



Asphalt Paving QA/QC Manual Sample

Selected pages (not a complete manual)

Sample includes:

- Quality Manual Pages
- Reporting Forms
- Inspection Forms

Contact:

First Time Quality

410-451-8006

[CompanyName]

[CompanyAddress]

[CompanyPhone2]

Asphalt Paving Quality Manual

Operating Policies of the [CompanyName] Quality System

Effective Date: [Date]

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Approval Signature and Date: _____

President/ Date

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QUALITY MANUAL

TABLE OF CONTENTS

1. Quality System Management and Responsibilities	7
1.1. Overview	7
1.2. [CompanyName] Quality Policy	7
1.3. Quality Duties, Responsibilities, and Authority	7
1.4. Quality System Performance Measures	10
1.5. Customer Satisfaction Performance Measures	10
1.6. Exceptions	10
2. Project Quality Assurance/Quality Control Plan	11
2.1. Overview	11
2.2. [CompanyName] Project License and Qualification Requirements	11
2.3. Project Personnel and Qualifications	11
2.4. Project Quality Assurance/Quality Control Plan	13
2.5. Identification of Quality Controlled Work Tasks	13
2.6. Project Quality Inspection and Test Plan	14
2.7. Project Quality Communications Plan	14
2.8. Project Quality Training Plan	14
2.9. Customer Training On Operation and Maintenance	14
2.10. Project Records and Documentation Plan	14
2.11. Project Audit Plan	15
3. Contract Specifications	16
3.1. Overview	16
3.2. Contract Technical Specifications	16
3.3. Contract Drawings	16
3.4. Contract Submittals	16
3.5. Customer Submittal Approval	18
3.6. Contract Warranty	19
3.7. Contract Review and Approval	19
4. Project-Specific Quality Standards	20
4.1. Overview	20
4.2. Regulatory Codes	20
4.3. Industry Quality Standards	20
4.4. Material and Equipment Specifications	21
4.5. Work Process Specifications	21
4.6. Controlled Material Identification and Traceability	21
4.7. Measuring Device Control and Calibration	22
4.8. [CompanyName] Quality Standards	22
4.9. Application of Multiple Sources of Specifications	22

5. Project Purchasing	23
5.1. Overview	23
5.2. Qualification of Outside Organizations and Company Departments	23
5.3. Quality Responsibilities of Key Subcontractor and Supplier Personnel	24
5.4. Requirements for Subcontractor QC Plan	25
5.5. Subcontractor and Supplier Quality Policy	25
5.6. Project Subcontractor and Supplier List	26
5.7. Purchase Order Requirements	26
5.8. Project Purchase Order Approvals.....	26
6. Process Controls.....	27
6.1. Overview.....	27
6.2. Project Startup and Quality Control Coordination Meeting	27
6.3. Preparatory Project Quality Assurance/Quality Control Plan Planning.....	27
6.4. Weekly Quality Planning and Coordination Meetings.....	28
6.5. Process Control Standards.....	28
6.6. Daily Quality Control Report.....	30
6.7. Monthly Quality Control Report	30
7. Inspections and Tests	31
7.1. Overview.....	31
7.2. Required Work Task Quality Inspections and Tests.....	31
7.3. Material Inspections and Tests	31
7.4. Work in Process Inspections.....	32
7.5. Work Task Completion Inspections	32
7.6. Inspection of Special Processes	33
7.7. Independent Measurement and Tests	33
7.8. Commissioning Functional Acceptance Tests.....	33
7.9. Hold Points for Customer Inspection.....	33
7.10. Quality Inspection and Test Specifications	33
7.11. Inspection and Test Acceptance Criteria	34
7.12. Inspection and Test Status.....	35
7.13. Independent Quality Assurance Inspections	35
7.14. Inspection and Test Records.....	35
7.15. Project Completion and Closeout Inspection	36
8. Nonconformances and Corrective Actions	38
8.1. Overview.....	38
8.2. Nonconformances	38
8.3. Corrective Actions	39
9. Preventive Actions	40
9.1. Overview.....	40
9.2. Identify Preventive Actions for Improvement	40
9.3. Train Preventive Actions for Improvement	40
10. Quality System Audits	42

10.1. Overview	42
10.2. Project Quality System Audit	42
10.3. Company-wide Quality System Audit	42
11. Record and Document Controls.....	44
11.1. Overview	44
11.2. Quality System Documents	44
11.3. Document Controls.....	44
11.4. Record Controls	45
12. Appendix.....	47
12.1. Definitions of Terms	47
13. Forms	50

Selected Pages

4. PROJECT-SPECIFIC QUALITY STANDARDS

APPLICABLE REGULATIONS, INDUSTRY, and COMPANY STANDARDS

4.1. OVERVIEW

[CompanyName] personnel and subcontractors and suppliers are accountable for compliance to standards-based written specifications.

To achieve expectations reliably and consistently, specifications are clearly spelled out, not only for results but also for processes. Specifications apply to materials, work steps, qualified personnel and subcontractors and suppliers, safe work rules, and environmental work conditions.

Standards ensure that results are specified rather than left to discretionary practices.

4.2. REGULATORY CODES

All [CompanyName] construction activities comply with the relevant regulations. The Quality Manager identifies regulatory requirements applicable to the jurisdictions served, including:

- Applicable Federal regulations
- Applicable State regulations
- Applicable building codes and local addenda to building codes
- Applicable Fire Code
- Applicable Fuel and Gas Code
- Applicable Mechanical Code
- Applicable Plumbing Code
- Additional regulations specified by the customer contract

The Quality Manager identifies regulatory requirements that apply to a specific project on the Project Quality Assurance/Quality Control Plan.

The Superintendent had jobsite access to relevant codes and government regulations.

4.3. INDUSTRY QUALITY STANDARDS

All [CompanyName] construction activities comply with generally accepted good workmanship practices and industry standards.

The Quality Manager identifies supplemental requirements for industry standards that apply to a specific project on the Project Quality Assurance/Quality Control Plan when it is not otherwise specified by the contract, contract technical specifications, or approved drawings.

Regulatory Codes and Industry Standards		
Description	Reference Standard No.	Reference Standard Title
Geotextile storing and handling	ASTM D 4873	Identification, Storage, and Handling of Geosynthetic Rolls and Samples
Storage of bituminous paving mixtures	AASHTO M 156	Standard Specification for Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures

4.4. MATERIAL AND EQUIPMENT SPECIFICATIONS

The Quality Manager ensures that all types of materials and equipment that affect quality are identified and controlled.

The Quality Manager evaluates the expected use of materials and equipment and identifies types of materials and equipment that may affect project quality. For each item, the Quality Manager sets specifications for their intended use, including:

- Compliance to contract requirements
- Compliance to code and industry standards and listing requirements
- Structural integrity
- Performance
- Durability
- Appearance
- Product identification for traceability.

The Quality Manager identifies controlled material and equipment that apply to the project.

The Quality Manager ensures that purchase orders for listed materials and equipment include the relevant specifications as specified in section 5.7 Purchase Order Requirements.

Only approved materials are used in the construction process.

4.5. WORK PROCESS SPECIFICATIONS

The Quality Manager ensures that work processes are controlled to ensure that the specified requirements are met. When appropriate, the Quality Manager will specify project quality standards for work processes that may include:

- References to documented procedures such as manufacturer's installation instructions
- Procedures for carrying out process steps
- Methods to monitor and control processes and characteristics
- Acceptability criteria for workmanship
- Tools, techniques and methods to be used to achieve the specified requirements.

4.6. CONTROLLED MATERIAL IDENTIFICATION AND TRACEABILITY

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

For each type of quality-controlled material, the Quality Manager determines lot control traceability requirements, if any, and specifies the means of lot identification. Identification methods may include physical labels, tags, markings 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 Quality Manager can re-identify or re-certify the materials.

4.7. MEASURING DEVICE CONTROL AND CALIBRATION

The Quality Manager evaluates the project requirements and determines if there are measuring devices that require controls to assure quality results.

For each type of device, the Quality Manager identifies:

- Restrictions for selection
- Limitations on use.
- Calibration requirements including the frequency of calibration. All calibrations must be traceable to national measurement standards.

When a measurement device is found not to conform to operating tolerances, the Quality Manager validates the accuracy of previous measurements.

4.8. [COMPANYNAME] QUALITY STANDARDS

[CompanyName] quality standards supplement contract requirements when they are necessary to ensure quality.

The Quality Manager identifies supplemental requirements for [CompanyName] Quality standards that apply to a specific project on the Project Quality Assurance/Quality Control Plan.

When [CompanyName] quality standards differ from industry standards or product manufacturer instructions, the Quality Manager justifies that the standard reliably achieves quality results and then documents the justification.

All [CompanyName] construction activities conform to the company quality standards.

4.9. APPLICATION OF MULTIPLE SOURCES OF SPECIFICATIONS

Should multiple sources of specifications apply to a work task, the higher level of specification applies.

When there are equal levels of specifications that conflict, the specifications are applied in this order:

- Submittals approved by the customer
- Contract technical specifications
- Contract drawings
- Government regulations that exceed requirements of items below
- [CompanyName] quality specifications, including subcontract specifications
- [CompanyName] Quality Manual
- Product installation instructions
- Industry standards
- Generally accepted practices

Should multiple sources of conflicting specifications apply to a project, the Quality Manager defines the standards that apply to the specific project on the Project Quality Assurance/Quality Control Plan.

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 Quality 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 Quality 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

[CompanyName] will preserve and protect work in process, completed work, component parts, materials, and when applicable, delivery to the destination so as to maintain so that compliance with project requirements and standards. This includes handling, storage, protection from natural elements, and reducing risks of damage.

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

The Quality 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).

7.5.6. 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

14. FORMS

[CompanyName] Point of Contact List	53
[CompanyName] Project Quality Communications Plan	54
[CompanyName] Project Subcontractor and Supplier List	56
[CompanyName] Quality Inspection and Test Plan	57
[CompanyName] Quality Controlled Work Task List	58
[CompanyName] Daily Production Report	59
[CompanyName] Work Task Work Order Form	60
[CompanyName] Work Task Inspection Form	1
[CompanyName] Punch List	2
[CompanyName] Nonconformance Report	3
[CompanyName] Controlled Materials Form	4
[CompanyName] Material Inspection and Receiving Report	5
[CompanyName] Project Quality System Audit Form	1

Selected Pages

[CompanyName] Quality Inspection and Test Plan												
Project ID				Project Name						PROJECTOR		
[ProjectNumber]				[ProjectName]						[CompanyName]		
SPECIFICATION SECTION AND PARAGRAPH NUMBER		SCHEDULE ACTIVITY ID	TEST REQUIRED	ACCREDITED/ APPROVED LAB YES /NO		SAMPLED BY	TESTED BY	LOCATION OF TEST ON/OFF SITE/SITE		DATE COMPLETED	DATE FORWARDED TO CUSTOMER	REMARKS

[CompanyName] Daily Production Report		
Project ID	Project Name	Preparer*/Date
[ProjectNumber]	[ProjectName]	
<p>* On behalf of the Projector, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the Project drawings and specifications to the best of my knowledge except as noted in this report.</p>		
	Description	
Job-ready and WIP Inspections (Active work tasks)		
Work Tasks Completion Inspections		
Sampling/Tests Performed		
Nonconformance Reports		
Problems encountered, actions taken, problems, and delays		
On Site Subcontractors and Suppliers, Company Crews, and Visitors		
Meetings held and decisions made		
General Remarks and improvement ideas		
Weather conditions	Temperature: Low: _____ F High: _____ F Precipitation: <input type="checkbox"/> No <input type="checkbox"/> Yes, type and amount: _____	

[CompanyName] Punch List						
Project ID		Project Name		Punch List Type		
[ProjectNumber]		[ProjectName]		<input type="checkbox"/> Work Task: _____ <input type="checkbox"/> Supervisor Punch List <input type="checkbox"/> Pre-Final Customer Inspection <input type="checkbox"/> Final Acceptance Inspection		
Inspection Date		Preparer				
Item	Location	Description	Due Date	Compl. Date	Item Completion Verification	
					Super Initial	QA Initial
Punch List Completion Date		Final QA Sign-off		Remaining Nonconformances Reported ID # and Description		

[CompanyName] Material Inspection and Receiving Report <small>Version 20150128</small>								
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
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receiving Quality Control								
<p>ACCEPTANCE</p> <p>Listed items have been accepted by me or under my supervision</p> <p><input type="checkbox"/> Conform to contract specifications EXCEPT as noted herein or on supporting documents.</p> <p><input type="checkbox"/> Received in apparent good condition EXCEPT as noted</p> <p>Signature of authorized person and date: _____</p>								
<p>EXCEPTIONS:</p>								

Questions? Call First Time Quality 410-451-8006

LIST OF INCLUDED INSPECTION FORMS FOR ASPHALT PAVING

FROM CSI DIVISIONS

- Earthwork – 31
- Exterior Improvements - 32

FORMS:

- Excavating and Fill
- Grading
- Base Courses
- Curbs// Gutters// Sidewalks// and Driveways
- Flexible Paving

Selected Pages

Exterior Improvements - Rigid Paving 32.13.00

Project:	Phase:	Contract#:	Subcontractor:	Crew:
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<p><u>Compliance Verification</u></p> <p><input type="checkbox"/> Compliance with initial job-ready requirements</p> <p><input type="checkbox"/> Compliance with material inspection and tests</p> <p><input type="checkbox"/> Compliance with work in process first article inspection requirements</p> <p><input type="checkbox"/> Compliance with work in process inspection requirements</p> <p><input type="checkbox"/> Compliance with Task completion inspection requirements</p> <p><input type="checkbox"/> Compliance with inspection and test plan</p> <p><input type="checkbox"/> Compliance with safety policies and procedures</p> <p>Reported Nonconformances and incomplete items:</p>	<p><u>FTQ 2TQ Heightened Awareness Checkpoints</u></p> <p><input type="checkbox"/> <input type="checkbox"/> Paving profile and reinforcing approved by ENGINEER</p> <p><input type="checkbox"/> <input type="checkbox"/> Reinforcement secured and placed at appropriate depth</p> <p><input type="checkbox"/> <input type="checkbox"/> All concrete loads placed within specified batch time limits</p> <p><input type="checkbox"/> <input type="checkbox"/> Slump and strength tests provided to ENGINEER</p> <p><input type="checkbox"/> <input type="checkbox"/> Expansion joints firmly mounted and flush with adjacent surfaces</p> <p><input type="checkbox"/> <input type="checkbox"/> Top of joint filler// cap// and sealant even with adjacent surfaces</p> <p><input type="checkbox"/> <input type="checkbox"/> Paving of even thickness and surface finish</p> <p><input type="checkbox"/> <input type="checkbox"/> Edge material compacted and brought even with finished surface</p> <p><input type="checkbox"/> <input type="checkbox"/> Finished pervious paving surface vacuumed// clean// and free sediment/debris</p> <p><input type="checkbox"/> <input type="checkbox"/> Finished surface free of irregularities and brought to desired grade</p>
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FTQ Scores and Completion Sign-off

Field Mgmt.-91.45.01

Quality 5 4 3 2 1 Notes:

On-Time 5 4 3 2 1 Notes:

Safety 5 4 3 2 1 Notes:

Sign and date*: Cell # / ID #: _____ Signed: _____ Date: _____

Task has been has been verified complete and in compliance with contract drawings and specifications except for non-conformances a n d incomplete items reported above.

<u>Quality Score</u>	5 = 100% NO problems	4 = 1 minor problems	3 = Hotspot or 2-3 minor	2 = 6+ or major problems	1 = Excessive problems
<u>On-Time Score</u>	5 = On Time	4 = Late	3 = Late by 1 day	2 = Late by 2 days	1 = Late more than 2 days
<u>Safety Score</u>	5 = 100% NO problems	4 = 1 minor problem	3 = Hotspot or 2-3 minor	2 = 4+ or major problem	1 = Injury

Questions? Call First Time Quality 410-451-8006



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