Development Plan Amendment

By the Council

Gawler (CT)

Commercial and Rural Areas Development Plan Amendment

Explanatory Statement and Analysis

For Consultation (September 2017)

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Have Your Say

This Development Plan Amendment (DPA) will be available for inspection by the public at the Customer Service Centre located at 43 High Street Gawler East and the Evanston Gardens Branch Library located at 65 Angle Vale Road, Evanston Gardens from 26 September 2017 until 21 November 2017. During this time anyone may make a written submission about any of the changes the DPA is proposing.

Submissions should be marked “Commercial and Rural Areas DPA – Submission” and addressed to the Chief Executive Officer and sent either via mail to Town of Gawler, PO Box 130, Gawler, SA, 5118, or email to council@gawler.sa.gov.au

Submissions should indicate whether the author wishes to speak at a public meeting about the DPA. If no-one requests to be heard, no public meeting will be held.

If requested, a meeting will be held on 30 November 2017 at 7pm, at the Gawler Administration Centre, 43 High Street Gawler East.

Explanatory Statement

Introduction

The *Development Act 1993* provides the legislative framework for undertaking amendments to a Development Plan. The *Development Act 1993* allows either the relevant council or, under prescribed circumstances, the Minister responsible for the administration of the *Development Act 1993 (*the Minister*),* to amend a Development Plan.

Before amending a Development Plan, a council must first reach agreement with the Minister regarding the range of issues the amendment will address. This is called a Statement of Intent. Once the Statement of Intent is agreed to, a Development Plan Amendment (DPA) (this document) is written, which explains what policy changes are being proposed and why, and how the amendment process will be conducted.

A DPA may include:

1. An Explanatory Statement (this section)
2. Analysis, which may include:
    a. Background information
    b. Investigations
    c. Recommended policy changes
    d. Statement of statutory compliance
3. References/Bibliography
4. Certification by Council's Chief Executive Officer
5. Appendices
6. The Amendment.

Need for the amendment

The land under consideration for rezoning as part of this DPA process is the site on the south-western corner of Main North and Gordon Roads at Kudla, (CT 6108/58 and a portion of CT 6108/56) (the Kudla site) and the site on the south-western corner of the intersection of Angle Vale Road and Jack Cooper Drive (CT5448/384) (the Evanston Gardens site).

The Peter Kittle Motor Company has expressed a strong desire to use the site at the corner of Main North and Gordon Roads for a car dealership and delivery centre to service the northern Adelaide population. As Adelaide continues to grow, the geographic centre of the City has commensurately moved north of the CBD, requiring additional services and facilities in the area.

The site has a history of commercial use and most recently was disposed of as a garden centre and supply outlet. Opposite this site to the east of Main North Road, there is another small cluster of commercial land uses including a paving supplier, motorcycles sales, a motor wreckers and sound system supplier. These are accessed off a service road and are within the Rural Zone.

Being located on the major Northern arterial road on the approach into the Town of Gawler, this site has very high levels of exposure and as such is an ideal location for a use such as that proposed by the Peter Kittle Motor Company.

Notwithstanding the previous land use, the current Rural Zone is relatively restrictive as to the types of land uses allowable on the site, with that proposed by the Peter Kittle Motor Company and many like it designated as non-complying.

Council appreciates the need for new job opportunities within the northern region, especially with the closure of the Holden plant and notes that this site is a potential option for the land use proposed (and thus rezoning) given its previously history for commercial uses. Its high exposure location and position on the very edge of the zone noting that to the north (east and west of the land), on the approach in to Gawler, the zone changes to Residential and the land uses envisaged turn more urban, means the State's requirement for increased employment opportunities can be achieved with minimal impact on the amenity of the area.

The Evanston Gardens site is currently within the Residential Zone and particularly Policy Area 4 – Evanston Gardens/Evanston South Residential and is located on the corner of Jack Cooper Drive and Angle Vale Road. It has previously been used by both the Country Fire Services and Council as a depot.

This parcel of land would be difficult to develop for residential land uses due to its size and location, being triangular in shape with extensive frontages along both Angle Vale Road and Jack Cooper Drive, which are arterial roads under the care and control of DPTI.

The draft Evanston Gardens DPA notes that this site is likely to be impacted by traffic noise. Given its elongated road frontage and narrow depth, as a standalone parcel this may well result in the proposed development turning its back on these roads thus providing a street frontage of solid fencing.

It is also possible that this site, even if amalgamated with adjoining land currently zoned deferred urban, will be required for noise attenuation measures for a residential land use. Conversely, the site's exposure, road frontages and location are all positive attributes for the use of the site as a commercial site which will buffer the residential land behind from noise.

In particular, the site is in close proximity to developing residential areas not well serviced with commercial facilities. In order to access such facilities, residents must cross the by-pass, which forms both a physical and psychological barrier.

Council has identified that this site would be suitably located to accommodate a modern petrol filling station with an associated small shop. This would provide access to petrol and convenience items to these otherwise relatively isolated residents.

To this end, the site could be excised from the Residential zone and changed to a zone that enables a use of the site that supports the neighbourhood and takes advantages of aspects of the site and its locality that would otherwise not be possible.

To this end, this DPA will investigate an appropriate alternative zone to enable commercial development on the two specific sites identified.

Statement of Intent

The Statement of Intent relating to this DPA was agreed to by the Minister on 13 September 2017.

The issues and investigations agreed to in the Statement of Intent have been undertaken and addressed.

Affected area

The area(s) affected by the proposed DPA is described as follows:

The Kudla site comprises 3283 Main North Road, Kudla (CT6108/58) and a small portion of the adjoining allotment (CT6108/56); and

The Evanston Gardens site (CT5448/384) on the corner of Angle Vale Road and Jack Cooper Drive, Evanston Garden within the Residential Zone, Policy Area 4 – Evanston Gardens/Evanston South Residential

The area affected by the proposed DPA is shown on the attached map:

Summary of proposed policy changes

The DPA proposes the following changes:

Council Wide

- No change

Zones and Policy Area

- Amend the Business Zone such that it is applicable to the two specific sites without compromising its applicability to the area shown on Fig B/1 and amend the list of non-complying land uses in the Business Zone.

Tables

- Amend Table Ga/4 to include specific provisions for Petrol Filling Stations and Showrooms.

Maps

- Amend various Development Plan maps to reflect the above proposed changes.

Legal requirements

Prior to the preparation of this DPA, council received advice from a person or persons holding prescribed qualifications pursuant to section 25(4) of the *Development Act 1993*.

The DPA has assessed the extent to which the proposed amendment:

- accords with the Planning Strategy
- accords with the Statement of Intent
- accords with other parts of Council's Development Plan
- complements the policies in Development Plans for adjoining areas
- accords with relevant infrastructure planning
- satisfies the requirements prescribed by the *Development Regulations 2008*.

Consultation

This DPA is now released for formal agency and public consultation. The following government agencies and organisations are to be formally consulted:

- Department for Communities and Social Inclusion;
- Country Fire Service;
- Department for Education and Child Development;
- Department of Environment, Water and Natural Resources;
- Department for Health and Ageing;
- Legal Services Commission;
- Metropolitan Fire Services;
- Department of Planning, Transport and Infrastructure;
- Department of the Premier and Cabinet;
- Department of Primary Industries and Regions;
- Department of the Treasury and Finance;
- SAPOL;
- Department of State Development;
- State Emergency Service;
- Environment Protection Authority;
- ElectraNet Pty Ltd;
- Epic Energy;

- SA Power Networks;
- APA Group;
- South East Australia Gas Pty Ltd;
- SA Water;
- Adelaide and Mount Lofty Ranges NRM Board;
- Council;
- DPTI (SSD, Planning and Office of the Coordinator General);
- SA Water;
- Department of Primary Industries;
- City of Playford;
- Light Regional Council;
- Service providers;
- RDA Barossa;
- Peter Kittle Motor Company;
- Member for Light;
- Member for Napier;
- Barossa Council;

All written and verbal, agency and public submissions made during the consultation phase will be recorded, considered, summarised and responses provided. Subsequent changes to the DPA may occur as a result of this consultation process.

Important Note for Agencies: This DPA includes modules from the State Planning Policy Library.

As the policy library was subject to agency consultation during its development, agencies are requested to comment only on the range and application of the modules selected and not on the actual policy content, except where that policy has been included as a local addition. Agencies are invited to comment on any additional issues (if relevant).

The final stage

When the council has considered the comments received and made any appropriate changes, a report on this (the *Summary of consultations and proposed amendments* report) will be sent to the Minister.

The Minister will then either approve (with or without changes) or refuse the DPA.

Analysis

1. Background

The Council has been approached with a request that it consider rezoning the Kudla site from Rural to a zoning that would enable the Peter Kittle Motor Company to establish a car dealership on the site.

Council appreciates the need to provide opportunities for employment, especially with the closure of the nearby Holden vehicle manufacturing plant.

The Kudla site has been used as a commercial property and is located in an area along Main North Road that has a mixture of other commercial land uses including non-rural related uses. The site is also at the extremities of the zone adjacent to both land zoned Residential and Open Space.

Notwithstanding the Council appreciates that this site is suitable for the purposes proposed, it nevertheless values the role the Rural Zone plays as a buffer to the balance of the metropolitan area.

The Council also has identified the Evanston Gardens site for rezoning. Council owns this land which is currently zoned Residential and is located at the intersection of Jack Cooper Drive and Angle Vale Road. It is located in proximity to growth areas that are as yet not well serviced with commercial facilities such as petrol stations and small convenience retail. As the previous land use was a Country Fire Services and Council depot, it is considered that its location and past use make it well suited to development for a low impact commercial land use and that it may be unsuitable for a sensitive use such as residential.

2. The strategic context and policy directions

2.1 Consistency with South Australia's Strategic Plan

South Australia's Strategic Plan outlines a medium to long-term vision for the whole of South Australia. It has two important, complementary roles. Firstly, it provides a framework for the activities of the South Australian Government, business and the entire South Australian community. Secondly, it is a means for tracking progress state-wide, with the targets acting as points of reference that can be assessed periodically.

The DPA supports the following targets of South Australia's Strategic Plan:

South Australia's Strategic Plan 2011	
Strategic Plan Objective/Targets	**Comment/Response**
33 Government Planning Decisions, South Australia leads the nation in timely decisions of Development Applications through to 2020.	By timely review of planning policy, decisions on Development Applications should be streamlined.
47 Jobs, increase employment by 2% each year to 2016	Although 2016 has passed, job creation and providing employment opportunities remain a priority for South Australia.
49 Unemployment, maintain equal or lower than the Australian average to 2020	Job creation and providing employment opportunities remain a priority for South Australia.

2.2 Consistency with the Planning Strategy

The Planning Strategy presents current State Government planning policy for development in South Australia. In particular, it seeks to guide and coordinate State Government activity in the construction and provision of services and infrastructure that influence the development of South Australia. It also indicates directions for future development to the community, the private sector and local government.

The following volumes of the Planning Strategy are relevant to this DPA:

2.2.1 The 30 Year Plan for Greater Adelaide (2017 update)

The DPA supports the policies of the Planning Strategy as follows:

Planning Strategy	DPA response
Policy	
Design Quality	
Health, wellbeing, and inclusion	
Policy 47 - Plan future suburbs and regenerate and renew existing ones to be healthy neighborhoods that include: • Access to local shops, community services and facilities. • Access to fresh food and food services	One site to be rezoned as part of this DPA is being rezoned to facilitate small scale business activity. It is likely that this will include a convenience shopping opportunity to be located in proximity to housing (and further housing growth areas) that presently has limited access to such a facility.
Economy and Jobs	
Policy 56 - Ensure there are suitable land supplies for the retail, commercial and industrial sectors.	This DPA rezones two strategic sites 'Business' to enable a broader range of land uses including some retail and commercial activities. This is very important in the context of northern Adelaide.

2.3 Consistency with other key strategic policy documents

2.3.1 Council's Strategic Directions Report

Recommendations from Council's Strategic Directions (Section 30) Report supporting the proposed DPA are as follows:

This DPA will contribute to a number of the projects in the Council's Strategic Directions report notably Project 1 – Rural Areas, Project 3 – Growth Management and Project 6 Evanston Gardens.

Whilst this DPA relates only to a portion of each of these larger projects, it nevertheless looks to rezone land to best support the existing and growing community by enabling the provision of additional access to services and facilities. It also looks to locate land uses having regard to the function and nature of transport corridors and optimise key high exposure locations and looks to whether or not specific uses interface appropriately with surrounding areas.

2.3.2 Gawler Community Plan 2014 - 2024

The Gawler Community Plan 2014-2024 is the overarching strategic plan for the Town of Gawler as it moves forward. This Plan establishes the Council's vision as being:

> *"A liveable Community – serving today's community for tomorrow"*

To attain this vision the Plan sets out five goals, each one supported by a number of objectives and strategies. The five goal areas, and the objectives and strategies most directly related to this DPA, are listed below:

- Create a clearly defined township, which is distinctively separate from our neighbouring peri-urban areas;
    - Development of peri-urban and regional town planning policies that ensure Gawler's built form provides a sense of distinction from metropolitan Adelaide; and
    - Ensure the views and vistas are maintained to provide an open landscape character through the provision of both open space and a buffer area, retaining Gawler's regional appearance and sense of arrival.
- Our Growth – Sustainable Growth Management
- Physical and social infrastructure to match population growth
    - Develop land use policy for Evanston South, Hillier and Kudla to build an attractive, accessible, integrated and resident friendly environment, supporting a range of housing, lifestyle, recreational and rural opportunities.
- Responsive to the local environment
- Economic Development – creating local economic activity, job opportunities and wealth creation.
- Our Leadership – A Strong Vibrant Community.

This DPA will propose planning policy that supports the attainment of the Council's goals and objectives and through this the Council's vision for the area.

2.3.3 Look North – A shared vision for Northern Adelaide

This Plan is a blueprint for economic planning in Northern Adelaide primarily focusing on areas south of Gawler including the Cities of Playford, Port Adelaide Enfield and Salisbury. Nonetheless, this Plan speaks generally of the need to provide for economic development and job creating activities in the northern areas. It also seeks to promote uses to support food production and the Virginia Horticultural Area and notes the Gawler East Collector Link Road. This DPA is consistent with this Plan.

2.3.4 Infrastructure planning

An Infrastructure Master Plan was prepared for the new southern urban areas in August 2006 in response to areas previously zoned Deferred Urban coming on stream to address land supply and growth. This Plan identified a number of interventions within the vicinity of the subject land. Specifically, this plan identified the signalisation of the Gordon Road/Tiver Road/Main North Road junction and the upgrade of Karbeethan Reserve, and a gateway Statement along Main North Road on the approach to Gawler.

The intersection upgrade, including signalisation, of Gordon Road/Tiver Road and Main North Road has been completed.

Karbeethan Reserve is an important space and is used for organised club sport. This Reserve is under lease to a community group 'Karbeethan Sporting Association Incorporated', which has obtained grants to assist with upgrades to the facility. Council is also the process of prepare a master Plan for the future redevelopment of Karbeethan Reserve.

The State Government has committed $55 million in the 2015/2016 budget for a Gawler East Link Road from Calton Road to Potts Road. Council has been working with the State Government and Developers to reach agreement on the roads alignment, classification, ownership and funding. As part of deliberations associated with the alignment of the Gawler East Link Road, Council has also expressed its desire for this road to extend to the Tiver/Main North Road intersection (via Bentley Road). Council is currently investigating the feasibility of this potential future extension.

Construction of the Gateway Statement is currently under way along Main North Road.

This DPA is not considered to impact any of the above infrastructure projects as it will not significantly intensify any land uses or residential populations.

The Development Plan Concept Plan Map Ga/1 (Overlay 1) Enlargement H also shows an electricity installation to be developed on part of the site on the corner of Gordon Road and Main North Road in the area to be rezoned. This rezoning will not provide any planning impediments to that infrastructure.

In summary, this DPA will promote appropriate job creating development along road corridors whilst ensuring the integrity of the rural area. There are no major infrastructure upgrades required to facilitate the development of either of the specific sites identified to be rezoned Business that would not be site specific and thus provided by the developer. This will include onsite stormwater management and site access.

Specifically, this DPA will also support the provision of open space in the form of the rural buffer that properly manages the interface between the metropolitan area and the township of Gawler.

There is no other infrastructure planning considered to be of relevance to this DPA.

2.3.5 Current Ministerial and Council DPAs

This DPA has taken into account the following Ministerial and Council DPAs which are currently being processed:

Council DPAs	Response/Comment
Gawler (CT) Evanston Gardens DPA	The Evanston Gardens DPA is not directly related to the proposed amendments in this Commercial and Rural Areas DPA, however it does relate to adjoining land and as a result Maps Ga/1 (Overlay 1) Enlargement H, Ga/8, Ga/16 and Figure Res 2 will need to be checked for consistency at such time each amendment is being finalised.
Gawler (CT) Gawler East Structure Plan DPA	The Gawler East Structure Plan DPA is not directly related to the proposed amendments as per this Commercial and Rural Areas DPA, however it does relate to adjoining land and as a result Maps Ga/1 (Overlay 1) Enlargement H will need to be checked for consistency at such time each amendment is being finalised.
Ministerial DPAs	**Response/Comment**
There are no publicly available Ministerial DPAs affecting this land	

2.3.6 Existing Ministerial Policy

This DPA proposes changes to the following, existing Ministerial policy:

Existing Ministerial Policy	Proposed Change and Justification
N/A	

3. Investigations

3.1 Investigations undertaken prior to the SOI

Jensen Planning + Design was engaged to undertake investigations into Land Use and Infrastructure over land comprising one portion of the study area. This was undertaken in conjunction with Wallbridge and Gilbert Engineers and Econsearch.

This study concluded by recommending some guiding principles and these have been taken into consideration in this DPA.

3.2 Investigations undertaken to inform this DPA

In accordance with the Statement of Intent for this DPA the following investigations have been undertaken to inform this DPA:

3.2.1 Interface management

Both sites are located at the extremity of the respective zone.

Kudla Site

Activities associated with the proposed land use for the Kudla site may require management, including noise, light, traffic movements and parking, including mainly domestic vehicles but also large-scale delivery vehicles such as low loaders.

All of these issues are likely to require detailed consideration at the development assessment stage once the design parameters for the project are known.

Land to the north of the site is zoned both Residential and Open Space. This is separated by Gordon Road and a setback of 15m is proposed within the residential zone to that boundary. An electricity substation is proposed adjacent the Kudla site, however at this time that land and indeed all the abutting land is vacant.

In this case the positioning of the Kudla site at a major intersection, is such that it is unlikely to have significant interface issues with the neighbouring zones and existing and/or prospective land uses.

The proposed land use for the Kudla site is generally developed in a variety of locations including on the edge of residential areas. Its offsite impacts are readily managed, for example traffic can be managed, lights can be shielded and noise can be controlled through hours of operation and physical devices.

Thus it is considered that the rezoning of the Kudla Site is consistent with the following of Council's Guiding Principles:

- *Land uses can be managed to address interface issues between incompatible land uses.*

Evanston Gardens Site

Potential impacts associated with a petrol filling station could include odour, noise, light and traffic. Traffic will comprise a range of vehicles both domestic and commercial.

A petrol filling station is an EPA licenced activity and environmental interface issues will be controlled under their direction during the assessment of any future development application.

There is policy in the Business Zone that also specifically addresses environmental interface issues.

In this case, the site has access directly from arterial roads and does not require access via any residential streets.

The site could cause impacts relating to interface between land uses however, such issues as noise, light spill, glare and traffic impacts can all be addressed during development application assessment. The construction of built form and fencing provides the opportunity to control noise impacts. Lighting on the site can be directed and shielded to control glare and any food outlets may require specialised exhaust fan systems.

The Development Plan currently includes a relatively extensive suite of policies pertaining to land use interfaces. These are reproduced below and all need to be considered as part of any development application within the area, irrespective of the zone.

Objective 39: Development located and designed to prevent adverse impact and conflict between land uses.

Objective 40: Protect community health and amenity and support the operation of all desired land uses.

PDC 97 Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:

(a) the emission of effluent, odour, smoke, fumes, dust or other airborne pollutants;
(b) noise;
(c) vibration;
(d) electrical interference;
(e) light spill;
(f) glare;
(g) hours of operation;
(h) traffic impacts.

PDC 98 Development should be sited and designed to minimise negative impact on existing and potential future land uses considered appropriate in the locality.

PDC 99 Development adjacent to a Residential Zone or residential area within a Township Zone should be designed to minimise overlooking and overshadowing of nearby residential properties.

PDC 100 Residential development adjacent to non-residential zones and land uses should be located, designed and/or sited to protect residents from potential adverse impacts from non-residential activities.

PDC 101 Sensitive uses likely to conflict with the continuation of lawfully existing developments and land uses considered appropriate for the zone should not be developed or should be designed to minimise negative impacts.

In addition, there are additional policies within the Business Zone that address specific elements of interface management including*:*

PDC 3 Activities which have the potential for off-site environmental impacts should be appropriately located in relation to more sensitive land uses.

PDC 4 Intensity and/or nature of a use should minimize land, water or air pollution.

PDC 5 Wastes and emissions should be managed effectively to minimize environmental impact.

Design Technique (Design Techniques illustrate ONE WAY of satisfying the above principle)

5.1 All waste liquids associated with any activity undertaken on the premises are discharged into a sewer (with the approval of the relevant State Government authority), or to a holding tank, which is protected from stormwater intrusion, prior to regular removal offsite to a licensed waste depot by a licensed waste carrier; and

5.2 Any vehicle, plant or equipment washing/cleaning activity undertaken within an area that is:

(a) Roofed;

(b)- Designed to contain all the wastewater likely to pollute stormwater;

(c) Bonded with an impervious material, such as concrete, to facilitate wastewater collection;

(d) Of sufficient size to prevent 'splash-out' or 'over-spray' of wash/wastewater from the washing/cleaning area; and

(e) Designed to drain to either a treatment device (such as sediment traps and a coalescing plate oil separator) with subsequent disposal to sewer or a Septic Tank Effluent Disposal Scheme (with the approval of the relevant State or Local Government authority) or to a holding tank prior to regular removal off-site to a licensed waste depot by a licensed waste carrier; and

5.3 Dedicated rubbish skips are provided for the collection of all solid waste material, including general office rubbish, which are:

(a) Covered at all times to prevent the entry of stormwater or dispersal by wind;

(b) Sealed to prevent leakage;

(c) Located on 'hard standing' areas graded to a collection point in order to inimize the movement of any solids or contaminated water, and to prevent the entry of external stormwater; and

(d) Not used for oils, solvents, partly used paints, flammable materials, other liquids or sludges (oil-stained rags are acceptable) or toxic materials, including paint residues, particularly if they contain lead. These wastes are to be stored in covered bunded areas or, if not contained under cover, in airtight containers within bunded areas such that there is no airborne or waterborne migration from the designated storage areas.

5.4 Measures are incorporated into development such as recycling or reuse of materials onsite including wastewater to minimize the generation of waste.

5.5 Where wastewater cannot be recycled or reused, its appropriate treatment or disposal is ensured through an approved trade waste connection.

PDC 7 (Emissions) The nature, scale and intensity of the activity should:

(a) *minimize the levels of noise, vibration, dust, odours or other airborne emissions;*

(b) not detrimentally affect nearby residential, recreational or educational uses; and

(c) incorporate management practices, technology or design techniques to minimize the impact on the environment from all emissions likely to be generated by development.

Advisory Note:

An emissions assessment may be required to demonstrate that the activity has minimal impact on the environment.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

7.1 Development does not exceed the maximum pollution levels identified by the Environmental Protection (Air Quality) Policy 1994.

7.2 Dust emissions are controlled through the incorporation of dust suppressors.

7.3 All roadways, entrances and main traffic areas are compacted and sealed.

PDC 20 (Outdoor Lighting) Outdoor lighting designed and installed so that it does not intrude on other properties or roads in the locality.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

20.1 Outside lighting is directed down and towards the site to prevent spillage onto surrounding properties or thoroughfares; and

20.2 Outdoor lighting is provided in accordance with 'Interim Australian Standard 4282 – 1995: Control of the obtrusive effects of outdoor lighting'.

PDC 35 (Outdoor storage and service areas) Outdoor storage and service areas should be located, designed and managed to be screened from public areas (including car parking areas) and avoid impacts on the surrounding locality.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

35.1 Outdoor storage areas and services and service structures including fire services, pipes, flues, cooling or heating plant or appliances are screened from public view by landscaping, or a fence or enclosure in pre-coloured sheet metal or of materials matching those of the main buildings or by an appropriate combination of solid fencing and landscaping. Services on roofs are designed and integrated into the structure and design of the building.

35.2 Outdoor storage and services areas are designed and managed to ensure that all litter is contained within those areas.

35.3 Storage areas for outdoor waste and refuse bins are paved and drained to a collection system to prevent polluted wastewater from bin washdown entering the stormwater system.

35.4 Outdoor and service areas located behind buildings and without or limited exposure to public areas.

PDC 38 (Lighting) Lighting should be provided to:

(a) facilitate the security, safety and amenity of the area and avoid detrimental effects on adjacent areas;

(b) not impair the amenity of the locality of any residential zone as a result of light spill or reflection;

(c) be vandal resistant to minimize maintenance

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

38.1 the establishment of lighting:

(a) is in accordance with AS 1158.1 – 1997: SAA Public Lighting Code; and

(b) avoids distraction to vehicle drivers on internal or external roads in accordance with AS 4282 – 1997: Control of the Obtrusive effects of Outdoor Lighting;

These provisions are considered to adequately cover the issue of interface management.

- Whilst there will be some interface matters that require management, it is considered this issue is adequately addressed in the Development Plan in the Council Wide and Business Zone sections which contain a number of specific Objectives and Principles of Development Control that can be applied at the development assessment stage.
- This DPA is therefore not considered to require any further specifics in this regard.

3.2.2 Contamination

Kudla Site

The Kudla site has a history of use for commercial purposes and it is proposed to rezone this to Business, thus enabling the development of a car dealership and delivery centre. This is considered to be a land use of similar sensitivities to the former uses and is likely to have extensive hard paving. Notwithstanding, should an application be received for that land that is considered to warrant further investigations, this can be done specifically in relation to the development application and proposed land use.

Evanston Gardens Site

The Evanston Gardens site, currently zoned Residential, is known to have been used as a depot. A report by JBS&G Australia Pty Ltd was prepared in 2014 in respect to the neighbouring sites to the north as part of the draft Evanston Gardens DPA. This report confirms the depot land use for this parcel of land. The proposal as part of this DPA is to rezone the site to Business to allow a commercial use, most likely a petrol station and ancillary uses. This form of land use is usually accompanied by extensive largely impervious hard stand areas. Commercial type land uses are generally considered to be a less sensitive land use than is likely to occur under the current Residential zone.

Given the prospect for some levels of contamination on this site, this should be addressed as part of any redevelopment proposal. There may not be a requirement for full remediation but a management plan may be required, particularly during the period of construction.

There is currently a provision in the Council wide section of the Development Plan that addresses land contamination.

Council Wide PDC 41 currently states:

Contaminated Land

PDC 41 Development should not occur where contamination has been identified or is suspected unless the site has been assessed to be suitable for the intended use or remedial work is undertaken to make the site suitable for the intended use.

This PDC would be applied to any future development application.

The above analysis does not indicate any need for this DPA to amend the Development Plan with respect to site contamination.

3.2.3 Stormwater management

Greenhill was engaged to review the stormwater conditions for the Kudla site and the Evanston Gardens site.

Kudla Site

As part of the Gordon Road/Tiver Road/Main North Road intersection upgrade in 2012, a new underground stormwater system was constructed in Gordon Road/Tiver Road. The new stormwater pipe in Gordon Road/Tiver Road is 1800mm in diameter and discharges to an open drainage channel near to the western boundary of the site.

The proposed pre-delivery centre requires the construction of a new road crossing over this open channel. It is anticipated that an 1800mm diameter pipe under the road crossing with headwalls on both sides would be adequate.

The stormwater surface run-off from the proposed car dealership and pre-delivery centre site will likely be captured with a private internal underground stormwater system. The internal stormwater system for the dealership site is assumed to be able to be discharged into the existing 1800mm diameter pipe with a direct connection, whilst the underground stormwater system for the pre-delivery centre can most likely discharge to the open channel at the same outlet location as the new road crossing.

New developments require stormwater detention and stormwater quality treatment.

The requirement for stormwater detention is typically driven by the need to prevent any adverse impacts to the performance of existing stormwater systems as a result of developments. However, given the extremely close proximity of the site to the existing outlet, it is anticipated that the proposed development would have no impact on the existing stormwater system and that stormwater detention would not be required for this site. A formal investigation and report at lodgement of any development proposal will be required.

Stormwater quality treatment will also be required to meet the relevant Environmental Protection Authority (EPA) treatment targets. It is anticipated that raingardens or an underground proprietary treatment product would be sufficient for the proposed site. The selection of appropriate methods will be subject to the treatment requirements, functionality, design restraints constraints, desired aesthetics and costs and can be determined at the time of a formal proposal.

Improvements to stormwater management on the site will be consistent with the Council's Guiding Principle:

- *Land uses will contribute to the environmental health of the study area and region.*

Evanston Gardens Site

An existing swale runs along the front of the property and currently flows towards a grated inlet pit located at the approximate midpoint of the bend. This grated inlet pit then discharges to a 525mm diameter reinforced concrete pipe (RCP) in Angle Vale Road with a 300mm diameter RCP discharging into the Milne Road stormwater system.

New developments require stormwater detention and stormwater quality treatment.

Based on previous work by others, it is understood that the existing system in Angle Vale Road and Milne Road has capacity for this development and that on-site stormwater detention would be required to restrict the post-development flows to the pre-development flows.

Given the nature of the products used and activities occurring at a prospective petrol station, it is anticipated that increased stormwater quality treatment measures would be required in order to meet EPA quality treatment targets for the site.

It is anticipated that a vegetated treatment swale and an underground proprietary treatment product will be sufficient for the site, however this will be subject to detailed design and further consideration once an application for land use is received.

The Business Zone contains the following Objective and PDCs that address stormwater management.

Objective 5:
Minimising the production of wastes (solid and water).

PDC 4. Intensity and/or nature of a use should minimize land, water, or air pollution.

PDC 5 Wastes and emissions should be managed effectively to minimize environmental impact.

PDC 15. Site drainage should:

(a) Incorporate where practicable, provision for on-site stormwater detention, retention and use (including, where practicable, the collection and storing of water from roofs and communal car parks in appropriate devices);

(b) provide on-site infiltration, where practicable, having regard to:

(c) the availability of unsealed areas or areas which are not built up;

(d) the capacity of soils to absorb water;

(e) the capacity of building footings on and adjacent to the site to withstand the likely effects of retained water; and

(f) potential adverse impacts on the level of groundwater;

(g) allow convenient access to all components of the drainage system for maintenance purposes; and

(h) not cause damage or nuisance flows on the site or onto adjoining properties.

PDC 16 The storm drainage system should maximize the interception, retention, and removal of waterborne physical, chemical and biological pollutants prior to their discharge to surface or underground receiving waters. Disposal should be via on-site treatment or authorised disposal to a sewer or licensed waste depot by a licensed waste carrier.

PDC 17. Stormwater discharge should be minimized through the adoption of reuse and recycling techniques.

These provisions are considered to adequately address stormwater management.

3.2.4 Visual Analysis/Buffer

The above analysis indicates that development will need to manage stormwater in accord with Objective 1 and PDCs 4, 5, 15, 16 and 17. Accordingly, no further changes to the provisions are considered to be required.

Kudla Site

The area runs parallel to Dalkeith Road, extending north to the north/north-western boundary of the Rural Zone (along with a similar area to the south in the City of Playford), and has for many years been identified as a buffer/green belt between Adelaide and the township of Gawler.

The role of a buffer/greenbelt varies but as identified by *Jensen, 2015,* typically a buffer/greenbelt provides for:

- a transition in landscape that marks a separation between different areas, communities or environments that is usually perceived as a visual change;
- a sense of identity to each community;
- a sense of arrival/departure.

The buffer/greenbelt in Gawler performs each of these roles although, the extent varies upon the location within the area.

For example, the strongest separation and sense of arrival is experienced on the main approach to Gawler along Main North Road. For a driver or passengers in a vehicle, this sense of arrival is gained from driving through urban areas with urban land uses lining the road corridor into an area that has a rural character. The buffer area at this point is more open and has fencing and land uses typical of a rural area, before once more entering the township of Gawler which, whilst undoubtedly urban, is , nevertheless urban in the context of a country township.

As the adjoining area of within the City of Playford zoned Suburban Neighbourhood further develops, the sense of arrival will also become more prominent in that area. At this stage however, until development extends to the Council Boundary and interface policy area, the sense of arrival is still more subtle as one travels through lower density residential development into more open rural areas with horticulture, floriculture, animal keeping, nut crops and other rural land uses at this stage blurring the entry to the buffer.

This is an important consideration as to whether or not rezoning the Kudla site has a material impact on visual amenity. To test this further the Council's relevant Guiding Principles have been used.

Guiding Principle	Kudla Site
• Land uses will maintain and improve views of an open rural character from key entrances to Gawler of a rural character (components of a rural character relating to land use, style, setbacks, design features etc. will be required to facilitate and achieve open rural views);	The site to be rezoned is on the extreme edge of the zone. It is currently vacant but until recently was developed with a building. The openness of the site generally provides for continued views. This site will ultimately assist with the transition to be more residential development. The rezoning is therefore not considered to be inconsistent with the provision nor detrimentally impact the views on the approach to Gawler.
• Land uses will reinforce the transition between Gawler (a regional township in a rural setting) and metropolitan Adelaide	This site will ultimately transition to residential development as the sites to the north are developed. Furthermore, there is a balance to the approach along this part of Main North Road as the opposite side of Main North Road is developed with similarly commercially land uses. Its rezoning is therefore not considered to be inconsistent with the provision nor considered to significantly detrimentally impact the views on the approach to Gawler.

Evanston Gardens Site

The Evanston Gardens site is a small site on a key intersection. The approach has existing built form and this rezoning is not considered to be detrimental to views and will in fact frame the intersection.

An assessment of the vegetation around the proposed commercial Evanston Gardens site has identified the opportunity to preserve that which is located on the north western side of the allotment between the proposed commercial use and the future residential areas to act as a buffer between these expected future land uses. However it is proposed it should be a consideration at the Development Assessment stage.

This investigation does not indicate the need for a policy response in respect to views and the urban buffer.

3.2.5 Commercial land uses

Kudla Site

The Kudla site is on the very edge of the Rural Zone; an area that has a generally rural character. Typically, this area compromises a range of rural, commercial/industrial/agricultural and rural living land uses.

One of the Council's Guiding Principles for this area is:

Land uses will contribute to the economic health of the local and broader community

Commercial land uses feature most strongly along the Main North Road approach and not all of these are necessarily associated with rural land uses specifically. Examples of commercial land uses in the area include display centres for paving, sheds and playgrounds; car and motor bike sales and repairs, farm equipment and repairs and a concrete batching plant.

Non-rural based land uses have the potential to detract from the rural character of the locality and ideally will be limited and preferably clustered towards the edges of the rural area.

Main North Road is a very high exposure road for commercial activities and as the City grows, the north becomes more geographically central. As a result, this area sustains demand for commercial land uses, particularly those that rely on passing trade. This provides somewhat of a planning challenge, particularly in the current economic circumstances where employment is a key priority for the Government and Council but this area is an equally important rural area.

The proposal for a car dealership and delivery centre is one such use attracted to the area due to the expanding growth of the region. It is considered that this land use requires a high exposure location and is appropriate to Main North Road. The specific site chosen is right on the edge of the Rural Zone and a future growth area and a commercial land use on this site is therefore considered to be appropriate. It is also located in an area where, on the opposite side of the road, there is already a cluster of commercial and industrial land uses. Council's existing Business Zone policy is appropriate to extend across this site and contains a number of design based policies that will be helpful in ensuring built form with good design that is appropriate to its surroundings.

It is considered therefore that providing an appropriate zone over this site is on balance a good planning outcome and one that will provide employment opportunities in the north and thus meets the term of the Council's Guiding Principle in this respect.

Evanston Gardens Site

This site is currently zoned Residential but it is not desirable for residential development, being located on the intersection. There is likely to be a desire to turn any residential development inward, thus presenting back and side fences to the roads, which would greatly diminish the streetscape appeal.

In addition, this site provides an opportunity to provide desirable services to a relatively isolated community. It is noted that there is a Neighbourhood Centre Zone to the south-west of this site and a petrol filling stations is a merit land use in this zone. The Concept Plan in the Development Plan for this site shows most of the land on the same side of Angle Vale Road as the subject site is intended for education and community purposes. It is currently developed with the Angle Vale Primary School and thus provides no opportunity for the development of a petrol filling station within the Neighbourhood Centre Zone. The balance of the Centre Zone is on the opposite side of Angle Vale Road and appears to be used for primary production or similar. The concept plan shows this area being largely for retail and car parking. This concept plan also includes a notation for future petrol filling station / service trade premises in the vicinity of the subject land. The establishment of a Business Zone to facilitate a petrol filling station is considered appropriate as this provides a short-term option of getting a service centre to the community. It is not considered to prejudice a petrol filling station in the Neighbourhood Centre Zone in due course (petrol filling stations typically establish on both sides of a road to catch passing traffic), and enables the coordinated development of the centre on the south-eastern side of Angle Vale Road in accord with the concept plan in due course.

Finally, the level of remediation likely to be required on the site for a commercial purpose is considered more appropriate and economically viable than that for a sensitive land use such as residential and thus is likely to see orderly and economic development on this land that otherwise might lie dormant.

This above investigation is reflected in the DPA by:

- Rezoning the Kudla site to Business; and
- Rezoning the Evanston Gardens site to Business; and
- Adding extra policy provisions to that zone to make it apply appropriately to both of these additional sites as well as to the land already contained within the Zone.

3.2.6 Civil Service provision

Greenhill Engineers were engaged to provide specific services advice to inform this DPA. The Civil Services report is included in Appendix 1.

3.2.6.1 Power

Kudla Site
The site is currently fed via a dedicated high voltage line to a pole mounted transformer internal to the site. The high voltage service comes off an existing high voltage line on the eastern side of Main North Road.

It is noted that there is existing street lighting on both sides of Main North Road and Tiver Road that are powered by an underground reticulation system, however the location and capacity of this infrastructure is unknown.

SA Power Networks' servicing advice has not been received at this time.

Depending on the final design, it may be possible to retain the existing stobie pole and transformer, and create a new underground reticulation system from this supply point.

If the stobie pole and overhead infrastructure require removal, it will need to be undertaken by SA Power Networks and a new supply point created. Given that this site was previously required to install its own transformer, it is likely that a low voltage connection is not possible for this site and that a new transformer would be required.

The site will be able to be serviced however, there may be a cost to the proponent.

Evanston Gardens Site

High voltage and low voltage infrastructure is located along Angle Vale Road and the rear boundary.

SA Power Networks' servicing advice has not been received at this time.

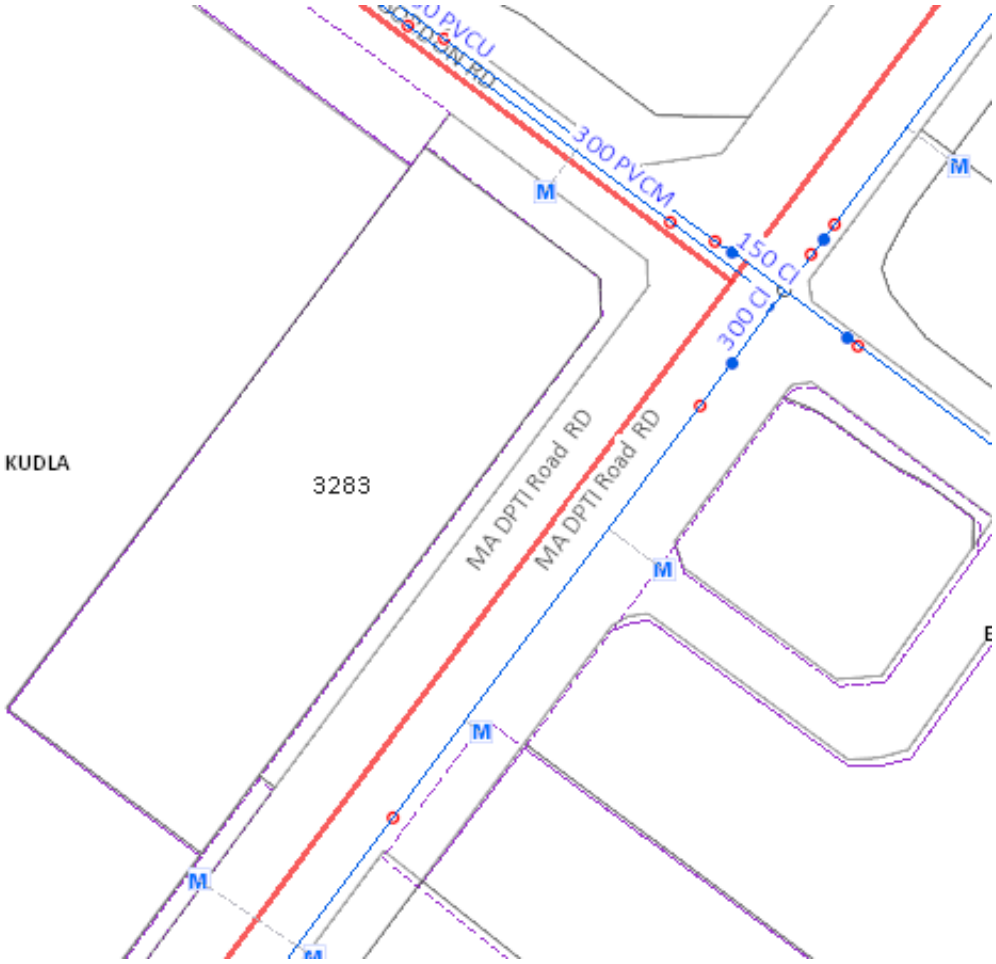
It is not yet known if the existing low voltage infrastructure has capacity to service the proposed land use as is or whether a new transformer would be required. The site will be able to be serviced however there may be a cost to the proponent.

Electricity supply has no specific implications for the DPA.

3.2.6.2 Water

Kudla Site

There is an existing 300mm diameter water main in Main North Road, and a 150mm diameter water main in Tiver Road/Gordon Road. The 150mm main extends west to Coventry Road through an easement. An additional 300mm diameter water main was constructed in Tiver Road in 2012 to support future development in the area. The 300mm diameter main currently ceases at the end of Gordon Road/Tiver Road.



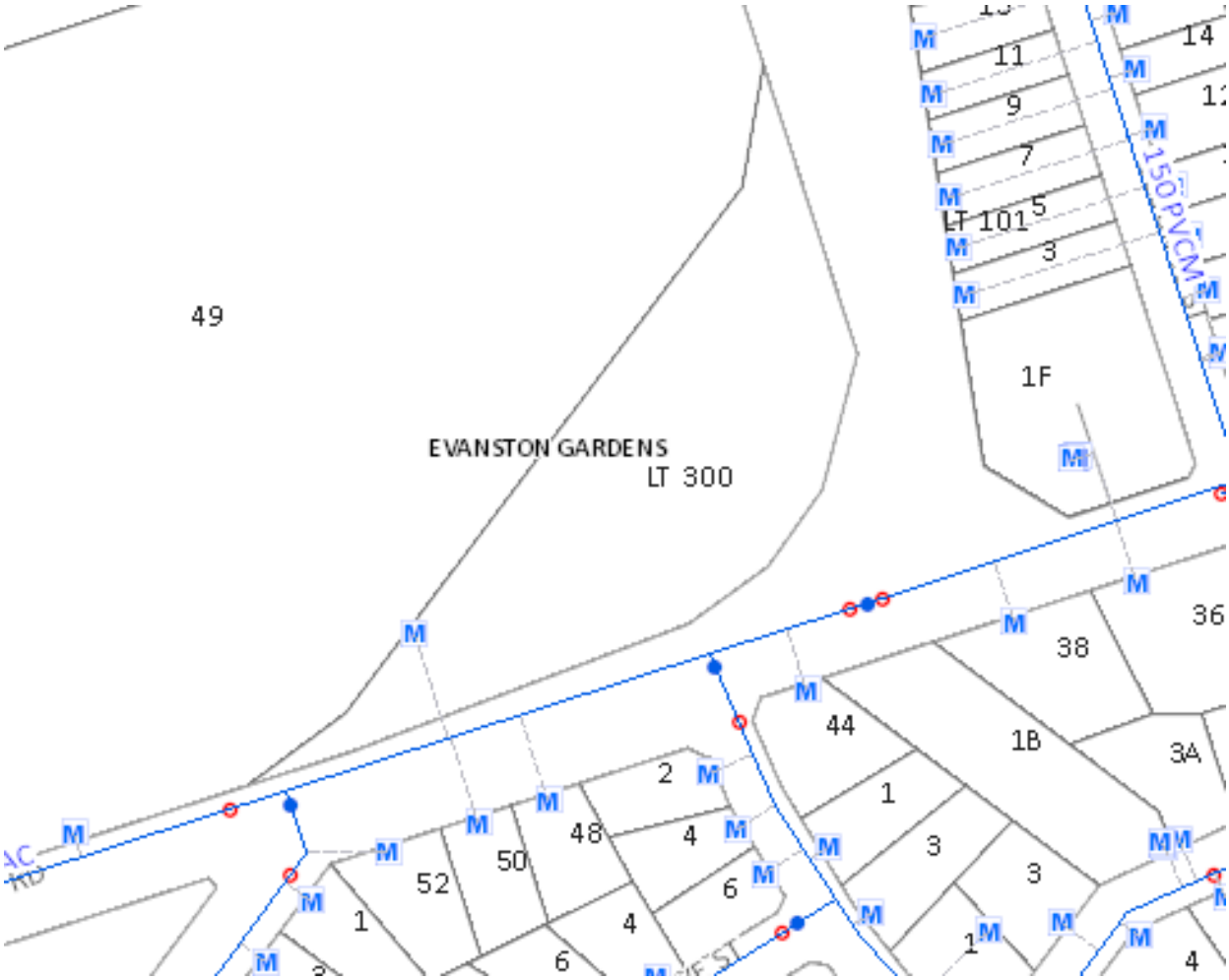
A 40mm metered connection currently services the site from the 150mm main in Tiver Road.

It is believed that the 40mm diameter connection will be suitable for the proposed commercial car dealership and future delivery centre.

Should the 40mm diameter main be insufficient, SA Water has advised that the recently laid mains in this area would have been sized for future growth, and that an additional connection should be feasible.

Evanston Gardens Site

There is an existing 100mm diameter water supply main in Angle Vale Road which feeds a 40mm service to the property. SA Water has advised that this can be upgraded to a 50mm connection if required.



Should a fire service be required, a mains extension or upgrade may be requested, dependent on the size and the pressure required. There is a 150mm main in Coventry Rd and Osborne St which could be extended.

The above analysis indicates that:

- Potable water is available to both sites proposed to be rezoned and each has access to a supply sufficient to its needs.

3.2.6.3 Gas

Kudla Site

This site is located in proximity to the supply main located in Main North Road. This is considered to be a priority main. APA Group is currently investigating the demands on this main, in order to ascertain if a new connection is possible.

A survey of the site in 2014 did not locate any existing gas meters on site. Even if there is currently no gas connection, and a gas supply is required for the development, a new connection would need an application to APA Group, pending the results of the capacity analysis.

If a new connection to the main is not possible, on-site gas tank storage may be an alternative.

Gas supply or lack thereof does not preclude development.

Evanston Gardens Site

There is an existing gas supply main in Angle Vale Road and Jack Cooper Drive.

APA Group has advised that there is sufficient capacity in the existing mains to service the site including for the purposes of a service station.

Gas is not a service that will preclude development and thus there are no implications for this DPA.

3.9.6.4 Sewer

Kudla Site

A 150mm sewer main is located approximately 250m east of the site in Tiver Rd, at the corner of Greenslade Boulevard, and another approximately 400m north of the site, crossing Main North Road.

SA Water has advised that there are no current plans to extend the wastewater network in this area, and that if a wastewater mains connection is required, a connection could be provided to both of these sewer mains with a private pump station and rising main.

Alternatively, an on-site wastewater treatment system may be more appropriate for this site (i.e. septic tanks). It is noted that a survey undertaken in 2014 located an existing septic tank on site however, the size and suitability of the existing septic tank is unknown.

Sewer provision can be resolved at the time of a development application.

Evanston Gardens Site

This site is in proximity of a reticulated waste water main. An existing 525mm diameter main is located Angle Vale Road.

SA Water has advised that a new sewer connection could be provided to service the property.

The above analysis indicates

- Both sites to be rezoned Business can be connected to a sewer system and in any case the Business Zone adequately provides provisions covering wastewater management.

3.2.6.5 Telecommunications

Telecommunications can be supplied upon demand. Some of the area is NBN enabled.

Telecommunications have no implications for this DPA.

3.2.7 Traffic and Access

Greenhill Engineers were engaged to provide some specific traffic and access advice to inform this DPA.

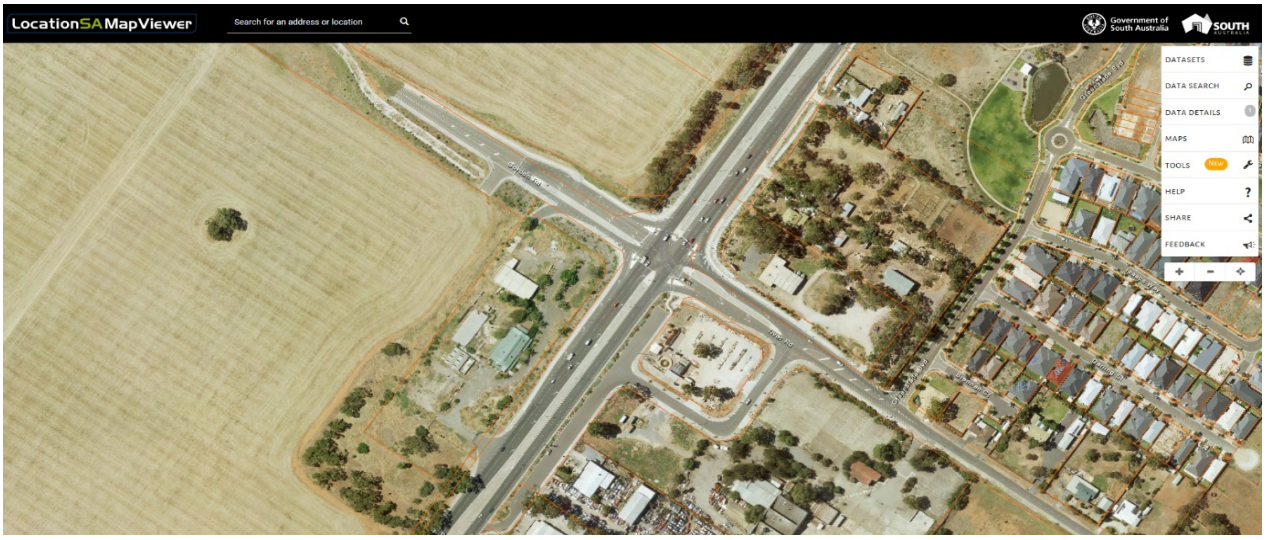
Kudla Site

Site Access

This site has two access points, one on Main North Road and another on Gordon Road.

The Main North Road access is a left-in and left-out access, located approximately 200m southwest of the Gordon Road/Tiver Road intersection with Main North Road. Right turn movements are not permitted due to the existing raised median on Main North Road.

The Gordon Road/Tiver Road access is a left-in only access, located about 70m northwest of the Tiver Road/Gordon Road intersection. This is restricted via a median constructed as part of the intersection upgrade.



Both Main North Road and Gordon Road/Tiver Road at this location are classed as Controlled Access Roads by DPTI. Any new access or modifications to the existing access arrangement will be subject to DPTI's approval.

Road Networks

Main North Road is a Primary Arterial Road that runs in a northeast-southwest direction, providing connection to the major centres in the north.

Main North Road has the following functions identified in the Functional Hierarchy for South Australia's Land Transport Network:

- a standard frequency corridor (Go Zone);
- a major cycling route (metro);
- a major traffic route; and
- a freight route.

At this location, the road currently has two traffic lanes and a bicycle lane in each direction separated by a raised median. It has an estimated annual average daily traffic (AADT) of 34,800 vehicles per day and a 4% commercial vehicle content (DPTI Traffic Volume Maps 2015). It forms part of a B-double gazetted road network and has a speed limit of 90km/h at this point.

Gordon Road/Tiver Road is a future Distributer Road to support the urban growth area in Evanston Gardens. A section comprising 250m of Gordon Road/Tiver Road was constructed in 2013 when the Main North Road/Tiver Road/Gordon Road intersection was upgraded to a signalised intersection.

Potential/Future Road Upgrades

The signalisation of Main North Road/Gordon Road/Tiver Road/Tiver Road Intersection was to support the planned development in the Gawler Urban Growth Area as identified in the 30 Year Plan for Greater Adelaide. There are no further upgrades planned at this intersection.

This section of Main North Road is currently subject to a possible Metropolitan Adelaide Road Widening Plan requirement of a 15m wide strip on both sides (East and West) for potential future road upgrades and road widening.

Gordon Road/Tiver Road is currently a 'No Through' road. Traffic entering Gordon Road will be required to undertake a U-turn and return to the Main North Road/Tiver Road intersection. The Gawler Transport and Traffic Management Plan (March 2016) has also identified Gordon Road/Tiver Road to be upgraded in future to provide 'an alternative east/west' traffic route including a future grade separated rail crossing. The timing to extend Gordon Road/Tiver Road to meet Coventry Road is currently unknown and it is subject to the future growth in the Evanston Gardens.

Future Traffic Considerations

The site was previously operating as a garden and paving centre, which is commercial in nature. The proposed Peter Kittle car dealership (as per the Greenhill Traffic Impact Assessment Report included in Appendix 2) and pre-delivery centre is expected to generate a total of 50 trips to the surrounding network during the evening patch. This is not considered to impact the surrounding road network.

Heavy vehicle turning movements will need to be considered during the development assessment process and subject to the internal site operation. Traffic from the north can utilise Gordon Road/Tiver Road to access the site whilst traffic from the south can enter via Main North Road. Egress is currently via Main North Road. In future, there may be an opportunity to leave via Gordon Road/Tiver Road when the road gets extended/upgraded.

In addition to the general sections of the Development Plan, the Business Zone includes provisions to address access. These are listed below:

PDC 9 Access to individual sites should:

(a) be coordinated and if the land is divided into individual allotments, shared facilities should be managed communally;

(b) minimize traffic hazards;

(c) ensure the safety of the public and the free flow of traffic in the locality;

(d) minimize traffic hazards and queuing on roads; and

(e) ensure vehicles exit in a forward direction.

PDC 10 Vehicle and bicycle parking should be provided commensurate with the intensity of the activity proposed and allowing safe and convenient access.

PDC 11 Car parking areas and associated manoeuvring areas should be efficient and coordinated and be sufficient to enable safe, convenient and efficient parking and traffic circulation.

PDC 12 Surface treatment of all car parking and vehicular manoeuvring areas should be designed to withstand vehicular traffic in all weather conditions and to prevent soil erosion, dust and drainage problems.

PDC 13 Car parking areas should be suitably planted with canopy trees and screened with landscaping to reduce visual impact.

PDC 14 Servicing, including garbage and recycling collection services, should not impact on adjoining developments and streets.

These provisions will need to be addressed as part of any development proposal and are considered to adequately address traffic matters.

Evanston Gardens Site

Access
This site has two access points, one on Angle Vale Road and another on Jack Cooper Drive. See the figure below.

The Angle Vale Road access is currently unrestricted and vehicles can undertake all left turn and right turn movements into and out from the site. This access is located approximately 110m west of the Angle Vale Road/Jack Cooper Drive junction.

The Jack Cooper Drive access is also unrestricted and it is located at approximately 70m north of the Angle Vale Road/Jack Cooper Drive junction.

Only Jack Cooper Drive is classed as a Controlled Access Road. Any new access and modifications to the existing access arrangement will be subject to DPTI's approval.

Road Networks

Angle Vale Road is a rural arterial road connecting the northern suburbs between Gawler and Virginia.

Jack Cooper Drive runs in a continuation of Angle Vale Road providing connections to the Gawler Bypass.

Both Angle Vale Road and Jack Cooper Drive form a link to provide a freight connection to major logistic centres in the north and form part of a B-double gazetted road network. They are both also classified as a Freight Route under the Functional Hierarchy for South Australia's Land Transport Network and both are under the care and control of DPTI.

Both roads currently have one lane in each direction and have an estimated AADT of 4,600 vehicles per day and a 4% commercial vehicle content (DPTI Traffic Volume Maps 2015).

Potential/Future Road Upgrades

The Integrated Transport and Land Use Plan (ITLUP 2016) identifies this section of Angle Vale Road and Jack Cooper Drive as subject to 'arterial and local road upgrades including intersection and midblock improvements'.

The Gawler (CT) Evanston Gardens/Evanston South/Hillier Structure Plan (April 2016) also highlights the Coventry Road will be realigned and intersect with Angle Vale Road at right-angle to form a T- intersection or a roundabout.

The Gawler Transport and Traffic Management Plan (March 2015) also identified the opportunity to change the priorities at the Jack Cooper Drive/Angle Vale Road junction to form a continuous arterial road.

Neither Angle Vale Road nor Jack Cooper Drive are subject to the Metropolitan Adelaide Road Widening Plan requirements.

Future Traffic Considerations

Given this is a rezoning proposal, exact details of any future petrol filling station are yet unknown. However, to verify the appropriateness of the site for such land use, Greenhill, in its Traffic Impact Assessment (Included in Appendix 2), has made assumptions based on an average sized operation. This assessment concluded the petrol filling station would be expected to generate some 132 vehicle trips in the evening peak. Based on likely distribution of movements, Greenhill concluded the surrounding road network has adequate capacity to accommodate this. Heavy vehicle turning movements would need to be assessed at the DA stage. It is also recommended that any cross over from Jack Cooper Drive be located as far as is practicable from the intersection to enable a possible future junction realignment.

In addition to the general sections of the Development Plan the Business Zone includes provisions to address access. These are listed below:

PDC 9 Access to individual sites should:

(a) be coordinated and if the land is divided into individual allotments, shared facilities should be managed communally;
(b) minimize traffic hazards;
(c) ensure the safety of the public and the free flow of traffic in the locality;
(d) minimize traffic hazards and queuing on roads; and
(e) ensure vehicles exit in a forward direction.

PDC 10 Vehicle and bicycle parking should be provided commensurate with the intensity of the activity proposed and allowing safe and convenient access.

PDC 11 Car parking areas and associated manoeuvring areas should be efficient and coordinated and be sufficient to enable safe, convenient and efficient parking and traffic circulation.

PDC 12 Surface treatment of all car parking and vehicular manoeuvring areas should be designed to withstand vehicular traffic in all weather conditions and to prevent soil erosion, dust and drainage problems.

PDC 13 Car parking areas should be suitably planted with canopy trees and screened with landscaping to reduce visual impact.

PDC 14 Servicing, including garbage and recycling collection services, should not impact on adjoining developments and streets.

These provisions will need to be addressed as part of any development proposal and are considered to adequately address traffic matters.

The above analysis indicates

- Both sites proposed to be rezoned to Business Zone have existing access to sealed roads. Applications for development of the site will be tested against the provisions of the Business Zone that are considered to be adequate.

4. Recommended Policy Changes

The investigations undertaken in relation to this DPA and the implication for policy are summarised in the table below.

Investigations Issue	DPA Response
Interface Management	The DPA will rely upon the existing policies in the Council wide section and Business Zone that address interface management.
Contamination	The DPA will rely upon the existing policies in the Council wide section that address contamination.
Stormwater Management	The DPA will rely upon the existing policies in the Business Zone that address stormwater management.
Commercial land use	To respond to commercial uses the DPA seeks to rezone the land at the corner of Main North Road and Gordon Road/Tiver Road to Business and rezone the land at the corner of Jack Cooper Drive and Angle Vale Road to Business. It proposes to add a couple of extra policy provisions to the Business Zone to make it apply appropriately to both of these additional sites as well as to the land already contained within the Zone.
Infrastructure Services	The DPA acknowledges the infrastructure constraints in its policy settings that are such that no additional infrastructure is required specifically related to this DPA.
Traffic and Access	The Business Zone as applied has provisions governing traffic and access. The balance of the DPA does not impact traffic or access.

In accord with the summary above, the following is a list of the recommended policy changes based on the investigations of this DPA:

Zones and Policy Area

- Amend the Business Zone such that it is applicable to the two specific sites without compromising its applicability to the area shown on Fig B/1 and amend the list of non-complying land uses in the Business Zone.

Tables

- Amend Table Ga/4 to include specific provisions for Petrol Filling Stations and showrooms.

Maps

- Amend Development Plan maps Ga/1 (overlay 1) Enlargement H, Ga/8 Zones and Ga/16 Policy Areas to reflect the above proposed changes.

Figures

- Amend Development Plan Evanston Gardens/ Evanston Gardens South/ Hillier Residential Policy Area 4 Figure Res/2 to remove CT 5448/384.

5. Consistency with the Residential Code

N/A

6. Statement of Statutory Compliance

Section 25 of the *Development Act 1993* prescribes that the DPA must assess the extent to which the proposed amendment:

- accords with the Planning Strategy
- accords with the Statement of Intent
- accords with other parts of council's Development Plan
- complements the policies in Development Plans for adjoining areas
- accords with relevant infrastructure planning
- satisfies the requirements prescribed by the Development Regulations 2008.

6.1 Accords with the Planning Strategy

Relevant strategies from the Planning Strategy are summarised in the Appendices of this document. This DPA is consistent with the direction of the Planning Strategy.

6.2 Accords with the Statement of Intent

The DPA has been prepared in accordance with the Statement of Intent agreed to on 13 September 2017. In particular, the proposed investigations outlined in the Statement of Intent have been have been addressed in Section 3 of this document.

6.3 Accords with other parts of the Development Plan

The policies proposed in this DPA are consistent with the format, content and structure of the Gawler (CT) Development Plan.

This Development Plan is not converted to the BDP and as such consideration had to be given to the most appropriate zoning approach. Consideration was given to using the Commercial Zone from the Planning Policy Library however it was felt the Development Plan would be more consistent and logical by applying the current Business Zone with some specific modifications to ensure that its current application is unchanged and thus is simply extended across two additional sites.

6.4 Complements the policies in the Development Plans for adjoining areas

The study area abuts a portion of the Light Regional Council. Land within the Light Regional Council abutting the study area is variously zoned Primary Production, Rural Living and Recreation. Neither of the new business zones are in close proximity to this boundary. The Rural Zone abutting Light Regional Council is considered to be both appropriate and complementary.

There is one DPA currently under preparation in Light Regional Council: the Freeling (West) Residential Amendment. This Gawler (CT) Commercial and Rural Areas DPA is not impacted by nor impacts upon these other proposed policy changes.

The study area also abuts the City of Playford. Land within the City of Playford where it abuts the study area is variously zoned from east to west Hills Face, MOSS, Suburban Neighbourhood with a rural interface Policy Area and Primary Production. Neither of the new Business Zones interface with the Council boundary. The Rural Zone interface along these boundaries is considered to be appropriate with the adjoining MOSS Zone and Rural Interface Area contributing to the buffer between the urban area in the City of Playford and the Gawler township.

There are two DPAs currently under preparation within the City of Playford: the Greater Edinburgh Parks Employment Lands Amendment (Part 2) DPA, and the Munno Para Bowls Club site DPA. This Gawler (CT) Commercial Areas DPA is not impacted by nor impacts upon these other proposed policy changes.

Accordingly, the policies proposed in this DPA will not affect and will complement the policies of Development Plans for adjoining areas.

6.5 Accords with relevant infrastructure planning

This DPA complements current infrastructure planning for the Council area, as discussed in section 2.3.3 of this document.

6.6 Satisfies the requirements prescribed by the Regulations

The requirements for public consultation (Regulation 11) and the public meeting (Regulation 12) associated with this DPA will be met.

References/Bibliography

- Draft Infrastructure Master Plan New Southern Urban Areas August booklet, Town of Gawler, 2006
- Evanston Gardens DPA (including background documents) URPS *et al*
- Gawler Open Space, Sport and Recreation Plan 2025, Town of Gawler, 2015
- Gawler Transport and Traffic Management Plan, Town of Gawler, March 2016
- Infrastructure capacity and traffic analysis for the study area and subject land, Greenhill, June 2017
- Look North, A shared Economic Plan for Northern Adelaide, Government of South Australia, City of Port Adelaide Enfield, City of Playford and City of Salisbury.
- Primary Production and Agricultural Assessment for the study area, Rural Directions, June 2017
- Rural Land Use and Infrastructure and Investigations, Jensen Planning and Design, Report Number 1 Background Paper, March 2015
- Smith Creek Stormwater Management Plan, Prepared for the City of Playford, AWE and Water Technology, (Draft 2015)

Schedule 4a Certificate

CERTIFICATION BY COUNCIL'S CHIEF EXECUTIVE OFFICER

DEVELOPMENT REGULATIONS 2008

SCHEDULE 4A

Development Act 1993 – Section 25 (10) – Certificate - Public Consultation

CERTIFICATE OF CHIEF EXECUTIVE OFFICER THAT A DEVELOPMENT PLAN AMENDMENT (DPA) IS SUITABLE FOR THE PURPOSES OF PUBLIC CONSULTATION

I Henry Inat, as Chief Executive Officer of the Town of Gawler, certify that the Statement of Investigations, accompanying this DPA, sets out the extent to which the proposed amendment or amendments -

(a) accord with the Statement of Intent (as agreed between the Town of Gawler and the Minister under section 25(1) of the Act) and, in particular, all of the items set out in Regulation 9 of the *Development Regulations 2008*; and

(b) accord with the Planning Strategy, on the basis that each relevant provision of the Planning Strategy that related to the amendment or amendments has been specifically identified and addressed, including by an assessment of the impacts of each policy reflected in the amendment or amendments against the Planning Strategy, and on the basis that any policy which does not fully or in part accord with the Planning Strategy has been specifically identified and an explanation setting out the reason or reasons for the departure from the Planning Strategy has been included in the Statement of Investigation; and

(c) accord with the other parts of the Development Plan (being those parts not affected by the amendment or amendments); and

(d) complement the policies in the Development Plans for adjoining areas; and

(e) satisfy the other matters (if any) prescribed under section 25(10)(e) of the *Development Act 1993*.

The following person or persons have provided advice to the council for the purposes of section 25(4) of the Act:

Helen Dyer - RPIA (Fellow), Managing Director at Holmes Dyer

DATED this "Insert Date" day of "Insert Month" 20"Insert Year"

……
Chief Executive Officer

Appendices

Appendix 1 – Civil Services Report

Preliminary Infrastructure and Services Report

COMMERCIAL & RURAL AREAS DPA – TOWN OF GAWLER

Prepared for:

Holmes Dyer Pty Ltd

10 July 2017

Project Number: 17-1523

Revision A

Preliminary Infrastructure and Services Report

Commercial & Rural Areas DPA – Town of Gawler

Prepared for:	Holmes Dyer Pty Ltd
Reference:	17-1523
Prepared by:	Jonathan Marwitz
Reviewed by:	Tyson Radetti

Revision History

Revision	Revision Date	Details	Authorised	
			Name/Position	Signature
A	10 July 2017	For Issue	Tyson Radetti, Senior Engineer	

Table of Contents

1. Introduction

GREENHILL has been engaged by Holmes Dyer Pty Ltd to undertake an assessment of existing infrastructure for two sites within the Town of Gawler, and to advise on the servicing requirements for potential commercial developments.

It is understood that the following infrastructure investigation will be used to inform a development plan amendment (DPA) by the Town of Gawler. The proposed DPA seeks to review:

- The appropriateness of the site at 3283 Main North Road, Kudla (CT 6108/58) and a small portion of the adjoining allotment (CT 6108/56) for commercial use, specifically for a car dealership and pre-delivery centre.
- The appropriateness of the former Country Fire Service (CFS) Depot (CT5448/384) on the corner of Angle Vale Road and Jack Cooper Drive, Evanston Garden for commercial use, potentially for a petrol filling station.

This investigation included the following:

- A Dial Before You Dig investigation;
- Liaison with service authorities to review the capacity and augmentation capability of the existing infrastructure to meet the increase demands associated with the potential development of the sites;
- Advice on possible alternative solutions to mitigate the impacts of augmentation costs (if / where relevant);
- Outline of the capacity and approximate locations of the existing services infrastructure, as determined by liaison with the relevant service authorities and a Dial Before You Dig enquiry;
- Summary of the likely servicing requirements for the proposed developments and identification of potential capacity issues;
- Identification of any substantial restraints that servicing the sites with existing infrastructure places on the proposed developments.

The following should be noted:

- The information presented is conceptual only and should not be used for the purpose of construction or detailed design;
- The service information presented is based on liaison with the relevant service authorities and Dial Before You Dig (DBYD) enquiry information;

2. Infrastructure Assessment - 3283 Main North Road, Kudla

The following provides a summary of the existing infrastructure and advice received in relation to new infrastructure required for the purpose of servicing the proposed commercial development at 3283 Main North Road, Kudla.

The infrastructure identified as being present on, or adjacent the site, as provided by 'Dial Before You Dig' (DBYD) and the associated service authorities is as follows:

- Potable water (SA Water);
- Roads & Stormwater (Town of Gawler, DPTI);
- Gas (APA Group);
- Telecommunications (Telstra, NBN Co., Nextgen, Optus); and
- Electrical (SAPN).

Whilst we have contacted authorities, we have not received definitive information from all of them at this time and our assumptions are provided herein.

2.1. Water Supply

There is an existing 300mm diameter water main in Main North Road, and a 150mm diameter water main in Gordan Road. The 150mm main extends west to Coventry Road through an easement. An additional 300mm diameter water main was constructed in Tiver Road in 2012 to support future development in the area. The 300mm diameter main currently ceases at the end of Gordan Road.

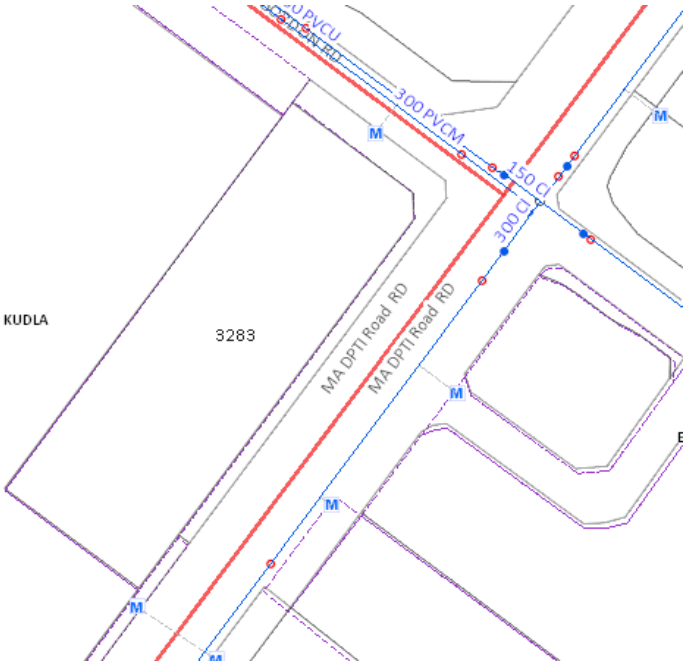


Figure 1: Existing Water Supply Infrastructure

A 40mm metered connection currently services the site from the 150mm main in Gordan Road.

At the time of writing, SA Water have not undertaken a servicing investigation for the site. It is assumed that the 40mm diameter connection will be suitable for the proposed commercial car dealership and future delivery centre.

If the 40mm diameter main is insufficient, SA Water have advised that the recently laid mains in this area would have been sized for future growth, and that an additional connection should be feasible.

2.2. Wastewater

There is a 150mm sewer main approximately 250m east of the site in Tiver Rd, at the corner of Greenslade Boulevard, and another approximately 400m north of the site, crossing Main North Road.

SA Water have advised that there are no current plans to extend the wastewater network in this area, and that if a wastewater mains connection is required, a connection could be provided to both of these sewer mains with a private pump station and rising main.

Alternatively, an on-site wastewater treatment system may be more appropriate for this site (i.e. septic tanks). It is noted that a survey undertaken in 2014 located an existing septic tank on site. However, the size and suitability of the existing septic tank is unknown.

2.3. Stormwater Drainage

As part of the Tiver Road/Main North Road intersection upgrade in 2012, a new underground stormwater system was constructed in Gordan Road. The new stormwater pipe in Gordan Road is 1800mm in diameter and discharges to an open drainage channel near to the western boundary of the site.

The proposed pre-delivery centre requires the construction of a new road crossing over this open channel. It is anticipated that an 1800mm diameter pipe under the road crossing with headwalls on both sides would be suitable.

The stormwater surface run-off from the proposed car dealership and pre-delivery centre site will likely be captured with a private internal underground stormwater system. The internal stormwater system for the dealership site is assumed to be able to discharge into the existing 1800mm diameter pipe with a direct connection, whilst the underground stormwater system for the pre-delivery centre can most likely discharge to the open channel at the same outlet location as the new road crossing.

The Town of Gawler advised that typically new developments require stormwater detention and stormwater quality treatment.

The requirement for stormwater detention is typically driven by the need to prevent any adverse impacts to the performance of existing stormwater systems as a result of developments. However, given the extremely close proximity of the site to the existing outlet, it is anticipated that the proposed development would have no impact on the existing stormwater system and that stormwater detention would not be required for this site. The Town of Gawler advised that this may be accepted, but would be subject to a formal investigation and report before it could be removed from the DAP requirements.

The Town of Gawler also indicated that stormwater quality treatment would be required to meet the relevant Environmental Protection Authority (EPA) treatment targets. It is anticipated that raingardens or an underground proprietary treatment product would be sufficient for the proposed site. The selection of which method to use will be subject to the treatment requirements, functionality, design restraints, desired aesthetics, and costs.

2.4. Electrical Supply

The site is currently fed via a dedicated high voltage line to a pole mounted transformer internal to the site. The high voltage service comes off of an existing high voltage line on the eastern side of Main North Road.

It is noted that there is existing street lighting on both sides of Main North Road and Gordan Road that are powered by an underground reticulation system, however the location and capacity of this infrastructure is unknown.

SA Power Networks have been contacted in regards to the proposed development; however, no servicing advice has been received at this time.

Depending on the final design, it may be possible to retain the existing stobie pole and transformer, and create a new underground reticulation system from this supply point.

If the stobie pole and overhead infrastructure require removal, it would need to be undertaken by SA Power Networks and a new supply point created. Given that this site was previously required to install its own transformer, it is likely that a low voltage connection is not possible for this site, and that a new transformer would be required.

2.5. Communications

NBN Co. have indicated that the Fibre-to-the-Node rollout has commenced construction in the area, and that the site can be serviced once construction has been completed.

2.6. Gas Supply

A survey undertaken in 2014 did not locate any existing gas meters on site.

APA Group have advised that a service connection can be provided to the existing gas supply main in Main North Road. However, the cost for the connection is subject to the final position and size of the gas meter, and the loading requirements of the development.

2.7. Roads & Transport

Figure 2: Existing Site Access

Site Access

This site has two access points, one on Main North Road and another on Gordon Road.

The Main North Road access is a left-in and left-out access, located approximately 200m southwest of the Tiver Road/Gordon Road intersection. The right turn movements are not permitted due to the existing raised median on Main North Road.

The Gordon Road access is a left-in only access, located about 70m northwest of the Tiver Road/Gordon Road intersection.

Both Main North Road and Gordon Road at this location classed as Controlled Access Road by DPTI. Any new access or modifications to the existing access arrangement will be subject to DPTI's approval.

Road Networks

Main North Road is a Primary Arterial Road that runs in a northeast-southwest direction and providing connection to the major centres in the north.

Main North Road has the following functions identified in the Functional Hierarchy for South Australia's Land Transport Network:

- a standard frequency corridor (Go Zone);
- a major cycling route (metro);
- a major traffic route; and
- a freight route.

At this location, the road currently has two traffic lanes and a bicycle lane in each direction separated by a raised median. It has an estimated annual average daily traffic (AADT) of 34,800 vehicles per day and a 4% commercial vehicle content (DPTI Traffic Volume Maps 2015). It forms part of a b-

double gazetted road network and the current posted speed limit on this section of Main North Road is 90km/h.

Gordon Road is a future Distributer Road to support the urban growth area in Evanston Gardens. Only 250m of Gordon Road was constructed in 2013 when the Main North Road/Tiver Road/Gordon Road intersection was upgraded to a signalised intersection.

Potential/Future Road Upgrades

The signalisation of Main North Road/Gordon Road/Tiver Road Intersection was to support the planned development in the Gawler Urban Growth Area as identified in the 30 Year Plan for Greater Adelaide. There are no further upgrades planned at this intersection.

This section of Main North Road is currently subject to a possible Metropolitan Adelaide Road Widening Plan requirement of 15m wide strip on both sides (East and West) of the road for potential future road upgrades and road widening.

Gordon Road currently is a 'No Through' road. Traffic entered Gordon Road will be required to undertake a U-turn and return to the Main North Road/Tiver Road intersection. The Gawler Transport and Traffic Management Plan (March 2016) has also identified Gordon Road to be upgraded in future to provide 'an alternative east/west' traffic route including a future grade separated rail crossing. The timing to extend Gordon Road to meet Coventry Road is currently unknown and it is subject to the future growth in the Evanston Gardens.

Future Traffic Considerations

The site was previously operating as a garden and paving centre, which is commercial in nature. The proposed Peter Kittle car dealership and pre-delivery centre is expected to generate similar traffic movements compared to the previous use, however, this will need to be confirmed via a traffic impact assessment during the development planning stage.

Heavy vehicle turning movements will need to be considered during the development planning stage and subject to the internal site operation. Traffic from the north can utilise Gordon Road to access the site. Vice versa, traffic from the south can enter via Main North Road. Egress is currently via Main North Road. In future, there may be an opportunity to leave via Gordon Road when the road gets extended/upgraded.

3. Infrastructure Assessment – Crn Angle Vale Road / Jack Cooper Drive, Evanston Gardens

The following provides a summary of the existing infrastructure and advice received in relation to new infrastructure required for the purpose of servicing the proposed commercial development at the corner of Angle Vale Road and Jack Cooper Drive, Evanston Gardens, formerly a CFS Depot.

The infrastructure identified as being present on, or adjacent the site, as provided by 'Dial Before You Dig' (DBYD) and the associated service authorities is as follows:

- Potable water (SA Water);
- Roads & Stormwater (Town of Gawler);
- Gas (APA Group);
- Telecommunications (Telstra, NBN Co.); and
- Electrical (SAPN).

Whilst we have contacted authorities, we have not received definitive information from all of them at this time and our assumptions are provided herein.

3.1. Water Supply

There is an existing 100mm diameter water supply main in Angle Vale Road which feeds a 40mm service to the property. SA Water have advised that this could be upgraded to a 50mm connection if required.

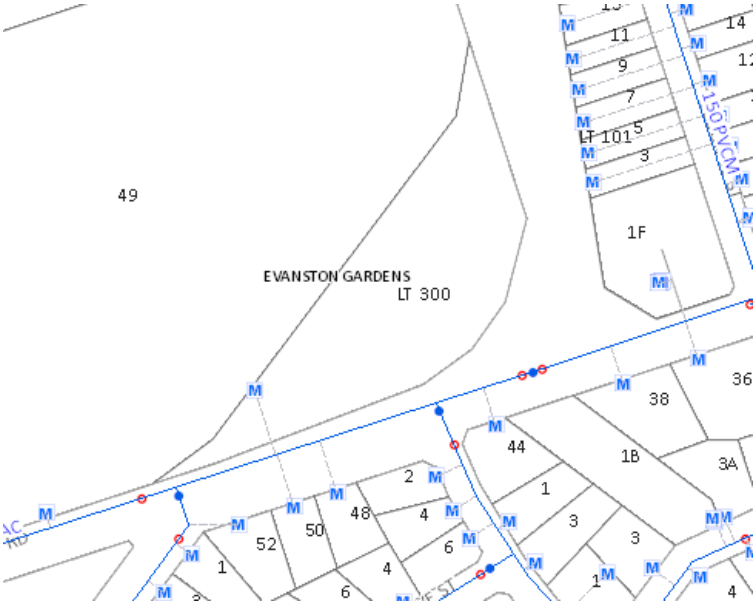


Figure 3: Existing Water Supply Infrastructure

Should a fire service be required, a mains extension or upgrade may be requested, dependent on the size and the pressure required. There is a 150mm main in Coventry Rd and Osborne St which could be extended.

3.2. Wastewater

There is an existing 525mm diameter wastewater main in Angle Vale Road.

SA Water have advised that a new sewer connection could be provided to service the property.

3.3. Stormwater Drainage

An existing swale along the front of the property currently flows towards a grated inlet pit located at the approximate midpoint of the bend. This grated inlet pit then discharges to a 525mm diameter RCP in Angle Vale Road with a 300mm diameter RCP, which then discharge into the Milne Road stormwater system.

The Town of Gawler advised that typically new developments require stormwater detention and stormwater quality treatment.

It is assumed that the existing system in Angle Vale Road and Milne Road is currently under capacity and that on-site stormwater detention would be required to restrict the post-development flows to the pre-development flows.

Given the nature of the products used and activities occurring at a petrol station, it is anticipated that increased stormwater quality treatment measures would be required in order to meet EPA quality treatment targets for the site.

It is anticipated that a vegetated treatment swale and an underground proprietary treatment product will be sufficient for the site, however this will be subject to detailed design and further correspondence with the relevant authorities.

3.4. Electrical Supply

The site is currently bounded by high voltage and low voltage infrastructure in Angle Vale Road and along the rear boundary.

SA Power Networks have been contacted in regards to the proposed development; however, no servicing advice has been received at this time.

It is not yet known if the existing low voltage infrastructure has capacity to service the proposed service station, or if a new transformer would be required.

3.5. Communications

A Dial Before You Dig indicated that there is an existing Telstra service to the site, most likely for the old CFS station. The suitability of the existing service for the proposed service station is not known.

NBN Co. have advised that the Fibre-to-the-Node (FTTN) rollout has been completed in this area. However, the parcel of land in question did not receive a connection.

If a service application were submitted currently, the premise would likely be designated as a fixed wireless service. NBN Co. have advised however that it may be possible to apply to have the parcel of land serviced from the FTTN infrastructure, given its close proximity.

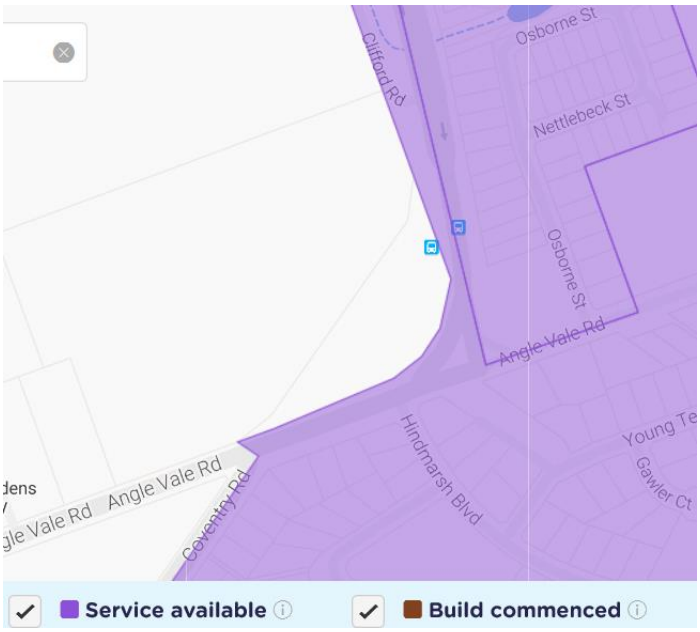


Figure 4: NBN Co. Rollout Map

3.6. Gas Supply

There is an existing gas supply main in Angle Vale Road and Jack Cooper Drive.

APA Group have advised that there is sufficient capacity in the existing mains to service the proposed service station.

Any new gas meters would be required to be located along the front boundary with bollard protection.

3.7. Roads & Transport

Figure 4: Former CFS Depot Access Locations

Site Access

This site has two access points, one on Angle Vale Road and another on Jack Cooper Drive.

The Angle Vale Road access is currently unrestricted and vehicles can undertake all left turn and right turn movements into and out from the site. This access is located approximately 110m west of the Angle Vale Road/Jack Cooper Drive junction.

The Jack Cooper Drive access is also unrestricted and it is located at approximately 70m north of the Angle Vale Road/Jack Cooper Drive junction.

Only Jack Cooper Drive is classed as a Controlled Access Road. Any new access and modifications to the existing access arrangement will be subject to DPTI's approval.

Road Networks

Angle Vale Road is a rural arterial road connecting the northern suburbs between Gawler and Virgina. Jack Cooper Drive runs in a continuation of Angle Vale Road providing connections to the Gawler Bypass.

Both Angle Vale Road and Jack Cooper Road form a link and provides a freight connection to major logistic centres in the north and is part of a b-double gazetted road network.

Angle Vale Road and Jack Cooper Drive are classified as a Freight Route under the Functional Hierarchy for South Australia's Land Transport Network.

Both Angle Vale Road and Jack Cooper Road are under the care, control and management of DPTI. Both roads currently have one lane in each direction and have an estimated AADT of 4,600 vehicles per day and a 4% commercial vehicle content (DPTI Traffic Volume Maps 2015).

The current posted speed limit on this section of road is 60km/h.

Potential/Future Road Upgrades

The Integrated Transport and Land Use Plan (ITLUP 2016) has highlighted this section of Angle Vale Road and Jack Cooper Drive could be subject to 'arterial and local road upgrades including intersection and midblock improvements'.

The Gawler (CT) Evanston Gardens/Evanston South/Hillier Structure Plan (April 2016) also highlights the Coventry Road will be realigned and intersect with Angle Vale Road at right-angle to form a T- intersection or a roundabout.

The Gawler Transport and Traffic Management Plan (March 2015) also identified the opportunity to change the priorities at the Jack Cooper Drive/Angle Vale Road junction to form a continuous arterial road.

Both Angle Vale Road and Jack Cooper Drive are not subject to the Metropolitan Adelaide Road Widening Plan requirements.

Future Traffic Considerations

The proposed petrol station will likely generate a higher traffic movements compared to the former CFS Depot. It is expected the right turn movements into and out from the site will be increased.

Further traffic assessment may be required to review the traffic implications to the operation of Angle Vale Road and Jack Cooper Drive.

The vehicle sight distance at the Jack Cooper Drive access will need to be assessed to ensure safety at the Angle Vale Road/Jack Cooper Drive intersection. The existing access arrangements will need to be reviewed should the Jack Cooper Drive/Angle Vale Road junction become a continuous arterial road.

The access arrangements for the site should consider other arterial and local road upgrades highlighted in ITLUP.

Appendix 2 – Traffic Impact Assessment

GREENHILL

Commercial and Rural Areas DPA
Traffic Impact Assessment

September 2017

GREENHILL

Traffic Impact Assessment

Commercial and Rural Areas DPA

Prepared for

Holmes Dyer Pty Ltd

Document Ref : 15232

Date: Friday, 22 September 2017

Prepared by: Stephen Chan

Reviewed by: Tyson Radetti

Endorsed by: Peter Tan

Revision History

Revision	Revision Date	Details	Authorised	
			Author	Reviewer
A	22.09.2017	For Approval	S.Chan	Tyson Radetti

Contents

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List of Tables

1.0 Introduction

GREENHILL has been engaged by Holmes Dyer Pty Ltd to prepare a Traffic Impact Assessment for a developer funded Development Plan Amendment (DPA) for two sites within the Town of Gawler.

It is understood that the investigation and any identified transport infrastructure will be used to inform Council in adopting the DPA and Infrastructure Agreement.

The proposed DPA seeks to review:

- The appropriateness of **Site A**, at 3283 Main North Road, Kudla (CT 6108/58) and a small portion of the adjoining allotment (CT 6108/56), shown in Figure 1 – Proposed Commercial Development Area, for commercial use, specifically for a car dealership and pre-delivery centre.
- The appropriateness of **Site B**, the former Country Fire Service (CFS) Depot (CT5448/384 shown in Figure 1 – Proposed Commercial Development Area) on the corner of Angle Vale Road and Jack Cooper Drive, Evanston Garden for commercial use, potentially for a petrol station.

This report provides:

- A review of existing available information with the relevant road authorities.
- A high-level assessment of traffic impacts of the proposed developments.
- A recommendation on the likely transport infrastructure requirements to support the proposed developments.

Figure 1 – Proposed Commercial Development Area
(Courtesy: Property Location Browser, 2017)

2.0 The Proposed Development

The proposed development comprises of two separate sites located near Evanston Gardens, southwest of Gawler. Refer to Figure 1 – Proposed Commercial Develoment Area.

Site A is bounded by Main North Road to the southeast and Gordon Road to the northeast. This site (currently within the Rural Zone) has been proposed to be developed as a car dealership and pre-delivery centre. This site was formally home to a garden and paving centre (Backyard Inspirations), a commercial site. It is noted that a portion of this site has been planned for a future power substation.

Site B is bounded by Angle Vale Road to the south and Jack Cooper Drive to the east. This site (currently within the Residential Zone), has been proposed to be developed as a petrol station. This site was formally a Country Fire Service (CFS) Depot.

Access to Site A is proposed from the existing entrance on Main North Road and Gordon Road. The Main North Road access is currently a left-in and left-out access, located approximately 200m from the Tiver Road/Gordon Road signalised intersection. Whereas, the Gordon Road access in a left-in only access, located approximately 70m from the Main North Road/Tiver Road signalised intersection.

Access to Site B is proposed from two existing entrance points on Angle Vale Road and Jack Cooper Drive. Both accesses are currently unrestricted and vehicles can undertake all left turn and right turn movements into and out from the site. The Angle Vale Road and Jack Cooper Drive accesses are located approximately 110m and 70m, respectively, from the Angle Vale Road/Jack Cooper Drive junction.

3.0 Current Road Network

The existing road network relevant to the DPA is as follow:

Main North Road is a Major Traffic Route that runs in a northeast-southwest direction and providing connection to the major centres in the north. At Site A, the road currently has two traffic lanes and a bicycle lane in each direction separated by a raised median. It has an estimated annual average daily traffic (AADT) of 34,800 vehicles per day and a 4% commercial vehicle content (Traffic Volume Maps 2015 provided by the Department of Planning, Transport and Infrastructure, DPTI). It forms part of a b-double gazetted road network and the current posted speed limit on this section of road is 90km/h.

Main North Road is also classed as a Controlled Access Road by DPTI. Any new access or modifications to the existing access arrangement will be subject to DPTI's approval.

Gordon Road is a future Distributer Road to support the urban growth area in Evanston Gardens area. A 250m section of Gordon Road was constructed in 2013 when the Main North Road/Tiver Road/Gordon Road intersection was upgraded to a signalised intersection. The upgrade takes into account a 2031 estimated traffic volume of 9,100 vehicles per day on Gordon Road based on the Metropolitan Adelaide Strategic Transport Evolution Model (MASTEM).

Gordon Road is also classed as a Controlled Access Road by DPTI. Any new access or modifications to the existing access arrangement will be subject to DPTI's approval.

Angle Vale Road is a rural arterial road connecting the northern suburbs of Gawler and Virgina. It is classified as a Freight Route and it is estimated to carry 4,600 vehicles per day and a 4% commercial vehicle content (DPTI Traffic Volume Maps 2015). The current posted speed limit on this section of road is 60km/h.

Jack Cooper Drive runs in a continuation of Angle Vale Road travelling in the Gawler direction and providing connections to the Gawler Bypass. Jack Cooper Drive forms an unsignalised junction at Angle Vale Road travelling in the Angle Vale direction. It also forms part of a B-double gazetted road network and it is estimated to carry the same traffic volumes as Angle Vale Road.

4.0 Future Road Network without Site A and Site B Developments

It is not expected that there will be any significant changes to the future arterial road network over the next 5 years without the development.

The Integrated Transport and Land Use Plan (ITLUP 2016) has highlighted that Angle Vale Road and Jack Cooper Drive could be subject to 'arterial and local road upgrades including intersection and midblock improvements'.

The signalisation of Main North Road/Gordon Road/Tiver Road Intersection was to support the planned development in the Gawler Urban Growth Area as identified in the 30 Year Plan for Greater Adelaide and the intersection upgrade took into account 2031 estimated traffic volumes based on the MASTEM modelling. There are no further upgrades currently planned at this signalised intersection.

The Gawler Transport and Traffic Management Plan (March 2016) identified that:

- Gordon Road is to be upgraded in future to provide 'an alternative east/west' traffic route including a future grade separated rail crossing.
- Jack Cooper Drive/Angle Vale Road junction could be realigned to form a continuous arterial road.
- Coventry Road will be realigned and intersect with Angle Vale Road at right-angle to form a T-intersection or a roundabout.

The timing of these future upgrades is currently unknown and it is subject to the future growth in the area.

Main North Road is subject to a possible Metropolitan Adelaide Road Widening Plan requirement of 15m wide strips on both sides (East and West) of the road for potential future road upgrades and road widening.

5.0 Future Road Network with Site A and Site B Developments

This section provides an assessment of traffic impacts of the proposed development. No consideration has been given to other developable areas within the area.

5.1 Key Assumptions

The assessment is based on the development areas as shown in Figure 1 – Proposed Commercial Development Area. A high-level review of the total site area and following assumptions have been considered:

- Site A has a total area of about 29,000m^2 (excluding the power station) and the full development of the site could comprise of:
  - Workshops, spare parts and delivery areas of 2,500m^2,
  - Office areas of 500m^2, and
  - Motor Showroom areas of 2,000m^2

- Site B has a total area of about 8,800m^2, a typical petrol station development is generally comprising of a convenience store of 200m^2 and 4 double sided fuel dispensers.

5.2 Traffic Generation

There are no specific traffic generation rates nominated in the Town of Gawler's Development Plan. For the purpose estimating the traffic generation for proposed developments, the NSW's Road and Marine Services (formerly RTA) Guide to Traffic Generating Developments 2002 (the RTA Guide) has been considered. The RTA Guide is a nationally accepted guideline used by traffic practitioners for the assessment of traffic and parking impacts in Australia.

As the workshops, spare parts and delivery areas within a car dealership centre provide a function similar to a small factory, these areas have been categorised as a 'factory' for the purpose of estimating the traffic generation. Table 1 – Estimated Traffic Generation provides the summary of the estimated traffic generation based on the assumed floor areas within the proposed developments.

Table 1 – Estimated Traffic Generation

Form of development	Unit	Rate of trip generation	Evening peak hour trip
SITE A: Proposed Car Dealership and Pre-Delivery Centre			
Office	500sq.m	2 trips/100sq.m	10 vehicle trips
Motor Showrooms	2,000sq.m	0.7 trips/100sq.m	14 vehicle trips
Factory	2,500sq.m	1 trip/100sq.m	25 vehicle trips
SITE B: Proposed Petrol Station			
Petrol station	200sq.m	0.66 x Gross Floor Area	132 vehicle trips

Hence the proposed development at Site A could generate a total 50 vehicle trips (rounded) to the surrounding road network in the evening peak hour.

Site B could generate a total of 132 vehicle trips to the surrounding road network in the evening peak hour.

5.3 Traffic Distribution

A traffic distribution has been estimated for the evening peak period to identify any infrastructure upgrade required to accommodate the proposed developments.

A 50/50 percentage distribution is assumed for this assessment.

Figure 2 – Estimated Traffic Distribution at Site A: Car Dealership and Pre-Delivery Centre

Figure 3 – Estimated Traffic Distribution at Site B: Petrol Station

5.4 Traffic Assessment

Site A – Car Dealership and Pre-Delivery Centre

This site was previously operating as a garden and paving centre, which is commercial in nature. Based on a high-level assessment, the proposed car dealership and pre-delivery centre could generate approximately 50 trips in the evening peak hour to the surrounding road network.

Heavy vehicle (19m semi-trailer) turning movement will need to be confirmed at the development planning stage. Traffic from the north can utilise Gordon Road to access the site. Vice versa, traffic from the south can enter via Main North Road.

Egress is currently provided on Main North Road only. In future, there may be an opportunity to exit via Gordon Road when the road gets extended/upgraded.

The traffic operation at the Main North Road/Tiver Road/Gordon Road intersection had been upgraded to cater for forecasted 2031 traffic volume. The proposed development would have minimal traffic impact to Main North Road, Gordon Road and the Main North Road signalised intersection.

It is noted that Gordon Road currently is a 'No Through' road. Traffic entering Gordon Road will be required to undertake a U-turn and return to the Main North Road/Tiver Road intersection.

Site B – Petrol Filling Station

The proposed petrol station could generate approximately 132 trips in the evening peak hour to the surrounding road network.

Heavy vehicle (19m semi-trailer) turning movement will need to be confirmed at the development planning stage. Traffic from Angle Vale can access the site from the west by turning left off Angle Vale Road and exit the site by turning left onto Jack Cooper Drive. Vice versa, traffic from Gawler can enter the site by turning right on Jack Cooper Drive.

The proposed development would have minimal traffic impact to Angle Vale Road, Jack Cooper Drive and the Angle Vale Road/Jack Cooper Road junction.

Minor road widening on Angle Vale Road and Jack Cooper Drive would be required for safe left turning movements into the development.

It is understood that the Angle Vale Road/Jack Cooper Road junction may be realigned to form a continuous arterial road. The Jack Cooper Drive access point should be located as far away from the Angle Vale junction as possible to accommodate the future realignment.

6.0 Concluding Statement

The key outcomes of this traffic assessment for the proposed development are:

- Site A, at 3283 Main North Road, Kudla (CT 6108/58) and a small portion of the adjoining allotment (CT 6108/56) is proposed to be a car dealership and pre-delivery centre.
- Site B (CT5448/384) on the corner of Angle Vale Road and Jack Cooper Drive, Evanston Gardens is proposed to be a petrol station.
- Site A would generate in the order of 50 trips in the evening peak hour based on an assumed size of the overall development.
- Site B would generate 132 trips in the evening peak hour based on a typical petrol station with a convenience store of 200m^2.
- The surrounding road network (Main North Road, Gordon Road, Angle Vale Road and Jack Cooper Drive) would have capacity to cater for the additional traffic generated from the proposed Site A and Site B developments.
- Local widening would be required on Angle Vale Road and Jack Cooper Drive for safe left turning movement into the development.

Development Plan Amendment

By the Council

Gawler (CT)

Commercial and Rural Areas Development Plan Amendment

The Amendment

For Consultation

Development Plan Amendment Instructions Table

Corporation of the Town of Gawler

Gawler (CT) Development Plan

Commercial and Rural Areas DPA

The following amendment instructions (at 14 September 2017) relate to the Gawler (CT) Development Plan consolidated on 28 April 2016.

Where amendments to this Development Plan have been authorised after the aforementioned consolidation date, consequential changes to the following amendment instructions will be made as necessary to give effect to this amendment.

Amendment Instruction Number	Method of Change • Amend • Replace • Delete • Insert	Detail what in the Development Plan is to be amended, replaced, deleted or inserted. If applicable, detail what material is to be inserted and where. Use attachments for large bodies of material.	Is Renumbering required (Y/N)	Subsequent Policy cross-references requiring update (Y/N) if yes please specify.
COUNCIL WIDE / GENERAL SECTION PROVISIONS (including figures and illustrations contained in the text)				
Amendments required (Yes/No): **No**				
ZONE AND/OR POLICY AREA AND/OR PRECINCT PROVISIONS (including figures and illustrations contained in the text)				
Amendments required (Yes/No): **Yes**				
Business Zone				
	Delete the Business Zone	Replace with all the material in Appendix A	Yes	No
TABLES				
Amendments required (Yes/No): **Yes**				
Table				
	Delete Table Ga/4	Replace with all the material in Appendix B	No	No
MAPPING (Structure Plans, Overlays, Enlargements, Zone Maps, Policy Area & Precinct Maps)				
Amendments required (Yes/No): **Yes**				
Map(s)				
	Delete Map Ga/1 (Overlay 1) Enlargement H	Replace with all the material in Appendix C	No	No

	Delete Map Ga/8	Replace with all the material in Appendix D	No	No
	Delete Map Ga/16	Replace with all the material in Appendix E	No	No
	Delete Figure Res/2	Replace with Figure Res/2 in Appendix F	No	No

Attachment A

BUSINESS ZONE

Introduction

In addition to the Council Wide policies, the Business Zone policies apply to the areas shown in Maps Ga/8 and 9.

Desired Character

The purpose of the Zone is to accommodate a wide range of local services and goods retailing, bulky goods outlets, service trade premises, warehousing and service industry.

The Zone should develop as a well-contained precinct separated from adjoining uses by attractively landscaped areas. Landscaping will also perform the function of retaining and disposing of stormwater run-off and enhancing the arterial road frontage of the zone.

Building design and site development should be well-integrated within a uniform and specified framework of structural forms, building materials and colours, advertising styles and landscaping to ensure an attractive appearance along the main approach road to Gawler.

There should be a strong emphasis on minimizing impacts on residential uses where they adjoin the Zone. Whilst this will be achieved through a range of design techniques, a critical factor is the limited scale of the uses intended in the zone.

The design and layout of community access roads; car parking; entry points onto public roads; landscaping; and direction of traffic movements should be in accordance with the structure in Fig B/1

Visual interest and amenity appeal will be achieved through a consistent layout and design of buildings and structures, with a particular emphasis on the following elements:

(a) an integrated vehicle movement system and shared car parking;

(b) building set-back from car parks and internal roads;

(c) consistency in the use of building materials, colours and decorative elements;

(d) use of roof forms;

(e) coordinated signage;

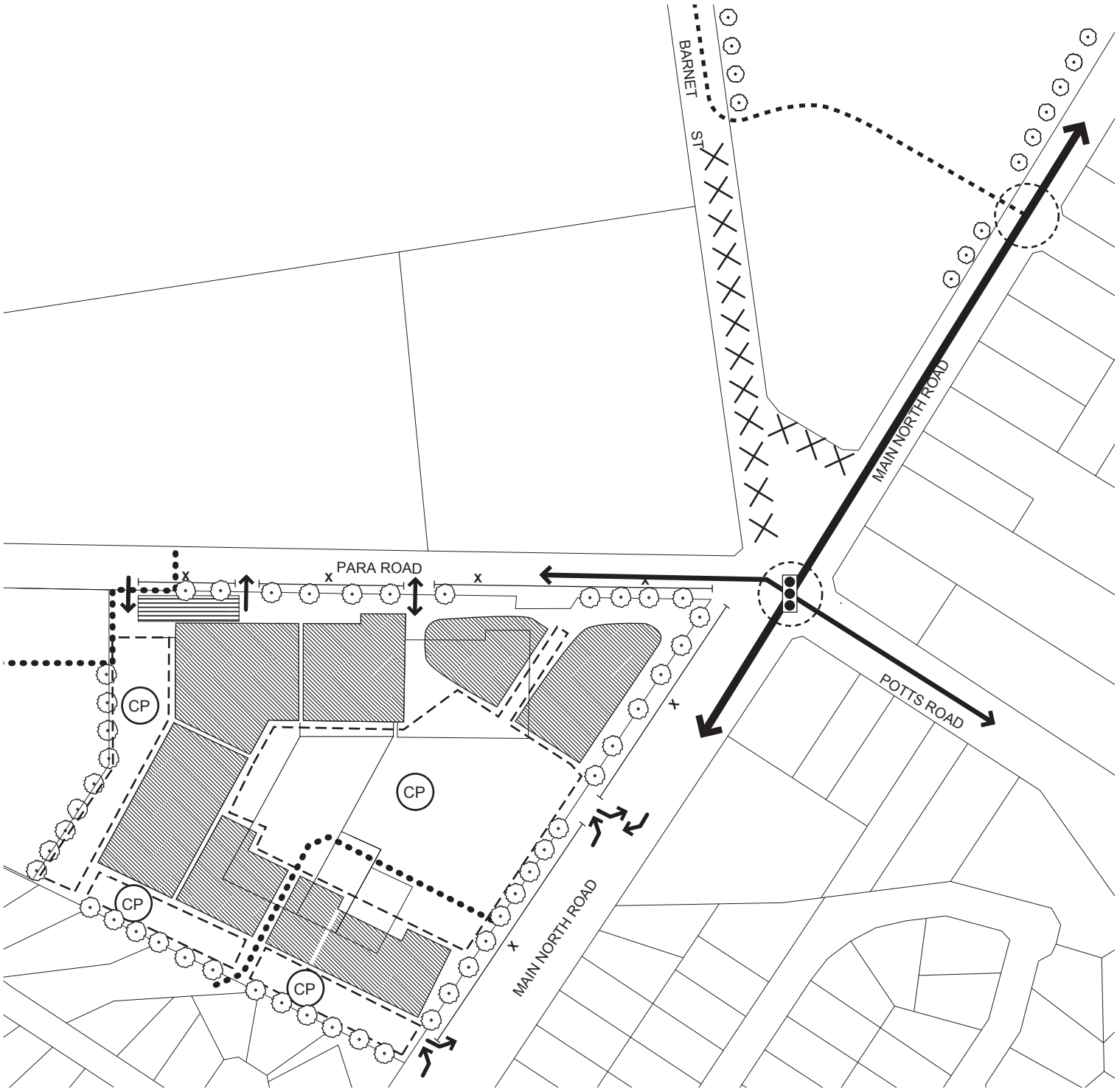
(f) uniform landscape treatments;

(g) consistency in fencing design, set-back and location of outdoor storage areas; and

(h) building or floor areas which are not excessive (and within the area shown on Fig B/1 less than 1500 square metres, apart from one which should not exceed 3000 square metres

Land uses or activities that are suitable in the zone, subject to design considerations, include:

Bulky Goods Outlet
Motor Showroom
Motor Repair Station
Petrol Filling Station except on the site on the south-western corner of the Main North Road and Gordon/Tiver Road intersection
Plant Nursery
Restaurant (less than 300 square metres)
Service Industry
Service Trade Premises
Veterinary Practice
Warehousing



- Carparking Areas (inclusive of Landscaping)
- Vehicular Access
- No Direct Vehicular Access
- Anticipated Development Areas
- Drop Off Area / Carparking
- Main Public Pedestrian Linkages
- Landscaping
- Signalised Intersection/ Pedestrian & Vehicular Movement
- Road Closure
- Road Realignment
- Intersection treatment
- Secondary Arterial Road
- Local Road

Scale 1:2500

0 100m

GAWLER (CT) BUSINESS ZONE STRUCTURE/SITE LAYOUT PLAN Fig B/1

Consolidated - 28 April 2016

OBJECTIVES

Objective 1: A zone accommodating a range of specified business activities.

Objective 2: An attractively developed and landscaped zone.

Objective 3: Uses that have low external impacts and do not detract from the amenity of nearby residential areas and educational uses.

Objective 4: Orderly and economic division of land appropriate for business use.

Objective 5: Minimising the production of wastes (solid and water).

PRINCIPLES OF DEVELOPMENT CONTROL

Design Techniques are one way in which a relevant principle of development control may be satisfied.

There may be other appropriate *design techniques* that could be applied, depending upon local circumstances. It is not necessary for every proposal to satisfy every *design technique.*

1 Development should be consistent with the desired character and use of land for the Zone, and within the area shown on Fig B/1 with Fig B/1.

2 Development located within the zone to minimize impact on the locality. Reference should be given to the scale of the buildings; the intensity of use; the hours of operation; and generation of emissions.

Environmental Management

3 Activities which have the potential for off-site environmental impacts should be appropriately located in relation to more sensitive land uses.

4 Intensity and/or nature of a use should minimize land, water or air pollution.

5 Wastes and emissions should be managed effectively to minimize environmental impact.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

5.1 All waste liquids associated with any activity undertaken on the premises are discharged into a sewer (with the approval of the relevant State Government authority), or to a holding tank, which is protected from stormwater intrusion, prior to regular removal offsite to a licensed waste depot by a licensed waste carrier; and

5.2 Any vehicle, plant or equipment washing/cleaning activity undertaken within an area that is:

(a) Roofed;

(b)- Designed to contain all the wastewater likely to pollute stormwater;

(c) Bonded with an impervious material, such as concrete, to facilitate wastewater collection;

(d) Of sufficient size to prevent 'splash-out' or 'over-spray' of wash/wastewater from the washing/cleaning area; and

(e) Designed to drain to either a treatment device (such as sediment traps and a coalescing plate oil separator) with subsequent disposal to sewer or a Septic Tank Effluent Disposal Scheme (with the approval of the relevant State or Local Government authority) or to a holding tank prior to regular removal off-site to a licensed waste depot by a licensed waste carrier; and

5.3 Dedicated rubbish skips are provided for the collection of all solid waste material, including general office rubbish, which are:

(a) Covered at all times to prevent the entry of stormwater or dispersal by wind;

(b) Sealed to prevent leakage;

(c) Located on 'hard standing' areas graded to a collection point in order to minimize the movement of any solids or contaminated water, and to prevent the entry of external stormwater; and

(d) Not used for oils, solvents, partly used paints, flammable materials, other liquids or sludges (oil-stained rags are acceptable) or toxic materials, including paint residues, particularly if they contain lead. These wastes are to be stored in covered bunded areas or, if not contained under cover, in airtight containers within bunded areas such that there is no airborne or waterborne migration from the designated storage areas.

5.4 Measures are incorporated into development such as recycling or reuse of materials onsite including wastewater to minimize the generation of waste.

5.5 Where wastewater cannot be recycled or reused, its appropriate treatment or disposal is ensured through an approved trade waste connection.

Energy

6 Energy consumption for lighting, heating, cooling, processing and ventilation should be minimized by:

(a) orientation and siting of buildings to:

(i) minimize opportunities for passive heating and cooling;

(ii) reduce energy use; and

(iii) minimize access to natural light; and

(b) incorporating landscaping into development which minimizes access to light in winter, and shade in summer.

Emissions

7 The nature, scale and intensity of the activity should:

(a) minimize the levels of noise, vibration, dust, odours or other airborne emissions;

(b) not detrimentally affect nearby residential, recreational or educational uses; and

(c) incorporate management practices, technology or design techniques to minimize the impact on the environment from all emissions likely to be generated by development.

Advisory Note:

An emissions assessment may be required to demonstrate that the activity has minimal impact on the environment.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

7.1 Development does not exceed the maximum pollution levels identified by the Environmental Protection (Air Quality) Policy 1994.

7.2 Dust emissions are controlled through the incorporation of dust suppressors.

7.3 All roadways, entrances and main traffic areas are compacted and sealed.

Parking, Access and Servicing

8 No development within the area shown on Fig B/1 should occur within the zone until alterations to the roads and traffic signals depicted in Fig B/1 have been completed and other traffic management infrastructure constructed including but not limited:

(a) acceleration/turning lanes adjoining the land on Main North Road;

(b) modification of the open swale drain across Main North Road;

(c) roadside landscaping and shoulder works;

9 Access to individual sites should:

(a) be coordinated and if the land is divided into individual allotments, shared facilities should be managed communally;

(b) minimize traffic hazards;

(c) ensure the safety of the public and the free flow of traffic in the locality;

(d) minimize traffic hazards and queuing on roads; and

(e) ensure vehicles exit in a forward direction.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

9.1 Access onto roads designed and located to enable all vehicle entry/exit from the site to occur in a forward direction.

9.2 The dimensions and arrangements of all parking, loading and manoeuvring areas are established in accordance with Australian Standards 2890.2-1989: Commercial vehicle facilities; and

9.3 A designated loading/ unloading area is provided and separated from customer and employee car parking.

10 Vehicle and bicycle parking should be provided commensurate with the intensity of the activity proposed and allowing safe and convenient access.

11 Car parking areas and associated manoeuvring areas should be efficient and coordinated and be sufficient to enable safe, convenient and efficient parking and traffic circulation.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

11.1 Car parking spaces and areas are designed, constructed and line marked in accordance with Australian/New Zealand Standard 2890.1:2004-1986: Off-street car parking.

12 Surface treatment of all car parking and vehicular manoeuvring areas should be designed to withstand vehicular traffic in all weather conditions and to prevent soil erosion, dust and drainage problems.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

12.1 Car parking spaces and manoeuvring areas are sealed with an all-weather hard paved surface (such as bitumen, concrete or brick paving).

13 Car parking areas should be suitably planted with canopy trees and screened with landscaping to reduce visual impact.

14 Servicing, including garbage and recycling collection services, should not impact on adjoining developments and streets.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

14.1 All servicing, including garbage collection, is capable of being carried out wholly within the site, with collection points being positioned at convenient locations.

14.2 Provision is made for shared recycling in the zone.

Stormwater Drainage

15 Site drainage should:

(a) Incorporate where practicable, provision for on-site stormwater detention, retention and use (including, where practicable, the collection and storing of water from roofs and communal car parks in appropriate devices);

(b) provide on-site infiltration, where practicable, having regard to:

(i) the availability of unsealed areas or areas which are not built up;

(ii) the capacity of soils to absorb water;

(iii) the capacity of building footings on and adjacent to the site to withstand the likely effects of retained water; and

(iv) potential adverse impacts on the level of groundwater;

(c) allow convenient access to all components of the drainage system for maintenance purposes; and

(d) not cause damage or nuisance flows on the site or onto adjoining properties.

16 The storm drainage system should maximize the interception, retention and removal of waterborne physical, chemical and biological pollutants prior to their discharge to surface or underground receiving waters. Disposal should be via on-site treatment or authorised disposal to a sewer or licensed waste depot by a licensed waste carrier.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

16.1 Rainfall run-off from the roof of any building is discharged directly to the street water table or an approved stormwater system and not mixed with rainfall run-off originating from surfaces such as car parks, outdoor storage areas and display areas; and

16.2 Rainfall from ground surfaces is directed to open swales (long depressions that guide surface runoff) via purpose designed and built traps for litter, sediment grease, oil and other substances capable of contaminating stormwater, and a high flow bypass is provided in conjunction with the traps, to enable water from extreme rainfall events to discharge direct to stormwater swales or to Council stormwater systems; and

16.3 Swales are designed in combination with roads and other paved surface areas to detain the whole run-off from a1 in 10 year rainfall event flow, and a 1 in 100 year event storm, for a period of one hour.

17 Stormwater discharge should be minimized through the adoption of reuse and recycling techniques.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

17.1 Stormwater discharge does not exceed the capacity of existing or planned external stormwater systems by:

(a) the collection of roof water in above and/or below ground tanks or detention basins designed in accordance with the average rainfall for the area and roof size and located on site and where necessary overflows that connect into the stormwater system;

(b) the incorporation of on-site detention facilities and the utilisation and re-use of stormwater for:

(i) irrigation of landscaped areas; or

(ii) aquifer recharge; or

(iii) process purposes.

17.2 Roof water that is not contaminated with other water (such as air conditioning or cooling tower wastewater) and cannot be reused or recycled on site should be discharged (via underground pipes) directly into the Council stormwater system.

17.3 Where stormwater runoff is generated from car parks, driveways, hard paved areas, and rubbish bin/skip storage areas, and other contaminated stormwater, the runoff is treated by diversion into an approved stormwater treatment system/device that is capable of removing litter, sediment and oil products.

17.4 Treated stormwater is discharged:

(a) into grassed swales, vegetation or garden strips adjacent to car parks and the property boundaries; or

(b) into stone filled trenches either open to surface or underground, similar to a septic tank absorption field; or

(c) by a method approved by a hydrological specialist.

17.5 Where stormwater does not contain solid waste or runoff from potentially polluted surfaces such as driveways, car parks and paved areas, the runoff is directed onto a suitable vegetation filter strip before being redirected off the site.

17.6 Wastewater from air conditioning units, cooling towers and compressors is disposed of to sewer or collected by an authorised carrier and disposed of at an approved waste depot.

Chemicals and Materials Storage

18 Chemicals and materials should be used, stored and managed on-site and disposed of in a manner which guards against the risk of explosion, spills, fire and exposure to air.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

18.1 Chemicals and materials are stored separately in covered, bunded areas or, if not under cover, in airtight containers within bunded areas, so that there is no airborne or waterborne migration from the designated storage areas; and

18.2 Bunded areas are protected from external stormwater intrusion with drainage to sewer with the approval of the relevant State authority, or to a holding tank prior to regular removal off-site to a licensed waste depot by a licensed waste carrier; and

18.3 Loading/unloading areas are designed and constructed to prevent the entry of external stormwater, to contain any spilt materials and 'washdown' likely to pollute stormwater, with drainage to sewer (with the approval of the relevant State or Local Government authority) or to a holding tank prior to regular removal off-site to a licensed waste depot by a licensed waste carrier. Where loading/unloading activities involve quantities of hazardous chemicals, the operator has an emergency spill contingency plan.

18.4 The capacity of the bunded compound/area:

(a) takes into account the volume displaced by containers stored within the bunded compound;

(b) is at least 120 percent of the volume of the largest vessel it contains; or

(c) where many small containers are stored, the bund must be capable of holding 25 percent of the total volume stored within the bund.

18.5 Bund walls and floors are of impervious construction to retain the materials being stored.

18.6 Bunded areas include a waste retaining sump, holding tank or pumping sump either within or draining the bunded compound/ area and of sufficient size to contain any spills and washdown material.

18.7 Bunded areas, compounds/ storage, waste retaining sumps, holding tanks or pumping sumps do not have external drains or valves. Spilled or leaked materials including clean up materials are:

(a) contained within the bund, waste retaining sump, holding tank or pumping sump; and

(b) removed by a portable or manual pump, to be collected for reuse, or treated and disposed of by an authorised waste disposal contractor.

18.8 Bunded compounds/areas/storages are:

(a) designed and constructed to enable sufficient cleaning;

(b) provided with appropriate signage to indicate the chemical types held within the storage area; and

(c) protected and secured from public access.

Hours of Operation and Noise

19 Development should not adversely affect the level of amenity in adjoining non-business areas by virtue of hours of operation and noise emitted.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

19.1 Where the business operation is to be located within 60 metres of a residential area:

(a) Delivery trucks only arrive at the premises after 7am and depart before 10pm on any weekday or Saturday, and after 8am and before 10pm on a Sunday or Public Holiday; and

(b) Work shift breaks are after 7am and before 10pm on any weekday or Saturday, and after 8am and before 10pm on a Sunday or Public Holiday; and

19.2 The noise level (leq) emanating from premises measured and adjusted at the residential boundary is less than 52Db(a) leq between the hours of 7am and 10pm and less than 42Db(a) between 10pm and 7am[1].

[1] Leq measurement includes the addition of 5Db(a) penalties where tonal or modulation (amplitude or frequency) or impulse noise is being assessed. All measurements are made at any residential boundary outside the business zone. The onus of proof that engineered noise containment preventing noise impacts escaping from the development site will achieve this level of performance to rest with the proponent or applicant.

19.3 An appropriately designed acoustic barrier in the form of a solid masonry wall or a similar structure (that does not unreasonably overshadow adjoining properties), is provided between the noise source and adjoining residential areas.

Outdoor Lighting

20 Outdoor lighting designed and installed so that it does not intrude on other properties or roads in the locality.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

20.1 Outside lighting is directed down and towards the site to prevent spillage onto surrounding properties or thoroughfares; and

20.2 Outdoor lighting is provided in accordance with 'Interim Australian Standard 4282 – 1995: Control of the obtrusive effects of outdoor lighting'.

Amenity and Urban Design

21 Building layout and appearance should be compatible with the desired character of the zone.

Building Size

22 In the area depicted on Fig B/1 a maximum of one building of 3000 square metres is appropriate, however all other individual buildings or structures in the area shown on Fig B/1 should not exceed 1500 square metres in area.

23 In all other areas of the zone except the site on the south-western corner of the intersection of Main North Road/Gordon/Tiver Road, buildings should not exceed 1500 square metres.

Set-backs

24 For development in the area depicted on Fig B/1, building set-backs should generally conform with the Development Areas (buildings, outdoor display, loading areas) in Fig B/1 to achieve a defined and where appropriate, articulated building line and good streetscape quality.

25 Other buildings should have setbacks appropriate to the site and locality.

Internal Facades Facing Internal/Core Car Park

26 All buildings are to incorporate design features to provide a human scale, weather protection and entry definition.

27 In the area depicted on Fig B/1 specifically, buildings should be designed to provide:

(a) Building facades broken into discreet frontages of varying length. The maximum 'unbroken' façade length is 30 metres.

(b) Entries and markers approximately 3.0 metres wide by 6.0 metres long by 5.0 metres high to punctuate the verandahs randomly at approximately 12.0 metre centres.

Rear (Delivery) Façade (South and East Elevations)

28 Buildings in the area depicted on Fig B/1 are to incorporate:

(a) Projecting canopies to protect delivery points of 4.0 metres above the roadway, 1.0 metre high, 4.0 metre wide and projecting by 3.0 metres incorporating a roof element at a 18 degree pitch, of a contrasting non-reflective steel coloured finish.

(b) Wall panels should be treated with a surface treatment pattern which creates a play of shadow and texture and a lower scale, in panels sized approximately 4.0 metres wide by 1.5 metres high in an alternating, subtle checkerboard pattern.

(c) Parapets should alternate in height from between 5.5 metres and 6.5 metres high. This variety should be somewhat random to avoid a 'castellated' look and should match the wall panel width of around 4.0 metres.

Para Road Frontage

29 Buildings fronting Para Road should to incorporate:

(a) Facades with verandahs approximately 3.0 metres which are punctuated by markers to identify building functions, ie doorways, windows etc.

(b) A window pattern that relieves a long continuous façade.

Building Materials, Colours and Decorative Elements

30 Coloured masonry or galvanized iron should be used using soft or muted colours for all buildings in the area depicted on Fig B/1. Decorative elements should be confined to louvred roof vents and wall vents.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

30.1 Appropriate wall colours: Birch; Armour Grey; Off White; Gull Grey;

30.2 Appropriate trim colours: Mountain Blue; Torrens Blue; Slate Grey; Atoll Green; Heritage Red.

Wall Heights and Roof Pitch

31 For development in the area depicted on Fig B/1, a maximum wall height of 6.0 metres, with an expressed mansard roof element commencing at 5.0 metres and rising to 6.5 metres pitched at 45 degrees.

32 In all other areas, the wall height and roof pitch should be appropriate to the locality and in most cases wall height should be no greater than 9.0 metres.

Fenestration (Window) Pattern

33 The primary building facades should be approximately 50 percent glazed, in a modulated or informal pattern, based on 2.0 metre wide entrance door or display window, alternating with a solid 2.0 metre wall panel.

Landscaping

34 Landscaping should be provided to facilitate amenity, environmental sustainability and buffer the impact of business uses on adjacent areas.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

34.1 Landscaping for sustainability to include minimal lawn areas; moisture monitors; water timers; garden mulch; collection and re-use of rainwater.

Outdoor Storage and Service Areas

35 Outdoor storage and service areas should be located, designed and managed to be screened from public areas (including car parking areas) and avoid impacts on the surrounding locality.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

35.1 Outdoor storage areas and services and service structures including fire services, pipes, flues, cooling or heating plant or appliances are screened from public view by landscaping, or a fence

or enclosure in pre-coloured sheet metal or of materials matching those of the main buildings or by an appropriate combination of solid fencing and landscaping. Services on roofs are designed and integrated into the structure and design of the building.

35.2 Outdoor storage and services areas are designed and managed to ensure that all litter is contained within those areas.

35.3 Storage areas for outdoor waste and refuse bins are paved and drained to a collection system to prevent polluted wastewater from bin washdown entering the stormwater system.

35.4 Outdoor and service areas located behind buildings and without or limited exposure to public areas.

Safety and Security

36 Provision should be made to ensure personal safety and security through:

(a) the avoidance of areas which have the potential to become traps for pedestrians; and

(b) ensuring that safe pedestrian access is provided adjacent to intensive activity nodes.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

36.1 Facilitation of visibility and legibility of areas through the:

(a) provision of lighting in accordance with AS 1158.1-1997: SAA Public Lighting Code and AS 4242 – 1997: Control of the Obtrusive Effects of Outdoor Lighting;

(b) maintenance of clear lines of sight.

36.2 Incorporation of passive surveillance by:

(a) designing buildings to overlook public and open spaces, pathways, car parking and bicycle parking areas; and

(b) incorporating visually permeable landscaping and fencing to minimize concealment opportunities.

36.3 Site design facilitates opportunities for escape, communication or help when in danger through:

(a) legible design; and

(b) comprehensive and legible signage.

37 Development should ensure the security of property, and in areas where there is potential for graffiti vandalism, the use of materials from which graffiti can be easily removed.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

37.1 Development:

(a) provides clear definition of ownership and legitimate use of private, public and community space; and

(b) minimize access between roofs, balconies and windows of adjoining buildings.

Lighting

38 Lighting should be provided to:

(a) facilitate the security, safety and amenity of the area and avoid detrimental effects on adjacent areas;

(b) not impair the amenity of the locality of any residential zone as a result of light spill or reflection;

(c) be vandal resistant to minimize maintenance

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

38.1 the establishment of lighting:

(a) is in accordance with AS 1158.1 – 1997: SAA Public Lighting Code; and

(b) avoids distraction to vehicle drivers on internal or external roads in accordance with AS 4282 – 1997: Control of the Obtrusive effects of Outdoor Lighting;

Fencing

39 Fencing should be of a consistent type in the area depicted on Fig B/1, and in all cases be designed to not detrimentally affect the amenity or streetscape of the area or dominate the streetscape of roads, or set-back areas from street alignments.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

39.1 Security fencing adjacent to public roads is set back:

(a) in line with the building façade; or

(b) behind the building line;

39.2 Wire mesh fencing is avoided.

Outdoor Advertising

40 The scale, type, design, location, materials, style and illumination of any sign should conform with the performance standards in Table Ga/4 and:

(a) contribute positively to the appearance of development and be coordinated in design, colour and graphics complementing adjacent buildings, structures and other well designed signs;

(b) be compatible with the design and character of the buildings and land to which it is related and the streetscape and amenity of its locality; and

(c) not endanger public safety or detrimentally affect the amenity of adjacent premises due to their location, position, construction or design.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

40.1 Signs:

(a) are designed so that structural supports are concealed from public view or are of minimal visual impact;

(b) are coordinated and complementary on buildings or sites occupied by a number of tenants or occupiers and be limited to a single structure designed in a coordinated manner with provision for each tenant or occupier;

(c) do not dominate or obscure other signs or result in visual clutter;

(d) are constructed of durable materials and maintained in good condition;

(e) do not emit excessive glare or reflection from internal or external illumination;

(f) do not obscure a driver's view of vehicles, pedestrians or potentially hazardous road features;

(g) are not confused with or reduce the effectiveness of traffic control devices;

(h) are limited in message to the firm's name and insignia;

(i) restricted to: Pylon or Freestanding; Flat Wall, desirably painted directly onto the fabric of the building; Verandah fascia; Under-verandah; Shop-front;

(j) do not include: Bunting; Mobile; Projecting above verandah; Roof; and Sandwich Board;

(k) in respect of Flat Wall signs have maximum dimensions of: length 8.0 metres; height 0.65 metres and text size of 0.4 metres.

(l) limited to a zone of a maximum of 1.5 metres high on the building façade from 3.5 metres to 5.0 metres above the footpath.

Land Division

41 Any land division should result in allotments and roadways where the dimensions are of suitable size and shape to accommodate the intended use of the land and an integrated form of development.

42 The design of roadways should ensure safe and convenient road access in accordance with the intended use of the land and the layout shown in Fig B/1.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

42.1 Roadways have a minimum carriageway of 13.5 metres and 3.75 metres of verge on either side of the carriage way.

42.2 Verges are structured to enable a tree planting area clearance of 1.6 metres from hard fixtures and common service trenches.

42.3 Road paving is designed to accommodate the type and volume of anticipated traffic and in accordance with best engineering practice, and in accordance with Austroads – Pavement Design: A Guide to the Structural Design of Road Pavements, 1992.

43 The layout of allotments and roadways should provide for adequate provision for drainage through:

(a) the development of overland flow paths, which take into consideration and where possible make use of existing flow paths; and

(b) the provision of detention or retention basins that accommodate excess flows.

44 Useable and appropriately located land should be provided for:

(a) vegetated buffers in road reserves;

(b) easements required for the provision of or existing public utilities and services; and

(c) access to easements for maintenance.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

44.1 Easements of a minimum width of 5 metres are provided to accommodate existing or required infrastructure and its future maintenance.

45 Services and infrastructure should be:

(a) provided to facilitate current and future development; and

(b) designed, sited and constructed to minimize potential detrimental visual or other impact

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

5.1 All services to new allotments are located in underground service trenches.

45.2 Approved sewerage and wastewater disposal systems are provided to meet the likely needs of future land uses in accordance with AS 3500.3.

45.3 Where overland stormwater drainage is required, it is incorporated into roadways to cater for major flows (100 year ARI).

45.4 Stormwater generated by a site is managed by a minor system (underground pipe network) and the major system (road network) for the gap flows between the minor system (10 year ARI) and the 100 year ARI storm event.

46 Where additional off-site infrastructure is required to accommodate stormwater generated by a development, the cost associated of such infrastructure should be borne by the developer.

47 Development adjacent to, or immediately opposite a zone boundary, should be designed and sited so as not to detract from the amenity of the adjacent zone through:

(a) the provision of a visual buffer in the form of landscape plantings, attractive and consistent style fencing, siting of buildings or other similar means is provided between any car parking, service area, outdoor storage area or any other activity likely to have an impact on the adjacent zone; and

(b) the reception, storage and processing of bulky materials occurring within a building or where adequately screened by fencing, landscaping, buildings or other structures on the site.

Design Technique *(Design Techniques illustrate ONE WAY of satisfying the above principle)*

47.1 An acoustic barrier is provided between any noise generating source of development and adjacent non-industrial zones comprising either:

(a) walls of solid masonry or similar sound attenuating properties; or

(b) an intensively landscaped buffer with a minimum width of 2 metres;

whichever is appropriate to the situation.

Access, Parking and Traffic Management

48 No direct vehicular access or egress for business purposes should be provided to any allotment to or from Main North Road or Para Road.

PROCEDURAL MATTERS

Non-complying Development

49 The following kinds of development including expansion of an existing use, are **non-complying** in the Business Zone:

Agistment and Holding of Stock
Builders Yard
Buildings and structures with a floor area in excess of 3000 square metres except on the site on the south-western corner of the Main North Road and Gordon/Tiver Road intersection
Caravan Park
Community Centre

Consulting Room (other than veterinary consulting room)
Drive-In Theatre
Dwelling
Educational Establishment
Fast Food Restaurant on the site on the south-western corner of the Main North Road and Gordon/Tiver Road intersection
General Industry
Hotel
Intensive Animal Keeping
Landscape Supplies
Motel
Motor Racing Track
Non-residential Club
Office, other than an office ancillary to a desired use including any expansion, addition, alteration or the like, where the resultant floor area does not exceed 250 square metres
Petrol Filling Station on the site on the south-western corner of the Main North Road and Gordon/Tiver Road intersection
Place of Worship
Prescribed Mining Operations
Public Works Depot
Racecourse
Recreation or Entertainment Centre
Residential Club
Shop (excluding bulky goods outlet, restaurant under 300 square metres gross leasable floor space, showroom, or shop under 500 square metres gross leasable floor area on CT 5448/384)
Special Industry
Stadium
Stock Sales Yard
Store (except in association with an existing or contemplated land use)
Waste Disposal Depot

The following advertising displays:

(i) flashing or animated signs;

(ii) roof mounted advertisements projecting above the roof line;

(iii) parapet mounted advertisements projecting above the top of the parapet;

(iv) advertising hoardings where third party advertisements or advertisements that display messages or advertise products that are not directly related to the activity on land on which the advertisement is being displayed (except on CT 5448/384).

Public Notification

50 Categories of public notification are prescribed in Schedule 9 of the Development Regulation 2008. Further, the following forms of development are designated:

Category 2

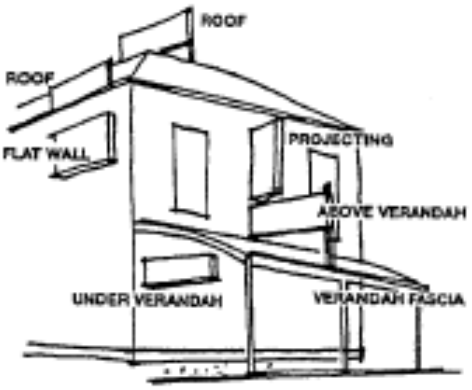
Service Trade Premises
Car Dealership
Vehicle Distribution Centre
Motor Repair Station
Motor Showroom
Petrol Filling Station (except on the south-western corner of the Main North Road and Gordon/Tiver Road intersection)

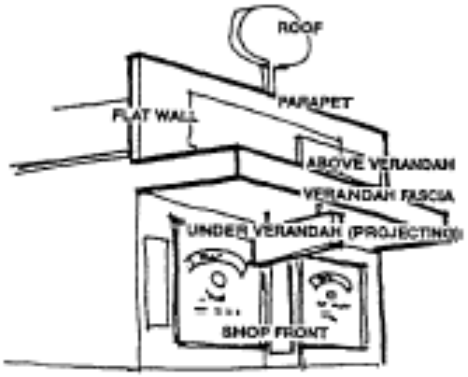
Attachment B

Advertising and Advertising Displays

Definitions and Design Criteria

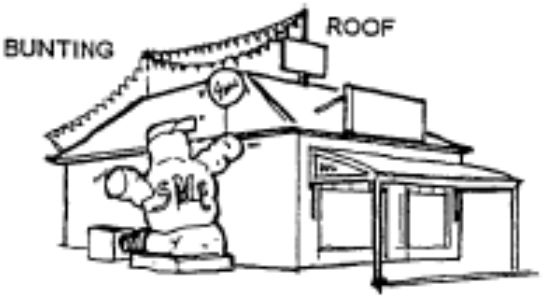
1.0 DEFINITIONS OF SIGN TYPES





PYLON FREE STANDING

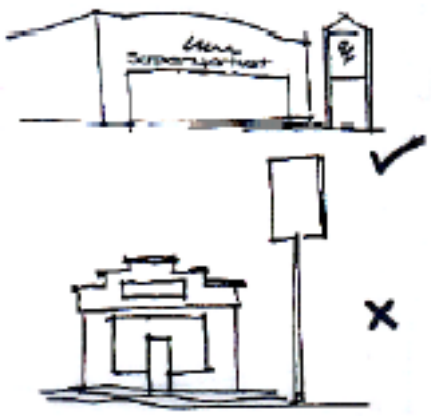
SANDWICH BOARD

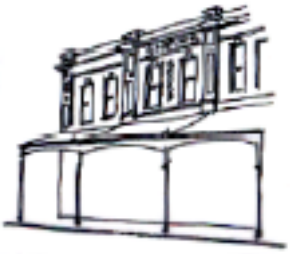
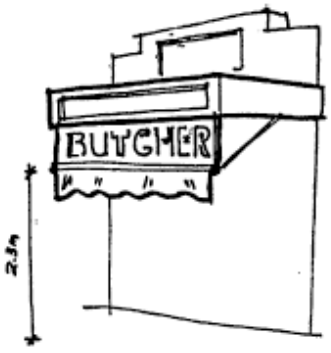


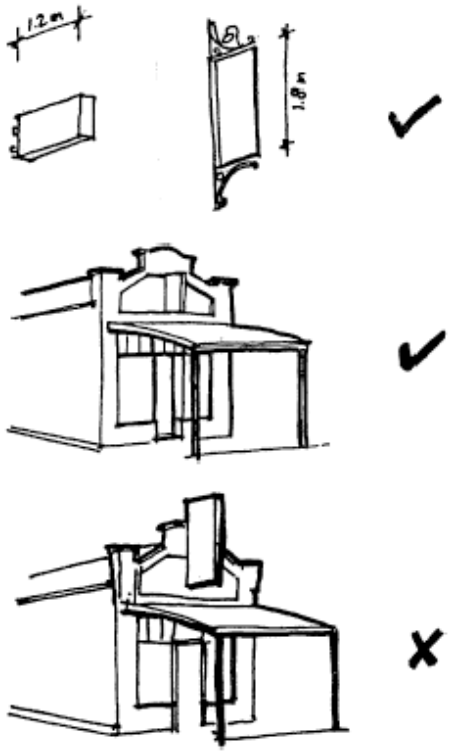
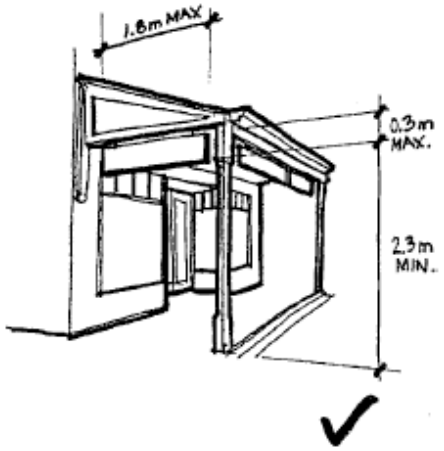
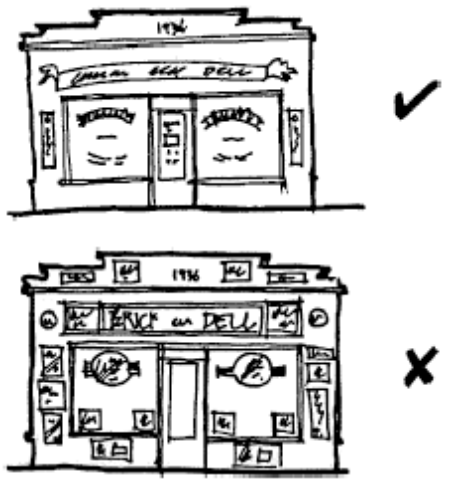
INFLATABLE

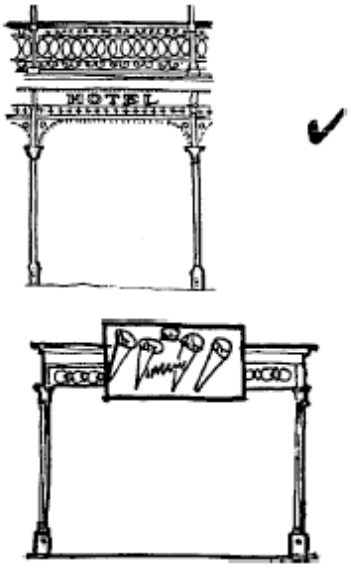
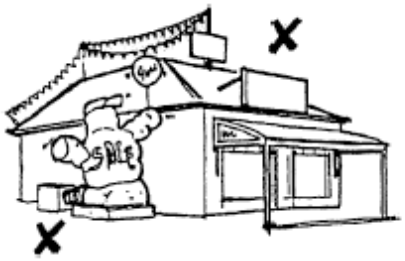
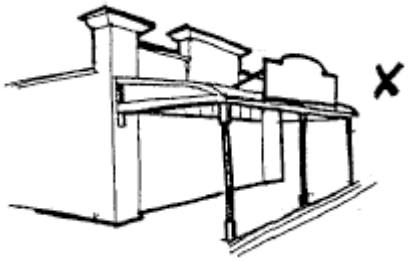
MOBILE

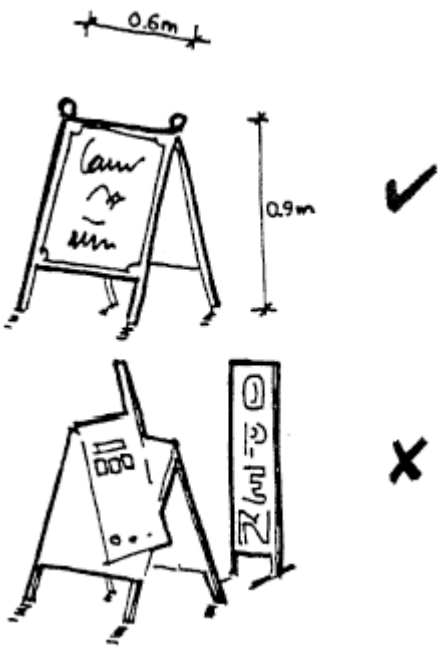
DESIGN RULES TO BE FOLLOWED:

Sign Type	Criteria	
PYLON OR FREESTANDING SIGN	**Supermarket:** (regardless of height of building) maximum height 6.0m. Maximum sign face area: 5.0m² **All other land uses:** no higher than the buildings on the site, up to maximum height of 6.0m Maximum sign face area: 3.0m² **Town Centre Historic Zone:** Maximum sign face area 2.2m² **All other zones:** Maximum number for per site: 1 **Petrol Filling Station or development on the site of the south-western corner of the Main North Road and Gordon/Tiver Road intersection:** maximum height of one sign to 6.0m and any additional pylon or freestanding signs to be a maximum of 5.0m. Maximum sign face area 5.0m^2	

Sign Type	Criteria	
FLAT WALL SIGN	Maximum number: 1 per side wall 1 per rear wall Placement and size of signs in scale and integrated with the architectural features and elements of the building gable wall. Positioned not to conceal architectural features or detailing.	 ✔  ✘  ✘  ✔
VERANDAH BLIND	Minimum clearance of any fixed blind: 2.3m	 ✔

Sign Type	Criteria	
PROJECTING SIGN	Maximum width: 1.2m Maximum height: 1.8m Maximum number per site: 1 Location below Parapet	
UNDER VERANDAH SIGN	Maximum number: 1 per tenancy Minimum clearance to pavement: 2.3m Maximum width: 1.8m Maximum height: 0.3m	
SHOP FRONT, PETROL FILLING STATION CONTROL BUILDING OR SHOWROOM	Maximum coverage: (including windows) 30 percent Placement integrated with architectural features or detailing	

Sign Type	Criteria	
VERANDAH FASCIA SIGN	Placement and size of signs in scale and integrated with the architectural features and elements of the building	
ROOF AND BUNTING	Not appropriate	
ABOVE VERANDAH	Not appropriate	
MOBILE SIGN	Not appropriate	

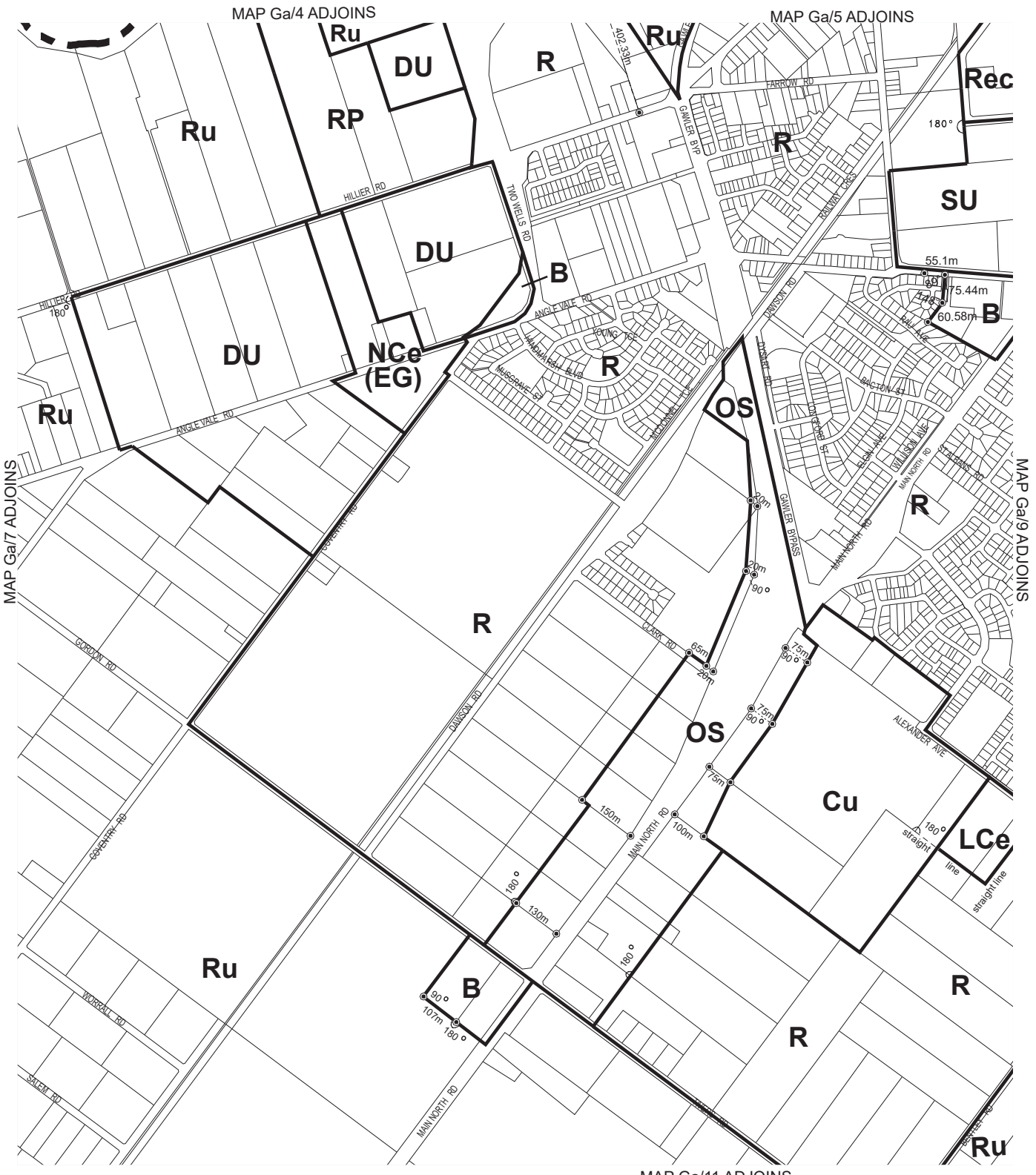
Sign Type	Criteria	
SANDWICH BOARD	Maximum number: 1 per site Maximum height: 0.9m Maximum width: 0.6m	

Attachment C

Living
Business
R/O Retail / Office
Railway Station Precinct
Education / Community
Medium Density
Open Space
Retail Street
Primary Arterial Road
Distributor Road
Collector Road
Potential Distributor Road Plus Overpass
Local Road (Indicative)
Traffic Control
Watercourse / Wetland / Detention
*** Boulevard Style
xxxx 15 metre Setback
Road Widening (2 metres)
Major Pedestrian / Cycle Pathways
Acoustic Protection
Acoustic Barrier
Aquifer Storage Recharge
ETSA Infrastructure
Railway
NCe Neighbourhood Centre
LCe Local Centre
Gas Pipeline
Gas Pipeline Measurement Length (640 metres)

GAWLER (CT)
EVANSTON GARDENS / EVANSTON SOUTH / HILLIER STRUCTURE PLAN
MAP Ga/1 (Overlay 1)
Enlargement H

Attachment D



NOTE : For Policy Areas See MAP Ga/16

B	Business
Cu	Community
DU	Deferred Urban
LCe	Local Centre
NCe(EG)	Neighbourhood Centre (Evanston Gardens)
OS	Open Space
Rec	Recreation
R	Residential
RP	Residential Park
Ru	Rural
SU	Special Uses

Zone Boundary

Development Plan Boundary

Scale 1:15000

0 1km

GAWLER (CT) ZONES MAP Ga/8

Attachment E

4	Evanston Gardens / Evanston South / Hillier Residential
5	Evanston/Evanston Park Residential
9	Hillier Road Residential

Scale 1:15000

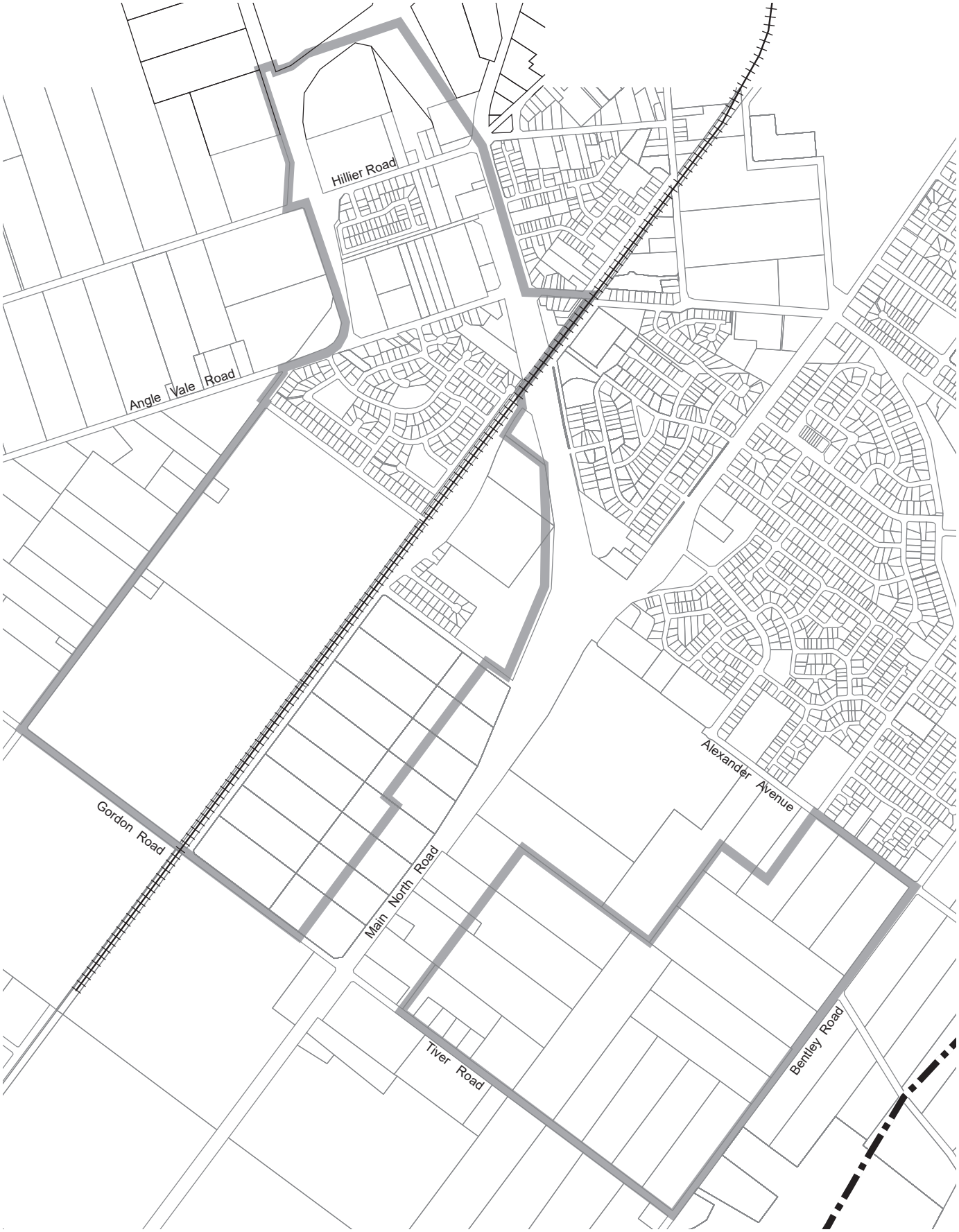
0 1km

GAWLER (CT)
POLICY AREAS
MAP Ga/16

Policy Area Boundary

Development Plan Boundary

Attachment F



For more detail refer to MAPS Ga/1 (Overlay 1) Enlargement F and Ga/1 (Overlay 1) Enlargement H

0 m 375 750

Railway

Policy Area Boundary

GAWLER (CT) EVANSTON GARDENS/ EVANSTON SOUTH / HILLIER RESIDENTIAL POLICY AREA 4 FIGURE Res/2