

**LOTS 9 & 9525
VICTORIA
PARK DRIVE,
BURSWOOD**

STRUCTURE PLAN
AMENDMENT (VICP / 2016)

AUGUST 2017



Document Control

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ENDORSEMENT PAGE

This structure plan amendment is prepared under the provisions of the Town of Victoria Park

Town Planning Scheme No. 1

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE

WESTERN AUSTRALIAN PLANNING COMMISSION ON:

[DATE]

Signed for and on behalf of the Western Australian Planning Commission:

an officer of the Commission duly authorised by the Commission pursuant to section 16

of the Planning and Development Act 2005 for that purpose, in the presence of:

_____ Witness

_____ Date

_____ Date of Expiry

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Executive Summary

This structure plan amendment request (Structure Plan amendment) has been prepared by TPG Town Planning, Urban Design and Heritage (TPG) on behalf of EG Funds Management Pty Ltd (EG Funds), and seeks an amendment to the operational Burswood Lakes Structure Plan (the Structure Plan) for Lots 9 & 9525 Victoria Park Drive, Burswood (the subject sites).

The Burswood Lakes Precinct is a highly prominent location within the Perth Metropolitan Region where it forms a frame edge to the city and along with other precincts of the Burswood Peninsula contains a number of entertainment and sporting functions. The subject sites are strategically located having excellent public transport access, strong vehicle linkages, within close proximity of the Perth CBD, the Crown Perth entertainment precinct and the new Perth Stadium, which is currently under construction.

This structure plan amendment aligns with the overall strategic intent for the area, and ties into the planning framework over the site including the Burswood Peninsula District Structure Plan (Burswood Peninsula DSP), the Town of Victoria Park (the Town) Town Planning Scheme No 1 and local planning policies.

This proposed Structure Plan amendment has been written in accordance with the Western Australian Planning Commission (WAPC) guidelines for the format, preparation and lodgement of structure plans under the Planning and Development (Local Planning Schemes) Regulations 2015 (the Regulations).

The format of this Structure Plan amendment has been designed to append and add to the existing Structure Plan. Given the age and format of the existing 2002 Structure Plan, this format was chosen to keep the proposed amendment and level of detail herein more in line with the current Regulations and have a focus on the subject sites. Provided within Part One, section 7.0.1-Amended Figures is a suite of updated figures to reflect the proposed Structure Plan amendment, and these figures supersede the plans contained within the original Structure Plan document.

Summary Table

Item	Data
Total Area Covered by Structure Plan	1.1454ha
Area of Residential	Ha / Lot Yield 1.1454ha
Retail	2,200m ²
Total Lot Yield	Existing lots
Estimated no. of dwellings	353 dwellings, 208 serviced apartments.
Estimated site density	308 dwellings per hectare (489 including serviced apartments).
Estimated Population	N/A
No. of high schools	N/A
No. of primary schools	N/A
Estimated commercial floorspace	1,600m ² of retail floor space
Estimated open space area	As per Structure Plan
Estimated percentage of natural area.	As per Structure Plan



Part One: Implementation

1. Structure Plan Amendment Area

This structure plan amendment relates to both Lot 9 and Lot 9525 Victoria Park Drive, Burswood (the subject site). Both lots are considered simultaneously on the basis of their common ownership, close relationship, clear opportunities for compatible built form and use and the high level of potential integration between the two sites. The subject sites are also commonly referred to as a distinct 'neighbourhood' within the Structure Plan. In terms of broad context, the subject sites are in close proximity to the Burswood Train Station, being immediately north east of the Crown Perth entertainment precinct and in close proximity to the Great Eastern Highway within the suburb of Burswood.

2. Operation

This structure plan amendment to the endorsed Burswood Lakes Structure Plan 2003 (as amended) comes into effect on the date of approval by the WAPC.

3. Staging

As the Burswood Lakes Structure Plan has been operational for a number of years and approaching completion, all necessary major infrastructure and roads are already in existence within the structure plan area. Additional servicing and capacity needs will be addressed at development stage as outlined in detail in the servicing section of this report. Future development will be subject to separate development approvals.

4. Development Requirements - Structure Plan Amendment

The structure plan amendment allows for the development of three towers - two residential towers on Lot 9 and one Hotel I Serviced Apartments apartment tower on Lot 9525 with associated parking, servicing areas, access and integration with external sites as well as a limited number of small retail tenancies to service the resident and Serviced Apartments population.

The proposed amendment to the Structure Plan as it relates to the subject sites will create high quality developments that are well integrated with the adjacent development and train station. Development provisions are detailed below. Detail that is not amended by these provisions remains consistent with the existing Burswood Lakes Structure Plan.

4.0.1 Land Use and General Development

Land uses on the subject sites are as per the planning framework as detailed within the Burswood Precinct plan.

4.0.2 Built Form

The proposed built form on the subject sites is to:

- Ensure a high degree of engagement with the public realm while protecting the privacy of future residents.
- Provide for a greater diversity of housing, including short-stay apartments in close proximity to conveniently located commercial, retail and entertainment facilities all within close proximity to public transport services.
- Incorporate high quality and publicly accessible landscaped open spaces, and activated internal connections.

- Address constraints associated with potential noise and vibration impacts from the railway line.
- Create an integrated and functional interface with the PTA owned land (Lot 50) and pedestrian linkages to Burswood Station.
- Be designed to make highest and best use of the subject sites.
- Lend support and add to the viability of public transport services, as well as increase passive surveillance and activation over the rail station through CPTED design principles.
- Ensure that the height and density is well designed and located appropriately within the subject sites so as to reduce the impact of the development at street level as much as is practical.

4.0.3 Plot Ratio

The plot ratio amendments for the subject sites are as follows:

- Lot 9 being amended from the current statutory provision of 1.36:1 to 4.00:1, and
- Lot 9525 being amended from 0.91:1 (0.27 over the entire site) to 2.3:1 over the entire site.

4.0.4 Maximum Number of Dwellings

The 'maximum number of dwellings' amendments for the subject sites are as follows:

- Lot 9 being amended from 60 dwellings to 353 dwellings, comprising of 340 apartments and 13 townhouse style dwellings; and
- Lot 9525 being amended from five dwellings to 208 Hotel / Serviced Apartments in lieu of permanent residential accommodation.

4.0.5 Variation to Building Height Limits and to Maximum Number of Storeys

The 'maximum building height' amendments for the subject sites are as follows:

- Lot 9 being amended from 21 metres to 75 metres, with a maximum of 24 storeys; and
- Lot 9525 being amended from 17.5 metres to 51 metres with a corresponding maximum number of storeys amended to 16.

Building heights are also subject to limitations under the Airports Act 1996 and Airports (Protection of Airspace) Regulations 1996 administered by Perth Airport and the Commonwealth Department of Infrastructure and Regional Development.

4.0.6 Vehicle Access

The following vehicle access points are provided to the subject sites:

- Lot 9 - Primary full movement vehicle access is to be from Bow River Crescent, with a potential secondary minor access from Victoria Park Drive.
- Lot 9525 - Vehicle access is to be from Victoria Park Drive.
- Detailed access arrangements for these sites will be determined as part of future development proposals. Modifications to the arrangements as set out above can be considered where supported by suitable traffic assessment.

4.0.7 Retail Floor Area

Retail development on the subject site is intended to provide for some specialty retail and the daily needs of the residents.

The following requirements relate to retail floorspace provision on the subject sites:

- A maximum of 2,400m² of retail NLA to be provided on the subject sites; and
- A maximum single tenancy size of 400m² retail NLA.

4.0.8 Other Development Controls

In addition to the provisions listed above the development of the subject sites must have regard for the existing planning and policy framework of the Town, including development policies including but not limited to:

- Local Planning Policy 4.12 Design Guidelines For Development With Buildings Above 3 - Storeys; and
- Planning Policy 3.15 Design Guidelines for Burswood Lakes

Future development will also have regard to the following Guidelines:

- State Planning Policy 5.4 Road and Rail Transport Noise and Freight Consideration in Land Use

Planning and WAPC Implementation Guidelines for State Planning Policy 5.4

- WAPC Designing Out Crime Planning Guidelines
- PTA Guidelines for Working in and Around the PTA Rail Reserve.

5. Local Development Plans

No local development plans have been provided or will be required as the level of detail contained within this Structure Plan amendment, read in conjunction with the Structure Plan itself and the Burswood Peninsula DSP, provide sufficient detail to guide the assessment of the development concepts while not prejudicing future development.

6. Other Requirements

6.0.1 Infrastructure and Servicing

The servicing investigations have been undertaken to establish the availability of the existing services infrastructure in the area and their capacity to service the proposed development. Where the existing infrastructure have been identified as potentially insufficient to meet development demands, infrastructure extensions and upgrades have been identified:

- The Water Corporation has advised that the existing wastewater reticulation network is capable of servicing the proposed development and expect this capacity to be available for the next five to ten years.
- The water pressure potentially requires that each building should allow suitable pumps and tanks for domestic water supply and fire fighting purposes.
- Lot 9 would potentially require one authority owned switchgear and two authority owned 1000kVA transformers to reticulate the distribution system throughout the proposed lot.
- Lot 9525 will potentially require one switchgear and one 1000kVA transformer.
- The existing point of electricity supply will potentially need to be removed

All above servicing requirements are based on preliminary analysis only and are subject to future investigation. Servicing upgrades relating to the subject sites that are identified in future studies are to be constructed at the cost of the developer.

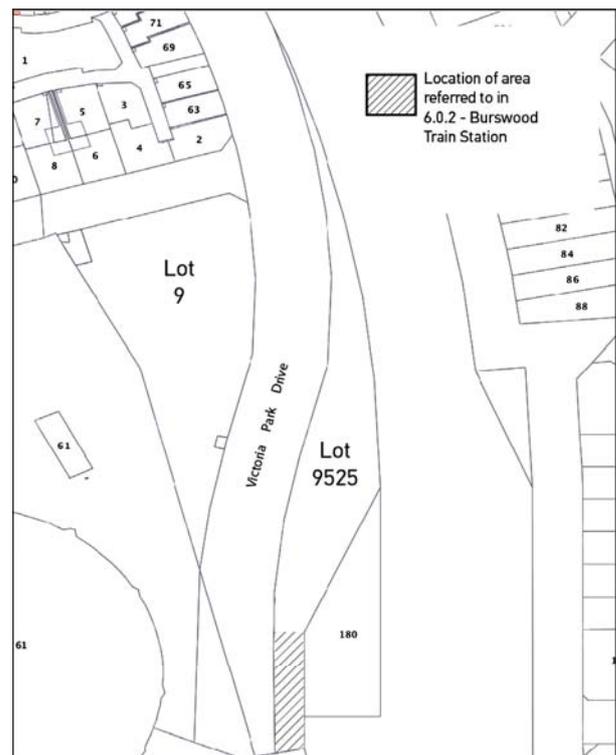
6.0.2 Burswood train station

The southern end of Lot 9525, as shown in Figure 1A, is required for the future redevelopment of the Burswood train station.

This area of land is required to remain undeveloped and available for the future station redevelopment, including potential for underground access, until such time as future land requirements for the station have been determined by the state government.

Prior to construction of development on Lot 9525, the area of this lot required for access and/or development of the station is expected to be ceded to the Crown by subdivision, or by alternate agreement.

Figure 1A - Area Required for Future Redevelopment of Burswood Train Station



7. Additional Information

7.0.1 Amended Figures

Figures 2, 5-10, 18, 19, 24, 25, 27, 29 and 31 to existing Burswood Lakes Structure Plan are amended in accordance with Table 1A below:

Table 1A - Amended Structure Plan Figures

Figure No.	Replaced Figure Name
2	Proposed Site Section And Elevation
5	Updated Photo Montages
6	Updated Photo Montages
7	Updated Photo Montages
8	Updated Photo Montages
9	Proposed Summer Shadow Analysis
10	Proposed Winter Shadow Analysis
18	Proposed Indicative Development Plan
19	Structure Plan
24	Updated Building Control Envelopes
25	Updated Building Control Envelopes
27	Updated Building Control Envelopes
29	Updated Building Control Envelopes
31	Updated Indicative Public Realm

7.0.2 Other Considerations

The following additional information will be provided at development or subdivision as specified in Table 2A below:

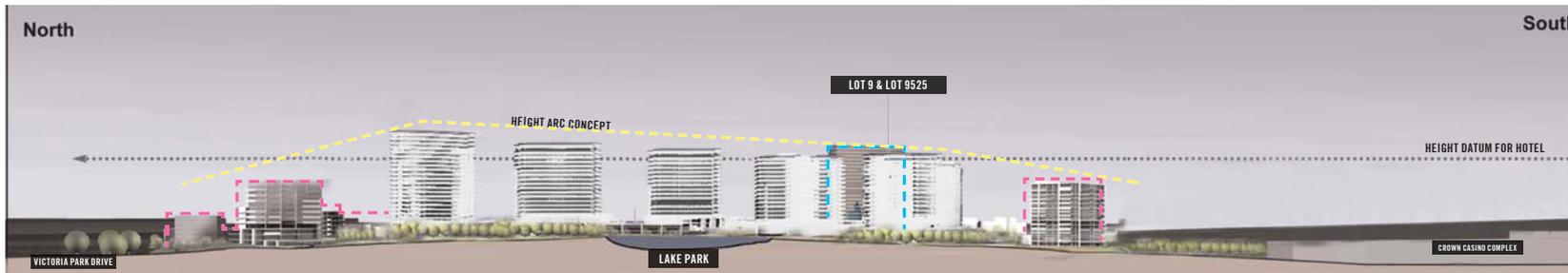
Table 2A - Additional Information Required at Development or Subdivision Stage

Additional Information	Approval Stage	Consultation Required
Design details	Development	Yes - PTA and other stakeholders
Permanent public access, to facilitate the future development of a train station forecourt	Subdivision/ Development of Lot 9525	No
Noise and vibration impact mitigation	Development	No
Crime Prevention through Environmental Design principles	Development of Lot 9525	Yes - PTA

FIGURE 2: PROPOSED SITE SECTION AND ELEVATION



EAST - WEST SECTION A-A



NORTH - SOUTH SECTION THROUGH LAKE PARK B-B

FIGURE 5: UPDATED PHOTO MONTAGES



VIEW 4: VIEW WEST FROM EAST PERTH JUNCTION OF ARDEN AND CONSTITUTION STREET



VIEW 5: MONTAGE VIEW FROM THE CAUSEWAY



VIEW 6: VIEW FROM GREAT EASTERN HIGHWAY

FIGURE 6: UPDATED PHOTO MONTAGES



VIEW 7: VIEW FROM CANNING HIGHWAY. AT THIS LOCATION, BURSWOOD LAKES CANNOT BE SEEN.



VIEW 8: APPROACHING GREAT EASTERN HIGHWAY



VIEW 7A: ("GHOST" IMAGE) - THIS VIEW DEMONSTRATES THE 'LOCATION' OF BURSWOOD LAKES IN VIEW 7. HOWEVER, THE DEVELOPMENT IS SCREENED BY EXISTING BUILDINGS AND MATURE TREES.



VIEW 8A: ("GHOST" IMAGE) - THIS VIEW DEMONSTRATES THE 'LOCATION' OF BURSWOOD LAKES IN VIEW 8. HOWEVER, THE DEVELOPMENT IS SCREENED BY EXISTING BUILDINGS AND MATURE TREES.

FIGURE 7: UPDATED PHOTO MONTAGES



VIEW 9: VIEW NORTHWEST FROM THE JUNCTION OF SHEPPERTON ROAD AND FLINT STREET, VICTORIA PARK. BURSWOOD LAKES CANNOT BE SEEN.



VIEW 10: VIEW NORTHWEST FROM NEXT TO ORIGINAL SITE OF THE OLD RED CASTLE HOTEL



VIEW 9A: ("GHOST" IMAGE) - THIS VIEW DEMONSTRATES THE 'LOCATION' OF BURSWOOD LAKES IN VIEW 9. HOWEVER, THE DEVELOPMENT IS SCREENED BY EXISTING BUILDINGS AND MATURE TREES.



VIEW 10A: ("GHOST" IMAGE) - THE TOPOGRAPHY AND MATURE TREES ALL SCREEN BURSWOOD LAKES FROM VIEW.

FIGURE 8: UPDATED PHOTO MONTAGES



VIEW 11: VIEW FROM NEAR THE BBQ AREA ON THE BANKS OF THE SWAN RIVER (IN FRONT OF CROWN CASINO COMPLEX)



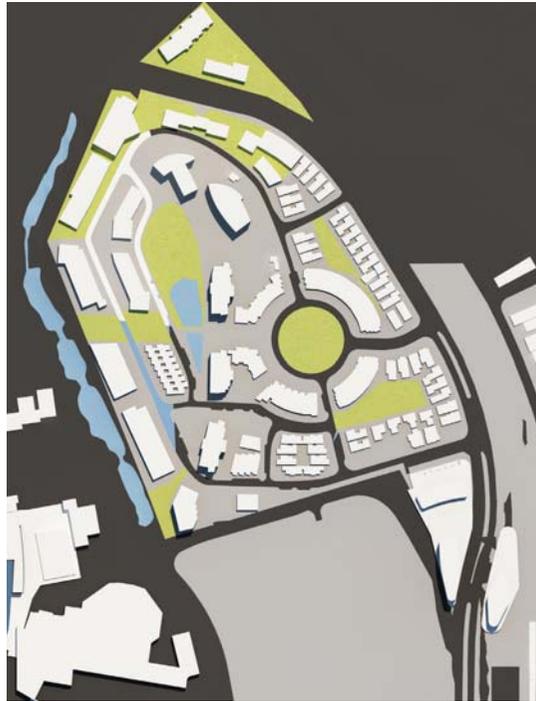
VIEW 12: VIEW FROM VICTORIA PARK DRIVE OVERPASS NORTH OF THE SITE

FIGURE 9: PROPOSED SUMMER SHADOW ANALYSIS

SUMMER SOLSTICE - DECEMBER 21ST



9:00AM



12:00PM



4:00PM

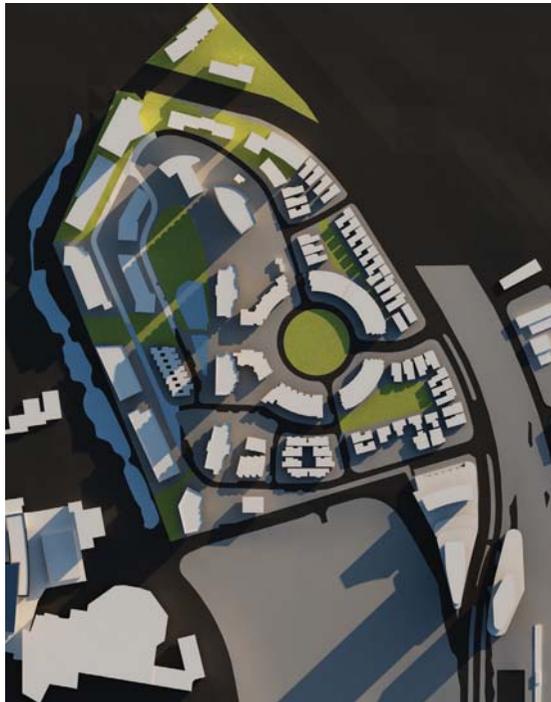
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FIGURE 10: PROPOSED WINTER SHADOW ANALYSIS

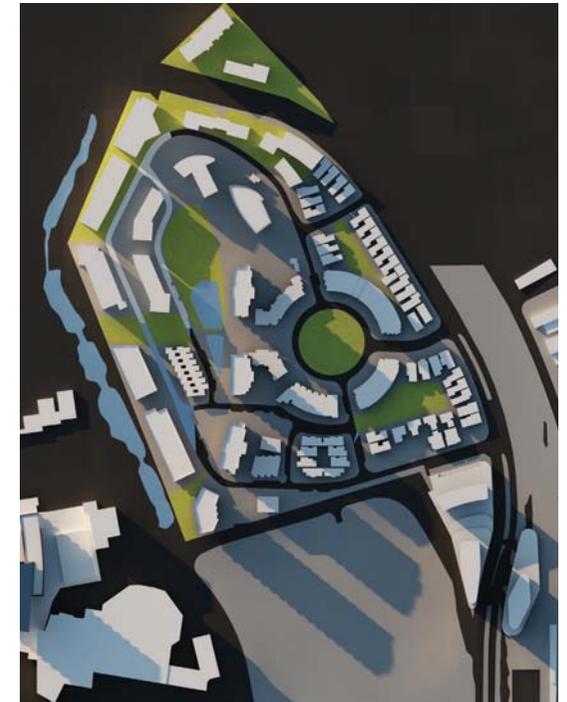
SUMMER SOLSTICE - JUNE 21ST



9:00AM



12:00PM



4:00PM

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FIGURE 18: PROPOSED INDICATIVE DEVELOPMENT PLAN



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FIGURE 19: PROPOSED STRUCTURE PLAN AMENDMENT GRAPHIC



Proposed Structure Plan Amendment Graphic

FIGURE 24: UPDATED BUILDING CONTROL ENVELOPES

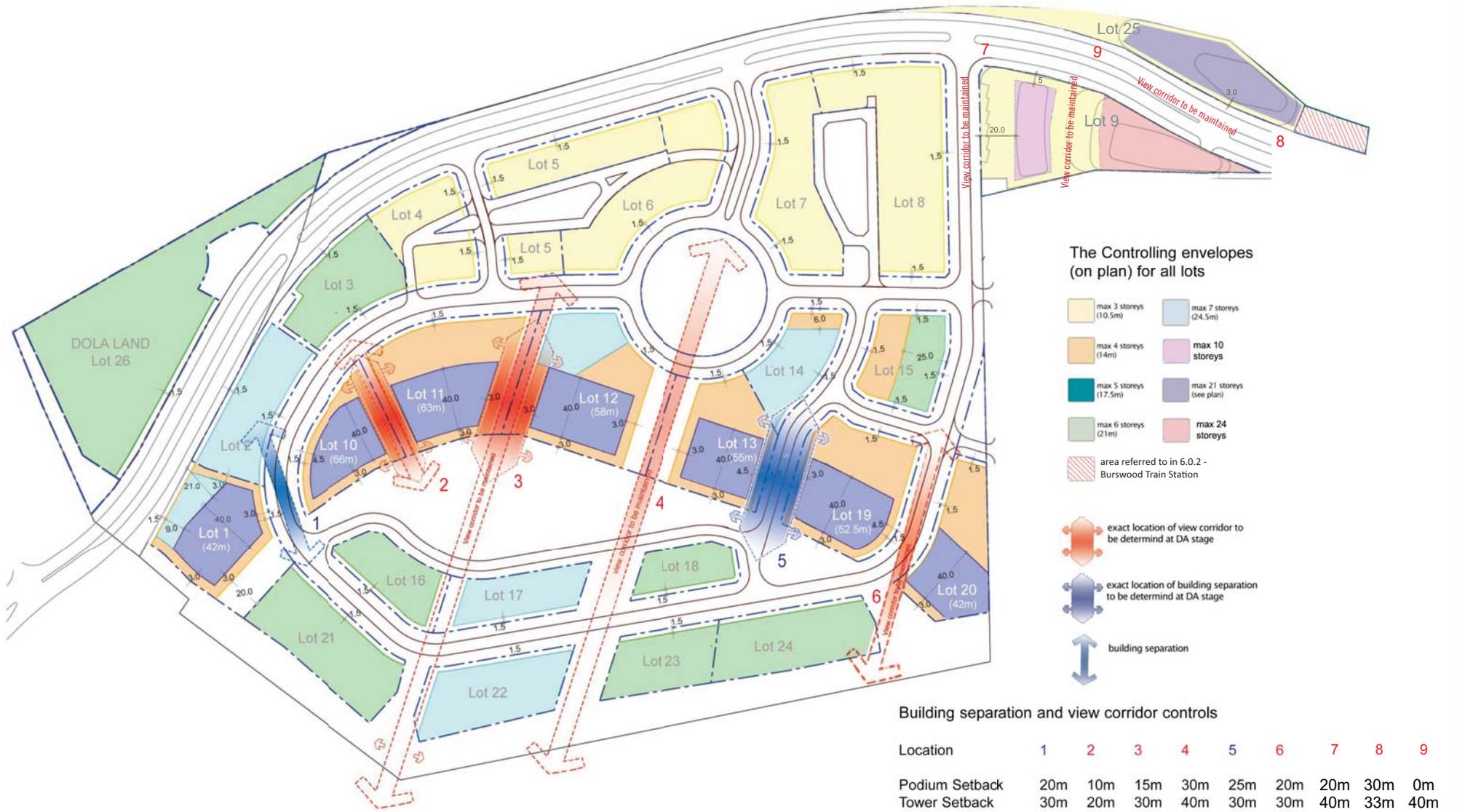
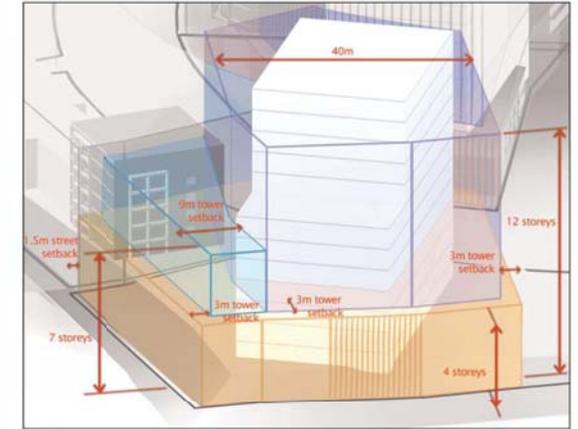
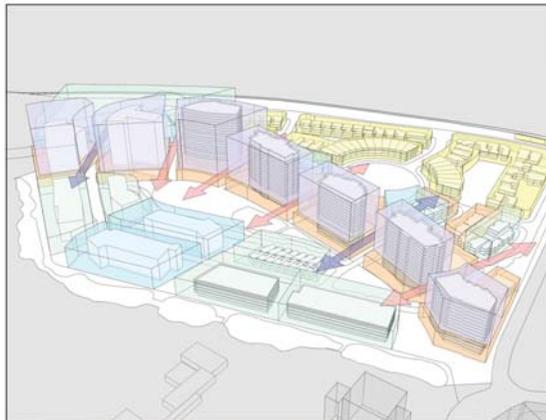
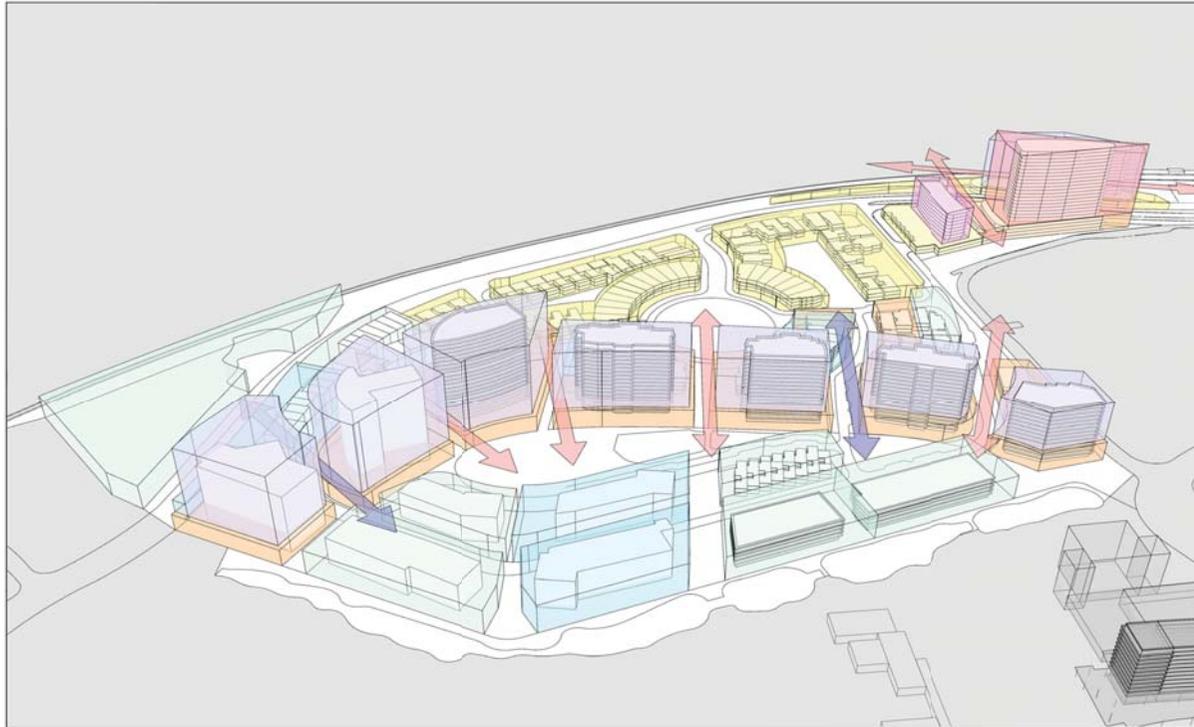
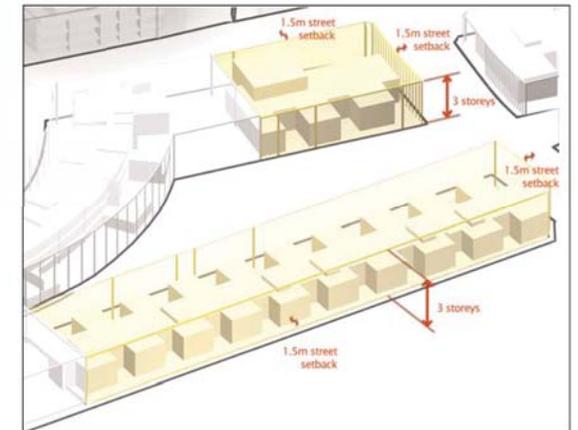


FIGURE 25: UPDATED BUILDING CONTROL ENVELOPES



LOT 1



LOT 5

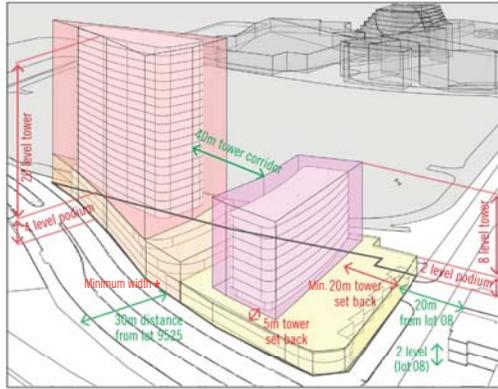
- max 3 storeys
 max 5 storeys
 max 7 storeys
 max 21 storeys
- max 4 storeys
 max 6 storeys
 max 10 storeys
 max 24 storeys

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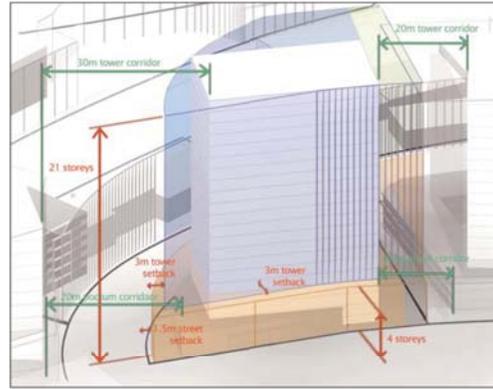
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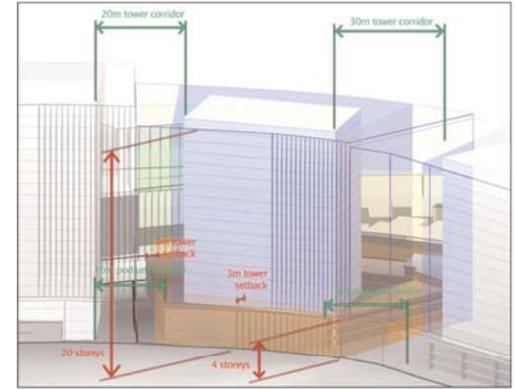
FIGURE 27: UPDATED BUILDING CONTROL ENVELOPES



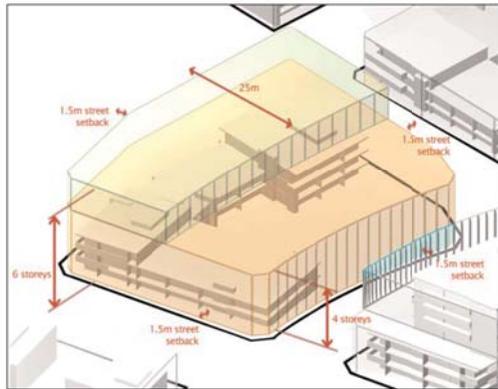
LOT 9 * Pedestrian access to be minimum width of 8m



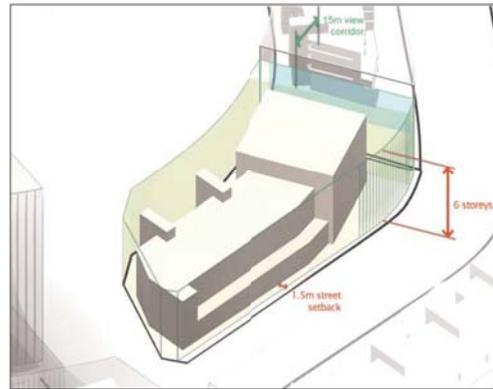
LOT 10



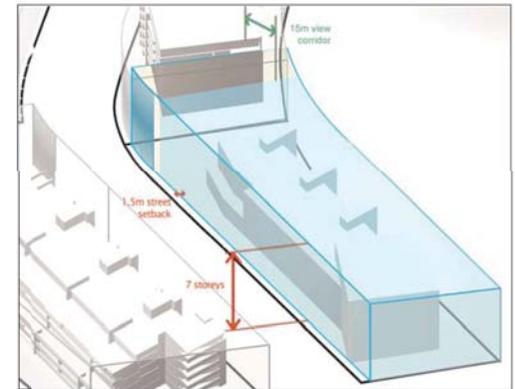
LOT 11



LOT 15



LOT 16



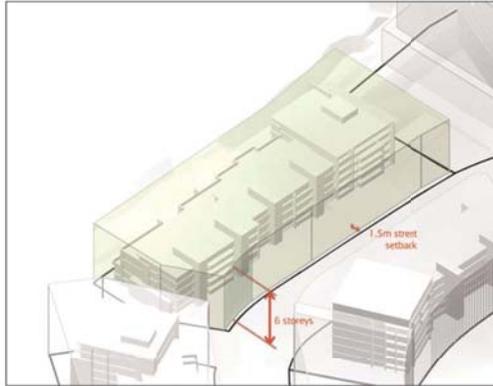
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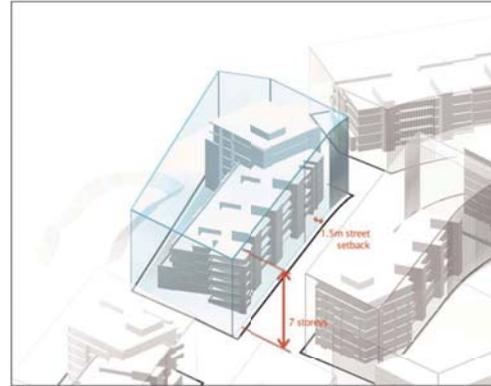
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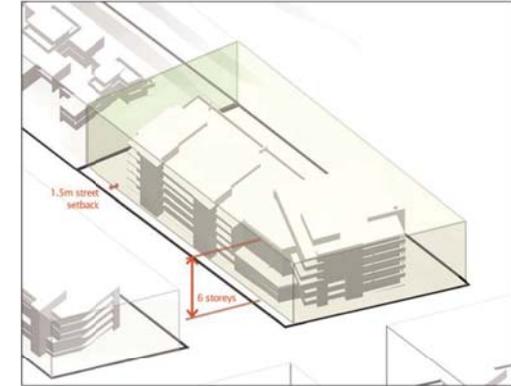
FIGURE 29: UPDATED BUILDING CONTROL ENVELOPES



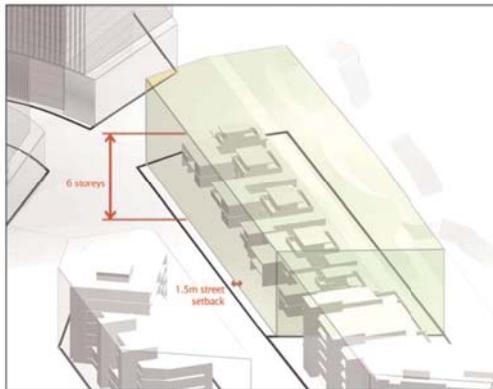
LOT 21



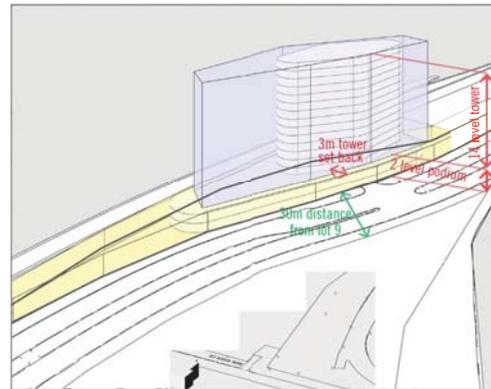
LOT 22



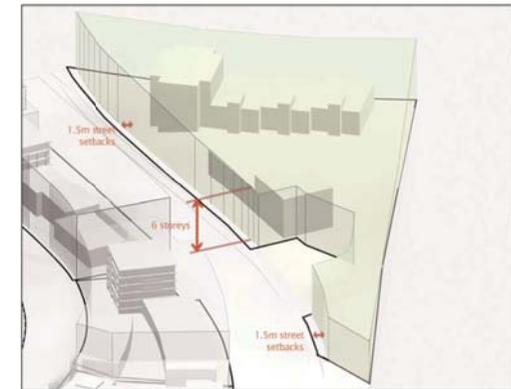
LOT 23



LOT 24



LOT 25



DOLA / MRD LAND (LOT 26)

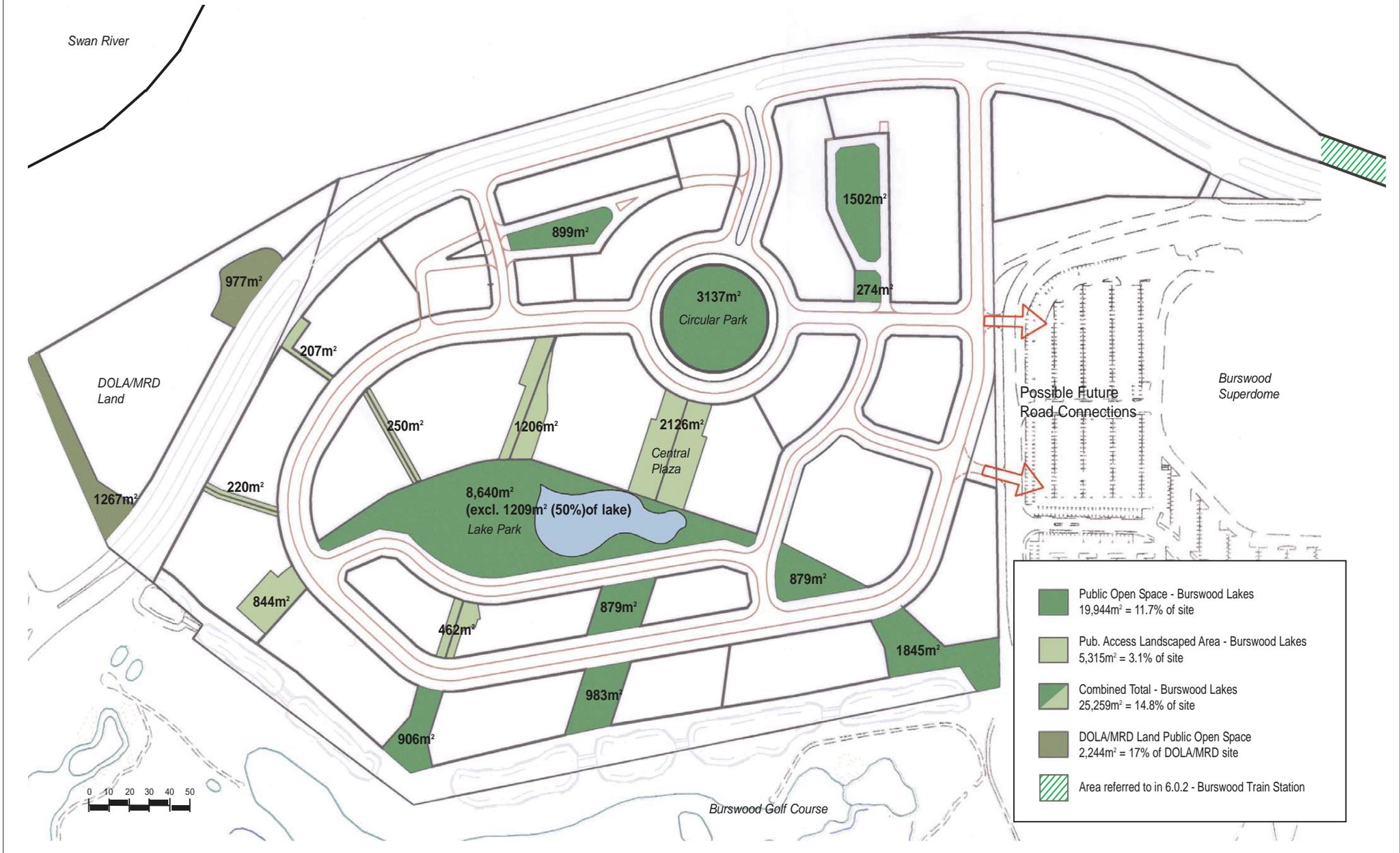


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FIGURE 31 - INDICATIVE PUBLIC REALM



Part Two: Explanatory Report

Preamble

The purpose of Part Two of this report is to provide the planning background and explanatory information used to prepare the Structure Plan amendment and inform the controls detailed in Part One. The following information is directly relevant and is deemed to be more than sufficient to support the Structure Plan amendment for the subject sites and provide further information to assist decision-making. The format of this Structure Plan amendment has been designed to append and add to the existing Structure Plan, and has been drafted as a balance between the provisions of the operational Structure Plan and the Regulation provisions. Given the age and format of the Structure Plan, this format was chosen to keep the proposed amendment and level of detail herein more in line with the current Regulations with a direct focus on the subject sites.

In addition to the above, as part of the preliminary stages of the consideration of this Structure Plan amendment feedback was sought from the Town's Design Advisory Committee (DRC), who provided valuable feedback which has been incorporated into the final framework of the Structure Plan amendment.

The structure plan amendments allows for the development of three towers - two residential towers on Lot 9 and one Hotel I Serviced Apartments apartment tower on Lot 9525 with associated parking, servicing areas, access and integration with external sites as well as a limited number of small retail tenancies to service the resident and Serviced Apartments population.

The Structure Plan amendment request ultimately requires approval from the WAPC, with reference to any comments and recommended modifications made by the Town who will assess the Structure Plan amendment request and conduct the required public consultation processes. In making a decision on the proposal the WAPC will need to consider its planning and strategic

merits and if the requested amendments to the Structure Plan will prejudice progressive development of the area in the context of the current planning framework and history of the site.

The following amendments to the Structure Plan are requested to Lots 9 and 9525:

- Amendments to plot ratio provisions.
- Amendments to maximum number of dwellings provisions.
- Amendments to land use, building height limits, maximum number of storeys, the inclusion of some minor retail land use floorspace and indicative built form controls.

Detail that is not amended by these provisions remains consistent with the existing operational Structure Plan.

Figure 19 depicts the structure plan amendment request in graphical terms consistent with the existing graphics in the Burswood Lakes Structure Plan.

The Structure Plan amendment provisions have been developed based on specific development concepts for the subject sites that have been evolved in accordance with the planning framework, the previous work done on the site, the project architects Elenberg Fraser, the DoP, the Public Transport Authority (PTA) and other sub consultants as required.

The Structure Plan amendment provisions have also been the subject of detailed feedback from the Town's Design Review Committee who made a number of recommendations which have been incorporated into the final framework.

Specific regard has been had to ensuring that any future development of the subject sites integrates with the PTA proposals for the rail station, and the integration of the sites into the precinct wide planning that has been undertaken separately.

The purpose of this Structure Plan amendment report is to address relevant development standards and to also demonstrate why the structure plan variations as requested will not prejudice the progressive development of the area and will assist in realising the objectives and built form envisaged by the Burswood DSP and State level planning instruments that promote Transit Oriented Development (TOD) and urban activation.

Planning background

Introduction and Planning History

The purpose of this section is to provide a summary of current strategic planning policy and historical planning activity relating to the subject sites and wider Burswood Peninsula.

Burswood Lakes Structure Plan

The Burswood Lakes Structure Plan (Structure Plan) and associated precinct plan amendment were prepared in 2002 in order to guide future development of the Burswood Precinct (the former Swan Portland Cement site) in an orderly manner. The Structure Plan introduced corresponding amendments to the Town's Burswood Precinct Plan P2 (the Precinct Plan) in order to implement the outcomes depicted in the Structure Plan.

The current controls that were implemented through the structure planning process altered the requirements within Table 1 of the Residential Design Codes (R-Codes) and introduced density controls through maximum dwelling numbers, in addition to the use of the R-IC performance standards of the R-Codes.

The intent of the alterations was to provide for a more open and creative framework within which to facilitate development that would accommodate a rising inner city population. It was considered at the time of creation of the structure plan that from 1996 to 2031 there would be projected growth of 4,500 persons in the Central Perth area and a total of 10,100 residents. This formed the basis for the density controls. It is noted that this is not considered to be an accurate reflection of current or projected housing demand.

Burswood Peninsula District Structure Plan

Following on from the Burswood Station Precinct Development Review process undertaken in 2005, there was recognition by the Town of Victoria Park (the Town), the Department of Planning (DoP), the Public Transport Authority (PTA) and the other key stakeholders in the area that a substantive review needed to be undertaken of the future strategic planning for the entire Burswood Peninsula, inclusive of the area to the north of Great Eastern Highway, extending north to the Swan River, including the Belmont Racecourse and areas east of the railway line and Graham Farmer Freeway. The Burswood Peninsula District Structure Plan (Burswood Peninsula DSP) was created in order to recognise the key inner city location of the Burswood Peninsula and to facilitate the objectives of key State and local planning policies.

The project is to look at opportunities to take maximum advantage of transport and infrastructure provision within these areas to promote sustainability and to provide high quality community and private places for the benefit of residents and the wider community.

The draft Burswood Peninsula DSP, although not intended to be a statutory instrument, establishes the overarching principles and settings within which the further structure planning activities (and indeed structure plan amendments such as this) can be progressed. Due to the complexity of issues involved and significant State investment in the area, the Burswood Peninsula DSP was a planning exercise undertaken collaboratively between by the DoP and the Town in consultation with a large number of stakeholders and service agencies. This Structure Plan amendment request as proposed has been prepared in the context of this document, and is considered to completely align with the scale, intent and strategic direction of the Burswood Peninsula as envisioned within the Burswood Peninsula DSP.

The Subject Sites - Structure Plan Amendment History

A previous Structure Plan amendment request was lodged with the Town in 2009, and whilst it received support from the DoP the Town refused to approve the application on 24 November 2009. The Applicant subsequently applied to the State Administrative Tribunal (the SAT) for review of the Town's decision.

The Minister for Planning, Culture and the Arts (the Minister) directed the President of the SAT to refer the application for determination pursuant to section 246(2) (a) of the Planning and Development Act 2005 (WA) (the Act) due to the significance of the subject sites. The reasons for determining that the application was refused have been summarised and tabulated below, along with commentary against the reasons noting how the planning framework and context have progressed significantly since the decision by the Minister, and should now be approved.

Ministerial Determination – Summary and Commentary

The ministerial decision in broad summary came down to one main issue, as follows:

- (a) *Whether approval of the Variation would be premature having regard to:*
- (i) *the commencement but non-completion of the structure planning and investigations identified as necessary by the Review and, more particularly, by the draft Framework; and*
 - (ii) *the planning and investigations underlying the Variation request, including work done for earlier planning documents.*

In addressing the above point, the ultimate decision of the Minister was that the application to vary the Structure Plan was premature in the context of ongoing planning investigations in progress with the Department of Planning and the Town, also in the context of other high profile planning decisions such as the location of the new Perth Stadium and Crown Towers were underway which had the potential to influence the planning and development form of the area.

At the time, the proponent presented the following key arguments which remain relevant to the current proposed Structure Plan amendment:

- Development of the subject land consistently with the constraints currently imposed by the Structure Plan would result in a sub-optimal development.
- The Structure Plan amendment is consistent with relevant regional planning documents, the Review and the draft Framework, particularly in relation to the encouragement of transit oriented developments, and would lead to several desirable outcomes.
- The Structure Plan, the Review, the draft Framework and the Structure Plan amendment request collectively provide an adequate and sufficient overview and consideration of the matters required to be contained and addressed in a structure plan, pursuant to clause 29 of TPS 1.
- The Structure Plan amendment provides the detail required for a structure plan, including in relation to development standards and controls and the effect of development authorised by the Variation on the progressive development of the locality, so that:
 - the Structure Plan amendment will provide the necessary guidance and certainty in respect of the development to occur on the subject land;
 - approval of the Structure Plan amendment would not prejudice progressive development of the locality; and
 - the process under TPS 1 and the Precinct Plan for amending the Structure Plan in accordance with the Structure Plan amendment is appropriate.
- The Precinct Plan expressly contemplates amendments and alterations to, and significant departures from, the Structure Plan.
- The subject sites are distinguishable from other land in the locality in a way which favours its development in advance of other land in the vicinity and prior to the completion of the structure planning and investigations identified by the Review and the draft Framework because:
 - The current planning framework allows for significant alterations to the Structure Plan;
 - The subject sites are in close proximity to the Station;
 - The subject sites have a unique locational relationship with the central area of developed land in the Structure Plan Area;
 - The subject sites comprise a relatively isolated development node because it is located adjacent to:

- The Burswood Lakes development but separated from it by Bow River Crescent and the Burswood Entertainment Centre by the (former) Burswood Dome site, in respect of Lot 9 and on the western side of Victoria Park Drive; and the Station site and the Perth to Armadale railway line in respect of Lot 9525 and on the eastern side of Victoria Park Drive;
- There is already an established road network servicing the subject land and the immediate locality that is unlikely to be changed by the diversion, or otherwise, of those roads;
- It does not impact on the connectivity and access points between the development sites; and
- The WAPC and the DoP support approval of the Structure Plan amendment.

The Minister in his decision to refuse the previous Structure Plan amendment request noted that some elements such as the traffic analysis were too focussed on the subject site, and that whole of precinct effects were unable to be assessed in the context of surrounding and future development. Cognisant of these concerns, the proponent has addressed precinct wide implications of the structure plan amendments proposed within this report. In addition, the key considerations from the Ministerial decision have been addressed in Table 1 overleaf.

Table 1 - Response to Key Considerations from Ministerial Decision

Key Considerations of Ministerial Decision	Comment
(a) Whether systematic observance of planning procedures and steps is consistent with orderly and proper planning.	The proposed Structure Plan amendment is consistent with the principles of orderly and proper planning – this Structure Plan amendment request has been prepared in accordance with the Regulations, it relates to an operational structure plan and is completely aligned with all State level policies both specifically for the Burswood Peninsula and in more general terms for planning considerations such as maximising the efficiency of developable land while not compromising amenity, and the provision of residential density in close proximity to established public transport nodes.
(b) Whether the strategic planning issues for the relevant area have been resolved.	The strategic planning issues for the relevant area to the subject sites have been resolved through the Burswood Peninsula DSP and the resolution of ‘big ticket’ items such as the decision on the location of the new Perth Stadium and associated infrastructure commitments that provide certainty for major infrastructure assets. Issues that relate to other areas within the Burswood Peninsula such as the areas to the east of the railway line are not considered to be directly relevant to the subject site, given its physical separation and unique characteristics.
(c) Whether approval of the Structure Plan amendment is presently consistent with orderly and proper planning.	As noted above, the proposed Structure Plan amendment is ‘presently’ consistent with the principles orderly and proper planning – this scheme amendment request has been prepared in accordance with the current Regulations, it relates to a current operational structure plan and is completely aligned with all current state level policies both specifically for the Burswood Peninsula and in more general terms. The proposed Structure Plan amendment addresses current planning considerations such as maximizing the efficiency of developable land while not compromising amenity, and the provision of residential density in close proximity to established public transport nodes.
(d) Whether I, acting in the public interest, should approve significant variations to the Structure Plan which were the subject of heavy public objections, before the public has had the opportunity to consider and comment upon the draft Framework.	Public comment has been sought, compiled and responded to at the district level strategic planning which was the subject of extensive consultation and lengthy comment periods. Further advertising and consultation will form part of both this structure plan amendment process and any development application that follows.
(e) Given that the approval of the Variation at this time would facilitate the early approval and carrying out of the developments proposed by the Applicant, whether the present condition of the Station is appropriate to accommodate that development.	<p>Traffic consultants Flyt have analysed the usage of the station and the related capacity of trains moving to and from the station and have concluded that there is capacity within the train network to accommodate additional passengers from the proposed structure plan amendment. Whilst the PTA have advised that there are no specific station upgrades proposed for the station, the proximity of a large number of residents adjacent to the station will contribute to surveillance and activation of the station, which will maximise the efficiency of the infrastructure and reduce anti social behaviour.</p> <p>In addition the access to and from the station to the west will be totally reconfigured subject to study and approval, with a number of access options available through the site to facilitate connection and permeability through to the Crown complex and other residential areas of the Burswood Peninsula. The increased patronage accessing the train station as a direct result of this structure plan amendment will add to the justification for the PTA redeveloping the station sooner (if deemed necessary) to service better the increased catchment utilising the station.</p>
(f) Whether approval of the Variation ... is consistent with the achievement of transit orientated design objectives.	The development of high density residential development directly adjacent to an existing train station is entirely consistent with the objectives and theory of transit oriented design and planning principles. The concentration of residents and Serviced Apartments patrons, combined with limited parking will encourage the use of public transport – which will also comprise the easiest method of accessing the largest employment generator in the vicinity – the Perth CBD.
(g) Whether there is justification in the public interest to fast track the Applicant's development intentions by approving significant variations to the Structure Plan before strategic planning issues in the area have been resolved.	The strategic planning issues raised before as they relate to the subject sites have largely been resolved. The subject sites form a discrete component – one of the last undeveloped pockets of an operational structure plan and the proposed structure plan amendment will bring the existing structure plan into line with the Burswood Peninsula DSP and the residential density aspirations contained within.
(h) Whether approval of the Variation at this time is premature.	The approval of the Structure Plan amendment is no longer premature. The new Perth Stadium is nearing completion, planning for the Belmont Park development is nearly complete, The Springs residential development is well underway and the district level planning for the whole peninsula has been completed. This proposal is entirely in harmony both with the surrounding contextual development and also the strategic intent of the district level planning. The issues which made the previous application premature have been resolved and the proposed Structure Plan amendment represents the clear application of orderly and proper planning principles.

In summary, the key issues of the Ministerial Decision have been addressed with:

- the necessary traffic and urban services analysis have been undertaken;
- planning processes have been far advanced and a high degree of certainty over the development form in the Peninsula has been locked in; and
- large facility and infrastructure commitments have been confirmed and are under construction.

Accordingly, this structure plan amendment can be considered to be orderly and proper planning and thus approved by the WAPC in their capacity as the decision maker for structure plan amendments under the Regulations.

Structure Plan Amendment Land Description

The Structure Plan amendment applies to land which originally comprised 26 superlots, including super lots 9 and 25. Those two superlots are now described as Lots 9 and 9525 on Deposited Plan 53689 and comprise the Applicant's land ("the subject sites"). Lot 9 has an area of 6,441 square metres and is located on the western side of Victoria Park Drive. It has a street frontage to Bow River Crescent on its northern boundary and is adjoined to the west by the former Burswood Dome site.

Lot 9525 has an area of 5,013 square metres and is located on the eastern side of Victoria Park Drive. It abuts the Perth to Armadale railway line on its eastern boundary and the Burswood Railway Station ("the Station") is located directly to its south.

Location and Context

Located at the edge of the Town of Victoria Park, the Burswood Peninsula is a development precinct with excellent exposure to the Perth CBD, the Burswood Train Station, the Swan River, Graham Farmer Freeway and the Great Eastern Highway. The community facilities existing within close proximity to the subject sites are summarized below:

- Burswood Train Station.
- Burswood Peninsula foreshore.
- Crown Entertainment Complex (Casino, Convention Centre and Hotels).
- Burswood Park Golf Course.

- State Tennis Centre (Tennis West).
- Restaurants and other eating facilities at the Crown Entertainment Complex.
- Belmont Racecourse.
- Burswood Water Sports Centre.
- The new Perth Stadium (under construction).

Both the train line and Crown Perth entertainment precinct are sources of noise, which can be addressed and have been considered in the design of the development concepts. There are significant other development sites within the Burswood Peninsula area, including the following:

- The Springs development located to the north-east of the Graham Farmer Freeway, which contain a large number of developments either recently completed or under construction with very high densities ranging from Residential R100 to Residential R160.
- Belmont Racecourse, which is a significant landholding on the peninsula, and is currently used for recreational purposes. The development of this strategic site has been under consideration for some time, and it is understood that a current concept is in the final stages of planning that allows for significant residential and other forms of development.

The Burswood Peninsula and Springs development once fully built out are anticipated to add another 20,000 new residents to the area.

Regional Context

The subject sites are located on the Burswood Peninsula within the Town of Victoria Park, approximately three kilometres east of the Perth CBD and two kilometres from the Victoria Park Town Centre. The subject sites are located in the suburb of Burswood, being surrounded by the suburbs of Lathlain, Victoria Park, Carlisle and East Victoria Park.

A regional centre is located nearby at Belmont in addition to the district centres of Victoria Park, East Victoria Park and Bentley. Neighbourhood centres in proximity include those in Archer Street, Lathlain Place, Orrong Road/Archer Street, Carlisle and Tuckett/Oats Street. East of the Burswood train station is 'The Springs' residential development consisting of high density residential development with small scale neighbourhood centre.

In addition, the existing local strip centre of Rivervale, located along Great Eastern Highway is within walking distance of the subject sites and includes a service station, convenience store, bakery, pizza shop, pharmacy, lotto centre, post office, newsagency and the Empire Hotel. The subject sites have very convenient access to a range of amenities and services within walking distance, or through short trips by private vehicle, bus or train to access higher order goods at the Belmont Regional Centre or Perth CBD.

There are four major industrial/commercial areas within the Regional catchment that provide significant employment opportunities, including the areas of Welshpool/Carlisle, Belmont, the Burswood Road Commercial Area and an area east of the subject sites located between Goodwood Parade and the Graham Farmer Freeway.

Refer to Figure 1 - Location Plan

Refer to Figure 2 - Site Plan

Refer to Figure 3 - Aerial Plan

Planning Framework

Zoning and Reservations

Metropolitan Region Scheme

The subject sites are zoned 'Urban' under the provisions of the Metropolitan Region Scheme (MRS), which identifies land for a variety of urban purposes including commercial and residential development. On this basis, the development concepts would be consistent with the MRS zoning of the sites.

No MRS reservations apply to the subject sites.

Refer to Figure 5 - Metropolitan Region Scheme Zoning

Town of Victoria Park Town Planning Scheme No.1

The subject sites are zoned 'Special Use – Burswood Precinct P2' under the provisions of the Town of Victoria Park Town Planning Scheme No.1 (TPS1). The related Precinct Plan guides the development of the subject sites and forms part of TPS1.

Refer to Figure 6 – Town Planning Scheme No. 1 Zoning Plan

It is acknowledged that the development concepts for the subject sites would exceed the residential densities, building height and plot ratio controls prescribed under the Precinct Plan and Structure Plan.

The actual variations that would be required to the provisions of TPS1, the Precinct Plan and the Structure Plan are set out in detail below with corresponding justifications provided.

Burswood Lakes Precinct Plan P2

The Precinct Plan provides that development within the Special Use Zone is 'to be generally consistent with the provisions of the adopted structure plan, amended from time to time by the Council and Western Australian Planning Commission'. The Precinct Plan includes the variations introduced by the Structure Plan as described in Section 1, Part C of the Structure Plan.

The Precinct Plan includes the following intent and requirements to be met by development proposals:

- Development should acknowledge the prominence of the Burswood Peninsula, with buildings and landscaping of a high visual standard being required.
- Development near the Crown Entertainment Complex should acknowledge the proximity of the complex, the setting of the Precinct as a backdrop to the Swan River and views of the Peninsula from various vantage points.
- New development will contribute to the development of a well-integrated pedestrian network through site layout and building design.
- Public places should be enhanced so that they contribute to a pleasant environment in the precinct.
- The Burswood Precinct should be redeveloped primarily for residential uses with integrated mixed use development west of the railway.

The development concepts for the subject sites are demonstrated to be able to meet the intent and requirements of the Precinct Plan as detailed above, as they propose high quality development with appropriate built form and land uses that reflect the prominence of the location and the unique characteristics of the subject site.

Land Use

The use class table within the Precinct Plan indicates that Multiple Dwellings are a “P” permitted use. Shop, Office, Fast Food Outlet and Restaurant are “AA” uses, being subject to advertising and approval at the discretion of Council.

Hotel and Serviced Apartment uses are specifically referenced in the land use table of the Precinct Plan as not being permitted, and under these circumstances it is acknowledged that an amendment to the Precinct Plan and the local planning scheme and will be required should a hotel or serviced apartment use be proposed as part of future development.

The development concepts include some retail floor area, with potentially some other smaller scale entertainment uses complementary to the functions of the site. It is noted that in respect to the development concepts for the subject sites, all suggested uses are permissible with the consent of Council with the exception of the Serviced Apartments uses as noted above.

Special Control Area

The subject sites are included within a special control area under the Precinct Plan and are described as the Burswood Lakes Environmental and Geotechnical Special Control Area (‘ENV’). The Precinct Plan indicates that development in these areas should take into account the state of remediation. The Precinct Plan notes that development applications are required to provide a geotechnical assessment appropriate for any proposed development, and although not a development application a geotechnical assessment over the subject sites has been previously conducted which notes that the subject sites are considered suitable for development.

Variation to the Precinct Plan

The Precinct Plan states that:

Development within the Special Use Zone shall be generally consistent with the provisions of a Structure Plan approved and amended from time to time by the Council and the Western Australian Planning Commission. The approved Structure Plan will form the basis of Councils determination of applications for subdivision and development of land within the Precinct.

The Precinct Plan provides the opportunity for non-complying development to be assessed and considered for approval where a proposal is not in keeping with the development standards of the Precinct Plan, TPS1 or a planning policy.

The Precinct Plan also provides that development, including residential and mixed use, shall be in accordance with the “Design Guidelines for Burswood Lakes” as included in the TPS1 policy manual, which includes performance criteria reflecting the R-IC performance standards of the R-Codes. The R-Codes have been updated since the adoption of the Precinct Plan, and which state that Residential development in land zoned ‘R-IC’ is to be assessed under the provisions of ‘R-AC3’.

Figure 1. Location Plan

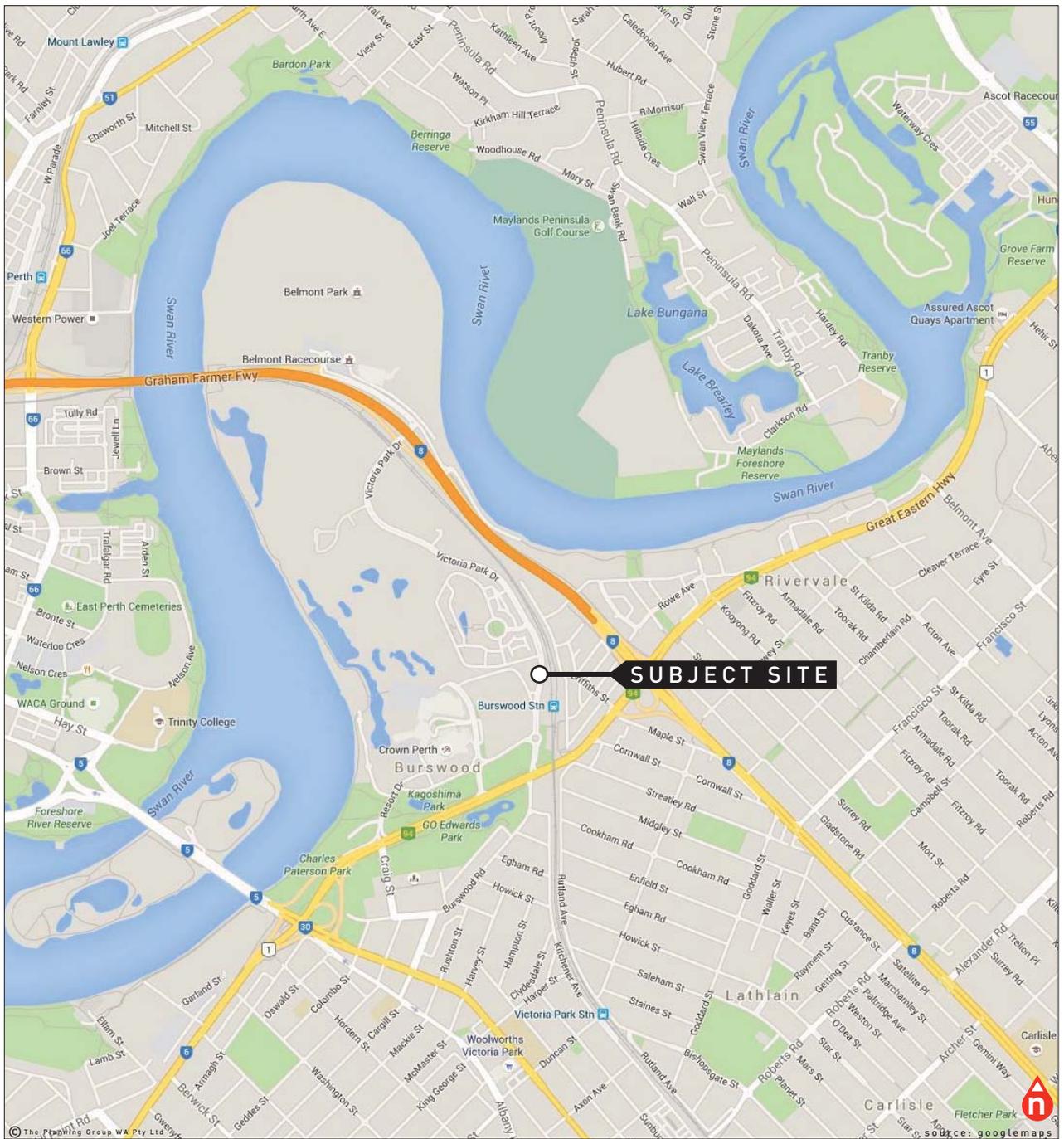


Figure 3. Aerial Plan



 subject site

Figure 4. Metropolitan Region Scheme Zoning

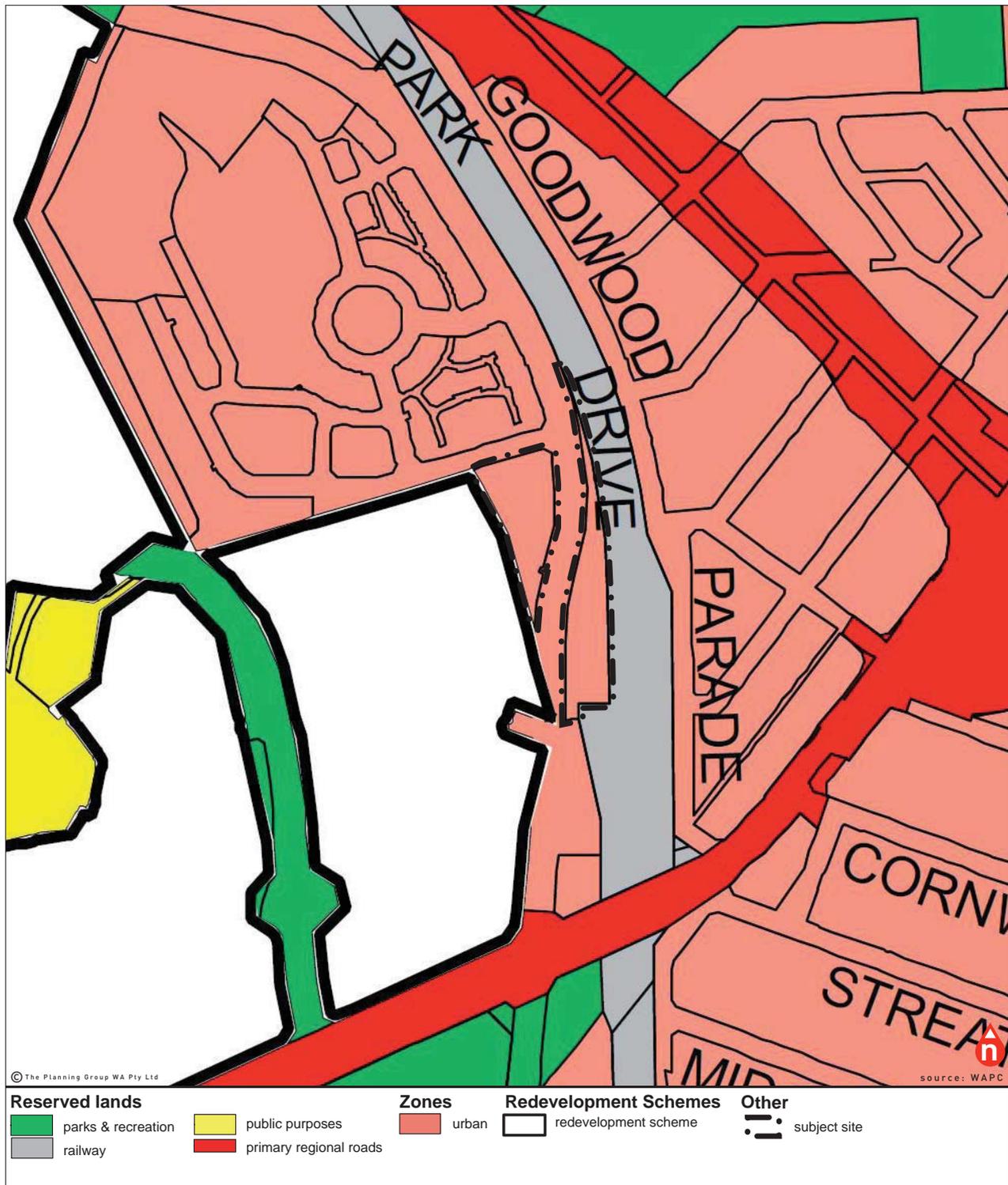
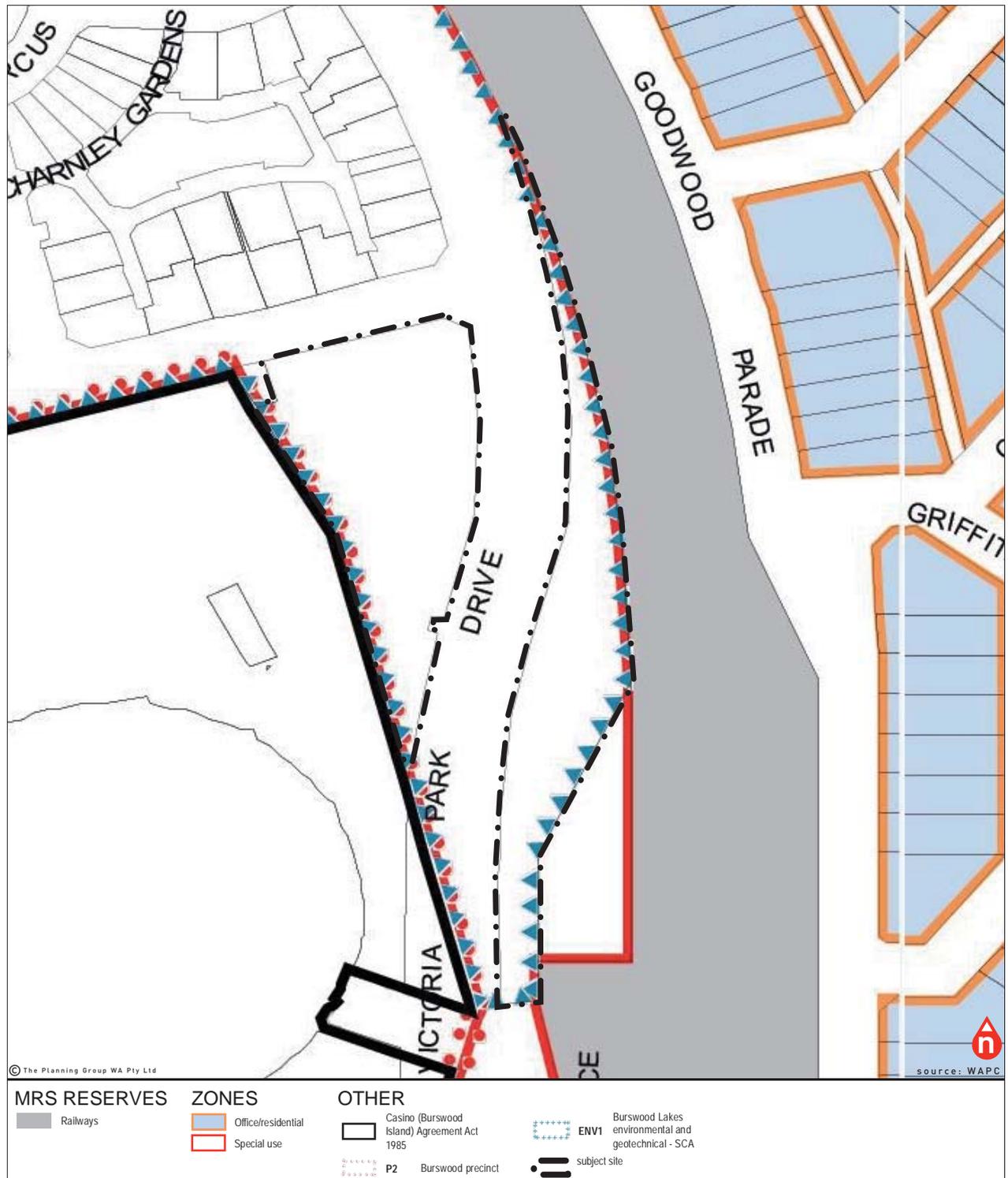


Figure 5. Town Planning Scheme No. 1 Zoning Plan



Plot Ratio

The Precinct Plan indicates that development of Lot 9 may include residential development having a maximum plot ratio of 1.36:1. The Precinct Plan indicates that development of Lot 9525 may include residential development having a maximum plot ratio of 0.27 for the site in its entirety or 0.91 for the notional 1,500m² of the site that is suitable for development.

The combined development concepts for both Lot 9 and Lot 9525 have a plot ratio of 3.28:1.

The definition of floor area contained within the Precinct Plan has been utilised to calculate the residential plot ratio area for the subject sites. The total floor area for the purpose of calculating plot ratio for the subject sites is 37,226m². This gives a plot ratio of 3.25:1 (37,226m²/11,454m²), being in excess of the prescribed plot ratio for the combined subject sites.

In terms of individual lots, the development concept for Lot 9525 based on a plot ratio area of 9,363m² is 2.3:1. In respect to Lot 9, based on a plot ratio area of 25,780m² the development concept has a plot ratio of 4.00:1 which are in excess of the current plot ratio noted in the Structure Plan and Precinct Plan.

Justification relating to the plot ratios within the development concepts is later in this structure plan amendment request.

Building Height

For Lot 9, building height is limited to six storeys and 21 metres under the Precinct Plan. The development concept that supports the proposed Structure Plan amendment for Lot 9 includes two residential apartment buildings being 10 and 24 storeys in height each inclusive of a two storey / four storey podium respectively. The heights of the towers would approximately be 33.0m and 75.0m (or approximately 24m and 60m above the podium level) respectively.

The taller buildings would be surrounded at the street level by lower rise buildings and podiums, which would establish an appropriate human scale and transition to public spaces and streets in the surrounding areas and avoid overwhelming the street. Key to this aim is the creation of 'townhouse' type units on Lot 9 which will reflect the built form and bulk of the adjacent existing residential.

For Lot 9525, building height is limited to five storeys and 17.5 metres under the Precinct Plan. The development concept supports the proposed Structure Plan amendment for Lot 9525 which includes a Hotel / Serviced Apartments apartment building of 16 levels inclusive of a 3 level podium to a maximum height of approximately 48m from Victoria Park Drive or 36m above podium height.

Density

The minimum site area able to be allocated for development on Lot 9 is 100m² per dwelling under the Precinct Plan. The development concept for Lot 9 includes 146 one bedroom multiple dwellings having an average site area of 44-52m², 182 two bedroom multiple dwellings having an average site area of 62-79m² and 12 three bedroom multiple dwellings having an average site area of 70-75m². In addition to these apartments there are 13 townhouses proposed with an average area of 120m². All of the proposed dwellings (with the exception of the townhouses) would have a site area below the minimum 100m² site area requirement and the total number of dwellings would exceed the limit of 60 dwellings prescribed under the Structure Plan.

The minimum site area able to be allocated for development on Lot 9525 is 110m² per dwelling under the Precinct Plan. The majority of dwellings have a site area below the minimum 110m² site area requirement prescribed under the Structure Plan, due to the nature of short term accommodation.

The level of development within the development concepts for the subject sites is considered to be orderly with regard to current State Planning Policies and strategies; however it is at variance with both the Structure Plan and Precinct Plan adopted under TPS1.

Car Parking

Under the development concept for Lot 9 the total number of car parking bays that would be provided is 371 car parking bays, or 1.05 bays per residential unit. Parking bays would be distributed over the basement level and concealed behind podium levels.

Under the development concept for Lot 9525, 112 bays have been provided for the Hotel and the retail components to both lots. This reduced level of parking supports the underlying premise of the development having good proximity to public transport facilities, encouraging non private vehicle mode share and reducing overall traffic impact on the surrounding street network.

An assessment of the development concept car parking provisions and a comparison with other recently approved developments within the area is provided within the Flyt traffic and transport assessment located at Appendix 2. Note that these car parking levels have been provided to demonstrate feasibility of the built form envelopes, and detailed car parking considerations will form a part of future development applications.

Burswood Train Station Integration

The portion of Lot 9525 as noted in Part 1 is required to remain undeveloped and available for the future station redevelopment, including potential for underground access, until such time as future land requirements for the station have been determined by the state government. As the development on the peninsula progresses in line with the approved District Structure Plan, the train station may require expansion and reconfiguration to service the evolving population. A key consideration will be the integration of the station with the surrounding built form fabric, and it is expected that the landowner will liaise with the State Government at the time of development application to ensure that the objectives of the various agencies are addressed.

Burswood Peninsula District Structure Plan (DSP)

The Burswood Peninsula DSP was finalised in March of 2015, with the long term vision of creating:

an attractive, vibrant and sustainable urban setting, with a diverse mix of housing, recreation, entertainment, tourism and employment opportunities. The area will have direct access to the city's regional road network, be serviced by high quality public transport, and include the following key elements:

- high density, contemporary urban neighbourhoods created at Belmont Park, Burswood Station and The Springs;
- an expanded tourism and entertainment precinct at Crown Perth, including the proposed new six-star Crown Towers Hotel;
- a major sporting stadium with access to upgraded public transport facilities and an expanded pedestrian network;
- a significant area of new parkland that provides opportunities for passive and active recreation, and adds to the existing network of parks managed by the Burswood Park Board;

- new centres of living, employment, retail and hospitality within the walkable catchments of Belmont Park and Burswood railway stations; and
- an extended riverine parkland along the shore of the Swan River connected by a high quality network of pedestrian and cycle pathways.

The purpose of the Burswood Peninsula DSP is to 'provide a strategic framework to guide the development of these key projects in the short term, and support the planning, assessment, coordination and implementation of longer term development across the Peninsula.'

The subject sites are located within the Burswood Station West precinct of the Burswood Peninsula DSP, with the neighbourhood vision of being a 'comprehensive redevelopment of the land formerly occupied by the Burswood Dome and surrounding carpark, Burswood Station West is envisaged as a mixed residential, commercial and entertainment precinct that stitches together The Peninsula and the Crown Entertainment Complex with an upgraded Burswood station.'

The proposed Structure Plan amendments clearly meet the objectives of this neighbourhood vision, as well as providing the framework that will allow the development of a 'mix of medium to high density residential, office, retail and entertainment within the station's walkable catchment' in line with the aspirations for development listed under Part 5 of the Burswood Peninsula DSP.

Based on the provisions within the Burswood Peninsula DSP, it can be clearly demonstrated that the proposed Structure Plan amendments will not prejudice the future holistic structure planning for the Burswood Station West Precinct (the timing of which is unknown but unlikely to be in the short to medium term). Due to the consistency with the Burswood Peninsula DSP, relative isolation of the subject sites to the remainder of the precinct and advanced stages of development for the remainder of the Structure Plan area, the urban context is well understood. The ability to demonstrate the potential for a significantly improved interface with the Burswood station and surrounds is possible through associated amenity, CPTED and activation benefits.

Local Structure Plan

Burswood Lakes Structure Plan

The Structure Plan is the approved structure plan that applies to and sets development standards for the subject sites. These development standards have been incorporated into the Precinct Plan via a town planning scheme amendment.

The Structure Plan specifically identified the development potential of the subject sites as follows:

- Lot 9 has a permitted maximum of 60 dwellings, a maximum of six storeys, building height of 21 metres and plot ratio of 1.36:1. A 1.5 metre setback from the two roads to which the subject sites has frontage is also required.
- Lot 9525 has a permitted maximum of five dwellings, a maximum of five storeys, building height of 17.5 metres and plot ratio of 0.91 over 1,500m² (0.27 over the entire site). A 1.5 metre setback from the road to which the subject sites has frontage is also required.

The Precinct Plan and Structure Plan reference variations to the development standards in the R-IC development standards of the Residential Design Codes 2008 (R-Codes). The R-Codes have since been updated and no longer include the 'R-IC' density coding, which has been replaced by the R-AC3 codings applicable to activity centres. Notwithstanding, the Precinct Plan and Structure Plan propose to vary to the provisions of the R-Codes as follows:

- Amendment to the density criteria in Table 1 of the R-Codes with the setting of a maximum dwelling number.
- In the case of Lot 9 the plot ratio requirements for R-IC (now R-AC3) development in Table 1 of the R-Codes.
- Amendments to the R-Code plot ratio provisions.
- Variation to Element 3 of the R-Codes providing alternative car parking standards.
- Variation to building height requirements of the R-Codes.

Amendments to Development Standards

The requested amendments to existing planning controls that would be required to facilitate the development concepts are depicted in the following Tables 2 and 3 and can be summarised as follows:

- Variation to the plot ratio provisions of the Precinct Plan and Structure Plan.
- Variation to the minimum site area standards for residential development prescribed in the Precinct Plan.
- Variation to the minimum car parking standards prescribed in the Precinct Plan.
- Variation to the building height limits prescribed under the Precinct Plan and Structure Plan.

Table 2 - Lot 9 Planning Control Amendments

Lot 9	Current Provisions	Development Concept
Total Site Area	6,441m ²	-
Current Zoning	Special Use Zone	-
Plot Ratio	1.36:1	4.00:1
Plot Ratio Area	8,760m ²	25,774 m ²
Maximum Storeys	6 storeys	24 storeys
Maximum Building Height	21 metres	75 metres
Minimum Site Area per Dwelling	100m ²	Ranges from 44m ² to 120m ²
Total Car Bays	355.33	371 bays

Table 3 - Lot 9525 Planning Control Amendments

Lot 9525	Current Provisions	Development Concept
Total Site Area	5,013m ²	-
Current Zoning	Special Use Zone	-
Plot Ratio	0.91 on 1,500m ² (Notional residential portion) 0.27 over entire site	2.3:1 (entire site)
Plot Ratio Area	1,365m ²	11,452m ²
Max. storeys	5 storeys	16 storeys
Max. Building Height	17.5 metres	51 metres
Min. site area per dwelling	110m ²	NA Hotel Use
Total Car Bays	298 bays	109 bays provided

Justification for Amendments to Development Standards

The level of development as encompassed within the development concepts for the subject sites is considered to be appropriate with regard to current State level planning policy and strategies; however would be at variance with both the Precinct Plan and Structure Plan as set out above.

In this instance, the variations as encompassed within the development concepts for the subject sites are demonstrated to be appropriate and justified, in light of the following considerations:

- The development concepts would result in a residential population of a level that would complement and activate other uses such as tourist, entertainment, commercial development and public transport within the Burswood Peninsula. This type of new community would contribute to the economic life of not only the Burswood Peninsula but to the broader area and surrounds including the Victoria Park Town Centre and nearby neighbourhood centres.
- The level of development within the development concepts is in keeping with the intent of relevant State Government Planning Policy and would represent orderly and proper planning for the locality.
- The development concepts provide for high quality buildings and landscaping design that acknowledges the strategic prominence of the subject sites within the Burswood Peninsula. Architectural design features incorporated within the development concepts, in conjunction with high quality public realm treatments would establish a positive relationship for the creation of a high quality urban environment, of benefit to both residents and visitors alike.
- Street and lower level interface of the development concepts will provides passive and active surveillance and activation to the street edge.
- The Burswood Peninsula is well served by regional shared path networks. These networks of paths cater to pedestrians and cyclists providing efficient, legible and safe alternative modes of transport. The development concepts will link into these networks. This promotes health benefits and reductions in car dependency.
- A number of buildings in the constructed portions of the Burswood Lakes development have not been developed to the full extent of the approved structure plan provisions. Accordingly, the development provisions specified in this structure plan amendment will provide an opportunity for the Burswood Peninsula to achieve the required population targets envisaged by the original structure planning process within the planned tolerances of road and infrastructure networks. This will act as a catalyst for urban revitalisation and activation.
- The densities as provided within the development concepts satisfy the intent of State planning policy by providing a greater range of housing types and density, satisfying demand for alternative types of housing in light of changing demographics (smaller households, changing culture of being in CBD proximity etc.) in the Perth Metropolitan Region and will add to the range of affordable housing opportunities.
- The provision of high-density apartment housing reduces the ecological footprint of buildings and communities, providing enhanced opportunities for density, diversity and an efficient urban environment. This clustering of people provides for improved efficiency in infrastructure servicing, resources and community facilities, and is a well established Planning Principal.
- The development concepts would contribute to the vitality, amenity, comfort and safety of the public realm and create an improved streetscape. A clear distinction between public and private spaces is provided for whilst active street frontages would contribute to a vibrant and engaging urban environment.
- Currently the Burswood Train Station is relatively isolated and has only a limited residential catchment, with associated issues with anti social activity and crime. The development concepts would be located to provide greater population within a comfortable walk to the train station as well as a residential population overlooking and activating the station areas. This would provide for increased patronage, vitality and a safer pedestrian friendly environment in keeping with the desired outcomes for the Burswood Precinct.
- Occupiers and users of the developments would experience a high level of amenity both within the public realm and by virtue of the high quality architectural design of the proposed development concepts. The level of density and building height would not adversely impact on the occupiers and users of the development, nor the community at any significant scale.
- The development concepts would not inhibit the development of surrounding lots or adversely impact on the form of future development in the locality, through variation to the current building height and density provisions within the Precinct Plan. This is demonstrated by the well located siting

of subject sites in the context of surrounding uses. This is further demonstrated in the development concept shadow analysis. Specific consideration has been given to ensuring that views would be maintained from sites located around the subject sites.

- The future residential community as allowed for within the development concepts would have the benefit of being located in proximity to established services and key infrastructure including adjacent public transport services, employment nodes, recreation areas, entertainment facilities including the new Perth Stadium as well as regional retail facilities in close proximity.
- The development concepts are in keeping with the intent of the Precinct Plan in that they would boast a high level of amenity for occupants in terms of dwelling design, public realm treatment, views, open space and proximity to a range of employment and services.
- The height of the development concepts would be complementary to the scale of visible and approved development in the Burswood Peninsular, Perth CBD and East Perth. Dwellings would have the benefit of commanding significant views to the Swan River and Perth CBD but would have minimal impact on the views of surrounding residents.
- The proposed development framework will allow the towers to be created with a consistent low impact street frontage and set back built form to existing Bow River Crescent residents. A 'sight line' approach has been taken where the northern tower has been height limited to lessen the perceived bulk for the adjacent residents.
- The development concepts would contribute to a safe and accessible movement network for pedestrians, cyclists and people using public transport at the adjacent Burswood Train Station. A key consideration of the framework is the integration of planning networks through the subject lots, and the linkages between the subject lots and the built form envisaged by the DSP.

Significant revisions to the framework took place as a result of detailed feedback from the Town's DRC, with modifications to the built form parameters of the plan - therefore in conclusion the level of development as depicted within the development concepts for the subject sites that can be facilitated through the proposed Structure Plan amendment is considered to represent orderly and proper planning for the locality, and most importantly satisfies the objectives of applicable State and local planning policy.

Local Planning Policy

Local Planning Policy 4.12 Design Guidelines For Development With Buildings Above 3 - Storeys.

The Town's Local Planning Policy, Design Guidelines for Developments with Buildings Above 3 Storeys sets the planning and design framework for development incorporating buildings above three storeys or 11.5 metres in height.

The design guidelines seek high quality designs that respond sensitively to their context and respect current and/or future desired character of the area. A performance approach is adopted under the policy, with emphasis on requiring the design to 'perform' by satisfying desired outcomes rather than by meeting a fixed set of standards, that may not reflect particular site circumstances.

The approach differs from the traditional prescriptive approach, providing opportunities for flexibility and innovation.

The primary aim of the design guidelines is to facilitate appropriate design responses, where pressure exists for more intensive development within the Town of Victoria Park. To achieve this, the design guidelines seek to:

- Optimise the development potential of properties in appropriate locations as recommended in the Town's Urban Design Study.
- Optimise the attractiveness of the Town for quality residential, commercial and mixed use development.
- Contribute to business and economic activity by creating new opportunities for a broader range of businesses to locate in Victoria Park through facilitating larger and higher quality office accommodation integrated with residential and retail development.
- Create new opportunities for diverse residential types and lifestyles close to excellent public transport facilities.
- Achieve buildings that respond appropriately to the Town's statements of desired future character for any given area, whether these statements call for enhancement of existing character and/or recognition of the heritage of an area, or for the transition to a different character.
- Create appropriately scaled and designed buildings, which contribute to the Town and are sensitive to existing built form.

- Maintain and enhance the spatial qualities and social amenity of the streets, open spaces and parks in the Town.
- Contribute to enlivening the street life of the Town through enhancing the viability of quality retail, restaurants and cafes.
- Promote alternative means of transport through easy access and linkages to the adjacent train station and through to other precincts.

The development concepts for the subject sites are in keeping with and support the objectives of Planning Policy 4.12. The policy includes 10 design elements, which include the following:

1. Site Planning
2. Streetscape
3. Building Appearance and Neighbourhood Character
4. Private Open Space
5. Communal Open Space and Publicly Accessible spaces
6. Resource Efficiency
7. Safety and Security
8. Privacy
9. On-site Parking and Access
10. Site Facilities

The detailed provisions for each of the Design Elements are the same as those included in the Town's Planning Policy 3.15 - Design Guidelines for Burswood Lakes. The proposed Structure Plan amendment addresses the above requirements at a structure planning level, with detailed design considerations to be addressed as part of future development application processes.

Planning Policy 3.15 Design Guidelines for Burswood Lakes

The Town's Planning Policy 3.15 – 'Design Guidelines for Burswood Lakes' set the planning and design framework for all development within land zoned 'Special Use' under the Precinct Plan, and applies to all forms of development including residential and mixed use developments.

The design guidelines seek high quality design that responds sensitively to local context and the current and/or future desired character of the area. A performance approach is included in the design guidelines, where the emphasis is upon requiring the

proposal to perform by satisfying desired outcomes rather than by meeting a fixed set of standards.

The design guidelines include the following elements, which are to be addressed in the design of development within the Burswood Lakes Precinct. They are the same as those included in the Local Planning Policy 4.12 mentioned above. The architectural concepts prepared by Elenberg Fraser Architects indicatively shows how these elements might be addressed for the subject sites, noting that detailed development plans will form part of any future development application for the subject sites.

Key elements of the development review included a mixed-use commercial, higher density residential and tourist development, a rail station upgrade and a new town centre. While creating a new urban focal point for this precinct, the development's presence to the north links into the neighbourhood created by the existing residential developments of the Burswood Peninsula Precinct. The developments concepts for the subject sites would play an important role in linking the residential Burswood Lakes development, with future potential developments adjacent to or located on the previous Burswood Dome site and those associated with the PTA land with the Burswood Railway Station.

The design approach to the development concepts represents a hierarchy of scale and massing that reflects the diversity of the urban fabric in this locality.

Resource Efficiency

The intent of this element is to adhere to the principles of ecologically sustainable development by incorporating features which limit the use of fossil fuels and natural resources and reduce greenhouse gas emissions over the life of the development and to encourage and maximise public transport patronage within the 800 metres walkable catchment of the Burswood Train Station. The subject sites abut or are approximately 100m from the Burswood Train Station. The co-location of density is a catalyst for introducing amenity, security and a community feel.

Safety and Security

The intent of this element is to provide personal and property security for occupants and visitors and enhance actual and perceived safety.

The development concepts have been designed so as to ensure that passive surveillance is possible through the observation of apartments on the adjacent streets as well as over podium spaces. In addition the street side and pedestrian thoroughfare activation would establish a significant level of activity related to pedestrian traffic going to and from the railway station as well as the proposed restaurant, foyers and convenience stores on Lot 9525 and through to Lot 9. The development concepts provides for a high level of street side lighting, clear vistas and a clear vehicular environment. Townhouses situated along the street as well as the apartments in the towers would have secure entrances through foyer spaces accessed off generous activated pedestrian spaces. Access to the podiums would also be secure, including access to all parking spaces. Conversely this urban fabric will also create an inviting feel to the pedestrian at a street level enhanced by through block connectivity to other precincts.

Privacy

The intent of this element is to site and design buildings to meet projected user requirements for visual and acoustic privacy for nearby residents in their dwellings and private open space.

The design of the apartments within the development concept for Lot 9 has been cognisant of overlooking and privacy both internally and to existing and potential future developments on nearby and adjoining sites. The entrance foyers and circulation cores have been established in relation to different grouping of apartments around the site allowing for both security and privacy. Access to these cores would also be available from the podium and basement parking.

The design of the Hotel / Serviced Apartments within the development concept for Lot 9525 has been cognisant of overlooking and privacy both internally and to existing and potential future developments on nearby and adjoining sites. The entrance foyers and circulation cores have been established to allow for both security and privacy. Access to these cores would also be available from the podium and basement parking. A separate foyer would also be provided for the office tenancies, separating residential and commercial functions.

Onsite Parking And Access

The intent of this element is to ensure appropriate provision of secure and accessible on-site parking and access for occupants and visitors. The development concepts for both sites incorporate adequate car parking bays generally within basement and podium levels as described previously.

Access and Interface to Burswood Train Station

Initial analysis established a need and opportunity for a significant route from the Burswood Lakes development and the Crown Entertainment Complex to the railway station. In response to this analysis the project architects Elenberg Fraser have developed a number of options and forms that these linkages might take. Whilst the detail is a matter for future development applications that will respond to the Burswood Station in any form, the architectural concepts demonstrate how the requirements for clear, legible and universal access can be easily accommodated within the subject sites, as part of a Development Application.

One key element of the site access is the integrated 'through site' linkage depicted on Lot 9. This linkage serves a number of purposes - it will provide a sheltered pedestrian route through the site, it will create a retail edge and focal point and it will create an activated zone from which lobby access will be taken for the residential towers above.

Recent discussions with the PTA have guided the design of the development concepts and its future positive relationship with the Burswood Station. Though however the PTA noted that there were no short term plans to upgrade the Burswood Station in any significant capacity. The proponent is confident of achieving a positive outcome through design and collaboration with the PTA, the DoP and other stakeholders. The proposed development concepts and structure plan amendment allow the flexibility to respond to changes in the station form into the future if required. As noted previously the increased patronage of the station delivered through the proposed Structure Plan amendment will likely lead to a more rapid redevelopment of the station itself catalysed by the increased usage.



Planning Policy 5.1 - Car Parking and Access

The Local Planning Policy 5.1 - Car Parking and Access (Parking and Access Policy), provides that car parking for residential purposes is to be provided in keeping with the relevant standards of the R-Codes. Car parking provision is addressed under the Transport, Transport and Movement Section of this report. An alternative parking rate to that specified under the Precinct Plan is utilized for the development concept for Lot 9525 and is justified in order to encourage public transport uptake.

The Parking and Access Policy provides guidance relating to access arrangements, the requirements for which are satisfied as follows:

- The number of entry points to both Lot 9 and 9525 would be limited. Vehicular access to Lot 9525 will be via a crossover with full movement access onto Victoria Park Drive, and for Lot 9 a primary access has been provided onto Victoria Park Drive, with the potential for a secondary limited access onto Bow River Crescent. The crossover locations have been located so as to limit potential traffic hazard, disruption to dual use paths and possible nearby future developments.
- Traffic circulation and manoeuvring spaces within parking areas have been designed so that vehicles are able to enter and leave in a forward direction and are able to queue, if necessary, within the parking area and not on the street.
- Circulation within the parking areas for both sites would be separated from pedestrian and cyclist paths. Driver sight lines would not be obstructed by signs, fencing or any other obstacles.
- Car parking design as provided for in the development concepts would be in keeping with the design standards of the Parking and Access Policy, as well as the relevant Australian Standards where appropriate.

Refer to the Traffic, Transport and Movement section below for additional information.

State Level Planning Policy

Statement of Planning Policy No. 3 – Urban Growth and Settlement

State Planning Policy 3 - Urban Growth and Settlement (SPP3) provides high-level objectives relating to the desired pattern of urban development in the State. SPP

3 provides the following objectives being of particular relevance to the development concepts for the subject sites, including:

- To build on existing communities having established local and regional economies, concentrating investment in the improvement of services and infrastructure and enhancing the quality of life in those communities.
- To manage the growth and development of urban areas in response to the social and economic needs of the community in recognition of relevant climatic, environmental, heritage and community values and constraints.
- To promote the development of a sustainable and liveable neighbourhood form which reduces energy, water and travel demand whilst ensuring safe and convenient access to employment and services by all modes, provides choice and affordability of housing and creates an identifiable sense of place for each community.

The current pattern of metropolitan development has produced car-dependent communities that experience a significant lag in the timing of infrastructure, service provision and the establishment of employment opportunities in activity centres. It is well established that this is detrimental to economy and health.

The development concepts for the subject sites would present an opportunity to provide alternative housing options where future residents would benefit greatly from the range of employment, services, shopping, entertainment and sustainable transport opportunities in the locality. The development concepts would have the added benefit of reducing future burden on the regional transport network, limit growth in carbon emissions and minimise reliance on private vehicles to access the majority of employment, goods and services required by future residents and occupants.

Statement of Planning Policy 3.1 – Residential Design Codes (2015)

The Burswood Precinct Plan P2 provides that the development of the subject sites should be in keeping with the provisions of the R-IC development standards of the Residential Design Codes (R-Codes), with the exception of any variations made by the Precinct Plan. The R-IC provisions of the R-Codes have subsequently been replaced with R-AC3 provisions.

Specific provisions of the R-IC (R-AC3) standards include performance criteria to be satisfied by the development with respect to specified design elements including the following:

- Housing Density and Built Form (varied under the Burswood Lakes Precinct Plan).
- Streetscape.
- Boundary Setbacks.
- Open Space.
- Site Levels.
- Height and Bulk.
- Privacy.
- Design for Solar Access.
- Vehicle Access and Car Parking (varied under the Burswood Lakes Precinct Plan).
- Incidental Development.

The Design Guidelines for Burswood Lakes incorporate criteria that reflect these performance criteria of the R-Codes in a more elaborate form. Local planning policy also provides residential design and car parking and access criteria.

Development Control Policy 1.6 - Planning to Support Transit Oriented Development

This policy seeks to maximise the benefits of an effective and well used public transit system to the existing and future community by promoting planning and development outcomes that will support and sustain public transport use only possible with sufficient patronage and scale. This will achieve the more effective integration of land use and public transport infrastructure.

Key objectives and statements identified in the policy of most relevance to the subject sites include:

- Residential development and other forms of appropriate higher density development such as Serviced Apartments accommodation should be encouraged close to transit facilities, to help in creating a sense of place that makes a Transit Oriented Development (TOD) precinct more than just a place where transit is available, giving places an individual identity within the urban fabric.
- Higher density development and Serviced Apartments accommodation place greater numbers of occupants and residents close to transit services,

increasing the potential for those occupants and residents to look to transit as a travel option, with a corresponding increase in patronage.

- Streetscapes should include features that will help to promote walking by improving the general level of amenity along pedestrian routes to and from the transit facility. Climate moderation in the form of verandas, canopies and arcades, and landscaping, will help to increase the level of comfort for pedestrians and the likelihood that people will see walking to the transit stop as an attractive option. Well-lit pedestrian routes and waiting areas are also essential for convenience and safety.

The development concepts for the subject sites would directly support the objectives and intent of Development Control Policy 1.6 as detailed below:

- The development concepts would provide for a greater density and diversity of residential dwelling types and Serviced Apartments accommodation located within very close proximity of the Burswood Train Station. This would have a two fold benefit in that it would generate a demand for the use of the existing transit infrastructure and services and make it easier to plan and efficiently operate public transport services, and in turn the occupants and residents benefit from their proximity and accessibility to excellent public transport.
- DC Policy 1.6 states that “within existing developed areas, there are clear opportunities to intensify existing activities and to promote new uses that will make better use of transit facilities and services.” The subject sites have outstanding access to the Burswood Train Station and bus services along Great Eastern Highway. It is considered that the development concepts would present an outstanding opportunity to provide for higher density development on sites that are currently undeveloped and greatly detract from the amenity of the greater Burswood area.
- The development concepts would provide for improved amenity along Victoria Park Drive, which provides an important pedestrian route for people to access the Burswood Train Station. This would in turn provide for increased surveillance and activity along this route, which would promote walking by improving the general amenity of this area. The development concepts would provide for increased activity and vitality within an area that currently has only very limited opportunities for passive surveillance.

Directions 2031 and Beyond (Directions 2031) and the Central Metropolitan Perth Sub-regional Strategy (Sub-regional Strategy)

Directions 2031 and Beyond (Directions 2031) estimates that the population of the Perth Metropolitan Region will have grown to 2.2 million within the next 20 years. To mitigate some of the negative impacts of continued urban expansion (urban sprawl), Directions 2031 has set a target to accommodate 47 percent of that new growth as infill development within existing urban areas. The State Government recently released the Central Metropolitan Perth Sub-regional Strategy which sets out eight strategic priorities to achieve Directions 2031 targets. The Sub-regional Strategy covers 19 central metropolitan local government areas and estimates that the sub-region is capable of accommodating an additional 205,000 people in 121,000 new homes. This assumes an average of 1.7 people per household and a reduction in dwelling size from the current Western Australian average of 244 square metres.

Rather than adopting a blanket approach to increased population and housing densities, Directions 2031 and the Sub-regional Strategy have targeted growth in key activity centres and activity corridors. The proposed Structure Plan amendments facilitate infill development in established district already supported with road networks, public transport and established infrastructure.

Population and Housing

The Sub-regional Strategy has identified Burswood Peninsula as one of the key “Planned Urban Growth Areas” within the sub-region, estimating that the area has the capacity to support 5,400 dwellings housing over 9,000 residents. Since the release of the Sub-regional Strategy, more detailed planning of the Burswood Peninsula as noted within the Burswood Peninsula DSP has confirmed that the area has even greater potential to accommodate up to 12,500 dwellings and a population of approximately 20,000 residents is now considered appropriate.

This additional capacity is considered achievable due to:

- the proximity of the area to high order road and rail infrastructure

- the accessibility to the Perth city centre
- the Swan River and substantial public parklands; and
- the ability to achieve higher residential densities without impacting on existing lower density neighbourhoods.

The development forms allowed by the proposed Structure Plan amendments will assist in meeting these revised development targets in a high quality transit oriented precinct.

Traffic, Transport and Movement Assessment

Consultant transport engineers Flyt have prepared a traffic impact statement to assess and provide support for the development concepts for the subject sites. The statement has been prepared in consultation with relevant State and local government agencies, including Main Roads WA and the Town. The assessment work is based on the extensive experience of Flyt with transport analysis in the Burswood Peninsula, and the work has been prepared largely in accordance with the Western Australian Planning Commission (WAPC) Transport Assessment Guidelines for Developments (August 2006) Volume 4 – Individual Developments. In broad terms, the assessment aims to establish the traffic generation of the development concepts, to assess the operations of the crossovers for each potential development on Victoria Park Drive, and to identify, if required, any traffic management measures, which may be necessary on the immediately adjacent road network.

The traffic assessment undertaken concludes that the access arrangements for the development concepts are appropriate and raise no issues of concern.

The outcomes and recommendations of the assessment are summarised below:

- The traffic generated from these sites reflects only 5% of the traffic generated from this area of the PACE model in the forecast year of 2031. In the context of that extensive forecast year modelling exercise, the attribution of impact to the land use proposed for these sites is minimal;
- The proposed development has a residential car parking provision rate that is much lower than any other recent major residential development or structure plan in this area already approved by JDAP decision or the Town of Victoria Park. This

will directly result in reduced private vehicle usage and promote greater use of public transport and walking/cycling modes;

- All local intersections and access points function to a high degree during forecast 2018 AM and PM peak periods assessed;
- The proximity of the site being directly adjacent to the Burswood Train Station will encourage non private vehicle trips to be made;
- There is a range of frequent bus services running along Great Eastern Highway that provide access to destinations around the Perth Metropolitan Region via the Causeway East Interchange;
- There are excellent cycling and pedestrian facilities adjacent to the site which will provide for cycling and walking trips;
- Improvements and alterations to the local street network will be progressively introduced by State and Local Agencies resulting in a higher level of access for vehicle and public transport trips; and
- Provision of detailed design elements for the site, including integration with the existing Burswood Station infrastructure, would be subject to subsequent development approval processes.

Importantly, the reporting concludes that the ‘impacts of the proposed development on the Structure Plan area and the adjoining transport network are minimal. Moreover, the reduced residential parking levels proposed and the proximity to the Burswood Station will result in fewer vehicle trips being generated in comparison to existing or proposed developments within the Burswood Peninsula location’.

Refer Appendix 2 – Traffic Impact Assessment (Flyt)

Retail Component

A number of smaller retail tenancies are proposed in the development concepts for the site, primarily to service the needs of the residential and Hotel / Serviced Apartments population. Whilst there is no intention to provide a supermarket scale retail development, there is demonstrated demand for smaller convenience and specialty retail which will provide for the daily needs of the local residential population. The proposed retail component offers a number of advantages:

- it will activate and provide passive surveillance to the pedestrian linkages, and in particular the ‘through block’ connection to Lot 9.
- it will remedy an existing identified deficiency within the Structure Plan area whereby the daily and

specialist retail needs of the local population are not being met within a walkable catchment; and

- The retail will complement the passing pedestrian flow from the Crown complex to the station.

Infrastructure coordination and servicing

Wood & Grieve Engineers were commissioned to provide an Engineering Servicing Report (ESR) to assist with this structure plan amendment. The contents of the ESR report are based on the indicative building yields and development usage for lots 9 and 9525 Victoria Park Drive Burswood.

The servicing investigations have been undertaken to establish the availability of the existing services infrastructure in the area and their capacity to service the proposed development. Where the existing infrastructure have been identified as potentially insufficient to meet development demands, infrastructure extensions and upgrades have been identified. The following advice is based on discussions with the Town of Victoria Park and the service authorities operating in the area. The following commentary has been extracted from the ESR document.

Water

Existing Infrastructure

The existing water supply infrastructure near Lots 9 and 9525 consists of a 150mm diameter water reticulation main running north of Lot 9 in Bow River Crescent and within Victoria Park Drive between lots 9 and 9525.

Supply Requirements

The Water Corporation has advised that supply of water to Lots 9 and 9525 can be made via a direct connection to the existing 150mm diameter water reticulation main in Victoria Park Drive. It is anticipated that the water pressure in the Water Corporation mains are unlikely to be of sufficient pressure to satisfactorily provide water to any of the buildings. The ESR recommends that each building should allow suitable pumps and tanks for domestic water supply and fire fighting purposes.

Wastewater

Existing Infrastructure

Lot 9 currently has a connection to 225mm diameter uPVC gravity wastewater reticulation main within Bow River Crescent. Lot 9525 has a connection to 225mm diameter uPVC gravity wastewater reticulation main within Victoria Park Drive. A plan showing the existing wastewater infrastructure is provided in Appendix 1 (Wood and Grieve Servicing Report).

Connection Requirements

The Water Corporation has advised that the existing wastewater reticulation network is capable of servicing the proposed development and expect this capacity to be available for the next five to ten years. Following the Water Corporation's recent review of the Burswood Peninsula they are intending to reinforce the existing wastewater network with new pump stations as development in the area intensifies.

The Water Corporation requires all three buildings are required to have separate connections to the 225mm diameter uPVC wastewater reticulation main.

Power

Existing Infrastructure

An analysis of Western Power's existing infrastructure (refer Appendix 1 of Wood and Grieve Servicing Report) has been conducted in order to determine the existing power supply configuration surrounding the development. The existing Western Power network surrounding Lot 9 consists of existing 22kV underground cable that runs along the western side of Victoria Park Drive, supplying an existing switchgear. The existing parcel of land does not appear to have an existing Western Power point of connection however there is a pillar in Lot 164 adjacent Lot 9's north west corner along Bow River crescent.

Lot 9525 has 22kV high voltage underground cables running through the lot as well as 22kV high voltage cable running adjacent to the lot on the eastern side of Victoria Park Drive. This lot appears to have a current Western Power point of supply. The 22kV feeders originate from the Rivervale Zone substation on Streatley Road, Rivervale roughly 500m away. Street lighting is installed along Victoria Park Drive via double outreach poles down the median strip.

Initial Conceptual Solutions

Based on the current maximum yield within the development concepts, we have estimated the maximum demand load to be in the order of 2.72MVA which is based on the standard Western Power ADMD (after diversity maximum demand) load allocation for the region.

On this basis Lot 9 would require one authority owned switchgear and two authority owned 1000kVA transformers to reticulate the distribution system throughout the proposed lot. Lot 9525 will require one switchgear and one 1000kVA transformer. The existing point of supply will also need to be removed.

It should be noted that due to the dynamic nature of Western Power's network, infrastructure requirements and connection points referred above may differ when applications are placed in the future. The ESR recommends that a feasibility study be conducted closer to the date of proposed load uptake to determine if the existing network has the capacity to take on the development load. The charges and time frames for a feasibility study are determined on a case by case basis however a fixed price agreement will be made prior to any design work commencing. The proponent acknowledges these servicing requirements and further studies and analysis are anticipated.

Developer Contribution Arrangements

Liaison with the Town and the DoP indicated that Developer Contributions would be a matter that would be considered as part of any Structure Plan amendment process. The applicant is of the view that the original development of the Burswood Lakes Structure Plan incorporated the creation of roads and common infrastructure to service all of the lots that form part of the greater Structure Plan area. As such it is considered that the development of the precinct has already included/anticipated significant developer contributions, which have been reflected in the purchasing price of the lots in the private transfer to the current owner.

In any event, a developer contribution scheme over the subject sites would require the resolution of broader contextual issues on the Peninsula, and would be an extremely complicated document to produce and ensure that it remains equitable to both future and existing or approved development.

Given the above and the fact that there is no developer contribution scheme currently in operation or under development by the Town for this area, it is considered that no developer contribution would be appropriate for development on this site.

Geotechnical Conditions

Golder Associates undertook a preliminary geotechnical investigation and preliminary acid sulphate soils investigation for the subject sites as part of the previous structure plan amendment application in 2008, with the aim to obtain sufficient geotechnical and acid sulphate soil information to establish that the site conditions would be suitable for the residential and any more detailed studies (if required) can be completed at development application stage.

The outcomes of the investigations are summarised below and the full reporting can be provided upon request.

Geology

The area is underlain by two geological units. These are described as:

- Sand – pale and olive yellow, medium to coarse grained, subangular to subrounded quartz, trace feldspar, moderately sorted and of residual origin.
- Clay – moderate to dark grey, soft, saturated, prominent, 0.2 m thick with oyster shell bed near surface being of alluvial origin.

Subsurface Conditions

The subsurface conditions of the subject sites are as follows.

Lot 9

- Fill: Sand (SP), – generally medium dense to dense but very dense in zones, fine to coarse grained, dry into moist, brown yellow and black, silty in part, containing minor gravel and cobbles, typically extending from the surface to depths of 2.0 to 3.75 metres; overlying
- Sand - medium dense becoming dense to very dense with depth, fine to coarse grained, moist extending to depths ranging from 14.0 to 17.0 metres; overlying
- Clay/Sandy Clay – stiff to very stiff occurring in lens up to approximately 1.5 metres thick between the depths of 14 to 16.8 metres; overlying

- Sand - very dense, present to depths of up to 20.0 metres; overlying
- Clayey Sand/Sand - generally medium dense but loose in zones, probably cemented, present to the maximum investigated depth of 31.2 m.

Lot 9525

- Fill: Gravelly Sand (SP) Sandy Gravel (GP), – generally medium dense to dense but very dense in zones, fine to coarse grained, dry into moist, brown yellow and black, silty in part, containing minor building rubble and cobbles including some pavement materials, typically extending from the surface to depths of 0.5 to 1.2 metres; overlying
- Sand - medium dense becoming dense to very dense with depth, fine to coarse grained, moist extending to depths ranging from 14.0 to 15.5 metres; overlying
- Clay/Sandy Clay – stiff to very stiff occurring in lens up to approximately 1.0 metre thick between the depths of 14 to 17.8 metres; overlying
- Sand - very dense, present to depths of up to 20.0 metres; overlying
- Clayey Sand/Sand - generally medium dense but loose in zones, probably cemented, present to the maximum investigated depth of 25.2m.

Groundwater

The Perth Groundwater Atlas (1997) shows the maximum groundwater level varies from about RL 2.5 metres AHD. This is within about 8.5 to 10.5 metres below the current ground surface on the subject sites.

Groundwater was encountered in three of the ten holes left after extraction of the CPT probe at depths ranging from 8.4 to 9.7 metres. These depths correspond to approximate elevations of RL 2.6 metres AHD and RL 1.3 metres AHD. Groundwater was not intersected in the boreholes to the depth drilled on 7.5 metres.

Acid Sulphate Soils

Field screening test results from the preliminary Acid Sulphate Soils (ASS) assessment indicated a low probability of Potential Acid Sulphate Soils (PASS) being present across the subject sites. Laboratory testing confirmed that neither Actual Acid Sulphate Soils (AASS) or PASS were present within the soil samples analysed during the preliminary investigation. Isolated pockets of potential non-sulfidic acidity were detected in near surface soils, however these materials have pH in the order of 9.4 to 11.7 and contain significant buffering

capacity and therefore lime treatment of these soils would not be considered to be required.

Geotechnical Conclusions

As a result of the investigations no constraints to development of the subject sites were identified. Specific conclusions are provided below:

- Based on the results of the investigation it is considered that the likely building loads could be supported on a system of shallow pad and strip footings or a shallow raft footing or a combination of both types of footings. The most appropriate type of footing to use would depend on the columns spacing and the load applied.
- It is not expected that deep piled footings would be required to support the loads unless highly concentrated loads over and above what is normally associated with the types of structures as suggested apply.
- Excavation should be readily achieved using conventional earthmoving equipment. Given the expected depth of excavation, temporary and permanent retaining structures would be required to retain the basement excavations.
- Given the relatively uniform conditions encountered during the investigations, the risk of encountering acid sulfate soils during future site development would be considered to be low. On this basis, further ASS investigation would not be considered to be warranted and an ASS Management Plan would not be considered to be required to support future development.

Acoustic Report

Gabriels Environmental Design undertook a preliminary acoustic and vibration investigation and analysis for the subject sites. The analysis concluded that in terms of the control of environmental noise intrusion, it is evident that acoustic glazing will be required to the various facades dependent on the type of occupancy, the size of window, and orientation of the window to the road and rail line.

In terms of Vibration Control: Lot 9525 is located close to the Rail line and preliminary measurements indicate that vibration control will be required in this building. Lot 9 is located at greater distance from the rail line and therefore the preliminary vibration measurements indicate that vibration control is not as important on this site.

Detailed noise and vibration measurements will need to be carried out early in the Development Approval stage of the project to inform the design in terms of acoustic and vibration requirements.

The requirements of the Building Code of Australia are set out in the report contained at Appendix 4, and the analysis notes that the outcomes can be achieved can be achieved using a wide variety of construction systems and are not an impediment to development.

Technical Studies Appendices Index

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Appendix 1 - Flyt Traffic Analysis

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Appendix 2 - Servicing Report

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Appendix 3 - Acoustic Report

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