NATIONAL STANDARD
OF COMPETENCY
FOR ARCHITECTS
2021

EXPLANATORY NOTES
AND DEFINITIONS

2021 NSCA

EXPLANATORY NOTES AND DEFINITIONS

FOREWORD

The practice of architecture continually faces new challenges and, as such, needs to be inherently dynamic. The context in which architects work is ever-changing, and our communities' expectations of the built environment continue to evolve. It is important, therefore, that we maintain standards of competency that ensure our knowledge and skills keep pace with these many changes, always with the intent to drive further improvements in our built environment.

We are particularly proud that the 2021 National Standard of Competency for Architects (NSCA) promotes a greater focus on more meaningful engagement with First Nations peoples and caring for Country, and also supports key reform in sustainability and the role of the built environment in mitigating and adapting to the impacts of climate change.

These are areas of great interest for practitioners, and the 2021 NSCA is well supported within the architectural community. We acknowledge that these are new areas of learning for many architects but recognise that there is a significant desire within the profession to address these issues. This document has been developed to support architects, graduates, students and educators to increase their knowledge, competency and experience in these areas. It aims to ensure we are all ready when the rollout of assessments to the 2021 NSCA begins in January 2022. (Implementation will be progressive from January 2022 to January 2023 for the various AACA programs, for more detail please refer to the website).

This is a guide document. It offers definitions of new terms, explanations of what the criteria mean in practice, and examples of how competency might be demonstrated at different stages of an architect's development. It is not exhaustive, but reflects key items of learning that are likely to be of most benefit to the majority of architects. It will be reviewed and added to annually.

I'd like to thank Dr Danièle Hromek (Budawang/Yuin) and Vanessa Dudman for their expertise and efforts in writing and developing the content offered in this document, and thank the AACA National Advisory Panel, the AACA National Convenor, the AACA program working groups, the Australian Institute of Architects First Nations Working Group, and the Climate Action and Sustainability Taskforce for their involvement in reviewing and guiding this work.

Instigated under the leadership of former CEO Kate Doyle, the 2021 NSCA will be enriched by the addition of these explanatory notes. As our knowledge of issues related to First Nations and sustainability increases, so too will the information in this document. We expect it to be a solid starting point that provides a framework to help begin a process of deep engagement with knowledge critical to both current and longer-term challenges facing the built environment and the practice of architecture.

Kathlyn Loseby, CEO AACA

November 2021

Located on Gadigal Country, the AACA acknowledges the Traditional Custodians of Country throughout Australia and their connections to land, sea and community. We pay our respects to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander Peoples today.

INTRODUCTION

The 2021 National Standards of Competency for Architects represents a significant shift in the way the capabilities and competencies of an architect are understood and assessed. These changes include new and expanded content within the Professional Capabilities and the introduction of three Competency Profiles that map the expectations at three different levels. These expectations are described through Performance Criteria.

Two specific new areas of responsibility and knowledge relate to understanding and respecting Country and expanded expectations in terms of sustainability, life cycle assessment and whole life carbon.

These Explanatory Notes and Definitions support understanding of these new and expanded areas of knowledge, and clarify those knowledge areas that have presented challenges to candidates for registration in the past, or have been the subject of debate. They define key terms, and provide explanatory notes and examples of how a range of Performance Criteria might be met at graduation, at the point of registration, and in the ongoing practice of an experienced architect.

This is not an exhaustive list of definitions (and may be added to and modified over time as part of an ongoing annual review process). As such, the examples aim to support understanding and offer guidance by presenting suggestions of how requirements might be met and the required knowledge could be demonstrated.

CREDITS

Dr Danièle Hromek (Budawang/Yuin) and Vanessa Dudman wrote these definitions, explanatory notes and examples.

The content supporting the caring for Country obligations is grounded in Dr Hromek's foundational research and in her own practice as an Indigenous built environment practitioner and cultural translator. Her doctoral thesis of 2019, *The (Re)Indigenisation of Space: Weaving narratives of resistance to embed Nura [Country] in design* considers Aboriginal peoples' comprehension of space, exploring spatial reclamation and lived experiences of space to reveal connections between Country, people and practice. This work was included on the UTS's Chancellor's List 2020 which recognises outstanding doctoral theses that are judged to be of the highest calibre.

This was developed with the support of the Australian Institute of Architects First Nations Working Group, chaired by Sarah Lynn Rees and Professor Paul Memmott, and is endorsed by this group.

The content supporting the new environmental sustainability requirements and expanding on other areas of professional competency was written by Vanessa Dudman. It is informed by her long career as a senior manager within architectural practice and as an independent consultant.

The sustainability definitions and content has been developed with the input and support of the Climate Action and Sustainability Taskforce (CAST) of the Australian Institute of Architects, led by Professor Helen Lochhead and Professor Deo Prasad.

The development of this document was led by Kathlyn Loseby, CEO of the AACA and guided by the AACA National Advisory Panel. It was edited by Justine Clark and Susie Ashworth.

PATHWAYS TO COMPETENCY

The NSCA provides a clear roadmap for developing and assessing professional competency at key milestones over the course of an architectural career – from graduation, through the registration process, to ongoing practice.

The NSCA acknowledges that the path to acquiring competency is not always linear, and there are many diverse career paths within the architecture profession. This means that individuals may, at any one time, have differing levels of competency across the various professional capabilities. The NSCA sets out the *minimum* requirements for meeting the criteria at each competency profile.

These competencies are defined through a suite of performance criteria, with expectations detailed for each of the three competency profiles.

These requirements are described through a set of active terms, and are organised within a broad framework that corresponds to the process of acquiring competency through increasing knowledge and experience over time – from foundational awareness to understanding to skilled application.

These three stages of acquiring knowledge and experience typically align with the three competency profiles: graduates are expected to have foundational knowledge of a topic; candidates for registration are expected to be able to clearly demonstrate and articulate a more detailed level of knowledge and be able to apply core knowledge sets; and experienced practitioners are expected to be able to skilfully apply this knowledge and to continue to increase their understanding and expertise over time.

Not all performance criteria articulate different requirements for each competency profile – many have a single requirement across the profiles, and some criteria are not applicable at graduation. The guidance offered in this document focuses on those criteria that have staged requirements and/or cover new areas of knowledge.

DEVELOPING COMPETENCY

FOUNDATIONAL		SKILLED
AWARENESS	**UNDERSTANDING**	**APPLICATION**
• Be aware of • Have knowledge of	• Understand • Demonstrate understanding • Have an understanding of • Be able to draw on • Be able to evaluate • Be able to explain • Be able to explore • Be able to identify • Be able to investigate • Be able to nominate • Be able to select	• Be able to advise • Be able to analyse • Be able to apply • Be able to assess • Communicate • Be able to complete • Comply with • Be able to coordinate • Be able to develop • Be able to engage with • Be able to implement • Be able to integrate • Be able to monitor • Be able to prepare • Be able to present • Be able to produce • Be able to resolve • Be able to undertake

The following definitions expand on active terms that have specific disciplinary meanings in the context of architecture.

1. AWARENESS

Be aware of	To have a foundational awareness of a particular concept, principle, philosophy, methodology or idea
Have knowledge of	To have some familiarity with the characteristics of a concept, skill or principle.

2. UNDERSTANDING

Understand	To grasp the idea of; to know the intended meaning of; perceive the significance and explanation of; perceive the cause of; to know why or how something works; to comprehend.
Demonstrate understanding	Demonstration of understanding can be achieved through organising, comparing, translating, interpreting, describing, and stating facts and ideas.
Be able to explain	To describe something in a way that brings about understanding; to make something intelligible; to provide information to give clarity (to an idea, body of knowledge, concept, theory, etc.).
Be able to explore	To establish facts and find out about (the condition or nature of something); to ascertain or discover a cause for something, etc. To inquire into or discuss (a subject) in detail; to assess, evaluate (an option, a possibility, etc.); to investigate, scrutinise, examine, survey.

3. APPLICATION

Be able to apply	To be able to interpret, use, demonstrate, implement and execute. Demonstration of application can be achieved through using acquired knowledge, facts, techniques and rules in a different way to problem solve.
Be able to develop	To bring to fruition (a new design, methodology or process), typically after the implementation of alterations to the original concept following testing or consultation. To formulate or create by successive stages of improvement or advancement. To explain in detail, elaborate on (an idea, theory, etc.).
Be able to undertake	To have the capacity to do or begin to do something (create a conceptual design, prepare a document, to deliver a presentation, etc.).

NEW AND EXPANDED AREAS OF KNOWLEDGE

This section supports the new areas of knowledge with the NSCA – understanding and respecting Country and expanded expectations in terms of sustainability, life cycle assessment and whole life carbon. It explains and defines terms and phrases that may be unfamiliar to some. Becoming familiar with these terms, and the concepts conveyed through them, is fundamental to developing competency in these areas.

UNDERSTANDING COUNTRY

Embedded within the practice of architecture, as defined by the NSCA, is the recognition of Aboriginal and Torres Strait Islander Peoples' ongoing connection and custodianship of Country, and the ethical responsibilities to the physical environment. These responsibilities are fundamental to architecture practice in Australia.

Country is broadly understood as a holistic worldview that incorporates human, non-human and all the complex systems that connect them. Country relates to First Nations Peoples' cultural groups and the places to which they belong. It is understood in cultural, spiritual and tangible ways. An understanding of Country includes intangible ideas about place, Law, lore, language, customs, spirit, cultural practice, identity and kin. It is very important to recognise that First Nations Peoples' 'understanding of Country' differs between groups, individuals and contexts.

First Nations or **First Nations Peoples** refer to Aboriginal and Torres Strait Islander peoples. These terms recognise and respect the position of Aboriginal and Torres Strait Islander peoples as those who first inhabited and cared for the continent now called Australia. **Aboriginal peoples** are those whose ancestry originates from the mainland. **Torres Strait Islander peoples**' ancestry originates from the Torres Strait Islands. **Indigenous peoples** is the term used to include both Aboriginal and Torres Strait Islander peoples, while also associating with Indigenous peoples globally. Each individual, community and group will have different preferences regarding how they are identified. It is good practice to ask their preference and to respect this by using their preferred terms.

Caring for Country is a term used to describe the land management practices and programs that First Nations Peoples undertake, and the role these play in enabling continuing culture. To care for Country is to recognise that the different ecosystems across the continent require different practices to enable sustainable living.

First Nations Peoples' **aspirations to care for Country** respond to the knowledge and responsibility entrusted to them, providing a deep sense of belonging, purpose and identity.

Respects Country is a design position. It requires an ethical approach to design and respect for Country and the environment.

Implications for Country refers to ethical and considered behaviour towards Country and those who are part of Country, including human and non-human. The specifics of this will involve different things on different projects, depending on the capacity within the project and project team to engage with First Nations Peoples and the place itself. Minimum considerations involve the protection of existing cultural materials. The next step is to do no further harm to culture and the environment. At its best, working with 'implications for Country' is about celebrating Country through the project. In a rural or outback setting, this could mean enabling cultural practices associated with a site. In an urban context, it might involve engaging with deeper memories and narratives of place.

First Nations land management refers to a diverse range of cultural, environmental, natural and economic resource management activities that are undertaken by individuals or groups. These include ceremony, knowledge sharing, periodic burning

practices (often known as cultural fire or cultural burning), management of water, bush regeneration, bush harvesting or hunting, invasive species control, biodiversity management, art making, and management and maintenance of art sites.

Cultural practices incorporate any practice of caring for Country that First Nations Peoples carry out that connects them to their culture and Country. A cultural practice is not restricted to 'traditional' practices; 'contemporary' practices can also connect with culture and Country. Cultural practices are specific to groups and even individuals, and differ depending on the Country and culture from which they originate.

Culturally responsive refers to being aware of one's own cultural identity and worldview to enable respectful actions and thoughts towards others' ideas, beliefs and values, irrespective of whether they differ from one's own cultural position. Acting in a culturally responsive way requires a level of cultural competence and a recognition that there is no single way of being, acting and knowing. Cultural responsiveness enables equity and inclusion.

Cultural competence is the values, practices and behavioural skills that enable participation in an ethical and effective way across cultures. Cultural competence ensures cultural safety for all involved.

Cultural safety is defined as an environment that is safe for all people, in which there are no challenges or denial of others' identities. In contrast, actions that create culturally unsafe environments include demeaning or disempowering others, and can originate from individual positions or systemic policies, procedures or practices. Cultural safety requires self-awareness of one's own values, beliefs, perspectives and attitudes that may intentionally or unintentionally harm others.

Engagement processes are the processes of working in a collaborative way with groups of people affected by or affiliated to a project or place. Engagement seeks to work with stakeholders to achieve equitable decision-making, sustainable outcomes and enduring relationships. Engagement is an ongoing undertaking and assumes that key stakeholders are included in a project from inception to completion and through the ongoing life of the place.

A meaningful engagement process is one that includes active listening, taking account of stakeholders' perspectives, and embedding those in outcomes.

A **reciprocal relationship** is a relationship that is balanced for both parties, and in which one is not benefiting more than the other. For First Nations Peoples, relationships with land are based on respect and reciprocity. Through kinship structures, First Nations Peoples understand their relationships to each other and everything else in the complex relational system.

Cultural knowledge is the shared values, norms, worldviews, symbols, and understandings of reality that a group of people believe and think. These differ from culture to culture and are an aspect of the shared knowledge within the culture. First Nations Peoples' cultural knowledge has accumulated via long and sustained contact with specific areas, ecosystems and resources. This is reflected in narratives, languages, values, beliefs, customs, Laws and social organisation. Unlike cultures that use written word, First Nations Peoples' cultural knowledge is often oral. As such, First Nations' cultural knowledge responds to change, absorbing new information and adapting, and therefore is not static.

Knowledge Holders are individuals and/or particular family groups that hold and maintain specific aspects of cultural knowledge, including knowledge about places, the environment and methodologies of caring for Country. Knowledge Holders and Traditional Custodians are those who can speak for Country due to their deep ancestral connections to place. Each community decides who the Knowledge Holders are within

that community. This is not a self-appointed role. While the broader community may be aware generally about features or aspects of cultural knowledge, it is not common practice for detailed cultural knowledge to be conferred in the broader community or First Nations organisations.

Vouching is using cultural translators or relational guides who are integrated in the community and can introduce you in a culturally appropriate way. Vouching can help both ways – in confirming someone is who they say they are, and that they are of good character.

Understanding obligations in relation to the **authorship of cultural knowledge** refers to appropriately and respectfully crediting those who are the originators, custodians or creators of cultural knowledge, taking responsibility for this occurring, and being accountable towards Knowledge Holders.

Cultural appropriation is the inappropriate use or application of elements of one culture by members of another culture. This may include identities, practices, customs, ideas, artworks, clothing or designs. It is particularly problematic when a dominant culture exploits a minority inappropriately or for gain at the expense of the original culture.

First Nations Peoples' **aspirations to care for Country** respond to the knowledge and responsibility entrusted to them, which provides a deep sense of belonging, purpose and identity.

A **worldview** is the fundamental overarching comprehension of the world held by an individual or society that informs their values, attitudes, actions and beliefs. It is the perspective from which one interprets the world. The **knowledges, worldviews and perspectives** of First Nations Peoples differ from those of other peoples as they originate from different societal structures and places.

Culturally responsive methods employ respectful communication that is thoughtful and inclusive. They rely on having an awareness of one's own cultural identity and views about difference, and the ability to learn from and relate to those from other cultures.

Supporting **health and wellbeing outcomes for Country** involves enabling sustainable and ongoing care of Country activities *and* supporting and reinforcing First Nations peoples' relationships to their environments through cultural, physical, spiritual, social and economic inclusion. Health and wellbeing outcomes are interdependent for First Nations Peoples and for Country.

An understanding of the **impact on Country** relates to understanding the impact on the environment. However, it is not the same thing. First Nations Peoples understand themselves to be part of Country and so by impacting Country people are likewise impacted. The intangible aspects of Country such as spirit, cultural expressions, and lore are inseparable from Country; thereby, when impacting Country, the identity, dignity and self-empowerment of First Nations People are also affected. This may be in both positive and negative ways.

Law when spelled with a capital L refers to the laws, customs and protocols of the land set out in the Dreaming as a set of rules or guidelines for every entity to follow as a means of caring for Country. Laws are not changeable by humans. When spelled with a small l, **law** is referring to the imported laws that have come from abroad. For reference, **lore** refers to knowledge or tradition passed from generation to generation through story, song, and other performative expressions. Law and lore are inter-related and rely on each other, whereas law imposes itself on the land, and on First Nations Peoples.

ENVIRONMENTAL SUSTAINABILITY, LIFE CYCLE ASSESSMENT AND WHOLE LIFE CARBON

The 2021 NSCA places a new emphasis on environmental sustainability and life cycle assessment (LSA) and introduces the concept of whole life carbon (WLC).

In defining this area of knowledge, the 2021 NSCA draws on the National Strategy for Ecologically Sustainable Development (NSESD) definition of Ecologically Sustainable Development (ESD) – "using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased."

Released in 1992, this definition was developed specifically for an Australian context and was endorsed by the Council of Australian Governments (COAG). The core objectives and guiding principles set by the NSESD have been widely referenced and incorporated into many federal and state policies and pieces of legislation in Australia. They are also referenced in the Green Building Council of Australia (GBCA) guidelines.

This definition provides a useful framework, particularly as there is no global consensus on the definition of everyday terms such as sustainability, sustainable development and environmental sustainability.

Life Cycle Assessment (LCA) is the systematic analysis of potential environmental impacts associated with the provision of products and services. LCA is a technique for evaluating the environmental impacts of any industrial activity across its entire life cycle – from sourcing raw materials, through manufacture, assembly, use and demolition to the point where all residual materials are returned to the earth. This is known as from 'cradle to grave'.

The International Organization for Standardization (ISO) provides guidelines and requirements for conducting a Life Cycle Assessment according to ISO 14040 and ISO 14044.

Whole Life Carbon (WLC) refers to the carbon emissions resulting from the construction and use of a building over its whole life, including the demolition and disposal phase. WLC includes both operational and embodied carbon impacts. Whole Life Carbon is defined and widely used by World Green Building Council and other authoritative organisations internationally.

The ISO 14000 series of standards sets out the overarching principles of WLC measurement in the built environment. The World Green Building Council provides guiding principles for Net Zero Operational Carbon and Net Zero Embodied Carbon.

The European Committee for Standardization (CEN) Standard EN 15978 specifies a calculation method, based on Life Cycle Assessment (LCA) and other quantified environmental information, for assessing the environmental performance of a building, and is applicable to new and existing buildings and refurbishment projects. This outlines five stages of a building's life cycle from cradle to grave.

Operational carbon is the energy use during occupation of a building, facility or place.

Embodied carbon is the emissions associated with raw material extraction, building material manufacture, transport, construction and maintenance and the building's end of life (recycling, reuse and/or disposal of the materials).

Design considerations for environmental sustainability include (but are not limited to) passive solar design, energy efficiency and thermal comfort (operational carbon); the selection of materials, resources and systems of construction to minimise construction waste and maximise reuse and recycling (embodied carbon); the use of non-toxic

materials; water consumption and management and the integration of green infrastructure; as well as exploring opportunities for adaptive reuse.

All these considerations have implications for climate change, and the changing climate will have implications for these in return. These considerations also all have implications for environmental impacts beyond carbon and climate change – for example, resource depletion, habitat and biodiversity loss, environmental pollution and toxicity and so on. Environmental sustainability encompasses all of these factors.

Mitigation is about how good design can mitigate the impacts of climate change and build resilience – for example, aspiring to net zero through good design.

Adaptation is about how good design can help communities adapt to those impacts that cannot be avoided and builds resilience to climate change.

TERMS SPECIFIC TO ARCHITECTURAL PRACTICE

The following definitions explain specific terms used throughout the Performance Criteria, which are particular to the practice of architecture. This is not an exhaustive list and may be added to over time.

A **Client Architect Agreement (CAA)** is the formal agreement between the client and the architect. It may also be known as a Client Agreement, Letter of Engagement, Fee Letter or Consultancy Agreement. This generally includes details of the parties to the agreement, the project brief, stages of architectural services being offered, construction budget, the selected project procurement process, program, costs for the phases of service offered, and other secondary or sub-consultants that may be required to assist in undertaking the services, and assumptions and exclusions. The agreement also stipulates the obligations of both parties under the agreement, including compliance with the relevant code of conduct, and other terms and conditions, such as dealings with copyright and moral rights, variations to services, and termination. Specific requirements differ across states and territories. Refer to the relevant Architects Act, regulation and/or code of professional conduct.

Examples of industry contracts include:

- Association of Consulting Architects Short Form Client Architect Agreement
- Consult Australia Short Form and Long Form Consultancy Agreements
- Australian Institute of Architects Client and Architect Agreement

Examples of Australian Standard Contracts include:

- AS 4122-2021
- AS 4904-2009 for Design and Construct procurement method

The **Procurement method** is the method used to bring a building or other project into existence – from client initiation to commissioning and handover. A variety of procurement methods and corresponding construction contracts are available. The choice of procurement strategy is influenced by key client objectives and project parameters such as scope, time, quality and cost. These factors also allocate a specific risk profile to the parties involved in each method.

More commonly used procurement methods include:

- Fixed lump sum
- Design and construct
- Cost plus

Some other forms of procurement methods undertaken in Australia include:

- Novation (often used in design and construct projects)
- Construction Management
- Turnkey
- Public Private Partnership (PPP)
- Varying relationship models including alliancing and early contractor involvement.

Typically, all types of construction procurement contracts include the timely and cost-effective management of design delivery, review, and inspection processes as part of the architectural scope of services.

Partial services is when an architect is appointed to only complete some of the core architectural services, such as 'design only', 'design and documentation only' and 'partial contract administration only'. It is important to understand the inherent risks

External Resources

Association of Consulting Architects Short Form Client Architect Agreement*

Consult Australia Short Form and Long Form Consultancy Agreements*

Australian Institute of Architects Client and Architect Agreement*

AS 4122-2021

AS 4904-2009 for Design and Construct procurement method

Novation*

Architects Award

National Construction Code (NCC)

Standards Australia

Work Health and Safety Act (WHS Act)

Work Health and Safety Regulations (WHS Regulations)

Safe Work Australia

*Subscription required

associated with providing partial services – for instance, taking over design and documentation services from another architect, or only completing documentation to tender phase. Partial services with limits and exclusions need to be clearly defined.

Other architectural services are those beyond the traditional core architectural services. This includes a very wide range of specialist activities – for example, record documentation for heritage restoration, master planning and expert witness services. Before providing these services, the architect should confirm they have the necessary education, experience, and resources to competently undertake them.

Engagement of secondary and sub-consultants refers to the process, implications, inherent benefits, and risks of either directly engaging consultants or having the client engage the consultants directly. Moreover, there needs to be recognition that whichever form of engagement is adopted, an architect should undertake due diligence on the prospective consultants including confirming their qualifications, their capacity to undertake the project, whether there are limits on their liability, and whether their conditions of engagement are consistent with those of the architect.

Regulatory requirements and obligations refer to the obligations set out in federal and state/territory legislation that affect architectural practice. This includes legislation relating to climate change, sustainability, environmental requirements, heritage, Indigenous and First Nations matters, work, health and safety matters, employment, human rights and antidiscrimination, and the ethical and legal obligations embedded in the Architects Act, state/territory based professional codes of conduct and the Architects Award. This also includes the obligations set out in the National Construction Code (NCC) and applicable Australian Standards.

Relevant federal regulations include, but are not limited to: *Fair Work Act 2009,* National Employment Standards*, Architects Award 2020, Competition and Consumer Act 2010, Copyright Act 1968* and *Copyright Amendment Act 2000, Racial Discrimination Act 1975, Sex Discrimination Act 1984, Disability Discrimination Act 1992, Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)* and *Environmental Protection and Biodiversity Conservation Regulations 2000, National Greenhouse and Energy Reporting Act 2007, Aboriginal and Torres Strait Islander Heritage Protection Act 1984, Native Title Act 1993*, the *Aboriginal and Torres Strait Islander Act 2005*, and the *Safe Work Australia Act 2008*. State/territory legislation varies across Australia and it is imperative to refer to relevant regulation in each jurisdiction.

Quality and performance standards: can include documents published by government departments and other reputable/authoritative institutions comprising mandatory and preferred quality and performance criteria. They may include aspirational vision and philosophy statements as well as technical standards and checklists/data sheets.

Relevant building codes and standards include the National Construction Code (NCC) and the relevant Australian Standards referenced within the sections of the NCC.

Planning controls include state and territory acts, and planning policies and local council policies.

Communities are a group of people bound by commonalities. These shared characteristics and experiences vary widely, and may include aspects such as geographic location, cultural norms, customs, identity, levels of education, interests, nationality, religion, risk profile, social roles and values. Communities exist physically and virtually. They may be small or encompass large group affiliations. The term community may also be used to mean society in general; however, in this instance, community and 'implication for community' is focused on the interactions between the built environment and the community it serves.

Stakeholders are those with an interest or concern in something. They generally have responsibilities towards it and an interest in its success. In this instance, project stakeholders refer to clients and those parties with a financial interest in the project as well as the broader user groups – for example, residents, customers, employees, vendors, suppliers, communities and government bodies.

Continued engagement means engaging in a genuine, meaningful and ongoing way from the project conception to completion.

Project planning is the act of planning for a specific project to address the brief and other criteria. A project plan stipulates the tasks and activities to be undertaken, the project deliverables, the program durations for each task and activity (for example, the integration of planning and building approval requirements), accountabilities, participant and stakeholder inputs (including local communities and First Nations Peoples), coordination processes, important gateway approvals, and staff resourcing.

The project plan focuses on the 'what', 'how' and 'when'. It maps the steps and identifies when important interactions with stakeholders and communities need to take place. It guides project outcomes and tracks costs to the business so that adequate staff resources can be allocated to the tasks identified.

Project costs refers to the total funds needed to complete a project. It comprises direct costs and indirect costs to the business. Examples of direct costs include labour, materials and equipment. Examples of indirect costs include utilities and quality control processes. Project costs describe the costs associated with the provision of architectural services, and relate to the approved architectural fee. They should not be confused with construction costs or cost of works.

Project team structures are groupings of staff with appropriate training and expertise brought together for the express purpose of completing a project according to a defined project brief and scope of services.

Project development options refers to the process of identifying and analysing contextual considerations, including project brief objectives, budgetary and program objectives and regulatory requirements, as well as consideration for stakeholders, community and the environment. The architect uses this information to assess project viability by creating iterative and culturally responsive exploration studies that appraise a range of ideas. These studies evolve through testing to become informed concept designs. (This may also be known as feasibility studies.)

Intellectual property (IP) refers to creations of the mind – for instance, artworks, literary works, inventions, symbols, names, and images. IP is protected by a range of federal legislation, including the *Copyright Act 1968*, *Patents Act 1990*, *Patents Regulations 1991*, the *Trade Marks Act 1995*, *Trade Marks Regulations 1995* and *Designs Act 2003*.

Moral rights are the personal rights held by the creator of a work, even if the creator no longer owns the work. Moral rights concern the creator's right to be correctly credited or attributed, and their work protected from derogatory conduct. Moral rights cannot be assigned or sold. Moral rights are protected under the Copyright Act and have three components – Right of Attribution, Right Against False Attribution and Right of Integrity of Authorship.

Indigenous Cultural and Intellectual Property (ICIP) refers to the rights of First Nations Peoples to protect their heritage and culture. There is no specific legislation in Australia that recognises ICIP; however, it may be protected by legislation related to copyright or trademarks. First Nations communities and individuals are increasingly choosing to implement protocols and contracts that protect their ICIP.

Risk management and mitigation principles have the objective of identifying risks and addressing them by elimination, modification or management. One of the tools used to identify risks is a Risk Matrix, which concentrates on the likelihood and consequences of each risk. Risks are then controlled using the 'hierarchy' of control measures. Regularly employing risk management strategies is a means of improving the likelihood of project success, particularly for complex projects.

Safety in design Designers have obligations to design safe places of work under the various state and territory work health and safety legislation. This legislation is based on the model Work Health and Safety Act (WHS Act) and Work Health and Safety Regulations (WHS Regulations) formulated by Safe Work Australia. Safe places of work include the parts of residential development where maintenance works or building servicing is undertaken (for example, waste collection, post and parcel delivery). The legislation and corresponding regulations vary slightly in each state and territory, and it is important that architects are familiar with their duties in the jurisdictions in which they practice.

A Safety in Design risk analysis includes the following broadly defined steps:

Step 1 – Hazard Identification

Step 2 – Risk Evaluation

Step 3 – Control Measures

Step 4 – Action Plan

Step 5 – Maintenance of Risk Management

A Safety in Design process should consider all stakeholders' input.

Project Risk is the identification of factors that may impact upon the client's brief, project requirements and objectives. Project risk can also apply to the inherent risks to the architectural practice – for example, the nature of the client, their level of experience and sophistication, and whether they are litigious. Other risk factors include not having appropriate training to undertake services.

Project documentation includes models, drawings, specifications, schedules, reports, registers and certificates, which are coordinated and cohesive. Documentation evolves over the various phases of a project. The different modes of representation, and levels of detail provided, should be commensurate with the purpose of the document and intended audience. Documentation intended to be issued for construction (IFC) should be fully described and resolved to achieve the project quality and cost objectives, as well as comply with planning controls and construction codes. Some procurement methods will affect the way architectural documentation is prepared; for example, under a design and construct contract, the architect may be required to produce architectural documentation in trade packages.

Accurate documents The requirement to produce accurate, relevant, truthful and unambiguous documentation is enshrined in the various state and territory codes of professional conduct. A failure to comply with this may constitute unsatisfactory professional conduct.

Construction services provisions relate to construction phase services as defined in the **Client Architect Agreement**. (They are sometimes referred to as construction or site attendance.) These services involve observing conformity to the design intent and quality outcomes embedded in the contract documents. They include attending site meetings; periodic site visits to carry out visual inspections; responding to contractors' requests for information (RFIs); reviewing shop drawings, mock-ups, prototypes and

sample submissions; and carrying out defects inspections and preparing inspection reports. 'Provisions' relate to the processes and supporting documentation that must be provided to deliver these services. Processes include programming regular site visits; having an appropriate tracking system for managing responses to RFIs and shop drawing review; and documentation such as monthly site reports, defects inspection reports, and compliance certificates and registers.

Construction administration systems refers to the systems employed to enable architects to carry out their contract administration duties as defined in the **Client Architect Agreement**, ensuring that the works are executed in accordance with the terms of the construction contract. In addition to the construction services provisions highlighted above, these duties comprise the following: issuing architects' instructions, assessing progress claims, issuing progress certificates, assessing contract price adjustments and extension of time claims, certificate of practical completion and final certificate on completion of the defects liability period. The systems employed include using template forms that are compatible with the construction contract, registers to track claims, variations, and adjustments to the contract sum. Underpinning this should be a robust filing system for storing and retrieving contract information.

Periodic site visits are made by architects in accordance with the **Client Architect Agreement**. These enable the architects to execute their duty of care and satisfy themselves that the works are being carried out generally in accordance with the contract documents.

Post occupancy evaluation (POE) is the process of rigorously and systematically evaluating the performance of a building against specified assessment criteria, objectives, or standards following occupation. A clear statement of the purpose of the post-occupancy evaluation is essential. POEs are usually undertaken between six months and one year after completion although there may be occasions when a longer time period is preferred. A POE may also be carried out on the procurement process itself.

EXPLANATORY NOTES

PRACTICE MANAGEMENT AND PROFESSIONAL CONDUCT

PC 1

On graduation from an architecture program	At the point of registration	Post registration
Understand the **regulatory requirements and obligations** pertaining to practice as an architect, including professional codes of conduct and obligations for continuing professional development and professional indemnity insurance.	Demonstrate understanding of the **regulatory requirements and obligations** pertaining to practice as an architect, including legislation, professional codes of conduct, and obligations for continuing professional development and professional indemnity insurance.	Comply with the **regulatory requirements and obligations** pertaining to practice as an architect, including legislation, professional codes of conduct, obligations for continuing professional development and professional indemnity insurance.

Explanatory Notes

Architects must have a broad knowledge of the regulatory frameworks pertaining to architectural practice, practice management and registration as an architect. A sound working knowledge, including recognition of the hierarchy and interrelationships between the legislations, is required to ensure architects can identify and comply with these obligations.

Examples

At graduation, this could be demonstrated through an awareness of the ethical criteria embedded in the relevant state/territory Architects Acts and professional code of conduct, the Architects Award and other legislation relevant to the business of architecture – for example, the *Racial Discrimination Act 1975*, *Sex Discrimination Act 1984, Disability Discrimination Act 1992*, and the *Environmental Protection and Biodiversity Conservation Act 1999*.

At registration, this would be demonstrated through identifying the legal obligations for registration as an architect, as well as describing the code of conduct requirements contained within a client/architect agreement, and demonstrating an understanding of obligations of employers and employees under the Architects Award.

At post registration, this would be demonstrated by undertaking continuing professional development to maintain skills and knowledge, maintaining registration with the relevant state/territory board of architects, meeting all obligations under the Architects Award and National Employment Standards, and being covered by appropriate professional indemnity insurance.

PC 3

On graduation from an architecture program	At the point of registration	Post registration
Understand the principles of **project planning**, considering implications for **Country**, **environmental sustainability**, **communities**, **stakeholders** and **project costs**.	Demonstrate understanding of the principles of **project planning**, considering implications for **Country**, **environmental sustainability**, **communities**, **stakeholders** and **project costs**.	Apply principles of **project planning**, considering implications for **Country**, **environmental sustainability**, **communities**, **stakeholders** and **project costs**.

Explanatory Notes

Architectural project planning must incorporate consideration for Country and environmental sustainability as well as stakeholders and project costs. Project plans provide the framework and roadmap for managing and tracking project outcomes and performance. When used as a management tool, they provide guidance on the connections between project phase activities and participant/stakeholder/ community interactions. They embed quality management attributes by incorporating hold points for inhouse documentation approvals, external stakeholder/authority approvals and peer review where appropriate. Project plans are an effective tool for providing value through sustainable, timely and effective professional services in accordance with the ethical and legal obligations of an architect to their clients, stakeholders and the wider community.

Caring for Country practices, including architecture and place shaping, have existed on this continent since time immemorial. Like all aspects of **project planning**, understanding and applying principles informed by **Country** and **First Nations' management of Country** involves doing due diligence – in this case, in relation to **First Nations communities**, and any **implications for Country** that may result from architectural processes. This generates acknowledgement and respect for **First Nations' Countries, cultures and communities,** and their ways of being, knowing and doing. It develops understanding of the different First Nations' cultures across the continent and how Country has been cared for using diverse methodologies for millennia. These should be reflected in architectural project planning.

There is already legislation in place that allocates responsibility and requires these considerations in architectural projects. Examples include cultural heritage legislation and planning acts, authority requirements, Indigenous Land Use Agreements (ILUAs) and so on.

Considering the **implications for Country** is an aspect of **environmental sustainability** and a precursor for activities relating to the health and wellbeing of Country. This requires architects do no further harm to Country, including waterways, soils, landscapes, flora, fauna, ecological communities, biodiversity, etc. Considering the implications for Country also requires sensitivity in terms of not impeding First Nations' **cultural practices**. While it is acknowledged that it is not feasible or possible to undertake engagement on all projects, taking the implications for Country into consideration will assist in understanding which projects must have First Nations inclusion – including in the planning stage to identify the appropriate stakeholders and skillset that may be required for the project.

Where the requirements for implications on environmental sustainability and for Country are highly complex and cannot be met by an architect, a secondary or sub-consultant with this specialised knowledge should be engaged. This is the same outcome as would be expected with other specialised requirements (for example, accessibility, fire, quantity surveying). Interactions with specialist secondary or sub-consultants would be mapped as part of the project plan.

Example

At graduation, this could be demonstrated through identifying the phases of a project from inception to completion, identifying tasks and activities that require external input and describing the project deliverables arising from these.

Graduates could demonstrate this during due diligence investigations in a studio project to determine the appropriateness of a site in relation to any cultural heritage overlays and understandings of First Nations history and rights, impact of government policy, relationships to Country, as well as geographical context, including specifically to First Nations knowledge and values. It may be illustrated through being able to identify diverse community and stakeholder groups relevant to a project, including First Nations groups, and knowing ways of working with them to develop a shared project understanding. This includes existing and historical caring for Country activities and cultural practices that might be informants to the project. It may include gaining an understanding of a cultural heritage management plan (or equivalent) to embed in a studio project**.**

At registration, this might be demonstrated as part of due diligence in relation to First Nations individuals and communities, and any impacts on Country that may occur because of architectural processes. This could be illustrated through developing a project plan that includes being able to identify First Nations community groups related to a project and relevant stakeholders within those groups, working with First Nations community groups to create a shared project understanding of Country, and the implications the project will have for Country.

At the point of registration, architects will need to be able to check if a cultural heritage management plan (or equivalent) process is required, undertake a holistic assessment of damage to water, air and land, as well as determine whether the project or its outcomes will limit or cause damage to First Nations' cultural practices. They should also be able to identify secondary or sub-consultants with specialised knowledge who might be engaged on the project, as would be expected with other specialised requirements.

At post registration, this may be demonstrated as part of due diligence in relation to First Nations Peoples, their communities, and any impacts on Country that may occur because of architectural processes. This may be shown through developing and applying a project plan that incorporates the identification of First Nations community groups related to a project, including the relevant stakeholders within those groups, and working with them to create a shared project understanding of Country. Architects should also be able to identify the implications for Country and demonstrate links between how this can be mitigated using environmental sustainability practices as well as caring for Country activities. Where the requirements are highly complex and cannot be met by an architect, this should be indicated by engaging an appropriate secondary or sub-consultant with this specialised knowledge on the project, as would be expected with other specialised requirements.

PC 5

On graduation from an architecture program	At the point of registration	Post registration
Understand the essential elements of a **client architect agreement**, across the range of **procurement methods** and the different scales and types of project.	Demonstrate understanding of the essential elements of a **client architect agreement** across the range of **procurement methods**; and be able to explain appropriateness of different agreements in relation to scale and type of project, including alternatives for **partial services** and the **engagement of secondary and sub-consultants**.	Be able to apply essential elements of a **client architect agreement** across the range of **procurement methods** in relation to their appropriateness to the scale and type of the project, including alternatives for **partial services** and the **engagement of secondary and sub-consultants**.

Explanatory Notes

Before commencing work on a commission, architects should agree their fee, terms and conditions in writing. This is a requirement under most Architects Acts, and failure to do so may constitute a breach of professional obligations. It is important to understand the constituent parts of the **client architect agreement** and potential impact on business and project risk that specific inclusions, exclusions and omissions may impose; being wary of terminology that increases risk, such as unqualified warranties, guarantees and undefined indemnities. Architects should be cognisant of services and commitments that may fall outside the cover of their professional indemnity insurance and know when to seek professional legal and insurance advice.

Example

At graduation, this would be demonstrated through the development of a draft client architect agreement, with appropriate recognition to the particular project type, fee structure and architectural services undertaken in each phase.

At registration, this would be demonstrated through preparing fee letters for smaller projects procured under a lump sum contract or contributing to the preparation of fee letters for more complex projects by analysing the project brief and providing input into the phases of service necessary to undertake the commission. This could include evaluating the inherent benefits and risks of engaging secondary consultants or sub-consultants directly. Evidence could also be demonstrated through preparing scope of services variation requests.

At post registration, this would be demonstrated through preparation of properly executed client architect agreements that are appropriate for the procurement method adopted and the scale and type of a project. This would also include recognising when to seek legal and insurance advice when assessing the risks of undertaking partial services or engaging secondary consultants directly.

PC 8

On graduation from an architecture program	At the point of registration	Post registration
Understand how to implement culturally responsive and meaningful **engagement processes** that respect the importance of **Country** and reciprocal relationships with **Aboriginal and Torres Strait Islander Peoples** across architectural services.	Be able to implement culturally responsive and meaningful **engagement processes** that respect the importance of **Country** and reciprocal relationships with **Aboriginal and Torres Strait Islander Peoples** across architectural services.	

Explanatory Notes

Meaningful **engagement processes** require the understanding that there is no universal way to engage with all peoples or **communities**. The project-specific engagement process should be designed in partnership with the community and respect the nuances of that particular community. For **First Nations communities**, this entails recognising how each group is diverse and different – including within groups – and therefore requires tailored engagement methods. Important to this process is the identification of appropriate **Knowledge Holders** and respect for what they can share. Meaningful engagement means being inclusive to all who relate to places, including those who can speak for **Country** – for example, **Traditional Custodians and Knowledge Holders** – as well as those who live there, and First Nations organisations that may have **care for Country** responsibilities.

Meaningful engagement means working with communities in **culturally safe** ways, rather than making uninformed decisions or taking actions on their behalf. It requires developing genuine and reciprocal relationships that endure beyond the project life. It might include a written or verbal agreement with Traditional Custodians and other stakeholders about the project, its processes and proposed outcomes. Meaningful engagement starts by asking each group or individual how they would like to be engaged and embedding that in an engagement plan. It means that the design of the plan of engagement is as considered as the design of the building and placemaking. The engagement plan should include an undertaking that the process is community driven. It may use processes of **vouching** by cultural translators or relational guides.

Examples

At graduation, this may be demonstrated by engaging with First Nations authored books, articles, audio-visuals, and other references in the existing body of knowledge that give foundations for improving a graduate's lens on the world and understanding of their own perspective. Engagement with these resources should include gaining an expanded understanding of social, cultural, historical contexts and racism. It may also be shown by writing a culturally responsive engagement plan for a studio project.

At registration and post registration, this could be demonstrated through the development and implementation of an engagement plan. An example could include a methodology or framework that incorporates a means of identifying Traditional Custodians and other stakeholders, and an appreciation of how they prefer to be engaged. The engagement plan should contain a project definition, an understanding of what the project is and why it is happening, and be inclusive, both of Knowledge Holders who can speak for Country, those who live there, and those who have care for Country responsibilities. The engagement plan should be mapped to the stages of the project, including timelines and any details that Traditional Custodians feel are relevant – for example, the values of Country and/or community, or defining the scope and briefing information.

External Resources

Indigenous Cultural Rights and Engagement Principles, National Museum of Australia (www.nma.gov.au)

Aboriginal Cultural Values: An Approach for Engaging with Country, Danièle Hromek (djinjama.com)

Puntukurnu Aboriginal Medical Services (PAMS) Healthcare Hub Newman, Kaunitz Yeung Architecture, Newman WA (kaunitzyeung.com)

PC 10

On graduation from an architecture program	At the point of registration	Post registration
Understand the **whole life carbon implications** of **procurement methods**, materials, components and construction systems.	Demonstrate understanding of the **whole life carbon implications** of **procurement methods**, materials, components and construction systems.	

Explanatory Notes

Whole Life Carbon (WLC) encompasses the carbon emissions associated with operational and embodied energy. Whole Life Carbon Assessment is a tool for lowering carbon emissions by calculating WLC emissions through the 'product stage', 'construction process stage', 'use stage', 'end of life stage' and 'reuse/recovery stage'. This assessment process influences the design, material selection, structural system and plant selection, construction sequencing, and even the benefits of reusing and recycling materials at the end of the useful life of the building. It helps to quantify and mitigate the impacts of design choices on the environment.

Different building **procurement methods** place different emphasis on quality, risk, cost and construction program length. These methods affect the timing of design decisions as they pertain to building elements such as structural systems, materiality, heating ventilation and airconditioning (HVAC), and construction sequencing. Effective mitigation of the environmental impact of building design relies on establishing emissions benchmarks early in the design brief and continually measuring the impacts of the choices made.

Where the requirements are highly complex and cannot be met by an architect, a secondary or sub-consultant with this specialised knowledge would be engaged. This is the same outcome as would be expected with other specialised requirements (for example, waste management).

Example

At graduation, this would be demonstrated through explaining the key concepts of embodied and operational carbon through exploration of a case study using WLC assessment methodology for cradle-to-grave project life cycle stages.

At registration and post registration, this would be demonstrated by explaining the phases of a WLC assessment methodology from cradle-to-grave life cycle stages and describing how these interact. A more experienced architect would demonstrate this by preparing concept design options based on the findings from the WLC analysis for the cradle-to-gate stage (including the potential for adaptive reuse), integrating specialist consultant advice to develop the most appropriate scheme, as well as selecting appropriate finishes and materials to comply with the environmentally sustainable commitments for the project.

External Resources

Whole Life Carbon Assessment for the Built Environment, 1st edition (www.rics.org)

Whole life carbon assessment for architects (architecture.com)

Embodied Carbon Primer (leti.london)

Whole Life Carbon Vision (worldgbc.org)

PC 12

On graduation from an architecture program	At the point of registration	Post registration
Understand how **relevant building codes, standards** and **planning controls** apply across architectural practice, including **climate change implications**, the principles of fire safety, and barriers to universal access.	Provide independent, culturally responsive and objective advice in accordance with **relevant building codes, standards**, technical specifications and guidelines, and planning regulations, including **climate change implications** across all aspects of architectural practice.	

Explanatory Notes

Various **statutory requirements** and **planning controls** must be be identified and addressed in the design and documentation of a project.

The National Construction Code (NCC) outlines how to achieve the minimum necessary standards for structural and fire safety, health, amenity, accessibility and sustainability based on criteria such as building typology, size, height and location. Active and passive fire safety measures are nominated for incorporation into buildings to facilitate the safe evacuation of occupants in the event of fire. Similarly, clauses applicable to accessibility are stipulated, including parts of a building that should be accessible, physical constraints on spaces, designs for floor level changes, amenities designs, colour contrasts and barrier free signage. Compliance with the NCC is achieved by satisfying the governing requirements and performance requirements stipulated.

The NCC also references applicable Australian Standards, which provide additional detailed information on how to satisfy the requirements of the NCC.

State and local planning legislation and policies set the rules that control building development. These controls are sometimes prescriptive and sometimes aspirational, articulating guiding principles and frameworks to encourage innovation. Compliance with relevant planning controls is determined through the authority approval process.

A range of codes, standards and planning controls provide the regulatory framework for addressing climate change. These include ISO 14067:2018, which defines the principles, requirements and guidelines for quantifying a product's carbon footprint; and ISO 16745-1:2017, which covers sustainability in buildings and civil engineering works.

Examples

At graduation, this would be demonstrated through preparing a schematic design for a building typology that has specific planning or siting controls. The design response to these controls should include appropriate consideration of core themes in the controls, such as climate change, fire egress and universal access.

At registration and post registration, this would be demonstrated through the preparation of schematic design and design development documentation that integrates the requirements of conditions of consent, and integrates and coordinates with information from secondary/sub-consultants. Demonstration of climate change implications could be explored through relevant case study analysis.

A more experienced architect would demonstrate this through the preparation of feasibility studies and concept designs that respond to site planning controls and integrate and coordinate information from secondary/sub-consultants. This could also

be demonstrated through evaluating where NCC 'deemed to satisfy' provisions or 'alternate fire solutions' might be employed in a project, as well as the preparation of specific types of detailed documentation such as facade/wall type details and fire compartmentation drawings.

PC 14

On graduation from an architecture program	At the point of registration	Post registration
	Be able to identify and apply **construction services provisions** and/or **construction administration systems** needed to fulfil all obligations appropriate to the procurement process in accordance with the terms of the agreement.	

Explanatory Notes

Providing **construction services provisions** and **construction administration systems** requires an in-depth knowledge of the architects' obligations in relation to each type of service. In providing contract administration services, the architect becomes a party to the construction contract and must be highly diligent about executing their obligations under that contract. The architect is contractually bound to execute their duties fairly and impartially.

Architects are required to create systems, processes, and template documents to support these varied activities to ensure information is being correctly captured and dealt with.

Note: contract administration services can only be provided when the construction contract allows for administration by the architect. Moreover, architects need to be mindful of the additional obligations and risks when undertaking contract administration services and ensure that their professional indemnity insurance covers the scope of service being provided.

Examples

At registration and post registration, this would be demonstrated through identifying the activities required to be undertaken for construction phase services and contract administration services, as well as describing the appropriate process or documentation for executing the architects' obligations under the contract.

A more experienced architect would demonstrate this through identifying the detailed activities required to be undertaken for construction phase services and contract administration services, establishing appropriate filing systems, preparing template documents/registers and process flow charts to guide and assist with competently undertaking these services.

PC 15

On graduation from an architecture program	At the point of registration	Post registration
Understand legal and ethical obligations relating to **copyright**, **moral rights**, **authorship of cultural knowledge** and **intellectual property** requirements across architectural services.	Comply with legal and ethical obligations relating to legislated requirements in relation to **copyright**, **moral rights**, **authorship of cultural knowledge** and **intellectual property** requirements across architectural services.	

Explanatory Notes

Architects are responsible to First Nations People to have a sound understanding of copyright, moral rights and authorship of cultural knowledge, and to avoid cultural appropriation. First Nations' **cultural knowledge** has been developed iteratively over many generations in response to their environments and ecological communities, to which they have care responsibilities and belonging. Despite colonisation impacting **First Nations Peoples'** ways of life, cultural knowledge through **lore** and custom has been retained in contemporary society. First Nations Peoples continue to maintain their kinship networks, deep respect for ancestral belief systems, and **care of Country** obligations.

First Nations Peoples have rights according to the *United Nations Declaration on the Rights of Indigenous Peoples*, including the rights to self-determination, to practise and revitalise their cultural traditions and customs, as well as past, present or future manifestations of their cultures. States have an obligation to provide effective mechanisms for prevention and redress of any action that deprives First Nations Peoples of their integrity as distinct peoples, their cultural values, or ethnic identities. Additionally, any action that has the aim or effect of dispossessing them of their lands, territories or resources must be addressed by the State.

Architects are responsible to First Nations People to, at a minimum, avoid **cultural appropriation**. The next level is to have a sound understanding of legal and ethical obligations in terms of legislated requirements such as **copyright**, **moral rights**, **authorship of cultural knowledge** and intellectual property as pertains to architectural services. Best practice is to proactively seek opportunities to address First Nations Peoples' rights in architectural practice.

It is important to understand that, while architects have authorship of the design, they do not have authorship of cultural knowledge. This is retained and maintained by First Nations communities. Architects as creators of a work maintain their copyright over architectural works, including drawings, sketches and models. The Copyright Act also protects a creator's moral rights, which are held by an individual and protect their reputation and the integrity of their work.

Examples

At graduate level, this might be established through undertaking a cultural risk assessment incorporated in a studio project or written work to demonstrate an understanding of their legal and ethical obligations (in terms of copyright, moral rights and intellectual property, and an understanding of authorship of cultural knowledge) as is relevant to the practice of architecture.

At registration and post registration, this could be demonstrated through a cultural risk assessment that incorporates a copyright, moral rights, intellectual property and Indigenous cultural and intellectual property clause in project understandings or agreements.

PC 16

On graduation from an architecture program	At the point of registration	Post registration
Understand **risk management** and mitigation principles and strategies across architectural services – including **safety in design**, **project risk**, requirement for resilience from the **impacts of climate change** and appropriate insurances.	Be able to apply **risk management** and mitigation strategies across architectural services – including **safety in design**, **project risk**, requirement for resilience from the **impacts of climate change** and appropriate insurances.	

Explanatory Notes

Architects should be knowledgeable about current and developing expectations regarding liveable and environmentally appropriate development, including management of risks such as bushfires and cyclones.

Risk management includes both minimising or eliminating the risk (mitigation) and avoiding when you can't minimise or eliminate (adaptation). Resilience typically refers to the latter. Resilience from the impacts of climate change would include the ability to withstand anticipated climate change impacts, such as global warming and increased risks due to bushfire risks, flooding, droughts, and other extreme weather events.

Project risks would also be identified through a Strengths Weaknesses Opportunities Threats Analysis (SWOT Analysis). This could include analysing changes to legislation that affect architectural deliverables and may require modifications to insurance to undertake the commission. (For example, the NSW Designers and Building Practitioners Act and Regulation and other state and territory legislation under development in response to the Building Confidence Report Implementation Plan.)

Examples

At graduation, this could be demonstrated through examination of case studies that describe a **risk management process** and use appropriate mitigation principles and strategies as they apply to climate change impacts on a building and other project risks. This could also be demonstrated by analysing designers' obligations for safety in design by providing examples of hazards, risks, and risk minimisation strategies as they apply to a simple building typology.

At registration and post registration, this would be demonstrated through the application of risk management principles and strategies – for example, through meeting the obligations of relevant codes (such as the application of BAL rating for bushfire risks), evaluation of project opportunities and constraints, or participation in a safety in design process.

PROJECT INITIATION AND CONCEPTUAL DESIGN

PC 17

On graduation from an architecture program	At the point of registration	Post registration
Have an understanding of Aboriginal and Torres Strait Islander Peoples' **aspirations to care for Country** and how these inform architectural design.		

Explanatory Notes

Following the arrival of non-Indigenous people, many **First Nations Peoples** were forcibly removed from their traditional lands, and further impacted by the introduction of hostile policies and laws. Architecture and the built environment have benefitted from this dispossession. Irrespective of this, First Nations Peoples continue to maintain their cultural connections to **Country**, including their responsibilities to **care for Country** using a diversity of **land management practices** and methodologies. Furthermore, First Nations' aspirations endure for the future and health of their traditional lands, even if access is no longer possible due to colonial processes inhibiting it. Architectural projects provide opportunities to empower First Nations Peoples to embody, visualise and express their aspirations for Country, including providing access to Country. Architects' roles are to support these aspirations, to inform and enable the design process in relation to these aspirations, and to include First Nations Peoples as part of the process where possible. This is at every stage of a project, from the project initiation and conceptual design phase to project completion.

While it is important First Nations Peoples are engaged with the architectural process, it is also imperative there is an understanding of the limitations First Nations communities have to engage due to a variety of factors. These include fracturing within their communities resulting from colonial processes and power structures, flawed consultation processes and consultation fatigue, and expectations their feedback will be for free or disrespectfully low fees. Like other technical experts, **Knowledge Holders** have spent many years honing their knowledge and working in their communities, and often their knowledge has originated through many generations of people.

Examples

At graduation this may be demonstrated through being able to identify opportunities to partner with First Nations communities to inform projects about their visions and aspirations for Country and how the communities could be part of the ongoing care activities of Country. If not possible in person, a graduate could engage with the many First Nations authored resources to assist their understandings, ensuring they are relevant to the Country and community they are working with. This could be demonstrated through a report or case study that identifies how First Nations communities can inform the architectural practice and design, and how their vision and aspirations for Country can be incorporated into a project.

At registration and post registration, this may manifest through developing a return brief that enables First Nations community groups related to a project to inform the project about their visions and aspirations for Country and how they would like to be part of the ongoing care activities of Country. It may include understandings of how care for Country activities can inform or even guide the design of the architecture.

PC 24

On graduation from an architecture program	At the point of registration	Post registration
Understand how to identify and evaluate **project development options** in response to a project brief – its objectives, budget, user intent and built purpose, risks and timeframe, including **environmental sustainability considerations**.	Be able to prepare and analyse **project development options** in response to a project brief – its objectives, budget, user intent and built purpose, risk and timeframes, including **environmental sustainability considerations**.	

Explanatory Notes

Multifaceted research and complex thinking is required to prepare informed **project development options**.

Examples

At graduation, this would be demonstrated through a portfolio tracking the design process for a studio project, showing generation of alternative options, their rigorous assessment and subsequent design responses.

At registration and post registration, this would be demonstrated through preparing feasibility studies that explore responses to specific project criteria (brief, budget, purpose, longevity, environmental sustainability considerations etc.) and evaluating the feasibility studies against the criteria by using appropriate measures (such as comparative area schedules or user group checklists) to refine the design response.

A more experienced architect would demonstrate this by preparing specific project criteria based on previous knowledge and experience. It could include input from stakeholders and other sources to responds to the project brief.

PC 27

On graduation from an architecture program	At the point of registration	Post registration
Understand how to embed the knowledge, **worldviews** and perspectives of **Aboriginal and Torres Strait Islander Peoples**, shared through **engagement processes**, into the conceptual design in a meaningful, respectful and appropriate way.		

Explanatory Notes

There are many **worldviews** that describe how each individual or group comprehends the world, how the world is thought to operate, and how each person understands their purpose as part of a society. **First Nations Peoples** have differing worldviews and perspectives from non-Indigenous people as they originated from a long history of living reciprocally with the land and in place within different societal structures.

Understanding another person's or group's worldviews and perspectives, and the resultant ways of knowing, being and doing that are generated by that worldview, requires a willingness to hear, empathise, and actively listen.

Each First Nations group will have a different worldview, and it is only through effective communications and respectful engagement that these nuanced understandings can be appreciated and interpreted in a design.

Examples

At graduation, this may be demonstrated through being able to engage critically with First Nations' designs, literature and projects. It could be illustrated through using culturally responsible language in both spoken and written contexts, which is then embedded into a conceptual design.

At registration and post registration, this could be demonstrated through developing a methodology in an engagement plan that includes a means of working with a First Nations community or individual to gain understanding of their worldviews and perspectives and resultant knowledge for this to be co-designed and embedded into a conceptual design.

External Resources

Our Voices: Indigeneity and Architecture, Rebecca Kiddle, luugigyoo patrick stewart and Kevin O'Brien (Eds) (oroeditions.com)

Walumba Elders Centre, iredale pedersen hook architects, Warrmun Community, WA (iredalepedersenhook.com)

Synapse SAIF (Supported Accommodation Innovation Fund), People Oriented Design (POD) and Indij Design, Cairns QLD (architectureanddesign.com.au)

PC 31

On graduation from an architecture program	At the point of registration	Post registration

Be able to identify, analyse and integrate information relevant to **environmental sustainability** – such as energy and water consumption, resources depletion, waste, embodied carbon and carbon emissions – over the life cycle of a project.

Explanatory Notes

A **Whole Life Carbon** analysis informs environmental sustainability inputs for a project, and supports the evaluation and incorporation of environmentally sustainable passive design, materials selection, and services systems throughout the design process. Auditing the project against the WLC analysis at key project milestones provides insight into how the project is tracking against the environmental sustainability criteria and commitments.

Example

At graduation, registration and post registration, this would be demonstrated through an analysis of a case study using the WLC assessment methodology for a cradle-to-grave project life cycle to identify environmental sustainability project criteria. This would also be demonstrated through exploring specialist consultant environmental modelling examples to identify environmental sustainability project criteria.

A more experienced architect would demonstrate this through preparation of return brief documents (or Principal Project Requirements documents) based on the findings from the WLC analysis for the cradle-to-grave project life cycle, integrating specialist consultant advice to develop the most appropriate scheme, as well as selecting appropriate finishes and materials to comply with the environmental sustainability commitments for the project.

PC 34

On graduation from an architecture program	At the point of registration	Post registration
Be able to apply principles and methodologies for presenting conceptual design proposals and associated information to clients, **stakeholders** and **communities**, including using **culturally responsive methods** appropriate to different audiences.	Communicate conceptual design proposals and associated information to client, **stakeholders** and **communities** using appropriate and **culturally responsive methods** appropriate to different audiences.	

Explanatory Notes

Architects are required to deploy appropriate verbal, written and visual means (drawings, models, fly-throughs, and other graphics) to communicate relevant aspects of architectural design and architectural services to clients, **stakeholders**, industry partners and the wider **community**. The emphasis on **culturally responsive methods** refers not only to the content of the presentation, but the appropriateness of the venue, the selection of invitees and the type of language employed to convey the design ideas. Advice from specialist consultants may be required to support the development of culturally responsive language and tone.

Examples

At graduation, this could be demonstrated through learning about the key concepts of cultural responsiveness, including identifying cultural biases and examining appropriate language and presentation techniques to be used to convey design ideas to different audiences.

At registration, this could be demonstrated through describing the key concepts of cultural responsiveness, as well as describing appropriate language and presentation techniques to be used to convey design ideas to different audiences.

At post registration, this could be demonstrated by undertaking culturally responsive training, and employing culturally responsive presentation strategies. This may also be demonstrated by working with a specialist consultant.

PC 35

On graduation from an architecture program	At the point of registration	Post registration
Understand the **operational** and **embodied carbon** implications of chosen materials, components and systems.	Be able to assess the **operational** and **embodied carbon** implications of materials, components, construction systems and supply chains (including transport) to achieve net zero **whole life carbon** when developing design concepts. This includes integrating relevant consultant expertise and advising on the impact of chosen materials, components and systems on carbon outcomes.	

Explanatory Notes

A range of current regulatory and non-regulatory frameworks and tools support the assessment measurement and benchmarking of carbon outcomes, including NatHERS, BASIX, GreenStar, and NABERS. At the moment, these mainly concern **operational carbon**. Developments to include **embodied carbon** calculations are expected.

This is a fast-evolving area. Many local government bodies and state governments are currently undertaking, or have already released, new standards for net zero carbon building performance. Architects should have adequate knowledge to enable them to collaborate with the expert consultants who can assess the operational and embodied carbon of construction systems, and supply chains. Further training and upskilling, as well as the development of testing systems, will need to be developed in the future.

Architects should be careful when specifying materials to ensure that they comply with the sustainability parameters established for the project, and provide detailed information including technical data and place of origin. This is important as it provides a benchmark for the later stages of the design process. This rigour also helps prevent inappropriate substitutions being made during the construction phase.

Examples

At graduation, this would be demonstrated through reports or case studies considering performance standards for net zero building performance and demonstrating an understanding of the need for sourcing appropriate materials, components and systems, and being familiar with the types of specialist consultants/suppliers who can support the process of achieving a net zero building.

At registration and post registration, this would be demonstrated through completed project examples with specialist consultant and supplier advice evaluated and integrated into project documentation, specifically in relation to selection of construction systems and materials to achieve the project operational and embodied carbon objectives.

External Resources

NatHERS

BASIX

GreenStar

NABERS

DETAILED DESIGN AND CONSTRUCTION DOCUMENTATION

PC 36

On graduation from an architecture program	At the point of registration	Post registration
Be able to apply creative imagination, design precedents, emergent knowledge, critical evaluation and continued engagement with **Aboriginal and Torres Strait Islander Peoples** to produce a coherent project design. This should be resolved in terms of supporting **health and wellbeing outcomes for Country**, site planning, formal composition, spatial planning and circulation as appropriate to the project brief and all other factors affecting the project.		

Explanatory Notes

Country is inseparable from **First Nations Peoples**, while also being subtly different and dependent on the context. As such, there are tangible positive outcomes for the health and wellbeing of both people and Country when both are enabled to flourish. Architectural projects that engage with First Nations Peoples have genuine opportunities to embed positive outcomes relating to the **health and wellbeing of Country** in the architectural process and outputs. Integrating First Nations Peoples' understandings of Country provides chances to co-design the project design together as part of a continuing engagement process. First Nations' intimate knowledge of place and deep histories can inform a variety of outcomes, including the vision, values and principles of the project; site and spatial planning; composition and layout; material choices and colour palette. It requires the engagement to be continuing and genuine throughout the project to completion.
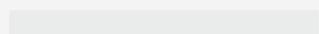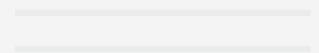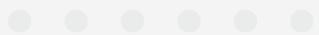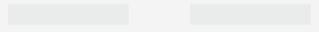
It is not always possible or feasible to undertake First Nations engagement on every project, so it is important to have a methodology in an engagement plan that assists determining when engagement should occur. Whether engagement is possible or not, having strategies for how to support the health and wellbeing of Country is essential. Maintaining ongoing relationships with First Nations individuals and communities will assist, as will engaging with First Nations authored resources that are relevant to the Country as well as communities who have enduring connections to the site. Like any other technical expert, engagement of Knowledge Holders who are Traditional Custodians should be costed in the project planning.

Examples

At graduation, recognising it is not always possible to undertake engagement with First Nations' communities, this could be demonstrated through the ability to identify many forms of cultural representation and expression in projects. For example, this could include spatial expressions, cultural practices, or recognising the identity of Country materially in a project. (It should not be limited to adding an artwork.) Graduates should ensure this is evident at all stages of a project, from the beginning of a project through to the Detailed Design and Construction Documentation phase. Engaging with First Nations authored written and audio-visual resources will raise self-awareness of the values, Laws and lore to implement in projects, and support the wellbeing of Country and communities. These learnings could be demonstrated through providing opportunities for ecological repair or creating habitats during the Detailed Design and Construction Documentation stages.

At registration and post registration, this may be demonstrated through a resolved Detailed Design that incorporates First Nations' interpretations and comprehensions of the Country on which the construction is located, which arose through an engagement

process. This should include considerations for the health and wellbeing outcomes for Country, site planning, formal composition, spatial planning, and circulation as appropriate to the project brief and other factors affecting the project. Continued and genuine engagement should be evident. It could also be shown through an awareness of cultural sensitivities with regards to objects, materials, landscapes and flora, and how they may affect the design. This is achieved through working closely with the community to test design ideas regarding cultural appropriateness.

PC 45

On graduation from an architecture program	At the point of registration	Post registration
Understand processes for selecting materials, finishes, fittings, components and systems, based on consideration of **quality and performance standards**, the **impact on Country** and the environment, and the **whole life carbon impact** of the project.	Be able to nominate and integrate **quality and performance standards** with regard to selected materials, finishes, fittings, components and systems, considering the **impact on Country** and the environment, and the **whole life carbon** impact of the project. This includes integrating **life cycle assessments** and other expertise and advice from consultants.	

Explanatory Notes

First Nations Peoples understand that everything comes from the land and, therefore, in architecture, all materials, finishes, fittings, components and systems likewise originate from the environment. As such, all of the built environment originates from and is part of Country. Impacting Country has tangible effects and impacts intangible understandings, such as the spirit or memory of Country, as well as cultural expressions and cultural practices that are part of Country.

Conscientious specifying and awareness of supply chains is key to ensuring that **impacts on Country** are meticulously considered, from the beginning to end of the life of a project. During the procurement of materials, architects should check where each material originates from, ensure they are as specified, and undertake due diligence as they might for the acoustic rating or fire rating. This is to minimise, mitigate or eliminate negative impacts that may arise through the process of the architectural project. This requires consideration of cultural understandings about materials and planting, and that materials can have tangible and intangible impacts. It includes being aware of how materials are sourced, knowing how to find out if they are causing harm to the environment from which they come, and being able to evaluate beyond their carbon footprint.

Where the requirements for identifying implications of quality and performance standards that consider impact on Country, the environment, and the whole life carbon impacts of the project are highly complex and cannot be met by an architect, a secondary or sub-consultant with this specialised knowledge should be engaged.

Examples

At graduation, this might be demonstrated through specifications in a studio project that establish a rationale for each material, finish, fitting or component, including beyond the life of the construction and going further than only considering the carbon footprint. This needs to include an understanding of the impacts on Country.

At registration and post registration, this might be illustrated through nomination and integration of materials, finishes, fittings, components and systems that include demonstration of the impacts each item specified has on Country, including beyond the life of the construction and going further than only considering the carbon footprint.

PC 46

On graduation from an architecture program	At the point of registration	Post registration
Understand the processes for producing **project documentation** that meets the requirements of the contract and **procurement procedure,** and complies with regulatory controls, building standards, codes, and conditions of construction and planning approvals.	Be able to produce **project documentation** that meets the requirements of the contract and **procurement procedure**, and complies with regulatory controls, building standards and codes.	

Explanatory Notes

Determining the appropriate mode of **documentation** and level of detail required at different stages involves analysing the project requirements to determine the appropriate architectural deliverables under each stage of a contract and in response to the selected **procurement process**. For instance, under a design and construct contract, the tender documentation produced may be at a notional 70% complete IFC documentation status to allow early pricing to be undertaken by the contractor. The architect will need to determine how best to convey the project parameters and design intent including quality outcomes and may elect to provide some of this information in the form of precedent images, schedules, and data sheets rather than detailed technical drawings.

Examples

At graduation, this would be demonstrated through mapping the various architectural documentation deliverables against milestones inherent in different modes of project procurement to identify the most appropriate documentation to convey compliance with the brief, planning approvals, regulatory and building standards. This could also be demonstrated by exploring and comparing the different documentation types required to satisfy a particular phase of services – for example, tender documentation under a fixed lump sum and cost plus contract.

At registration and post registration, this would be demonstrated by preparing models, drawings, specifications, schedules and reports through the different phases of architectural service to meet the needs of the project procurement process.

In addition to preparing appropriate documentation, a more experienced architect would demonstrate this through preparation of a project plan and document register that considers the architectural deliverables for each phase of service.

PC 47

On graduation from an architecture program	At the point of registration	Post registration
Be able to complete and communicate on-time, **accurate documents** for relevant **stakeholders**, including drawings, models, specifications, schedules, and construction documentation.		

Also refer to **PC3 Project Plan** and **PC 5 Client Architect Agreement**.

Explanatory Notes

Completing accurate documents for clients and other stakeholders is extremely important, as is the ability to communicate this information in a clear, compelling manner. The importance of establishing good relationships with the client and **stakeholders**, as well as defining clear lines of communication, cannot be underestimated. This is vital for assisting with controlling the expectations of the client and stakeholders, as well as mitigating risk. (For example, unclear instructions can lead to information 'falling between the cracks'). Estimating time allowances is a necessary part of managing a project or when working with a team. This relies on having a clear understanding of the scope of work and services (defined in the **client architect agreement**), the ability to estimate time against defined activities, the ability to allocate sufficient resources to undertake the activities, and the ability to **identify and manage risk** items (scope of work changes, delays to authority approvals etc.). Defining appropriate deliverables relies on having a clear understanding of the scope of work and services being undertaken.

Examples

At graduation, this would be demonstrated through a portfolio of design drawings, photographs of models and report/specifications, showing examples of communication techniques and processes appropriate for a particular design stage.

At registration, this would be demonstrated by preparing documentation to suit a project program, incorporating important document review processes, and assisting in maintaining comprehensive project records that are well communicated to clients and other stakeholders.

At post registration, this would be demonstrated by preparing comprehensive project programs and resourcing schedules, undertaking a quality review of documentation prior to issue, and maintaining comprehensive project records that are well communicated to clients and other stakeholders.

DESIGN DELIVERY AND CONSTRUCTION PHASE SERVICES

PC 48

On graduation from an architecture program	At the point of registration	Post registration
Understand available **procurement methods** and their application to project delivery, considering relevant factors including project type, scale and coordination of contractors.	Be able to select and implement project administration systems, based upon an assessment of the selected **procurement methods** and its implications on project delivery.	

Also refer to PC 5 **Client Architect Agreement**.

Explanatory Notes

The selected procurement method will dictate the form of construction contract used. The construction contract will establish different expectations and obligations upon the architect that need to be identified and managed through the effective use of project administration systems and processes. The focus of this performance criteria is on identifying appropriate **procurement methods** to suit specific project requirements, identifying the architects' obligations contained within, and implementing appropriate management systems to support the scope of services activities and mitigate project risks.

Example

At graduation, this could be demonstrated by analysing and evaluating common **procurement methodologies** in terms of their impact on time, cost and quality. This could include describing the risk allocation for each method and determining the circumstances in which one project procurement method may be favoured over another.

At registration and post registration, this would be demonstrated by describing the impact of procurement methodologies on the way documentation is structured and delivered.

A more experienced architect would demonstrate this by effectively implementing project management processes and structures that address architects' obligations for each procurement method, including preparation of template documents and flowcharts to describe project requirements and ensure consistency.

PC 49

On graduation from an architecture program	At the point of registration	Post registration
-	Be able to implement **project team structures** necessary to deliver a full suite of professional services or **partial services** appropriate to the selected procurement process.	

Also refer to PC3 **Project Planning** and PC5 **Client Architect Agreement** and **Procurement process**.

Explanatory Notes

Architects are required to adequately resource their projects. Considerations include project type, complexity, criteria, legal requirements, procurement method, program, and client/stakeholder expectations. A detailed knowledge of the project requirements is essential to allocating appropriate staff to execute specific roles within the project team structure. Establish responsibilities, accountabilities and clear lines of communication are paramount for a successful project.

Example

At registration and post registration, this would be demonstrated through describing the roles and responsibilities of a project team and articulating how they change over the different architectural scope of services phases.

A more experienced architect would demonstrate this by preparing a project team organisational chart, which outlines the roles, responsibilities and accountabilities for each team member at each architectural phase of service.

PC 50

On graduation from an architecture program	At the point of registration	Post registration
-	Be able to **continue engagement** with relevant **Aboriginal and Torres Strait Islander Peoples** throughout all stages of the project and its delivery in a meaningful, respectful and appropriate way.	

Explanatory Notes

Engagement with **First Nations Peoples** in architectural projects must be continuous from the inception of a project, throughout the project delivery to construction and completion. Formal mechanisms should be embedded into the project to provide updates, explain and report about each stage, and ensure the co-design process expands into an integrated project ownership. Continued engagement means ensuring everyone is updated, including the Traditional Custodians, other stakeholders, First Nations organisations, local government, and so on.

Building the values of the **Traditional Custodians** into the values of the project as part of respectful engagement can help ensure everyone engaged on the project signs up to those values.

Meaningful engagement is not a 'box ticking exercise' and does not finish at the end of the concept design stage. Respectful and appropriate engagement assists buy-in for the project and enriches the experience not only of the design team, but also the community who are being engaged, and those who inevitably inhabit and operate the facility being designed.

Important to respectful engagement are genuine relationships that are maintained beyond the life of the project, and that project successes are celebrated inclusively.

Example

At registration and post registration, this may be demonstrated through embedding Traditional Custodians' values in the project values, and/or embedding processes in the quality assurance system that track engagement from beginning to end. A "cultural project diary" could be developed as a means of sharing cultural knowledge and understandings ascertained through the course of the project, and including any lessons learned that are appropriate to share. It would be delivered both to the Knowledge Holders for their verification and keepsake, and to the future inhabitants or operators of the construction to facilitate continued sharing and learning.

External Resources

Our Voices II: The DE-colonial Project, Kevin O'Brien, Rebecca Kiddle, luugigyoo patrick stewart (Eds) (oroeditions.com)

Narrative, Self and Engagement: An Immersive T(r)opical Experience, Michael Mossman and Anna Ewald-Rice (acsa-arch.org)

Level Crossing Removal Project (LXRP), WSP in collaboration with the LXRP team, Cheltenham VIC (levelcrossings.vic.gov.au)

PC 52

On graduation from an architecture program	At the point of registration	Post registration
-	Be able to apply the principles and mechanisms implicit in the selected **procurement method** and associated construction contract(s), based on an understanding of the implications of differing contractual relationships.	

Explanatory Notes

Contractual relationships differ according to the **procurement method** and associated contracts. The definition of the architect's role in each case must inform the actions of the architect.

Example

At registration and post registration, this would be demonstrated through analysing and evaluating the risk allocation for each party as they apply to the more common procurement methodologies, understanding the effect of novation on the relationship between the architect and the client, and determining the circumstances for which one project procurement method may be favoured over another.

A more experienced architect would demonstrate this by effectively implementing project management processes and structures that address architects' obligations for each procurement method.

PC 53

On graduation from an architecture program	At the point of registration	Post registration
-	Be able to provide advice to clients on the impact of a selected **procurement method** on cost, time, **life cycle implications** and quality control during the construction phase.	

Explanatory Notes

Advice to the client on the advantages and disadvantages of alternative **procurement method** should include consideration of the following:

- Timing – how quickly is the project required?
- Cost – how much certainty on cost does the client require?
- Control over the design – how much control over design does the client want to retain?
- Experience of the client – is the client experienced in delivering the project typology?
- Other stakeholders – how important is it to engage with stakeholders such as community or statutory authorities?
- Capacity to allow for changes over time – is the project to be delivered in stages or are future phases contemplated?
- Whole of life benefits
- Capacity for innovation
- Complexity of the project – some procurement models are better value for money if the project is complex and stages can be overlapped or delivered simultaneously.
- The allocation of risk to the party best placed to manage it. Key risks include design, construction, maintenance, operating, financing, technology, delivery, user demand, cost/budget certainty and interface risk.

Example

At registration, and post registration, this would be demonstrated through explaining the interactions between life cycle implications at construction phase under a lump sum or design and construct procurement method. Another example would be preparing a report articulating advantages and disadvantages of various procurement strategies weighted against a set of specific project criteria to enable a client to make an informed decision regarding an appropriate project procurement method.

PC 54

On graduation from an architecture program	At the point of registration	Post registration
Understand the purpose of **periodic site** visits of construction works for quality assurance.	Be able to monitor construction progress and quality as required under the provisions of the construction contract, which may include **site visits**.	

Explanatory Notes

Periodic site visits provide a mechanism for architects to raise any quality issues observed on site with the contractor and client and, if administering the construction contract, observe the quantity of work completed to date for the purposes of processing contractors' claims under the contract.

Examples

At graduation, this would be demonstrated through an examination of an architect's duty of care or obligations to the client under a standard form of contract (for example, a simple lump sum contract).

At registration and post registration, this would be demonstrated by explaining the actions required to be taken to monitor progress on site and methodology to convey appropriate quality related issues to the contractor and client. It would also be demonstrated through describing the circumstances and actions to be taken for instructing the contractor to 'open up the works'.

PC 60

On graduation from an architecture program	At the point of registration	Post registration
-	Apply appropriate methodologies for undertaking **post occupancy evaluations** and life cycle assessment where required under terms of engagement.	

Explanatory Notes

Successful and meaningful **post occupancy evaluations** (POEs) rely on establishing clear criteria underpinned by a rigorous method, which includes processes for data collection and evaluation, and compiling findings. This is best undertaken as an independent process. Occupant feedback should be evaluated using reputed and benchmarked POE surveys, which are administered and analysed independent of the designer, owner or tenant organisation.

The life cycle of a project can be taken to mean from inception to post occupancy evaluation – if there is a formal mechanism available under the **Client Architect Agreement** to enable this evaluation to occur. Life cycle analysis can also be undertaken on a building that is the subject of a new commission if adaptive reuse is a viable option. Undertaking meaningful analysis for buildings later in their life cycle (or approaching end of useful life) may be undertaken as a case study for research purposes.

Example

At registration and post registration, this could be demonstrated through participating in a POE led by a specialist. This might include conducting background research using existing documentation, gathering field data, and analysing the data against the assessment criteria.

Experienced architects should know enough about the process and methodology to be able to collaborate effectively with an independent expert. Where the architect has specific POE expertise, they could demonstrate this by formulating a POE methodology, including statement of purpose, performance criteria, methods for data collection and evaluation. This could also include preparing template documents for use throughout the POE process as well as preparation of the final report.
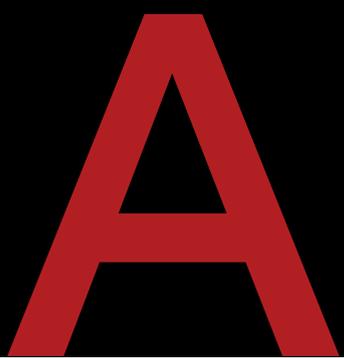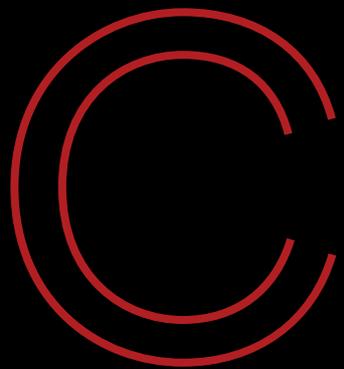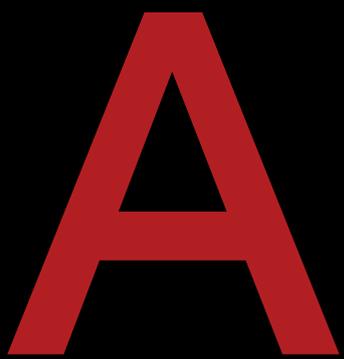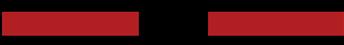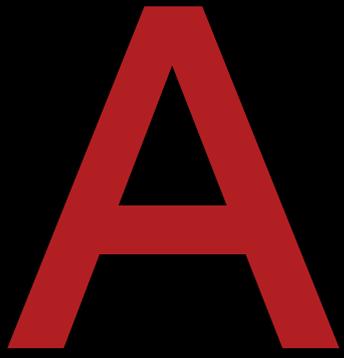
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