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## QA/QC Plan Sample

Selected pages (not a complete plan)

**Part 1: Project-Specific Quality Plan**

**Part 2: Quality Manual**

**Part 3: Submittal Forms**

**Part 4: @ # 7**

**Contact:**

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## Quality Assurance/Quality Control Plan

[ProjectName]

[ProjectNumber]

# PROJECT-SPECIFIC CONSTRUCTION QUALITY PLAN

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## **G. QUALIFICATION OF THIRD PARTY INSPECTION/TESTING COMPANIES AND SUBCONTRACTORS AND SUPPLIERS**

[CompanyName] evaluates outside organizations to ensure that the quality of their materials or services will meet contract requirements, and that they have the capacity and equipment to carrying out the contract on schedule.

Our subcontractors and suppliers meet the project requirements by either 1) working under the [CompanyName] Quality System or 2) operating their own quality program as long as it meets [CompanyName] Quality System requirements.

Ongoing monitoring of performance continually validates qualifications of each subcontractor and supplier.

Key outside organizations that will be used on this project are listed on the Subcontractor and Supplier List form. A Subcontractor and Supplier List form exhibit is included in this subsection. The qualifications of listed suppliers have been verified.

## **CONSTRUCTION INSPECTION/TESTING LABORATORY QUALIFICATION REQUIREMENTS**

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

## **QUALIFICATION**

The Quality 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]  
Project Subcontractor and Supplier List**

Version 20130521

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

Selected Pages

## L. WORK TASK QUALITY INSPECTIONS

[CompanyName] identifies a list of work tasks, which will be quality, controlled. Each work task is subject to a series of inspections; before, during, and after completion.

Each inspection verifies compliance with full scope of the relevant specifications; not limited to inspection form checkpoints.

The initial work task-ready inspection occurs when work is ready to start and ensures that work begins only when it does not adversely impact quality results.

Incoming material inspections verify that materials are as specified and meet all requirements necessary to assure quality results.

Work-in-process inspections continuously verify that work conforms to project specifications and quality expectations. Work continues only when it does not adversely impact quality results.

At completion of the work task, an inspection verifies that work has been completed in accordance with project quality requirements.

Inspection results are recorded and maintained as part of the project files.

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

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.

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

### IDENTIFICATION OF QUALITY INSPECTED WORK TASKS

A listing of project work tasks is included on the Quality Control work task List and included as an exhibit in this subsection.

### REQUIRED INSPECTIONS FOR EACH WORK TASK

Each work task is subject to a series of inspections before, during, and at completion as described below. Results of inspections are recorded.

#### PREPARATORY SITE INSPECTION

The Superintendent 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 task to begin
- Identifies potential problems

**TASK-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.

**WORK IN PROCESS QUALITY INSPECTIONS**

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.

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**[CompanyName]  
Work Task Inspection Form**

Version 20130521

Work Task :

Project: Id#  
[ProjectNumber]

Project Name:  
[ProjectName]

Subcontractor and Supplier Company  
ID/Name:

Location/Area:

Reference drawing version #:

Crew ID/Name

**Compliance Verification**

- Compliance with initial job-ready requirements
- Compliance with material inspection and tests
- Compliance with work in process first article inspection requirements
- Compliance with work in process inspection requirements
- Compliance with work task completion inspection requirements
- Compliance with inspection and test plan

**Heightened Awareness Checkpoints**

- [Insert items identified at project startup and preparatory meetings]
- 
- 
- 
- 

Production Notes:

Reported Nonconformances:

**Verification of Work Task Completion (sign and date)**

Subcontractor and Supplier Sign and date\*:  
Work task verified complete to specifications (sign and date)

Project Superintendent Sign and date\*:  
Work task verified complete to specifications (sign and date)

Project Superintendent score subcontractor/crew performance and feedback notes

**Quality:** 5 4 3 2 1  
**Safety:** 5 4 3 2 1  
**Delivery:** 5 4 3 2 1

**Quality Manager Sign and date\*:**  
Work task verified complete to specifications (sign and date)

Quality Manager score quality performance and feedback notes

**Quality: 5 4 3 2 1**

\* On behalf of the contractor, 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 contract drawings and specifications to the best of my knowledge except as noted in this report.

## M. CONTROL OF CORRECTIONS AND NONCONFORMANCES

Should a problem occur in the quality of work, we systematically contain the issue and quickly make corrections. Our first action is to clearly mark the item by tape, tag, or other easily observable signal to prevent inadvertent cover-up.

Then we expedite a corrective action that brings the workmanship or material issue into conformance by repair, replacement, or rework. Previously completed work is reinspected for similar nonconformances. In the event that we cannot correct the item to meet contract specifications, the customer will be notified and customer approval of corrective actions is required before proceeding.

Fixing problems found is not sufficient. [CompanyName] systematically prevents recurrences to improve quality. First enhanced controls and management monitoring are put into place to assure work proceeds without incident. Then using a structured problem solving process, [CompanyName] identifies root causes and initiates solutions. Solutions may involve a combination of enhanced process controls, training, upgrading of personnel qualifications, improved processes, and/or the use of higher-grade materials. Follow-up ensures that a problem is completely resolved. If problems remain, the process is repeated.

Nonconformances and their resolution are recorded on a Nonconformance Report form. A Nonconformance Report form exhibit is included in this subsection.

### MARKING OF NONCONFORMANCES AND OBSERVATIONS

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

### CONTROL THE CONTINUATION OF WORK

After the item is marked, the Superintendent determines if work can continue in the affected area:

**CONTINUE WORK:** When continuing work does not adversely affect quality or hide the defect, work may continue in the affected area while the disposition of the item is resolved. The Superintendent may place limitations on the continuation of work.

**STOP WORK ORDER:** When continuing work can adversely affect quality or hide the defect, work must stop in the affected area until the disposition of the item resolved. The Superintendent identifies the limits of the affected area. The Superintendent quickly and clearly identifies the boundaries of the stop work area.

### RECORDING OF NONCONFORMANCES

If nonconformances or observed items exist by the work task completion inspection, the Superintendent or inspector records the nonconformances on a nonconformance report.

The Superintendent sends the nonconformance report to the Quality Manager.

## QUALITY MANAGER DISPOSITION OF NONCONFORMANCE REPORTS

When the Quality Manager receives a Nonconformance Report, he or she makes an assessment of the affect the reported nonconformance has on form, fit, and function. The Quality Manager may assign a disposition of either:

**REPLACE:** The nonconformance can be brought into conformance with the original specification requirements by replacing the nonconforming item with a conforming item.

**REPAIR:** The nonconformance can be brought into conformance with the original requirements through completion of required repair operations.

**REWORK:** The nonconformance can be made acceptable for its intended use, even though it is not restored to a condition that meets all specification requirements. The Quality Manager may specify standards that apply to the completion of rework. Rework nonconformances must be approved by the customer.

**USE AS-IS:** When the nonconforming item is satisfactory for its intended use. Any use as-is items that do not meet all specification requirements must be approved by the customer.

## CORRECTIVE ACTIONS

The Superintendent verifies that corrective actions eliminate the nonconformance to the requirements of the original specifications or as instructed by the disposition of the nonconformance report, and then removes, obliterates, or covers the nonconformance marker.

<b>[CompanyName]</b> <b>Nonconformance Report</b> <small>Version 20130521</small>		
Nonconformance Report Control ID	Project ID	Project Name
	[ProjectNumber]	[ProjectName]
Preparer Signature/ Submit Date		Quality Manager Signature / Disposition Date
Description of the requirement or specification		
Description of the nonconformance, location, affected area, and marking		
Disposition	<input type="checkbox"/> Replace <input type="checkbox"/> Repair <input type="checkbox"/> Rework <input type="checkbox"/> Use As-is	
	Approval of disposition required by customer representative? Yes <input type="checkbox"/> No <input type="checkbox"/>	
	Customer approval signature /date: _____	
Corrective Actions	<input type="checkbox"/> Corrective actions completed Name/Date: _____ Customer acceptance of corrective actions required? Yes <input type="checkbox"/> No <input type="checkbox"/> Name/Date: _____	
Preventive Actions	<input type="checkbox"/> Preventive actions completed Name/Date: _____	

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# QUALITY MANUAL

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## 4. DESIGN REVIEW AND CONTROL

### 4.1. OVERVIEW

[CompanyName] ensures that the designs have well defined specifications, stakeholders have input as the designs progress, qualified personnel carry out the design work, and final designs are verified to meet all contract and regulatory requirements. Design control applies to architectural and engineering design. Process controls apply to approved designs that have additional detail provided by shop drawings, product selections, or requests for information.

### 4.2. DESIGN INPUT REVIEW

The Quality Manager ensures that the information in design inputs clearly defines customer expectations and that the necessary details are provided to set requirements for design.

The Quality Manager obtains design specifications from the customer and conducts a customer design input review to ensure that:

- Customer design input requirements and specifications are complete
- Design process review milestones are specified when necessary
- Customer design output requirements and specifications are complete for review milestones as well as the completed design
- Customer design requirements and specifications are compatible with the relevant regulations, [CompanyName] quality standards, and Quality System requirements
- [CompanyName] has the capability to deliver the completed design in the time allotted

The Quality Manager identifies supplemental design specifications that supplement customer specifications when they are needed to ensure a quality design.

Before design work begins, the Quality Manager makes sure that all design requirements are clearly understood, all discrepancies are resolved, and all requirements are agreed upon. Once these requirements are met, the Quality Manager approves the design input.

The Quality Manager ensures that design input documents are verified by qualified personnel. The person responsible must verify:

- Design input specification are approved by a customer authority
- Design input specifications are complete
- Design input 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

### 4.3. PROJECT DESIGN QUALITY ASSURANCE/QUALITY CONTROL PLAN

The Quality 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 Quality 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.

#### **4.4. DESIGN PROGRESS REVIEWS**

The Quality Manager holds review meetings with interested parties at key design milestones. The Quality 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 Quality 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.

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# 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.

## 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 Ed Caldeira 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

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## Inspection Forms Available by Division Sections (Up to 3 Divisions included with your plan)

### CONCRETE

- Cast Decks and Underlayment
- Concrete Finishing
- Concrete Forming
- Concrete Reinforcing
- Grouting
- Precast Concrete
- Structural Concrete

### MASONRY

- Concrete Form Masonry Units
- Concrete Unit Masonry
- Exterior Stone Cladding
- Maintenance of Masonry
- Manufactured Brick Masonry

### METALS

- Metal Decking
- Metal Railings
- Metal Stairs
- Structural Steel Framing

## **WOOD/PLASTICS/AND COMPOSITES**

- Architectural Wood Casework
- Exterior Finish Carpentry
- Interior Finish Carpentry
- Sheathing
- Wood Decking
- Wood Framing

## **OPENINGS**

- Door Hardware
- Doors and Frames
- Glazing 08.80.00
- Louvers and Vents
- Unit Skylights
- Windows

## **COMMUNICATIONS**

- Audio-Video Communications
- Cable Trays for Communications Systems
- Communications Backbone Cabling
- Communications Equipment Room Fittings
- Data Communications
- Structured Cabling
- Voice Communications

## **FIRE SUPPRESSION**

- Suppression Water-Service Piping
- Fire Pumps
- Fire-Suppression Sprinkler Systems
- Fire-Suppression Standpipes
- Fire-Suppression Water Storage

## **FINISHES**

- Access Flooring
- Acoustic Treatment
- Acoustical Ceilings
- Backing Boards and Underlayments
- Carpeting
- Masonry Flooring
- Painting and Coating
- Plaster and Gypsum Board
- Resilient Flooring
- Stone Facing
- Terrazzo Flooring
- Textured Ceilings
- Tiling
- Wall Coverings
- Wood Flooring

## HVAC

- Air Outlets and Inlets
- Air Terminal Units
- Breechings//Chimneys// and Stacks
- Central Cooling Equipment
- Commissioning ofHVAC
- Cooling Towers
- Facility Fuel-Oil Piping
- Facility Fuel-Storage Tanks
- Facility Natural-Gas Piping
- Furnaces
- Heating Boilers
- HVAC Air Cleaning Devices
- HVAC Ducts and Casings
- HVAC Fans
- HVAC Insulation
- HVAC Piping and Pumps
- HVAC Water Treatment
- Indoor Central-Station Air-Handling Units
- Instrumentation and Control for HVAC
- Refrigerant Piping
- Testing// Adjusting// and Balancing for HVAC

## **ELECTRICAL**

- Conduit for Electrical Systems
- Electrical and Cathodic Protection
- Enclosed Bus Assemblies
- Exterior Lighting
- Grounding and Bonding for Electrical Systems
- Identification for Electrical Systems
- Interior Lighting
- Low-Voltage Circuit Protective Devices
- Low-Voltage Controllers
- Low-Voltage Electrical Power Conductors and Cables (<600V)
- Low-Voltage Electrical Service Entrance
- Low-Voltage Switchgear
- Low-Voltage Transformers
- Raceway and Boxes for Electrical Systems
- Switchboards and Panelboards

## **PLUMBING**

- Electric Domestic Water Heaters
- Facility Potable-Water Storage Tanks
- Facility Sanitary Sewerage
- Facility Storm Drainage
- Facility Water Distribution
- Fuel-Fired Domestic Water Heaters
- Plumbing Fixtures
- Plumbing Insulation

## **EARTHWORK**

- Bored Piles
- Caissons
- Clearing and Grubbing
- Driven Piles
- Excavating and Fill
- Grading

## **ELECTRONIC SAFETY AND SECURITY**

- Commissioning of Electronic Safety and Security
- Conductors and Cables for Electronic Safety and Security
- Electronic Access Control and Intrusion Detection
- Electronic Surveillance
- Fire Detection and Alarm
- Mass Notification Systems
- Pathways for Electronic Safety and Security

## **EXTERIOR IMPROVEMENTS**

- Base Courses
- Curbs// Gutters// Sidewalks// and Driveways
- Fences and Gates
- Flexible Paving
- Irrigation
- Planting
- Retaining Walls
- Rigid Paving

## THERMAL AND MOISTURE PROTECTION

- Applied Fireproofing
- Blanket Insulation
- Board Insulation
- Dampproofing and Waterproofing
- Exterior Insulation and Finish Systems
- Firestopping
- Flashing and Sheet Metal
- Joint Protection
- Membrane Roofing
- Thermal and Moisture Protection-Roof Accessories
- Thermal and Moisture Protection-Roof and Deck Insulation
- Thermal and Moisture Protection-Roof Panels 07.41.00
- Roof Tiles
- Roofing and Siding Panels
- Sheet Metal Roofing
- Shingles and Shakes
- Siding
- Wall Panels
- Weather Barriers

## UTILITIES

- Culverts
- Public Water Utility Distribution Piping
- Sanitary Utility Sewerage Force Mains
- Sanitary Utility Sewerage Piping
- Storm Drainage Structures
- Storm Utility Water Drains
- Subdrainage
- Water Utility Distribution Equipment

Selected Pages

Project:	Phase:	Contract#:	Organization: <b>9101</b> Field Operations	Crew:
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**Compliance Verification**

- Compliance with initial job-ready requirements
- Compliance with material inspection and tests
- Compliance with work in process first article inspection requirements
- Compliance with work in process inspection requirements
- Compliance with Task completion inspection requirements
- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Concrete Finishing Schedule reviewed with ENGINEER/ARCHITECT prior to Concrete Placement **1030**
- No damage to coated reinforcing exposed during patching activities **1031**
- Adequate water is present to wet finishing equipment and prevent smearing of the finish **1032**
- Color admixture evenly distributed throughout concrete mix (no streaking or color variations) **1033**
- Surface Grooves orientated to direct water off of the slab **1034**
- Adequate form release agent has been applied to concrete stamps **1035**
- Finished surfaces are free of pin holes// spalling// and other surface irregularities **1036**
- Finishing is smooth and ready to receive surface treatment (carpet// tile// etc.) **1037**
- Concrete sealer applied to surfaces free of dust and standing water **1038**
- Site runoff is directed away from placed concrete until properly finished and cured **1039**

### FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 91.45.01**

Quality      5   4   3   2   1    Notes:

-----  
On-Time      5   4   3   2   1    Notes:

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Safety        5   4   3   2   1    Notes:

Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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

**Field Mgmt.-QA Inspection 91.45.02**

Quality      5   4   3   2   1    Notes:

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Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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

<b><u>Quality Score</u></b>	5 = 100% NO problems	4 = 1 minor problems	3 = Hotspot or 2-3 minor	2 = 6+ or major problems	1 = Excessive problems
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# Masonry-Manufactured Brick Masonry 04.71.00

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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**Compliance Verification**

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- Compliance with work in process inspection requirements
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- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Brick Masonry color/finish verified with ARCHITECT prior to order/placement **1110**
- Substrate adequately supports weight of Brick Masonry **1111**
- Substrate is plumb/even and free from protrusions **1112**
- Veneer anchors securely installed **1113**
- Veneer only supporting its own weight **1114**
- Brick Masonry not in contact with finished grade **1115**
- Brick Masonry placed plumb/even as per design **1116**
- Embedded fittings are secure and sturdy **1117**
- Required mortar joint type utilized **1118**
- All mortar intact// free of openings// and bonded with Brick Masonry units **1119**

## FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

**Quality**     5   4   3   2   1   *Notes:*

Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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

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# Metals-Structural Steel Framing 05.12.00

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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- Compliance with work in process inspection requirements
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- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Shop applied primer and galvanizing intact and without blemishes **2580**
- Drainage holes installed to prevent water traps with unobstructed openings **2581**
- Bearing base plates fully and evenly supported **2582**
- Connecting bolts, washers, and nuts tight and clean of dirt/rust **2583**
- Welded connections continuous, even, clean, and free of blow holes or other irregularities **2584**
- Connecting hardware and welds primed with paint of the same quality as the shop coat **2585**
- Openings in structural members approved by ENGINEER **2586**
- Spray-on fireproofing evenly applied and without gaps **2587**
- Framing members free of twist, bow, buckle, or other directional irregularity **2588**
- Framing members installed plumb, level, and true to line **2589**

## FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

Quality     5   4   3   2   1   *Notes:*

Sign and date\*: Cell # / ID #:: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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**Wood// Plastics// and Composites-Interior Finish Carpentry 06.20.23**

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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**Compliance Verification**

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- Compliance with work in process inspection requirements
- Compliance with Task completion inspection requirements
- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Wood type/ size and profile: per plans and specifications **2299**
- Nails and fasteners: correct size and heads **2300**
- Nails or staples; set for painter prep. past flush **2301**
- Edges and joints: aligned and flush **2302**
- All joints: coped or scarfed; sharp cuts **2303**
- Caulks and glues: none on faces/ type per specifications **2304**
- Warp/ split and saw damage free; no hammer marks **2305**
- Flashings and drip edges: per plans and specifications **2306**
- Correct fit: no visible spaces **2307**
- Assembly reveals: correct/consistent/ per plans and specifications **2308**

**FTQ Scores and Completion Sign-off**

**Field Mgmt.-Superintendent Inspection 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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

**Quality**      5   4   3   2   1   *Notes:*

Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Thermal and Moisture Protection-Exterior Insulation and Finish Systems

## 07.24.00

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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- Compliance with work in process inspection requirements
- Compliance with Task completion inspection requirements
- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Layout/ minimum panel sizes per manufacturer's specifications **2349**
- Manufacturer's system as specified by plans **2350**
- Finish coat/ substrates/ panels and reinforcement match mfrs. specifications **2351**
- Fasteners; correct set for substrates/ rough and finish coats **2352**
- Edges and joints: aligned and flush **2353**
- Flashings/ drip edges and corners: per plans **2354**
- Expansion joints: damage and finish coat free channels **2355**
- Moisture and drainage system: per specifications and functional **2356**
- Finish coat: color/ pattern correct/ no scaffold lines or cold joints **2357**
- Water traps: none; correct slopes on sills and decorative elements **2358**
- Aggregates: correct size and type; uniform application **2359**

### FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

**Quality**      5   4   3   2   1   *Notes:*

Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
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Project:	Phase:	Contract#:	Organization: <b>9101</b> Field Operations	Crew:
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- Compliance with work in process inspection requirements
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- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Location/ specifications/ size and swing (handing) per plan **2509**
- Maker/ labels and ratings per specifications **2510**
- Weatherstrip/ frame and saddle: continuous seal/ undamaged **2511**
- Finish: frame and doors/ faces and edges: No defects/damage **2512**
- Header and jambs: plumb/ square and level **2513**
- Uniform spacing between door/ header/ jamb and sill **2514**
- Smooth swing and latching **2515**
- Seal check: light/ drafts and sound/ door closed **2516**
- Threshold/Saddle and frame secure; no movement when stressed **2517**
- Installation and operation per manufacturer's instructions and manual **2518**

**FTQ Scores and Completion Sign-off**

**Field Mgmt.-Superintendent Inspection 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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

**Quality**     5   4   3   2   1   *Notes:*

-----  
 Sign and date\*: Cell # / ID #:: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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## Finishes-Backing Boards and Underlayments 09.28.00

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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- Compliance with work in process inspection requirements
- Compliance with Task completion inspection requirements
- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Boards and Underlayment securely mounted and free of movement **1131**
- Surface is smooth and even. **1132**
- Backing board secured as per manufacturer's recommendations **1133**
- Gaps between floor/ceiling and board sealed **1134**
- All joints taped and sealed **1135**
- Ends and edges of board located over framing members or solid backing **1136**
- Floor Underlayments fully bedded **1137**
- Wet area applications caulked with a sealant instead of grouted **1138**
- Vapor barrier applied **1139**
- Joints in Backing Board sheets staggered so as not to match subfloor joints **1140**

### FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

**Quality**     5   4   3   2   1   *Notes:*

-----  
 Sign and date\*: Cell # / ID #:: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Fire Suppression-Fire-Suppression Sprinkler Systems 21.13.00

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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- Compliance with work in process inspection requirements
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- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Piping pitched to allow complete drainage **1294**
- Firestops installed at penetrations through fire partitions// fire walls// smoke partitions// or floors **1295**
- Penetrations through floor// exterior wall and roof sealed and made watertight **1296**
- Piping secured to prevent movement and chafe **1297**
- System pressure tested and without leaks **1298**
- Valves provided with tamper-proof seals **1299**
- Wet piping not exposed to freezing conditions **1300**
- Piping installed straight and true on hangers and supports **1301**
- Piping system flushed with potable water **1302**
- Piping bends and fittings restrained **1303**

## FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

Quality      5   4   3   2   1   Notes:

Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Plumbing-Facility Sanitary Sewerage 22.13.00

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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**Compliance Verification**

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- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- No dips in gravity lines **1357**
- Adequate clean-outs provided in straight runs and at all bends **1358**
- Vents discharge outside of buildings and away from air intakes **1359**
- Grease trap located near source of grease **1360**
- Baffling provided on inlets and outlets of septic tanks **1361**
- Grinder pumps located on tank bottom **1362**
- Effluent pumps located off of tank bottom **1363**
- Lifting cables / chains / devices securely connected to pumps **1364**
- Below ground tanks secured against floatation **1365**
- Alarms are visible and audible **1366**
- Pump tanks adequately vented **1367**
- Insect screens installed on all tank vents **1368**

## FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

Quality     5   4   3   2   1   *Notes:*

Sign and date\*: Cell # / ID #:: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Heating// Ventilating// and Air Conditioning (HVAC)-Air Terminal Units

## 23.36.00

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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**Compliance Verification**

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- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Air Terminal Units rigidly mounted **1532**
- Air Terminal Units plumb and level **1533**
- Units supported structure// not duct work **1534**
- Access panels shall be clear of ducts// supports// structural members// and other obstructions **1535**
- Units located to provide straight run of inlet duct **1536**
- Supply air flow rate is steady in Constant-Air-Volume Units **1537**
- Supply air temperature is steady in Variable-Air-Volume Units **1538**
- Heating coils operational **1539**
- Air Terminal Units operate over entire temperature range **1540**
- Operation and Maintenance Manuals supplied to Owner **1541**

### FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

**Quality**      5   4   3   2   1   *Notes:*

Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Electrical-Grounding and Bonding for Electrical Systems 26.05.26

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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**Compliance Verification**

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- Compliance with work in process first article inspection requirements
- Compliance with work in process inspection requirements
- Compliance with Task completion inspection requirements
- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Connections tight and free of corrosion// paint// and other non-conductive materials **1633**
- Anti-oxidant paste applied to connection junctions **1634**
- Shielding grounded across splices and connections **1635**
- Ground cabling entering/exiting buildings are sealed and waterproofed **1636**
- Metal conduits// boxes// panels// etc. bonded to Grounding System **1637**
- Ground rods not located in rock or stone fill **1638**
- Wiring secured to prevent movement and chafe **1639**
- Multi-strand wire or strap connectors utilized on movable connections **1640**
- Ground system tested for continuity **1641**

## FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 91.45.01**

Quality      5   4   3   2   1   Notes:

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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 verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

**Field Mgmt.-QA Inspection 91.45.02**

Quality      5   4   3   2   1   Notes:

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Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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

<b><u>Quality Score</u></b>	5 = 100% NO problems	4 = 1 minor problems	3 = Hotspot or 2-3 minor	2 = 6+ or major problems	1 = Excessive problems
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**Communications-Communications Equipment Room Fittings 27.11.00**

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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**Compliance Verification**

- Compliance with initial job-ready requirements
- Compliance with material inspection and tests
- Compliance with work in process first article inspection requirements
- Compliance with work in process inspection requirements
- Compliance with Task completion inspection requirements
- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Utilities not servicing Communications Equipment do not pass through room **1798**
- Floors sealed to reduce airborne dust **1799**
- Floors without carpet to reduce static **1800**
- Sprinkler heads not located above equipment **1801**
- Equipment mounted firmly to structural members **1802**
- Firestops installed at penetrations through fire partitions// fire walls// smoke partitions// or floors **1803**
- Metal Conduits// Racks// Frames// and Enclosures bonded and grounded **1804**
- Racks// Frames// and Enclosures level and plumb **1805**
- Cables clamped at Service Entrances for strain relief **1806**
- Communication Cables terminated on blocks or with termination hardware **1807**

**FTQ Scores and Completion Sign-off**

**Field Mgmt.-Superintendent Inspection 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: \_\_\_\_\_

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**Field Mgmt.-QA Inspection 91.45.02**

**Quality**     5   4   3   2   1   *Notes:*

Sign and date\*: Cell # / ID #:: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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## Electronic Safety and Security-Electronic Access Control and Intrusion Detection 28.10.00

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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- Compliance with work in process inspection requirements
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- Compliance with inspection and test plan
- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Proximity sensors aimed for optimum target acquisition **1896**
- Position indicators// relays// and other intrusion sensors functional across all sensor indicators / ranges **1897**
- Call and Alarm Stations visible and clearly labeled **1898**
- Video cameras shielded against tampering **1899**
- Firestops installed at penetrations through fire partitions// fire walls// smoke partitions// or floors **1900**
- Penetrations through floor// exterior wall and roof sealed and made watertight **1901**
- Cables grouped and bundled according to signal being carried (power// data// audio// video// etc.) **1902**
- Power and control circuits not readily accessible from the exterior of the structure **1903**
- Alarm reporting locations verified with OWNER prior to programming and connection **1904**

### FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 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: \_\_\_\_\_

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**Field Mgmt.-QA Inspection 91.45.02**

**Quality**      5   4   3   2   1   *Notes:*

Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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Project:	Phase:	Contract#:	Organization: <b>9101</b> Field Operations	Crew:
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- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Locate and mark Overhead Utility Crossings in work area and along travel routes **2240**
- Locate and mark Underground Facilities **2241**
- Prevent damage to Underground Facilities in equipment traffic areas **2242**
- Properly support and do not excessively stack stored piles / caissons / piers **2243**
- Same equipment is utilized for placement of test and production piles **2244**
- Do not place concrete near active pile placement to prevent aggregate segregation **2245**
- Limit concrete placement rate and properly vibrate fill to prevent void formation **2246**
- Prevent "flashes" caused by ignition of volatile gas buildup within hollow piles **2247**
- Verify placement / stability / protection of construction benchmark **2248**
- Observe adjacent ground / structures for heave during pressure-injection operations **2249**

## FTQ Scores and Completion Sign-off

**Field Mgmt.-Superintendent Inspection 91.45.01**

Quality      5   4   3   2   1   *Notes:*

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On-Time      5   4   3   2   1   *Notes:*

-----  
Safety        5   4   3   2   1   *Notes:*

Sign and date\*: Cell # / ID #: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

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**Field Mgmt.-QA Inspection 91.45.02**

Quality      5   4   3   2   1   *Notes:*

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**Exterior Improvements-Curbs// Gutters// Sidewalks// and Driveways**  
**32.16.00**

Sep2011

Project:	Phase:	Contract#:	Organization: <b>9101</b> Field Operations	Crew:
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Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Reinforcement secured and placed at appropriate depth **1981**
- All concrete loads placed within specified batch time limits **1982**
- Slump and strength tests provided to ENGINEER **1983**
- Curbing type (slanted// rolled// vertical// etc.) approved by the ENGINEER **1984**
- Concrete of even thickness **1985**
- Control and expansion joints installed **1986**
- Specified driveway flare installed **1987**
- Curves// curb returns// and transitions smooth and consistent **1988**
- Surfaces evenly finished **1989**
- Detectable warning surfaces aligned with direction of travel (parallel and perpendicular NOT diagonal) **1990**
- Valve boxes// clean-outs// and other accessories flush with finished surface **1991**

**FTQ Scores and Completion Sign-off**

**Field Mgmt.-Superintendent Inspection 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: \_\_\_\_\_

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**Field Mgmt.-QA Inspection 91.45.02**

**Quality**     5   4   3   2   1   *Notes:*

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**Utilities-Sanitary Utility Sewerage Force Mains 33.34.00**

Feb2012

Project:	Phase:	Contract#:	Vendor: <b>9101</b> Field Operations	Crew:
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- Compliance with safety policies and procedures

Reported Nonconformances and incomplete items:

**FTQ 2TQ Heightened Awareness Checkpoints**

- Piping has sufficient cover for anticipated traffic **2147**
- Piping bury below frost line for lines containing standing sewage **2148**
- Proper separation between water and sewer lines maintained (10' horizontal// 18" vertical with water on top) **2149**
- Mechanically restrained joints tight and secure **2150**
- Push-on joints fully inserted **2151**
- Thrust blocking and anchors in contact with piping and firmly attached **2152**
- Fittings and accessories compatible (material// pressure rating// connection type) with the piping utilized **2153**
- Protective coating/wrap is intact// uniform// and free of damage **2154**
- Indicator tape or tracer wire installed above piping **2155**
- Piping pressure tested and free of leaks **2156**

**FTQ Scores and Completion Sign-off**

**Field Mgmt.-Superintendent Inspection 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:*

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**Field Mgmt.-QA Inspection 91.45.02**

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