



**TS 04943:1.0**  
T MU SS 90007 ST  
**Standard**

# **Bicycle Parking at Stations, Mass Transit Stops and Ferry Wharves**

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## Document information

**Owner:** Principal Architect  
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## Document history

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| 1.0      | 10 March 2016    | First issue as T MU SS 90007 ST <i>Bicycle Parking at Transport Interchanges</i>  |
| 1.0      | 02 December 2024 | <p>Renumbered as TS 04943:1.0. Version number recommenced in line with new designation. Changes to previous content include:</p> <ul style="list-style-type: none"> <li>• change of document title to Bicycle Parking at Stations, Mass Transit Stops and Ferry Wharfs</li> <li>• clarifications, edits and updates to referenced documents</li> <li>• updates to terms and definitions</li> <li>• reference to the requirement for bike parking Classification A (lockers) to align with TS 04992, subject to approvals</li> <li>• single level horizontal bike lockers only (no double tier or vertical bike lockers)</li> <li>• bike parking Classifications B (sheds) and C (racks) installed at locations no further than 50 m from public transport interchange entry and exit points, subject to approvals</li> <li>• 50% of bike parking in bike sheds allocated for the provision of static horizontal bike racks, with a preference for 100%. Vertical hanging bike racks may be used as a facility type for remaining spaces</li> <li>• no multi-tier parking facilities</li> <li>• each new and upgraded transport interchange shall have Class C bike racks installed at a minimum</li> <li>• requirement for bike sheds and bike racks to include a minimum of 5% of total spaces for parking non-standard bikes</li> <li>• aligning to the five design principles detailed in the Cycleway Design Toolbox specifically relating to bike parking</li> <li>• introducing a three-step process to plan bike parking facility provision</li> <li>• active transport SME shall guide decision making on facility type and number bike parking spaces to be installed</li> <li>• planning allocation of space for shared devices at transport interchanges with supporting wayfinding</li> <li>• removing reference to bike parking shelters as a facility type</li> <li>• bike parking be future proofed with conduits to provide connection provisions for future services.</li> </ul> |

## Preface

This standard is a first issue as TS 04943 and supersedes T MU SS 90007 ST *Bicycle Parking Facilities*, Version 2.0.

This document sets the minimum requirements for the planning, delivery and operation of new or upgraded bicycle (bike) parking facilities at transport interchanges.

This document aims to enable consistent, high quality bike parking at new or upgraded transport interchanges that:

- supports cycling access to transport interchanges
- caters for parking of a growing range of bikes, micromobility devices and share devices
- can be applied to all transport interchanges, including metropolitan and regional transport locations with consideration of heritage or space constraining issues.

Changes to previous content include:

- change of document title to Bicycle Parking at Stations, Mass Transit Stops and Ferry Wharfs
- clarifications, edits and updates to referenced documents
- updates to terms and definitions
- reference to the requirement for bike parking Classification A (lockers) to align with TS 04992, subject to approvals
- single level horizontal bike lockers only (no double tier or vertical bike lockers)
- bike parking Classifications B (sheds) and C (racks) installed at locations no further than 50 m from public transport interchange entry and exit points, subject to approvals
- 50% of bike parking in bike sheds allocated for the provision of static horizontal bike racks, with a preference for 100%. Vertical hanging bike racks may be used as a facility type for remaining spaces
- no multi-tier parking facilities
- each new and upgraded transport interchange shall have Class C bike racks installed at a minimum
- requirement for bike sheds and bike racks to include a minimum of 5% of total spaces for parking non-standard bikes
- aligning to the five design principles detailed in the Cycleway Design Toolbox specifically relating to bike parking
- introducing a three-step process to plan bike parking facility provision

- active transport SME shall guide decision making on facility type and number bike parking spaces to be installed
- planning allocation of space for shared devices at transport interchanges with supporting wayfinding
- removing reference to bike parking shelters as a facility type
- bike parking be future proofed with conduits to provide connection provisions for future services.

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# 1 Scope

This standard sets the minimum requirements for the planning, delivery and operation of new or upgraded bicycle (bike) parking facilities at stations, mass transit stops and ferry wharves (referred to as transport interchanges for the purpose of this document).

Bike parking facilities include bike lockers, bike sheds and bike racks that cater for standard bikes and non-standard bikes, as well as current and emerging forms of micromobility.

# 2 Application

This document applies to TfNSW staff, TAOs and service providers when planning, designing, installing, upgrading, operating, maintaining and dismantling bike and micromobility parking facilities at transport interchanges.

This document will enable delivery of bike parking in accordance with CP21001.

This document applies to the following public transport services:

- mass transit stops
- ferry wharves
- heavy rail and metro stations.

Project teams shall seek advice from an appropriate active transport SME as part of the planning, design and delivery of bike parking. The active transport SME will be considered as a stakeholder and consulted throughout the project lifecycle. This includes providing advice on the location, quantity and type of bike parking facilities being provided.

# 3 Referenced documents

The following documents are cited in the text. For dated references, only the cited edition applies. For undated references, the latest edition of the referenced document applies.

## **Australian standards**

AS 2890.3 *Parking facilities – Part 3: Bicycle parking*

AS 1668.4 *The use of ventilation and airconditioning in buildings – Part 4: Natural ventilation of buildings*

## **Transport for NSW standards**

TS 04935 (T HR SS 80001 ST) *Infrastructure Lighting*

TS 00008.1 *Fire Life Safety – Part 1: Principles*

TS 00008.2 *Fire Life Safety – Part 2: Stations*

TS 01505 (T MU AM 01001 ST) *Life Cycle Costing*

TS 01590 *Cycleway Design Toolbox – Designing for cycling and micromobility*  
TS 03794 (T HR EL 08001 ST) *Safety Screens and Barriers for 1500 V OHW Equipment*  
TS 03954 *Low Voltage Electrical Standards*  
TS 04951.1 *Functional Spaces – Part 1: Principles*  
TS 04951.2: *Functional Spaces – Part 2: Stations*  
TS 04989 *Public Transport Closed Circuit Television Functional Requirements Standard*  
TS 04992 *Surface Transport Fixed Infrastructure Physical Security Standard (see Note 1)*

Note 1: This document is not publicly available. To obtain access email  
[standards@transport.nsw.gov.au](mailto:standards@transport.nsw.gov.au)

## **Legislation**

*Heritage Act 1977 (NSW)*

## **Other referenced documents**

Australian Building Codes Board (ABCB), 2022, *National Construction Code 2016*

Austrroads, 2016, *Bicycle Parking Facilities: Guidelines for Design and Installation*, Research Report, AP-R527-16

Austrroads, 2017, *Cycling Aspects of Austrroads Guides*, AP-G88-17

Austrroads, 2020, *Guide to Traffic Management – Part 11: Parking Management Techniques*, AGTM11-20

Office of Environment and Heritage, 2005, *State Agency Heritage Guide – Management of Heritage Assets by NSW Government Agencies*, publication number HO05/01, Heritage Council of NSW and Heritage Office

NSW Government, 2021, *NSW Government Brand Framework*, Department of Customer Service

NSW Government, , *NSW State Heritage Inventory*

TfNSW, 2023, *Bike Parking Forecasting Tool* (see Note 2)

TfNSW, 2023, *Bike Parking at Transport Interchanges Forecasting Methodology* (see Note 2)

Note 2: This document is not publicly available. To obtain access email  
[activetransport@transport.nsw.gov.au](mailto:activetransport@transport.nsw.gov.au)

TfNSW, 2021, *Providing for Walking and Cycling in Transport Projects Policy* CP21001

TfNSW, 2023, *Section 170 Heritage and Conservation Register*, Transport Asset Holding Entity

TfNSW, 2017, *Wayfinding Planning Guide; Stations and Interchanges*, version .8 (see Note 3)

TfNSW, 2024, *Wayfinding Planning Guide, Sydney Metro*, version 3.3 (see Note 3)

Note 3: This document is not publicly available. To obtain access email  
wayfindingteam@transport.nsw.gov.au

## 4 Terms, definitions and abbreviations

The following terms, definitions and abbreviations apply in this document.

**active transport SME** a subject matter expert with extensive knowledge of active transport and provision of bike parking facilities at transport interchanges

**bike locker** an enclosed lockable space designed to park one bike within it. Lockers are made of secure materials for protection against theft and the weather and classified as security Level A

**bike rack** a bike parking device for one or more than one bike that allow users to lock the bike frame and both wheels to the rack. Classified as security Level C

**bike shed** a communal bike parking facility that is roofed and positioned within walls, fences or facilities, containing bike parking devices that allow users to lock the bike frame and both wheels to bike racks. They are classified as security Level B

**bike shelter** a structure that covers bike racks providing protection from weather

**cargo bike** a bicycle that is designed to carry a load, commonly used to carry children and for last mile freight deliveries

**CCTV** closed circuit television

**CDT** Cycleway Design Toolbox

**EACS** Electronic Access Control System

**ferry wharf** a site used for the purposes of public passenger services provided by ferries that are operated and managed by TfNSW

**intercity train station** the stations servicing Blue Mountains, Central Coast and Newcastle, Hunter, South Coast and Southern Highlands train lines

**kiss and ride** limited-time parking near a public transport mode for picking up or dropping off customers

**LED** light-emitting diode

**mass transit** high-capacity public transport services between major centres on fixed routes

Note 1: Mass transit will typically be used on NSW's busiest public transport corridors to quickly and efficiently move a large number of customers.

Note 2: light rail, T-Way and B-line are types of mass transit transport modes that have stops.

**may** indicates the existence of an option (source SG-006 *Rules for the structure and drafting of Australian Standards*)

**micromobility** lightweight devices such as bicycles, scooters or skateboards

**non-standard bike** a bike which does not meet typical dimensions or mass, such as power assisted bicycles, and bicycles with additional components such as storage bags and basket

**paid area** an area within the station inside the barriers or the ticket control point

**rail corridor (metro)** the land corridor acquired or to be acquired for the construction and operation of a rail project. The land for permanent road and river diversions and the land for certain emergency access

**rail corridor (heavy rail)** means land

- a. that is owned, leased, managed or controlled by a public authority for the purpose of a railway or rail infrastructure facilities, or
- b. that is zoned under an environmental planning instrument predominantly or solely for development for the purpose of a railway or rail infrastructure facilities, or
- c. in respect of which the Minister has granted approval under Part 3A or Division 5.2 or (before its repeal) Division 4 of Part 5 of the Act, or consent under Part 4 of the Act, for carrying out of development (or for a concept plan for a project comprising or including development for the purpose of a railway or rail infrastructure facilities.

**regional train stations** the stations servicing North Coast, North Western, Western and Southern regions of NSW and to Brisbane, Canberra and Melbourne

**SFAIRP** so far as is reasonably practicable

**shall** indicates that a statement is mandatory (source SG-006 *Rules for the structure and drafting of Australian Standards*)

**should** indicates a recommendation (source SG-006 *Rules for the structure and drafting of Australian Standards*)

**SRS** system requirements specification, a description of what the system should do, in terms of the system's functions, interactions and interfaces with its operational environment. It communicates the stakeholder requirements to the technical community who will specify and build the system. Alternatively referred to as system requirements document

**standard bike** a two-wheeled vehicle designed to be propelled solely by human power

**station** includes train station and metro station

**stop** refers to mass transit bus stops and light rail stops for the purposes of this document

**transport interchange** refers to a station, mass transit stop or ferry wharf for the purpose of this document

**TfNSW** Transport for NSW

**TAO** Technically Assured Organisation

**unpaid area** an area of a train station outside the barriers or ticket control point

**user** the bike rider that benefits from the provision of bike parking facilities at transport interchanges

## 5 Planning process

### 5.1 General

The following three-step process specified in this document shall be applied when planning for new or upgraded bike parking facilities at transport interchanges:

1. estimate the bike parking requirements by evaluating current and potential future needs
2. identify appropriate bike parking facility types by considering options that align with user preferences and site conditions
3. design high quality bike parking to meet the needs and expectations of users and to support journeys made by bike.

AP-R527-16, AP-G88-17 and AGTM11-20 may be used to provide additional guidance for the provision of bike parking.

### 5.2 Step 1: Estimating bike parking

Bike parking shall be planned to allow provision for the current demand at the transport interchange, including any potential latent demand, as well as for the projected demand as indicated by the TfNSW *Bike Parking Forecasting Tool*.

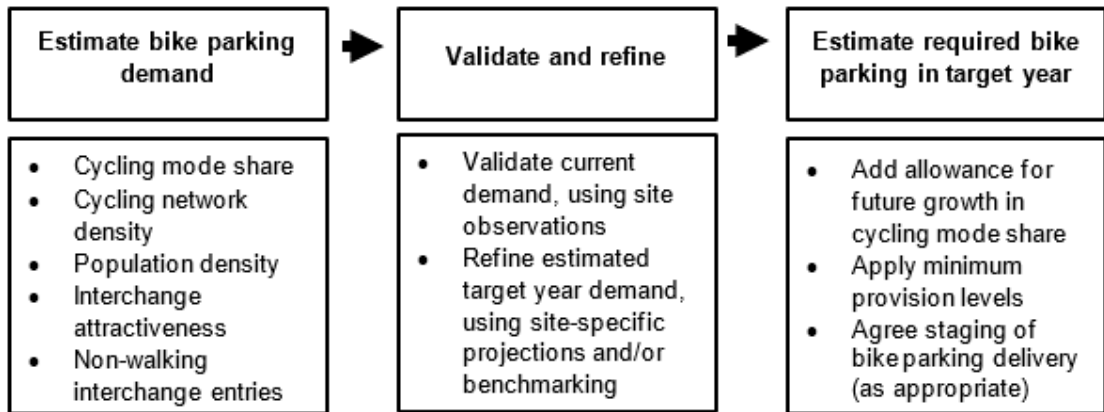
Planning shall take into account the function of the transport interchange so bike parking can be provided that meets the needs and expectations of users.

The active transport SME will provide:

- estimates for the total number of bike parking spaces to be installed
- information regarding shared device parking areas, where appropriate.

TfNSW's Active Transport *Bike Parking at Transport Interchanges Forecasting Methodology* and TfNSW *Bike Parking Forecasting Tool* shall be used to determine bike parking

requirements to estimate current and future demand at the transport interchange. See Figure 1 for an overview of the bike parking estimate approach.



**Figure 1 – Bike parking estimate approach**

### **5.3 Step 2: Identify appropriate facilities**

Bike parking at transport interchanges shall provide facilities to accommodate privately owned devices and other forms of micromobility devices. See Table 1 for more information.

When identifying bike parking for transport interchanges, TfNSW staff, TAOs or service providers shall take into account:

- transport interchange location and security
- current and forecasted patronage
- typical duration of facility use.

Each new and upgraded transport interchange shall have Classification C bike racks installed as a minimum.

The active transport SME will guide decision making on the type of bike parking facility to be provided.

See Appendix A for examples of bike parking facilities that TfNSW has delivered at transport interchanges.

**Table 1 – Bike parking facilities**

| <b>Classification and security level</b> | <b>Description</b>  | <b>Locations</b>   |
|--|---|--|
| <b>A: Locker</b>                         | An enclosed lockable space designed to park one bicycle within it. Lockers are made of secure materials for protection against theft and the weather. | Suitable at transport interchanges where security concerns are high, or where services are less frequent.  |
| <b>B: Shed</b>                           | A bike parking facility that is roofed and positioned within walls, fences or within facilities with restricted access.                               | Suitable at transport interchanges to provide secure bike parking.   |
| <b>C: Racks</b>                          | A bike parking device for one or more than one bike.  | Suitable at transport interchanges with high frequency services where a large share of short-stay, convenient and ease of use parking is required. |

### 5.3.1 Class A facility – bike locker requirements

Bike lockers at transport interchanges may be:

- a standalone facility
- integrated with other facilities, such as car parks, buildings and bike sheds.

Bike lockers at transport interchanges shall:

- be single level horizontal bike lockers only
- not include double tier or vertical bike lockers
- be spaced to allow >90° outward door opening
- be able to be easily opened from the inside to eliminate the possibility of entrapment
- have the surfaces and finishes coated to facilitate easy removal of graffiti, for example, through the application of permanent anti-graffiti coatings or non-sacrificial anti-graffiti coatings
- be future proofed with conduits to provide connection provisions for future services
- have wayfinding signage in accordance with TfNSW Wayfinding Planning Guide relevant to the transport interchange.

Bike lockers may require the installation of a Grade 316 stainless steel loop in the concrete slab within each bike locker to provide an additional loop and lock mechanism See Figure 7 for an example of a loop and lock mechanism used in a bike locker

## 5.3.2 Class B facility – bike shed requirements

Bikes sheds at transport interchanges may be:

- provided as a standalone facility
- integrated into other facilities such as car parks and buildings, in accordance with TS 04951.2.

Bike sheds at transport interchanges shall:

- have 50% of bike parking allocated for the provision of static horizontal bike racks, with a preference for 100%. Vertical hanging bike racks may be used as a facility type for remaining spaces
- not include multi-tier bike parking facilities
- include a minimum of 5% of total spaces for parking non-standard bikes
- allow the frame and both wheels of a bike to be conveniently and effectively locked in accordance with AS 2890.3
- have the bike racks arranged adjacent to the external walls or screens to prevent damage to the bicycles
- have power sourced from a suitable power supply if solar is found to be inadequate
- have the electrical power supply complying with TS 03954
- be future proofed with conduits to provide connection provisions for future services
- have the appropriate illumination levels for optimum operation, as recommended by the security risk assessment
- have sufficient internal and external lighting that minimises glare
- have vandal proof LED fittings
- provide sensor lighting that detect motion, or low lighting that activates when movement is detected
- be safe and easy to use, free of elements that can injure users or compromise functionality
- have vandal resistant locks and doors
- be able to be easily opened from the inside to eliminate the possibility of entrapment
- allow for non-intrusive security inspection of the facilities' contents
- have the surfaces and finishes coated to facilitate easy removal of graffiti, for example, through the application of permanent anti-graffiti coatings or non-sacrificial anti-graffiti coatings
- have all visible welds smoothed off

- have the structural steel earthing and bonding requirements addressed as required
- have material with suitable level of visibility and durability, for example, mesh, with a minimum 70% open area or approved equivalent material walls
- have 95% visibility target through the mesh using a combination of the minimum aperture and dark colour paint
- have 95% visibility target through glass walls and access and exit points
- have ventilation in accordance with AS 1668.4
- have finished floor level, with shed slab entrance to be as close as possible to the external level to minimise ramping. The National Construction Code stipulates a 5 mm maximum lip for ramp transition
- have reinforced concrete floor with broom, cove or other slip resistant finish and sealed with an appropriate sealant
- have roof drainage that includes eaves, gutters, down pipes and leaf guards as required
- have internal drainage to remove excess water
- have fire safety requirements complying with TS 00008.1 and TS 00008.2
- have electronic ticketing system (smartcard) access (for example, TfNSW Opal Card) with EACS to enable electronic ticketing system access controls that are compatible with Transport's approved contractor requirements for operations and maintenance of bike sheds
- have wayfinding signage in accordance with TfNSW Wayfinding Planning Guide relevant to the transport interchange.

### **5.3.3 Class C facility – bike rack requirements**

Bike racks at transport interchanges shall:

- have static horizontal racks only that allow the frame and both wheels of a bike to be conveniently and effectively locked and supported upright in accordance with AS 2890.3
- include a minimum of 5% of total spaces for parking non-standard bikes
- be located under a new dedicated bike shelter if the bike racks cannot be located under existing interchange awnings, canopies or covered paths, to offer shelter and weather protection. Relaxation of bike shelter requirements may be considered at transport interchanges that are of State or National Heritage significance
- be spaced to allow two bikes to share one hoop with space for a user to fit between
- allow positioning of the bikes for front in parking or rear in parking, or both, where the space is available

- be durable, corrosion resistant and vandal resistant
- be manufactured from a suitable material such as Grade 316 stainless steel
- be appropriately secured to a hard stand area. If this is not possible then bike racks shall be securely fixed through the substrate to the pavement with a tamper proof bolting mechanism which prevents theft and forced removal of the rack
- have fixing details with safety features that prevent tripping hazards to users
- be positioned and designed in a way so as to not impede access for people with disabilities or the vision impaired.

## 5.4 Step 3: Design

The design of bike parking facilities shall meet the needs and expectations of users, SFAIRP, to promote and encourage cycling as part of their journey to and from transport interchanges.

Bike parking at transport interchanges shall be designed in accordance with AS 2890.3 and integrated into transport interchanges as specified in TS 04951.1 and TS 04951.2.

In addition to AS 2890.3, the five key bike parking principles detailed in the CDT shall be applied when planning bike parking at transport interchanges. These are:

1. accessibility
2. integration
3. location
4. security
5. operations and maintenance.

### 5.4.1 Accessibility

Accessibility considerations shall:

- provide accessible and convenient connectivity to the bike parking facility, limiting the need to dismount and walk to and from bike parking
- have a convenient kerb ramp near the provided bike parking facility for road to footpath transitions
- provide accessibility to all bike and micromobility sizes, such as cargo bikes and non-standard bikes with sufficient space allocated
- provide dedicated spaces for bicycle types that are not suited to be accommodated in standard bike racks. Dimensions for various bicycle types, are as stated in AS 2890.3 and the CDT.

Bike parking facilities should have suitable connections to existing active transport links, local neighbourhoods, public open space and activity centres, along with any potential future route options in consultation with local government authorities or relevant state government agencies, as applicable.

## 5.4.2 Integration

Integration considerations shall include:

- co-located with complementary street furniture and amenities to enhance facility convenience and attractiveness
- use of materials and form that enhance the surrounding built environment
- use of location, directional and wayfinding signs from bike parking facilities and demarcated share device parking areas to and from the transport interchange entrances and exits, designed in accordance with the TfNSW Wayfinding Planning Guide relevant to the transport interchange.
- inclusion of bike parking facilities and designated share device demarcated parking areas on wayfinding, information maps and station guides.

The *Heritage Act 1977* (NSW) is designed to protect, maintain and manage environmental heritage in NSW, including items of archaeological significance. It applies when changes are proposed to transport interchanges that have heritage significance. For items on the *State Heritage Inventory*, the *Heritage Act 1977* (NSW) applies.

When changes are proposed to transport interchanges that have heritage significance, one of the following shall apply:

- for those items listed on the *NSW State Heritage Inventory*, the provisions of the *Heritage Act 1977* (NSW) applies
- for items listed on TfNSW *Section 170 Heritage and Conservation Register*, the heritage management principles and relevant asset management guidelines that are outlined in the *NSW State Agency Heritage Guide* shall be followed.

Proposals to introduce new or upgraded bike parking facilities into a heritage listed precinct, or in the vicinity of a listed item shall:

- take the heritage significance of the precinct or the items into account
- be developed in consultation with relevant approval authorities, including the nominated operator or maintainer of the regulatory authority, or both as applicable.

Designs for all new elements shall be developed to ensure that any negative heritage impacts likely to result from the proposal are minimised, and that identified heritage values are not unduly compromised.

Designs for bike parking facilities shall demonstrate how heritage issues have been addressed as part of the planning process before designs are finalised and submitted for approval or for construction.

The scale, form, bulk, configuration and appearance of bike parking facilities in the vicinity of a heritage listed precinct item shall relate appropriately to the existing site features and characteristics.

New construction materials, finishes and colours shall complement those that are prevalent locally, both in the built environment and the surrounding landscape.

### **5.4.3 Location**

#### **5.4.3.1 Bike lockers**

The location of bike lockers at transport interchanges shall ensure:

- a security risk assessment is undertaken
- lockers proposed within 50 m of a transport interchange entrance or exit requires an approved concession in accordance with TS 04992.

The location of bike lockers at transport interchanges should ensure line of sight between transport interchange entrance and bike lockers.

#### **5.4.3.2 Bike sheds and bike racks**

The location of bike sheds and bike racks at transport interchanges shall:

- be installed at locations no further than 50 m from transport interchange entry and exit points
- have line of sight between transport interchange entrances and bike parking facilities
- not obstruct or hinder pedestrian access ways, loading zones, public help access points, fire hydrants, fire escapes and areas adjacent to accessible car parking.

The location of bike sheds and bike racks at transport interchanges should:

- ensure cyclists can legally ride to the facility without obstructing other customers.  
Consideration shall be taken in identifying the best possible location that allows cyclists to ride to the facility to help ensure that the design does not impede existing pedestrian and vehicle flows SFAIRP
- be located closer to transport interchange entry and exit points than feeder public transport bus stops, taxi ranks, kiss and ride and commuter car parking.

### 5.4.3.3 Additional requirements

The planning and installation of bike lockers, bike sheds and bike racks at transport interchanges shall involve consultation with bus, ferry, light rail, heavy rail and metro internal stakeholders.

TfNSW provided bike parking facilities at rail interchanges shall:

- not be located inside either the metro or heavy rail corridors
- comply with TS 03794 if constructed directly adjacent to the railway corridor fence and there is a potential for electrification.

Bike parking at intercity train stations and regional train stations may be located near an actively manned station guard office, unpaid area or paid area to increase security and safety, subject to consultation.

### 5.4.4 Security

Security considerations and requirements shall ensure that the bike parking facilities:

- includes CCTV coverage for bike parking facilities or locate facilities in areas covered by existing interchange CCTV in accordance with TS 04989
- applies security and crime prevention through environmental design requirements in accordance with TS 04992
- applies lighting requirements in accordance with TS 04935
- are located in open, well illuminated areas that promote passive surveillance and are not surrounded by dense vegetation or structures
- are always well-lit, including access paths between the transport interchange entrance and bike parking facilities (a lighting assessment shall be conducted to determine the appropriate level of lighting)
- ensure emergency exit points of the transport interchange are not obstructed
- not be placed so that they provide a climbing aid for access to high-risk areas such as the rail corridor, boundary fence or building rooftops
- are accessible to police and emergency services personnel
- are designed and located to provide security to users and their bicycles when using bike parking facilities and to reduce the risk of vandalism.

## 5.5 Operations and maintenance

Operations and maintenance requirements shall:

- aim to ensure bike parking facilities are designed to optimise whole-of-life costs in accordance with TS 01505
- include the development of a Technical Maintenance Plan based on the same costing data and periods between anticipated maintenance activities assumed in the lifecycle cost
- have bike parking facilities with a minimum design life of 25 years unless noted otherwise in this document or as part of the project SRS requirements.

As part of the preceding list, project teams shall work with internal stakeholders to establish an ongoing maintenance program for bike parking facilities.

## Appendix A Images of bike parking facilities at transport interchanges

### A.1 Bike shed (external)

See Figure 2 that shows an external photograph of a bike shed (Classification B) located at Sutherland station.



Figure 2 – Bike shed

## A.2 Bike shed (internal)

See Figure 3 that shows an internal photograph of a bike shed (Classification B) with horizontal static racks and vertical hanging racks located at Woy Woy station.



**Figure 3 – Bike racks located within a bike shed**

## A.3 Bike racks

See Figure 4 that shows bike racks with a bike shelter (Classification C) at Cherrybrook metro station.



Figure 4 – Bike racks

## A.4 Bike racks

See Figure 5 that shows bike racks (Classification C), located under an awning at the entrance to Sydenham station.



Figure 5 – Bike racks

## A.5 Co-located bike lockers and bike shed

See Figure 6 that shows bike lockers (Classification A) and a bike shed (Classification B) co-located at Sutherland station.



Figure 6 – Co-located bike lockers and a bike shed

## A.6 Example of the loop and lock device to be provided in bike lockers

See Figure 7 for an example of a loop and lock device in a bike locker that can be used to increase security.



Figure 7 – Example of a loop and lock device provided in a bike locker