FTA Quality Management System Sample

Selected pages (not a complete document)

Sample includes:

- ✓ QA/QC Plan Pages
- ✓ Quality Manual Pages
- ✓ Standard Operating Procedure Pages
- ✓ Forms Examples

Contact:
First Time Quality
410-451-8006

www.firsttimequalityplans.com

[CompanyName]

Construction

Quality Assurance/Quality Control Plan

[ProjectName]
[ProjectNumber]

Management acceptance

This Quality Assurance/Quality Control Plan has been reviewed and excepted

Endorsed By: (Name / Title)	[QCManagerName], QC Manager		
Signature:	*[QCManagerName]*	Date:	[Date]

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SIGNATURE SHEET

Plan Preparer

This [CompanyName] Project Quality Control Plan was prepared in accordance with the contract specifications and requirements of the [CompanyName] quality system and approved by:

[QCManagerName] / [Date] / [Phone Number]

[QCManagerName, QC Manager /Date / Phone Number

Approval by Company Officer

This [CompanyName] Project Quality Control Plan is approved by:

[SeniorManagerName] / [Date] / [Phone Number]

[SeniorManagerName] Senior Manager /Date / Phone Number

Plan Concurrence

[CompanyName] Project Quality Control Plan concurrence by:

[ProjectManagerName] / [Date] / [Phone Number]

[ProjectManagerName], Project Manager /Date / Phone Number

[SuperintendentName] / [Date] / [Phone Number]

[SuperintendentName], Superintendent /Date / Phone Number

PROJECT QUALITY CONTROL PLAN

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B. ELEMENT 2: DOCUMENTED QUALITY SYSTEM

[CompanyName] documents its Quality System by three integrated and coordinated components.

This Quality Assurance/Quality Control Plan provides details of how [CompanyName] will apply its Quality System to meet the unique requirements of this project

The Quality Manual documents how [CompanyName] institutes its quality management process as a company.

The Standard Operating Procedures document work steps and forms for recording operation of the Quality System.

These documents are attached to this Quality Assurance/Quality Control Plan.

QUALITY MANUAL

The QC Manager maintains the [CompanyName] Quality Manual that documents [CompanyName] quality policies. Each policy identifies the titles of personnel responsible.

The QC Manager ensures that the Quality Manual and documents related to a work task are accessible to personnel performing the work.

The QC Manager maintains, improves, and updates the manual as necessary. At least annually, the QC Manager determines if updated versions of standards and product installation instructions are available. If so, the QC Manager updates the Quality System documentation accordingly.

QUALITY SYSTEM PROCEDURES

The QC Manager prepares procedures when documented work steps are necessary for establishing, implementing, and maintain the [CompanyName] Quality System. Only procedures approved by the QC Manager are a requirement of the [CompanyName] Quality System.

Written procedures are required for the use of forms to record quality data.

Each procedure must contain the following elements:

- Purpose
- Scope
- Definitions
- Responsible Person(s)
- References
- Procedure steps: that describe sequential processes to be followed to accomplish quality objectives

E. ELEMENT 5: PURCHASING

Subcontractors and suppliers will be used to provide products, materials and/or services. Key subcontractors and suppliers that will be used on this project are listed on the Source of Supply form. A Source of Supply form exhibit is included in this subsection.

The qualifications of listed suppliers have been verified. Supplier and Subcontractor Qualification form exhibits are included in this subsection.

[CompanyName] verifies the qualifications of subcontractors and suppliers to ensure that they are capable of completely carrying out their assigned responsibilities. Quality requirements are defined, verified, and documented before they are approved for a project.

QUALIFICATION OF SUBCONTRACTORS AND SUPPLIERS

The QC Manager qualifies outside organization and company work department capabilities to ensure that they are capable of completely carrying out their assigned quality responsibilities before approving and signing the contract, purchase order, or work order.

Subcontractors and suppliers must meet all Quality System requirements by either 1) working under the [CompanyName] Quality System or 2) operating their own quality program if it meets [CompanyName] Quality System requirements.

The QC Manager defines quality-related credentials for each project work task that affects quality including required:

- Organization and personnel licenses
- Personnel training
- Organization and personnel certifications
- Organization and personnel experience
- Senior person designated as QC Manager
- Knowledge of Company quality standards
- Demonstrated capability to complete work to Company quality standards
- Demonstrated skills, knowledge, and experience
- Effective self-inspection process
- Access to codes, standards and product instructions
- Equipment availability
- Production capacity
- Demonstrated results

For critical components, the QC Manager determines if a source quality inspection is necessary to validate supplier quality and delivery capabilities.

When the qualification assessment identifies minor nonconformances to the subcontract requirements, the QC Manager may approve a provisional subcontract. The provisional subcontract supplements the subcontract with requirements for actions that address correction of the nonconformances. All nonconformances must be corrected before work in the affected area begins.

QUALIFICATION OF TESTING LABORATORIES

Independent laboratories performing tests or quality inspections have additional requirements for certification by a nationally recognized testing accreditation organization as appropriate for the scope of the inspection or test:

- NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
- NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- The American Association of State Highway and Transportation Officials (AASHTO)
- International Accreditation Services, Inc. (IAS)
- U. S. Army Corps of Engineers Materials Testing Center (MTC)
- American Association for Laboratory Accreditation (A2LA) program

Purchase Order Requirements

The Project Manager ensures that materials, equipment and services are purchased only from the supplier listed on the Project Subcontractor and Supplier List form (see section 6.6Project Subcontractor and Supplier List.)

The Project Manager holds outside organizations to the same quality requirements that must be met by [CompanyName]. The Project Manager ensures that subcontracts and purchase orders clearly specify quality requirement expectations including:

- Conformance to the [CompanyName] Quality System or the subcontractor's own quality program if it meets [CompanyName] Quality System requirements.
- Conformance to contract specifications (Section 3 Contract Specifications)
- Conformance to project quality standards (Section 5 Project-Specific Quality Standards)
- Quality Management practices including
  - Performance of self-inspections.
  - Control of quality non-conformances and responsive corrections
  - Prevention of non-conformances
  - Controls that ensure completion of post-construction service work
  - Participation in quality training
- Preparation of submittals
- Participation in project planning meetings
- Participation in work task planning meetings
- Handling, storage, packaging, and delivery, as applicable
- Product or material identification for traceability

Purchase Order Approval

The Project Manager ensures that contracts and purchase orders are issued only to qualified outside organizations. The Project Manager must review, approve, and sign each purchase order.

The outside organization must agree to the purchase order terms and specifications, and then sign the contract or purchase order.

Additional detail on [CompanyName] policies and procedures for the selection and qualification appear in Quality Manual section 6.2Qualification of Outside Organizations and Company Departments and 6.8Project Purchase Order Approvals.

[CompanyName]
Project Subcontractor and Supplier List

Project ID	Project Name			Preparer/ Date
[ProjectNumber]	[ProjectName]			

Work Tasks	Subcontractor and Supplier Name	Description of Services	Quality Control Method (Not Applicable/ Subcontractor and Supplier QC/ [CompanyName] QC)	Remarks

[CompanyName]
Subcontractor and Supplier Qualification Form

Company Name:	Scope of Work (specification sections):

Project ID	Project Name	Approval	Approved By
[ProjectNumber]	[ProjectName]	☐Yes ☐Conditional ☐No	

Subcontractor and Supplier Quality System:	Subcontractor and Supplier site quality inspection
☐Works under [CompanyName] Quality System ☐Approved to Work under subcontractor's quality system	☐Site quality inspection required before approval ☐Site quality inspection of product/material required before delivery

Review Topics

Project-Related Job Credentials

Licenses required:	License and expiration dates:
Certification required:	Certifications and expiration dates:
Training required:	Training completed and expiration date:
Type and length of experience required:	Certifications and expiration dates:
Personnel license, certification, and training required:	List each person's credentials on the Subcontractor and Supplier Certifications and Licenses form.

Qualifications

☐Senior person designated as QC Manager	☐Demonstrated results
☐Knowledge of Company quality standards	☐Effective self-inspection process
☐Demonstrated capability to complete work to Company quality standards	☐Access to codes, standards and product instructions
☐Demonstrated skills and knowledge	☐Equipment availability
☐Demonstrated experience	☐Production capacity
	☐Staffing availability

QUALIFICATION NOTES:

Provisional Approval: Action plan for improvement

Follow-up results and date

[CompanyName]
Subcontractor and Supplier Certifications and Licenses

Project ID	Project Name	Preparer	Date
[ProjectNumber]	[ProjectName]		

Subcontractor and Supplier/ Personnel	Certification, License, or Credential	Expiration Date

F. Element 6: Product Identification and Traceability

Products and materials are controlled to assure the use of only correct and acceptable items. Controls include identification of the inspection status. Materials that require lot control traceability and the method of traceability are listed on the Controlled Materials form included as an exhibit in this subsection.

Identification of Lot Controlled Materials

The QC Manager determines types of project materials that require quality controls.

For each type of quality-controlled material, the QC Manager determines lot control traceability requirements, if any, and specifies the means of lot identification. Identification methods may include stamping, tagging or physical separation and/or attached certification documents.

When lot-controlled materials are received, the Superintendent verifies that materials have the specified lot identifications.

The Superintendent maintains lot identification at all production phases from receipt, through production, installation, or assembly, to final completion. Acceptable methods for preserving lot identification include physically preserving observable lot identifications, recording the lot identification on a work task quality inspection form or other work record, or collecting the physical lot identifier as a record along with supplemented with location.

If lot-controlled materials are without lot identification, the Superintendent deems the materials as nonconforming and segregates them and/or clearly marks them to prevent inadvertent use. The Superintendent treats the material according to the company policy for nonconformances. Only the QC Manager can re-identify or re-certify the materials.

Controlled Use of Materials

The Project Manager ensures that contracts and purchase orders are awarded only to outside organizations qualified to perform the work task and/or supply materials as required for the specific project.

Only approved materials are used in the construction process. Only approved materials are specified in purchase and/or subcontracts.

Materials that are defective, deteriorated, damaged, or not approved are not used. The Superintendent clearly marks such materials for non-use or otherwise holds them aside.

When customer-supplied materials are lost, damaged, or otherwise found unsuitable for use, the Superintendent reports such findings to the customer.

When subcontractor–supplied materials are damaged or otherwise found unsuitable for use, the Superintendent reports such findings to the subcontractor.

The Superintendent ensures that construction uses only materials specified in the contract technical specifications, contract drawings, and approved submittals. Substitutions are made only by agreement of the customer and documented by a change order (see section 2.1.3.6).

Material Inspection

Material quality inspections and tests ensure that purchased materials meet purchase contract quantity and quality requirements. The Superintendent inspects or ensures that a qualified inspector inspects materials prior to use for conformance to project quality requirements.

The Superintendent ensures that each work task that uses the source inspected materials proceed only after the material has been accepted by the material quality inspection or test.

Inspection and Test Status

The status of each quality control inspection or test is clearly marked by tape, tag, or other easily observable signal to ensure that only items that pass quality inspections is accepted.

For each quality-controlled work task, the QC Manager determines the appropriate method of identification to show inspection and test status.

For each quality-controlled material, the QC Manager determines the appropriate method for identifying quality inspection and test status.

Marking of Nonconformance Materials

When the QC Manager, Superintendent, inspector, or customer identifies a nonconformance or an observation, the item is quickly and clearly marked by paint, tape, tag, or other easily observable signal to prevent inadvertent cover-up.

Additional detail on [CompanyName] policies and procedures for the product identification and traceability appear in Quality Manual sections 5.6 Controlled Use of Materials, 7.5.5 Controlled Use of Materials, 8.3Material Inspections and Tests, and 9.2.1Marking of Nonconformances and Observations.

[CompanyName]
Controlled Materials Form

Contract ID	Contract Name	Preparer	Date	
[ProjectNumber]	[ProjectName]			

Contract Section/ Activity ID	Material	Intended Use (If description is necessary)	Lot Traceability Requirements	Method for identification of Approved Inspection Status

[CompanyName]
Material Inspection and Receiving Report

Contract ID	Contract Name	Purchase Order No.	Supplier	Bill of Lading No.	Date
[ProjectNumber]	[ProjectName]				

Item No.	Stock/Part No.	Description	Quantity Received	Condition	Marking	Accept	Conditional Use	Reject
						☐	☐	☐
						☐	☐	☐
						☐	☐	☐
						☐	☐	☐
						☐	☐	☐
						☐	☐	☐

Receiving Quality Control

ACCEPTANCE

Listed items have been accepted by me or under my supervision

☐ Conform to contract specifications EXCEPT as noted herein or on supporting documents.
☐ Received in apparent good condition EXCEPT as noted

Signature of authorized person and date: _____

EXCEPTIONS:

J. ELEMENT 10: INSPECTION AND TEST STATUS

[CompanyName] identifies the inspection and test status for quality controlled work tasks to ensure that only work that has passes required inspections and tests is accepted. Only work tasks that are identified as accepted is incorporated into, or is covered by, ongoing work.

Section G. ELEMENT 7: PROCESS CONTROLS lists the project construction work tasks that require inspections or tests. Section H. ELEMENT 8: INSPECTION AND TESTING lists the required inspection and tests and related records.

INSPECTION AND TEST REPORTS

Inspection and test reports record the checking and reviews performed, the inspections status, and when the inspected work is conforming, approval of the completed work.

INSPECTION AND TEST REPORT STATUS

An inspection is accepted only when the inspection and test report is complete, has a status of PASS or ACCEPTED and is approved by a competent inspector.

PHYSICAL MARKING OF ACCEPTED WORK

When a work task is accepted, the inspector clearly marks accepted work task by tape, tag, or other easily observable signal.

Additional detail on [CompanyName] policies and procedures for the for inspection and test status appears in Quality Manual sections 2.5 Identification of Quality Controlled Work Tasks, 5.6 Controlled Material Identification and Traceability, and 8.12Inspection and Test Status.

[CompanyName]

Construction

Corporate Quality Manual

Operating Policies of the
[CompanyName] Quality System

Management acceptance

This Quality Assurance Manual has been reviewed and excepted

Endorsed By: (Name / Title)	[PresidentName], Senior Manager		
Signature:	*[PresidentName]*	Date:	[Date]

Revision History

DATE	DOCUMENT#	REVISION	COMMENTS	APPROVED BY
[Date]	QAM	1	Original Issue	[PresidentName]

QUALITY MANUAL

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PROJECT QUALITY MANAGEMENT

The President forms a team consisting of a QC Manager, Project Manager, and Superintendent.

First, the QC Manager assembles a set of project specifications that includes customer specifications and requirements, regulations, industry standards, product instructions, and [CompanyName] quality standards. [CompanyName] operating policies assure compliance to the project specifications.

The QC Manager evaluates personnel, subcontractors and suppliers, materials, and suppliers, and ensures that only those that are capable and qualified are included on the project. Training is provided to ensure that all personnel involved understand their project work task requirements as well as their quality responsibilities and authorities.

The QC Manager then details how the quality is controlled throughout the construction process through a listing of all work task inspections and tests that will be performed.

As the project proceeds and prior to starting each construction work task, the Superintendent coordinates detailed quality requirements and resources, working conditions, and communicates them through a meeting with all interested parties. The Superintendent amends work task inspection checklists with items for heightened awareness based on the concerns of all parties.

The subcontractors and suppliers, Superintendent, and QC Manager use inspection checklists to monitor conformance of each work task to the project specifications before, during, and at completion. Laboratory and functional tests are performed to assure performance results.

Should quality nonconformances occur, they are systematically segregated, controlled and corrected. Improvements are made to prevent recurrences.

Throughout the project, the QC Manager performs on-site quality audits to ensure that the [CompanyName] Quality System is operating effectively.

CROSS REFERENCES

The [CompanyName] Quality System complies with Quality Management System Guidelines for Federal Transit Administration (FTA) construction projects.

FTA Guidelines Section	Quality Manual Section
1. Management Responsibility	1 Quality System Management and Responsibilities
2. Documented Quality Management System	Key Elements of the Quality System
3. Design Control	3.7 Contract Review and Approval 4 Design Review and Control
4. Document Control	12.3 Document Controls
5. Purchasing	6 Project Purchasing
6. Product Identification and Traceability	5.6 Controlled Material Identification and Traceability
7. Process Control	7 Process Controls
8. Inspection and Testing	8 Inspections and Tests
9. Inspection, Measuring, and Test Equipment	5.7 Measuring Device Control and Calibration
10. Inspection and Test Status	8.11 Inspection and Test Acceptance Criteria 8.12Inspection and Test Status
11. Nonconformance	9.2 Nonconformances
12. Corrective Action	9.3 Corrective Actions
13. Quality Records	12.4 Record Controls
14. Quality Audits	11 Quality System Audits
15. Training	2.8 Project Quality Training Plan 10.3 Train Preventive Actions for Improvement

7. Process Controls

HOW WORK IS CARRIED OUT

7.1. Overview

The construction process plan defines how project work is to be done and approved for the overall project. The construction process plan is communicated to all key personnel, subcontractors and suppliers 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.

7.2. Project Startup and Quality Control Coordination Meeting

Prior to the commencement of work, the Project Manager holds a meeting to discuss and coordinate how project work will be performed and controlled. Key personnel from [CompanyName], subcontractors and suppliers 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 Quality Assurance/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

7.3. Preparatory Project Quality Assurance/Quality Control Plan Planning

7.3.1. Work Task Requirements Review

In preparation for the start of an upcoming work task, the Superintendent reviews an integrated and coordinated set of documents that collectively define quality requirements for the work task including:

- Objectives and acceptance criteria of the work task
- Quality standards that apply to the work task
- Work instructions, process steps, and product installation instructions that apply to the work task
- Shop drawings
- Submittals
- Tools and equipment necessary to perform the work
- License, certification, or other qualification requirements of personnel assigned to work
- Required records of the process and resulting product
- The subcontractor contracted to perform the work, if applicable
- Customer contract requirements
- Required quality inspections and tests
- Method for clearly marking nonconformances to prevent inadvertent use
- Location of quality system records and documents
- Personnel training

7.3.2. Preparatory Site Inspection

The Superintendent also performs a quality inspection of the work area and:

- Assesses completion of required prior work
- Verifies field measurements
- Assures availability and receiving quality inspection status of required materials
- Identifies any nonconformances to the requirements for the work task to begin
- Identifies potential problems

7.3.3. Work Task Preparatory Quality Planning Meetings

Prior to the start of a work task, the Superintendent conducts a meeting with key company, subcontractor personnel responsible for carrying out, supervising, or inspecting the work, and interested customer representatives.

During the meeting, the Superintendent communicates the work task quality requirements and reinforces heightened awareness for critical requirements. Topics for a work task quality plan meeting include:

- Conflicts that need resolution
- Required quality documents and a verification of availability to personnel carrying out, supervising, or inspecting the work task
- Record keeping requirements and the availability of necessary forms
- Review methods and sequences of installation
- Special details and conditions
- Standards of workmanship
- Heightened awareness of critical quality requirements
- Quality risks
- Work tasks quality inspection form

7.4. Weekly Quality Planning and Coordination Meetings

The Superintendent conducts a meeting with key company, subcontractor and supplier 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 Superintendent facilitates coordination among the participants, communication among the participants, and reinforces heightened awareness for critical requirements.

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

7.5. Process Control Standards

7.5.1. 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.

The QC Manager identifies supplemental start-work requirements that apply to a specific project when they are necessary to assure quality results.

7.5.2. Work in Process Standards

Work is conducted only when conditions do not adversely impact quality, comply with government regulations, contract technical specifications, industry standards, or product installation instructions.

The QC Manager identifies supplemental work in process requirements that apply to a specific project when they are necessary to assure quality results.

7.5.3. Protection of Completed Work Standards

Completed work is protected from damage as specified by government regulations, contract technical specifications, industry standards, or product installation instructions.

The QC Manager identifies supplemental protection requirements that apply to a specific project when they are necessary to assure quality results.

7.5.4. Material storage

The Superintendent ensures all materials will be delivered, stored and handled in a manner that protects them from damage, moisture, dirt and intrusion of foreign materials.

Delivery of materials will be planned according to the work progress to minimize storage on site, where there are higher possibilities of damages and deterioration of materials.

Stored materials will be segregated to prevent cross contamination and limit losses should a delivery be rejected.

The Superintendent surveys stored materials during daily jobsite reviews and identifies any material that have incurred damage or otherwise become defective and therefore unfit for use.

7.5.5. Controlled Use of Materials

The Project Manager ensures that contracts and purchase orders are awarded only to outside organizations qualified to perform the work task and/or supply materials as required for the specific project.

Only approved materials are used in the construction process. Only approved materials are specified in purchase and/or subcontracts.

Materials that are defective, deteriorated, damaged, or not approved are not used. The Superintendent clearly marks such materials for non-use or otherwise holds them aside.

When customer-supplied materials are lost, damaged, or otherwise found unsuitable for use, the Superintendent reports such findings to the customer.

When subcontractor–supplied materials are damaged or otherwise found unsuitable for use, the Superintendent reports such findings to the subcontractor.

The Superintendent ensures that construction uses only materials specified in the contract technical specifications, contract drawings, and approved submittals. Substitutions are made only by agreement of the customer and documented by a change order (see section 2.1.3.6).

7.5.5.1. Controlled Product Use and Installation

[CompanyName] construction activities conform to manufacturers' product use and installation instructions that apply to the construction process.

When installing a product, the Superintendent has access to all applicable product installation instructions.

7.6. Daily Quality Control Report

The Superintendent records a summary of daily work activities. The report will include:

- Schedule Activities Completed
- General description of work activities in progress.
- Problems encountered, actions taken, problems, and delays
- Meetings held, participants, and decisions made
- Subcontractor and Supplier and Company Crews on site
- Visitors and purpose
- General Remarks
- Improvement Ideas
- Weather conditions

7.7. Monthly Quality Control Report

When a monthly quality control report is required by the Project Quality Plan, the Superintendent records a monthly status report. The report includes:

- A summary of work completed and work in progress
- Outstanding issues
- Issues resolved during the reporting period
- Outstanding potential change orders
- Project status with current project costs and estimated completion date
- A cost analysis summarizing actual costs to date and estimated future costs
- Project pictures as appropriate

8. INSPECTIONS AND TESTS

ASSURE COMPLIANCE

8.1. OVERVIEW

Inspections are necessary to verify that work processes and results conform to both contract requirements and [CompanyName] quality standards.

Qualified personnel inspect every project throughout the construction process. Additional reviews validate the accuracy of the field quality inspections and ensure that the quality standards apply uniformly.

An inspection and test plan defines the quality inspections and tests required for a specific project.

Personnel may only inspect work activities for which they have been qualified by the QC Manager.

8.2. REQUIRED WORK TASK QUALITY INSPECTIONS AND TESTS

The QC Manager identifies each Task that is a phase of construction that requires separate quality controls to assure and control quality results. Each Task triggers as set of requirements for quality control inspections before, during and after work tasks.

Tasks are divided into two categories:

- Discrete Tasks are standard type of work where a completion inspection is performed one time at the completion of a phase of work.
- Process Tasks are tasks where completion inspections are performed continuously. Continuous inspections are required when there is a limited window of time to perform a completion inspection before the next task begins. Process tasks may also be characterized by independent monitoring of a work process, such as welding, where the observer verifies conformance to work procedures.

Process tasks undergo additional quality controls that continuously monitor compliance to specifications.

Independent quality audits are conducted to verify that the task quality controls are operating effectively.

Construction projects may execute a work task multiple times in a project, in which case a series of quality inspections are required for each work task.

8.3. MATERIAL INSPECTIONS AND TESTS

Material quality inspections and tests ensure that purchased materials meet purchase contract quantity and quality requirements. The Superintendent inspects or ensures that a qualified inspector inspects materials prior to use for conformance to project quality requirements.

The Superintendent ensures that each work task that uses the source inspected materials proceed only after the material has been accepted by the material quality inspection or test.

8.3.1.1. SOURCE INSPECTIONS

Source quality inspections are required when quality characteristics cannot or will not be verified during subsequent processing. The QC Manager determines if a source inspection is necessary to validate supplier quality before materials are delivered to the project jobsite.

The Superintendent ensures that each work task that uses the source inspected materials proceed only the material has been accepted by the source inspection.

8.4. Work in Process Inspections

Work in process quality inspections continuously verify compliance project quality standards beginning at the start of a work task, as work is conducted, and continues until the work task is complete.

8.4.1.1. Initial Job-Ready Inspections

For each work task, the Superintendent or a qualified inspector performs job-ready quality inspections to ensure that work activities begin only when they should begin. Job-ready quality inspections verify that conditions conform to the project quality requirements.

8.4.1.2. Initial Work in process Inspection

For each work task, the Superintendent or a qualified inspector performs an initial work in process inspection when the first representative portion of a work activity is completed.

8.4.1.3. Follow-up Work in Process Inspections

The Superintendent or a qualified inspector performs ongoing work in process quality inspections to ensure that work activities continue to conform to project quality requirements. Punch Items

If the Superintendent or inspector observes an item for correction prior to a work task completion inspection, the item is identified for correction. During the work task completion inspection each punch item correction is verified.

Any outstanding punch items remaining after the work task completion inspection is deemed a nonconformance.

8.4.2. Additional Inspection Requirements for Process Tasks

For each process task, a qualified person inspects the ongoing completion work for conformance to project quality requirements. This is in addition to discrete task completion inspections that are performed one time at the end of a phase of work.

The continuous monitoring inspections are conducted before starting other work activities that may interfere with an inspection.

8.5. Work Task Completion Inspections

For each work task, the QC Manager or a qualified inspector inspects the completion of each work task to verify that work conforms to project quality requirements.

Completion quality inspections are performed for each work task. Completion quality inspections are conducted before starting other work activities that may interfere with an inspection.

Any outstanding punch items remaining after the work task completion inspection is deemed a nonconformance.

8.6. Inspection of Special Processes

The QC Manager identifies special processes where the results cannot be verified by subsequent inspection or testing and determines if continuous work in process inspections are required. For these special processes, a qualified inspector continuously inspects the work process.

8.7. Independent Measurement and Tests

The QC Manager ensures that quality tests that apply to a specific project are clearly identified. Tests for a project include:

- Customer required quality tests as specified by the contract, contract technical specifications, contract drawings, and approved submittals.
- Additional quality tests necessary to assure quality results.

8.8. Commissioning Functional Acceptance Tests

A functional test is performed on each functional system. A qualified inspector performs functional acceptance tests to verify that a system meets predetermined acceptance criteria including:

- The equipment and systems operate as intended
- The equipment and systems perform as intended
- Documentation for operation and maintenance is complete

Each functional test has a documented testing procedure that includes:

- Step-by-step work instructions for conducting the test
- Data recording requirements
- Acceptance criteria
- A determination of pass or fail

8.9. Hold Points for Customer Inspection

The Superintendent stops work when reaching a hold point specified on the inspection and test plan. The Superintendent ensures that work proceeds only with customer approval.

8.10. Quality Inspection and Test Specifications

Specifications for each inspection or test are clearly understood before the inspection or test is performed including:

- Items to be inspected/tested
- Inspections/tests to be performed
- Testing schedule frequency
- Specification references including contract drawing identification number and version, if applicable, and/or contract technical specification number and version, if applicable
- Performing party
- Witness parties
- Certificates required
- Checklists/procedures
- Reference standards

8.11. Inspection and Test Acceptance Criteria

Inspections assess conformance of materials or work for each work task to project quality requirements, including applicable:

- Contract technical specification
- Contract drawings
- Approved shop drawings
- Approved product submittals
- Approved allowances and unit prices
- Product identification requirements
- Approved submittals
- [CompanyName] quality standards

The material or completed work task is accepted only when it meets all project quality requirements.

8.12. Inspection and Test Status

The status of each quality control inspection or test is clearly marked by tape, tag, or other easily observable signal to ensure that only items that pass quality inspections is accepted.

For each quality-controlled work task, the QC Manager determines the appropriate method of identification to show inspection and test status.

For each quality-controlled material, the QC Manager determines the appropriate method for identifying quality inspection and test status.

8.13. Independent Quality Assurance Inspections

The QC Manager and/or qualified inspectors perform independent quality assurance inspections that verify that task quality controls are operating effectively.

The QC Manager selects a representative portion of task completion inspections performed by the Superintendent. Those tasks are independently inspected by the QC Manager and/or qualified inspectors. The findings are compared to the findings of the inspections performed by the Superintendent. Any deviations are addressed by corrective actions and preventive actions as necessary.

8.14. Inspection and Test Records

8.14.1. Inspection Records

The QC Manager prepares an inspection form for each work task. The QC Manager lists on the form checkpoints for heightened awareness including:

- Initial job-ready inspection requirements
- Inspection and tests
- Work in process inspection requirements
- Completion quality inspections
- Other quality requirements as necessary to reduce quality risks

The person responsible for the inspection, records work task inspection results on the work task inspection form.

8.14.2. Test Records

Test result data include as appropriate:

- Reference to the inspection and test plan item
- Description or title of the inspection activity
- Drawing identification number and version, if applicable
- Technical specification number and version, if applicable
- Location of the inspection activity
- Acceptance criteria
- Nonconformances
- Validation that nonconformances are corrected, reinspected or retested, and confirmed to meet Quality System requirements.
- Any open items to be completed later.
- Inspector's name and signature indicating compliance with all requirements of the Quality System
- Quality rating scores as appropriate
- Date of inspection or test
- Certificate, if applicable
- Conspicuous statement of final result as either "CONFORMS" or "DOES NOT CONFORM"

8.15. Project Completion and Closeout Inspection

8.15.1. Pre-Final [CompanyName] Inspection

Near the end of the project, or a milestone established in the Project Quality Inspection and Test Plan, the QC Manager will inspect the completed project and verify conformance to contract specifications.

The QC Manager records nonconforming items.

The Superintendent assigns a planned date by which the deficiencies will be corrected. The date may be assigned for all items or individual items as necessary. After corrections have been made, the Superintendent verifies the completion of each item.

Then the QC Manager conducts a follow-up inspection and verifies that all nonconforming items have been corrected to meet contract specifications. Any remaining deficiencies are recorded and managed as nonconformances.

When the pre-final [CompanyName] inspection process is complete, the QC Manager then notifies the customer that the project is ready for the customer's final inspection. The customer is also notified of any remaining nonconformances and their planned resolution.

8.15.2. Pre-Final Customer Inspection

If the customer performs a pre-final inspection, the QC Manager records nonconforming items and assigns a planned date by which the deficiencies will be corrected.

The Superintendent assigns a planned date by which the deficiencies will be corrected. The date may be assigned for all items or individual items as necessary. After corrections have been made, the Superintendent verifies the completion of each item.

After corrections have been made, the QC Manager will conduct a follow-up inspection and verify that all nonconforming items have been corrected to meet contract specifications. Any remaining deficiencies are recorded and then managed as nonconformances.

When the pre-final customer inspection process is complete, the QC Manager then notifies the customer that the project is ready for the customer's Final inspection. The customer is also notified of any remaining nonconformances and their planned resolution.

8.15.3. Final Acceptance Customer Inspection

If the customer performs a final inspection, the Quality Control Manager, Superintendent, and Project Manager will participate in the inspection. The QC Manager records nonconforming items and assigns a planned date by which the deficiencies will be corrected. The date may be assigned for all items or individual items as necessary. After corrections have been made, the Superintendent verifies the completion of each item.

After corrections have been made, the QC Manager will conduct a follow-up inspection and verify that all nonconforming items have been corrected to meet contract specifications. Any remaining deficiencies are recorded managed as nonconformances.

When the final customer inspection process is complete, the QC Manager then notifies the customer that the project is ready for the customer's follow-up verification. The customer is also notified of any remaining nonconformances and their planned resolution.

[CompanyName]

Quality System
Standard Operating Procedures

STANDARD OPERATING PROCEDURES

TABLE OF CONTENTS

QUALITY SYSTEM SOP 6.7 CONTROLLED MATERIAL IDENTIFICATION AND TRACEABILITY	
Version	**Approved by:**
[Date]	QC Manager

Purpose:

To specify which project materials are subject to lot control

Scope:

All projects

Definitions:

None:

Responsible Person(s):

QC Manager has overall responsibility

Project Manager

References:

Quality Manual Section 6.7 Controlled Material Identification and Traceability

Quality Manual Section 13.4.2 Project Records Control

Procedure:

1. The Responsible Person identifies if lot traceable materials are necessary to supplement the contract as required by the Quality Manual.
2. The Responsible Person records types of controlled materials and equipment on the Controlled Materials form as required by Quality Manual. When no controlled materials are required to supplement contract requirements, “none required” is recorded.
3. The Responsible Person records specifications that apply to each type of controlled material and equipment as required by Quality Manual.
4. The Responsible Person updates the Controlled Materials Form as necessary during the project.
5. When a material is listed on the Controlled Materials Form, only that material may be purchased for the intended purpose.
6. The Responsible Person stores the completed form in the field office as required by Quality Manual Section 13.4.2 Project Records Control.

[CompanyName]
Controlled Materials Form

Contract ID	Contract Name	Preparer	Date	
[ProjectNumber]	[ProjectName]			

Contract Section/ Activity ID	Material	Intended Use (if description is necessary)	Lot Traceability Requirements	Method for identification of Approved Inspection Status

[CompanyName]
Metals Material Receiving Inspection Report

Project ID	Project Name	P.O.#	Supplier	Receipt Date
[ProjectNumber]	[ProjectName]			

Type of Material (i.e., steel plate)	Material Description (nominal dimensions)	Heat Number/ Serial Number/Markings	Condition / Damage	Color Code Marking

Receiving Inspector Approval Signature / Date	Government Representative Name/Approval Date	
		❑ Material Receiving Inspection Passed

[CompanyName]
Material Inspection and Receiving Report

Contract ID	Contract Name	Purchase Order No.	Supplier	Bill of Lading No.	Date
[ProjectNumber]	[ProjectName]				

Item No.	Stock/Part No.	Description	Quantity Received	Condition	Marking	Accept	Conditional Use	Reject
						☐	☐	☐
						☐	☐	☐
						☐	☐	☐
						☐	☐	☐
						☐	☐	☐
						☐	☐	☐

Receiving Quality Control

ACCEPTANCE

Listed items have been accepted by me or under my supervision

☐Conform to contract specifications EXCEPT as noted herein or on supporting documents.
☐Received in apparent good condition EXCEPT as noted

Signature of authorized person and date: _____

EXCEPTIONS:

QUALITY SYSTEM SOP 6.8 MEASURING DEVICE CONTROL AND CALIBRATION	
Version	**Approved by:**
[Date]	QC Manager

Purpose:

To clearly define measuring devices that require calibration and to keep calibration records.

Scope:

All measuring devices that requires calibration as specified by the [CompanyName] Quality Manual

Definitions:

None:

Responsible Person(s):

Superintendent

References:

Quality Manual Section 6.8 Measuring Device Control and Calibration

Quality Manual Section 13.4.2 Project Records Control

Procedure:

1. Use the Measuring Devices and Calibration Form contained in this procedure unless the customer contract or Project Quality Assurance/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. The Responsible Person completes the Measuring Devices Calibration Form (contained in this procedure) with information as required by the Quality Manual.
3. The Responsible Person stores the completed form in the field office as required by Quality Manual Section 13.4.2 Project Records Control

[CompanyName]
Test Equipment Calibration Plan and Log

Project ID	Project Name	Preparer	Date	
[ProjectNumber]	[ProjectName]			

Type of measuring device	Calibration Type and Frequency	Measuring Device ID	Calibrated By/ Calibration Date	Calibration certificate #	Next Calibration Due Date
					Project Start

For More Information:

Visit our Online Store at:

www.firsttimequalityplans.com

or

Contact: First Time Quality

410-451-8006

edc@firsttimequality.com