



City of Christchurch Bicycle Network Sign Design Manual

November 2014





This report was prepared for

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Amendment record

Version Number	Date	Description	Page No.
0.1	5/11/2014	Draft preliminary report for internal comment	-



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1 Introduction

Christchurch City Council is developing a high-quality network of bicycle routes to enable residents and visitors to use their bicycles for transport, fitness and recreation on a daily basis. In order to ensure maximum use and access to this network Christchurch City Council is installing a system of directional and wayfinding signage across the bicycle network. The implementation of consistent way-finding and directional signage on the Christchurch bicycle network will help bicycle riders to more easily use the network. Comprehensive directional signage assists users to easily navigate to their trip destinations, builds user confidence in the system, increases personal safety and improves information and access to community facilities.

This manual details the design and manufacture of a comprehensive sign system covering primary, local and tourist/recreational bicycle routes located in on-road or off-road environments. A separate document, the *City of Christchurch Bicycle Network Signage Plan* details the methodology and process for the implementation of the signage system across the Christchurch bicycle network. This manual should be read in conjunction with the *Signage Plan*.

The implementation of bicycle route signage on the existing network will be undertaken as a progressive rollout at priority locations. All new cycle routes will include a signage component in accordance with this manual.

Table 1: Level of signing for bicycle routes*

Level of signing	C1	C2	C3	C4
Type of route	High-speed, limited-access, routes	All other primary bicycle routes	Local routes	Tourist/recreational routes
Advance direction signs	Yes, before route junctions with other C1 or C2 routes	Yes, at junctions where the route changes direction	No	Route markers may be used on single routes
Fingerboards at intersection	Yes, at route junctions with other C1 or C2 routes	Yes	Yes, mounted with street signage	Yes
Reassurance signs with distances	Yes, after route junctions with other C1 or C2 routes	Only if advance direction signs are not used	No	Route markers may be used in between intersections
Route markers	No	No	Yes	Yes
Route numbering	Optional	No	No	No
Branding logos	Optional	Optional	No	Optional

*Refer to the CCC Report, *City of Christchurch Bicycle Network Signage Plan* for a detailed information on “level of signing” and signing methodology.

1.1 About this manual

This sign design manual is divided into five parts:

Part 1 – Introduction, methodology and sign content conventions. This section provides an overview of the signage system, guidance and a methodology for the planning and implementation of network signage usually on a route by route basis. This section also contains advice on standard abbreviations to be used on all signage where sign length needs to be minimised;

Part 2 – Directional signs for bicycle routes. This consists of bicycle network signage to be used for primary, local and tourist/recreational bicycle routes in all locations, on-and off-road. This section provides dimensioned details of all types of signs used to sign the different elements of the network;

Part 3 – Route numbering, naming and branding. This section provides guidelines on the use of route numbering systems, the naming of routes and the application route branding.;

Part 4 – Construction, materials and installation. This section includes technical recommendations for the manufacture and placement of signs; and,

Part 5 – Sign maintenance. This section covers issues associated with the on-going maintenance of the signage system.

1.2 Methodology for signing bicycle routes

The following process is undertaken when signing a bicycle route (refer to the Christchurch City Council report, *Christchurch Bicycle Network Signage Plan* for further information on detail issues):

1. Determine the location and context of each route within the overall bicycle network. The current edition of the Christchurch Bicycle Network Focal Point Map should be consulted to identify destinations to be listed for the route being signed and the destinations for other routes indicated at junctions. A key part of this process is to determine the Level of Signing for each bicycle route. This is done according to its position in the bicycle network route hierarchy – see Table 1 and the *Christchurch Bicycle Network Signage Plan* for details. Level of Signing determines the number and type of signs used for each route at a network junction;
2. Undertake a detailed sign site assessment to identify suitable locations for signs and to determine the physical condition of the route via a pre-signage and risk assessment survey;
3. Develop a signage schedule setting out the sign types and sign content to be used at route junctions;
4. Verify the sign schedule via site inspections and determine the precise locations for all signs. Update schedule with collected/corrected data;
5. Check all sign layouts for accuracy prior to manufacture. Manufacture signs;
6. Install signs; and,
7. Conduct a final site check and verification of the complete sign installation. This will be carried out by the sign designer who will issue instructions to correct any errors or omissions.



1.3 Major sign types and their use

Table 2: CCC Bicycle Network and Local Facility Signage – Sign types and their usage

Sign Class	Sign type	Sign code	Manual section	Primary use	Use with other sign families
Primary route	Fingerboard	FBP	2.1.1	Used to indicate route direction only at intersections with other routes (primary or local). When used FBP signs always display distances.	Used also at branching junctions with local routes
Primary route	Direction Indication	DIP	2.1.2	Used in place of fingerboards at route junctions and at other intersections where the route changes direction. This sign can also be used for reassurance in-between intersections. Distances are only used when used in place of fingerboards at route junctions.	Used also at branching junctions with local routes
Primary route	Advance Direction	ADP	2.1.3	Used to indicate upcoming route options only at intersections of primary and secondary routes. ADP signs never display distances and only shown focal points (not sub destinations)	Only used on primary routes
Primary route	Location Plate	LPP	2.1.4	Used to denote streets or roads which cross over the top of bicycle routes. Usually fixed to the face of bridges or overpasses. Can also be used to denote important adjacent streets.	Can be used for primary and local routes
Primary route	Reassurance Direction	RDP	2.1.5	Used to denote distances to upcoming directions after a major primary route junction.	Used mainly on high-speed, limited-access cycleways but can be used if reassurance is required on primary routes
Primary route	Map sign	MSP	2.1.6	Used at prime network 'gateway' locations to advise cyclists of multiple network choices available from the map location.	See additional diagrams in this manual for on-road and off-road siting locations
Local route	Fingerboard	FBL	2.2.1	Used at intersections or path junctions where a local route branches from a primary route. Also used at the route destination indicating the route back to the start of the route (primary junction).	Where a local route branches from a primary route FBP fingerboards are also fitted to this intersection to show destinations and distances for the primary route
Local route	Marker	LMV LMH	2.2.2	Used at intersections, path junctions and route turnings to indicate the path of a local route	Only used on local routes in between FBL signs
Tourist/ recreational route	Fingerboard	FBT	2.3.1	Used at the start and finish of tourist/recreational routes. Used at intersections or path junctions where the tourist/recreational route branches from a primary route.	Where a tourist/recreational route branches from a primary route FBP fingerboards are also fitted to this intersection to show destinations and distances for the primary route
Tourist/ recreational route	Facility indicator sign (fingerboard)	FIT	2.3.2	Used at points along a tourist/recreational route to indicate the road or path or route to facilities and attractions associated with the route. Also used at the facility to indicate the path back to the main route.	Only used on tourist/recreational routes
Tourist/ recreational route	Marker	TMV TMVB	2.3.3	Used at intersections, path junctions and route turnings to indicate the path of a local route	Only used on tourist/recreational routes in between FBT signs
Path behaviour	Path behaviour sign	PBS	2.4.1	Used on paths to indicate preferred user behaviour	See advice in Section 2.4.1 of this manual

1.4 Sign families

There are three sign groups or families – one for each route type within the bicycle network hierarchy of routes. These sign families are shown pages 6, 7 and 8 of this manual.

Primary route signs

Primary routes are the spine of the network from which local bicycle routes radiate. They provide connections between areas of high population density and major activity centres, such as public transport nodes, universities, schools, shopping or commercial centres, industrial areas and regional recreational facilities. Primary routes are usually high-quality, high-priority routes providing quick unhindered travel between the major centres offering the most direct access with minimal delays. The primary route sign family is shown on page 6 of this manual.

Local route signs

Local routes provide high quality connectivity usually feeding from primary routes to residential streets and local trip-generating facilities such as schools, bus and train interchanges, pools, libraries and shops. Local routes provide for necessary circulation within the city and suburbs. The local route sign family is shown on page 7 of this manual.

Tourist/recreational route signs

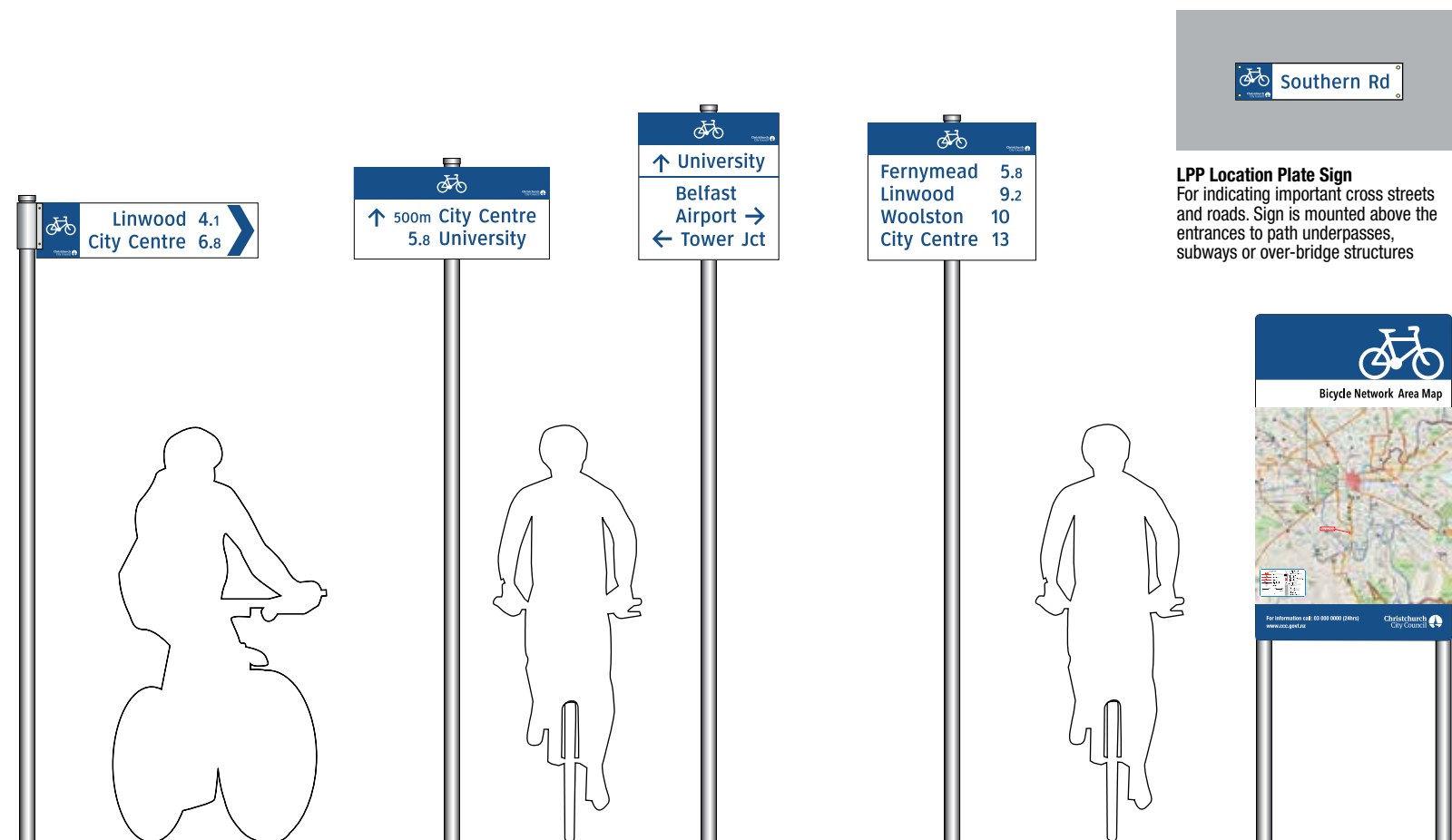
Tourist or recreational routes are designated routes which provide recreational and tourist bicycle access within the city or across regions. Examples of this type of route are rail trails (built along disused rail corridors), riverside pathways and historical trails. The tourist/recreational route sign family is shown on page 8 of this manual.

Path behaviour signs

Path behaviour guidance signage is available for installation to communicate key behavioural messages to path users. A multi message sign has been developed for use on shared paths. Additional single message signs are also available for use in shared path environments. The path behaviour guidance sign family is shown on page 8 of this manual.



Primary route sign family



FBP Fingerboard Sign
Mounted at junctions with other routes (primary, secondary or local)

DIP Direction Indication Sign
To indicate travel direction only

ADP Advance Direction Sign
Indicates route direction information in advance of a junction with another primary route

RDP Reassurance Direction Sign
Indicates destinations following a route junction

MSP Map Sign
Indicates bicycle routes available at a location

Primary route signs

FBP - Fingerboards
The sign type is used only at primary route junctions with other primary routes and with local routes.
Refer to Drawings FBP-1 and FBP-2

DIP - Direction Indication Sign
This plate-type sign is used to indicate continuing direction or change of direction for a primary or secondary route. It can be used at or near intersections or at points along a route.
Refer to Drawings DIP and DIP-1-3

ADP - Advance Direction Sign
This type of sign is used only on primary or secondary routes in advance of a junction with another primary or secondary route.
Refer to Drawings ADP, ADP-2-4, ADP-5-6, ADPNR and ADPG

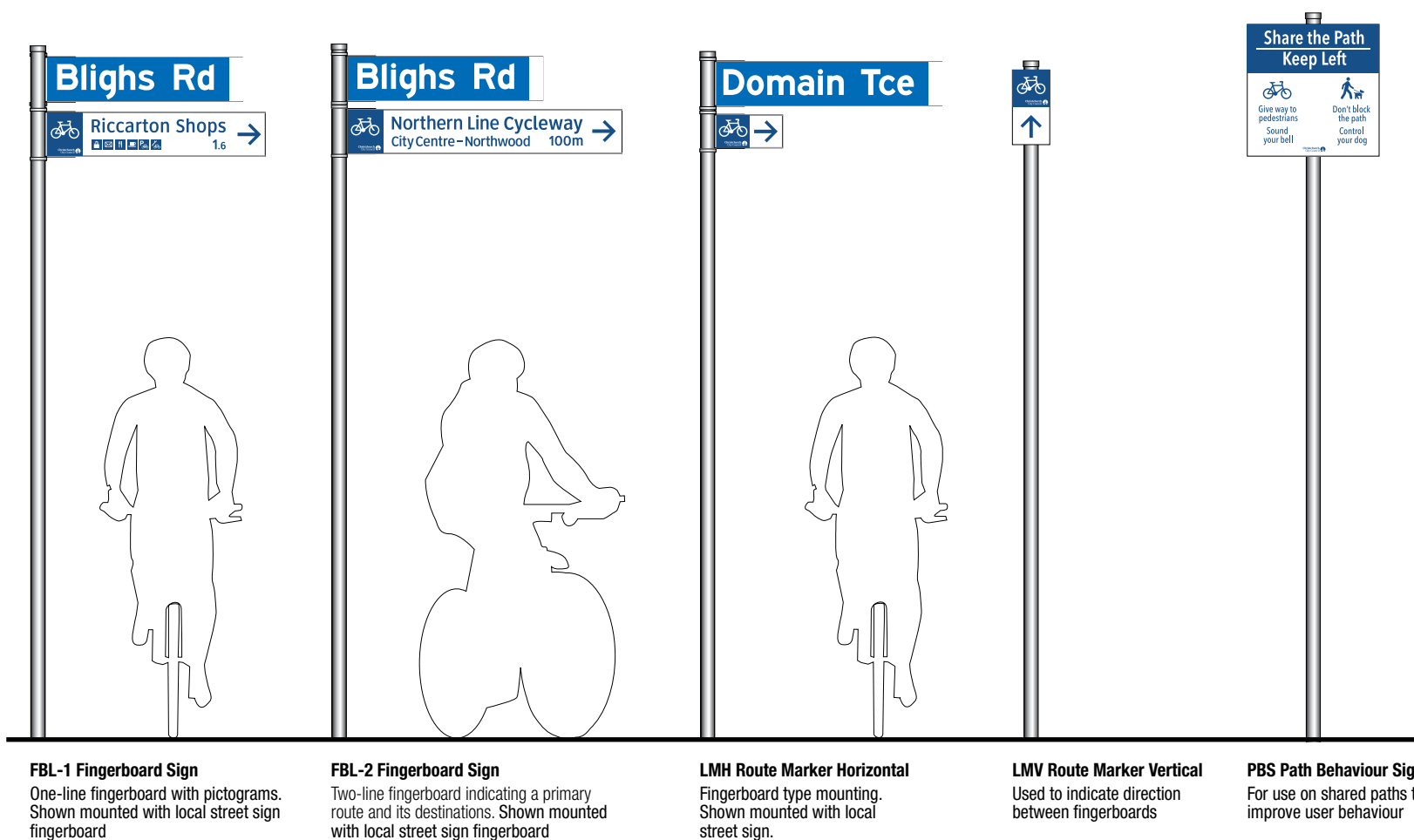
RDP - Reassurance Direction Sign
This type of sign is used following a junction of primary routes to reassure riders and inform them of the distances to listed destinations. This type of sign is only used on routes with C1 level of signing such as high-speed, limited access cycleways.
Refer to Drawings RDP, RDP-1-6 and RDPNR

LPP - Location Plate Sign
This type of sign is used to mark cross streets/roads on the faces of bridges over bikeways or at underpasses.
Refer to Drawings LPP

MSP Bicycle Network Map Sign
This type of sign is only used at selected gateway locations where a number of route possibilities are available. A map can easily show multiple route possibilities within an area.
Refer to Drawings MSP-A to MSP-D



Local route sign family



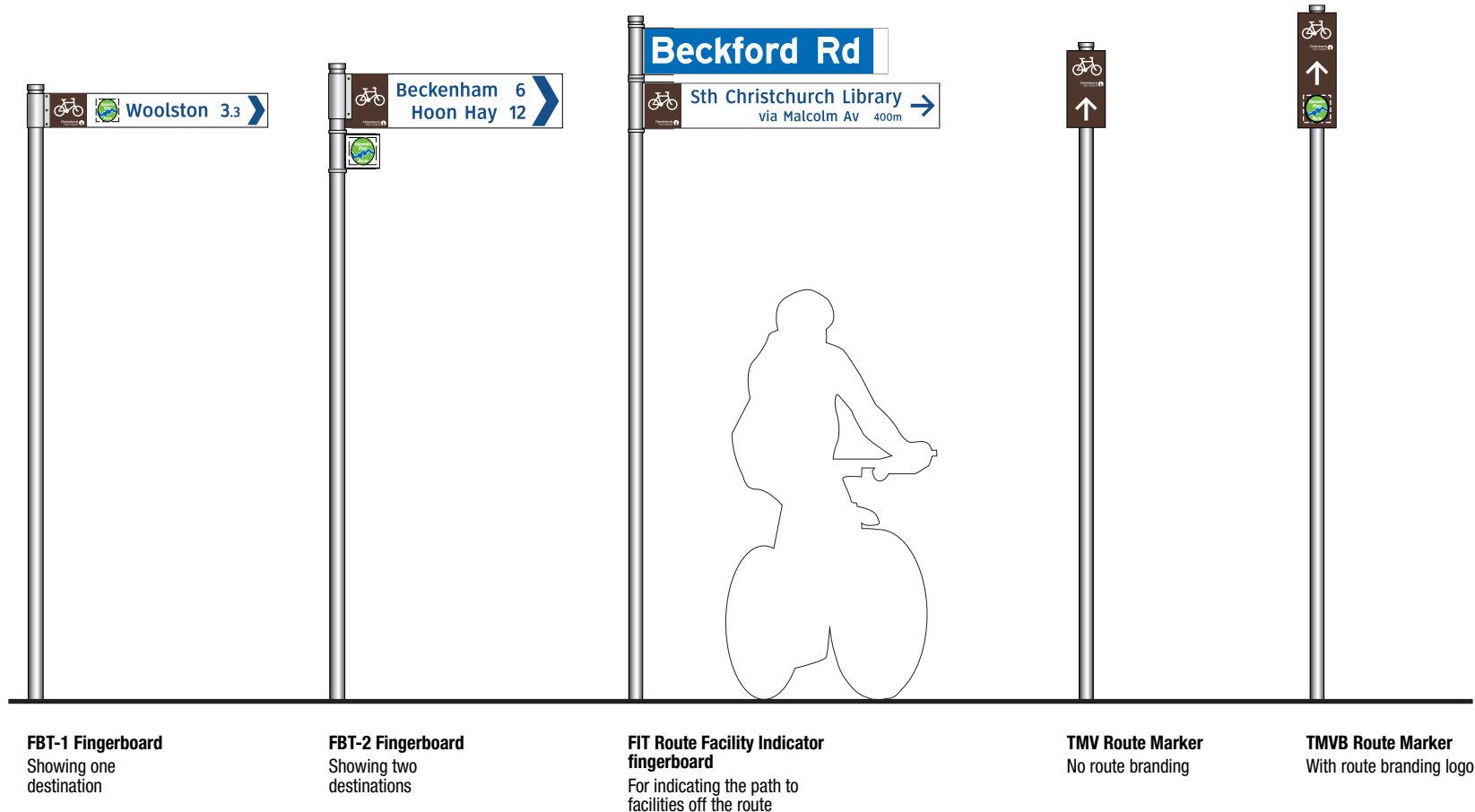
Local route signs

FBL - Local route fingerboard
This type of sign is used at the junction of a local route where it branches from a primary or secondary route and as a final sign towards the end of a local route pointing to the final destination. Refer to Drawings FBL-1 and FBL-2

LM - Local route marker
This type of sign is used to indicate continuing direction and turnings for local routes in between local route fingerboards. Refer to Drawing LMH/LMV



Tourist/recreational route sign family and path behaviour sign



Tourist/recreational route signs

FBT - Tourist/recreational route fingerboard

This type of sign is used at the junction of a local route where it branches from a primary or secondary route and as a final sign towards the end of a local route pointing to the final destination.

Refer to Drawing FBT

FIT - Tourist/recreational route facility indicator signs

This type of sign is used to indicate good path behaviour in specific areas where continuing instances of poor user behaviour have been identified.

Refer Drawing FIT

TM - Tourist/recreational route markers

This type of sign is used to indicate continuing direction and turnings for local routes in between local route fingerboards.

Refer to Drawing TMV/ TMVB

Path behaviour sign

PBS - Path Behaviour Sign

This type of sign is used to indicate good path behaviour in specific areas where continuing instances of poor user behaviour have been identified.

Refer Drawing PBS



1.5 Application of different sign families

Signing primary route intersections



At primary or secondary route junctions with another primary or secondary route (as in the junctions marked "a") use two fingerboards for each route at the junction and one advance direction sign 30-50m before the junction in each direction for each route.

Direction indication signs are used on primary and secondary routes for reassurance between major intersections and at turnings where other routes are not present. See examples on the map marked "b". Pavement markings can also be used to indicate difficult turnings and on- to off-road transitions.

Map Boards are ideally located in an area with enough space to view the map in a safe off road environment such as adjacent parkland (see map example "c").

Signing local route intersections and destinations



Where local routes branch from, or intersect with, primary or secondary routes (see map examples "d") use one Local Destination fingerboard for the local route and two fingerboards for the primary route, one for each direction. Advance direction signs are not used on the primary/secondary route to indicate local route junctions.

Local routes use fingerboards only at each end of the route. The first points to the local destination as it branches from the primary/secondary, or local route. The second is located at the last turn before the destination (see example "e"). At all intermediate turns and for reassurance, route marker signs are used (see examples "f"). Road pavement markers can also be used on local routes.

Signing tourist/recreational routes

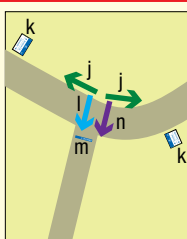


The Local Facility signage series (blue background with white lettering) is primarily intended as an aid to wayfinding for pedestrian path users and to connect paths (often located in remote locations) to the local street system.

Local Facility fingerboards are used to indicate path services and facilities and to indicate the way to local centres remote from the path (see examples "g"). Linked street pavement indicators are the primary method of indicating all streets connected to the main path via access paths (see map example "h").

Information Maps are ideally located at key path junctions and at high pedestrian activity areas (see map example "i").

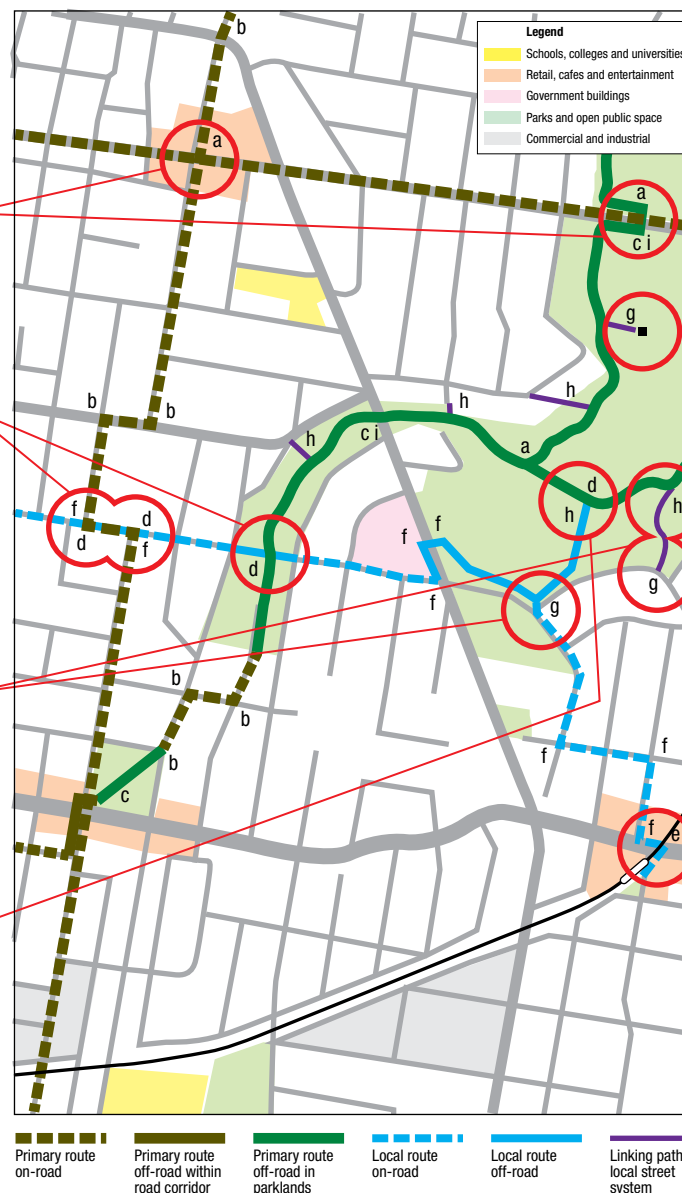
Using different sign families at junctions where routes connect



The example, left, is an enlargement of the circled path intersection. This intersection is a junction between primary and local bicycle routes. The path between "h" and "g" (shown on the map right) also links the main path to the local street system for pedestrians.

At this location the path junction should be signed for all users:

- Bicycle Network fingerboards (j) and ADP signs (k);
- Local Destination fingerboard indicating the route to the train station (i);
- Linked street pavement markers (m) at each end of the linking path and fingerboards (n) at each end as the link path is lengthy.



Application of sign types

Bicycle network routes on- and off-road

This group of signs is used to provide directional and wayfinding information for all CCC Bicycle Network Primary Routes.

Refer to Section 2.1 for details

Local bicycle routes on- and off-road

This group of sign types is used to provide directional and wayfinding information for all CCC Bicycle Network Local Routes.

Refer to Section 2.2 for details

Tourist/recreational bicycle routes on- and off-road

This group of sign types is used to provide directional and wayfinding information for tourist/recreational routes such as coastal trails, riverside trails and rail trails.

Refer to Section 2.3 for details

Path behaviour signage for shared paths in parkland locations

This group of signs and pavement markings is used to provide directional and wayfinding information primarily for pedestrians on all CCC shared paths. Refer to Section 2.4 for details



1.6 Graphical standards for all sign families

1.6.1 Typefaces used on signs

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

Clearview 3B - for blue letters on white base

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

Clearview 3W - for white letters on blue base

All measurements for lettering heights on signs are for the 'X-height'

× X-HEIGHT
Cap X-height

Fernymead	5.8	<p>Distance numerals flush right and aligned on the decimal point</p> <p>Numerals for distances less than one kilometre and the sub-kilometre part of distances under 10km have a 45mm X-height</p> <p>For signs showing only distances without decimal points, these distance numerals are aligned flush right with the edge of the type zone</p>
Linwood	9.2	
Woolston	10	
City Centre	13	

Notes for destination names and distances layout for fingerboards and reassurance direction signs

Showing distance numeral layout for destinations of less than a kilometre

- Destinations are listed flush left. Lettering Cap X-height on FBP, RDP, FBL, FBT and FIT type signs is 60mm.
- Distance numerals one kilometre and above are the same point size as destination names.
Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.
- Distance numerals are aligned on the decimal point and to the right side of the sign.
- Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
- Distances less than one kilometre are shown in metres (rounded up to the nearest 100 metres eg: 500m - see above example). The numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
- If the destination can be seen from the sign location (ie less than 100m etc, then a distance should not be shown).

Fonts

Clearview 3-B

The Clearview 3-B typeface is to be used on primary, local and tourist/recreational route signage for all destination names, text and numerals where blue or brown lettering on a white base is specified as detailed on individual sign type layout diagrams. All lettering shall be true to its letter form in face weight and construction.

Clearview 3-W

The Clearview 3-W typeface is to be used on primary, local and tourist/recreational route signage where white lettering on a black base is specified. All lettering shall be true to its letter form in face weight and construction.

Note: It is the responsibility of the signmaker to purchase the correct font. No other versions, similar or otherwise will be accepted.



1.6.2 Colours used on signs

PRIMARY SIGN COLOURS



AS2700 B23 Bright Blue
RGB 23, 79, 137
Pantone 7686C



AS2700 G37 Dark Brown
RGB 79, 54, 45
Pantone 476C

PICTOGRAM/SYMBOL COLOURS



White symbol on blue
AS2700 B23 Blue



Yellow symbol
AS2700 Y26 Yellow on
AS2700 B23 Blue



White symbol on
AS2700 G13
Emerald Green



White symbol on
AS2700 R13 Red



White symbol on
AS2700 B23 Blue

Colours

Colours as specified to be used for all parts and faces as noted on the sign type drawings.

AS2700 B23 Bright Blue

Used on all bicycle network signs for distance names and numerals, sign mastheads and pictograms as indicated on individual sign layouts.

AS2700 X65 Dark Brown

Used on all tourist/recreational signs as indicated on individual sign layouts.

AS2700 G13 Emerald Green

Used as the background colour on the hospital/medical centre pictogram.

AS2700 BR13 Signal Red

Used as the background colour on the Fire Station pictogram.



1.6.3 Pictograms and logos used on signs



PPS - Police Station



PHM - Hospital or Medical Centre



PFS - Fire Station



PTI - Tourist Information Centre



PPT - Public Telephone



PPO - Post Office



PRE - Restaurant



PCA - Cafe



PAP - Airport



PTR - Train Station



PWS - Walking path entrance



PLO - Lookout



PMF - Public Toilets



PSP - Swimming pool or beach



PSC - Shops or Shopping Centre



PHS - Historic Site



PDW - Drinking Water



PBP - Bicycle Parking



PBS - Bicycle Shop (Repairs)



PAT - Auto Teller Machine

Pictograms

Pictograms to be selected relative to each section of the local destination route.

Pictograms will be provided digitally and must be scaled proportionally.

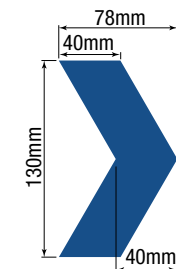
Note: pictograms may be obtained by the principal in charge upon request.

When nominating pictograms, use the codes provided eg. (PTR) = Train Station

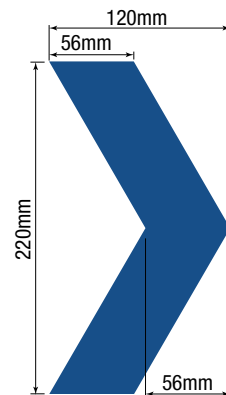


1.6.4 Arrow types used on signs

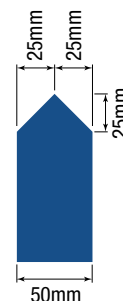
Arrows used for primary route fingerboards and tourist/recreational route fingerboards



FBDA-1 DETAIL
Small direction
arrow for one-line
fingerboard



FBDA-2 DETAIL
Small direction
arrow for two-line
fingerboard



ADDGA
ADP Graphical layout sign
Route indication arrowhead

Arrows used for primary route direction indication signs, advance direction signs, local route fingerboards and all route markers



Arrow sizes
given in mm

Arrow sizing for all on-road
cycle network directional
signage is the width of the
arrow head as indicated in
the sample left.



ADD-A-L
Left turn
arrow



ADD-A-VL
Veer left
arrow



ADD-A-S
Straight
ahead arrow



ADD-A-VR
Veer right
arrow



ADD-A-R
Right turn
arrow

Arrows

Major arrows on bicycle network fingerboards are shown dimensioned on individual sign type layout diagrams. Smaller arrow artwork as shown on this page is to be used for all bicycle network route indication signs, Advance Direction Signs, local destination fingerboards and local route marker signs.

The artwork will be provided digitally and must be scaled proportionately.

No other versions, similar or otherwise will be accepted.



1.7 Sign content conventions

Primary route fingerboards

- Fingerboards are usually double-sided signs which show destinations and their distances. See sign layouts and details in Section 2.1.1.
- Primary route fingerboards are used at route junctions with other primary, local or tourist/recreational bicycle routes.
- When fingerboards are used along a route to indicate a change of route direction only, distance numerals are not used.
- Destination names are shown in mixed capitals and lower case. The Cap X-height of destination lettering is 60mm.
- The destination closest to the sign site is listed at the top of the sign with other destinations below in increasing distance order.
- Destination names are always aligned (justified) to the distance numerals and/or direction arrow (for a straight ahead arrow – always on the left side of the sign – the destination name(s) are left justified, for a right turn arrow the destination names are right justified).
- Distance numerals are located between the direction arrow and the destination name.
- The direction arrow always points outwards from the sign mounting towards the direction of travel.
- Distances above 10km are rounded to the nearest kilometre.
- Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
- Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
- Distance numerals are aligned on the decimal point.
- Distance numerals one kilometre and above are the same point size as destination names. Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.
- Maximum length of fingerboard is 1200mm subject to lettering content.
- The white bicycle symbol in blue background is always located at the mounting end of each sign face. The bicycle always faces in the direction of travel.

Direction indication signs

- Direction indication signs are generally used to indicate the change of direction along a route where fingerboard signs cannot be used due to siting/mounting or legibility issues. In situations where fingerboards cannot be used at route junctions, direction indication signs may be used instead. When used at route junctions, direction indication signs show distances to destinations. When used along a route to indicate a change of route direction only, distance numerals are not used. See sign layouts and details in Section 2.1.2.
- Direction indication signs are only used to indicate a single route.
- Destination names are shown in mixed capitals and lower case. The Cap X-height of destination lettering is 60mm.
- The destination closest to the sign site is listed at the top of the sign with other destinations below in increasing distance order.
- Destination names are always aligned (justified) to the distance numerals and/or direction arrow (for a straight ahead arrow – always on the left side of the sign – the destination name(s) are left justified, for a right turn arrow the destination names are right justified).
- Distance numerals, when used, are located between the direction arrow and the destination name.
- The direction arrow always points outwards from the sign mounting towards the direction of travel.
- Distances above 10km, when used, are rounded to the nearest kilometre.
- Distances less than 10km, when used, are shown to the nearest 100 metres in standard decimal form.
- Distances less than one kilometre, when used, are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
- Distance numerals, when used, are aligned on the decimal point.
- Distance numerals one kilometre and above, when used, are the same point size as destination names. Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.

- The white bicycle symbol is always located centred in the dark blue sign header. The bicycle always faces in the direction of travel if a turn is indicated. Where the sign indicates a straight ahead travel direction, the bicycle faces to the right side of the sign.

Advance direction signs

- Advance direction signs are used to indicate the destination choices for multiple routes in advance of a primary route junction. Advance direction signs are not usually used at local route junctions except in situations where the local route leads to a particularly strong trip attractor. Advance direction signs may be used at primary route junctions with tourist/recreational routes. See sign layouts and details in Section 2.1.3.
- Advance direction signs only show focal point destinations and never sub destinations.
- Advance direction signs never show distances.
- Destination names are shown in mixed capitals and lower case. The Cap X-height of destination lettering is 60mm.
- Destination names are always aligned (justified) to the direction arrow (for a straight ahead arrow – always on the left side of the sign – the destination name(s) are left justified, for a right turn arrow the destination names are right justified).
- The destination name and direction of travel arrow for the route being followed is always shown at the top of the sign. The destinations for other routes crossing or branching at the junction are listed below in order of network importance (routes to more popular destinations are listed ahead of more remote destinations).
- Destinations for branching or crossed routes are grouped with each direction indication arrow located between the destination lettering and the edge of the sign and facing outwards in the direction of travel for that route.
- Separate routes are indicated by a horizontal line between each route destination (where a route branches at the junction), or destinations (where a route is crossed at the junction).
- The white bicycle symbol is always located centred in the dark blue sign header. The bicycle always faces in the direction of travel if a turn is indicated for the route being followed. Where the sign indicates a straight ahead travel direction for the route



being followed, the bicycle faces to the right side of the sign.

Reassurance direction signs

- Reassurance direction signs are used following route junctions on major primary routes (usually on high-speed, limited-access separated routes) to indicate the destinations and distances on the route being followed. See sign layouts and details in Section 2.1.5.
- Reassurance direction signs are not used on local or tourist/recreational routes.
- Reassurance direction signs list the next sub destination, focal point destination and other subsequent focal or terminal focal points to be reached.
- Destinations and their distances are listed in ascending order with the destination closest to the sign shown to the top of the list.
- Destination names are shown in mixed capitals and lower case. The Cap X-height of destination lettering is 60mm.
- Destinations are shown left justified and destinations right justified on the decimal point.
- Distances above 10km, when used, are rounded to the nearest kilometre.
- Distances less than 10km, when used, are shown to the nearest 100 metres in standard decimal form.
- Distances less than one kilometre, when used, are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
- Distance numerals, when used, are aligned on the decimal point.
- Distance numerals one kilometre and above, when used, are the same point size as destination names. Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.
- The white bicycle symbol is always located centred in the dark blue sign header. The bicycle always faces the right side of the sign.

Local route fingerboards

- Local route fingerboards are used at each end of a local route where it branches from a primary route and at its destination to indicate destinations and distances to significant local destinations and trip attractors. See sign layouts and details in Section 2.2.1.
- Local Fingerboard Signs are double sided. Reassurance direction signs are not used on local or tourist/recreational routes.
- The FBL-1 sign has only one destination per sign. Distance numerals are shown on the lower line along with up to six pictograms. See Sheet FBL-1.
- FBL-2 signs can have a main destination on the top sign row and a sub destination or route information relating to the main destination on the bottom row. See Sheet FBL-2.
- On local route fingerboard signs the destination names are shown in mixed capitals and lower case. On local fingerboards the destination text on the upper line has a Cap X-height of 60mm. The Cap X-height of the destination lettering and the main distance numerals for the lower line is 45mm. For decimal point numerals or distances expressed in metres on all lower line destinations the Cap X-height is 34mm.
- Destination names are always aligned (justified) to the distance numerals and/or direction arrow (for a straight ahead arrow – always on the left side of the sign – the destination name(s) are left justified, for a right turn arrow the destination names are right justified).
- Distance numerals are located between the direction arrow and the destination name. The direction arrow always points outwards from the sign mounting towards the direction of travel. Upward pointing arrows are not used.
- Distances above 10km are rounded to the nearest kilometre.
- Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
- Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals. Distances less than 100m are not shown.
- On FBL-2 two line signs, the distance numerals are aligned on the decimal point.

- Distance numerals one kilometre and above are the same point size as the lower line destination names (45mm). Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 34mm.
- Maximum length of fingerboard is 1200mm subject to lettering content.
- The white bicycle symbol in blue background is located at the mounting end of each sign face. with the bicycle facing the direction of travel.

Tourist/recreational route fingerboards

- Tourist/recreational route fingerboards are double-sided signs which show destinations and their distances. See sign layouts and details in Section 2.3.1.
- Primary route fingerboards are used at route junctions with other primary, local or tourist/recreational bicycle routes.
- When fingerboards are used along a route to indicate a change of route direction only, distance numerals are not used.
- Destination names are shown in mixed capitals and lower case.
- The Cap X-height of destination lettering on the upper line is 60mm. The Cap-X height for lettering on the bottom line is 45mm.
- Destination names are always aligned (justified) to the distance numerals and/or direction arrow (for a straight ahead arrow – always on the left side of the sign – the destination name(s) are left justified, for a right turn arrow the destination names are right justified).
- The destination closest to the sign site is listed at the top of the sign with other destinations below in increasing distance order.
- Distance numerals are located between the direction arrow and the destination name. The direction arrow always points outwards from the sign mounting towards the direction of travel.
- Distances above 10km are rounded to the nearest kilometre.
- Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
- Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed



on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.

- Distance numerals are aligned on the decimal point.
- Distance numerals one kilometre and above are the same point size as destination names.
- Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm for distance on the top line of the sign and 34mm for the lower line.
- Maximum length of fingerboard is 1200mm subject to lettering content.
- The white bicycle symbol in blue background is always located at the mounting end of each sign face. The bicycle always faces in the direction of travel.

Abbreviations

Where a destination name is lengthy and greatly increases the potential size of a sign, an abbreviation may be used to reduce the overall size and cost of the sign.

Table 3 lists abbreviations which may be used on CCC bicycle network signage. Contact the CCC Bicycle Network Team for advice on other words not listed below.

Table 3 – Sign abbreviations

Name	Abbreviation
Avenue	Av
Brook	Bk
Court	Ct
Creek	Ck
Crescent	Cr
East	East
Highway	Hwy
Island	Is
Junction	Jct
Kilometre, also Kilometres	Km
Kilometres per hour	Km/h
Metre	m
Motorway	Mwy
Mountain	Mt
New Zealand	NZ
North	Nth
Parade	Pde
Park	Pk
Railway	Rly
Reserve	Res
Road	Rd
South	Sth
Square	Sq
Station	Stn
Street	St
Terrace	Tce
University	Uni
West	West



2 Directional signs for bicycle routes





2.1 Primary route signs

2.1.1 FBP Fingerboard signs

Purpose

Fingerboards are used at intersections where junctions with other routes in the bicycle network occur or at route turnings/intersections along a route. Bicycle network fingerboards are used to sign primary routes in the CCC Network.

Fingerboards usually list up to two destinations and the distances to those destinations. The closest destination is always listed to the top of the fingerboard. Distances are only shown on fingerboards when used at junctions with other primary, secondary or local bicycle routes. At all other route turnings where fingerboards are used, distances are not listed.

Destinations typically shown on fingerboards usually consist of a sub destination and the next focal point destination beyond. It is an essential principle of signing that once a destination is listed on a sign it should continue to be listed on all subsequent signs in the series until the destination is reached. Once a sub destination has been reached, the next sub destination is then listed until it too is reached. Similarly with focal point destinations.

Two focal points are seldom listed unless one is a terminal focal point – the destination at the end of the route. Use of terminal destinations should be avoided unless the route has no further sub destinations in which case two destinations (the next focal point and the terminal destination) can be used on the sign sequence.

In a situation where two or more routes share a common path (overlap each other) for a short distance, individual fingerboards for each of these routes will be maintained and erected together and stacked one under another.

If two or more overlapping routes share a common path for a full network segment (between two focal points) separate two-line fingerboards should be used for each route.

In some situations it is desirable to list in addition to a sub destination and focal point, an additional prominent focal point destination off the route (but easily accessible from it). In this case

a separate fingerboard will need to be used to the additional focal point. An example of this usage is when “City Centre” is the listed focal point destination off the route being followed. If “City Centre” is found to be the trip destination of the majority of users, it should be listed on the sign sequence up until the junction with the route which eventually leads to it.

Refer to Sign layout sheets FBP-1 and FBP-2 for layouts and technical details.

Location

Bicycle route fingerboards are located at intersections and indicate the travel direction along a street/road or path. Fingerboards are sited clear of turning traffic and in full visibility of the route.

For ease of navigation it is preferable to locate all fingerboards on the one pole in a prominent location. Signs in split locations need to be carefully sited to be ‘read’ intuitively by the user. For example at a right turn of the route it may be useful to locate one fingerboard on the right side of the street in the direction of travel. This draws the eye of the user in the direction of travel (right turn). Locating signs outside the users’ normal field of vision is to be avoided.

Fingerboards may be used in conjunction with road pavement markers (RPM) to indicate the turning particularly if this is a transition from on- to off-road or vice versa.

Sign posts are to be set a minimum of 500mm from the road/path edge, preferably on the same side as the direction of travel.

Site verification

Where applicable, fingerboards should direct pathway users to the most appropriate direction to enable them to easily follow the bicycle route. Fingerboards need to be positioned in a way that minimises confusion at path junctions, particularly where there are multiple junctions.

Fingerboards located near roads must be positioned in a way that minimises confusion with road signs and names.

All sign sites need to be individually assessed taking likely user travel needs and conditions into consideration.

FBP fingerboard sign variations

FBP-1

One-line bicycle route fingerboard
Refer to drawing FBP-1 for graphic, construction details and sign layout

FBP-2

Two-line bicycle route fingerboard
Refer to drawing FBP-2 for graphic, construction details and sign layout



FBP-1 One-line fingerboard



Sign content notes

1. Distance numerals are located between the direction arrow and the destination name. The direction arrow always points outwards from the sign mounting towards the direction of travel.
2. The white cyclist symbol in blue background is always located at the mounting end of each sign face. The cyclist always faces in the direction of travel.
3. Distances above 10km are rounded to the nearest kilometre.
4. Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
5. Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
6. Distance numerals are aligned on the decimal point.
7. Distance numerals one kilometre and above are the same point size as destination names. Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.
8. Maximum length of fingerboard is 1200mm subject to lettering content.

FBP-1 Technical Details

Construction Details

1. 150mm high (length to suit lettering)
6mm aluminium Standard Grade
H5005 H34 with 5mm radius corners.
Maximum length 1200mm subject to content.
2. Mounting and construction to CCC
Construction Standard Specification.
3. Mount using standard galv/steel
150mm sign clamp. See Section 4 of
this manual for details when mounting
with other fingerboards.

Graphic Details

Digital printed graphics in AS2700 B23
Bright Blue using full solvent inks onto
white Class 2 retroreflective material
sheeted with anti-graffiti overlay film NI-EF
40801-12-45 or equivalent.

Sizes

DESTINATIONS/DISTANCES
60mm cap X-height (Clearview 3-B)
Numerals: $\geq 1\text{km}$ 60mm cap X-height,
<1km 45mm cap x-height

BICYCLE SYMBOL
White bicycle symbol 130mm x 82.5mm

ARROWS
FBDA-1 fingerboard arrow



White CCC logo (100mm x 25mm)
Bicycle symbol (130mm x 82.5mm) centred in blue area
Section under clamp required for mounting in blue colour

FBP-1 One-line primary route fingerboard artwork template

Drawing Number:
FBP-1



FBP-2 Two-line primary route fingerboard layout

Showing distance numeral layout for destinations of less than a kilometre

- Distance numerals are located between the direction arrow and the destination name. The direction arrow always points outwards from the sign mounting towards the direction of travel.
- The white cyclist symbol in blue background is always located at the mounting end of each sign face. The cyclist always faces in the direction of travel.
- Distances above 10km are rounded to the nearest kilometre.
- Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
- Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
- Distance numerals are aligned on the decimal point.
- Distance numerals one kilometre and above are the same point size as destination names. Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.
- Maximum length of fingerboard is 1200mm subject to lettering content.

Construction Details

1. 240mm high (length to suit lettering)
6mm aluminium Standard Grade
H5005 H34 with 5mm radius corners.
Maximum length 1200mm subject to
content.
2. Mounting and construction to CCC
Construction Standard Specification.
3. Mount using standard galv/steel
200mm sign clamp. See Section 4 of
this manual for details when mounting
with other fingerboards.

Graphic Details

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

DESTINATIONS/DISTANCES
60mm cap X-height (Clearview 3-B)
Numerals: $\geq 1\text{km}$ 60mm cap X-height,
 $<1\text{km}$ 45mm cap x-height

BICYCLE SYMBOL
White bicycle symbol 130mm x 82.5mm

ARROWS
FBDA-2 fingerboard arrow



FBP-2 Two-line primary route fingerboard artwork template

Drawing Number:
FBP-2



2.1.2 DIP Direction indication signs

Purpose

Direction indication signs are used to mark primary and secondary routes in the CCC bicycle network where fingerboards are not easily seen or followed.

Direction indication signs can also be used in place of fingerboards at intersections where other routes join or cross. At these locations distance numerals are shown on DIP signs. Numerals are not shown on DIP signs at intersections or route turnings in between route junctions.

Direction indication signs list only a focal point destination and a sub destination for the route being followed. The travel/turn direction for the focal point is indicated by an arrow located to the side of the first destination listed.

Direction arrows are located to the side of the sign and pointing in the direction of the upcoming turn. Turn arrows should always point out of the sign body. Straight ahead, left turn and veer left arrows should always be located to the left of destination names and right turn and veer right arrows located to the right of their destination names.

When two destination names are grouped with a single direction arrow, the destinations are justified to the side closest to the arrow.

If two overlapping routes share a common path for a full network segment (between two focal points) it is possible to combine signs for both routes for the route segment and only use one DIP sign for both routes as these will share the same sub destination while showing the focal point for each route.

In some situations it is desirable to list in addition to a sub destination and focal point, an additional prominent focal point destination off the route (but easily accessible from it). In this case a three-line direction indication sign will need to be used to list a sub destination and two focal points. An example of this usage is when “City Centre” is the listed focal point destination off the route being followed. If “City Centre” is found to be the trip destination

of the majority of users, it should be listed on the sign sequence up until the junction with the route which eventually leads to it.

This type of sign should not be used to indicate a named route. Refer to Sign layout sheets DIP-2 and DIP-1-3 for layouts and technical details.

Location

Direction indication signs are located at intersections or route turnings either before or after the intersection whichever offers the most visible and legible siting for the sign. The actual siting of these signs depends on the road/path situation. On a downhill approach, signs may need to be located on the approach side of the intersection to provide adequate warning of a turning. The optimal siting for a direction indication sign may be on the far side of large or complicated intersections to draw the eye of the user through the intersection along the street or road to be followed.

Direction indication signs should ideally be located on the left side of the road/path with good approach visibility.

Sign posts are to be set a minimum of 500mm from the road/path edge on the same side as the direction of travel.

Site verification

All sign sites need to be individually assessed taking likely user travel needs and conditions into consideration.

DIP sign variations

DIP-1

One-line direction indication sign
Refer to drawing DIP for graphic and construction details and drawing DIP-1-3 for sign layout

DIP-2

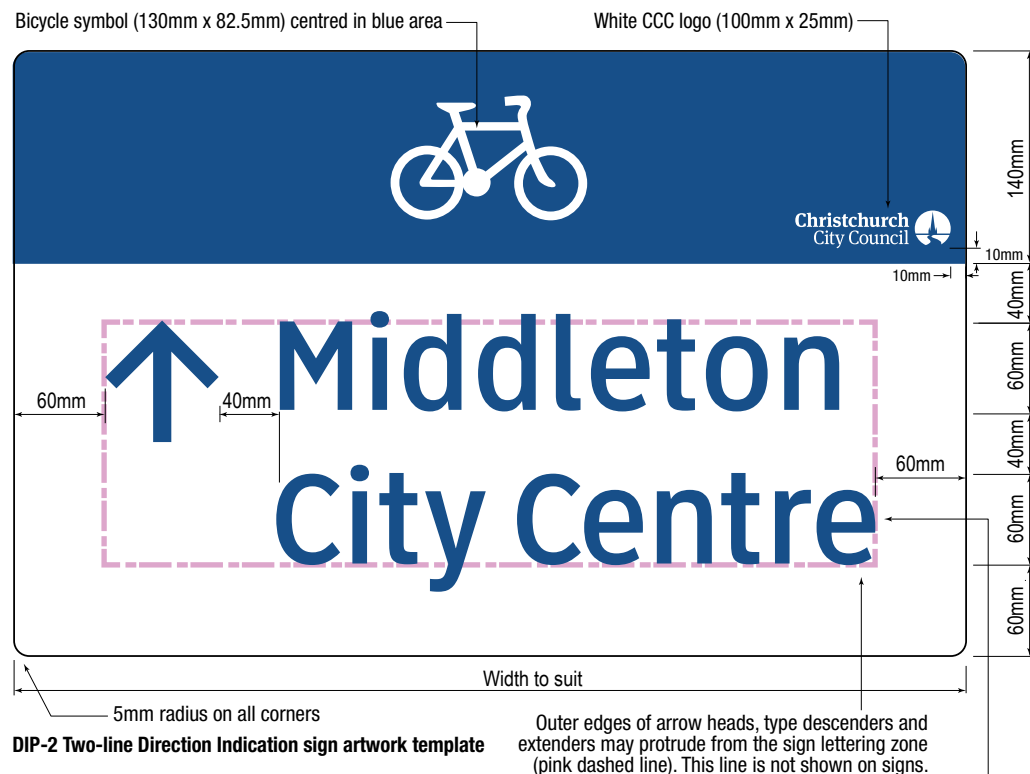
Two-line direction indication sign
Refer to drawing DIP for graphic and construction details and drawing DIP-1-3 for sign layout

DIP-3

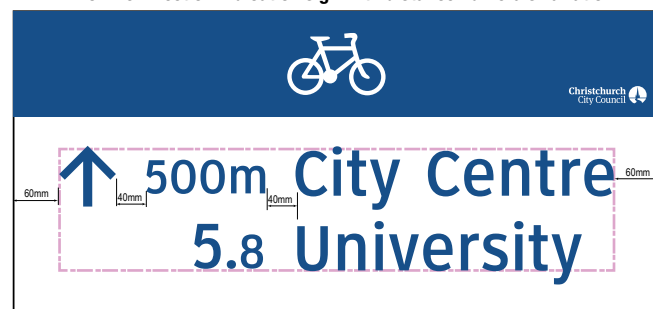
Three-line direction indication sign
Refer to drawing DIP for graphic and construction details and drawing DIP-1-3 for sign layout



DIP Direction Indication Sign (Dimensioned example: DIP-2)



DIP-2 Two-line Direction Indication sign with distance numerals variation



The longest line combination of lettering, arrow and spacing associated with a single direction arrow determines the sign width.
For this sign the top arrow destination group in the stack sets the width for this sign.

Sign content notes

1. Focal point destinations and sub destinations are used on Direction Indication signs. In the example two focal points are shown - "City Centre", a significant terminal focal point can be shown in the absence of a sub destination.
2. Only the route being followed is indicated by destinations and an arrow as on the example.
3. Straight ahead and left turn arrows are always shown on the left side of the destination(s) with the destination names left justified as shown.
4. Right hand turns are indicated by an arrow to the right of the destination lettering. In this case the destinations are shown right justified with the same horizontal spacings as for a straight or left turn arrow sign.
5. When DIP signs are used in place of fingerboards at route junctions, distance numerals are shown signs located between the direction arrow and the destination name. The direction arrow always points outwards from the sign mounting towards the direction of travel.
6. Distances above 10km are rounded to the nearest kilometre. Distances less than 10km are shown to the nearest 100 metres in standard decimal form. Distance numerals are aligned on the decimal point.
7. Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
8. Distance numerals one kilometre and above are the same point size as destination names. Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.
9. CCC branding sized and positioned as shown.

DIP Technical Details

Construction Details

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Type 1 aluminium stiffener rail centred widthways 100mm less of sheet width with mounted to galvanised post using straps and buckle.
3. Sign panel to type 1 aluminium stiffener rails using self-piercing riveting system (eg. Henrob).
4. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

Digital printed graphics in AS2700 Bright Blue B23 using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

DESTINATIONS

60mm cap X-height (Clearview 3-B)
Distances only used when DIP sign is located at a route junction in place of a fingerboard.

SIGN MASTHEAD

AS2700 B23 Bright Blue panel, width of sign x 140mm high
White bicycle symbol 130mm x 82.5mm

ARROWS

ADDA type 80mm

Drawing Number:

DIP

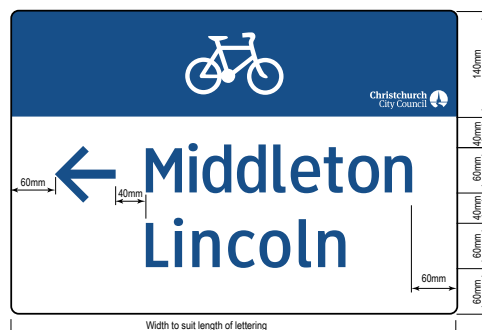


DIP-1, DIP-2 & DIP-3 Direction Indication Signs – One- two- and three-line versions



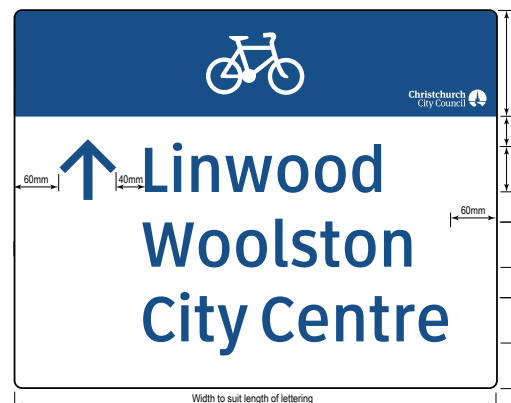
DIP-1 One-line direction indication sign artwork template

This version of the DIP sign can be used in two ways: (a) in advance of an intersection to clearly indicate the continuing route direction; and, (b) in place of a fingerboard at a minor route turning (where distances (in km) are not shown on signage).



DIP-2 Two-line direction indication sign artwork template - single route with sub destination

This version of the DIP sign is used instead of a fingerboard to indicate a route turning at an intersection. Distance numerals are not shown where the intersection/turning is not a junction with another route.



DIP-3 Three-line direction indication sign artwork template - parallel routes with shared sub destination

This version of the DIP sign is used instead of a fingerboard to indicate a route turning at an intersection. Distance numerals are not shown where the intersection/turning is not a junction with another route.



DIP-2 Two-line direction indication sign with distance numerals - artwork template - single route with sub destination

This version of the DIP sign is used instead of a fingerboard at a route junction to indicate a route travel direction. Distances (in km) are shown on this sign variation.

Notes relating to signs on this page

1. Refer to general notes for all DIP signs on Page 20 of this manual.
2. Refer to application and usage notes for DIP signs on Drawing Number DIP-2 of this manual.

DIP Technical Details

DIP-1

One-line Direction Indication Sign
Refer to drawing DIP for graphic and construction details

DIP-2 without distances

Two-line Direction Indication Sign
Refer to drawing DIP for graphic and construction details

DIP-2 with distances

Two-line Direction Indication Sign with distance numerals shown
Refer to drawing DIP for graphic and construction details

DIP-3

Three-line Direction Indication Sign
Refer to drawing DIP for graphic and construction details

Drawing Number:

DIP-1-3



2.1.3 ADP Advance direction signs

Purpose

Advance direction signs are used to provide advance warning of route junctions between primary or secondary bicycle routes in the CCC Bicycle network. Advance direction signs are not used in advance of junctions with local routes. Fingerboards only are used at these junctions.

Advance direction signs list the focal point destinations for the route being followed and any other primary or secondary route passing through the junction. Sub destinations are not used on advance direction signs.

Distances to destinations are not listed on advance direction signs. Distances are provided on fingerboards at the actual junction.

The route being followed is always shown to the top of the sign.

Destinations are grouped according to their common travel direction. The travel/turn direction for each focal point, or group of focal points sharing a common direction, is indicated by an arrow pointing in the travel direction to be taken through the junction.

Travel/turn arrows should always point out of the sign body away from their associated destination names. Straight ahead, left turn and veer left arrows should be located to the left of their destination names and right turn and veer right arrows located to the right of their destination names. Where two or more destination names are grouped with a single direction arrow, the destinations are justified to the side closest to the arrow.

Where different routes are crossed, a horizontal line is used to separate the main travel direction arrow and destination names from those of other routes.

Destinations listed on advance direction signs should be consistent with fingerboards and other signs used on all routes feeding into the junction.

Advance direction signs for named routes

ADP-NR signs can be used to indicate the name of the route being followed (eg Bicentennial Bikeway etc). The layout of this type of sign is similar to standard advance direction signs with the addition of a facility name box at the top of the sign. Bikeway names are never shown for other routes only for the route being followed.

Advance direction signs with graphical layout

At large, complex, multi-legged intersections, often with traffic islands, signalised crossings and divided roadways, it may be advisable to graphically indicate a recommended path through the intersection to the user as an aid to their navigation. In these situations (which often may also involve on-road to off-road transitions) an ADPG graphical layout sign can be used in advance of the intersection. As these signs have to be individually designed for each intersection they should be used sparingly when normal advance direction signs will not provide adequate indication of the correct path to take.

Refer to Sign layout sheets ADP, ADP-2-4, ADP-5-6, ADPNR, ADPG for layouts and technical details.

Location

Advance direction signs are located between 30 and 50 metres in advance of the intersection. Mounting distance and actual sign siting depend on the road/path situation. On a downhill approach, signs may need to be located at the extent of the range or further back up the hill to account for a high approach speed.

Advance direction signs should always be located on the left side of the road/path with good approach visibility.

Sign posts are to be set a minimum of 500mm from the road/path edge on the same side as the direction of travel.

Site verification

All sign sites need to be individually assessed taking likely user travel needs and conditions into consideration.

ADP Sign Variations

ADP-2

Two-line advance direction sign
Refer to drawing ADP for graphic and construction details
Refer to drawing ADP-2-4 for sign layout

ADP-3

Three-line advance direction sign
Refer to drawing ADP for graphic and construction details
Refer to drawing ADP-2-4 for sign layout

ADP-4

Four-line advance direction sign
Refer to drawing ADP for graphic and construction details
Refer to drawing ADP-2-4 for sign layout

ADP-5

Five-line advance direction sign
Refer to drawing ADP for graphic and construction details
Refer to drawing ADP-5-6 for sign layout

ADP-6

Six-line advance direction sign
Refer to drawing ADP for graphic and construction details
Refer to drawing ADP-5-6 for sign layout

ADP-NR

Advance direction sign for named route
Refer to drawing ADPNR for graphic, construction details and sign layout

ADP-G

Advance direction sign with special graphical layout
Refer to drawing ADPG for graphic, construction details and layout

[illegible]

1. Only focal point destinations are used on Advance Direction signs. Sub destinations are not used.
2. The route being followed is always listed at the top of the destination stack regardless of the direction of the arrow.
3. Focal points for parallel overlapping routes (which share a common direction), are listed with a single direction arrow. Within grouped items the closest destination is listed to the top.
4. Multiple destinations grouped with a single destination arrow are to be left justified for straight ahead and left pointing arrows and right justified for right pointing arrows.
5. Straight ahead and left turn arrows are always shown on the left side of the destination(s). Right turn arrows are always shown to the right of destinations.
6. Focal point destinations for other routes crossing or branching from the route being followed are shown below the followed route destinations and separated by a 4mm line.

In the example shown, the route being followed is to University. At the indicated junction this route is crossed by two other routes which both lead in one direction to Tower Junction and in the other to separate focal points of Belfast and Airport.

7. CCC branding sized and positioned as shown.

— The longest line combination of lettering, arrow and spacing associated with a single direction arrow determines the sign width. For this sign the top arrow destination group in the stack sets the width for this sign.

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Type 1 aluminium stiffener rail centred widthways 100mm less of sheet width with mounted to galvanised post using straps and buckle.
3. Sign panel to type 1 aluminium stiffener rails using self-piercing riveting system (eg. Henrob).
4. Mounting and construction to CCC Construction Standard Specification.

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

DESTINATIONS
60mm cap X-height (Clearview 3-B)
Distances not used.

AS2700 B23 Bright Blue panel, width of
sign x 140mm high
White bicycle symbol 130mm x 82.5mm

ADDA type 80mm

ADP

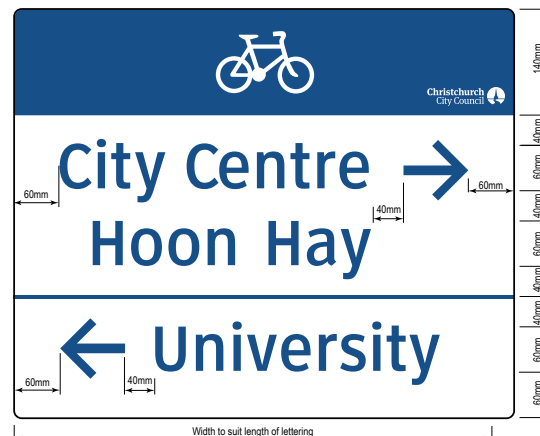


ADP-2, ADP-3 and ADP-4 Advance Direction Signs – Two- three- and four-line versions



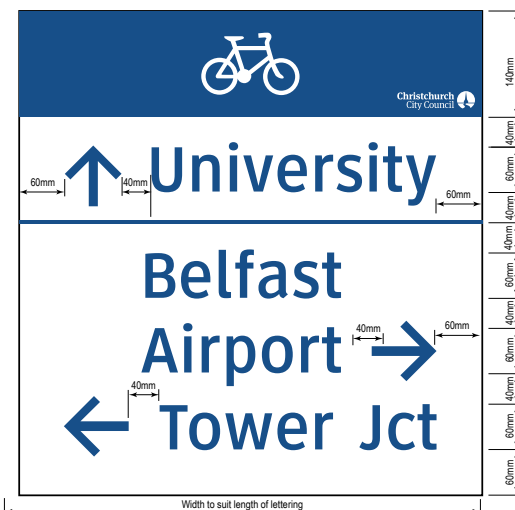
ADP-2 Two-line advance direction sign artwork template

This version of the AD sign indicates direction for the primary route being followed and a right branching primary route.



ADP-3 Three-line advance direction sign artwork template

This version of the AD sign indicates direction for the primary route being followed and a primary route crossing this route.



ADP-4 Four-line advance direction sign artwork template

This version of the AD sign indicates direction for two primary routes sharing the same path (for the next route segment) and a primary route crossing these routes.

ADP Technical Details

ADP-2

One- and two-line Advance Direction Sign
Refer to drawing ADP for graphic and construction details

ADP-3

Three-line Advance Direction Sign
Refer to drawing ADP for graphic and construction details

ADP-4

Four-line Advance Direction Sign
Refer to drawing ADP for graphic and construction details

Notes relating to signs on this page

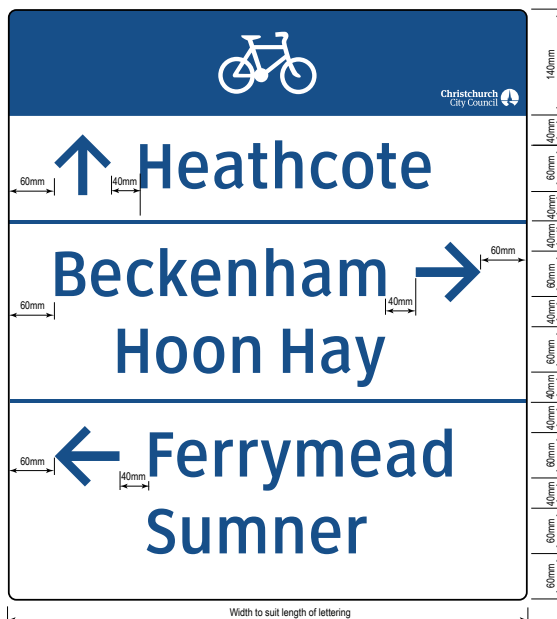
1. Refer to general notes for all ADP signs on page 23 of this manual.
2. Refer to application and usage notes for ADP signs on page 24 of this manual.

Drawing Number:

ADP-2-4



ADP-5 and ADP-6 Advance Direction Signs – Five- and six-line versions

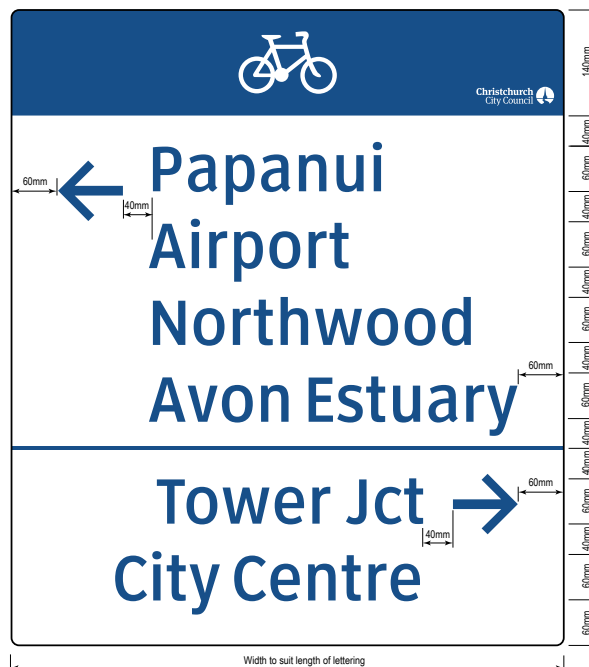


ADP-5 Five-line advance direction sign artwork template

This version of the AD sign indicates direction for one primary route crossing two overlapping primary routes (two focal points are indicated for each route). The horizontal lines are used to separate the different routes.

Notes relating to signs on this page

1. Refer to general notes for all ADP signs on page 23 of this manual.
2. Refer to application and usage notes for ADP signs on page 24 of this manual.



ADP-6 Six-line advance direction sign artwork template

This version of the AD sign indicates direction for multiple overlapping primary routes (for the following route segment). Focal point destinations are indicated for each route and the City Centre focal point is also indicated as it is an important terminal focal point accessible via the Tower Junction route.

ADP Technical Details

ADP-5

Five-line Advance Direction Sign
Refer to drawing ADP for graphic and construction details

ADP-6

Six-line Advance Direction Sign
Refer to drawing ADP for graphic and construction details

Drawing Number:

ADP-5-6

[illegible]

1. Named routes are prominent CCC cycleway facilities with a significant pre-investment in route naming both in existing signage and inclusion on existing public mapping. Named routes are only signed with the approval of the manager responsible for the CCC Bicycle Network.
2. The ADPNR is a variation of the standard ADP sign and is used only on named bicycle facilities. Refer to the notes for Advance Direction signs (see pages 23 and 24 for details of typical ADP sign layout etc).
3. The named route box on the ADPNR sign is only to be used to denote the route being followed. It is not to be used to indicate crossing or branching primary routes, whether named or not.
4. The named route box is always positioned at the top of the destination list.
5. The route name is white and centred within a 60mm high black route name box. This line of type is in Clearview 3-W 30mm Cap X-height.
6. ADPNR type signs are not to be used in place of DIP signs where such signs are used instead of fingerboards at minor route turnings, or along difficult to follow routes as an aid to wayfinding. See page 20 for details of this use.
7. In the example shown, the facility being followed is the Northern Line Cycleway to Papanui. At the signed intersection this route is crossed by another route which leads in one direction to the City Centre and in the other to the University.

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Type 1 aluminium stiffener rail centred widthways 100mm less of sheet width with mounted to galvanised post using straps and buckle.
3. Sign panel to type 1 aluminium stiffener rails using self-piercing riveting system (eg. Henrob).
4. Mounting and construction to CCC Construction Standard Specification.

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

ROUTE NAME
30mm cap X-height (Clearview 3-W) white
lettering on black background

60mm cap X-height (Clearview 3-B)
Distances not used.

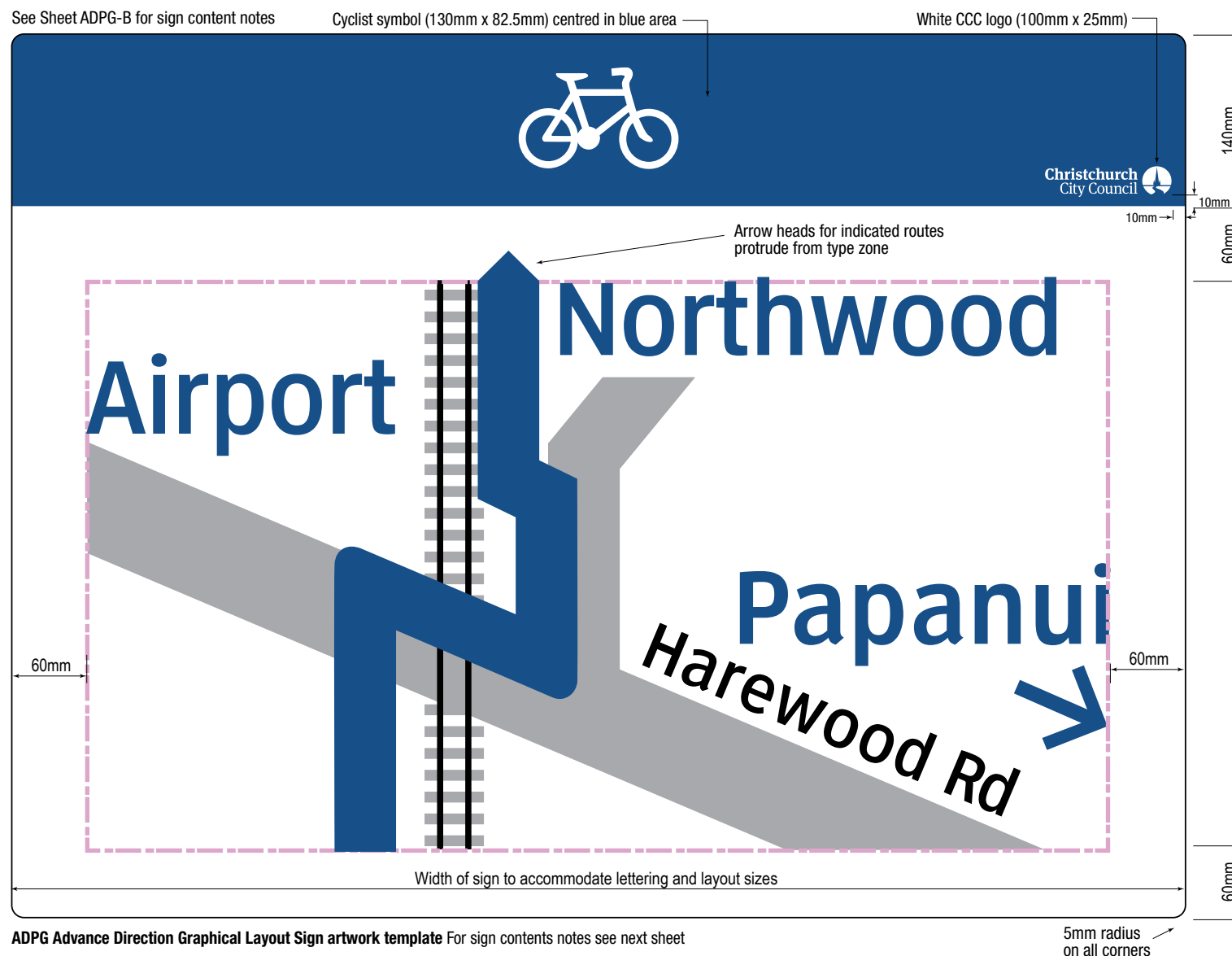
AS2700 B23 Bright Blue panel, width of sign x 140mm high
White bicycle symbol 130mm x 82.5mm

ADDA type 80mm

ADPNR



ADPG Advance Direction Sign with graphical layout



ADP-G Technical Details

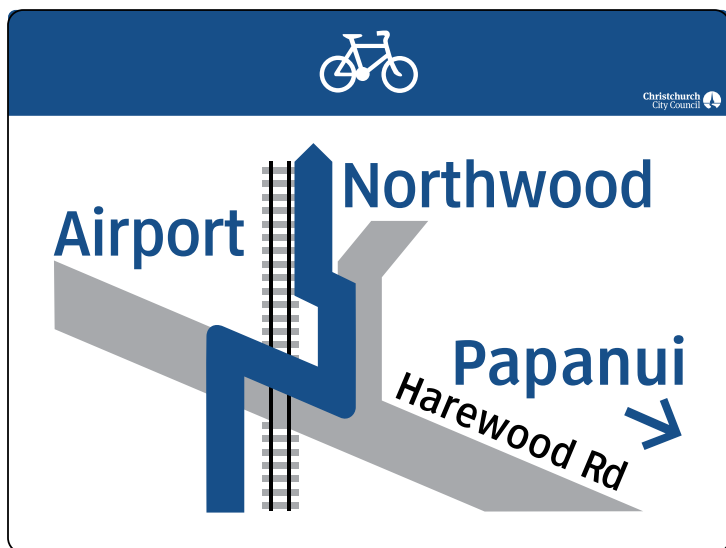
Construction Details

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Type 1 aluminium stiffener rail centred widthways 100mm less of sheet width with mounted to galvanised post using straps and buckle.
3. Sign panel to type 1 aluminium stiffener rails using self-piercing riveting system (eg. Henrob).
4. Mounting and construction to CCC Construction Standard Specification.

Drawing Number:
ADPG-A



ADPG Advance Direction Sign Graphical Layout – Layout details



ADPG Advance Direction Graphical Layout Sign

Sign content notes

1. ADPG graphical layout signs are used only in advance of complex intersections where it is necessary to indicate to the user a recommended path through the intersection. This may involve off-road to on-road transitions through multi-legged intersections often with traffic islands, signalised crossings and divided roadways.
2. The ADPG is an individually designed variation of the standard ADP sign and is used only as an advance direction sign in place of a standard ADP sign. Refer to the notes for Advance Direction signs (pages 23 and 24 for details of typical ADP sign layout etc).
3. The suggested travel paths for all indicated routes is shown by a 50mm wide line in Blue. See page 13 for ADPGA arrow head details.
4. Streets crossed or followed by indicated routes are shown in 40% tone 80mm width for major roads and 65mm width for minor roads. The name of the cross street is shown in 30mm high black lettering aligned to the street.
5. The graphical layout should aim to clearly represent the approximate shape of the intersection and the angles of the street junctions to further assist with navigation.
6. Sign width is determined using standard ADP sign spacings. Graphical elements should be carefully spaced to ensure good legibility.
7. ADPNR type signs can be used in place of DIP signs where such signs are used at route turnings, or along difficult to follow routes as an aid to wayfinding.
8. If destination names consist of two words these can be stacked (with a 25mm vertical spacing) for more compact layout. Where two separate destinations are listed the normal vertical spacing of 40mm should be used.
9. In the example shown, the facility being followed is an off-road route crossing Harewood Road and the parallel railway line. After a short section on-road on a minor street the route rejoins the railway corridor as an off-road path to Northwood, the next focal point destination.

ADP-G Technical Details

Graphic Details

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

DESTINATIONS
60mm cap X-height (Clearview 3-B)
Distances not used.

SIGN MASTHEAD
AS2700 B23 Bright Blue panel, width of sign x 140mm high
White bicycle symbol 130mm x 82.5mm

ROAD SHAPES
40% black tone

ROAD NAMES
30mm cap X-height (Clearview 3-B) black lettering

ARROWS
ADDGA arrow heads 50mm route direction lines.

Drawing Number:

ADPG-B



2.1.4 LPP Location plate signs

Purpose

Location plate signs are located where a route passes under a significant road or cross street. Location plate signs are not used to mark junctions with other routes – fingerboards are used at these junctions.

The location plate sign lists only the name of the road or cross street. This sign does not show distances or direction arrows though in rare cases a direction arrow may be used as a further aid to route navigation where the associated underpass has a bend in the path direction or change of grade. This type of sign should not be used to indicate a named route.

There are two types of LPP sign. The LPP-A sign is used to mark a cross street or road which carries a bicycle route which is part of the CCC Bicycle Network. The LPP-B sign is used to indicate cross street names where these do not part of the bicycle network.

Refer to Sign layout sheet LPP for layout and technical details.

Location

Location plate signs are located above the bikeway on both approaches to underpasses and bridges to clearly identify the street or road being crossed at different grade/level to the bikeway. The optimal siting for a location plate sign is on the face of a bridge/overpass structure, easily seen from, and directly above the bikeway/path. Signs are permanently affixed to the bridge/overpass structure. The method of fixing should take into account the type, age and materials used in the structure.

Location plate signs are used for primary, secondary and local routes. They may be used on local routes where the cross street or road is a primary or secondary bicycle route.

Site verification

All sign sites need to be individually assessed taking likely user travel needs and conditions into consideration.

LPP Sign Variations

LPP-A

One-line location plate sign for use on a bicycle route to indicate a cross street which carries another bicycle route.

Refer to drawing LPP for graphic, construction details and sign layouts

LPP-B

One-line location plate sign for use on a bicycle route to indicate a cross street which is not part of the bicycle network.

Refer to drawing LPP for graphic, construction details and sign layouts



LPP Location plate sign



LPP-1 One-line Location Plate mounting arrangement

Mounting method to be determined depending on the structure to which it is to be fixed

Mounting holes only if required

Sign content notes

1. Maximum length of the location plate is 1200mm subject to lettering content.
2. Destinations or distance numerals are not used on this type of sign.
3. LPP location plate signs may also be used on local routes where appropriate.
4. LPP-A type sign is used to mark overpasses of cross streets which carry a bicycle route. LPP-B type sign is used to mark overpasses of cross streets which do not carry bicycle routes.
5. See Section 4 of this manual for guidance on destination name abbreviations



LPP-A One-line Location Plate (bicycle route on cross street) Artwork Template

Length of sign to suit sign content.



LPP-B One-line Location Plate (no bicycle route on cross street) Artwork Template

Length of sign to suit sign content.

LPP Technical Details

Construction Details

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Sign glued, screwed (or other) and permanently fixed to the face of overhead structures where the bikeway travels under or over a cross street/road.
3. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

DESTINATIONS
60mm cap X-height (Clearview 3-B)
Distances not used.

SIGN MASTHEAD
AS2700 B23 Bright Blue panel, width of sign x 140mm high
White bicycle symbol 130mm x 82.5mm

ARROWS
Not used

Drawing Number:

LPP



2.1.5 RDP Reassurance direction signs

Purpose

Reassurance direction signs are used mainly on high-speed or limited access routes such as veloways to indicate travel distance information (km) to upcoming destinations along the route. This type of sign also provides confirmation to users that they have joined the veloway or are continuing on it.

These signs, though most applicable for use on routes with a level of signing C1 (see Table 2), may in specific instances be used on primary or secondary bicycle routes following remote intersections or after complex intersections to reassure riders that they have made a correct turn and are following the right route.

A maximum of six destinations per sign can be listed in descending distance order with the closest destination at the top of the list. Focal point destinations, terminal destinations and the next sub destination can be listed on reassurance destination signs.

Refer to Sign layout sheets RDP, RDP-2-6 and RDPNR for layouts and technical details.

Reassurance direction signs for named routes

RDP-NR signs can be used to indicate the name of the route being followed (eg Northern Line Cycleway etc). The layout of this type of sign is similar to standard reassurance direction signs with the addition of a facility name box at the top of the sign. Bikeway names are never shown for other routes only for the route being followed.

Location

Reassurance direction signs are installed 50 – 100m following veloway junctions with other primary or secondary routes. They are not appropriate for use near junctions with local routes as these are signed with both bicycle network and local destination fingerboards.

Sign posts are to be set a minimum of 500mm from the road/path edge on the same side as the direction of travel.

Site verification

All sign sites need to be individually assessed taking likely user travel needs and conditions into consideration.

RDP Sign Variations (max 6 destinations)

RDP-2

Two-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details
Refer to drawing RDP-2-6 for sign layout

RDP-3

Three-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details
Refer to drawing RDP-2-6 for sign layout

RDP-4

Four-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details
Refer to drawing RDP-2-6 for sign layout

RDP-5

Five-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details
Refer to drawing RDP-2-6 for sign layout

RDP-6

Six-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details
Refer to drawing RDP-2-6 for sign layout

RDP-NR

Reassurance Direction Sign showing named route (maximum six destinations as above)
Refer to drawing RDPNR for graphic, construction details and sign layout

[illegible]

1. Destinations are listed in distance sort order with the nearest destination at the top of the list and the furthest at the bottom.
2. Focal point destinations, terminal destinations and the next sub destination can be listed.
3. Destinations are listed flush left.
4. Distances above 10km are rounded to the nearest kilometre.
5. Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
6. Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
7. Distance numerals are aligned on the decimal point.
8. Distance numerals one kilometre and above are the same point size as destination names. Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.
9. BCC branding sized and positioned as shown.

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Type 1 aluminium stiffener rail centred widthways 100mm less of sheet width with mounted to galvanised post using straps and buckle.
3. Sign panel to type 1 aluminium stiffener rails using self-piercing riveting system (eg. Henrob).
4. Mounting and construction to CCC Construction Standard Specification.

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

60mm cap X-height (Clearview 3-B)
Numerals: $\geq 1\text{km}$ 60mm cap X-height,
 $<1\text{km}$ 45mm cap x-height

AS2700 B23 Bright Blue panel, width of sign x 140mm high
White bicycle symbol 130mm x 82.5mm

Not used



RDP





RDP-2 to RDP-6 Reassurance Direction Sign – Two- to six-line variations

 	
Riccarton	1.2
City Centre	3.9



RDP-2 Two-line Reassurance Direction Sign artwork template

 	
Merivale	4.1
Papanui	5.2
Airport	10

RDP-3 Three-line Reassurance Direction Sign artwork template

 	
Hoon Hay	1.2
Middleton	3.9
University	5.2
Papanui	10.7
Northwood	15

RDP-5 Five-line Reassurance Direction Sign artwork template

 	
Riccarton	1.2
City Centre	3.9
University	4.2
Papanui	4.8
Northwood	9.1
Woodend	26

RDP-6 Six-line Reassurance Direction Sign artwork template

 	
Fernymead	5.8
Linwood	9.2
Woolston	10
City Centre	13

RDP-4 Four-line Reassurance Direction Sign artwork template

Notes relating to signs on this page

1. Refer to general layout and construction notes for all RDP signs on page 33 of this manual.
2. Refer to application and usage notes for RDP signs on page 32 of this manual.

RDP Technical Details

RDP-2
Two-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details

RDP-3
Three-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details

RDP-4
Four-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details

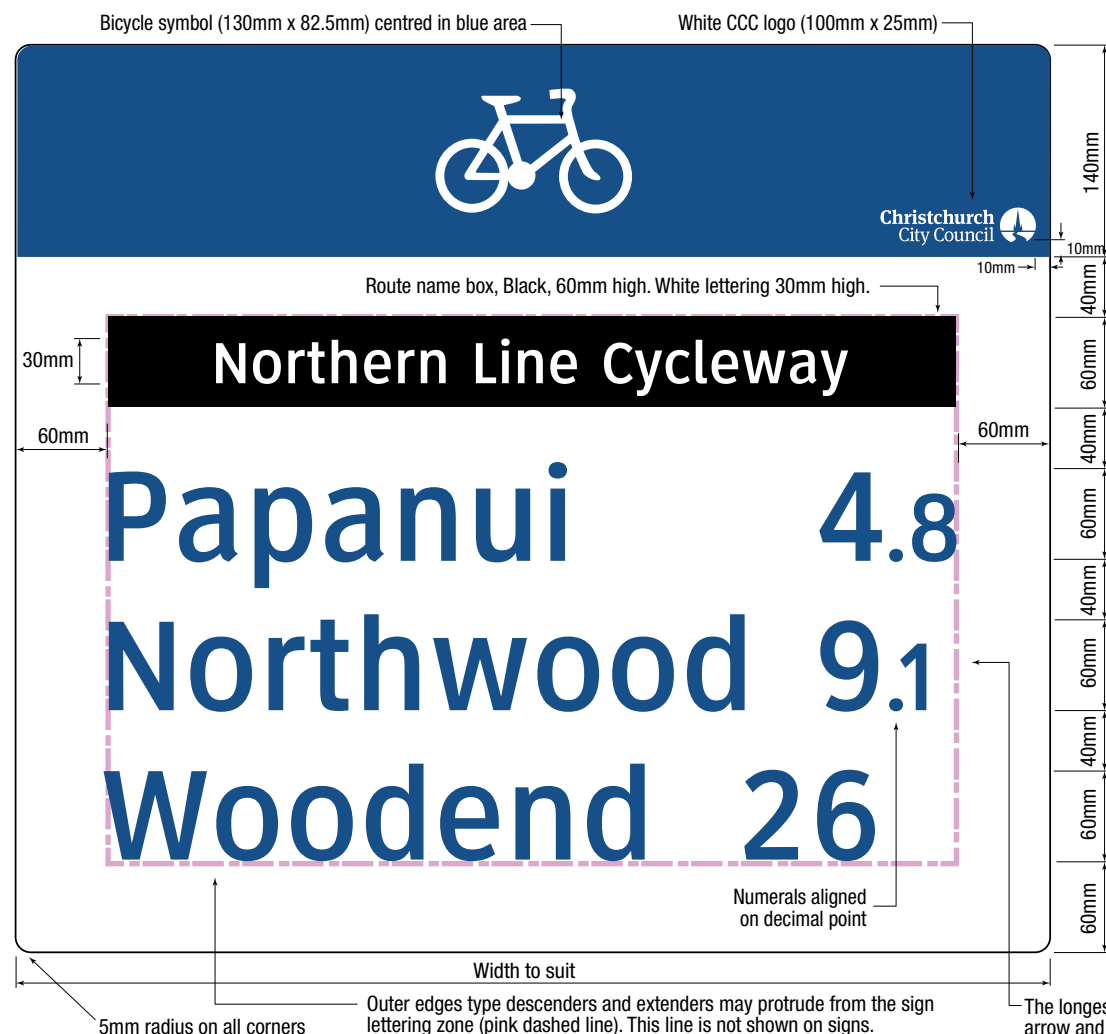
RDP-5
Five-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details

RDP-6
Six-line Reassurance Direction Sign
Refer to drawing RDP for graphic and construction details

Drawing Number:
RDP-2-6



RDPNR Reassurance Direction Sign for named route (Dimensioned example: RDPNR-3)



Sign content notes

1. Named routes are prominent CCC cycleways with a significant pre-investment in route naming both in existing signage and inclusion on existing public mapping. Routes are only named with the approval of the manager responsible for the CCC Bicycle Network.
2. The RDPNR sign is a variation of the standard RDP design for use on named routes. See sheet RDP-4 for details.
3. The named route box on the RDPNR sign is only to be used to denote the route being followed.
4. The route name box is always positioned at the top of the destination stack. The name of the route is centred within the black 60mm high box.
5. Destinations are listed in distance sort order with the nearest destination at the top of the list and the furthest at the bottom. Focal point destinations, terminal destinations and the next sub destination can be listed.
6. Destinations are listed flush left. Distance numerals are aligned on the decimal point to the right side of the sign.
7. Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
8. Distance numerals one kilometre and above are the same point size as destination names. Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.
9. CCC branding sized and positioned as shown.

RDP-NR Technical Details

Construction Details

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Type 1 aluminium stiffener rail centred widthways 100mm less of sheet width with mounted to galvanised post using straps and buckle. Sign panel to type 1 aluminium stiffener rails using self-piercing riveting system (eg. Henrob).
3. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

ROUTE NAME
30mm cap X-height (Clearview 3-W) white lettering on black background

DESTINATIONS/DISTANCES
60mm cap X-height (Clearview 3-B)
Numerals: ≥1km 60mm cap X-height,
<1km 45mm cap X-height

SIGN MASTHEAD
AS2700 B23 Bright Blue panel, width of sign x 140mm high
White bicycle symbol 130mm x 82.5mm

The longest line combination of lettering, arrow and spacing associated with a single direction arrow determines the sign width. For this sign the middle arrow destination in the list sets the width for this sign.

ADPNR-3 Three-line Reassurance Direction Sign for Named Route - artwork template

Drawing Number:
RDPNR



2.1.6 MSP Bicycle network map sign

Purpose

Bicycle network maps can show people the many possibilities a cycle network can offer them to navigate around their locality and further afield throughout the region. They can also show local routes centred on universities, schools, technical colleges, large work places, shopping centres, train or bus stations ferry wharves and other trip attractors. Cycle network maps show not only bicycle network routes but also the local street system, local/regional facilities and points of interest.

The MSP map sign shows the location of the user at the centre of the map which shows the surrounding street network with a coverage of approximately 6km x 6km. High quality Christchurch street maps are used and include the following features:

- road network
- existing Christchurch Bicycle Network routes (current route highlighted)
- parks, sporting or recreation grounds
- local centres
- major destinations such as shopping centres and employment nodes
- educational facilities
- police stations
- hospitals
- public libraries
- places of worship
- scout/ community halls
- public toilets
- bicycle parking
- waterways, water reservoirs, and
- significant natural landmarks

Maps should be orientated north in line with conventional street directory mapping. Maps are produced at an appropriate scale to ensure the bikeway and surrounding features are easily identifiable with a “you are here” indicator approximately in the centre of the map. Significant trip attractors that exist outside the map area are marked with text and an arrow indicating the direction of the facility or destination (e.g. CBD 4km).

Refer to sign layout sheets MSP-A to MSP-E for layouts and technical details.

Location

Map signs are placed at network junctions and particularly at ‘gateway’ locations (bridges, CBD periphery etc) which provide access to a large section of the cycle network. This may be adjacent to a major road or at key junctions along the route.

Map signs for on-road routes should be sited in an off-road map viewing bay (see Sheet MSP-C) or in parklands adjacent to the street or road being followed (see Sheet MSP-E). Map signs ideally should be located to allow path users to view the map when facing in a northerly direction to facilitate easy map orientation.

Map viewing bays are not recommended on roads with a speed limit greater than 60km/h.

When siting maps near paths and off-road bikeways where no viewing bay is provided, map boards are located at least one metre from the path edge to ensure there is sufficient space to move off the path to read the sign and not create a hazard for other path users.

To indicate desired/safe rest stops along bikeways, the location of map boards, where appropriate, can be co-located with other bikeway infrastructure such as seats, lights, racks, shelters etc.

The location of signs in lit areas is recommended to extend the functional hours the signs are usable.

Site verification

Map signs are positioned where cyclists can easily translate the information from the map to the surrounding environment. All maps are positioned with maximum visibility for pathway users travelling in all directions. If a map board is positioned near a major road, the map should be located in an off-road map viewing bay visible to cyclists entering, exiting or passing the map bay.

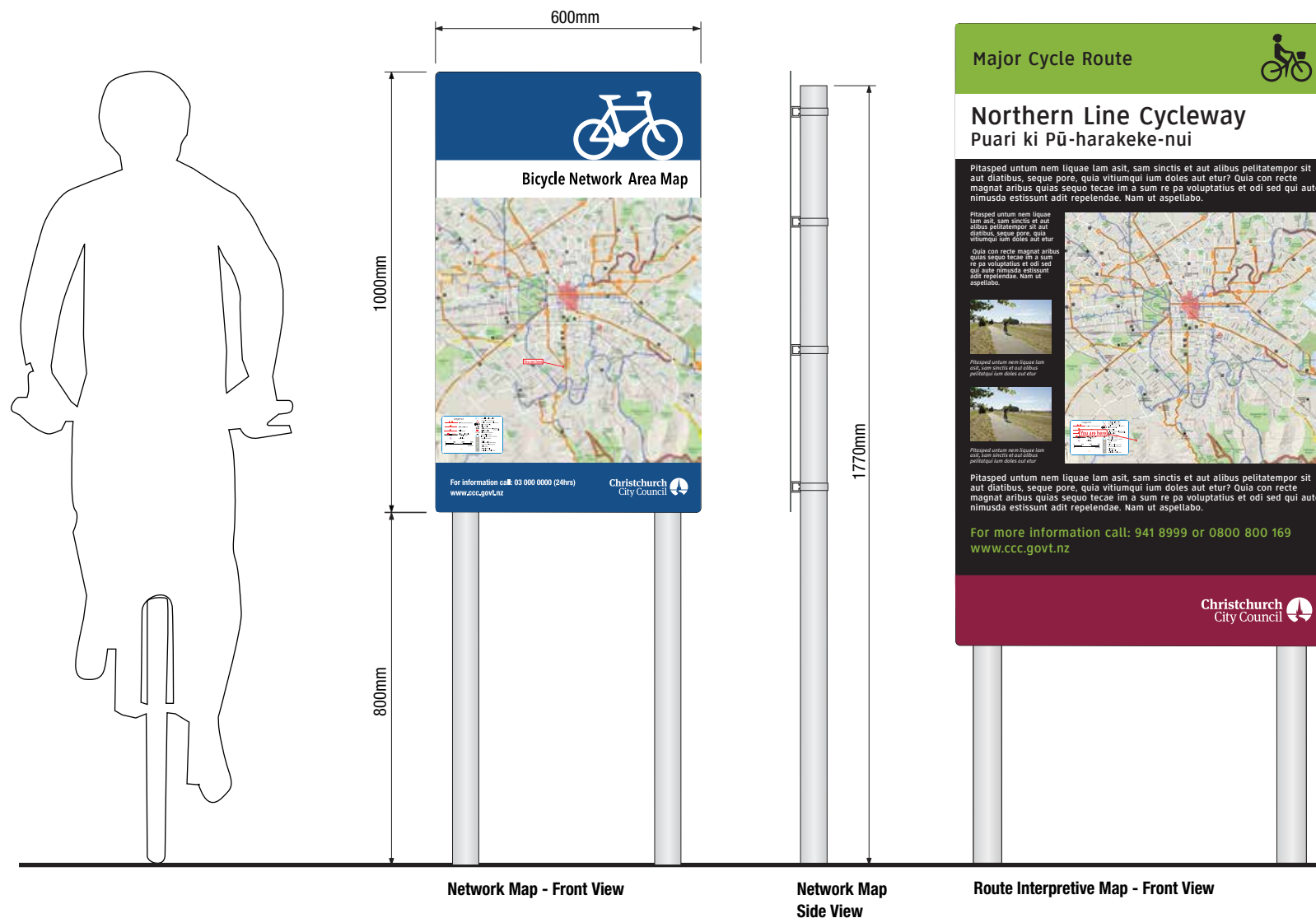
Careful siting of the map board for maximum visibility also provides casual surveillance from passers-by which may discourage vandalism to the sign.

An MSP-AD sign is erected 50-100m in advance of a map viewing bay associated with a street or road (See Sheets MSP-C and MSP-AD for sign layout and siting details).

All sign sites need to be individually assessed taking likely user travel needs and conditions into consideration.



Bicycle network area map sign - general and mounting



MSP Technical Details

Construction Details

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Type 1 aluminium stiffener rail centred widthways 100mm less of sheet width with mounted to galvanised post using straps and buckle.
3. Sign panel to type 1 aluminium stiffener rails using self-piercing riveting system (eg. Henrob).
4. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

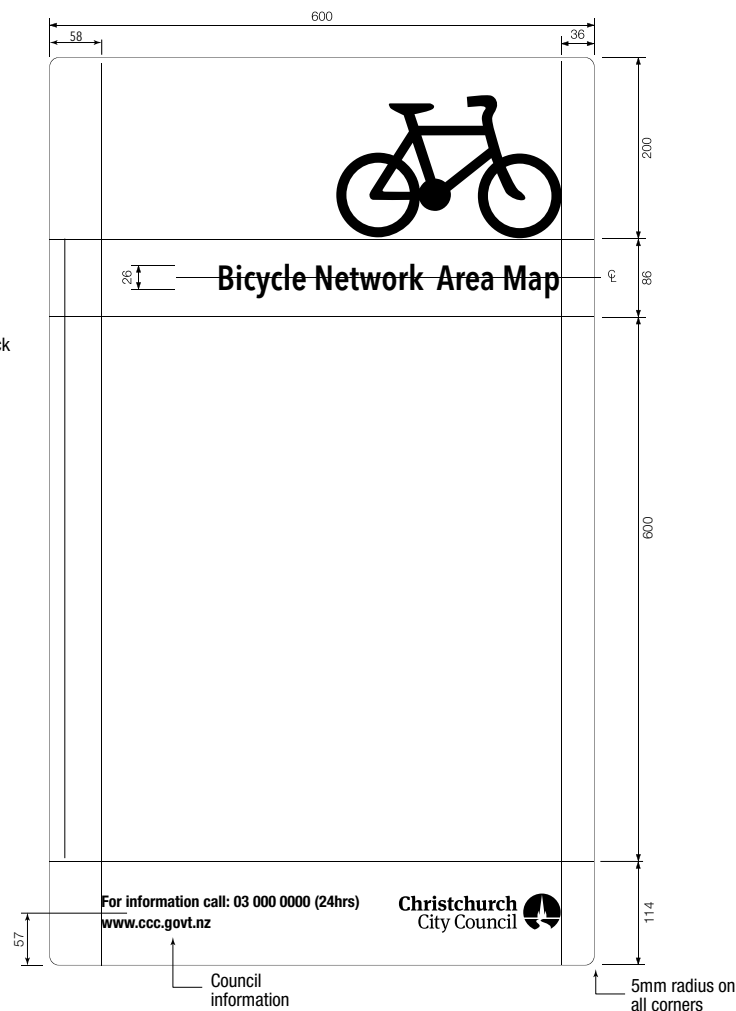
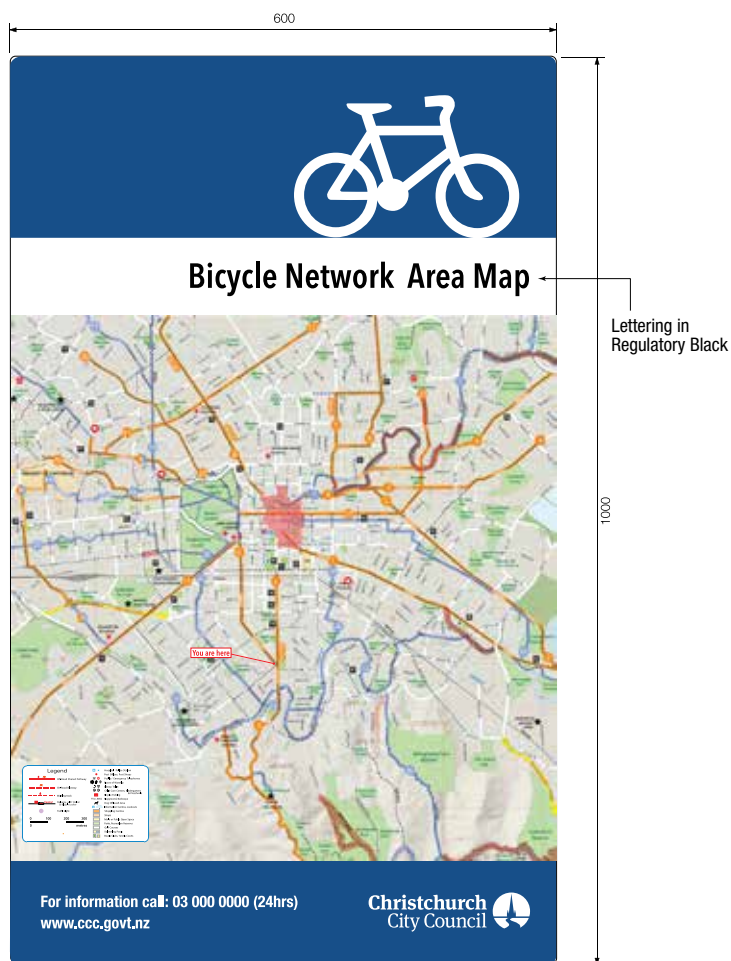
Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto 600 x 1000mm White Cast Vinyl sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Drawing Number:

MSP-A



Bicycle network area map sign - layout details



MSP Technical Details

Graphic Details

Sizes

MAP SIGN TITLE
26mm cap X-height (Clearview 3-B)
AS2700 G37 Black as shown

COUNCIL INFORMATION TEXT
12mm cap X-height (Clearview 3-W) white
as shown

YOU ARE HERE POINTER AND TEXT
6mm cap X-height (Clearview 3-B) AS2700
R13 Red as shown

YOU ARE HERE MAP
600mm H x 585mm W

Map Details

Maps should be consistent with any bicycle network maps in use. Existing bicycle routes are to be shown. Bus routes are not shown. All maps to include a legend box and "You are here" marker.

Layout Notes

Use the template on this page as base guide when producing new artwork.

Drawing Number:

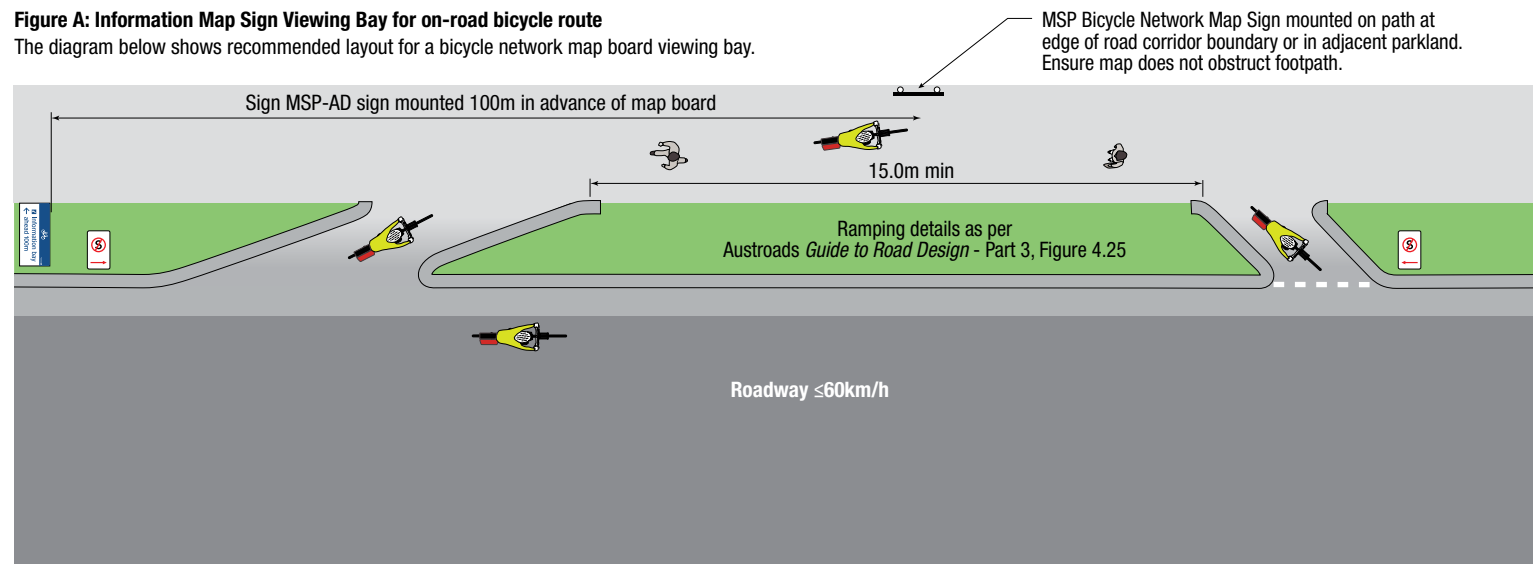
MSP-B



MSP Bicycle Network Map Sign – Siting details for on-road use

Figure A: Information Map Sign Viewing Bay for on-road bicycle route

The diagram below shows recommended layout for a bicycle network map board viewing bay.



MSP Viewing Bay Technical Details

Layout for MSP viewing bay for on-road bicycle routes

The map should be sited for optimal viewing from the viewing bay as detailed in the diagram on this sheet.

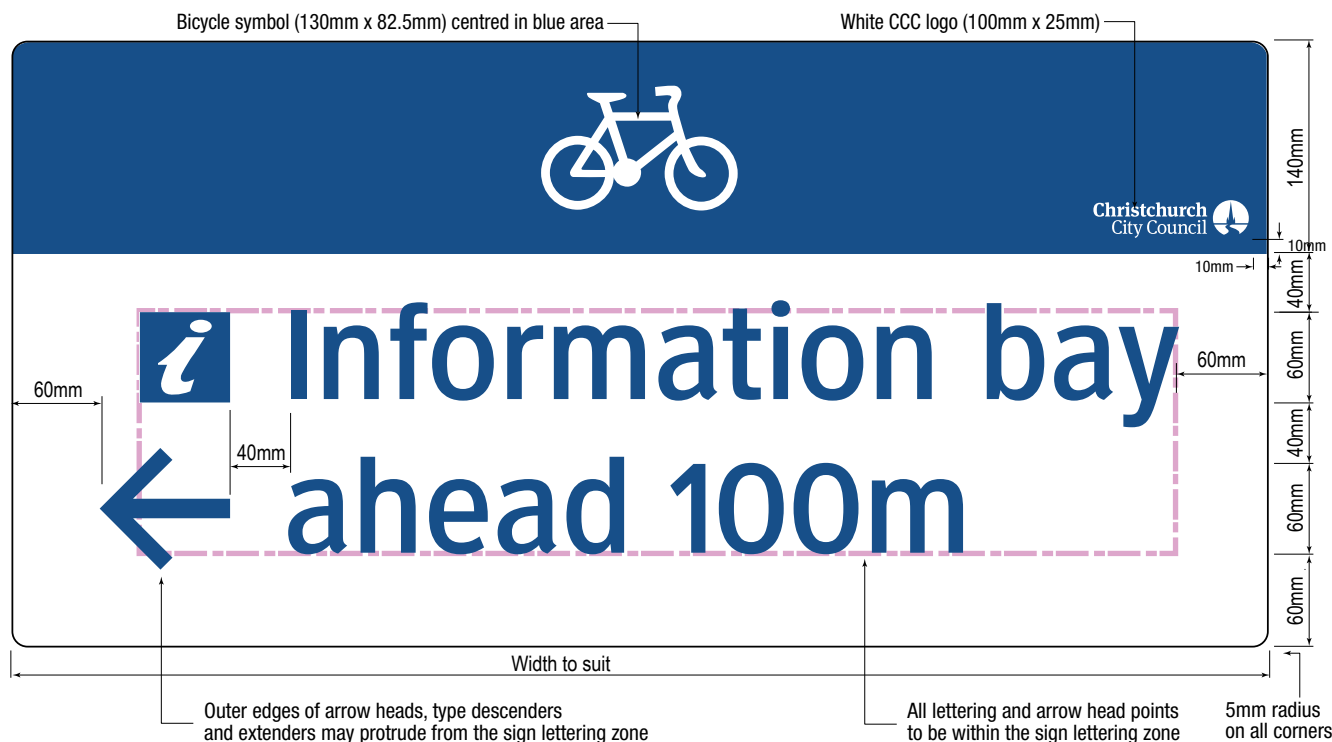
Notes

1. For on-road routes MBP signs are always mounted off-road in a map viewing bay (layout as shown above) or in an adjacent parklands.
2. When maps are used adjacent to off-road paths, the map board is sited with sufficient surrounding space to permit comfortable viewing of the map without obstructing the normal flow of pedestrians or cyclists using the path. See sheet MSP-E in this manual for details.
3. The viewing area surrounding the map board should be paved to minimise erosion.
4. For streets/roads with greater than 3,000vpd, mount one MBP-AD sign 100metres (or other distance to suit site conditions) in advance of map viewing bay on the same side of the street as the bay.
5. For streets/roads with traffic less than 3,000vpd, MBP-AD signs may be mounted to indicate the viewing bay from both approach directions.
6. Parking restriction signage should be erected to prevent overparking of the entrance and exit of the map viewing bay.

Drawing Number:
MSP-C



MSP-AD Bicycle Network Map Bay Advance Direction Sign – Layout details



MBP-AD Advance Direction Sign for use with Map Bay artwork template

Sign content notes

1. The distance to map viewing bay is nominally 100m. This may be varied to suit site requirements and the sign(s) sited accordingly.
2. This sign is intended for use for on-road travel in a one-way direction (same side as viewing bay) for roads ≥ 3000 vpd. For roads below 3000 vpd, signs may be placed to indicate the map viewing bay for travellers in a two-way direction.
3. CCC branding sized and positioned as shown.

MSP-AD Technical Details

Primary Route Map Bay Advance Direction Sign

Construction Details

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Type 1 aluminium stiffener rail centred widthways 100mm less of sheet width with mounted to galvanised post using straps and buckle.
3. Sign panel to type 1 aluminium stiffener rails using self-piercing riveting system (eg. Henrob).
4. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

SIGN LETTERING
60mm cap X-height (Clearview 3-B)

SIGN MASTHEAD
AS2700 B23 Bright Blue panel, width of sign x 140mm high
CCC Cyclist white, 100mm high

ARROWS
ADDA type 80mm

PICTOGRAM
PTI-Blue background. White "P"

Drawing Number:

MSP-AD



MSP-AD Bicycle Network Map Sign Bay Advance Direction Sign – Siting details for off-road use

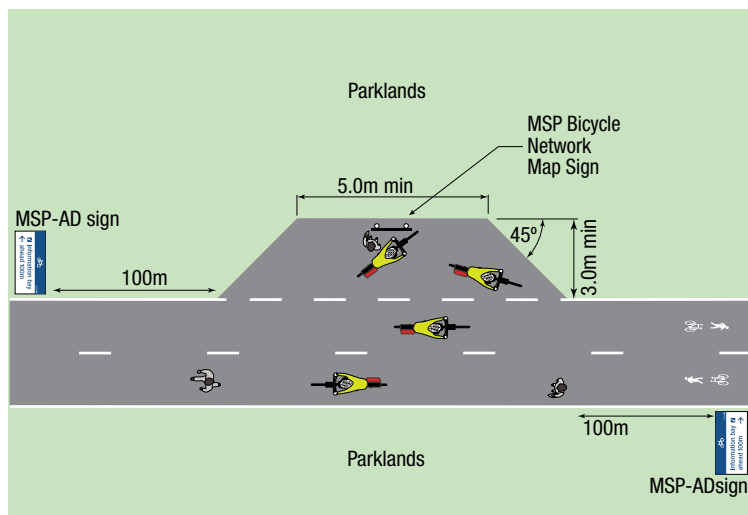


Figure A: Information Map Sign Viewing Bay for off-road path

The diagram below shows recommended layout for high-use path map sign viewing bay.



Figure B: Information Map Sign Viewing Bay example

This photograph shows a map sign viewing bay constructed adjacent to a high-use shared path with kerbed path and additional landscaping. Roma Street Parklands/Normanby Pedestrian Cycle Link. Brisbane, Queensland.

MSP Viewing Bay Technical Details

Layout for MSP viewing bay for off-road bicycle routes

The map should be sited for optimal viewing from the viewing bay as detailed in the diagram on this sheet.

Drawing Number:
MSP-D



2.2 Local route signs

2.2.1 FBL Local route fingerboards

Purpose

Local destination fingerboards are used on primary and secondary routes to mark the start of a route to a significant local destination (see Table 1 for types of destinations suitable for local signing).

When signing local routes, local destination fingerboards are usually used as the first and last sign of the route with all intermediate intersections/turnings indicated by local destination markers.

At the junction of a local and primary or secondary route, it is usual practice to erect bicycle network fingerboards (for the primary or secondary route) as well as the local destination fingerboard.

Local destination fingerboards are also used to mark short local routes and indicate local destinations in areas where there are no primary and secondary bicycle routes.

There are three versions of the local destination fingerboard. The FBL-1 one-line sign lists destination, distance and direction arrow. This design allows for the addition of pictograms to indicate facilities available at the destination.

The FBL-1 sign is used for routes to a single local destination. Pictograms can be used on the sign to indicate services and facilities available at the destination.

The FBL-2 fingerboard is used on a route linking a local destination to a primary or secondary bicycle route which in turn links to more important trip destinations. The top row of the FBL-2 sign lists the name of the route, the lower line lists the focal points at either end of the primary or secondary route. Another variation of the FBL-2 sign is used where there is an important sub destination (or a destination accessible from a branching path) along this route.

Local destination fingerboards are designed to mount with standard street name signs. Where possible it is preferable to

mount these fingerboards on the same pole and below street name signs.

Refer to Sign layout sheets FBL-1 and FBL-2 for layouts and technical details for local destination fingerboards.

Location

Local destination fingerboards are usually only located at intersections and point to the route travel direction along a street or path. Fingerboards are sited clear of turning traffic and in full visibility of cyclists using the route.

For ease of navigation it is preferable to locate all fingerboards on the one pole in a prominent location. Signs in split locations are to be carefully sited to be easily 'read' by the user. For example at a right turn of the route it may be useful to locate one fingerboard on the right side of the street in the direction of travel. This draws the eye of the user in the correct direction of travel. Locating signs outside the user's normal field of vision is to be avoided.

Sign posts are to be set a minimum of 500mm from the road/path edge, preferably on the same side as the direction of travel.

Site verification

Fingerboards need to be positioned in a way that minimises confusion at path junctions, particularly where there are multiple junctions.

Where applicable, fingerboards should direct pathway users to the most appropriate direction to enable them to easily follow the bicycle route.

Fingerboards located near roads must be positioned in a way that minimises confusion with road signs and names.

FBL Sign Variations

FBL-1

One-line Local Bicycle Route Fingerboard with Services Pictograms

Refer to drawing FBL-1 for sign layout, graphic and construction details

FBL-2

Two-line Local Bicycle Route Fingerboard with Primary/Secondary Route indication or with Sub Destination indication

Refer to drawing FBL-2 for sign layout, graphic and construction details



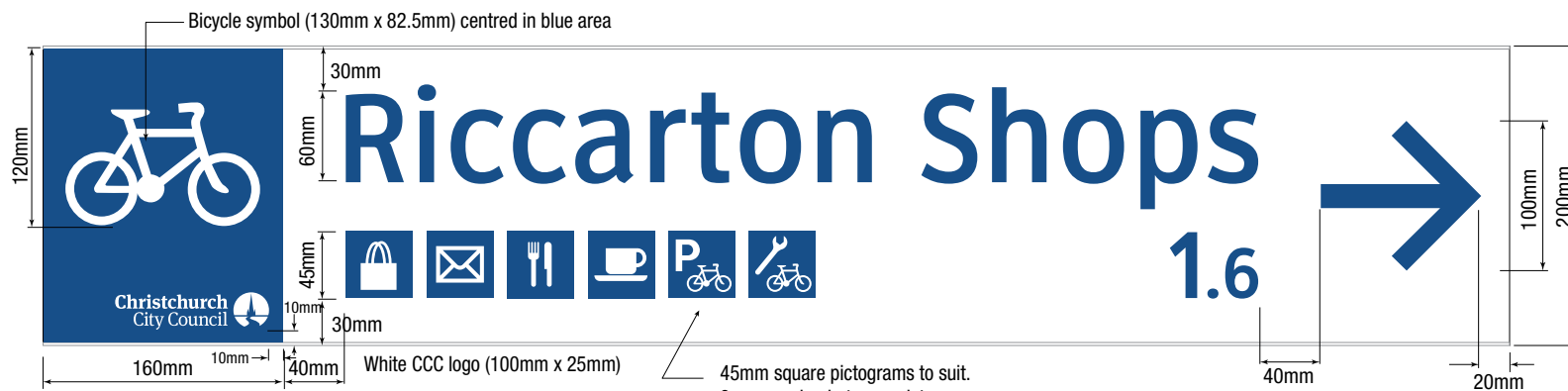
FBL-1 Local route/destination fingerboard - one destination only



FBL-1 Local cycle route fingerboard with optional pictograms (max 6)
Mounted on same pole beneath street name sign.



FBL-1 Local route fingerboard reverse side of above sign



FBL-1 Local route fingerboard artwork template

Sign content notes

1. Local Fingerboard Signs are double sided. See left for reverse side layout details.
2. The FBL-1 sign has only one listed destination per sign. The bottom row may contain pictograms and the distance to the listed destination.
3. The white bicycle symbol in a blue background is located at the mounting end of each sign face, with the cyclist facing the direction of travel.
4. Distance numerals are located on the bottom row aligned with the destination name and adjacent to the direction arrow. The direction arrow always points outwards from the sign mounting towards the direction of travel. Upward pointing arrows are not used.
5. Distances above 10km are rounded to the nearest kilometre.
6. Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
7. Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals. Distances less than 100m are not shown.
8. Distance numerals for whole kilometres have a Cap X-height of 45mm (same as the pictograms). Numerals for distances less than one kilometre have a Cap X-height of 34mm.
9. Maximum length of fingerboard is 1200mm subject to lettering content.

FBL Technical Details

Construction Details

1. Standard CCC street sign aluminium extrusion 200mm high (length to suit lettering). Standard Grade H5005 H34. Maximum length 1200mm subject to content.
2. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

DESTINATIONS

Top line: 60mm cap X-height (Clearview 3-B)

Bottom line: 45mm cap X-height (Clearview 3-B)

DISTANCES

(Bottom line only) Clearview 3-B, $\geq 1\text{km}$ 45mm cap X-height, $< 1\text{km}$ 34mm cap X-height

BICYCLE SYMBOL

White bicycle symbol 130mm x 82.5mm

ARROWS

ADDA type 100mm

Drawing Number:

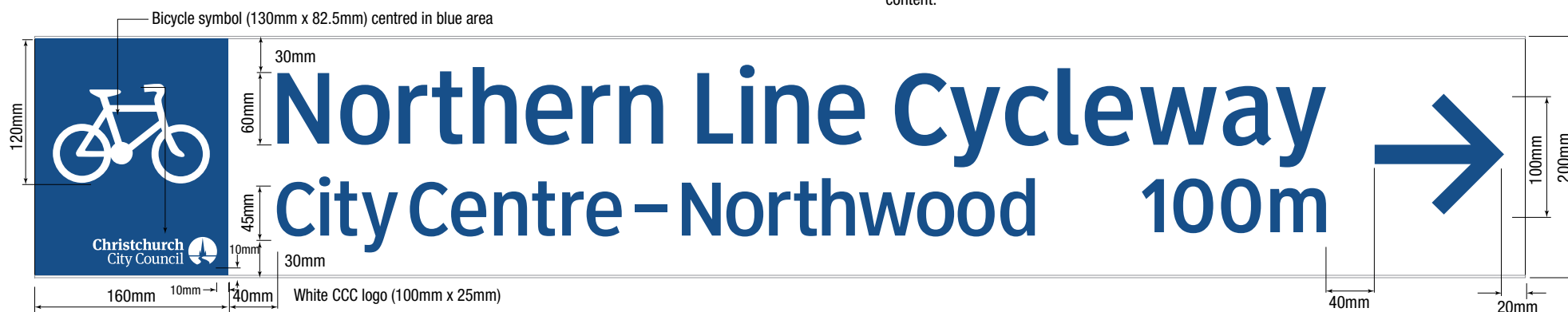
FBL-1



FBL-2 Local route/destination fingerboard - two destination lines



FBL-2 Local route fingerboard with two destinations. Sub destination on lower row.



FBL-2 Local route fingerboard with main destination - artwork template

Sign content notes

1. Local Fingerboard Signs are double sided. See previous page for details of a typical reverse side layout.
2. The FBL-2 sign has up to two listed destinations per sign. The bottom row may also contain the destinations for the indicated cycleway. Only the distance to the cycleway is listed (there will be other signage at the cycleway junction to provide this information).
3. A white bicycle symbol in a blue background is located at the mounting end of each sign face, with the cyclist facing the direction of travel.
4. Distance numerals are located on the bottom row aligned with the destination name and adjacent to the direction arrow. The direction arrow always points outwards from the sign mounting towards the direction of travel. Upward pointing arrows are not used.
5. Distances above 10km are rounded to the nearest kilometre.
6. Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
7. Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals. Distances less than 100m are not shown.
8. Distance numerals for whole kilometres have a Cap X-height of 45mm (same as the pictograms). Numerals for distances less than one kilometre have a Cap X-height of 34mm.
9. Maximum length of fingerboard is 1200mm subject to lettering content.

FBL Technical Details

Construction Details

As for FBL-1. See previous page.

Graphic Details

As for FBL-1. See previous page.

Sizes

As for FBL-1. See previous page.

Drawing Number:
FBL-2



2.2.2 LM Local route markers

Purpose

Local destination markers are used to mark local routes which typically branch off primary or secondary routes to reach important local destinations. Markers are used between the FBL fingerboards located at either end of the local route to mark route turnings and reassure riders that they are on the correct path of travel.

There are two versions of local destination markers. The horizontal layout type is double-sided and designed for side mounting with bracketing usually on the same poles and below standard street name signs.

Vertical type markers are single-sided markers designed to face the cyclist along a street or at a turning. These markers can be mounted on new or existing poles.

Refer to sign layout sheets LMH and LMV for layouts and technical details for local destination markers.

Location

Local destination markers are usually located at intersections and point to the route travel direction along a street or path. Markers are sited in full visibility of cyclists using the route.

All marker posts are to be set a minimum of 500mm from the road/path edge, preferably on the same side as the direction of travel.

Site verification

Route markers need to be positioned in a way that minimises confusion at path junctions, particularly where there are multiple junctions.

Where applicable, markers should direct users to the most appropriate direction to enable them to easily follow the bicycle route.

Markers located near roads must be positioned in a way that minimises confusion with road signs and names.

Local Route Markers Sign Variations

LMH

Local Bicycle Route Marker Horizontal Format
Refer to drawing LMH for graphic and construction details

LMV-SA

Local Bicycle Route Marker Vertical Format, arrow indicating straight ahead
Refer to drawing LMV for graphic and construction details

LMV-LT

Local Bicycle Route Marker Vertical Format, arrow indicating left turn
Refer to drawing LMV for graphic and construction details

LMV-RT

Local Bicycle Route Marker Vertical Format, arrow indicating right turn
Refer to drawing LMV for graphic and construction details

LMV-VL

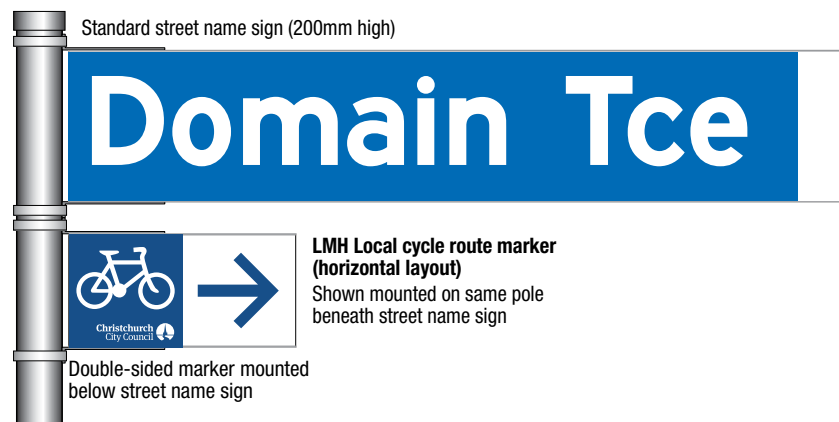
Local Bicycle Route Marker Vertical Format, arrow indicating veer left
Refer to drawing LMV for graphic and construction details

LMV-VR

Local Bicycle Route Marker Vertical Format, arrow indicating veer right
Refer to drawing LMV for graphic and construction details



LMH Local Route Marker Horizontal Type – Layout details



Sign content notes

1. Route markers are used on local routes in between fingerboards to mark route turnings and as a general aid to route navigation.
2. Route markers are preferably mounted below or on the same pole as street name signs.
3. Horizontal markers are double sided and are designed to mount singly or with street name signs to indicate route turnings.
4. The marker is bracket mounted with the arrow pointing in the direction of travel. The arrow should always point outwards from the mounting on each side of the marker.
5. The bicycle symbol always faces in the same direction as the arrow on both sides of the marker plate.

LMH Technical Details

Construction Details

1. Standard CCC street sign aluminium extrusion 150mm high x 300mm long. Standard Grade H5005 H34.
2. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

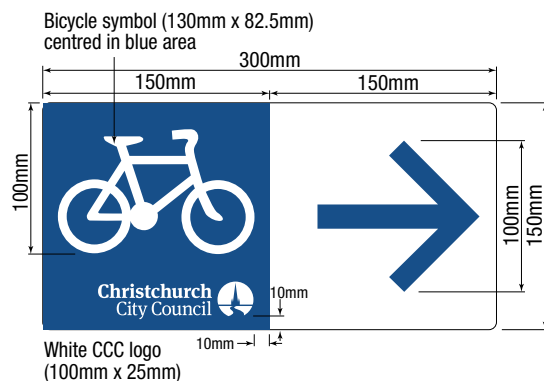
Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

BICYCLE SYMBOL
White bicycle symbol 130mm x 82.5mm

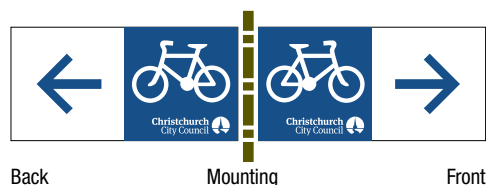
ARROWS
ADDA type 100mm

Local cycle routes are signed between local cycle route fingerboard signs using route markers



White CCC logo
(100mm x 25mm)

LMH Local route marker horizontal format artwork template



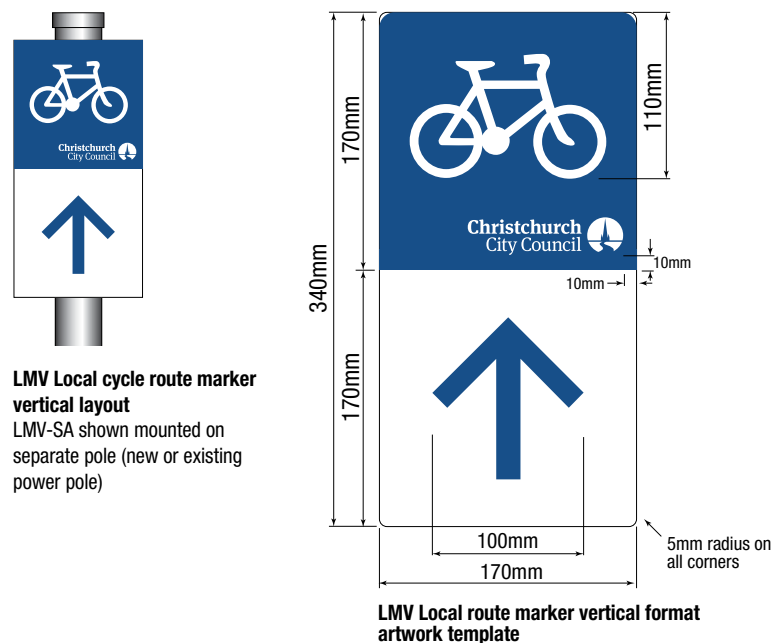
LMH Local route marker double sided layout arrangement

Drawing Number:

LMH



LMV Local Route Marker Vertical Type – Layout details



Sign content notes

1. Route markers are used on local routes in between fingerboards to mark route turnings and as a general aid to route navigation.
2. Route markers are preferably mounted below or on the same pole as street name signs.
3. Vertical markers are single-sided and are designed to mount on new or existing street poles to indicate route turnings.
4. The marker is mounted with the arrow pointing in the direction of travel. The arrow should always point cyclists in the recommended direction of travel.
5. The bicycle symbol faces in the same direction as the arrow. For 'Up arrow' markers the bicycle symbol faces to the right.

LMV Technical Details

Construction Details

1. 340mm high x 170mm wide, 6mm aluminium Standard Grade H5005 H34 with 5mm radius corners.
2. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

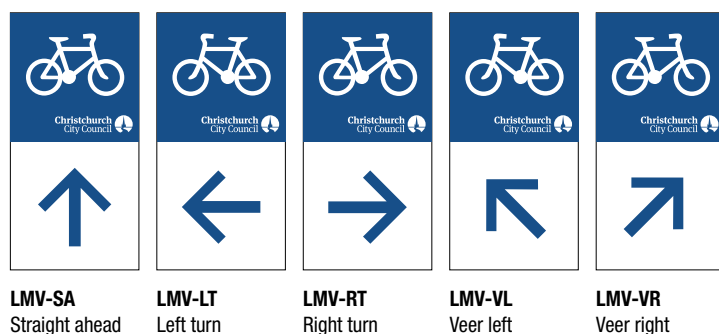
Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

BICYCLE SYMBOL
White bicycle symbol 130mm x 82.5mm

ARROWS
ADDA type 100mm

RMV Local route marker vertical format layout variations



Drawing Number:
LMV



2.3 Tourist/recreational signs

2.3.1 FBT Tourist/recreational route fingerboards

Purpose

Tourist/recreational route fingerboards are the major means of indicating bicycle route direction at decision points or intersections. Focal point destinations for the route, plus any sub destinations, are shown on intersection fingerboards along with distances.

If advance or reassurance direction signage is required near an intersection on tourist or recreational bicycle routes to ensure adequate route wayfinding (due to complicated intersection alignments etc), tourist/recreational route markers should be used.

Refer to sign layout sheets FBT for layouts and technical details for local destination fingerboards.

Location

Tourist/recreational fingerboards are usually only located at intersections and point to the route travel direction along a street or path. Fingerboards are sited clear of turning traffic and in full visibility of cyclists using the route.

For ease of navigation it is preferable to locate all fingerboards on the one pole in a prominent location. Signs in split locations are to be carefully sited to be easily 'read' by the user. For example at a right turn of the route it may be useful to locate one fingerboard on the right side of the street in the direction of travel. This draws the eye of the user in the correct direction of travel. Locating signs outside the user's normal field of vision is to be avoided.

Sign posts are to be set a minimum of 500mm from the road/path edge, preferably on the same side as the direction of travel.

Site verification

Fingerboards need to be positioned in a way that minimises confusion at path junctions, particularly where there are multiple junctions.

Where applicable, fingerboards should direct pathway users to the most appropriate direction to enable them to easily follow the bicycle route.

Fingerboards located near roads must be positioned in a way that minimises confusion with road signs and names.

FBT Sign Variations

FBT-1

One-line Local Bicycle Route Fingerboard with Services

Pictograms

Refer to drawing FBT for sign layout, graphic and construction details

FBT-2

Two-line Local Bicycle Route Fingerboard with Primary/Secondary Route indication

Refer to drawing FBT for sign layout, graphic and construction details



FBT Tourist/Recreational Route Fingerboards

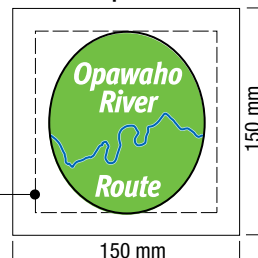


Route branding logo
for use on signs -
artwork template



Maximum size of logo
100mm square

Route branding logo for
use external to signs -
artwork template



Maximum size of logo
120mm square

Sign content notes

1. Distance numerals are located between the direction arrow and the destination name. The direction arrow always points outwards from the sign mounting towards the direction of travel.
2. The white cyclist symbol in blue background is always located at the mounting end of each sign face. The cyclist always faces in the direction of travel.
3. Distances above 10km are rounded to the nearest kilometre.
4. Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
5. Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals.
6. Distance numerals are aligned on the decimal point.
7. Distance numerals one kilometre and above are the same point size as destination names. Numerals for distances less than one kilometre are shown in metres and have a Cap X-height of 45mm.
8. Maximum length of fingerboard is 1200mm subject to lettering content.

FBT Technical Details

Construction Details

1. Standard CCC street sign aluminium extrusion 200mm high (length to suit lettering). Standard Grade H5005 H34. Maximum length 1200mm subject to content.
2. Mounting and construction to CCC Construction Standard Specification.
3. External route branding tag made of 150mm aluminium extrusion fixed to pole beneath sign with standard Signfix fittings.

Graphic Details

Digital printed graphics in AS2700 X65 Dark Brown using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

DESTINATIONS
60mm cap X-height (Clearview 3-B)

DISTANCES
Clearview 3-B, ≥1km 60mm cap X-height,
<1km 45mm cap x-height

BICYCLE SYMBOL
White bicycle symbol 130mm x 82.5mm

ARROWS
FBDA-1 and FBDA-2 types



Drawing Number:
FBT



2.3.2 FIT Tourist/recreational facility indicators

Purpose

These fingerboard type signs are used on tourist/recreational routes to direct riders to facilities and attractions relevant to the route. They are usually used at intersections or access roads adjoining the route.

The name of the facility/attraction is shown on the fingerboard along with distances to these destinations. Where distances are less than 1 kilometre these shall be shown in metres. These signs are subject to approval by the route management authority. Facilities signs may include one or more facilities logos to indicate the availability of facilities/services such as toilets, water, rest stops, accommodation and attractions such as points of local interest and historic sites.

Refer to Sign layout sheet FIT for layouts and technical details for local destination fingerboards.

Location

Tourist/recreational facility indicators are usually only located at intersections and point along the route travel direction towards the facility being indicated. Facility indicator signs are sited clear of turning traffic and in full visibility of cyclists using the route.

Sign posts are to be set a minimum of 500mm from the road/path edge, preferably on the same side as the direction of travel.

Site verification

Fingerboards need to be positioned in a way that minimises confusion at path junctions, particularly where there are multiple junctions.

Where applicable, fingerboards should direct pathway users to the most appropriate direction to enable them to easily follow the bicycle route.

Fingerboards located near roads must be positioned in a way that minimises confusion with road signs and names.

FIT Sign Variations

FIT-1

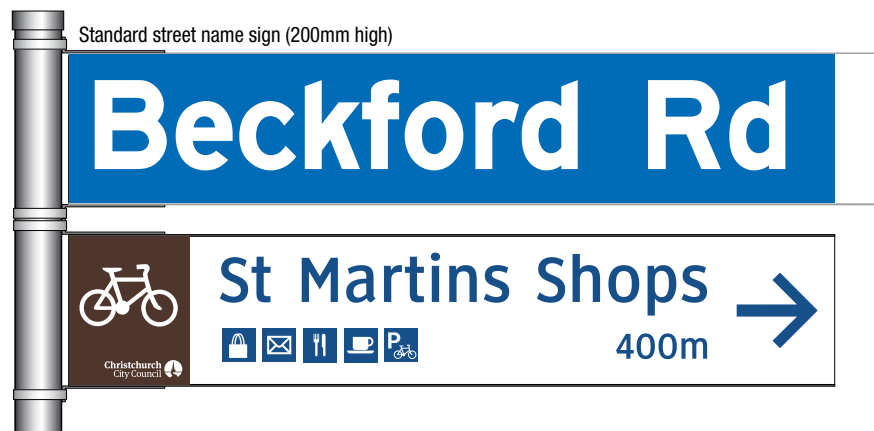
One-line Local Bicycle Route Fingerboard with services pictograms
Refer to drawing FIT for sign layout, graphic and construction details

FIT-2

Two-line Local Bicycle Route Fingerboard without services pictograms and extra text on lower line to assist wayfinding
Refer to drawing FIT for sign layout, graphic and construction details



FIT Tourist/Recreational Route Facility Indication fingerboards



FIT-1 Facility Indication fingerboard (one destination) with optional pictograms (max 6)

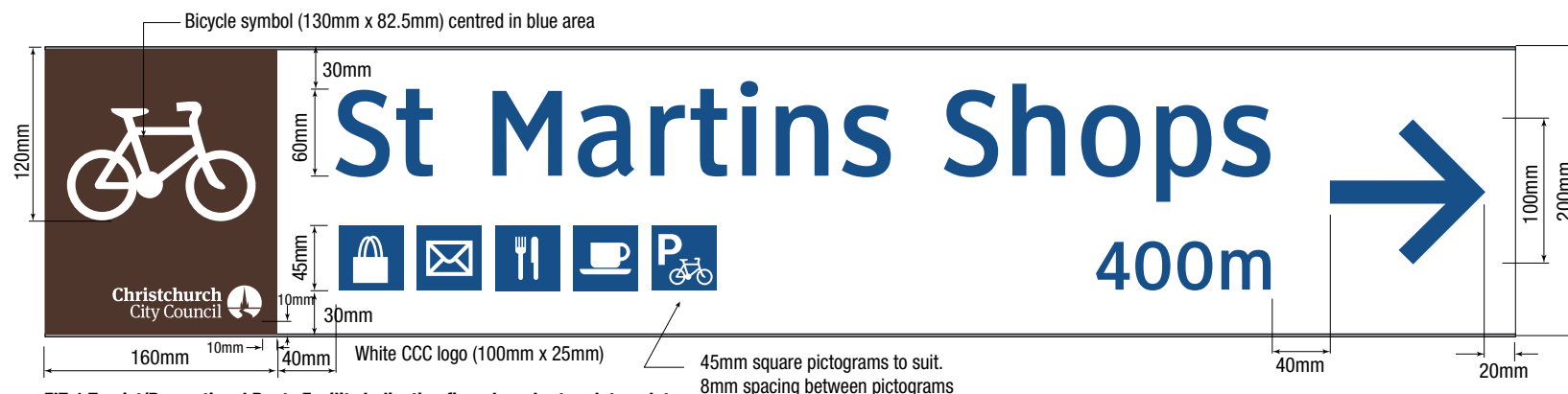
Signs pointing to destinations off the route do not use route branding logos. See Sheets FBP, FBL-1 for similar details of reverse side layout.

All sign dimensions same as fingerboard below



FIT-2 Facility indication fingerboard (one destination) without pictograms

Distance numerals are always positioned on the bottom row to reduce sign length



FIT-1 Tourist/Recreational Route Facility Indication fingerboard artwork template

Christchurch City Council • Bicycle Network Sign Design Manual • September 2014

Sign content notes

1. The FIT-1 sign has only one listed destination per sign. The bottom row may contain pictograms and the distance to the listed destination or additional text to assist wayfinding.
2. The white bicycle symbol in a brown background is located at the mounting end of each sign face, with the bicycle facing the direction of travel.
3. Distance numerals are located on the bottom row aligned with the destination name and adjacent to the direction arrow. The direction arrow always points outwards from the sign mounting towards the direction of travel. Upward pointing arrows are not used.
4. Distances above 10km are rounded to the nearest kilometre.
5. Distances less than 10km are shown to the nearest 100 metres in standard decimal form.
6. Distances less than one kilometre are shown in metres (rounded to the nearest 100 metres eg: 300m). When listed on signs the numerals and the 'm' abbreviation (no space in between) are aligned right with other destination numerals. Distances less than 100m are not shown.
7. Distance numerals for whole kilometres have a Cap X-height of 45mm (same as the pictograms or text). Numerals for distances less than one kilometre have a Cap X-height of 34mm.
8. Maximum length of fingerboard is 1200mm subject to lettering content.

FIT Technical Details

Construction Details

1. Standard CCC street sign aluminium extrusion 200mm high (length to suit lettering). Standard Grade H5005 H34. Maximum length 1200mm subject to content.
2. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

Digital printed graphics in AS2700 X65 Dark Brown using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

DESTINATIONS
60mm cap X-height (Clearview 3-B)

DISTANCES
Clearview 3-B, ≥1km 60mm cap X-height,
<1km 45mm cap x-height

BICYCLE SYMBOL
White bicycle symbol 130mm x 82.5mm

ARROWS
ADDA type 100mm

Drawing Number:
FIT



2.3.3 TMV & TMVB Tourist/Recreational Route Markers

Purpose

Tourist/recreational route markers are an additional aid to navigation and are used to supplement direction signing on routes that are significant through-routes (lengthy off-road trails). Markers, when used away from intersections, are placed at 5km intervals. Markers can also be used on trails as advance direction and reassurance signs to supplement intersection fingerboards.

Tourist/recreational route markers are single-sided signs designed to face the cyclist along a street or at a turning. These markers can be mounted on new or existing poles. The TMVB marker is similar to the TMV marker with the exception of an inset route branding logo.

Refer to sign layout sheet TMV for layouts and technical details for tourist/recreational route markers.

Location

Tourist/recreational route markers are usually located at intersections and point to the route travel direction along a street or path. Markers are sited in full visibility of cyclists using the route.

All marker posts are to be set a minimum of 500mm from the road/path edge, preferably on the same side as the direction of travel.

Site verification

Route markers need to be positioned in a way that minimises confusion at path junctions, particularly where there are multiple junctions.

Where applicable, markers should direct users to the most appropriate direction to enable them to easily follow the bicycle route.

Markers located near roads must be positioned in a way that minimises confusion with road signs and names.

Tourist/Recreational Route Markers Sign Variations

TMV-SA

Tourist/recreational Bicycle Route Marker Vertical Format, arrow indicating straight ahead
Refer to drawing TMV for graphic and construction details

TMV-LT

Tourist/recreational Bicycle Route Marker Vertical Format, arrow indicating left turn
Refer to drawing TMV for graphic and construction details

TMV-RT

Tourist/recreational Bicycle Route Marker Vertical Format, arrow indicating right turn
Refer to drawing TMV for graphic and construction details

TMV-VL

Tourist/recreational Bicycle Route Marker Vertical Format, arrow indicating veer left
Refer to drawing TMV for graphic and construction details

TMV-VR

Tourist/recreational Bicycle Route Marker Vertical Format, arrow indicating veer right
Refer to drawing TMV for graphic and construction details

TMVB-SA

Tourist/Recreational Bicycle Route Marker with route branding logo and arrow indicating straight ahead
Refer to drawing TMV for graphic and construction details

TMVB-LT

Tourist/Recreational Bicycle Route Marker with route branding logo and arrow indicating left turn
Refer to drawing TMV for graphic and construction details

TMVB-RT

Tourist/Recreational Bicycle Route Marker with route branding logo and arrow indicating right turn
Refer to drawing TMV for graphic and construction details

TMVB-VL

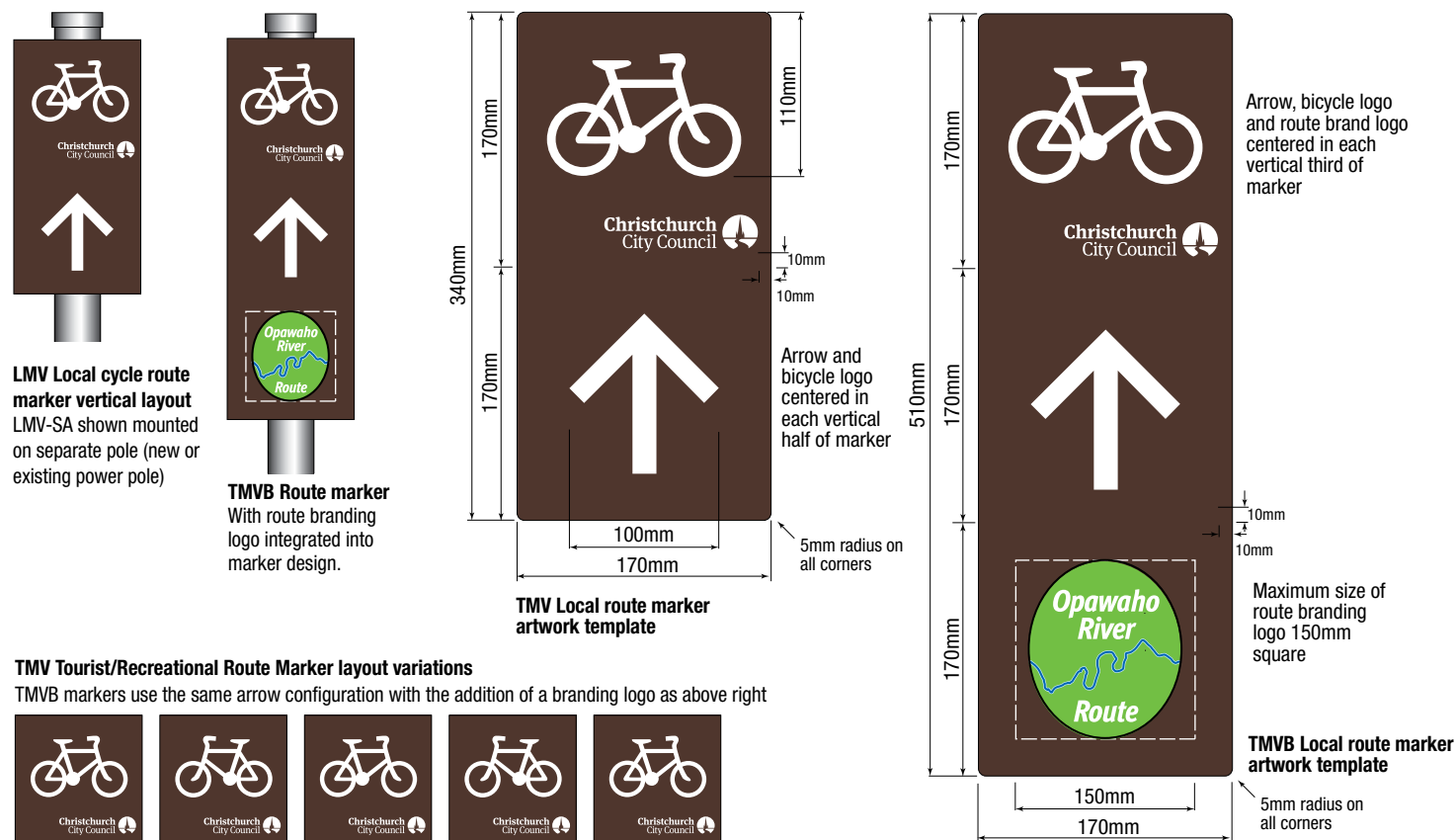
Tourist/Recreational Bicycle Route Marker with route branding logo and arrow indicating veer left
Refer to drawing TMV for graphic and construction details

TMVB-VR

Tourist/Recreational Bicycle Route Marker with route branding logo and arrow indicating veer right
Refer to drawing TMV for graphic and construction details

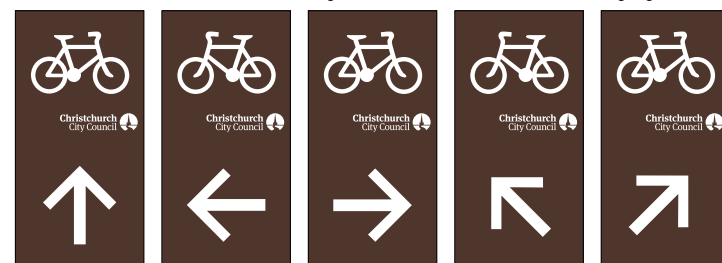


TMV and TMVB Tourist/Recreational Route Markers – Layout details



TMV Tourist/Recreational Route Marker layout variations

TMVB markers use the same arrow configuration with the addition of a branding logo as above right



TMV-SA Straight ahead
TMV-LT Left turn
TMV-RT Right turn
TMV-VL Veer left
TMV-VR Veer right

Sign content notes

1. Route markers are used on tourist/recreational routes in between fingerboards to mark route turnings and as a general aid to route navigation.
2. In urban areas markers are preferably mounted below or on the same pole as street name signs.
3. Markers are single-sided and are designed to mount on new or existing street poles to indicate route turnings.
4. The marker is mounted with the arrow pointing in the direction of travel. The arrow should always point cyclists in the recommended direction of travel.
5. The bicycle symbol faces in the same direction as the arrow. For 'Up arrow' markers the bicycle symbol faces to the right.

TMV & TMVB Technical Details

Construction Details

1. TMV 340mm high x 170mm wide. 6mm aluminium Standard Grade H5005 H34 with 5mm radius corners.
2. TMVB 510mm high x 170mm wide. 6mm aluminium Standard Grade H5005 H34 with 5mm radius corners.
3. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

Digital printed graphics in AS2700 X65 Dark Brown using full solvent inks onto white Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

BICYCLE SYMBOL
White bicycle symbol 130mm x 82.5mm

ARROWS
ADDA type 100mm

Drawing Number:
TMV



2.4 Path-use signage

Guidance signage to provide information on path features and to communicate key behavioural messages to path users has been developed for use on shared paths.

To improve management of shared paths through the promotion of key behavioural messages, a tiered implementation framework is recommended and is detailed in *VicRoads Cycle Notes 10 – Shared Path Behavioural Signs* and in the *NSW Bicycle Guidelines* Section 6.6 (see Table 4 and Figure 1 below). Choosing the appropriate level of path marking requires a site-specific analysis of the types of path user and the operational conditions relating to each location.

In addition to the multi-message PBS sign detailed below and on Drawing PBS, a set of four advisory signs has been developed for use on shared paths (Figure 1). These signs are to be used in conjunction with standard path linemarking and pavement symbols.

To improve management of shared paths through the use of the individual key message signs, a three level implementation framework is recommended. This framework (Table 4) provides recommendations from a basic Level 1 management up to high Level 3, where specific problem issues are addressed by targeted signage erected at path 'hot spots'.

Table 4: Shared Path Behavioural Sign Installation Framework

Level	Level of usage	Recommended installation
Level 1	Basic requirement for all shared paths. Low use and few reported conflicts.	Path centreline and pavement symbols. See Austroads for path linemarking recommendations.
Level 2	Moderate path use and number of reported conflicts.	As for Level 1 plus group signs (Figure 1 (e) or (g)) at key locations and sign columns (Figure 1 (f)) at min 500m spacings.
Level 3	High path use and number of reported conflicts.	As for Level 2 plus additional single or grouped behavioural signs according to the type and level of reported and observed conflicts.

Choosing the appropriate level of path signage requires an understanding of the types of path user and some information on the predominant types of conflicts and their locations.

It is recommended that an incremental 'bottom up' approach be used when installing the signs. Begin with Level 1 behavioural messages. These may be sufficient to significantly improve user behaviour and reduce conflicts to an acceptable level. Allow path

Figure 1: Shared path behavioural signs - individual messages



users to get used to these Level 1 messages and, if necessary, make some observations or obtain feedback from path users. If further education of path users is required, consider introducing a Level 2 approach and then, if appropriate, site specific Level 3 messages.

2.4.1 PBS Path behaviour sign

Purpose

Where continuing instances of a range of poor path user behaviour and conflict between different types of users are recorded, the multi-message path-use sign may be selectively applied to improve path operation and to increase enjoyment and mutual respect among path users.

Location

This sign is designed for use on high-volume pathways or where shared path conflict has been often reported by the community.

The sign features four key messages: SHARE THE PATH legends are placed on the main path near access points.

KEEP LEFT and RING YOUR BELL legends are placed intermittently on a path, at distances no closer than 400m apart.

SLOW DOWN legends should only be placed at known 'hot spots' of speeding cyclists, or at blind/ narrow curves in the path.

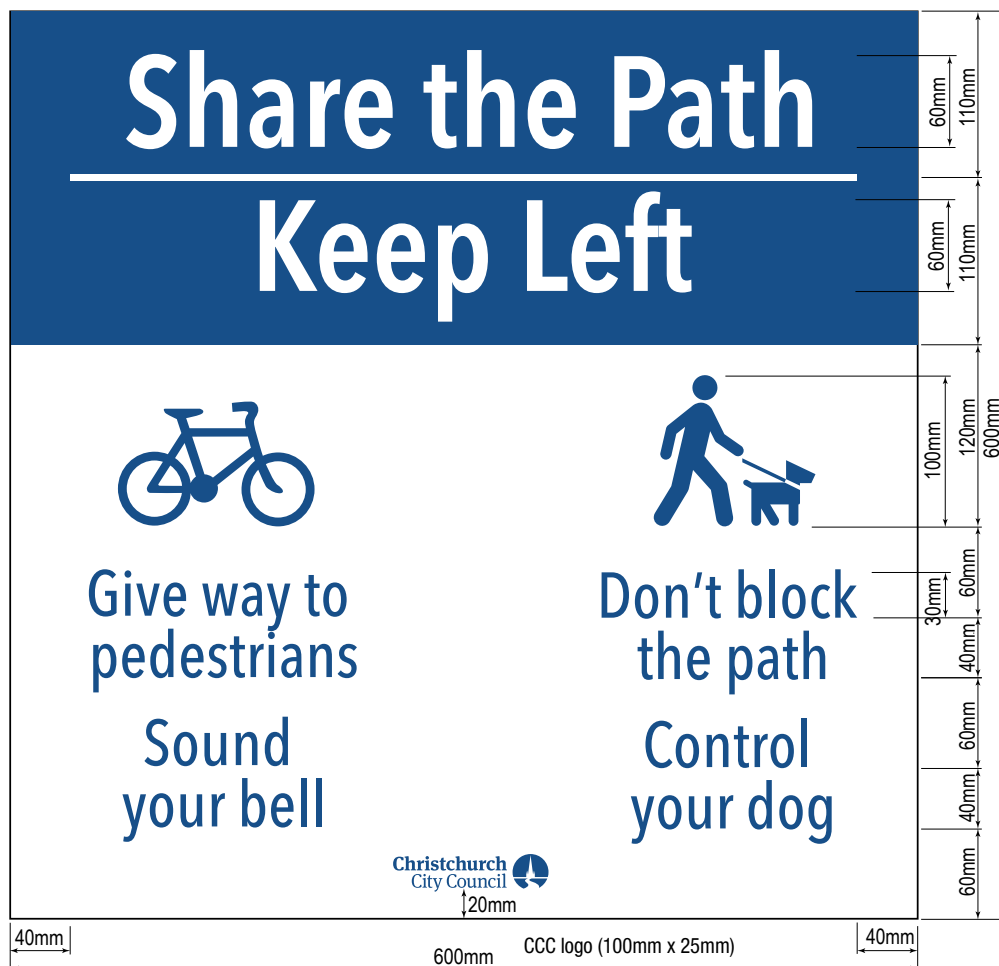
DOGS ON LEASH legends are placed near path access points and in areas where uncontrolled dogs have been regularly reported.

Site verification

Locations are selected where there is no existing signage, to avoid over-use of this medium.



PBS Path Behaviour Sign – Layout details



PBS Technical Details

Path behaviour sign

Construction Details

1. 1.6mm aluminium type 5251, tempered H38 as specified in Australian Standards 1734, sign panel with 5mm radius corners and digitally printed graphics.
2. Type 1 aluminium stiffener rail centred widthways 100mm less of sheet width with mounted to galvanised post using straps and buckle.
3. Sign panel to type 1 aluminium stiffener rails using self-piercing riveting system (eg. Henrob).
4. Mounting and construction to CCC Construction Standard Specification.

Graphic Details

Digital printed graphics in AS2700 B23 Bright Blue using full solvent inks onto 600 x 1000mm White Class 2 retroreflective material sheeted with anti-graffiti overlay film NI-EF 40801-12-45 or equivalent.

Sizes

MAIN MESSAGES
60mm cap X-height

SUB MESSAGES
30mm cap X-height

CCC LOGO
100mm x 25mm, centred, 20mm from bottom

USER LOGOS
100mm high

Drawing Number:

PBS



3 Route numbering, naming and branding

The primary cycle route signage system makes provision for the naming of cycle routes where these already exist (ADPNR and RDPNR sign variations). Naming routes is, however, cumbersome. Naming routes does not necessarily improve wayfinding and can place heavy demands on available sign space and can consequently increase the size of signs.

Lengthy route names are to be avoided. Where the length of a route name exceeds the available sign length (usually determined by the length of the longest listed destination) an abbreviated form or a smaller letter size may need to be used. When used, named route indication is limited to signs at the start and finish of the named route and to important junctions where other major routes enter.

Longer recreational and tourist routes are being developed throughout New Zealand for a variety of purposes ranging from local recreational paths to long distance trails such as the New Zealand Cycle Trail. These routes often pass through a number of local government areas. To give the route its own identity, local governments can cooperate to give the route a distinctive branding and a promotional identity which encompasses design elements such as path logo, specialist wayfinding and facilities signage designs.

The preferred way to identify tourism and recreational routes, along with more easily identifiable urban routes, is by branding – using an easily recognisable logo or symbol to mark the route. Humans respond quicker to symbols and graphical shapes and can read them from far greater distances than lettering or words. Logos are very compact and so require very little precious sign space.

Where a cycle route uses part or all of a route with a branded identity, the logo for this route may be integrated into the sign design (for new tourism and recreational cycle route signage installations) or affixed to existing signage as shown in the example on this page. Primary cycle route signage branding is integrated into the sign design as shown in the detail diagram. Local routes do not use branding logos.

Route branding logos can be used to indicate different routes by locating them on the same line as the relevant destination (see example). Where route identity branding logos are used for individual destinations, they are located on the same line as the related destination name and placed at the opposite end of the text line to the distance indication numerals. Where branding logos are primarily associated with the route (ie all listed destinations), they are located at the top of the sign adjacent to the bicycle symbol as for numbered routes (see the branding examples illustrated on this page). Logos, when used in conjunction with individual destinations should always match the height of the associated destination lettering.



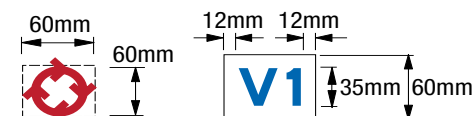
Above: Integrated route branding on German national bicycle network signage. This example shows an advance direction sign in Munich, Bavaria. The lower sign indicates a link at the next junction to a lower riverside path. This path carries three overlapping branded routes - the Inner Ring Route (top line) and the River Isar Bike Route which is also part of German National Route Number 11 (lower line).



ADP sign layout with branded route



RDP sign layout on a veloway with branded route



Sample branded route logo
Maximum size of logo

Numbered route indicator for TMR veloway

Above: Route branding examples from the *Brisbane City Council Bicycle Signage Manual*. The red symbol is used to denote a City Circle Route. The V1 tag indicates a high-speed, limited-access veloway, the V1.



4 Construction, materials and installation

All work and materials shall comply with Christchurch City Council Construction Standard Specification

4.1 Construction standards

Construction standards is to be of the highest of industry standards. Spaces, drilled holes and fixings shall be consistent from one sign to another.

Screws, adhesives and silicones shall be concealed and or made flush with the surface.

Fit components with care. Graphic standards are to be carefully adhered to.

4.2 Graphic standards

The following rules of graphic quality apply:

- All lettering shall be true to its letter form in face weight and construction.
- All graphics are to be electronically, photographically or mechanically reproduced.
- All colours are as specified in AS2900 colour reference system or other specified colour.

Graphics

Sign messages are to be created from electronic artwork to faithfully reproduce the shapes and typefaces specified. The graphic layouts shall follow the guidelines outlined in the individual sign layout drawings. Graphics shown on these drawings will be provided on CDROM as Illustrator .ai or .eps files in Macintosh or Windows format.

It is the responsibility of the sign maker to ensure that all electronic files are accurately converted and match the individual sign layout drawings provided in form, size & colour.

The drawings shown in this manual are to be used as the primary reference.

Vinyl graphics

Cut from self-adhesive vinyl by computer operated flatbed knife cutter or other accurate technique.

Typeface

The fonts shown on the sign type drawings are to be used for all messages, text and numerals except where specifically stated otherwise. No other versions of typefaces will be accepted. It is the responsibility of the sign maker to purchase the fonts as specified.

Pictograms and arrows

Only the symbols as shown on the sign type drawings are to be used. No other versions will be accepted.

Colours

Colours for all parts and faces are as noted on the drawings.

4.3 Installation standards

Site conditions

Site inspections are to be carried out prior to installation to verify locations and confirm all mounting conditions.

General

All installations to be plumb and level, at the heights indicated, securely mounted with theft-resistant fixings.

Work shall be complete with all bolts, rivets and other fittings to adequately transmit the loads and stresses imposed.

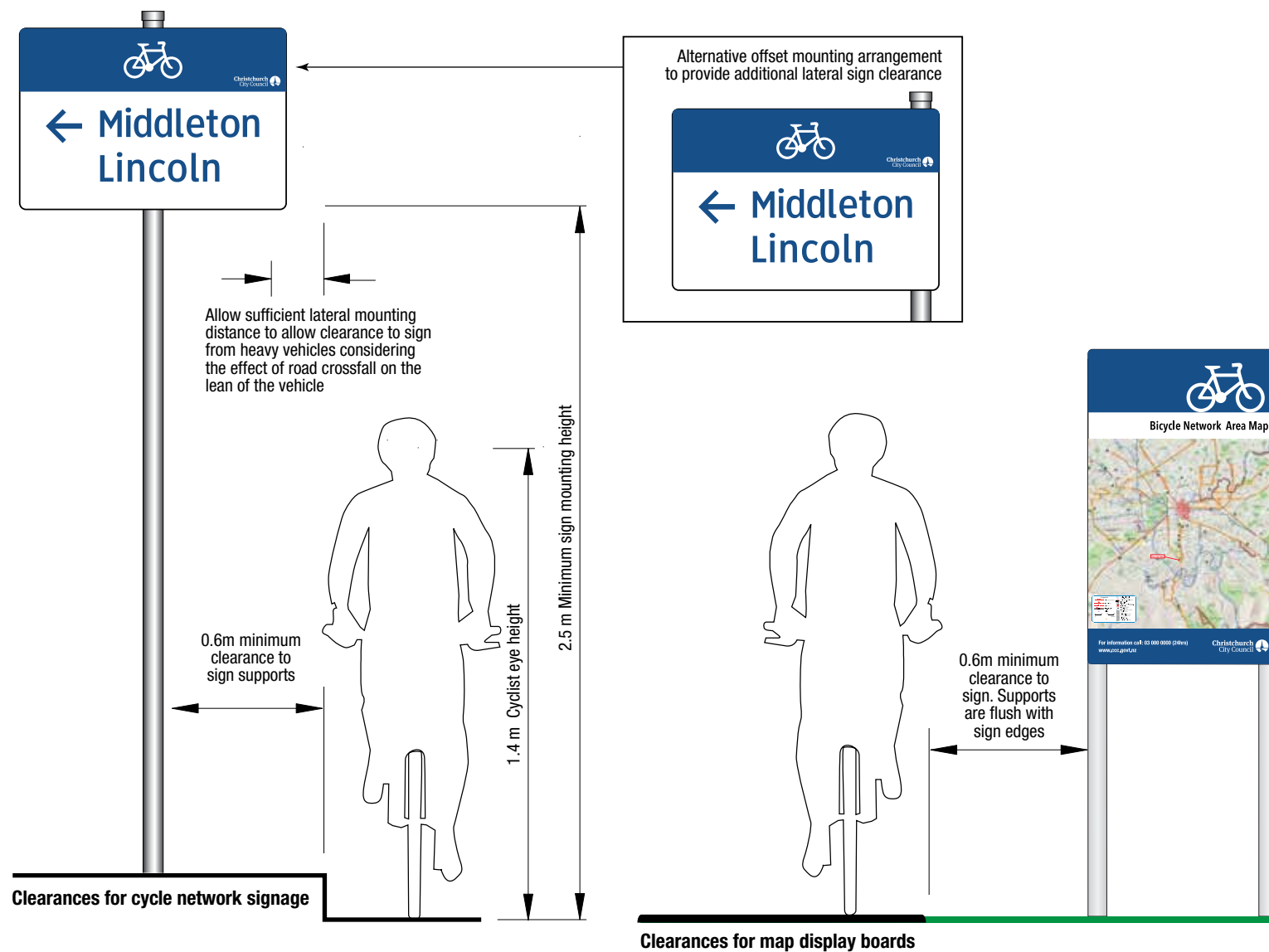
Where bolting of metal work to concrete is specified, fixings to be of approved masonry anchors of the required size.

Proper edge clearances are observed so there is no risk of possible damage to concrete or structural framing.

Packing of fixings is permitted to approved tolerances to level and square installations.

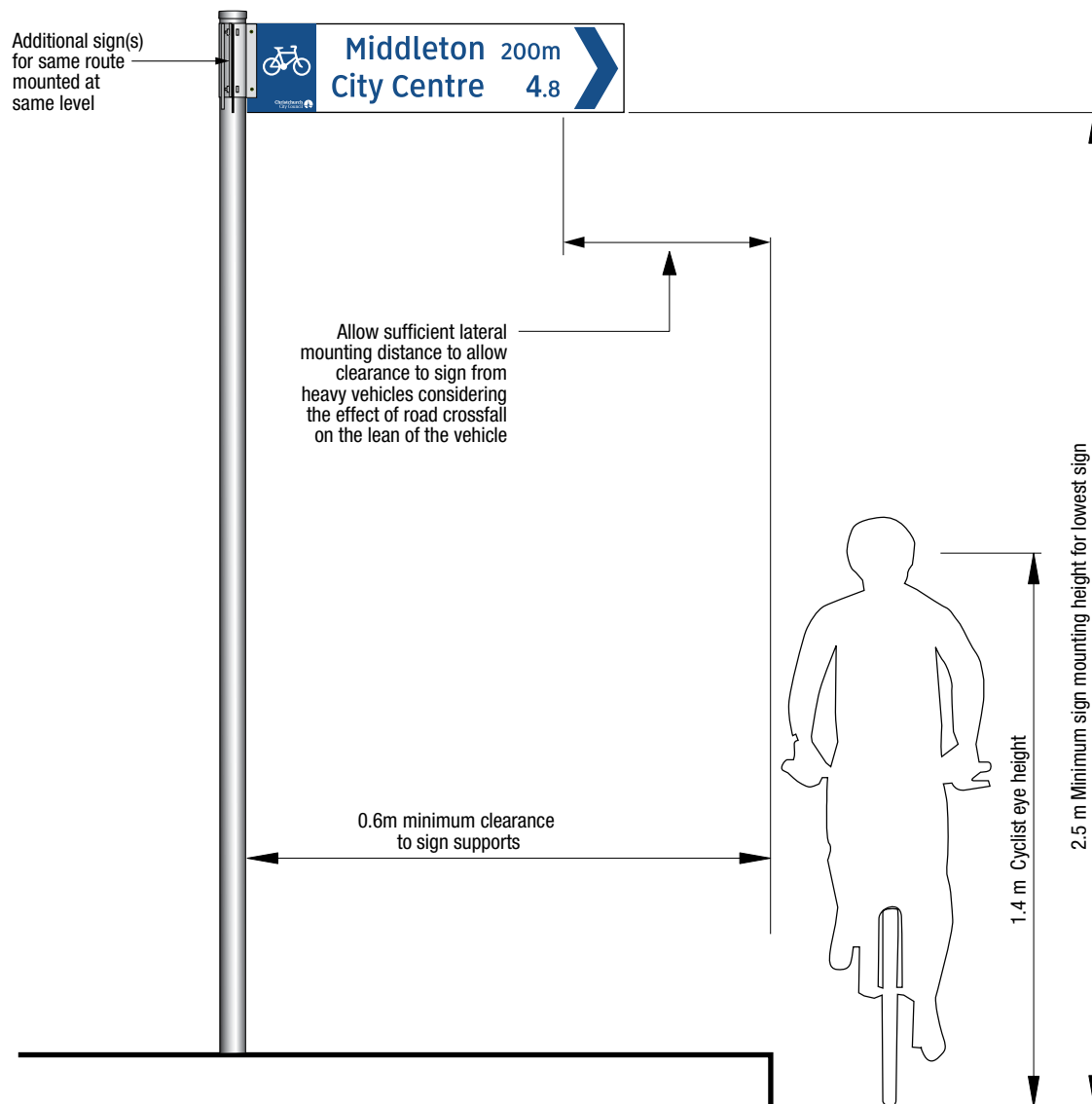


Bicycle Network Signage – Sign mounting clearances





Bicycle Network Signage – Sign mounting details

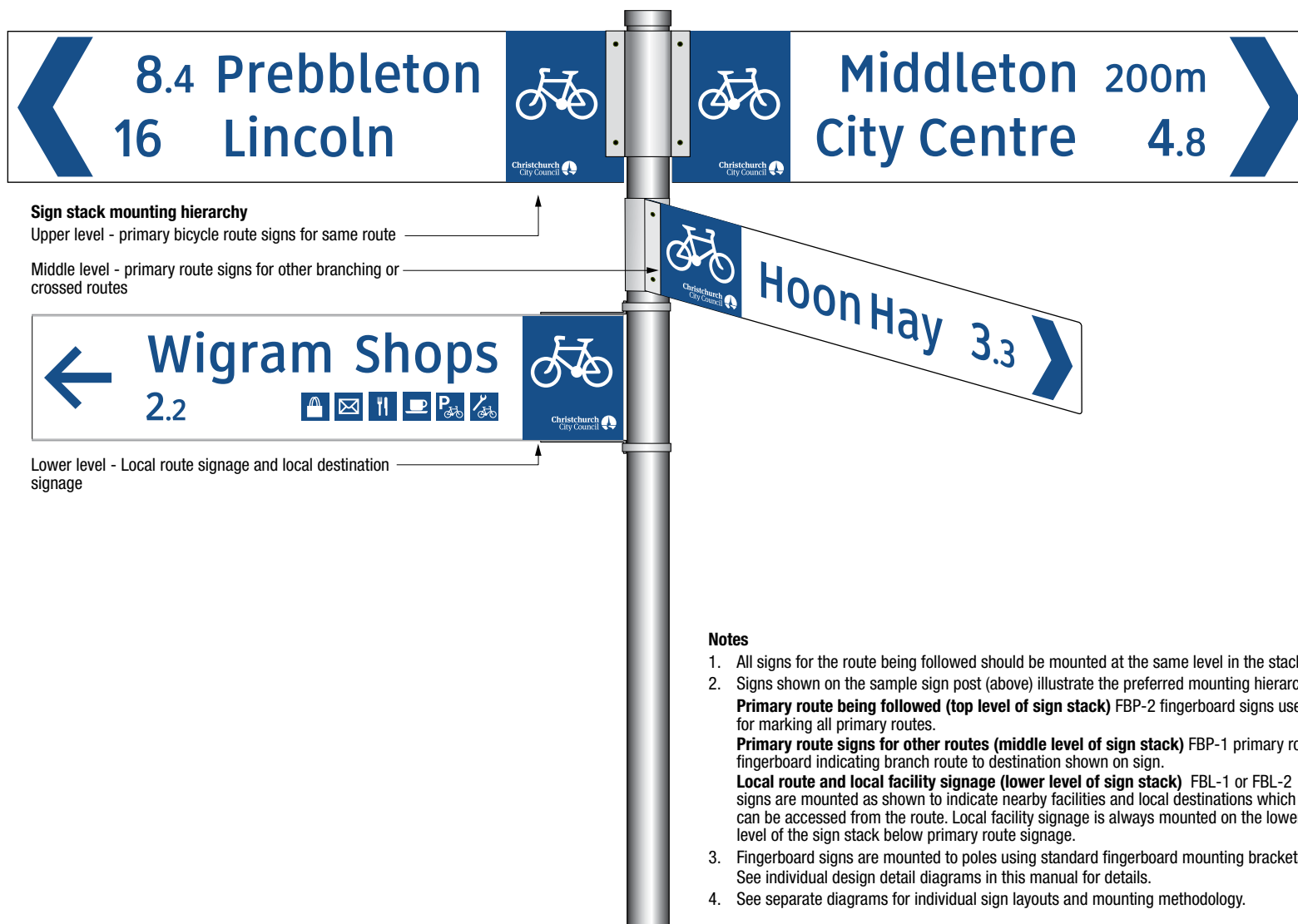


Notes

1. See separate diagram for individual sign layout, typical intersection sign layout and mounting methodology.
2. Signs shown on the sample sign post are FBP-2 bicycle network fingerboard signs used for marking primary or secondary routes. Local and recreational type signs can be mounted on the same sign pole where these routes branch. Local destination signs and local facility signs are always mounted below (lower level in the sign stack) to bicycle network signage.
3. Direction sign poles are galvanised plated to CCC Standard Specification for outdoor use.
4. Fingerboard signs are mounted on poles using standard fingerboard mounting brackets. See individual sign design drawings in this manual for bracket details. Brackets should be pinned to prevent accidental movement due to wind or vandalism.



Bicycle Network Signage – Fingerboard mounting hierarchy for network route junctions





5 Sign maintenance

General cleaning

Step 1

Wipe clean with mild detergent and soft lint-free cloth.

Step 2

When panels have dried, apply Mr Sheen or similar.

Note - DO NOT use abrasive cleaners, solvents or chemicals.

Touch up paint

Use only 2 pack polyurethane paint (in the specified colours) when repairing minor chips, cracks, etc.

For major damage, panels will need to be removed and sprayed professionally.

Graffiti removal

Procedure as outlined below:

Step 1

Use general purpose thinners such as Acetic Acid Alcohol, Toluene or IPA (Isopropyl Alcohol) to clean graffiti from the surface.

Step 2

Wipe off with clean white rag (Do not re-use dirty rags). If more than 2 applications are needed to remove stubborn stains, rinse the area with clean water and wipe dry before additional application.

Step 3

Rinse all cleaned surfaces with water.

Step 4

Allow surface to dry. Disregard used rags in closed container.

