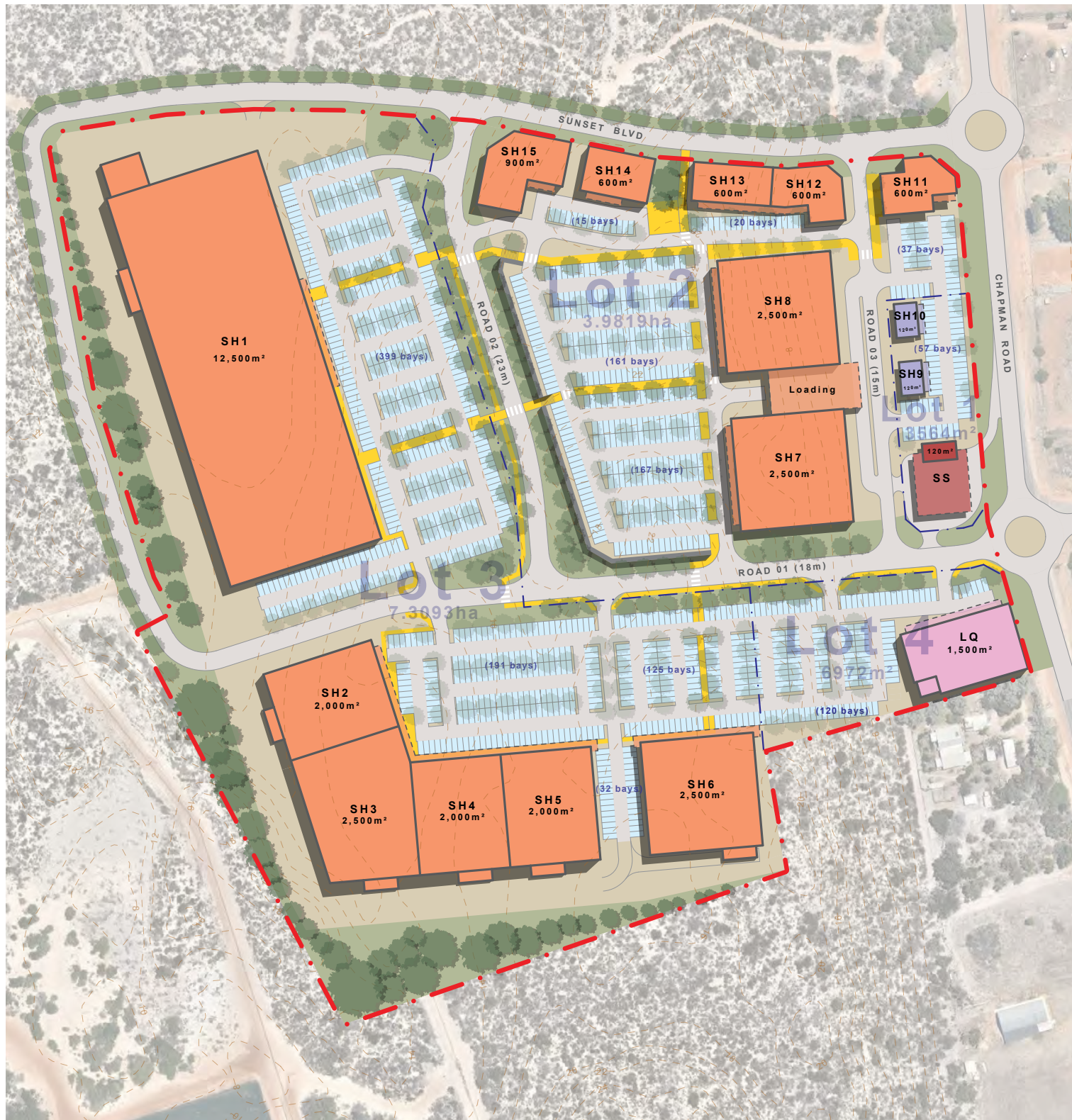




LOT 55 CHAPMAN ROAD, GLENFIELD

ACTIVITY CENTRE PLAN

January 2017

715-528

Activity Centre Plan

Lot 55 Chapman Road, Glenfield

January 2017

Prepared for: **ASDC Pty Ltd**

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Endorsement Page

This Activity Centre Plan is prepared under the provisions of the City of Greater Geraldton Local Planning Scheme No. 1.

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

_____ Date

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

_____ Date

An officer of the Commission duly authorised by the Commission pursuant to section 16 of the *Planning and Development Act 2005* for that purpose, in the presence of:

_____ Witness

_____ Date

_____ Date of Expiry

Table of Amendments

Amendment No.	Summary of the Amendment	Amendment Type	Date approved by WAPC

Executive Summary

Overview

This Activity Centre Plan (ACP) has been prepared to guide the development of land totalling 12,2397 hectares in area, and encompasses Lot 55 (No. 871) Chapman Road, Glenfield (the Activity Centre Plan area) within the City of Greater Geraldton.

The ACP area is located approximately 9.3 kilometres north of the Geraldton Town Centre and is within 350 metres of the coastline to the west. The subject site is located in the centre of the growing residential catchments for both Glenfield to the north and Sunset Beach to the south. The subject site is located within a wastewater treatment plant special control area relating to a Water Corporation Waste Water Treatment Plant (WWTP) situated approximately 300 metres west of the Activity Centre Plan area.

This ACP has been prepared on behalf of the landowner ASDC Pty Ltd and has been informed by investigations undertaken by the following consultant team:

- TPG + Place Match – town planning, urban design
- Strategen – environmental, local water management, bushfire management
- Pritchard Francis – engineering, servicing
- Transcore – traffic assessment
- Pracsys – retail format needs analysis

Purpose

The intent of this ACP is to provide a statutory framework to guide and facilitate the development of land for a limited range of service commercial purposes including the potential for showroom/bulky goods, service station, liquor store, car wash and other showroom and service commercial relates land uses.

Although this ACP does not supersede or overlap any approved Structure Plan, the orientation of development associated with this ACP is to take advantage of the Glenfield District Activity Centre to the north of the ACP area. This ACP should be read in conjunction with the Activity Centre Structure Plan for Lot 9000 Chapman Road, Glenfield to ensure that development of the entire District Activity Centre area is done so in a coordinated and integrated manner.

Design Approach

The design of this ACP is a product of a multidisciplinary approach which was predicated on the need to respond to a number of site issues and constraints in order to deliver a balanced and better environmental outcome for the site to that currently documented. This ACP has been informed by the following studies:

1. Preparation of a Retail Analysis (Pracsys) to analyse the market capacity for bulky goods development at this location.
2. Preparation of a servicing and infrastructure report (Pritchard Francis) to identify strategic engineering opportunities and constraints within the ACP area.
3. Preparation of an Environment Assessment and Management Strategy (Strategen) to identify any potential impacts to the environment resulting from the development of the ACP area and identify management actions.
4. Preparation of a Bush Fire Hazard Level and Bushfire Attack Level Assessment (Strategen) to in response to the bushfire risk imposed by classified vegetation to the north, east, south and west of the ACP area.
5. Preparation of a Transport Assessment (Transcore) to accommodate the modeled traffic movement that would be generated by the resultant bulky goods development within the ACP area.

Executive Summary Table

Item	Data	Activity Centre Plan Ref
Total area covered by the Activity Centre Plan	12.2397 ha	Part 2 – Section 1.2.2
Estimated Area of each land use proposed:		
<u>Zones</u>		
• Service Commercial zone	11.5328 ha	N/A
<u>Reserves</u>		Part 2 – Section 4.6.1
• Road Reserves	1.9948 ha	
Total estimated lot yield	Not applicable	Part 2 – Section 4.3
Estimated service commercial floor space	33,660 m ²	Part 2 – Section 4.5
Estimated number of dwellings	Nil	N/A
Estimated jobs provided	340 Jobs	Part 2 – Section 4.5
Estimated population	Nil	N/A
Number of primary schools	Nil	N/A
Number of high schools	Nil	N/A
Public open space	Nil	N/A

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Part One - Implementation

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1. Activity Centre Plan Area

- (a) This Activity Centre Plan shall apply to Lot 55 (No. 871) Chapman Road, Glenfield, being the land contained within the inner edge of the line denoting the Activity Centre Plan boundary on Activity Centre Plan Map (Plan 1).

2. Staging

- (a) The development of the ACP area will be implemented in stages due to the size of the ACP area and the service commercial nature of the land uses. The staging in terms of timing and composition will be dependent upon a number of factors, including market demand and servicing and infrastructure considerations.

3. Operation

- (a) This Activity Centre Plan commences operation on the day on which it is endorsed by the Western Australian Planning Commission (WAPC).

4. Subdivision and Development Requirements

4.1 Land Use Permissibility

- (a) The Activity Centre Plan Map (Plan 1) outlines land use, zones and reserves within the ACP area. The intention of zones and land use permissibility within the ACP area shall be in accordance with the corresponding zone or reserve under the Scheme, except as follows.
- (b) Land use permissibility shall be in accordance with the 'Service Commercial' zone in the Scheme with the exception of the following restricted uses, which are NOT PERMITTED:
- Child Care Premises
 - Civic Use
 - Club Premises
 - Convenience Store
 - Community Purpose
 - Consulting Rooms
 - Convenience Store
 - Exhibition Centre
 - Fast Food Outlet

- Funeral Parlour
- Hotel
- Market
- Medical Centre
- Motel
- Office
- Office – Small Scale
- Place of Worship
- Reception Centre
- Recreation Private
- Restaurant / Café
- Shop
- Supermarket
- Tavern

- (c) In addition, the following additional uses may be approved at the discretion of the City:

- Fuel Depot (D)

4.2 Minimum Lot Size

- (a) Notwithstanding Table 6 of Clause 3.5.2 of the Scheme, the minimum lot size within the ACP area shall be 2,500m².

5. Local Development Plans

(LDP) are required for the following:

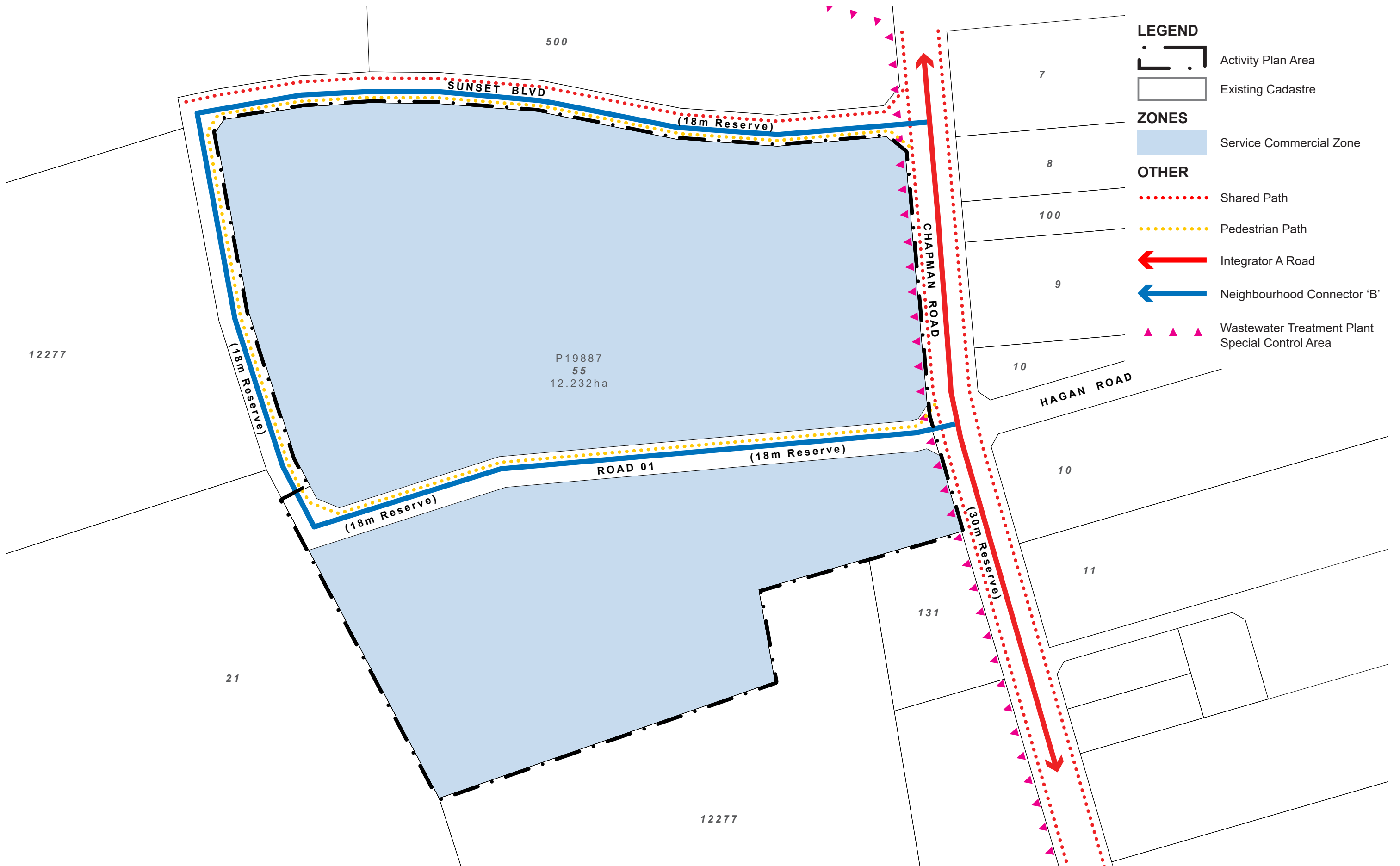
- (a) Any development or subdivision that proposes retaining in excess of 2 metres. The LDP must address the finish of the retaining wall(s), slope, gradients and access for both vehicles and pedestrians in accordance with the relevant Australian Standard.
- (b) Any lot that proposes land uses that require specific management of any aspect of the development to ensure its compatibility with the WWTP buffer requirements.
- (c) Any development over the area with 'Good' vegetation (as depicted on Figure 8: Vegetation Condition, of Appendix B – Environmental Assessment and Management Strategy). The LDP is to address the potential for the retention and regeneration of the vegetation, where practical.

6. Other Requirements

- (a) Prior to any subdivision or development application being lodged in excess of 4 years from the operation date of the ACP (as defined in section 2), an updated Transport Impact Assessment (TIA) shall be prepared. Thereafter, any further subdivision or development application shall be accompanied by a TIA less than 4 years from publication.

7. Additional Information

Additional Information	Approval Stage	Consultation Required
Urban Water Management Plan (inclusive of detailed permeability testing and the collection of 6 months, potentially up to 12 months, of groundwater monitoring data including a winter peak as well as an Acid Sulfate Soils investigation).	Development application or subdivision.	City of Greater Geraldton in conjunction with the Department of Water.
Site works and finished floor / lot levels.	Development application or subdivision.	City of Greater Geraldton.
Chapman Road upgrades (detailing the extent of upgrades, the ultimate road construction standard and any staging of upgrades).	Development application or subdivision.	City of Greater Geraldton.



Plan 1 - Activity Centre Plan

Lot 55 Chapman Road, Glenfield

Date: 28 October 2016
 Scale: 1:2,000 @ A3
 Drawing No. 715-528 ST-1 A
 Staff: MD_GW

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Figure 2 – Aerial Plan

Figure 3 – Context Plan

Figure 4 – Site Plan

Figure 5 – Local Planning Scheme No. 1

Figure 6 – Odour Distances from WWTP

Figure 7 - Indicative Development Concept

Figure 8 - Indicative perspective of the landscaping incorporated into the existing ridge

Figure 9 – Indicative perspective of the relationship between the road network and footpaths.

Figure 10 - Indicative perspective of development along Chapman Road

Abbreviations

ACP	Activity Centre Plan
AHD	Australian Height Datum
ARI	Average Recurrence Interval
AAMGL	Annual Average Maximum Groundwater Levels
BAL	Bush Fire Attack Level
BPZ	Building Protection Zone
CoGG	City of Greater Geraldton
DoW	Department of Water
DPaW	Department of Parks and Wildlife
DSI	Detailed Site Investigation
EPA	Environmental Protection Authority
LSP	Local Structure Plan
LWMS	Local Water Management Strategy
POS	Public Open Space
Scheme	City of Greater Geraldton Local Planning Scheme No. 1
UWMP	Urban Water Management Plan
WAPC	Western Australian Planning Commission

1. Planning Background

1.1 Introduction and Purpose

This Activity Centre Plan (ACP) has been prepared by TPG + Place Match on behalf of the landowner ASDC Pty Ltd to guide the development of land on Lot 55 (No. 871) Chapman Road, Glenfield (the ACP area).

This non-statutory (explanatory) section constitutes Part 2 of the proposed ACP to facilitate the development of the ACP area to allow for a restricted range of service commercial land uses. This ACP has been prepared for the ACP area to fulfill the requirements of SPP 4.2 and the City of Greater Geraldton Commercial Activity Centres Strategy as a District Centre.

This ACP will be used by the Western Australian planning Commission (WAPC), the Department of Planning, City of Greater Geraldton, State government agencies, landowners and the local community to inform further detailed planning and provide certainty and future development over Lot 55.

Supporting documentation in the form of separate technical reports have been prepared to inform this ACP and are appended to this document. These documents include:

- Environmental Assessment and Management Strategy (2016) prepared by Strategen;
- Opportunities and Constraints Report (2016) prepared by Pritchard Francis;
- Transport Assessment (2016) prepared by Transcore;
- Retail Analysis (2016) prepared by Pracsys; and
- Bushfire Hazard Level and Bushfire Attack Level Assessment (2016) prepared by Strategen.

This ACP comprises a Part 1 Statutory section and Part 2 Explanatory Section and technical appendices.

Part 1 - Implementation Section sets out the provisions that apply to the Activity Centre Plan.

Part 2 - Explanatory Section provides supporting information and explanation as background to the Part 1 provisions. The content and format of Part 2 responds to the requirements of the WAPC's Structure Plan Preparation Guidelines, the Model Centre Framework and SPP 4.2.

1.2 Land Description

1.2.1 Location

The area subject to this ACP comprises solely Lot 55 Chapman Road, Glenfield (the ACP area) and is located within the City of Greater Geraldton local government area. The ACP area is located approximately 450 kilometres north of Perth, nine kilometres north of the Geraldton Town Centre.

The ACP area is bound by vacant land subject to the Glenfield District Activity Centre to the north, Chapman Road to the east, land reserved 'Public Open Space' and 'Foreshore' to the south and to the west, and a Water Corporation Waste Water Treatment Plant (WWTP) approximately 300 metres to the west. The ACP area is strategically located adjacent to Chapman Road and achieves direct access onto the North West Coastal Highway through Hagan Road. The ACP area is currently vacant and existing vegetation, broadly described as a degraded mid-open shrubland.

The recently prepared Glenfield District Activity Centre Plan for land immediately to the north incorporates residential, retail and commercial land uses and is designated to accommodate a future district activity centre.

Refer to Figure 1 – Location Plan

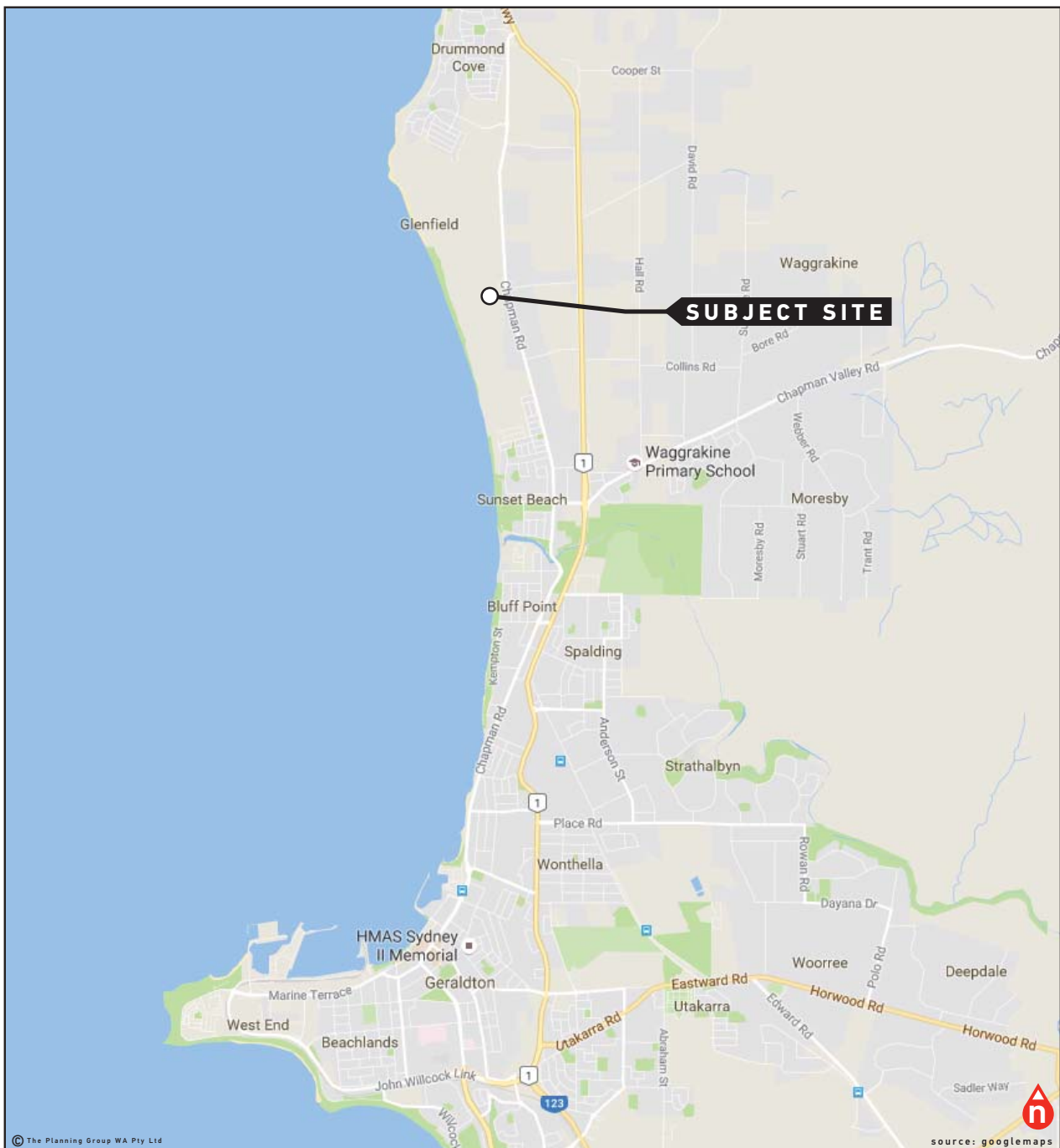


Figure 1. Location Plan

The ACP area has a total of 12.2320 ha of land and comprises a vacant site which accommodates existing coastal vegetation. Historically, the ACP area has remained vacant and is set aside for future development pursuant to various strategic planning documents for the area. In addition to this, a number of structure plans have been prepared or are in the process of being prepared over land surrounding the ACP area. Throughout the past 20 years, residential development has occurred to the north of the ACP area and has been the catalyst for the designation of land to accommodate a future district activity centre.

Refer to Figure 2 – Aerial Plan

Refer to Figure 3 – Context Plan

1.2.2 Legal Description and Ownership

The ACP area comprises Lot 55 Chapman Road, Glenfield. The details of the relevant Certificate of Title are provided in the following table.

Table 1 – Certificate of Title Details

Lot No.	Street Address	Volume/Folio	Plan	Area	Owner
55	Lot 55 Chapman Road, Glenfield	2009/981	P19887	12.232ha	ASDC Pty Ltd

Refer to Figure 4 – Site Plan

1.2.3 Limitations and Encumbrances on Title

There are no limitations or encumbrances listed on the current certificate of title.

1.3 Planning Framework

1.3.1 Regional Planning

1.3.1.1 Geraldton Region Plan 1999

The Geraldton Region Plan (GRP) provides a broad regional planning framework for the growth and development of the greater Geraldton urban area. It seeks to provide a framework for the future management, protection and coordination of regional

planning in the region and allocates the general location and extent of land uses at a broad scale.

The GRP identifies the ACP area as ‘Future Urban’, however it is noted that the Greater Geraldton Structure Plan 1999 is now superseded by the Greater Geraldton Structure Plan 2011 (GGSP).

The GRP is still relevant to the planning framework of the region and it is intended that it be used in conjunction with the Greater Geraldton Structure Plan until local governments have prepared a new local planning strategy and/or district structure plans.

1.3.1.2 Greater Geraldton Structure Plan 2011

The Greater Geraldton Structure Plan 2011 (GGSP) is an update to the existing Greater Geraldton Structure Plan 1999, which forms Part 3 of the Geraldton Region Plan. The GGSP focuses on urban areas and areas likely to experience pressure from development within the City of Geraldton-Greenough and the Shire of Chapman Valley. The GGSP reflects a number of land use changes that have occurred since the inception of the previous 1999 version of the Structure Plan.

Pursuant to the GGSP, the ACP area is shown as ‘Urban’. Areas shown as Urban provide for a range of activities, including residential, commercial, recreational and light industry.

1.3.1.3 State Planning Policy 4.1 – Industrial State Buffer

State Planning Policy 4.1 – Industrial State Buffer (SPP4.1) provides a consistent statewide approach for the protection and long-term security of industrial zones, transport terminals (including ports) other utilities and special uses, and provides for the safety and amenity of surrounding land uses while having regard to the rights of landowners who may be affected by residual emissions and risk.

The objectives of SPP4.1 are:

- To provide a consistent statewide approach for the definition and securing of buffer areas around industry, infrastructure and some special uses.
- To protect industry, infrastructure and special uses from the encroachment of incompatible land uses.



Figure 2. Aerial Plan

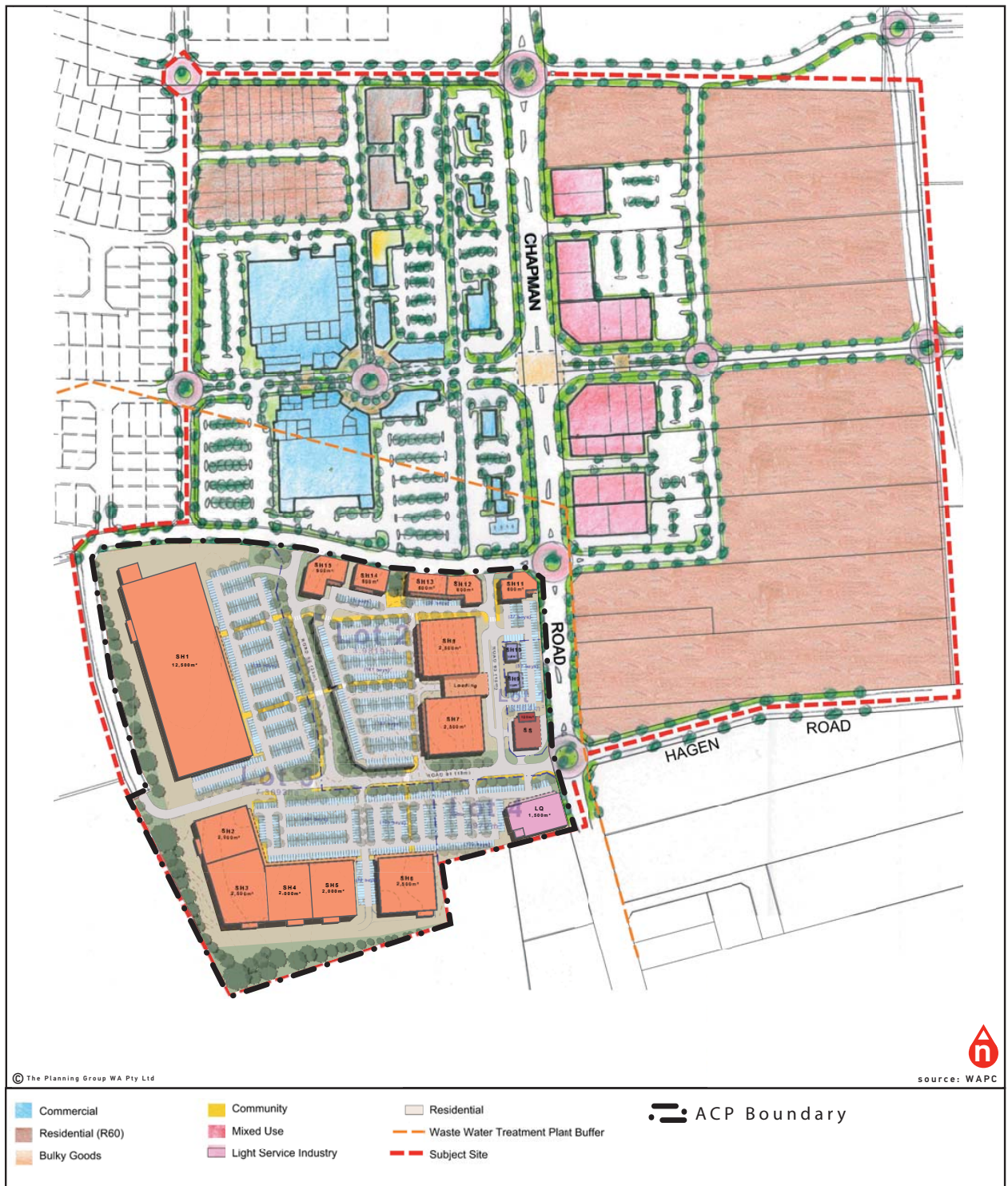


Figure 3. Context Plan



Figure 4. Site Plan

- *To provide for the safety and amenity of land uses surrounding industry, infrastructure and special uses.*
- *To recognise the interests of existing landowners within buffer areas who may be affected by residual emissions and risks, as well as the interests, needs and economic benefits of existing industry and infrastructure which may be affected by encroaching incompatible land uses.*

This ACP addresses the objectives of SPP4.1 by prohibiting land uses that are not considered to be suitable land uses within the odour buffer. Further justification is provided in Section 4.4 of this report.

1.3.1.4 Guidance Statement No. 3 - Separation Distances Between Industrial and Sensitive Land Uses

In 2005, the Environmental Protection Authority (EPA) has prepared Guidance Statement 3: Separation Distances between Industrial and Sensitive Land Use (GS3). GS3 relates to the EPA's environmental factors of human health and amenity which may be impacted by gaseous and particulate emissions, noise, dust and odour generated from industry, and makes reference to a range of industries which require separation from sensitive land uses, and provides the recommended separation distance.

The purpose of GS3 is to

- Identify the need for specific separation distance or buffer definition studies; and
- Provide general guidance on separation distances in the absence of site- specific technical studies.

GS3 specifically references a 'Wastewater Treatment Plant', which is to have a recommended separation distance to be determined on a 'Case by Case' basis.

With regard to the existing Water Corporation Waste Water Treatment Plant, the EPA expects the City of Greater Geraldton to seek advice of the Office of the Environmental Protection Authority (OEPA), as required by the above.

1.3.1.5 Draft Environmental Assessment for Separation Distances Between Industrial and Sensitive Land Uses

The Environmental Protection Authority (EPA) has prepared the draft Environmental Assessment Guideline for Separation Distances between Industrial and Sensitive Land Uses (EAG), which is expected to replace the existing Guidance Statement 3: Separation Distances between Industrial and Sensitive Land Use (GS3).

Further to GS3, the purpose of draft EAG is to:

- *Provide advice on which land uses require separation, and recommend the appropriate separation distances;*
- *Outline the EPA's expectations on the application of separation distances for schemes and scheme amendments in the environmental impact assessment process; and*
- *Support strategic and statutory land use planning and development decisions by planning authorities where proposed land uses have the potential to adversely impact on human health and amenity.*

Unlike GS3, a wastewater treatment plant is not specifically referenced under the draft EAG. In this regard, the draft EAG stipulates that the local authority is to seek advice where an industry is not listed, or is to be determined on a case by case basis.

Whilst the draft EAG is yet to be endorsed, it is anticipated that the EPA will have due regard to the provisions contained within the draft EAG, when determining the separation distance between the ACP area and the existing Water Corporation Waste Water Treatment Plant.

A buffer has been identified for a Waste Water Treatment Plant, and is identified in Figure 5 of this ACP.

1.3.1.6 Water Corporation Land Use Compatibility Matrix

Water Corporation has prepared the Water Corporation Land Use Compatibility Matrix (LUCM) which systematically lists a range of land use categories and the compatibility of those land uses with various buffers.

Water Corporation stipulates that odour buffers be provided to all Water Corporation waste water treatment plants to protect from the impacts of odour and help prevent land use conflict.

The table below outlines those relevant land uses as part of this ACP, in line with the LUCM.

Land Use	Water Corporation Permissibility
Amusement Parlour	Not Supported
Car Park	Supported
Child Care Premises	Not Supported
Civic Use	Not Supported
Club Premises	Not Supported
Convenience Store	Not Supported
Consulting Rooms	Not Supported
Community Purposes	Not Supported
Exhibition Centre	Not Supported
Fast Food Outlet	Not Supported
Fuel Depot	Supported
Hotel	Not Supported
Industry - Light	Discretionary Use
Industry - Service	Discretionary Use
Liquor Store	Use Not Listed
Market	Not Supported
Medical Centre	Not Supported
Motel	Not Supported
Motor Vehicle Wash	Supported
Office	Not Supported
Place of Worship	Not Supported
Reception Centre	Not Supported
Restaurant / Cafe	Not Supported
Service Station	Not Supported
Shop	Not Supported
Showroom	Not Supported
Supermarket	Use Not Listed
Tavern	Not Supported

1.3.1.7 Local Biodiversity Strategy

The City of Greater Geraldton prepared the Local Biodiversity Strategy (LBS) to provide a process for assessing the ecological significance of local natural areas.

The LBS is based on the following goals:

1. **Retention** - Retain natural areas. Aim to retain at least 3334ha of the remaining 6041ha of natural areas remaining.
2. **Protection** - Protect natural areas and specific biodiversity features, targeting at least 5% of the original extent of natural areas, leading to the protection of an additional 1058ha of areas of conservation value.
3. **Management** - Manage protected natural areas for conservation. Active management of 100% of LGA natural areas of conservation value.
4. **Engagement** - Increased community contributions to biodiversity conservation. Decrease in behaviours identified as threats to biodiversity values.
5. **Regeneration** - Ensure the rate of regeneration exceeds the rate of degradation. E.g. restore more than 1500 ha of natural areas in CGG.

Given that the ACP area comprises existing vegetation, the goals of the LBS are applicable to this ACP. It is proposed that future Local Development Plans will contain provisions encouraging the retention of 'good' pockets of vegetation where possible and practical and/or transplanting vegetation to future landscaping areas to ensure retention of individual stands of vegetation.

1.3.1.8 Geraldton Regional Flora and Vegetation Survey

The Department of Planning prepared the Geraldton Regional Flora and Vegetation Survey (GRFVS) in 2010 as a key information source to help minimise the environmental impact of future development in the Geraldton region, and to meet the EPA's expectation on regional flora and vegetation information in the Geraldton region. GRFVS covers 40,737 hectares in the City of Geraldton-Greenough and the Shire of Chapman Valley and identifies a broad scale vegetation types within a broad study area encompassing Geraldton and its surrounds.

GRFVS identifies existing vegetation within the ACP area as *Acacia rostellifera* shrublands and *Eucalyptus camaldulensis* subsp. *obtusa*, *Casuarina obesa* and *Melaleuca raphiophylla*.

The GRFVS is adequately addressed in Section 2.1.2.

1.3.1.9 City of Greater Geraldton Integrated Transport Strategy

The City of Greater Geraldton Integrated Transport Strategy (ITS) has been prepared to direct the expansion of the City's transport system to service a growing population.

The goal of the City's ITS is to "provide a transport infrastructure network capable of supporting a Greater Geraldton population of up to 100,000 people prosperously, equitably and safety that promotes City vibrancy"

Chapman Road is currently identified as a 'District Distributor' road, and as identified under the ITS, is subject to the transition from a 'Rural Road' to an 'Urban Road' between Sunset Beach and Drummonds Cove, through the Glenfield District Activity Centre, incorporating kerbing, stormwater, shared pathways and on-road cycle lanes.

Given that the ACO is to comprise a restricted range of Service Commercial uses only over a single lot only, the provisions of the ITS is not considered to have an advantageous impact on the future outcomes of this ACP.

1.3.2 Local Planning Framework

1.3.2.1 City of Greater Geraldton Local Planning Scheme No. 1

Service Commercial Zone

The ACP area is zoned 'Urban Development' pursuant to the City of Greater Geraldton Local Planning Scheme No. 1 (LPS1). Pursuant to LPS1, the objectives of the 'Urban Development' zone are to:

- *Identify areas that require comprehensive planning in order to provide for the coordination of subdivision, land use and development; and*
- *Provide for the orderly and proper planning and development through a structure planning process.*

LPS1 stipulates that the City is not to consider the recommendation for subdivision of land or approve development on land located on or within the Urban Development zone unless a structure plan in respect to the area the subject to the application, is endorsed and generally in accordance with the structure plan.

Refer to Figure 5 – Local Planning Scheme No. 1

This ACP designates a 'Service Commercial' zone over the ACP area. On this basis, any development over the ACP area shall meet the objectives and general requirements in accordance with the 'Service Commercial' zone, pursuant to LPS 1. The objectives of the 'Service Commercial' zone are to:

- accommodate commercial activities which, because of the nature of the business, require good vehicular access and/or large sites;*
- provide for a range of wholesale sales, showrooms, trades and services, which by reason of their scale, character, operational or land requirements, are not appropriate for industrial or commercial zones; and*
- ensure development achieves relatively high amenity standards based on the level of exposure of the site and proximity to residential areas.*

Pursuant to Clause 3.15.14 of LPS1, the City may, in respect of a use that is not specifically referred to in the zoning table, and that cannot reasonably be determined as falling within a use class referred to in the table; determine that the use is consistent with the objectives of the particular zone and is therefore a use that may be permitted in the zone.

With respect to the above, a Service Commercial zone designation over the ACP area is considered to meet the objectives above on the basis that the ACP will:

- facilitate the development of land uses which requires good vehicular access and large site areas;*
- provide for a range of showrooms, trades and services which are not appropriate for industrial or commercial zones; and*
- comprise appropriate land uses which facilitate good access and urban design controls so as not to interfere with traffic flow and safety, or detract from the amenity of the locality.*

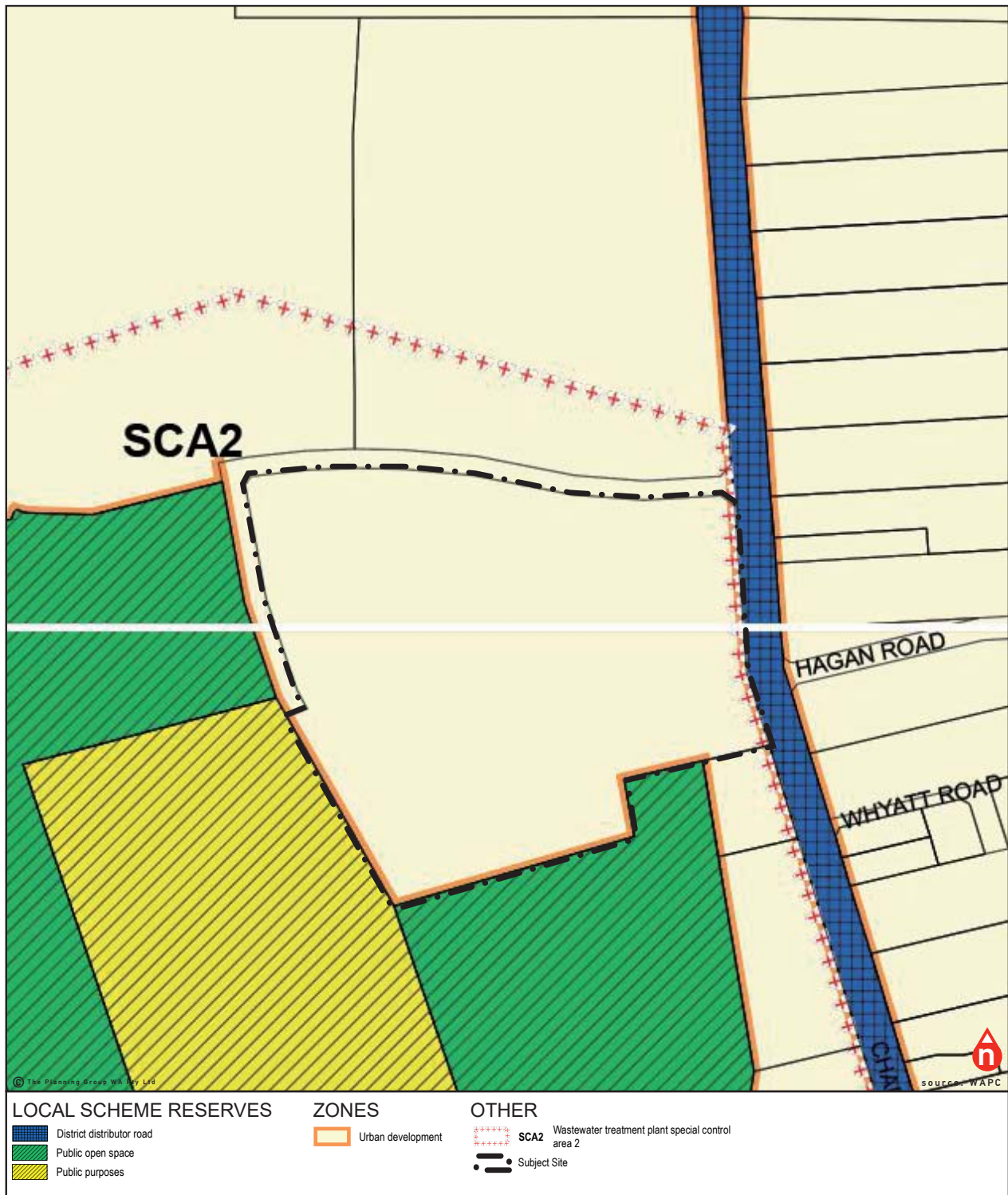


Figure 5. Local Planning Scheme No. 1

Special Control Area 2 – Waste Water Treatment Plant

Pursuant to Schedule 6 – Special Control Areas of LPS1, the ACP area is also identified as being within a Special Control Area 2 - Waste Water Treatment Plant (SCA2) area. The objectives of SCA2 are to:

- a) *minimise land use conflict; and*
- b) *provide for compatible and beneficial land uses within the buffer.*

Schedule 6 stipulates that in considering any application, the City shall have regard to:

- a) *the Water Corporation's advice in relation to compatible and beneficial land uses for buffers; and*
- b) *the potential odour impact of the wastewater treatment plant and whether the proposal is compatible with the existing and proposed future use of the plant.*

The potential odour impact in relation to SCA2 and the proposed Service Commercial zone are discussed in detail in Section 2.8 of this report.

1.3.2.2 City of Greater Geraldton Local Planning Strategy

The City of Greater Geraldton Local Planning Strategy (LPS) has been prepared to form the strategic basis for the preparation of a local planning scheme. The Strategy is an effort to ensure that as the City grows, it keeps pace with not only the cultural development aspects of regional life, but continues to add the necessary vibrancy and uniqueness which will ensure residents continue to retain pride in the community and have a desire for continuous improvement.

Pursuant to the City's LPS, the ACP area is identified as being within the 'Geraldton Urban Area'

Specifically, LPS makes reference for Service Commercial areas within the Geraldton Urban Area which states:

"Service commercial areas capitalise on the movement economy, are predominately car-based and provide a transition between busy roads and industrial areas, adjoining residential and commercial areas. Service commercial areas are generally not appropriate within activity centres, being car based and therefore easily accessible from major traffic routes. Existing service commercial areas have developed adjacent to North West

Coastal Highway. This form of development provides an important component of the Commercial Activity Centres Strategy accommodating a range of large format / bulky goods businesses".

This ACP adequately addresses the intent for Service Commercial areas, as identified above.

Furthermore, Part 5.3 of LPS also identifies three strategies for Commercial development within the Geraldton Urban Area. These strategies include:

- 1) establish a hierarchy of activity centres and areas where priority should be given for more intensification in close proximity to existing and planned services.
- 2) identify areas for mixed use adjacent to activity centres to strengthen the centre and provide a transition to adjoining residential areas.
- 3) recognise the role of large format retail as part of the commercial hierarchy.

In response to the strategies above, LPS identifies actions which address the above. The imposed actions include:

- (i). The implementation land use planning recommendations from the Commercial Activity Centres Strategy.
- (ii). Zone land in and around activity centres to ensure that they provide for residential, retail, commercial intensification and mixed use development as appropriate.
- (iii). Restrict residential uses in Commercial zoned areas to retain the integrity of commercial areas.
- (iv). Include a Service Commercial zone to primarily cater for bulky goods and showrooms.

The proposed land uses which form part of this ACP adequately address the actions above, with specific reference made to the Service Commercial zone which is to primarily cater for bulky goods and showrooms.

1.3.2.3 City of Greater Geraldton Commercial Activity Centres Strategy

The City's Commercial Activity Centres Strategy (CACS) provides a detailed planning framework to guide the future growth and location of future activity centres throughout the City.

CACS identifies the ACP area as being within the frame 'District Centre' which is defined as "multipurpose centres that provide a diversity of uses. They share some characteristics with the regional centre but serve smaller sub- regional catchments. They offer a range of essential services, facilities and employment opportunities to support their sub-regional catchments. They perform an important role in the City's economy".

The typical retail types within the District Centre, as identified under CACS, include, but are not limited to 'Discount Department Stores', 'Supermarkets', 'Convenience Goods', 'Small/Medium Scale comparison Shopping', 'Some Speciality Shops' and 'Personal Services'.

Notwithstanding, Part 9.2.1 of CACS stipulates that retail land uses should be concentrated in centres in a compact urban form and that lower intensity uses such as showrooms should be located outside the core of activity centres.

Pursuant to Part 9.2.11 of CACS, bulky goods retailing is generally considered to be unsuited to the walkable catchment or the core of activity centres given their size and car-parking requirements, low employment densities and need for freight vehicle access.

CACS identifies bulky goods to be displayed and sold from retail showrooms that typically comprise extensive display and storage areas with direct vehicle access and car parking. Notwithstanding, bulky goods retailing does not include the sale of food, clothing or personal effects goods.

CACS indicates that the City is to promote clusters of bulky goods retail adjacent to, or in close proximity to activity centres and the regional road and public transport networks. This should maximise the use of infrastructure, including the shared use of car parking; limit the number of car trips; and economically support other activity centre business.

The encroachment of bulky goods retail into residential zones should be avoided and development in an ad-hoc manner or as ribbon development along regional roads is discouraged. Bulky goods retail should be developed with access and urban design controls so as not to interfere with traffic flow and safety, or detract from the amenity of public transport or the locality.

CACS identifies that bulky goods retail are preferably to be located:

- a) *Edge-of-centre sites integrated with, but not within, the walkable catchment or core activity centre precincts;*
- b) *Where it is demonstrated that sufficient suitable sites in or adjacent to activity centres are not available, out-of-centre mixed business or equivalent zones integrated with established and well- located bulky-goods nodes; and*
- c) *In limited circumstances where it is demonstrated that sufficient suitable sites in or adjacent to activity centres or within or integrated with existing bulky-goods nodes are not available, other out-of centre mixed business or equivalent zones.*

The proposed land uses which form part of this ACP are considered adequately address and meet the objectives of 9.2.11. As such, bulky goods land uses are considered to be appropriate land uses over the ACP area on the basis that:

- The ACP will promote bulky goods showroom uses outside the core of the Glenfield District Centre;
- The ACP will promote a cluster of bulky goods adjacent to the district centre to promote shared trade while not impacting on the walkability of the District Centre itself;
- The ACP will accommodate larger format retail uses with higher car parking demand that are not suitable to be located within the District Centre;
- This ACP proposes land uses which comprises extensive display and storage areas with direct vehicular access and car parking and does not include the sales of food, clothing or personal effects goods;
- The ACP area has direct access to the regional road, and is in close proximity to the Glenfield District Activity Centre;
- The ACP area does not encroach on any existing or proposed residential development areas; and
- The ACP area is able to be adequately serviced from a traffic and servicing point of view.

1.3.2.4 Local Biodiversity Strategy

The City of Greater Geraldton and the Shire of Chapman Valley has prepared the Local Biodiversity Strategy (LBS) to provide a process for assessing the ecological significance of local natural areas.

The LBS is based on the following goals:

1. **Retention** - Retain natural areas. Aim to retain at least 3334ha of the remaining 6041ha of natural areas remaining.
2. **Protection** - Protect natural areas and specific biodiversity features, targeting at least 5% of the original extent of natural areas, leading to the protection of an additional 1058ha of areas of conservation value.
3. **Management** - Manage protected natural areas for conservation. Active management of 100% of LGA natural areas of conservation value.
4. **Engagement** – Increased community contributions to biodiversity conservation. Decrease in behaviours identified as threats to biodiversity values.
5. **Regeneration** - Ensure the rate of regeneration exceeds the rate of degradation. E.g. restore more than 1500 ha of natural areas in CGG.

Given that the ACP area comprises existing vegetation, the goals of the LBS are applicable to this ACP.

Notwithstanding, this ACP adequately addresses the goals above and is discussed in detail in section 2.1 of this report.

1.3.3 Planning Policies

1.3.3.1 State Planning Policy 4.2 – Activity Centres for Perth and Peel (WAPC)

State Planning Policy 4.2 – Activity Centres for Perth and Peel (SPP4.2) establishes the hierarchy for activity centres within the Perth and Peel region, as well as identifying planning and development requirements for new and existing activity centres in Perth and Peel and supersedes the WAPC's Metropolitan Centres Policy.

The policy defines activity centres as:

'Activity centres are communal focal points. They include activities such as commercial, retail, higher density housing, entertainment, tourism, civic/community, higher

education and medical services. Activity centres vary in size and diversity and are designed to be well serviced by public transport.'

Activity centres are identified as priority locations for employment generating activities of various types, which should contribute to achieving employment self-sufficiency targets outlined in Directions 2031 for the sub-regions.

The policy defines a hierarchy of centres with the objectives to:

- Distribute activity centres to meet different levels of community need and enable employment, goods and services to be accessed efficiently and equitably by the community.
- Apply the activity centre hierarchy as part of a long term and integrated approach by public authorities and private stakeholders to the development of economic and social infrastructure.

Whilst the provisions of SPP 4.2 applies to the Perth and Peel region, the local planning framework identifies the ACP area as being located in a 'District Centre'. In this regard, the principles and characteristics of activity centres prescribed by SPP 4.2 has influenced and guided the preparation of this ACP.

Pursuant to SPP 4.2, a District Centre is to *"have a greater focus on servicing the daily and weekly needs of residents. Their relatively smaller scale catchment enables them to have a greater local community focus and provide services, facilities and job opportunities that reflect the particular needs of their catchments"*.

This ACP contributes to the objective of the District Centre by creating employment and providing the provision of goods and services to the local and greater community.

1.3.3.2 Planning for Bush Fire Management (SPP 3.7)

SPP 3.7 establishes a risk minimisation approach to assist in decision making with respect to planning and development in proximity to bush fire-prone areas. The provisions of SPP3.7 are to be applied in conjunction with the Department of Planning's Visual guide for Bushfire Risk Assessment in Western Australia and AS 3959–2009.

In accordance with SPP 3.7, identification of an area as being bush fire-prone is not in itself an indication of bush fire risk, however does trigger the requirement for a proponent to assess the level of risk through either a bush fire hazard assessment and/or a Bush Fire Attack Level (BAL) assessment.

The ACP area is situated within a designated bushfire prone area as depicted in the Western Australia State Map of Bush Fire Prone Areas. As such, Strategen have prepared a Bushfire Hazard Level Assessment to support the ACP.

A Bushfire Hazard level (BHL) Assessment and Bushfire Attack Level (BAL) Assessment has been undertaken and is contained in Appendix D.

The BAL rating descriptions are contained in the Guidelines and are described in the following table:

Table 2 – BAL Ratings

BAL	Description
BAL-LOW	There is insufficient risk to warrant any specific construction requirements but there is still some risk.
BAL-12.5	There is risk of ember attack.
BAL-19	There is risk of ember attack and burning debris ignited by wind-borne embers and a likelihood of exposure to radiant heat.
BAL-29	There is an increased risk of ember attack and burning debris ignited by wind-borne embers and a likelihood of exposure to an increased level of radiant heat.
BAL-40	There is much increased risk of ember attack and burning debris ignited by wind-borne embers, a likelihood of exposure to a high level of radiant heat and some likelihood of direct exposure to flames from the fire front. Not supported by planning.
BAL-Flame Zone	There is an extremely high risk of ember attack and burning debris ignited by wind-borne embers, and a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front. Not supported by planning.

SPP 3.7 stipulates that Bush Fire Hazard Assessments are to identify the applicable BAL rating and any development of an area rated at BAL 40 or above is not to be supported unless it can be demonstrated that the risk can be reduced to comply with the policy requirements or the proposal is considered to be unavoidable development.

The BAL Assessment confirms that the ACP area does not have a rating of BAL 40 or above.

1.3.3.3 Liveable Neighbourhoods

Liveable Neighbourhoods is an operational policy, adopted by the WAPC, and establishes guidelines for the design and assessment of new structure plans and subdivisions. Liveable Neighbourhoods Element 7 addresses Activity Centres and Employment. The following summarises the relevant provisions in relation to the ACP:

- Large format bulky goods should be located in close proximity to transit corridors, on the fringe of activity corridors, or in areas which have accessibility to the regional road network.

The general intent and objectives of Liveable Neighbourhoods is considered relevant in terms of addressing such elements as connectivity and walkability, urban water management and utilities. Furthermore, a detailed description of the design rationale for the ACP is provided in Section 4 of this ACP report.

2. Site Considerations and Constraints

The following section outlines the existing physical site conditions which have been taken into account during the preparation of the ACP.

2.1 Natural Area Assets and Biodiversity

2.1.1 Topography

The ACP area is located on the northern extent of the Swan Coastal Plain, which forms the central portion of the Perth Basin.

The ACP area is defined by variable topography ranging from approximately 4 metres Australian Height Datum (mAHD) along the eastern boundary to a maximum height of approximately 22m AHD on the central dune ridge, which extends in a north-south direction.

As the topography of the ACP area ranges by approximately 18 metres, alterations to the existing contour levels are required to accommodate future development. This ACP proposes to level and manage the existing topography to various levels through the provision of excavation and hard landscaping, as illustrated in Figure 11. The alteration to the existing topography will allow the ACP area to be useable for those intended land uses as part of this ACP.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.1.2 Flora and Vegetation

The EPA's objectives for flora and vegetation is to maintain representation, diversity, viability and ecological function at the species, population and community level.

Further to the above objective, the potential sources of impact to native vegetation within the ACP area from future development includes:

- clearing of approximately 11.4 ha of vegetation will directly reduce the extent of vegetation communities, and may disturb conservation significant flora species or ecological communities;
- vehicle movements during construction and earthworks have the potential to create dust which may smother vegetation and introduce and spread exotic species leading to degradation of vegetation condition; and
- on-site ignition sources that could result in increased fire frequency/intensity that may favour the establishment of weeds and prevent the regeneration of adjacent native vegetation.

The Geraldton Regional Flora and Vegetation Survey (GRFVS) describes broad scale vegetation types within a broad study

The BRFS identifies that the ACP area occurs within the Geraldton Sandplains Interim Biogeographical Regionalisation for Australia (IBRA) sub-region. This sub-region is dominated by endemic rich, proteaceous scrub heaths on sandy earths of extensive, undulating and lateritic sandplains. The subregion also consists of sand heaths with emergent *Banksia* and *Callitris*, *Eucalyptus loxophleba* woodlands on alluvial plains, proteaceous heath and *Acacia* scrubs on limestone and low closed shrubland of *Acacia rostellifera* on alluvial plains of the Greenough and Irwin Rivers.

Vegetation in the vicinity of the ACP area falls within vegetation types that are described as *Acacia rostellifera* shrublands on coastal and near coastal areas as well as drainage lines dominated by *Eucalyptus camaldulensis* subsp. *obtus*, *Casuarina obesa* and *Melaleuca raphiophylla*.

Based on a preliminary Flora and Vegetation Site Assessment undertaken by Strategen, vegetation within the ACP area is made up of the following communities:

- **S1:** Low open shrubland of *Acacia rostellifera*, *Stylobasium spathulatum* and **Lycium ferocissimum* over *Rhagodia baccata*, *Ptilotus divaricatus* subsp. *divaricatus*, *Threlkeldia diffusa*, *Acanthocarpus preissii* and **Sonchus oleraceus* on low backdunes;
- **S2:** Degraded Mid open shrubland of *Acacia rostellifera* and **Lycium ferocissimum* over *Enchylaena tomentosa* and **Avena barbata* on gravel and sandy soils between backdunes and drainage lines; and
- **C:** Cleared areas.

Following the Flora and Vegetation Site Assessment, there is no record of any threatened or priority flora species within the ACP area.

Furthermore, the condition of vegetation within the ACP area ranges from “Good” to “Completely Degraded”. Approximately 3.58% of the ACP was mapped to be in “Good” condition, 89.76% in “Good-Degraded” condition, and 6.66% in “Completely Degraded” condition. However, the majority of remnant vegetation within the broader Geraldton area, in particular the area covered by the Geraldton Regional Flora and Vegetation Survey (GRFVS) is threatened by development, weed invasion, grazing, fire or recreational use,

It is considered that areas of vegetation being in “Good” condition are also identified as having a significant level of weed cover, including African boxthorn which will continue to spread and degrade the condition of vegetation over time.

Having due regard the potential for weed cover to grow, and that there are no threatened or priority flora species identified on the ACP area, future development as part of this ACP is not considered to have a detrimental impact on the representativeness and viability of the existing vegetation. As such, it is development as part of this ACO is considered to be acceptable, where appropriate to the satisfaction of the City.

Notwithstanding, in accordance with the City’s Local Biodiversity Strategy, it is intended to encourage the retention of ‘Good’ vegetation where possible within car parking and or landscaping areas. It may also be possible to transplant specific stands of vegetation to landscaping areas following earthworks and constructions activities.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.1.3 Fauna

The EPA’s objective for fauna is “to maintain representation, diversity, viability and ecological function at the species, population and assemblage level”.

The following table lists the significant fauna identified during the database searches.

Table 3 – Significant Fauna

Species		Conservation code	
Common name	Scientific name	EPBC Act	WC Act
Carnaby’s cockatoo	<i>Calyptorhynchus latirostris</i>	Endangered	S1
Malleefowl	<i>Leipoa ocellata</i>	Vulnerable	S1
Southern giant petrel	<i>Macronectes giganteus</i>	Endangered/ Migratory	S2
Northern giant petrel	<i>Macronectes halli</i>	Vulnerable/ Migratory	S3
Shy Albatross	<i>Thalassarche cauta cauta</i>	Vulnerable/ Migratory	S3
Fork-tailed swift	<i>Apus pacificus</i>	Migratory	S3
Great egret	<i>Ardrea alba</i>	Migratory	S3
Cattle egret	<i>Ardrea ibis</i>	Migratory	S3
White bellied sea-eagle	<i>Haliaeetus leucogaster</i>	Migratory	S3
Rainbow bee-eater	<i>Merops ornatus</i>	Migratory	S3
Caspian tern	<i>Sterna caspia</i>	Migratory	S3

Notwithstanding, the potential sources of impact to native terrestrial fauna and associated habitat within the Site include:

- clearing of vegetation will directly disturb fauna habitat through destruction, degradation and/ or fragmentation and may result in the loss of individual terrestrial fauna
- vehicle movements may result in the injury or fatality of individual terrestrial fauna, especially less-mobile species
- human activities have the potential to increase the presence of introduced predator species (e.g. foxes and cats) which has the potential to result in increased rates of predation of native fauna species as well
- construction infrastructure and machinery have the potential to disturb fauna through noise, vibrations and light spill.

Given the highly degraded nature of the ACP area, the presence of feral predatory species and absence of proteaceous and myrtaceous species utilised by Carnaby's cockatoos for foraging, roosting and breeding, it is considered unlikely that Carnaby's cockatoo or malleefowl inhabit the ACP area.

The fauna habitat investigations relevant to the ACP area identified that:

- no habitat for conservation significant terrestrial fauna species is present ;
- no vascular plant species listed as being utilised by Carnaby's cockatoos were recorded;
- no signs of malleefowl mounds or Rainbow bee-eater burrows were observed; and
- feral animals were abundant.

With regard to the above, it is considered that future development as part of this ACP is in line with the EPA objective for fauna.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.1.4 Biodiversity

The ACP area comprises natural areas and a variety of life forms, as discussed in Section 2.1.1 and 2.1.2 above. As such, the existing biodiversity is notably recognised as contributing to the natural ecological processes within the local area.

As mentioned in Section 1.3.3.4, the LBS recommend the following goals, as a strategic vision, which is applicable to the ACP area:

1. **Retention** - Retain natural areas. Aim to retain at least 3334ha of the remaining 6041ha of natural areas remaining.
2. **Protection** - Protect natural areas and specific biodiversity features, targeting at least 5% of the original extent of natural areas, leading to the protection of an additional 1058ha of areas of conservation value.
3. **Management** - Manage protected natural areas for conservation. Active management of 100% of LGA natural areas of conservation value.

4. **Engagement** - Increased community contributions to biodiversity conservation. Decrease in behaviours identified as threats to biodiversity values.
5. **Regeneration** - Ensure the rate of regeneration exceeds the rate of degradation. E.g. restore more than 1500 ha of natural areas in CGG.

The proposed ACP is considered to adequately address the goals above on the basis of the following:

- Existing vegetation is to be retained throughout the ACP, predominately along the western and southern periphery, and is to be integrated into any proposed landscaping including car parking and pedestrian networks;
- The ACP area does not comprise any vegetation identified to have specific biodiversity features;
- The ACP area does not contain any protected natural areas;
- The ACP area is to comprise soft landscaping which is considered to contribute to the biological processes of the local area; and
- Vegetation is proposed to be planted throughout the ACP area, where appropriate.

2.2 Landforms and Soils

2.2.1 Soils

The Perth Basin is sedimentary in origin and is marginal to the west of the Australian Shield.

The ACP area is within the coastal system comprising undulating Holocene shoreline deposits (Quindalup Dune System) underlain by the older Pleistocene consolidated dune system of the Tamala Limestone (Spearwood Dune System), comprising the following four soil types:

1. Quindalup Central Stable Parabolic Dune – this soil association is found across the majority of the ACP area and is described as a large scale parabolic dune with relief 20 metres to 40 metres on Aeolian calcareous sands and minor limestone in the north coastal plain. It is generally calcareous, deep sand;
2. Quindalup Central Swale – this soil association is found within the north-western portion of the ACP area and is described as gently undulating plains surrounded by parabolic dunes on Aeolian

calcareous sands and minor limestone in the north coastal plain. It is also comprised of calcareous, deep sand;

3. Tamala South Grey-Brown Sand – this soil association is found in the north-eastern portion of the ACP area, adjacent to Chapman Road, and is described as mid to lower slopes of Tamala limestone ridges and some isolated rises on Lithified Pleistocene calcareous dune deposits and recent calcareous sands. It is generally calcareous, deep and shallow sands; and
4. Tamala South Red Sand – this soil association is found within the south-eastern portion of the ACP area, adjacent to Chapman Road and described as lower lying and swale areas on Lithified Pleistocene calcareous dune deposits and recent calcareous sands. It is generally considered to consist of deep, red sand.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.2.2 Microclimate

The ACP area is influenced by a dry warm Mediterranean climate regime, experiencing hot, dry summers and mild, wet winters with an average of 446 mm/year rainfall and on average six months with less than 20 mm rainfall each year.

The wind pattern within the region is largely a result of the land-sea interface which results in easterly land breezes in the morning, followed up by south to south-westerly sea breezes in the late morning to afternoon in the warmer months. During the winter months, wind patterns are most commonly influenced by cold fronts moving east over the land mass from the Indian Ocean.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.2.3 Acid Sulphate Soils (ASS)

An environmental assessment prepared by Stratagen indicates that the majority of the ACP area is not identified as having a risk of Acid Sulphate Soils within three metres of the soil surface. However, a narrow portion of the eastern boundary of the ACP area is identified as having a high to moderate risk of Acid Sulphate Soils occurring within three meters of the soils surface. A field inspection conducted using the indicators

for Acid Sulphate Soils, as outlined in the Department of Environment and Conservation's Identification and Investigation of Acid Sulfate Soils and Acidic Landscapes, indicates no signs of Acid Sulphate Soils.

An Urban Water Management Plan (UWMP) is required at the Development Application Stage to meet the requirements of the City of Greater Geraldton and the 'Better Urban Water Management (2008)' process. This plan will include an acid sulphate soils investigation.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.3 Groundwater and Surface Water

2.3.1 Groundwater

The ACP area is located within the Arrowsmith Groundwater Area and the Dongara Subarea. Groundwater within the Dongara sub area ranges between two and 15 meters below ground level, with the majority of recharge derived from rainfall and surface runoff. Groundwater generally flows in a westerly direction and discharges into the Indian Ocean via a seawater interface. Overall, groundwater is expected to be shallower in the eastern portion of the ACP area.

A search of the Water Register indicates that groundwater is available for allocation in the superficial aquifer in the area.

The ACP area is not located within a Public Drinking Water Source Area (PDWSA).

Refer to Appendix B – Environmental Assessment and Management Strategy

2.3.2 Surface Water and Hydrology

An Environmental Assessment and Management Strategy (EAMS) provided in Appendix B identifies that there are no permanent surface water features on land within the ACP area.

The nearby surface water features include Buller River, being located approximately six kilometres north of the ACP area, Dolby Creek, a tributary of Buller River, being located approximately three kilometres north of the ACP area, and a blind creek system which extends south from

Dolby Creek and ceased approximately 250 metres north of the ACP area.

The land directly to the north contains an ephemeral surface water feature locally known as “Rum Jungle”. Rum Jungle is a naturally formed alluvial flat which is a palusplain, maintained by rainfall and drainage from Dolby Creek to the north of the Site and seepage from coastal dunes.

During the 1 in100 year ARI event, floodwaters from Dolby Creek enter Rum Jungle and are anticipated to result in limited inundation in the north-eastern corner of the ACP area.

The EAMS also indicates that development over the ACP area has the potential to negatively impact upon groundwater quality though infiltration of stormwater that may contain pollutants such as nutrients and hydrocarbons. Notwithstanding, the development of the ACP area may result in limited increases in winter groundwater levels due to reduced evaporation and increased runoff from hard surfaces.

A Local Water Management Strategy (LWMS) was prepared by AECOM in 2014 for the Glenfield District Activity Centre and was approved by the City of Greater Geraldton. The City has confirmed that the same principals of the approved LWMS to on site stormwater management will apply to Lot 55 Chapman Road. The specific principles in the AECOM LWMS for the 1 year, 5 year and 100 year ARI events are outlined below.

1 Year AYI

- To retain and treat on site the 1 hour duration 1 year ARI event, rooves to be connected to soak wells and where appropriate, to rainwater tanks.
- All stormwater will be contained within each lot prior to discharge/ infiltration to groundwater.
- Road runoff will be infiltrated as close to source as practical using water sensitive urban design (WSUD) measures including roadside swales.

5 Year AYI

- Road runoff will be infiltrated as close to source as practical using water sensitive urban design (WSUD) measures including roadside swales/ bioretention structures draining into flood storage areas adjacent to public open space (POS).
- Bioretention structures will treat and infiltrate stormwater using vegetation and biofiltration media to improve water quality prior to release to the environment.
- Flood storage will be within unfenced landscaped shallow sized basins with sand filters.

100 year AYI

- Provide via overland flow paths to enable conveyance of runoff to infiltration basins.
- Flood storage areas (infiltration basins) will be unfenced, landscaped, shallow sided basins with sand filters.

The AECOM LWMS indicated that a conservative infiltration rate for the site to the north was 15m/ day and given the topography and geology of Lot 55 Chapman Road is similar this rate of infiltration could be assumed to apply.

The City of Greater Geraldton has confirmed that for commercial and industrial developments, the minor storms are required to be stored and infiltrated on site with the major events to overland flow into the council system.

With regard to the above, an Urban Water Management Plan (UWMP) is to be prepared at the Development Application Stage to detail stormwater treatment measures and to meet the requirements of the City of Greater Geraldton and the ‘Better Urban Water Management (2008)’ process. The collection of at least 6 months (potentially up to 12 months) of groundwater monitoring data including a winter peak as well as an Acid Sulfate Soils investigation will be required to support the UWMP.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.4 Bushfire Hazard

A desktop search of the Western Australia State Map of Bush Fire Prone Areas identifies that the ACP area is located within a designated bushfire prone area.

A Bushfire Hazard level (BHL) Assessment and Bushfire Attack Level (BAL) Assessment has been prepared by Strategen for the ACP area, which identifies potential impacts of bush fires and a range of bushfire management measures that, on implementation, will enable all proposed lots to be developed whilst maintaining a manageable level of bushfire risk and compliance with the *Guidelines for Planning in Bushfire-Prone Areas* (the Guidelines).

Bushfire will be managed in accordance with the BHL and BAL Assessments, through appropriate hazard separation distances pursuant to the Guidelines.

Refer to Appendix 3 of Appendix B – Bushfire Hazard level Assessment and Bushfire Attack Level Assessment

2.5 Heritage

No known Aboriginal or European heritage sites are present within the ACP area. Construction activities have the potential to unearth or identify Aboriginal artefacts.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.6 Coast and Foreshores

The ACP area is located in excess of 300 metres east of the horizontal shoreline datum of the coast, and thus *State Planning Policy No. 2.6 State Coastal Planning Policy* (SPP 2.6) is not applicable.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.7 Contaminated Sites

A review of the Department of Environment Regulation (DER) Contaminated Sites Database indicates that there are no known contaminated sites within 1 km of the ACP area.

The ACP area is vacant bushland and is considered to represent a low risk of contamination. Limited unauthorised dumping ('fly tipping') has occurred adjacent to tracks within the ACP area.

Material illegally dumped on the ACP area will be removed and disposed of to an appropriate landfill prior to construction.

The development is not expected to pose an unacceptable risk of contamination to the surrounding environment.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.8 Odour

The ACP area is located within the GNWWTP odour buffer, identified under LPS1 as SCA 2. The purpose of the SCA 2 is to provide separation between the GNWWTP and the potential impact of odour from sensitive land uses.

Notwithstanding, the EPA objectives relevant to air quality and amenity are:

- to maintain air quality for the protection of the environment and human health and amenity, and to minimise the emission of greenhouse and other atmospheric gases through the application of best practice
- to ensure that impacts to amenity are reduced as low as reasonably practical.

A desktop assessment carried out by Strategen identified that it is possible for odour emissions from the GNWWTP to reach the ACP area, and has the potential to impact on the amenity for persons working within or visiting future development over the ACP area. In view of this, field assessments were undertaken to determine the potential impact of odour from GNWWTP on the ACP area.

Consultation was undertaken with Water Corporation as part of the assessment. Water Corporation confirmed that high rainfall events can destabilise the aerobic conditions in the ponds and generate increased odour emissions for up to two weeks after the rain has ceased. Anecdotal evidence from Water Corporation indicates that those impacts could extend outside a buffer zone defined by the 5 OU criteria. This suggests that these events and any other atypical (upset) conditions provide the greatest potential for odour impacts at the ACP area. However, as this scenario is considered to occur on a low frequency, such upset events reduces the risks of atypical odour emission events from impacting the ACP area. On this basis, the proposed future non-sensitive land use development at the ACP area would not be precluded.

Overall, the field observations and wind direction frequency analysis indicated a low probability of odour impacts at the ACP area from normal operation of the GNWWTP. Furthermore, the levels of odours detected at the ACP area are predicted to be well below Water Corporation's 5 OU criterion requirement for establishment of buffer zones around WWTPs (Figure 6). The Water Corporation criterion is set for a 1 hour average, which means higher concentrations can be considered appropriate for short duration impacts as observed from the field observations.

The compatibility for potential land uses and the odour buffer associated with this ACP are addressed in Section 4.4 of this report.

Refer to Appendix B – Environmental Assessment and Management Strategy

2.9 Unexploded Ordnances (UXO)

A desktop search of the Register of Known or Suspected UXO Contaminates Sites in WA indicates that the ACP area is located within an area identified as a former WWII military training area, WA UXO Register N 91 'Smuggler's Cove'. This former range area has been identified by FESA as one of the most used anti-tank, artillery and mortar training areas in the Geraldton region during WWII.

Notwithstanding, UXO or explosive ordnance fragments / components have not been recovered from the ACP area.

It is recommended that further UXO surveys be undertaken prior to development within the ACP area.

Refer to Appendix A – Servicing Opportunities and Constraints Report



3. Economic and Social Context

3.1 Complementary Centres

The Retail Needs Analysis in Appendix E identifies that the ACP area is anticipated to precede the development of Lot 9000 directly to the North. Lot 9000 is designated as a District Centre within the City's Activity Centre Strategy and is likely to contain more traditional retail uses with a small contingent of bulky goods. In the retail sphere, this trend of co-locating bulky goods with traditional retail uses is becoming more and more prevalent for large format retail developments. The approach offers more flexibility for developers in allowing traditionally narrowly focused large format retailing to offer a range of different services. The co-location with the district centre is expected to offer many benefits:

- The district centre is expected to include a supermarket; this will act as an anchor of sorts that attracts users and reinforces habit forming behaviours. As such, the supermarket will assist in attracting and retaining customers which in turn will increase dwell time in the centre and increases opportunistic shopping and potential spend.
- Bulky goods typically operate predominantly as weekend traders, by introducing diversity and traditional retail to the mix of uses, the precinct will allow for more 'round the clock activation. This in turn promotes habit forming behaviours, higher foot traffic and improves the attractiveness of the centre which can result in a much higher potential spend due to increased exposure.
- The co-location allows the development to be represented as a full line shopping destination (with all the associated benefits) while retaining its own identity as a bulky goods centre.
- These benefits are likely to assist in the ability to attract and retain higher quality retailers that can attract a wider catchment and bring greater value to the ACP area.

Refer to Appendix E – Retail Needs Analysis

3.2 District Centre Catchment Demographics

As a major regional town, Geraldton is expected to service a significant portion of the Midwest. Therefore, it is expected that consumers are likely to travel larger distances for their bulky goods needs.

The primary catchment includes approximately 80% of all dwellings in the main trade area and includes the major residential area of Geraldton. The primary catchment stretches approximately 20km to the north of the ACP area and approximately 50km east and south. The secondary catchment surrounds the primary catchment, and includes residents that reside up to 100km from ACP area.

A Retail Analysis prepared by Pracsys has identified that significant growth is expected to be concentrated in the northern corridor. As such, it is expected that retail demand will naturally gravitate toward nodes such as the Glenfield District Activity Centre.

The Glenfield District Activity Centre Plan is of particular interest to this ACP as it is anticipated that the Glenfield District Activity Centre area will have up to 100 dwellings.

The co-location with the Glenfield District Activity Centre to the north is expected to promote longer dwell times and weekly activation, which will facilitate the potential to attract more customers.

Refer to Appendix E – Retail Needs Analysis

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4. Land Use and Subdivision Requirements

An overall conceptual development plan has been prepared for the Lot 55 Chapman Road, Glenfield to assist in outlining a vision for development within the ACP area. Figure 7 – Indicative Development Concept provides an illustration sketch of the vision for the Precinct.

4.1 Design Rationale and Objectives

This ACP has been prepared to demonstrate the intended development pattern for the ACP area, as indicated in the Commercial Activity Centres Strategy as a ‘District Centre’. The objectives of this ACP are based on the following principles:

- Co-location of bulky goods showrooms and ancillary commercial along a regional road network;
- Orientate and position development to respond to the surrounding environment;
- Creation of employment and job opportunities for the local population;
- To service the developing northern corridor of Geraldton with showroom development;
- Orientate development to take advantage of the Glenfield District Activity Centre to the north;
- Provide for logical connections of pathways and road access; and
- Ensure that appropriate buffers are identified to avoid conflict between sensitive land uses.

4.2 Activity Centre Principles

While the ACP area is not specifically identified as an activity centre within SPP4.2, the ACP area is identified as being within a District Centre pursuant to the City of Greater Geraldton Commercial Activity Centres Strategy. In this regard, this ACP is to take into account the relevant planning principles set out in State planning Policy 4.2 Activity Centres for Perth and Peel, and Liveable Neighbourhoods (Element 7 – Activity Centres).

The vision for this Activity Centre Plan is based on the following objectives:

- Distribute activity centres to meet different levels of community need and enable employment, goods and services to be accessed efficiently and equitably by the community;
- Apply the activity centre hierarchy as part of a long-term and integrated approach by public authorities and private stakeholders to the development of economic and social infrastructure;
- Plan activity centres to support a wide range of retail and commercial premises and promote a competitive retail and commercial market;
- Increase the range of employment in activity centres and contribute to the achievement of sub-regional employment self-sufficiency targets;
- Increase the density and diversity of housing in and around activity centres to improve land efficiency, housing variety and support centre facilities;
- Ensure activity centres provide sufficient development intensity and land use mix to support high-frequency public transport;
- Maximise access to activity centres by walking, cycling and public transport while reducing private car trips;

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SITE SUMMARY	
SITE AREA	12.2397ha
Bulky Goods Showroom	32,040m ² GFA
Service Station	120m ² GFA
Liquor Store	1,500m ² GFA
TOTAL GFA	33,660m ² GFA
TOTAL BAYS REQUIRED	719 bays
TOTAL BAYS PROVIDED	1323 bays

CITY OF GREATER GERALDTON PARKING REQ.	
Bulky Goods Showroom	1 bay per 50m ² GFA
Service Station	1 bay per 50m ² GFA
Liquor Store	1 bay per 20m ² GFA

LOT SUMMARY	
LOT 1	
LOT AREA	0.3564ha
Bulky Goods Showroom	240m ² GFA
Service Station	120m ² GFA
TOTAL GFA	360m ² GFA
TOTAL BAYS REQUIRED	8 bays
TOTAL BAYS PROVIDED	57 bays

LOT 2	
LOT AREA	3.9819ha
Bulky Goods Showroom	8,300m ² GFA
TOTAL GFA	8,300m ² GFA
TOTAL BAYS REQUIRED	166 bays
TOTAL BAYS PROVIDED	400 bays

LOT 3	
LOT AREA	7.3093ha
Bulky Goods Showroom	23,500m ² GFA
TOTAL GFA	23,500m ² GFA
TOTAL BAYS REQUIRED	470 bays
TOTAL BAYS PROVIDED	746 bays

LOT 4	
LOT AREA	0.6972ha
Liquor Store	1,500m ² GFA
TOTAL GFA	1,500m ² GFA
TOTAL BAYS REQUIRED	75 bays
TOTAL BAYS PROVIDED	120 bays

LEGEND

- Site Boundary
- Existing Cadastre
- Existing Contours (2m)
- Indicative Retaining Wall Location
- Vegetation Screening
- Proposed Lot Boundary

- SH Bulky Goods Showroom
- LQ Liquor Store
- SS Service Station
- Pedestrian Route
- Parking Bays
- Road

Figure 7. Indicative Development Concept

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- Plan activity centre development around a legible street network and quality public spaces; and
- Concentrate activities, particularly those that generate high numbers of trips, within activity centres.

4.3 Staging and Subdivision

The development of the Activity Centre Plan area is proposed to be implemented in stages due to the size of the Activity Centre Plan area and the commercial nature of the future land uses. The staging in terms of timing and composition will be dependent upon a number of factors including market demand and servicing and infrastructure considerations.

Staging of road connections and accessways is permitted with new public roads to be extended as required to service staged development.

The concept plan that has been prepared to inform this ACP is predicated on a four-lot subdivision, however this is indicative only, and the ultimate subdivision may yield more or less lots. A minimum lot size of 2,500 m² is proposed for lots within the ACP area, which is considered the minimum lot size required to support the type of land use and development envisaged for the ACP area.

4.4 Land Use

LPS 1 stipulates that development and use of land within the 'Urban Development' zone is to be in accordance with the ACP.

Part 1 of this ACP states that the land use permissibility within the ACP area shall be in accordance with the zones and reserves designated under the ACP as if the zones and reserves were incorporated into the Scheme.

This ACP designates a 'Service Commercial' zone over the ACP area. The ACP, once adopted, will facilitate the development of primarily "Bulky Goods Showroom", supported by complementary land uses that are compatible with the Water Corporation WWTP buffer, as noted in Section 2.8.

Pursuant to LPS 1, a 'Bulky Goods Showroom' use is defined as a premises:

- Used to sell by retail any of the goods and accessories of the following types that are principally used for domestic purposes:

- automotive parts and accessories;*
- camping, outdoor and recreation goods;*
- electric light fittings;*
- animal supplies including equestrian and pet goods;*
- floor and window coverings;*
- furniture, bedding, furnishings, fabrics, manchester and homewares;*
- household appliances, electrical goods and home entertainment goods;*
- party supplies;*
- office equipment and supplies;*
- babies' and children's goods, including play equipment and accessories;*
- sporting, cycling, leisure, fitness goods and accessories;*
- swimming pools*

or

- used to sell by retail goods and accessories if:
 - a large area is required for the handling, display or storage of the goods; or*
 - vehicular access is required for the premises for the purpose of collection of purchased goods.*

A Bulky Goods Showroom is a 'D' use in the Service Commercial zone pursuant to LPS 1. However, given that the ACP area is located within SCA1, the land use permissibility of a Bulky Goods Showroom use is to be determined by the City with regard to:

- Water Corporation's advice in relation to compatible and beneficial land uses for buffer;
- Water Corporation's Land Use Compatibility Matrix; and
- The potential odour impact of the wastewater treatment plant and whether the proposal is compatible with the existing and proposed future use of the plant.

Consultation was previously undertaken with the Water Corporation who has confirmed that odour emissions has the potential to increase by up to two weeks after high rainfall events. This scenario is considered to occur on a low frequency basis. However, non-sensitive land uses such as Bulky Goods Showroom, which are typically

located in industrial estates an areas of relatively constrained land, which also typically involve the employment of part time staff and attract customers who visit the premises for only short periods, is considered to be a compatible use within the odour buffer.

Furthermore, field observations and wind direction frequency analysis indicates a low probability of odour impacts at the ACP area from normal operation of the GNWWTP. The field observations indicated that the levels of odour detected on the ACP area are predicted to be well below Water Corporation's 5 OU criterion requirement for establishment of buffer zones around

WWTPs (Figure 6). The Water Corporation criterion is set for a 1 hour average, which means higher concentrations can be considered appropriate for short duration impacts as observed from the field observations. In this instance, it is considered that there is provision for non-sensitive land uses to be established over the ACP area,, being zoned Service Commercial, as justified below.

Table 5 below is a list of potential land uses which are considered to be compatible, as assessed against Water Corporations' LUCM and compares this with the range of uses permissible within the Service Commercial zone of LPS 1.

Table 5 – Odour Buffer Land Use Permissibility Table

Table 5: Compatible Land Use Table – Service Commercial Zone			
Land Use	Water Corporation Permissibility	LPS1 Permissibility	Proposed response within ACP Area
Amusement Parlour	X	Use Not Listed	Not permitted within ACP Area.
Bulky Goods Showroom	Use Not Listed	D	Bulky goods showroom uses are typically large format land uses that are intended to be accommodated in areas on the periphery of an activity centre, such as the ACP location. A bulky goods showroom use is highly consistent with the objectives of the Service Commercial zone in that they often require large lots and good vehicular access. The intent of the Service Commercial zone is to accommodate wholesale sales, showrooms, trades and associated service uses. Bulky goods showroom uses are typically not sensitive to odour buffers as they can often accommodate their own odour generating uses such as supply of garden products and pet supplies, for instance. They are typically low employment generating land uses and with a majority of employees consisting of part time positions, meaning that employees will not be exposed to long periods of odour associated with the risk of intermittent odour associated with the WWTP. It is therefore considered appropriate that a Bulky Goods Showroom Use be listed as a discretionary use within the ACP area, with approval to be at the discretion of the relevant determining authority.
Car Park	P	D	Land use is compatible within Water Corporation buffer.
Child Care Premises	X	D	Not permitted within ACP area.
Civic Use	X	D	Not permitted within ACP area.
Club Premises	X	D	Not permitted within ACP area.
Convenience Store	X	D	Not permitted within ACP area.
Consulting Rooms	X	D	Not permitted within ACP area.
Community Purpose	X	D	Not permitted within ACP area.
Club Premises	X	D	Not permitted within ACP area.
Dry Cleaning Premises / Laundromat	Use Not Listed	D	I dry cleaning premises or laundromat is a low intensity and low employment generating land use that will generate low levels of customer patronage. It is a discretionary land use that is compatible with the objectives of the Service Commercial zone. On this basis, it is considered that a dry cleaning premises or laundromat is a land use that is compatible with the odour buffer associated with the WWTP.
Exhibition Centre	X	D	Not permitted within ACP area.
Fast Food Outlet	X	D	Not permitted within ACP area.

Table 5: Compatible Land Use Table – Service Commercial Zone			
Land Use	Water Corporation Permissibility	LPS1 Permissibility	Proposed response within ACP Area
Fuel Depot	P	X	Not permitted within ACP area.
Funeral Parlor	X	D	Not permitted within ACP area.
Garden Centre	Use Not Listed	D	It is considered that a Garden Centre is a compatible land use within the WWTP odour buffer as a Garden Centre typically generates its own low levels of odour as a result of storage of manure and soil improvers. It is therefore not likely that a Garden Centre operator or its customers would raise a complaint in relation to intermittent odour generated by the WWTP. It is considered that a Garden Centre is a use that is not sensitive to the intermittent odour generated by the WWTP and may be permitted at the discretion of the relevant determining authority.
Hotel	X	D	Not permitted within ACP area.
Industry – Light	D	D	This use is considered to be compatible with the odour buffer and land use and development will be at the discretion of the relevant decision making authority.
Industry - Service	D	Use Not Listed	This use is considered to be compatible with the odour buffer and land use and development will be at the discretion of the relevant decision making authority and is to be assessed as a 'use not listed'.
Liquor Store	Use Not Listed	A	As this is a non-food related retail use, involving the sale of bottled alcohol and other drinks to be consumed off-site, it is considered a compatible use with the odour buffer. Customers are unlikely to spend long within the ACP area and therefore there is limited risk of adverse exposure to the nuisance of odour generated intermittently by the WWTP. Approval will be at the discretion of the decision-making authority following advertising and referral of the application to the Water Corporation and other stakeholders.
Machinery Sales	Use Not Listed	D	A machinery sales use is typically a low employment generating land use with low volume of customers. Therefore any odour impacts generated by the WWTP are likely to have a minimal impact on the operation of a machinery sales use. It is also considered unlikely that a machinery sales operator or customers would raise formal complaints in relation to the intermittent odour generated by the WWTP. It is considered that a machinery sales use is a use that is not sensitive to the intermittent odour generated by the WWTP and may be permitted at the discretion of the relevant determining authority.
Market	X	D	Not permitted within ACP area.
Medical Centre	X	D	Not permitted within ACP area.
Motel	X	D	Not permitted within ACP area.
Motor Vehicle, Boat or Caravan Sales	X	D	A motor vehicle, boat or caravan sales use is typically a low employment generating land use with low volume of customers. Therefore any odour impacts generated by the WWTP are likely to have a minimal impact on the operation of a sales centre. It is also considered unlikely that a sales centre operator or customers would raise formal complaints in relation to the intermittent odour generated by the WWTP. It is considered that a motor vehicle, boat or caravan sales use is a use that is not sensitive to the intermittent odour generated by the WWTP and may be permitted at the discretion of the relevant determining authority.
Motor Vehicle Wash	P	D	This use is considered to be compatible with the odour buffer and land use and development will be at the discretion of the relevant decision making authority.
Motor Vehicle Repair	P	D	Land use is considered to be compatible with the odour buffer and may be permitted at the discretion of the relevant determining authority.

Table 5: Compatible Land Use Table – Service Commercial Zone			
Land Use	Water Corporation Permissibility	LPS1 Permissibility	Proposed response within ACP Area
Office	X	D	Not permitted within ACP area.
Place of Worship	X	A	Not permitted within ACP area.
Reception Centre	X	D	Not permitted within ACP area.
Recreation - Private	X	D	Not permitted within ACP area.
Restaurant / Cafe	X	D	Not permitted within ACP area.
Service Station	X	D	A service station use is considered to be compatible with the WWTP odour buffer as a Service Station use is a non-sensitive land use that generates its own odours in its immediate vicinity. Customers will not be exposed to potential odour issues for long periods, as they will arrive by car, fuel up pay and then leave shortly after. It is considered that a proposed service station is in accordance with the objectives of the Service Commercial zone, in that it requires good vehicular access and a comparatively large land area, will provide an important fueling service to passing trade associated with the Glenfield District Centre and is located away from existing residential areas.
Shop	X	D	Not permitted within ACP area.
Showroom	X	D	Permitted at the discretion of the determining authority. Refer to justification contained against 'Bulky Goods Showroom'.
Supermarket	Use Not Listed	D	Not permitted within ACP area.
Tavern	X	A	Not permitted within ACP area.
Telecommunications Infrastructure	P	D	Land use is considered to be compatible with the odour buffer and may be permitted at the discretion of the relevant determining authority.
Trade Supplies	Use Not Listed	D	Land use is considered to be similar in nature to Bulky Goods Showroom and Showroom and may be permitted at the discretion of the relevant determining authority for reasons provided in relation to 'Bulky Goods Showroom'.
Transport Depot	Use Not Listed	D	A Transport Depot involves the storage of vehicles and is a low employment generating warehouse and does not require access by the general public. It is therefore considered that a Transport Depot use is not sensitive to the WWTP odour buffer and may be permitted at the discretion of the relevant determining authority.
Veterinary Centre	D	D	A Veterinary Centre is typically a low employment generating land use with low volume of customers. Therefore any odour impacts generated by the WWTP are likely to have a minimal impact on the operation of a veterinary centre. It is also considered unlikely that a veterinary centre operator or customers would raise formal complaints in relation to the intermittent odour generated by the WWTP. It is considered that a Veterinary Centre is a use that is not sensitive to the intermittent odour generated by the WWTP and may be permitted at the discretion of the relevant determining authority.
Warehouse / Storage	P	D	A warehouse involves the storage of goods and is a low employment generating warehouse and does not require access by the general public. It is therefore considered that a warehouse is not a sensitive land use in relation to the WWTP buffer and may be permitted at the discretion of the relevant determining authority.

Refer to Appendix B – Environmental Assessment and Management Strategy

4.5 Bulky Goods Retail Needs Analysis

The Bulky Goods Retail Needs Analysis has been prepared by Pracsys to test the market potential for bulky goods development within the catchment of the ACP Area.

The analysis assumes that potentially 27,880 sqm of other retail floorspace could be accommodated within the ACP area.

The analysis estimated floor space supply and retail demand for the catchment of the ACP area. Based on this the future expenditure was calculated for bulky goods. Assuming completion of development over the ACP Area in 2018, the floor space productivity is estimated to be close to \$3,100/m² before rising to \$3,300/m² upon the forecast completion of development of Lot 9000 in 2020. This level of turnover in 2018 represents an acceptable and profitable trading level for a rural bulky goods development.

The positive impact that is expected when the district centre becomes operational further strengthens the case for the development due to their complimentary natures.

Refer to Appendix E – Retail Needs Analysis

4.6 Movement Networks

The movement of people and goods is essential to maintain a connected and accessible community. In this regard, it is important to develop a street network that not only provides access for vehicles and public transport, but also specifically aims to attract a high level of use by pedestrians, cyclists and the disabled.

Figure 8 below illustrates an indicative perspective of the type of road and footpath layout which is suggested to be developed within the ACP area.

A Transport Assessment (TA) was prepared by Transcore to analyse the existing and proposed road network, including the overall performance, in the context of the ACP.

Refer to Appendix C – Transport Assessment

4.6.1 Road Network

Vehicle access is provided to the ACP area via Sunset Boulevard to the north, and a 23m wide road reserve 'Road 1' centrally, through the site, as shown on Figure 11.

A proposed single lane roundabout at the intersection of Chapman Road, Hagan Road, and Road 1, is expected to operate satisfactorily during peak hours at the outset of the development and the year 2031.

The existing standard of Chapman Road is capable to accommodate the development traffic at the outset of the proposed development. Chapman Road is identified as Integrator B road in the short to medium term and in the long term, is proposed to be widened to two lanes in each direction, including an upgrade to an Integrator 'A' road.

The local road network also provides connection into the lot to the north to allow any future development of this site to utilise the local road connections proposed in this ACP.

All proposed roads are to be constructed to the satisfaction of the City of Greater Geraldton.

A Transport Assessment (TA) provided at Appendix C demonstrates that future subdivision and development over the ACP area is capable of accommodating future traffic volumes which will not prejudice future development of the Glenfield District Activity Centre to the north.

In addition, the objectives of the Service Commercial Zone as defined in the City's LPS1 provide that Service Commercial zones are to:

- "accommodate commercial activities which, because of the nature of the business, require good vehicular access and/or large sites"; and
- "provide for a range of wholesale sales, showrooms, trade and services which, by reason of their scale, character, operational or land requirements, are not generally appropriate in, or cannot conveniently or economically be accommodated in, the central area, shops and offices or industrial zones".



Figure 8. Indicative perspective of the landscaping incorporated into the existing ridge



Figure 9. Indicative perspective of the relationship between the road network and footpaths.

With regard to the above, this ACP and the proposed road network are considered to adequately address the intent and objectives of the Service Commercial zone pursuant to the Regulations.

4.6.2 Pedestrian Movement

In response to providing accessible pedestrian networks, this ACP proposes a network of shared paths and footpaths throughout the ACP area. Figure 9 below illustrates an indicative perspective of the relationship between the road network and footpaths.

The TA identifies that this network will provide accessibility and permeability for pedestrians and cyclists within the ACP area and facilitate connections to adjacent developments and the surrounding road network.

4.6.3 Public Transport

The ACP area is accessible by public transport, with the closest existing bus route to the ACP area being Bus Route No. 850, which traverses along Chapman Road and terminates at Drummond Cove. The closest bus stop is about 170m north of Hagan Road.

This ACP does not propose to extend upon the existing public transport infrastructure.

Refer to Appendix C - Transport Assessment

4.7 Car Parking

A total of 1,323 parking bays are proposed for the ACP area which meets and exceeds the City of Greater Geraldton parking requirement. Access and egress to the ACP area is through two roundabout intersections on Chapman Road which is in line with the proposed Master Plan for the Glenfield District Activity Centre.

The proposed development concept which has informed the ACP has been assessed against the City's minimum car parking requirements contained within LPS1 in Table 6.

Table 6 – Car Parking Requirements

Land Use Category	Bays Required	Bays Provided
Bulky Goods Showroom – 1 per 50m ²	641	1193
Liquor Store - 1 per 20m ²	75	120
Service Station - 1 per 50m ²	3	10
Total	719	1323

As the above table demonstrates, there will be a surplus of 604 car parking bays, based on the Indicative Concept Plan (Figure 11). As the number of car parking bays is indicative, car parking calculations will be determined upon formal application for development approval.

4.8 Water Management

An Urban Water Management Plan will be prepared prior to subdivision and development to confirm water management arrangements for the ACP area.

The City has confirmed that the same principals of the approved LWMS for the Glenfield District Activity Centre will apply to Lot 55 Chapman Road. The approved LWMS indicates a conservative infiltration rate for the Glenfield District Activity Centre area to the north of 15m/day and suggests a similar rate of infiltration for Lot 55 Chapman Road.

An Environmental Assessment and Management Strategy (EAMS) provided in Appendix B suggests that development over the ACP area has the potential to impact groundwater quality though infiltration of stormwater that may contain pollutants such as nutrients and hydrocarbons.

With regard to the above, an Urban Water Management Plan (UWMP) is to be prepared at the Development Application Stage to manage potential impacts to groundwater and ensure that finished levels are adequate to prevent flooding.

Refer to Appendix A – Servicing Opportunities and Constraints Report

Refer to Appendix B – Environmental Assessment and Management Strategy

4.9 Landscaping

Landscaping is integral to ensure that development offers an enhanced level of amenity and encourages the biological process within the natural ecosystems, and be incorporated into the urban water management functions as a solution to manage stormwater, improve water quality and reduce run-off. Landscaping can also be used to integrate development into the natural environment.

This ACP is to contribute to the local biodiversity through the use of native vegetation. Non-native species can be considered if they are easy to maintain and contribute to the amenity of the streetscape.

Hard landscaping such as retaining walls, street furniture, public art and paving is to contribute to providing an attractive and safe environment.

Water, particularly scheme water, undergoes an intensive process of collection, processing and distribution to be made available for public consumption. As such, it is important to integrate stormwater treatment into the landscape by incorporating multi-use corridors that maximise the visual and recreational amenity of developments.

Furthermore, the ACP area comprises a ridgeline running north-south through the middle of the site at approximately RL 22m. This contour falls sharply to the east towards Chapman Road to an approximate level of RL 4.0m. The western portion of the ACP area varies in level from RL 4.0m in the north west corner to RL 14.0m in the south western corner of the site. This variation in height is incorporated into both hard and soft landscaping through the middle of the ACP area. As a result, the existing ground level over the ACP area will be separated to accommodate intended use and access as illustrated in Figure 10.

4.10 Activity Centre and Employment

The ACP area is located approximately 9.3 kilometres north of the Geraldton City Centre, which provides a full range of economic and community services for the surrounding area and is a significant employment node within the Greater Geraldton region.

There are no District Centres currently located within the Greater Geraldton region, however there are several

Neighbourhood Centres which are located along Chapman Road.

The nearest Neighbourhood Centre is located approximately three (3) kilometres south of the ACP area at Sunset Shopping Plaza, located the corner of Chapman Valley Road and Chapman Road. Neighbourhood Centres are important local community focal points that help to provide for the main daily to weekly household shopping and community needs. They are also a focus for medium-density housing. There are also many smaller local centres such as delicatessens and convenience stores that provide for the day-to-day needs of local communities.

4.11 Utilities and Servicing

An Opportunities and Constraints Report has been undertaken by Pritchard Francis in relation to the proposed ACP and this report is contained at Appendix A, The recommendations of this report are summarised in the following sub sections.

4.11.1 Water Supply

Liaison with the Water Corporation has determined that the ACP area is currently serviced with a 100mm wide main, however it is not considered to provide adequate flows and pressures on the basis of the size of the ACP area.

An existing 300mm wide distribution main is located at the intersection of Chapman Road and Chapman Valley Road which is expected to be extended up past the development in mid too late 2020. Although this extension is considered to provide suitable service to the ACP area, any earlier trigger for extension of this main is to be at the expense of the developer.

Should development proceed prior to the installation of the distribution main above, it is recommended that the existing 150mm wide main be extended 2.5km from the south of the ACP area from Moorings Loop, with a cross connection into the existing 100mm wide main in Corallina Quays which leads up to the ACP area.

Water Corporation has confirmed that the extension of a 150mm wide main is an acceptable option, in lieu of extending the 300mm wide distribution main.

Refer to Appendix A – Servicing Opportunities and Constraints Report



Figure 10. Indicative perspective of development along Chapman Road

4.11.2 Sewerage Reticulation

Liaison with Water Corporation has determined that there is no existing sewer reticulation gravity main fronting the ACP area. Currently, there is an existing 200mm sewer pressure main along Chapman Road and which follows Sunset Boulevard around the edge of the ACP area, connecting in to the Water Corporation's existing Geraldton North Wastewater Treatment Plant to the west of the ACP area.

The ACP area is located within the Waggrakine Sewer District as a catchment for a future Wastewater Pumping Station (WWPS). However, Water Corporation has confirmed that there are no plans to construct this WWPS and any consideration to do so will require substantial development within the area.

Based on the current development options of subdivision this ACP, sewerage reticulation can be achieved through the following options:

- A Private WWPS and pressure main discharging into the existing Wastewater Treatment Plant to the west of the ACP area for each proposed lot (or a variation of this arrangement);
- A temporary WWPS built to Water Corporation Standards;
- On site treatment and disposal of wastewater through the use of ATU's; and
- Septic tanks.

Each servicing option could be considered however a final determination for servicing each lot would be based on the individual costs and constraints for each proposed lot.

Refer to Appendix A – Servicing Opportunities and Constraints Report

4.11.3 Road networks

Liaison with the City of Greater Geraldton has determined that the construction of Sunset Boulevard will be required to loop around the western edge of the ACP area and connect into the proposed 'Road 1' through to Hagen Road.

The construction of Sunset Boulevard is to be in accordance with Liveable Neighbourhoods standards and will be wholly at the developer's expense should they be the first to proceed with the development. However, the initial developer may be able to claim shared costs from the later developer at a time in the future.

The City has also noted that the developer will be required to upgrade Chapman Road completely though they have yet to confirm the exact requirements for the upgrade. The upgrade of Chapman Road is to be funded by the developer.

Refer to Appendix A – Servicing Opportunities and Constraints Report

4.11.4 Power Supply

Western Power has advised the following:

- The ACP area is within an 11KV network area and is located approximately 3.5km from Chapman Zone Substation (CPN).
- Two 11KV feeders (CPN316 and CPN336) run parallel to the ACP area along Chapman Road.
- This area is supplied by CPN 316.0 Waggrakine HV feeder circuit.
- There is no existing supply to the ACP area.

With regard to the above, there is spare capacity on both HV feeders running past the development. Western Power recommends the installation of 2x substation (2+2 RMU and 2MVA transformer), the installation of 4x HV cable (approx. 820m), the installation of 2x LV cable (approx. 140m), 2x HV joint, 3x cable pole termination, the replacement of 2x pole, the removal of a bay of HV conductors and the installation of 1x pillar.

The above works are to be installed at the expense of the developer.

Refer to Appendix A – Servicing Opportunities and Constraints Report

4.11.5 Gas

Liaison with ATCO Gas has determined that ACP area comprises existing gas reticulation of a medium pressure main (225mm, 70kPa) along on the west side of Chapman Road from which a connection can be extended into the ACP area.

ATCO Gas has confirmed the ACP area can ultimately be serviced with a natural gas reticulation however the maximum pressure available to the ACP area is 10kPa.

Refer to Appendix A – Servicing Opportunities and Constraints Report

4.11.6 Communications

Liaison with 3E Consulting Engineers has advised the following:

- Broadband and voice communications to the area has been converted to NBN Co Fixed Line.
- Telstra cable capacity to the area is limited to 70 pair and may not be sufficient to service new development. if new NBN Co copper based services were required.
- Telstra fibre is available at the intersection of Hagan Road and Chapman Road.
- Design for telecommunications to the new National Broadband Network (NBN) specifications will be required. Independent consultants can design the telecommunications to NBN specifications.

Refer to Appendix A – Servicing Opportunities and Constraints Report

4.12 Bushfire Management

A Bushfire Hazard Level and BAL Contour Assessment recommends that increased building construction standards (i.e. BALs) responds to the bushfire risk imposed by classified vegetation to the north, south, east and west of the ACP area, in accordance with SPP 3.7 requirements.

The final BALs for any proposed buildings on the ACP area are to be determined once the location and design of future buildings are confirmed. The BMP provided at the development application stage will detail these findings.

The recommended heightened building construction standards (i.e. BALs) will ensure the affected development is built to the engineering and materiality specifications appropriate to the level of bushfire attack that may be received at the building interface. It is expected that proposed bulky goods developments will meet the intent of SPP 3.7 through ensuring adequate separation from bushfire hazards in conjunction with the implementation of heightened construction standards applied to future buildings.

Refer to Appendix D – Bushfire Management Plan



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Bulky Goods Showroom	32,040m ² GFA
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TOTAL BAYS PROVIDED	1323 bays

CITY OF GREATER GERALDTON PARKING REQ.	
Bulky Goods Showroom	1 bay per 50m ² GFA
Service Station	1 bay per 50m ² GFA
Liquor Store	1 bay per 20m ² GFA

LOT SUMMARY	
LOT 1	
LOT AREA	0.3564ha
Bulky Goods Showroom	240m ² GFA
Service Station	120m ² GFA
TOTAL GFA	360m ² GFA
TOTAL BAYS REQUIRED	8 bays
TOTAL BAYS PROVIDED	57 bays

LOT 2	
LOT AREA	3.9819ha
Bulky Goods Showroom	8,300m ² GFA
TOTAL GFA	8,300m ² GFA
TOTAL BAYS REQUIRED	166 bays
TOTAL BAYS PROVIDED	400 bays

LOT 3	
LOT AREA	7.3093ha
Bulky Goods Showroom	23,500m ² GFA
TOTAL GFA	23,500m ² GFA
TOTAL BAYS REQUIRED	470 bays
TOTAL BAYS PROVIDED	746 bays

LOT 4	
LOT AREA	0.6972ha
Liquor Store	1,500m ² GFA
TOTAL GFA	1,500m ² GFA
TOTAL BAYS REQUIRED	75 bays
TOTAL BAYS PROVIDED	120 bays

LEGEND

- Site Boundary
- Existing Cadastre
- Existing Contours (2m)
- Indicative Retaining Wall Location
- Vegetation Screening
- Proposed Lot Boundary

- SH Bulky Goods Showroom
- LQ Liquor Store
- SS Service Station
- Pedestrian Route
- Parking Bays
- Road

Figure 11. Indicative Development Concept

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5. Indicative Development Concept

An Indicative Development Concept (Figure 11) has been prepared for the ACP area which outlines one possible approach to developing the ACP area in line with this ACP.

It is envisaged that development will comprise a range of Service Commercial uses including, but not limited to, Bulky Goods Showroom, Liquor Store and Service Station Store which is to be located on four separate lots, subject to future subdivision. Specifically, the Concept Plan envisages the development of the following within the ACP area:

- Bulky Goods Showroom with a potential total gross floor area of 32,040m²;
- Liquor Store with an indicative gross floor area of 1,500m²;
- Service Station with an indicative total gross floor area of 120m²;
- 719 car parking bays to be predominately located Internally;
- Provision for logical connections of pathways and road access;
- Localised drainage overland flow paths to manage storm water discharge in accordance with water sensitive design principles; and
- Provision of large lots to accommodate development flexibility whilst upholding good urban design principles.

Figure 11 has been prepared to address the existing environmental constraints, specifically with regard to the north-south ridgeline, and the WWTP to the southwest. The existing ridgeline is to be adequately addressed through the provision of cut and fill excavation works, where required, to provide a hardstand car parking area and associated hard and soft landscaping which includes an indicative retaining wall. Where a building is to be developed over the ridgeline (specifically SH6, SH7, SH8, SH12 and SH13), the natural ground level is to be adequately graded.

The ACP area is to comprise internally located car parking areas to service the future development. The internal location will minimise the overall dominance of car parking on the external road network, and ensure that the street frontages are presented with active frontages, specifically Chapman Road and Sunset Boulevard.

It is imperative for the design to address the Glenfield District Activity Centre to the north. Development on the ACP area is to be oriented to complement any compatible land uses and infrastructure to the north of the ACP area, and are to enhance the overall character of the Sunset Boulevard Streetscape. Furthermore, development to the eastern balance of the ACP area, being located adjacent to Chapman Road, is to ensure that it does not have any adverse impact on the existing residential development opposite Chapman Road.

Access to the ACP area is well afforded via Chapman Road, and via neighbourhood connector roads which provide direct access to the Glenfield District Activity Centre. Road 01, 02 and 03 provide local road access through the structure plan area providing access to proposed car parking areas and future tenancies.

Landscaping is to be provided along the periphery of the ACP area to the south and to the west with the intent to reduce the impact of prevailing wind from the Indian Ocean to the west. Notwithstanding, landscaping is also to provide screening to those adjoining properties to south and to the west of the ACP area, noting that the rear of SH1 to SH6 face the lot boundary, as indicated on Figure 11 on the previous page.

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6. Conclusion

This ACP has been prepared under Clause 3.13 of the City of Greater Geraldton Local Planning Scheme No. 1 in order to facilitate the orderly and proper development of Lot 55 (827) Chapman Road, Glenfield. Notable features of this ACP include:

- Land use permissibility in accordance with the 'Service Commercial' zone of LPS1, with additional land use restrictions imposed to ensure land use compatibility with the WWTP buffer;
- Bulky Goods Showroom with an indicative gross floor area of 32,040m²;
- Liquor Store with an indicative gross floor area of 1,500m²;
- Service Station with an indicative gross floor area of 120m²;
- 719 car parking bays to be predominately located Internally;
- Orientation of development to address Sunset Boulevard, and to take advantage of the adjoining Glenfield Activity Centre to the north;
- Landscaping and vegetative screening to the south and to the west of the ACP area;
- Provision for logical connections of pathways and road access;
- Peripheral building protection zones for fire management to the west and north of the dwellings;
- Localised drainage overland flow paths to manage storm water discharge in accordance with water sensitive design principles; and
- Provision of large lots to accommodate development flexibility whilst upholding good urban design principles.

This Activity Centre Plan has been prepared in conjunction with the preparation of technical reports referred to above and illustrates the appropriate development potential and land capability of the ACP area.

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