



**INDUSTRIAL DEVELOPMENT STRATEGY
2018**

Document status

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EXECUTIVE SUMMARY

The Industrial Development Strategy (the Strategy) is intended to provide direction in regard to strategic and statutory planning decision making within the City of Kalamunda (the City) to facilitate and manage growth and changes to industrial estates within the municipal area.

The City's industrial areas are well situated for industrial activity given the proximity to major freight routes, established industrial estates and Perth Airport. High Wycombe, Forrestfield and Wattle Grove in particular have accommodated significant industrial expansion over the past 30 years and have areas suitable for further growth.

The Strategy builds on the City's Strategic Community Plan to facilitate diverse and sustainable industrial development to meet changing social and economic needs and support the success and growth of industry and business.

The vision of the Strategy is to enhance and expand upon our industrial precincts to accommodate future growth and diversity in industrial land uses and develop modern, efficient and attractive industrial estates that provide for the local and regional community.

Key development precincts identified within the Strategy are generally consistent with the sites identified in the Western Australian Planning Commission's (WAPC) Economic and Employment Land Strategy, and are broadly identified as follows:

1. **Forrestfield Marshalling Yards:** Representing the existing marshalling yards / intermodal freight facility between Perth Airport and Dundas Road;
2. **Forrestfield Industrial Area:** Representing the established Forrestfield industrial precinct west of Roe Highway in Forrestfield;
3. **Forrestfield / High Wycombe Light Industrial Area Stage 1:** Representing the growing industrial precinct to the north of the Forrestfield Industrial Area;
4. **Maddington Kenwick Strategic Employment Area (MKSEA):** Representing the north-eastern most section of the MKSEA precinct, colloquially known as the 'Kalamunda Wedge' area, an area planned for future industrial development;
5. **Wattle Grove South:** Representing an area identified for urban investigation, and considered to have strong potential for future industrial development;
6. **Walliston Industrial Area:** Representing the established industrial area within Walliston, which has potential for renewal and intensification; and
7. **Hatch Court / Stirling Crescent Light Industrial Area:** Representing an area identified for light industrial development abutting the City of Swan's Hazelmere Industrial Area and Perth Airport land, subject to further detailed planning.

The progression of key actions identified within this Strategy for each of these areas will be implemented via the preparation of new *Local Planning Scheme No.4* and the Local Planning Policy framework, and where necessary, amendments to the *Metropolitan Region Scheme*.

1.0 INTRODUCTION

The City currently has a total of approximately 351ha of industrial land, spread across five suburbs in Forrestfield, High Wycombe, Wattle Grove, Kewdale and Walliston.

The City's Local Planning Strategy (2010) drew on existing strategic documents at the time and resulted in a number of planning implications related to planning for industrial areas:

- Ongoing demand for industrial land due to freight rail facility in High Wycombe.
- The City's location is of strategic importance to transport-oriented industry as it is well located relative to major road and rail systems to and from the Eastern States and intra-state.
- Kewdale-Hazelmere Integrated Masterplan (KHIM) and Economic and Employment Lands Strategy (EELS) recommended that existing Rural and Special Rural land to the west of Roe Highway should be rezoned for industrial uses.
- Expanded industrial areas should help respond to the demand for truck parking activity throughout the City.
- Land located south of Welshpool Road East abutting the City of Gosnells to be rezoned to allow for industrial development as a result of the Maddington Kenwick Strategic Employment Area.

Importantly, there have been some key developments in regard to the above planning implications, as summarised below:

- Forrestfield/High Wycombe Industrial Area Stage 1 planning framework developed for freight and logistics based light industrial uses. Development is progressing in this precinct and progressing as is the delivery of key infrastructure projects.
- Wattle Grove South is being investigated for industrial development.
- Maddington Kenwick Strategic Employment Area (MKSEA) has been rezoned to industrial. Infrastructure upgrades and subdivision/development to commence in the near future.
- The State Government's announcement in 2014 confirming the Forrestfield-Airport Link project, resulted in a major shift in the strategic context envisaged by the KHIM and EELS plans for the provision of industrial land in High Wycombe. This resulted in the need to redefine the potential land uses surrounding the future station, focusing on mixed use development incorporating retail, commercial and higher density residential.

This Strategy seeks to build upon the strategic directions of the Local Planning Strategy 2010 and deliver a new set of objectives updated with the intentions of the latest State strategic documents, best practice examples, and incorporating updated statistical data. The Strategy will ultimately form a component of a new Local Planning Strategy for the City.

1.1 GOAL

The Strategy builds on the priorities of the City's Strategic Community Plan by supporting our local economy and using our land and assets sustainably, diversely and effectively. The Strategy has the following overarching goal:

The City of Kalamunda will enhance and expand upon our industrial precincts to accommodate growth and diversity in industrial land uses and develop modern, efficient and attractive industrial estates that provide for the local and regional business community.

1.2 OBJECTIVES

The objectives of the Industrial Development Strategy are to:

- Develop an understanding of the key functions, attributes and needs of the City's industrial areas.
- Acknowledge the regional and local influences that determine the opportunities and constraints for the City's industrial areas.
- Outline strategies and actions that guide future strategic and statutory planning decision making in regard to industrial land use and development considerations in the City's industrial areas, with a particular focus on:
 - Attracting high quality industrial operators in strategic locations;
 - Establishing robust industrial areas that can withstand changing market conditions;
 - Improve local employment opportunities in industrial areas; and
 - Facilitate public realm improvements in industrial areas generally and improve the interface between industrial and sensitive land uses.

The above objectives are further expanded within the Strategic Directions and Actions section of the Strategy.

2.0 STATE PLANNING FRAMEWORK

State Planning Strategy

The State Planning Strategy is a long-term strategic plan which provides a vision and broad strategic direction regarding land use and development for Western Australia. It recognises the importance of providing strategically identified industrial areas that are connected to suitable transport infrastructure and appropriately integrated with surrounding compatible land uses to ensure long term sustainability.

Economic and Employment Lands Strategy 2012 (EELS)

The aim of EELS is to ensure that adequate forward planning is undertaken to provide employment land in both the Perth and Peel regions to 2031. Employment land is defined as land that could be used for employment generating activities, including land zoned for industrial and commercial purposes.

EELS identifies the areas, type and locations of general and light industrial land required over the next 20 years. The Local Planning Strategy will generally be in accordance with the areas identified in EELS except where local issues arise and require alternative outcomes.

EELS identifies the Forrestfield Industrial Area stages 1, 2 and 3 as the City of Kalamunda's contribution towards the North-East Metropolitan Sub-region. Overall, the Sub-region is estimated to require an additional 424 hectares of industrial land by 2031. Of that, the City's contribution through the Forrestfield Industrial Area equates to 240 hectares, with the planning for Stage 1 (70 hectares) already finalised.

On 7 August 2014, the Western Australian Planning Commission (WAPC) advised the City that, due to the proposed Forrestfield Airport Link and Forrestfield train station, the proposed Forrestfield Industrial Area Stages 2 and 3, should no longer proceed. Instead, the WAPC requested the City to undertake District Structure Planning to identify new opportunities for office/commercial and residential land uses, which would make better use of the proposed train station.

Since Stages 2 and 3 of Forrestfield Industrial Area equate to approximately 170 hectares, the City cannot provide its original 240 hectare contribution of industrial land to the North-East Metropolitan Sub-region as envisaged under EELS, unless the Local Planning Strategy identifies additional or alternative locations for industrial land.

EELS also identifies the Maddington Kenwick Strategic Employment Area (MKSEA) as being located within the City of Gosnells with a small section referred to as the "Kalamunda wedge" being located within Kalamunda. MKSEA is characterised by fragmented landownership, high levels of access to Tonkin and Roe Highways, low-lying topography and in close proximity to an existing workforce population.

It should be noted that EELS is now 6 years old, and the economy has changed significantly since its adoption. Therefore some of the recommendations of EELS may no longer be relevant.

North-East Sub-Regional Planning Framework

The final North-East Sub-Regional Framework (Framework) was released on 23 March 2018. The Framework is mostly in alignment with EELS but also takes into account all local government's Local Planning Strategies. In the City's case, the Local Planning Strategy 2010 identified MKSEA to be expanded from the City of Gosnells into Wattle Grove, south of Welshpool Road East. The Framework included this change and, in December of 2015, the Metropolitan Region Scheme was amended to rezone the City of Kalamunda's portion of MKSEA as Industrial.

The Framework also identifies the Forrestfield Train Station and shows the Forrestfield North area as Urban. This represents a loss of 170ha of industrial land from stages 2 and 3 of the Forrestfield / High Wycombe Industrial Area. The Framework only identifies an additional 50ha within the MKSEA area. This results in the City having lost a total of 124ha of potential industrial land given the shift in land use for Forrestfield North. Opportunities for additional industrial land may need to be borne by the rest of the sub-region unless this Strategy identifies additional or alternative locations for industrial land.

Not all industrial land is specifically identified for industrial purposes under the Framework or under the Metropolitan Region Scheme. For example the Framework identifies two (2) of the City's industrial areas within the Urban zone, Forrestfield/High Wycombe Industrial Area (Stage 1) and the Hatch Court / Stirling Crescent light industrial area. Both of these areas would permit light industrial uses which are generally compatible with urban land uses and are therefore able to be considered in the Urban zone.

The City has a dwelling target of an additional 11,452 dwellings and population target of an additional 25,194 by 2050. The majority of this growth is anticipated to occur in High Wycombe, Forrestfield, Wattle Grove and Maida Vale which is also in the area where the City's key industrial sites are located and where industrial development will predominantly occur. This is beneficial in terms of growing the City's employment self-sufficiency and creation of consolidated demand for service infrastructure, with associated potential congestion and land use conflict planning issues to address.

Industrial Land Needs Study (ILNS)

The ILNS was prepared in 2008 by Syme Marmion & Co for the Department for Planning and Infrastructure (now Department of Planning, Lands and Heritage). ILNS models the drivers of supply and demand to determine future requirements of industrial land by 2030. This included population and settlement growth, economic growth and decline, and location criteria and market preferences.

Many of the references made within ILNS relate to the strong, growing industrial market of 2005 – 2008. At that time, ILNS identified a supply shortage and interpreted that there would be a deficit of between 990 to 2,300 hectares of industrial land in the Perth and Peel regions by 2030.

While the more recent contraction in mining resources sector has seen a reduction in demand for industrial land, large tenants and investment groups are still seeking high quality industrial sites in strategic locations. This is reflected through recent sales of land in Forrestfield and Wattle Grove.

In addition to recent changes to the economic environment, it should be noted that this Study is now 10 years old and may no longer accurately represent the true industrial demand in the current market.

Kewdale-Hazelmere Integrated Masterplan (KHIM)

The KHIM was prepared 2006 by the WAPC. The Kewdale-Hazelmere area is a major strategic area for the freight industry in the Perth Region. The area has extensive road/rail intermodal freight infrastructure networks and overlaps three levels of government jurisdictions. There is also the challenge to facilitate the rapid expansion and change occurring in the freight industry and accommodate the existing population of residents within the area.

The KHIM makes a number of recommendations that impact the City. This includes revising the access strategy for Abernethy Road, structure planning for the Forrestfield North and Forrestfield/High Wycombe Industrial Area with appropriate land use interface designs for residential and industrial areas abutting land and upgrading the freight rail line within the Forrestfield Marshalling Yards.

It should be noted that the KHIM is now 12 years old, and certain aspects of the plan may be outdated and require review.

State Planning Policy 4.1 State Industrial Buffer / Draft State Planning Policy 4.1 Industrial Interface

State Planning Policy 4.1 (SPP 4.1) is a guiding document applicable to existing and new industrial areas and industrial uses. Its purpose is to protect industry from encroachment of sensitive land uses and, conversely, to protect sensitive land uses from potentially hazardous industrial activity. SPP 4.1 achieves this by recommending buffers be applied to industrial land where sufficient separation distances cannot be met on-site.

It is noted that this policy is currently under review, with a key component being the appropriate planning at the residential and industrial interface. Refer to Section 5.9 of the Strategy for detailed analysis of residential and industrial interface.

The measures contained in SPP 4.1 will be considered in this document for the purposes of managing and planning for existing and new industrial areas.

Development Control Policy 4.1 Industrial Subdivision

Adopted in 1988, Development Control Policy 4.1 (DC4.1) is still relatively contemporary in its operation. Lot sizes are not controlled in a strict manner; rather, it is suggested that lot sizes be determined later in the process to allow for a flexible design outcome that suits the function and purpose of each particular industrial area. The DC4.1 also has requirements around access, public open space and infrastructure servicing, which are further detailed at the structure planning or scheme amendment stages.

DCP 4.1 will be considered as a component of the creation of industrial policies and during the assessment of new industrial areas and activities.

Development Control Policy 4.2 Planning for Hazards and Safety

Adopted in 1991, Development Control Policy 4.2 (DC4.2) provides for location of industrial developments relative to more sensitive land uses. DC 4.2 also includes some guidance on buffer zones and separation distances similar to SPP 4.1.

All proposals within this Local Planning Strategy are consistent with DC 4.2.

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3.0 REGIONAL CONTEXT

The City's foothill suburbs have several characteristics that make them well located for industrial development. These characteristics include the following:

- The City's Industrial areas are centrally located within an extensive road and rail network.
- Connectivity to surrounding industrial estates; with Welshpool/Kewdale, Maddington, MKSEA, South Guildford and Hazelmere in close proximity.
- Key road connections Roe Highway, Tonkin Highway, Abernethy Road and Welshpool Road East provide easily accessible routes to key freight and industrial locations.
- Close proximity to the Perth Airport. Perth Airport borders the City to the west and is easily accessible via Tonkin Highway and Abernethy Road.
- The City has land available, particularly in Wattle Grove and Forrestfield for future industrial development which is well located due to the above points.
- Planned residential development (eg. Forrestfield North) provides increased demand for population driven industrial uses.

The following table provides a summary of other industrial areas in the region that influence the City's industrial areas.

Industrial Areas	Details	Relevance
City of Swan (CoS)		
Hazelmere Enterprise Area	<p>The Hazelmere Enterprise Area (HEA) forms part of the Kewdale-Hazelmere Integrated Masterplan (KHIM) area. The area comprises approximately 210 hectares of land proposed to be rezoned to industrial.</p> <p>This area is well located for industrial development due to its close proximity to Roe Highway, Tonkin Highway, Great Eastern Highway, Perth Airport and existing industrial in</p>	<p>The HEA borders the northern parts of High Wycombe and Maida Vale.</p> <p>HEA provide an alternative industrial land supply and development opportunity outside of the City.</p> <p>The HEA will need to consider how to appropriately plan the residential/industrial interface due to the industrial of Hazelmere abutting residential of High Wycombe and Maida Vale.</p>

	<p>Hazelmere and South Guildford. Most of the area was previously zoned rural and has been rezoned for industrial development. There is still a significant portion of the HEA that is yet to be developed.</p> <p>This precinct includes several areas of environmental importance including the Helena River and Hazelmere Lakes. The area also includes areas of residential.</p>	
Malaga	<p>A diverse industrial area with a range of lot sizes and land uses. Located in the north-west of the City of Swan, Malaga is well located at the head of the Tonkin Highway / Reid Highway intersection, serving important connections to the airport, Perth CBD and industrial areas to the south. Alexander Drive also borders the site to the west and Hepburn Avenue is located to the north of the site. Most of the site has been developed, with a few remaining land parcels the north and east of the site. The North Link project which incorporates a redesigned Reid Highway/Tonkin Highway/Hepburn Avenue intersection runs along the eastern boundary of the site.</p>	<p>Although not in close proximity to the City, Tonkin Highway and Reid Highway which becomes Roe Highway provide key linkages between Malaga and the City's industrial areas.</p>
South Guildford	<p>South Guildford is a small established industrial area to the south of the City of Swan. The site has reached full development. South Guildford's main key connection is via the Great Eastern Highway/Bypass which connects to the Perth Airport and Perth CBD to the west and industrial areas and other key connections to the east.</p>	<p>South Guildford has direct access to the City via Kalamunda Road. Connections to industrial areas within the City stem off Kalamunda Road and Great Eastern Bypass via Abernethy Road and Roe Highway.</p>

City of Canning (CoC)		
Welshpool / Kewdale	Located to the north-east of the City of Canning, Welshpool/Kewdale is a well-established industrial area that has key connections to the Perth CBD via Orrong Road and Albany Highway, Fremantle Port via Leach Highway, Kwinana Industrial Area and industrial areas to the north and south via Roe Highway, and the Airport via Abernethy Road and Horrie Miller Drive. The site has been fully developed with no future areas of expansion. The Kewdale Freight Terminal is a vital location for the movement of freight.	Located to the west of the City's suburb Wattle Grove, the Roe Highway / Welshpool Road East intersection provides a natural barrier between the residential of Wattle Grove and industrial of Welshpool. The industrial interface will have to continue to be considered at this location. Welshpool /Kewdale has direct access to the City's industrial areas via Roe Highway, Dundas Road and Abernethy Road.
Canning Vale	Located to the south-east of the City of Canning. Canning Vale also forms part of the City of Gosnells to the west. Canning Vale has almost reached its full development potential. Canning Vale's main connection is via Roe Highway which borders the site to the north and provides a key connection to the Kwinana Industrial Area and other industrial areas to the north and south.	Although not in close proximity to the City, Roe Highway provides a key linkage between Canning Vale and the City's industrial areas.
City of Gosnells (CoG)		
Maddington Kenwick Strategic Employment Area (MKSEA)	MKSEA was first identified by the State Government for industrial development in 1990. In August 2014, the City of Gosnells completed the necessary studies in support of the rezoning of the major portion of the Maddington-Kenwick Strategic Employment Area (MKSEA) within their boundaries, from Rural to Industrial. MKSEA is a large site recently rezoned from Rural	MKSEA is located to the south of the City, along the Wattle Grove border (incorporating a small wedge within Wattle Grove). The industrial interface with the Wattle Grove residential areas will be an important consideration for the planning of the site. MKSEA has direct connection to the City's industrial areas via Roe Highway.

	to industrial. The site incorporates a small area within Wattle Grove. MSKEA provides industrial infill between the existing industrial areas of Maddington and Welshpool. MKSEA is located between the key freight routes of Tonkin Highway, Roe Highway and Welshpool Road East which provide key connections to Perth Airport, Kwinana Industrial Area and the Perth CBD respectively. Development in MKSEA will commence over the coming years.	MKSEA in the City of Gosnells provides an alternative industrial land supply and development opportunity outside of the City.
Maddington	An established industrial area to the north of the City of Gosnells. The majority of the Maddington industrial area has been developed. Maddington has key connections to the Perth Airport via Tonkin Highway, and Perth CBD, strategic commercial centres to the west and industrial areas to the west via Albany Highway.	Maddington is in close proximity to the City to the south of Wattle Grove. The key connection for industrial traffic to the City from Maddington is via Tonkin Highway and then on to Roe Highway to access the industrial areas.
Perth Airport		
Perth Airport	<p>Located on Australian Government land and leased and operated by the Westralia Airports Corporation. This land is reserved under the Metropolitan Region Scheme for 'public purposes'.</p> <p>Perth Airport is the hub of air freight operations in Pert. The industrial and freight component of Perth Airport is relatively small with significant future expansion anticipated. Perth Airport is well located to key industrial and freight locations via key connections Great Eastern Highway, Tonkin Highway, Horrie Miller Drive/Kewdale Road,</p>	<p>Located to the west of the City of Kalamunda. There is a significant interface to the Forrestfield industrial area. The City's Forrestfield Industrial Area is a 'spill-over' from the Perth Airport and has key connections to Perth Airport via Tonkin Highway and Abernethy Road.</p> <p>Perth Airport offers an alternative industrial land supply and development opportunity outside of the City.</p> <p>Sensitive land uses such as residential within close</p>

	Abernethy Road and Leach Highway.	proximity to the Airport are considered via State Planning Policy 5.1 Land Use Planning in the Vicinity of Perth Airport.
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4.0 LOCAL PLANNING FRAMEWORK

City's Strategic Community Plan

Kalamunda Advancing 2027 is the City's Strategic Community Plan, which guides the strategic direction of the City.

The City's endorsed vision in Kalamunda Advancing is 'Connected communities, valuing nature and creating our future together'.

Priority 3 – Kalamunda develops to support our local economy and use our land and assets diversely and effectively. The relevant strategies that this Industrial Development Strategy will target are:

- 3.1.1 Plan for Diverse and Sustainable housing, community facilities and industrial development to meet changing social and economic needs.
- 3.2.1 Optimal management of all assets.
- 3.3.1 Facilitate and support the success and growth of industry and businesses.

These strategies were influenced by the results of the Community Perceptions Survey 2016. In the survey, our community identified a need for greater transparency, clear communication, job creation and forward thinking.

The City's Corporate Business Plan identifies the following actions that this Industrial Development Strategy will satisfy:

- 3.1.1.10 Review the Local Planning Strategy ensuring sustainable development and preservation of environmental values are recognised.
- 3.1.1.17 Prepare an Industrial Development Strategy to identify and justify future industrial land in the City as an input into the new Local Planning Strategy.

Local Planning Strategy 2010

The Local Planning Strategy 2010 (LPS) was prepared to set out the long term strategic planning directions in regard to land use planning for the City, based on relevant State and Regional planning policies. The 2010 LPS was ultimately endorsed by the WAPC in 2013. Local Planning Strategies are required to be reviewed every five (5) years; This Strategy is a component of the City's preparation to review the LPS.

The vision statements relating to industrial land use provided in the 2010 LPS includes:

- Expand industrial development and uses within the Shire (now City) taking advantage of the broader state industrial and transport policies, and the development related to Perth Airport.
- Develop industrial areas to maximise economic and employment opportunities without compromising the amenity of the adjacent land uses or the natural environment.

The 2010 LPS had the following strategies relating to industrial land use:

- Implement the recommendations of the Kewdale-Hazelmere integrated master plan (KHIMP), with the development of the Forrestfield/High Wycombe Industrial area.

- Consolidate industrial uses west of Roe Highway and east of Perth Airport to form a single industrial freight hub and provide additional employment opportunities.
- Implementation of recommendations contained in the Economic and Employment Lands Strategy.
- Review road and transport hierarchy around existing and planned industrial area to support freight movements and seek government financial assistance to address vehicle blackspots.
- Work with the City of Gosnells in respect to the planning implications of the Maddington Kenwick Strategic Employment Area for land owners in the Shire of Kalamunda.

The following table indicates the status of implementation of the abovementioned strategies through Scheme Amendments and Policy Initiatives:

Initiative	Progress	Comments
Incorporate relevant zoning changes as proposed in the Economic and Employment Lands Strategy – Non-Heavy Industry (2012).	Forrestfield/High Wycombe Industrial Area and MKSEA rezoned as recommended by the EELS. Forrestfield North not rezoned for industrial due to the train station located to the western border of the site, with a transit-oriented-development considered a more appropriate planning response.	Review required on whether there is a need to pursue additional land that was lost as a result of the Forrestfield North area not progressing for industrial development.
Prepare Environmentally Sensitive Design guidelines for industrial development and other controls to manage potential impact on the amenity of adjacent areas.	Forrestfield/High Wycombe Industrial Area design guidelines have been developed. No design guidelines for other industrial areas.	There continues to be a need to consider implementation of design guidelines to other industrial areas within the City.
Work with State Government and Landcorp to secure partnership to develop the Forrestfield/High Wycombe Industrial Area.	Partnership did not eventuate. The City has undertaken the structure planning and project management for the Forrestfield/High Wycombe Industrial Area.	No partnership required. Continue project management of the Structure Plan and Developer Contribution Scheme.
Undertake comprehensive planning and analysis of the Forrestfield/High Wycombe Industrial area.	Structure planning undertaken for the site with project infrastructure works ongoing.	Continue to roll out infrastructure works.
Identify land located to the south of Welshpool Road East abutting the City of Gosnells as future Industrial Development.	Land identified (MKSEA) has been rezoned to industrial.	Oversee the planning of the site and ensure the planning and development meets modern principles and adheres to the relevant planning frameworks.

The City has initiated some of the actions as mentioned above since the LPS 2010 was adopted. This Strategy and ultimately the future Local Planning Strategy will review actions that have not been fully implemented.

Local Planning Scheme No. 3

Local Planning Scheme No. 3 (LPS3) sets out the planning framework and requirements for land use planning within the City. More specifically the zoning table of LPS3 sets the permissibility of land uses in industrial zones. The Site Requirements Table sets out the site requirements in industrial zones. LPS3 also sets out the objectives and development requirements in industrial zones. LPS3 is planned to be superseded by the City's Local Planning Scheme No. 4 which is will be progressed as part of the preparation of a future Local Planning Strategy.

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5.0 LOCAL PROFILE

5.1 POPULATION DEMOGRAPHICS

Population Demographics obtained from Profile. Id (2017).

The City has a 2018 forecast population of 60,739 people. This is predicted to increase to 76,179 people by 2036. The suburbs of Forrestfield, High Wycombe and Wattle Grove are expected to experience some of the highest population rises within the City as well as the Forrestfield North development area. High Wycombe population is set to rise by 1373 people, 12,563 to 13,936 in the next 18 years (this is not including population rise from Forrestfield North). Forrestfield population is predicted to rise by 3465 people in the next 18 years, 13,614 to 17,079. Wattle Grove is predicted to rise by 643 people in the next 18 years, 6586 people to 7229. The Forrestfield North development area is set to add an additional 6303 people over the next 18 years, 310 to 6613. These localities are all in close proximity to the City's and neighbouring local government's industrial areas. The population increase from these suburbs will be able to increase the local industrial workforce and provide a challenge to cater for increased demand for population driven industrial uses. Given the increase and expansion in the residential population, the industrial interface will need to be considered with any future planning of industrial areas within close proximity to residential.

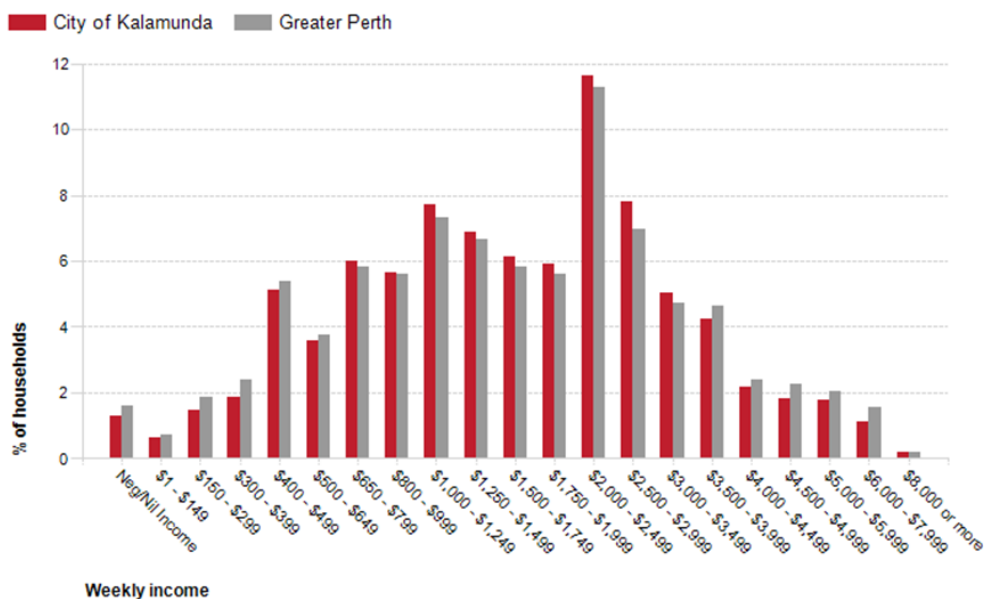
Refer to Appendix 1 for detailed table of the above data.

5.2 ECONOMY AND EMPLOYMENT

Economy and Employment obtained from Profile id (2016).

The City's residents' are considered to be predominantly in the 'medium income' bracket, with the City having higher percentages of people in the \$650-\$3499 weekly household income brackets compared to Greater Perth. The City has lower percentages of people in the \$0-\$649 and \$3500 and greater weekly income brackets.

Weekly household income, 2016



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Enumerated data)
Compiled and presented in profile.id by .id, the population experts.

.id
the population experts

Source: Profile id 2016

The City's residents' five most common employment sectors are health care and social assistance, construction, retail trade, education and training, and transport, postal and warehousing. The majority of these industries are associated with industrial areas.

The City has higher percentages of people than Greater Perth employed in the following industries:

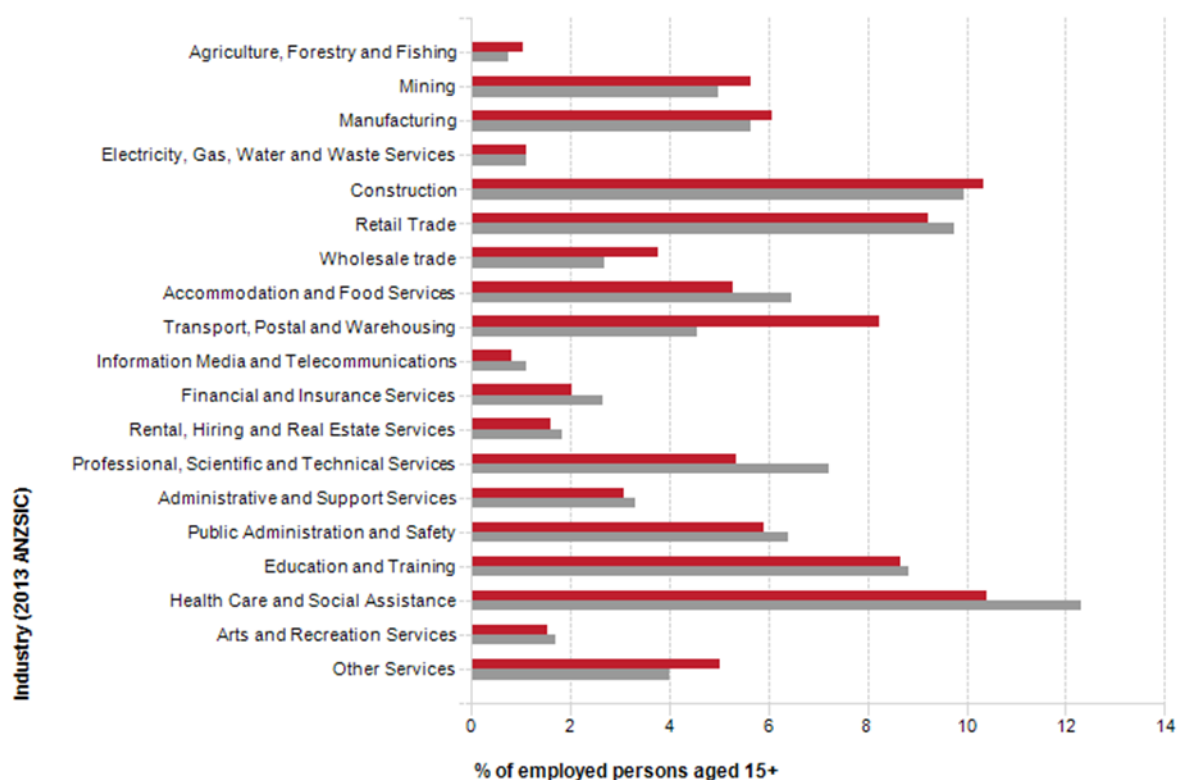
- agriculture, forestry and fishing;
- mining;
- manufacturing;
- electricity, gas, water and waste services;
- construction;
- wholesale trade; and
- transport, postal and warehousing

These industries all have association with industrial areas, demonstrating the significant workforce the City has employed in industrial areas. This demonstrates an importance to provide industrial land to enable residents to work close to home.

Industry sector of employment, 2016

Total employed persons

■ City of Kalamunda ■ Greater Perth



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data)
Compiled and presented in profile.id by .id, the population experts.

.id the population experts

Source: Profile id 2016

The City's residents' three most common occupations of employment are technicians and trade workers, professionals and clerical and administrative workers. Technicians, trade workers and administrative workers in particular are associated with employment in industrial areas.

The City has higher percentages of people than Greater Perth with the following occupations:

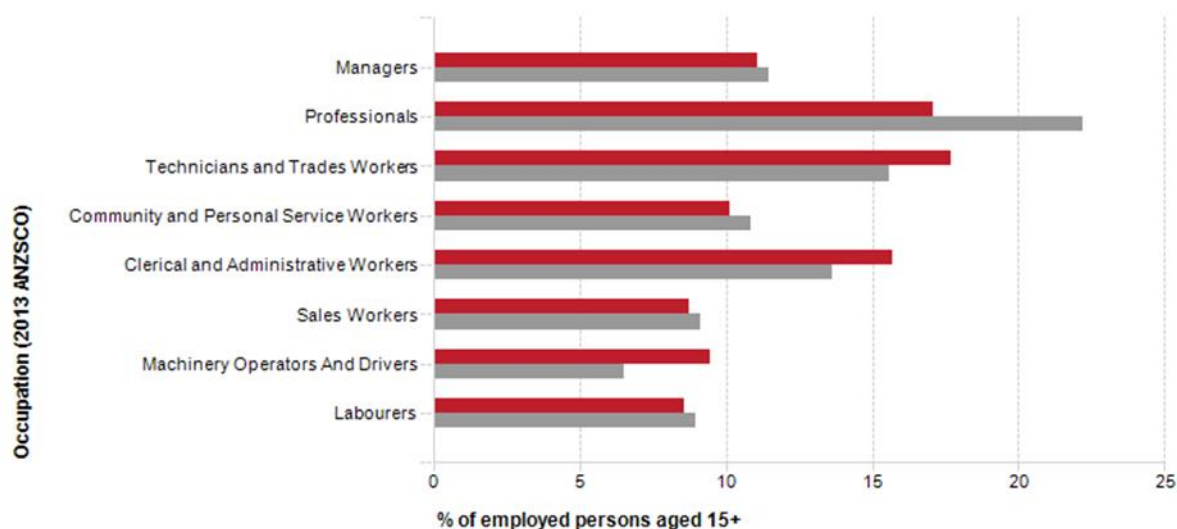
- technician and trade workers
- clerical and administrative workers
- machinery operators and drivers

These occupations all have association with industrial areas, demonstrating the importance of the City's industrial areas for creating local employment.

Occupation of employment, 2016

Total employed persons

City of Kalamunda Greater Perth



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data)
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the population experts

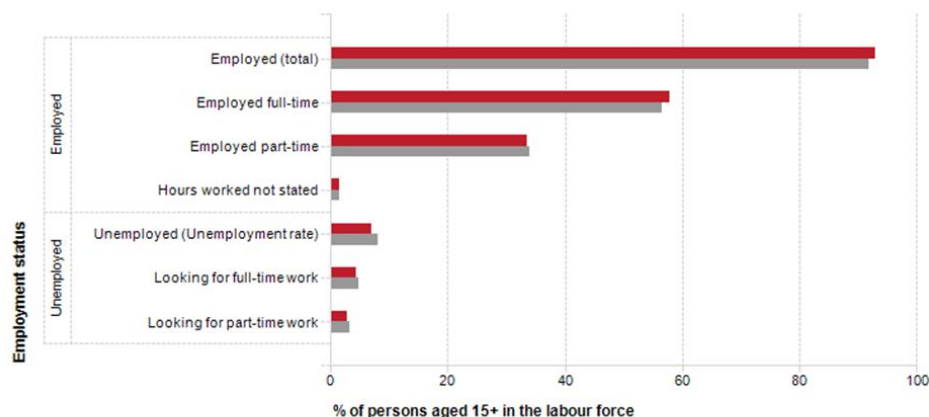
Source: Profile id 2016

The City has higher percentage of its population employed and employed full-time than Greater Perth and has a lower percentage of its population employed part-time and unemployed than Greater Perth.

Employment status, 2016

Total persons in the labour force

City of Kalamunda Greater Perth



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data)
Compiled and presented in profile.id by .id, the population experts.

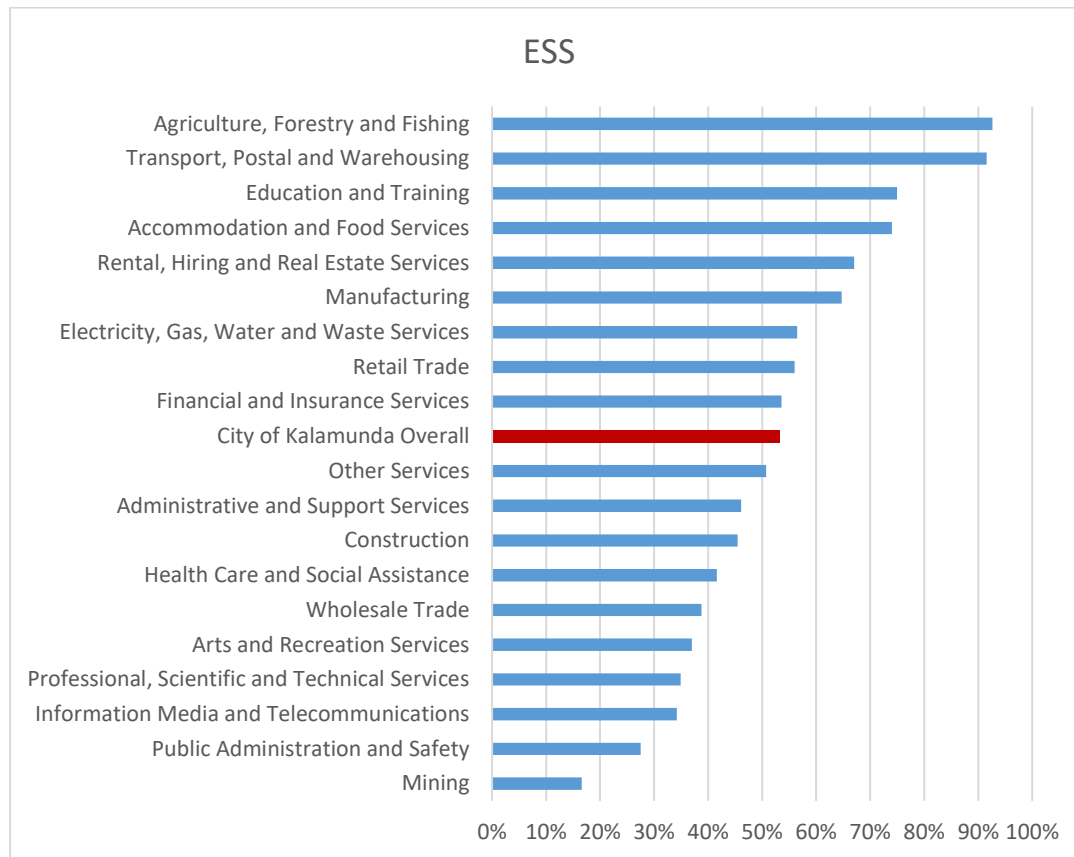
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the population experts

Source: Profile id 2016

Kalamunda has a relatively low rate of employment self-sufficiency (53%). Only the Agriculture Forestry and Fishing, Transport Postal and Warehousing, Education and Training and Accommodation and Food Services sectors have employment self-sufficiency rates at over 70%. This means that the majority of City resident workers travel outside of the City for employment. However, even though the City has low employment self-sufficiency, a

high proportion of the resident workforce work in the City of Belmont, City of Swan, and Perth Airport which have substantial industrial and commercial estates.

City of Kalamunda – Employment Self-Sufficiency by Industry, 2016



Source: ABS Census 2016 (Employment, Industry Sector by Place of Work and Place of Usual Residence)

5.3 TRANSPORT LINKAGES

5.3.1 ROADS

The City has the following key transport linkages that service industrial traffic:

Name of Road	Direction of Travel	Key Destinations	Future Plans and Funding
Roe Highway	North/South	<ul style="list-style-type: none"> • Kwinana FWY • Jandakot Airport • Canning Vale industrial area • Willetton industrial area • Reid HWY • Great Eastern HWY • Great Eastern HWY Bypass • Great Northern HWY 	Main Roads future plans to remove all at grade intersections and convert to grade-separated. Kalamunda Road/Roe Highway intersection will be affected by these plans.
Tonkin Highway	North/South	<ul style="list-style-type: none"> • Perth Airport • Malaga industrial area • Maddington industrial area • Great Eastern HWY – connection to Perth CBD 	As part of Main Roads' future plans to remove all at grade intersections and convert to grade-separated roads, in April 2018 the State and Federal Governments have committed funding towards improving the Hale Road and Welshpool Road interchanges.
Abernethy Road	West/East North/South	<ul style="list-style-type: none"> • Perth Airport • Hazelmere Industrial area • Kewdale/Welshpool Industrial area 	Future road upgrades planned for Abernethy Road. Future runway project for Perth Airport to consider Grogan Road connection to Abernethy Road.
Welshpool Road East	West/East	<ul style="list-style-type: none"> • Kewdale/Welshpool Industrial area • Orrong Road – Perth CBD 	Welshpool Road/Tonkin Highway intersection planned to be grade separated. In April

			2018 the State and Federal Governments have committed funding towards improving the Welshpool Road interchange.
Kalamunda Road	West/East	<ul style="list-style-type: none"> • Hazelmere Industrial area • Great Eastern HWY Bypass • Great Eastern HWY 	Kalamunda Road/Roe Highway intersection planned to be grade separated.

The above key transport links, connect the City's industrial areas to other key industrial areas, freight links and activity centres.

5.3.2 PUBLIC TRANSPORT

Public transport access to existing industrial areas is currently limited and infrequent. There are currently no bus services to the Forrestfield Industrial Area and Forrestfield/High Wycombe Industrial Area. Access to these localities is expected to improve when the Forrestfield Train Station opens with the train station in close proximity and additional bus routes utilising Berkshire Road to link with the Train Station expected. There is an existing bus route that utilises Abernethy Road and provides access to the Forrestfield Marshalling Yard. The Walliston Bus Depot is located in the Walliston Industrial Area and is where buses servicing Kalamunda are stored and serviced by the Public Transport Authority. Most of the bus routes however terminate in Kalamunda, with bus routes starting or ending in Walliston infrequent. There is a bus route that services potential industrial area Wattle Grove South. To encourage modal shift to public transport the City will need to liaise with PTA to justify the addition of bus servicing to industrial areas.

5.3.3 CYCLING

The only existing cycle lanes currently servicing industrial areas in the City are along Abernethy Road providing cycle access to Forrestfield Marshalling Yards and along Dundas Road providing cycling access to the Forrestfield Industrial Area and Forrestfield/High Wycombe Industrial Area. Further expansion on this cycle infrastructure will be required to further encourage modal shift to cycling and connect with existing networks throughout the metropolitan area. Bicycle infrastructure improvements throughout the City, including within the City's industrial areas have been identified in the City's Bicycle Plan which is anticipated to be adopted in 2018.

5.4 INFRASTRUCTURE AVAILABILITY

Reticulated sewer in the City is limited to the industrial areas of Forrestfield, High Wycombe, Maida Vale and Wattle Grove. The central area surrounding the Kalamunda town centre is also serviced. Any future industrial development will occur in areas which are currently rural and not serviced by sewer. The majority of the City is serviced by reticulated water, apart from the parks and recreation areas and fringe Hills Rural areas.

The City will continue to work with landowners and the State Government to facilitate the extension of sewer to existing and future industrial estates, but recognise that interim solutions via on-site treatment of wastewater are potentially acceptable subject to land capability assessment.

All current and future industrial areas have access to electricity. All established industrial areas have above-ground power. The City to work with Western Power to investigate potential power upgrades such as underground power to established industrial areas and ensure that future industrial areas incorporate power infrastructure that is future proof and up to modern day standards.

See Appendix 2 for servicing map.

Existing National Broadband Network (NBN) currently services the Hills Rural Area, High Wycombe, Maida Vale and the Forrestfield Industrial Area. The remainder of the Hills Area (Kalamunda, Lesmurdie and Walliston) are currently in the process of build out and according to the NBN will be fully operational by April 2018. The remaining non-serviced NBN areas of Wattle Grove and Forrestfield are planned to receive the NBN rollout between mid-2018 to late-2019. This demonstrates that all industrial businesses will have access to the NBN network currently or in the near future.

See Appendix 3 for NBN roll out map.

5.5 QUANTITY OF INDUSTRIAL LAND

The availability of land is a key consideration for industrial operators in determining whether to establish an industrial development in the City.

The City currently has a total of approximately 351ha of industrial land, spread across five suburbs; Forrestfield, High Wycombe, Wattle Grove, Kewdale and Walliston.

Refer to Appendix Map 1

Forrestfield has the most amount of industrial land with approximately 212ha, equating to 61% of the City's total industrial land supply. All industrial land in the City is located on the foothills apart from Walliston which has approximately 12ha of industrial land.

The City has the following amount of existing land for each zone under the Local Planning Scheme:

Light Industry	37ha
General Industry	208ha
Industrial Development	82ha
Special Use	8ha
Railways	16.52ha

The City is expected to have an additional 36ha of land rezoned for industrial in the future, which takes the total amount of industrial land to 387ha. The 'Wattle Grove South area' is approximately 310ha and this has been identified for industrial and urban investigation. Initial feasibility investigations indicate that it is unlikely that the entire area will be suitable for future industrial therefore the industrial component is unlikely to exceed 140ha.

Approximately 314ha of the 387ha of industrial land within the City has already been developed. There is approximately 73ha remaining that is yet to be developed. This includes the land expected to be rezoned to industrial in the future, which is the second stage of MKSEA. Note that MKSEA already has been rezoned under the MRS.

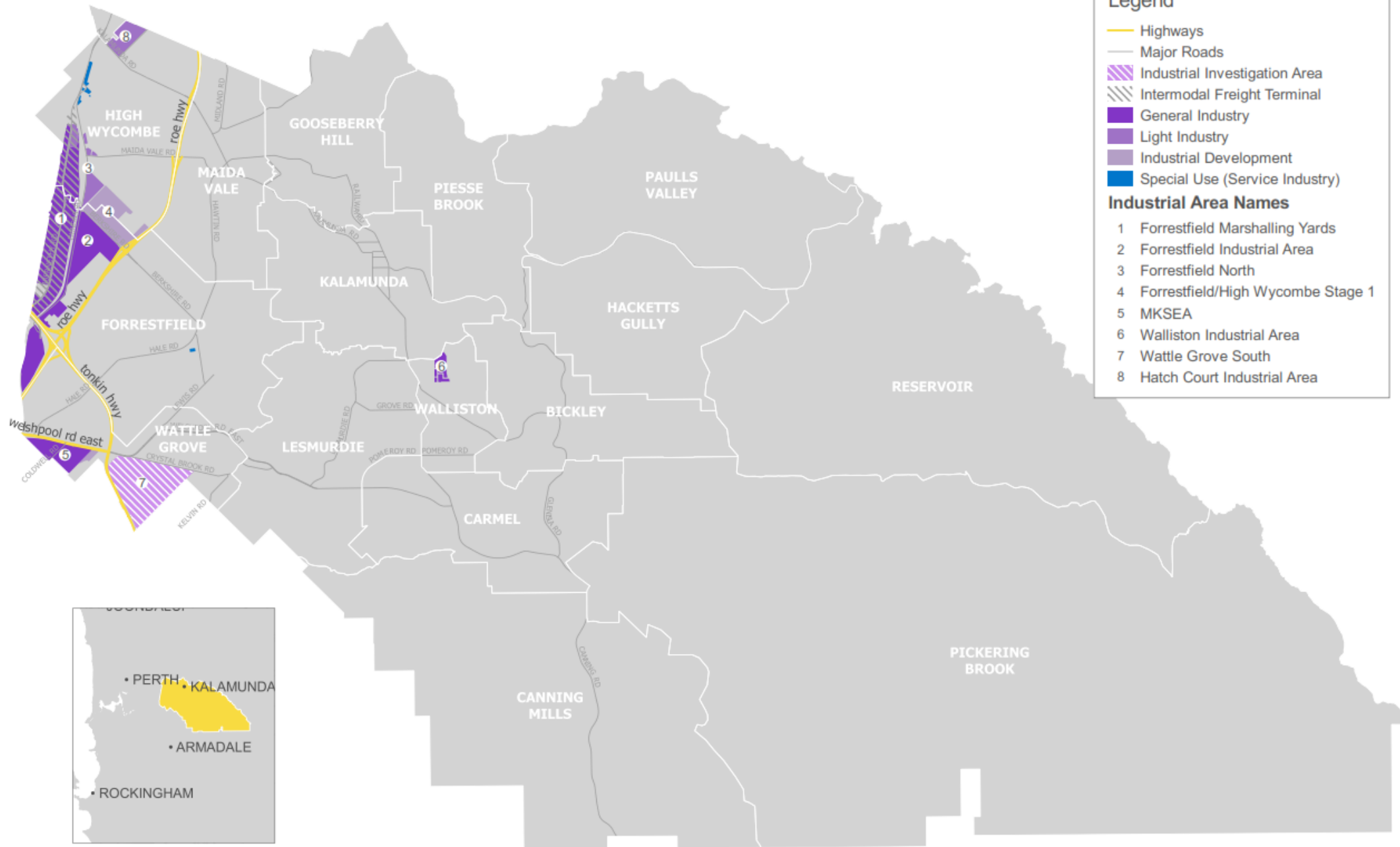
There are a number of contaminated sites located in the City. The future use of many these sites is unknown pending detailed investigations and remediation. Depending on the results of detailed investigations and remediation requirements, the possibility of using these sites for alternative employment generating land uses associated with industry should be considered.

See Appendix 4 for suburb breakdown of industrial areas.

DRAFT

MAP 1: INDUSTRIAL AREAS - CITY OF KALAMUNDA

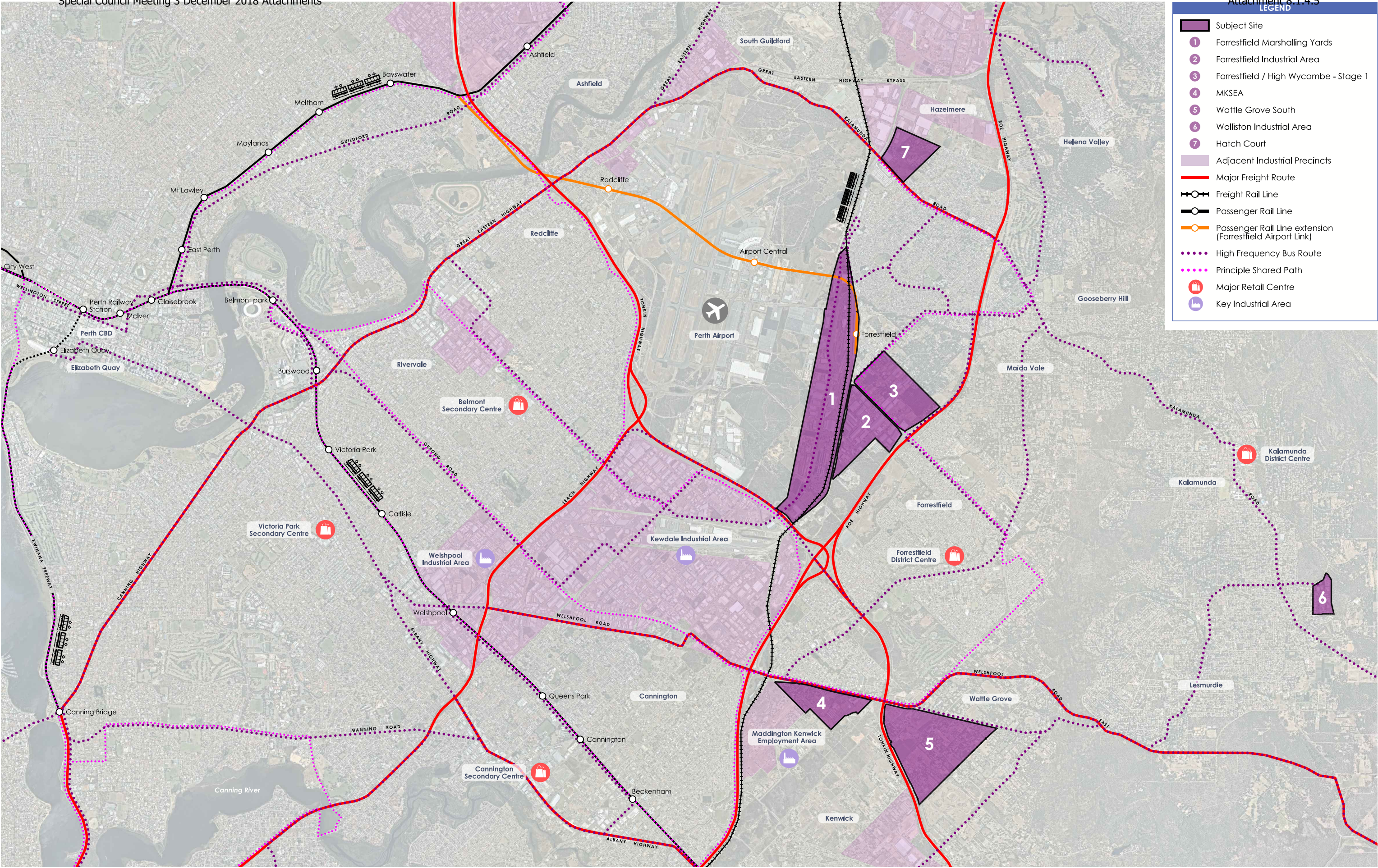
Industrial Development Strategy



MAP 2: INDUSTRIAL AREAS - REGIONAL CONTEXT

LEGEND

- Subject Site
- 1 Forrestfield Marshalling Yards
- 2 Forrestfield Industrial Area
- 3 Forrestfield / High Wycombe - Stage 1
- 4 MKSEA
- 5 Wattle Grove South
- 6 Walliston Industrial Area
- 7 Hatch Court
- Adjacent Industrial Precincts
- Major Freight Route
- Freight Rail Line
- Passenger Rail Line
- Passenger Rail Line extension (Forrestfield Airport Link)
- High Frequency Bus Route
- Principle Shared Path
- Major Retail Centre
- Key Industrial Area



6.0 ANALYSIS OF KEY AREAS / ISSUES

6.1 FORRESTFIELD MARSHALLING YARDS

The Forrestfield Marshalling Yards encompass more than 190ha of land from which some of the largest distribution and transport companies in Australia operate. The marshalling yards are an intermodal freight for road and heavy rail, which also takes advantage of the adjacent airport.

The development of land within the marshalling yards precinct largely occurs without significant guidance from the City of Kalamunda. The Freight and Logistics Council of WA provides guidance to operators and policy makers about supply chain efficiencies, which affects development patterns within the marshalling yards.

Since the majority of the marshalling yards are built-out, there is little opportunity for development or redevelopment.

It is important to plan around this important strategic asset of state and regional significance. The residential development proposed at Forrestfield North will need to implement appropriate mitigation measures to prevent any adverse impacts on residents and businesses from the 24 hour operations at the Marshalling Yards. Noise and vibration are the key risks associated with development in close proximity to the Marshalling Yard, which will be investigated as part of the Forrestfield North Structure Planning process. Reducing the amount of residential development within the areas most affected by noise and vibration will be a key consideration. The development of large scale mixed use and commercial buildings and appropriate development requirements for buildings to reduce the impact of noise and vibration will be key strategies in the planning for Forrestfield North.

Draft State Planning Policy 5.4 Road and Rail Noise (SPP 5.4) has a trigger distance of 300m from the closest freight rail track whereby sensitive land uses should be avoided or where they do occur the appropriate interface management and development conditions are required to ensure adverse effects are minimised.

Forrestfield Marshalling Yards snapshot:

Criteria	Existing
Local Planning Scheme Zoning	Majority General Industry Small portion Light Industry
Predominant Land uses	<ul style="list-style-type: none"> • Transport Depot • Warehouse • Storage
Industrial Typology	Freight and Logistics
Lot Sizes	0-1ha: 8 lots 1-2ha: 16 lots 2-3ha: 1 lots 3-4ha: 6 lots 4-5ha: 1 lots 5ha+: 3 lots
Movement Network	<ul style="list-style-type: none"> • Abernethy Road, Other Regional Road, • Freight Rail Line

	<ul style="list-style-type: none">• Dundas Road
Infrastructure and Utilities	<ul style="list-style-type: none">• Water• Gas• Electricity – part aboveground and underground• Sewer provided

Strategies:

- **To protect the Forrestfield Marshalling Yards from encroaching urban development and mitigating noise and vibration issues in respect to future residential development.**
- **Maintain a high standard of landscaping and road maintenance.**

6.2 FORRESTFIELD INDUSTRIAL AREA

The Forrestfield Industrial Area is approximately 70 ha, zoned General Industry and home to some the City's more intense industrial activity. This area is subject to a 20 year old structure plan that addresses interface and general development requirements.

Local Planning Scheme No. 3 and the Forrestfield Industrial Area Structure Plan control development but do not account for modern building typologies and lot layouts.

Forrestfield Industrial Area snapshot:

Criteria	Existing
Local Planning Scheme Zoning	<ul style="list-style-type: none"> • General Industry • Light Industry (Berkshire Road interface and southern portion)
Predominant Land use	<ul style="list-style-type: none"> • Warehouse • Storage • Transport Depot • Local Services • Fabrication and Manufacturing
Industrial Typology	<ul style="list-style-type: none"> • Warehousing and Distribution • General • Transport and Logistics
Lot Sizes	0-1ha: 62 1-2ha: 7 2-3ha: 4 3-4ha: 4 4-5ha: 4 5ha+: 1
Movement Network	<ul style="list-style-type: none"> • Berkshire Road • Dundas Road • Milner Road • Roe Highway
Infrastructure and Utilities	<ul style="list-style-type: none"> • Water • Gas • Electricity – Aboveground along Berkshire Road and Dundas Road. Underground within estate • Sewer (Partial – northern portion of precinct)

Strategy:

- **Provide modern and flexible development guidance.**

6.3 FORRESTFIELD/HIGH WYCOMBE STAGE 1

Forrestfield/High Wycombe Stage 1 comprises an area of approximately 70 ha and provides for principally transport and logistics based industrial uses. The area is zoned Urban under the Metropolitan Region Scheme (MRS) and Industrial Development under the City's Local Planning Scheme No. 3. The North-East Sub-Regional Framework supports the urban classification of the land under the MRS.

The Industrial Development zone requires a Local Structure Plan be prepared for development guidance and permits land uses in accordance with transport- and logistics-based industries. The area is designed to accommodate Category 7 Restrict Access Vehicles (37.5m trucks) to take advantage of its proximity to Roe Highway and the significant upgrades by the state government in the Gateway project.

The Forrestfield/High Wycombe Stage 1 Local Structure Plan provides for future road connections, subdivision and design requirements. There is also a Development Contribution Plan (DCP) in place that collects funds from developing landowners to develop new roads, land acquisition for roads and other common infrastructure. Planning for this area has been had to take into consideration the proposed Forrestfield North urban development. The planning framework has recently been reviewed to address this interface and ensure it is contemporary, efficient, and in line with community aspirations.

A review of the planning framework investigated three key areas relating to the Forrestfield/High Wycombe Industrial Area Stage 1 Local Structure Plan:

- Land use permissibility and lot sizes;
- The proposed local road network; and
- The DCP.

Market analysis indicated that there would be no advantage for reducing or removing the minimum lot size for subdivision within the precinct generally, as the demand is highest for lots that exceed 2ha. However, the review indicated that Lots 50-52 Sultana Road West and Lots 5-6 Ashby Close would potentially benefit from a reduced lot size to facilitate subdivision and providing an alternative industrial product to the market. As a result a proposal was presented to the WAPC in early 2018 to enable the flexibility of reduced lot sizes to a minimum of 2000m² for these lots. In March 2018 the WAPC advised the City that there is insufficient justification for reduced lot sizes and that this proposal would not be supported.

The modifications also included changes to the movement network to allow for more efficient traffic movements within the site, with subsequent changes to the DCP in response to the modifications. A composite industrial zone has also be recommended to be introduced as a Scheme Amendment over Lot 50 which abuts the Forrestfield North development area. This will assist with appropriate industrial-residential interface management and the provision on an alternative lot product within the area.

Facilitating development in this area is key to delivering the proposed infrastructure and should be the focus of the planning framework.

Forrestfield/High Wycombe Stage 1 snapshot:

Criteria	Existing
Local Planning Scheme Zoning	Industrial Development
Predominant Land uses	<ul style="list-style-type: none"> • Rural • Transport Depot • Warehouse • Storage
Industrial Typology	Transport and Logistics
Lot Sizes	0-1ha: 27 1-2ha: 24 2-3ha: 0 3-4ha: 4 4-5ha: 1 5ha+: 1
Movement Network	<ul style="list-style-type: none"> • Berkshire Road • Dundas Road • Milner Road • Roe Highway
Infrastructure and Utilities	<ul style="list-style-type: none"> • Water • Gas • Electricity – Aboveground along Berkshire Road and Dundas Road. Underground within estate • Sewer – Berkshire Road and Milner Road

Strategies:

- **Keep development contributions relevant and within relevant frameworks;**
- **Maintain a high standard of landscaping where appropriate and road maintenance;**
- **Attract large businesses by protecting key land parcels from subdivision;**
- **Provide opportunity for small and medium sized businesses to benefit from, and co-locate with, larger industries where appropriate;**
- **Ensure there are logical transition zones between residential and industrial uses; and**
- **Capitalise on the close proximity to the airport, freight marshalling yards and highways.**

6.4 MADDINGTON-KENWICK STRATEGIC EMPLOYMENT AREA (MKSEA)

In August 2014, the City of Gosnells completed all the necessary studies in support of the rezoning of the major portion of the Maddington-Kenwick Strategic Employment Area (MKSEA) within their boundaries, from Rural to Industrial. 13% of MKSEA is within the City of Kalamunda's boundaries, which equates to approximately 20.4ha. MKSEA in the City of Kalamunda is bounded by Welshpool Road East and the City of Gosnells local government boundary. MKSEA is zoned General and Light Industry and has a specific policy to guide development and design. The area is not yet developed, but there are some leases and sales mainly to freight, logistics and warehousing operators. There is potential with MKSEA to accommodate ancillary services such as cafés, a gym, retail outlets and service stations.

The General Industry zone is intended for properties to accommodate industrial type uses as an extension to the freight and logistics precinct within the City of Gosnells. The Light Industry zone is intended for properties to accommodate service and light industrial uses as an interface to Welshpool Road East and a buffer to the residential land uses within Wattle Grove (Cell 9). The proposed provisions include a requirement for further bushfire, drainage and environmental assessments for future development in the entire amendment area. Design guidelines for lots fronting Welshpool Road East have also been required to be developed to ensure a sensitive and appropriate interface with existing residential development in Cell 9 in accordance with SPP 4.1. MKSEA also proposes to modify the permitted land uses in the Special Control Area.

Maddington-Kenwick Strategic Employment Area snapshot:

Criteria	Existing
Local Planning Scheme Zoning	<ul style="list-style-type: none"> General Industry Light Industry (Welshpool Road East interface)
Predominant Land uses	<ul style="list-style-type: none"> Rural Storage
Industrial Typology	No existing industrial
Lot Sizes	0-1ha: 0 1-2ha: 24 2-3ha: 1 3-4ha: 5 4-5ha: 0 5ha+: 0
Movement Network	<ul style="list-style-type: none"> Welshpool Road East Roe Highway
Infrastructure and Utilities	<ul style="list-style-type: none"> Water Gas Electricity – Aboveground along Berkshire Road and Dundas Road. Underground within estate Sewer (Partial – northern portion of precinct)

Strategies:

- Keep development contributions relevant and within frameworks;

- **Ensure there are logical transition zones between residential and industrial uses; and**
- **Provide modern and flexible development guidance.**

6.5 WATTLE GROVE SOUTH

Wattle Grove South is identified for urban investigation by the Local Planning Strategy 2010. The North-East Sub-Regional Structure Plan also identifies Wattle Grove South as an urban expansion area with a Medium-Long term (2022+) development horizon. The area for possible industrial is approximately 136ha with 170 existing lots. Feasibility investigations are required to determine what land uses are the most appropriate and feasible within the site. Given the site is bordered by key freight links, Tonkin Highway and Welshpool Road East and is in close proximity to Roe Highway and Perth Airport, industrial development maybe considered a feasible development option for a portion or entirety of the site. Any proposed industrial development would be freight and logistics oriented or light industrial. It is possible for Light Industrial to be classified over the Urban zone under the MRS, as has occurred in the Forrestfield / High Wycombe Stage 1 and the Hatch Court / Stirling Crescent industrial areas. In this regard, the Wattle Grove South area has been identified under the North-East Sub-Regional Framework as Urban expansion and there is potential for light industrial uses to be considered under this identification.

Aircraft noise needs to be considered as part of the development of Wattle Grove South. The provision of industrial uses may assist with mitigating impacts from Perth Airport.

Criteria	Existing
Local Planning Scheme Zoning	Special Rural
Predominant Land uses	Rural Lifestyle
Industrial Typology	No existing industrial typology
Lot Sizes	0-1ha: 61 1-2ha: 141 2-3ha: 32 3-4ha: 3 4-5ha: 7 5ha+: 3
Movement Network	<ul style="list-style-type: none"> • Tonkin Highway • Welshpool Road East • Kelvin Road
Infrastructure and Utilities	<ul style="list-style-type: none"> • Water • Electricity – aboveground
Industrial Typology	No existing industrial typology

Strategy:

- **Investigate sites for potential industrial development.**

6.6 WALLISTON INDUSTRIAL AREA

The Walliston Industrial Area was first established in the 1970s and is at full build out. The Walliston Industrial Area is a small industrial area, mostly providing the servicing needs of the Hills local residents. The City's Operations Centre is also located within the Walliston Industrial Area, providing an important operational location for the City. Many of the existing buildings date back to the 1970s, demonstrating a need to promote renewal within the area.

The Walliston Industrial Area abuts regional reserve to the north and east and low density residential to the west and south. The interface measures used are slithers of public open space and road reserves between the industrial area and residential area. Public realm opportunities should be investigated to improve the interface between the industrial and residential area.

Criteria	Existing
Local Planning Scheme Zoning	General Industry
Predominant Land uses	<ul style="list-style-type: none"> • Warehouse • Storage • Local Services • Fabrication and Manufacturing
Industrial Typology	General - Service
Lot Sizes	0-1ha: 51 1-2ha: 1 2-3ha: 1 3-4ha: 0 4-5ha: 0 5ha+: 0
Movement Network	<ul style="list-style-type: none"> • Canning Road • Lesmurdie Road
Infrastructure and Utilities	<ul style="list-style-type: none"> • Water • Electricity – (above ground)

Strategies:

- **Investigate public realm improvements in industrial areas to improve the industrial-residential interface; and**
- **Ensure there are logical transition zones between residential and industrial uses.**

6.7 HATCH COURT / STIRLING CRESCENT

Hatch Court Industrial Area is located in the north-west corner of High Wycombe, abutting the City of Swan and Perth Airport. The site is currently zoned urban development and is approximately 30 hectares. The site was originally rezoned from Rural to Urban under the MRS in 2010 and a Local Structure Plan to facilitate residential development was adopted by Council in 2013, however refused by the Department of Planning.

Subsequently it was decided that the location was more appropriate for industrial, given its location abutting the City of Swan's Hazelmere industrial development area and Perth Airport's industrial area, in addition to access to freight links such as Abernethy Road. Amendment 80 was initiated in 2015 to rezone the site from urban development to light industry. At Council's February 2017 OCM, Council adopted Amendment 80. In order to develop light industry within the site a Local Structure Plan must first be prepared. The site abuts urban development to the east, which will require an appropriate industrial – residential interface in accordance with SPP 4.1.

Item	Existing
Local Planning Scheme Zoning	General Industry
Predominant land uses	Rural Lifestyle
Industrial Typology	No existing industrial typology
Lot Sizes	0-1ha: 0 1-2ha: 12 2-3ha: 2 3-4ha: 0 4-5ha: 1 5ha+: 1
Movement Network	<ul style="list-style-type: none"> • Kalamunda Road • Abernethy Road • Stirling Crescent
Infrastructure and Utilities	<ul style="list-style-type: none"> • Water • Electricity – Aboveground • Gas (along Stirling Crescent) • Sewer (eastern side of Stirling Crescent)

Strategy:

- Capitalise on the close proximity to the airport, freight marshalling yards and highways; and
- Ensure there are logical transition zones between residential and industrial uses.

6.8 RESIDENTIAL AND INDUSTRIAL INTERFACE

Residential and Industrial interface is addressed through the requirements of SPP 4.1. The intention of SPP 4.1 is to prevent land use conflict between industrial areas and sensitive land uses such as residential areas. SPP 4.1 requires statutory buffers to be put in place where applicable. SPP 4.1 states that statutory buffers should take the form of a Special Control Area, or similar with related scheme provisions in the applicable local planning scheme. The size and extent of statutory buffers should be determined by potential off-site impacts and strategic planning considerations. The management of land use conflicts and preventing adverse impacts should ensure the co-location of industrial land uses in clusters or industrial areas. Sensitive land uses should not be considered in industrial areas. Strategic and General Industry zones should not have direct interface with sensitive zones. An interface of compatible land use zones should be identified in local planning schemes such as light industry, commercial zones, rural zones and public open space reserves.

The City will ensure that interface issues and land use conflicts are addressed by ensuring there are logical boundaries between residential and industrial uses and utilising transition zones (light industry, commercial, rural and public open space). An example where the City has considered a transition zone is in the Forrestfield/High Wycombe Industrial Area, where a composite zone has been proposed to be introduced. The residential component of the zone faces the future Forrestfield North development which will be urban and the industrial component faces the industrial area. The composite zone will provide an appropriate transition from residential to industrial.

Strategy:

- **Ensure there are logical transition zones between residential and industrial uses.**

7.0 OBSERVATIONS

There is limited opportunity for further development of large industrial areas within the City's boundaries. Future industrial development within the City will occur in the already identified locations of Forrestfield/High Wycombe Industrial Area, MKSEA Wattle Grove and Hatch Court. With Forrestfield North and Maida Vale South both identified for urban development there are few rural areas left in the foothills that could be rezoned to accommodate industrial development. Wattle Grove South has also been identified for urban development under the North-East Sub-Regional Framework, however it is potentially the last remaining area that could be identified for industrial development for the City. The area should be investigated for the potential development of industrial within the area, given its location with close proximity to key industrial links, Tonkin Highway and Welshpool Road East. In this regard, it is possible for Light Industrial to be classified over the Urban zone under the MRS, as has occurred in the Forrestfield / High Wycombe Stage 1 and the Hatch Court / Stirling Crescent industrial areas. The sub-regional framework does not identify any other areas within the City that haven't already been identified as part of this Strategy for industrial development, further limiting industrial expansion opportunities.

The focus of the Strategy should be ensuring that future industrial development is supported in the existing and future industrial areas. Supporting the local workforce by increasing the local population in close proximity to industrial areas should be supported. Attracting high quality businesses should be supported through effective planning measures such as reasonable developer contribution schemes, promoting quality design through design guidelines and quality landscaping, and ensuring transport links are provided to a high standard.

There is also a need for more up-to-date research at a regional scale on industrial demand for the region, with previous research undertaken as part of EELS, ILNS and KHIM possibly outdated and in need of review.

8.0 STRATEGIES AND ACTIONS

Short Term: 1-3 years

Medium Term: 4-8 years

Long Term: 9 years +

OBJECTIVES		
STRATEGIES	ACTIONS	PRIORITY/RESPONSIBILITY
ATTRACT HIGH QUALITY BUSINESSES THAT CAN WITHSTAND CHANGING MARKET CONDITIONS		
1.1 Provide modern and flexible development guidance.	1.1.1 Develop a Local Planning Policy for all industrial areas to guide design and address modern industrial development standards.	Short Term / City of Kalamunda
	1.1.2 Normalise Forrestfield Industrial Area Structure Plan into Local Planning Scheme No. 4	Short Term / City of Kalamunda
PROVIDE INCENTIVES TO DEVELOP AND INVEST IN EXISTING AND FUTURE INDUSTRIAL AREAS		
2.1 Maintain a high standard of landscaping and road maintenance.	2.1.1 Investigate options for inclusion in the City's future Capital Works Programs or other funding mechanisms.	Short Term / City of Kalamunda
2.2 Investigate public realm improvements in industrial areas to improve the industrial-residential interface.	2.2.1 Investigate options for inclusion in the City's future Capital Works Programs or other funding mechanisms.	
2.3 Keep development contributions relevant and consistent with the principles underlying development contributions in Western Australia.	2.3.1 Continue conducting annual reviews of all development contribution plans and maintain transparency and accountability in all workings.	Ongoing / City of Kalamunda
2.4 To protect the Forrestfield Marshalling Yards from encroaching urban development and mitigating any noise and vibration issues.	2.4.1 Ensure that any urban development within close proximity of the freight rail track are assessed in accordance with relevant State Planning Policy.	Ongoing / City of Kalamunda
GUIDE DEVELOPMENT TO ADDRESS A REGIONAL NEED		
3.1 Attract large industrial	3.1.1 Project specific brief to	Medium Term / City of

operators by protecting key land parcels from subdivision.	identify industrial land in appropriate locations that are suitable for increased lot sizes, and facilitate the protection of larger lots and minimum lot size requirements.	Kalamunda
3.2 Capitalise on the close proximity to the airport, freight marshalling yards and highways.	3.2.1 Zone land that permits freight and logistics based industries to locate near key services.	Medium Term / City of Kalamunda
3.3 Investigate sites for potential industrial development.	3.3.1 Undertake feasibility study on appropriate land uses within Wattle Grove South site.	Short Term / City of Kalamunda / Department of Planning, Lands and Heritage
	3.3.2 Consider alternative employment generating land uses associated with industry for contaminated sites.	Long Term / City of Kalamunda / Department of Water and Environmental Regulation
3.4 Ensure there are logical transition arrangements and interfaces between sensitive and industrial land uses.	3.4.1 Industrial areas and sensitive land uses in close proximity to industrial areas assessed and determined in accordance with State Planning Policy 4.1 Industrial Interface.	Ongoing / City of Kalamunda
3.5 Identify industrial regional demand.	3.5.1 Investigate and review the regional demand for industrial land.	Short Term / City of Kalamunda
IMPROVE LOCAL EMPLOYMENT OPPORTUNITIES IN INDUSTRIAL AREAS		
4.1 Provide opportunities for small and medium sized businesses to benefit from, and co-locate with, larger industries.	4.1.1 Prepare a project specific brief to identify industrial land in appropriate locations to allow smaller lot subdivision and a broader range of land uses compatible with industrial uses.	Medium Term / City of Kalamunda
4.2 Increase population of local workforce.	4.2.1 Rezone Forrestfield North and Maida Vale South to allow for higher density residential.	Short Term / City of Kalamunda

9.0 REVIEW

The Strategy will be required to be reviewed periodically as needed and at least every 5 years as a minimum. It is recommended that the base assessment methodology remains

unchanged during periodic review to retain the integrity of the existing Strategy. The City shall support the continual improvement to industrial policy (both State and local), strategic partnerships, and operational activities and procedures. In doing so, this will enable the City to deliver efficient and effective industrial outcomes.

10.0 IMPLEMENTATION

This Strategy is a long-term plan which outlines the future recommendations for industrial areas within the City. Within the implementation phase of the Strategy, the City will prioritise the Strategy's recommendations based on available resources, funding and Council priorities.

APPENDIX 1: POPULATION DEMOGRAPHICS

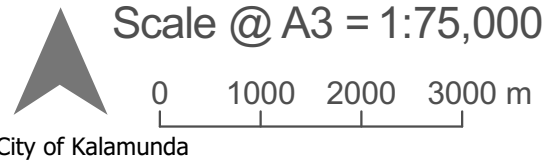
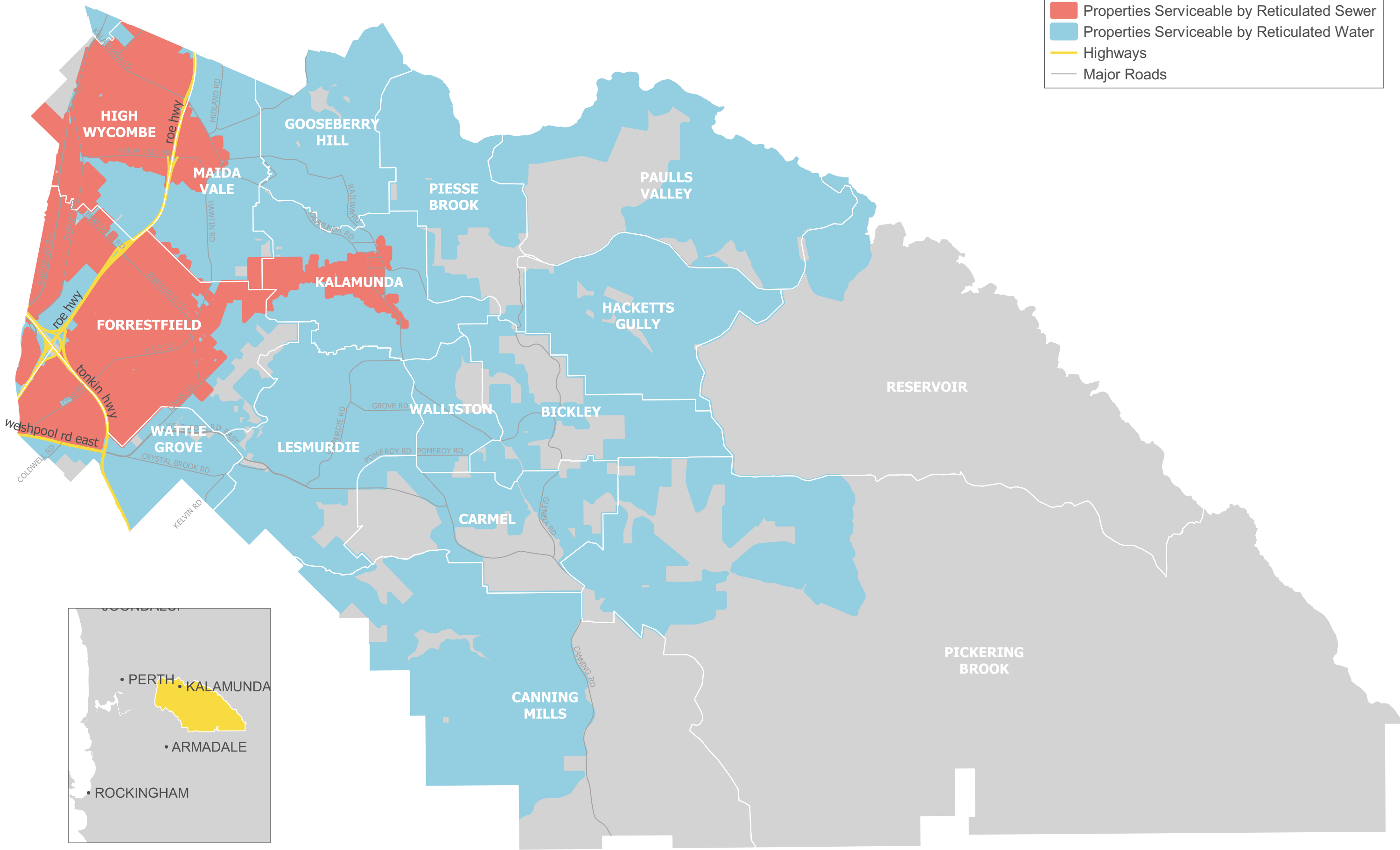
	Forecast 2018 pop.	Forecast 2036 pop.	Change 2018-36	Change 2018-36 Percentage	Land Area (ha)	Forecast Population Density 2018 (persons per hectare)	Forecast Population Density 2036 (persons per hectare)
City of Kalamunda	60,739	76,179	+15,440	25.42%	32,436	1.87	2.35
Hills	23,009	25,274	+2,265	9.84%	27,950	0.82	0.90
Kalamunda	7,517	8,969	+1452	19.31%	1,064	7.06	8.43
Lesmurdie	8,605	8,694	+89	1.03%	1,365	6.30	6.37
Gooseberry Hill	3,467	3,620	+153	4.41%	895	3.87	4.04
Rural East-Walliston	3,420	3,991	+571	16.69%	24,626	0.14	0.16
Foothills	37,730	50,905	+13,175	34.92%	4,485	8.41	11.35
Wattle Grove	6,586	7,229	+643	9.77%	867	7.60	8.34
Forrestfield	13,614	17,079	+3465	25.45%	1702 (+30ha in Forrestfield North)	7.99	10.03
Forrestfield North DSP	310	6,613	+6,303	2033.86%	264	1.17	25.05
High Wycombe	12,563	13,936	+1,373	10.92%	811 (+234ha in Forrestfield North)	15.49	17.18
Maida Vale	4,657	6,048	+1,391	29.88%	841	5.54	7.19

APPENDIX 2: INFRASTRUCTURE SERVICING

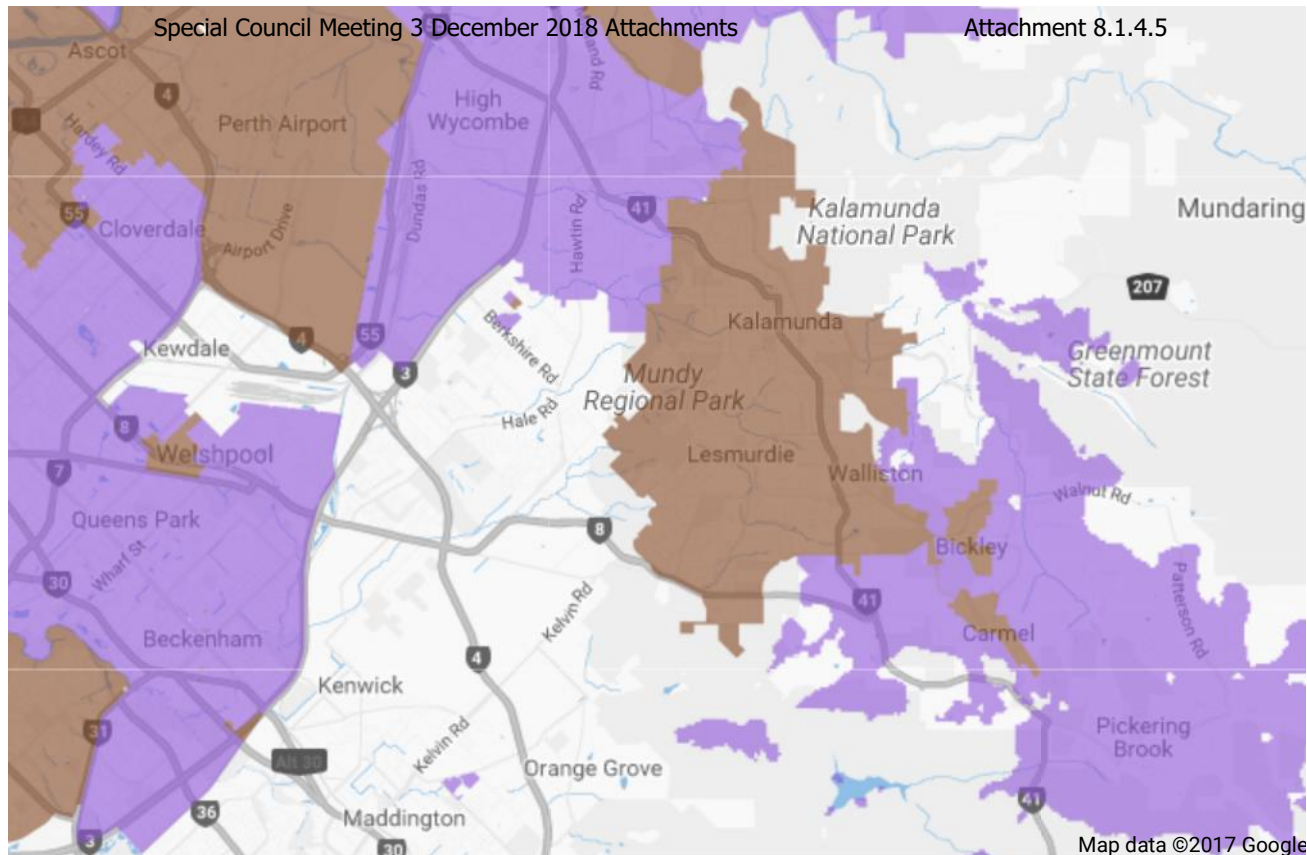
Local Infrastructure Servicing Strategy

Legend

- Properties Serviceable by Reticulated Sewer
- Properties Serviceable by Reticulated Water
- Highways
- Major Roads



APPENDIX 3: NBN ROLLOUT



■ Service available

■ Build commenced

■ Other fibre provider

City of Kalamunda

APPENDIX 4: INDUSTRIAL AREAS BREAKDOWN

Forrestfield	Existing Industrial Zoned Land (ha)	Future Industrial Zoned Land (ha)	Existing Industrial to be Rezoned to Urban (ha)
Light Industry	11.8		
Industrial Development	42.9		
General Industry	147.56		
Special Use	1.78		
Railways	8.26		
Total	212.3	0	0
Overall Existing + Future	212.3		
Industrial Investigation Area (ha)	0		

Wattle Grove	Existing Industrial Zoned Land (ha)	Future Industrial Zoned Land (ha)	Existing Industrial to be Rezoned to Urban (ha)
Light Industry	10.08		
Industrial Development	4.26		
General Industry	8.39	36.37	
Special Use			
Railways			
Total	22.73	36.37	0
Overall Future + Existing	59.1		
Industrial Investigation Area (ha)	50		

High Wycombe	Existing Industrial Zoned Land (ha)	Future Industrial Zoned Land (ha)	Existing Industrial to be Rezoned to Urban (ha)
Light Industry	14.74		4.18
Industrial Development	35.08		
General Industry	15.2		
Special Use	6.17		2.4
Railways	8.26		
Total	79.45	0	6.58
Overall Future + Existing	72.87		

Industrial Investigation Area (ha)	0		
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Walliston	Existing Industrial Zoned Land (ha)	Future Industrial Zoned Land (ha)	Existing Industrial to be Rezoned to Urban (ha)
Light Industry			
Industrial Development			
General Industry	11.71		
Special Use			
Railways			
Total	11.71	0	0
Overall Future + Existing	11.71		
Industrial Investigation Area (ha)	0		

Kewdale	Existing Industrial Zoned Land (ha)	Future Industrial Zoned Land (ha)	Existing Industrial to be Rezoned to Urban (ha)
Light Industry			
Industrial Development			
General Industry	25		
Special Use			
Railways			
Total	25	0	0
Overall Future + Existing	25		
Industrial Investigation Area (ha)	0		

APPENDIX 5: SITE PLANS



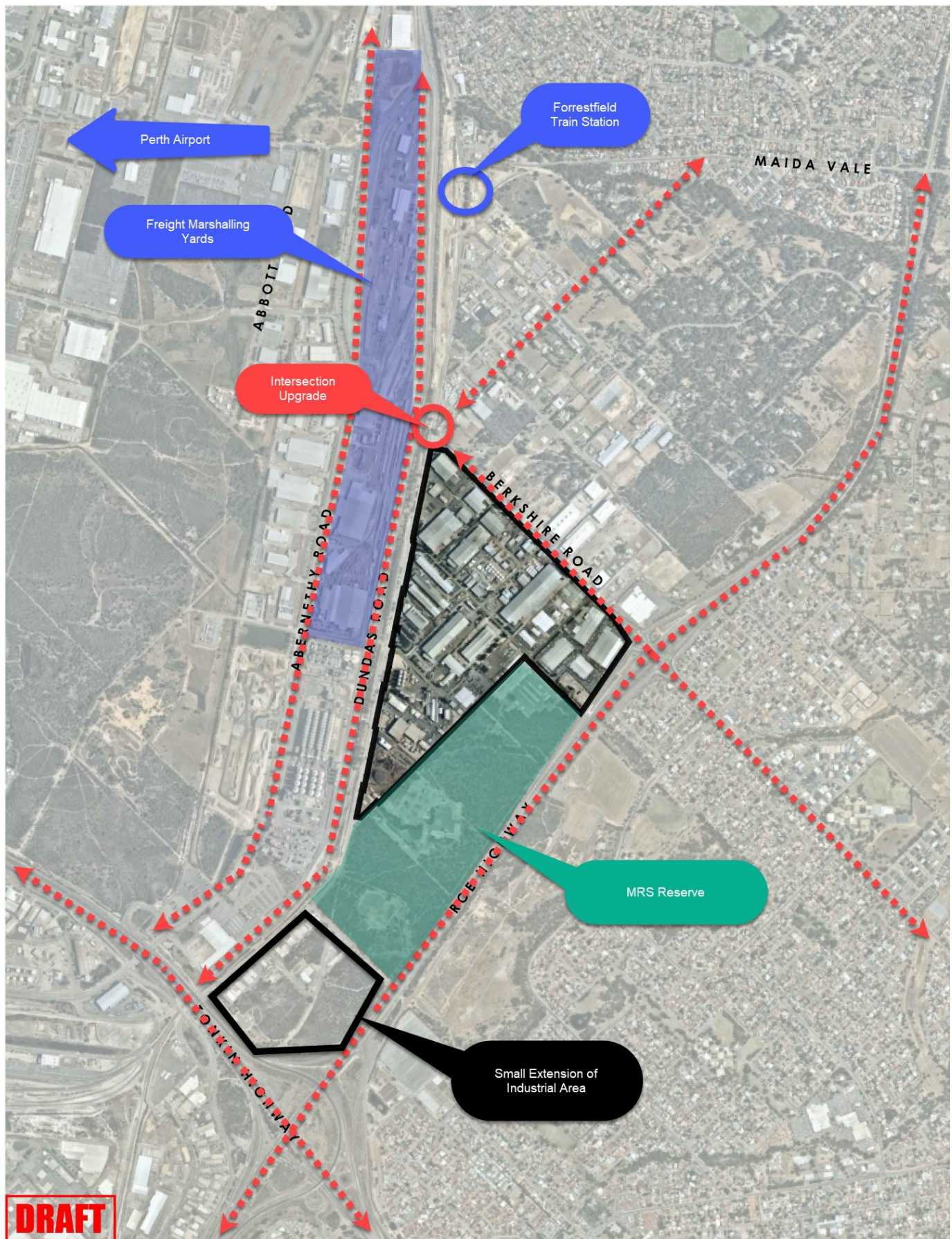
City of Kalamunda Industrial Strategy
A City of Kalamunda Project



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d: 21 Feb 2018
p: 17/103/005

Taylor Burrell Barnett Town Planning and Design
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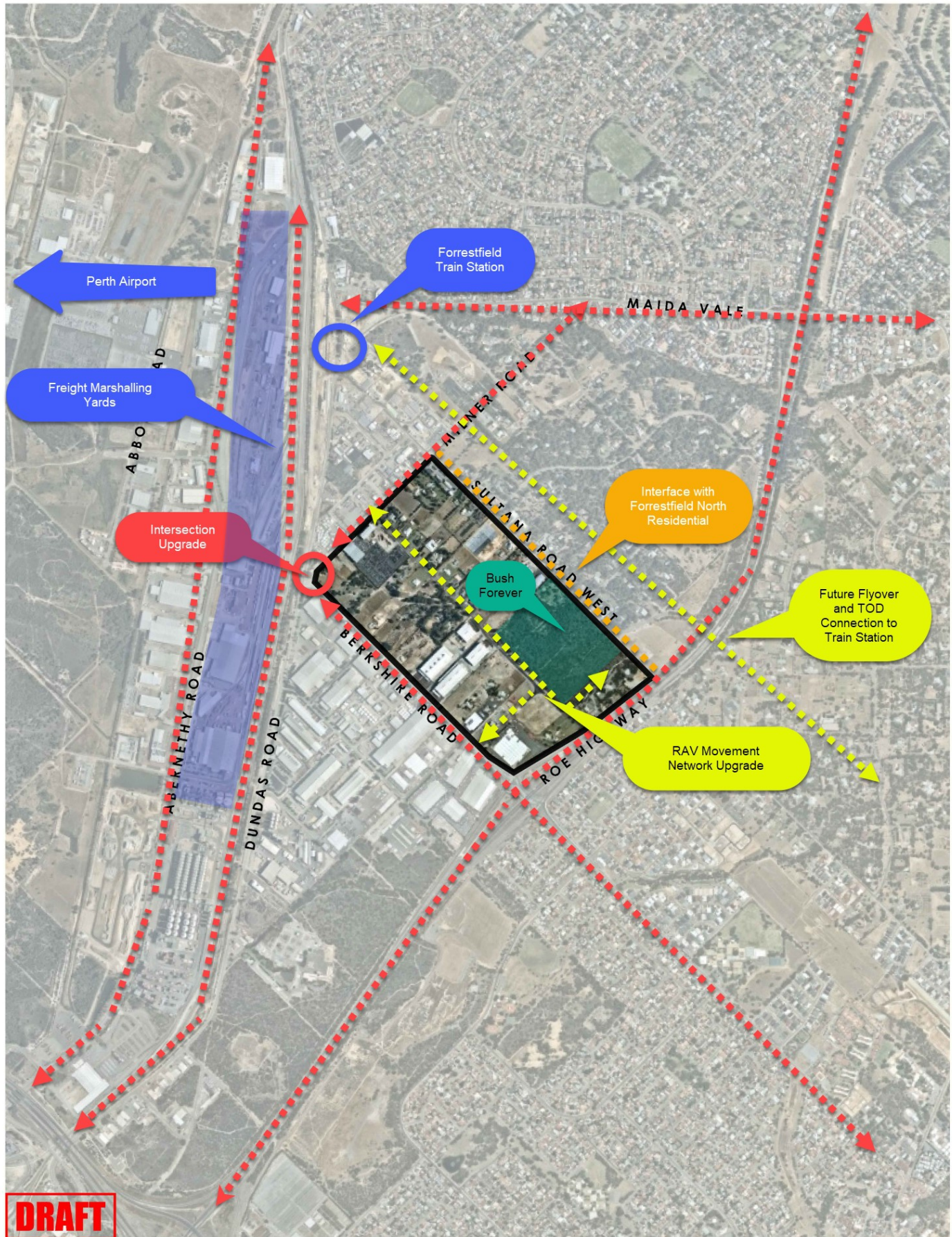


**FORRESTFIELD INDUSTRIAL AREA -
OPPORTUNITIES & ISSUES ANALYSIS**
City of Kalamunda Industrial Strategy
A City of Kalamunda Project

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d: 21 Feb 2018
p: 17/103/005

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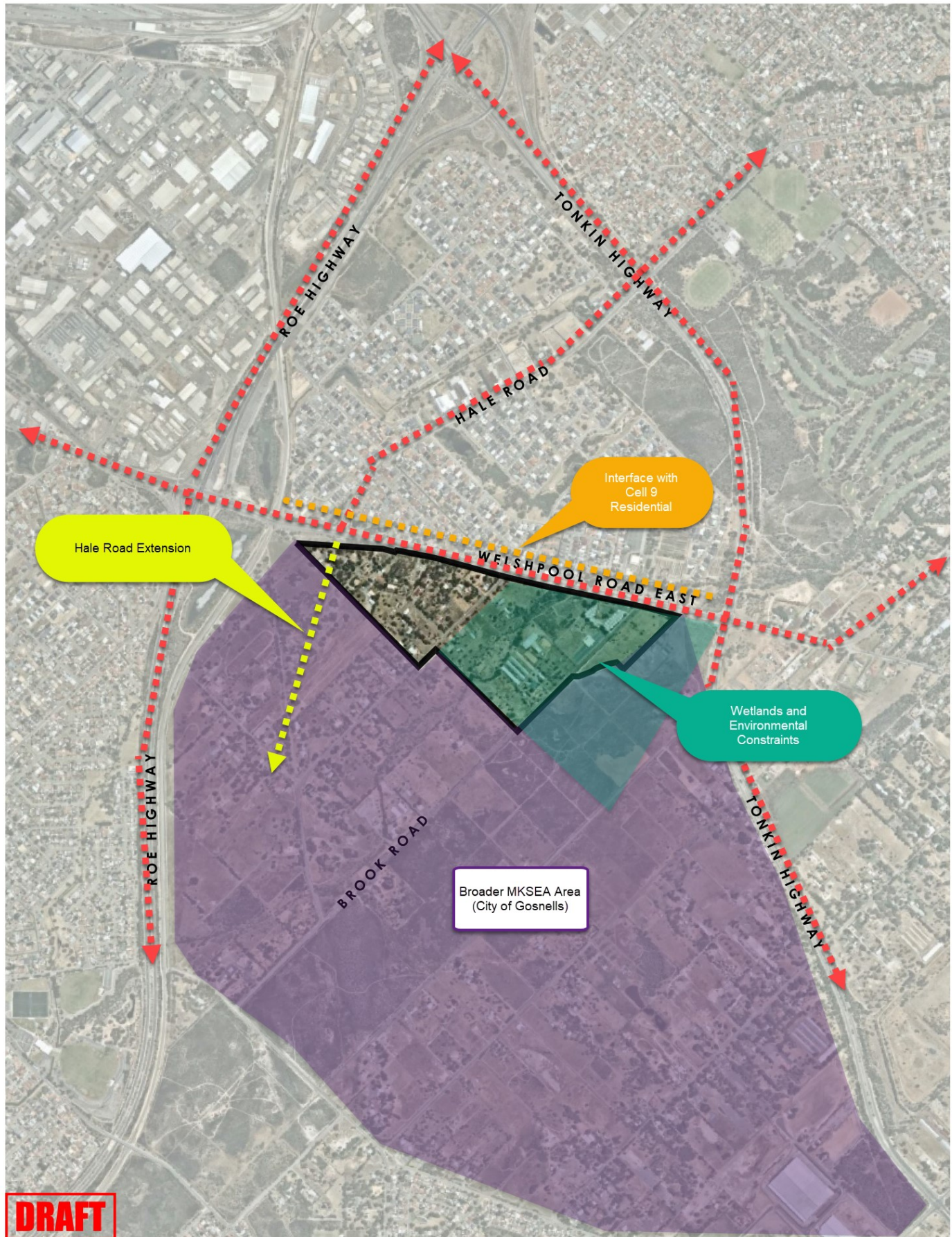
FORRESTFIELD HIGH WYCOMBE (STAGE 1) - OPPORTUNITIES & ISSUES ANALYSIS

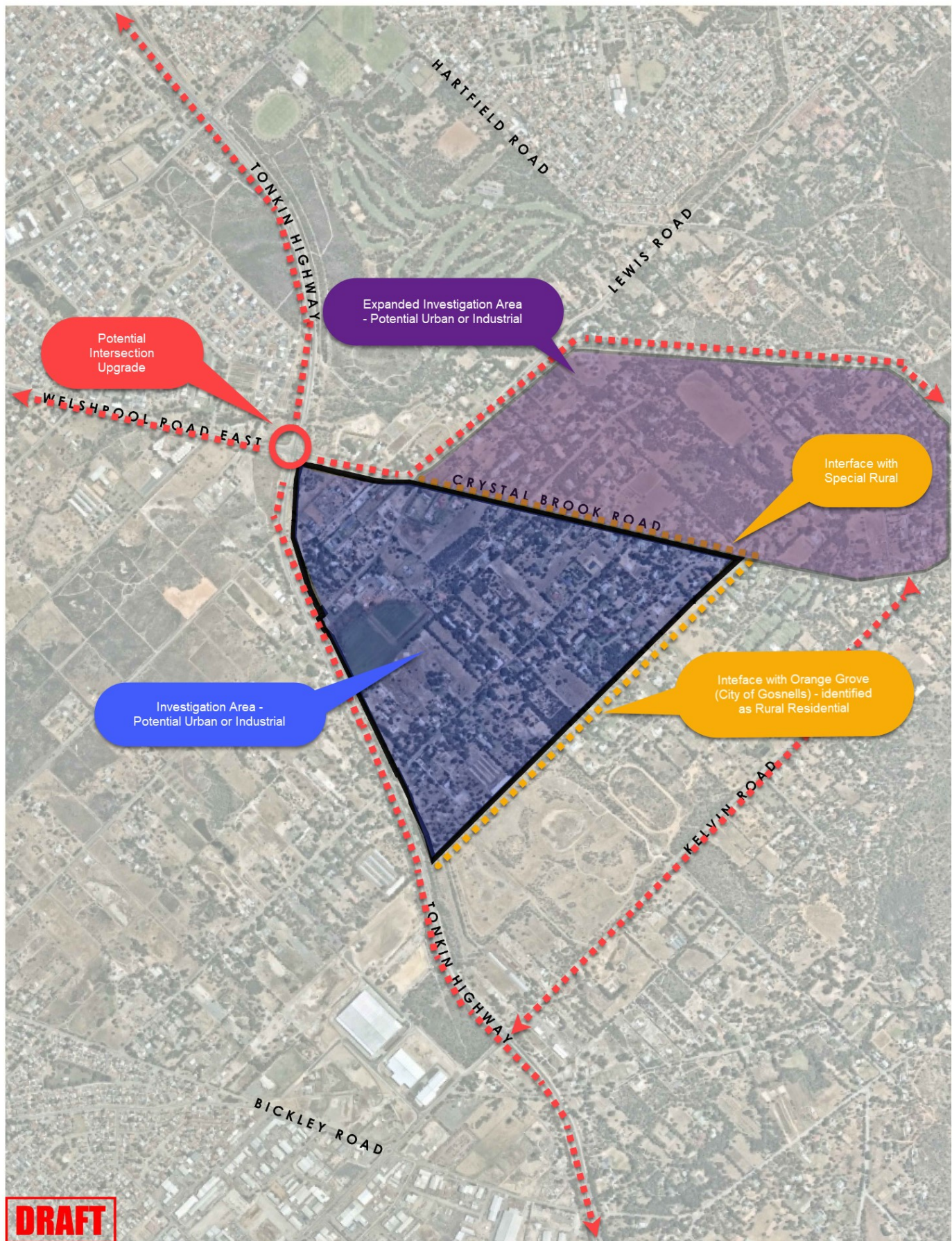
City of Kalamunda Industrial Strategy
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**WATTLE GROVE SOUTH -
OPPORTUNITIES & ISSUES ANALYSIS**
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A City of Kalamunda Project

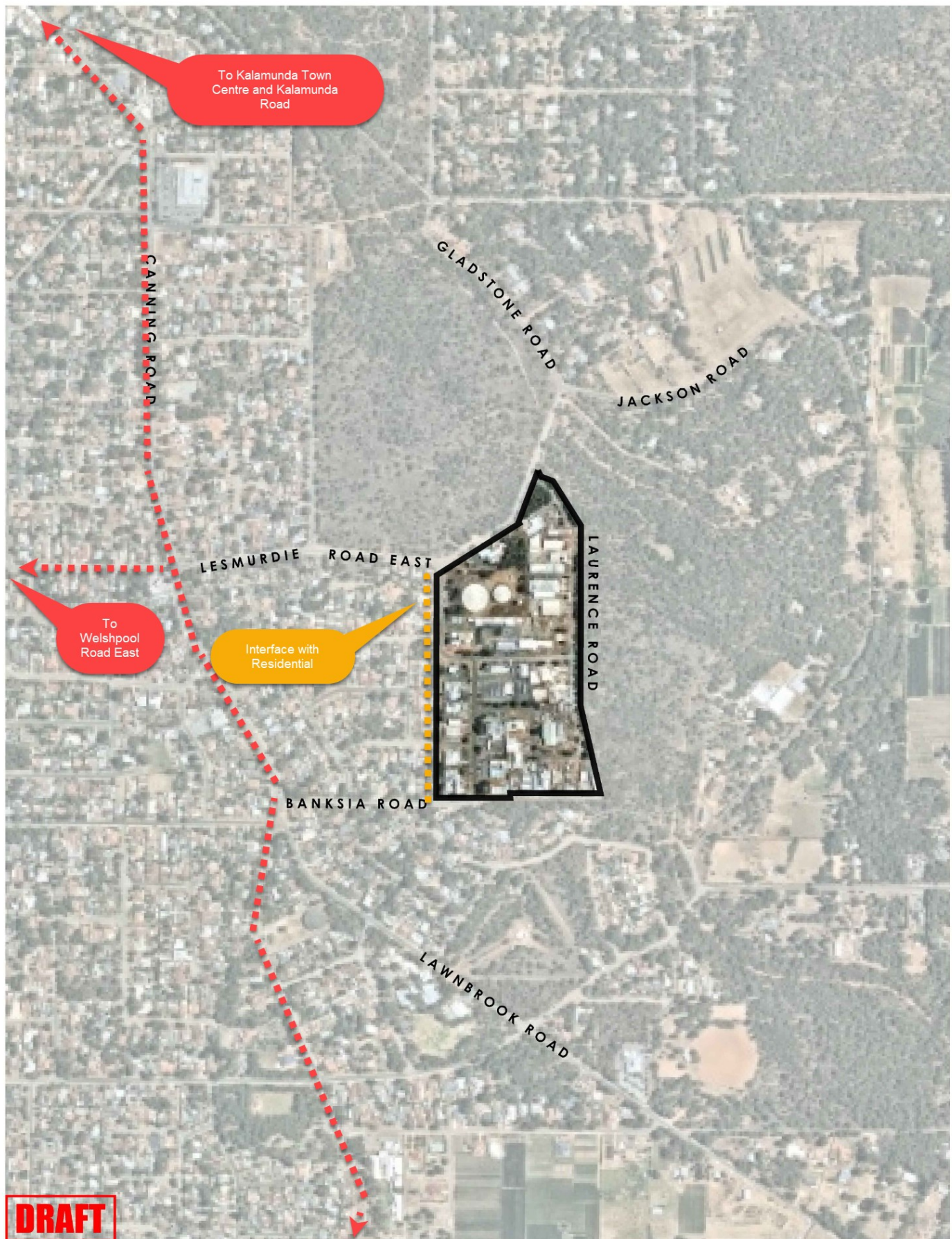


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**WALLISTON INDUSTRIAL AREA -
OPPORTUNITIES & ISSUES ANALYSIS**
City of Kalamunda Industrial Strategy
A City of Kalamunda Project

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d: 21 Feb 2018
p: 17/103/005

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**HATCH COURT -
OPPORTUNITIES & ISSUES ANALYSIS**
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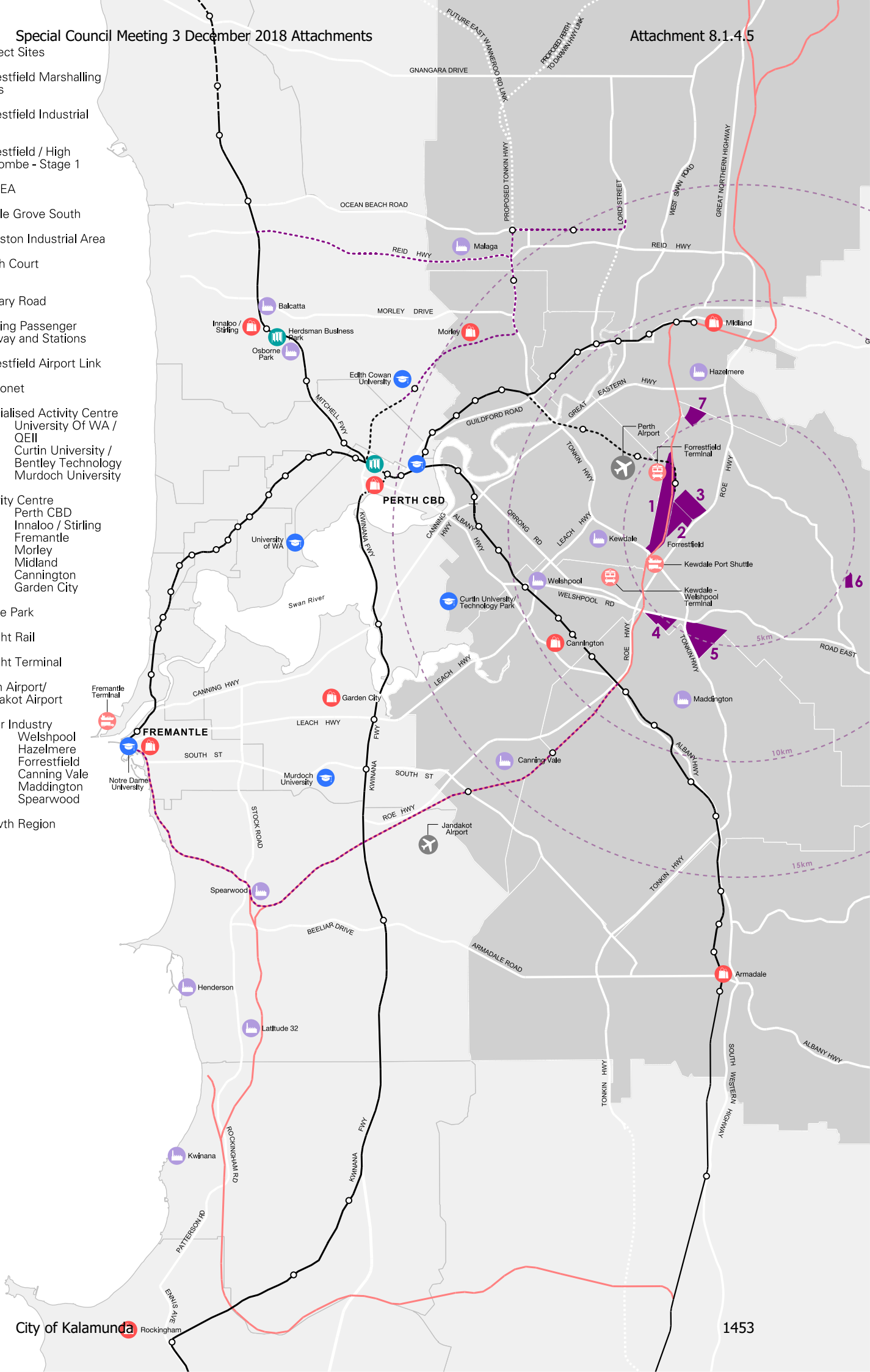
APPENDIX 6: METROPOLITAN CONTEXT PLAN

LEGEND

Special Council Meeting 3 December 2018 Attachments

Attachment 8.1.4.5

- Subject Sites
- 1 Forrestfield Marshalling Yards
- 2 Forrestfield Industrial Area
- 3 Forrestfield / High Wycombe - Stage 1
- 4 MKSEA
- 5 Wattle Grove South
- 6 Walliston Industrial Area
- 7 Hatch Court
- Primary Road
- Existing Passenger Railway and Stations
- Forrestfield Airport Link
- Metronet
- Specialised Activity Centre
University Of WA / QEII
Curtin University / Bentley Technology
Murdoch University
- Activity Centre
Perth CBD
Innaloo / Stirling
Fremantle
Morley
Midland
Cannington
Garden City
- Office Park
- Freight Rail
- Freight Terminal
- Perth Airport/
Jandakot Airport
- Major Industry
Welshpool
Hazelmere
Forrestfield
Canning Vale
Maddington
Spearwood
- Growth Region



APPENDIX 7: REFERENCES

Australian Bureau of Statistics (2016) ABS Census 2016 (Employment, Industry Sector by Place of Work and Place of Usual Residence), Retrieved from: <http://www.abs.gov.au/>

Forecast. id (2017) Population Forecast, City of Kalamunda, Retrieved from: <http://forecast.id.com.au/kalamunda>

Profile. id (2017) Community Profile, City of Kalamunda, Retrieved from: <https://profile.id.com.au/kalamunda>