North Sydney

Public Domain Style Manual & Design Codes

June 2024

Originally prepared by

OCULUS

landscape architecture
urban design

DATE	VERSION	PREPARED/UPDATED BY
28 MARCH 2014	Revision A Adopted	OCULUS
20 MAY 2014	Revision B	OCULUS
23 MAY 2014	Revision C	OCULUS
5 APRIL 2016	Revision D	OCULUS
5 MARCH 2018	Revision E	NORTH SYDNEY COUNCIL
15 FEBUARY 2019	Revision F	NORTH SYDNEY COUNCIL
15 JULY 2019	Revision G	NORTH SYDNEY COUNCIL
5 SEPTEMBER 2019	Revision H	NORTH SYDNEY COUNCIL
30 SEPTEMBER 2019	Revision I	NORTH SYDNEY COUNCIL
JULY 2022	Revision J	NORTH SYDNEY COUNCIL
17 JUNE 2024	Revision K	NORTH SYDNEY COUNCIL

Part 1: 01 Introduction

01 Introduction

1.1 Purpose

The purpose of the 'Public Domain Style Manual and Design Codes' is to outline North Sydney Council's approach to implementing public domain infrastructure improvements within the North Sydney local government area (LGA).

The document establishes a comprehensive set of objectives to create unified, yet distinctive precincts across the North Sydney LGA.

A new materials palette establishes the character for each precinct. Detailed plans and sections demonstrate how they are applied to create a consistent and high quality public domain.

The 'Public Domain Style Manual and Design Codes' are to be used in conjunction with the North Sydney 'Infrastructure Specification for Roadworks, Drainage and Miscellaneous' works which expands on the specification manual and provides further technical detail.

Standard technical details assist to realise a cohesive aesthetic for North Sydney as projects will be implemented over time in small often disconnected stages.

1.2 Scope

The 'Public Domain Style Manual and Design Codes' apply to all work carried out in the public domain which are under or will revert to the ownership, care, control and management of North Sydney Council.

It is encouraged that the codes be used for areas within the North Sydney public domain that are not under North Sydney Councils control to ensure a complimentary if not consistent finish is achieved in these areas. The document also sets the quality standard of what is expected in the public realm within and outside council land.

The manual is to be used when designing or constructing works on the streets and footpaths and parks of North Sydney Council LGA. Users of the manual include developers, design consultants, council officers, contractors, government organisations, community groups and North Sydney residents.

1.3 Design and approvals process

All works have to be approved by Council's nominated certifying officer.

All works must comply with Australian Standards and relevant approval authorities such as the RMS, STA, AUSGRID and other relevant authorities.

1.4 Policy context and framework

The code is to be used in conjunction with the following planning documents (Refer to Document Review in the Appendices in addition to the table below).

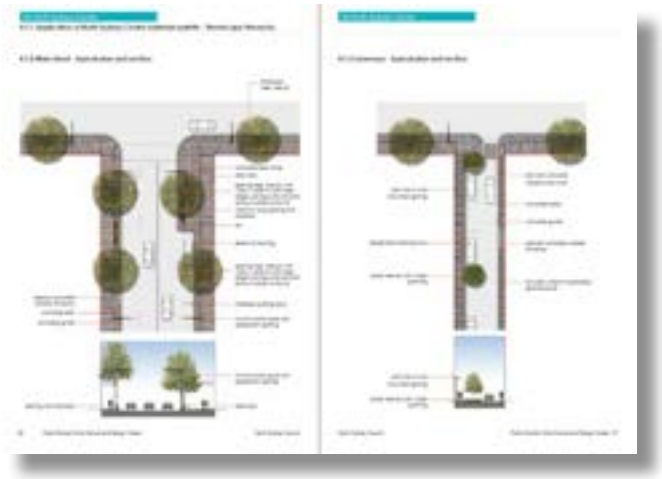
POLICY CONTEXT / FRAMEWORK				
STATUTORY DOCUMENTS	STUDIES AND DESIGN STRATEGIES	MASTERPLANS	DESIGN CODES	PLANS OF MANAGEMENT
North Sydney DCP 2013	North Sydney Pedestrian Network and Amenity Study 1999	Waverton Peninsula Strategic Masterplan 1999	North Sydney Street Tree Strategy 2006	Asset Management Plans
North Sydney Local Environmental Plan 2013	Crows Nest Main Street Program 2002	Atchison Street West Masterplan 2005	Signage and Wayfinding Strategy	Plans of Management
North Sydney S94 Contributions Plan	St Leonards Public Domain Strategy 2003	Neutral Bay Shopping Centre Masterplan 2011		
	North Sydney Traffic Management Plan 2005	Crows Nest Public Domain Upgrade (2015)		
	North Sydney Recreation Needs Study 2005	Neutral Bay Public Domain Upgrade (2015)		
	North Sydney Water Based Recreation Needs Study 2006			
	St Leonards Strategy 2006			
	North Sydney Foreshore Access Strategy 2007			
	North Sydney Open Space Provision Strategy 2009			
	North Sydney Bike Strategy 2009			
	North Sydney Residential Development Strategy 2009			
	St Leonards / Crows Nest Planning Study - Precinct 1 + Addendum 2012			
	Education Precinct Planning Study 2013			
	North Sydney CBD Public Domain Strategy - Stage 1			

1.5 How to use the manual

The manual establishes eight different precincts within the North Sydney LGA. These precincts have been derived from the suburb and character statements outlined in section 3.1 which are consistent with the character descriptions outlined in councils LEP 2013.

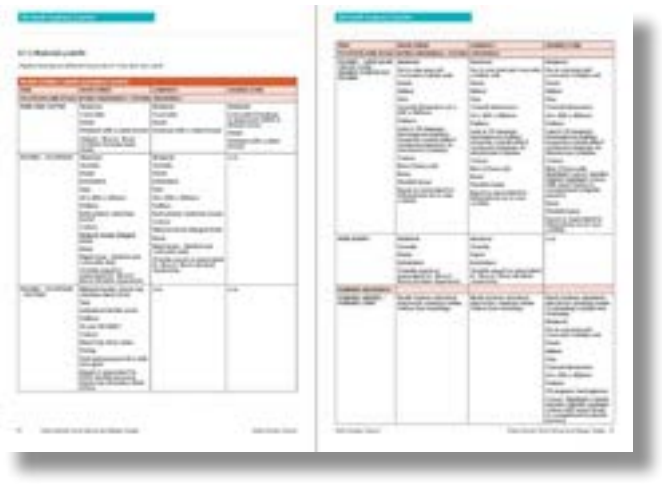
The manual is then broken down into eight precinct type chapters. For instance 'North Sydney Centre'. The existing character of each precinct is outlined in the introduction of each chapter. Each precinct type has a distinct character and materiality appropriate to its scale, zoning and use which is detailed in a precinct materials palette.

Typical detail plans and sections illustrate the desired overall 'look' of each precinct and demonstrate how the materials palette is applied to main streets, laneways, shared zones, open space and other public domain areas.



The indicative materials palette consists of a series of detail sheets that provide a typical detail, indicative product image and notes detailing key features and installation requirements.

These materials are then summarised in a materials palette table for each precinct at the end of each chapter.



The table lists what materials are required in each situation whether it be a main street, laneway, Shared Zone, plaza, park or open space.

The table is divided into categories that relate directly to the chapters of the 'Infrastructure Specification for Roadworks, Drainage and Miscellaneous Works.' It should be referred to for more detailed installation specifications.

The Appendices outline the analysis process and document review undertaken to arrive at the proposed precinct types and materials palette.

1.6 Materials note

Terms and/or trade names used to describe items or materials in the document are intended to define the style and overall appearance. They are not intended to be used as a product specification for supply purposes of such items or materials, nor are they intended to imply that they must be manufactured and/or supplied by the specific firms named.

Steps to follow

1. Select a **location** / **street** / **park** / **open space.**
2. Determine **which precinct** it is located in. Refer to the overall plan included in the 'Streetscape and open space context and location' chapter. Locate the precinct chapter and determine if it is a main street, laneway, shared zone, park or plaza.
3. Refer to the **precinct application illustrations.** Typical sections and detail plans for that type of street and precinct.
4. Familiarise yourself with the materials and details that are within that precinct type under the **'Indicative Materials and Furniture'** section of that chapter.
5. Review the relevant column in the **'Materials palette table'** to locate which items are relevant to your project type. Refer back to the **'Indicative materials and furniture' section.**
6. Refer to **'Technical detail sheets'** and specification in the separate 'Infrastructure Specification for Roadworks, Drainage and Miscellaneous Works document if further information is required.

02 The Importance of great street design

02 The importance of great street design

2.1 What makes a street great?

Streets are the true public places of our cities and towns. Streets are for everyone to enjoy and occupy. The livelihood of these spaces and their adjacent uses rely on our ability to imbed them with beauty, facilitate and promote activity and most importantly, to ensure that they are comfortable, functional, safe and accessible for all members of our community to use.

Streets form a critical part of the public domain - they are important places for people to meet and socialise, and in many ways, are key to the livability of our urban environments. Great streets can provide the setting and backdrop for street life and activity.

Streets provide routes and connections, not only for vehicles, but also for pedestrians and cyclists. Streets provide the primary way that we move and navigate around our cities, and serve to link neighbourhoods, centres, public transport nodes and open space together. In this regard, a balance is required between the various competing demands upon our streets, and particularly the often competing requirements of vehicles and pedestrians.

Great streets need to work on a number of levels, including their:

- character, interest and amenity
- functionality, accessibility and legibility
- comfort and usability
- sustainability

Streets can act as unifying elements, helping to provide consistency to the public domain in our dynamic urban environments, where adjacent built form and uses can change rapidly. At the same time, it is important that streets reflect and reinforce local identity and sense of place.

People

Activity

Greenery and amenity

WSUD and sustainability

2.2 Design Principles

Whilst every street should be considered to be a unique element within the public domain and designed accordingly, there are certain key design principles that can be applied to all streets to varying degrees as summarised below.

- Create streets that can provide a setting and backdrop for activity and events; meeting, socialising and dwelling
- Provide a highly connected and legible network that facilitates safe, accessible and convenient pedestrian and bicycle links particularly to activity centres, public transport nodes and open space
- Create streets that work with their natural and built setting to provide high levels of amenity and interest
- Ensure streets are functional, comfortable and safe for all users to be in
- Ensure streets provide accessibility and universal design for all users
- Use streets to create a unifying element within the public domain
- Allow the design and materials palette of streets to reflect and reinforce local character and place
- Ensure that streetscape design and materiality responds to the hierarchy / type of street
- Create high quality, robust and durable streetscapes
- Provide appropriate amenities for pedestrians and cyclists including street furniture
- Integrate street tree planting and other landscape treatments to improve microclimate and biodiversity
- Integrate WSUD into streets wherever possible to detain and treat urban storm water
- Allow for the integration of public art, interpretation strategies and installations specific to place
- Use materials with low embodied energy, high recycled content, local provenance, high durability, long service life and low maintenance.
- Design roads to cater to vehicles - cars, trucks, buses as well as pedestrians and cyclists

2.3 Definitions : Streetscape Hierarchy

2.3.1 Main streets

Generally a main street is the primary retail street of the village, town or small city. Within this document the term ‘main streets’ covers arterial roads and other major roads. In most cases these roads have retail and commercial as the zoning control.

A high grade finish is established in this manual for main streets due to their high use and visibility.

Due to the urban character and scale of main streets a large format paver is appropriate with a durable, hard wearing surface.

Main streets generally have at least one traffic lane in each direction in addition to a parking lane.

The parking lane is critical in providing access to main street retail / commercial activities. Arterial roads may not have a parking lane as more room is required for the larger traffic volumes on these roads. Arterial roads generally have two lanes of traffic in each direction.

Pedestrian footpaths are generally wide and paved from kerb to boundary line / building line. Tree pit treatments are flush with adjacent pavements and are trafficable for pedestrians. Pedestrians are given priority over motorists within the footpath corridor.

2.3.2 Laneway

Typically a narrow road coming off a larger road. Laneways often act as service roads and often provide rear access to lots. Other services are often located in the laneway such as rubbish removal and deliveries.

Laneways are generally bordered by a consistent edge whether it be the building line, fences or hedges.

Laneways are often one way and may also contain one row of parallel parking.

Generally a more simple finish is applied in laneways due to their service function, lower visibility and reduced use by pedestrians.

A laneway's character is largely defined by its edge conditions and programming.

Depending on the size of the laneway it may or may not have a pedestrian path down one side. Pedestrian use is generally low.

2.3.3 Shared zone

A shared zone is a road space that accommodates both vehicles, pedestrian and cyclists safely. This is achieved by slowing down traffic to a maximum speed of 10km, providing visual cues and traffic calming that demonstrate that it is a shared space.

Shared zones are sign posted as a shared zone at the entry and exit point along with 10km/h signage. In addition, a consistent pavement treatment is used across pedestrian footpaths and across the road carriageway to enhance the sense of equality between pedestrians and vehicles. To reinforce this effect kerbs and gutters are removed and a flush paving treatment is applied. Road line markings are not used in a shared zone. shared zones have a raised threshold treatment and a different surface texture to adjacent streets.

In special circumstances kerbs and gutters can be retained but only if approved by the RMS. In such cases the existing footpath is to be footway must be treated so that it cannot be used by pedestrians to ensure that the existing road becomes a road related area.. This may involve the use of bollards.

Roads can only be considered for shared zones when they have a low traffic volume. This is less than 100 cars an hour and 1000 cars a day. Shared zones are most often one way but can run in both directions. Shared zones should be considered for areas of high pedestrian activity especially where footpaths are narrow and pedestrians are forced to walk along the road.

Cars can only stop in shared zones when parked in marked bays. No reversing is allowed in a Shared Zone and drivers must give way to pedestrians at all times.

2.3.4 Parks and open space

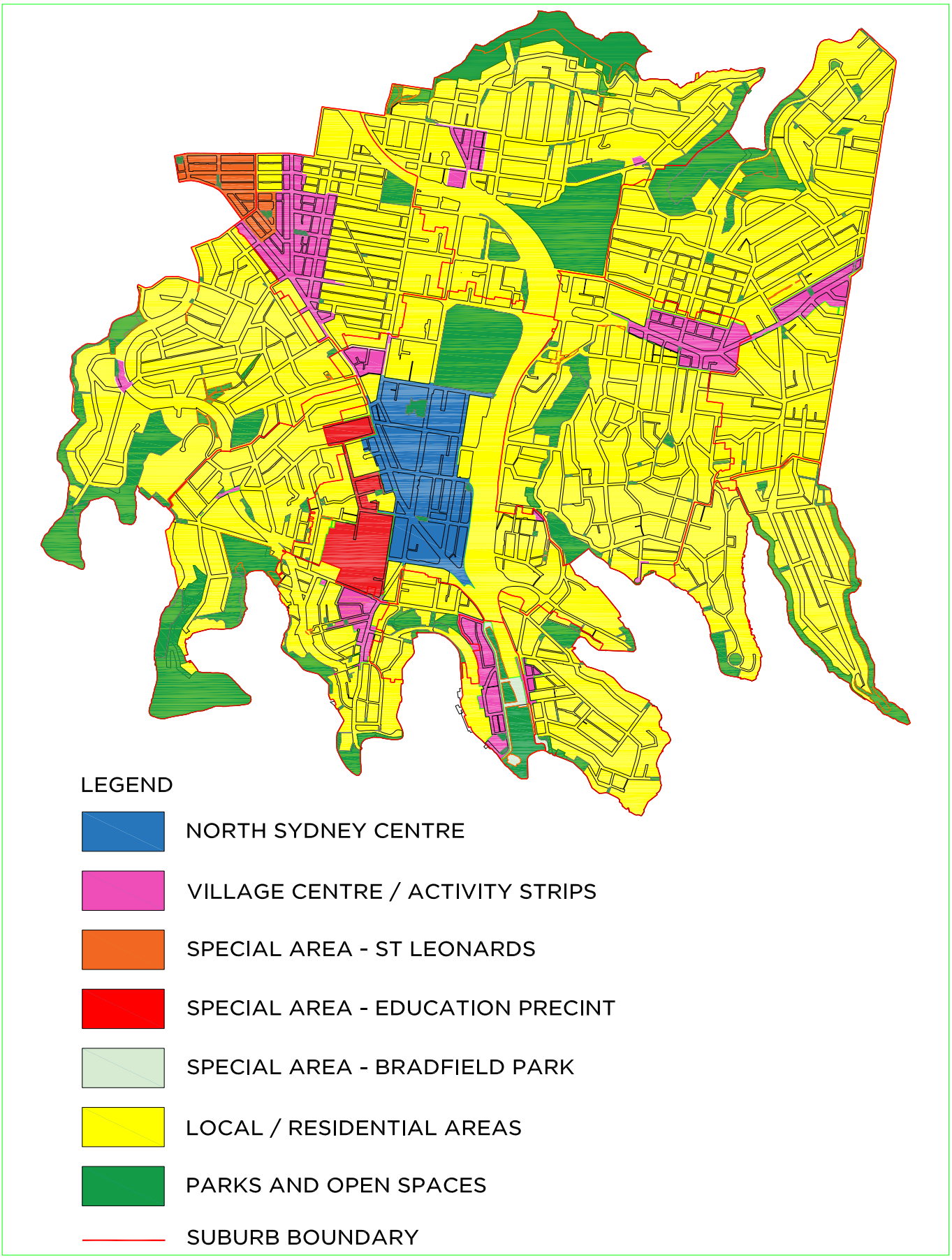
This category includes neighbourhood parks, district parks, regional parks, playgrounds, street enclosures, reserves, foreshore parks, bushland and sportsgrounds.

Open space is outdoor space that is in the public realm, is freely accessible and serves a recreation function; from organised sport, casual exercise, family recreation to walking trails and areas of native vegetation.

Footpaths in open space need to cater to both pedestrians and cyclists. They require a hard wearing durable surface with an excellent slip resistance. As large areas of pavement are required a more cost effective product is required that is low maintenance.

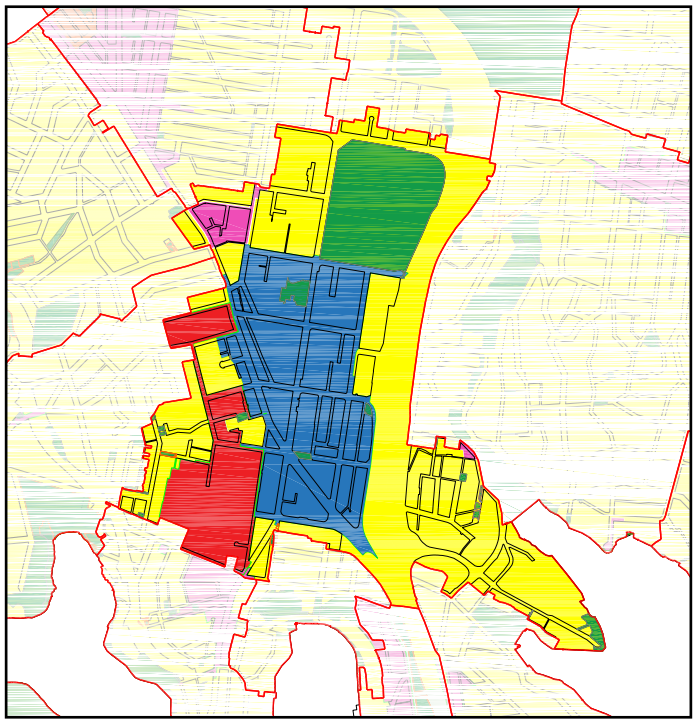
03 Streetscape and open space context and location

03 Streetscape and open space context and location



Suburb character statements

3.1 North Sydney



NORTH SYDNEY

The North Sydney Planning Area is an iconic and attractive area, with the focus on the North Sydney Centre, which is identified under the 'Metropolitan Strategy for Sydney to 2031' as a global commercial centre. New development within the Planning Area should result in:

- A viable and attractive employment centre;
- A diverse range of living, employment, recreation and social opportunities being provided that attract both local and regional populations which contribute to the vibrancy of the centre;
- A high level of amenity for residents, workers and visitors to enjoy;
- A high quality of built form;
- A high level of public transport patronage which is easily accessible to residents, workers and visitors; and
- The area being linked to the Sydney CBD, other suburban centres and many parts of the Sydney Region by rail and bus as well as by road and is a place of interchange between the various modes.

Quality Urban Environment:

- There are links to the Sydney CBD, other suburban centres and many parts of the Sydney region by ferry, rail, bus and road and the centre is a place of interchange between the various transport modes;
- Public transport, including walking and cycling, is the main form of access to the centre;
- Traffic is managed so that pedestrians can move within the area freely and safely, and amenity is maintained;
- Parking is managed in a way that maintains pedestrian safety and the quality of the public realm and minimises traffic generation;
- Rear lanes allow for the primary vehicular access to properties
- The level of public parking within the centre is maintained;
- Limited increase to the capacity of private parking; and
- Pedestrians are assisted to safely cross barriers such as the Pacific Highway.

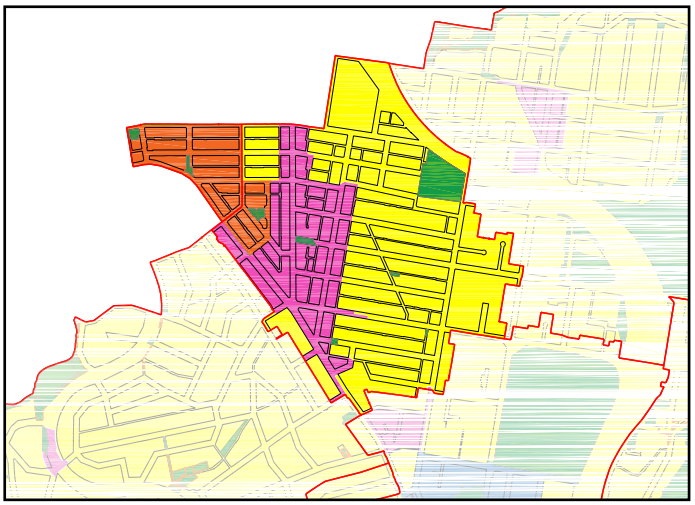
Public Domain:

- Additional open space is provided to service the increased residential and working population of the North Sydney Centre; and
- Streetscape improvements occur in accordance with this strategy.

North Sydney can be divided into the following locality areas:

- Central Business District
- Eden Neighbourhood
- Hampden Neighbourhood
- McLaren Street Conservation Area
- Walker Street Conservation Area
- Education Precinct

3.2 St Leonards / Crows Nest



ST LEONARDS / CROWS NEST

The Planning Area is focussed around the town centres of St Leonards and Crows Nest in the north-west of the area both of which are situated on major traffic routes. The remainder of the area comprises a number of predominantly low density residential neighbourhoods, much of which is characterised by retention of the historic subdivision pattern.

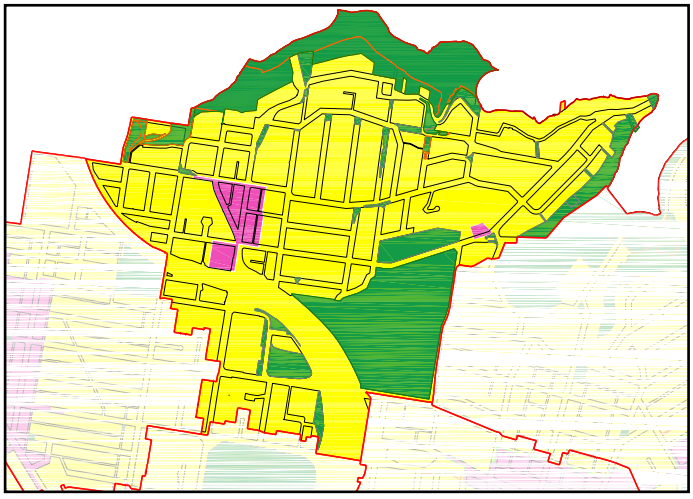
St Leonards Town Centre, which is identified as a Specialist office precinct under the Metropolitan Strategy 2031, is a significant, sustainable and busy urban centre where:

- A diverse range of living, employment, recreation and social opportunities are provided which serve both local and regional populations and contribute to the vibrancy of the centre;
- Residents, workers and visitors enjoy a high level of amenity and quality of the natural and built environment; and
- Residents, workers and visitors can easily access the Area through excellent public transport links to the Sydney CBD, other suburban centres and many parts of the Sydney Region by rail and bus.

Crows Nest Town Centre is smaller in scale in comparison to St Leonards, with 19th Century, two storey shop front parapets along Willoughby Road and the Pacific Highway. The Town Centre services the daily needs of residents and visitors, as well as having a lively dining district. Traffic is managed so pedestrians can move freely across Willoughby Road.

The residential neighbourhoods are generally quiet and characterised by wide roads with street tree plantings. Laneways facilitate movement and provide rear lane access to properties. Local shops, dispersed throughout the area, serve both local and regional needs. St Thomas Rest Park, located toward the northern edge of the area, provides much needed open space and complements pocket parks within the area, with access to St Leonards Park on the eastern edge.

3.3 Cammeray



CAMMERAY

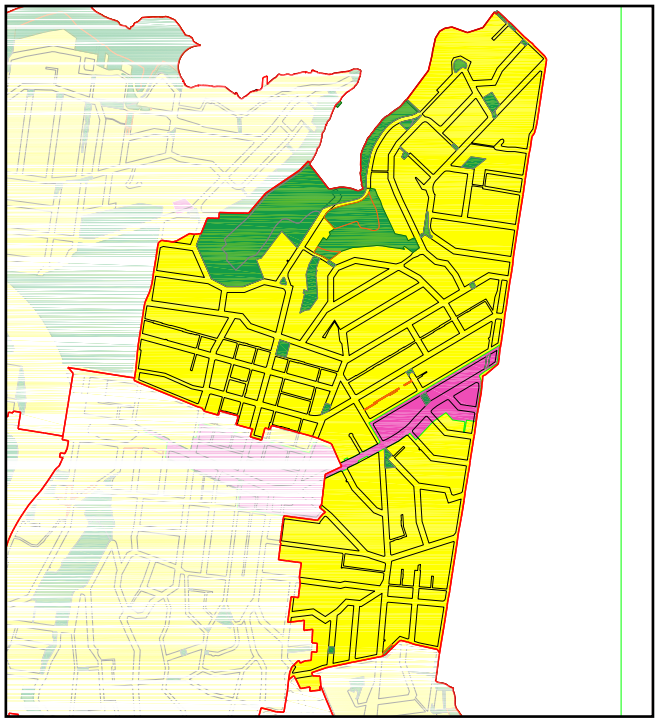
The Planning Area is focussed around Cammeray Village, which is an active, pedestrian friendly shopping area that has small scale shops and provides street level activity with an lively pedestrian environment, where:

- Local shops cater to the local community and are balanced between basic needs such as food and grocery, and recreation such as cafes and galleries;
- Development on both sides of Miller Street is unified through common elements; and
- There is safe and easy pedestrian movement across Miller Street.

The surrounding residential neighbourhoods are diverse in nature, where:

- Most of the existing dwelling houses and dual occupancies are retained;
- Capacity exists to accommodate some attached dwellings, multi-dwelling housing and residential flat buildings close to existing public transport, services and facilities; and
- The density of residential development generally reduces the further away from Miller and Falcon Streets a property is located.

3.4 Cremorne



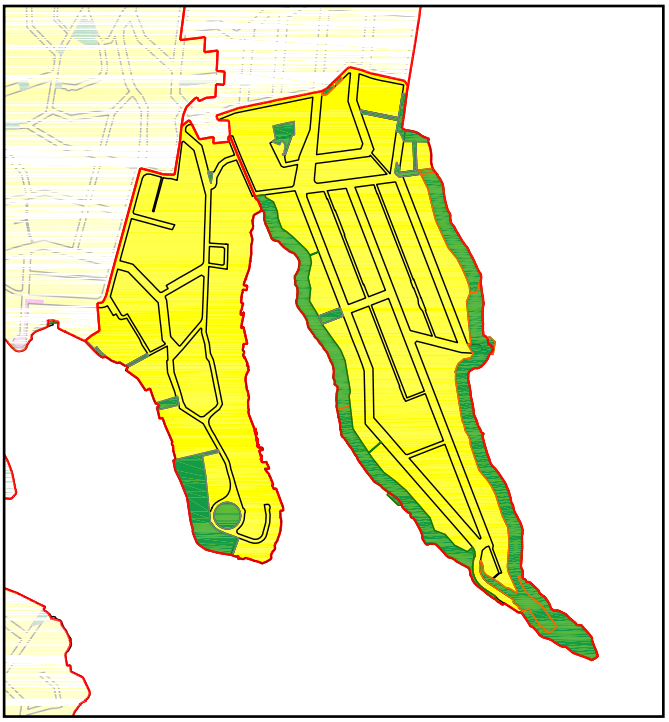
NORTH CREMORNE

Cremorne is a primarily residential neighbourhood providing a diverse range of housing forms for a mixed population. It is bound on its southern side by the Neutral Bay and Cremorne Town Centres, which are bustling places where people live, shop, eat, work and socialise providing a high level of amenity for all users.

Development within the Planning Area should result in:

- Residential growth being provided in accordance with Council's Residential Development Strategy, with the growth concentrated within the Mixed Use zones of the Town Centres located on or in the vicinity of Military Road, and the remainder comprising of multi- dwelling housing and residential flat buildings in the surrounding residential areas;
- Residential densities not being increased in foreshore areas and areas of steep terrain;
- Development within the R2 – Low Density Residential zone being of a similar scale to existing characteristic development;
- A wide range of residential types and sizes being distributed throughout the area according to zone; and
- A range of retail and commercial premises, services and facilities being available to the local community within the Town Centres.

3.5 Cremorne Point / Kurraba Point



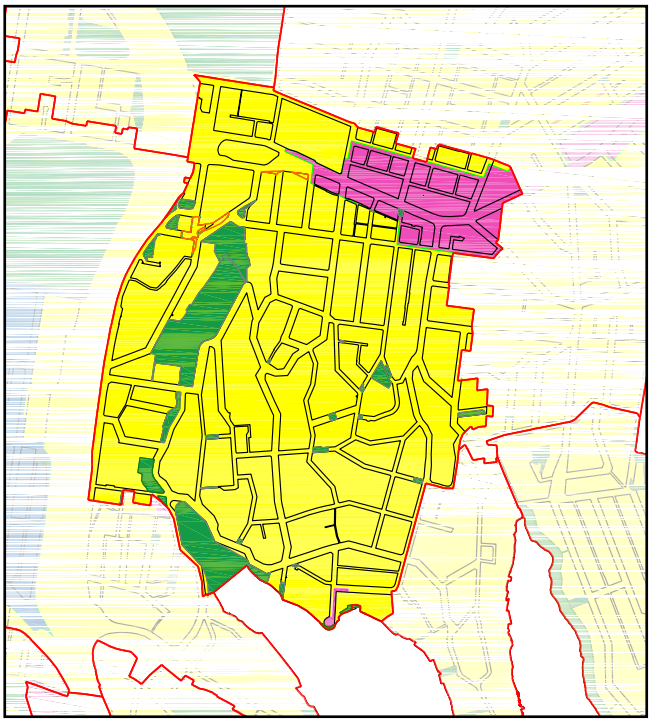
CREMORNE POINT / KURRABA POINT

Cremorne Point / Kurraba Point is a green, leafy area sympathetic to its harbour side setting. The design of new buildings is to be sympathetic to the landscape and character of buildings within the locality, complementing existing building forms in respect to massing, composition, materials, colours and maintaining the original subdivision pattern.

Development within the Planning Area should result in:

- No substantial change to residential densities;
- No significant change in intensity of development;
- A wide range of single household residential types being distributed in a number of distinctive built form/landscape areas; and
- The conservation of features which contribute to the local identity.

3.6 Neutral Bay



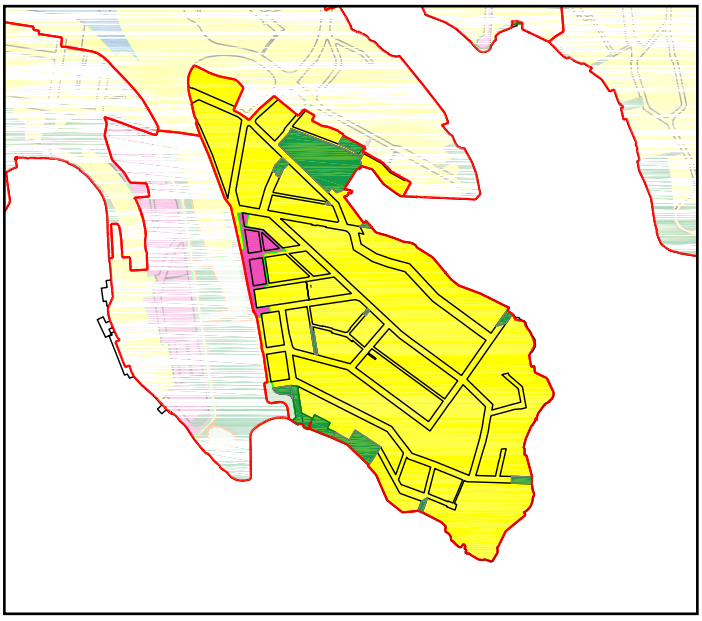
NEUTRAL BAY

Neutral Bay is a diverse residential neighbourhood. Lower density development exists in the neighbourhood where there are small allotments, conservation areas and heritage items. Small shops, community and school facilities cater for the local residents. The waterfront and harbour setting of the Neutral Bay Area provide passive and active recreation pursuits, access to transportation, to other parts of the harbour via ferries and contribute to the natural and scenic qualities of the neighbourhood.

Development in the Planning Area should result in:

- Residential growth occurring in accordance with Council's Residential Development Strategy, principally in the high density residential zones situated in the vicinity of Military Road;
- A wide range of residential types and sizes being distributed throughout the area;
- A scattered range of shops, services and facilities being available to the local community; and
- Any alterations and additions being of a similar scale to existing buildings.

3.7 Kirribilli



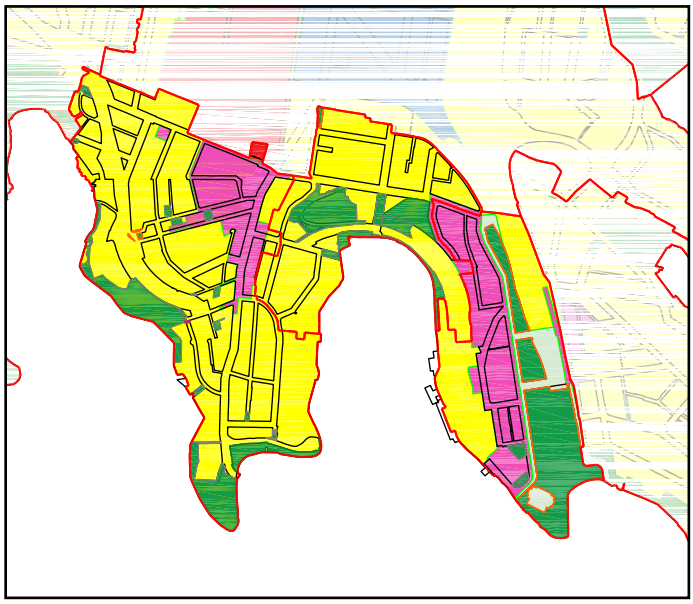
KIRRIBILLI

Kirribilli is located on the foreshores of Sydney Harbour with spectacular views of the Sydney CBD, the Sydney Opera House and Sydney Harbour Bridge. Bradfield Park, at the base of the Sydney Harbour Bridge, provides unique outlooks and a place for outdoor recreation and softens the dense built form on the foreshores. The focal point of the Kirribilli peninsula is the Kirribilli Village Centre, a compact and lively area with a community centre, local shops and outdoor cafes that serve the needs of the local community. The village is surrounded by a predominantly residential area with a small number of other uses such as education, transport, maritime activities and community facilities. Conservation areas are often associated with prominent landmarks such as Admiralty House and Kirribilli House.

Development within the Planning Area should result in:

- Limited growth with no substantial increase in residential densities; and
- No significant change in low density residential or conservation areas.

3.8 Lavender Bay / McMahons Point / Milsons Point



LAVENDER BAY / MCMAHONS POINT / MILSONS POINT

The Lavender Bay Planning Area is a diverse area reflected by the very wide range of land uses occurring within the Area, including a mixture low, medium and high density residential accommodation, commercial premises, light industry, education establishments, places of worship and public recreational facilities. Many of these land uses are located in a leafy setting with strong links to Sydney Harbour and are often associated with landmark buildings such as Graythwaite, the Shore School and St Peter's Church.

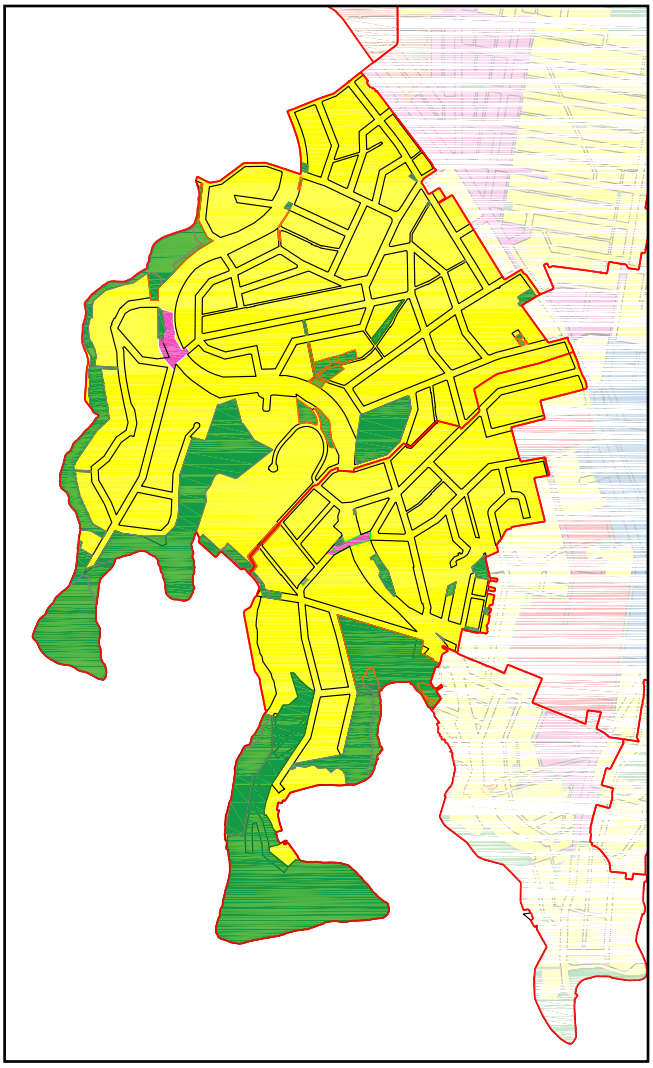
The Planning Area is noted for its historical character arising from the retention of much of its original subdivision pattern and good examples of largely intact mid 19th century and early 20th Century buildings. Blues Point Road in McMahons Point is a popular village centre enjoyed by local residents and visitors to the area with its outdoor cafes, galleries and small specialty shops.

Milsons Point is on the shores of Sydney Harbour and consists of a large concentration of mixed residential and commercial towers located at the base of the Sydney Harbour Bridge, surrounded by landmarks such as Luna Park, Bradfield Park and North Sydney Pool.

Development within the Planning Area should result in:

- Any residential growth being in accordance with the Residential Development Strategy, with high density residential accommodation mainly being accommodated within the mixed use zone at Milsons Point, with no substantial change in the other residential and light industrial areas;
- A wide range of single household residential types being distributed in a number of distinctive built forms/landscape areas;
- Any retail premises being of a scale to cater to the local community and which provide a balance between basic (e.g. food and groceries) and recreational (e.g. cafes and galleries) needs; and
- The conservation of features which positively contribute to the local identity.

3.9 Wollstonecraft / Waverton



WOLLSTONECRAFT / WAVERTON

The Planning Area generally comprises a diverse residential neighbourhood ranging from low density residential development adjacent to the foreshore areas of Sydney Harbour to high density residential development generally on the upper slopes and in close proximity to railway stations. The suburbs of Waverton and Wollstonecraft essentially align with the two ridges/peninsulas that project out into Sydney Harbour. The Area is also physically divided by the North Shore Railway line. Both neighbourhoods are in a pleasant setting, as a result of buildings being setback from boundaries, on site landscaping, street trees and strong links to Sydney Harbour.

The foreshores of the Planning Area are generally protected from development by recreational and bushland buffers, with the minor exception of maritime industrial activities which are reliant on a land-water interface.

Development within the Planning Area, should result in:

- Residential growth being provided in accordance with Council's Residential Development Strategy, predominantly comprising attached dwellings, multi dwelling housing and residential flat buildings in the appropriate zones redevelopment of sites respects the existing built form and maintains the character of the area. This includes any alterations and additions to existing buildings;
- A wide range of residential types being distributed in a number of distinctive built forms and landscape areas;
- Local shops cater to the local community and are balanced between basic needs of food and grocery, and social needs- such as cafes and galleries; and
- Future maritime uses having a minimal impact on residential amenity.

Reference:

Part C Area Character Statements, North Sydney Development Control Plan 2013

04 North Sydney Centre

04 North Sydney Centre

North Sydney Centre is located on the northern bank of Sydney Harbour. It has views across to Sydney city and is linked by the Harbour Bridge, tunnel and train line. It is located at a high point ensuring excellent views. The centre is set out on a grid with Miller Street as the main arterial road. The Pacific Highway intersects the grid on an angle generating several triangular shaped lots along the western side of the centre.

North Sydney Centre is a major commercial centre that supports high rise office towers with mixed use development along the northern and western boundaries. Apartment living is also on the rise in the North Sydney Centre with several high rise residential developments in construction along the Pacific Highway. North Sydney has a mix of architecture with lower, older buildings and more modern highrise commercial towers of varying styles developed within the last 30 - 40 years.

Tall buildings and wide main streets generate a civic scale. Many of North Sydney's streets are shaded for much of the day and can often be windy. North Sydney Centre contains streets that are suitable for conversion to shared zones along with other types of streets including laneways, main streets and arterial roads. Each have their own distinct character and scale.

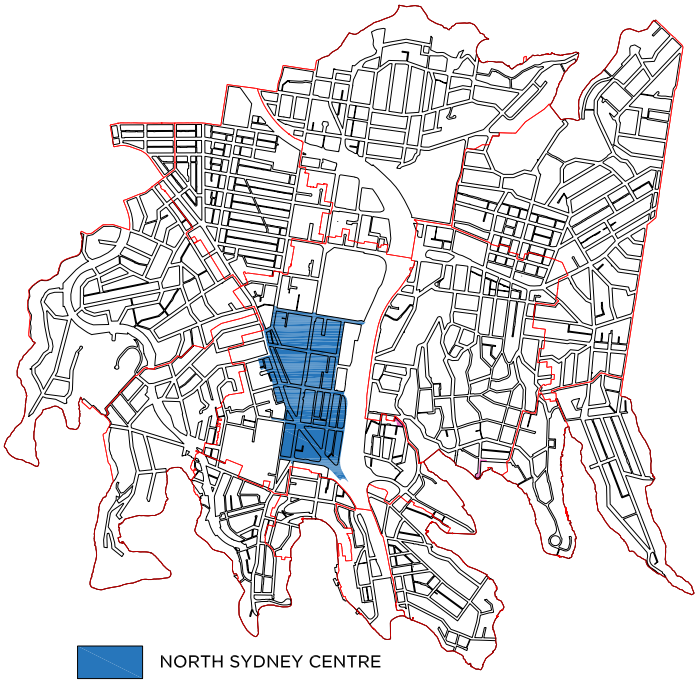
The underlying sandstone geomorphology of North Sydney has been picked up in the use of sandstone steps, walling and paving within the LGA. These earthy tones are also used frequently in painted facades such as the Post Office. In many places through out the LGA there are cuttings into the sandstone exposing the sandstone geomorphology. There are steep pockets within North Sydney Centre which influence the public domain and accessibility.

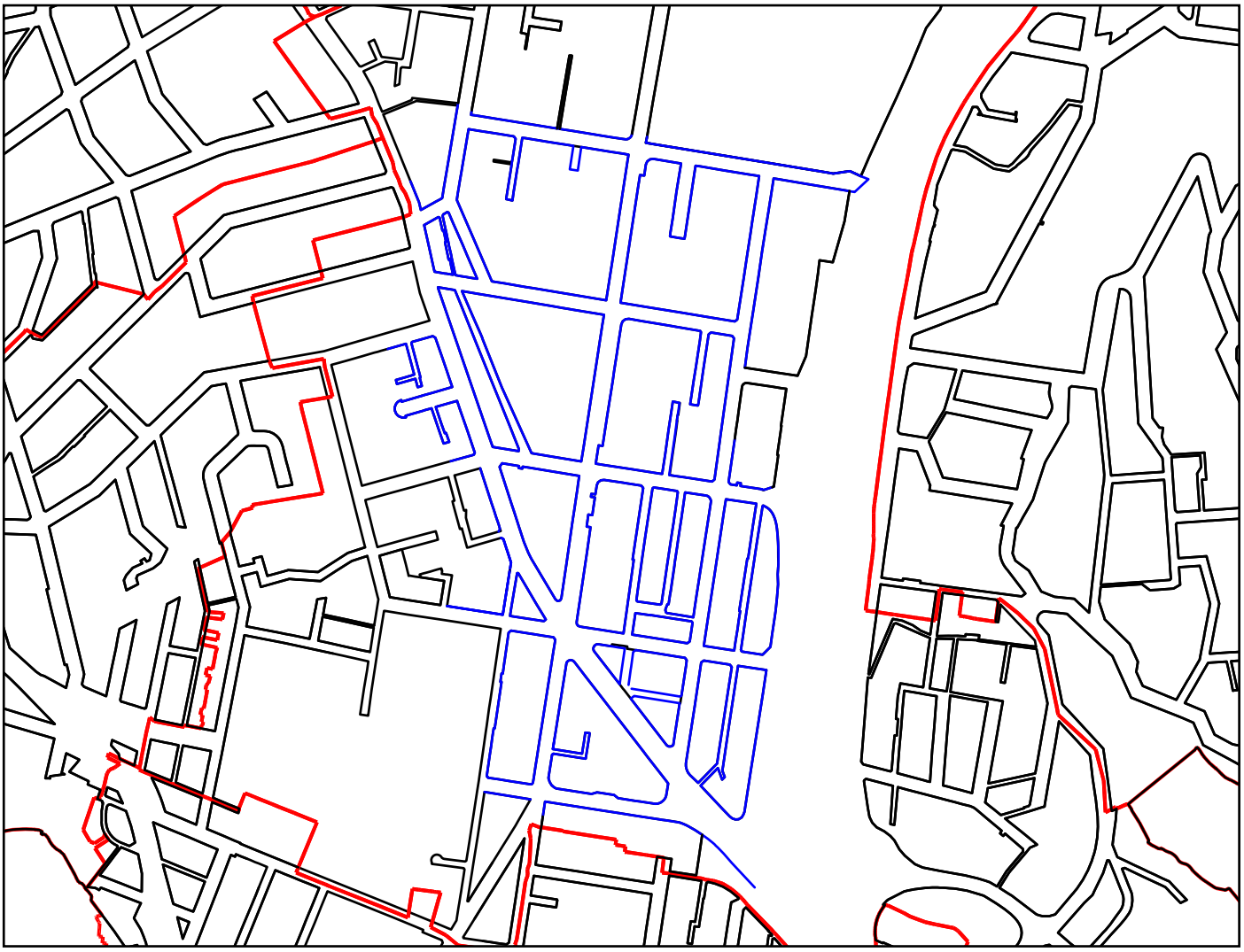
North Sydney Centre requires a high quality public domain as it is a large centre, is highly used and is a competitor with both Sydney city and Parramatta as a commercial centre. Currently there is a mix of paving materials. Pink precast pavers, brick pavers, sandstone paving, concrete and asphalt. Multi purpose poles have been rolled out in the city centre. They have a copper coloured base.

A materials palette for the North Sydney Centre must have a civic and urban quality, be contemporary, durable and easily maintained.

Mature London Plane trees line the main streets of North Sydney generating distinctive green avenues. There are only small parks and plazas within the North Sydney Centre due to the space limitations of a highly developed business district. Brett Whiteley Place also contributes to the Public Domain and urban character of North Sydney Centre.

North Sydney is a major commercial centre that supports high-rise office towers with mixed use development along the northern and western boundaries





NORTH SYDNEY CENTRE FOOTPATH

4.1 Materials palette objectives

The North Sydney Centre public domain materials palette should respond to the heritage, geographical, geological and civic character of North Sydney.

Materials palette selection should also reflect the urban and contemporary character of North Sydney Centre.

Materials shall be hard wearing, proven elsewhere, readily available and meet requirements for access and sustainability.

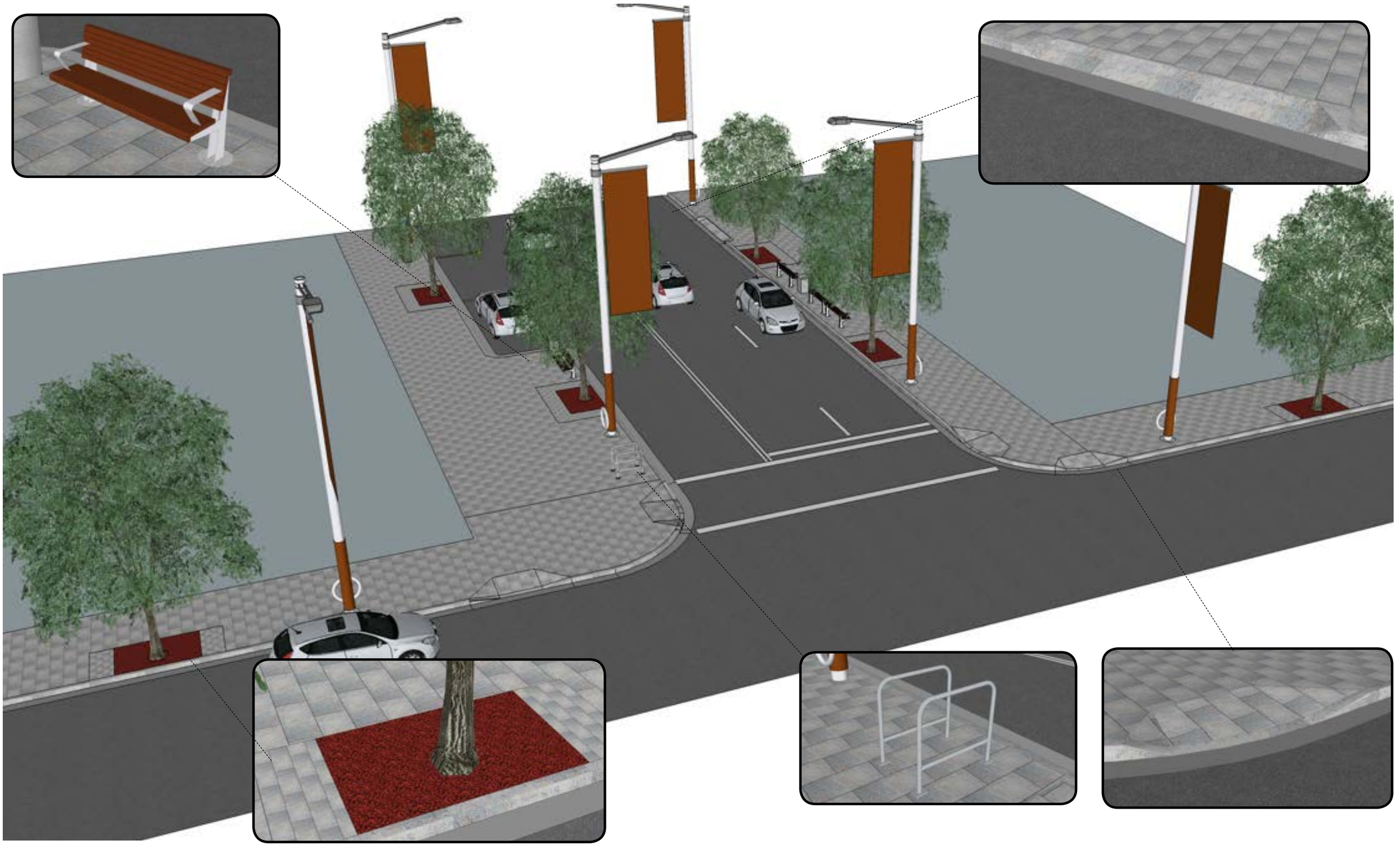
The use of standard fixtures and typical details encourages a cohesive character and strong identity for the North Sydney Centre.

A standardised approach to streetscape design ensures the street acts as a canvas for activity rather than becoming a clutter of inconsistent additions and improvements over time.

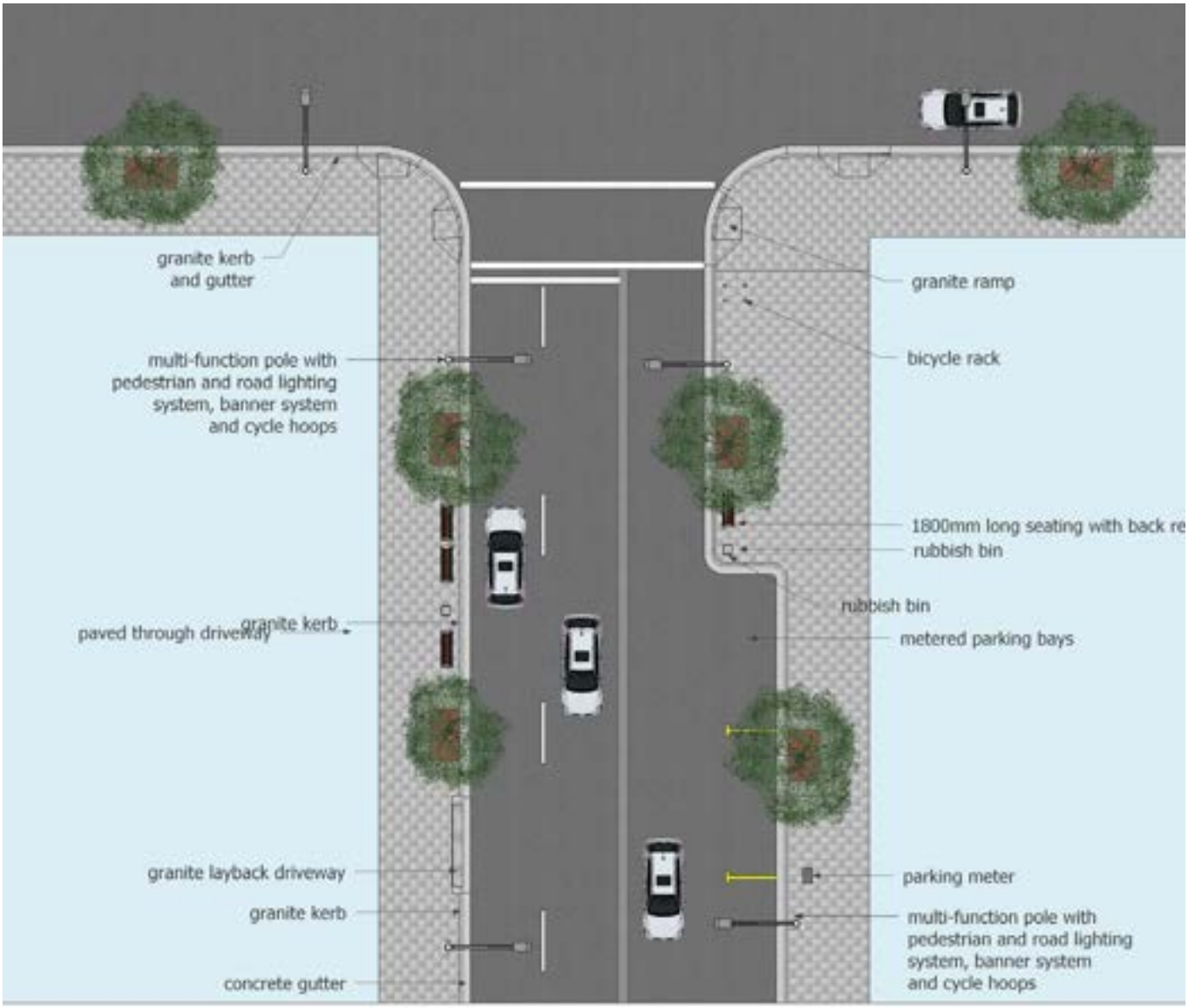
Contents

04 North Sydney Centre

4.2 Main street - perspective view

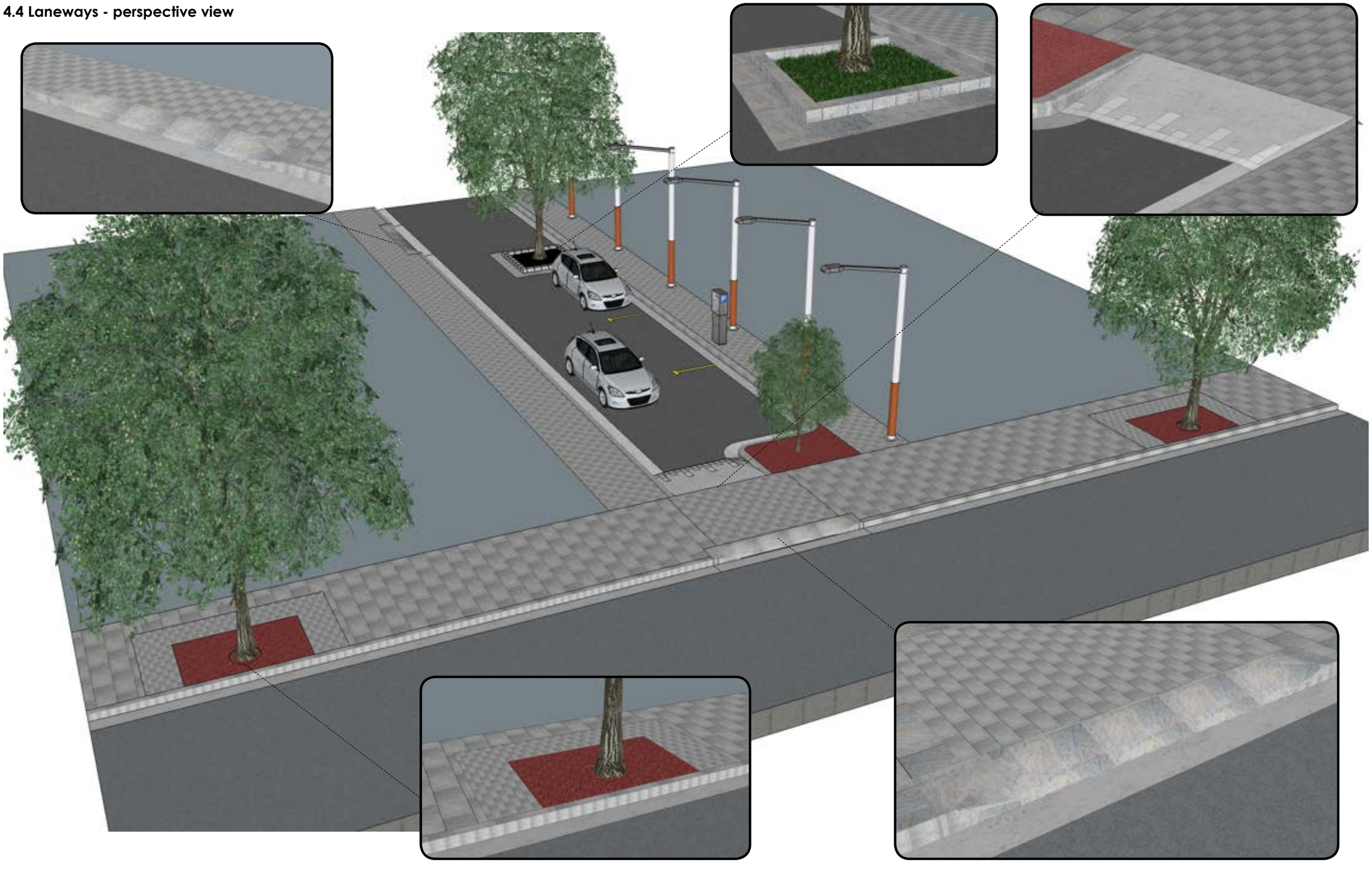


4.3 Main street - plan and section view

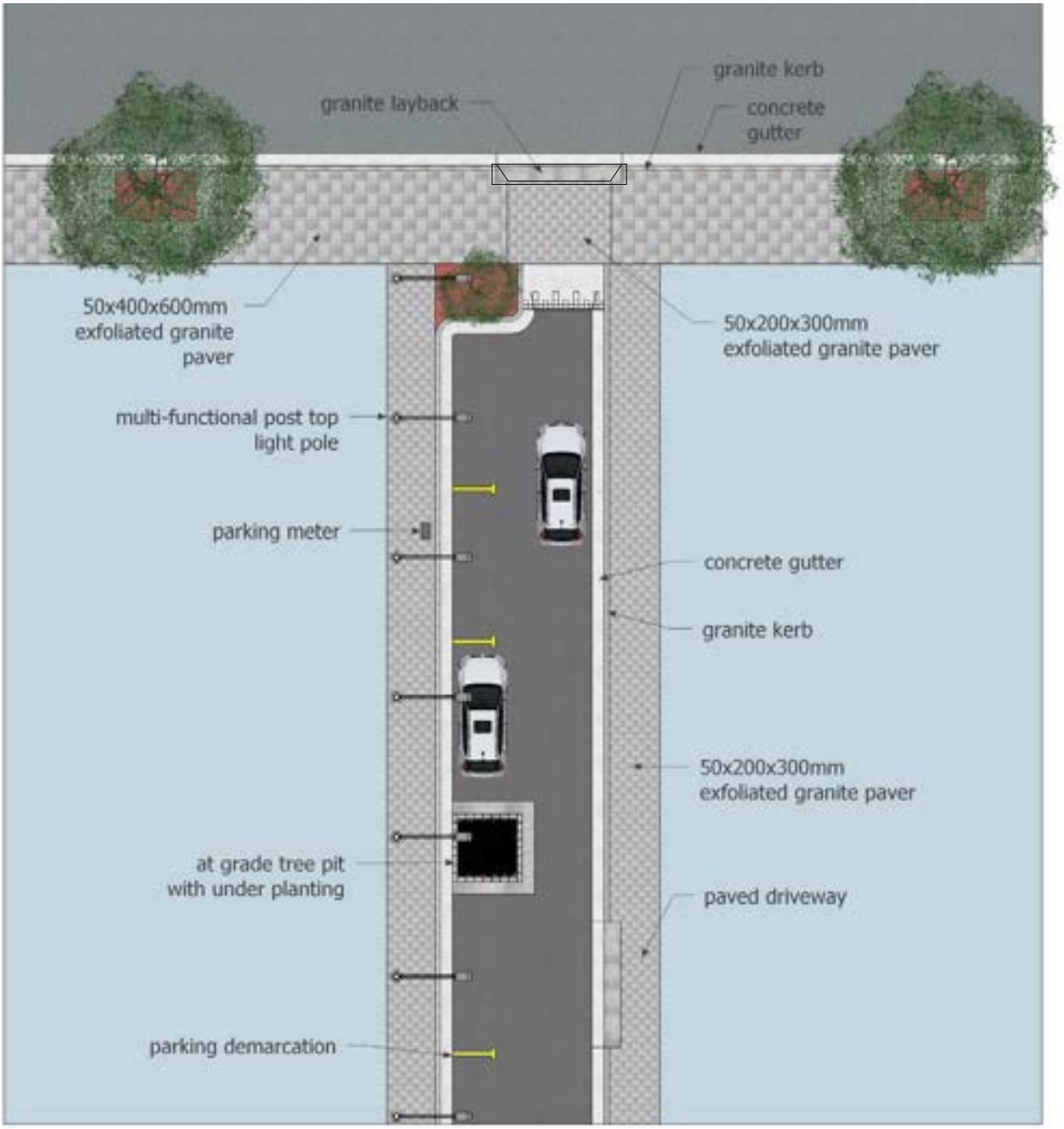


04 North Sydney Centre

4.4 Laneways - perspective view

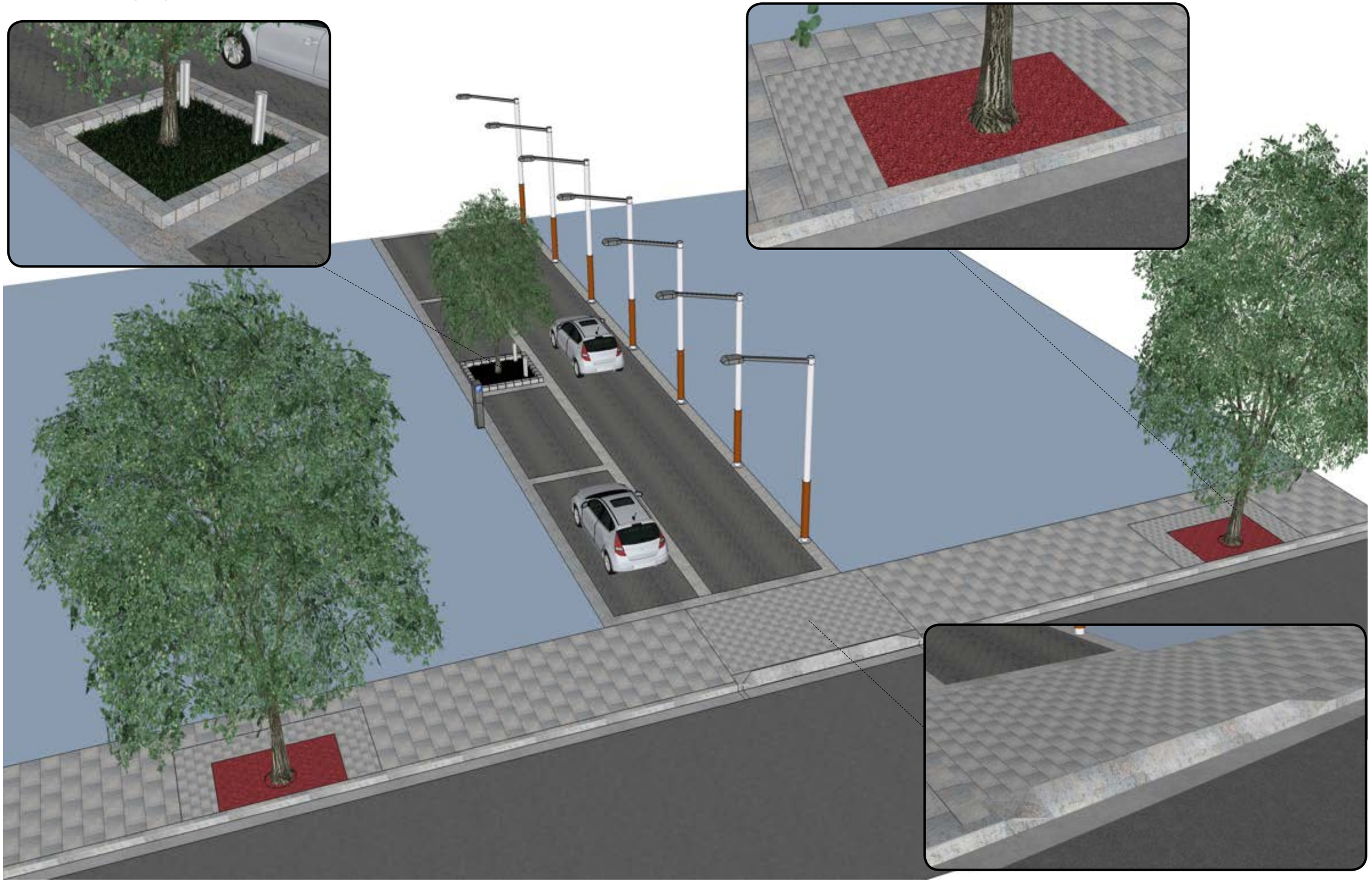


4.5 Laneways - plan and section view



04 North Sydney Centre

4.6 Shared zone - perspective view

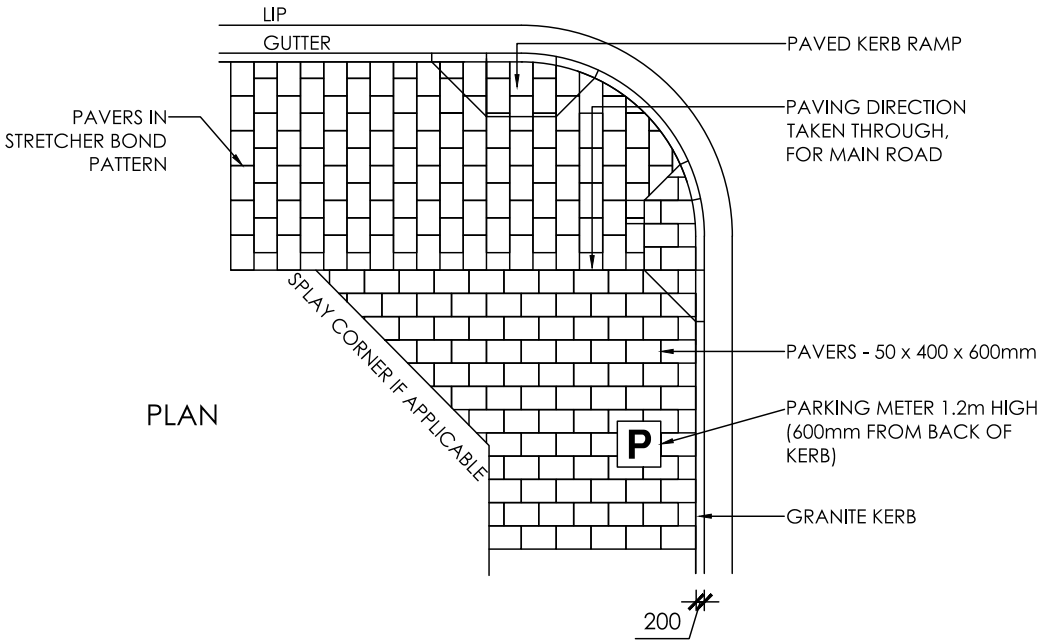


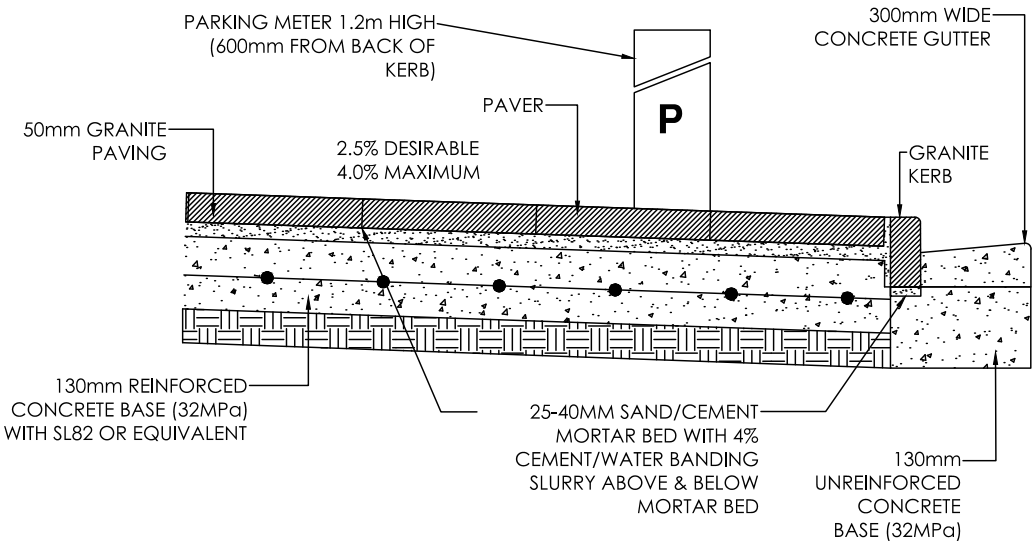
4.7 Shared zone - plan and section view

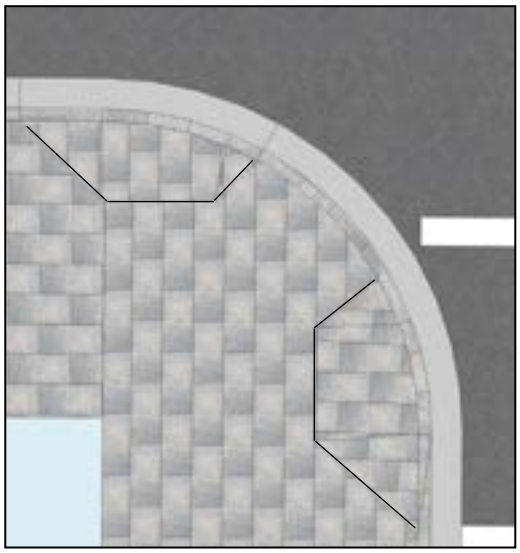
4.8 Indicative Materials and Furniture

Main Street

Typical footpath paving pattern plan and cross-section

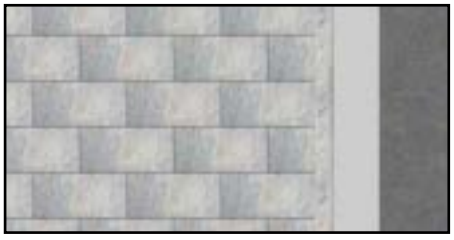






Kerb ramps align with boundary line

"Bruce" Rock (Austral Juperana) granite



"Bruce" Rock (Austral Juperana) granite

Notes

1. 50 x 400 x 600mm granite paving with an exfoliated finish to provide a hard wearing and serviceable finish.

2. Mid coloured paving with a fleck of colour for warmth.

3. Natural variation in granite assists in concealing marks.

4. Butt jointed, stretcher bond paving pattern with no header.

5. Rigid base - reinforced concrete slab.

6. All existing service pits within the footpath shall be replaced with infill paver lids. Applicable paving shall be laid in the pit lid on a mortar bed (paving thickness may require modification to suit depth of infill pit lid.

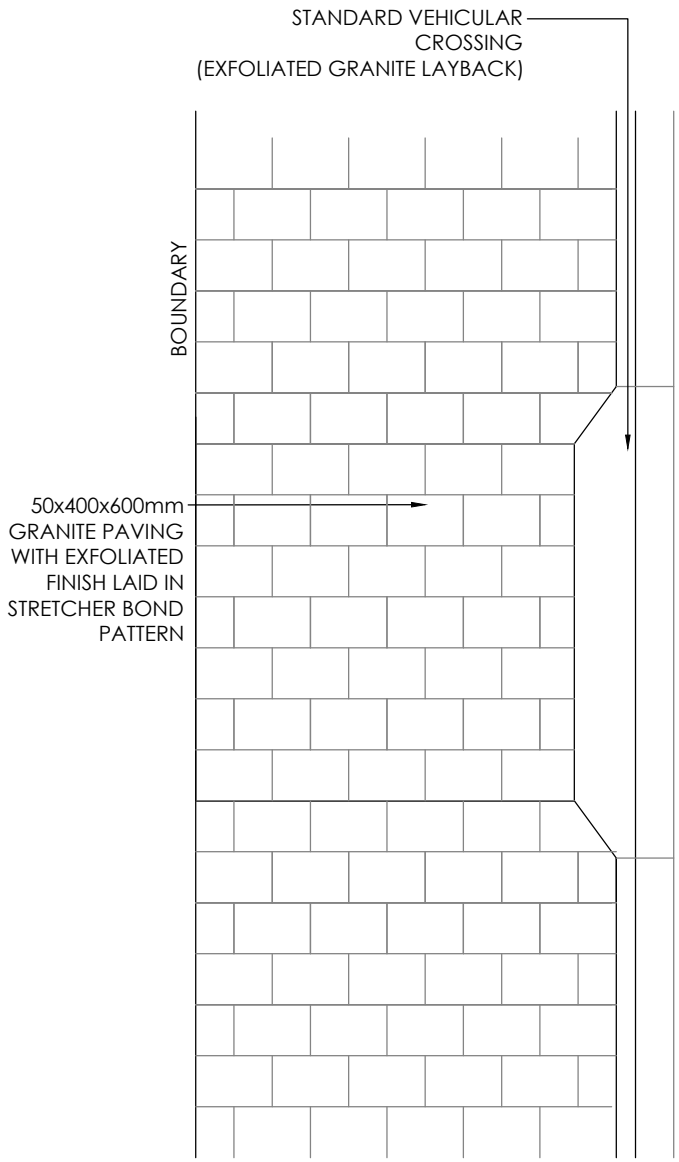
7. Where finished footpath surface levels do not match existing, contact Council's parking meter services division for further details about footing requirements and repositioning of meter stem.

8. All sign stems (50mm NB) shall be installed using V-Loc + wedge system (galvanised). Footpath pavement shall be neatly core drilled 200mm DIA.

9. All open joints shall be sealed with Bostik "Seal 'N' Flex 1" in accordance with the manufacturer's recommendations - this includes boundaries, back of kerb and lintels, utility pits, construction joints etc

Main Street

Typical driveway paving



Notes

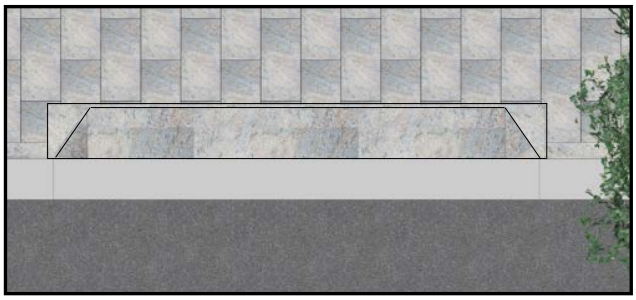
1. 50 x 400 x 600mm granite paving with exfoliated finish.

2. Rigid base - reinforced concrete slab.

3. Lanko 751 Priming Solution to be applied to concrete base slab.

4. 30-70mm Parex Streetscape Fine Bedding Concrete bed.

5. Lanko 702 Jointing Mortar.



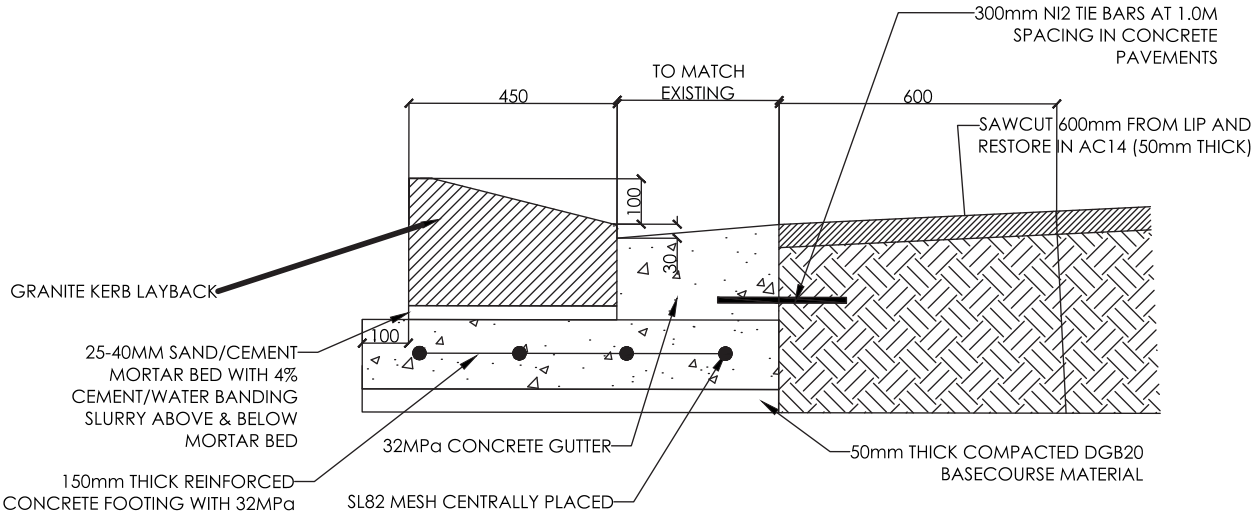
Typical driveway treatment

"Bruce" Rock (Austral Juperana) granite

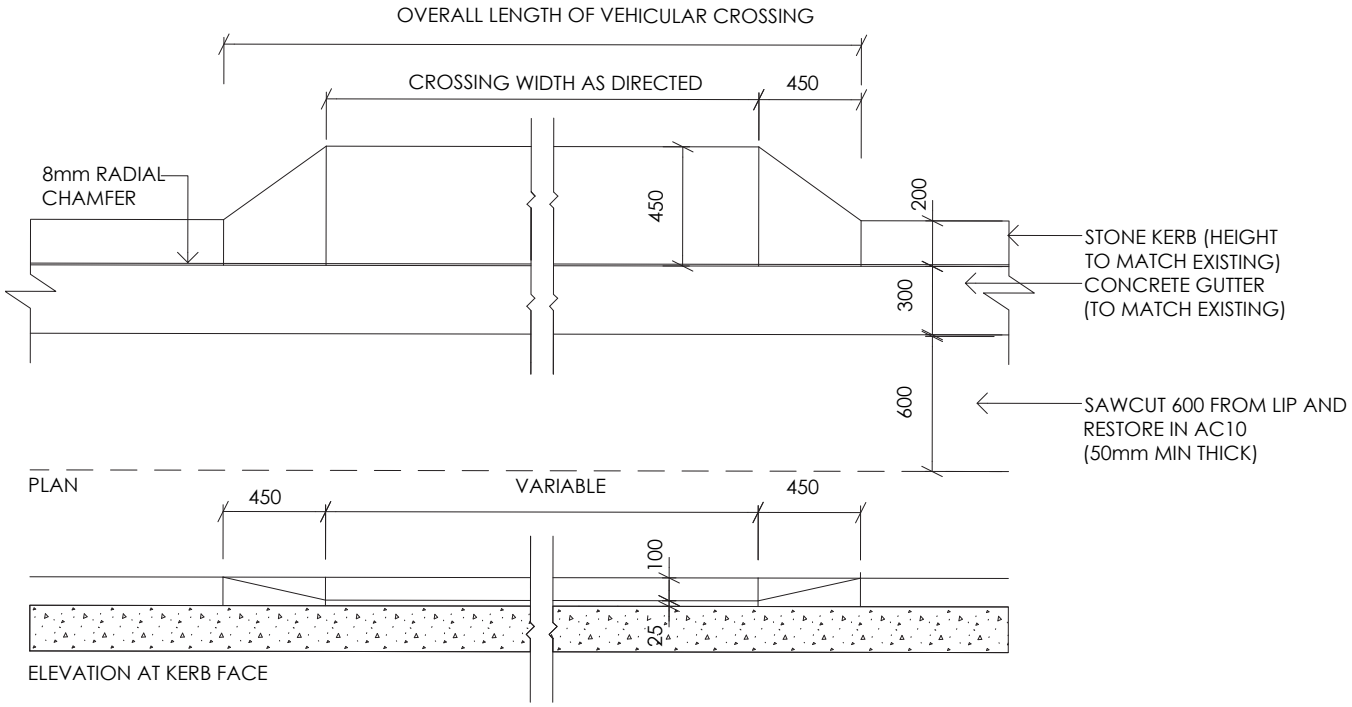
Granite layback on Berry Street

Main Street

Typical Vehicular Crossing

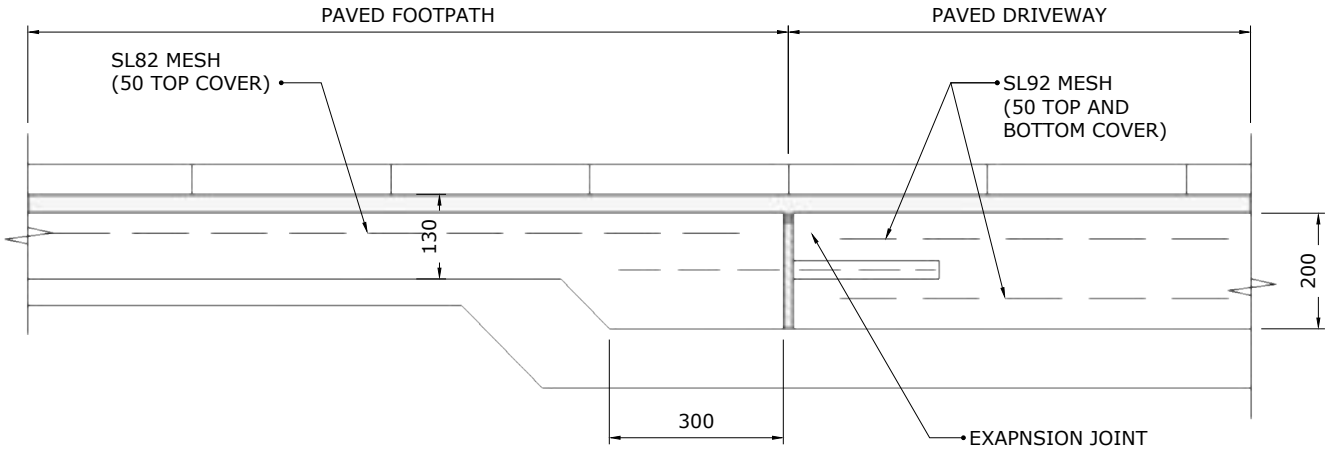


Typical Section

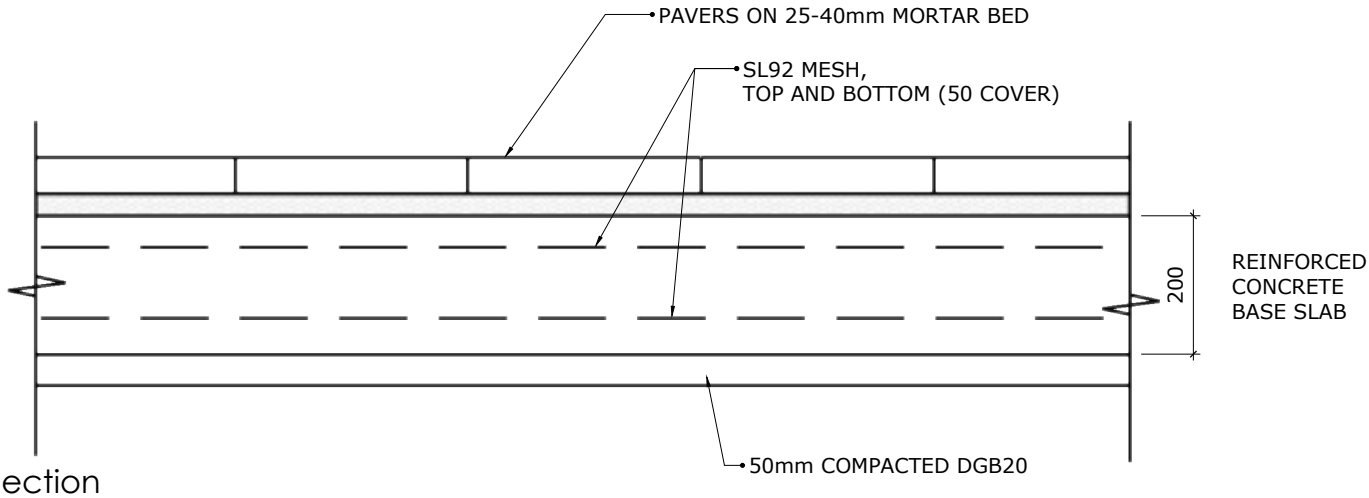


Main Street

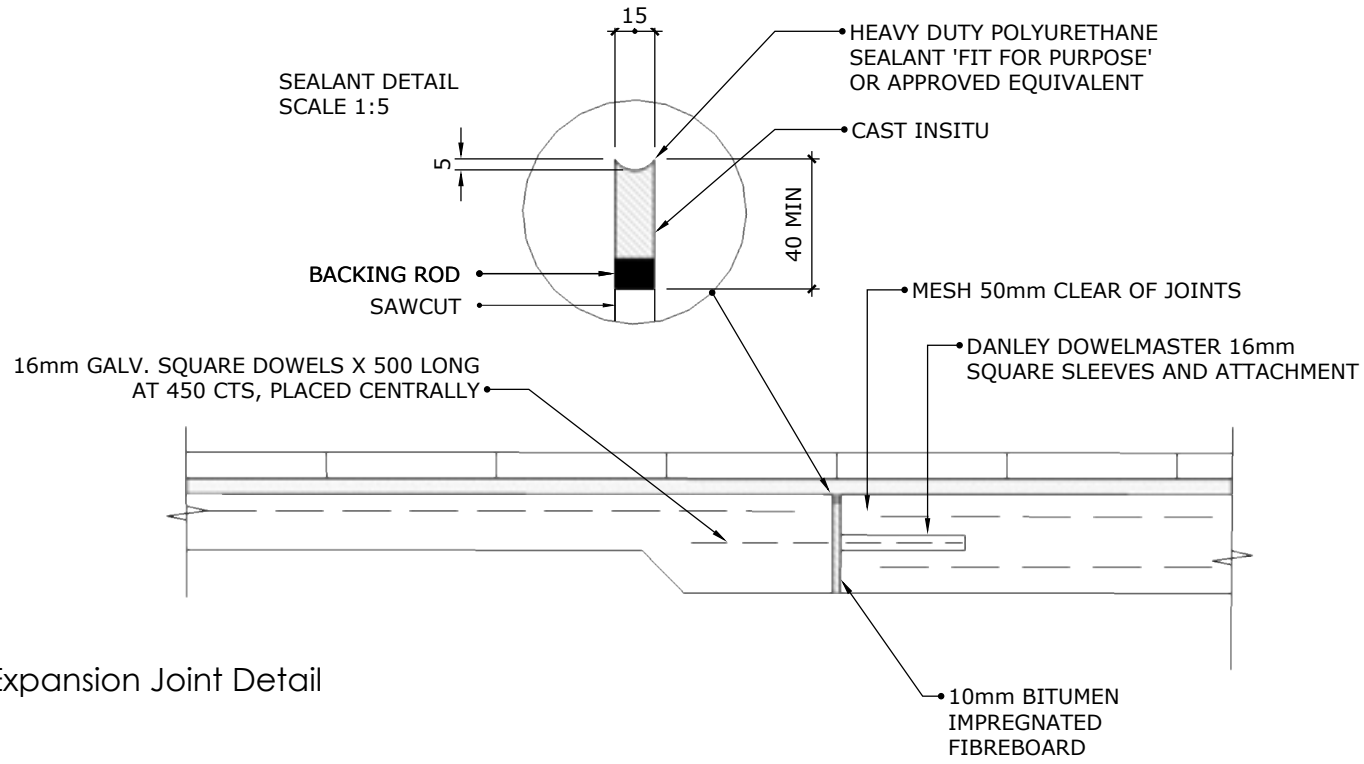
Typical Vehicular Crossing Slab



Elevation



Section

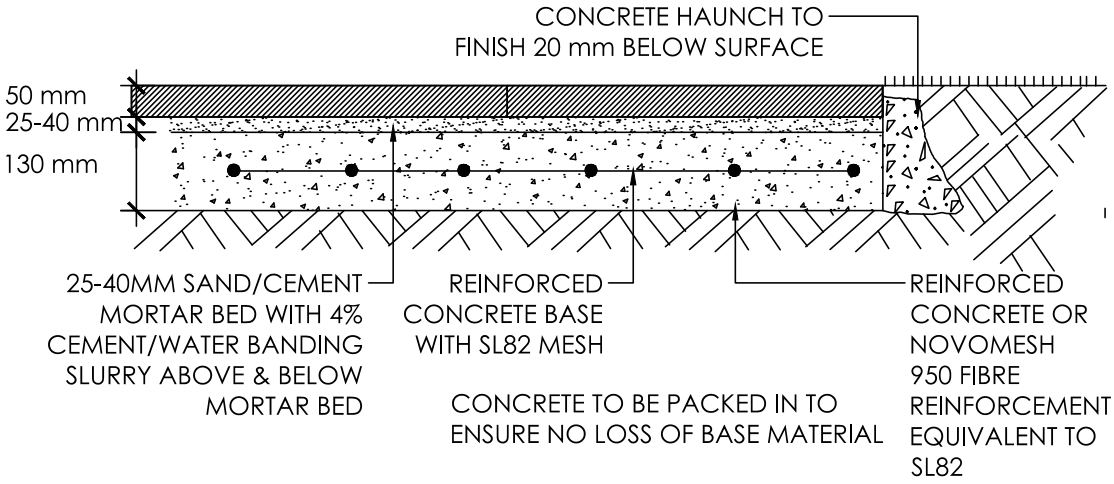


Expansion Joint Detail

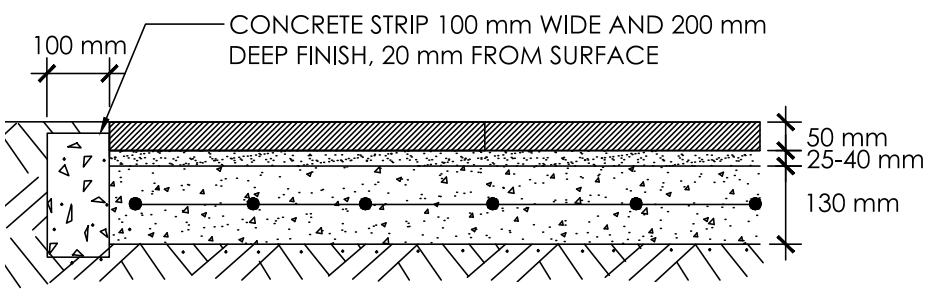
Main Street

Typical granite paving edge restraint - concrete haunch, concrete strip, brass edge

Concrete Haunch



Concrete Strip



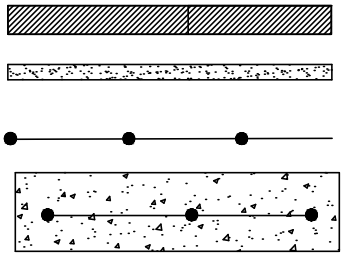
Notes

1. 50 x 400 x 600mm granite paving.

2. 25-40mm mortar bed.

3. Rigid base - 130mm concrete slab (F'c = 32 MPa) reinforced with SL82 with 65mm top cover; Novomesh 950 dosed at rate of 5.75kg/m3 or approved equivalent product.

LEGEND

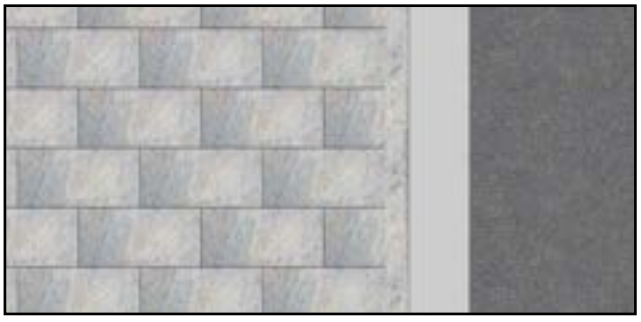


50 x 400 x 600 mm GRANITE PAVERS

25-40MM SAND/CEMENT MORTAR BED WITH 4% CEMENT / WATER BANDING SLURRY ABOVE & BELOW MORTAR BED

STEEL MESH REINFORCEMENT

130 mm THICKNESS OF CONCRETE SLAB

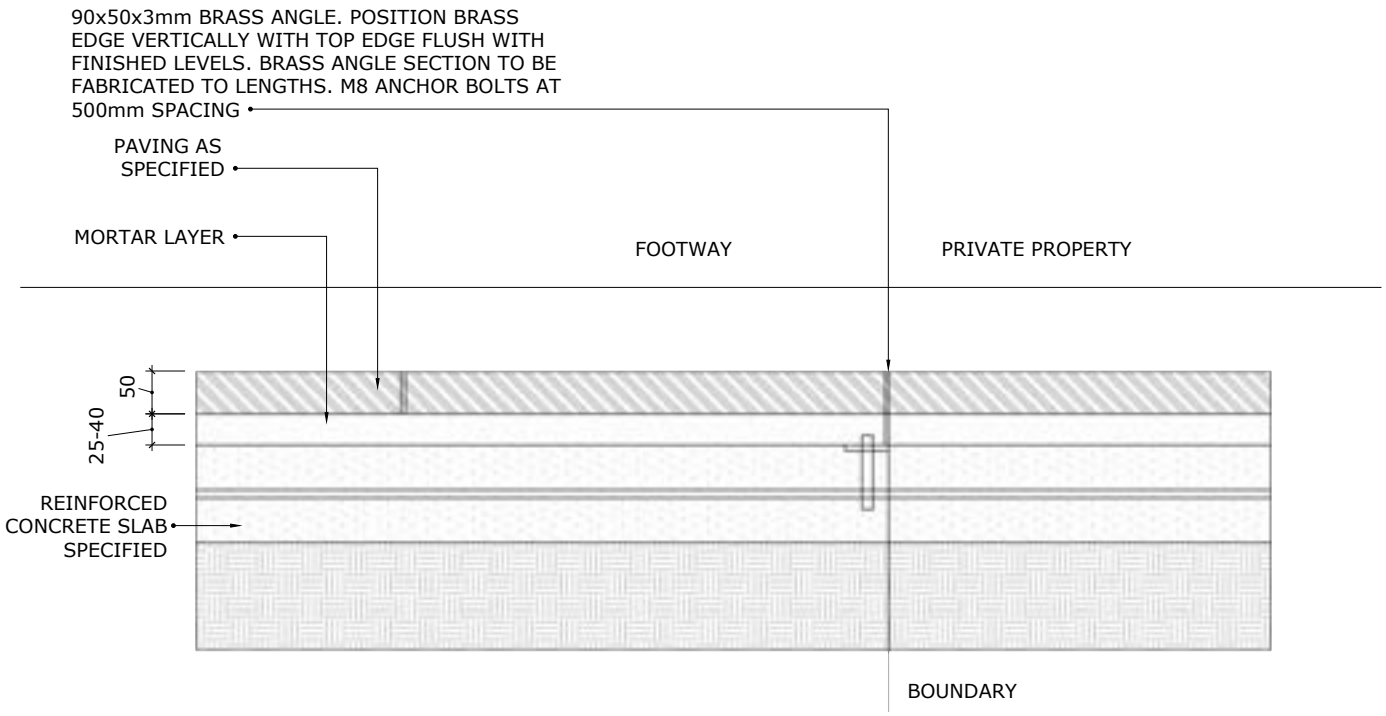


"Bruce" Rock (Austral Juperana) granite in stretcherbond pattern

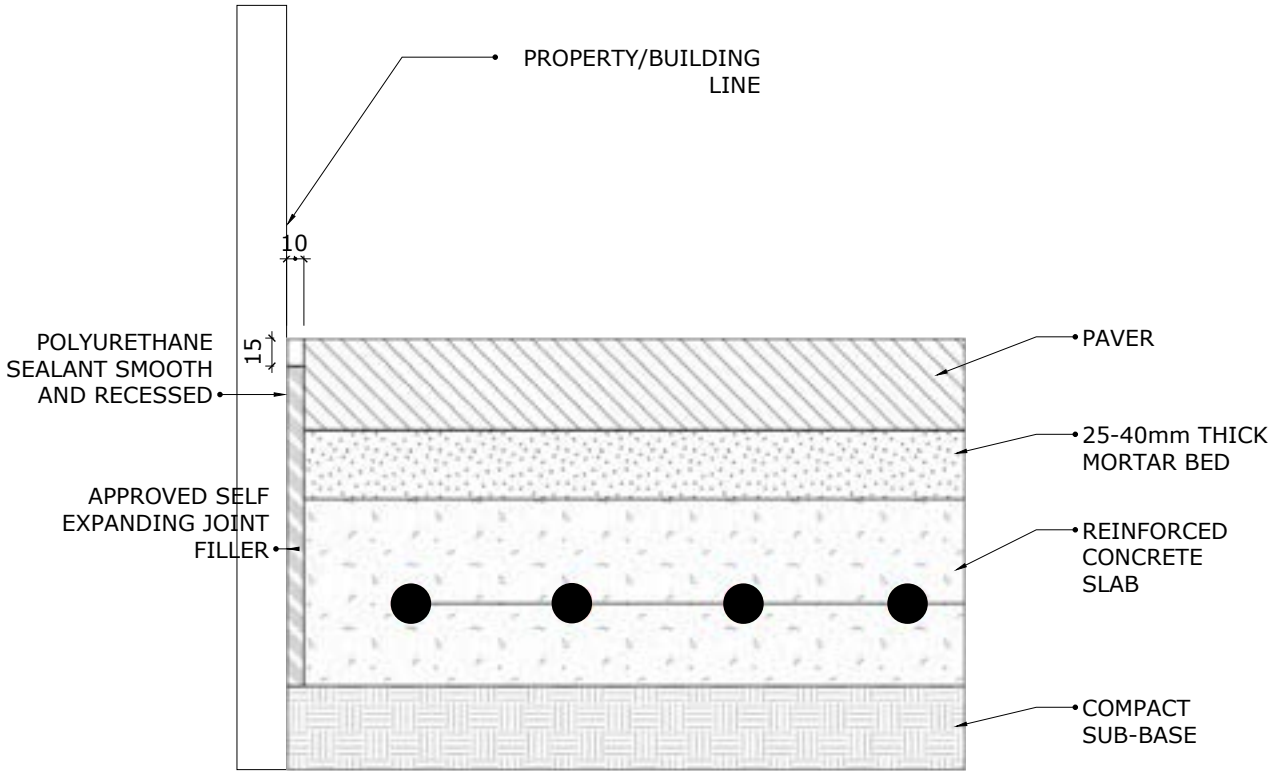
"Bruce" Rock (Austral Juperana) granite

Main Street

Brass Edge

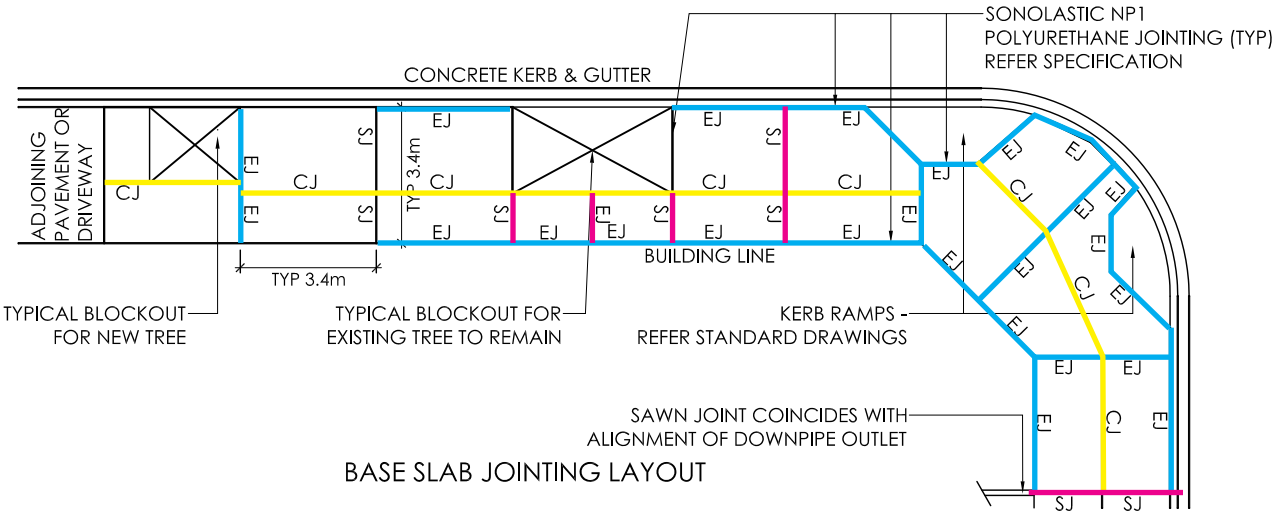


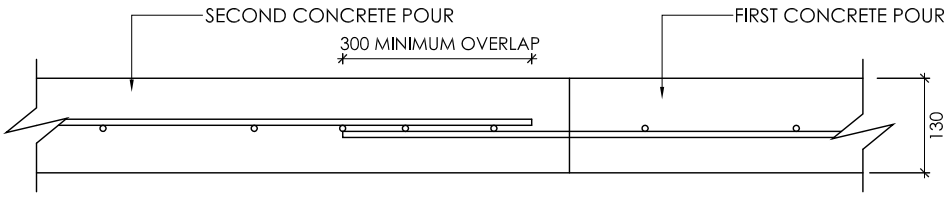
Typical Paving Junction with Building Edge



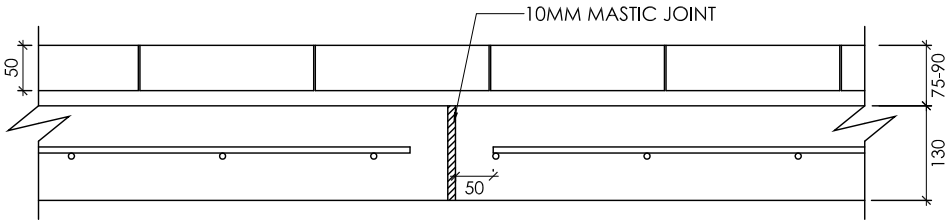
Main Street

Typical base slab joint details

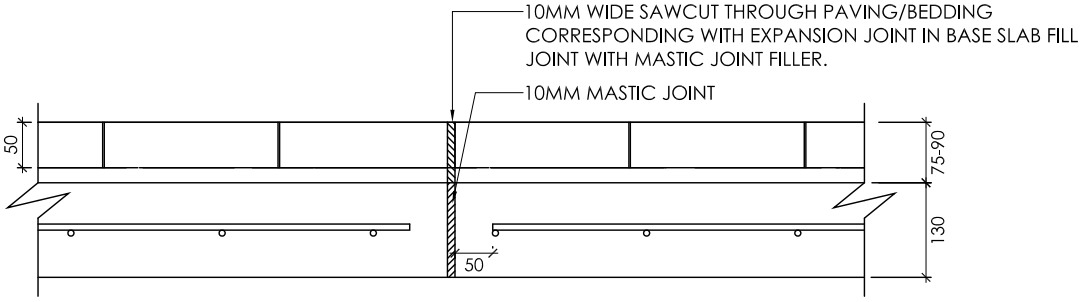




CONSTRUCTION JOINT DETAIL (CJ)



SAWN JOINT DETAIL - GRANITE PAVEMENT (SJ)



EXPANSION JOINT DETAIL - GRANITE PAVEMENT (EJ)

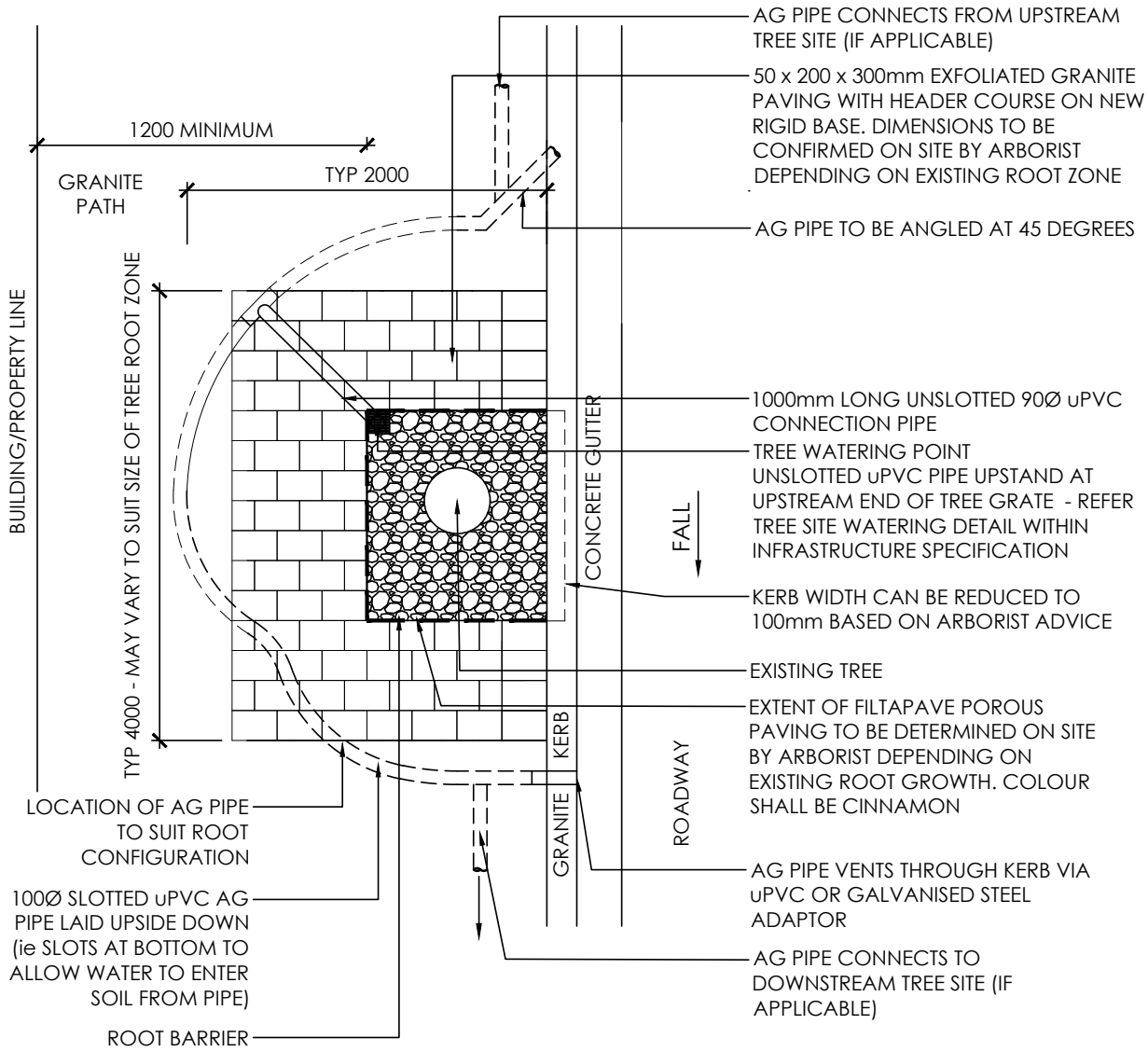
Notes

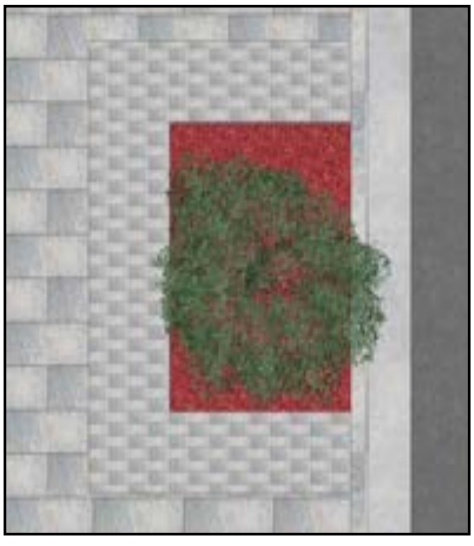
1. Base slab shall be 130mm concrete slab (F'c = 32 MPa) reinforced with SL82 with 65mm top cover; Novomesh 950 dosed at rate of 5.75kg/m3 or approved equivalent product.

2. The maximum aspect ratio of slab is length:width 2:1 with a maximum dimension of 4m in any direction.

Main Street

Typical existing CBD tree site porous rubber surround





Existing tree pit detail

Notes

1. Existing tree site with porous rubber surround.

2. Colour of FiltaPave surround is cinnamon.

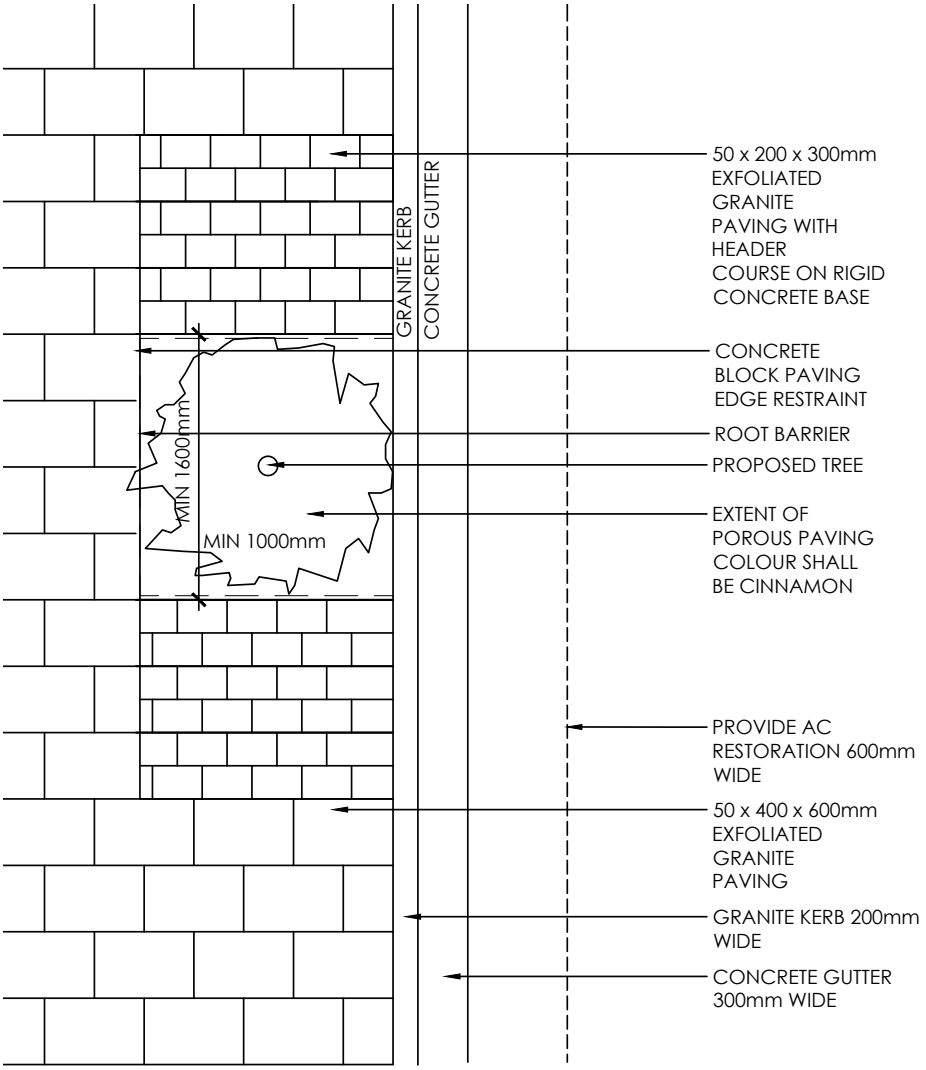
3. 50 x 200 x 300mm granite paving surround in an exfoliated finish.

4. Existing base to be reconstructed in concrete slab (130mm depth).

5. Butt jointed, stretcher bond paving pattern with header.

Main Street

Typical tree site formation for new tree



Notes

1. Tree site formed in paving pattern with a flexible base.

2. Concrete block paving edge restraint. Refer 'Typical granite paving edge restraint detail'.

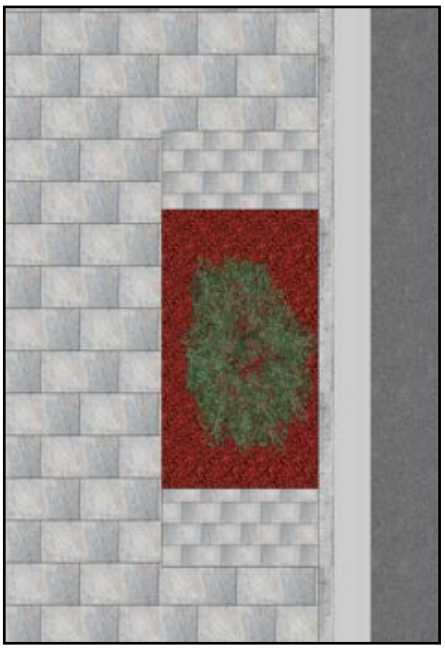
3. 50 x 200 x 300mm granite paving with an exfoliated finish to provide a hard wearing, serviceable finish. Smaller unit to extend for six courses on either side of tree pit.

4. Butt jointed, stretcher bond paving pattern with header to both sides of tree pit.

5. Tree pit min 1m x 1.6m with FiltaPave porous rubber surfacing. Colour shall be cinnamon, thickness shall be 45mm.

6. Root barrier - refer to Section 18 of Council's Infrastructure Specification'.

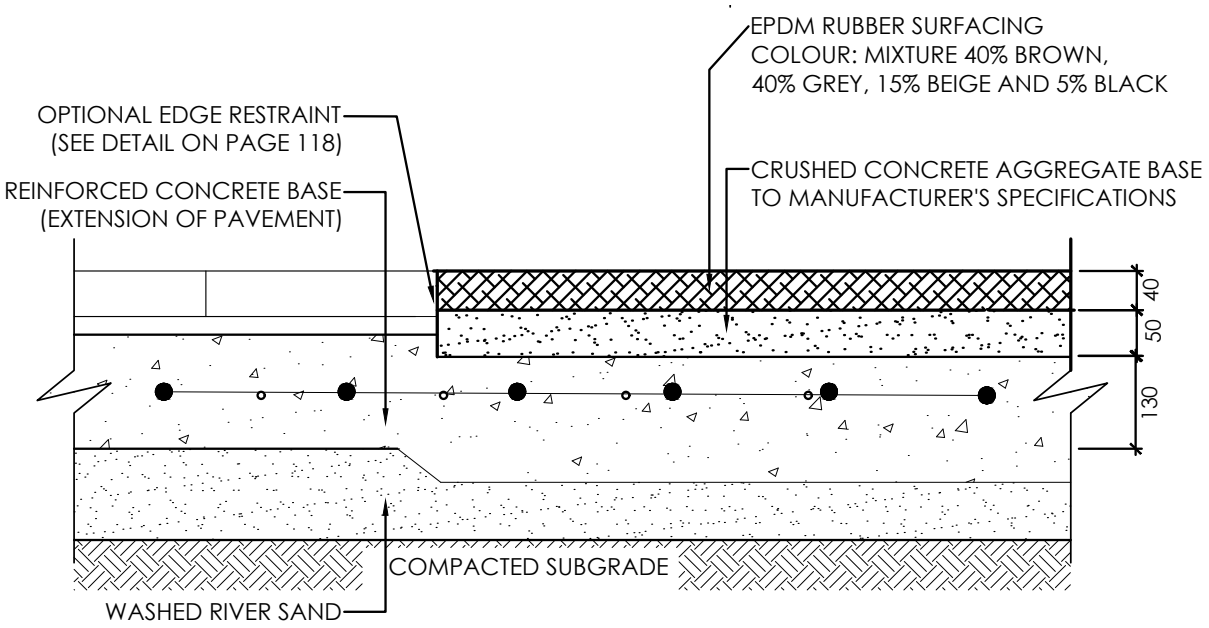
Porous rubber surfacing to tree pit



Tree site paving pattern (New tree)

Main Street

Typical rubber paver at “hotel” loading zones



RUBBER PAVER DETAIL

Notes

1. EPDM rubber surfacing.
Colour: 40% brown, 40% grey, 15% beige and 5% black

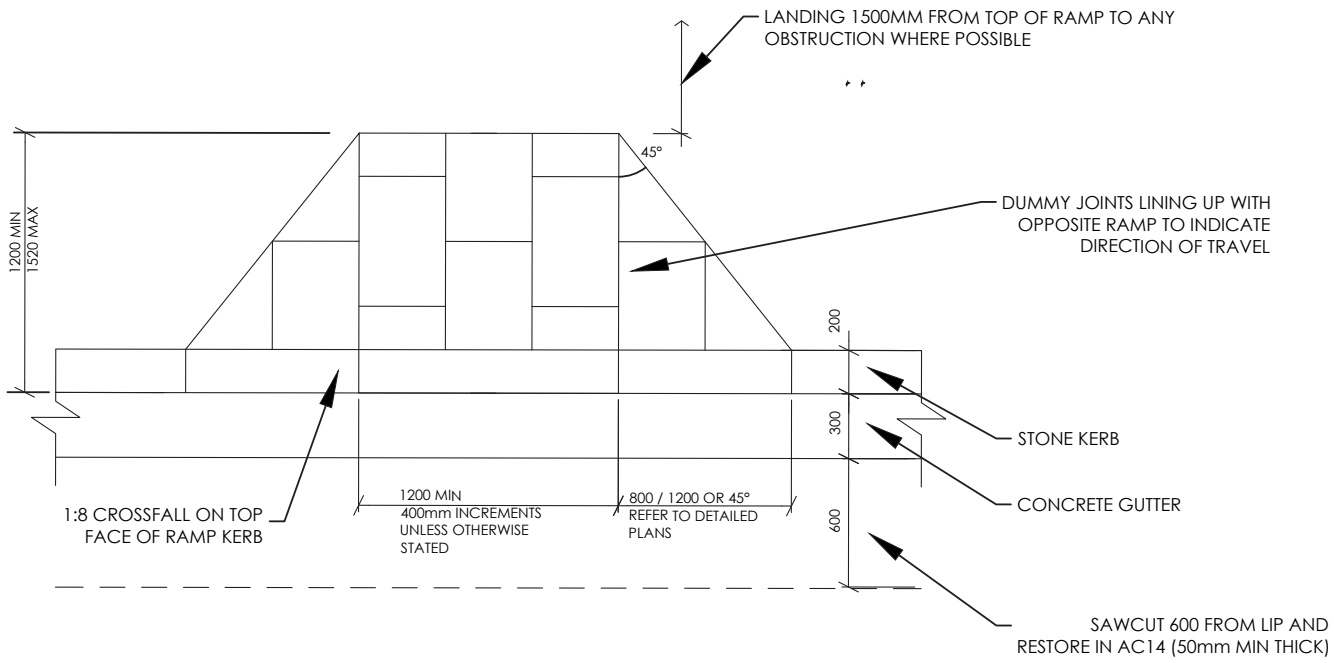
2. Base to be 50mm crushed concrete aggregate.

3. Rigid base - Reinforced concrete slab.

Recycled rubber surfacing

Main Street

Kerb Ramp



Typical Plan

Kerb Ramp

Notes

1. All kerb ramps shall be paved in granite. Smaller units shall be used when the standard unit 50 x 400 x 600mm cannot achieve the grade required.

2. Rigid base - reinforced concrete slab.

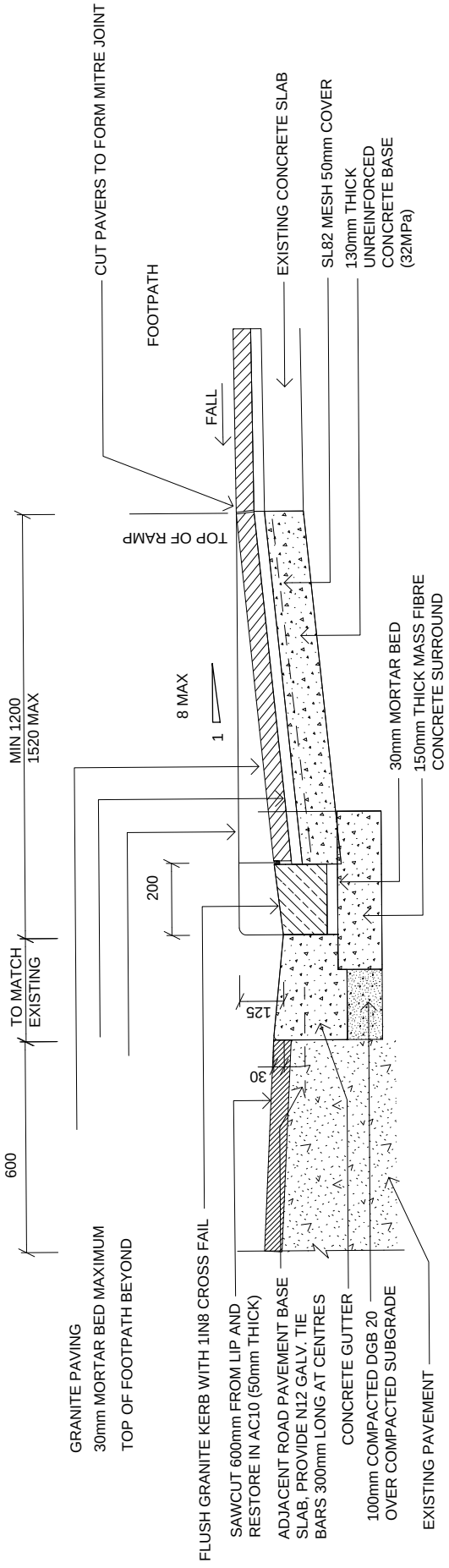
3. For ramps greater than 1520mm, maximum grade is 1 in 14.

4. Maximum grade from top to bottom of kerb ramp is 1 in 8.

5. Typically 1200mm wide kerb ramps in North Sydney Centre.

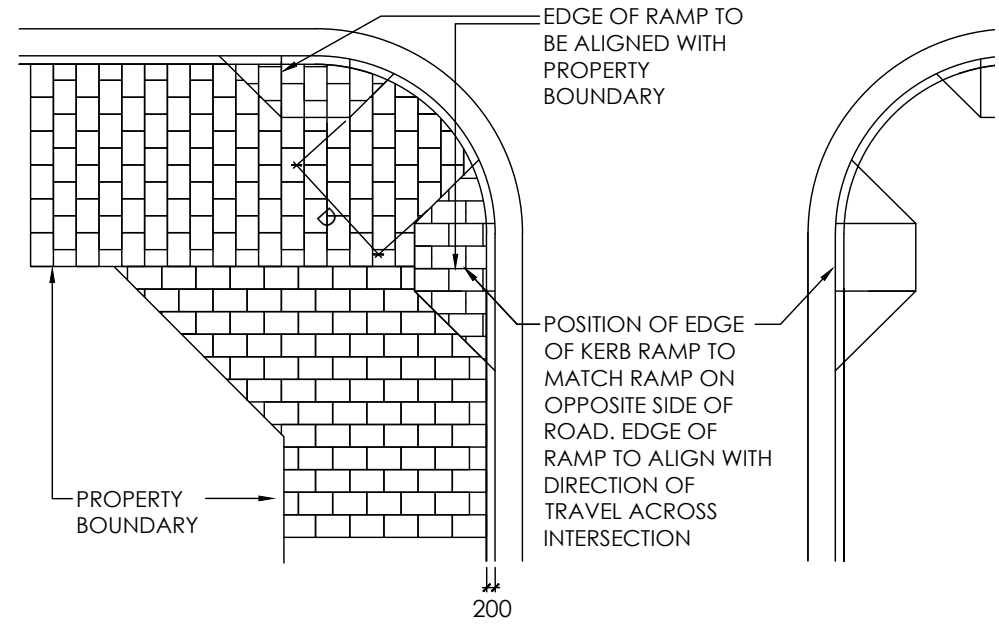
Main Street

Typical Section- Kerb ramp

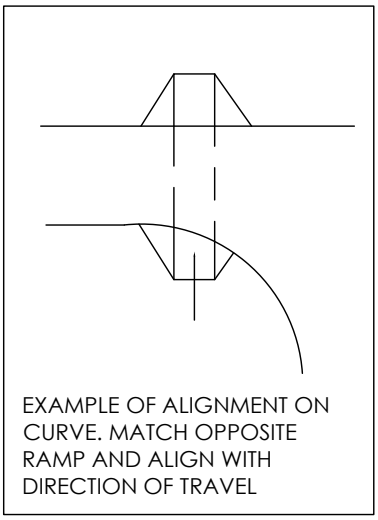


Main Street

Typical kerb ramp configuration



PLAN



EXAMPLE OF ALIGNMENT ON CURVE. MATCH OPPOSITE RAMP AND ALIGN WITH DIRECTION OF TRAVEL

Notes

1. This drawing is to be read in conjunction with 'Typical Kerb Ramp' detail.

2. Granite unit paving to run down kerb ramp. 50 x 400 x 600mm units.

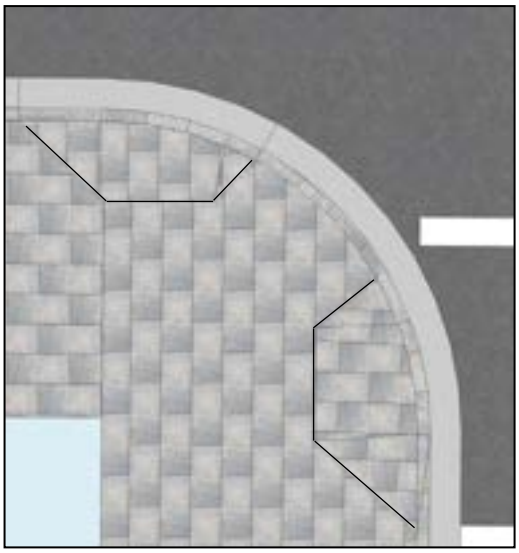
3. Kerb ramps align with property boundaries.

4. 1330mm landings at the top of any kerb ramp where possible.

5. 1:10 grade from top to bottom of kerb ramp. 1:8 maximum.

6. Kerb ramp to finish flush with adjacent paving.

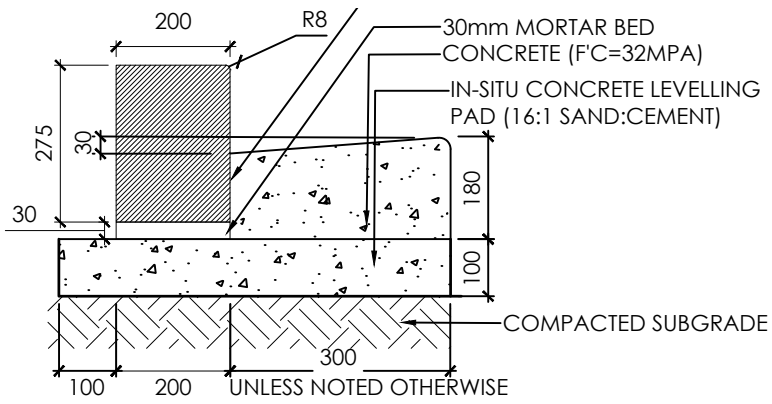
7. Kerb ramps to comply with AS1428.1.



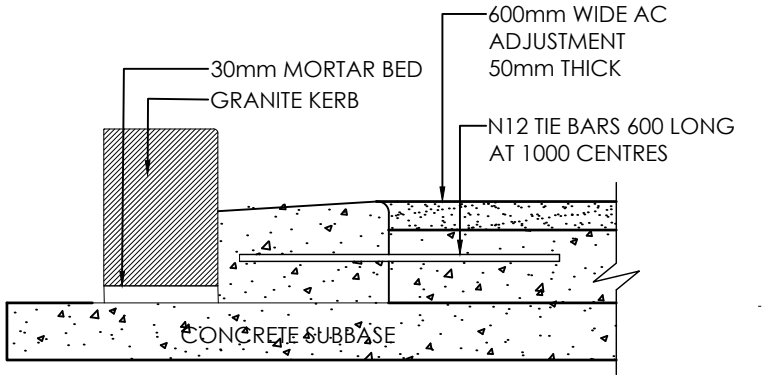
Typical plan

Main Street

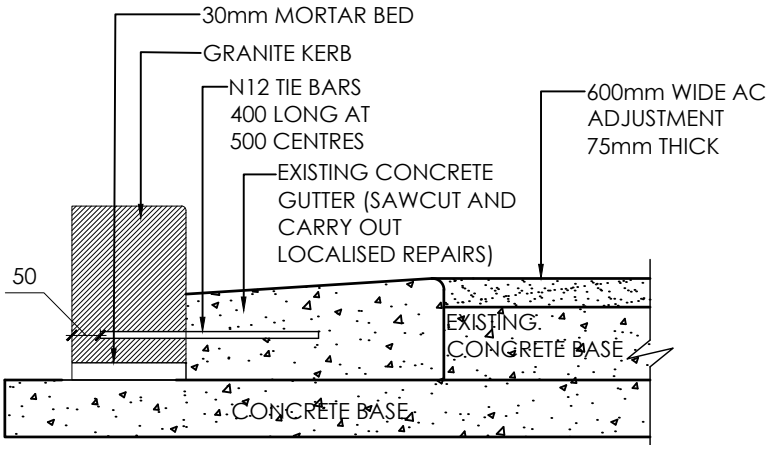
Typical granite kerb and concrete gutter detail (on State & Regional Roads only)

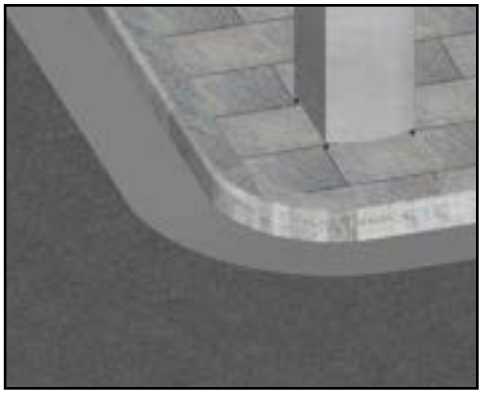


CBD BARRIER KERB & GUTTER



CBD BARRIER KERB - ROADS WITH CONCRETE BASE





Kerb treatment

Existing Kerb treatment

Notes

1. Subgrade: compacted subgrade as shown.

2. Basecourse: Concrete base as shown.

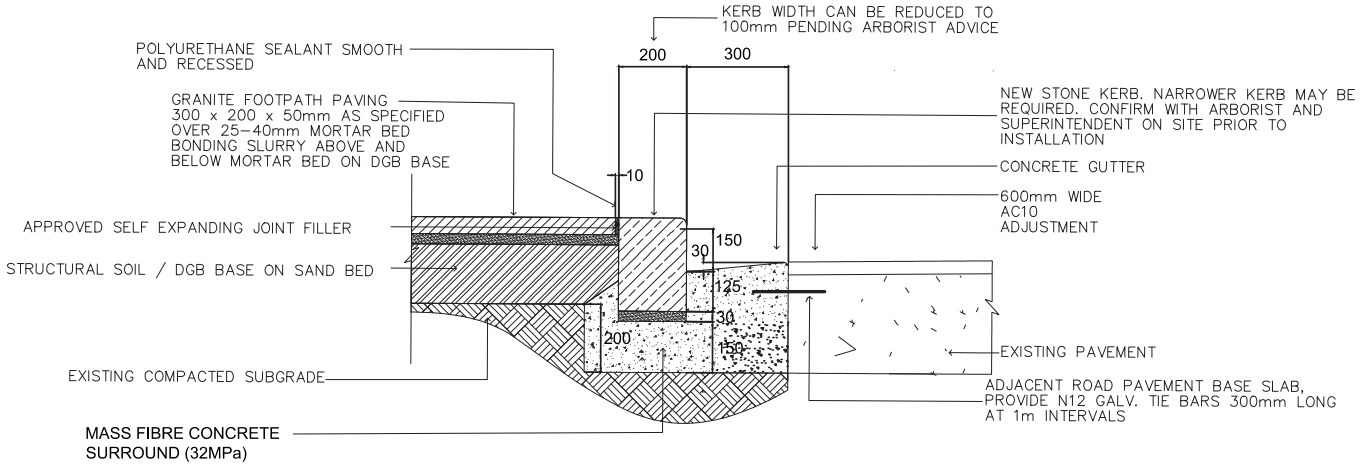
3. AC10mm adjustment:
Provide 600mm wide AC10 correction course layer 50mm thick as shown.

4. Granite kerb:
"Bruce" Rock granite (Austral Coffee). Top face only to have exfoliated finish. Front face is to have sawn finish.

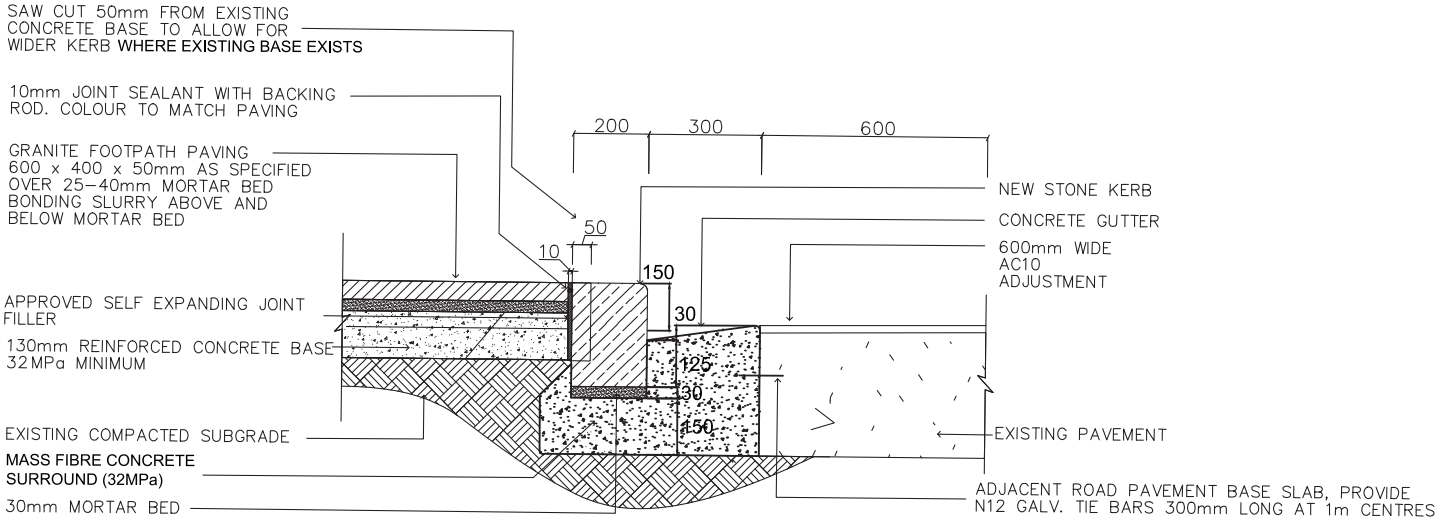
Main Street

Typical granite kerb and concrete gutter details (on non State & Regional roads)

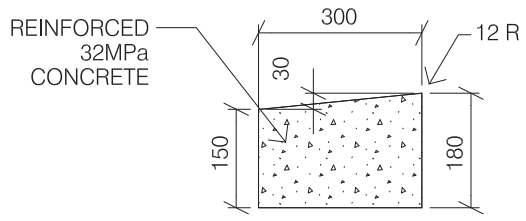
Granite Stone Kerb and Concrete Gutter adjacent to Tree Pit



Typical Granite Stone Kerb and Concrete Gutter Adjacent to Granite Footpath



Concrete Gutter



Notes

1. Subgrade: compacted subgrade as shown.
2. Basecourse: Concrete base as shown.
3. AC10mm adjustment:

Provide 600mm wide AC10 correction course layer 50mm thick as shown.

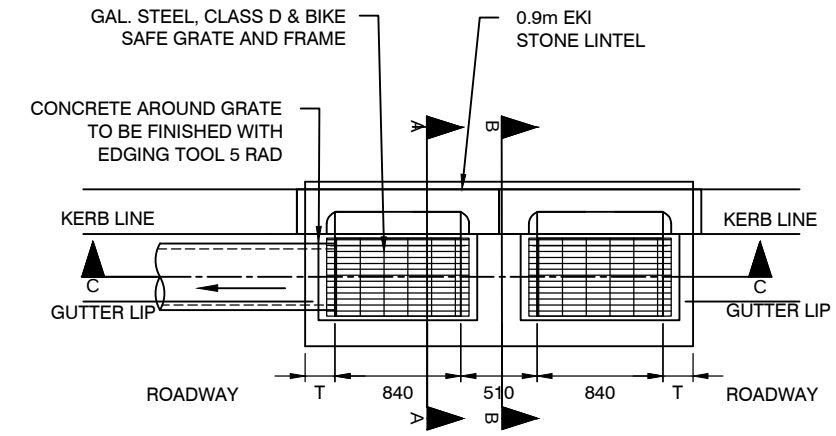
4. Granite kerb:

"Bruce" Rock granite (Austral Coffee). Top face only to have exfoliated finish. Front face is to have sawn finish.

Main Street

Double inlet pit with granite lintel

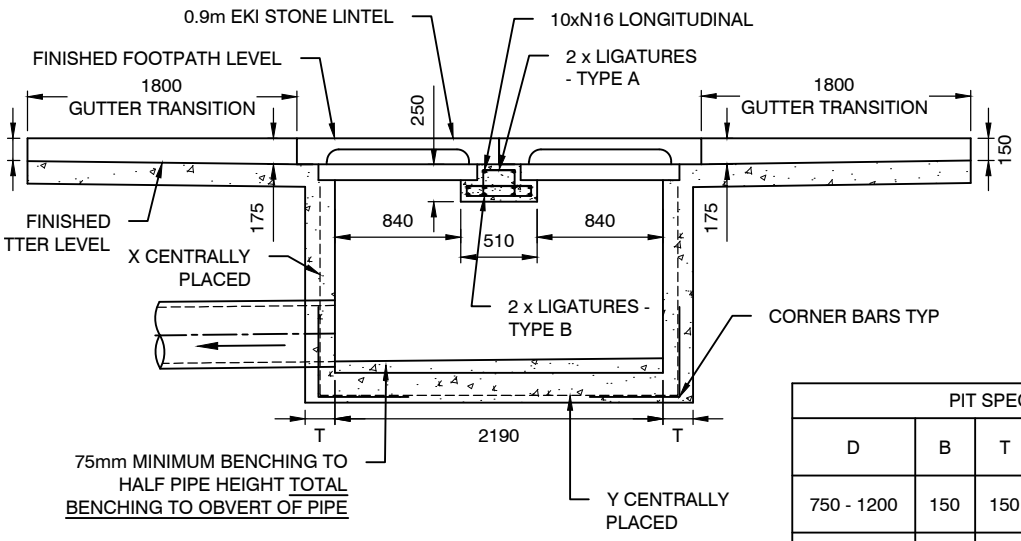
PLAN



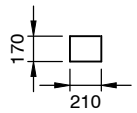
NOTES:

1. ALL LIGATURES TO BE R6 WITH DIMENSIONS AS SPECIFIED.
2. ALL REINFORCEMENT TO COMPLY WITH AS1302, 1303 & 1304.
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS TO BE 32MPa.
4. 75mm MINIMUM BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OBVERT OF PIPE.
5. 100mmØ SUBSOIL DRAINAGE PIPE 3.0m LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES.
6. PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1.0m AT 300mm CENTRES.
7. PITS OVER 2.1m IN DEPTH TO BE DESIGNED BY STRUCTURAL ENGINEER.
8. GRATES SHALL BE BICYCLE SAFE AND HAVE MAXIMUM INLET CAPACITY. ALL GRATES MUST BE APPROVED BY THE CITY'S REPRESENTATIVE.
9. DRAINAGE PIPE TO BE MINIMUM 375Ø CLASS 4 REINFORCED CONCRETE PIPE

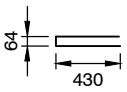
SECTION C-C



LIGATURES TYPE A

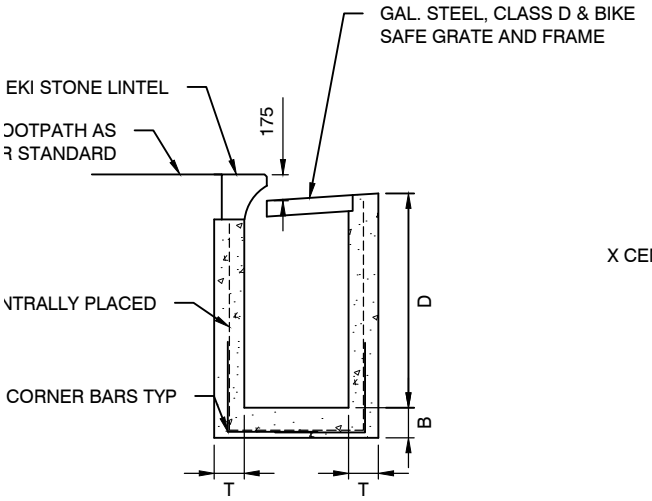


LIGATURES TYPE B

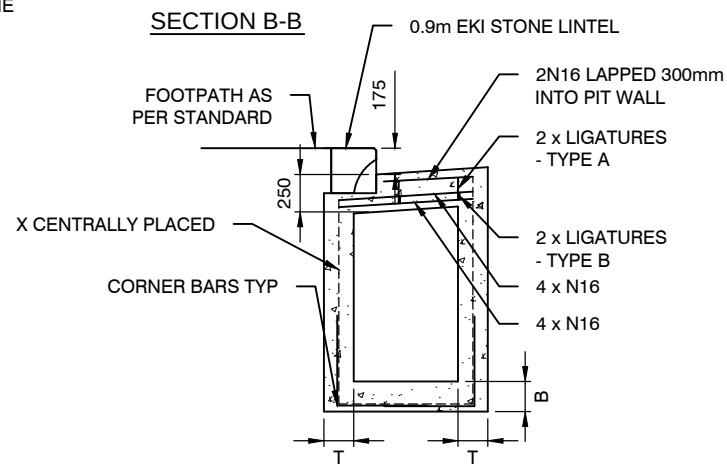


PIT SPECIFICATIONS					
D	B	T	X	Y	CORNER BARS
750 - 1200	150	150	SL82	SL81	N12-300 L 500
1200 - 2100	200	180	SL81	SL81	N12-200 L 600
> 2100	TO STRUCTURAL ENGINEERS SPECIFICATION				

SECTION A-A



SECTION B-B



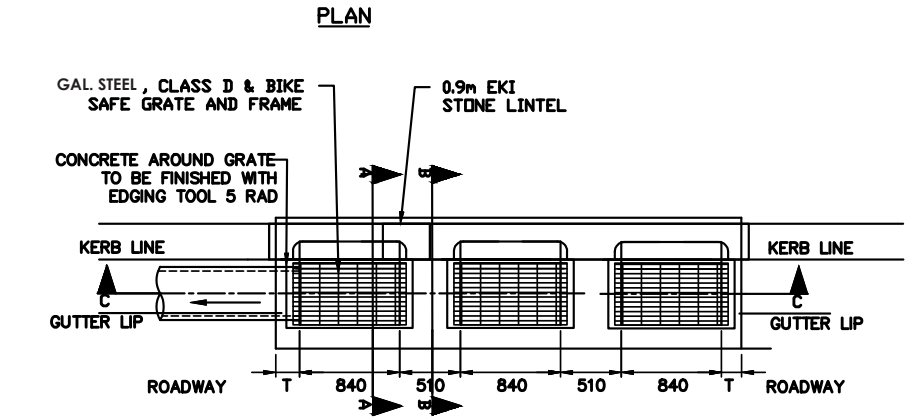
Single inlet pit with granite lintel

Typical Granite Stone Kerb and Concrete Gutter

Double inlet pit with granite lintel

Typical Granite Stone Kerb and Concrete Gutter

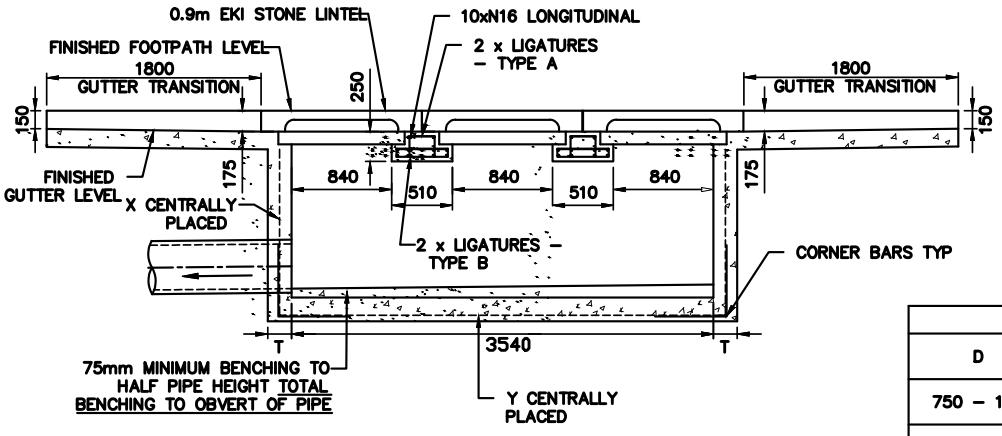
High flow inlet pit with granite lintel (3 or more grated inlet pits)



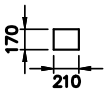
NOTES:

1. ALL LIGATURES TO BE R6 WITH DIMENSIONS AS SPECIFIED.
2. ALL REINFORCEMENT TO COMPLY WITH AS1302, 1303 & 1304
3. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS TO BE 32MPa.
4. 75mm MINIMUM BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OBVERT OF PIPE.
5. 100mmØ SUBSOIL DRAINAGE PIPE 3.0m LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES.
6. PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1.0m AT 300mm CENTRES.
7. PITS OVER 2.1m IN DEPTH TO BE DESIGNED BY STRUCTURAL ENGINEER.
8. GRATES SHALL BE BICYCLE SAFE AND HAVE MAXIMUM INLET CAPACITY. ALL GRATES MUST BE APPROVED BY THE CITY'S REPRESENTATIVE.
9. DRAINAGE PIPE TO BE MINIMUM 375Ø CLASS 4 REINFORCED CONCRETE PIPE

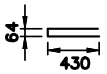
SECTION C-C



LIGATURES TYPE A

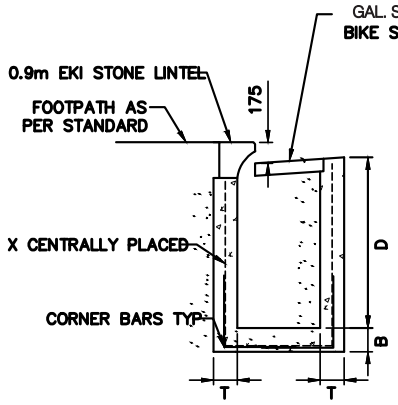


LIGATURES TYPE B

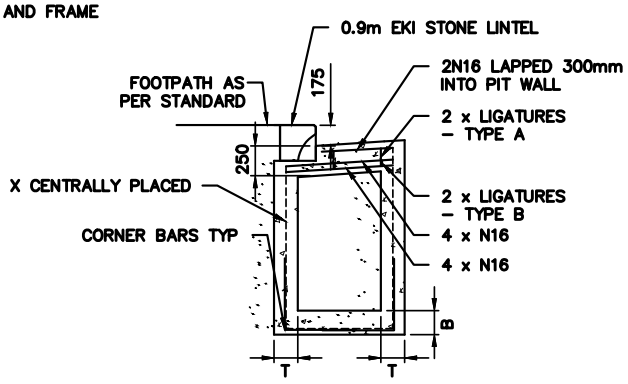


PIT SPECIFICATIONS					
D	B	T	X	Y	CORNER BARS
750 – 1200	150	150	SL82	SL81	N12–300 L 500
1200 – 2100	200	180	SL81	SL81	N12–200 L 600
> 2100	TO STRUCTURAL ENGINEERS SPECIFICATION				

SECTION A-A



SECTION B-B



SCALE 1:50

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED

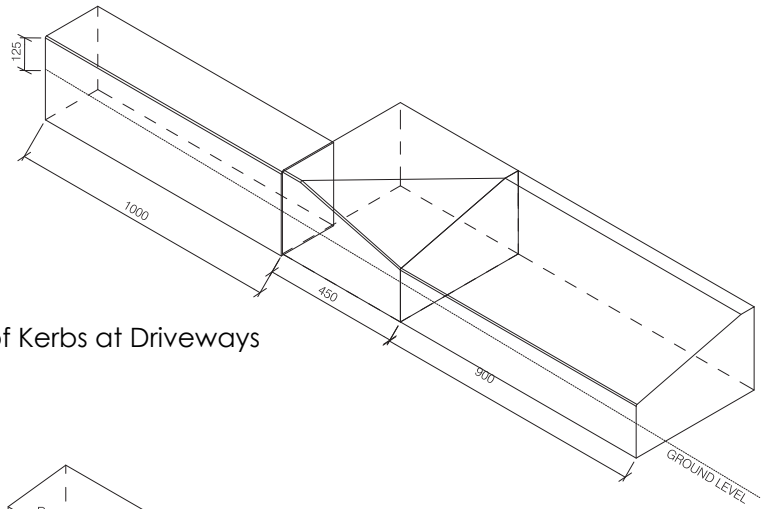
High flow inlet pit with granite lintel (3 or more grated inlet pits)

Typical Granite Stone Kerb and Concrete Gutter

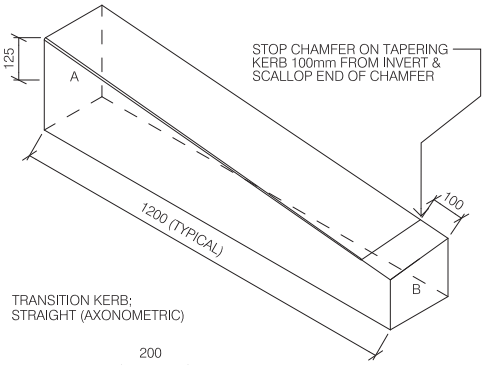
Typical Granite Stone Kerb and Concrete Gutter

Main Street

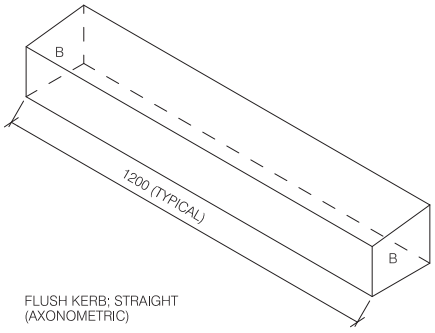
Stone Kerb, Layback Kerb and Layback Kerb Transition



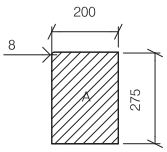
Sequence of Kerbs at Driveways



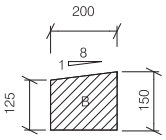
TRANSITION KERB; STRAIGHT (AXONOMETRIC)



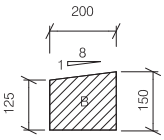
FLUSH KERB; STRAIGHT (AXONOMETRIC)



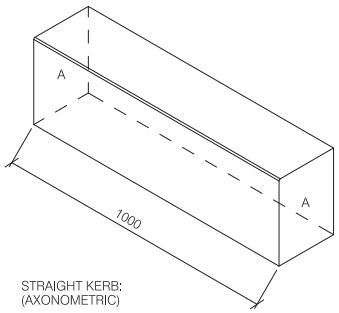
TRANSITION KERB; STRAIGHT (SECTION)



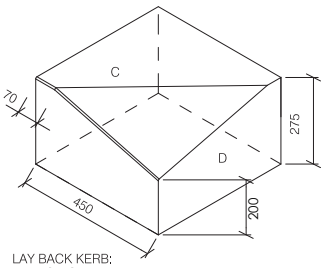
TRANSITION KERB; STRAIGHT (SECTION)



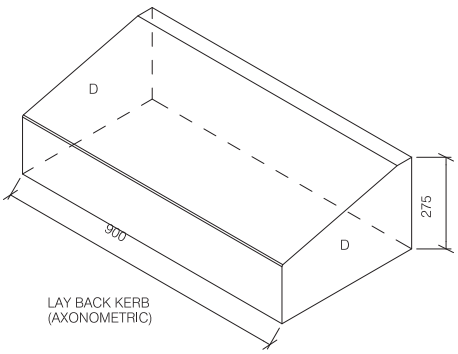
FLUSH KERB; STRAIGHT (SECTION)



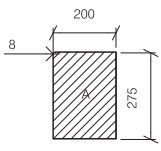
STRAIGHT KERB; (AXONOMETRIC)



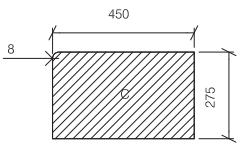
LAY BACK KERB; TRANSITION (AXONOMETRIC)



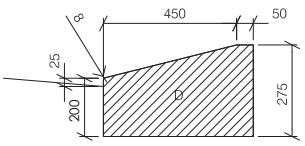
LAY BACK KERB (AXONOMETRIC)



STRAIGHT KERB: (SECTION)

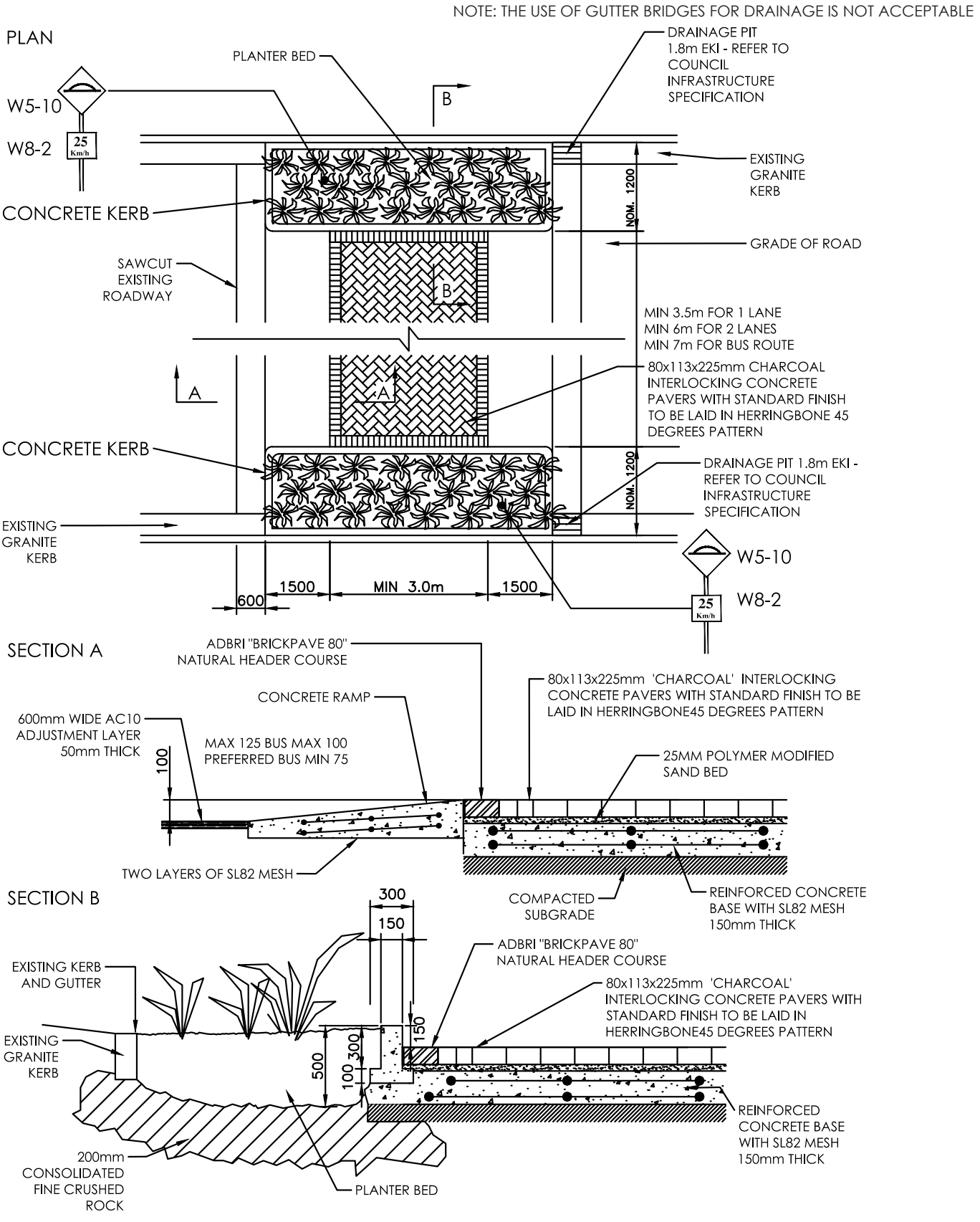


LAY BACK KERB:TRANSITION (SECTION)



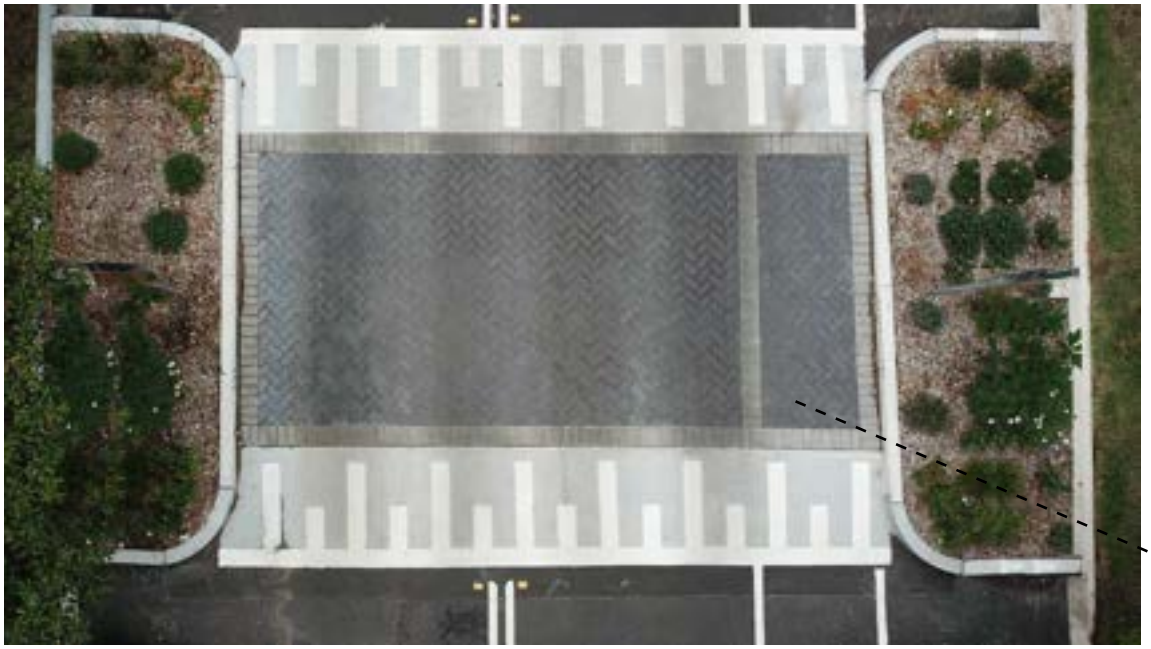
Main Street

Typical threshold with concrete ramps and interlocking paving



Main Street

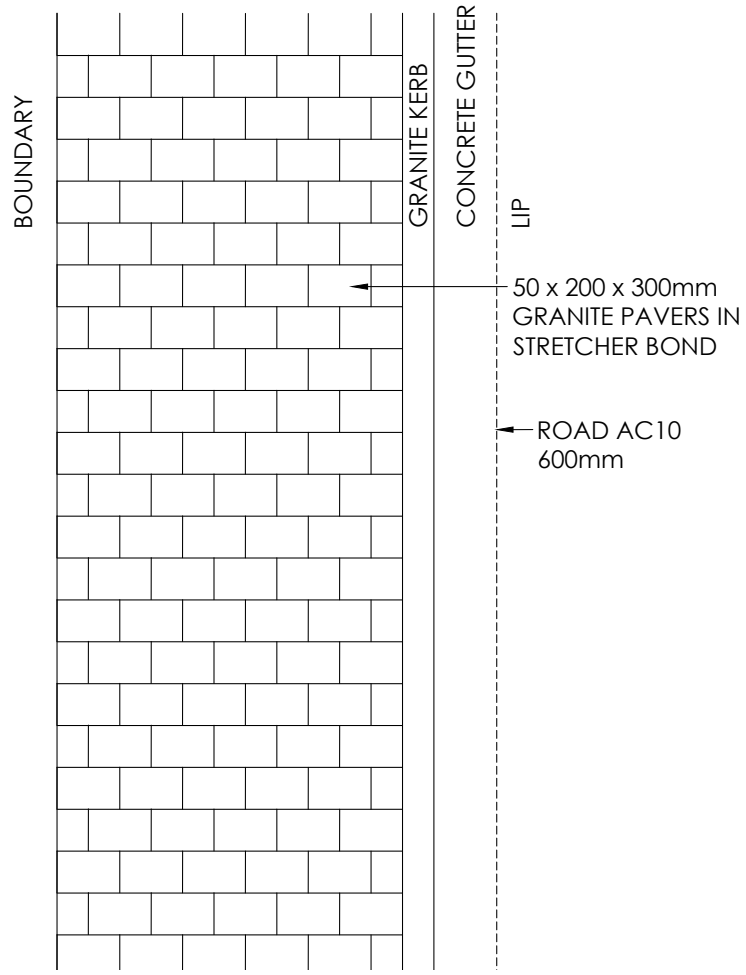
Typical threshold with concrete ramps and interlocking paving



Additional banding for optional cycleway shown

Laneway

Typical footpath paving in laneways



Notes

1. 50 x 200 x 300mm granite paving with an exfoliated finish to provide a hard wearing and serviceable finish.

2. Mid coloured paving with a fleck of colour for warmth.

3. Natural variation in granite assists in concealing marks.

4. Butt jointed, stretcher bond paving pattern with no header.

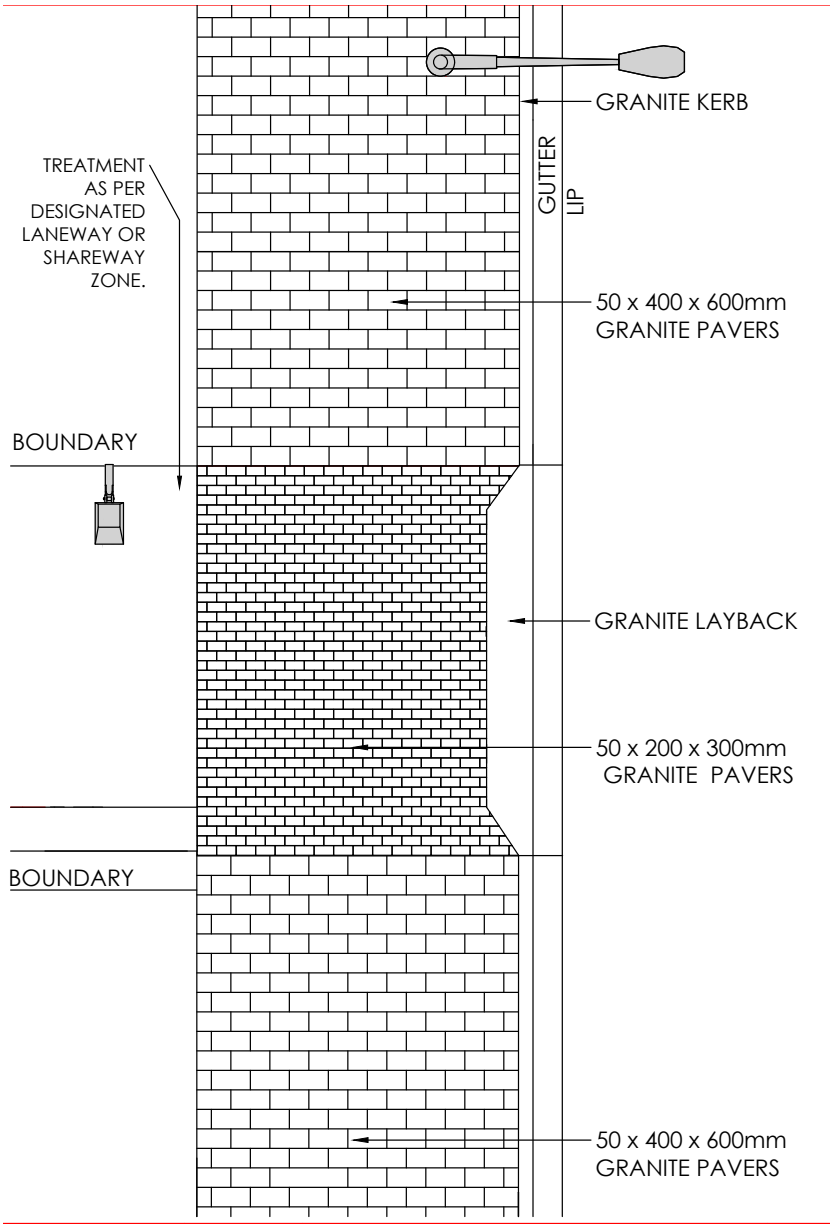
5. Rigid base - reinforced concrete slab.

"Bruce" Rock (Austral Juperana) granite

"Bruce" Rock (Austral Juperana) granite in stretcher bond pattern

Shared zone

Typical Raised Crossing at Entry to Laneway and Shared Zone (footpath continuation)



Notes

1. Main footpath 50 x 400 x 600mm granite paving with an exfoliated finish to provide a hard wearing and serviceable finish.

2. Laneway and shared zone crossing 50 x 200 x 300mm granite paving with an exfoliated finish to provide a hard wearing and serviceable finish.

3. Mid coloured paving with a fleck of colour for warmth.

4. Natural variation in granite assists in concealing marks.

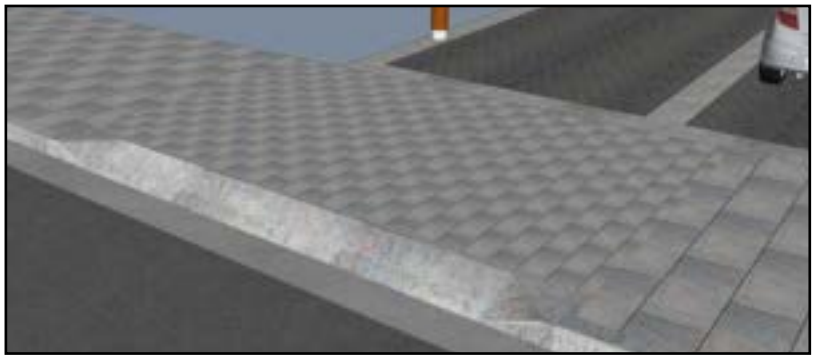
5. Butt jointed, stretcher bond paving pattern with no header.

6. Rigid base - reinforced concrete slab for granite pavement.

7. Laneway and shared zone crossing on Parex Streetscape System mortar bed and joining to manufacturer's specification

8. All sign stems (50mm NB) shall be installed using V-Loc + wedge system (galvanised). Footpath pavement shall be neatly core drilled 200mm DIA.

9. All open joints shall be sealed with Bostik "Seal 'N' Flex 1" in accordance with the manufacturer's recommendations - this includes boundaries, back of kerb and lintels, utility pits, construction joints etc

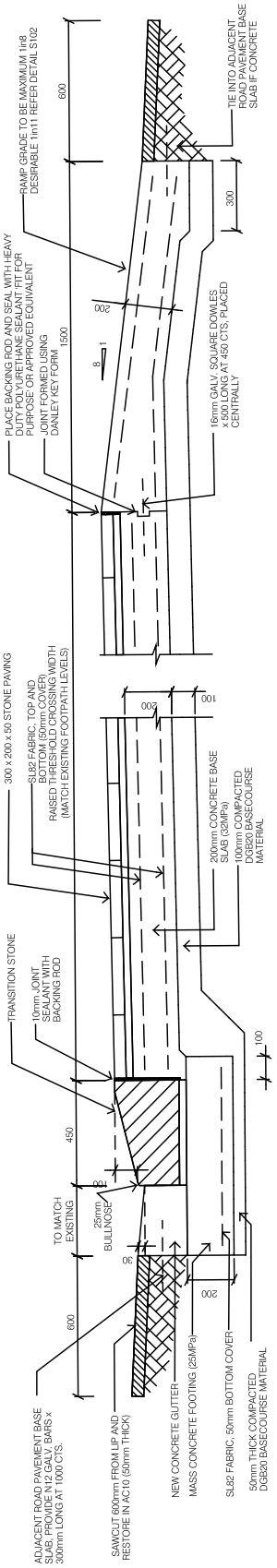


Typical driveway treatment

"Bruce" Rock (Austral Juperana) granite

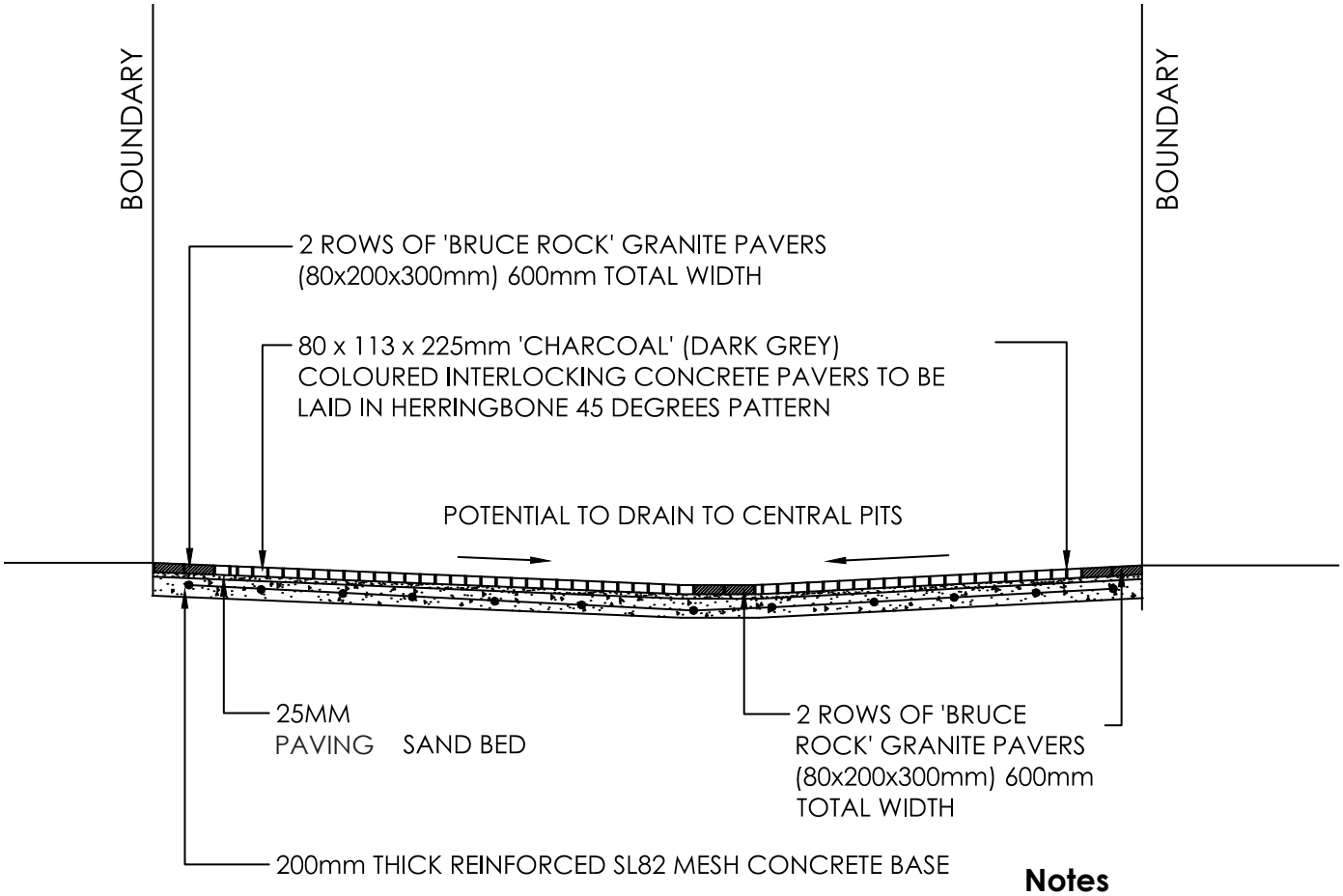
Laneway

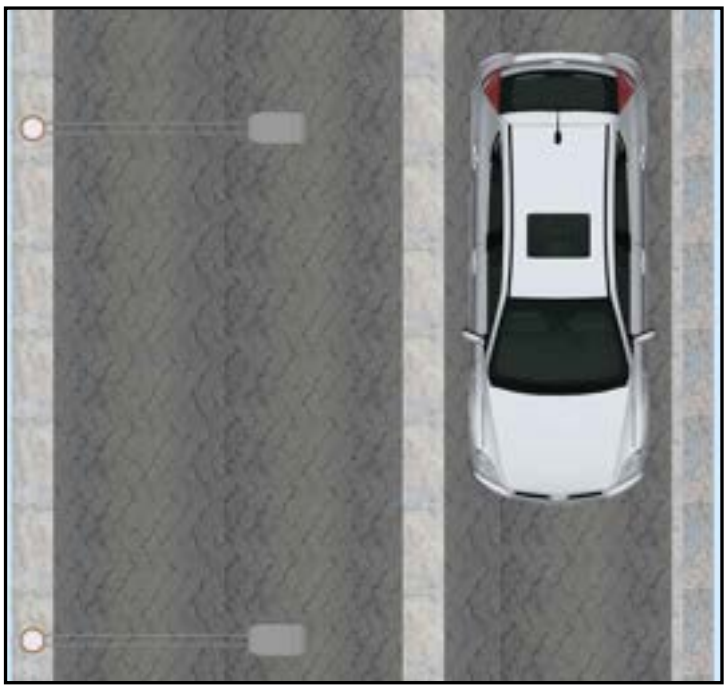
New Laneway Crossing



Shared zone

Typical laneway and shared zone section





Shared zone treatment

Interlocking concrete pavers

Granite pavers

Notes

1. Shared zone: 80 x 113 x 225mm 'Charcoal' (dark grey) coloured interlocking concrete pavers with standard finish

2. To be laid in herringbone 45 degrees pattern.

3. To be laid on a rigid base to prevent rutting.

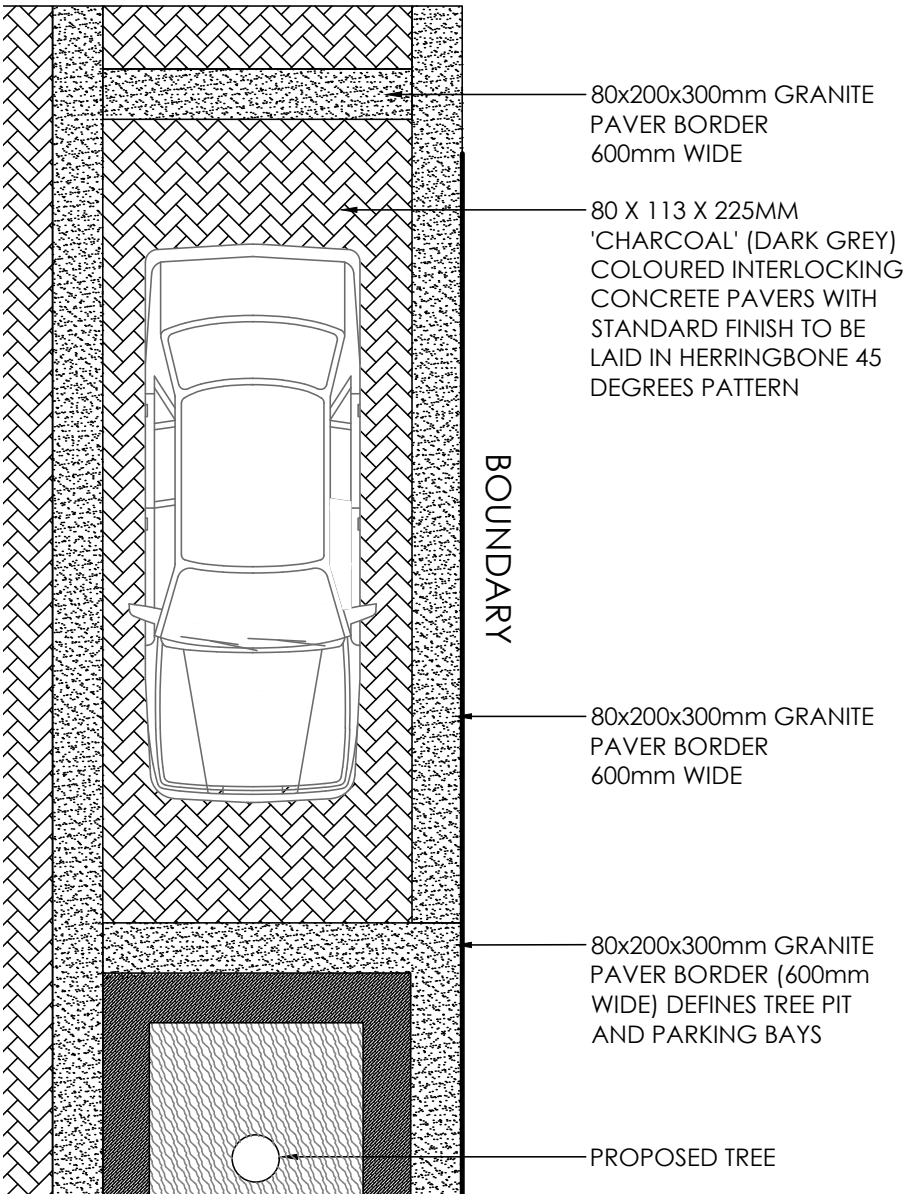
4. Main colour is 'charcoal'

5. Border is granite paver 600mm wide.

6. Parking bays to be marked out in granite paver 80x200x300mm in stretcherbond pattern

Shared zone

Typical parking demarcation in granite - shared zone only



Notes

1. Shared zone: 80 x 200 x 300mm exfoliated interlocking concrete pavers with standard finish in stretcherbond pattern.

2. To be laid in herringbone 45 degrees pattern.

3. To be laid on a rigid base to prevent rutting.

4. Main colour is 'charcoal'

5. All sign stems (50mm NB) shall be installed using V-Loc + wedge system (galvanised). Footpath pavement shall be neatly core drilled 200mm DIA.

6. All open joints shall be sealed with Bostik "Seal 'N' Flex 1" in accordance with the manufacturer's recommendations - this includes boundaries, back of kerb and lintels, utility pits, construction joints etc

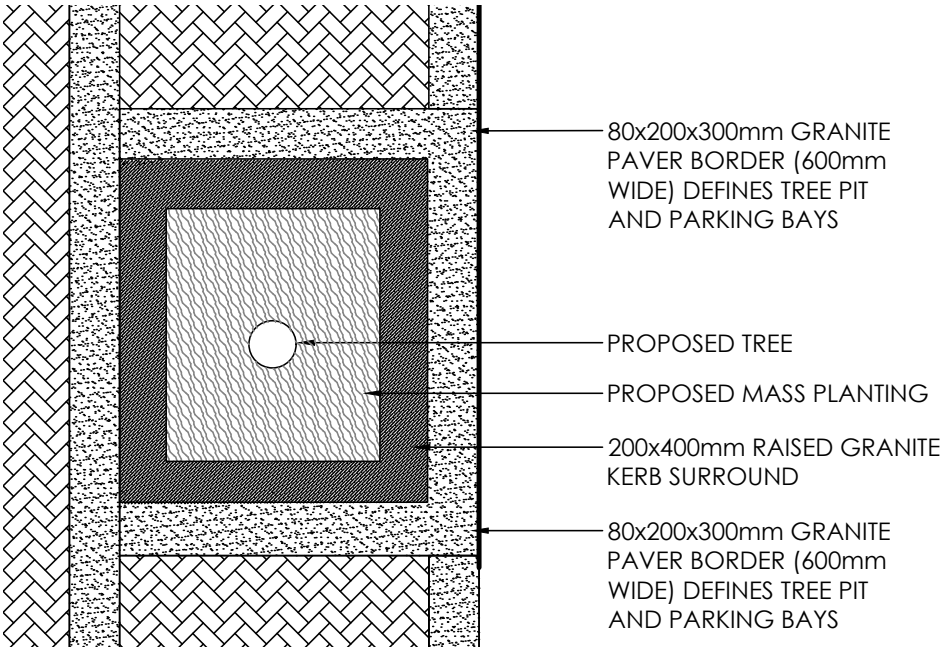
Interlocking concrete pavers

Granite pavers

Shared zone treatment

Shared zone

Typical at grade tree pit in shared zone - plan and section



Tree Pit with optional Fixed bollard

Notes

1. Shared zone: 80 x 113 x 225mm 'Charcoal' coloured interlocking concrete pavers with standard finish to be laid in herringbone 45 degrees pattern and on a rigid base to prevent rutting.

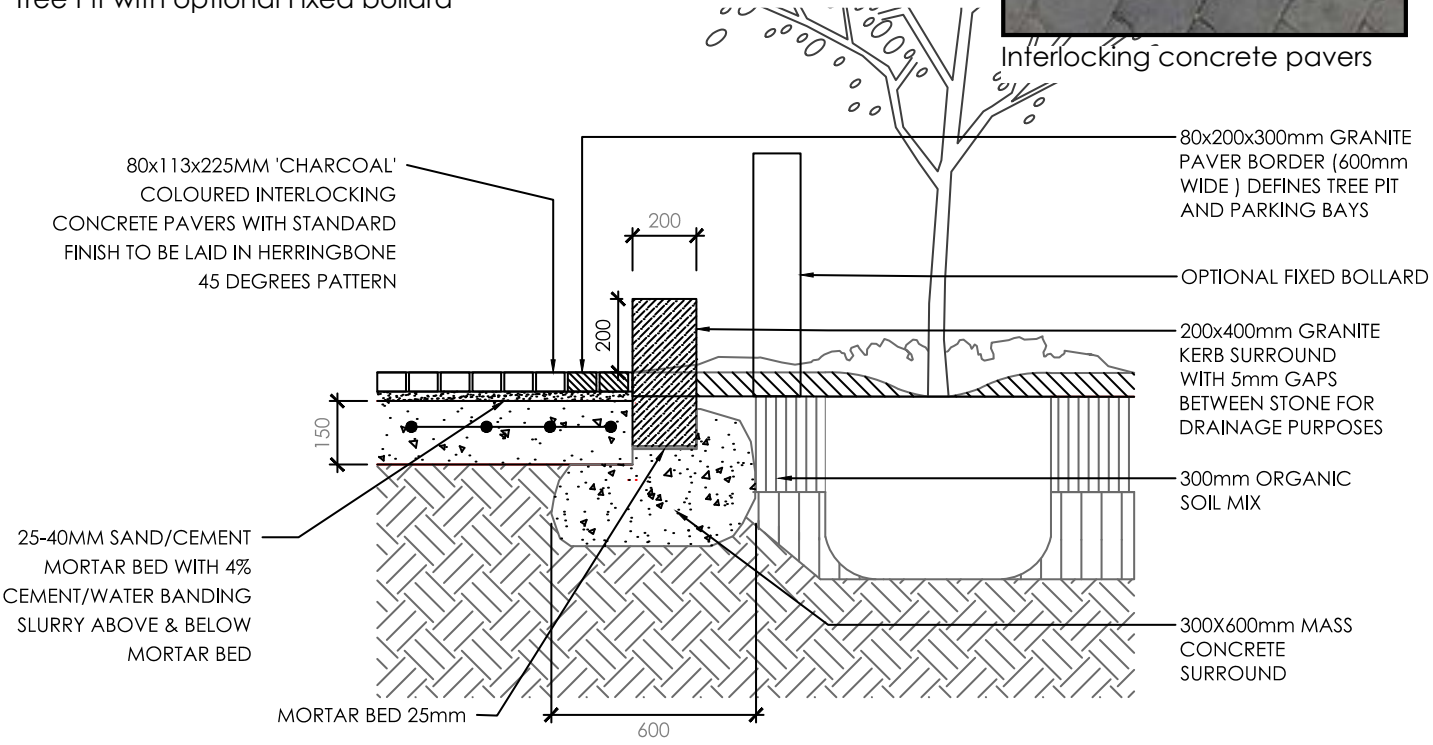
2. Interlocking to be laid on a paving sand layer (Coarse Paving Sand)

3. Granite to be laid on Parex Streetscape System motor bed and joining with Sikaflex high performance polyurethane sealant

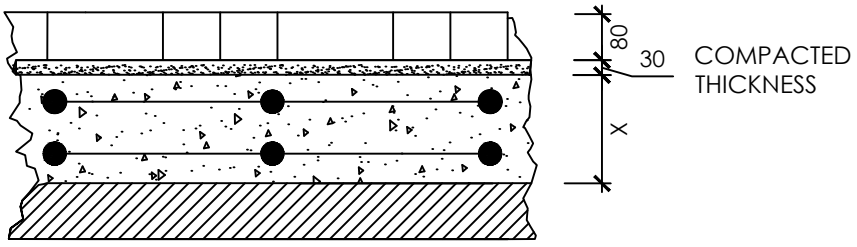
4. Granite to be sealed

Granite pavers

Interlocking concrete pavers



Typical road pavers interlocking including concrete base



ADBRI 'UNIPAVE 80' 80mm THICK IN HERRINGBONE LAYING PATTERN (OR APPROVED EQUIVALENT)

NOM. 30mm SAND BEDDING (COARSE PAVING SAND)

REINFORCED CONCRETE SUB-BASE WITH SL82 MESH

SUBGRADE

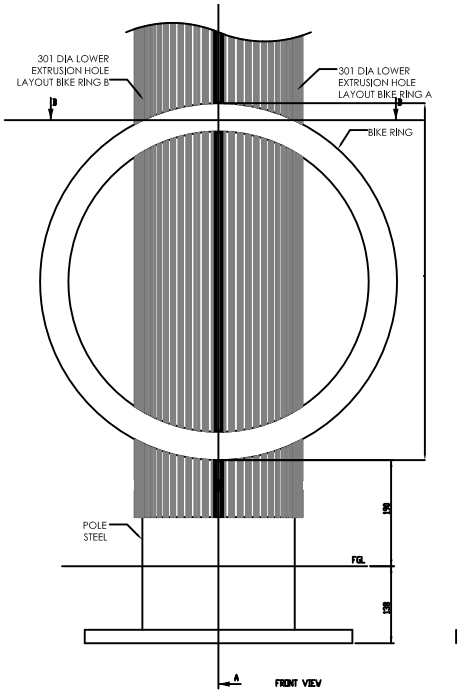
Notes

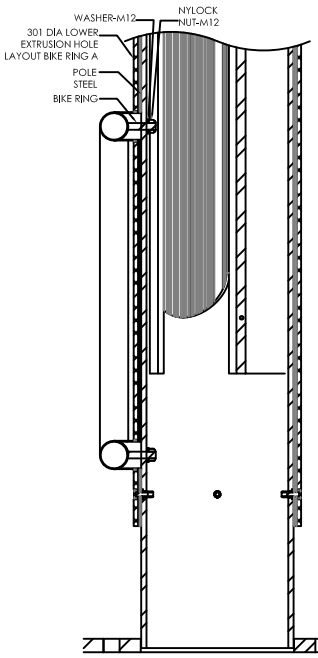
1. 'X' Is to be 250mm for bus bays and 200mm for driveways, reinforced with SL82 reinforcement top and bottom.

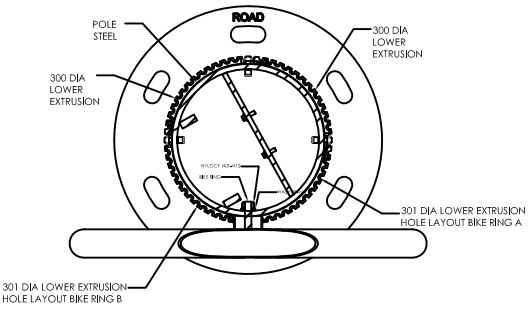
2. Interlocking pavers to be 'charcoal' colour. Highlight colour shall be 'Natural' 'Brickpave 80'.

Furniture and Fixtures

Typical bicycle parking - bike hoop







Notes

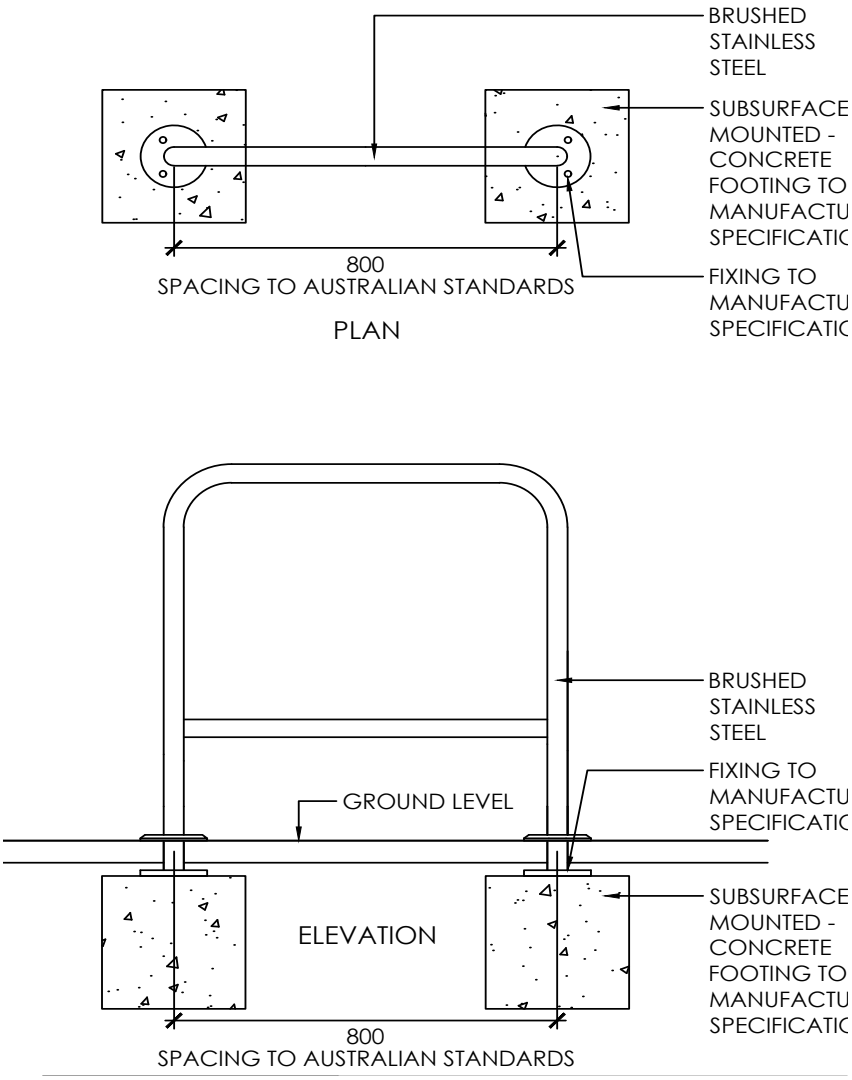
1. Bike hoops to be HUB bike ring assembly or approved equivalent.

2. Bike rings to be fixed to Multi-Purpose Poles (MPPs).

3. Brushed stainless steel (integral finish).

4. Ideally bike racks shall be located in areas where footpaths are widened. Bike racks should also be located where there is a change in transport type - for instance at ferry terminals, bus stops and train stations. They should also be located along cycleways and at cycle destinations.

Typical bicycle parking - bike rack



Notes

1. Subsurface mounted where possible.

2. Brushed stainless steel (brushed finish).

3. Ideally bike racks shall be located in areas where footpaths are widened. Bike racks should also be located where there is a change in transport type - for instance at ferry terminals, bus stops and train stations. They should also be located along cycleways and at cycle destinations.

Stainless steel bike racks

Furniture and Fixtures

Typical seat with back

Notes

1. Timber battens with hidden fixings.

2. Stainless steel frame.

3. Angular, contemporary form.

4. Seat with back

5. Three person seats approximately 1850mm long.

6. To be sub-surface fixed where possible.

7. Stainless steel anti-tamper fixings.

8. Seat to be Rondo seat by StraBe or equal and approved. Image and details indicative of style only.

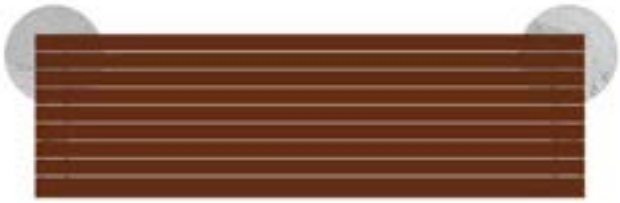
9. Timber to be weathered for 6 months and treated prior to installation.

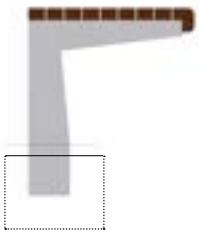
10. Maximum grade at which seats can be installed 8.6%. Min seat height 380mm; max seat height 540mm.

Furniture and Fixtures

Typical bench seat

Optional handrails shown





Notes

1. Timber battens with hidden fixings.

2. Stainless steel frame.

3. Angular, contemporary form.

4. Three person seats approximately 1850mm long.

5. To be sub-surface fixed where possible.

6. Stainless steel anti-tamper fixings.

7. Seat to be Rondo seat by StraBe or equal and approved. Image and details indicative of style only.

8. Timber to be weathered for 6 months and treated prior to installation.

9. Maximum grade at which seats can be installed 8.6%. Min seat height 380mm; max seat height 540mm.

10. Optional handrails available

Furniture and Fixtures

Typical parking meter

Parking meter

Notes

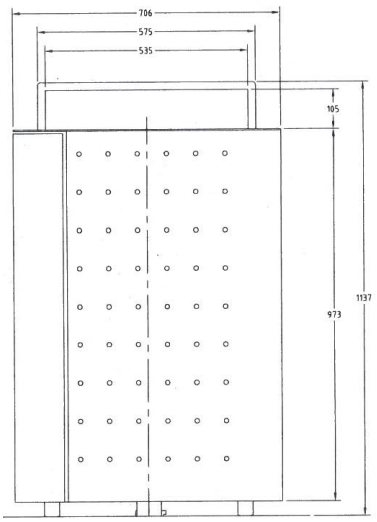
1. Parking meter 1.3m high

2. Situated 600mm from back of kerb

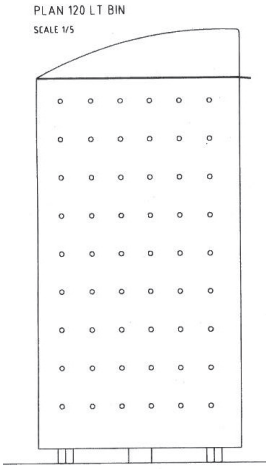
3. Where finished footpath surface levels do not match existing, contact Council's parking meter services division for further details about footing requirements and repositioning of meter stem.

Furniture and Fixtures

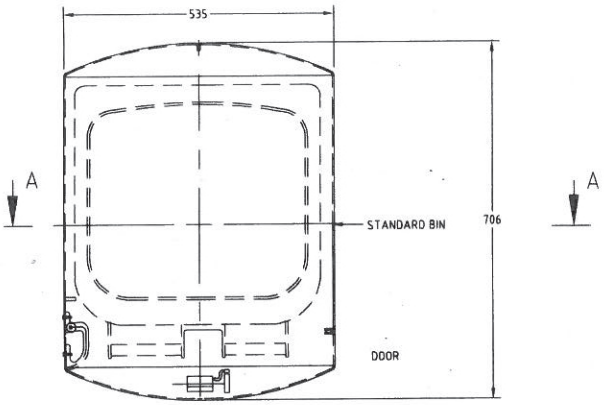
Typical metal bin Installation detail

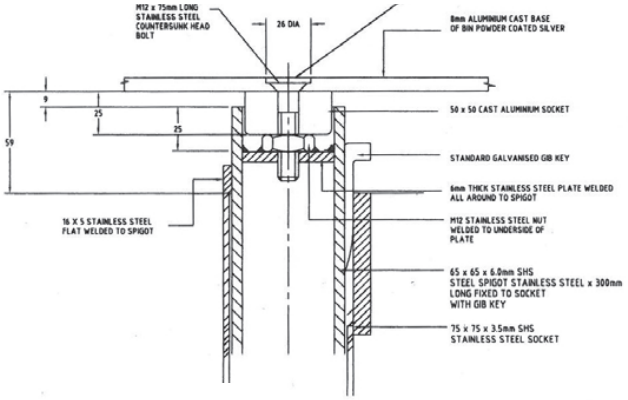


FRONT VIEW 120 LT BIN

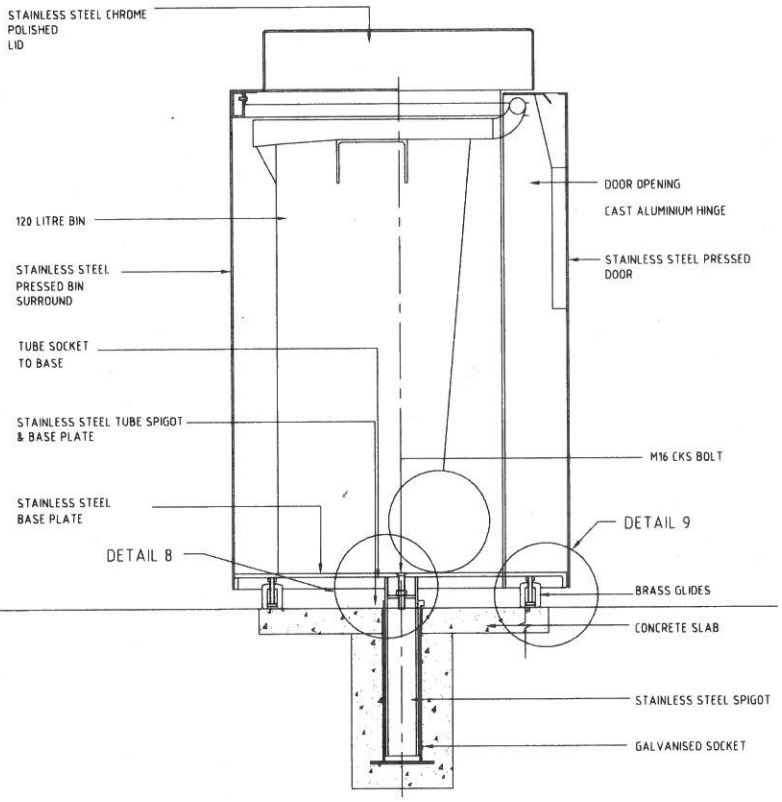


SECTION VIEW 120 LT BIN

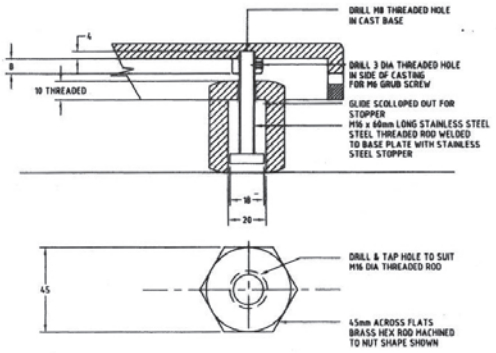




SPIGOT CONNECTION DETAIL



SECTION AA VIEW 120 LT BIN



ADJUSTABLE FEET DETAIL

Notes

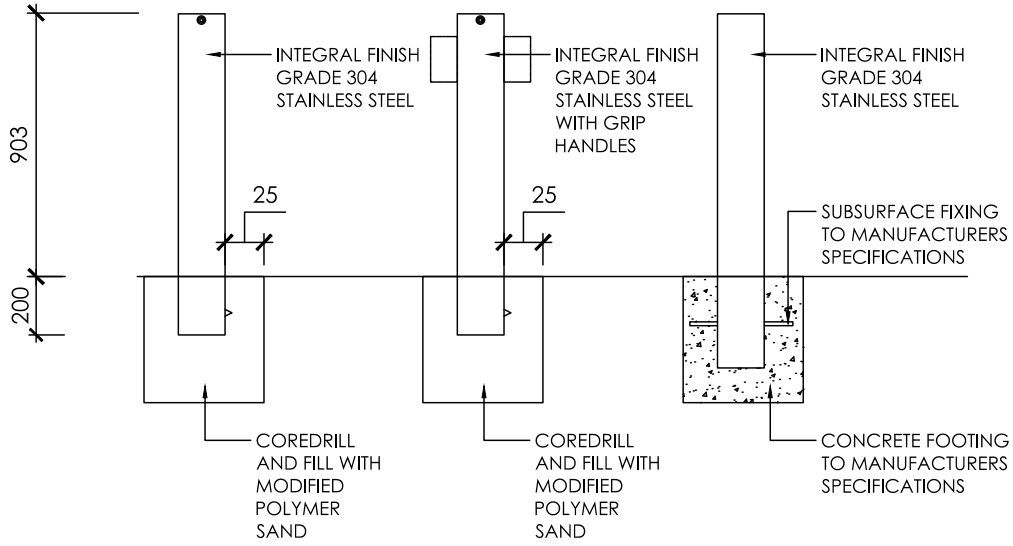
1. All dimensions in mm.

2. Stainless steel finish.

3. Bins are to be sub-surface mounted as shown.

Furniture and Fixtures

Typical 125mm and 150mm bollard - Fixed and removable



Locking and removable bollard

Locking and removable bollard with grip handles

Fixed insitu bollard

Notes

1. Integral finish grade 304 stainless steel.

2. Bollards are to be subsurface fixed.

3. Finish: Linished.

4. Optional handles and reflective tape.

Locking and removable bollard / Fixed insitu bollard (with optional grip handles)

168mm Bollard - Automatic retractable

Automatic retractable bollard with optional reflective tape

Notes

1. Integral finish grade 304 stainless steel.
2. Finish: Linished.
3. Optional reflective tape.
4. 168mm dia. 600mm high.
5. 6mm wall thickness automatic retractable bollard.

Furniture and Fixtures

Typical bus shelter

Notes

1. Urban / Contemporary bus shelter.

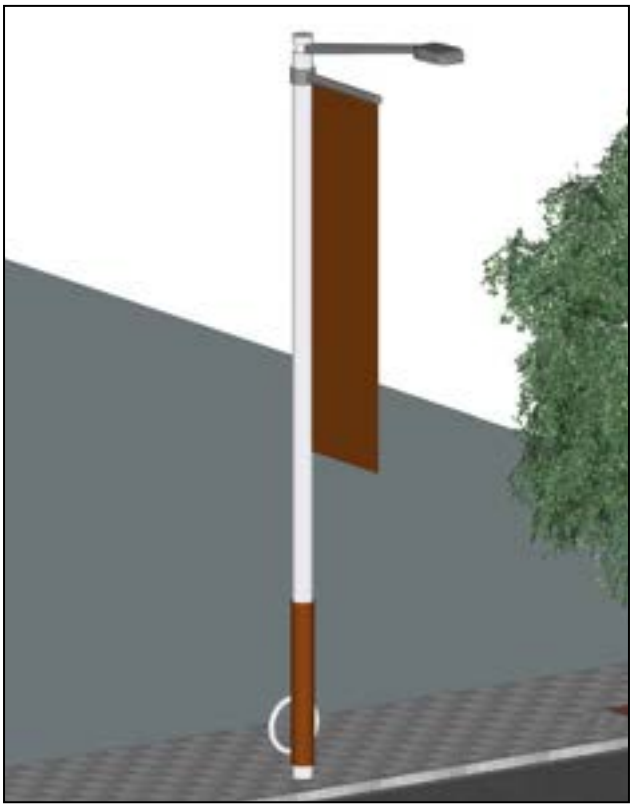
2. Bus shelter to incorporate advertising material and information panels.

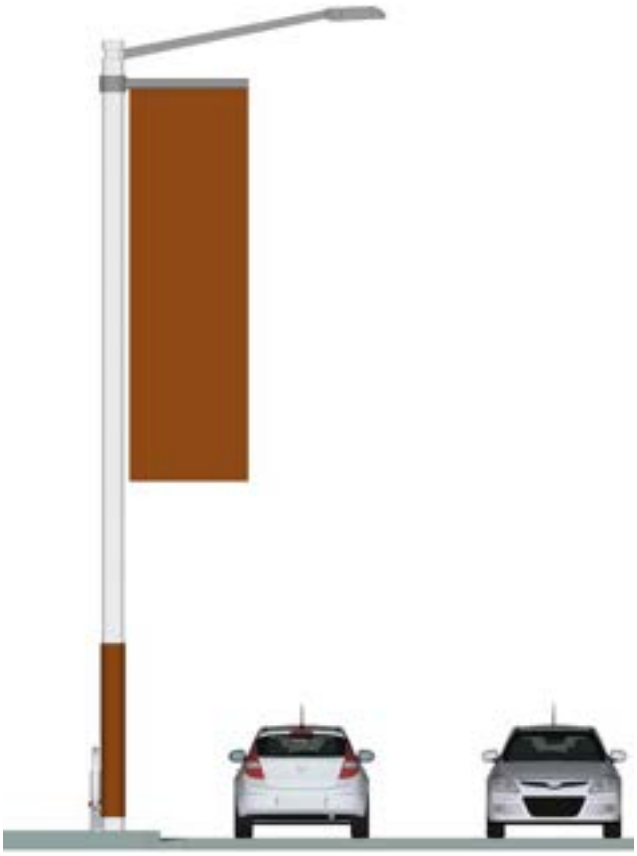
3. Size to vary to suit location and demand.

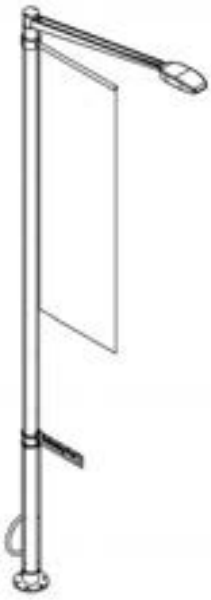
4. Bus shelters are to be installed as per the specification from North Sydney Council's current bus shelter supplier.

Furniture and Fixtures

Typical post top light (Main Street)







Multi-functional post top light pole

Notes

1. LED Luminaire with P.E. cells

2. Lighting design to comply with Australian Standards.

3. Anodised finish.

4. Foundation cage cast into 32 MPa concrete footing in subgrade.

5. Poles are to be assembled and erected in accordance with manufacturers specifications.

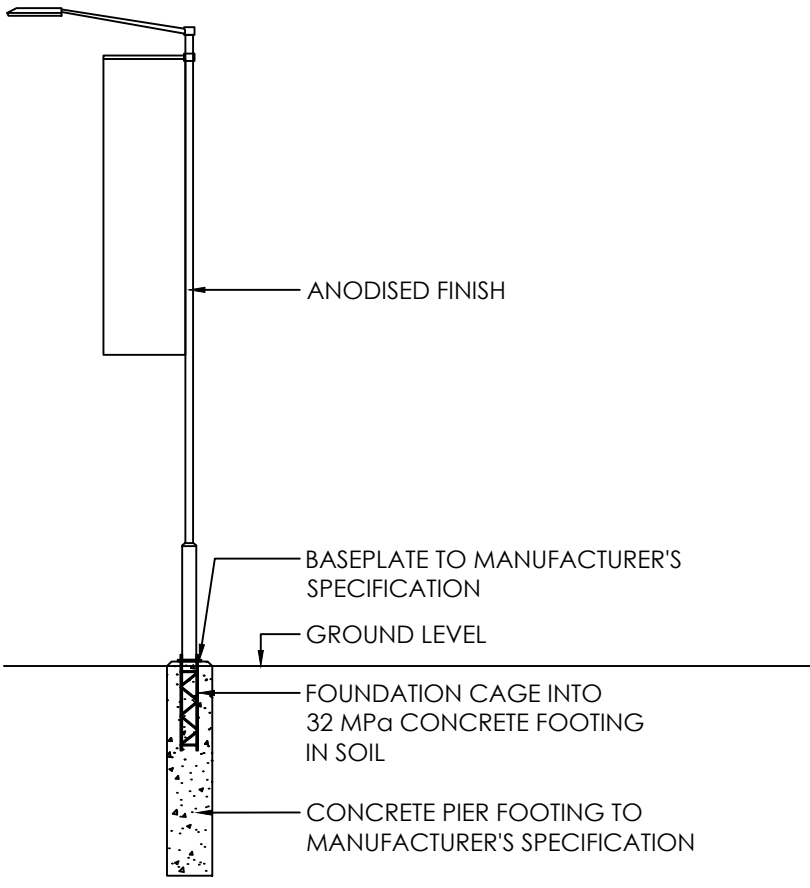
6. Pole Height: 9.5m

7. Luminaire outreach arm: 3m

8. Spacing of poles to be determined by lighting design.

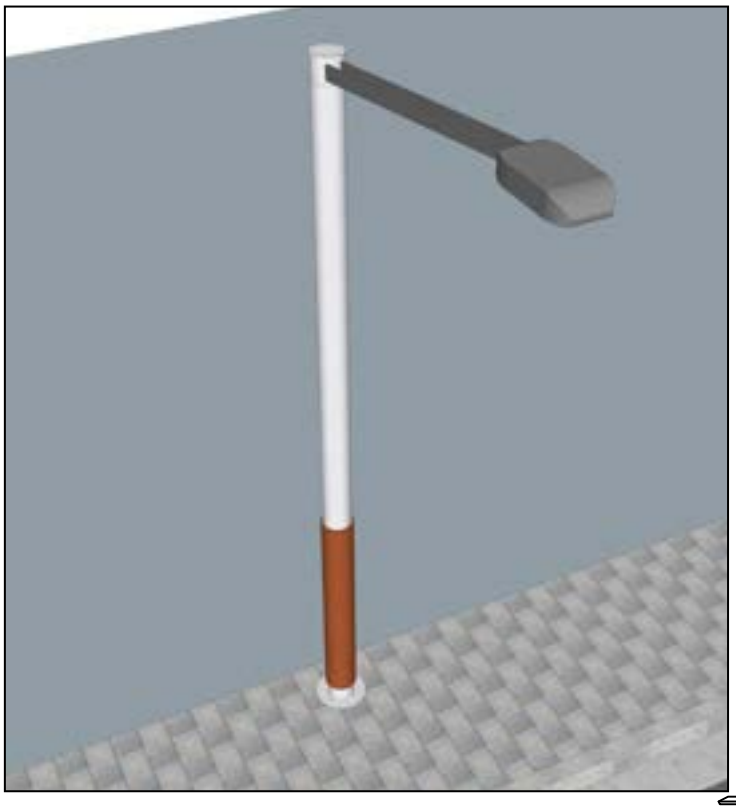
9. Banner outreach arm: 2m

10. Provision of two mini-hubs



Furniture and Fixtures

Typical post top light - default option 1 (Laneways and shared zones)



Multi-functional post top light pole

Notes

1. LED Luminaire with P.E. cells

2. Lighting design to comply with Australian Standards.

3. Anodised finish.

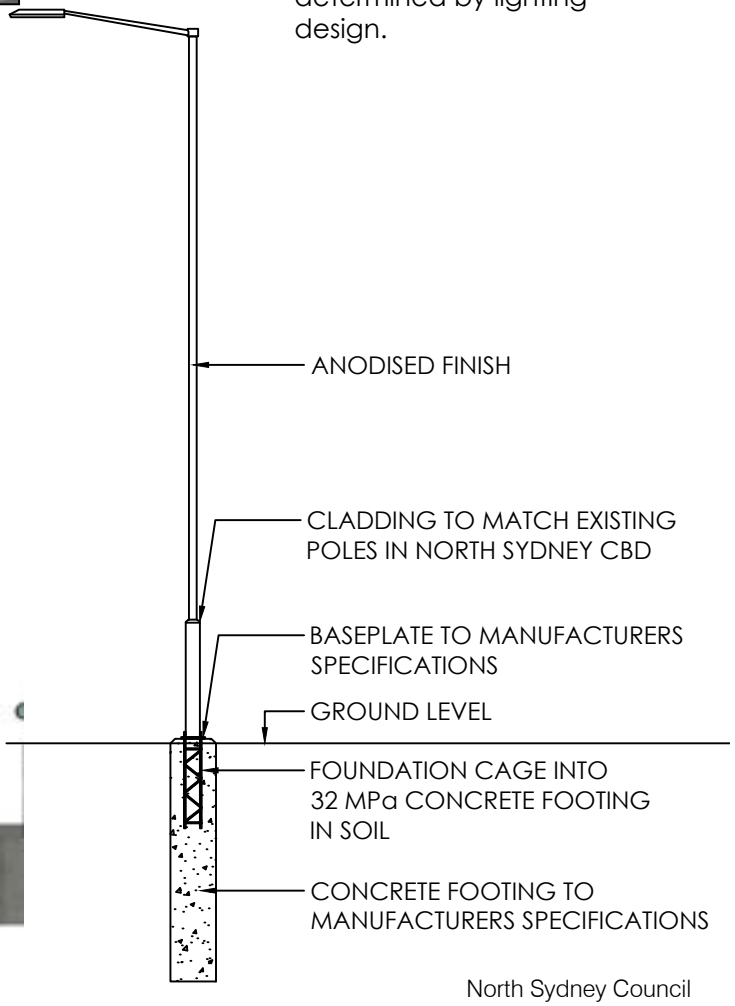
4. Foundation cage cast into 32 MPa concrete footing in subgrade.

5. Poles are to be assembled and erected in accordance with manufacturers specifications.

6. Pole Height: 7m

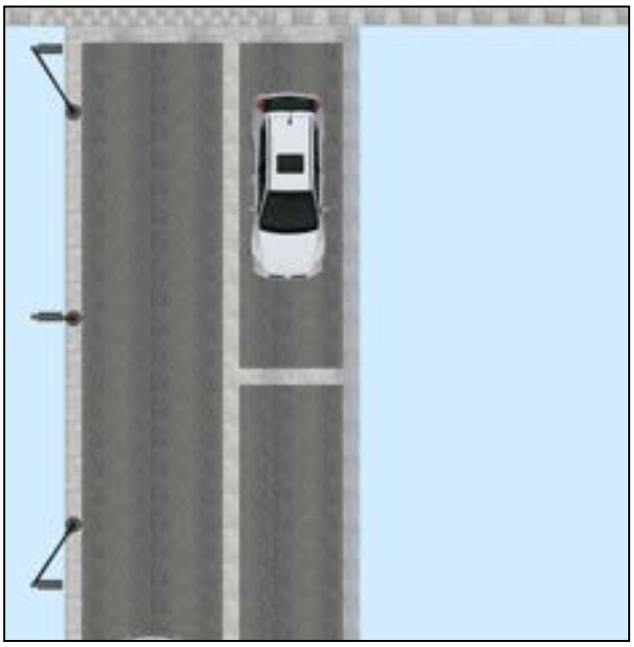
7. Luminaire outreach arm: 2m

8. Spacing of poles to be determined by lighting design.



Furniture and Fixtures

Typical post top light - option 2 (Laneways and shared zones)



Post top light pole

Notes

1. LED Luminaire with P.E. cells

2. Lighting design to comply with Australian Standards.

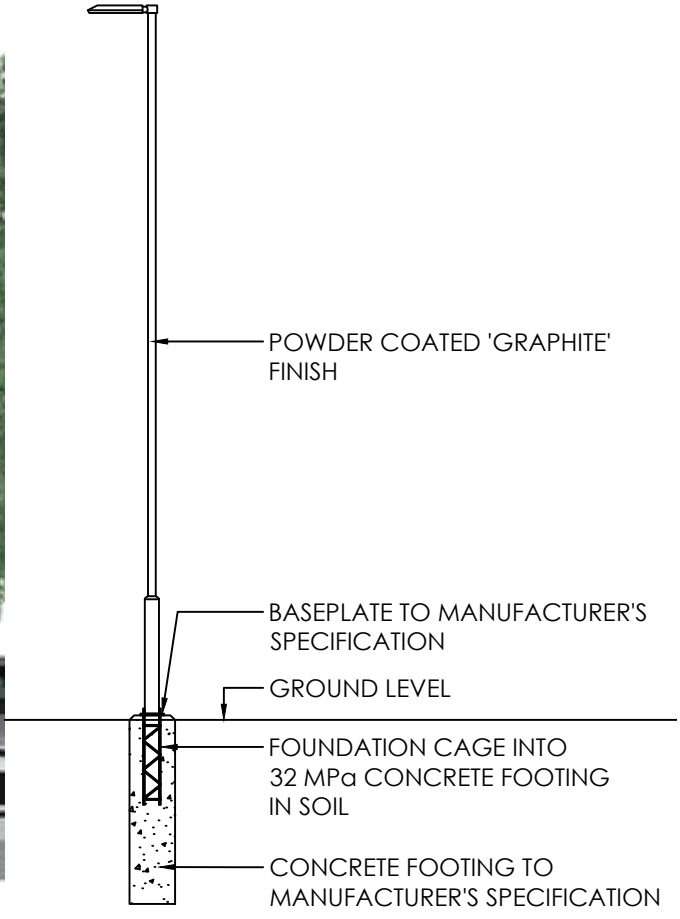
3. Powder coated 'Graphite' finish.

4. Foundation cage cast into 32 MPa concrete footing in subgrade.

5. Poles are to be assembled and erected in accordance with manufacturers specifications.

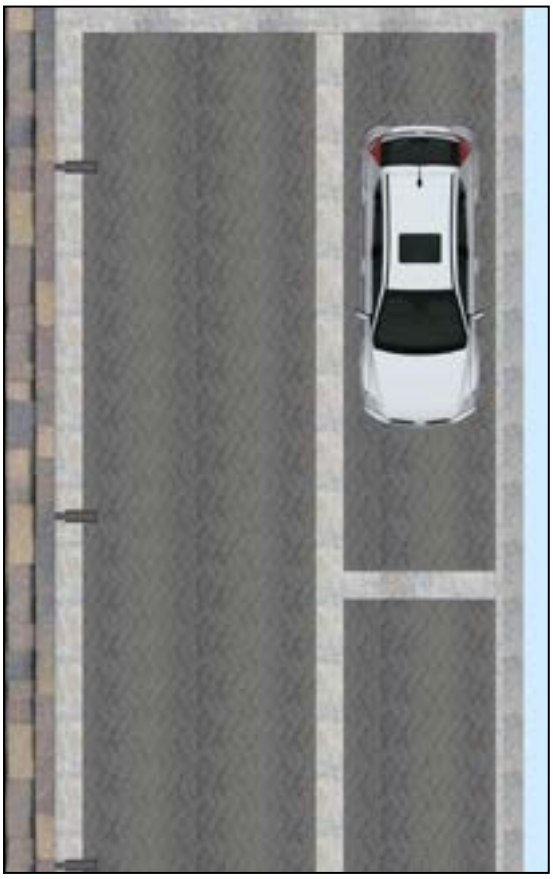
6. Pole Height: 7m

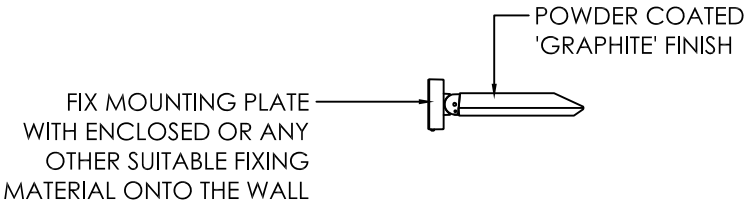
7. Spacing of poles to be determined by lighting design.



Furniture and Fixtures

Typical wall mounted light (Laneways and shared zones)





Wall mounted LED light

Notes

1. A consistent light colour warmth across fittings.

2. A consistent palette of light fittings for different applications.

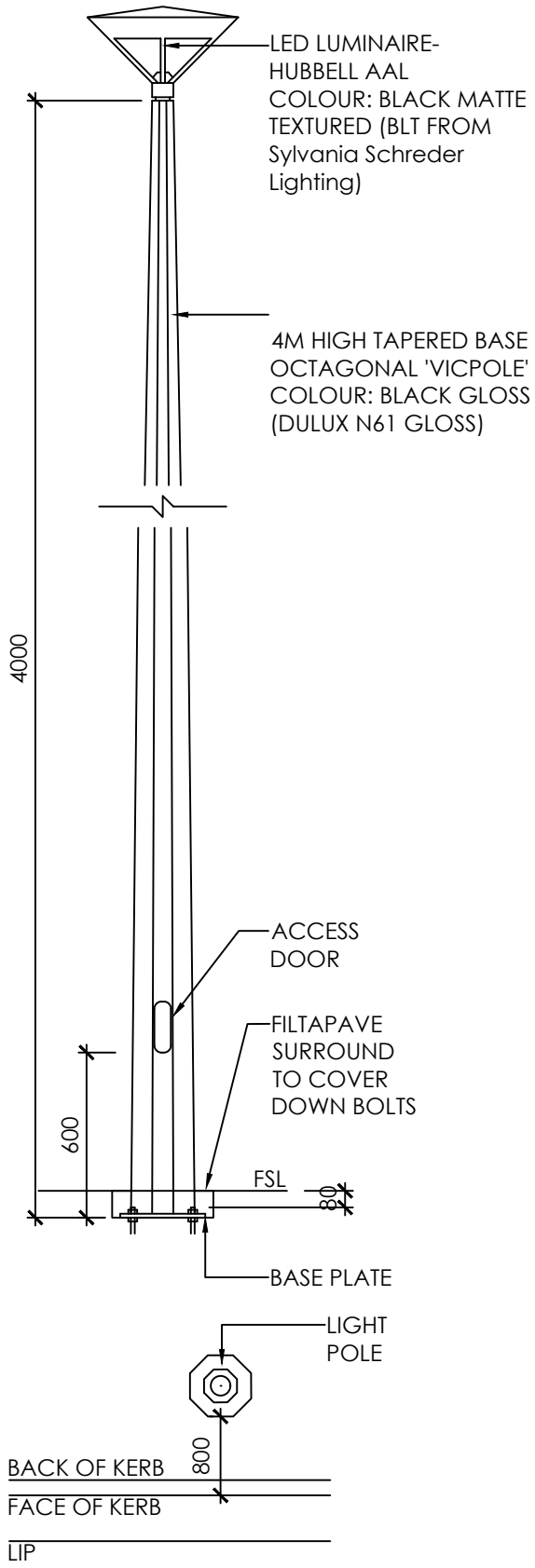
3. Powdercoated 'Graphite'.

4. Lead mains supply cable through the cable entry of the mounting plate.

5. Fix the mounting plate with enclosed or any other suitable fixing material onto the mounting surface.

Furniture and Fixtures

Typical octagonal light pole (Public plazas and spaces)



Notes

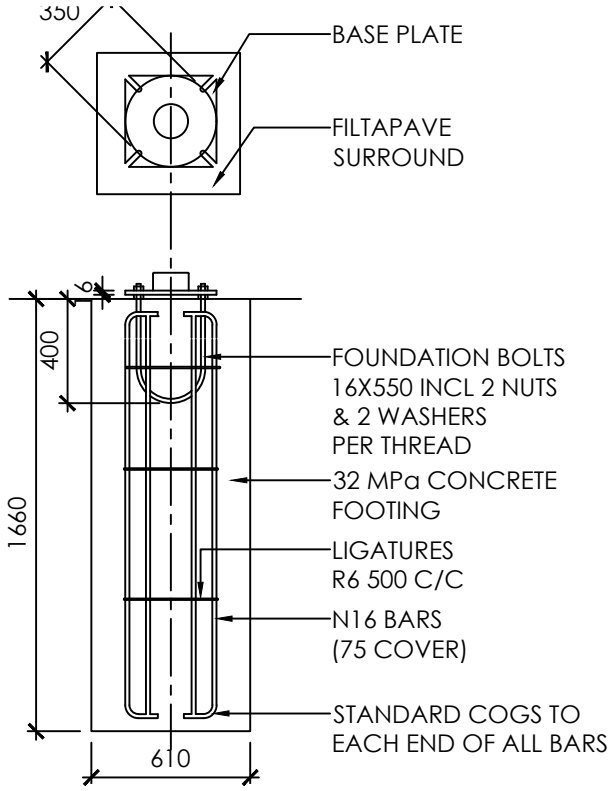
1. For installation detail. Refer to manufacturer's specification.

2. Allow for grout packing between the concrete footing and the base plate of the light pole to achieve a vertical alignment when erecting the pole. The grout pack shall have a minimum strength of 32MPa at 7 days. The maximum tolerance for vertical misalignment will be 30mm from the vertical.

3. Light colour warmth to match other fittings.

4. Painted in Matte Black (MTB).

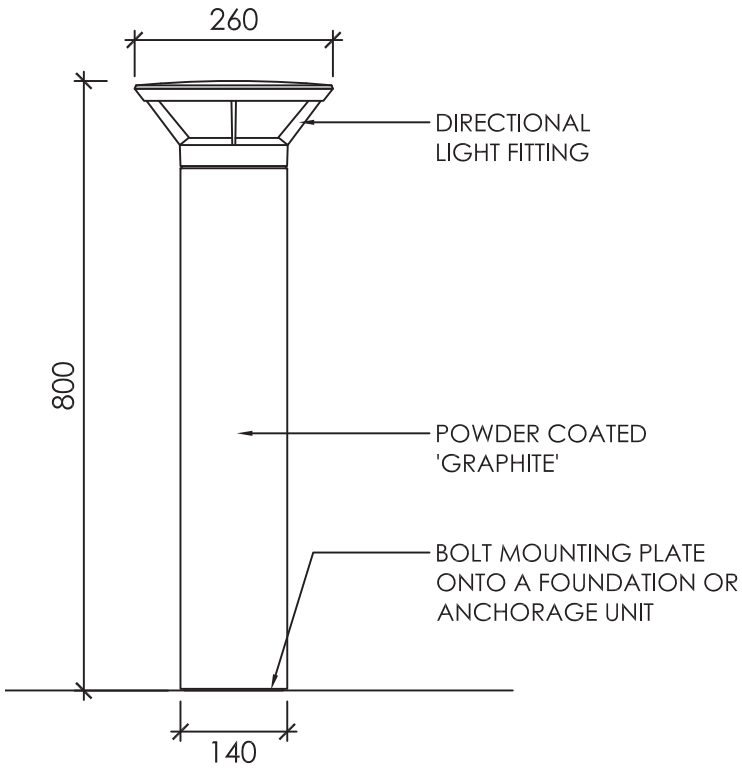
Post top LED light



Furniture and Fixtures

Typical illuminated bollard

Illuminated Bollard



Notes

1. Fixing: Bolted with a mounting plate onto a foundation.

2. Light fittings shall be directional.

3. Powder coated 'Graphite'.

4. Fitting to match post top (parks and plazas) luminaire range.

5. Bolt mounting plate onto foundation or anchorage unit to manufacturers specifications.

Furniture and Fixtures

Typical handrail lighting

Notes

1. Lighting to be housed within a stainless steel handrail.

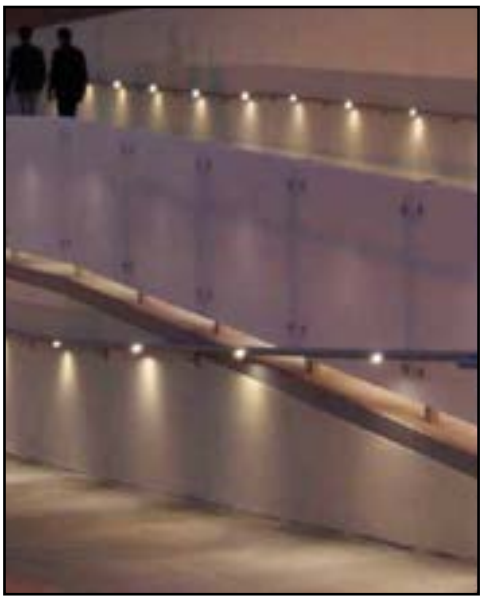
2. Point source lighting at a regular interval directed to the adjacent path of travel.

3. Light fittings to be easy to replace over time and to not be on a single circuit.

4. Light fitting must not protrude from handrail.

5. Stainless Steel fixture.

6. Lighting to be installed as per specification from Planet Lighting.

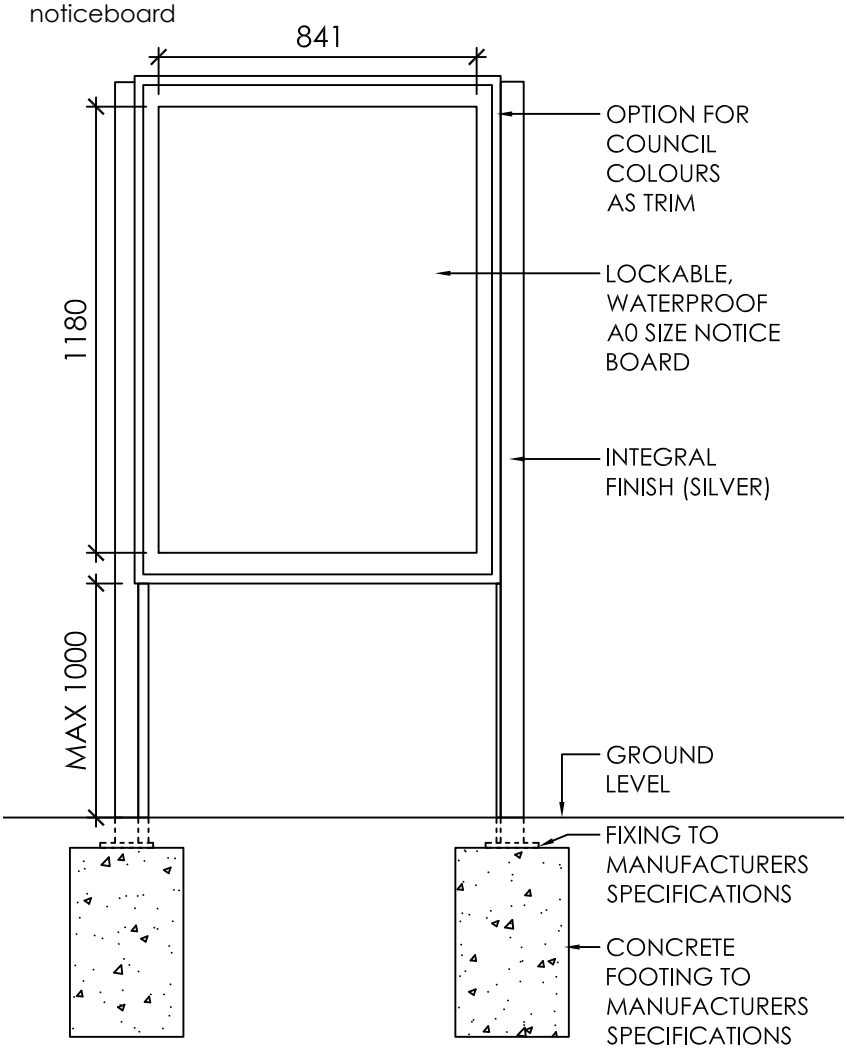


Indicative handrail lighting

Furniture and Fixtures

Typical community notice board - free standing

Indicative illustration of free standing community noticeboard



Notes

1. Integral finish (silver) to frame.

2. Option for council colours as a trim.

3. Lockable.

4. Waterproof.

5. Internal size A0 (1180 x 841mm).

6. Noticeboard - portrait orientation.

7. Base of noticeboard maximum 1m from ground level.

8. Weather proof seals.

9. Stainless steel hinges incorporated into the swing door.

10. Manual or gas struts door stays.

11. 3mm poly carbonate or acrylic cover.

12. Optional anti-graffiti film applied to cover.

13. Sign frame finishes range from anodised matt silver to standard powder coat colours.

Furniture and Fixtures

Typical community noticeboard - wall mounted

Indicative illustration of wall mounted noticeboard in village bus stop (portrait)

Example of A0 noticeboard (landscape)

Notes

1. Integral finish (silver) to frame.

2. Option for council colours as a trim.

3. Lockable.

4. Waterproof.

5. Internal size A0 (1180 x 841mm).

6. Noticeboard - portrait orientation.

7. Base of noticeboard maximum 1m from ground level.

8. Wall mounted.

9. Weather proof seals.

10. Stainless steel hinges incorporated into the swing door.

11. Manual or gas struts door stays.

12. All fixings to be concealed.

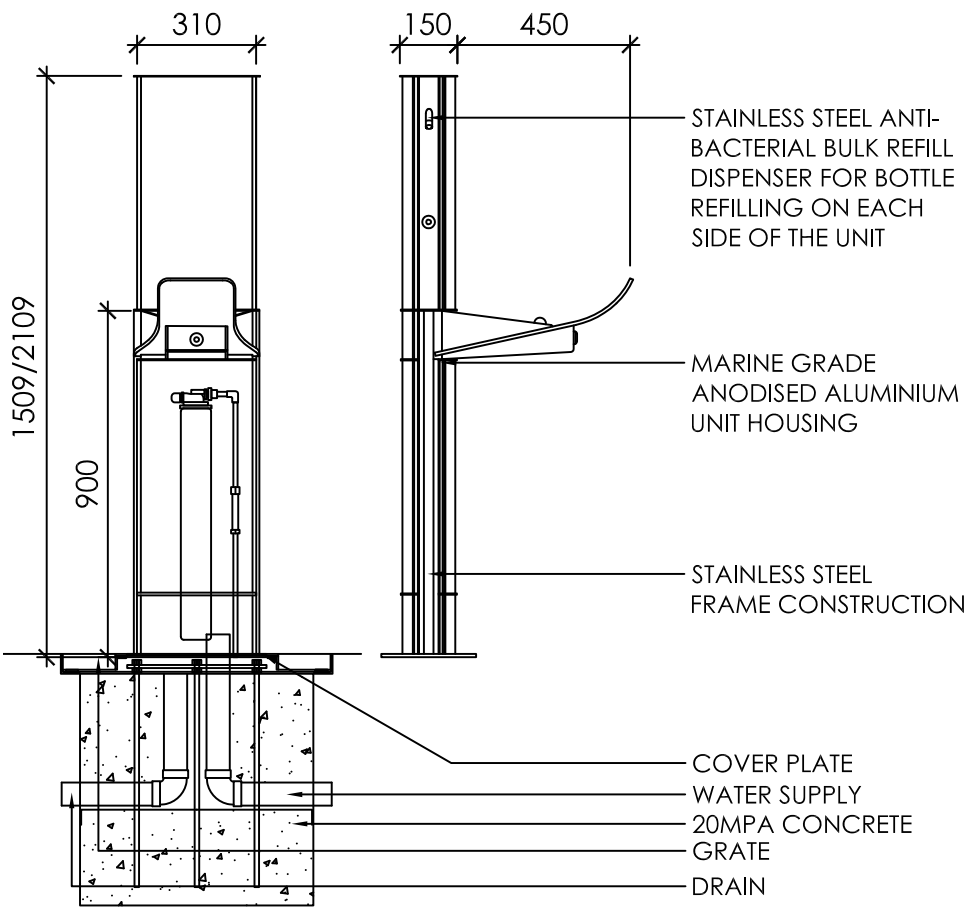
12. 3mm Poly carbonate or acrylic cover.

13. Optional anti-graffiti film applied to cover.

14. Sign frame finishes range from anodised matt silver to standard powder coat colours.

Furniture and Fixtures

Typical bottle refill station with drinking fountain



Bottle refilling station with drinking fountain

Bottle refilling station with drinking fountain

Notes

1. Wheelchair accessible drinking fountain.

2. 1500mm high refill station.

3. Stainless steel bulk refill dispenser for bottle refilling each side of the unit.

4. Stainless steel frame construction.

5. Marine grade anodised aluminium unit housing.

6. Optional filtered water unit.

7. Multiple bottle refill points.

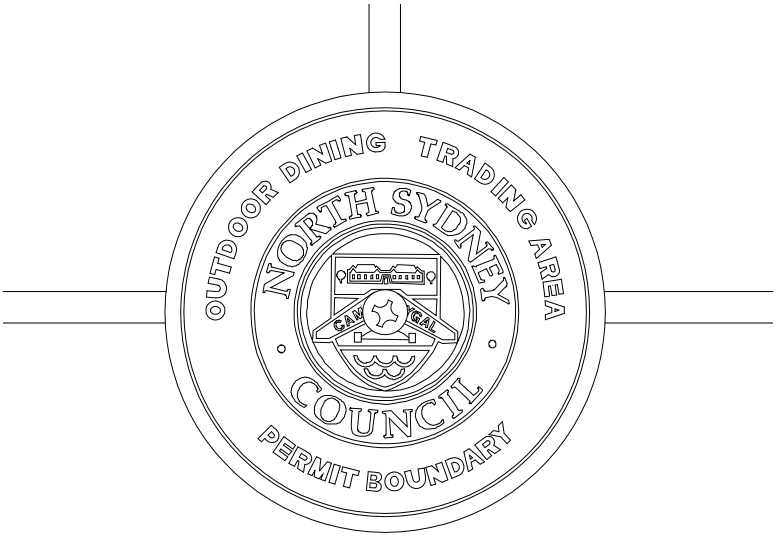
8. Excavate a hole 440 x 730 x 500mm.

9. Footing cage and drainage tray installed with the top of the drainage tray flush with ground level.

10. Connect plumbing for drainage and water supply.

Furniture and Fixtures

Typical alfresco demarcation line



Notes

1. Alfresco demarcation plaques are to be nailed to the pavement along the extent of licenced outdoor dining trading area.

2. Plaques are to be nailed into joints between pavers if possible.

3. Plaques are to be located in a consistent line at an interval appropriate to the scale of the space.

4. Plaques are to be supplied by council and are to have the North Sydney logo.

5. Plaques are brass and are epoxy fixed along with a central pin.


HSBC

4.9 Materials palette

(Approved equal alternative product may also be used)

NORTH SYDNEY CENTRE MATERIALS PALETTE			
ITEM	**MAIN STREET**	**LANEWAY**	**SHARED ZONE**
FOOTPATH AND ROAD WORKS DRAWINGS / PAVING DRAWINGS			
KERB AND GUTTER	**Gutter Material:** **Concrete** **Finish:** **Finished with a steel trowel** **Kerb & Lintel Material:** **"Bruce" Rock (Coffee) Granite kerb stone** **Finish: exfoliated finish to top face; sawn finish to front face.**	**Gutter Material:** **Concrete** **Finish:** **Finished with a steel trowel** **Kerb & Lintel Material:** **"Bruce" Rock (Coffee) Granite kerb stone** **Finish: exfoliated finish to top face; sawn finish to front face.**	**Not Applicable**
PAVING - FOOTPATH	**Material:** **Granite** **Finish:** **Exfoliated** **Size:** **50 x 400 x 600mm** **Pattern:** **Stretcher bond** **Colour:** **Natural stone integral finish** **Base:** **Rigid base - Reinforced concrete slab (130mm thick)** **Granite equal or equivalent to "Bruce" Rock (Austral Juperana).** **Joint sealant:** **Sikaflex - High Performance Polyurethane Joint Sealant (Grey)** **Paver sealant:** **Dry Treat Stain Proof with Intensifia and wet look sealant**	**Material:** **Granite** **Finish:** **Exfoliated** **Size:** **50 x 200 x 300mm** **Pattern:** **Stretcher bond** **Colour:** **Natural stone integral finish** **Base:** **Rigid base - Reinforced concrete slab** **Granite equal or equivalent to "Bruce" Rock (Austral Juperana).** **Joint sealant:** **Sikaflex - High Performance Polyurethane Joint Sealant (Grey)** **Paver sealant:** **Dry Treat Stain Proof with Intensifia and wet look sealant**	**Not Applicable**

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FOOTPATH AND ROAD WORKS DRAWINGS / PAVING DRAWINGS			
PAVING - FOOTPATH - TACTILES	Pathfinder Stainless Steel TGSI with Carborundum insert to meet AS 1428 Size: Individual tactile studs Pattern: As per AS1428.4.1 Colour: Black top silver sides Fixing: Drill and pressure fit or drill and glue Equal or equivalent to DTAC tactile terraced black top (Stainless Steel (316)	Pathfinder Stainless Steel TGSI with Carborundum insert to meet AS 1428 Size: Individual tactile studs Pattern: As per AS1428.4.1 Colour: Black top silver sides Fixing: Drill and pressure fit or drill and glue Equal or equivalent to DTAC tactile terraced black top (Stainless Steel (316)	Not Applicable
UTILITY PIT SURROUNDS (IN FOOTPATH PAVING)	Material: Coloured concrete - 'Chicory' by Sydney Decorative Concrete Warehouse Mortar mix - Lanko 702 Durabed available from Bunnings Warehouse	Material: Coloured concrete - 'Chicory' by Sydney Decorative Concrete Warehouse Mortar mix - Lanko 702 Durabed available from Bunnings Warehouse	Not Applicable

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
PARKING DRAWINGS			
PAVING - VEHICULAR CROSS OVER / SHARED ZONE ROAD PAVING	Material: Granite Finish: Exfoliated Size: 50 x 200 x 300mm Pattern: Stretcher bond Colour: Natural stone integral finish Base: Rigid base - Reinforced concrete slab (200mm thick) Material Granite equal or equivalent to “Bruce” Rock (Austral Juperana) Mortar: Parex Streetscape System mortar bed and joining to manufacturer’s specification Joint sealant: Sikaflex - High Performance Polyurethane Joint Sealant (Grey) Paver sealant: Dry Treat Stain Proof with Intensifia and wet look sealant	Material: Precast concrete interlocking paving Colour: Charcoal Size: 80x112.5x225mm Bedding: Paving sand (Coarse Paving Sand) Granite Finish: Exfoliated Size: 80 x 200 x 300mm Pattern: Stretcher bond interlocking Colour: Natural stone integral finish Base: Rigid base - Reinforced concrete slab Material Granite equal or equivalent to “Bruce” Rock (Austral Juperana) Mortar: Parex Streetscape System mortar bed and joining to manufacturer’s specification Joint sealant: Sikaflex - High Performance Polyurethane Joint Sealant (Grey) Paver sealant: Dry Treat Stain Proof with Intensifia and wet look sealant	Material: Precast concrete interlocking paving Colour: Charcoal Size: 80x112.5x225mm Bedding: Paving sand (Coarse Paving Sand) Granite Finish: Exfoliated Size: 80 x 200 x 300mm Pattern: Stretcher bond interlocking Colour: Natural stone integral finish Base: Rigid base - Reinforced concrete slab Material Granite equal or equivalent to “Bruce” Rock (Austral Juperana) Mortar: Parex Streetscape System mortar bed and joining to manufacturer’s specification Joint sealant: Sikaflex - High Performance Polyurethane Joint Sealant (Grey) Paver sealant: Dry Treat Stain Proof with Intensifia and wet look sealant

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
PARKING DRAWINGS			
KERB RAMPS	**Material:** **Granite** **Finish:** **Exfoliated** **Granite equal or equivalent to "Bruce" Rock (Austral Juperana).** **Base:** **Rigid Base**	**Material:** **Granite** **Finish:** **Exfoliated** **Granite equal or equivalent to "Bruce" Rock (Austral Juperana).** **Base:** **Rigid Base**	**Not Applicable**
PARKING METERS / PARKING LINES	**North Sydney standard electronic parking meter. Yellow line markings (thermoplastic)**	**North Sydney standard electronic parking meter. Yellow line markings**	**North Sydney standard electronic parking meter. Contrasting granite line markings** **Material:** **Granite** **Finish:** **Exfoliated** **Size:** **80 x 200 x 300mm** **Pattern:** **Stretcher bond** **Colour:** **Natural stone integral finish** **Base:** **Rigid base - Reinforced concrete slab** **Granite equal or equivalent to "Bruce" Rock (Austral Juperana)** **Mortar:** **Parex Streetscape System mortar bed and joining to manufacturer's specification** **Joint sealant:** **Sikaflex - High Performance Polyurethane Joint Sealant** **Paver sealant:** **Dry Treat Stain Proof with Intensifia and wet look sealant**

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
PAVING DRAWINGS			
PAVING - RECYCLED RUBBER SURFACING AT HOTEL LOADING ZONES	Material: EPDM rubber surfacing Base: 50mm crushed concrete aggregate. Colour Mixture: 40% Brown, 40% Grey, 15% Beige and 5% Black Base: Rigid base - Reinforced concrete slab	Material: EPDM rubber surfacing Base: 50mm crushed concrete aggregate. Colour Mixture: 40% Brown, 40% Grey, 15% Beige and 5% Black Base: Rigid base - Reinforced concrete slab	Not Applicable
LANDSCAPE DRAWINGS			
TREE PIT BASE TREATMENTS - EXISTING TREE	Existing CBD tree site with Filtapave porous paving surround Colour: Cinnamon Paving surround Material: Granite Exfoliated Size: 50 x 200 x 300mm Pattern: As per detail / butt jointed Colour: Natural stone integral finish Equal or equivalent to “Bruce” Rock (Austral Juperana) Joint sealant: Sikaflex - High Performance Polyurethane Joint Sealant (Grey) Paver sealant: Dry Treat Stain Proof with Intensifia and wet look sealant Finish: Base: Rigid concrete base Edge: Steel edge with root barrier	Not Applicable	Not Applicable

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
UTILITY PIT SURROUND (IN FOOTPATH PAVING)	Material: concrete colour – Chicory from Sydney Decorative Concrete Warehouse; mortar mix – Lanko 702 Durabed from Bunnings Warehouse.	Material: concrete colour – Chicory from Sydney Decorative Concrete Warehouse; mortar mix – Lanko 702 Durabed from Bunnings Warehouse.	Not Applicable
PAVING DRAWINGS / LANDSCAPE DRAWINGS			
TREE PIT BASE TREATMENTS - PROPOSED TREE	Tree pit with steel edge min. 1m x1.6m tree pit. No header treatment Material: Filtapave porous paving Colour: Cinnamon Paving surround Material: Granite Equal or equivalent to "Bruce" Rock (Austral Juperana) Joint sealant: Sikaflex - High Performance Polyurethane Joint Sealant Paver sealant: Dry Treat Stain Proof with Intensifia and wet look sealant Finish: Exfoliated Size: 50 x 200 x 300mm Pattern: As per detail, butt jointed Colour: Natural stone integral finish Base: Rigid concrete base Edge: Steel edge with root barrier	Tree pit in road level granite kerb blister surround - refer to detail on page 66	Tree pit in road level granite kerb blister surround - refer to detail on page 66

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FIXTURES - FURNITURE			
BICYCLE RACKS	Material: Stainless steel Fixing: Circular Rings: Equal or equivalent to stainless steel bike ring assembly by HUB Inground Racks: Equal or equivalent to the GM850 (modified to include bottom rail) by Bikestorage	Material: Stainless steel Fixing: Circular Rings: Equal or equivalent to stainless steel bike ring assembly by HUB Inground Racks: Equal or equivalent to the GM850 (modified to include bottom rail) by Bikestorage	Material: Stainless steel Fixing: Circular Rings: Equal or equivalent to stainless steel bike ring assembly by HUB Inground Racks: Equal or equivalent to the GM850 (modified to include bottom rail) by Bikestorage
SEATING	Timber seat approx. 1850 mm long with back rest. Bench seat approx. 1800mm long. Stainless steel legs/frame. Spotted gum battens weathered for 6 months prior to installation. Fixing: Seats and benches are to be subsurface fixed. Stainless steel anti-tamper fixing Equal or equivalent to Rondo seat by StraBe	Timber seat approx. 1850 mm long with back rest. Bench seat approx. 1800mm long. Stainless steel legs/frame. Spotted gum battens weathered for 6 months prior to installation. Fixing: Seats and benches are to be subsurface fixed. Stainless steel anti- tamper fixing Equal or equivalent to Rondo seat by StraBe	Not Applicable
RUBBISH BINS	North Sydney standard bin Fixing: Bins are to be subsurface fixed. Spigot and socket mounted. Equal or equivalent bin designed by Ian Dryden of Dryden Crute Design Victoria/JC Brown.		

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FIXTURES - FURNITURE			
125mm or 150mm BOLLARDS - FIXED INSITU, REMOVEABLE, AUTOMATIC RETRACTABLE	(Fixed, removable, automatic retractable) 900mm high stainless steel bollard Finish: Linished Optional reflective tape Removable Bollard: Socket and cap for when bollard is removed Fixed Bollard Fixing: Bollards are to be subsurface fixed with mass concrete footings. 125mm or 150mm equal or equivalent to Leda Slimline bollard (Fixed or removable (Locking and removable)) Equal or equivalent to 168mm dia, 600mm high, 6mm wall thickness Advantage automatic retractable bollard by Leda	Not Applicable	(Removable, automatic retractable) Removable Bollard 900mm high stainless steel bollard Finish: Linished Optional reflective tape Fixed Bollard Removable Bollard: Socket and cap for when bollard is removed Automatic retractable Bollard: 600mm high stainless steel bollard 168mm diameter 125mm or 150mm equal or equivalent to Leda Slimline bollard (removable (Locking and removable))
BUS SHELTER	Contemporary bus shelter. Glass awning Advertising and signage panels if specified Approx. 1800mm long timber seating with backrest Equal or equivalent to JCDecaux 'Cox' bus shelter	Not Applicable	Not Applicable

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FIXTURES - FURNITURE			
STREET LIGHTING	Post Top LED with node Luminaire: IZYLUM 3 5304 Wattage: 107W LED or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core Steel core – 220mm DIA Colour: Anodised aluminium extrusion Cladding: Rimex Height: 9.5m with single 3.0m light outreach arm Banner arm: 2m outreach Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 9.5m (HUB-NSP-SL95-S3) or approved equivalent	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W LED or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Cladding: Rimex Height: 7m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 7m (HUB-HUB-NSP-SL70) or approved equivalent	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W LED or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Cladding: Rimex Height: 7m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 7m (HUB-HUB-NSP-SL70) or approved equivalent
PEDESTRIAN LIGHTING – (OPTION 1) PREFERRED OPTION UNLESS APPROVED OTHERWISE BY NORTH SYDNEY COUNCIL) Refer to HUB Australasia for further details	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Height: 5m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 5m (HUB-NSP-PL50) or approved equivalent	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Height: 5m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 5m (HUB-NSP-PL50) or approved equivalent	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Height: 5m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 5m (HUB-NSP-PL50) or approved equivalent

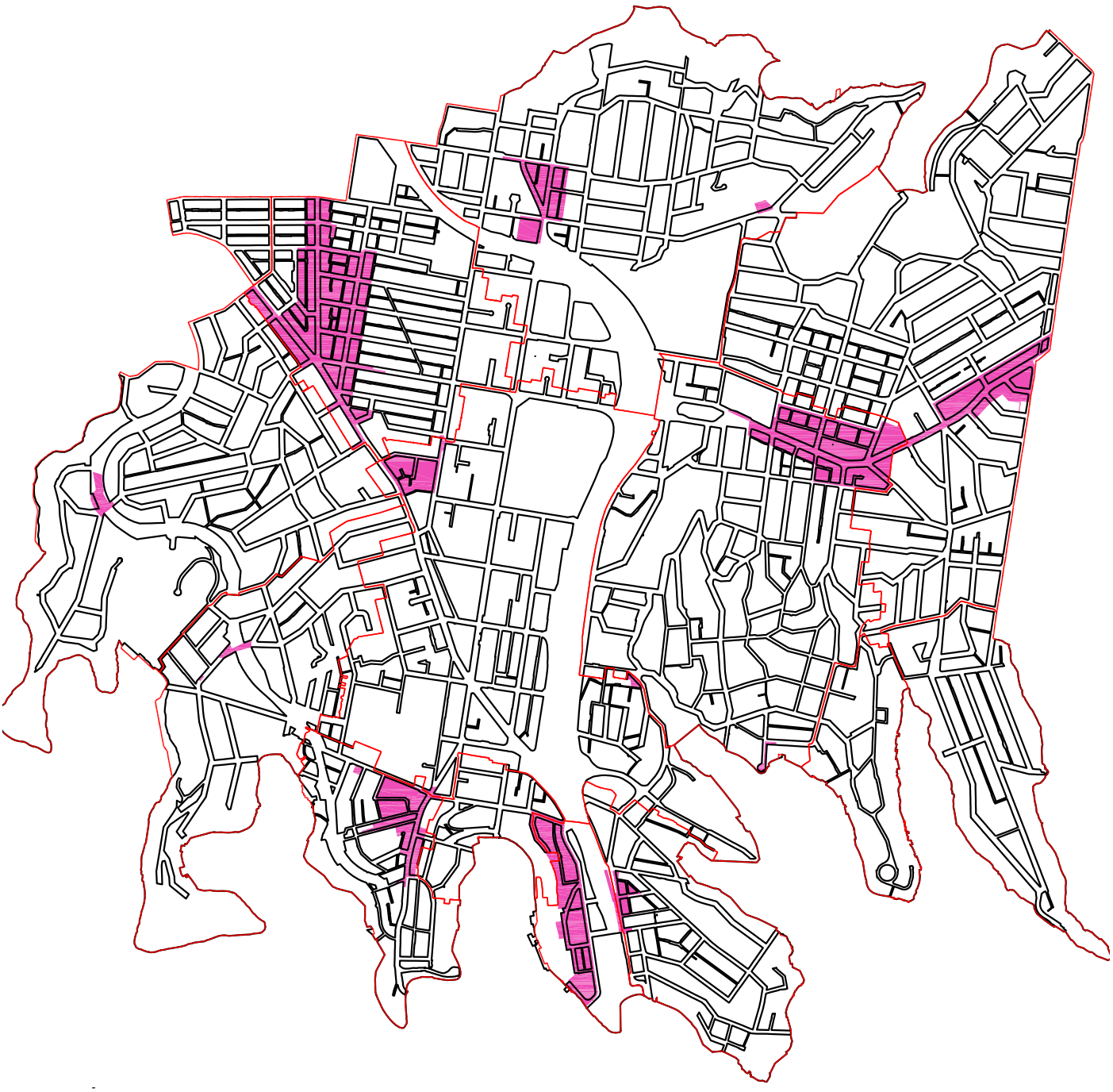
ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FIXTURES - FURNITURE			
PEDESTRIAN LIGHTING - (Option 2) POST TOP LIGHT	Post top LED luminaire on octagonal Vicpole Colour: Refer to drawings Equal or equivalent to Hubbell AAL Largent LED Post top luminaire.	Post top LED luminaire on octagonal Vicpole Colour: Refer to drawings Equal or equivalent to Hubbell AAL Largent LED Post top luminaire.	Post top LED luminaire on octagonal Vicpole Colour: Refer to drawings Equal or equivalent to Hubbell AAL Largent LED Post top luminaire.
PEDESTRIAN LIGHTING WALL MOUNTED LIGHT (Laneways and Shared Zones)	Not Applicable	Wall luminaire LED Finish: Powdercoated Colour: Graphite Equal or equivalent to BEGA LED Wall luminaire.	Wall luminaire LED Finish: Powdercoated Colour: Graphite Equal or equivalent to BEGA LED Wall luminaire.
PEDESTRIAN LIGHTING - POST TOP LIGHT (Park / Plaza locations)	Post top LED luminaire on octagonal Vicpole Colour: Refer to drawings Equal or equivalent to Hubbell AAL Largent LED Post top luminaire.	Not Applicable	Not Applicable
PEDESTRIAN LIGHTING - ILLUMINATED BOLLARD	LED 800mm high illuminated bollard Finish: Powdercoated Colour: Graphite Fixing: Bollards are bolted with a mounting plate onto a foundation. Light fittings shall be directional. Equal or equivalent to BEGA Illuminated bollard. 800mm high. LED	LED 800mm high illuminated bollard Finish: Powdercoated Colour: Graphite Fixing: Bollards are bolted with a mounting plate onto a foundation. Light fittings shall be directional. Equal or equivalent to BEGA Illuminated bollard. 800mm high. LED	LED 800mm high illuminated bollard Finish: Powdercoated Colour: Graphite Fixing: Bollards are bolted with a mounting plate onto a foundation. Light fittings shall be directional. Equal or equivalent to BEGA Illuminated bollard. 800mm high. LED
PEDESTRIAN LIGHTING - HANDRAILS	LED integrated handrail lighting system Equal or equivalent to Planet Lighting HLS GEN4 LED integrated handrail lighting system.	Not Applicable	Not Applicable

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FIXTURES - FURNITURE			
MISCELLANEOUS COMMUNITY NOTICE BOARDS Free standing community notice board / Outdoor wall mounted notice board	Colour: Silver frame with option for council colours to be incorporated as a trim Key features: Lockable Waterproof A0 (1180 x 841mm) internal dimension Portrait orientation Option for anti-graffiti film on notice board Poly carbonate or acrylic cover Equal or equivalent to HD1 Harsh Duty Outdoor Lockable Notice Board by Arrow Alpha Equal or equivalent to MD6 Keyless Secure Notice Board by Arrow Alpha	Not Applicable	Not Applicable
MISCELLANEOUS FIXTURES -FURNITURE Bottle refill station with drinking fountain	1500mm high refill station with drinking fountain Stainless steel bulk refill dispenser for bottle refilling each side of the unit Marine grade anodised aluminium unit housing Optional filtered water unit Multiple bottle refill points Changeable panels Stainless steel drinking bowl Stainless steel frame construction Fixing: Stainless steel base plate with drainage pit Equal or equivalent to Aquafill product Type C 1500mm high refill station with drinking fountain by Arrow-Alpha Industries	Not Applicable	Not Applicable
PAVING - ALFRESCO DINING AREAS	Outdoor dining - trading area permit boundary markers with North Sydney logo Material: Brass Fixing: Epoxy fix with central pin	Not Applicable	Not Applicable

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FIXTURES - FURNITURE			
BANNER POLE	**6063T6 Untapered high tensile aluminium** **Powdercoat finish** **Equal or equivalent to Abel Elegance range banner pole**	**Not Applicable**	**Not Applicable**

05 Village Centres & Activity Strips

Active & lively shopping strips and village centres with shops, restaurants, cafes and galleries. Characterised by smaller scale built form, more intimate character, street level activity & pedestrian activity.



LEGEND

Village Centre / Activity Strip

05 Village Centres and Activity Strips

Villages and activity strips within North Sydney LGA include:

- Wollstonecraft and Waverton railway station activity strips (Category 1 Paving)
- Blues Point Road activity strip (Category 1 Paving)
- Union Street activity strip (Category 1 Paving)
- Milsons Point / Kirribilli Villages (Category 1 Paving)
- Cammeray village (Category 1 Paving)
- Cammeray Road activity strip (Category 1 Paving)
- Neutral Bay village (Category 1 Paving)
- Cremorne village (Category 1 Paving)
- Hayes Street Wharf activity strip (Category 1 Paving)
- Clark Road activity strip (Category 1 Paving)
- Crows Nest bordered by Alexander Lane, Chandos Street and the Pacific Highway. (Category 2 Paving)

The villages of North Sydney are located on the north of Sydney Harbour. Many have views across to Sydney city and the harbour. Most are located at high points along ridge lines.

Villages and activity strips within the North Sydney LGA vary in size and use and are spread across the LGA. The extent of a village or activity strip is largely defined by its zoning; commercial and retail. Activity strips are generally located on Main streets.

In terms of built form villages generally have a building height of two stories with some exceptions of taller commercial or residential buildings. A consistent series of awnings are also often in place improving the comfort level for pedestrians below. Villages in North Sydney have a smaller scale and more intimate character than North Sydney Centre or St Leonards.

Villages generally contain main streets and laneways. In some instances Shared Zones may be incorporated in high pedestrian use areas.

Parks within villages shall be treated in the 'Parks and open space' section of this manual.

Villages shall have a higher quality finish to pavements and street furniture than adjacent local / residential areas. Villages differ to local / residential areas in that they have continuous pavements from kerb to boundary line/ building line. Residential areas will have a grassed verge in most areas, villages will also have a greater provision of street furniture.

Consistency in materials is critical in village centres as it ensures they read as part of North Sydney, however it is also important that each village and activity strip has its own distinct character; and therefore have some elements that differ. This is achieved through the use of suburb / village logos, public art, street tree species and through the preservation of existing built form character.

5.1 Materials palette objectives

The village centre public domain materials palette should respond to the more intimate character and smaller scale of village areas.

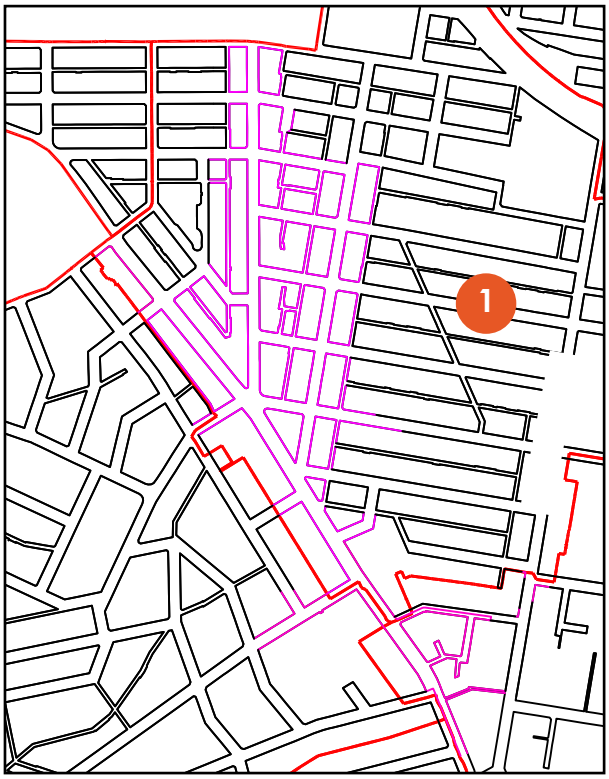
The materials palette should reflect and reinforce local character, heritage and place.

The incorporation of suburb logos provides an opportunity for branding and identity that is distinct to the suburb. Logos can be incorporated in street furniture such as bollards, seating and pedestrian barriers.

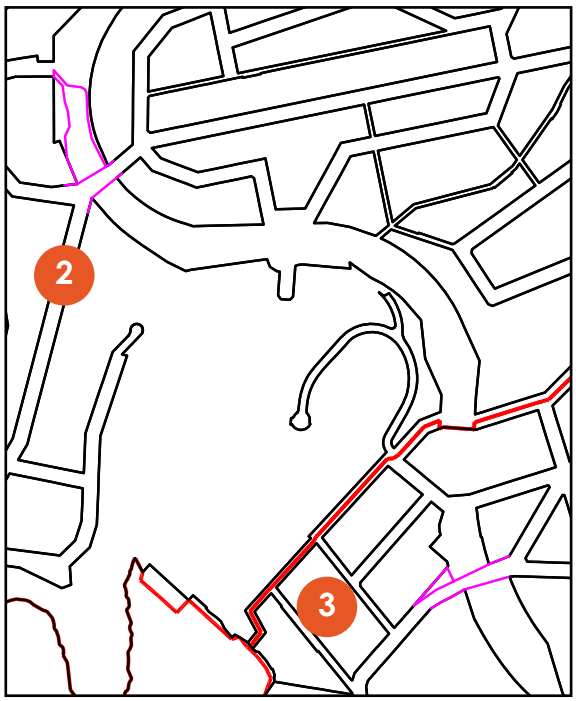
Materials selection should have longevity and proven performance under high usage.

Contents

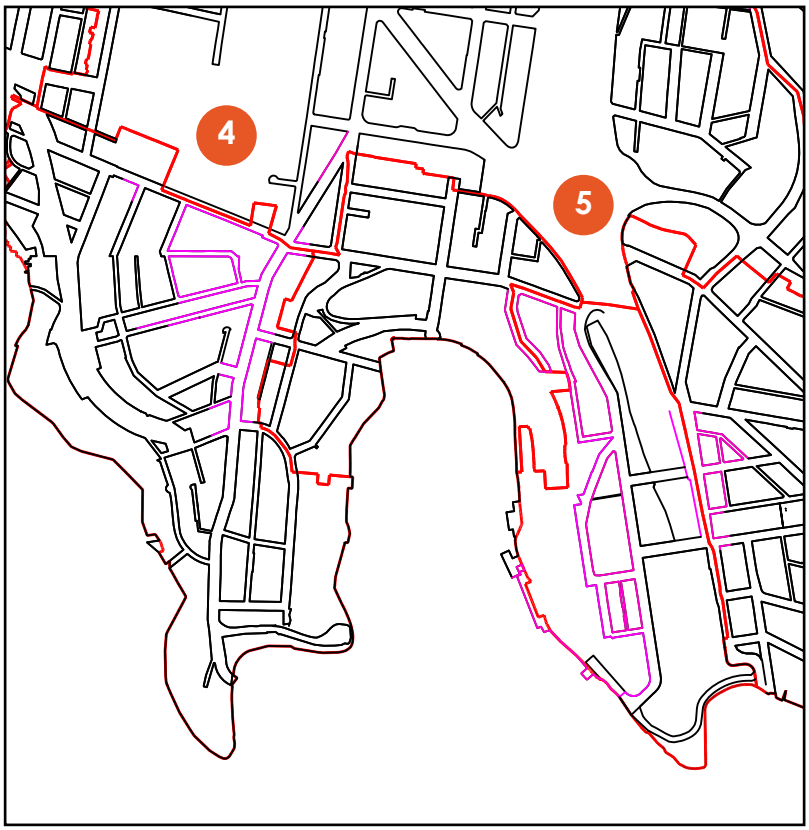
VILLAGE CENTRES AND ACTIVITY STRIP LOCATIONS



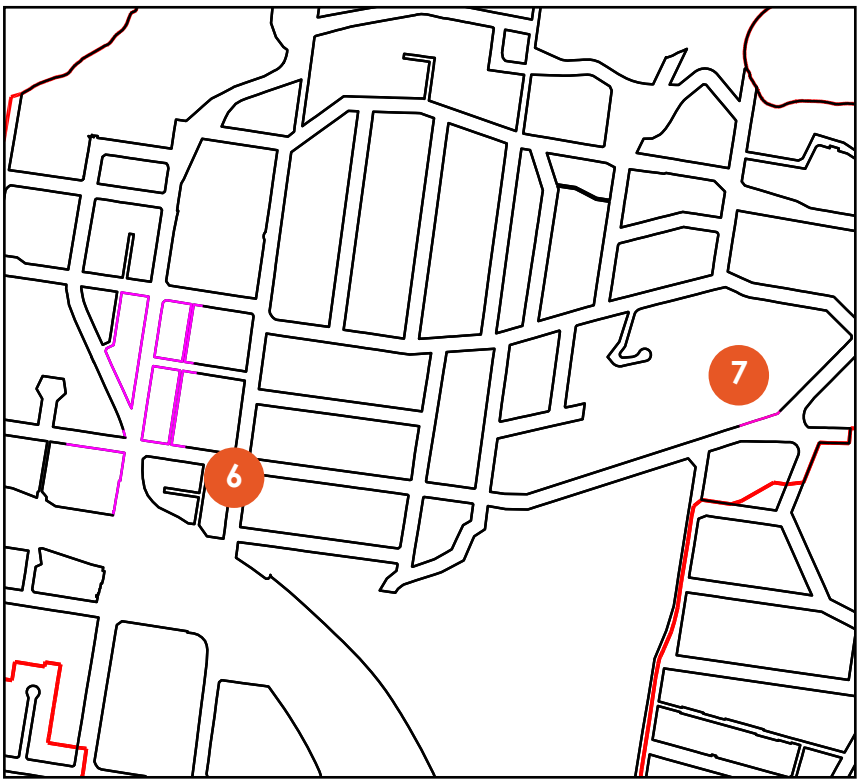
CROWS NEST 1



WOLLSTONECRAFT 2 / WAVERTON 3

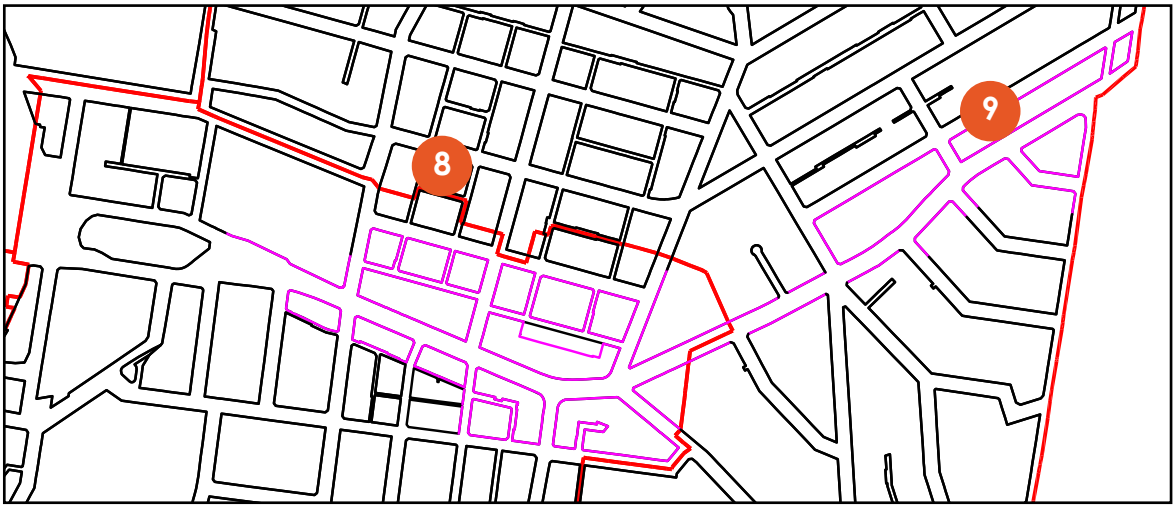


UNION STREET / BLUES POINT ROAD 4
/ MILSONS POINT / KIRRIBILLI 5



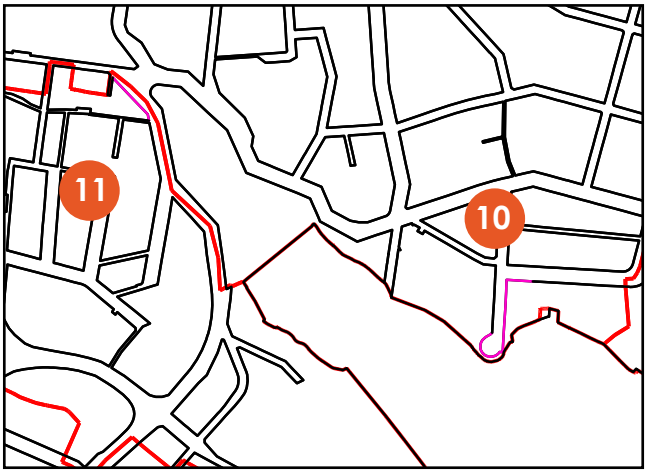
CAMMERAY 6

CAMMERAY ROAD SHOPS 7



CREMORNE 8

NEUTRAL BAY 9



HAYES STREET WHARF NEUTRAL BAY 10

CLARK ROAD SHOPPING STRIP 11

05 Village Centres and Activity Strips

5.2 Main streets - perspective view (Category 1 Paving) - applicable to all areas except Crows Nest Village

5.3 Main streets - plan and section view (Category 1 Paving) - applicable to all areas except Crows Nest Village

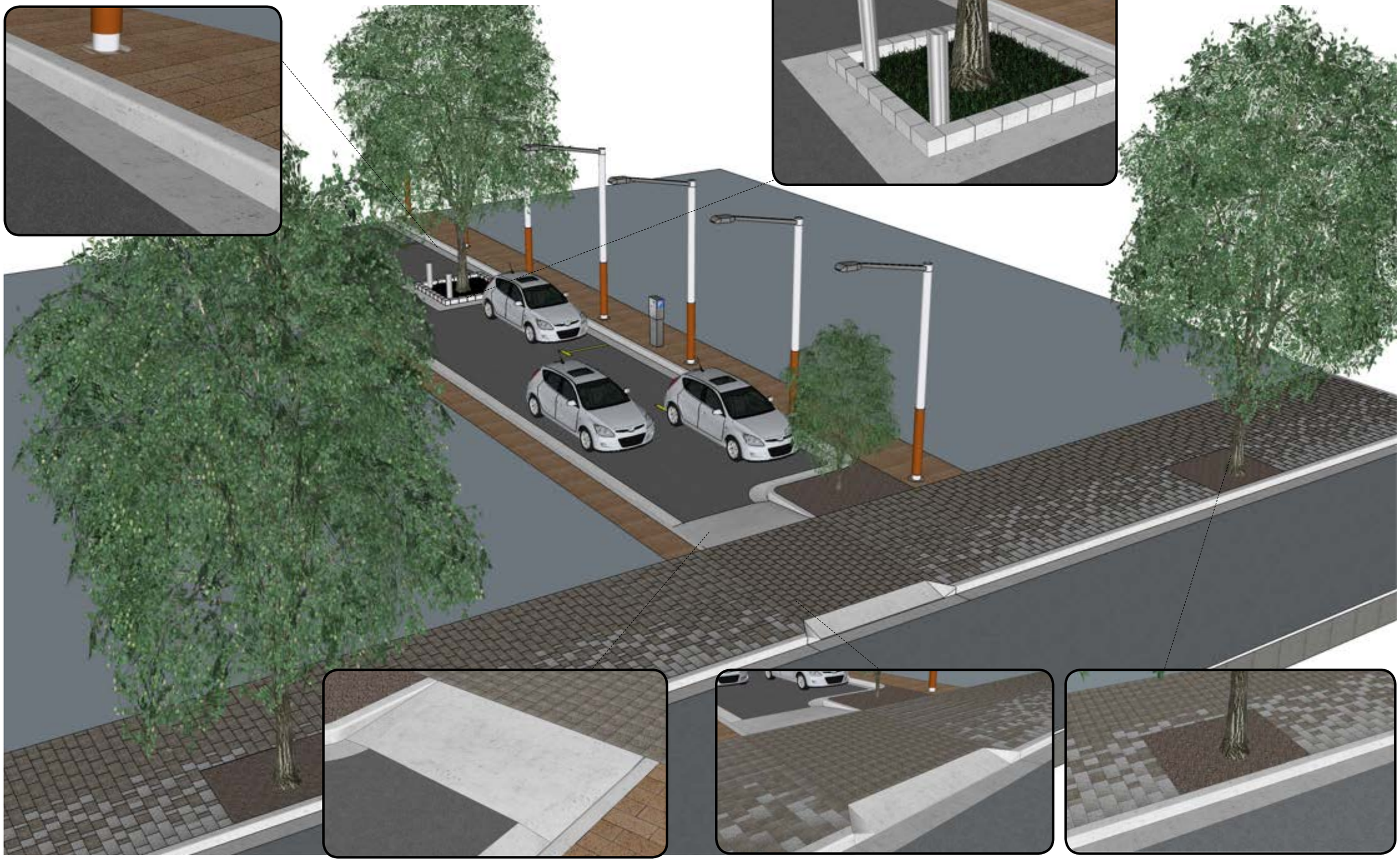
05 Village Centres and Activity Strips

5.4 Main streets - perspective view (Category 2 Paving) - Crows Nest Village Only

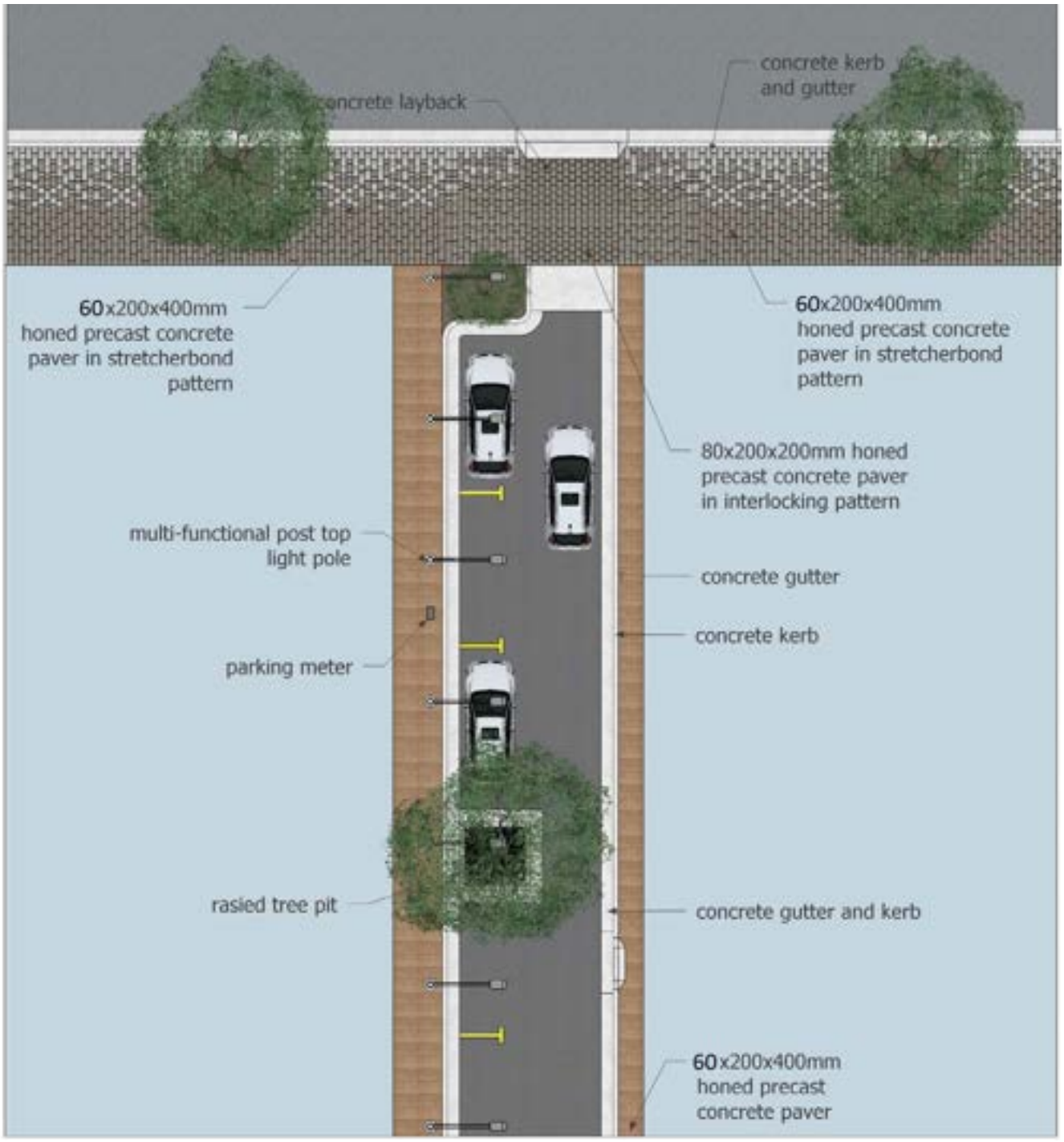
5.5 Main streets - plan and section view (Category 2 Paving) - Crows Nest Village Only

05 Village Centres and Activity Strips

5.6 Laneways - perspective view (Category 1 Paving) - applicable to all areas except Crows Nest Village



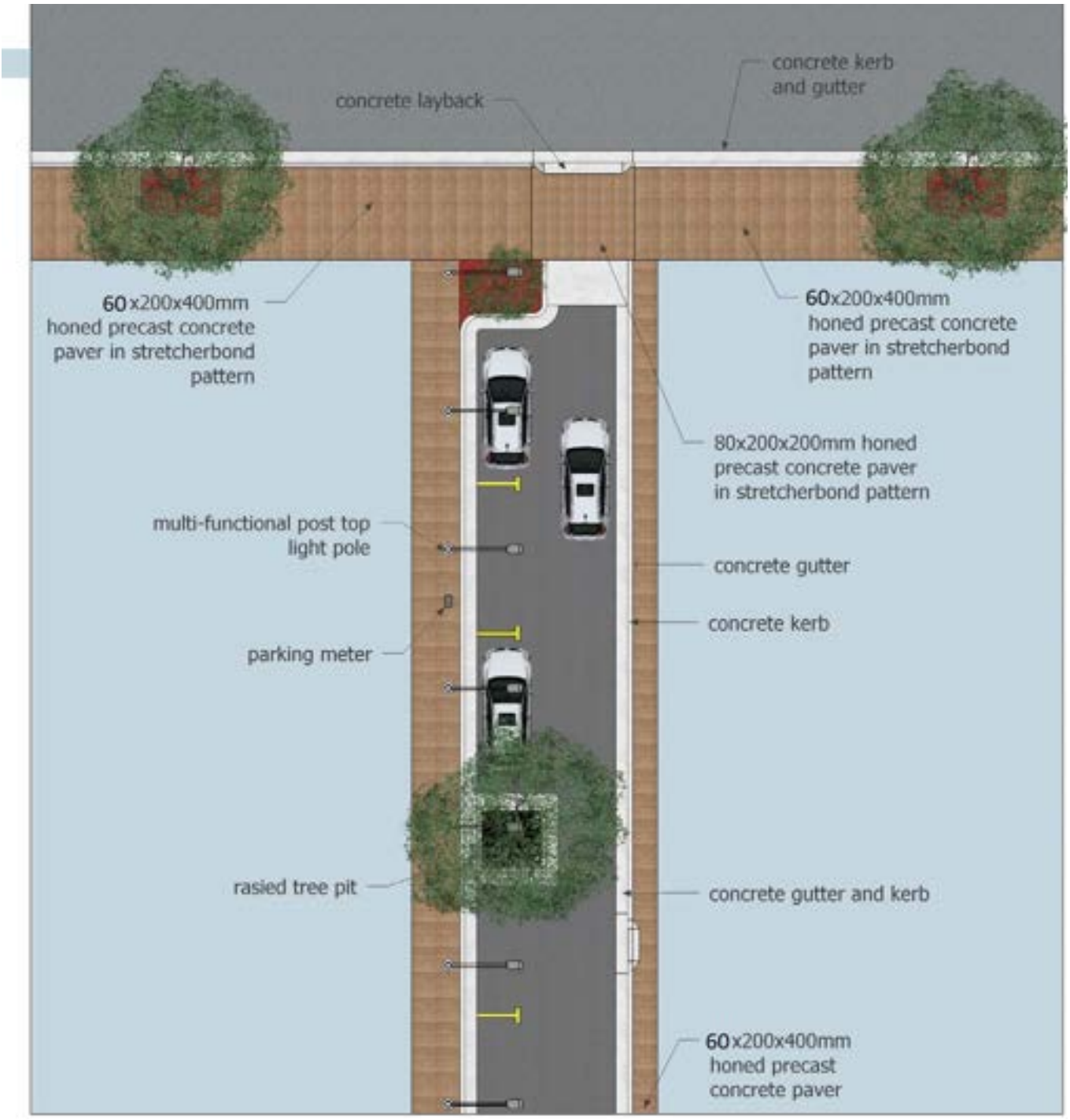
5.7 Laneways - plan and section view (Category 1 Paving) - applicable to all areas except Crows Nest Village



05 Village Centres and Activity Strips

5.8 Laneways - perspective view (Category 2 Paving) - Crows Nest Village Only

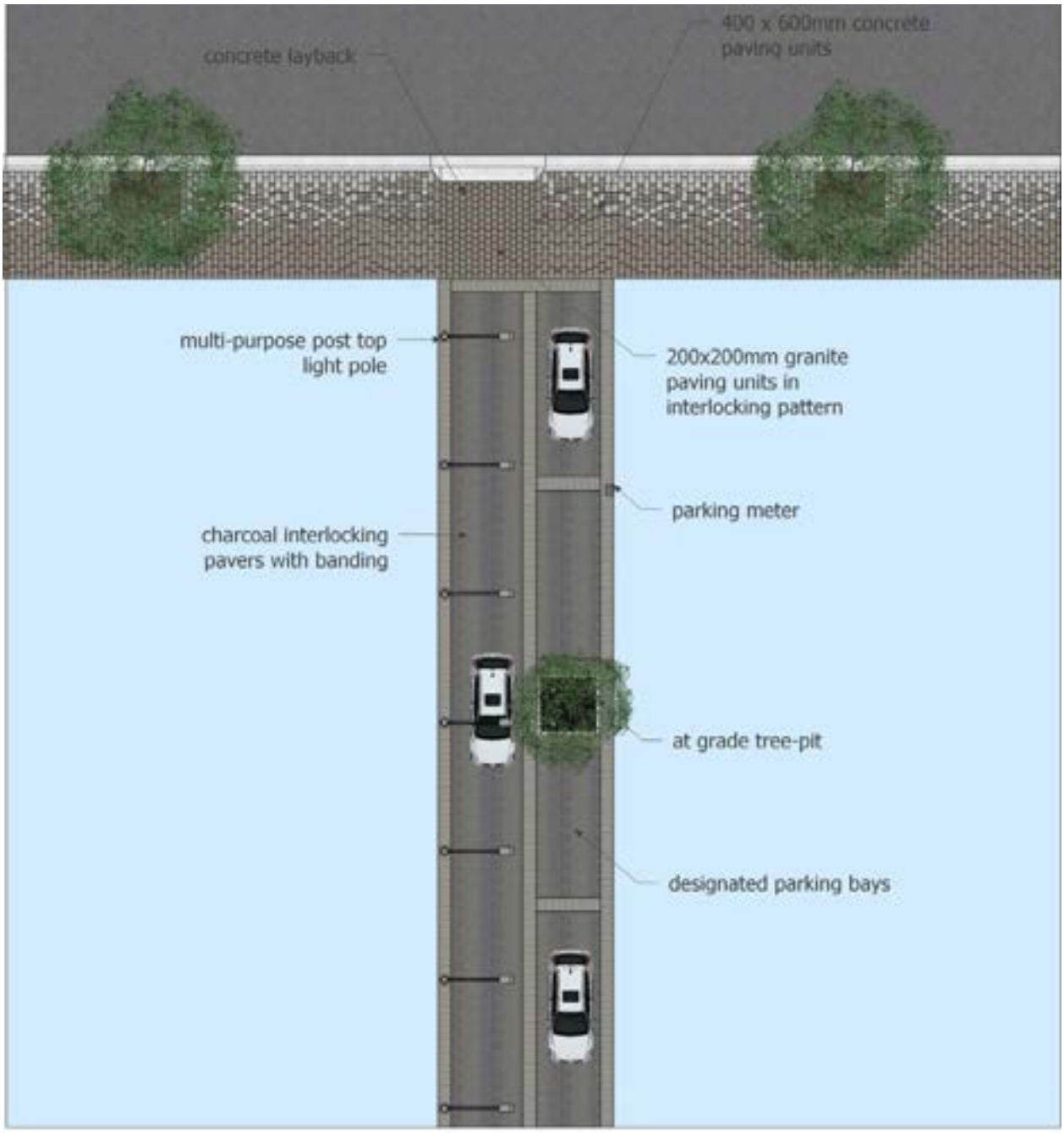
5.9 Laneways - plan and section view (Category 2 Paving) - Crows Nest Village Only



05 Village Centres and Activity Strips

5.10 Shared zone - perspective view (Category 1 Paving) - applicable to all areas except Crows Nest Village

5.11 Shared zone - plan and section view (Category 1 Paving) - applicable to all areas except Crows Nest Village



05 Village Centres and Activity Strips

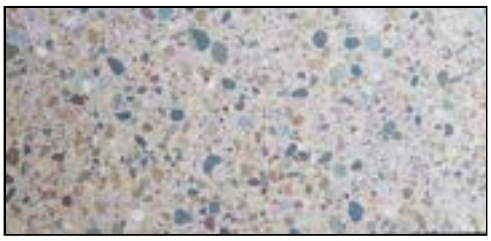
5.12 Shared zone - perspective view (Category 2 Paving) - Crows Nest Village Only

5.13 Shared zone - plan and section view (Category 2 Paving) - Crows Nest Village Only

5.14 Indicative Materials and Furniture

Main Street (Category 1 Paving) - all areas except Crows Nest Village

Typical footpath paving pattern design plan



Precast concrete unit paver - type 1
(refer below for more information)

Precast concrete unit paver - type 2
(refer below for more information)

Stainless Steel Tactile
Ground Surface Indicators

Paving Unit Sizes

1. Paving Type A: 60 x 200 x 400mm
2. Paving Type B: 60 x 200 x 300mm
3. Paving Type C: 60 x 200 x 200mm
4. Paving Type D: 60 x 200 x 100mm

Paving Unit Types

1. Paving Type 1: PPX540 : 35D
2. Paving Type 2: PPX1837: 35D
3. Paving Type 3: Cut to size as per site requirement

NOTE: PPX540 : **RD** and PPX1837: **RD** Rough Diamond(RD) finish may be used where higher slip resistance is desirable.

Paving Module Types

Module A - (2400x3500mm) - Typical random two-tone pattern

Module B - (2400x3500mm) - Typical transition module between existing paving and typical module A.

Module C - (2400x3500mm) - Typical transition zone

Paving Design Notes

1. Precast concrete unit pavers as per 180917-North Sydney Combine Paving Details 2019.

2. Precast concrete unit paver with a honed finish laid in a stretcherbond pattern on a rigid base.

3. Mid coloured precast concrete paving with a fleck of colour for warmth. Pavers are to have a prominent but small sized aggregate to add warmth to the paver.

4. Butt jointed, stretcher bond paving pattern with no header or banding.

5. Kerb ramp located in alignment with boundary.

6. Pathfinder Stainless Steel TGSI with Carborundum insert to meet AS 1428

7. All existing service pits within the footpath shall be replaced with concrete lids. Telstra service pits may be plastic or concrete.

8. Where finished footpath surface levels do not match existing, contact Council's parking meter services division for further details about footing requirements and repositioning of meter stem.

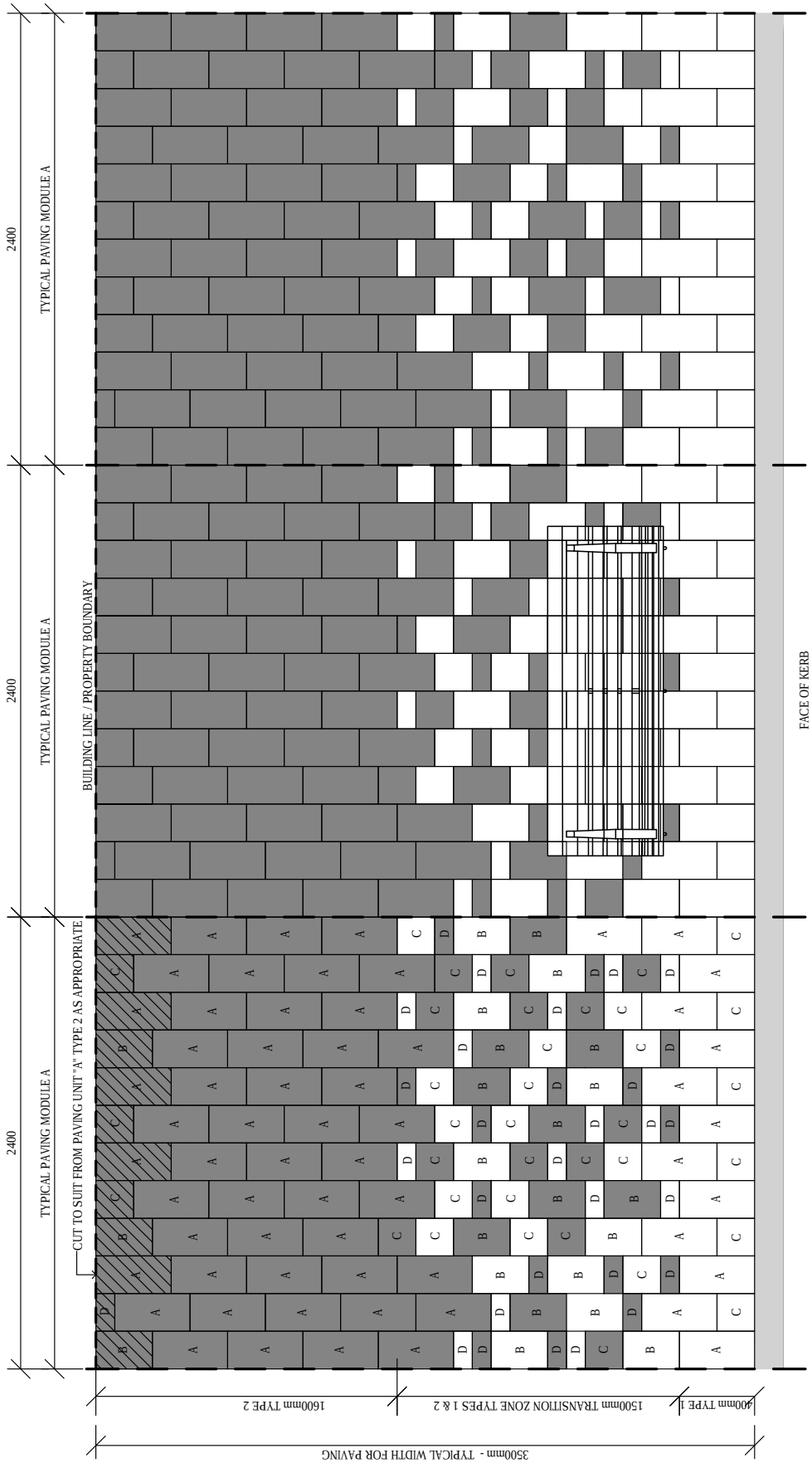
9. All sign stems (50mm NB) shall be installed using V-Loc + wedge system (galvanised). Footpath pavement shall be neatly core drilled 200mm DIA.

10. All open joints shall be sealed with Bostik "Seal 'N' Flex 1" Black colour in accordance with the manufacturer's recommendations - this includes boundaries, back of kerb and lintels, utility pits, construction joints etc. (Colour Black)

Typical plan

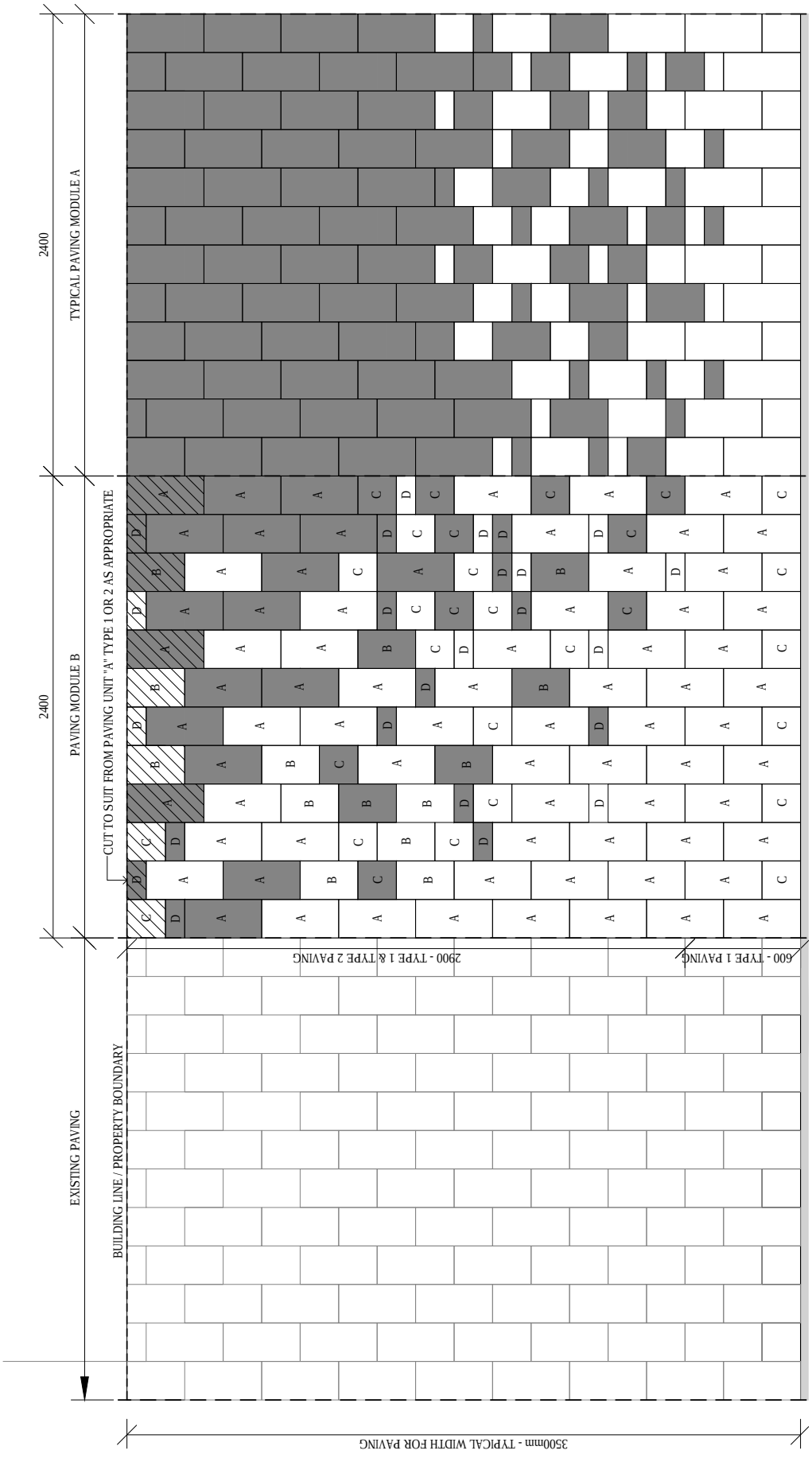
Main Street (Category 1 Paving) - all areas except Crows Nest Village

Module A Paving - typical paving design



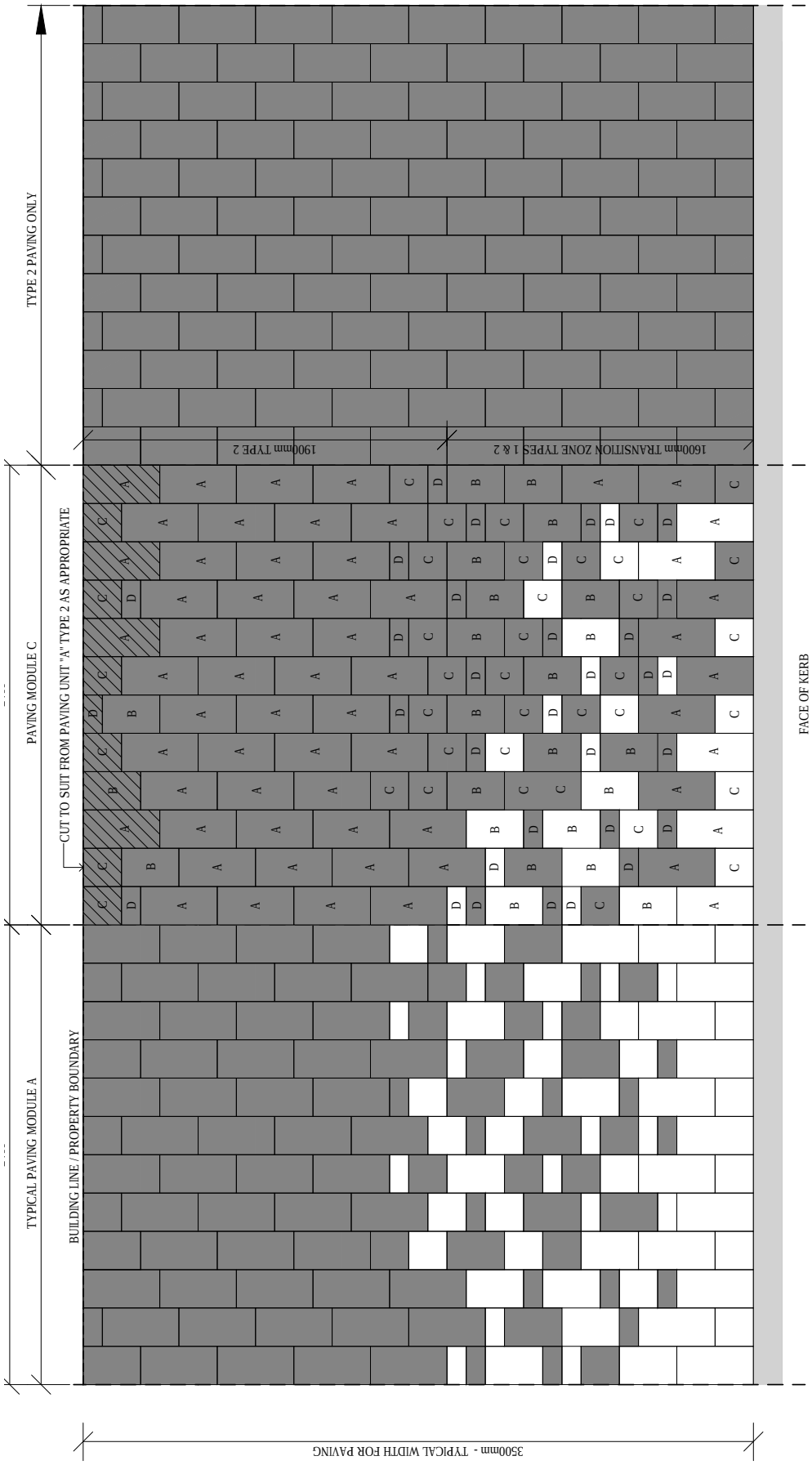
Main Street (Category 1 Paving) - all areas except Crows Nest Village

Module B Paving - typical transition module between Module-A and Type-1 (lighter) paving



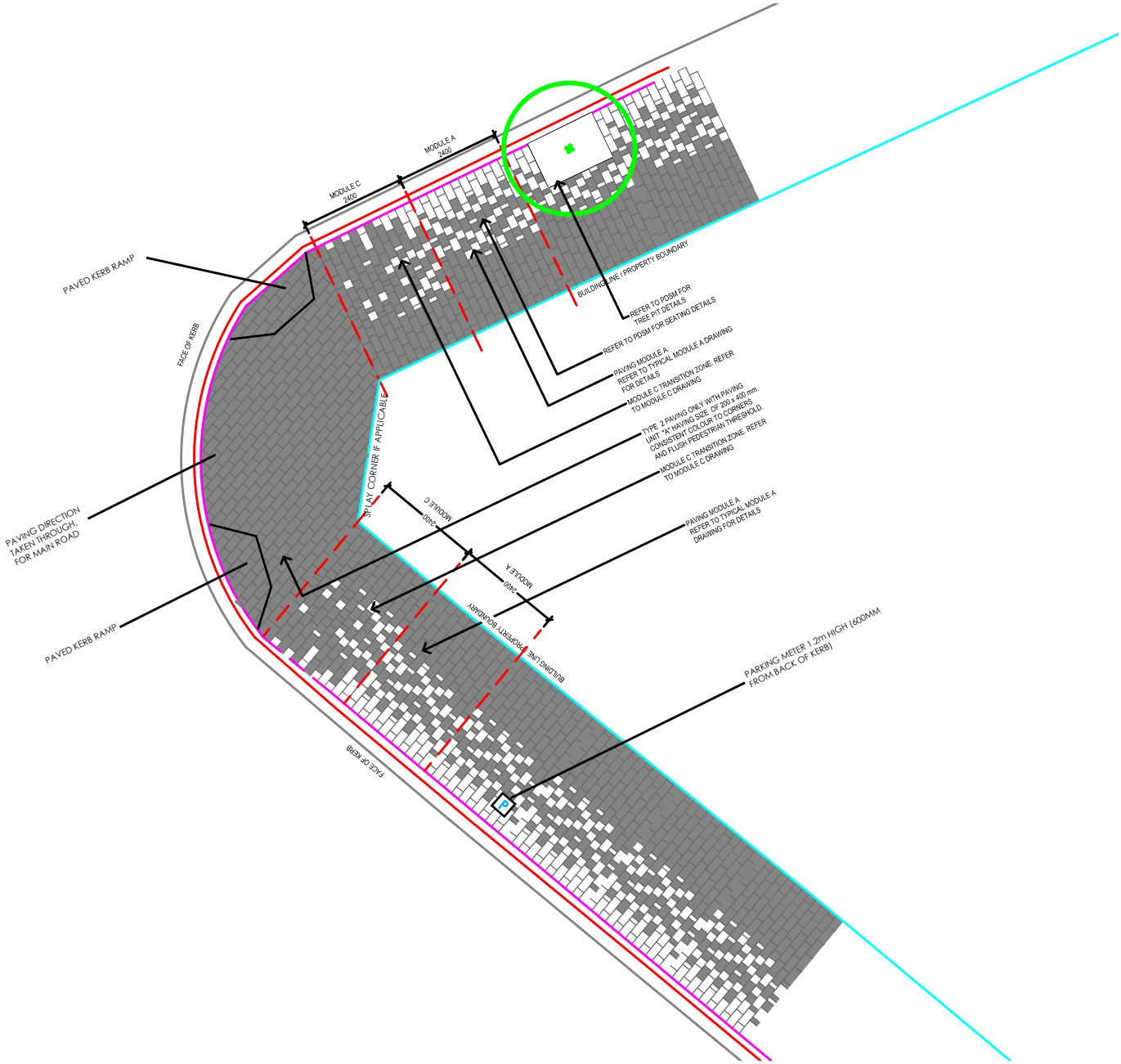
Main Street (Category 1 Paving) - all areas except Crows Nest Village

Module C Paving - typical transition module between Module-A and Type-2 (darker) paving



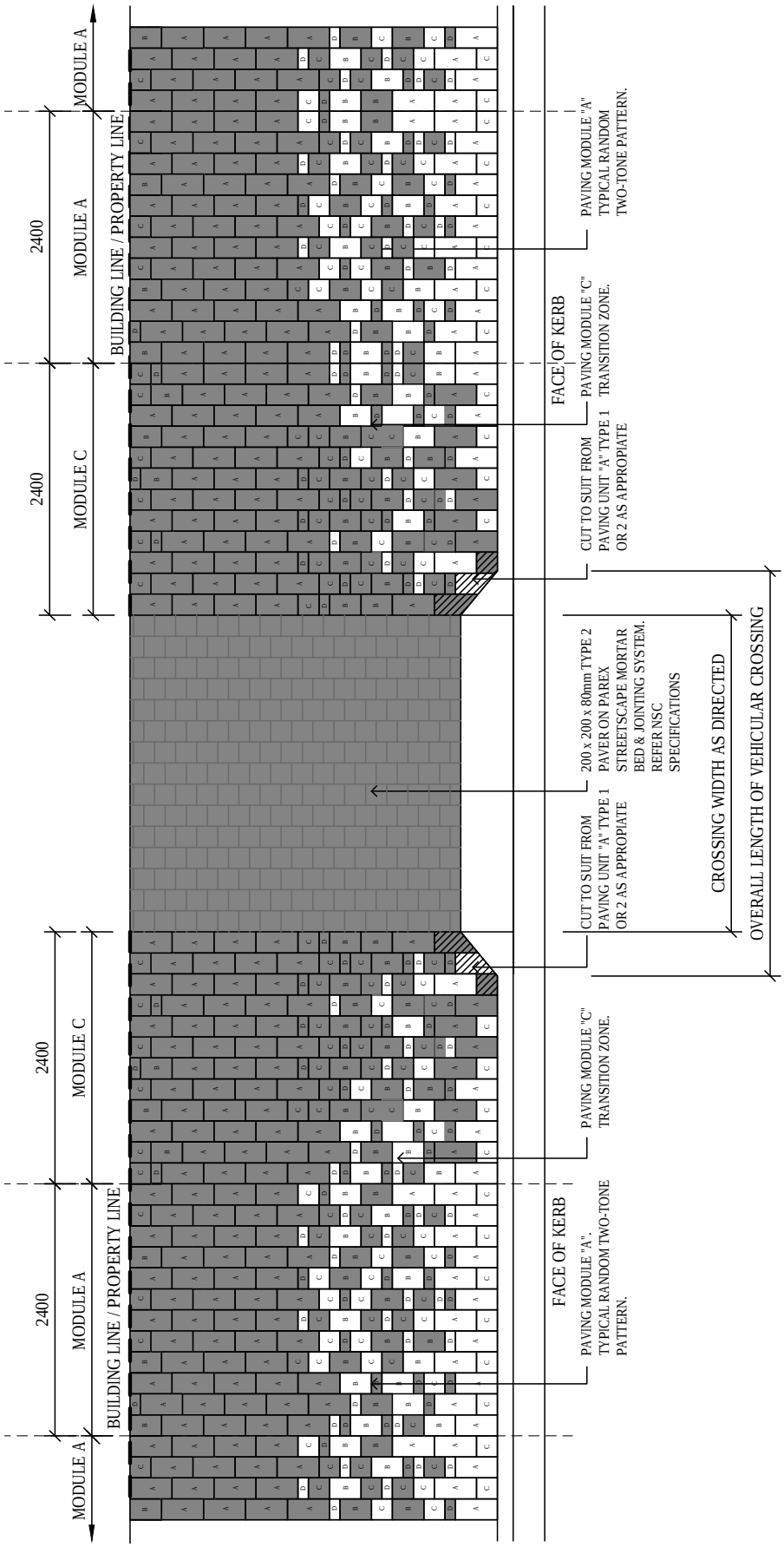
Main Street (Category 1 Paving) - all areas except Crows Nest Village

Typical footpath paving pattern plan and cross-section



Main Street (Category 11 Paving) - all areas except Crows Nest Village

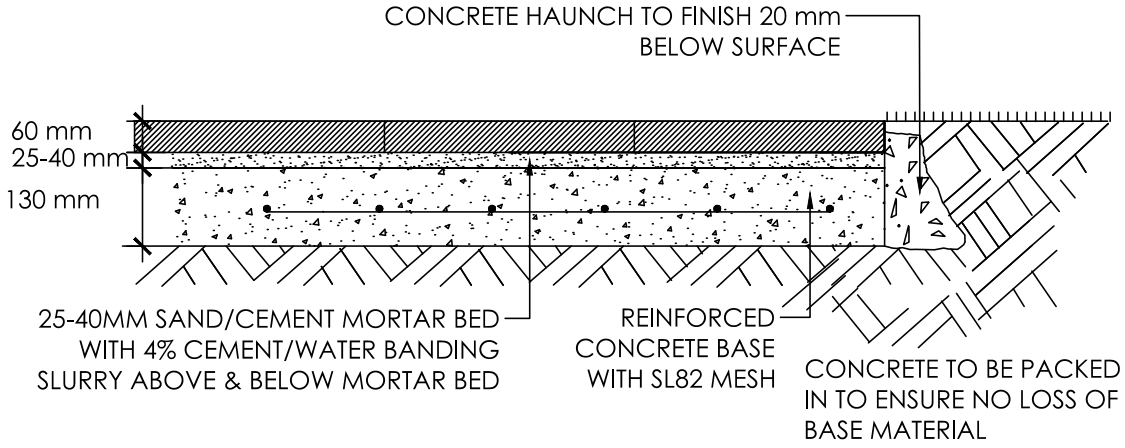
Typical driveway treatment



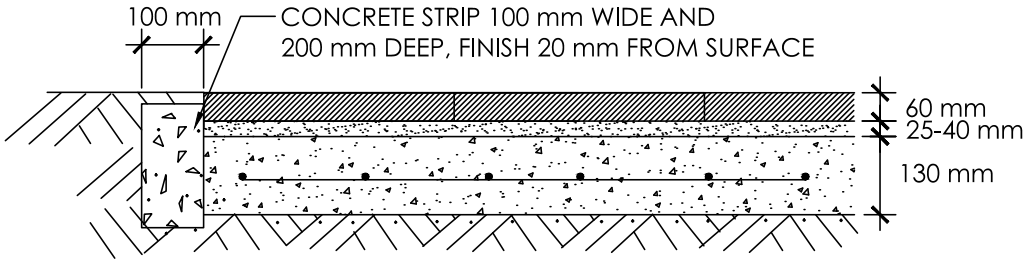
Main Street (Category 1 Paving) - all areas except Crows Nest Village

Typical precast concrete paving edge restraint - concrete haunch, concrete strip, steel edge

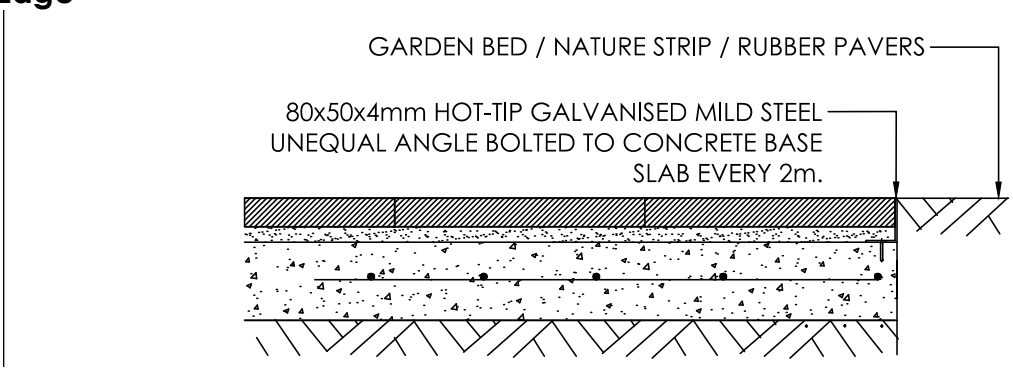
Concrete haunch



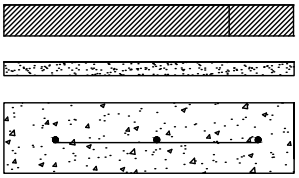
Concrete Strip



Steel Edge



LEGEND



60 X 200 x 400mm PRECAST CONCRETE PAVERS

25-40MM SAND/CEMENT MORTAR BED WITH 4% CEMENT / WATER BANDING SLURRY ABOVE & BELOW MORTAR BED

130 mm THICK REINFORCED CONCRETE SLAB

Precast concrete unit

Precast concrete unit in stretcherbond pattern

Notes

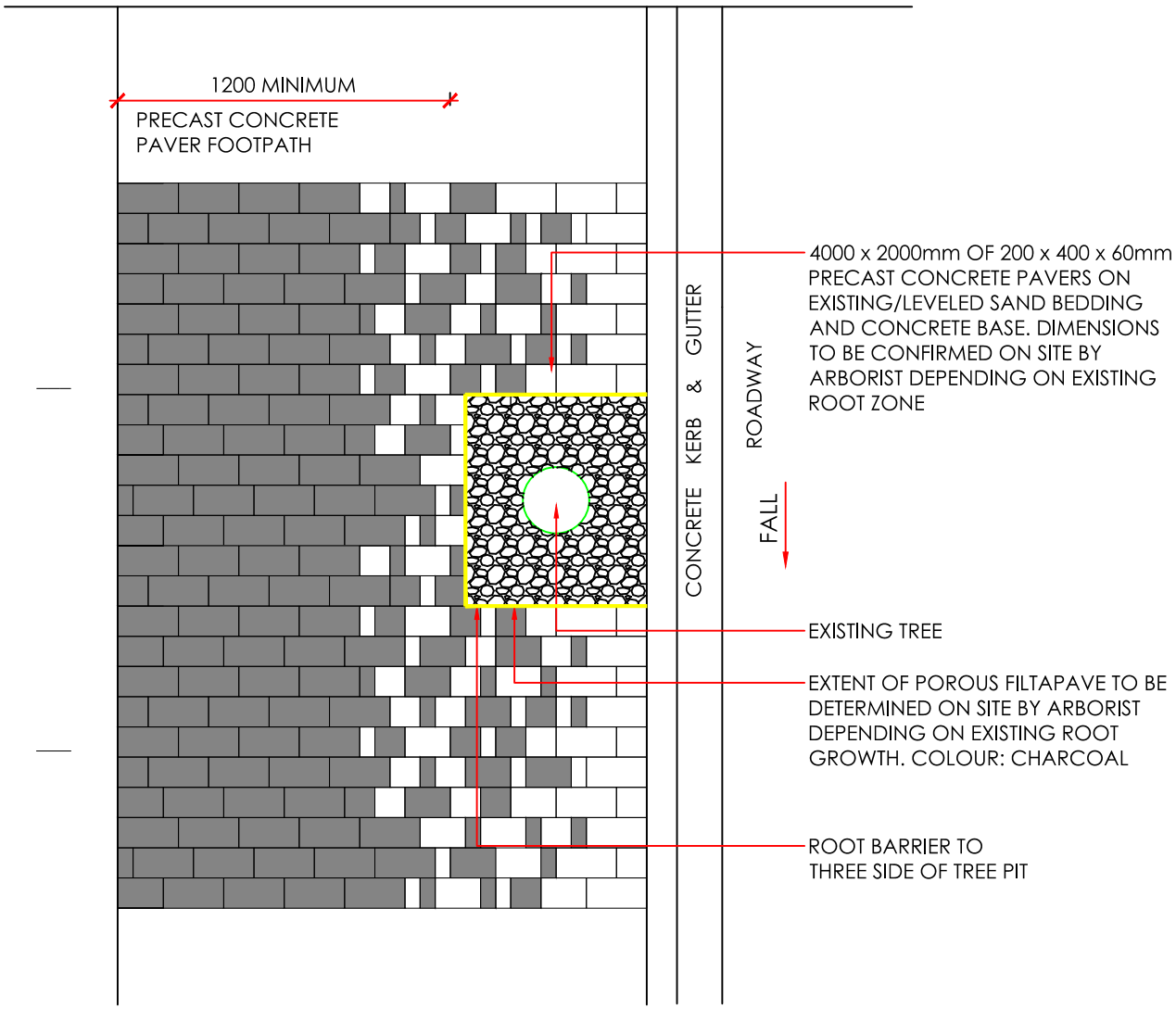
1. 60 x 200 x 400mm precast concrete unit paving.

2. 25-40mm mortar bed.

3. Rigid base - concrete slab.

Main Street (Category 1 Paving) - all areas except Crows Nest Village

Typical existing tree site porous rubber surround



Notes

1. Existing tree site with FILTAPAVE porous surround.

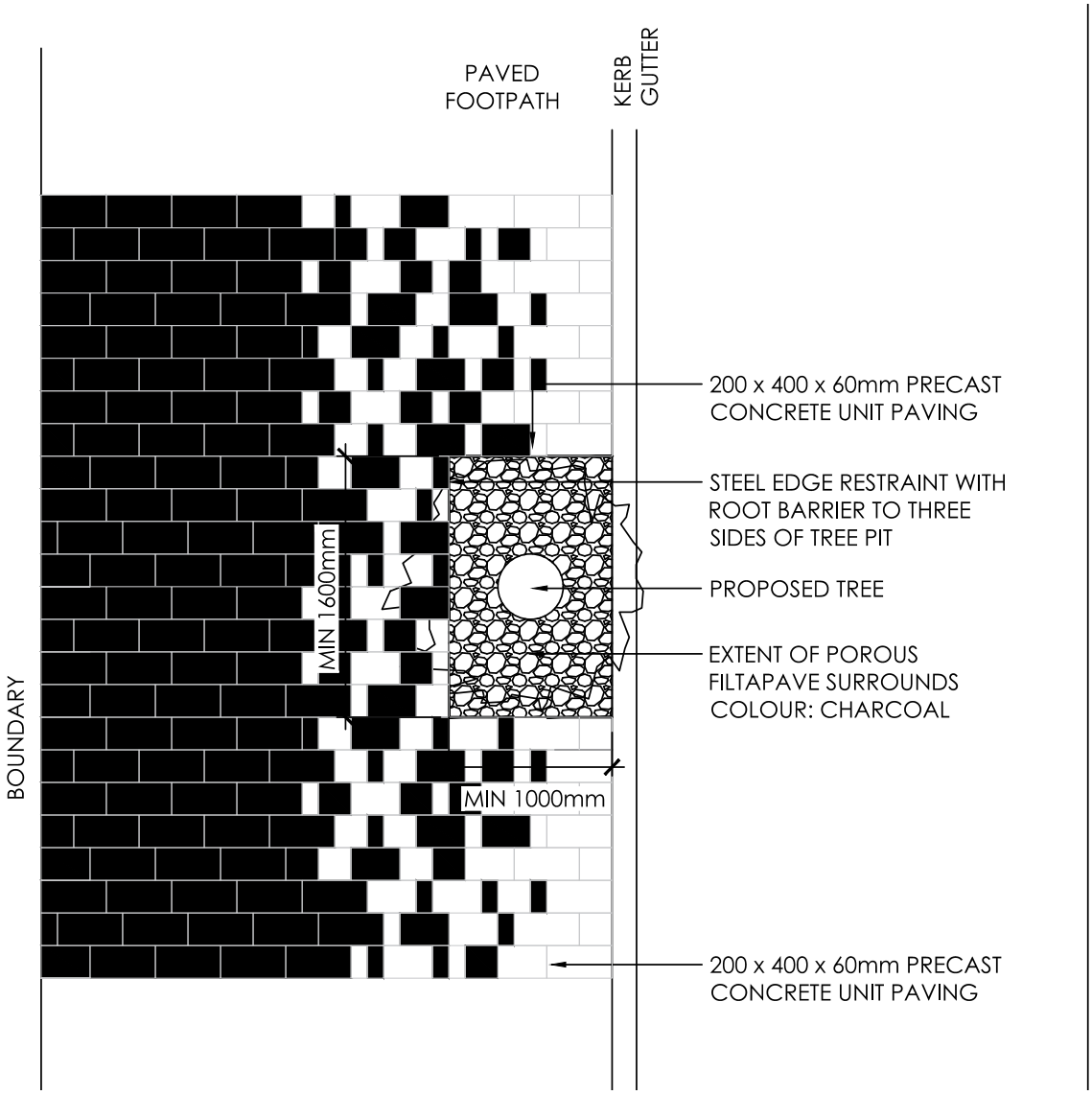
2. Colour: Charcoal.

3. 60 x 200 x 400mm precast concrete unit paver with a honed finish, laid in a butt jointed, stretcherbond pattern shown on the detail.

4. Existing base or rigid base to paving surround.

Main Street (Category 1 Paving) - all areas except Crows Nest Village

Typical new tree site formation



Notes

1. Tree site formed in paving pattern.

2. Edge restraint as per 'Typical precast concrete paving edge restraint' details.

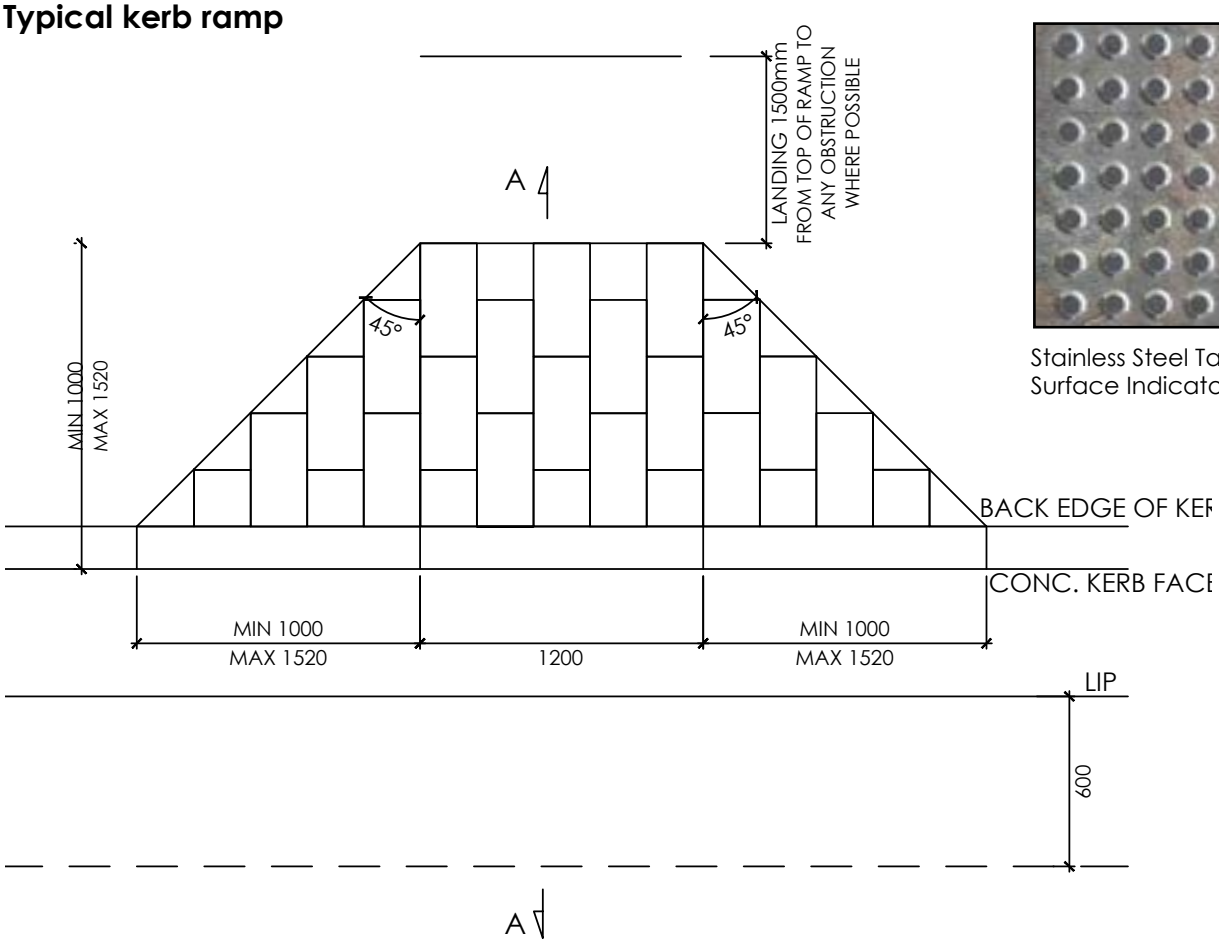
3. 60 x 200 x 400mm precast concrete unit paver with a honed finish.

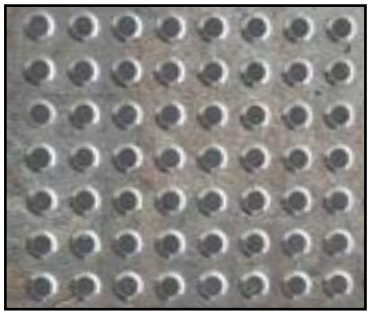
4. Tree pit min 1m x 1.6m with FiltaPave rubber surround. Colour: Charcoal

Tree site paving pattern (New tree)

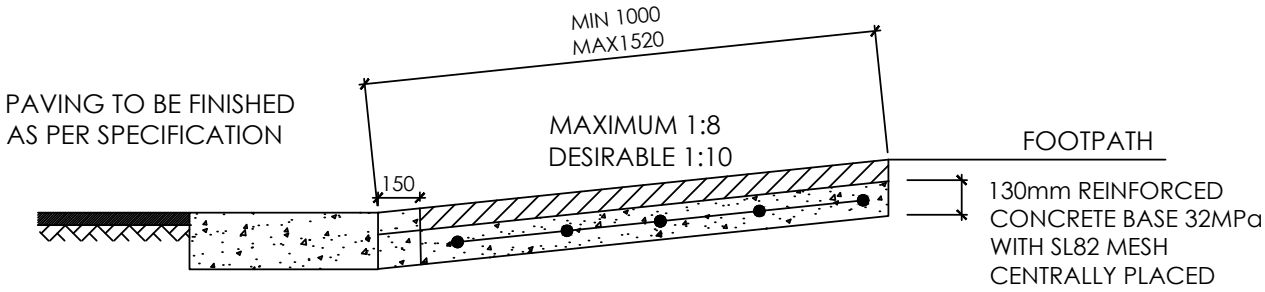
Main Street (Category 1 Paving) - all areas except Crows Nest Village

Typical kerb ramp

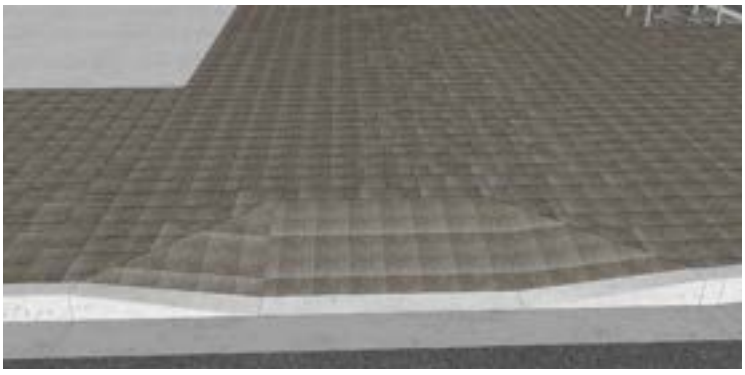




Stainless Steel Tactile Ground Surface Indicators



SECTION A-A



Typical kerb ramp

Notes

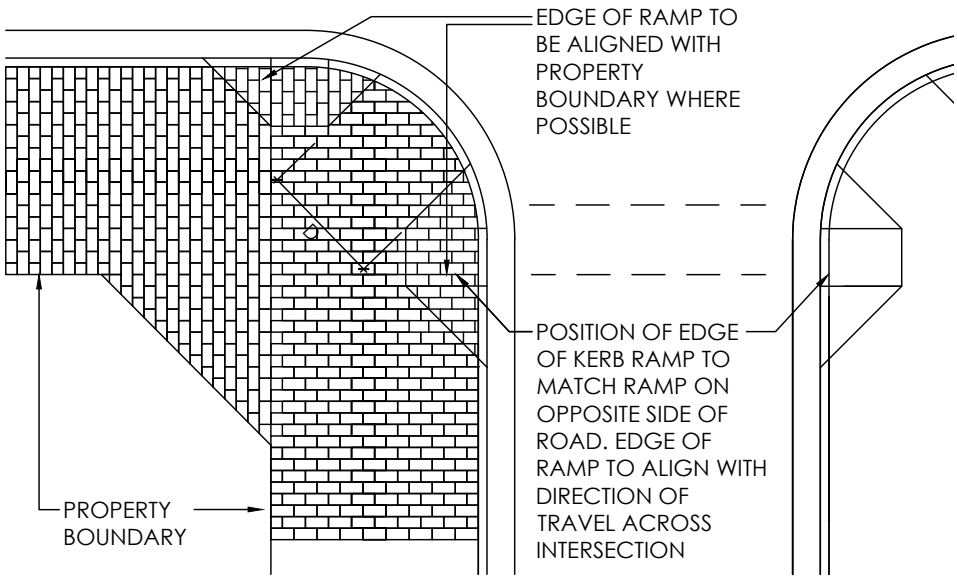
1. All kerb ramps shall be constructed in precast concrete pavers 60 x 200 x 400mm.

2. For ramps greater than 1520mm, maximum grade is 1 in 14. Ramps typically 1:10 grade, max 1:8.

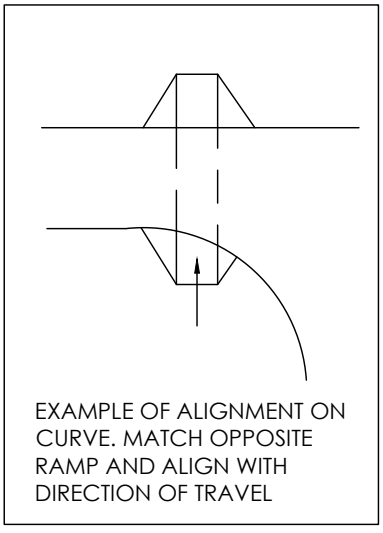
3. Pathfinder Stainless Steel TGSI with Carborundum insert to meet AS 1428

Main Street (Category 1 Paving) - all areas except Crows Nest Village

Typical kerb ramp configuration



PLAN



Notes

1. This drawing is to be read in conjunction with 'Typical kerb ramp drawing'.

2. Precast concrete unit pavers to kerb ramp. Pavers to run down ramp.

3. Kerb ramps align with property boundaries.

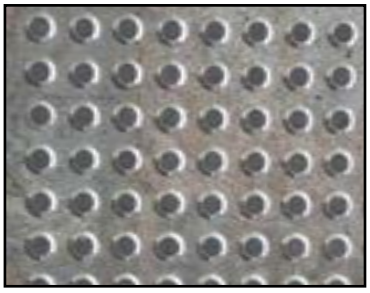
4. 1330mm landings at the top of any kerb ramp where possible.

5. Grade from top to bottom of kerb ramp. 1:8 maximum.

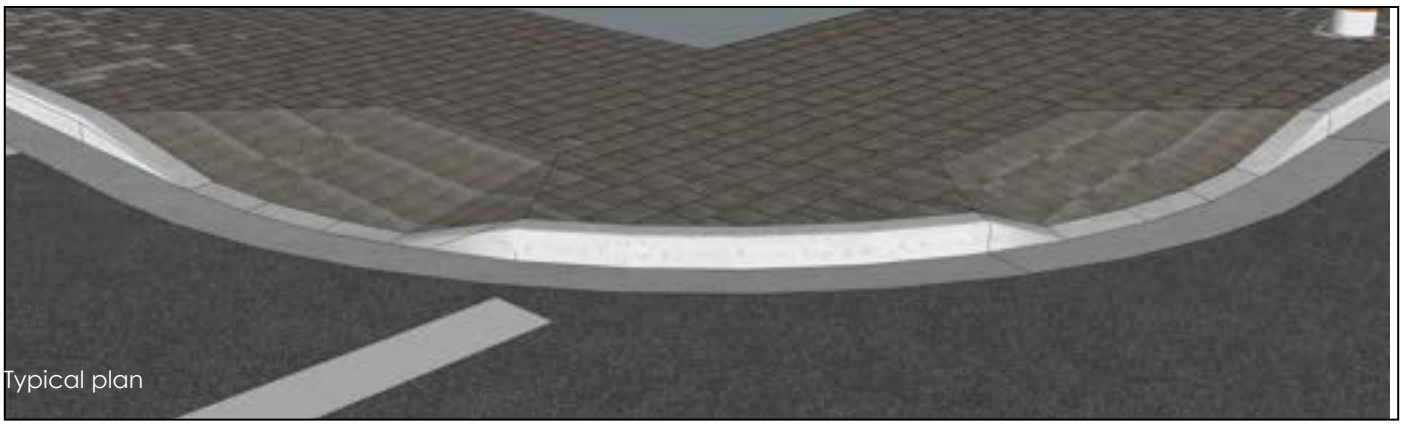
6. Kerb ramp to finish flush with adjacent paving.

7. Kerb ramps to comply with AS1428.1.

8. Pathfinder Stainless Steel TGSI with Carborundum insert to meet AS 1428



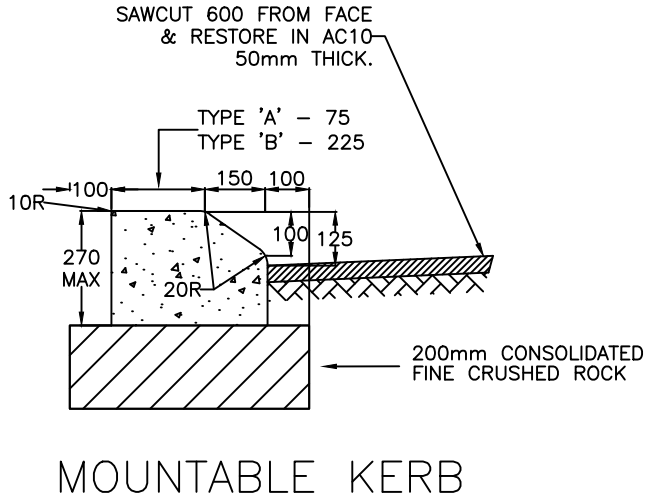
Stainless Steel Tactile Ground Surface Indicators



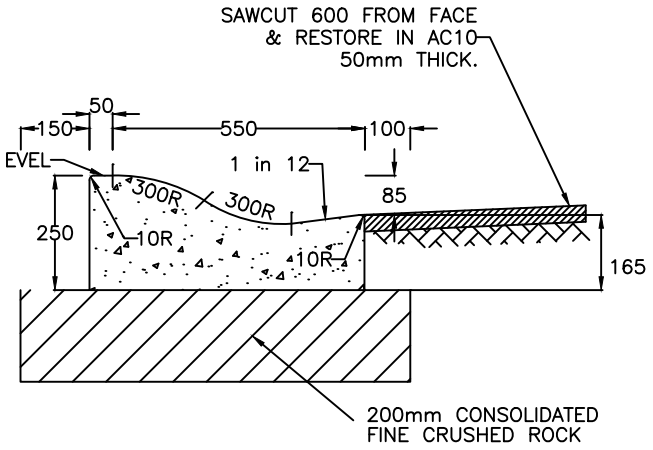
Typical plan

Main Street (Category 1 Paving) - all areas except Crows Nest Village

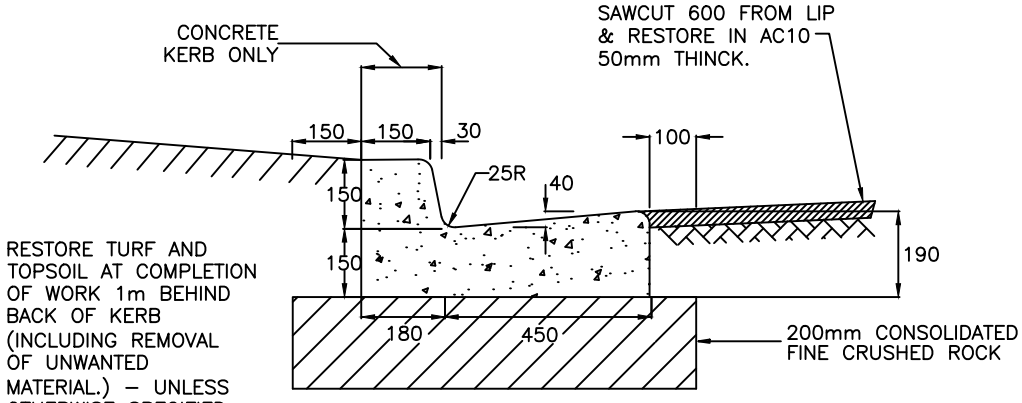
Typical kerb and gutter



MOUNTABLE KERB



ROLL KERB



BARRIER KERB

Notes

1. Base course - Consolidated fine crushed rock to councils specification.

2. Concrete finish

A. All edges shall be tool finished with 12mm rad. 50mm wide edging tool.

B. Gutter and layback shall be finished with a steel trowel.

C. Driveway slab to be Cove finish.

3. Expansion joints

Expansion joints shall be placed at 6m intervals.

4. All plan dimensions are in millimetres.

5. AC10mm adjustment. Provide 600mm wide AC10 correction course layer 50mm thick as shown.

Kerb and gutter treatment - Category 1 Paving

Existing kerb and gutter treatment Category 2 Paving

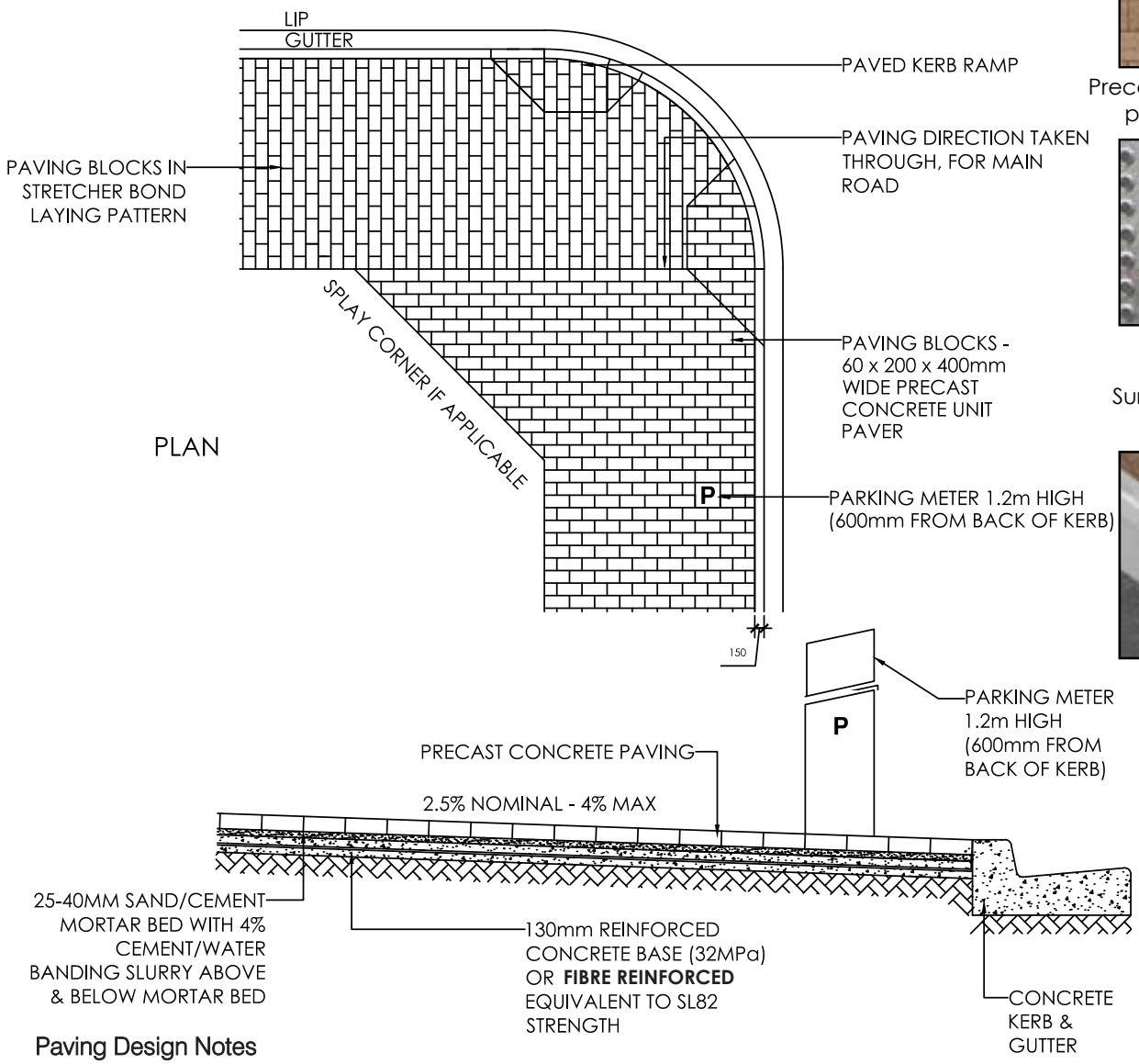
Main Street - Category 2 Paving - Crows Nest Village Only

Typical footpath paving pattern plan and cross-section

Precast concrete unit paver PPX540:35D

Stainless Steel Tactile Ground Surface Indicators

Precast concrete unit paver in stretcherbond pattern



Paving Design Notes

1. 60 x 200 x 400mm precast concrete unit paver laid on rigid concrete base. Paving Type: PPX 540:35D (honed) Note: PPX540:RD (rough) may be used if higher slip resistance is desirable

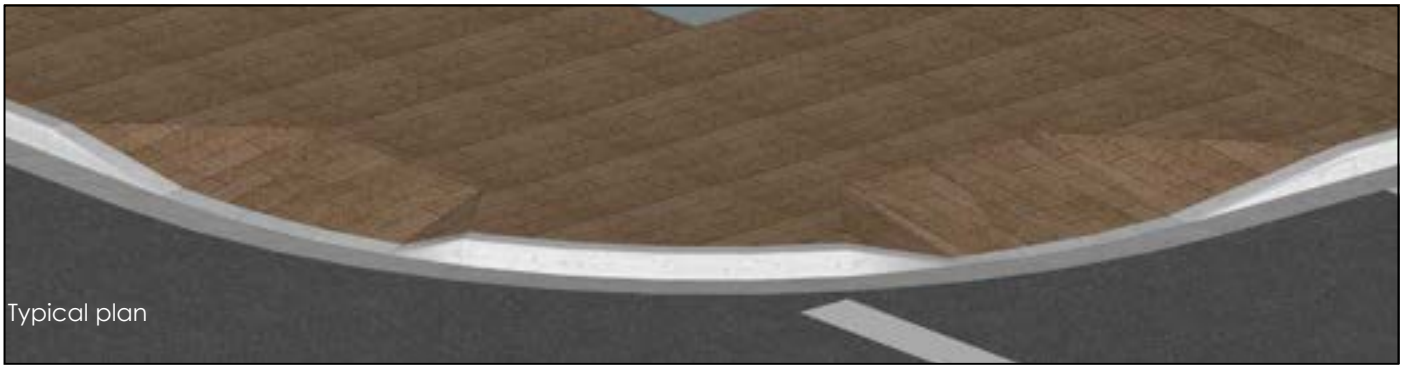
2. Mid coloured precast concrete paving with a fleck of colour for warmth. Pavers are to have a prominent but small sized aggregate to add warmth to the paver.

3. Butt jointed, stretcher bond paving pattern with no header or banding.

4. Kerb ramp located in alignment with boundary.

5. Pathfinder Stainless Steel TGSI with Carborundum insert to meet AS 1428

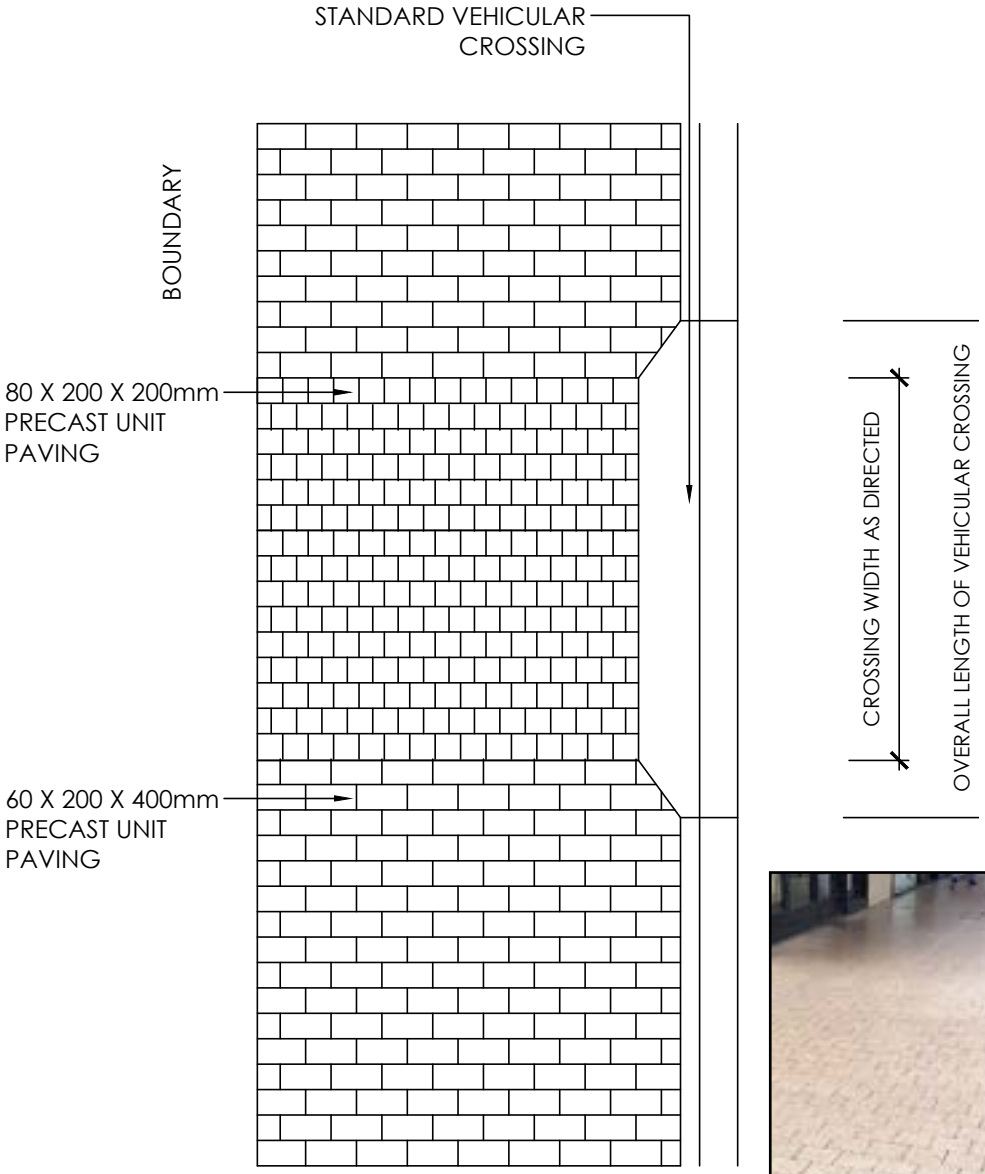
6. All existing service pits within the footpath shall be replaced with infill paver lids. Applicable paving shall be laid in the pit lid on a mortar bed (30mm paving thickness may be required to suit depth of infill pit lid.



Typical plan

Main Street - Category 2 Paving - Crows Nest Village Only

Typical driveway treatment



Notes

1. To be laid in stretcherbond pattern on a rigid base to prevent rutting.

2. Parex Streetscape System mortar bed and joining.

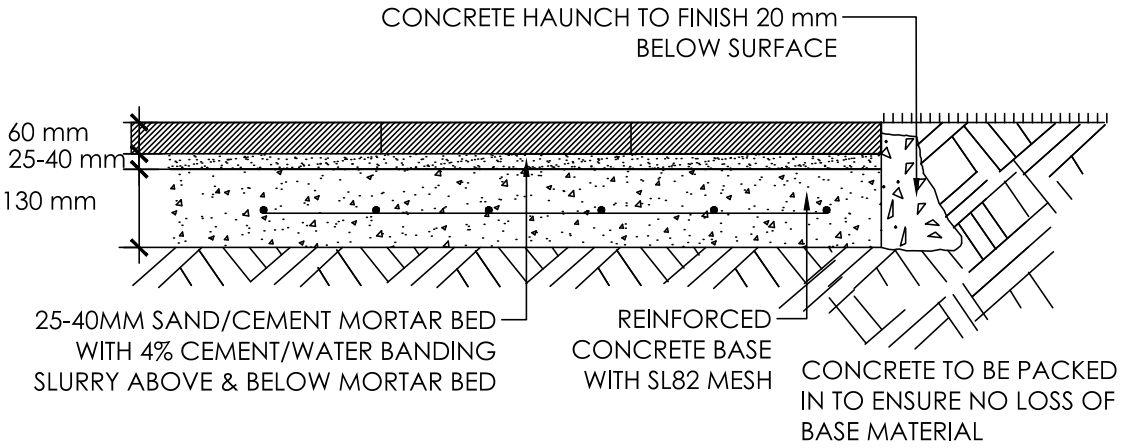
Concrete Pavers

Typical driveway treatment

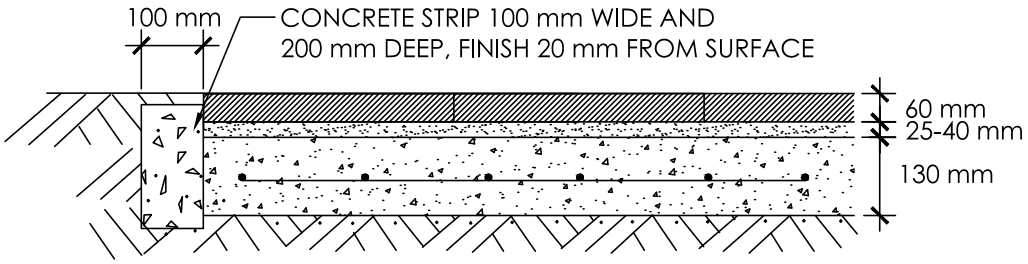
Main Street - Category 2 Paving - Crows Nest Village Only

Typical precast concrete paving edge restraint - concrete haunch, concrete strip, steel edge

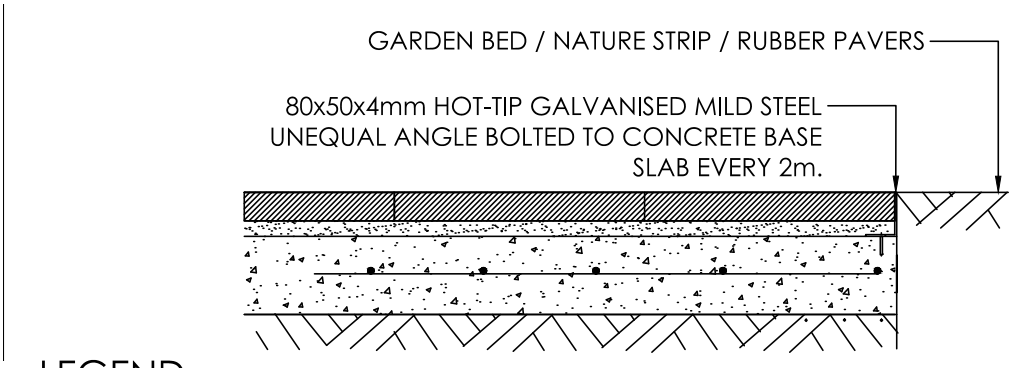
Concrete haunch



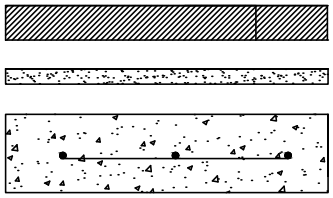
Concrete Strip



Steel Edge



LEGEND



60 X 200 x 400mm PRECAST CONCRETE PAVERS

25-40MM SAND/CEMENT MORTAR BED WITH 4% CEMENT / WATER BANDING SLURRY ABOVE & BELOW MORTAR BED

130 mm THICK REINFORCED CONCRETE SLAB

Precast concrete unit

Precast concrete unit in stretcherbond pattern

Notes

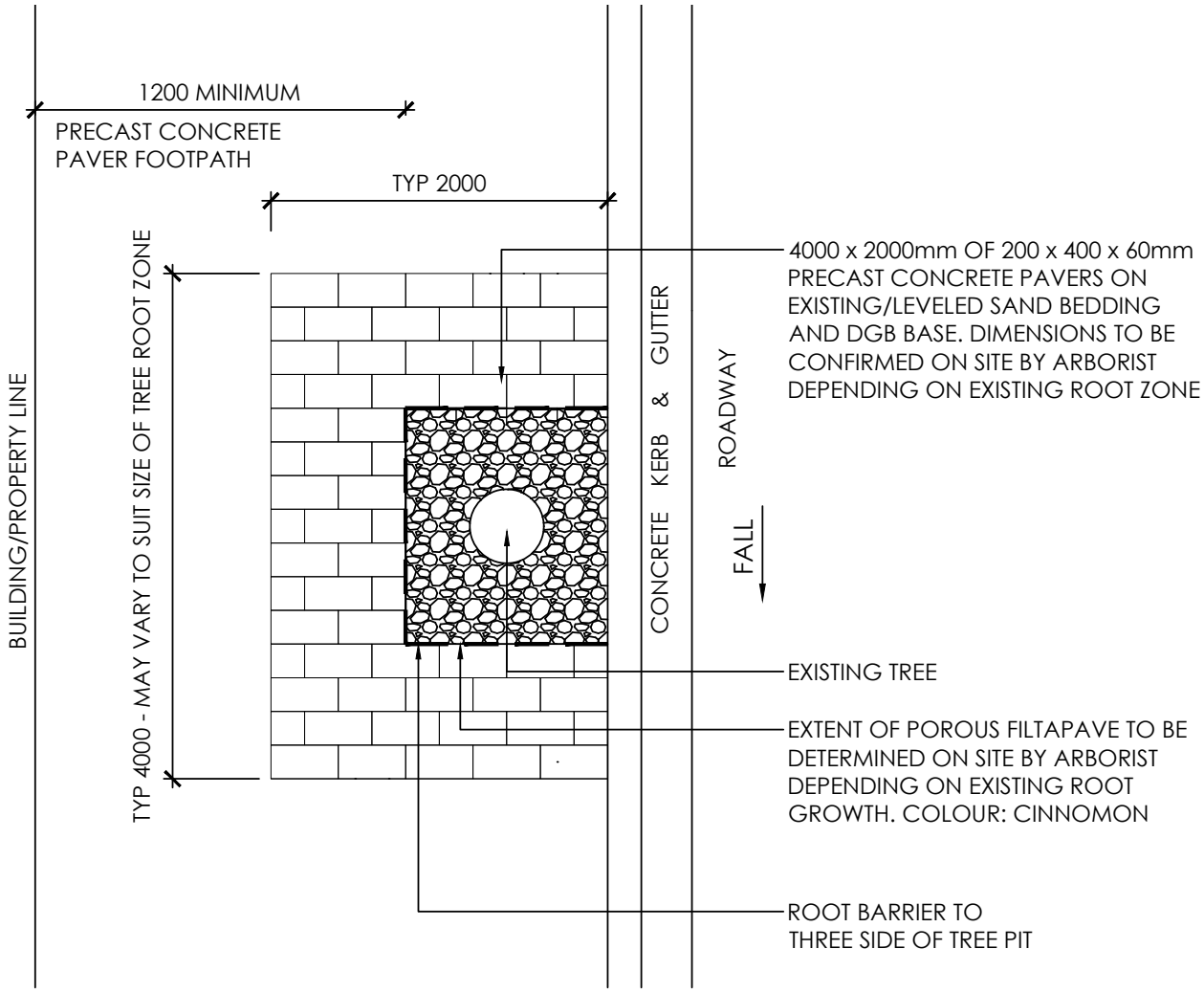
1. 60 x 200 x 400mm precast concrete unit paving.

2. 25-40mm mortar bed.

3. Rigid base - concrete slab.

Main Street - Category 2 Paving - Crows Nest Village Only

Typical existing tree site porous rubber surround



Notes

1. Existing tree site with FILTAPAVE porous surround.

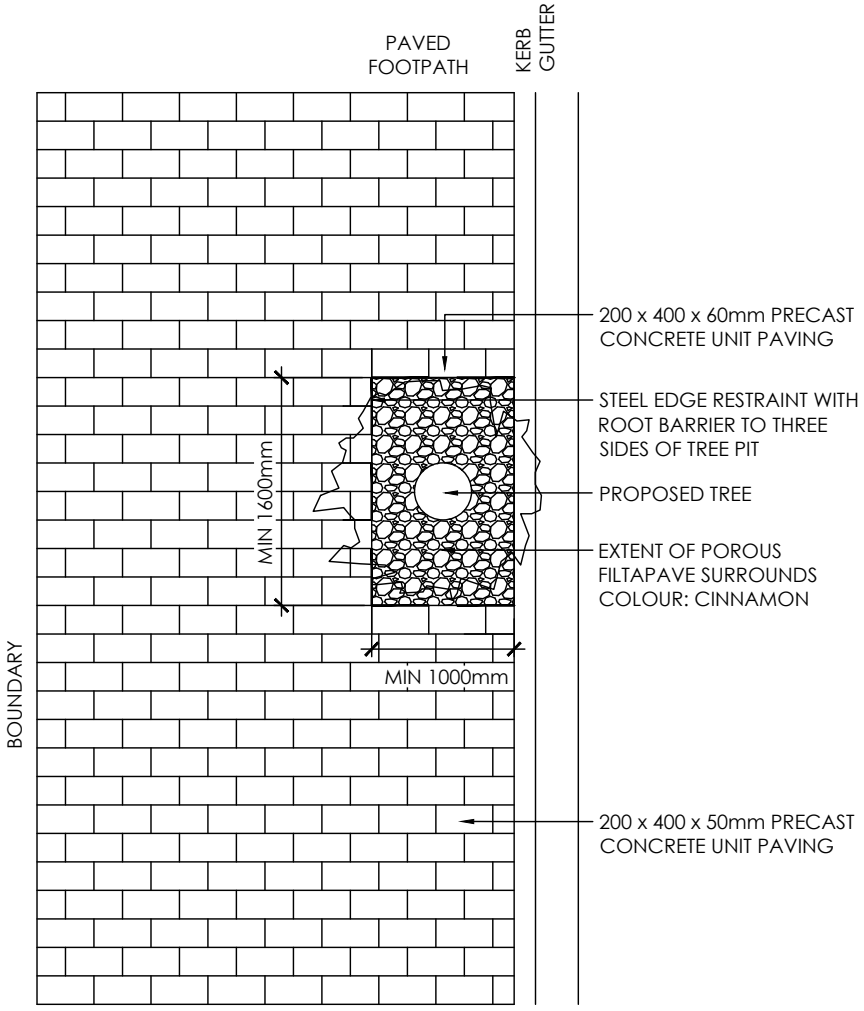
2. Colour: Cinnamon.

3. 60 x 200 x 400mm precast concrete unit paver with a honed finish, laid in a butt jointed, stretcherbond pattern shown on the detail.

4. Existing base or rigid base to paving surround.

Main Street - Category 2 Paving - Crows Nest Village Only

Typical new tree site formation



Notes

1. Tree site formed in paving pattern.

2. Edge restraint as per 'Typical precast concrete paving edge restraint' details.

3. 60 x 200 x 400mm precast concrete unit paver with a honed finish.

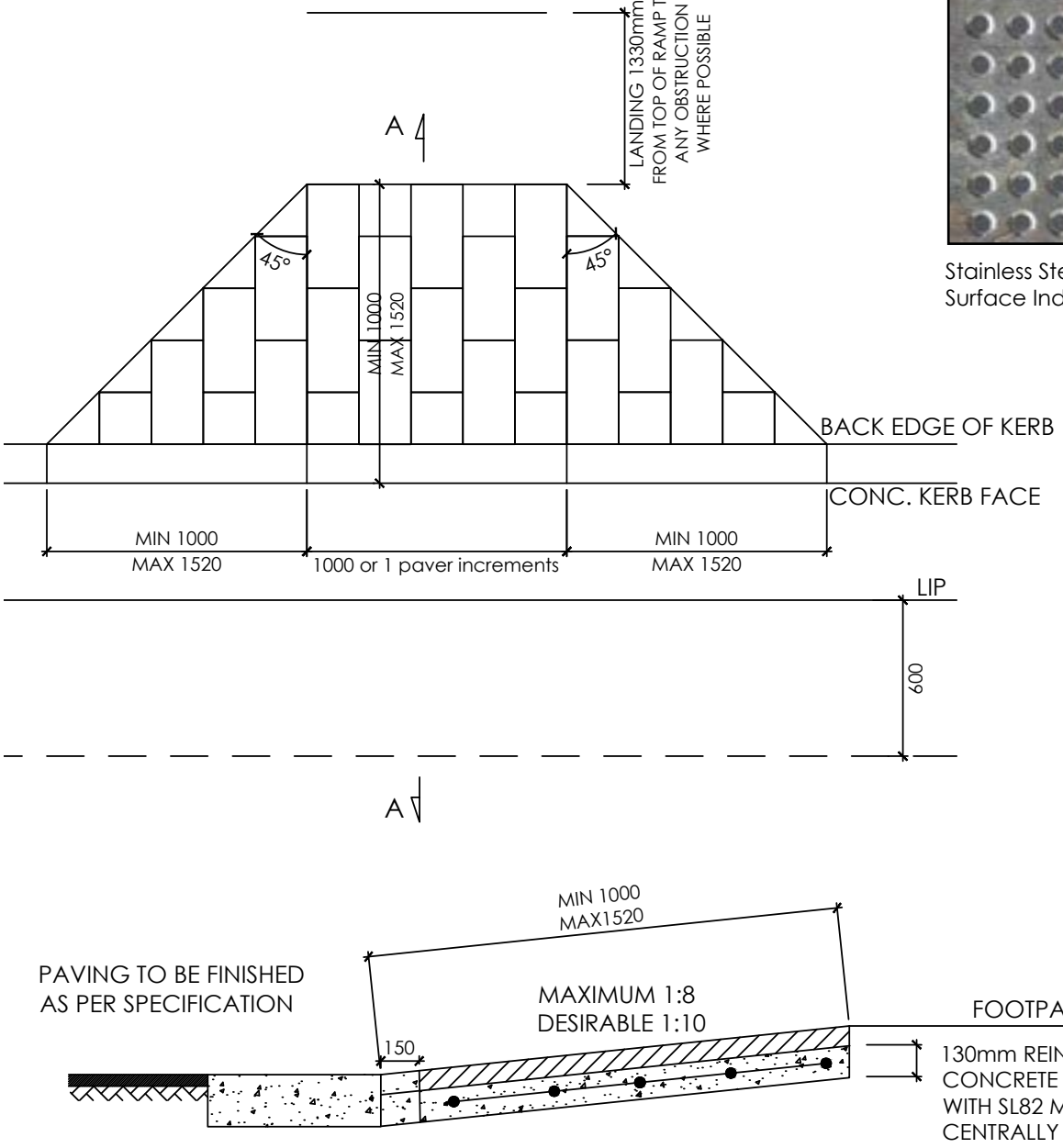
4. Tree pit min 1m x 1.6m with FiltaPave rubber surround. Colour: Cinnamon

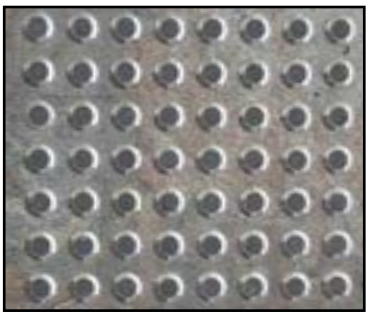
Tree pit

Tree site paving pattern (New tree)

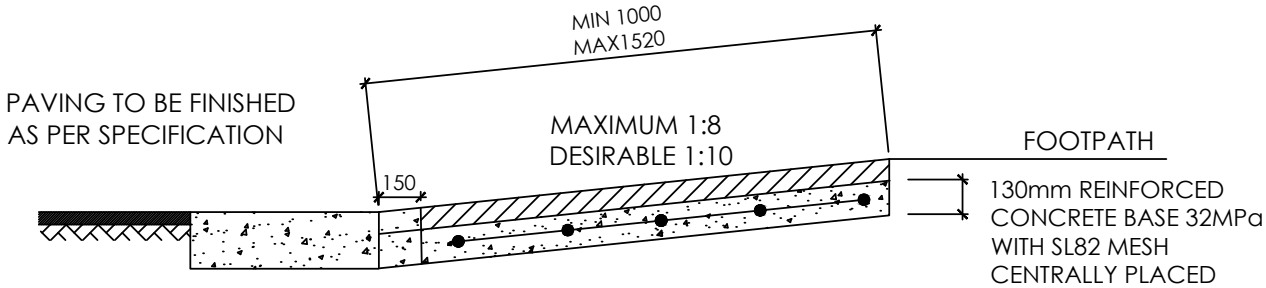
Main Street - Category 2 Paving - Crows Nest Village Only

Typical kerb ramp





Stainless Steel Tactile Ground Surface Indicators



SECTION A-A

Typical kerb ramp

Notes

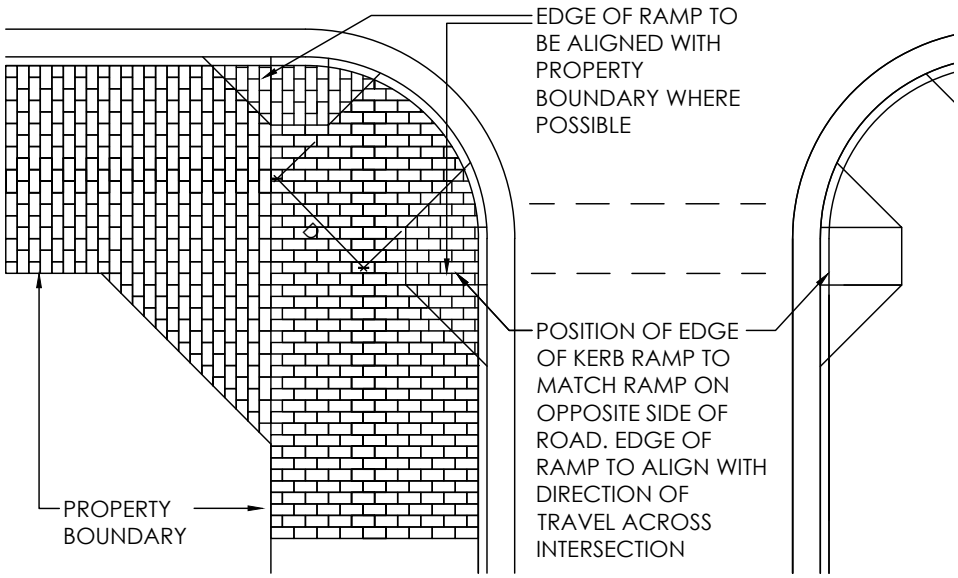
1. All kerb ramps shall be constructed in precast concrete pavers 60 x 200 x 400mm.

2. For ramps greater than 1520mm, maximum grade is 1 in 14. Ramps typically 1:10 grade, max 1:8.

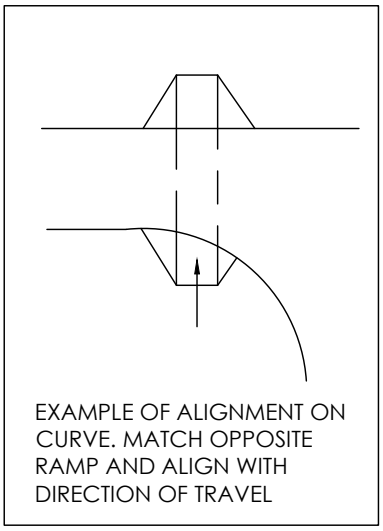
3. Pathfinder Stainless Steel TGSI with Carborundum insert to meet AS 1428

Main Street - Category 2 Paving - Crows Nest Village Only

Typical kerb ramp configuration



PLAN



Notes

1. This drawing is to be read in conjunction with 'Typical kerb ramp drawing'.

2. Precast concrete unit pavers to kerb ramp. Pavers to run down ramp.

3. Kerb ramps align with property boundaries.

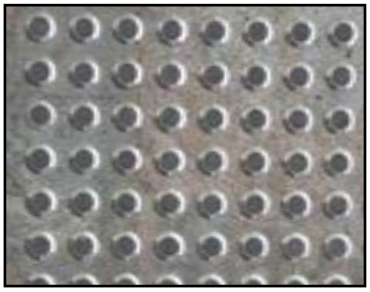
4. 1330mm landings at the top of any kerb ramp where possible.

5. Grade from top to bottom of kerb ramp. 1:8 maximum.

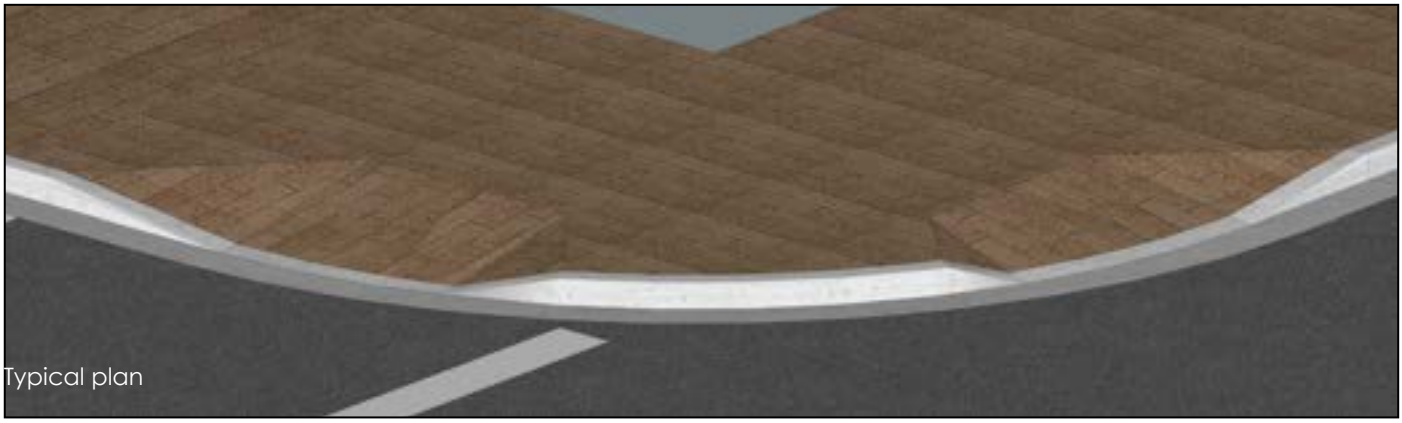
6. Kerb ramp to finish flush with adjacent paving.

7. Kerb ramps to comply with AS1428.1.

8. Pathfinder Stainless Steel TGSI with Carborundum insert to meet AS 1428



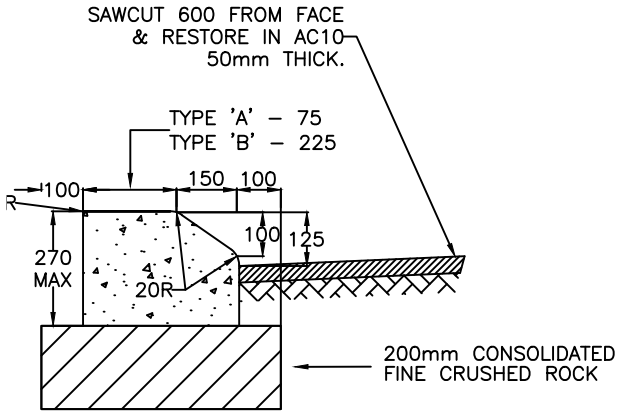
Stainless Steel Tactile Ground Surface Indicators



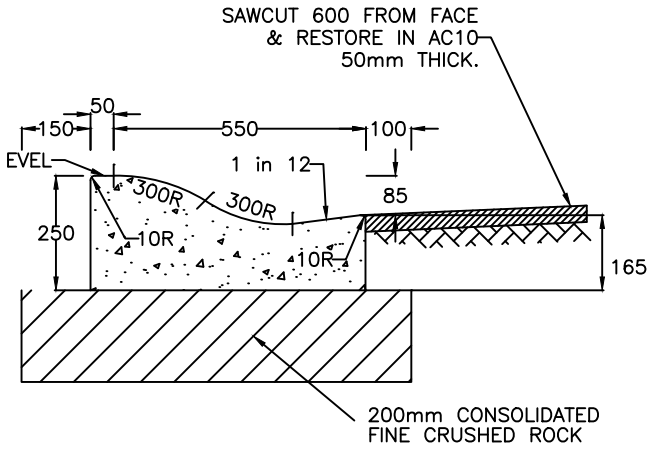
Typical plan

Main Street - Category 2 Paving - Crows Nest Village Only

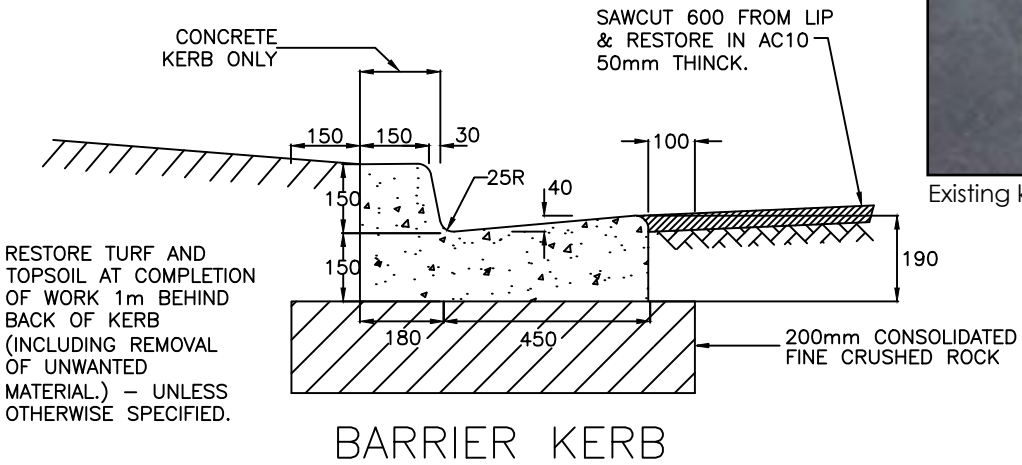
Typical kerb and gutter



MOUNTABLE KERB



ROLL KERB



BARRIER KERB

Notes

1. Base course

Consolidated fine crushed rock to councils specification.

2. Concrete finish

A. All edges shall be tool finished with 12mm rad. 50mm wide edging tool.

B. Gutter and layback shall be finished with a steel trowel.

C. Driveway slab to be Cove finish.

3. Expansion joints

Expansion joints shall be placed at 6m intervals.

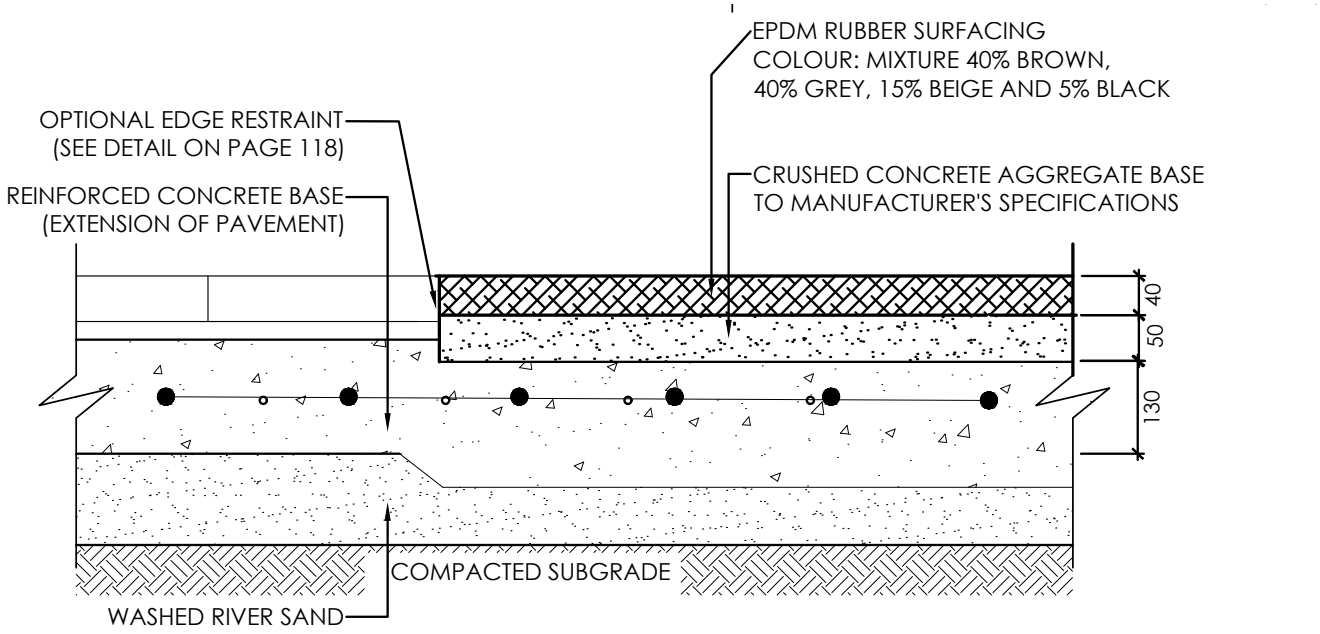
4. All plan dimensions are in millimetres.

5. AC10mm adjustment. Provide 600mm wide AC10 correction course layer 50mm thick as shown.

Kerb and gutter treatment

Existing kerb and gutter treatment

Typical rubber paver at "hotel" loading zones



Notes

1. EPDM rubber surfacing.
Colour: 40% brown, 40% grey, 15% beige and 5% black

2. Base to be 50mm crushed concrete aggregate.

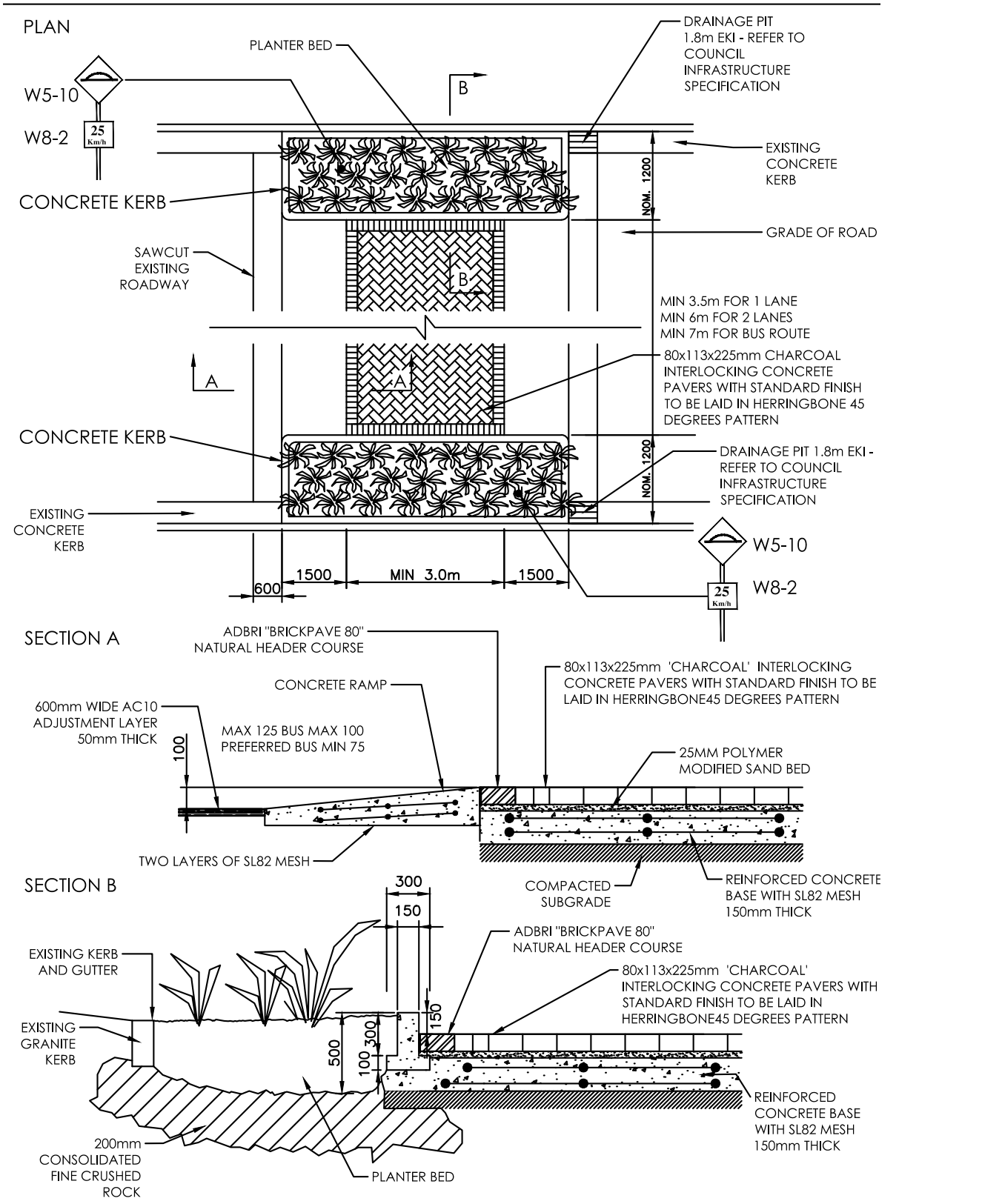
3. Rigid base - Reinforced concrete slab 32MPA with SL82 central mesh

Recycled rubber surfacing

Main Street

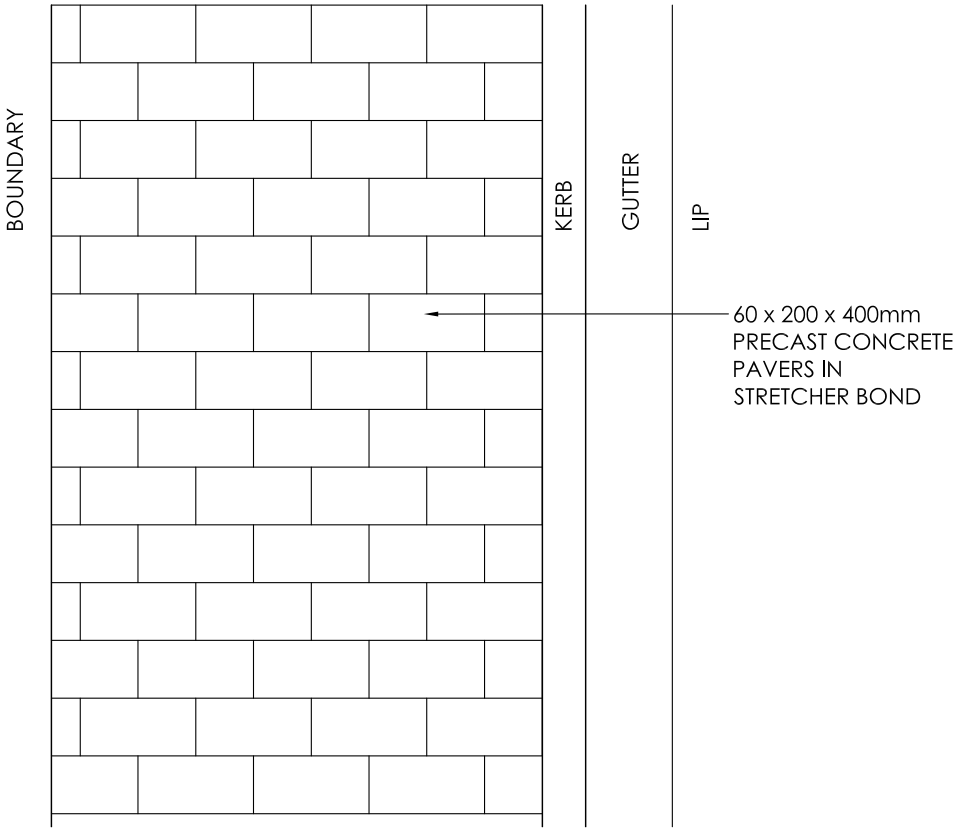
Typical threshold with planting and unit paving

NOTE: THE USE OF GUTTER BRIDGES FOR DRAINAGE IS NOT ACCEPTABLE



Laneway

Typical footpath paving in laneways



Precast concrete unit

Precast concrete unit in stretcherbond pattern

Notes

1. 60 x 200 x 400mm precast concrete unit paver with a honed finish. Laid in stretcherbond pattern on a rigid base.

2. Mid coloured precast concrete paving with a fleck of colour for warmth. Pavers are to have a prominent but small sized aggregate to add warmth to the paver.

3. Butt jointed, stretcher bond paving pattern with no header or banding.

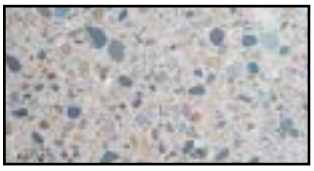
Shared zone - Category 1 Paving - all areas except Crows Nest Village

Typical raised crossing at entry to shared zone (footpath continuation)

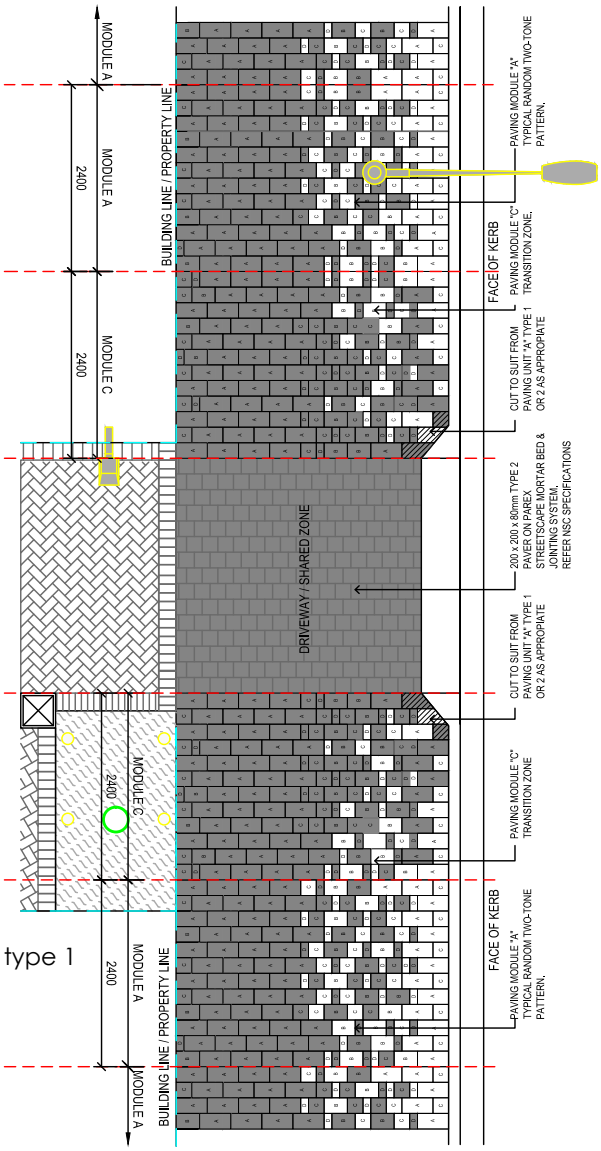
Shared Zone Interlocking concrete pavers

Shared Zone Interlocking concrete pavers with soldier course

Precast concrete unit paver - type 1



Precast concrete unit paver - type 2



Driveway treatment

Driveway treatment - detail

Notes

1. Footpath: 60 x 200 x 400mm precast concrete unit paver with a honed finish laid in a stretcherbond pattern on a rigid base.

2. Footpath: Mid coloured precast concrete paving with a fleck of colour for warmth. Pavers are to have a prominent but small sized aggregate to add warmth to the paver.

3. Footpath: Butt jointed, stretcher bond paving pattern with no header or banding.

4. Shared zone: 80 x 113 x 225mm 'Charcoal' (dark grey) coloured interlocking concrete pavers with standard finish. To be laid in herringbone 45 degrees pattern on a concrete base to prevent rutting.

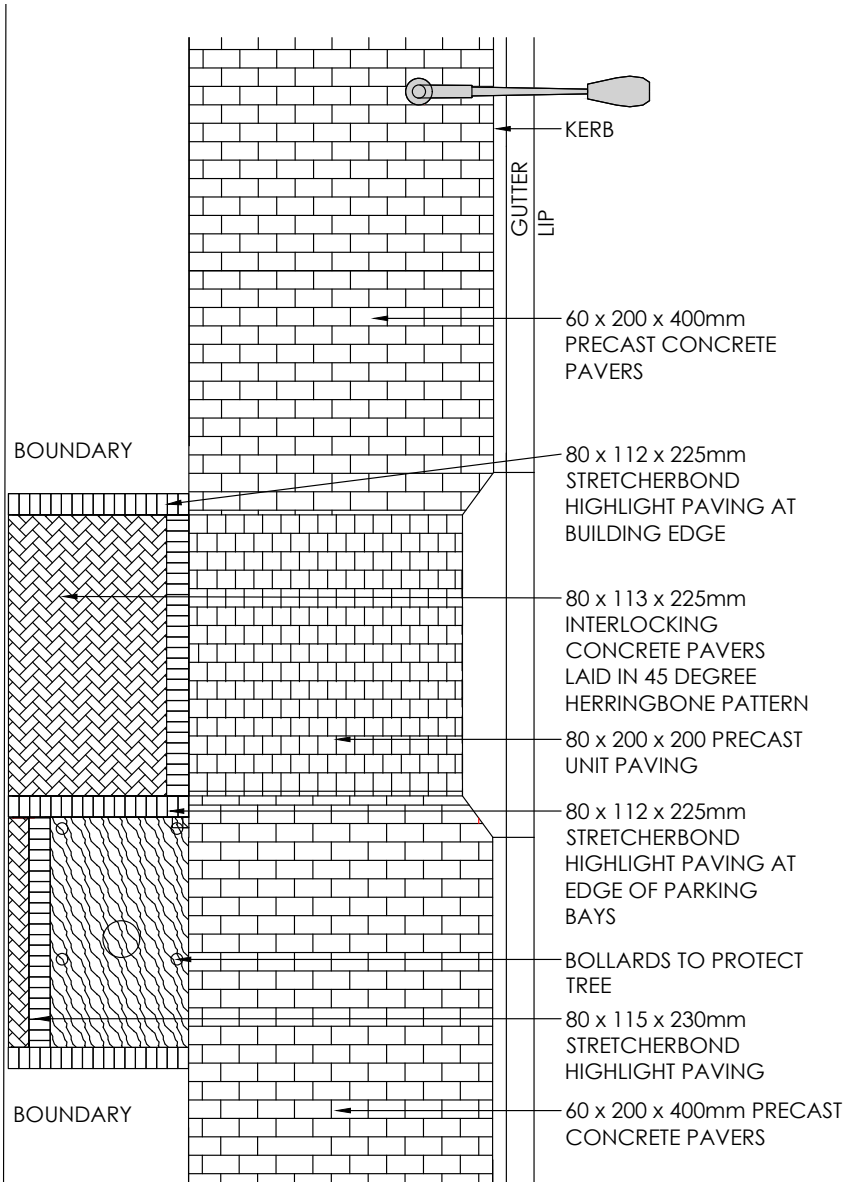
5. Cross over: 200 x 200 x 80mm paver in stretcher bond. Colour to match adjacent footpath. Parex Streetscape System mortar bed and joining to manufacturer's specification.

6. All sign stems (50mm NB) shall be installed using V-Loc + wedge system (galvanised). Footpath pavement shall be neatly core drilled 200mm DIA.

7. All open joints shall be sealed with Bostik "Seal 'N' Flex 1" in accordance with the manufacturer's recommendations - this includes boundaries, back of kerb and lintels, utility pits, construction joints etc

Shared zone - Category 2 Paving - Crows Nest Village Only

Typical raised crossing at entry to shared zone (footpath continuation)



Notes

1. Footpath: 60 x 200 x 400mm precast concrete unit paver with a honed finish laid in a stretcherbond pattern on a rigid base.

2. Footpath: Mid coloured precast concrete paving with a fleck of colour for warmth. Pavers are to have a prominent but small sized aggregate to add warmth to the paver.

3. Footpath: Butt jointed, stretcher bond paving pattern with no header or banding.

4. Shared zone: 80 x 113 x 225mm 'Charcoal' (dark grey) coloured interlocking concrete pavers with standard finish. To be laid in herringbone 45 degrees pattern on a concrete base to prevent rutting.

5. Cross over: 200 x 200 x 80mm paver in stretcher bond.

Colour to match adjacent footpath.

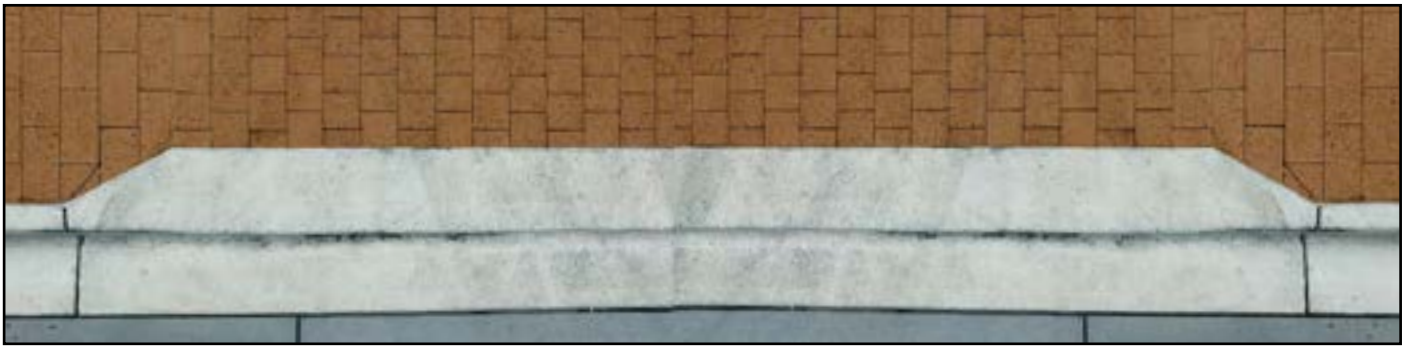
Parex Streetscape System mortar bed and joining to manufacturer's specification.

6. All sign stems (50mm NB) shall be installed using V-Loc + wedge system (galvanised). Footpath pavement shall be neatly core drilled 200mm DIA.

7. All open joints shall be sealed with Bostik "Seal 'N' Flex 1" in accordance with the manufacturer's recommendations - this includes boundaries, back of kerb and lintels, utility pits, construction joints etc

Interlocking concrete pavers

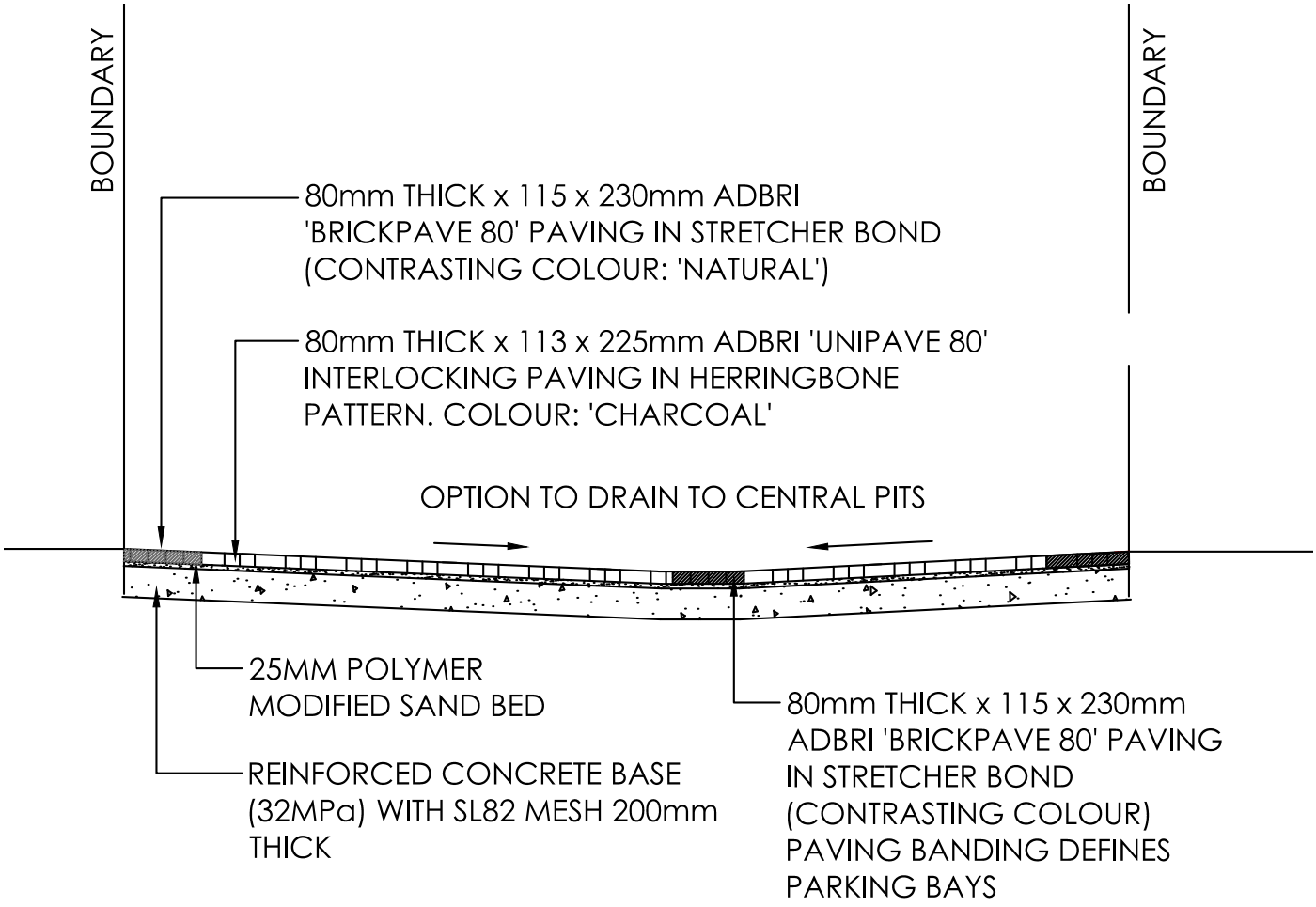
Precast concrete unit



Driveway treatment

Shared zone

Typical shared zone section



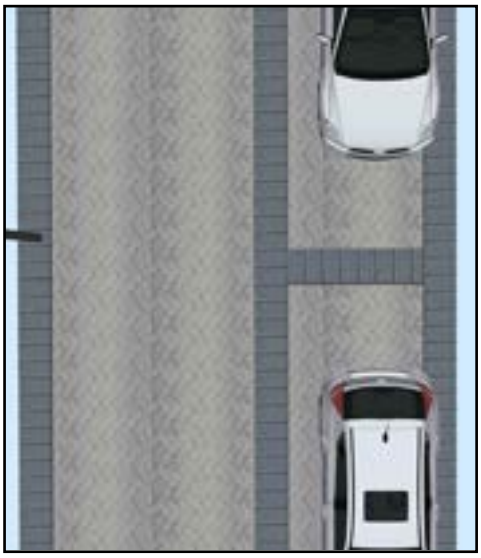
Notes

1. 225 x 113 x 80mm 'Charcoal' (dark grey) coloured interlocking concrete pavers with standard finish.

2. To be laid in herringbone 45 degrees pattern on a concrete base to prevent rutting.

3. Parking bays to be marked out in highlight colour paver 'Natural' 225 x 112 x 80mm.

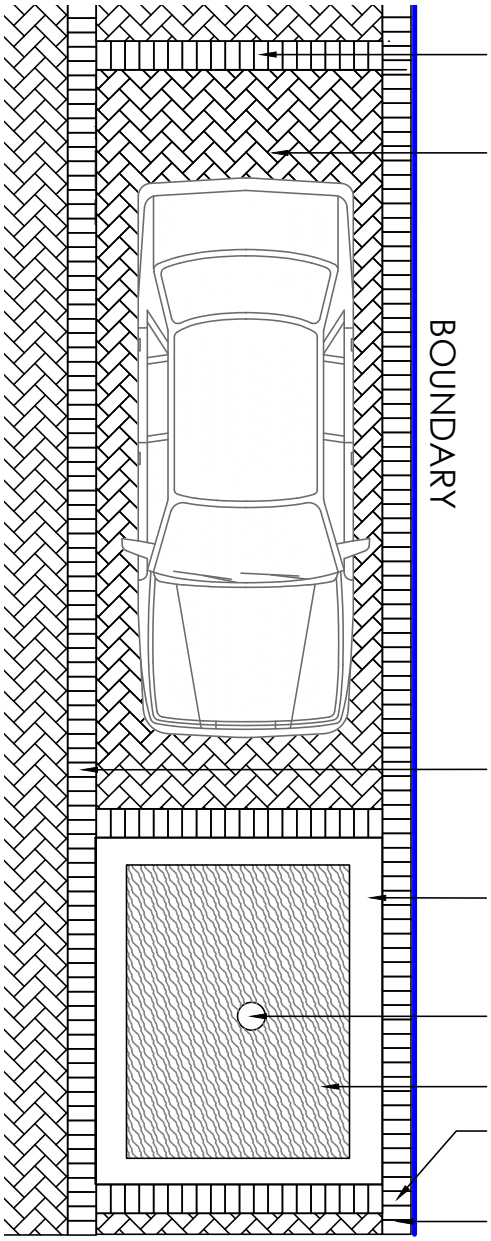
Interlocking concrete pavers



Shared Zone treatment

Shared zone

Typical parking demarcation in pavers - shared zone only



80 x 115 x 230mm ADBRI 'BRICKPAVE 80' CONCRETE PAVER. SOLDIER COURSE. COLOUR: 'NATURAL'

80 x 113 x 225mm ADBRI 'UNIPAVE 80' INTERLOCKING CONCRETE PAVER IN 45 DEGREES HERRINGBONE. COLOUR: 'CHARCOAL'

80 x 115 x 230mm ADBRI 'BRICKPAVE 80' CONCRETE PAVER. STRETCHERBOND. COLOUR: 'NATURAL'

CONCRETE SURROUND (200mmX400mm)

PROPOSED TREE

PROPOSED MASS PLANTING

80 x 115 x 230mm ADBRI 'BRICKPAVE 80' CONCRETE PAVER. COLOUR: N'ATURAL'

80 x 113 x 225mm ADBRI 'UNIPAVE 80' INTERLOCKING CONCRETE PAVER IN 45 DEGREES HERRINGBONE PATTERN. COLOUR: 'CHARCOAL'

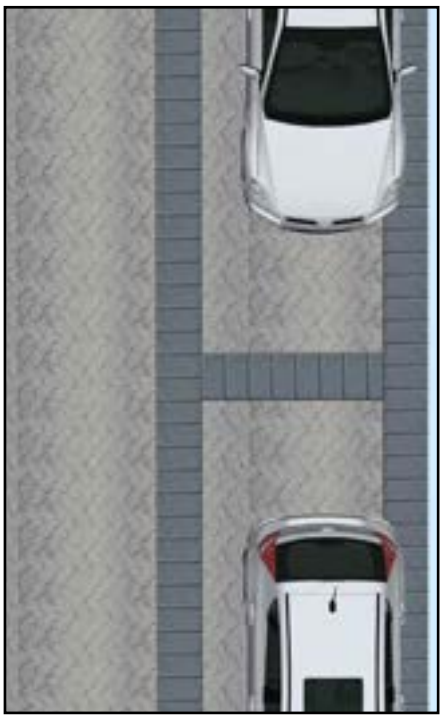
Notes

1. 225 x 113 x 80mm 'Charcoal' (dark grey) coloured interlocking concrete pavers with standard finish.

2. To be laid in herringbone 45 degrees pattern on a concrete base to allow for movement.

3. Parking bays to be marked out in highlight colour paver 'Natural' 225 x 112 x 80mm.

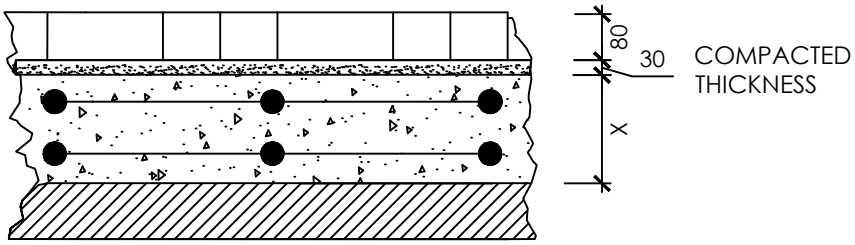
Interlocking concrete pavers



Shared Zone treatment

Shared zone

Typical road pavers interlocking including concrete base



ADBRI 'UNIPAVE 80' 80mm THICK IN HERRINGBONE LAYING PATTERN (OR APPROVED EQUIVALENT)

NOM. 30mm SAND BEDDING (COARSE PAVING SAND)

REINFORCED CONCRETE SUB-BASE WITH SL82 MESH

SUBGRADE

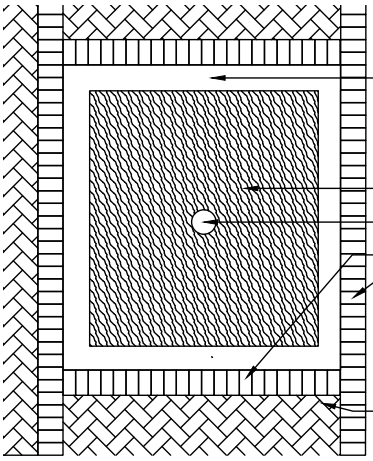
Notes

1. 'X' Is to be 250mm for bus bays and 200mm for driveways, reinforced with SL82 reinforcement top and bottom.

2. Interlocking pavers to be 'charcoal' colour. Highlight colour shall be 'Natural' 'Brickpave 80'.

Shared zone

Typical tree pit at grade in shared zone - plan and section



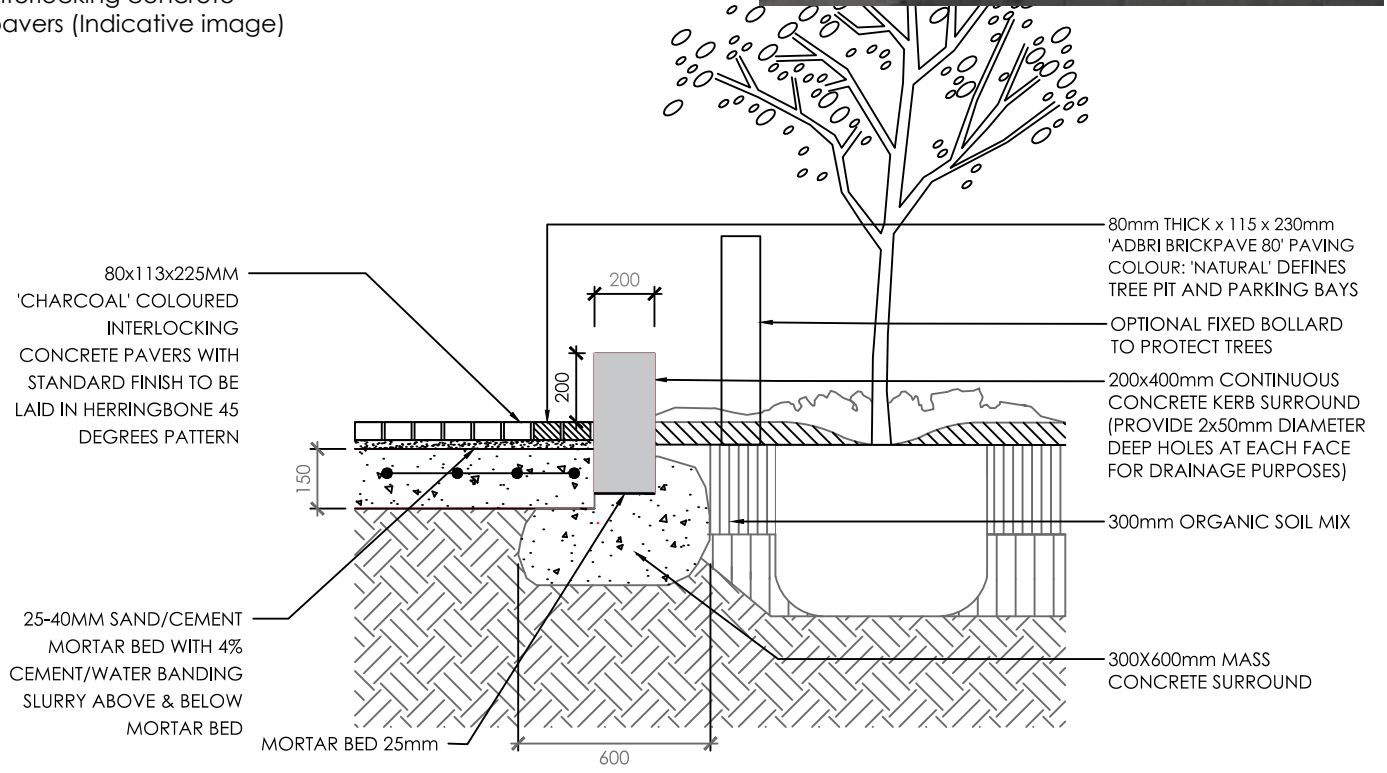
Notes

1. 225 x 113 x 80mm 'Charcoal' (dark grey) coloured interlocking concrete pavers with standard finish. To be laid on a rigid base to prevent rutting. Laid in 45 degrees herringbone pattern.

2. Highlight paver 'Brickpave 80' 'Natural' defines edge of tree pit and parking bays.

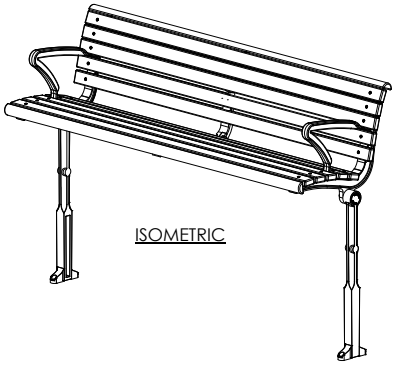
3. Optional fixed bollards protect trees.

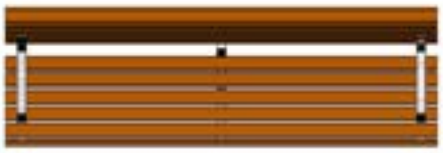
Interlocking concrete pavers (Indicative image)

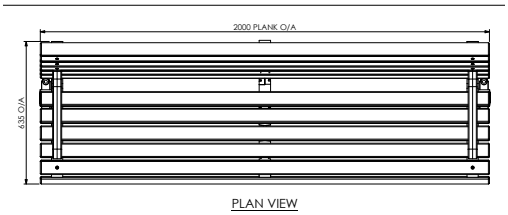


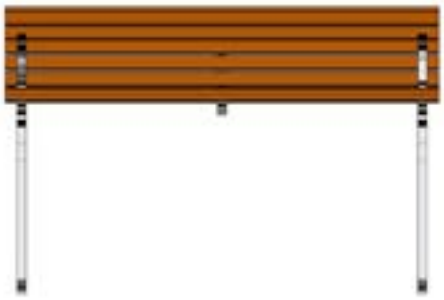
Furniture and Fixtures

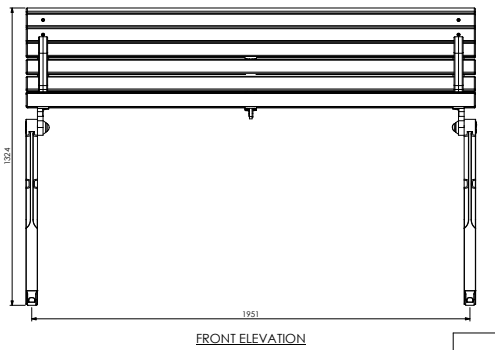
Typical seating with back

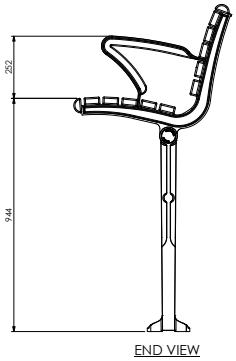












Notes

1. Timber battens with hidden fixings.

2. Galvanised or powdercoated finish to supports and frame. Aluminium arm rests.

3. Curved form.

4. Seat with backrests and arm rests.

5. Three person seats. Approximately 2000mm long.

6. Seats are to be subsurface fixed where possible.

Furniture and Fixtures

Typical bench

Notes

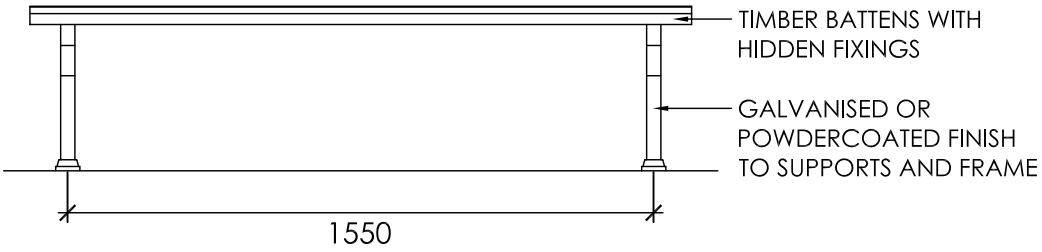
1. Timber battens with hidden fixings.

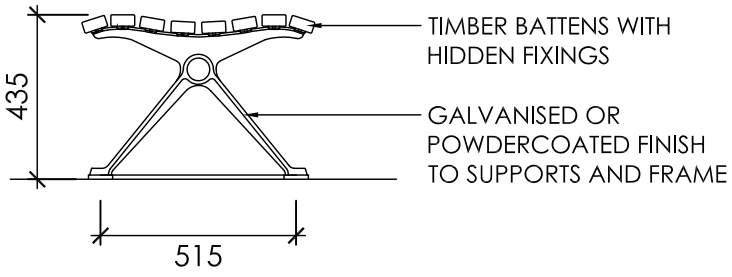
2. Galvanised or powdercoated finish to supports and frame. Aluminium arm rests.

3. Curved form.

4. Three person bench. Approximately 1800mm long.

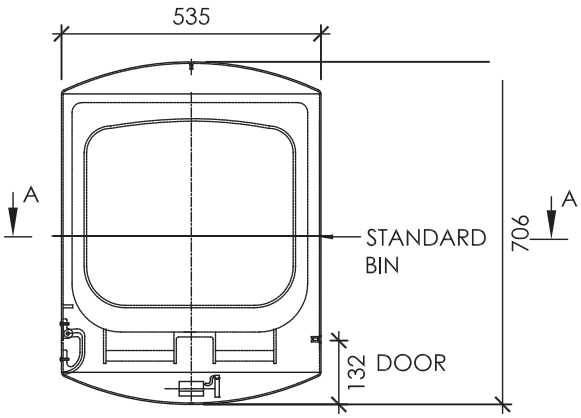
6. Benches are to be subsurface fixed where possible.

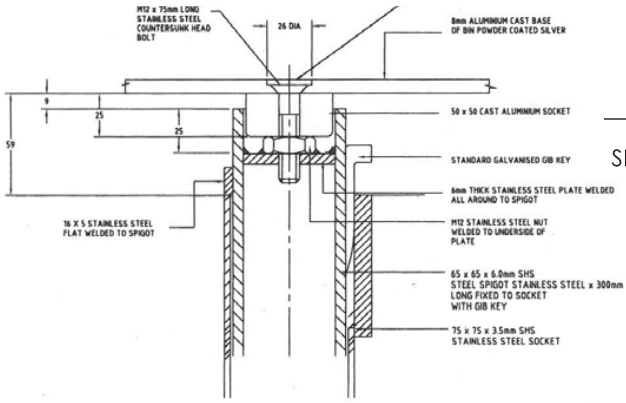




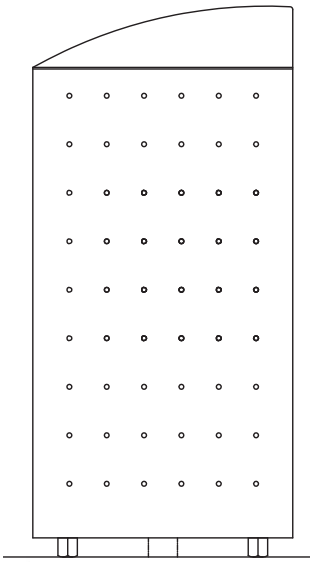
Furniture and Fixtures

Typical metal bin installation detail





SPIGOT CONNECTION DETAIL



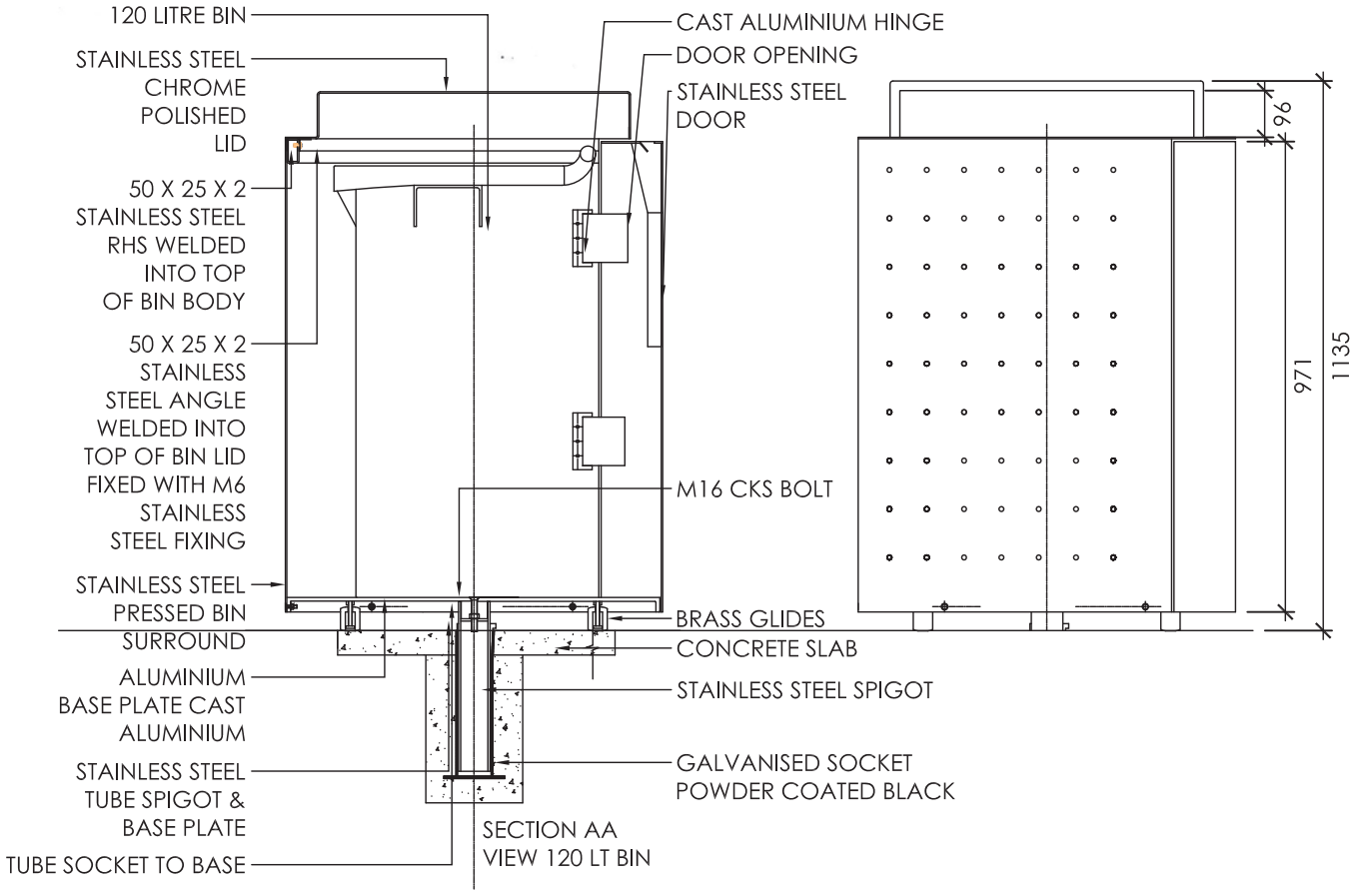
SECTION VIEW 120 LT BIN

Notes

1. All dimensions in mm.

2. Stainless steel finish.

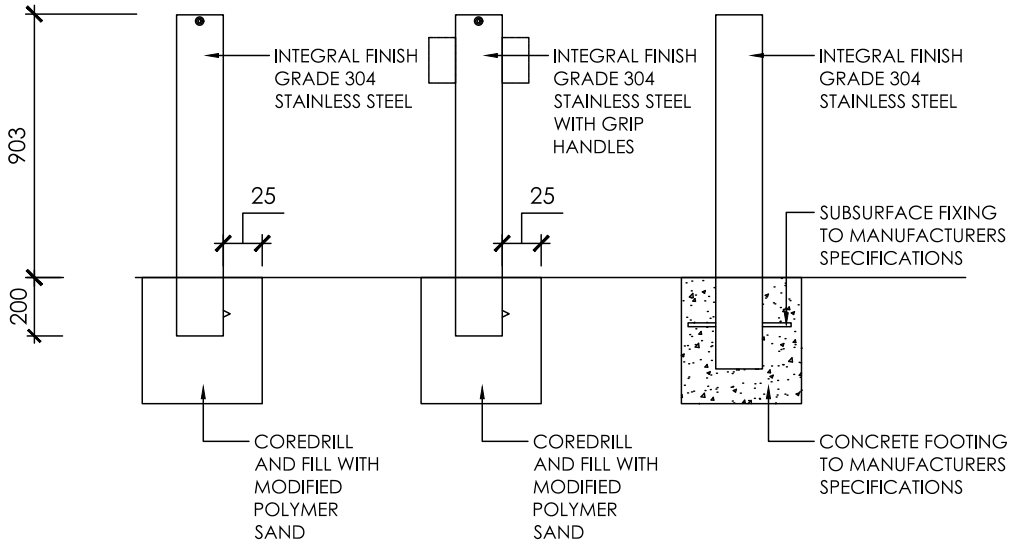
3. Bins are to be sub-surface mounted.



SECTION AA
VIEW 120 LT BIN

Furniture and Fixtures

Typical 125mm and 150mm bollard - fixed and removable



Locking and removable bollard

Locking and removable bollard with grip handles

Fixed insitu bollard

Notes

1. Integral finish grade 304 stainless steel.
2. Bollards are to be subsurface fixed.
3. Finish: Linished.
4. Optional reflective tape.

Locking and removable bollard / Fixed insitu bollard (With optional grip handles)

Typical parking meter

Parking meter

Notes

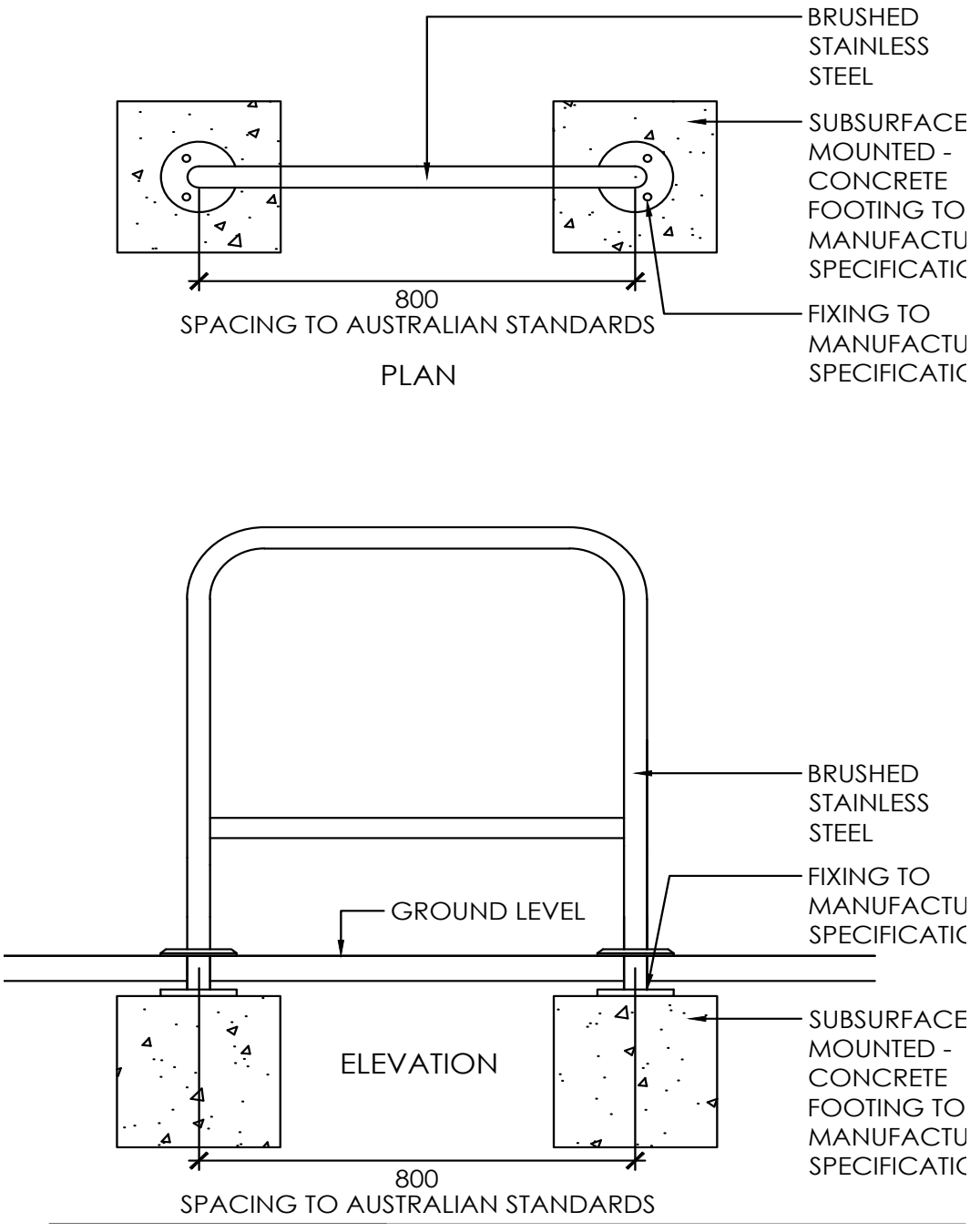
1. Parking meter 1.2m high

2. Situated 600mm from back of kerb

3. Where finished footpath surface levels do not match existing, contact Council's parking meter services division for further details about footing requirements and repositioning of meter stem.

Furniture and Fixtures

Typical bicycle parking



Notes

1. Subsurface mounted where possible.

2. Brushed stainless steel (brushed finish).

3. Ideally bike racks shall be located in areas where footpaths are widened. Bike racks should also be located where there is a change in transport type - for instance at ferry terminals, bus stops and train stations. They should also be located along cycleways and at cycle destinations.

Stainless steel bike racks

Furniture and Fixtures

Typical bus shelter

Existing bus stop - Neutral Bay

Existing bus stop - Cammeray

Notes

1. Existing bus shelters to remain in village areas.

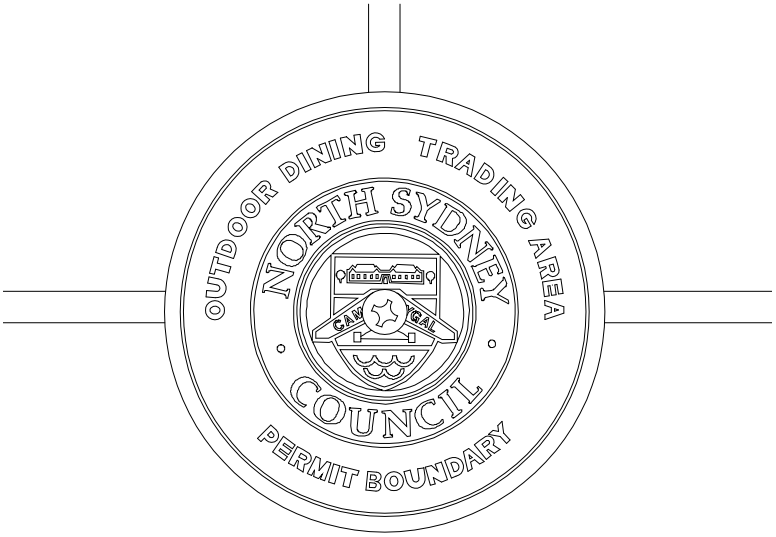
2. Seating to be updated to match current manual.

3. Bus shelter to incorporate advertising material and information panels.

4. Size to vary to suit location and demand.

Furniture and Fixtures

Typical alfresco demarcation line



Notes

1. Alfresco demarcation plaques are to be nailed to the pavement along the extent of licenced outdoor dining trading area.

2. Plaques are to be nailed into joints between pavers if possible.

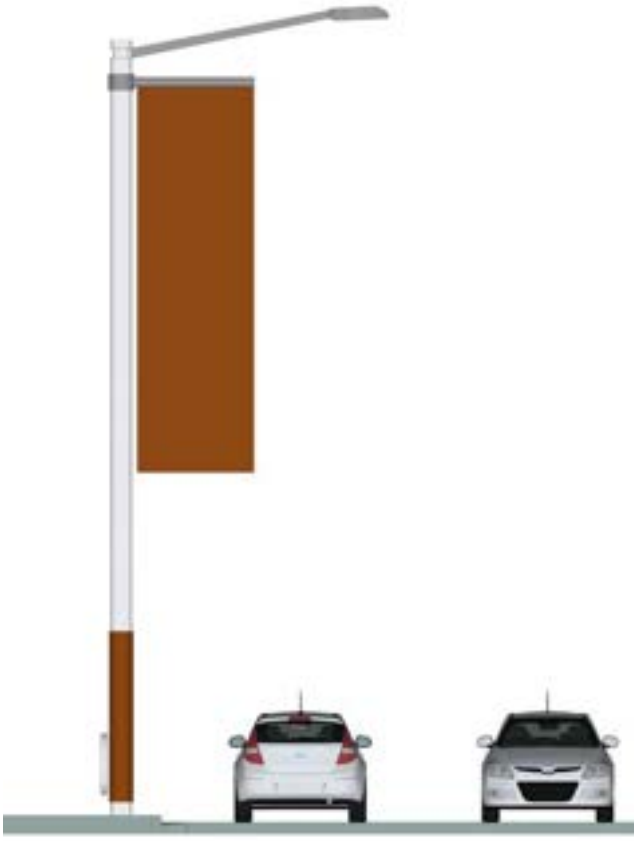
3. Plaques are to be located in a consistent line at an interval appropriate to the scale of the space.

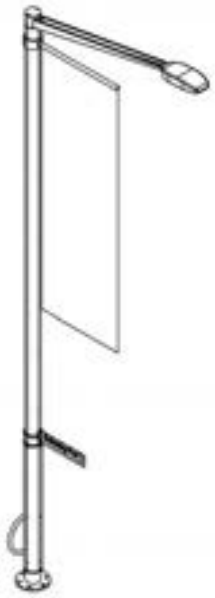
4. Plaques are to be supplied by council and are to have the North Sydney logo.

5. Plaques are brass and are epoxy fixed along with a central pin.

Furniture and Fixtures

Typical post top light (Main Street)

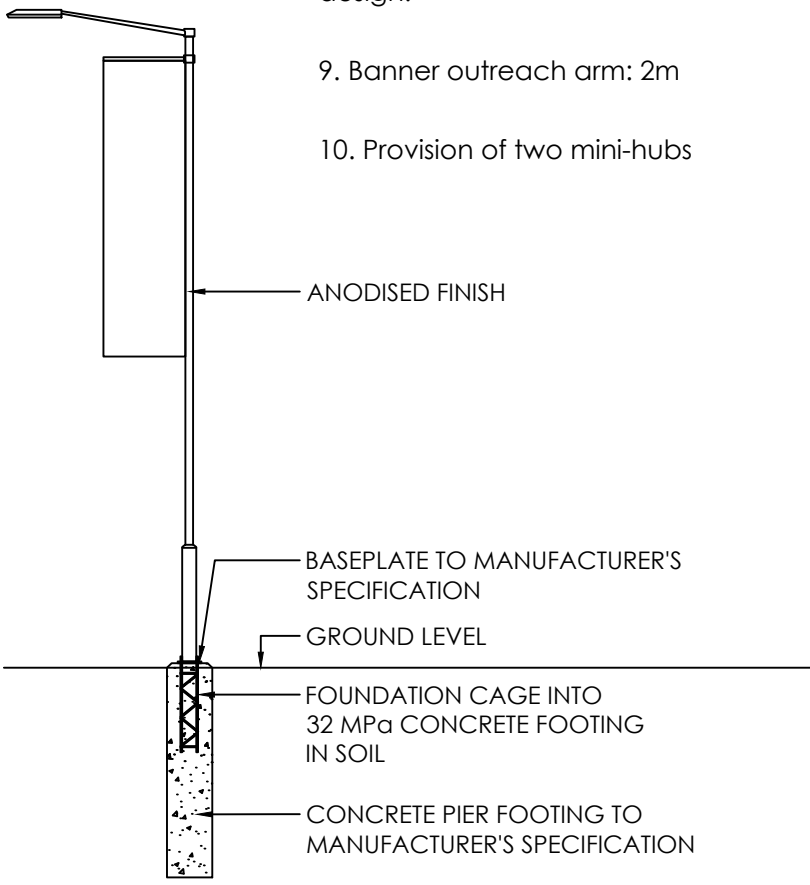




Multi-functional post top light pole

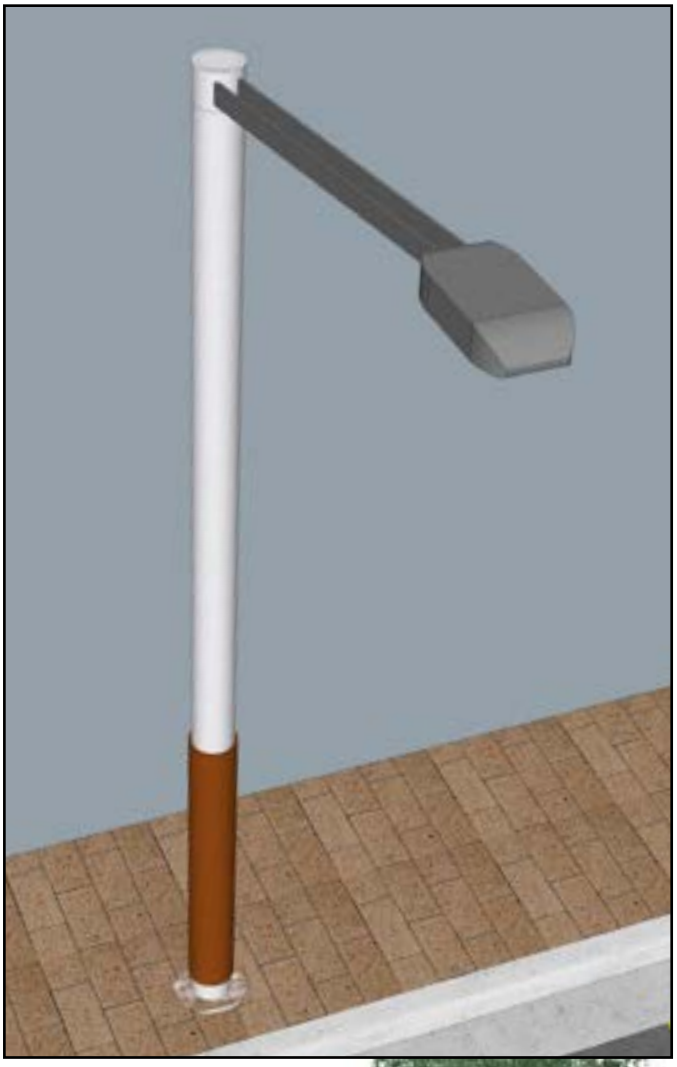
Notes

1. LED Luminaire with P.E. cells
2. Lighting design to comply with Australian Standards.
3. Anodised finish.
4. Foundation cage cast into 32 MPa concrete footing in subgrade.
5. Poles are to be assembled and erected in accordance with manufacturers specifications.
6. Pole Height: 9.5m
7. Luminaire outreach arm: 3m
8. Spacing of poles to be determined by lighting design.
9. Banner outreach arm: 2m
10. Provision of two mini-hubs



Furniture and Fixtures

Typical post top light - default option 1 (Laneways and shared zones)



Multi-functional post top light pole

Notes

1. LED Luminaire with P.E. cells

2. Lighting design to comply with Australian Standards.

3. Anodised finish.

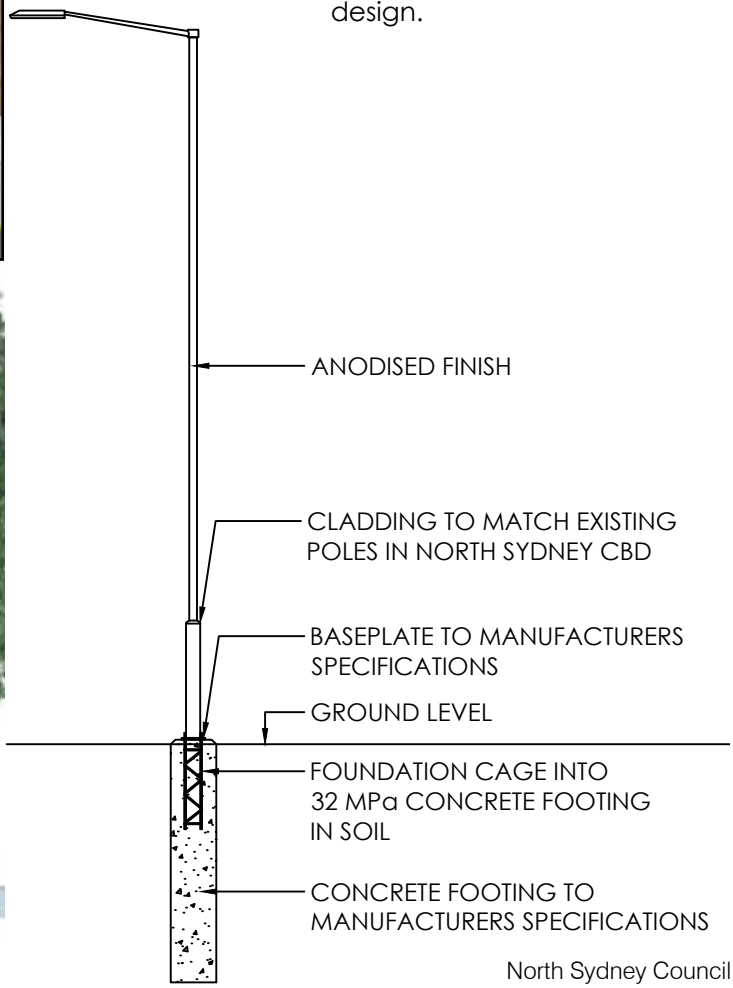
4. Foundation cage cast into 32 MPa concrete footing in subgrade.

5. Poles are to be assembled and erected in accordance with manufacturers specifications.

6. Pole Height: 7m

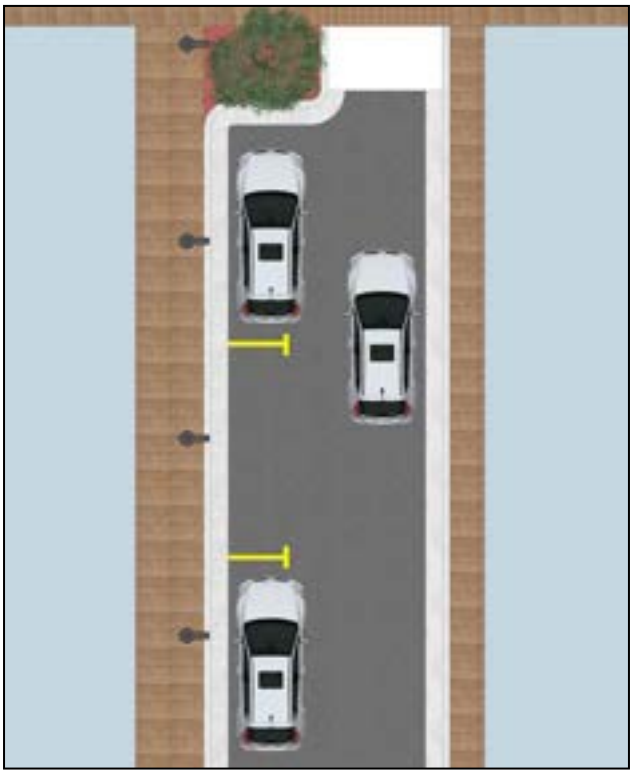
7. Luminaire outreach arm: 2m

8. Spacing of poles to be determined by lighting design.



Furniture and Fixtures

Typical post top light - option 2 (Laneways and shared zones)



Post top light pole

Notes

1. LED Luminaire with P.E. cells

2. Lighting design to comply with Australian Standards.

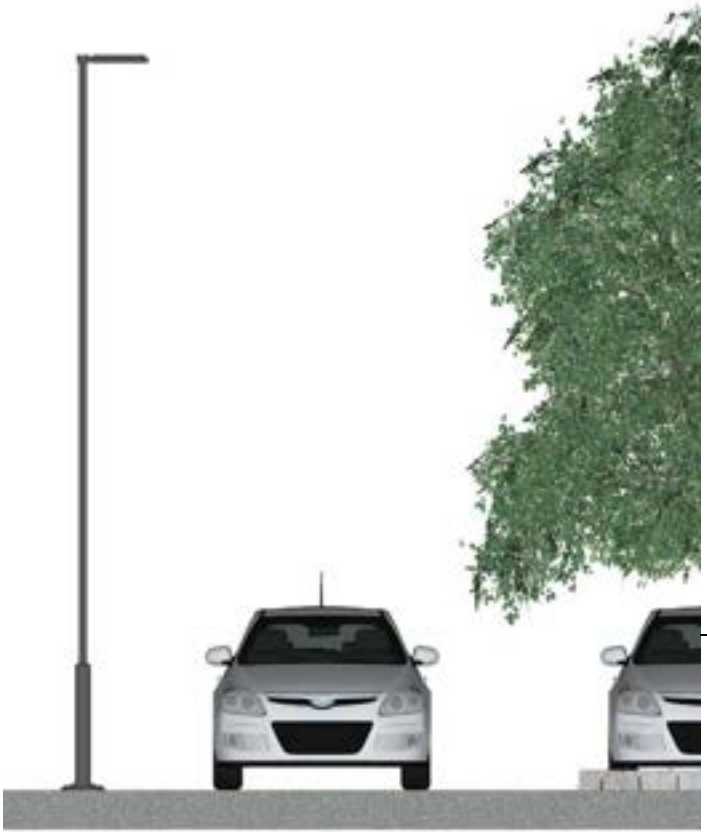
3. Powder coated 'Graphite' finish.

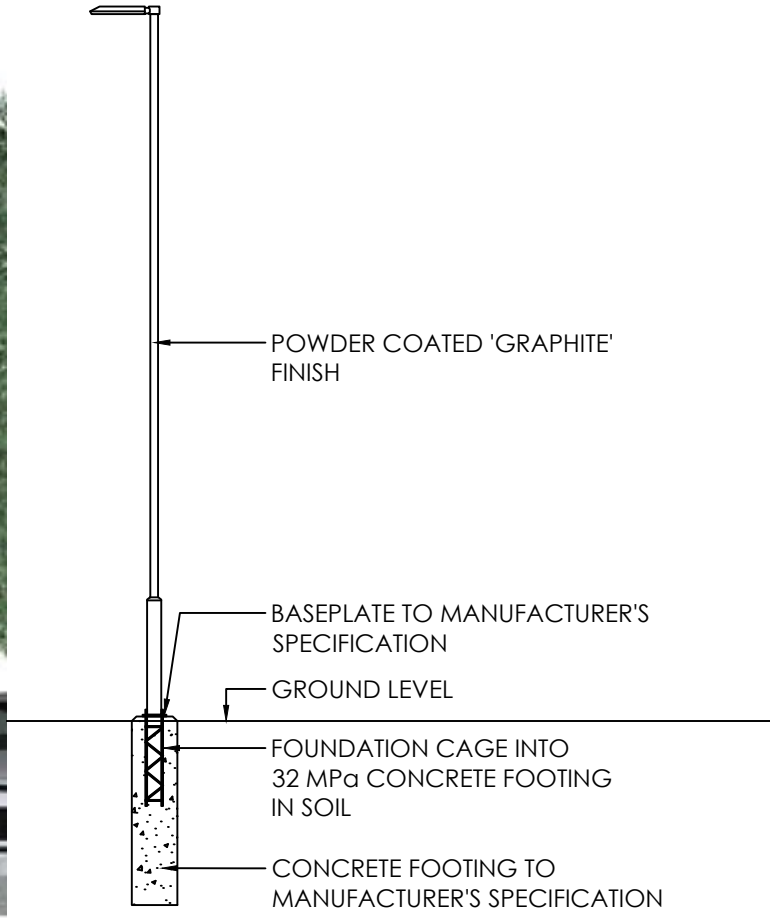
4. Foundation cage cast into 32 MPa concrete footing in subgrade.

5. Poles are to be assembled and erected in accordance with manufacturers specifications.

6. Pole Height: 7m

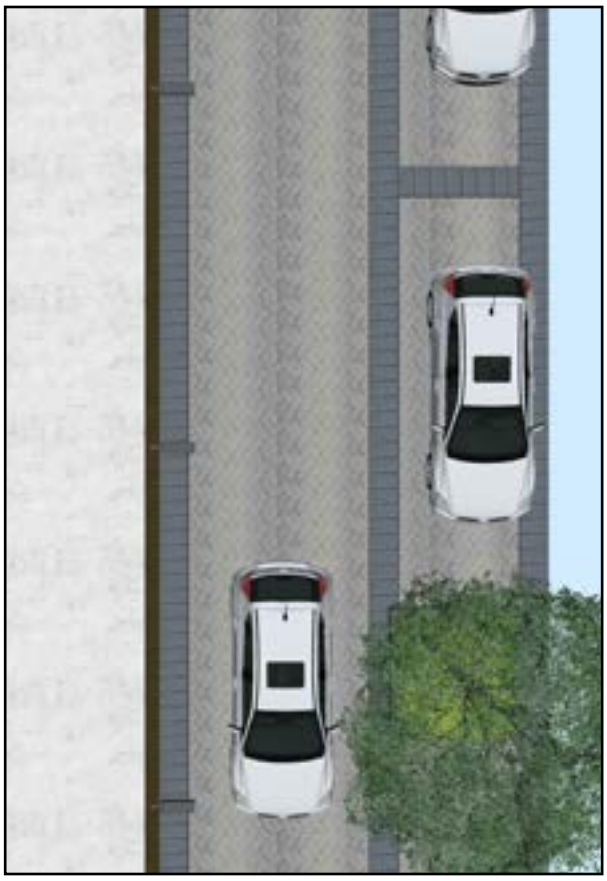
7. Spacing of poles to be determined by lighting design.





Furniture and Fixtures

Typical wall mounted light (Laneways and shared zones)



Notes

1. A consistent light colour warmth across fittings.

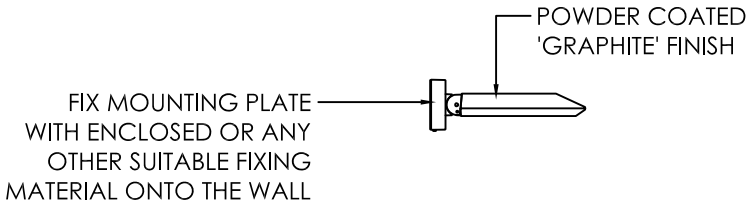
2. A consistent palette of light fittings for different applications.

3. Powdercoated 'Graphite'.

4. Lead mains supply cable through the cable entry of the mounting plate.

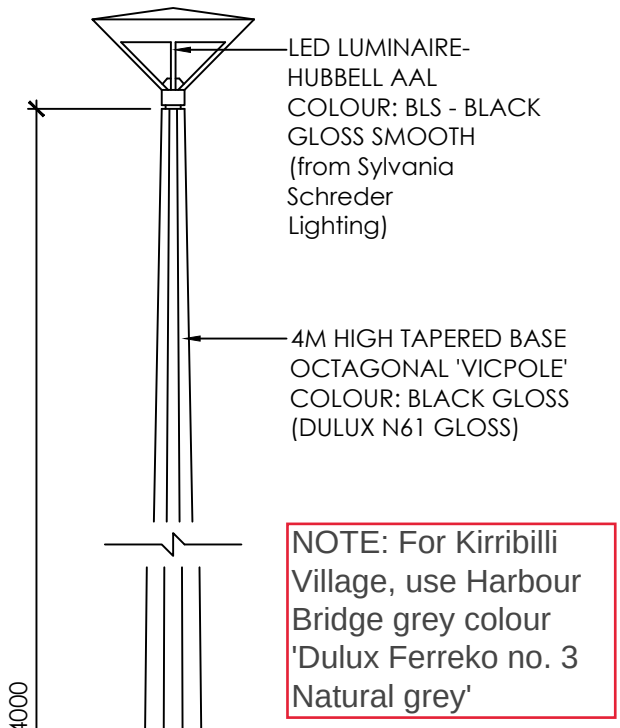
5. Fix the mounting plate with enclosed or any other suitable fixing material onto the mounting surface.

Wall mounted light



Furniture and Fixtures

Typical octagonal light pole (Public plazas and spaces)



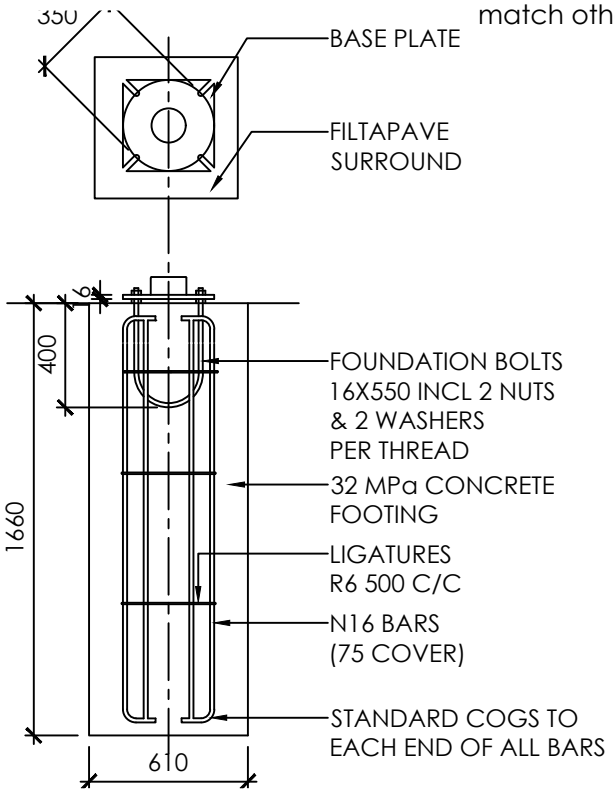
Post top light (Parks and Plazas)

Notes

1. For installation detail. Refer to manufacturer's specification.

2. Allow for grout packing between the concrete footing and the base plate of the light pole to achieve a vertical alignment when erecting the pole. The grout pack shall have a minimum strength of 32MPa at 7 days. The maximum tolerance for vertical misalignment will be 30mm from the vertical.

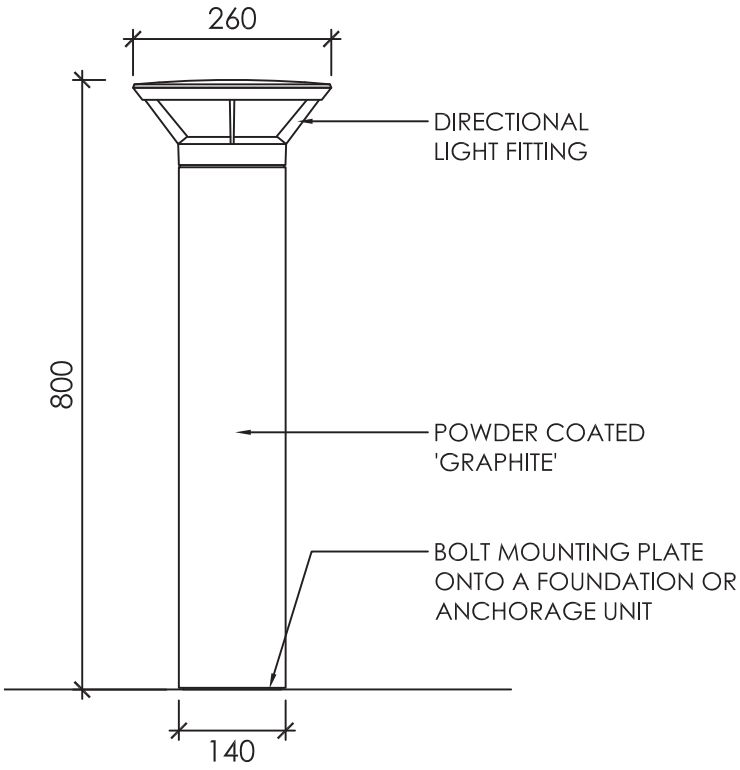
3. Light colour warmth to match other fittings.



Furniture and Fixtures

Typical illuminated bollard

Illuminated Bollard



Notes

1. Fixing: Bolted with a mounting plate onto a foundation.

2. Light fittings shall be directional.

3. Powder coated 'Graphite'.

4. Fitting to match post top (parks and plazas) luminaire range.

5. Bolt mounting plate onto foundation or anchorage unit to manufacturers specifications.

Furniture and Fixtures

Typical handrail lighting

Notes

1. Lighting to be housed within a stainless steel handrail.

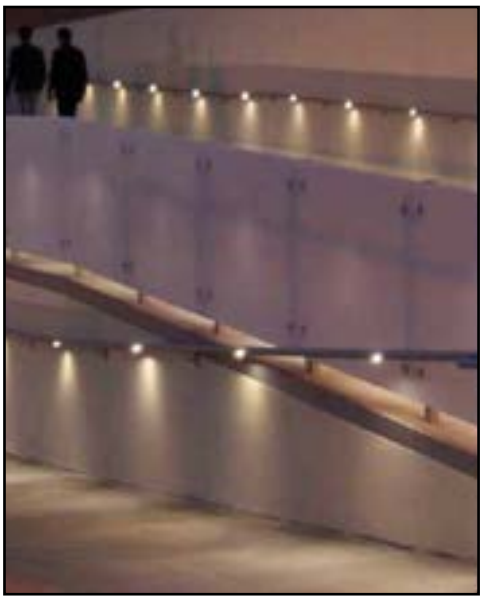
2. Point source lighting at a regular interval directed to the adjacent path of travel.

3. Light fittings to be easy to replace over time and to not be on a single circuit.

4. Light fitting must not protrude from handrail.

5. Stainless steel fixture.

6. Lighting to be installed as per specification from Planet Lighting.



Indicative handrail lighting

Furniture and Fixtures

Typical modified RMS Pedestrian Fences - barriers

Planting adjacent to fence line

Suburb logo in fence (Crows Nest)

Pedestrian barrier (Cammeray)

Notes

1. North Sydney standard pedestrian barrier.

2. Suburb logo to be incorporated in village pedestrian fences.

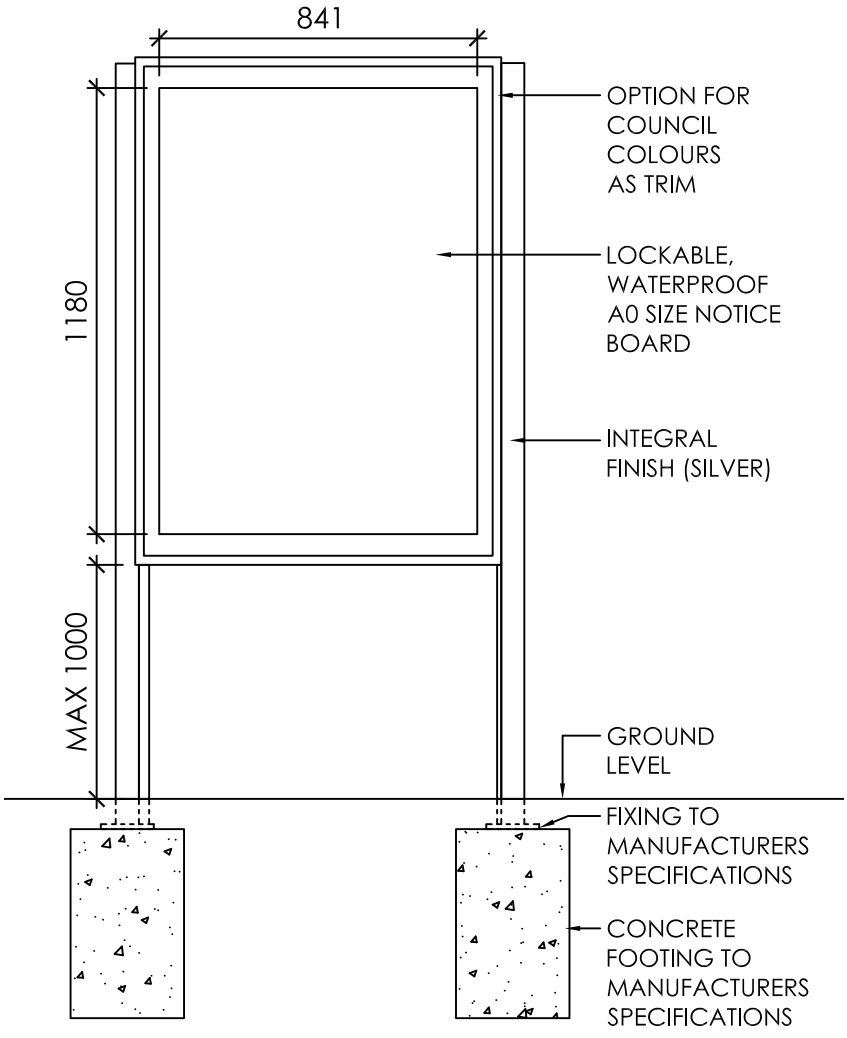
3. Painted to match existing.

Suburb logo in fence (Neutral Bay)

Furniture and Fixtures

Typical community notice board - free standing

Indicative illustration of free standing community noticeboard



Notes

1. Integral finish (silver) to frame.

2. Option for council colours as a trim.

3. Lockable.

4. Waterproof.

5. Internal size A0 (1180 x 841mm).

6. Noticeboard - portrait orientation.

7. Base of noticeboard maximum 1m from ground level.

8. Weather proof seals.

9. Stainless steel hinges incorporated into the swing door.

10. Manual or gas struts door stays.

11. 3mm poly carbonate or acrylic cover.

12. Optional anti-graffiti film applied to cover.

13. Sign frame finishes range from anodised matt silver to standard powder coat colours.

Furniture and Fixtures

Typical community noticeboard - wall mounted

Indicative illustration of wall mounted noticeboard in village bus stop (portrait)

Example of A0 noticeboard (landscape)

Notes

1. Integral finish (silver) to frame.

2. Option for council colours as a trim.

3. Lockable.

4. Waterproof.

5. Internal size A0 (1180 x 841mm).

6. Noticeboard - portrait orientation.

7. Base of noticeboard maximum 1m from ground level.

8. Wall mounted.

9. Weather proof seals.

10. Stainless steel hinges incorporated into the swing door.

11. Manual or gas struts door stays.

12. All fixings to be concealed.

12. 3mm poly carbonate or acrylic cover.

13. Optional anti-graffiti film applied to cover.

14. Sign frame finishes range from anodised matt silver to standard powder coat colours.

Furniture and Fixtures

Typical community notice board - free standing open

Indicative illustration of free standing open community noticeboard

Notes

1. Integral finish (silver) to frame.

2. Option for council colours as a trim.

3. Lockable.

4. Waterproof.

5. Internal size A0 (1180 x 841mm).

6. Noticeboard - portrait orientation.

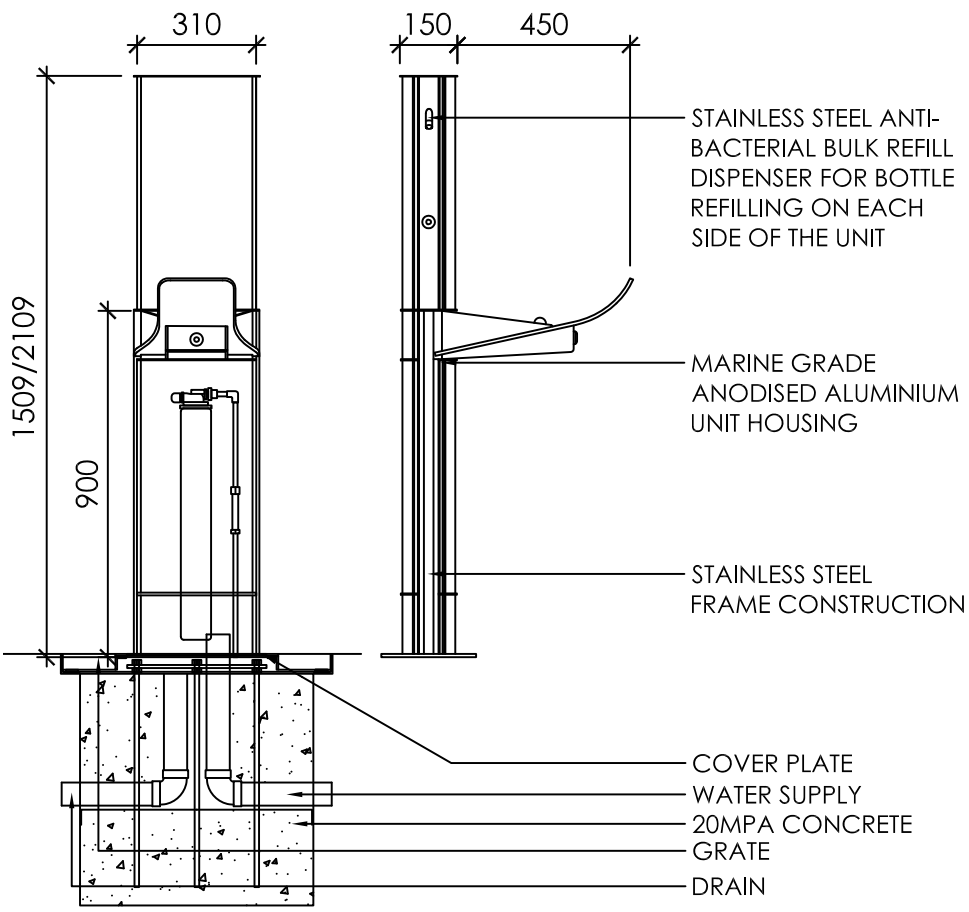
7. Base of noticeboard maximum 1m from ground level.

8. Open cork board in the middle. A0 format.

9. Awning over open area.

Furniture and Fixtures

Typical bottle refill station with drinking fountain



Bottle refilling station with drinking fountain

Bottle refilling station with drinking fountain

Notes

1. Wheelchair accessible drinking fountain.

2. 1500mm high refill station.

3. Stainless steel bulk refill dispenser for bottle refilling each side of the unit.

4. Stainless steel frame construction.

5. Marine grade anodised aluminium unit housing.

6. Optional filtered water unit.

7. Multiple bottle refill points.

8. Excavate a hole 440 x 730 x 500mm.

9. Footing cage and drainage tray installed with the top of the drainage tray flush with ground level.

10. Connect plumbing for drainage and water supply.

Indicative view: Waters Road, Neutral Bay

Crows Nest

5.15 Materials palette

(Approved equal alternative product may also be used)

VILLAGE CENTRES AND ACTIVITY STRIPS MATERIALS PALETTE			
ITEM	**MAIN STREET**	**LANEWAY**	**SHARED ZONE**
FOOTPATH AND ROAD WORKS DRAWINGS			
KERB AND GUTTER	**Material:** **Concrete** **Finish:** **Finished with a steel trowel**	**Material:** **Concrete** **Finish:** **Finished with a steel trowel**	**Material:** **Concrete. If kerbing is approved within a shared zone** **Finish:** **Finished with a steel trowel**
ITEM	**MAIN STREET**	**LANEWAY**	**SHARED ZONE**
PAVING - FOOTPATH	**Category 1 Paving: All areas except Crows Nest Village** **Material:** **Precast concrete unit paver** **Finish:** **Honed** **Size:** **Paving A:** **60 x 200 x 400mm** **Paving B:** **60 x 200 x 300mm** **Paving C:** **60 x 200 x 200mm** **Paving D:** **60 x 200 x 100mm** **Pattern:** **Butt jointed, Stretcherbond** **Colour:** **Typ 1: PPX:540:35.D** **Typ 2: PPX:1837:35 D** **Base:** **Rigid base** **Supplier:** **Equal or equivalent to Pebblecrete** **Paver sealant:** **Dry Treat Stain Proof with Intensifia and wet look sealant**		

PAVING - FOOTPATH	**Category 2 Paving:** **Crows Nest Only** **Material:** **Precast concrete unit paver** **Finish:** **Honed** **Size:** **60 x 200 x 400mm** **Pattern:** **Butt jointed, Stretcherbond** **Colour:** **PPX:540:35.D** **Base:** **Rigid base** **Supplier:** **Equal or equivalent to Pebblecrete** **Paver sealant:** **Dry Treat Stain Proof with Intensifia and wet look sealant**	**Material:** **Precast concrete unit paver** **Finish:** **Honed** **Size:** **60 x 200 x 400mm** **Pattern:** **Butt jointed, Stretcherbond** **Colour:** **PPX:540:35.D** **Base:** **Rigid base** **Supplier:** **Equal or equivalent to Pebblecrete** **Paver sealant:** **Dry Treat Stain Proof with Intensifia and wet look sealant**	**Not Applicable**

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FOOTPATH AND ROAD WORKS DRAWINGS / PAVING DRAWINGS / LANDSCAPE DRAWINGS			
PAVING - VEHICULAR CROSS OVER / SHARED ZONE ROAD PAVING	Material: Precast concrete unit paver Finish: Honed Size: 80 x 200 x 200mm Pattern: Butt jointed, Stretcherbond Colour: PPX:540:35 D (Type 1 Zones) PPX:1837:35 D (Type 2 Zones) Base: Rigid base Mortar: Parex Streetscape System mortar bed and joining to manufacturer's specification Supplier: Equal or equivalent to Pebblecrete Paver sealant: Dry Treat Stain Proof with Intensifia and wet look sealant	Material: Precast concrete unit paver Finish: Honed Size: 80 x 200 x 200mm Pattern: Butt jointed, Stretcherbond Colour: PPX:540:35.D Base: Rigid base Mortar: Parex Streetscape System mortar bed and joining to manufacturer's specification Supplier: Equal or equivalent to Pebblecrete Paver sealant: Dry Treat Stain Proof with Intensifia and wet look sealant	Material: Precast concrete unit paver Finish: Honed Size: 80 x 200 x 200mm Pattern: Butt jointed, Stretcherbond Colour: PPX:540:35.D Base: Rigid base Mortar: Parex Streetscape System mortar bed and joining to manufacturer's specification Supplier: Equal or equivalent to Pebblecrete Paver sealant: Dry Treat Stain Proof with Intensifia and wet look sealant
PAVING - FOOTPATH - TACTILES	Pathfinder Stainless Steel TGSI with Carborundum insert to meet AS 1428 Size: Individual tactile studs Pattern: As per AS1428.4.1 Colour: Black top silver sides Fixing: Drill and pressure fit or drill and glue Equal or equivalent to DTAC tactile terraced black top (Stainless Steel (316)	Not Applicable	Not Applicable

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FOOTPATH AND ROAD WORKS DRAWINGS / PAVING DRAWINGS			
PAVING - RECYCLED RUBBER SURFACING AT HOTEL LOADING ZONES	Material: EPDM rubber surfacing Base: 50mm crushed concrete aggregate. Colour Mixture: 40% Brown, 40% Grey, 15% Beige and 5% Black Base: Rigid base - Reinforced concrete slab	Material: EPDM rubber surfacing Base: 50mm crushed concrete aggregate. Colour Mixture: 40% Brown, 40% Grey, 15% Beige and 5% Black Base: Rigid base - Reinforced concrete slab	Not Applicable
KERB RAMPS	Material: Precast concrete unit paver Finish: Honed Size: 60 x 200 x 400mm Pattern: Butt jointed, Stretcherbond Colour: PPX:1837:35 D (Type 2) Base: Rigid Base Equal or equivalent to Pebblecrete	Material: Precast concrete unit paver Finish: Honed Size: 60 x 200 x 400mm Pattern: Butt jointed, Stretcherbond Colour: PPX:540:35.D Base: Rigid Base Equal or equivalent to Pebblecrete	Not Applicable

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
LANDSCAPE DRAWINGS			
TREE PIT BASE TREATMENTS - EXISTING TREE	Existing tree site with porous rubber surround. Material: FiltaPave porous rubber surround Colour: Cinnamon (Crows Nest) Charcoal (All other areas) Material: Precast concrete unit pavers Finish: Honed Size: 60 x 200 x 400mm Colour: PPX:540:35 D (Type 1) PPX:1837:35 D (Type 2) Pattern: Refer to detail Base: Rigid base Equal or equivalent to Pebblecrete Edge: Steel edge with root barrier	Not Applicable	Not Applicable
PARKING DRAWINGS			
PARKING METERS / PARKING LINES	North Sydney standard electronic parking meter Yellow line markings	North Sydney standard electronic parking meter Yellow line markings	North Sydney standard electronic parking meter highlight paving line markings. Highlight paver: Concrete paver Finish: Standard finish Size: 80 x 112 x 225mm Highlight colour: Steel (light grey) Base: Rigid base Pattern: Stretcherbond / Soldier course Equal or equivalent to Adbri Brickpave 80.

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
PAVING DRAWINGS			
TREE PIT BASE TREATMENTS - PROPOSED TREE	Tree pit with paving banding. Tree pit min. 1m x1.6m tree pit. Material: FiltaPave porous rubber surround Colour: Cinnamon (Crows Nest) Charcoal (All other areas) Material: Precast concrete unit pavers Finish: Honed Size: 60 x 200 x 400mm Colour: PPX:540:35.D (Type 1) PPX:1837:35.D (Type 2) Pattern: Refer to detail Base: Rigid base Equal or equivalent to Pebblecrete Edge: Steel edge with root barrier	Not applicble	Tree pit in road level concrete kerb blister surrounds - refer to detail on page 151
FIXTURES - FURNITURE			
SEATING	Seat with backing Approx. 2000mm long with armrest Equal or equivalent to Stoddart Part No: SPTP-SSE10-T3-SS-AR2-2000. Bench seat Approx. 1800mm long. Fixing: Bench is to be subsurface fixed. Equal or equivalent to 'Bench seat' by SFA.	Not Applicable	Not Applicable

RUBBISH BINS	**North Sydney standard bin** **Fixing:** **Bins are to be subsurface fixed.** **Spigot and socket mounted** **Equal or equivalent bin designed by Ian Dryden of Dryden Crute Design Victoria/JC Brown.**	**Not Applicable**	**Not Applicable**
ITEM	**MAIN STREET**	**LANEWAY**	**SHARED ZONE**
FIXTURES - FURNITURE			
125mm or 150mm BOLLARDS - FIXED INSITU AND REMOVEABLE	**(Fixed or removable)** **900mm high stainless steel bollard** **Finish:** **Linished** **Removable Bollard:** **Socket and cap for when bollard is removed** **Fixed Bollard** **Fixing:** **Bollards are to be subsurface fixed with mass concrete footings.** **125mm or 150mm equal or equivalent to Leda Slimline bollard (Fixed or removable (Locking and removable))**	**Not Applicable**	**(Removable only)** **900mm high stainless steel bollard** **Finish:** **Linished** **Fixed Bollard** **Removable Bollard:** **Socket and cap for when bollard is removed** **125mm or 150mm equal or equivalent to Leda Slimline bollard (removable (Locking and removable))**
BICYCLE RACKS	**Material:** **Stainless steel** **Fixing:** **Bicycle stands are to be subsurface fixed with mass concrete footings.** **Equal or equivalent to the GM850 (modified to include bottom rail) by Bikestorage**	**Material:** **Stainless steel** **Fixing:** **Bicycle stands are to be subsurface fixed with mass concrete footings.** **Equal or equivalent to the GM850 (modified to include bottom rail) by Bikestorage**	**Material:** **Stainless steel** **Fixing:** **Bicycle stands are to be subsurface fixed with mass concrete footings.** **Equal or equivalent to the GM850 (modified to include bottom rail) by Bikestorage**
BUS SHELTER	**Retain existing bus shelters**	**Not Applicable**	**Not Applicable**
PAVING - ALFRESCO DINING AREAS	**Outdoor dining - trading area permit boundary markers with North Sydney logo** **Material:** **Brass** **Fixing:** **Epoxy fix with central pin**	**Not Applicable**	**Not Applicable**

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FIXTURES - FURNITURE			
STREET LIGHTING	Post Top LED with node Luminaire: IZYLUM 3 5304 80 Wattage: 107W LED or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core Steel core – 220mm DIA Colour: Anodised aluminium extrusion Cladding: Rimex Height: 9.5m with single 3.0m light outreach arm Banner arm: 2m outreach Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 9.5m (HUB-NSP-SL95-S3) or approved equivalent	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W LED or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Cladding: Rimex Height: 7m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 7m (HUB-HUB-NSP-SL70) or approved equivalent	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W LED or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Cladding: Rimex Height: 7m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 7m (HUB-NSP-SL70) or approved equivalent
ITEM	**MAIN STREET**	**LANEWAY**	**SHARED ZONE**
FIXTURES - FURNITURE			
PEDESTRIAN LIGHTING – (OPTION 1) PREFERRED OPTION UNLESS APPROVED OTHERWISE BY NORTH SYDNEY COUNCIL)	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Height: 5m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 7m (HUB-NSP-PL50) or approved equivalent	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Height: 5m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 5m (HUB-NSP-PL50) or approved equivalent	Post Top LED with node Luminaire: IZYLUM 3 5307 40 LH351C 550mA Wattage: 68W or as per commissioned lighting design Sylvania Schreder Lighting or approved equivalent Multifunctional Pole Steel core – 168mm DIA Colour: Anodised aluminium extrusion Height: 5m Assembly: All fixtures (caps, grub screws, rag bolt system/cage etc) Footing: As per manufacturer's specification North Sydney Hub Street Pole 5m (HUB-NSP-PL50) or approved equivalent

PEDESTRIAN LIGHTING - (Option 2) **POST TOP LIGHT**	Post top LED luminaire on octagonal Vicpole Colour: Refer to drawings Equal or equivalent to Hubbell AAL Largent LED Post top luminaire.	Post top LED luminaire on octagonal Vicpole Colour: Refer to drawing Equal or equivalent to Hubbell AAL Largent LED Post top luminaire.	Post top LED luminaire on octagonal Vicpole Colour: Refer to drawings Equal or equivalent to Hubbell AAL Largent LED Post top luminaire.
ITEM	**MAIN STREET**	**LANEWAY**	**SHARED ZONE**
FIXTURES - FURNITURE			
PEDESTRIAN LIGHTING - WALL MOUNTED LIGHT (Laneways and Shared Zones)	Not Applicable	Wall luminaire LED Finish: Powdercoated Colour: Graphite Equal or equivalent to BEGA LED Wall luminaire.	Wall luminaire LED Finish: Powdercoated Colour: Graphite Equal or equivalent to BEGA LED Wall luminaire.
PEDESTRIAN LIGHTING - POST TOP LIGHT (Park / Plaza locations)	Post top luminaire LED Finish: Powdercoated Colour: Refer to drawings Light fittings shall be directional. Equal or equivalent to LED Luminaire-Hubbell AAL Post top luminaire (4M high tapered base octagonal 'Vicpole').	Not Applicable	Not Applicable
PEDESTRIAN LIGHTING - ILLUMINATED BOLLARD	LED 800mm high illuminated bollard Finish: Powdercoated Colour: Graphite Fixing: Bollards are bolted with a mounting plate onto a foundation. Light fittings shall be directional. Equal or equivalent to BEGA Illuminated bollard. 800mm high. LED	LED 800mm high illuminated bollard Finish: Powdercoated Colour: Graphite Fixing: Bollards are bolted with a mounting plate onto a foundation. Light fittings shall be directional. Equal or equivalent to BEGA Illuminated bollard. 800mm high. LED	LED 800mm high illuminated bollard Finish: Powdercoated Colour: Graphite Fixing: Bollards are bolted with a mounting plate onto a foundation. Light fittings shall be directional. Equal or equivalent to BEGA Illuminated bollard. 800mm high. LED
PEDESTRIAN LIGHTING - HANDRAILS	Integrated handrail lighting system Lighting to be housed within a stainless steel handrail. Point source lighting at a regular interval. Equal or equivalent to Planet Lighting HLS GEN4 LED integrated handrail lighting system.	Not Applicable	Not Applicable

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FIXTURES - FURNITURE			
MISCELLANEOUS COMMUNITY NOTICE BOARDS Free standing community notice board / Outdoor wall mounted notice board/ Free standing open community notice board	Colour: Silver frame with option for council colours to be incorporated as a trim Key features: Lockable Waterproof A0 (1180 x 841mm) internal dimension Portrait orientation Option for anti-graffiti film on notice board Poly carbonate or acrylic cover Notice boards to be maximum 1m above ground level at the base when freestanding A0 sized open cork board in the middle of open community notice boards Simple awning to open community notice boards Equal or equivalent to HD1 Harsh Duty Outdoor Lockable Notice Board by Arrow Alpha Equal or equivalent to MD6 Keyless Secure Notice Board by Arrow Alpha Equal or equivalent to HD1 Harsh Duty Outdoor Lockable Notice Board by Arrow Alpha	Not Applicable	Not Applicable

ITEM	MAIN STREET	LANEWAY	SHARED ZONE
FIXTURES - FURNITURE			
MISCELLANEOUS FIXTURES -FURNITURE Bottle refill station with drinking fountain	1500mm high refill station with drinking fountain Stainless steel bulk refill dispenser for bottle refilling each side of the unit Marine grade anodised aluminium unit housing Optional filtered water unit Multiple bottle refill points Changeable panels Stainless steel drinking bowl Stainless steel frame construction Fixing: Stainless steel base plate with drainage pit Equal or equivalent to Aquafill product Type C 1500mm high refill station with drinking fountain by Arrow-Alpha Industries	Not Applicable	Not Applicable
BANNER POLE	Rota-Top Euro Banner Pole Powdercoat finish By Abel Flags	Not Applicable	Not Applicable
PEDESTRIAN FENCES			
PEDESTRIAN BARRIERS	North Sydney standard pedestrian barrier.	Not Applicable	Not Applicable
MISCELLANEOUS			
SIGN POSTS	Sign Posts to have V-Lock grips V-Locks to be supplied by council		
POWER POLES	Base of power poles to have 50x500x500mm FiltaPave surrounds Colour: Cinnamon		