

Revision 1.0

Infrastructure Design Standards

Module S11: Heritage and Culture Division of Finance (Strategic Infrastructure) Charles Sturt University

Document Control

Document Name	Infrastructure Design Standards
Sub-Section Name	Module S11: Heritage and Culture
Document Status	Current
Revision Number	1.0
Effective Date	11/11/2024
Review Date	10/11/2025
Unit Head	Director, Strategic Infrastructure
Author(s)	The Standards have been developed by Strategic Infrastructure, Facilities Management, external consultants, contractors, and colleagues.
Enquiries Contact	Division of Finance (Strategic Infrastructure)

Contents

1	. Intro	oduction	4
	1.1.	Overview	4
	1.2.	The University	4
	1.3.	University Vision and Values	4
	1.4.	Using the Infrastructure Design Standards	5
	1.5.	Modules	5
	1.6.	Related Documents	6
	1.6.1.	University Documents	6
	1.6.2.	Federal Legislation	6
	1.6.3.	NSW State Legislation	7
	1.6.4.	Federal Regulations and Standards	7
	1.6.5.	NSW State Regulations and Standards	7
	1.6.6.	Manufacturer Specifications and Data Sheets	7
	1.6.7.	Project-Specific Documents	7
	1.7.	Discrepancies	8
	1.8.	Departures	8
	1.9.	Professional Services	8
	1.10.	Structure of Document	8
2	. Gen	neral Requirements	9
	2.1.	Overview	9
	2.2.	Design and Implementation Guidelines	9
	2.3.	Implementation Process	9
	2.4.	Demolition	9
	2.5.	Monitoring, Maintenance, and Conservation Post-Implementation	. 10
3	. Sup	porting Documentation	. 11
	3.1.	Supporting Legislation	. 11
	3.2.	Supporting Standards	. 11
	3.3.	Industry Codes of Practice	. 11
	3 4	Other Resources	12

1. Introduction

1.1. Overview

The Charles Sturt University Infrastructure Design Standards (the Standards) outline the University's expectations for its built forms to achieve consistency in the quality of the design and construction of those built forms.

The Standards have been developed to provide guidance to the design team and to assist Facilities Management to drive a consistent approach to the design, construction, commissioning, handover, and operation of new capital projects to ensure the new asset is fully integrated into campus life and conforms to the University's standards and policies.

The successful integration of any new project into the day-to-day operation of campus life cannot be underestimated and is vital to ensuring the new asset provides a fully functional platform for Facilities Management clients and the University. The Standards will ensure Facilities Management is successful in supporting the University's strategic objectives now and into the future. The pitfall of viewing any new project as a standalone entity must be avoided as any new project is an extension of the existing campus.

The Standards are aligned with Charles Sturt's requisites for aesthetic appeal, life cycle maintenance and environmental sustainability, while ensuring that there is sufficient scope for innovation and technological advancements to be explored within each project.

1.2. The University

The history of Charles Sturt University dates to 1895, with the establishment of the Bathurst Experiment Farm. Formed progressively through the merge of regional institutions in south-western and western NSW, Charles Sturt was formally incorporated on 19 July 1989 under the Charles Sturt University Act 1989. As one of Australia's newer universities, Charles Sturt has been built on a tradition of excellence in teaching and research spanning more than 100 years.

With over 40,000 current students studying both on-campus and online, Charles Sturt University is the largest tertiary education institution in regional Australia. The University operates six main campuses across New South Wales in Albury-Wodonga, Bathurst, Dubbo, Orange, Port Macquarie, and Wagga Wagga, alongside specialist campuses in Canberra, Parramatta, and Goulburn. Charles Sturt University is structured around three Faculties: Arts and Education; Business, Justice and Behavioural Sciences; and Science and Health.

1.3. University Vision and Values

Charles Sturt University is committed to building skills and knowledge in its regions by offering choice and flexibility to students, while collaborating closely with industries and communities in teaching, research, and engagement. As a significant regional export industry, the University brings both strength and learning back to

its regions, positioning itself as a market-oriented institution. Its goals are to remain the dominant provider of higher education in its regions and a sector leader in flexible learning.

Charles Sturt University believes that wisdom has the power to transform communities. With perseverance and dedication, the University contributes to shaping resilient and sustainable regions for the future. Acknowledging the deep culture and insight of First Nations Australians, the University's ethos is encapsulated by the Wiradjuri phrase *yindyamarra winhanganha*, which translates to "the wisdom of respectfully knowing how to live well in a world worth living in." Through its values, Charles Sturt University fosters a welcoming community and learning environment that supports innovation, drives societal advancement, and gives back to the regions it serves.

1.4. Using the Infrastructure Design Standards

The Infrastructure Design Standards are written to advise Charles Sturt University performance requirements and expectations that exist above and beyond existing industry codes and standards.

The Infrastructure Design Standards do not repeat codes and standards.

Performance to Codes and Standards are a non-negotiable regulatory minimum of any design solution, to be determined for each project by the design team.

The Standards are to be used by all parties who are engaged in the planning, design, and construction of Charles Sturt's facilities. This includes external consultants and contractors, Charles Sturt's planners, designers, and project managers as well as faculty and office staff who may be involved in the planning, design, maintenance, or refurbishment of facilities. All projects must comply with all relevant Australian Standards, NCC, EEO as well as Local Government and Crown Land Legislation.

1.5. Modules

The Standards are divided into the following modules for ease of use, but must be considered in its entirety, regardless of specific discipline or responsibilities:

- S01 Overview and Universal Requirements
- S02 Active Transport
- S03 Acoustics
- S04 Building Management System
- S05 Electrical and Lighting
- S06 Energy Management
- S07 Ergonomics
- S08 Fire and Safety Systems
- S09 Floor and Window Coverings
- S10 Furniture
- S11 Heritage and Culture
- S12 Hydraulic

- S13 Information Technology
- S14 Irrigation
- S15 Mechanical Services
- S16 Roof Access
- S17 Termite Protection, Vermin Proofing and Pest Management
- S18 Security Systems
- S19 Signage
- S20 Sustainable Building Guidelines
- S21 Waste Management
- S22 Project Digital Asset and Data Requirements
- S23 Commissioning, Handover and Training

1.6. Related Documents

1.6.1. University Documents

The Standards are to be read in conjunction with the following relevant University documents, including but not limited to:

- Facilities and Premises Policy along with supporting procedures and guidelines
- Charles Sturt University Accessibility Action Plan 2020 2023
- Relevant operational and maintenance manuals
- Charles Sturt University Asbestos Management Plan
- Charles Sturt University Signage Guidelines
- Charles Sturt University Modern Slavery Statement
- Charles Sturt University Sustainability Statement
- Charles Sturt University Work Health and Safety Policy
- Charles Sturt University Risk Management Policy
- Charles Sturt University Resilience Policy
- Charles Sturt University Health, Safety and Wellbeing Policy

1.6.2. Federal Legislation

The planning, design and construction of each Charles Sturt University facility must fully comply with current relevant Federal legislation, including but not limited to:

- National Construction Code (NCC)
- Disability Discrimination Act 1992 (DDA)
- Environment Protection and Biodiversity Conservation Act 1999 (EPBC)
- Work Health and Safety Act 2011

1.6.3. NSW State Legislation

The planning, design and construction of each Charles Sturt University facility must fully comply with current relevant Federal legislation, including but not limited to:

- Work Health and Safety Act 2011
- Environmental Planning and Assessment Act 1979 (EP&A Act)
- Building and Development Certifiers Act 2018
- Heritage Act 1977
- Protection of the Environment Operations Act 1997 (POEO Act)
- Design and Building Practitioners Act 2020
- State Environmental Planning Policies (SEPPs)
- Local Government Act 1993

1.6.4. Federal Regulations and Standards

- Relevant Australian or Australian/New Zealand Standards (AS/NZS)
- Safe Work Australia Model Codes of Practice
- Work Health and Safety Regulations 2011
- Disability (Access to Premises Buildings) Standards 2010
- National Environment Protection Measures (NEPMs)

1.6.5. NSW State Regulations and Standards

- SafeWork NSW Codes of Practice
- Disability (Access to Premises Buildings) Standards 2010
- Building and Development Certifiers Regulation 2020
- NSW Work Health and Safety Regulation 2017
- Protection of the Environment Operations (General) Regulation 2022
- NSW State Environmental Planning Policies (SEPPs)
- Fire and Rescue NSW Fire Safety Guidelines
- NSW Local Council Development Control Plans (DCPs)

1.6.6. Manufacturer Specifications and Data Sheets

All installation must be carried out in accordance with manufacturer specifications and data sheets to ensure product performance over its intended life and so as not to invalidate any warranties.

1.6.7. Project-Specific Documents

Requirements specific to a particular project, campus, or other variable, will be covered by project specific documentation, such as client briefs, specifications, and drawings. These Standards will supplement any such

project specific documentation. The Standards do not take precedence over any contract document, although they will typically be cross-referenced in such documentation.

Extracts from the Standards may be incorporated in specifications; however, it must remain the consultant's and contractor's responsibility to fully investigate the needs of the University and produce designs and documents that are entirely 'fit for purpose' and which meet the 'intent' of the project brief.

1.7. Discrepancies

The Standards outline the University's generic requirements above and beyond the above-mentioned legislation. Where the Standards outline a higher standard than within the relevant legislation, the Standards will take precedence. If any discrepancies are found between any relevant legislation, the Standards and project specific documentation, these discrepancies should be highlighted in writing to the Manager, Capital Works.

1.8. Departures

The intent of the Standards is to achieve consistency in the quality of the design and construction of the University's built forms. However, consultants and contractors are expected to propose 'best practice / state of the art' construction techniques, and introduce technological changes that support pragmatic, innovative design. In recognition of this, any departures from relevant legislation, or the Standards, if allowed, must be confirmed in writing by the Manager, Capital Works. Any departures made without such written confirmation shall be rectified at no cost to the University.

1.9. Professional Services

All projects at Charles Sturt University require the involvement of adequately skilled and experienced professionals to interpret and implement the Standards. Consultants or contractors lacking proper qualifications and licenses are not permitted to conduct any work.

1.10. Structure of Document

This document is structured into 4 sections:

- Section 1 Introduction (this Section).
- **Section 2** General Requirements outlines the general requirements or design philosophies adopted at Charles Sturt University.
- **Section 3** Supporting Documentation Legislation, Standards, Codes of Practice, University Policies, and other applicable technical references.
- **Section 4** Specifications (if applicable) materials specifications and/or preferred lists for materials, processes or equipment used by Charles Sturt University.

2. General Requirements

2.1. Overview

Contractors engaged in Charles Sturt University projects must comply with all relevant heritage and construction standards. These include:

- Australian Standards: AS/NZS codes for building, materials, and conservation practices.
- National Construction Code (NCC): Compliance with accessibility and environmental sustainability requirements.
- **University Infrastructure Design Standards**: Specific guidelines that exceed industry norms to reflect the university's heritage priorities.

All deviations from the standards require written approval from the Director of Strategic Infrastructure.

2.2. Design and Implementation Guidelines

Contractors must ensure that their work respects and preserves the cultural significance of heritage assets. Guidelines include:

- Respect Cultural Values:
 - o Adhere to the Burra Charter principles for minimal intervention and reversibility.
 - o Retain the authenticity of the asset's fabric and design.
- Use Appropriate Materials and Techniques:
 - Select materials that match or complement the original construction.
 - o Apply traditional methods where feasible to maintain authenticity.
- Ensure Compatibility:
 - New developments must blend with existing heritage elements without compromising their integrity.

2.3. Implementation Process

- Planning: Conduct detailed site assessments to identify and mitigate risks to heritage assets.
- Approvals: Obtain necessary permits from regulatory authorities, including council and state heritage bodies.
- **Construction**: Implement works as per approved CMPs, ensuring adherence to conservation and sustainability principles.

2.4. Demolition

If demolition of a heritage-listed asset is necessary, contractors must:

 Secure Permissions: Apply for and obtain development consent from the local council or relevant heritage authority.

- Prepare Heritage Impact Assessments (HIA): Document the heritage significance of the structure and justify demolition, including proposed mitigation measures.
- Salvage Materials: Recover architectural features and other elements for reuse where possible.
- **Document the Process**: Maintain records of the asset, including photographs and detailed descriptions, before and during demolition.

2.5. Monitoring, Maintenance, and Conservation Post-Implementation

Contractors must provide post-implementation support to ensure the longevity of heritage conservation efforts. This includes:

- Maintenance Documentation: Prepare detailed maintenance schedules and guidance for project officers.
- Monitoring Programs: Implement systems to regularly check the condition of completed works and address emerging issues.

3. Supporting Documentation

These below lists are not all-inclusive and those associated with the project are responsible for identifying and complying with all standards relevant to the scope of works.

3.1. Supporting Legislation

National Construction Code of Australia (NCC) 2022 (Cth)

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) (Cth)

Australian Heritage Council Act 2003 (Cth)

Aboriginal Torres Strait Islander Heritage Protection Act 1984 (Cth)

Heritage Act 1977 (NSW)

Heritage Regulation 2012 (NSW)

Environmental Planning and Assessment Act 1979 (NSW)

Aboriginal Cultural Heritage Act 2003 (NSW)

Heritage Act 2004 (ACT)

Planning and Development Act 2007 (ACT)

Territory Plan (ACT)

Nature Conservation Act 2014 (ACT)

Local Government Acts and Planning Schemes

3.2. Supporting Standards

Standard Number	Standard Title
AS/NZS 2311:2017	Guide to the Painting of Buildings
BS 7913: 2013	Guide to the Conservation of Historic Buildings

3.3. Industry Codes of Practice

Burra Charter & Practice Notes

https://australia.icomos.org/publications/burra-charter-practice-notes/#bc

NSW Heritage Office: The Local Government Heritage Guidelines

https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Heritage/local-government-heritage-quidelines.pdf

Heritage Council of NSW: Investigating Heritage Significance

https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Heritage/investigating-heritage-significance-2021.PDF

NSW Environment and Heritage, Department of Climate Change, Energy, the Environment and Water: Heritage Compliance Framework

https://www.environment.nsw.gov.au/research-and-publications/publications-search/heritage-compliance-framework

NSW Environment and Heritage, Department of Climate Change, NSW Environment and Heritage: Minimum standards of maintenance and repair for heritage items

https://www.environment.nsw.gov.au/topics/heritage/manage-heritage-items/minimum-standards-maintenance-repair-for-heritage-items

NSW Environment and Heritage, Department of Climate Change, NSW Environment and Heritage: Ruins – A guide to Conservation and Management

https://www.environment.nsw.gov.au/research-and-publications/publications-search/ruins-guide-to-conservation-and-management

Australian Institute of Architects: Heritage Policy

https://www.architecture.com.au/wp-content/uploads/Heritage-Policy.pdf

NSW Heritage Office: Photographic Recording of Heritage Items Using Film or Digital Capture

https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Heritage/photographic-recording-of-heritage-items-using-film-or-digital-capture.pdf

3.4. Other Resources

Department of Climate Change, Energy, the Environment and Water: Managing National Heritage places https://www.dcceew.gov.au/parks-heritage/heritage/about/national/managing-national-heritage-places
Department of the Environment, Water, Heritage and the Arts: A guide to Heritage Listing in Australia https://www.nepc.gov.au/sites/default/files/2022-09/htg-brch-guide-heritage-listing-200901.pdf

Joint Standing Committee on Northern Australia

https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Former_Committees/Northern_Australia_46P

Heritage Council of Victoria: Conservation Management Plans: Managing Heritage Places

https://www.heritage.vic.gov.au/ data/assets/pdf file/0022/514273/Conservation-Management-Plans-Managing-Heritage-Places.pdf

Housing Industry Association: Undertaking Alterations to a Heritage Building

https://hia.com.au/resources-and-advice/getting-approval-to-build/development-and-planning-approvals/articles/undertaking-alterations-to-a-heritage-building-nsw

Engineers Australia - Engineering Heritage Australia: An Engineer's Guide to the Conservation of Australia's Engineering Heritage

https://www.engineersaustralia.org.au/sites/default/files/2023-09/engineers-guide-conservation-australias-engineering-heritage.pdf

Albury City Council: Heritage Conservation

https://www.alburycity.nsw.gov.au/property/plan/planning-controls/heritage-conservation

Bathurst Regional Council: Heritage Advice & Guidelines

https://www.bathurst.nsw.gov.au/Council/About-our-City/History-and-Heritage/Heritage-Advice-Guidelines

Orange City Council: Heritage Support

https://www.orange.nsw.gov.au/heritage-support/

Wagga Wagga City Council: Heritage

https://wagga.nsw.gov.au/building-and-development/heritage