



Charles Sturt
University

Revision 1.0

Infrastructure Design Standards

Module S01: Overview and Universal Requirements

Division of Finance (Strategic Infrastructure)
Charles Sturt University

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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

A primary objective for Facilities Management at Charles Sturt University is to provide effective stewardship of campus facilities by ensuring all resources are effectively and efficiently focused towards supporting our students and staff in their pursuit of academic excellence. The purpose of the Standard is to provide 'guidance' to the Strategic Infrastructure project design team in relationship to standardisation, quality and environmental outcomes required by Facilities Management to ensure the new asset is integrated seamlessly into campus life.

Facilities Management understands that while the project design and construction phase is important, it is only a brief phase in the life cycle of an asset that will need to be operated and maintained. To ensure the success of Strategic Infrastructure projects, it is essential that the experience and knowledge of Facilities Management staff is fully engaged as early as possible in the project design. It's crucial for Facilities Management staff to grasp the specific goals of a capital project and collaborate with both building occupants and the Strategic Infrastructure team to optimise outcomes for the University. While initial occupants may change over time, the operational responsibilities for the asset remain with Facilities Management throughout its life cycle. Hence, the design approach should mirror typical commercial development, where Facilities Management acts as the long-term custodian.

The Standards serves as a blueprint, ensuring consistency in design, construction, and operation, seamlessly integrating new assets into campus life. Integrating new projects seamlessly into campus life is vital, as it ensures they serve as fully functional platforms for Facilities Management's clients and align with the University's strategic objectives. We must not view new projects in isolation; they're extensions of the existing campus fabric.

2.2. University Estate Portfolio

Charles Sturt University's campus portfolio spans multiple regional centres in New South Wales, including Albury-Wodonga, Bathurst, Dubbo, Orange, Port Macquarie, and Wagga Wagga. Each campus offers tailored facilities and amenities to support student learning, research, and community engagement. Specialised facilities cater to various undergraduate and postgraduate disciplines such as agriculture and environment along with allied health and medical sciences providing students with hands-on experiences and industry connections.

Our campuses (Table 1) boast fully equipped teaching facilities, including modern scientific and computer laboratories, providing students with hands-on learning experiences. Extensive resources and services, such as the Library, Academic Skills, and Student Support, are available ensuring comprehensive support for all students. With access to state-of-the-art facilities and services, students gain industry-relevant skills right from their first year of study. Charles Sturt also boasts specialist facilities that offer course such as theology and policing along with metro locations in Sydney and Melbourne (Table 2).

Campus	Address
Albury-Wodonga Campus	Elizabeth Mitchell Drive, Thurgoona, NSW, 2640
Bathurst Campus	Panorama Avenue, Bathurst, NSW, 2795
Dubbo Campus	Tony McGrane Place, Dubbo, NSW, 2830
Orange Campus	Leeds Parade, Orange, NSW, 2800
	Bloomfield Medical Centre, Level 1, 1521 Forest Road, Orange, NSW, 2800
Port Macquarie Campus	7 Major Innes Road, Port Macquarie, NSW, 2444
Wagga Wagga Campus	Boorooma Street, North Wagga, NSW, 2650

Table 1: Campus Locations

Campus	Address
Canberra Campus	15 Blackall Street, Barton, ACT, 2601
	10-12 Brisbane Avenue, Barton, ACT, 2600
Goulburn	1 McDermott Drive, Goulburn, NSW, 2580
Paramatta	16 Masons Drive, North Parramatta, NSW, 2151
Charles Sturt Sydney	Level 6 / 77 Berry St, North Sydney, NSW, 2060
Charles Sturt Melbourne	Level 3 / 222 Bourke Street, Melbourne, VIC, 3000

Table 2: Specialist Campus Locations

2.3. Campus Master Plan Higher Order Considerations

Campus master planning enables informed decision-making, guiding physical development and facilities to benefit the university, students, and the community. The university has commissioned master plans for the Wagga Wagga and Bathurst Campuses along with a Portfolio Plan that outlines strategic principles that guide decision-making for the University's future estate. These considerations have been developed to align with the University's Strategy 2030, addressing infrastructure, student engagement, cultural integration, and operational excellence. Key points include:

- **Campus Consolidation and Densification:** Aiming to streamline and focus campus resources to meet the University's future infrastructure needs.
- **Investment in Specific Initiatives:** Prioritising early investments in initiatives that address pressing needs and optimize the value of capital planning.
- **Boosting Enrolment and Retention:** Creating conditions that enhance student enrolments and retention as key drivers of financial sustainability.
- **Cultural and Community Respect:** Developing campuses that honour and integrate connections to Country, culture, and the local community.
- **Performance Measurement:** Implementing key performance indicators (KPIs) to track how campus operations support the University's strategic goals.

- **Organisational Involvement:** Encouraging broad participation across the University to implement actions aligned with the future vision for campuses.
- **Unified Administrative Model:** Moving towards a "one administration" approach that prioritizes customer-centric campus operations.
- **Campus Life and Vibrancy:** Intentionally fostering vibrant, inspiring campus environments that attract and engage students, staff, researchers, and the community.

All strategic planning and capital projects must align with campus master plans and the above portfolio plan principles, ensuring they benefit the University, students, and community. These plans guide decision-making for physical development, supporting our Strategy 2030 vision.

2.4. Capital Projects Gateway Framework

The Project Gateway Framework standardises the planning and delivery of facilities projects and allows for appropriate consultation, approvals, and governance throughout the project lifecycle. Throughout this process, solutions are examined for their need and benefit. Spanning the entirety of the project's lifecycle, the Gateway Framework delineates six pivotal gates, each representing a significant juncture in the journey towards project fruition:

- Gate 1 – Proposal
- Gate 2 – Briefing
- Gate 3 – Schematic Design
- Gate 4 – Detailed Design, Procurement and Construction
- Gate 5 – Handover
- Gate 6 – Project Completion

All capital projects will adhere to the Capital Project Gateway Framework, ensuring streamlined processes, transparency, and accountability throughout. This standardised approach fosters efficiency, accelerates decision-making, and cultivates a culture of continuous improvement and excellence, ensuring that every project benefits from its structured guidance.

2.5. Universal Requirements

All Stakeholders and Consultants shall be familiar with Universal Requirements detailed in this section, which provides context on the organisational and governance arrangements that apply to the design and construction of new facilities and describes the key principles that underpin the requirements of the Standards.

2.5.1. Equity, Diversity, and Inclusion

At Charles Sturt University we strive to create a working environment that is fair, inclusive, and free from all forms of prejudice and discrimination. We embrace diversity and equality by promoting social inclusion and equal opportunity for all. This is through:

- merit-based recruitment, selection, and promotion processes
- flexible work practices various leave options that support work/life balance and family responsibilities
- programs that increase access and participation, such as our First Nations Employment Strategy
- workplace adjustments that enable people with disability to work effectively at Charles Sturt University
- targeted training and development opportunities to support career progression
- policies and procedures to prevent unlawful discrimination, harassment, and bullying
- responsive management of concerns and complaints

Charles Sturt seeks to improve access, participation, and success for students from disadvantaged or diverse backgrounds through the provision of support services and programs. That can include students who are:

- from rural and isolated areas
- from lower socioeconomic backgrounds
- from non-English speaking backgrounds
- from humanitarian or refugee backgrounds
- diverse sex, sexuality and gender identity
- First Nations
- have a disability
- possess different preferences for learning such as neurodivergence
- women studying in traditionally male-dominated areas.

We also have programs to help students access and stay at university, including:

- equity scholarships and grants
- access schemes
- student support programs.

To complement the university's commitment to equity, diversity, and inclusion, the design process for university facilities is informed by Inclusive Design principles. These principles encompass the consideration of physical, sensory, and cognitive requirements throughout the user journey, accommodating diverse capabilities and needs. By integrating these principles, the university ensures that its facilities are accessible and welcoming to all members of the community, fostering an environment where everyone can thrive and participate fully in academic and social activities.

2.5.2. First Nations and Reconciliation

We respectfully acknowledge the traditional owners and custodians of the lands on which we live and work together. Charles Sturt University and its staff pay respect to Elders within First Nations communities and acknowledge the continuity of cultures, languages, leadership and knowledge systems.

We acknowledge First Nations peoples' continuous connection to Country, recognising the unique, diverse identities and cultures of peoples in our communities, regions and nation. As such, we value the collaboration

to strongly position First Nations peoples in our university, through languages, leadership, cultures, knowledges, research and ceremonies.

We are privileged to have as our purpose the Wiradjuri phrase Yindyamarra Winhanganha. This phrase means the wisdom of respectfully knowing how to live well in a world worth living in. Together, we will strive to bring this purpose to life through our everyday actions and work. It should underpin everything we do - our commitment to our students, communities and stakeholders, and our interactions with each other. We are still learning about Yindyamarra Winhanganha, and as a university and as individuals we will continually learn, grow, and adopt this meaningful and inspiring concept. This applies to being respectful of current and past knowledges and sharing new knowledges for future generations. When we connect our attributes with those of our peers, amazing things start to happen. We start to make a real difference to the lives of many – the colleagues we work with, the students who come to our university to explore their ideas and everyone who works.

The Charles Sturt University First Nations Strategy, 2023-2025 has been co-created to advance a suite of agreed initiatives aligned to six strategic outcomes:

1. Increase First Nations people's success in higher education as students, graduates, researchers, and staff.
2. Create a culturally safe university environment and implement measures to ensure continuous improvement.
3. Commit to appropriate and diverse involvement of First Nations people in decision making.
4. Promote university-wide understanding and engagement with First Nations ways of knowing, being and doing.
5. Develop sustainable frameworks for First Nations research, engagement, and ethical conduct.
6. Integrate Indigenous Australian studies and content into all courses.

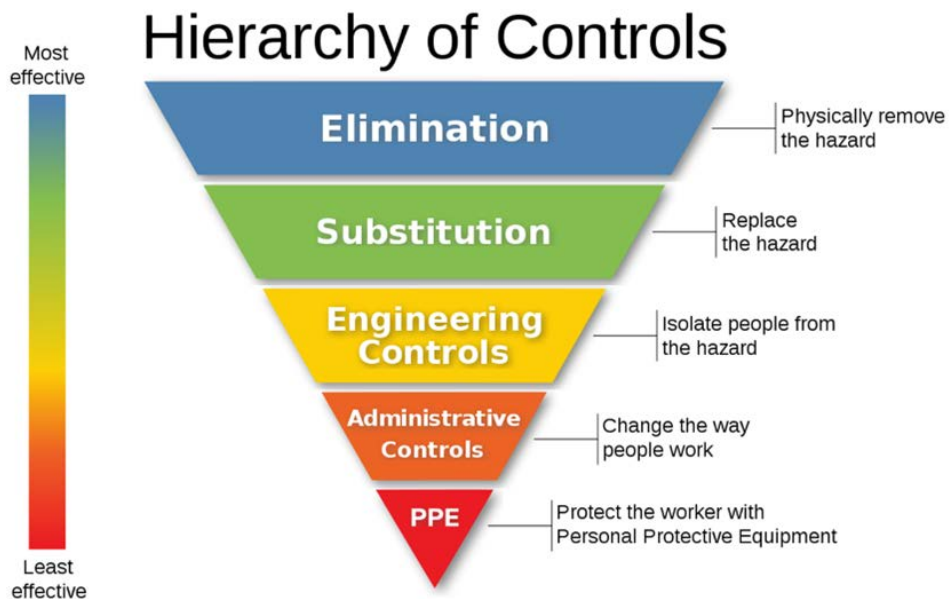
Facilities Management and Strategic Infrastructure shares the University commitment for First Nations initiatives and reconciliation. The group will, where possible, draw upon First Nations experiences through design consultation.

2.5.3. Work Health and Safety

Charles Sturt University commits to providing and maintaining a safe and healthy workplace for workers, contractors, students, visitors, and anyone who's safety can be affected by what we do and what we don't do. We all have a duty as workers, to keep ourselves safe and protect the safety of others both by what we do and what we don't do.

2.5.3.1. Controlling Risk

Charles Sturt projects will make use of the Hierarchy of Controls to remove or reduce risk to people in the workplace (listed in order of effectiveness):



1. **Eliminate:** The most effective control measure involves eliminating the hazard and associated risk. If you can't eliminate risks, you must minimise risks by working through the other alternatives in the hierarchy. For examples, you can eliminate the risk of a fall from height by doing the work at ground level, by removing trip hazards on the floor, disposing of unwanted chemicals, or not working in an isolated or remote area.
2. **Substitute:** Substitute the hazard with something safer. For instance, replace solvent-based paints with water-based ones or allow workers to have more control of line speed instead of pacing line work by computer.
3. **Isolate:** Isolate the hazard from people. This involves physically separating the source of harm from people by distance or using barriers. For instance, install guardrails around exposed edges and holes in floors; use remote control systems to operate machinery; store chemicals in a fume cabinet; place barriers between workers and customers where there is a risk of assault.
4. **Engineer:** Engineer a safer way to work with the hazard. An engineering control is a control measure that is physical in nature, including a mechanical device or process. For instance, use mechanical devices such as trolleys or hoists to move heavy loads.
5. **Administrative requirements:** Administrative controls include training, supervision, work instructions (WI), and standard operating processes/ procedures (SOPs) that are designed to minimise exposure to a hazard as well as to ensure workers can work safely. For instance, provide training and support to managers and workers to identify and manage health and safety risks, implement anti-bullying policies, limit exposure time to a hazardous task, and/or use signs to warn people of a hazard.
6. **Personal Protective Equipment:** Wear Personal Protective Equipment (PPE). PPE limits exposure to the harmful effects of a hazard but only if workers wear and use the PPE correctly. Examples of PPE include earmuffs, respirators, face masks, hard hats, gloves, aprons and protective eyewear.

2.5.3.1. Incidents and Hazards

All incidents must be reported through the University's official reporting system to ensure compliance with obligations and to provide a true and accurate record of events. This reporting is essential for monitoring safety performance, identifying trends, and enabling timely intervention. An event or instance that must be reported includes anything that has, or could have, led to:

- Injury or illness (physical and/or psychological),
- Danger to someone's health or safety,
- Damage to property or the environment.

Reporting safety incidents and hazards is crucial to creating safer campuses for staff, students, contractors, and the public. Prompt reporting enables the University to:

- **Minimise Risks:** By understanding and addressing hazards, the University can take proactive measures to reduce the likelihood of harm and prevent future incidents.
- **Prevent Recurrence:** Investigating reported incidents helps identify root causes and implement corrective actions to prevent similar incidents from occurring.
- **Support Injury Management:** Reporting injuries allows access to injury management resources, facilitating earlier intervention, faster recovery, and a safe return to work. This supports both the injured worker and the University's legal obligations.
- **Compliance and Accountability:** Incident reporting ensures the University is meeting its legal and regulatory obligations, including maintaining accurate records for internal audits, regulatory reporting, and continuous improvement initiatives.

Protect Psychological Well-being: In line with the University's commitment to both physical and psychological safety, incidents involving mental health risks (such as workplace bullying, stress, or trauma) must also be reported and addressed with appropriate support measures.

All staff, students, contractors, and visitors are responsible for promptly reporting incidents or hazards. Failure to report may result in non-compliance with University policies, Work Health and Safety (WHS) legislation, and potential risks remaining unaddressed.

The University ensures confidentiality for those reporting incidents, especially in cases involving sensitive issues such as psychological health. Support systems, including Employee Assistance Programs (EAP) and counselling services, are available for affected individuals.

By fostering a culture of transparency and accountability in incident reporting, Charles Sturt University can take swift action to protect the health and safety of its community, ensuring continuous improvement in campus safety and well-being.

2.6. Safety in Design

Safe design principles, as advocated by Safe Work Australia and similar regulatory bodies, must be integrated into all capital projects at Charles Sturt University unless an exemption is formally approved by the Manager, Capital Works. These principles are:

- **Responsibility:** All individuals and organizations involved in design decisions are obligated to prioritize health and safety. This extends beyond legal compliance to actively identifying and addressing potential hazards throughout the design process.
- **Lifecycle Approach:** Safety must be considered at every stage of a project's lifecycle, from concept to disposal. Early incorporation of safety measures minimizes risks and enhances the project's safety and durability.
- **Systematic Risk Management:** Safe design requires systematic identification, assessment, and control of hazards. This involves conducting risk assessments and implementing controls to mitigate risks effectively.
- **Competence and Training:** Design decision-makers must have the necessary skills and knowledge in safe design practices. Continuous training ensures personnel are equipped to handle safety challenges.
- **Information Sharing and Collaboration:** Open communication among stakeholders is crucial for effective safe design. Sharing information across multidisciplinary teams allows for collective identification and mitigation of safety risks.

These principles mandate a proactive approach to safety in design, minimising risks, enhancing workplace health and safety, and safeguarding the community.

2.7. Sustainability at Charles Sturt

Sustainability at Charles Sturt University represents the institution's commitment to fostering a sustainable future, deeply integrated into its strategic objectives. Aligned with the University's Clean Energy Strategy - a Tier 1 strategic priority - sustainability is embedded in all facets of campus planning, construction, and operations. This commitment is further reflected in the University's Sustainability Statement, which outlines the guiding principles for reducing environmental impact.

The University has established clear sustainability targets through its Asset Optimization Plan, aiming to reduce emissions, improve energy and water efficiency, and minimise waste production. The Strategic Infrastructure group coordinates these efforts, ensuring sustainability principles are woven into the core of all projects and initiatives, including campus-wide engagement with programs like Sustainable Development Goals, maintaining carbon neutrality, and contributing to networks such as Australian Campuses Towards Sustainability.

Integration of Sustainability in Project Management

Facilities Management and Strategic Infrastructure integrate sustainability across all project management areas, including biodiversity, energy, resource efficiency, and sustainable construction. The following sustainability focus areas are systematically managed:

- **Biodiversity:** Initiatives like habitat restoration and native vegetation promotion are executed with project management methodologies to align with sustainability goals and achieve maximum impact.
- **Energy:** Sustainable energy projects focus on reducing consumption and transitioning to renewable sources, with management frameworks ensuring their efficient execution.

- **Resource Efficiency and Waste Management:** Effective project management strategies are applied to waste reduction efforts, recycling programs, and composting initiatives across campuses.
- **Sustainable Construction and Renovation:** Projects incorporate energy-efficient designs and eco-friendly materials, with adherence to green building standards and certifications such as those referenced in the Clean Energy Strategy.
- **Sustainable ICT:** Project planning ensures the implementation of sustainable IT practices, reducing the environmental impact of digital operations.
- **Transport:** Initiatives like alternative transportation, public transit investments, and carpooling programs reduce carbon emissions, guided by structured project management.
- **Water Management:** Conservation projects using water-saving technologies are planned to promote sustainable water use and minimize consumption.

Mandating Sustainability in Contracts and Specifications

All contract documentation and project specifications at Charles Sturt University must explicitly include sustainability requirements unless a formal exemption is approved. These requirements align with the Clean Energy Strategy and broader sustainability goals, ensuring that contractors contribute to reducing the environmental footprint. Contractors are mandated to follow relevant guidelines, including those provided by the EPA, and report on sustainability actions in accordance with BuyNSW contract documentation now used by Strategic Infrastructure.

This approach ensures that sustainability is a core consideration in project planning, design, and execution. It mandates the integration of environmental goals into capital projects, encompassing areas such as:

- Renewable energy implementation,
- Waste reduction,
- Sustainable material use,
- Efficient water management.
- Consultation with Sustainability Experts

Project Officers are required to consult Sustainability at Charles Sturt University early in the project lifecycle to ensure alignment with the University's sustainability objectives. This proactive consultation ensures that environmental considerations are integrated from the outset, promoting resource conservation and environmental stewardship in every project.

2.8. Hazardous Materials

In adherence to safety protocols and regulatory requirements, consultants are mandated to proactively address potential hazards associated with hazardous materials and dangerous goods throughout the design, demolition, and construction phases of projects. It is imperative for consultants to remain conscious of the possibility of encountering such materials on site and to integrate appropriate measures into project plans to mitigate risks effectively. This includes allowing for the identification and management of asbestos, hazardous materials, and dangerous goods in accordance with prevailing codes and standards. To facilitate this process,

consultants are asked to work directly with Project Officers to access Hazardous Materials Reports which can provide insights into potential hazards present within project sites.

Consultants working with hazardous materials will have current state accredited licences along with certifications in AS/NZS ISO 45001:2018, ISO 14001:2015/Amd 1:2024, ISO 9001:2015/Amd 1:2024 along with qualifications in . Furthermore, consultants are tasked with ensuring that project designs accommodate the safe storage and handling of materials to minimise exposure and comply with established safety protocols. This encompasses designing facilities in a manner that minimises the risk of hazards while also adhering to the requirements outlined in current standards and codes. Special attention is directed towards preventing environmental contamination, with consultants mandated to ensure that no building operation or facility activity results in ground, air, or water pollution exceeding approved limits set by the Environmental Protection Agency (EPA). Compliance with standards such as AS 1940:2017 Amd 2:2021 and NSW OH&S Legislative requirements is paramount, particularly concerning the storage of flammable liquids indoors, which necessitates strict adherence to guidelines regarding cabinet separation, ventilation, and ignition source control.

2.9. Information Technology Integration

Strategic Infrastructure managed capital projects will coordinate the early engagement of the Division of Information Technology to ensure DIT resource scheduling, all ICT elements are considered, solutions specified, and equipment procurement lead times are understood. The Division of Technology has specific standards documents related to Networking and Communications along with Audio Visual and Video Conferencing technology areas. Standards documents are to be provided to consultants and contractors and must be adhered to. DIT can be initially engaged through the logging of a support ticket via the DIT website.

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
- Building Code of Australia (BCA)
- Work Health and Safety Act 2011 (NSW)
- Work Health and Safety Regulation 2017 (NSW)
- Environmental Planning and Assessment Act 1979 (NSW)
- Environmental Planning and Assessment Regulation 2000 (NSW)
- Protection of the Environment Operations Act 1997 (NSW)
- Heritage Act 1977 (NSW)
- Security of Payment Act 1999 (NSW)

3.2. Supporting Standards

Standard Number	Standard Title
AS 3600:2018	Concrete structures
AS 3700:2018	Masonry Structures
AS 4100:2020	Steel structures
AS 1428 Series	Design for access and mobility
AS/NZS 4804:2001	Occupational health and safety management systems — General guidelines on principles, systems and supporting techniques
AS/NZS ISO 14001:2016	Environmental management systems — Requirements with guidance for use

3.3. Industry Codes of Practice

SafeWork NSW List of codes of practice
<https://www.safework.nsw.gov.au/resource-library/list-of-all-codes-of-practice>

3.4. University Documents

Charles Sturt University Facilities and Premises Policy
<https://policy.csu.edu.au/document/view-current.php?id=465>

Charles Sturt University Facilities and Premises Guidelines - Damage or Loss of Property
<https://policy.csu.edu.au/document/view-current.php?id=71>

Charles Sturt University Facilities and Premises Guidelines - Space Management

<https://policy.csu.edu.au/document/view-current.php?id=347>

Charles Sturt University Facilities and Premises Procedure - Access, Use and Security

<https://policy.csu.edu.au/document/view-current.php?id=239>

Charles Sturt University Facilities and Premises Procedure - Asbestos Management

<https://policy.csu.edu.au/document/view-current.php?id=461>

Charles Sturt University Facilities and Premises Procedure - Circular Economy and Resource Efficiency

<https://policy.csu.edu.au/document/view-current.php?id=572>

Charles Sturt University Facilities and Premises Procedure - Corporate Signage

<https://policy.csu.edu.au/document/view-current.php?id=193>

Charles Sturt University Facilities and Premises Procedure - Electrical Safety

<https://policy.csu.edu.au/document/view-current.php?id=407>

Charles Sturt University Facilities and Premises Procedure - Parking and Traffic Management

<https://policy.csu.edu.au/document/view-current.php?id=337>

Charles Sturt University Facilities and Premises Procedure - Pesticide Management and Notification

<https://policy.csu.edu.au/document/view-current.php?id=340>

Charles Sturt University Facilities and Premises Procedure - Space Management

<https://policy.csu.edu.au/document/view-current.php?id=355>

Charles Sturt University Health, Safety and Wellbeing Policy

<https://policy.csu.edu.au/document/view-current.php?id=212>

Charles Sturt University Health, Safety and Wellbeing Procedure - Incident Reporting and Investigation

<https://policy.csu.edu.au/document/view-current.php?id=518>

Charles Sturt University Health, Safety and Wellbeing Procedure - Induction and Training

<https://policy.csu.edu.au/document/view-current.php?id=476>

Charles Sturt University Health, Safety and Wellbeing Procedure - Inspections, Plans, Audits and Reviews

<https://policy.csu.edu.au/document/view-current.php?id=188>

Charles Sturt University Health, Safety and Wellbeing Procedure - Risk and Hazard Management

<https://policy.csu.edu.au/document/view-current.php?id=471>

Charles Sturt University Information Technology Policy

<https://policy.csu.edu.au/document/view-current.php?id=448>

Charles Sturt University Risk Management Policy

<https://policy.csu.edu.au/document/view-current.php?id=175>

Charles Sturt University Risk Management Procedure

<https://policy.csu.edu.au/document/view-current.php?id=413>

Charles Sturt University Resilience Policy

<https://policy.csu.edu.au/document/view-current.php?id=332>

Charles Sturt University Thermal Comfort Guidelines

<https://policy.csu.edu.au/document/view-current.php?id=484>

Charles Sturt University Strategy 2030

<https://about.csu.edu.au/our-university/universitystrategy-2030>

Charles Sturt University Contractor Worker Registration

<https://about.csu.edu.au/services-facilities/contractor-management/worker-registration>

3.5. Other Resources

Tertiary Education Facilities Management Association

<https://www.tefma.com/>