

5.0 DETAIL CONSIDERATIONS

5.1 MATERIALS AND FINISHES

Pavements

Concrete

Concrete pathways are a durable material, suitable for high volume use and a variety of recreation users. Constriction techniques should seek to minimise excessive joints, which can be problematic for in-line skaters and some cyclists. The concrete can be coloured if desirable and for detailed areas.

- Advantages: Strength and durability.
- Disadvantages: Marginal additional cost up front.
- Recommended for: Main pathways, recreation loop paths, secondary paths

Asphalt

Asphalt pavements are also suitable for high volume areas and for a variety of recreation users. Preferred by some cyclists and skaters as a smoother finish. The asphalt can be coloured if desirable.

- Advantages: Marginal cost benefit up front.
Ability to patch and repair.
May be more appropriate for areas of subsidence.
Low reflectivity
- Disadvantages: Less durable in the long term.
Susceptible to uplift and damage from tree roots.
Edges become unstable without proper edging.
- Recommended for: Main pathways, recreation loop paths, secondary paths where no damage likely from tree roots.

Detailed Concrete Treatments

Selected areas can be enhanced with colour and texture, whilst maintaining the strength and durability of concrete.

There are opportunities for integrated details, art works, textures.

- Advantages: Flexibility and diversity of finishes.
Strength and durability.
- Disadvantages: Marginal additional cost up front.
Specialist installation
- Recommended for: Secondary paths and interpretive trails.

Unit Pavements

Selected areas can be enhanced with colour and texture, whilst maintaining the strength and durability. Unit pavements include natural stone and concrete. There are opportunities for varying materials use integrated details, art works, and textures. A change in materials and surface texture can be used to indicate a change in recreation path type from high speed to slow speed environments or to signal intersections.

- Advantages: Highlight pavement to special areas
- Disadvantages: Proper installation required in order to prevent settlement and rough joints
Marginal additional cost up front
- Recommended for: Selected areas on secondary paths and interpretive trail

Suspended Concrete Pavement

Suspended concrete pavement is valuable for achieving pathways with consistent widths and surface finishes to adjacent pathways in areas with restricted width.

- Advantages: Achieves a contiguous and cohesive path surface finish
- Disadvantages: High cost and difficult construction
- Recommended for: Main pathway located on embankment



Concrete Pathway
Standard plain concrete pathway with line marking (George Kendall Reserve Parramatta).



Asphalt Pavement
Coloured asphalt cycleway with concrete edging and line marking (Swan River Perth).



Unit Pavement
Concrete unit pavement used to define threshold to car park and high use pedestrian area (Swan River Perth).



Unit Pavement
Sandstone pavement to define threshold to secondary pathway.



Unit Pavement
Porphyry stone pavement to define separation of seating area off the recreation pathway.



Detail Concrete Treatment
Colour and texture to in-situ concrete pavement (Botanic Gardens Perth).



Detail Concrete Treatment
Colour and texture to in-situ concrete along interpretive pathway.



Detail Concrete Treatment
Colour and texture to in-situ concrete with shot blast patterns for habitat based artworks (Roma St Parklands Brisbane).



Suspended Concrete Pavement
Concrete pavement elevated on pier footings to maintain level of footpath in an area otherwise restricted due to embankment (Canada Bay Trail).



Timber Boardwalk
Elevated boardwalk through rehabilitated wetland environment (Swan River Perth).



Gravel Pavement
Stabilised decomposed granite provides additional trafficable area along main pathway (Meadowbank, Ryde)



Park Seating and Benches
Standard park furniture designed for comfort and ease of maintenance and replacement.



Custom Seating
Simple large scale timbers reflect maritime heritage of the area (Bedlam Bay Interpretive Trail)



Custom Seating
Sandstone blocks define an informal rest stop along recreation pathway and integrate to pavement materials (Castle Hill Heritage Park).



Custom Seating
Custom concrete seats integrated to colour, pavement and form of the riverside promenade (New Farm Waterfront, Brisbane River)

Boardwalks and Decking

Boardwalks are valuable in allowing access through sensitive environments such as water edges and bushland areas. Boardwalks may be constructed with timber, precast concrete sleepers, recycled plastic decking or steel mesh.

- Advantages: Access to special areas where standard pathway construction would cause undue disturbance.
- Disadvantages: Decking materials can be slippery for cyclists.
High cost for installation
Maintenance required
- Recommended for: Selected areas on secondary paths and interpretive trail.

Gravel

Stabilised gravel such as crushed sandstone and decomposed granite are suitable for informal use areas and are preferred by some joggers as a soft pathway alternative. The gravel surface may be more in character with informal park settings, where hard surfaces would seem inappropriate.

- Advantages: Low cost up front.
Soft and informal character suitable for park settings.
Low reflectivity
- Disadvantages: Unsuitable to high use areas, or sloped sites.
Susceptible to erosion, with need for patch and repair.
- Recommended for: Selected areas on secondary paths and interpretive trails

Seating

Seating along the River Walk needs to cater for a variety of ages and physical abilities, whilst be responsive to the park setting in which it is located.

Standard Park Furniture

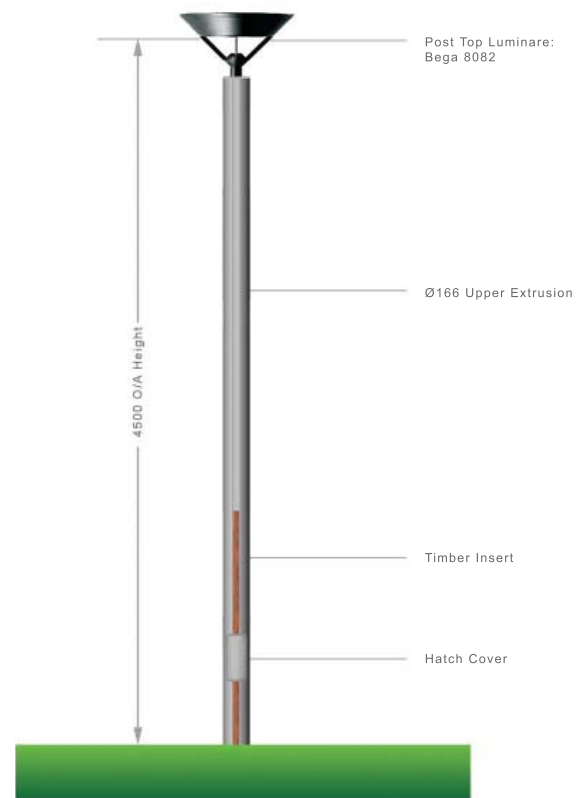
Standard park seating, benches and picnic settings are designed for accessibility and comfort.

- Advantages: Standard maintenance regimes
- Disadvantages: Not responsive to site character
- Recommended for: Main gathering areas along the route

Informal and Custom Seating Alternatives

There are opportunities to create informal seating opportunities using materials and scale of objects that are responsive to site and settings, such as large timber pieces that are in keeping with maritime character. There are also opportunities for including details and artworks within the customised seating.

- Advantages: Flexibility to suit character of sites
Modify heights and positions for variety of ages
Integration of artworks
- Disadvantages: Does not always meet access and mobility standards
- Recommended for: Secondary paths and interpretive trails



Light Pole Standard
Standard pole light (Bega) for parks in the Ryde LGA.

5.2 LIGHTING PROVISION

The provision of lighting along the River Walk is integral to the use as a regional recreation trail as well as a commuter route. Regional trails are used for recreation purposes at different times of the day, including before and after work hours.

The varied context and form of the River Walk require different lighting approaches in different areas such as:

- areas of high recreation use to be well lit
- areas such as near Railway and Ferry stops, the path will need to be lit for pedestrian commuters,
- pathways for cycle commuter use to be well lit,
- parks with poor surveillance should not be lit to discourage night access,
- pathways that directly back on to residential areas may need to have modified lighting,
- pathways next to sensitive habitat areas should have little or no lighting,
- pathways on and adjacent streets may need minimal or no additional lighting.

Standards

There are several standards and guides that have application to the site. These are not mandatory; however they are useful as a guide. The primary standards are:

- AS1158.3.1:2005 Lighting for roads and public spaces Part 3.1: Pedestrian area (Category P) lighting- Performance and design requirements.
- Austroads Guide to Traffic Engineering Practice Part 13 Pedestrians.
- Austroads Guide to Traffic Engineering Practice Part 14 Bicycles.

General Recommendations

- The lighting should be site specific and not be a consistent treatment along the length of the River Walk.
- If the section of the River Walk will be used as a primary route from a station or ferry wharf then the path should be lit to the appropriate category of AS1158.3.1.
- Lighting key intersections, crossings and junctions.
- If the river walk passes along a residential street then the lighting of the residential street is considered adequate provided the street is illuminated to at least P4 category.
- Isolated paths through bushland areas where there is little or no opportunity for natural surveillance should either not be lit at all or at most a row of small marker lights. People should be encouraged to go around the area via the streets at night.
- Lighting of signage and important artwork elements

Lighting of Artworks

There is an opportunity to light artworks as part of the overall lighting strategy, and will increase the night time appreciation of the River Walk. The lighting will depend on the nature and location of the artwork.

The primary works to be lit include:

- route markers, to assist in wayfinding.
- iconic artworks in focal locations that can be visible from a distance.



Identity Signage Precedent Cooks River Corridor
(Anne Gordon Design)

Signage concept design for identity markers along the Cooks River recreation corridor. The signage and branding provides an identity for the corridor as a whole. Individual places and parks along the corridor are also marked.



Route Marker Concept
(Jane Cavanough)

The proposed route markers integrate a cohesive range of interpretive sculptural elements to achieve a cohesive identity to the signage markers.



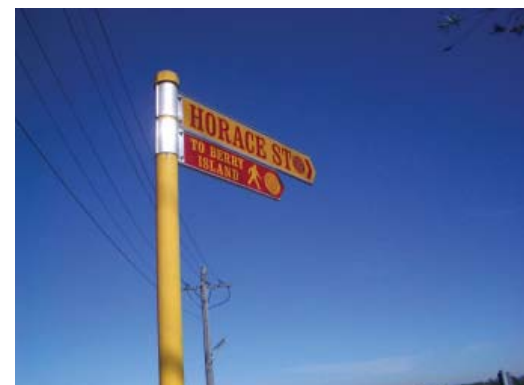
Wayfinding Signage Precedent Cooks River Corridor
(Anne Gordon Design)

Signage concept design for mapping and directional signage along the Cooks River recreation corridor.



Wayfinding Signage Precedent Waverley Coastal Walk
Mapping and Information Signage

Signage includes mapping of entire route and route in the context of the local area. Local area mapping information includes park facilities and amenities, parking, public transport connection points. Information on signage also includes park regulations.



Wayfinding Signage Precedent - North Sydney Council
Directional signage integrated to street signs. Wayfinding information includes destination, distance or route. Separate sign panel and colour to differentiate from street name sign.

5.3 SIGNAGE AND WAYFINDING

Signage and wayfinding is important for both cyclists and pedestrians using the River Walk. Systems of wayfinding need to respond differently to conditions of urban centres, street corridors and parks. The signs should be integrated with other signage types and posts to minimise clutter where possible, yet be distinctive enough to allow differentiation from vehicular streets signage.

Regulatory signage also needs to be incorporated along the route to identify cycling shared pathways. These regulatory signage requirements have been included in Path Typologies.

Identity Signage

The River Walk is a series of interconnected parks, streets and pathways. To reinforce the connections between these places, a system of Identity Signs is beneficial for raising awareness of the route and to mark key entry points. River Walk identity signage has the purpose of:

- providing a recognisable identity to points along the route for users to be able to understand the continuity of the pathways,
- working in conjunction with park signage to reinforce the character of the places along the route, without overbearing the identity of the park or immediate setting.

The potential for the River Walk is to integrate the identity signage as a system of route marker artworks. Refer Section 8.0 Art Strategy.

Wayfinding Signage

Wayfinding is important for existing cyclists and pedestrians to be aware of efficient and safest routes for travel, and to raise awareness for new cyclists in trialling cycling as a means of transport. The approach to the location of wayfinding signage is to position the signs at key decision points, to identify connections and destinations, and at rest stops. Signage for wayfinding needs to communicate:

- long distance routes,
- local connections and destinations to railway, ferry and urban centres, and
- connection to the main River Walk route from other areas in the parks or local centres nearby.

The wayfinding for local connections also has benefit for general pedestrian wayfinding. The detailed connections used by cyclists and pedestrians is often different to vehicular traffic, such as through one-way streets, through parks and street closures. The system of wayfinding needs to consider the legibility of the signage to the cycle and pedestrian users, without confusion to the vehicular traffic.

Types

There are two main types of wayfinding signage:

1. Mapping based signage: provides information on the route and other facilities and amenities.
2. Directional signage: provides guidance along the route and denotes decision points.

Locations

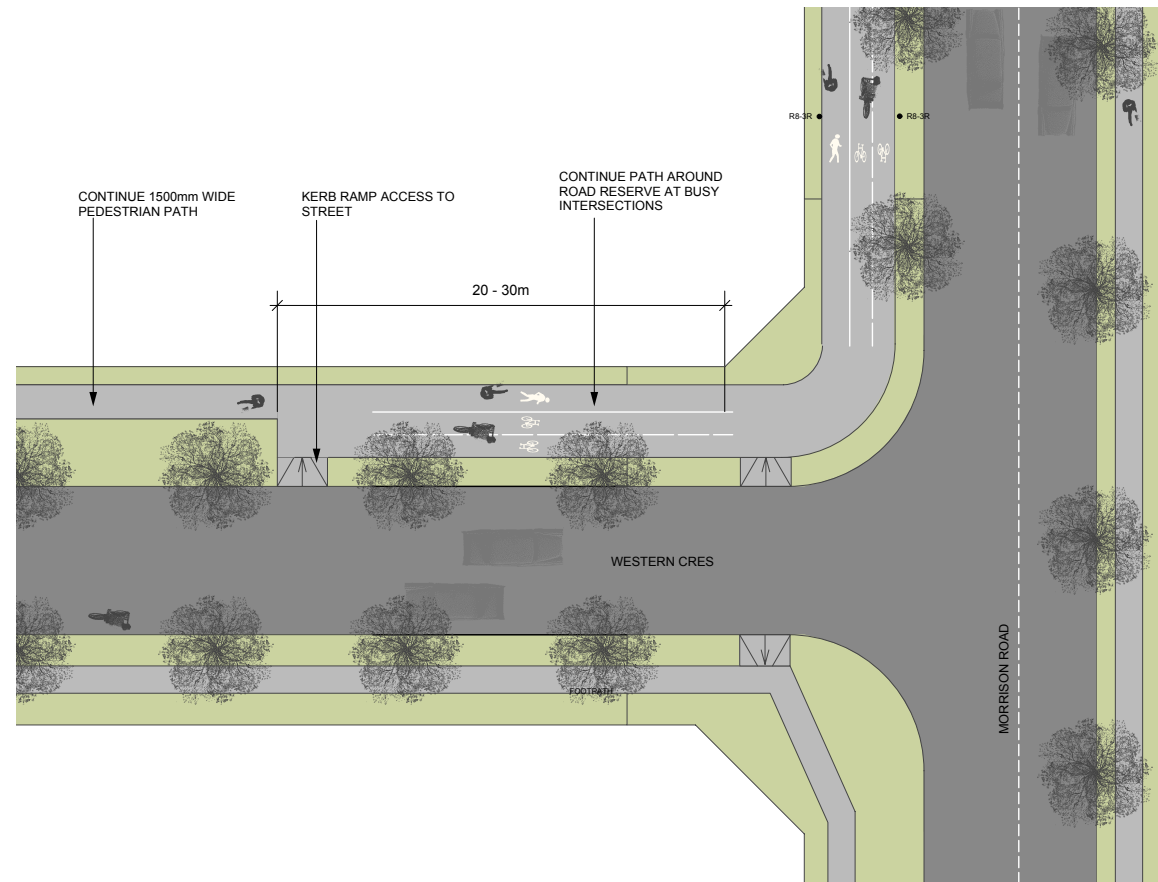
The wayfinding signage shown on the precinct plans (Section 3.0 Planning the Route) are located at the following positions:

- main entry points such as car parks and ferry wharves (mapping and information),
- decision points and junctions along the route (directional signage),
- junctions to alternate routes, used to identify value such as easy gradients, scenic value, cycle preference (directional signage),
- rest stops and shelters (mapping and information).

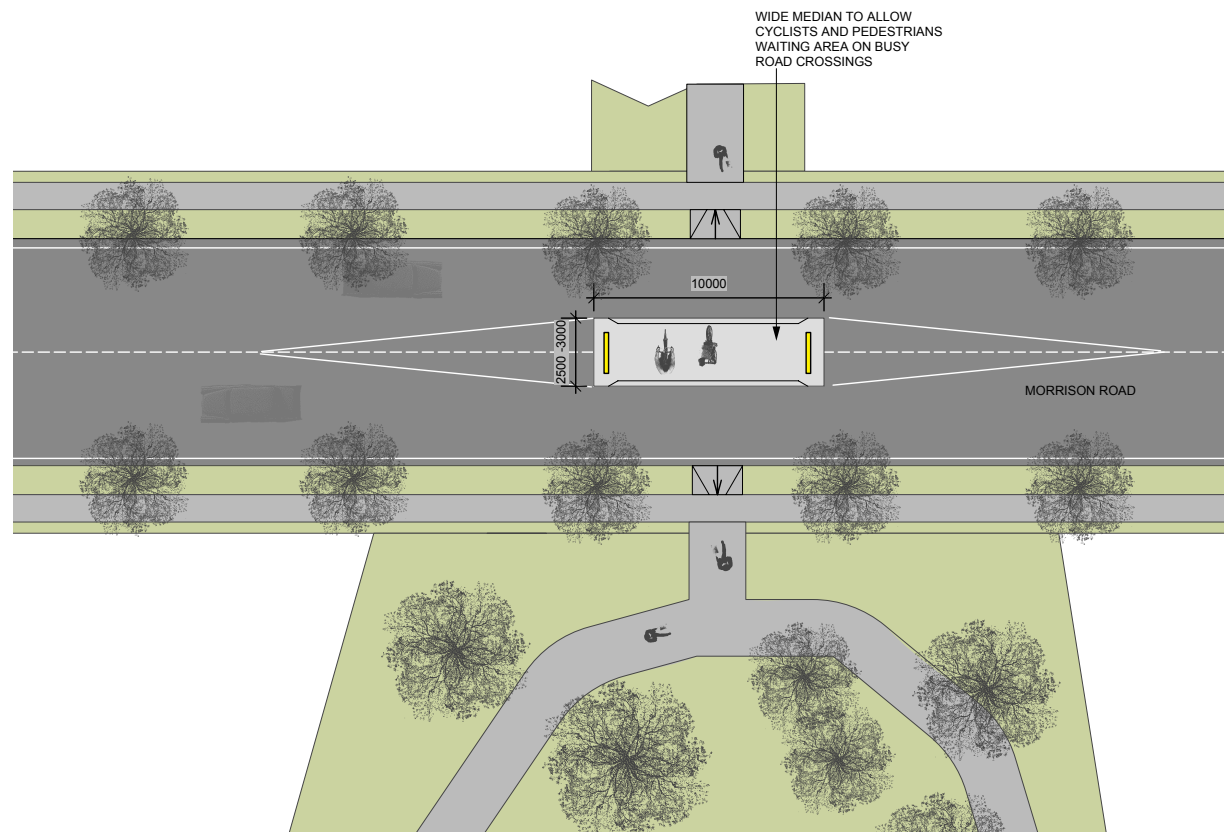
Additional Mapping Information

To assist people to explore the length of the River Walk and use alternative loops and transport connections, the following supporting information should also be available at key areas.

- walking maps of the route available at key entries, local centres and via the internet
- history information for self-guided walks,
- public transport links and timetables.



Footpath to Street Connection



Busy Road Crossing

5.4 CROSSINGS AND JUNCTIONS

The connections along the length of the River Walk such as road intersections, road crossings, park to street linkages conditions are important to ensure a safe and cohesive route. The connections need to consider the variety of users along the trail in terms of age and physical ability, as well as potential for large groups.

Footpath to Street Connection

The connection between shared footpaths and street may create conflict for cyclists due to turning traffic from the main road to the quieter street. The proposal as indicated on the Figure for footpath to street connections, is based in the principles of:

- Continuing the shared footpath around the corner of the street to allow cyclists to manoeuvre from street to the footpath clear of the intersection,
- Pedestrian ramp to allow access to shared footpath (ensure no parking in front),
- Pedestrian and children cyclists can continue along the footpath.

This situation occurs on the following intersections:

- Corner of Delange Rd and Pellisier Rd,
- Corner of Champion Rd and Morrison Rd,
- Corner of Western Cres and Morrison Rd,
- Corner of Ashburn and York St,
- Corner of Ashburn and Punt Rd.

Investigations should be undertaken to assess the vehicle volume for these streets and the detail resolution with consideration of widths of pavements, driveways and potential obstacles.

Road Crossings

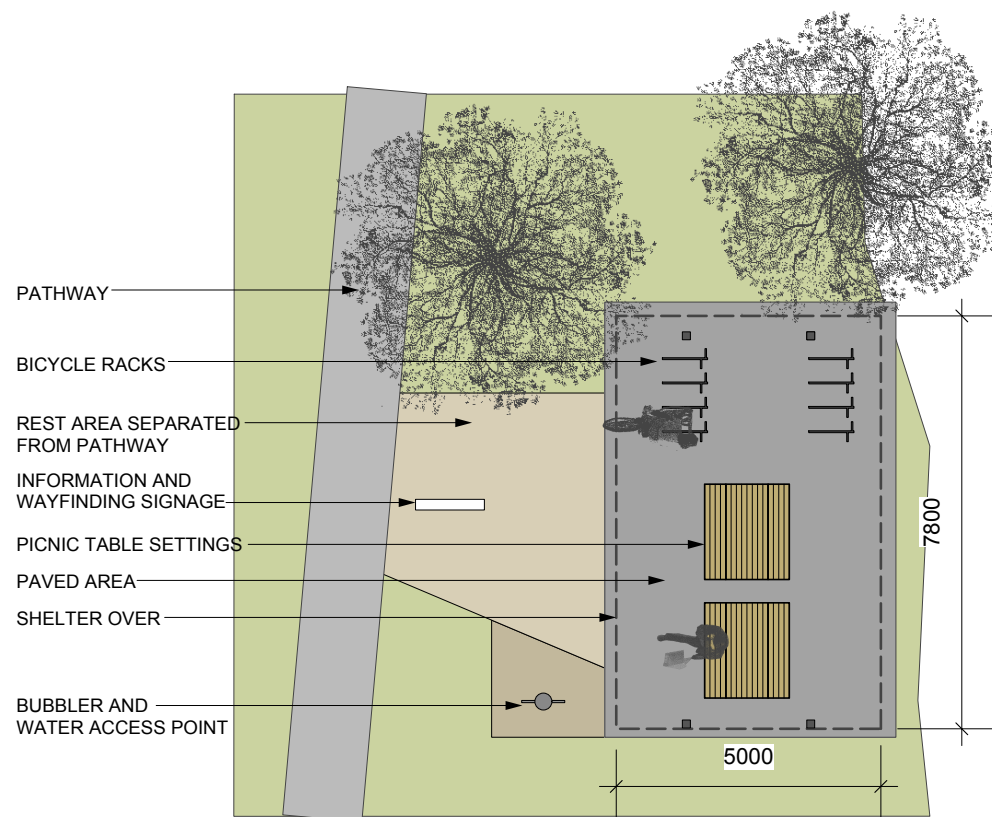
The crossing of busy roads is a potential risk for cyclists and groups of pedestrians. There are no direct crossings along the River Walk route, however there are a number of connections to the River Walk from adjacent streets and parks to be considered. The proposal as indicated in the Figure for Busy Road Crossing, is based on the principles of:

- Establishing a safe wide median as a half-way crossing area,
- The width allows cyclists to cross and wait without stacking bikes in line,
- Clear visibility from the footpath to check there is enough room to wait,
- Length of median to allow groups / families to wait.
- Narrowing of traffic travel lane to encourage slow vehicle speeds.

Potential busy road crossing points are along:

- Constitution Road West - to Meadowbank Park
- Waterview Street - to Kissing Point Park
- Morrison Rd - to Morrison Bay Park and Bill Mitchell Park.

Investigations should be undertaken to assess the potential crossing points along with road widths, and impact on parking arrangements.



REST AREA AND SHELTER

5.5 REST AREAS

Rest stops should be provided at key areas along the length of the River Walk. The rest areas should include shade and shelter for people using the trail, as well as being places of orientation and meeting. The size and facilities should respond to the park setting where they are located. The rest areas would also provide for park users.

The River Walk has the potential to be used for social and community groups, so the rest areas should be of a scale that large groups can gather and meet. These facilities could be provided in a large single structure or in a cluster of smaller shelters.

Use

- Rest areas located at points along the main route.
- Shelter for shade and weather protection.
- Water and bubblers provided.
- Information and wayfinding signage to be provided.

Form

- Locate adjacent but separated from the main pathway
- Size of shelter to be adequate for groups to meet and gather.
- Picnic table settings provided.
- Cycle racks provided.



Rest shelter Rouse Hill Regional Park (Phillips Marler)
Generous pavilions with BBQs and seating for large groups. Simple open style in character with park setting.



Rest shelters Castle Hill Heritage Park (Spackman and Mossop)
Clusters of pavilions with BBQs and seating provide flexibility for small or large groups.