dicaeum hirundinaceum* – one bird heard in a dense patch of planted shrubs; may have been investigating the site for foraging opportunities after a recent seasonal return to the site; incidentally recorded.
- Grey Fantail – one bird recorded at the edge of dense shrubs: should be expected in this type of habitat and associated trees more often at Royal Park.
- Grey Currawong *Strepera versicolor* – a bird observed foraging on the ground and in a large eucalypt was the first of this species recorded at Royal Park; could be a more frequent visitor to remnant and planted woodland areas at Royal Park.

13 Royal Children’s Hospital Woodland

- Galah – a pair observed roosting in a tall Sugar Gum on the edge of the site.

3.3 Diversity and new species in Royal Park

Fifty-three species were recorded in Royal Park during March 2011 (see Appendix 2). This total is greater than those recorded for November – December 2007 and June 2009 but is slightly less than the total for February-March 2007 (50, 46 and 55 species respectively).

One hundred and fifty-two bird species have been recorded in Royal Park (see Appendix 1; Bartram 1999; Appleby 2007, 2008; Henry 2009; B-a 2011; FoRP 2011). This total has increased since the 2009 surveys mainly due to records from the 2011 monitoring surveys, incidental observations by private birdwatchers and surveys by Friends of Royal Park.

One species, the Grey Currawong *Strepera versicolor*, was recorded in Royal Park for the first time in March 2011, during monitoring surveys.

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4 DISCUSSION

4.1 *Bird densities*

The previous reports on birds of Royal Park (Appleby 2007, 2008; Henry 2009) stated or reiterated that “Densities of birds can best be calculated for the onsite observations at each site (i.e. from a fixed area of relatively homogeneous habitat that can be used repeatedly for comparative results)”. These reports further assert that:

- “the numbers of many species can be successfully counted within the site as they tended to use habitat with similar structure (i.e. different to surrounding areas);
- other species may move around or through the site and are at risk of being counted more than once;
- some species can be difficult to count or to observe at all”.

With care, it is possible to calculate densities for a number of the monitoring sites and a limited range of species. The suitable types of sites are:

- distinct habitats (internally homogeneous or “islands”) - Australian Native Garden, Grassland, Escarpment Bushland, Storage Wetland and Treatment Wetland;
- part of a wider area of homogeneous habitat - Golf Course; and
- patches of habitat with strong connections to similar habitat - Former Nursery, Zoo Frontage, The Avenue, Elliott Avenue Bushland and Macarthur Road Woodland; also Royal Children’s Hospital Woodland.

One site, the Creeklines, has proved to be too variable for accurate density calculation as it includes mature exotic vegetation, remnant woodland and wetland habitats. However, there are indications that a number of native waterbird, grassland, woodland and forest bird species are using parts of this site with increasing frequency. Gross densities calculated for this site would provide an indication of increasing or decreasing use by various species but would not be able to be compared with density data from other monitoring sites with more homogeneous habitat at Royal Park or elsewhere. Separating broad habitats within some sites such as the Creeklines could refine future analyses based on density data.

Gross densities of selected species are presented in Appendices 6a-d. Further discussion of these density figures and those that can be derived from previous survey data are not included as part of this report.

4.2 *Trends in selected species*

In addition to descriptions of bird populations at Royal Park based on densities at monitoring sites, a more general analysis of selected species is presented below.

Superb Fairy-wren

As noted in section 3.2, Superb Fairy-wrens were recorded for the first time at the Australian Native Garden site. These birds now occur in most areas with prostrate to medium shrub growth and associated lawn or grassland. This contrasts with their

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very restricted range during the two survey periods in 2007. In the several woodland-bushland sites where they are notably absent, it appears that a significant limiting factor may be a lack of native groundcover plants or prostrate to medium shrubs.

White-browed Scrubwren

As also noted in section 3.2, this species was recorded for the first time at the Storage and Treatment Wetlands. It has also increased its range in Royal Park after not being recorded other than from the railway line adjoining the Former Nursery site during the two survey periods in 2007. The maturing of planted shrubs and establishment of plantings with a high shrub component may have assisted this species increasing its range locally.

Galah

Galahs have not been frequently recorded at Royal Park. In March 2011, up to 68 were counted on H.G. Smith Oval adjoining The Avenue site, feeding on the reseeded turf. Smaller numbers were seen elsewhere in the park (during monitoring surveys and incidentally), indicating that the oval was the main attraction for the birds in the area. This is an example of a localised food source that can temporarily attract an unusually large number of a species to an area; at Royal Park, this phenomenon usually occurs with nectarivorous species such as lorikeets foraging on large numbers in flowering Sugar Gums *Eucalyptus cladocalyx* and Spotted Gums *Corymbia maculata*.

Australasian Grebe *Tachybaptus novaehollandiae*

This species was notably absent from the Treatment Wetland, a site where it has been regularly found (including breeding) for several years. In March 2011, the aquatic vegetation at this site had reduced the area of surface water compared with previous surveys and had probably restricted the movement of diving species such as grebes. Variations in water level as well as the extent of aquatic vegetation growth are normal for wetlands of this form. In general, allowing aquatic vegetation to reduce the area of surface water, to dry out the wetland and to flood it again suit different groups of birds at different stages and should be part of the management of the Treatment Wetland.

4.3 Trends at monitoring sites

The previous trends in bird diversity and habitat type found in previous reports (Appleby 2007, 2008; Henry 2009) are generally reflected in the March 2011 survey. Wetlands had the highest diversity, with the Creekline site and two woodlands (Australian Native Garden and the Former Nursery) being only slightly less diverse. The remaining woodland sites and the Grassland were the lowest in diversity. Bird activity and numbers at two woodland sites (Macarthur Drive and the Royal Children's Hospital) and the Grassland were relatively low, a phenomenon not clearly indicated in the survey data.

Woodlands

If not for individuals of several unusual species (for the type of habitat or Royal Park in general) occurring at the Macarthur Drive Woodland, the diversity figures for this site would have been very low: singletons of Grey Fantail, Grey Currawong and Mistletoebird contributed significantly to the diversities at this sites.

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Bird use of the Royal Children's Hospital Woodland has probably been altered through habitat loss (with the building of the new hospital) and by the fence around the building site changing movements through this part of the park. A lack of prostrate to medium shrubs and groundcover plants may limit the diversity and number of birds at both the Macarthur Drive and the Royal Children's Hospital Woodlands. There are also indications that some established tall shrub species at the Macarthur Drive Woodland are senescing while others are suckering or have produced dense seedling growth, producing patches of habitat with decreasing plant diversity or poorer habitat quality. Lush grass growth after a relatively wet winter-summer period may also have discouraged a number of ground-foraging birds which would prefer more open ground and lower groundcover.

The Grassland

As with the Macarthur Road Woodland, individuals of several unusual species (Grey Fantail, Grey Butcherbird and Black-shouldered Kite) account for a significant proportion of the bird diversity at the Grassland. Other species contributing significantly to the diversity at this site are those recorded solely as flying over (four out of nine species overall, and three out of four during the morning survey). The number of species using the ground habitat has apparently been reduced by the notably dense grass growth (which was heavily dominated by exotic grasses) and potentially by the loss of perching sites formerly provided by the fence.

While both native and exotic grasses would have benefitted from unusually good winter-summer rainfall, exotic species have become dominant. A program of seasonal slashing and patch burning would be a suitable way to reduce grass density and to increase the proportion of native grass species. Grazing would also be a good method to reduce grass density but is probably impractical in an urban location and an unfenced site.

The removal of the boundary fence from the Grassland has resulted in the loss of perching sites (for resting or from which to forage) for species such as the Australasian Pipit *Anthus novaeseelandiae* and Welcome Swallow *Hirundo neoxena*. However, terrestrial species such as the former may still use the site but are more difficult to detect without the artificial perches provided by the fence.

Changes in species composition

As with previous survey periods, the recording of new species for sites was countered by absences of many species previously found at the same sites. This trend, described as "turnover" of species in previous reports, is more accurately a reflection of factors such as:

- seasonal movements of species at the local up to national scale;
- diurnal movements (e.g. to and from roosts); and
- chance events such as disturbance by other birds, predators and people.

Further monitoring surveys (particularly those undertaken in different seasons), should result in additional species being recorded.

5 Recommendations

Future monitoring

- surveys should continue the format of occurring during the morning and evening which are generally the peak periods for bird activity;
- bird surveys should occur during every season i.e. summer (for breeding and presence of migrants), spring-summer (for the main breeding season), spring and autumn (for passage of migrants), winter (for passage or presence of migrants from Tasmania and inland);
- encourage the Friends of Royal Park (FoRP) to integrate their surveys at common sites (i.e. the Treatment Wetland, Storage Wetland and Escarpment Bushland) with City of Melbourne commissioned monitoring surveys by standardising survey technique (i.e. 20-minute counts from the same areas, establishing if there are significant methodological differences and if so, working towards a common methodology).

Analysis of data

- restrict formal data analysis to on site records from monitoring sites to allow accurate quantification of bird occurrences (such as for calculation of gross densities);
- all other observations within and around monitoring sites should continue to be recorded as useful background information and also for inclusion in the Department of Sustainability and Environment's Victorian Biodiversity Atlas and/or the Birds Australia Atlas;
- collaborate with FoRP in the analysis of monitoring data.

Additional data

- promote knowledge of the monitoring sites within the birdwatching community to encourage collection of incidental observations or formal 20-minute counts;
- continue to collect incidental records from private observers to build bird lists for Royal Park as a whole and for monitoring sites.

Management

- further investigate links between bird occurrences and management regimes at Royal Park to provide formal feedback on management regimes, detailed revegetation works and park use.

Potential management works (to be checked against the Royal Park Master Plan)

- improve habitat diversity through supplementary planting in established areas of revegetation or native planting;
- develop planting lists of native species with emphasis on the species which locally have been observed to provide good foraging, roosting, shelter and breeding habitat for birds, and other species which may also be suitable for these purposes;
- improve habitat diversity in new and established revegetation areas by

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planting a greater variety of plant species, adding “missing” vegetation strata such as groundcover species, and replacing senescing woody understory species;

- retain or import fallen wood and rocks to areas managed mainly for native vegetation;
- further limit the spread and vigour of growth of grassy weeds, focussing particularly on areas planted with native species and with remnant vegetation;
- integrate cycles of wetting and drying in the Treatment and Storage Wetlands into the overall management of this water treatment system to increase the variation in habitat niches available and to improve the health of the wetlands;
- specifically investigate the effects of introduced Common Mynas *Acridotheres tristis* and native Noisy Miners *Manorina melanocephala* (species of concern for aggressive, exclusionary behaviour towards other birds) within Royal Park;
- provide nest boxes for the numerous hollow nesting bird species found at Royal Park with particular care to monitor and potentially limit use by possums, honeybees and Common Mynas.

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6 CONCLUSION

Bird diversity continues to grow throughout the mosaic of habitats at Royal Park. Established and new revegetation and formal plantings are providing useful habitat for birds of bushlands, wetlands and grasslands. Continued monitoring of bird populations and collection of general bird observations will assist in management of the Park and will engender greater public interest and use of the Park.

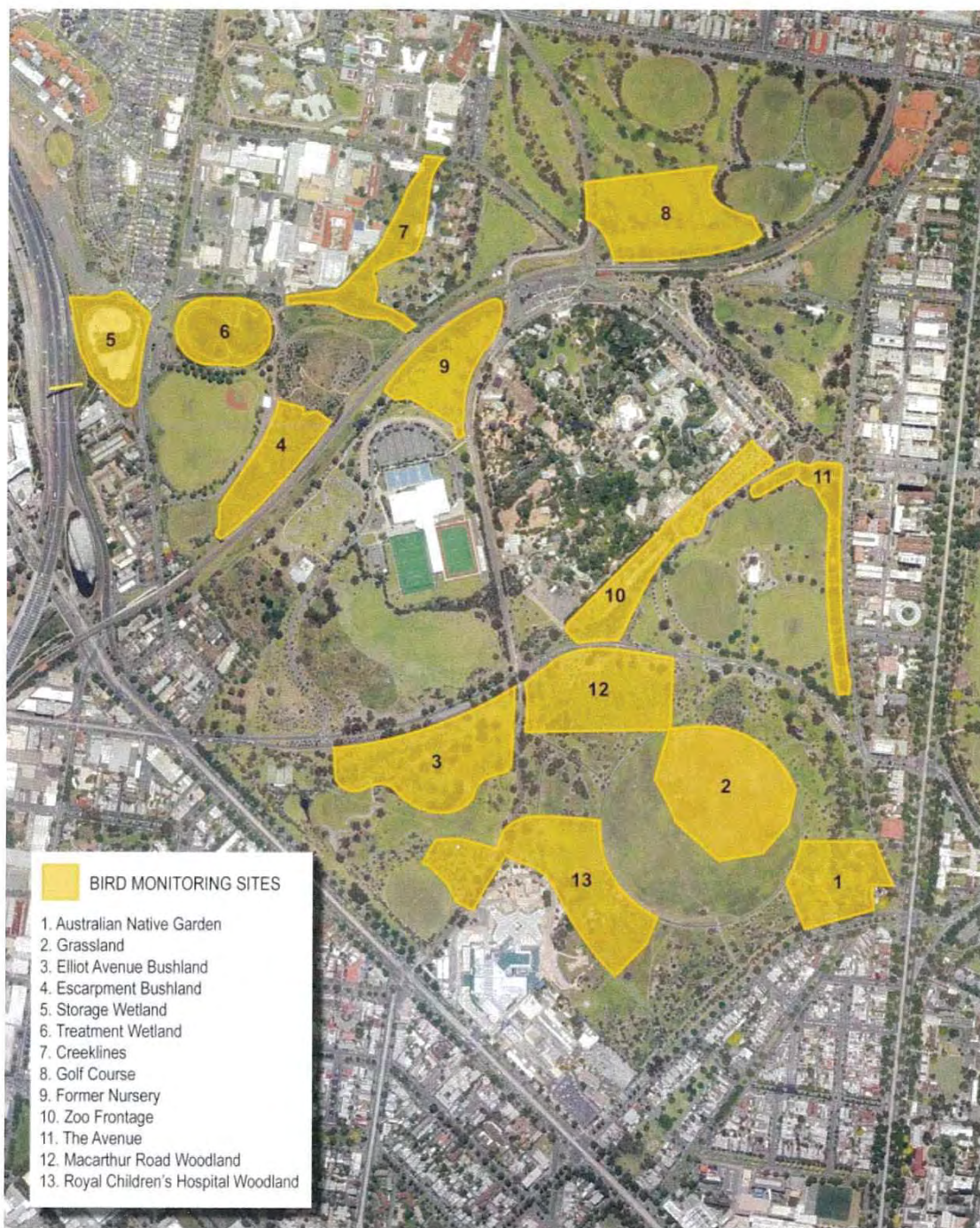
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Figure 2. Bird monitoring sites at Royal Park



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Appendix 1: Birds recorded at Royal Park

Conservation Status Codes:

FFG Flora and Fauna Guarantee Act 1988 (DSE 2010)
 EPBC Environment Protection and Biodiversity Conservation Act 1999 (DSEWPC (2011))
 DSE Advisory List of Threatened Vertebrate Fauna in Victoria (DSE 2007)

Conservation Status:

L listed as threatened under the FFG Act
 M listed migratory and/or marine species under the EPBC Act
 E Endangered (EPBC and/or DSE)
 V Vulnerable (EPBC and/or DSE)
 NT Near Threatened (DSE).

Origin:

probable escapee
 ^ vagrant or escapee
 * introduced or exotic.

Sources: Bartram (1999); VFD (2009); Appleby 20007, 2008; Henry 2009; GA 2011; FoRP (2011), EB (2011); B-a (2011); N. Spillane & P. Jacobson; C. Lester; T. Dolby.

Note: Torresian Crow is included in the list but is subtracted from the total number of species and Bartram's list since the record is highly unlikely.

Conservation status			Origin	Family	Common Name	Scientific Name
FFG	EPBC	DSE				
	M			Accipitridae	Collared Sparrowhawk	<i>Accipiter cirrhocephalus</i>
	M			Accipitridae	Brown Goshawk	<i>Accipiter fasciatus</i>
	M			Accipitridae	Wedge-tailed Eagle	<i>Aquila audax</i>
	M			Accipitridae	Swamp Harrier	<i>Circus approximans</i>
	M			Accipitridae	Black-shouldered Kite	<i>Elanus axillaris</i>
	M			Accipitridae	Whistling Kite	<i>Haliastur sphenurus</i>
	M			Accipitridae	Little Eagle	<i>Hieraetus morphnoides</i>
			*	Alaudidae	Eurasian Skylark	<i>Alauda arvensis</i>
	M			Anatidae	Chestnut Teal	<i>Anas castanea</i>
	M			Anatidae	Grey Teal	<i>Anas gracilis</i>
	M		*	Anatidae	Northern Mallard	<i>Anas platyrhynchos</i>
	M			Anatidae	Australasian Shoveler	<i>Anas rhynchotis</i>
	M			Anatidae	Pacific Black Duck	<i>Anas superciliosa</i>
	M			Anatidae	Pink-eared Duck	<i>Malacorhynchus membranaceus</i>
	M	V		Anatidae	Hardhead	<i>Aythya australis</i>
	M			Anatidae	Australian Wood Duck	<i>Chenonetta jubata</i>
	M			Anatidae	Black Swan	<i>Cygnus atratus</i>
	M			Anatidae	Australian Shelduck	<i>Tadorna tadornoides</i>
				Anhingidae	Darter	<i>Anhinga novaehollandiae</i>
	M			Apodidae	White-throated Needletail	<i>Hirundapus caudacutus</i>
L		E		Ardeidae	Australasian Bittern	<i>Botaurus poiciloptilus</i>
L	M	V		Ardeidae	Eastern Great Egret	<i>Ardea modesta</i>
L		E		Ardeidae	Little Egret	<i>Egretta garzetta nigripes</i>
	M			Ardeidae	Cattle Egret	<i>Ardea ibis</i>
				Ardeidae	White-necked Heron	<i>Ardea pacifica</i>
				Ardeidae	White-faced Heron	<i>Egretta novaehollandiae</i>
	M	NT		Ardeidae	Nankeen Night-Heron	<i>Nycticorax caledonicus</i>
				Artamidae	Australian Magpie	<i>Gymnorhina tibicen</i>
				Artamidae	Grey Butcherbird	<i>Craicticus torquatus</i>
				Artamidae	Dusky Woodswallow	<i>Artamus cyanopterus</i>
				Artamidae	Grey Currawong	<i>Strepera versicolor</i>
				Artamidae	Pied Currawong	<i>Strepera graculina</i>
				Cacatuidae	Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>
				Cacatuidae	Galah	<i>Eolophus roseicapilla</i>
				Cacatuidae	Gang Gang Cockatoo	<i>Cacatua fimbriatum</i>

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Conservation status			Origin	Family	Common Name	Scientific Name
FFG	EPBC	DSE				
				Cacatuidae	Long-billed Corella	<i>Cacatua tenuirostris</i>
				Cacatuidae	Little Corella	<i>Cacatua sanguinea</i>
				Cacatuidae	Sulphur-crested Cockatoo	<i>Cacatua galerita</i>
				Campephagidae	White-winged Triller	<i>Lalage sueruii</i>
	M			Campephagidae	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>
	M			Charadriidae	Masked Lapwing	<i>Vanellus miles</i>
	M			Charadriidae	Common Sandpiper	<i>Actitis (Tringa) hypoleucos</i>
			*	Columbidae	Rock Dove	<i>Columba livia</i>
			*	Columbidae	Spotted Dove	<i>Streptopelia chinensis</i>
				Columbidae	Crested Pigeon	<i>Ocyphaps lophotes</i>
				Columbidae	Common Bronzewing	<i>Phaps chalcoptera</i>
				Corvidae	Australian Raven	<i>Corvus coronoides</i>
	M			Corvidae	Little Raven	<i>Corvus mellori</i>
				Corvidae	Torresian Crow ¹	<i>Corvus orru</i>
			*	Corvidae	House Crow	<i>Corvus splendens</i>
	M			Cuculidae	Fan-tailed Cuckoo	<i>Cacomantis flabelliformis</i>
	M			Cuculidae	Shining Bronze-Cuckoo	<i>Chalcites lucidus</i>
	M			Cuculidae	Horsfield's Bronze-Cuckoo	<i>Chalcites basalis</i>
	M			Cuculidae	Pallid Cuckoo	<i>Cuculus pallidus</i>
	M			Cuculidae	Eastern Koel	<i>Eudynamis orientalis</i>
				Dicaeidae	Mistletoebird	<i>Dicaeum hirundinaceum</i>
	M			Dicruridae	Magpie-lark	<i>Grallina cyanoleuca</i>
	M			Dicruridae	Satin Flycatcher	<i>Myiagra cyanoleuca</i>
				Dicruridae	Grey Fantail	<i>Rhipidura albiscarpa</i>
				Dicruridae	Willie Wagtail	<i>Rhipidura leucophrys</i>
	M			Dicruridae	Rufous Fantail	<i>Rhipidura rufifrons</i>
	M			Falconidae	Australian Hobby	<i>Falco longipennis</i>
	M			Falconidae	Brown Falcon	<i>Falco berigora</i>
	M			Falconidae	Nankeen Kestrel	<i>Falco cenchroides</i>
	M			Falconidae	Peregrine Falcon	<i>Falco peregrinus</i>
			*	Falconidae	European Goldfinch	<i>Carduelis carduelis</i>
			*	Falconidae	European Greenfinch	<i>Carduelis chloris</i>
				Halcyonidae	Laughing Kookaburra	<i>Dacelo novaeguineae</i>
	M			Halcyonidae	Sacred Kingfisher	<i>Todiramphus sanctus</i>
	M			Hirundinidae	Welcome Swallow	<i>Hirundo neoxena</i>
				Hirundinidae	Fairy Martin	<i>Petrochelidon ariel</i>
	M			Hirundinidae	Tree Martin	<i>Petrochelidon nigricans</i>
	M			Laridae	Silver Gull	<i>Chroicocephalus novaehollandiae</i>
	M	NT		Laridae	Whiskered Tern	<i>Chlidonias hybrida</i>
				Maluridae	Superb Fairy-wren	<i>Malurus cyaneus</i>
				Meliphagidae	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>
				Meliphagidae	Red Wattlebird	<i>Anthochaera carunculata</i>
				Meliphagidae	Little Wattlebird	<i>Anthochaera chrysoptera</i>
				Meliphagidae	White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>
				Meliphagidae	Noisy Miner	<i>Manorina melanocephala</i>
				Meliphagidae	Bell Miner	<i>Manorina melanophrys</i>
				Meliphagidae	White-naped Honeyeater	<i>Melithreptus lunatus</i>
				Meliphagidae	Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>
				Meliphagidae	Yellow-tufted Honeyeater	<i>Lichenostomus melanops</i>
				Meliphagidae	Fuscous Honeyeater	<i>Lichenostomus fuscus</i>
				Meliphagidae	New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>
				Meliphagidae	Spiny-cheeked Honeyeater	<i>Acanthagenys rufogularis</i>
	M			Motacillidae	Australasian Pipit	<i>Anthus novaeseelandiae</i>
	M		*	Muscicapidae	Common Blackbird	<i>Turdus merula</i>
	M		*	Muscicapidae	Song Thrush	<i>Turdus philomelos</i>
				Oriolidae	Olive-backed Oriole	<i>Oriolus sagittatus</i>
				Pachycephalidae	Crested Shrike-tit	<i>Falcunculus frontatus</i>

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Conservation status			Origin	Family	Common Name	Scientific Name
FFG	EPBC	DSE				
				Pachycephalidae	Golden Whistler	<i>Pachycephala pectoralis</i>
				Pachycephalidae	Grey Shrike-thrush	<i>Colluricincla harmonica</i>
				Pardalotidae	Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>
				Pardalotidae	Yellow Thornbill	<i>Acanthiza nana</i>
				Pardalotidae	Brown Thornbill	<i>Acanthiza pusilla</i>
				Pardalotidae	Weebill	<i>Smicronis brevirostris</i>
				Pardalotidae	Spotted Pardalote	<i>Pardalotus punctatus</i>
				Pardalotidae	Striated Pardalote	<i>Pardalotus striatus</i>
				Pardalotidae	White-browed Scrubwren	<i>Sericornis frontalis</i>
			*	Passeridae	Eurasian Tree Sparrow	<i>Passer montanus</i>
			*	Passeridae	House Sparrow	<i>Passer domesticus</i>
				Passeridae	Red-browed Finch	<i>Neochmia temporalis</i>
	M			Pelecanidae	Australian Pelican	<i>Pelecanus conspicillatus</i>
				Petroicidae	Flame Robin	<i>Petroica phoenicea</i>
				Petroicidae	Rose Robin	<i>Petroica rosea</i>
				Petroicidae	Scarlet Robin	<i>Petroica boodang</i>
				Phalacrocoracidae	Great Cormorant	<i>Phalacrocorax carbo</i>
				Phalacrocoracidae	Little Black Cormorant	<i>Phalacrocorax sulcirostris</i>
				Phalacrocoracidae	Little Pied Cormorant	<i>Microcarbo melanoleucos</i>
		NT		Phalacrocoracidae	Pied Cormorant	<i>Phalacrocorax varius</i>
	M			Phasianidae	Stubble Quail	<i>Coturnix pectoralis</i>
				Podargidae	Tawny Frogmouth	<i>Podargus strigoides</i>
				Podicipedidae	Australasian Grebe	<i>Tachybaptus novaehollandiae</i>
				Podicipedidae	Hoary-headed Grebe	<i>Polioccephalus poliocephalus</i>
				Psittacidae	Musk Lorikeet	<i>Glossopsitta concinna</i>
				Psittacidae	Little Lorikeet	<i>Glossopsitta pusilla</i>
				Psittacidae	Purple-crowned Lorikeet	<i>Glossopsitta porphyrocephala</i>
L	E, M	E		Psittacidae	Swift Parrot	<i>Lathamus discolor</i>
			#?	Psittacidae	Budgerigar	<i>Melopsittacus undulatus</i>
	M			Psittacidae	Blue-winged Parrot	<i>Neophema chrysostoma</i>
				Psittacidae	Cockatiel	<i>Nymphicus hollandicus</i>
			#	Psittacidae	Pale-headed Rosella	<i>Platycercus adscitus</i>
				Psittacidae	Crimson Rosella	<i>Platycercus elegans elegans</i>
				Psittacidae	Eastern Rosella	<i>Platycercus eximius</i>
			#	Psittacidae	Western Rosella	<i>Platycercus icterotis</i>
				Psittacidae	Red-rumped Parrot	<i>Psephotus haematonotus</i>
				Psittacidae	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidosus</i>
				Psittacidae	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>
	M			Rallidae	Buff-banded Rail	<i>Gallinallus philippensis</i>
				Rallidae	Dusky Moorhen	<i>Gallinula tenebrosa</i>
				Rallidae	Eurasian Coot	<i>Fulica atra</i>
	M			Rallidae	Purple Swamphen	<i>Porphyrio porphyrio</i>
				Rallidae	Black-tailed Native-hen	<i>Gallinula ventralis</i>
				Rallidae	Australian Spotted Crane	<i>Porzana fluminea</i>
L	M	V		Rallidae	Baillon's Crane	<i>Porzana pusilla</i>
	M	NT		Scolopacidae	Latham's Snipe	<i>Gallinago hardwickii</i>
L		V		Strigidae	Powerful Owl	<i>Ninox strenua</i>
				Strigidae	Southern Boobook	<i>Ninox novaeseelandiae</i>
			*	Sturnidae	Common Myna	<i>Acridotheres tristis</i>
			*	Sturnidae	Common Starling	<i>Sturnus vulgaris</i>
	M			Sylviidae	Australian Reed-Warbler	<i>Acrocephalus australis</i>
	M			Sylviidae	Golden-headed Cisticola	<i>Cisticola exilis</i>
				Sylviidae	Little Grassbird	<i>Megalurus gramineus</i>
	M			Sylviidae	Brown Songlark	<i>Cincloramphus cruralis</i>
	M			Sylviidae	Rufous Songlark	<i>Cincloramphus mathewsi</i>
				Threskiornithidae	Yellow-billed Spoonbill	<i>Platalea flavipes</i>

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Conservation status			Origin	Family	Common Name	Scientific Name
FFG	EPBC	DSE				
		V		Threskiornithidae	Royal Spoonbill	<i>Platalea regia</i>
	M			Threskiornithidae	Australian White Ibis	<i>Threskiornis molucca</i>
	M			Threskiornithidae	Straw-necked Ibis	<i>Threskiornis spinicollis</i>
	M			Zosteropidae	Silveryeye	<i>Zosterops lateralis</i>



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Appendix 2: Birds recorded at Royal Park during survey period 4

Conservation Status Codes:

FFG Flora and Fauna Guarantee Act 1988; EPBC Environment Protection and Biodiversity Conservation Act 1999; DSE Advisory List of Threatened Vertebrate Fauna in Victoria (DSE 2007)

Conservation Status:

L listed as threatened under the FFG Act; M listed migratory and/or marine species under the EPBC Act; NT Near Threatened (DSE 2007).

Origin:

probable escapee; ∆ vagrant or escapee; * introduced or exotic.

Conservation status			Origin	Family	Common name	Scientific name	Site number												
FFG	EPBC	DSE					1	2	3	4	5	6	7	8	9	10	11	12	13
M				Accipitridae	Black-shouldered Kite	<i>Elanus axillaris</i>		y											
M				Accipitridae	sparrowhawk/goshawk sp.	<i>Accipiter species</i>													
M				Anatidae	Australian Wood Duck	<i>Chenonetta jubata</i>			y										
M				Anatidae	Black Swan	<i>Cygnus atratus</i>				y									
M				Anatidae	Chestnut Teal	<i>Anas castanea</i>			y	y	y								
M				Anatidae	Pacific Black Duck	<i>Anas superciliosa</i>			y	y	y		y						
M		NT		Ardeidae	Nankeen Night-Heron	<i>Nycticorax caledonicus</i>													
				Ardeidae	White-faced Heron	<i>Egretta novaehollandiae</i>				y									
				Artamidae	Australian Magpie	<i>Gymnorhina tibicen</i>	y	y	y	y	y		y	y	y		y		
				Artamidae	Grey Butcherbird	<i>Cracticus torquatus</i>		y					y		y		y		
				Artamidae	Grey Currawong	<i>Strepera versicolor</i>											y		
				Artamidae	Pied Currawong	<i>Strepera graculina</i>							(y)						
				Cacatidae	Galah	<i>Eolophus roseicapilla</i>			y				y	y	y	y	y		
				Columbidae	Crested Pigeon	<i>Ocyphaps lophotes</i>	y		y	y	y		y	y	y	y	y		
			*	Columbidae	Rock Dove	<i>Columba livia</i>				y	y	y		y					
			*	Columbidae	Spotted Dove	<i>Streptopelia chinensis</i>	y		y	y		y	y		y	(y)	y		
M				Corvidae	Little Raven	<i>Corvus mellori</i>		y											
				Dicacidae	Mistletoebird	<i>Dicacum hirundinaceum</i>							y				(y)		
				Dieruridae	Grey Fantail	<i>Rhipidura albiscapa</i>	y	y			y		y				y		
M				Dieruridae	Magpie-lark	<i>Grallina cyanoleuca</i>	y		y	y	y		y	y	y	y			
				Dieruridae	Willie Wagtail	<i>Rhipidura leucophrys</i>	y			y	y		y	y		y			
M				Falconidae	Australian Hobby	<i>Falco longipennis</i>											y		
M				Hirundinidae	Welcome Swallow	<i>Hirundo neoxena</i>	y	y		y	y	y	y		y	y	y		
M				Laridae	Silver Gull	<i>Chroicocephalus novaehollandiae</i>				y	y	y							
				Maluridae	Superb Fairy-wren	<i>Malurus cyaneus</i>	y			y	y	y		y					
				Meliphagidae	Bell Miner	<i>Manorina melanophrys</i>										y			

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Conservation status			Origin	Family	Common name	Scientific name	Site number													
FFG	EPBC	DSE					1	2	3	4	5	6	7	8	9	10	11	12	13	
				Meliphagidae	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	y						y		y					
				Meliphagidae	Little Wattlebird	<i>Anthochaera chrysoptera</i>	y						y	y		y	y			
				Meliphagidae	New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>							y	y						
				Meliphagidae	Noisy Miner	<i>Munorina melanoccephala</i>		y	y				y	y	y	y	y	y		
				Meliphagidae	Red Wattlebird	<i>Anthochaera carunculata</i>	y		y	y	y	y		y	y	y		y		
				Meliphagidae	White-plumed Honeyeater	<i>Lachenostomus penicillatus</i>	y			y	y	y	y	y	y	y				
M		*		Muscicapidae	Common Blackbird	<i>Turdus merula</i>	y			y	y	y	y		y			y	y	
M		*		Muscicapidae	Song Thrush	<i>Turdus philomelos</i>	y													
				Pardalotidae	Brown Thornbill	<i>Acanthiza pusilla</i>	y													
				Pardalotidae	Spotted Pardalote	<i>Pardalotus punctatus</i>	y						y							
				Pardalotidae	pardalote	<i>Pardalotus species</i>	y													
				Pardalotidae	thornbill	<i>Acanthiza species</i>							y							
				Pardalotidae	White-browed Scrubwren	<i>Sericornis frontalis</i>	y				y	y	y		y					
				† Passeridae	House Sparrow	<i>Passer domesticus</i>						y								
				* Passeridae	Sparrow sp.	<i>Passer species</i>				y					y					
				Phalacrocoracidae	Little Pied Cormorant	<i>Microcarbo melanoleucos</i>						y								
				Podicipedidae	Australasian Grebe	<i>Tachybaptus novaehollandiae</i>						y								
				Psittacidae	Eastern Rosella	<i>Platycercus eximius</i>				y				y				y		
				Psittacidae	Little Lorikeet	<i>Glossopsitta pusilla</i>				y				y				y		
				Psittacidae	Musk Lorikeet	<i>Glossopsitta concinna</i>	y	y	y		y	y		y	y	y	y			
				Psittacidae	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	y		y	y	y	y	y	y	y	y	y			
				Psittacidae	Red-rumped Parrot	<i>Psephodes haematotus</i>	y		y	y	y	y		y		y	y			
				Rallidae	Dusky Moorhen	<i>Gallinula tenebrosa</i>					y	y	y							
				Rallidae	Eurasian Coot	<i>Fulica atra</i>					y		y							
M				Rallidae	Purple Swamphen	<i>Porphyrio porphyrio</i>						y	y							
				* Sturnidae	Common Myna	<i>Acridotheres tristis</i>			y	y	y	y	y		y	y			y	y
				* Sturnidae	Common Starling	<i>Sturnus vulgaris</i>	y		y		y	y	y		y	y				
M				Sylviidae	Australian Reed-Warbler	<i>Acrocephalus australis</i>					y	y	(y)							
				Sylviidae	Little Grassbird	<i>Megalurus gramineus</i>						y								
Totals					55		21	9	16	15	24	28	22	12	21	17	16	8	9	
													(+2)				(+1)	(+1)		

Note: brackets indicate additional species only recorded incidentally

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Appendix 3: Definition of conservation status of fauna***National conservation status*****Listed under the EPBC Act as:**

- M migratory and/or marine species (taxon);
- EX Extinct: when there is no reasonable doubt that the last individual of the taxon has died”;
- CR Critically Endangered: a taxon faces “an extremely high risk of extinction in the wild in the immediate future”;
- E Endangered: a taxon faces “a very high risk of extinction in the wild in the near future”;
- V Vulnerable: a taxon faces “a high risk of extinction in the wild in the medium-term future”.

State conservation status**Listed under the FFG Act as:**

- L threatened taxon.

Listed in the Advisory List of Threatened Vertebrate Fauna in Victoria (DSE 2007) as:

- EX Extinct: “when there is no reasonable doubt that the last individual (of a taxon) has died”;
- RX Regionally Extinct: “as for Extinct but within a defined region (in this case the State of Victoria) that does not encompass the entire geographic range of the taxon”;
- WX Extinct in the Wild: a taxon “is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range”;
- CR Critically Endangered: a taxon “considered to be facing an extremely high risk of extinction in the wild”;
- E Endangered: a taxon “considered to be facing a very high risk of extinction in the wild”;
- V Vulnerable: a taxon “considered to be facing a high risk of extinction in the wild”.

Regional conservation status**Listed in the Advisory List of Threatened Fauna of Threatened Vertebrate Fauna in Victoria (DSE 2007) as:**

- NT Near Threatened: taxon “does not currently qualify for Critically Endangered, Endangered or Vulnerable status, but is close to qualifying for or is likely to qualify for a threatened category in the near future”;
- DD Data Deficient: “when there is inadequate information to make a direct, or indirect, assessment of (a taxon’s) risk of extinction based on its distribution and/or population status”.

Source for definitions: DSE (2007).

Appendix 4: Description of bird monitoring sites

Note: The following descriptions are reproduced with minor alterations from Henry (2009) and Appleby (2007, 2008).

1 Australian Native Garden

This site consists of a series of well-watered garden beds planted with native shrubs, herbs and grasses, drier garden beds around River Red Gums *Eucalyptus camaldulensis* and other native trees, open lawns and a pond with native water plants. These planted features form a relatively enclosed area of patches of habitat. Many of the native plants are not indigenous to the site or Victoria.

2 Grassland

The Grassland site is part of a former sporting oval that has been replanted with indigenous grass species and which includes a large River Red Gum and numerous seedlings and saplings. It is mainly dominated by wallaby-grasses *Austrodanthonia* spp. but has a section dominated by Kangaroo Grass *Themeda triandra*.

3 Elliott Avenue Bushland

Vegetation at this site consists of mature, sapling and seedling River Red Gums, and large planted Sugar Gums *E. cladocalyx* with supplementary native plantings in numerous patches, that follows a former drainage line towards Moonee Ponds Creek.

4 Escarpment Bushland

This bushland is apparently a section of what was an escarpment along the valley of Moonee Ponds Creek. Its upper side is roughly level with the main part of Royal Park but is cut off from this area by a railway cutting. The vegetation is relatively isolated from other substantial occurrences of native plants but is supplemented by planting on the edge of the White's Skink *Egernia whiteii* habitat. After a history of at least partial clearance of native vegetation and planting of site-indigenous and non-Victorian native plants, vegetation at the site contains small but mature River Red Gums with varying densities of site-indigenous shrubs, and indigenous grasses and chenopod species as groundcover.

5 Storage Wetland

This site consists mainly of open water with a dense band of aquatic graminoids, a wide fringe densely planted with native grasses and herbs, and an outer band of trees and shrubs. The wetland is the downstream stage in the water treatment process from site 6, the Treatment Wetland, and currently resembles the Floodplain Wetland Complex EVC. The triangle of dry grassland to the south is not included in the survey area while the whole planted area up to the tollway sound barriers is included.

6 Treatment Wetland

This site was created from a former sporting field that has been densely planted out with aquatic species and groundcover plants on the surrounding mounds (which retain native and exotic trees planted around the former oval). The wetland currently resembles Floodplain Wetland Complex EVC. It is fed by water from the creekline that originally flowed across the site to Moonee Ponds Creek. This water quality is variable as it drains a large urban catchment including the State Netball and Hockey Centre, the Melbourne Zoo and some industrial and institutional sites. As the site name suggests, it was constructed to treat stormwater for supply of irrigation water to nearby sports ovals and the golf course and for discharge into Moonee Ponds Creek.

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7 Creeklines

The Creeklines site consists of two small incised creeks that meet just upstream of the sedimentation pond from which water is piped to site 6, the Treatment Wetland. The main creek consists of a short section of natural channel (with a bedrock floor) with heavily modified banks mainly overgrown with exotic vegetation that is dominated by large trees in a park like setting. The smaller creek, which drains an area including the State Netball and Hockey Centre and Melbourne Zoo, has a relatively natural channel downstream of the bike path and railway embankment. It has only a narrow fringe of vegetation (including several River Red Gums and non-indigenous eucalypts) that is confined between the adjacent youth health facility and the less restored part of the White's Skink habitat. The River Red Gums are possibly remnants of the original Creeklines Grassy Woodland at this site. Both creeks and banks are frequently strewn with large amounts of flood-borne rubbish.

8 Golf Course

This site consists of lines of planted eucalypts (none of which are site-indigenous species) along the railway cutting and fairways in the Royal Park Golf Course, and includes part of a fringe of large Sugar Gums around a sporting oval. The grassy areas of the golf course are also included in the survey area.

9 Former Nursery

The Former Nursery site is mainly an open area of exotic grass with beds of planted native trees, shrubs and groundcover species (some of which are indigenous to the site). Some older planted Eucalypts occur along the boundary with the railway line.

10 Zoo Frontage

This site consists of relatively young planted native trees and associated garden beds fringing the front car parks at the Melbourne Zoo, as well as paths and the car parks themselves. Large planted Sugar Gums are not included in this area.

11 The Avenue

The Avenue site consists of a plantation of large Sugar Gums and groups of River Red Gums (the latter possibly being planted), with a scattering of other tree species, along the western edge of The Avenue and curving part way along Elliott Avenue. Dense plantings of tall shrubs separate the site from Elliott Avenue while roads and a sporting oval surround the rest of the site.

12 Macarthur Road Woodland

The Macarthur Road Woodland consists of a network of patches of planted native trees and shrubs with grassland in between. Medium-large Sugar Gums occur adjacent to the road. Several patches of tall shrubs and small trees are senescing, leaving plenty of dead wood still standing and on the ground.

13 Royal Children's Hospital Woodland

This site is structurally similar to the Elliott Avenue Bushland but differs in having no River Red Gums, fewer patches of planted shrubs and a greater variety of planted trees. From December 2007, approximately half of this site was cut off from public access by a tall opaque fence that was erected for the construction of the new Royal Children's Hospital at an adjacent site. In March 2011, an additional area was added to the site to replace this excised area.

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Appendix 5: Birds used for calculation of gross densities at monitoring sites

Species	Characteristics of interest
Australasian Grebe <i>Tachybaptus novaehollandiae</i>	Diving species; has colonised wetlands at Royal Park rapidly, with an apparently high rate of breeding
Chestnut Teal <i>Anas castanea</i>	Dabbling species; has colonised wetlands at Royal Park rapidly with breeding occurring
Pacific Black Duck <i>Anas superciliosa</i>	Dabbling species; has colonised wetlands at Royal Park rapidly with breeding occurring
Purple Swampphen <i>Porphyrio porphyrio</i>	Aquatic/littoral; has colonised wetlands at Royal Park slowly with breeding occurring
Eurasian Coot <i>Fulica atra</i>	Mainly aquatic; has colonised wetlands at Royal Park slowly with breeding occurring
Dusky Moorhen <i>Gallinula tenebrosa</i>	Mainly aquatic; has colonised wetlands at Royal Park slowly with breeding occurring
Crested Pigeon <i>Ocyphaps lophotes</i>	Rapid range increase in southern Victoria during recent long term drought; may compete with next two species
Spotted Dove* <i>Streptopelia chinensis</i>	Successful coloniser of urban and woodland-shrubland habitats
Rock Dove* <i>Columba livia</i>	Strongly adapted to living in close proximity to human development
Rainbow Lorikeet <i>Trichoglossus haematodus</i>	Probable resident with strong focus on seasonal flowering of eucalypt species
Musk Lorikeet <i>Glossopsitta concinna</i>	Seasonal visitor with strong focus on seasonal flowering of eucalypt species
Eastern Rosella <i>Platycercus eximius</i>	Nests in tree hollows; prefers open woodland
Red-rumped Parrot <i>Psephotus haematonotus</i>	Nests in tree hollows; prefers grasslands
Welcome Swallow <i>Hirundo neoxena</i>	Aerial forager but often concentrated over discrete habitat patches
Common Blackbird* <i>Turdus merula</i>	Able to adapt to a wide variety of woodland-/forest habitats; could be utilising new plantings better than native birds
Willie Wagtail <i>Rhipidura leucophrys</i>	Woodland/grassland species; relatively easy to monitor; favours ground and understorey
Australasian Pipit <i>Anthus novaeseelandiae</i>	Likely to only occur at the Grassland site
Australian Reed-Warbler <i>Acrocephalus australis</i>	Migratory species; has colonised wetlands at Royal Park rapidly; strongly favours reedbeds
Little Grassbird <i>Megalurus gramineus</i>	Seasonal species; has been relatively slow to colonise wetlands at Royal Park; strongly favours reedbeds
Superb Fairy-wren <i>Malurus cyaneus</i>	Favours low and dense vegetation; apparently expanding range rapidly at Royal Park as plantings increase in area and maturity
White-browed Scrubwren <i>Sericornis frontalis</i>	Favours low and dense vegetation; apparently expanding range at Royal Park as plantings increase in area and maturity
Red Wattlebird <i>Anthochaera carunculata</i>	Usually present year-round; uses a variety of shrubby to treed habitat; strongly linked to seasonal flowering

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Species	Characteristics of interest
Little Wattlebird <i>Anthochaera chrysoptera</i>	of eucalypts Probable seasonal visitor; possibly increasing locally use due to increasing supply of flowering native shrubs and trees
Noisy Miner <i>Manorina melanocephala</i>	Aggressive species; rapidly expanded range in recent years
Bell Miner <i>Manorina melanophrys</i>	Aggressive species; apparently confined to the Zoo but could potentially colonise other local areas
New Holland Honeyeater <i>Phylidonyris novaehollandiae</i>	Probable seasonal visitor; previous rare locally but possibly increasing due to greater supply of flowering native shrubs and trees
White-plumed Honeyeater <i>Lichenostomus penicillatus</i>	Apparent resident at Royal Park; uses a variety of shrubby to treed habitat; strongly attracted to seasonal flowering of eucalypts
House Sparrow* <i>Passer domesticus</i>	Introduced species that is surprisingly uncommon at Royal Park; competitor with native granivorous species which appear to be uncommon at Royal Park
Common Starling* <i>Sturnus vulgaris</i>	Introduced species that is surprisingly uncommon at Royal Park; possible competitor with native species for tree hollows for nesting
Common Myna* <i>Acridotheres tristis</i>	Considered to be a pest; possible competitor with native species for tree hollows for nesting
Magpie-lark <i>Grallina cyanoleuca</i>	Woodland/grassland species; relatively easy to monitor
Australian Magpie <i>Gymnorhina tibicen</i>	Woodland/grassland species; relatively easy to monitor; aggressive species
Little Raven <i>Corvus mellori</i>	Cosmopolitan species; predator on invertebrates through to small/young birds etc.



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Appendix 6a: Density of selected species at monitoring sites 1-3

Densities presented as birds/hectare; Blank entries presented where species not recorded on site or during monitoring surveys, occur aerially without using site or for additional reasons noted in section 2.1.
SP = survey period; * = exotic or introduced species

Common name	Scientific name	1 Aust. Native Garden (2.2 ha)				2 Grassland (4.7 ha)				3 Elliot Ave B'land (4.5 ha)			
		SP1	SP2	SP3	SP4	SP1	SP2	SP3	SP4	SP1	SP2	SP3	SP4
Australasian Grebe	<i>Tachybaptus novaehollandiae</i>	-	-	-	-	-	-	-	-	-	-	-	-
Chestnut Teal	<i>Anas castanea</i>	-	-	-	-	-	-	-	-	-	-	-	-
Pacific Black Duck	<i>Anas superciliosa</i>	-	-	-	-	-	-	-	-	-	-	-	-
Purple Swamphen	<i>Porphyrio porphyrio</i>	-	-	-	-	-	-	-	-	-	-	-	-
Eurasian Coot	<i>Fulica atra</i>	-	-	-	-	-	-	-	-	-	-	-	-
Dusky Moorhen	<i>Gallinula tenebrosa</i>	-	-	-	-	-	-	-	-	-	-	-	-
Crested Pigeon	<i>Ocyphaps lophotes</i>	0	2.3	0	0.9	-	-	-	-	0	0.4	0.2	0.9
Spotted Dove*	<i>Streptopelia chinensis</i>	4.5	0.9	1.4	0.5	1.1	0.9	1.5	0	0.2	0.2	0	0.4
Rock Dove*	<i>Columba livia</i>	0	0	0	0	-	-	-	-	-	-	-	-
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	1.4	0.9	2.7	1.4	-	-	-	-	2.2	9.6	5.1	0.9
Musk Lorikeet	<i>Glossopsitta concinna</i>	0.9	0	0	0	-	-	-	-	8.9	0	2.7	5.3
Eastern Rosella	<i>Platycercus eximius</i>	0.5	0.5	0	0	0	0	0.2	0	0.9	0	0	0.7
Red-rumped Parrot	<i>Psephotus haematodotus</i>	3.6	0	0	0.9	0	0	1.7	0	0.4	0	0	0.4
Welcome Swallow	<i>Hirundo neoxena</i>	0	0.5	0.9	0	2.3	2.6	3.4	0	-	-	-	-
Common Blackbird*	<i>Turdus merula</i>	2.3	1.8	0.9	2.3	-	-	-	-	0.4	0.4	0.4	0
Willie Wagtail	<i>Rhipidura leucophrys</i>	1.4	0	0	0.5	0.2	0	0	0	0.2	0.2	0	0
Australasian Pipit	<i>Anthus novaeseelandiae</i>	-	-	-	-	0.4	0.2	0	0	-	-	-	-
Australian Reed-warbler	<i>Acrocephalus australis</i>	-	-	-	-	-	-	-	-	-	-	-	-
Little Grassbird	<i>Megalurus gramineus</i>	-	-	-	-	-	-	-	-	-	-	-	-
Superb Fairy-wren	<i>Malurus cyaneus</i>	0	0	0	2.3	-	-	-	-	-	-	-	-
White-browed Scrubwren	<i>Sericornis frontalis</i>	1.4	0.5	0	0.9	-	-	-	-	-	-	-	-
Red Wattlebird	<i>Anthochaera carunculata</i>	2.3	5.5	4.1	2.7	-	-	-	-	2.7	0.7	2	2.9
Little Wattlebird	<i>Anthochaera chrysoptera</i>	1.8	2.3	0.5	2.3	-	-	-	-	0	0	0.4	0
Noisy Miner	<i>Manorina melanoccephala</i>	0	0	0.5	0	-	-	-	-	3.1	1.6	0.4	2
Bell Miner	<i>Manorina melanophrys</i>	-	-	-	-	-	-	-	-	-	-	-	-
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	-	-	-	-	-	-	-	-	-	-	-	-
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>	3.6	1.8	0.9	1.8	-	-	-	-	0.4	0.7	0	0
House Sparrow*	<i>Passer domesticus</i>	-	-	-	-	-	-	-	-	-	-	-	-
Common Starling*	<i>Sturnus vulgaris</i>	1.4	0	0	0	0	0.4	1.7	0	3.1	0	0.9	1.6
Common Myna*	<i>Acridotheres tristis</i>	5	1.4	1.4	0	7.5	0.6	0	0.4	2.4	5.1	3.6	5.6
Magpie-lark	<i>Grallina cyanoleuca</i>	0.9	0.9	1.4	0.9	2.8	0	1.9	0	0	0.2	0.4	0.9
Australian Magpie	<i>Gymnorhina tibicen</i>	0.9	2.3	1.4	0.9	1.3	0	0.4	0	0	0.4	0.7	0.5
Little Raven	<i>Corvus mellori</i>	0.5	0	0	0	0.4	0	0.9	0	0.2	0	0.4	0

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Appendix 6b: Density of selected species at monitoring sites 4-6

Densities presented as birds/hectare; Blank entries presented where species not recorded on site or during monitoring surveys, occur aerially without using site or for additional reasons noted in section 2.1. SP = survey period; * = exotic or introduced species.

Common name	Scientific name	4 Escarpment B'land (2.0 ha)				5 Storage Wetland (2.1 ha)				6 Treatment Wetland (1.7 ha)			
		SP1	SP2	SP3	SP4	SP1	SP2	SP3	SP4	SP1	SP2	SP3	SP4
Australasian Grebe	<i>Tachybaptus novaehollandiae</i>	-	-	-	-	2.9	1.9	2.4	1.9	3.5	1.2	0	0
Chestnut Teal	<i>Anas castanea</i>	-	-	-	-	1	0	0	1	1.2	5.9	3.5	2.9
Pacific Black Duck	<i>Anas superciliosa</i>	-	-	-	-	1.9	7.1	1.9	1.9	7.1	5.9	1.2	11.8
Purple Swamphen	<i>Porphyrio porphyrio</i>	-	-	-	-	0	0	1.4	0	0.6	4.1	2.4	3.5
Eurasian Coot	<i>Fulica atra</i>	-	-	-	-	0.5	6.7	7.1	4.8	0	0.6	0.6	0
Dusky Moorhen	<i>Gallinula tenebrosa</i>	-	-	-	-	0.5	1.9	2.9	2.9	4.7	2.4	4.1	5.9
Crested Pigeon	<i>Ocyphaps lophotes</i>	0	0.5	0	0.5	0	0	0	0.5	0	0.6	0	0
Spotted Dove*	<i>Streptopelia chinensis</i>	1.5	1	2	1	1.9	1.4	0.5	0	2.9	1.2	1.8	4.1
Rock Dove*	<i>Columba livia</i>	0	0	0	0	0.5	0	1.4	0	0	1.2	4.7	0
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	0.5	0	1.5	1	-	-	-	-	0	1.2	3.5	0
Musk Lorikeet	<i>Glossopsitta concinna</i>	-	-	-	-	-	-	-	-	1.2	0	3.5	2.4
Eastern Rosella	<i>Platycercus eximius</i>	-	-	-	-	-	-	-	-	-	-	-	-
Red-rumped Parrot	<i>Psephodes haematodes</i>	-	-	-	-	0.5	0	0	1.9	0.6	0	0	1.2
Welcome Swallow	<i>Hirundo neoxena</i>	0.5	0	0	3.5	1.4	0	0	0	7.1	2.9	3.5	1.2
Common Blackbird*	<i>Turdus merula</i>	0	1	0	1	0.5	0	0	2.4	0.6	0	1.2	1.2
Willie Wagtail	<i>Rhipidura leucophrys</i>	1	0	0.5	0.5	0.5	0.5	0	0	0	0	0.6	0.6
Australasian Pipit	<i>Anthus novaeseelandiae</i>	-	-	-	-	-	-	-	-	-	-	-	-
Australian Reed-warbler	<i>Acrocephalus australis</i>	-	-	-	-	1.9	7.1	1.0	1.9	1.2	8.8	0	1.8
Little Grassbird	<i>Megalururus granineus</i>	-	-	-	-	0	0.5	0	0	0	0.6	0	3.5
Superb Fairy-wren	<i>Malurus cyaneus</i>	1.5	1	2.5	0	0	0	2.4	3.3	0	0	2.9	2.9
White-browed Scrubwren	<i>Sericornis frontalis</i>	-	-	-	-	0	0	0	1	0	0	0	1.2
Red Wattlebird	<i>Anthochaera carunculata</i>	1.5	2	1	0.5	0.5	2.4	1.4	1	0.6	2.4	0	4.7
Little Wattlebird	<i>Anthochaera chrysoptera</i>	0	0	0.5	0	-	-	-	-	0	0	0	0.6
Noisy Miner	<i>Manorina melanoccephala</i>	-	-	-	-	-	-	-	-	-	-	-	-
Bell Miner	<i>Manorina melanophrys</i>	-	-	-	-	-	-	-	-	-	-	-	-
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	0	0	1.5	0	-	-	-	-	0	0	0	9.4
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>	3	1.5	0.5	0.5	4.3	2.4	1.9	3.3	4.1	1.2	3.5	17.6
House Sparrow*	<i>Passer domesticus</i>	-	-	-	-	7.1	0	0	0	10	2.9	0.6	1.8
Common Starling*	<i>Sturnus vulgaris</i>	2.5	0	10	0	0.5	0.5	0	0	14.1	0	0	0
Common Myna*	<i>Acridotheres tristis</i>	0	3	0.5	1.5	2.9	0.5	0	0	1.2	2.9	0	1.8
Maggie-lark	<i>Grallina cyanoleuca</i>	0.5	0	1.5	0	0.5	0	0	0.5	1.2	0.6	0	1.2
Australian Magpie	<i>Gymnorhina tibicen</i>	0	0	1.5	0	-	-	-	-	0.6	0	1.8	0
Little Raven	<i>Corvus mellori</i>	-	-	-	-	0	1.4	0.5	0	0	0	1.8	0

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Appendix 6c: Density of selected species at monitoring sites 7-9

Densities presented as birds/hectare; Blank entries presented where species not recorded on site or during monitoring surveys, occur aerially without using site or for additional reasons noted in section 2.1.
SP = survey period; * = exotic or introduced species

Common name	Scientific name	7 Creeklines (2.0 ha)				8 Golf Course (3.9 ha)				9 Former Nursery (2.1 ha)			
		SP1	SP2	SP3	SP4	SP1	SP2	SP3	SP4	SP1	SP2	SP3	SP4
Australasian Grebe	<i>Tochybaptus novaehollandiae</i>	0	0	1	0	-	-	-	-	-	-	-	-
Chestnut Teal	<i>Anas castanea</i>	0.5	2	1	1.5	-	-	-	-	-	-	-	-
Pacific Black Duck	<i>Anas superciliosa</i>	1.5	2.5	0	1	-	-	-	-	-	-	-	-
Purple Swamphen	<i>Porphyrio porphyrio</i>	0	0	0	1	-	-	-	-	-	-	-	-
Eurasian Coot	<i>Fulica atra</i>	0	0	0	0.5	-	-	-	-	-	-	-	-
Dusky Moorhen	<i>Gallinula tenebrosa</i>	0	0	1	0.5	-	-	-	-	-	-	-	-
Crested Pigeon	<i>Ocyphaps lophotes</i>	0	0	0.5	0	1.8	1	0.5	1.1	0	0	1.9	1.4
Spotted Dove*	<i>Streptopelia chinensis</i>	4	12	2	3	0.3	0	0	0	1	1.9	5.7	2.9
Rock Dove*	<i>Columba livia</i>	-	-	-	-	-	-	-	-	0	1	1.9	0
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	-	-	-	-	5.1	2.1	3.8	2.8	0	1.4	1.4	1
Musk Lorikeet	<i>Glossopsitta concinna</i>	-	-	-	-	4.4	1.3	3.8	4.1	0	0	7.1	0
Eastern Rosella	<i>Platycercus eximius</i>	-	-	-	-	1.3	0	0.3	1.3	-	-	-	-
Red-rumped Parrot	<i>Psephotus haematonotus</i>	-	-	-	-	-	-	-	-	0	1.9	2.4	0
Welcome Swallow	<i>Hirundo neoxena</i>	0.5	0	1	3	0	0	0.5	0	1	0	1	3.8
Common Blackbird*	<i>Turdus merula</i>	3.5	2	3.5	3	-	-	-	-	1.4	0.5	1	0.5
Willie Wagtail	<i>Rhipidura leucophrys</i>	0	0.5	1	0	0.3	0	0.3	0.3	0.5	1	0.5	1
Australasian Pipit	<i>Anthus novaeseelandiae</i>	-	-	-	-	-	-	-	-	-	-	-	-
Australian Reed-warbler	<i>Aerocephalus australis</i>	-	-	-	-	-	-	-	-	-	-	-	-
Little Grassbird	<i>Megalurus granineus</i>	-	-	-	-	-	-	-	-	-	-	-	-
Superb Fairy-wren	<i>Malurus cyaneus</i>	2.5	1	5	1	-	-	-	-	0	0	3.3	7.1
White-browed Scrubwren	<i>Sericornis frontalis</i>	1	1	0	1	-	-	-	-	0	0	0	0.5
Red Wattlebird	<i>Anthochaera carunculata</i>	0.5	3.5	0	0	1	1.8	3.8	0	1	2.4	3.3	3.8
Little Wattlebird	<i>Anthochaera chrysoptera</i>	0	1	0	0.5	1	0	0.5	0	0.5	0	1.4	0.5
Noisy Miner	<i>Manorina melanoccephala</i>	0	0.5	0	0	2.6	6.4	3.8	4.6	0	0	2.9	0.5
Bell Miner	<i>Manorina melanophrys</i>	-	-	-	-	-	-	-	-	-	-	-	-
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	0	0	1	0.5	-	-	-	-	-	-	-	-
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>	3.5	3	2.5	7	0.3	0.3	0	0	1.4	1.9	3.8	1.9
House Sparrow*	<i>Passer domesticus</i>	-	-	-	-	-	-	-	-	0	0.5	0	0
Common Starling*	<i>Sturnus vulgaris</i>	0	1.5	7.5	1.5	0	0	1.3	0	0	1.4	1	0.5
Common Myna*	<i>Acridotheres tristis</i>	1	2.5	3.5	10.5	3.1	0	0	0	13.8	1.4	4.8	2.9
Magpie-lark	<i>Grallina cyanoleuca</i>	0	1.5	0	0	0.5	0.3	0.3	1	0	1	2.4	0.5
Australian Magpie	<i>Gymnorhina tibicen</i>	1	0	0	0	1	2.1	2.8	1	0	1.9	1	1
Little Raven	<i>Corvus mellori</i>	0	0	1.5	0	-	-	-	-	0	1	1	0

Bird Survey at Royal Park: Part 4 – George Appleby

Appendix 6d: Density of selected species at monitoring sites 10-13

Densities presented as birds/hectare: Blank entries presented where species not recorded on site or during monitoring surveys, occur aerially without using site or for additional reasons noted in section 2.1. SP = survey period; * = exotic or introduced species; ** slightly different areas surveyed during SP1, SP2, SP3 and SP4 – see section 2.3 for more details.

Common name	Scientific name	10 Zoo Frontage (3.0 ha)				11 The Avenue (1.9 ha)				12 MacArthur Rd W'land (3.9 ha)				13 RCH W'land** (3.9-4.4 ha)			
		SP1	SP2	SP3	SP4	SP1	SP2	SP3	SP4	SP1	SP2	SP3	SP4	SP1	SP2	SP3	SP4
Australasian Grebe	<i>Tachybaptus novaehollandiae</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chestnut Teal	<i>Anas castorea</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific Black Duck	<i>Anas superciliosa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purple Swamphen	<i>Porphyrio porphyrio</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eurasian Coot	<i>Fulica atra</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dusky Moorhen	<i>Gallinula tenebrosa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crested Pigeon	<i>Ocyriaps lophotes</i>	0.3	0	1	2.7	0	5.8	0.5	1.1	0	0	0.5	1.3	0.7	0	0	1.4
Spotted Dove*	<i>Streptopelia chinensis</i>	1	2	1.3	1	-	-	-	-	0.5	1	0	0.3	-	-	-	-
Rock Dove*	<i>Columba livia</i>	0	0	0	0.7	-	-	-	-	-	-	-	-	-	-	-	-
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	2	0	3.7	0.3	0	1.6	9.5	6.3	0.5	0	1.5	0	0	1.3	0.3	0
Musk Lorikeet	<i>Glossopsitta concinna</i>	0.7	0	2	0.3	15.8	0	3.2	12.1	1.3	0	1	0	0.5	0	3.8	0
Eastern Rosella	<i>Platycercus eximius</i>	-	-	-	-	1.1	0	0	1.1	0	0	0.5	0	0	0	1	0
Red-rumped Parrot	<i>Psephotus haematoptus</i>	1	0	0	0.3	2.2	1.1	5.3	1.6	0	0.5	0	0	0.2	0.5	0	0
Welcome Swallow	<i>Hirundo neoxena</i>	0	0.7	0.7	1.3	0.5	1.6	0.5	0	0	0.3	0.5	0	0	0.5	0.8	0
Common Blackbird*	<i>Turdus merula</i>	0.3	0	1.7	0	-	-	-	-	0.3	0	0	0.3	0	0	0	0.2
Willie Wagtail	<i>Rhipidura leucophrys</i>	0	0.7	0	0	0	1.1	1.6	0.5	0.3	0.5	0	0	-	-	-	-
Australasian Pipit	<i>Anthus novaeseelandiae</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Australian Reed-warbler	<i>Acrocephalus anstralis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Little Grassbird	<i>Megalurus gramineus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Superb Fairy-wren	<i>Malurus cyaneus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White-browed Scrubwren	<i>Sericornis frontalis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Wattlebird	<i>Anthochaera carunculata</i>	1	2	5	4	2.1	3.2	3.2	10	1.8	3.3	1.3	0	1.5	2.6	2.1	0.7
Little Wattlebird	<i>Anthochaera chrysoptera</i>	0.7	0	0.7	1.3	-	-	-	-	-	-	-	-	0	0	0.5	0
Noisy Miner	<i>Manorina melanoccephala</i>	1.7	1	5	5	0	1.6	3.2	4.7	0.5	2.6	2.6	1.5	1.6	0.8	3.1	3
Bell Miner	<i>Manorina melanophrys</i>	2.3	1.7	5	2.7	-	-	-	-	0	0	1.5	0	-	-	-	-
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>	3.7	6.3	1.3	1.3	2.6	2.6	0	1.1	0.5	0	0	0	0.2	0	1.5	0
House Sparrow*	<i>Passer domesticus</i>	0.7	1.3	0.3	0	-	-	-	-	-	-	-	-	-	-	-	-
Common Starling*	<i>Sturnus vulgaris</i>	-	-	-	-	2.6	0.5	0	0	0	0.3	1.8	0	0	0.5	0	0
Common Myna*	<i>Acridotheres tristis</i>	9.3	3.3	5	4	0.5	5.3	2.1	0	7.9	1.3	1	1.3	2.3	1	0	0
Magpie-lark	<i>Grallina cyanoleuca</i>	0.3	0.3	0.3	2	1.1	2.6	1.1	1.1	1.3	0.8	1	0	0	0.5	0.5	0.9
Australian Magpie	<i>Gymnorhina tibicen</i>	0	0.3	0.7	1.3	1.6	2.6	3.7	0.5	0.5	1.3	0.5	0	0.2	0.5	2.1	0.9
Little Raven	<i>Corvus mellori</i>	0	1.3	0.7	0	-	-	-	-	-	-	-	-	-	-	-	-

Author C. Munro

Date 24 October 2013

Subject Royal Park Pedestrian Counts

Project No. 0039

1. Introduction

The City of Melbourne commissioned CDM Research to undertake classified counts of pedestrian and cyclist movements at four sites in Royal Park. The counts were to be classified by mode (pedestrian, cyclist) and direction of travel. To control for inherent variation in demand across days (due to days of week, weather and inherent variation) data across at least a two week period was required.

2. Count sites

The four sites are shown in Figure 2.1. The sites are:

1. Elliott Av East: Shared path to the south of Elliott Avenue south of Brens Oval
2. Capital City Trail: immediately to the east of the granitic sand path leading into the skink habitat
3. Elliott Av West: Shared path to the south of Elliott Avenue approximately 100 m to the west of the tram line
4. Tram 55: shared path running to the immediate east of the tram line around 40 m south of Elliott Avenue.

■ Figure 2.1: Count sites



3. Count method

Cameras using infrared motion detection were used to obtain digital photographs of the sites when a heat-emitting object (namely, a pedestrian or rider) passed within the field of view. These images were subsequently manually processed to obtain counts by mode and direction of travel. The cameras functioned continuously (day/night) during the survey period. This method allowed for an improved count estimate compared to a short-period (i.e. one day) manual count, which will not account for weather or random variation.

At the Capital City Trail site an automatic radar counter (Sierzega SR4) was also installed, in order to provide longer period bicycle rider counts (and overcome shortcomings in the use of motion detection cameras for high speed rider traffic).

4. Count period

The count period covered 19 days of pedestrian and cyclist counts at three sites (Elliott Av East and West, Tram 55). There were 8 days of pedestrian counts at the Capital City Trail site and 11 days of cyclist counts (from the radar counter).

5. Summary statistics

Summary counts by site and mode are provided in Table 5.1.

■ **Table 5.1: Summary counts**

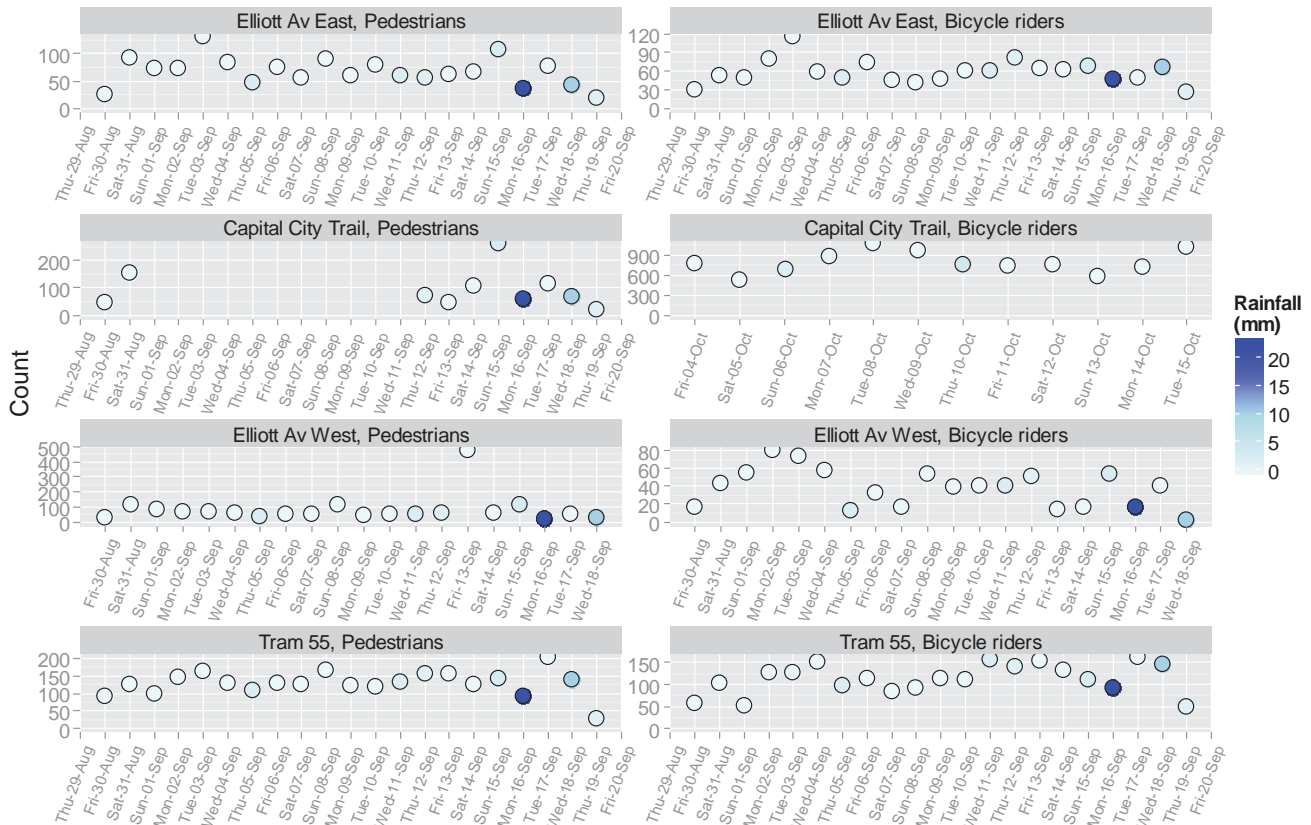
Site	Weekdays		Weekends		All days	
	Pedestrians	Bicycle riders	Pedestrians	Bicycle riders	Pedestrians	Bicycle riders
Elliott Av East	59 (19 - 130)	60 (26 - 115)	80 (56 - 107)	52 (42 - 69)	66 (19 - 130)	58 (26 - 115)
Elliott Av West	54 (17 - 477)	40 (2 - 80)	97 (51 - 117)	48 (16 - 55)	56 (17 - 477)	40 (2 - 80)
Capital City Trail	58 (19 - 116)	822 (710 - 1066)	154 (105 - 260)	627 (524 - 748)	69 (19 - 260)	752 (524 - 1066)
Tram 55	130 (27 - 203)	127 (48 - 162)	127 (99 - 166)	99 (52 - 133)	130 (27 - 203)	113 (48 - 162)
Median daily counts, with minimum and maximum counts in brackets.						

6. Detailed counts

The daily count by site is provided in Figure 6.1. Only two days during the observation period had substantial periods of rainfall – these being 16 September (23 mm) and 18 September (10.4 mm). As expected, all counts were markedly lower during these days.

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Figure 6.1: Daily counts by site, mode and rainfall



Exceptionally high pedestrian counts were observed at two sites:

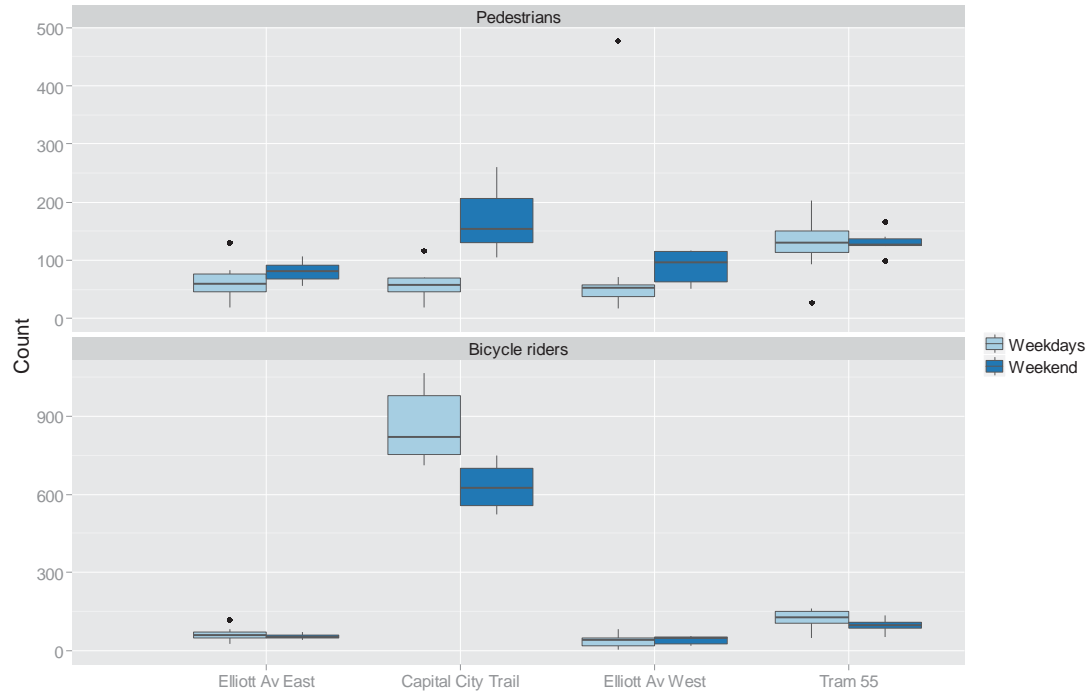
- Capital City Trail on Sunday 15 September, when an organised running event used the path.
- Elliott Avenue West on Friday 13 September, when a large school group passed in both directions.

As indicated by the range between the minimum and maximum daily counts in Table 5.1, there were very significant variations across days. The range is illustrated in the box plot in Figure 6.2¹. The absolute variation was greatest for the bicycle rider count at the Capital City Trail site.

¹ In these box plots the median value is shown by the horizontal line in the box. The box itself represents the interquartile range, or the range within which 50% of the data lies (i.e. the lower limit of the box is the 25th percentile and the upper is the 75th percentile). The vertical lines outside the boxes (“whiskers”) extent to the furthest data point within 1.5 times the interquartile range. Data outside this range are shown as points, and represent outliers (or extreme values).

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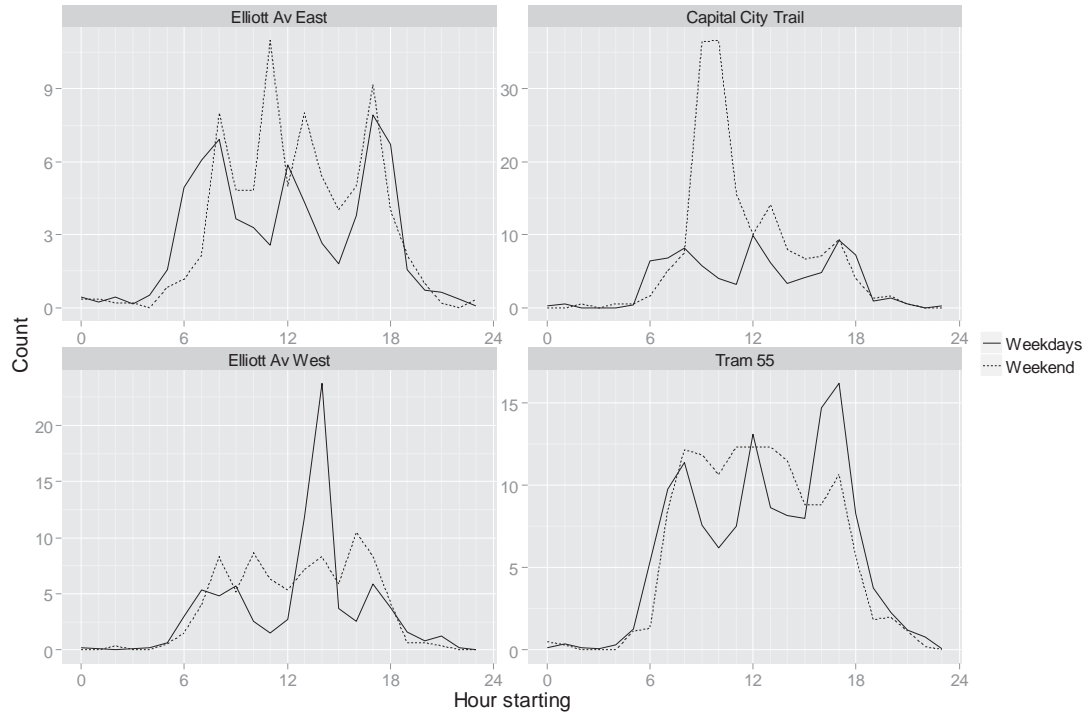
■ **Figure 6.2: Box plots of counts my site, mode and day of week**



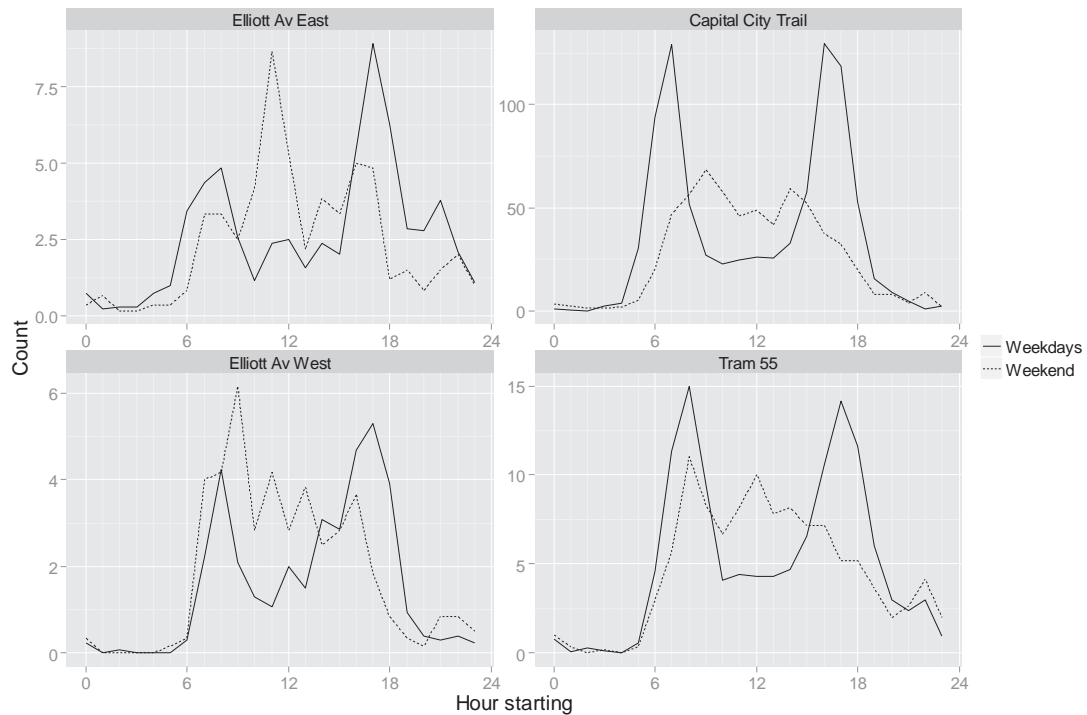
The average hourly profiles by day of week are shown in Figure 6.3 for pedestrians, and Figure 6.4 for bicycle riders. The average pedestrian count at the Capital City Trail site is being skewed by the organised run which occurred on Sunday 15 September during the morning.

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■ **Figure 6.3: Average hourly pedestrian demand**



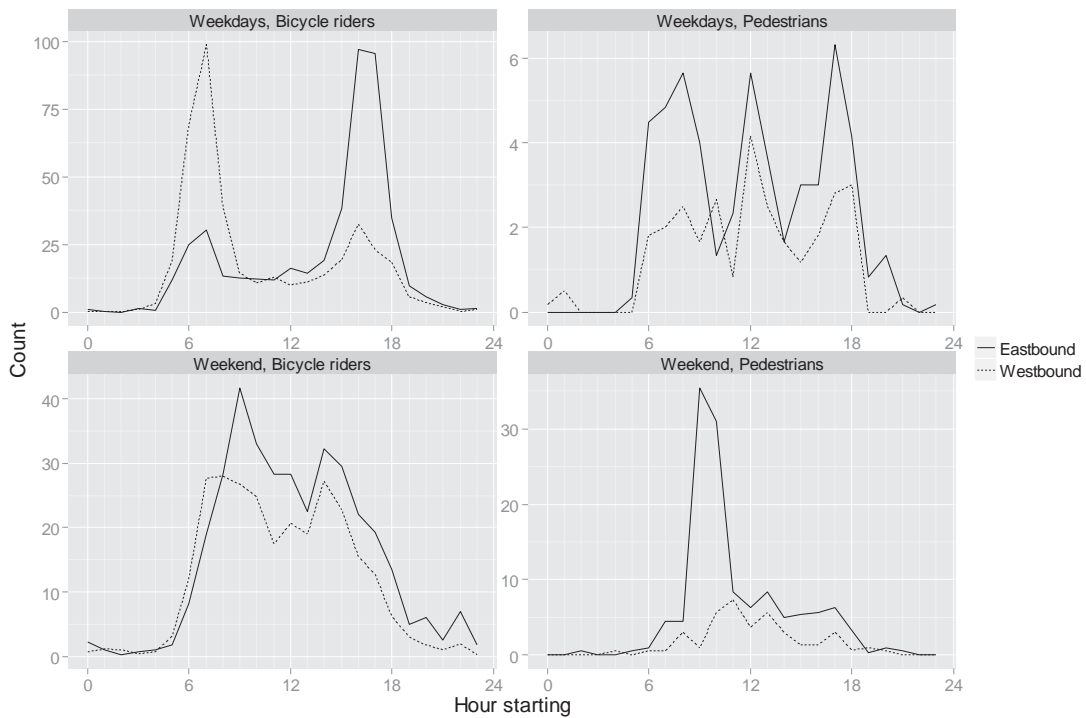
■ **Figure 6.4: Average hourly bicycle rider demand**



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The Capital City Trail site was, as expected, subject to very tidal movements by bicycle riders on weekdays. In the AM peak period most riders were travelling west towards Docklands, while in the PM peak the pattern was reversed. The weekday pedestrian flow is less tidal across the day, but there does appear to be significantly more pedestrians walking eastbound than westbound.

■ **Figure 6.5: Capital City Trail counts by mode, day of week and direction of travel**





THE STATUS OF WHITE'S SKINK (*Liopholis whitii*) AT ROYAL PARK WEST.



Peter Robertson & Paul Coventry

May 2010



**Wildlife Profiles Pty. Ltd.
Ecological Consultants**

A.B.N. 30 061 149 219

P.O. Box 572, Hurstbridge, Vic. 3099, Australia.

Telephone: (03) 9718 2828. Fax: (03) 9718 2820.

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INTRODUCTION

At 170 hectares, Royal Park is the largest park in the City of Melbourne. The vision for Royal Park is guided by the Royal Park Master Plan which seeks to evoke the original Australian landscape character of the area.

Royal Park West is broadly bound by Manningham Street, the Upfield Railway Line, Poplar Road and a number of health institutions such as CSL. The area comprises sports fields, the Trin Warren Tam boore wetlands, an area of remnant indigenous vegetation and an old Council tip site.

During an assessment of the reptile and amphibian fauna of Royal Park undertaken in 1999 (Robertson 1999), a regionally significant population of White's Skink (*Liopholis whitii*)¹ was located in and adjacent to a former tip site at Royal Park West. At that time, modifications to this 'wasteland' which may have affected the lizard population were imminent.

In order to determine the status of the species, a subsequent study of the distribution and habitat use by White's Skink was undertaken in November 2000 (Robertson 2000). During that study, seventy-four observations of White's Skink, and twenty observations of four other species of scincid lizard, were recorded. In addition, proposals for management were formulated, such that any potentially deleterious impacts on the lizards from the works proposed in the former tip site could be minimised.

In 2003 the City of Melbourne adopted *Growing Green*, an Environmental Sustainability Plan for the City's open spaces and recreation centres. One of the aims of the strategy is to protect and enhance biological diversity. Several projects were undertaken in Royal Park West to meet the objectives of *Growing Green*. These included the construction of wetlands, and significant revegetation and landscaping works designed, amongst other objectives, to maintain or improve the habitat value for the population of White's Skink.

Subsequent to completion of landscaping and planting in a portion of the former wasteland, a further assessment of the status of White's Skink was undertaken in March 2006 (Robertson & Steane 2006). During that study, seventy-eight observations of White's Skink, and seven observations of two other species of scincid lizard, were recorded. White's Skink was found to be present in similar numbers to those observed during the 2000 survey, with the noticeable difference being the distribution within the former tip site – most records were concentrated within the remaining patches of wasteland habitat in the north, with comparatively few in the then newly-constructed areas. The remaining wasteland patches were considered extremely important for the population of White's Skink in Royal Park West, apparently supporting a greater density of these lizards than adjacent areas (as was evident also in the 2000 survey). While some lizards were observed within the newly landscaped and planted areas, it appeared that these still required time and management to develop as White's Skink habitat.

In order to investigate the current status of reptiles within Royal Park West, now that some of the development works have been completed and planted vegetation has developed, Wildlife Profiles Pty. Ltd. was engaged by the City of Melbourne to undertake an additional survey to document habitat use in the area.

¹ Cover illustration - **White's Skink** (*Liopholis whitii*) female, Royal Park West. February, 1999.

OBJECTIVES

As outlined in the project brief, the requirements of this study were:

- Survey methodology should be systematic and consistent with previous reptile surveys;
- Determine the extent and significance of reptile populations in the survey site;
- Provide a species list identifying the National, State and Regional status and gross density estimates of species within the survey site;
- Map the distribution of sightings;
- Analyse and compare the results with previous survey results. Discuss any variations in distribution within areas of the survey site and comment on the value of habitats;
- Based on results, identify any additional species or processes threatening to herpetofauna communities.



Plate 1. White's Skink juveniles, one 'spot-backed' form and one 'plain-backed' form. Royal Park West, 1999.

BACKGROUND

Pertinent information from the previous surveys is included below:

White's Skink is a terrestrial, communally-living species, with small family groups sharing burrow systems, often beneath rocks, logs and other ground debris. It needs abundant vegetation/litter cover at ground level, with small open areas for basking, only a sparse tree or shrub layer to allow sun to penetrate to the ground layer, and preferably structural complexity at ground level (as supplied by rocks and logs) for adequate shelter sites. It is omnivorous to some extent, but the bulk of the diet is usually small invertebrates.

The population within Royal Park, recorded by Wallis et al. (1993), zoo personnel, and by Robertson (1999), occurs within the woodlands of Royal Park West and adjacent 'wasteland' areas. This population is one of the few remaining within the Greater Melbourne area, is probably the one occurring closest to the CBD, and may be the only one potentially viable in the long-term in this area – as such it is considered to be highly regionally significant.

The 'wasteland', (a former depot site for council recycling materials) adjacent to Royal Park West appears to be particularly important for this species, which may not survive in Royal Park if this area was to be substantially modified. This 'wasteland' area, in combination with the remnant grassy woodland to the south, is considered likely to be able to support a viable population of White's Skink in the long term – the native vegetation remnant would probably be unable to do so alone.

Habitat attributes which appear important for White's Skink in Royal Park include:

- *Very open or no tree cover.*
- *Sparse or few shrubs.*
- *Ground cover of low perennial tussock grasses, in varying densities, with some open areas.*
- *Diversity of shelter and basking sites at ground level, in the form of boulders, rock piles and scree slopes, in conjunction with vegetated areas. Logs, branches, and other debris/litter may be utilised.*
- *Variation in topography – north and west slopes appear to often provide opportunities for basking and burrowing in conjunction with sparser vegetation and rock piles.*
- *Adequate food supply – currently unknown, but ants (*Camponotus* spp.) may be important.*

It was suggested that, to minimise adverse effects on the lizard population during the establishment phase of any habitat works program, that a staged development be implemented, to progressively develop areas over 3-4+ years. It is important that a continuity of presence of suitable habitat is maintained through time. This may be accomplished by only undertaking works on a portion of the site in any one year. Monitoring of the effects of the works on the lizards will be important to guide subsequent stages of development.

Since the original 2000 survey, there have been considerable changes to the habitat at the wasteland site. Prior to 2006, over half of the area was burnt and some was cleared for landscaping works. These works involved enhancing an existing rocky area adjacent to the native vegetation remnant to the south, by placing additional rocks to form a 'rock stream'; extensive laying of 'mineral mulch' (gravel) over the hill and western slope, into which native grasses were planted; establishment of 'habitat patches' for White's Skink within the mineral mulch areas, comprising rocks, logs and food and shelter plants; some tree planting; and intermittent weed control and maintenance. Since 2006, the vegetation in these landscaped areas has developed considerably, and there has been some periodic weed control and other maintenance. Within the native vegetation remnant to the south, there have been few changes, mainly accidental fires in small areas. The effects on reptile populations of these habitat changes are the subject of the current study.

METHODOLOGY

The boundaries of the study area are shown on Figure 1, an aerial photograph of Royal Park West. These were, approximately: to the north the small waterway draining from Royal Melbourne Zoological Gardens, to the west the retaining wall of the hockey field car park, to the east the railway, and to the south the margin of the 'native' vegetation remnant.

The 'wasteland' associated with the old tip site occupies about 60% of the area of potential habitat for reptiles in the study area. It was an area with numerous piles of rocks, rubble and old building materials, vegetated predominantly by introduced grasses (often very dense) and shrubs, with only few trees, again mostly introduced species. Now, less than half of the wasteland (i.e. the northern section) remains in this state. The remainder has been subject to the landscaping and habitat works mentioned earlier, and as indicated on Figures 1 and 2.

The southern ~40% of the study area is a remnant of 'native' vegetation which is being actively managed to encourage its regeneration. It is a woodland of native trees (including *Acacia mearnsii*), with a moderate cover of shrubs (some planted) and a sparse to moderate cover of grasses, including many sparse patches of native perennial species on skeletal soils.

Field inspections of all areas of potential habitat within the study area were undertaken on the 28th of March and the 4th of April, 2010.

Direct searching was the method employed primarily to detect reptiles. This comprised:

- Searching for inactive individuals in shelter sites – careful turning of rocks, logs, and other debris; raking of litter and grass;
- Searching for active individuals during the day – direct observation. Potential basking sites were quietly observed whenever suitable weather conditions prevailed;
- Searching for the characteristic burrows of White's Skink.

The study area was divided into arbitrary segments, and a standard timed search effort for each technique was applied in each segment. While not providing an absolute measure of the species' abundance, this method does allow some relative comparisons of possible population sizes in each area, and a consequent index of the relative habitat suitability in each area.

However, one major limitation of this technique is the potentially differing 'detectability' of lizards in areas of different habitat attributes – *i.e.* the lizards are easier to find in open areas which have boulders to search beneath, than in areas of dense tall grasses with no rocks. To more accurately compare population use of different habitats, and to obtain absolute estimates of population sizes, one would need to undertake a systematic trapping exercise involving capture, mark, release, and recapture of individuals – this was considered unnecessary to fulfil the primary objective of this project.

Locations of all observations were determined by the use of a Garmin GPSmap76CSx hand-held Global Positioning System, utilising the GDA94 map datum. Details of the habitat and microhabitat of each individual observed were recorded.



Figure 1. The study area in Royal Park West. The orange line indicates the study area boundary. Note that this is a 2005 aerial photograph – vegetation in the area of landscaping works has developed considerably since this time (see Figure 2).



Figure 2. The study area in Royal Park West – 2009 photograph showing development of vegetation since 2005.

RESULTS AND DISCUSSION

Fifty-one observations of White's Skink, and an additional 32 burrows, were recorded from the study area during the survey period in March and April 2010. Details of these are included in Appendix 1, and their locations are shown on Figure 4. For comparison, observations of White's Skink from the 2006 survey are shown on Figure 5, and from the 2000 survey on Figure 6.

Two other species of skinks, the Garden Skink (*Lampropholis guichenoti*) and the Common Blue-tongued Lizard (*Tiliqua scincoides*) were also recorded, with eight and two observations respectively. Two other species of lizards were encountered – five individual Marbled Geckos (*Christinus marmoratus*) were found in hollows under concrete sleepers, and one adult male Gippsland Water Dragon (*Physignathus lesueurii howittii*) was seen active on flood debris near the junction of the two watercourses.

As for the previous surveys, it was not possible to accurately measure the size of the population of White's Skink in Royal Park West. However, because survey effort was consistent across the study area, the mapped data do give an indication of the extent of utilisation of different parts of the study area. These data are summarised in Figure 3, with numbers of sightings in each major 'zone' of Royal Park West indicated. It should be reiterated that detectability of skinks in each zone may vary – during the current survey, observations were largely dependent on locating inactive individuals in shelter sites. Areas with rocks or other debris that could be searched probably produced a disproportionate number of records – those without such cover may have produced few records despite the skinks being present. This is illustrated by the data on distribution of burrows located during the survey (orange dots on Figure 4), where many burrows were found within the native remnant zone. Note that burrow data are not included in Figure 3.

Major zone	'Habitat class' in each major area	Number of sightings in each 'habitat class'	Total number of sightings in each major zone
Railway embankment	Railway embankment	4	4
Wasteland	Wasteland	12	15
	Wasteland margins	2	
	Creek margin	1	
Partial rehabilitation	Partial rehabilitation	9	9
Rehabilitation	Shrub/tree planting	3	16
	Grass/gravel	2	
	Habitat island patch	4	
	Rock stream & margins	7	
Native remnant	Native remnant	4	7
	Edge of remnant	3	

Figure 3. Sightings of White's Skinks in major zones of Royal Park West during the current study.

Sightings of White's Skink were made at 15 locations in the remaining wasteland patches, and an additional four were from similar habitat along the railway embankment. The partially rehabilitated zone (cleared, with logs placed and some planting, but predominantly now weedy vegetation) produced nine observations. It is encouraging that the rehabilitated zone (landscaped and planted prior to 2006) produced 16 observations – in particular, the 'habitat islands' now support skinks, and as noted in previous surveys the rock stream is important habitat. The native vegetation remnant produced only seven sightings, but as indicated by the number of burrows seen here, this zone is likely to very important for White's Skink.

These figures vary from those obtained during the 2006 survey, with the noticeable difference being the evidence of some colonisation of the rehabilitated and partially rehabilitated zones. The remaining wasteland patches retain their importance for the population of White's Skink in Royal Park West, as does the native remnant.

Of the four other species of reptiles recorded during the 2000 survey, only two (Garden Skink and Common Blue-tongued Lizard) were found during the 2006 survey – the same two were encountered in low numbers during the current survey. The Weasel Skink (*Saproscincus mustelinus*) and the Tussock Skink (*Pseudemoia pagenstecheri*) were not found in either 2006 or the current survey. As most of the observations of these two species in 2000 were from the former tip site, it appears likely that their numbers may have declined as a result of the extensive modifications to this area in recent years.

Two reptile species not recorded during previous surveys – the Marbled Gecko and Gippsland Water Dragon – were found during the current study, although Robertson (2000) postulated that they were likely to be present. The Marbled Gecko is a cryptic, nocturnal species requiring drier microhabitats, while the Gippsland Water Dragon is likely to have entered Royal Park West along the watercourse originating in the Zoological Gardens, where a free-ranging population is present.

While none of these reptile species is considered threatened in a State or regional context, their occurrences are of local significance. In addition, White's Skink is greatly depleted in the Melbourne area, and its occurrence as a sizeable population within Royal Park is considered highly regionally significant (Robertson 1999, 2000). The reptile fauna of Royal Park West, although of limited species diversity, is important in the context of the Melbourne area, as no other areas as close to the CBD support such a range of species. The potential for improving habitats for many of these species exists within the context of the *Royal Park Master Plan* and *Growing Green*. Efforts should be continued to further secure their future in Royal Park West, and to ensure that habitats are not inadvertently compromised during any landscaping works.



Figure 4. Locations of White's Skink records, March-April 2010. Yellow dots indicate sightings of individuals, orange dots indicate burrows.

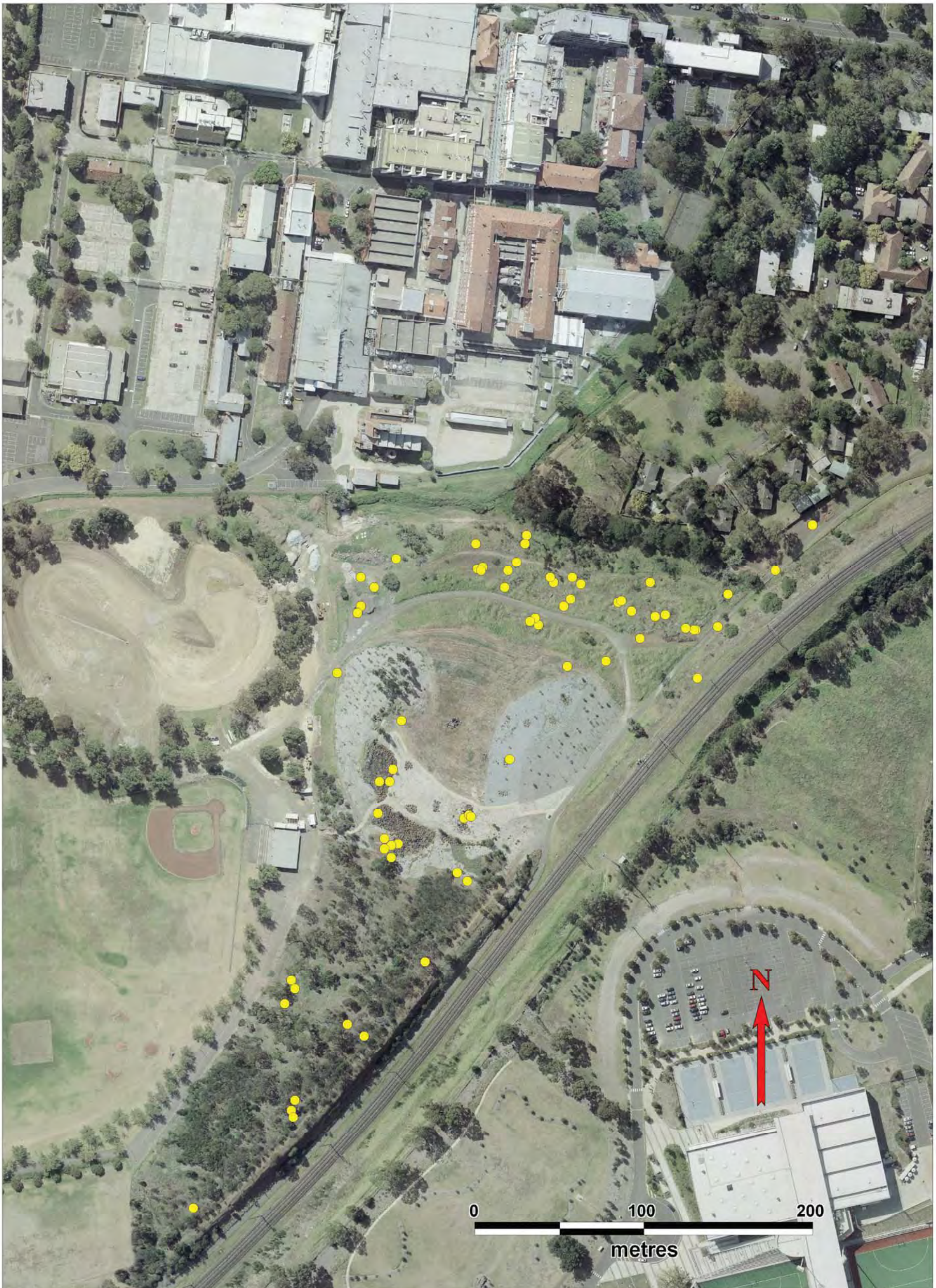


Figure 5. Locations of White's Skink records, March 2006. Yellow dots indicate sightings.



Figure 6. Locations of White's Skink records, November 2000. Red dots indicate sightings. Note that this is a 2005 aerial photograph – the area shown enclosed within the yellow line has been greatly modified since November 2000.

General Threats to the Reptile Fauna

A number of threats to the herpetofauna of Royal Park West were identified in 2000, and are still evident. They are reiterated below, but are not presented in any particular perceived order of importance, and their effects will vary from species to species.

Introduced predators. Foxes are known to reside in Royal Park, and presumably feral cats are also present. These efficient introduced carnivores have the ability to greatly deplete and, in the absence of suitable shelter, probably eliminate some species of reptiles. Effective and ongoing control of these predators is required, in concert with providing sufficiently complex microenvironments with adequate shelter sites to afford protection.

Habitat loss and fragmentation. An historical and perhaps ongoing phenomenon, probably exacerbated at least in the short-term by the landscaping works in the former tip site. Efforts to prevent further loss, enhance and increase areas of habitat, and to link areas of habitat should be continued.

Revegetation efforts which, applied without due cognisance of the need to provide continuity of habitat in space and time, inadvertently exclude some species. It is important that continuity of habitat is maintained during revegetation programs, and that large areas are not 'laid bare' prior to revegetation, thus eliminating the herpetofauna. Rather, small plantings or weedings within existing vegetation are favoured. Widespread use of herbicide may be detrimental to reptiles, and amphibians in particular.

Potential conflicts with visitor use. Increasing visitor use in Royal Park West has the potential not only to directly interrupt activities of (and displace) some species, but to modify the habitat such that it becomes less suitable. Paths may act as partial barriers to reptile movements, as well as traffic occasionally causing mortalities. Ideally, paths should be sited away from known reptile habitats wherever possible.

Small size of existing populations. The inherently small size of the populations in Royal Park West leaves them particularly susceptible to other threats, with (for most species) little chance of unassisted recolonisation. Unlike many birds, most reptiles are generally unable to recolonise habitat islands unless corridors of habitat to nearby source populations exist. For the species present in Royal Park West, few, if any, areas of habitat exist nearby. Furthermore, potential genetic and demographic problems are amplified in small populations. They become increasingly vulnerable to stochasticity in the environment.

Habitat Utilisation

The results of the three surveys suggest that the total population of White's Skink in Royal Park West remains in the order of 100 to 200 individuals. The minimum population size for maintaining viability in the longer term is unknown, however population viability estimates for a closely-related species with a similar life-history (*Lissolepis coventryi*, see Robertson 1997), suggest that about 200 individuals would be required. It may be surmised, therefore, that Royal Park West could possibly support a population in the long term, but that the 'native' vegetation remnant alone would probably be incapable of doing so. As such, the importance of the former tip site, in particular the remaining 'wasteland' patches, becomes evident.

Habitat attributes which appear important for White's Skink in Royal Park West include:

- Very open or no tree cover.
- Sparse or few shrubs.
- Ground cover of low perennial tussock grasses, in varying densities, with some open areas.
- Diversity of shelter and basking sites at ground level, in the form of boulders, rock piles and scree slopes, in conjunction with vegetated areas. Logs, branches, and other debris/litter may be utilised.
- Variation in topography – north and west slopes appear to often provide opportunities for basking and burrowing in conjunction with sparser vegetation and rock piles.
- Adequate food supply – currently unknown, but ants (*Camponotus* spp.) are likely to be important.

Maintenance of these attributes, together with protection from introduced predators and restriction of visitor usage should be the broad objectives of habitat management for White's Skink (and other reptiles) in Royal Park West. Of particular note with regard to the habitat requirements of reptiles is that some species are often able to survive (and even flourish) within greatly disturbed environments that bear little resemblance to the original vegetation communities. Often, structural complexity and diversity in the ground layer are the key to retaining and/or encouraging use of areas by these animals. 'Naturalness' as such may not be an important criterion in many areas, as illustrated by the importance of the wasteland area for reptiles. The proximity of such areas to semi-natural areas, such as the remnant vegetation at Royal Park West, is also of importance in determining the species present and ensuring their conservation.

Examples of the variety of potential habitats for reptiles in Royal Park West are illustrated in Plates 2 to 16 below, with notes on their current utilisation.



Plate 2. Burrow of White's Skink amongst exotic vegetation in railway embankment, 2006.



Plate 3. High quality habitat of White's Skink in remaining 'wasteland' patch, 2006. Note the building rubble and dense exotic vegetation providing shelter, basking and foraging opportunities.



Plate 4. High quality habitat of White's Skink in remaining 'wasteland' patch, 2010. Path construction appears not to have seriously compromised this habitat.



Plate 5. Habitat of White's Skink in railway embankment, 2006. Exotic vegetation with some open ground providing burrowing opportunities.



Plate 6. Section of railway embankment, 2010. Exotic vegetation with some planting adjacent to cycle path.



Plate 7. White's Skink habitat in the remnant vegetation, 2006. Moderate cover of native tussock grasses, with little overshadowing by shrubs or trees.



Plate 8. White's Skink habitat in the remnant vegetation, 2010. Moderate cover of native tussock grasses, adjacent to car park.



Plate 9. Boulder stream, constructed around pre-existing rubble in the landscaped area, 2006.



Plate 10. Boulder stream, with well-developed vegetation, 2010.



Plate 11. Mineral mulch in the landscaped area, with plantings of native grasses, 2006.
Was unlikely to provide habitat for White's Skink in 2006, as there were no burrowing or shelter opportunities.



Plate 12. Mineral mulch in the landscaped area, with plantings of native grasses, 2010.
White's Skink was found in 2010 to have traversed these areas to occupy some habitat islands, and may have burrows in some areas of mineral mulch.



Plate 13. 'Habitat island' constructed and planted with food/shelter species for White' Skink, within mineral mulch of the landscaped area, 2006.



Plate 14. Organic mulch and tree planting in the landscaped area, 2006. White's Skinks were found on the margins of this habitat in 2010. May be compromised as habitat by overshadowing as trees grow.



Plate 15. Scraped area within the landscape zone, 2006. At this stage, had no habitat value for reptiles.



Plate 16. Development of the scraped area after placement of logs and some planting, 2010. Designated 'partial rehabilitation' herein, was very weedy, but found to support White's Skinks in 2010.

Habitat Management Recommendations

Careful consideration needs to be given to the ongoing maintenance and improvement of habitats within Royal Park West such that existing values and habitat attributes are maintained, and preferably enhanced. A number of broad recommendations aimed at ameliorating the effects of perceived threats and at enhancing the habitats for herpetofauna were advanced by Robertson (1999, 2000, 2006), and are still appropriate. These include:

- Control feral predators, with an ongoing campaign that is not detrimental to the habitats of the herpetofauna.
- Maintenance and enhancement of existing areas of habitat is encouraged, with links between areas especially important. The opportunity exists to utilise and enhance corridors along rail and tramlines.
- Revegetation should include only very sparse (or no) trees, sparse shrub layer, and a mosaic of moderately dense and sparse ground cover of predominantly native perennial grasses. Species of plants which provide food for the lizards or their prey should be utilised – some suggested species are included in Appendix 2.
- Provide many habitat refuge sites of a diversity of sizes and structures, including large/small rocks piles, isolated rocks in vegetation, logs, scree slopes, etc.
- Revegetation should avoid use of mulch – the lizards require areas of open soil for burrow construction, basking etc, and perennial native grasses such as *Austrodanthonia* may establish better on areas of bare (perhaps skeletal) soils.
- It is important that continuity of habitat is maintained through time during revegetation programs, and that large areas are not 'laid bare' prior to revegetation, thus eliminating the herpetofauna. Rather, small plantings or weedings within existing vegetation are favoured.
- Widespread use of herbicide may be detrimental to reptiles, and should be avoided where possible. Other potential toxins (eg. pesticides) to be avoided.
- Visitor use of habitat areas should be carefully directed and regulated, such that it does not directly affect the species present and their habitats, and does not provide barriers to dispersal or disrupt links between habitat areas.
- Ongoing management of rehabilitated areas is essential, to curb weed invasion, to control predators, to control visitors, and to encourage further development of desirable habitat attributes. In 2010, weeds appear to still present a major problem, with considerable weed presence evident in the rehabilitated areas – their judicious and low-impact control should be a priority.

It is suggested that, to minimise adverse effects on the lizard population during the establishment phase of any further habitat works program, a staged development be implemented, to progressively develop areas over a number of years. As stated earlier, it is important that a continuity of presence of suitable habitat is maintained through time. This may be accomplished by only undertaking works on a portion of the site in any one year, and ensuring that the newly-modified habitat is occupied before embarking on further works in currently undisturbed areas (such as the 'wasteland' patches). Ongoing monitoring of the lizards will be important to guide the timing and implementation of any subsequent stages of development.

Specific suggestions as to how the habitat for White's Skink may be maintained and/or enhanced at the former tip site, arising from observations of habitat use during the current and previous surveys, include:

- No further habitat works should occur within the remaining 'wasteland' patches in the north of the study area, until the newly-created habitat is demonstrated to support a substantial population of lizards, at least twice that currently within the 'wasteland' patches.
- As recommended previously, when works are undertaken in occupied habitat (such as are ultimately planned for the northern 'wasteland' area), only a small proportion (preferably less than 20%) of this habitat should be disturbed at any one time, and that allowed to develop to a state where it is demonstrated to support lizards before embarking on the next stage.
- Increasing the size of 'habitat patches' within the mineral mulch areas, and providing additional links between them, should be contemplated.
- Inspection of habitat patches for successful establishment of the range of food plants should be undertaken periodically, and supplementary planting implemented as necessary.
- The rock streams have been enhanced as habitat by plantings to achieve a 50-70% vegetation cover of grasses and low shrubs. These plantings should be monitored periodically to ensure that they achieve this cover without excessive overshadowing of the rocks.
- Trees planted either singly or in groups should be monitored to ensure that they do not overshadow lizard habitat, and actions taken to prune or remove them as required.
- The large bare scraped area within the centre of the former tip site has been planted and landscaped to some extent, but could be improved to better provide additional habitat elements utilized by the skinks. Provision of such habitat within this area should be a priority, particularly to enhance links between the remnant grassy woodland in the south and the occupied 'wasteland' habitat to the north. To further assist with this linking, a large rock stream at the break of slope is desirable, with numerous scattered and linked habitat patches as previously implemented. Mulch (either mineral or organic) and trees should be avoided. Again, native grasses should predominate if possible.
- Maintenance of vegetation within the remnant grassy woodland vegetation area in the south should continue as currently implemented. Previous fire resulted in some dense patches of Acacia regeneration – these should be monitored and thinned if required to maintain desired vegetation structure.

ACKNOWLEDGMENTS

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Appendix 1. Details of reptile observations, Royal Park West, March-April 2010.

REPTILE DETAILS					OBSERVATION DETAILS					HABITAT DETAILS						Air temperature (°C)	COMMENTS			
Species	Common Name	Age	White's Skink back pattern form	White's Skink tail condition	Date	Time	Waypoint number	Easting GDA94	Northing GDA94	Location	Substrate	Microhabitat	Number of burrow entrances	Exotics (% cover)	Native (% cover)			Bare ground (% cover)	Rock (% cover)	Woodchip (% cover)
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	R	28/03/2010	9:11	212	319005	5816316	Edge of creek	Soil	Under rock	1	10	10	0	80	-	23.6	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	9:22	213	319003	5816302	Planting/drain	Soil	Under rock		10	10	20	60	-		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	9:22	213	319003	5816302	Planting/drain	Soil	Under rock		10	10	20	60	-		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	9:22	214	318999	5816299	Planted habitat	Soil	Under rock		10	0	-	60	30		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	9:40	215	319031	5816208	Edge of rock stream	Soil	Under rock		10	10	50	30	-		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	9:42	216	319034	5816207	Edge of rock stream	Soil	Under rock		-	40	50	10	-		
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	R	28/03/2010	9:46	217	319044	5816203	Edge of rock stream	Grass	Under rock		-	45	-	45	10		
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	R	28/03/2010	9:48	218	319045	5816204	Edge of rock stream	Soil	Under rock		+	30	10	30	30	25	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	9:53	219	319057	5816209	Edge of rock stream	Soil	Under rock		-	30	40	20	10		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	9:53	219	319057	5816209	Edge of rock stream	Soil	Under rock		-	30	40	20	10		
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	10:06	220	319178	5816270	Railway embankment	Gravel			60	+	30	10	-		10% concrete cover
<i>Lampropholis guichenoti</i>	Garden Skink	Adult			28/03/2010	10:39	221	319179	5816370	Wasteland	Rubble	Under asphalt		70	-	20	10	-		
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	10:42	222	319167	5816376	Wasteland	Soil	Under concrete		60	+	20	20	-		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	10:45	223	319157	5816370	Wasteland	Soil	Under concrete		70	-	10	20	-		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	10:49	224	319140	5816384	Wasteland	Soil	Under concrete		80	-	10	10	-		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	R	28/03/2010	10:49	225	319137	5816377	Wasteland	Soil	Under concrete		80	-	10	10	-		
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	R	28/03/2010	10:49	225	319137	5816377	Wasteland	Soil	Under concrete		80	-	10	10	-		
<i>Lampropholis guichenoti</i>	Garden Skink	Juvenile			28/03/2010	10:50	226	319134	5816381	Wasteland	Soil	In grass		90	-	-	10	-		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	10:52	227	319139	5816383	Wasteland	Soil	Under concrete		60	+	30	10	-		
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	10:56	228	319116	5816378	Wasteland	Soil	Under bluestone		60	-	20	20	-		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	10:57	229	319102	5816381	Wasteland	Soil	Under bluestone		65	-	15	20	-		
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	11:03	230	319067	5816384	Wasteland	Rock	Under bluestone		50	-	20	30	-		
<i>Lampropholis guichenoti</i>	Garden Skink	Adult			28/03/2010	11:05	231	319064	5816382	Wasteland	Soil	Under bluestone		80	-	10	1	-		
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	R	28/03/2010	11:14	232	319020	5816388	Wasteland	Soil	Under concrete		95	-	-	5	-		
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	11:22	233	318990	5816249	Railway embankment	Soil	Under sandstone		75	-	-	25	-	26	
	White's Skink - Burrow				28/03/2010	12:59	234	318956	5816028	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	12:59	235	318959	5816030	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	13:00	236	318966	5816037	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	13:00	237	318971	5816044	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	13:01	238	318972	5816045	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	13:01	239	318978	5816050	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	13:04	240	319003	5816078	Edge of native remnant			1							
<i>Lampropholis guichenoti</i>	Garden Skink	Adult			28/03/2010	13:06	241	319006	5816082	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	13:07	242	319013	5816084	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	13:09	243	319026	5816100	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	13:12	244	319037	5816125	Edge of native remnant			1							
	White's Skink - Burrow				28/03/2010	13:12	245	319035	5816117	Edge of native remnant			1							
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	13:16	246	319079	5816151	Edge of native remnant	Soil	Under log	1	50	15	25	-	-	26	10% log cover
	White's Skink - Burrow				28/03/2010	13:31	247	319024	5816072	Railway embankment										
	White's Skink - Burrow				28/03/2010	13:39	248	318940	5815988	Railway embankment										
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	13:40	249	318941	5815986	Railway embankment	Soil	Under bluestone		20	10	60	10	-		
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	?	28/03/2010	13:40	250	318940	5815985	Railway embankment	Soil	Under rock		25	25	40	10	-		
	White's Skink - Burrow				28/03/2010	13:50	251	318948	5816104	Edge of native remnant		Bluestone wall								Latrine site
	White's Skink - Burrow				28/03/2010	13:51	252	318961	5816126	Edge of native remnant		Bluestone wall								Latrine site
	White's Skink - Burrow				28/03/2010	13:52	253	318969	5816141	Edge of native remnant		Bluestone wall								Latrine site
	White's Skink - Burrow				28/03/2010	13:58	254	318998	5816205	Native remnant		Sparse Wallaby Grass	6							
	White's Skink - Burrow				28/03/2010	13:59	255	318997	5816197	Native remnant		Sparse Wallaby Grass	3							
	White's Skink - Burrow				28/03/2010	14:00	256	318995	5816196	Native remnant		Sparse Wallaby Grass	5							

Appendix 1. (contd.)

REPTILE DETAILS					OBSERVATION DETAILS					HABITAT DETAILS						Air temperature (°C)	COMMENTS		
Species	Common Name	Age	White's Skink back pattern form	White's Skink tail condition	Date	Time	Waypoint number	Easting GDA94	Northing GDA94	Location	Substrate	Microhabitat	Number of burrow entrances	Exotics (% cover)	Native (% cover)			Bare ground (% cover)	Rock (% cover)
	White's Skink - Burrow				28/03/2010	14:01	257	318995	5816193	Native remnant		Sparse Wallaby Grass	2						
	White's Skink - Burrow				28/03/2010	14:02	258	318997	5816194	Native remnant		Sparse Wallaby Grass	2						
	White's Skink - Burrow				28/03/2010	14:03	259	318989	5816183	Native remnant		Sparse Wallaby Grass	1						
	White's Skink - Burrow				28/03/2010	14:04	260	318995	5816178	Native remnant		Sparse Wallaby Grass	2						
	White's Skink - Burrow				28/03/2010	14:07	261	318976	5816151	Native remnant		Sparse Wallaby Grass	4						
	White's Skink - Burrow				28/03/2010	14:09	262	318972	5816144	Native remnant		Sparse Wallaby Grass	1						
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	14:11	263	318984	5816121	Native remnant	Soil	Under rock		55	25	10	10	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	?	28/03/2010	14:15	264	318969	5816082	Native remnant	Soil	Under rock	1	10	10	75	5	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	14:18	265	318939	5816030	Native remnant	Soil	Under log	1	-	10	80	10	-	
<i>Lampropholis guichenoti</i>	Garden Skink	Adult			28/03/2010	14:26	266	318998	5816109	Native remnant	Soil	Under log							
	White's Skink - Burrow				28/03/2010	14:35	267	319062	5816215	Rock stream			3						
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	14:42	268	319049	5816259	Habitat island in rehab. area	Soil	Under rock		30	50	-	20	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	14:42	269	319048	5816259	Habitat island in rehab. area	Soil	Under rock		30	50	-	20	-	
<i>Christinus marmoratus</i>	Marbled Gecko	Adult			28/03/2010	14:50	270	319028	5816279	Edge of rock stream	Soil	Concrete sleeper							
<i>Christinus marmoratus</i>	Marbled Gecko	Adult			28/03/2010	14:52	271	319031	5816279	Edge of rock stream	Soil	Concrete sleeper							
<i>Christinus marmoratus</i>	Marbled Gecko	Adult			28/03/2010	14:52	271	319031	5816279	Edge of rock stream	Soil	Concrete sleeper							
<i>Christinus marmoratus</i>	Marbled Gecko	Adult			28/03/2010	14:52	271	319031	5816279	Edge of rock stream	Soil	Concrete sleeper							
<i>Christinus marmoratus</i>	Marbled Gecko	Adult			28/03/2010	14:52	271	319031	5816279	Edge of rock stream	Soil	Concrete sleeper							
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	14:56	272	319059	5816299	Partial rehab. area	Soil	Under concrete		30	15	20	35	-	
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	15:00	273	319062	5816302	Partial rehab. area	Soil	Under basalt		20	10	20	50	-	
	White's Skink - Burrow				28/03/2010	15:03	274	319067	5816320	Partial rehab. area			3						
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	15:09	275	319088	5816303	Partial rehab. area	Soil	Under concrete		40	-	-	60	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	15:09	276	319089	5816301	Partial rehab. area	Soil	Under timber		60	-	10	-	-	30% timber cover
	White's Skink - Burrow				28/03/2010	15:09	277	319100	5816300	Partial rehab. area			7						
<i>Tiliqua scincoides</i>	Common Blue-tongued Lizard	Adult			28/03/2010	15:10	278	319103	5816302	Partial rehab. area		Under concrete							
<i>Liopholis whitii</i>	White's Skink	Adult	Spot		28/03/2010	15:17	279	319117	5816309	Partial rehab. area	Soil	Under concrete		-	20	-	80	-	
<i>Tiliqua scincoides</i>	Common Blue-tongued Lizard	Adult			28/03/2010	15:20	280	319105	5816301	Partial rehab. area	Soil	Under concrete		-	20	-	80	-	
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot		28/03/2010	15:20	280	319105	5816301	Partial rehab. area	Soil	Under concrete		10	80	-	10	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	R	28/03/2010	15:21	281	319121	5816319	Partial rehab. area	Soil	Under bark		5	10	10	-	-	26.8 75% bark cover
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	15:24	282	319126	5816310	Partial rehab. area	Soil	Under log		20	20	20	-	-	40% log cover
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	R	28/03/2010	15:25	283	319124	5816303	Partial rehab. area	Soil	Under bluestone		+	70	25	5	-	
	White's Skink - Burrow				28/03/2010	15:27	284	319116	5816286	Habitat island in rehab. area									
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	15:29	285	319115	5816283	Habitat island in rehab. area	Soil	Under bluestone		20	10	15	55	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	28/03/2010	15:29	285	319115	5816283	Habitat island in rehab. area	Soil	Under bluestone		20	10	15	55	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	R	28/03/2010	15:32	286	319128	5816265	Rehab. area	Soil	Under rock	1	15	-	-	-	85	
	White's Skink - Burrow				28/03/2010	15:35	287	319144	5816261	Rehab. area			1						
	White's Skink - Burrow				28/03/2010	15:38	288	319141	5816295	Habitat island in rehab. area									
	White's Skink - Burrow				28/03/2010	15:41	289	319169	5816305	Wasteland									
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	28/03/2010	15:43	290	319199	5816333	Wasteland	Soil	Under timber		20	10	60		-	10% timber cover
<i>Physignathus lesueurii howittii</i>	Gippsland Water Dragon	Adult male			28/03/2010	15:56	291	319108	5816406	Stream junction		On flood debris							
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	4/04/2010	9:06	292	319116	5816382	Edge of wasteland	Soil	Under bluestone		60	+	10	30	-	18.4
<i>Lampropholis guichenoti</i>	Garden Skink	Adult			4/04/2010	9:13	293	319127	5816376	Edge of wasteland	Soil	In grass		100	-	-	-	-	
<i>Lampropholis guichenoti</i>	Garden Skink	Juvenile			4/04/2010	9:27	294	319172	5816368	Edge of wasteland	Soil	In grass		70	-	30	-	-	
<i>Lampropholis guichenoti</i>	Garden Skink	Adult			4/04/2010	9:30	295	319178	5816367	Edge of wasteland	Soil	In grass		70	10	20	-	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	4/04/2010	10:29	296	318926	5816077	Edge of native remnant	Soil	Bluestone wall	1	-	20	10	70	-	21.2 At latrine site
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	4/04/2010	12:06	297	318972	5816038	Edge of native remnant	Soil	Base of tree stump		70	15	-	-	-	24.4 15% timber cover
<i>Liopholis whitii</i>	White's Skink	Juvenile	Spot	O	4/04/2010	12:18	298	318903	5815987	Native remnant	Soil	At burrow entrance	3	-	30	70	-	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	4/04/2010	13:57	299	319021	5816221	Rehab. Grassland	Woodchip	Retreating under rock		-	30	-	20	50	28.2
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	4/04/2010	14:46	300	319169	5816369	Edge of wasteland	Soil	In grass		100	-	-	-	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	4/04/2010	15:18	301	319058	5816307	Wasteland	Soil	Retreating under rock	1	35	20	20	25	-	
<i>Liopholis whitii</i>	White's Skink	Adult	Spot	O	4/04/2010	15:22	302	319039	5816262	Edge of rock stream	Soil	Basking on rock		+	-	5	95	-	

Appendix 2. List of plants potentially of benefit to White's Skink, to include in landscaping plantings.

Suggested plants to provide food opportunities for *Liopholis whitii*.

Einadea nutans
Enchylaena tomentosa
Dianella revoluta
Dianella amoena
Astroloma humifusum

Suggested plants to provide food resources for ant prey of *Liopholis whitii*.

Acacia acinacea
Acacia paradoxa
Acacia mearnsii

Tree species for provision of shade, litter and additional ant resources.

Acacia implexa
Eucalyptus melliodora
Eucalyptus camaldulensis

CITY OF MELBOURNE GUIDELINES FOR LANDSCAPING FOR OPEN SPACE OVER SUBSTANTIAL STRUCTURES

CONTEXT

Council has a number of open space and landscape developments based over underground carparks, road tunnels, constructed podiums and the like. These include:

Grant St (Southbank) – City Link Tunnel
Kensington Estate (Kensington) - proposed underground carpark under paving only
University Square (Carlton) - carpark
City Square (CBD) – carpark
Docklands – various developments
Flagstaff Gardens (Underground rail loop)

While a landscape design can always be developed and implemented for these spaces, the end result generally involves a range of design issues, compromises and expenses that a “natural ground” landscape would not require, with solutions employed which often are counter to the City of Melbourne’s policies and broad strategic directions.

Most of the issues relate to soft landscaping issues, however recreational facility design, such as for playgrounds, can also be affected.

KEY ISSUES

The main issues are:

1. Tree size and longevity – Trees in these areas generally do not grow to a large size, and need to be replaced once they get too large for the provided area (This is particularly true of “containerised” solutions). Ten years or less may be the effective life of the trees, where as Council’s objective is to increase the size and longevity of tree stock.

Examples: Bourke Street Mall plantings, University Square, Collins St Extension

2. Soil: Structural soil is usually required to manage the structural load bearing issues associated with the design of pavements and trafficable surfaces within planted areas, and to allow good drainage away from the site.

Example: City Square

3. Sustainable vegetation: For plants to be healthy and grow, this means that water has to be “kept up” to them- which in turn means that irrigation is a necessity and will be used more frequently. This management approach runs counter to Council’s overall objective to reduce reliance on potable water where possible. There is evidence of whole landscapes which have died after experiencing a few days of hot weather without any supplementary irrigation.

Water Sensitive Urban Design or water collection methods can be considered, however this will add to the overall cost of the project and the amount of water required to maintain the landscape will be more than that required in a “natural ground” landscape.

Example: Collins Street Extension, Docklands

4. Engineering requirements: The structure of a slab over a car park or structure will need to be thicker than that required for road or building works because of the load bearing issues from the soil, and the need to support ‘live loads’ in the form of maintenance and emergency vehicles (up to size of a tree pruning crane or fire truck) and trees which increase in mass with growth.

CITY OF MELBOURNE GUIDELINES FOR LANDSCAPING FOR OPEN SPACE OVER SUBSTANTIAL STRUCTURES

Example: Kensington Estate

5. Management: If Council's asset will be sitting over a private facility some sort of strata title arrangement would need to be made. Examples of issues which would need to be considered include: water leakages, invasion by roots, how infrastructure and services repairs would be managed, addressed and paid for if necessary.

Example: City Link Tunnel under Grant Street Reserve

6. Recreational facilities: Some installations and play equipment (eg climbing nets) require massive structural footings and support for installation. Load limitations could compromise the play and activity potential of a playground or event area. Council's policy is to provide shading for playgrounds by using natural shade from trees, therefore tree growth and health requirements are closely related to the location of play equipment.

Example: Grant St, City Square,

6. Infrastructure not associated with the open space can be located in the open space. Items relevant to the underground use are often required above ground: eg: vent stacks, power access, private water tanks etc

Example: City Square, Flagstaff Gardens

7. Special maintenance procedures. The more technical and fragile nature of these landscapes require special maintenance plans. This costs Council more in both maintenance and administration costs.

Example: Docklands streetscapes

6. Limit future development: In the future if Council wishes to install new facilities or change what is in the open space, then the load bearing capacity of any underlying structures will always be a determining factor in any renewal plans.

Example: University Square, Kensington Estate

COUNCIL'S POSITION

Council has a strong preference for all public open space in the municipality to be based on natural ground. Such an arrangement allows Council to maximise the potential of the site and develop strong and hardy assets which are sustainable and enduring in the long term.

Should Council agree to develop open space on top of a structure, the following minimum conditions should apply.

Minimum conditions

- Structural capacity to support at least 1.5 metre depth of saturated soil and associated live loadings.
- Irrigation system
- Soil profile acceptable to Council
- Plant species acceptable to Council
- Independently certified structural design to allow maintenance vehicle access, and installation of all types of commercially available play equipment
- No fault clause for damage to underlying structure caused by approved landscaping plan or approved maintenance plan.

City of Melbourne

Tree Retention and Removal Policy 2012

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1. Context

- 1.1. City of Melbourne’s urban forest is critical infrastructure and an asset that provides innumerable environmental and health benefits to the municipality. The protection of trees is vital to retaining our city’s character and environment.
- 1.2. All construction and development works near public trees must abide by the protection and retention requirements outlined in this document.

2. Scope

- 2.1. This policy applies to all trees in the municipality that are either owned or managed by the City of Melbourne; such trees shall be referred to as public trees. (A public tree includes any tree which has any part of its trunk growing from Council managed land.)
- 2.2. Council currently manages over 70,000 public trees.
- 2.3. The practices listed in this policy are to be implemented by the property owner, project/planning permit applicant, contractor or designee and are minimum standards by which the care of a public tree is to be administered.
- 2.4. The practices and procedures detailed in this policy are consistent with best management practices in the arboricultural industry and are intended to promote healthy, structurally sound trees.
- 2.5. In all cases, Council’s arborist shall, within the parameters of best practice and meeting the community’s expectations, have the discretion to modify or add to any condition, practice or standard outlined within the policy.

3. Policy Objectives

- 3.1. To recognise the value and importance of public trees that comprise the City of Melbourne's urban forest and to provide adequate protection for those trees.
- 3.2. To ensure and promote preservation of the existing tree canopy cover within the City's public urban forest.
- 3.3. To increase the long-term viability of public trees during and after construction events by ensuring that appropriate protection standards and best management practices are implemented.
- 3.4. To define the circumstances under which public trees may be removed or pruned.

4. Policy Statement

- 4.1. In recognition of the vital role of the urban forest, all public trees within the municipality, unless hazardous, will be:
 - a. Protected from any activity, including development, that threatens their health and/or longevity.
 - b. Protected from infrastructure conflict, where possible, with priority given to the relocation of infrastructure away from trees to reduce the potential for immediate or future damage.
 - c. Given a priority status when considering applications for new developments such that potential conflicts with trees will be addressed before the approval of applications for planning, construction management plans and building and road opening permits.

5. Tree Protection Requirements

- 5.1. Trees grow in a delicate balance with their environment and any changes to that balance must be minimized if the tree is to remain in a healthy state and fulfil its useful life potential. It is rarely possible to repair stressed and injured trees, so damage needs to be avoided during all stages of development and construction. Root systems are opportunistic and often extend far beyond the drip-line of the tree canopy. Disturbance of the root system can result in severe injury to the tree.
- 5.2. Tree protection begins in the planning and design stages of a project. Decisions made in the early stages of a project can limit the amount of damage that trees sustain throughout the development and construction process. The most important consideration for the successful retention of trees is to allow appropriate above and below ground space for the trees to continue

to grow. This requires the allocation of Tree Protection Zones for retained trees.

5.3. To ensure that public trees in the municipality are fully protected at all times, the following requirements must be complied with:

- 5.3.1. Removals of trees will not occur unless approved by Council.
- 5.3.2. An authorised agent of Council will undertake any tree removals that are required.
- 5.3.3. Trees will not be pruned in any form and branches and roots will be removed only by an authorised agent of Council unless Council’s arborist advises otherwise.
- 5.3.4. Pruning of roots and branches will be in accordance with the Australian Standard AS 4970-2009 *Protection of trees on development sites* (Australian Standard) or any more recent relevant Standard.
- 5.3.5. A Tree Protection Zone (TPZ) shall be established for the duration of any works near a tree. A TPZ preserves roots and soil and keeps branches clear of contact with construction equipment and materials.
- 5.3.6. The tree protection distance method outlined in the Australian Standard will be used for the allocation of tree protection zones (TPZ) for trees. The TPZ for individual trees is calculated based on trunk (stem) diameter (DBH), measured at 1.4 metres up from ground level. The radius of the TPZ is calculated by multiplying the trees DBH by 12. Example; Tree with 40cm DBH requires a TPZ of 4.8 metres. The method provides a TPZ that addresses both the stability and growing requirements of a tree. TPZ distances are measured as a radius from the centre of the trunk at (or near) ground level. There is scope within AS 4970 to modify TPZs with certain provisos. Council’s arborist must approve any modification to a TPZ.
- 5.3.7. Mechanical excavation on the road, footpath or any public space within the defined TPZ of a tree is not permitted without the approval of Council’s arborist.
- 5.3.8. Stockpiling of building materials, debris or soil is not permitted within the TPZ of a tree except on existing hard surfaces.
- 5.3.9. The extent or length of boring in the vicinity of trees will be determined by the TPZ. The entry and exit pits for boring will be positioned outside the designated TPZ for each tree. This requirement should apply unless root sympathetic exploratory investigations have been undertaken and it has been determined that access within the TPZ will not significantly affect the tree. A minimum boring depth of 800mm - 1100mm from natural grade to the TOP should apply under all TPZs. The depth of the boring tunnel should be increased according to the size of the tree trunk. Table 1 indicates the recommended boring depths for trees based on their trunk diameter.

Table 1: Depth of boring

Trunk diameter	Minimum Depth to TOP
<100cm	800mm
100-150cm	950mm
>150cm	1100mm

- 5.3.10. Boring depth should also consider soil topography. Boring within the 'A' soil horizon (topsoil) will impact on the root system of the tree, as this area is the most conducive soil environment for root growth. Boring below this area in the 'B' horizon or sub-soil layer will reduce the impact on the root system of the tree by avoiding most of the lateral and absorbing roots as well as avoiding root damage to services.
- 5.3.11. Soil levels and structure must not be altered within TPZ of a tree without permission from Council's arborist.
- 5.3.12. Care shall be taken to ensure that no damage is caused to tree trunks, roots, canopy or branches during construction.
- 5.3.13. Where a gantry or hoarding is to be constructed over a footpath the placement of the footings and gantry structure must not adversely impact trees.
- 5.3.14. If a tree is enclosed within a hoarding or gantry space, the owner and/or builder are responsible for implementing a maintenance program for affected trees as approved by Council.
- 5.3.15. A protection zone should be established for the duration of any development or construction project according to the measures detailed in this Section 5.
- 5.3.16. No service pit or hatch is permitted on a nature strip within the TPZ of a tree without permission from Council's arborist.
- 5.3.17. A vehicular crossing is not permitted within the TPZ of a tree without permission from Council's arborist.

6. Tree Protection Management Plans

- 6.1. Prior to commencement of a development project, a property owner or representative shall prepare a *Tree Protection Management Plan* if any activity is within the tree protection zone of a public tree defined in accordance with the Australian Standard.
- 6.2. The Tree Protection Management Plan will be prepared by a certified arborist to assess impacts to public trees, recommend mitigation to reduce impacts to a less than significant level and identify construction guidelines to be followed through all phases of a construction project.
- 6.3. Tree Protection Management Plans will be developed in accordance with the Australian Standard or any more recent Standard, on development sites, as identified by Council's arborist.
- 6.4. The Tree Protection Management Plan should be submitted to Council's arborist for endorsement during the planning phase of a development, and prior to works commencing.
- 6.5. The Tree Protection Management Plan will include provision that the property owner or representative will be liable for any damage caused to public trees during the development process, including damage caused by contractors engaged by the property owner in carrying out the development works.

7. Tree Removal Criteria

- 7.1. Council will manage its public trees by monitoring the condition of all public trees and by removing and replacing them where appropriate.
- 7.2. All management options of public trees will be explored and exhausted before tree removal is recommended.
- 7.3. Future street tree planting and greening opportunities within the municipality will be explored when considering planning applications.
- 7.4. Instances when public tree removals will not be considered include:
 - 7.4.1. If there is a safe and practical means for tree retention.
 - 7.4.2. To minimise obstruction of views, advertising or signage.
 - 7.4.3. To reduce leaf and fruit litter debris.
 - 7.4.4. For solar access.
 - 7.4.5. For unjustified property damage claims.
 - 7.4.6. For causing minor allergenic or irritant responses.
- 7.5. Public tree removals may be permitted in the following instances:
 - 7.5.1. All hazardous trees will be removed immediately.
 - 7.5.2. Trees that are dead, dying or in severe decline from natural causes or irreversibly diseased unless it is defined that they must remain in the landscape for habitat provision or other purposes.
 - 7.5.3. Trees identified as being an inappropriate tree species for a location, in consultation with the community.
 - 7.5.4. In the case of development, only if all possible design solutions have been considered to retain the tree and have been deemed by Council's arborist to be exhausted.
 - 7.5.5. Trees causing damage to private infrastructure or causing conflicts to utilities and services only when the appropriate investigations have been made and all feasible interventions to retain the tree have been considered and deemed to be exhausted.
 - 7.5.6. Trees recognized as inducing severe allergenic or health responses based on assessment on a case by case basis.
 - 7.5.7. If the tree is defined by Council's arborist to be a poor arboricultural specimen and contributes little amenity or ecological services.
 - 7.5.8. If the development project results in an improvement to green space/infrastructure that would not be possible without the removal of existing trees.

8. Bonds and payments

- 8.1. Where construction activities have the potential to impact public trees, a bond for the protection of the tree will be held by Council. The amount of the bond shall amount to the combined tree amenity and ecological value determined in accordance with this policy. A bond will be held for the duration of the works, subject to an approved Tree Protection Management Plan.
- 8.2. Where a public tree removal is approved by Council's arborist in relation to a development, the associated cost of the tree and its removal shall be paid by the property owner, or representative prior to the removal.
- 8.3. The costs associated with removal of a public tree include:
 - A – **Removal Costs**: amounting to the fees incurred by Council for physically removing the tree.
 - B – **Amenity Value**: calculated in accordance with Council's Amenity Formula.
 - C – **Ecological Services Value**: calculated in accordance with the i-Tree valuation tool.
 - D – **Reinstatement Greening Costs**: calculated in accordance with the greening required to replace the loss to the landscape incurred by the removal. The level of reinstatement greening required will be determined by Council and will take into consideration the location, the significance, the biodiversity provision and the amenity of the tree. Reinstatement greening costs will also include a 24-month maintenance fee and any treatment or Water Sensitive Urban Design (WSUD) measure deemed to be required to establish replacement growth.

9. Tree Roots and Infrastructure

- 9.1. Trees growth is strongly influenced by below-ground conditions. Tree root growth is opportunistic and will proliferate wherever moisture, aeration, nutrition and soil structure are favourable. Tree root growth in the urban environment is highly modified and is not governed by property boundaries.
- 9.2. There are a number of common conflicts with tree roots in the built environment:
 - A) Direct Damage**

Direct damage is the distortion of built structures as the growing tree root exerts pressure. Direct damage by tree roots is usually limited to light built structures such as pavements and low walls and can also be witnessed in buildings of sub-standard footings.

B) Indirect Damage

Indirect damage is the distortion of built structures as the growing tree root takes up soil moisture. Often there are multiple factors contributing to foundation movement and are seldom associated with tree root growth alone. For this reason, claims of indirect tree root damage must be accurately investigated.

- 9.3. Leaking pipes (as a result of poor construction, old earthenware, cracked and faulty joints and degradation) can create a moisture gradient that encourages tree root growth in the direction of the pipe.
- 9.4. The property owner is responsible for the maintenance, repair and replacement from the legal point of discharge, usually near the property boundary kerb. Council should always be given the opportunity to inspect the pipes and offending tree roots prior to the property owner undertaking repair works.
- 9.5. Council will seek to resolve tree root conflicts in the following manner:
 - 9.5.1. All claims of direct tree root damage from public trees will be investigated.
 - 9.5.2. Council will seek practical solutions to reduce the risk of damage to infrastructure from public trees.
 - 9.5.3. Tree removal will only be considered if no practical arboricultural solution can be found.
 - 9.5.4. Every effort will be taken to ensure that replacement and future public trees will not themselves result in similar damage to built structures.
 - 9.5.5. Claims of indirect tree root damage to built structures will be investigated if a geotechnical or structural engineering report implicates tree root damage.
 - 9.5.6. Should tree root growth cause foundation movement the Council will seek a viable arboricultural solution to rectify the situation and to retain the public tree.
 - 9.5.7. The removal of public trees for indirect property damage will only be considered if a geotechnical or structural engineer's report attributes the damage to tree root growth and if no practical alternative arboricultural solution can be obtained. Potential for soil heave as a result of tree removal must also be considered.
 - 9.5.8. Claims of property damage from tree roots must comply with Council guidelines for submitting a claim.
 - 9.5.9. The Council will not remove public trees for unjustified claims of pipe or sewer damage from tree root activity.

10. Community Consultation and Involvement

- 10.1. The community is passionate about its trees and relies on Council to ensure the maintenance and preservation of public trees for the long-term benefit of the city.
- 10.2. The Council will endeavour to inform the community of scheduled public tree removals prior to removal occurring.
- 10.3. The Council values its community's opinion and will provide the community an opportunity to comment on proposed tree removals.
- 10.4. Notification of public tree removal can include direct contact, site meetings, letters to residents in the immediate vicinity, signage on site and a published list on the City of Melbourne website. Methods and periods of notification will be determined in accordance with a number of factors including; the prominence of the location, the significance of the tree, the size of the tree, the number of trees and impact of removal.
- 10.5. In circumstances where major public tree removals are proposed to occur, such as avenue removals, and in particular major removals of trees significantly valued by the community, Council will seek to ensure that the community engagement period for such proposals is of a reasonable period and that the community reach of the consultation is as broad as possible.
- 10.6. The Council will provide the community with reasons for public tree removal if prior notification cannot be undertaken.
- 10.7. Removals that occur due to the public tree being deemed hazardous will be undertaken immediately and may not necessarily provide a period of notification and community consultation.

URBAN FOREST TREE PROTECTION

TREE PROTECTION IN THE CITY OF MELBOURNE

INFORMATION FOR PLANNERS, DEVELOPERS, SERVICE PROVIDERS AND CONTRACTORS

The protection of trees is vital to retaining our city's character and environment. Trees grow in a delicate balance with their environment and any changes to that balance must be minimized if the tree is to remain healthy state and fulfil its potential. It is rarely possible to repair stressed and injured trees, so damage needs to be avoided during all stages of development and construction.

This document guides work around trees to ensure their long-term protection, integrity and vitality and applies to all trees in the municipality that are either owned or managed by the City of Melbourne.

In all cases, Melbourne City Council's arborists shall, within the parameters of best practice and meeting the community's expectations, have the discretion to modify or add to any condition, practice or standard outlined within the policy. All construction and development works near public trees must abide by the protection and retention requirements outlined in this document.

TREE PROTECTION REQUIREMENTS

The most important consideration for the successful retention of trees is to allow appropriate above and below ground space for the trees to continue to grow. This requires the allocation of Tree Protection Zones for retained trees. A protection zone should be established for the duration of the project. Care must be taken to ensure that no damage is caused to council tree trunks, roots, canopy or branches during construction.

To ensure that public trees in the municipality are fully protected at all times, the following requirements must be complied with:

A - TREE PROTECTION ZONES

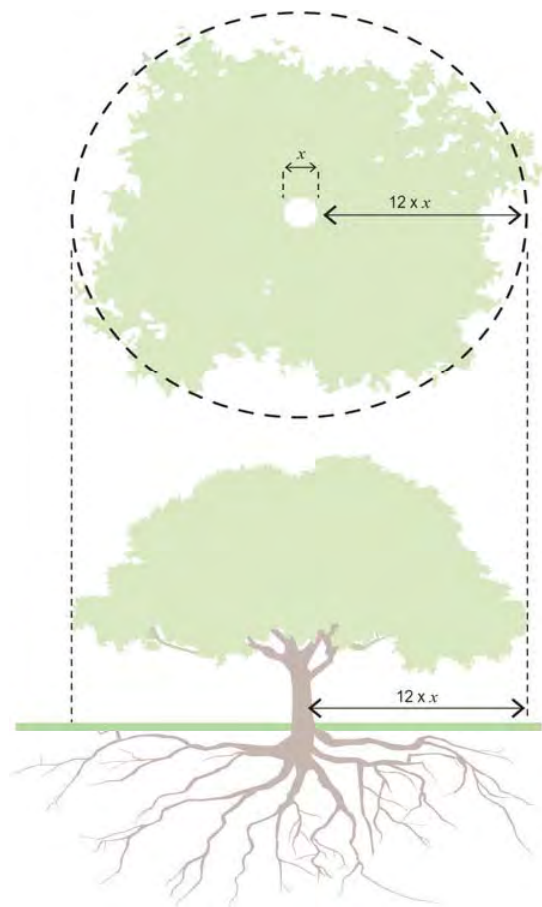
1. A Tree Protection Zone (TPZ) shall be established for the duration of any works near a tree.
2. The tree protection distance method outlined in the current Australian Standard will be used for the allocation of tree protection zones. The TPZ for individual trees is calculated based on trunk (stem) diameter (DBH), measured at 1.4 metres up from ground level. The radius of the TPZ is calculated by multiplying the tree's DBH by 12. For example; a tree with 40cm DBH requires a TPZ of 4.8 metres. The method provides a TPZ that addresses both tree stability and growth requirements. TPZ distances are measured as a radius from the centre of the trunk at ground level.
3. The Council's arborist must approve any modification to a tree protection zone



URBAN FOREST TREE PROTECTION

Trunk Diameter (DBH)	Tree Protection Zone (TPZ)
10cm	1.2m
20cm	2.4m
40cm	4.8m
75cm	9m
100cm	12m

Table 1: Example Tree Protection Zone



The following are not permitted within a tree protection zone:

1. Mechanical excavation on the road, footpath or any public space
2. Stockpiling of building materials, debris or soil
3. Vehicular traffic except on existing paved surfaces
4. Installation of service pits or hatches
5. Vehicular crossings
6. Severing of tree roots with a diameter greater than 30mm
7. Alteration of soil levels and structure

B – BORING

1. Installation of underground services are to be bored
2. Entry and exit pits will be positioned outside the designated TPZ of each tree. This requirement should apply unless root sympathetic exploratory investigations have been undertaken and it has been determined that access within the TPZ will not significantly affect the tree.
3. The extent or length of boring in the vicinity of trees will be determined by the TPZ.
4. The depth of the boring will depend on the size of the tree. Table 2 indicates the recommended boring depths for trees based on their trunk diameter.
5. Where boring is unavailable, excavation shall be by hand or non-destructive digging.



URBAN FOREST TREE PROTECTION

Trunk diameter	Minimum Depth to TOP
<100cm	800mm
100-150cm	950mm
>150cm	1100mm

Table 2: Depth of boring

PRUNING

1. No council tree may be pruned or branches removed by anyone other than those authorised by council
2. Pruning of roots and branches will be in accordance with AS 4373, Pruning of Amenity Trees or any more recent relevant Standard.

REMOVAL

1. Removals of trees will not occur unless approved by the Council.
2. No council tree may be removed by anyone other than those authorised by the Council.
3. Where a public tree removal is approved by the Council's arborist in relation to a development, the associated cost of the tree and its removal shall be paid by the property owner or a representative prior to the removal.

HOARDING AND GANTRY

1. Where a gantry or hoarding is to be constructed over a footpath the placement of the footings and gantry structure must not adversely impact trees. Structures must be placed more than 0.5m away from tree trunks, branches or roots.
2. If a tree is enclosed within the hoarding or gantry space, the owner and/or builder are responsible for implementing a maintenance program for affected trees as approved by the Council.

TREE PROTECTION MANAGEMENT PLANS

1. Permission from the Council's arborist is required for activities that do not comply with the above measures.
2. A Tree Protection Management Plan endorsed by the Council's arborist will be prepared prior to the commencement of the works.
3. A Tree Protection Management Plan is developed in accordance with the Australian Standard AS 4970-2009 Protection of trees on development sites or any more recent standard. It is prepared by a certified arborist to assess impacts to public trees, provide recommendations to reduce impacts on public trees and identify construction guidelines to be followed through all phases of construction.

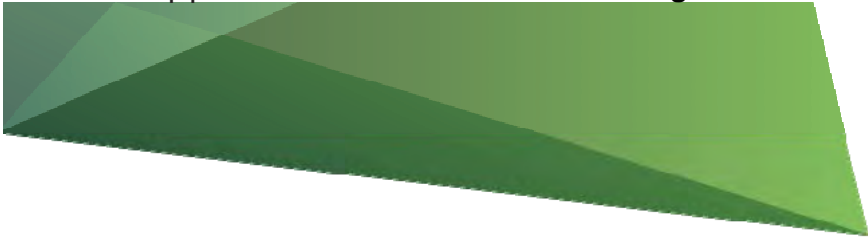
TREE PROTECTION BONDS

Where construction activities have the potential to impact public trees, a bond for the protection of the tree will be held by the Council. The amount of the bond will amount to the combined tree amenity and ecological value and will be held for the duration of the works, subject to an approved Tree Protection Management Plan.

**For further information please contact the City of Melbourne on 03 9658 9658
or email: trees@melbourne.vic.gov.au**



URBAN FOREST TREE PROTECTION



Australian Institute of Landscape Architects Position statement 2 on East West Link – Stage One

8th October 2013



Introduction

Park Infrastructure Supporting Urban Growth

The AILA is the professional organisation for Landscape Architects in Australia and has no political affiliations. Victorian members have carefully reviewed available information about the “East West Link” from the Linking Melbourne Authority. Our Institute has formed the view that the project as currently proposed will cause irreparable damage to Melbourne’s largest park – Royal Park – and the already compromised, yet very important, ecological and open space corridor of Moonee Ponds Creek. In August, AILA issued a public statement that, on these grounds alone, the project should be seriously reconsidered or abandoned.

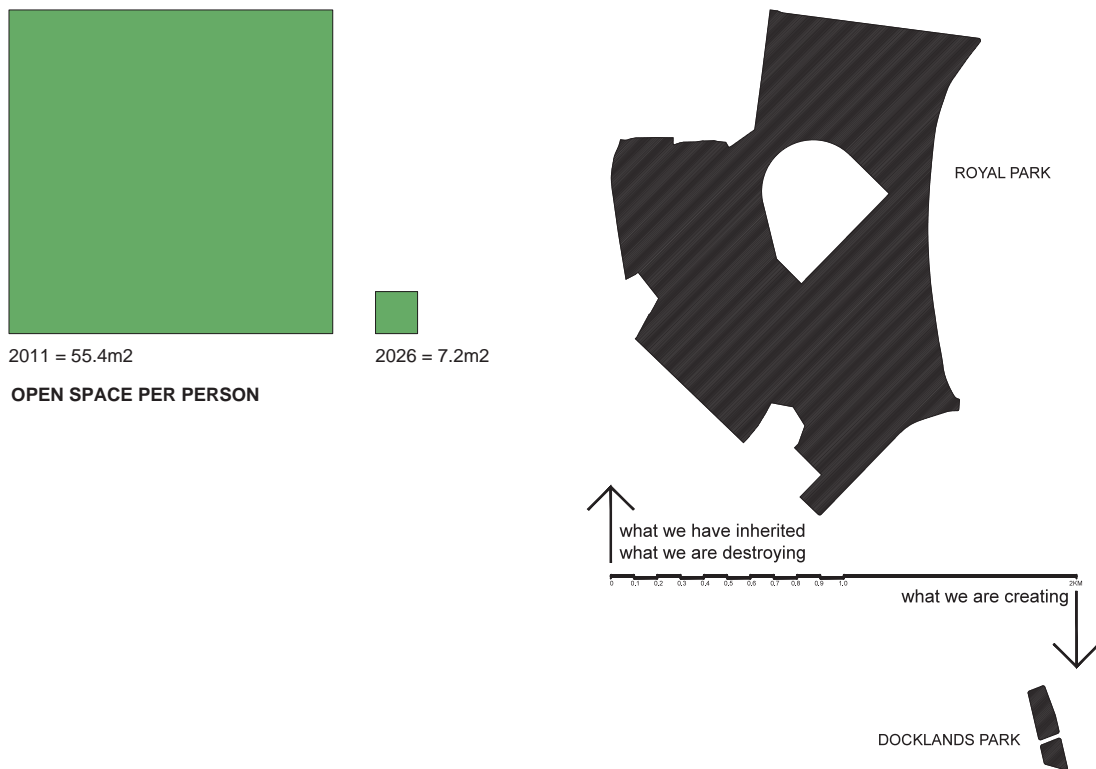
Australia’s Prime Minister elect, Tony Abbott, has promised \$11 billion for city road building, saying he aims “to be an infrastructure prime minister who puts bulldozers on the ground and cranes into our skies”. In line with this sentiment, Mr Abbott has expressed support for the Victorian Government’s proposal to build the East West Link.

However, it is AILA’s contention that Mr Abbott should recognise the role that parks play as vital city infrastructure. The value of infrastructure does not correspond to the quantity of concrete it contains. The value of urban infrastructure depends on what it does for the people of a city.

In a recent letter supporting AILA’s position on the East West Link, the Victorian president of Parks and Leisure Australia (the peak organisation representing professionals in the parks and leisure industry) sets out what AILA members know well: Accessible open spaces that attract active community use have important health benefits, helping to improve physical and mental health and wellbeing, and supporting children’s development. Parks have social benefits in connecting and building communities, benefiting people with low incomes, and enhancing liveability in urban environments. They have environmental benefits in contributing to storm water management, carbon sequestration, reduction of air and noise pollution, abatement of the urban heat island effect, and protecting areas of natural and cultural heritage value. And parks have economic benefits, attracting visitors and generating tourism, attracting businesses and local employment, increasing worker satisfaction and productivity, and enhancing the market value of nearby properties.

Moreover, Parks and Leisure Australia emphasises that:

it is projected that the population of Melbourne will increase significantly from 98,162 in 2011 to 164,832 in 2016, and [because of its impact on Royal Park, the East West Link] project is likely to result in a decrease in available parkland per person from 55.4 sqm to 33.7 sqm assuming that the current stock of land remains. The impact is further exacerbated if we consider the working population in the City as well, which will see available parkland per person reduced to 7.2 sqm per person in 2026.



Any reduction in land currently available in Royal Park for sport, active recreation, and passive recreation will likely create a domino effect on surrounding LGA's as there will be increased pressure placed on these municipalities to cater for displaced sporting clubs and casual users of public open space.

The City of Melbourne's assessment of the proposed East West Link identifies sporting areas in Royal Park that are actively used up to 35 hours per week in summer peak will be lost, displacing ten sports groups and affecting up to 1000 participants per week in summer. There is no capacity at other City of Melbourne sports fields to accommodate these users, even though the City of Melbourne boasts parklands of vastly greater extent than other inner-city municipalities.

The City of Melbourne and adjoining municipalities constitute one of the major growth areas of the metropolitan area. With expansion of the inner urban population – for example in Docklands, where few open spaces are large enough to toss a frisbee, let alone to engage in community sports – pressures on existing parks have increased, and will continue to increase.

Royal Park was one of the areas reserved in the 1850s by Governor La Trobe, who recognised the importance of parks for community health and recreation. Melbourne's inheritance from this is extraordinary, in that its greatest values are only likely to be fully appreciated two centuries later, when this parkland becomes a resource for a population that will have expanded far beyond anything La Trobe could have imagined.

The proposed East West Link project will not simply build new infrastructure. It will destroy irreplaceable infrastructure that is vital to support urban growth and consolidation in the inner city area. AILA implores Mr Abbott and the Victorian Government to aspire to the vision of La Trobe, and to protect and enhance this vital piece of parkland.



The site for the western tunnel portal will result in the loss of one of the few remaining fragments of natural vegetation.



Ross Shaw field, a high grade multi-use sports area home to several clubs, will be sacrificed to create an elevated freeway interchange.

PARTICIPATE MELBOURNE SUMMARY #1 - MATERIAL SUBMITTED PRIOR TO CITY OF MELBOURNE PUBLIC MEETING ON 8 OCTOBER 2013

Context

Prior to the first public meeting, the City of Melbourne invited community members to post their East West Link questions to the dedicated [Participate Melbourne page](#) under the key impact categories in the Preliminary Impact Assessment. Community members were also encouraged to vote for questions that they supported.

The table below lists the questions by category and vote count.



No.	Comment	Vote Count
Submit your Traffic and Transport questions		
1	How will pedestrian and bike traffic be addressed with the fly over and ramps? A healthy and fit Melbourne should be encouraged. We are an embarrassment overseas. Headlines will read "most liveable city drops to most unliveable city due to lack of public transport, green initiatives and no sense of community". "Melbourne's LA STORY worse-not even a train from the airport". City of Melbourne please help ?????	13
2	Urban Planning experts from all over the world have consistently and comprehensively debunked the idea that freeways solve issues of congestion. The State Government and the LMA are making a huge mistake in pressing forward with this project. Melbourne is crying out for better investment in public transport and this freeway will not only fail to curb any supposed congestion issues, but will divert desperately needed money away from public transport projects. The community has condemned this project as un-necessary, un-called for and unwanted. Will the City of Melbourne take heed of Melbournians views and follow the Yarra City Council's lead in totally opposing this project? Or will they roll over and pander to the interests of the roads lobby and the pathetic state government?	12
3	How can we possibly think anything that impacts Royal Park is appropriate. It is not. Can we respect that protected place please, this is not a priority project worth losing something we can never get back.	11
4	I think this tunnel is a waste of money! A flyover-really!! This will be a serious divide in the inner north. How will community be encouraged with such a monstrosity? Surely there is another way and a fly over can be avoided if this must go ahead. The same turnoff can remain if the tunnel commences from gold st. I would like the increased noise, pollution and decreased property values to be addressed for residents as well as compensation. If this must go ahead I would like alternatives to the fly over please.	11
5	<p>What discussions has the MCC had with the LMA / Vic Gov regarding the protection of residents from increased noise levels?</p> <p>As either single residents or in groups, we've had meetings and emailed both the LMA and State Gov, but had only one response to the question of: what sections of the EWL.St-2 will have sound barriers.</p> <p>The only direct response we have so far is that sound barriers are not going to be required as the area is semi industrial, and so our home need not be considered.</p> <p>Can you please advise what the true situation is on sound reduction barriers?</p>	10



No.	Comment	Vote Count
6	<p>Lord Mayor Doyle has already expressed his enthusiastic support for the EW Toll-road. Council expressed its concern with the current plan by a majority of 1 vote. Unfortunately, the City of Melbourne ignores the catastrophic impacts of the Toll-road on homes, parkland and liveability. The Officers Report reflects the 'smoke and mirrors' statements from LMA. It provides no critical analysis, particularly on the highly suspect traffic claims. Extensive traffic studies associated with the Northern Central City Corridor Study (2003) and the Eddington Report (2008) should have informed the current study. Instead, such basic information has been ignored.</p> <p>The EW Toll-road is a project without demonstrable merit. A Business Case and supporting traffic data is not available. According to Premier Napthine such information will never be released. To claim \$1.4 benefit for every dollar spent (for the virtually identical Eddington project the benefit was just \$0.5) and to force the sovereign risk onto the taxpayer is outrageous. It is these matters that should be addressed by the Council.</p> <p>Many worthy public transport projects (rail lines to Doncaster and airport, rail signal upgrades etc) and smaller roads projects (rail-road grade separations etc) could be funded from the \$8 billion now slated for the Toll-road. The Council should be addressing public transport upgrades rather than supporting mega roads projects.</p>	9
7	<p>My questions are as follows:</p> <p>1) How will residents in Manningham Street, Parkville West, be provided with appropriate access to Brunswick South (to the north) and to Flemington Rd via Church St (to the south/east)?</p> <p>2) Will trucks used in construction give priority to residents when leaving/entering the street?</p> <p>3) Once the over-bearing portal at Elliot Avenue is in operation, how will the Elliot Ave/Flemington Rd/Racecourse Rd intersection be managed? It is currently a death trap for pedestrians (including school children heading to Errol Street) and the elderly? Have the LMA provided a detailed traffic management analysis for all the predicted vehicles (including trucks) that will be generated at this point trying to make their way into congested Flemington Rd, Racecourse Rd and Mt Alexander Rd? Or is that that something that the residents of Flemington, North Melbourne and Parkville have to endure? The big yellow dashed line on their aerial photographs doesn't provide any sort of information regarding this pedestrian aspect?</p> <p>4) If the Link is primarily for freightage as recently espoused by the LMA, and speed limit at the flyovers is 80km, what measures are in place to make noise from trucks etc at appropriate decibel levels? Current 3d renders show pathetic acoustic panels. Similar case for residents to the west of existing Citylink - they already endure traffic along this freeway (sound tunnel is in place) but will have another freeway arterial at another level over their parkland (Debney Park) and close to the high-rise, high-density</p>	7



No.	Comment	Vote Count
	housing. What sensitive design measures are in place to reduce noise from traffic for these residents? 5) Will tram route through Royal Park be disrupted? It has the highest patronage of all tram routes and will be a significant impact? 6) Will the Capital City bike trail be affected or disrupted at any point in time?	
8	can Council please provide, for those suburbs directly affected in its remit, a suburb-by-suburb breakdown of projected traffic impact of the current tollway design, and steps needed to be undertaken to address potential problems, for instance, extra traffic on Smithfield Road, by Council and expected costs.	7
9	What is the opinion of the council regarding the location of Stage-2 in Kensington? Specifically, does the MCC consider it better to locate the EWL St-2 in the (mainly) vacant land on the eastern side of City Link, as originally planned by the LMA? (This option would appear to offer a lower overall project cost by simply expanding the existing City Link infrastructure, give lower impacts upon current residents, while maintaining the overall integrity of the Arden/Macaulay Plan). Please advise?	7
10	I certainly prefer to be drawn into strategic planning discussions on transport, as the Metro link is clearly where we need to spend the money. More discussions on the road make it seem more like a certain course of action.	6
11	How is the city of Melbourne addressing the need for more public transport? A new design for Flinders St station should we be encouraging more public transport and less cars? If the tunnel goes ahead how will the city address the influx of cars down community streets that aim to avoid tolls?	6
12	What impact will the proposed on/off ramps on Arden and Elliot streets have on local traffic? Will local streets be widened to accommodate trucks and port traffic?	5
13	I would like to know what measurements have been made to assess the impact of thousands of additional cars being moved to Elliott Avenue and Flemington Road every day. These roads are already at a standstill from 7:30 - 9:30 and 3:30 - 7:00. The additional traffic from the proposed toll road would only make this worse - I'd be interested to know just how much worse. I'd also be interested to know why it is not possible to mitigate this additional congestion by having the western end of the road emerge near Macaulay station and run directly up onto the Bolte Bridge. Although the Bolte is not exactly a free flowing river of traffic, at least it moves reasonably freely	5



No.	Comment	Vote Count
	during rush hour and has the added bonus of getting commuters to the CBD, St Kilda Rd/South Melbourne, the western suburbs and the airport - without an hour or so spent sitting in traffic on Elliott Ave!	
14	<p>How can the MCC project a 'significant decrease' in traffic on Macarthur Road and Flemington Road? The vast proportion of traffic to and from the CBD via those routes will not change with the completion of the EWL. Likely the opposite as cars attempt to (a) avoid the toll road and (b) access the CBD.</p> <p>More freeways mean more cars. That will NOT ease congestion.</p>	5
15	Will there be any disruption to public transport (particularly Macaulay and Flemington Bridge stations) either during or post construction?	4
16	Why is the reference design and project envelope where it is? The above ground section in Kensington is much more impactful on business and residents that if it were to the east. There is mostly vacant land and empty warehouses there, much like a transport corridor.	3
17	<p>In discussions with noise engineers from the project I was told that the noise levels will apparently be within legal limits so noise abatement measures (e.g. double glazing) would only be considered for buildings utterly adjacent to the flyovers. Noise isn't only a critical issue for those within fifty feet of the tollway. The truck noise from Citylink is already disturbing hundreds of meters away and current barriers do nothing to curtail the noise. The addition of trucks accelerating and breaking as they speed around the curves of this new project would be intolerable.</p> <p>Can the whole thing - including the gradient sections of Citylink - be enclosed in genuinely soundproof tubes?</p> <p>I was also told that construction would proceed uninterrupted, 24 hours a day, with heavily laden trucks constantly rolling out of the tunnel making the possibility of undrugged sleep rather remote.</p> <p>Will local residents be shown any consideration if this thing goes ahead?</p>	3
18	There have been no assessments of impacts to local roads even when these are to be directly built over and closed. This ought not be a faith accompli	1
19	<p>Stage 2 of the proposed freeway includes on and off ramps at Arden St. The existence of these ramps is likely to result in a significant increase in local traffic in Kensington and North Melbourne together with associated amenity issues (noise, light and air pollution) for adjacent residents. I pose the following questions:</p> <p>1. Why is it necessary for the Stage 2 infrastructure to connect to Arden St when the principle purpose behind Stage 2 is to afford connection to the Port area? Can the project proceed without connecting to Arden St?</p> <p>2. What attenuation steps will be taken to ensure that world's best practice is employed in the construction of the freeway and ramps in mitigating</p>	1



No.	Comment	Vote Count
	noise, light and air pollution for adjacent residents?	
20	The proposed toll road comes within 14m of the apartment block I live in. The increased pollution via the increased diesel fumes (a known carcinogen linked to numerous diseases and health problems such as cancer) caused by the 24 hour truck traffic on the new toll road, in addition to the increased noise volumes will make my home unliveable. The LMA have told us that noise levels will increase to 65db or 68db - concerts at the nearby showgrounds have to stay within 62db-65db. Noise at this level may cause disruptions in sleep patterns, which can also lead to health issues such as heart attack) What action will the MCC be taking to protect its residents and ratepayers from living within unreasonable proximity to the toll road and thus the excessive noise and air pollution it will generate? How will you help protect us from the health issues we may be exposed to as a result of living so close to the new toll road?	1
21	Is December last year the CEO of the LMA presented a PowerPoint slide showing the proposed route of the Port link section of the East West Link on the eastern side of the existing Citylink structure: an area that is predominantly brownfield. In March this year a large plot of land in the area on the eastern side of Citylink, earmarked for the port link, was sold to a developer and a \$700m residential development was announced to be built on that land. In July this year the LMA released maps to the public showing the port link on the western side of the existing Citylink on the West Bank of the Moonee Ponds Creek and within metres of established residences. Upon questioning the LMA as to why the road had suddenly shifted for the east of Citylink to the west, their response was that it was due to the C190 Arden Macaulay Planning Scheme Amendment. However the area on which the road had suddenly shifted over to also comes under the C190 Scheme so how can Council be satisfied with that reasoning from the LMA? Why are council not fiercely standing up for the rights of existing residents & ratepayers over the power & muscle of developers and the planning minister? Existing residents are clearly being shafted to protect profits.	1
22	Please confirm that there is an error on page 8 of the Preliminary Assessment, which suggests that the traffic impacts on Flemington Rd will be 'Neutral'. I understand that this reference should have referred to Flemington Rd north of the Racecourse road/Elliott Ave intersection. On Flemington Rd to the south of this intersection, we would see a 'Significant Increase' with the LMA design, which is pretty obvious as cars would exit at Elliott Ave to drive to the city.	1
23	The Council has proposed that it will be reviewing the need for Elliott Ave north bound ramps (i.e. towards Royal Pde) - page 9 of the Preliminary Assessment. Given the significant increases in traffic on Elliott Ave (west of the LMA's Royal Park freeway interchange) and on Flemington Rd (south bound), why isn't the Council also reviewing the need for Elliott Ave ramps in both directions? This interchange will cut the park in 2 and cause irreversible damage to the park. I agree with the Lord Mayor that this interchange would simply cycle cars into the city and onto the local streets of Parkville and North Melbourne and therefore it should be strongly opposed. Local residents wanting to use the tunnel will still be able to	1



No.	Comment	Vote Count
	access it at Dynon Rd and Moreland Rd (and potentially Arden St) and they will be the ones who will be impacted greatly if the Elliot Ave interchange was constructed. It is also important to note that minimal freight originates or arrives at destinations in the area near Elliott Ave and therefore the business case for this interchange must be seriously questioned.	
24	The LMA has proposed a new viaduct along the western side of the CityLink viaduct, which would be built as part of Stage 2. This alignment will cause significant and irreversible negative impacts to the Moonee Ponds Creek, including permanent shading of some areas. The viaduct could have been aligned on the eastern side of the existing viaduct. Is it true that the western alignment was selected because it was a cheaper option when compared to securing a corridor through private land? As an alternative to both viaduct options, a tunnel could be constructed under the private land on the Eastern side - has this alternative been considered by Council to reduce the impacts on the residents of Kensington?	1
25	The allowable limit is 63dBA, and noise at night is not counted at all. This is very loud, well above World Health Organisation standards. VicRoads sets the 63dBA level, and good luck to anyone who can get them to explain where they get the figure from.	0
26	The major disruption to public transport is that the Doncaster Rail line and the Melbourne Metro will not be built if the EWL goes ahead.	0
27	Melbourne does have a growing urban transport problem, no doubt. The city travelling public with travelling options are the road users who can choose between single occupant car or public transport to get to work. These comprise up to 80% of vehicles on the roads. Their choice is made on the basis of which is the least awful at any given moment--car or public. (Commercial road traffic is practically invariant because they must use roads, they have no choice). More freeways means private commuters bleed out of public transport in favour of their cars. But because peak-hour space requirement on public transport is less than 1 sq. metre/person but single occupant vehicle takes at least 20 sq. metre/person, it doesn't take too many commuters fleeing from the current public transport horrors to clog new freeway entries exits and feeder roads, just like it is now. The EW Link upside is: 1) not much improvement for commercial traffic, and even that short-lived because of natural growth, 2) no detectable improvement of public transport, 3) continued bleeding of public monies for project bailouts and subsidies. That's the good side. And the downside? 1) loss of many, and damage to many other, irreplaceable inner suburban public amenities and sporting infrastructures, 2) disruption to and degradation of quality of life in and around EWL structures during and after construction, 3) restriction of pre-existing local traffic flows leading to isolation of old inner suburbs, 4) dramatic loss of property value of adjacent householders not directly affected (ie those houses not demolished), 4) inadequate compensation for loss of property, inconvenience and lost time, and increased stress for those compulsorily acquired, 5) permanent increase in local traffic, 6) massive expenditure on a single white elephant which cripples every other possible	0



No.	Comment	Vote Count
	urban transport program. We have seen all these up and downsides before in Melbourne, in Sydney and in Brisbane. Please convince me it will it'll be different this time.	
28	<p>What is the future of urban mobility in Melbourne? According to some by 2050 there could be 2.5bn cars roaming the planet and most of them will be concentrated in cities, the OECD has reported.</p> <p>BBC reports that "Saudi Arabia, one of the world's top oil exporters, expects domestic consumption to exceed exports by that year purely to feed its internal needs for automotive fuel. Meanwhile, if Chinese levels of automobile ownership reach US levels (840 cars per 1,000 people), demand for oil in China alone will surpass present-day global oil production, management consultants McKinsey have reported."</p> <p>And climate scientists predict irreversible environmental damage with continued carbon emissions if we follow the continual reliance on fossil fuel to drive private transportation systems with a "business as usual" attitude.</p> <p>A quick visit to major cities around the world, quickly reveal the importance of mass transit systems to the vitality of cities , and the efficiency by which these move large numbers of people particularly in peak times. Equally important, that public transport delivers connectivity and promotes active public spaces, from a recreational and commercial basis.</p> <p>Eg San Francisco is a city well served by a complex grid of trams, buses and trains..In London, New York, Paris, etc cities benefit from broad networks and simple ticketing systems.</p> <p>In Israel, Rail projects are now being implemented as well as, crossing improvements and an expansion of light rail through Jerusalem..</p> <p>And in Shanghai, complex integrated hubs deliver forward thinking to delivering transit solutions.</p> <p>Meanwhile in Melbourne, the best we can come up with is an expensive tunnel to move more single occupant cars from one congestion to another, and create more traffic jams upstream. This is tunnel vision, and is not the answer to Melbourne' future needs.</p> <p>Isn't it time to change the thinking (and public spend) away from roads, that have failed to deliver long term sustainable transit solutions to more forward thinking mass transit solutions??</p>	0
29	Why can't the current Citylink be expanded as opposed to building a whole new corridor on the West Bank of the Moonee Ponds Creek? Surely that would be more cost effective and lessen the blow to the creek and residents along it?	0



No.	Comment	Vote Count
30	The impacts if the proposed toll road on Royal Park is nothing short of catastrophic. Four arterials of two lanes plus emergency lane will spew out through the last remnant open woodlands in Melbourne, to then become 14kms of above ground, grey, dirty, concrete eyesores snaking their way through our suburbs? Why is the MCC not doing more to persuade the Napthine Government to stop the project altogether and instead urge the Government to focus investment on other more environmentally friendly transport alternatives? This project will cause irreparable damage to the park and to Moonee Ponds Creek; to the City of Melbourne in terms of the environment. May I ask have all MCC councillors actually visited and physically walked the route of this proposed project? If they had I think they may be doing more to negotiate with or lobby the State Gov.	0
31	Alternative designs have been presented to the Council to reduce the impacts on Royal Park, should the project be constructed. Has the Council developed alternative designs to address the significant negative impacts that would be felt by Royal Park with the LMA design? If so, have these been presented to the LMA or the three bidders? If alternative designs have not been developed, why not?	0
32	I would also be interested to know the expected effect on traffic from Smithfield Road onto Epsom Road. The truck traffic on Epsom Road in the evenings is excessive now. Height restrictions stop trucks (theoretically) travelling to Citylink via Racecourse Road because they cannot get under the rail bridge at Newmarket. Does this mean more trucks on Epsom Road / Kensington Road / Macaulay Road?	0
Submit your Social Impact questions		
33	1. Will City of Melbourne investigate whether residents who are not compulsory acquired can receive compensation for eroded property values? 2. How much deterioration can occur before the level of noise and air quality fails to meet current standards?	11
34	Can you comment on the loss of amenity as a result of what appears to be 8 lanes of traffic exiting out of the proposed tunnel? This is a park that provides a haven for many inner urban residents, not only in Kensington, but also Brunswick and Parkville. Further to this, what are the expected impacts for the Zoo, which attracts both local and international visitors. Will the Zoo in turn be seeking compensation?	10
35	1. We understand that sound barriers may not be required along lengths of the tollway (particularly in Kensington) as the area is 'semi industrial'. What can City of Melbourne do to protect residents? 2. What analysis has been done on the impact of additional light pollution and deterioration of air quality?	9
36	Before the last election we were promised the Doncaster rail, which can be used by people from all walks of life. Why are we instead being given a tollway which will largely benefit road freight companies, and which if constructed, will make the Doncaster rail too expensive to be viable?	8



No.	Comment	Vote Count
37	How will we be prioritised and not let the LMA run roughshod over us. This road does not serve the greater good, it does not serve our Kensington community, and it does not look after me and my neighbours. How can we ensure we are properly represented and that things are not fast tracked over us	7
38	If there is a Proclaimed park, surely this we can expect to be protected. If we can't even uphold that, what hope is there for the Kensington residents and the above ground sections. Respect for existing places should come first	6
39	LMA states the proposed East West Link route was determined after considering "social, environmental and capital costs". What social and environmental conclusions did LMA determine when they decided to put eight lanes of truck bearing freeway above my neighbour's and my own home in the Kensington mill area? Particularly as there is derelict industrial wasteland on the other side of the existing freeway.	6
40	How will we protect the remnant heritage mill precinct in Kensington? Surely the simplest expedient to community and creek preservation is to redirect activity to the eastern industrial wastelands.	5
41	Having a freeway and two Off Ramps at the bottom of the garden is not what I thought was happening when I bought my house in April. How will we be compensated for our life savings being diminished by becoming a port transport route instead of a mixed use community	4
42	<p>1. Is it absolutely necessary to construct a flyover to direct northbound Hoddle Street traffic onto the Eastern Freeway? It seems that with just a little bit of thought, the existing on-ramp and roads could be re-configured to achieve the same result at or below ground level and avoid an expensive flyover that will not only be devastating to the local residents but will form a physical barrier for pedestrian and bike traffic moving between Clifton Hill and Collingwood.</p> <p>2. If it is necessary for a flyover to be built as part of this project; what measures are in place to guarantee local residents will not be forced to endure increased noise and pollution / particulate from car exhaust?</p> <p>3. Will the state government look at giving local residents the option of having their properties acquired (similar to the owners of the Evo apartments) in other areas where they are directly adjacent to a new above ground fly-over?</p>	4
43	<p>Has there been any research done by the Melbourne City Council, LMA or State Government regarding the devastating social impact that car-dependency has on Victorian communities?</p> <p>Expanding Melbourne's network of freeways as opposed to the public's preferred expansion of public transport services will lock people into unhealthy, anti-social patterns of car-dependency and the issues of social isolation and obesity that follow.</p> <p>The new freeway structures in royal park, PUBLIC PARKLAND, will emit</p>	4



No.	Comment	Vote Count
	<p>significant noise pollution into what is now a peaceful, quiet park. I am sure that the LMA has promised freeway noise barriers, but as anyone who lives anywhere near a freeway knows, these do not work very well.</p> <p>Furthermore, Has there been any research conducted into the increased levels of air pollution that will be emitted throughout the city if this increase in traffic numbers is realised? Air pollution kills hundreds, if not thousands, of people in Australia every year and we should be working to REDUCE car numbers, not increase them. This state government has got their priorities totally the wrong way around. INVEST IN CLEAN, GREEN, SOCIALLY EQUITABLE PUBLIC TRANSPORT! PLEASE!!</p>	
44	<p>1) Has there been any conversation with the LMA regarding the impact of building added carriageways and on-ramps on Flemington Housing estates and the recently revitalised Debney Park Playground? Do the residents in the high-rise towers have any opportunity for recompense? There will be increased noise, pollution and visual barriers.</p> <p>2) Royal Park is public parkland. Melbourne's population is increasing. How can the City of Melbourne allow this parkland to be destroyed for a tolled freeway? This seems to contravene the rights of citizens to have public space kept intact without fear of destruction for private use.</p> <p>3) What advice and support can City of Melbourne provide to those residents severely impacted by this unqualified project. Impacts include significant property value decline, loss of amenity, visual intrusions, air quality decline, health risks, noise increase, construction mismanagement, etc</p> <p>4) What kind of support will residents in Manningham Street, Parkville be given? It seems LMA/State Government are willing to sacrifice our standard of living to support a project that has no evidence-backed business case</p>	4
45	<p>1. With huge increases of resident population and numerous number of apartment approvals by the Planning Minister, how can the reduction of the already limited existing passive and active open spaces be justified?</p> <p>2. Were there any proper consultation done with the Chinese elderly people's home just next to the Evo apartments? Not only will they have severe amenity impacts, they will also be fenced in between freeways. How was this thought through? Was there any consideration for them?</p>	3



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46	<p>As a resident of Kensington, in the heritage mill area between Macaulay Rd and Arden St, I cannot help but have very strong feelings about how I am about to contribute to the East West Link project. I was completely oblivious to the opportunity I was given to do my bit until I read about the impending dual carriage elevated freeway to be built in my neighbourhood, via the newspaper. I feel amazing to be part of it.</p> <p>When I look over the existing City-Link Freeway to the vacant industrial wasteland where one would think a massive elevated monolith would be built, I wonder how we were given the chance to be such an integral part of the new project. The Melbourne City Council last year recognised that our old area does not meet the required standard of having open space parkland within 300 metres of a residential area. The neglected area along Moonee Ponds Creek was identified in the future plans to be revitalized and meet those needs. Then LMA commandeered that land along the creek for a freeway to carry the trucks night and day from the docks past the outside and over the front door of our 120 year old house. It seems incredible to say the least.</p> <p>I have done my due diligence to find out as much information as I can before I fully appreciated this position my wife and I have been given. When I rang LMA they kindly told me if I was not happy with what was about to happen, they would tell me the process that will be used to enable it to happen (you're screwed but we will tell you how we're going to screw you).</p> <p>I look at the plans in the preliminary report and wonder. The MCC states our heritage area, where they even dictated what colour we must paint our home, may now become "urban blight" with the freeway and off ramp.</p> <p>Though there are some interesting opportunities identified. According to the preliminary report, turning the area under the freeway into a park may be a positive. I'm not a horticulturist but I thought plants and grass need sunlight and rainfall to grow? The land where they planted under the adjacent City-Link, along the bike path, after construction subsequently died and today is just dust. But I'm sure technology has come a long way.</p> <p>One thing that does propagate very well underneath the freeway on the industrial side is graffiti tagging. We can be guaranteed of that blooming outside our homes. How great it will be to wake up in the morning and see a new piece of vandalism outside our homes and think about the "artists" who graced our area under the freeway in the middle of the night.</p> <p>This freeway is purpose built to take trucks from the docks to the Eastern Freeway. LMA has kindly said they might build some noise protection in areas that are not "semi industrial". The MCC has put some pictures in the preliminary report of the possible sound proofing someone in their office grabbed off the internet. Just google image search "freeway designs" and you will find the same images. I'm not sure whether I should be concerned that none of that sound proofing even exists. They are all just indicative artist impressions. One is of visionary solar panel design over a freeway to</p>	3



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	<p>produce energy. I'm sure solar panels over a freeway will mitigate the noise coming through my 120 year old house?</p> <p>The greater good must be served. There is talk of a \$700million apartment complex developers have earmarked for a section of the industrial wasteland. I feel inspired to know that vast parts of our community will benefit from the freeway over the creek. The developers, graffiti taggers and decision makers will all benefit from the "urban blight" that is expected to become of our neighbourhood. We, who have been working ratepayers in the Kensington area for many years, just need to accept this gift. The \$100,000 plus that we will lose in property value need not be of concern as we pay our mortgage and our property value goes down.</p> <p>When I lay in bed at night and listen to the trucks go past I will wonder how lucky I and my neighbours are.</p>	
47	<p>What happens to C190 as people thought they knew where they were to be living, and now it seems we will be living at a truck park. I want to see what the strategy is for my home</p>	2
48	<p>If only! I've been trying to get a campaign going to move the western exit to this area for months, and have not gotten any traction at all :(Link to petition below, if you're interested - if this monstrosity has to be built, it could at least be built with minimal impact to locals and with an exit point which might actually benefit drivers, instead of dumping them into even worse traffic than they currently experience on Alexandra Pde!!</p> <p>http://www.communityrun.org/petitions/don-t-destroy-our-homes-and-parks-to-build-east-west-link?source=facebook-share-button&time=1379421206</p>	1
49	<p>The EWL will actually mean that the Doncaster Rail link would be impossible - the reconfiguration of lanes of the Eastern would remove large parts of the median, which was initially set aside for the inclusion of the rail link there.</p>	1
50	<p>When this plan was first presented, I rang the Zoo to ask what I could do to help them to fight this plan. Their PR rep said that they did not have any plan to fight the EWL, which I found very interesting - not sure what this decision was based on or what promises have been made, but it looks like the Zoo will not be acting to stop EWL at this stage.</p>	0
51	<p>Stage 2 of the proposed freeway is to be located to the west of the existing Citylink freeway and along the western banks of the Moonee Ponds Creek. This will have a significant adverse impact on the amenity of Kensington residents by reason of the loss of the parkland on the western banks of Moonee Ponds Creek and in terms of noise, light and air pollution for adjacent residents. I submit two questions:</p> <p>1. What options are available for relocating the proposed freeway to the eastern side of the existing Citylink structure in order to preserve the Moonee Ponds Creek and amenity for residents?</p>	0



No.	Comment	Vote Count
	2. What attenuation steps will be taken to ensure that world's best practice is employed in the construction of the freeway in mitigating noise, light and air pollution for adjacent residents?	
52	If past experience is any indicator, you will not get noise barriers. The Eastern Freeway (free until the East-West Link goes ahead that is...) has been repeatedly extended, now all the way to the Monash. Each time, the noise level has increased. In all that time not a single noise barrier has been built, despite being promised by both parties. Vicroads just wants to build roads, it does not care about the consequences. LMA is no different.	0
Submit your Open Space and Recreation questions		
53	Royal Park was set aside specifically to ensure that a large open space with native vegetation would be maintained in the inner city. Why are we allowing this to be eroded?	14
54	It seems that Royal Park will be essentially cut in half, with up to 8 lanes of traffic exiting from the tunnel at the point where the bike path currently crosses Elliott Avenue. Are you able to comment on how this might impact on the current amenity of the park in relation to noise (including the impact on the amenity of the zoo), wildlife and what will happen with the walking paths and bike paths?	9
55	<p>MCC has acknowledged that "Sporting fields will be lost including the permanent loss of Ross Straw Field. The municipality does not have enough land for current sporting and informal recreation and demand and population growth is seeing this demand increase."</p> <p>How can this loss of such vital community space be condoned? Especially when the benefits of the EWL are only applicable to a small proportion of commuters (and of course the road and freight lobby), but every taxpayer will have to cover the costs for generations to come!</p> <p>Never was so much owed by so many [with only the benefit] to so few.</p>	9
56	What will City of Melbourne do to protect the amenity of Mooney Ponds Creek? Areas of concern are: sever overshadowing from concrete overpasses, potential deterioration of water quality, impact on wildlife and vegetation caused by air and noise pollution and potential loss of bike and walk paths.	8
57	Flemington families presently have limited open space, with Debney park being the only significant park and playfield in the suburb. The Debney playground next to CityLink, recently built for 1.7 million dollars, is very popular and much needed in this inner city suburb. The duplication of city link will clearly destroy this very valuable outdoor space, along with the community centre, and Flemington residents will lose a significant part of the only large outdoor space in the suburb. How can the government condone this, without consideration of the impacts? Where do they expect Flemington	8



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	families to take their children for outdoor play? Under the freeway?	
58	<p>Organised sport is one of the most significant uses of public space provided within Royal Park. The loss of Ross Straw field - which is used heavily by many sports including cricket, baseball, touch football, soccer and many others - as well as impacts on other sporting facilities within Royal Park, is of great concern to many involved with sport in the inner north. Replacement sporting fields and facilities are near impossible to come by - not to mention open space generally - and meanwhile the population of inner Melbourne is projected to increase, and along with it the demand for sporting and recreation facilities.</p> <p>I would like to know:</p> <ol style="list-style-type: none"> 1. What is going to be done to facilitate the replacement of the invaluable sporting fields, facilities and recreational spaces in the congested environs of inner Melbourne lost to the East West Link's construction? 2. How will users of these public facilities, particularly sporting groups, be accommodated with alternatives in the interim until permanent, satisfactory solutions are provided? 3. Will sporting clubs and other user groups be compensated if they are forced to relocate to new sporting facilities far from their original community base? 4. Will sporting clubs and groups remaining in Royal Park - which may be exposed to increased traffic, pollution, decreased access during and after construction, and reduced amenity of the park in general - be somehow compensated or assisted with upgraded facilities? 	7
59	<p>My questions are as follows:</p> <ol style="list-style-type: none"> 1) Will a safe and appropriate alternative be made available for the playground that exists at Manningham Street (at the beginning of the driveway to the Sports Pavilion)? Many families in the area have young children that utilise Ross Straw Field and the playground daily. 2) Will there be any consultation with recreational users of the sports fields (and not just the sports clubs that have formal usage of the fields)? Many young people from Flemington (including those who reside at the high-rise public housing estate) use the field every week. Are there any records or statistics regarding such patronage? How will these people be consulted and properly compensated for the removal of their public open space? 3) Will fitness and health experts be consulted to provide their expert opinions on the long-term detrimental societal effects to a community that has diminished access to open space and recreational options that are free 	7



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	and available to everyone?	
60	What proportion of open space within the City of Melbourne will be lost permanently or during construction, and for how long?	7
61	We were looking forward to the revitalising of the remnant heritage mill precinct, with wonderful Young husbands, the mill, the remaining heritage listed houses and the important links to the creek being refreshed with parks and green linears. Surely this is better strategy	6
62	<p>The Arden Macaulay Plan looked at the revitalization of the Moonee Ponds Creek (west bank) to provide a high quality urban green space from Racecourse Rd to Arden St (approx. 4 hectare?).</p> <p>Given that the EWL.St-2 will effectively degrade any possibility of a high quality open space, has the MCC discussed the possibility of equal land size compensation from the State Government to provide an alternative space in the same area?</p>	6
63	The Melbourne City Council recognized that the Kensington mill area does not meet the required liveability standard of having parkland within 300 metres of the residential homes. The Moonee Ponds Creek corridor was to be revitalized under plan C190 to fill this void. Now LMA wants to turn the land into freeway instead of park. How does this meet the required needs of the area or will the residents just be too tired from listening to trucks all night to require any sort of park anyway?	5
64	Royal Park is essential as a quiet peaceful open space to walk, sit, take your dog and relax. It has existed for over 160 years and was established to provide the residents of Melbourne and surrounds to have a natural environment with greenery and quiet open spaces to escape the noise and bustle, pollution and crowds of the city. Now, the state government feel that they can heedlessly throw away this wise action of our city forefathers and invade our park with the monstrous intrusions of heavy traffic, flyovers, ramps, tunnels and carriageways. I want to know just where does their mandate to do all this comes from after promising that they would NOT build the east-west link before the election?	5
65	The City of Melbourne has recently spent a significant amount of money on Royal Park with the landscaping of the wetlands adjacent Manningham Street and Ross Straw Field, as well as incorporating water retention facilities within the park. What will happen with these excellent forward thinking projects? Is the local ecosystem which was being carefully and sustainably nurtured by the Council to be 'landscaped' with concrete and bitumen instead? I am totally shocked that the City of Melbourne has been completely silent on the effects of the East West link on Royal Park. Man up	4



No.	Comment	Vote Count
	councillors!	
66	How can we protect our poor misused creek. This road is certainly not the way	3
67	Stage 2 of the proposed freeway is to be located to the west of the existing CityLink freeway and along the western banks of the Moonee Ponds Creek. This will have a significant adverse impact on the amenity of Kensington residents by reason of the loss of the parkland on the western banks of Moonee Ponds Creek. What options are available for relocating the proposed freeway to the eastern side of the existing Citylink structure in order to preserve the Moonee Ponds Creek and amenity for residents?	3
68	Has there been any information gathered about the amount of Pollution (noise, fine particles & diesel) that this tunnel (that is not a tunnel) thru Royal Park will generate and its proximity to people/animals at the Zoo, people using the sporting facilities and the effect on the Children's Hospital. And who are the experts that will decide on this & the heavy machinery vibration disruption to the Zoo animals? These should be decided on Health values NOT be dollar based values.	1
69	Given that the low lying areas of Kensington have a long history of industrial pollution for more than a century (currently one community garden in Kensington is closed due to lead pollution) and that the Moonee Ponds creek is well known to be heavily degraded and one of the most heavily river systems in Victoria, does the MCC think it prudent to commission a study to looking at the levels of heavy metal soil contaminants within the path of the East West link? (Rather than risk exposure to residents from heavy metal and other pollutants that would be safely contained within the current earth banks of the MP Creek).	1
70	Will the MCC support residents in opposing the current format of the EWLINK stages 1&2, and asking for the LMA and State Government to reconsider their rushed approach and provide more time for community and business input to improve this project?	1
71	As the EWL Stage 1&2 stands currently, residents next to the path and in the surrounding corridor area are looking at significant property value right downs. This therefore means that the MCC also stands to lose a considerable amount in rates due to the right down in property values. Will the MCC support constituting a register of both total property value and total rates reduction losses for both the residents and the MCC itself with the intent of seeking compensation from the state government for the effective transfer of this asset value / income to the state and the winning tenderer? (Based on the logic that the project cannot proceed in its current format, without our combined asset values being reduced, while the state and winning tendered gains at the least an equivalent if not greater gain to their balance sheet based on our loss).	1
72	If there was a building in excellent condition built before 1873 with features now found no longer in the Melbourne area (remnant woody grassland) and	1



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	scarce in the whole of Victoria which could not be replaced, would the City of Melbourne allow it to be destroyed with no compensation and with the people of the City of Melbourne paying for the destruction? Royal Park is a biolink, feeds migratory birds on their journeys, has scarce and much needed sporting ovals, is a buffer zone for the World class Zoo, has over 90% native birdlife which is incredibly unusual in inner Melbourne, cleanses the air for the people of Melbourne, has historic monuments and links to our founding and will alleviate the city Heat sink as the temperature increases in the future. All these advantages are lost if the Park's area is depleted or divided. How can the City of Melbourne not fight this.	
73	The geology of Royal Park is such that tunnelling is unlikely to be feasible and the proposed East West Link would be built as 'open-cut'. This means a larger area of Royal Park would be destroyed for construction. Also, because the project is a 'design & build', the open-cut may never be covered over, especially if cost blow-outs occur (as is the case for most infrastructure projects). Can we look forward to an 'Eastern Freeway' through Royal Park instead?	1
Submit your Urban Design questions		
74	Is Council considering alternate routes to suggest to the government? There are surely ones that would do less harm to the City of Melbourne's assets and communities?	10
75	The easement in the centre of the Eastern Freeway was specifically set aside for the construction of the Doncaster railway. Why is this being allowed to be hijacked by a project which will scuttle the Doncaster rail? This is the absolute opposite of what was designed for.	6
76	<p>1) Has the Office of the Victorian Government Architect been consulted with on such a major infrastructure project as the proposed flyovers at Parkville West are indeed a shameful and destructive 'design' exercise?</p> <p>2) Which urban planners and landscape consultants have been engaged by the LMA to provide less intrusive solutions to what is clearly an engineered proposal bereft of human scale and impact?</p> <p>3) Does the LMA realise and acknowledge that real people live in Parkville West and that the above-ground solutions (as well as the tunnel) will have serious impact on: Royal Park and its wetlands, amenities such as open space, natural light, quiet environment?</p> <p>4) When will the residents who are directly impacted by the proposed EW Link be properly consulted about the tunnel and flyover interchanges? When will real specific detail be issued to residents regarding heights, effects on direct light (for those of us who live directly adjacent or south of the flyovers) etc?</p> <p>5) As per question 4 above, what will the Elliot Avenue exit/entry look like? How much Royal Park will this obliterate? Will any remnant vegetation be destroyed?</p>	6



No.	Comment	Vote Count
	6) Will the natural escarpment near the rail line (behind Ross Straw Field) be destroyed in any way? 7) What will the effect of construction and the emerging freeway be on the wetlands?	
77	Does City of Melbourne have a view on the maximum height of the elevated tollway along Moonee Ponds Creek?	5
78	It's been proven time and time again that roads are not the future. From a long term strategy point of view, there is no miraculous de congestion from road building. On the contrary we are buying a stinking truck route for posterity. Really? We can't think long term and put clean rail in?	5
79	What will this look like, and how can we make it astonishingly fabulous and not a concrete monstrosity with Perspex. Bring on the best architect in the world if we have no choice here	4
80	What are the time frames for all the decision making? Won't we be locked into a contract that is cheap, and the sound and design aspects are afterthoughts? I feel like this is going off very under baked. I would like certainty before we leap into the void, and good design would help.	2
81	I would love to know how to get the following proposal up for consideration: - Train line (or light rail) to Doncaster incorporated into the tunnel, running express from Doncaster to an underground CBD station near Melbourne University. - At the eastern end, the rail/light rail goes underground, followed by the road. All entry/exit points are through the existing median strip, meaning that there will be no impact on homes or businesses. - At the western end, the tunnel emerges into the industrial area near Macaulay station, preferably through one of the many blocks of vacant land. Exits take drivers onto the Bolte Bridge, allowing them to go to the CBD, St Kilda/South Melbourne, the western suburbs or the airport. This would be a much better outcome for drivers than being dumped onto Elliott Avenue, Arden Street or one of the other seriously overcrowded inner northern roads. If we're going to spend huge sums of taxpayer money on infrastructure, why can't it be well designed infrastructure that supports public transport *and* private vehicles while also minimising the impact on people who live and work nearby? The Melbourne City Loop was built over forty years ago - no buildings were destroyed, overall the negative impact of the project was negligible - and it gave the city a major benefit, allowing the train network to handle almost double the number of trains. Surely it should be possible for us to build the EWL in a similar fashion and with a similar level of taxpayer benefits!	2
82	Why does this proposed tunnel exit in parkland, destroying so much open space in the inner north and west, when it could exit in industrial land south of Arden St, or next to Dynon road? It would still link directly to CityLink and the docks. The destruction of Royal Park, Denney Park, Travancore Park,	2



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	Moonee Ponds Creek etc is all completely unnecessary, and a total indictment on those who have planned this.	
83	Can an independent urban design review of the proposed freeway junctions at both the Tullamarine Interchange and the Elliot Ave Interchange be undertaken? The panel could be made of landscape designers, architects, from both Australia and overseas, those that are recognised within the industry for their expertise in complex design solutions. If this project goes ahead, surely we deserve better than what is currently on the table. A first year student would have failed their design submission if they put on and off ramps either side of an existing building (Evo apartments)!	2
84	<p>Stage 2 of the proposed freeway is to be located to the west of the existing Citylink freeway and along the western banks of the Moonee Ponds Creek. This will have a significant adverse impact on the amenity of Kensington residents by reason of the loss of the parkland on the western banks of Moonee Ponds Creek and in terms of noise, light and air pollution for adjacent residents. I submit two questions:</p> <p>1. What options are available for relocating the proposed freeway to the eastern side of the existing Citylink structure in order to preserve the Moonee Ponds Creek and amenity for residents?</p> <p>2. What attenuation steps will be taken to ensure that world's best practice is employed in the construction of the freeway in mitigating noise, light and air pollution for adjacent residents?</p>	1
85	<p>In regards to the construction of the East West Link Stage One, where will the excavated spoil from tunnel boring go?</p> <p>Which landfill site will be able to accommodate an approximately 5,000,000m³ of soil (this estimation includes a bulking factor of the soil by 2.0).</p> <p>This poses a further challenge for Melbourne's transportation network when transporting thousands truck loads to no doubt remote landfill locations.</p> <p>What is Linking Melbourne Authority strategy regarding this matter?</p>	1
86	Urban redesign or urban mutilation to accommodate new freeways is not going to solve Melbourne's traffic woes. The basic problem of Melbourne traffic is too many one ton vehicles with a 70 kg payload---single occupant commuter cars. These make up 70-80% of vehicles on our roads, as a 10 minute observation of any arterial road will reveal. This is inefficient in energy and requires a lot of road space, and makes life unbearable for legitimate commercial traffic. Remove half these single occupant vehicles and most current road problems are solved. But that requires heavy investment to make public transport systems frequent, convenient, reliable, comfortable and safe. And foresight and wisdom, like Melbourne was noted for ---up to about 1923.	0



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87	<p>One of the most important reasons to oppose the East-West link is the destruction of the Western end of Royal Park. The State has been chipping away at this historic, loved and valuable park for decades. Indeed, Melburnians have been worried about this loss of publicly owned and treasured open space since at least 1945.</p> <p>The Hockey Centre and Olympic Village have recently removed open space from the park. It is a death by a thousand cuts. The Eastern Freeway has destroyed the peace and quiet of Yarra Bend Park forever. Now it appears to be Royal Park's turn for the road builders.</p> <p>It is worth visiting the work of Enrique Peñalosa who completed his three-year term as Mayor of Bogotá, Colombia on December 31, 2000. While mayor, Peñalosa was responsible for numerous radical improvements to the city and its citizens. He promoted a city model giving priority to children and public spaces and restricting private car use, building hundreds of kilometres of sidewalks, bicycle paths, pedestrian streets, greenways, and parks:</p> <p>"Urban transport is a political and not a technical issue. The technical aspects are very simple. The difficult decisions relate to who is going to benefit from the models adopted."</p> <p>"The importance of pedestrian public spaces cannot be measured, but most other important things in life cannot be measured either: Friendship, beauty, love and loyalty are examples. Parks and other pedestrian places are essential to a city's happiness."</p> <p>"The world's environmental sustainability and quality of life depends to a large extent on what is done during the next few years in the Third World's 22 mega-cities. There is still time to think different... there could be cities with as much public space for children as for cars, with a backbone of pedestrian streets, sidewalks and parks, supported by public transport."</p> <p>"Why is all the power of the State applied in opening the way for a road, while it is not done for a park such as the Long Island Sound greenway? Despite the fact that more people may benefit from the greenway than the highway?"</p> <p>Peñalosa is correct – the question that is not being asked is: "Who really benefits from this project, and who really loses. In the case of the East-West Road link it is the people of Melbourne who are losing more and more open parkland in the service of the almighty motor vehicle. Who gains? Well, the road builders – they make their profit and run. They have no meaningful social connection to the project, and no responsibility for the damage it does.</p> <p>There is no Cost Benefit Analysis available for this project. Why? Surely the people are entitled to know how and why their own money is to be spent? According to Eddington, and others, new freeways return a LOSS of 50</p>	0



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	<p>cents in the dollar. How is this a good thing for Melbourne?</p> <p>This loss of parklands is not only at the local level, it is occurring nationally as well.</p> <p>New York is building parks as fast as it can:</p> <p>Highline Park</p> <p>Lowline Park</p> <p>The closure of Broadway at Times Square between 42nd and 47th Streets has not only improved traffic flow in the area, but also improved business.</p> <p>Many major cities are removing freeways: "Removing Freeways: Restoring Cities"</p> <p>Portland has removed the freeway along the riverside and replaced it with parklands. Far from being "impossible" as the traffic engineers insisted for decades, Harbor Drive was closed in 1974. Interstate-5 from the east side of the Willamette River is next on the list of freeway removals.</p> <p>Paris closed the roadway on the Rive Gauche and turned it into parkland.</p> <p>Seoul removed a freeway and opened a park right through the city.</p> <p>In spite of the road engineers' bleatings: "you can't close freeways", the simple fact is that all these closures have had little to no negative effect on the life of the city, and in all cases improved the amenity of social and business life on the streets.</p> <p>Why is Melbourne so backwards? Does nobody at the RACV or the State Government read about urban design?</p> <p>These modern toll-road projects are a simple turn-key DBO (design, build, operate) financial instrument for private investors. They generate their own customers by negating the appropriate development of cheaper and more efficient alternatives.</p> <p>Lazy, short-term political self-interest means most governments are looking for 'ready to build' projects they can commission and open with a ribbon cutting ceremony and a self-serving plaque, preferably within a single term of government. Where is the long-term strategic infrastructure planning and building we had in the 50's and 60's?</p> <p>Please, review your support for this project. In every poll, a majority of Melburnians shout that they want the Melbourne Metro rail built.</p> <p>We want public transport. We are begging for public transport, and yet the decision makers are not listening.</p>	



No.	Comment	Vote Count
	<p>Why not? Who stands to gain? Every time I hear the words "Commercial in Confidence" I know we are about to be ripped off. The "confidence" in that phrase refers to the confidence trick played again and again on the public.</p> <p>The East West Road link will suck money away from public transport for yet another ten years, as did the Bolte, as did the Monash widening as did the Eastern. None of those roads have achieved their stated aims of reducing congestion.</p> <p>It has been very well known for decades that building new roads INCREASES congestion.</p> <p>"RACV general manager of public policy Brian Negus said completing the East-West link was a crucial step towards unlocking Melbourne's gridlock, and would provide a desperately needed alternative to the Monash-Westgate corridor.</p> <p>The East-West link will alleviate the massive congestion at the end of the Eastern Fwy and on both east-west and north-south roads in the extensive area north of the city," he said.</p> <p>You simply cannot build your way out of gridlock with new roads. It is logically absurd.</p> <p>But this statement does demonstrate the mindset of the RACV and Vicroads managerial level. The glad handing and back scratching that goes on between VicRoads, the RACV and major road-building industry groups and the State Government would be a farce, if it were not so damaging to our city.</p> <p>Negus' statement above is incorrect and not based on any independent research. The E/W Link will, in fact increase congestion and invite more and more traffic onto the inner Melbourne road system. It will not alleviate, for example, if there is a crash on the Bolte area as recently, the ensuing congestion. It will send all that "new" traffic onto what will be an already full road, shifting the congestion from one area to another.</p> <p>Mind you it is not surprising Negus is wrong. His response to turning two of the four traffic lanes on Princes Bridge from cars to bicycles was that we should build cantilevered lanes on the outside of the bridge for cyclists! Melbourne's most iconic bridge, and is listed on the Victorian Heritage Register. Philistine does not begin to describe it.</p> <p>Freeways take up massive amounts of potential transport space, over-utilise them in peak hours – very inefficiently, and under-use them in all other hours, also inefficiently.</p> <p>This is an example of the minimum impact the E/W Link will have on Royal Park:</p>	



No.	Comment	Vote Count
	<p>We should not build the East West Road link. We should build a viable Melbourne Metro system set up for multimodal use right across the city, and especially in the new outer ring of suburbs. The “car as mass transit” experiment has failed utterly and completely. Why continue with it when there are so many better options?</p> <p>Well that’s what I think anyway.</p> <p>As of August 22nd, the Auditor-General agrees with me too.</p> <p>Further thoughts on this matter 9/9/2013</p> <p>Traffic flows can be analysed and modelled using the principles of fluid dynamics. Essentially traffic is a liquid.</p> <p>The Tulla/Bolte/Citylink/Monash is one high pressure pipe. The Eastlink/Doncaster/Hoddle is another high pressure pipe.</p> <p>Currently the two flows are separated by a series of relief valves in Alexandra Pde, Princes St, Elliott Ave and their flow-off systems. This alleviates the pressure from the two systems described above.</p> <p>It is well known, and demonstrated repeatedly all over the world and also in Melbourne and Sydney that building urban roads increases congestion by a phenomenon known as “induced demand”. Roads generate more traffic, which fills them to capacity.</p> <p>So what happens when you remove the pressure relief valves between the two high pressure systems? The pressure equalizes, of course, just as in a fluid dynamics experiment.</p> <p>The East West Tunnels will be like dropping the final keystone in an arch (sorry for mixed metaphors here *sheesh*). My expectation is that the EWT will lock up the whole inner freeway system, causing more congestion than we have ever seen before.</p> <p>Then you have the “phantom crashes” – where a freeway comes to a grinding halt. But as you drive through, there is no actual reason for the stop. This is a pressure wave, and EWT will provide the connection for these to reverberate right around the system.</p> <p>A pressure wave in CityLink will travel around, just as a sound wave in water does, to EWT, up the Tulla and down the Monash, and then back up around Eastlink.</p> <p>And what will the response of the roads lobby be to this increased congestion? “Oh we can fix this with a new freeway/widening/tunnel etc. etc.</p> <p>Links and references available here: http://johnhandley.wordpress.com/east-west-road-link-vs-melbourne-metro-rail/</p>	



PARTICIPATE MELBOURNE SUMMARY #2 – MATERIAL SUBMITTED FROM 8 NOVEMBER UNTIL 20 NOVEMBER 2013

Context

The City of Melbourne invited public comment through the Participate Melbourne page on the East West Link proposal based on the additional information in the CIS and the first public information evening.

The table below lists the comments received.



No.	Comment
88	<p>Could we have a new public open space gateway to Kensington by taking the remaining buildings out of Bent Street and making a big park along the awful new tollway when the viaduct is complete? Planting established trees along the edge would help a little in reducing the eyesore, the pollution and give the community back some amenity. I wouldn't want to live or work that close to a tollway and would want to move - so make it a benefit to those who stay.</p>
89	<p>I am 100% all for the East West link. I use trains occasionally but often drive my car, and whilst trains have their place my car is much more convenient - as it is for many Melbournians. I often use the path that the East West link is proposed to take and feel that this project will have a massive benefit for me and many people that I work with. Thousands of people travel East - West - East each day, wasting precious family time in a traffic jam, and these people's current plights cannot be ignored. Arguments saying that Royal Park will be decimated are very inaccurate. Less than 2ha is expected to be lost to this vital project, 2ha out of 160ha! A number of people appear to be opposed to the East West link and are instead in favour of the Melbourne Metro rail tunnel and encourage funds to be used there. I believe there are serious issues with the Metro rail which are yet to be addressed by the people who are campaigning for it, including Council authorities. The biggest issue being that we don't actually need it. I have previously worked in the Public Transport industry and I am aware that with our current capacity and infrastructure, we could have a Doncaster and Airport rail line tomorrow; these lines need not be dependent on Metro rail increasing capacity. Metro rail will do nothing for Melbourne that our current Public Transport infrastructure cant already do (e.g. we can already get from South Kensington to South Yarra by train, we can already get from the north of the CBD to the south of the CBD by tram). I believe we need the East West link to be completed well before Metro Rail as it will have a much bigger benefit for the people of Melbourne. Additionally, the benefits will extend to those from regional Victoria who holiday or visit family/friends. East West Link should be Melbourne's number one priority.</p>
90	<p>The area that comprises Melbourne City would cop a range of negative impacts from the East West Link as it is currently proposed, for very little benefit. Amenities would be reduced or negatively impacted across a range of areas, as clearly summarised in the Oct 8 public meeting at the Town Hall. As a resident and rate payer in MCC region, I don't see why we should stand for such a range of negative impacts to benefit the driving convenience of outer suburbanites when rail solutions could easily reduce traffic volumes on the road, freeing up space for those who insist on personal vehicle transportation over shared. If this new road is so important to east-west drivers, are they prepared to pay a realistic toll price to compensate those who would be directly and negatively affected? I would guess not. Yet for the convenience of 10-20 minutes less on the road, others lose or have negatively impacted their homes (often only singular asset), their parkland, their creek, their noise and air quality, plus more. If this road is so important to some, then they should be prepared to pay for the privilege to compensate those whose quality of life reduces. This East West Link just doesn't stack up on so many levels (why else hide the business case) - just don't allow it to be built, or if it is so vital to build, compensate all who are negatively affected.</p>



No.	Comment
91	<p>The Melbourne Zoo, one of our top tourist attractions will be significantly affected during construction and operation of the East West Link. Key concerns for the Zoo are: - The main construction worksite includes an area directly abutting the Zoo between Brens Drive and the Zoo. This site is visible from the Australian animal and baboon enclosures. It will be operational for five years, with activity occurring there 24 hours a day, every day of the week. During this time it will be a base for 3,000 construction workers, and all spoil removed from the tunnel will be managed out of this site. - Construction works disrupting all forms of non-car access to the Zoo, especially train travel, walking and cycling. - Significant noise, vibrations, light spill and visual impacts affecting the Zoo during construction and operation. - Removing numerous mature sugar gums and moreton bay figs in the vicinity of Elliot avenue, impacting on the sense of arrival at the Zoo. - Cut and cover construction proposed for all works in Royal Park causing significant impacts on the area surrounding the Zoo. The CIS has failed to assess specific impacts on the Zoo. Further, the overall impact on Royal Park is completely unacceptable. Will LMA compulsorily acquire land to replace this critical public open space? The heritage of Royal Park needs to be protected.</p>
92	<p>Hi @SandraAnderson. I appreciate that the tunnel would benefit some people like you but I think you are misunderstanding the level of impact on Royal Park, should the project proceed. The LMA's calculations of the area of park lost are based on the footprint of the project at the surface of the park. So for a viaduct crossing the park, this only includes the small area of the column that supports the roadway above. The City of Melbourne has used a more reasonable approach to calculate the area of usable park lost, which will be the size of 6 MCGs (10ha). This area would include the loss of up to 3Ha (i.e. including loss due to temporary "lay down" areas for truck parking and soil/rock stockpiling) of Melbourne's last remaining area of remnant vegetation (which has Victoria's highest rating for native vegetation conservation) plus four sporting fields and a permanent disturbance to the amenity of a beautiful part of Melbourne in West Parkville, which I suggest you visit some day.</p>
93	<p>If you are visiting the LMA information session tonight at the Town Hall you may see a poster that presents the "positive" impacts on traffic in the inner north of the CBD, should the East West Link be constructed. Unfortunately, the poster doesn't present the "negative" impacts on traffic that would be caused by the project and so I'm including some of them here, which have been taken from Chapter 7 of the CIS, page 40: Elliott Ave, Parkville +10% Manningham and Oak Sts, Parkville +10% Mooltan St, Travencore +20% Guthrie St and South Daly St, Brunswick East +10% Pattison St, Moonee Ponds +10% Kent St, Flemington +20% Wellington St +10% Cohuna St and Moule St +10% We often hear that on school holidays the traffic flows well because the volume reduces by 10%. All of the streets above will be seeing an increase of at least 10%, which will have a significant impact for these residents.</p>
94	<p>Why aren't we following Infrastructure Australia's list of prioritizing projects? It's their role to advise the Government on the Projects most beneficial to the public. The Schedule clearly has the Melbourne Metro more progressed and needed when compared to the East-West Link. See: https://www.nics.gov.au/Home/PriorityProjects</p>



ISSUES AND COMMENTS RAISED BY MEMBERS OF THE PUBLIC AT MELBOURNE CITY TOWN HALL AT THE PUBLIC MEETING ON 8 OCTOBER 2013 FROM 5.30PM – 7PM

Context

The City of Melbourne invited the community to this public meeting to present its Preliminary Impact Assessment, and hear the community's views on the implications of the East West Link (EWL) project. This feedback will inform the City of Melbourne's submission on the Linking Melbourne Authority (LMA) Comprehensive Impact Statement. Participants' feedback has been captured under the key impact categories in the Preliminary Impact Assessment.

Recreation & social

- Melbourne University Baseball club has 6 teams and is 100 years old. They have played at Ross Straw since 1960. The club has been informed that the project will start digging on the field in October 2014. They are worried that this will mean the end of a long history for the club. There is no capacity for them to be relocated, as sportsgrounds in the municipality are already at 95% capacity.
- Holbrooke Reserve Brunswick may be impacted and causes a flow on effect to clubs like Brunswick Zebra's soccer club. The East West Link (EWL) will have an impact to sports fields beyond CoM. There will also be a need to manage access constraints to Royal Park.
- City of Melbourne needs to look wider than its municipal boundary to understand the total impact eg. also look at impacts on Moreland
- Parkville Cricket club is based at the centre of Royal Park and it will be impacted too.
- Has council considered creative ideas to return built up parts of Royal Park that are currently built up for recreational use?
- Junior Flemington Sports Club will also be impacted
- No one has put forward the possibility to create more open space around the Arden Street redevelopment as part of the C190

Urban Design & social

- Participant stated that 80% of the traffic on Alexandra parade will still be using the road after the construction of the East West Link and so it is unlikely we will be able to reduce it to two lanes.
- Council's proposed improvement plans show 2 lanes; will this accommodate the 80%? is this feasible or realistic?
- How long will it take to get the trees back to the same height as the Elms that are there now?
- Will trams still be able to cross from North to South if construction method is cut and cover in Alexandra Pde or while the works are being undertaken?



Open Space & social

- What statistics do we have on passive recreation use of Royal Park?
- AILA (Australian Institute of Landscape Architects) cannot commend the proposal for the East west Link. It has released 2 position statements in opposition to the proposal. [Please see attachment 1 for the position statements that have been provided post-meeting as promised by the AILA representative]
- Not enough emphasis on how open space loss in C190 area (Kensington) will be addressed?
- Need to advocate for removal of concrete channel on Moonee Ponds Creek & restore the creek in the section from Flemington Road to Park Street- Moonee Ponds Creek Coordination Committee and Friends of Moonee Ponds Creek(MPCCC)
- Councillors have to stand up (and "MAN UP") on this issue
- Royal Park must be preserved
- Need to use Council's reserve money to tell the world how good Royal Park is
- Councillors must represent the residents, especially when the state is treating them so poorly
- Will the construction result be a cut & cover? Open cut in Royal Park may not be ever covered over. It is a large impact on the Park. Council needs to be proactive on this.
- Impact on Moonee Ponds creek: concerned at further loss of open space at Moonee Ponds creek, when structure planning was trying to create more. The current proposal shows further expansion of the western side of the freeway, further diminishing open space and creating an overshadowing problem. Have any alternative designs been considered to the eastern side of the freeway?
- The 2 buildings on corner of Macaulay Rd & Bent St should be purchased for open space
- Concern about Moonee Ponds creek, lack of open space
- Ross Straw Field – carved up, needs to be replaced within CoM
- North Melbourne Football club not the answer – location to new Woolworths?
- Concerned on impact on Zoo
- Any freeway must be underground, entirely tunnelled
- Will affect flora, fauna, sport & passive recreation
- Everything should be replaced and it should be fully funded by the project; including new facilities for Active Sport & passive recreation
- Congratulations to Council for the public meeting
- There has been no support for the project
- Needs to ensure 10 hectares of lost open space are returned

Traffic & Transport

- Impact on public transport and trams in Moonee Valley City Council
- Impact on public transport
- The City of Melbourne's Preliminary Impact Assessment is based on limited data. The assumption that reduced impact – where has that come from (Nicholson Steet etc)
- Gap in data around Macaulay Street & Ben Street, Kensington
- Why are we making assumptions in relation to traffic coming into North Melbourne from CBD?
- Suggest that instead of the tunnel, that traffic flow be improved within existing road networks, by alternative solutions such as removing right hand turns, removing on street parking, etc. Have other alternative solutions for traffic management been considered?



- Have Council officers looked at the community designs for the Link which try to minimise the impacts and redesign the road?
- LMA engineers at a community information session acknowledged Elliot Ave would likely have to be widened for slip lanes (ie loss of more of Royal Park) for traffic entering Flemington Road. Also City of Melbourne officers were noted at this very point this morning (8/10/13)! The City of Melbourne should consider high likelihood in their CIS submission and against their predicted “neutral” impacts on Flemington Road
- Participant believes the vent stack will be on the escarpment on Royal Park West, that there won't be pollution scrubbers which are used in Europe and that families and health services in the area (several hospitals) would be affected. No filters & scrubbers on vent stacks
- No analysis of the location & potential impacts
- What is current travel count on Macarthur Road?
- Who will monitor air pollution? The LMA or the EPA?
- Would like more information on the impact on Flemington Road, especially impact in the eastern direction. There are 4 hospitals in this area and a lot of interest from the Eastern suburbs. The impact on Flemington Road is underestimated.
- Council has myopic view CBD and needs to look beyond to consider the full extent of impacts
- Public transport in inner CBD is effected further out, traffic jams will expected
- Need comprehensive network assessment on traffic beyond CoM
- Road will increase traffic problems. The answer is trains not tollways!
- Has council considered on alternative road alignment?
- Serious concerns about impact on Moonee Ponds Creek. The proposal desperately needs improving
- Massive impact on Mt Alexander Road and Racecourse Road. There will be an increase in traffic and it is already a nightmare.
- There will be an impact on traffic & trams on Flemington Road
- Macaulay Road is already dysfunctional. The rail lines already represent an obstacle to flow ant the traffic banks up behind
- Will the tunnel go very deep?
- Need to thing about all rail and road pieces of puzzle together
- East-West road tunnel will probably kill any rail plans
- Concern that the general increase in density and housing (eg Woolworths development) is not being considered. Under the approved plans for the Woolworth development in North Melbourne 600 car parks have been approved, but they haven't been built yet and this will add additional traffic to the area. Additional traffic is already planned for (600 cars on the street).
- In an earlier lecture on traffic calming, City of Melbourne officers expressed the difficulty of getting traffic calming installed in Gatehouse Street. If it was difficult then, how can it be done within the scope of this project? (in areas suggested it may be required).
- RPPG (Royal Park Protection Group)– can't believe that the City of Melbourne will agree to wrecking of Royal Park & Elliot Avenue and turn it into a traffic sewer
- Concerns about traffic modelling. When the CityLink was built, people tried to avoid the tolls and moved to other streets, such as Mt Alexander Road.
- How will the capital city trail & Upfield line be impacted?
- Melbourne is on track to experience chronic peak hour crowding on nine of its rail lines by 2017. Patronage will continue to grow by 4.5% for the next decade, representing an extra 100 million annual passenger journeys to the metropolitan network. London, Perth, Sydney and Singapore are all cities that are investing heavily in public transport to



remain competitive globally. Why then is the Victorian Government wilfully ignoring the facts and squandering money on a toll road that will create more traffic jams, ignore the needs of people living in the outer suburbs and destroy the fabric of inner Melbourne?

- Royal Park map didn't show interface tunnel with Elliot Ave. What will the impact be?
- Just look at the portals for the Lane Cove tunnel and the South Dowling Street tunnel. The proposed portals for the East-West Link in Royal Park will divide the park in two. There would be significant loss of park and amenity.
- Most of the traffic at the Elliot avenue portals will go from Elliot Avenue to Racecourse Road. Why can't it go under Flemington Road & come out Racecourse Road? Then there will be a lesser impact on Royal Park. Keep Royal Park section underground.
- City of Melbourne to advocate:
 - Tunnel not cut n' cover!
 - Tunnel to Incorporate train or light rail from Doncaster to the University of Melbourne (and possible extend to airport)
 - Eastern end on the off point to go through the centre median
 - Western portal on vacant land near Macaulay Station taking cars directly to Citilink to align with the C190 Urban renewal plan

Other

- An overriding concern is that the project has turned its back on democratic proposals and process. The erosion of democratic processes is evident
- Public opinion is against it, but we are being denied a voice, including this Council
- Manningham Street resident – I want them to revalue my property now and in a year's time for the rate notice. I don't want to pay rates for a devalued property.
- The whole of West Parkville will need to be re-valued
- Royal Melbourne Zoo
 - Concerned by the impact & devastation on the inhabitants of the zoo
 - Due to the vibration drilling and noise of this project, how many will perish due to the stress caused?
- Concerned about timelines. The timing for the only community input allowed is scheduled to occur at the busiest time in December for people.
- Supports C190 & calls on Council to continue to progress C190
- Health impacts – Air pollutions – Cardiac & respiratory disease. The OECD (Organisation for Economic Co-operation and Development) has stated that the highest number of urban deaths is due to air pollutions
- Concerns in relation to air pollution & burden of disease
- Concern in relation timelines – why is there such a rush in the process?
- Has council considered nominating Royal Park as a world heritage site?
- East-West Link Preliminary statement – councillors could not comprehend impact & did not vote to oppose. The City of Melbourne should have taken stand earlier – other councils did
- West Parkville flyovers - What will happen there is that this project will create a slum. How will council mitigate this to help the residents who live here? They will be impacted by the end result and by the construction. They will be surrounded by it. A lot of the small people there have not been spoken to by anyone. Their views are not heard. They want to feel the Council supports them and is looking after their interests, as well as looking after the park.
- The profit from the EWL will benefit a small number of companies. A lot of negative economic outcomes will come from the project and the costs of these will be picked up by the City of Melbourne and other municipalities.



- Don't agree with traffic projections that will see a reduction. Cannot continue to allow parks to be destroyed by the roads lobby.
- Council should take baseline on air and noise quality data
- The City of Melbourne should take a leadership role for the greater Melbourne Area. It needs to show a need for infrastructure upgrade across the whole of Melbourne – so oppose the EWL tunnel.
- Friends of Royal Park - Deputy Lord Mayor Susan Riley voted against motion before council. Does she regret it?
- Why using LMA's on specific map of the Arden-Macaulay Urban Renewal Areas– doesn't affected area include Kensington – ie. City of Melbourne's Arden Mac Area
- This is why the EWL should be opposed:
 - No business case
 - No traffic models
 - Not in transport strata or MSS
 - Greenhouse gas emissions
 - Congestion remain
 - Destruction Royal Park, Moonee Park. Compulsory acquisition houses
- Two economics professors recently were reported in The Age saying “All infrastructure proposals should have an independent, transparent evaluation of the proposed and a rigorous cost-benefit analysis and publication of the results” – the Council should also be calling for this
- What will the impact be on Zoo and the Royal Children's Hospital?
- Haven't heard Council speak strongly on this. Appreciate a complex role for Council but we need emphasis on leadership role of Councillors and the City of Melbourne.
- This project is not in the interest of residents. I want council to speak strongly for residents.
- Request for Councillors to mount a class action against state government for their request to sign a confidentiality agreement in order to release further information about the EWL project
- Take leadership – all progressive councils and governments have moved away from this old style of moving traffic. Need all councils to work together against the secrecy, for the sake of future generations.
- Do not support the officer presenting on traffic's statement that he has no view on the project, wants officers to have one.
- Page 10 of the notes indicated a number of decreases in traffic. Ever such road development increases local traffic and demand. This fact has been known since 1950s
- We cannot continue to allow our parks to be destroyed by the roads lobby
- Compulsory acquisition of homes, threat to Zoo and Royal Children's Hospital



NOTES MADE ON POSTER MAPS BY MEMBERS OF THE PUBLIC AT MELBOURNE TOWN HALL AT THE PUBLIC MEETING ON 8 OCTOBER 2013 FROM 5.30PM – 7PM

Urban Design – Moonee Ponds Creek – Impacts and Responses

- Cars will avoid tolls, traffic will increase
- What compensation will be available for loss of parkland?
- Please begin a dialogue on having a metropolitan government so the city can make its own decisions on its infrastructure direction. I hope the City of Melbourne can help advocate for this or give us a forum to say so
- Impact to Moonee Ponds Creek? How will it be minimised?
- (Indicating Oak Street close to Upfield Train line) - Only remaining grassy woodland in City of Melbourne. Habitat of only population of the regionally significant Whites Skink
- Elliot Ave will be decimated with traffic coming out of tunnel. This needs to be acknowledged
- (Indicating Flemington Road) - This must see an increase in traffic.
- What about choice? What about public transport?
- Public transport is far more sustainable. 1 train takes up to 800 cars off the road. No more road building
- Keep the green open space

Open Space and Recreation – Possible responses

- Where will I go when I lose my playground?
- Nobody benefits from Elliot Ave exit except the locals and they wouldn't want it! Scrap the exit
- Leave Elliot Avenue as minor road – no more traffic here
- Leave Royal Park alone
- Set up study of alternative exits on route of tunnel to avoid impacting Royal Park
- What about choice? What about public transport?
- No off/on ramps into parkland. No underpass of traffic lights. Don't divert tram lines. Keep all activities inside the existing road. This ridiculous interchange defies logic
- Put Macarthur into a 2 lane tunnel and you don't need a tollway at all

Urban Design – Alexandra Parade, Cemetery Road East – Impacts and responses

- What about public transport?
- What about traffic onto Hoddle Street?
- We are destroying 160 houses and you can already travel in each direction. An unnecessary spaghetti junction
- Stop the destruction of Royal Park and Moonee Ponds Creek. Why so little vision from current politicians and council?
- This project will only increase traffic in the City of Melbourne and do nothing to help congestion. You should be looking after the residents of the city you represent

Urban Design – Responses – East West Link Architecture Options

- We don't need a road overpass icon
- Where is this intended to be located?



- What about choice? What about public transport?
- Crisp renders and trendy parametric design won't improve traffic. Public transport will

Open Space and Recreation – Royal Park Impacts

- Reduction in green corridors for movement of wildlife
- Loss of upgrade to Glenford Pond and enhancement of habitat
- Concern for migrating birds
- Vibrations will impact animals, including those in the zoo
- Need Geology assessments of EWL, though all Royal Park and potential that EWL will have to be built as “open cut”, not a tunnel
- Lots of informal recreation use too
- Royal Park is of State significance. This project will ruin it for the future
- Surely traffic coming off at Elliot Avenue will turn into access the Parkville “Precinct” and the city
- Damage to existing soil structure. Loss of top soil during construction

Traffic impacts – estimate only

- I am concerned about the impact of increased traffic on public transport on Mount Alexander Road, 59 tram, 57 tram and Racecourse Road
- 4 Major hospitals: What traffic impact studies in context of Parkville/Flemington Road?
- Racecourse Road is a community centre as well as Thoroughfare. Its population has grown and needs to be able to breathe, hear and move
- Traffic is heading for the city, Flemington will be a car park
- (Indicating area around Upfield Line and Poplar Road) – Why increase here at North of Royal Park?
- (Indicating Alexandra Parade near St Georges Road) – What percentage of traffic that comes along here now actually goes right through to Macarthur Avenue and City Link rather than South into the city or north to other suburbs?
- What about tree loss? Royal Park is too precious to lose. No entry/exit in Elliot Avenue.
- Positive impact on surrounding streets seems exaggerated. Evidence suggests that there will be increased traffic for those avoiding the tolls

Urban Design – Moonee Ponds Creek – Impacts and responses

- Will the project inhibitor/prohibit an airport rail link?
- Impact on public housing unacceptable
- Community severance at key locations, limiting access across roads due to increasing traffic
- Will sporting fields be replaced to cover the loss at Ross Straw field?
- I live in Manningham Street and go to school in North Melbourne. How will I walk to school crossing? Elliot Avenue will be very difficult, as it will be very busy. (Peta, age 7)
- It is impossible for Flemington Road to be “neutral”
- What about Moonee Ponds Creek? Overshadowing in Kensington is intolerable
- Concerned this will not decrease congestion & instead create greater vehicle reliance. Will negatively impact parklands/wetlands & local amenity
- Decrease likelihood of much needed PT spending!
- Not confident congestion will be decreased in these areas, but need to prioritise PT, walking, cycling access
- Trains, not more roads

Traffic & Transport – Possible Responses



- Management plans will have limited impact if project proceeds, encouraging people to use their cars at the expense of sensible public transport solutions

Urban Design – Alexandra Para Responses – Possible Indicative Sections

- It is archaic. Leadership of all levels of government need to oppose any infrastructure that ponders to car and truck transport. We need excellent public transport
- Urban Design – developed within democratic principles and processes
- (indicating “Existing Street Section”) – Do this now. Remove cars. Close roads, create space for people
- (Indicating “Potential Street Section”) – Great use of vegetation canopy
- Clearly designate as bike lane rather than “shared” as on Swanston Street
- Improves public transport would make this vision more believable, otherwise encouraging roads for people, not just cars



Australian Institute of Landscape Architects Position statement 2 on East West Link – Stage One

8th October 2013



Introduction

Park Infrastructure Supporting Urban Growth

The AILA is the professional organisation for Landscape Architects in Australia and has no political affiliations. Victorian members have carefully reviewed available information about the “East West Link” from the Linking Melbourne Authority. Our Institute has formed the view that the project as currently proposed will cause irreparable damage to Melbourne’s largest park – Royal Park – and the already compromised, yet very important, ecological and open space corridor of Moonee Ponds Creek. In August, AILA issued a public statement that, on these grounds alone, the project should be seriously reconsidered or abandoned.

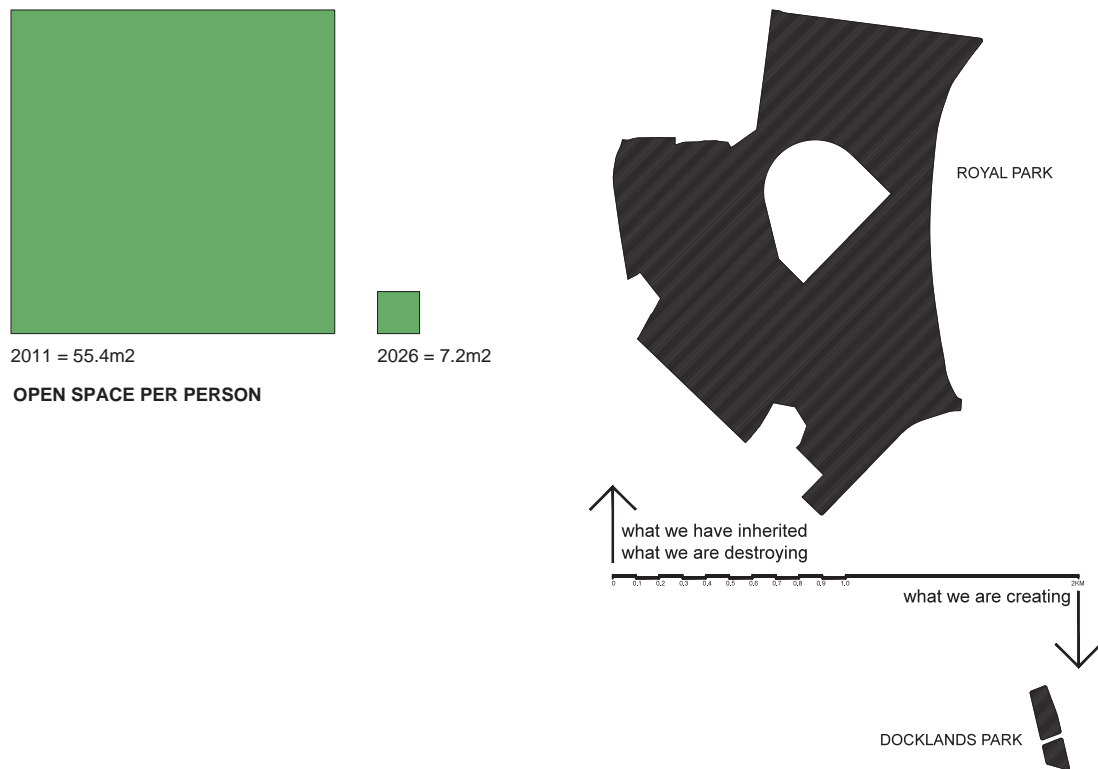
Australia’s Prime Minister elect, Tony Abbott, has promised \$11 billion for city road building, saying he aims “to be an infrastructure prime minister who puts bulldozers on the ground and cranes into our skies”. In line with this sentiment, Mr Abbott has expressed support for the Victorian Government’s proposal to build the East West Link.

However, it is AILA’s contention that Mr Abbott should recognise the role that parks play as vital city infrastructure. The value of infrastructure does not correspond to the quantity of concrete it contains. The value of urban infrastructure depends on what it does for the people of a city.

In a recent letter supporting AILA’s position on the East West Link, the Victorian president of Parks and Leisure Australia (the peak organisation representing professionals in the parks and leisure industry) sets out what AILA members know well: Accessible open spaces that attract active community use have important health benefits, helping to improve physical and mental health and wellbeing, and supporting children’s development. Parks have social benefits in connecting and building communities, benefiting people with low incomes, and enhancing liveability in urban environments. They have environmental benefits in contributing to storm water management, carbon sequestration, reduction of air and noise pollution, abatement of the urban heat island effect, and protecting areas of natural and cultural heritage value. And parks have economic benefits, attracting visitors and generating tourism, attracting businesses and local employment, increasing worker satisfaction and productivity, and enhancing the market value of nearby properties.

Moreover, Parks and Leisure Australia emphasises that:

it is projected that the population of Melbourne will increase significantly from 98,162 in 2011 to 164,832 in 2016, and [because of its impact on Royal Park, the East West Link] project is likely to result in a decrease in available parkland per person from 55.4 sqm to 33.7 sqm assuming that the current stock of land remains. The impact is further exacerbated if we consider the working population in the City as well, which will see available parkland per person reduced to 7.2 sqm per person in 2026.



Any reduction in land currently available in Royal Park for sport, active recreation, and passive recreation will likely create a domino effect on surrounding LGA's as there will be increased pressure placed on these municipalities to cater for displaced sporting clubs and casual users of public open space.

The City of Melbourne's assessment of the proposed East West Link identifies sporting areas in Royal Park that are actively used up to 35 hours per week in summer peak will be lost, displacing ten sports groups and affecting up to 1000 participants per week in summer. There is no capacity at other City of Melbourne sports fields to accommodate these users, even though the City of Melbourne boasts parklands of vastly greater extent than other inner-city municipalities.

The City of Melbourne and adjoining municipalities constitute one of the major growth areas of the metropolitan area. With expansion of the inner urban population – for example in Docklands, where few open spaces are large enough to toss a frisbee, let alone to engage in community sports – pressures on existing parks have increased, and will continue to increase.

Royal Park was one of the areas reserved in the 1850s by Governor La Trobe, who recognised the importance of parks for community health and recreation. Melbourne's inheritance from this is extraordinary, in that its greatest values are only likely to be fully appreciated two centuries later, when this parkland becomes a resource for a population that will have expanded far beyond anything La Trobe could have imagined.

The proposed East West Link project will not simply build new infrastructure. It will destroy irreplaceable infrastructure that is vital to support urban growth and consolidation in the inner city area. AILA implores Mr Abbott and the Victorian Government to aspire to the vision of La Trobe, and to protect and enhance this vital piece of parkland.



The site for the western tunnel portal will result in the loss of one of the few remaining fragments of natural vegetation.



Ross Shaw field, a high grade multi-use sports area home to several clubs, will be sacrificed to create an elevated freeway interchange.

PARTICIPATE MELBOURNE SUMMARY #1 - MATERIAL SUBMITTED PRIOR TO CITY OF MELBOURNE PUBLIC MEETING ON 8 OCTOBER 2013

Context

Prior to the first public meeting, the City of Melbourne invited community members to post their East West Link questions to the dedicated [Participate Melbourne page](#) under the key impact categories in the Preliminary Impact Assessment. Community members were also encouraged to vote for questions that they supported.

The table below lists the questions by category and vote count.



No.	Comment	Vote Count
Submit your Traffic and Transport questions		
1	How will pedestrian and bike traffic be addressed with the fly over and ramps? A healthy and fit Melbourne should be encouraged. We are an embarrassment overseas. Headlines will read "most liveable city drops to most unliveable city due to lack of public transport, green initiatives and no sense of community". "Melbourne's LA STORY worse-not even a train from the airport". City of Melbourne please help ?????	13
2	Urban Planning experts from all over the world have consistently and comprehensively debunked the idea that freeways solve issues of congestion. The State Government and the LMA are making a huge mistake in pressing forward with this project. Melbourne is crying out for better investment in public transport and this freeway will not only fail to curb any supposed congestion issues, but will divert desperately needed money away from public transport projects. The community has condemned this project as un-necessary, un-called for and unwanted. Will the City of Melbourne take heed of Melbournians views and follow the Yarra City Council's lead in totally opposing this project? Or will they roll over and pander to the interests of the roads lobby and the pathetic state government?	12
3	How can we possibly think anything that impacts Royal Park is appropriate. It is not. Can we respect that protected place please, this is not a priority project worth losing something we can never get back.	11
4	I think this tunnel is a waste of money! A flyover-really!! This will be a serious divide in the inner north. How will community be encouraged with such a monstrosity? Surely there is another way and a fly over can be avoided if this must go ahead. The same turnoff can remain if the tunnel commences from gold st. I would like the increased noise, pollution and decreased property values to be addressed for residents as well as compensation. If this must go ahead I would like alternatives to the fly over please.	11
5	<p>What discussions has the MCC had with the LMA / Vic Gov regarding the protection of residents from increased noise levels?</p> <p>As either single residents or in groups, we've had meetings and emailed both the LMA and State Gov, but had only one response to the question of: what sections of the EWL.St-2 will have sound barriers.</p> <p>The only direct response we have so far is that sound barriers are not going to be required as the area is semi industrial, and so our home need not be considered.</p> <p>Can you please advise what the true situation is on sound reduction barriers?</p>	10



No.	Comment	Vote Count
6	<p>Lord Mayor Doyle has already expressed his enthusiastic support for the EW Toll-road. Council expressed its concern with the current plan by a majority of 1 vote. Unfortunately, the City of Melbourne ignores the catastrophic impacts of the Toll-road on homes, parkland and liveability. The Officers Report reflects the 'smoke and mirrors' statements from LMA. It provides no critical analysis, particularly on the highly suspect traffic claims. Extensive traffic studies associated with the Northern Central City Corridor Study (2003) and the Eddington Report (2008) should have informed the current study. Instead, such basic information has been ignored.</p> <p>The EW Toll-road is a project without demonstrable merit. A Business Case and supporting traffic data is not available. According to Premier Napthine such information will never be released. To claim \$1.4 benefit for every dollar spent (for the virtually identical Eddington project the benefit was just \$0.5) and to force the sovereign risk onto the taxpayer is outrageous. It is these matters that should be addressed by the Council.</p> <p>Many worthy public transport projects (rail lines to Doncaster and airport, rail signal upgrades etc) and smaller roads projects (rail-road grade separations etc) could be funded from the \$8 billion now slated for the Toll-road. The Council should be addressing public transport upgrades rather than supporting mega roads projects.</p>	9
7	<p>My questions are as follows:</p> <p>1) How will residents in Manningham Street, Parkville West, be provided with appropriate access to Brunswick South (to the north) and to Flemington Rd via Church St (to the south/east)?</p> <p>2) Will trucks used in construction give priority to residents when leaving/entering the street?</p> <p>3) Once the over-bearing portal at Elliot Avenue is in operation, how will the Elliot Ave/Flemington Rd/Racecourse Rd intersection be managed? It is currently a death trap for pedestrians (including school children heading to Errol Street) and the elderly? Have the LMA provided a detailed traffic management analysis for all the predicted vehicles (including trucks) that will be generated at this point trying to make their way into congested Flemington Rd, Racecourse Rd and Mt Alexander Rd? Or is that that something that the residents of Flemington, North Melbourne and Parkville have to endure? The big yellow dashed line on their aerial photographs doesn't provide any sort of information regarding this pedestrian aspect?</p> <p>4) If the Link is primarily for freightage as recently espoused by the LMA, and speed limit at the flyovers is 80km, what measures are in place to make noise from trucks etc at appropriate decibel levels? Current 3d renders show pathetic acoustic panels. Similar case for residents to the west of existing Citylink - they already endure traffic along this freeway (sound tunnel is in place) but will have another freeway arterial at another level over their parkland (Debney Park) and close to the high-rise, high-density</p>	7



No.	Comment	Vote Count
	housing. What sensitive design measures are in place to reduce noise from traffic for these residents? 5) Will tram route through Royal Park be disrupted? It has the highest patronage of all tram routes and will be a significant impact? 6) Will the Capital City bike trail be affected or disrupted at any point in time?	
8	can Council please provide, for those suburbs directly affected in its remit, a suburb-by-suburb breakdown of projected traffic impact of the current tollway design, and steps needed to be undertaken to address potential problems, for instance, extra traffic on Smithfield Road, by Council and expected costs.	7
9	What is the opinion of the council regarding the location of Stage-2 in Kensington? Specifically, does the MCC consider it better to locate the EWL St-2 in the (mainly) vacant land on the eastern side of City Link, as originally planned by the LMA? (This option would appear to offer a lower overall project cost by simply expanding the existing City Link infrastructure, give lower impacts upon current residents, while maintaining the overall integrity of the Arden/Macaulay Plan). Please advise?	7
10	I certainly prefer to be drawn into strategic planning discussions on transport, as the Metro link is clearly where we need to spend the money. More discussions on the road make it seem more like a certain course of action.	6
11	How is the city of Melbourne addressing the need for more public transport? A new design for Flinders St station should we be encouraging more public transport and less cars? If the tunnel goes ahead how will the city address the influx of cars down community streets that aim to avoid tolls?	6
12	What impact will the proposed on/off ramps on Arden and Elliot streets have on local traffic? Will local streets be widened to accommodate trucks and port traffic?	5
13	I would like to know what measurements have been made to assess the impact of thousands of additional cars being moved to Elliott Avenue and Flemington Road every day. These roads are already at a standstill from 7:30 - 9:30 and 3:30 - 7:00. The additional traffic from the proposed toll road would only make this worse - I'd be interested to know just how much worse. I'd also be interested to know why it is not possible to mitigate this additional congestion by having the western end of the road emerge near Macaulay station and run directly up onto the Bolte Bridge. Although the Bolte is not exactly a free flowing river of traffic, at least it moves reasonably freely	5



No.	Comment	Vote Count
	during rush hour and has the added bonus of getting commuters to the CBD, St Kilda Rd/South Melbourne, the western suburbs and the airport - without an hour or so spent sitting in traffic on Elliott Ave!	
14	<p>How can the MCC project a 'significant decrease' in traffic on Macarthur Road and Flemington Road? The vast proportion of traffic to and from the CBD via those routes will not change with the completion of the EWL. Likely the opposite as cars attempt to (a) avoid the toll road and (b) access the CBD.</p> <p>More freeways mean more cars. That will NOT ease congestion.</p>	5
15	Will there be any disruption to public transport (particularly Macaulay and Flemington Bridge stations) either during or post construction?	4
16	Why is the reference design and project envelope where it is? The above ground section in Kensington is much more impactful on business and residents that if it were to the east. There is mostly vacant land and empty warehouses there, much like a transport corridor.	3
17	<p>In discussions with noise engineers from the project I was told that the noise levels will apparently be within legal limits so noise abatement measures (e.g. double glazing) would only be considered for buildings utterly adjacent to the flyovers. Noise isn't only a critical issue for those within fifty feet of the tollway. The truck noise from Citylink is already disturbing hundreds of meters away and current barriers do nothing to curtail the noise. The addition of trucks accelerating and breaking as they speed around the curves of this new project would be intolerable.</p> <p>Can the whole thing - including the gradient sections of Citylink - be enclosed in genuinely soundproof tubes?</p> <p>I was also told that construction would proceed uninterrupted, 24 hours a day, with heavily laden trucks constantly rolling out of the tunnel making the possibility of undrugged sleep rather remote.</p> <p>Will local residents be shown any consideration if this thing goes ahead?</p>	3
18	There have been no assessments of impacts to local roads even when these are to be directly built over and closed. This ought not be a faith accompli	1
19	<p>Stage 2 of the proposed freeway includes on and off ramps at Arden St. The existence of these ramps is likely to result in a significant increase in local traffic in Kensington and North Melbourne together with associated amenity issues (noise, light and air pollution) for adjacent residents. I pose the following questions:</p> <p>1. Why is it necessary for the Stage 2 infrastructure to connect to Arden St when the principle purpose behind Stage 2 is to afford connection to the Port area? Can the project proceed without connecting to Arden St?</p> <p>2. What attenuation steps will be taken to ensure that world's best practice is employed in the construction of the freeway and ramps in mitigating</p>	1



No.	Comment	Vote Count
	noise, light and air pollution for adjacent residents?	
20	<p>The proposed toll road comes within 14m of the apartment block I live in. The increased pollution via the increased diesel fumes (a known carcinogen linked to numerous diseases and health problems such as cancer) caused by the 24 hour truck traffic on the new toll road, in addition to the increased noise volumes will make my home unliveable. The LMA have told us that noise levels will increase to 65db or 68db - concerts at the nearby showgrounds have to stay within 62db-65db. Noise at this level may cause disruptions in sleep patterns, which can also lead to health issues such as heart attack) What action will the MCC be taking to protect its residents and ratepayers from living within unreasonable proximity to the toll road and thus the excessive noise and air pollution it will generate? How will you help protect us from the health issues we may be exposed to as a result of living so close to the new toll road?</p>	1
21	<p>Is December last year the CEO of the LMA presented a PowerPoint slide showing the proposed route of the Port link section of the East West Link on the eastern side of the existing Citylink structure: an area that is predominantly brownfield. In March this year a large plot of land in the area on the eastern side of Citylink, earmarked for the port link, was sold to a developer and a \$700m residential development was announced to be built on that land. In July this year the LMA released maps to the public showing the port link on the western side of the existing Citylink on the West Bank of the Moonee Ponds Creek and within metres of established residences. Upon questioning the LMA as to why the road had suddenly shifted for the east of Citylink to the west, their response was that it was due to the C190 Arden Macaulay Planning Scheme Amendment. However the area on which the road had suddenly shifted over to also comes under the C190 Scheme so how can Council be satisfied with that reasoning from the LMA? Why are council not fiercely standing up for the rights of existing residents & ratepayers over the power & muscle of developers and the planning minister? Existing residents are clearly being shafted to protect profits.</p>	1
22	<p>Please confirm that there is an error on page 8 of the Preliminary Assessment, which suggests that the traffic impacts on Flemington Rd will be 'Neutral'. I understand that this reference should have referred to Flemington Rd north of the Racecourse road/Elliott Ave intersection. On Flemington Rd to the south of this intersection, we would see a 'Significant Increase' with the LMA design, which is pretty obvious as cars would exit at Elliott Ave to drive to the city.</p>	1
23	<p>The Council has proposed that it will be reviewing the need for Elliott Ave north bound ramps (i.e. towards Royal Pde) - page 9 of the Preliminary Assessment. Given the significant increases in traffic on Elliott Ave (west of the LMA's Royal Park freeway interchange) and on Flemington Rd (south bound), why isn't the Council also reviewing the need for Elliott Ave ramps in both directions? This interchange will cut the park in 2 and cause irreversible damage to the park. I agree with the Lord Mayor that this interchange would simply cycle cars into the city and onto the local streets of Parkville and North Melbourne and therefore it should be strongly opposed. Local residents wanting to use the tunnel will still be able to</p>	1



No.	Comment	Vote Count
	access it at Dynon Rd and Moreland Rd (and potentially Arden St) and they will be the ones who will be impacted greatly if the Elliot Ave interchange was constructed. It is also important to note that minimal freight originates or arrives at destinations in the area near Elliott Ave and therefore the business case for this interchange must be seriously questioned.	
24	The LMA has proposed a new viaduct along the western side of the CityLink viaduct, which would be built as part of Stage 2. This alignment will cause significant and irreversible negative impacts to the Moonee Ponds Creek, including permanent shading of some areas. The viaduct could have been aligned on the eastern side of the existing viaduct. Is it true that the western alignment was selected because it was a cheaper option when compared to securing a corridor through private land? As an alternative to both viaduct options, a tunnel could be constructed under the private land on the Easter side - has this alternative been considered by Council to reduce the impacts on the residents of Kensington?	1
25	The allowable limit is 63dBA, and noise at night is not counted at all. This is very loud, well above World Health Organisation standards. VicRoads sets the 63dBA level, and good luck to anyone who can get them to explain where they get the figure from.	0
26	The major disruption to public transport is that the Doncaster Rail line and the Melbourne Metro will not be built if the EWL goes ahead.	0
27	Melbourne does have a growing urban transport problem, no doubt. The city travelling public with travelling options are the road users who can choose between single occupant car or public transport to get to work. These comprise up to 80% of vehicles on the roads. Their choice is made on the basis of which is the least awful at any given moment--car or public. (Commercial road traffic is practically invariant because they must use roads, they have no choice). More freeways means private commuters bleed out of public transport in favour of their cars. But because peak-hour space requirement on public transport is less than 1 sq. metre/person but single occupant vehicle takes at least 20 sq. metre/person, it doesn't take too many commuters fleeing from the current public transport horrors to clog new freeway entries exits and feeder roads, just like it is now. The EW Link upside is: 1) not much improvement for commercial traffic, and even that short-lived because of natural growth, 2) no detectable improvement of public transport, 3) continued bleeding of public monies for project bailouts and subsidies. That's the good side. And the downside? 1) loss of many, and damage to many other, irreplaceable inner suburban public amenities and sporting infrastructures, 2) disruption to and degradation of quality of life in and around EWL structures during and after construction, 3) restriction of pre-existing local traffic flows leading to isolation of old inner suburbs, 4) dramatic loss of property value of adjacent householders not directly affected (ie those houses not demolished), 4) inadequate compensation for loss of property, inconvenience and lost time, and increased stress for those compulsorily acquired, 5) permanent increase in local traffic, 6) massive expenditure on a single white elephant which cripples every other possible	0



No.	Comment	Vote Count
	urban transport program. We have seen all these up and downsides before in Melbourne, in Sydney and in Brisbane. Please convince me it will it'll be different this time.	
28	<p>What is the future of urban mobility in Melbourne? According to some by 2050 there could be 2.5bn cars roaming the planet and most of them will be concentrated in cities, the OECD has reported.</p> <p>BBC reports that "Saudi Arabia, one of the world's top oil exporters, expects domestic consumption to exceed exports by that year purely to feed its internal needs for automotive fuel. Meanwhile, if Chinese levels of automobile ownership reach US levels (840 cars per 1,000 people), demand for oil in China alone will surpass present-day global oil production, management consultants McKinsey have reported."</p> <p>And climate scientists predict irreversible environmental damage with continued carbon emissions if we follow the continual reliance on fossil fuel to drive private transportation systems with a "business as usual" attitude.</p> <p>A quick visit to major cities around the world, quickly reveal the importance of mass transit systems to the vitality of cities , and the efficiency by which these move large numbers of people particularly in peak times. Equally important, that public transport delivers connectivity and promotes active public spaces, from a recreational and commercial basis.</p> <p>Eg San Francisco is a city well served by a complex grid of trams, buses and trains..In London, New York, Paris, etc cities benefit from broad networks and simple ticketing systems.</p> <p>In Israel, Rail projects are now being implemented as well as, crossing improvements and an expansion of light rail through Jerusalem..</p> <p>And in Shanghai, complex integrated hubs deliver forward thinking to delivering transit solutions.</p> <p>Meanwhile in Melbourne, the best we can come up with is an expensive tunnel to move more single occupant cars from one congestion to another, and create more traffic jams upstream. This is tunnel vision, and is not the answer to Melbourne' future needs.</p> <p>Isn't it time to change the thinking (and public spend) away from roads, that have failed to deliver long term sustainable transit solutions to more forward thinking mass transit solutions??</p>	0
29	Why can't the current Citylink be expanded as opposed to building a whole new corridor on the West Bank of the Moonee Ponds Creek? Surely that would be more cost effective and lessen the blow to the creek and residents along it?	0



No.	Comment	Vote Count
30	The impacts if the proposed toll road on Royal Park is nothing short of catastrophic. Four arterials of two lanes plus emergency lane will spew out through the last remnant open woodlands in Melbourne, to then become 14kms of above ground, grey, dirty, concrete eyesores snaking their way through our suburbs? Why is the MCC not doing more to persuade the Napthine Government to stop the project altogether and instead urge the Government to focus investment on other more environmentally friendly transport alternatives? This project will cause irreparable damage to the park and to Moonee Ponds Creek; to the City of Melbourne in terms of the environment. May I ask have all MCC councillors actually visited and physically walked the route of this proposed project? If they had I think they may be doing more to negotiate with or lobby the State Gov.	0
31	Alternative designs have been presented to the Council to reduce the impacts on Royal Park, should the project be constructed. Has the Council developed alternative designs to address the significant negative impacts that would be felt by Royal Park with the LMA design? If so, have these been presented to the LMA or the three bidders? If alternative designs have not been developed, why not?	0
32	I would also be interested to know the expected effect on traffic from Smithfield Road onto Epsom Road. The truck traffic on Epsom Road in the evenings is excessive now. Height restrictions stop trucks (theoretically) travelling to Citylink via Racecourse Road because they cannot get under the rail bridge at Newmarket. Does this mean more trucks on Epsom Road / Kensington Road / Macaulay Road?	0
Submit your Social Impact questions		
33	1. Will City of Melbourne investigate whether residents who are not compulsory acquired can receive compensation for eroded property values? 2. How much deterioration can occur before the level of noise and air quality fails to meet current standards?	11
34	Can you comment on the loss of amenity as a result of what appears to be 8 lanes of traffic exiting out of the proposed tunnel? This is a park that provides a haven for many inner urban residents, not only in Kensington, but also Brunswick and Parkville. Further to this, what are the expected impacts for the Zoo, which attracts both local and international visitors. Will the Zoo in turn be seeking compensation?	10
35	1. We understand that sound barriers may not be required along lengths of the tollway (particularly in Kensington) as the area is 'semi industrial'. What can City of Melbourne do to protect residents? 2. What analysis has been done on the impact of additional light pollution and deterioration of air quality?	9
36	Before the last election we were promised the Doncaster rail, which can be used by people from all walks of life. Why are we instead being given a tollway which will largely benefit road freight companies, and which if constructed, will make the Doncaster rail too expensive to be viable?	8



No.	Comment	Vote Count
37	How will we be prioritised and not let the LMA run roughshod over us. This road does not serve the greater good, it does not serve our Kensington community, and it does not look after me and my neighbours. How can we ensure we are properly represented and that things are not fast tracked over us	7
38	If there is a Proclaimed park, surely this we can expect to be protected. If we can't even uphold that, what hope is there for the Kensington residents and the above ground sections. Respect for existing places should come first	6
39	LMA states the proposed East West Link route was determined after considering "social, environmental and capital costs". What social and environmental conclusions did LMA determine when they decided to put eight lanes of truck bearing freeway above my neighbour's and my own home in the Kensington mill area? Particularly as there is derelict industrial wasteland on the other side of the existing freeway.	6
40	How will we protect the remnant heritage mill precinct in Kensington? Surely the simplest expedient to community and creek preservation is to redirect activity to the eastern industrial wastelands.	5
41	Having a freeway and two Off Ramps at the bottom of the garden is not what I thought was happening when I bought my house in April. How will we be compensated for our life savings being diminished by becoming a port transport route instead of a mixed use community	4
42	<p>1. Is it absolutely necessary to construct a flyover to direct northbound Hoddle Street traffic onto the Eastern Freeway? It seems that with just a little bit of thought, the existing on-ramp and roads could be re-configured to achieve the same result at or below ground level and avoid an expensive flyover that will not only be devastating to the local residents but will form a physical barrier for pedestrian and bike traffic moving between Clifton Hill and Collingwood.</p> <p>2. If it is necessary for a flyover to be built as part of this project; what measures are in place to guarantee local residents will not be forced to endure increased noise and pollution / particulate from car exhaust?</p> <p>3. Will the state government look at giving local residents the option of having their properties acquired (similar to the owners of the Evo apartments) in other areas where they are directly adjacent to a new above ground fly-over?</p>	4
43	<p>Has there been any research done by the Melbourne City Council, LMA or State Government regarding the devastating social impact that car-dependency has on Victorian communities?</p> <p>Expanding Melbourne's network of freeways as opposed to the public's preferred expansion of public transport services will lock people into unhealthy, anti-social patterns of car-dependency and the issues of social isolation and obesity that follow.</p> <p>The new freeway structures in royal park, PUBLIC PARKLAND, will emit</p>	4



No.	Comment	Vote Count
	<p>significant noise pollution into what is now a peaceful, quiet park. I am sure that the LMA has promised freeway noise barriers, but as anyone who lives anywhere near a freeway knows, these do not work very well.</p> <p>Furthermore, Has there been any research conducted into the increased levels of air pollution that will be emitted throughout the city if this increase in traffic numbers is realised? Air pollution kills hundreds, if not thousands, of people in Australia every year and we should be working to REDUCE car numbers, not increase them. This state government has got their priorities totally the wrong way around. INVEST IN CLEAN, GREEN, SOCIALLY EQUITABLE PUBLIC TRANSPORT! PLEASE!!</p>	
44	<p>1) Has there been any conversation with the LMA regarding the impact of building added carriageways and on-ramps on Flemington Housing estates and the recently revitalised Debney Park Playground? Do the residents in the high-rise towers have any opportunity for recompense? There will be increased noise, pollution and visual barriers.</p> <p>2) Royal Park is public parkland. Melbourne's population is increasing. How can the City of Melbourne allow this parkland to be destroyed for a tolled freeway? This seems to contravene the rights of citizens to have public space kept intact without fear of destruction for private use.</p> <p>3) What advice and support can City of Melbourne provide to those residents severely impacted by this unqualified project. Impacts include significant property value decline, loss of amenity, visual intrusions, air quality decline, health risks, noise increase, construction mismanagement, etc</p> <p>4) What kind of support will residents in Manningham Street, Parkville be given? It seems LMA/State Government are willing to sacrifice our standard of living to support a project that has no evidence-backed business case</p>	4
45	<p>1. With huge increases of resident population and numerous number of apartment approvals by the Planning Minister, how can the reduction of the already limited existing passive and active open spaces be justified?</p> <p>2. Were there any proper consultation done with the Chinese elderly people's home just next to the Evo apartments? Not only will they have severe amenity impacts, they will also be fenced in between freeways. How was this thought through? Was there any consideration for them?</p>	3



No.	Comment	Vote Count
46	<p>As a resident of Kensington, in the heritage mill area between Macaulay Rd and Arden St, I cannot help but have very strong feelings about how I am about to contribute to the East West Link project. I was completely oblivious to the opportunity I was given to do my bit until I read about the impending dual carriage elevated freeway to be built in my neighbourhood, via the newspaper. I feel amazing to be part of it.</p> <p>When I look over the existing City-Link Freeway to the vacant industrial wasteland where one would think a massive elevated monolith would be built, I wonder how we were given the chance to be such an integral part of the new project. The Melbourne City Council last year recognised that our old area does not meet the required standard of having open space parkland within 300 metres of a residential area. The neglected area along Moonee Ponds Creek was identified in the future plans to be revitalized and meet those needs. Then LMA commandeered that land along the creek for a freeway to carry the trucks night and day from the docks past the outside and over the front door of our 120 year old house. It seems incredible to say the least.</p> <p>I have done my due diligence to find out as much information as I can before I fully appreciated this position my wife and I have been given. When I rang LMA they kindly told me if I was not happy with what was about to happen, they would tell me the process that will be used to enable it to happen (you're screwed but we will tell you how we're going to screw you).</p> <p>I look at the plans in the preliminary report and wonder. The MCC states our heritage area, where they even dictated what colour we must paint our home, may now become "urban blight" with the freeway and off ramp.</p> <p>Though there are some interesting opportunities identified. According to the preliminary report, turning the area under the freeway into a park may be a positive. I'm not a horticulturist but I thought plants and grass need sunlight and rainfall to grow? The land where they planted under the adjacent City-Link, along the bike path, after construction subsequently died and today is just dust. But I'm sure technology has come a long way.</p> <p>One thing that does propagate very well underneath the freeway on the industrial side is graffiti tagging. We can be guaranteed of that blooming outside our homes. How great it will be to wake up in the morning and see a new piece of vandalism outside our homes and think about the "artists" who graced our area under the freeway in the middle of the night.</p> <p>This freeway is purpose built to take trucks from the docks to the Eastern Freeway. LMA has kindly said they might build some noise protection in areas that are not "semi industrial". The MCC has put some pictures in the preliminary report of the possible sound proofing someone in their office grabbed off the internet. Just google image search "freeway designs" and you will find the same images. I'm not sure whether I should be concerned that none of that sound proofing even exists. They are all just indicative artist impressions. One is of visionary solar panel design over a freeway to</p>	3



No.	Comment	Vote Count
	<p>produce energy. I'm sure solar panels over a freeway will mitigate the noise coming through my 120 year old house?</p> <p>The greater good must be served. There is talk of a \$700million apartment complex developers have earmarked for a section of the industrial wasteland. I feel inspired to know that vast parts of our community will benefit from the freeway over the creek. The developers, graffiti taggers and decision makers will all benefit from the "urban blight" that is expected to become of our neighbourhood. We, who have been working ratepayers in the Kensington area for many years, just need to accept this gift. The \$100,000 plus that we will lose in property value need not be of concern as we pay our mortgage and our property value goes down.</p> <p>When I lay in bed at night and listen to the trucks go past I will wonder how lucky I and my neighbours are.</p>	
47	<p>What happens to C190 as people thought they knew where they were to be living, and now it seems we will be living at a truck park. I want to see what the strategy is for my home</p>	2
48	<p>If only! I've been trying to get a campaign going to move the western exit to this area for months, and have not gotten any traction at all :(Link to petition below, if you're interested - if this monstrosity has to be built, it could at least be built with minimal impact to locals and with an exit point which might actually benefit drivers, instead of dumping them into even worse traffic than they currently experience on Alexandra Pde!!</p> <p>http://www.communityrun.org/petitions/don-t-destroy-our-homes-and-parks-to-build-east-west-link?source=facebook-share-button&time=1379421206</p>	1
49	<p>The EWL will actually mean that the Doncaster Rail link would be impossible - the reconfiguration of lanes of the Eastern would remove large parts of the median, which was initially set aside for the inclusion of the rail link there.</p>	1
50	<p>When this plan was first presented, I rang the Zoo to ask what I could do to help them to fight this plan. Their PR rep said that they did not have any plan to fight the EWL, which I found very interesting - not sure what this decision was based on or what promises have been made, but it looks like the Zoo will not be acting to stop EWL at this stage.</p>	0
51	<p>Stage 2 of the proposed freeway is to be located to the west of the existing Citylink freeway and along the western banks of the Moonee Ponds Creek. This will have a significant adverse impact on the amenity of Kensington residents by reason of the loss of the parkland on the western banks of Moonee Ponds Creek and in terms of noise, light and air pollution for adjacent residents. I submit two questions:</p> <p>1. What options are available for relocating the proposed freeway to the eastern side of the existing Citylink structure in order to preserve the Moonee Ponds Creek and amenity for residents?</p>	0



No.	Comment	Vote Count
	2. What attenuation steps will be taken to ensure that world's best practice is employed in the construction of the freeway in mitigating noise, light and air pollution for adjacent residents?	
52	If past experience is any indicator, you will not get noise barriers. The Eastern Freeway (free until the East-West Link goes ahead that is...) has been repeatedly extended, now all the way to the Monash. Each time, the noise level has increased. In all that time not a single noise barrier has been built, despite being promised by both parties. Vicroads just wants to build roads, it does not care about the consequences. LMA is no different.	0
Submit your Open Space and Recreation questions		
53	Royal Park was set aside specifically to ensure that a large open space with native vegetation would be maintained in the inner city. Why are we allowing this to be eroded?	14
54	It seems that Royal Park will be essentially cut in half, with up to 8 lanes of traffic exiting from the tunnel at the point where the bike path currently crosses Elliott Avenue. Are you able to comment on how this might impact on the current amenity of the park in relation to noise (including the impact on the amenity of the zoo), wildlife and what will happen with the walking paths and bike paths?	9
55	<p>MCC has acknowledged that "Sporting fields will be lost including the permanent loss of Ross Straw Field. The municipality does not have enough land for current sporting and informal recreation and demand and population growth is seeing this demand increase."</p> <p>How can this loss of such vital community space be condoned? Especially when the benefits of the EWL are only applicable to a small proportion of commuters (and of course the road and freight lobby), but every taxpayer will have to cover the costs for generations to come!</p> <p>Never was so much owed by so many [with only the benefit] to so few.</p>	9
56	What will City of Melbourne do to protect the amenity of Mooney Ponds Creek? Areas of concern are: sever overshadowing from concrete overpasses, potential deterioration of water quality, impact on wildlife and vegetation caused by air and noise pollution and potential loss of bike and walk paths.	8
57	Flemington families presently have limited open space, with Debney park being the only significant park and playfield in the suburb. The Debney playground next to CityLink, recently built for 1.7 million dollars, is very popular and much needed in this inner city suburb. The duplication of city link will clearly destroy this very valuable outdoor space, along with the community centre, and Flemington residents will lose a significant part of the only large outdoor space in the suburb. How can the government condone this, without consideration of the impacts? Where do they expect Flemington	8



No.	Comment	Vote Count
	families to take their children for outdoor play? Under the freeway?	
58	<p>Organised sport is one of the most significant uses of public space provided within Royal Park. The loss of Ross Straw field - which is used heavily by many sports including cricket, baseball, touch football, soccer and many others - as well as impacts on other sporting facilities within Royal Park, is of great concern to many involved with sport in the inner north. Replacement sporting fields and facilities are near impossible to come by - not to mention open space generally - and meanwhile the population of inner Melbourne is projected to increase, and along with it the demand for sporting and recreation facilities.</p> <p>I would like to know:</p> <ol style="list-style-type: none"> 1. What is going to be done to facilitate the replacement of the invaluable sporting fields, facilities and recreational spaces in the congested environs of inner Melbourne lost to the East West Link's construction? 2. How will users of these public facilities, particularly sporting groups, be accommodated with alternatives in the interim until permanent, satisfactory solutions are provided? 3. Will sporting clubs and other user groups be compensated if they are forced to relocate to new sporting facilities far from their original community base? 4. Will sporting clubs and groups remaining in Royal Park - which may be exposed to increased traffic, pollution, decreased access during and after construction, and reduced amenity of the park in general - be somehow compensated or assisted with upgraded facilities? 	7
59	<p>My questions are as follows:</p> <ol style="list-style-type: none"> 1) Will a safe and appropriate alternative be made available for the playground that exists at Manningham Street (at the beginning of the driveway to the Sports Pavilion)? Many families in the area have young children that utilise Ross Straw Field and the playground daily. 2) Will there be any consultation with recreational users of the sports fields (and not just the sports clubs that have formal usage of the fields)? Many young people from Flemington (including those who reside at the high-rise public housing estate) use the field every week. Are there any records or statistics regarding such patronage? How will these people be consulted and properly compensated for the removal of their public open space? 3) Will fitness and health experts be consulted to provide their expert opinions on the long-term detrimental societal effects to a community that has diminished access to open space and recreational options that are free 	7



No.	Comment	Vote Count
	and available to everyone?	
60	What proportion of open space within the City of Melbourne will be lost permanently or during construction, and for how long?	7
61	We were looking forward to the revitalising of the remnant heritage mill precinct, with wonderful Young husbands, the mill, the remaining heritage listed houses and the important links to the creek being refreshed with parks and green linears. Surely this is better strategy	6
62	<p>The Arden Macaulay Plan looked at the revitalization of the Moonee Ponds Creek (west bank) to provide a high quality urban green space from Racecourse Rd to Arden St (approx. 4 hectare?).</p> <p>Given that the EWL.St-2 will effectively degrade any possibility of a high quality open space, has the MCC discussed the possibility of equal land size compensation from the State Government to provide an alternative space in the same area?</p>	6
63	The Melbourne City Council recognized that the Kensington mill area does not meet the required liveability standard of having parkland within 300 metres of the residential homes. The Moonee Ponds Creek corridor was to be revitalized under plan C190 to fill this void. Now LMA wants to turn the land into freeway instead of park. How does this meet the required needs of the area or will the residents just be too tired from listening to trucks all night to require any sort of park anyway?	5
64	Royal Park is essential as a quiet peaceful open space to walk, sit, take your dog and relax. It has existed for over 160 years and was established to provide the residents of Melbourne and surrounds to have a natural environment with greenery and quiet open spaces to escape the noise and bustle, pollution and crowds of the city. Now, the state government feel that they can heedlessly throw away this wise action of our city forefathers and invade our park with the monstrous intrusions of heavy traffic, flyovers, ramps, tunnels and carriageways. I want to know just where does their mandate to do all this comes from after promising that they would NOT build the east-west link before the election?	5
65	The City of Melbourne has recently spent a significant amount of money on Royal Park with the landscaping of the wetlands adjacent Manningham Street and Ross Straw Field, as well as incorporating water retention facilities within the park. What will happen with these excellent forward thinking projects? Is the local ecosystem which was being carefully and sustainably nurtured by the Council to be 'landscaped' with concrete and bitumen instead? I am totally shocked that the City of Melbourne has been completely silent on the effects of the East West link on Royal Park. Man up	4



No.	Comment	Vote Count
	councillors!	
66	How can we protect our poor misused creek. This road is certainly not the way	3
67	Stage 2 of the proposed freeway is to be located to the west of the existing CityLink freeway and along the western banks of the Moonee Ponds Creek. This will have a significant adverse impact on the amenity of Kensington residents by reason of the loss of the parkland on the western banks of Moonee Ponds Creek. What options are available for relocating the proposed freeway to the eastern side of the existing Citylink structure in order to preserve the Moonee Ponds Creek and amenity for residents?	3
68	Has there been any information gathered about the amount of Pollution (noise, fine particles & diesel) that this tunnel (that is not a tunnel) thru Royal Park will generate and its proximity to people/animals at the Zoo, people using the sporting facilities and the effect on the Children's Hospital. And who are the experts that will decide on this & the heavy machinery vibration disruption to the Zoo animals? These should be decided on Health values NOT be dollar based values.	1
69	Given that the low lying areas of Kensington have a long history of industrial pollution for more than a century (currently one community garden in Kensington is closed due to lead pollution) and that the Moonee Ponds creek is well known to be heavily degraded and one of the most heavily river systems in Victoria, does the MCC think it prudent to commission a study to looking at the levels of heavy metal soil contaminants within the path of the East West link? (Rather than risk exposure to residents from heavy metal and other pollutants that would be safely contained within the current earth banks of the MP Creek).	1
70	Will the MCC support residents in opposing the current format of the EWLINK stages 1&2, and asking for the LMA and State Government to reconsider their rushed approach and provide more time for community and business input to improve this project?	1
71	As the EWL Stage 1&2 stands currently, residents next to the path and in the surrounding corridor area are looking at significant property value right downs. This therefore means that the MCC also stands to lose a considerable amount in rates due to the right down in property values. Will the MCC support constituting a register of both total property value and total rates reduction losses for both the residents and the MCC itself with the intent of seeking compensation from the state government for the effective transfer of this asset value / income to the state and the winning tenderer? (Based on the logic that the project cannot proceed in its current format, without our combined asset values being reduced, while the state and winning tendered gains at the least an equivalent if not greater gain to their balance sheet based on our loss).	1
72	If there was a building in excellent condition built before 1873 with features now found no longer in the Melbourne area (remnant woody grassland) and	1



No.	Comment	Vote Count
	scarce in the whole of Victoria which could not be replaced, would the City of Melbourne allow it to be destroyed with no compensation and with the people of the City of Melbourne paying for the destruction? Royal Park is a biolink, feeds migratory birds on their journeys, has scarce and much needed sporting ovals, is a buffer zone for the World class Zoo, has over 90% native birdlife which is incredibly unusual in inner Melbourne, cleanses the air for the people of Melbourne, has historic monuments and links to our founding and will alleviate the city Heat sink as the temperature increases in the future. All these advantages are lost if the Park's area is depleted or divided. How can the City of Melbourne not fight this.	
73	The geology of Royal Park is such that tunnelling is unlikely to be feasible and the proposed East West Link would be built as 'open-cut'. This means a larger area of Royal Park would be destroyed for construction. Also, because the project is a 'design & build', the open-cut may never be covered over, especially if cost blow-outs occur (as is the case for most infrastructure projects). Can we look forward to an 'Eastern Freeway' through Royal Park instead?	1
Submit your Urban Design questions		
74	Is Council considering alternate routes to suggest to the government? There are surely ones that would do less harm to the City of Melbourne's assets and communities?	10
75	The easement in the centre of the Eastern Freeway was specifically set aside for the construction of the Doncaster railway. Why is this being allowed to be hijacked by a project which will scuttle the Doncaster rail? This is the absolute opposite of what was designed for.	6
76	<p>1) Has the Office of the Victorian Government Architect been consulted with on such a major infrastructure project as the proposed flyovers at Parkville West are indeed a shameful and destructive 'design' exercise?</p> <p>2) Which urban planners and landscape consultants have been engaged by the LMA to provide less intrusive solutions to what is clearly an engineered proposal bereft of human scale and impact?</p> <p>3) Does the LMA realise and acknowledge that real people live in Parkville West and that the above-ground solutions (as well as the tunnel) will have serious impact on: Royal Park and its wetlands, amenities such as open space, natural light, quiet environment?</p> <p>4) When will the residents who are directly impacted by the proposed EW Link be properly consulted about the tunnel and flyover interchanges? When will real specific detail be issued to residents regarding heights, effects on direct light (for those of us who live directly adjacent or south of the flyovers) etc?</p> <p>5) As per question 4 above, what will the Elliot Avenue exit/entry look like? How much Royal Park will this obliterate? Will any remnant vegetation be destroyed?</p>	6



No.	Comment	Vote Count
	6) Will the natural escarpment near the rail line (behind Ross Straw Field) be destroyed in any way? 7) What will the effect of construction and the emerging freeway be on the wetlands?	
77	Does City of Melbourne have a view on the maximum height of the elevated tollway along Moonee Ponds Creek?	5
78	It's been proven time and time again that roads are not the future. From a long term strategy point of view, there is no miraculous de congestion from road building. On the contrary we are buying a stinking truck route for posterity. Really? We can't think long term and put clean rail in?	5
79	What will this look like, and how can we make it astonishingly fabulous and not a concrete monstrosity with Perspex. Bring on the best architect in the world if we have no choice here	4
80	What are the time frames for all the decision making? Won't we be locked into a contract that is cheap, and the sound and design aspects are afterthoughts? I feel like this is going off very under baked. I would like certainty before we leap into the void, and good design would help.	2
81	I would love to know how to get the following proposal up for consideration: - Train line (or light rail) to Doncaster incorporated into the tunnel, running express from Doncaster to an underground CBD station near Melbourne University. - At the eastern end, the rail/light rail goes underground, followed by the road. All entry/exit points are through the existing median strip, meaning that there will be no impact on homes or businesses. - At the western end, the tunnel emerges into the industrial area near Macaulay station, preferably through one of the many blocks of vacant land. Exits take drivers onto the Bolte Bridge, allowing them to go to the CBD, St Kilda/South Melbourne, the western suburbs or the airport. This would be a much better outcome for drivers than being dumped onto Elliott Avenue, Arden Street or one of the other seriously overcrowded inner northern roads. If we're going to spend huge sums of taxpayer money on infrastructure, why can't it be well designed infrastructure that supports public transport *and* private vehicles while also minimising the impact on people who live and work nearby? The Melbourne City Loop was built over forty years ago - no buildings were destroyed, overall the negative impact of the project was negligible - and it gave the city a major benefit, allowing the train network to handle almost double the number of trains. Surely it should be possible for us to build the EWL in a similar fashion and with a similar level of taxpayer benefits!	2
82	Why does this proposed tunnel exit in parkland, destroying so much open space in the inner north and west, when it could exit in industrial land south of Arden St, or next to Dynon road? It would still link directly to CityLink and the docks. The destruction of Royal Park, Denney Park, Travancore Park,	2



No.	Comment	Vote Count
	Moonee Ponds Creek etc is all completely unnecessary, and a total indictment on those who have planned this.	
83	Can an independent urban design review of the proposed freeway junctions at both the Tullamarine Interchange and the Elliot Ave Interchange be undertaken? The panel could be made of landscape designers, architects, from both Australia and overseas, those that are recognised within the industry for their expertise in complex design solutions. If this project goes ahead, surely we deserve better than what is currently on the table. A first year student would have failed their design submission if they put on and off ramps either side of an existing building (Evo apartments)!	2
84	<p>Stage 2 of the proposed freeway is to be located to the west of the existing Citylink freeway and along the western banks of the Moonee Ponds Creek. This will have a significant adverse impact on the amenity of Kensington residents by reason of the loss of the parkland on the western banks of Moonee Ponds Creek and in terms of noise, light and air pollution for adjacent residents. I submit two questions:</p> <p>1. What options are available for relocating the proposed freeway to the eastern side of the existing Citylink structure in order to preserve the Moonee Ponds Creek and amenity for residents?</p> <p>2. What attenuation steps will be taken to ensure that world's best practice is employed in the construction of the freeway in mitigating noise, light and air pollution for adjacent residents?</p>	1
85	<p>In regards to the construction of the East West Link Stage One, where will the excavated spoil from tunnel boring go?</p> <p>Which landfill site will be able to accommodate an approximately 5,000,000m³ of soil (this estimation includes a bulking factor of the soil by 2.0).</p> <p>This poses a further challenge for Melbourne's transportation network when transporting thousands truck loads to no doubt remote landfill locations.</p> <p>What is Linking Melbourne Authority strategy regarding this matter?</p>	1
86	Urban redesign or urban mutilation to accommodate new freeways is not going to solve Melbourne's traffic woes. The basic problem of Melbourne traffic is too many one ton vehicles with a 70 kg payload---single occupant commuter cars. These make up 70-80% of vehicles on our roads, as a 10 minute observation of any arterial road will reveal. This is inefficient in energy and requires a lot of road space, and makes life unbearable for legitimate commercial traffic. Remove half these single occupant vehicles and most current road problems are solved. But that requires heavy investment to make public transport systems frequent, convenient, reliable, comfortable and safe. And foresight and wisdom, like Melbourne was noted for ---up to about 1923.	0



No.	Comment	Vote Count
87	<p>One of the most important reasons to oppose the East-West link is the destruction of the Western end of Royal Park. The State has been chipping away at this historic, loved and valuable park for decades. Indeed, Melburnians have been worried about this loss of publicly owned and treasured open space since at least 1945.</p> <p>The Hockey Centre and Olympic Village have recently removed open space from the park. It is a death by a thousand cuts. The Eastern Freeway has destroyed the peace and quiet of Yarra Bend Park forever. Now it appears to be Royal Park's turn for the road builders.</p> <p>It is worth visiting the work of Enrique Peñalosa who completed his three-year term as Mayor of Bogotá, Colombia on December 31, 2000. While mayor, Peñalosa was responsible for numerous radical improvements to the city and its citizens. He promoted a city model giving priority to children and public spaces and restricting private car use, building hundreds of kilometres of sidewalks, bicycle paths, pedestrian streets, greenways, and parks:</p> <p>"Urban transport is a political and not a technical issue. The technical aspects are very simple. The difficult decisions relate to who is going to benefit from the models adopted."</p> <p>"The importance of pedestrian public spaces cannot be measured, but most other important things in life cannot be measured either: Friendship, beauty, love and loyalty are examples. Parks and other pedestrian places are essential to a city's happiness."</p> <p>"The world's environmental sustainability and quality of life depends to a large extent on what is done during the next few years in the Third World's 22 mega-cities. There is still time to think different... there could be cities with as much public space for children as for cars, with a backbone of pedestrian streets, sidewalks and parks, supported by public transport."</p> <p>"Why is all the power of the State applied in opening the way for a road, while it is not done for a park such as the Long Island Sound greenway? Despite the fact that more people may benefit from the greenway than the highway?"</p> <p>Peñalosa is correct – the question that is not being asked is: "Who really benefits from this project, and who really loses. In the case of the East-West Road link it is the people of Melbourne who are losing more and more open parkland in the service of the almighty motor vehicle. Who gains? Well, the road builders – they make their profit and run. They have no meaningful social connection to the project, and no responsibility for the damage it does.</p> <p>There is no Cost Benefit Analysis available for this project. Why? Surely the people are entitled to know how and why their own money is to be spent? According to Eddington, and others, new freeways return a LOSS of 50</p>	0



No.	Comment	Vote Count
	<p>cents in the dollar. How is this a good thing for Melbourne?</p> <p>This loss of parklands is not only at the local level, it is occurring nationally as well.</p> <p>New York is building parks as fast as it can:</p> <p>Highline Park</p> <p>Lowline Park</p> <p>The closure of Broadway at Times Square between 42nd and 47th Streets has not only improved traffic flow in the area, but also improved business.</p> <p>Many major cities are removing freeways: "Removing Freeways: Restoring Cities"</p> <p>Portland has removed the freeway along the riverside and replaced it with parklands. Far from being "impossible" as the traffic engineers insisted for decades, Harbor Drive was closed in 1974. Interstate-5 from the east side of the Willamette River is next on the list of freeway removals.</p> <p>Paris closed the roadway on the Rive Gauche and turned it into parkland.</p> <p>Seoul removed a freeway and opened a park right through the city.</p> <p>In spite of the road engineers' bleatings: "you can't close freeways", the simple fact is that all these closures have had little to no negative effect on the life of the city, and in all cases improved the amenity of social and business life on the streets.</p> <p>Why is Melbourne so backwards? Does nobody at the RACV or the State Government read about urban design?</p> <p>These modern toll-road projects are a simple turn-key DBO (design, build, operate) financial instrument for private investors. They generate their own customers by negating the appropriate development of cheaper and more efficient alternatives.</p> <p>Lazy, short-term political self-interest means most governments are looking for 'ready to build' projects they can commission and open with a ribbon cutting ceremony and a self-serving plaque, preferably within a single term of government. Where is the long-term strategic infrastructure planning and building we had in the 50's and 60's?</p> <p>Please, review your support for this project. In every poll, a majority of Melburnians shout that they want the Melbourne Metro rail built.</p> <p>We want public transport. We are begging for public transport, and yet the decision makers are not listening.</p>	



No.	Comment	Vote Count
	<p>Why not? Who stands to gain? Every time I hear the words “Commercial in Confidence” I know we are about to be ripped off. The “confidence” in that phrase refers to the confidence trick played again and again on the public.</p> <p>The East West Road link will suck money away from public transport for yet another ten years, as did the Bolte, as did the Monash widening as did the Eastern. None of those roads have achieved their stated aims of reducing congestion.</p> <p>It has been very well known for decades that building new roads INCREASES congestion.</p> <p>“RACV general manager of public policy Brian Negus said completing the East-West link was a crucial step towards unlocking Melbourne’s gridlock, and would provide a desperately needed alternative to the Monash-Westgate corridor.</p> <p>The East-West link will alleviate the massive congestion at the end of the Eastern Fwy and on both east-west and north-south roads in the extensive area north of the city,” he said.</p> <p>You simply cannot build your way out of gridlock with new roads. It is logically absurd.</p> <p>But this statement does demonstrate the mindset of the RACV and Vicroads managerial level. The glad handing and back scratching that goes on between VicRoads, the RACV and major road-building industry groups and the State Government would be a farce, if it were not so damaging to our city.</p> <p>Negus’ statement above is incorrect and not based on any independent research. The E/W Link will, in fact increase congestion and invite more and more traffic onto the inner Melbourne road system. It will not alleviate, for example, if there is a crash on the Bolte area as recently, the ensuing congestion. It will send all that “new” traffic onto what will be an already full road, shifting the congestion from one area to another.</p> <p>Mind you it is not surprising Negus is wrong. His response to turning two of the four traffic lanes on Princes Bridge from cars to bicycles was that we should build cantilevered lanes on the outside of the bridge for cyclists! Melbourne’s most iconic bridge, and is listed on the Victorian Heritage Register. Philistine does not begin to describe it.</p> <p>Freeways take up massive amounts of potential transport space, over-utilise them in peak hours – very inefficiently, and under-use them in all other hours, also inefficiently.</p> <p>This is an example of the minimum impact the E/W Link will have on Royal Park:</p>	



No.	Comment	Vote Count
	<p>We should not build the East West Road link. We should build a viable Melbourne Metro system set up for multimodal use right across the city, and especially in the new outer ring of suburbs. The “car as mass transit” experiment has failed utterly and completely. Why continue with it when there are so many better options?</p> <p>Well that’s what I think anyway.</p> <p>As of August 22nd, the Auditor-General agrees with me too.</p> <p>Further thoughts on this matter 9/9/2013</p> <p>Traffic flows can be analysed and modelled using the principles of fluid dynamics. Essentially traffic is a liquid.</p> <p>The Tulla/Bolte/Citylink/Monash is one high pressure pipe. The Eastlink/Doncaster/Hoddle is another high pressure pipe.</p> <p>Currently the two flows are separated by a series of relief valves in Alexandra Pde, Princes St, Elliott Ave and their flow-off systems. This alleviates the pressure from the two systems described above.</p> <p>It is well known, and demonstrated repeatedly all over the world and also in Melbourne and Sydney that building urban roads increases congestion by a phenomenon known as “induced demand”. Roads generate more traffic, which fills them to capacity.</p> <p>So what happens when you remove the pressure relief valves between the two high pressure systems? The pressure equalizes, of course, just as in a fluid dynamics experiment.</p> <p>The East West Tunnels will be like dropping the final keystone in an arch (sorry for mixed metaphors here *sheesh*). My expectation is that the EWT will lock up the whole inner freeway system, causing more congestion than we have ever seen before.</p> <p>Then you have the “phantom crashes” – where a freeway comes to a grinding halt. But as you drive through, there is no actual reason for the stop. This is a pressure wave, and EWT will provide the connection for these to reverberate right around the system.</p> <p>A pressure wave in CityLink will travel around, just as a sound wave in water does, to EWT, up the Tulla and down the Monash, and then back up around Eastlink.</p> <p>And what will the response of the roads lobby be to this increased congestion? “Oh we can fix this with a new freeway/widening/tunnel etc. etc.</p> <p>Links and references available here: http://johnhandley.wordpress.com/east-west-road-link-vs-melbourne-metro-rail/</p>	



PARTICIPATE MELBOURNE SUMMARY #2 – MATERIAL SUBMITTED FROM 8 NOVEMBER UNTIL 20 NOVEMBER 2013

Context

The City of Melbourne invited public comment through the Participate Melbourne page on the East West Link proposal based on the additional information in the CIS and the first public information evening.

The table below lists the comments received.

No.	Comment
88	<p>Could we have a new public open space gateway to Kensington by taking the remaining buildings out of Bent Street and making a big park along the awful new tollway when the viaduct is complete? Planting established trees along the edge would help a little in reducing the eyesore, the pollution and give the community back some amenity. I wouldn't want to live or work that close to a tollway and would want to move - so make it a benefit to those who stay.</p>
89	<p>I am 100% all for the East West link. I use trains occasionally but often drive my car, and whilst trains have their place my car is much more convenient - as it is for many Melbournians. I often use the path that the East West link is proposed to take and feel that this project will have a massive benefit for me and many people that I work with. Thousands of people travel East - West - East each day, wasting precious family time in a traffic jam, and these people's current plights cannot be ignored. Arguments saying that Royal Park will be decimated are very inaccurate. Less than 2ha is expected to be lost to this vital project, 2ha out of 160ha! A number of people appear to be opposed to the East West link and are instead in favour of the Melbourne Metro rail tunnel and encourage funds to be used there. I believe there are serious issues with the Metro rail which are yet to be addressed by the people who are campaigning for it, including Council authorities. The biggest issue being that we don't actually need it. I have previously worked in the Public Transport industry and I am aware that with our current capacity and infrastructure, we could have a Doncaster and Airport rail line tomorrow; these lines need not be dependent on Metro rail increasing capacity. Metro rail will do nothing for Melbourne that our current Public Transport infrastructure cant already do (e.g. we can already get from South Kensington to South Yarra by train, we can already get from the north of the CBD to the south of the CBD by tram). I believe we need the East West link to be completed well before Metro Rail as it will have a much bigger benefit for the people of Melbourne. Additionally, the benefits will extend to those from regional Victoria who holiday or visit family/friends. East West Link should be Melbourne's number one priority.</p>
90	<p>The area that comprises Melbourne City would cop a range of negative impacts from the East West Link as it is currently proposed, for very little benefit. Amenities would be reduced or negatively impacted across a range of areas, as clearly summarised in the Oct 8 public meeting at the Town Hall. As a resident and rate payer in MCC region, I don't see why we should stand for such a range of negative impacts to benefit the driving convenience of outer suburbanites when rail solutions could easily reduce traffic volumes on the road, freeing up space for those who insist on personal vehicle transportation over shared. If this new road is so important to east-west drivers, are they prepared to pay a realistic toll price to compensate those who would be directly and negatively affected? I would guess not. Yet for the convenience of 10-20 minutes less on the road, others lose or have negatively impacted their homes (often only singular asset), their parkland, their creek, their noise and air quality, plus more. If this road is so important to some, then they should be prepared to pay for the privilege to compensate those whose quality of life reduces. This East West Link just doesn't stack up on so many levels (why else hide the business case) - just don't allow it to be built, or if it is so vital to build, compensate all who are negatively affected.</p>



No.	Comment
91	<p>The Melbourne Zoo, one of our top tourist attractions will be significantly affected during construction and operation of the East West Link. Key concerns for the Zoo are: - The main construction worksite includes an area directly abutting the Zoo between Brens Drive and the Zoo. This site is visible from the Australian animal and baboon enclosures. It will be operational for five years, with activity occurring there 24 hours a day, every day of the week. During this time it will be a base for 3,000 construction workers, and all spoil removed from the tunnel will be managed out of this site. - Construction works disrupting all forms of non-car access to the Zoo, especially train travel, walking and cycling. - Significant noise, vibrations, light spill and visual impacts affecting the Zoo during construction and operation. - Removing numerous mature sugar gums and moreton bay figs in the vicinity of Elliot avenue, impacting on the sense of arrival at the Zoo. - Cut and cover construction proposed for all works in Royal Park causing significant impacts on the area surrounding the Zoo. The CIS has failed to assess specific impacts on the Zoo. Further, the overall impact on Royal Park is completely unacceptable. Will LMA compulsorily acquire land to replace this critical public open space? The heritage of Royal Park needs to be protected.</p>
92	<p>Hi @SandraAnderson. I appreciate that the tunnel would benefit some people like you but I think you are misunderstanding the level of impact on Royal Park, should the project proceed. The LMA's calculations of the area of park lost are based on the footprint of the project at the surface of the park. So for a viaduct crossing the park, this only includes the small area of the column that supports the roadway above. The City of Melbourne has used a more reasonable approach to calculate the area of usable park lost, which will be the size of 6 MCGs (10ha). This area would include the loss of up to 3Ha (i.e. including loss due to temporary "lay down" areas for truck parking and soil/rock stockpiling) of Melbourne's last remaining area of remnant vegetation (which has Victoria's highest rating for native vegetation conservation) plus four sporting fields and a permanent disturbance to the amenity of a beautiful part of Melbourne in West Parkville, which I suggest you visit some day.</p>
93	<p>If you are visiting the LMA information session tonight at the Town Hall you may see a poster that presents the "positive" impacts on traffic in the inner north of the CBD, should the East West Link be constructed. Unfortunately, the poster doesn't present the "negative" impacts on traffic that would be caused by the project and so I'm including some of them here, which have been taken from Chapter 7 of the CIS, page 40: Elliott Ave, Parkville +10% Manningham and Oak Sts, Parkville +10% Mooltan St, Travencore +20% Guthrie St and South Daly St, Brunswick East +10% Pattison St, Moonee Ponds +10% Kent St, Flemington +20% Wellington St +10% Cohuna St and Moule St +10% We often hear that on school holidays the traffic flows well because the volume reduces by 10%. All of the streets above will be seeing an increase of at least 10%, which will have a significant impact for these residents.</p>
94	<p>Why aren't we following Infrastructure Australia's list of prioritizing projects? It's their role to advise the Government on the Projects most beneficial to the public. The Schedule clearly has the Melbourne Metro more progressed and needed when compared to the East-West Link. See: https://www.nics.gov.au/Home/PriorityProjects</p>



ISSUES AND COMMENTS RAISED BY MEMBERS OF THE PUBLIC AT MELBOURNE CITY TOWN HALL AT THE PUBLIC MEETING ON 8 OCTOBER 2013 FROM 5.30PM – 7PM

Context

The City of Melbourne invited the community to this public meeting to present its Preliminary Impact Assessment, and hear the community's views on the implications of the East West Link (EWL) project. This feedback will inform the City of Melbourne's submission on the Linking Melbourne Authority (LMA) Comprehensive Impact Statement. Participants' feedback has been captured under the key impact categories in the Preliminary Impact Assessment.

Recreation & social

- Melbourne University Baseball club has 6 teams and is 100 years old. They have played at Ross Straw since 1960. The club has been informed that the project will start digging on the field in October 2014. They are worried that this will mean the end of a long history for the club. There is no capacity for them to be relocated, as sportsgrounds in the municipality are already at 95% capacity.
- Holbrooke Reserve Brunswick may be impacted and causes a flow on effect to clubs like Brunswick Zebra's soccer club. The East West Link (EWL) will have an impact to sports fields beyond CoM. There will also be a need to manage access constraints to Royal Park.
- City of Melbourne needs to look wider than its municipal boundary to understand the total impact eg. also look at impacts on Moreland
- Parkville Cricket club is based at the centre of Royal Park and it will be impacted too.
- Has council considered creative ideas to return built up parts of Royal Park that are currently built up for recreational use?
- Junior Flemington Sports Club will also be impacted
- No one has put forward the possibility to create more open space around the Arden Street redevelopment as part of the C190

Urban Design & social

- Participant stated that 80% of the traffic on Alexandra parade will still be using the road after the construction of the East West Link and so it is unlikely we will be able to reduce it to two lanes.
- Council's proposed improvement plans show 2 lanes; will this accommodate the 80%? is this feasible or realistic?
- How long will it take to get the trees back to the same height as the Elms that are there now?
- Will trams still be able to cross from North to South if construction method is cut and cover in Alexandra Pde or while the works are being undertaken?



Open Space & social

- What statistics do we have on passive recreation use of Royal Park?
- AILA (Australian Institute of Landscape Architects) cannot commend the proposal for the East west Link. It has released 2 position statements in opposition to the proposal. [Please see attachment 1 for the position statements that have been provided post-meeting as promised by the AILA representative]
- Not enough emphasis on how open space loss in C190 area (Kensington) will be addressed?
- Need to advocate for removal of concrete channel on Moonee Ponds Creek & restore the creek in the section from Flemington Road to Park Street- Moonee Ponds Creek Coordination Committee and Friends of Moonee Ponds Creek(MPCCC)
- Councillors have to stand up (and "MAN UP") on this issue
- Royal Park must be preserved
- Need to use Council's reserve money to tell the world how good Royal Park is
- Councillors must represent the residents, especially when the state is treating them so poorly
- Will the construction result be a cut & cover? Open cut in Royal Park may not be ever covered over. It is a large impact on the Park. Council needs to be proactive on this.
- Impact on Moonee Ponds creek: concerned at further loss of open space at Moonee Ponds creek, when structure planning was trying to create more. The current proposal shows further expansion of the western side of the freeway, further diminishing open space and creating an overshadowing problem. Have any alternative designs been considered to the eastern side of the freeway?
- The 2 buildings on corner of Macaulay Rd & Bent St should be purchased for open space
- Concern about Moonee Ponds creek, lack of open space
- Ross Straw Field – carved up, needs to be replaced within CoM
- North Melbourne Football club not the answer – location to new Woolworths?
- Concerned on impact on Zoo
- Any freeway must be underground, entirely tunnelled
- Will affect flora, fauna, sport & passive recreation
- Everything should be replaced and it should be fully funded by the project; including new facilities for Active Sport & passive recreation
- Congratulations to Council for the public meeting
- There has been no support for the project
- Needs to ensure 10 hectares of lost open space are returned

Traffic & Transport

- Impact on public transport and trams in Moonee Valley City Council
- Impact on public transport
- The City of Melbourne's Preliminary Impact Assessment is based on limited data. The assumption that reduced impact – where has that come from (Nicholson Steet etc)
- Gap in data around Macaulay Street & Ben Street, Kensington
- Why are we making assumptions in relation to traffic coming into North Melbourne from CBD?
- Suggest that instead of the tunnel, that traffic flow be improved within existing road networks, by alternative solutions such as removing right hand turns, removing on street parking, etc. Have other alternative solutions for traffic management been considered?



- Have Council officers looked at the community designs for the Link which try to minimise the impacts and redesign the road?
- LMA engineers at a community information session acknowledged Elliot Ave would likely have to be widened for slip lanes (ie loss of more of Royal Park) for traffic entering Flemington Road. Also City of Melbourne officers were noted at this very point this morning (8/10/13)! The City of Melbourne should consider high likelihood in their CIS submission and against their predicted “neutral” impacts on Flemington Road
- Participant believes the vent stack will be on the escarpment on Royal Park West, that there won't be pollution scrubbers which are used in Europe and that families and health services in the area (several hospitals) would be affected. No filters & scrubbers on vent stacks
- No analysis of the location & potential impacts
- What is current travel count on Macarthur Road?
- Who will monitor air pollution? The LMA or the EPA?
- Would like more information on the impact on Flemington Road, especially impact in the eastern direction. There are 4 hospitals in this area and a lot of interest from the Eastern suburbs. The impact on Flemington Road is underestimated.
- Council has myopic view CBD and needs to look beyond to consider the full extent of impacts
- Public transport in inner CBD is effected further out, traffic jams will expected
- Need comprehensive network assessment on traffic beyond CoM
- Road will increase traffic problems. The answer is trains not tollways!
- Has council considered on alternative road alignment?
- Serious concerns about impact on Moonee Ponds Creek. The proposal desperately needs improving
- Massive impact on Mt Alexander Road and Racecourse Road. There will be an increase in traffic and it is already a nightmare.
- There will be an impact on traffic & trams on Flemington Road
- Macaulay Road is already dysfunctional. The rail lines already represent an obstacle to flow ant the traffic banks up behind
- Will the tunnel go very deep?
- Need to thing about all rail and road pieces of puzzle together
- East-West road tunnel will probably kill any rail plans
- Concern that the general increase in density and housing (eg Woolworths development) is not being considered. Under the approved plans for the Woolworth development in North Melbourne 600 car parks have been approved, but they haven't been built yet and this will add additional traffic to the area. Additional traffic is already planned for (600 cars on the street).
- In an earlier lecture on traffic calming, City of Melbourne officers expressed the difficulty of getting traffic calming installed in Gatehouse Street. If it was difficult then, how can it be done within the scope of this project? (in areas suggested it may be required).
- RPPG (Royal Park Protection Group)– can't believe that the City of Melbourne will agree to wrecking of Royal Park & Elliot Avenue and turn it into a traffic sewer
- Concerns about traffic modelling. When the CityLink was built, people tried to avoid the tolls and moved to other streets, such as Mt Alexander Road.
- How will the capital city trail & Upfield line be impacted?
- Melbourne is on track to experience chronic peak hour crowding on nine of its rail lines by 2017. Patronage will continue to grow by 4.5% for the next decade, representing an extra 100 million annual passenger journeys to the metropolitan network. London, Perth, Sydney and Singapore are all cities that are investing heavily in public transport to



remain competitive globally. Why then is the Victorian Government wilfully ignoring the facts and squandering money on a toll road that will create more traffic jams, ignore the needs of people living in the outer suburbs and destroy the fabric of inner Melbourne?

- Royal Park map didn't show interface tunnel with Elliot Ave. What will the impact be?
- Just look at the portals for the Lane Cove tunnel and the South Dowling Street tunnel. The proposed portals for the East-West Link in Royal Park will divide the park in two. There would be significant loss of park and amenity.
- Most of the traffic at the Elliot avenue portals will go from Elliot Avenue to Racecourse Road. Why can't it go under Flemington Road & come out Racecourse Road? Then there will be a lesser impact on Royal Park. Keep Royal Park section underground.
- City of Melbourne to advocate:
 - Tunnel not cut n' cover!
 - Tunnel to Incorporate train or light rail from Doncaster to the University of Melbourne (and possible extend to airport)
 - Eastern end on the off point to go through the centre median
 - Western portal on vacant land near Macaulay Station taking cars directly to Citilink to align with the C190 Urban renewal plan

Other

- An overriding concern is that the project has turned its back on democratic proposals and process. The erosion of democratic processes is evident
- Public opinion is against it, but we are being denied a voice, including this Council
- Manningham Street resident – I want them to revalue my property now and in a year's time for the rate notice. I don't want to pay rates for a devalued property.
- The whole of West Parkville will need to be re-valued
- Royal Melbourne Zoo
 - Concerned by the impact & devastation on the inhabitants of the zoo
 - Due to the vibration drilling and noise of this project, how many will perish due to the stress caused?
- Concerned about timelines. The timing for the only community input allowed is scheduled to occur at the busiest time in December for people.
- Supports C190 & calls on Council to continue to progress C190
- Health impacts – Air pollutions – Cardiac & respiratory disease. The OECD (Organisation for Economic Co-operation and Development) has stated that the highest number of urban deaths is due to air pollutions
- Concerns in relation to air pollution & burden of disease
- Concern in relation timelines – why is there such a rush in the process?
- Has council considered nominating Royal Park as a world heritage site?
- East-West Link Preliminary statement – councillors could not comprehend impact & did not vote to oppose. The City of Melbourne should have taken stand earlier – other councils did
- West Parkville flyovers - What will happen there is that this project will create a slum. How will council mitigate this to help the residents who live here? They will be impacted by the end result and by the construction. They will be surrounded by it. A lot of the small people there have not been spoken to by anyone. Their views are not heard. They want to feel the Council supports them and is looking after their interests, as well as looking after the park.
- The profit from the EWL will benefit a small number of companies. A lot of negative economic outcomes will come from the project and the costs of these will be picked up by the City of Melbourne and other municipalities.



- Don't agree with traffic projections that will see a reduction. Cannot continue to allow parks to be destroyed by the roads lobby.
- Council should take baseline on air and noise quality data
- The City of Melbourne should take a leadership role for the greater Melbourne Area. It needs to show a need for infrastructure upgrade across the whole of Melbourne – so oppose the EWL tunnel.
- Friends of Royal Park - Deputy Lord Mayor Susan Riley voted against motion before council. Does she regret it?
- Why using LMA's on specific map of the Arden-Macaulay Urban Renewal Areas– doesn't affected area include Kensington – ie. City of Melbourne's Arden Mac Area
- This is why the EWL should be opposed:
 - No business case
 - No traffic models
 - Not in transport strata or MSS
 - Greenhouse gas emissions
 - Congestion remain
 - Destruction Royal Park, Moonee Park. Compulsory acquisition houses
- Two economics professors recently were reported in The Age saying “All infrastructure proposals should have an independent, transparent evaluation of the proposed and a rigorous cost-benefit analysis and publication of the results” – the Council should also be calling for this
- What will the impact be on Zoo and the Royal Children's Hospital?
- Haven't heard Council speak strongly on this. Appreciate a complex role for Council but we need emphasis on leadership role of Councillors and the City of Melbourne.
- This project is not in the interest of residents. I want council to speak strongly for residents.
- Request for Councillors to mount a class action against state government for their request to sign a confidentiality agreement in order to release further information about the EWL project
- Take leadership – all progressive councils and governments have moved away from this old style of moving traffic. Need all councils to work together against the secrecy, for the sake of future generations.
- Do not support the officer presenting on traffic's statement that he has no view on the project, wants officers to have one.
- Page 10 of the notes indicated a number of decreases in traffic. Ever such road development increases local traffic and demand. This fact has been known since 1950s
- We cannot continue to allow our parks to be destroyed by the roads lobby
- Compulsory acquisition of homes, threat to Zoo and Royal Children's Hospital



NOTES MADE ON POSTER MAPS BY MEMBERS OF THE PUBLIC AT MELBOURNE TOWN HALL AT THE PUBLIC MEETING ON 8 OCTOBER 2013 FROM 5.30PM – 7PM

Urban Design – Moonee Ponds Creek – Impacts and Responses

- Cars will avoid tolls, traffic will increase
- What compensation will be available for loss of parkland?
- Please begin a dialogue on having a metropolitan government so the city can make its own decisions on its infrastructure direction. I hope the City of Melbourne can help advocate for this or give us a forum to say so
- Impact to Moonee Ponds Creek? How will it be minimised?
- (Indicating Oak Street close to Upfield Train line) - Only remaining grassy woodland in City of Melbourne. Habitat of only population of the regionally significant Whites Skink
- Elliot Ave will be decimated with traffic coming out of tunnel. This needs to be acknowledged
- (Indicating Flemington Road) - This must see an increase in traffic.
- What about choice? What about public transport?
- Public transport is far more sustainable. 1 train takes up to 800 cars off the road. No more road building
- Keep the green open space

Open Space and Recreation – Possible responses

- Where will I go when I lose my playground?
- Nobody benefits from Elliot Ave exit except the locals and they wouldn't want it! Scrap the exit
- Leave Elliot Avenue as minor road – no more traffic here
- Leave Royal Park alone
- Set up study of alternative exits on route of tunnel to avoid impacting Royal Park
- What about choice? What about public transport?
- No off/on ramps into parkland. No underpass of traffic lights. Don't divert tram lines. Keep all activities inside the existing road. This ridiculous interchange defies logic
- Put Macarthur into a 2 lane tunnel and you don't need a tollway at all

Urban Design – Alexandra Parade, Cemetery Road East – Impacts and responses

- What about public transport?
- What about traffic onto Hoddle Street?
- We are destroying 160 houses and you can already travel in each direction. An unnecessary spaghetti junction
- Stop the destruction of Royal Park and Moonee Ponds Creek. Why so little vision from current politicians and council?
- This project will only increase traffic in the City of Melbourne and do nothing to help congestion. You should be looking after the residents of the city you represent

Urban Design – Responses – East West Link Architecture Options

- We don't need a road overpass icon
- Where is this intended to be located?



- What about choice? What about public transport?
- Crisp renders and trendy parametric design won't improve traffic. Public transport will

Open Space and Recreation – Royal Park Impacts

- Reduction in green corridors for movement of wildlife
- Loss of upgrade to Glenford Pond and enhancement of habitat
- Concern for migrating birds
- Vibrations will impact animals, including those in the zoo
- Need Geology assessments of EWL, though all Royal Park and potential that EWL will have to be built as “open cut”, not a tunnel
- Lots of informal recreation use too
- Royal Park is of State significance. This project will ruin it for the future
- Surely traffic coming off at Elliot Avenue will turn into access the Parkville “Precinct” and the city
- Damage to existing soil structure. Loss of top soil during construction

Traffic impacts – estimate only

- I am concerned about the impact of increased traffic on public transport on Mount Alexander Road, 59 tram, 57 tram and Racecourse Road
- 4 Major hospitals: What traffic impact studies in context of Parkville/Flemington Road?
- Racecourse Road is a community centre as well as Thoroughfare. Its population has grown and needs to be able to breathe, hear and move
- Traffic is heading for the city, Flemington will be a car park
- (Indicating area around Upfield Line and Poplar Road) – Why increase here at North of Royal Park?
- (Indicating Alexandra Parade near St Georges Road) – What percentage of traffic that comes along here now actually goes right through to Macarthur Avenue and City Link rather than South into the city or north to other suburbs?
- What about tree loss? Royal Park is too precious to lose. No entry/exit in Elliot Avenue.
- Positive impact on surrounding streets seems exaggerated. Evidence suggests that there will be increased traffic for those avoiding the tolls

Urban Design – Moonee Ponds Creek – Impacts and responses

- Will the project inhibitor/prohibit an airport rail link?
- Impact on public housing unacceptable
- Community severance at key locations, limiting access across roads due to increasing traffic
- Will sporting fields be replaced to cover the loss at Ross Straw field?
- I live in Manningham Street and go to school in North Melbourne. How will I walk to school crossing? Elliot Avenue will be very difficult, as it will be very busy. (Peta, age 7)
- It is impossible for Flemington Road to be “neutral”
- What about Moonee Ponds Creek? Overshadowing in Kensington is intolerable
- Concerned this will not decrease congestion & instead create greater vehicle reliance. Will negatively impact parklands/wetlands & local amenity
- Decrease likelihood of much needed PT spending!
- Not confident congestion will be decreased in these areas, but need to prioritise PT, walking, cycling access
- Trains, not more roads

Traffic & Transport – Possible Responses



- Management plans will have limited impact if project proceeds, encouraging people to use their cars at the expense of sensible public transport solutions

Urban Design – Alexandra Para Responses – Possible Indicative Sections

- It is archaic. Leadership of all levels of government need to oppose any infrastructure that ponders to car and truck transport. We need excellent public transport
- Urban Design – developed within democratic principles and processes
- (indicating “Existing Street Section”) – Do this now. Remove cars. Close roads, create space for people
- (Indicating “Potential Street Section”) – Great use of vegetation canopy
- Clearly designate as bike lane rather than “shared” as on Swanston Street
- Improves public transport would make this vision more believable, otherwise encouraging roads for people, not just cars



Australian Institute of Landscape Architects Position statement 2 on East West Link – Stage One

8th October 2013



Introduction

Park Infrastructure Supporting Urban Growth

The AILA is the professional organisation for Landscape Architects in Australia and has no political affiliations. Victorian members have carefully reviewed available information about the “East West Link” from the Linking Melbourne Authority. Our Institute has formed the view that the project as currently proposed will cause irreparable damage to Melbourne’s largest park – Royal Park – and the already compromised, yet very important, ecological and open space corridor of Moonee Ponds Creek. In August, AILA issued a public statement that, on these grounds alone, the project should be seriously reconsidered or abandoned.

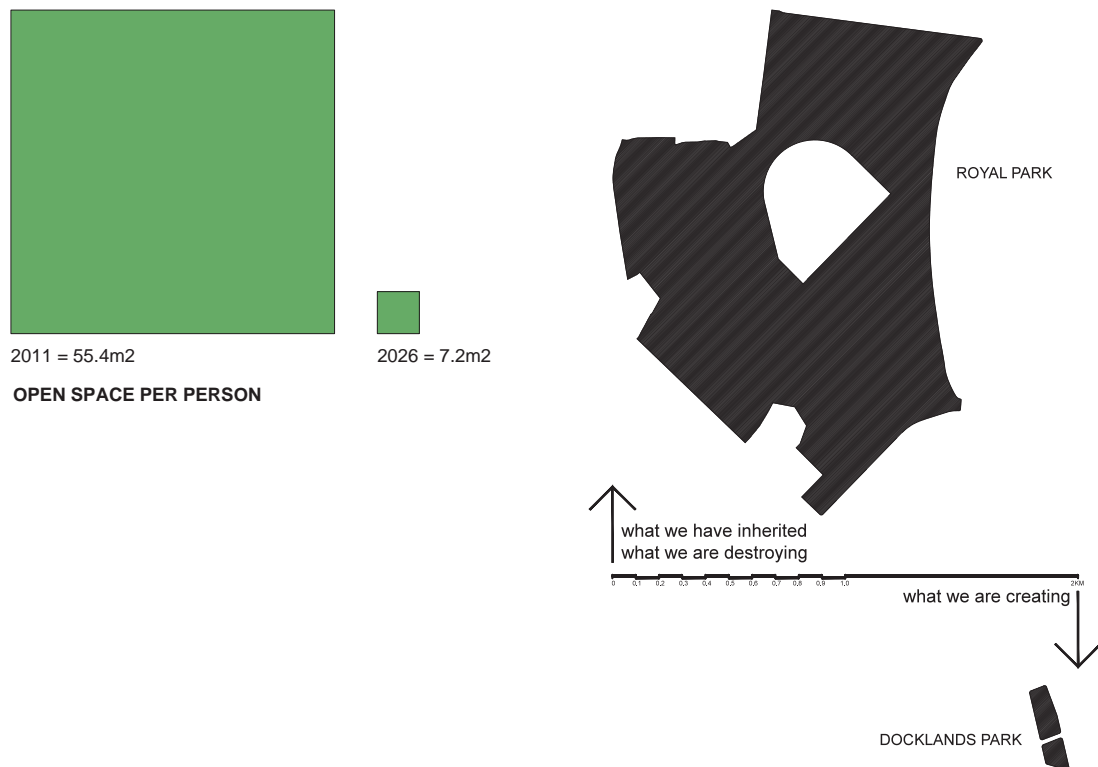
Australia’s Prime Minister elect, Tony Abbott, has promised \$11 billion for city road building, saying he aims “to be an infrastructure prime minister who puts bulldozers on the ground and cranes into our skies”. In line with this sentiment, Mr Abbott has expressed support for the Victorian Government’s proposal to build the East West Link.

However, it is AILA’s contention that Mr Abbott should recognise the role that parks play as vital city infrastructure. The value of infrastructure does not correspond to the quantity of concrete it contains. The value of urban infrastructure depends on what it does for the people of a city.

In a recent letter supporting AILA’s position on the East West Link, the Victorian president of Parks and Leisure Australia (the peak organisation representing professionals in the parks and leisure industry) sets out what AILA members know well: Accessible open spaces that attract active community use have important health benefits, helping to improve physical and mental health and wellbeing, and supporting children’s development. Parks have social benefits in connecting and building communities, benefiting people with low incomes, and enhancing liveability in urban environments. They have environmental benefits in contributing to storm water management, carbon sequestration, reduction of air and noise pollution, abatement of the urban heat island effect, and protecting areas of natural and cultural heritage value. And parks have economic benefits, attracting visitors and generating tourism, attracting businesses and local employment, increasing worker satisfaction and productivity, and enhancing the market value of nearby properties.

Moreover, Parks and Leisure Australia emphasises that:

it is projected that the population of Melbourne will increase significantly from 98,162 in 2011 to 164,832 in 2016, and [because of its impact on Royal Park, the East West Link] project is likely to result in a decrease in available parkland per person from 55.4 sqm to 33.7 sqm assuming that the current stock of land remains. The impact is further exacerbated if we consider the working population in the City as well, which will see available parkland per person reduced to 7.2 sqm per person in 2026.



Any reduction in land currently available in Royal Park for sport, active recreation, and passive recreation will likely create a domino effect on surrounding LGA's as there will be increased pressure placed on these municipalities to cater for displaced sporting clubs and casual users of public open space.

The City of Melbourne's assessment of the proposed East West Link identifies sporting areas in Royal Park that are actively used up to 35 hours per week in summer peak will be lost, displacing ten sports groups and affecting up to 1000 participants per week in summer. There is no capacity at other City of Melbourne sports fields to accommodate these users, even though the City of Melbourne boasts parklands of vastly greater extent than other inner-city municipalities.

The City of Melbourne and adjoining municipalities constitute one of the major growth areas of the metropolitan area. With expansion of the inner urban population – for example in Docklands, where few open spaces are large enough to toss a frisbee, let alone to engage in community sports – pressures on existing parks have increased, and will continue to increase.

Royal Park was one of the areas reserved in the 1850s by Governor La Trobe, who recognised the importance of parks for community health and recreation. Melbourne's inheritance from this is extraordinary, in that its greatest values are only likely to be fully appreciated two centuries later, when this parkland becomes a resource for a population that will have expanded far beyond anything La Trobe could have imagined.

The proposed East West Link project will not simply build new infrastructure. It will destroy irreplaceable infrastructure that is vital to support urban growth and consolidation in the inner city area. AILA implores Mr Abbott and the Victorian Government to aspire to the vision of La Trobe, and to protect and enhance this vital piece of parkland.



The site for the western tunnel portal will result in the loss of one of the few remaining fragments of natural vegetation.



Ross Shaw field, a high grade multi-use sports area home to several clubs, will be sacrificed to create an elevated freeway interchange.

PARTICIPATE MELBOURNE SUMMARY #1 - MATERIAL SUBMITTED PRIOR TO CITY OF MELBOURNE PUBLIC MEETING ON 8 OCTOBER 2013

Context

Prior to the first public meeting, the City of Melbourne invited community members to post their East West Link questions to the dedicated [Participate Melbourne page](#) under the key impact categories in the Preliminary Impact Assessment. Community members were also encouraged to vote for questions that they supported.

The table below lists the questions by category and vote count.



No.	Comment	Vote Count
Submit your Traffic and Transport questions		
1	How will pedestrian and bike traffic be addressed with the fly over and ramps? A healthy and fit Melbourne should be encouraged. We are an embarrassment overseas. Headlines will read "most liveable city drops to most unliveable city due to lack of public transport, green initiatives and no sense of community". "Melbourne's LA STORY worse-not even a train from the airport". City of Melbourne please help ?????	13
2	Urban Planning experts from all over the world have consistently and comprehensively debunked the idea that freeways solve issues of congestion. The State Government and the LMA are making a huge mistake in pressing forward with this project. Melbourne is crying out for better investment in public transport and this freeway will not only fail to curb any supposed congestion issues, but will divert desperately needed money away from public transport projects. The community has condemned this project as un-necessary, un-called for and unwanted. Will the City of Melbourne take heed of Melbournians views and follow the Yarra City Council's lead in totally opposing this project? Or will they roll over and pander to the interests of the roads lobby and the pathetic state government?	12
3	How can we possibly think anything that impacts Royal Park is appropriate. It is not. Can we respect that protected place please, this is not a priority project worth losing something we can never get back.	11
4	I think this tunnel is a waste of money! A flyover-really!! This will be a serious divide in the inner north. How will community be encouraged with such a monstrosity? Surely there is another way and a fly over can be avoided if this must go ahead. The same turnoff can remain if the tunnel commences from gold st. I would like the increased noise, pollution and decreased property values to be addressed for residents as well as compensation. If this must go ahead I would like alternatives to the fly over please.	11
5	<p>What discussions has the MCC had with the LMA / Vic Gov regarding the protection of residents from increased noise levels?</p> <p>As either single residents or in groups, we've had meetings and emailed both the LMA and State Gov, but had only one response to the question of: what sections of the EWL.St-2 will have sound barriers.</p> <p>The only direct response we have so far is that sound barriers are not going to be required as the area is semi industrial, and so our home need not be considered.</p> <p>Can you please advise what the true situation is on sound reduction barriers?</p>	10



No.	Comment	Vote Count
6	<p>Lord Mayor Doyle has already expressed his enthusiastic support for the EW Toll-road. Council expressed its concern with the current plan by a majority of 1 vote. Unfortunately, the City of Melbourne ignores the catastrophic impacts of the Toll-road on homes, parkland and liveability. The Officers Report reflects the 'smoke and mirrors' statements from LMA. It provides no critical analysis, particularly on the highly suspect traffic claims. Extensive traffic studies associated with the Northern Central City Corridor Study (2003) and the Eddington Report (2008) should have informed the current study. Instead, such basic information has been ignored.</p> <p>The EW Toll-road is a project without demonstrable merit. A Business Case and supporting traffic data is not available. According to Premier Napthine such information will never be released. To claim \$1.4 benefit for every dollar spent (for the virtually identical Eddington project the benefit was just \$0.5) and to force the sovereign risk onto the taxpayer is outrageous. It is these matters that should be addressed by the Council.</p> <p>Many worthy public transport projects (rail lines to Doncaster and airport, rail signal upgrades etc) and smaller roads projects (rail-road grade separations etc) could be funded from the \$8 billion now slated for the Toll-road. The Council should be addressing public transport upgrades rather than supporting mega roads projects.</p>	9
7	<p>My questions are as follows:</p> <p>1) How will residents in Manningham Street, Parkville West, be provided with appropriate access to Brunswick South (to the north) and to Flemington Rd via Church St (to the south/east)?</p> <p>2) Will trucks used in construction give priority to residents when leaving/entering the street?</p> <p>3) Once the over-bearing portal at Elliot Avenue is in operation, how will the Elliot Ave/Flemington Rd/Racecourse Rd intersection be managed? It is currently a death trap for pedestrians (including school children heading to Errol Street) and the elderly? Have the LMA provided a detailed traffic management analysis for all the predicted vehicles (including trucks) that will be generated at this point trying to make their way into congested Flemington Rd, Racecourse Rd and Mt Alexander Rd? Or is that that something that the residents of Flemington, North Melbourne and Parkville have to endure? The big yellow dashed line on their aerial photographs doesn't provide any sort of information regarding this pedestrian aspect?</p> <p>4) If the Link is primarily for freightage as recently espoused by the LMA, and speed limit at the flyovers is 80km, what measures are in place to make noise from trucks etc at appropriate decibel levels? Current 3d renders show pathetic acoustic panels. Similar case for residents to the west of existing Citylink - they already endure traffic along this freeway (sound tunnel is in place) but will have another freeway arterial at another level over their parkland (Debney Park) and close to the high-rise, high-density</p>	7



No.	Comment	Vote Count
	<p>housing. What sensitive design measures are in place to reduce noise from traffic for these residents?</p> <p>5) Will tram route through Royal Park be disrupted? It has the highest patronage of all tram routes and will be a significant impact?</p> <p>6) Will the Capital City bike trail be affected or disrupted at any point in time?</p>	
8	<p>can Council please provide, for those suburbs directly affected in its remit, a suburb-by-suburb breakdown of projected traffic impact of the current tollway design, and steps needed to be undertaken to address potential problems, for instance, extra traffic on Smithfield Road, by Council and expected costs.</p>	7
9	<p>What is the opinion of the council regarding the location of Stage-2 in Kensington?</p> <p>Specifically, does the MCC consider it better to locate the EWL St-2 in the (mainly) vacant land on the eastern side of City Link, as originally planned by the LMA?</p> <p>(This option would appear to offer a lower overall project cost by simply expanding the existing City Link infrastructure, give lower impacts upon current residents, while maintaining the overall integrity of the Arden/Macaulay Plan).</p> <p>Please advise?</p>	7
10	<p>I certainly prefer to be drawn into strategic planning discussions on transport, as the Metro link is clearly where we need to spend the money. More discussions on the road make it seem more like a certain course of action.</p>	6
11	<p>How is the city of Melbourne addressing the need for more public transport? A new design for Flinders St station should we be encouraging more public transport and less cars? If the tunnel goes ahead how will the city address the influx of cars down community streets that aim to avoid tolls?</p>	6
12	<p>What impact will the proposed on/off ramps on Arden and Elliot streets have on local traffic? Will local streets be widened to accommodate trucks and port traffic?</p>	5
13	<p>I would like to know what measurements have been made to assess the impact of thousands of additional cars being moved to Elliott Avenue and Flemington Road every day. These roads are already at a standstill from 7:30 - 9:30 and 3:30 - 7:00. The additional traffic from the proposed toll road would only make this worse - I'd be interested to know just how much worse.</p> <p>I'd also be interested to know why it is not possible to mitigate this additional congestion by having the western end of the road emerge near Macaulay station and run directly up onto the Bolte Bridge. Although the Bolte is not exactly a free flowing river of traffic, at least it moves reasonably freely</p>	5



No.	Comment	Vote Count
	during rush hour and has the added bonus of getting commuters to the CBD, St Kilda Rd/South Melbourne, the western suburbs and the airport - without an hour or so spent sitting in traffic on Elliott Ave!	
14	<p>How can the MCC project a 'significant decrease' in traffic on Macarthur Road and Flemington Road? The vast proportion of traffic to and from the CBD via those routes will not change with the completion of the EWL. Likely the opposite as cars attempt to (a) avoid the toll road and (b) access the CBD.</p> <p>More freeways mean more cars. That will NOT ease congestion.</p>	5
15	Will there be any disruption to public transport (particularly Macaulay and Flemington Bridge stations) either during or post construction?	4
16	Why is the reference design and project envelope where it is? The above ground section in Kensington is much more impactful on business and residents that if it were to the east. There is mostly vacant land and empty warehouses there, much like a transport corridor.	3
17	<p>In discussions with noise engineers from the project I was told that the noise levels will apparently be within legal limits so noise abatement measures (e.g. double glazing) would only be considered for buildings utterly adjacent to the flyovers. Noise isn't only a critical issue for those within fifty feet of the tollway. The truck noise from Citylink is already disturbing hundreds of meters away and current barriers do nothing to curtail the noise. The addition of trucks accelerating and breaking as they speed around the curves of this new project would be intolerable.</p> <p>Can the whole thing - including the gradient sections of Citylink - be enclosed in genuinely soundproof tubes?</p> <p>I was also told that construction would proceed uninterrupted, 24 hours a day, with heavily laden trucks constantly rolling out of the tunnel making the possibility of undrugged sleep rather remote.</p> <p>Will local residents be shown any consideration if this thing goes ahead?</p>	3
18	There have been no assessments of impacts to local roads even when these are to be directly built over and closed. This ought not be a faith accompli	1
19	<p>Stage 2 of the proposed freeway includes on and off ramps at Arden St. The existence of these ramps is likely to result in a significant increase in local traffic in Kensington and North Melbourne together with associated amenity issues (noise, light and air pollution) for adjacent residents. I pose the following questions:</p> <p>1. Why is it necessary for the Stage 2 infrastructure to connect to Arden St when the principle purpose behind Stage 2 is to afford connection to the Port area? Can the project proceed without connecting to Arden St?</p> <p>2. What attenuation steps will be taken to ensure that world's best practice is employed in the construction of the freeway and ramps in mitigating</p>	1



No.	Comment	Vote Count
	noise, light and air pollution for adjacent residents?	
20	The proposed toll road comes within 14m of the apartment block I live in. The increased pollution via the increased diesel fumes (a known carcinogen linked to numerous diseases and health problems such as cancer) caused by the 24 hour truck traffic on the new toll road, in addition to the increased noise volumes will make my home unliveable. The LMA have told us that noise levels will increase to 65db or 68db - concerts at the nearby showgrounds have to stay within 62db-65db. Noise at this level may cause disruptions in sleep patterns, which can also lead to health issues such as heart attack) What action will the MCC be taking to protect its residents and ratepayers from living within unreasonable proximity to the toll road and thus the excessive noise and air pollution it will generate? How will you help protect us from the health issues we may be exposed to as a result of living so close to the new toll road?	1
21	Is December last year the CEO of the LMA presented a PowerPoint slide showing the proposed route of the Port link section of the East West Link on the eastern side of the existing Citylink structure: an area that is predominantly brownfield. In March this year a large plot of land in the area on the eastern side of Citylink, earmarked for the port link, was sold to a developer and a \$700m residential development was announced to be built on that land. In July this year the LMA released maps to the public showing the port link on the western side of the existing Citylink on the West Bank of the Moonee Ponds Creek and within metres of established residences. Upon questioning the LMA as to why the road had suddenly shifted for the east of Citylink to the west, their response was that it was due to the C190 Arden Macaulay Planning Scheme Amendment. However the area on which the road had suddenly shifted over to also comes under the C190 Scheme so how can Council be satisfied with that reasoning from the LMA? Why are council not fiercely standing up for the rights of existing residents & ratepayers over the power & muscle of developers and the planning minister? Existing residents are clearly being shafted to protect profits.	1
22	Please confirm that there is an error on page 8 of the Preliminary Assessment, which suggests that the traffic impacts on Flemington Rd will be 'Neutral'. I understand that this reference should have referred to Flemington Rd north of the Racecourse road/Elliott Ave intersection. On Flemington Rd to the south of this intersection, we would see a 'Significant Increase' with the LMA design, which is pretty obvious as cars would exit at Elliott Ave to drive to the city.	1
23	The Council has proposed that it will be reviewing the need for Elliott Ave north bound ramps (i.e. towards Royal Pde) - page 9 of the Preliminary Assessment. Given the significant increases in traffic on Elliott Ave (west of the LMA's Royal Park freeway interchange) and on Flemington Rd (south bound), why isn't the Council also reviewing the need for Elliott Ave ramps in both directions? This interchange will cut the park in 2 and cause irreversible damage to the park. I agree with the Lord Mayor that this interchange would simply cycle cars into the city and onto the local streets of Parkville and North Melbourne and therefore it should be strongly opposed. Local residents wanting to use the tunnel will still be able to	1



No.	Comment	Vote Count
	access it at Dynon Rd and Moreland Rd (and potentially Arden St) and they will be the ones who will be impacted greatly if the Elliot Ave interchange was constructed. It is also important to note that minimal freight originates or arrives at destinations in the area near Elliott Ave and therefore the business case for this interchange must be seriously questioned.	
24	The LMA has proposed a new viaduct along the western side of the CityLink viaduct, which would be built as part of Stage 2. This alignment will cause significant and irreversible negative impacts to the Moonee Ponds Creek, including permanent shading of some areas. The viaduct could have been aligned on the eastern side of the existing viaduct. Is it true that the western alignment was selected because it was a cheaper option when compared to securing a corridor through private land? As an alternative to both viaduct options, a tunnel could be constructed under the private land on the Eastern side - has this alternative been considered by Council to reduce the impacts on the residents of Kensington?	1
25	The allowable limit is 63dBA, and noise at night is not counted at all. This is very loud, well above World Health Organisation standards. VicRoads sets the 63dBA level, and good luck to anyone who can get them to explain where they get the figure from.	0
26	The major disruption to public transport is that the Doncaster Rail line and the Melbourne Metro will not be built if the EWL goes ahead.	0
27	Melbourne does have a growing urban transport problem, no doubt. The city travelling public with travelling options are the road users who can choose between single occupant car or public transport to get to work. These comprise up to 80% of vehicles on the roads. Their choice is made on the basis of which is the least awful at any given moment--car or public. (Commercial road traffic is practically invariant because they must use roads, they have no choice). More freeways means private commuters bleed out of public transport in favour of their cars. But because peak-hour space requirement on public transport is less than 1 sq. metre/person but single occupant vehicle takes at least 20 sq. metre/person, it doesn't take too many commuters fleeing from the current public transport horrors to clog new freeway entries exits and feeder roads, just like it is now. The EW Link upside is: 1) not much improvement for commercial traffic, and even that short-lived because of natural growth, 2) no detectable improvement of public transport, 3) continued bleeding of public monies for project bailouts and subsidies. That's the good side. And the downside? 1) loss of many, and damage to many other, irreplaceable inner suburban public amenities and sporting infrastructures, 2) disruption to and degradation of quality of life in and around EWL structures during and after construction, 3) restriction of pre-existing local traffic flows leading to isolation of old inner suburbs, 4) dramatic loss of property value of adjacent householders not directly affected (ie those houses not demolished), 4) inadequate compensation for loss of property, inconvenience and lost time, and increased stress for those compulsorily acquired, 5) permanent increase in local traffic, 6) massive expenditure on a single white elephant which cripples every other possible	0



No.	Comment	Vote Count
	urban transport program. We have seen all these up and downsides before in Melbourne, in Sydney and in Brisbane. Please convince me it will it'll be different this time.	
28	<p>What is the future of urban mobility in Melbourne? According to some by 2050 there could be 2.5bn cars roaming the planet and most of them will be concentrated in cities, the OECD has reported.</p> <p>BBC reports that "Saudi Arabia, one of the world's top oil exporters, expects domestic consumption to exceed exports by that year purely to feed its internal needs for automotive fuel. Meanwhile, if Chinese levels of automobile ownership reach US levels (840 cars per 1,000 people), demand for oil in China alone will surpass present-day global oil production, management consultants McKinsey have reported."</p> <p>And climate scientists predict irreversible environmental damage with continued carbon emissions if we follow the continual reliance on fossil fuel to drive private transportation systems with a "business as usual" attitude.</p> <p>A quick visit to major cities around the world, quickly reveal the importance of mass transit systems to the vitality of cities , and the efficiency by which these move large numbers of people particularly in peak times. Equally important, that public transport delivers connectivity and promotes active public spaces, from a recreational and commercial basis.</p> <p>Eg San Francisco is a city well served by a complex grid of trams, buses and trains..In London, New York, Paris, etc cities benefit from broad networks and simple ticketing systems.</p> <p>In Israel, Rail projects are now being implemented as well as, crossing improvements and an expansion of light rail through Jerusalem..</p> <p>And in Shanghai, complex integrated hubs deliver forward thinking to delivering transit solutions.</p> <p>Meanwhile in Melbourne, the best we can come up with is an expensive tunnel to move more single occupant cars from one congestion to another, and create more traffic jams upstream. This is tunnel vision, and is not the answer to Melbourne' future needs.</p> <p>Isn't it time to change the thinking (and public spend) away from roads, that have failed to deliver long term sustainable transit solutions to more forward thinking mass transit solutions??</p>	0
29	Why can't the current Citylink be expanded as opposed to building a whole new corridor on the West Bank of the Moonee Ponds Creek? Surely that would be more cost effective and lessen the blow to the creek and residents along it?	0



No.	Comment	Vote Count
30	The impacts if the proposed toll road on Royal Park is nothing short of catastrophic. Four arterials of two lanes plus emergency lane will spew out through the last remnant open woodlands in Melbourne, to then become 14kms of above ground, grey, dirty, concrete eyesores snaking their way through our suburbs? Why is the MCC not doing more to persuade the Napthine Government to stop the project altogether and instead urge the Government to focus investment on other more environmentally friendly transport alternatives? This project will cause irreparable damage to the park and to Moonee Ponds Creek; to the City of Melbourne in terms of the environment. May I ask have all MCC councillors actually visited and physically walked the route of this proposed project? If they had I think they may be doing more to negotiate with or lobby the State Gov.	0
31	Alternative designs have been presented to the Council to reduce the impacts on Royal Park, should the project be constructed. Has the Council developed alternative designs to address the significant negative impacts that would be felt by Royal Park with the LMA design? If so, have these been presented to the LMA or the three bidders? If alternative designs have not been developed, why not?	0
32	I would also be interested to know the expected effect on traffic from Smithfield Road onto Epsom Road. The truck traffic on Epsom Road in the evenings is excessive now. Height restrictions stop trucks (theoretically) travelling to Citylink via Racecourse Road because they cannot get under the rail bridge at Newmarket. Does this mean more trucks on Epsom Road / Kensington Road / Macaulay Road?	0
Submit your Social Impact questions		
33	1. Will City of Melbourne investigate whether residents who are not compulsory acquired can receive compensation for eroded property values? 2. How much deterioration can occur before the level of noise and air quality fails to meet current standards?	11
34	Can you comment on the loss of amenity as a result of what appears to be 8 lanes of traffic exiting out of the proposed tunnel? This is a park that provides a haven for many inner urban residents, not only in Kensington, but also Brunswick and Parkville. Further to this, what are the expected impacts for the Zoo, which attracts both local and international visitors. Will the Zoo in turn be seeking compensation?	10
35	1. We understand that sound barriers may not be required along lengths of the tollway (particularly in Kensington) as the area is 'semi industrial'. What can City of Melbourne do to protect residents? 2. What analysis has been done on the impact of additional light pollution and deterioration of air quality?	9
36	Before the last election we were promised the Doncaster rail, which can be used by people from all walks of life. Why are we instead being given a tollway which will largely benefit road freight companies, and which if constructed, will make the Doncaster rail too expensive to be viable?	8



No.	Comment	Vote Count
37	How will we be prioritised and not let the LMA run roughshod over us. This road does not serve the greater good, it does not serve our Kensington community, and it does not look after me and my neighbours. How can we ensure we are properly represented and that things are not fast tracked over us	7
38	If there is a Proclaimed park, surely this we can expect to be protected. If we can't even uphold that, what hope is there for the Kensington residents and the above ground sections. Respect for existing places should come first	6
39	LMA states the proposed East West Link route was determined after considering "social, environmental and capital costs". What social and environmental conclusions did LMA determine when they decided to put eight lanes of truck bearing freeway above my neighbour's and my own home in the Kensington mill area? Particularly as there is derelict industrial wasteland on the other side of the existing freeway.	6
40	How will we protect the remnant heritage mill precinct in Kensington? Surely the simplest expedient to community and creek preservation is to redirect activity to the eastern industrial wastelands.	5
41	Having a freeway and two Off Ramps at the bottom of the garden is not what I thought was happening when I bought my house in April. How will we be compensated for our life savings being diminished by becoming a port transport route instead of a mixed use community	4
42	<p>1. Is it absolutely necessary to construct a flyover to direct northbound Hoddle Street traffic onto the Eastern Freeway? It seems that with just a little bit of thought, the existing on-ramp and roads could be re-configured to achieve the same result at or below ground level and avoid an expensive flyover that will not only be devastating to the local residents but will form a physical barrier for pedestrian and bike traffic moving between Clifton Hill and Collingwood.</p> <p>2. If it is necessary for a flyover to be built as part of this project; what measures are in place to guarantee local residents will not be forced to endure increased noise and pollution / particulate from car exhaust?</p> <p>3. Will the state government look at giving local residents the option of having their properties acquired (similar to the owners of the Evo apartments) in other areas where they are directly adjacent to a new above ground fly-over?</p>	4
43	<p>Has there been any research done by the Melbourne City Council, LMA or State Government regarding the devastating social impact that car-dependency has on Victorian communities?</p> <p>Expanding Melbourne's network of freeways as opposed to the public's preferred expansion of public transport services will lock people into unhealthy, anti-social patterns of car-dependency and the issues of social isolation and obesity that follow.</p> <p>The new freeway structures in royal park, PUBLIC PARKLAND, will emit</p>	4



No.	Comment	Vote Count
	<p>significant noise pollution into what is now a peaceful, quiet park. I am sure that the LMA has promised freeway noise barriers, but as anyone who lives anywhere near a freeway knows, these do not work very well.</p> <p>Furthermore, Has there been any research conducted into the increased levels of air pollution that will be emitted throughout the city if this increase in traffic numbers is realised? Air pollution kills hundreds, if not thousands, of people in Australia every year and we should be working to REDUCE car numbers, not increase them. This state government has got their priorities totally the wrong way around. INVEST IN CLEAN, GREEN, SOCIALLY EQUITABLE PUBLIC TRANSPORT! PLEASE!!</p>	
44	<p>1) Has there been any conversation with the LMA regarding the impact of building added carriageways and on-ramps on Flemington Housing estates and the recently revitalised Debney Park Playground? Do the residents in the high-rise towers have any opportunity for recompense? There will be increased noise, pollution and visual barriers.</p> <p>2) Royal Park is public parkland. Melbourne's population is increasing. How can the City of Melbourne allow this parkland to be destroyed for a tolled freeway? This seems to contravene the rights of citizens to have public space kept intact without fear of destruction for private use.</p> <p>3) What advice and support can City of Melbourne provide to those residents severely impacted by this unqualified project. Impacts include significant property value decline, loss of amenity, visual intrusions, air quality decline, health risks, noise increase, construction mismanagement, etc</p> <p>4) What kind of support will residents in Manningham Street, Parkville be given? It seems LMA/State Government are willing to sacrifice our standard of living to support a project that has no evidence-backed business case</p>	4
45	<p>1. With huge increases of resident population and numerous number of apartment approvals by the Planning Minister, how can the reduction of the already limited existing passive and active open spaces be justified?</p> <p>2. Were there any proper consultation done with the Chinese elderly people's home just next to the Evo apartments? Not only will they have severe amenity impacts, they will also be fenced in between freeways. How was this thought through? Was there any consideration for them?</p>	3



No.	Comment	Vote Count
46	<p>As a resident of Kensington, in the heritage mill area between Macaulay Rd and Arden St, I cannot help but have very strong feelings about how I am about to contribute to the East West Link project. I was completely oblivious to the opportunity I was given to do my bit until I read about the impending dual carriage elevated freeway to be built in my neighbourhood, via the newspaper. I feel amazing to be part of it.</p> <p>When I look over the existing City-Link Freeway to the vacant industrial wasteland where one would think a massive elevated monolith would be built, I wonder how we were given the chance to be such an integral part of the new project. The Melbourne City Council last year recognised that our old area does not meet the required standard of having open space parkland within 300 metres of a residential area. The neglected area along Moonee Ponds Creek was identified in the future plans to be revitalized and meet those needs. Then LMA commandeered that land along the creek for a freeway to carry the trucks night and day from the docks past the outside and over the front door of our 120 year old house. It seems incredible to say the least.</p> <p>I have done my due diligence to find out as much information as I can before I fully appreciated this position my wife and I have been given. When I rang LMA they kindly told me if I was not happy with what was about to happen, they would tell me the process that will be used to enable it to happen (you're screwed but we will tell you how we're going to screw you).</p> <p>I look at the plans in the preliminary report and wonder. The MCC states our heritage area, where they even dictated what colour we must paint our home, may now become "urban blight" with the freeway and off ramp.</p> <p>Though there are some interesting opportunities identified. According to the preliminary report, turning the area under the freeway into a park may be a positive. I'm not a horticulturist but I thought plants and grass need sunlight and rainfall to grow? The land where they planted under the adjacent City-Link, along the bike path, after construction subsequently died and today is just dust. But I'm sure technology has come a long way.</p> <p>One thing that does propagate very well underneath the freeway on the industrial side is graffiti tagging. We can be guaranteed of that blooming outside our homes. How great it will be to wake up in the morning and see a new piece of vandalism outside our homes and think about the "artists" who graced our area under the freeway in the middle of the night.</p> <p>This freeway is purpose built to take trucks from the docks to the Eastern Freeway. LMA has kindly said they might build some noise protection in areas that are not "semi industrial". The MCC has put some pictures in the preliminary report of the possible sound proofing someone in their office grabbed off the internet. Just google image search "freeway designs" and you will find the same images. I'm not sure whether I should be concerned that none of that sound proofing even exists. They are all just indicative artist impressions. One is of visionary solar panel design over a freeway to</p>	3



No.	Comment	Vote Count
	<p>produce energy. I'm sure solar panels over a freeway will mitigate the noise coming through my 120 year old house?</p> <p>The greater good must be served. There is talk of a \$700million apartment complex developers have earmarked for a section of the industrial wasteland. I feel inspired to know that vast parts of our community will benefit from the freeway over the creek. The developers, graffiti taggers and decision makers will all benefit from the "urban blight" that is expected to become of our neighbourhood. We, who have been working ratepayers in the Kensington area for many years, just need to accept this gift. The \$100,000 plus that we will lose in property value need not be of concern as we pay our mortgage and our property value goes down.</p> <p>When I lay in bed at night and listen to the trucks go past I will wonder how lucky I and my neighbours are.</p>	
47	<p>What happens to C190 as people thought they knew where they were to be living, and now it seems we will be living at a truck park. I want to see what the strategy is for my home</p>	2
48	<p>If only! I've been trying to get a campaign going to move the western exit to this area for months, and have not gotten any traction at all :(Link to petition below, if you're interested - if this monstrosity has to be built, it could at least be built with minimal impact to locals and with an exit point which might actually benefit drivers, instead of dumping them into even worse traffic than they currently experience on Alexandra Pde!!</p> <p>http://www.communityrun.org/petitions/don-t-destroy-our-homes-and-parks-to-build-east-west-link?source=facebook-share-button&time=1379421206</p>	1
49	<p>The EWL will actually mean that the Doncaster Rail link would be impossible - the reconfiguration of lanes of the Eastern would remove large parts of the median, which was initially set aside for the inclusion of the rail link there.</p>	1
50	<p>When this plan was first presented, I rang the Zoo to ask what I could do to help them to fight this plan. Their PR rep said that they did not have any plan to fight the EWL, which I found very interesting - not sure what this decision was based on or what promises have been made, but it looks like the Zoo will not be acting to stop EWL at this stage.</p>	0
51	<p>Stage 2 of the proposed freeway is to be located to the west of the existing Citylink freeway and along the western banks of the Moonee Ponds Creek. This will have a significant adverse impact on the amenity of Kensington residents by reason of the loss of the parkland on the western banks of Moonee Ponds Creek and in terms of noise, light and air pollution for adjacent residents. I submit two questions:</p> <p>1. What options are available for relocating the proposed freeway to the eastern side of the existing Citylink structure in order to preserve the Moonee Ponds Creek and amenity for residents?</p>	0



No.	Comment	Vote Count
	2. What attenuation steps will be taken to ensure that world's best practice is employed in the construction of the freeway in mitigating noise, light and air pollution for adjacent residents?	
52	If past experience is any indicator, you will not get noise barriers. The Eastern Freeway (free until the East-West Link goes ahead that is...) has been repeatedly extended, now all the way to the Monash. Each time, the noise level has increased. In all that time not a single noise barrier has been built, despite being promised by both parties. Vicroads just wants to build roads, it does not care about the consequences. LMA is no different.	0
Submit your Open Space and Recreation questions		
53	Royal Park was set aside specifically to ensure that a large open space with native vegetation would be maintained in the inner city. Why are we allowing this to be eroded?	14
54	It seems that Royal Park will be essentially cut in half, with up to 8 lanes of traffic exiting from the tunnel at the point where the bike path currently crosses Elliott Avenue. Are you able to comment on how this might impact on the current amenity of the park in relation to noise (including the impact on the amenity of the zoo), wildlife and what will happen with the walking paths and bike paths?	9
55	<p>MCC has acknowledged that "Sporting fields will be lost including the permanent loss of Ross Straw Field. The municipality does not have enough land for current sporting and informal recreation and demand and population growth is seeing this demand increase."</p> <p>How can this loss of such vital community space be condoned? Especially when the benefits of the EWL are only applicable to a small proportion of commuters (and of course the road and freight lobby), but every taxpayer will have to cover the costs for generations to come!</p> <p>Never was so much owed by so many [with only the benefit] to so few.</p>	9
56	What will City of Melbourne do to protect the amenity of Mooney Ponds Creek? Areas of concern are: sever overshadowing from concrete overpasses, potential deterioration of water quality, impact on wildlife and vegetation caused by air and noise pollution and potential loss of bike and walk paths.	8
57	Flemington families presently have limited open space, with Debney park being the only significant park and playfield in the suburb. The Debney playground next to CityLink, recently built for 1.7 million dollars, is very popular and much needed in this inner city suburb. The duplication of city link will clearly destroy this very valuable outdoor space, along with the community centre, and Flemington residents will lose a significant part of the only large outdoor space in the suburb. How can the government condone this, without consideration of the impacts? Where do they expect Flemington	8



No.	Comment	Vote Count
	families to take their children for outdoor play? Under the freeway?	
58	<p>Organised sport is one of the most significant uses of public space provided within Royal Park. The loss of Ross Straw field - which is used heavily by many sports including cricket, baseball, touch football, soccer and many others - as well as impacts on other sporting facilities within Royal Park, is of great concern to many involved with sport in the inner north. Replacement sporting fields and facilities are near impossible to come by - not to mention open space generally - and meanwhile the population of inner Melbourne is projected to increase, and along with it the demand for sporting and recreation facilities.</p> <p>I would like to know:</p> <ol style="list-style-type: none"> 1. What is going to be done to facilitate the replacement of the invaluable sporting fields, facilities and recreational spaces in the congested environs of inner Melbourne lost to the East West Link's construction? 2. How will users of these public facilities, particularly sporting groups, be accommodated with alternatives in the interim until permanent, satisfactory solutions are provided? 3. Will sporting clubs and other user groups be compensated if they are forced to relocate to new sporting facilities far from their original community base? 4. Will sporting clubs and groups remaining in Royal Park - which may be exposed to increased traffic, pollution, decreased access during and after construction, and reduced amenity of the park in general - be somehow compensated or assisted with upgraded facilities? 	7
59	<p>My questions are as follows:</p> <ol style="list-style-type: none"> 1) Will a safe and appropriate alternative be made available for the playground that exists at Manningham Street (at the beginning of the driveway to the Sports Pavilion)? Many families in the area have young children that utilise Ross Straw Field and the playground daily. 2) Will there be any consultation with recreational users of the sports fields (and not just the sports clubs that have formal usage of the fields)? Many young people from Flemington (including those who reside at the high-rise public housing estate) use the field every week. Are there any records or statistics regarding such patronage? How will these people be consulted and properly compensated for the removal of their public open space? 3) Will fitness and health experts be consulted to provide their expert opinions on the long-term detrimental societal effects to a community that has diminished access to open space and recreational options that are free 	7



No.	Comment	Vote Count
	and available to everyone?	
60	What proportion of open space within the City of Melbourne will be lost permanently or during construction, and for how long?	7
61	We were looking forward to the revitalising of the remnant heritage mill precinct, with wonderful Young husbands, the mill, the remaining heritage listed houses and the important links to the creek being refreshed with parks and green linears. Surely this is better strategy	6
62	<p>The Arden Macaulay Plan looked at the revitalization of the Moonee Ponds Creek (west bank) to provide a high quality urban green space from Racecourse Rd to Arden St (approx. 4 hectare?).</p> <p>Given that the EWL.St-2 will effectively degrade any possibility of a high quality open space, has the MCC discussed the possibility of equal land size compensation from the State Government to provide an alternative space in the same area?</p>	6
63	The Melbourne City Council recognized that the Kensington mill area does not meet the required liveability standard of having parkland within 300 metres of the residential homes. The Moonee Ponds Creek corridor was to be revitalized under plan C190 to fill this void. Now LMA wants to turn the land into freeway instead of park. How does this meet the required needs of the area or will the residents just be too tired from listening to trucks all night to require any sort of park anyway?	5
64	Royal Park is essential as a quiet peaceful open space to walk, sit, take your dog and relax. It has existed for over 160 years and was established to provide the residents of Melbourne and surrounds to have a natural environment with greenery and quiet open spaces to escape the noise and bustle, pollution and crowds of the city. Now, the state government feel that they can heedlessly throw away this wise action of our city forefathers and invade our park with the monstrous intrusions of heavy traffic, flyovers, ramps, tunnels and carriageways. I want to know just where does their mandate to do all this comes from after promising that they would NOT build the east-west link before the election?	5
65	The City of Melbourne has recently spent a significant amount of money on Royal Park with the landscaping of the wetlands adjacent Manningham Street and Ross Straw Field, as well as incorporating water retention facilities within the park. What will happen with these excellent forward thinking projects? Is the local ecosystem which was being carefully and sustainably nurtured by the Council to be 'landscaped' with concrete and bitumen instead? I am totally shocked that the City of Melbourne has been completely silent on the effects of the East West link on Royal Park. Man up	4



No.	Comment	Vote Count
	councillors!	
66	How can we protect our poor misused creek. This road is certainly not the way	3
67	Stage 2 of the proposed freeway is to be located to the west of the existing CityLink freeway and along the western banks of the Moonee Ponds Creek. This will have a significant adverse impact on the amenity of Kensington residents by reason of the loss of the parkland on the western banks of Moonee Ponds Creek. What options are available for relocating the proposed freeway to the eastern side of the existing Citylink structure in order to preserve the Moonee Ponds Creek and amenity for residents?	3
68	Has there been any information gathered about the amount of Pollution (noise, fine particles & diesel) that this tunnel (that is not a tunnel) thru Royal Park will generate and its proximity to people/animals at the Zoo, people using the sporting facilities and the effect on the Children's Hospital. And who are the experts that will decide on this & the heavy machinery vibration disruption to the Zoo animals? These should be decided on Health values NOT be dollar based values.	1
69	Given that the low lying areas of Kensington have a long history of industrial pollution for more than a century (currently one community garden in Kensington is closed due to lead pollution) and that the Moonee Ponds creek is well known to be heavily degraded and one of the most heavily river systems in Victoria, does the MCC think it prudent to commission a study to looking at the levels of heavy metal soil contaminants within the path of the East West link? (Rather than risk exposure to residents from heavy metal and other pollutants that would be safely contained within the current earth banks of the MP Creek).	1
70	Will the MCC support residents in opposing the current format of the EWLINK stages 1&2, and asking for the LMA and State Government to reconsider their rushed approach and provide more time for community and business input to improve this project?	1
71	As the EWL Stage 1&2 stands currently, residents next to the path and in the surrounding corridor area are looking at significant property value right downs. This therefore means that the MCC also stands to lose a considerable amount in rates due to the right down in property values. Will the MCC support constituting a register of both total property value and total rates reduction losses for both the residents and the MCC itself with the intent of seeking compensation from the state government for the effective transfer of this asset value / income to the state and the winning tenderer? (Based on the logic that the project cannot proceed in its current format, without our combined asset values being reduced, while the state and winning tendered gains at the least an equivalent if not greater gain to their balance sheet based on our loss).	1
72	If there was a building in excellent condition built before 1873 with features now found no longer in the Melbourne area (remnant woody grassland) and	1



No.	Comment	Vote Count
	scarce in the whole of Victoria which could not be replaced, would the City of Melbourne allow it to be destroyed with no compensation and with the people of the City of Melbourne paying for the destruction? Royal Park is a biolink, feeds migratory birds on their journeys, has scarce and much needed sporting ovals, is a buffer zone for the World class Zoo, has over 90% native birdlife which is incredibly unusual in inner Melbourne, cleanses the air for the people of Melbourne, has historic monuments and links to our founding and will alleviate the city Heat sink as the temperature increases in the future. All these advantages are lost if the Park's area is depleted or divided. How can the City of Melbourne not fight this.	
73	The geology of Royal Park is such that tunnelling is unlikely to be feasible and the proposed East West Link would be built as 'open-cut'. This means a larger area of Royal Park would be destroyed for construction. Also, because the project is a 'design & build', the open-cut may never be covered over, especially if cost blow-outs occur (as is the case for most infrastructure projects). Can we look forward to an 'Eastern Freeway' through Royal Park instead?	1
Submit your Urban Design questions		
74	Is Council considering alternate routes to suggest to the government? There are surely ones that would do less harm to the City of Melbourne's assets and communities?	10
75	The easement in the centre of the Eastern Freeway was specifically set aside for the construction of the Doncaster railway. Why is this being allowed to be hijacked by a project which will scuttle the Doncaster rail? This is the absolute opposite of what was designed for.	6
76	<p>1) Has the Office of the Victorian Government Architect been consulted with on such a major infrastructure project as the proposed flyovers at Parkville West are indeed a shameful and destructive 'design' exercise?</p> <p>2) Which urban planners and landscape consultants have been engaged by the LMA to provide less intrusive solutions to what is clearly an engineered proposal bereft of human scale and impact?</p> <p>3) Does the LMA realise and acknowledge that real people live in Parkville West and that the above-ground solutions (as well as the tunnel) will have serious impact on: Royal Park and its wetlands, amenities such as open space, natural light, quiet environment?</p> <p>4) When will the residents who are directly impacted by the proposed EW Link be properly consulted about the tunnel and flyover interchanges? When will real specific detail be issued to residents regarding heights, effects on direct light (for those of us who live directly adjacent or south of the flyovers) etc?</p> <p>5) As per question 4 above, what will the Elliot Avenue exit/entry look like? How much Royal Park will this obliterate? Will any remnant vegetation be destroyed?</p>	6



No.	Comment	Vote Count
	<p>6) Will the natural escarpment near the rail line (behind Ross Straw Field) be destroyed in any way?</p> <p>7) What will the effect of construction and the emerging freeway be on the wetlands?</p>	
77	Does City of Melbourne have a view on the maximum height of the elevated tollway along Moonee Ponds Creek?	5
78	It's been proven time and time again that roads are not the future. From a long term strategy point of view, there is no miraculous de congestion from road building. On the contrary we are buying a stinking truck route for posterity. Really? We can't think long term and put clean rail in?	5
79	What will this look like, and how can we make it astonishingly fabulous and not a concrete monstrosity with Perspex. Bring on the best architect in the world if we have no choice here	4
80	What are the time frames for all the decision making? Won't we be locked into a contract that is cheap, and the sound and design aspects are afterthoughts? I feel like this is going off very under baked. I would like certainty before we leap into the void, and good design would help.	2
81	<p>I would love to know how to get the following proposal up for consideration:</p> <ul style="list-style-type: none"> - Train line (or light rail) to Doncaster incorporated into the tunnel, running express from Doncaster to an underground CBD station near Melbourne University. - At the eastern end, the rail/light rail goes underground, followed by the road. All entry/exit points are through the existing median strip, meaning that there will be no impact on homes or businesses. - At the western end, the tunnel emerges into the industrial area near Macaulay station, preferably through one of the many blocks of vacant land. Exits take drivers onto the Bolte Bridge, allowing them to go to the CBD, St Kilda/South Melbourne, the western suburbs or the airport. This would be a much better outcome for drivers than being dumped onto Elliott Avenue, Arden Street or one of the other seriously overcrowded inner northern roads. <p>If we're going to spend huge sums of taxpayer money on infrastructure, why can't it be well designed infrastructure that supports public transport *and* private vehicles while also minimising the impact on people who live and work nearby? The Melbourne City Loop was built over forty years ago - no buildings were destroyed, overall the negative impact of the project was negligible - and it gave the city a major benefit, allowing the train network to handle almost double the number of trains. Surely it should be possible for us to build the EWL in a similar fashion and with a similar level of taxpayer benefits!</p>	2
82	Why does this proposed tunnel exit in parkland, destroying so much open space in the inner north and west, when it could exit in industrial land south of Arden St, or next to Dynon road? It would still link directly to CityLink and the docks. The destruction of Royal Park, Denney Park, Travancore Park,	2



No.	Comment	Vote Count
	Moonee Ponds Creek etc is all completely unnecessary, and a total indictment on those who have planned this.	
83	Can an independent urban design review of the proposed freeway junctions at both the Tullamarine Interchange and the Elliot Ave Interchange be undertaken? The panel could be made of landscape designers, architects, from both Australia and overseas, those that are recognised within the industry for their expertise in complex design solutions. If this project goes ahead, surely we deserve better than what is currently on the table. A first year student would have failed their design submission if they put on and off ramps either side of an existing building (Evo apartments)!	2
84	<p>Stage 2 of the proposed freeway is to be located to the west of the existing Citylink freeway and along the western banks of the Moonee Ponds Creek. This will have a significant adverse impact on the amenity of Kensington residents by reason of the loss of the parkland on the western banks of Moonee Ponds Creek and in terms of noise, light and air pollution for adjacent residents. I submit two questions:</p> <p>1. What options are available for relocating the proposed freeway to the eastern side of the existing Citylink structure in order to preserve the Moonee Ponds Creek and amenity for residents?</p> <p>2. What attenuation steps will be taken to ensure that world's best practice is employed in the construction of the freeway in mitigating noise, light and air pollution for adjacent residents?</p>	1
85	<p>In regards to the construction of the East West Link Stage One, where will the excavated spoil from tunnel boring go?</p> <p>Which landfill site will be able to accommodate an approximately 5,000,000m³ of soil (this estimation includes a bulking factor of the soil by 2.0).</p> <p>This poses a further challenge for Melbourne's transportation network when transporting thousands truck loads to no doubt remote landfill locations.</p> <p>What is Linking Melbourne Authority strategy regarding this matter?</p>	1
86	Urban redesign or urban mutilation to accommodate new freeways is not going to solve Melbourne's traffic woes. The basic problem of Melbourne traffic is too many one ton vehicles with a 70 kg payload---single occupant commuter cars. These make up 70-80% of vehicles on our roads, as a 10 minute observation of any arterial road will reveal. This is inefficient in energy and requires a lot of road space, and makes life unbearable for legitimate commercial traffic. Remove half these single occupant vehicles and most current road problems are solved. But that requires heavy investment to make public transport systems frequent, convenient, reliable, comfortable and safe. And foresight and wisdom, like Melbourne was noted for ---up to about 1923.	0



No.	Comment	Vote Count
87	<p>One of the most important reasons to oppose the East-West link is the destruction of the Western end of Royal Park. The State has been chipping away at this historic, loved and valuable park for decades. Indeed, Melburnians have been worried about this loss of publicly owned and treasured open space since at least 1945.</p> <p>The Hockey Centre and Olympic Village have recently removed open space from the park. It is a death by a thousand cuts. The Eastern Freeway has destroyed the peace and quiet of Yarra Bend Park forever. Now it appears to be Royal Park's turn for the road builders.</p> <p>It is worth visiting the work of Enrique Peñalosa who completed his three-year term as Mayor of Bogotá, Colombia on December 31, 2000. While mayor, Peñalosa was responsible for numerous radical improvements to the city and its citizens. He promoted a city model giving priority to children and public spaces and restricting private car use, building hundreds of kilometres of sidewalks, bicycle paths, pedestrian streets, greenways, and parks:</p> <p>"Urban transport is a political and not a technical issue. The technical aspects are very simple. The difficult decisions relate to who is going to benefit from the models adopted."</p> <p>"The importance of pedestrian public spaces cannot be measured, but most other important things in life cannot be measured either: Friendship, beauty, love and loyalty are examples. Parks and other pedestrian places are essential to a city's happiness."</p> <p>"The world's environmental sustainability and quality of life depends to a large extent on what is done during the next few years in the Third World's 22 mega-cities. There is still time to think different... there could be cities with as much public space for children as for cars, with a backbone of pedestrian streets, sidewalks and parks, supported by public transport."</p> <p>"Why is all the power of the State applied in opening the way for a road, while it is not done for a park such as the Long Island Sound greenway? Despite the fact that more people may benefit from the greenway than the highway?"</p> <p>Peñalosa is correct – the question that is not being asked is: "Who really benefits from this project, and who really loses. In the case of the East-West Road link it is the people of Melbourne who are losing more and more open parkland in the service of the almighty motor vehicle. Who gains? Well, the road builders – they make their profit and run. They have no meaningful social connection to the project, and no responsibility for the damage it does.</p> <p>There is no Cost Benefit Analysis available for this project. Why? Surely the people are entitled to know how and why their own money is to be spent? According to Eddington, and others, new freeways return a LOSS of 50</p>	0



No.	Comment	Vote Count
	<p>cents in the dollar. How is this a good thing for Melbourne?</p> <p>This loss of parklands is not only at the local level, it is occurring nationally as well.</p> <p>New York is building parks as fast as it can:</p> <p>Highline Park</p> <p>Lowline Park</p> <p>The closure of Broadway at Times Square between 42nd and 47th Streets has not only improved traffic flow in the area, but also improved business.</p> <p>Many major cities are removing freeways: "Removing Freeways: Restoring Cities"</p> <p>Portland has removed the freeway along the riverside and replaced it with parklands. Far from being "impossible" as the traffic engineers insisted for decades, Harbor Drive was closed in 1974. Interstate-5 from the east side of the Willamette River is next on the list of freeway removals.</p> <p>Paris closed the roadway on the Rive Gauche and turned it into parkland.</p> <p>Seoul removed a freeway and opened a park right through the city.</p> <p>In spite of the road engineers' bleatings: "you can't close freeways", the simple fact is that all these closures have had little to no negative effect on the life of the city, and in all cases improved the amenity of social and business life on the streets.</p> <p>Why is Melbourne so backwards? Does nobody at the RACV or the State Government read about urban design?</p> <p>These modern toll-road projects are a simple turn-key DBO (design, build, operate) financial instrument for private investors. They generate their own customers by negating the appropriate development of cheaper and more efficient alternatives.</p> <p>Lazy, short-term political self-interest means most governments are looking for 'ready to build' projects they can commission and open with a ribbon cutting ceremony and a self-serving plaque, preferably within a single term of government. Where is the long-term strategic infrastructure planning and building we had in the 50's and 60's?</p> <p>Please, review your support for this project. In every poll, a majority of Melburnians shout that they want the Melbourne Metro rail built.</p> <p>We want public transport. We are begging for public transport, and yet the decision makers are not listening.</p>	



No.	Comment	Vote Count
	<p>Why not? Who stands to gain? Every time I hear the words “Commercial in Confidence” I know we are about to be ripped off. The “confidence” in that phrase refers to the confidence trick played again and again on the public.</p> <p>The East West Road link will suck money away from public transport for yet another ten years, as did the Bolte, as did the Monash widening as did the Eastern. None of those roads have achieved their stated aims of reducing congestion.</p> <p>It has been very well known for decades that building new roads INCREASES congestion.</p> <p>“RACV general manager of public policy Brian Negus said completing the East-West link was a crucial step towards unlocking Melbourne’s gridlock, and would provide a desperately needed alternative to the Monash-Westgate corridor.</p> <p>The East-West link will alleviate the massive congestion at the end of the Eastern Fwy and on both east-west and north-south roads in the extensive area north of the city,” he said.</p> <p>You simply cannot build your way out of gridlock with new roads. It is logically absurd.</p> <p>But this statement does demonstrate the mindset of the RACV and Vicroads managerial level. The glad handing and back scratching that goes on between VicRoads, the RACV and major road-building industry groups and the State Government would be a farce, if it were not so damaging to our city.</p> <p>Negus’ statement above is incorrect and not based on any independent research. The E/W Link will, in fact increase congestion and invite more and more traffic onto the inner Melbourne road system. It will not alleviate, for example, if there is a crash on the Bolte area as recently, the ensuing congestion. It will send all that “new” traffic onto what will be an already full road, shifting the congestion from one area to another.</p> <p>Mind you it is not surprising Negus is wrong. His response to turning two of the four traffic lanes on Princes Bridge from cars to bicycles was that we should build cantilevered lanes on the outside of the bridge for cyclists! Melbourne’s most iconic bridge, and is listed on the Victorian Heritage Register. Philistine does not begin to describe it.</p> <p>Freeways take up massive amounts of potential transport space, over-utilise them in peak hours – very inefficiently, and under-use them in all other hours, also inefficiently.</p> <p>This is an example of the minimum impact the E/W Link will have on Royal Park:</p>	



No.	Comment	Vote Count
	<p>We should not build the East West Road link. We should build a viable Melbourne Metro system set up for multimodal use right across the city, and especially in the new outer ring of suburbs. The “car as mass transit” experiment has failed utterly and completely. Why continue with it when there are so many better options?</p> <p>Well that’s what I think anyway.</p> <p>As of August 22nd, the Auditor-General agrees with me too.</p> <p>Further thoughts on this matter 9/9/2013</p> <p>Traffic flows can be analysed and modelled using the principles of fluid dynamics. Essentially traffic is a liquid.</p> <p>The Tulla/Bolte/Citylink/Monash is one high pressure pipe. The Eastlink/Doncaster/Hoddle is another high pressure pipe.</p> <p>Currently the two flows are separated by a series of relief valves in Alexandra Pde, Princes St, Elliott Ave and their flow-off systems. This alleviates the pressure from the two systems described above.</p> <p>It is well known, and demonstrated repeatedly all over the world and also in Melbourne and Sydney that building urban roads increases congestion by a phenomenon known as “induced demand”. Roads generate more traffic, which fills them to capacity.</p> <p>So what happens when you remove the pressure relief valves between the two high pressure systems? The pressure equalizes, of course, just as in a fluid dynamics experiment.</p> <p>The East West Tunnels will be like dropping the final keystone in an arch (sorry for mixed metaphors here *sheesh*). My expectation is that the EWT will lock up the whole inner freeway system, causing more congestion than we have ever seen before.</p> <p>Then you have the “phantom crashes” – where a freeway comes to a grinding halt. But as you drive through, there is no actual reason for the stop. This is a pressure wave, and EWT will provide the connection for these to reverberate right around the system.</p> <p>A pressure wave in CityLink will travel around, just as a sound wave in water does, to EWT, up the Tulla and down the Monash, and then back up around Eastlink.</p> <p>And what will the response of the roads lobby be to this increased congestion? “Oh we can fix this with a new freeway/widening/tunnel etc. etc.</p> <p>Links and references available here: http://johnhandley.wordpress.com/east-west-road-link-vs-melbourne-metro-rail/</p>	



PARTICIPATE MELBOURNE SUMMARY #2 – MATERIAL SUBMITTED FROM 8 NOVEMBER UNTIL 20 NOVEMBER 2013

Context

The City of Melbourne invited public comment through the Participate Melbourne page on the East West Link proposal based on the additional information in the CIS and the first public information evening.

The table below lists the comments received.

No.	Comment
88	<p>Could we have a new public open space gateway to Kensington by taking the remaining buildings out of Bent Street and making a big park along the awful new tollway when the viaduct is complete? Planting established trees along the edge would help a little in reducing the eyesore, the pollution and give the community back some amenity. I wouldn't want to live or work that close to a tollway and would want to move - so make it a benefit to those who stay.</p>
89	<p>I am 100% all for the East West link. I use trains occasionally but often drive my car, and whilst trains have their place my car is much more convenient - as it is for many Melbournians. I often use the path that the East West link is proposed to take and feel that this project will have a massive benefit for me and many people that I work with. Thousands of people travel East - West - East each day, wasting precious family time in a traffic jam, and these people's current plights cannot be ignored. Arguments saying that Royal Park will be decimated are very inaccurate. Less than 2ha is expected to be lost to this vital project, 2ha out of 160ha! A number of people appear to be opposed to the East West link and are instead in favour of the Melbourne Metro rail tunnel and encourage funds to be used there. I believe there are serious issues with the Metro rail which are yet to be addressed by the people who are campaigning for it, including Council authorities. The biggest issue being that we don't actually need it. I have previously worked in the Public Transport industry and I am aware that with our current capacity and infrastructure, we could have a Doncaster and Airport rail line tomorrow; these lines need not be dependent on Metro rail increasing capacity. Metro rail will do nothing for Melbourne that our current Public Transport infrastructure cant already do (e.g. we can already get from South Kensington to South Yarra by train, we can already get from the north of the CBD to the south of the CBD by tram). I believe we need the East West link to be completed well before Metro Rail as it will have a much bigger benefit for the people of Melbourne. Additionally, the benefits will extend to those from regional Victoria who holiday or visit family/friends. East West Link should be Melbourne's number one priority.</p>
90	<p>The area that comprises Melbourne City would cop a range of negative impacts from the East West Link as it is currently proposed, for very little benefit. Amenities would be reduced or negatively impacted across a range of areas, as clearly summarised in the Oct 8 public meeting at the Town Hall. As a resident and rate payer in MCC region, I don't see why we should stand for such a range of negative impacts to benefit the driving convenience of outer suburbanites when rail solutions could easily reduce traffic volumes on the road, freeing up space for those who insist on personal vehicle transportation over shared. If this new road is so important to east-west drivers, are they prepared to pay a realistic toll price to compensate those who would be directly and negatively affected? I would guess not. Yet for the convenience of 10-20 minutes less on the road, others lose or have negatively impacted their homes (often only singular asset), their parkland, their creek, their noise and air quality, plus more. If this road is so important to some, then they should be prepared to pay for the privilege to compensate those whose quality of life reduces. This East West Link just doesn't stack up on so many levels (why else hide the business case) - just don't allow it to be built, or if it is so vital to build, compensate all who are negatively affected.</p>



No.	Comment
91	<p>The Melbourne Zoo, one of our top tourist attractions will be significantly affected during construction and operation of the East West Link. Key concerns for the Zoo are: - The main construction worksite includes an area directly abutting the Zoo between Brens Drive and the Zoo. This site is visible from the Australian animal and baboon enclosures. It will be operational for five years, with activity occurring there 24 hours a day, every day of the week. During this time it will be a base for 3,000 construction workers, and all spoil removed from the tunnel will be managed out of this site. - Construction works disrupting all forms of non-car access to the Zoo, especially train travel, walking and cycling. - Significant noise, vibrations, light spill and visual impacts affecting the Zoo during construction and operation. - Removing numerous mature sugar gums and moreton bay figs in the vicinity of Elliot avenue, impacting on the sense of arrival at the Zoo. - Cut and cover construction proposed for all works in Royal Park causing significant impacts on the area surrounding the Zoo. The CIS has failed to assess specific impacts on the Zoo. Further, the overall impact on Royal Park is completely unacceptable. Will LMA compulsorily acquire land to replace this critical public open space? The heritage of Royal Park needs to be protected.</p>
92	<p>Hi @SandraAnderson. I appreciate that the tunnel would benefit some people like you but I think you are misunderstanding the level of impact on Royal Park, should the project proceed. The LMA's calculations of the area of park lost are based on the footprint of the project at the surface of the park. So for a viaduct crossing the park, this only includes the small area of the column that supports the roadway above. The City of Melbourne has used a more reasonable approach to calculate the area of usable park lost, which will be the size of 6 MCGs (10ha). This area would include the loss of up to 3Ha (i.e. including loss due to temporary "lay down" areas for truck parking and soil/rock stockpiling) of Melbourne's last remaining area of remnant vegetation (which has Victoria's highest rating for native vegetation conservation) plus four sporting fields and a permanent disturbance to the amenity of a beautiful part of Melbourne in West Parkville, which I suggest you visit some day.</p>
93	<p>If you are visiting the LMA information session tonight at the Town Hall you may see a poster that presents the "positive" impacts on traffic in the inner north of the CBD, should the East West Link be constructed. Unfortunately, the poster doesn't present the "negative" impacts on traffic that would be caused by the project and so I'm including some of them here, which have been taken from Chapter 7 of the CIS, page 40: Elliott Ave, Parkville +10% Manningham and Oak Sts, Parkville +10% Mooltan St, Travencore +20% Guthrie St and South Daly St, Brunswick East +10% Pattison St, Moonee Ponds +10% Kent St, Flemington +20% Wellington St +10% Cohuna St and Moule St +10% We often hear that on school holidays the traffic flows well because the volume reduces by 10%. All of the streets above will be seeing an increase of at least 10%, which will have a significant impact for these residents.</p>
94	<p>Why aren't we following Infrastructure Australia's list of prioritizing projects? It's their role to advise the Government on the Projects most beneficial to the public. The Schedule clearly has the Melbourne Metro more progressed and needed when compared to the East-West Link. See: https://www.nics.gov.au/Home/PriorityProjects</p>



ISSUES AND COMMENTS RAISED BY MEMBERS OF THE PUBLIC AT MELBOURNE CITY TOWN HALL AT THE PUBLIC MEETING ON 8 OCTOBER 2013 FROM 5.30PM – 7PM

Context

The City of Melbourne invited the community to this public meeting to present its Preliminary Impact Assessment, and hear the community's views on the implications of the East West Link (EWL) project. This feedback will inform the City of Melbourne's submission on the Linking Melbourne Authority (LMA) Comprehensive Impact Statement. Participants' feedback has been captured under the key impact categories in the Preliminary Impact Assessment.

Recreation & social

- Melbourne University Baseball club has 6 teams and is 100 years old. They have played at Ross Straw since 1960. The club has been informed that the project will start digging on the field in October 2014. They are worried that this will mean the end of a long history for the club. There is no capacity for them to be relocated, as sportsgrounds in the municipality are already at 95% capacity.
- Holbrooke Reserve Brunswick may be impacted and causes a flow on effect to clubs like Brunswick Zebra's soccer club. The East West Link (EWL) will have an impact to sports fields beyond CoM. There will also be a need to manage access constraints to Royal Park.
- City of Melbourne needs to look wider than its municipal boundary to understand the total impact eg. also look at impacts on Moreland
- Parkville Cricket club is based at the centre of Royal Park and it will be impacted too.
- Has council considered creative ideas to return built up parts of Royal Park that are currently built up for recreational use?
- Junior Flemington Sports Club will also be impacted
- No one has put forward the possibility to create more open space around the Arden Street redevelopment as part of the C190

Urban Design & social

- Participant stated that 80% of the traffic on Alexandra parade will still be using the road after the construction of the East West Link and so it is unlikely we will be able to reduce it to two lanes.
- Council's proposed improvement plans show 2 lanes; will this accommodate the 80%? is this feasible or realistic?
- How long will it take to get the trees back to the same height as the Elms that are there now?
- Will trams still be able to cross from North to South if construction method is cut and cover in Alexandra Pde or while the works are being undertaken?



Open Space & social

- What statistics do we have on passive recreation use of Royal Park?
- AILA (Australian Institute of Landscape Architects) cannot commend the proposal for the East west Link. It has released 2 position statements in opposition to the proposal. [Please see attachment 1 for the position statements that have been provided post-meeting as promised by the AILA representative]
- Not enough emphasis on how open space loss in C190 area (Kensington) will be addressed?
- Need to advocate for removal of concrete channel on Moonee Ponds Creek & restore the creek in the section from Flemington Road to Park Street- Moonee Ponds Creek Coordination Committee and Friends of Moonee Ponds Creek(MPCCC)
- Councillors have to stand up (and "MAN UP") on this issue
- Royal Park must be preserved
- Need to use Council's reserve money to tell the world how good Royal Park is
- Councillors must represent the residents, especially when the state is treating them so poorly
- Will the construction result be a cut & cover? Open cut in Royal Park may not be ever covered over. It is a large impact on the Park. Council needs to be proactive on this.
- Impact on Moonee Ponds creek: concerned at further loss of open space at Moonee Ponds creek, when structure planning was trying to create more. The current proposal shows further expansion of the western side of the freeway, further diminishing open space and creating an overshadowing problem. Have any alternative designs been considered to the eastern side of the freeway?
- The 2 buildings on corner of Macaulay Rd & Bent St should be purchased for open space
- Concern about Moonee Ponds creek, lack of open space
- Ross Straw Field – carved up, needs to be replaced within CoM
- North Melbourne Football club not the answer – location to new Woolworths?
- Concerned on impact on Zoo
- Any freeway must be underground, entirely tunnelled
- Will affect flora, fauna, sport & passive recreation
- Everything should be replaced and it should be fully funded by the project; including new facilities for Active Sport & passive recreation
- Congratulations to Council for the public meeting
- There has been no support for the project
- Needs to ensure 10 hectares of lost open space are returned

Traffic & Transport

- Impact on public transport and trams in Moonee Valley City Council
- Impact on public transport
- The City of Melbourne's Preliminary Impact Assessment is based on limited data. The assumption that reduced impact – where has that come from (Nicholson Steet etc)
- Gap in data around Macaulay Street & Ben Street, Kensington
- Why are we making assumptions in relation to traffic coming into North Melbourne from CBD?
- Suggest that instead of the tunnel, that traffic flow be improved within existing road networks, by alternative solutions such as removing right hand turns, removing on street parking, etc. Have other alternative solutions for traffic management been considered?



- Have Council officers looked at the community designs for the Link which try to minimise the impacts and redesign the road?
- LMA engineers at a community information session acknowledged Elliot Ave would likely have to be widened for slip lanes (ie loss of more of Royal Park) for traffic entering Flemington Road. Also City of Melbourne officers were noted at this very point this morning (8/10/13)! The City of Melbourne should consider high likelihood in their CIS submission and against their predicted “neutral” impacts on Flemington Road
- Participant believes the vent stack will be on the escarpment on Royal Park West, that there won't be pollution scrubbers which are used in Europe and that families and health services in the area (several hospitals) would be affected. No filters & scrubbers on vent stacks
- No analysis of the location & potential impacts
- What is current travel count on Macarthur Road?
- Who will monitor air pollution? The LMA or the EPA?
- Would like more information on the impact on Flemington Road, especially impact in the eastern direction. There are 4 hospitals in this area and a lot of interest from the Eastern suburbs. The impact on Flemington Road is underestimated.
- Council has myopic view CBD and needs to look beyond to consider the full extent of impacts
- Public transport in inner CBD is effected further out, traffic jams will expected
- Need comprehensive network assessment on traffic beyond CoM
- Road will increase traffic problems. The answer is trains not tollways!
- Has council considered on alternative road alignment?
- Serious concerns about impact on Moonee Ponds Creek. The proposal desperately needs improving
- Massive impact on Mt Alexander Road and Racecourse Road. There will be an increase in traffic and it is already a nightmare.
- There will be an impact on traffic & trams on Flemington Road
- Macaulay Road is already dysfunctional. The rail lines already represent an obstacle to flow ant the traffic banks up behind
- Will the tunnel go very deep?
- Need to thing about all rail and road pieces of puzzle together
- East-West road tunnel will probably kill any rail plans
- Concern that the general increase in density and housing (eg Woolworths development) is not being considered. Under the approved plans for the Woolworth development in North Melbourne 600 car parks have been approved, but they haven't been built yet and this will add additional traffic to the area. Additional traffic is already planned for (600 cars on the street).
- In an earlier lecture on traffic calming, City of Melbourne officers expressed the difficulty of getting traffic calming installed in Gatehouse Street. If it was difficult then, how can it be done within the scope of this project? (in areas suggested it may be required).
- RPPG (Royal Park Protection Group)– can't believe that the City of Melbourne will agree to wrecking of Royal Park & Elliot Avenue and turn it into a traffic sewer
- Concerns about traffic modelling. When the CityLink was built, people tried to avoid the tolls and moved to other streets, such as Mt Alexander Road.
- How will the capital city trail & Upfield line be impacted?
- Melbourne is on track to experience chronic peak hour crowding on nine of its rail lines by 2017. Patronage will continue to grow by 4.5% for the next decade, representing an extra 100 million annual passenger journeys to the metropolitan network. London, Perth, Sydney and Singapore are all cities that are investing heavily in public transport to



remain competitive globally. Why then is the Victorian Government wilfully ignoring the facts and squandering money on a toll road that will create more traffic jams, ignore the needs of people living in the outer suburbs and destroy the fabric of inner Melbourne?

- Royal Park map didn't show interface tunnel with Elliot Ave. What will the impact be?
- Just look at the portals for the Lane Cove tunnel and the South Dowling Street tunnel. The proposed portals for the East-West Link in Royal Park will divide the park in two. There would be significant loss of park and amenity.
- Most of the traffic at the Elliot avenue portals will go from Elliot Avenue to Racecourse Road. Why can't it go under Flemington Road & come out Racecourse Road? Then there will be a lesser impact on Royal Park. Keep Royal Park section underground.
- City of Melbourne to advocate:
 - Tunnel not cut n' cover!
 - Tunnel to Incorp train or light rail from Doncaster to the University of Melbourne (and possible extend to airport)
 - Eastern end on the off point to go through the centre median
 - Western portal on vacant land near Macaulay Station taking cars directly to Citilink to align with the C190 Urban renewal plan

Other

- An overriding concern is that the project has turned its back on democratic proposals and process. The erosion of democratic processes is evident
- Public opinion is against it, but we are being denied a voice, including this Council
- Manningham Street resident – I want them to revalue my property now and in a year's time for the rate notice. I don't want to pay rates for a devalued property.
- The whole of West Parkville will need to be re-valued
- Royal Melbourne Zoo
 - Concerned by the impact & devastation on the inhabitants of the zoo
 - Due to the vibration drilling and noise of this project, how many will perish due to the stress caused?
- Concerned about timelines. The timing for the only community input allowed is scheduled to occur at the busiest time in December for people.
- Supports C190 & calls on Council to continue to progress C190
- Health impacts – Air pollutions – Cardiac & respiratory disease. The OECD (Organisation for Economic Co-operation and Development) has stated that the highest number of urban deaths is due to air pollutions
- Concerns in relation to air pollution & burden of disease
- Concern in relation timelines – why is there such a rush in the process?
- Has council considered nominating Royal Park as a world heritage site?
- East-West Link Preliminary statement – councillors could not comprehend impact & did not vote to oppose. The City of Melbourne should have taken stand earlier – other councils did
- West Parkville flyovers - What will happen there is that this project will create a slum. How will council mitigate this to help the residents who live here? They will be impacted by the end result and by the construction. They will be surrounded by it. A lot of the small people there have not been spoken to by anyone. Their views are not heard. They want to feel the Council supports them and is looking after their interests, as well as looking after the park.
- The profit from the EWL will benefit a small number of companies. A lot of negative economic outcomes will come from the project and the costs of these will be picked up by the City of Melbourne and other municipalities.



- Don't agree with traffic projections that will see a reduction. Cannot continue to allow parks to be destroyed by the roads lobby.
- Council should take baseline on air and noise quality data
- The City of Melbourne should take a leadership role for the greater Melbourne Area. It needs to show a need for infrastructure upgrade across the whole of Melbourne – so oppose the EWL tunnel.
- Friends of Royal Park - Deputy Lord Mayor Susan Riley voted against motion before council. Does she regret it?
- Why using LMA's on specific map of the Arden-Macaulay Urban Renewal Areas– doesn't affected area include Kensington – ie. City of Melbourne's Arden Mac Area
- This is why the EWL should be opposed:
 - No business case
 - No traffic models
 - Not in transport strata or MSS
 - Greenhouse gas emissions
 - Congestion remain
 - Destruction Royal Park, Moonee Park. Compulsory acquisition houses
- Two economics professors recently were reported in The Age saying “All infrastructure proposals should have an independent, transparent evaluation of the proposed and a rigorous cost-benefit analysis and publication of the results” – the Council should also be calling for this
- What will the impact be on Zoo and the Royal Children's Hospital?
- Haven't heard Council speak strongly on this. Appreciate a complex role for Council but we need emphasis on leadership role of Councillors and the City of Melbourne.
- This project is not in the interest of residents. I want council to speak strongly for residents.
- Request for Councillors to mount a class action against state government for their request to sign a confidentiality agreement in order to release further information about the EWL project
- Take leadership – all progressive councils and governments have moved away from this old style of moving traffic. Need all councils to work together against the secrecy, for the sake of future generations.
- Do not support the officer presenting on traffic's statement that he has no view on the project, wants officers to have one.
- Page 10 of the notes indicated a number of decreases in traffic. Ever such road development increases local traffic and demand. This fact has been known since 1950s
- We cannot continue to allow our parks to be destroyed by the roads lobby
- Compulsory acquisition of homes, threat to Zoo and Royal Children's Hospital



NOTES MADE ON POSTER MAPS BY MEMBERS OF THE PUBLIC AT MELBOURNE TOWN HALL AT THE PUBLIC MEETING ON 8 OCTOBER 2013 FROM 5.30PM – 7PM

Urban Design – Moonee Ponds Creek – Impacts and Responses

- Cars will avoid tolls, traffic will increase
- What compensation will be available for loss of parkland?
- Please begin a dialogue on having a metropolitan government so the city can make its own decisions on its infrastructure direction. I hope the City of Melbourne can help advocate for this or give us a forum to say so
- Impact to Moonee Ponds Creek? How will it be minimised?
- (Indicating Oak Street close to Upfield Train line) - Only remaining grassy woodland in City of Melbourne. Habitat of only population of the regionally significant Whites Skink
- Elliot Ave will be decimated with traffic coming out of tunnel. This needs to be acknowledged
- (Indicating Flemington Road) - This must see an increase in traffic.
- What about choice? What about public transport?
- Public transport is far more sustainable. 1 train takes up to 800 cars off the road. No more road building
- Keep the green open space

Open Space and Recreation – Possible responses

- Where will I go when I lose my playground?
- Nobody benefits from Elliot Ave exit except the locals and they wouldn't want it! Scrap the exit
- Leave Elliot Avenue as minor road – no more traffic here
- Leave Royal Park alone
- Set up study of alternative exits on route of tunnel to avoid impacting Royal Park
- What about choice? What about public transport?
- No off/on ramps into parkland. No underpass of traffic lights. Don't divert tram lines. Keep all activities inside the existing road. This ridiculous interchange defies logic
- Put Macarthur into a 2 lane tunnel and you don't need a tollway at all

Urban Design – Alexandra Parade, Cemetery Road East – Impacts and responses

- What about public transport?
- What about traffic onto Hoddle Street?
- We are destroying 160 houses and you can already travel in each direction. An unnecessary spaghetti junction
- Stop the destruction of Royal Park and Moonee Ponds Creek. Why so little vision from current politicians and council?
- This project will only increase traffic in the City of Melbourne and do nothing to help congestion. You should be looking after the residents of the city you represent

Urban Design – Responses – East West Link Architecture Options

- We don't need a road overpass icon
- Where is this intended to be located?



- What about choice? What about public transport?
- Crisp renders and trendy parametric design won't improve traffic. Public transport will

Open Space and Recreation – Royal Park Impacts

- Reduction in green corridors for movement of wildlife
- Loss of upgrade to Glenford Pond and enhancement of habitat
- Concern for migrating birds
- Vibrations will impact animals, including those in the zoo
- Need Geology assessments of EWL, though all Royal Park and potential that EWL will have to be built as “open cut”, not a tunnel
- Lots of informal recreation use too
- Royal Park is of State significance. This project will ruin it for the future
- Surely traffic coming off at Elliot Avenue will turn into access the Parkville “Precinct” and the city
- Damage to existing soil structure. Loss of top soil during construction

Traffic impacts – estimate only

- I am concerned about the impact of increased traffic on public transport on Mount Alexander Road, 59 tram, 57 tram and Racecourse Road
- 4 Major hospitals: What traffic impact studies in context of Parkville/Flemington Road?
- Racecourse Road is a community centre as well as Thoroughfare. Its population has grown and needs to be able to breathe, hear and move
- Traffic is heading for the city, Flemington will be a car park
- (Indicating area around Upfield Line and Poplar Road) – Why increase here at North of Royal Park?
- (Indicating Alexandra Parade near St Georges Road) – What percentage of traffic that comes along here now actually goes right through to Macarthur Avenue and City Link rather than South into the city or north to other suburbs?
- What about tree loss? Royal Park is too precious to lose. No entry/exit in Elliot Avenue.
- Positive impact on surrounding streets seems exaggerated. Evidence suggests that there will be increased traffic for those avoiding the tolls

Urban Design – Moonee Ponds Creek – Impacts and responses

- Will the project inhibitor/prohibit an airport rail link?
- Impact on public housing unacceptable
- Community severance at key locations, limiting access across roads due to increasing traffic
- Will sporting fields be replaced to cover the loss at Ross Straw field?
- I live in Manningham Street and go to school in North Melbourne. How will I walk to school crossing? Elliot Avenue will be very difficult, as it will be very busy. (Peta, age 7)
- It is impossible for Flemington Road to be “neutral”
- What about Moonee Ponds Creek? Overshadowing in Kensington is intolerable
- Concerned this will not decrease congestion & instead create greater vehicle reliance. Will negatively impact parklands/wetlands & local amenity
- Decrease likelihood of much needed PT spending!
- Not confident congestion will be decreased in these areas, but need to prioritise PT, walking, cycling access
- Trains, not more roads

Traffic & Transport – Possible Responses



- Management plans will have limited impact if project proceeds, encouraging people to use their cars at the expense of sensible public transport solutions

Urban Design – Alexandra Para Responses – Possible Indicative Sections

- It is archaic. Leadership of all levels of government need to oppose any infrastructure that ponders to car and truck transport. We need excellent public transport
- Urban Design – developed within democratic principles and processes
- (indicating “Existing Street Section”) – Do this now. Remove cars. Close roads, create space for people
- (Indicating “Potential Street Section”) – Great use of vegetation canopy
- Clearly designate as bike lane rather than “shared” as on Swanston Street
- Improves public transport would make this vision more believable, otherwise encouraging roads for people, not just cars



City of Melbourne submission to East West Link Assessment Committee



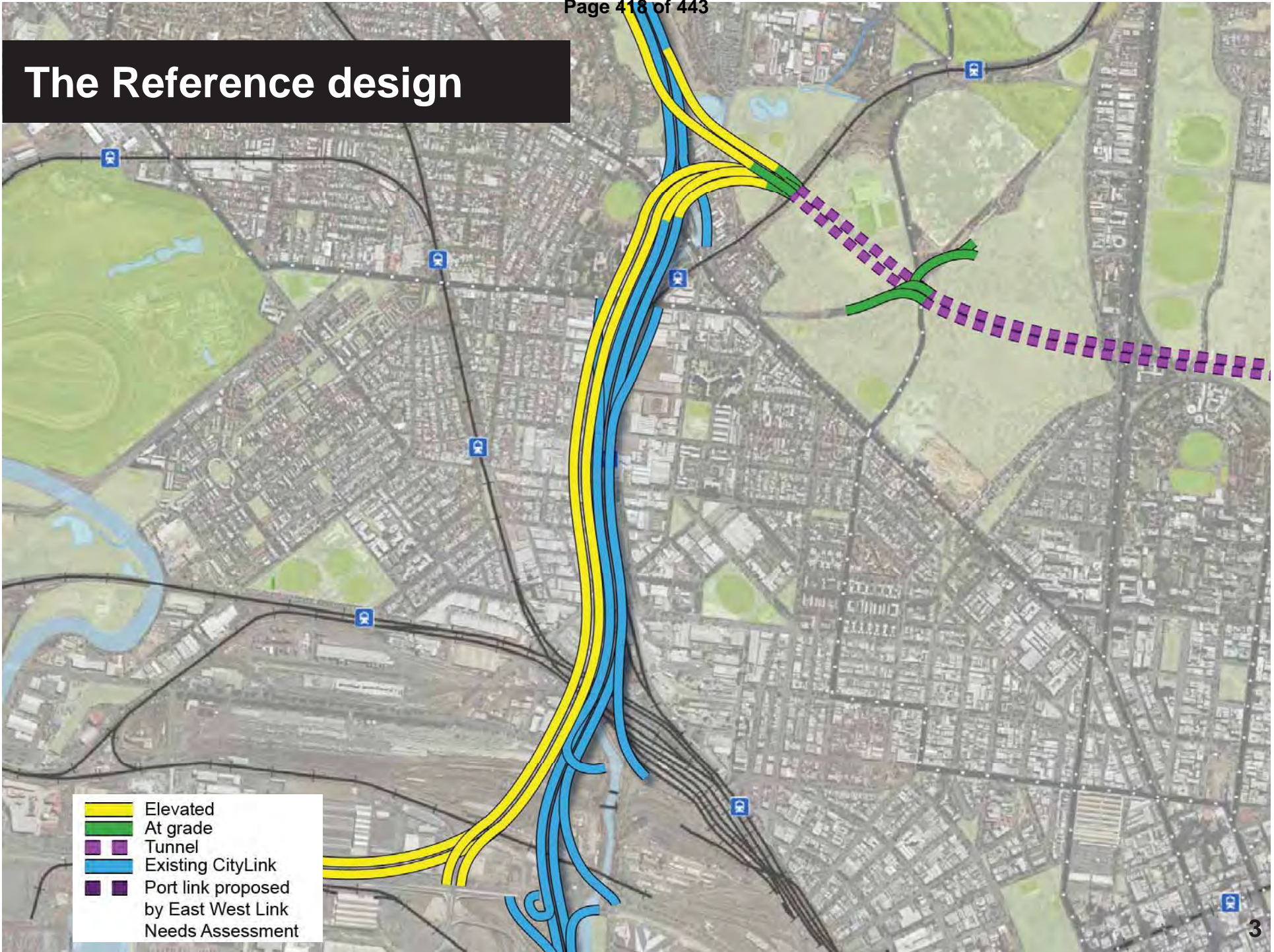
CITY OF MELBOURNE

City of Melbourne Submission to East West Link to the Assessment Committee

Summary of Recommended Changes to the alignment and design






1. Re-cast the East West Link Strategy for the Part B Section
2. Reduce the impacts of the Western Portal on Royal Park and West Parkville
3. Reduce impacts on Royal Park of the Elliot Avenue portal
4. Provide for Royal Park sporting and recreational facilities, water supply and open space needs

The Reference design



1. Re-cast strategy for Part B viaduct






1. Use the existing CityLink as long term alternative to part of the proposed new viaduct

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment

1. Re-cast strategy for Part B viaduct

1. Use the existing CityLink as long term alternative to proposed new viaduct

2. Consider alternatives to Arden Street ramps

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment






1. Re-cast strategy for Part B viaduct

1. Use the existing CityLink as long term alternative to proposed new viaduct

2. Consider other alternatives to Arden Street ramps

Southbound access to CityLink from Racecourse Road

Northbound access to CityLink from Dynon Road






-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment

1. Re-cast strategy for Part B viaduct

1. Use the existing CityLink as long term alternative to proposed new viaduct

2. Consider alternatives to Arden Street ramps

3. Allow for a Part B tunnel link in the very long term

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment






1. Re-cast strategy for Part B viaduct

1. Use the existing CityLink as long term alternative to proposed new viaduct

2. Consider alternatives to Arden Street ramps

4. Avoid reserving land for a future surface road corridor

3. Allow for a Part B tunnel link in the very long term

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment

1. Re-cast strategy for Part B viaduct






1. Use the existing CityLink as long term alternative to proposed new viaduct

2. Consider alternatives to Arden Street ramps

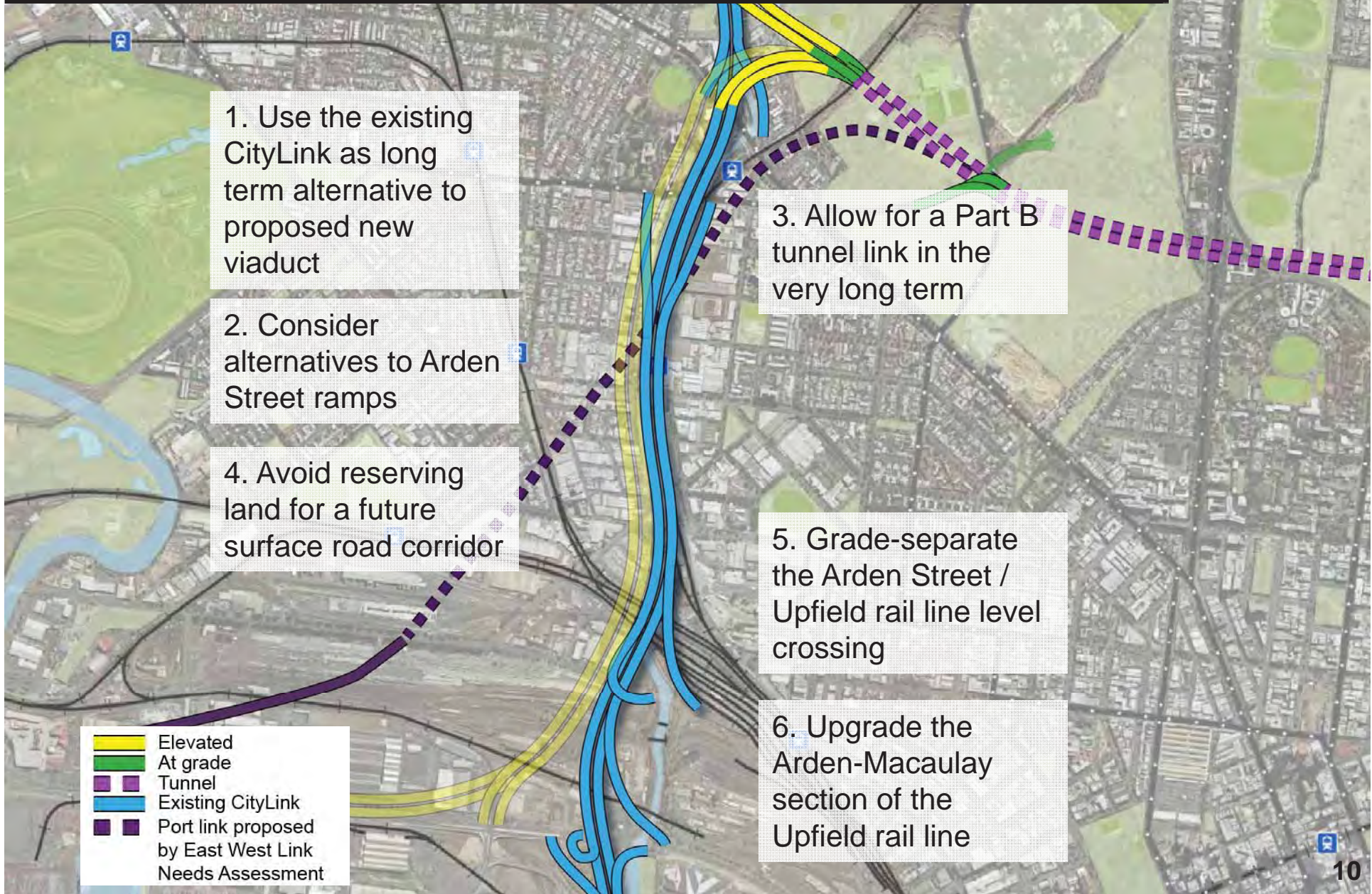
4. Avoid reserving land for a future surface road corridor

3. Allow for a Part B tunnel link in the very long term

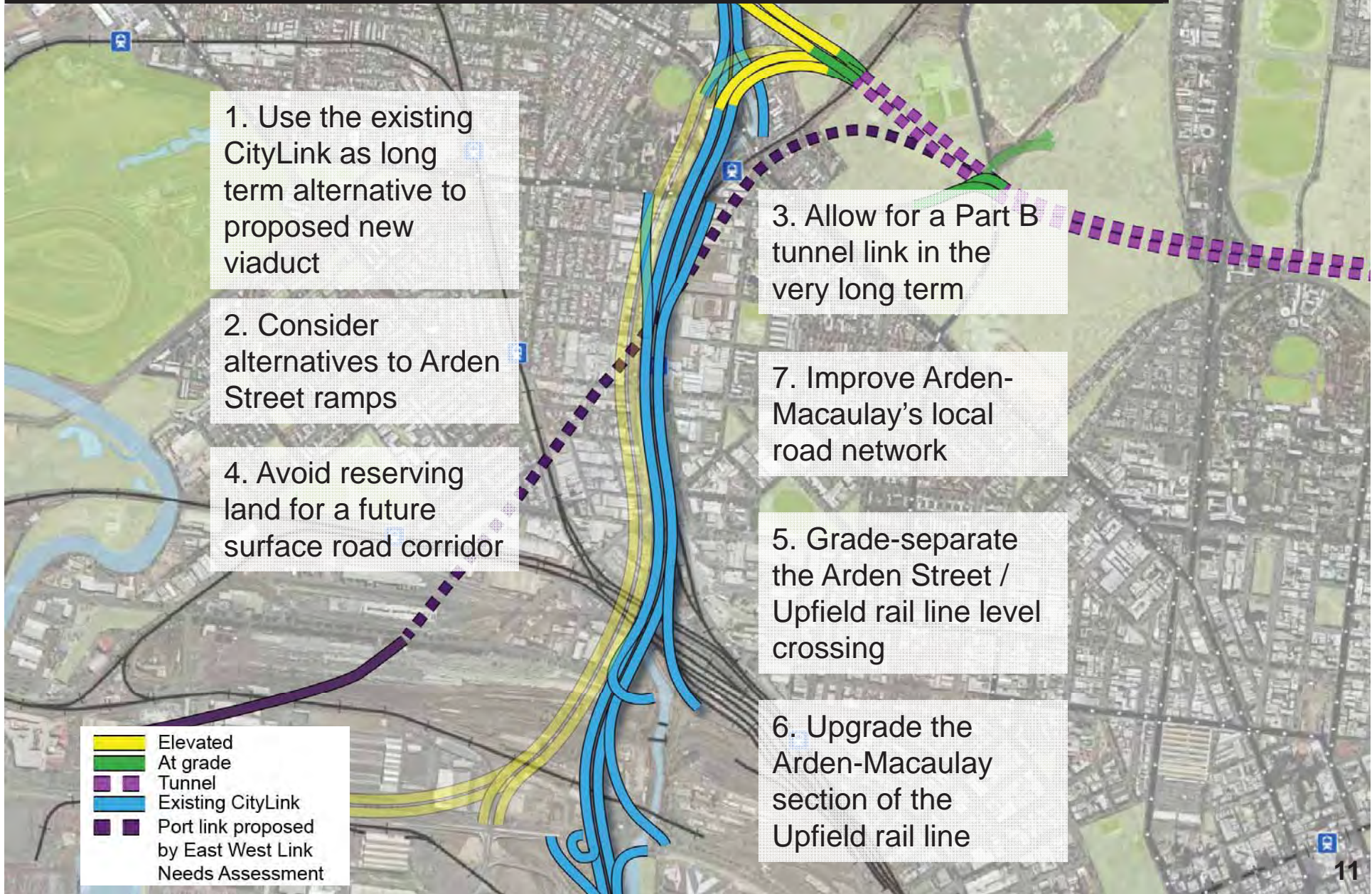
5. Grade-separate the Arden Street / Upfield rail line level crossing

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment

1. Re-cast strategy for Part B viaduct



1. Re-cast strategy for Part B viaduct



1. Re-cast strategy for Part B viaduct

1. Use the existing CityLink as long term alternative to proposed new viaduct

2. Consider alternatives to Arden Street ramps

4. Avoid reserving land for a future surface road corridor






8. Connection from future western section

3. Allow for a Part B tunnel link in the very long term

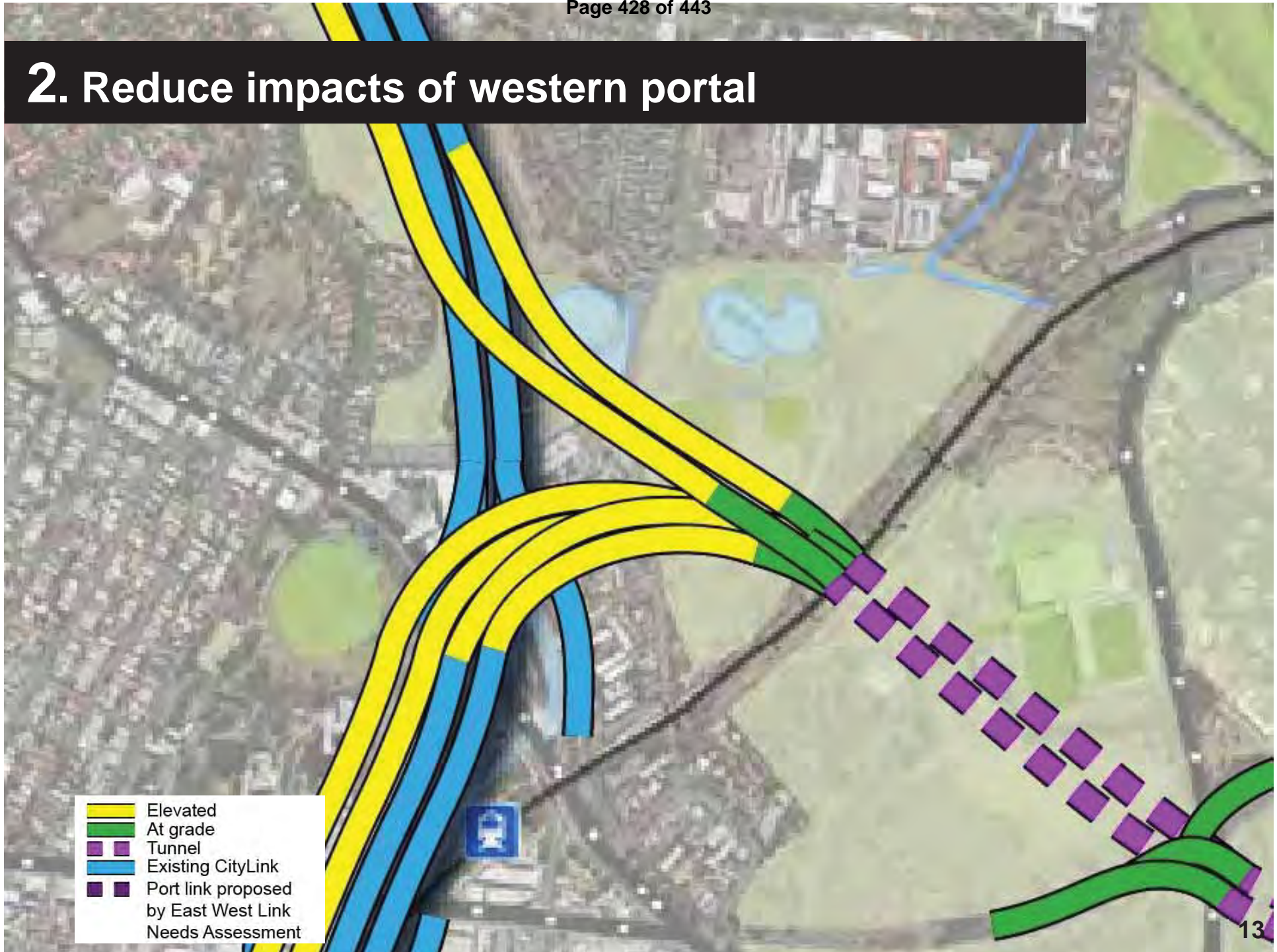
7. Improve Arden-Macaulay's local road network

5. Grade-separate the Arden Street / Upfield rail line level crossing

6. Upgrade the Arden-Macaulay section of the Upfield rail line

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment

2. Reduce impacts of western portal








2. Reduce impacts of western portal

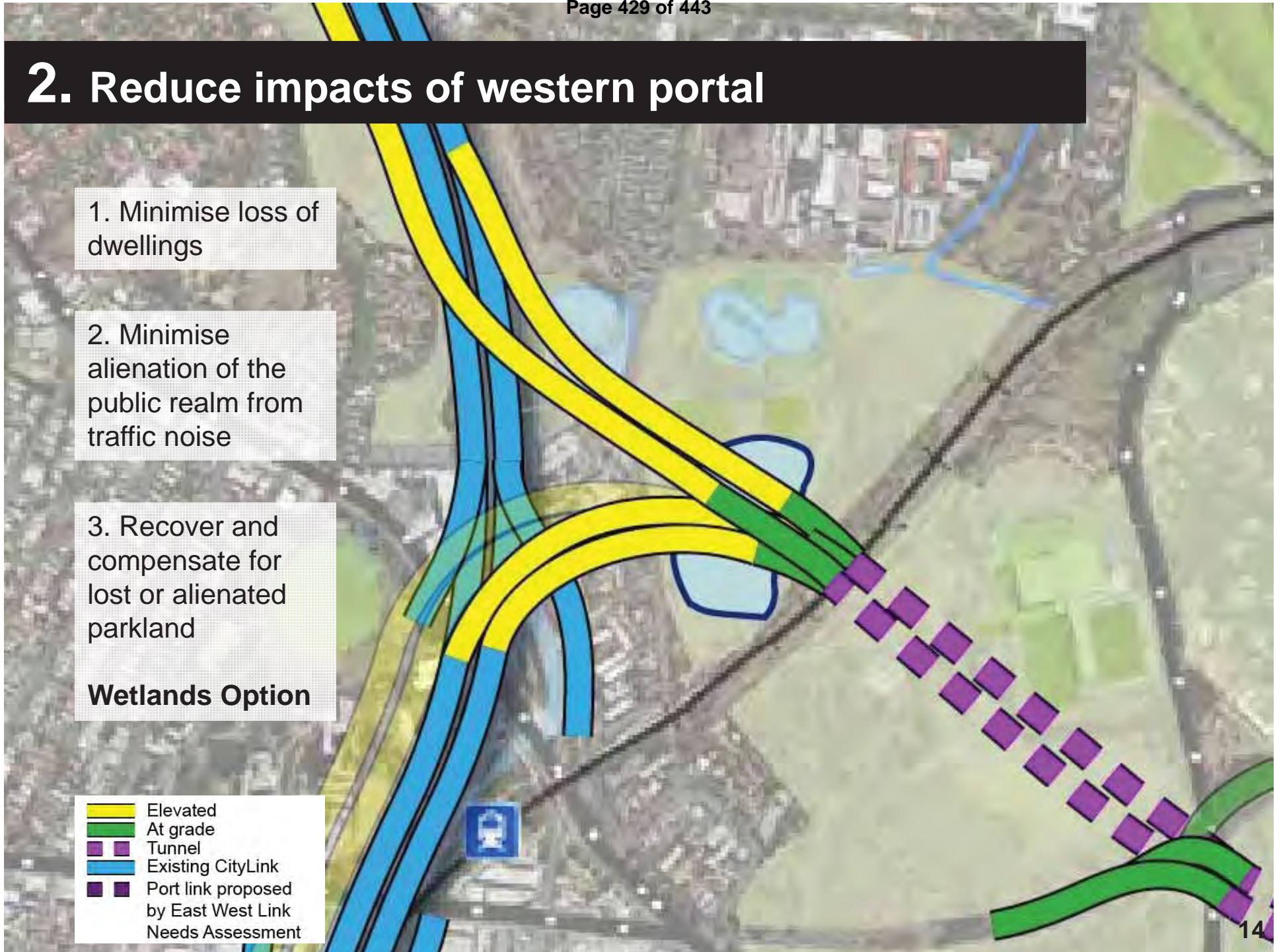
1. Minimise loss of dwellings

2. Minimise alienation of the public realm from traffic noise

3. Recover and compensate for lost or alienated parkland

Wetlands Option

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment



2. Reduce impacts of western portal

Recover and compensate for lost or alienated parkland **The Reference Design**



2. Reduce impacts of western portal

Recover and compensate for lost or alienated parkland **Wetlands Option**








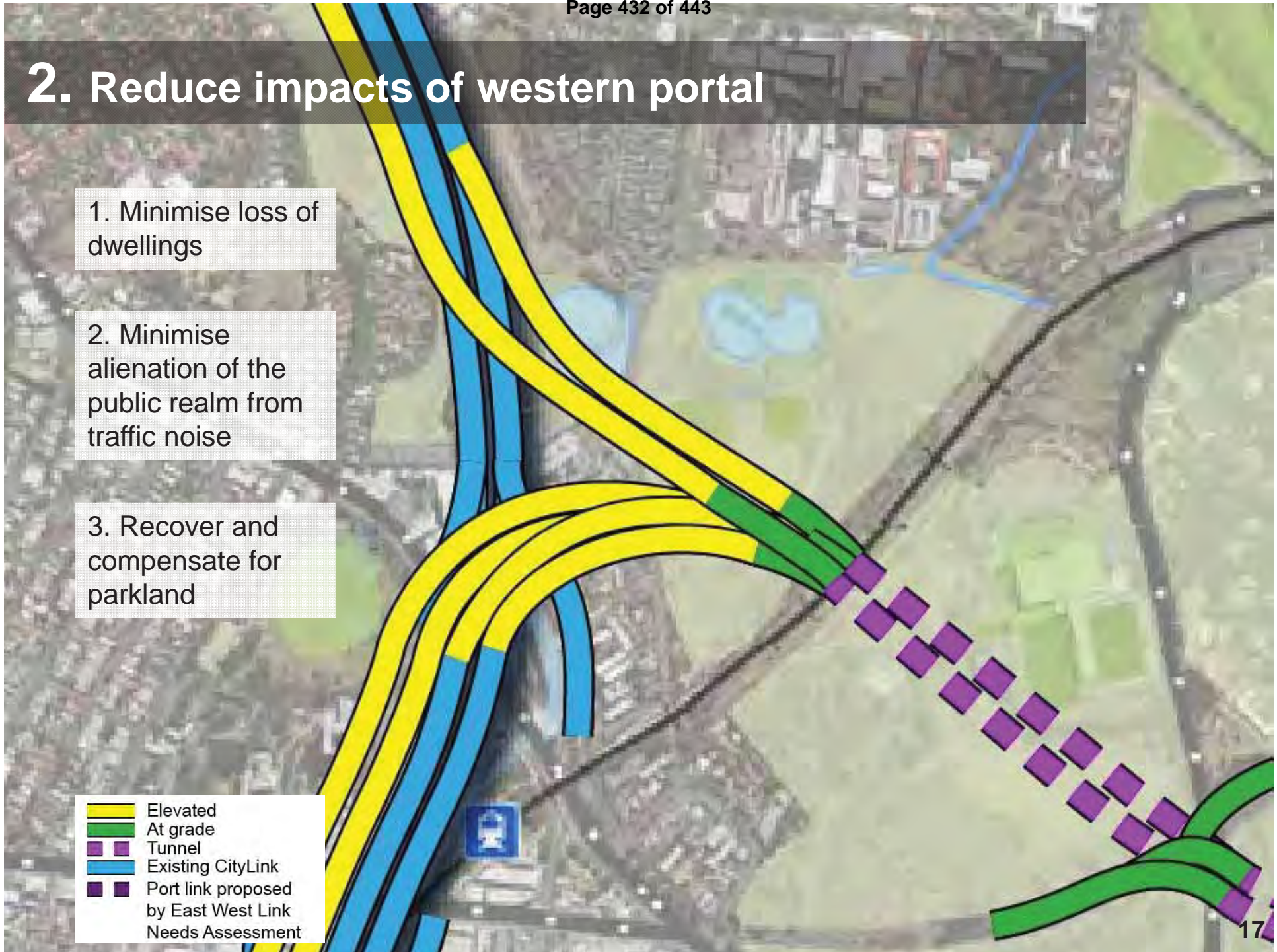
2. Reduce impacts of western portal

1. Minimise loss of dwellings

2. Minimise alienation of the public realm from traffic noise

3. Recover and compensate for parkland

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment








2. Reduce impacts of western portal

1. Minimise loss of dwellings

2. Minimise alienation of the public realm from traffic noise

3. Recover and compensate for lost or alienated parkland

Mounding Option

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment

2. Reduce impacts of western portal

Recover and compensate for lost or alienated parkland **The Reference Design**



2. Reduce impacts of western portal

Recover and compensate for lost or alienated parkland **Earth Mound Option**








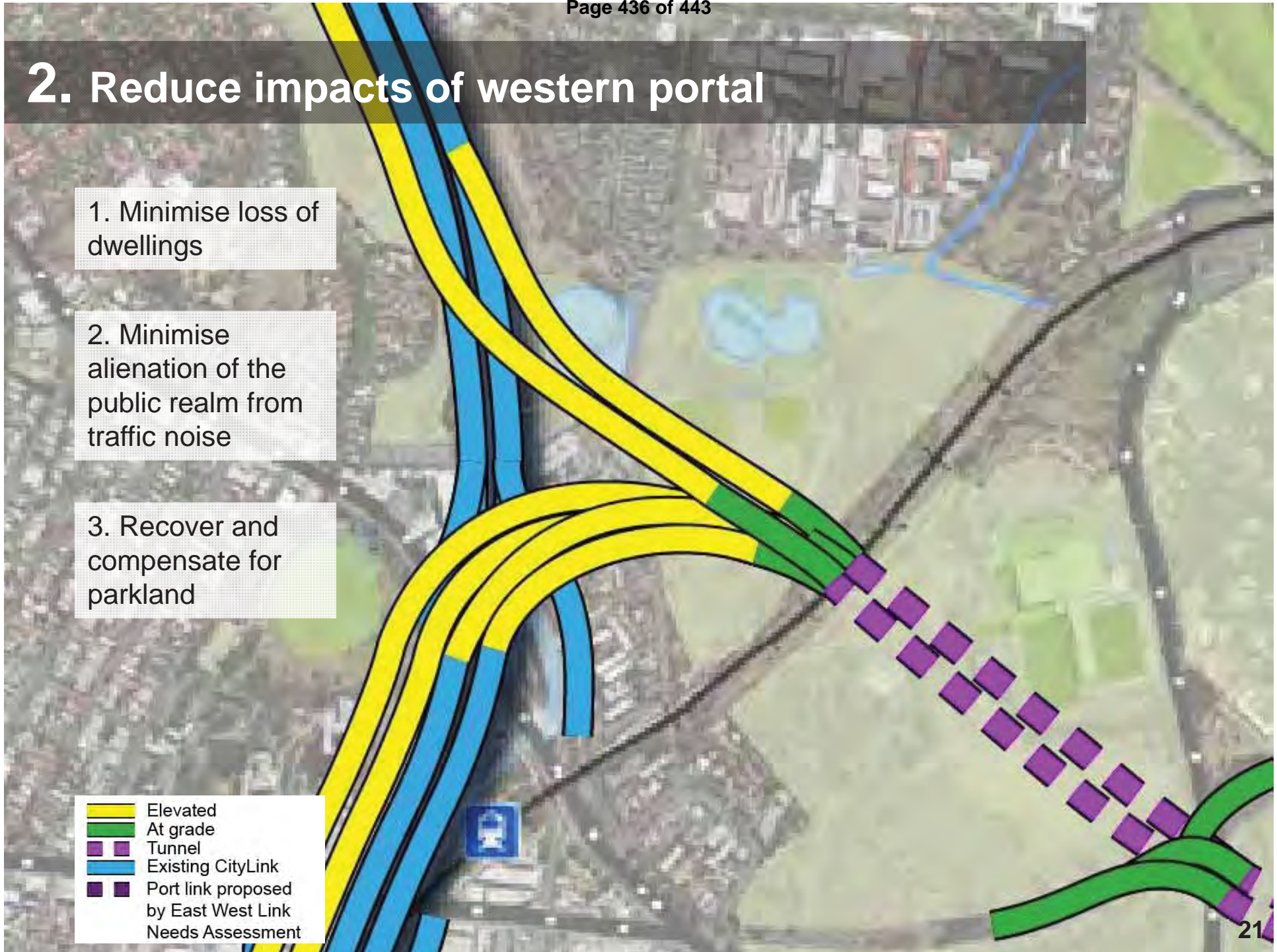
2. Reduce impacts of western portal

1. Minimise loss of dwellings

2. Minimise alienation of the public realm from traffic noise

3. Recover and compensate for parkland

-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment



2. Reduce impacts of western portal






1. Minimise loss of dwellings

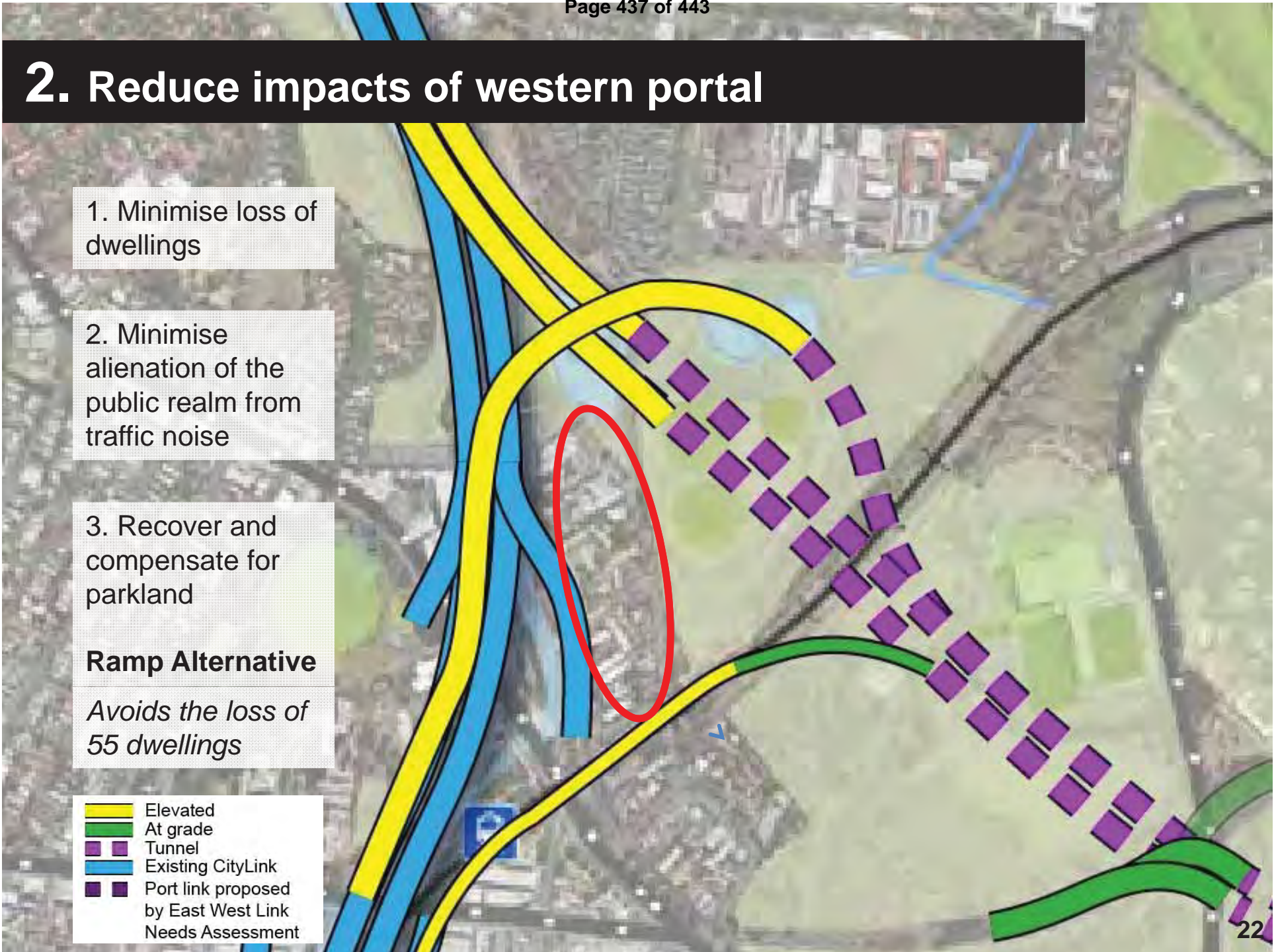
2. Minimise alienation of the public realm from traffic noise

3. Recover and compensate for parkland

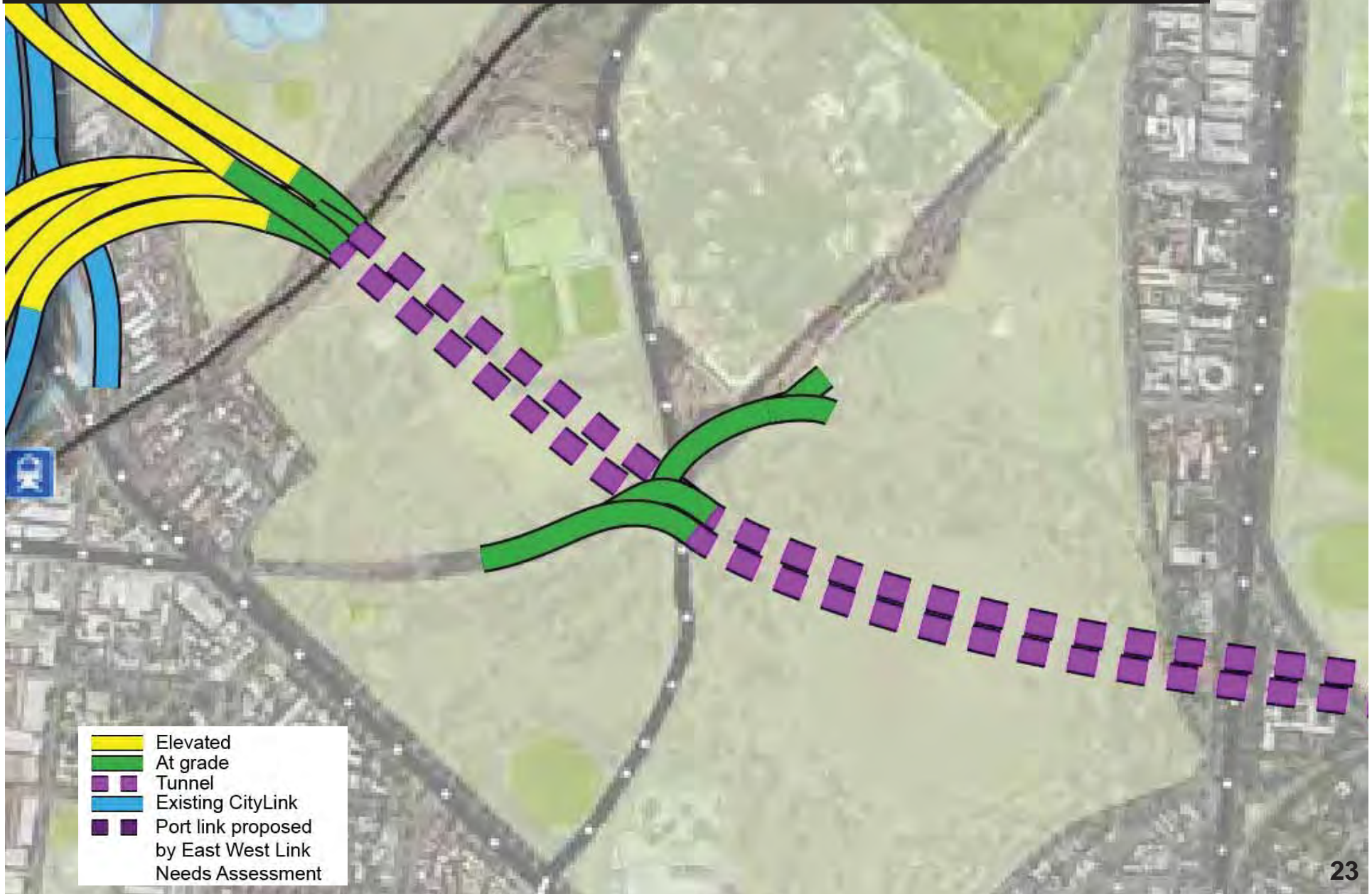
Ramp Alternative

Avoids the loss of 55 dwellings

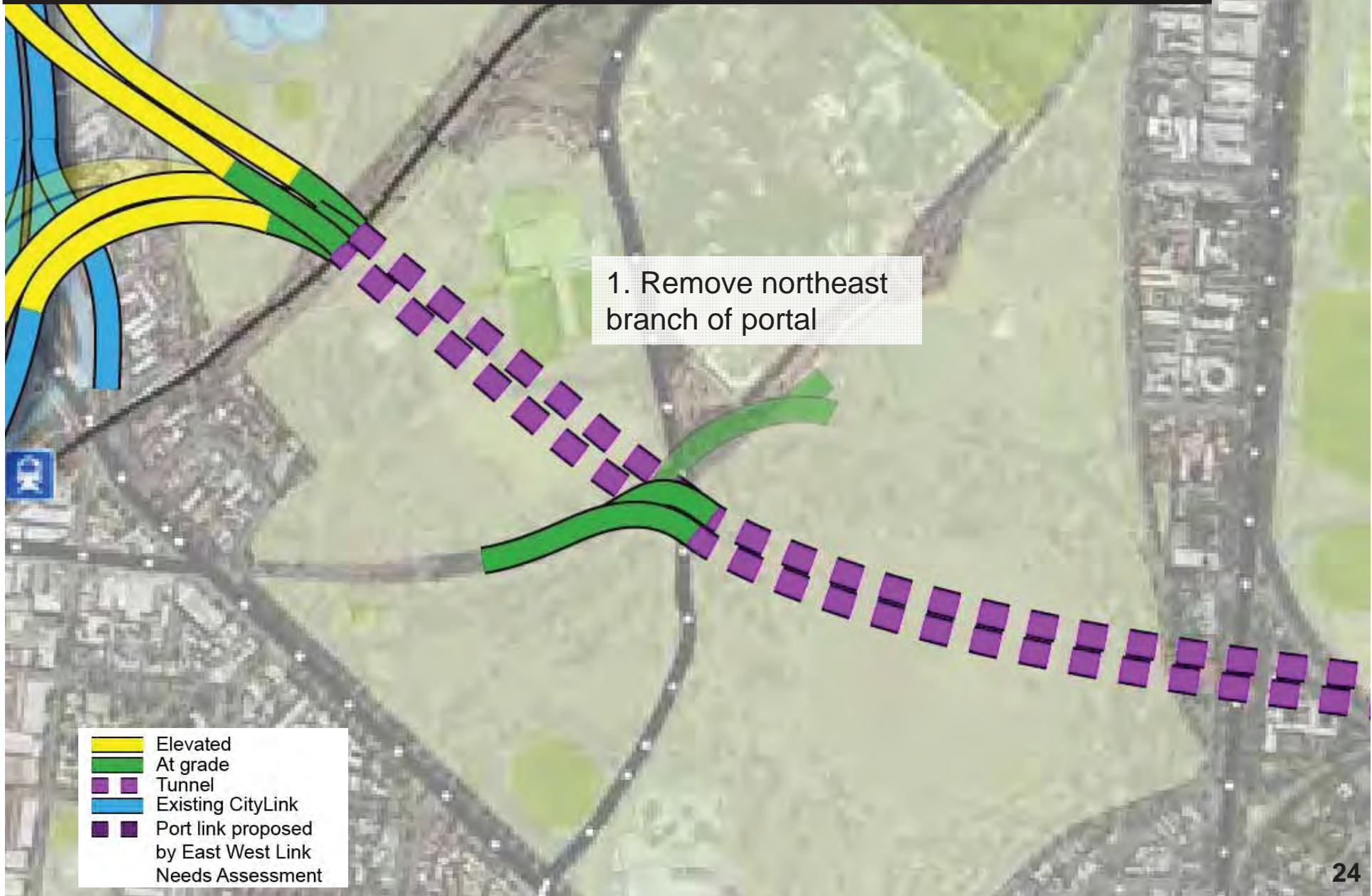
-  Elevated
-  At grade
-  Tunnel
-  Existing CityLink
-  Port link proposed by East West Link Needs Assessment



3. Reduce impacts of Elliot Ave portal on Royal Park



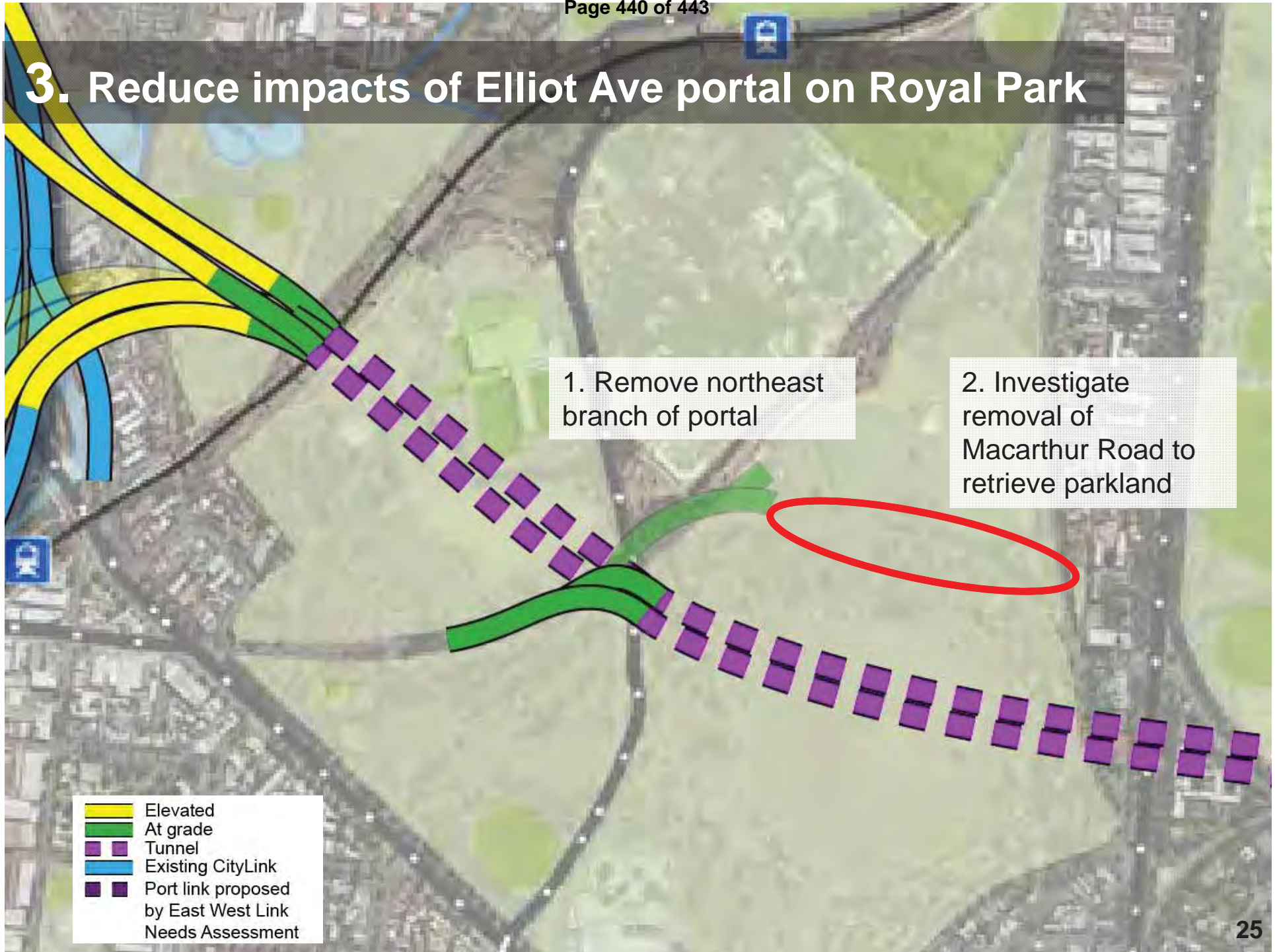
3. Reduce impacts of Elliot Ave portal on Royal Park



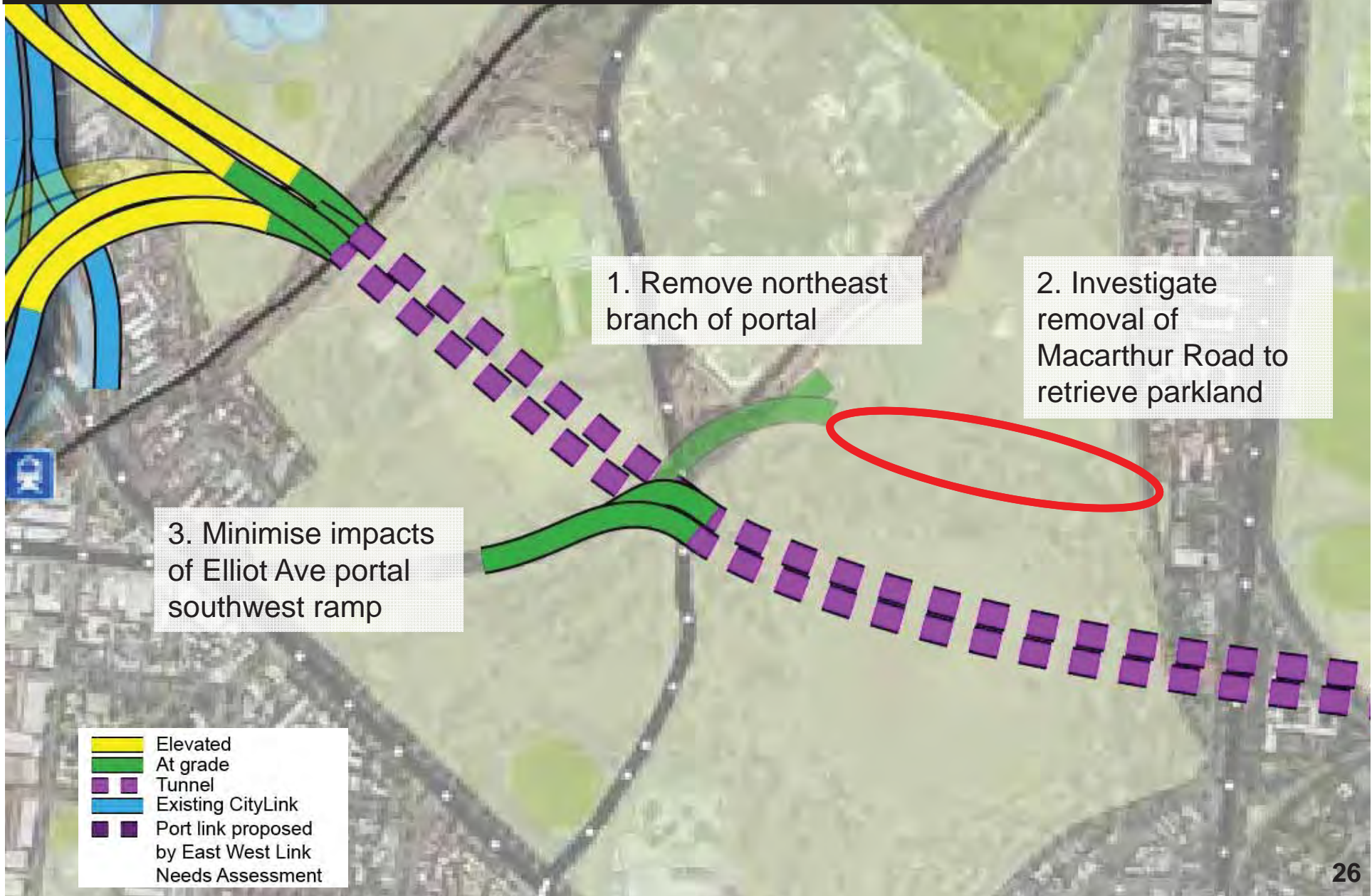
1. Remove northeast branch of portal

- Elevated
- At grade
- Tunnel
- Existing CityLink
- Port link proposed by East West Link Needs Assessment

3. Reduce impacts of Elliot Ave portal on Royal Park

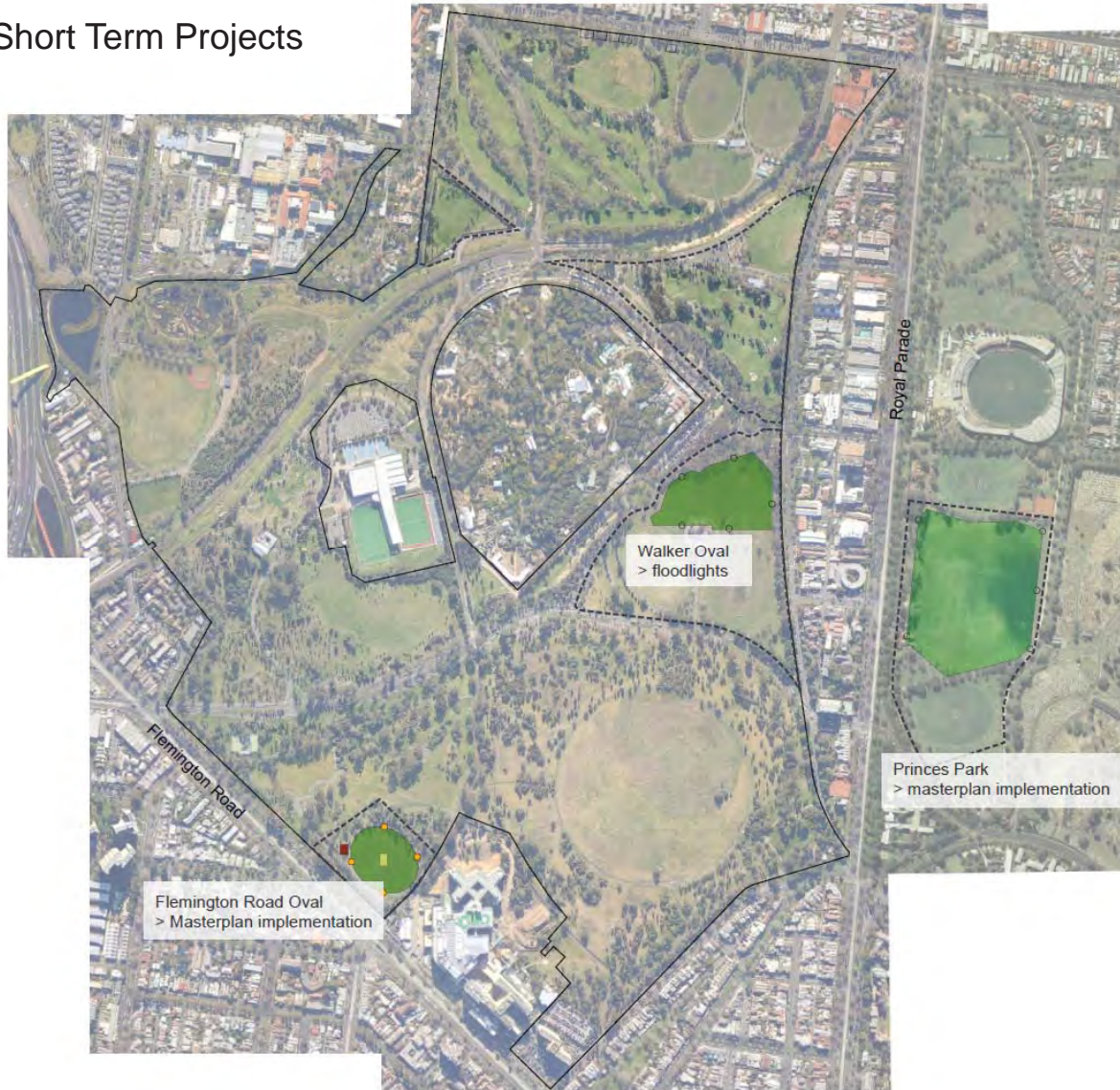


3. Reduce impacts of Elliot Ave portal on Royal Park



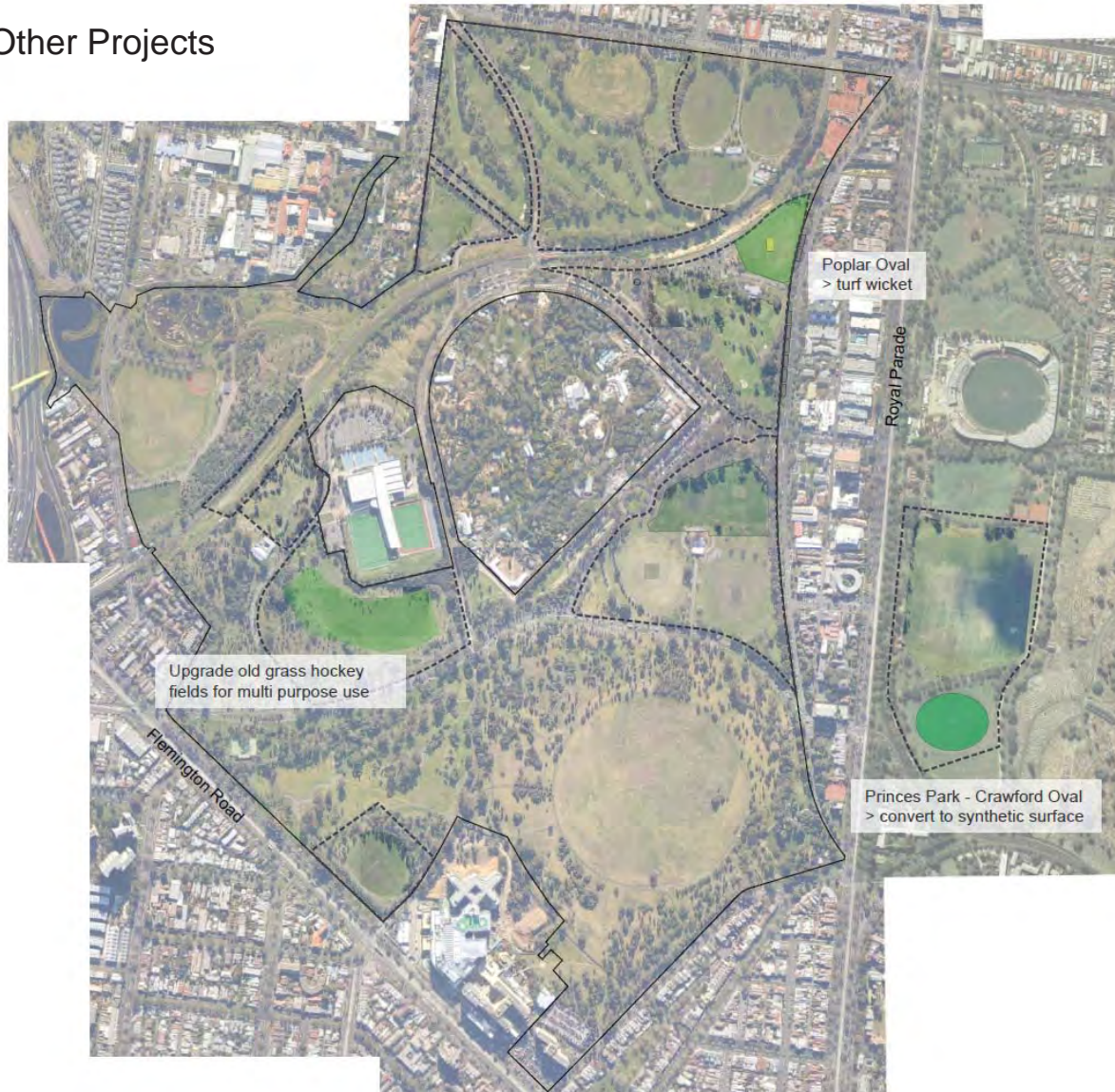
4. Provide Royal Park sporting and recreational facilities

Short Term Projects



4. Provide Royal Park sporting and recreational facilities

Other Projects



Expand water storage and irrigation system with potential connection to Dights Falls