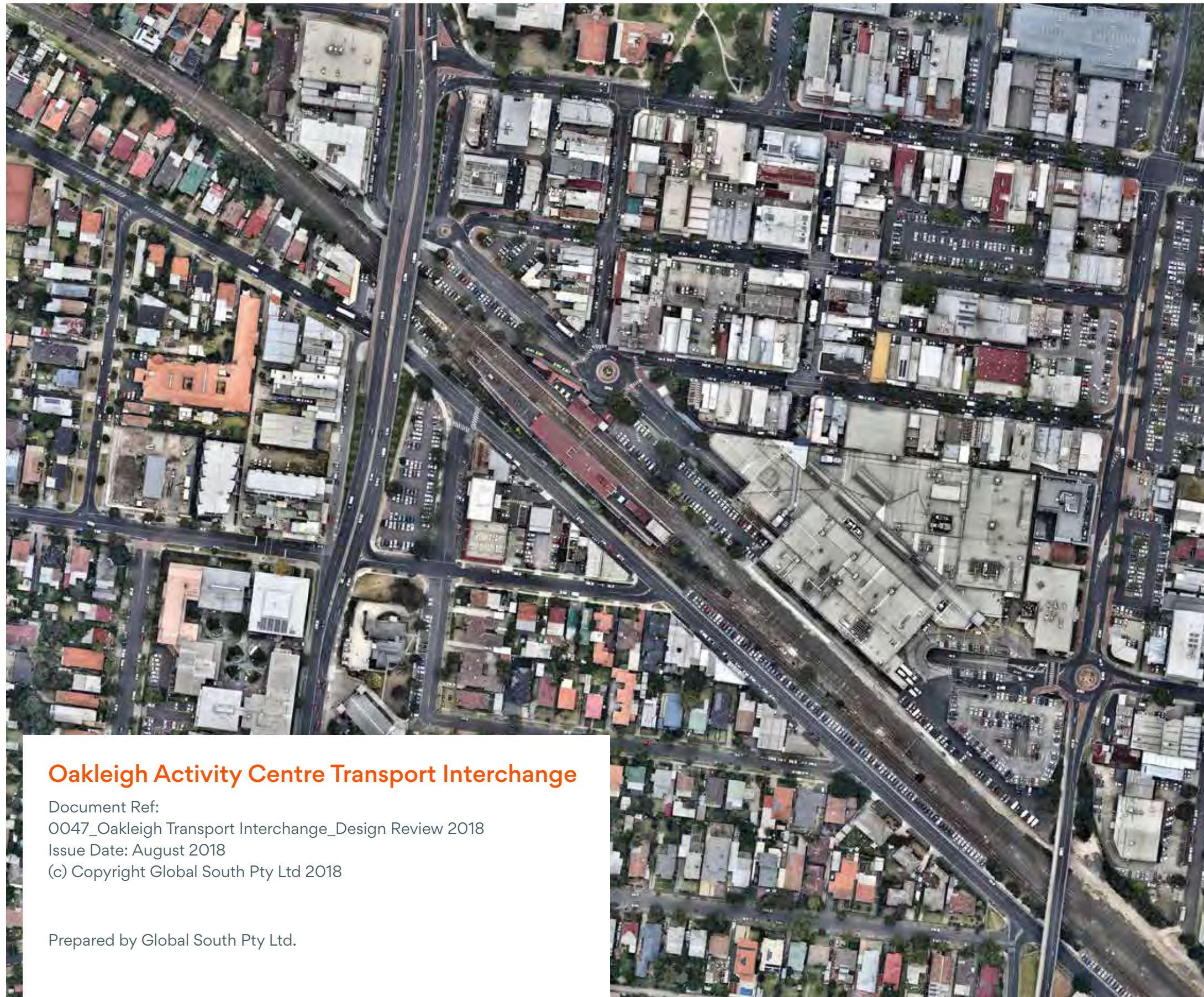




Oakleigh Activity Centre Transport Interchange

Design Review 2018 Final Report

August 2018



Oakleigh Activity Centre Transport Interchange

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Oakleigh Activity Centre Transport Interchange

Design Review 2018

Executive Summary

A summary of the proposed package of urban renewal initiatives around Oakleigh's Transport Interchange.



Urban Design Principles

Diversity and Inclusion:

Working towards a diverse, welcoming, accessible and contemporary Village Centre.

Public realm:

Prioritising pedestrian movement between the Village Centre, Station, bus interchange, and across the rail corridor, while accommodating a diverse range of public realm activities within a green, comfortable, inviting public environment.

Built form:

Providing public benefits through new development – activation, amenity and human-scale public environments.

Movement and Transport:

Enhancing the experience of using Public Transport and arriving in Oakleigh, and balancing accessibility, safety and convenience for all transport modes.

Civic, Cultural and Community Facilities:

Reinforcing the civic qualities of the locality, while increasing community opportunities and facilities.

Residential:

Providing a range of housing types to optimise diversity, liveability and amenity.

Enterprise, Retail and Business:

Providing opportunities for all business types, including small and home-based enterprises, and contemporary modes of work.

Cultural and Environmental Values:

Reinforcing Oakleigh's "village feel" and embedding best practice sustainability outcomes in the public realm and buildings.



Before...

Urban Design Principles



...After

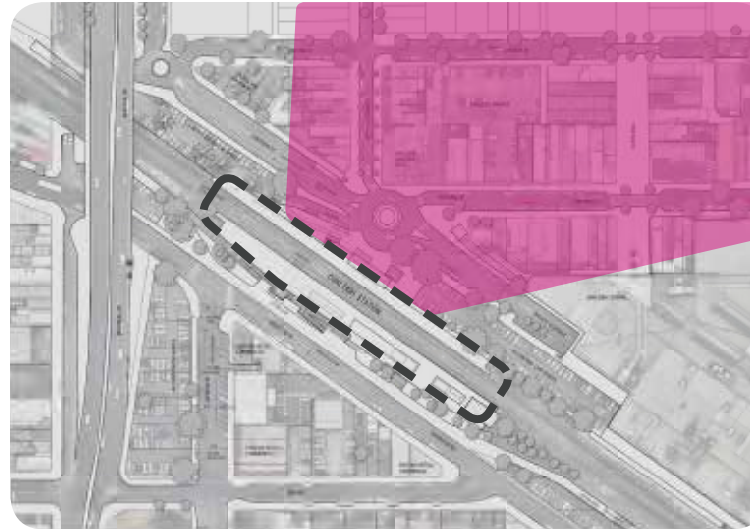
Key moves

Extended activity:

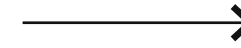
From dormant streets... to active, around a revitalised transport hub.

Currently, pedestrian activity is concentrated in Oakleigh on key streets including Eaton Mall and Portman Street, and to a lesser extent, Station Street and Chester Street. The sense of vibrancy that this activity creates does not extend to the Station environs. The southern side of the rail corridor lacks any significant activity in the public realm.

Proposed urban renewal initiatives comprising redevelopment and public realm improvements around the transport hub, combined with planned upgrades to the Station itself, will revitalise this part of the Activity Centre. This will draw pedestrian activity to both sides of the Station, creating a greater sense of vibrancy, safety and amenity.



From dormant streets...



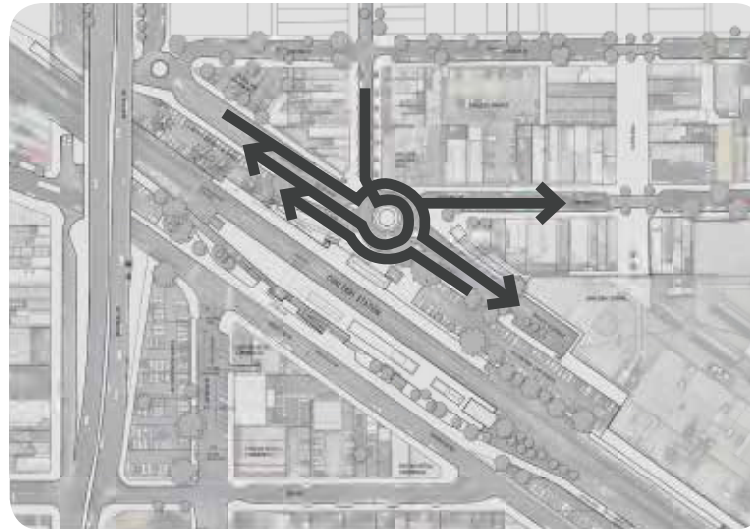
... to active, around a revitalised transport hub.

Station forecourt:

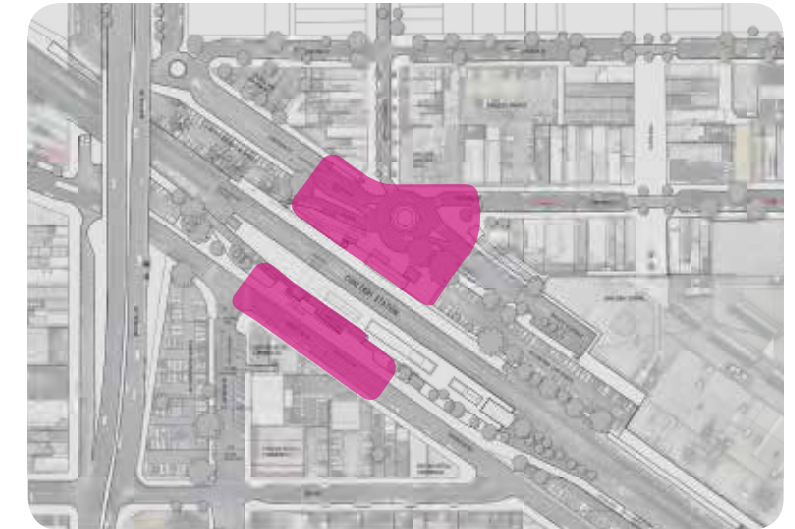
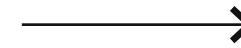
From traffic roundabout... to Station forecourt.

The large roundabout in front of Oakleigh Station creates a traffic-dominated environment and severely restricts pedestrian movement, safety and amenity. It also interrupts the relationship between the heritage Station building, and the heritage Oakleigh Junction Hotel.

The proposed removal of this roundabout, and replacement with a new streetscape treatment at the intersection of Portman and Station Streets, constituting a 'shared space' environment (potentially with 'Barnes' signalised crossing), effectively shifts the focus to people, rather than vehicles. This initiative will create a new, attractive arrival experience in Oakleigh, and facilitate safe, comfortable and universally accessible mobility for pedestrians between the Station, bus interchange and Village Centre.



From traffic roundabout...



...to station forecourt.

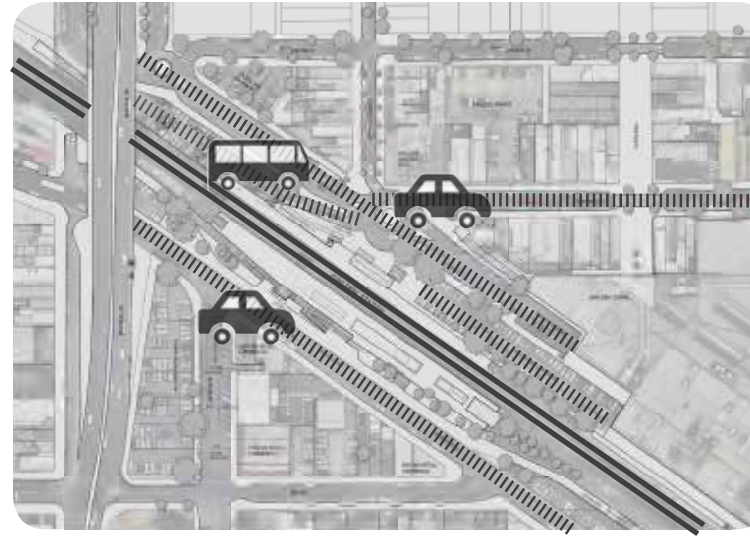
Key moves

Connected pedestrian network:

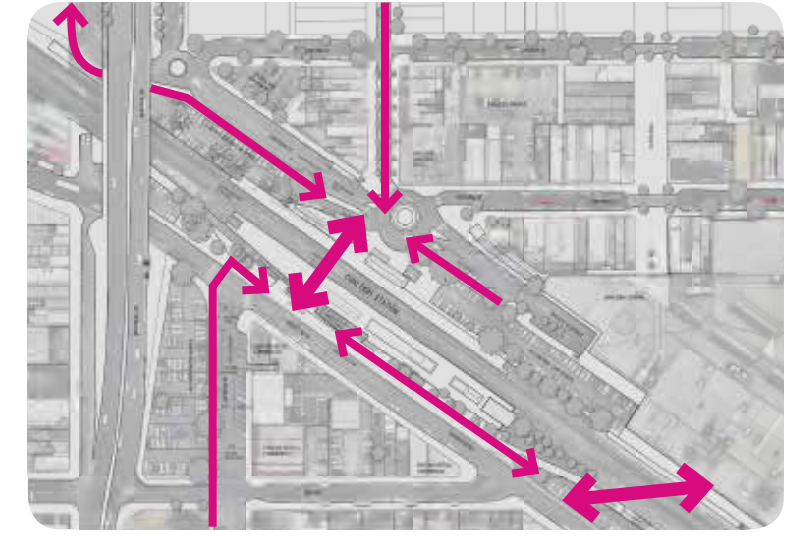
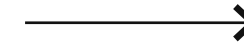
From barriers to walking and cycling... to strong links between the street grid and transport hub.

Walking and cycling is currently restricted in and around Oakleigh's transport hub, by traffic-oriented street configurations, significant traffic and bus movements, narrow footpaths, complex and indirect pedestrian crossings, and roundabout intersections. Limited streetscape activation and poor amenity further constrain walking and cycling.

By enhancing streetscapes and extending the streetscape character of the Village Centre towards the transport hub, while limiting traffic flows and improving bus movements, Oakleigh will become more pedestrian- and bike-friendly, encouraging sustainable transport into and through the Village.



From barriers to walking and cycling...



...to strong links between the street grid

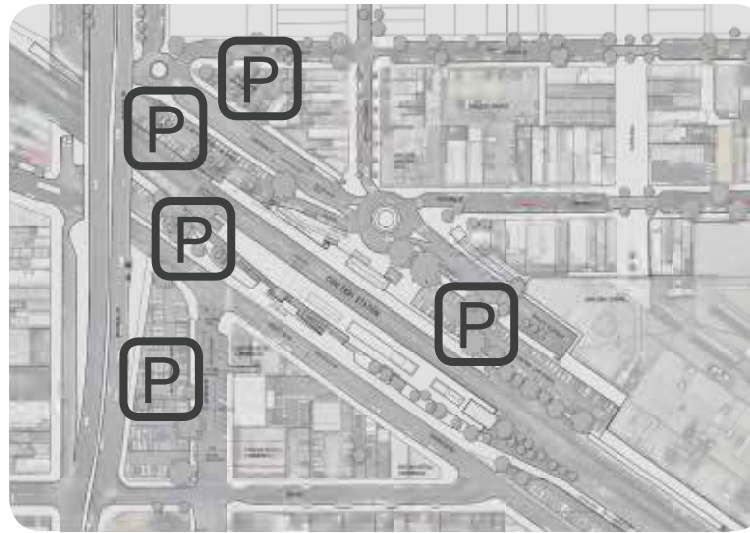
Consolidated parking:

From fragmented car park areas... to integrated developments.

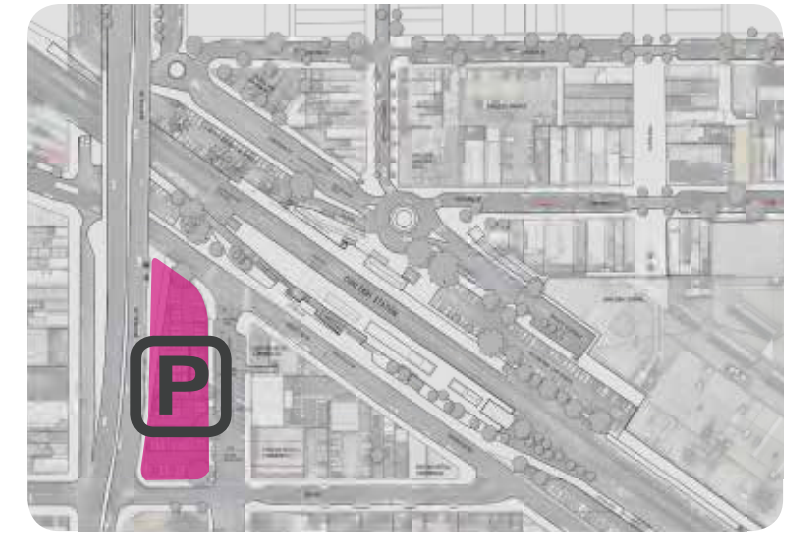
The substantial commuter car parks on both sides of the rail corridor serve to further isolate the Station from the Village Centre, and contribute to the sense of expansive asphalt areas around the transport hub.

Facilitating integrated, mixed-use developments on these sites, while accommodating equivalent or increased commuter parking within a development, will create more comfortable, active and safe streets, extending the Village 'feel' towards the Station, and integrating the Station with the Village street network.

Further, redevelopment will bring increased local resident populations into Oakleigh, which will increase patronage for local shops and businesses, as well as activity levels on the streets.



From fragmented car park areas...



...to integrated developments.

Sites and urban renewal initiatives

Zone A: Site 1:

Existing: Oakleigh Central land, vacant (entrance canopy, paved public space).

Proposed (Option 1): Single-storey pavilion/kiosk building, retail/café, activated public space.

Proposed (Option 2): Two-storey infill development, active ground floor (retail, food and beverage).

Site 2:

Existing: VicTrack land, commuter parking, bike storage, paved public space.

Proposed (Option 1): Single-storey pavilion/kiosk building, retail/café, car park retained.

Proposed (Option 2): Two-storey infill development, ground floor commercial, first floor residential.

Potential future integrated development in conjunction with redevelopment of Oakleigh Central.

Public realm (Portman/Station Street intersection):

Existing: Roundabout.

Proposed: Paved streetscape treatment and extended pedestrian zones.

Zone B: Site 3 (A and B):

Existing: VicTrack-owned retail properties (3A), Council-owned surface car park (3B).

Proposed: 3-storey residential townhouse developments (live/work) with ground floor office frontage and kiosk retail tenancy.

Site 4:

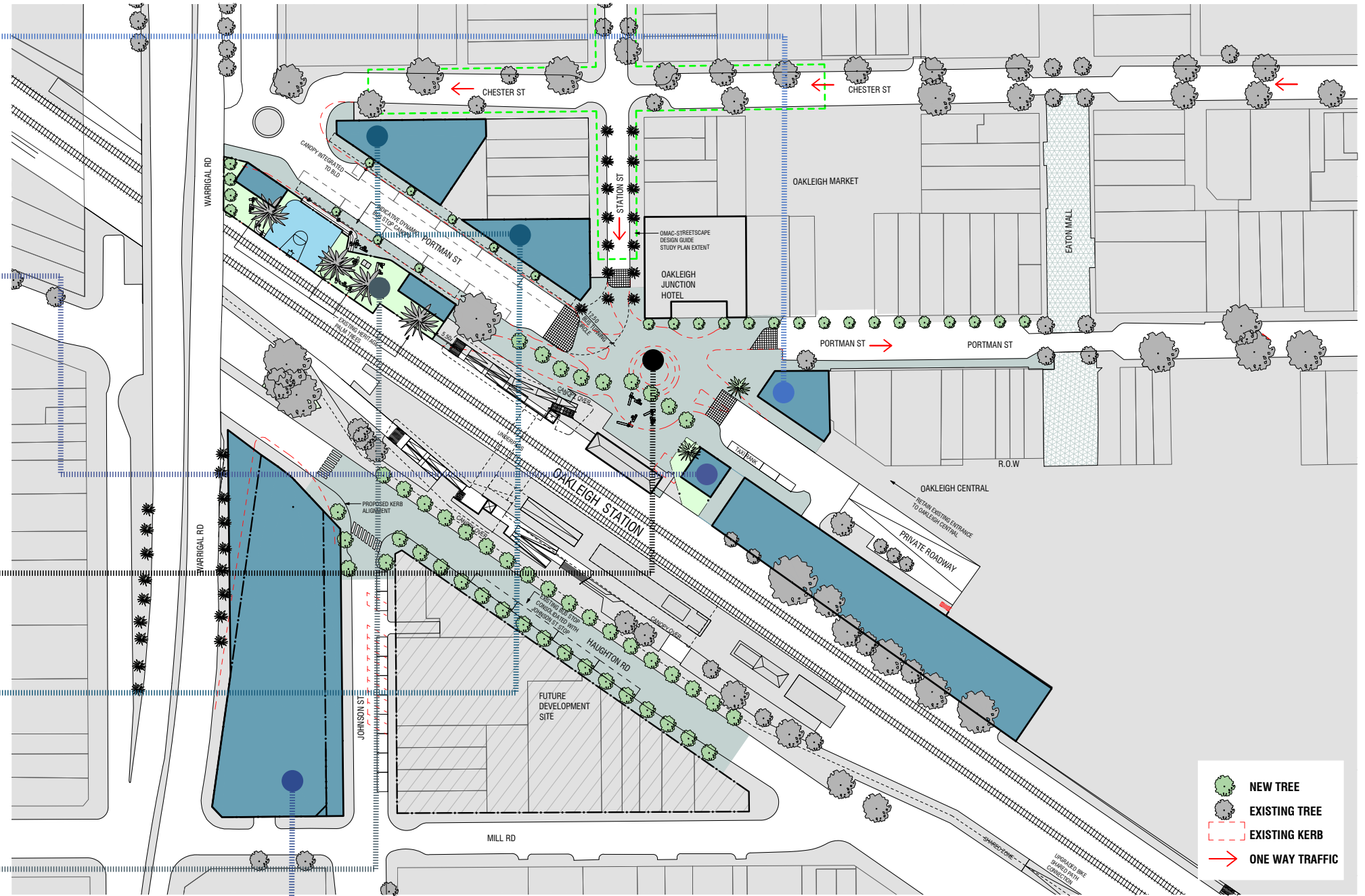
Existing: VicTrack land, commuter car parking.

Proposed: Public open space (passive/active), two pavilion/kiosk units (retail/café/community uses), and improved bus interchange user experience.

Zone C: Site 5:

Existing: VicTrack land, with component of Council land, commuter car parking.

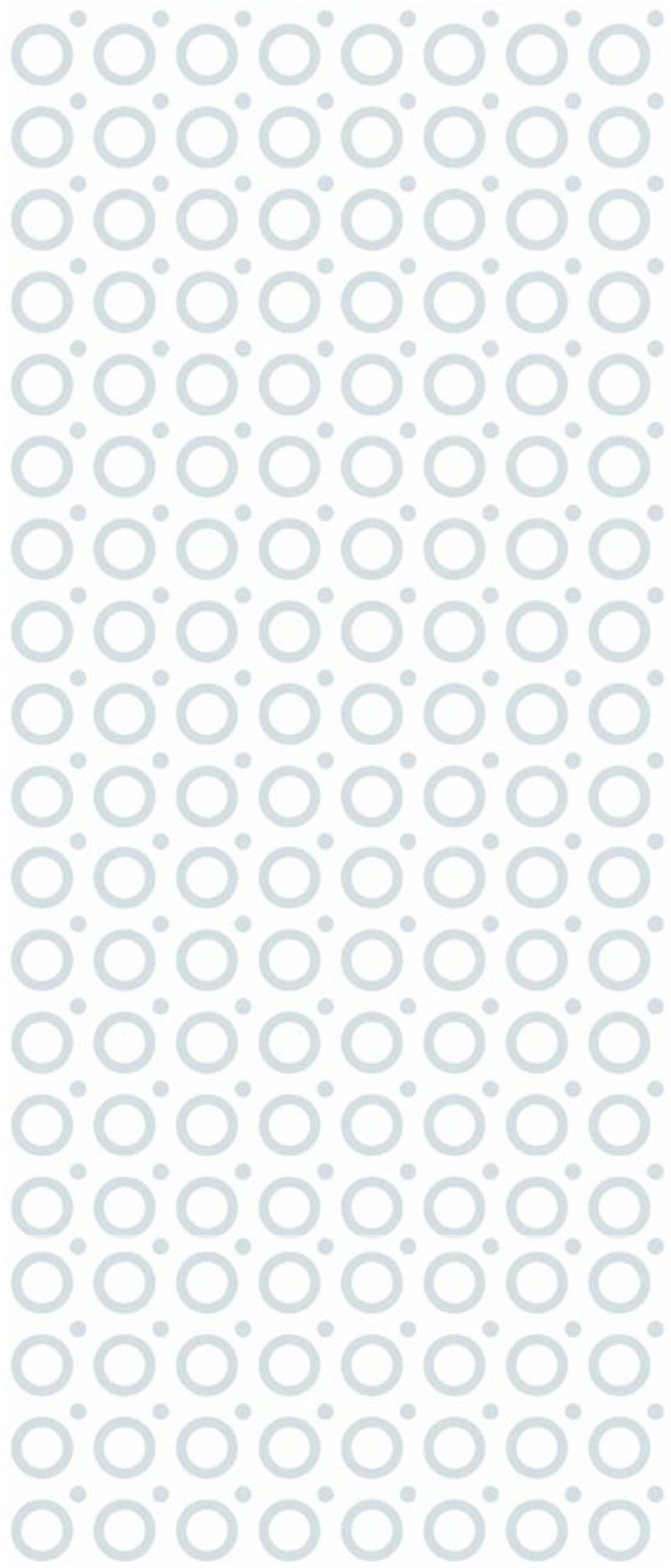
Proposed: 8-storey residential development comprising townhouses (live/work), apartments and commuter car parking (replacement for commuter parking on Sites 2, 4 and 5).



Sites and urban renewal initiatives







Chapter 1.0
Introduction

1.0 Introduction

1.1 Project outline and Brief

This Report is the final, consolidated output from the Oakleigh Activity Centre Transport Interchange Design Review project, carried out between March 2018 and May 2018, through a series of collaborative Workshops involving Council officers, consultants and stakeholders.

The project consultant team comprised:

- Global South (Urban Design / lead consultant)
- BKK Architects
- Charter Keck Cramer (urban economics)
- Rider Levett Bucknall (quantity surveying).

This report contains the following:

- Part 1.0: Introduction, process, background
- Part 2.0: Urban Framework
- Part 3.0: Individual site proposals
- Appendix A: Full A3 drawing set
- Appendix B: Public Realm Cost Plan.

The purpose of this project is to review and build upon a range of preceding studies and proposals, and to align with and leverage benefit from current proposals and planned transport infrastructure initiatives, to establish the conditions for improvement to the urban environment around Oakleigh Station.

From the Project Brief

Council's aim is to reinvigorate the public transport precinct, building on its positive attributes and addressing site constraints through innovation, to create an accessible, engaging and vibrant arrival experience to the activity centre.

The purpose of the project is to review relevant design documentation and site information provided by Council in order to develop a viable, implementable and agreed design proposal for the site area.

The Design Proposal will deliver an integrated vision for the station precinct which leverages synergies between viable site development, investment (public and private), transport upgrades and public realm activation.

1.2 Process

The project process has comprised:

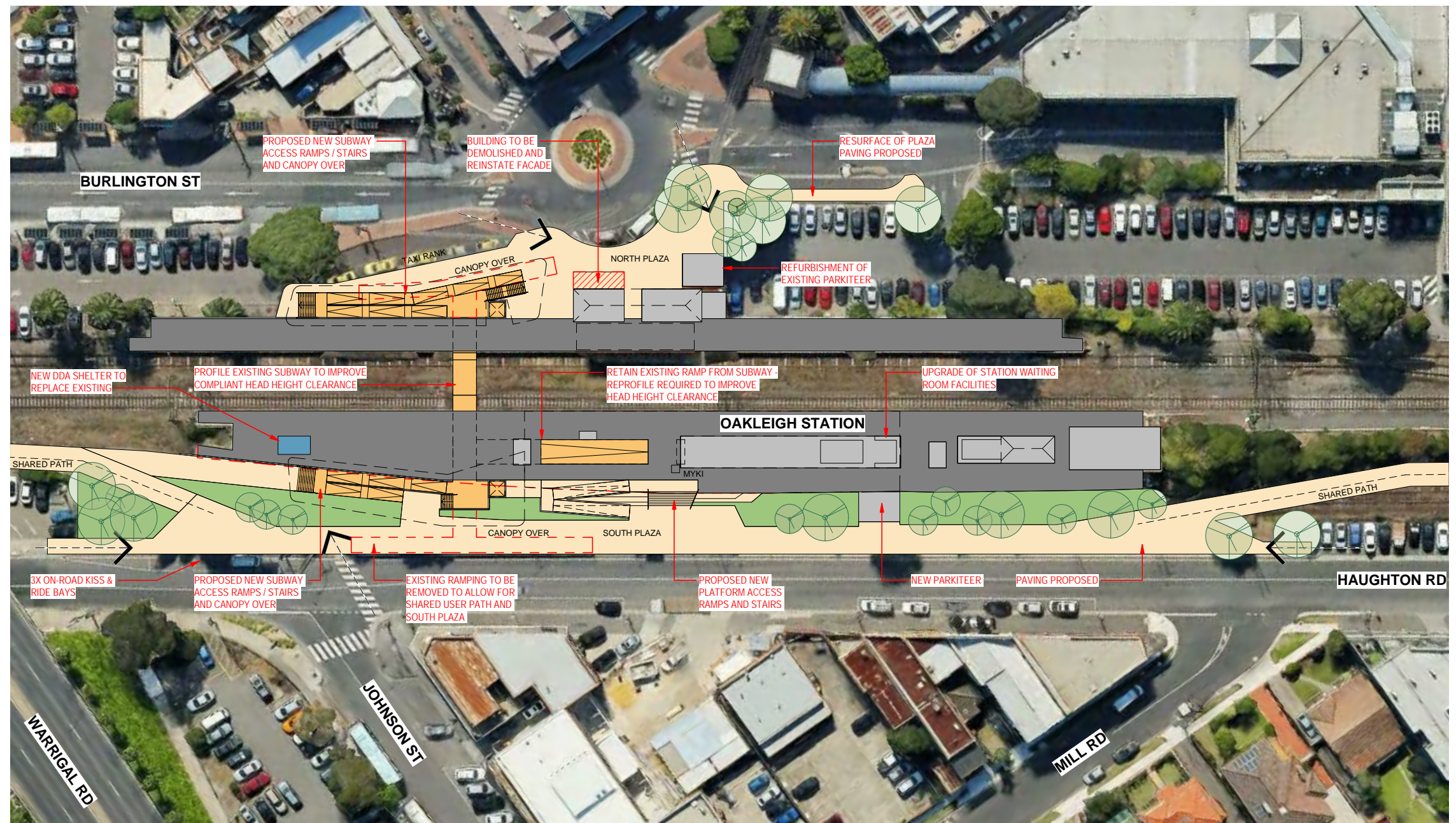
- Review of provided background information, as set out below
- Series of four (4) collaborative Workshops held in Oakleigh with Council officers (urban design and transport), consultant team and selected stakeholders, to develop concept designs. These Workshops involved extensive discussion and debate, development and testing of ideas, inspections of the study area, and consideration of reference projects and implementation approaches:
 - Workshop 1 (1 day): Opportunities
 - Workshop 2 (2 days): Design Proposal (Draft)
 - Workshop 3 (1 day): Design Proposal (further development)
 - Workshop 4 (half day): Implementation Plan.
- Project team:
 - Council officers (urban design and transport/traffic)
 - Public Transport Victoria (PTV).

1.0 Introduction

1.3 Project context

The project has occurred within the following context:

- The LXRA’s consultant team has developed plans for the upgrade of Oakleigh Station, expected to be delivered within approximately 12 months from May 2018, according to LXRA officers. The project team has received these plans and 3D modelling, which include:
 - Upgraded pedestrian underpass, with new ramps, stairs and lifts;
 - New Station canopies above underpass access ramps;
 - Removal of ‘lean to’ from main Station building;
 - New Station/platform entrance from Houghton Road, including tiered ramps.
- VicTrack has received “Transport Clearance” to instigate the process for development on the large car park site south-west of the Station, along the Warrigal Road interface. Council owns a small portion of this block
- Council has developed a Streetscape Design Guide indicating proposed street upgrades and modifications to Portman and Station Streets
- Council is seeking to liaise with Vicinity, the owners of Oakleigh Central Shopping Centre, at Director level, to discuss the future of Oakleigh Central, which interfaces with the study area
- Transport for Victoria is preparing a Station User Access Plan for Oakleigh, but it is not clear when this will be complete or available.



Layout Plan of proposed Oakleigh Station upgrade works. (image source: LXRA)

1.0 Introduction

1.4 Background: Preceding studies

The following previous studies which apply to the study area were reviewed and discussed through the process, to inform current thinking.

1.4.1 Oakleigh Urban Design Framework (Context Conybeare Morrison, 2002)

The UDF observed that:

- The Station and Oakleigh Junction Hotel are local landmarks
- Backs of shops and Oakleigh Central face the Station environment, creating a poor interface
- Station Street is on axis to the main Station building, but the axis is interrupted by the traffic roundabout
- Eaton Mall (not Station Street) is the main activity hub
- Heritage landscape features (palm trees) exist on Portman Street, north-west of the Station
- Oakleigh Central is the dominant form in the area
- The Station forecourt is an “unkind space”.

Key elements of the UDF proposal include:

- Integrated transport interchange
- Public domain hub (Station forecourt and Portman Street between Station Street and Eaton Mall)
- Core commercial edge to the Village (between Warrigal Road and Station Street)
- New Northern and Southern plaza spaces
- Pedestrian overpass at Station (presumably replacing underpass)
- Removal of frontage shops on Portman Street (south side) to open up plaza and links to Eaton Mall
- Commercial development: multiple sites, height ranges 2-3 up to 5-8 storeys.

1.4.2 Urban Design Guidelines (2007)

This document notes that the Station is an important gateway/arrival point for Oakleigh, but streetscapes around the Station are dominated by vehicles, to the detriment of pedestrian amenity. Issues and opportunities include:

- Precinct needs to be reshaped
- Revitalisation through new retail uses
- Form a new public square, integrating Portman St
- Forecourt structures obscure heritage station
- Opportunity for major new entrance
- Avoid new development which dominates or overwhelms new/existing public space.

The Vision includes:

- Major new pedestrian public space
- Enclosed overhead bridge across the railway corridor
- New development: 2-storey active facades, upper levels set back
- Retention and restoration of historic buildings in Station Street.

1.4.3 Oakleigh Village Rejuvenation Schematic Design Report (ASPECT Studios, 2010)

This design proposal for the public realm on the north side of the railway corridor comprised:

- Removal of the central roundabout (intersection Station and Portman Streets)
- New “Shared Space” treatment to the Station forecourt and intersection of Station and Portman Streets, with continuous surface and contemporary pavement design
- Retention of street-based bus interchange on Portman Street, west of Station Street, with 10 bus bays, with continuous new shelters
- New drop-off / “kiss ‘n ride” / taxi parking with vehicle through access (west to east), adjacent to bus interchange on existing commuter car park land (north side of rail corridor, west of Station Street)
- New shared path connection

The plans indicate a Station footbridge with ‘iconic’ glazed lift tower at the entrance.

1.0 Introduction

1.4.4 Placemaking study (Village Well, 2011)

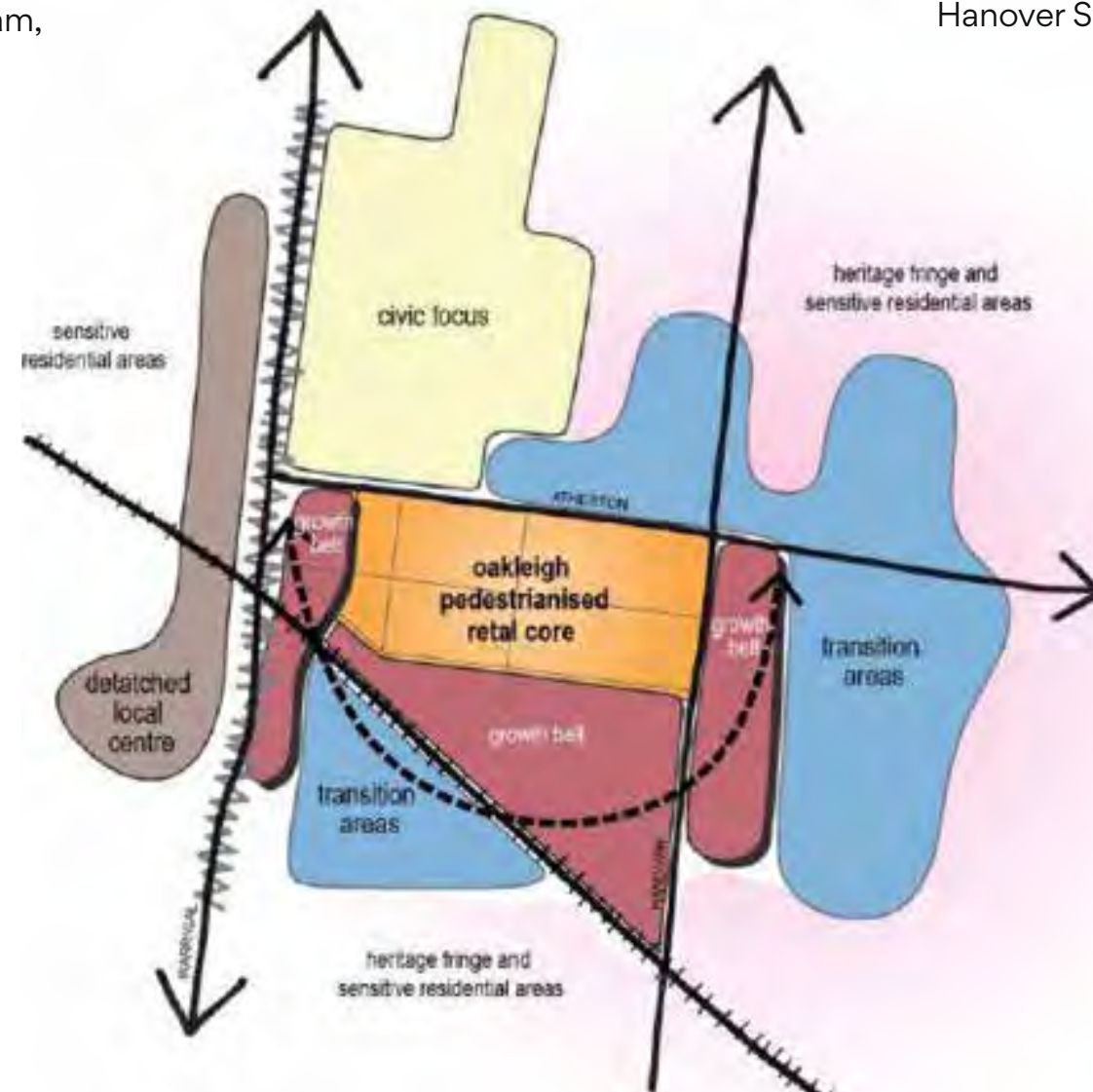
This consultative, investigative study identified the following aspects of Oakleigh’s character:

- Place essence: A place for all... for conversations, to taste the world, to experience village life
- Principles: Intimate, diverse, thriving, inclusive
- What makes Oakleigh special?
 - Specialty food shops – not necessary to go to supermarket;
 - Butchers, delis, bread shops, fresh food;
 - Conversations with friends;
 - Bustling, busy;
 - Links between activities - cafes, offices...;
 - Greek coffee shops, mix of good food and location;
 - People.
- Opportunities (Oakleigh 2021):
 - Living in the centre;
 - Activation through food tasting, demonstrations...;
 - Station St as linkage to Park;
 - Mixed-use for day/night activation;
 - Open air cinema, laneway art.

- Key themes:
 - Exciting and vibrant public realm;
 - Improved retail mix, extended hours;
 - Diversity, celebrated through art;
 - Pedestrian-friendly and accessible;
 - Connections.
- Opportunities for “quick wins”:
 - Walking tours, free wifi, stories;
 - Cultural food tours, events program, outdoor cinema, BBQ, cooking demonstrations.

1.4.5 Oakleigh MAC Structure Plan (City of Monash, 2012)

The Structure Plan covers the entire centre, so is relatively high-level and strategic in its focus, but identifies the following relevant considerations:



Urban structure

- ‘Growth belt’ forms a U-shape south of the central retail core, characterised by higher forms with the greatest opportunity for development consolidation
- ‘Barrier area’ associated with the rail line and Warrigal Road offers opportunities for consolidation given they are less sensitive in terms of amenity and heritage impact
- Focal points of activity include the Oakleigh railway station, Oakleigh Market, Eaton Mall, Oakleigh Central and future form on Hanover Street.

1.0 Introduction

Vision

The Oakleigh Major Activity Centre will be an attractive, safe and highly accessible place where people can access shops and services to meet most of their daily and weekly needs.

It will be a vibrant and prosperous Activity Centre, which retains its strong sense of identity and its multi-cultural character. It will remain the focal point for the community, fostering its social and cultural development.

The centre will provide a range of employment opportunities in enterprises that provide a diverse range of services.

It will provide a diverse range of residential buildings to enable a greater choice of housing for the community.

Strategic response encourages:

- Redevelopment and concentration of activity
- Medium to high rise (4-8 storeys)
- Arts, culture, entertainment
- Restaurants
- Office uses
- Enhanced linkages
- Greater Public Transport linkages.

Objectives include:

- Built Form: Buildings will enhance public spaces, connect well to their streets, be energy and resource efficient and able to accommodate changing uses over their lifetime
- Public Realm: Public places, streets and parks are accessible, comfortable, delightful, safe and well-maintained
 - Enhancement of the “Western Gateway”, the area in front of the Oakleigh Station and its surrounds, including the bus interchange area
 - Improve connections to and between existing public places, car parks and major attractors within and surrounding the Activity Centre.

1.4.6 Implications from background studies

In the context of the current project, this range of preceding work illustrates several key directions for the study area:

- Protecting and reinforcing the qualities and character of the village
- Encouraging intensification of land use and redevelopment in appropriate locations
- Enhancing the transport environment and arrival experience
- Improving the pedestrian environment and connectivity to the Station and bus interchange.

These directions have informed the work on this project.

1.5 Context: Transit-oriented development and suburban nodes in Melbourne

In recent years, Melbourne has experienced an increasing shift in development types towards higher densities, mixed use and more compact housing, especially in major activity centres and around transport nodes.

Suburban nodes such as Footscray, Dandenong, Hawthorn, Box Hill and Glen Waverley within City of Monash, are undergoing significant change through redevelopment. Without delving into this trend, it appears to suggest an increasing appetite for well-located, well-serviced, higher-density urban living across Melbourne.



Emerging higher-density, mixed-use development in Oakleigh Major Activity Centre.

(Atherton and Atkinson development)

1.0 Introduction

1.6 Context: Global objectives for cities

Also recently, the importance and role of cities in addressing the urgent challenges of climate change and social inequality has been increasingly recognised. Cities around the world are taking concerted action, towards more socially, economically and environmentally sustainable, safe, liveable and fair urban settlements. This action is being driven at Local Government level, and through international city networks, informed by global commitments and frameworks.

These provide strategic goals and directions for sustainable urban development around the world. Key points from these documents are provided below.

1.6.1 Sustainable Development Goals (UN, 2015)

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

1.6.2 New Urban Agenda (UN, 2016)

We share a vision of cities for all, referring to the equal use and enjoyment of cities and human settlements, seeking to promote inclusivity and ensure that all inhabitants... are able to inhabit and produce just, safe, healthy, accessible, affordable, resilient and sustainable cities and human settlements to foster prosperity and quality of life for all.

- Leave no one behind
- Ensure sustainable and inclusive urban economies
- Ensure environmental sustainability by promoting clean energy and sustainable use of land and resources in urban development.

We commit ourselves to working towards an urban paradigm shift:

- Readdress the way we plan, finance, develop, govern and manage cities
- Adopt sustainable, people-centred, age- and gender-responsive and integrated approaches to urban development.

We urge all national, subnational and local governments, as well as all relevant stakeholders, in line with national policies and legislation, to revitalise, strengthen and create partnerships, enhancing coordination and cooperation to effectively implement the New Urban Agenda and realise our shared vision.



1.0 Introduction

1.7 Urban Design Principles

These principles have been developed through reviews of the background studies, and design workshops for this project. They seek to set the overarching requirements and directions for the urban design outcomes. They also inform a set of Key Performance Indicators (below), though which the proposals may be assessed.

Diversity and Inclusion: Working towards a diverse, welcoming, accessible and contemporary Village Centre.

- To welcome and accommodate people of all ages, abilities and interests in the public realm
- To retain Oakleigh’s accessible, public, welcoming feel, “leaving no one behind”
- Within developments, to provide for affordable and accessible dwellings and commercial spaces
- To respond to demographic projections and trends, ensuring the mix is right
- To respond to contemporary living patterns and new tenure models (centralised rent, co-living, retirement living, share-housing etc.).

Public Realm: Prioritising pedestrian movement between the Village Centre, Station, bus interchange, and across the rail corridor, while accommodating a diverse range of public realm activities within a green, comfortable, inviting public environment.

- To prioritise pedestrian movement between the village centre, Station, bus interchange, and across the rail corridor
- To create a ‘seamless’, continuous, high quality public realm to draw activity to the Station, and integrate the (future) Station environment with the village centre
- To reflect and respond to the distinct cultural and social characteristics of Oakleigh, creating great places and local activation
- To encourage and facilitate a diverse range of uses, activities, individuals and groups in public realm spaces
- To reduce the extent of road space around the Station
- To create new places of intimate scale with active, defined edges
- To ‘green’ and soften the urban environment around the Station
- To achieve a balance of solar access and shade in the public realm.

Built Form: Providing public benefits through new development – activation, amenity and human-scale public environments.

- To ensure that new development contributes positively to the public realm and the experience of arriving in and moving through Oakleigh Village
- To ensure that new development optimises the use of land around Oakleigh Station and Village Centre
- To facilitate development which provides clear public benefits
- To extend the fine grain, human-scale qualities of the town centre, towards the Station
- To avoid detrimental overshadowing and wind impacts on the public realm
- To address and reinforce local sightlines
- To maximise views from the public realm, and from new development, both locally and longer-range
- To address challenging interfaces, including Warrigal Road and the railway corridor, to maximise amenity and reduce impacts
- To encourage ‘sleeving’ of car parking with active uses
- To reinforce and complement the heritage and fine grain character of Station Street and Portman Street.

Movement and Transport: Enhancing the experience of using Public Transport and arriving in Oakleigh, and balancing accessibility, safety and convenience for all transport modes.

- To reinforce a key gateway to the centre, as an attractive alternative to car access
- To provide a safe, efficient, expanded bus interchange
- To address commuter car parking satisfactorily
- To enhance the experience of using Public Transport and arriving in Oakleigh, and the presentation and image of the Station and surrounds
- To enhance accessibility and legibility, with equitable access and synergies between all modes
- To balance accessibility, safety and convenience for all modes
- To configure car parking for future adaptability to other uses
- To minimise detrimental impacts from bus movements on streets
- To optimise the local street network in terms of functionality, amenity and activation.

1.0 Introduction

Civic, Cultural and Community Facilities:

Reinforcing the civic qualities of the locality, while increasing community opportunities and facilities.

- To reinforce the visual presence of the heritage Station building in the town centre
- To reinforce the connection between the Station and the Village street grid
- To enhance the civic qualities of the spaces around the Station
- To integrate community facilities and meeting spaces within and around new developments.

Residential:

Providing a range of housing types to optimise diversity, liveability and amenity.

- To provide for a range of residential types to suit various market sectors, including small families, singles/couples, first home buyers, down-sizers
- To maximise liveability within new developments, including: access, amenity, acoustics, social spaces, etc.
- To provide useable communal spaces for residents within developments
- To respond to potential amenity impacts from Warrigal Road and the railway corridor.

Enterprise, Retail and Business:

Providing opportunities for all business types, including small and home-based enterprises, and contemporary modes of work.

- To provide spaces and opportunities for local small and home-based businesses
- To facilitate new modes of work, including shared/co-working spaces
- To accommodate home/work combinations
- To reinforce existing retail activity in the Centre
- To reinforce and expand food-based business and opportunities.

Cultural and Environmental Values:

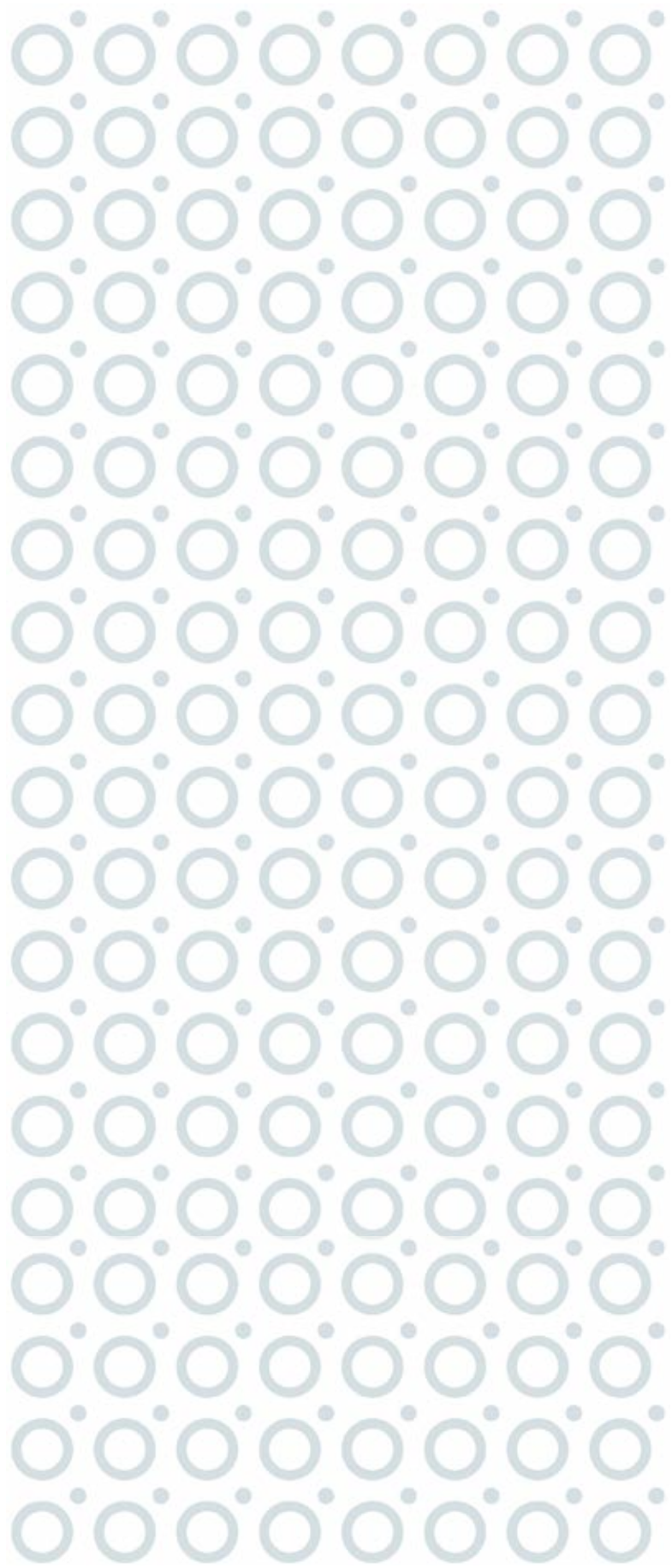
Reinforcing Oakleigh’s “village feel” and embedding best practice sustainability outcomes in the public realm and buildings.

- To reinforce and enhance Oakleigh’s “village feel”
- To reinforce Oakleigh’s food and produce thematic focus
- To retain and extend existing vegetation and heritage trees
- To embed best practice sustainability outcomes in the public realm and buildings: water collection and storage, energy production and efficiency, urban greening and food production.



Eaton Mall is the primary public space / streetscape in central Oakleigh.





Chapter 2.0
Urban Framework

2.0 Urban framework

2.1 Key moves

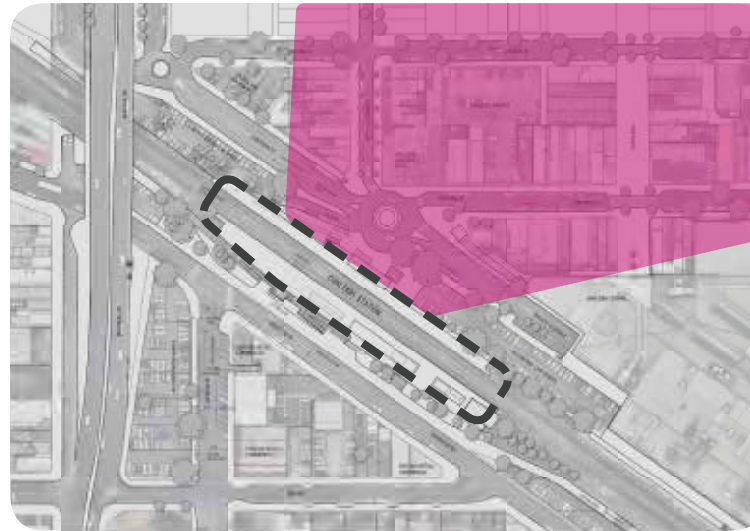
The proposed urban framework includes the following initiatives.

Extended activity:

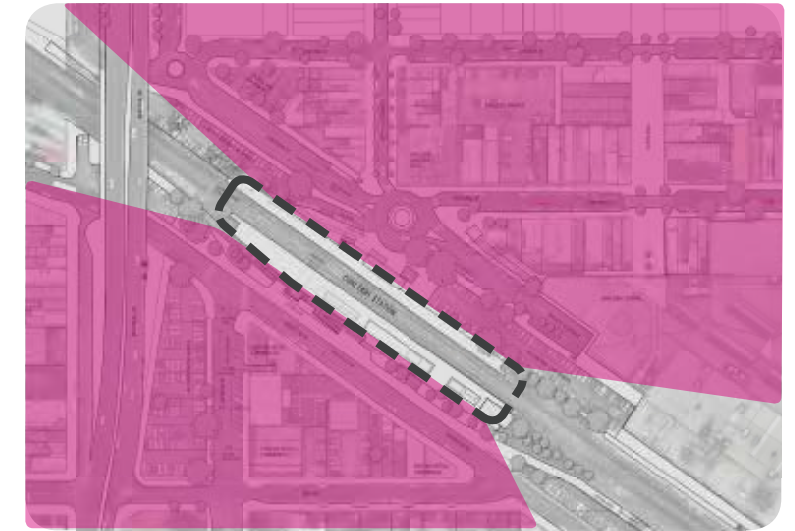
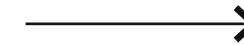
From dormant streets... to active, around a revitalised transport hub.

Currently, pedestrian activity is concentrated in Oakleigh on key streets including Eaton Mall and Portman Street, and to a lesser extent, Station Street and Chester Street. The sense of vibrancy that this activity creates does not extend to the Station environs. The southern side of the rail corridor lacks any significant activity in the public realm.

Proposed urban renewal initiatives comprising redevelopment and public realm improvements around the transport hub, combined with planned upgrades to the Station itself, will revitalise this part of the Activity Centre. This will draw pedestrian activity to both sides of the Station, creating a greater sense of vibrancy, safety and amenity.



From dormant streets...



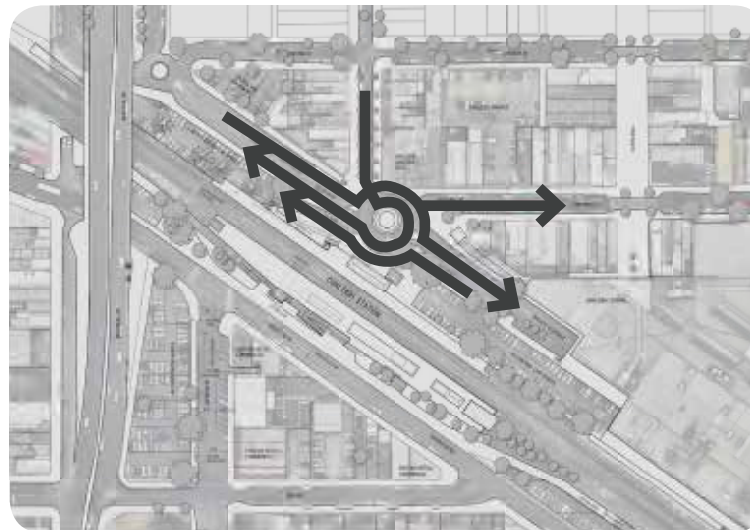
... to active, around a revitalised transport hub.

Station forecourt:

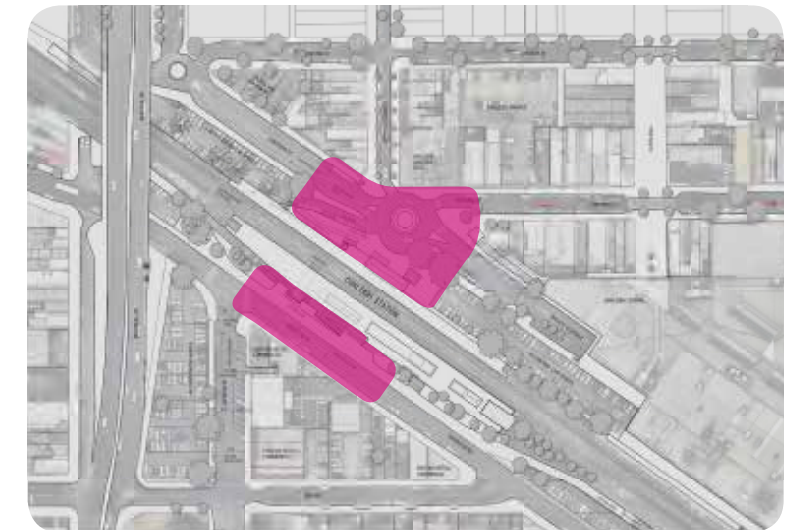
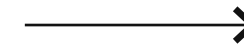
From traffic roundabout... to Station forecourt.

The large roundabout in front of Oakleigh Station creates a traffic-dominated environment and severely restricts pedestrian movement, safety and amenity. It also interrupts the relationship between the heritage Station building, and the heritage Oakleigh Junction Hotel.

The proposed removal of this roundabout, and replacement with a new streetscape treatment at the intersection of Portman and Station Streets, constituting a 'shared space' environment (potentially with 'Barnes' signalised crossing), effectively shifts the focus to people, rather than vehicles. This initiative will create a new, attractive arrival experience in Oakleigh, and facilitate safe, comfortable and universally accessible mobility for pedestrians between the Station, bus interchange and Village Centre.



From traffic roundabout...



...to station forecourt.

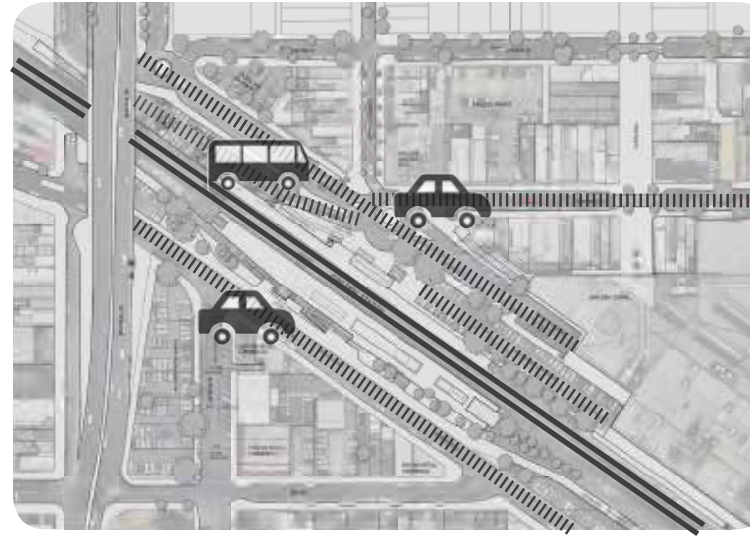
2.0 Urban framework

Connected pedestrian network:

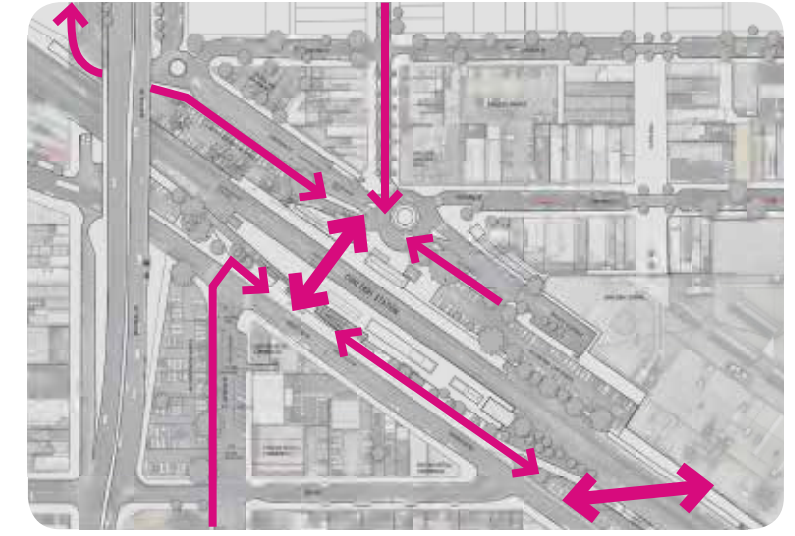
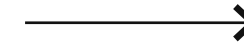
From barriers to walking and cycling... to strong links between the street grid and transport hub.

Walking and cycling is currently restricted in and around Oakleigh's transport hub, by traffic-oriented street configurations, significant traffic and bus movements, narrow footpaths, complex and indirect pedestrian crossings, and roundabout intersections. Limited streetscape activation and poor amenity further constrain walking and cycling.

By enhancing streetscapes and extending the streetscape character of the Village Centre towards the transport hub, while limiting traffic flows and improving bus movements, Oakleigh will become more pedestrian- and bike-friendly, encouraging sustainable transport into and through the Village.



From barriers to walking and cycling...



...to strong links between the street grid

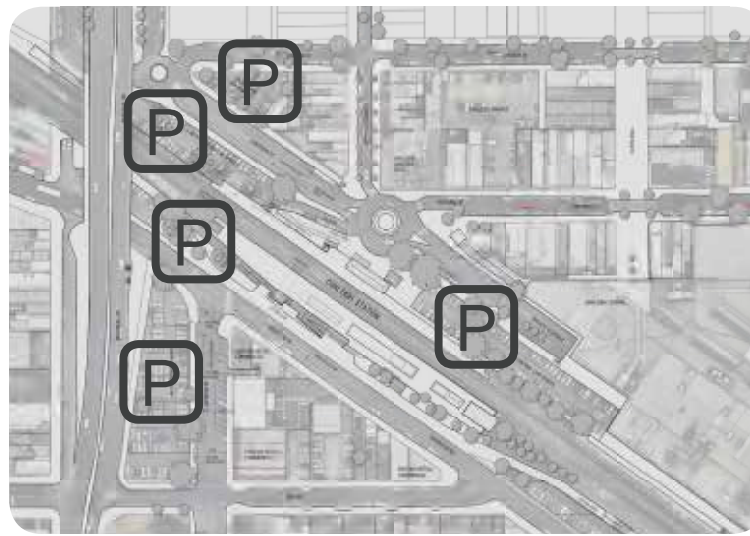
Consolidated parking:

From fragmented car park areas... to integrated developments.

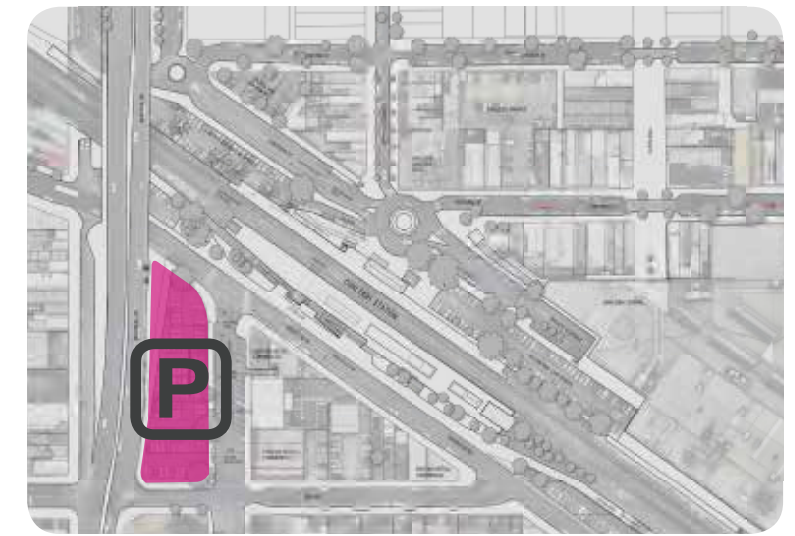
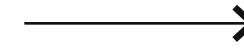
The substantial commuter car parks on both sides of the rail corridor serve to further isolate the Station from the Village Centre, and contribute to the sense of expansive asphalt areas around the transport hub.

Facilitating integrated, mixed-use developments on these sites, while accommodating equivalent or increased commuter parking within a development, will create more comfortable, active and safe streets, extending the Village 'feel' towards the Station, and integrating the Station with the Village street network.

Further, redevelopment will bring increased local resident populations into Oakleigh, which will increase patronage for local shops and businesses, as well as activity levels on the streets.



From fragmented car park areas...



...to integrated developments.

2.0 Urban framework

2.2 Constraints and challenges

The following considerations have been identified through the project workshops.

2.2.1 Development feasibility

Encouraging mixed-use development on underutilised sites around the Station is an important outcome, and well-designed built form will deliver a range of benefits, including activation, safety, passive surveillance and an improved 'look and feel' of the area.

The proposals for redevelopment, set out below, are predominantly on publicly-owned land, while opportunities for future development on private land are also identified consistent with Oakleigh Major Activity Centre Structure Plan 2012.

It is recognised that enhanced streetscape/ public realm conditions may act as a catalyst to new development, as the locality becomes more attractive, walkable and amenable.



2.2.2 Public realm as catalyst to development

It is recognised that improvements to the public realm will enhance the attractiveness of the location for private-sector-led development opportunities. The planned LXRA Station Upgrade works will improve the presentation of the Station and immediate environs on both north and south sides of the rail corridor.

More expansive improvements will contribute to this area becoming more attractive, amenable, safe and comfortable, which is expected to enhance redevelopment prospects, both on publicly-owned land, and private landholdings, over time.

2.2.3 Commuter car parking

Commuter car parking is considered an inefficient and sub-optimal use of land immediately adjacent to Oakleigh Station, and does not contribute to activation, visual interest or passive surveillance.

VicTrack's general principle is that lost commuter parking should generally be replaced in the same location or general area, or potentially at nearby Stations on the same or different lines. It is understood that car parking has recently been significantly expanded at nearby Huntingdale Station, and that the grade separation works between Caulfield and Dandenong will ultimately deliver increased car parking generally, but this increase is yet to be quantified or confirmed by PTV. It would be expected that there would be no net loss of commuter car spaces at Oakleigh.

This issue requires further discussion with VicTrack.

2.0 Urban framework

2.3 Link and Place approach

Link and Place is a system of categorising streets, developed in the UK and applied widely, including in South Australia, through which all streets may be identified as a certain extent of “link” (access way) and/or “place” (space to spend time in).

Link and Place is a new approach to planning and designing urban streets, based on their “Link” and “Place” functions, which include transport performance, economy and environmental indicators. As a Link, a street is for movement and designed for users to pass through as quickly and conveniently as possible, in order to minimise travel time; while as a Place, the street is a destination in its own right, where people are encouraged to spend time taking part in activities. Both functions have their own sets of design requirements (Jones & Boujenko, Link and Place, A New Approach to Street Planning and Design).

It is appropriate within Activity Centres to evolve streets to become Places, to attract pedestrian activity, outdoor dining and social interaction, rather than purely Links or through-routes which people may not want to spend time in.

The proposals set out below for Oakleigh work effectively to shift Portman Street/bus interchange, the Station Street intersection, and Johnson Street more towards “Place” and less as purely “Links”. Haughton Road is retained as a Link (and perhaps reinforced as such, by shifting bus stops from Johnson Street to this road), although the planned LXRA Station upgrade works contribute to Haughton Road as a “Place” also.

This is in line with wider and longer term/ ongoing initiatives in Oakleigh to make streets into Places (Eaton Mall, other street upgrades etc.)



Eaton Mall is the primary public space / streetscape in central Oakleigh.

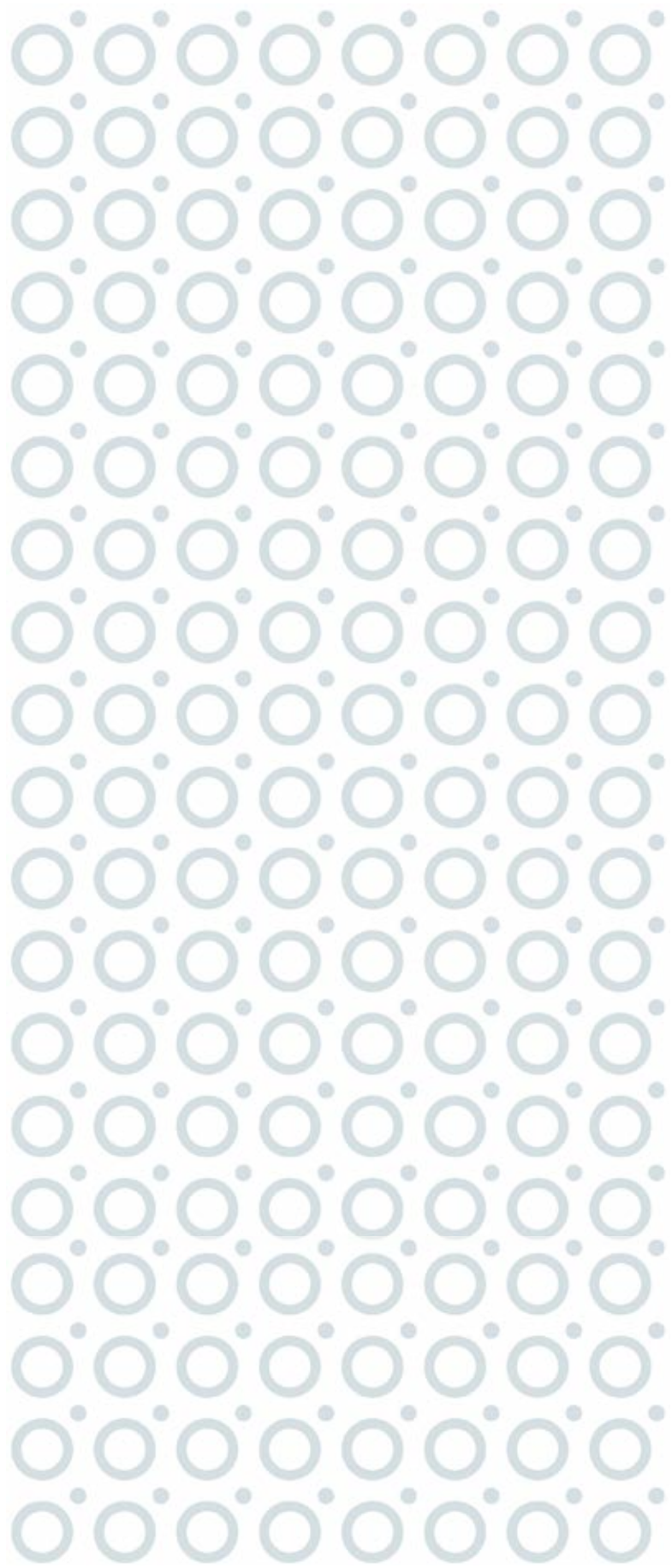


2.0 Urban framework

2.4 Potential development sites

The following plan diagram shows the identified potential redevelopment sites:





Chapter 3.0
Individual site proposals

3.0 Individual site proposals

3.1 Summary of sites and proposals

Zone A: Site 1:

Existing: Oakleigh Central land, vacant (entrance canopy, paved public space).

Proposed (Option 1): Single-storey pavilion/kiosk building, retail/café, activated public space.

Proposed (Option 2): Two-storey infill development, active ground floor (retail, food and beverage).

Site 2:

Existing: VicTrack land, commuter parking, bike storage, paved public space.

Proposed (Option 1): Single-storey pavilion/kiosk building, retail/café, car park retained.

Proposed (Option 2): Two-storey infill development, ground floor commercial, first floor residential.

Potential future integrated development in conjunction with redevelopment of Oakleigh Central.

Public realm (Portman/Station Street intersection):

Existing: Roundabout.

Proposed: Paved streetscape treatment and extended pedestrian zones.

Zone B: Site 3 (A and B):

Existing: VicTrack-owned retail properties (3A), Council-owned surface car park (3B).

Proposed: 3-storey residential townhouse developments (live/work) with ground floor office frontage and kiosk retail tenancy.

Site 4:

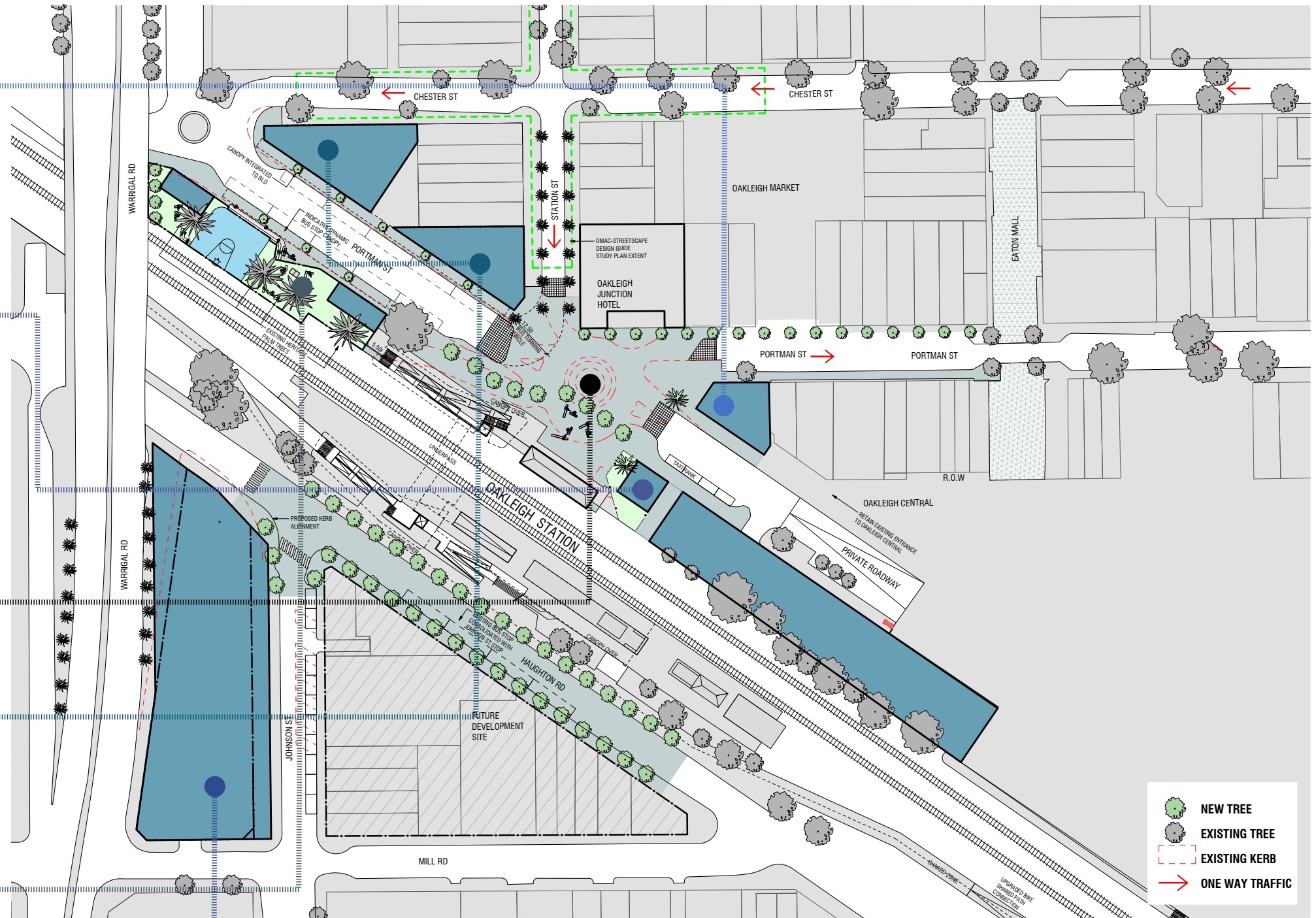
Existing: VicTrack land, commuter car parking.

Proposed: Public open space (passive/active), two pavilion/kiosk units (retail/café/community uses), and improved bus interchange user experience.

Zone C: Site 5:

Existing: VicTrack land, with component of Council land, commuter car parking.

Proposed: 8-storey residential development comprising townhouses (live/work), apartments and commuter car parking (replacement for commuter parking on Sites 2, 4 and 5).



3.0 Individual site proposals



3.2 Zone A

3.2.1 Site 1

Existing conditions

The site is owned by Vicinity, as part of the Oakleigh Central shopping centre;

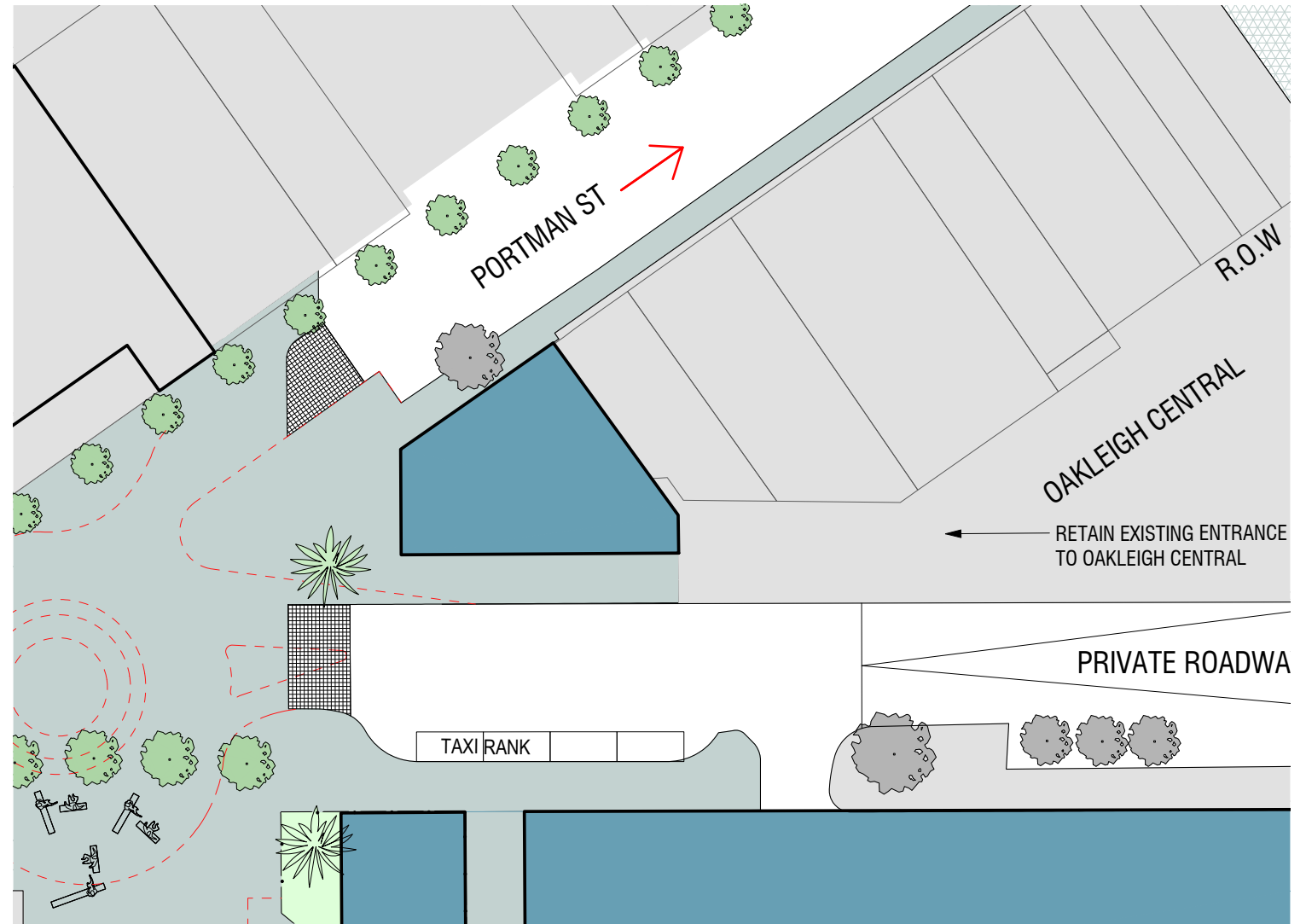
It currently contains public open space and an open canopy and covered way connecting to a secondary shopping centre entrance, alongside the vehicle access ramp.

Objectives

- Extend fine-grain streetscape conditions of Portman Street towards the station
- Increase activation around the Station
- Reduce open-ill-defined space around the Station.

Proposal

- Oakleigh Central to develop prominent 'corner building' on land between Portman Street and the shopping centre access road, comprising retail, food and beverage and commercial space (up to 3-storeys), with potential upper level roof deck, providing a distinctive public/café experience overlooking this central heart of Oakleigh
- Retain pedestrian access into Oakleigh Central, via indoor route (along line of existing path)
- This building could be occupied by a retail or food and beverage tenant, such as:
 - Small café or coffee kiosk, with outdoor seating;
 - Fresh produce or gourmet/ local food retail;
 - Health food store or delicatessen;
 - Bakery, cake shop or ice creamery.



Site 1 existing conditions, from Portman Street.



Existing subway access road below Oakleigh Central shopping centre.

3.0 Individual site proposals

(image source: Contemporist dot com)



Proposal – Stand Alone

- Install lightweight pavilion/kiosk building immediately west of the existing laneway connection to Portman Street, facing towards the north (Portman Street) and west (Station forecourt)
- Improve the adjoining public open space 'triangle' between Portman Street (east) and the Oakleigh Central access road, including new paving to match the Station forecourt
- The kiosk should contain a small retail, café or similar use, to help activate and animate this area, at the entrance to both Oakleigh Central and Portman Street (east).

Potential benefits

This initiative will:

- Reduce the expanse of space around the northern Station entrance, and contribute to a more defined, enclosed, intimate character
- Increase activity and activation close to the Station
- Improve the image and presentation of this area, on arrival from the station
- Make better use of the north-facing space between Portman Street and the Oakleigh Central access road, for public use
- Enhance the entry experience to Oakleigh Central
- Provide new commercial/community space for small-scale operations.



(image source: Google)



(image source: Stephenson and Turner)



(image source: Pinterest)



(image source: MJ Richardson Creative Commons)

3.0 Individual site proposals



Kiosk site

VicTrack Car Park site

3.2.2 Site 2

Existing conditions

This area is in VicTrack ownership, and falls within the railway corridor land. It is currently underutilised and unsightly area in front of and beside the main Station building. It contains a 'parkiteer' bicycle storage cage, which is proposed to be relocated.

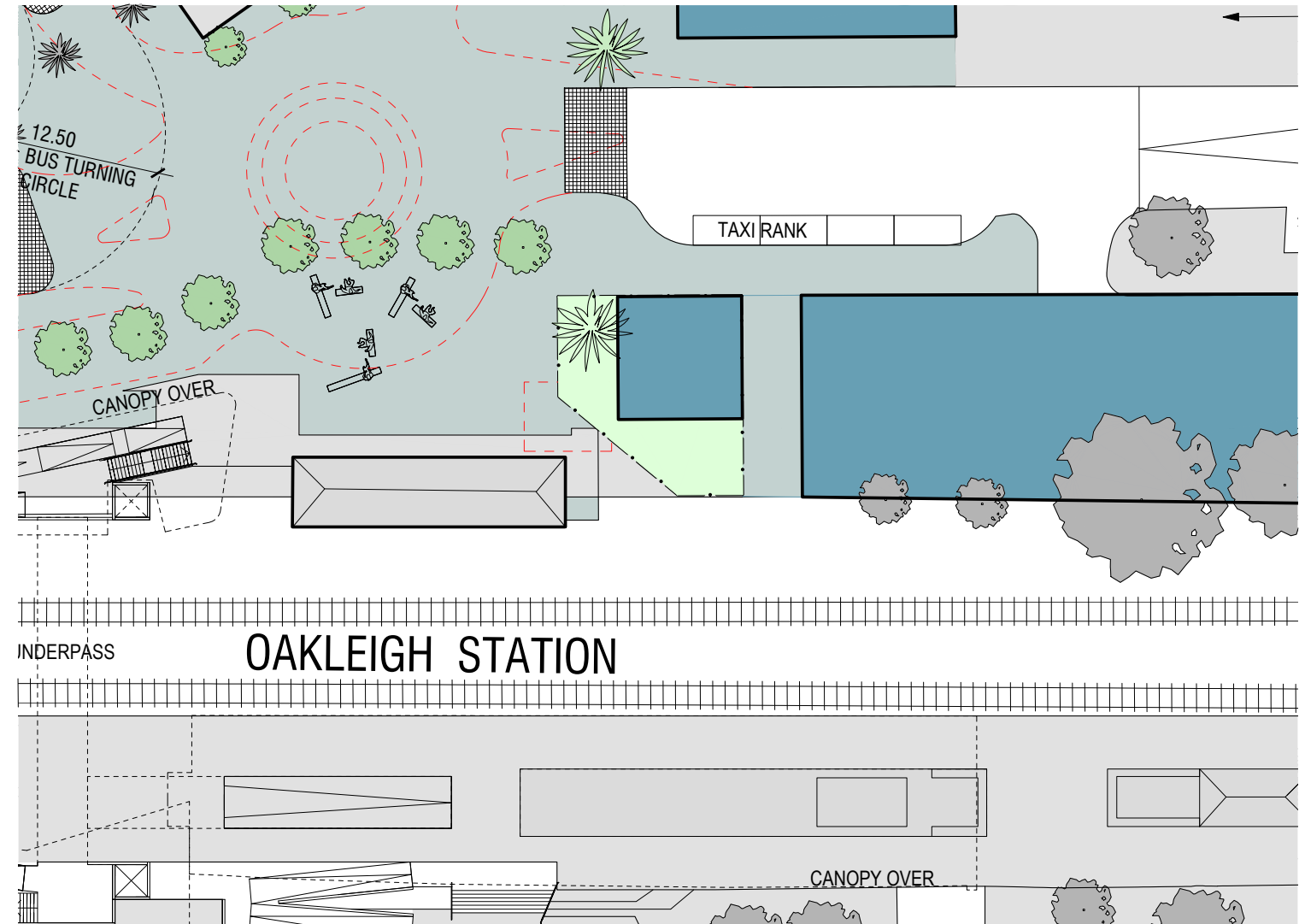
This area also forms the western end of the north-east commuter car park.

Objectives

- To 'frame' the heritage Station building
- To create an edge to the new station forecourt
- To increase activation around the Station
- To reduce the extent of open, ill-defined space around the Station.

Proposal – Kiosk site

- Develop low-height (1-2 storeys) lightweight pavilion/kiosk building between the existing Station building and commuter parking, for retail and community uses
- This building could be occupied by a range of selected community or commercial uses, such as:
 - Small café or coffee kiosk;
 - Bicycle repair shop, with bicycle storage;
 - Small convenience retail, dry cleaning, newsagency.



Proposal – VicTrack Car Park site

- Utilise existing surface commuter parking for higher-value land use potentials
- Develop elongated 2-storey mixed-use building, for commercial/studios at ground floor, and residential at first floor.
- Unviable due to site constraints and challenging interfaces, being located between the rail corridor and ‘back of house’ areas of Oakleigh Central
- It is likely to be preferable to consider the commuter car park land as part of a larger redevelopment potential with Oakleigh Central (see 3.2.3 below), incorporating mixed-use retail, commercial and upper level residential uses.

Potential benefits

This initiative will:

- Create a defined edge and enhance activation close to the northern Station building
- Reduce the expanse of ill-defined space around the northern Station entrance, and contribute to a more defined, enclosed, intimate character
- Improve the image and presentation of this area, on arrival from the station
- Provide new commercial/community space for small-scale operations.



Existing roundabout in front of Oakleigh Station.



Contemporary building 'frames' a Montreal heritage building.

(image source: Design Source Guide)



Lightweight pavilion/kiosk building.

(image source: Modscape)



Lightweight pavilion building.

(image source: Modscape)

3.0 Individual site proposals



3.2.3 Zone A: Private landholdings (future redevelopment opportunity)

Existing conditions

The area east of Sites 1 and 2 comprises property owned by VicTrack (commuter car parking along the rail corridor), and Vicinity (Oakleigh Central Shopping Centre).

The commuter car park contains approximately 83 spaces.

Objectives

- To address the challenging interface and public realm issues in this area
- To enhance the experience of arriving and accessing Oakleigh Central
- To make better use of surface car parking land close to Oakleigh Village and the Station
- To make better use of the space 'above' the shopping centre, and encourage a wider mix of uses
- To enhance the presentation of Oakleigh Central to the rail corridor, and to support activation and passive surveillance to this area, including the planned new bicycle (shared user path) underpass.

Proposal

This area is identified as a future redevelopment opportunity, potentially in partnership between VicTrack and Vicinity.

The loss of car parking that would result has been replaced in the proposal for Site 5, Option 3 (below).

A mixed-use redevelopment could comprise integrated retail, commercial, community spaces and residential development above, potentially with accessible roof deck or elevated courtyard.

Charter Keck Cramer have identified the potential for a smaller supermarket such as an Aldi Store in this part of Oakleigh Central.



Existing VicTrack commuter car park, and rear interface to Oakleigh Central shopping centre.



Entrance to existing VicTrack commuter car park from Oakleigh Central subway access road.

3.0 Individual site proposals



3.2.4 Zone A: Public realm

This central public realm area is envisaged as an enhanced 'heart' of Oakleigh Village, with seamless connections into Eaton Mall, Station Street, Portman Street and the (enhanced) bus interchange.

Existing conditions

This area is dominated by road surface and a large central traffic roundabout. Footpath space is constrained spatially, and pedestrian amenity is impacted by lack of space, traffic movements and lack of activation. Pedestrians are forced to take indirect and unclear routes between the Station and the Village.

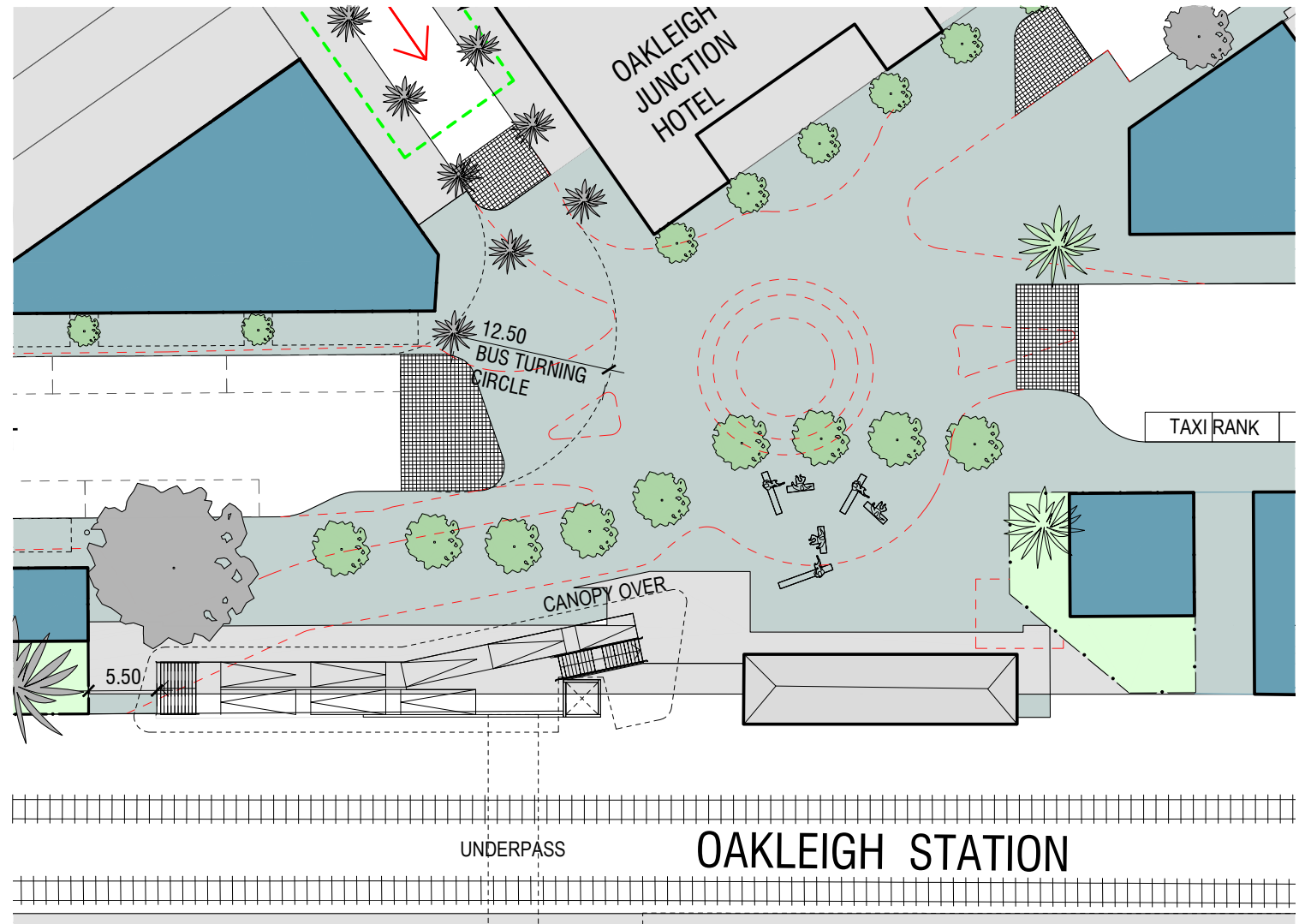
The heritage station and Hotel buildings help to define this space, but the visual relationship is affected by the traffic conditions in between.

As a result, the Station area feels expansive and open, and separate and disconnected from the Village itself, and the public realm is fragmented, ill-defined, cluttered and unloved.

The existing station building will be enhanced by removal of the existing 'lean-to' building, along with new ramps, stairs, lifts and canopy over the pedestrian underpass, as part of the planned LXRA Station upgrade works.

Objectives

- To better connect the Station with the Village
- To enhance the amenity and presentation of the station forecourt area
- To reduce the impact of traffic movements in front of the station
- To provide for safe, legible and direct pedestrian accessibility between the Station and the Village.



Pedestrian crossings and access routes to the Station are indirect, narrow and complicated, creating barriers to movement for people.

3.0 Individual site proposals

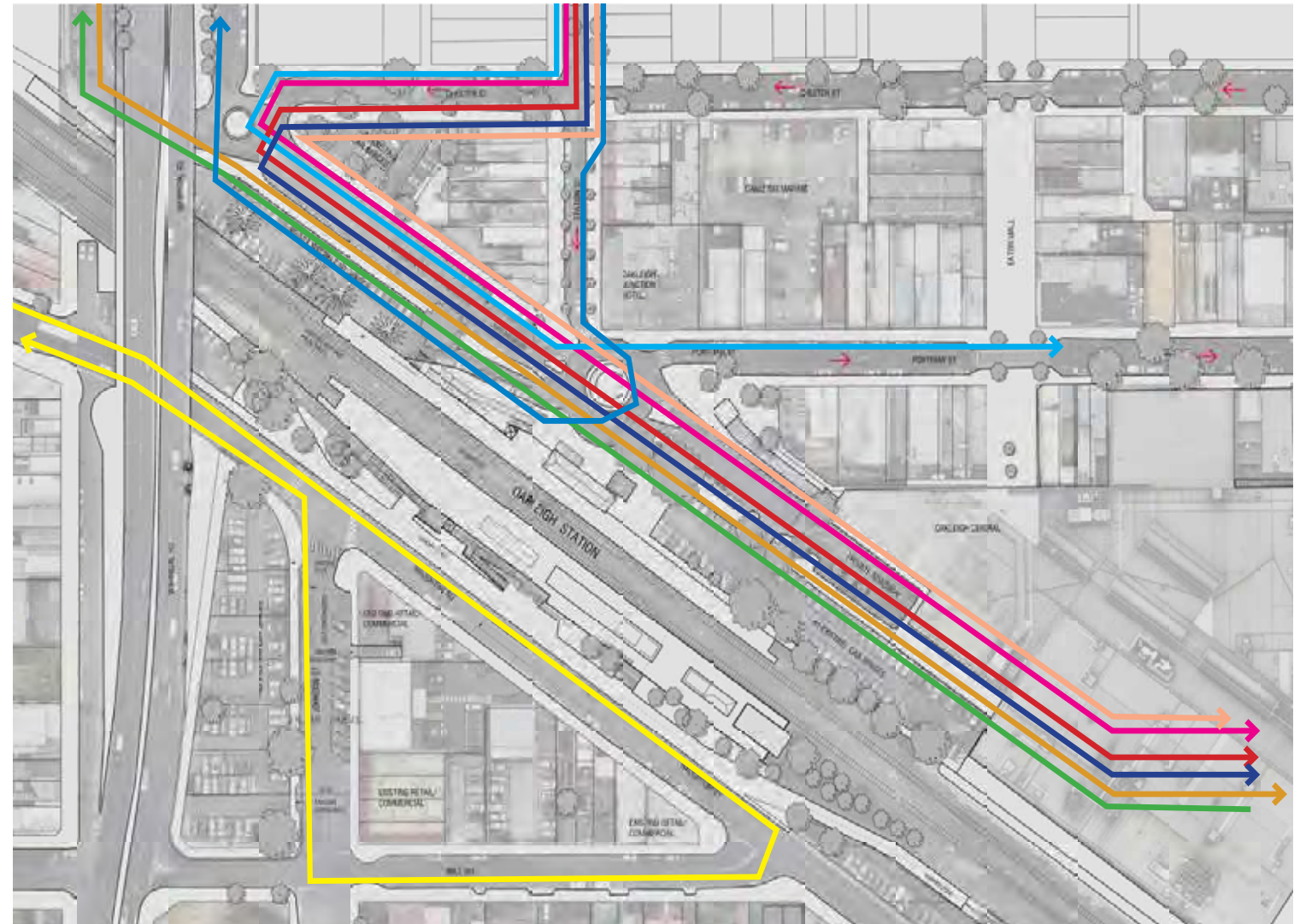
Proposal

- The central roundabout is proposed to be removed
- A new Station forecourt is established
- The forecourt surface will match the pavement of Eaton Mall, and will extend across into Portman Street (east and west) and the intersection with Station Street, creating continuous, seamless and direct pedestrian movement routes to/from the Station
- The central intersection area will become a 'shared space' with distinctive surface treatment which is subtle in colour (provisionally toned concrete). Entry points to this central intersection will be treated with a 'rumble' surface such as bluestone pavers, to help slow traffic down. Traffic movement routes will be clearly defined by the pavement treatment and bollards
- Existing power transmission lines would be undergrounded, and new street lights and street trees installed. Street furniture, lighting and signage to the Station forecourt will be subject to future detailed design.

Potential benefits

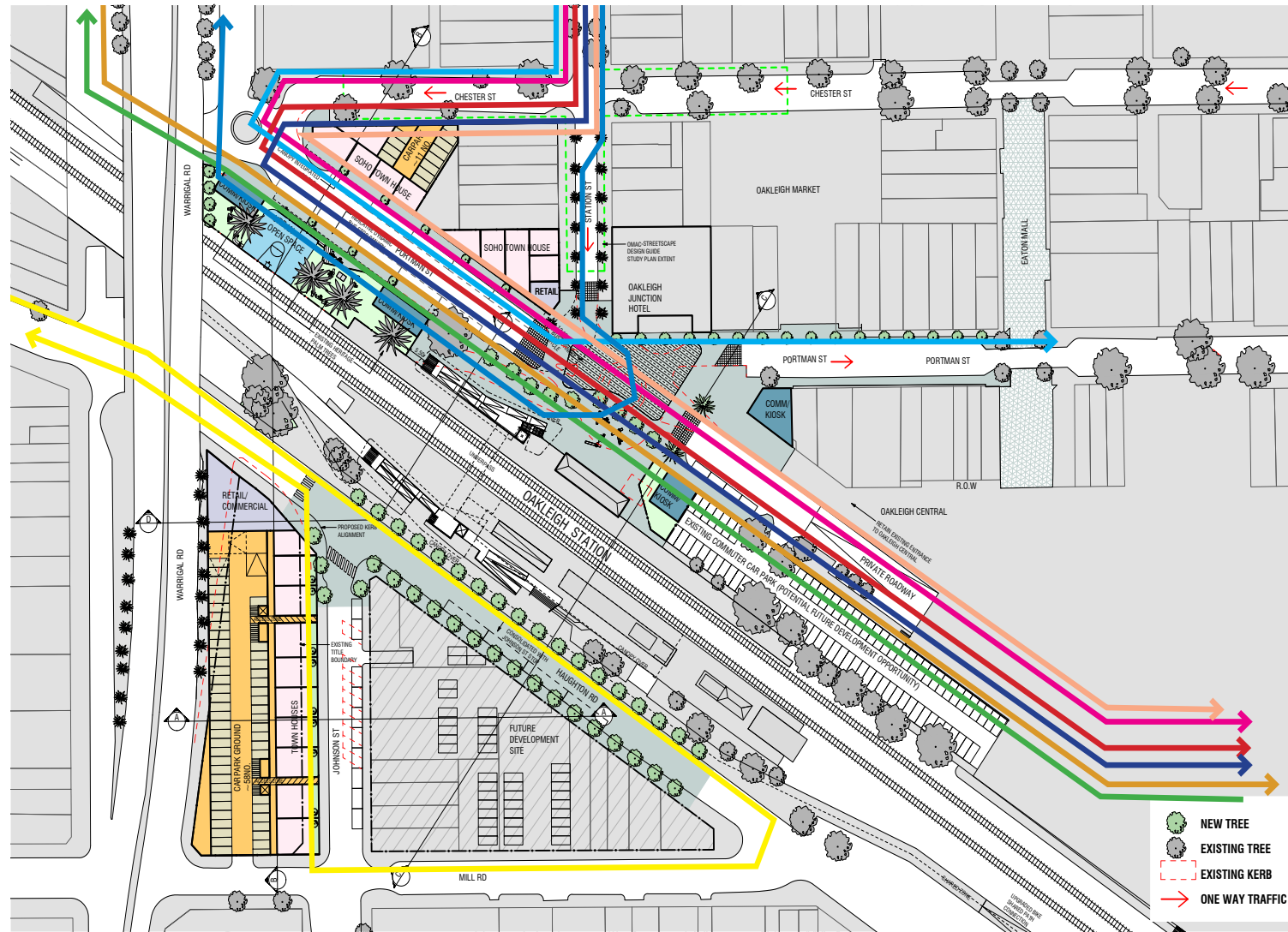
This initiative will:

- Remove the primary barrier to pedestrian connectivity between the Station and the Village
- Improve pedestrian safety and amenity in the Station precinct, and contribute to increased pedestrian activity
- Improve the image and presentation of this area
- Improve bus operations, including an easier right-turn from Station Street
- Improve connections and reinforce the axial alignment from Station Street to the northern Station building
- Enhance the entry experience to Oakleigh Central.



*Diagrammatic map of existing bus routes, derived from PTV maps, demonstrating that routes are not changed or interrupted by the proposed streetscape works.
(bus route data source: PTV route maps)*

3.0 Individual site proposals



Bus turns right from Station Street into Portman Street bus interchange, demonstrating the challenges of turning movements through the existing roundabout.

Proposed streetscape and public realm upgrades allow retention of all existing bus routes.
 (bus route data source: PTV route maps)

- **Route 624:**
Kew - Oakleigh Stn
- **Route 693:**
Belgrave - Oakleigh
- **Route 701:**
Oakleigh - Bentleigh
- **Route 704:**
East Clayton - Oakleigh
- **Route 742:**
Eastland - Chadstone
- **Route 800:**
D'nong Stn - Chadstone
- **Route 802/804/862:**
D'nong - Chadstone
- **Route 900:**
Stud Park - Caulfield
- **Route 903:**
East Clayton - Oakleigh

3.0 Individual site proposals



Proposed Station forecourt/streetscape to Portman Street, viewed from the north-east.

3.0 Individual site proposals



Proposed station forecourt space (concept only), looking west towards bus interchange.

3.0 Individual site proposals



3.3 Zone B

3.3.1 Zone B: Site 3

Existing conditions

VicTrack owns a cluster of four (4) properties in the southern corner of this triangular street block, namely 29, 31, 33 and 35 Station Street.

City of Monash owns the surface car park area in the western corner of this block.

The central triangular property fronting Portman Street, and the northern properties fronting Station Street, are privately owned.

The bus interchange on Portman Street lacks activation, passive surveillance and sense of enclosure, due to the generally 'open' frontages and rear interfaces.

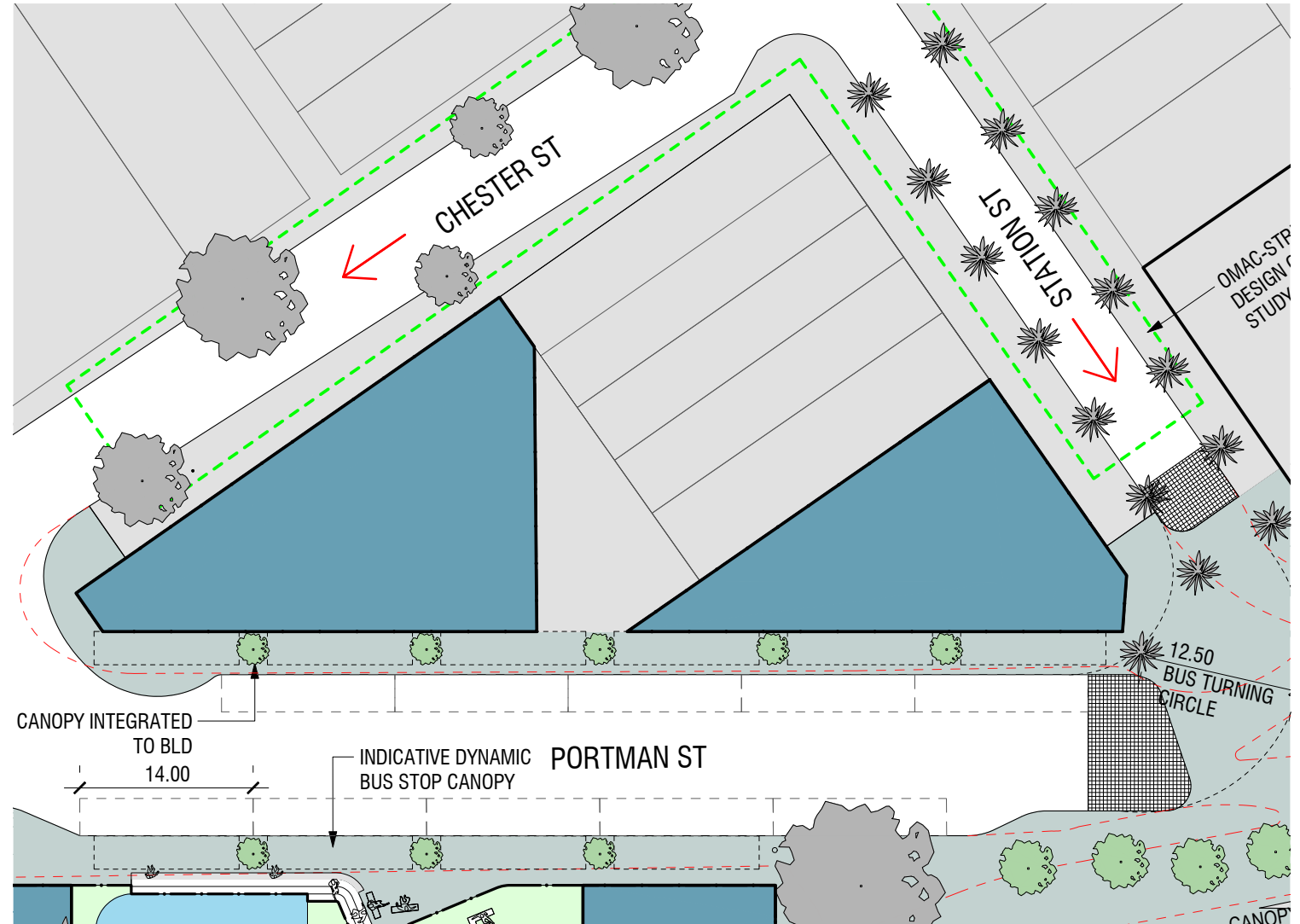
Objectives

- To increase streetscape definition, activation and amenity to the bus interchange on Portman Street
- To increase residential accommodation in the Village, close to the Station
- To create increased activity at the periphery of the Village Centre
- To improve the appearance and amenity of areas close to Warrigal Road
- To enhance the entry experience and 'gateway' into Oakleigh from the west.

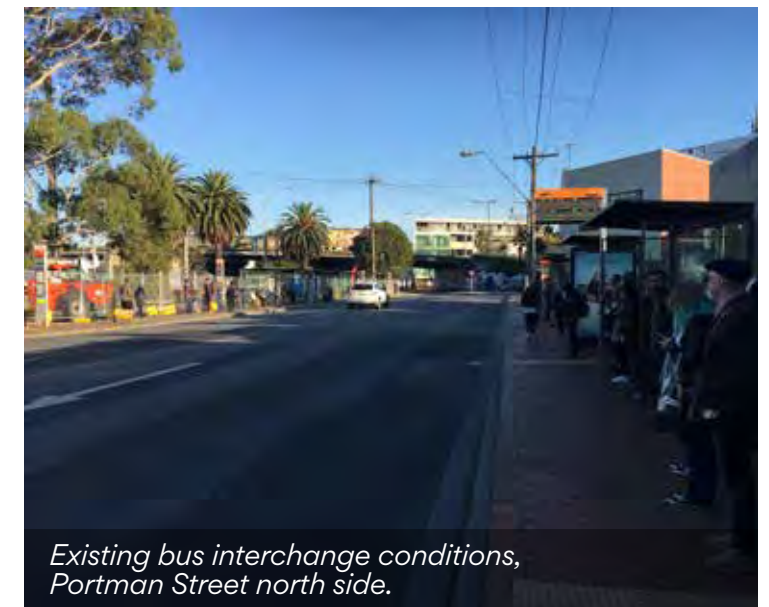
Proposal

Develop two separate buildings on Council owned and Victrack owned properties consistent with Oakleigh Major Activity Structure Plan 2012:

- Active street frontages with residential above
- Explore potential for joint development opportunities.



Existing built form to be retained, Station Street.



Existing bus interchange conditions, Portman Street north side.

3.0 Individual site proposals

Potential benefits

This initiative will:

- Increase activation and passive surveillance to the bus interchange
- Increase shelter and amenity for pedestrians at the bus interchange
- Reduce the visual impact of surface car parking and 'back of house' areas
- Extend the characteristic urban 'grain' of the Village towards its peripheral areas
- Enhance the image and presentation of this part of the Village and bus interchange area
- Provide new commercial/kiosk space for small-scale operation
- Provide new residential live/work spaces in the Village centre.



3-storey contemporary urban townhouse/apartment development.

(image source: Pinterest)



Existing car park, Portman and Chester Streets.



Existing bus interchange environment, Portman Street.



(image source: Pinterest)

3.0 Individual site proposals



3.3.2 Zone B: Site 4

Existing conditions

This block is VicTrack-owned, and is located with the rail corridor, as is used for commuter car parking (although has recently been occupied for construction/civil works).

It currently contains approximately 40 commuter parking spaces.

A row of heritage palm trees exists within this site.

Objectives

- To increase streetscape definition, activation and amenity to the bus interchange on Portman Street
- To make better use of land within the transport interchange
- To enhance activation, vibrancy and passive surveillance
- To provide recreational facilities for the growing local population
- To create increased activity at the periphery of the Village Centre
- To improve the appearance and amenity of areas close to Warrigal Road
- To enhance the entry experience and ‘gateway’ into Oakleigh from the west
- To retain visual connection between the train platforms and the bus interchange
- To ‘frame’ the heritage Station building
- To reduce open-ill-defined space around the Station.

Proposal

- Install new 1-storey lightweight pavilion/ kiosk buildings at both ends of the site (Sites 4A and 4B), to face and frame the Station/forecourt, and the Warrigal Road ‘end point’
- Create new public open space in between, potentially comprising ‘urban’ sports facilities such as half-court basketball, small running track, outdoor gym equipment, as well as tiered seating and lawn/play areas.

Potential benefits

This initiative will:

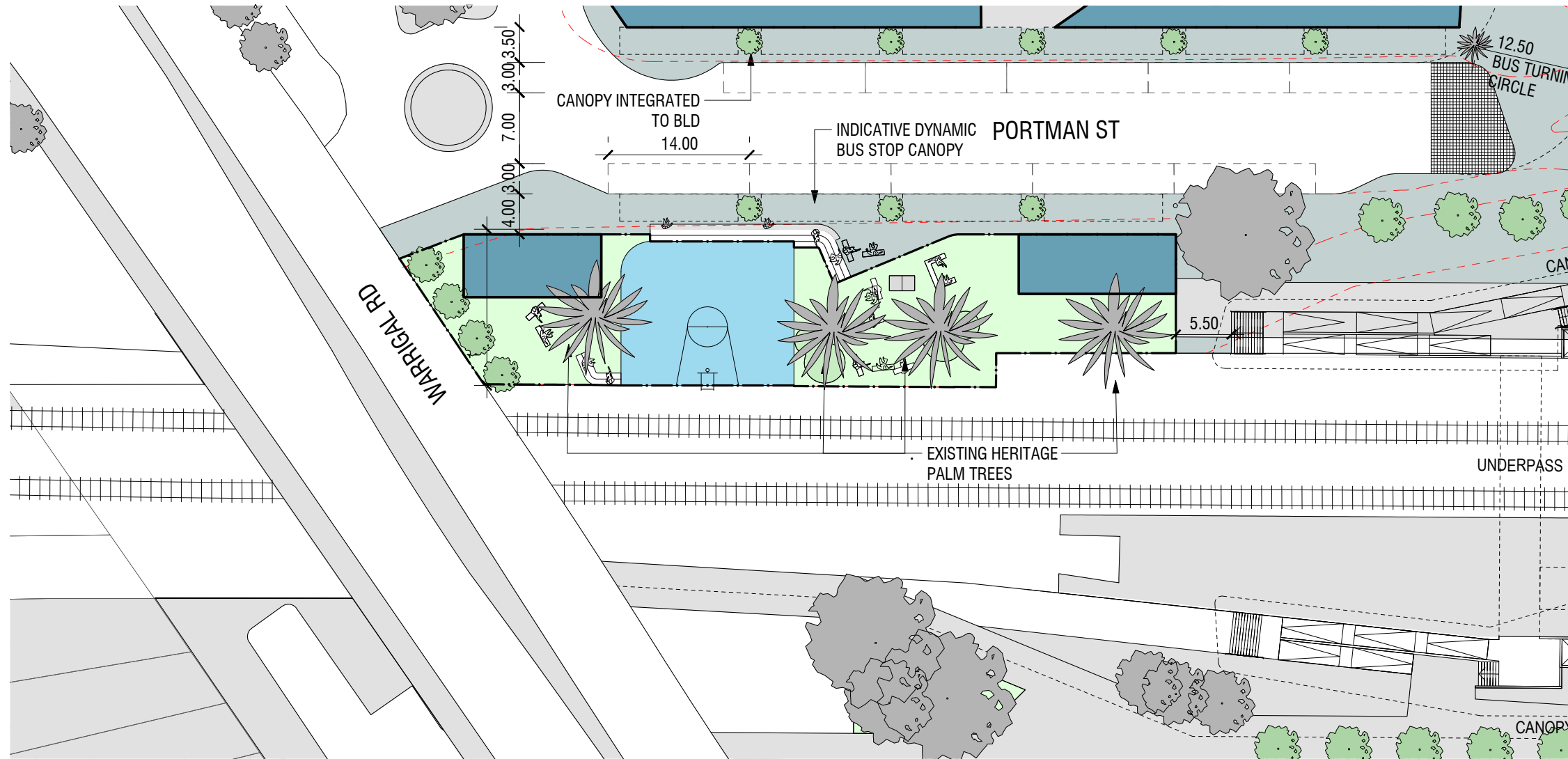
- Provide new commercial/community spaces for small-scale operations
- Make better use of existing surface car parking land
- Enhance the image and presentation of this part of the Village and bus interchange area
- Increase shelter and amenity for pedestrians at the bus interchange
- Reduce the visual impact of surface car parking and ‘back of house’ areas
- Increase activation and passive surveillance to the bus interchange.



Heritage palm trees and existing bus interchange, Portman Street south side.



Existing bus interchange on Portman Street, viewed from the central roundabout.



RMIT temporary urban recreation space.



RMIT temporary urban recreation space.

(image source: Peter Elliott Architects)



Box Hill Gardens.

(image source: Andrew Lloyd)



Monash University Caulfield urban sports/recreation space.

(image source: The Commercial Gallery dot com)



RMIT temporary urban recreation space.

(image source: Peter Elliott Architects)

3.0 Individual site proposals



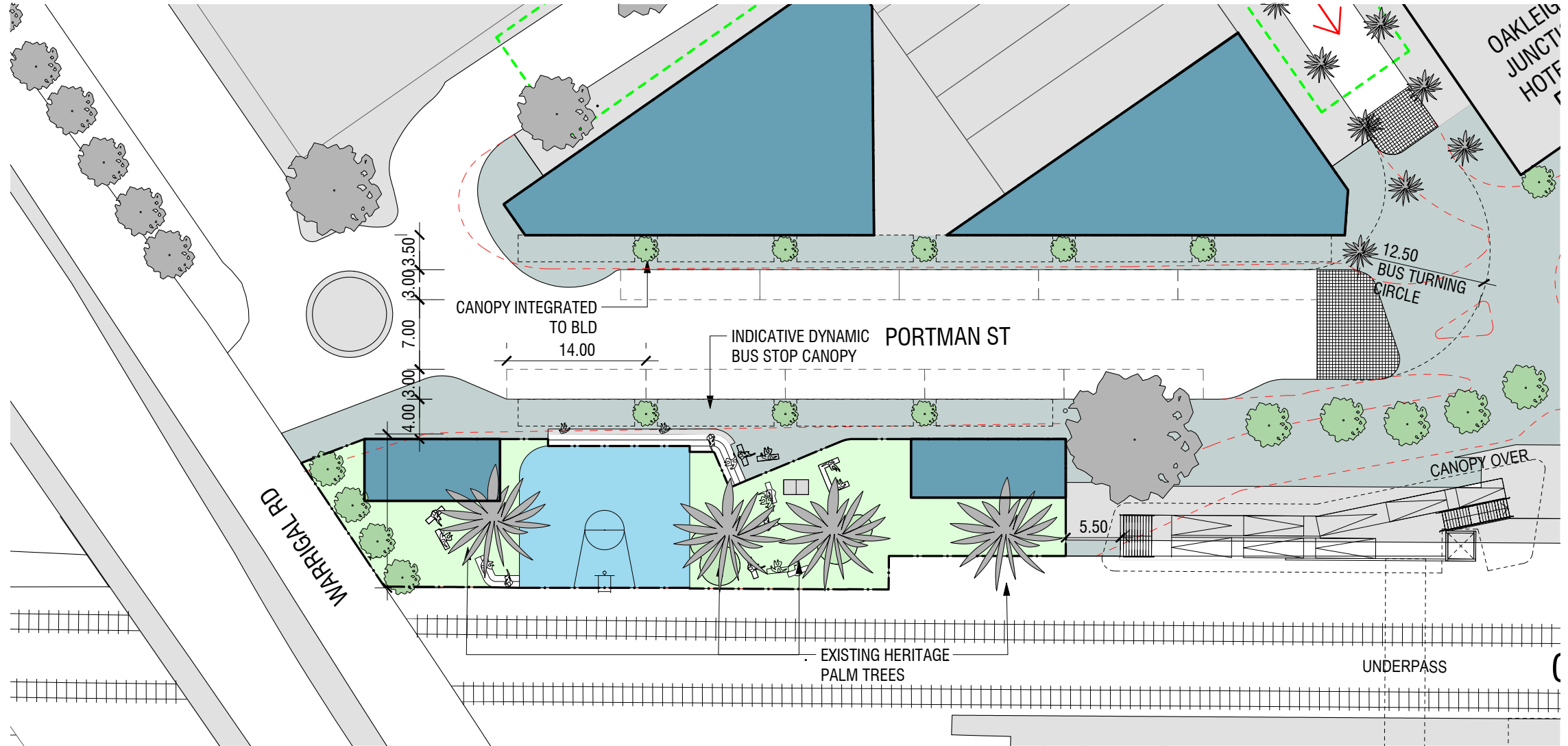
3.3.3 Zone B: Public realm (bus interchange)

Existing conditions

The existing bus interchange is street-based and linear, with buses running in both directions, stopping in bus bays on both sides of Portman Street. The buses appear to utilise a 'dynamic' system whereby stopping buses use the front or furthest available stopping bay.

Some buses were observed to 'layover' in the bus interchange for several minutes, but most move through the interchange quickly during morning peak.

While freestanding bus shelters are provided, the bus interchange lacks adequate pedestrian waiting space, shelter and amenity.



Existing bus interchange, Portman Street.



3.0 Individual site proposals

Objectives

- To improve amenity for pedestrians in the bus interchange
- To retain or enhance bus operational functionality.

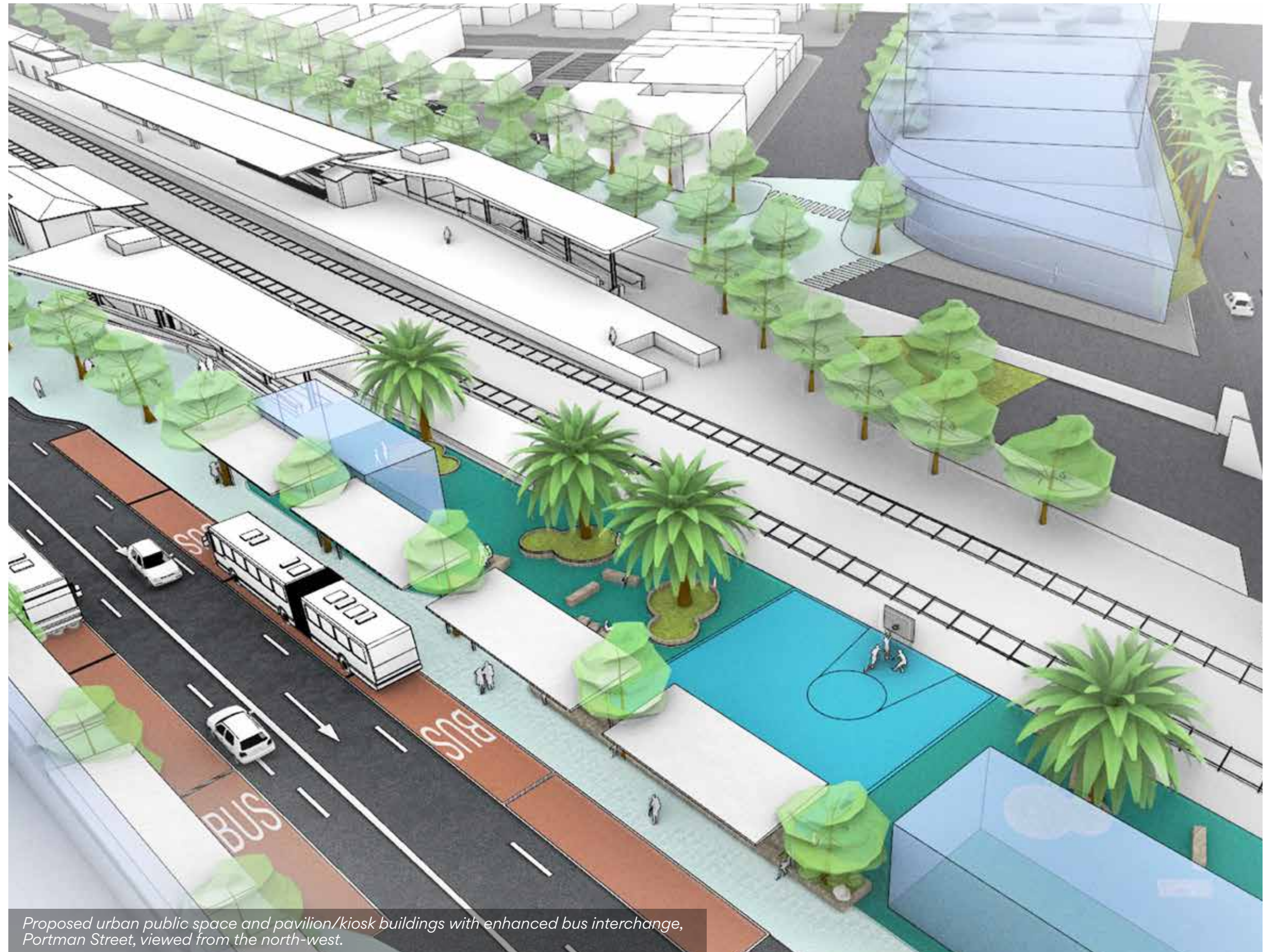
Proposal

- Realign Portman Street kerbs to provide for wider footpaths on both sides, with opportunities for new street trees
- Provide expanded shelters to the footpath area (fixed to buildings on the north side)
- Underground existing overhead power lines
- Install new pavement materials, lighting and street furniture in accordance with established guidelines for the activity centre.

Potential benefits

This initiative will:

- Enhance the experience and comfort of waiting for buses
- Improve the safety and amenity of the street-based interchange.



Proposed urban public space and pavilion/kiosk buildings with enhanced bus interchange, Portman Street, viewed from the north-west.

3.0 Individual site proposals



Proposed bus interchange streetscape and public open space (indicative concept only), Portman Street south side.

3.0 Individual site proposals



3.4 Zone C

3.4.1 Site 5

Existing conditions

This irregular-shaped block is predominantly VicTrack-owned, with a portion of Council-owned land near the northern end, and is used for commuter car parking.

It currently contains approximately 78 commuter parking spaces.

It interfaces with an embankment to the elevated Warrigal Road, which contains a row of palm trees planted close to the roadway.

VicTrack has received “Transport Clearance” to pursue redevelopment on this site.

Objectives

- To make better use of inefficient surface car parking area
- To increase activation to Johnson Street
- To enhance commuter parking experience, safety and security (potential)
- To increase activation around the Station
- To increase residential accommodation in the Village, close to the Station
- To create increased activity at the periphery of the Village Centre
- To improve the appearance and amenity of areas close to Warrigal Road.



Existing Warrigal Road embankment interface to Site 5, viewed from Haughton Road.



Existing commuter car park and Warrigal Road embankment interface.



3.0 Individual site proposals

Proposal

- Increase the site area to accommodate efficient car parking layouts, including narrowing of Johnson Street by 2.5m at ground floor level, and extension of the site into the Warrigal Road embankment
- Potential for residential-focused development, which also provides the full complement of Oakleigh Station commuter park and own site parking needs. For example:
 - Ground/First floors: 2-storey Live/Work townhouse units, and single commercial unit fronting Houghton Road and parking for residents
 - Level 2: Parking for commuters (120+ spaces)
 - Levels 3-7: Residential apartments, with significant setback to Warrigal Road interface for amenity considerations.



(image source: ClarkeHopkinsClarke)



(image source: Urban Melbourne)

3.0 Individual site proposals

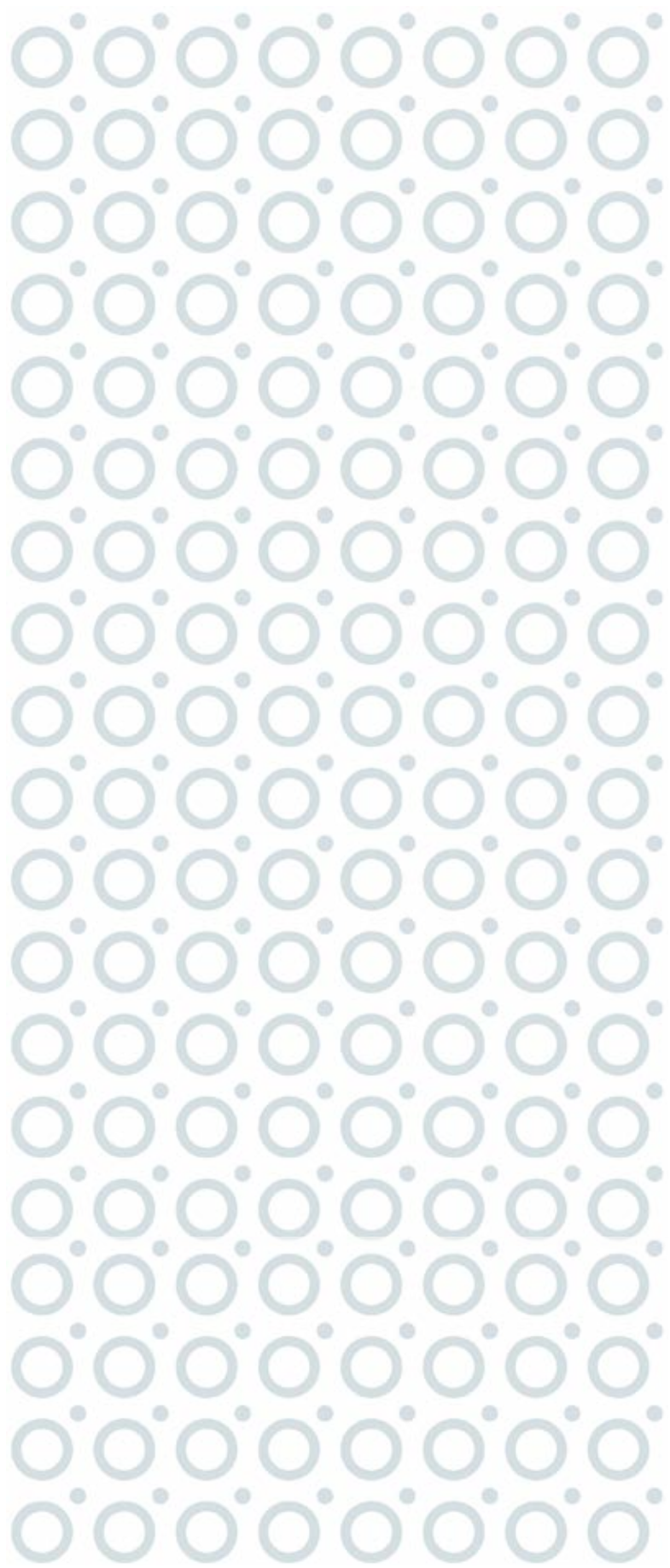
Potential benefits

This initiative will:

- Enhance the image and presentation of this part of the Village south of the rail corridor
- Reduce the visual impact of surface car parking and 'back of house' areas
- Make better use of existing surface car parking land
- Increase activation and passive surveillance to adjacent streets
- Contribute to a more intimate, pedestrian-friendly, defined streetscape character on Johnson Street
- Provide new commercial/community spaces for small-scale operations
- Provide new commercial space for small-scale operation
- Provide new residential live/work spaces, and new residential apartments, in the Village centre
- Contribute to an urban edge and acoustic 'buffer' to the Warrigal Road edge.

Ground Floor, with residential parking.





Chapter 4.0: Appendix A
Full A3 drawing set

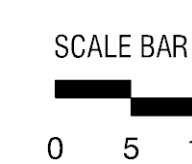


GENERAL NOTE
 ALL DRAWINGS HAVE BEEN PREPARED FOR HIGH LEVEL MASTERPLAN CONCEPTS ONLY AND HAVE BEEN PREPARED FROM DISPARATE BASE EXISTING CONDITIONS INFORMATION AND AVAILABLE AERIAL PHOTOGRAPHS. THE ACCURACY OF DRAWN INFORMATION CONTAINED HERE IN IS NOT GUARANTEED ERROR FREE WITH RESPECT TO ITS ACCURACY, CURRENCY AND COMPLETENESS

PROJECT
Oakleigh Transport Interchange

TITLE
**GROUND LEVEL
 EXISTING CONDITION**

SCALE
1:500 @ A1



DATE
2018_05_18

REVISION
00

JOB NO
BKK406

DRAWING NO.
A-SK000



ZONE A
 ZONE B
 ZONE C
 BUILDING NO #

GENERAL NOTE
 ALL DRAWINGS HAVE BEEN PREPARED FOR HIGH LEVEL MASTERPLAN CONCEPTS ONLY AND HAVE BEEN PREPARED FROM DISPARATE BASE EXISTING CONDITIONS INFORMATION AND AVAILABLE AERIAL PHOTOGRAPHS. THE ACCURACY OF DRAWN INFORMATION CONTAINED HERE IN IS NOT GUARANTEED ERROR FREE WITH RESPECT TO ITS ACCURACY, CURRENCY AND COMPLETENESS

PROJECT
Oakleigh Transport Interchange
 TITLE
GROUND LEVEL_ZONING

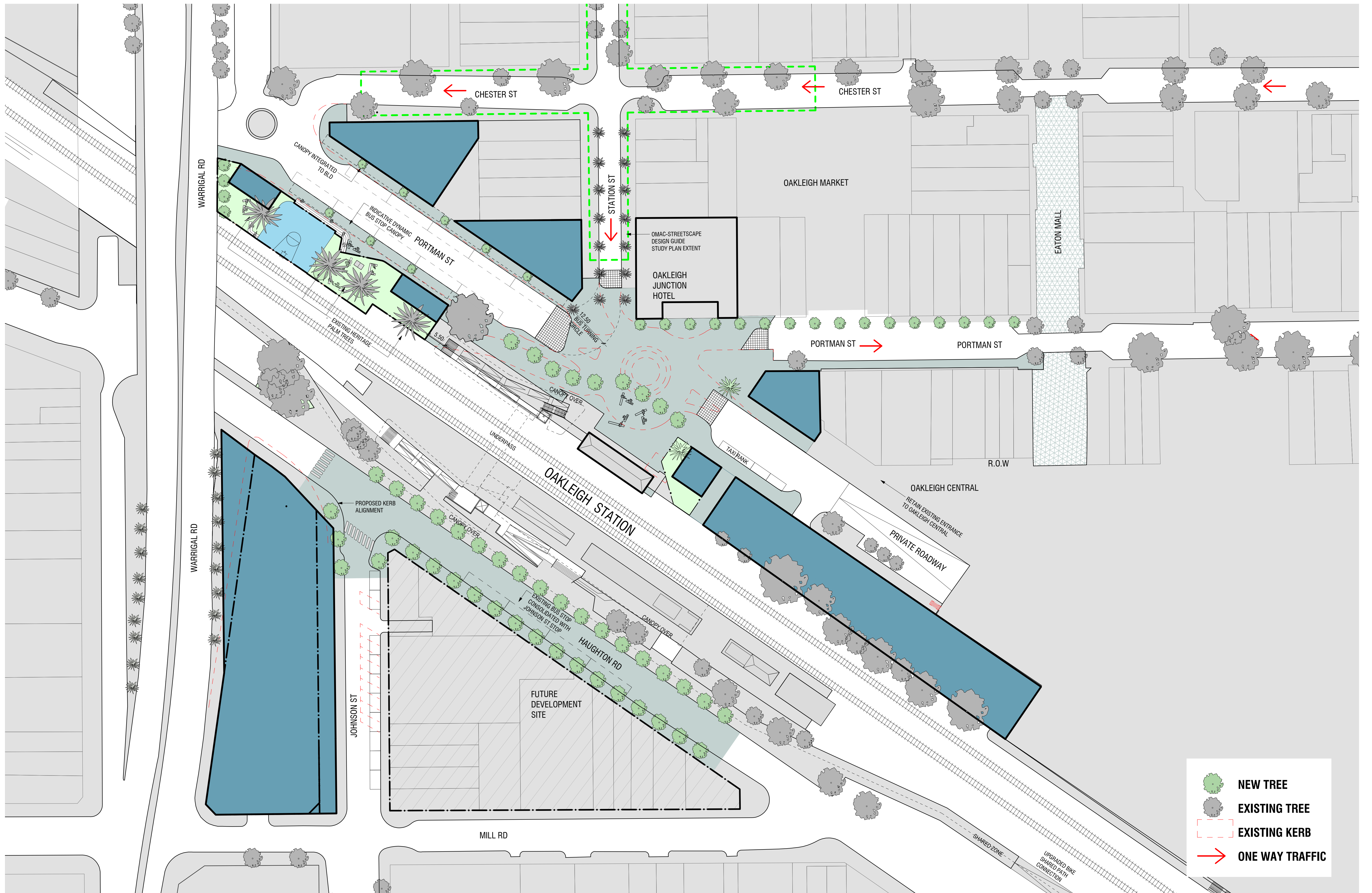
SCALE
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DATE
2018_06_20

REVISION
00

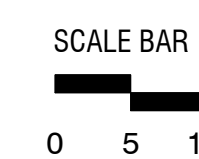
JOB NO
BKK406
 DRAWING NO.
A-SK001



GENERAL NOTE
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PROJECT
Oakleigh Transport Interchange
 TITLE
GROUND LEVEL

SCALE
1:500 @ A1

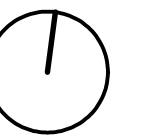


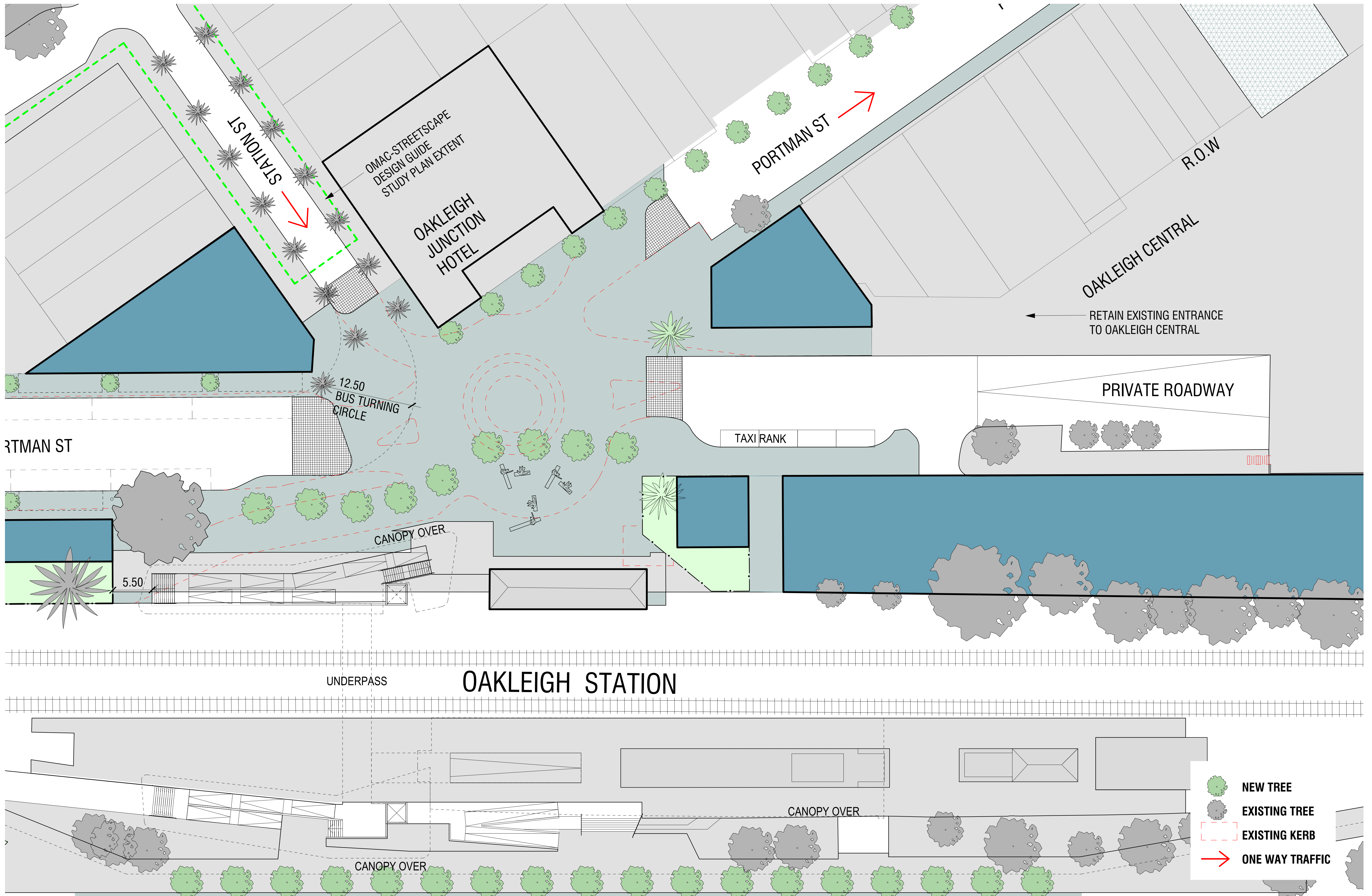
DATE
2018_08_03

REVISION
00

JOB NO
BKK406

DRAWING NO.
A-SK002





GENERAL NOTE
 ALL DRAWINGS HAVE BEEN PREPARED FOR HIGH LEVEL MASTERPLAN CONCEPTS ONLY AND HAVE BEEN PREPARED FROM DISPARATE BASE EXISTING CONDITIONS INFORMATION AND AVAILABLE AERIAL PHOTOGRAPHS. THE ACCURACY OF DRAWN INFORMATION CONTAINED HERE IN IS NOT GUARANTEED ERROR FREE WITH RESPECT TO ITS ACCURACY, CURRENCY AND COMPLETENESS

PROJECT
Oakleigh Transport Interchange

 TITLE
GROUND LEVEL (ZONE A)

SCALE
1:250 @ A1

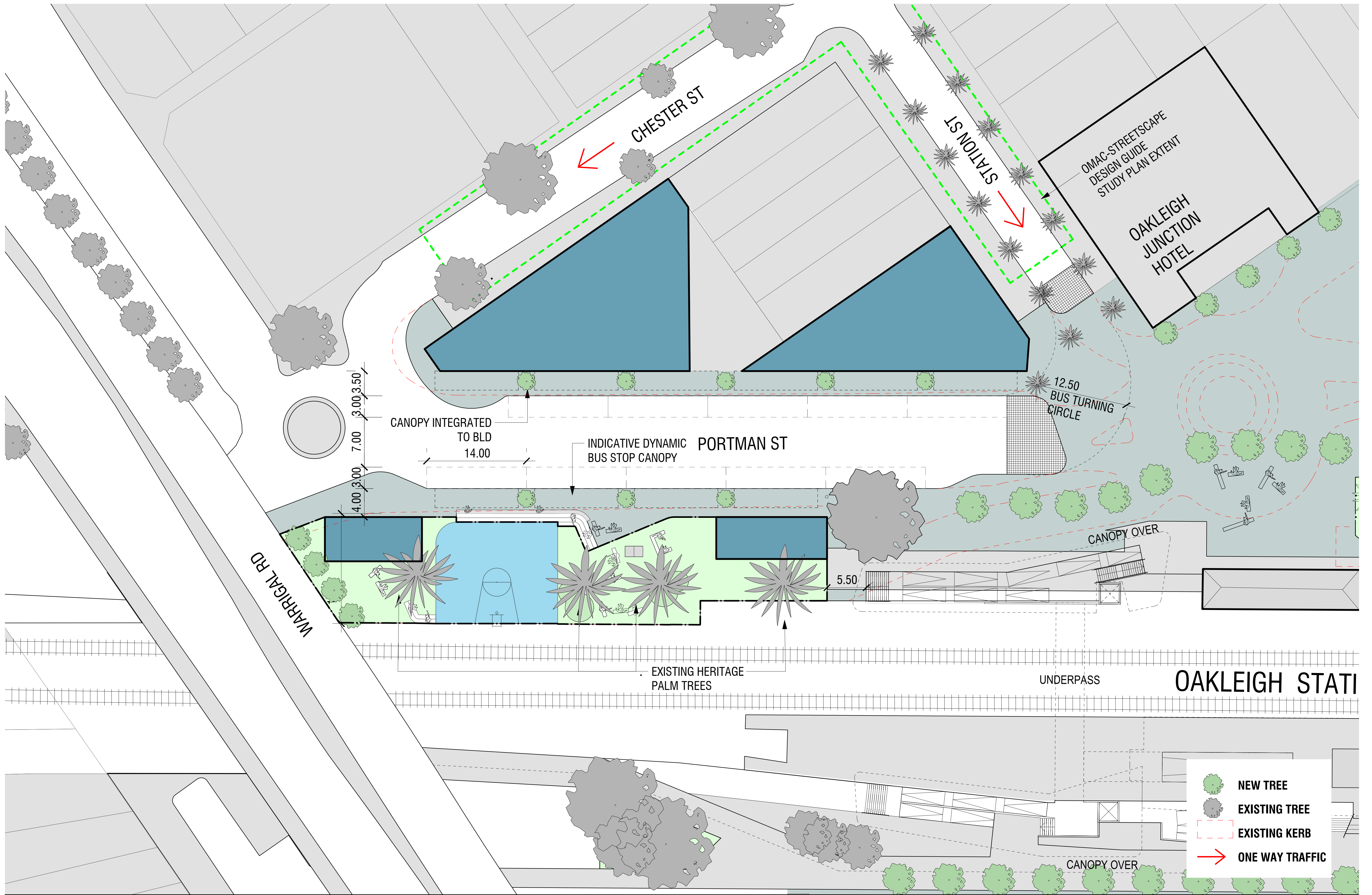
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DATE
2018_08_03

 REVISION
00

 JOB NO
BKK406

 DRAWING NO.
A-SK003



GENERAL NOTE
 ALL DRAWINGS HAVE BEEN PREPARED FOR HIGH LEVEL MASTERPLAN CONCEPTS ONLY AND HAVE BEEN PREPARED FROM DISPARATE BASE EXISTING CONDITIONS INFORMATION AND AVAILABLE AERIAL PHOTOGRAPHS. THE ACCURACY OF DRAWN INFORMATION CONTAINED HERE IN IS NOT GUARANTEED ERROR FREE WITH RESPECT TO ITS ACCURACY, CURRENCY AND COMPLETENESS

PROJECT
Oakleigh Transport Interchange

TITLE
GROUND LEVEL (ZONE B)

SCALE
1:250 @ A1

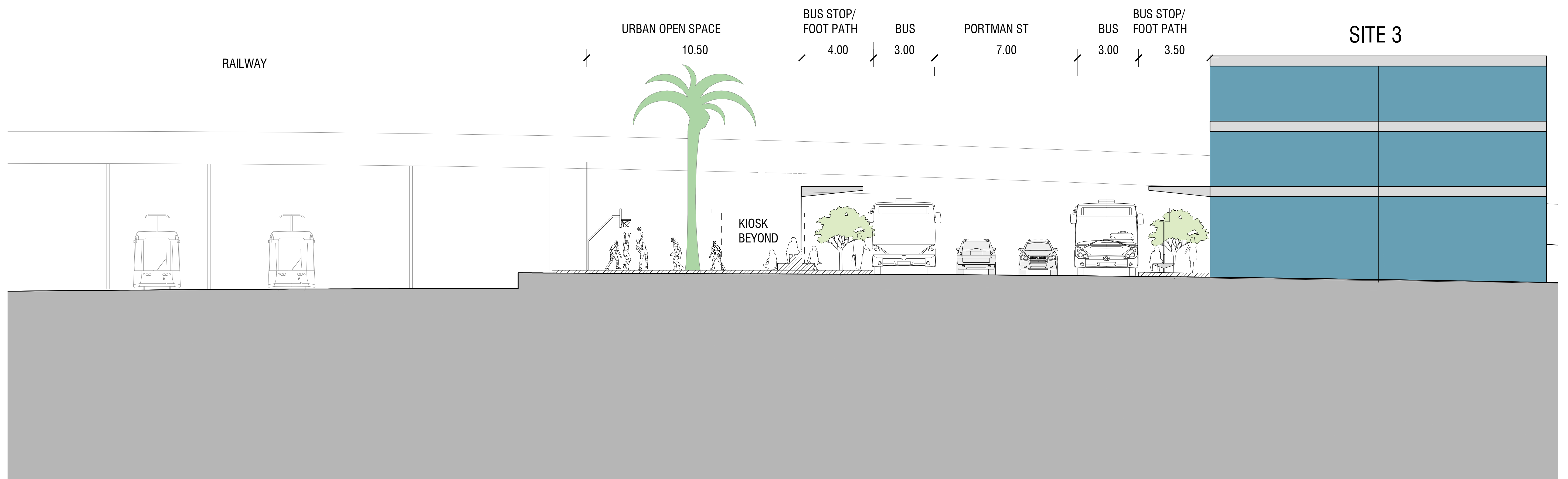
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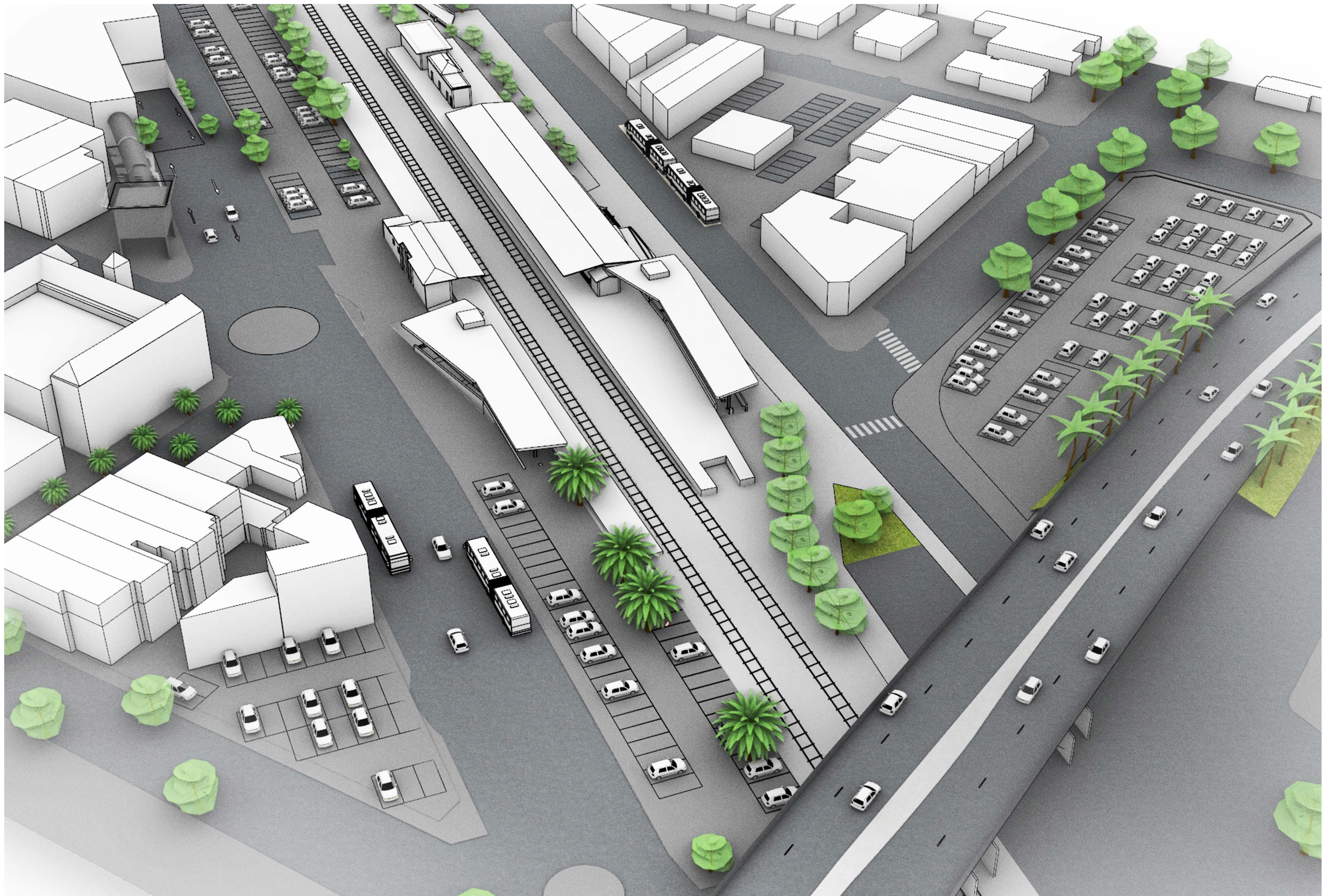
DATE
2018_08_03

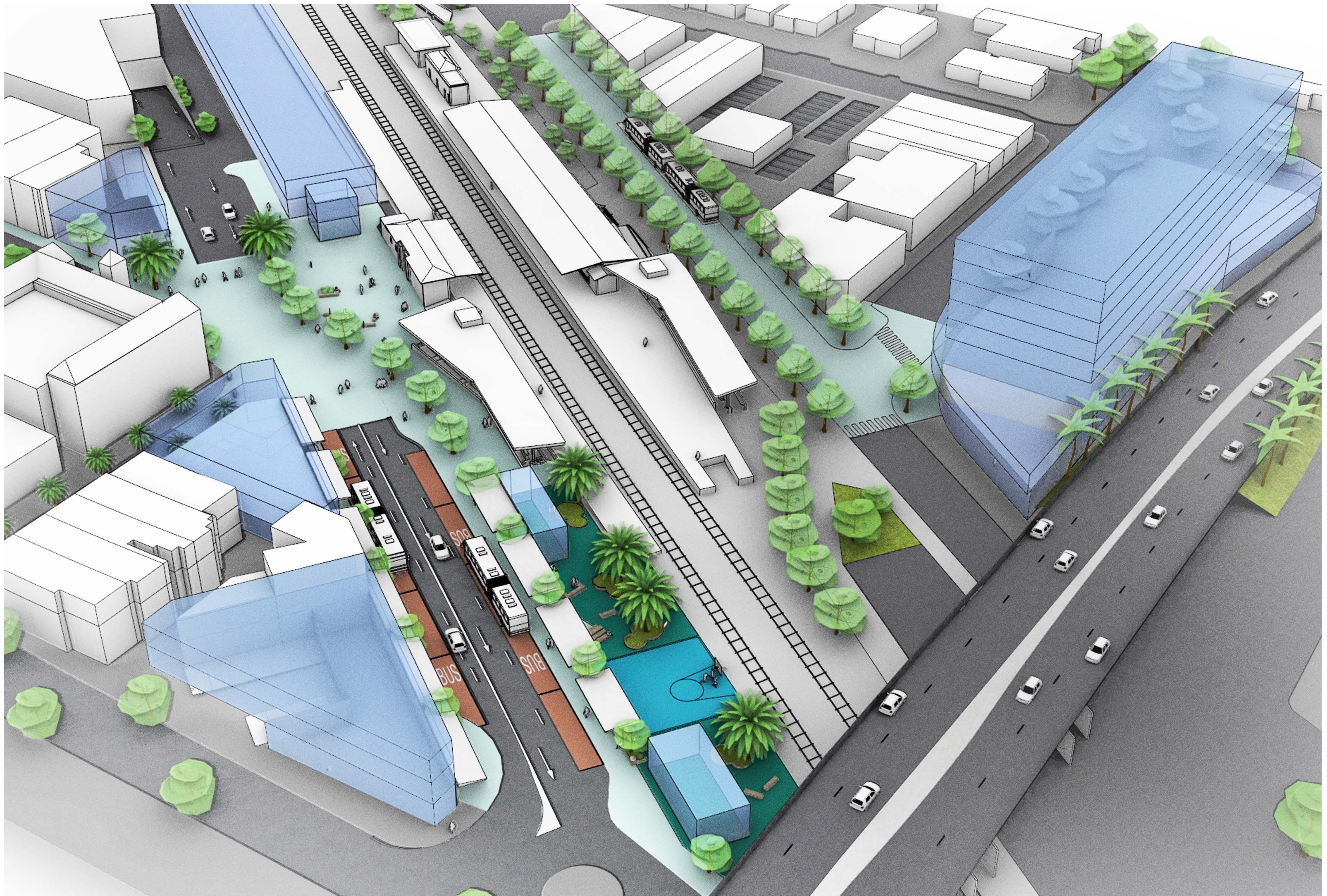
REVISION
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JOB NO
BKK406

DRAWING NO.
A-SK004



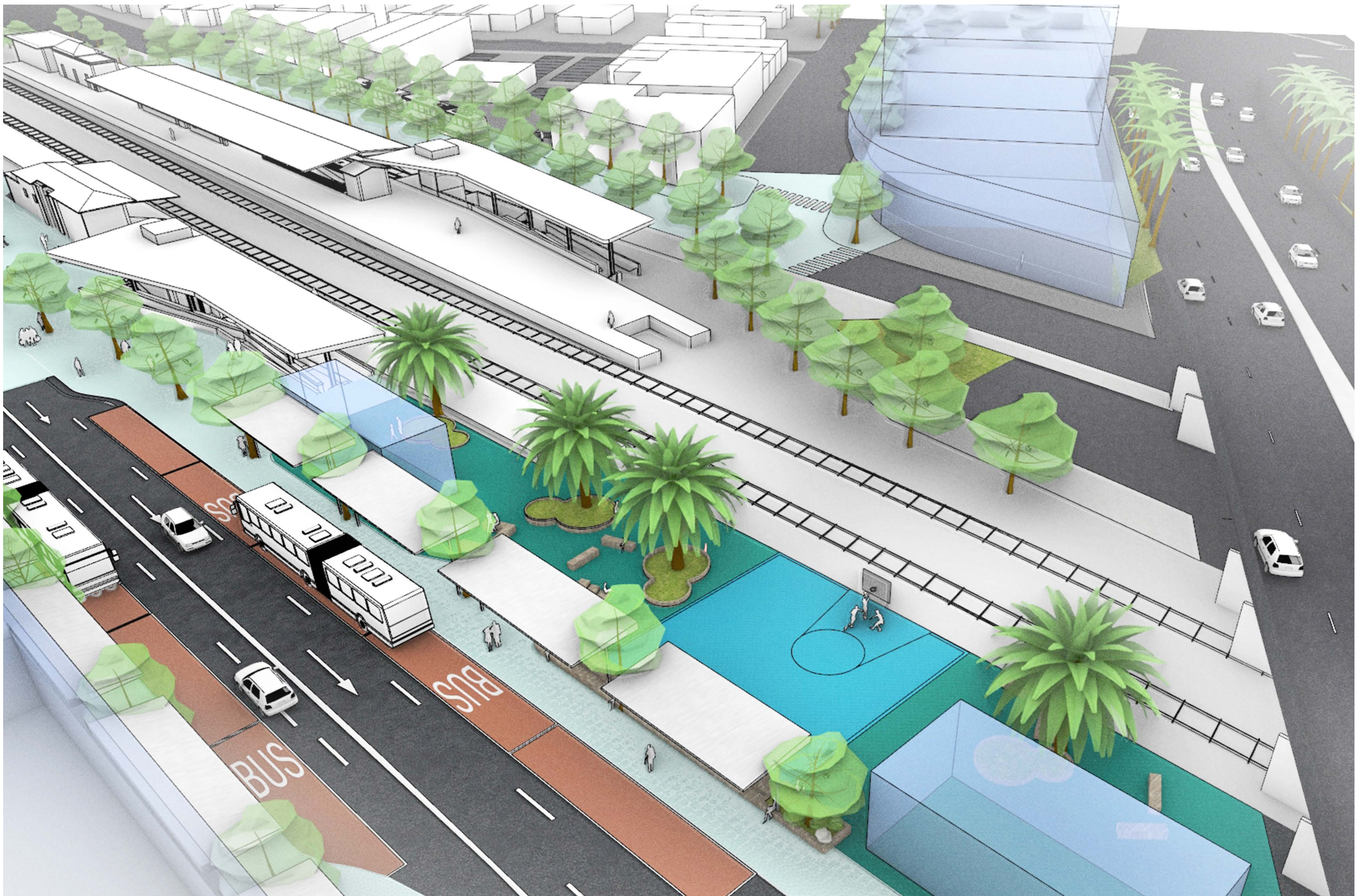


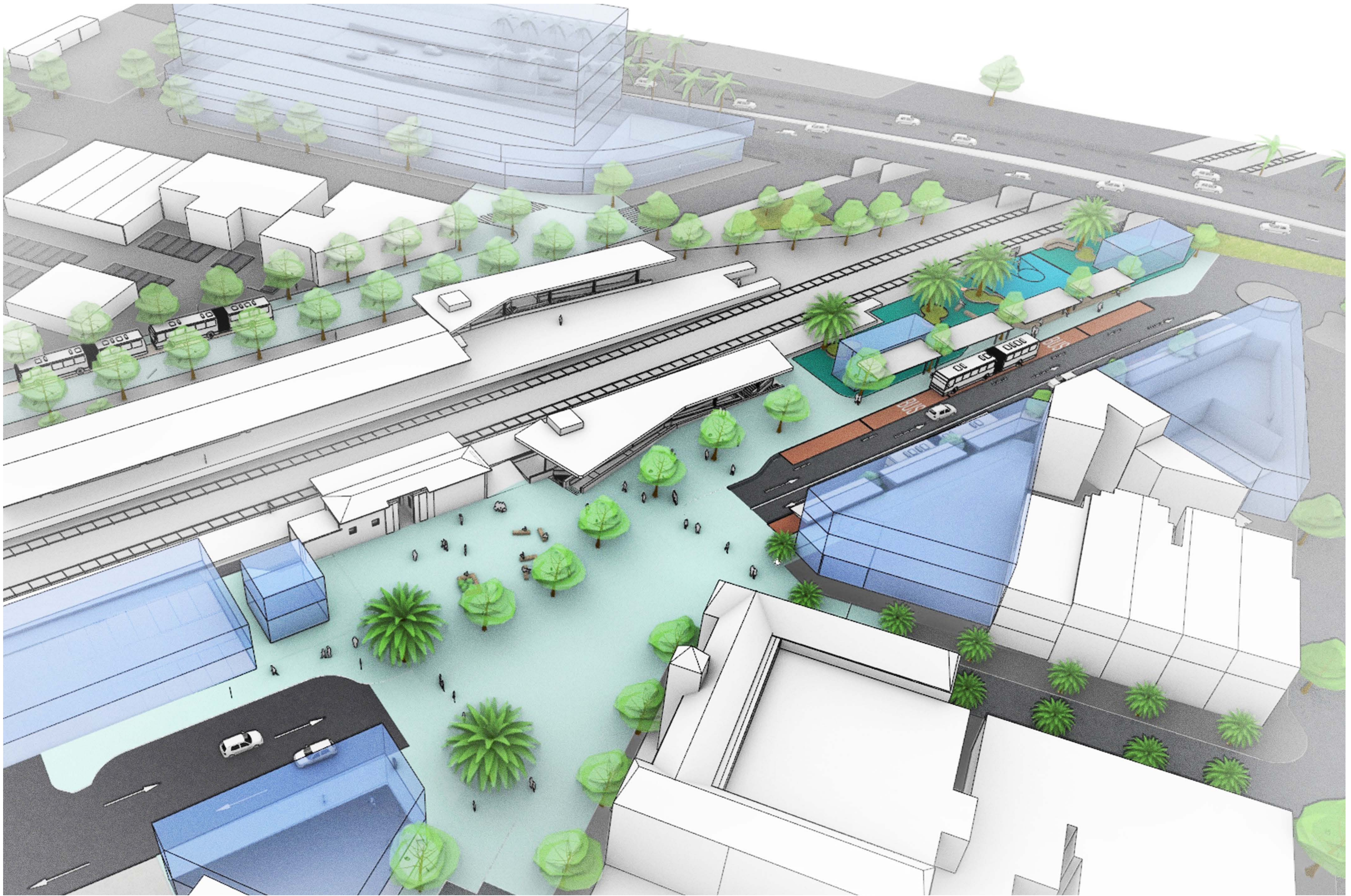


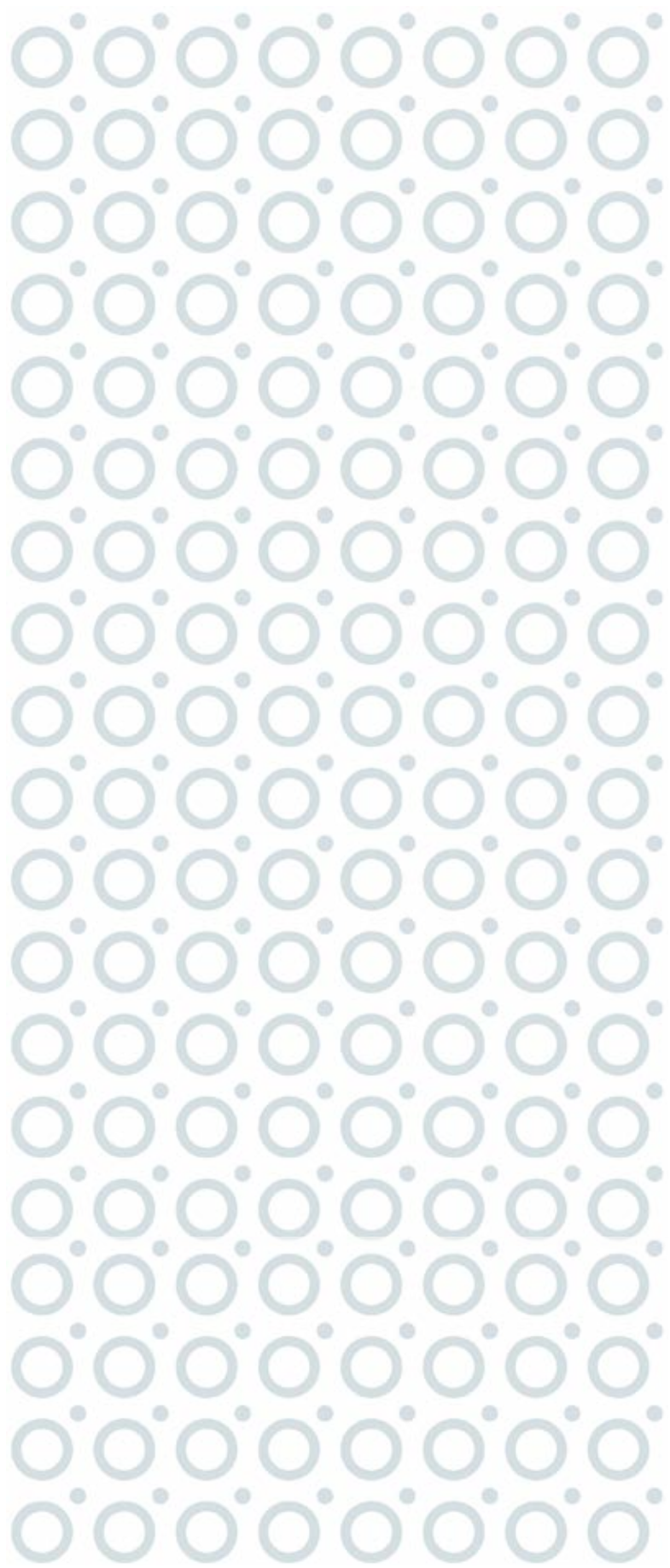












Chapter 5.0: Appendix B
Public Realm Cost Plan



GENERAL NOTE
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PROJECT
Oakleigh Transport Interchange

TITLE
Public Realm Key Plan

SCALE
1:500 @ A1

SCALE BAR
 0 5 10 20 50

DATE
2018_03_03

REVISION
00

JOB NO.
BKK406

DRAWING NO.
A-SK013

Oakleigh Transport Interchange

Estimate 5

Location Summary

GFA: GFA
Rates Current At May 2018

Location	GFA m ²	Cost/m ²	Total Cost AUD
A PACKAGE A (STATION NE)			
A3 PUBLIC REALM ZONE A			
A3A Enabling			1,293,425
A3B Public Realm			2,262,140
A3C Road			82,880
			\$3,638,445
			A - PACKAGE A (STATION NE) \$3,638,445
B PACKAGE B (STATION NW)			
B3 PUBLIC REALM ZONE B & POCKET PARK 4			
B3A Enabling			1,142,205
B3B Public Realm			2,104,100
B3C Road			380,480
			\$3,626,785
			B - PACKAGE B (STATION NW) \$3,626,785
C PACKAGE C (STATION SW) MODERATE OPTION			
C2 PUBLIC REALM ZONE C			
C2A Enabling			346,045
C2B Public Realm			359,500
C2C Road			135,240
			\$840,785
			C - PACKAGE C (STATION SW) MODERATE OPTION \$840,785
			ESTIMATED NET COST \$8,106,015
MARGINS & ADJUSTMENTS			
Design Development Contingency			Included
Staging / Out of Hours Penalties	2.0%		\$162,121
Builder's Preliminaries	7.9%		\$656,344
Builder's Overheads and Margin	4.0%		\$357,031
			ESTIMATED CONSTRUCTION COST AT MAY 2018 \$9,281,511
Escalation - 2 years	6.0%		\$556,896
Headworks and Authority Charges	2.8%		\$274,712
Loose Furniture, Fittings and Equipment			Excl.
Design Consultants Fees	10.0%		\$1,011,316
Project Contingency	10.0%		\$1,112,447

Oakleigh Transport Interchange

Estimate 5

Location Summary

GFA: GFA
Rates Current At May 2018

Location	GFA m ²	Cost/m ²	Total Cost AUD
MARGINS & ADJUSTMENTS (continued)			
Penalties Associated with Work in / Under / Over Rail Corridors			Excl.
All ramps, shelters and access relating to the Station North and South Interfaces			Excl.
Contamination Removal			Excl.
Hazmat Removal			Excl.
Adverse Ground Conditions Risk	5.0%		\$611,849
Land Acquisition			Excl.
Main Services Upgrade			Excl.
Oakleigh Station Rail Systems Services Relocation / disruption / penalties - North side			Excl.
GST	10.0%		\$1,284,879
Basis of Estimate: BKK406 2018_05_16 Oakleigh Transport Interchange_DRAFT PACKAGE. BKK406 2018_05_16 Oakleigh_Transport Interchange - Development Schedule...			
			ESTIMATED TOTAL COST \$14,133,610

Oakleigh Transport Interchange

Estimate 5

Location Element Item

A PACKAGE A (STATION NE)

A3 PUBLIC REALM ZONE A

A3A Enabling

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
PR PRELIMINARIES				
515 Allowance for traffic and pedestrian management - enabling and new work	Item			250,000
518 Allow to ascertain the precise location of all services which could be affected by the works	Item			100,000
PRELIMINARIES				\$350,000
XP SITE PREPARATION				
1 Demolition of buildings & structures	m ²	174	200	34,800
2 Demolition of hardstandings & external areas	m ²	3,525	45	158,625
504 Services diversions	Item			0
SITE PREPARATION				\$193,425
XR ROADS, FOOTPATHS AND PAVED AREAS				
534 Minor road works incl patching / infill on kerb realignment and marking / signage. Resurface / major works excluded - incl TM / staging	m ²		70	0
ROADS, FOOTPATHS AND PAVED AREAS				\$0
XE EXTERNAL ELECTRIC LIGHT AND POWER				
554 powerline underground	m	250	3,000	750,000
EXTERNAL ELECTRIC LIGHT AND POWER				\$750,000
ENABLING				\$1,293,425

Oakleigh Transport Interchange

Estimate 5

Location Element Item

A PACKAGE A (STATION NE)

A3 PUBLIC REALM ZONE A

A3B Public Realm

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
PR PRELIMINARIES				
517 Allow for hoarding and temporary signage as necessary *	m	310	200	62,000
PRELIMINARIES				\$62,000
FT FITMENTS				
509 Allowance for fitments (incl. bins, & bicycle racks) *	m ²	3,525	40	141,000
521 Allow for park bench *	No	6	4,000	24,000
548 Contemporary design security bollards	No	40	800	32,000
FITMENTS				\$197,000
XR ROADS, FOOTPATHS AND PAVED AREAS				
511 Allow for new bluestone kerb and channel *	m	310	250	77,500
519 Blue stone paving *	m ²	3,341	340	1,135,940
520 EO Bluestone paving for Material 2 paving (exact material to be specified)	m ²	527	100	52,700
522 Ramp / transition / features material 3 paving (exact material to be specified) - assumed granite paving	m ²	185	450	83,250
534 Minor road works incl patching / infill on kerb realignment and marking / signage. Resurface / major works excluded - incl TM / staging	m ²		70	0
ROADS, FOOTPATHS AND PAVED AREAS				\$1,349,390
XL LANDSCAPING AND IMPROVEMENTS				
513 Allowance for native tree - assumed 300ltr (planting & bioretention pit to be connected to stormwater, excavate pit to min depth of 1m including backfill with topsoil, fertiliser and mulch) *	No	5	2,000	10,000
514 Allowance for native tree - assumed 400ltr (planting & bioretention pit to be connected to stormwater, excavate pit to min depth of 1m including backfill with topsoil, fertiliser and mulch)	No	2	3,000	6,000
550 Sculpture and artwork provision Realm A	No	1	150,000	150,000
LANDSCAPING AND IMPROVEMENTS				\$166,000
XK EXTERNAL STORMWATER DRAINAGE				
542 Stormwater drainage, detention and WSUD	m ²	3,525	50	176,250
EXTERNAL STORMWATER DRAINAGE				\$176,250
XE EXTERNAL ELECTRIC LIGHT AND POWER				
512 Allowance for new streetlight pole (incl installation, 10Nr per site) *	No	10	10,000	100,000
543 Lighting low level	m ²	3,525	30	105,750
544 Power, comms infrastructure, security cameras	m ²	3,525	30	105,750
EXTERNAL ELECTRIC LIGHT AND POWER				\$311,500
XC EXTERNAL COMMUNICATIONS				
546 Bus / train displays	No	1		Excl.
EXTERNAL COMMUNICATIONS				Excl.
XX ALTERATIONS AND RENOVATIONS TO EXISTING EXTERNAL WORKS				
507 Remove existing major trees	No	2		Incl.

Oakleigh Transport Interchange
Estimate 5

Location Element Item

A PACKAGE A (STATION NE)

A3 PUBLIC REALM ZONE A

A3B Public Realm (continued)

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
508 Remove existing (smaller) trees *	No	2		Incl.
ALTERATIONS AND RENOVATIONS TO EXISTING EXTERNAL WORKS				Incl.
FU FURNITURE, FITTINGS AND EQUIPMENT				
541 Loose FFE	No	1		Excl.
FURNITURE, FITTINGS AND EQUIPMENT				Excl.
PUBLIC REALM				\$2,262,140

Oakleigh Transport Interchange
Estimate 5

Location Element Item

A PACKAGE A (STATION NE)

A3 PUBLIC REALM ZONE A

A3C Road

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
XR ROADS, FOOTPATHS AND PAVED AREAS				
534 Minor road works incl patching / infill on kerb realignment and marking / signage. Resurface / major works excluded - incl TM / staging	m ²	1,184	70	82,880
ROADS, FOOTPATHS AND PAVED AREAS				\$82,880
ROAD				\$82,880

Oakleigh Transport Interchange
Estimate 5

Location Element Item

B PACKAGE B (STATION NW)

B3 PUBLIC REALM ZONE B & POCKET PARK 4

B3A Enabling

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
PR PRELIMINARIES				
515 Allowance for traffic and pedestrian management - enabling and new work	Item			250,000
PRELIMINARIES				\$250,000
XP SITE PREPARATION				
1 Demolition of buildings & structures	m ²	100	200	20,000
2 Demolition of hardstandings & external areas	m ²	2,049	45	92,205
504 Services diversions	Item			30,000
SITE PREPARATION				\$142,205
XR ROADS, FOOTPATHS AND PAVED AREAS				
534 Minor road works incl patching / infill on kerb realignment and marking / signage. Resurface / major works excluded - incl TM / staging	m ²		70	0
ROADS, FOOTPATHS AND PAVED AREAS				\$0
XE EXTERNAL ELECTRIC LIGHT AND POWER				
554 powerline underground	m	250	3,000	750,000
EXTERNAL ELECTRIC LIGHT AND POWER				\$750,000
ENABLING				\$1,142,205

Oakleigh Transport Interchange
Estimate 5

Location Element Item

B PACKAGE B (STATION NW)

B3 PUBLIC REALM ZONE B & POCKET PARK 4

B3B Public Realm

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
PR PRELIMINARIES				
517 Allow for hoarding and temporary signage as necessary *	m	289	200	57,800
PRELIMINARIES				\$57,800
FT FITMENTS				
509 Allowance for fitments (incl. bins, & bicycle racks) *	m ²	2,049	40	81,960
521 Allow for park bench *	No	13	4,000	52,000
523 Custom seating areas *	m	54	1,500	81,000
524 Custom multi-level seating areas *	m	28	2,500	70,000
525 Custom seating stools *	No	2	2,000	4,000
529 Basketball court equipment (incl installation) and HIGH back fence *	No	1	15,000	15,000
530 Bus Shelters (incl installation) *	No	4	12,000	48,000
555 Other features , walls, table tennis, fitments	No	1	100,000	100,000
FITMENTS				\$451,960
XR ROADS, FOOTPATHS AND PAVED AREAS				
511 Allow for new bluestone kerb and channel *	m	289	250	72,250
519 Blue stone paving *	m ²	1,395	340	474,300
527 Hard surface for urban open space *	m ²	555	250	138,750
528 Urban Open Space- Basketball area surface *	m ²	242	200	48,400
534 Minor road works incl patching / infill on kerb realignment and marking / signage. Resurface / major works excluded - incl TM / staging	m ²		70	0
ROADS, FOOTPATHS AND PAVED AREAS				\$733,700
XN BOUNDARY WALLS, FENCING AND GATES				
540 Railway fencing / screening *	m	100	800	80,000
BOUNDARY WALLS, FENCING AND GATES				\$80,000
XB OUTBUILDINGS AND COVERED WAYS				
547 Cover to basket ball court	No	1		Excl.
OUTBUILDINGS AND COVERED WAYS				Excl.
XL LANDSCAPING AND IMPROVEMENTS				
513 Allowance for native tree - assumed 300ltr (planting & bioretention pit to be connected to stormwater, excavate pit to min depth of 1m including backfill with topsoil, fertiliser and mulch) *	No	20	2,000	40,000
526 Garden bed - 75deep crushed basalt mulch, 300d topsoil incl earth works and plants (EXCL RAISED PLANTERS) and irrigation *	m ²	35	150	5,250
539 Large palms and planters / irrigation, drainage, grates*	No	4	40,000	160,000
545 Sculpture and artwork provision	No	1	100,000	100,000
LANDSCAPING AND IMPROVEMENTS				\$305,250
XK EXTERNAL STORMWATER DRAINAGE				
542 Stormwater drainage, detention and WSUD	m ²	2,049	50	102,450
EXTERNAL STORMWATER DRAINAGE				\$102,450

Oakleigh Transport Interchange
Estimate 5

Location Element Item

B PACKAGE B (STATION NW)

B3 PUBLIC REALM ZONE B & POCKET PARK 4

B3B Public Realm (continued)

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
XE EXTERNAL ELECTRIC LIGHT AND POWER				
512 Allowance for new streetlight pole (incl installation, 10Nr per site) *	No	10	10,000	100,000
543 Lighting low level	m ²	2,049	30	61,470
544 Power, comms infrastructure, security cameras	m ²	2,049	30	61,470
EXTERNAL ELECTRIC LIGHT AND POWER				\$222,940
XC EXTERNAL COMMUNICATIONS				
546 Bus / train displays	No	1		Excl.
EXTERNAL COMMUNICATIONS				Excl.
XX ALTERATIONS AND RENOVATIONS TO EXISTING EXTERNAL WORKS				
508 Remove existing (smaller) trees *	No	7		Incl.
552 Upgrade dynamic bus stop	No	3	50,000	150,000
ALTERATIONS AND RENOVATIONS TO EXISTING EXTERNAL WORKS				\$150,000
FU FURNITURE, FITTINGS AND EQUIPMENT				
541 Loose FFE	No	1		Excl.
FURNITURE, FITTINGS AND EQUIPMENT				Excl.
PUBLIC REALM				\$2,104,100

Oakleigh Transport Interchange
Estimate 5

Location Element Item

B PACKAGE B (STATION NW)

B3 PUBLIC REALM ZONE B & POCKET PARK 4

B3C Road

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
XR ROADS, FOOTPATHS AND PAVED AREAS				
534 Minor road works incl patching / infill on kerb realignment and marking / signage. Resurface / major works excluded - incl TM / staging	m ²	1,312	70	91,840
556 Full road reconstruction incl drainage, demolition, markings, signage, TM / stages - bus interchange	m ²	1,312	220	288,640
ROADS, FOOTPATHS AND PAVED AREAS				\$380,480
ROAD				\$380,480

Oakleigh Transport Interchange

Estimate 5

Location Element Item

C PACKAGE C (STATION SW) MODERATE OPTION

C2 PUBLIC REALM ZONE C

C2A Enabling

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
PR PRELIMINARIES				
515 Allowance for traffic and pedestrian management - enabling and new work	Item			250,000
PRELIMINARIES				\$250,000
XP SITE PREPARATION				
1 Demolition of buildings & structures	m ²	5	200	1,000
2 Demolition of hardstandings & external areas	m ²	1,001	45	45,045
504 Services diversions	Item			50,000
SITE PREPARATION				\$96,045
XR ROADS, FOOTPATHS AND PAVED AREAS				
534 Minor road works incl patching / infill on kerb realignment and marking / signage. Resurface / major works excluded - incl TM / staging	m ²		70	0
ROADS, FOOTPATHS AND PAVED AREAS				\$0
ENABLING				\$346,045

Oakleigh Transport Interchange

Estimate 5

Location Element Item

C PACKAGE C (STATION SW) MODERATE OPTION

C2 PUBLIC REALM ZONE C

C2B Public Realm

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
XR ROADS, FOOTPATHS AND PAVED AREAS				
534 Minor road works incl patching / infill on kerb realignment and marking / signage. Resurface / major works excluded - incl TM / staging	m ²		70	0
ROADS, FOOTPATHS AND PAVED AREAS				\$0
XL LANDSCAPING AND IMPROVEMENTS				
12 Public Realm bluestone pavement, kerbing, signage, lighting, stormwater, staging - incl cross over	m ²	651	500	325,500
536 Warrigal road verge make good	m ²	300	100	30,000
549 Planting	No	10	400	4,000
LANDSCAPING AND IMPROVEMENTS				\$359,500
PUBLIC REALM				\$359,500

Oakleigh Transport Interchange
Estimate 5

Location Element Item

C PACKAGE C (STATION SW) MODERATE OPTION

C2 PUBLIC REALM ZONE C

C2C Road

Rates Current At May 2018

Description	Unit	Qty	Rate	Total AUD
XR ROADS, FOOTPATHS AND PAVED AREAS				
534 Minor road works incl patching / infill on kerb realignment and marking / signage. Resurface / major works excluded - incl TM / staging	m ²	1,932	70	135,240
				ROADS, FOOTPATHS AND PAVED AREAS
				\$135,240
				ROAD
				\$135,240

