

ILUKA STRUCTURE PLAN

Structure Plan No. 26

**This Structure Plan is prepared under the provisions of Part 9 of the City of
Joondalup District Planning Scheme No. 2**

This Structure Plan is prepared under the provisions of Part 9 of the City of Joondalup District Planning Scheme No. 2

**CERTIFICATION OF AGREED STRUCTURE PLAN
(SCHEDULE 8)**

CERTIFIED THAT AGREED ILUKA STRUCTURE PLAN, WAS ADOPTED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON

(Signed)

.....

Chairperson, Western Australian Planning Commission

AND BY RESOLUTION OF THE COUNCIL OF THE CITY OF JOONDALUP ON 27 FEBRUARY 2007 AND THE SEAL OF THE MUNICIPALITY WAS PURSUANT TO THE COUNCIL'S RESOLUTION HERETO AFFIXED IN THE PRESENCE OF

(Signed)

.....

Mayor

(Signed)

.....

Chief Executive Officer

Record of Amendments made to the Iluka Structure Plan

Amendment No.	Description of Amendment	Endorsed by Council	Endorsed by WAPC
1	<p>A. Changes to Figure 1 as follows:</p> <ol style="list-style-type: none"> 1. Modify the layout of the western side of the structure plan area south of O'Mara Boulevard by re-orientating commercial and public open space land and including laneways in the adjoining residential land with a small section being recoded to R30. 2. Remove the laneway in the north-west corner of the structure plan area along Burns Beach Road. In addition recode the portion fronting Burns Beach Road from R20 to R30. 3. Recode a stretch of land on the east side of Delgado Parade and land to the north of O'Mara Boulevard from R30 to R25. 4. Removal of a laneway to the north and south of a portion of land in the centre of O'Mara Boulevard. 5. Inclusion of a laneway for R30 lots north-west of Sir James McCusker Park. 6. Modify the road layout for all R30 lots located north of Sir James McCusker Park and O'Mara Boulevard to reflect the subdivision proposal dated 16 October (WAPC No.120494). 7. Delete reference to Detailed Area Plan (DAP). <p>B. Changes to Part 1 'Statutory Planning' as follows:</p> <ol style="list-style-type: none"> 1. Deleting section 5.2 and replacing with generic design guidelines for R20, R25 and R30 lots. <p>C. Delete reference to the 'Residential Planning Codes' and replace with 'Residential Design Codes'.</p>	27 May 2003	
2	Changes to Figure 1 as follows:	5 April 2005	27 May 2005

	<ol style="list-style-type: none"> 1. Modify the configuration of the small pocket park in the northernmost section of the structure plan area by providing road interfaces on all sides of the POS. 2. Modify the road network immediately surrounding the POS outlined in 1. above to facilitate the change in POS configuration. 3. Inclusion of Controlled Access Places along the north eastern section of Burns Beach Road and Delgado Parade. 		
3	Modify clause 5.2 Provisions – Parts 2, 3 and 4 to read: Land use permissibility and general provisions shall be the same as those within the Residential zone under the scheme unless otherwise specified in the Structure Plan.	27 February 2007	23 November 2009
4	<ol style="list-style-type: none"> 1. Removal of Centre Zone, replaced with Commercial R60 Zoning. 2. Requirement for Local Development Plans for Village Centre sites, rather than separate Structure Plan. 		

CONTENTS PAGE

OVERVIEW

1. PARTS OF THE STRUCTURE
2. SUMMARY

PART 1 – STATUTORY PLANNING

1.0	SUBJECT AREA	1
2.0	STRUCTURE PLAN ZONES / RESERVATION	2
3.0	DEFINITIONS	3
4.0	THE SCHEME	4
5.0	RESIDENTIAL ZONE	5
	5.1 Objectives	5
	5.2 Provisions	5
6.0	CENTRE ZONE	12
	6.1 Objectives	12
	6.2 Provisions	12
7.0	PARKS AND RECREATION RESERVES	13

PART 2 – EXPLANATORY REPORT

1.0	INTRODUCTION	14
1.1	Background	14
1.2	Project Objectives	15
2.0	SITE CHARACTERISTICS	16
2.1	Location	16
2.2	Land Use	16
2.3	Landform & Soils	16
2.4	Vegetation and Flora	17
2.5	Fauna	17
3.0	STATUTORY PLANNING FRAMEWORK	19
3.1	Strategic Planning	19
3.2	Metropolitan Region Scheme	19
3.3	Local Town Planning Scheme	19
4.0	CONTEXT ANALYSIS	20
5.0	DESIGN PHILOSOPHY	23
5.1	Traditional Planning Principles	23
5.2	Coastal Village	24
5.3	Residential Neighbourhood	25
5.3.1	Lot Orientation	25
5.3.2	Residential Density and Design	25
5.4	Public Open Space and Community Facilities	26
5.5	Interconnected Street Pattern	29
5.6	Pedestrian / Cycle Network / Public Transport	30
5.7	Landscape Works and Streetscape Treatments	30
6.0	ENVIRONMENTAL CONSIDERATIONS	31
7.0	ENGINEERING SERVICES AND INFRASTRUCTURE	32
8.0	TRAFFIC	33
9.0	STAGING	34
10.0	CONCLUSION	35

APPENDIX A	-	PARKLAND MANAGEMENT PLAN
APPENDIX B	-	LETTER – CITY OF JOONDALUP 8 MARCH 1999
	-	BEAUMARIS ESTATE POS SCHEDULE
APPENDIX C	-	TRAFFIC ASSESSMENT REPORT
APPENDIX D	-	TRAFFIC MANAGEMENT AND PEDESTRIAN/CYCLE NETWORK PLAN
APPENDIX E	-	ILUKA STRUCTURE PLAN – LANDSCAPE COMPONENT

- APPENDIX F - SERVICING REPORT ASSOCIATED WITH THE STRUCTURE
PLANNING FOR ILUKA
- APPENDIX G - FLORA AND VEGETATION SURVEY & FAUNA HABITAT
ASSESSMENT

OVERVIEW

1. PARTS OF THE STRUCTURE PLAN

This Structure Plan comprises two parts:

Part 1 – [Statutory Planning Implementation](#)

[Section](#)

Part 2 – Explanatory Report

~~Sub-clause 9.8.2 of the City of Joondalup Town Planning Scheme No. 2 states the following:~~

~~“Where an Agreed Structure Plan imposes a classification on the land included in it by reference to reserves, zones (including Special Zones) or Residential Density Codes, until it is replaced by an amendment to the Scheme imposing such classifications:~~

~~(a) the provisions of the Agreed Structure Plan shall apply to the land within it as if its provisions were incorporated in this Scheme and it shall be binding and enforceable in the same way as corresponding provisions incorporated in the Scheme; and~~

~~(b) provisions in the Scheme applicable to land in those classifications under the Scheme shall apply mutatis mutandis to the Agreed Structure Plan area.”~~

~~Sub-clause 9.8.3 (b) of the Scheme enables an Agreed Structure Plan to make provision for a standard or requirement applicable to zones or R Codings under the Scheme to be varied. Sub-clause 9.8.3 (g) states that an Agreed Structure Plan may distinguish between provisions, standards or requirements which are intended to have effect as if included in the Scheme and provisions, standards and requirements which are for guidance or information only.~~

INSERT PLAN: ILUKA STRUCTURE PLAN – A3

2. SUMMARY

This Structure Plan refers to the land within Iluka bounded by Burns Beach Road to the west and north, Silver Sands Drive to the south and Naturaliste Boulevard and Delgado Parade to the east. The site is located within Swan Location 1370 and includes Pt Lot M1722, contained within Certificate of Title Volume 2098, Folio 1000 and Pt Lot M1722, contained within Certificate of Title Volume 1975, Folio 725. This Structure Plan shall determine the overall land use and form of development for this area.

The Structure Plan area is divided into the ~~'Centre Zone'~~Commercial Zone, 'Residential Zone' and 'Parks and Recreation' reservation. Part 1 of the report outlines the objectives and provisions for each of these zones/reservations. The Explanatory Report contained within Part 2 provides further explanation about the site and the rationale for the proposed design.

The zones and reservations nominated for Iluka are shown on the Structure Plan (refer to Figure 1 - Iluka Structure Plan).

~~INSERT PLAN: ILUKA STRUCTURE PLAN - A3 INSERT~~

PART 1 – ~~STATUTORY PLANNING~~IMPLEMENTATION SECTION

~~As provided for under Part 9 of the Scheme, this part of the Structure Plan has the same force and effect as a provision, standard or requirement of the Scheme.~~

1.0 SUBJECT AREA

The Structure Plan area comprises approximately 95ha of land bounded by Burns Beach Road to the west and north, Silver Sands Drive to the south and Naturaliste Boulevard and Delgado Parade to the east (refer to Figure 2 - Location Plan).

Insert LOCATION PLAN (A3 INSERT)

2.0 STRUCTURE PLAN ZONES / RESERVATION

The Structure Plan shows the road structure and divides the Structure Plan area into the following:

- Residential Zone
- ~~Centre-Commercial~~ Zone
- Parks and Recreation Reservation

3.0 DEFINITIONS

The terms used in this Part of the Structure Plan Report shall be interpreted in accordance with the City of Joondalup Town Planning Scheme No. 2, ~~and as set out hereunder:~~

~~“STOREY” shall mean the vertical space extending from one habitable floor of a building to the floor above and for residential properties shall be deemed to be no more than 3.5 metres. The term shall not include any space within a roof, whether used for habitation or not.~~

4.0 THE SCHEME

Unless provided for by specific requirements of this Structure Plan, all requirements shall be in accordance with the provisions of the City of Joondalup Town Planning Scheme No. 2.

5.0 RESIDENTIAL ZONE

5.1 Objectives

The objectives for the Residential Zone are:

- To provide for a range of lot sizes to facilitate housing diversity and choice;
- To provide lots which are orientated and dimensioned to suit energy efficient housing;
- To provide lots which optimise coastal views, solar orientation and cooling coastal breezes;
- To arrange lots to front the Parks and Recreation reservations and to properly address street frontages to promote attractive streetscapes and passive surveillance of public spaces;
- To provide for smaller lots around the Centre Zone and the Parks and Recreation reservations;
- To guide building layout and access on laneway lots to enable efficient use of land and protection of neighbourhood amenity;
- To maintain a high level of pedestrian safety, amenity and accessibility.

5.2 Provisions

1. The residential density codes nominated on the Structure Plan (refer to Figure 1 – Iluka Structure Plan) shall apply to future development within the Residential Zone.

2. R20 Lots

Development of all Residential R20 lots shown on the structure plan shall be assessed in accordance with the Residential Design Codes, District Planning Scheme, Council's Policies (except in the case of Building Height in which the Residential Design Codes applies), relevant Local Laws and Building Codes of Australia.

3. R25 Lots

Development of all Residential R25 lots shown on the Structure Plan shall be assessed in accordance with the Residential Design Codes, District Planning

Scheme, Council's Policies (except in the case of Building Height in which the Residential Design Codes applies), relevant Local Laws and Building Codes of Australia, except where they have been varied in the following instances:

- a. A minimum 2.5 metre front setback and an average of 4.5 metres shall be met. An average front setback of 3.0 metres shall be permitted where 50% or more of the garage/carport is recessed into the design of the dwelling, however garage/carports shall be setback a minimum of 4.0 metres regardless.
- b. Rear setback shall be in accordance with the Residential Design Codes.
- c. Laneway access is not permitted.
- d. Development of Residential R25 lots shall have a maximum site coverage of 60% of the total lot.
- e. To encourage solar access and energy efficiency whilst preserving similar solar access to adjoining properties, a zero lot setback onto a side boundary other than a street boundary is encouraged (except where stated for corner lots with a secondary street frontage, refer to 3(i)). The use of a zero setback shall be limited to the western boundary for north/south-orientated lots and the southern boundary for east/west orientated lots. A zero setback to the side boundary is required to be in accordance with acceptable development provision A2 (iii) section 3.3.2 of the Residential Design Codes.
- f. Regardless of whether or not a zero setback has been sought to one of the side boundaries referred to in (e) above a minimum setback of 1.5 metres is required to the opposite side boundary for both ground and upper floors for walls without a major opening. This will be to the eastern boundary for north/south, orientated lots and the northern boundary for east/west, orientated lots. Where major openings are proposed, setbacks are to be in accordance with the Residential Design Codes.

- g. Those lots with the zero lot line on one side boundary shall also have a mandatory 2.0 metre second storey setback when the wall contains no major openings to habitable rooms. This setback is to apply specifically on the south for east/west lots and the west for north/south lots. Where major openings to habitable rooms are proposed setbacks are to be in accordance with the Residential Design Codes.

- h. Maximum building height is to be in accordance with Table 3 'Category B' of the 'Residential Design Codes'. This provision supercedes any Local Planning Policy that relates to Building Height.

- i. For corner lots with two frontages to a street, the secondary street setback is to be in accordance with the Residential Design Codes. To encourage active frontage and surveillance to a secondary street a zero setback may be permitted to up to 50% of the secondary street boundary subject to the following conditions:
 - (a) The part of the building that is located at a zero setback must address the secondary street in a similar manner to that of the primary street;
 - (b) The remaining part of the building is to be setback in accordance with the Residential Design Codes for secondary street;
 - (c) Any fencing proposed to the secondary street boundary is required to be a maximum height of 1.8 metres with the solid component being permitted to a maximum height of 750mm with the remainder being 'permeable fencing' (See City of Joondalup Policy 3.2.6 'Subdivision and Development Adjoining Areas of Public Space' for an example of 'permeable fencing') and
 - (d) The secondary street boundary does not include the corner truncation.

- j. Elements 8 and 9 of the Residential Design Codes, do not apply.

- k. Each Single house is required to provide an enclosed, lockable storage area, constructed in a design and material matching the dwelling, accessible from outside the dwelling, with a minimum internal dimension of 1.5m with an internal area of at least 4m². Storerooms are permitted in garages provided the minimum dimensions and area are achieved.
- l. Where no fence is proposed along the front boundary, side fencing must not exceed a height of 1 metre within the front setback area. Where front fencing is proposed the side fencing within the front setback area is required to be of the same height (not to exceed 1.0m), same style and same materials as the front boundary fence.
- m. Fencing forward of the front building line is not encouraged, however where it is proposed permeable fencing or solid fencing or a combination of the two will be permitted to a maximum height of 1.0 metre.
- n. Should an application not be in accordance with the development provisions provided in this section, consultation with adjoining or other landowners and the submission of a development application is required.

4. R30 Lots

Land use permissibility and general provisions shall be the same as those within the Residential zone under the Scheme unless otherwise specified in this Structure Plan.

Development of all Residential R30 lots shown on the Structure Plan shall be assessed in accordance with the Residential Design Codes, District Planning Scheme, Council's Policies (except in the case of Building Height in which the Residential Design Codes applies), relevant Local Laws and Building Codes of Australia, except where they have been varied in the following instances:

- a. The development of all residential lots with rear laneway access shall satisfy a minimum 1.5-metre front setback and an average of 3.0 metres.

- b. The development of lots without laneway access shall satisfy a minimum 2.5-metre front setback and an average of 4.5 metres. An average front setback of 3m shall be permitted where 50% or more of the garage is recessed into the design of the dwelling. A minimum 4m setback shall apply to all garages/carports.
- c. Rear setback (excluding garages/carports for lots with rear laneways) shall be in accordance with the Residential Design Codes.
- d. Garages and carports on laneway lots shall provide a 1.5 metre minimum rear setback. A 1.5 metre side offset is required for garage/carport openings to the boundary for site truncation to enable improved vehicle access.
- e. To encourage solar access and energy efficiency whilst preserving similar solar access to adjoining properties, a zero lot setback onto a side boundary other than a street boundary is encouraged (except where stated for corner lots with a secondary street frontage, refer to 4(k)). The use of a zero setback shall be limited to the western boundary for north/south-orientated lots and the southern boundary for east/west orientated lots. A zero setback to the side boundary is required to be in accordance with acceptable development provision A2 (iii) section 3.3.2 of the Residential Design Codes.
- f. Those lots with the zero lot line on one side boundary shall also have a mandatory 2.0 metre second storey setback when the wall contains no major openings to habitable rooms. This setback is to apply specifically on the south for east/west lots and west for north/south lots. Where major openings to habitable rooms are proposed setbacks are to be in accordance with the Residential Design Codes.
- g. Regardless of whether or not a zero setback has been sought to one of the side boundaries referred to in (e) above a minimum

setback of 1.5 metres is required to the opposite side boundary for both ground and upper floors for walls without major openings to habitable rooms. This will be to the eastern boundary for north/south, orientated lots and the northern boundary for east/west, orientated lots. Where major openings are proposed setbacks are to be in accordance with the Residential Design Codes.

- h. Development of Residential R30 lots shall have maximum site coverage of 60% of the total lot.
- i. Rear garages/carports are mandatory for all laneway allotments.
- j. Maximum building height is to be in accordance with Table 3 'Category B' of the 'Residential Design Codes'. This provision supercedes any Local Planning Policy that relates to Building Height.
- k. For corner lots with two frontages to a street, the secondary street setback is to be in accordance with the Residential Design Codes. To encourage active frontage and surveillance to a secondary street a zero setback may be permitted to up to 50% of the secondary street boundary subject to the following conditions:
 - (a) The part of the building that is located at a zero setback must address the secondary street in a similar manner to that of the primary street;
 - (b) The remaining part of the building is to be setback in accordance with the Residential Design Codes for secondary street;
 - (c) Any fencing proposed to the secondary street boundary is required to be a maximum height of 1.8 meters with the solid component being permitted to a maximum height of 750mm with the remainder being 'permeable fencing' (see City of Joondalup Policy 3.2.6 'Subdivision and Development Adjoining Areas of Public Space' for an example of 'permeable fencing') and
 - (d) The secondary street boundary does not include the corner

truncation.

- i. Elements 8 and 9 of the Residential Design Codes, do not apply.

- m. All developments are required to provide an enclosed, lockable storage area, constructed in a design and material matching the dwelling, accessible from outside the dwelling, with a minimum internal dimension of 1.5m with an internal area of at least 4m² per dwelling. Storerooms are permitted in garages provided the minimum dimensions and area are achieved.

- n. Where no fence is proposed along the front boundary, side fencing must not exceed a height of 1 metre within the front setback area. Where front fencing is proposed the side fencing within the front setback area is required to be of the same height (not to exceed 1.0m), same style and same materials as the front boundary fence.

- o. Fencing forward of the front building line is not encouraged, however where it is proposed permeable fencing or solid fencing or a combination of the two will be permitted to a maximum height of 1.0 metre.

- p. Should an application not be in accordance with the development provisions provided in this section, consultation with adjoining or other landowners and the submission of a development application is required.

6.0 CENTRE-COMMERCIAL ZONE

6.1 Objectives

The objectives for the Centre-Commercial Zone are to be consistent with those contained within the City of Joondalup Town Planning scheme No. 2 for the Commercial Zone.

- ~~• To promote development which is an integral part of and a focus for the broader community;~~
- ~~• To provide efficient and safe access arrangements with pedestrian / cycle priority;~~
- ~~• To promote development which complements the coastal setting and contributes a strong sense of place to Huka;~~
- ~~• To promote buildings with active street frontages, which properly address the street and public spaces;~~
- ~~• To encourage high standards of built form and streetscape;~~
- ~~• To encourage a mix of uses which can sustain commercial and community activities beyond normal business hours.~~

6.2 Provisions

1. ~~No subdivision or other development shall commence or be carried out on land within the Centre-Commercial Zone until a Structure-Local Development Plan has ~~been~~ prepared and ~~adopted~~ on that land in accordance ~~with the requirements of Part 9 of the~~ of the City of Joondalup- Town Planning Scheme No. 2 for this area.~~
2. The approved Structure-Local Development Plan shall address the following:
 - ~~i. Permissibility of uses within the Centre Zone, including the maximum permissible area of retailing;~~
Measures to ensure built form fronts O'Mara Boulevard with ground floor street activating non-residential land uses;
 - ~~ii. Built form controls generally reflecting the intent to deliver a mixed use development incorporating multiple dwellings a mixture of alternative housing types not prevalent in the immediate locality, which considers its context including surrounding built form and scale.~~
 - ~~iii. Height limit/s.~~
 - ~~iv. Building design guidelines and development standards Specific Multiple Dwelling R-Code variations necessary to facilitate mixed use development on the land; and~~
 - ~~viii. Overshadowing and protection of privacy; and~~
 - ~~iv. Car parking and vehicular access requirements.~~

3. A Minimum allowance for 1,500sqm of street activating non-residential floorspace generally fronting O'Mara Boulevard shall be provided on land within the Commercial Zone, with non-residential uses to frame both sides of the road reserve to create a 'main-street' pedestrian environment.
34. A maximum building height restriction of three storeys shall apply for all development within the ~~Centre-Commercial~~ Zone, unless it can be demonstrated that additional height will comply with the Design Principles of the R-Codes at cl. 6.1.2 and not have undue negative impact on the surrounding community.
45. An R60 density coding shall apply to residential development within the ~~Centre-Commercial~~ Zone.
56. Residential Development within the ~~Centre-Commercial~~ Zone shall comply with the relevant provisions of the Residential Planning Codes and Building Code of Australia.
7. For any non-residential land uses fronting O'Mara Boulevard, parking shall generally be provided at a ratio of 1 bay per 20 sqm of net lettable floor area.

PART 2 – EXPLANATORY REPORT

1.0 INTRODUCTION

1.1 Background

Development of Iluka is managed by Beaumaris Land Sales on behalf of The Roman Catholic Archbishop of Perth and Davidson Pty Ltd. Iluka forms part of the Beaumaris Estate and is located approximately 28 kilometres north west of the Perth Central Business District (CBD) and 3.5 kilometres west of the Joondalup City Centre (refer to Figure 2 - Location Plan). The site comprises an area of approximately 95ha and is projected to yield approximately 900 allotments, catering for an estimated population of 2300 persons.

An earlier Structure Plan was prepared for Iluka by Feilman Planning Consultant Pty Ltd in 1992. This Structure Plan formed the basis for a submission to the then City of Wanneroo seeking approval to rezone the site from 'Rural' to 'Residential', 'Commercial', 'Civic' and 'Service Station' (Amendment No. 641). Scheme Amendment No. 641 and the former Structure Plan were not formally endorsed by the City of Wanneroo due to a number of outstanding issues associated with a legal agreement. Accordingly, the site remained zoned 'Rural' under the preceding City of Joondalup Town Planning Scheme No. 1 (TPS No. 1).

TPS No. 1 was superseded by Town Planning Scheme No. 2 (TPS No. 2) in November 2000. Under TPS No. 2 the subject land is zoned 'Urban Development'. A provision is included within this Scheme requiring a Structure Plan to be prepared for land zoned 'Urban Development' before subdivision or development can commence.

In order to progress the required Structure Plan, a project team was commissioned comprising the following members:

Roberts Day Group	Town Planners
Sharni Howe Architects	Architect
Cossill and Webley	Civil Engineers
Riley Consulting	Traffic Engineers
ATA Environmental	Environmental Consultants
McMullen Nolan & Partners	Licensed Surveyors
McNally Newton Landscape Architects	Landscape Architects

In preparing the Structure Plan a number of investigations were carried out by the project team including environmental, engineering and traffic assessments.

Collation of information from these investigations has enabled clear identification of the opportunities and constraints presented by the site and provided a logical framework for the delineation of future land uses and the structure of the proposed design. The Structure Plan also responds to the Western Australian Planning Commission's (WAPC) Liveable Neighbourhoods and is lodged for assessment under this code.

This report provides complete details of results from the investigative process and the rationale behind the land use mix and design proposed by the Structure Plan. It also responds to the Liveable Neighbourhoods and the City of Joondalup District Planning Scheme requirements for the preparation of local structure plans. Aspects of the Structure Plan relative to the subdivision design may be changed at the subdivision application and/or detailed design stages.

1.2 Project Objectives

The overriding vision for Iluka is to create a quality residential estate, incorporating the most recent design and environmental initiatives, while recognising the unique opportunities presented by the site in the building of a future community. With this vision in mind, the following project objectives were developed to guide the development of the Iluka Structure Plan:

- Promote the development of a premier coastal community with its own clear identity and sense of place, using the coastal location and natural undulating topography of the site as key foundations;
- Design a neighbourhood which promotes the building of a 'real' local community, including a strong emphasis on a mixed-use [neighbourhood-local](#) centre;
- Provide opportunities for a mix of uses to promote vibrant and dynamic spaces and to generate local employment activity;
- Provide efficient, safe, convenient and fully integrated transport networks for pedestrians, cyclists, public transport and motorists;
- Provide public open spaces (POS) that are well distributed, designed and managed to provide choice of recreational opportunities for all members of the community;
- Promote residential development which optimises coastal views, solar orientation and cooling coastal breezes;
- Provide a diversity of lots for a wide range of quality housing and a diverse community; and
- Incorporate the main elements of traditional planning principles into the Structure Plan to promote a place for quality living, recreating and working.

2.0 SITE CHARACTERISTICS

2.1 Location

Iluka is situated near the coast within the City of Joondalup, approximately 28 kilometres north-west of the Perth CBD. The site is bounded by Burns Beach Road to the west and north, Silver Sands Drive to the south and Naturaliste Boulevard and Delgado Parade to the east (refer to Figure 2 - Location Plan).

The site is located within Swan Location 1370 and includes Pt Lot M1722, contained within Certificate of Title Volume 2098, Folio 1000 and Pt Lot M1722, contained within Certificate of Title Volume 1975, Folio 725.

2.2 Land Use

The site is vacant and partially cleared of natural vegetation as a result of the overall earthworks program for the site. Uncleared portions are mostly covered with coastal heath.

2.3 Landform & Soils

The site is located within the Spearwood Dune System, which is characterised by low hilly to undulating terrain. The Quindalup Dune System, which usually occupies the near coastal zone within the coastal strip of the Perth metropolitan region, is absent within this location. This Quindalup system does however occur adjacent to the beach, north of the Burns Beach Caravan Park and to the south of the site.

The coastal area east of the beach consists of bare limestone and shallow brown sandy soils over limestone (McArthur & Bartle, 1980). Inland of this, particularly within the southern section, the site comprises Karrakatta sand characterised by grey-brown sand over yellow sand, generally with limestone within two metres. Further east and interspersed with the Karrakatta sand in places, limestone is again exposed or covered with a shallow layer of sand.

The site has varied relief with a central ridge which dissects the site from north to south and which slopes down towards the coast and Marmion Avenue (refer to Figure 3 – Site Analysis Plan). The land falls towards the coast to a low point of 5 AHD in the south western sector, near the coastal reserve.

The natural relief contributes important landscape character to the site, which underpins the design proposed by the Structure Plan. To preserve this landscape character and optimise the advantages it affords, boulevards will be aligned to offer long distance views to the ocean from the lots developed on the more elevated land.

Based on topographical information for the site, the minimum separation from groundwater is about 4 metres at the lowest point. There are no wetlands or surface expressions of the groundwater within the site or within immediately neighbouring areas.

2.4 Vegetation and Flora

ATA Environmental has coordinated a flora and vegetation survey and fauna habitat assessment of the site. Full details of the findings from this research are provided under Appendix G – Flora and Vegetation Survey and Fauna Habitat Assessment.

The flora and vegetation survey was undertaken by qualified botanists during October and December 2000. Six principle native vegetation associations were recorded from the study area all broadly mapped as the Cottesloe Complex – Central and South. The vegetation comprises areas of heath, which predominantly occur in locations where limestone is at or close to the surface and woodlands consisting primarily of Banksia species over a dense low under storey on deeper sands. All associations with the possible exception of Eucalyptus foecunda Mallee are represented within the conservation and reservation estates (including the nearby Neerabup National Park) and as a consequence are not considered to be of high conservation value.

A total of 111 flora species from 42 families were recorded during the field surveys. This included 17 introduced, non-endemic or invasive species, which were largely restricted to disturbed areas. The native species total comprised one cycad, 29 monocotyledons and 81 dicotyledons. None of the species recorded are listed as a Declared Rare Flora species or on CALM's Priority flora list. Two of the species from the list *Sarcozona bircarinata* and *Hibbertia spicata* have been previously recorded from the vicinity of the study area. Although neither was recorded during this study the timing of the survey was appropriate for identification of both species.

2.5 Fauna

A search of the Department of Conservation and Land Management's (CALM's) database in November 2000 indicated three species that are Specially Protected under provisions of the Wildlife Conservation Act 1950 and one species of Priority taxa are known to occur in the area (Appendix 2). These are:

- Schedule 1 - Rare or likely to become extinct
Short-billed (or Carnaby's) Black-Cockatoo, *Calyptorhynchus latirostris*
- Schedule 4 - Otherwise in need of special protection
Peregrine Falcon, *Falco peregrinus*
Carpet Python, *Morelia spilota imbricata*
- Priority 4 - Taxa in need of monitoring

Southern Brown Bandicoot (or Quenda), *Isodon obesulus fusciventer*

A fauna habitat assessment involving a one day site inspection occurred in November 2000. All of the fauna species recorded are typical of the location and available habitats. One species of significant fauna, Short-billed (or Carnaby's) Black Cockatoo, *Calyptorhynchus latirostris* (Schedule 1) is known to occur at the site. This species would occur as a seasonal visitor to the area during the non-breeding period. Possible signs of the Southern Brown Bandicoot (Priority 4) were recorded in one location on the site, however the presence of this species has not been confirmed.

Suitable habitats for fauna occurring or expected to occur on the site, including the bandicoot, are protected within existing and proposed reserves to the north and north-east of the site such as Neerabup National Park and the coastal Foreshore Reserve. Continued clearing of bushland for the expansion of the Iluka residential development will result in the removal of habitat. Wherever possible, retention of good quality vegetation should be considered as part of the allocation of Public Open Space (POS) for the subdivision development. In particular, retention of the area of *Eucalyptus foecunda* Mallee near Burns Beach Road should be considered.

3.0 STATUTORY PLANNING FRAMEWORK

3.1 Strategic Planning

The subject site has been identified as a future urban development node in a number of strategic planning studies produced by the WAPC. These studies include, Urban Expansion Policy Statement (November 1990), Metroplan (December 1990) and North West Corridor Structure Plan (March 1992).

3.2 Metropolitan Region Scheme

The Iluka Structure Plan area is zoned 'Urban' under the Metropolitan Region Scheme (MRS). Land to the west of the subject site is reserved 'Parks and Recreation' under the MRS, land to the north is zoned 'Rural' and land east and south is zoned 'Urban'.

3.3 Local Town Planning Scheme

The subject site is zoned Urban Development under the existing City of Joondalup Town Planning Scheme No. 2. The purpose of the Urban Development Zone is to provide for the orderly planning and redevelopment of larger areas of land in an integrated manner within a regional context whilst retaining flexibility to review planning with changing circumstances.

To achieve this outcome, the Scheme requires that an Agreed Structure Plan be prepared and endorsed before subdivision and/or development proceeds and for subdivision and development to be carried out in conformity with the Agreed Structure Plan.

4.0 CONTEXT ANALYSIS

A Context Analysis Plan has been prepared to locate Iluka within its broader metropolitan context and to demonstrate the site's relationship with surrounding developed and natural areas, including planned and committed development for adjacent sites.

Iluka is situated approximately 28 kilometres north west of the Perth CBD and 3.5 kilometres west of the Joondalup City Centre. Iluka is a coastal site, abutting a MRS 'Parks and Recreation' coastal reserve on its western boundary.

The Context Analysis Plan shows that, with the exception of the Burns area to the north, the Iluka Structure Plan area is encircled by developed residential estates based on conventional residential subdivision design. Kinross is located to the north east, Currambine to the east and Ocean Reef to the south. Areas within the southern and eastern sectors of Iluka are also developed and a small residential settlement exists at Burns Beach to the north-west.

The Burns area to the north of Iluka is the subject of a MRS Amendment to zone the land 'Urban'. The Amendment is yet to be finalised due to a number of environmental issues. To support the initiation of the proposed MRS Amendment, a Structure Plan was prepared for the Burns area (refer to Figure 4 - Context Analysis Plan). This Structure Plan, having no formal status other than that it supported the initiation of the MRS Amendment, is expected to be subjected to further revisions and refinements.

The most direct connecting roads to Joondalup from Iluka are Shenton Avenue and to a lesser extent Moore Drive and the most direct route to the Perth CBD is via Marmion Avenue and the Mitchell Freeway. Vehicular access from Iluka to the coast is via Ocean Parade and a series of trails within the coastal reserve provide for controlled pedestrian access. The existing bike paths and bus route locations available to Iluka are depicted on the Context Analysis plan. The nearest train station is at Currambine, approximately two kilometres east of Iluka.

Originally, the Iluka Structure Plan predicted that a market would exist for up to 3,300sqm of retail floorspace within the Village Centre, with the exact amount of floor space to be determined at a later date. Following a prolonged and detailed market investigation, including several attempts at tenant procurement, in addition to urban design considerations for potential scenarios, it has been established that a figure of 1,500sqm of non-residential floorspace is both desirable and achievable. Key considerations pertinent to the non-residential floorspace include:

- The urban design outcome necessary to accommodate the originally planned 3,300sqm of retail floorspace, would likely result in a traditional 'big box' internalized shopping centre with a large at-grade car park surrounding.
- This urban design outcome would represent a poor result for residents within the Iluka

Iluka Structure Plan

community, particularly considering vistas toward the lower lying Village Centre sites.

- Since original planning of the Village Centre was conducted, the nearby Currambine Central Centre has expanded to include a range of civic services and retail/commercial floorspace beyond what was originally anticipated. This has impacted on the ability for the Iluka Village Centre to attract a commercial operator for a major retail tenant.
- Demand for retail and local entertainment experiences has evolved since the inception of original planning for the estate, with options now desired to be accessible and welcoming to local pedestrians and cyclists, not just motorists that have the ability to park nearest the entry.
- Equally, local residents have expressed a desire for the centre to be a 'local' destination, rather than attract large amounts of regional traffic.
- The market has matured since original planning for the Village Centre was conducted, with an identified demand for apartment living in the area that was not always anticipated.
- This identified market segment represents an opportunity to:
 - Improve the possible urban design outcomes for the Village Centre, by substantially increasing the likelihood of non-residential land uses being delivered below appropriately scaled apartment development – creating a true form of 'mixed-use' development.
 - Increase the likelihood for basement level car parking to be provided, and/or built form framing the street to screen unsightly large expanses of at-grade parking areas.
 - Provide dwelling stock that responds to the City's Housing Strategy, and provides a diverse form of housing that appeals to a broad range of demographics.

~~In terms of local retail and community facilities, the Iluka Structure Plan provides for a~~The intent is to create a mixed use Coastal Village located within comfortable walking distance of all residents. This Village will function as a ~~neighbourhood-local~~ centre for local residents and is expected to comprise a minimum of ~~up to 1,53,300 sqm²~~ of street activating non-residential floor space ~~fronting O'Mara Boulevard for retail, entertainment or medical use~~ and 1,000m² for community use located on the northern side of O'Mara Boulevard (or otherwise provided as a contribution to benefit local residents). The exact amount of floor space dedicated to retail and community use will be determined, as part of the more detailed ~~structure-planning~~ local development plan that will be required for this area before development can proceed.

~~Although this centre will provide predominantly convenience retailing, it is anticipated that provision will also be made for ancillary offices for local employment, local health, welfare and community~~

Iluka Structure Plan

~~facilities and for some attractions for visitors. The primary catchment for the centre will include all residential properties within the Iluka area bounded by Burns Beach Road, Marmion Avenue and Shenton Avenue. Visitors from the broader metropolitan region are expected to be attracted to the coastal location unique to the Village and provide an important secondary catchment.~~

~~Currambine Market Place, located approximately one kilometre to the south-east of Iluka, is the nearest District Centre. This Centre includes cinemas which will provide an important recreational resource for future residents of Iluka, particularly youth. It is expected that this centre will service the weekly retail shopping needs of Iluka residents.~~

Joondalup is the nearest Strategic Regional Centre to Iluka, providing a full range of shopping, office, administrative, social, entertainment, recreation and community services. Joondalup will continue to grow and will provide an important service and employment centre for Iluka residents. [Other centres such as Currambine Central already serve the Iluka community, which has grown larger than originally envisaged.](#)

The nearest primary schools to Iluka are Beaumaris Primary School and St Simon Peter Catholic Primary School to the south, Currambine Catholic Primary School to the east and Kinross Primary School to the north-east. The Education Department of Western Australia has advised that Iluka is within the public school catchment for Beaumaris Primary School. The school catchment areas for the Joondalup Education District could however change should a new primary school be developed within the Burns area to the north of Iluka as is currently proposed in the Structure Plan proposed for this area.

The nearest high schools to Iluka are both to the south within Ocean Reef, being Ocean Reef Senior High School and Prendiville Catholic College. A new school accommodating years 6 – 10 is proposed for Kinross, which may service the northern sector of Iluka.

The Edith Cowan University and TAFE Joondalup campuses provide the nearest tertiary education facilities for future Iluka residents.

Notable recreational resources available to Iluka include extensive coastal reserve, the Joondalup Golf Course to the south-west, Ocean Reef Boat Harbour to the south, the Joondalup Arena to the east and Neerabup National Park to the north-east.

Iluka Structure Plan

The existing lakes parkland area, which is contained within the south-eastern sector of the Iluka Structure Plan area, is developed with a system of pathways and attractive lakes within a landscaped setting. This area is suited mostly to passive forms of recreation. The other two main parklands

Iluka Structure Plan

proposed for Iluka are of sufficient size and are of regular shape to be developed to meet the needs of the initial community and to be modified as community needs change over time.

5.0 DESIGN PHILOSOPHY

5.1 Traditional Planning Principles

Neighbourhoods designed and developed in accordance with traditional town planning principles provide the framework for the creation of integrated and sustainable communities. The design proposed for Iluka incorporates traditional planning principles which promote community development and diversity (refer to Figure 1 - Structure Plan). The principles adopted are:

- An accessible, vibrant and identifiable ~~neighbourhood~~ local /village centre, ~~meeting the daily needs of~~ providing a select amount of street activating non-residential mixed uses and alternative housing options for local residents;
- A built environment which can accommodate a compatible mix of land uses – housing, shops, work places, parks and civic facilities;
- Land use mix, development densities and interconnecting street patterns which make walking, cycling and public transit viable alternatives to driving;
- Priority given to public spaces and the location of public buildings;
- Housing choices for diverse residential communities – i.e. different age groups, economic levels, cultural backgrounds etc;
- A sense of community and place;
- Strong links with other neighbourhoods, district/regional centres and outside attractions; and
- Ability to accommodate modern society – i.e. advances in telecommunications / technology and changing living / working patterns and transport needs.

The key principles espoused by the proposed design are discussed in further detail below.

5.2 Coastal Village

A mixed use community and commercial Coastal Village is proposed adjacent to the coastal reserve, within comfortable walking distance of all residents. This village ~~will be an integral~~will be delivered in the form of a mixed use, part of a regional string of beach-side, main-street node~~development along the coast, including complementary but smaller in size to nearby developments such as Sorrento, Hillarys and Mindarie.~~ The Village ~~will comprise a combination~~intends to provide a diverse range of alternative housing options and a mix of street activating non-residential land uses~~of retail, office, community, residential and recreational uses;~~ providing convenient facilities, services and employment opportunities for local residents and attractions for visitors. ~~It is considered that the unique characteristics of the site will render the Coastal Village a visitor destination in its own right.~~It is expected that the day-to-day commercial viability for the street activating non-residential land uses fronting O'Mara Boulevard will be primarily from local customers, both within the Village Centre itself and the Iluka community.

Located at the western end of O'Mara Boulevard, the main east-west route into the Estate, the Coastal Village will have a strong visual presence for visitors and local residents and will become a significant landmark for the Estate. The Village will comprise multi-storey buildings of up to three storeys with landmark qualities. These buildings would mark the termination of the vista for O'Mara Boulevard and provide a key interest along Burns Beach Road. POS will be developed immediately south of the Village, providing a complementary Village Green and an important recreation and meeting space for the local community and visitors.

The Village design will be based upon "Main Street" principles, with buildings having active street frontages along O'Mara Boulevard. The Village will also be designed to provide a strong sense of place which is closely linked with its coastal setting.

It is proposed for a residential density ~~limit~~of R60 and a building height restriction of three storeys to apply to development within the Coastal Village, unless it can be demonstrated that additional height will be of a high architectural standard and not have an undue impact on the surrounding community. A strong residential presence within this area will promote ~~a vital, 24-hour centre~~the vitality of the centre and viability of businesses.

As noted in Part 1 of this structure plan, a ~~detailed structure~~Local Development p~~Plan/s~~ for the Coastal Village (Centre-Commercial Zone) will need to be ~~endorsed~~approved by Council before development within this area can proceed. The ~~structure~~Local Development

Huka Structure Plan

Plan will be required to address, ~~among other matters,~~ ~~building design~~ ~~activation of O'Mara Boulevard,~~ ~~development standards~~ ~~R-Code variations,~~ ~~overshadowing and protection of privacy~~ ~~built form controls,~~ ~~height limits,~~ and ~~car parking and vehicular access requirements.~~

This requirement will give Council the control needed to ensure future development within the Village is of a high standard and compatible with development within the Estate and its coastal location. The Village will function as a ~~Neighbourhood~~ Local Centre and is expected to comprise

~~approximately 13,350m² of retail~~ street activating non-residential floor space fronting O'Mara Boulevard, and 1,000m² for community use to be located to the northern side of O'Mara Boulevard (or otherwise provided as a contribution to benefit local residents). ~~This is similar to the recommended floor space limit contained within the earlier Huka Structure Plan (Feilman Planning Consultants, 1992) which recommended a neighbourhood centre comprising 3,286m².~~

~~The figure recommended in the earlier structure plan was based on 0.53m² per capita being provided for the estimated residential population within the catchment area bounded by Marmion Avenue, Burns Beach road, Ocean Reef Avenue and Shenton Avenue. This earlier structure plan had proposed for the centre to be located inland from the coast, whereas the revised proposal is for a coast side location which is expected to draw trade from the local residential catchment as well as from visitors of the wider metropolitan catchment.~~

5.3 Residential Neighbourhood

5.3.1 Lot Orientation

Residential lots will be oriented to maximise the benefits of solar orientation, cooling coastal breezes and where applicable, views of the ocean and surveillance of POS areas (refer to Figure 3 - Site Analysis).

The street block layout will accommodate north-south and east-west oriented lots. The dwellings designed for these lots will be able to benefit from solar access, incorporating north and east facing habitable room windows and outdoor living areas. Section 5.2 sets out provisions for all residential laneway lots. This includes the smaller residential lots that will be developed within the Estate for which the opportunities for capturing solar access are more limited. The provisions will, among other matters, be required to address solar orientation and solar setbacks.

The interconnected road pattern proposed for the Estate will afford strong physical and visual links between the residential areas and the Coastal Village, the foreshore reserve and local parks.

5.3.2 Residential Densities and Design

A range of residential densities are proposed to facilitate a diversity of housing types and to meet the requirements of people with different housing needs.

In terms of yield, it is projected that the Structure Plan area will produce approximately 900 lots. It is proposed for approximately 80 per cent of this yield to be coded R20 and the remaining 20 per cent to be coded R30. Residential land within the R20 coded areas will include some lots with areas above the average lot size permissible under the R20 coding. These larger lots will enable a proportion of larger homes to be developed within the Estate.

Applying the metropolitan average housing hold size of 2.6 persons (ABS 1996), the Structure Plan area is expected to cater for an estimated population of 2300 persons.

The higher density, R30 residential precincts will generally frame parkland areas, the Coastal Village and O'Mara Boulevard leading into the Village. Within these locations, the limited private areas available to the smaller lot sizes can be offset by proximity to open space or the public areas associated with the Coastal Village.

Rear laneways are proposed for lots fronting POS areas to provide vehicular access to garages at the rear of lots and reduce vehicular traffic on the frontage streets. Coupled with reduced setbacks, the laneway lots will encourage greater community interaction on frontage streets and dwelling designs which effectively address the street.

Along the ridgeline, lower density development is proposed to accommodate the larger homes built to optimise premium coastal views. These lots will all have east-west orientations to maximize coastal views and will be serviced by rear laneways to ensure the houses properly address the street frontage. The laneways will also enable direct access to the upper level of the dwellings.

The design and standard of residential development will generally be controlled by the Residential Planning Codes and Covenants. Site specific building provisions, as set out in section 5.2, will be prepared for the smaller lot precincts where additional development controls are required to ensure buildings function effectively for prospective owners and contribute to attractive and unified streetscapes. These provisions will also be used for the larger lots with rear laneways to guide building layout, design and access and ensure dwellings are oriented to have surveillance over the street frontage and rear laneways.

5.4 Public Open Space and Community Facilities

Two well defined neighbourhood parks and one district park are proposed. As shown in Figure 5 – Public Open Space Plan, most dwellings will be within 400 metres of a neighbourhood or district park as required by Liveable Neighbourhoods. The interconnected street pattern will ensure convenient pedestrian and cycle access to these parks. Residential lots will be oriented to overlook each of the spaces; promoting good opportunities for passive surveillance and an attractive outlook for residents. Streets leading to the parkland areas will also benefit from the attractive vistas afforded by these spaces.

The largest park will be the existing district lakes parkland area, comprising an area of approximately 6.13ha (includes lakes) within the south-eastern sector of the Estate. This POS area will be used primarily for passive recreation and will serve an important drainage function. The two neighbourhood parks will be located in the lower lying areas to the south and north of the Coastal Village, where coastal views are unavailable. Being of a substantial size and of regular shape, these open spaces will have the flexibility to be adaptable to changing community needs. The neighbourhood park to the south will have a drainage function.

In addition to these neighbourhood parks, boardwalks and pavilions will provide controlled community access to the adjacent coastal reservation. Well defined east – west links within the Estate will provide direct access to this important community space and resource.

POS will be provided in accordance with the WAPC's Liveable Neighbourhoods wherein there is provision for a 2 per cent discount on the normal 10 per cent POS requirement. This provision is subject to compliance with the following:

- Element 1- Community Design Objectives of Liveable Neighbourhoods having been satisfied to achieve the desired urban structure, lot layout and parkland distribution.
- Any local parks having the support of the local government and both neighbourhood and local parks being constructed in accordance with an approved landscaping and management plan to the satisfaction of the local government.
- Any regional open space or foreshore reserve being provided in accordance with Clauses 3.2 and 3.3 of the WAPC's policy DC 2.3.

With respect to the first of the above points, the Structure Plan and this accompanying report effectively demonstrate compliance with the Community Design objectives outlined under Element 1 of Liveable Neighbourhoods. With regard to the second point, a Parkland Agreement is provided under Appendix A which provides an undertaking to the City of Joondalup that development of the POS areas within the Structure Plan area will be carried out in accordance with an approved landscaping and management plan to the satisfaction of the City. These plans are currently being progressed and will be lodged with the City prior to subdivision. With regard the last point of the above points, the regional coastal reserve complies with the WAPC's Policy DC 2.3.

During March 1999, the City of Joondalup considered and confirmed the accuracy of the POS Schedule that was prepared for the whole of the Beaumaris Estate (refer to Appendix B - Letter from City of Joondalup dated 8 March 1999 and Beaumaris Estate POS Schedule). This Schedule had shown a 5,000m² surplus of POS for the Beaumaris Estate.

Iluka Structure Plan

Since this Schedule was prepared, the Structure Plan for the undeveloped area of Iluka has been modified. The implications of these changes for POS provision are as follows:

- i) The '~~Retail~~—Commercial' (1.61ha) and 'Service Station' (0.15ha) sites, which equate to a POS deduction of 1.76ha for the 'Iluka Village Precinct', do not apply under the revised Structure Plan. These commercial components have been replaced by the Centre Zone which equates to a 2.18ha POS deduction;
- ii) The lakes POS area within the 'Iluka Village Precinct' of the former Structure Plan comprised a total area of 5.43ha (drainage deducted). Under the revised Structure Plan this POS area is proposed to comprise 4.13ha (drainage deducted);
- iii) The former Structure Plan proposed a single POS area within the 'Balance Residential Area' comprising 1.77ha. The revised Structure Plan replaces this area with a POS area within the north western sector and a second area within the south western sector. Together these areas will provide 1.57ha of POS (drainage deducted).

The revised POS schedule for Iluka, which allows for the above variations, is provided, together with the original figures, in the table below:

Description	Former POS Calculations for Iluka	Revised POS Calculation for Iluka
Gross Area	207.19ha	207.19ha
Total Deductions	7.64ha (incl. drainage)	5.17ha (excl. drainage)
Net Subdivisible Area	199.55ha	202.02ha (92.82 ha = Structure Plan Area 109.20 ha = remainder of Iluka)
POS Required	19.95ha (10% requirement)	8% of 92.82ha = 7.4256ha 10% of 109.02ha = 10.902ha Total = 18.3276
Drainage Areas		2.89ha
Drainage Credit	N/A	1.44ha (50% credit)
POS Provided	20.86ha	20.80ha (incl. drainage credit)
Surplus POS	0.91ha	2.47ha

It is evident from the above table that allowing for deductions for non-residential land uses (eg. Coastal Village, road widening, drainage) the revised Structure Plan for Iluka results in a POS surplus of 2.47ha above the 8% and 10% contribution requirement applicable to Iluka.

5.5 Interconnected Street Pattern

The Structure Plan proposes a highly interconnected street pattern which will offer choice so as to reduce excessive flows on any individual route and will provide good connectivity between Iluka and adjoining neighbourhoods.

The street layout has been deliberately configured to preserve long distance views of the ocean and foreshore conservation reserve and to provide direct pedestrian/cycle access between the residential areas and the Coastal Village, coastal reserve and POS areas. Fundamental to the road structure is the central, main east-west O'Mara Boulevard between Naturaliste Boulevard and the coast.

It will provide a strategic link between the two primary Estate attractions; the existing lakes parkland area and the Coastal Village. Traversing the central saddle, O'Mara Boulevard will also afford motorists, pedestrians and cyclists extensive coastal views and enables the Coastal Village to be centrally located to the Estate (refer to Figure 3 - Site Analysis).

O'Mara Boulevard will be designed and landscaped to contrast strongly with local streets so as to effectively distinguish 'civic' from 'neighbourhood' streets and provide legible and convenient access to the Coastal Village for residents of nearby Estates and other visitors. Street blocks with a north-south orientation will lead into the Boulevard, ensuring convenient pedestrian/cycle access to the Coastal Village for local residents and enabling dwellings to be oriented to capture optimal coastal views.

In addition to the central boulevard, an east-west link will be provided within the northern sector of the Estate. This link will provide direct access to the northern neighbourhood park, to the coastal reserve and to the Burns Beach coastal village. Importantly, this link will also provide the Burns Beach community with convenient access to the Iluka Estate and its associated facilities. Motorists will be denied uninterrupted vehicle access along this route to ensure priority is given to pedestrian/cycle movement.

Traffic management measures will be incorporated into the street system to maintain a high level of safety and amenity within the residential precincts and the Coastal Village.

5.6 Pedestrian / Cycle Network / Public Transport

The Iluka development has been planned to provide for convenient east-west connections between residential development, the village centre, the beach and foreshore reserve and the existing Iluka community.

The modified grid street pattern, incorporating frequent junctures and direct linkages to key attractions and facilities, will encourage local pedestrian and cycle movement throughout Iluka. To promote safe and efficient movement, dual use paths will be provided on the main connecting routes. The proposed road reserve widths will be of sufficient width to accommodate footpaths in accordance with the requirements of Liveable Neighbourhoods.

The Department of Transport (DOT) has been consulted about future bus services to Iluka. The DOT has advised that two routes will service Iluka; feeding residents and visitors between Iluka and the Joondalup railway station. From the Joondalup railway station, passengers will have direct access to the Perth CBD and other metropolitan centres.

The proposed bus routes are submitted in the Traffic Assessment Report included under Appendix C. Details of the pedestrian/cycle routes that are proposed to service the Structure Plan area are shown on the Traffic Management and Pedestrian/Cycle Network Plan submitted under Appendix D.

5.7 Landscape Works and Streetscape Treatments

Details of the landscape works and streetscape enhancement projects that are proposed to be implemented as part of the development of the Structure Plan area are submitted in the landscaping and streetscape enhancement report prepared by McNally Newton Landscape Architects under Appendix E.

6.0 ENVIRONMENTAL CONSIDERATIONS

Development of the site in accordance with the Structure Plan will involve the removal of existing vegetation and habitats. The area is not identified in the draft Perth's Bushplan (1998) as supporting regionally significant bushland.

The vegetation complex occurring on the site is represented within the nearby areas that are presently afforded protection or recommended for retention in Perth's Bushplan. A total of 36% of the complex remains within the Perth Metropolitan Region with over 15% currently protected (WAPC, 1998). Implementation of the draft Perth's Bushplan would result in a total of 19% of the original extent of this vegetation complex being retained in the Perth Metropolitan Region, which is well above the target applied in Perth's Bushplan of 10% being protected.

The Iluka Structure Plan area lies adjacent to large areas supporting regionally significant vegetation that are presently protected or proposed for protection in Perth's Bushplan. This includes the wide coastal foreshore reserve fronting the development area, Burns Beach bushland immediately to the north, Neerabup National Park to the north-east and the link between Burns Beach and Neerabup National Park. These areas will preserve representative areas of vegetation, flora and habitat for fauna in the local area.

The bushland at Iluka is therefore considered of local significance only. Pockets of vegetation will be retained within areas of POS, and where feasible, linkage will be maintained between the POS areas and the neighbouring foreshore area.

There are no natural drainage features or wetlands within the Structure Plan area. The drainage design will incorporate features to facilitate removal of pollutants to minimise potential impacts on groundwater quality.

The Structure Plan has been designed to take account of the natural landscape of the site and retain the character of the site as much as feasible in the context of residential development.

A Foreshore Management Plan (FMP) for the Foreshore Reserve was prepared in 1991 and updated in 1993. Provision of controlled access from the development will be essential to ensure the long term protection of the adjoining coastal foreshore area. Opportunities for access points from the residential areas to the coast are shown on the Structure Plan. Details of proposed access points from the Structure Plan area to the coastal reserve, facilities within the foreshore reserve, and any proposed modification to the previous FMP will be provided at a later date as planning proceeds, and will be subject to approval from relevant agencies. No development is to intrude into the foreshore reserve.

7.0 ENGINEERING SERVICES AND INFRASTRUCTURE

An Engineering Services Report and Drainage Management Plan Report have been prepared by Cossill and Webley. These reports appear in Appendix F and provide details of the following engineering servicing and infrastructure requirements for servicing future urban development of the Structure Plan area:

- the provision of reticulated water supply and sewerage disposal;
- the provision of public utility services i.e.: underground electricity supply, telephone and natural gas supplies;
- drainage management strategy; and
- earth working strategy.

8.0 TRAFFIC

A detailed traffic assessment was prepared by Riley Consulting. Full details of the findings from the assessment and recommendations for traffic management are detailed in the Traffic Assessment Report provided under Appendix C.

Details of proposed treatments for intersections are shown in the Traffic Management and Pedestrian/Cycle Network Plan submitted under Appendix D.

In relation to the local centre, it is expected there will be high levels of walking and cycling to local facilities. For any non-residential land uses fronting O'Mara Boulevard, parking shall generally be provided at a ratio of 1 bay per 20 sqm of net lettable area. This parking ratio is typical of major shopping centres with significantly higher traffic demands and thus is considered reasonable. blanket A consistent parking ratio will assist the centre in maintaining tenants by allowing change of uses to occur easily without being constrained by parking, ensuring longevity of the centre for the benefit of local residents. The provision of on-street parking surrounding the local village sites will also assist in enhancing the viability of tenants, and may be viewed as contributing toward the site's overall parking requirements (for visitors of both residential and non-residential land uses). Reciprocal parking is to be encouraged for non-conflicting land uses in the village centre, to reduce the burden of parking and associated access on the efficient use of land.

9.0 STAGING

It is proposed for the development to be staged ~~over a seven year period with approximately 150 lots being released annually~~ generally adopting a frontal approach to development, with releases developed and timed to respond to market demand and other identified objectives.

The Village Centre will be among the last land to be developed, once the surrounding catchment is mature.

10.0 CONCLUSION

The future urban development of Iluka forms a natural extension of the residential development that has occurred in recent years to the south, east and north-west and which is proposed for the land to the north. This pressure for urban development within this locality and the appropriateness of this form of development for the subject site is acknowledged by the 'Urban' zoning applicable to the site under the MRS.

The proposed Structure Plan provides a comprehensive planning framework for the future development of the site. A design approach has been adopted which incorporates traditional planning principles and which is consistent with the WAPC's Liveable Neighbourhoods, including diversity of lot sizes, an interconnected street pattern, mixed land uses and development focused around an accessible neighbourhood centre and prominent neighbourhood parks. The design also responds to local site conditions, particularly in terms of optimising coastal views, and maintaining a strong relationship with the coastal reservation and surrounding existing residential estates.

The subject site is zoned Urban Development in the City of Joondalup TPS No. 2. Under the Scheme, a Structure Plan is required to be approved for this zone before development or subdivision can proceed. To progress development of the site in accordance with the proposed Structure Plan, the City of Joondalup and WAPC's early consideration and adoption of the proposed Iluka Structure Plan is therefore sought.

R E F E R E N C E S

Alan Tingay & Associates (1991). **Beaumaris Foreshore Management Plan**. Prepared for Satterley Real Estate/Beaumaris Land Sales.

Alan Tingay & Associates (1999a). **Pt Lot 2 Burns Beach Flora and Vegetation Survey**. Prepared for Burns Management Pty Ltd.

Alan Tingay & Associates (1999b). **Pt Lot 2 Burns Beach Vertebrate Fauna**. Prepared for Burns Management Pty Ltd.

McArthur W.M. & Bartle G.A. (1980) **Landforms and Soils as an Aid to Urban Planning in the Perth Metropolitan Northwest Corridor, Western Australia**; Land Resources Management Series No. 5. CSIRO, Australia.

Water & Rivers Commission (1997). **Perth Groundwater Atlas**. Perth, Western Australia.

Western Australian Planning Commission (1998). **Perth's Bushplan (Draft)**. Western Australian Planning Commission, Perth, Western Australia.

Western Australian Planning Commission (2000). **Liveable Neighbourhoods**. Western Australian Planning Commission, Perth, Western Australia.

ILUKA PARKLAND MANAGEMENT PLAN

1. The Management Plan includes the two neighbourhood parks (public open space areas) included within the endorsed Iluka Structure Plan.
2. Prior to development of these parks, Beaumaris Land Sales shall submit to the City of Joondalup a detailed landscaping and reticulation plan for approval.
3. Beaumaris Land Sales undertake to develop the parks in accordance with the landscaping and reticulation plan approved by the City of Joondalup.
4. Beaumaris Land Sales shall maintain and be responsible for the parks for two consecutive summers commencing from the practical completion of the works.
5. An inspection shall occur just prior to the date for the handover of maintenance responsibilities to the City of Joondalup to enable City of Joondalup Officers the opportunity to assess the condition of the respective parks and for any outstanding matters to be addressed prior to handover to the City.

BEAUMARIS LAND SALES

..... **Signature**

..... **Date**

CITY OF JOONDALUP

..... **Signature**

..... **Date**

APPENDIX B
LETTER – CITY OF JOONDALUP 8 MARCH 1999
BEAUMARIS ESTATE POS SCHEDULE

APPENDIX E

ILUKA STRUCTURE PLAN – LANDSCAPE COMPONENT

APPENDIX G

FLORA AND VEGETATION SURVEY & FAUNA HABITAT ASSESSMENT