



CQR-3

QUALITY REQUIREMENTS for INSPECTION and/or SURVEILLANCE SERVICES Revision Date: 08/13/2018

1.0 SCOPE

This document establishes the minimum quality program requirements for inspection companies providing surveillance and/or inspection services to Technical and Project Solutions (T&PS).

2.0 GENERAL

The quality requirements set forth in this document; the Owner's surveys, audits, and surveillances; or the absence, lack of, or deficiency in these requirements shall in no way relieve the Inspection Company of any contractual obligations or responsibilities.

The Inspection Company shall be responsible for ensuring the quality of all equipment or material obtained or service provided meets the requirements of either the Owner's procurement documents, or the Contractor's requirements, whichever is more stringent.

3.0 QUALITY PROGRAM

The Inspection Company shall establish, document, and maintain a corporate and site-specific quality program that meets or exceeds the requirements of this document, and that provides any additional controls necessary to ensure compliance with the Owner's procurement documents, specifications, and applicable codes and standards.

3.1 Quality Program Requirements

The Inspection Company shall have a quality program, reviewed within 2 years of submission, approved and signed by the Inspection Company's senior management, which contains, but is not limited to, the following:

1. Quality Organization - The quality program shall define the organizational structure of the Inspection Company, with special emphasis on the quality organization. The quality responsibilities shall be defined, including any project quality requirements. The program shall contain an organizational chart identifying the quality management structure of the Inspection Company. This chart shall establish a quality reporting level to a sufficiently high level of autonomous and independent management to ensure quality problems can be resolved without undue influence from the construction or scheduling processes.
2. Inspection Company Quality Representative(s) - The quality program shall identify the Inspection Company's representative(s) authorized to resolve quality matters. The Inspection Company's quality representative(s) shall be personnel other than those performing the work and shall not be reporting directly to management responsible for construction or scheduling. The Inspection Company shall designate an onsite quality professional who is qualified to properly inspect and evaluate the work being performed by the companies performing the construction. The Inspection Company's designated quality professional's qualifications shall be submitted to the Owner for review and approval. Owner reserves the right to reject proposed quality professional, and to remove an approved quality professional if it is found they are not properly managing the approved quality program.

3. Personnel Training - The quality program shall provide for and require the training of personnel performing or managing activities affecting quality. This shall include at a minimum, the quality program, procedures, project-specific technical requirements, and revisions to each as they occur.

The quality program shall identify the activities requiring personnel certification and the requirements for obtaining and maintaining certification.

The Inspection Company shall generate and maintain documentation to show that quality personnel have completed the training and are familiar with its contents, prior to the start of work activities.

4. Procedures - The Inspection Company shall develop and use procedures, guidelines, related forms, and other documents, as part of the site-specific quality program, to address the processes, actions, and activities necessary for the implementation of the quality activities related to the scope of work. The procedures shall be controlled and available to the employees performing the work. The procedures shall identify activities to be performed as well as responsible parties, and shall provide documentation as objective evidence to verify that controls have been satisfactorily established and performed.

The Inspection Company shall develop process procedures to include technical criteria as noted in the Owner's specifications for the areas referenced in Item 6, Construction Process Control, as related to the scope of work and conditions of the contract. These process procedures shall contain the following information, as applicable:

- Scope of work covered by the procedure.
 - Key personnel involved in the process and their responsibilities.
 - Technical criteria and references with applicable acceptance criteria.
 - Procedural steps, explained in a logical manner, demonstrating how the process will be accomplished and accepted.
 - Special conditions, exceptions, or activities relevant to the scope of work and site conditions.
 - Key inspection points and hold points, including interfaces with the Owner.
 - Relevant forms and checklists, as they apply to the scope of the procedure, to ensure consistency and a determination of the status (for example, acceptance).
 - Documentation requirements for the process and the need for submittal to the Owner.
5. Document Control - The Inspection Company shall have measures in place to control issuance of, receipt of, and changes to documents affecting quality. All documents provided to the Inspection Company, whether Owner-supplied or supplied by another company, including revisions, shall be controlled by the Inspection Company's organization. The Inspection Company's system shall maintain traceability, identify proper status, and control transmittal of controlled documents. The Inspection Company shall ensure that documents are reviewed for adequacy, approved for release by authorized personnel, and distributed to the appropriate work location. The Inspection Company shall ensure changes to documents receive the same level of authorization as the original documents. All changes shall be processed in writing or electronically, and all obsolete documents shall be removed promptly from all points of issue and use, or be adequately marked to identify their status. Documents shall be easily retrievable, legible, reproducible, and uniquely identified.
 6. Inspection Process Control – Inspection activities are accomplished through the use of documented instructions, procedures, or drawings of a type appropriate to the circumstances.

Inspection activities shall be performed in accordance with applicable codes, technical specifications, manufacturer's recommendations, and engineering drawings. Procedures shall address how special conditions will be met, explain key inspection areas and hold points, identify special equipment needs, define acceptance criteria, and include copies of all relevant forms and checklists.

Inspection Company procedures, including appropriate inspection and testing, shall be provided to the Owner for review for the applicable contractual work scope.

Owner reserves the right to reject procedures deemed insufficient to properly control or document quality.

7. Control and Calibration of Measuring and Testing Equipment - Measuring and testing equipment (MTE) utilized will be appropriate to the work performed and in good repair and working condition. At prescribed intervals, or prior to each use, all MTE and devices used for inspection or testing shall be calibrated and adjusted against certified equipment having a known valid relationship to nationally recognized standards. When no national standards exist, the basis employed for calibration shall be documented. The Inspection Company shall:

- Identify MTE and provide a tag, sticker, or other suitable means to show the calibration status.
- Maintain calibration records. Calibration documentation shall provide traceability of calibrated equipment by demonstrating an unbroken chain of calibration or comparisons linking them to relevant national standards or physical constants.

If MTE is found to be out of calibration, the equipment and the tests performed with the out-of-calibration equipment shall be evaluated. The equipment shall be tagged and segregated and shall not be used until it has been calibrated, repaired, and found acceptable for use. If it cannot be repaired, the equipment shall be properly disposed. If the results of the testing performed with the equipment are not valid, a nonconformance shall be written.

Calibration and control measures are not required for commercial equipment such as rulers, tape measures, and so forth.

8. Nonconforming Items and Corrective Action - The Inspection Company shall use Purchaser's NCR program for reporting non-conformances found during their inspection / surveillances.
9. Quality Records - The Inspection Company shall adequately define quality records and identify procedures for the care, custody, control, and retention of those records. Any documentation created to show that work performed is in accordance with applicable codes, standards, specifications, and drawings shall be completed in a timely fashion and turned over to the Owner for review within a week of completing the document.
10. Quality Program Evaluations - The Inspection Company shall routinely monitor the effectiveness of the quality program through inspections, meetings, assessments, or audits and make appropriate adjustments to the quality program to comply with requirements. Additionally, the Inspection Company shall institute a quality surveillance program, using Predictive Solutions software, that includes quality surveillances performed by construction personnel.

4.0 QUALITY PROGRAM DOCUMENTATION SUBMITTAL AND EVALUATION

4.1 Documentation Required for Qualification and Evaluation

Companies requesting the opportunity to perform construction surveillance and/or inspection for T&PS shall submit their application and one uncontrolled copy of their corporate quality program through the BROWZ web-based system.

T&PS shall review the potential Inspection Company's quality program as a part of the qualification process. Deficiencies noted during the review will be documented and transmitted through BROWZ to the potential company for consideration or correction.

4.2 Documentation Required with Proposal

Companies selected to bid on a construction surveillance and/or inspection scope of work shall submit a corporate quality program as part of their bid proposal, as specified in the special conditions of the contract. This quality program shall meet or exceed the requirements of this document. The Owner shall review the program and forward any noted deficiencies to the bid evaluation team for proper consideration and action.

If the company is an unsuccessful bidder, the quality programs may be destroyed after the purchase order has been placed.

4.3 Documentation required for approval prior to start of construction activities

4.3.1 Site-Specific Quality Program

4.3.1.1 *Program Submittal*

Within 5 days of award, the Inspection Company shall formally submit to the Owner's Construction Quality group, a site-specific quality program that meets or exceeds the requirements of this document. The site-specific quality program must be approved prior to starting any quality related work.

The submitted contractor quality program shall be project-specific and shall encompass all relevant portions of the work to be performed on the project.

4.3.1.2 *Personnel Certification*

The Inspection Company shall submit to the Owner the qualifications and/or certifications of all Inspection Company and testing agency personnel performing inspection and tests.

The Owner reserves the right to request personnel be replaced if their qualifications are deemed unacceptable, or they are found to not be properly administering the approved quality program.

The Inspection Company shall have a solely dedicated, onsite quality professional who is qualified to properly inspect and evaluate the work being performed. This individual shall be familiar with the scope of work being performed and shall be onsite whenever agreed upon inspection is being performed. This individual shall be responsible for interfacing with the Owner regarding the Inspection Company's quality program to ensure the work performed by the Inspection Company meets or exceeds all quality standards. This individual shall have authority and the autonomy to enforce the approved quality program.

4.3.1.3 *Program Review*

The Owner's Construction Quality group shall conduct a formal review of the Inspection Company's site-specific quality program and procedures.

The Owner may conduct an initial pre-construction meeting with the Inspection Company to clarify, discuss, and review the results of the contractor site-specific quality program evaluation.

The Owner reserves the right to request inspection and test plans and any additional documentation and procedures to supplement and further define the contractor quality program.

4.3.1.4 *Acceptance and Follow-up*

After evaluation by T&PS Construction Quality, results will be submitted to the Inspection Company.

- Acceptable results are considered accepted for use for inspection performed by the contractor on the specific project.
- Any deficiencies identified shall be corrected by the Inspection Company and resubmitted for review and approval.

After corrective actions are taken and satisfactory results are obtained, an T&PS Construction Quality representative shall submit acceptance documentation to the Inspection Company.

NOTE

If acceptable results are not achieved in a timely manner, T&PS may issue an NCR addressing the nonconforming items.

T&PS reserves the right to perform whatever inspection, testing, and monitoring necessary to ensure quality conformance to applicable procedures, project specifications, and drawings.

All revisions, deletions, addendums, or changes to the approved contractor quality program shall be submitted to the Owner for review and approval.

4.4 **Other Documentation Required for Approval**

4.4.1 Quality Control Documentation List

When required by the procurement documents, the Inspection Company shall compile and submit for approval a QC documentation list of the specific documents to be generated during erection or installation at the construction site. This documentation shall include, but is not limited to, copies of all forms, checklists, inspection and test plans (ITPs), and so forth to be used to verify QC and conformance to specifications requirements.

5.0 **QA SURVEYS, AUDITS, AND SURVEILLANCE**

5.1 **General**

The Inspection Company's work is subject to surveys, assessments, and surveillance by the Owner or Owner's authorized representatives to ensure quality standards are met and determine adherence to approved procedures. This surveying, auditing, and surveillance shall in no way relieve the Inspection Company of any contractual responsibilities.

5.2 **Quality Surveillances**

The Inspection Company's quality program shall be subject to surveillance by the Owner and will vary depending on the Inspection Company's performance, past records, past surveillance results, and other factors. The Owner will report in writing to the Inspection Company nonconformance issues with the specified requirements having a significant effect on quality found during surveillance, inspection, testing and auditing of its' operation. Responses to reports on nonconforming items shall be documented and corrective action accomplished expeditiously.