



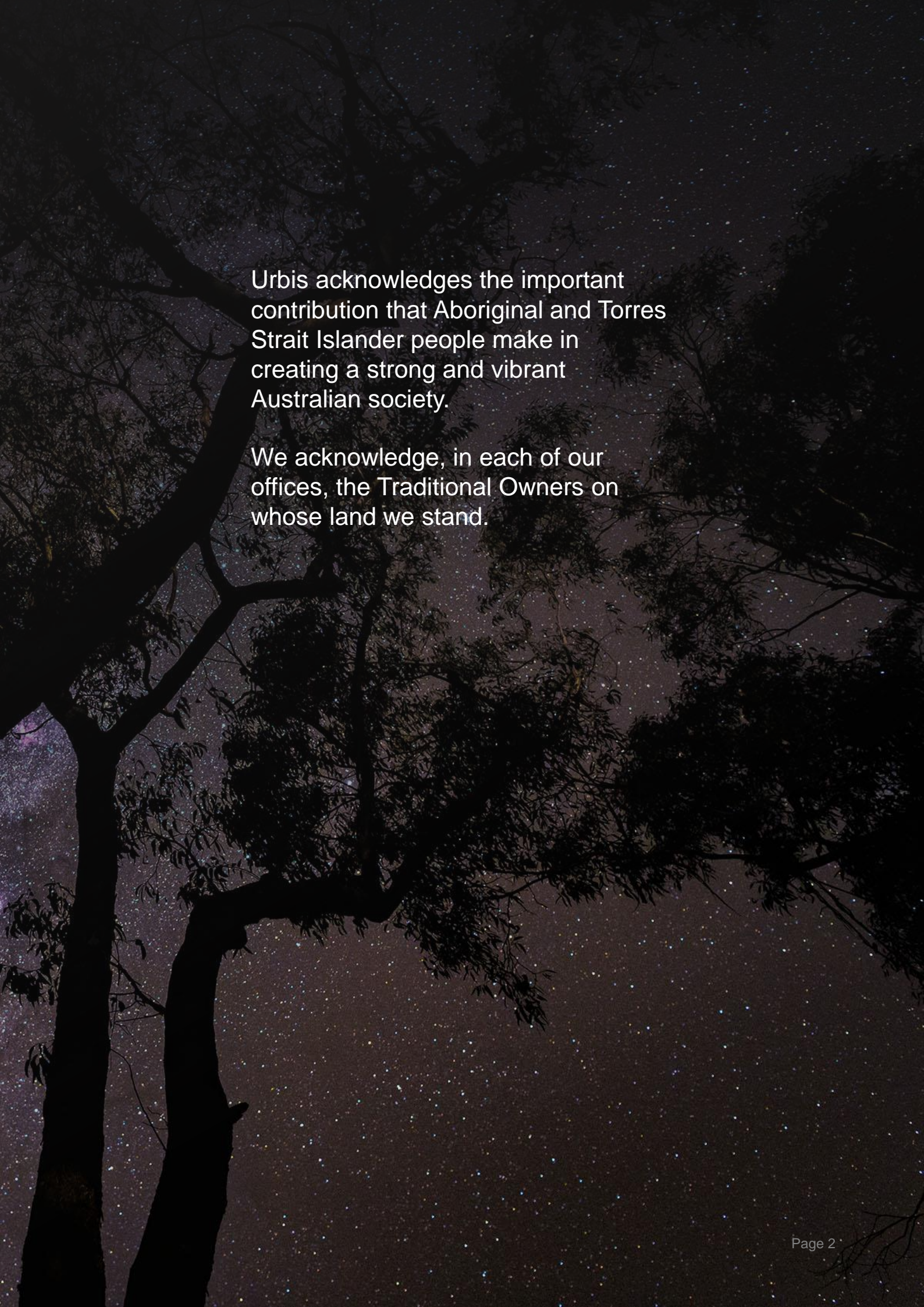
OATS STREET PRECINCT STRUCTURE PLAN

BACKGROUND AND CONTEXT ANALYSIS

Prepared for Town of Victoria Park

August 2023





Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

CONTENTS

Key Findings Summary	4
-----------------------------	----------

Project Overview and Background	6
--	----------

Regional Context	24
-------------------------	-----------

Local Context	32
----------------------	-----------

Opportunities and Constraints Map	56
--	-----------

Engagement Context	64
---------------------------	-----------

Appendices

- Engagement Communications Plan (Urbis)
 - Land Use Economics Report (Urbis)
 - Environmental and Contamination Review (Western Environmental)
 - Transport Impact review (PJA)
 - Civil and Services Review (Pritchard Francis)
 - Urban Water Report (Urbanaqua)
-

© Urbis Pty Ltd

ABN 50 105 256 228

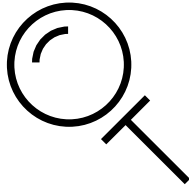
All Rights Reserved. No material may be reproduced without prior permission.

You must read the important disclaimer appearing within the body of this report.



KEY FINDINGS

Place Context



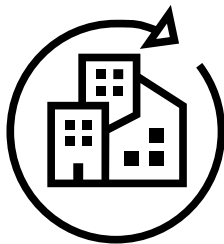
- Oats Street Precinct has mostly pre-determined boundaries, however there is some potential to expand to the north-west.
- The precinct is best classified as a station precinct and needs to consider the context and function of surrounding activity centres.
- The Precinct contains a high portion of 'working professionals' and higher socio-economic status – reflective of proximity to the Perth CBD.
- The dominant housing typology is detached housing, with a high portion of 'lone households' and tertiary education attainment. There is also a higher portion of rented properties.
- Key attractors to the Precinct include the TAFE and Aqualife.

Urban Ecology



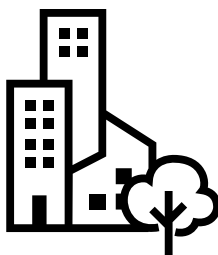
- Much of the Precinct is low-lying, reflected in water bodies and drainage infrastructure, with some high points to the west.
- The Precinct contains nine land parcels identified as contaminated. Several sites are yet to be assessed, meaning additional contamination may exist within the Precinct.
- Most streets incorporate street trees, although most of these trees are exotic species.
- Opportunity exists to provide further street trees and greening to work towards the City's 20% tree canopy target.

Urban Structure



- The proximity of other Activity Centres influences the form and function of the Oats Street Precinct, including Albany Highway.
- The Precinct is generally characterised by fine grained residential blocks and industrial superblocks, reinforcing its position within different activity centres.
- Given the precinct's location centred around a train station, future urban structure will likely be guided by medium density housing and connectivity to the train station.

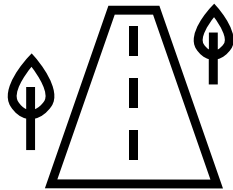
Public Realm



- Limited regional open spaces exists within the Precinct, however future open space will be provided as part of the METRONET project.
- Modification of existing streetscape will provide an opportunity to enhance the public realm for sustainable transport options.
- The Town has a focus to incorporate arts and culture within its urban settings. New development within the precinct may provide opportunities to cultivate public art opportunities and spaces for public art and culture.

KEY FINDINGS

Movement



- The METRONET project will increase east-west connectivity through the precinct for pedestrians, cyclists and also vehicles.
- Movement throughout the Precinct is largely dominated by private vehicle movements.
- Opportunity exists to increase

- focus on sustainable modes of transportation, including walking and cycling – conducive to a station precinct typology.
- Development of infrastructure to support sustainable modes of transportation should be explored.

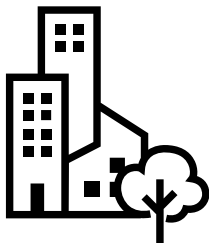
Land Use



- Land uses framing the Oats Street Precinct including industrial to the east, residential to the north and west, and retail / commercial / entertainment to the south have bled into the precinct.
- Future land use planning will need to give careful consideration to the blend of uses surrounding Oats Street and interface externally.

- Land use planning for the precinct needs to support surrounding Activity Centre functionality.
- Land use planning will need to ensure employment and housing opportunities are prioritised over those which attract private vehicle movements.
- Transition away from industrial/car-based related activities should be appropriately managed.

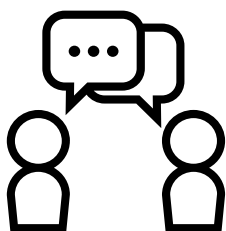
Built Form



- The Precinct is generally characterised by a low-rise built form, consisting of older residential and industrial style developments.
- The built form quality for the residential areas is of a medium-good to quality, whilst there are a number of poor-quality developments within the

- industrial area.
- Infill opportunities exist within the industrial area, although the transitioning of the industrial precinct will need to be managed over time.

Engagement



- Stakeholders from METRONET project engagement already undertaken have expressed the following key place-based objectives
 - Place of exchange – connecting higher education, main streets and the city.
 - Urban Reinvention – whilst retaining entrepreneurial spirit.
 - Safe and welcoming – activities throughout the day and night.
- Stakeholders have stated the following key design parameters preferred within the precinct:

- Better connections (pedestrians and vehicles).
- More greenery and shade with green street edges.
- Additional green space around/over existing public assets.
- Design that enables transition with finer grain laneway networks.
- Support of urban transition of light-industrial area
- Traffic calming to support pedestrian connections.

PROJECT OVERVIEW AND BACKGROUND

PROJECT OVERVIEW

The Oats Street Precinct is located across East Victoria Park and Carlisle, approximately 8km from Perth Central Train Station, and centred on the Oats Street Train Station which includes a bus interchange. The area currently supports a diversity of current land uses include the TAFE site, industrial and commercial businesses, low to medium density residential, retail markets (Swansea Street), Aqualife (and its proposed neighbourhood hub), and a church. It borders the Welshpool industrial area to the south and feeds into Curtin University to the south-west.

What's a Precinct Structure Plan?

A Precinct Structure Plan (PSP) is an urban planning tool that sets out how a place will grow and change into the future.

The METRONET Victoria Park to Canning Level Crossing Removal project is presently being progressed which proposed to raise the train line and stations above the ground with the ground level converted to public open space.

The Town is preparing a PSP for the Oats Street Station precinct which will coordinate the planning of the area taking into consideration the works from the METRONET project. The PSP will guide the future direction of Oats Street precinct land uses, streetscapes and open spaces, environmental performance, access and transport, and more.

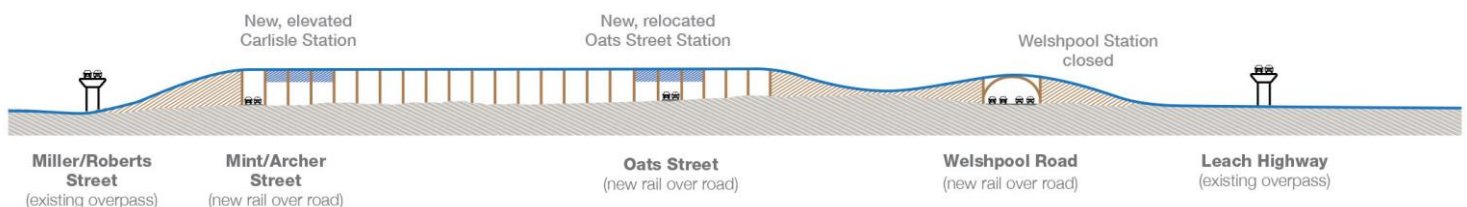
Where will it apply?

The proposed Oats Street PSP boundary has been informed by analysis of key constraints in terms of proximity to the Train Station, the underlying Metropolitan Region Scheme zoning/reservation and existing land uses.

The exact boundaries have not yet been set and will be a matter for further consideration from scenario development and selection. For the time being, we have out forward a proposed boundary based on desktop and site visit analysis.

How does this project fit in with METRONET works?

Significant engagement has already occurred with the METRONET Community Reference Group to understand the ideal future of the precinct area. The key theme emerging to create a new sense of "connectedness" across the diversity of assets operating in the precinct, with a particular focus on creating "vibrancy", safe and desirable public realm and a diversity of residential and commercial uses. The planning for this precinct has opportunity to leverage from the significant investment from the level crossing removal and new open space provision (see below elevation detail from METRONET website).



PROJECT OVERVIEW

WHY DOES OATS STREET NEED A PSP?

Oats Street is identified as a 'Station Precinct' in Perth and Peel @ 3.5 Million and also is a designated District Centre under State Planning Policy 4.2 – Activity centres for Perth and Peel. This means that future planning around the station needs to be carefully considered and guided through a PSP.

The Town's Local Planning Strategy outlines the strategic direction for the next 10-15 years and divides the Town into 14 neighbourhoods with specific guidance for future planning of the areas. Oat Street Station (Neighbourhood 10) has the following objectives:

- Maximise high density residential and mixed use development close to the Station and bus routes.
- Ensure appropriate transition in built form and scale between future high density development with established lower density development.
- Address gaps in the provision of Public Open Space.

As per State Planning Policy 7.2 – Precinct Design, *station precincts are areas with the potential to accommodate transit-oriented development (TOD) surrounding stations and other transport interchanges.*

The Planning and Design focus for station precincts are:

- *Facilitating public transport use by ensuring transit infrastructure within the precinct is integrated with surrounding development and promotes ease of access for residents and visitors.*
- *Guiding zoning and subdivision to achieve desired residential density, land use mix and an intensity of activity to support public transport use.*

- *Designing the movement network, streetscape and public realm to ensure safe and inviting linkages by all modes between the surrounding precinct and public transport infrastructure.*
- *Improving the public realm and its interface with transit infrastructure in support of the green network and enhanced amenity.*

Preparing the PSP is also an exciting opportunity to ensure that the Oats Street area is ready for development which leverages from the high accessibility and connectivity of the area and the public investment into the area in the form of public realm improvements. This precinct has been identified by the Town's various strategic planning frameworks as appropriate to facilitate residential and employment growth building on existing work undertaken by the METRONET engagement with the community.

PURPOSE OF THIS INITIAL REPORT?

This report has been prepared by a team of technical experts who are working with the Town to develop the PSP. This report covers the current context and work that has been undertaken to date which in turn has informed the opportunities and constraints to explore further in the development of scenarios and concepts/ideas in future stages of planning for the precinct.

This document also undertakes a literature review of the important planning and strategic documents which are to be taken into consideration for the future planning of the area.



PRECINCT BOUNDARY

The Oats Street Precinct Structure Plan Area is shown as such within the Town's Local Planning Strategy which we understand has been informed by a number of factors.

Precinct boundaries around train stations are typically informed by walkable catchments (see below diagram) whereby persons can access the station as a pedestrian within a short walk. Following from this, major roads and barriers can either extend or contract the boundary accordingly.

The boundary to the eastern side is limited by the Industrial area (zoned as such under the Metropolitan Region Scheme) on the southern side of Cohn Street. The properties are not appropriate for inclusion within the boundary due to their limited ability to accommodate Urban development and land uses.

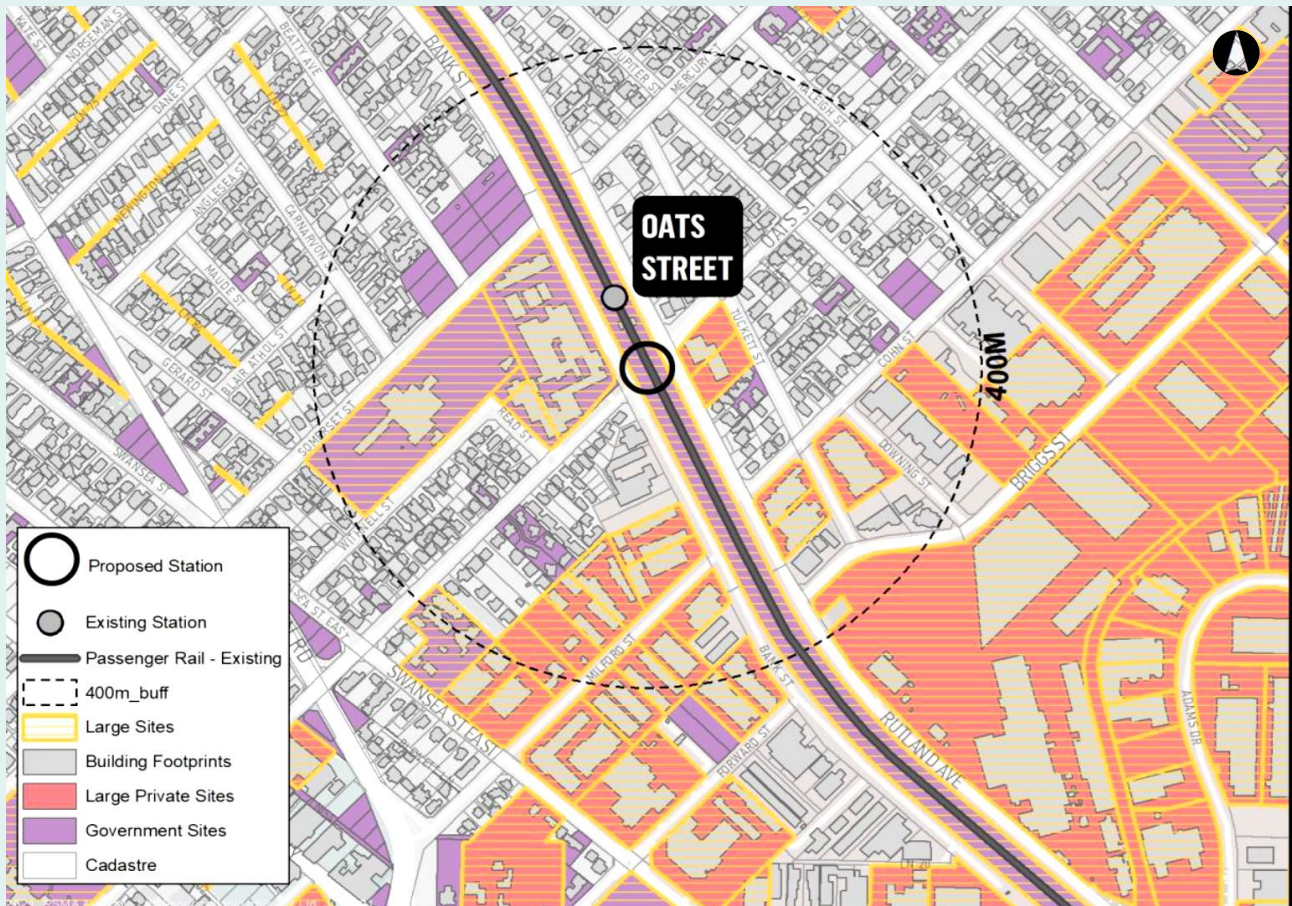
The boundary of the Town with the City of Canning is at Welshpool Road and this area contains the Urban zoned land used for light industrial purposes which may be appropriate to contain more dense urban development. Therefore, the southern boundary is logically at Welshpool Road.

Shepperton Road to the west also provides another logical boundary with the Albany Highway precinct structure plan area being on the south-western side of Shepperton Road.

The northern side of Somerset Street may be appropriate to consider including within the Oats Street Precinct, however, there has been extensive in-fill within this area and there is also a character area further to the north where the Town has identified that the streetscape character and original dwellings are ideally retained as much as practical.

To the north-east of the train station, there may be consideration to increase the boundary, however the walkability of the catchment is also important to consider as well as the amount of residential in-fill that has already occurred.

For the purpose of this initial context analysis the boundaries identified under the City's Local Planning Strategy have been used.



SUB-AREA DESCRIPTION

STATION

- Provides significant bus interchange and some car parking for commuters.
- Proposed to significantly change from the METRONET project with substantial open space provided under the rail infrastructure and new connections through.
- The patronage of the train station is very commuter based due to the connectivity to Curtin University and bus interchange to the eastern suburbs.



EAST OF THE STATION

- Extensive strata in-fill residential development
- Some commercial/community uses opposite the Train Station
- Local centre on corner of Bishopgate Street and Oats Street.
- Four (4) DoC land parcels
- 73 Oats Street character building worthy of retention but not heritage listed or within character area.



WEST OF THE STATION

- TAFE site
 - Main frontage to Oats Street.
 - Streetscape interface is poor to Bank Street and Somerset Street
 - Fencing and car parking to perimeter acts as barrier to activity and engagement to the street
 - Site also contains other training facilities
 - Lack of permeability and legibility through the site and does not connect into the Aqualife site.
- Aqualife facility;
 - Substantial car park to Somerset Street between the TAFE and recreation facilities.
 - Tree lined perimeter with substantial surplus land
 - Lack of engagement with the street due to building setback.
 - Car parking at-grade to the north and south of the facility
 - Slope across the site with higher side being Withnell Street and lower side being Somerset Street
- Quiet pocket of residential between Aqualife and Oats Street.



SUB-AREA DESCRIPTION

NORTH-EAST OF THE STATION

- North-east of the train line there are many homes with character (not listed on the Municipal Inventory or within Character area) and approx. 15-20 which have not been subdivided/developed.
- Further north is less accessible to the train station and greater prevalence of in-fill development.



NORTH-WEST OF THE STATION

- Dane to Bank street block and Carnarvon to Beatty street block has majority single storey infill. Some properties remaining without subdivision/development.
- Western power and water corporation sites.
- Character area further north-west.



SOUTH OF STATION

- Light industrial area with mix of commercial and industrial uses of various age and condition.
- Banks Street has footpath on edge of road reservation and low level trees – power lines are imposing
- Many businesses which have car based activity.
- Milford Street has great street tree canopy and footpaths.
- Swansea Markets site
 - Large car park around building.
 - At high point of precinct and therefore has great access to views
 - Market use is popular but has peaks of activity.
 - Existing buildings have architectural character and value
- Towards western portion is more residential in nature with Brightwater facility.
- Substantial existing residential development within the precinct which has been strata titled.
- Road noise on Oats street is substantial and also substantial power infrastructure present.
- Street trees and footpath of high quality with potential for some improvement



HISTORY

The Oats Street Train Station was opened in 1954 and the areas around the station developed for single residential through to the 1970's. The Swansea Markets was an early addition to the precinct in the 1950's which is still in operation today. Smaller commercial tenancies co-located with the Swansea markets around Banks and Milford Street which slowly expanded and extended over time. The industrial area to the south of the train station emerged in the 1960's with more informal roads and uses, with the roads, infrastructure and buildings establishing more through the 1970's and the being fully built out by the 1990's. The station was upgraded and expanded in the 1970's as residential and commercial uses became more established.

The emergence of in-fill development commenced in the 1990's with the residential areas now dominated by single-storey unit development and significantly reduce canopy cover compared to the 1970's (when single residential development was mostly completed in the area).

The TAFE campus and Aqualife facilities were established in the 1960's with Aqualife expanded in the 1970's and then again in the early 2000's. The TAFE campus was added to adjacent to Oats Street in the 1990's.

The areas level of proximity to the CBD and transport has made it an attractive option for urban/residential consolidation and new facilities such as the Brightwater Facility have established in the south-western portion of the precinct.



DEMOGRAPHICS

POPULATION

- The population is marginally younger than Greater Perth and the Town of Victoria Park LGA, with the largest cohort being 15-64 year olds (noting fewer 65+ persons and 0-14 year olds).
- The area is more densely populated than both the Greater Perth area and the remainder of the Town.

HOUSEHOLD TYPE

- There is a higher proportion of lone person households and fewer family households compared to the Greater Perth average, however this is consistent with the remainder of the Town.
- The households are mainly consistent with the Perth averages in terms of Australian born vs Overseas born, with the Town having a higher percentage of persons born overseas.

HOUSING TYPE

- There are less separate houses than Greater Perth average but lower than the Town's average.
- There are more units than the Greater Perth average but lower than the Town's average.
- There is a higher proportion of rented properties than the Greater Perth average which is consistent with the Town's average.

HOUSING COST

- The average mortgage is lower than the rest of the Town and comparative to the Greater Perth Region.
- The average rents within the area are more than Greater Perth but less than the Town average.
- Additionally, there is a slightly higher proportion of rented properties than the Town and much higher than the Greater Perth average.

KEY DEMOGRAPHICS	EAST VICTORIA PARK - CARLISLE SA2	SURROUNDING AREA SA2'S*	GREATER PERTH
POPULATION			
Population	17,245	98,173	2,116,647
Average Age	37	39	39
Aged 0-14	16%	14%	19%
Aged 15-64	73%	69%	65%
Aged 65+	12%	17%	16%
People Per Hectare	27.5	21.7	3.3
Dependency Ratio	38%	44%	53%
HOUSEHOLD CHARACTERISTICS			
Australian Born	62%	58%	62%
Overseas Born	38%	42%	38%
Family Households	61%	59%	72%
Lone person household	31%	33%	25%
Group household	8%	7%	4%
HOME LIFE			
Dwelling Structure - Separate House	61%	46%	71%
Dwelling Structure - Semidetached & Units	20%	26%	13%
Dwelling Structure - Apartments	11%	16%	7%
Tenure Type - Owned Outright	22%	27%	29%
Tenure Type - Owned with a Mortgage	35%	29%	43%
Tenure Type - Rented	43%	44%	27%
FINANCES			
Average Income			
Working Age	\$71,200	\$69,800	\$65,900
Per Capita (15+)	\$61,000	\$59,900	\$56,500
Per Capita (Total)	\$55,400	\$55,300	\$48,700
Household	\$130,000	\$127,000	\$125,900
Average Monthly Mortgage	\$2,200	\$2,350	\$2,150
Average Weekly Rent	\$340	\$370	\$280
Unemployment Rate	5.1%	5.1%	5.3%
White Collar	75%	76%	69%
Blue Collar	25%	24%	31%

DEMOGRAPHICS

HOUSEHOLD INCOME AND EDUCATION

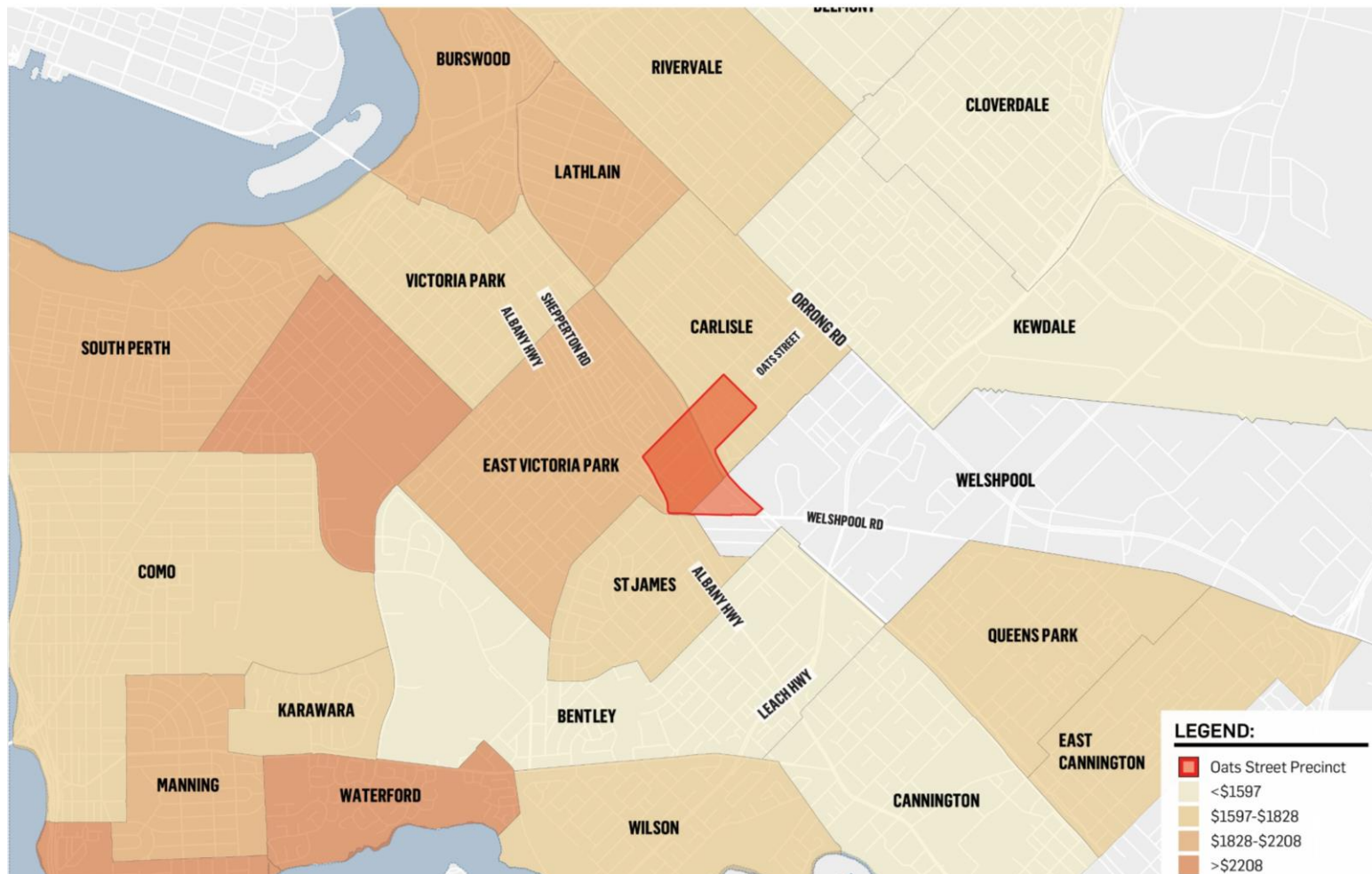
The precinct has a mixed social economic composition as are the surrounding areas. The median weekly income on the eastern side of the rail is lower than the weekly income on the southern side (see below).

The average household incomes within the area is higher than the Perth and Town averages (see above table). This should be considered in the context of the average household size being on the lower end compared to the remainder of the Town.

There is also a higher percentage of 'white collar' employed persons than the greater Perth average, which is consistent with the Town average.

The precinct has a population with a higher tertiary education attainment level (34.8%) which is much than the Greater Perth region (24%) but is slightly lower than the Town's level (36.5%) (direct ABS data).

This social economic mix in such proximity of the city, emphasises the need to cater for a wide range of housing options in the area.



ATTRACTORS

TAFE CAMPUS

The TAFE campus is a regional attractor, providing the region with tertiary refrigeration and air-conditioning training and automotive refinishing with the former being the only training centre in WA. The campus also accommodates an Adult Migrant English Program on the campus. This campus has limited capacity to expand unless existing buildings are demolished and redeveloped to be multi-level. There is no indication that the TAFE will be seeking to relocate or repurpose the buildings in the foreseeable future.

This campus does not attract significant activity on the weekends and attracts a peak of activity in the morning and evening peaks based on student and staffing movements.



AQUALIFE

Aqualife is one of two recreation facilities within the Town which includes a 50-metre outdoor pool, 25-metre indoor pool, hydrotherapy pool, spa and sauna, creche, gym and group fitness studio and external club rooms. The facility also has outdoor play space adjacent and surface level public car parking accessed from Sommerset Street. The facility attracts significant weekend activity and is the only public aquatic facility within the Town of Victoria Park. The facility has a high patronage with 420,000 visits annually (35,000 monthly) and presently does not have an operational café.

It is understood that the Aqualife facility and Leisurelife facility are proposed to be combined at the subject site with a number of design options in the process of being considered.



STRATEGIC PLANNING INTENT

Direction 2031

Directions 2031 – Metropolitan Planning Beyond the Horizon (Directions 2031) establishes a vision for the future growth of the Perth and Peel area, which is expected to grow from 1.65 million people to 2.2 million people 2031. The Town of Victoria Park is located within the Central sub region which is expected to need an additional 121,000 dwellings by 2031 to meet the infill rate of 47%.

The Strategy calls for higher density, innovative housing solutions for more sustainable urban growth in precincts which support this growth. The Oat Street Precinct, is a suitable location for such infill given it's high level of connectivity.

Perth and Peel @ 3.5 Million

This document is a continuation and complements Directions 2031. The document provides a framework for a population of 3.5 million people in Perth by 2050.

The subject site is within the Central Sub-Planning framework which identifies the Oat Street Precinct as an Activity Centre.

The aim of Activity Centres is to allow people to live closer to where they work. Centres should be a focal point of commercial and social activity with access to quality public transport. Oats Street is identified as a 'District Centre'.

Perth and Peel @ 3.5 million emphasises the need for more housing infill and innovative housing design. The Town has an in-fill target of 19,320 additional dwellings to be provided by 2050 which are anticipated to be provided in strategic locations rather than spread across the Town.

Town Objectives for METRONET

The Town is assisting the State Government in creating places which are well-connected and thriving for the train stations (Burswood, Carlisle and Oats Street) and have identified three key factors in achieving this vision.

Great places

Station precincts are great places that provide obvious and lasting community benefits.

- Ensuring that people are the focus of the project rather than infrastructure and efficient movement.

All stations remain

All existing stations in the Town must remain with only minor adjustments to their locations.

- Train stations are crucial to supporting future of population growth and shouldn't be sacrificed for travel time efficiency.

Sustainable access

Station precincts promote and facilitate walking, cycling and public transport as the predominant choices for accessing each station.

- Promote economic development of local precincts as well as the health of the community.

LITERATURE REVIEW

STRATEGIC COMMUNITY PLAN 2022 – 2023

The Strategic Community Plan 2022-2023 champions the 4 pillars of sustainability to create a Town that is a dynamic place for everyone. The document sets out community priorities which have been informed by previous engagement. These priorities which are relevant to Oats Stret Precinct are listed below:

Social

- Improving perceptions of safety
- Inclusivity and diversity
- Improving access to art, history, culture and education

Economic

- Strong local economy
- Attracting local businesses and people to local Activity Centres through planning and activation

Environment

- Protecting and enhancing the natural environment
- Increasing and improving POS
- Well-built and well-maintained buildings
- Enhancing liveability through planning, urban design and development
- Improving accessibility/connectivity in the Town

This project has a high level of alignment with the strategic community plan – most notably the environment priorities for connectivity and the creation of better places.

ECONOMIC DEVELOPMENT STRATEGY 2018 – 2023

The Town's Economic Development Strategy: Pathways to Growth 2018 – 2023 provides a 5-year vision and blueprint for sustainable economic growth in the Town – to enhance the importance of the entertainment, leisure, education, retail and hospitality precincts within the Town. The Strategy identifies the action to develop place plans for each high-value precinct noting that the project area feed people into the Curtin University precinct and also ensuring that the precinct is developed as a safe, vibrant and attractive station precinct.

Furthermore, there is desire to see a location within the Town for knowledge-based industries including appropriate, a city competitive advantages and incentives framework, and a coordinated business attraction strategy. This precinct's high level of accessibility and existing TAFE and Industrial uses may attract certain land uses and activity which may promote the attractiveness of the area for other residential and commercial activity.

ACCESS AND INCLUSION PLAN 2022 – 2027

This plan has been prepared by the Town to fulfill requirements under the Disability Services Act 1993. The main actions of this plan of relevance to this project are as follows:

- Ensure that engagement on this project provides materials which a wider set of abilities can engage with, and stakeholder mapping is more inclusionary of marginalised groups.
- Infrastructure is provided throughout the Town which enables increased physical access to services.
- Develop the Town's Wayfinding Style to comply with best practice access and inclusion.

The public realm design needs to ensure compliance with the Town's Access and Inclusion Plan 2022-2027.

REFLECT RECONCILIATION ACTION PLAN 2018 – 2022

The Town established an Aboriginal Engagement Advisory Group in 2013 to build relationships and respect between other Australians and Aboriginal and Torres Strait Islander people. In 2016 the Aboriginal Engagement Advisory Group embarked on the development of an inaugural Reconciliation Action Plan (RAP) to provide a framework for the Town to build further on respect, relationships and opportunities. The RAP includes the following actions relevant to the Oats Street PSP:

Celebrate and recognise Aboriginal and Torres Strait Islander Cultures.

Aboriginal and Torres Strait Islander signage and display.

Ensure that all documents of the Town are inclusive and consider and reflect Aboriginal and Torres Strait Islander people.

Investigate Aboriginal and Torres Strait Islander Walking Trail in Victoria Park

The draft 2022-2025 RAP is aiming to be an Innovate RAP which will expand on the Town's commitments to reconciliation.

The RAP requires that in the preparation of this document considers and engages with Aboriginal and Torres Strait Islander people.

LITERATURE REVIEW

TOWN OF VICTORIA PARK TPS1

The Town of Victoria Park's Town Planning Scheme No.1 (TPS1) is the primary statutory document that guides development over the Town. The general objectives of the Scheme are to cater for the housing, business, employment, education, leisure and access opportunities of residents and to promote sustainable development.

Under TPS1, the project area has a range of different zones and reserves as per the below map.

It is noted that the TPS1 is likely to be superseded by the Town's Draft LPS2 by the time the Oats Street Structure Plan is endorsed by the WAPC.

Under the Town's Town Planning Scheme No. 1 (TPS1), the Scheme area is divided into precinct areas. The study area north of the rail line is within Precinct 8 – Carlisle, Precinct 9 – Welshpool to the south-east and Precinct 10 – Shepperton to the south.

The intent for each precinct is provided as follows:

PRECINCT 8

The intent for the Precinct is to remain a primarily residential area.

For land zoned 'Residential', TPS1 has a preference for medium density residential development. Single houses and group dwelling are considered most appropriate. Infill in the form of battle axe development is preferred. Non-residential uses should be limited to activities that support the day-to-day uses of residents.

For land zoned 'Commercial', low intensity uses are preferred. New development should be of a scale and style that enhances the existing built form.

PRECINCT 9

The Welshpool Precinct shall continue to function as an industrial area, meeting the need for service industry in the inner areas of the city and close to the city centre.

A mixture of industrial uses will occupy the majority of this precinct.

Non-industrial uses shall generally be discouraged from locating in this precinct except where they directly serve the area or are to be incidental to a primary industrial use. Importantly, particular attention will be given to ensuring that the land uses respect the amenity of adjacent residential areas.

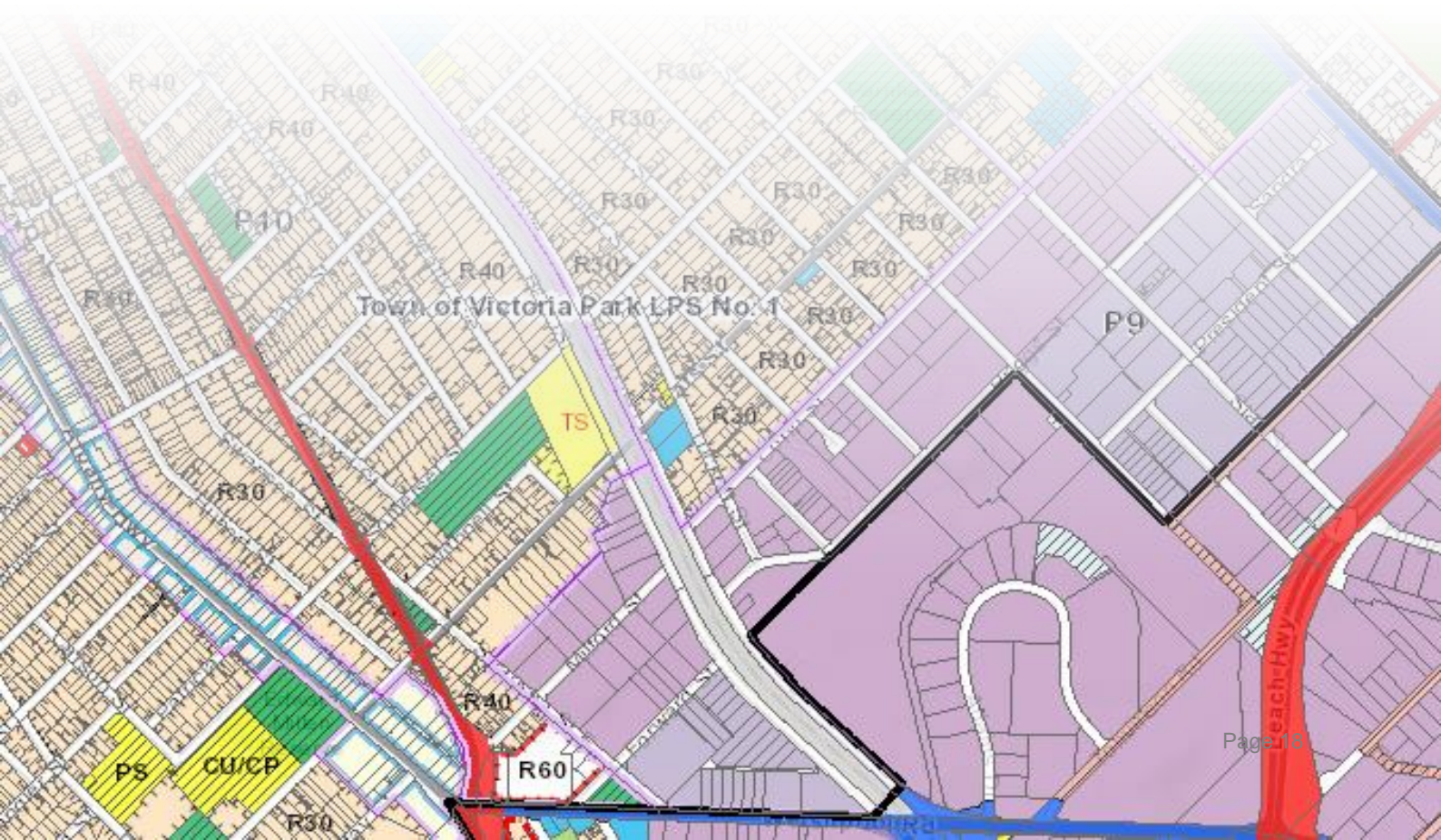
The precinct is less suited to residential use by virtue of its industrial nature.

PRECINCT 10

The intent of the Precinct is to remain primarily residential with low to medium density dwellings. Retention of original houses and mature trees is encouraged, new development should complement the existing built form of the area. Additionally, the Precinct aims to increase active modes of transport

The Somerset Pool should continue to function in its current capacity, any development to the site should be of small scale.

Significant expansion of the TAFE will not be supported unless there are no adverse impacts to neighbouring residential properties



LITERATURE REVIEW

METRONET – Oat Street Station Precinct Preliminary Place Plan 2020

The MetroNet Oats Street Station Precinct Place Plan (PPP) was prepared prior to commencement of the concept design stage and is the basis for the coordinated delivery of the MetroNet precinct. The PPP is based on a 'sense of place' approach to guide development that is aligned with community values.

The PPP includes place principles and design responses (listed below) and an indicative place plan. Sense of Place Statements identified as follows:

- Place of exchange – connecting higher education, main streets and the city.
- Urban Reinvention – whilst retaining entrepreneurial spirit.
- Safe and welcoming – activities throughout the day and night.

The Precinct Structure Plan is required to build on the initial findings of this PPP which has identified the following opportunities and constraints.

OPPORTUNITIES

- The South Metropolitan TAFE Carlisle Campus is well placed to capitalise on a new station and railway infrastructure at Oats Street. Campus activities could spill out to the proposed open space.
- The parcel of commercially zoned land on Bank St, Forward St and Milford St offers opportunities for commercial and mixed-use redevelopment.
- Land topography rises at the mid-point between Shepperton Road and Bank Street, offering opportunities for views out to the eastern hills from new development.
- There are good examples of medium density development which could be used as a model on other sites in the precinct.
- Block bounded by Mercury / Tuckett / Oats Streets and Rutland Avenue offers some potential for high-density adjacent to the station.
- Swansea Street Market Site offers opportunity as a demonstration project, which could provide the impetus for urban development to occur in the existing light industrial area south of Oats Street Station.

- Somerset and Mercury Streets could be reconnected if the rail alignment for Oats Street is elevated, improving connectivity across the rail corridor throughout the neighbourhood.
- A large mature fig tree on the corner of 76 Oats Street Carlisle offers an opportunity for development to open onto landscape and the street
- Existing Water Corporation draining areas or 'blue corridors' could be enhanced and opened to offer public open space functions, with residential redevelopment opening onto this amenity.
- Further greening of Oats Street could help improve links between station and key nodes.

CONSTRAINTS

- Many residential lots within the precinct have been subdivided or strata titled.
- Existing Western Power substation is in a prime location for redevelopment, however, the site offers limited opportunity and impacts on visual amenity.
- Industrial area offers very limited opportunity for redevelopment.
- The intersection of Oats, Bank and Rutland has the potential to be a car dominated space. Attention should be applied to ensure this area is appropriately traffic calmed and safe for pedestrians.
- Read Street terminates where the Aqualife Recreation Centre is located, limiting clear pedestrian, cyclist, and vehicle movement through the space. This connection can be made public, with possible development opportunities to face the newly created street (including future expansion of the TAFE or Aqualife)
- Open space provision is low within the core and frame of the station, below typical 10% standards.

LITERATURE REVIEW

METRONET – Oat Street Station Precinct Preliminary Place Plan 2020 (cont.)

The PPP includes place principles and design responses (listed below) and an indicative place plan.

Design responses to place principles

Stronger connections

- New pedestrian and potential vehicle connection at Somerset and Mercury Street.
- New pedestrian connect at Cohn and Milford Street.
- Integrated PSP
- Station and bus interchange moved south of Oat Street

Bringing in more greenery and shade

- Green street edges to Bank Street and Rutland Avenue
- Passive spaces underneath viaduct
- Existing WaterCorp site on Somerset Street to new useable passive green space with strong links to Aqualife and TAFE. Built form on surrounding vacant utilities can be redeveloped to open onto this space

Design that enables transition

- Station and bus interchange design ensure permeability under viaduct
- Fine grain laneway networks that define the Milford Street precinct can form the basis for future detailed planning
- High quality station and infrastructure design provides long-term catalyst to support urban transition of adjacent light-industrial area
- The location and design of the bus interchange must ensure a quality interface with neighbours

Campus interface

- Bank Street (between Somerset and Oats St) is traffic calmed to enhance TAFE interface
- Flexible spaces under viaduct for possible TAFE activities
- Investigation of opportunities that allow TAFE buildings and facilitates to open out onto the space underneath the viaduct, with stronger connections between TAFE buildings and new campus space.



LITERATURE REVIEW

METRONET Station Precincts Gateway 2021

Building on the METRONET Oat Street Station Precinct PPP, the Metronet Gateway Strategy was prepared to further analyse the opportunities and constraints of the Oat Street Station and the development potential of the wider precinct. The document evaluates the current state of the station through a place indicator analysis and the development potential of the site through a second analysis. This information can inform the PSP preparation.

The below are high level opportunities and constraints identified:

Opportunities

- There are established education and community facilities in the precinct
- Elevated rail will create

opportunities for the creation of new public spaces

- Close proximity to the Park Centre, Aqualife Recreation Centre and Welshpool Industrial Area.
- The Oats Street level crossing removal will improve safety and connectivity across the corridor.

Constraints

- The high level of land fragmentation in private ownership provides limited opportunities for consolidated redevelopment.
- The lack of pedestrian infrastructure and amenity is impacting precinct walkability.

The place indicator analysis evaluated metrics such as housing, movement, amenities, employment




and urban ecology. Oats Street performed above average except for Amenities and Urban Ecology, which is primarily due to the lack of POS.










The development potential analysis considered growth, market ownership, land availability and readiness metrics. Oat Street was above average on all metrics but excelled at ownership and readiness. The site has above average proportion of government owned land which is an opportunity to intensify housing, employment and community uses. Additionally, the proportion of R40 land and established infrastructure puts the precinct in a good position for further infill. However, high-density development is not anticipated until after 2035 with medium density development more likely in the interim.

Precinct scenario

- 1 Elevated rail will enable connections across the rail corridor and create opportunities for new public spaces.
- 2 Oats Street level crossing removal.
- 3 Welshpool Station to close due to low patronage.
- 4 Transition to medium and high intensity surrounding station and along key corridors.
- 5 Low intensity to outer precinct that is sympathetic to existing neighbourhood character.
- 6 Welshpool Industrial Area to intensify and diversify over time.
- 7 Welshpool Road level crossing removal.



CAPACITY ESTIMATE			
	CURRENT	MLUFs 2031	METRONET Growth Scenario
 Dwellings	3,660	4,080	4,080
 Population	7,900	8,910	8,910
 Employment	4,130	4,620	4,620

FUTURE URBAN FORM	Storeys	Residential Focus	Employment Focus
High Intensity	5+	 Mixed-use, Apartments >R100	 Large Office, Retail
Medium Intensity	2-4	 Apartments, Some mixed use R40-R80	 Office, Retail, Showroom, Industrial
Low Intensity	1-2	 Single, Grouped, Small Apartments <R35	 Industrial, Office, Retail, Showroom
		 Open space	 Education, Health or Civic campuses
		 Train Station	 Bus Interchange

HOW DOES THIS IMPACT THE PRECINCT?

STRATEGIC ALIGNMENT

- Strategically, the precinct is desirable to facilitate additional dwellings and activity which encourages localised employment and education.
- The precinct is ideally planned with a people focus which means car movements and parking should have a lower priority with planning of the public realm geared towards making it more attractive to use sustainable forms of transport.
- The preparation of the PSP needs to consider and engage with Aboriginal and Torres Strait Islander people.
- TPS1 zonings are proposed to be superseded by LPS2. The zonings and controls need to be reviewed in the context of the outcomes of the proposed PSP.

METRONET REPORTS

- The Station and associated open space design is decided and will be implemented. The public realm adjacent will need to consider this design and move people strategically to key advantage through the precinct.
- Stakeholders have expressed the following key place-based objectives
 - Place of exchange – connecting higher education, main streets and the city.
 - Urban Reinvention – whilst retaining entrepreneurial spirit.
 - Safe and welcoming – activities throughout the day and night.
- Stakeholders have stated the following key design parameters preferred within the precinct:
 - Better connections (pedestrians and vehicles) at Somerset and Mercury Street and as well as Cohn and Milford Street (pedestrians).
 - More greenery and shade with green street edges to Bank Street and Rutland Avenue
 - Additional green space around/over existing public assets.
 - Design that enables transition with finer grain laneway networks that define the Milford Street precinct.
 - Support of urban transition of light-industrial area
 - Bank Street (between Somerset and Oats St) is traffic calmed to enhance TAFE interface and stronger connections between TAFE buildings and new campus space.



HOW DOES THIS IMPACT THE PRECINCT?

TYPE AND BOUNDARIES

- The precinct is best planned for as a station precinct given it's proximity to nearby retail and specialised centres.
- The precinct boundaries have logical barriers such as major roads in some directions and in others are constrained by viability of re-development and incompatible zoning.
- The history of the area seems to indicate that it was developed in isolation of the train station rather than outwards from the rail line. This means that the land uses and activities haven't necessarily been planned to leverage from the high accessibility of the area from public transport.

DEMOGRAPHICS

- The baseline of existing density is higher and therefore in-fill opportunities are not as easy or prevalent, however the housing typology is mostly detached houses, which is lower than the Town average. This indicates smaller lot sizes and greater 'fragmentation' and limited apartment developments.
- There is higher proportion of lone households, white collar workers and tertiary education attainment, as well as a higher median household income. This means that generally the precinct would indicate that there is a higher socio-economic profile, however there is a split east and west of the train line – west being slightly higher in terms of household income.
- There is a higher proportion of rented properties and lower average mortgage with a higher average weekly rent in the precinct.

ATTRACTORS

- The TAFE facility attracts high number of persons through the week, however the campus has limited expansion opportunities (unless upwards) and the site interface to the streetscapes is poor and could be improved. It is understood that TAFE has no significant expansion plans in the near future.
- The Aqualife facility is well used by the community, especially on the weekends, and has surplus land which could be better utilised to make more efficient use of the land asset. There is strategic aim to maintain and increase patronage of the Aqualife facility for the wider community.



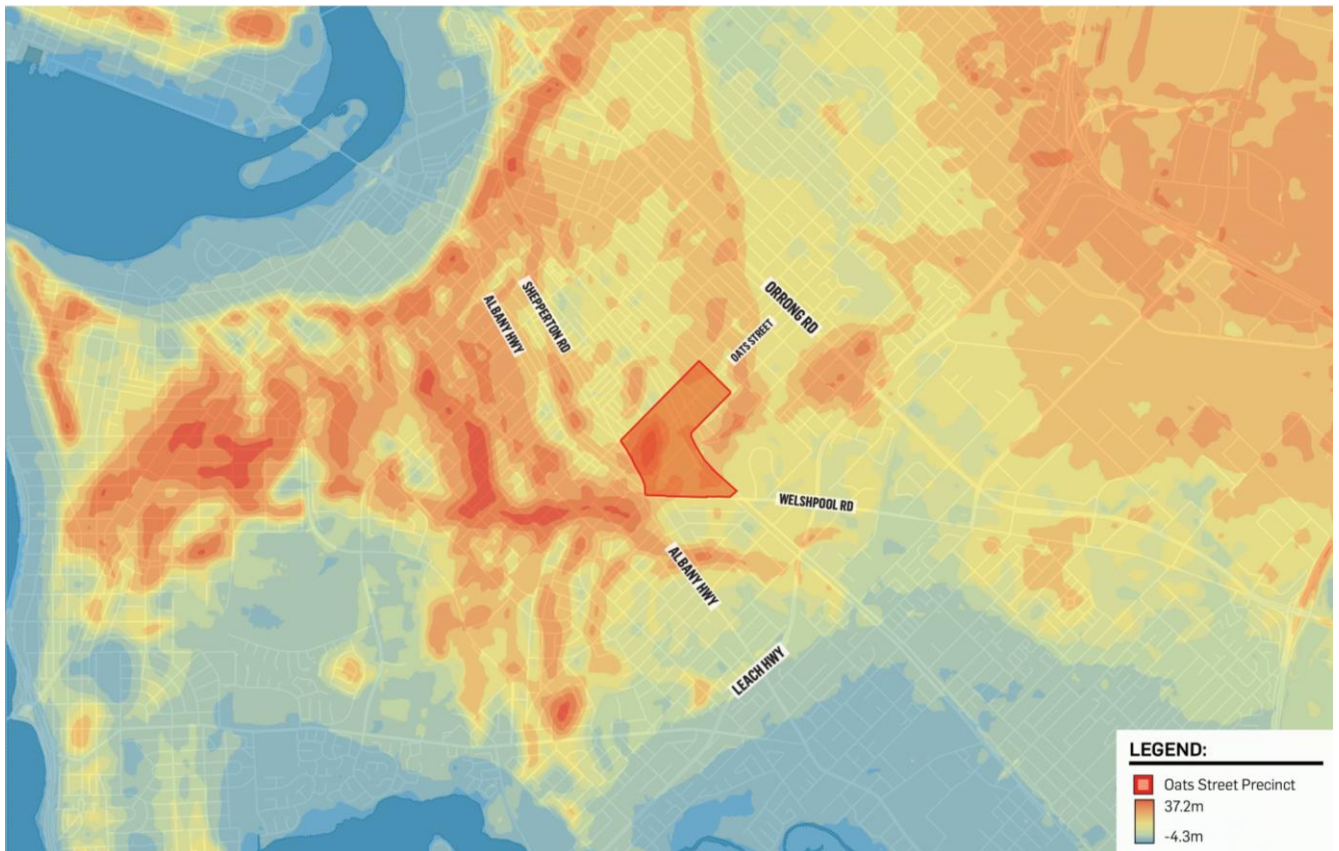
REGIONAL CONTEXT

URBAN ECOLOGY

TOPOGRAPHY

The topography in the area surrounding the Oats Street Precinct is characterised by a series of ridge lines, valleys and low-lying areas. The residential areas to the north and west of precinct which includes the suburbs of Como, South Perth, Kensington, (East) Victoria Park, Bentley, Lathlain and Rivervale generally have a more undulating topography and are located on the higher grounds. The areas to the south and east are flatter and are have lower elevations. These areas include the residential suburbs of St James, Queens Park and most of the Welshpool industrial area.

The Oats Street Precinct is largely located within a valley that covers most of the suburb of Carlisle and ties into the lower areas the south and east. The railway line follows much of this valley.



URBAN STRUCTURE

ACTIVITY CENTRES

The Oats Precinct is well located in relation to a variety of Activity Centres. The precinct is located between the Perth Capital City Activity Centre and the Strategic Activity Centre of Cannington. Both can be easily accessed from the Oats Street Precinct by both public and private transport. Perth City is a main employment hub and provides an important function in delivering social and cultural services such as medical facilities, tertiary education and entertainment. Cannington as a strategic centre puts a greater emphasis on providing a retail and commercial services. These services are complemented by the entertainment and food and beverage offerings that are included in the Carousel shopping centre.

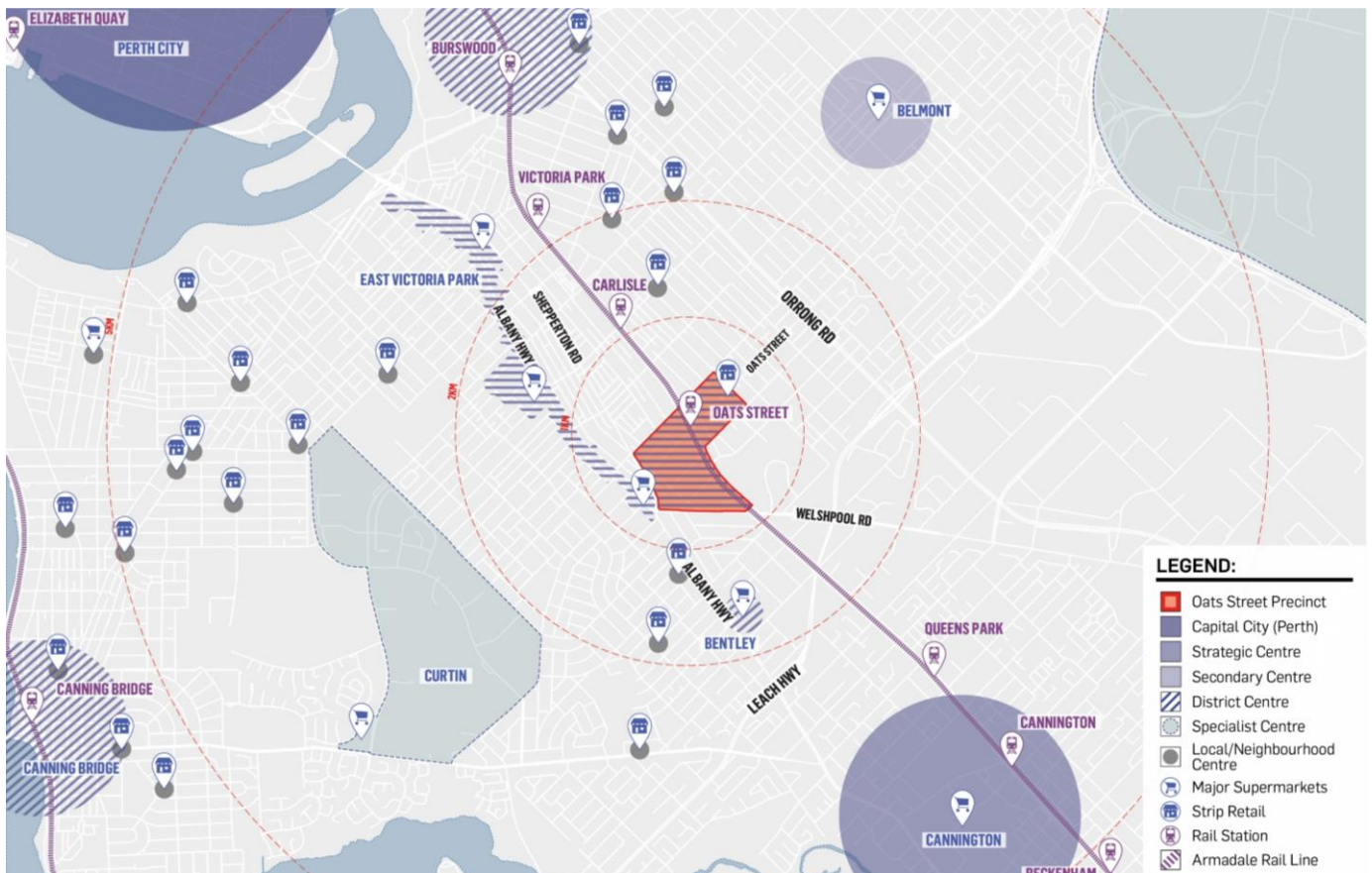
The Belmont Activity Centre (Secondary Centre), located approximately 3km north of the precinct performs a similar function as Cannington. However, the service offering in Belmont is not as extensive as the one in Cannington.

Oats Street is also in close proximity to a few District Activity Centre, including Burwood, Canning Bridge, Bentley Town Centre and the Albany Highway corridor. The Oats Street Precinct has been classified as a District Activity Centre itself. District centres have a greater focus on servicing the daily and weekly needs of residents although some of these centres serve a wider catchment as well. This is case of the Burwood Activity Centre which has a strong focus on entertainment and tourism. Canning Bridge on the other hand is mainly focused on providing opportunities for high-density housing.

The Albany Highway corridor provides a mix of activities including retail and commercial, residential and food and beverage. Albany Highway is to the south-west of the Oats Street Precinct and is also going through a precinct planning process to determine the most appropriate development scenario and re-assess it's hierarchy. This precinct boundary stops at Shepperton Road and therefore proposed to directly interface with the Oats Street PSP area. The properties directly to the south of Shepperton Road on the western side of Oats Street are identified as being appropriate for residential in-fill development for up to 6-8-storeys with flexible ground levels. The eastern portion of the Albany Highway precinct has a more a retail focus and includes building heights of up to 14-storeys.

Oats Street is also right in between the Perth Airport and the Curtin/Bentley Activity Centres, which are specialist centres that focus on employment and education. Curtin University supports a 37,000-student population on campus. Oats Street is one of the closest train stations and many of the students and staff travel through the Oats Street Precinct to go the university.

The precinct interfaces with Welshpool Industrial area at Cohn Street and Welshpool Road to the south of the precinct.



PUBLIC REALM

OPEN SPACE

Within 5km of the Oats Street Precinct there is a mixed supply of public open spaces and sporting recreation facilities. This includes playing fields, golf course, the Perth Waters and Canning River foreshores, pocket parks and the proposed linear open space underneath the elevated railway line. The open space areas are quite fragmented and disconnected from each other. Other than the proposed open linear open space along the railway line there are no opportunities to create interconnected ecological corridors in the area.

Limited open space is available to the east of the site. The lack of open space relates to the industrial nature of this area

The open space areas in the immediate surrounding of the precinct are relatively small and mainly have a local function. To access the larger parks and recreational facilities, residents of the Oats Street Precinct will require the use of a private vehicles, a bicycle or public transport.



MOVEMENT NETWORK

REGIONAL ROAD NETWORK

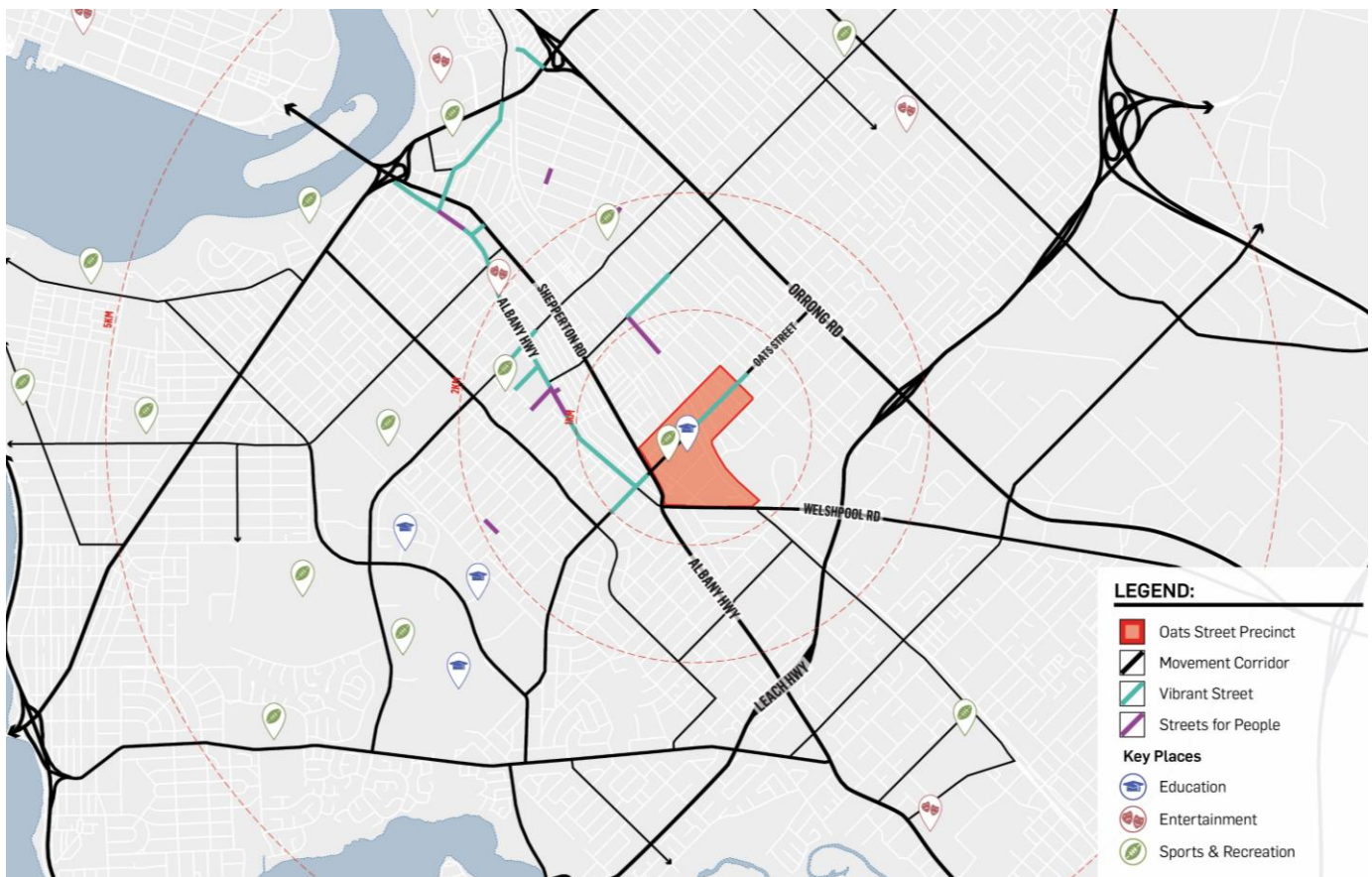
The precinct sits along multiple significant movement corridors. The southern boundaries to the precinct are formed by Shepperton Road (29,155 – 31,720 vpd) and Welshpool Road (15,585 vpd), which are sign posted 60km per hour and include dual carriage ways each way. The roads are key connectors to key employment, commercial and social infrastructure services in the Perth CBD, Welshpool and Cannington.

Leach Highway is located 600m south-east to the precinct and connects Perth Airport to the Fremantle. Leach Highway is a key primary distributor Road that links up to several other major roads including Tonkin Highway, Kwinana Freeway, Albany Highway and Orrong Road. The latter is located approximately 900m to the north of the precinct. Orrong Road (65,000 vpd) is currently a 60km per hour a dual carriage way road and provides an alternative connection to the Perth CBD and the Welshpool employment area. There are plans to upgrade Orrong Road to an (semi) underground expressway.

Albany Highway is another major road in the surrounding area. It functions as a main street environment immediately to the south of the precinct where it runs parallel to Shepperton Road. Albany Highway's function changes into a movement corridor (primary distributor road) at the intersection of Shepperton Road and Welshpool Road which is in the south-west corner of the precinct.

Oats Street (9,145 vpd) runs through the centre of the precinct and provides connectivity between Orrong Road, Shepperton Road, Albany Highway and south-west towards Curtin University. Oats Street has been identified as both a Movement Corridor and a Vibrant Street under the Town of Victoria Park's Draft Transport Strategy. Under this policy Vibrant Streets are classified as complex places that attract both large numbers of people that move by various modes of transport. Main Roads preliminary plans for Orrong Road remove the direct Oats Street connection, which may impact on the function the road plays in regional road network.

The precinct is thus well connected to the regional road network, which provides both opportunities and challenges. The main challenge for the precinct is balance the traffic movements in and around the precinct, whilst creating an environment that is pleasant for people to live and work.



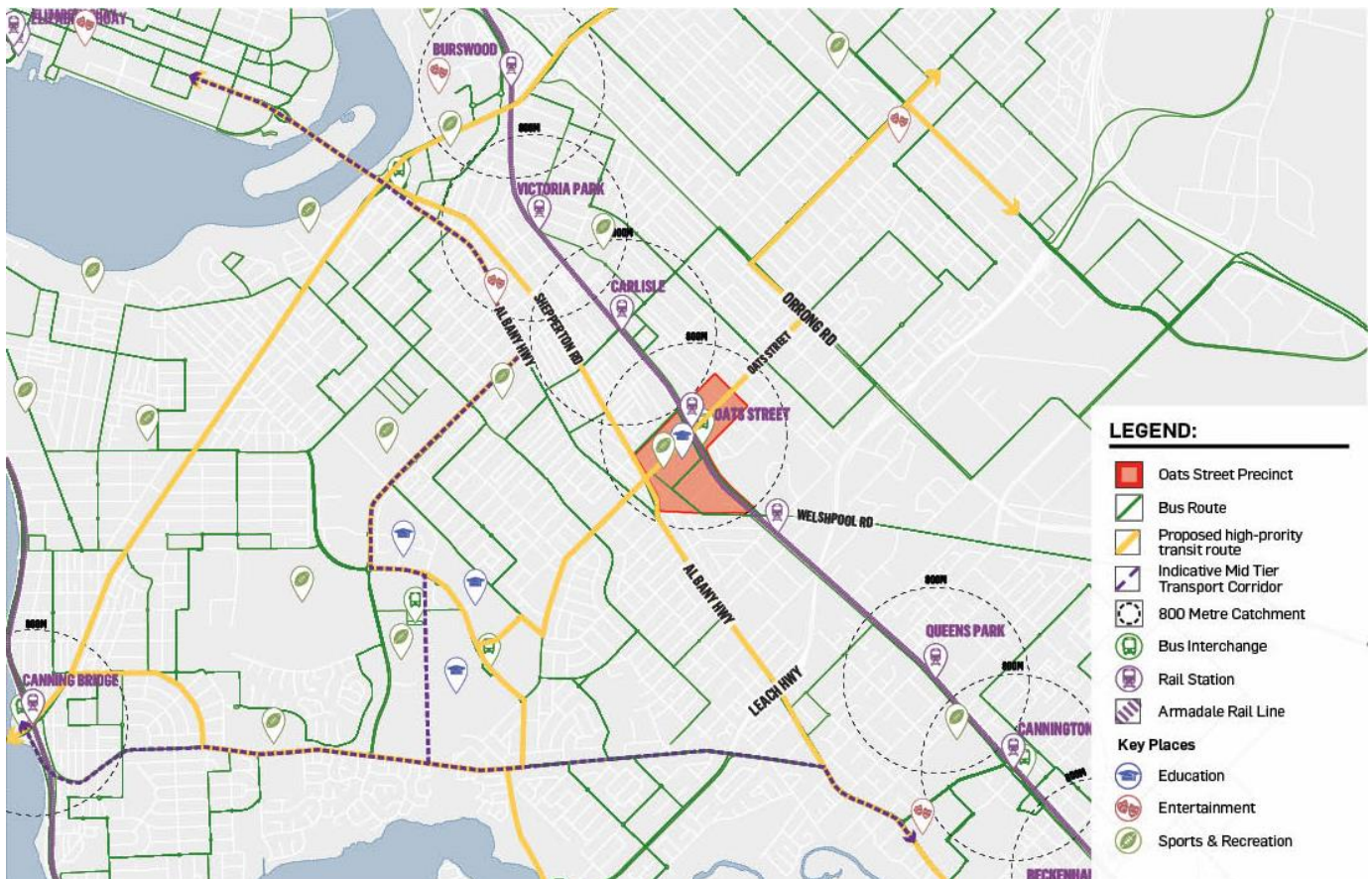
MOVEMENT NETWORK

PUBLIC TRANSPORT NETWORK

The precinct is well serviced by public transport. The precinct includes a railway station with a bus interchange, which will be reconfigured as part of Metronet's proposal to remove the levels crossings in the area. Welshpool and Carlisle railway stations are also nearby. As part of the railway upgrade Welshpool station will be removed, which will further elevate the importance of the Oats Streets station. Oats Street station is a stop on both the Armadale and Thorlie lines. Both lines are currently being extended to respectively Byford and Cockburn Central. The extension to Cockburn Central will provide a direct rail link to the Mundurah line.

Several bus routes either go through the precinct or are nearby. These routes provide connections to the Perth CBD, Curtin University, Belmont Forum, the Welshpool employment area, the Cannington Activity Centre and the Kalamunda Bus Station.

A series of high-priority transit routes have been earmarked for the area. The proposed routes connect several Activity Centres together and are part of a strategy to address congestion and help meet Perth's urban consolidation target. Several local governments have joined forces together to advocate for a mid-tier transport system that compliments this high-priority transport system. As the mid-tier transport system doesn't traverse the precinct itself and is an advocacy piece only, the implications of this proposal are not yet known.



LAND USE

SURROUNDING LAND USE

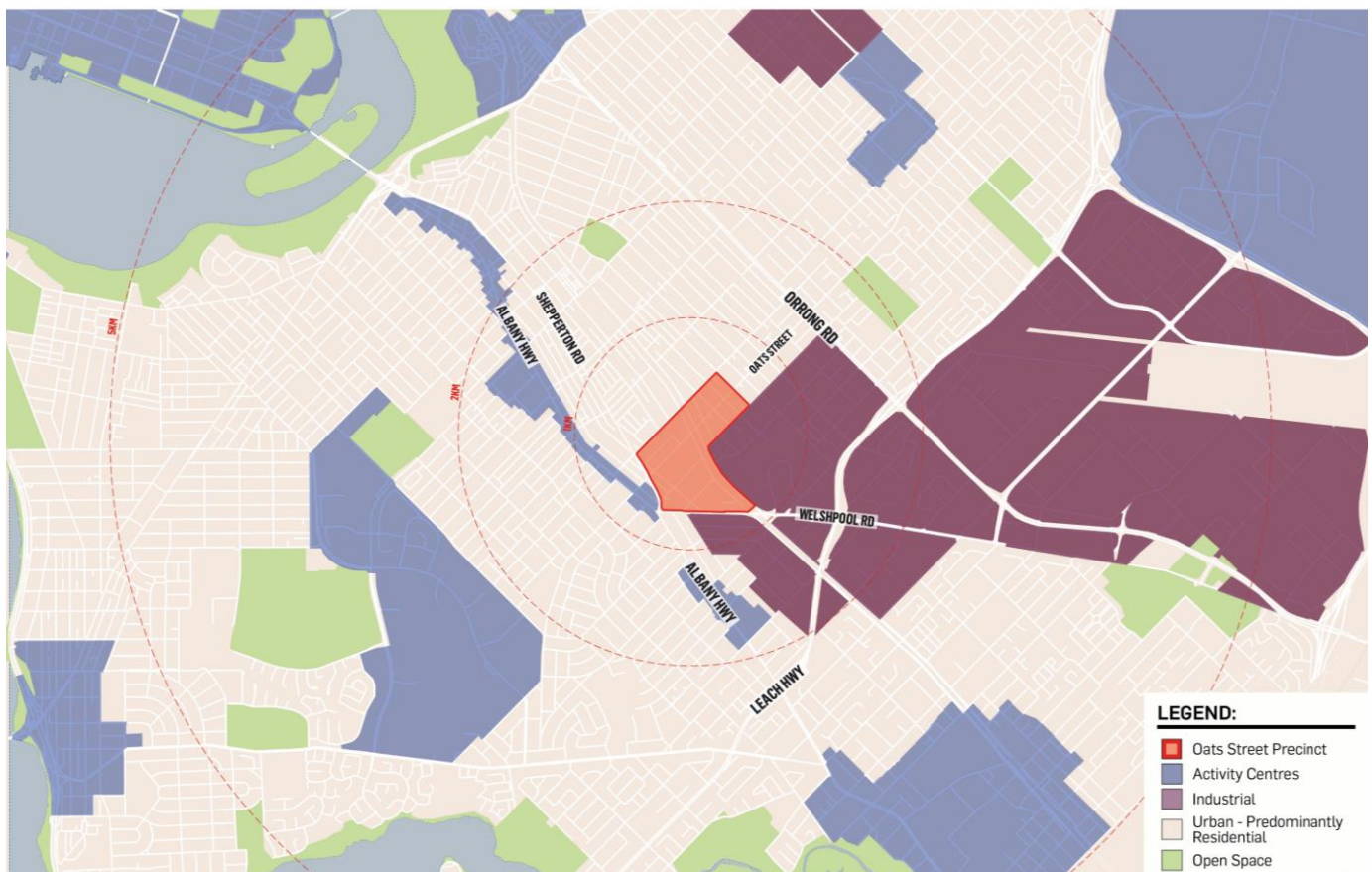
The precinct is surrounded by predominantly residential areas, activity centre and industrial land uses.

The Curtin/Bentley Activity Centres is only 2.5 kilometres to the south-west of the precinct and as noted before Oats Street is one of the nearest train stations to this activity centre and there are direct bus routes between the two. Curtin University and the Bentley Technology Park for the key components of this Activity Centre. The Bentley Technology Park was established as Western Australia's first science and innovation precinct in 1985. The park is governed by the State Government's Industry and Technology Development Act, which regulates the nature of business that can operate within the park. All tenant enterprises require ministerial approval to ensure all enterprises have a technological and innovation focus in research and development. The stringent approval process makes it harder for start-up business and auxiliary uses to be located themselves within the technology park, which provides an opportunity for the Oats Street precinct.

The residential areas surrounding the precinct are well established areas which are characterised by predominantly 1-2 storey dwellings many of which are strata or battle axe town houses.

To the South-east of the precinct is the Welshpool Industrial area which is partially within the Town of Victoria Park and mainly within the City of Canning. The Industrial area zoned as such under the Metropolitan Region Scheme is not appropriate to accommodate residential or urban growth and as such limits the boundary of the Oats Street precinct accordingly.

The project area is zoned Urban under the Metropolitan Region Scheme (MRS) with reserves for the railway, regional roads (Welshpool and Shepperton Road) and the TAFE site. The Railway reserve is within a Planning Control Area (PCA no. 165) to facilitate the desired outcomes for the METRONET project for the level crossing removals. This means that all development approvals within the PCA area are required to be determined by the WAPC.



HOW DOES THIS IMPACT THE PRECINCT?



Urban Ecology / Public Realm

Much of the Oats Street Precinct is located within a relatively flat valley giving large parts of the precinct an enclosed/internalised feel.

This landform provides opportunities to deliver increased building heights without impact on too much on the views of the surrounding areas.

The landform also has impacted the historic land use in the area. Historically low-lying areas tended to be developed into non-residential uses.

The south eastern part of the precinct and its immediate surroundings are relatively low and ended up being developed as industrial uses with limited open space areas. Any redevelopment of the industrial areas will need to consider the hydrology and could require the introduction of new open space areas.

There is limited regional space within proximity of the precinct and therefore residents and visitors will rely on more local scale open space within and adjacent to the precinct.



Urban Structure

The proximity of other Activity Centres influences the form and function of the Oats Street Precinct.

The Albany Highway Precinct is located immediately to the south of the Oats Street precinct. This limits the capacity to expand the Oats Street Precinct boundary and also impacts on what type Activity Centre precinct it can become.

The function of the Oats Street Precinct is closely aligned with station precinct activity centre. The precinct should therefore focus on the delivery of medium to high density housing, employment growth and the optimisation of the access to the station.

Oats Streets will thus act as a gateway and assists in serving and promoting the nature of the other surrounding activity centres.



Movement

Oats Street Precinct is bound by two major movement corridors (Shepperton Road and Welshpool Road), creating a physical barrier between the precinct and its surroundings.

The elevation of the railway line will remove movement barrier within the precinct. The long-term impacts and opportunities are difficult to entertain at this point in time. Oats Street is already a major movement corridor and the removal of the level crossing could result in a further

increase of traffic.

In particular the impacts of the Orrong Road project will need to be considered, however the final design has yet to be determined and hence likely impact is also unknown.

The closing of the Welshpool Train Station may also impact on the movement network in the area (note proposed bus service replacement).

The precinct plan will need to consider to wider road hierarchy and balance these with prioritising more sustainable transport options.



Land Use

The Oats Precinct is framed by industrial and employment land uses to the east, residential land uses to the north and west and retail/commercial/entertainment uses within the Albany Highway Activity Centre to the south.

The Oats Street precinct is where these land uses come together and transition. This juxtaposition of uses creates a scenario where activities push and pull and blend into each other.

a delicate balance where redevelopment of the area doesn't result in loss of appeal whilst providing the appropriate amenities and buffers for new activity and residential development.

The Oats Street precinct can provide a supporting role to the surrounding Activity Centres. In particular to the Curtin/Bentley Centre. Due to its proximity and connectivity, Oats Street can provide supplementary employment and housing opportunities.

The Precinct Plan will need provide

LOCAL CONTEXT

URBAN ECOLOGY

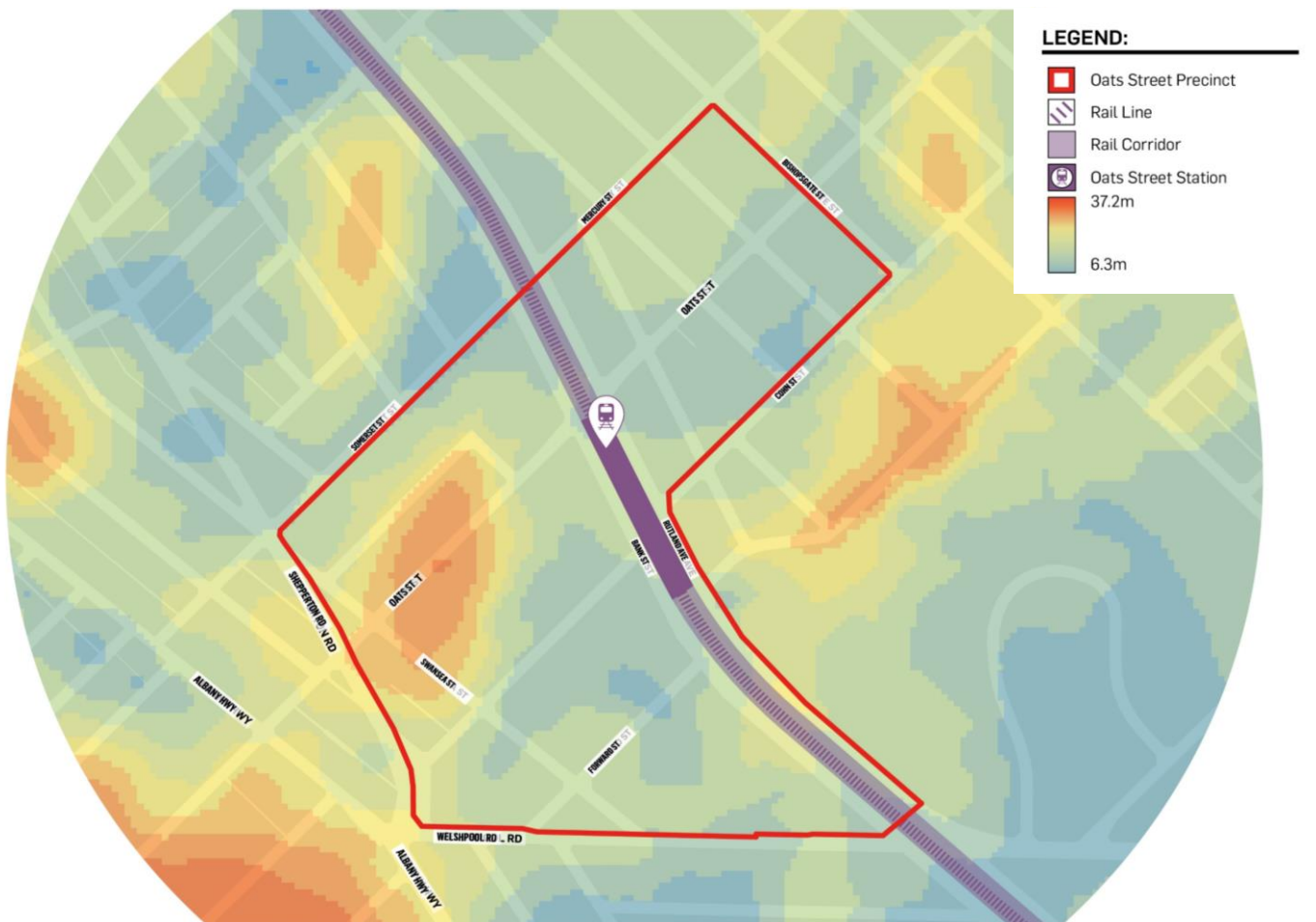
TOPOGRAPHY

The precincts elevation increases in a south-westerly direction from approximately 15m AHD at the lowest point to 25m AHD to the highest. The precinct has one distinct highpoint which is located near the Oats Street/Swansea Street intersection from which there are long range view to the City and the Hills.

The low points are situated on the corner of Beatty Avenue and Somerset Street, the corner of Jupiter Street and Cohn Street and Forward Street. These low point areas co-aside with the drainage basins in the area. The lower lying areas predominantly include the industrial area and the residential blocks north of the railway station between Oats Street, Bishops Gate Street and Cohn Street.

GEOLOGY

The majority of the geology comprises of white to pale grey sand at surface, turning yellow at depth. The sand is fine to medium-grained. The south-eastern portion of the Site is underlain by the same geology, however over sandy clay to clayey sand of the Guildford Formation of eolian origin. The majority of the precinct has soils with high permeability and suitability for construction.



URBAN ECOLOGY

WATER AND DRAINAGE

The below has been prepared by Urbanaqua. The full report provided in Appendix F.

WATER RESOURCES

The site is located within the Town of Victoria Park Subarea and Perth South Confined Subarea.

There is groundwater allocation available in the superficial aquifer.

There are no wetlands within the precinct area.

GROUNDWATER LEVELS

Maximum water table level increasing from 10m AHD in the western portion of the precinct to 11.5m AHD in the east. The surface levels range from 15m to 25m AHD – this means there is a minimum separation of 3.5m AHD in the eastern portion of the precinct.

SURFACE WATER

There is an existing network of ToVP and Water Corporation managed urban drains, in two major catchments terminating at fenced Water Corporation drainage compensating basins (Somerset St CB and Forward St CB). These basins are both controlled with pumped discharges to downstream Water Corporation main drainage systems.

There is one additional compensating basin located in the Study Area, within the Somerset St catchment (Jupiter St CB).

WATER QUALITY

The existing drainage system provides for little to no water quality treatment prior to discharge into the groundwater or Swan-Canning River system. Some incidental treatment may be provided by vegetation present in existing sumps and drainage basins although these systems have not been designed for this purpose and vegetation has not been selected for water quality treatment efficacy.

WATER DRAINAGE

There are three compensating basins currently owned and operated by the Water Corporation basins within the study area (Jupiter Street, Somerset Street and Forward Street). It is noted that the ToVP drainage network does not incorporate any storage systems and connects directly to the Water Corporation's main drainage system in this precinct.

The Water Corporation's Main Drains are operated on the basis that post development flows should not exceed predevelopment flows. This is consistent with the Water Services Licence and Water Sensitive Design Principles. As such, a key consideration for the structure plan will be to consider suitable local strategies to mitigate any increase in predicted post development flows into the Water Corporation's system.

Jupiter St CB and Somerset CB are pumped into the Victoria Park Main Drain which transitions to a gravity pipe before ultimately discharging into the Swan River. Forward St CB is pumped into the Welshpool Rd Branch Drain which terminates at Charles St CB. This basin in turn is pumped into the Mills Street Main Drain which transitions to a gravity pipe before ultimately discharging into the Canning River.

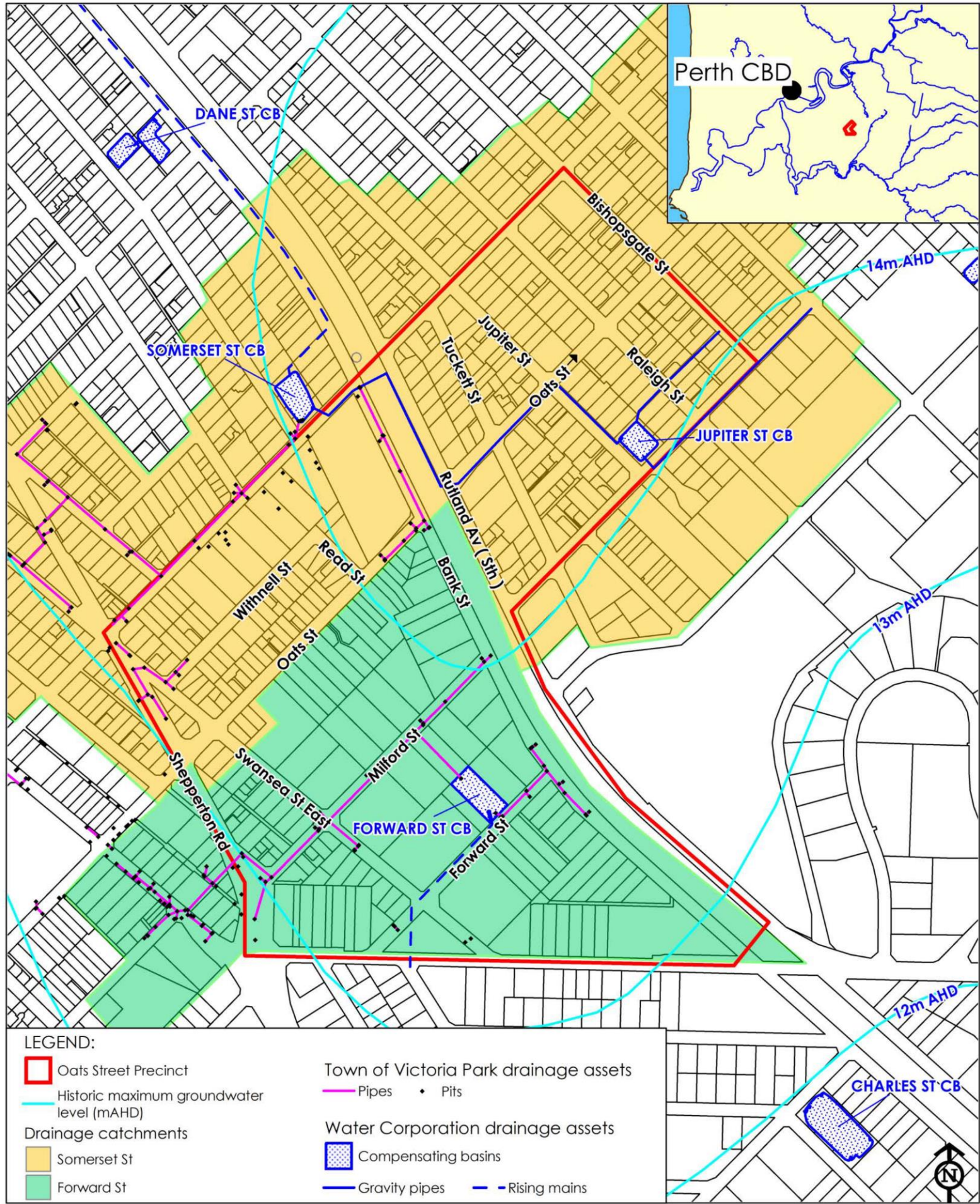
Water Corporation have indicated that a flood instance was recorded near the Jupiter St Compensating Basin in the early nineties. Modelled longitudinal sections of the Water Corporation's drainage system indicate that flooding is predicted at both Somerset St and Jupiter St Compensating Basins in the 10% AEP event and therefore there is no available capacity at either basin. However, it appears that there is sufficient freeboard at Forward St Compensating Basin such that some additional flows could be considered.

IMPLICATIONS FROM METRONET

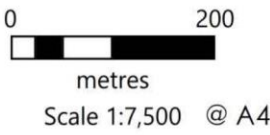
Metronet proposes elevated rail through the study area, with creation of new public realm areas in the land beneath the tracks. The landscape designs for these areas include integrated water sensitive urban design that is intended to maximise on-site management of stormwater and prevent any increase in discharges to the existing Town of Victoria Park and Water Corporation drainage systems. Where existing piped drains cross the rail reserve, these will be either maintained as existing or relocated and replaced like-for-like, if required.

Town of Victoria Park - Oats Street Precinct Water Management Strategy

Figure 3 - Surface water and groundwater



* ©2021. While Urbaqua has taken care to ensure the accuracy of this product, Urbaqua and client make no representations or warranties about its accuracy, completeness or suitability for any particular purpose. Urbaqua and client cannot accept liability of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred as a result of the product being inaccurate, incomplete or unsuitable in any way and for any reason. Data source: Landgate, Town of Victoria Park. Created by: HB Projection: MGA: zone 50.



URBAN ECOLOGY

CONTAMINATION

The Site contains nine land parcels where a site classification has been assigned by DWER under the CS Act. All nine land parcels have been classified as remediated for restricted use. Contaminated groundwater underlay all these land parcels, as such, groundwater abstraction is not permitted other than for analytical testing or remediation. Furthermore, migration of contaminated plumes to downgradient properties within the Site may be occurring.

Preliminary and Detailed Site Investigations (PSI/DSI) designed and executed as per the Assessment and Management of Contaminated Sites guideline (DWER 2021) are recommended for the nine land parcels included in the DWER Contaminated Sites Database and any properties directly down gradient. Management of contaminated groundwater should also be considered should dewatering be required.

With the exception of the two land parcels included in the DWER Contaminated Sites Database (site numbers 12967 and 13196), none of the other properties within the industrial zone have ever been assessed. This does not exclude them from being a source of contamination.

PSIs designed and executed as per the Assessment and Management of Contaminated Sites guideline (DWER 2021) are recommended for the industrial properties west of the Perth-Armadale railway line (including the Oats Street Station) should earthworks or a change to a more sensitive land use be required.

There is a potential for hazardous materials (e.g. asbestos and lead) to be present within built infrastructure built prior to the year 2000.

Buildings surveys (asbestos and lead) are recommended for any built infrastructure built prior to the year 2000 that are earmarked for demolition.

CLIMATE AND ENVIRONMENT

The Site is situated in an area mapped as "moderate to low risk of ASS occurring within 3 m of the natural soil surface but high to moderate risk of ASS beyond 3 m of natural soil".

Assessment and management of acid sulfate soils is recommended especially for earthworks beyond 3 mbgl and/or where dewatering is required.

There are no Geomorphic Wetlands, TEC's, Environmentally Sensitive Areas, Priority Fauna, Priority Flora or Vegetation mapped within the Site.

The Site is mapped as being within the buffer zone for both Carnaby's Cockatoo and Black Cockatoo Roosting Sites. As there is no foraging or roosting habitat within the project area this would negate the roosting buffer.

The climate is typical of the southwestern region of Western Australia with hot to very hot summers and mild winters.

The average annual rainfall (Perth Airport station, no. 9021) since 1944 is 760.4mm, but has declined to 655.3mm since 2000 (12.5% decrease).

Evaporation exceeds rainfall between September and April.



URBAN ECOLOGY LITERATURE REVIEW

Waterwise Council Action Plan 2021

The Waterwise Council Program is run by Water Corporation and enables a cooperative working relationship with local government to improve water use efficiency. The plan establishes waterwise goals and a set of actions to ensure the goals are achieved within the 5-year plan period.

The initiatives of relevance to the project area are as follows:

- Investigate introduction of higher standards of ESD in the planning framework.
- Provide active progress towards upgrading retrofitting local drainage sumps infrastructure to improve community accessibility, amenity and environmental improvement outcomes using Water Sensitive Design techniques.
- To inform future stormwater and groundwater management strategies, continue to update the existing Contaminated Sites Register and map layer to demonstrate areas that have the potential for soil or groundwater contamination.
- Develop a new Stormwater Management Strategy

Draft Environment Plan 2023-2028

The Draft Environmental Plan has 5 focus areas that align with the Town of Victoria Park's Community Strategic Plan, 7 of the UN's Sustainable Design Goals and the International Union for the Conservation of Nature (IUCN) Nature Positive Approach. They are;

- Climate Change
- Water management
- Land use and built environment
- Natural areas and biodiversity
- Waste management

The Plan is extensive and has over 50 actions to support the strategic intent of the document. The Plan makes no direct mention the subject site, however the following actions may be applicable to the proposal;

10. Continue to implement Urban Forest Strategy to increase tree canopy, supported by LPP39 Tree Planting and Retention.
20. Integrate WSUD infrastructure to projects – includes permeable paving, swales and infiltration basins.
30. Protect existing trees and where possible install street trees.
34. Expand the Urban Forestry Strategy to include integrating native vegetation into POS and passive recreation parks/reserves and sumps.

Urban Forest Strategy 2018

The Urban Forest Strategy was developed a result of a community concern that there was requirement for better protection and enhancement of the Town's canopy cover on both private and public land. The implementation plan for 2019 – 2024 seeks to achieve a 20% canopy cover across the Town, engage and utilise the community greening initiatives, increase tree diversity to improve resilience, maintain high standard of vegetation health, improve growing conditions and improve urban ecosystems.

Climate Emergency Plan 2021

The Town's Climate Emergency Plan establishes 8 priority areas to ensure that the Town can rapidly reduce their emissions and be in position to respond to the immediate impacts from climate change.

More specifically to the project area, infrastructure provision needs to be more resilient to change climate to minimise disruption to essential services and reduce repair/replacement costs, ensure that the loss of ecosystem is mitigated and reduce the impacts of the urban heat island effect. Climate Emergency Plan 2021

URBAN STRUCTURE

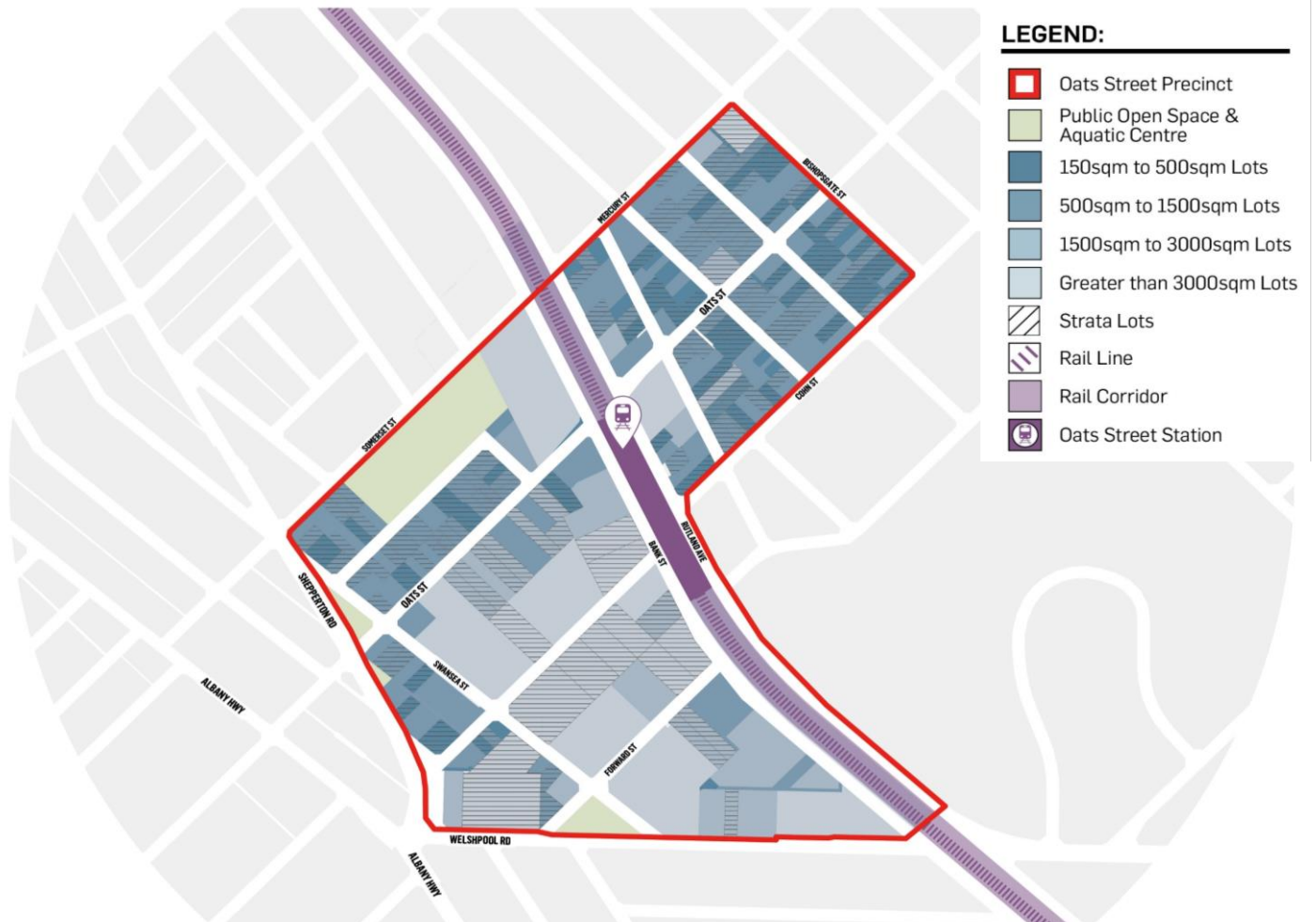
LOT STRUCTURE

The residential areas traditionally consisted of large quarter acre blocks which have been subdivided over time. The lack of laneways and the street block depths (typically 80-105m) has impacted how this redevelopment occurred. Strata lots with a common driveway and battle axe lots are now the dominant lot products in the residential precinct, which limits the future redevelopment potential.

Larger lots can predominantly be found in the southern portion of the precinct between Welshpool Road and Milford Street. These larger sites are currently occupied by commercial and industrial land user. The TAFE site and the existing childcare centre site on the corner of Oats Street and Rutland Avenue are some of the other larger landholdings in the area.

Their scale and proximity to the Oats Street train station provides opportunities for redevelopment within the precinct. It is to be noted that several of the commercial/industrial properties are in strata ownership. This fragmentation could limit the opportunities for redevelopment.

Key considerations for any future redevelopment of this area includes the importance to retain local employment and activity and the requirement to improve the walkability in the area. The large lots lack permeability which may require any future development to incorporate additional walkable urban connections.



URBAN STRUCTURE

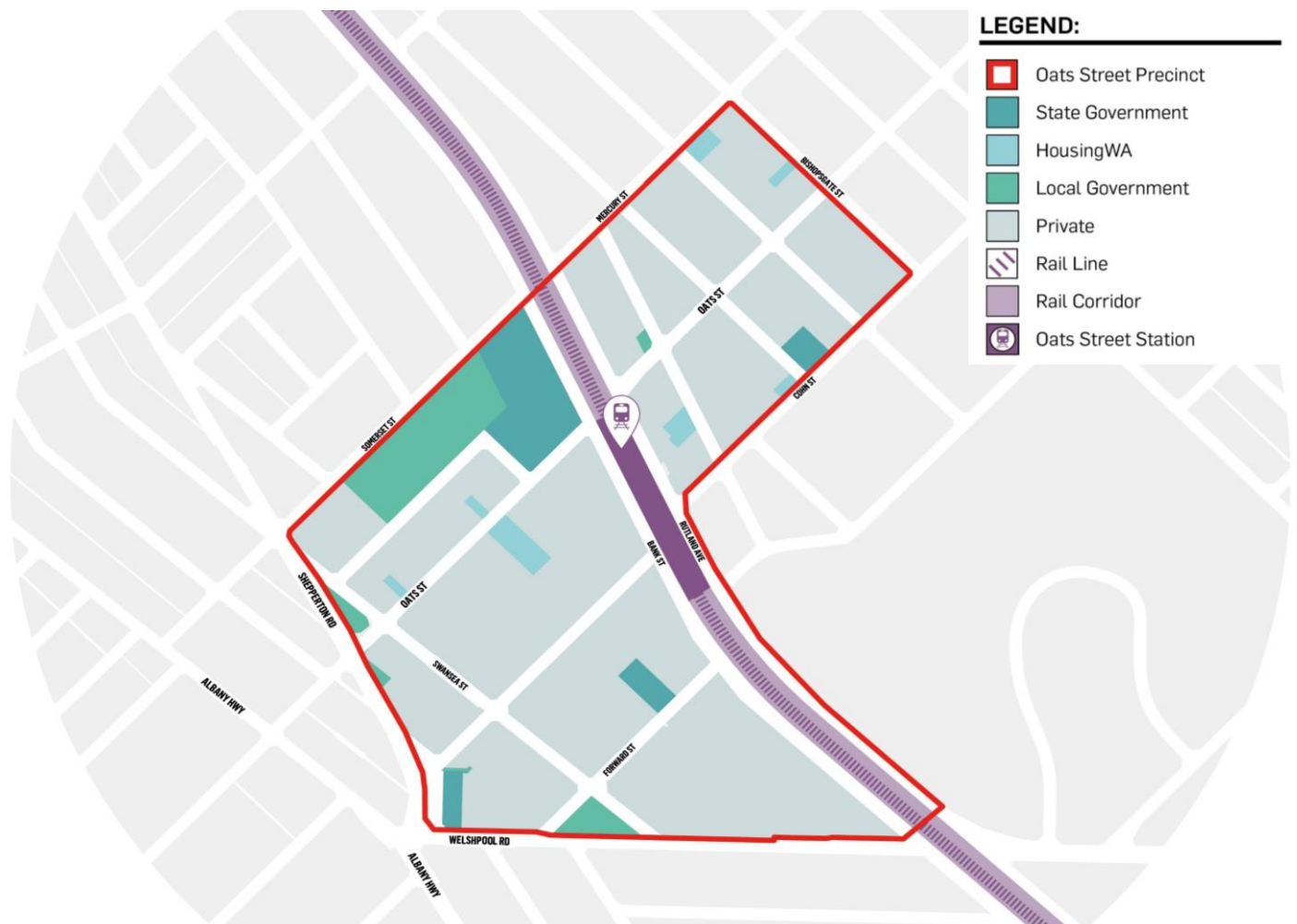
OWNERSHIP

The precinct is mainly within private freehold ownership. Particularly the residential areas are highly fragmented and only a small portion of the residential landholdings are owned by the State Government.

The Town of Victoria Park owns a number of lots in the area, which are used for open space and recreational purpose. The Town's largest landholding is the Somerset Park/Aqualife Centre.

In addition to the above-mentioned residential lots, The State Government also owns several landholdings around the precinct, most notably the TAFE site but also for public housing. The State also owns the local drainage areas which are vested to WaterCorp.

The high level of fragmented freehold ownership, redevelopment within the area will a challenge in the short and medium term.



URBAN STRUCTURE

URBAN FABRIC

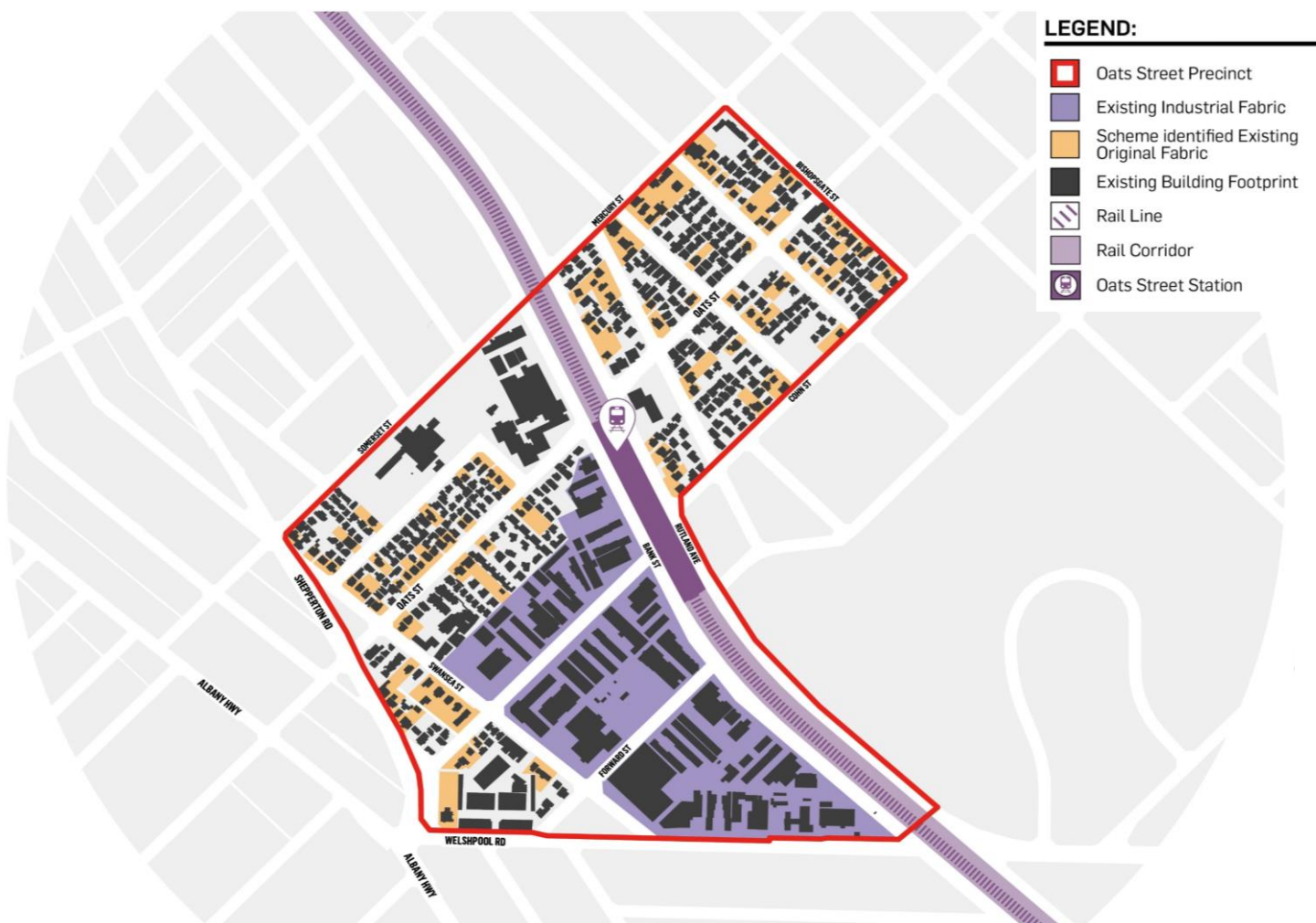
The precinct is characterised by a mix of uses and built form typologies. The built form in the residential areas reflects the fragmented ownership. The residential areas are dominated by small footprint buildings that are close to each other. The negative space (areas which is not built upon) within residential areas is limited and large parts of these are taken up by shared driveways.

Several of the original residences (original fabric) are still present within the area. Only a few of these residences are haven't been redeveloped over time and still come with a large garden. The majority has been redeveloped and the original dwelling has been retained on the street frontage. Whilst these properties don't have a heritage status, the architectural style and materials of these buildings provide a sharp contrast to the contemporary town house developments in the area.

Primary street setbacks within the residential are predominately 3-4m. The original fabric residences are an exception to this rule and tend to have bigger street setbacks.

The TAFE and Aqualife Centre are characterised by buildings that sit within a landscape and are setback away from the street. Whilst this has allowed for vegetation to occur within the streetsetback, it also has resulted in the lack of interaction between development and the street. This is particularly the case with the TAFE.

Developments within the industrial/employment area have a variety of street setbacks. Some of them are setback from the street to provide for parking other developments have minimal street setbacks. These commercial and industrial buildings have larger building footprints, but also have a lesser amount of site coverage.



URBAN STRUCTURE

UTILITIES AND SERVICING

SEWER

The servicing is directed towards Beatty Ave South WWPS on the corner of Beatty Avenue and Somerset Street.

The train line separates the eastern and western catchments with one connection at Somerset Street to connect the eastern portion to the WWPS.

Majority of residential lots are serviced from the rear of the lot which will make redevelopment difficult in some configurations.

Some upgrades may be required to facilitate future developments.

WATER RETICULATION

There are several 'dead' Water Corporation mains within the suite area which have been decommissioned and replaced with new infrastructure (approx. 5 years ago). These dead assets makes newer infrastructure more difficult to install due to less space being available.

There will be capacity within the site area, subject to the increase of the water mains to facilitate the minimum DN150mm pipe size for fire requirements of mixed-use/multi-use developments, due to the proximity of several large assets. This includes capacity for wet fire services in the future.

STORMWATER DRAINAGE

The ToVP drainage system connects into the Water Corporation system.

High point of the precinct is Oats Street east of Swansea Street – providing separation of catchments with the sump for the catchment located on Somerset Street next to the Western Power electrical sub-station and the WWPS.

Urbaqua have undertaken a preliminary investigation of the stormwater drainage network and will provide further advice regarding capacity to accommodate future change in land use and intensification of built form and design requirements

POWER

Adequate access to power is provided within the area due to the proximity to the Victoria Park substation.

Western Power's Transmission System Plan 2022 public report indicated that the Victoria Park substation is still energised, however the transformer has been removed and loads have been transferred to neighbouring stations.

METRONET UPGRADES

North of Oats Street Station, overhead powerlines within the rail corridor between Miller Street overpass and Oats Street Station will be removed to create space to build overhead rail stations. These powerlines will be undergrounded and directed through John Bisset Reserve off Miller Street, and fed through Beatty Avenue, Somerset Street, Aqualife and reconnect into the underground network at Albany Highway.

South of Somerset Street, steel poles will be installed in some areas along Bank Street and Sevenoaks Street, and new wood transmission poles installed to replace existing poles. Options are being considered by MetroNet / Western Power for the distribution power affected by the transmission works ranging from undergrounding to placing the existing overhead wires on the new transmission poles, where possible.



PUBLIC REALM

GREEN FABRIC

At moment there are only three parks/open space reserves within the precinct, all of which are located on the southern side of the railway line. The Somerset Park/Aqualife Centre is the largest open space in the area. The majority of the reserve is taken up by the Aqualife Centre facilities and car parking areas. Area surrounded the Aqualife Centre is fenced off to the public leaving only a small area to be utilised for recreational services. Somerset Park lacks amenities, and its main attribute are the significant vegetation which includes both native Western Australian and Australian species

The areas of open space around Aqualife service current facilities users and are not designed to attract broader community (they are also used as parking overflow). The Town has identified the need to prepare a Master Plan for the Aqualife site which may expand the building footprint and reduce areas of open space. However, any future master-planning should consider utilising and designing the remaining open space around the facility for broader community use.

The second largest open space area is the Swansea Street reserve within the southern part of the precinct adjacent Welshpool Road. This park includes a playground and seating areas and incorporates several significant trees most of which are Australian natives. Swansea Street reserves is at the edge of the precinct and only has a limited residential catchment. The park is surrounded by a couple of larger single ownership landholdings which presents opportunity for regeneration in the area taking advantage of the amenities the park has to offer.

The smallest of all open space areas is located adjacent Shepperton Road. This POS area (as per LPS2) is currently the location for underground power works and installation of new towers. This has resulted in the POS being low (especially given location on Shepperton Road). This POS should be re-designed and upgraded to improve amenity and biodiversity through the Town's Urban Forest Strategy and Public Places Program.

The area includes a couple of drainage basins which form part of the green fabric as well. Whilst the basins are fenced off and the ability for reconfiguration is limited as they are already at capacity, most basins incorporate significant vegetation contributing to the biodiversity in the area. Just outside the precinct on the southern corner of Beatty Avenue and Somerset Street is a drainage lot that currently doesn't serve any drainage function. There is the opportunity to include this lot within the precinct boundary and redevelop the site for recreational or residential purpose.

The biggest opportunity for the area is the elevation of the railway line. As part of this scheme, a linear open space is proposed underneath the rail incorporating active and passive recreational functions. The central location within the precinct means that the residents north of the railway line will have better future access to open space.



PUBLIC REALM

STREETSCAPES

Street trees are a key component of the green fabric. The road reserve within the precinct are generally 20m wide, providing sufficient space for street trees. The vast majority of the existing street trees are exotic species. There is an opportunity to increase the amount of street trees (and in particular native ones) throughout the precinct with streetscape improvements.

Footpaths vary in provision and quality with some street trees interfering with footpath levels and quality.

There are areas which have poor streetscape interface in terms of CPTED principles. The TAFE site, Banks Street Industrial Area, Western Power site and Aqualife Centre are key examples where there is poor passive surveillance, poor fencing examples and barrier to public realm engagement.

Street lighting could be improved through the area, especially to improve the pedestrian experience

There are a number of overhead powerlines which detract from the amenity of the area and in some areas, prevent tree growth.



PUBLIC REALM LITERATURE REVIEW

SAFER NEIGHBOURHOODS PLAN 2027

The Town's Safer Neighbourhoods Plan 2022-2027 identifies current community safety and crime priorities, objectives, and actions to help achieve the Town's vision of a *dynamic place for everyone*.

The plan establishes that the Town has a role to play as a facilitation and coordination role in bringing together stakeholder to address existing or emerging crime and safety challenges. The plan identifies that there are the following key areas of relevance to the project area:

- CPTED audits
- CCTV partnership program
- Security incentive scheme
- Government collaboration
- Strategic lighting upgrades
- Parking, streetscape, and pathway upgrades
- Park/precinct redevelopments

HEALTHY VIC PARK PLAN 2017 – 2022

This plan was prepared to meet the Town's obligations under the WA Public Health Act 2016. The plan aims to create healthy places and space, people and community and businesses and events.

There are a range of key actions of relevance to the Oats Street project which are generally summarised as follows:

- Maintain and enhance public open space for various purposes which promotes a healthy lifestyle.
- Encourage increased patronage and use of leisure facilities such as Aqualife.
- Ensure public realm is conducive to more sustainable forms of transport.

SOCIAL INFRASTRUCTURE STRATEGY 2022

The Social Infrastructure Strategy (SIS) provides a strategic approach for the Town to plan, deliver and manage social infrastructure, in alignment with population growth, and based upon the assessment of facility need analyses and Social Infrastructure Benchmarking and Catchment Analysis 2021. The key initiatives of the strategy which are relevant to the project area are as follows:

- Investigate opportunities to incorporate Town of Victoria Park administration services with other community uses as part of multi-purpose hubs, particularly at 99 Shepperton Road, Macmillan/Leisurelife precinct, and/or Aqualife precinct.
- Investigate opportunities to promote private social infrastructure facilities available to the community.
- Investigate opportunities to facilitate making underutilised private building spaces available to non-profits or service providers at a low cost to activate underperforming local centres.
- Support the preparation of a public open space cash-in-lieu expenditure plan through the Public Open Space Strategy implementation, to ensure that outdoor active recreation spaces meet the community's future needs.
- Investigate opportunities to secure community meeting infrastructure spaces in growth areas and social infrastructure hubs through development incentives for community benefit.
- Continue to support the Maker Spaces project and investigate opportunities to implement future recommendations.
- Support the preparation of a

playground audit and a playground strategy through the Public Open Space Strategy implementation, with the view of ensuring that a broad variety of play infrastructure is available across the Town catering to different age groups, abilities and play types.

- Investigate opportunities to provide facilities for the local population in social infrastructure serving a regional catchment where reasonable demand and local benefit can be demonstrated, particularly for:
 - a) Multi-purpose netball or basketball courts
 - b) Synthetic hockey turf
 - c) Aquatic facilities
 - d) Makers spaces and creative production spaces
- Prepare a Masterplan for the Aqualife Precinct to guide redevelopment of the site into a neighbourhood hub, potentially incorporating
 - a) aquatic facility
 - b) playing courts
 - c) community support spaces and community meeting spaces where these complement precinct planning for the Oats Street Precinct Planning Area.
 - d) fitness area
 - e) aquatic playground

PUBLIC REALM LITERATURE REVIEW

Arts and Culture Plan 2020

The Town acknowledges the important role that arts and culture can play in the community in creating spaces of inclusivity and positivity. Furthermore, the Town notes that arts and culture has an important role in welcoming new residents, encouraging visitation and creating a vibrant place to live and work. The Town has created a vision and 5 strategic focus areas with associated actions to achieve these aims. In terms of existing review of the locality, the following is of relevance to the Oats Street project:

Opportunities:

- Potential to re-home Centre for the Arts to a more visible and central location and extend Centre's programming
- Arts and cultural programming associated with heritage assets including Edward Millen House and Reserve
- Public art and culture space opportunities within major development projects

Key assets include:

- Aqualife

Community groups:

- Australian Museum of Motion Picture & TV
- Helen O'Grady Drama Academy for Children
- SC Quilters Group
- St James Community Garden (Spunky Spud)
- Belmont Camera Club
- The Awkwardstra

Making Space for Culture

Inner City LGAs collaborated to identify operating models, funding / advocacy opportunities and policy mechanisms that inner metro local governments could pursue to facilitate an uptake of sustainable, affordable, and long-term artist live/workspaces and creative maker spaces across inner city neighbourhoods. These measures have objective to retain creatives living, working and practicing locally to create opportunities for economic development, community participation, visitor/resident attraction and place activation.

The identified key opportunities and challenges for the Town are as follows:

- Significant demand for space (from amateur to hobbyist to professionals).
- Understanding the Town's role and capacity to facilitate the delivery of creative spaces with limited resources and alternative and sustainable funding and operating models
- A wide range of potential locations including vacant shops in activity centres (Albany Highway and local centres), tourism destinations (e.g. Burswood Peninsula, Ed Millen House), infill development precincts and industrial areas etc.
- Partnership potential with schools, TAFE's and universities.

The toolkits for local governments relevant to this project are as follows:

- Policy to facilitate affordable workspace and affordable housing
- Planning incentives (community benefits) to deliver space
- Cultural facilities plan
- Aligning zoning
- Creating guidelines for developers

Public Open Space Strategy 2019

The Public Open Space Strategy identifies that in some areas of the Town there is inadequate access to POS, the Town anticipates an overall undersupply of POS by 2050.

The Carlisle and East Victoria Park are identified as having insufficient POS. Oat Street Station is identified as a possible area to acquire or develop land for POS. Additionally it suggests that the Station is best converted to a 'Town Square' design to improve access to POS. Both these actions are medium term goals.

Town wide actions include increasing residential interface with POS and investigating developer contributions to POS.

MOVEMENT

LOCAL ROAD NETWORK

The local movement network is dominated by the Shepperton Road, Welshpool Road and Oats Street.

Shepperton Road and Welshpool Road are major thoroughfare roads carrying a significant amount of traffic each days. Whilst this provides challenges from an amenity and interface perspective, it does provide opportunities as well. The main opportunity is to capitalise on the exposure these roads by prioritising non-residential land uses in the locations.

Parts of Oats Street have been classified as a "Vibrant Street" and will include both a movement and place function. Oats Street will be main access into for both the bus network and private vehicle. Balancing the vehicle and place functions could be a challenge, particularly in and around the station.



MOVEMENT

TRAFFIC VOLUMES AND CRASH ANALYSIS

Please see Appendix D for full Transport Technical Review.

Traffic Volumes and Crash analysis

Traffic volumes are available through MRWA and the Town' Intramaps system. The below table has collated the statistics relevant to the major roads within the precinct.

Crash Analysis

In the five-year period from 1 January 2018 to 31 December 2022 there were 390 recorded crashes within the site area and along the higher order bordering roads, of which 63 resulted in injury, as shown in the below figure. Of the injury crashes, 48 crashes required medical treatment and 15 required hospitalisation.

When considering all crashes, there are 13 that involved a pedestrian, cyclist or other vulnerable road user type (excluding motorcycles).

When considering the traffic volumes to crashes – Oats Street seems to have a higher proportion of crashes, especially at the intersections with the train line and Shepperton Road.

GAPS

There are gaps in the data provided as follows:

- No existing pedestrian count data for the area.
- No existing cycling and e-ridable count data for the area.
- No forecast traffic volumes for the area once the level Oats Street level crossing has been removed.

Table 2: Traffic Volumes MRWA Traffic map

Road	Location	MRWA Classification	Traffic Volumes		
			AM	PM	Daily
Shepperton Road	North of Welshpool Road	Primary Distributor	2,110	2,650	29,155
	North of Oats Street		2,620	2,185	31,720
Welshpool Road	East of Albany Highway	Distributor A	1,250	1,300	15,585
Oats Street	North of Shepperton Street	Distributor A	740	775	9,145
Bishopgate Street	South of Lion Street	Local Distributor	200	210	2,110
Mercury Street	South of Star Street	Access Road	115	105	1,195
Cohn Street	South of Star Street	Access Road	170	195	2,140



MOVEMENT

ACTIVE TRANSPORT

A key consideration for station precinct Activity Centres is how pedestrians and cyclist move through the precinct. All existing roads within the precinct include footpaths. A large portion of the footpaths are on the property boundary providing a (vegetated) buffer from the carriageways. The main exception to this are some of the local residential street north of the railway line and Shepperton Road. The lack of separation combined with the traffic speed and volumes on Shepperton Road create an unpleasant walking environment.

Oats Streets currently is the main pedestrian spine through the precinct, connecting the residential areas north of the railway line to East Victoria Park Town Centre. The road includes pedestrian pathways on both sides the street and the majority of these are located away from the carriageway. The paths along Oats Street are typically 1.5m wide which isn't suitable for high volume pedestrian areas. The preferred footpath width in high volume areas is 2.4m. Oats Street also includes narrow (approximately 1m wide) on-street cycle lanes on both side of carriageway. The on-street cycle lanes form part of the secondary cycle network in Perth. The intent to transform Oats Street into a "Vibrant Street" with protected cycle infrastructure and improved carriageway layout, space for mature street trees and improved pedestrian connectivity will be difficult as Oats Street can't do it all.

The elevation of the railway includes an improvement to the existing PSP. The PSP connects the Oats Street precinct to the Perth CBD and the Cannington Activity Centre.

As part of the METRONET Armadale Level Crossing Removal project, 18-month temporary closure of the line has been planned (September 2023 onwards), with rail replacement bus services in operation to reduce disruption to passengers. To manage expected increase in traffic demand, MRWA propose to improve flow of traffic by:

- Restricting right turn movements onto side roads through installation of a physical median on Shepperton Road between Duncan Street and Somerset Street (directly to the north of the Oats Street Station Precinct).
- Delivery of dedicated CBD bound bus lane on Welshpool and Shepperton Roads, and Albany Highway; and
- Provision of new pedestrian crossing on Shepperton Road, north of Somerset Street..



MOVEMENT LITERATURE REVIEW

INTEGRATED TRANSPORT STRATEGY 2022

The Town's Integrated Transport Strategy sets the strategic direction for managing the Town's transport network over the next 10 years and identifies a range of mobility focused initiatives that will enable the Town to continue prospering as a vibrant inner-city community

The priority projects which are within the project area are as follows:

- Work with the PTA to review existing public transport routes into, through and around the Town, particularly options for improving east-west connectivity.
- Ensure the broader active transport network provides connectivity beneath the viaduct being proposed as part of the level crossing removal program. For Oats Street Station this includes Cohn Street / Milford Street, Somerset / Mercury Street and Oats Street.
- Work with the PTA to implement recommendations outlined in the Station Access Strategy for Oats Street Station.
- Advocate to MRWA to improve the pedestrian environment and priority at signalised intersections along key corridors.
- Assess and effectively monitor freight and heavy vehicle access in and out of the Welshpool Industrial Area.
- Improve wayfinding throughout the Town.
- The central section of Oats Street is ideal to be a "Vibrant Street", providing both high movement and place function and include protected cycle infrastructure, shared road space, public transport improvements and significant vegetation coverage.
- Classify portions of Bank Street adjacent to the TAFE and Station as "Streets for People" to ensure street design and function maximises pedestrian and cycle amenity and access being key activity generators, i.e., Oats Street Station and TAFE.

PARKING MANAGEMENT PLAN 2022

The Town's Integrated Transport Strategy requires the preparation of a Parking Management Plan to ensure that the Town appropriate balances the limited finite public car parking (and available space for future provision) with the provision of an appropriate level of amenity and other accessibility requirements. The proposed improvements applicable to the project area are as follows:

- Increase parking turnover to help promote economic activity for local businesses
- Reduce local traffic congestion and increase attractiveness of urban areas
- Promote behavioural change through increased change to more sustainable travel choices
- Make better use of available land for community benefit.

The following planning mechanisms are identified as being appropriate to use to implement the above:

- Parking benefits districts
- Parking ratios and cash-in-lieu
- Encourage consolidated/shared car parking for larger/adjacent developments

It should be noted that as of July 2023, a WAPC adopted Parking Plan in required to be able to take cash in lieu of parking as per the *Planning and Development (Local Planning Scheme) Regulations 2015*.

OATS STREET STATION ACCESS STRATEGY 2019

Prepared by Flyt on behalf of the Public Transport Authority, the Oats Street Station Access Strategy forms part of the Rail Growth Plan (RGP) that the PTA is undertaking for the urban rail network in Perth to recommended strategies and infrastructure proposals that will retain and enhance access to the station in the future. The only outstanding recommendation not implemented in the station design and immediate public realm improvements is:

- Pedestrian improvements including more legible connections, improved streetscapes and safety through improved lighting.

LAND USE

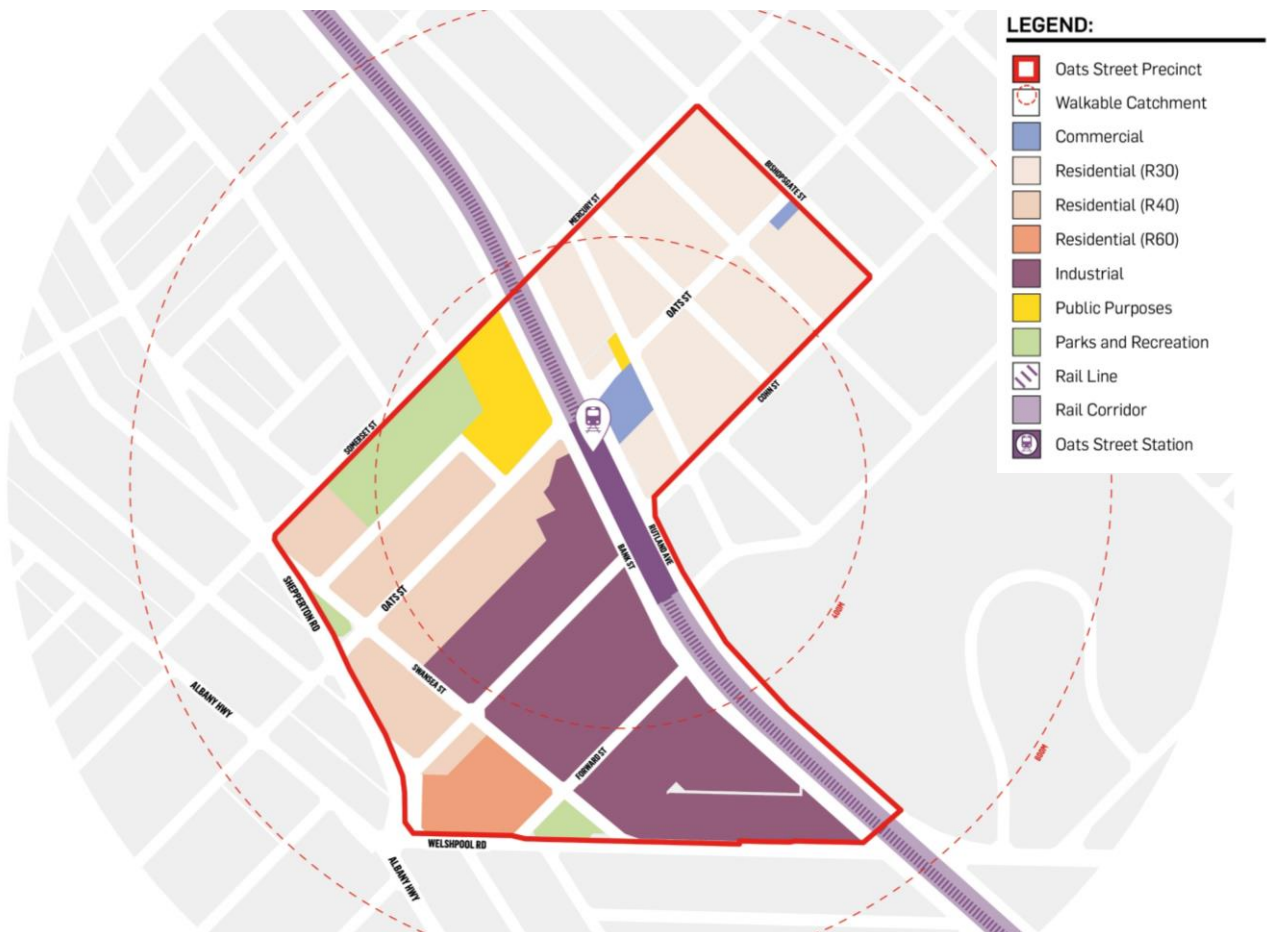
EXISTING LAND USES

The precinct includes a variety of land uses with residential and industrial being the dominant land use. Residential mostly consist of single and grouped dwellings and are currently coded R30 (north of the railway line) or R40 (south of the rail). The lime apartment development within the south-west part of the precinct is the only residential area that has an R60 coding. This development consist of three storey apartment buildings and commercial development along Welshpool Road.

The industrial areas houses a diverse mix of activities which contribute to both the economic and community fabric of the area. The include:

- Vehicle & motor trades
- Dance, stage, music production & costuming
- Church & community services (including Cuddles Childcare)
- Laundry, locksmith & general cleaning services
- Catering, lunch & artisan food production
- Swansea markets (antiques, craft and collectables);
- Offices; and
- General industrial and warehouses

Other key land uses in the area are the education facilities (TAFE and Migrant Centre), The Aqualife Leisure centre and local centre on the corner of Bishopsgate Street and Oats Street.



LAND USE





Urbis prepared an Economics and Land Use analysis to understand conditions for a number of different land uses considering market demand and competition to determine precinct suitability.

Some key findings which informed the below table :

- The Aqualife and TAFE are key employment land uses within the precinct (based on data provided).
- There is generally good property price growth for detached dwellings but less so for units and apartments.
- There is possibly unmet demand that is not revealed due to a lack of medium and high density developments of scale in the surrounding area.
- The feasibility of higher density typologies is expected to increase over time as additional amenity is supported in the area by the station redevelopment.

- Food and beverage (restaurants, take-away food etc.) could be supported in mixed-use developments or by the community services and recreation uses that are existing in the precinct if they remain.
- Population services such as health, community and shopfront office uses would complement the current land use mix and additional floorspace could be supported by future residential growth in wider area.
- Commercial office uses are not considered to be supportable in the precinct currently or in near term.
- We do not have data to inform the level of employment and activity within the industrial area.

The ratings used are professional opinion, noting that market demand and competition may change the precinct suitability recommendations over time.

TYPE	MARKET DEMAND	COMPETITION	PRECINCT SUITABILITY
 <p>Terrace / Walk-Up & Low Rise Apartments</p>	Perth is experiencing a tight residential market and there is substantial demand for well-connected areas in central locations.	The precinct has not seen any large-scale, consolidated development of medium density product, with more, newer stock available elsewhere.	The precinct will be well-positioned for medium density development.
Rating:	Strong	Moderate	Strong
 <p>Food and Beverage</p>	Strong demand from neighbouring residents and those visiting population services (education / community services) in the precinct.	The precinct does not support a concentration of food and beverage uses that already established in other precincts like Albany Highway.	The precinct benefits from close proximity to public transport and the student population at the TAFE.
Rating:	Strong	High	Strong
 <p>Population Services</p>	Strong demand from neighbouring residential land.	Existing uses could complement rather than compete with existing population services (i.e. education).	Precinct will benefit from increased activation. Population services would be suitable for mixed use development.
Rating:	Strong	Moderate	Strong
 <p>Commercial</p>	The area has not seen demand for commercial office product.	There is substantial competition from other suburban locations such as Belmont and Burswood, with amenity better suited to tenants' requirements.	The precinct is located between significant industrial and retail areas and therefore not suited to office commercial.
Rating:	Low	High	Low

LAND USE LITERATURE REVIEW

Place Plans

Portion of the project area is within the East Victoria Park Place Plan. The intent of the plan is to provide a 'place filter' on the Town's suite of Informing Strategies to create a clear 'work list' for each neighbourhood. Relevant actions from the Place Plan for the project area have been listed below:

- Facilitate the creation of East Vic Park Town Team.
- Investigate potential Laneway Improvement Program.
- Prepare a design that creates an improved cycling environment on Oats Street

Another portion of the precinct is within the Carlisle Place Plan area. The relevant actions for the project area are as follows (where not listed above):

- Facilitate the creation of a Carlisle Town Team or Place-Based Organisation.
- Prepare a business case for 71 Oats Street.

The remainder of the project area is within the Welshpool Precinct Plan area with the relevant actions to the project area as follows (where not listed above):

- Facilitate the creation of a Welshpool Town Team or Place-Based Organisation in conjunction with the City of Canning.

Draft Activity Centres Strategy 2017

The Town prepared the Activity Centres Strategy in 2017 which fed into the preparation of the Town's Local Planning Strategy.

The Oats Street Precinct has boundary delineated inclusive of substantial industrial, commercial and residential area either side of the rail line.

The identified boundary includes areas zoned Residential R30 in the Carlisle Precinct and R40 areas within the Shepperton Precinct (which have largely already been developed with grouped dwellings). These residential areas are identified as unlikely to be developed in the short-medium term due to prevalence of existing grouped dwelling development.

The strategy identifies that the industrial areas are the prime opportunity for change, however these areas need to be considered in the context of the City of Canning strategic intentions for the adjacent areas. The role of service and light industry is still considered to be important for the future of this area

Draft Local Planning Scheme no. 2

The Town is currently advertising a new draft Local Planning Scheme no. 2 (LPS2) to replace TPS1 until August 2023.

Draft LPS2 has been informed by recommendations made in the Town's Local Planning Strategy which was adopted in 2022. The Scheme aims to encourage to activate public places and to contribute to the delivery of the Town's Strategic Community Plan whilst also updating zoning to better reflect existing and future desired land uses.

Under the Draft LPS2 the zoning of the project area remains largely the same. The following changes are proposed by the new Scheme:

1. Local Centre at the north eastern end of Oat Street, R40 which allows for 2 storeys.
2. Rezone 'Commercial' lots to 'Mixed Use R-AC4', allows for 3 storeys.
3. Aqualife transitions from POS reserve to 'Recreation' reserve.
4. Eastern Gateway LDP normalised – 'Mixed Use' R60, includes additional uses.
5. Industry 1 and 2 converted to 'Light Industry' to reflect Urban MRS zoning.

It is noted that changes (if still in draft form) to the draft or Scheme Amendment to gazetted version will be required to facilitate changes to the Scheme to ensure consistency with the outcomes of the Precinct Structure Planning for the project area.

LAND USE LITERATURE REVIEW

State Planning Policies

SPP2.10 Swan-Canning River System

The study area is partially within the Lower Canning Precinct of SPP2.10. The intent of the Policy is to protect and enhance the amenity and environmental value of the Swan and Canning River system.

SPP 4.1 Industrial Interface

Given there are existing Industrial land uses within the precinct, the provision of more residential within the area may prevent Industrial uses from expanding their operations or new Industrial uses emerging within the precinct unless they can mitigate/contain their impact. The Precinct Structure Plan and Scheme Amendment to follow will need to consider provisions to require future redevelopment incorporating sensitive land uses to demonstrate that any impacts on non-conforming land uses that continue operating are appropriately avoided, mitigated or managed.

SPP4.2 Activity Centres for Perth and Peel

Oat Street is identified as a District Centre under SPP4.2. The main role of a District Centre is to service the daily and weekly needs of residents with a recommended cap of 5,00m² of retail net lettable area. District centres with a rail station should be a focus for medium and high-density housing and employment growth with a recommended density of 35 dwellings per hectare within 800 – 1,200 metres of the station. The preferred typology is medium rise apartments and townhouses.

SPP5.4 – Road and Rail Noise

The intent of SPP 5.4 is to protect the public from unreasonable levels of noise from road and rail. The precinct is within the passenger railway trigger area and Shepperton Road is a 'Other

significant freight/traffic' trigger zone. Development and change of land uses for sensitive land uses (namely residential) within these areas is likely to require additional measures to mitigate noise impacts.

SPP 7.0 – Design of the Built Environment

New planning frameworks and development is required to consider the 10 principles of good design. The proposed precinct structure plan will need to be prepared considering these 10 principles. For specific relevance is the site and context analysis.

SPP 7.2 – Precinct Design

The subject site being a 'station precinct' requires that the planning framework prepared for the area is consistent with the guidance provided within SPP7.2.

SPP 7.3 – Residential Design Codes

New residential development will need to be designed to comply with the requirements of the Residential Design Codes. The Residential Design Codes provide density codes which stipulate lot sizes (or plot ratio) and built form requirements for development – which the Precinct Structure Plan will need to reference. The precinct structure plan can inform the densities ideal for the area which would in-turn inform the density code applicable. Precinct Structure Planning also can stipulate a minimum density – however this is still due regard unless able to be incorporated into scheme provision.

Localised variation of the 'accepted development' and 'deemed to comply' provisions is permitted through Precinct Structure Plans (except for lot sizes).

Local Planning Policies

The Town has a range of Local Planning Policies currently in force which will need to be reviewed in the context of the Draft Local Planning Scheme No. 2 being adopted.

It is anticipated that any content within the future Precinct Structure Plan for the area will override content of a Local Planning Policy in the case of a conflict. The below policies are considered to be the most relevant to the precinct with the Precinct Structure Plan to be prepared to avoid duplication of provisions within these policies where the provisions are still applicable;

- LPP 3 – Non-residential uses in or adjacent to residential areas
- LPP 4 – Mixed use Development and Residential Uses in Non-Residential Areas
- LPP 7 – Development and Vehicle Access to Properties Abutting Rights-of-way
- LPP 10 – Pedestrian Walkways
- LPP 17 – Street Frontage Design Guideline for District Centres and Commercial Areas along Albany Highway
- LPP 20 – Design Guidelines for Developments with Buildings above 3 storeys
- LPP 23 – Parking Policy
- LPP 24 – Loading and Unloading Policy
- LPP 25 – Local Planning Policy – Streetscape
- LPP 27 – Building Height Controls
- LPP 29 – Public Art Private Developer Contribution
- LPP 33 – Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-residential Development
- LPP 36 – Climate Control (Energy Efficiency)
- LPP 38 – Signs
- LPP 39 – Tree Planting and Retention
- LPP 42 – Vehicle Access for Residential Development
- LPP 43 – Heritage List

BUILT FORM

HERITAGE CONSIDERATIONS

Two sites are listed on the Local Heritage Survey, however these listings are not on the Town's Heritage List and therefore there are no statutory protections over these properties.

- 71 Oats Street, Carlisle – Category D/4 (since demolished)
- Sommerset Street Pool – Category C/3

There are no registered or known significant Aboriginal Heritage sites within the precinct, however the train lines throughout Perth and many significant roads have followed historic pathways established by the Noongar people. There are two 'Other Aboriginal Heritage Sites' within 1km of the precinct.

A data search on the Heritage Council State register (inHerit) identifies three European Heritage sites: Place No.: 01926 - Carlisle Child Health Centre and Place No.: 09226 – Moorsfort. The WA Heritage Survey lists Place No.: 3895 - Somerset Street Pool as all being within the Site footprint.

The Town is also investigating a heritage assessment for the Swansea street market in the Town's Heritage Survey.

BUILDING TYPOLOGY AND AGE

Recent development has been industrial/commercial development in the southern portion of the precinct and detached dwellings in the remainder of the precinct with the TAFE and Aqualife precinct. The age of the dwelling stock within the precinct seems to vary in age with in-fill (rear) housing being mostly 1990's – 2000's stock. The age of the Industrial area building stock ranges from older 1970's – 80's stock to newer commercial buildings which are generally multi-level. There are few residential developments over two storeys and few industrial developments over single storey.

The residential development within the area is in medium to good condition – indicative of the age and socio-economics of the area. The industrial area has a higher proportion of lower quality stock with some pockets of newer higher quality development.



PRECINCT CHARACTER

Whilst the precinct has some good character evident in the built form in older stock in both the residential and industrial areas, there is limited heritage protection prevalent within the precinct. There are a number of 1940's and 1950's character homes within the residential areas and some older industrial builds which provide interest and add value to the area. Original homes have front gardens, lower/permeable fencing and construction from brick. Newer residential builds have also used brick and combination of tiled and steel roofs with some streetscapes having more fencing than others.

The TAFE and Aqualife buildings have different extensions and materials of construction prevalent indicative of institutional buildings of their respective ages.



HOW DOES THIS IMPACT THE PRECINCT?

Urban Ecology

There are high points within the precinct which have views to the City, escarpment and tree lined streets of the precinct.

The geology of the area has mainly sandy soils suitable for in-fill development.

Due to the topography of the precinct, there are a couple of low points where compensating drainage basins are located. These basins are in various forms – some landscapes and others just grassed. Opportunities for increased landscaping and dual use can provide additional tree canopy and open space options.

Increased landscaping throughout the precinct presents opportunities to assist with improving water quality and drainage throughout the precinct and cooling the urban environment.

There are some sites which have remnant contamination which is known. The industrial area may have additional unknown contaminated sites. This means that new development will need to be supported by more detailed site investigations at the time of development.

The project area contains significant portions of areas which have capacity for substantial increase in tree canopy (noting the Town's 20% target) – both on site and within the adjacent public realm. Conversely, there are also established street trees within the area which are conflicting with infrastructure and lacking in diversity.

Whilst most of the streets incorporate street trees, the majority of these trees are exotic species which are not well suited to the local climate and the native fauna and conflict with infrastructure in some circumstances.

Urban Structure

The precinct's urban structure is characterised by fine grained residential blocks and industrial superblocks along wide tree lined streets. Ownership in the area is varied and fragmented limiting the redevelopment potential of many of the areas.

The key redevelopment opportunities are within the industrial precinct which includes a number of larger landholdings in single ownership.

The location of sewer easements within some of the lots is an additional constraint that may impact on the feasibility of redevelopment for some properties.

The sub-station on Banks Street is still in use, however with reduced function as transformer has been removed and loads transferred to neighbouring stations. Understanding long term plans for this asset and potential to reduce footprint and improve the streetscape interface.

As part of METRONET there are overhead power lines proposed to be removed, however majority of the precinct will retain overhead powerlines. Undergrounding power lines throughout the precinct may improve the public realm.

Public Realm

Changing street cross sections and increasing the tree canopy will improve the visual amenity in the area and reduce the urban heat island effect.

Co-location of street trees within roadside swales and raingardens can improve water infiltration performance.

The two streets adjacent to the station (Banks Street and Rutland Avenue) will require attention to ensure a more conducive pedestrian environment.

Further open space is less required with the new open space under the rail line, however distribution may be an issue in future depending on future development scenarios.

Existing drainage basins and sumps are significant assets that can be successfully modified to create community spaces and urban habitats with a design process that includes consideration of safety and drainage functionality.

The public realm has discontinuous footpaths and street lighting in some areas and various types of street trees. Creating a more cohesive public realm character may help in improving the public realm appeal.

The Town has a significant aim to improve access to arts and culture opportunities. New developments within the precinct offer opportunities to provide public art and spaces for arts and culture to be cultivated.

Crime Prevention Through Environmental Design (CTPED) principles are required to be implemented throughout the precinct as there are locations with poor streetscape interface. This may be contributing to crime and antisocial behaviour within the precinct

The Aqualife facility is a significant community asset for the entire town – redevelopment to modernise and improve interface with the street will make it more attractive to residents to visit and have other complimentary land uses co-locate.

HOW DOES THIS IMPACT THE PRECINCT?

Movement

Encouraging more sustainable transport options requires the improvement of walkable and cycling environments by improving the amenity within the public realm.

The increased accessibility for private vehicles and busses on Oats Street will impact on the function of the road, Oats Street can't do it all, therefore alternative pathways for cyclist and pedestrians may be needed. Need to consider Oats Street cross section from AHPSP.

Several locations through the precinct are more prone to crashes – namely Oats Street and key intersections. Reduced speed limits may increase the safety for pedestrians and cyclists.

The Town's Skinny Streets program may encourage lower traffic speeds and significantly improve pedestrian/cycling movement. This may also assist with greening opportunities.

Public parking assets are recommended to be reviewed to ensure that sustainable transport options are prioritised and negative impacts from traffic and parking are costed appropriately on users.

New developments are ideal to have minimum car parking or reductions in minimum required car parking.

Infrastructure to support sustainable transport such as bicycle parking, end of trip facilities, electric rideable charging facilities and pedestrian shelter/amenity will assist in further encouraging sustainable forms of transport.

Land Use

There are a number of car-oriented land uses within the precinct, namely within the Industrial area. This contradicts with the intent of a station precinct.

Apartment development of more substantial scale will become increasingly feasible over the long term. Present residential development feasibility is limited by lot size, construction prices and market price. Ideally a mix of residential typologies would be provided to suit a range of household types.

Food and beverage (restaurants, take-away food etc.) could be supported in mixed-use developments or recreation uses that are existing in the precinct but their scale should be limited to prevent competition with the Albany Highway precinct.

Population services such as health, community and shopfront office uses would complement the current land use mix and moderate additional floorspace could be supported by future residential growth in wider area (noting centre typology).

Although desirable from a strategic perspective, commercial uses such as office are not considered to be viable in the short and longer term.

Times of activity within the precinct have peaks based on the limited land use offering.

There is a push for greater accommodation of arts and culture land uses as they add to the economy of the local area – there are affordable options for commercial tenancies within the precinct currently but this could change over time.

Transition within the Industrial area needs to be managed over time as there is a right to continue existing activities. This means that new development and land uses needs consider existing land uses in the interim.

Built Form

The built form is mainly low-rise but densely developed. This may create transitioning issues for new development.

There are a number of older residential and commercial developments which don't necessarily have heritage listing, they do add value and sense of place.

The vernacular and materials of the buildings can provide guidance for new development in the area to ensure the unique character in the area is retained

The intensity of development within the precinct is relatively low in terms of height which will present challenges in terms of interface with larger scale development.

The built form quality is medium to good in the residential area with several more poor-quality developments in the industrial area, further indicating the more immediate in-fill opportunities being in the Industrial area.

OPPORTUNITIES AND CONSTRAINTS MAP

LEGEND:

- Oats Street Precinct
- Potential Precinct Expansion
- Rail Line
- Public Open Space
- Walkable Catchment



NETWORKS & PUBLIC REALM

- Arterial Roads - physical and visual barrier
- Oats Street: primary link through precinct provides opportunities for streetscape improvement to increase safety and provide flexibility for future traffic volumes
- Secondary Connections: opportunity for key green links throughout precinct to provide high quality public realm for pedestrians and cyclists
- Link Opportunity: to connect public transport, amenity and activity through the existing TAFE site
- PSP within railway reserve
- Banks Street downgrade: opportunity to create pedestrian focussed environment and increase canopy cover
- Busy Intersection: multi-modal connection point
- Signalled pedestrian crossing location
- Non signalled pedestrian crossing location

ACTIVITY & INTENSITY

- Existing activity anchor
- Inactive / Impermeable Edge: opportunity to externalise activities to interact with the public realm
- Larger single dwelling residential lots
- Lots subject to strata: potentially difficult to redevelop or subject to a long timeframe
- Development opportunity site for recreation, community and cultural uses, co-located with existing amenity and activity anchors
- Drainage Sites: opportunity for landscape improvements
- Public open space under elevated rail: opportunity to tie into surrounding green networks and provide an activity anchor
- View locations
- Tree retention opportunity within future development

INFRASTRUCTURE & CONTEXT

- High / Low Points
- Significant level change
- Overhead powerlines retained
- Electrical Substation
- Sewer infrastructure within lots
- Long term industrial interface
- Contaminated Sites

ENGAGEMENT CONTEXT

PREVIOUS ENGAGEMENT AND STAKEHOLDER MAPPING

The Oats Street Preliminary Place Plan included significant engagement with the community in the form of a community reference group but also wider community engagement. Some key take-aways from this engagement

Areas of concern were:

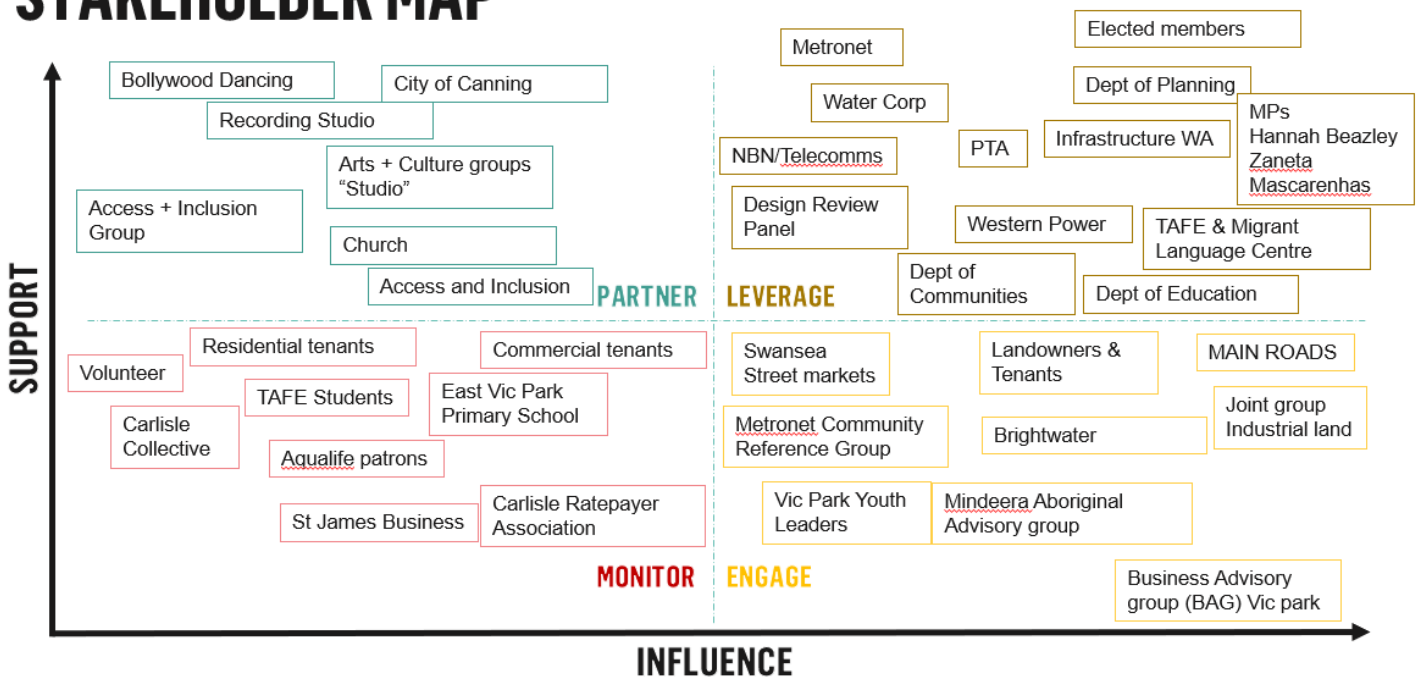
- + Noise (19.8%);
- + Visual amenity (17.7%); and
- + Construction impacts (13.8%).

Areas of excitement were:

- + Easing congestion (32.9%);
- + Saving Time (22.2%); and
- + Safety (13.4%).
- + New public spaces (9.7%)
- + Revitalising the area (8.8%)

As part of initial engagement with internal stakeholders, an external stakeholders map was developed to understand who is impacted and has influence in the development of the PSP. The below maps the stakeholder's likely level of support and influence which in turn has informed the communications plan prepared by Urbis to ensure that the preparation of the PSP captures relevant information at the crucial stages of the project.

STAKEHOLDER MAP



DRAFT KEY PRINCIPLES

The overriding objectives for this project are to :

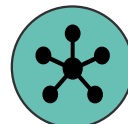
1. Maximise higher density residential and mixed-use development close to the Oats Street station and high frequency bus services.
2. Ensure an appropriate transition in built form and scale between future higher density development and surrounding lower scale development
3. Address gaps in provision of public open space as per the public open space

Acknowledging the level of engagement to date that has occurred with the community and key stakeholders to date, the community is proposed to be involved in select portions of this project through various engagement mediums.

The community is proposed to be involved in the scenario selection for further development and then in the formal advertising of the draft PSP. Key stakeholders will be interviewed to explore more specific issues to inform scenario development.

Initial workshop with internal stakeholders was held to assist in stakeholder mapping and developing key principles to guide this project moving forward. The key principles are proposed to be workshopped and further refined in scenario development and testing.

Further testing these principles will also assist in scenario refinement. Further analysis of socio-economic trends and development trends may illuminate other areas of investigation.



CONNECTED

Improved pedestrian and bike connections Better wayfinding Network of paths to precinct attractions i.e TAFE, Aqualife, public open space and river



GREEN

Living drainage for community amenity Existing tree canopy maintained and improved Places to rest and dwell



VIBRANT & ACTIVE

Youth focus working in with TAFE, Aqualife Vibrancy from train through to heart of precinct Focus on active health activities and allied health services



DIVERSE

Mix of typography and housing stock Mix of small to medium business Diversity of demographics



ART, CULTURE & DESIGN

Design appropriate to heritage of Vic Park and 50 and 60s architecture through site Arts and cultural activity

**STATE UTILITY SITES TO EXPLORE FOR
REVELOPMENT/PUBLIC OPEN SPACE/ COMMUNITY
AMENITY**



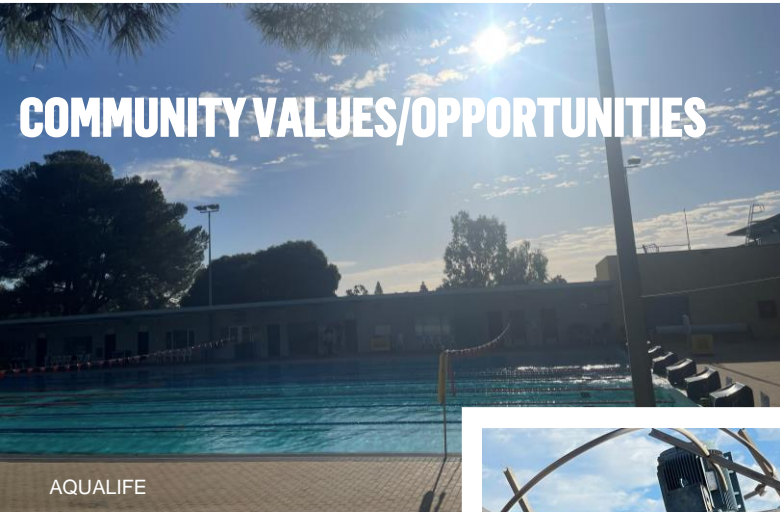
WATER CORP DRAINAGE POND



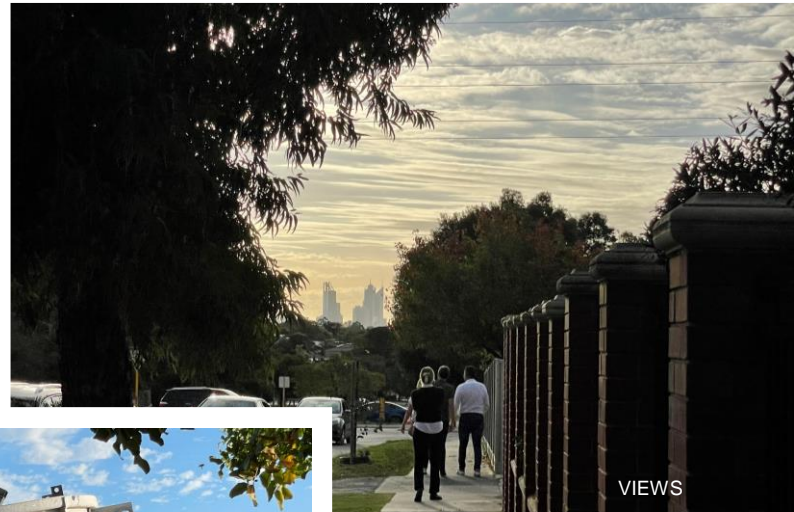
WESTERN POWER DECOMMISSIONED
SUB STATION



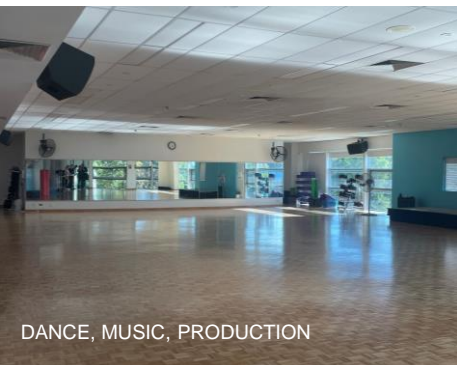
WATER CORP DRAINAGE



AQUALIFE



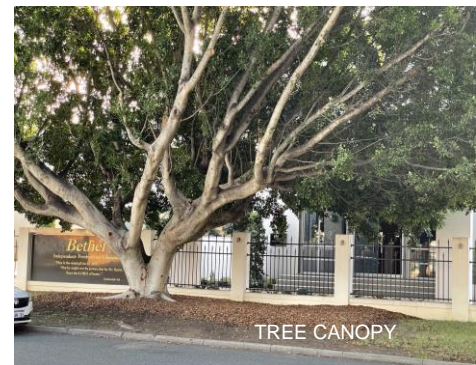
VIEWS



DANCE, MUSIC, PRODUCTION



INDUSTRIAL ARTS



TREE CANOPY

WHAT DOES THIS MEAN?

The draft key principles have been developed based on initial engagement internally – externally testing these principles will inform if there are other principles of higher priority which may inform the scenario refinement. Concepts such as indigenous engagement, key partnerships and trends in socio-economic planning and development may assist.

These may be further refined considering initial community feedback undertaken for the Oats Street PPP.

Understanding some landowners' intentions within the precinct area longer term will be valuable in terms of understanding key barriers to uptake of development potential and key barriers. Namely strata landowners, government agencies and industrial landowners.

