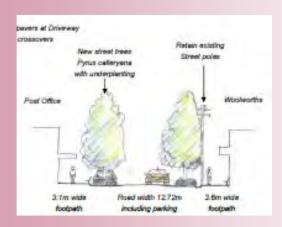
Street trees Acer buergerianum Retain existing street poles Existing retaining wall Existing Berala Pub carpark 2.9m wide footpath Cross section Woodburn Road Berala

perking spot Rained pedestren (threshold



BERALA VILLAGE

Public Domain Plan

MARCH 2015



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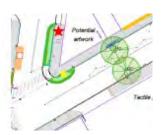
REFERENCES AND ACKNOWLEDGEMENTS

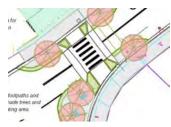
REV	DETAILS	TRIM REF
A	18 March 2015 Draft Public Domain Plan reported to Council	

PART 1: INTRODUCTION

This Plan details the design concept and implementation plan for the public domain improvement works for Berala Village.

This Plan also provides an overview of Berala: the people; the place; and the issues identified in previous studies. It outlines the urban design principles on which the Plan is based, and links these design principles to Council's long term strategic directions¹ and the key issues which the Plan addresses.





1.1 What is a public domain plan?

What is the public domain?

The public domain is defined as the publicly owned spaces, including streets and places such as parks, plazas, and squares. It can be thought of as the shared public spaces between buildings.

The public domain is also considered to include publicly accessible privately owned spaces including arcades, building forecourts and other semi-public spaces. These spaces are often well used by the public and thus also influence the public domain.

A high quality public domain contributes to a strong sense of place and is important for community pride and wellbeing. It also contributes to a centre's economic wellbeing, and has a significant effect on perceptions of, and investment in, a village or town centre.

Relationship between the public domain and private development

The space where the buildings of the private domain meet the street of the public domain is often known as the public-private domain "interface". This Public Domain Plan and the Auburn Development Control Plan (DCP) 2010 address this public-private domain interface in the following ways:

- the Public Domain Plan identifies key public domain improvements, and how they will be implemented
- the DCP sets out how individual (private) buildings should address the street in terms of their bulk, scale, proportions, building entry, detailing and overall appearance.

Purpose of the Plan

The *purpose* of this Public Domain Plan is to outline the public domain design concept for the Berala Village, together with an effective implementation plan. The implementation plan will outline how this design concept will be delivered on the ground.

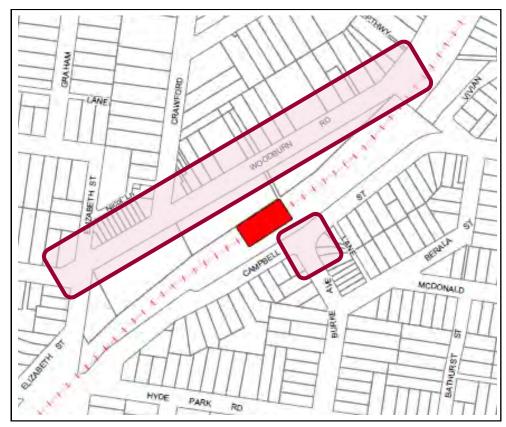
Aims of this Plan

The aims of this public domain plan are to:

- improve the overall appearance of Berala Village;
- build on Berala's village atmosphere and character;
- improve pedestrian safety and comfort;
- · add greenery to the centre; and
- address issues identified in previous studies of Berala.

1.2 Area

This plan applies to the following area within Berala Village:



Map 1: Berala Village Centre

1.3 How to use this plan

Structure

Part 1 outlines outlines the scope and purpose of the Public Domain Plan. It also outlines the relationship of the Public Domain Plan to other key documents and policies, and includes an overview of previous studies and strategic documents that have influenced the preparation of this Plan.

Part 2 outlines outlines the urban design principles on which the Public Domain Plan is based. It also describes the people, the place, and the key issues identified in previous studies of Berala.

Part 3 outlines the design concepts for Berala Village. A detailed design concept is provided for different sections within the area identified in Map 1 on the previous page. This part also expands on the sustainability, safety, accessibility, and traffic and parking aspects on the design concepts.

Part 4 outlines how the Public Domain Plan will be implemented. It includes detail on staging, project management, approach to consultation with businesses and the community, and schedules of cost estimates for the proposed work.

PART 2: PREPARATION OF THE PLAN

Berala is named from an Aboriginal word meaning musk-duck. Development of Berala as a European settlement dates from 1885, when the first public auction of land took place. Berala Station was opened in 1912, located slightly northeast of the existing station embankment. In the 1920s the first public school and post office in Berala were established, and Berala station was rebuilt in its present location, on the then Lidcombe to Cabramatta line. The most significant development in Berala occurred from the interwar period onwards, and particularly during the 1940s-1970s. The late 1960s saw the construction of 3 and 4 storey walk-up flats, followed by town houses more recent housing dating from the 1960s.

2.1 Previous studies and community engagement

A number of studies of Berala and community engagement workshops have been undertaken over the years, particularly between 2009 and 2013. The outcomes of these studies and sessions has highlighted key issues needing attention in Berala, as well as key attributes and the aspects people value most about Berala.

This section presents a brief summary, with the key outcomes of the community engagement detailed on the following pages as "attributes" and "issues", and forming the basis of this plan.

Berala Village Study 2014

Berala Village study was prepared between 2009-2014. It was a detailed study of Berala, including the main street area. Its purpose was to identify opportunities to revitalise and improve Berala, and to inform Council's strategic planning.

Key recommendations of this study related to the public domain included:

- prepare a public domain plan incorporating relevant issues identified in the study;
- include implementation of Berala Public Domain Plan in the capital works program for 2015/16;
- prioritise funding for construction of a community centre in Woodburn Road, Berala (actioned);
- continue community education on waste and illegal dumping prevention initiatives (ongoing); and
- continue to advocate for provision of a lift at Berala Station by the State government (ongoing).

Community engagement The workshops undertaken as part of the Berala Village study focused specifically on identifying issues within the village centre, and discussing opportunities for renewal and revitalisation.

As part of this study, a workshop activity on Berala's main street area was undertaken. Participants were given a map of Berala's main street area and an illustrated list of possible streetscape elements (eg landscaping, paving, seats) and were asked to indicate which elements they would like to see included in Berala's main street area. The outcomes of this activity are summarised in section '2.3 Issues and Attributes' of this plan, and form the basis of the design concepts detailed in Section 3 of this plan. They are also summarised in more detail in Appendix 1.

Auburn City Community Strategic Plan 2013-2023

The Community Strategic Plan (CSP) sets the 10 year strategic direction for Council. It is based around 4 themes of Community, Place, Environment and Leadership. This public domain plan addresses the following CSP key outcomes and themes:

Theme: Our Community: Diverse and inclusive



Outcome: promotion of community pride

Theme: Our Places: Attractive and liveable



Outcome: Attractive public spaces and town centres (deliver public domain improvement programs)

Community engagement A series of community forums were held in 2009-2010 and 2012 during the preparation of the Council's 10 year Community Strategic Plans (2011-21 and 2013-23), The purpose of these forums was to engage community members about what they saw as important for the future of their suburb and Auburn City as a whole. These community aspirations were used to shape the broad outcomes in the CSP and to set the strategic direction for Council for the following 10 year period. During this process, participants were also asked to identify key social, economic, environmental and civic issues affecting their suburb and Auburn City.

Key issues for Berala participants at these forums included:

- need for quality village centre development;
- need to improve Berala's main street area;
- lack of public facilities;
- improve cleanliness of streets;
- better address illegal dumping; and
- more community education, especially on road safety and waste management.

Community Priorities Surveys (2010, 2012, 2014)

Commencing in 2010, Council has engaged Micromex Research, a specialist consultant, to undertake a telephone survey of 1,000 randomly selected residents on community priorities every second year. On behalf of Council. The surveys provide a measure of how important various functions and services are to the community and how satisfied they are with Council's delivery of these.

Of the top 14 factors influencing overall community satisfaction (across Auburn City) in 2014, the following factors are directly related to public domain areas:

- · long term planning for Auburn City;
- attractiveness of town and village centres;
- town centre cleaning;
- traffic management and road safety;
- maintaining footpaths;
- maintaining building heights in town centres; and
- festivals and events.

The public domain plan for Berala directly addresses many of these key factors. By undertaking this type of random survey every second year, Council can effectively measure its progress in working towards meetings its long term strategic goals and community aspirations.

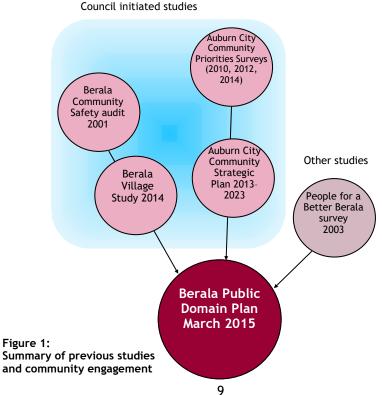
People for a Better Berala 2003

In December 2003, a subcommittee of the local resident group, People for a Better Berala, undertook a small survey of 110 respondents (including committee members). The survey questionnaire asked participants about their vision for Berala generally, and for Berala's main shopping street. It also asked about preferred building heights, and what public services and facilities are needed in Berala.

Key issues identified in this survey included the need for:

- cleaner streets;
- lift access at Berala Station;
- better security and lighting;
- public toilets;
- more seats, street furniture and garbage bins;
- more bike racks; and
- greater mix of shops.

Note: Whilst Council had no role in the preparation of survey content, survey administration or analysis of this survey, the key issues identified have been included in other studies as appropriate.



2.2 People and Place

People

Diversity

In terms of diversity, the suburb of Berala reflects a similar level of cultural diversity as Auburn City as a whole, with just over 50% of both localities being overseas born at the 2011 Census. This is highly diverse when compared with the Sydney average. The four most common languages spoken at home in Berala at the 2011 Census were Cantonese, Mandarin, Arabic and Vietnamese.

The people

Berala has a strong sense of community with many residents having lived in Berala for a number of years. Unlike many other parts of Auburn City, it is anticipated that the proportion of Berala's population over 60 years will increase by 18% by 2021. The most common type of household in Berala at the 2011 Census was couple families with dependents (43%), reflecting Auburn City as a whole. However between now and 2021, the largest increase in household type is expected to be single person households. Both of these are important considerations for public domain projects.

Living and working

Berala has a higher level of home ownership (32%) than Auburn City as a whole (24%). Many of the people living in Berala who have come from overseas have lived there since before 2001.

65% of Berala's population work full time and 31 % work part time. Approximately half of Berala residents drive to work, with approximately 28% travelling to work by train at the 2011 Census, reflecting a similar situation across Auburn City as a whole.

Berala has slightly lower levels of managers and professionals compared with Auburn City, and higher levels of people working as labourers, and in technical and trades industries.



Place

Location and identity

Berala is located in the southern part of Auburn City, on the Bankstown rail line. It is one of three village centres within Auburn City, together with Regents Park and Newington. Berala Village Centre provides local day to day convenience shopping. It is located relatively close to Regents Park, as well as Auburn and Lidcombe Town Centres. Berala has a distinct identity as a suburb and as a village centre. It is identified in the State government's centres hierarchy as a village centre.

Built form

Berala's main street is characterised by 1-3 storey buildings with a relatively fine grain subdivision pattern. The exception to this is Woolworths, which has a longer and less- active frontage along the southern side of Woodburn Road. This type of built form is relatively conducive to pedestrian activity and is of a pedestrian scale. The main street area is built around the railway station, and is a relatively compact, walkable centre, with relatively easy pedestrian access from surrounding residential areas. A connection between Woodburn Road on the northern side of the railway line and Campbell Street/Burke Avenue on the southern side, is provided at ground level through a concourse under the railway line.

Flooding

Parts of Berala's main street area are flood affected. Much of Woodburn Road north east of Crawford Street is identified as being of low flood risk. Campbell St, on the southern side of the railway line, is identified as being of medium flood risk, with areas of high flood risk located north of the village centre area around Vivian Crescent.

Heritage

Berala Railway Station, opened in 1912, is an item of State archaeological heritage significance, and is typical of many suburban stations of that time. This is the only heritage item within Berala's main street area. Nearby items (outside the area to which this plan applies) include Berala Public School and the Brush Box trees in Lidbury Street.

Pedestrian activity

Berala's relatively fine grain subdivision and village scale built form within the main street area is conducive to pedestrian activity. The centre's location around a suburban railway station is a further generator of pedestrian activity.



2.3 Issues and Attributes

"A village is a place where you can find peace, unity, strength, inspiration and most importantly a natural and beautiful life"

Minahil Urfan

Attributes

Village character

Berala's village atmosphere and character is one of its most frequently identified strengths by members of the community. Berala has a distinct sense of identity and many residents like the fact that the centre has a very different feel to that of Auburn and Lidcombe town centres.

It is Important that the public domain concept reflects this key attribute that is strongly valued by many community members, through the inclusion of streetscape elements that reinforce a village scale and character, whilst still being robust and of high quality.

Strong Community

Berala has a strong sense of community with many residents having lived in Berala for many years. In response to community feedback that more community events were required to strengthen community pride, Council has implemented a park reach program of community events. The public domain upgrade of Berala's main street area will further facilitate community pride.

Convenient shopping

The completion of the Woolworths development has not only provided Berala residents with much needed improvements in day to day convenience shopping, but has also had a positive effect on surrounding local shops. By improving the overall appearance and public domain of Berala's main street area through the implementation of this plan, Council hopes that further positive effects and benefits are felt by local businesses and residents alike.

Scale of development

Berala Village is of a smaller, more intimate scale that Auburn and Lidcombe town centres. Participants and community engagement sessions over the years have consistently identified this as an attribute of Berala, and have indicated they wish to see future development continue in a similar scale. The public domain plan should also reflect this key attribute.

A walkable centre

Berala village has the advantage of being a small, compact centre build around a railway station. Whilst the need to improve access to the Station itself, via a lift, is an ongoing issue for which Council continues to lobby the State government, the proximity of the centre to Berala station is a key attribute.

Community facilities

Berala's community facilities include York Park, Jack and Jill Park, and the soon -to-be-completed Berala community centre. During the absence of a community centre, Berala Public School has played a key role in supporting community activities within Berala. Both York Park and Jack and Jill Park are highly used and valued by the local community.

"Berala is in need of improvement - we need the right sort of development which will benefit the residents"

People for a Better Berala 2003

Issues

Overall appearance

The need for revitalisation and beautification of Berala's main street area has been consistently identified by community members in a number of forums including the *Community Strategic Plan 2013-2023* and *Berala Village Study 2014* sessions, as well as the community-led *People for a Better Berala Survey* (2003). Specifically, community members have highlighted the need for landscaping, more seats and street furniture, better street lighting and improved shop fronts. Comments have emphasised the need for high quality improvements, that look good, function well, and that are durable.

Need for public facilities and community services

The need for a public toilet and a community centre in Berala has been consistently identified by community members over the years. With the Berala Centre for Community well underway, the public domain plan is an opportunity to incorporate a public toilet in a suitable location within the main street area.

Retail mix

Whilst the retail mix of a main street is beyond the control of Council, a streetscape upgrade and improved overall appearance of a centre can have significant flow on effects in terms of retail mix, vacancy levels, and the success and viability of businesses within the centre. This public domain revitalisation follows the long-awaited development of a supermarket within Berala, which may also have a positive effect on the centre as a whole over time.

Scale of development

This issue is closely related to Berala's strong village character and atmosphere, highly valued by many within the community. At various community engagement sessions over the years, participants have reiterated their desire to see village-scale development within Berala's main street and surrounding areas. The public domain plan can reinforce and build on Berala's existing village character through landscaping and street furniture selection included in the concept plans.

Access, transport and parking

Pedestrian access within and to Berala's main street areas could be improved, particularly the footpath surfaces on the northern side of Woodburn Road. The need for disabled parking within the village centre has been a long standing issue, and the village centre now has 3 on-street disabled parking spaces. The public domain plan provides an opportunity to improve the overall appearance of the village centre, without compromising parking and loading spaces, which are vital for the effective operation and convenience of businesses and shoppers alike. The plan also provides an opportunity to improve disabled access to shops through more even and level footpath surfaces. The need for a lift at the station is an ongoing issue, and whilst it is outside the scope of this plan, Council continues to advocate for provision of a lift at Berala station through the State government.

Community pride and clean streets

The overall appearance of a centre is a key factor which influences community pride. Participants at community engagement sessions over the years have indicated that cleaner streets and more garbage bins in the main street area are needed. This, together with new and renewed elements such as seats, paving and landscaping, can result in a greater sense of community and pride amongst Berala residents and businesses.

2.4 Urban design principles

Principles

This public domain plan is based on four key principles that have been developed in response to the attributes and issues identified by the people of Berala in previous studies and engagement activities. The principles are:

Design for localness;

- A place for people;
- Design excellence; and
- Safety and accessibility.

These principles have also been developed in line with the clearly defined aims of this plan, outlined in Section 1.1. These principles also reflect the long term strategic direction for Auburn City as a whole, outlined in Council's *Community Strategy Plan 2013-2023* (Section 2.1). The principles are outlined on the following pages.

Design for localness

This principle is about design that builds on the strengths and positive attributes of an area and design which suits the people who use the centre. It is about recognising history and heritage. It is also about addressing issues that have been identified in previous studies and where possible, providing elements that are currently missing.

In the case of Berala, this principle is about building on the existing village character and atmosphere of the centre. It is about renewal and improvement, without losing Berala's key attributes including its intimate, village scale feel, ease of access by foot, and its relaxed atmosphere. Woodburn Road is characterised by fine grain shopfronts, with a distinctly pedestrian scale.

Previously identified issues and elements missing in Berala Village centre which the Public Domain Plan will address include poor overall appearance, lack of seating and greenery, and the need for a public toilet.

It is also important for the Public Domain Plan to be of a scale that is practical to implement in terms of budget, and one which can also be delivered by Council within a reasonable timeframe. It is therefore important to strike a balance between design ideals or 'wishlists' and practicality. The Public Domain Plan for Berala Village reflects this approach.



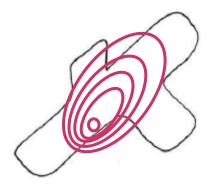
A place for people

The most successful places for people typically have a number of elements in common: a distinct identity; safe and pleasant public spaces; they are easy for pedestrians to move around; and they feel comfortable.

This principle is about achieving a balance between the different users of the street: pedestrians, cyclists and drivers. It is also about creating spaces where people can stop and rest, and sit and talk.

This plan aims to improve the comfort and feel of Berala's main street area. In particular, it is about renewing and upgrading the footpath areas and the overall look and feel of the centre. More seats, more greenery, and more even footpaths will go a long way towards improving Berala as a place for people.



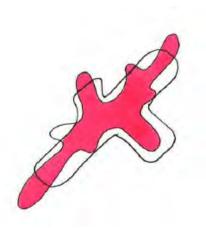


Design excellence

Design excellence refers to sound design and the use of good quality materials, finishes and landscaping elements. It is also about sustainable design, which is robust, minimises environmental impacts and conserves resources.

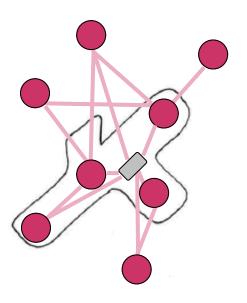
The appearance and quality of streets and public spaces plays an important role in the economic viability of a centre. A high quality public domain can also foster community pride among local business people and residents. It can be a catalyst for change and renewal. Cleanliness and on-going maintenance is a key part of this principle.

In Berala this will be achieved through elements such as landscaping, paving and well located seating. The implementation of this plan will cover maintenance to address the issue of well maintained and clean streets.



Safety and Accessibility

Designing for safety involves applying the principles of crime prevention through environmental design (CPTED). It is about maximising natural surveillance and sightlines, and ensuring public spaces feel owned and cared for through their design. Accessibility is about minimising barriers to movement and ensuring public spaces are accessible to all members of the community.

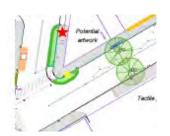


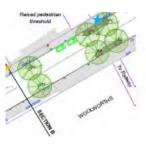
PART 3: PUBLIC DOMAIN DESIGN CONCEPT

This part outlines the public domain design concepts for Berala Village.

The first section provides details of the proposed upgrade for different parts of Berala Village (split into 4 distinct sections).

The subsequent sections within this part of the plan detail other key aspects of the plan including sustainability, safety and access, crime prevention through environmental design (CPTED), and parking and loading provisions within the village centre.





3.1 Elizabeth Street - Crawford Street



Aim

- Create a sense of arrival
- Improve pedestrian safety
- Add greenery to the streetscape

Design Concept

- Trident Maple trees create a sense of entry to Berala and a sense of changing seasons
- Ornamental Pear Trees, planted at approximately 25m intervals along Woodburn Road, provide greenery and create cohesion within the streetscape
- Planting trees within the roadway will result in a consistent streetscape and will allow more natural shaped tree canopies over time, without interference from awnings or powerlines
- Raised pedestrian threshold defines entry to Berala, moderates traffic speeds and improves pedestrian safety
- Kerb realignment improves pedestrian safety and traffic flow through Crawford St-Woodburn Rd intersection

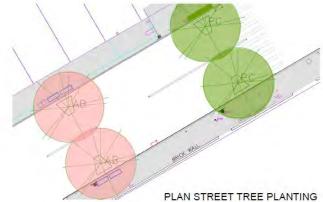
Issues Addressed

- Garden bed on the corner of Crawford and Elizabeth Streets adds greenery and helps absorb changes in level, helping to improve pedestrian accessibility and safety
- Tactile pavers adjacent to driveways improve pedestrian safety
- Trees provide greenery, improving village centre appearance and pedestrian comfort

PLANTING DETAILS



AB Acer buergerianum Trident Maple 6 metres x 6 metres



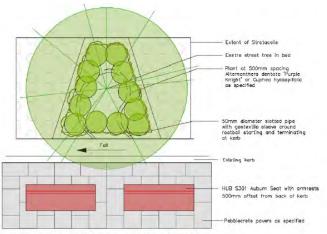
PLAN STREET TREE PLANTING



PC Pyrus calleryana 'Chantileer' Ornamental Pear 11 metres x 6 metres



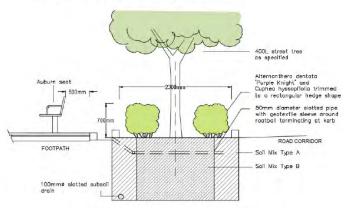
Install strata cells to improve tree health



PLAN DETAIL TREE PLANTING IN ROAD



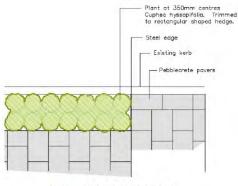
Auburn Seat with armrests



SECTION TREE PLANTING IN ROAD



Cuphea hyssopifolia 'Golden Ruby'

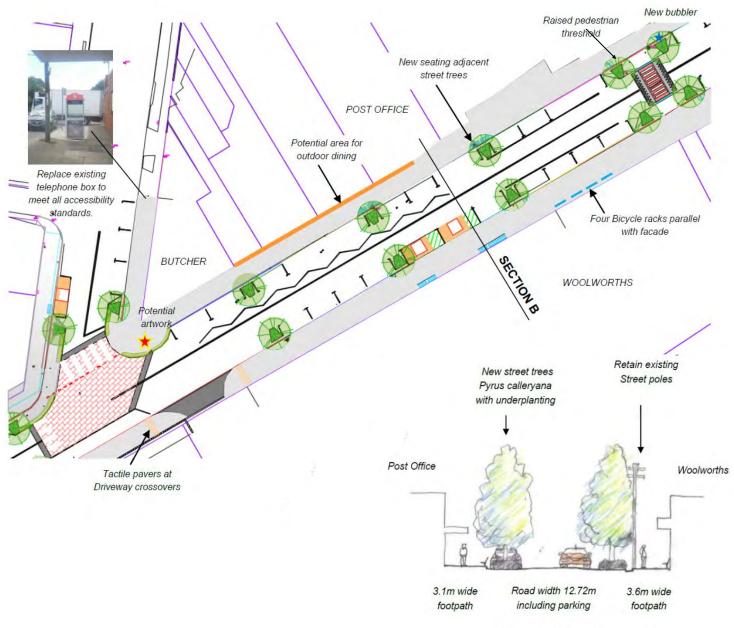


PLAN HEDGE PLANTING



Alternanthera dentata 'Purple Knight'

3.2 Crawford Street - station entry



CROSS SECTION B WOODBURN ROAD

Aim

- Improve pedestrian comfort
- Add greenery to the streetscape
- Improve pedestrian safety

Design Concept

- Ornamental Pear Trees provide greenery and create a cohesive streetscape, small areas of hedge planting softens streetscape
- New street furniture, including new seats located under street trees, providing shade in summer
- New garbage bins with increased volume and introduction of recycling improves sustainability and community pride
- Retain overhead powerlines, however design and construct conduit under footpath for future use
- 4 new bike racks outside Woolworths, close to station
- Location for street furniture style-artwork identified
- Location for potential outdoor dining identified

Issues Addressed

- Pedestrian comfort improved through well located new street furniture
- Raised pedestrian crossing at station entry will improve pedestrian access and safety
- Tactile pavers adjacent to driveways results in improved pedestrian safety
- New bubbler with sign translated into key languages improves pedestrian comfort and reduces waste
- Small electricity box and phone box relocated, removing footpath obstruction, and improving pedestrian viability and safety

OUTDOOR DINING



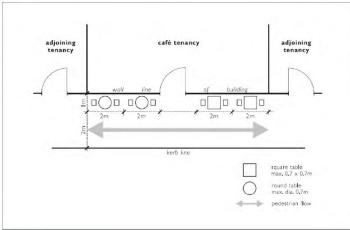
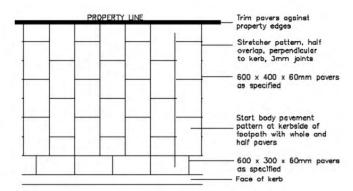


Diagram I

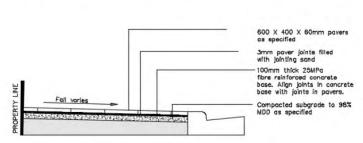
Footpath cafe adjacent to the respective indoor premises

- alignment and minimum clearance for pedestrian traffic
- nominal dimensions for furniture layout with 2 chairs per table

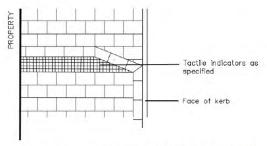
PAVING DETAILS



PLAN TYPICAL PAVING PATTERN



SECTION TYPICAL FOOTPATH CROSS SECTION



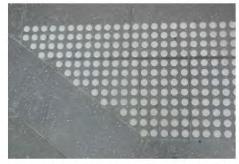
PLAN TACTILE PAVERS AT DRIVEWAY CROSSING



Pebblecrete Pavers



Identification tiles for Bus Stops



Compliance to Australian Accessibility Standards

STREET FURNITURE



Install 11 new seats to match existing seats

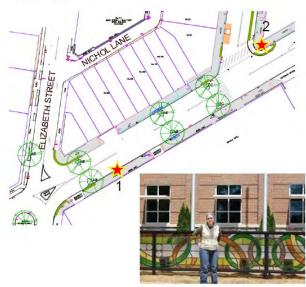


Replace existing single 240L bins with dual 140L bins for waste and recycling

POTENTIAL PUBLIC ARTWORK

Two locations have been identified for public artwork.

These works will be developed in liaison with Council's Arts
Coordinator.



Wall mosaics



New Bubbler and water refill station.



Install four new bike racks. Racks to run parallel to building façade. Potential to involve community in design of racks.



Lighting Design



Temporal Installations



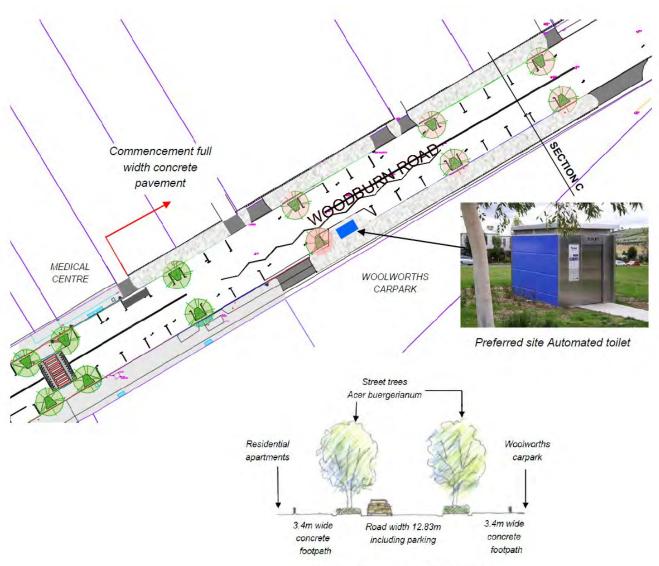
Sculptural Landmarks



Footpath Designs

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3.3 Station entry - Woolworths car park (northern end)



CROSS SECTION C WOODBURN ROAD

Aim

- Create a sense of entry to the main street area
- Create a transition from the main street area to the residential area, ensuring village character is maintained
- Improve pedestrian comfort and safety
- Add greenery to the streetscape

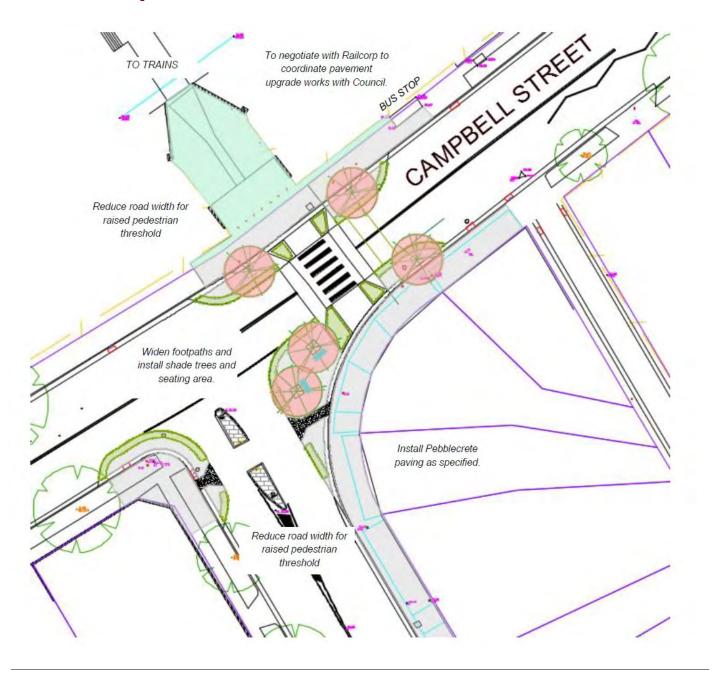
Design Concept

- Trident Maple trees create a sense of entry to Berala and a sense of changing seasons
- Ornamental Pear Trees provide greenery and create cohesion within the streetscape
- New public toilet, conveniently located close to station entry and shops. Scope for public artwork on toilet facade
- Transition between main street area and residential area reflected in paving treatment transitioning from full width grey pavers to concrete footpath with banding of grey pavers

Issues Addressed

- Pedestrian comfort improved through convenient location of new public toilet
- Toilet carefully located on widened footpath to ensure unobstructed footpath circulation. Toilet entrance designed and located to maximise safety and minimise potential for anti social behavior.
- Tactile pavers adjacent to driveways improved pedestrian safety

3.4 Campbell Street and Burke Avenue



Aim

- Improve the overall appearance of this part of the main street area
- Add greenery to the streetscape
- Improve pedestrian safety and comfort
- Create a greater feeling of cohesion between the 2 sides of the railway line

Design Concept

- Trident Maple trees create a sense of entry to Berala and the southern side of the rail line, and a sense of changing seasons
- Landscaping on widened kerb areas add greenery
- New footpath paving around the intersection improves accessibility, and contributes to a cohesive streetscape
- Potential to negotiate with Railcorp to coordinate improvement works immediately outside station area

Issues Addressed

- Pedestrian crossing on raised threshold directly linking station improves sightlines and pedestrian safety
- More pedestrian space at corner of intersection
- Tactile pavers adjacent to driveways improves pedestrian safety
- Seating and trees on widened kerb areas creates a sheltered place to sit

3.5 Sustainability

Landscaping and WSUD

The landscaping design in the public domain plan incorporates the principles of water sensitive urban design (WSUD). Below each tree pit is a small slotted pipe which will capture rainwater and redistribute it for irrigation of the landscaping within that tree pit. This reduces the need for watering and use of potable water. The species selected are low maintenance and robust in nature.

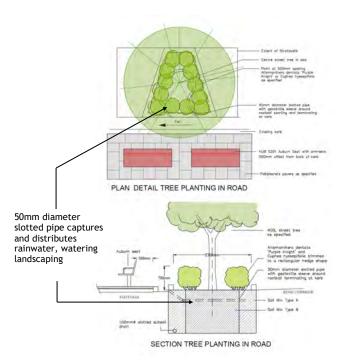
The use of strata cells within the tree pits below ground allows adequate room for growth of the root ball, which is fundamental to the trees' long term survival. The strata cells are installed below the road pavement and are then resurfaced with standard road surfacing, meaning their presence is unnoticed by motorists and pedestrians.

Garbage bins

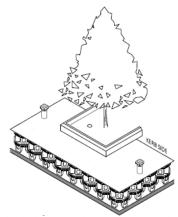
The replacement of the existing bins (6) with new stainless steel dual bin kiosks (6) each with tow bins: one for general waste and one for recyclable material not only increases capacity for waste collection within Berala, but also introduces recycling. The introduction of bins for recycling can significantly reduce and divert waste from landfill, as well as encouraging recycling. The proposed bins are the same as those successfully trialled and then rolled out in Auburn Town Centre.

Public Toilet

The public toilet is an environmentally and cost efficient solution. The toilet specified has high standards of cleanliness combined with low water usage. It also uses robust materials such as stainless steel which can be recycled at the end of its lifecycle.



Robust landscaping species together with water sensitive urban design whereby rainwater is captured and distributed within the base of each tree, which reduces water use and the need for hand watering, and maximises plant health



Use of strata cells (below ground) maximises tree health and longevity by ensuring adequate space for root growth



New dual kiosk bins increases capacity and allows collection of recycled material.



New public toilet with recyclable stainless steel and durable components, and efficient water usage

3.6 Safety (CPTED)

Safety and Crime Prevention through Environmental Design (CPTED)

In accordance with Council's policy², the principles of crime prevention through environmental design (CPTED) have been applied throughout the preparation of this plan. These principles are:

- natural surveillance;
- access control;
- territoriality; and
- space management.

Some examples of the application of these principles in the public domain plan are briefly described below.

Landscaping Design

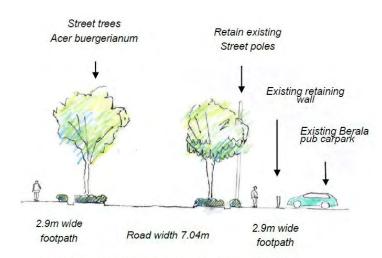
The landscaping has been specifically designed to ensure unobstructed sightlines along the streets and footpaths above 700mm below 2 metres about ground level. The tree canopies of the trees selected will not obstruct pedestrian or driver sightlines.

Footpath improvements

Footpath improvements, particularly the relocation of the existing phone box, will improve pedestrian sightlines within Berala, and will remove potential obstructions. Whilst a clear definition between privately and publicly owned space in Berala exists at present, the public domain upgrade works will ensure that the public spaces within Berala village feel owned and cared for.

Toilet siting and design

The toilet location and design has been carefully considered during the preparation of the plan. The model selected can have the entry oriented so that passive surveillance is maximised, and opportunities for anti social behavior are minimised. The new public toilet will be located on a section of widened footpath so that sightlines along the street and footpath are maintained, the footpath is not obstructed, and potential hiding spaces are minimised.



CROSS SECTION A ENTRANCE WOODBURN ROAD

3.7 Accessibility

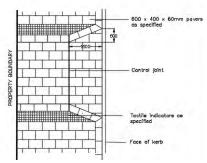
Pedestrian crossings have been narrowed to improve pedestrian and driver safety and sightlines, and to ensure compliance with Australian Standards.

Footpaths the public domain plan presents an opportunity to significantly improve accessibility through significantly reducing existing variations in footpath levels, resulting in a substantially more even surface for pedestrians. The public domain plan will further improve accessibility for all community members through the relocation of utilities such as the Telstra phone box and the small electricity box, both of which are currently located towards the centre of the footpath areas. Relocating this utility infrastructure to more suitable locations nearby, will significantly improve footpath accessibility and will remove obstructions.

Levelling and repaving footpaths will result in new pram ramps which are compliant with the relevant Australian Standards. In addition, tactile markers will be incorporated into the new footpath surface, improving accessibility for some user groups.

Bubbler the proposed bubbler for the village centre (same design as that successfully used in Auburn Town Centre) is wheelchair accessible and is compliant with Australian Standard AS-1428. The accompanying educational sign, informing people that they can refill their drink bottles at the bubbler, will include translations in 10 of Auburn City's key languages.

Toilet the toilet selected for the public domain upgrade is wheelchair accessible and is compliant with Australian Standards.



Footpath paving detail with tactile markers



Uneven levels to be addressed, and small electricity box to be relocated to improve accessibility



Phone box to be replaced with newer style in a less obstructive position on the footpath

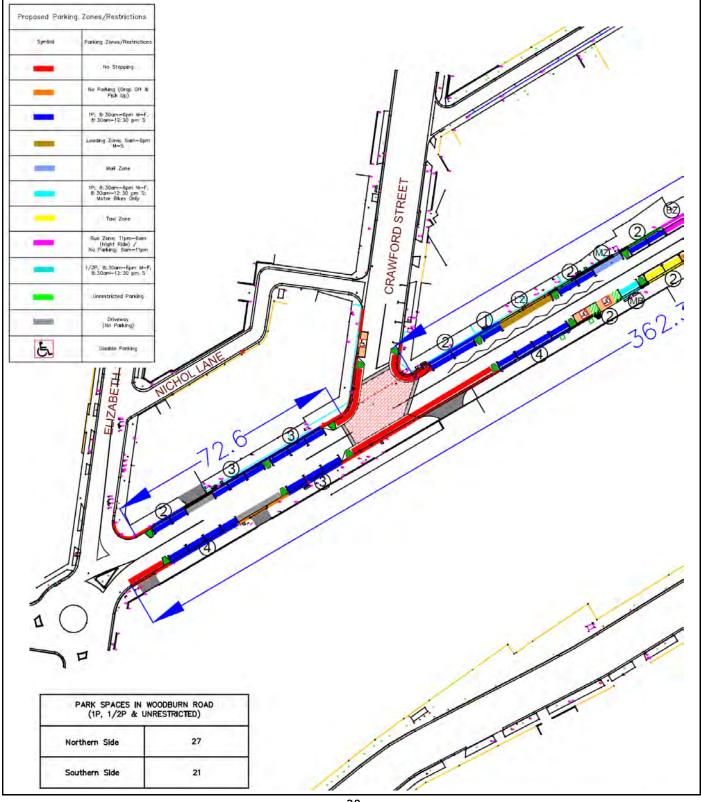


New accessible Australian Standard compliant bubbler and educational sign to be installed

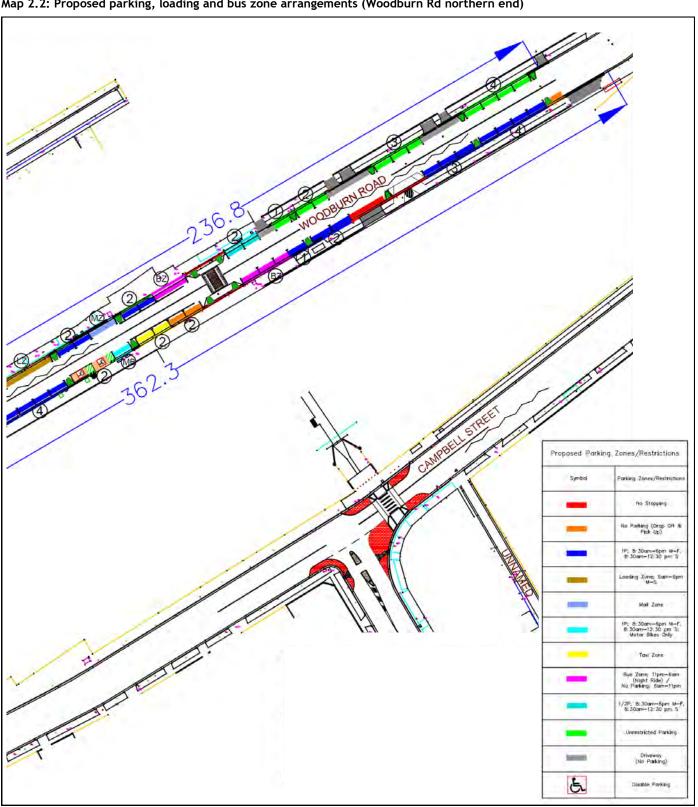
3.8 Traffic and Parking

The existing 40 parking spaces are maintained and an additional eight (8) parking spaces are provided under the public domain plan (Woodburn Road). No changes to parking arrangements on the Campbell Street side are proposed. The three existing disabled spaces are maintained, as are the two existing mail collection spaces. The two taxi zone spaces are maintained under the plan, as is the bus zone. The drop off zone for the station has been consolidated and repositioned slightly.

Map 2.1: Proposed parking, loading and bus zone arrangements (Woodburn Rd southern end)

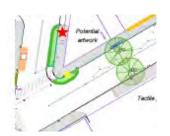


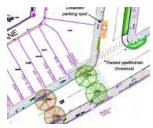
Map 2.2: Proposed parking, loading and bus zone arrangements (Woodburn Rd northern end)



PART 4: IMPLEMENTATION PLAN

This part of the plan outlines how the public domain concepts for Berala Village will be implemented. It outlines the staging and implementation approach, followed by a breakdown of cost estimates for the delivery of the public domain improvements as illustrated in the plan.

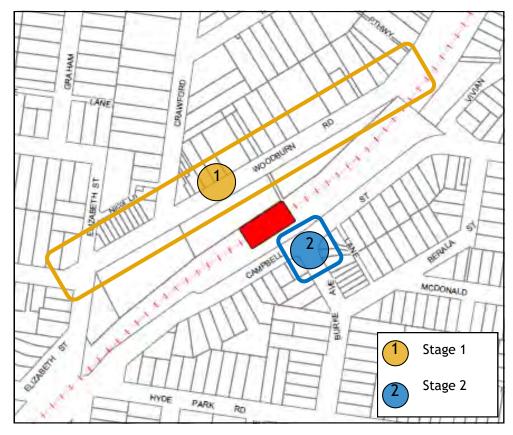




4.1 Staging

The implementation of the public domain plan will be undertaken in 2 stages, as illustrated in the plan below.

The construction of Stage 1 will be further divided into a number of smaller stages. This more detailed construction staging will be based on recommendations by the successful contractor, in consultation with Council's Project Delivery Team



Map 3: Macro-level Staging Plan

4.2 Project Implementation

Overview

Following the successful implementation and project management of the construction phase of the Auburn Town Centre public domain upgrade, a similar approach will be undertaken with Berala.

Following the tender process and appointment of a contractor for construction, the implementation phase will be managed by Council's Project Delivery team. This team will liaise with Council's Design team as necessary to ensure sound implementation of the public domain concept plan.

Community Engagement

As part of their appointment to this project, the Construction Contractor will be required to identify a Community Liaison Officer, whose focus will be day to day contact and liaison with business owners and operators and the local community who use the Village Centre throughout the construction phase (Figure 1 opposite). Council's Community Priorities Surveys, conducted every second year, have indicated that face to face communication is one of the most highly used methods by which the people of Auburn City get information. Council's experience with the Auburn Town Centre upgrade confirms the effectiveness of this approach in effectively communicating with affected businesses and community members, and minimising disruptions during the construction phase.

In addition to this, Council will again use monthly or fortnightly newsletters, similar to those used in the Auburn Town Centre upgrade project to ensure effective communication with businesses and community members. These newsletters will also be available on Council's website and social media.

Auburn City Council Town Centre Infrastructure Manual

The tables in 4.3 Cost Estimates on the following pages make reference to the detailed specifications for the village centre upgrade. As part of the project implementation, this Manual will be updated to include and new infrastructure details and elements.

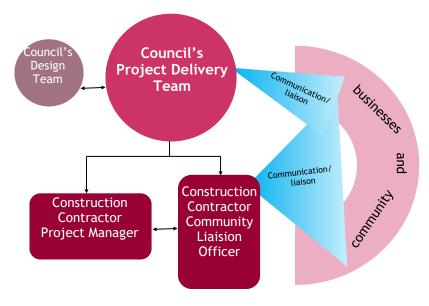


Figure 2: Implementation and Project Management, focusing on liaison and communication with businesses and local community

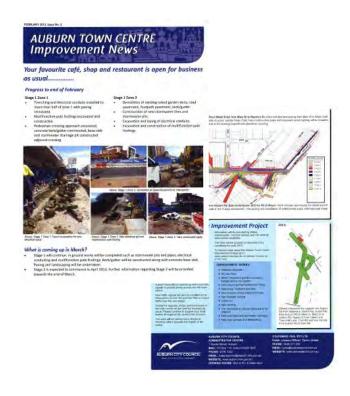


Figure 3: Example of fortnightly or monthly newsletters which can be used to effectively communicate with businesses and the community

4.3 Cost Estimates

SUMMARY

The table below provides a summary of the cost estimates for the Berala Village public domain plan. Detailed tables, including a breakdown and description of each of these items, are provided on the following pages.

<u>NOTE</u>: these cost estimates are approximate only. Review and verification by a qualified Quantity Surveyor is recommended prior to appointment of the construction contractor.

ITEM	COST ESTIMATE
ROAD ENGINEERING—STAGE 1	\$180,750.00
ROAD ENGINEERING—STAGE 2	\$46,250.00
FOOTPATHS—STAGE 1	\$1,334,345.00
FOOTHPATHS—STAGE 2	\$326,254.00
LANDSCAPING (TOTAL) - STAGE 1	\$152,108.00
LANDSCAPING AND STREET FURNITURE STAGE 2 ⁴	TBA
STREET FURNITURE	\$287,019.00
UTILITIES/SERVICES	\$332,800.00
SUBTOTAL	\$2,659,526.50
ROUNDING ¹	\$2,659,600.00
GST	\$265,960.00
SUBTOTAL #2	\$2,925,560.00
PROJECT CONTINGENCY (15%)	\$438,834.00
TOTAL	\$3,364,394.00

¹ subtotal rounded upwards

 $^{^{2}}$ GST = 10% of rounded subtotal

³ project contingency = 15% of subtotal #2

⁴ landscaping design and cost estimates still being finalized at time of printing

ROAD ENGINEERING - STAGE 1

ITEM	DETAIL	QUANTITY	COST ESTIMATE
Kerb and gutter	Woodburn Rd: \$150 per lineal metre (excluding Woolworths) 350+30+25+20+115+135	675	\$101,250.00
Re-sheet/linemarking	Woodburn Rd: Line marking only; @ \$5/m	1500	\$7,500.00
Raised threshold	Cnr Crawford St and Woodburn Rd	1	\$60,000.00
Parking signage	\$150 per sign (Woodburn Rd)	80	\$12,000
TOTAL			\$180,750.00

ROAD ENGINEERING - STAGE 2

ITEM	DETAIL	QUANTITY	COST ESTIMATE
Kerb and gutter	Campbell St: \$150 per lineal metre	125	\$18,750.00
Re-sheet/linemarking	Campbell St: Line marking only; @ \$5/m	200	\$1,000.00
Raised threshold	Campbell St	1	\$25,000.00
Parking signage	\$150 per sign (Campbell St)	10	\$1,500.00
TOTAL	1	1	\$46,250.00

FOOTPATHS - STAGE 1

ITEM	DETAIL	QUANTITY	COST ESTIMATE
Paving	Woodburn Rd: \$800 per sq m (including service adjustment)	1150	\$920,000.00
Concrete with banding	\$450 per sq m	500	\$225,000.00
Paving contingency	15% of footpath cost estimate	-	\$174,045.00 (Stage 1)
TOTAL	•		\$1,334,345.00

FOOTPATHS - STAGE 2

ITEM	DETAIL	QUANTITY	COST ESTIMATE
Paving	Campbell St: \$800 per sq m (including service adjustment)	350	\$28,000.00
Paving contingency	15% of footpath cost estimate	-	\$42,000.00 (Stage 2)
TOTAL			\$326,254.50

LANDSCAPING - STAGE 1

ITEM	DETAIL	QUANTITY	COST ESTIMATE
Trees: Acer buergerianum	400L @\$750.00 ea	11	\$8,250.00
Trees: Pyrus calleryana 'Chantileer'	400L @\$750.00 ea	14	\$10,500.00
Understorey planting	12/tree planting pit @ \$8.75 ea	288	\$2,520.00
Roadside planting	4 plants/m ² @\$8.75 ea	200	\$1,750.00
Structural soils roadside planting	m ³ @ \$60.00	96	\$5,760.00
Raised kerb around planting beds	\$150/lineal m; 8.4m/tree pit = \$1260/pit	24	\$30,240.00
WSUD subsoil drainage	4 lineal m/pit @ \$55/lineal m = \$220/pit	24	\$5,280.00
Demolition	@ \$200/tree	23	\$4,600.00
Labour	estimate	-	\$15,000.00
TOTAL	I	1	\$83,900.00

LANDSCAPING - STRATA CELLS - STAGE 1

ITEM	DETAIL	QUANTITY	COST ESTIMATE
Strata cells supply	per pit	24	\$35,088.00
Installation of cells	\$400/pit	24	\$9,600.00
Excavation of road	4m³ /pit @ \$50/m³	24	\$4,800.00
Structural soils	4m ³ /pit @ \$60/m ³	96	\$5,760.00
Reasphalt/pave	6m² repave/pit @ \$90/m²	24	\$12,960.00
TOTAL		·	\$68,208.00

LANDSCAPING AND STREET FURNITURE—STAGE 2 (cost estimate to follow)

ITEM	DETAIL	QUANTITY	COST ESTIMATE
	To be confirmed		
TOTAL			TBC

STREET FURNITURE - STAGE 1

ITEM	DETAIL	QUANTITY	COST ESTIMATE
seats	Standard seats from Town Centre Infrastructure Design Manual—wooden bench seats (some with arms)	11	\$45,589.50
Relocation of existing seats	To more appropriate location (@ \$500 per seat)	2	\$1,000
Public toilet	Exeloo 1 x single unisex Saturn or Titan auto Exeloo accessible toilet - with artwork on side	1	\$166,720.00
Bins - dual bins	Stainless steel dual bin kiosk for 2 x 140L bins: 1 x waste bin (red marking of bin entry) and 1 x recycling (yellow marking of bin entry)	6	\$25,710.00
Bubbler and educational sign (supply)	Britex stainless steel DDS (accessible AS-1428 compliant) pedestal drinking fountain + sign by Cuneen as per Auburn Town Centre with educational message translated into 10 languages	1	\$2,200.00
Bike racks	@ \$1,000 ea. Possible public art project (in consultation with Council's public domain design team)	4	\$4,000.00
Public art	Possible locations identified in the plan. Artwork to be determined by Council's public domain design team.	-	\$40,000.00
Removal of old bottle green "Berala" entry signs	Note: new "Berala" entry signs have recently been installed in Berala in Council's standard corporate style.	1	\$1000.00
TOTAL			\$287,091.50

UTILITIES/SERVICES

ITEM	DETAIL	QUANTITY	COST ESTIMATE
Conduit design (Level 3 Designer) for undergrounding Ausgrid overhead aerials along Woodburn Road	Note: this is the cost of getting the conduit designed, <u>not</u> the actual cost of undergrounding the Ausgrid powerlines	-	\$22,900 (ex GST)
Lighting and reticulation design for new smart poles (ie privately maintained (ie Council) roadway lighting	400m to AS Roadway design standards and Council's required lighting category	-	\$9,900.00 ex GST
Relocation of small electricity (turret) box (Level 3 Designer required)	To less obstructive position on footpath. Estimate only.	1	\$50,000.00
Relocation and replacement of Telstra phone booth	Cost estimate is dependent on levels and proposed new location of phone booth. Estimate only	1	\$100,000.00
Services contingency	-	-	\$150,000
TOTAL			\$332,800.00

4.4 Funding

It is proposed that the public domain upgrade works be funded from Council's capital works budget and Section 94 contributions.

Section 94 funds can be used to fund the elements of the plan that involve new works, the introduction of new elements, and works which increase the capacity of the centre. Works such as replacing worn items, maintenance, and upgrading items *cannot* be funded by Section 94.

The table below provides a break down of the estimated total cost of the Berala Public Domain Plan, the estimated cost of works eligible for Section 94 funding, and the remaining cost. A detailed summary of elements eligible for Section 94 funding is provided in Appendix 2.

ITEM	COST ESTIMATE
TOTAL ESTIMATED COST OF WORKS	\$3,364,394.00
TOTAL ESTIMATED COST OF WORKS ELIGIBLE FOR S94 FUNDING	\$760,170.00
REMAINDER (COUNCIL)	\$2,603,224.00

4.5 Utilities

During the preparation of this plan, relevant utilities and service providers were contacted and advised of Council's forthcoming public domain works and approximate construction timing. These included (but not limited to) Ausgird, NBN, Telstra, Jemena, and Sydney Water. These service providers have been encouraged to undertake any planning works as soon as possible to avoid damaged to the newly paved footpaths. Liaison with these authorities will continue throughout the project.

4.6 Maintenance

Parts 2 and 3 of this public domain plan have emphasised the importance of a clean and well maintained centre, including increased community and civic pride, increased community well being, increased perception of public safety, increased business and economic activity, and increased private investment.

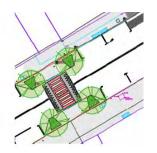
On going maintenance of the proposed public domain improvement works is critical to the success of this project and the overall appearance of Berala in the long term. During the project delivery stage, Council's Outdoor Unit will review the concept plans and develop an approach to maintenance and cleaning for Berala.

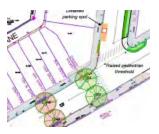
4.7 Possible future works

There are 2 key elements that Council could consider in terms of possible future works:

- undergrounding of the overhead power lines it is proposed that a conduit be designed and constructed as part of the public domain plan implementation, which would minimize the need to remove and replace footpath paving in the future. The estimated cost of undergrounding of power lines is approximately \$2,000 per lineal metre (over a distance of approximately 800 lineal m)
- replacement of the street lights with multi function poles Council could consider replacing the existing street lights with a slightly smaller, village-scale version of the multi function poles used in Auburn Town Centre. Cost estimates and timing can be investigated in the future if Council wishes to pursue this option. As with Auburn Town Centre, once this occurs, Council becomes the owner of the street lighting asset.

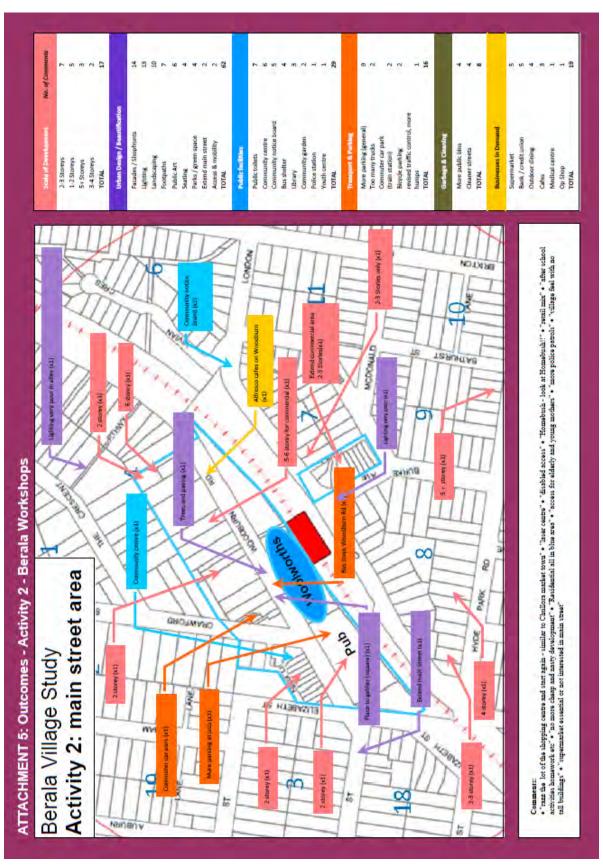
APPENDICES





APPENDIX 1

Summary of issues identified at past community engagement sessions



APPENDIX 2

Breakdown of estimated cost of works eligible for S94 funding

ITEM	DESCRIPTION	S94 ELIGIBILITY	DETAIL	COST ESTIMATE
raised threshold	new - purpose is to improve pedestrian safety around pedestrian crossings, and to facilitate greater volumes of pedestrians and vehicles using crossings	Yes	Woodburn Road	\$60,000.00
Paving	only kerb extension area is applicable - remainder is maintenance/upgrade	part - kerb extension area	kerb extension area = 361 m sq	\$288,800.00
tactile markers/pavers	new - purpose is to improve accessibility within the village centre	Yes	All eligible	\$19,550.00
Landscaping - trees (Stage 1)	4 new trees	part	4 x trees @\$750.00 ea	\$3,000.00
Landscaping - understorey planting (Stage 1)	New - purpose is to improve overall appearance of centre and to provide shade. Robust and low maintenance. Will be watered by captured rainwater.	Yes	All eligible	\$2,520.00
landcaping - roadside planting (Stage 1)	All new - purpose is as described above.	Yes	All eligible	\$1,750.00
raised kerb around planting beds	New - purpose is to protect new planting beds and plants	Yes	All eligible	\$30,240.00
WSUD	New - purpose is to capture rainwater to water new landscaping and to minimise need for hand watering	Yes	All eligible	\$5,280.00
strata cells for new planting	yes - all new. Purpose is to ensure survival and health of new trees	Yes	All eligible	\$68,208.00
Landscaping - trees (Stage 2)	To be confirmed. Still being designed and costed as time of printing	Yes	TBC	TBC
Landscaping – planting (Stage 2)	As above	Yes	TBC	TBC
Tree grates (Stage 2)	As above	Yes	TBC	TBC
Seats (Stage 1)	8 new seats to be installed (reminder will remain or be relocated). Purpose is to provide additional seating in the village centre	Part (ie 8 seats)	cost of 8 seats	\$33,147.00
Seats (Stage 2)	To be confirmed. Still being designed and costed as time of printing	Yes	TBC	TBC
public toilet	yes - new. Currently does not exist. Accommodates greater use of village centre	Yes	cost of toilet	\$166,720.00
Bins (Stage 1)	In part – 6 existing bins replaced with 12 bins - in 6 pairs of 1 x waste bin and 1 x recycling bin, increasing the capacity of waste collection in the centre, and introducing collection of recycled waste.	Yes - 6 new recycling bins	cost of 6 bins (ie increased capacity)	\$12,855.00
Bins (Stage 2)	To be confirmed. Still being designed and costed as time of printing	Yes	TBC	TBC
bikes racks	New - none on northern side of railway	Yes	4 new racks. Can be done as art project	\$4,000.00
public art	a number of possible locations identified within the plan	Yes	to be developed with Council's design team	\$40,000.00
bubbler and educational sign	new - purpose is to improve pedestrian comfort and reduce waste	Yes	Britex pedestal DDS; Cuneen sign	\$2,200.00
conduit design	new - does not exist. Future proofs new footpath paving by building in underground conduit for future use.	Yes	by Level 3 designer	\$22,900.00
TOTAL	· · · · · · · · · · · · · · · · · · ·			\$761,170.00

NOTE: 1. all items are for Stage 1 unless otherwise specified

^{2.} Some Stage 2 costs are still being finalised at the time of printing. These will be provided to Council at the Council meeting

References

2011 Census of Population and Housing. Australian Bureau of Statistics. 2011.

Auburn City Community Strategic Plan 2013-2023. Auburn City Council. 2013

Berala Village Study 2014. Auburn City Council. 2014.

Community Priorities Surveys 2010, 2012, 2014. Micromex Research on behalf of Auburn city Council.

People for a Better Berala Survey 2003. Residents of Berala. 2003.

Policy on Crime Prevention through Environmental Design. Auburn City Council. 28 June 2006.

Population Profile: Auburn LGA. Profile id. 2013-14.

Population Forecast: Auburn LGA. Forecast id. 2013-14.

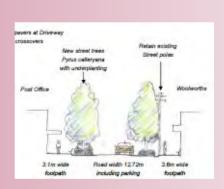
Acknowledgements

This document was prepared by Council's Design Team comprising the Strategy Unit (urban design and landscape architecture) and the Engineering Unit.

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