



TOWN OF  
VICTORIA PARK

# Burswood South

## Streetscape Improvement Plan

MARCH, 2022

ASPECT Studios



**HATCH** | RobertsDay

# Context

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# Context



# Project Mandate

## Place Plan (adopted by Council 2020):

- Action 3.3 – Prepare and implement a Streetscape Improvement Plan for Teddington and Burswood Roads.
- Project scope expanded to all streets (2km length same as Archer St. streetscape plan).

### Action 3.03

#### Streetscape Plan For Burswood and Teddington Roads



Burswood and Teddington Roads have the potential to form a major 'business' high street in the Town, but currently function mostly as a thru-traffic route. The poor-quality environment, parking and traffic access issues from side streets, hinders the attraction of investment in the redevelopment of Burswood South and needs addressing.



There is a need to rejuvenate this important streetscape to attract investment in redevelopment and attract more people to Burswood South as customers and residents. The Streetscape Improvement Plan will address undergrounding power, greening and shading, creating people-friendly footpaths and spaces, parking, vehicle access from side streets and people access through to GO Edwards park.

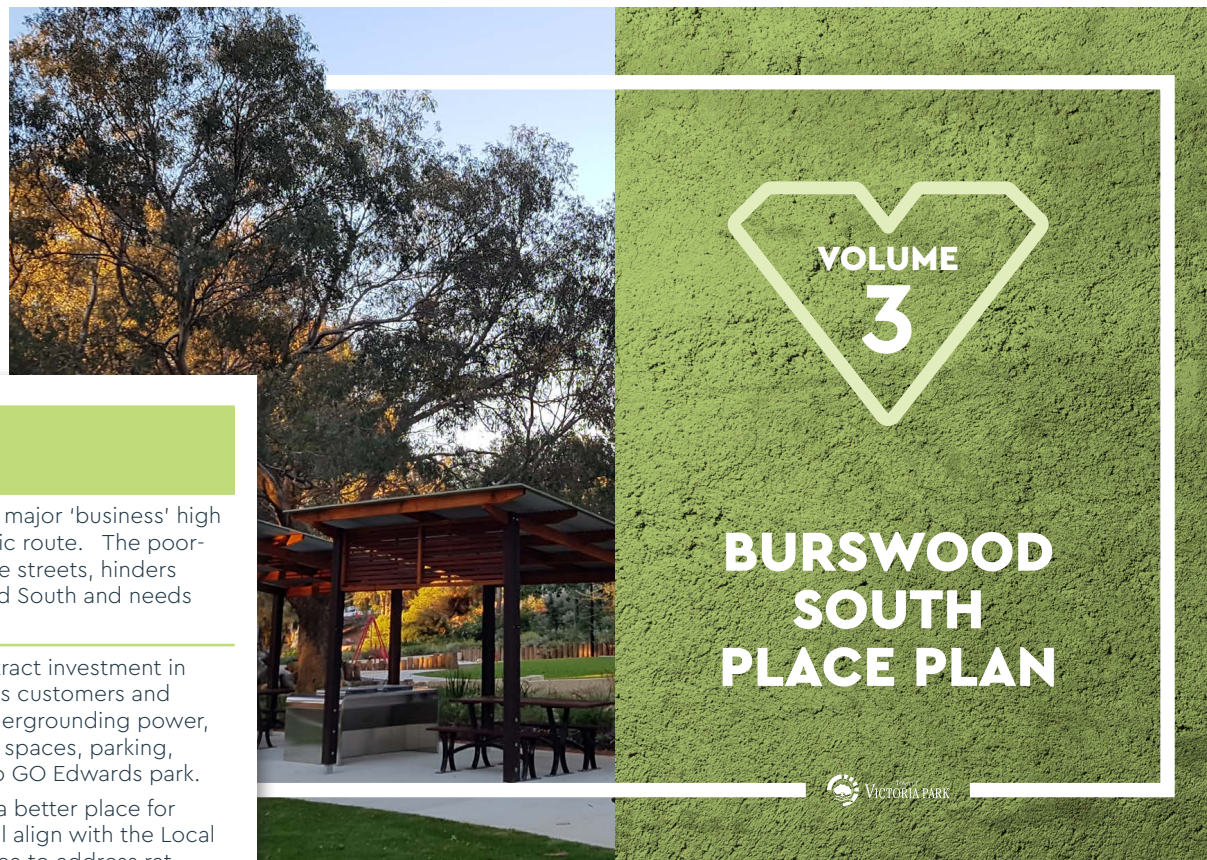
The Plan will create a better identity for Burswood South and a better place for business and people, while managing thru traffic. The Plan will align with the Local Area Traffic Management Plan being prepared for the wider area to address rat-running and access to Burswood Road.



Prepare and implement a Streetscape Improvement Plan for Teddington and Burswood Roads.



R1 R2 T2





# Project Area





# Project Objectives

## The objectives of the Streetscape Improvement Plan are:

- To rejuvenate and rebrand the image and character of the area as a highly desirable inner-city precinct for living and doing business.
- Provide for an attractive, safe and comfortable public realm, re-balancing priorities towards pedestrian accessibility and experience over through and circulating vehicles.
- To ensure streets contribute to a more sustainable and resilient urban environment (eg. mitigate heat island, better stormwater management, encourage walking and cycling).
- To ensure public investment is proportional to the economic and social value of the place, within the Town's capacity to fund and an incentive to private investment.



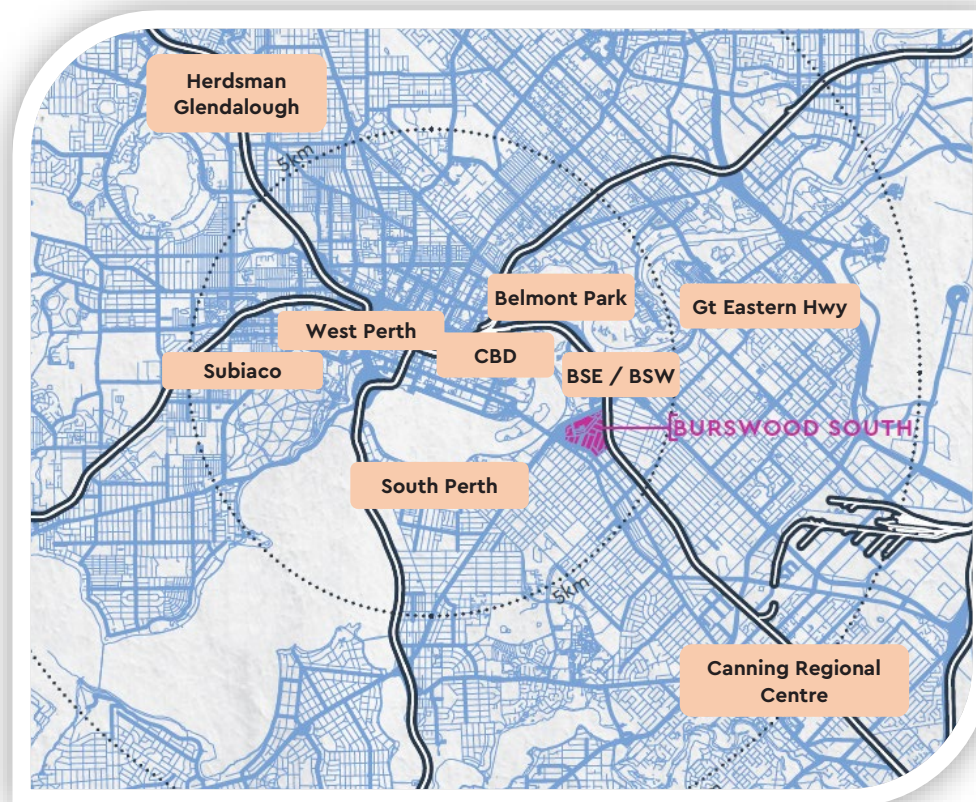
# Strategic Context

## CONTEXT

The Burswood South is located within a competitive ring of existing and proposed inner city commercial areas on the doorstep of the Perth CBD. Burswood South has some advantage given proximity to the Perth airport, access to the regional road network and Welshpool-Kewdale industrial area.

While the key purpose of the streetscape plan is to rectify existing issues, provide a fit-for-purpose public realm and stimulate private investment, the streetscape plan also provides an opportunity for implementation of the Town's strategic goals (expressed through Informing Strategies):

- **Urban Forest Strategy** – contribute to biodiversity and mitigate urban island affect through street trees and native garden beds.
- **Environment Plan / Climate Emergency Plan / Stormwater Management Plan** – address groundwater and surface run off water quality and provide for aquifer recharge through water sensitive urban design (filtration / rain gardens).
- **Economic Development Plan** – attract knowledge-based jobs that add to the diversity of local employment options, attract inward investment and have multiplier effects through the local economy.
- **Transport Strategy** – create a healthy, safe, accessible and liveable place by re-dressing the balance between cars and active transit modes.





# Planning Framework

## CONTEXT

- Current zone "Office/Residential".
- Current floorspace – 88,000 sqm 'mixed' business, 50% size of Albany Hwy.
- Current Local Planning Policy 22 :
  - heights generally 2–6 storeys
  - 6 sites @ 18 storeys
  - 2 sites @ 12 storeys
  - anticipates 2,300 residents + 3000 jobs
- commercial activation ground floor + building / parking design
- Draft Local Planning Strategy – recommends a review of the planning framework (ie. update LPP22) in the medium term (3–4 years)



Diagram of full development as per Local Planning Policy 22



# Issues – Opportunity Survey

CONTEXT

Survey open in March, 2021.

450 flyers distributed to business/workers, landowners and residents + social media.

58 responses received.

## Satisfaction Ratings (% total scores)

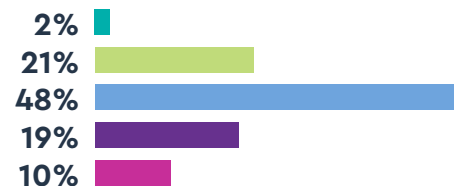
### GENERAL QUALITY OF STREETS



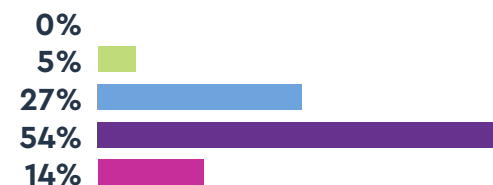
### PARKING AVAILABLE



### DRIVING ENVIRONMENT



### CYCLING ENVIRONMENT



### WALKING ENVIRONMENT



● Excellent ● Good ● Just Okay ● Poor ● Very Poor

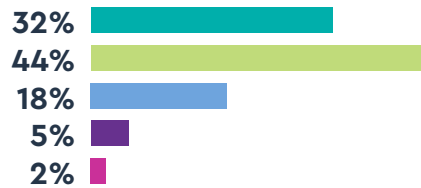
## Notes

- high level of dissatisfaction with the quality of streets across the board.
- dissatisfaction with parking is not reflected parking occupancy survey (2017) which found of average occupancy of 22%, 45% in peak times.
- dissatisfaction with driving environment reflected in high % of qualitative comments received about recent changes to road network (Craig St) and side street access from residential areas/rat running.
- dissatisfaction with cycling environment was not repeated in qualitative comments.
- dissatisfaction with walking environment reflected in high % of qualitative comments received about ped crossing safety, comfort/amenity.

# Issues – Opportunity Survey

## Perception of Safety

### FEEL SAFE DURING THE DAY



### FEEL SAFE DURING THE NIGHT



● Strongly Agree ● Somewhat Agree ● Neutral ● Somewhat disagree ● Strongly disagree

## Notes

- 69% people feel unsafe at night.
- 24% people are neutral or disagree with feeling safe during the day, and 44% "somewhat agree". Could this be due to poor pedestrian-vehicle conflicts, road access issues from side streets?

# Issues – Opportunity Survey

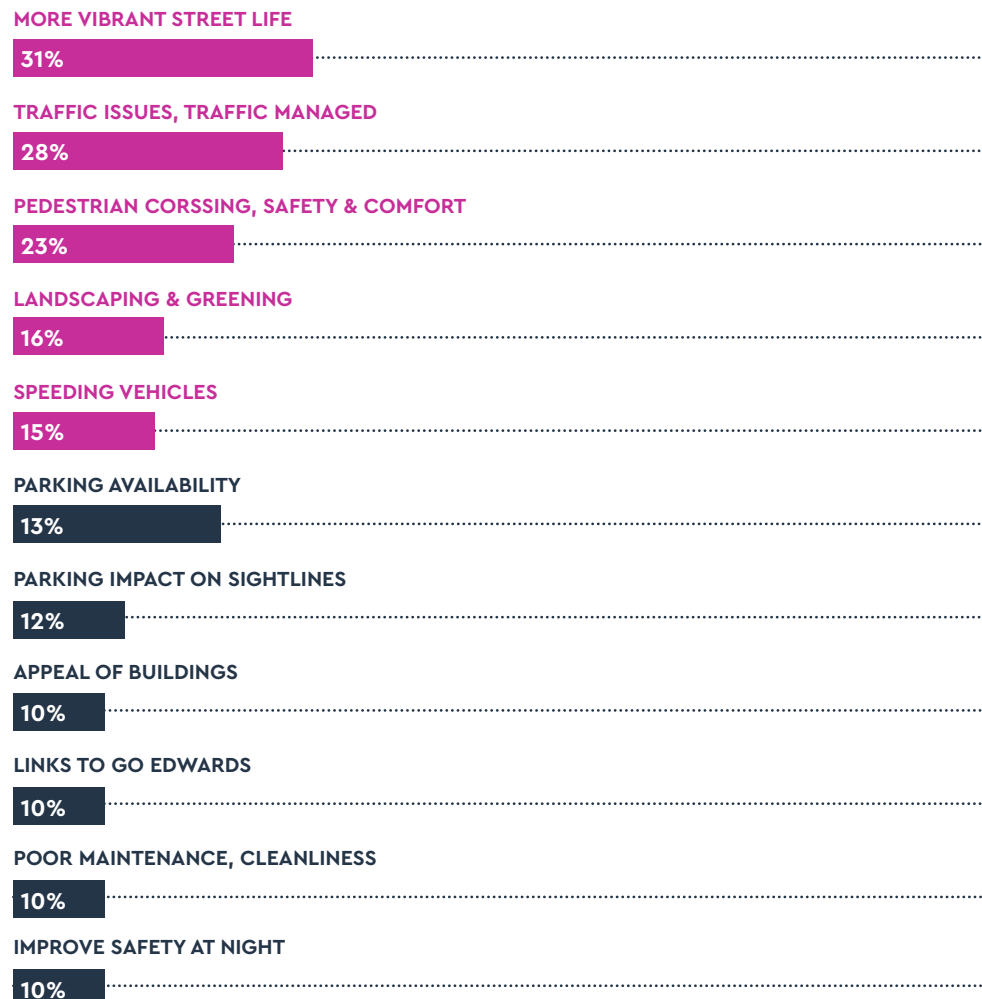
CONTEXT

## Street Improvement Priorities (set options)

AVERAGE RANK 1–10



## Issues / Aspirations (open ended)





# Issues – Opportunity Survey

## CONTEXT

### I think Burswood South would be a better place if the streets...

... "had distinctive streetscape that included parklets with seats, shade, sculptures, bins etc, it could become an interesting boulevard for urban art."

... "were safer, better night lighting on Hawthorne Place."

... "had less traffic and more control over speeding vehicles, more parking"

... "had underground power. verges kept mowed and clean."

... "had a few cafes, and retail options, without having to go to Albany Highway or Crown, more friendly and vibrant, with more cafes and shopfronts."

... "were well lit up and had more activity occurring in day and night, connected to the park properly."

... "were treated to a higher standard with new underground power and lighting, new footpath and road pavements and street trees in the footpath area for shade and also in the middle of the roads to create an avenue effect."

... "were seen as an extension of Albany Hwy, rather than a passage between it and Great Eastern Hwy."

(Sample of responses)

## What other street improvement are needed...

- ... "its really difficult for my kids to cross Burswood Rd with their grandparents to go to park. Burswood Rd also has a lot of blind corners due to all the parked cars. Would love more vibrancy in businesses too."
- ... "I regularly access Burswood road from Harvey street. It is a traffic nightmare, there are too many cars travelling along Burswood road, and parking can make access dangerous, and it is usually a significant wait. Many many cars use Rushton street and Harvey street as an access from Shepperton Road to Great Eastern highway, and visa versa."
- ... "need to beautify area with appropriate plants, paving fixtures etc. which increase the visual appeal. Verges in some areas in particular are an eyesore. All of this needs to be maintained regularly."
- ... "put in disabled but NOT on private property – this should be a council responsibility!"
- ... "and unsafe. I wouldn't walk there at night. My street is a 10min walk to the train station and we get a lot of break ins and have had our cars stolen. I'd love more safety measures."
- ... "underground power and remove trees and replace with ones which don't make such a mess, it is a nightmare to keep business environment clean."
- ... "we need to see a big tidy up, nice landscaping & some shady trees."
- ... "median island installation along Teddington/Burswood Roads with extensive tree planting on islands to create a canopy of shade along these stretches of roads and provide crossing places for pedestrians (think Subiaco Centro Avenue). .Provide a better link to the parkland area and create a reason for people to visit this park (ie cafe on the lake area). Installation of play equipment at the Hawthorne Place end of the park area as car parking is already in place. "
- ... "rezoning of commercial properties to have more cafe, brewery, restaurants. And linked to the park. Possibly pedestrianise some sections."
- ... "general tidy up of some visible buildings."
- ... "as more and more businesses move into the area, we need a lot more temporary parking for our customers/ clients as well as long term parking for employees. The development of Burswood Peninsula has some similarities to Docklands Development in Melbourne. My hope is that we create a balance between inviting businesses into the area whilst keeping it attractive for families through parks, and activities."

(Sample of responses)

# Site Analysis



# Movement

## DRIVING



- Burswood Road District Distributor B. Wide vehicle carriageways.
- Functions as through-road given restrictions from Shepperton to Great Eastern Hwy and no-right turn Craig St to GEH.
- Must accommodate larger vehicles servicing businesses.
- Range of on-street parking with varying time limits.
- Council carpark on Hawthorne, under-utilised.

## PUBLIC TRANSPORT



- Range of public transport modes within reasonable walking distance.
- Bus routes along Craig and Asquith Streets, Shepperton Road.

# Movement

## SITE ANALYSIS

### CYCLING



- Proximity to regional cycle network along Great Eastern Highway for access to Burswood Peninsula, Swan River and beyond.
- Burswood Road barrier for adjoining residential cyclists.
- No dedicated on-street bike parking facilities, likely low number end-trip facilities in older buildings.
- Constrained road space for on-road cycling lanes.

### WALKING



- Footpaths on every street. No seating, except for cafes.
- Lots of driveway crossovers make footpaths unsafe and nuisance. Fair degree of cracking to edges of paths.
- No priority given to pedestrians other than 1 crossing on Burswood Road. Traffic speed and constant volume creates crossing issues.
- Lack of shade / patchy shade along all streets. Noisy.
- Network of rear laneways provide additional access although unwelcoming.

# Night Audit

## SITE ANALYSIS



Low lighting levels, concentrated in sections, 4 lights not working



Burswood Rd reasonable, some businesses add to lighting and sense of activity



Very poor lighting directly off main road

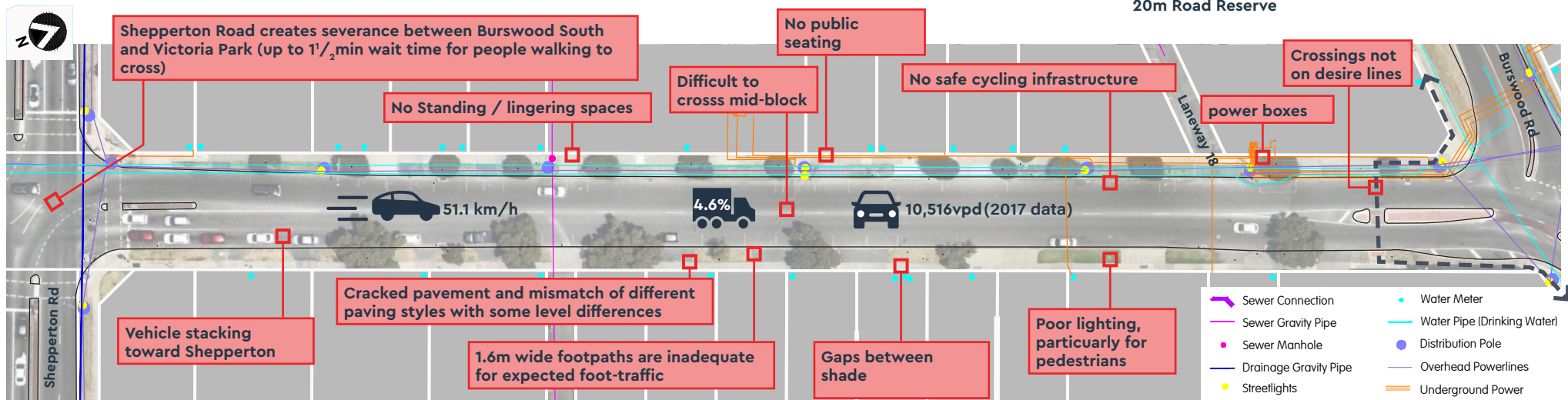
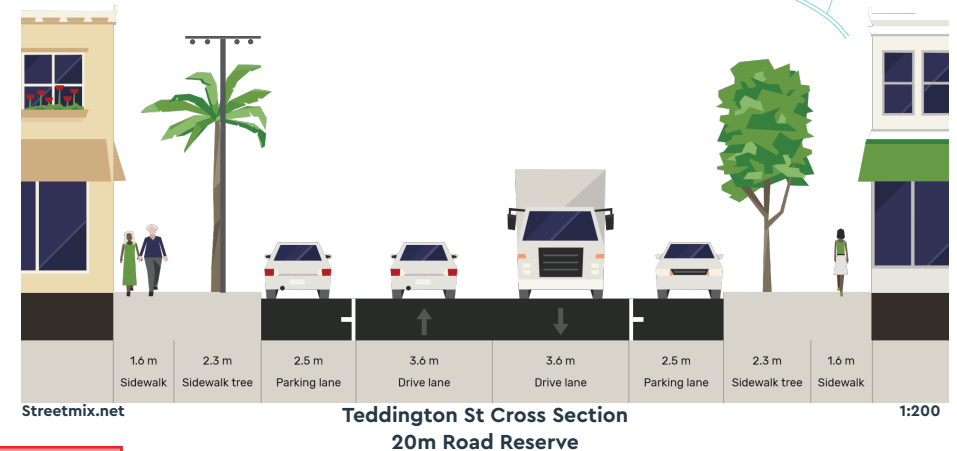


## SITE ANALYSIS

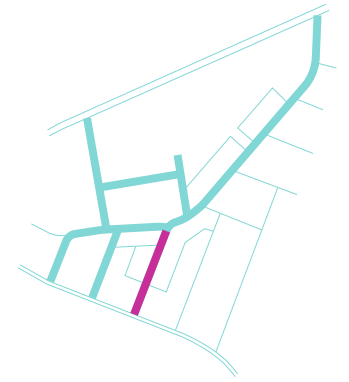
# Teddington Road

### Positives

- No major interruptions to footpaths for 200m+
- Eclectic mix of uses
- Potential gateway / connection to Albany Hwy to the south-west.
- Separation of pedestrians from moving traffic.







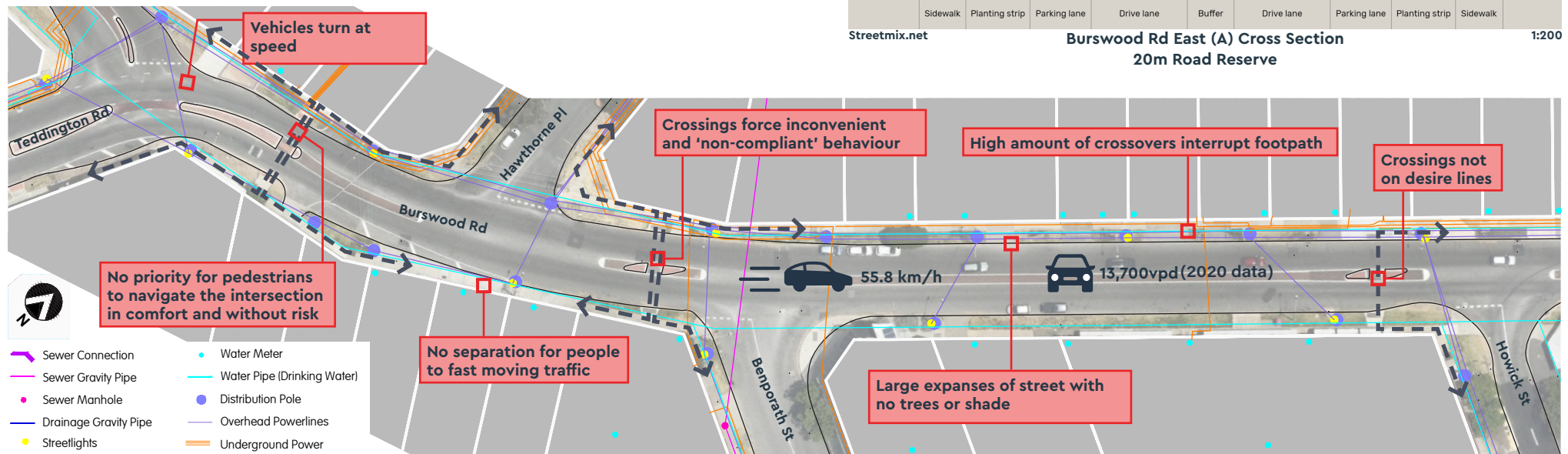
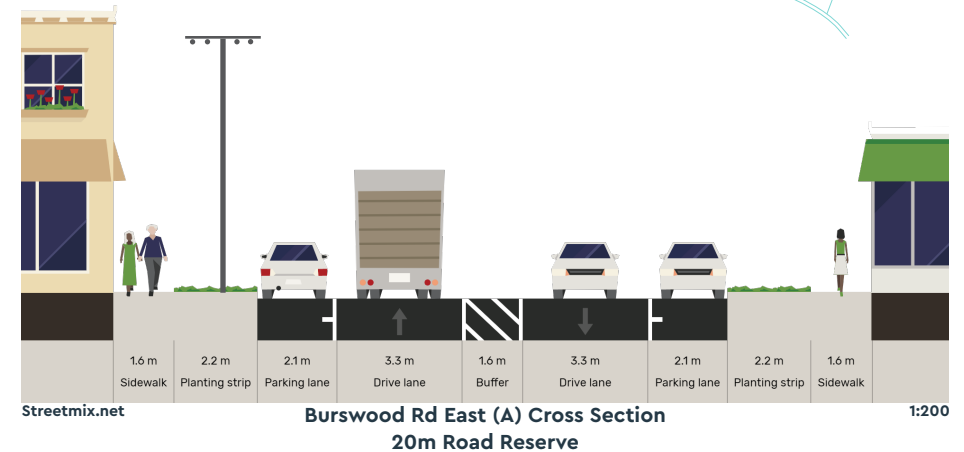


## SITE ANALYSIS

# Burswood Road (East of Teddington A)

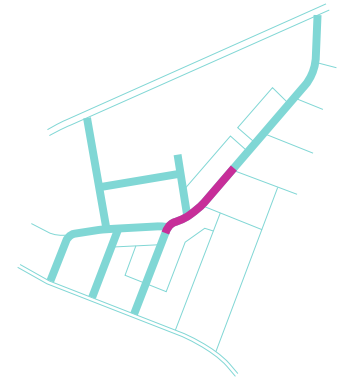
### Positives

- Eclectic mix of uses
- New Mixed-Use building (development investment)
- Existing frontages enclose street, including older buildings – setbacks are urban.
- Median pedestrian crossing refuge.





## SITE ANALYSIS



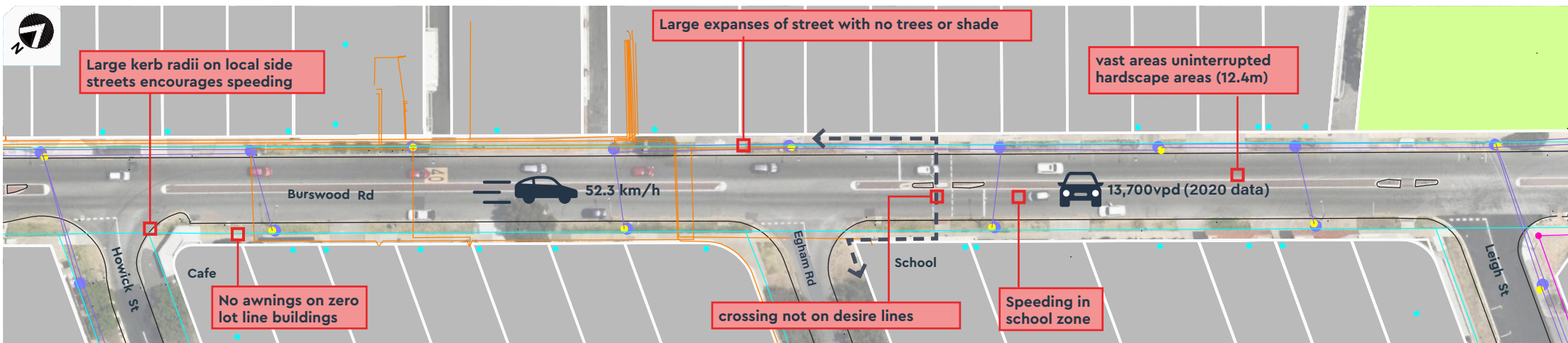
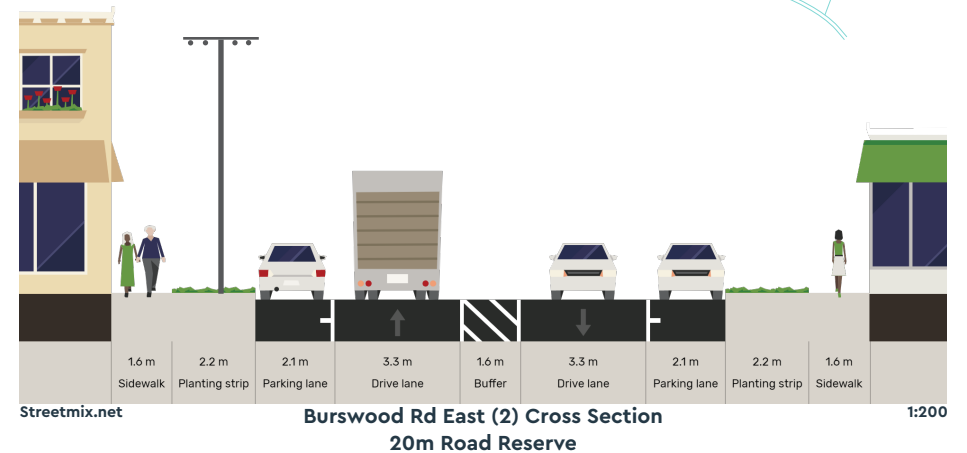


## SITE ANALYSIS

# Burswood Road (East of Teddington B)

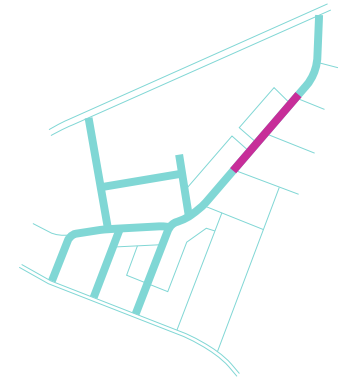
### Positives

- Existing connections to Go Edwards Park through laneways.
- Landmark 'attractors' on corners to side streets (cafe and school).
- Median pedestrian crossing refuge.



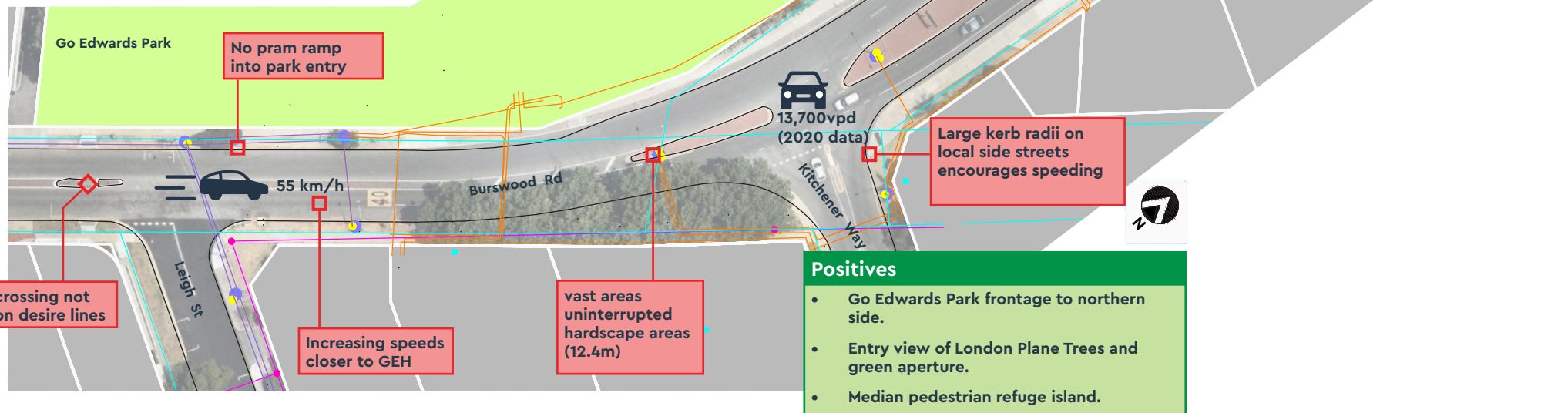


## SITE ANALYSIS





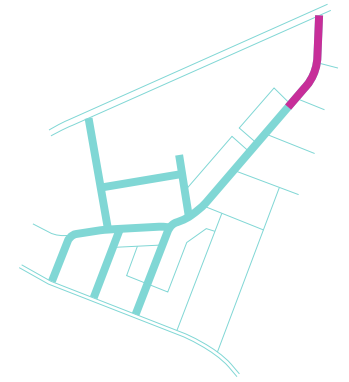
# Burswood Road (East of Teddington C)



## Positives

- Go Edwards Park frontage to northern side.
- Entry view of London Plane Trees and green aperture.
- Median pedestrian refuge island.



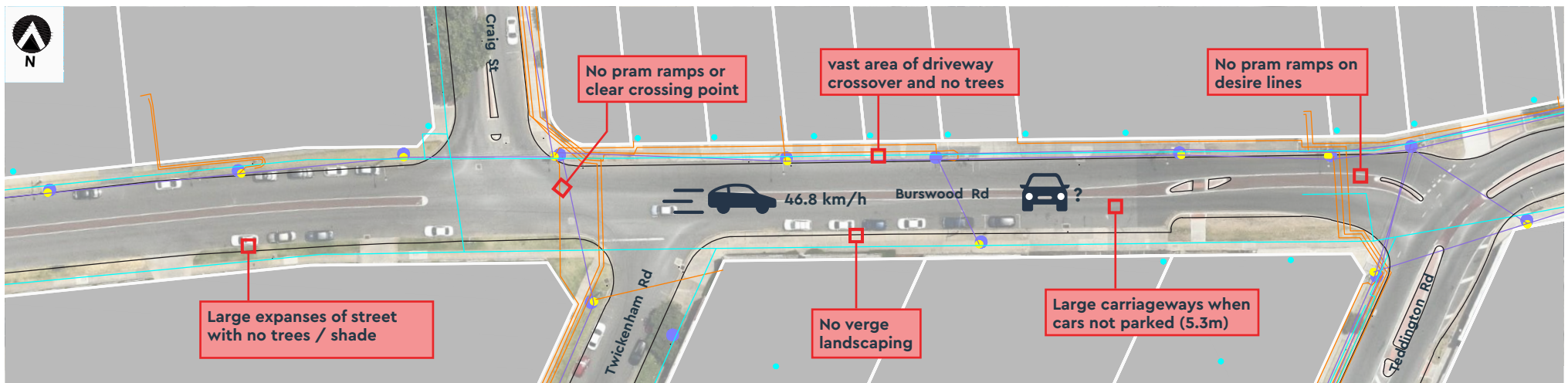
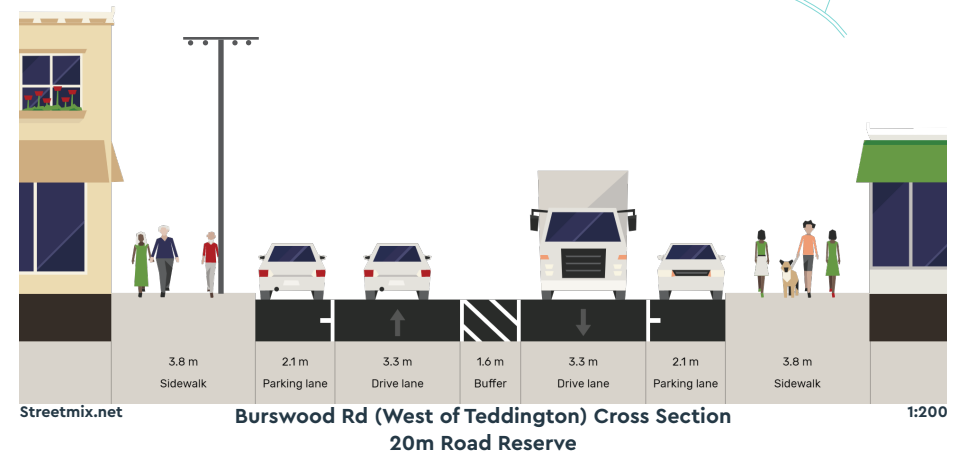




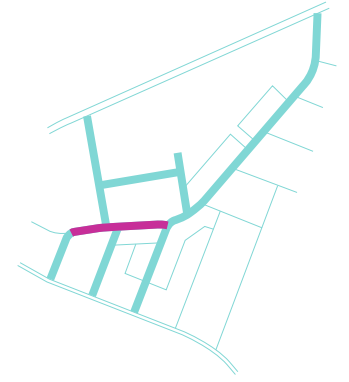
# Burswood Road (West of Teddington)

## Positives

- Low traffic volumes and noise levels.
- Bus movements only for special events.
- larger landholdings with opportunity for redevelopment.







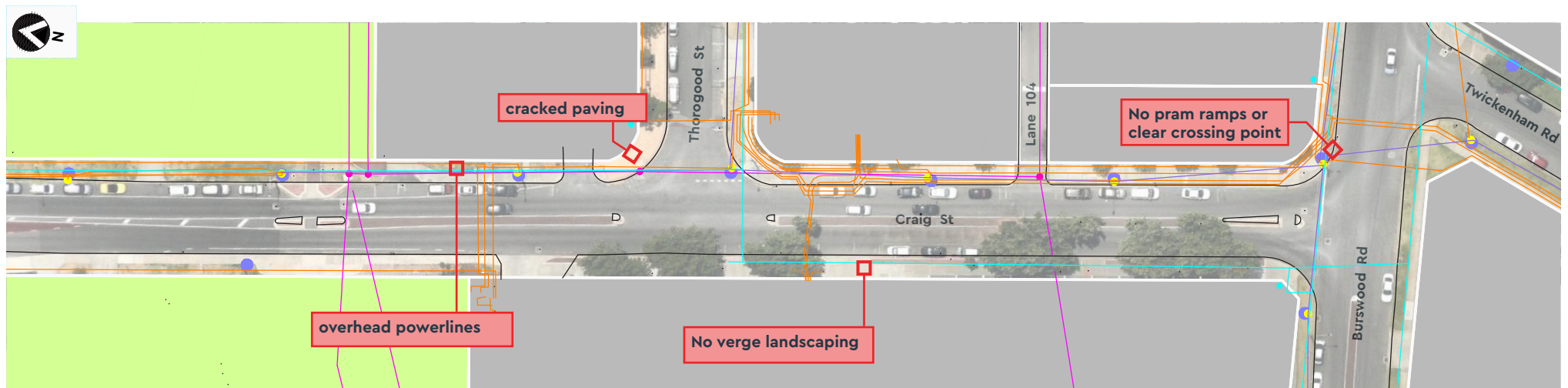
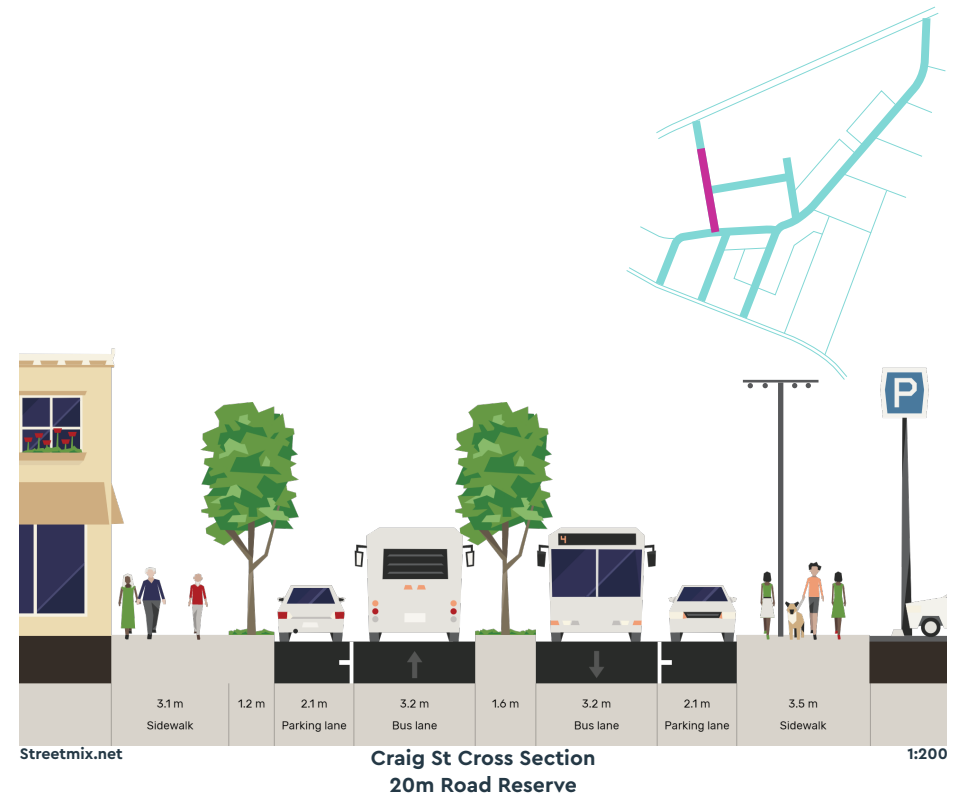


## SITE ANALYSIS

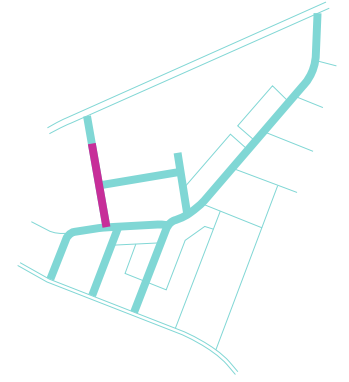
# Craig Street

### Positives

- Good median street tree planting
- Signalised intersection crossing over Great Eastern Highway towards River.
- Bus Route.
- Connections to Principal Shared Path network.
- Generous foot / shared path on eastern side.







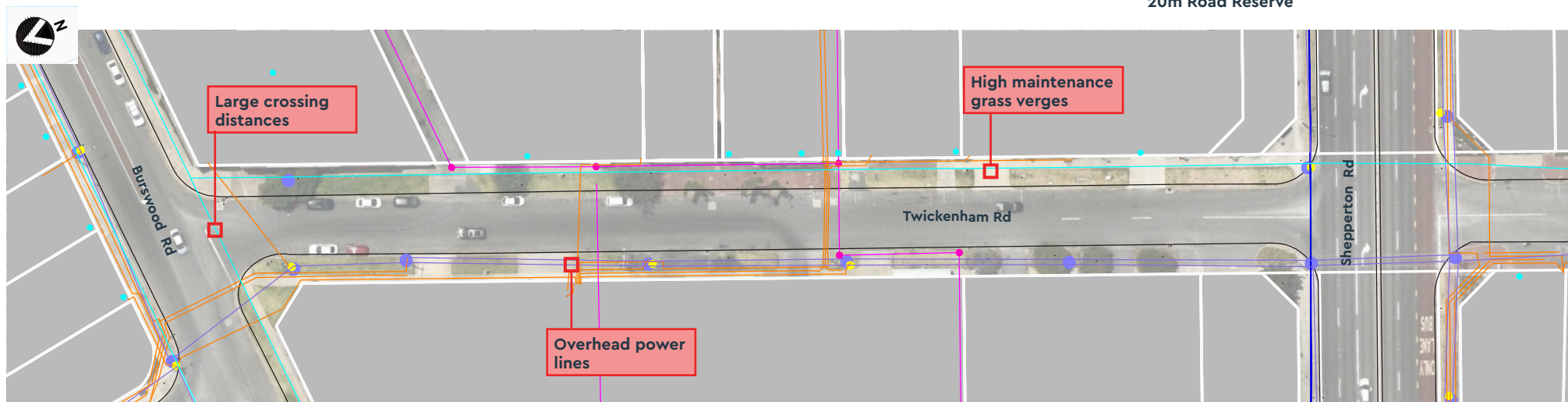
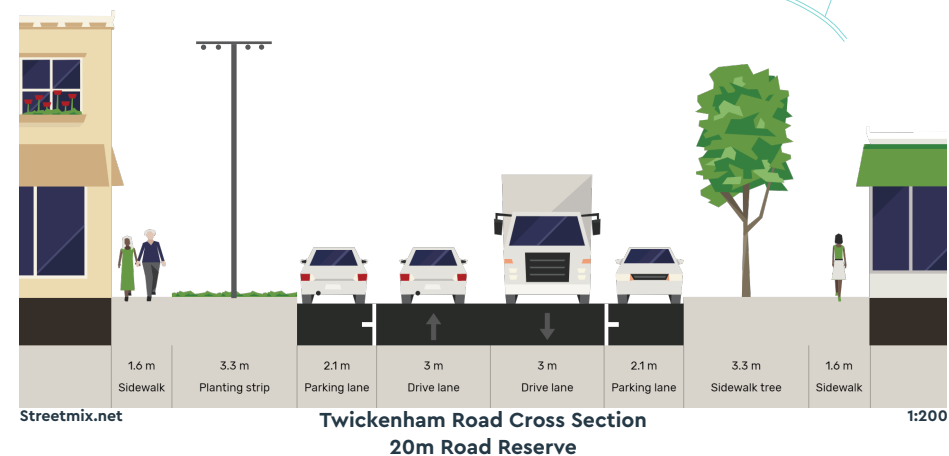


## SITE ANALYSIS

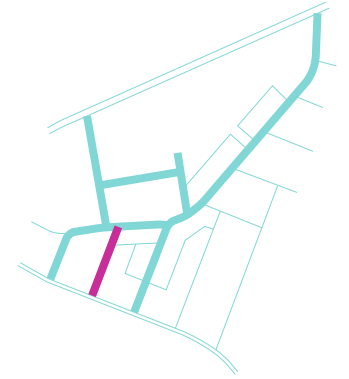
# Twickenham Road

### Positives

- Low traffic volumes and low road noise.
- Generous verges for tree planting.
- Eclectic mix of built form.







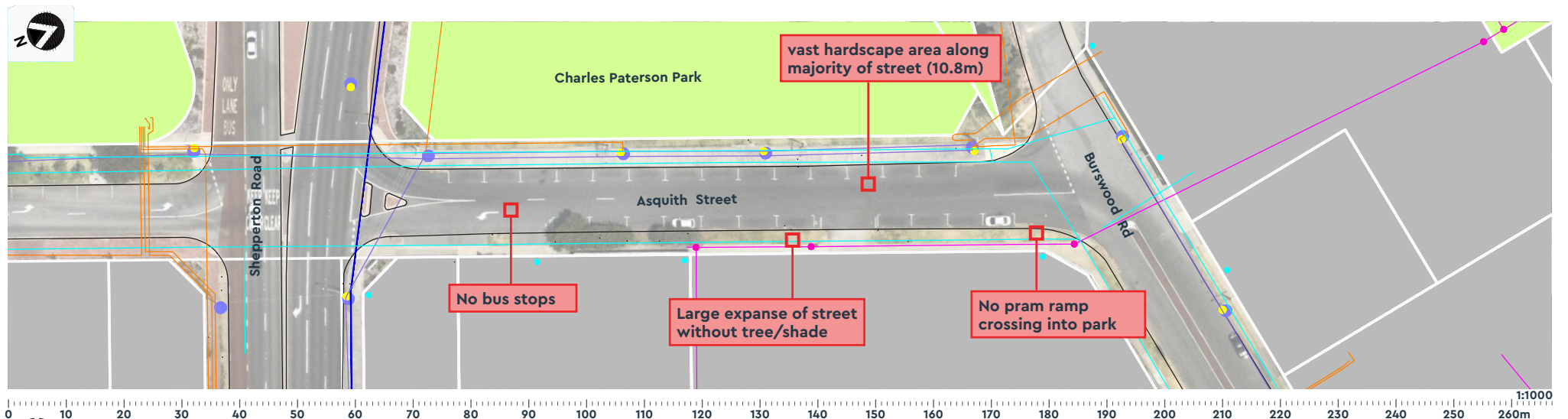
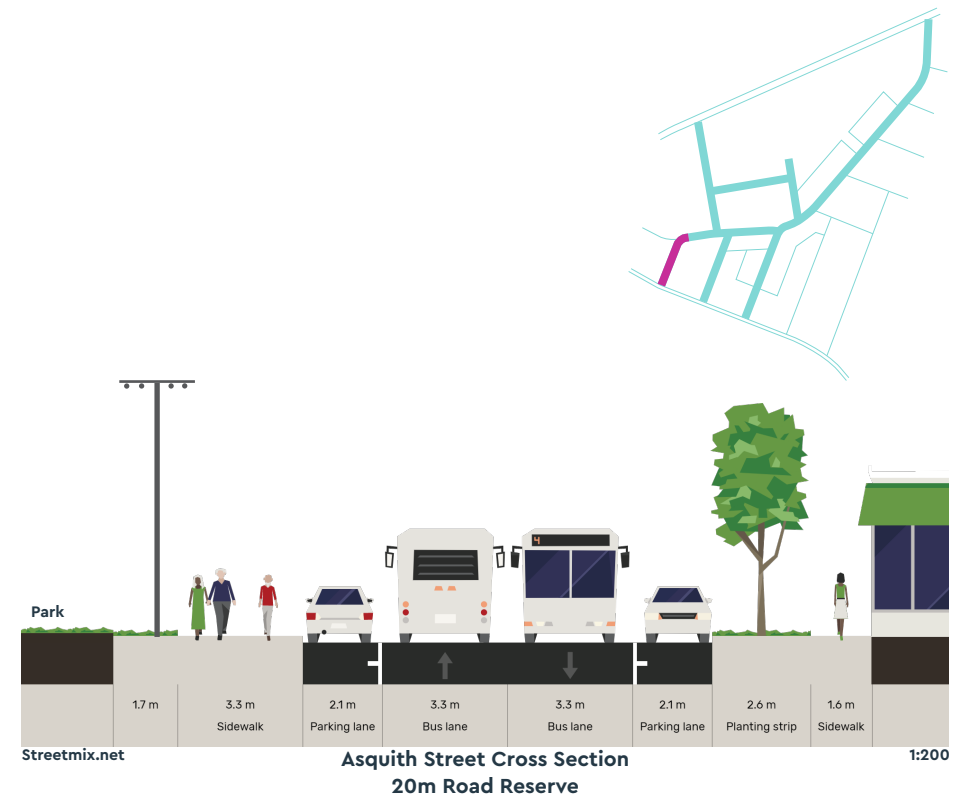


## SITE ANALYSIS

# Asquith Street

### Positives

- Park frontage
- Shared path on park side
- Generous verge for street tree planting
- Bus route







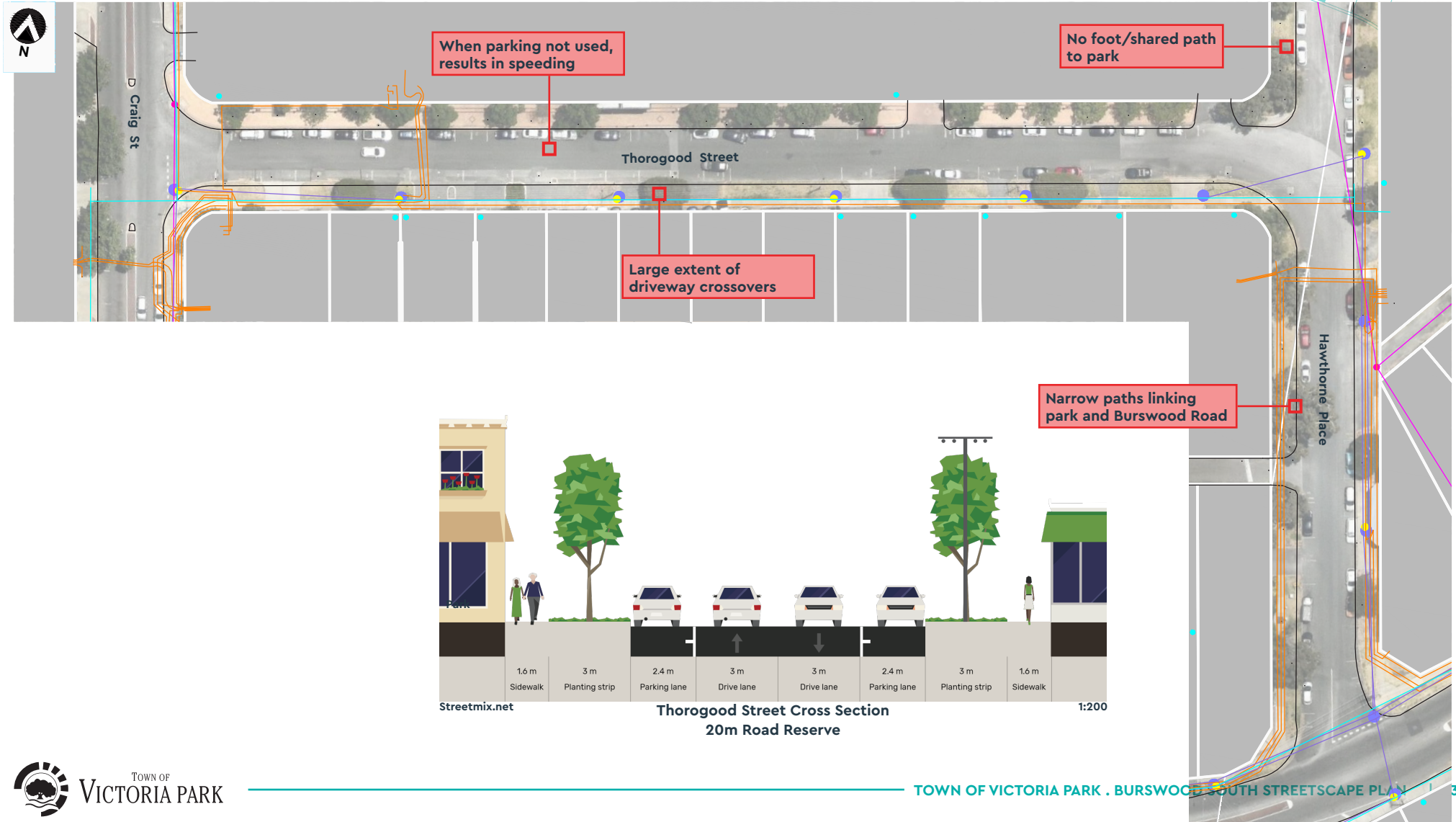


## SITE ANALYSIS

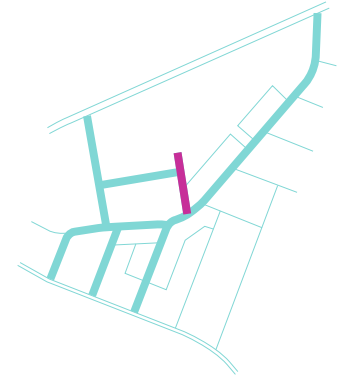
# Thorogood and Hawthorne

### Positives

- Continuous row of good street trees / shade on one side
- Pedestrian scale light and paving on the same side
- Large public car park
- Access to the park.









## Common / Key Issues

1. Lacking greenery and shade
2. Poor footpaths and crossings
3. Poor cycling opportunities
4. Speeding vehicles on Burswood and Teddington Roads
5. No identifiable heart or sense of place
6. Streetscape quality does not match strategic significance of the place



# Issues and Opportunities (Summary)

Movement		Place	
Issues	Opportunities	Issues	Opportunities
<ul style="list-style-type: none"> <li>Through traffic (no right-turn from Shepperton to Great Eastern Hwy, and Craig to GEH) causes higher volumes on Burswood-Teddington.</li> <li>High proportion of larger/service vehicles need to accommodate in road carriageway widths and turning.</li> <li>Limited space in road carriageway for dedicated on-road cycle lane.</li> </ul>	<ul style="list-style-type: none"> <li>Introduce traffic calming on Burswood-Teddington to lower traffic speeds, improve pedestrian crossing safety, lower road noise, improve side street vehicle access.</li> <li>Improve quality and width of footpaths.</li> <li>Extend kerbs at side street intersections to decrease vehicle turning speeds, improve pedestrian priority along main street.</li> <li>Introduce obvious pedestrian crossing points to channel pedestrians and moderate driver behaviour and awareness.</li> <li>Reduce vehicle speed to improve on-street cycling.</li> </ul>	<ul style="list-style-type: none"> <li>Space within the existing road reserve to accommodate multiple features eg. wide footpaths, trees in verge, central median.</li> <li>No identifiable central heart.</li> </ul>	<ul style="list-style-type: none"> <li>Explore special places or focal points, places to hang-out, public seating for workers and visitors.</li> <li>Increase street trees and shade for better walking environment and sustainability.</li> <li>Improve verges and introduce garden beds for street appeal.</li> <li>Improve lighting / explore underground power.</li> <li>Proximity to CBD and sub-regional significance.</li> <li>Introduce rain gardens for water sensitive urban design (WSUD) especially given proximity.</li> </ul>



# Opportunities and Constraints



Links to Regional Bike Path



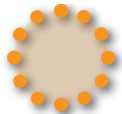
Local Streets – trees and paths



High Street tree-lined boulevard, high quality people environment, reinforce links to Albany Hwy and Burswood Peninsula



Improve access from side streets, create tranquil seating areas etc



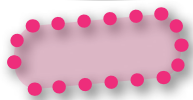
Reinforce gateways



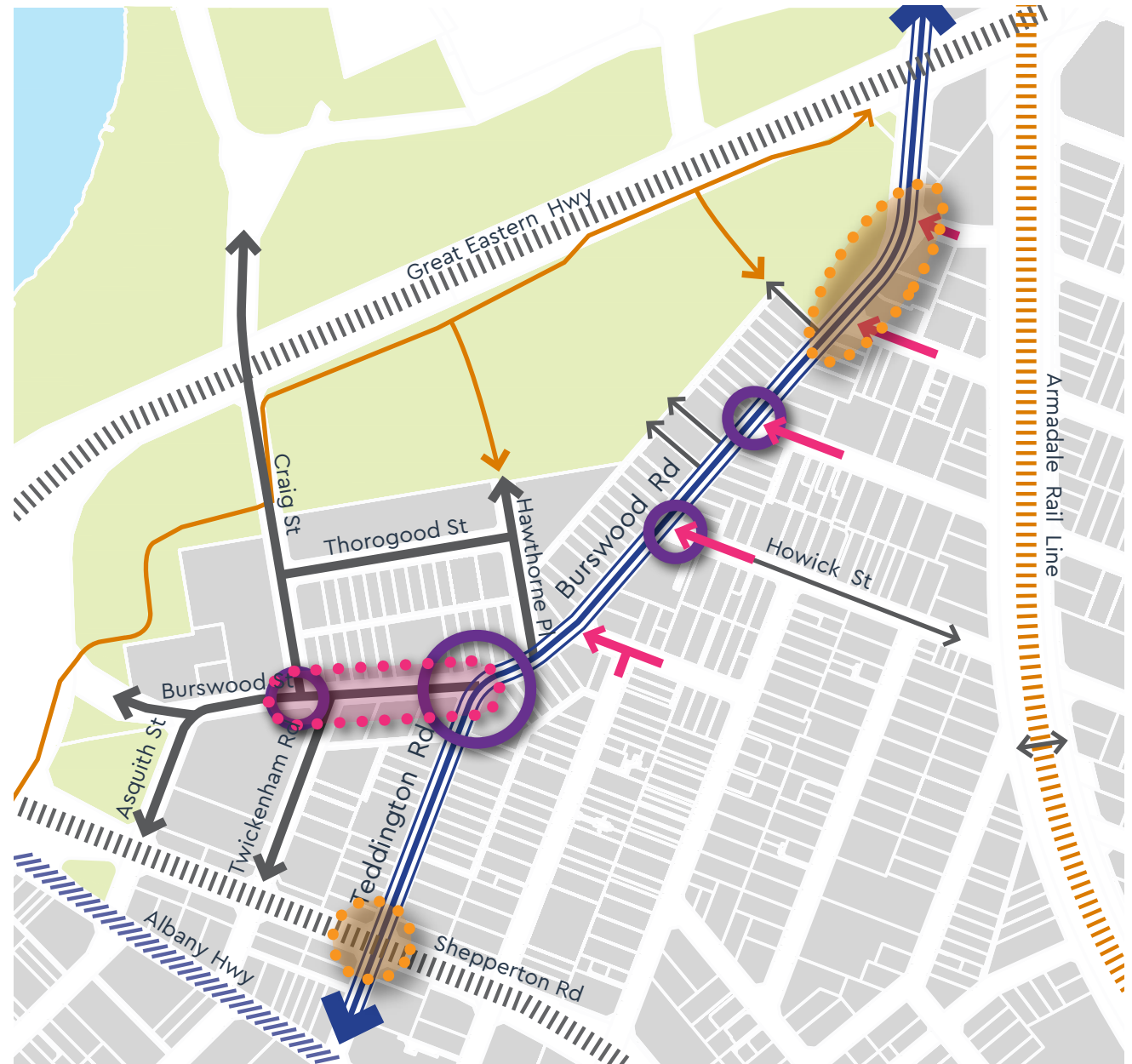
Focal Points / Dwell Places / Shaded Seating



Major Focal Point / Central Hub



Potential Mini Main Street (longer-term)



**Concept Only:** Final design subject to technical design considerations, detailed investigation of services and relevant approvals



# Streetscape Design



# Key Moves



Slow  
Traffic



Safer  
Footpaths  
& Crossings



Green & Shade  
the Street



Create Distinct  
People Places



Enhance Identity  
& Vibrancy



Strengthen  
Walking & Cycling  
Connections

# Movement Types



**1. Business High Street  
(Vibrant Street)**



**2. Future Mini Main Street  
(Street for People)**



**3. Bus Avenue  
(Local Street – Major)**



**4. Local Street**



**5. Shared Lane**



**6. Walking & Cycling  
Connections**



# Place Types



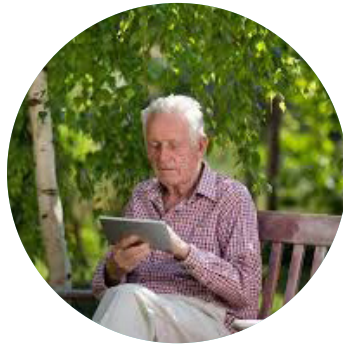
**1. Hub**



**2. Green Gateway**



**3. Micro Plaza**



**4. Micro Green**



**5. Green Break**

# Place Design Framework

DESIGN

## Legend

### Movement Types

-  1. Business High Street (Vibrant Street)
-  2. Future Mini Main Street (Street for People)
-  3. Local Street (Bus Avenue)
-  4. Local Streets
-  5. Shared Lane
-  Cycling
-  New/Improved Cycling

### Place Types

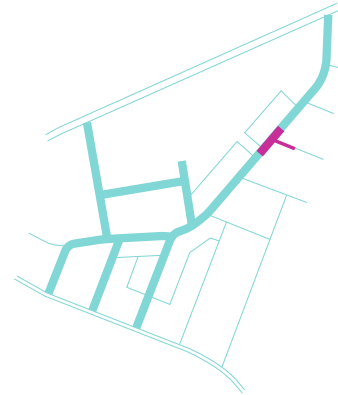
-  1. Hub
-  2. Green Gateway
-  3. Micro Plaza
-  4. Micro Green
-  5. Green Break





# Business High St & Micro Plaza

Opposite is visualization depicting all Key Moves of the Streetscape Improvement Plan in the one location. It illustrates the vision for Burswood Road (east of Teddington) to be transformed over time into a Business High Street (Vibrant Street), consisting of a 'string of pearls' or distinct people places. In this image, a play and learn Micro Plaza that wraps around the corner of Egham Road adjacent to the existing activity node of Perth Individual School.



Existing Conditions



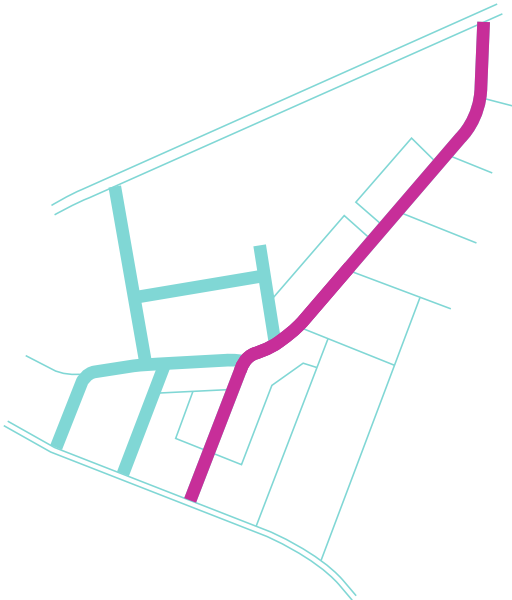
Proposed Concept



# Movement Type 1

## Business High Street (Vibrant Street)

Create a highly desirable business address with exposure to passing traffic, with a high amenity and pleasant boulevard of street trees and shaded footpaths.



### Streetscape Elements

Location	Teddington Rd and Burswood Rd (East)
Total Reserve Width	20m
Design Speed	40km/hr
Travel Lanes	Asphalt
Parking	Parallel both sides   flush with verge/footpath
Median	Canopy trees   shrubs   flush kerb   existing driveway access
Landscape Strip	Canopy trees   shrubs   existing driveway crossovers   retention of paperbarks eastern side of Teddington Rd. Investigate retention and additional canopy tree planting on western side
WSUD Options	Rain gardens and permeable paving
Paths	2.5m shared path both sides   Narrower path widths may be required for tree retention on Teddington Rd
Street Furniture	Pedestrian scale street lights   occasional public seating   drinking fountains   bike racks
Other	2 x Mid block crossings

### Key Moves

#### Slow Traffic

1. Minimise travel lane widths
2. On street parking
3. Street tree enclosure

#### Green and Shade the Street

4. Underground powerlines
5. 3 x rows of canopy trees
6. Shrub planting

#### Safer Footpaths and Crossings

7. Widen path by 1m both sides
8. Fix uneven surfaces
9. Mid block crossings & traffic calming. Widen median

#### Create Distinct People Places

10. Urbane Business High Street
11. Pause points

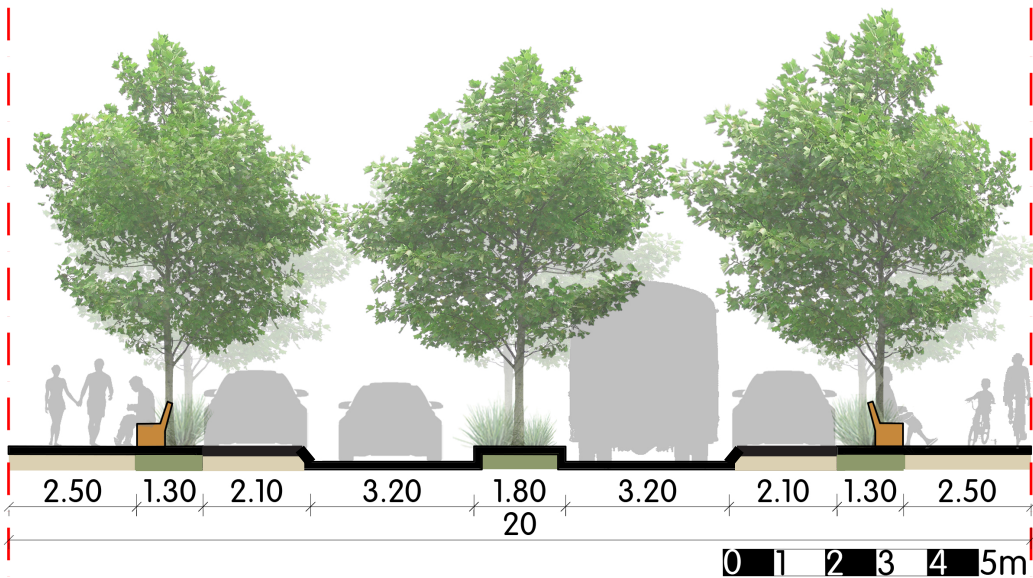
#### Promote Vibrancy and Identity

12. Provide a desirable address
13. Future additional people spaces – transition away from driveways to rear access
14. Continuous tree canopy

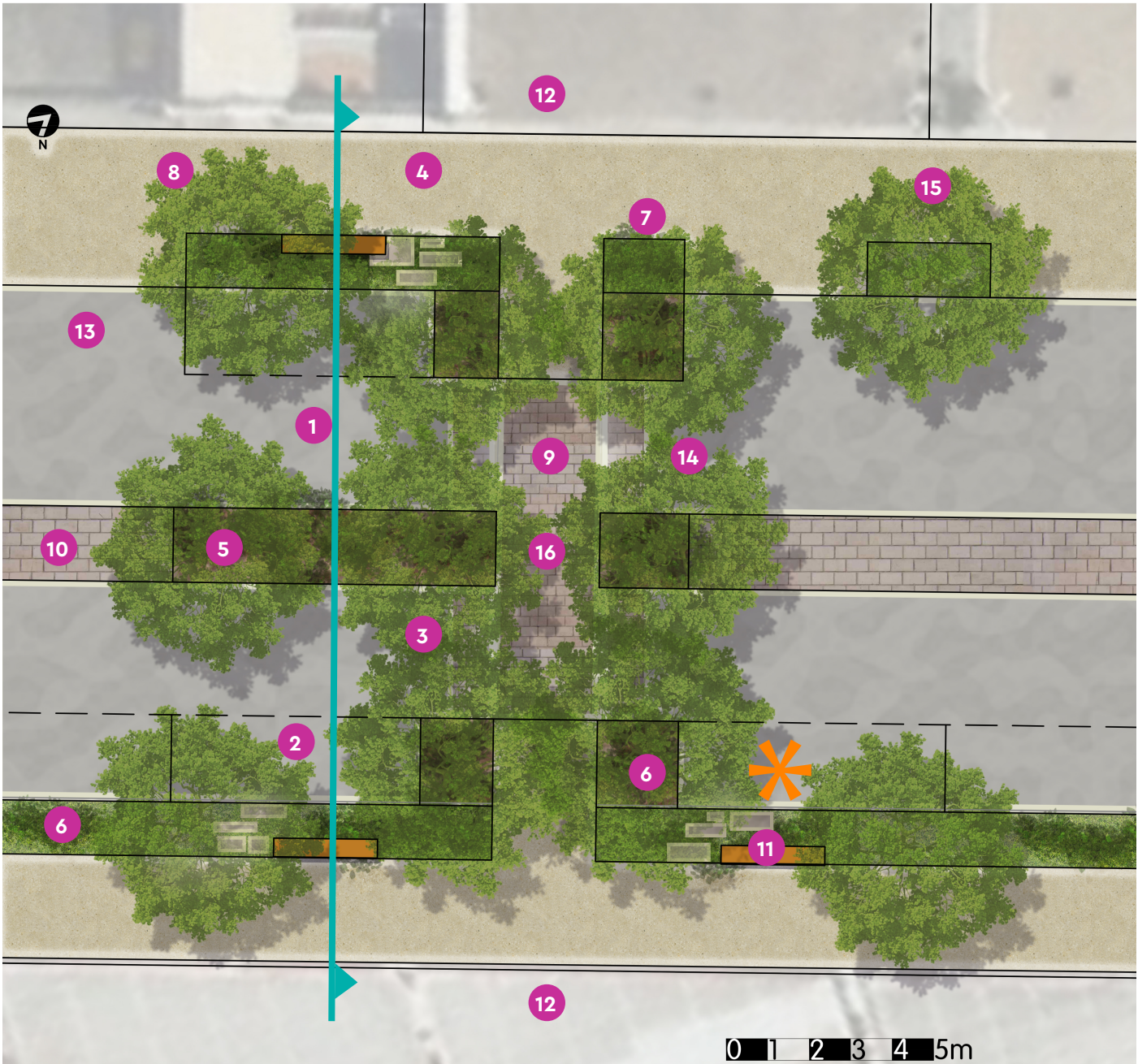
#### Strengthen Walking & Cycling Connections

15. Shared paths for local movement
16. Median refuge for crossing

✳ Opportunity for occasional parklet to complement adjoining cafe/retail



DESIGN

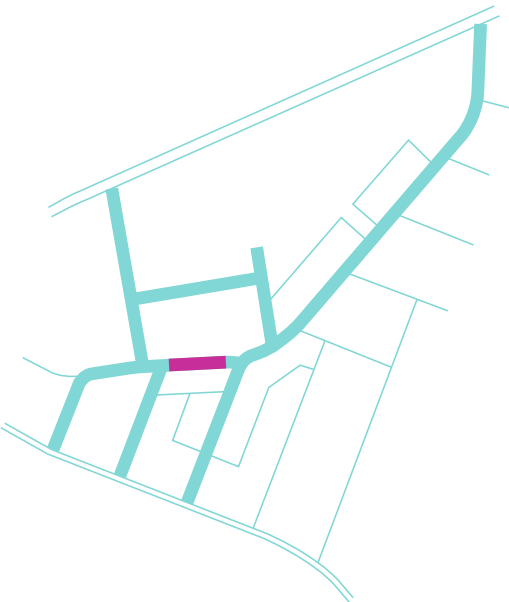




# Movement Type 2

## Future Mini Main Street (Street for People)

A longer-term proposal for a slow traffic, low noise shared space suitable for alfresco cafes, to service future residents and workers.

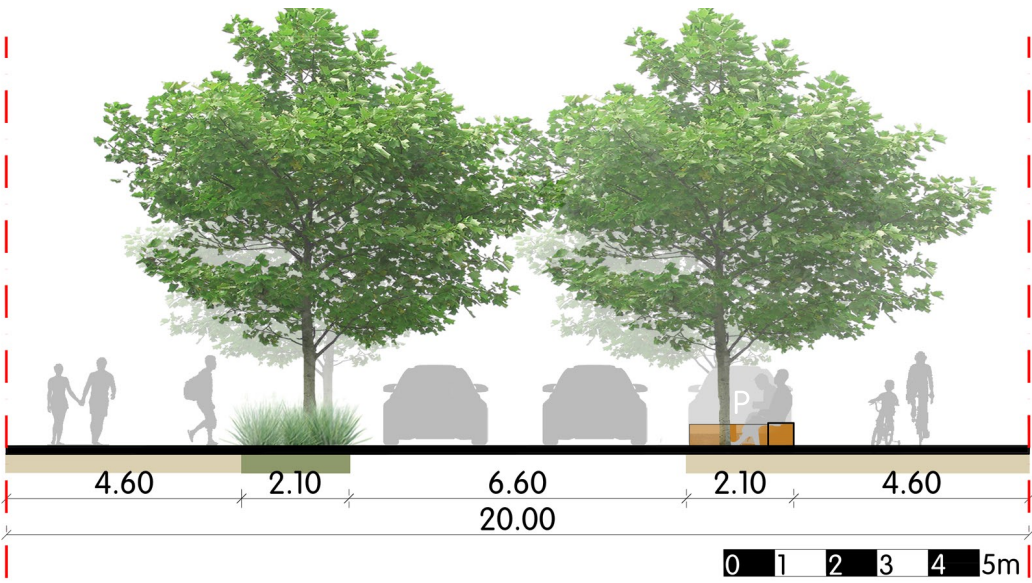


### Streetscape Elements

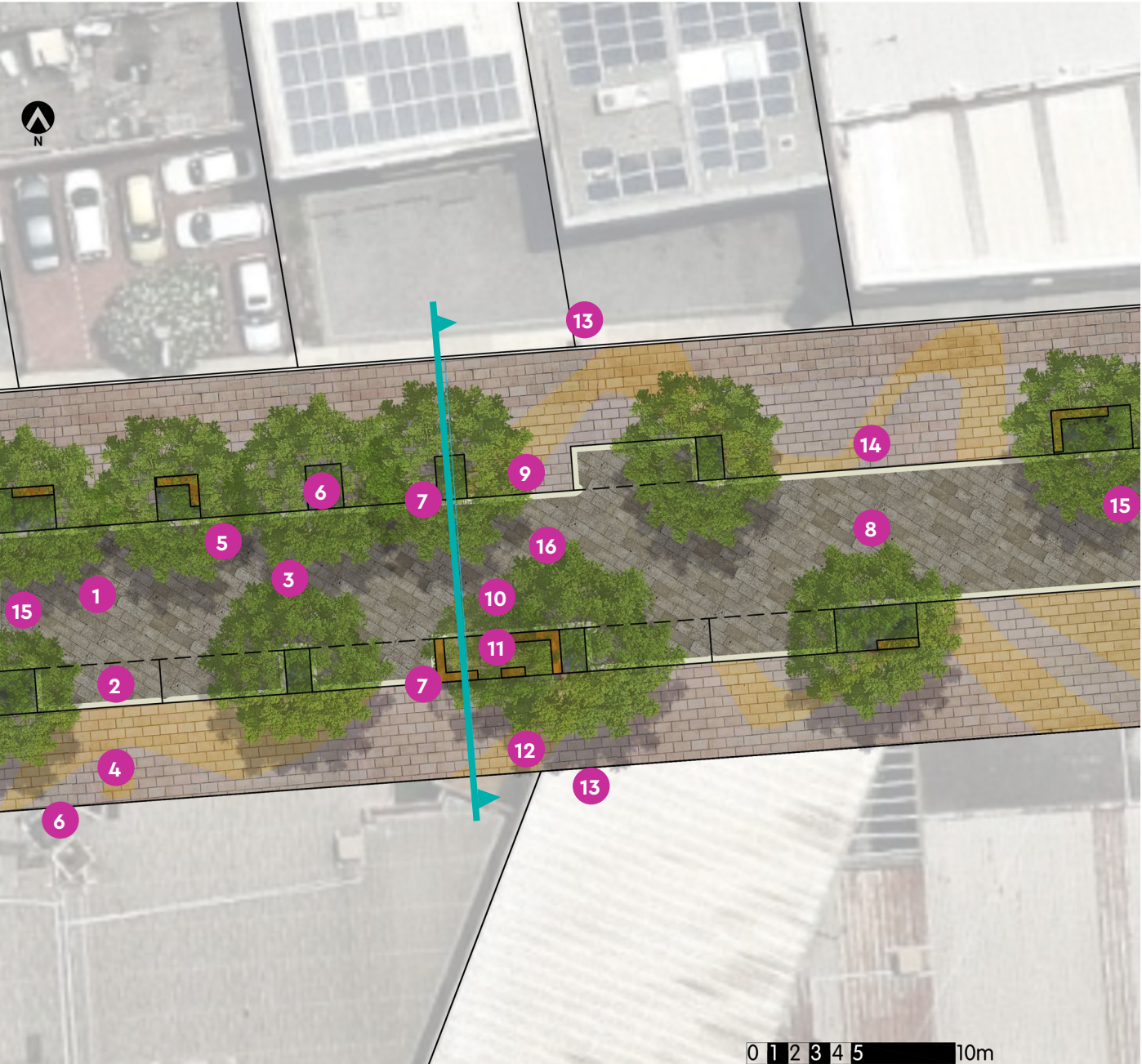
Location	Burswood Rd (West) between Teddington Rd and Burswood Rd (East)
Total Reserve Width	20m
Design Speed	40km/hr
Travel Lanes	Feature treatment
Parking	Parallel both sides   flush kerb
Median	Remove existing median and widen path space
Landscape Strip	Canopy trees between existing driveway crossovers with base shrub planting
WSUD Options	Rain gardens and permeable paving
Paths	Flexible and generous path space both sides (up to 6.7m)
Street Furniture	Pedestrian scale street lights   generous public seating   bike racks   drinking fountains
Other	Public Art   potential to introduce horizontal deflections to further slow cars, including 1 way pinch points

### Key Moves

- Slow Traffic**
  - Minimise travel lane widths
  - Friction from on street parking
  - Street tree enclosure
- Green and Shade the Street**
  - Underground powerlines
  - Maximise canopy tree cover
  - Shrub planting
- Safer Footpaths and Crossings**
  - Widen path space by 0.8m both sides
  - Flush surface for regular universally accessible crossing
  - Transition away from driveways to rear access
- Create Distinct People Places**
  - Urbane Business High Street
  - Pause points and parklets
  - Future alfresco opportunities (north facing)
- Promote Vibrancy and Identity**
  - Promote active edges day and night through redevelopment
  - Future additional people spaces – transition away from driveways to rear access
  - Hub and Green Gateway Place Types at either end to strengthen identity
- Strengthen Walking & Cycling Connections**
  - Space for unobstructed movement
  - Safe cycling on street



DESIGN

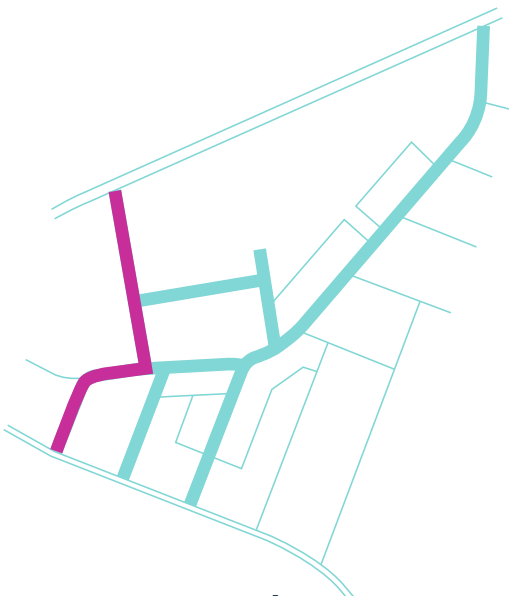




# Movement Type 3

## Local Street (Bus Avenue)

Extend the current design of Craig Street to Asquith St and west end of Burswood Rd. Create strong green link through street trees to the River.



### Streetscape Elements

Location	Craig St, Asquith St, and Burswood Rd (West) between Twickenham St and Asquith St
Total Reserve Width	20m
Design Speed	40km/hr
Travel Lanes	Asphalt
Parking	Parallel both sides except for bus stops  upright kerb
Median	Canopy trees   shrubs   flush kerb   existing driveway access NA for Asquith St
Landscape Strip	Canopy trees   shrubs at base   existing driveway crossovers
WSUD Options	NA
Paths	1.5m min footpath one side and 2.5m min shared path other side
Street Furniture	Pedestrian scale street lights   some public seating   bus stops at existing locations + nib*
Other	Asquith St – add trees in between parking bays on the park side (every 2 spaces) + mid block crossing offering improved park access (refer to Business High Street)

### Key Moves

#### Slow Traffic

1. Minimise travel lane widths
2. Friction from on street parking
3. Street tree enclosure

#### Green and Shade the Street

4. Underground powerlines
5. Continuous canopy cover (3 rows)
6. Shrub planting at base of trees

#### Safer Footpaths and Crossings

7. Tree buffer between traffic and pedestrians
8. Additional median trees to protect pedestrians crossing

#### Create Distinct People Places

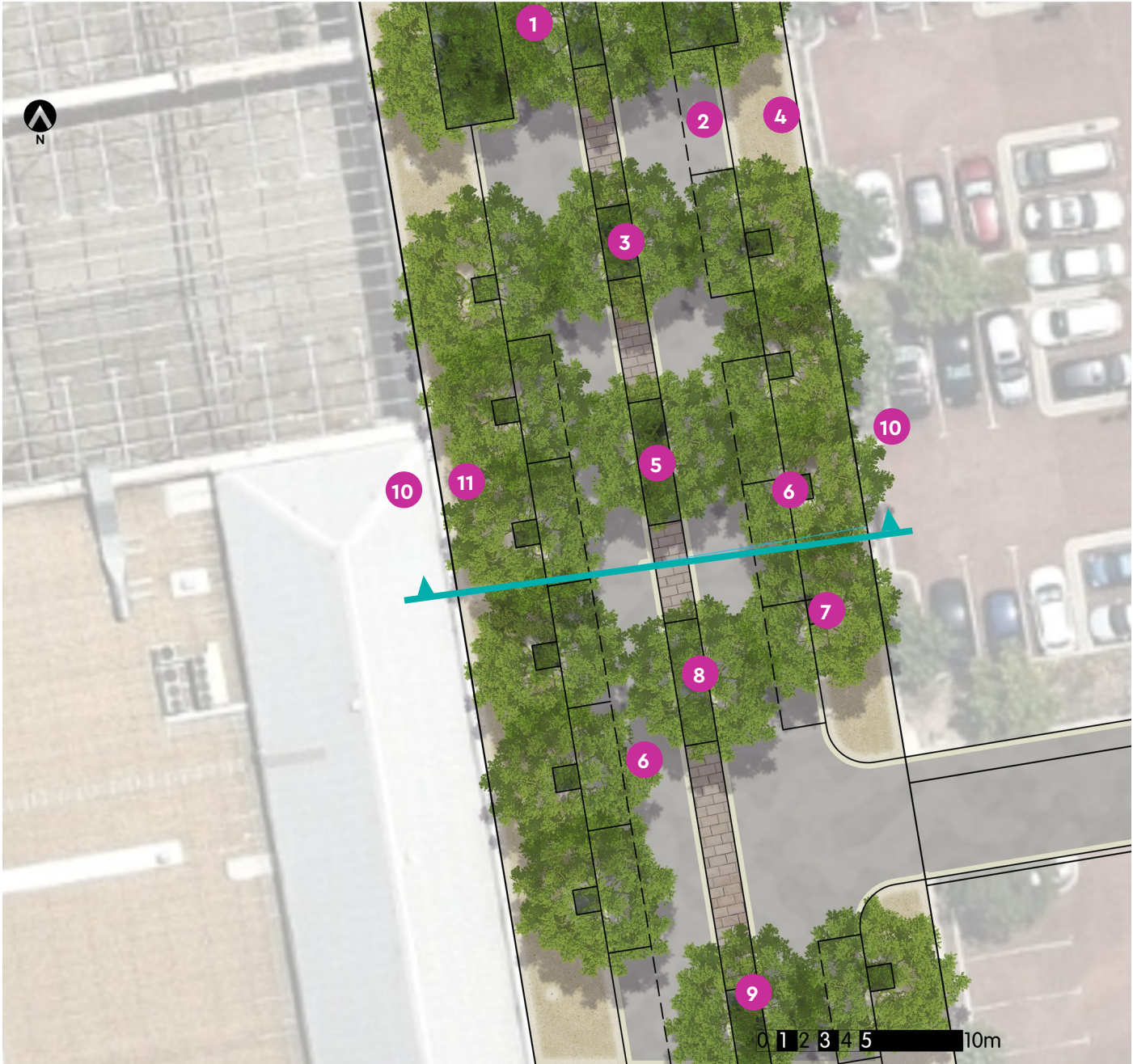
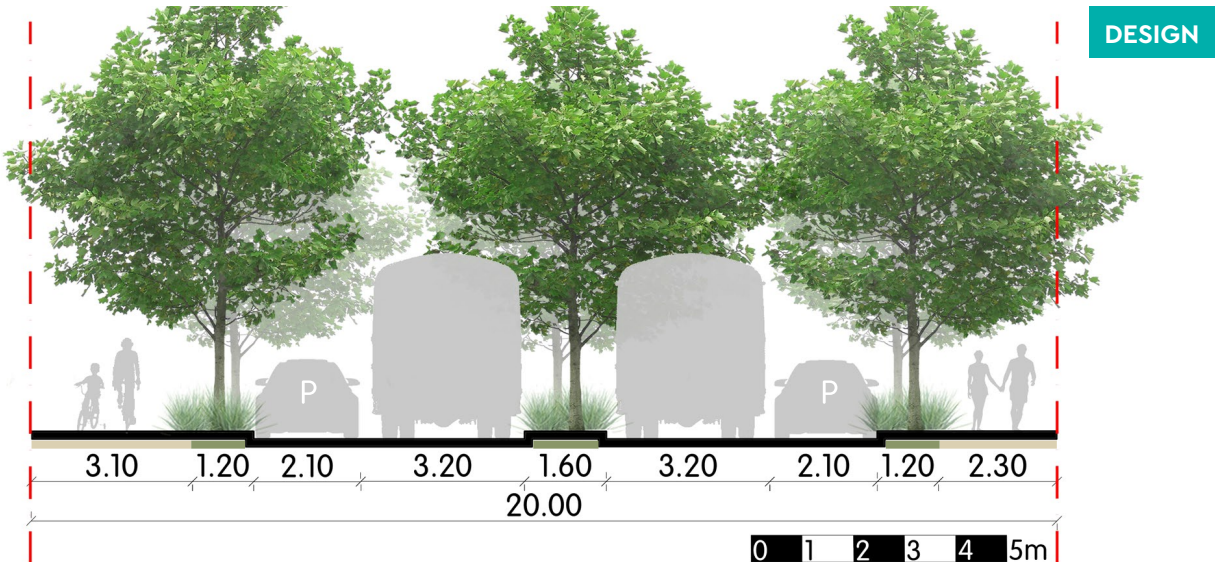
9. Green avenue link between different parts of GO Edwards Park and river foreshore

#### Promote Vibrancy and Identity

10. Increased amenity to promote redevelopment

#### Strengthen Walking & Cycling Connections

11. Shared paths for local movement, particularly river foreshore



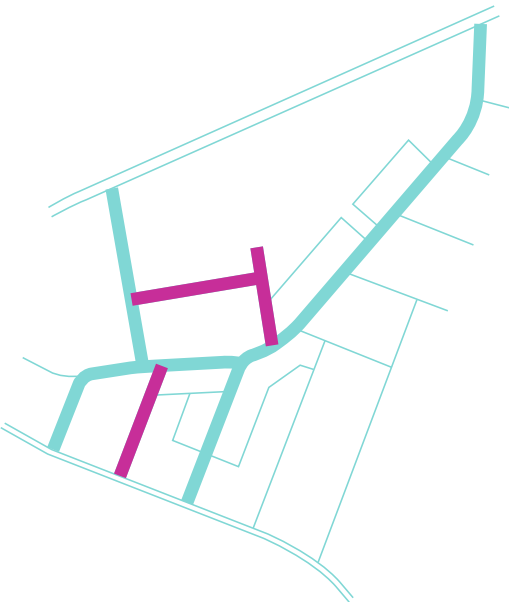
\* engage PTA re bus nib Craig Street



# Movement Type 4

## Local Streets

Create pleasant and shaded local places for workers, customers and future residents.



### Streetscape Elements

Location	Twickenham St, Asquith St, Thorogood St and Hawthorne St (key link to GO Edwards Park)
Total Reserve Width	20m
Design Speed	40km/hr
Travel Lanes	Asphalt
Parking	Parallel both sides   upright kerb
Median	NA
Landscape Strip	Canopy trees   shrubs   existing driveway crossovers
WSUD Options	NA
Paths	1.6m footpath both sides   2.5m shared path one side on Hawthorne Pl
Street Furniture	Pedestrian scale street lights   occasional public seating
Other	1 x Mid block crossings

### Key Moves

#### Slow Traffic

- 1. Retain existing travel lane widths
- 2. Retain friction from on street parking
- 3. Street tree enclosure

#### Green and Shade the Street

- 4. Underground powerlines
- 5. Maximise canopy cover
- 6. Shrub planting in existing verges
- 7. Mid block greening

#### Safer Footpaths and Crossings

- 8. Mid block crossings
- 9. Fix uneven surfaces

#### Create Distinct People Places

- 10. Low key, people-friendly local street
- 11. Pause points

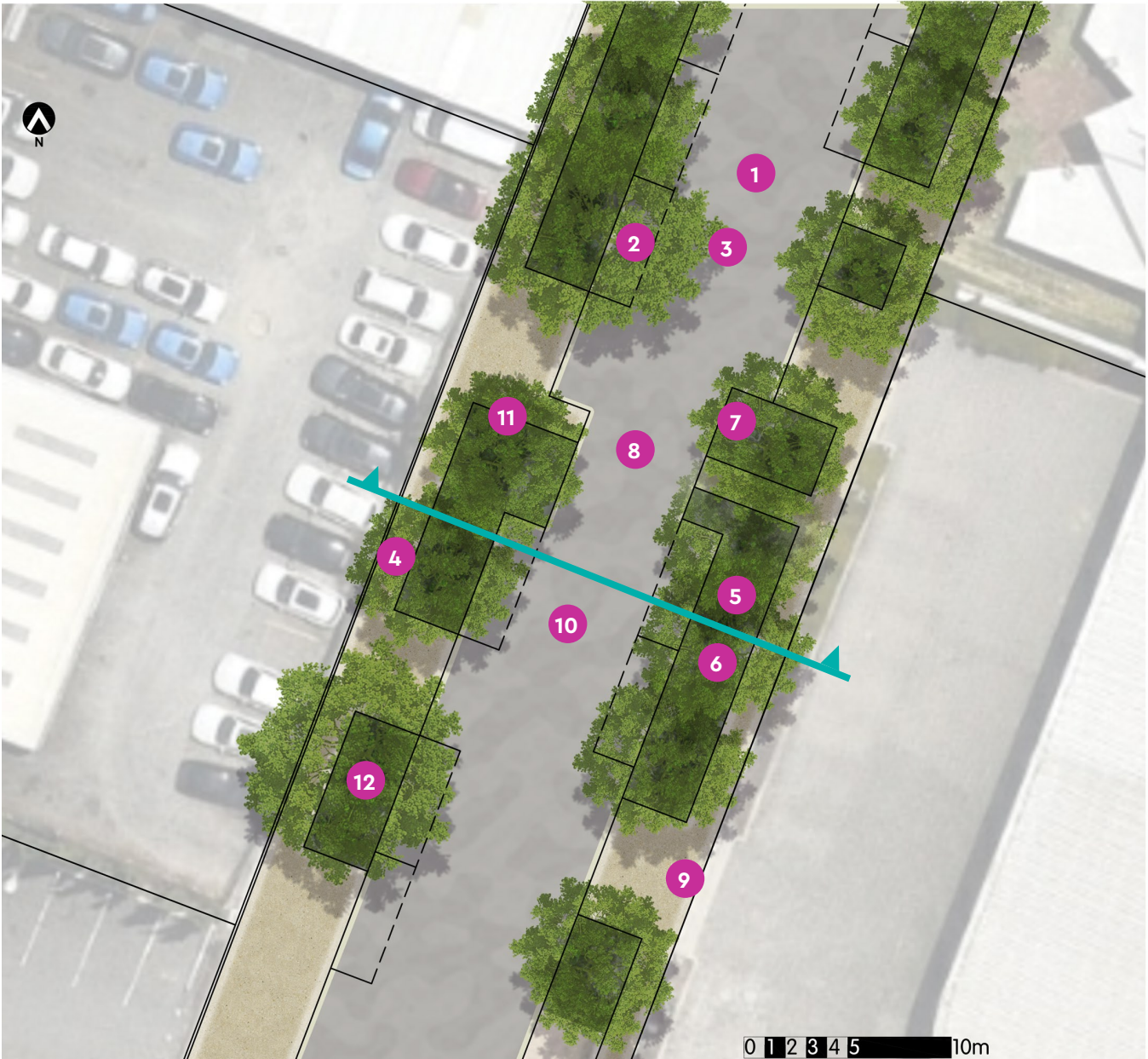
#### Promote Vibrancy and Identity

- 12. Enhance identity through greenery

#### Strengthen Walking & Cycling Connections

- 13. Shared paths for local movement
- 14. Median refuge for crossing

DESIGN

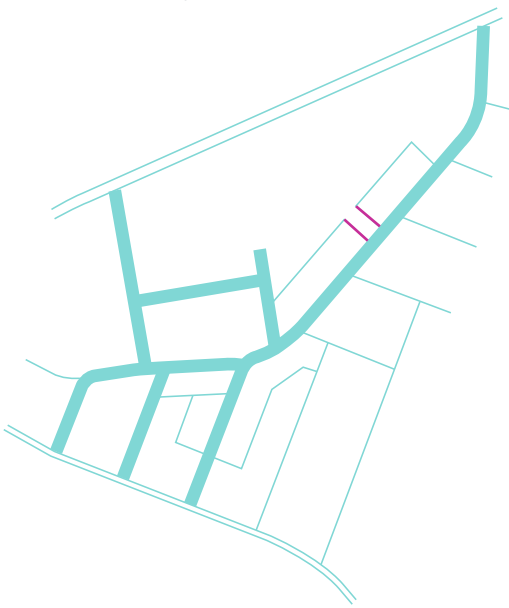




# Movement Type 5

## Shared Laneway

Create safe and well lit links to GO Edwards Park, encouraging adjacent buildings to activate the laneway through side openings.



### Streetscape Elements

Location	Lane 59 and 59a
Total Reserve Width	5m
Design Speed	10km/hr
Travel Lanes	Feature treatment   flush kerb
Parking	NA
Median	NA
Landscape Strip	Staggered planter boxes
WSUD Options	NA
Paths	Shared pedestrian, cyclists and vehicle movement
Street Furniture	Suspended feature lighting
Other	

### Key Moves

#### Slow Traffic

- 1. Horizontal deflections
- 2. Yielding to oncoming traffic
- 3. Minimise travel lane (3m)

#### Green and Shade the Street

- 4. Shrubs in planter boxes
- 5. Abutting built form for shade

#### Safer Footpaths and Crossings

- 6. Slow traffic
- 7. Maintain sight lines above greenery

#### Create Distinct People Places

- 8. Urbane people friendly lane day and night

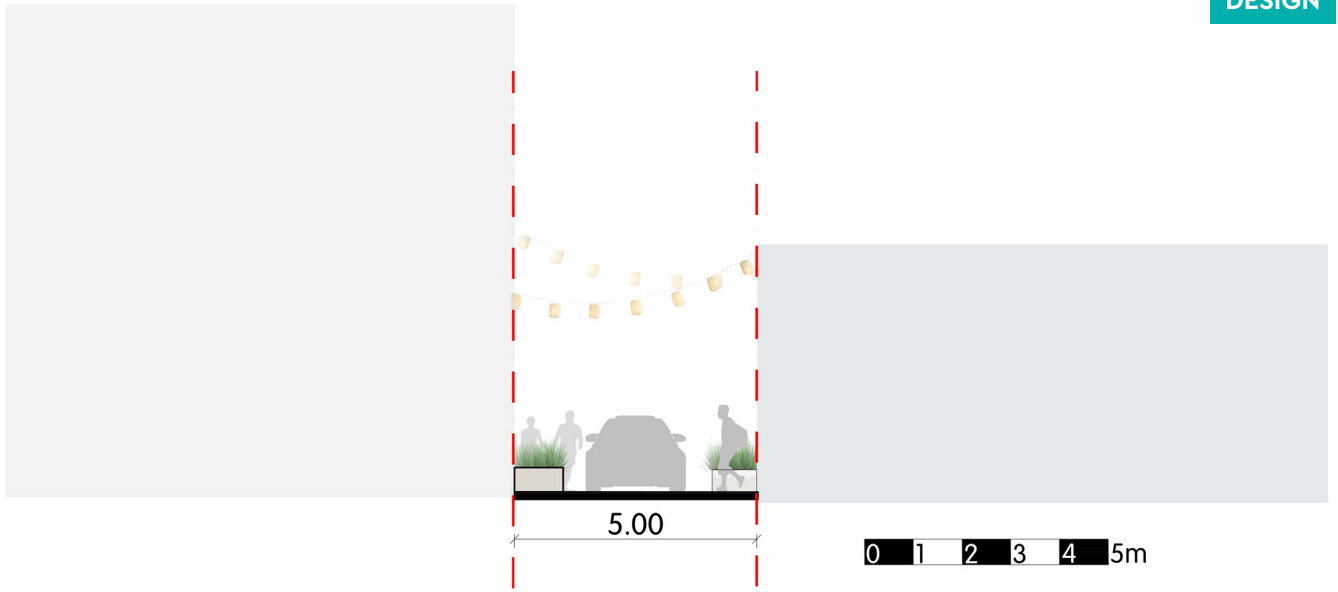
#### Promote Vibrancy and Identity

- 9. Greenery and feature lighting
- 10. Mural artworks on adjoining walls

#### Strengthen Walking & Cycling Connections

- 11. Pedestrian and cyclist connection between park, Business High Street, school and housing to east

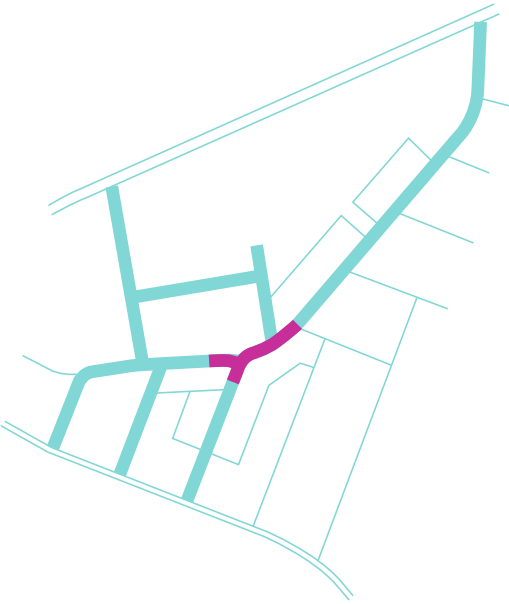
✳ Place-making opportunity – kids space, mural etc.





# Place Type 1 Hub

Create a distinctive and unifying heart for Burswood South with additional space for people, slower traffic and safer pedestrian crossing points.



## Streetscape Elements

Location	Cnr Burswood Rd and Teddington Rd
Total Reserve Width	20–25m
Design Speed	20km/hr
Intersection Treatment	Raised flush intersection all sides
Travel Lanes	Feature treatment   flush kerb
Parking	Nil
Median	Nil
Landscape Strip	Canopy and feature trees   shrubs   existing driveway crossovers
WSUD Options	Rain gardens and permeable paving
Paths	Shared space   2.5m min pedestrian thoroughfare clearance
Street Furniture	significant public seating   bike racks   drinking fountains
Other	Public Art

## Key Moves

### Slow Traffic

1. Minimise travel lane widths
2. Tighten corner radius
3. Tighten kerb radii

### Green and Shade the Street

4. Underground powerlines
5. Mass tree planting
6. Shrub planting

### Safer Footpaths and Crossings

7. Channelise pedestrians to cross at safe locations
8. Slow traffic to 20km/hr
9. Maintain clear sight lines

### Create Distinct People Places

10. Highest order people priority
11. Pause points | alfresco | socialising | meeting place

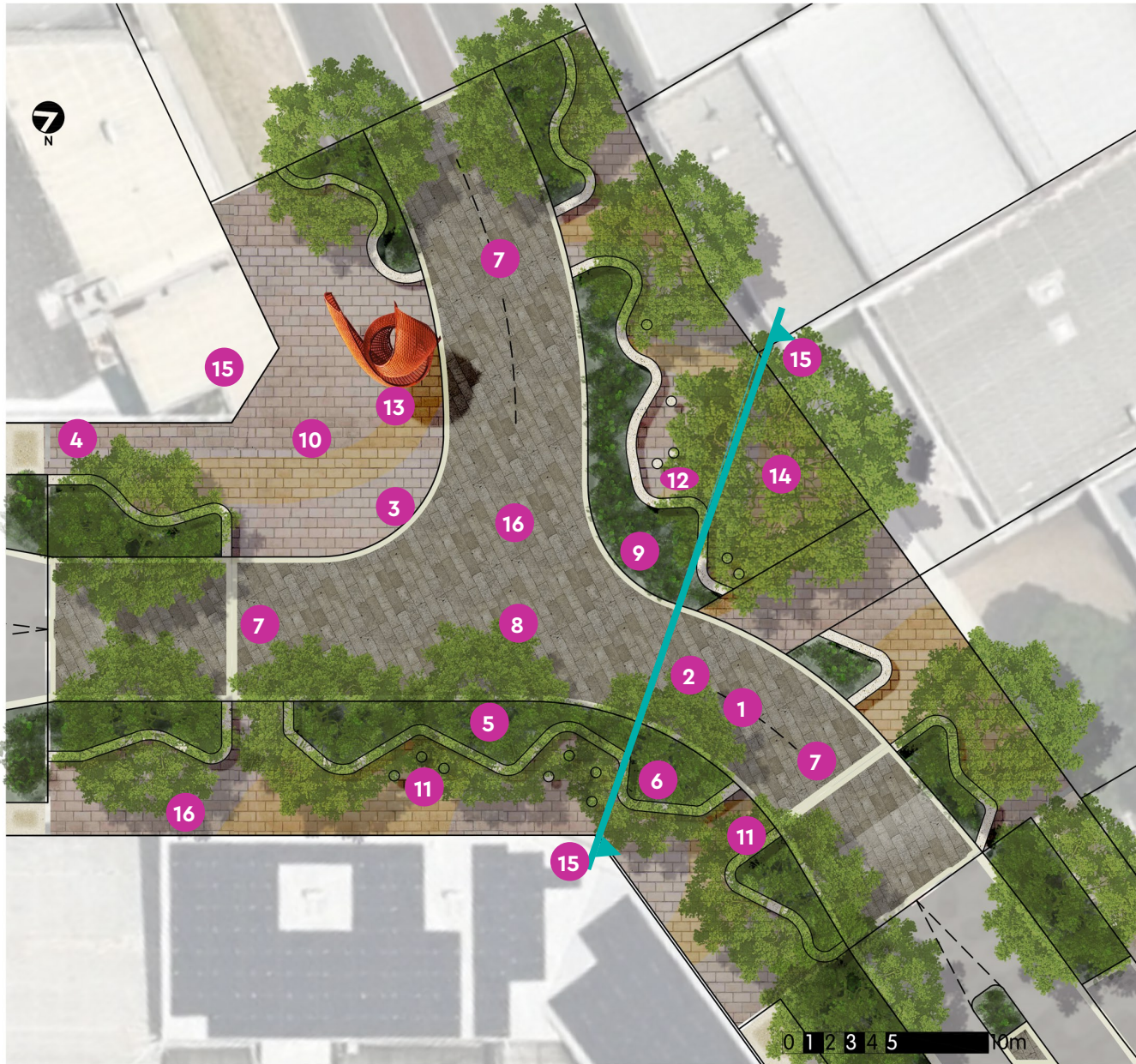
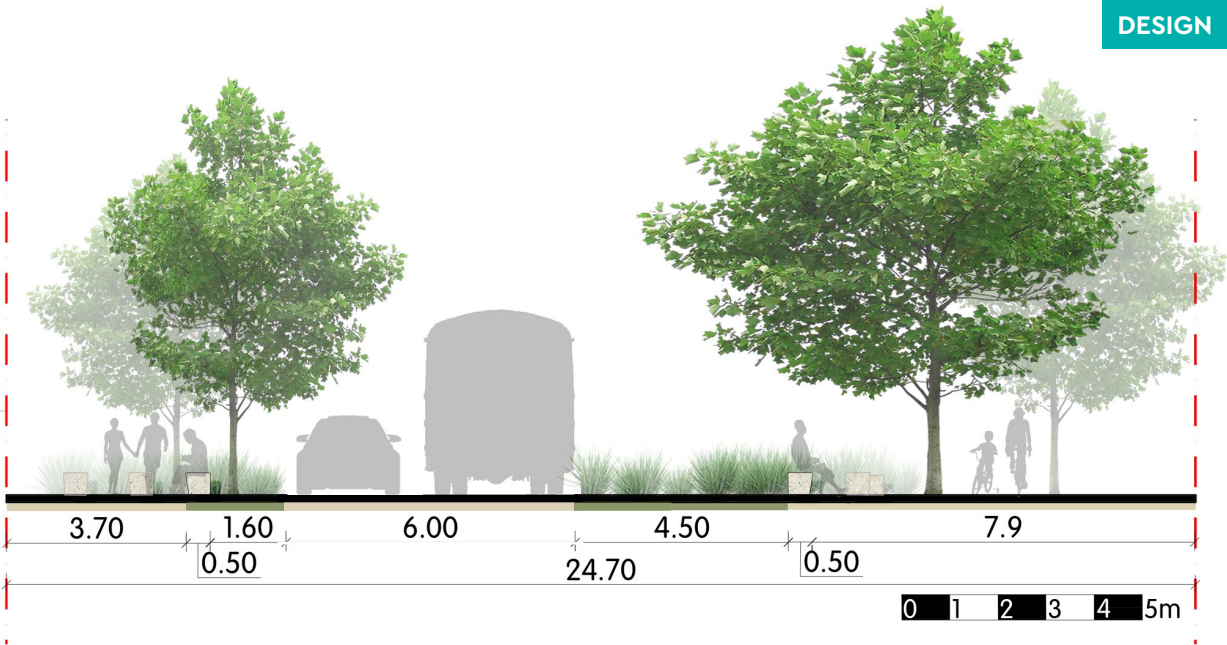
### Promote Vibrancy and Identity

12. Highly identifiable central Hub
13. Public art on key view-line (south-west down Teddington)
14. Feature tree on on key view-line (north up Teddington)
15. Active edge built form and land use opportunities

### Strengthen Walking & Cycling Connections

16. Slow speed / dismount shared cycling environment

DESIGN

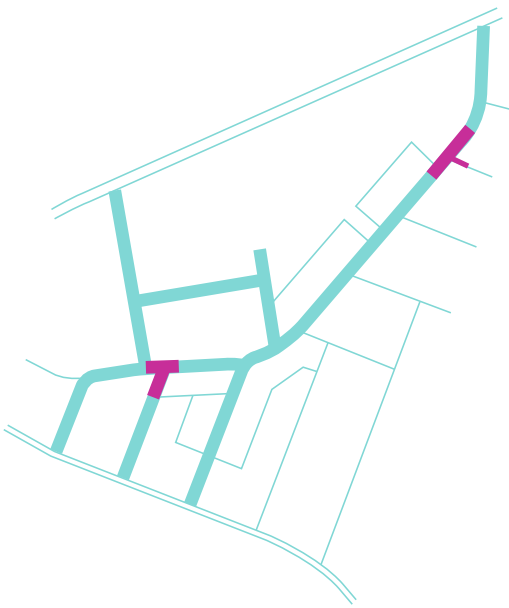




# Place Type 2

## Green Gateway

Create memorable green gateways that extend the amenity from surrounding parklands into the precinct.



### Streetscape Elements

Location	Cnr Burswood Rd (East) and Leigh St   Cnr Burswood Rd (West), Craig St and Twickenham St
Total Reserve Width	20m
Design Speed	30km/hr
Intersection Treatment	Raised crossing on side street
Travel Lanes	Asphalt   upright kerb
Parking	Nil
Median	Nil
Landscape Strip	Mass canopy tree and shrub planting
WSUD Options	Rain gardens and permeable paving
Paths	2.5m shared path both sides of Burswood Rd and one side of Leigh St
Street Furniture	Pedestrian scale street lights   public seating
Other	Gateway to GO Edwards Park   direct pedestrian and cyclist paths

### Key Moves

- Slow Traffic**
1. Minimise travel lane widths and kerb radii
  2. Horizontal deflection
  3. Street tree enclosure

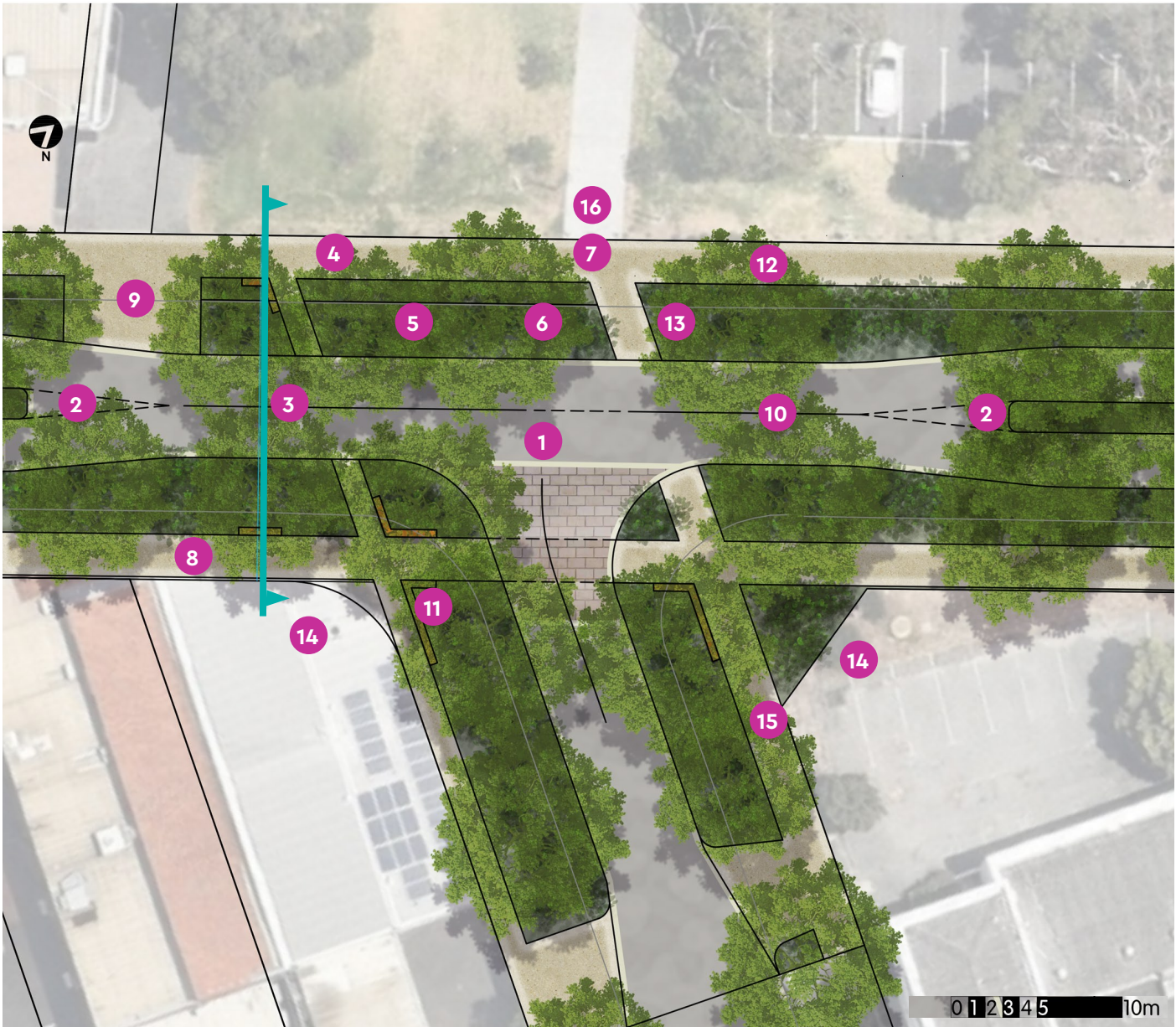
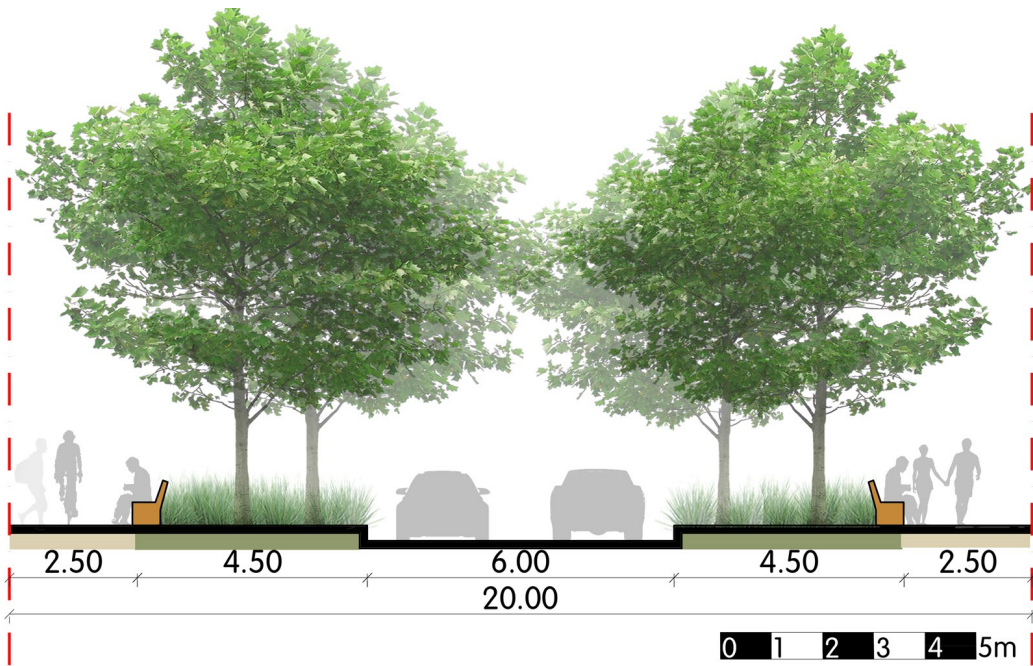
- Green and Shade the Street**
4. Underground powerlines
  5. Dense canopy tree planting
  6. Widen landscape strip by 2m+ both sides for mass Shrub planting

- Safer Footpaths and Crossings**
7. Widen path by 1m both sides
  8. Fix uneven surfaces
  9. Maintain laneway access

- Create Distinct People Places**
10. Memorable Green gateway into precinct
  11. Pause points

- Promote Vibrancy and Identity**
12. Create feeling of moving through though a park
  13. Public art / wayfinding to highlight park entry
  14. Provide a desirable address

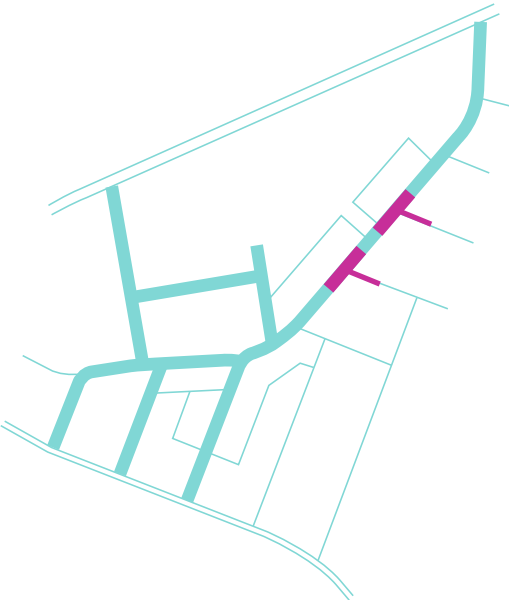
- Strengthen Walking & Cycling Connections**
15. Shared paths for local movement
  16. Key link to park network, river foreshore and City





# Place Type 3 Micro Plaza

Create raised platforms along Burswood Road to slow traffic, improve side street vehicle access and create safe pedestrian crossing points.



## Streetscape Elements

Location	Cnr Burswood Rd (East) and Howick St Cnr Burswood Rd (East) and Egham Rd
Total Reserve Width	20m
Design Speed	30km/hr
Intersection Treatment	Raised flush surface on both streets
Travel Lanes	Feature treatment   flush kerbs
Parking	Nil
Median	Canopy trees   shrubs   flush kerb Existing driveway access
Landscape Strip	Canopy trees   shrubs Existing driveway crossovers Flexible Micro Plaza adjacent to existing school and cafe. Detailed design in consultation with these user groups
WSUD Options	Rain gardens and permeable paving
Paths	2.5m shared path
Street Furniture	Public seating   bike racks pedestrian scale street lights
Other	Public art

## Key Moves

- Slow Traffic**
1. Minimise travel lane widths and kerb radii
  2. Vertical deflection
  3. Street tree enclosure

- Green and Shade the Street**
4. Underground powerlines
  5. Dense canopy trees
  6. Shrub planting

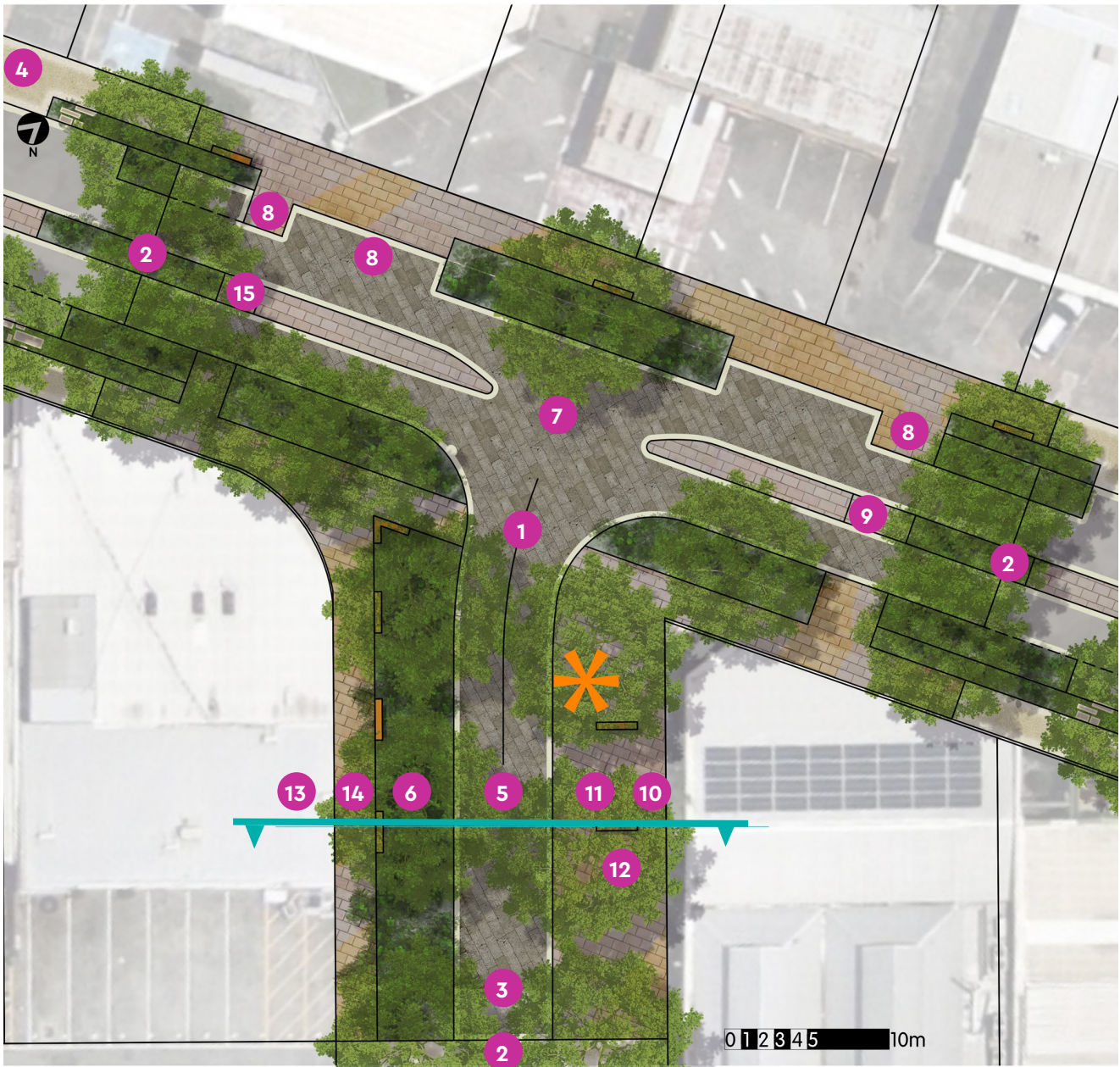
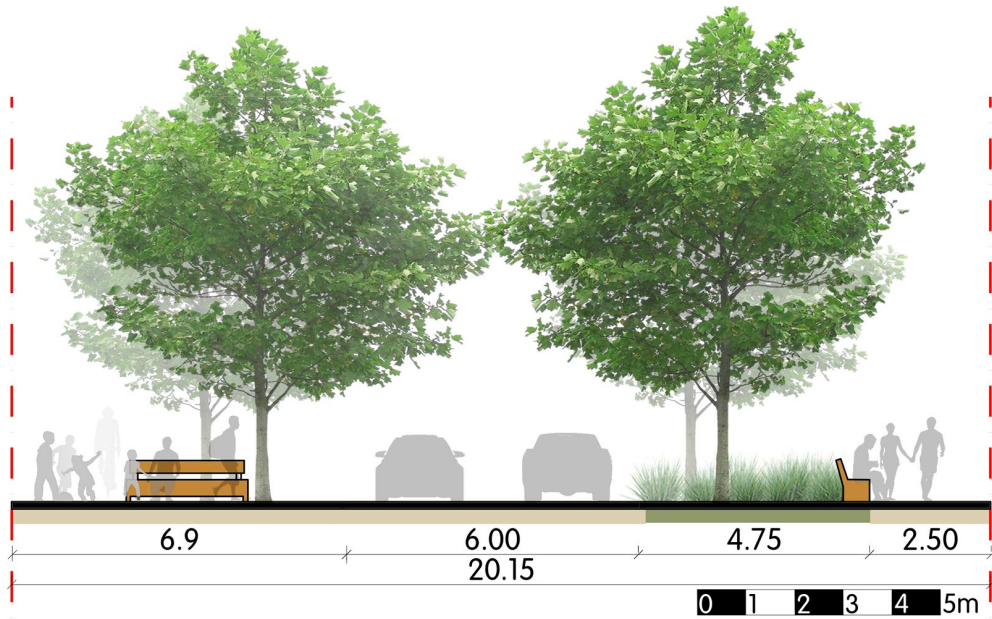
- Safer Footpaths and Crossings**
7. Slow vehicles
  8. Transition away from front driveway access
  9. Widen median refuge

- Create Distinct People Places**
10. Linger node around existing active uses

- Promote Vibrancy and Identity**
11. Intergenerational play and learning space
  12. Seating for pick-up and drop off
  13. Mural opportunity

- Strengthen Walking & Cycling Connections**
14. Shared paths for local movement
  15. Median refuge for crossing
- ✳ Place-making opportunity – kids space, mural etc.

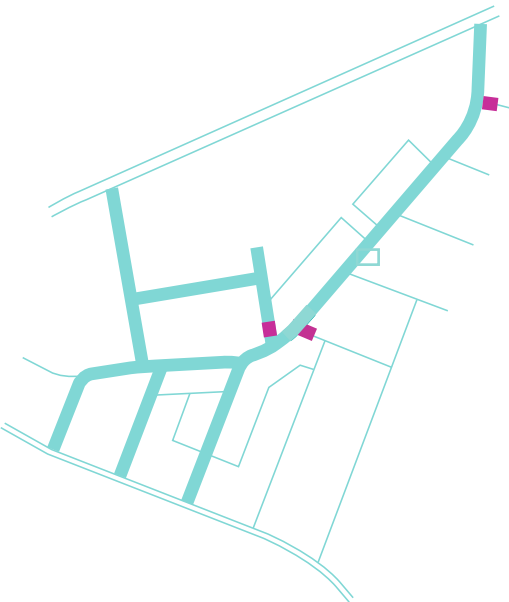
DESIGN





# Place Type 4 Micro Green

Create tranquil pockets of green relief, with continuous, raised footpath crossings on side streets parallel to Burswood Road, and opportunities for rain gardens.



## Streetscape Elements

Location	Cnr Hawthorne and Burswood Rd (East) Cnr Benporath and Burswood Rd (East) Cnr Kitchener Way and Burswood Rd (East)
Total Reserve Width	20–26m
Design Speed	30km/hr
Intersection Treatment	Raised flush path across side street
Travel Lanes	Asphalt   upright kerb
Parking	Nil
Median	NA
Landscape Strip	Canopy trees   shrubs   existing driveway crossovers
WSUD Options	Rain gardens and permeable paving
Paths	2.5m shared path one side of the street
Street Furniture	Pedestrian scale street lights   occasional bench seating   bike racks

## Key Moves

### Slow Traffic

1. Minimise travel lane widths
2. Vertical deflection
3. Street tree enclosure

### Green and Shade the Street

4. Underground powerlines
5. Dense canopy trees
6. Widen landscape strip (by 2–7m) for mass shrub planting

### Safer Footpaths and Crossings

7. Slow turning vehicles
8. Maintain sight lines
9. Transition away from driveway access

### Create Distinct People Places

10. Passive pause point

### Promote Vibrancy and Identity

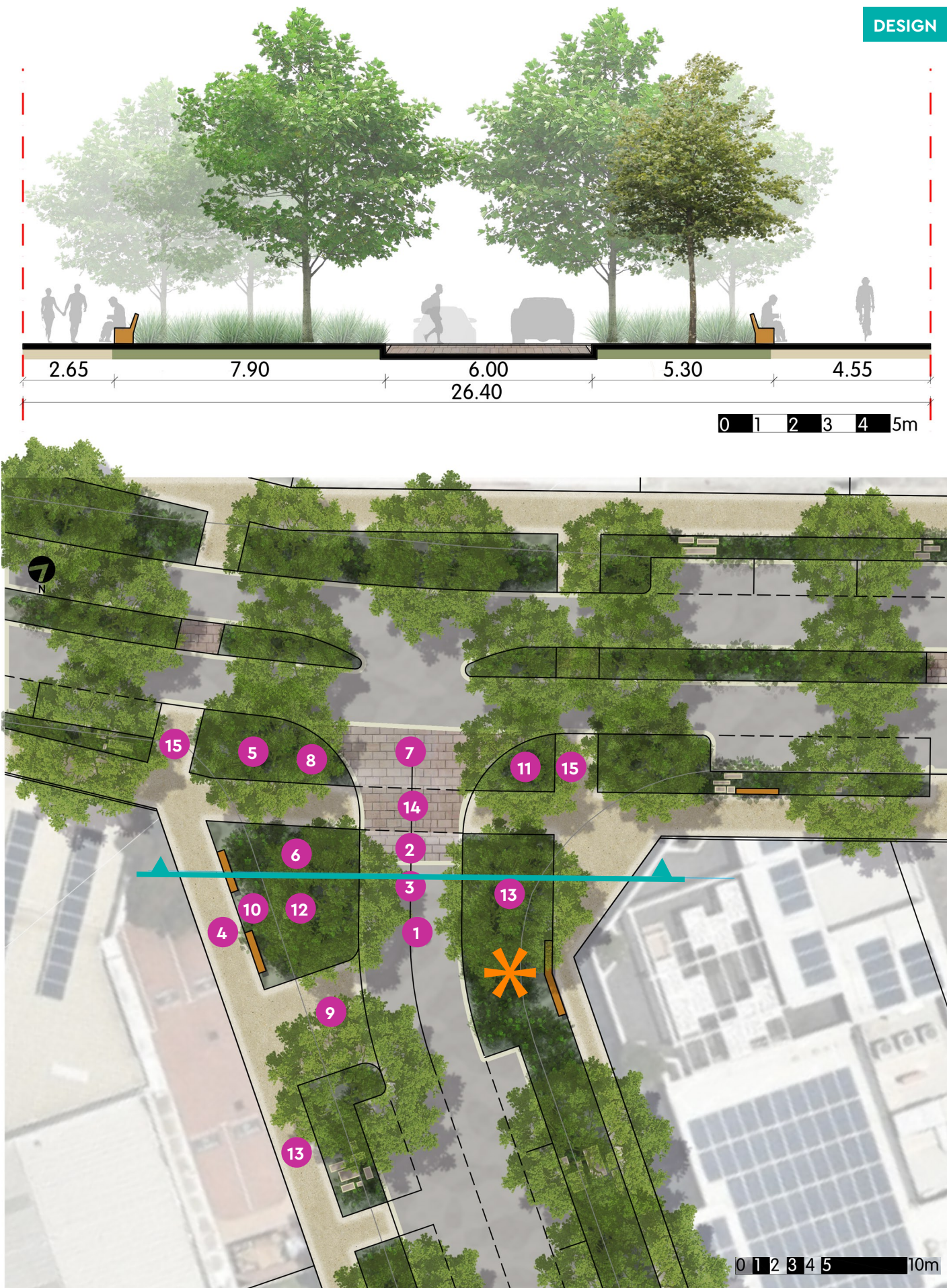
11. Green relief on Burswood Rd (East)
12. Amenity to promote adjacent redevelopment (wider verge)

### Strengthen Walking & Cycling Connections

13. Shared paths for local movement
14. Flush surface crossing
15. Crossings on desire lines

✱ Place-making opportunity

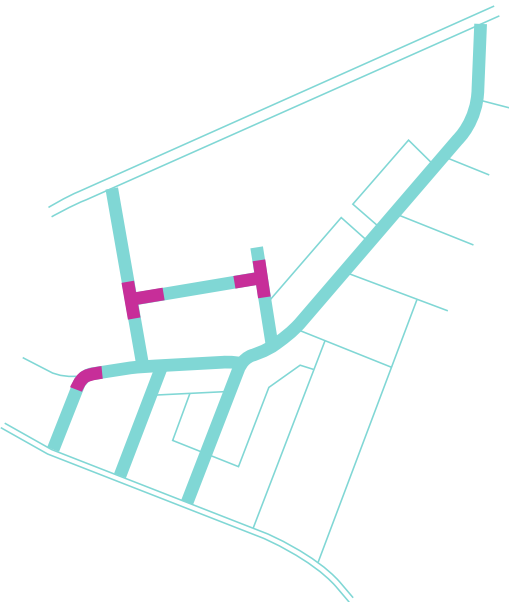
DESIGN





# Place Type 5 Green Break

Green relief within the local street network, improved pedestrian access and opportunities for rain gardens.



## Streetscape Elements

Location	Cnr Asquith St and Burswood Rd (West) Cnr Craig St and Thorogood St Cnr Thorogood St and Hawthorne Pl
Total Reserve Width	20–26m
Design Speed	40km/hr
Intersection Treatment	Kerb extensions
Travel Lanes	Asphalt   upright kerb
Parking	Nil
Median	NA
Landscape Strip	Canopy trees   shrubs   existing driveway crossovers
WSUD Options	Rain gardens and permeable paving
Paths	2.5m shared path one side of the street min
Street Furniture	Pedestrian scale street lights   occasional bench seating

## Key Moves

### Slow Traffic

- 1. Minimise travel lane widths
- 2. Street tree enclosure
- 3. Reduce kerb radii

### Green the Street

- 4. Underground powerlines
- 5. Widen landscape strip by 2m for shrub planting and breathing space for canopy trees

### Safer Footpaths and Crossings

- 6. Slow vehicles
- 7. Maintain sight lines
- 8. Transition away from front driveway access

### Create Distinct People Places

- 9. Low key local pause points

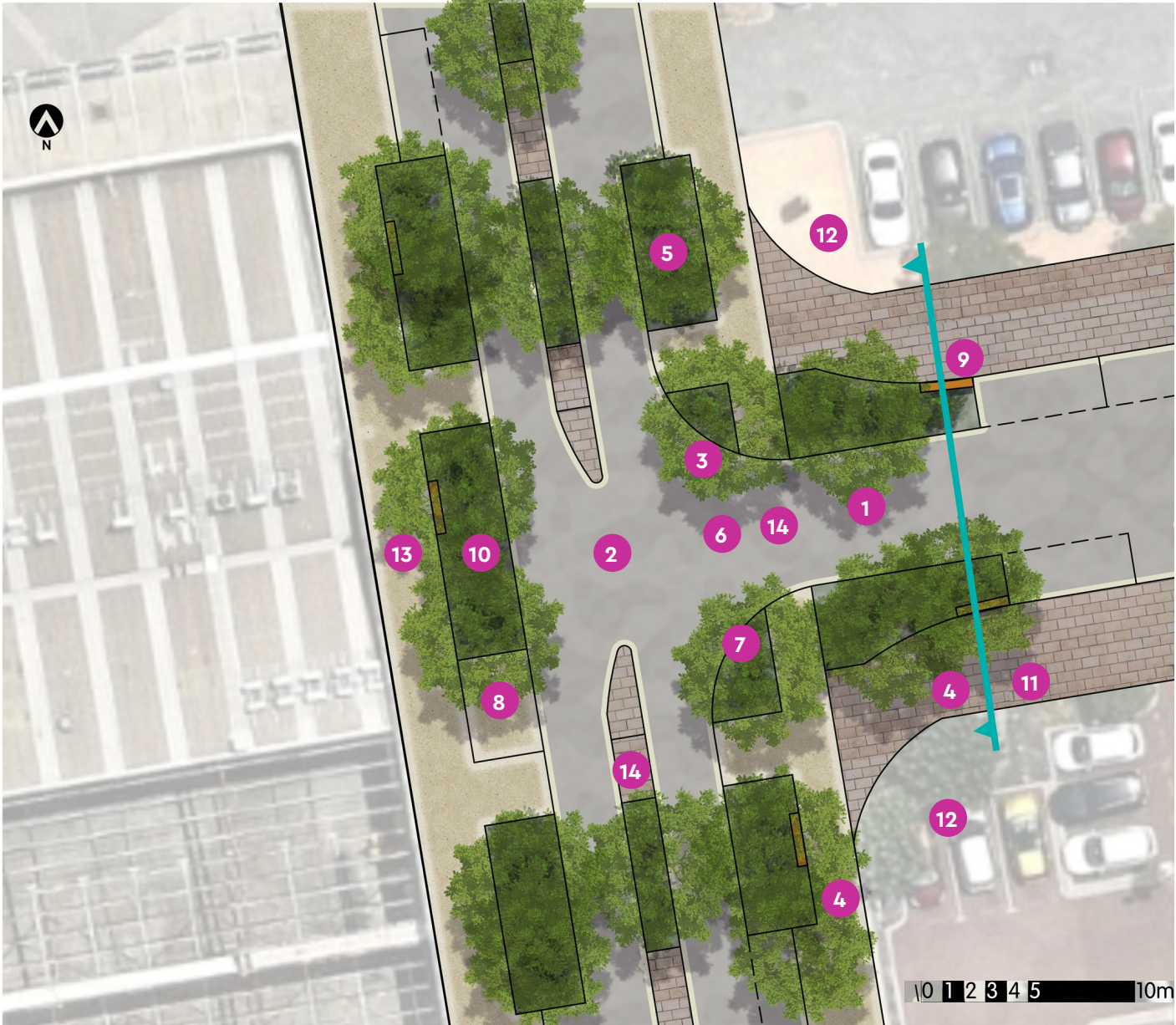
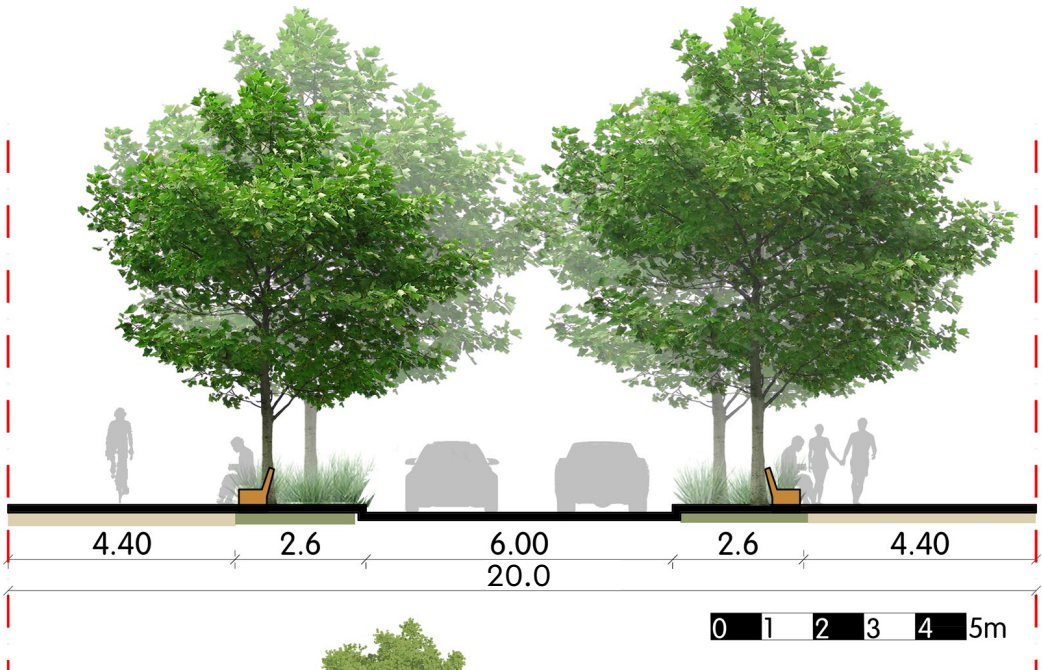
### Promote Vibrancy and Identity

- 10. Green relief within local street network
- 11. Mirror existing quality paving and street trees on Thorogood St
- 12. Promote redevelopment on important corner sites

### Strengthen Walking & Cycling Connections

- 13. Improve key connection to river
- 14. Reduce crossing distance

DESIGN





# Design Inspiration – Movement Types (MT)

MEDIANS & TREES – MT1



FLUSH LEVEL PARKING – MT1



CROSSINGS – MT1





# Design Inspiration – Movement Types (MT)

DESIGN

WSUD- MT1



SHARED STREET – MT2



LANEWAY – MT5





# Design Inspiration – Place Types (PT)

DESIGN

## PLAZA GREENING – PT1



## PLAY & ALFRESCO – PT3



## GREEN BREAKS – PT5





# Implementation



# Implementation

## IMPLEMENTATION

The Place Design Framework defines street types and place types which provide the strategic basis for the revitalisation of the Burswood South mixed-use precinct. The Place Design Framework recommends an extensive set of interventions across many different parts of the streetscape, which range in size, complexity and cost. The plan does not recommend any specific staging at this point in time, as implementation requires further detailed design and feasibility assessment, understanding the priority and timing for underground power, and consideration of long-term funding strategies.

There is flexibility to deliver the plan as a series of projects over the next 10 years through a combination of:

- Existing programs of the Town eg. street tree planting.
- Planned upgrade of existing assets eg. renewal of footpaths or road surfaces.
- Creation of new assets (eg. rain gardens, pedestrian crossings).

### **How Businesses, Landowners and Residents Can Assist**

Local businesses and resident can also play a role in revitalising the area by upgrading building frontages, replacing poor signage or applying for a Town of Victoria Park Place Grant for improving public spaces outside businesses, for example constructing a parklet (see [victoriapark.wa.gov.au/Business/Grow-your-business/Vic-parklets](http://victoriapark.wa.gov.au/Business/Grow-your-business/Vic-parklets) and [victoriapark.wa.gov.au/Around-town/Community-development/Vic-Park-Funding-Program/Place-grants](http://victoriapark.wa.gov.au/Around-town/Community-development/Vic-Park-Funding-Program/Place-grants)).



The following actions are required to implement the Streetscape Improvement Plan following adoption by the Council:

# IMPLEMENTATION

		Responsibility	Timeframe	Resources (Estimated)
1	<b>Underground Power Feasibility</b> Continue investigating the feasibility of undergrounding power with Western Power. Present proposed costs and funding options to the Council for consideration.	Infrastructure Operations, Place Planning, Project Management Office	Ongoing	Subject to a future budget request
2	<b>Funding Strategy / Long Term Financial Plan</b> Prepare a funding strategy to inform: <ul style="list-style-type: none"> <li>• Allocation of funds in the Town's Long-Term Financial Plan, 4 year capital works plan and annual budgets to implement the streetscape plans in stages over a 10-year period.</li> <li>• Consideration of contributions from landowners.</li> <li>• Assess eligibility for Black Spot funding.</li> <li>• Ongoing monitoring of external grant opportunities from State and Federal Government to contribute to funding.</li> <li>• Any opportunities to advocate for external funds from State and Federal Governments.</li> <li>• Alignment with the draft Transport Strategy (2021) recommendation for creation of a Parking Benefit District that would reinvest parking revenues into place improvements.</li> </ul> Present the Funding Strategy to the Council for consideration and adoption prior to commencement of the detailed design phase.	Place Planning, Finance, Project Management Office	By end 2022	Staff



		Responsibility	Timeframe	Resources (Estimated)
3	<p><b>Design Development / Detailed Design + Staging Plan</b></p> <p>Following Council adoption of the Final Streetscape Improvement Plan, progress to Design Development / Detailed Design phase, carrying out further investigations and preparing detailed plans including (but not limited to):</p> <ul style="list-style-type: none"> <li>• Detailed utility services survey.</li> <li>• Carry out further transport analysis to assess volumes, gaps and capacity, the re-distribution effect, and whether its desirable to further investigate any other network improvements, and refine concepts.</li> <li>• Consider any implications arising from the Town's Drainage Asset Assessment.</li> <li>• Investigate the sensitivity of existing paperbark trees on Teddington Road in relation to underground power tunnelling.</li> <li>• Investigate the ability to plant trees under powerlines ahead of any potential undergrounding power tunnelling.</li> <li>• Engage with PTA regarding future bus routes, lane widths, priority right turn from Asquith to Burswood and bus stop nibs.</li> <li>• Investigate the potential for smart street infrastructure.</li> <li>• Investigate the potential for school pickup/drop off on Burswood Rd, east of Egham Road.</li> <li>• Investigate potential for design refinement to maximise Black Spot funding if eligible.</li> <li>• Installation of signage to direct cyclists to the regional bike network.</li> </ul> <p>Refer detailed design to the Town's Access and Inclusion group for feedback.</p> <p>Prepare a Staging Plan for implementation over a 10-year period (or thereabouts) – note that staging will be influenced by multiple factors including (but not limited to):</p> <ul style="list-style-type: none"> <li>• Progressing the feasibility of underground power.</li> <li>• More immediate priorities such as improving pedestrian crossings.</li> <li>• Availability of funds through the Long-Term Financial Plan and other external sources (eg. grants and/ or landowner contributions).</li> <li>• Optimal management of traffic during works to minimise disruption to businesses and residents.</li> </ul> <p>Apply to Main Roads for a reduction in signage speed on Burswood-Teddington Roads from 50km/hr to 40km/hr at an appropriate stage of design (as per Main Roads advice).</p>	Project Management Office, Place Planning	2022-2023	<p>\$345,000</p> <p>Subject to budgeting for 2022-2023</p>



		Responsibility	Timeframe	Resources (Estimated)
4	Prepare detailed designs for one micro-piazza in the event that State and/or Federal government funding becomes available.	Project Management Office, Infrastructure Operations	2022–2023	\$60,000 Subject to budgeting for 2022–2023
5	<b>Urban Forest – Street Tree Program</b> Prioritise the planting of street trees in secondary streets in the shorter-term – Twickenham, Craig, Burswood (west), Thorogood and Hawthorne Streets. Submit a project proposal form to the Urban Forest Strategy Implementation Working Group for consideration.	Infrastructure Operations	2022–2023	Within existing Urban Forest programs (Leafy Streets).
6	<b>Parking Occupancy Review</b> Consider any recommendations of the regular parking occupancy survey and review being conducted for the Burswood South area.	Parking	2022	Within existing Parking program.
7	<b>Public Art Theme</b> Develop a place-specific public art theme to create a strong and cohesive sense of place and identity through consistency or connection between individual public art pieces. For example, the theme could reflect Aboriginal culture and/or stories associated with the Swan River and surrounds. The theme will guide the delivery of public art under the Streetscape Plan and potentially public art delivered through private redevelopment as per the Town's Local Planning Policy 29 Public Art Private Developer Contribution.	Community (Events Arts and Funding), Place Planning	2022–2023 2023–2024	\$5,000 Subject to future budgets
8	<b>Right of Ways</b> Ensure the transfer of ownership of ROWs from deceased estates to the Town as per the recommendations of the Town's Local Planning Strategy, through the future update of the Rights-of-Way Plan.	Property and Leasing, Place Planning	2024–2025	n/a
9	<b>Business Frontages and Signage</b> Provide information to businesses about the benefits of consolidating signage and improving business frontages to add to the attractiveness of the area.	Place Planning	2022–2023	n/a
10	<b>Place Grants</b> Encourage businesses to apply for Place Grants for parklets and other improvements to public spaces outside their properties that align with the streetscape design concepts.	Place Planning	Ongoing	Within existing Vic Park Community Funding Program.
11	<b>Place Activation</b> Fund and deliver small-scale place activation projects (eg. parklet, temporary landscaping, murals) to improve the place prior to construction of the streetscape plan.	Place Planning	2022–2023 2023–2024	\$25,000 Subject to budgeting for 2022–2023
12	<b>Community Safety Funding</b> Encourage businesses to apply for funding from the Town to implement community safety initiatives such as CCTV.	Place Planning	Ongoing	Within existing Vic Park Community Funding Program.



# Appendix



## BURSWOOD SOUTH STREETSCAPE PLAN

### PRELIMINARY COST SCENARIOS

14 July 2021

#### Introduction and Disclaimer

The following costs represent an Opinion of Probable Costs for high level Preliminary Concepts only. They should be read in conjunction with the design concepts and materials palette.

They provide a guide to potential costs associated with the design and materials for each Place Type. They are for reference only and will vary subject to further detailed investigations and design stages. These costs should NOT be read in lieu of a cost plan or Bill of Quantities prepared by a Quantity Surveyor. All nominated quantities, dimensions, areas, rates, inclusions and costs should be verified by a certified Quantity Surveyor. They are not guaranteed by the Consultant Team.

#### Summary of Cost Scenarios

	Cost Scenarios		
	Low	Medium	High
Place Type 1 - Central Hub	\$320,000	\$450,000	\$680,000
Place Type 2 - Green Gateway	\$410,000	\$550,000	\$560,000
Place Type 3 - Micro-Plaza (Egham St)	\$430,000	\$580,000	\$840,000
Place Type 3 - Micro-Plaza (Howick St)	\$320,000	\$440,000	\$700,000
Place Type 4 - Micro-Green (Kitchener Av)	\$210,000	\$250,000	\$270,000
Place Type 4 - Micro-Green (Benporath)	\$340,000	\$460,000	\$500,000
Place Type 4 - Micro-Green (Hawthorne)	\$270,000	\$340,000	\$410,000
Business High Street - remainder of Burswood-Teddington in between Place Types.	\$2,770,000	\$3,130,000	\$4,730,000
	<b>\$5,070,000</b>	<b>\$6,200,000</b>	<b>\$8,690,000</b>

Please note the following concepts have not been fully costed:

- Bus Avenue / Local Streets (Asquith, Twickenham, Thorogood, Burswood West end)- however, if planted with street trees in verges only as an interim measure, then @\$503 per tree (with watering) cost is around \$50,000 under the existing UFS program budget.
- Green Breaks (Asquith, Thorogood, Hawthorne) – estimated between \$25k-\$50k approx. per intersection.
- Mini Main Street – considered a long-term proposal.
- Green Gateway - Burswood Rd West (cnr Craig/Twickenham)- considered a longer-term proposal.
- Shared Laneways.



## Cost Scenario - Assumptions

	Low Specification	Medium Specification	High Specification
Hardscape / Furniture	<p>Ashphalt Feature + Sreetbond rate of \$120/sqm including:</p> <ul style="list-style-type: none"> <li>av \$90/sqm for Concrete Path</li> <li>\$115/sqm for Feature Ashphalt + Streetbond at raised platform</li> <li>\$20/sqm Furniture allowance.</li> </ul> <p>Does not include resurfacing exiting driveways to match footpath.</p>	<p>Ashphalt Feature + Sreetbond rate of \$170/sqm including:</p> <ul style="list-style-type: none"> <li>\$135/sqm for Exposed Aggregate Concrete.</li> <li>\$35/sqm Furniture allowance.</li> <li>Raised pedestrian crossing - interlocking trafficable pavers.</li> </ul> <p>Area includes Existing Driveways resurfaced to match footpath areas (exposed aggregate concrete).</p>	<p>\$200/sqm including:</p> <ul style="list-style-type: none"> <li>\$150/sqm for Urban Stone Paving</li> <li>\$50/sqm Furniture allowance.</li> <li>Raised pedestrian crossing - interlocking trafficable pavers.</li> </ul> <p>Area includes Driveways Existing, to be resurfaced to match footpath areas (Urban Stone Pavers). On Street Parking areas are to be permeable paving, rate includes sub-base prep. Includes provision for resurfacing all existing asphalt areas within the Precinct.</p>
Soft Landscape / Trees	<p>Garden beds and irrigation, does not include rain gardens.</p> <p>Approx. 1 tree for every 8-10m, 100L.</p>	<p>Rain gardens (WDUD) and irrigation for all Place Types, does not include allowance for rain gardens in all other areas. Structural soils for all Place Types only, to support tree root growth under hardscape areas (road and paving) (calc at 30% of all softscape areas, 1m depth.) Approx. 1 tree for every 8-10m, 200L. One mature tree transplant.</p>	<p>Rain gardens (WDUD) and irrigation for the entire project area. Structural soils for all areas, to support tree root growth under hardscape areas (road and paving) (calc at 30% of all softscape areas, 1m depth.). Option to replace structural soils with Tree Cells to support tree root growth and to ensure the soil volume can remain aerated and prevents soil compaction (has not been costed). Approx. 1 tree for every 8-10m, 200L. Four mature tree transplants.</p>
Artworks	n/a	Three artworks.	Six artworks.
Street lighting	Every 60m, price excludes luminaries.	Same a low cost scenario.	<p>Additional feature Gobo Lighting in Place Types 1 &amp; 3, at 4 units per intersection.</p> <p>Option - Smart poles (Multipoles) are can be substituted for itemised street lighting. Multipoles include provision for CCTV, Wifi, sensors and other smart technologies and cost \$12,000 per unit. Provision of Multipoles for the entire precinct would cost approximately \$570,000.</p>
Demolition	Area includes Landscape Existing and excludes Asphalt Existing, Asphalt Feature and Driveways Existing.	Same a low cost scenario.	Same a low cost scenario.
Earthworks	Area includes Sub-Base Prep for existing verge area and new paved areas including imported fill, compaction, etc. and excludes Asphalt Existing, Asphalt Feature and Driveways Existing.	Same a low cost scenario.	Same a low cost scenario.
Hydraulics	Includes and allowance for strip drains where required, modifications to stormwater inlets.	Same a low cost scenario.	Same a low cost scenario.

Traffic management costs are estimated at 5% of the total cost but costs may vary based on different staging approaches.



PLACE TYPE 1 – HUB (intersection of Teddington-Burswood Roads)

LOW COST SCENARIO (BASE CASE)

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	822	sqm	40.00	32,882
Earthworks / Sub-base Preparation	822	sqm	25.00	20,551
Hard Landscaping - Street Bond Asphalt + Furniture	641	sqm	135.00	86,476
Road Surface - Asphalt (single colour - red)	495	sqm	50.00	24,768
Soft Landscaping - Garden Bed incl. irrigation	181	sqm	90.00	16,334
Trees - 100L	13	per tree	350.00	4,550
Electrical Services	641	sqm	40.00	25,623
Street Lighting - CW0255 (Std Galvanised - 6.5m)	3	per light	700.00	2,100
Hydraulic Services	641	sqm	75.00	48,042
				260,000
Preliminaries	12%	percentage		30,000
Traffic Management	5%	percentage		10,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		10,000
				320,000

MEDIUM COST

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	822	sqm	40.00	32,882
Earthworks / Sub-base Preparation	822	sqm	25.00	20,551
Hard Landscaping - Exposed Aggregate Insitu Conc. + Medium Spec Furniture	641	sqm	170.00	108,896
Road Surface - Asphalt with Street Bond	495	sqm	115.00	56,966
Soft Landscaping - Rain Garden incl. irrigation	181	sqm	150.00	27,224
Structural Soils (30% of all garden areas - 1m deep)	54	m3	120.00	6,534
Trees - 200L	13	per tree	600.00	7,800
Mature Tree Transplant	1	per tree	10,000.00	10,000
Electrical Services	641	sqm	40.00	25,623
Street Lighting - CW0110 (Powder coated - 6.5m)	3	per light	930.00	2,790
Artwork Allowance	1	per unit	10,000.00	10,000
Hydraulic Services	641	sqm	75.00	48,042
				360,000
Preliminaries	12%	percentage		40,000
Traffic Management	5%	percentage		20,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		20,000
				450,000

HIGH COST

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	1317	sqm	40.00	52,696
Earthworks / Sub-base Preparation	1317	sqm	25.00	32,935
Hard Landscaping - Urban Stone Paving + High Spec Furniture	641	sqm	200.00	128,113
Road Surface - Interlocking Pavers (trafficable)	495	sqm	140.00	69,349
Permeable Paving - Parking areas (Incl. sub-base)	0	sqm	180.00	-
Soft Landscaping - Rain Garden incl. irrigation	181	sqm	150.00	27,224
Structural Soils (30% of all garden areas - 1m deep)	54	m3	120.00	6,534
Trees - 200L	13	per tree	600.00	7,800
Mature Tree Transplant	2	per tree	10,000.00	20,000
Electrical Services	641	sqm	40.00	25,623
Street Lighting - CW0174 (Powdercoated deco - 6.5m)	3	per light	1,400.00	4,200
Feature Lighting - Gobo lighting	4	per light	25,000.00	100,000
Artwork Allowance	2	per unit	10,000.00	20,000
Hydraulic Services	641	sqm	75.00	48,042
				540,000
Preliminaries	12%	percentage		60,000
Traffic Management	5%	percentage		30,000
Margin	4%	percentage		20,000
Contingency	5%	percentage		30,000
				680,000

Plan of Area





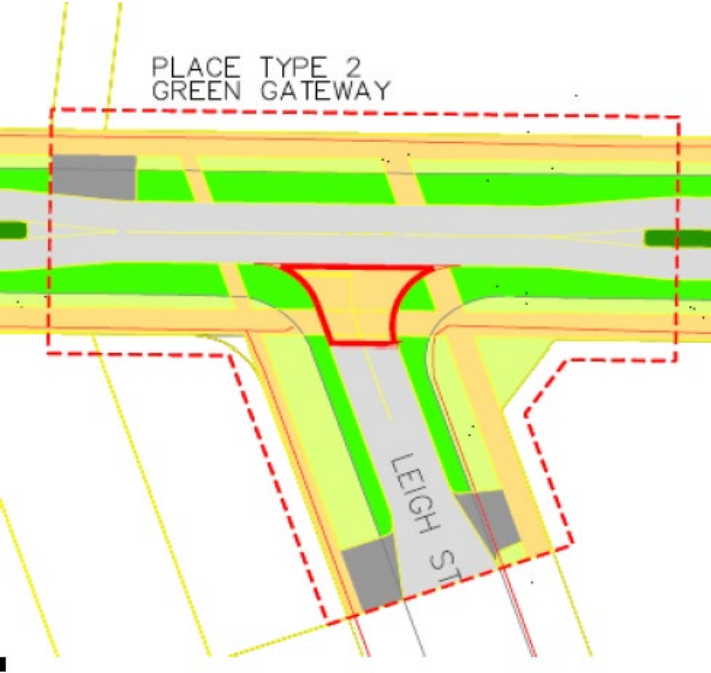
PLACE TYPE 2 – GREEN GATEWAY (Great Eastern Hwy end / intersection of Leigh St)

LOW COST

Description of Works	Quantity	Unit	Ave Rate	Total	Description of Works
Demolition	1,096	sqm	40.00	43,842	Demolition
Earthworks / Sub-base Preparation	1,096	sqm	25.00	27,401	Earthworks / Sub-base Preparation
Hard Landscaping - Concrete Paths + Furniture	500	sqm	120.00	59,964	Hard Landscaping - Exposed Aggregate Insitu Conc. + Medium Spec Furniture
Road Surface - Asphalt Existing	528	sqm	0.00	-	Road Surface - Interlocking Pavers (trafficable)
Soft Landscaping - Garden Beds incl. irrigation	613	sqm	90.00	55,153	Soft Landscaping - Rain Garden incl. irrigation
Trees - 100L	20	per tree	350.00	7,000	Structural Soils (30% of all garden areas - 1m deep)
Electrical Services	1,096	sqm	40.00	43,842	Trees - 200L
Street Lighting - CW0255 (Std Galvanised - 6.5m)	3	per light	700.00	2,100	Mature Tree Transplant
Hydraulic Services	1,096	sqm	75.00	82,204	Electrical Services
				320,000	Street Lighting - CW0110 (Powder coated - 6.5m)
Preliminaries	12%	percentage		40,000	Artwork Allowance
Traffic Management	5%	percentage		20,000	Hydraulic Services
Margin	4%	percentage		10,000	
Contingency	5%	percentage		20,000	
				410,000	

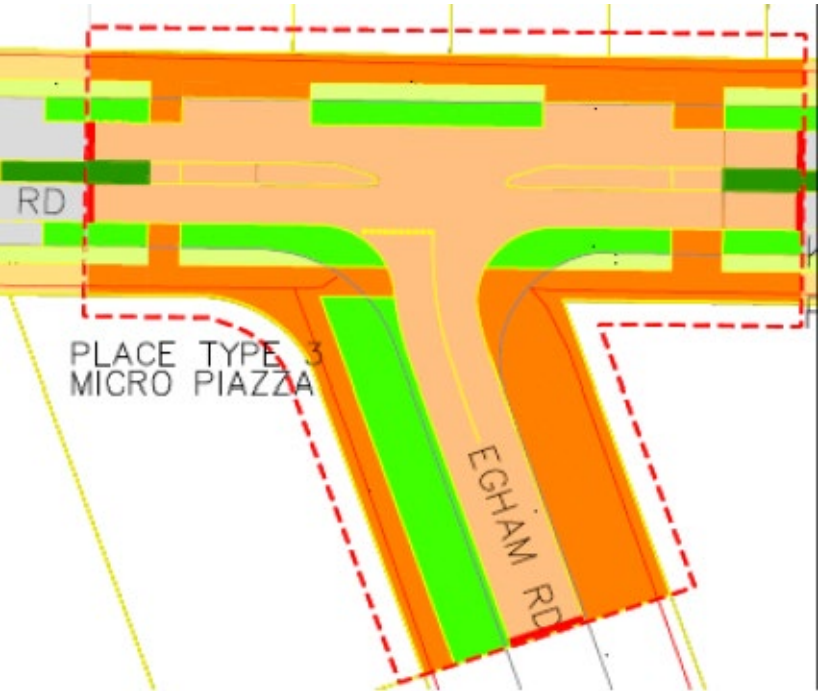
MEDIUM

Description of Works	Quantity	Unit	Ave Rate	Total	Description of Works	Quantity	Unit	Ave Rate	Total	F
Demolition	1,184	sqm	40.00	47,349	Demolition	1,184	sqm	40.00	47,349	
Earthworks / Sub-base Preparation	1,184	sqm	25.00	29,593	Earthworks / Sub-base Preparation	1,184	sqm	25.00	29,593	
Hard Landscaping - Urban Stone Paving + High Spec Furniture	500	sqm	200.00	99,941	Hard Landscaping - Urban Stone Paving + High Spec Furniture	500	sqm	200.00	99,941	
Road Surface - Interlocking Pavers (trafficable)	71	sqm	140.00	9,970	Road Surface - Interlocking Pavers (trafficable)	71	sqm	140.00	9,970	
Permeable Paving - Parking areas (Incl. sub-base)	0	sqm	180.00	-	Permeable Paving - Parking areas (Incl. sub-base)	0	sqm	180.00	-	
Soft Landscaping - Rain Garden incl. irrigation	340	sqm	150.00	50,937	Soft Landscaping - Rain Garden incl. irrigation	340	sqm	150.00	50,937	
Structural Soils (30% of all garden areas - 1m deep)	102	m3	120.00	12,225	Structural Soils (30% of all garden areas - 1m deep)	102	m3	120.00	12,225	
Trees - 200L	20	per tree	600.00	12,000	Trees - 200L	20	per tree	600.00	12,000	
Mature Tree Transplant	0	per tree	10,000.00	-	Mature Tree Transplant	0	per tree	10,000.00	-	
Electrical Services	1,184	sqm	40.00	47,349	Electrical Services	1,184	sqm	40.00	47,349	
Street Lighting - CW0174 (Powdercoated deco - 6.5m)	3	per light	930.00	2,790	Street Lighting - CW0174 (Powdercoated deco - 6.5m)	3	per light	1,400.00	4,200	
Artwork Allowance	0	per unit	10,000.00	-	Artwork Allowance	0	per unit	10,000.00	-	
Hydraulic Services	1,184	sqm	75.00	88,780	Hydraulic Services	1,184	sqm	75.00	88,780	
				440,000					400,000	
Preliminaries	12%	percentage		50,000	Preliminaries	12%	percentage		50,000	
Traffic Management	5%	percentage		20,000	Traffic Management	5%	percentage		20,000	
Margin	4%	percentage		20,000	Margin	4%	percentage		20,000	
Contingency	5%	percentage		20,000	Contingency	5%	percentage		20,000	
				550,000					\$560,00	



PLACE TYPE 3 – MICRO-PLAZA (intersection of Egham Street and Burswood Rd)

LOW					MEDIUM					HIGH				
Description of Works					Description of Works					Description of Works				
Quantity	Unit	Ave Rate	Total		Quantity	Unit	Ave Rate	Total		Quantity	Unit	Ave Rate	Total	P
Demolition	999	sqm	40.00	39,965	Demolition	999	sqm	40.00	39,965	Demolition	1,700	sqm	40.00	68,014
Earthworks / Sub-base Preparation	999	sqm	25.00	24,978	Earthworks / Sub-base Preparation	999	sqm	25.00	24,978	Earthworks / Sub-base Preparation	1,700	sqm	25.00	42,509
Hard Landscaping - Street Bond Asphalt + Furniture	605	sqm	135.00	81,611	Hard Landscaping - Exposed Aggregate Insitu Conc. + Medium Spec Furniture	605	sqm	170.00	102,770	Hard Landscaping - Urban Stone Paving + High Spec Furniture	605	sqm	200.00	120,905
Road Surface - Asphalt (single colour - red)	701	sqm	50.00	35,061	Road Surface - Asphalt with Street Bond	701	sqm	115.00	80,641	Road Surface - Interlocking Pavers (trafficable)	701	sqm	140.00	98,172
Soft Landscaping - Garden Bed incl. irrigation	395	sqm	90.00	35,514	Soft Landscaping - Rain Garden incl. irrigation	395	sqm	150.00	59,190	Permeable Paving - Parking areas (Incl. sub-base)	0	sqm	180.00	-
Trees - 100L	20	per tree	350.00	7,000	Structural Soils (30% of all garden areas - 1m deep)	118	m3	120.00	17,047	Soft Landscaping - Rain Garden incl. irrigation	395	sqm	150.00	59,190
Electrical Services	999	sqm	40.00	39,965	Trees - 200L	20	per tree	600.00	12,000	Structural Soils (30% of all garden areas - 1m deep)	118	m3	120.00	14,206
Street Lighting - CW0255 (Std Galvanised - 6.5m)	3	per light	700.00	2,100	Mature Tree Transplant	0	per tree	10,000.00	-	Trees - 200L	20	per tree	600.00	12,000
Hydraulic Services	999	sqm	75.00	74,934	Electrical Services	999	sqm	40.00	39,965	Mature Tree Transplant	2	per tree	10,000.00	20,000
				340,000	Street Lighting - CW0110 (Powder coated - 6.5m)	3	per light	930.00	2,790	Electrical Services	999	sqm	40.00	39,965
Preliminaries	12%	percentage		40,000	Artwork Allowance	1	per unit	10,000.00	10,000	Street Lighting - CW0174 (Powdercoated deco - 6.5m)	3	per light	1,400.00	4,200
Traffic Management	5%	percentage		20,000	Hydraulic Services	999	sqm	75.00	74,934	Feature Lighting - Gobo lighting	4	per light	25,000.00	100,000
Margin	4%	percentage		10,000					460,000	Artwork Allowance	2	per unit	10,000.00	20,000
Contingency	5%	percentage		20,000	Preliminaries	12%	percentage		60,000	Hydraulic Services	999	sqm	75.00	74,934
				430,000	Traffic Management	5%	percentage		20,000					670,000
					Margin	4%	percentage		20,000	Preliminaries	12%	percentage		80,000
					Contingency	5%	percentage		20,000	Traffic Management	5%	percentage		30,000
									580,000	Margin	4%	percentage		30,000
										Contingency	5%	percentage		30,000
														840,000





PLACE TYPE 3 – MICRO-PLAZA (intersection of Howick Street and Burswood Rd)

LOW

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	745	sqm	40.00	29,794
Earthworks / Sub-base Preparation	745	sqm	25.00	18,621
Hard Landscaping - Street Bond Asphalt + Furniture	472	sqm	135.00	63,786
Road Surface - Asphalt (single colour - red)	560	sqm	50.00	27,990
Soft Landscaping - Garden Bed incl. irrigation	272	sqm	90.00	24,512
Trees - 100L	15	per tree	350.00	5,250
Electrical Services	745	sqm	40.00	29,794
Street Lighting - CW0255 (Std Galvanised - 6.5m)	3	per light	700.00	2,100
Hydraulic Services	745	sqm	75.00	55,864
				260,000
Preliminaries	12%	percentage		30,000
Traffic Management	5%	percentage		10,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		10,000
				320,000

MEDIUM

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	745	sqm	40.00	29,794
Earthworks / Sub-base Preparation	745	sqm	25.00	18,621
Hard Landscaping - Exposed Aggregate Insitu Conc. + Medium Spec Furniture	472	sqm	170.00	80,323
Road Surface - Asphalt with Street Bond	560	sqm	115.00	64,378
Soft Landscaping - Rain Garden incl. irrigation	272	sqm	150.00	40,854
Structural Soils (30% of all garden areas - 1m deep)	82	m3	120.00	11,766
Trees - 200L	15	per tree	600.00	9,000
Mature Tree Transplant	0	per tree	10,000.00	-
Electrical Services	745	sqm	40.00	29,794
Street Lighting - CW0110 (Powder coated - 6.5m)	3	per light	930.00	2,790
Artwork Allowance	1	per unit	10,000.00	10,000
Hydraulic Services	745	sqm	75.00	55,864
				350,000
Preliminaries	12%	percentage		40,000
Traffic Management	5%	percentage		20,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		20,000
				440,000

HIGH

Description of Works	Quantity	Unit	Ave Rate	Total
Earthworks / Sub-base Preparation	1,305	sqm	40.00	52,186
Hard Landscaping - Urban Stone Paving + High Spec Furniture	1,305	sqm	25.00	32,616
Road Surface - Interlocking Pavers (trafficable)	472	sqm	200.00	94,498
Permeable Paving - Parking areas (Incl. sub-base)	560	sqm	140.00	78,373
Soft Landscaping - Rain Garden incl. irrigation	0	sqm	180.00	-
Structural Soils (30% of all garden areas - 1m deep)	272	sqm	150.00	40,854
Trees - 200L	82	m3	120.00	9,805
Mature Tree Transplant	15	per tree	600.00	9,000
Electrical Services	2	per tree	10,000.00	20,000
Street Lighting - CW0174 (Powdercoated deco - 6.5m)	745	sqm	40.00	29,794
Feature Lighting - Gobo lighting	3	per light	1,400.00	4,200
Artwork Allowance	4	per light	25,000.00	100,000
Hydraulic Services	2	per unit	10,000.00	20,000
	745	sqm	75.00	55,864
				550,000
Preliminaries	12%	percentage		70,000
Traffic Management	5%	percentage		30,000
Margin	4%	percentage		20,000
Contingency	5%	percentage		30,000
				700,000



PLACE TYPE 4 – MICRO-GREEN (intersection of Kitchener Street and Burswood Rd)

LOW

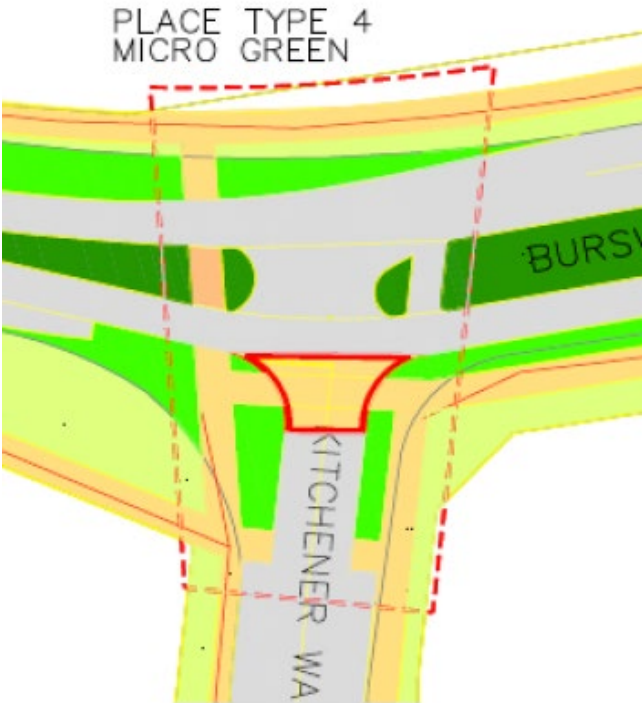
Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	523	sqm	40.00	20,930
Earthworks / Sub-base Preparation	523	sqm	25.00	13,081
Hard Landscaping - Concrete Paths + Furniture	216	sqm	120.00	25,935
Road Surface - Raised Concrete Crossing	53	sqm	200.00	10,644
Soft Landscaping - Garden Beds (incl. irrigation)	254	sqm	90.00	22,852
Trees - 100L	15	per tree	350.00	5,250
Electrical Services	523	sqm	40.00	20,930
Street Lighting - CW0255 (Std Galvanised - 6.5m)	3	per light	700.00	2,100
Hydraulic Services	523	sqm	75.00	39,244
				160,000
Preliminaries	12%	percentage		20,000
Traffic Management	5%	percentage		10,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		10,000
				210,000

MEDIUM

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	523	sqm	40.00	20,930
Earthworks / Sub-base Preparation	523	sqm	25.00	13,081
Hard Landscaping - Exposed Aggregate Insitu Conc. + Medium Spec Furniture	216	sqm	170.00	36,741
Road Surface - Interlocking Pavers (trafficable)	53	sqm	140.00	7,451
Soft Landscaping - Rain Garden incl. irrigation	254	sqm	150.00	38,087
Structural Soils (30% of all garden areas - 1m deep)	76	m3	120.00	10,969
Trees - 200L	15	per tree	600.00	9,000
Mature Tree Transplant	0	per tree	10000.00	-
Electrical Services	523	sqm	40.00	20,930
Street Lighting - CW0110 (Powder coated - 6.5m)	3	per light	930.00	2,790
Artwork Allowance	0	per unit	10000.00	-
Hydraulic Services	523	sqm	75.00	39,244
				200,000
Preliminaries	12%	percentage		20,000
Traffic Management	5%	percentage		10,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		10,000
				250,000

HIGHT

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	523	sqm	40.00	20,930
Earthworks / Sub-base Preparation	523	sqm	25.00	13,081
Hard Landscaping - Urban Stone Paving + High Spec Furniture	216	sqm	200.00	43,224
Road Surface - Interlocking Pavers (trafficable)	53	sqm	140.00	7,451
Permeable Paving - Parking areas (Incl. sub-base)	0	sqm	180.00	-
Soft Landscaping - Rain Garden incl. irrigation	254	sqm	150.00	38,087
Structural Soils (30% of all garden areas - 1m deep)	76	m3	120.00	9,141
Trees - 200L	15	per tree	600.00	9,000
Mature Tree Transplant	0	per tree	10,000.00	-
Electrical Services	523	sqm	40.00	20,930
Street Lighting - CW0174 (Powdercoated deco - 6.5m)	3	per light	1,400.00	4,200
Artwork Allowance	0	per unit	10,000.00	-
Hydraulic Services	523	sqm	75.00	39,244
				210,000
Preliminaries	12%	percentage		30,000
Traffic Management	5%	percentage		10,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		10,000
				270,000





PLACE TYPE 4 – MICRO-GREEN (intersection of Benporath Street and Burswood Rd)

LOW

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	956	sqm	40.00	38,221
Earthworks / Sub-base Preparation	956	sqm	25.00	23,888
Hard Landscaping - Concrete Paths + Furniture	394	sqm	120.00	47,322
Road Surface - Concrete Raised Crossing	53	sqm	200.00	10,599
Soft Landscaping - Garden Beds (incl. irrigation)	508	sqm	90.00	45,736
Trees - 100L	17	per tree	350.00	5,950
Electrical Services	956	sqm	40.00	38,221
Street Lighting - CW0255 (Std Galvanised - 6.5m)	3	per light	700.00	2,100
Hydraulic Services	956	sqm	75.00	71,664
				280,000
Preliminaries	12%	percentage		30,000
Traffic Management	5%	percentage		10,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		10,000
				340,000

MEDIUM

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	993	sqm	40.00	39,703
Earthworks / Sub-base Preparation	993	sqm	25.00	24,815
Hard Landscaping - Exposed Aggregate Insitu Conc. + Medium Spec Furniture	431	sqm	170.00	73,339
Road Surface - Interlocking Pavers (trafficable)	53	sqm	140.00	7,419
Soft Landscaping - Rain Garden incl. irrigation	903	sqm	150.00	135,379
Structural Soils (30% of all garden areas - 1m depth)	271	m3	120.00	38,989
Trees - 200L	17	per tree	600.00	10,200
Mature Tree Transplant	0	per tree	10000.00	-
Electrical Services	993	sqm	40.00	39,703
Street Lighting - CW0110 (Powder coated - 6.5m)	3	per light	930.00	2,790
Artwork Allowance	0	per unit	10000.00	-
Hydraulic Services	993	sqm	75.00	74,444
				450,000
Preliminaries	12%	percentage		50,000
Traffic Management	5%	percentage		20,000
Margin	4%	percentage		20,000
Contingency	5%	percentage		20,000
				\$460,000

HIGHT

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	1,056	sqm	40.00	42,223
Earthworks / Sub-base Preparation	1,056	sqm	25.00	26,390
Hard Landscaping - Urban Stone Paving + High Spec Furniture	431	sqm	200.00	86,281
Road Surface - Interlocking Pavers (trafficable)	53	sqm	140.00	7,419
Permeable Paving - Parking areas (Incl. sub-base)	63	sqm	180.00	11,340
Soft Landscaping - Rain Garden incl. irrigation	508	sqm	150.00	76,227
Structural Soils (30% of all garden areas - 1m deep)	152	m3	120.00	18,295
Trees - 200L	17	per tree	600.00	10,200
Mature Tree Transplant	0	per tree	10,000.00	-
Electrical Services	993	sqm	40.00	39,703
Street Lighting - CW0174 (Powdercoated deco - 6.5m)	3	per light	1,400.00	4,200
Artwork Allowance	0	per unit	10,000.00	-
Hydraulic Services	993	sqm	75.00	74,444
				400,000
Preliminaries	12%	percentage		50,000
Traffic Management	5%	percentage		20,000
Margin	4%	percentage		20,000
Contingency	5%	percentage		20,000
				\$500,000



PLACE TYPE 4 – MICRO-GREEN (intersection of Hawthorne and Burswood Rd)

LOW

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	703	sqm	40.00	28,103
Earthworks / Sub-base Preparation	703	sqm	25.00	17,564
Hard Landscaping - Concrete Paths + Furniture	322	sqm	120.00	38,693
Road Surface - Concrete Raised Crossing	67	sqm	200.00	13,480
Road Surface - Asphalt Feature	49	sqm	50.00	2,458
Soft Landscaping - Garden Beds (incl. irrigation)	264	sqm	90.00	23,721
Trees - 100L	15	per tree	350.00	5,250
Electrical Services	703	sqm	40.00	28,103
Street Lighting - CW0255 (Std Galvanised - 6.5m)	3	per light	700.00	2,100
Hydraulic Services	703	sqm	75.00	52,693
				210,000
Preliminaries	12%	percentage		30,000
Traffic Management	5%	percentage		10,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		10,000
				270,000

MEDIUM

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	758	sqm	40.00	30,317
Earthworks / Sub-base Preparation	758	sqm	25.00	18,948
Hard Landscaping - Exposed Aggregate Insitu Conc. + Medium Spec Furniture	427	sqm	170.00	72,581
Road Surface - Interlocking Pavers (trafficable)	67	sqm	140.00	9,436
Road Surface - Feature Asphalt (Single Colour)	49	sqm	50.00	2,458
Soft Landscaping - Rain Garden incl. irrigation	264	sqm	150.00	39,536
Structural Soils (30% of all garden areas - 1m deep)	79	m3	120.00	11,386
Trees - 200L	15	per tree	600.00	9,000
Mature Tree Transplant	0	per tree	10000.00	-
Electrical Services	758	sqm	40.00	30,317
Street Lighting - CW0110 (Powder coated - 6.5m)	3	per light	930.00	2,790
Artwork Allowance	0	per unit	10000.00	-
Hydraulic Services	758	sqm	75.00	56,844
				280,000
Preliminaries	12%	percentage		30,000
Traffic Management	5%	percentage		10,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		10,000
				340,000

HIGH

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	885	sqm	40.00	35,407
Earthworks / Sub-base Preparation	885	sqm	25.00	22,129
Hard Landscaping - Urban Stone Paving + High Spec Furniture	427	sqm	200.00	85,389
Road Surface - Interlocking Pavers (trafficable)	67	sqm	140.00	9,436
Permeable Paving - Parking areas (Incl. sub-base)	78.1	sqm	180.00	14,058
Soft Landscaping - Rain Garden incl. irrigation	264	sqm	150.00	39,536
Structural Soils (30% of all garden areas - 1m deep)	79	m3	120.00	11,386
Trees - 200L	15	per tree	600.00	9,000
Mature Tree Transplant	0	per tree	10,000.00	-
Electrical Services	807	sqm	40.00	32,283
Street Lighting - CW0174 (Powdercoated deco - 6.5m)	3	per light	1,400.00	4,200
Artwork Allowance	0	per unit	10,000.00	-
Hydraulic Services	807	sqm	75.00	60,531
				320,000
Preliminaries	12%	percentage		40,000
Traffic Management	5%	percentage		20,000
Margin	4%	percentage		10,000
Contingency	5%	percentage		20,000
				410,000





**Burswood-Teddington Business High Street - All other sections in between Place Type treatments.**

**LOW**

**MEDIUM**

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	7,505	sqm	40.00	300,191
Earthworks / Sub-base Preparation	7,505	sqm	25.00	187,619
Hard Landscaping - Concrete Paths + Furniture	3,291	sqm	120.00	394,946
Road Surface - Asphalt Feature (single Colour)	549	sqm	50.00	27,448
Soft Landscaping - Garden Beds (incl. irrigation)	3,665	sqm	90.00	329,814
Trees - 100L	211	per tree	350.00	73,850
Electrical Services	7,505	sqm	40.00	300,191
Street Lighting - CW0255 (Std Galvanised - 6.5m)	27	per light	700.00	18,900
Hydraulic Services	7,505	sqm	75.00	562,857
				<b>2,200,000</b>
Preliminaries	12%	percentage		260,000
Traffic Management	5%	percentage		110,000
Margin	4%	percentage		90,000
Contingency	5%	percentage		110,000
				<b>2,770,000</b>

Description of Works	Quantity	Unit	Ave Rate	Total
Demolition	7,466	sqm	40.00	298,647
Earthworks / Sub-base Preparation	7,466	sqm	25.00	186,654
Hard Landscaping - Exposed Aggregate Insitu Conc. + Medium Spec Furniture	3,802	sqm	170.00	646,269
Road Surface - Feature Asphalt (Single Colour)	549	sqm	50.00	27,448
Soft Landscaping - Garden Bed incl. irrigation	3,665	sqm	90.00	329,814
Structural Soils (30% of all garden areas - 1m deep)	0	m3	120.00	-
Trees - 200L	211	per tree	600.00	126,600
Mature Tree Transplant	0	per tree	10000.00	-
Electrical Services	7,466	sqm	40.00	298,647
Street Lighting - CW0255 (Std Galvanised - 6.5m)	27	per light	700.00	18,900
Artwork Allowance	0	per unit	10000.00	-
Hydraulic Services	7,466	sqm	75.00	559,963
				<b>2,490,000</b>
Preliminaries	12%	percentage		300,000
Traffic Management	5%	percentage		120,000
Margin	4%	percentage		100,000
Contingency	5%	percentage		120,000
				<b>3,130,000</b>

**HIGH**

**ALL OTHER AREAS**

Description of Works	Quantity	Unit	Ave Rate	Total	P
Demolition	8,998	sqm	40.00	359,900	
Earthworks / Sub-base Preparation	8,998	sqm	25.00	224,938	
Hard Landscaping - Urban Stone Paving + High Spec Furniture	3,802	sqm	200.00	760,317	
Road Surface - Single Colour Asphalt resurface for Entire Precinct	8,677	sqm	50.00	433,837	
Permeable Paving - Parking areas (incl. sub-base)	982	sqm	180.00	176,828	
Soft Landscaping - Rain Garden (incl. irrigation)	3,665	sqm	150.00	549,690	
Structural Soils (30% of all garden areas - 1m deep)	1,099	m3	120.00	158,311	
Trees - 200L	211	per tree	600.00	126,600	
Mature Tree Transplant	0	per tree	10,000.00	-	
Electrical Services	8,015	sqm	40.00	320,605	
Street Lighting - CW0174 (Powdercoated deco - 6.5m)	27	per light	1,400.00	37,800	
Artwork Allowance	0	per unit	10,000.00	-	
Hydraulic Services	8,015	sqm	75.00	601,135	
				<b>3,750,000</b>	
Preliminaries	12%	percentage		450,000	
Traffic Management	5%	percentage		190,000	
Margin	4%	percentage		150,000	
Contingency	5%	percentage		190,000	
				<b>4,730,000</b>	