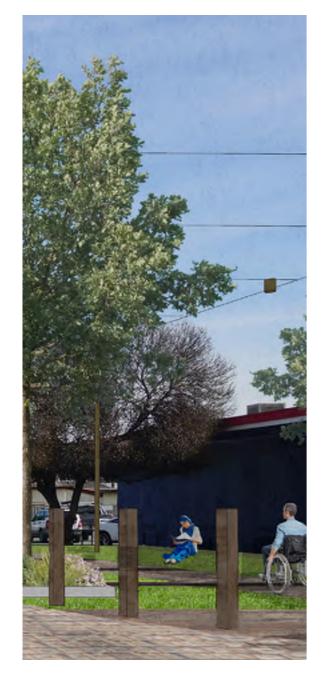
# PROSPECT ROAD

# **Concept Plans**

November 2020















## **Prospect Road Background Review**



## Preamble

An analysis was undertaken to ensure that the Prospect Road Upgrade will be aligned with the existing character of the area as well as previous council plans and strategies. This is an important step as it ensures that the street scape upgrade is aligned with previous planning outcomes and that elements specific to this project were identified and considered.

The background review and site analysis informs the creation of a Prospect Road vision, this provides direction for the public realm development of the precinct in the future. The analysis provides an overview of various elements of Prospect Road and how they can deliver the sense of place and future public realm for Prospect Road.

On the following pages, the key considerations for the guidelines are identified and presented in relation to urban form and land use, pedestrian and cycling movement, vehicle movement and car parking and landscape and public realm.

Utilising this information, a series of urban tacticts have been developed to guide the location and type of upgrades to the precincts. A series of seven projects are provided which details the different approaches to these tactics in specific locations.









# WGA WAX

## Context



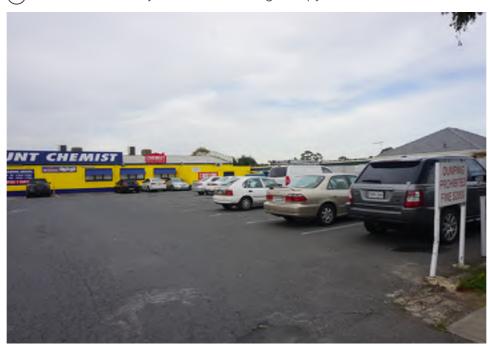
(1) Vehicle traffic lanes with signalised pedestrian crossing



4 Landscape to kerb and boundary edges



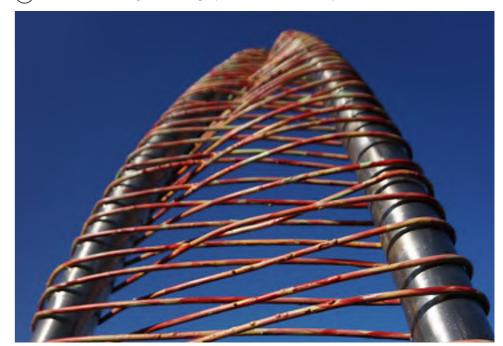
2 Pedestrian walkways under the building canopy



(5) Rear-loaded car parking behind main street businesses



3 Pedestrian refuge crossings provide little amenity to the street



6 Strong focus on public art to the length of Prospect Road



Urban Form and Land Use



#### **KEY**





Commerical Residential

#### **OBSERVATIONS**

- Built form character to main street differs between eastern and western sides
- Fragmented built form to the eastern edge with large set backs
- Continuous built form edge to west with no set back
- Low rise development with limited overshadowing of the road corridor
- Defined pedestrian oriented main street activities to western
- Vehicular access oriented land uses dominant to eastern side
- Less land amalgamation to east (potential for future development)
- Increase shading from buildings along western edge

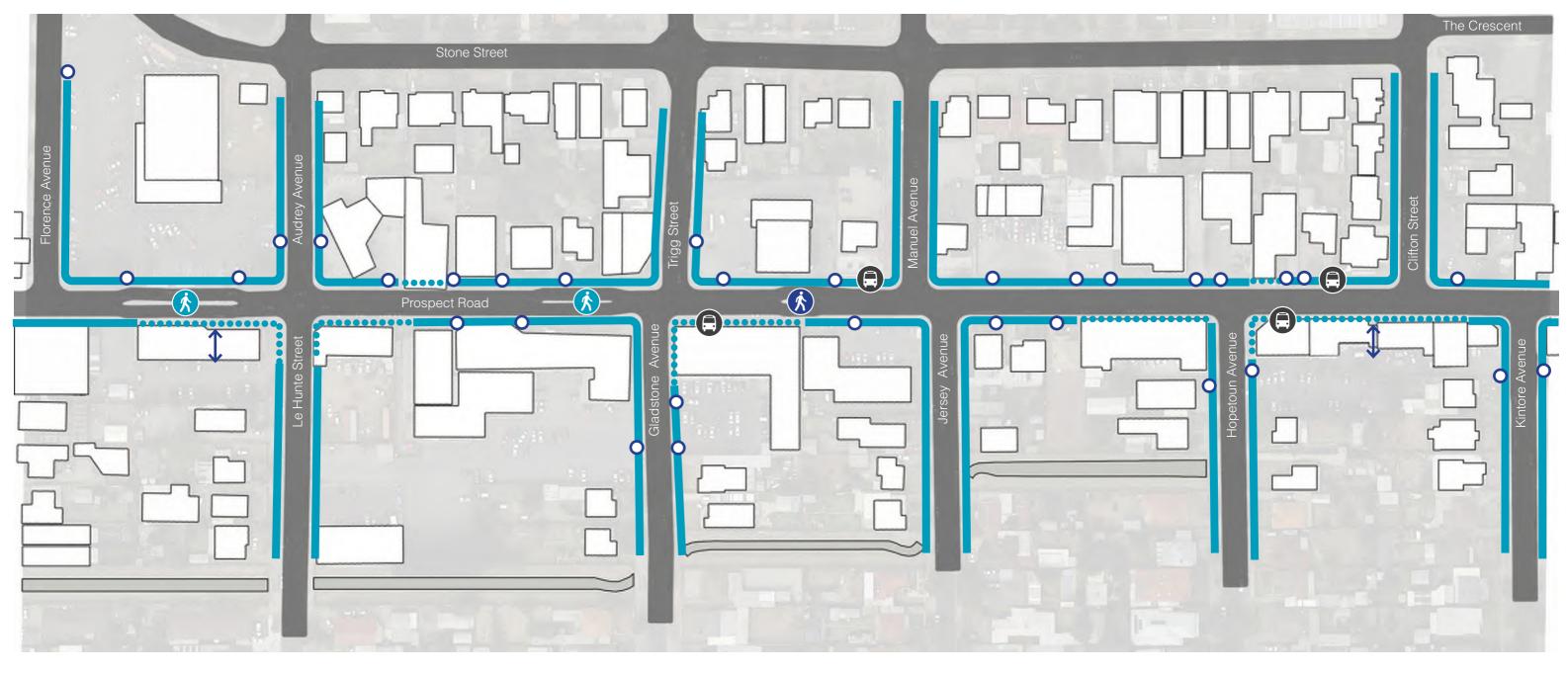
#### **DESTINATIONS**

- 1. IGA Supermarket
- 2. Post Office
- 3. Petrol Station
- Bakery Empire Hotel
- 6. Market
- 7. Chemist
- 8. Supermarket
- 9. Fruit and Veg Store
- 10. Kebab and Pizza
- 11. Medical Centre
- 12. Charcoal Kebab House 13. The Ghan Kebab House
- 14. Agha Juice





## Pedestrian and Cycling Movement



#### **KEY**

Footpa

Footpath (under canopy)

Pedestrian laneway



Pedestrian crossing (signalised)



Pedestrian refuge (in median)



Bus stop

0

Vehicle driveway crossover

#### **OBSERVATIONS**

- Sections of canopy cover provide a degree of shelter
- Accessible footpath network along road corridor
- Footpath fragmented by driveway crossovers to the east
- Minor distruptions to footpaths on western side
- Pedestrian crossings to central and northern sections of corridor (lack of pedestrian crossings to south end of precinct)
- Journeys between rear car parking and main street are lacking direct connections
- Pedestrians required to walk from rear car park to residential streets at either end and around to main street
- Lack of cycling infrastructure.



50m



Vehicle Movement and Car Parking



# Collector road Local road Car park Direction of vehicle access to car parks On-street parking

Bus stop

## **OBSERVATIONS**

- Defined road corridor (18 metre width)
- Wide carriageway with line marked seperation
- Significant car parking areas off-street (behind buildings)
- Limited pedestrian access from car parks to main street
- Good on-street parking provision (need to maintain for commercial activity)
- Confused vehicular access to IGA car park
- Large turning radius into side streets (10 metres) creating increase crossing distance





## Landscape and Public Realm



#### **KEY**



Mature tree cover



Landmark trees

Public open space



Private Open Space



Fenced drain



Sewer Gravity Mains

#### **OBSERVATIONS**

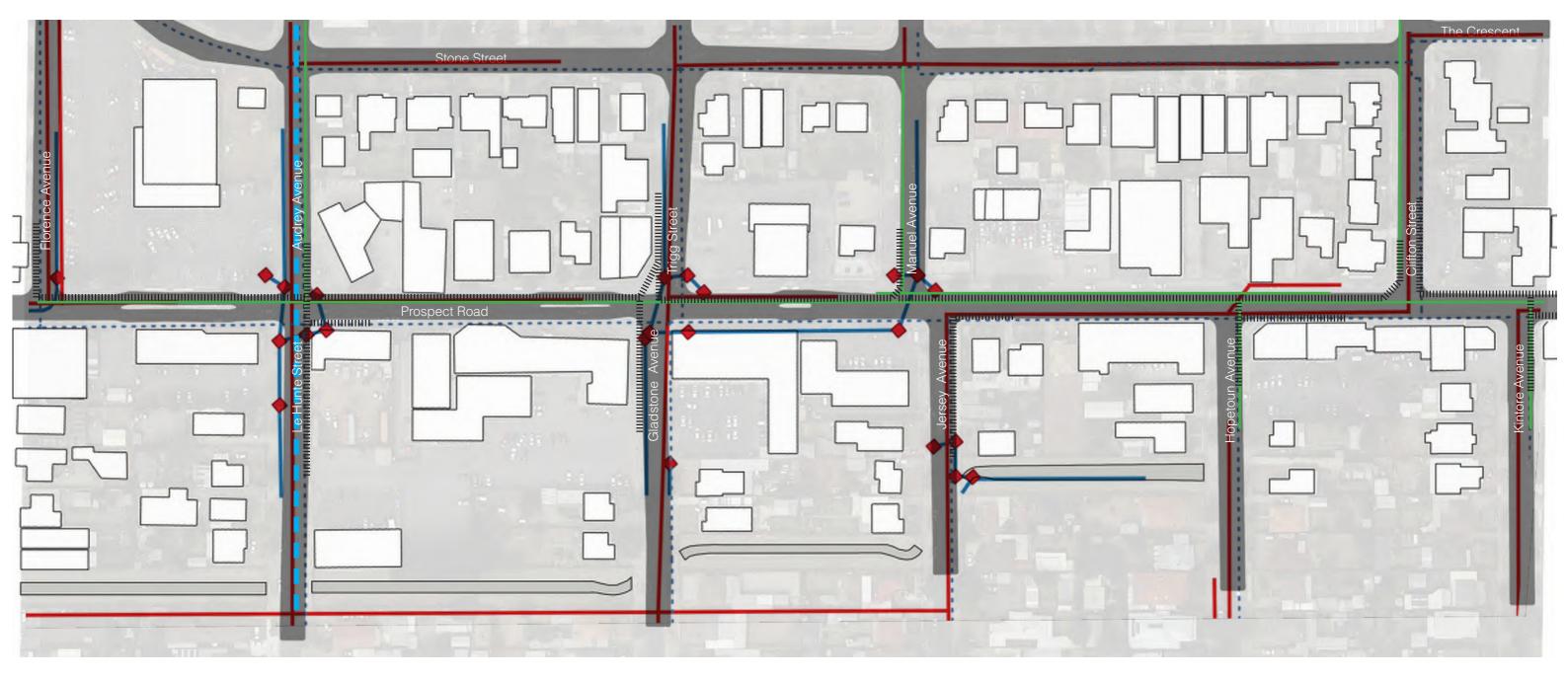
- Existing vehicle crossovers limit tree planting to main street edge
- Limited tree cover to main road
- Small pockets of public space along road corridor
- Areas of private space adjoining footpaths and public space
- Pockets of avenue trees to side streets (east)
- Limited landscape amenities to car parks
- Limited shade provided by street trees
- No activation of drain and associated open space



50m



## Underground Infrastructure



### KEY

Sewer Gravity Mains

Stormwater Infrastructure

--- Water Mains

Side Entry Pit

IIIIIIIIII SA Power Networks

Fibre Optic Conduit

Gas Mains

### **OBSERVATIONS**

- Sewer and stormwater infrastructure beneath Prospect Road may limit potential areas of median tree planting
   No side entry pits to southern
- No side entry pits to southern end of Prospect Road (south of Manuel Avenue)



## **Technical Assessment Summary**



#### TRAFFIC AND CRASH ANALYSIS

Prospect Road is maintained by the Dept. of Infrastructure & Transport (D.I.T.): 13,300 VPD with 5% CV

Roadside development is primarily commercial and retail businesses and attracts a high volume of "on road" parking

The posted speed limit on prospect road is 50km/h. The side roads assume the default 50km/h speed limit.

Crash period: 1/1/2014-31/12/2018 (5 years)

Crashes reviewed are primarily those related to the junctions or intersections and not the midblock crashes (the 8 midblock crashes are typically rear end, side swipe, hit fixed object or hit parked car).

- The predominant crash type is 'right angle' followed by 'side swipe'.
- Good sight lines at the intersection and reinforcing the priority movements at junctions and intersection are considered to be the main factors that could influence the rate of right-angle crashes.
- Side swipe crashes may occur where lane changing occurs, such as turning into or out of the sheltered right turn lanes with painted medians, drawing out from roadside carpark spaces on Prospect Road or vehicles merging.
- The intersection of LeHunte Street and Audrey Avenue with Prospect Road presents the largest number of crashes. The urban design strategy for this intersection will take into account the possible mitigation strategies to reduce the number of crashes.

#### **EXISTING CONDITIONS**

Prospect Road has road lighting, poles appear to be relatively new with L.E.D. lamps/luminaires (standard unknown but likely Category V3)

Prospect Road has a painted median scheme, with right turns generally provided to side roads where it is possible to do so.

Bicycle lanes are formed north of Way Street but not within the project extent between Kintore Avenue and Way Street.

Protuberances in the form of concrete islands restrict parking in some locations

Kerb indents provide roadside parking in some locations.

Two pedestrian actuated crossings (P.A.C.) are provided between Gladstone Avenue and Way Street and a pedestrian refuge is located between Trigg Street and Manuel Avenue. An informal pedestrian crossing incorporating 2 kerb ramps opposite each other on each side of Prospect Road is provided between Hopetoun Avenue and Clifton Street.



#### **PARKING**

Parking on Prospect Road is typically restricted to 1 hour duration between 8am and 6.00pm any day of the week on the western side. Parking on the eastern side is also restricted any day of the week between 8.00am and 6.00pm but the time limit varies. Some parking is limited to half an hour or 1.0 hour. Other locations are limited to 2.0 hours.

Based on the data provided between 27-01 2019 and 15-07-2020 for 7 random days Monday through to Sunday, off-street parking is generally 20% to 37% utilised in all the off-street parking locations counted. The one exception to this is the off-street parking behind Chemist Warehouse/ Saigon Gate Cuisine/Lucky Asian Grocery. This exception may be due to the rear-access accessibility to these premises from the car park.

## RELEVANT GUIDELINES FOR URBAN DESIGN STRATEGIES AT JUNCTIONS AND INTERSECTIONS

Guidance will be drawn from AS 1792.13-2009 Local Area Traffic Management where the principles of a "Perimeter Threshold' may be deployed. Other guidance will be drawing from the D.I.T. Code of Technical Requirements for Traffic Control Devices Part 2 from which the principle of "Contrasting Pavements" at intersections may be deployed. AUSTROADS Guide to Traffic Management Part 8: Local Area Traffic Management provides guidance on "Raised Pavement" treatments which may be deployed.

There are precedents for junction/threshold treatments already in place at the junction of Rose Street with Prospect Road within the City of Prospect. The junction of Rosa Street with Goodwood Road at Goodwood in the City of Unley is also another precedent the design team may deploy.

Any non-standard devices/treatments will require approval from the Commissioner of Highways.

#### **Mainstreet Tactics**

#### 1. Shared space thresholds to western junctions

- Modify junctions to create new shared spaces
- Reduce road widths to increase the public realm and reduce the impact of traffic
- Consider one-way access to increase public space
- Develop continuous paving treatments and raised tabletop crossings
- Explore traffic control measures to allow road closures
- Develop extensive landscape treatments, public realm upgrades and tree planting

## 2. Improved pedestrian movement and crossings to the eastern junctions

- Providing improved connections across junctions and driveways
- Develop cohesive public realm
- Increase accessibility and improve mobility
- Developed linked facilities (medical centre)
- Reduce crossing distances for pedestrians
- Increase the public realm
- Explore opportunities for additional landscape treatments
- Reduction in posted speed on Prospect Road Discuss with DIT

#### 3. Tree planting to the central median

- Creates a unique streetscape character for the road
- Use trees to create focal points
- Increase the shading of the road corridor
- Reduction in urban heat island effects
- Provision of landscape amenity
- Explore location to plant large trees as landmarks
- Increase the shading of the street

## 4. Adjust IGA and other vehicular entrances and crossovers to increase public realm legibility

- Modify existing car park entrances to increase public spaces and reduce pedestrian conflicts
- Consider removing entrance from Prospect Road and creating new entrances to side roads
- Use spaces created by entrance closure for tree planting and landscape treatments
- Improve footpath treatment to car park edges

## 5. Integration of private realm and street frontages to create larger spaces for people

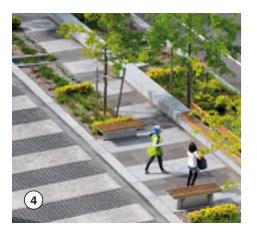
- Exploit unused or underused areas of private land for public purpose
- Provide greater amenity within the corridor
- Provide opportunities for larger tree planting and garden beds
- Develop shared use agreements and management of open space
- Increase landscape treatments to mitigate urban heat island effects



# WGA WAX

LOCATION

## Gladstone Avenue











11. SIGNAGE DIRECTING VEHICLES TO REAR CAR PARKING

## Gladstone Avenue





Existing Gladstone Road



Proposed Gladstone Road upgrade utilised for community events



Proposed Gladstone Road upgrade



Proposed Gladstone Road upgrade includes catenary lighting creating opportunities for night time use

# WGA WAX

Le Hunte Street

























- 5. SEATING OPPORTUNITIES WITH BENCHES AND PODS TO WHILST PREVENTING VEHICLES ENTERING PUBLIC REALM
- 6. LIGHTING AND BANNER POLE OPPORTUNITIES WITH CATERNARY LIGHTING
- 7. BOLLARDS TO RAISED ROAD EDGE
- 8. OUTDOOR DINING OPPORTUNITIES
- 9. VEHICLE CROSSOVERS MAINTAINED TO REAR CAR PARKS
- 10. SIGNAGE DIRECTING VEHICLES TO REAR PARKING

## Clifton Street













## IGA and Audrey Street

11. FOOTPATH WIDTH REDUCED BETWEEN GARDEN BEDS (2.2M)





## Trees to central median on Prospect Road





Median Tree Planting Opportunities





## Kerb Build-Out Opportunities



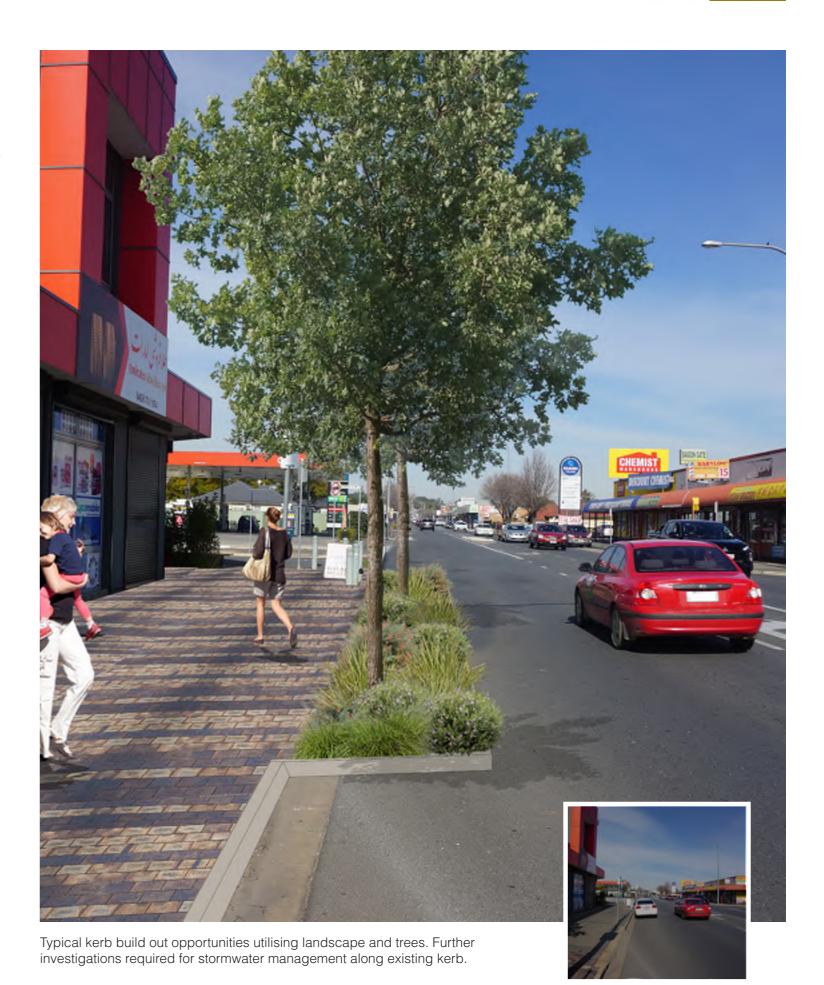
The following opportunities have been developed through an analysis of on-street parking trends over a period of four year (2017-2020). The following identified areas experience an average parking utilisation of 20% or less.

Given the discreet nature of the opportunities and the degree of change that is anticipated over the next few years it is recommended that limited modification is undertaken to this

Opportunitiies for kerb build outs in under utilised off street parking locations

50m





# **Tree Species**



## Tree Options Analysis

Priority	Trees Performance											
		Location	Height	Spread	Longevity	<b>Growth Rate</b>	Shape	Fruitless	Deciduous	Leaf Colour	Exotic	Score
	Preferred criteria	Dry Urban	12-20m	5-8m	Yes	Fast	Upright, rounded, dense	Yes	Yes	Yes	Yes	Out of 10
1	Acer x freemanii 'Armstrong'	Yes	10-15m	5-8m	Moderate	Fast	Upright, rounded, dense	Minimal	Yes	Yes	Yes	9
2	Pyrus Chanticleer, (Columna pear)	Yes	10-15m	6m	Moderate	Fast	Oval,columnal, dense	Yes	Yes	Yes	Yes	8.5
3	Quercus palustris	Yes	10-15m	5-8m	Yes	Slow	Upright, rounded, dense	No	Yes	Yes	Yes	8
4	Celtis australis	Yes	10-15m	5-8m	Yes	Yes	Upright, rounded, dense	No	Yes	Minimal	Yes	8
5	Pistacia chinensis	Yes	8-15m	5-8m	Yes	Moderate	Upright, oval, dense	No	Yes	Yes	Yes	8
6	Eucalyptus leucoxylon 'Euky Dwarf'	Yes	4-10m	3-4m	Yes	Fast	Rounded, dense	Yes	No	No	No	7
7	Cupaniopsis anacardioides, (Tuckeroo)	Yes	8-15m	5-8m	Yes	Moderate	Rounded, dense	No	No	No	No	5.5









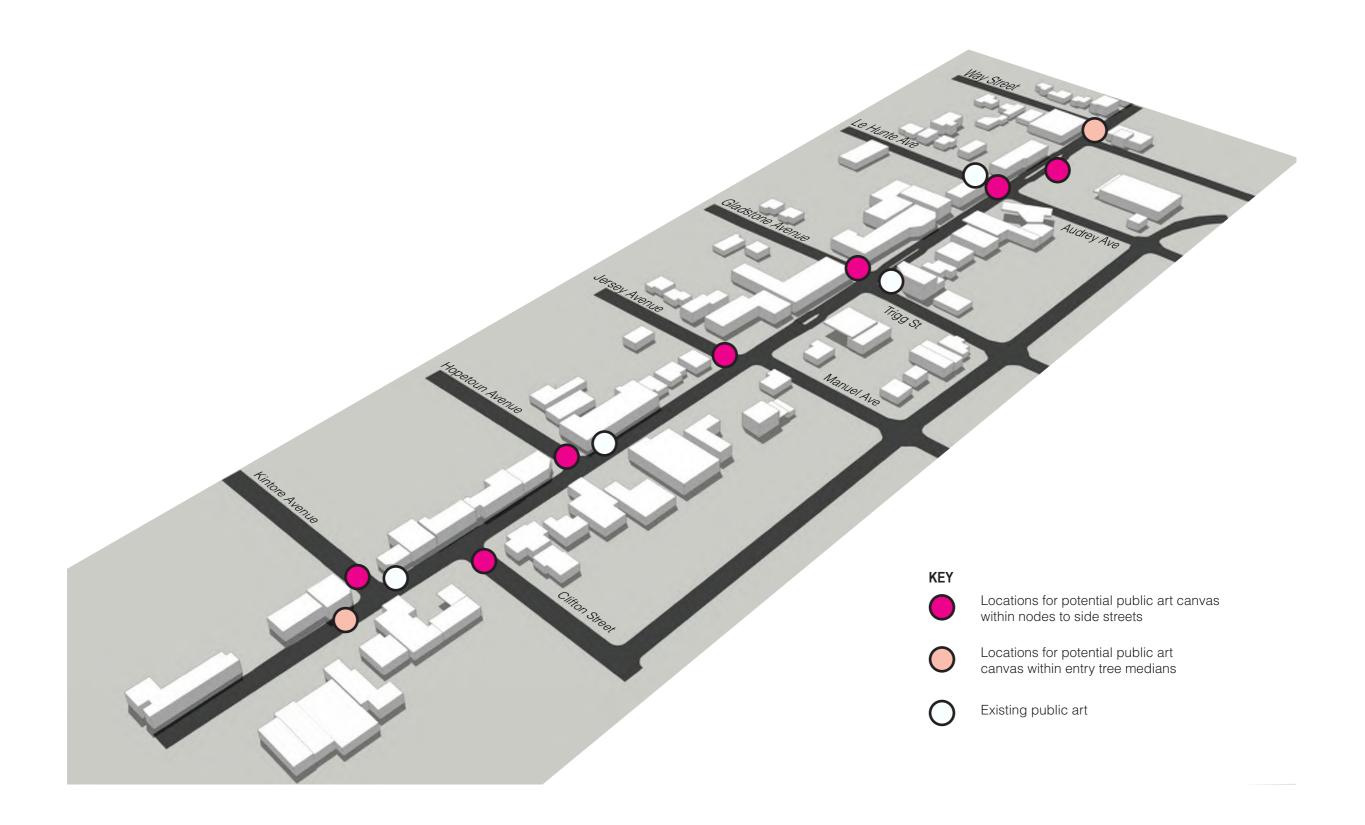






# **Public Art Opportunities**





# Multi Criteria Analysis (MCA)





Tactics Projects

actics								Fiojeci	-							
Criteria	Weight	Tactic 1: Shared space thresholds to western junctions		Tactic 3: Tree planting to central median	Tactic 4: Adjust IGA entrances and crossovers to increase public realm legibility	Tactic 5: Integration of private realm and street frontages to create larger spaces for people	Tactic 6: Create new pedestrian crossings to the southern end of the street	Criteria	Weight	Project 1: Gladstone	Project 2: Le Hunte	Project 3: Kintore Jersey, Hopetoun	Project 4: Clifton	Project 5: IGA/Audrey, Manuel, Trigg		Project 7: Kerb build out
Providing places or people to stop and gather	3	5 (15)	1 (3)	1 (3)	1 (3)	5 (15)	1 (3)	Providing places for people to stop and gather	3	5 (15)	5 (15)	4 (12)	4 (12)	2 (6)	1 (3)	1 (3)
Increasing pedestrian permeability across and along the main street	3	3 (3)	5 (3)	1 (3)	2 (6)	1 (3)	1(3)	Increasing pedestrian permeability across and along the main street	3	4 (12)	5 (12)	3 (9)	4 (12)	4 (12)	1 (3)	1 (3)
Increasing canopy cover and shade to main street and addressing Urban Heat Island effects	2	5 (15)	2 (6)	5 (15)	3 (9)	2 (6)	1 (3)	Increasing canopy cover and shade to main street and addressing Urban Heat Island effects	2	5 (10)	5 (10)	4 (8)	3 (6)	2 (4)	4 (8)	4 (8)
Consolidating vehicle access points and car parking	2	1 (3)	2 (6)	1 (3)	5 (15)	1 (3)	1 (3)	Consolidating vehicle access points and car parking	2	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	3 (6)
Slowing vehicle raffic between Kintore Avenue and Way Street	2	2 (6)	2 (6)	3 (9)	1 (3)	1 (3)	5 (15)	Slowing vehicle traffic between Kintore Avenue and Way Street	2	2 (4)	4 (8)	2 (4)	1 (4)	1 (4)	3 (6)	2 (4)
Events/ multi- unction spaces	3	5 (15)	3 (9)	1 (3)	1 (3)	3 (9)	1 (3)	Events/ multi- function spaces	3	5 (15)	5 (15)	4 (12)	1 (3)	1 (3)	1 (3)	1 (3)
Public art and cultural representation	3	4 (12)	4 (12)	1 (3)	2 (6)	3 (9)	1 (3)	Public art and cultural representation	3	4 (12)	4 (12)	4 (12)	3 (9)	3 (9)	1 (3)	3 (9)
Supporting commercial/retail activity	2	4 (12)	3 (9)	1 (3)	2 (6)	3 (9)	4 (12)	Supporting commercial/retail activity	2	5 (10)	4 (8)	4 (8)	4 (8)	2 (4)	1 (2)	1 (2)
Opportunities for andscape areas and WSUD	3	5 (15)	3 (9)	5 (15)	3 (9)	2 (6)	2 (6)	Opportunities for landscape areas and WSUD	3	4 (12)	4 (12)	4 (12)	4 (12)	4 (12)	4 (12)	4 (12)
Total		96	63	57	60	62	51	Total		92	94	79	68	56	42	50
Ranking		1	2	5	4	3	6	Ranking		2	1	3	4	5	7	6

## **Indicative Costings**

WGA WAX

CASE STUDY VICTOR HARBOR (STAGE 1)

LOCATION VICTOR HARBOR

PROJECT 201

DATE \$961,702

size 2,158 m2

RATE @\$445/m2

#### Description:

Public realm upgrade with new assets, stormwater upgrades, lighting. New paving on sand bed and street furniture. WSUD and landscape treatments.

CASE STUDY VICTOR HARBOR (STAGE 2)

LOCATION VICTOR HARBOR

PROJECT 2017

cost \$2,029,000

3560 m2

RATE @\$570/m2

#### Description:

Public realm upgrade with new assets, significant stormwater upgrades, lighting. New paving on sand bed and street furniture. WSUD and landscape treatments.

CASE STUDY VICTOR HARBOR (STAGE 3)

LOCATION VICTOR HARBOR

PROJECT 2020

DATE

cost \$1,671,000

SIZE 4330 m2

RATE @\$386/m2

#### Description:

Public realm upgrade with new assets and lighting. New paving on sand bed and street furniture. WSUD and landscape treatments.

CASE STUDY WALKER PLACE

LOCATION TOWN OF GAWLER

PROJECT 2020

cost \$1,314,476

size 1,223 m2

RATE @\$1,075/m2

#### Description:

Public realm upgrade with new assets, extensive stormwater upgrades, lighting. New paving on concrete slab and bed and new street furniture. WSUD and landscape treatments.

#### CASE STUDY WILLUNGA MAINSTREET

LOCATION WILLUNGA

PROJECT 202017

ATE.

\$2,843,842

13,473 m2

RATE @\$211/m2

#### Description:

SIZE

Public realm upgrade with new assets. Limited kerb replacement and minor modifications to existing public realm. Upgrades to lighting. Discreet paving upgrades and new street furniture. WSUD and landscape treatments.

Recommend urban design cost average \$500 to \$570 for public realm upgrades.

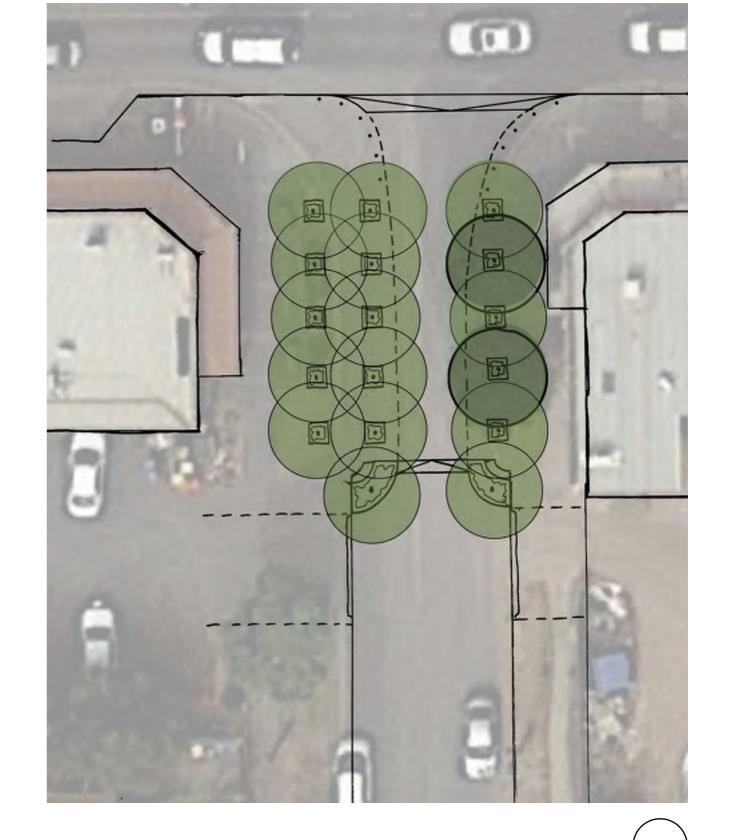
#### Total Stage 1 Capital Cost \$1,600,000

	Project	MCA Rating	Rates (\$/m2)	Area (m2)	Cost Range (\$000)
1	Gladstone Avenue	2	\$500-\$570	850m2	\$425-485
2	Le Hunte Avenue	1	\$500-\$570	700m2	\$350-\$399
3a	Kintore Avenue	3	\$500-\$570	510m2	\$255-\$290
3b	Jersey Avenue	3	\$500-\$570	510m2	\$255-\$290
3c	Hopetoun Avenue	3	\$500-\$570	510m2	\$255-\$290
4a	Clifton Avenue	4	\$450-\$525	320m2	\$144-\$168
5a	Audery IGA	5	\$450-\$525	750m2	\$338-\$394
5b	Manuel	5	\$300-\$375	500m2	\$150-\$188
5c	Trigg	5	\$300-\$375	500m2	\$150-\$188
6	Tree median	7	\$500-\$570	150m2	\$75-\$86
7	Kerb build outs	6	\$500-\$570	200m2	\$100-\$114
-	Footpath upgrade (east side)	5	\$300-\$375	1,520m2	\$456-\$570
TOTAL					\$2,953-\$3,462

Gladstone Avenue

Le Hunte Street





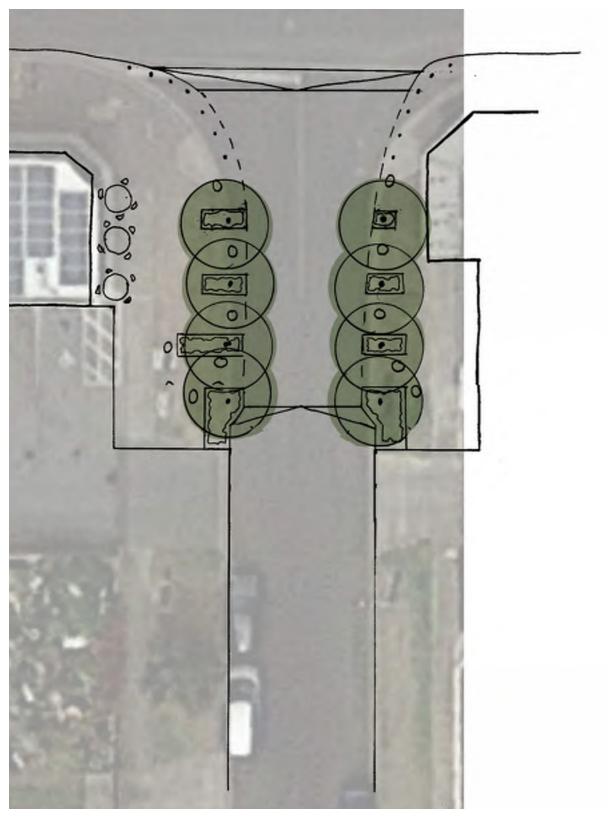
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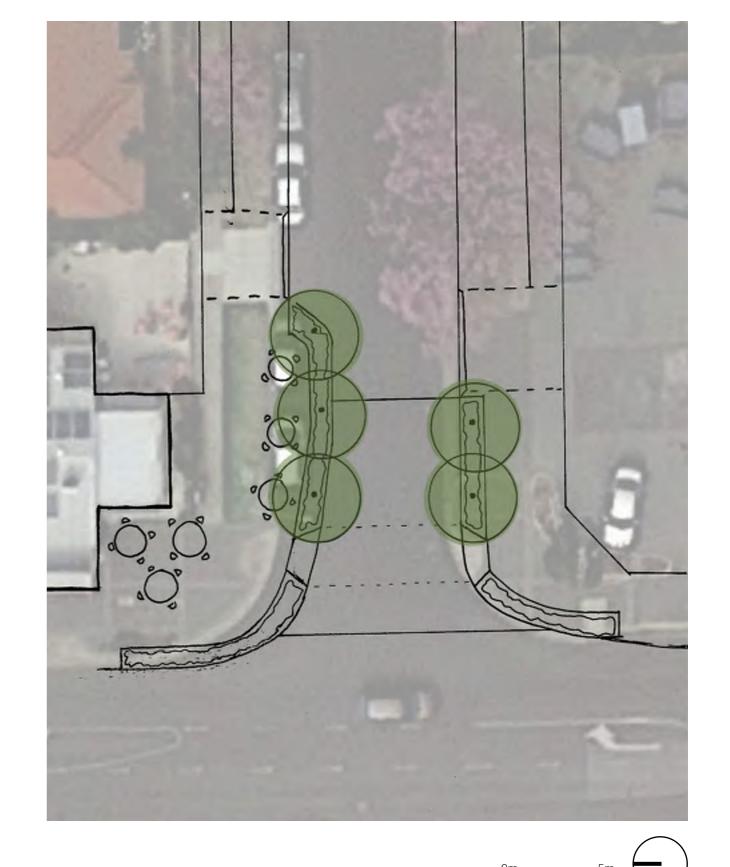
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Kintore Avenue



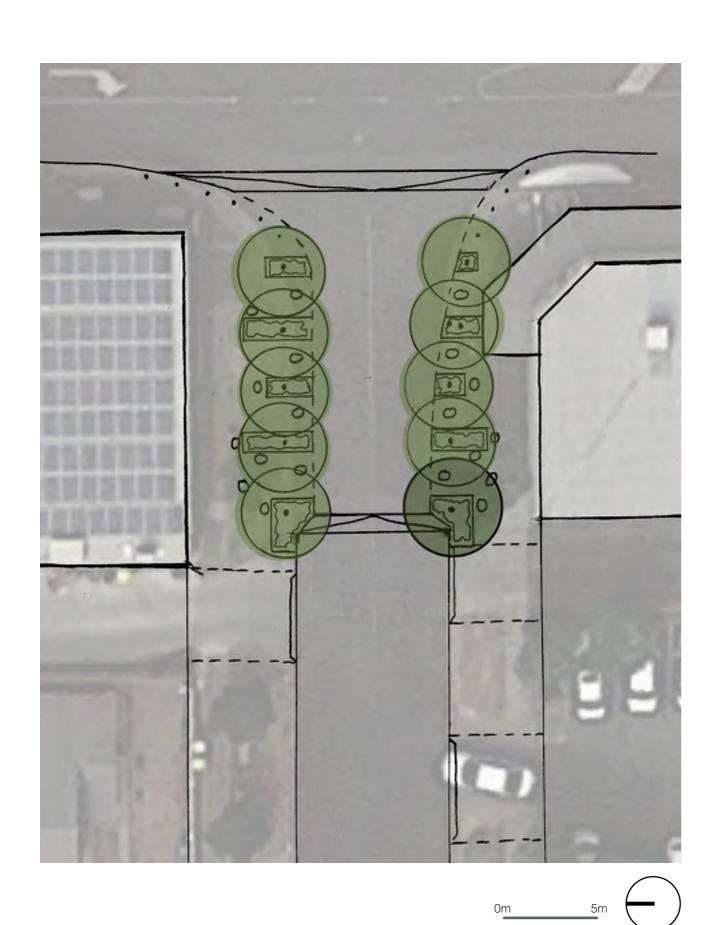


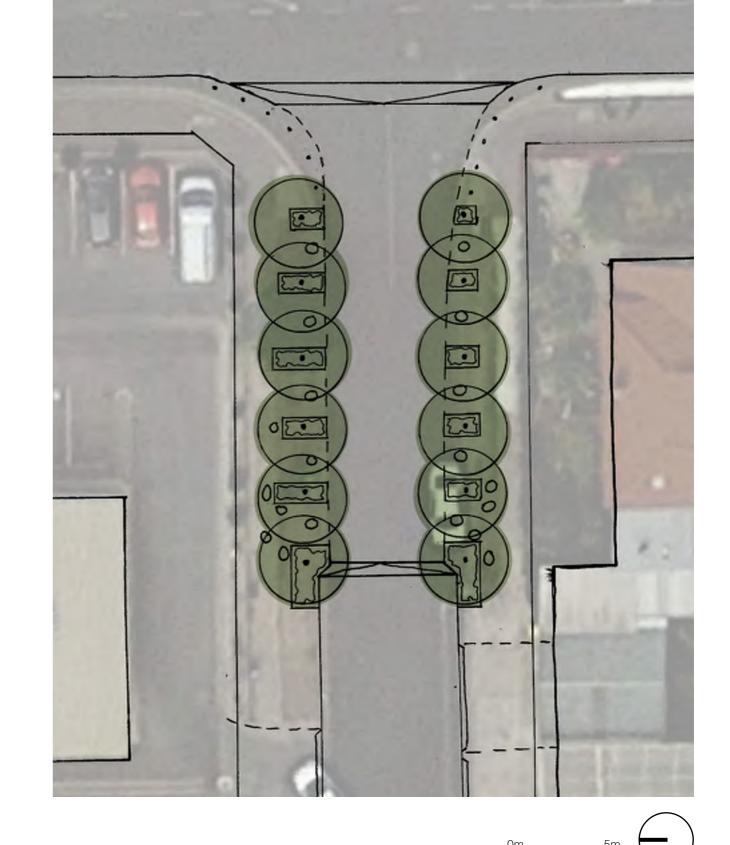


WGA

Hopetoun Avenue

Jersey Avenue





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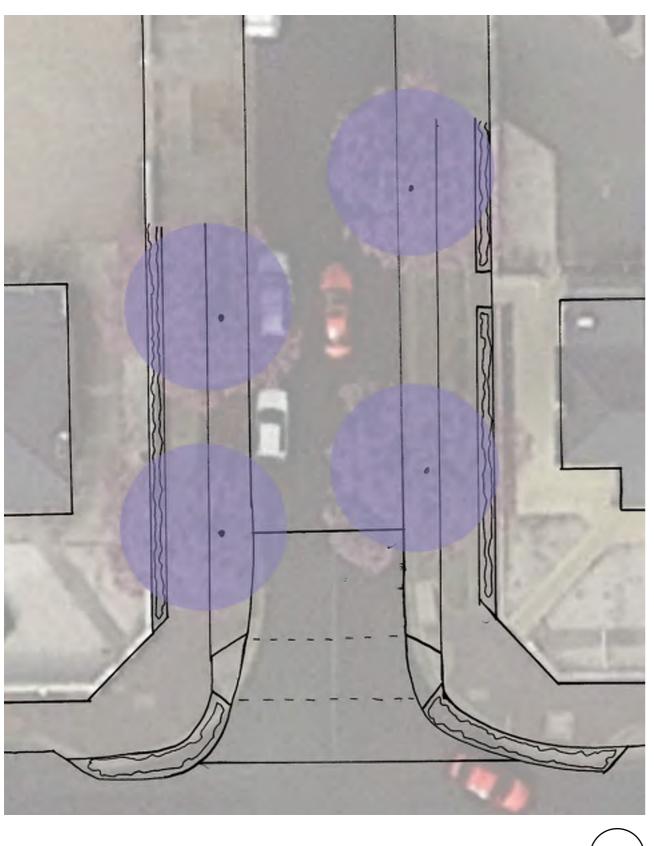
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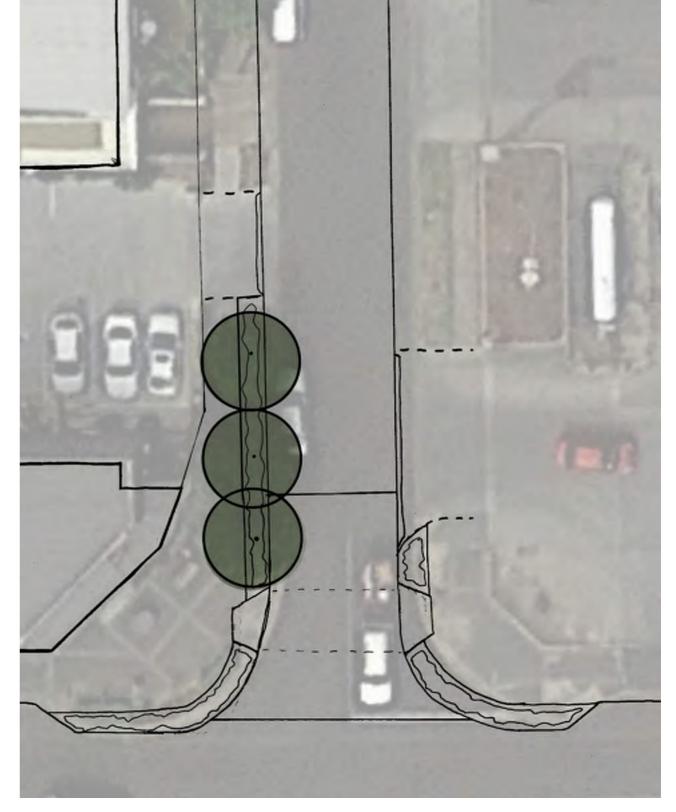
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Manuel Avenue

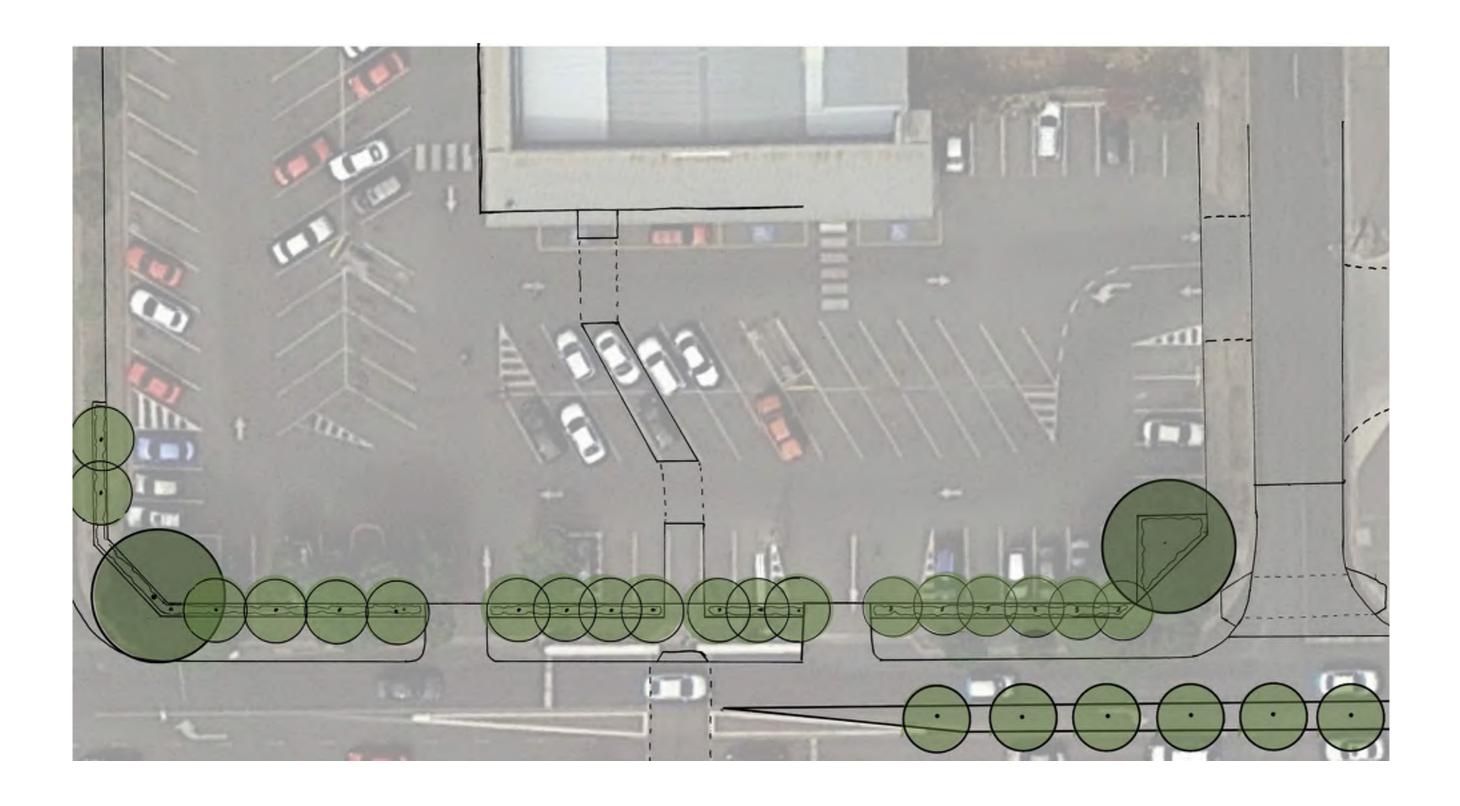


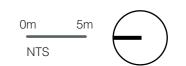






IGA/Audrey Option 1





# **Appendix**

## On-street Parking Analysis

PARKING SECTION REFERENCE	SIDE ROAD REFERENCE	AVAILABLE SPACES	Average Number of Spaces Used in Section	Average % Parking Utilisation in Section
REF # A	North of Way St	2	0.2	10.7%
REF # B	North of Florence Ave	5	0.5	10.0%
REF # C	Between Way St and Le Hunte St	6	1.6	27.4%
REF # D	Between Way St and Le Hunte St	2	1.0	50.0%
REF # E	Between Le Hunte St and Gladstone Ave	4	2.1	53.6%
REF#F	Between Audrey Ave and Trigg St	3	1.0	33.3%
REF # G	Between Audrey Ave and Trigg St	2	0.3	14.3%
REF#H	Between Gladstone Ave and Jersey Ave	5	1.4	28.6%
REF # I	Between Trigg st and manuel Ave	2	0.4	17.9%
REF#J	Between Manuel Ave and Hopetoun Ave	9	5.6	61.9%
REF # K	Between Jersey Ave and Hopetoun Ave	6	3.5	58.3%
REF#L	Between Hopetoun and Clifton St	3	1.6	54.8%
REF # M	Between Hopetoun and Kintore Ave	5	0.7	14.3%
REF # N	Between Hopetoun and Kintore Ave	5	2.1	42.9%
REF # O	Opposite Kintore Ave	2	0.9	46.4%
REF # P	South of Kintore Ave	4	1.2	30.4%
REF # Q	South of Kintore Ave	1	0.5	50.0%
REF # R	South of Kintore Ave	1	0.1	14.3%
	TOTAL AVAILABLE SPACE	S 67		

