

Back Beach Tourism Central Precinct South

Lot 497 Ocean Drive Bunbury
July 2016



DETAILED STRUCTURE PLAN

This structure plan is prepared under the provisions of the City of
Bunbury Town Planning Scheme No.7

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY
RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION
ON:

2 September 2016

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

2 September 2016

Date

Date of Expiry: **19 OCTOBER 2027**

Document Control

Document ID: PG 2015/715-127 Bunbury Lot 497 Ocean Drive - DSP/6 Draft Documents/1 Draft Report/715-127 Bunbury Lot 497 Ocean Dr - DSP Folder/715-127 Bunbury Lot 497 Ocean Dr - DSP 02.10.15.indd						
Issue	Date	Status	Prepared by		Approved by	
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2	02.10.15	Draft	Gary McCullough		Murray Casselton	
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Part 1

Implementation

1. Structure Plan Area

The Detailed Structure Plan (DSP) applies to Lot 497 (DP:31953) Ocean Drive, being land contained within the 'Detailed Structure Plan Boundary' as depicted on the Detailed Structure Plan Map.

The DSP area is bounded by Scott Street to the north, Upper Esplanade to the east, Lots 1 (DP:68725) and 2 (DP:38725) Ocean Drive to the south and Ocean Drive to the west, within the City of Bunbury (the City).

The area of land incorporated within the boundary of the DSP is the Central Precinct South (4,472m²), within which sit a number of Sub-precincts:

- i. Sub-precinct 1 - Development
- ii. Sub-precinct 2 - Public Piazza
- iii. Sub-precinct 3 - Development

Note:

The DSP area has been rezoned Special Use Zone – Back Beach Tourism Mixed Use No. 1 (SU1) through the recently finalised Scheme Amendment 66 (Amendment 66) to the City of Bunbury Town Planning Scheme No. 7 (TPS7).

2. Structure Plan Content

The DSP comprises:

- (a) Part 1 – Implementation Section
Part 1 contains all information for which subdivision and development are required to have due regard and includes the Detailed Structure Plan Map and the detailed standards, requirements and pre-requisites for subdivision and development within the DSP area.
- (b) Part 2 – Explanatory Section
Part 2 serves as a reference guide to explain and implement the provisions in Part 1. The Part 2 document contains appendices including detailed technical reports supporting the structure plan.

3. Purpose

The purpose of the DSP is to support the General Structure Plan – Back Beach Tourism (GSP) and respond to the requirements of SU1 within TPS7 by introducing detailed development criteria and standards that inform and guide the preparation of subdivision proposals and development applications (DAs).

4. Interpretation and Scheme Relationship

The words and expressions used in this DSP shall have the same meanings given to them in TPS7, including any amendments gazetted thereto:

Pursuant to TPS7 and the provisions of the *Planning and Development (Local Planning Scheme) Regulations 2015* deemed provisions for local planning schemes clause 27(1), a decision maker for an application for development approval or subdivision approval in an area that is covered by a structure plan that has been approved by the Western Australian Planning Commission (WAPC) is to have due regard to, but is not bound by, the structure plan when deciding the application.

Part 2 of this DSP and all appendices are to be used as a reference only to clarify and guide interpretation and implementation of Part 1.

5. Operation

The DSP shall come into operation on the date it is granted final approval and endorsed by the WAPC.

6. Land Use and Subdivision Requirements

The standards, requirements and prerequisites for subdivision and development on the Detailed Structure Plan Map and in the development requirements tables as set out in clauses 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6 below, which are to be given due regard as part of any subdivision or development approval, shall be as set out for the SU1, within Schedule 2 of TPS7.

Note:

The provisions of the *Planning and Development (Local Planning Scheme) Regulations 2015* take effect from 19 October 2015.

6.1 Land Use and General Development Requirements

6.1 Land Use and General Development Principles	General Requirements
	<p>(a) Development proposals shall be considered in accordance with:</p> <ul style="list-style-type: none"> (i) The provisions of SU1 as prescribed under Schedule 2 – Special Use Zone of TPS7; (ii) The requirements of the adopted General Structure Plan (GSP); and (iii) The requirements of this DSP. <p>(b) Residential and mixed-use development shall comply with the relevant provisions of State Planning Policy 3.1 Residential Design Codes (R-Codes) relating to the Residential R-AC0 density coding, unless specifically otherwise stated within an adopted Detailed Structure Plan.</p> <p>(c) Where provisions are not specified within SU1 under Schedule 2 – Special Use Zones, an adopted General Structure Plan or an adopted Detailed Structure Plan, the general development standards of TPS7 shall prevail.</p> <p>(d) Land use permissibility within each development precinct and sub-precinct as identified on the Detailed Structure Plan Map shall be in accordance with the requirements set out in Table 1.1: Land Use Requirements of the GSP.</p> <p>(e) Development is to comply with the requirements as set out in clauses 2.2-2.9 of the GSP.</p> <p>(f) Staging of residential development is to comply with the requirements as set out in clause 3.1 of the GSP.</p> <p>(g) Prior to subdivision or development occurring the following actions are recommended in respect to potential Aboriginal Heritage considerations:</p> <ul style="list-style-type: none"> (i) Consultation with relevant Aboriginal people take place in order to gain a better understanding of the significance of Department of Aboriginal Affairs (DAA) Site ID 21371 and its implications for development of the subject site, if any. (ii) That the results of these consultations be provided to the DAA/Aboriginal Cultural Material Committee (ACMC) so that an informed assessment can be made of the significance of DAA Site ID 21371 and its status with respect to Section 5 of the <i>Aboriginal Heritage Act 1972</i> (AHA). (iii) That the proponent obtain consent under Section 18 of the AHA to use the land if it is established that an Aboriginal Site is likely to be adversely impacted. (iv) Archaeological monitoring be carried out during ground disturbance activity within the subject site, particularly if ground is being disturbed for the first time or what appears to be the first time. (v) An Aboriginal Heritage Management Plan (AHMP) be developed and implemented that includes stop-work procedures to be put into effect in the event that any previously unidentified Aboriginal sites or objects, including skeletal material, are encountered during earthworks associated with the development of these lots.

6.2 Built Form

6.2.1 Plot Ratio and Building Envelopes

6.2.1 Building Envelopes	General Requirements
	<p>(a) Plot ratio is to be a maximum of 1.25.</p> <p>(b) Building height is to comply with the requirements as set out in clause 5.1-5.4 of the GSP.</p> <p>(c) All development is to be situated within the building envelopes defined by the setback and building height requirements as set out in clauses 4.2-4.3 and 5.1-5.4 respectively of the GSP.</p> <p>(d) Maximum building heights exclude building plant and lift overruns where they are located so as to be not visible or are appropriately screened with compatible materials from the public realm.</p>

6.2.2 Building Setbacks

6.2.2 Building Setbacks	General Requirements
	<ul style="list-style-type: none"> (a) Building setbacks are to comply with the requirements set out in clauses 4.2 and 4.3 of the GSP. (b) Ground level setbacks are to be no greater than 5m to Ocean Drive except where necessary to provide a forecourt, building articulation, alfresco dining or other feature that adds amenity and interest to the streetscape. (c) Development, including fencing at the intersection of Scott Street and Upper Esplanade is to be appropriately setback to achieve adequate sight lines.

6.2.3 Building Orientation

6.2.3 Building Orientation	General Requirements
	<ul style="list-style-type: none"> (a) Buildings shall be orientated towards the street or public areas (such as the piazza). (b) Buildings may be orientated towards communal open space areas where this has been considered as an integral component of the design. (c) Buildings are to be positioned to avoid potential adverse wind impacts on buildings and public spaces, including wind tunnelling. Particular attention is required to ensure that the proposed piazza is not adversely affected by wind tunnelling.

6.2.4 Active Frontages and Adaptability

6.2.4 Active Frontages and Adaptability	General Requirements
	<ul style="list-style-type: none"> (a) Active frontages are required along Scott Street and abutting the piazza and are encouraged along Ocean Drive in conjunction with appropriate weather protection. (b) Blank unrelieved walls in excess of 10m in length and 6m in height are not permitted to any street frontage. (c) Building adaptability is to be provided in accordance with the requirements as set out in clause 6.8 of the GSP. (d) Office uses on the ground floor in Central Sub-precinct 1 shall occupy no more than 50% of any one frontage addressing Ocean Drive or the piazza as set out in clause 2.9 of the GSP. (e) Ground floor levels of all buildings are required to provide a minimum finished floor to floor height of 4m to allow for adaptable use, including development fronting the Scott Street / Upper Esplanade intersection and Upper Esplanade. (f) Buildings addressing street frontages shall be designed to provide a continuous frontage at ground level, except where required to respond to ground level variations where interfacing with the piazza, pedestrian or service access between buildings, a pedestrian pathway as depicted on the Detailed Structure Plan Map or a public thoroughfare in accordance with the requirements of the GSP. (g) Ground floor elevations to the piazza (including any pedestrian pathways leading into the piazza) are to be glazed to a minimum of 70% of the building frontage with a visually permeable material, to ensure unobstructed views to the pedestrian pathways and the piazza. This shall be measured as a proportion of the total building ground floor elevation. All glazing shall meet energy efficiency requirements and BCA standards.

6.2.5 Building Entrances

6.2.5 Building Entrances	General Requirements
	<ul style="list-style-type: none"> (a) All buildings and individual ground level tenancies shall have at least one visibly clear and legible entry from the public domain. (b) All buildings should provide shelter for pedestrians at the point of entry.

6.2.6 Finished Floor Levels at Ground

6.2.6 Finished Floor Levels at Ground	General Requirements
	<ul style="list-style-type: none"> (a) For residential and visitor accommodation units at ground floor level fronting Scott Street the finished floor level is required to be at least 0.8m above the pedestrian or shared path level. (b) Pedestrians are required to be able to access the ground floor and any floors above from an entrance to a building that is at grade and directly accessible from a street or public space. (c) For sites with a sloping frontage, the ground floor must not exceed more than 1.2m above or below the level of the site frontage. The level of the site frontage is measured at every point along that boundary.

6.2.7 Building Facades

6.2.7 Building Facades	General Requirements
	<ul style="list-style-type: none"> (a) Building facades shall be modulated and articulated through, for example, the use of apertures, recesses, projections, materials and textures. (b) Outdoor living areas are to be provided in accordance with R-Code requirements. (c) Where balconies are provided within the 2m setback area for hotel, short stay and non-residential uses, in accordance with clause 4.3 of the GSP, they shall: <ul style="list-style-type: none"> (i) Have a minimum dimension of 2.4m (depth or length) and allow for useable outdoor living/dining space. (ii) Assist to articulate the building façade in a complementary contemporary architectural form. (iii) Be commensurate in scale/composition to the building. (iv) Be designed as an integral part of the building elevation and shall not appear as an 'add on' structure. (v) Contribute to the sense of safety and liveliness of the street by being designed for passive surveillance and visual engagement between the public and private realm.

6.2.8 Rooflines

6.2.8 Rooflines	General Requirements
	<ul style="list-style-type: none"> (a) Flat, skillion and other non-pitched site responsive roof forms are encouraged to minimise the overall bulk and massing of buildings.

6.2.9 Landmark Corners

6.2.9 Landmark Corners	General Requirements
	<ul style="list-style-type: none"> (a) Development on landmark corners as identified on the Detailed Structure Plan Map shall be designed and constructed in a manner that recognises the strategic location of the identified site. (b) Landmark corners provide opportunities for distinctive architecture through an expression of one or more of the following features: <ul style="list-style-type: none"> (i) Additional height sought under the performance based (design principles) approach to building height detailed under clause 5.4 of the GSP, supported by a Development Impact Statement (Building Height and View Shed Analysis), however this should not include an additional habitable storey; (ii) Different geometric or volumetric design; (iii) Architectural feature elements such as enhanced vertical articulation or modulation; (iv) Additional glazing (fenestration); (v) Enhanced palette of compatible materials and textures; and (vi) Major openings and balconies.

6.2.10 Interface Treatments

6.2.10 Interface Treatments	General Requirements
	<ul style="list-style-type: none"> (a) The interface between the public and private realms shall be clearly defined through the use of low fencing (no greater than 1.2m in height) or other boundary defining elements such as landscaping or minor level differences. (b) Fences to the public domain (including pedestrian only access ways) shall be at least 50% visually permeable and no greater than 1.2m in height from finished floor level.

6.2.11 Crime Prevention Through Environmental Design (CPTED)

6.2.11 Crime Prevention Through Environmental Design (CPTED)	General Requirements
	<ul style="list-style-type: none"> (a) Crime Prevention Through Environmental Design (CPTED) principles are to be incorporated into building design and, where appropriate, the public realm. (b) CPTED principles to be adopted into all developments are required to include consideration of the following: <ul style="list-style-type: none"> (i) Natural Surveillance <ul style="list-style-type: none"> 1. Windows overlooking footpaths, parks and other publicly accessible areas such as car parks 2. Accessways designed to encourage non-vehicular movements such as pedestrians and cyclists 3. Landscaping treatments designed to promote surveillance especially around entry points 4. Fencing treatments that allow for viewing over and through, and in the front yards between adjacent properties, dwellings or buildings 5. Lighting that does not create blind-spots, provides visibility for sensitive uses and enables pedestrian use of key paths and public spaces after dark (ii) Natural Access Control (Legibility) <ul style="list-style-type: none"> 1. Clearly defined points of entry that direct visitors to appropriate areas 2. Designs restricting access to roofs and upper levels, and using locked gates for private yard areas 3. Landscaping treatments that contribute to access control (iii) Natural Territorial Control (Ownership) <ul style="list-style-type: none"> 1. Creation of attractive public and communal spaces that will be used more frequently 2. Encouraging activity through seating and amenities in public and communal spaces

6.2.12 Noise Attenuation

6.2.12 Noise Attenuation	General Requirements
	<p>(a) Where an acoustic assessment is identified as necessary, in accordance with clause 11.1(f) of the GSP, the following LAeq levels must not be exceeded for short stay accommodation, dwellings and the residential component of mixed use developments;</p> <ul style="list-style-type: none"> (i) 35dB(A) in any bedroom in the building at any time 10pm to 7am; and (ii) 40dB(A) at any time anywhere else in the dwelling (other than a garage, kitchen, bathroom or hallway). <p>Development proposals requiring an acoustic assessment shall demonstrate to the satisfaction of Local Government that the stated LAeq levels are able to be achieved, and incorporate insulation and acoustic shielding measures as necessary to minimise potential external and internal noise impacts.</p> <p>Within proposals such measures may not include but are not limited to:</p> <ul style="list-style-type: none"> (i) Indoors <ul style="list-style-type: none"> 1. Laminated glazing 2. Fixed, casement or awning windows with seals (ii) Bedrooms <ul style="list-style-type: none"> 1. No external doors 2. Closed eaves 3. No vents to outside walls/eaves 4. Laminated glazing 5. Mechanical ventilation/air conditioning 6. The internal arrangement of noise-sensitive areas away from the noise source <p>(b) Where an acoustic assessment is identified as necessary, in accordance with clause 11.1(f) of the GSP, notification is to be placed on the property titles with regard to possible noise impacts; A notification, pursuant to Section 165 of the <i>Planning & Development Act 2005</i>, shall be placed on the certificates of title of the proposed lots advising of the existence of a hazard or other factor. Notice of the notification is to be included on the diagram or plan or survey (deposited plan). The notification shall state as follows;</p> <p><i>"This lot is located within a mixed use development in close proximity to entertainment and hospitality venues and has the potential to be affected by noise emissions from these land uses."</i></p> <p>(c) Non-residential development and land uses may trade and/ or operate between the hours of 7am to 10pm Monday to Saturday and 9am to 7pm on Sundays, in accordance with the <i>Environmental Protection (Noise) Regulations 1967</i>. Proposals for non-residential development and land uses trading and/or operating outside of these hours must be supported by a Development Impact Statement and supporting Noise Management Plan submitted as part of the acoustic assessment (as required by clause 11.1(f) of the GSP) as part of any application for planning approval, prepared by a suitably qualified person to the specification and satisfaction of the local government. The Development Impact Statement should address the scope of issues that have the potential to impact on the amenity of existing and future residents such as noise, lighting and crime prevention, and proposed appropriate mitigating measures for consideration.</p>

6.2.13 Signage

6.2.13 Signage	General Requirements
	<p>(a) Building signage shall be integrated with building facades and relate to the architecture of the building.</p> <p>(b) All signage is to comply with the requirements as set out in TPS7 and the City's Local Planning Policy for Signage and Advertisements.</p>

6.2.14 Verandahs and Awnings

6.2.13 Verandahs and Awnings	General Requirements
	(a) The ground floor of any building fronting Scott Street, Ocean Drive or the piazza shall provide a cantilevered verandah, canopy or awning along the full extent of the frontage. The verandah, canopy or awning shall have a minimum height of 3m and a maximum of 4.5m and be a minimum depth of 2m.

6.3 Open Space

6.3.1 Communal and Private

6.3.1 Communal and Private	General Requirements
	<p>(a) Site open space is to be a minimum of 30%.</p> <p>(b) Communal open space for multiple dwellings is to be in accordance with the requirements set out in clause 7.1 of the GSP and is encouraged to be responsive to finished ground levels with appropriate separation from publicly accessible areas and internal pedestrian pathways.</p> <p>(c) Appropriately designed and climatically responsive roof terraces are acceptable as communal open space areas.</p> <p>(d) Private open space is to be provided in accordance with R-Code requirements.</p>

6.3.2 Public Open Space (Piazza)

6.3.2 Public Open Space (Piazza)	Sub-Precinct 2 Requirement
	<p>(a) Public Open Space (POS) is to be provided in accordance with the location identified on the Detailed Structure Plan Map.</p> <p>(b) The Central Sub-precinct 2 in the form of a public piazza is to be designed and developed at the total cost of the developer at the subdivision stage or prior to occupancy of any development to the satisfaction of the City, in accordance with the requirements set out in clause 7.2 of the GSP. The design is required to consider and incorporate the following features:</p> <ul style="list-style-type: none"> (i) High quality hard and soft landscaping using waterwise plantings appropriate to coastal climatic conditions, including open paved and turfed areas framed with trees; (ii) Distinctive large format paving to main piazza hardscape areas with low walls separating the piazza from the promenade at the lower Ocean Drive level; (iii) Bollard and in-set wall lighting within the piazza to minimise light spill; (iv) Low plantings to the base of walls, with integrated public art on wall surfaces; (v) High quality robust public furniture and shade structures that are responsive to coastal climatic conditions, in particular prevailing winds; (vi) Timber seating throughout, including free standing seating and seating set on top of walls; (vii) Multiple spaces for both casual and more formalised public use, including event staging and an interactive water play sculpture, with these areas defined by level differences, landscaping treatments and hard landscape features; (viii) The incorporation of gradual steps to transition levels and provide informal seating / event viewing opportunities; and (ix) Consideration of integrated alfresco dining opportunities as an extension of adjacent development. <p>(c) Following the development and subsequent maintenance of the completed piazza by the developer to the satisfaction of the City and for a period of time to be agreed by the City, Central Sub-precinct 2 shall be maintained by the City as POS for recreation and community purposes.</p> <p>(d) The public open space area depicted on the structure plan shall be ceded free of cost and without any compensation by the Crown as a condition of subdivision.</p>

6.4 Access and Movement

6.4.1 Vehicles

6.4.1 Access	General Requirements
	<p>(a) The internal laneway network identified as the '6m wide vehicle access easement' on the Detailed Structure Plan Map is to have a minimum width of 6m and is to be developed as a low speed shared vehicle and pedestrian zone to the satisfaction of the City.</p> <p>(b) The provision of the internal laneway network is to be subject to a legal agreement being put in place to the satisfaction of the City that:</p> <ul style="list-style-type: none">(i) Ensures that the developer is responsible for the ongoing provision, cost of construction, maintenance and any other cost associated with the internal laneway network in perpetuity.(ii) After completion of the internal laneway network and prior to occupation of the associated development, easement(s) over the laneway network in accordance with Sections 195 and 196 of the Land Administration Act 1997 for the benefit of the City are to be placed on the relevant certificates of title of any relevant lots specifying access rights. Notice of this easement(s) is to be included on a lodged diagram or plan of survey (deposited plan). The easement(s) are to state as follows: <p><i>'The purpose of the easement is to provide pedestrian, vehicular and servicing connectivity'.</i></p>

6.4.2 Walking and Cycling

6.4.2 Walking and Cycling	General Requirements
	<p>(a) Pedestrian and shared pathways are to be provided in accordance with the requirements set out in clause 8.4 of the GSP, and in the locations as depicted on the Detailed Structure Plan Map.</p>

6.4.3 Access

6.4.3 Access	General Requirements
	<p>(a) Vehicle access is to be provided in accordance with the requirements set out in clauses 8.1, and 8.2 of the GSP, having regard to the preferred site access locations as depicted on the Detailed Structure Plan Map.</p> <p>(b) Site access points are to be off-set (staggered) a minimum of 15m centreline to centreline from any existing vehicular access points on the opposite side of the road (primarily residential development access).</p>

6.4.4 Parking

6.4.4 Parking	General Requirements
	<ul style="list-style-type: none"> (a) No at grade car parking is permitted in front setback areas between buildings and public streets. (b) Parking provision is to be considered within the design of proposed development and is encouraged to be provided in basement, multi-level or undercroft formats as an integrated component of proposed buildings where it is achievable and economically viable to do so. (c) Parking is to be provided on-site in accordance with the requirements set out in clauses 9.1, and 9.2 of the GSP, in accordance with the standards as set out in the R-Codes and TPS7. (d) Any requested variations to R-Code or TPS7 parking standards will require supporting analysis and justification addressing the following matters: <ul style="list-style-type: none"> (i) Whether demand for car parking associated with the proposed development has been demonstrated to be less than the specified standards; (ii) The availability and likely use of modes of transport other than the private car; (iii) The practicability and likelihood that car pooling will be employed as a means of reducing the demand for parking; (iv) The availability and likely level of use of end-of-trip bicycle facilities; (v) Any reduction in car parking demand due to the shared use of car spaces between different land uses; and (vi) Any other relevant consideration. (e) In appropriate circumstances, cash-in-lieu for a shortfall of onsite visitor and non-residential car parking may be agreed as an acceptable alternative at the discretion of the City, in accordance with the requirements of TPS7 and the City's Local Planning Policy LPP3.1 Access and Parking for Pedestrians, Bicycles and Vehicles, with the funds being invested into shared public parking facilities in other mutually agreed locations within the vicinity of the development.

6.4.5 Loading and Unloading

6.4.5 Loading and Unloading	General Requirements
	<ul style="list-style-type: none"> (a) Loading and unloading areas shall be provided in accordance with the minimum requirements for delivery and service vehicles as set out in the City's Local Planning Policy LPP3.1 Access and Parking for Pedestrians, Bicycles and Vehicles. (b) A minimum of 2 delivery and service vehicle parking locations are to be provided, accessed via the internal laneway network and distributed such that all future development receives a level of accessibility to the satisfaction of the City.

6.4.6 Emergency Vehicle Access

6.4.6 Emergency Vehicle Access	General Requirements
	<ul style="list-style-type: none"> (a) The internal access to be designed and constructed to allow for emergency vehicle access and egress to the satisfaction of the City.

6.4.7 Visual Screening

6.4.7 Visual Screening	General Requirements
	<ul style="list-style-type: none"> (a) All at grade car parking areas are to be appropriately screened from view from the abutting street network to the satisfaction of the City. Screening may include vegetation and hardscape elements such as appropriately integrated and treated feature walls or architectural features.

6.4.8 Plant Equipment and Outdoor Storage

6.4.8 Plant Equipment and Outdoor Storage	General Requirements
	<ul style="list-style-type: none"> (a) Service and storage areas shall be predominantly screened from public view. (b) Building design shall ensure that all plant and equipment is not visible from a public space. Screening devices shall be designed as an integral part of the design of the building. (c) All piped and wired services, air conditioners, clothes drying areas and hot water storage are to be concealed from the street and public view.

6.5 Developer Contribution Arrangements

6.5 Developer Contribution Arrangements	General Requirements					
	(a) Development contributions to be undertaken in accordance with the table below:					
	Responsibility	Road Frontage	Existing Item Status	Proposed Item Status	Requirement	Mechanism
	Developer Lot 497 Ocean Drive	Ocean Drive / Scott Street	N/A	Public piazza (on Central Sub-precinct 2)	The public piazza is to be designed and developed at the total cost of the developer as a requirement of subdivision or development approval. All designs and works are to be to the satisfaction of the City and at completion the developer shall have on-going maintenance responsibility for a period of time to be agreed in conjunction with the City.	Subdivision / Development Approval
	Developer Lot 497 Ocean Drive	Upper Esplanade	2.5 metre wide shared path	3 metre wide shared path	Individual developers to construct the 3 metre path as a condition of development for their frontage prior to the site / development being occupied.	Condition of Development Approval
	Developer Lot 497 Ocean Drive	Scott Street	2.5 metre wide shared path	4 metre wide shared path	Individual developers to construct the 4 metre path as a condition of development for their frontage prior to the site / development being occupied.	Condition of Development Approval
	Developer Lot 497 Ocean Drive and City of Bunbury	Scott Street	Bore water reticulation treatment plant, shed, soak wells and stormwater drainage pipe	Satisfactory relocation	Bore and stormwater infrastructure repositioned to the satisfaction of the City if not relocated prior to development. Timing and responsibility subject to negotiations with the City.	Condition of Development Approval
	Developer Lot 497 Ocean Drive	Ocean Drive	N/A	5 metre wide pedestrian promenade	Promenade to be provided and subsequently maintained by the developer(s) in association with the 5 metre setback along the Ocean Drive frontage. Public access (easement) to be secured.	Condition of Development Approval

6..5 Developer Contribution Arrangements						
	Responsibility	Road Frontage	Existing Item Status	Proposed Item Status	Requirement	Mechanism
	Developer Lot 497 Ocean Drive	Baldock Street	Un-signalised T-intersection with Baldock Street Relevant to all precincts	Right turn deceleration lane	Overall 50% contribution to a 3.5 meter wide and 80 meter long right turn deceleration lane in Ocean Drive northbound and associated re-alignment of pedestrian crossing for the whole Special Use Zone No.1 area. Of the 50% overall contribution, no more than 79% is to be apportioned to the northern and Southern development precincts (2.78ha out of the total land area of 3.51ha across Special Use Zone No. 1)	Condition of development approval

6.6 Subdivision/Strata Strategies and Plans

6.6 Subdivision/Strata Strategies and Plans	General Requirements
	<p>(a) In addition to GSP clause 11.1, at the time of subdivision and/or prior to development, the following management plans are to be prepared to the satisfaction of the relevant authority:</p> <ul style="list-style-type: none"> (i) Construction Environment Management Plan, including; <ul style="list-style-type: none"> 1. A suitable geotechnical assessment for the potential presence of karst onsite and other considered constraints; 2. Confirmation of Acid Sulfate Soil (ASS) risk once detailed design plans have been developed. If required on site testing/assessment to occur prior to ground disturbing activities or as part of the geotechnical assessment; and 3. If required, a trapping and relocation program for Quenda developed in consultation with the Department of Parks and Wildlife (DPAW). It should also be investigated if the Central Precinct (Lots 66 and 497 can be cleared together to ensure that monitoring and (if required) relocation can occur concurrently. (ii) Detailed Earthworks and Retaining Wall Plan; and (iii) Waste Management Plan. <p>The information outlined above shall be lodged with the relevant subdivision or development application, or to satisfy the requirements of subdivision or development.</p> <p>(b) A Strata Management Statement is required to be applied to all strata arrangements within the subject site addressing the management of tourist accommodation units and the relationship to the permanent residential units including URA to the satisfaction of the City and WAPC.</p> <p>(c) The Strata Management Statement is required to be prepared and submitted in accordance with Section 5C of the <i>Strata Titles Act 1985</i>, to establish a Schedule 1 by-law that requires as a minimum the establishment of a unit management agreement, lease or alternative arrangement between each owner of a tourist unit and/or URA dwelling, or the owners collectively, and a common facility manager/operator to provide for common on site management of all such units.</p> <p>(d) The management agreement, lease or alternative arrangement shall cover but not be limited to:</p> <ul style="list-style-type: none"> (i) Reception arrangements (tourist unit/URA); (ii) General rental/leasing arrangements and specific management arrangements to govern the relationship and operation between permanent occupation of units and the short-stay use of units as provided for in the URA land use; (iii) Security (tourist unit/URA); (iv) Maintenance (tourist unit only); (v) Caretaking (tourist unit only); (vi) Refurbishment (tourist unit only); (vii) Marketing (tourist unit only); (viii) Care and maintenance of drainage infrastructure in drainage attenuation areas (tourist unit/URA); and (ix) Other services required for the development to operate as a tourist facility.



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Part 2

Explanatory

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1. Planning Background

1.1 Introduction and Purpose

Special Use Zone No. 1 (SU1) under the City of Bunbury (City) Town Planning Scheme No. 7 (TPS7) provides the framework for the preparation and approval of a Detailed Structure Plan (DSP) for the land located at Lot 497 Ocean Drive, Bunbury (the subject site). This DSP has been developed to provide detailed guidance on subdivision and development requirements and should be read in conjunction with the preferred development vision, standards and requirements of the Back Beach Tourism General Structure Plan (GSP).

The DSP has also been modified to correspond to the new structure planning requirements as set out in the *Planning and Development (Local Planning Schemes) Regulations 2015*, that were gazetted on the 25 August 2015 and that will take effect on the 19 October 2015.

1.1.1 SCHEME AMENDMENT 66 – SPECIAL USE ZONE NO. 1 TO TPS7

Scheme Amendment 66 (Amendment 66) to TPS7 established the requirement for a DSP over the subject site and stipulated the matters that this must address, including the requirement for a number of supporting technical reports.

Further information in respect to Amendment 66 can be found in clause 1.1.1 of the GSP.

1.1.2 DETAILED STRUCTURE PLAN REQUIREMENTS

The DSP reinforces the GSP intent for the Central Development Precinct straddling Scott Street, to provide for a range of land uses comprising of a variety of commercial activities including restaurants and shops, short stay accommodation, including motels and hotels,

and Unrestricted Residential Accommodation (URA) on upper levels. The purpose of the DSP is to provide the detailed planning framework for subdivision and development to support the implementation of SU1 and the GSP.

1.2 Site Overview

1.2.1 LOCATION

The subject site is located approximately 700m south west of the Bunbury Central Business District (CBD) or in practical terms, approximately 1.2km by road via Prinsep Street and Upper Esplanade (refer to Figures 1 to 3).

Refer Figure 1 – Location Plan

Refer Figure 2 – Cadastre

Refer Figure 3 – Aerial Photograph

1.2.2 LEGAL DESCRIPTION AND OWNERSHIP

Table 1 below provides a summary of the property details for the subject site.

Table 1: Property Details

Lot Number/Street Address	Landowner	Lot Area
Lot 497 (65) Ocean Drive, Bunbury	City of Bunbury	4,472m ²

There are no known encumbrances over the title under the control and management of the City of Bunbury.

Figure 1 – Location Plan



Figure 2 – Cadastre

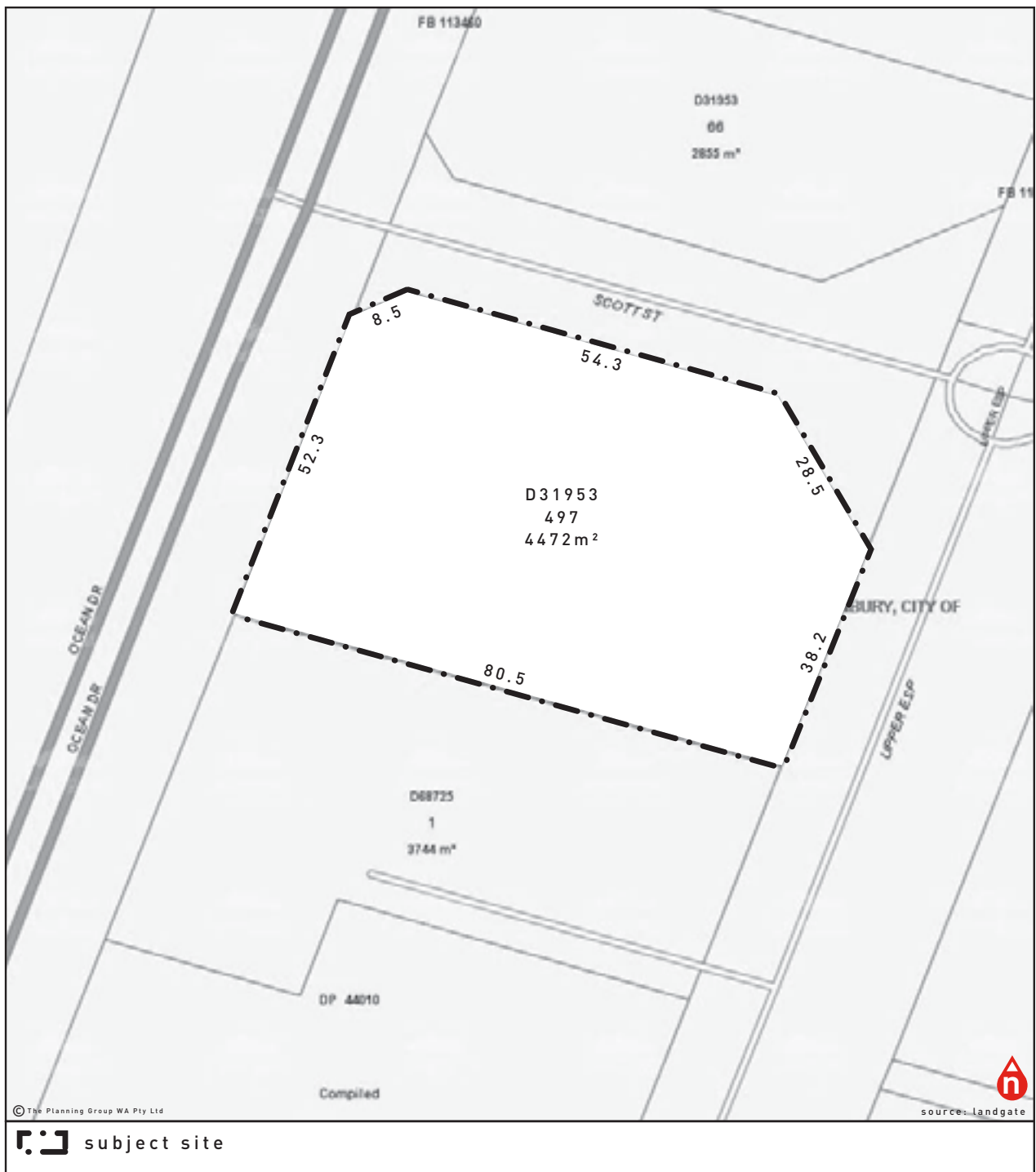


Figure 3 – Aerial Photograph



1.2.3 HISTORICAL CONTEXT

The subject site is bounded by Scott Street to the north, Upper Esplanade to the east, Lots 1 and 2 Ocean Drive to the south and Ocean Drive to the west.

The subject site, whilst current undeveloped, accommodates City infrastructure, including a bore water reticulation treatment plant, shed, soak wells and a stormwater drainage pipe. The subject site has been historically reserved for the purpose of a Parks and Recreation Reserve under the City's local planning framework.

1.2.4 LOCATIONAL CONTEXT

The subject site is located less than one kilometre south-west of the Bunbury CBD and is in close proximity of a range of recreational and tourism uses and facilities. Further information in respect to the type of uses and facilities in the location can be found in clause 1.2.1 of the GSP.

1.3 Planning Framework

1.3.1 ZONING AND RESERVATIONS

1.3.1.1 Greater Bunbury Region Scheme

The potential subdivision and proposed development of the subject site for commercial, short stay and URA purposes aligns with the objectives of the sites 'Urban' zoning under the Greater Bunbury Region Scheme (GBRS).

Refer Figure 4 – Greater Bunbury Region Scheme

1.3.1.2 City of Bunbury Town Planning Scheme No. 7

As a consequence of the finalisation of Amendment 66, the subject site is zoned SU1 under TPS7. This replaces the historical identification of the subject site as a local reserve for parks and recreation and is intended to facilitate the future integrated development of tourism-oriented uses.

This DSP is a direct response to the proposed requirements set out in SU1 and the GSP for the Back Beach area.

Refer Figure 5 – Town Planning Scheme No. 7

1.3.1.3 Back Beach Tourism General Structure Plan

The GSP for the broader Back Beach area has been prepared in accordance with the requirements for SU1 outlined under TPS7. The GSP provides for a range of land uses comprising of commercial, short stay accommodation, mixed use and unrestricted residential uses oriented towards tourism based activities across development precincts (and sub-precincts). The purpose of the GSP is to provide the planning framework to support the implementation of the SU1 provisions of TPS7 by prescribing:

- Objectives for land use and development.
- Spatial layout of land uses.
- General development requirements and standards.
- Arrangements for infrastructure provision and staging.
- Matters that must be addressed by DSPs, that are required to be submitted and endorsed prior to subdivision and/or development.

This DSP is a direct response to the detailed structure planning requirements as set out in SU1 and the GSP.

1.3.2 STATE PLANNING FRAMEWORK

1.3.2.1 State Planning Strategy

The State Planning Strategy provides the basis for long-term State and regional land use planning and coordinates a whole-of-government approach to planning. The general vision of the State Planning Strategy for the South West Region is set out under clause 1.3.2 of the GSP.

The key principles of the State Planning Strategy are as follows:

1. Environment - To protect and enhance the key natural and cultural assets of the State and deliver to all West Australians a high quality of life which is based on sound environmentally sustainable principles.
2. Community - To respond to social changes and facilitate the creation of vibrant, accessible, safe and self-reliant communities.
3. Economy - To actively assist in the creation of regional wealth, support the development of new industries and encourage economic activity in accordance with sustainable development principles.
4. Infrastructure - To facilitate strategic development by making provision for efficient and equitable

Figure 4 – Greater Bunbury Region Scheme

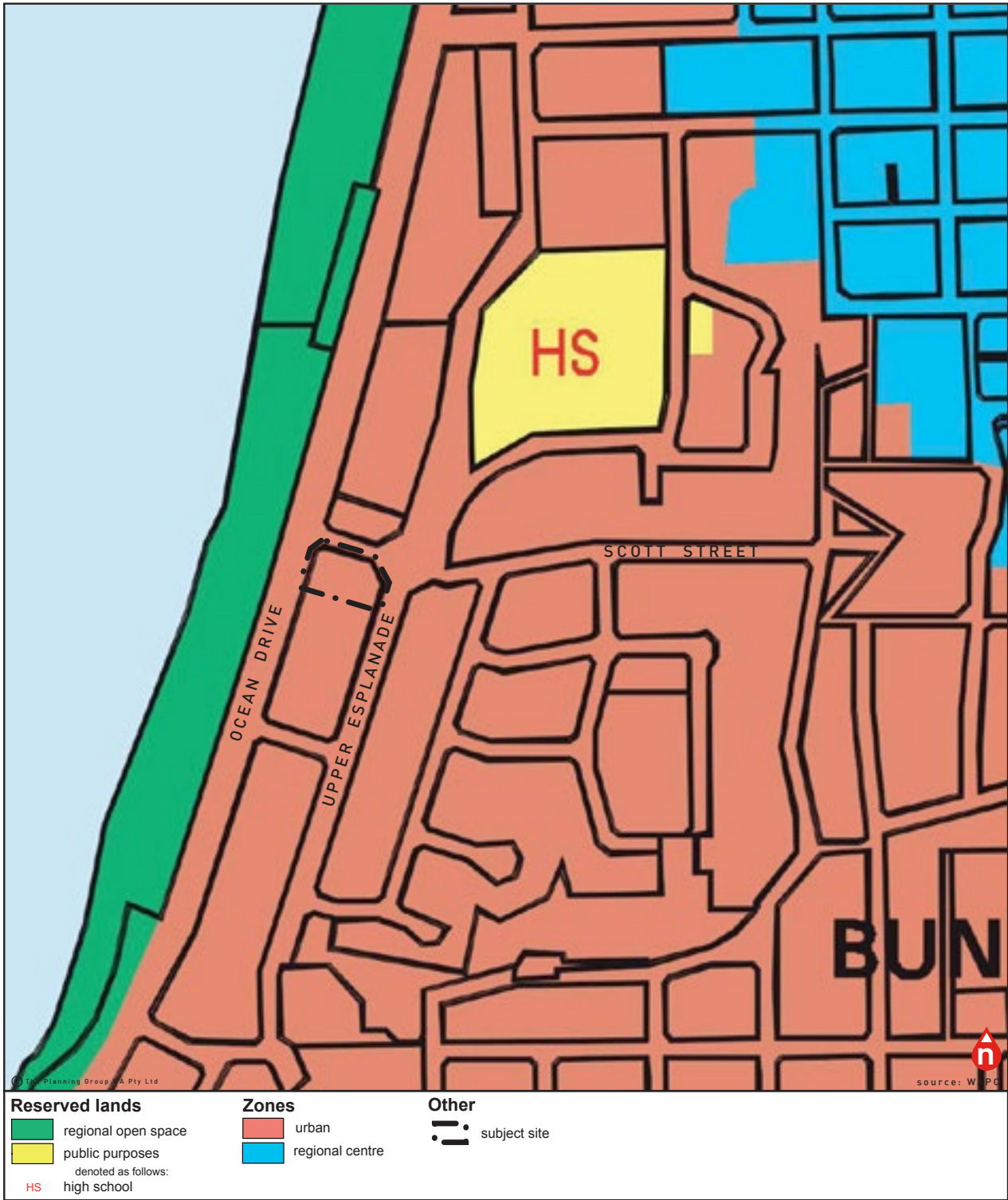


Figure 5 – Town Planning Scheme No. 7



transport and public utilities.

5. Regional Development - To assist the development of regional Western Australia by taking account of the special assets and accommodating the individual requirements of each region.

The DSP is intended to recognise the principles of the State Planning Strategy as they may be applied to the future development of the Back Beach area through:

- Recognition of the area as an asset for the local and wider community.
- Being responsive to community aspirations.
- Providing new commercial, short stay and residential economic opportunities as an extension of the Bunbury CBD.
- Utilising existing infrastructure efficiently.

1.3.2.2 State Planning Policy No. 2.6: State Coastal Planning Policy

The relevant objectives of the current gazetted and operational version of State Planning Policy 2.6 (SPP2.6) are set out under clause 1.3.2 of the GSP.

The DSP works within the 300 metre from the coastline building height limits of SPP2.6 and the City's Local Planning Policy: Building Height. Relevant studies indicate that the subject site is not considered to be at risk by either erosion or inundation by 2110. However, numerous local scale studies have previously confirmed that the Back Beach is subject to erosion, which is particularly evident during winter months. However, due to the relationship of the subject site with Ocean Drive, and the City's ongoing coastal protection works at Back Beach, it is considered that no additional measures are required to mitigate against the impact of future sea level rise or to protect development from potential storm surge.

1.3.2.3 State Planning Policy No. 3.4: Natural Hazards and Disasters

The relevant objectives of State Planning Policy 3.4 (SPP3.4) are set out under clause 1.3.2 of the GSP.

The impact of the development of the subject site on the surrounding environment has been considered in the preparation of the DSP. Flooding in particular is not considered a significant issue for the subject site due to its generally elevated nature, readily draining soils and depth to groundwater.

1.3.2.4 Liveable Neighbourhoods

The relevant aims and objectives of Liveable Neighbourhoods are set out under clause 1.3.2 of the GSP.

The DSP is an appropriate response to the requirements of Liveable Neighbourhoods as it proposes:

1. A walkable development form within a mixed-use context with excellent (and enhanced) pedestrian and vehicle permeability and improved connectivity to the Bunbury CBD, emerging public transport opportunities and nearby recreational areas and uses.
2. Mixed-use development focused on commercial, short stay accommodation and residential uses in a relatively (to the local context) dense and intense form, providing a variety of flexible retail/ commercial, short stay tourism and residential living opportunities.

1.3.2.5 Residential Design Codes

The DSP proposes to utilise the supplementary design codes for multiple dwellings in State Planning Policy 3.1 Residential Design Codes (R-Codes), which collectively provide complementary information and provisions for designing higher density mixed-use development such as is proposed in this instance.

1.3.3 REGIONAL PLANNING FRAMEWORK

1.3.3.1 Greater Bunbury Strategy 2013

The relevant objectives and development guidance provided in respect of the subject site under the Greater Bunbury Strategy (released December 2013) is set out under clause 1.3.3 of the GSP.

The DSP represents an appropriate response to the Strategy requirements in that it promotes residential and interrelated economic development opportunities that build on existing regional assets, features and infrastructure such as the Back Beach.

1.3.4 LOCAL PLANNING FRAMEWORK

1.3.4.1 Strategic Community Plan

The relevant key goals and objectives provided in respect of the subject site under the City's highest level policy document, the Strategic Community Plan (revised March 2015) is set out under clause 1.3.4 of the GSP.

The DSP represents an appropriate response to plan requirements in that it will create opportunities for new business and tourism accommodation providers, as well as provide flexible URA which can be responsive to emerging housing and accommodation needs. The DSP is also intended to ensure the development of an appropriately scaled development form that promote a distinct sense of place as part of an enhanced coastal environment and that integrates well with a public piazza developed as a new community focal point.

1.3.4.2 Local Planning Strategy for Tourism

The relevant framework and recommendations provided in respect of the subject site under the City's Local Planning Strategy for Tourism (LPS-T) are set out under clause 1.3.4 of the GSP.

Whilst the subject site was designated 'Parks and Recreation' Reserve at the time the LPS-T was adopted, similar neighbouring sites are designated as Non-Strategic Tourism Sites under the LPS-T within the broader Ocean Drive Strategic Tourism Location (STL).

The DSP is an appropriate response to the intent of the LPS-T in that it will facilitate the development of well connected and accessible commercial, short stay tourism and residential accommodation based around a high amenity activity node in a strategic location where these facilities have been historically lacking.

1.3.4.3 Local Planning Strategy for Activity Centres and Neighbourhoods

The relevant framework provided in respect of the subject site under the City's Local Planning Strategy for Activity Centres and Neighbourhoods (LPS-ACM) is set out under clause 1.3.4 of the GSP, which identifies that the subject site is located within an area identified as one of the three 'tourism corridors'.

The DSP supports the description and opportunities identified for this area due to the proposed development encompassing commercial land uses, short stay tourism and residential accommodation, and a new integrated public piazza.

1.3.4.4 Local Planning Strategy for Integrated Transport

The relevant objectives for the Local Planning Strategy – Integrated Transport Study (LPS-ITS) are set out under clause 1.3.4 of the GSP and generally relate to securing

improvements to non-private vehicle movements (walking, cycling and public transport).

The DSP will contribute to the objectives of the LPS-ITS by provided enhanced infrastructure in the form of replacement pedestrian and shared paths, a more comprehensive pedestrian and cycling network, including defined new pedestrian paths through the subject site connecting to the new piazza, and additional localised population such that enhanced public transport services may be justified based on emerging demand. These outcomes will be achieved in conjunction with a higher amenity and more secure environment, which will further contribute to pedestrian and cycle movements.

Sustainable levels of car parking are also proposed that are responsive to both demand and market considerations as well as localised upgrades to the road system in the longer term to cater for increased traffic volumes in a safe manner.

1.3.4.5 Local Planning Strategy for Heritage and Character

The City's Local Planning Strategy for Heritage and Character (LPSCCH) seeks to establish the methods by which the City:

- Conserves places and areas of cultural heritage significance.
- Ensures that development does not adversely affect the significance of heritage places and areas.
- Ensures that heritage significance is given due weight in planning decision-making.
- Provides certainty to landowners and community about planning processes for heritage identification, conservation and protection.
- There is no existing built heritage within the subject site requiring specific consideration under the DSP.

1.3.4.6 Local Planning Policy: Building Height

The development heights framework as set out under the City's Local Planning Policy: Building Height is provided in clause 1.3.5 of the GSP.

The DSP proposes development heights in accordance with planning policy and associated GSP requirements. 'Acceptable development' (deemed-to-comply) requirements are proposed to apply to the greater portion

of the structure plan area with the exception of the north eastern part of the subject site where performance based criteria are proposed to be applied supported by a development impact statement developed as part of the structure planning process. The performance based criteria are required to be applied in this location to accommodate an overall three storey development height with increased ground level floor to floor heights to accommodate land use adaptability over time.

1.3.4.7 Local Planning Policy: Unrestricted Residential Accommodation (URA)

The City's definitions and planning position on the development of URA and Unrestricted Residential Occupation (URO) are outlined in clause 1.3.5 of the GSP.

The DSP proposes to accommodate URA multiple dwellings on the subject site on upper levels of future development generally oriented towards the public piazza, Ocean Drive, Scott Street and Upper Esplanade. This is consistent with the City's policy position of having this form of development available in key tourism locations to broaden the scope and availability of short stay accommodation in an economically viable and responsible manner.

1.3.4.8 Local Planning Policy: Access and Parking for Pedestrians, Bicycles and Vehicles

The City's planning policy position in respect of the provision of parking and/or access for pedestrians, bicycles and vehicles are provided in clause 1.3.5 of the GSP.

A transport impact assessment that supports a sustainable level of car parking provision on the subject site based on contemporary standards and considerations, and in particular consideration of reciprocal (shared) use arrangements supports the DSP. Proposed access arrangements, including linkages into the proposed shared laneway and existing pedestrian and cycle networks within the wider Back Beach Precinct have been considered, along with pedestrian permeability through the site to reinforce the economic viability of businesses fronting the proposed piazza.

1.3.4.9 Local Planning Policy: Integrated Open Space Strategy

This Local Planning Policy (LPP) is aimed at guiding the management of areas of public open space with an objective to implement programs designed to provide

extensive greening and street tree planting as well as substantial parkland and natural area development.

The policy recognises the utility of open space is maximised when it is provided as a coherent and interconnected network. Provision of larger areas of open space is seen as the most appropriate method that will best allow for flexibility in function and minimise ongoing maintenance costs as community needs continue to change over time.

Bunbury's open space includes a broad range of types. Areas of existing open space are categorised into either local or neighbourhood open space. These categories are further broken down into specific themes, being:

- Conservation and landscape value (bushland, wetlands, waterways, beaches typically multiple use areas).
- Active recreation (sporting areas, includes sporting facilities).
- Passive recreation (Children's play grounds, picnic and BBQ facilities, no facilities as such).
- Key enhanced open space tourist nodes.

The DSP, in line with the GSP, proposes to provide a landscaped public piazza as a landmark feature at the corner of Scott Street and Ocean Drive. The piazza will create a focus of activation with retail uses benefiting from the pleasing outlook and amenities that will be on offer. The piazza will play a role in linking to other open space areas within the wider development area, will form a component of the desired pedestrian movement network in the locality and will provide additional passive recreational space for rest and contemplation for casual users as well as event space for the benefit of the wider community.

1.3.5 OTHER RELEVANT LOCAL PLANNING DOCUMENTS

1.3.5.1 Back Beach Tourism Precinct Plan

The City's Back Beach Tourism Precinct Plan (The Precinct Plan) was adopted by Council on the 11 December 2012 and is detailed in clause 1.3.5 of the GSP.

The development outcomes that will occur as a result of the implementation of the DSP will be consistent with the vision for the area established as part of the precinct planning process, including the established spatial framework, key land use and urban design parameters.

2. Site Conditions and Environment

An Environmental Assessment Report has been prepared by Coterra Environment (refer Appendix A) for the subject site. The key outcomes of the assessment are provided below.

Refer Appendix A – Environmental Assessment Report

2.1 Environmental Assets Assessment

2.1.1 VEGETATION AND FLORA

The site contains some patches of remnant vegetation, which on a regional scale are mapped as part of the Quindalup Complex. This complex is described as follows:

‘Coastal dune complex consisting mainly of two alliances the strand and fore dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of M. lanceolata – Callitris preissei and the closed scrub of Acacia rostellifera’.

It has been estimated that within the City’s jurisdiction approximately 32% of the Quindalup Complex remains (252ha out of the original 797ha). It is noted that complex does not meet regional representation and rarity local significance criteria (Molloy et al., 2007).

Remnant vegetation within the site is in ‘Degraded’ to ‘Completely Degraded’ condition and consists mostly of cleared areas with weeds. A cluster of shrubs is located adjacent to the existing shed in the north eastern section of the site; however this would not be considered to be of conservation significance (from both a regional and local perspective).

It is noted that the Environmental Review prepared for the GBRS did not identify remnant vegetation being present within the site or any recorded Declared Rare Flora (DRF) or threatened floristic communities occurring within or

adjacent to the site (WAPC, 2000).

In 2015, the City submitted a Threatened Ecological Community (TEC) and Priority Ecological Community (PEC) database search request to the former Department of Environment and Conservation (DEC, now DPaW) in relation to the site. Results obtained within a five kilometre radius of the site indicate that there are no TEC or PEC located within or adjacent to the site, however, the following communities are known to occur with a five kilometre radius:

- ‘Vulnerable’ – Dense shrublands on clay flats (SCP09).
- ‘Vulnerable’ – Threatened ecological community – ‘Herb rich saline shrublands in clay pans (SCP07)’
- ‘Vulnerable’ – Shrublands on calcareous silts of the Swan Coastal Plain (SCP18)
- Priority 1 – Relictual White Mangrove Community (Leschenault Inlet).
- Priority 3 – Southern *Banksia attenuata* woodlands (SCP21b)
- Priority 3 – Coastal shrublands on shallow sands (SCP29a)
- ‘Priority 3 - ecological community – ‘Southern *Eucalyptus gomphocephala*- *Agonis flexuosa* woodlands (SCP25)’

In Western Australia, under the *Wildlife Conservation Act 1950*, rare flora are specified species that are either (EPA, 2008):

- likely to become extinct or are rare, or otherwise in need of special protection; or
- are presumed to be extinct in the wild and therefore in need of special protection should they

be rediscovered.

It is an offence to take or clear rare flora for any purpose and on any lands without the written consent of the responsible minister.

Priority flora species in Western Australia are species under consideration by DPaW for declaration as rare flora, or are rare though not currently threatened. Unlike the rare flora list, the priority flora list does not confer special statutory protection on those species that are listed on it (EPA, 2008).

Whilst it is considered possible that *Lasiopetalum membranaceum* may be present on the site, its Priority 3 status indicates that the taxa is known from several populations and is not believed to be under immediate threat. This is likely to be due to the large number of known populations, or known populations being large, and either widespread or protected. Priority 3 taxa whilst under consideration for declaration as rare flora, are in need of further broad scale survey work to confirm this. The potential presence of this species within a small area (such as the subject site) is unlikely and would not be of considerable conservation significance should it occur.

2.1.1.1 Clearing of Native Vegetation

The DSP covers only the subject site, which currently contains some remnant vegetation in a degraded condition. Future implementation of the proposed DSP, likely through a proposed development application although potentially also via a subdivision application, will result in the clearing of the remaining vegetation.

In 2004, amendments to the *Environmental Protection Act 1986* (EP Act) introduced provisions for regulating the clearing of native vegetation. All clearing of native vegetation in Western Australia requires a permit from the Department of Environmental Regulation (DER) unless it is covered by an exemption. It is an offence to clear native vegetation without the authority of a permit or an exemption.

An exemption is a kind of clearing activity that does not require a permit (DEC, 2010). There are two types of exemptions. The first type is found in Schedule 6 of the EP Act. The second type is found in the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Regulations). Clause 9 within the Schedule 6 exemptions allows for clearing in accordance with an approved subdivision. This exemption for subdivision approvals may include clearing native vegetation for the purposes of (DEC, 2010):

- Constructing roads to provide access to or within the approved subdivision;
- Providing water services to the satisfaction of the Water Corporation;
- Filling or draining the land in accordance with the specifications of the approval; and
- Clearing within any building envelope described in the approved plan or diagram.

The above exemption does not generally apply to development applications, therefore a clearing permit may be required if a development application is submitted without any approved subdivision in place. This will need to be determined once the final development configuration for the subject site has been determined.

In order to manage possible off site impacts from the proposed clearing, compliance with *EPA Guidance Statement No 18 - Prevention of Air Quality Impacts from Land Development Sites* is recommended.

2.1.2 FAUNA AND HABITATS

A search of the DPaW NatureMap database (NatureMap, 2015) for potential threatened fauna occurrences within five kilometres of the subject site was undertaken in January 2015. In addition a search of the Department of the Environment (DotE) database was also undertaken for matters of national environmental significance and other matters protected by the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) within the site.

Whilst a large number of species of significance have been recorded or are expected to occur within five kilometres of the site, a review of the habitat types required by the identified species indicates that only three fauna species are possible visitors to the site, being the Rainbow Bee-Eater (IA, Migratory), Peregrine Falcon (S) and the White-bellied Sea Eagle (IA, Marine, Migratory). However, given the lack of remnant vegetation it is unlikely that the site is significant to these species.

2.1.3 STRUCTURE PLAN RESPONSE TO ENVIRONMENTAL ASSETS

2.1.3.1 Vegetation and Flora

In order to assess the potential impacts of the future development of the subject site on vegetation, a review of the long term potential conservation value of the remnant vegetation present was undertaken as outlined below.

The area of the Quindalup Complex remaining within the Greater Bunbury Region has been recorded at 40.6% of the original extent, with approximately 17.7% of the original extent in existing or proposed regional open space under the GBRS (RPS, 2009). This is above the minimum 10% requirement for the constrained areas, which include the Perth Metropolitan Area and the Bunbury Region (EPA, 2008).

In addition, the EPA (2006) states that 47% of the original area of the Quindalup Vegetation Complex remains vegetated within the Swan Coastal Plain (System 6 and portion of System 1 region).

Viability is the measure of the ability of an ecological community to be self-sustaining in supporting and maintaining the full range of living organisms it naturally contains over a long time frame, that is for at least 50 years (Del Marco *et al.*, 2004). Viability depends a great deal on the inherent resilience of an ecological community to recover from disturbance, weed invasion, fire, diseases, pests and other threats (Del Marco *et al.*, 2004).

The five easily measured components of viability that are outlined in the Perth Biodiversity Projects Biodiversity Planning Guidelines for the Perth Metropolitan Region are (Del Marco *et al.* 2004):

- Size
- Shape
- Perimeter to area ratio
- Condition
- Connectivity

Assessing the site against the above criterion, the biodiversity and the associated ecological value present within the subject site is considered unlikely to be viable in the long term and as such has little conservation value. Clearing of the vegetation therefore is considered unlikely to have a significant environmental impact.

In order to manage possible off site impacts from the proposed clearing, compliance with *EPA Guidance Statement No 18 - Prevention of Air Quality Impacts from Land Development Sites* is recommended.

On this basis the development of the subject site as provided for under the DSP is not encumbered by environmental assets, with no specific measures being required, therefore no further management measures are recommended for vegetation and flora within the site.

2.1.3.2 Fauna and Habitat

A review of the habitat types required by the species of conservation significance listed, indicates that only three fauna species are possible visitors to the site, being the Rainbow Bee-Eater (IA, Migratory), Peregrine Falcon (S) and the White-bellied Sea Eagle (IA, Marine, Migratory).

As discussed above, vegetation on the site is highly degraded and weedy. A clump of shrubs is located adjacent to the existing shed on the northern boundary; however this is not considered to be of conservation significance. There are no remnant trees within the subject site, which reduces the ability of this area to provide roosting or foraging opportunities for many local bird species, or suitable habitat for other species.

Possible scratchings of Quenda (P5) have been observed by the City's Environmental Office in the area, however they are generally solitary in nature with home ranges of up to seven hectares. Due to the small size of this remnant it is considered unlikely that a population or individual could be sustained on the subject site in the long term.

However, a Quenda trapping and relocation program will be developed as part of the Construction Environmental Management Plan (CEMP) in consultation with the City. Should Quendas be encountered on site then the program prepared in the CEMP will be activated, and relocation of the animals will occur prior to any clearing of vegetation on the site. If possible, it will be investigated if the Central Precinct (Lots 66 and 497) can be cleared together, to ensure that monitoring and (if required) relocation can occur concurrently.

As discussed in the previous section, the biodiversity and the associated ecological value present within the site is considered unlikely to be viable in the long term. On this basis, the environmental impact of the future development of the subject site on fauna and habitat is therefore considered to be within acceptable limits.

2.2 Landform and Soils

2.2.1 SOIL TYPE

The subject site is part of the Quindalup landform, which consists of dunes and beach ridges, composed of calcareous sand (Churchward and McArthur, 1978). The sub-unit present on the site is Safety Bay Sand (Qhs) (Geological Survey of WA).

Safety Bay Sand is defined as white, un lithified, calcareous fine to medium-grained quartz sand and shell fragments with traces of fine-grained, black, heavy minerals. It occurs along the coastal margin as stable and mobile aeolian

dunes, which overlie the Tamala Limestone and Becher Sand (McPherson and Jones, no date).

This geology is highly permeable and free draining therefore infiltration of stormwater for drainage purposes is not considered to be an issue.

Potential for karst to occur is generally related to the presence of Tamala Limestone geological units. The potential presence of karst onsite will be further reviewed during geotechnical investigations undertaken prior to the subdivision or development stage of the project, as part of a CEMP.

2.2.2 SOIL CONTAMINATION

The DER Contaminated Sites Database was searched for known contaminated sites within or adjacent to the subject site (DER, 2015). No registered sites were found within or in close proximity to the subject site.

2.2.3 ACID SULPHATE SOILS

Acid Sulfate Soil (ASS) risk mapping (Landgate, 2013) for the subject site shows that there is 'low to nil risk of acid or potentially acid sulphate soils >3m below the ground surface'. The Department of Environmental Regulation (2015) have recently released in final Identification and Investigation of ASS and Acidic Landscape guidelines, which identify when a site needs to be investigated for ASS.

As part of the preparation of the Environmental Assessment Report an assessment of the concept design prepared by TPG for the subject site was undertaken by Coterra against the DER (2015) criteria to determine whether the site needed to be investigated for ASS (refer to Table 3 of Environmental Assessment Report). Based on the assessment, and soil and geology characteristics of the subject site, the probability of ASS occurring within the subject site is unlikely. However, desktop assessment can be confirmed once the detailed design plans for the undercroft car park and areas to be earth worked are confirmed. Should ASS assessment be warranted this will be undertaken prior to ground disturbance or as part of the geotechnical investigation for the site.

2.2.4 LANDFORM AND EXISTING SITE LEVELS SUMMARY

Topography on the site slopes towards the coast, from approximately 13 mAHD along the eastern boundary to approximately 8 mAHD on the western boundary.

2.3 Groundwater and Waterways

2.3.1 EXISTING GROUNDWATER LEVELS

There are no regional groundwater contours in the vicinity of the site, however there are a number of Department of Water WIN bores within a one kilometre radius of the site. The most representative of these bores (Bore ID 61118026) indicates that the groundwater level at the subject site is likely to be approximately 0.55 mAHD. This equates to a separation distance from existing ground levels to groundwater of approximately 6.5 - 12.5 mbgl. The site is therefore considered unconstrained from a hydrological perspective.

2.3.2 PREDICTED GROUNDWATER LEVELS

Groundwater levels are not predicted to significantly change as a result of the development envisaged under the DSP.

2.3.3 GROUNDWATER QUALITY

Site specific groundwater monitoring has not been undertaken for the subject site. Given the close proximity of the site to the ocean, it is likely that the superficial aquifer underlying the site is brackish (1,000-1,500 mg/L) (DoW, 2013a).

2.3.4 SURFACE WATER

There are no mapped DER geomorphic wetlands or *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* (EPP) wetlands located within or immediately adjacent to the subject site. There were also no drains or drainage lines visible on the site identified as a result of site inspections that were undertaken.

2.3.5 COASTAL ENVIRONMENT

The subject site is located adjacent to the Indian Ocean, separated from the beach locally known as the 'Back Beach' by Ocean Drive and the existing coastal foreshore reserve.

2.3.5.1 Storm Surge Modelling for Bunbury

In 2010, strategic storm surge modelling was undertaken for the coastal areas within the City. It provided a simulation of potential inundation resulting from five different worst case scenarios involving storm surges and sea level rise(s). One of the key modelled outputs of the study was that the foredunes on the open coast plan a significant role in protecting the City from storm surge inundation for all cases considered (Fountain et al. 2010). A quantitative coastal-recession risk assessment in the Busselton to Rockingham area was also completed. The risk model indicated that (without coastal protection works and active management) the potential for shoreline recession could be up to 400-500 metres by 2100, which would affect not only the subject site but lower lying areas within the City.

It should be noted that there were limitations of the modelling outcomes in that the modelling methodology includes approximations, and model results are by nature only indicative. As a result, the model outputs described above should not be relied upon solely for planning decisions. The model results must be used as only one of a number of inputs that must be considered when attempting to interpret the risk of storm surge inundation to the City.

2.3.5.2 Coastal Hazard Mapping (Damara, 2012)

The Intergovernmental Panel on Climate Change (IPCC) has publicly released its Fifth Assessment Report on Climate Change 2013 (IPCC, 2013) which concludes that global mean sea level will continue to rise during the 21st century. Under all scenarios the ICPP states that the rate of sea level rise will very likely exceed that observed during 1971-2010, due to increased ocean warming and increased loss of mass from glaciers and ice sheets (IPCC, 2013).

The City's and Shire's of Bunbury, Busselton, Capel, Dardanup, Harvey, Mandurah, Murray, Rockingham, Waroona are a collective group of Local Governments between Cape Peron and Cape Naturaliste in the southwest of Western Australia, who have joined together to form the Peron Naturaliste Partnership. The vision of the Partnership is to empower a resilient regional community to reduce risks and optimise opportunities presented by climate change induced sea level rise (PNP, 2013).

The Partnership has undertaken a Coastal Adaptation Decision Pathways (CAPS) Project, which has produced coastal hazard mapping for the region. Inundation hazard mapping has been developed from evaluation of tide

gauge data sets from Fremantle, Bunbury, Busselton and the network of gauges within the Peel-Harvey estuarine system (Damara, 2012). Erosion hazard mapping has been derived from the downscaling of a regional recession study, through consideration of geology and landforms (Damara, 2012). Although there are some acknowledged limitations to the erosion mapping methodology, both sets of mapping by Damara (2012) indicate that the subject site is not considered to be at risk by either erosion or inundation by 2110.

2.3.5.3 State Planning Policy 2.6 State Coastal Planning Policy

SPP2.6 prepared under Part 3 of the *Planning and Development Act 2005*, applies to all planning proposals within the coastal zone in Western Australia. The purpose of SPP2.6 is to provide guidance for decision-making within the coastal zone including managing development and land use change; establishment of foreshore reserves; and to protect, conserve and enhance coastal values (WAPC, 2013). The SPP requires that coastal hazard risk management and adaptation is appropriately planned for, and ensures that development and the location of coastal facilities takes into account coastal processes, landform stability, coastal hazards, climate change and biophysical criteria (WAPC, 2013).

Development on the subject site would be considered as 'Infill Development' as it is situated adjacent to developed lots and to approved development (development south, east and future north on Lot 66) and can be protected from natural shoreline recession through management/coastal protection works including (but not limited to):

- Implementation of a protection scheme;
- Beach nourishment or replenishment;
- Dune management;
- Flood and sea walls;
- Groynes; and/or
- Off-shore breakwaters or reefs (WAPC, 2012).

The City has installed seawalls along portions of the Back Beach to protect infrastructure as part of the Bunbury Coastal Enhancement Project Stages 1-3. On a as required basis, the City completes coastal protection works at the Back Beach, to protect infrastructure and assets separating the subject site from the coast, and on this basis any potential erosion impacts are being effectively managed.

2.4 Existing Movement Network

2.4.1 ROAD NETWORK

The subject site fronts Ocean Drive to the west, Upper Esplanade to the east and Scott Street to the south, with direct vehicular access proposed from Upper Esplanade only. This access/egress point will be used for light vehicles, as well as service vehicles.

A Transport Impact Assessment (TIA) has been prepared by KC Traffic and Transport (KCTT) to support the DSP.

Refer Appendix B – Transport Impact Assessment

The assessment sets out the existing movement network and context and supports the proposed access arrangements to the subject site as proposed in the DSP. This is essentially a single driveway access/egress point from Upper Esplanade servicing the subject site. It is noted that these access arrangements are also consistent with the GSP requirement that no access be provided from Ocean Drive.

Given the importance of Upper Esplanade as a connection to Bunbury Senior High School, the current configuration of the roadway is assessed as appropriate, however, consideration for traffic management devices such as raised platforms may be considered at important pedestrian crossings, should vehicular speeds become of concern.

2.4.2 PEDESTRIAN AND CYCLING NETWORK

There are existing pedestrian and cycling facilities in the streets surrounding the DSP area. Ocean Drive, Upper Esplanade and Scott Street have shared paths on at least one side of the road reserve. The subject site currently has strong pedestrian connectivity to the Bunbury CBD and Bunbury Senior High School, with good shared path connectivity along Upper Esplanade.

The TIA identifies the following:

- Provision of pedestrian paths on the development side of the road reserve and additional pedestrian crossings would improve connectivity and safety of pedestrian traffic.
- The location of any road crossings on Ocean Drive should consider appropriate sight distances and lighting / visibility criteria due to the existing traffic volumes in the vicinity of the mentioned lots.

- It is likely that any existing paths on the development side of road reservations abutting the DSP area will need to be re-constructed at the completion of construction contracts due to damage during construction works.

The TIA also identifies proposed pedestrian and cyclist facilities external to the DSP area from the Bunbury Transport Vision 2030. The following linkages proposed in this vision statement are likely to improve connectivity between the Bunbury CBD, the subject site and the Back Beach area:

1. Proposed shared path in Symmons Street linking directly between Ocean Drive and Blair Street.
2. Extension of the existing shared path in Stockley Road to connect between Upper Esplanade and Ocean Drive in the west and between Tuart Street and Spencer Street.

These proposed connections will provide strong connectivity between the subject site, the Bunbury CBD and the key land uses within walkable catchments, and offer pedestrian, cyclist and bus transportation modes as strong options for trips within the Bunbury CBD and inner Bunbury areas.

The TIA concludes that the development of the subject site is not likely to require the development of any other specific linkages that have not been discussed as part of the Bunbury Transport Vision 2030.

2.4.3 PUBLIC TRANSPORT

Bus route 831 runs along Ocean Drive (Bunbury–Dalyellup via Usher). Bus stops approximately 350 metres north of the subject site with an interval of 60 minutes. There is also an existing school bus stop on Upper Esplanade in front of the high school that will remain.

Bus stops on both sides of the Ocean Drive road reserve are not linked with footpaths. Given the scope of this development, as well as other developments in surrounding locations, there would be the potential for improved utilisation of public transport, particularly if land uses which promote non short stay residents are provided for the wider population as is envisaged under the DSP. Accessibility to existing bus stop locations from future development sites can be improved through relatively minor additions to the existing network, particularly the proposed pedestrian pathway along the eastern side of Ocean Drive adjacent to the identified Back Beach Precinct development sites. As future development forms, land use distribution and intensity become clearer, consideration should also be given to potential relocation of or even provision of additional bus stops in locations, where they are in closer proximity to higher intensity use nodes or

hub points in the improved pedestrian network.

The TIA also identifies other key service provisions as noted in the Bunbury Transport Vision 2030. Key linkages proposed which will have an impact on the DSP area include:

- Proposed Cat Bus route in Upper Esplanade, Scott Street and Ocean Drive directly fronting the subject site.
- Proposed Bunbury Circle Route in Upper Esplanade, Scott Street and Ocean Drive directly fronting the subject site.
- Proposed bus route directly linking the subject site to the Bunbury Primary School and the Bunbury CBD Bus Station.

These additional bus linkages will improve the likely take-up of public transportation from the DSP area, and if service frequencies offer direct connection to the Bunbury CBD every 15 minutes or better during key service periods (i.e. AM/PM peaks and throughout the day) the public transportation mode share is likely to be higher than that modelled in the TIA. These initiatives also tie in directly with the recommendations of the City's Integrated Transport Study, which focuses on increasing the level of service for the circular route that runs past the subject site rather than introducing new routes. This is considered to be likely to be a more viable option and could result in an increase in the level of service of public transport to the precinct, particularly if undertaken in conjunction with strategic positioning of future bus stops to increase patronage.

2.5 Heritage

2.5.1 ABORIGINAL HERITAGE

A desktop assessment aboriginal heritage assessment was undertaken for the subject site by Amergin Consulting Australia Pty Ltd and is provided in Appendix C.

Refer Appendix C – Aboriginal Heritage Assessment

There are no registered Aboriginal Sites within or immediately adjacent to the subject site. However, the land is largely overlapped by one 'Other Heritage Place' as currently mapped on the Department of Aboriginal Affairs' Aboriginal Heritage Inquiry System: DAA Place ID 21371 'Back Beach 03 (BB03)' which is 'Lodged' with the DAA as a mythological place.

DAA Place ID 21371 comprises the sand dune ridge extending along Back Beach from the vicinity of Hayward Street in the south as far north as far as the basketball courts (Figure 3 of Appendix C). In order to seek further

clarification on the significance and extent of this heritage place, it is suggested that consultation be carried out with relevant Aboriginal people and that Section 18 approval be obtained if necessary prior to ground disturbance works.

In order to seek further clarification on the significance and extent of this place, it is suggested that consultation be carried out with relevant Aboriginal people at the appropriate stage of the site development process. The recommended consultations should seek to determine whether the sand dune ridge has specific mythological associations connected, for example, with the Ngarngungudditj Walgu or some other specific narrative, or whether it is a place of generalised significance, and to seek the views of the Aboriginal community on whether proposed development within the subject site would adversely impact the reported mythological values of the place.

The desktop assessment has also highlighted the potential for skeletal remains to be revealed during ground disturbance works within the coastal dune system generally, including the subject site. It is suggested that this potential be managed through archaeological monitoring of ground disturbance activities and the implementation of an Aboriginal Heritage Management Plan (AHMP) that includes stop-work procedures in the event that such material is encountered.

The recommendations arising out of the desktop assessment are as follows:

- It is recommended that consultation with relevant Aboriginal people take place in order to gain a better understanding of the significance of DAA Place ID 21371 and its implications for the development of the subject site, if any;
- It is recommended that the proponent obtain Ministerial consent under Section 18 of the *Aboriginal Heritage Act 1972* (AHA) to use the land if it is established that an Aboriginal Site is likely to be impacted;
- It is recommended that archaeological monitoring be carried out during ground disturbance activity within the subject site, particularly if ground is being disturbed for the first time or what appears to be the first time; and
- It is recommended that an AHMP be developed and implemented that includes stop-work procedures to be put into effect in the event that any previously unidentified Aboriginal sites or objects, including skeletal material, are encountered during earthworks associated with the development of the lot.

The above recommendations have been factored into

the DSP requirements in Part 1 and will require further consideration and implementation during the subdivision and/or development phases for the subject site.

2.5.2 EUROPEAN HERITAGE

The subject site is not listed on the City's Municipal Inventory or State Register of Heritage Places. There are however, known post colonisation heritage buildings and sites nearby. These are detailed on Figure 9 of the GSP and include:

- Bunbury Senior High School;
- Pioneer Park (the original Bunbury Protestant Cemetery);
- Lot 300 Upper Esplanade (the original Bunbury Roman Catholic Cemetery);
- The location of 'The Esplanade' former guesthouse located on lots 3 and 4 Upper Esplanade;
- The site of the former Craig House – Bunbury Senior High School Hostel;
- The building of the GWN Network facility.

With the potential exception of Bunbury Senior High School, any future development proposals are unlikely to have the potential to impact on any known cultural heritage values in the locality.

In the case of Bunbury Senior High School, the development impact statement provided at Appendix D demonstrates that the built form envisaged by the DSP has appropriately considered and mitigated possible heritage impacts on the school in terms of maintenance of key view corridors and sight lines to and from the school.

Refer Appendix D – Development Impact Statement

On this basis it is considered that cultural heritage considerations present no impediment to the implementation of the DSP in the form proposed and nor do they represent any constraints to the future development of the subject site.

2.6 Climatic Conditions

2.6.1 CLIMATE

Bunbury experiences a Mediterranean climate, with dry hot summers and cooler winters. The annual rainfall is approximately 718 mm/yr, with most of this falling between May and September as outlined in Table 2.

Table 2: Bunbury Rainfall

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean Rainfall	12.3	7	15	36	91.6	147.5	148.4	117.7	79	31.8	25.2	15.8	718.2

2.6.2 WIND

Local ambient wind conditions at Bunbury are dominated by the sea breeze/land breeze system. Predominately easterly winds prevail in the morning (9am) and predominately westerly winds in the afternoon (3pm). The frequency of occurrence of strong northerly winds (stronger than 40 km/hr) is negligible compared to the westerly events.

2.7 Opportunities, Constraints and Site Context Analysis

An analysis of existing site conditions and the potential opportunities and constraints that require consideration in the planning and development of the subject site has been undertaken to inform the preparation of the DSP. The key elements of this analysis are considered in further detail below and are generally identified in the constraints and opportunities analysis graphically depicted in Figure 10 and Figure 11 (Public Piazza) of the GSP.

2.7.1 BACK BEACH

The subject site benefits from high exposure to the Back Beach environment and close proximity to the Bunbury CBD, with ready access along a significant coastal transport route.

The opportunity therefore exists to maximise the benefits presented by the coastal environment, established recreational facilities and close proximity to the CBD in terms of being able to provide a significant quantum of flexible short stay accommodation and residential development opportunities that take advantage of the desirable coastal lifestyle and excellent access to the goods, services and amenities available in the CBD.

It would be expected that the future development of the subject site will take the form of high quality architecture with a climatically responsive coastal vernacular coupled with high amenity landscaping works, particularly within the new public piazza, that reinforce proposed improvements to the local movement network.

VIEWS AND VISTAS

The subject site sits within a wider context of some important views and vistas including those to and from the area east of Scott Street, the coastal foreshore and Ocean Drive.

As a response the DSP needs to consider the retention of the coastal landform as much as is practical through topographically responsive site benching to accommodate new development, the provision of key view corridors to maintain the relationship of areas to the east to the coastal environment, and through the development of a built form response that provides reasonable levels of visual permeability to views of significance, and that does not unduly compromise outlook, amenity or privacy.

2.7.2 OCEAN DRIVE

The subject site abuts Ocean Drive to the west. Ocean Drive is a significant road that provides access to the coastal environment, the Bunbury CBD, as well as access to southern suburbs of the City and beyond including Dalyellup. It forms an important component of the City's movement network and appropriate functionality and amenity must be maintained for projected future traffic volumes. This means that the potential for additional vehicle access is highly constrained and that pedestrian and cyclist facility upgrades must be foremost considerations as part of any future planning processes.

As a response the DSP will need to provide for appropriate alternative vehicular access from Upper Esplanade and will need to reinforce a desirable pattern of pedestrian and cycle movements to designated road crossing points through appropriate infrastructure upgrades, including improved opportunities to safely access existing and emerging public transport opportunities.

2.7.3 FORESHORE AND GREEN SPACE

The subject site is located within walkable proximity of considerable areas of public open space including the Ocean Drive Foreshore, Ocean Drive Reserve, Nidja Ngaalang Nedigar Ngoorndiny Reserve, and Pioneer Park.

High quality on site landscaping will be undertaken in association with the future public piazza. This forms a key component of the future development of the subject site and will create a new public space that is a focus of activity within the established open space network and that is responsive to the characteristics of the coastal erosive environment and site topology.

Key considerations will include providing improved and well defined linkages through the development of a coastal promenade and cross site public paths and rest areas for pedestrians, and ensuring that built development form is responsive to the coastal environment.

3. Land Use and Subdivision Requirements

3.1 Structure Plan Summary

The key elements of the proposed DSP for the subject site build upon the requirements as set out in the GSP in clause 3.1 and are as follows:

- Central Precinct with three Sub-precincts, each of which is consistent with the GSP.
- Creation of a high amenity built and landscaped environment that contributes to the quality and relationship with the public realm in the locality and the area as a south-western gateway to the Bunbury CBD.
- Maximum building heights and land use permissibility as set out in the GSP, including consideration of likely building envelopes defined primarily by height and setback allowances.
- A Development Impact Statement being incorporated to support additional height on a performance basis in the north eastern corner of the site to accommodate increased floor to floor heights for future land use adaptability.
- Reinforcement of the pedestrian promenade requirement along the Ocean Drive frontage consistent with the GSP requirements, as part of a wider range of movement network improvements in the locality.
- Detailed requirements for built form as part of any future development proposal with specific consideration of appropriate levels of ground floor activation along Ocean Drive and Scott Street frontages, abutting the public piazza and potentially along Upper Esplanade, and articulation of upper level development.
- Maintenance of a medium density and comparatively low scale residential environment to most of the Upper Esplanade frontage of the subject site to ensure a high level of residential amenity.

- A dedicated area of high quality public open space in the form of Public Piazza, designed to form in integrated component of the local movement network to ensure passing trade, contributing to activity, vitality and the viability of abutting businesses.
- Specific requirements relating to the interplay between dedicated short stay accommodation, URA, users of the public piazza and patrons of local businesses, including innovative use of management arrangements, shared facilities and locations for communal open space, to enhance the opportunities and amenities available to visitors and residents.
- A requirement for landmark built elements in a key location adjacent to the public piazza and guidance on the defining features that are expected to be incorporated into the built form.
- Guidance on developer contributions where need and nexus have been clearly established with the proposed development on the subject site.

3.1.1 SUMMARY TABLE

A summary of the key elements of the DSP is outlined in Table 3 below.

Table 3: Structure Plan Summary Table

Total area covered by the Detailed Structure Plan	0.4472ha
Estimated number of URA dwellings (upper levels only)	26
Estimated number of short stay apartments (ground level)	5
Estimated population (assuming 1.8 persons per URA dwelling and short stay apartment)	56
Estimated possible Non-Residential (Retail and Commercial) floor space	300m ² GFA
Estimated Food and Beverage Retail floor space (including restaurants, small bars etc)	350m ² GFA
Proposed Public Piazza Space (retained in public ownership as agreed with the City)	700m ²

3.2 Land Use

The predominant land use identified for the subject site is URA accommodation on the upper levels of future development, with short stay accommodation, retail, restaurant and bar uses at ground level fronting onto the public piazza and adjacent street network.

3.2.1 RESIDENTIAL LAND USE

In accordance with the GSP, the DSP intends that residential uses, in the form of URA multiple dwellings, will be the main development form in both Sub-precincts 1 and 3 on the upper levels of new development. This will include a range of housing types that will contribute to greater housing choice in Bunbury. The product mix is anticipated to respond to R-Code mixed use requirements, including the provision of single and multiple bedroom dwellings.

Development standards applicable to the subject site in respect to plot ratio, and open space provision and other key development standards such as certain setbacks, building height and other development standards are as specified under Part 1 of the GSP and Part 1 of the DSP.

Based on the development concept prepared by TPG, and in order to provide future development flexibility, maximum plot ratio has been set at 1.25, which is equivalent to an R100 density code. However, building height and setback parameters will be the primary drivers to controlling the scale and bulk of future built form on the site. Any additional residential plot ratio sought by development proposals will need to be justified against the relevant design principle of the R-Codes (Cl 6.1.1 P1), which stipulates:

'Development of the building is at a bulk and scale indicated in the local planning framework and is consistent with the existing or future desired built form of the locality.'

A minimum 30% of the site is required to be provided as open space although, based on the development concept prepared by TPG, it is expected that the provision of useable roof terraces may further increase the amount of open space provided on-site. Any variation to the minimum open space requirement is required to satisfy design principle 6.1.5 (P5) of the R-Codes, which stipulates:

'Open space respects existing or preferred neighbourhood character and responds to the features of the site.'

It is anticipated that development proposals will seek to use the application of the 'design principles' approach as outlined in the R-Codes in many instances as opposed to the deemed-to-comply approach to achieve site responsive development outcomes that are responsive to DSP and GSP objectives and requirements.

3.2.2 NON-RESIDENTIAL LAND USE

Non-residential uses within the subject site are primarily focused around Sub-precinct 2 fronting onto the public piazza and also on the Ocean Drive and Scott Street frontages. Uses are expected to mainly comprise short stay accommodation, retail and food and beverage uses (restaurants and small bars). This design and development of the public piazza has been identified as requiring particular consideration in terms of specifically supporting the retail and café/bar uses focussed on it to create an active people based and economically viable development hub.

It should be noted that floor space limitations to certain commercial uses apply under the GSP.

3.3 Movement Networks

KCTT have undertaken a thorough analysis of the existing movement networks in the vicinity of the subject site and assessed the impact of a conceptual development that is based on notional probable maximum yield projections on these existing networks. The Transport Impact Assessment is provided at Appendix C.

Refer Appendix B – Transport Impact Assessment

3.3.1 VEHICLE TRAFFIC

3.3.1.1 Daily Trip Generation

KCTT has applied the following daily trip generation rates to the proposed land uses on the subject site (based on trusted guideline sources such as the WAPC Transport Assessment Guidelines and the NSW RTA Guide to Traffic Generating Developments):

- Medium density residential apartments (and short stay apartments): 5.5 vehicle trips per dwelling per day and 0.8 peak hour trips per dwelling
- Retail: 121 trips per 100m² NLA and 10.0 peak hour trips per 100m² NLA
- Restaurants and Small Bars: 60 trips per 100m² GFA and 5 evening peak hour trips per 100m² GFA

The vehicle trip generation associated with URA, short stay apartments, retail and food and beverage land uses is shown in Table 4. The PM peak is expected to be the highest generator of hourly traffic into the locality due to the convergence of PM employment trips for the residential land uses as well as peak retail and restaurant usages.

Table 4: Daily Vehicle Trip Generation - Concept Development of Lot 497 Ocean Drive

Land Use	Number of Units	NLA	Requirements	Total VPD	Total VPH
Shops	n/a	277m ² NLA	121 vehicular trips per 100m ² of NLA and 10 peak hour vehicular trips per 100m ² of NLA.	(335) 235**	(28) 20**
Restaurants	n/a	60 seats or 120m ² 130m ² for food preparation, services and administration Total = 250m ²	60 vehicular trips per 100m ² of GFA and 5 evening peak hour vehicular trips per 100m ² of GFA.	(150) 105**	(13) 9**
Small Bar	n/a	20 seats or 40m ² bar area = 30m ² storage, food prep, services and admin area = 30m ² Total = 100m ²	60 vehicular trips per 100m ² of GFA and 5 evening peak hour vehicular trips per 100m ² of GFA.	(60) 42**	(5) 4**
URA (combination of unit sizes)	26	dwelling area 75m ² < GFA < 110m ²	5.5 vehicle movements per day per dwelling / 0.8 vehicle trips per peak hour dwelling	143	21
Short Stay Apartments	5	dwelling area 75m ² < GFA < 110m ²	5.5 vehicle movements per day per dwelling / 0.8 vehicle trips per peak hour dwelling	28	4
Total		600m² + Residential		(716) 553**	(71) 58**

** figures allowing for 30% reciprocity between uses

3.3.2 VEHICLE NETWORK

3.3.2.1 Site Access and Internal Movements

Vehicular access for future development on the subject site is expected to be from Upper Esplanade with no direct connections allowed to Ocean Drive. Vehicles enter the site from Upper Esplanade on the southern boundary of the site are expected to have the option of parking at grade before entering the basement level parking area.

In summary, the location shown for the proposed entrance on the DSP Map is suitable for the purposes of the development as provided for under the DSP. The exact location and vertical grades for each of the entrances will need to be refined in the detailed design process. However, it should be noted that the TIA indicates there are no design/speed environment issues in Upper Esplanade that preclude the connection of full movement access/egress in the general location described.

3.3.2.2 Management of Traffic Generated by the Development

The entrance/egress to the subject site from Upper Esplanade is expected to accommodate approximately 553 vehicular movements per day with a forecasted impact of around 58 vehicular movements per hour in the peak hour when future development is completed.

The estimated traffic flow is expected to be equal for the in and out direction. A large percentage of vehicles would be light vehicles, with less than 0.1% of all vehicles being service vehicles.

The AM peak on Upper Esplanade north of the intersection with Scott Street occurs between 08:00-09:00 with the development AM peak assumed to be between 08:30 - 09:30. It is assumed that the total peak hour vehicular traffic generated / attracted by the subject site will partially impact the traffic on the adjacent roads, since the peak hour periods partially coincide. Given the low volumes of traffic from the future development of the subject site however, the impact of this development on the network in the AM peak will be negligible.

The PM peak on Upper Esplanade occurs between 15:00-16:00 with the development PM peak expected between 16:30 - 17:30. It is assumed that the total peak hour vehicular traffic generated by the subject site will not impact the traffic on the adjacent roads, since the peak hour periods do not coincide.

Based on the analysis of the nature of the businesses utilising the facilities within the subject area and the proposed designated access/egress points to the site, it has been assessed that the traffic generation from the development / attraction to the development would be distributed onto the adjacent road network as follows: -

100% on Upper Esplanade – 553 VPD

40% on Upper Esplanade (to/from south) - 221 VPD;

60% on Upper Esplanade (to/from north) - 332 VPD;

5% on Scott Street (to/from west) - 17 VPD;

- 50% on Ocean Drive (to/from south) - 8 VPD;
- 50% on Ocean Drive (to/from north) - 8 VPD;

15% on Scott Street (to/from east) - 50 VPD;

80% on Upper Esplanade (to / from north) - 266 VPD;

The existing vehicular traffic on Upper Esplanade in this location is 1,461 VPD. The cross section of Upper Esplanade is suitable for 3,000 to 5,000 VPD is in accordance with the Liveable Neighbourhoods hierarchy of roads, based on the cross-sectional width of Upper Esplanade. All surrounding existing roads have carriageway widths that are wider than general requirements noted in Liveable Neighbourhoods and operate at between 15% and 50% of their theoretical capacities.

3.3.2.3 Cumulative Traffic Flow Impact of nearby proposed developments (including DSP over Lots 1, 2 and 76 Ocean Drive and proposal for Lot 66 Ocean Drive)

To highlight the likely cumulative impact of potential development over the next 10 years on Upper Esplanade, KCTT reviewed the earlier TIA report for the Lots 1, 2 and 76 Ocean Drive development and analysed the expected impact of developing Lot 66 Ocean Drive. The impacts on Upper Esplanade are as follows:

- Approximately 2,184 VPD to/from the south of the subject site; and
- Approximately 2,760 VPD to / from the north of the subject site.

Given that Upper Esplanade has sufficient capacity to carry 3,000-5,000 VPD, the cumulative impact of the proposed development on the subject site, the approved development of Lots 1, 2 and 76 Ocean Drive and the proposed development of Lot 66 Ocean Drive can be accommodated within the existing road structure.

3.3.2.4 Proposed Configuration of Scott Street

Special attention has been given to the future configuration of Scott Street, this being the road linking between the proposed developments on Lots 497 and 66 Ocean Drive. Scott Street also represents the core of the Central Precinct and its future form and amenity will contribute significantly to the tourism potential of the Back Beach Precinct in general.

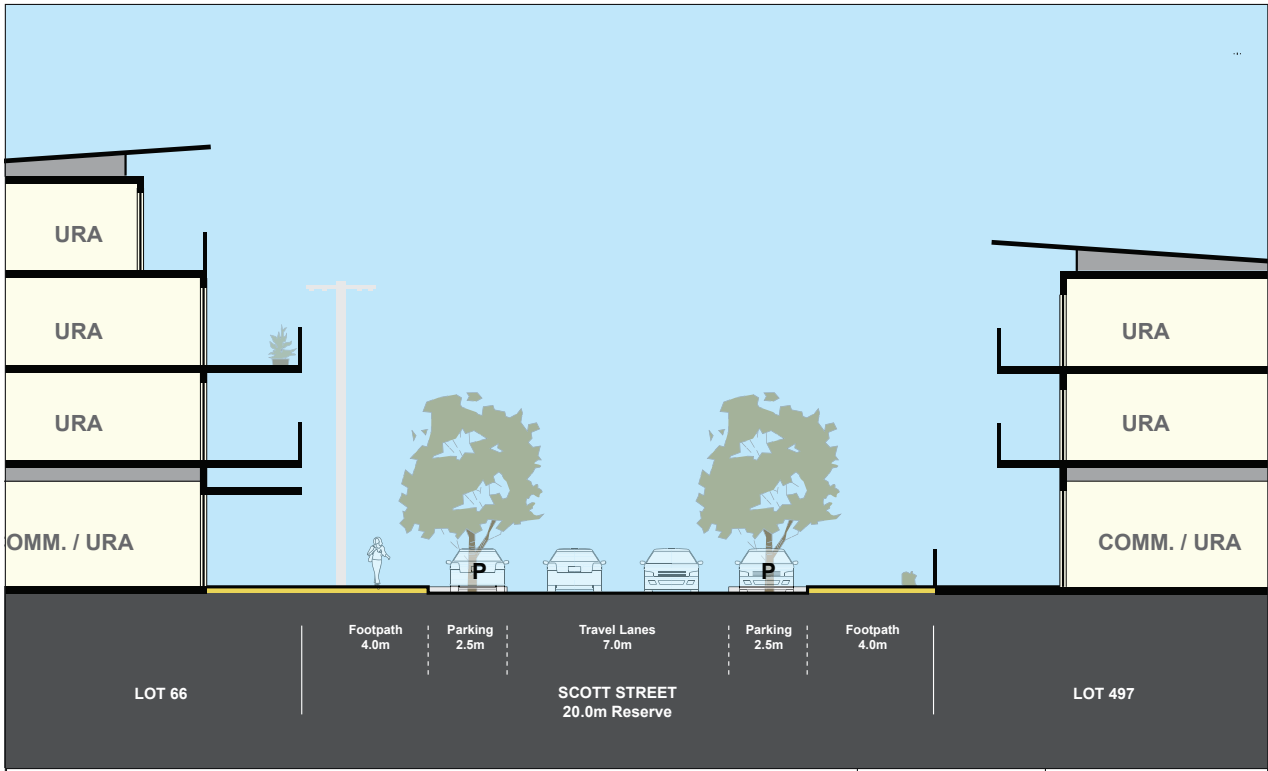
The intention is that Scott Street will become an iconic tourism hub for the City with low traffic speeds and excellent pedestrian, cycle and public transport accessibility. It will be vibrant and attractive with cafes and small bars as well as convenience and tourism focussed retail and services. In conjunction with the piazza it will be the focus of public life and activity on the Back Beach and provide the gravity to pull the occupants of the Northern and Southern Precincts towards the central core.

An indicative cross section for Scott Street is provided at Figure 6 and includes the following:

- Two 3.5 metre width traffic lanes in each direction;
- Two 2.5 metre wide strips of short stay on-street parallel parking;
- Two generous four metre wide shared paths.

Refer to Figure 6 – Indicative Scott Street Section

Figure 6 – Indicative Scott Street Section



It is anticipated that the on-street parking will contribute to overall street amenity and will also help reduce average operating speeds on the road for all vehicle types. Adjacent developments will respond to ground level variations with low retaining walls and terracing where required to allow for definition between public and private areas whilst ensuring high levels of ground floor activation along the length of the street. The generous four metre wide shared paths will provide ample opportunities for landscaping, street furniture, low speed cycle movements and casual spill-out alfresco dining from adjacent commercial tenancies with the incorporation of such features to be resolved at the detailed design stage.

Where supported by appropriate traffic management, sections of Scott Street may also be closed for special events and parking bays utilised for pop-up hospitality and retail uses or as extensions of adjacent alfresco areas. The materiality, form and treatments used for Scott Street will need to take into consideration its proposed future utility and differentiate it from the surrounding road network as a place for people rather than simply for the transitory movement of vehicles.

3.3.3 VEHICLE PARKING

The provision of appropriate levels of car parking is an important consideration for the development of the subject site due to its close proximity to the Back Beach and Bunbury CBD, the mixture of residential and non-residential uses proposed, the wide catchment from which visitors will be attracted, and the possible development of other vacant or underdeveloped land in the locality.

The combined impact of these elements requires careful assessment to determine what car parking facilities need to be provided in order to reasonably meet anticipated demand in a responsible and sustainable manner.

The strategy for the provision of car parking on the subject site is that an appropriate and sustainable level of car parking be provided within the site having regard to all those factors that might influence parking demand. This includes the potential for cash-in-lieu of onsite parking that can then be invested into shared public parking facilities in other locations within the locality. Such an option is likely to prove most attractive in a scenario where the cost of basement or undercroft parking adversely affects development viability or where a future developer seeks to maximise development potential and is not able to provide the requisite amount of car parking on-site. Approval for cash-in-lieu for car parking is at the discretion of the City and is appropriate for visitor parking and non-residential land uses only.

3.3.3.1 Parking Requirements

In order to determine relevant probable parking requirements for the future development of the subject site, KCTT undertook a comparative analysis of the development concept prepared by TPG based on minimum requirements for parking according to the NSW RTA Guide to Traffic Generating Developments, the requirements of the R-Codes and the requirements as set out in the City's TPS7 and supporting local planning policy framework. Factors allowing for reciprocal (shared) parking opportunities were also considered based on likely complementary future use arrangements in order to arrive at a responsible and sustainable car parking arrangement.

The minimum requirements for parking based on the above documents are as follows:

- URA / Short Stay Apartment – as per R-Codes (in this instance based on an average dwelling size of 75m², 1.25 spaces per dwelling and 0.25 visitor spaces per dwelling).
- Commercial – 1 bay per 30m² NLA (minimum of 5 spaces).
- Retail - 1 bay per 20m² NLA (minimum of 5 spaces).
- Small Bar (as per tavern) – 1 bay per 2m² NLA of bar area, plus 1 bay per 4 seats or 1 bay per 5m² NLA used for dining, reception or assembly area whichever is the greater; plus 1 bay per 15m² of NLA used for storage, food preparation, services and administration.
- Restaurant - 1 bay per 4 seats or 1 bay per 5m² of public drinking and/or dining area, whichever is the greater; plus 1 bay per 15m² NLA used for storage, food preparation, services and administration, as determined by the Local Government.

Table 5 provides a preliminary calculation for the parking requirements for the subject site on the basis of the likely development yields as depicted in the DSP and supporting development concept and taking into consideration likely reciprocal parking arrangements.

Table 5: Parking Requirements – Concept Development of Lot 497 Ocean Drive

Land Use	Number of Units	Yield	Requirements	Total No of Parking Bays
Shops	n/a	277m² NLA	1 bay per 20 square metres of NLA	Total =14
Restaurants	n/a	60 seats or 120m² NLA	1 bay per 4 seats, or 1 bay per 5m² of NLA used for public drinking and/or dining area.	24
		111m² NLA for food preparation, services and administration	1 bay per 15m² of NLA used for storage, food preparation, services and administration	7
		Total = 231m² NLA		Total = 31
Small Bar	n/a	20 seats or 40m² NLA	1 bay per 4 seats or 1 bay per 5m² of NLA used for dining, reception or assembly area	8
		bar area = 26m² NLA	1 bay per 2m² of NLA used for bar area	13
		storage, food prep, services and admin area = 26m² NLA	1 bay per 15m² of NLA used for storage, food preparation, services and administration	2
		Total = 92m² NLA		Total = 23
URA (combination of unit sizes)	26	Medium (75-110m²)	1.25 parking spaces per dwelling	33
			Visitors parking spaces = 0.25 parking spaces per dwelling	7
Short Stay Apartments	5	Medium (75-110m²)	1.25 parking spaces per dwelling	7
			Visitors parking spaces = 0.25 parking spaces per dwelling	2
Total – Concept Development				117

The parking rates shown above for the subject site equate to a sizeable portion of the developable land being utilised for parking based on the City's quoted parking ratios. It should be noted that no reciprocity of uses is applied to this figure. Given the nature of the surrounding area it can be expected that a significant portion of patrons for the retail and commercial premises will originate from nearby uses and from adjacent URA development. It is expected that this would effectively reduce the requirement for car parking for commercial use by approximately 25%. Further to this, there is a considerable amount of public parking within walking distance from the subject site. If reciprocity is applied, the minimum requirement to service the demand generated by the development concept as prepared by TPG to support the structure planning process would be approximately 100 bays.

Relevantly, the establishment of a medium to high frequency circle bus route running along Ocean Drive is set out as an objective in the City's Integrated Transport Study. Once a high frequency route is established, parking demand will decrease further as other transport options become available and more attractive.

The preliminary plans for the development concept prepared to support the structure plan show a total of 113 car parking bays (including three ACROD bays), which would be sufficient to cater for the requirements of the development.

It is noted that excessive over provision of car parking would be in direct contradiction to the principles on the Integrated Transport Study. This document outlines promotion of alternative modes of transportation (such as public transport, cycling and walking) as a strong objective in future transport planning for the City. Provision of surplus car parking tends to further stimulate vehicular travel.

As demonstrated within the development concept presented, basement or underground parking is likely to be necessary in order to satisfactorily meet the requirements of car parking in keeping with the development expectations for the subject site. Whilst residential car parking needs are to be accommodated entirely on site, opportunities exist through the City's TPS7 and related local planning policy framework to explore cash-in-lieu options that may result in some non-residential visitor/public parking needs being met off-site. Potential off-site locations are shown within Figure 10 of the GSP.

3.3.3.2 Provision for Delivery and Service Vehicles

Access for the delivery / service vehicles will be via the Upper Esplanade crossover. Waste vehicles can reverse into the development, perform waste collection and exit the development in a forward motion. The proposed development concept layout would allow the vehicle to perform three point turns internally to the development should this be required.

KCTT calculate the minimum parking requirements for the provision of delivery and service vehicles to be as follows:

- 1 bay for SRV as required
- Restricted manoeuvring on-site for HRV as required.
- Full manoeuvring on-site for SRV and other classes of service vehicles is required.

Whilst not currently shown on the development concept it is expected that the locations of these bays would be determined at the development application stage for any future development.

3.3.4 PEDESTRIAN AND CYCLISTS

The City stipulates requirements for bicycle parking in AD8.1.1 Bicycle Parking Table in LPP3.1 Local Planning Policy – Access and Parking for Pedestrians, Bicycles and Vehicles. The following criteria are application to the structure plan area:

- Commercial Services – 1 bay per 200m² NLA
- Restaurant – 1 bay per 100m² NLA, 2 for visitors
- Shop – 1 bay per 300m² NLA
- Convenience Store – 1 bay per 100m² NLA
- Short stay accommodation – no minimum required.

In addition, Clause 6.3.3 of the R-Codes stipulates the following minimum requirements regarding bicycle parking:

- Bicycle parking requirements - 1 space to each 3 dwellings for residents; and 1 space to each 10 dwellings for visitors.

Table 6 provides a calculation for the bicycle parking requirements for the subject site on the basis of the development yields as depicted in the development concept prepared in support of the DSP.

Table 6: Bicycle Parking Requirements – Concept Development of Lot 497 Ocean Drive

Land Use	Number of Units	NLA	Requirements	Total No. of Parking Bays
Shops	n/a	277m ² NLA	1 per 300m ² NLA (or 1 per 100m ² NLA for a convenience store)	1 (3 for convenience store)
Restaurants	n/a	231m ² NLA	1 per 100m ² NLA, 2 for visitors	5
Small Bar	n/a	192m ² NLA	No minimum requirement provided	2 (notional)
URA	26	dwelling size 75-110m ²	No minimum requirement provided	12
Short Stay Apartments	5	unit size 75-110m ²	No minimum requirement provided	n/a
Total Parking Bays Required				17 (19 for convenience store)

* - with retail tenancy as convenience store

The table above shows that the minimum requirements for the development concept prepared to support the proposed local structure plan is 10 bicycle parking spaces (if the shop tenancy is used as a convenience store), with the exact number being contingent on the final land use mix, and not factoring in requirements associated with the development of the public piazza.

Existing pedestrian and cycling facilities are already developed in the streets surrounding the subject site. Ocean Drive, Upper Esplanade and Baldock Street have shared paths on at least one side of the road reserve. There is a shared path on the southern side of Scott Street. The subject site currently has strong pedestrian path connectivity to the Bunbury CBD and the Bunbury Senior High School, with good shared path connectivity along Upper Esplanade. School students in particular are significant users of the pedestrian and cycle networks in the immediate and wider locality. Pedestrian crossing facilities on Ocean Drive are located adjacent to the proposed development therefore the connectivity to the adjacent recreational areas on the beachfront is good.

However, pedestrian connectivity to existing bus stops is inadequate which hinders the potential use of public transport options. The improvement of pedestrian connectivity along Ocean Drive should be the main focus of further planning and development of this area. Given the expectation that the Back Beach Precinct will become one of the major tourist areas provision of good pedestrian connectivity along Ocean Drive and to the CBD is of essence.

The development concept prepared to support the structure plan proposes alternative connections between Upper Esplanade and Ocean Drive via the public piazza to maximise the exposure and commercial viability of commercial tenancies fronting the public area. The piazza itself should also attract significant patronage and associated pedestrian movements.

It is likely that any existing paths on the development side of the road reservations abutting the subject site will need to be re-constructed at the completion of construction contracts due to impending damage during construction works. This is identified under the DSP as a developer contribution requirement.

Proposed pedestrian and cyclist facilities are primarily from the Bunbury Transport Vision 2030, augmented with additional connections as proposed under the DSP.

It is noted that the following linkages are likely to improve connectivity between the Bunbury CBD, the Ocean Drive Precinct and the Bunbury Back Beach recreational / tourism environs: -

- Proposed shared path in Symmons Street linking directly between Ocean Drive and Blair Street.
- Extension of the existing shared path in Stockley Road to connect between Upper Esplanade and Ocean Drive in the west and between Tuart Street and Spencer Street.

The development of the subject site is not likely to require the development of any other specific linkages.

3.3.5 PUBLIC TRANSPORT

Bus route 831 runs along Ocean Drive (Bunbury-Dalyellup via Usher). Bus stops are approximately 350 metres north of the subject site with an interval of 60 minutes.

Bus stops on both sides of the Ocean Drive road reserve are not linked with footpaths. Given the scope of this development, as well as other developments in surrounding locations, there would be the potential for improved utilisation of public transport, if some minor improvements are made to the local pedestrian path network linking the developments to the existing bus stops. Consideration could also be given to relocations of bus stops in the future to locations, which are closer to this general area.

The Bunbury Transport Vision 2030 suggests a number of ideas for improvement of public transport in Bunbury inclusive of potential CAT routes connecting the subject site to the CBD, circular route, bus rapid transit connecting Dallyellup and Australind and high-speed rail connecting Bunbury and Perth.

The City's Integrated Transport Study focuses on increasing the level of service for the circular route that runs past the subject site rather than introducing new routes. This is considered to be a more viable option. An increase in the level of service of public transport as well as strategic positioning of bus stops will help increase general patronage.

3.4 Public Realm

3.4.1 PUBLIC OPEN SPACE PROVISION

Public Open Space (POS) will be provided in accordance with the requirements of the WAPC and the City having regard to the specific requirements as set out in clause 7.2 of the GSP.

In this regard, the north western part of the subject site falls under the Central Sub-precinct 2 as identified in the GSP, requiring it to be developed as POS in the form of a public piazza for recreational and community purposes designed in accordance with the following:

- a minimum area of 700m²;
- a maximum depth from the lot boundary to a building of 25.0 metres on at least one street frontage;
- achieves a building height-to-width ratio of between 1:2 to 1.5:2 at the interface with Central Sub-precinct 1; and
- incorporates both hard and soft landscaping whilst maintaining outlook to the foreshore.

3.4.2 DESCRIPTION OF FORM AND FUNCTION FOR THE PUBLIC PIAZZA

The design of the piazza is required to consider and incorporate the following features:

- (i) High quality hard and soft landscaping using waterwise plantings appropriate to coastal climatic conditions, including open paved and turfed areas framed with trees;
- (ii) Distinctive large format paving to main piazza hardscape areas with low walls separating the piazza from the promenade at the lower Ocean Drive level;
- (iii) Bollard and in-set wall lighting within the piazza to minimise light spill;
- (iv) Low plantings to the base of walls, with integrated public art on wall surfaces;
- (v) High quality robust public furniture and shade structures that are responsive to coastal climatic conditions, in particular prevailing winds;
- (vi) Timber seating throughout, including free standing seating and seating set on top of walls;
- (vii) Multiple spaces for both casual and more formalised public use, including event staging and an interactive water play sculpture, with these areas defined by level differences, landscaping treatments and hard landscape features;

- (viii) The incorporation of gradual steps to transition levels and provide informal seating / event viewing opportunities; and
- (ix) Consideration of integrated alfresco dining opportunities as an extension of adjacent development.

The form and function of the public piazza is illustrated at Figure 7 below.

Refer Figure 7- Public Piazza Landscape Concept Plan

An architectural illustration of the intended form of the piazza and its relationship with adjacent development is provided at Figure 8 below.

Refer Figure 8 – Illustrative Perspective of Piazza

3.4.3 MANAGEMENT OF PROPOSED PUBLIC SPACES

The Central Sub-precinct 2 in the form of the public piazza is to be designed and developed at the total cost of the developer at the subdivision stage or prior to occupancy of any development to the satisfaction of the City, in accordance with the requirements set out in clause 7.2 of the GSP. The developer will be required to engage with the City during the design and implementation process. At completion the developer shall have on-going maintenance responsibility for a period of time to be agreed in conjunction with the City, following which the piazza will be ceded free of cost to the City.

3.5 Built Form

Multi-levelled street fronted buildings using a variety of high quality materials and finishes in a perimeter development form are proposed for the subject site fronting abutting streets and the public piazza. It is anticipated that this typology will be characterised by built form incorporating activated frontages (shops, cafes, visible entrances, glazing etc) at the ground floor that innovatively respond to differences in finished site levels, with low rise development above the ground level. It is expected that building heights will be up to four storeys having regard to GSP and City planning policy requirements. Refer to Figures 8, 9 and 10 in terms of architectural illustrations and a development concept that depicts the form of development envisaged for the subject site.

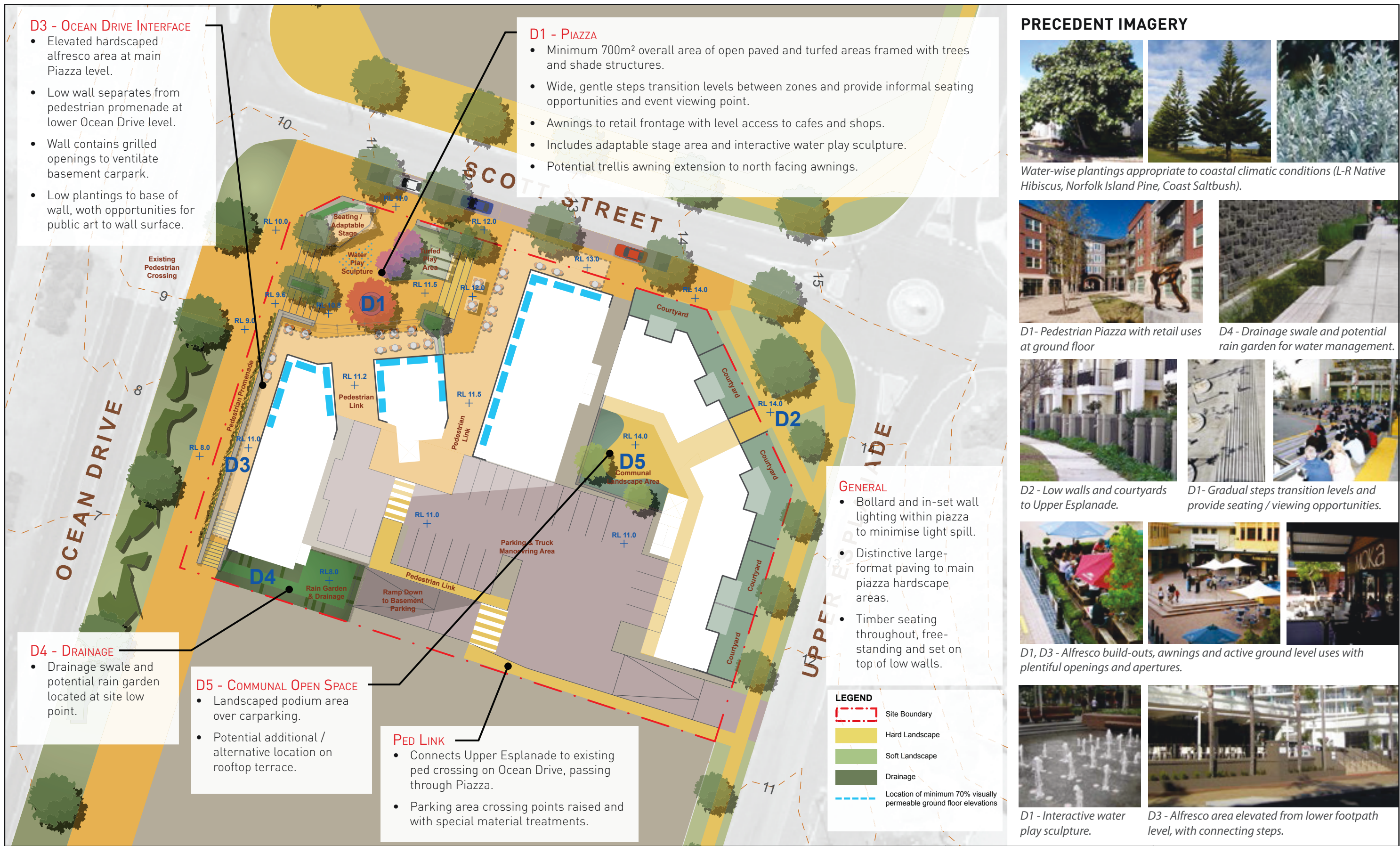
Refer Figure 9 - Development Concept

An architectural illustration of the intended built form at the Upper Esplanade interface and its relationship with Scott Street is provided at Figure 10 below.

Refer Figure 10 – Illustrative Perspective of Upper Esplanade Interface

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Figure 7- Public Piazza Landscape Concept Plan



Landscape Concept Plan

Lot 497 Ocean Drive, Bunbury

0 5 10m



Project Manager: MC Date: 25 September 2015
Drawn: OP Scale: 1:500 @ A3
Checked: MC Drawing No. 715-127 LP-01A



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Figure 8 – Illustrative Perspective of Piazza



Illustrative Perspective of Piazza

Lot 497 Ocean Drive, Bunbury

Project Manager: MC Date: 16 September 2015
Drawn: OP Scale: NTS
Checked: MC Drawing No. 715-127 LP-01A



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Figure 9 - Development Concept



Development Concept

Lot 497 Bunbury Back Beach

0 5 10m

DRAFT

Project Manager: MC Date: 16 September 2015

Drawn: OP Scale: 1:500 @ A3

Checked: MC Drawing No. 715-127 CP- 1 A

tpg

TOWN PLANNING

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Figure 10 – Illustrative Perspective of Upper Esplanade Interface



Illustrative Perspective of Upper Esplanade Interface
Lot 497 Ocean Drive, Bunbury

Project Manager: MC Date: 16 September 2015
Drawn: OP Scale: NTS
Checked: MC Drawing No. 715-127 LP-01A



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The development concept at Figure 9 incorporates a plot ratio of approximately 0.9, however to accommodate flexibility for future development and in order to be consistent with the DSP prepared for Lot 66 Ocean Drive, plot ratio in Part 1 is proposed at 1.25.

The setting back of upper levels will also serve to articulate the development and reduce the visibility of the built form from the pedestrian environment at the ground level. The intent is to provide for low-rise upper level development that does not adversely impact on the pedestrian scale of the public realm, in particular the piazza, whilst providing casual surveillance opportunities from balconies and major openings over rear service and car parking areas, the piazza and adjacent streets. In this way, upper levels can capitalise on the attractive views of the Back Beach, wider coastline and Indian Ocean, whilst not impacting on key views to and from the coast, respond sensitively to the existing residential character of Upper Esplanade and provide an enhanced perception of security and safety for residents and other users of the area.

A key consideration for future development will be mitigating the impacts of prevailing winds and avoiding potential negative impacts on the amenity of external living spaces (ex. balconies) and public spaces, in particular the piazza. The development concept provided at Figure 9 addresses this issue by using built form to screen the development and piazza area from easterly, westerly and south westerly winds, orientating pedestrian linkages through the development north west and south east to offset against potential wind tunnelling, and by limiting angular spaces or exposed corners within the public space.

3.5.1 GROUND FLOOR BUILT FORM

Ground floor setback requirements are defined under clause 4.2 of the GSP and have generally been minimised to facilitate articulated street front development forms with activated ground level uses that interact with the street and piazza at multiple levels. Allowance has also been made for a linear promenade to Ocean Drive with ocean outlook for pedestrian movements and alfresco dining through a five-metre setback requirement.

The Part 1 – Structure Planning Section for the subject site encourages activated and adaptable frontages to the public realm with buildings having minimal blank unrelieved walls and being required to be orientated towards the street or public areas, including the piazza. Buildings are able to be orientated towards communal open space areas where these have been considered to be an integral component of the design and provided on ground level.

Active frontages are required along Scott Street and abutting the piazza and are encouraged along Ocean Drive in conjunction with appropriate weather protection. Building adaptability is to be provided in accordance with the requirements as set out in clause 6.8 of the GSP with the ground floor levels of all buildings being required to provide a minimum finished floor to floor height of four metres to allow for adaptable use. Buildings addressing street frontages are required to be designed to provide a continuous frontage at ground level, except where required to respond to ground level variations where interfacing with the piazza, pedestrian or service access between buildings, a pedestrian pathway as depicted on the Detailed Structure Plan Map or a public thoroughfare in accordance with the requirements of the GSP.

Ground floor treatments to Ocean Drive, Scott Street and the piazza are to ensure activation of building frontages, with each building having at least one visibly clear entry point from the public domain. Pedestrian shelter at the point of entry to all buildings is also encouraged.

Ground floor elevations to the piazza (including any pedestrian pathways leading into the piazza) are to be glazed to a minimum of 70% of the building frontage with a visually permeable material, to ensure unobstructed views to the pedestrian pathways and the piazza. This shall be measured as a proportion of the total building ground floor elevation. All glazing shall meet energy efficiency requirements and BCA standards.

3.5.2 UPPER LEVEL BUILT FORM

Upper floor setback requirements for development in excess of three storeys in height are defined under clause 4.2 of the GSP with generally an additional three-metre setback being required. Upper level building facades are to be modulated and articulated through the use of apertures, recesses, projections, materials and textures to provide visual interest and avoid blank facades

Where balconies are provided within the two metre setback area as permitted under the GSP for hotel and non-residential uses they are required to:

- Be a minimum dimension of 2.4m to allow for useable outdoor living/dining space.
- Assist to articulate the building façade in a complementary contemporary architectural form.
- Be commensurate in scale/composition to the building.
- Be designed as an integral part of the building elevation and shall not appear as an 'add on' structure.

- Contribute to the sense of safety and liveliness of the street by being designed for passive surveillance and visual engagement between the public and private realm.

In terms of roof forms, flat, skillion and non-pitched site responsive roof forms are encouraged to minimise the overall bulk and massing of buildings. The use of roof areas for communal open space is encouraged, but requires careful consideration in terms of mitigating the impact of prevailing winds and other micro-climatic conditions.

Development on landmark corners is intended to be designed and constructed in a manner that recognises the strategic location of the identified site and the opportunities for distinctive architectural expression through one or of the following features:

- Additional height sought under the performance based (design principles) approach to building height detailed under clause 5.4 of the GSP, supported by a Development Impact Statement (Building Height and View Shed Analysis), however not including an additional habitable storey;
- Different geometric or volumetric design;
- Architectural feature elements such as enhanced vertical articulation or modulation;
- Additional glazing (fenestration);
- Enhanced palette of compatible materials and textures; and
- Major openings and balconies.

3.5.3 OTHER BUILT FORM CONSIDERATIONS

Pedestrians are required to be able to access the ground floor and any floors above from an entrance to a building that is at grade and directly accessible from a street or public space. For sites with a sloping frontage, the ground floor must not exceed more than 1.2 metres above or below the level of the site frontage. Indicative site levels are shown on Figure 7.

Interfaces between the public and private realms are proposed to be clearly defined through the use of fencing and other boundary defining elements such as landscaping or minor level differences, with fences to the public domain being at least 50% visually permeable and no greater than 1.2 metres in height from finished floor level.

Crime Prevention Through Environmental Design Principles (CPTED) are to be incorporated into building design and, where appropriate the public realm and are required to consider natural surveillance, natural access control (legibility) and natural territorial control (ownership).

All development proposals will also be required to have regard to mitigating potential external and internal noise impacts.

The visual analysis provided as part of the development impact statement at Appendix D demonstrates the relationship of the illustrative development concepts to the building envelopes that are essentially defined by the GSP. Building envelopes are shown as a transparent three-dimensional volume of potential development within which the ultimate development outcome will be constructed.

3.5.4 OPEN SPACE

Although able to be provided solely at ground level, given the publicly accessible nature of much of the likely future development on the subject site and the interrelationship with the proposed piazza, open space is encouraged to be provided in forms that ensure appropriate separation from publicly accessible areas and internal pedestrian pathways, whilst still maximising passive surveillance opportunities. The development concept at Figure 9 addresses this issue using probable finished ground levels to provide three distinct types of site open space including:

- Ground Level (Public) – Ground level open space areas that can be accessed by occupants of the development and also by the general public, generally as part of the movement network within and immediately adjacent to the site.
- Cantilevered Intermediate (Semi-Private) – A landscaped podium with simple communal facilities, such as seating and a barbeque area over car parking that is accessible only to occupants of the development. The design is intended to provide a proximal visual interrelationship with the ground level of the development, including opportunities for casual surveillance, particularly over the rear car parking and service area.
- Rooftop Terrace (Private) – Private rooftop terrace areas generally only accessible only to occupants and guests of the residential or short stay components of the development including more complex communal facilities potentially including swimming pools, gyms and other similar facilities. Such areas are to be sensitively located and designed to mitigate potential overlooking

issues whilst retaining the ability to provide casual surveillance of surrounding public areas.

The development concept at Figure 9 incorporates ground level open space at approximately 50%, however to accommodate flexibility for future development and in order to be consistent with the DSP prepared for Lot 66 Ocean Drive, minimum open space in Part 1 is proposed at 30% (1,132m²).

3.5.5 SHADOW ANALYSIS

A shadow analysis of the indicative built form has been undertaken for the subject site, with the shadow impacts for midday 21 June shown in Figure 11. It can be seen that there is limited overshadowing due to the orientation of the site and potential built form, setback requirements between buildings and the centrally located car parking and service area.

Refer Figure 11 – Solar Study – Mid Winter

It is noted that under clause 6.4.2 of the R-Codes, regarding overshadowing of adjacent properties, that deemed-to-comply overshadowing standards do not apply to development with a density coding above R60 with overshadowing impacts being required to be considered on a performance basis using the associated design principles.

3.5.6 DEVELOPMENT IMPACT STATEMENT

The proposed development for the subject site seeks to mitigate impacts upon key views and vistas, including:

- Ocean views from existing residential buildings fronting Upper Esplanade and Haig Crescent.
- Distant Views to the ocean from Scott Street.

Proposed visual impact mitigation strategies include the following:

3.5.6.1 General Ocean View Facilitation and Development Bulk Mitigation

- Proposed development largely follows accepted height maximums.
- Maximum building heights will generally follow a flat fixed height plane that is 15m above the lowest point on the site, with the exception of the north eastern corner where performance based criteria will apply at the development application stage. The performance based criteria will allow for a sloping height plane 15m

above the existing ground level and that follows existing site contours. The performance based criteria approach will allow for a maximum of approximately 4.5m in potential additional height above the fixed flat plane at the site's highest point.

3.5.6.2 Residential Interface

A maximum street wall height of three storeys along Upper Esplanade generally, with an opportunity for a setback fourth level. Uses are likely to be predominantly residential in nature to create a sympathetic interface to existing residential uses to the east.

Refer Figure 12 – Visual Analysis

Refer Appendix D – Development Impact Statement

In respect of the Development Impact Statement provided at Appendix D it should be noted that:

1. The information provided is indicative and for illustrative purposes only to address the requirements of clause 11.1(f) of the GSP. It does not fulfil the scope of a more detailed development impact analysis that will be required at the development application stage in accordance with clause 5.4 of the GSP.
2. On-site and nearby AHD levels have been determined based on publicly accessible data obtained during site investigations and are not based on detailed site surveys.

3.6 Water Management

A local water management strategy has not been prepared for this site based on advice from the City in view of its small size and lack of hydrological constraints, however a Stormwater Management Strategy (SMS) has been prepared, a summary of the SWS is provided below.

Refer to Appendix E – Stormwater Management Strategy prepared by Coterra Environment

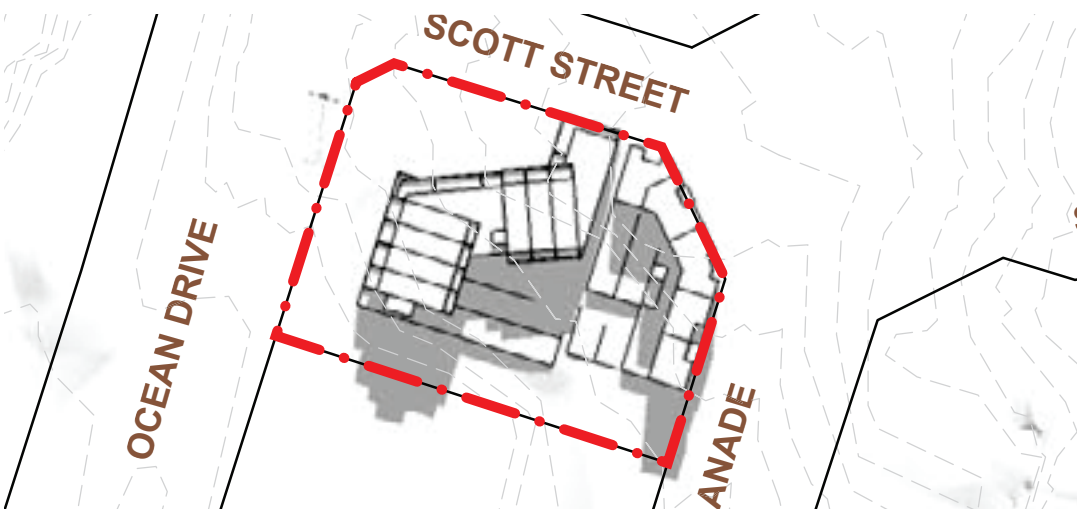
3.6.1 STORMWATER MANAGEMENT STRATEGY SUMMARY

The design objectives and criteria for the subject site is detailed in the SWS, which has been developed in accordance with the Better Urban Water Management (BUWM) guidelines (WAPC, 2008). Below provides an overview of the design elements and requirements for best management practices and control points.

Figure 11 – Solar Study – Mid Winter



9AM

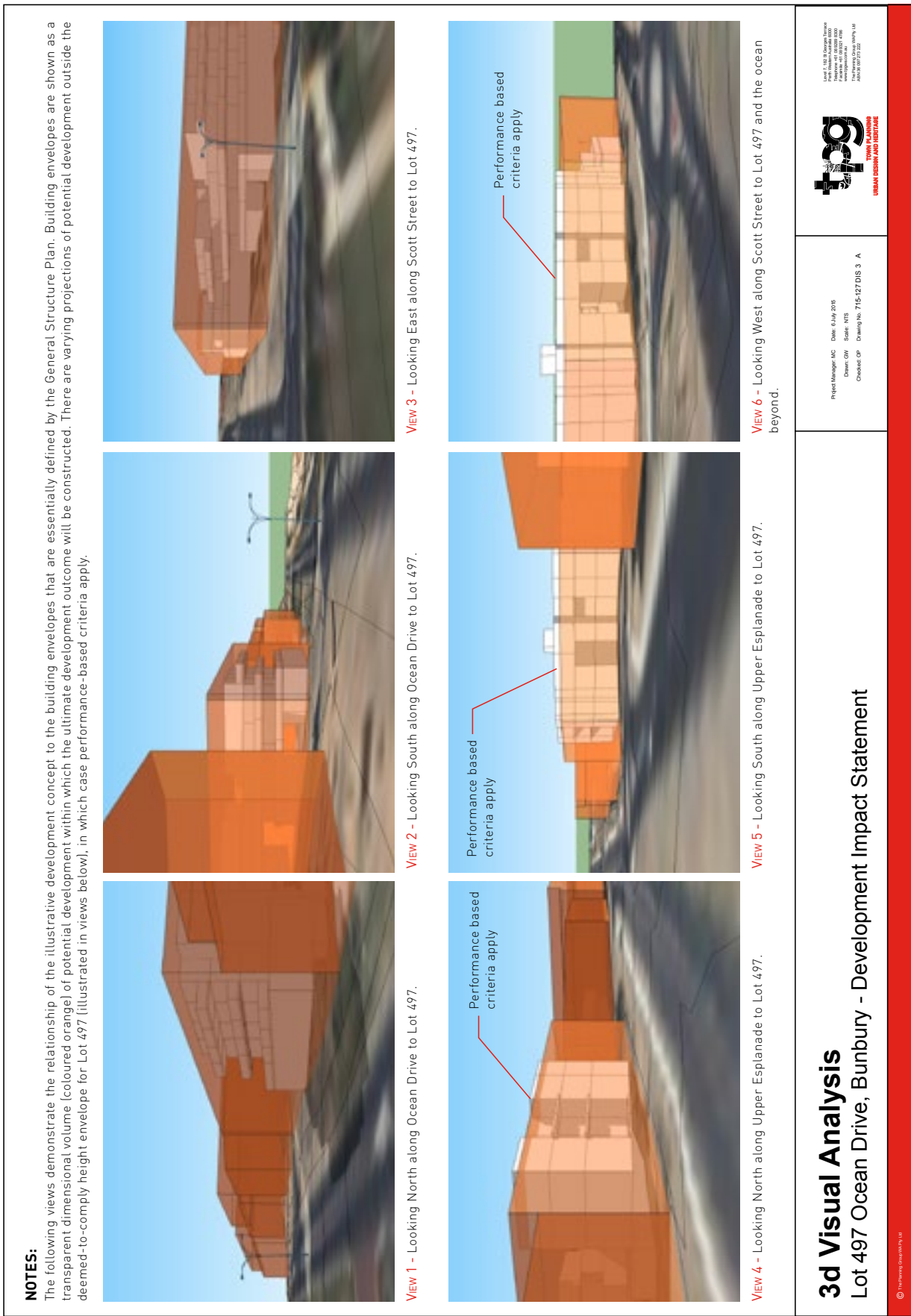


NOON



3PM

Figure 12 – Visual Analysis



3.6.1.1 Water Usage Strategy

Water Supply and Disposal

Potable water will be supplied via the regional water scheme. Aqwest is the water service provider in the area and there is an existing water pipeline along Ocean Drive.

Wastewater will be disposed of through the regional sewerage system. The Water Corporation operates the service in the area and there is existing sewerage infrastructure along Ocean Drive.

The subject site is undeveloped with no existing potable water supply or wastewater infrastructure present on site. New pipework and connections will be introduced to service the development.

Water Efficiency and Conservation

Water conservation measures will be adopted to create a 'Waterwise' development. The water conservation strategy will reduce scheme water demand through incorporating a variety of effective initiatives in the areas of internal water use, landscaping and irrigation.

Residential water use efficiency will be required through compliance with the 'Energy Use in Houses Code' and the 'Water Use in Houses Code'. These are known as the 5 Star Plus Codes, introduced by the Department of Housing and Works in 2007 (DoH, 2007 a, b). The proposed residential development is likely to be predominantly in the form of apartments and medium density grouped housing so there will be minimal external use of potable water.

Public Piazza

Based on the current development concept plan public open space within the development will consist of a largely paved and landscaped public piazza, with some grassed areas, small garden beds or feature trees that will require minimal irrigation.

Rain gardens and infiltration swales will be provided throughout the development, however as these provide a stormwater function, they do not require on going irrigation. Sedges and vegetation planted within the infiltration areas will be selected for their specific stormwater design function.

Given the nominal planted areas, the expected irrigation requirements are minimal; less than 200 kL/annum (or equivalent area of 250sqm of irrigation area/garden beds). The site does not currently hold a groundwater licence however there is groundwater availability in the superficial aquifer (pers. comm. DoW, May 2015).

Irrigation supply can be provided via scheme water or groundwater through the application for a 5C licence to take groundwater (submission of Form 3G to DoW).

Existing Bore Water Reticulation Facilities

A groundwater reticulation treatment plant, shed, soakwells and stormwater drainage pipe are currently located within the subject site. This bore is not currently registered on the water register (DoW, 2015). Bore and stormwater infrastructure will need to be repositioned to the satisfaction of the City if not re-located prior to development. Timing and responsibility will be subject to negotiation with the City and will be implemented as a condition of development approval if required. If necessary, a licence to construct a well (Form 26D) will also be applied for.

3.6.1.2 Stormwater Management

Stormwater will be managed through the implementation of Water Sustainable Urban Design (WSUD) principles and Best Management Practices (BMPs) to address increased runoff as a result of increased impermeable areas. Both water quality and quantity in minor and major storm events will be managed within the subject site.

Existing Drainage

The subject site is currently undeveloped with a small area of vegetation. Runoff flows in a south-westerly direction towards the Ocean Drive drainage system. The existing pipe network sketch is included in the SWS. Any runoff exceeding the capacity of the road drainage system flows into the Ocean Drive road reserve before ultimately discharging across the foreshore into the ocean.

A stormwater pipeline currently transects the subject site from Upper Esplanade to Ocean Drive. During development of the subject site this pipe will be realigned along Scott Street and will be upgraded to a 525mm pipe. The City has not advised of any pre-existing capacity issues with the Ocean Drive road drainage system.

Proposed Earthworks

The subject site slopes from its north-eastern corner to its south western corner, ranging from approximately 13 mAHD to 7 mAHD (approximately 10% slope). Some earthworks and cut and fill/ re-contouring will be required to form flat building pads. The detailed earthworks plans will be provided at detailed design stage. It is anticipated that cut and fill will use existing site sands where possible.

Proposed Drainage Strategy Overview

The site's drainage strategy will comprise of the following:

Storage and attenuation:

- Infiltration of small (1yearARI) events on site.
- Large events (>1year) will be attenuated on site, and discharged at a rate no greater than pre-development flow rates.
- Discharge from the site will be into the existing drainage network on Ocean Drive.

Conveyance:

- Events up the 5 year ARI event will be conveyed in a new piped network.
- Events greater than the 5 year ARI event will be conveyed by overland flow in the road/carpark reserves.

Water quality:

- Water quality treatment will be provided in infiltration areas.
- Stormwater will be infiltrated or discharged within 96 hours to prevent disease vector and nuisance insects.

3.6.1.3 Implementation

The effective implementation of the SMS requires ongoing involvement by the relevant stakeholders. As agreed with the City, a Stormwater Management Plan (SMP) will be required at subdivision stage. The requirements of the SMP will be confirmed with the City prior to preparation of the plan.

The future roles and responsibilities associated with the site is summarised in Table 7 below.

Table 7: SMS Roles and Responsibilities for Implementation

Principles	Role	Responsibility	Timeframes
Stormwater Management	Detailed design of stormwater drainage system in line with the criteria in this document	Proponent	Prior to construction
	Construction of stormwater infrastructure including water quality measures	Proponent	At construction
	Maintenance of the drainage basins	Proponent	Ongoing by owner or strata body
Groundwater Management	Detailed earthworks plain in line with the criteria in this document	Proponent	Prior to construction
Water Quality Management	Detailed design of water quality management features (i.e. rain gardens)	Proponent	Prior to construction

The next steps in SMS work will depend on whether the development is progressed via a subdivision stage or goes straight to development application. Final engineering design drawings will be required to support a development application. The engineering drawings should demonstrate compliance with the design objectives established within the SMS.

3.7 Civil Engineering and Infrastructure Requirements

KCTT have undertaken an assessment of the existing servicing infrastructure in the vicinity of the subject site and have identified where infrastructure upgrades or modifications will be required to service future development. The full infrastructure servicing report is provided at Appendix F with the outcomes of KC's assessment and probable upgrades outlined below.

Refer Appendix F – Infrastructure Servicing Report

3.7.1 DEVELOPMENT SITE LEVELS AND EARTHWORKS

3.7.1.1 Lot 497 Ocean Drive

The subject site has a reasonable coverage of low-lying vegetation. Given the sandy, dunal nature of the site, protection of external environments from wind-blown sands is a key requirement for this development during the earthworks phase in particular, and the construction phase in general.

The earthworks for this project are expected to be extensive, given the site's natural topography and the requirement to develop flat pads for the proposed building structures.

3.7.2 EXISTING INFRASTRUCTURE

3.7.2.1 Wastewater

A review of the Dial Before You Dig and Water Corporation ESINet systems indicate the following wastewater infrastructure exists in the vicinity of the subject site.

- An existing 150mm-diameter sewer main on the eastern side of Ocean Drive immediately adjacent to the western boundary of the subject site, with a connection at the boundary of Lots 1 and 2. This main is on a 5.0m alignment within the Ocean

Drive road reserve.

- An existing 150mm-diameter sewer main on the eastern side (opposite side) of Upper Esplanade. This main is on a 3.0m alignment within the Upper Esplanade road reserve.

It is noted that all sewer alignments noted above are indicative only and must be located by appropriate means prior to any construction works.

3.7.2.2 Water Reticulation

A review of the Dial Before You Dig and Water Corporation ESINet systems and information provided by Aqwest indicate the following water infrastructure exists in the vicinity of the subject site:

- Existing 100mm-diameter water main immediately adjacent to the proposed development site in Ocean Drive along the length of the subject site.
- Existing 100mm-diameter water main on the opposite side of Upper Esplanade.

The development of the subject landholding does not require any extension to the existing Aqwest water system.

3.7.2.3 Electricity

Western Power information is available through the Distribution Facilities Information System (DFIS) and the Network Capacity Mapping Tool (NCMT). These resources show the following infrastructure assets are available in the general vicinity of the subject site: -

- Three-phase 22kV high voltage (HV) aerial conductors along the eastern side of Upper Esplanade, south of Scott Street extending to Baldock Street to the south.

3.7.2.4 Telecommunications

Currently telecommunications services are available by either the NBN or via telephony service providers such as Telstra. A review of the NBN Mapping Tool has found that there is no current rollout of NBN services in Ocean Drive, Bunbury, nor are there any plans to rollout services. This does not preclude application to NBN at the time of development of this site, however at this stage it appears that telephony infrastructure will be negotiated directly with Telstra.

3.7.2.5 Gas Reticulation

A review of the Dial Before You Dig records indicate the following gas infrastructure exists in the vicinity of the subject site:

- 100mm-diameter PVC main on the development side of Ocean Drive, with a 50mm diameter connection into the Welcome Inn Motel site.
- 80mm-diameter PVC main on the eastern side of Upper Esplanade.
- 100mm-diameter PVC main on the northern side of Scott Street.

3.7.3 INFRASTRUCTURE UPGRADES REQUIRED

3.7.3.1 Wastewater

The development of the subject site does not require any extension to the existing Water Corporation sewer system. The site will however require upgrades to existing connections and associated infrastructure. A hydraulics consultant through negotiations with the Water Corporation will determine this infrastructure when a formal Development Application is submitted.

3.7.3.2 Water Reticulation

The development of the subject landholding does not require any extension to the existing Aqwest water system. The site will however require upgrades to existing connections and associated infrastructure. A hydraulics consultant through negotiations with Aqwest will determine this infrastructure when a formal development application is submitted.

3.7.3.3 Electricity

Western Power requires that all new developments be serviced by underground three phase power where three phase power is available and that this service is provided at one location (i.e. a subject site should only be provided with one point of connection). Due to the expected loadings from the proposed development configuration, existing transformers in the local area are not expected to be capable of servicing these sites. It is therefore likely that a new transformer substation will be required. Western Power will require a transformer on site with the Site Main Switchboard to be contiguous. It is likely a 1MVA transformer / switchgear would be more than sufficient to handle the proposed power loadings from this site, however this should be confirmed when final yields are known and by a qualified electrical consultant.

The Western Power NCMT shows the area has less than 5MVA of forecast remaining capacity in 2015, however there are planned upgrade works to the network by 2019 where there is likely to be an increase in forecast remaining capacity to between 15MVA and 20MVA. It is understood an extension of the 22kV HV network will be required along Scott Street to the development and this should be factored into any cost estimates for the development of the subject site.

3.7.3.4 Telecommunications

Fixed line telecommunications are serviced from the Bunbury Telephone Exchange, which is, located approximately 1.5km to the east of the subject site. Confirmation of servicing would occur at the time of application for servicing. Telstra charge fees for the design and installation of infrastructure as well as amendments, upgrades and the like to existing infrastructure located in road reserves external to development sites such as the subject site.

3.7.3.5 Gas Reticulation

ATCO Gas policy is for all major external infrastructure upgrades to be fully funded by the developer. The following infrastructure upgrades are expected to be required for the development of the DSP area:

The development of the subject site would require the addition of a delivery point meter.

3.7.4 DEVELOPER CONTRIBUTION ARRANGEMENTS

Based on the analysis provided above, and having regard to the principles ordinarily applied to developer contribution arrangements under applicable State level planning policy, the development contribution plan as set out in Table 8 sets out the obligations for the DSP area.

Figure 13 shows infrastructure upgrades specific to the development of the subject site as well as any required modifications to the proposed movement network.

Table 8 shows precinct wide developer contribution requirements with those relevant to the subject site highlighted.

Figure 13 – Infrastructure Upgrades

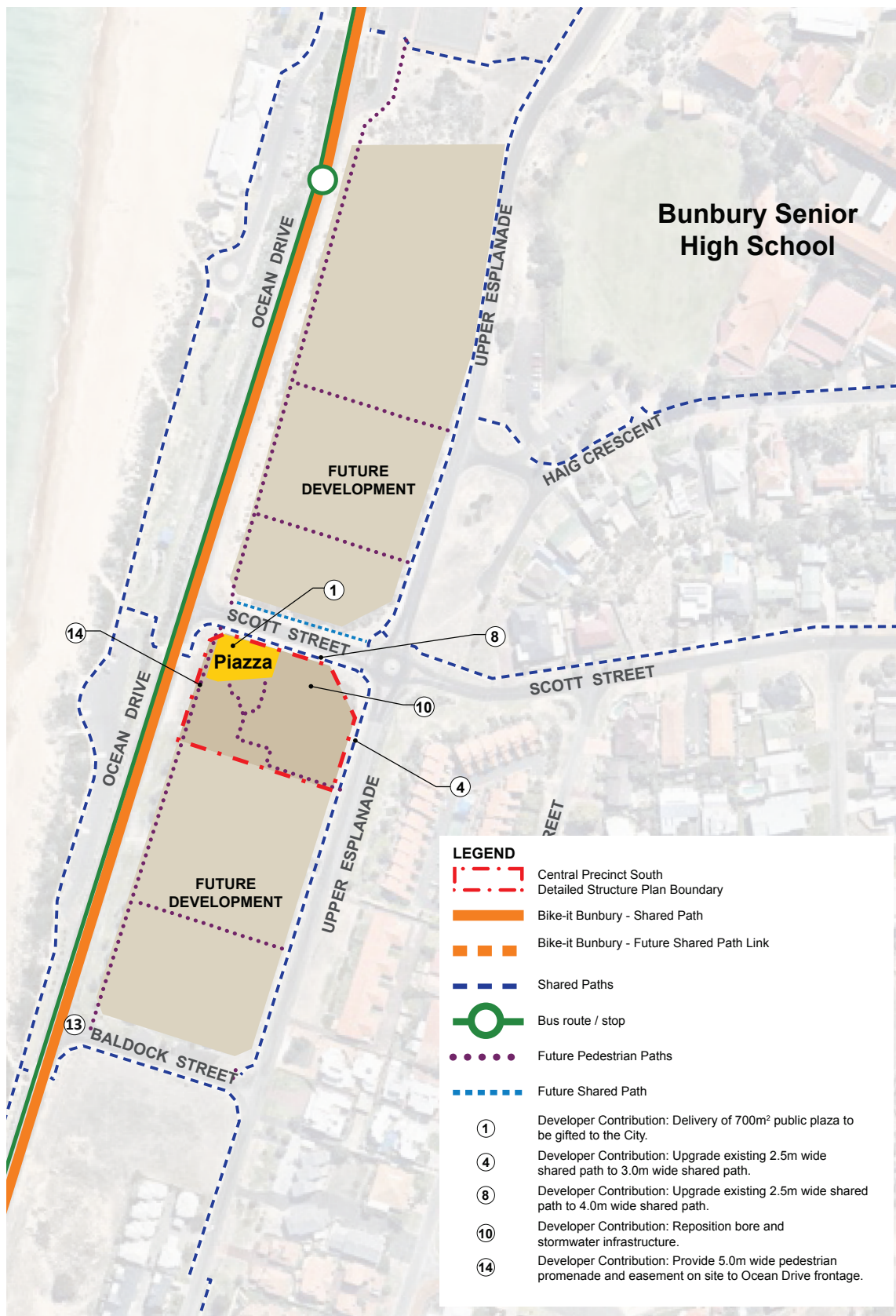


Table 8: Precinct Wide Developer Contribution Requirements (with those relevant to the subject site highlighted)

Upgrade	Responsibility	Road Frontage / Precinct	Existing Item Status	Proposed Item Status	Requirement	Mechanism
1	Developer Lot 497 Ocean Drive	Ocean Drive / Scott Street Central Precinct South	N/A	Public piazza (on Central Sub-precinct 2)	The public piazza is to be designed and developed at the total cost of the developer as a requirement of subdivision or development approval. All designs and works are to be to the satisfaction of the City and at completion the developer shall have on-going maintenance responsibility for a period of time to be agreed in conjunction with the City, following which the piazza will be gifted free of cost to the City.	Subdivision / Development Approval
2, 3, 4 and 5	Developers of all lots	Upper Esplanade All Precincts	2.5 metre wide shared path	3 metre wide shared path	Individual developers to construct the 3 metre path as a condition of development for their frontage prior to the site / development being occupied.	Condition of Development Approval
6	Developer Lot 76 Ocean Drive	Ocean Drive Northern Precinct	Un-signalised T-intersection with Scott Street	Left turn deceleration lane	Provide 3.5 metre wide and 80 metre long left turn deceleration lane in Ocean Drive southbound at time of substantive (more than 25% of frontage development in Northern Precinct fronting Ocean Drive).	Condition of Development Approval
7	Developer Lot 76 Ocean Drive	Ocean Drive Northern Precinct	N/A	1.5 metre wide pedestrian path	Provision of 1.5m metre wide pedestrian path linking precinct to existing bus stop (by connecting to path running adjacent to tennis courts).	Condition of Development Approval
8	Developer Lot 497 Ocean Drive	Scott Street Central Precinct South	2.5 metre wide shared path	4 metre wide shared path	Individual developers to construct the 4 metre wide shared path as a condition of development for their frontage prior to the site / development being occupied.	Condition of Development Approval
9	Developer Lot 66 Ocean Drive	Scott Street Central Precinct North	N/A	4 metre wide shared path	Individual developers to construct the 4 metre wide shared path as a condition of development for their frontage prior to the site / development being occupied.	Condition of Development Approval
10	Developer Lot 497 Ocean Drive and City of Bunbury	Scott Street Central Precinct South	Bore water reticulation treatment plant, shed, soak wells and stormwater drainage pipe	Satisfactory relocation	Bore and stormwater infrastructure repositioned to the satisfaction of the City if not relocated prior to development. Timing and responsibility subject to negotiations with the City.	Condition of Development Approval
11	Developers Lots 1 and 2 Ocean Drive	Baldock Street Southern Precinct	Two-lane undivided road with a 20 metre wide road reservation and 2 x 3.5 metres wide lanes.	2 x 3.0 metre wide lanes with potential on-street parking	Explore redesign and upgrade at time of development on immediately adjacent sites with on-street parking considered if appropriate. If no on-street can be accommodated then maintain existing cross section.	Condition of Development Approval

Upgrade	Responsibility	Road Frontage / Precinct	Existing Item Status	Proposed Item Status	Requirement	Mechanism
12	Developers Lots 1 and 2 Ocean Drive	Baldock Street Southern Precinct	2.5 metre wide shared path (south side)	2.5 metre wide shared path (both sides of the street)	Provide 2.5 metre wide shared path along entire lot frontage onto Baldock St (north side). Replace existing path (south side) if damaged during construction or if road geometry is modified at time of development on immediately adjacent sites.	Condition of Development Approval
13	Developers of Lot 1 and 2 Ocean Drive and others	Baldock Street Relevant to all precincts	Un-signalised T – intersection with Baldock Street	Right turn deceleration lane	Overall 50% contribution to a 3.5 metre wide and 80 metre long right turn deceleration lane in Ocean Drive northbound and associated realignment of pedestrian crossing for the whole Special Use Zone No.1 area. Of the 50% overall contribution, no more than 79% is to be apportioned to the Northern and Southern development precincts (2.78ha out of the total land area of 3.51ha across Special Use Zone No.1)	Condition of Development Approval
14	All developers	Ocean Drive All Precincts	N/A	5 metre wide pedestrian promenade	Promenade to be provided and subsequently maintained by the developer(s) in association with the 5 metre setback along the Ocean Drive frontage. Public access (easement) to be secured.	Condition of Development Approval

4. Subdivision and Development

4.1 City of Bunbury Town Planning Scheme No. 7

As discussed in Section 1 of this report, the DSP area has been rezoned SU1 through the recently finalised Amendment 66 to the City's TPS7. SU1 outlines the key elements that are specific to the special use zoning for the Back Beach Tourism Precinct and that are required to be addressed in the preparation of the required general structure plan and detailed structure plans for the area. In conjunction with the deemed provisions for local planning schemes contained in the *Planning and Development (Local Planning Scheme) Regulations 2015*, TPS7 provides the statutory mechanism for the preparation and approval of both the general structure plan and detailed structure plans. This DSP has been prepared in consultation with the City to ensure that all the requirements of SU1 have been suitably addressed.

4.2 Management Plans and Technical Reports

In accordance with the requirements of TPS7, a number of management plans and technical reports will be required at various stages in the planning process.

The following documents have been prepared to inform the preparation of the DSP and are included as technical appendices in Part 3.

- Appendix A – Environmental Assessment Report (Coterra Environment)
- Appendix B – Transport Impact Assessment (KCTT)
- Appendix C – Report of a Desktop Aboriginal Heritage Assessment of Lots 1, 2 and 76 Ocean Drive, Bunbury, Western Australia (Amergin Consulting Australia Pty Ltd)

- Appendix D – Development Impact Statement (TPG)
- Appendix E – Stormwater Management Strategy (Coterra Environment)
- Appendix F – Infrastructure Servicing Report (KCTT)

In addition to GSP Clause 11.1, at the time of subdivision and/or prior to development, the following management plans are to be prepared to the satisfaction of the relevant authority.

- (i) Construction Environment Management Plan, including;
 - A suitable geotechnical assessment for the potential presence of karst onsite and other considered constraints; and
 - Confirmation of Acid Sulfate Soil (ASS) risk once detailed design plans have been developed. If required on site testing/assessment to occur prior to ground disturbing activities or as part of the geotechnical assessment; and
 - If required, a trapping and relocation program for Quenda developed in consultation with the Department of Parks and Wildlife (DPAW). It should also be investigated if the Central Precinct (Lots 66 and 497 can be cleared together to ensure that monitoring and (if required) relocation can occur concurrently.
 - (ii) Detailed Earthworks and Retaining Wall Plan; and
 - (iii) Waste Management Plan.
- The information outlined above shall be lodged with the relevant subdivision or development application, or to satisfy the requirements of subdivision or development.

4.3 Strata Management Arrangements

In accordance with the requirements of SU1 a Strata Management Statement is required to be applied to all strata arrangements within the subject site addressing the management of tourist accommodation units including URA to the satisfaction of the City and WAPC.

The Strata Management Statement is required to be prepared and submitted in accordance with Section 5C of the *Strata Titles Act 1985*, to establish a Schedule 1 by-law that requires as a minimum the establishment of a unit management agreement, lease or alternative arrangement between each owner of a tourist unit and / or URA dwelling, or the owners collectively, and a common facility manager / operator to provide for common on site management of all such units.

The management agreement, lease or alternative arrangement shall cover but not be limited to:

- Reception arrangements (tourist unit/URA);
- General rental/leasing arrangements and specific management arrangements to govern the relationship and operation between permanent occupation of units and the short-stay use of units as provided for in the URA land use;
- Security (tourist unit/URA);
- Maintenance (tourist unit only);
- Caretaking (tourist unit only);
- Refurbishment (tourist unit only);
- Marketing (tourist unit only);
- Care and maintenance of drainage infrastructure in drainage attenuation areas (tourist unit/URA); and
- Other services required for the development to operate as a tourist facility.

4.4 Subdivision and Staging

Following the approval of the DSP by the City and WAPC, a subdivision application(s) may be lodged for consideration and determination by the WAPC, on advice of the City and other relevant referral agencies. The subdivision application(s) will identify proposed lot boundaries and will facilitate the creation of the proposed development sites. The landowner may then release these lots to the market for purchase and delivery of the built form by a developer.

In terms of development staging the proposed public piazza will need to be developed as the first stage of development. Development over the remainder of the subject site can be undertaken as one development or potentially through multiple development stages in response to market conditions or future landowner requirements.

4.5 Design Guidelines

The GSP and DSP establishes the development parameters that apply to the proposed development sites and specifies the key built form criteria that are to be achieved at the development and construction stage. In addition to the requirements of the GSP and DSP, the landowner may, in consultation with the City, prepare architectural design guidelines to guide and control the built form outcomes for the development site. These design guidelines would address more style-based elements of the built form, such as preferred architectural character and building materials and colours. Where design guidelines are prepared for the subject site, the landowners would implement the requirements via its sales contract with purchasers.

4.6 Development Applications

Development applications will be prepared for future development on the subject site. The development applications will provide detail regarding any proposed development, including the provision of parking, the proposed architectural form and demonstrating that due regard has been given to the applicable standards and requirements of Part 1 –Implementation Section of both the GSP and DSP for the relevant site.

For any proposed development with a construction value of \$10 million, a Joint Development Assessment Panel (JDAP), with the advice of the City, will make determination of a development application. A proponent may elect to have a development application determined by the JDAP where the value of the development is more than \$2 million and less than \$10 million. Where development is proposed with a construction cost less than \$2 million, a development application will be assessed and determination issued by the City.

Appendix A

Environmental Assessment Report (Coterra Environment)

Appendix B

Transport Impact Assessment (KCTT)

Appendix C

Aboriginal Heritage Assessment
(Amergin Consulting Australia Pty Ltd)

Appendix D

Development Impact Statement (TPG)

Appendix E

Stormwater Management
Strategy

(Coterra Environment)

Appendix F

Infrastructure Servicing Report (KCTT)

