ISO 9001: 2015 Engineering Design Construction Quality Management System
Sample - Selected pages (not a complete plan)

Part 1: Project-Specific Quality Plan
Part 2: Company Quality Manual
Part 3: Submittal Forms
Part 4: Standard Operating Procedures

Contact:
First Time Quality
410-451-8006
PROJECT QUALITY CONTROL PLAN

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F. CONTRACT REVIEW AND SUBMITTALS

(Ref. ISO10005 Quality Plan Requirement 5.11.2)

The contract for this project, [ProjectName] - [ProjectNumber], has been reviewed, approved, and signed by the President, Project design manager, and the DQC Manager.

Fulfilling customer contract expectations is a primary objective of the [CompanyName] Quality System. To ensure that customer expectations will be fulfilled, [CompanyName] clearly defines the requirements for each contract before it is approved.

The Project design manager ensures that the information in customer contracts clearly defines customer expectations and that the necessary details are provided to set requirements for design.

CONTRACT REVIEW AND APPROVAL

The President conducts customer contract reviews to ensure that:

- Customer requirements and specifications are complete
- Customer requirements and specifications are compatible with the relevant regulations, [CompanyName] quality standards, and Quality System requirements
- [CompanyName] has the capability to deliver the completed project in the time allotted

Before design begins, the President makes sure that all contract requirements are clearly understood, all discrepancies are resolved, and all requirements are agreed upon. Once these requirements are met, the President signs the contract.

SUBMITTALS

Lists of documents and records that will be submitted to the customer appear on the Submittal Schedule and Log form. The Submittal Schedule and Log Form exhibit is included in this subsection.

SUBMITTAL SCHEDULE AND LOG

The Project design manager identifies submittals that apply to a specific contract and when they should be submitted, including:

- Contract requirement reference (if applicable)
- Submittal type: Shop drawing, Design Document data, quality inspection and test plan, request for information, or allowances and unit prices
- Description
- Due date for submission to customer by [CompanyName]
- Due date for approval by the customer. Due dates may be a number of days after a project plan milestone.
- Approval date
SUBMITTAL REVIEW AND APPROVAL

The DQC Manager prepares submittals that provide additional details of how [CompanyName] plans to carry out quality-related aspects of the customer contract, contract technical specifications, and contract drawings and reporting of quality records to the customer.

The DQC Manager lists, schedules, and approves all quality-related submittals that are required by the project including submittals prepared by Architects, Engineers, and Subcontractors. The DQC Manager must review all submittals for compliance with the requirements of the [CompanyName] Quality System. The DQC Manager must sign approval of each contract submittal.

[CompanyName] extends compliance to contract specifications to all customer approved submittals. All [CompanyName] activities comply with customer approved submittals.

SUBMISSION TO CUSTOMER

See Submittal Forms exhibits in this subsection for all the forms that will be used to submit submittals on this project.

CUSTOMER APPROVED SUBMITTALS

The Project design manager obtains the signature of an authorized customer representative on the submittal form.

[CompanyName] extends compliance to contract specifications to customer approved submittals.

Work in the affected area of a pending submittal requirement does not start until the customer approves the submittal.


CONTRACT SUBMITTAL SCHEDULE

The Project design manager identifies submittals that apply to a specific contract and when they should be submitted, including:
**[CompanyName]**  
**Project Submittals Schedule and Log**  
Version 20170728

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<th>Contract Name</th>
<th>Preparer</th>
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<th>Notes</th>
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<td>[ProjectDesignManagerName]</td>
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<th>Type/Description of Submittal</th>
<th>Version /Date</th>
<th>Required Submittal Date</th>
<th>Date Submitted to Customer</th>
<th>Required Customer Approval Date</th>
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H. DESIGN REVIEW PROCESS

(Ref. ISO10005 Quality Plan Requirement 5.4)

Design controls are in place to assure the quality of designs for this project. A design plan is used to document the design control process. The Design Plan is included as an exhibit in this subsection.

Intermediate reviews will be carried out as indicated on the design control plan. The last review is the design output review.

A record of all reviews will be recorded on the Design Review form. A Design Review form exhibit is included in this subsection.

The President has appointed [DesignerRecordName] as the Designer of Record. [DesignerRecordName] will control the design process with specific quality responsibilities, duties, and the authority to carry them out. A record of the Designer of Record’s appointment appears in this plan as an exhibit in subsection E Quality Management Organization, Responsibilities, and Authority.

DESIGN PLAN

The DQC Manager prepares a project-specific design review plan that includes:

- A listing of company and customer stakeholders, reviews they will participate in, and how their input will be used to amended design requirements. The project organization chart includes interfaces between various groups and personnel for producing and reviewing the design.
- Design output deliverables, including required drawings, and engineering calculations
- Identification of who will perform design output verification activities and the criteria they will use.
- The DQC Manager reviews the design process project plan with the customer and other interested parties. The customer approves the plan after any discrepancies are resolved and the plan is agreed upon. Design work may begin only after the customer approves the plan.

DESIGN REVIEWS

DESIGN PROGRESS REVIEWS

The DQC Manager holds review meetings with interested parties at key design milestones. The DQC Manager identifies the key design milestones, the design output required for the review, and a list of reviewers.

Two design reviews are required: one is an input design review and the other is the final design review. The DQC Manager identifies other design reviews necessary to ensure a quality result. Design reviews may be specified at the completion of design work tasks, site assessments, preliminary engineering, preliminary design, percentage completion stages, and on a calendar schedule.

The DQC Manager identifies customer and company reviewers appropriate for each design milestone. Reviewers may include persons that have a stake in any of the following: quality, safety, constructability, scheduling, maintenance, purchasing, estimating, or cost control.
At each review, the DQC Manager reviews reviewer recommendations for amendments to the design specifications. The DQC Manager submits selected design amendments for customer approval. Customer approved design amendments are design requirements.

**DESIGN OUTPUT REVIEWS**

The DQC Manager ensures that design output documents are verified by qualified personnel independent of the person performing the work. The person responsible must verify:

- The completed design meets requirements specified by the design input
- The completed design meets approved design amendments
- Engineering calculations are correct
# Design Review Form

**[ProjectName]**

**Version 20140915**

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<tr>
<th>Project ID</th>
<th>Project Name</th>
<th>Design Review Ref#</th>
<th>Date</th>
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<td>[ProjectNumber]</td>
<td>[ProjectName]</td>
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**Review milestone:** Performing Department/Crew/Architect, Engineer, and Subcontractor:

Reference design documents under review

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<tr>
<th>Item #</th>
<th>Title or Description</th>
<th>Version / Issue Date</th>
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Review recommendations

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<tr>
<th>Item#</th>
<th>Recommendation (reference supporting documents)</th>
<th>[CompanyName] Acceptance/ Rejection Signature / Date:</th>
<th>Customer Acceptance/ Rejection Signature / Date:</th>
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- Disapproved
- Approval not required

- Approved
- Disapproved
- Approval not required

- Approved
- Disapproved
- Approval not required

- Approved
- Disapproved
- Approval not required

Questions? Call First Time Quality 410-451-8006
R. CONTROL OF QUALITY RECORDS AND DOCUMENTS

(Ref. ISO10005 Quality Plan Requirements 5.6 and 5.7)

On this project, [CompanyName] will keep specific documents and records of quality activities that occur throughout the duration of the project.

Project quality records will be stored in the project field office. As a backup, copies of records will be held offsite. The exact location will be determined at quality coordination meeting.

The [CompanyName] Quality Manual referenced in this quality plan is included as an appendix to this plan.

A Record of current version of project documents is listed on the Document Control Form included as an exhibit in this subsection. When new version approved, the DQC Manager updates the Project Document Control form.

A Record of records is listed on the Project Records Control Form included as an exhibit in this subsection.

DOCUMENT CONTROLS

The DQC Manager controls documents related to the [CompanyName] Quality System including:

- Quality System Manual
- Quality System Procedures
- Project Management Procedures (including interface and coordination with customers and regulatory agencies with jurisdiction over jobsites)
- Government regulations
- Industry standards
- Procurement specifications

The DQC Manager ensures that records of the distribution of Quality System documents are kept. When new versions are distributed, obsolete versions are destroyed or controlled to prevent inadvertent use.

The Project design manager controls documents related to specific customer contracts including:

- Customer contracts
- Contract technical specifications
- Contract drawings
- Shop drawing submittals and approvals
- Design Document data submittals and approvals
- Allowances and unit price submittals and approvals
- Requests for information and customer responses
- Subcontracts
- Inspection and test plans

The DQC Manager ensures that records of the distribution of project documents are kept. When new versions are distributed, obsolete versions are destroyed or controlled to prevent inadvertent use.
PROJECT QUALITY RECORD PLAN

The DQC Manager identifies the quality records that will be maintained during the planning and execution of the project. Considerations include:

- Contract requirements for maintaining records
- The size of the project
- Types of activities
- The complexity of processes and their interactions
- The competence of personnel
- The duration of the project
- The need to demonstrate completion of work
- The need to demonstrate due diligence for quality system related activities
- Balancing the cost and benefits of maintaining the record

DOCUMENT CONTROL PROCEDURE

Procedure:

- The Responsible Person reviews and approves all controlled documents prior to release and is responsible for future control of the document. The Responsible Person records the title of the document, approval date, name, job position, and the method of document control: either ‘hard copy’ or ‘computer file’. A record is maintained on the Project Document Control Form contained in this procedure.

1. When controlled documents are revised, the Responsible Person records the title of the document, the version, and date. Each subsequent document version cancels the previous versions of the document. The status of any controlled document can be verified by the Responsible Person.

2. The Responsible Person ensures that current issues of all documents are readily available at locations where activities essential to the effective functioning of the quality system are performed.

3. For distribution of controlled documents stored on computer media:
   - The Responsible Person designates one or more directory folders where all files in the folder are designated as either approved documents, current versions or controlled documents. Access to change or delete the files is restricted to the Responsible Person by password.
   - The Responsible Person removes obsolete versions of controlled documents from the directory folder.

4. Computerized records of controlled documents are backed up daily. Retrieval of backups can recover all controlled documents in effect as of any selected day.

5. Controlled documents stored on computer media are marked “Uncontrolled Copy When Printed” as the Responsible Person deems practical.

6. For the distribution of hard copies of controlled documents:
   - Only the DQC Manager is authorized to copy controlled documents.
   - When the DQC Manager distributes copies of controlled documents, the following record is made of the document: the version date, to which person it was distributed, and the document’s location.

7. Uncontrolled copies are marked “Uncontrolled Copy”

8. When a controlled document is superseded:
   - The first page of superseded documents is destroyed or marked “VOID”. The superseded document is removed from areas where quality inspection, test, or work is in progress.
   - The superseded document is replaced with a currently approved version of the document.

9. Quality documents are stored in their original condition, in a suitable environment to prevent damage, deterioration and loss. Quality Records are readily retrievable for review upon request. Access to Quality system documents is not limited but is subject to normal building security.

10. Quality documents are stored for a period of seven years to demonstrate conformance to specified requirements and the effective operation of the quality system. No quality system document is destroyed without written approval of the DQC Manager.
PROJECT DOCUMENT AND RECORD CONTROL PROCEDURE

Procedure:
- Project records completed by the person responsible for completing them, quality records are collected and filed. Any qualified person in the location identified on section 5.6 of the Project Design Quality Control Plan may file the records.

11. Quality Records are stored in their original condition, in a suitable environment to prevent damage, deterioration, and loss. Quality Records are readily retrievable for review upon request. Access to Quality Records is not limited but is subject to normal building security.

12. Quality Records are stored for a period of seven years to demonstrate conformance to specified requirements and the effective operation of the quality system. No quality record is destroyed without written approval of the DQC Manager.

13. Quality records are kept primarily as hard copy. When quality records are kept on a computer storage device, ability to enter information is password controlled and the computerized records are backed up on a regular basis.

Additional detail on [CompanyName] policies and procedures that apply to document and record controls appear in Quality Manual sections 14.3 Document Controls 14.4 Record Controls.
## QUALITY MANUAL

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9. PROCESS CONTROLS

HOW WORK IS CARRIED OUT

9.1. OVERVIEW
The design process plan defines how project work is to be done and approved for the overall project. The design process plan is communicated to all key personnel, architects, engineers, and subcontractors in a startup meeting. As the project proceeds, work task plans provide additional details of how each individual work task is carried out. Work tasks planning meetings are used to communicate expectations of the work task plan to key personnel responsible for carrying out the work task.

9.2. PROJECT STARTUP AND QUALITY CONTROL COORDINATION MEETING
Prior to the commencement of work, the Project Design Manager holds a meeting to discuss and coordinate how project work will be performed and controlled. Key personnel from [Company Name], architects, engineers, and subcontractors meet to review expectations for project quality results as well as quality assurance and quality control policies and procedures including:

- Key requirements of the project
- The Project Design Quality Control Plan
- Required quality inspections and tests
- The project submittal schedule
- Quality policies and heightened awareness of critical quality requirements
- Project organization chart and job responsibilities
- Methods of communication and contact information
- Location of project documents and records

9.3. WEEKLY PROJECT DESIGN QUALITY PLANNING AND COORDINATION MEETINGS
The Design Engineer conducts a meeting with key company, architect, engineer and subcontractor personnel responsible for carrying out, supervising, or inspecting the work, and interested customer representatives.

9.4. WEEKLY QUALITY PLANNING AND COORDINATION MEETINGS
The Design Engineer conducts a meeting with key company, architect, engineer, and subcontractor personnel responsible for carrying out, supervising, or inspecting the work, and interested customer representatives.

The meeting is held on a nominal weekly schedule. During the meeting, the Design Engineer facilitates coordination among the participants, communication among the participants, and reinforces heightened awareness for critical requirements.

The Design Engineer maintains a record of the meeting event on the Daily Quality Control Report.

9.5. PROCESS CONTROL STANDARDS

9.5.1. 8.5.1. CONTROL OF CUSTOMER PROPERTY
Care will be exercised for customer property used by or under [CompanyName] control. [CompanyName] will identify, inspect, verify, control, and protect customer property with the procedures that apply to company purchased materials. If any customer property is lost, damage, or otherwise found to be unsuitable for use [CompanyName] will report this to the customer.

9.5.2. JOB-READY START WORK STANDARDS

Work on a work task starts only when conditions do not adversely impact quality, comply with government regulations, contract technical specifications, industry standards, or product installation instructions.
List of Included Forms

Military Forms:

- Preparatory Phase Checklist
- Initial Phase Checklist Form
- Contractor Production Report
- Contractor Quality Control Report
- Testing Plan and Log

Standard Forms:

- Project Organization Chart Form
- Quality Manager Appointment Form
- Project Manager Appointment Form
- Project Superintendent Appointment Form
- Project Design Manager Appointment Form
- Project Personnel Qualification Form
- Personnel Certifications and Licenses Form
- Quality Controlled Task List Form
- Quality Inspection and Test Plan Form
- Project Quality Communications Plan Form
- Point Of Contact List Form
- Project Quality Training Plan Form
- Task Training Plan and Log Form
- Project Quality Records Plan Form
- Project Submittal Form
- Change Order Form
- Project Design Process Plan Form
- Design Review Meeting Participant Form
- Design Review Form
- Project Regulatory Building Codes Form
- Test Equipment Calibration Form
- Lot Controlled Materials Form
- Project Subcontractor or Supplier Qualification Form
- Subcontractor and Supplier Certifications and Licenses Form
- Source of Supply Form
- Preconstruction Meeting Form
- Task Project Quality Control Plan Form
- Task Project Quality Control Planning Meeting Form
Questions? Call First Time Quality 410-451-8006

- Daily Quality Control Report Form
- Monthly Quality Control Report Form
- Task Inspection Form
- Project Completion Inspection Form
- Inspection and Test Report Form
- Nonconformance Report Form
- Nonconformance Report Control Log Form
- Training Record Form
- Project Quality System Audit Form
- Quality System Audit Form
- Project Document Control Form
QUALITY SYSTEM SOP
3.5 CUSTOMER SUBMITTAL APPROVAL

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**Purpose:**

To provide a consistent method for presenting and recording key submittal information in a cover sheet for each submittal.

**Scope:**

All projects

**Definitions:**

None:

**Responsible Person(s):**

The Project Manager has overall responsibility

The Quality Manager must approve all submittals

**References:**

Quality Manual Section 3.5 Customer Submittal Approval

Contract Submittals

Quality Manual Section 12.4.2 Project Records Control

**Procedure:**

1. Use the Contract Submittal Form contained in this procedure unless the customer contract or Project Quality Control Plan specifies the use of a modified or customer supplied form. In that case, the specified form replaces the standard form for that contract.

2. For each project, the Responsible Person completes the Project Submittals Form (contained in this procedure) with information as required by the Quality Manual.

3. The Responsible Person updates the Project Submittal Form as necessary with actual date of submittal and actual date of customer submittal approval date.

4. The Responsible Person stores the completed form in the field project office as required by Quality Manual Section 12.4.2 Project Records Control
## [CompanyName]
### Project Submittal Form

**Version** September 28, 2011

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<th>Date</th>
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<tbody>
<tr>
<td></td>
<td>[ProjectNumber]</td>
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**To:**

**From:** [CompanyName]

**Location:**

**Type of Submittal:**
- [ ] Shop drawing
- [ ] Product data
- [ ] Request for information
- [ ] Completed form or quality record
- [ ] Quality system document
- [ ] Other:

**Description of submittal:**

**List of attachments:**

**Remarks:**

**Submittal Prepared by:** [CompanyName]

**Name:**

**Title:**

**Signature / Date:**

**Submittal Approved by [CompanyName] Quality Manager:**

**Name:**

**Title:**

**Signature / Date:**

**Customer Disposition:**
- [ ] Approved
- [ ] Conditionally approved, resubmission not required (see comments)
- [ ] Disapproved, resubmission required
- [ ] Other:

**Customer Representative:**

**Name:**

**Title:**

**Signature / Date:**

**Comments:**
For More Information:
Contact: Ed Caldeira
410-451-8006
www.firsttimequality.com
EdC@FirstTimeQuality.com