

Architects Accreditation Council of Australia PO Box 236 Civic Square ACT 2608 **Competency Based Assessment** in Architecture

THE NATIONAL COMPETENCY STANDARDS IN ARCHITECTURE

Copyright

© Architects Accreditation Council of Australia

Copyright of this material is owned by the Architects Accreditation Council of Australia.

You may print and reproduce this material in whole or part, subject to acknowledgement of the source, for your personal, non commercial use or use within your organisation. Apart from any use as permitted under the Copyright Act 1968, all other rights are reserved.

Except as permitted above you must not copy, adapt, publish, distribute or commercialise this material without the permission of the Architects Accreditation Council of Australia.

Requests for further authorisation should be directed to the AACA Registrar, E-mail address: registrar@aaca.org.au

For further information please refer to the Copyright Act 1968 (Commonwealth) at:

http://www.austlii.edu.au/au/legis/cth/consol_act/ca1968133

Bibliography

First Edition published 1993

Updated Version published September 2001

THE NATIONAL COMPETENCY STANDARDS IN ARCHITECTURE

| PREAMBLE | | |
|----------|---|----------------------|
| GLOSSA | RY OF TERMS | 6 |
| UNIT 1 | DESIGN Contextual Reference – A Complex Building | 7 |
| | Context 1.1 | 7 |
| | Element 1.1.1 Element 1.1.2 Element 1.1.3 Element 1.1.4 | 7 7 8 8 |
| | Context 1.2 | 8 |
| | Element 1.2.1 Element 1.2.2 Element 1.2.3 | 8 9 9 |
| | Context 1.3 | 9 |
| | Element 1.3.1 Element 1.3.2 Element 1.3.3 | 9 10 10 |
| | Context 1.4 | 11 |
| | Element 1.4.1 Element 1.4.2 Element 1.4.3 | 11 11 11 |
| | Context 1.5 | 12 |
| | Element 1.5.1 | 12 |
| UNIT 2 | DOCUMENTATION Contextual Reference – A Building of Moderate Complexity | 13 |
| | Context 2.1 | 13 |
| | Element 2.1.1 | 13 |
| | Context 2.2 | 13 |
| | Element 2.2.1 Element 2.2.2 Element 2.2.3 Element 2.2.4 | 13 13 14 14 |
| | Context 2.3 | 14 |
| | Element 2.3.1 | 14 |

| UNIT 3 | PROJECT MANAGEMENT Contextual Reference – A Building of Moderate Complexity | 15 |
|--------|---|----------------------------------|
| | Context 3.1 | 15 |
| | Element 3.1.1 Element 3.1.2 Element 3.1.3 Element 3.1.4 Element 3.1.5 | 15 15 15 15 16 |
| | Context 3.2 | 16 |
| | Element 3.2.1 Element 3.2.2 Element 3.2.3 Element 3.2.4 Element 3.2.5 Element 3.2.6 | 16 16 16 16 17 17 |
| | Context 3.3 | 17 |
| | Element 3.3.1 Element 3.3.2 | 17 17 |
| | Context 3.4 | 18 |
| | Element 3.4.1 Element 3.4.2 | 18 18 |
| UNIT 4 | PRACTICE MANAGEMENT | 19 |
| | Context 4.1 | 19 |
| | Element 4.1.1 Element 4.1.2 Element 4.1.3 Element 4.1.4 Element 4.1.5 | 19 19 19 20 20 |

PREAMBLE

Applicants for Competency Based Assessment (CBA) are assessed in relation to NCSA 01 The National Competency Standards in Architecture adopted by the Architects Accreditation Council of Australia (AACA) in September 1993. (Updated 2001).

The Architects Accreditation Council of Australia is a national body formed by the Registration Authorities of each State and Territory for the consideration of matters of common concern or interest. The main objective of this Council is recognition, accreditation and co-ordination of acceptable academic standards and registration practices, in the interest of national and international professional reciprocity in architecture.

The purpose of NCSA 01 The National Competency Standards in Architecture is to establish the benchmark standard of competence required for admission to registration as an architect in Australia.

Registration of an architect is the formal act that recognises acceptable standards of competence and conduct and results in the name of the applicant being placed on a Register of Architects.

An architect is expected to be competent in the design, organisation and construction of buildings, which could be undertaken in the circumstances of sole practice. An architect must also be able to contribute to resolution of the design, integrated technology and methods of procurement of complex buildings.

Because the purpose of registration and certification of the title 'architect' is to serve the public interest, the standards of competence required reflect consumer expectation of the activities architects should be relied upon to perform competently.

Whilst NCSA 01 The National Competency Standards in Architecture defines core competencies required for registration, architects are also expected to achieve competence in areas of individual specialisation additional to mandatory registration requirements.

AACA has the responsibility of facilitating the process of competency assessment and the maintenance of NCSA 01 The National Competency Standards in Architecture on behalf of the profession. AACA is not, however, a registration authority and can only make recommendations to the various Registration Authorities regarding their assessment of competence in respect of eligibility for the purposes of registration. The decision to register lies solely with the Registration Authorities while admission to membership of the Royal Australian Institute of Architects (RAIA) is the prerogative of the Institute.

AACA endorses the professional responsibility of tertiary institutions for the determination of course structure and teaching methods and supports these institutions in their assertion of independence in such matters.

GLOSSARY OF TERMS

Contextual Reference: establishes the scale and complexity for the application of the various Units of the NCSA 01 The National Competency Standards in Architecture.

A Complex Building: one that involves elements of high rise and/or large span requiring specialised or innovative structural solutions and/or one of low rise requiring highly specialised knowledge and exhibiting one or more of the following characteristics: demanding in its ordering and organisation of multiple occupancy and/or special purpose user requirements in terms of people and vehicular circulation; complicated in its spatial articulation; complex in the planning and co-ordination of complex construction systems, materials, building services and fittings; challenging in site configuration and existing features. The impact of a complex building on the natural and built environment is significant and requires an informed response to the urban or rural context and the physical, topographical and climatic context.

The realisation of a complex building requires specialist input for the resolution of structural and technical design components and special purpose provisions, and the collaboration of an experienced professional team for the preparation of project documentation and contract administration. The procurement of a complex building is dependent on an appropriate practice structure and adequate professional and financial resources for its achievement.

A Building of Moderate Complexity: one that involves elements of low or medium rise and/or medium span, utilises a standard structural solution, is straightforward in terms of both people and vehicular circulation, moderately demanding in its ordering and organisation of user requirements and creative in its spatial articulation. It requires the planning and co-ordination of conventional construction systems, building services and finishes. The site configuration and existing features are undemanding and the impact of the building on the natural and built environment is limited.

The realisation of a building of moderate complexity requires advice from consultants on structural and technical issues, a practice structure and financial resources adequate for the management of a project of medium scale and an experienced project leader to supervise preparation of documentation and administration of the project.

Conceptual Design: involves the exploration of ideas and options inspired by analysis of all the given facts, contextual issues and constraints and is informed by precedent and personal architectural philosophy. Drawing from a range of ideas and facts and the application of judgement, conceptualisation evolves into a Schematic Design.

Schematic Design: the Conceptual Design advanced to a level of legibility sufficient to gain client approval, receive consultant advice and provide the basis for the preparation of a reasonable estimate of cost. Client approval at the end of this phase leads to preparation of the Design Development.

Design Development: an expansion of Schematic Design and creation of preliminary construction details. Investigation and selection of materials and finishes, establishing equipment layouts and preliminary design of built in furniture and fittings for client approval. Receive more detailed consultant advice and undertake a detailed cost analysis.

Competency: the ability to perform activities within the profession of architecture to the standard expected in practice.

Unit of Competency: a collection of Elements of Competency which are sufficiently related to each other to be considered as a single block of connected activities. Units are groups of activities, which are likely, amongst experienced practitioners, to become the focus of specialisations.

Context of Competency: descriptive imperatives of the professional setting within which the performance is enacted and within which the Units of Competence are related to the comprehensive process of producing architecture.

Element of Competency: a discrete activity that a competent architect must be able to perform.

Performance Criteria: evaluative statements, which specify the performance required to denote competence.

UNIT 1 DESIGN

Contextual Reference - A Complex Building

Generic Statement:

Although listed separately for convenience and reference, the Elements of design constitute a system, a set of incidents, which are dynamically related. The Elements are given in the sequence in which they often occur, but they may merge, repeat and inform one another throughout the design process and cannot be considered or assessed in isolation.

A design evolves through exploration and reappraisal of a range of ideas and propositions that lead progressively to the eventual resolution of a coherent design proposal. Evidence of this progressive process must be demonstrated in each of the successive stages of Design as described in Unit 1.

Context 1.1 To create a design which is capable of realisation, through the exercise of knowledge, imagination, judgement and professional responsibility.

ELEMENT 1.1.1 GENERATE A SPATIAL AND MATERIAL CONCEPT WHICH CAN BE REALISED AS A BUILDING.

Performance Criteria:

- 1. The concept is based on analysis of and response to the design brief and is devised to satisfy user intent and fit the built purpose.
- 2. The concept responds to the physical location and addresses the relevant wider issues of urban or rural context and environmental concerns.
- 3. The concept demonstrates the exercise of critical choice, aesthetic judgement and creative imagination.
- 4. The underlying architectural philosophy of the architect is expressed.
- 5. Sensitivity to the ordering, sequencing and articulation of three-dimensional form and spatial content is evident.
- 6. The concept is informed by an understanding of the history of architectural thought and traditions of buildings and construction and by relevant current social and environmental concerns.
- 7. The concept demonstrates an appreciation of economic considerations, sound technical knowledge, and efficiency in the use of building systems and materials.

ELEMENT 1.1.2 COMMUNICATE ALL ASPECTS OF A CONCEPTUAL DESIGN CLEARLY AND WITHOUT AMBIGUITY.

- 8. The design is described through drawings and/or three-dimensional representation, computer simulation or other visual techniques.
- 9. Graphic and model making techniques are used in the development and communication of design concepts.
- 10. Visual representations are supported by a written report.

ELEMENT 1.1.3 RECOGNISE THE NEED TO SUSTAIN THE NATURAL AND THE BUILT ENVIRONMENT, THE NEEDS AND ASPIRATIONS OF BUILDING USERS AND THE COMMUNITY, IN THE FORMULATION OF A CONCEPTUAL DESIGN.

Performance Criteria:

- 11. The impact of the design concept upon the environment and the community is assessed and heeded.
- 12. An understanding of issues of national and regional planning and their relationship to local demography and resources is demonstrated.
- 13. Respect for the natural environment and awareness of the issues of sustainability are demonstrated in the conceptual design.

ELEMENT 1.1.4 COMPLY WITH LAWS AND REGULATIONS GOVERNING PLANNING, BUILDING PROCUREMENT AND THE PRACTICE OF ARCHITECTURE.

Performance Criteria:

- Knowledge of laws and statutes that regulate the practice of architecture is demonstrated.
- 15. The requirements of society, as expressed in laws and regulations governing health, safety, welfare and use of the built environment are observed.
- 16. Compliance with relevant codes, regulations and industry standards for development, design, construction and services is demonstrated.

Context 1.2 To formulate an initial response to a project brief sufficient to obtain endorsement, of overall objectives and concept, by a client and other interested parties.

ELEMENT 1.2.1 INTERPRET CLIENT BRIEF AND DECIDE DESIGN OBJECTIVES AND PARAMETERS.

- 17. Key aspects of the project brief are identified and interpreted.
- 18. Budget and time frame are established following an analysis of the project brief.
- 19. The feasibility of the project brief is considered with the client and alternative options reviewed.
- 20. Space, and functional requirements and relationships are established and issues of access understood.
- 21. The interests of building users, the community and other relevant groups are investigated and reconciled with the project brief.
- 22. Human, social, environmental and contextual issues are researched and addressed.
- 23. The implications of physical, technical, cost and regulatory constraints are identified and assessed.

- 24. The process of collaboration in the development of a conceptual design, sources of specialist information and expertise, when to seek advice and how to use advice, are understood.
- ELEMENT 1.2.2 DEVELOP A SCHEMATIC DESIGN TO INTERPRET OBJECTIVES THROUGH A REPETITIVE PROCESS OF HYPOTHESIS, EVALUATION AND RE-APPRAISAL.

Performance Criteria:

- 25. The program is analysed and priorities evaluated, problems defined, strategies formulated and a theoretical design approach considered.
- 26. Freehand drawings, diagrams and modelling (physical and/or computer simulated) are used to explore three-dimensional form and relationships in the development of a schematic design in response to the project brief.
- 27. The schematic design is progressively investigated, emerging issues researched, experiential, material and aesthetic options considered and alternatives explored, tested and refined.
- 28. The schematic design satisfies the project brief, site analysis, user requirements, design parameters, and identifies constraints.
- 29. The processes of technical design and the integration of structure, construction technologies and service systems, into a functionally effective whole, are validated.
- 30. Theoretical considerations, and intellectual and aesthetic judgement, inform the design.
- ELEMENT 1.2.3 AGREE DESIGN PROPOSALS WITH CLIENT AND INTERESTED PARTIES.

Performance Criteria:

- 31. Schematic design proposals are evaluated and tested to enable agreement on selection and commitment to the development of a preferred design.
- 32. Design approach, concept and conditions are articulated by graphic, three-dimensional or other means, to inform a client and other interested parties.
- 33. Ideals and limitations are reconciled, differences resolved, consequences recognised, alternatives ordered and responsibility for decisions assumed.
- 34. Agreement of client is obtained to proceed to the Design Development stage.

Context 1.3 To develop a design proposal from an initial concept.

ELEMENT 1.3.1 INVESTIGATE AND ESTABLISH REQUIREMENTS FOR AREAS, ORGANISATION OF SPACES AND CIRCULATION WITHIN AND AROUND A BUILDING.

Performance Criteria:

35. Specific spatial requirements and relationships for building occupancy and functions are determined.

- 36. Internal and external patterns of circulation and access are researched and the implications for design, construction and services assessed.
- 37. Integration of construction and technical systems into the spatial arrangement is demonstrated through technical drawings.
- 38. Information and recommendations provided by consultants, specialists and manufacturers are interpreted, assessed and incorporated.

ELEMENT 1.3.2 CONSIDER OPTIONS AND DECIDE THE DISPOSITION AND ASSEMBLY OF THE STRUCTURAL SYSTEM, CONSTRUCTION ELEMENTS, MATERIALS AND BUILDING COMPONENTS.

Performance Criteria:

- 39. Construction systems are investigated, and the advantages, disadvantages, building standard requirements and cost implications evaluated and consistency with design objectives assessed.
- 40. The choice of structure, construction system and materials derives from an understanding of structural theory and construction systems and their application to the design of built environments.
- 41. Physical properties of strength, performance and durability and the visual and contextual qualities of building components and materials are appropriate for realisation of the final design concept.
- 42. Selection of building materials is consistent with, and appropriate to, the structural and construction system proposed and details of their assembly are technically proficient.
- 43. The selection of fittings, fixtures and finishes is suitable for the purpose, cost and assembly.
- 44. Specialists are consulted as necessary.
- 45. Design intent is maintained.

ELEMENT 1.3.3 ESTABLISH REQUIREMENTS FOR BUILDING SERVICE SYSTEMS.

- 46. Active and passive service systems for thermal comfort, lighting and acoustics are suitable for the occupation, function and environmental parameters.
- 47. Mechanical and electrical, hydraulic and transportation systems are suitable for the occupation, function and environmental parameters and appropriate to time constraints.
- 48. Specialists are consulted as necessary.
- 49. Effective integration of technical and mechanical systems and equipment with the schematic design is achieved.

- Context 1.4 To resolve a schematic design sufficient to obtain agreement and authorisation to proceed to documentation for its translation into built form.
- ELEMENT 1.4.1 PROGRESSIVELY FINALISE ALL DECISIONS RELATING TO THE ASSESSMENT OF SPECIALIST INFORMATION, DESIGN DETAIL, MATERIAL CHOICE AND BUILDING COSTS AND MANAGEMENT STRATEGIES.

Performance Criteria:

- 50. Each aspect of the schematic design is considered and finalised and is consistent with the project brief.
- 51. All building elements are sufficient and appropriate for construction intentions and environmental sustainability.
- 52. Building elements and construction systems proposed are consistent with project budget and appropriate for time constraints.
- 53. Areas requiring additional expertise are identified and specialists consulted as necessary.
- 54. Interests of building users, the community and other relevant groups are reconfirmed.
- ELEMENT 1.4.2 NEGOTIATE AND AGREE THE SCHEMATIC DESIGN PROPOSAL WITH CLIENT AND OTHER INTERESTED PARTIES.

Performance Criteria:

- 55. Clear and accurate professional advice on the design response to each aspect of the project brief is provided.
- 56. The extent to which the schematic design fulfils the brief is reviewed and reasons for any departure from the brief are explained.
- 57. All outstanding issues are resolved in readiness for commencement of the construction documentation.

ELEMENT 1.4.3 PREPARE FOR START OF CONSTRUCTION DOCUMENTATION.

- 58. Strategy and program for construction documentation are adopted.
- 59. Other design specialist consultants for the project are determined and their respective contributions to the realisation of the project defined.

Context 1.5 To continuously comply with the brief and meet contractual agreements throughout the course of implementation of a design project.

ELEMENT 1.5.1 RESOLVE, IN DETAIL, ALL COMPONENTS OF THE DESIGN IN ORDER TO PREPARE INSTRUCTIONS FOR THEIR CONSTRUCTION OR SUPPLY.

- 60. Design intent is maintained throughout.
- 61. Decisions are timely and conform to the agreed contractual and administrative program.
- 62. The contribution of specialist designers and suppliers throughout the course of project delivery is co-ordinated.

UNIT 2 DOCUMENTATION

Contextual Reference - A Building of Moderate Complexity

Design Documentation: Construction Documentation: Post-Contract Documentation

Generic Statement:

Documentation prepared for the construction and contract management of a building project, including architectural drawings, specifications and schedules, must conform with relevant codes and industry standards.

The compliance of documentation, supplied by consultants, with codes and regulations is to be verified.

The consistency of all project documentation (in the selection and disposition of building elements, components, finishes and fittings) with design objectives and budgetary constraints must be demonstrated.

| Context 2.1 | To communicate information, throughout the course of determining a | |
|-------------|--|--|
| | brief and throughout the conceptual design, design development, | |
| | documentation and construction phases of the engagement. | |

ELEMENT 2.1.1 THE REQUIREMENTS FOR DESIGN DOCUMENTATION ARE INCORPORATED WITHIN UNIT 1, DESIGN, UNDER ELEMENTS 1.1.2, 1.2.3, 1.4.1 AND 1.4.2

Context 2.2 To generate documentation of a building project so that it can be costed, built and completed in accordance with the brief, time frame, cost and quality objectives.

ELEMENT 2.2.1 ESTABLISH A DOCUMENTATION PROCESS.

Performance Criteria:

- 63. Participants in the documentation process are identified.
- 64. Documentation types and procedures are determined.
- 65. Time schedules, for the completion of documentation, are established.
- 66. Monitoring and checking protocols are agreed.

ELEMENT 2.2.2 PREPARE ARCHITECTURAL DRAWINGS WITH REGARD TO THE LOCATION, EXTENT OF BUILDING ELEMENTS, COMPONENTS, FINISHES, FITTINGS AND SYSTEMS.

- 67. Materials, products and systems are selected in accordance with the design intent.
- 68. Drawings are produced which are timely, accurate, complete and comprehensible to architects, consultants, building contractors and approving authorities.
- 69. Drawings from consultants are reviewed and co-ordinated.

70. Client approvals are obtained for design changes, which evolve during contract documentation.

ELEMENT 2.2.3 PREPARE ARCHITECTURAL SPECIFICATIONS AND SCHEDULES.

Performance Criteria:

- 71. Specifications and schedules are produced which are timely, accurate, complete and comprehensible to architects, consultants, contractors and relevant authorities.
- 72. Specifications and schedules nominate type, quality and performance standards with regard to selected materials, finishes, fittings, components, systems and special items.
- 73. Specifications declare the type and extent of work of separate building trades and sub-contractors.
- 74. Specifications, schedules and drawings are cross-referenced and co-ordinated.
- 75. Specifications and schedules from consultants are checked for consistency with architectural documentation.

ELEMENT 2.2.4 CO-ORDINATE THE DOCUMENTATION OF THE PROJECT.

Performance Criteria:

- 76. Architectural and consultants' drawings, specifications and schedules are checked and confirmed as consistent and compatible with each other, with the design intent and with quality, cost and time parameters.
- 77. All drawings, specifications and schedules are consistent with the type of building contract and/or procurement procedure which has been selected for the project.

Context 2.3 Before, or at the completion of a building project, to provide for effective occupancy and as research input for future operational use.

ELEMENT 2.3.1 PREPARE AS-BUILT RECORD DOCUMENTS.

Performance Criteria:

78. Documents are produced which accurately record the location and extent of building elements and services as completed, including changes which have occurred during the construction process.

UNIT 3 PROJECT MANAGEMENT

Contextual Reference - A Building of Moderate Complexity

Context 3.1 To confirm objectives and conditions at inception of project.

ELEMENT 3.1.1 ESTABLISH AND EVALUATE IDENTIFIED NEEDS, PERCEPTIONS AND PRIORITIES.

Performance Criteria:

- 79. Project needs are established, evaluated, assessed and allocated priorities.
- 80. Budget and time frame are confirmed following an analysis of the project brief and constraints upon its delivery.
- 81. The brief is monitored and assessed against the budget, the program and external factors.

ELEMENT 3.1.2 ESTABLISH SITE CONDITIONS, SITE RELATED REQUIREMENTS AND LIMITATIONS AND EXISTING FACILITIES.

Performance Criteria:

- 82. Opportunities and limitations of the site and its environs, which may influence site development in relation to the project, are systematically investigated, identified and reported.
- 83. Limitations of site access are identified and access to utilities considered.
- 84. Specialist input is identified and obtained.
- 85. Options for re-use and life cycle costing are considered and where relevant the conservation of existing buildings and infrastructure are considered.

ELEMENT 3.1.3 ASSESS POTENTIAL INTERACTION BETWEEN THE PROJECT, THE ENVIRONMENT AND THE COMMUNITY.

Performance Criteria:

- 86. Cultural factors relating to the project are researched and their influence and implications reported.
- 87. Community participation processes are understood and recommendations made.
- 88. Relevant environmental issues relating to the site and its location are identified and reported.

ELEMENT 3.1.4 ASSESS APPLICABLE CODES, REGULATIONS AND LEGISLATION.

Performance Criteria:

89. Applicable codes and standards of regulating bodies are identified, understood and incorporated.

ELEMENT 3.1.5 ESTABLISH CONSTRUCTION SYSTEM AND MATERIALS OPTIONS TO MEET CLIENT NEEDS.

Performance Criteria:

90. Construction and service systems and material choices are consistent with the project brief and the realisation of the design objectives.

Context 3.2 To establish an appropriate procurement method and complete contractual arrangements with all participants.

ELEMENT 3.2.1 ESTABLISH TERMS OF AGREEMENT WITH CLIENT.

Performance Criteria:

- Scope of services to be provided and fee for professional services are clearly identified and communicated to the client.
- 92. A contract of engagement is selected which is appropriate to the scale and nature of the project and the scope of services to be provided.

ELEMENT 3.2.2 ESTABLISH PROJECT PROCUREMENT OPTIONS.

Performance Criteria:

- 93. A range of procurement options is considered, and their advantages and disadvantages relative to the needs and priorities of the project understood.
- 94. Project opportunities and constraints are assessed, key issues identified and recommendations made to the client.

ELEMENT 3.2.3 PREPARE PRELIMINARY PROJECT EVALUATIONS, PROGRAMS AND FEASIBILITY STUDIES.

Performance Criteria:

- 95. A building cost analysis is undertaken, which reflects an understanding of development, design, documentation and construction costs, duration and sequencing of project approval and construction processes.
- 96. Client time, costs and quality requirements and limitations are recognised and balanced against needs and priorities.
- 97. Project scope is clearly defined.

ELEMENT 3.2.4 ESTABLISH RECORDING, COMMUNICATION, PROJECT ADMINISTRATION AND MONITORING SYSTEMS.

Performance Criteria:

98. Recording and information systems are established to satisfy all requirements of the contract of engagement and to ensure the flow of information, instructions, approvals and agreements in accordance with specific contractual requirements and for communication with the client.

ELEMENT 3.2.5 ESTABLISH AND CO-ORDINATE SPECIALIST CONSULTANTS, CONTRACTORS AND SUPPLIERS.

Performance Criteria:

- 99. The need for particular specialists is determined.
- 100. The scope of specialist services is specified and briefs prepared.
- 101. Selection of specialists and fee arrangements are negotiated and client agreement secured.

ELEMENT 3.2.6 PREPARE AND CONCLUDE CONTRACTUAL AGREEMENTS AND NEGOTIATIONS FOR PROCEEDING WITH PROJECT CONSTRUCTION.

Performance Criteria:

- 102. Types of construction contracts are recognised and assessed relative to the project and recommendations made to the client.
- 103. Ethical tendering practices are followed to assist in the establishment of a contract.
- 104. Tenders are analysed, compared and evaluated prior to selection.
- 105. Contractor qualifications are evaluated prior to selection.
- 106. The terms and conditions of the contract are understood by all parties, are negotiated if necessary, and finalized.

Context 3.3 To provide contract administration for the construction of a project.

ELEMENT 3.3.1 ADMINISTER THE CONSTRUCTION CONTRACT.

Performance Criteria:

- 107. An administrative process is established and maintained to ensure progressive fulfilment of requirements of contract documents.
- 108. Progress of project construction is systematically monitored and compliance with the contract provisions and budget established.
- 109. Progress claims, variations and extensions are evaluated and certified.
- 110. Conflicts are resolved and final instructions issued.
- 111. Defects are identified and rectification by the builder monitored.

ELEMENT 3.3.2 MONITOR COMPLIANCE WITH CONTRACT DOCUMENTS AND REQUIREMENTS OF RELEVANT REGULATORY AUTHORITIES.

- 112. Authority approvals are obtained as required.
- 113. Project status is reported regularly to the client and any variations to the program, budgets and quality are addressed.

114. Final compliance with contract documents by all parties and requirements of regulatory authorities are verified.

Context 3.4 Before, or at the completion of the project, to document responsibilities and assemble information for future operational use.

ELEMENT 3.4.1 ASSEMBLE PROJECT MAINTENANCE AND OPERATION MANUALS.

Performance Criteria:

- 115. Warranties, maintenance agreements, certificates and approvals are obtained.
- 116. Maintenance and operation manuals are prepared.
- 117. Client responsibilities at hand-over are identified and advised.

ELEMENT 3.4.2 UNDERTAKE POST OCCUPANCY EVALUATION AND ASSESS FOR FUTURE OPERATIONAL USE.

Performance Criteria:

118. Feedback is systematically acquired, analysed, reviewed and disseminated to monitor client satisfaction and project performance and provided input for improvement of future projects.

UNIT 4 PRACTICE MANAGEMENT

Contextual Reference - A Building of Moderate Complexity

Context 4.1 To establish and maintain an architectural practice.

ELEMENT 4.1.1 DEFINE PRACTICE OBJECTIVES AND ESTABLISH STRUCTURE AND STRATEGIES FOR THEIR ACHIEVEMENT.

Performance Criteria:

- 119. Knowledge of alternative practice models is exhibited i.e. sole practice, partnership, company, joint-venture, secondary consultancy, networking.
- 120. An appropriate practice structure is established in response to anticipated scope and demand for professional services.
- 121. A business plan is developed and a performance review strategy established.
- 122. Professional, technical and financial resources are adequate and appropriate for the practice structure and strategies adopted.
- 123. Engagement procedures are defined.
- 124. Client satisfaction is monitored.

ELEMENT 4.1.2 ESTABLISH AND MAINTAIN PRACTICE MANAGEMENT SYSTEMS.

Performance Criteria:

- 125. A management system is established to report, monitor and review financial performance of the practice (office income, expenditure, capital and overheads).
- 126. Accounting procedures are established and maintained (for audit, taxation, insurance and salary purposes).
- 127. Specialist consultants are appointed as necessary.
- 128. Administrative systems and quality management standards are established and applied to facilitate efficient and timely provisions of professional services.
- 129. All systems are regularly analysed and reviewed.
- 130. Data collected from empirical observations, from other architects, consultants, government authorities, clients, existing buildings, and technical and scientific literature is assembled for storage and retrieval.

ELEMENT 4.1.3 DEPLOY AND MANAGE STAFF.

- 131. Criteria for staff requirements are developed in accordance with identified needs.
- 132. Staff responsibilities are clearly defined and understood by all staff.
- 133. Personnel records are maintained to ensure efficient administration of the terms and conditions of employment.

134. Provision is made for staff to undertake professional development.

ELEMENT 4.1.4 OBSERVE LEGAL AND REGULATORY OBLIGATIONS IN THE CONDUCT OF AN ARCHITECTURAL PRACTICE.

Performance Criteria:

- 135. An understanding of the legal constraints affecting an architectural practice, as a business entity and as an employer, is demonstrated and observed.
- 136. Legal and statutory obligations governing accounting and financial matters (civil liabilities and indemnities) are complied with.
- 137. An understanding of common law and duty of care provisions, and an understanding of the laws of contract and tort, as they relate to the practice of architecture, are demonstrated.
- 138. An understanding of copyright law and the protection of intellectual property, is demonstrated.
- 139. The need for specialist financial, legal, professional and other advice is recognised as necessary at times.

ELEMENT 4.1.5 IN THE PRACTICE OF ARCHITECTURE, OBSERVE THE STANDARDS OF CONDUCT EXPECTED OF A PROFESSIONAL BY THE COMMUNITY.

Performance Criteria:

- 140. An understanding of the legal responsibilities of an architect, with regard to registration, practice and building contracts is demonstrated.
- 141. An understanding of professional ethics as they apply to the practice of architecture is demonstrated and ethical practice observed.
- 142. The Standards of Professional Conduct for Architects, as defined in the Model Architects Act Legislative Guidelines, are complied with.

Updated Version, September 2001