

Warners Bay

Belmont

Glendale

Swansea

Toronto

Morriset

CARDIFF STREETScape MASTER PLAN

ADOPTED - Mar 2012 - Issue 01, Version 02.
- MISC/39/2011



Mount Hutton

Charlestown



PLANNING CONTROLS



LAKE MACQUARIE TOWN CENTRE STREETSCAPE MASTER PLANS

The 2008/2009 Management Plan and Budget identified the need to provide high quality public domains and a city identity. The Streetscape Master Plans provide a document that identifies this vision and provides a plan for its implementation.

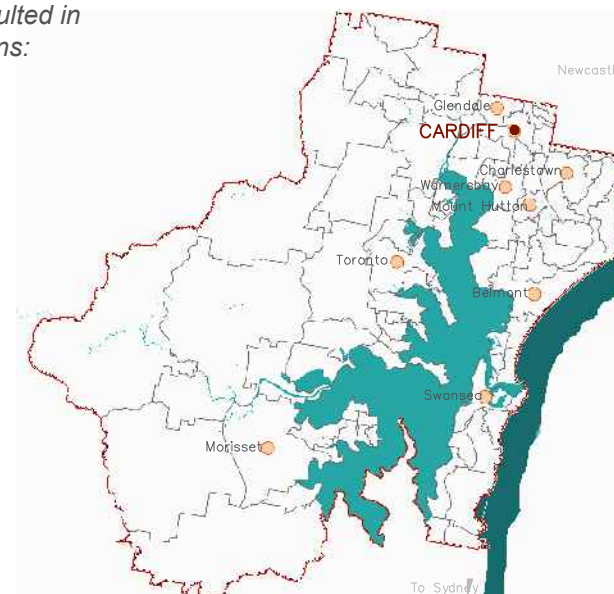
The Streetscape Master Plans are intended to improve the aesthetic appearance of the town centres, promote the areas personality, increase opportunity, accessibility, functionality, economic effect and provide a modern easily maintainable public domain.

The Streetscape Master Plans ensure a unified approach to undertaking public domain works by Council, developers and the community. It also assists in directing public and private investments and will inform the chamber of commerce in the preparation of strategic plans.

The Streetscape Master Plans are substantially focused on the areas currently zoned 3(1) Urban Centre (Core) and 3(2) Urban Centre (Support) under Lake Macquarie LEP 2004. These are the areas of each of the town centres where the majority of commercial activity will occur. These areas are also the most likely to undergo change in the future.

The consideration and collation of all relevant issues resulted in this overall priority order for the Streetscape Master Plans:

1. Charlestown
2. Cardiff
3. Belmont
4. Toronto
5. Morisset
6. Warners Bay
7. Glendale
8. Swansea
9. Mount Hutton



OBJECTIVES OF TOWN CENTRE STREETSCAPE MASTER PLANS

- To provide a clear vision and identity for each town centre
- To provide a clear guide for Council, the community and developers
- To create vibrant active town centres
- To provide consistencies within Lake Macquarie
- To preserve and enhance the uniqueness of Lake Macquaries town centres
- To ensure high quality outcomes
- To reduce asset maintenance costs

EXTENT OF TOWN CENTRE STREETSCAPE MASTER PLANS

The areas covered by the Streetscape Master Plan are the public areas owned and /or managed by council. The focus is on the streetscape elements within the road reserve and include street trees, tree guards, furniture, bins, bike racks, drinking fountains, bollards, lighting, paving, public art and town centre signage.

For consistency the streetscape treatments should be extended onto private land at building setbacks, building forecourts, arcade entrances, pedestrian lanes etc. and where logical to address pedestrian links. New developments need to address the streetscape as prescribed by this plan. Items and selections nominated in this plan will be reviewed periodically by LMCC in accordance with relevant legislation.

TOWN CENTRE PERSONALITIES

Town centre personalities have been developed for the nine main town centres.

These have been derived to provide a strong town centre identity and theme for enhancing character, heritage and sense of place.

The nine main town centres personalities are:

- Charlestown - the Central Business District
- Cardiff - the Skills & Trades Centre
- Belmont - the Activity Centre
- Toronto - the Lakeside Village
- Morisset - Nurtures the Spirit of Community
- Warners Bay - the Lifestyle Centre
- Glendale - the Dynamic Services Hub
- Swansea - the Seaside Village
- Mount Hutton - the Growing Community

Issue	Ver	Date	Notes
01	01	2011 - Oct	For exhibition
01	02	2012 - Feb	Amendment 1- Draft Cycle strategy reference Amendment 2- 'EXTENT OF TOWN CENTRE STREETSCAPE MASTER PLANS' note. Amendment 3 - LMCC Flood Planning Study reference. Amendment 4 - seat / street tree & bike rack selections. Amendment 5 - Action Plan.
01	02	2012 - Mar	Adopted by council.

Owner : Asset Management

Users : All council staff, the community and developers

Prepared by : City Design

CARDIFF STREETSCAPE MASTER PLAN

OBJECTIVES / VISION

- To create a vibrant new town centre
- To enhance the town centres personality
- To enhance safety and accessibility
- To create a consistent character
- To link key areas
- To provide a sustainable environment
- To provide facilities for public art
- To protect and enhance Cardiffs heritage
- To provide inviting town centre signage
- To connect the town centre with parks and open spaces
- To connect the town centre with the train station
- To improve connections from Macquarie, Main and Myall Rd to the town centre
- To create clean lines and reduce street clutter
- To provide high quality furniture, lighting and paving
- To retain on street parking to support businesses
- To provide for transport options in the town centre
- To enhance the character of surrounding streets
- To retain and protect significant trees

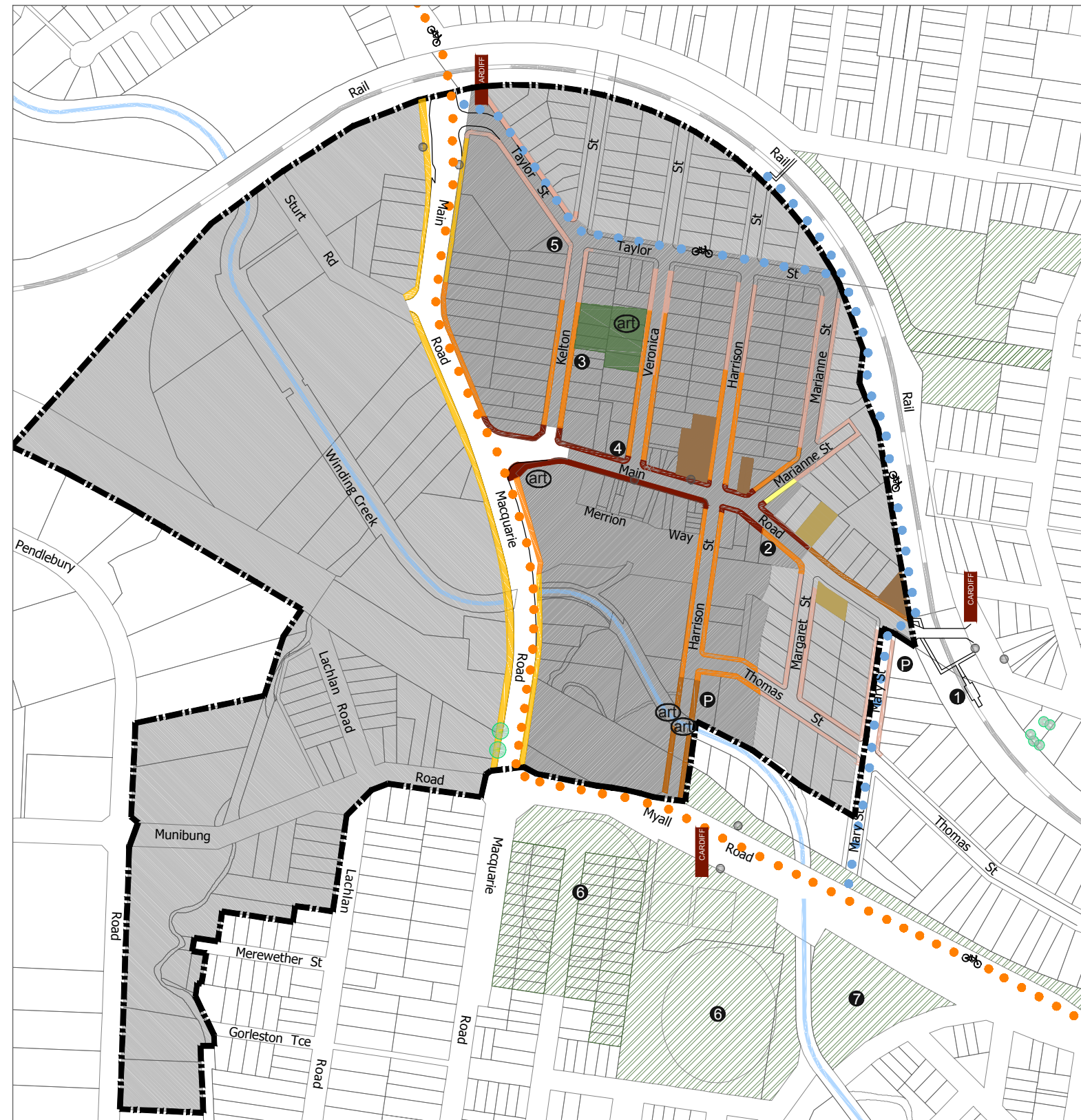
NOTE:

Refer page 1 for PLANNING CONTROLS

ADDITIONAL PLANNING CONSIDERATIONS FOR CARDIFF STREETSCAPE MASTER PLAN:

- LMCC Flood Planning Study
- Cardiff Parking Study - Under development
- Newcastle Lake Macquarie Bike Plan 1996 - Adopted, review under development
- LMCC Draft Cycling Strategy - in review
- Cardiff Station Upgrade works - Under development
- Cardiff Economic Development Plan - A Guide to Town Centre 3 Year Strategic Plans - Adopted
- Asset Management Plans - Current conditions and replacement schedule

These documents have been reviewed and considered as part of this plan. Where these initiatives or any other are adopted or modified the Streetscape Master Plan should be updated to reflect this.



CARDIFF STREETSCAPE MASTER PLAN

1:5000 at A3

LEGEND

EXISTING

- Heritage buildings - registered
- Open space
- Significant trees - LMCC significant tree register
- Bus stop
- 1 Train station
- 2 Library
- 3 Police station
- 4 Post office
- 5 Fire station
- 6 Oval
- 7 Park
- P Public council carpark

PROPOSED

- LEP Zoning 3(1)
- LEP Zoning 3(2)
- Street TYPE A
- Street TYPE B
- Street TYPE C
- Street TYPE D
- Street TYPE E
- Street TYPE F
- Heritage buildings - proposed by 1993 LMCC Heritage Study
- Proposed Urban Park - No 24,26,28,30 Kelton St & No.19,21,23,25 Veronica St.
- Primary Public Art locations
- Town Centre Signage
- On road cycleway
- Off road cycleway

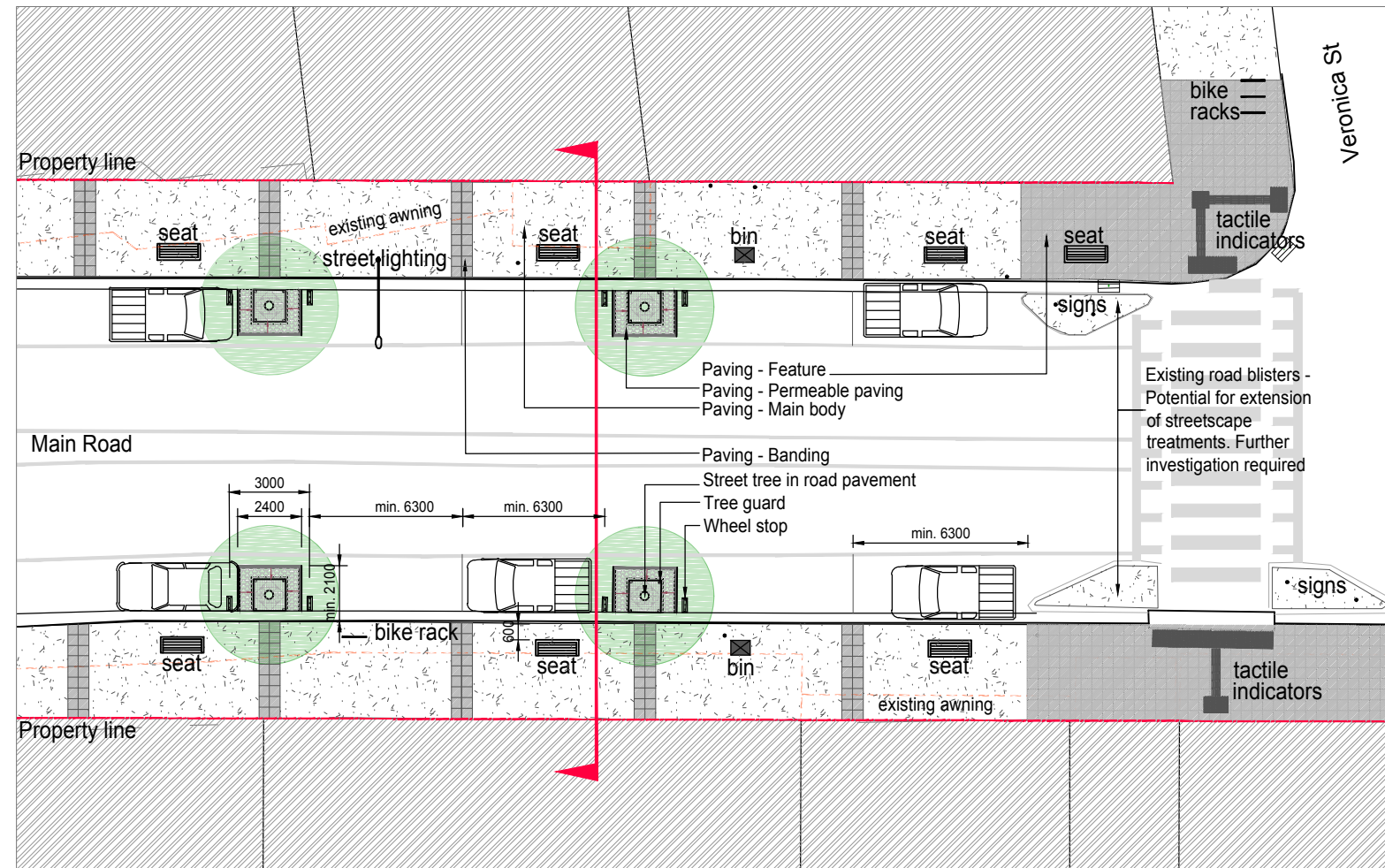
Street Type A Main Road (part of)

Objectives

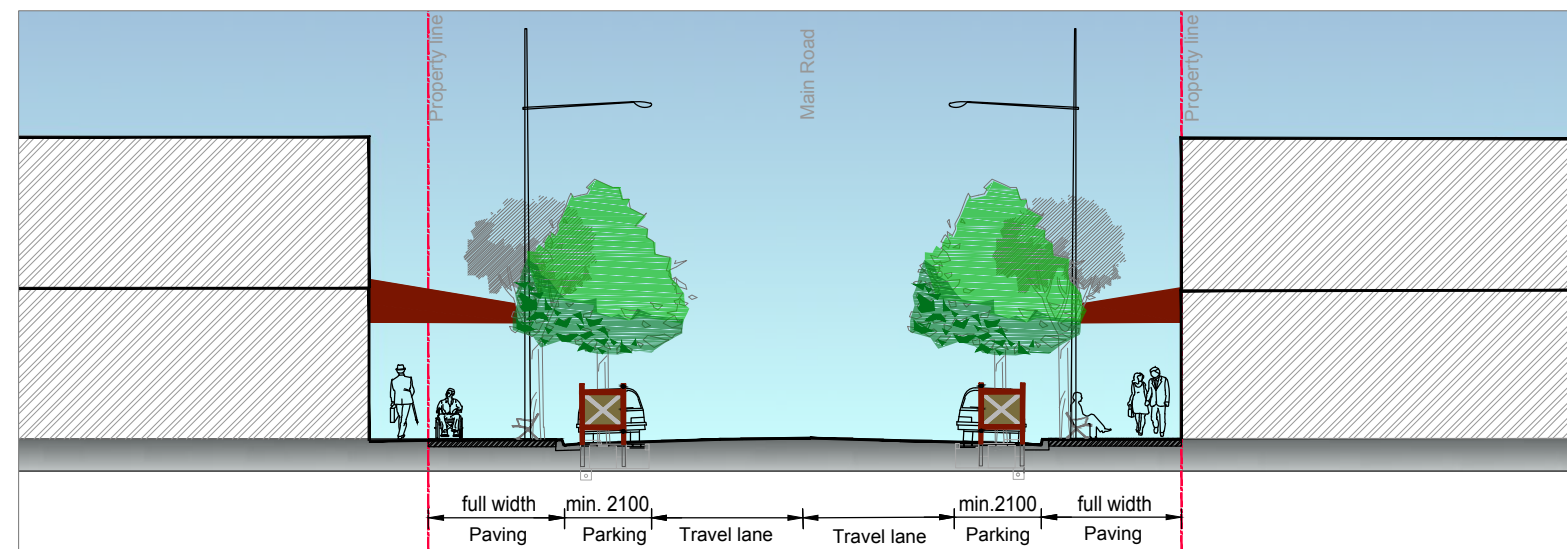
- To create a vibrant new street
- To create inviting entry points and vistas to town centre from Macquarie Rd and Cardiff Heights
- To maintain, strengthen and enhance the role of Main Rd and part of Harrison St as the main retail / commercial street of Cardiff
- To provide a sustainable environment through WSUD principles and other tools
- To enhance the heritage and enliven Cardiff with public art opportunities
- To encourage safe pedestrian connections to key areas
- To link Cardiff library to the town centre
- To create a safe and accessible bus stop
- To provide bicycle parking facilities at key areas
- To provide high quality furniture, lighting and paving
- To reduce maintenance costs

Existing Constraints

- Narrow footway both sides of street
- Over head power poles and lines to Northern side of street
- Insufficient street and pedestrian lighting
- Underground services within footway
- 2 way street, marked parallel parking both sides
- Irregular style awnings and overhangs
- Wide line marked median between Kelton and Harrison Sts
- Steep level change at corner of Main Rd and Veronica Sts
- Existing residential houses in LEP zones 3(1) Urban Centre
- Steep topography East of Harrison St
- Existing raised pedestrian crossings and road blisters



TYPICAL PLAN
STREET TYPE A 1:300 at A3



TYPICAL SECTION
STREET TYPE A 1:200 at A3

Specifications for installation can be found in the Cardiff Streetscape Technical Guidelines

Furniture

Seats

Location : Every 13m-15m and at bus stops, taxi stands and key locations

Selection : Custom -TBA. Standard - SFA -CMM101 with backs/armrests/splay legs/redwood modwood slats.

Bins

Location : Every 30-50m and at bus stops, taxi stands, outside food outlet areas and key locations

Selection : Gossi Park 240litre fireproof bin - Clear anodised aluminium finish

Street tree planting

Location : Every 13m-15m and or at suitable locations to enhance streetscape

Selection : Waterhousia floribunda 'Sweeper' - 100 litre

Tree guards

Location : Every 13m-15m and or at suitable locations to enhance streetscape

Selection : LMCC Custom design tree guard

Bike racks

Location : At key locations

Selection : Custom -TBA. Standard - D O Smith, A:14 Bike Rack Loop, s/s.

Drinking fountains

Location : At key locations

Selection : Urban Fountains and Furniture Apollo 800 - Anodised aluminium.

Bollards

Location : Where required to prevent and deter vehicle and/or pedestrian access

Selection : LMCC standard post and/or post and cable

Lighting

Location : Where required to AS1158.3.1

Selection :

Street lighting - TBA

Awning lighting - TBA

Pedestrian lighting - TBA

Tactile indicators

Location : As required to AS1428

Selection : Themoplastic polyurethane - Black

Wheel stops

Location : As required

Selection : Concrete - 600mm length

Paving

Main Body Paving

In situ concrete - Oxide CCS Onyx21

Banding

Adbri Metro Charcoal - 400x400x50 honed

Feature Paving at intersections, entrances and key locations

Adbri Metro Charcoal - 400x400x50 shot

Permeable Paving

Adbri Ecotrihex Charcoal - 181x88x80mm

Driveway Crossings

In situ concrete - Oxide CCS Onyx21

Street Type B

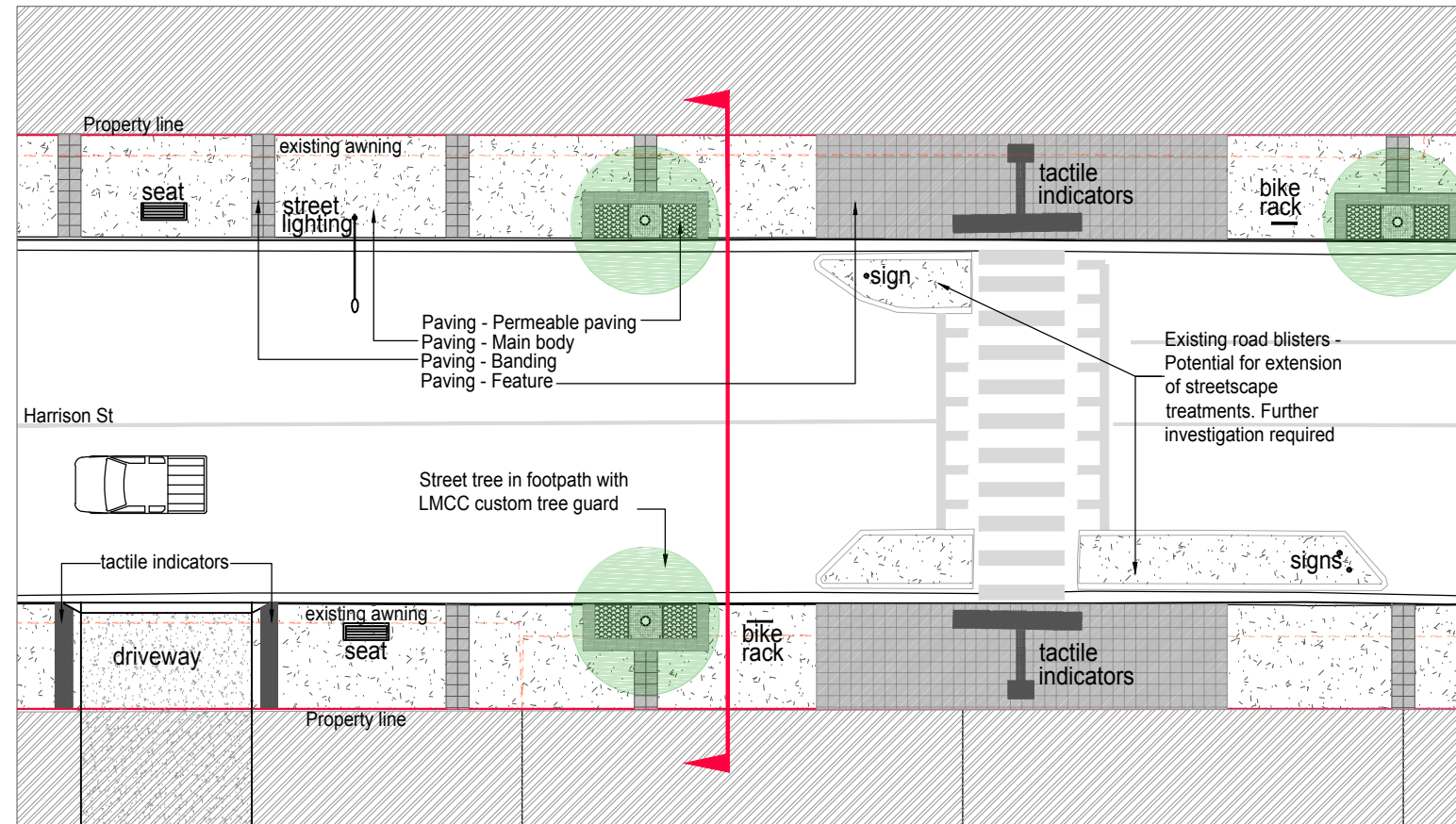
Main Rd, Macquarie Rd, Harrison, Thomas, Kelton, Veronica and Marianne Sts (part of)

Objectives

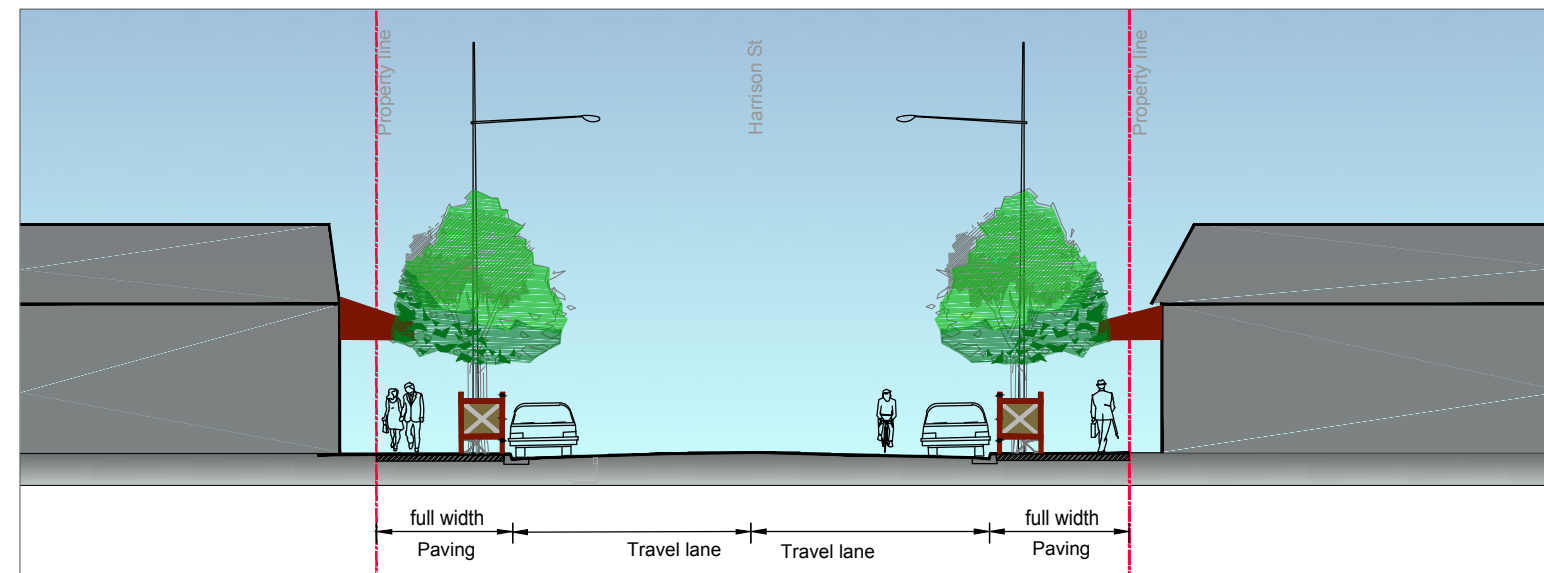
- To create interesting and inviting entry points and vistas to the town centre
- To maintain, strengthen and enhance the role of Main St (east west) as the main retail / commercial street of Cardiff
- To maintain, strengthen and enhance the role of Harrison St as Cardiffs secondary retail / commercial street
- To maintain the quality of Main St in surrounding streets whilst limiting intensity of treatments
- To link key areas on western side of Macquarie Rd to the town centre
- To link the town centre to the proposed urban park
- To encourage safe pedestrian connections
- To provide bicycle parking facilities at key areas
- To reduce maintenance with suitable selections of high quality furniture, lighting and paving

Existing Constraints

- Poor street aesthetics and building forms
- High traffic flow - Macquarie and Main Rd (north south)
- Overhead power poles and lines
- Irregular street and pedestrian lighting
- Irregular style awnings and overhangs
- Irregular, aged and damaged footway treatments
- Underground services
- Inappropriate street tree species - Main Rd and Harrison St
- Laneway and driveway entrances
- Parallel parking on street
- Traffic and pedestrian sightlines
- Large existing Brushbox in foot pavement - Veronica St
- Some existing mature street trees in supporting streets



TYPICAL PLAN
STREET TYPE B 1:300 at A3



TYPICAL SECTION
STREET TYPE B 1:200 at A3

Specifications for installation can be found in the Cardiff Streetscape Technical Guidelines

Furniture

Seats

Location : Every 30m-50m and at bus stops, taxi stands and key locations

Selection : Custom -TBA. Standard - SFA - CMM101 with backs/armrests/splay legs/redwood modwood slats.

Bins

Location : Every 30-50m and at bus stops, taxi stands, outside food outlets and key locations

Selection : Gossi Park 240litre fireproof bin - Clear anodised aluminium finish

Street tree planting

Location : Every 20-30m and or at suitable locations to enhance streetscape

Selection : Waterhousia floribunda 'Sweeper' - 100 litre

Tree guards

Location : Every 20-30m and or at suitable locations to enhance streetscape

Selection : LMCC Custom design tree guard

Bike racks

Location : At key locations

Selection : Custom -TBA. Standard - D O Smith, A:14 Bike Rack Loop, s/s.

Drinking fountains

Location : At key locations

Selection : Urban Fountains and Furniture Apollo 800 - Anodised aluminium.

Bollards

Location : Where required to prevent and deter vehicle and/or pedestrian access

Selection : LMCC standard post and/or post and cable

Lighting

Location : Where required to AS1158.3.1

Selection :

Street lighting - TBA

Awning lighting - TBA

Pedestrian lighting - TBA

Tactile indicators

Location : As required to AS1428

Selection : Themoplastic polyurethane - Black

Wheel stops

None

Paving

Main Body Paving

Insitu concrete - Oxide CCS Onyx21

Banding

Adbri Metro Charcoal - 400x400x50 honed

Feature Paving at intersections, entrances and key locations

Adbri Metro Charcoal - 400x400x50 shot

Permeable Paving

Adbri Ecotrihex Charcoal - 181x88x80mm

Street Type C

Main Rd and Harrison St (part of)

Main Rd (part of)

Objectives

To create an inviting entry to the town centre from Cardiff Heights

To link the train station to the town centre

To provide a safe pedestrian connection from the train station to the town centre

Existing Constraints

Steep topography

Very steep topography southern side of street. Inability to use for pedestrian links or other

Existing residential houses in LEP zones 3(1) Urban centre and 3(2) Urban support

Overhead powerpoles and lines on Northern side of street

Driveway entrances

1200mm wide footpath in turf verge on North side only

Parallel on road parking, no line marking

Harrison St (part of)

Objectives

To create an exciting entry and vista along Harrison St to the town centre.

To encourage traffic to use Harrison St to enter the town centre

To connect and activate the open space at corner of Myall Rd and Harrison St

To provide clear safe pedestrian routes from key areas

To enhance the visual amenity of Winding Creek crossovers with public art opportunities

Existing Constraints

Narrow footway area on Eastern side of street

Poor street aesthetics and building forms

Winding creek

Overhead powerpoles and lines on Eastern side of street

Laneway and driveway entrances

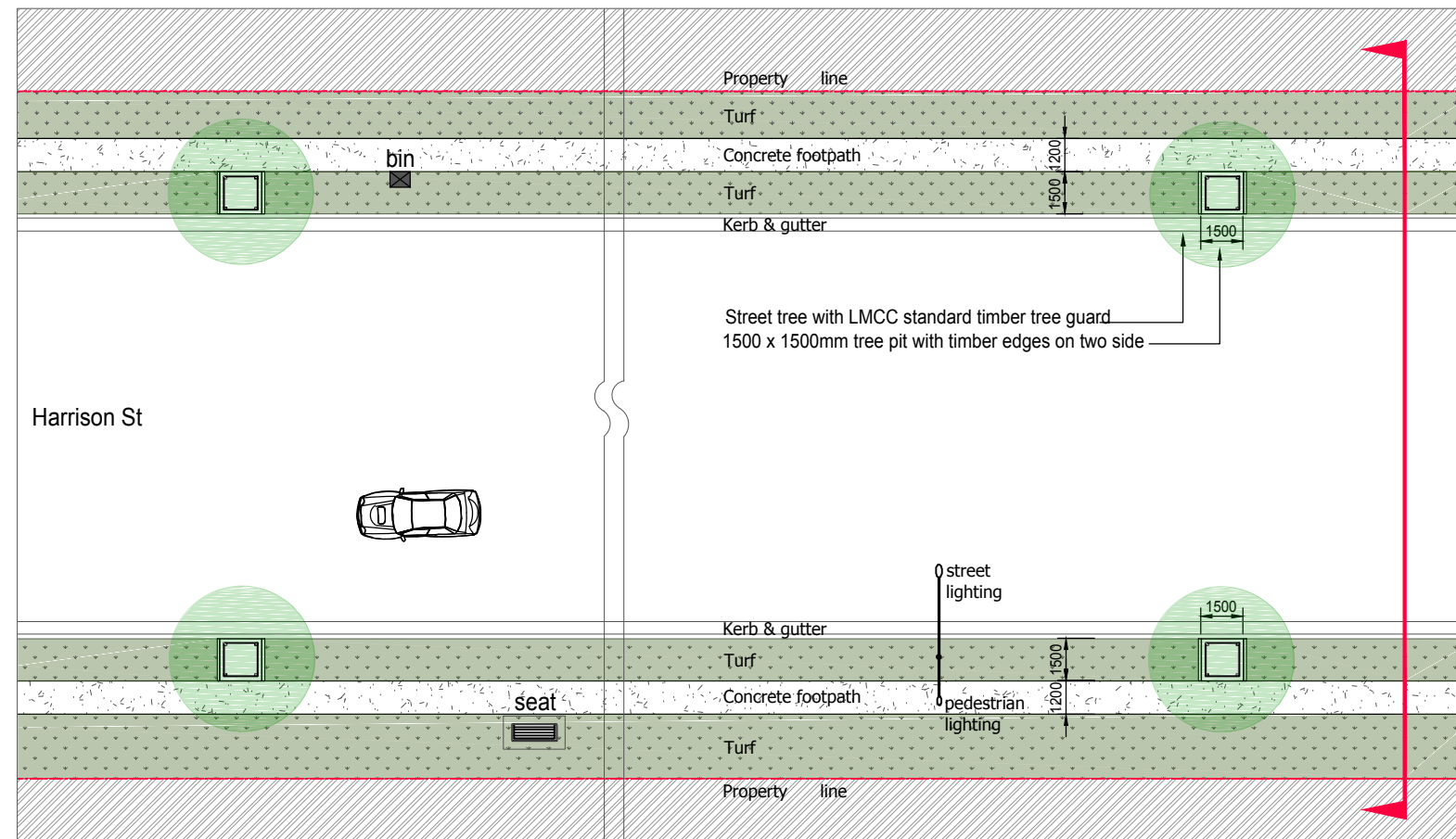
Irregular footway treatments

Minimal street lighting

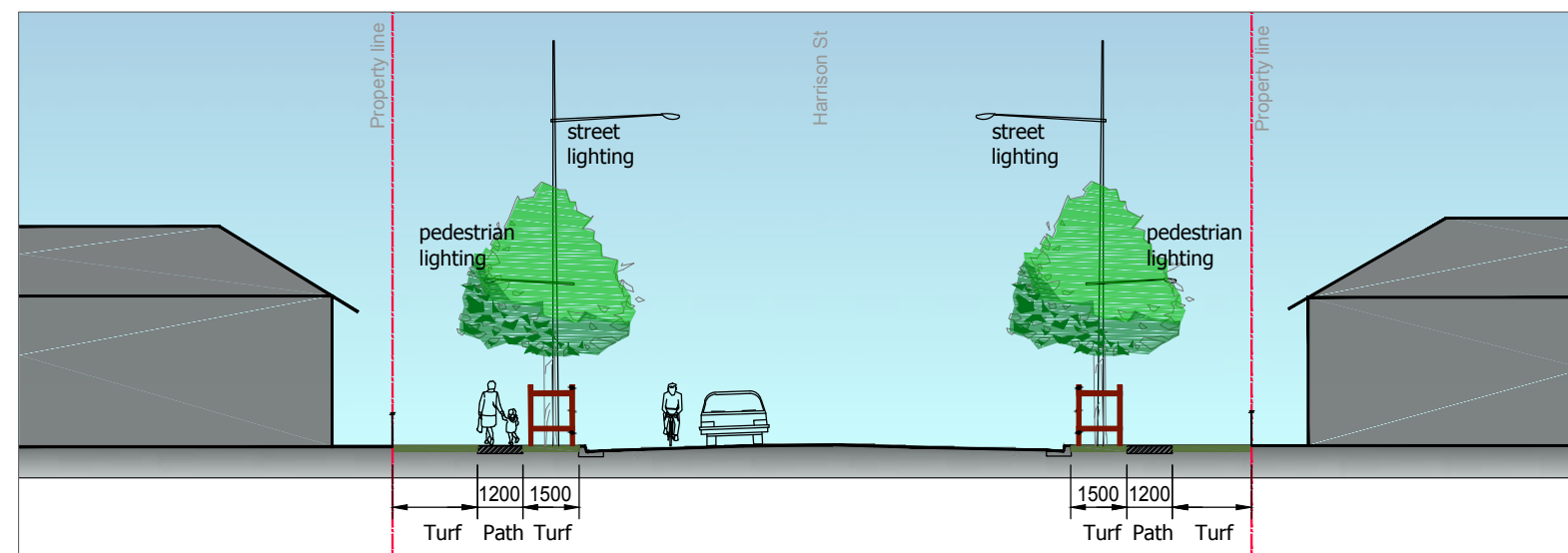
No pedestrian lighting

2 way street, unmarked parallel parking both sides

Underground services



TYPICAL PLAN
STREET TYPE C 1:300 at A3



TYPICAL SECTION
STREET TYPE C 1:200 at A3

Specifications for installation can be found in the Cardiff Streetscape Technical Guidelines

Furniture

Seats

Location : Approx every 80-100m and at key locations

Selection : Custom -TBA. Standard - SFA - CMM101 with backs/armrests/splay legs/redwood modwood slats.

Bins

Location : Approx every 100 - 200m and at key locations

Selection : Gossi Park 240litre fireproof bin - Clear anodised aluminium finish

Street tree planting

Location : Approx every 30-50m and or at suitable locations to enhance streetscape

Selection : Waterhousia floribunda 'Sweeper' - 100 litre

Tree guards

Location : Approx every 30-50m and or at suitable locations to enhance streetscape

Selection : LMCC Standard timber tree guard

Bike racks

None

Drinking fountains

None

Bollards

Location : Where required to prevent and deter vehicle and/or pedestrian access

Selection : LMCC standard post and/or post and cable

Lighting

Location : Where required to AS1158.3.1

Selection :

Street lighting - TBA

Awning lighting - TBA

Pedestrian lighting - TBA

Tactile indicators

Location : As required to AS1428

Selection : Themoplastic polyurethane - Black

Wheel stops

None

Footpath

1200mm wide concrete footpath in turf verge

Street Type D

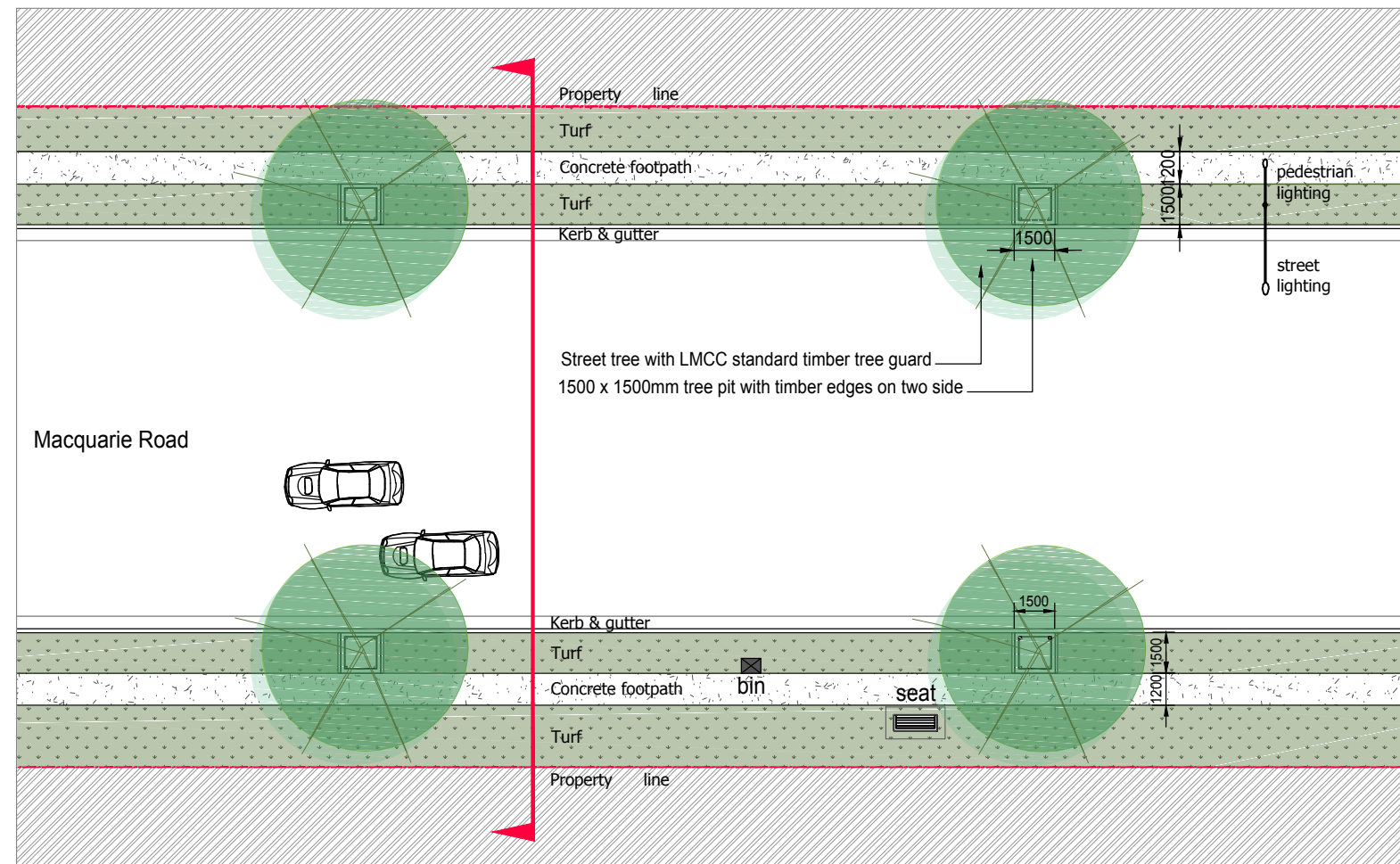
Macquarie Rd (part of), Main Rd (north south part of)

Objectives

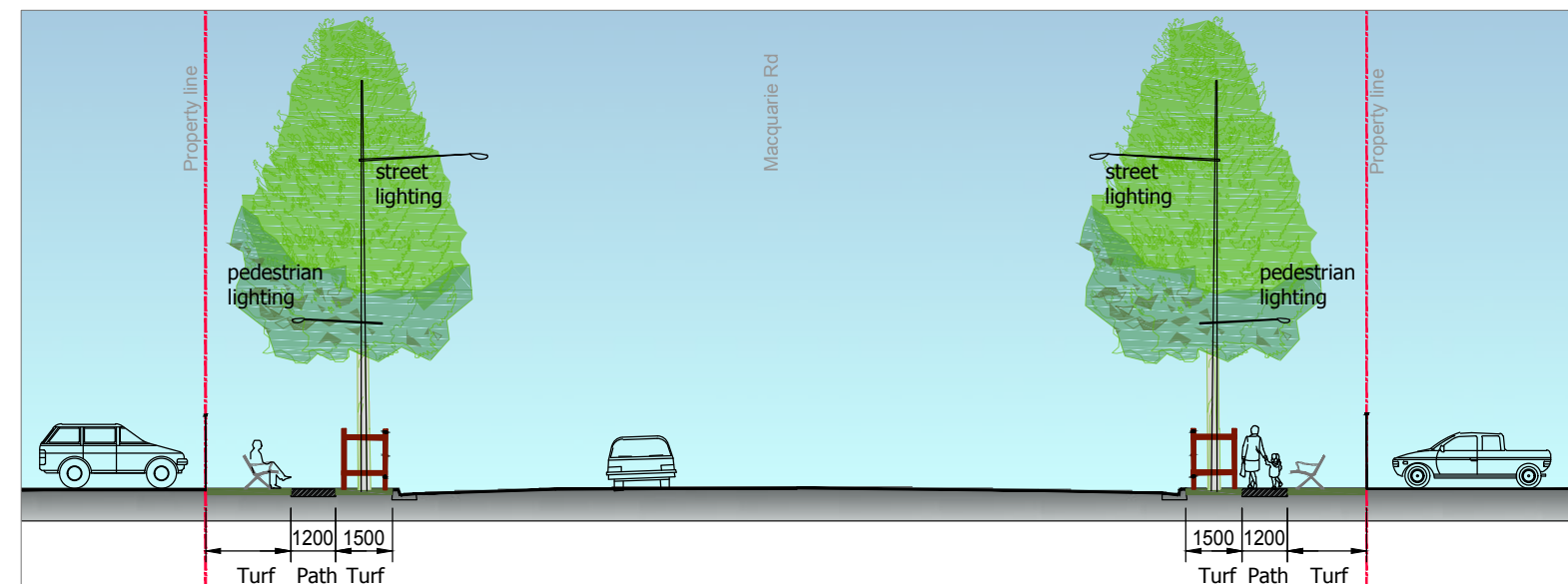
- To improve the aesthetics of Macquarie and Main Rd (north south)
- To create an exciting entry and vista to the town centre.
- To encourage traffic to enter town centre from Taylor and Main Rd (east west)
- To connect Macquarie and Main Rd (north south) to the town centre
- To create a safe and accessible contemporary bus stop
- To provide clear safe pedestrian routes from key areas

Existing Constraints

- Poor street aesthetics and building forms
- High traffic flow
- Traffic and pedestrian sightlines
- Street clutter
- Existing residential houses within zones 3(1) Urban centre and 3(2) Urban support
- Overhead power poles and lines
- Laneway and driveway entrances
- Irregular footway treatments
- No pedestrian lighting
- Underground services



TYPICAL PLAN
STREET TYPE D 1:300 at A3



TYPICAL SECTION
STREET TYPE D 1:200 at A3

Specifications for installation can be found in the Cardiff Streetscape Technical Guidelines

Furniture

Seats

Location : Approx every 80-100m and at key locations
Selection : Custom -TBA. Standard - SFA - CMM101 with backs/armrests/splay legs/redwood modwood slats.

Bins

Location : Approx every 100 - 200m and at key locations
Selection : Gossi Park 240litre fireproof bin - Clear anodised aluminium finish

Street tree planting

Location : Approx every 30-50m and or at suitable locations to enhance streetscape

Selection : Lophostemon confertus (Brushbox) - 100 litre

Tree guards

Location : Approx every 30-50m and or at suitable locations to enhance streetscape

Selection : LMCC Standard timber tree guard

Bike racks

None

Drinking fountains

None

Bollards

Location : Where required to prevent and deter vehicle and/or pedestrian access

Selection : LMCC standard post and/or post and cable

Lighting

Location : Where required to AS1158.3.1

Selection :

Street lighting - TBA

Awning lighting - TBA

Pedestrian lighting - TBA

Tactile indicators

Location : As required to AS1428

Selection : Themoplastic polyurethane - Black

Balustrade

Location : Winding Creek

Selection : LMCC Custom design - public art opportunity

Wheel stops

None

Footpath

1200mm wide concrete footpath in turf verge

Street Type E

Marianne St (part of) and others where level change occurs

Objectives

To increase the usability and aesthetics of pedestrian areas with level change.

To maintain, strengthen and enhance the role of Marianne St (part of) as a secondary retail / commercial street

Existing Constraints

Steep topography East side of street

Existing residential houses in LEP zones 3(1) Urban centre

Underground services

Overhead powerpoles and lines on Eastern side of street

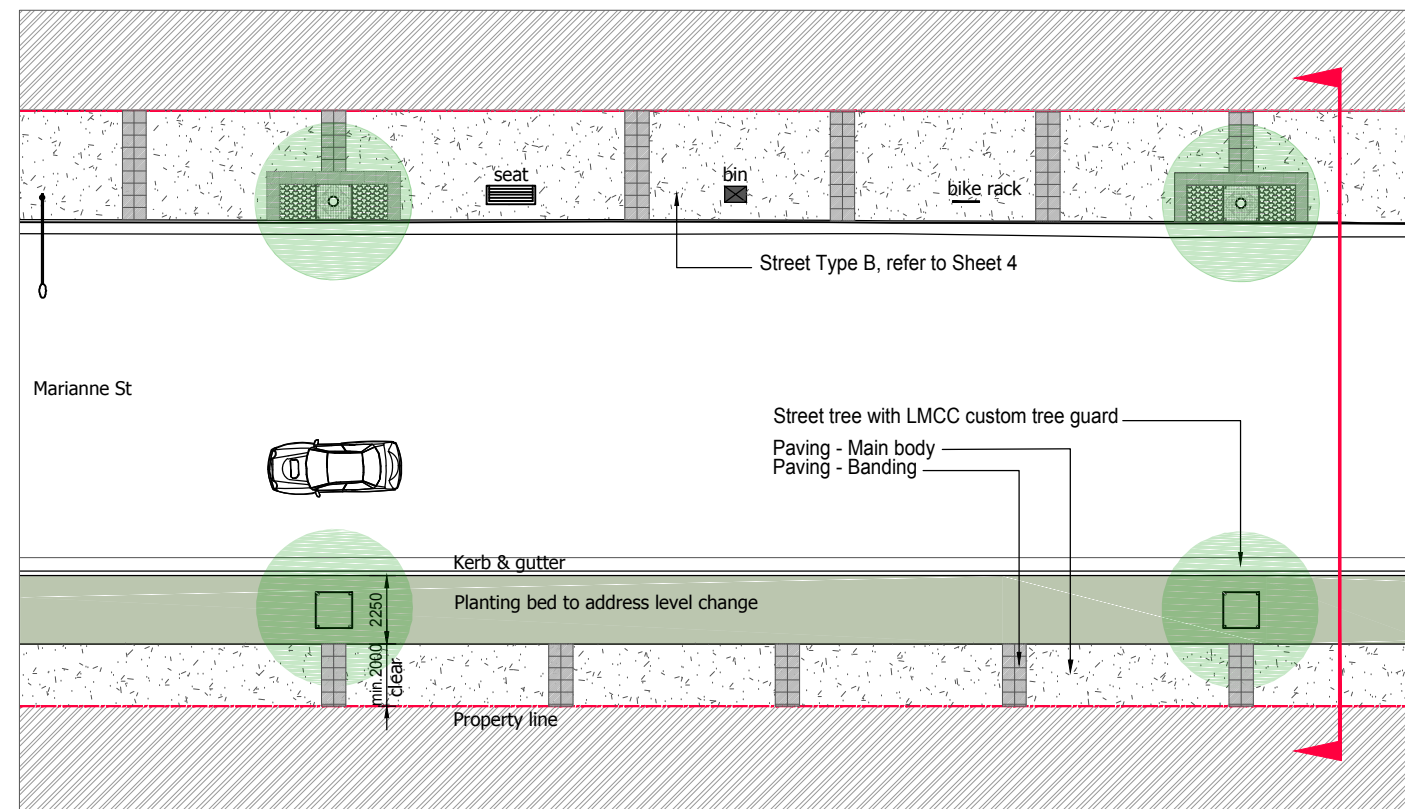
Irregular style awnings and overhangs

Laneway and driveway entrances

Irregular footway treatments

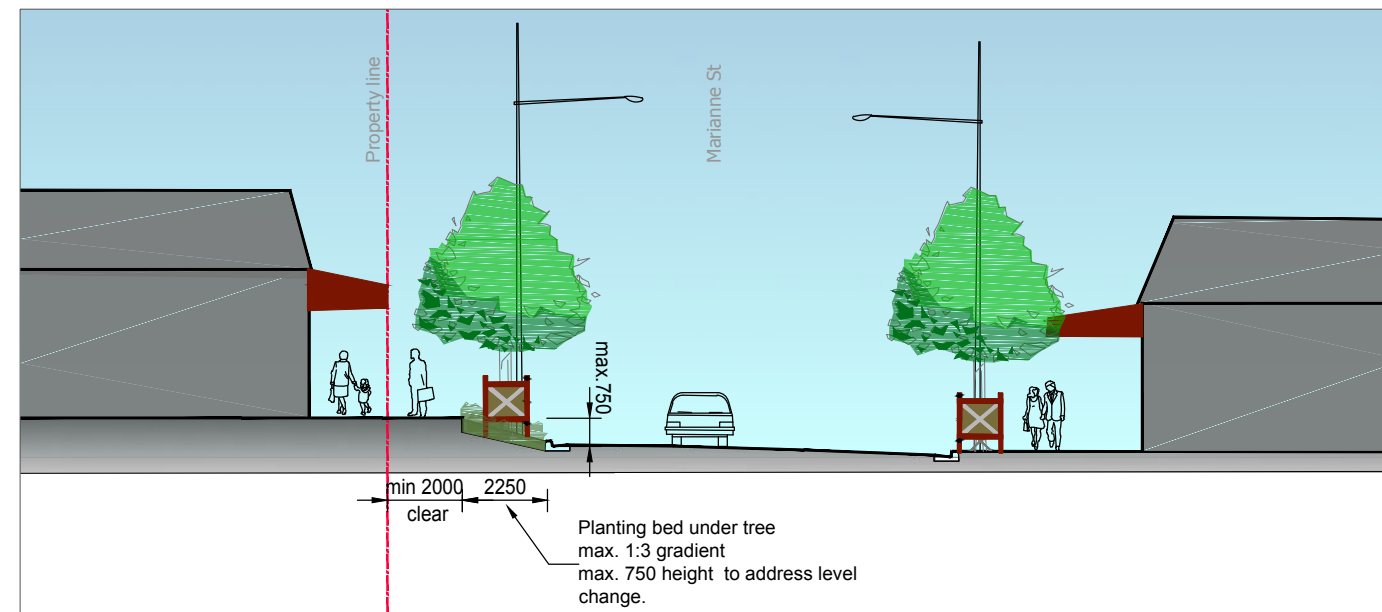
No street or pedestrian lighting

Parallel parking on street



TYPICAL PLAN
STREET TYPE E

1:300 at A3



TYPICAL SECTION
STREET TYPE E

1:200 at A3

Specifications for installation can be found in the Cardiff Streetscape Technical Guidelines

Furniture

Seats

Location : Where footway width permits

Every 50m-60m and at bus stops, taxi stands etc

Selection : Custom - TBA. Standard - SFA - CMM101 with backs/armrests/splay legs/redwood modwood slats.

Bins

Location : Where footway width permits

Every 50-60m and at bus stops, taxi stands, outside food outlet areas

Selection : Gossi Park 240litre fireproof bin - Clear anodised aluminium finish

Street tree planting

Location : Every 30m and or at suitable locations to enhance streetscape

Selection : Waterhousia floribunda 'Sweeper' - 100 litre

Tree guards

Location : Every 30m and or at suitable locations to enhance streetscape

Selection : LMCC Custom design tree guards

Bike racks

Location : Where footway width permits

At key locations

Selection : Custom - TBA. Standard - D O Smith, A:14 Bike Rack Loop, s/s.

Drinking fountains

Location : At key locations

Selection : Urban Fountains and Furniture Apollo 800 - Anodised aluminium.

Bollards

Location : Where required to prevent and deter vehicle and/or pedestrian access

Selection : LMCC standard post and/or post and cable

Lighting

Location : Where required to AS1158.3.1

Selection :

Street lighting - TBA

Awning lighting - TBA

Pedestrian lighting - TBA

Tactile indicators

Location : As required to AS1428

Selection : Thermoplastic polyurethane - Black

Wheel stops

None

Paving

Main Body Paving

Insitu concrete - Oxide CCS Onyx21

Banding

Abri Metro Charcoal - 400x400x50 honed

Feature Paving at intersections, entrances

Abri Metro Charcoal - 400x400x50 shot

Permeable Paving

Abri Ecotrihex Charcoal - 181 x 88 x 80mm

Driveway Crossings

Insitu concrete - Oxide CCS Onyx21

Street Type F

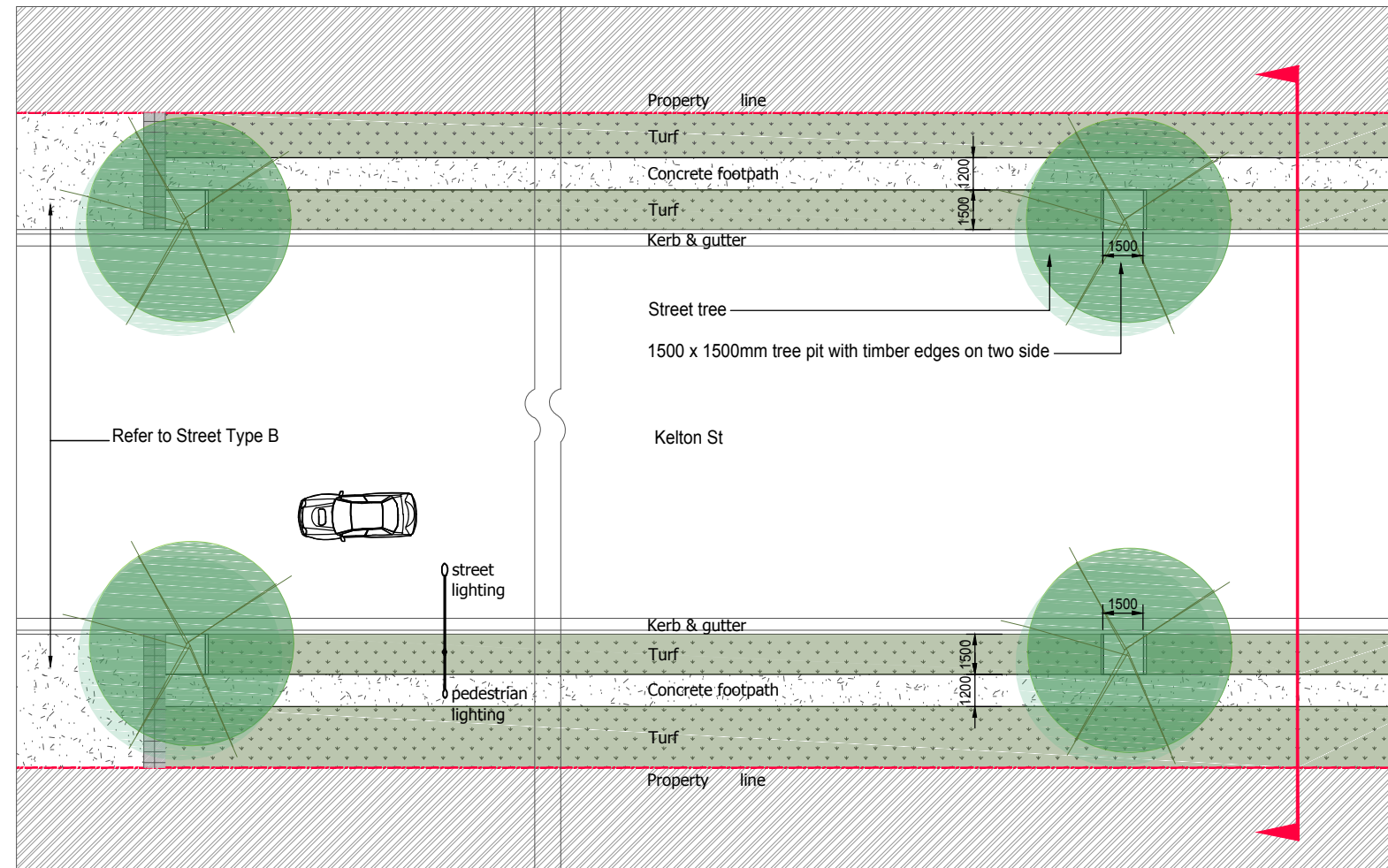
Taylor, Kelton, Veronica, Harrison, Marianne, Mary, Thomas and Margaret Sts

Objectives

- To create inviting entry points and vistas to the town centre from the supporting streets
- To encourage traffic to enter Taylor St to the town centre
- To encourage safe pedestrian connections
- To enhance and extend the existing street tree plantings (Brushbox)

Existing Constraints

- Some existing mature street trees (Brushbox)
- Existing residential houses in LEP zones 3(1)Urban centre and 3(2)Urban support
- Underground services
- Overhead powerpoles and lines
- Laneway and driveway entrances
- Irregular, aged and damaged footway treatments
- No street and pedestrian lighting
- 2 way street, unmarked parallel parking both sides



TYPICAL PLAN 1:300 at A3
STREET TYPE F

Specifications for installation can be found in the Cardiff Streetscape Technical Guidelines

Street trees

Location : Approx every 50-60m or at suitable locations to enhance streetscape

Selection :

Lophostemon confertus (Brushbox) - 100 litre
No tree guard

Lighting

Location : Where required to AS1158.3.1

Selection :

Street lighting - TBA
Awning lighting - TBA
Pedestrian lighting - TBA

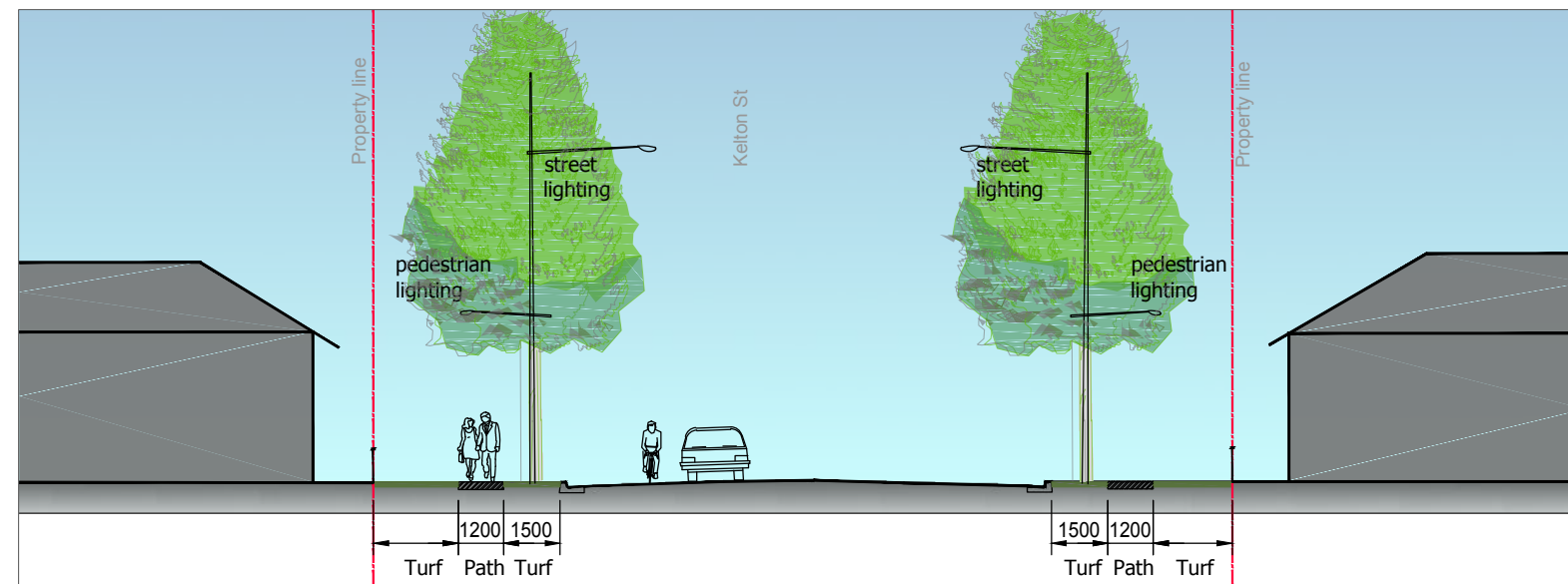
Tactile indicators

Location : As required to AS1428

Selection : Thermoplastic polyurethane - Black

Footpath

1200mm wide concrete footpath in turf verge



TYPICAL SECTION 1:200 at A3
STREET TYPE F

Item	Unit rate	Quantity required	Sub-Total	Total
STREET TYPE A				
Services - relocate above ground services to below ground. Reconnect to all premises.	Approx - \$860 lineal metre	559 lineal metres	\$480,740.00	
Paving and furniture	Approx - \$180 sqm	1956.50 sqm	\$352,170.00	
Street trees - with LMCC custom tree guards	Approx - \$8000/each. 100 litre tree, custom tree guard, install in roadway, permeable paving surround.	20 trees	\$160,000.00	
Street lighting - with pedestrian lighting where required	Approx - \$3100 each. Supply and install	22	\$68,200.00	
				\$1,061,010.00
STREET TYPE B / E				
Services - relocate above ground services to below ground. Reconnect to all premises.	Approx - \$860 lineal metre	1296 lineal metres	\$1,114,560.00	
Paving and furniture	Approx - \$150 sqm	3486 sqm	\$522,900.00	
Street trees - with LMCC custom tree guards	Approx - \$5500 each. 100 litre tree, custom tree guard, permeable paving surround.	29	\$159,500.00	
Street lighting - with pedestrian lighting where required	Approx - \$3100 each. Supply and install.	40	\$124,000.00	
				\$1,920,960.00
STREET TYPE C				
Services - relocate above ground services to below ground. Reconnect to all premises.	Approx - \$860 lineal metre	371 lineal metres	\$319,060.00	
Street trees - with LMCC standard tree guards.	Approx - trees \$3500	10 trees	\$35,000.00	
Footpath - repair and/or install new footpath.	Approx - \$150 lineal metre	371 lineal metres	\$55,650.00	
Furniture - seats and bins	Approx - \$3000 each item	6 seats, 2 bins	\$24,000.00	
Street lighting - with pedestrian lighting where required	Approx - \$3100 each. Supply and install.	15	\$46,500.00	
				\$480,210.00
STREET TYPE D				
Services - relocate above ground services to below ground. Reconnect to all premises.	Approx - \$860 lineal metre	1083 lineal metres	\$931,380.00	
Street trees - with LMCC standard tree guards.	Approx - trees \$3500	60 trees	\$210,000.00	
Footpath - repair and/or install new footpath.	Approx - \$150 lineal metre	1083 lineal meters	\$162,450.00	
Furniture - seats and bins	Approx - \$3000 each item	10 seats, 2 bins	\$45,000.00	
Street lighting - with pedestrian lighting where required	Approx - \$3100 each. Supply and install.	43	\$133,300.00	
				\$1,482,130.00
STREET TYPE F				
Street trees - no tree guards	Approx - \$1800 each	30	\$54,000.00	
Footpath	Approx - \$150 lineal metre	1470 lineal metres	\$220,500.00	
				\$274,500.00
PUBLIC ART				
Public Art - install 2 sculptural pieces, 2 balustrade art and other installations / treatments	Will vary on selection	2 sculptural pieces, 2 balustrade art and other installations / treatments	\$270,000.00	
				\$270,000.00
TOWN CENTRE SIGNAGE				
Signage - 4 town centre signs. 1 not shown on this plan	Approx - \$30,000	4 signs	\$120,000.00	
				\$120,000.00
			Total (Indicative only)	\$5,608,810.00

