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# INTRODUCTION & PRINCIPLES

## 1.1. Introduction

This Stage One Streetscape Plan has been prepared for Newcastle City Council to guide the design of the public domain within the study area located within the Newcastle East End precinct. The study focuses on the upgrade of Hunter Street between the intersection with Scott Street to the west, and the intersection with Newcomen Street to the east. The study also comprises of side streets including Perkins, Wolfe, Thorn, Market, Morgan and Newcomen Streets as well as a networks of laneways and stairs between King and Hunter Streets. The study will also capture Market Square located at the southern end of Market Street.

This document defines the character of each space within the study area as well as establishing a materials palette that is integrated with Council's Technical Manual and Street Tree Master Plan documents.



## 1.2. Project Objectives and Vision

With the planning for a number of significant projects within and around the study area including the Newcastle East End development, Newcastle Light Rail and the University of Newcastle New Space building, the study site will become a significant nodal destination within Newcastle.

The following studies and strategic documents have informed the design of the Public Domain, setting the core values and wider vision for the precinct:

- **Newcastle City Council Hunter Street Revitalisation Master Plan 2010**

The framework showed existing Hunter Street Mall as a priority catalyst site for city revitalisation. Describing the existing Hunter Street Mall as a natural meeting place and key catalyst site for future revitalisation in the city centre. The framework recommended that Hunter Street Mall design should encourage greater pedestrian connectivity and improve legibility and consider future developments for the area and transport options. In addition to this the design be a 'people and place' upgrade with additional landscaping treatment to improve the attractiveness of the space.

- **Newcastle 2030 Vision and Strategic Plan**

The Newcastle Community Strategic Plan 2030 (Newcastle 2030) reflects the community vision for our city. East end public domain improvements fits within the key strategic directions of Vibrant & Activated Public Places as well as the following objectives:

- Public places that provide for diverse activity and strengthen our social connections
- Culture, heritage and place are valued, shared and celebrated
- Safe and activated places that are used by people day and night

- **Newcastle Urban Renewal Strategy (NURS) Draft 2012**

The draft NURS highlighted the Hunter Street Mall as a priority site for city centre revitalisation. The recommend that the space to be de-cluttered to allow for the future design to integrates pedestrian and vehicles movements with a tree lined backdrop and to celebrate connecting the landscape with the surrounding heritage and built form for the existing Hunter Street Mall.

- **Newcastle City Council City Centre City Centre Public Domain Technical Manual 2014**

From an understanding of Council's vision as well as the emerging context within and around the study precinct, the following core objectives have been developed to drive the design of the public domain. These include:

- **People the street**

Bring people back to the city centre

- **Green the street**

Wider footpaths, better street planting and allow space for actives such as public seating and outdoor dining.

- **Read the street**

Easy to navigate and find your way around

## Understanding the Site

Newcastle's East End is a vibrant precinct within the Newcastle CBD centred around the main street, Hunter Street. The precinct is comprised of predominantly commercial and mixed use buildings many of which include heritage buildings with preserved facades.

The area is dominated by the Christ Church Cathedral within Cathedral park which is located on a high point with district views across the CBD skyline and Newcastle Harbour.

The streets within the precinct accommodate pedestrian circulation, vehicular circulation and parking as well as on street activity such as dining and markets. The ground plane and amenities are generally of a poor condition apart from the western end of Hunter Street which has already undergone an upgrade. The poor condition of the public domain provides little in regards to defining the precinct or encouraging further activation.

### Hunter Street

The continuous brick paved surface of Hunter Street creates a sense of ambiguity in regards to the delineation of pedestrian and vehicular / shared zones which can cause confusion for users. Lanes and parking spaces are defines by line markings with an array of mismatched furniture elements used to further define pedestrian only areas. This rudimentary mix of fixtures provides little identity and uniqueness to the precinct. An array of varying awnings and market structures also inhabit the street adding visual clutter.

Vehicular traffic is restricted to one way heading west between Newcomen and Scott Street, with parallel parking located along the way. Mature London Plane trees provide a good canopy over the street with incidental planting within raised planters providing the only other green coverage within the street.

### Side Streets and Lanes

The side streets and laneways to the north and south of Hunter Street offer little in regards to the pedestrian experience. These streets are generally inactive, provide little public amenity and a poor level of public domain.

Hunter Street delineates a change in topography through the centre of the precinct with side streets to the south rising up towards the Christ Church Cathedral located at the top of the ridge in Cathedral park. Streets to the north of Hunter are fairly flat leading towards the harbours edge.

The disconnection from the waterfront together with the hostile nature of Scott Street and the heavy rail, and the rising topography to the south has meant that on street activity is mainly focused on Hunter Street.

In more recent times the side streets have benefited from initiatives such as the Street Art Walking (SAW) project, which has seen the injection of colour and vibrancy through street art and murals. These colourful art pieces have now become ingrained in the character of the precinct.

## 1.3. Rejuvenation of the Precinct

A renewed interest in Newcastle's east end as a retail and leisure destination will be further fueled by the completion of major projects in the vicinity including the Newcastle East End mixed use development, Newcastle Light Rail and the University of Newcastle New Space Building. These projects will bring a renewed energy, as well as an influx of residents, students and visitors to the precinct. Most importantly for Newcastle East End is the completion of the removal of the heavy rail line and the process of re-stitching the CBD with the waterfront.

The precinct has also benefited from a cultural renaissance in more recent years. The Renew Newcastle Initiative has assisted in boosting cultural events and public artworks through a low rent short term lease scheme connecting local building owners with vacant shop fronts with creative enterprises and community groups interested in space within the CBD. This has resulted in a diverse range of pop up galleries, workshops, film studios and retail shops.

The Lock-up Cultural Centre launched in 2014 is located east of the project site is a dedicated multidisciplinary contemporary arts centre catering for artists and exhibitions. Street art has also flourished within the East End precinct spurred on by initiatives such as Street Art Walking (SAW) which secures permanent public street art sites throughout the CBD to be transformed by chosen artists.

The significant changes in local context and culture will amplify the importance of creating a public domain for Newcastle's East End that strengthens connections within and beyond the site while facilitating on street activation such as dining, markets shopping and public art.



Hunter Street with continuous brick paved surface



Heritage facade - City Arcade, Newcomen Street



Existing street trees and steep topography - Newcomen Street



Christ Church Cathedral dominates the skyline



SITE ANALYSIS



LOCAL SITE CONTEXT

LEGEND	
	Site boundary
	Mixed use & Commercial. Population: 4,499 (Newcastle , Newcastle East and Newcastle West 2011 census)
	Residential. Population: 3613 (Cooks Hill 2016 census)
	Light rail route
	Civic Precinct
	East End Precinct



PUBLIC TRANSPORT CONNECTIONS

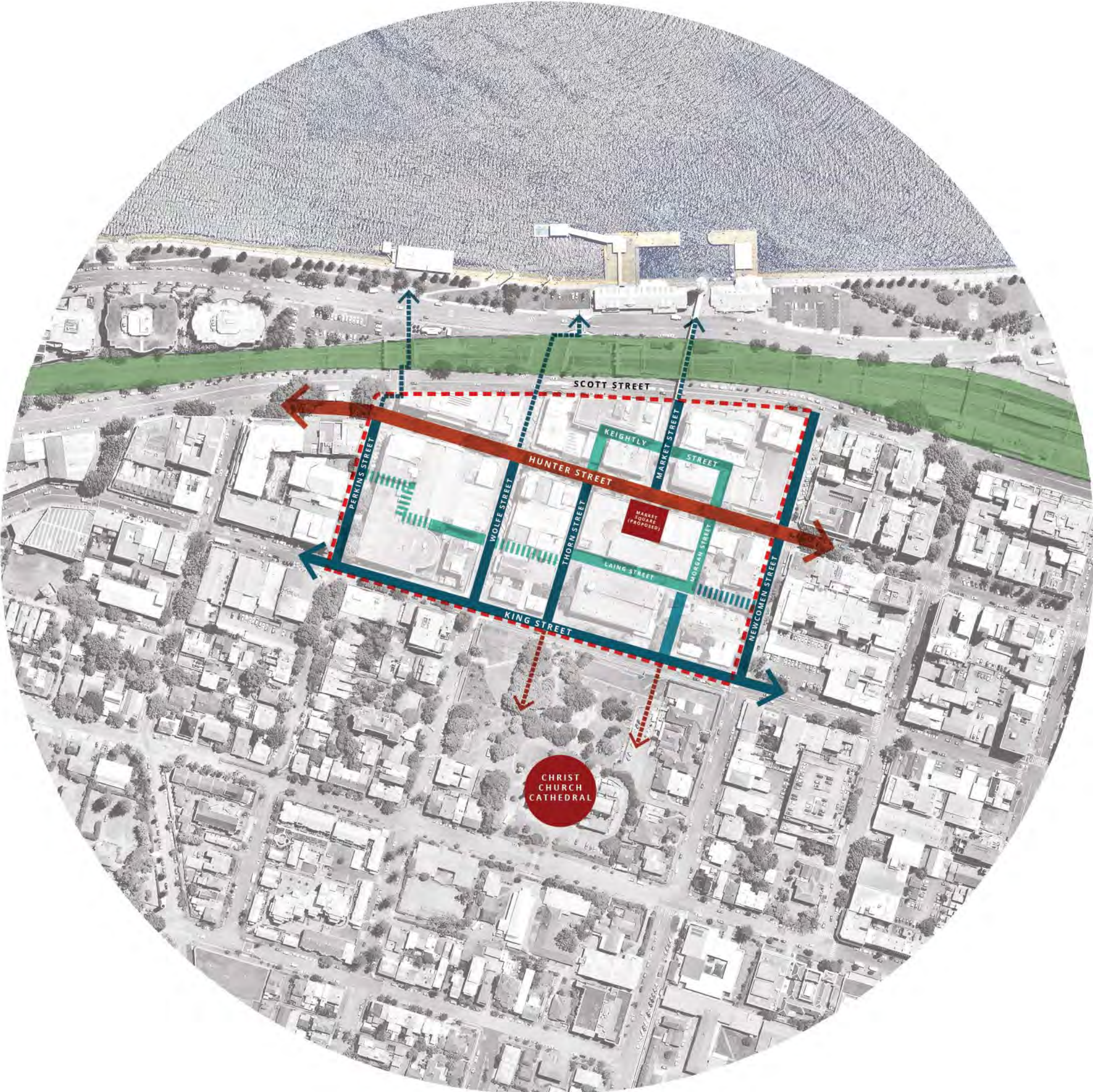
LEGEND	
	Site boundary
	Bus stop & route
	Ferry to Stockton Wharf
	Light rail route
	Light rail stop



EXISTING GREEN SPACE

LEGEND	
	Site boundary
	Existing green space



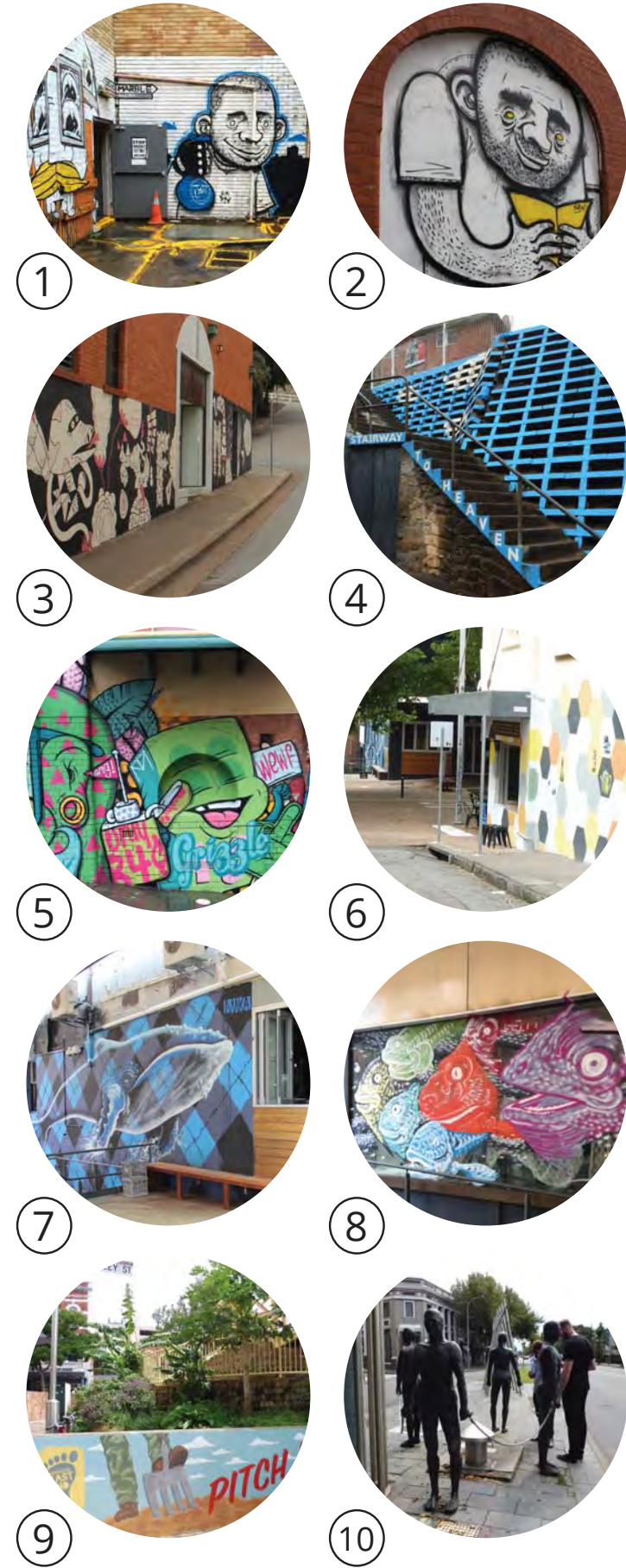


# STREET HIERARCHY

LEGEND	
	Site Boundary
	Newcastle Rail Corridor Revitalisation project (Hunter Development Corporation)
	Primary Street Connection
	Secondary Street Connection
	Existing Laneway Connection
	Proposed Laneway Connection
	Existing Stair Connection
	Proposed Stair Connection
	Southern Views to Cathedral
	Northern Pedestrian Connections



EXISTING PUBLIC ART +  
STREET ARTWORKS



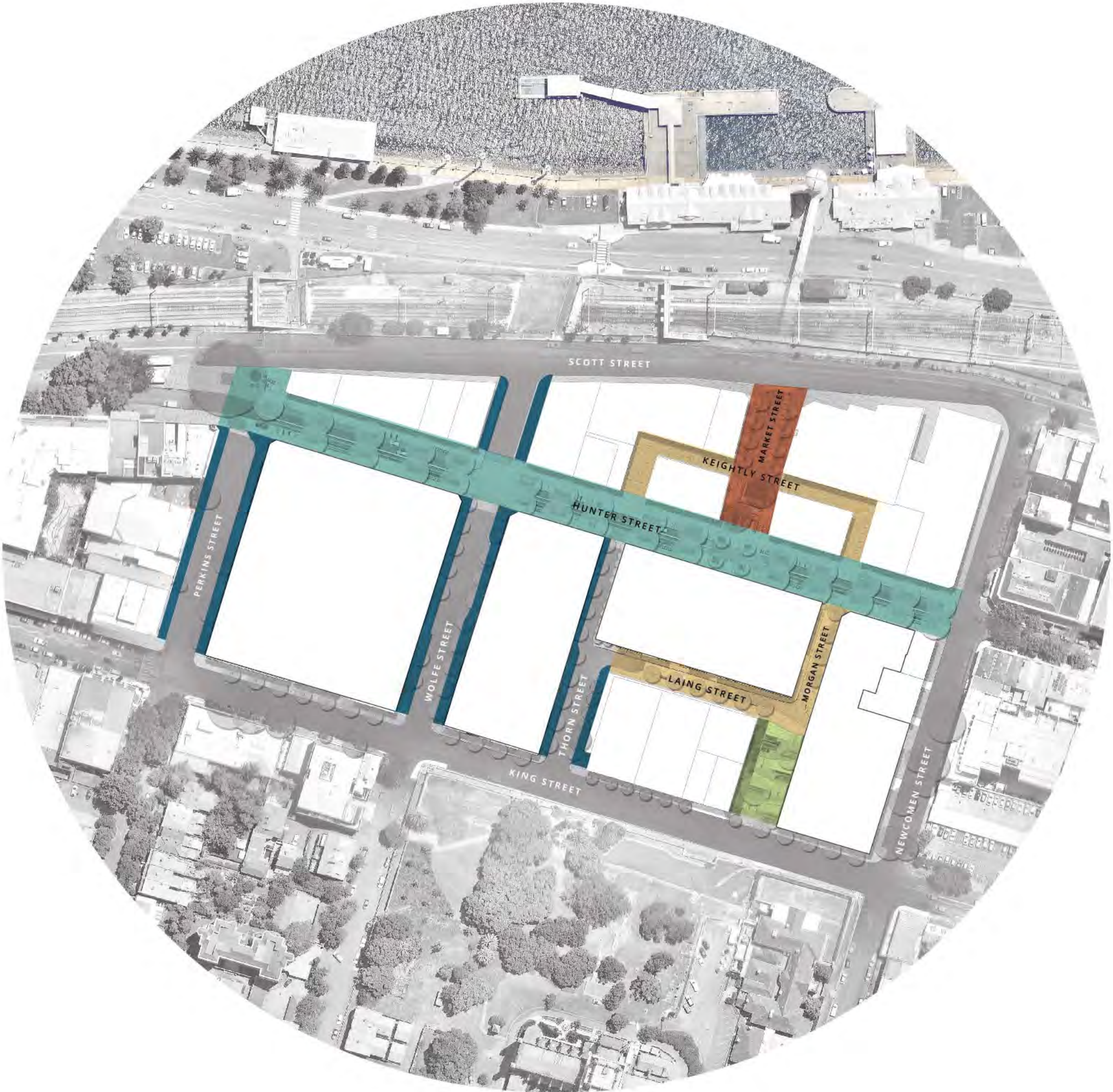


## LEGEND

Proposed RL's

Street grading





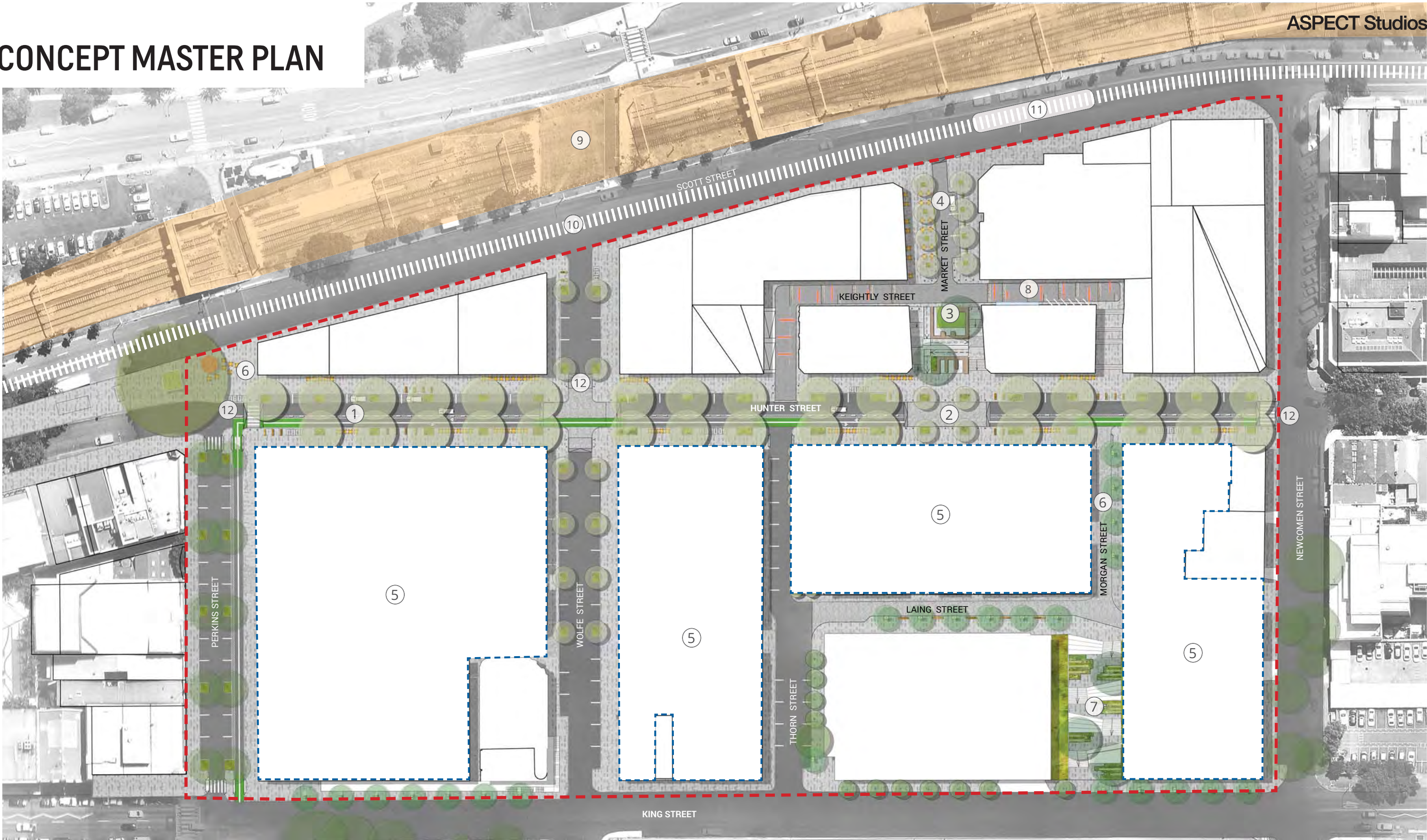
# LANDSCAPE SPACES

LEGEND

-  Hunter Street
-  Market Street
-  Secondary Streetscapes
-  Open Laneways
-  Morgan Street Steps
-  Open space delivered as part of private development works



# CONCEPT MASTER PLAN



**LEGEND**

- 1. Hunter Street carriageway with bi-directional cycleway and on street parking
- 2. Hunter Street pedestrian friendly crossing with raised paved threshold. Vehicular and cycle lanes defined by material transitions
- 3. Public terraces with stair + ramped access to market street
- 4. Market street shared / loading zone with raised + paved carriageway
- 5. Iris Capital development
- 6. Potential kiosk retail location
- 7. Morgan Street steps

- 8. Bin enclosure and motorcycle parking within Keightly Street
- 9. Market Street Lawn - Hunter Street Development Corporation
- 10. Light rail alignment
- 11. Light rail stop
- 12. Proposed raised pedestrian crossings

- - - - - Extent of Site
- - - - - Extent of works as part of the East End Development Application (Iris Capital)



# HUNTER STREET



**Description**  
Hunter Street forms the high street of the East End precinct. Currently the street accommodates pedestrians and vehicles within a flush paved ground plane with little to no definition of edges. The street presents a poor public interface with limited legibility, high level of street clutter and poor quality materials.

- Principles**
- Provide high quality legible lane connections that utilise the spatial character and play upon the existing urban grain of the Newcastle CBD
  - Provide adequate lighting throughout the lanes to promote surveillance and safe night time use.
  - Provide opportunities for integrated public art throughout the laneways

LEGEND

Hunter Street

## OPPORTUNITIES



## FUNCTION

- Improve legibility of circulation for both vehicles and pedestrians through the introduction of new kerb lines and material changes to define roadways and footpath zones
- Improve way finding and clarity of pedestrian movement within the study area and beyond
- Allow for areas of flexible programming, temporary activation and public events
- Incorporate planted swales and rain gardens for water retention and recycling

## AMENITY

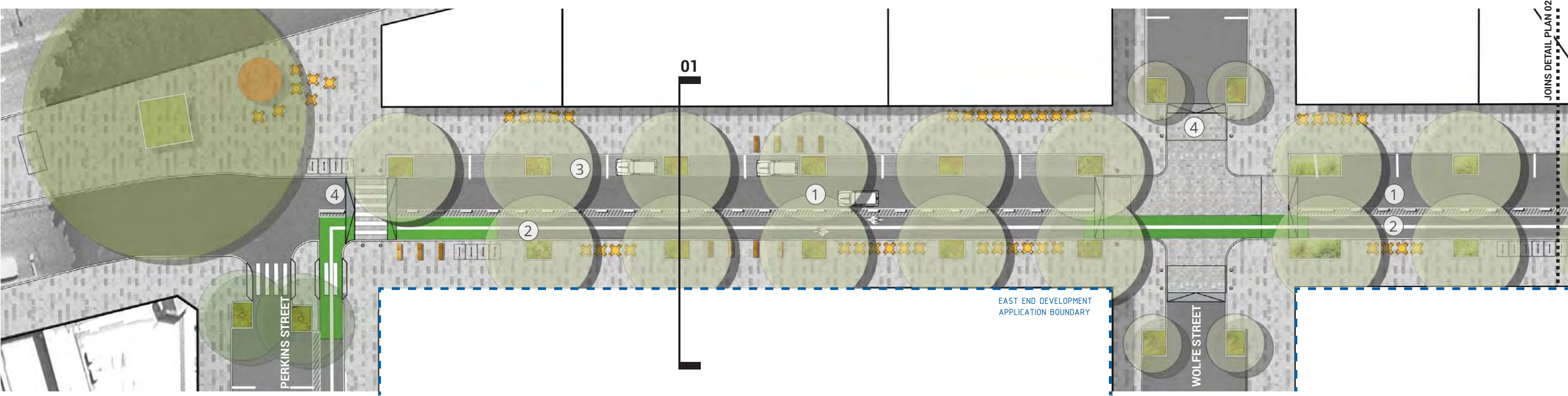
- Improve public amenity through the introduction of designated café/restaurant spill out areas and improved facilities
- Upgrade paving throughout Hunter Street and surrounds to create a high quality streetscape that is accessible and robust
- Create a consolidated suite of functional, bespoke street furniture and appropriate fixtures to replace existing clutter
- Improve lighting to increase passive surveillance and security and enhance the night time economy

## EXISTING CHARACTER

- Celebrate architectural qualities of heritage building façades through possible up-lighting strategy
- Minimise awning structures to shop fronts to create stronger visual connection to heritage building façades
- Retain avenue tree planting character, with possible succession of existing mature trees
- Prioritise pedestrian circulation wherever possible



# HUNTER STREET



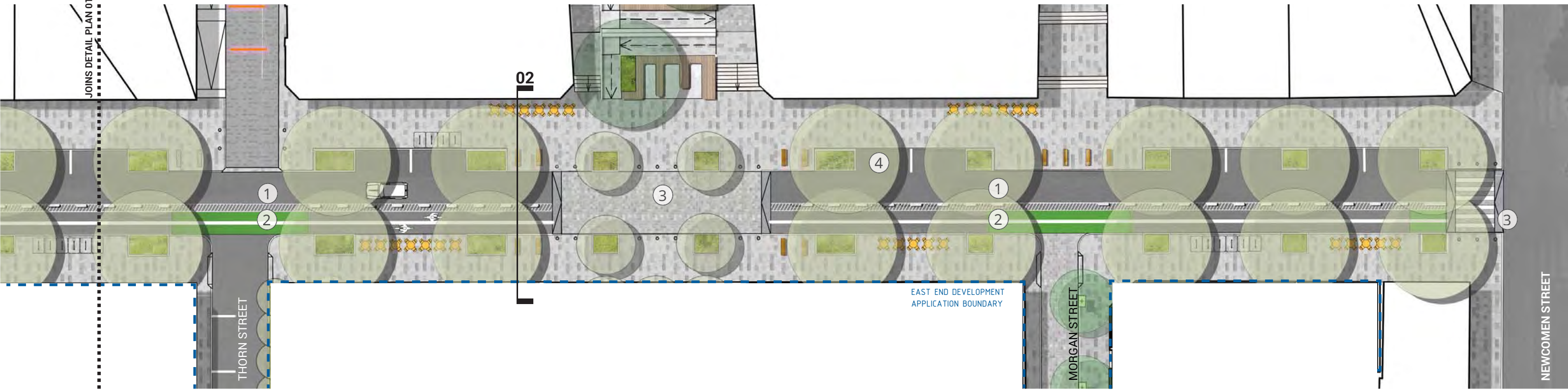
## DETAIL PLAN 01

### LEGEND

- 1. Single vehicular carriageway heading west between Newcomen and Perkins Streets
- 2. Bi-directional cycle lanes located on the southern side of the carriageway
- 3. Parallel parking bays provided on northern edge of the carriageway between street trees within planters (potential WSUD capabilities).
- 4. Raised cobble pedestrian crossing



# HUNTER STREET



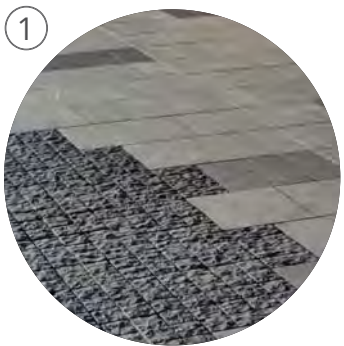
DETAIL PLAN 02

LEGEND

- 1. Single vehicular carriageway heading west between Newcomen and Perkins Streets
- 2. Bi-directional cycle lanes located on the southern side of the carriageway
- 3. Raised pedestrian friendly crossing at Market street and Newcomen Street intersections
- 4. On street parking spots provided along Hunter Street



# HUNTER STREET PEDESTRIAN FRIENDLY ZONE



Paving transitions define areas of pedestrian and vehicular movement



Generous footpath widths allow for additional outdoor dining and retail spillover



Removable bollards allow for large scale event overlays to occupy hunter street shared zone area.



7950

3500

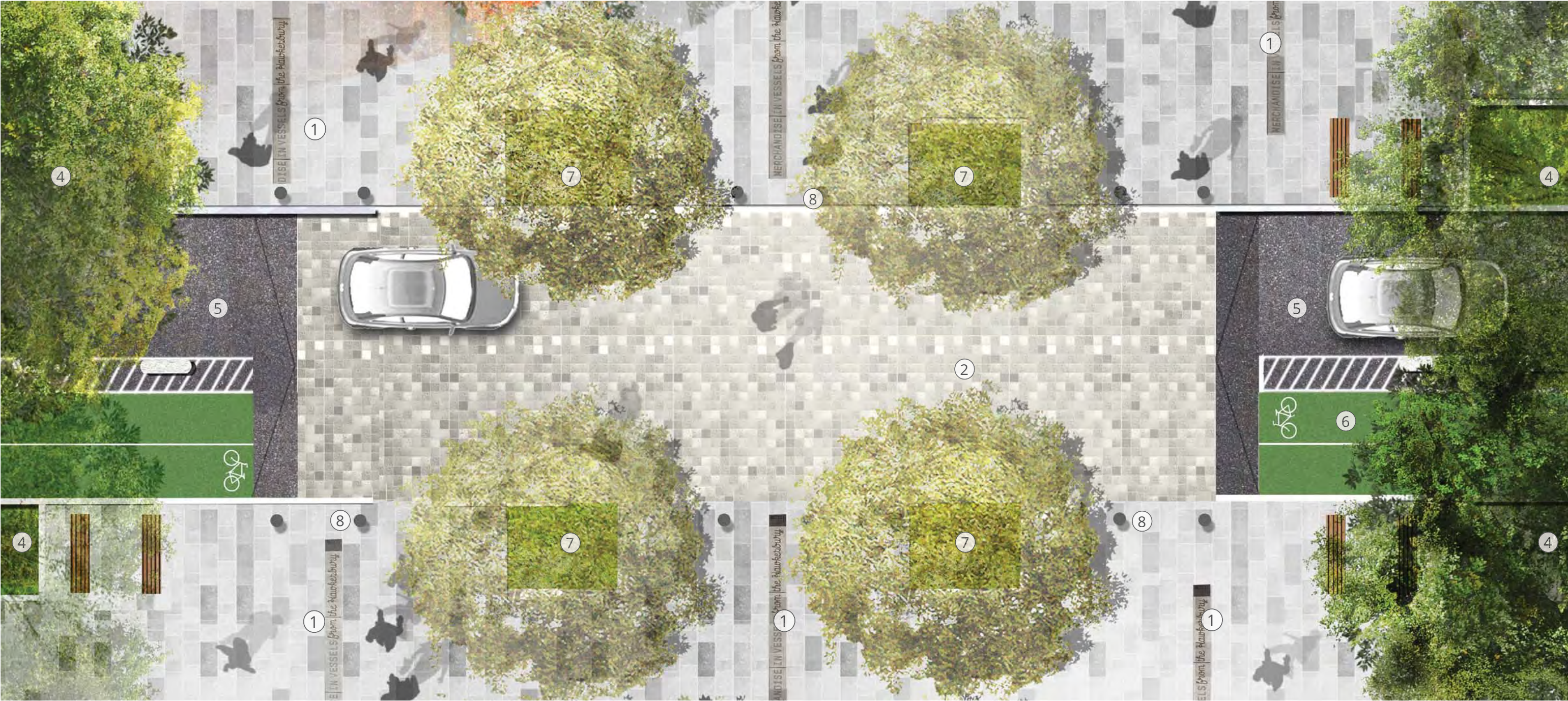
800

2500

5750



# HUNTER STREET PEDESTRIAN FRIENDLY ZONE



## KEY ELEMENTS

LEGEND	
①	Stone paved footpaths with potential interpretive banding
②	Raised cobble paved pedestrian crossing
③	300mm wide raised kerb island
④	Planters with potential WSUD capabilities
⑤	One-way vehicular carriageway
⑥	Bi-directional cycleway
⑦	Market Street tree plantings
⑧	Bollards



# HUNTER STREET CARRIAGEWAY WITH PARKING



Bi-directional cycleway with broken kerb to edge of vehicular carriageway. Swale plantings provide buffer to footpath and pedestrian zones



Generous footpath widths allow for additional outdoor dining and retail spillout

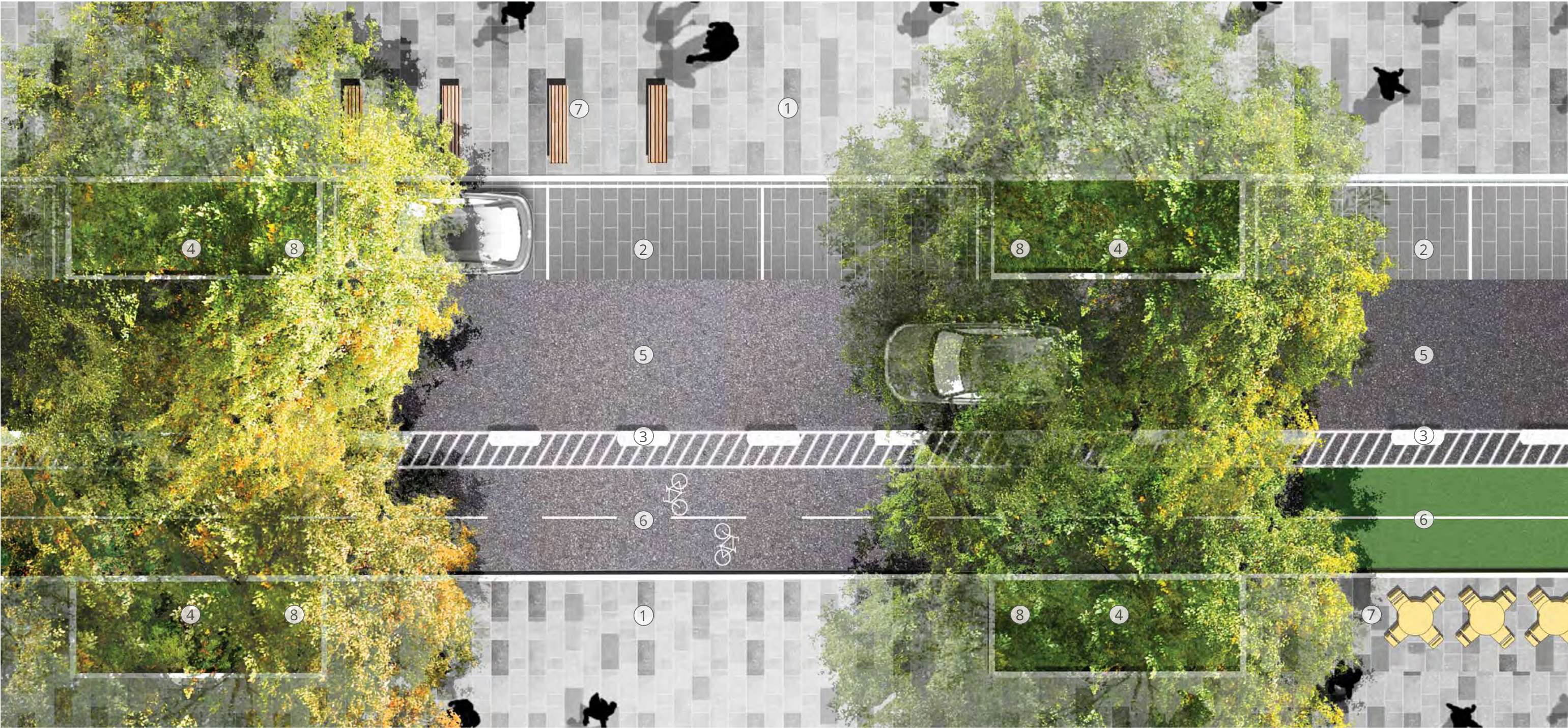


Improved street trees and swale plantings define outdoor rooms for retail and dining spillout, whilst also providing buffer between vehicular zones and footpaths.





# HUNTER STREET CARRIAGEWAY WITH PARKING



## KEY ELEMENTS

LEGEND	
①	Stone paved footpaths with potential interpretive banding
②	Proposed on street parking with permeable paving
③	300mm wide raised broken kerb delineating cycle lane
④	Proposed deciduous street trees
⑤	One-way vehicular carriageway
⑥	Bi-directional cycleway
⑦	Potential locations for public furniture, on street dining and retail spillout
⑧	On street planting beds with potential WSUD capabilities



# MARKET STREET



Description

Market Street is located between Hunter Street and Scott Street and will provide a strong link from the East End Precinct to the new market street light rail and waterfront. The intersection of Market Street and Hunter Street is highlighted as an active node punctuated by a generous raised pedestrian crossing linking across Hunter Street. A series of public terraces are provided between Hunter and Keightly Streets offering informal seating under trees. Disabled access ramps are also provided at this location. Market Street has been designed to allow pedestrian priority and minimise vehicle access to delivery and residential parking to existing underground carparking.

An intimate dining square is provided at the southern end of Market Street flanked by retail, this square will be delivered as part of the East End Development Application.

Principles

- Provide strong north - south pedestrian and visual connections to the waterfront
- Offer public breakout spaces that provide informal seating and gathering space
- Encourage outdoor dining

LEGEND

 Market Street



CHARACTER PRECEDENT IMAGES



MARKET STREET



LEGEND

- ① Hunter street raised pedestrian crossing.
- ② Public terraces with stair + ramped access to market street. Public seating located under large deciduous trees with small lawn facing market street
- ③ Market street shared / loading zone with raised + paved carriageway, new street trees and removable bollards for closure during events.
- ④ Proposed mail zone and loading bay

- ⑤ Bin enclosure
- ⑥ Light rail alignment
- ⑦ Light rail stop
- ⑧ Market Street - Hunter Development Corporation
- ⑨ Motorcycle parking



MARKET STREET



Flexible paved space that can be closed off to vehicles to cater for public events



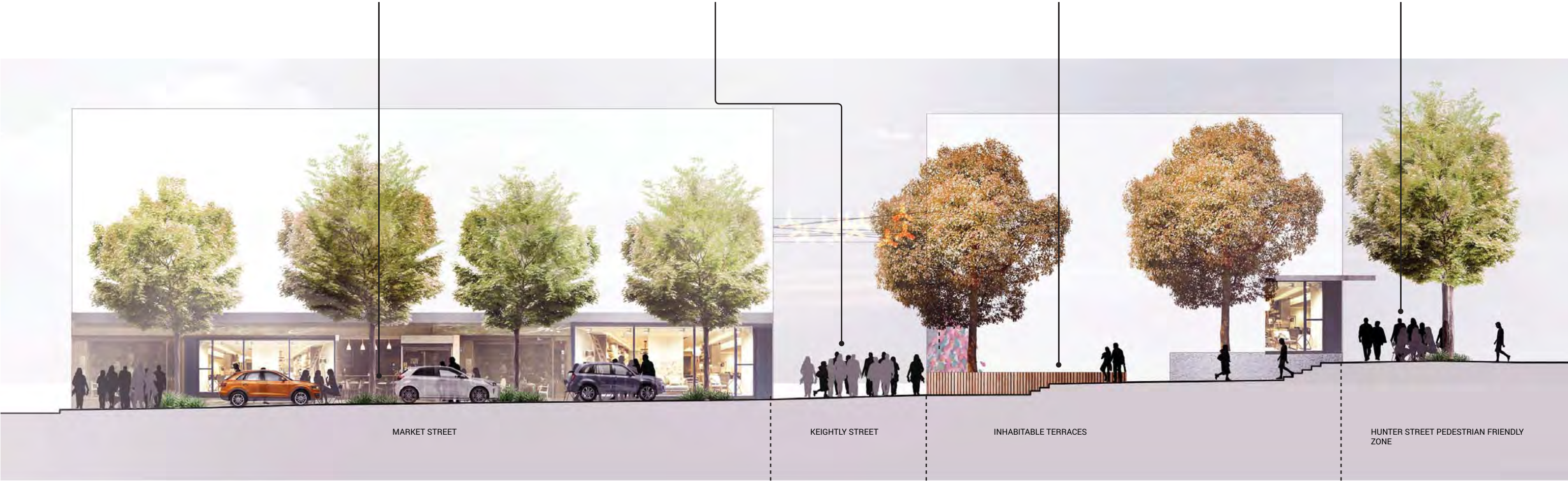
Vibrant laneways with public art and fine grain paving



Small scale gathering space with generous Public seating



Opportunities for on street dining under canopies of street trees





# MARKET STREET



Generous pedestrian friendly crossing point across Hunter Street



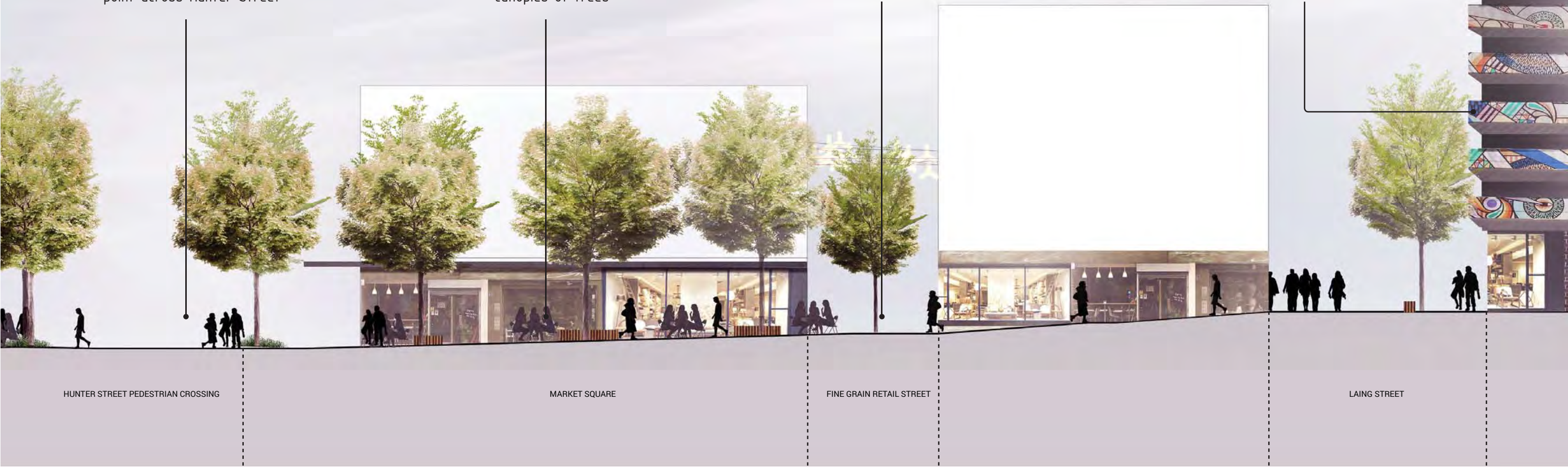
Intimate outdoor dining zones under canopies of trees



Fine grain retail laneway



Large scale public art opportunities





MARKET STREET





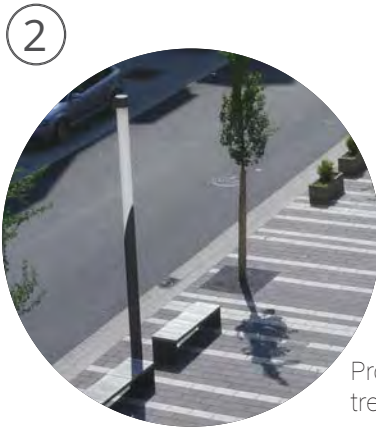
# LANEWAYS - LAING STREET



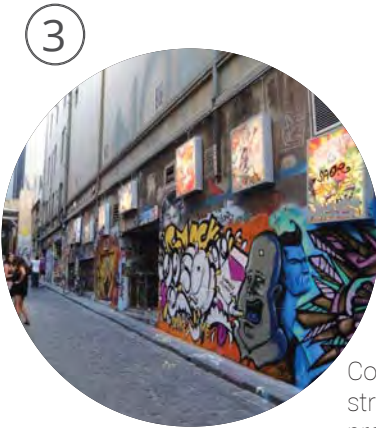
## KEY ELEMENTS



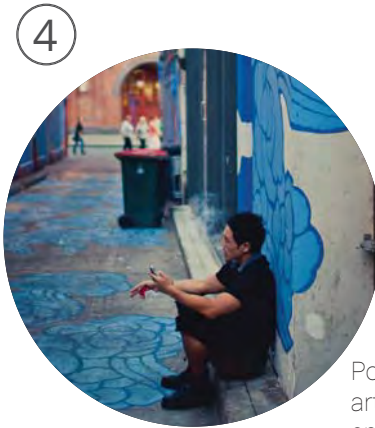
Fine grain retail opportunities to activate laneway network



Proposed seating and street tree plantings



Consolidated street art strategy to include existing and proposed buildings



Potential for installation artworks and interactive environments



# LANEWAYS - KEIGHTLY STREET



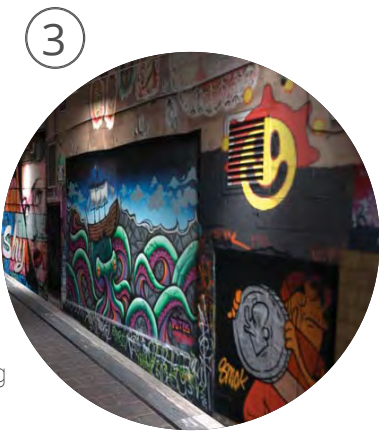
## KEY ELEMENTS



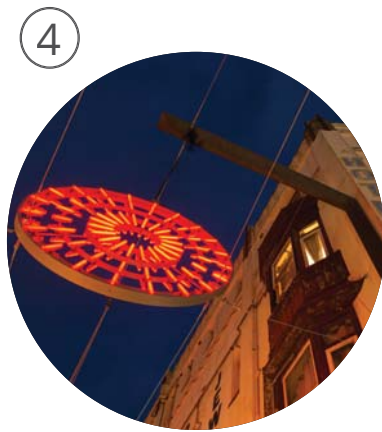
Fine grain and detailed paving changing character from service lane to pedestrian lane



Interpretive inlays within paving referencing the sites heritage



Consolidated street art strategy to include existing and proposed buildings



Potential for installation of catenary lighting / artworks within laneways



# MORGAN STREET STEPS




### Description

Morgan Street Steps is a publicly owned and accessible space comprising of flights of stairs with terraced planters transitioning between King Street and Laing Street. The indicative design proposes double height seating stairs located adjacent to access stairs providing informal north facing seating opportunities. An open paved space at the base of the stairs could provide the opportunity for informal events and performance. Public seating could be located throughout the terraces surrounded by large scaled shade trees with decorative understorey planting. The western boundary wall to adjacent Council carpark allows for integrated public art possibilities along the entire length of the terraces.

### Principles

- Provide generous width stair connection (minimum 3m wide) between King Street and Laing Street
- Include planted terraces and seating areas adjacent the stairs
- Provide adequate lighting throughout the terraces that allows safe night time use

LEGEND	
	Morgan Street Steps

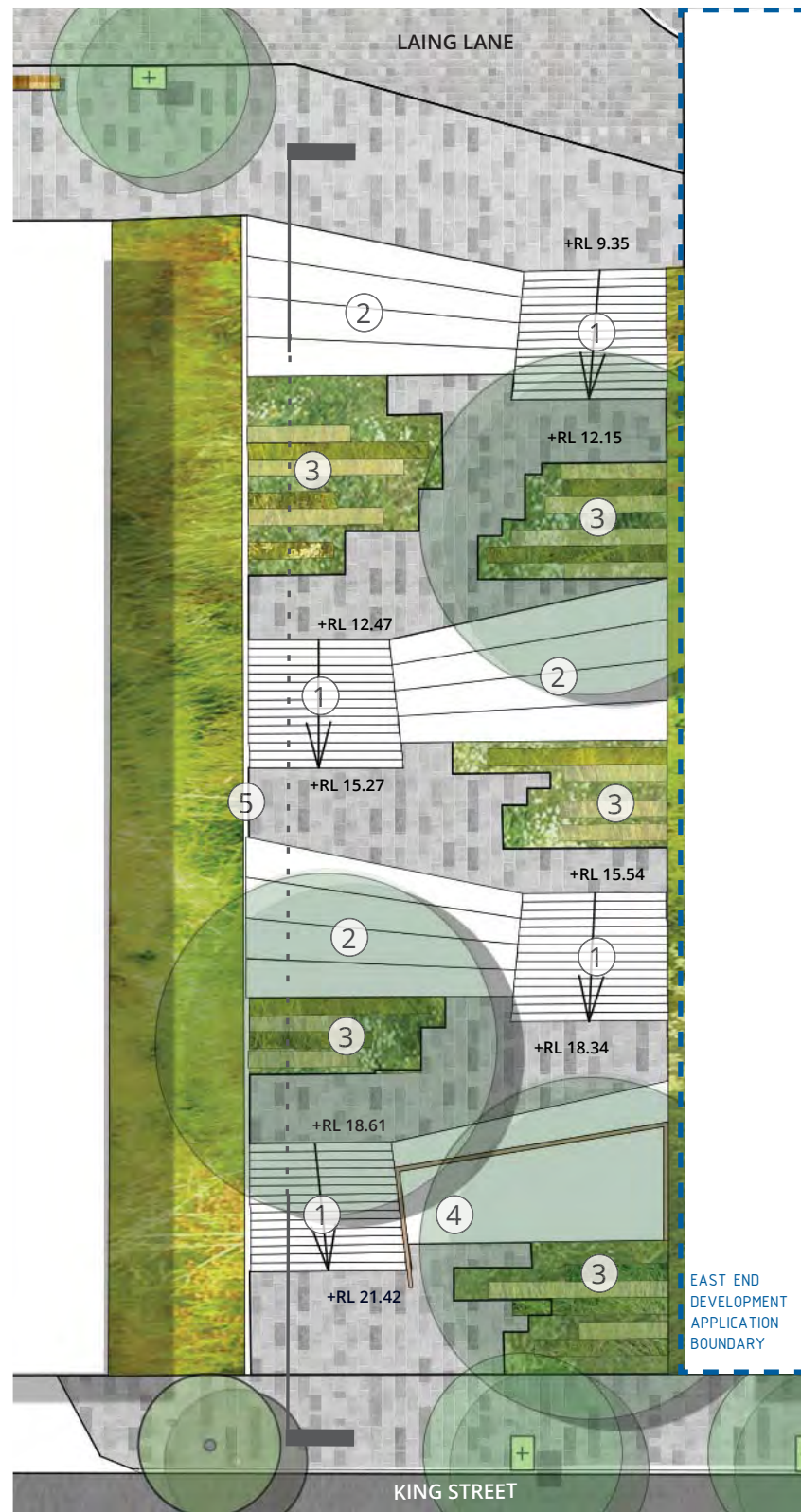


CHARACTER PRECEDENT IMAGES





# MORGAN STREET STEPS



INDICATIVE CONCEPT PLAN



INDICATIVE CONCEPT SECTION

LEGEND	
①	Access stairs with handrails and integrated lighting for night time use
②	Seating stairs forming informal amphitheatre for small events
③	Banded planting with large evergreen feature trees
④	Upper belvedere with views across CBD
⑤	Boundary wall adjacent to council carpark at balustrade height
⑥	Adjacent council carpark



PROPOSED PUBLIC ART

LEGEND



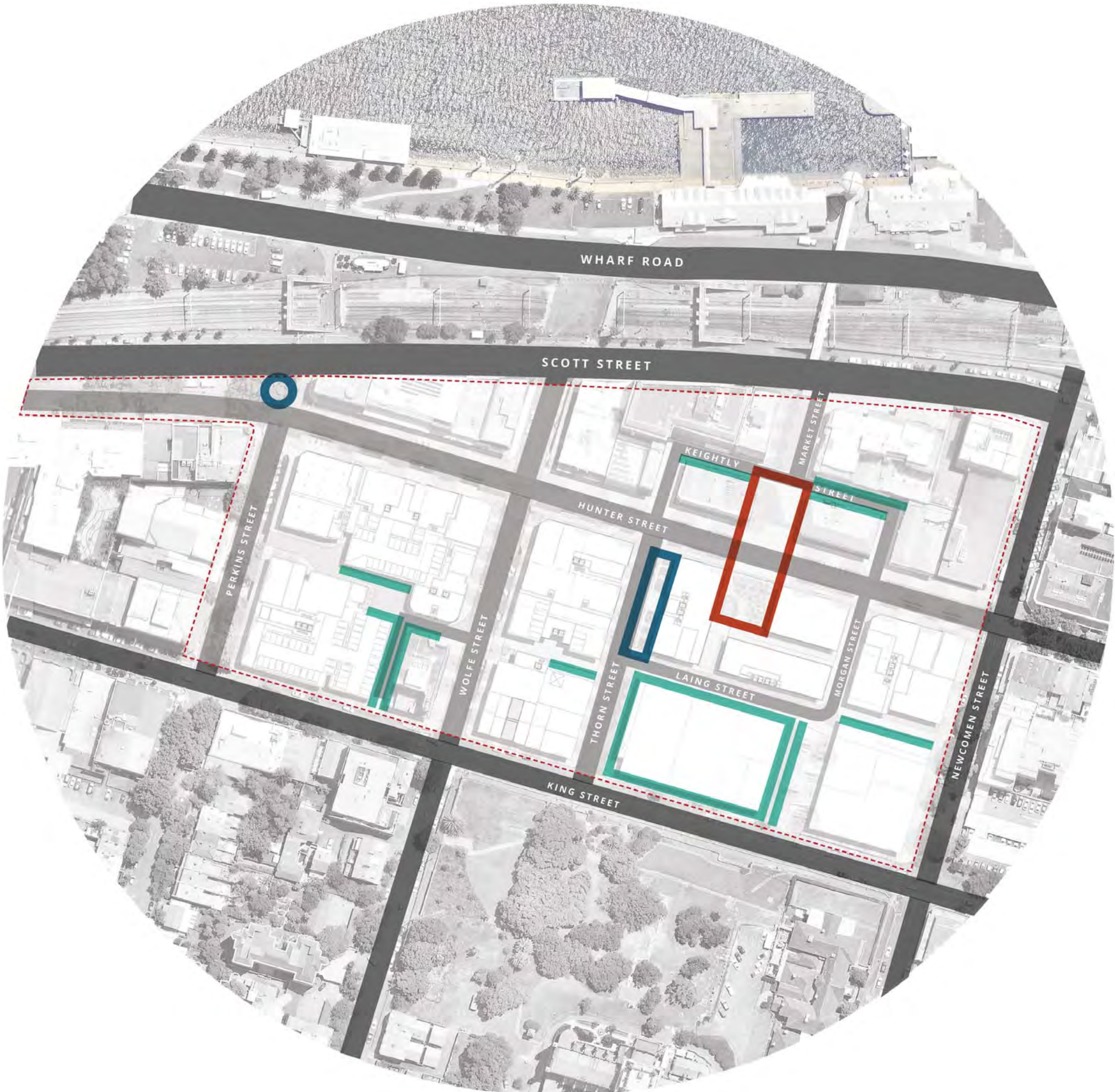
Primary public art installation



Potential walls for street art



Integrated interpretive public art





# SMART TECHNOLOGY IN THE PUBLIC DOMAIN

## WHY EMBED TECHNOLOGY IN THE PUBLIC DOMAIN?

Newcastle is an emerging smart and innovative city.

A key strand of the urban revitalisation narrative is that the city is an attractive place to live, work, invest and visit. The smart city will provide opportunity for entrepreneurs and businesses to thrive in the digital century, underpin diversification of the local economy, and drive inward investment and outward commercialisation of local and regional innovation.

A smart city is also focused on sustainability, improved livability, and increased public amenity. These principles are deeply related to the quality of the public domain and the city experience for residents and visitors.

Embedding technology in the public domain is a key strategy in creating a data-rich urban environment that produces insights on city and population. This city data provides a rich resource for urban administration and planning.

Technology in the built environment makes the city more navigable, accessible, responsive, information-rich and interesting.

## INTEGRATING TECHNOLOGY WITH URBAN INFRASTRUCTURE

A smart city requires two kinds of urban infrastructure.

### 1. Digital Connectivity

The first is digital connectivity. This includes fibre broadband networks and WiFi platforms. Newcastle is developing strategies for fibre-to-the-premises within a Digital Precinct and a City-wide WiFi platform in the city centre. Fibre and WiFi enable digital economy and urban data and are increasingly understood as fundamental city infrastructure.

### 2. Internet of Things

The internet of things (IoT) is the current and third wave of the internet. It relates to ubiquitous and networked computing that is connecting everything. Sensors and digital connectivity in a whole range of infrastructure and products is providing valuable real-time data that is the source of new insights and value creation. IoT is transforming wearables, smart home, retail and industry, and public infrastructure. Through embedding IoT technology traditional public infrastructures are made 'smart'.

## WHAT KINDS OF SMART TECHNOLOGY IS NEWCASTLE LOOKING AT?

### 1. WiFi

A city WiFi network provides the digital connectivity allowing sensors to be networked and linked to the internet. It is the backbone of the IoT platform in the city centre. City WiFi also supplies a free public WiFi service and enables improved city information.

### 2. Smart Lighting

Smart lighting involves sensors and controls in lighting infrastructure to enable real-time status awareness and responsive controls. Benefits include resource management, sustainability improvements and light-as-required.

### 3. Smart Parking

Smart parking involves sensors embedded in parking spaces to monitor use and signal availability. Real-time information on parking spaces can be used for improving urban mobility and citizen experience, reducing congestion, improving compliance and providing city data.

### 4. Smart Screens

Smart Screens are interactive touch and display screens embedded in the public spaces of the city to create points of concentration and activation such as plazas, parks and transport nodes. The screens display a city digital platform that provides real-time information on the city such as business, transport and event information.

### 5. Street Furniture

Street furniture can be embedded with digital connectivity and sensor technology to improve citizen experience and amenity. Examples include bench seating with WiFi and device charge stations, bus stops with help points, electric vehicle charge stations.

### 6. Smart Bins

City bins will be fitted with sensors that indicate when a bin is nearing capacity or has odour. This data is provided to waste management services and analytics plots an optimised route through the city for those bins that need to be emptied. Over time this information improves planning of waste demand and receptacle location. Benefits include resource optimisation and city data.

### 7. Interactive Environments

Sensor and digital technology in the built environment also enables development of interactive spaces of play and engagement. It opens a new field of digital placemaking where individuals can interact with and influence elements of public space. Examples might include interactive lighting, digital game spaces, mediated environments and motion controlled fountains.

### 8. Environmental Sensing

Sensors will collect data on environmental conditions (Co2, temp, humidity) and patterns of movement such as traffic and pedestrian mobility.



Smart wayfinding signage



Smart lighting



Smart parking meters



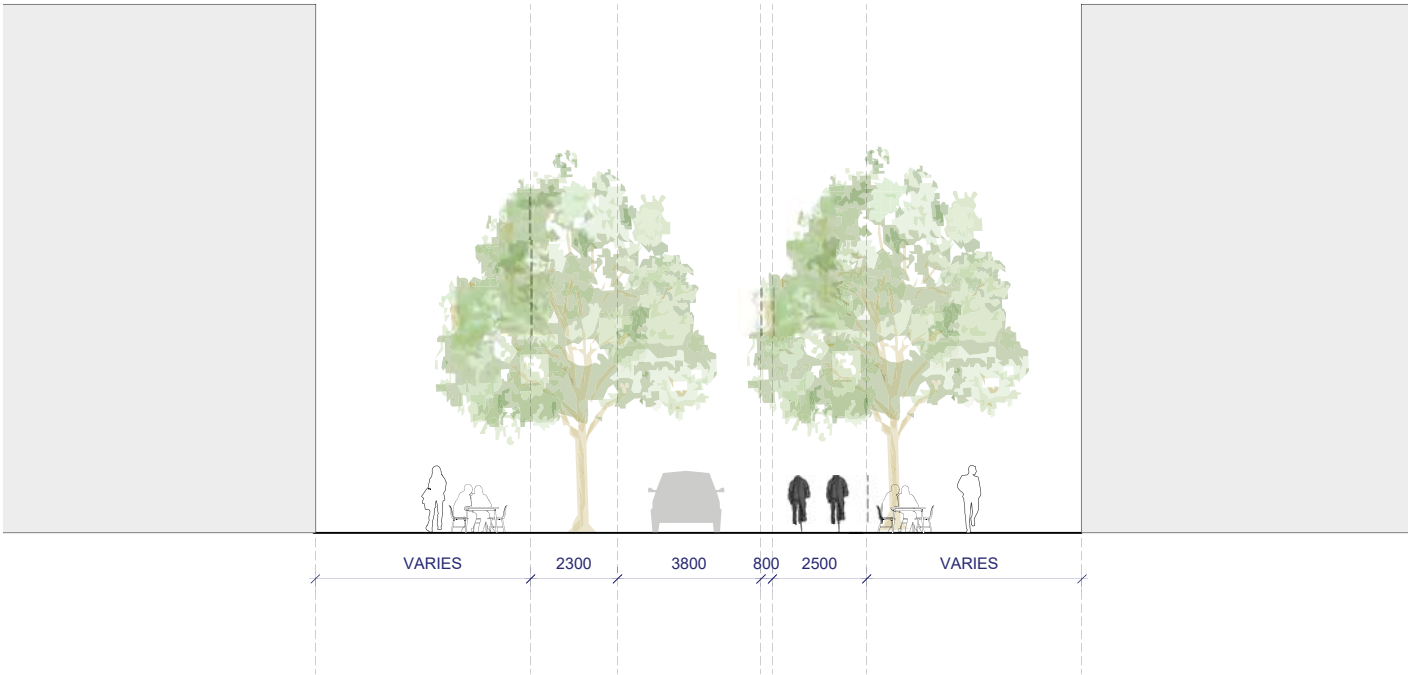
Smart rubbish bins



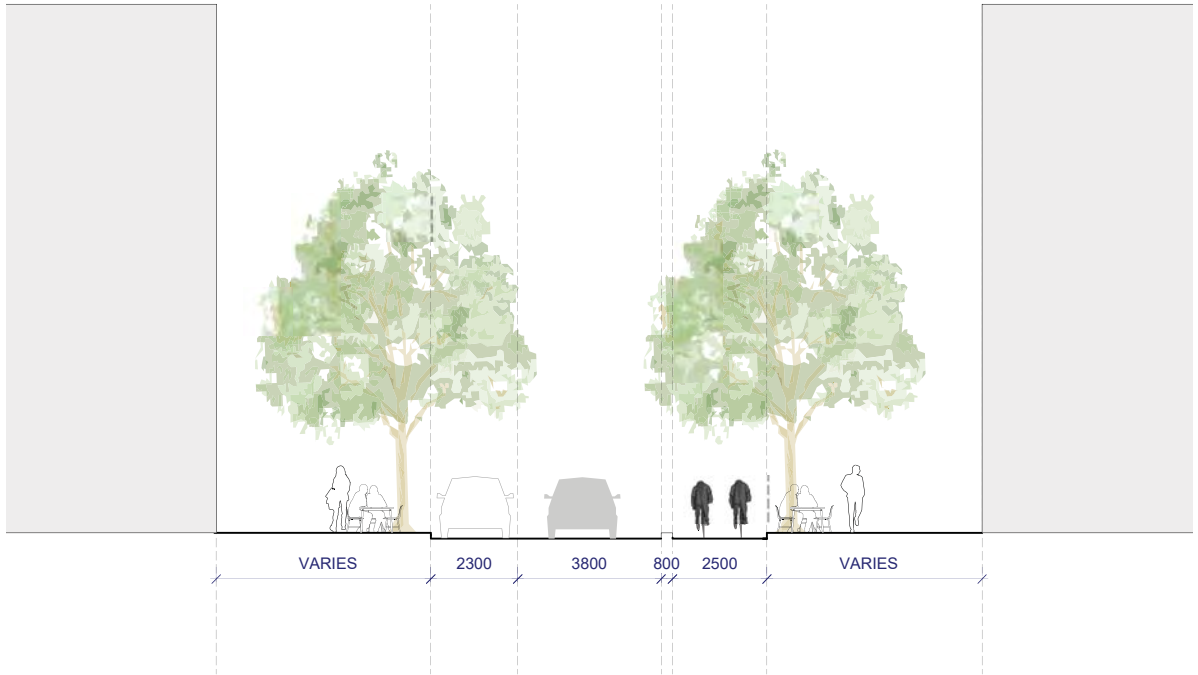
Interactive public artworks utilising Smart Technology



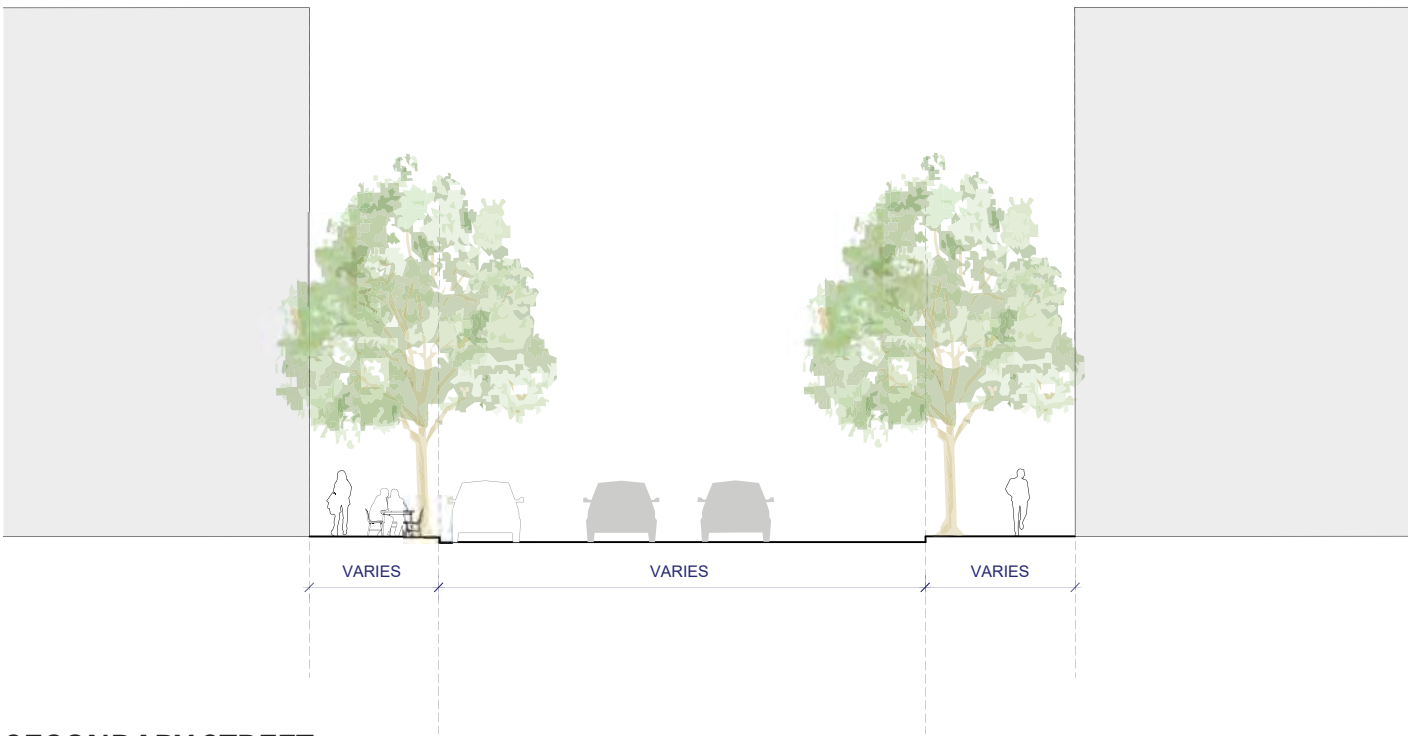
## TYPICAL STREET SECTIONS



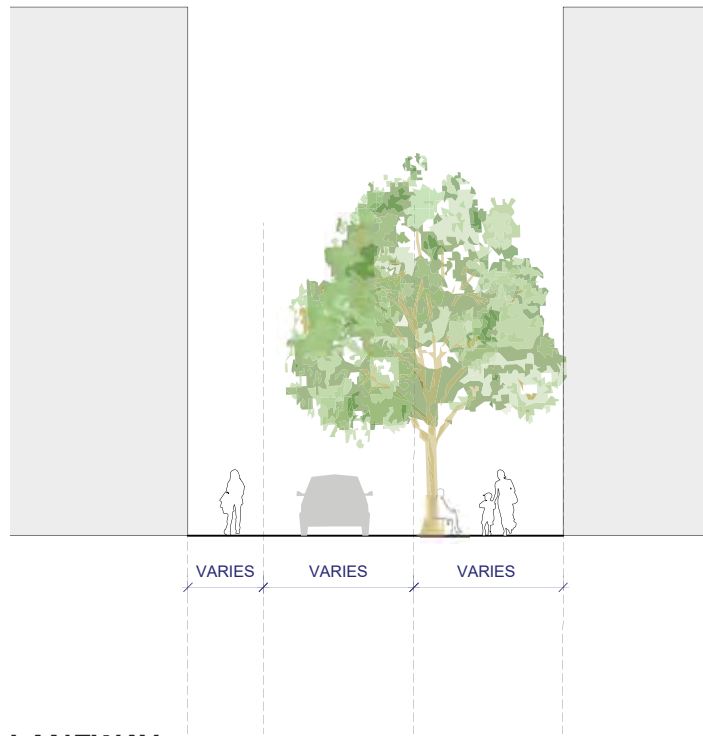
## HUNTER STREET PEDESTRIAN CROSSING



## HUNTER STREET VEHICULAR CARRIAGEWAY



## SECONDARY STREET



LANEWAY



INDICATIVE MATERIALS PRECEDENTS

MATERIALS



FURNITURE



LIGHTING + WAYFINDING



PUBLIC ART

