(Insert Firm Name)

Quality System Manual

Ver. 1.1

(enter implementation/revision date)

Controlled Document	
Created date:	
Revised date:	
Revision number:	
Approved by:	

Our Quality Policy

Write your firm's policy regarding quality. Be brief.

See **iProjects *QM UserGuide 7.1*** for guidance.

Our Quality Objectives

Write your objectives (3 to 5) regarding quality. Be brief. You must include an objective about ensuring that client requirements are determined and met, with the aim of achieving client satisfaction.

See **iProjects *QM UserGuide 7.1*** for guidance.

Purpose

The purpose of this Quality System is to define the design process needed for the quality system and its application throughout the firm; describe the sequence and interaction of the design process; define criteria and methods needed to ensure that the operation and control of the design process is effective; plan for resources and information sufficient to support operation and monitoring of the design process; monitor, measure and analyse the results as needed; and implement actions necessary to achieve planned outcomes and continual improvement of the design process.

As we are in the design business, all quality procedures are part of the overall design process. This Quality System defines all components of the design process required to comply with the provisions of the International Quality Standard ISO 9001-2008.

1 General Requirements

1.1 Control of documents and records

Documents required by this Quality System are required to be "controlled". Control means that certain steps must be taken to ensure that specific requirements defined in ISO 9001-2008 are met. This means that required documents are:

- ❖ Approved by management prior to issue,
- ❖ Reviewed periodically and updated as needed,
- ❖ Identified as to current version and date,
- ❖ Made available where and as needed,
- ❖ Are legible and identifiable,
- ❖ If coming from outside the firm and required for the operation of the quality system, are identified and their distribution controlled, and
- ❖ When they become obsolete, are so marked so they won't be used accidentally.

Records are documents that provide evidence that the quality system is working as intended. Accordingly, they must be properly identified, protected, stored, and remain easily retrievable.

The Quality Manager keeps a record of all controlled documents, identifying the current version and date.

Records required to be controlled as part of the quality system are identified throughout this system Manual.

Refer 3.1 for project document and record control.

1.1.1 Document ID

In general, all controlled documents and required records are identified by information in the footer of the document:

Left: Number and title of the document
Center: Version and date of the document
Right: Page number, and more than one page, the number of pages

Project document templates, in addition to the above information, are identified in the header with the number and title of the template, the project name and number, and the date the template was first used.

1.1.2 Library

The firm maintains a library of standard documents, product literature, samples, and other materials needed by staff.

Documents that are obsolete or superseded may be retained for reference (for example, obsolete copies of building regulations or standards that were applicable to past projects). Such retained superseded documents are stamped on the cover with a "Superseded" stamp to prevent their accidental use on future projects.

1.1.3 Filing system

The firm maintains a project-wide filing system for easy retrieval of project information. Refer Appendix 2. (Attach, as App. 2, a copy of your project documents filing system. Delete this note.)

2 Firm-wide quality management

Although most quality system functions take place at the project level, certain requirements are firm-wide, and are described below. Appendix 1 defines which functions are firm-wide, project-specific, or both.

2.1 Principals' commitment to quality

We are committed to ensuring compliance to principles of best practice in design, and continual improvement of our design processes. We do this by:

❖ Communicating this commitment to our clients and our team,
❖ Working to ensure that our policy and objectives are consistently implemented,
❖ Conducting periodic reviews of quality-related project records, and
❖ Providing qualified resources appropriate to project needs.

2.2 QM System planning

The Principals have implemented this Quality System to ensure that our quality policy and quality objectives are carried out.

Principals will regularly review reports and recommendations by the Quality Manager, and will implement changes to the system as required to fulfill its purpose.

2.3 Quality Manager

The firm has appointed (insert name) as Quality Manager, who is part of the Management team. The Quality Manager duties are:

❖ To ensure that quality processes are established, implemented and maintained,
❖ To report to Principals on performance management and need for improvement,
❖ To ensure that all staff are aware of client requirements for projects to which they are assigned,
❖ To be responsible for promoting and monitoring internal communication and providing feedback to Principals,
❖ To conduct internal audits and arrange for external audits, and
❖ Maintain records of management reviews of the Quality System.

2.4 Communication

In implementing this Quality System, Principals stress the importance of ongoing, firm-wide communication and feedback, particularly to advise the Quality Manager of any aspect of the Quality System that is not being implemented, or not effective in achieving its purpose.

2.5 Management review

Principals will review operation of the Quality System to ensure its stability, adequacy and effectiveness. Reviews shall consider recommendations for change and improvement of policy, objectives and processes made by the Quality Manager or others.

Frequency: Reviews will be held at least twice annually during the first two years of implementation and annually thereafter. Special reviews may be held where quality problems indicate that the System is not achieving intended objectives.

2.5.1 Review input

Reviews shall include audit results, client feedback, design process performance and output document quality, status of corrective/preventive actions, follow-up from previous reviews, suggested changes and improvement recommendations.

2.5.2 Review output

The review records shall include, at a minimum, decisions and actions on effectiveness improvement, improvement specific to client requirements, and resourcing needs (see 2.6).

2.6 Managing resources

Principals shall determine, on an on-going basis, the resources needed to implement and maintain the Quality System, improve its effectiveness, and enhance client satisfaction through meeting their requirements; and shall provide the resources necessary to achieve these objectives.

2.6.1 People

People shall be assigned to projects on the basis of having the necessary education, training, skills and experience to cope with project and client needs.
All senior staff have an obligation to coach and mentor less experienced staff. Where additional training is required, the firm will provide it.

Ongoing reviews will evaluate effectiveness of training and other competency actions.

Records of education, training, skills and experience for all staff are kept and maintained by the HR Manager. (If there isn't an HR Manager, change that to Quality Manager. Delete this note.)

Refer 3.3 for project resource management.

2.6.2 Workplace

The Principals are committed to providing a workplace that supports and enhances the objectives and purpose of this Quality System as well as the broader practice goals, including facilities, work environment, equipment and services as needed.

2.7 Design excellence

The firm values design excellence and strives to achieve that on all projects.

Refer 3.4 for project processes that promote design excellence.

2.7.1 Client relationships

The firm strives to build long-term, mutually rewarding client relationships through consistent application of strong client communication and matching best design practice to client requirements and expectations.

The primary method of determining client satisfaction is by direct, "face-to-face" interaction between clients and Principals, Project Directors and Project Managers.

Refer 3.2.2 for project client relationship management.

2.7.2 Internal audits

The Quality Manager will plan and conduct periodic internal audits as one method of ensuring compliance with this Quality System, and to identify areas of improvement needed for external audits.

Frequency: Not less than twice annually during the first two years of implementation and annually thereafter. Additional audits may be arranged if project history indicates that the Quality System is not achieving its purpose.

Audits shall include, but not be limited to:

  ❖ General compliance with the Quality System,
  ❖ Improvements from the results of prior audits and System changes,
  ❖ Appropriate selection of quality control tools, eg checklists, in project execution,
  ❖ Reporting of nonconforming work, project problems, client dissatisfaction, the results of design reviews, and the outcome of project closeout activities and post-contract reviews, and
  ❖ Implementation of the suggestions from external audits.

Audit reports are submitted to Principals for review and action as appropriate. The Quality Manager will maintain internal and external audit records.

2.7.3 Continual improvement

The firm supports a program of continual improvement, through all of the provisions of this Quality System Manual.

Refer 3.5.4 for project continual improvement (Post-contract review).

2.7.4 Corrective and preventive action

Corrective action means fixing process outcomes, by whatever appropriate means. Preventive action means changing the processes so they are less likely to generate similar problems on future projects.

Based on the Quality Manager's review and report, Principals will decide on corrective and preventive action steps. The Quality Manager will maintain corrective and preventive action records, including records of results of taking action.

Refer 3.4.6 for project corrective action (design checking and correction).

3.0 Project Management

General: Our firm utilises the **iProjects** Design Management system, which embeds project-based ISO 9001-2008 quality requirements. Procedures described below reference tools in the **iProjects** DM system; refer to them for details of use, particularly to the green user notes on many of the templates and the in-built UserGuide reference system.

3.1 Project document management

iProjects templates prompt the identification, collection and use of project documents throughout all design management functions. These include:

- ❖ Design DNA, for selection of relevant templates and the identification of project input and output documents by Stage
- ❖ Stage checklists that identify relevant Practice Notes and other resource materials
- ❖ PF02: Project Document Register & Transfer
- ❖ PF03: Incoming Project Document Register
- ❖ PF12: PMP Cover Sheet

3.1.1 Project document ID

In addition to the general firm document ID procedure described in Cl. 1.1.1, project documents are automatically identified as to Project Name and Project Number when a project is created in **iProjects**. This information is automatically entered in all templates selected for use on the project. In the event that additional templates are later added, the update process codes the additional templates with the project ID.

3.1.2 Communication Form

iProjects provides a "universal" communications template, that can easily be used for document generation for Instructions, Transmittals, Information, Phone Call records, Requests for Information, Design Review Records, Document Changes, Training / Training Attendance records, Client Complaint Reports, Incident Reports, Nonconformity Reports and Corrective Action reports.

Documents generated are automatically filed in logs in one of these 12 categories, and are linked to senders and recipients via the Contact system.

3.1.3 Document cross-referencing

Many **iProjects** templates contain fields for easy, one-mouse-click access to referenced documents, eg:

- ❖ CF: Communication Form
- ❖ PF03: Incoming Project Document Register
- ❖ PF11: Project Briefing & Change Log
- ❖ PF23: Change Advice & Variation Request
- ❖ PF25: Client Decision Matrix
- ❖ PF26: Information Required Schedule
- ❖ PF72: Request for Substitution Log

3.1.4 Project records management

Project records required to be retained and filed, regardless of their source or media, are those that relate to project cost, project time, project scope, project quality, and/or project risk. Other records may be retained as appropriate, at the discretion of the Project Manager.

Records media: (You may wish to describe your particular methods for records management here. Correct any clauses that don't describe what you do. Delete this note.)

- ❖ Paper project records are filed and stored in accordance with the firm's filing structure.
- ❖ Electronic records are maintained in at least two separate locations for security; on the central hard drive and on backup media.
- ❖ Meeting and telephone records relative to the five categories of record defined above shall be converted to paper or electronic media.

Records archival: Retained project records are stored onsite or offsite, for the length of time required by the Tax Office. After the statutory storage time has lapsed, project records may disposed of, on approval by a Principal.

3.2 Project communication

Internal and external project communication is primarily managed by use of the Communication Form structure described in 3.1.2. This structure provides instant access to all communication entries created in the template.

3.2.1 Team communication

Team communication is facilitated by use of the Communication Form structure, and by use of PF13: Project Team, which identifies all internal and external team members and their role on the project.

3.3.2 Client relationship management

Client relationships are managed by Project Directors and Project Managers through meetings and structured email contact, and are supported by **iProjects** tools that identify and track client project responsibilities, including:

- ❖ PF13: Project Team
- ❖ PF25: Client Decision Matrix
- ❖ PF26: Information Required Schedule

3.3 Project resource management

Project resource allocations are managed by the Principals, or their delegated Associates, on a weekly review basis, with the objective of meeting client requirements. Assignments are made based on provision of staff with the necessary skills and experience to meet project requirements, under the supervision of senior staff.

3.4 Design process management

3.4.1 Project planning

Project plans are generated using PF12: PMP Cover Sheet, which identifies all of the various documents needed as part of the project plan.

Project quality plans are generated using PF16: Quality Control Plan.

Experience and training records are maintained within the **iProjects** Contact system for each staff member.

3.4.2 Project briefing

Initial client briefs are identified in PF12: PMP Cover Sheet, and tracked and managed thereafter by use of PF11: Project Briefing & Change Log. Project briefing records are automatically retained in the system.

3.4.3 Project setup and control

Project criteria are identified and recorded using PF14: Project Setup & Controls, except for small projects, which use PF15: Small Project Setup & Controls.

3.4.4 Subconsultant management

In the language of the Quality Standard, appointment of subconsultants comes under Cl. 7.4: Purchasing. In most cases, subconsultants are appointed from a group that has previously been used by the firm, and where their skill and experience is known. Where we are weorking for the first time with a subconsultant, request their credentials and check them, verifying experience with referees as appropriate. Maintain records of all such checking.

iProjects provides multiple methods to ensure that subconsultants understand the scope of their services to be utilized on the project, and participate in the inter-disciplinary coordination required:

❖ TeamWork, an extensive, customizable suite of checklists covering most design functions that could be performed by one or more disciplines. The checklists are completed by the Project Manager to identify the particular functions required by the project and allocate them to selected subconsultants and other prime consultants.

❖ PF21: Consultants Coordination Verification is a two-stage tool that first asks all team members to identify the coordination activities required with other team members, and in the second stage requires them to check to ensure that the specified coordination has taken place and is either complete, or that additional coordination is still required.

Additionally, the system provides a suite of coordination checklists (CL41 through CL 49) for Landscape Architecture, Civil Engineering, Structural Engineering, Fire Protection and Hydraulic Engineering, Mechanical Services, Lifts and Escalators, Electrical Services, Communications and Kitchen Equipment.

3.4.5 Design process

PF32: Design Review Checklist is used to confirm that the design, as it is developed, meets specified design criteria. Design review records are automatically maintained in the system.

3.4.6 Scope/change management

Scope change is managed through PF11: Project Briefing & Change Log. Scope change records are automatically maintained in the system.

3.4.7 Design checking and correction

Traditionally, drawings are checked by senior staff using a "red lining" process that identifies problems and suggests revisions. PF31: Drawing Checking Record is used to summarize these changes and to maintain a record of the outcome of the correction process.

In addition, numerous checklists are used throughout design and documentation Stages to check that design meets design criteria of varying kinds. Records of suggested revisions and changes made are tracked through a signoff process, item by item, as well as by whole checklist. Design checking records are automatically maintained in the system.

3.4.8 Design process feedback

Post-design reviews are recorded using PF82: Lessons Learned, which may be used at the end of the Documentation Stage as well as at project completion.

3.5 Design implementation

Termed "Delivery" in the **iProjects** system, the design is implemented by a builder or contractor employed by the client. The builder/contractor will have and implement its own quality system, at whatever level, and accepted by the client.

Our firm is usually employed to check the work during the Delivery Stage, to achieve conformity with design requirements, but we are not responsible for the builder/contractor's quality performance.

3.5.1 Tendering / Bidding

Unless otherwise arranged, our firm administers a tender (bidding) process for construction (Procurement Stage) on behalf of the client. Tender/bidding documents identify the level of quality reporting required of the winning builder/contractor essential to award of contract.

3.5.2 Contract administration

Unless otherwise arranged, our firm administers the contract for construction (Delivery Stage) on behalf of the client. Contract documents identify the level of quality reporting required of the winning builder/contractor during the contract.

Construction administration checking records are maintained in the system, using the CF templates.

3.5.3 Project closeout

Stage Checklists, including CL81: Defects Liability Period and CL83: Testing & Commissioning, and PF81: Defects Remediation List, provide tools to ensure that as-built conditions correctly reflect the design intent. In the event of nonconformities in delivery, CF11: Nonconformity Report and CF12: Corrective Action, are used to direct the builder's attention to necessary remedial work. The CF template includes provision for entering of preventive measures, to be used if needed, with follow-up tracking.

Records are automatically retained in the system.

3.5.4 Post-contract review

Post-contract reviews are recorded using PF82: Lessons Learned, which may be used at the end of the Documentation Stage, the Completion Stage, or both.

Where appropriate, PF83: Post-occupancy Evaluation is used to provide a validation of service quality after completion of the Completion Stage.

Records of these reviews are maintained in the System. PF82: Lessons Learned provides for suggestions and dates for action growing out of the review. Completed forms are directed to be forwarded to the Project Manager, Project Director and Quality Manager.

Appendix 1: Quality System – ISO 9001-2008 Correlation

Type: **F** = Firm-wide, **P** = Project-specific

ISO 9001-2008		Our Quality System	Type	Records
4	**Quality management system**	(heading only)		
4.1	General requirements	Purpose	**F**	
4.2	Documentation requirements	(heading only)		
4.2.1	General	Purpose	**F**	
4.2.2	Quality manual	Purpose	**F**	
4.2.3	Control of documents	1.1 Control of documents and records 3.1 Project document management	**F+P**	
4.2.4	Control of records	1.1 Control of documents and records 3.1 Project document management	**F+P**	
5	**Management responsibility**	(heading only)		
5.1	Management commitment	2.1 Principals' commitment to quality	**F**	
5.2	Customer focus	Our Quality Objectives, 2.7.1 Client relationships	**F**	
5.3	Quality policy	Our Quality Policy	**F**	
5.4	Planning	(heading only)		
5.4.1	Quality objectives	Our Quality Objectives	**F**	
5.4.2	Quality management system planning	2.2 QM System planning	**F**	
5.5	Responsibility, authority and communication	(heading only)		
5.5.1	Responsibility and authority	2.3 Quality manager	**F**	
5.5.2	Management representative	2.3 Quality manager	**F**	
5.5.3	Internal communication	2.4 Communication 3.2 Project communication	**F+P**	
5.6	Management review	(heading only)		
5.6.1	General	2.5 Management review; 2.3 Quality Manager for records maintenance	**F**	Required
5.6.2	Review input	2.5.1 Review input	**F**	
5.6.3	Review output	2.5.2 Review output	**F**	
6	**Resource management**	(heading only)		
6.1	Provision of resources	2.6 Managing resources 3.3 Project resource management	**F+P**	
6.2	Human resources	(heading only)		
6.2.1	General	2.6.1 People 3.3 Project resource management	**F+P**	
6.2.2	Competence, training and awareness	2.6.1 People 3.3 Project resource management	**F+P**	Required – see Note 2
6.3	Infrastructure	2.6.2 Workplace	**F**	
6.4	Work environment	2.6.2 Workplace	**F**	
7	**Product realization**	(heading only – corresponds to 2.7 Design Excellence heading)		
7.1	Planning of product realization	3.4.1 Project planning	**P**	Required
7.2	Customer-related processes	(heading only)		
7.2.1	Determination of requirements	3.4.2 Project briefing	**P**	

ISO 9001-2008		Our Quality System	Type	Records
	related to the product			
7.2.2	Review of requirements related to the product	3.4.2 Project briefing	P	Required
7.2.3	Customer communication	3.2.2 Client relationship management	P	
7.3	Design and development	(heading only)		
7.3.1	Design and development planning	3.4.1 Project planning	P	
7.3.2	Design and development inputs	3.4.2 Project briefing	P	Required
7.3.3	Design and development outputs	3.4.3 Project setup and control	P	
7.3.4	Design and development review	3.4.4 Design process	P	Required
7.3.5	Design and development verification	3.4.6 Design checking and correction	P	Required
7.3.6	Design and development validation	3.5.2 Contract administration 3.5.4 Post-contract review	P	Required
7.3.7	Control of design and development changes	3.4.6 Scope/change management	P	Required
7.4	Purchasing	(heading only)		
7.4.1	Purchasing process	3.4.4 Subconsultant management 3.5.1 Tendering / Bidding	P	Required – See Note 6
7.4.2	Purchasing information	3.5.1 Tendering / Bidding	P	
7.4.3	Verification of purchased product	3.4.4 Subconsultant management 3.5.2 Contract administration	P	
7.5	Production and service provision	(heading only)		
7.5.1	Control of production and service provision	Not applicable – See Note 1		
7.5.2	Validation of processes for production and service provision	Not applicable – See Note 1		Conditional
7.5.3	Identification and traceability	Not applicable – See Note 1		Conditional
7.5.4	Customer property	Not applicable – See Note 3		Conditional
7.5.5	Preservation of product	3.1.4 Project records management	P	
7.6	Control of monitoring and measuring equipment	Not applicable – See Note 4		Conditional
8	**Measurement, analysis and improvement**	(heading only)		
8.1	General	2.7 Design excellence 3.5.4 Post-contract review	F+P	
8.2	Monitoring and measurement	(heading only)		
8.2.1	Customer satisfaction	2.7.1 Client relationships 3.4.8 Design process feedback	F+P	
8.2.2	Internal audit	2.3 Quality Manager 2.7.2 Internal audits	F	Required
8.2.3	Monitoring and measuring of processes	3.4.8 Design process feedback	P	
8.2.4	Monitoring and measuring of product	3.4.8 Design process feedback	P	
8.3	Control of nonconforming product	3.4.7 Design checking and correction	P	Required
8.4	Analysis of data	3.4.8 Design process feedback	P	
8.5	Improvement	(heading only)		
8.5.1	Continual improvement	2.7.3 Continual improvement	F+P	

ISO 9001-2008	Our Quality System	Type	Records
	3.5.4 Post-contract review		
8.5.2 Corrective action	2.7.4 Corrective and preventive action 3.4.7 Design checking and correction	**F+P**	Required – see Note 5
8.5.3 Preventive action	2.7.4 Corrective and preventive action	**F**	Required – see Note 5

NOTES:

Note 1: Unlike manufacturing businesses, where the firm designs and produces "the product", a design business only designs it, and someone else "manufacturers" it, by implementing the design. Clauses 7.5.1 - 7.5.3 are applicable to design & construct (design-build) firms.

Note 2: Records are required for education, training, skills & experience.

Note 3: Applicable only in the situation where the firm takes control of a client's property for a period of time; for example where an interior design firm arranges for the repair or recovering of a client's furnishings.

Note 4: Applicable only where a design professional uses equipment that can be calibrated; for example where a civil engineer / surveyor uses a transit / theodolite.

Note 5: Records are required of the results of actions taken.

Note 6: Records are required for the results of the evaluations of subconsultants and any actions arising from the evaluations.