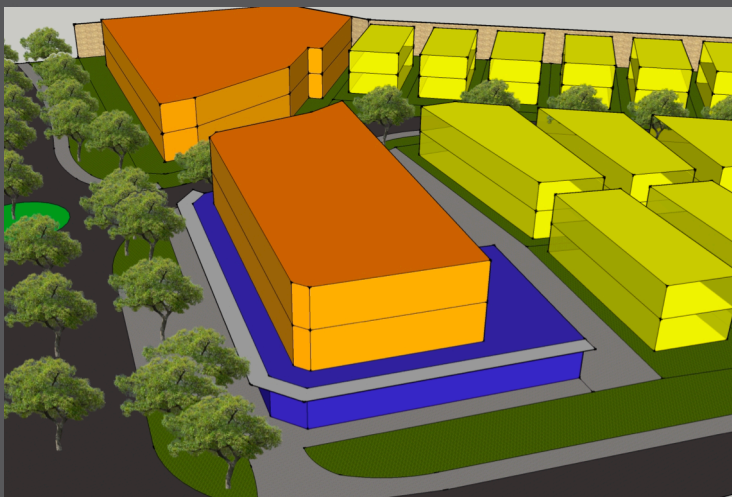


ORELIA LOCAL CENTRE

LOCAL STRUCTURE PLAN



Prepared by
URBANISM

ENDORSEMENT



CERTIFICATION OF AGREED LOCAL STRUCTURE PLAN - ORELIA LOCAL CENTRE -

CERTIFIED THAT AGREED STRUCTURE PLAN

ORELIA LOCAL STRUCTURE PLAN

WAS ADOPTED BY

RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING
COMMISSION ON

..... day of 20

Signed for and on behalf of the Western Australian Planning Commission

.....

an officer of the Commission duly authorised by the Commission
pursuant to section 24 of the Planning and Development Act 2005
for that purpose, in the presence of:

.....
Witness

.....
Date

MODIFICATIONS



No.	Description of Modification	Endorsed by Council	Endorsed by WAPC
1	Orelia Local Structure Plan V3		

EXECUTIVE SUMMARY



Orelia Local Centre was established in the early 1980s to serve this suburb. The centre has been in decline and most of the floor area is vacant and the service station has been demolished.

This Local Structure Plan is being prepared to offer a sustainable redevelopment of the site to improve the retail facilities, increase the financial viability of the development and promote the revitalisation of this centre.

The approach to the revitalisation of this site is based on a redevelopment of the centre into a new mixed-use facility at the corner of Orelia Avenue and Hennessy Avenue. The remainder of the site is to be redeveloped into medium density residential

Land Use	Intent	Approximate Land Area	Approximate Yield
Commercial Site	Retail Development	2,100m ²	600m ²
	Residential R50		8 units
Residential R50	Residential: Lot 3	1,650m ²	8 units
	Residential: Lots 2 and 5	1,350m ²	6 units
Residential R40	Residential: Lots 2 and 5	7,156m ²	29 units

Please note:

- The yield calculation is indicative and based on gross densities.
- A development capacity for the Commercial site based on 600m² of retail space, 4 x 2 bedroom residential units and 4 x 1 bedroom residential units.

The development could achieve 600m² of retail space and 51 residential units. It is likely that Lot 3 would be developed independent from the remainder of the site. The development over Lots 2 and 5 will require the redevelopment of the retail centre under current land use rights, before redevelopment of the remaining residential units could be considered.

The structure Plan guides the development of the Structure Plan Area in four parts:

Part 1	Background Information
Part 2	Statutory land use controls under the Structure Plan
Part 3	Design Guidelines for future development under the Structure Plan
Part 4	Implementation strategy

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Appendix A - Environmental Clearance for Lot 3

Part 1: Background

1.1. Introduction

Orelia Local Centre was established in the early 1980s to serve this suburb. In 1984 the centre comprised 907m² of occupied floorspace, with convenience goods dominating. The centre also accommodated a service station on Lot 3. The centre has been in decline and most of the floor area is vacant and the service station has been demolished.

This Local Structure Plan is being prepared to offer a sustainable redevelopment of the site to improve the retail facilities, increase the financial viability of the development and promote the revitalisation of this centre through redevelopment.

1.1.1. Location

Orelia suburb is located a mere 38km from the Perth CBD to the immediate west of

the Kwinana Freeway and Perth - Mandurah Railway line. This suburb enjoys good access to the Kwinana Freeway for north and southbound traffic and the Kwinana Station via Thomas Road.

The Orelia Local Centre site is located at 60 – 64 Orelia Avenue, at its intersection with Hennessy Avenue. Orelia Avenue links the Orelia suburb to the Kwinana Freeway via Thomas Road and the Kwinana Hub via Gilmore Avenue. This local centre has a local retail catchment and is likely to be affected by the greater variety of activities offered at the larger retail centres at Medina and Kwinana Town Centre. The centre may also compete against the incidental goods offered at the filling station near the Kwinana Station, off Thomas Road.

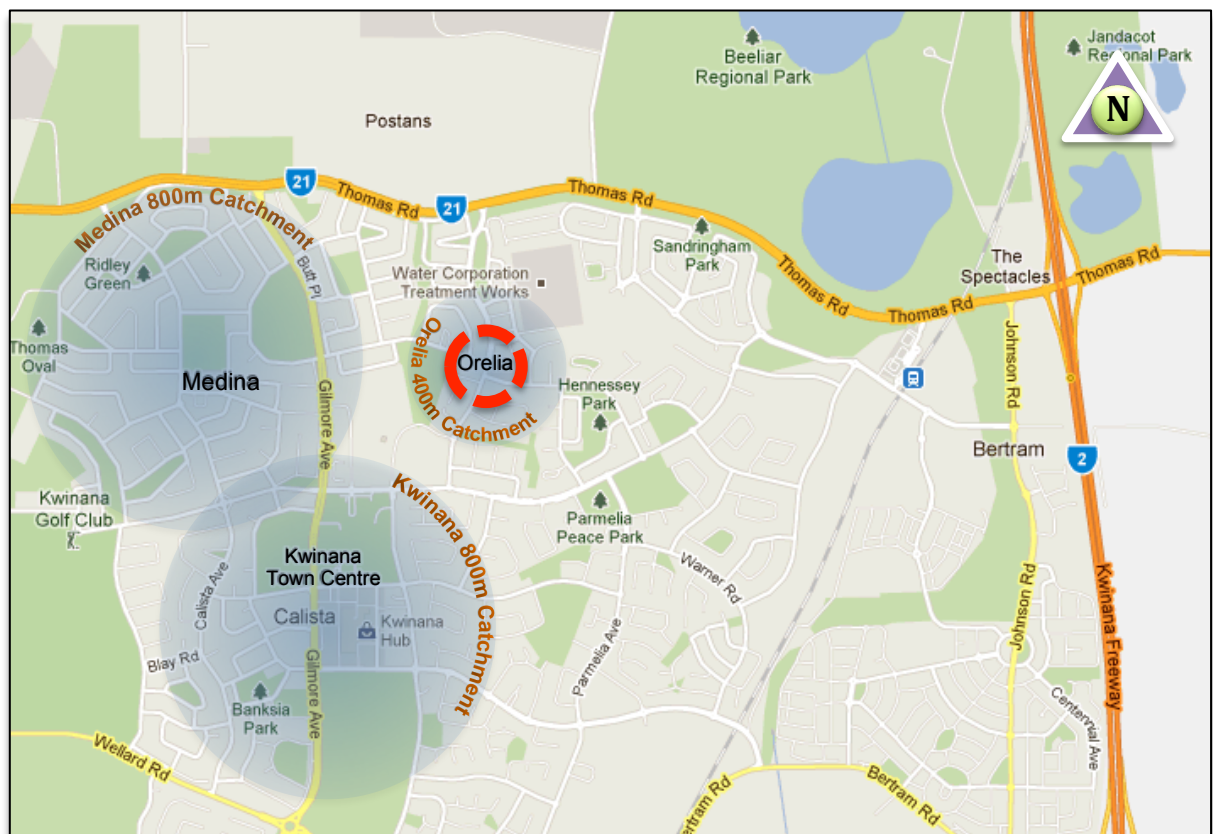


Figure 1: Locality

1.1.3. Purpose

The Orelia Local Structure Plan is prepared under the Town of Kwinana Town Planning Scheme No. 2 (TPS 2) and has statutory affect over land use and intensity of development.

This structure plan guides the future redevelopment of the Orelia Local Centre. It nominates land use arrangements, movement corridors and development standards over the Structure Plan Area.

1.1.2. Legal Description and Ownership

This local centre site is located over three lots:

Lot Sizes

Lot No	Address	Area
Lot 2	64 Orelia Avenue	5,029m ²
Lot 3	60 Orelia Avenue	1650m ²
Lot 5	62 Orelia Avenue	5,586m ²

Lots 2 and 3 are in separate ownership and are described in Diagram no. 57863. The development on Lot 5 is described on Strata Plan no. 11893. These Lots Constitute the Local Structure Plan Area (Figure 2).

The current Orelia Local Centre and parking areas are located on Lot 2, whereas Lot 3 previously contained the filling station on Orelia Avenue. Lot 5 remained a vacant site on the corner of Orelia and Hennessy Avenues.

1.1.3. Land Use

Orelia has a low-density residential character and contains several apartment developments, community facilities and significant amounts of open space.

Most of the housing stock appears to be 15-30 years old. However, a substantial number of new dwellings have been developed within the last 3 years through new residential subdivision to the immediate north of Orelia Local Centre.



Figure 2: Lot Numbers

There are a number of medium density clusters tucked away in the back end of loop roads and cul-de-sacs.

Less than 510 dwelling units are located within a walkable catchment (400m) from the existing shopping centre. These constitute a mix of single residences, age care units and apartments at a Gross Density of 4.3 units per hectare.

The current local centre consists of approximately 1,000m² of NLA (retail space). However, most of the shops are vacant and the centre now only sustains 4 of the ten original tenancies.

The low residential yield within the walkable catchment affects the viability of the retail uses and the structure plan is therefore seeking to rationalize a sustainable floor space and increase residential yield on the site.

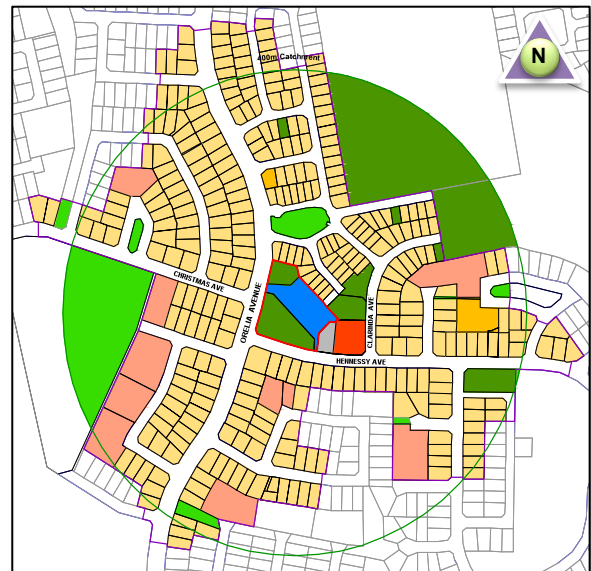


Figure 3: Land Use

1.2. Planning Framework

The State Government's Directions 2031 promotes a liveable and more compact and accessible city. It seeks a 50% increase in infill development and an increase in the average density from 10 units/ ha to 15 units/ ha.

1.2.1. State Policy

Under Directions 2031, the State gazetted The Activity Centres for Peel and Perth as a State Planning Policy (no 42) on 31 August 2011. The policy recognises Neighbourhood Centres as important local community focal points and the focus for medium density housing. Density increases around these centres are important to increase the local population within the walkable catchment. In addition, the retail/ activity offering should be improved through diversification and intensification.

The policy offers the following guidelines for Neighbourhood Centres:

- Purpose - weekly household shopping needs, community facilities and a small range of other convenience services
- Transport – focal point for bus stops
- Retail Types – supermarkets, personal services and convenience shops
- Commercial – local professional services

The Activity Centres for Peel and Perth policy also sets the following Key Performance Indicators for Neighbourhood Centres:

Trade Area	2,000-15,000 people within 1km radius
Gross density target	15 units/ha (minimum) <200m of the centre.
	25 units/ha (desirable)

1.2.2. Zoning

The Structure Plan Area is located within the Town of Kwinana and the Town of Kwinana Town Planning Scheme No. 2 (TPS 2) governs land use. Figure 4 depicts the current zoning of the land within the Orelia Local Structure Plan Area and the properties within a 400m walkable catchment.

The area is predominantly zoned for low-density residential development in the form of a variety of R12.5 and R20 lots. A number of pocket parks (shaded green) are distributed within the walkable catchment of this local centre, including the Orelia Oval.

The Water Corporation's treatment Works are located in the north-eastern quadrant of the walkable catchment (shaded yellow).

The Structure Plan Area is zoned Commercial. The Commercial Zone is intended for Shops and Showrooms. The zone allows for a number of permitted uses. Although Single Houses are discouraged, Residential Buildings and Multiple Dwellings may be considered as part of a mixed-use development. The main controls in this zone are:

- Plot Ratio of 2
- Multiple Dwellings development at R20 development standards.
- Front and Rear setbacks 6m
- Side Setbacks 1.5m

1.2.3. Commercial Centres Strategy

The Commercial Centres Strategy acknowledges the decline of the occupied retail floor space of the Orelia Local Centre and the negative impact on trade caused by the Thomas Road Service Station.

The strategy does not support retail expansion for Orelia, but rather the introduction of other non-residential uses.

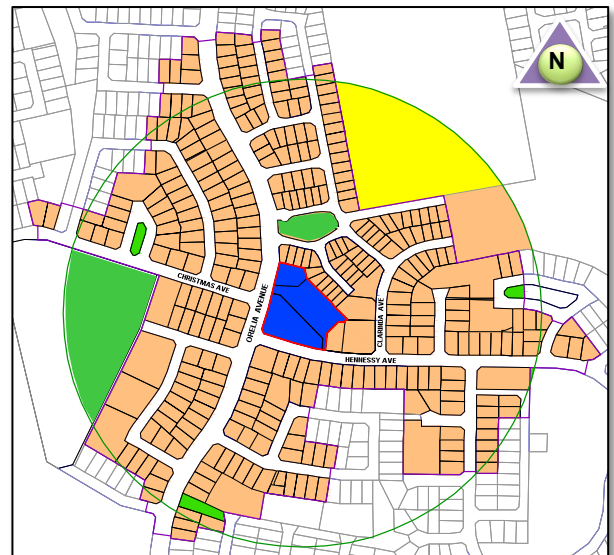


Figure 4: Current Zoning

1.2.4. Local Housing Strategy

The Local Housing Strategy informs Town Planning Scheme No 2 to guide future housing development. In particular, the strategy noted that Orelia Local Centre does not have an effective walkable catchment.

Orelia has a good mix of housing typologies and the strategy recommends higher densities adjacent to this centre. These densities should be planned, as some of the existing multi storey units do not fit within the existing urban form. Some of the older housing in the area are also not considered suitable for families.

The large lot sizes will allow infill development at marginally higher densities (R20), but a more comprehensive approach would be required to achieve densities of R30 and higher. The strategy acknowledges adequate open space provision in Orelia, but a marginal shortfall near the Orelia Shopping Centre. The strategy also encourages landscaping in road reserves to improve amenity.

Generally, the strategy promotes the increase in the residential stock through infill development at R20\ R30 density code within 400 metres of the Orelia Local Centre.

1.2.5. Residential Design Guidelines

The Residential Subdivision and Development Guidelines Local Planning Policy provides the planning framework to achieve the objectives of the Local Housing Strategy.

The Policy provides a number of design standards to control residential subdivision (Subdivisional Guidelines) and built form (Development Guidelines).

The Subdivision Guidelines of this policy have predominantly been formulated to address infill/ redevelopment of existing residential stock. As such, only some of the design parameters applies to new residential development under this Structure Plan and have been accommodated into Part 3 of this plan.

The Residential Subdivision Design Guidelines contain a number of provisions to guide future residential development. The following summary presents the design elements under this Local Planning Policy.

- Special provisions for Battleaxe lots
- Requirements for construction of porches, verandas or equivalent structures.
- Height requirements and roof design guidelines
- Requirements for retention of vegetation and planting of new vegetation
- Requirements for garages and porches
- Fencing requirements
- Requirements to promote neighbourhood safety through design
- Water and energy conservation

These have been accommodated into the design guidelines (Part 3) of this Structure Plan.

Part 2: Statutory Plan

2.1. Project Objectives

This Structure Plan has been prepared to achieve the following objectives:

- Develop a modern centre to compliment the character of Orelia neighbourhood.
- Create a variety of medium density housing to support the local centre and facilitate a sustainable development footprint.
- Create a sustainable local centre to accommodate local needs.
- Promote a sustainable community through creating a community place and neighbourhood identity in an accessible location.

2.1. Site Analyses

Most of the site is undeveloped. Lot 3 has been cleared from contamination (refer to Appendix A). Some retaining has been developed on the site. Lot 2 remains undeveloped and there is a telephone booth and a bus bay within the Hennessy Road. The shopping centre is in poor condition, contains an excess of retail floor space and does not enjoy direct exposure from Orelia Avenue or Hennessy Avenue - the structure plan proposes that the shopping centre be demolished and replaced by an improved centre.

The northern site boundary contains a prominent retaining wall, with a maximum wall height of 4.5m along the northern boundary of Lot 3 and 5.2m along Lot 5. A large rear boundary setback along this northern boundary will be required to facilitate solar access to development on this site during the winter solstice (20/ 21 June). Figure 5 suggests a rear setback of 7m and 8m across the rear boundaries of Lots 3 and 5 respectively to achieve solar access to all single storey residential units. For double storey units, these setbacks could be relaxed to 4m and 5m respectively to provide solar access to the upper level of each double storey residential unit.

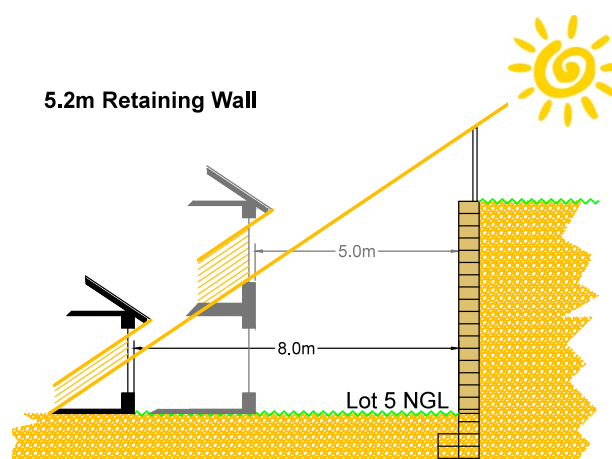
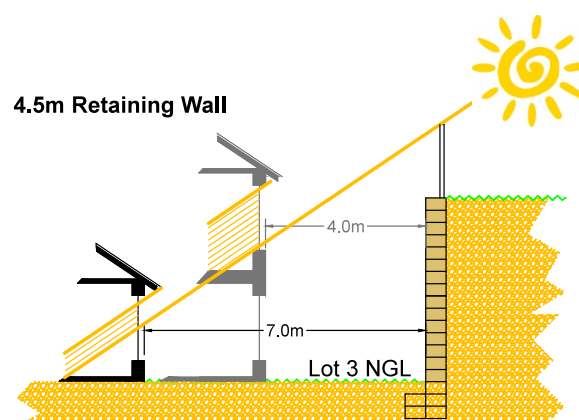


Figure 5: Solar Access from Raining Wall



The streetscape design for most of Orelia's streets does not accommodate street tree planting along the pedestrian path, contributing to poor amenity. Furthermore, the pedestrian paths are disconnected from the shopping centre and therefore also do not benefit from activated frontages.

The retail centre appears dated and will require significant upgrading to improve its appearance, functionality of the forecourt and modernise the architectural style. In addition, the access roads and parking area is in need for resurfacing. This centre is set back from the street and is elevated above the street and pedestrian paths. It therefore has no relation to the street and does little to manifest a prominent use in the area. The centre will also require an innovative retail strategy to fill vacant floor

area. A place management strategy would also be required to create a community function at this centre, i.e. community information board, play equipment for children and community events. It is proposed that a strong retail function be established onto Orelia Avenue, adopting a more urban architectural style to establish local character.

2.2. Structure Plan

The structure plan is presented in Figure 7. It defines the permitted uses within the Structure Plan Area and the development standards applicable to these land uses. The land use controls in this structure plan are consistent to the intent of the current planning policies under the Town Planning Scheme. Where there is a conflict in the planning standards and design guidelines, this structure plan will be take preference.

2.2.1. Commercial

The commercial use fulfils an important neighbourhood function and must be retained as an active use in this local centre. The development currently accommodates 1,000m² of retail floor space, comprising of a news agency, groceries store and hair salon. Most of the retail space is vacant and the majority of the site remains undeveloped.

The retail analyses concluded that there are only ¹502 dwellings within the walkable catchment of this retail centre. Although the Orelia suburb has a total of 1717 dwellings², the retail suffers from competition from surrounding retail activities at the filling station near the station, the Medina Neighbourhood Centre and the Town of Kwinana. Without securing a substantial new anchor tenant, the potential for this centre is unlikely to grow or exceed the existing development.

The current shopping centre is poorly located as a neighbourhood focus and, even if the locational constraints could be overcome, it will require substantial

redevelopment to improve the centre's appearance and functionality.

This Structure Plan therefore promotes the relocation of the retail activities to the roundabout in Orelia Avenue, at the new internal access road to improve exposure and creating the urban fabric as the heart of Orelia.

2.2.1. Residential

The retail analyses³ concluded that the residential yield in the primary market area (400m walkable catchment) is too low to maintain the retail demand. This study noted that the neighbourhood circulation pattern does not promote walkability and that there is significant unproductive land that has not developed for residential purposes within the walkable catchment of this centre.

The retail study recommends that certain infill developments be pursued to improve the residential yield and density within the centre's primary market area.

The Structure Plan adopts this approach and recommends medium density housing as a mixed use with the redevelopment of the commercial centre; with medium density housing over the remainder of the site.

Market research will be required to test the appropriate housing form for the Orelia Local Centre and it is anticipated that housing could be provided in residential apartments, townhouses, terrace housing or freestanding homes. The housing density should be increased to R50 along Orelia Avenue and R35 for the remainder of the site.

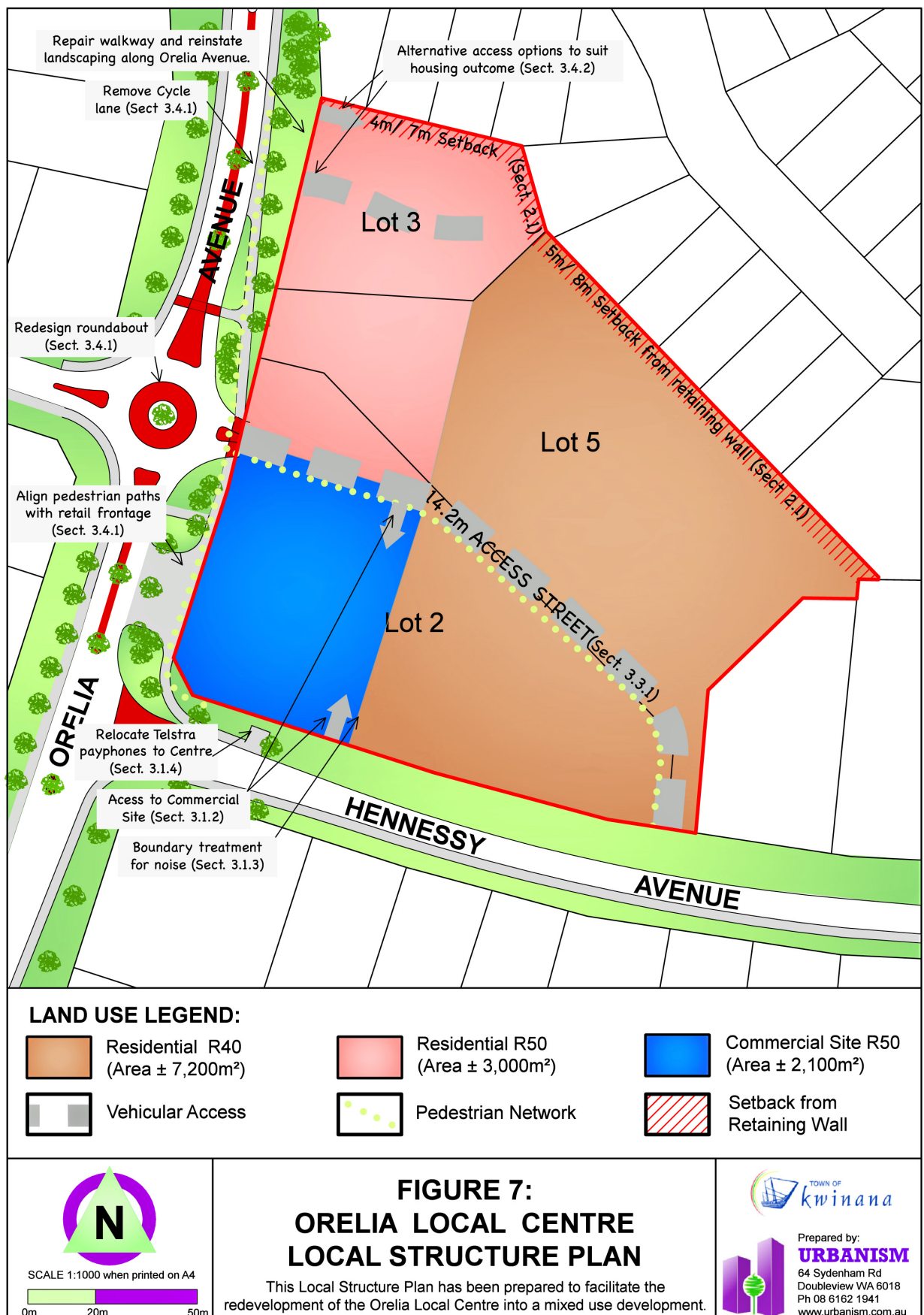
2.3 Land Use Control

This section provides the statutory land use control in support of the structure plan in Figure 7. It offers a range of uses that will be considered within the land use areas depicted on the Structure Plan and the plan should be interpreted in accordance with these land use controls.

¹Orelia Local Centre – Establishing a Sustainable Local Centre, Urbanism: 2011

² Australian Bureau of Statistics, Census of Population and Housing 2006.

³Orelia Local Centre – Establishing a Sustainable Local Centre, Urbanism: 2011



2.2.1. Permitted Uses

The following table indicates, subject to the provisions of the Town Planning Scheme no 2, the uses permitted in the Structure Plan Area for each of the proposed land use zones. Permitted Uses will be assessed under the Land Use Classes (Table 1) of Town Planning Scheme no 2 (TPS2).

The symbols in the Zoning table has the following meaning

- ‘✓’ Use is permitted under this structure plan and will be assessed under the Land Use Classes in Table 1 of TPS 2
- ‘X’ The Use is not supported under this structure plan

Zoning Table

Use Classes	Commercial	Residential R50	Residential R40
Ancillary Accommodation	X	X	✓
Aged and Dependant Persons Dwelling	X	X	✓
Car Park	✓*	X	X
Child Care Centre	X	✓	X
Civic Building	✓*	X	X
Club	X	✓	X
Consulting Rooms	✓*	X	X
Eating House	✓*	✓	X
Educational Establishment	X	✓	X
Family Day Care Centre	X	✓	X
Fish Shop	✓*	X	X
Grouped Dwelling	X	✓	✓
Health Studio	✓*	✓	X
Home Occupation	X	✓	✓
Laundry (Laundrette)	✓*	X	X
Licensed Restaurant	✓*	X	X
Liquor Store	✓	X	X
Local Shop	✓	X	X
Medical Clinic	✓*	✓	
Multiple Dwelling	✓*	✓	✓
Office	✓*	✓	X
Petrol Filling Station	X	✓	X
Professional Office	✓*	X	X
Residential Building	X	✓	✓
Shop	✓	X	X
Single House	X	✓	✓
Veterinary Clinic	✓*	✓	X

*Please Note: Any use supported for the Commercial site, will only be permitted within this zone if a Local Shop already exists or is formally proposed for the Commercial site.

All other uses listed in Table 1 of TPS 2 and not listed above, are not supported under this structure plan. For any use not listed above Zoning Table 1, the provisions of Clause 4.7 of TPS 2 apply.

2.3 Development Requirements

Development within the Structure Plan Area is subject to specific development requirements to achieve the required outcomes and objectives for this area. Council has discretion under the Town Planning Scheme to vary the requirements.

2.3.1 Setbacks

Setbacks within the commercial zone are specific for the ultimate land use. Retail development will be located at ground level and the development shall address Orelia Avenue and the new internal access road. A maximum setback will be introduced for retail development at ground level. Setbacks for other uses, above ground, will be increased to allow for vertical separation of uses, whilst achieving street address. Minimum setbacks will therefore apply to uses other than retail.

Setbacks for the Commercial Zone

Use	Condition	Setback
Any Retail/ Shop, Civic, Office, Medical or Institutional use.	Maximum Front Setback onto Orelia and Hennessy Avenues and new internal Access Street.	1.5m
	Minimum Side and Rear	6m
Residential	Minimum Front onto Orelia and Hennessy Avenues.	3m
	Minimum Front onto Secondary Streets	4.5m
	The Front Setback of any residential use above ground floor, shall be set back by an additional 2m from the ground floor façade along Orelia and Hennessy Avenues.	
	Minimum Side	1.5m
	Minimum Rear	1.5m

Setbacks for Residential land (R40 and R50) will be as per the R Codes. Special rear setbacks are introduced for residential development backing onto the retaining wall and the rear setbacks are therefore presented as follows:

Setbacks for the Residential Zone

Setbacks of the Residential Zone		
Lot	Condition	Minimum Rear Setback
Lot 3	Residential development backing onto existing retaining wall.	7m – Single storey 4m - Double storey
Lot 5		8m – Single storey 5m - Double storey
All other Setbacks – as per the R Codes		

2.3.2 Plot Ratio

Plot ratios shall control development proposed under the structure plan.

Plot Ratios

Zone	Plot Ratio
Commercial	2.0
Residential R40	In accordance with R Codes
Residential R45	

2.3.3 Site Coverage and Setbacks

In determining the site coverage and setbacks of any development other than residential development, Council may permit a site coverage of up to 100% and a set back variation to zero subject to it first being satisfied on matters relating to access, car parking, circulation, servicing, loading and unloading and other matters which Council in its absolute discretion may take into consideration.

2.3.4 Maximum Building Height

Proposed building heights are as follows.

Maximum Building Heights

Zone	Lot No	Building Height
Commercial	Lot 2	3 storeys
Residential R40	Lots 2 & 5	2 storeys
Residential R50	Lot 3	2 storeys
Residential R50	Lots 2 & 5	2 storeys

2.3.5 Minimum Building Height

In addition to the maximum building heights, this structure plan promotes two-storey development for any residential development along the existing retaining wall at the rear of Lots 3 and 5.

For the Commercial Zone, a minimum height of two storeys shall apply, unless the development is unable to resolve a feasible development option for this site, or parking supply could not be met in accordance with the car parking requirements under this structure plan.

2.3.6 Car Parking

Car parking spaces shall be provided, designed, constructed and maintained in accordance with the provisions the Town Planning Scheme and the approved plan relating thereto.

Parking Requirements

Use	Building Height
Any Residential	Small (under 75m ² or 1 bedroom) = 0.75 parking bay per dwelling Medium (75m ² -110m ²) = 1 parking bay per dwelling Visitors= 0.25 per dwelling
Office	4 for up to the first 200m ² gross floor area and thereafter 1 for every additional 100m ² gross floor area or part thereof.
Child Care Centre	1 to each person employed or 4 spaces, whichever is the greater.
Medical and Consulting	4 for every consulting room up to 2 such rooms and 2 for every additional consulting room.
Retail/ Shop	1 for every 20m ² gross floor area.

Source – Town Planning Scheme No 2

Part 3: Design Guidelines

This section addresses design guidelines for the future development of the Structure Plan Area. The focus is on built form control as well as public domain treatments.

3.1 Commercial Development

3.1.1 Building Address

Section 2.3 defines setback requirements; plot ratios and building height for the development within this land use zone. In addition to the setback requirements, the following development standards should be achieved within the development

- a) Ground level activities should orientate directly onto abutting streets, especially onto Orelia Avenue with active street frontages.
- b) The ground floor façades should present an unarticulated frontage to avoid blind or hidden areas from pedestrian areas.
- c) Establish an architectural form that could define the corner at this roundabout of Orelia Avenue.
- d) Support a 'fine grain' of uses that will allow for greater diversity in activities and add to the character of the place.
- e) The finished ground floor level at the entry points to the building should be at a similar level than the finished ground level (pedestrian path) along any streets.
- f) Finished ground floor level of any tenancy should not be more than 500mm higher or lower than the corresponding finished ground level on the pedestrian path.
- g) Avoid colonnades, as they impede visibility of retail activities and activities on pedestrian paths.



Figure 8: Good corner address



Figure 9: Activated street forecourt

3.1.2 Circulation and Parking

- h) No direct access to car parks will be permitted from Orelia Avenue.
- i) Access to the Commercial Site will be from Hennessy Avenue and the new Access Road through the Structure Plan Area. These access points will be offset by a minimum of 15m from the intersection of these roads with Orelia Avenue.
- j) Ground floor activities should present a positive link through or around the building to connect the front entry of ground floor tenancies with the car parking at the rear of the site.
- k) Loading facilities should be accommodated from the rear of non-residential uses at ground level from the public car park.
- l) Access for service vehicles to the site should be encouraged via Hennessy Avenue through car park design.
- m) Disabled parking provision and site access shall be designed in accordance with the requirements of the Building Code of Australia.



Figure 10: The impact of the colonnade at the existing Orelia Centre

3.1.3 Noise Treatment

The design of the commercial development should be cognisant of the impact of business activity on the surrounding residential development. The following design guidelines should be accommodated in the design:

- n) Vertical separation of uses will be achieved through the development of a continuous pedestrian awning along the front façade of any non-residential use along any public street
- o) The surface material of the retail parking area shall be sealed.
- p) The layout of the parking area should be designed for low traffic speeds and avoid the use of speed control devices such as speed humps.
- q) The side boundary of the Commercial site will be screened from the abutting residential development by a solid boundary fence with a minimum height

of 1.8m, but not exceeding a height of 2.1m from natural ground level of the residential lots.

- r) A 1m wide landscape strip will be provided between the parking area and the side boundary fence.
- s) Landscape treatment along the side boundary fence should contain trees/ and/ or hedges to screen the boundary wall from the parking area and discourage anti-social behaviour.

3.1.4 Site Facilities

- t) The developer should seek opportunity to relocate the Telstra pay phones along Hennessy Avenue to the new shopping centre and integrate it into the design of the facility.
- u) The developer should seek opportunity to locate Postal Services within the local centre and / or secure a post box and private letterboxes within the development.
- v) Include end-of-trip facilities to encourage walking and cycling. Locate secure bicycle storage in well-lit, visible locations in front of the retail activities on Orelia Avenue.



Figure 11: End-of-Trip facilities

3.1.5 Signage

- w) Signs should add visual interest to the area and contribute to a lively atmosphere.
- x) Signage for retail development will not be permitted above ground level above the pedestrian awning.
- y) Signage for the residential development will be installed at the street frontage entry to the residential development and/ or at an appropriate location above the ground level.
- z) The name of the centre shall be designed into the architectural approach for the centre.

3.2 Residential on Commercial Site

Residential development at ground level is not generally supported for the Commercial site. However, the design needs to meet disabled access requirements under the Building Code of Australia, which may require some units at ground level. The ground floor should also contain some facilities for residential development:

3.2.1 Building Address

Section 2.3 defines the setback requirements; plot ratios and building height for the development within this zone.

- a) Residential development on upper levels will have a pronounced entry at ground level.
- b) Residential development, above ground floor uses will be set back an additional 2m from the front façade of the ground floor use from any public street.
- c) Building depth for the residential component shall not exceed 18m.



Figure 12: Residential Setbacks and Address

3.2.2 Balconies

- d) Provide private open space for each unit in the form of balconies with a minimum dimension of 2.4m and measuring at least 8m² in extent.
- e) Avoid locating balconies to units where they address the side setback of the Commercial site.
- f) Balcony balustrades must be designed for privacy and noise treatment. Solid balcony balustrades are preferred along Orelia Avenue.
- g) Individual balcony enclosures are not supported. Balcony enclosures must form part of an overall building façade design treatment and should not compromise the functionality of the balcony as a private open space.

3.2.3 Parking

- h) Parking for the residential units should be delineated from public parking.
- i) Covered parking should be provided for at least one in two residential units.

- j) Visitor parking for residential units may be shared with the public parking of the retail component.

3.2.4 Facilities

- k) Ground floor entry for residential units should contain letterboxes to these units.
- l) Secure storage, measuring minimum 4m² in extent, should be provided for each residential unit – this could be integrated in the parking.

3.2 Residential Development

All residential development, other than that developed on the Commercial site, will be subject to the design standards of the Residential Design Standards (R-Codes) and the following (Please note that the relevant guidelines from the Residential Subdivision and Development Guidelines have been incorporated into this section and therefore overrides the requirements of this Local Planning Policy):

3.2.1 Subdivision Design

- a) The subdivision design will encourage walkability of the precinct through strong pedestrian links with the local centre through a developed network of pedestrian paths.
- b) Battleaxe legs should serve minimum 2 dwellings.
- c) Battleaxe legs should have minimum width of 5m and contain a minimum 0.5 metre landscaped and reticulated strip on either side of the driveway.
- d) Battleaxe lot area may be reduced to that controlled under R-Codes.

3.2.2 Building Envelopes

- e) The additional building envelopes along the northern boundaries of Lots 3 and 5, as specified in Section 2.3.1 should be maintained over and above the requirements of the R-Codes.
- f) Houses are subject to the wall and height requirements as specified for

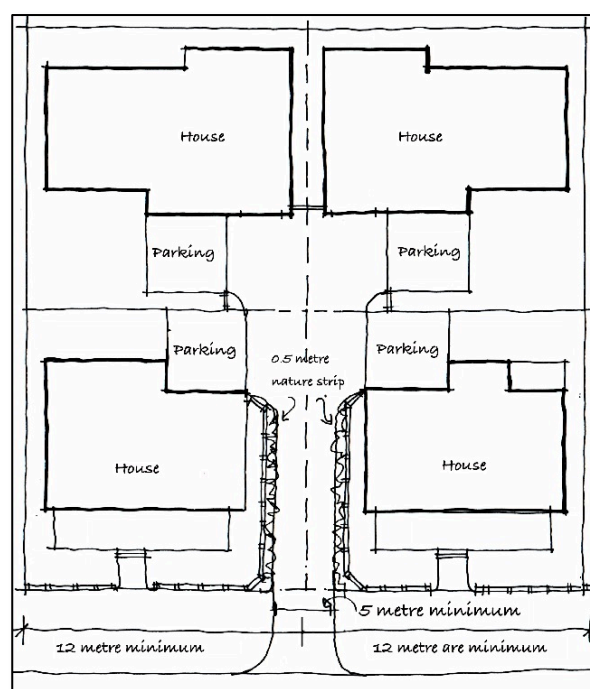


Figure 13: Battleaxe lots

(Source: Town of Kwinana)

Category B under Clause 6.7.1 A1.1 under the R-Codes.⁴

- g) Eaves (minimum width of 400mm) are encouraged for all houses along their northern and western facades
- h) Roof borne infrastructure should not be visible from the street.⁵

3.2.3 On-site Vegetation

- i) It is unlikely to retain the existing vegetation in the redevelopment of the site.. The development should therefore identify opportunities for new vegetation, especially the planting of native trees.⁶

3.2.4 Vehicle Access and Parking

- j) No garages and solid garage doors are to be constructed in front of the street building setback.⁷
- k) Carports are permitted forward of the street building setback, provided that:
 - i. they maintain the capacity to view the front of the house from the street; and
 - ii. they are constructed with similar roof pitch and materials to the house.⁸

3.2.5 Fencing

- l) Dangerous fencing material (razor wire) is not permitted.⁹
- m) Reduce fence heights to 0.9m near road truncations.¹⁰
- n) Portion of side fencing located forward of the primary building line are to be visually permeable (nominally 50% open) above 0.9 metres in height to a maximum height of 1.8 metres¹⁵

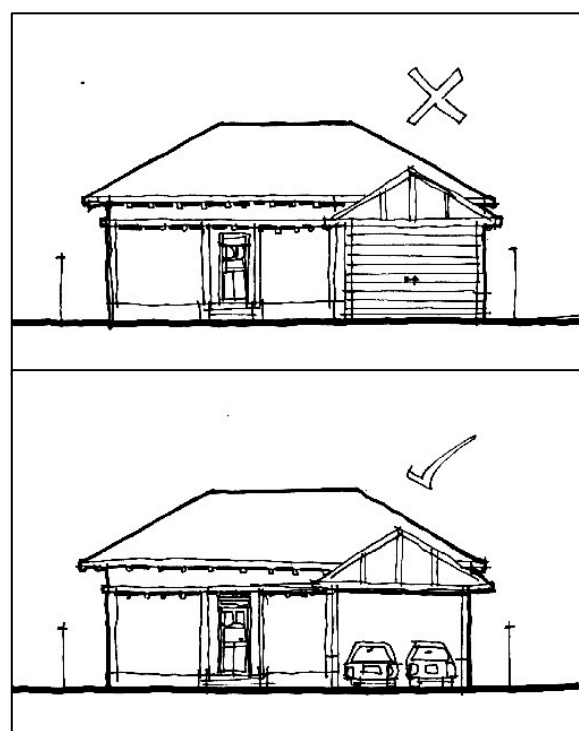


Figure 14: Carports in front of street setback
(Source: Town of Kwinana)

⁴ Residential Subdivision and Development Local Planning Policy

⁵ Residential Subdivision and Development Local Planning Policy

⁶ Residential Subdivision and Development Local Planning Policy

⁷ Residential Subdivision and Development Local Planning Policy

⁸ Residential Subdivision and Development Local Planning Policy

⁹ Residential Subdivision and Development Local Planning Policy

¹⁰ Residential Subdivision and Development Local Planning Policy

¹⁵ Residential Subdivision and Development Local Planning Policy

- o) Fencing to secondary streets that do not screen private space greater than 3m must comply with street fencing requirements.¹¹
- p) Fencing to have a maximum height of 1.8m,¹² except for residential lots backing onto the Commercial site.
- q) Fencing atop retaining walls shall be visually permeable above 1.2m where it adjoins a public road.
- r) Variation to fencing standards may apply where:
 - i. fencing could reduce the impact of noise, headlight glare, etc.; or
 - ii. to address topography.¹³

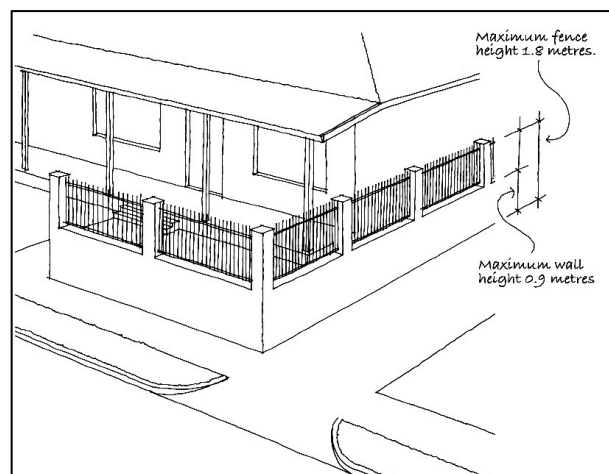


Figure 15: Fencing requirements
(Source: Town of Kwinana)

3.4 Street Design

The following general design guidelines will apply to all public streets within the Structure Plan Area:

- a) Develop a high quality streetscape that would create a distinctive character for the Orelia local centre.
- b) Implement traffic calming to reduce vehicle speeds in a safe pedestrian environment.
- c) Avoid cul-de-sacs as they make walking and cycling trips longer and limit route options. Look for opportunities to extend cul-de-sacs to meet other streets. If it is not feasible to extend the entire road, a lane or pedestrian/ cycle link may be viable. Ensure these links are safe to use.
- d) Streets should be well landscaped with trees and shrubs and include water sensitive urban design measures.
- e) Provide well-lit streets and public spaces to improve safety and comfort.

¹¹ Residential Subdivision and Development Local Planning Policy

¹² Residential Subdivision and Development Local Planning Policy

¹³ Residential Subdivision and Development Local Planning Policy

3.4.1 Orelia and Hennessy Avenues

The Town of Kwinana identified the roundabout as a black spot and will implement works to increase the efficiency and safety of the roundabout.

The development is likely impact on existing verges and it is expected that the developer(s) will execute the repair and upgrading of verges of Orelia Avenue and Hennessy Avenue along the Structure Plan Area boundary.

The following streetscape principles are promoted through this structure plan.

- Remove current cycle path through the roundabout and reroute it to follow the shared path on the road verge.
- Narrow the lanes of Orelia Avenue to 3.5m width.
- Redesign the roundabout to improve the functionality of the roundabout through chicaning the roads leading into the roundabout. Create pedestrian crossings to also function as a traffic-calming device.
- Establish additional street lighting on the eastern verge of Orelia Avenue on either side of the roundabout.
- Provide street tree planting on the Orelia Avenue and Hennessy Avenue verges to define a distinct character for Orelia Local Centre and offer pedestrian amenity.
- Align the pedestrian paths in Orelia and Hennessy Avenues to the retail activities.
- Create a forecourt for the proposed retail activities on the street verge to encourage street activation and accommodation of street furniture.
- Realign the entry into the Structure Plan Area from the roundabout to be diagonal to Orelia Avenue.
- Remove the redundant bus embayment in Hennessy Avenue.

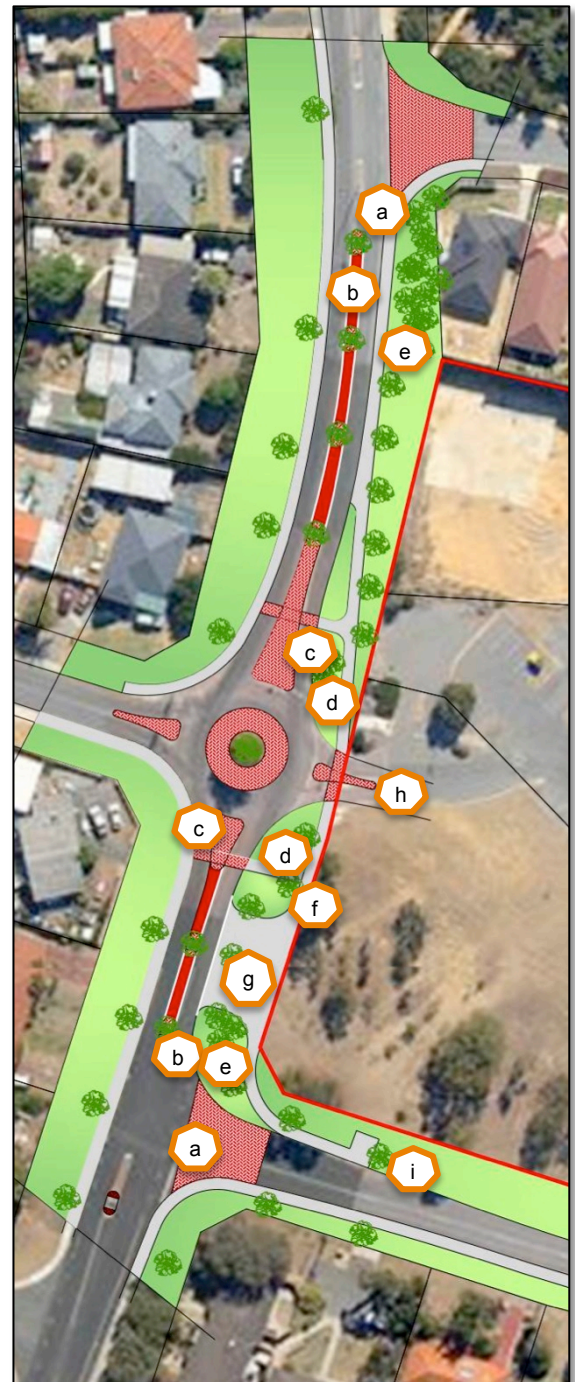


Figure 16: Concept Streetscape: Orelia Avenue

The typical street section for Orelia Avenue is presented in the following figure:

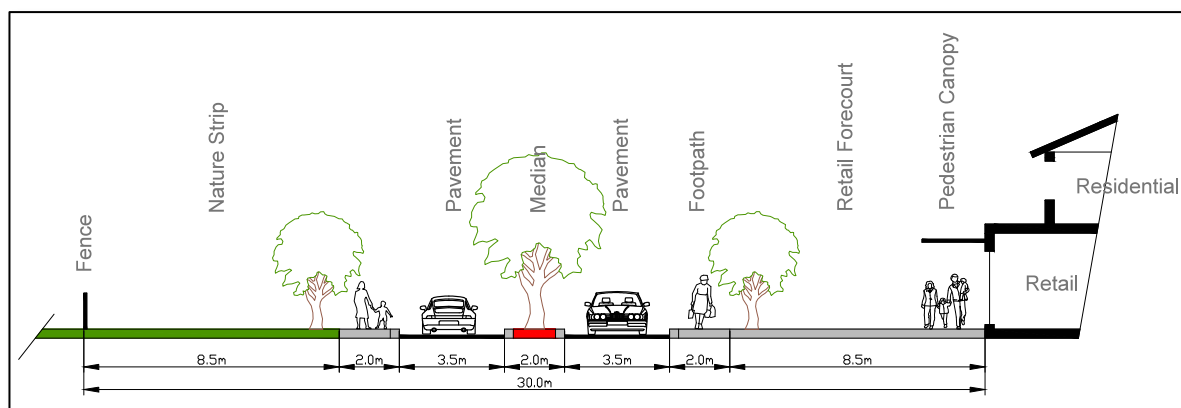


Figure 17: Cross Section for Orelia Avenue

3.4.2 New Access Streets

A new public road is proposed to service the residential development within the Structure Plan Area. The ultimate residential development form will determine the alignment of this street. This street is to be designed within a minimum 14.2m road reserve, as described in Figure 18.

Other streets and access roads will be designed in accordance with Liveable Neighbourhoods to compliment the residential form proposed in the Structure Plan Area.

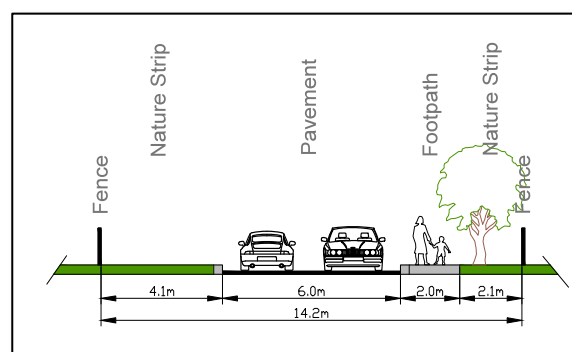


Figure 18: Cross Section for Access Road

Development options for Lot 2 are constrained by the impact of the retaining wall and the configuration of that lot. It is likely that residential development on this lot be in some strata development form. Access to this lot could therefore be required in two configurations:

Access Road

A private 6m road to service a central location within the lot in a Survey Strata development form (subdivision into individual lots, i.e. townhouses)

or

Private Access

An access driveway near the retaining wall, servicing car parking/ garages at the rear of the site in a strata development (apartments, terraces, etc.)

3.5 Safety and Security

- a) Commercial development should present active street frontages to the streets.
- b) The ground floor façades along public streets should present an unarticulated frontage to avoid blind or hidden areas from pedestrian areas.
- c) All residential development should provide windows to the street and encourage street surveillance from balconies, porches and verandas.
- d) Boundary fences should be designed to maintain privacy over private open space, whilst facilitating street surveillance.
- e) Whilst street lighting will be installed to provide visibility of public areas, private developments will accommodate lighting to illuminate private entrances and driveways.
- f) Establish community interest points at the retail centres, i.e. notice boards, post boxes, etc. to establish “community ownership” of this local centre and promote public safety.
- g) Detail design of streets and public places should be approached from a Design Out Crime perspective, incorporating the following:
 - i. Avoid blind corners in pathways, stairways, hallways and car parks.
 - ii. Provide entries to development that are clearly visible.
 - iii. Avoid landscaping that obstructs view of public areas and create blind spots/ corners.
 - iv. Screen blank walls with landscaping and trees.

3.6 Sustainability

- a) The placing and orientation of dwellings on the site should be cognisant of solar orientation, especially during winter solstice.
- b) Solar access to clothes drying areas and private open space should be achieved as far as possible.
- c) The proposed buildings would require onsite storm water disposal, whereas the internal roads will dispose into a drainage basin or sub surface storage system.

Part 4: Implementation

Implementation of works associated with the Structure Plan will be the joint responsibility of the landowners, Town of Kwinana and WAPC.

4.1 Metropolitan Region Scheme Zoning

The subject land is zoned 'Urban' under the provisions of the Metropolitan Region Scheme (MRS).

4.2 Town Planning Scheme

The subject land is zoned 'Commercial' under Town of Kwinana Town Planning Scheme No. 2 (TPS 2). An amendment is being prepared to this planning scheme to allow for mixed use development, subject to the provisions of a structure plan and 515m² of retail floor space being retained on the site. This Structure Plan sets the framework for development and once it has been endorsed, individual landowners can lodge Subdivision and Development Applications.

4.3 Planning Control

The Structure Plan shows the allocation of land uses, densities and detailed road network and provides sufficient information for landowners to lodge subdivision applications. Landowners should liaise with the relevant service authorities early in the subdivision process in relation to extending and upgrading services to the subject area.

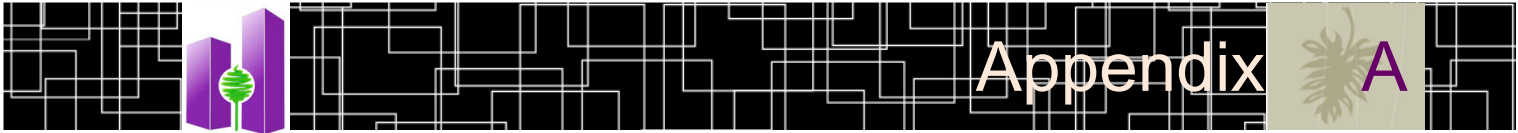
An Urban Water Management Plan may be required at the subdivision stage. It is noted that landowners will need to coordinate drainage infrastructure as drainage areas may be positioned beyond their property boundary.

The design guidelines contained in this Structure Plan will provide for a high quality and liveable urban village. Once approved, these guidelines will apply to all Development Applications within the Structure Plan Area.

4.4 Development Phasing

The Town of Kwinana's Town Planning Scheme No. 2 (TPS 2) is currently being amended and is likely to, through the amendment, require commercial development to remain on site for any residential development to occur. It is therefore imperative that the demolition of the retail centre only be considered by the Town of Kwinana as part of the redevelopment of the retail centre.

Residential development over Lot 3 could be achieved independent of the redevelopment of Lots 2 and 5. However, residential development over Lots 2 and 5 are unlikely in the absence of the redevelopment of the retail centre. It is therefore anticipated that the retail centre be the first redevelopment phase for this project. The design of the new centre is permitted under the current provisions of Town Planning Scheme 2. Following the approval of the structure plan and upon completion of the retail centre redevelopment, residential development could be considered over Lots 2 and 3.



Lot 3
Environmental Clearance



Government of Western Australia
Department of Environment and Conservation

RECEIVED
23 FEB 2011
BY: CS

Your ref:
Our ref: 11/90/839 & DEC3618
Enquiries: Registrar
Phone: 1300 762982
Fax:
Email:

Parsons Management
PO Box 189
South Fremantle WA 6162

Dear Sir/Madam

**NOTICE OF A CLASSIFICATION OF A KNOWN OR SUSPECTED CONTAMINATED
SITE GIVEN UNDER SECTION 15 OF THE CONTAMINATED SITES ACT 2003**

The site detailed below was classified under the *Contaminated Sites Act 2003* (the Act) on 13 July 2007 as '*Remediated for restricted use*' (the site):

- LOT 3 ON DIAGRAM 57863 as shown on certificate of title 1546/40 known as 60 Orelia Av, Orelia WA 6167

As a result of additional information submitted to the Department of Environment and Conservation (DEC) in relation to the contamination status of the site, the site has been re-classified to '*Decontaminated*'.

This notification is being sent to you in accordance with section 15(1) of the Act on the grounds that you, as the recipient, are one or more of the following:

- (a) owner of the site;
- (b) occupier of the site;
- (c) relevant public authority;
- (d) person in the CEO's opinion there is particular reason to notify;
- (e) person who made the report under section 11 or 12; and
- (f) person in the CEO's opinion who may be responsible for remediation of the site classified as *contaminated – remediation required*.

Re-classification of the site

Former site Classification

Category of Former site Classification: Remediated for restricted use

Date of Former site Classification: 13/07/2007

New site Classification

Category of New site Classification: Decontaminated

Date of New site Classification: 18/02/2011

DIRECTOR GENERAL AND ENVIRONMENTAL SERVICES DIVISIONS: The Atrium, 168 St Georges Terrace, Perth, Western Australia 6000

Phone: (08) 6467 5000 Fax: (08) 6467 5562

PARKS AND CONSERVATION SERVICES DIVISIONS: Executive: Corner of Australia II Drive and Hackett Drive, Crawley, Western Australia 6009

Phone: (08) 9442 0300 Fax: (08) 9386 1578 Operations: 17 Dick Perry Avenue, Technology Park, Kensington, Western Australia 6151

Phone: (08) 9219 8000 Fax: (08) 9334 0498

POSTAL ADDRESS FOR ALL DIVISIONS: Locked Bag 104, Bentley Delivery Centre, Western Australia 6983

www.dec.wa.gov.au

wa.gov.au

XDEC001

Reasons for classification: This site was reported to the Department of Environment and Conservation (DEC) prior to the commencement of the 'Contaminated Sites Act 2003'. The site classification is based on information submitted to DEC by 24 November 2010.

The site was used as a service station for 15 years, between 1988 and 2003, a land use that has the potential to cause contamination, as specified in the guideline 'Potentially Contaminating Activities, Industries and Landuses' (Department of Environment, 2004).

A contamination assessment was first carried out in association with the removal of site infrastructure in 2003. Further contamination assessments have been carried out up to June 2010 to render the site suitable for a proposed change in land use and development of the site as a child care centre. DEC understands that there are no current development applications for the site.

Remedial works comprising excavation and off-site disposal of soils have been carried out on the site, and the majority of identified impacted soils have been successfully remediated. Validation sampling indicated hydrocarbons (such as from petrol) were present in soil at a depth of 4.5 metres below ground level beneath a former UST at a concentration that exceeds the Health Investigation Level for residential land use (HIL A), which is the relevant assessment level for use of the site as a child care centre. Surrounding samples show the extent of hydrocarbons in soil is limited. Whilst the concentration of benzene in soil is above HIL A, the benzene-impacted soil is confined in nature, is present at a depth of 4.5 metres and is not accessible therefore, it is not considered to pose a human health risk.

Groundwater beneath the site occurs at approximately 20 metres below ground level and flows in a westerly direction. In 2006, low levels of hydrocarbons (such as from diesel/petrol) were present in groundwater in the northern and western portions of the site. Subsequent groundwater sampling conducted in 2007, 2008 and 2009 showed hydrocarbons were no longer detectable.

Based on the information provided, the site is suitable for unrestricted use, including sensitive uses such as residential, primary schools and childcare centres.

As the site has been successfully remediated and is suitable for all landuses, the site is classified as 'decontaminated'.

No further management of the site in relation to contamination is required.

DEC, in consultation with the Department of Health, has classified this site based on the information available to DEC at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to DEC, and as such, the usefulness of this information may be limited.

In accordance with Department of Health advice, if groundwater is being, or is proposed to be abstracted, DEC recommends that analytical testing should be carried out to determine whether the groundwater is suitable for its intended use.

The nature and extent of contamination and any restrictions on the use of the land, if applicable, are listed in Attachment A.

Information in relation to the classification of the site will be available to the public through a request for a summary of records on written application and payment of a prescribed fee from the Reported Sites Register.

In some instances DEC has had to classify sites based on historical information. It should be noted that a site may be re-classified at any stage to better reflect the current status when

additional information becomes available, for example where a new investigation or remediation report completed in accordance with DEC's *Contaminated Sites Management Series* of guidelines, is submitted to DEC. The current site classification is the classification most recently conferred on the site.

Memorials


In accordance with sections 58 (1) and (3) of the Act, DEC will give notice to Landgate to withdraw the current memorial(s) lodged against the Certificate of Title 1546/40 relating to the site.

Appealing the Site classification

All site classifications given by DEC are appealable. However, only certain people can lodge a valid appeal depending on the classification category as detailed in the attached Fact Sheet. Appeals need to be lodged in writing with the Contaminated Sites Committee at Level 22, The Forrest Centre, 221 St Georges Terrace, Perth WA 6000, within 30 days of being given this notification. The appeal should set out the appellant's relationship to the Site, and must include the grounds and facts upon which it is based.

For further information on all aspects of site classification, please refer to the *Site Classifications – What do they Mean?* Fact Sheet (enclosed) and *Site Classification Scheme 2006* (guideline) which are available from DEC's website www.dec.wa.gov.au/contaminatedsites or by contacting the Registrar on 1300 762 982.

Yours sincerely



Andrew Miller
SECTION MANAGER

CONTAMINATED SITES BRANCH
Delegated Officer under section 91
of the *Contaminated Sites Act 2003*

21/02/2011

Enc. Attachment A – Nature and Extent and Restrictions on Use.

Rights of Appeal under the *Contaminated Sites Act 2003* Fact Sheet
Site Classifications – "What do they mean" Fact Sheet



URBANISM

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