## QMP 2.2a-b – RFQ Quality Requirements – Public Sector Owner (or Developer) for Large-scope Contractor 2022-02-09

Note that we also have the following specifications for quality management requirements:

***QMP 2.2b – RFQ Quality Specifications Tiers 1-2 –Developer specification for Large-scope Contractor*.** [We suggest to copy this document or section, and simply substitute “Developer” for “Public Sector Owner”. Then save as QMP 2.2b; it has been tested, and it works.]

For the remainder of this QMP 2.2a document for Public Sector Owner, we will utilize the short form name “QMP 2.2” and will not reference “Developer”.

***QMP 2.2c – RFQ Quality Specifications Tier 2-3 – General Contractor specification for Large-scope Subcontractor (QMP 2.2c)***[This version does **not** work to copy, change Public Sector Owner to GC. But it has been manually reconfigured so it reads properly as is.]

***QMP 2.5 - Small Contractor or Subcontractor Quality Requirements – Short Form (QMP 2.5)***

1. **Basis for use and background**

QMP 2.2 provides a specification for Construction quality management concurrent with, but independent from Design quality specifications.

We have a section of the Quality Plan Template devoted to the design aspects of construction, found in section 4.D.4. To date, we have not provided a specification for Design Quality Management.

Design-Bid-Build versus Design-Build specifications for quality management – to be developed as needed.

[Note that the term RFQ (Request for Quotation) is often used interchangeably with RFP (Request for Proposal), but we will only use the term “RFQ” in this document.]

First a discussion of QMP 2.1 by the Public Sector Owner regarding Prime Contractor (Contractor) RFQ Quality Specifications. QMP 2.1 provides a meeting agenda for internal discussion of Contractor quality management specifications. On the table is whether QMP 2.2 for large-scope contracts or QMP 2.5 for small-scope contracts is required, however the graphic at the bottom of this document may show another method of decision between QMP 2.2 and QMP 2.5. It is the opinion of the author that this meeting discussion should occur so that the decision makers, and all on the team are in agreement at the direction quality management needs to take. QMP 2.1 is recommended as the first of these documents to be read.

Should any conflicts occur between QMP 2.1 and QMP 2.2, QMP 2.2 requirements shall govern.

This “*QMP 2.2 - RFQ Quality Requirements Tier 1-2 - Public Sector Owner to Contractor*” serves as the specification for large-scope Contractor quality requirements, including Quality Plan, Work Methods and inspection Checklists.

This QMP 2.2 provides quality requirements in addition to quality requirements from plans and specification.

*QMP 2.5 - Small Contractor or Subcontractor Quality Requirements – Short Form* serves as the specification for small-scope Tier 1-2 RFQ scopes or for Tier 2-3 RFQ, Contractor to Subcontractor requirements for quality management. QMP 2.5 provides Public Sector Owner specifications for small to medium size Contractor: including Quality Plan, Work Methods, and Inspection Checklists (same requirements for smaller scope subcontractors). QMP 2.5 provides a specification for Quality Management Requirements for small scopes where detailed quality management requirements are not required as the work involved is not complex (subcontractor level).

QMP 2.5 provides the opportunity to bring building trade subcontractors into quality management with their own short-form quality plan, which requires Work Methods and Inspection Checklists.

1. **Introduction**

*QMP 2.2a – RFQ Quality Requirements – Public Sector Owner to Large-scope Contractor*

**Objective:** provide a template for a Public Sector Owner to specify quality management requirements for implementation that the Contractor shall follow, that offer value when assessed against cost, and which help the Public Sector Owner ensure each project achieves the goal of “build it right the first time”.

***QMP 2.2 - Quality Specifications - Public Sector Owner for Large Contractor RFQ* has as its fundamental purpose to be utilized as the quality management section in a contract to be written between Public Sector Owner and Contractor (Tier 1-2)**

The bidding Contractor should read this entire QMP 2.2 carefully to ensure an understanding of the requirements. The significant items are as follows:

1. **1.0 Contractor Quality Plan:**

**1.1a** Public Sector Owner has provided the Contractor with this QMP 2.2 – RFQ Quality Requirements –Public Sector Owner to Contractor. The intent of this QMP 2.2 is to make clear the quality management requirements for Contractors working for Public Sector Owner. QMP 2.2 is a framework for specification review and control of all quality management procedures for any activity that has been contracted out by Public Sector Owner.

**1.1b** Often there is a Prequalification stage to public sector bids where the top 3 teams +/- are shortlisted, with shortlist selection based in part on a quality plan meeting specified requirements.

**1.2** Upon Contract award, the Contractor shall review, edit and revise the Contractors’ existing quality plan, so that it incorporates the requirements of QMP 2.2. The Contractor Quality Plan shall also respond and coordinate to all quality management requirements per the Prime Contract Designer, which may be issued by Public Sector Owner to Contractor. Regardless of the source, the Contractor Quality Plan shall reflect how the Contractor manages quality and it will serve as the foundation of quality management commitments from the Contractor to Public Sector Owner. The updated Contractor Quality Plan shall be submitted within 30 days of Contract signing for review and evaluation by Public Sector Owner.

**1.3** The Contractor Quality Plan submittal shall be evaluated in accordance with these QMP 2.2 RFQ Quality Requirements – Public Sector Owner to Contractor, and shall be marked “Revise and Resubmit”, “Reviewed with comment” or “Reviewed, no comments” by Public Sector Owner representative.

**1.4** At first encounter, a Contractor may not have a compliant Quality Plan, but they are encouraged to edit and write one that identifies their own processes while addressing and conforming to QMP 2.2.

**1.5** The Contractor is responsible for implementation of a Quality Management System (QMS) that is modelled after ISO 9001:2015 that encompasses Quality Management (QM) including Quality Control (QC), and Quality Assurance (QA).

In addition, the Contractor shall address the Public Sector Owner’s stated quality requirements in their entirety per this QMP 2.2.

This QMS shall be reviewed, edited and submitted by the Contractor, per 1.2 above.

During implementation, the Contractor shall comply with its stated QMS commitments, with audits to prove compliance.

**1.6** Note that Public Sector Owner is not obligated to accept a Contractor Quality Plan that provide for lesser quality management than is required by QMP 2.2.

**1.7** After the Contractor editing and Public Sector Owner approval of the Contractor Quality Plan (CQP), the Contractor Quality Plan will be used to communicate the commitments and deliverables for all Contractor QMS activities. The finalized and mutually accepted Contractor QMS shall include:

**1.** Finalized and mutually approved Inspection and Test Plans (ITPs) and/or inspection Checklists for all significant construction activities.

**2.** Finalized and mutually approved Work Methods (WMs) synchronized with Inspection and Test Plans and/or inspection checklists, for all significant construction activities.

**3.** Finalized and mutually approved Contractor Quality Plan (CQP) and attached Quality Management Procedures (QMPs).

4. Contractor proposed audit schedule**.** Requirements shall include audit of all activities within 1-2 weeks of start-up of any new activity – early audits are one key factor in the success of audits. On-going audits shall prioritize high-value and high-risk activities. Audit frequency to be maximum 6 months for any given activity, but with shorter duration for some as may be required.

5. All deliverables of the Prime Contractor Quality Requirements shall be submitted within 30 days of signing their contract agreement. In the case of “Revise and Resubmit” being assessed by the submittal review, the Contractor has 14 days from receipt of submittal to address the unapproved elements and resubmit. [Note that this time line shall be required for initial and subsequent iterations of “Revise and Resubmitted” Quality submittals and documents.]

6. The Contractor shall specify QMP 2.2 to all large-scope Subcontractors. [There shall be a discussion and decision by the Public Sector Owner as to the boundary requirements for when the Prime Contractor shall require QMP 2.2 for “large-scope Subcontractors” versus QMP 2.5 for “small-scope subcontractors”. See the last chapter in this document for monetary size of subcontract as a boundary requirement. This author recommends that for “complexity” is high or value is greater than $10million dollars, subcontractors be required to utilize QMP 2.2. Medium complexity or lesser value shall utilize QMP 2.5.]

7. The Contractor shall provide *QMP 2.5 Subcontractor Quality Requirements – Short Form template* to all Subcontractors not deemed to be included in 6.1 (small-scope subcontractors), and shall cause all subcontractors to review, edit, and submit updated Subcontractor Quality Plan, Work Method(s) Inspection Checklist or ITPs to the Contractor and to the Public Sector Owner.

8. All deliverables of Subcontractor Quality Requirements shall be submitted by Subcontractor within 30 days of signing their Subcontract Agreement, with copy to the Contractor and to the Public Sector Owner. In the case of “Revise and Resubmit” being assessed by the submittal review, the Subcontractor has 14 days from receipt of submittal to address the unapproved elements and resubmit. [Note that this time line shall be required for initial and subsequent iterations of “Revise and Resubmitted” Quality Requirements and documents.]

9. It is noted that the Contractor Quality Plan shall be edited, compliant with this QMP 2.2, and submitted to Public Sector Owner within 30 days of contract signing. The submission at 30 days from contract signing shall include Contractor Quality Plan with Work Methods and Checklists for the various contractor or subcontractor activities required to be undertaken within the first 60 days following Contract Award.

10. For completeness, note item 4.6 below: **“**No work shall be undertaken on any element of the work for which there are unresolved QMS submission requirements. Work shall not be undertaken until Public Sector Owner has accepted the base portion of the QMS and the specific details (Work Method, ITP, and inspection checklists) for that element of Work”.

**1.8** Subsequent activities (work to be undertaken subsequent to 60 days following Contract Award) shall be described in Work Methods and Checklists (per requirements of section 4 below) and these shall be submitted to the Public Sector Owner in a time frame such that the WM and inspection checklist are submitted 21 days in advance of the first instance of the WM activity. The Public Sector Owner after reviewing the submittals, shall return them within target one week and maximum two weeks of the receipt of the same with comments, concerns, feedback and approval (or non-approval) status.

**1.9** Note: If the Contractor will subcontract portions of the work, time must be allowed for subcontractors to be brought on board and those subcontractors shall also comply with the requirement for the WM and checklist to be submitted 21 days in advance of the first instance of the WM activity.

**1.10** Note: The Contractor and or subcontractor 21-day time frame noted above is to provide sufficient time for Public Sector Owner review (including possible “Revise and Resubmit”) and to provide time for Contractor or subcontractor revisions and resubmissions and for WM Review Meeting to be held and Sector Owner and Contractor responsibility. Note that Public Sector Owner and/or Contractor Audits may be conducted jointly.

**2. Quality management program – key components:**

**2.0 QMS** (Quality Management System)

**2.1** Self-check by the person or representative doing the work or the task.

**2.2** Quality Control – the organization performing the work, Contractor’s (or Subcontractor’s) responsibility in order to “get it right the first time”. It is noted that Quality Control as identified herein provides the requirement for all of the elements noted in this QMP, such that the Contractor performs all aspects of quality management including quality communications and notifications of all kinds to the Owner’s Rep, should it be the Owner’s Rep’s requirement.

**2.3** Quality Assurance (also called Quality Management)– the Contractor’s responsibility. Note that the Owner’s Rep shall also have their quality management requirements from the prime contract that the subcontractor will be required to follow.

**2.4** Quality Manual– which includes Quality Plan, QMPs, Work Methods, and Inspection Checklists for their scope of work; each General Contractor, subcontractor, and Sub-subcontractor’s responsibility.

**2.5** Subcontractor Quality Requirements – per QMP 2.5, Subcontractor’s responsibility.

**2.6** Audit of the Contractor and Subcontractor processes – Contractor and Subcontractor responsibility. Note that Contractor and/or Developer Audits may be conducted jointly.

**2.7** Quality Surveillance – Public Sector Owner responsibility.

2.8 Document control and records management – Public Sector Owner responsibility– Public Sector Owner responsibility.

2.9 Materials submissions quality management requirement submissions, and mockup submissions – Public Sector Owner responsibility.

**3. Quality Management Principles (ISO 9001-2015)**

The Contractor’s Quality Plan shall address all requirements of ISO 9001 including these quality management principles:

**3.1** Customer focus

**3.2** Leadership

**3.3** Engagement of people

**3.4** Process approach

**3.5** Improvement

**3.6** Evidence based decision-making

**3.7** Relationship management

**4. Quality Management System (QMS) – General Requirements**

**4.1** The Contractor shall be solely responsible for the performance and costs of all Contractor and subcontractor level Quality Management, Quality Assurance (QA) and Quality Control (QC) associated with the Work, unless noted otherwise in the terms and conditions of the Contract Agreement. The Contractor quality scope shall include, unless noted otherwise in the Contract Agreement, monitoring, inspecting and testing regarding the means, methods, materials, workmanship, processes and products of all aspects of the Work, construction, and management as necessary to ensure conformance with the Subcontract Agreement.

**4.2** The Contractor shall provide Quality Checklists and shall provide Work Methods for all significant work activities (where the absence of written instructions could have a negative impact on the product safety, quality, consistency, cost, or schedules) and submit these WMs for the review, and acceptance to Public Sector Owner.

**4.2** **Note 1:** It shall be the sole responsibility of the Contractor, and its subcontractors, to edit, prepare and submit to the Public Sector Owner inspection checklists, ITPs, and work methods such that they review and respond to plans and specifications for the scope of work in question.

**4.3** It is the sole responsibility of the Contractor to review the Work Method and make any changes necessary in order that the Work Method and Checklist conforms to project drawings, specifications and codes.

**4.4** Venders or Sub-subcontractors in the employ of the Contractor, supplying product or services, which have quality management implications for the project (per clause 4 and notes), shall inherit the applicable quality management obligations of the Contractor. The exception to this clause is that QMP 2.5 shall be required of small-scope subcontractors (as defined in 6.1 and 6.2 above), not QMP 2.2.

**4.4 Note 1:** Per this QMP 2.2, where the Contractor chooses to outsource to a subcontractor, all requirements stated as Contractor requirements shall be deemed subcontractor requirements. The exception to this clause is that QMP 2.5 shall be required of small-scope subcontractors (as defined in 6.1 and 6.2 above), not QMP 2.2.

**4.5** The Contractor shall not be relieved of any of its obligations or responsibilities by the assignment of its obligations to subcontractors or others.

**4.6** No work shall be undertaken on any element of the work for which there are unresolved QMS submission requirements. Work shall not be undertaken until Public Sector Owner has accepted the base portion of the QMS and the specific details (Work Method, ITP, and checklists) for that element of Work.

**4.7** The Contractor shall ensure that all workers are familiar with the QMS and Work Methods and their role under it, as well as with the Contract Drawings and Specifications.

**4.8** For all Work Methods, a Work Method Review Meeting per QMP 4.2 shall be organized by the Contractor or the subcontractor, with the following parties invited and with reasonable notice provided:

* Public Sector Owner personnel
* Designer Representative
* Subcontractor supervisor(s)
* Foreman and crew or crews from the organization responsible for the work
* Representatives may be invited from other appropriate groups, i.e. construction, engineering, quality control, testing firm, safety, and environmental (as required)

The Contractor or Subcontractors performing the Work Method Review Meeting shall notify Public Sector Owner in advance (2 working days for work on-site and 1 week for work off-site).

The Work Method Review Meeting shall be completed and any revisions to the WM provided to crews, interested parties, and to Public Sector Owner prior to commencement of the activity.

**4.9** Each finalized approved WM shall provide the required details of HOW the Contractor shall perform the work.

**4.10** not used

**4.11** “Initial Inspection” per QMP 4.3 shall be performed by the Contractor at the first occurrence of each significant process throughout the Project in order to provide confidence that Contractor Work Method and inspection process meets specification and delivers a product conforming to the specification. The Contractor performing the Initial Inspection shall notify Public Sector Owner in advance of the Initial Inspection (2 working days for work on-site and 1 week for work off-site).

**4.12** On-going Inspection: Once the first instance of any product or work has been implemented per the above Initial Inspection, subsequent work needs to be able to perform in the same manner to attain similar conforming results. On-going Inspections by personnel who have experienced previous inspections of the same element shall be required and records developed so as to not miss important elements, and as well to document work performed correctly.

**4.13** The Contractor shall provide unrestricted access to all its Quality Management operations and documentation and shall allow Public Sector Owner personnel full access at any reasonable time.

**4.14** Public Sector Owner will review the Contractor's performance of the Work based on the Public Sector Owner Quality Audit and field surveillance results, and by the Contractor's Quality inspection and test results - and determine the acceptability of the Work.

**4.15** Work failing to meet the conditions of the Contract shall be considered Nonconforming Work. Public Sector Owner may consider all Work subsequent to the last acceptable quality inspection or test as Nonconforming Work.

**4.16** The Contractor shall not be entitled to payment for Work that is Nonconforming. See items 10.3.5 and 10.4.3 for additional clarity.

**5. QC and/or QA testing**

**5.1** QC Testing is performed and paid for by the party (Contractor) doing Quality Control and QA Testing is performed by the Public Sector Owner (or agency reporting to the Public Sector Owner) doing Quality Assurance Testing

**5.2** QC Testing – Third party testing company (testing company): Work requiring testing per drawings and specs shall be hired by the Contractor and report to and be paid for by the Contractor, unless otherwise agreed to and provided for in the Contract Agreement. Reporting of QC Testing results shall be made to Contractor, and Public Sector Owner.

**5.3** Quality Assurance Testing (QA Testing) shall be carried out by an independent (third party) testing company (QA Testing Company) to be hired by Public Sector Owner and reporting to Public Sector Owner with notification to the Contractor. Typically, the QA Testing will be performed on elements of QC testing to confirm that QC testing is performed without bias.

**5.4** The Testing Company shall be certified to perform all testing to the required standards.

**5.5** For critical testing, side by side comparison testing (QC and QA testing) may be requested – as a method of Audit, by either the Contractor or by Public Sector Owner.

**5.6** Testing results must represent actual operations and results shall be reported accurately and in a timely manner as required by the Contract.

**5.7** All testing equipment shall be calibrated, properly maintained, and in good operating condition.

**5.8** The Contractor is responsible for providing scheduling (notice of test with reasonable notice in advance) to the Testing Company, and other relevant stakeholders to the activity.

**6. QMS Submission Requirements**

**6.1** Per previously identified submission requirements: Quality Plan, Work Methods, Inspection Test Plans, and Inspection Checklists, audit schedules, mock-ups, shop drawings, require submissions.

**6.2** The Contractor shall provide all resources and take all actions necessary to ensure:

**6.2.1** All testing and inspections are performed in accordance with Contract Requirements and applicable industry standards.

**6.2.2** Nonconformance Submission (notification) to Public Sector Owner within twenty-four (24) hours or 1 business day, for all inspection and tests that indicates non-conformance of the material being tested.

**6.2.3** Production of reports for all inspection and tests that indicate conformance: the objective should be for thorough reporting, with a well-organized reporting and filing structure, reporting such that every submission is potentially final (subject to Public Sector Owner review and agreement to this “as you go” provision of records) and not requiring end of project resubmission. Under the above scenario, weekly submissions of records showing conformance are required. Conforming inspection and test reports shall have signatures and no blank spaces that may indicate incomplete inspection, testing, or reporting. Conforming reports shall be audited, and initialed by Contractor or delegate weekly and summarized and available for audit by Public Sector Owner, in preparation for handover.

The above noted conformance record types and any others required, should be identified by the Public Sector Owner and a process for submission agreed with the Contractor.

It is recommended that the Public Sector Owner defines the requirements for records management submissions. The Contractor and Public Sector Owner shall jointly document this process.

**6.2.4** Audit (review) of handover records shall occur at the first availability of the records so that all are in agreement as to the criteria for acceptable records. It is required that record review or audit shall be performed first by the Contractor, and then followed by the Public Sector Owner.

**6.2.5** Organization compilation in a logical manner and submission of all project quality records as the project progresses, and at intervals as agreed between parties will facilitate handover of milestone portions of the project.

**6.3 In addition to the above noted submission requirements, the QMS shall include the following information:**

• the name of the Contractor Quality Manager and qualifications establishing a proven capability to provide the specific services required for the Project;

• the names of independent QC testing agencies and their proven capability to provide the specific services required for the Project;

• a listing of Contractor QMS staff (including names, qualifications and relevant experience) and their assigned roles and work scheduling and performing quality related duties;

• a list of testing equipment including calibration certificates if applicable to be used for the Work.

**6.4** The QMS shall include an Inspection and Test Plan (ITP) providing hold points (hold the work for Public Sector Owner or municipal inspection) and witness points (provide notification to Public Sector Owner of the designated time that the work will be ready for surveillance (witness) – but with no requirement to “hold” for Public Sector Owner surveillance).

**7 QMS Submission Requirements- Additional**

**7.1** Reviewed and revised QMPs or Work Methods introduced after the start of work will be amendments to the QMS. All amendments require submission according to the submittal process as per the original QMS and WM requirements.

**7.2** When materials or equipment are specified by standard or performance specifications, the Contractor shall obtain from suppliers or manufacturers independent test reports or test certificates stating that the materials or equipment meet specified requirements. The Contractor shall provide documentation of actual testing results.

**8 Public Sector Owner Quality Monitoring and Audit**

**8.1** Public Sector Owner (and the Owner’s Rep) shall be provided notification and the opportunity to monitor and audit all work and inspections carried out by the Contractor. Sufficient notice of initial inspections and on-going inspections and testing shall be provided to Public Sector Owner (and the Owner’s Rep) by the Contractor. Once confidence is gained that inspections are performed correctly and yield conforming results, monitoring frequency may be reduced to spot check inspections at a frequency deemed appropriate.

**8.2** The objective of Public Sector Owner Quality Audits is to have an independent evaluation of the performance of the Contractor’s QMS resulting in a proactive approach to avoiding or reducing quality issues. Also, the purpose of Public Sector Owner Quality Audits is to ensure that QMS procedures are available, being followed and the resulting products conform to Contract requirements.

**8.3** Public Sector Owner Audits will provide a performance assessment of how well the Contractor’s actual construction and project management processes comply with the Contract Requirements and the Contractor QMS.

**8.4** Public Sector Owner Auditor(s) shall be allowed unrestricted access to all activities, testing, and documentation of the work done by the Contractor, their agents, subcontractors, and suppliers.

**8.5** Where the audit can be called a system audit of Contractor processes, notice will be provided to auditees so that preparations and process can be efficient.

**9 Inspection by Public Sector Owner**

**9.1** Public Sector Owner will monitor the Contractor's operations and QMS to ensure the standards and terms of the contract regarding quality are being met.

**9.2** The objective of field inspection is to verify the Contractor’s implementation of Work Methods, Inspection and Test Plans, quality control check lists, Hold or Witness Points, or any other aspect of the QMS. Field inspection is documented and is an integral component of the Quality assurance process.

**10. Monthly Reporting and Deficiency and Nonconformity Reports (NCR)**

**10.1** The Contractor and Public Sector Owner shall review the Work, or portions thereof to determine if the work is in conformance with the contractual requirements.

**10.2** See QMP 8.3 Nonconformance, OFI, and Deficiency for definition of deficiencies relative to non-conformances and for NC process. See also QMP 8.3.1 NCR and Deficiency Report, QMP 8.3.2 Flowchart for NCR and Deficiency, QMP 8.3.3 Log of Deficiencies and NCRs

**10.3** Contractor's Internal or External NCRs – any observed Nonconformities shall be dealt with as follows:

**1.** Should the Contractor's observations or audits indicate that an element of the Work is not in conformance, the Contractor shall issue a Nonconformity Report (NCR) (with a notification copy to Public Sector Owner, and Owner’s Rep), including a response time for effective resolution.

**2.** The Contractor will implement an NCR tracking process to monitor the status of all NCR’s initiated by either the Contractor or Public Sector Owner.

**3.** An NCR summary must be included in the monthly Quality Management report to Public Sector Owner.

**4.** The party(s) responsible for the noncompliant Work shall respond to the Contractor, Public Sector Owner, and Owner’s Rep with a proposed resolution to the Nonconformity. A copy shall also be submitted to Public Sector Owner and the Owner’s Rep within the time specified - with the proposed resolution (the fix of the NC) and the Corrective Actions (to prevent recurrence) provided to close the NCR. The Contractor shall consult with Public Sector Owner regarding these proposed resolutions.

**5.** Payment for the Work itself may be withheld until the NCR issue is resolved. Contractor observation and disclosure of NC is required and greatly appreciated and typically, if the Contractor is doing a quality job and the QMS is being implemented, payment for NC is optional and can provide good will towards contractor engagement in quality management. Only NC disputes are suggested to result in non-payment until resolution.

**6.** Refer to QMP 8.3 Nonconformance, OFI, and Deficiency for details, report form, and NCR Log.

**10.4 Monthly Reporting**

The following is a list of Monthly Reporting Items to be submitted to the Public Sector Owner on the 1st day of the month:

Work methods status

Deficiency, Non-conformance and corrective action summary

Audit activities

Owner & company quality review meetings

QC/QA testing summary

Hand-over or completion activities

Critical items

Preventive action: [Work Method Review Meetings are preventive action.]

**10.5 Public Sector Owner-Issued NCRs**

**1.** Should Public Sector Owner Quality Audit or Surveillance reporting indicate that the Work is not in conformance, Public Sector Owner will identify quality concerns and the contractor will log them as an NCR in their system which will include a response time for a proposed resolution and Corrective Actions.

**2.** Owner’s Rep NCRs: [The Owner’s Rep may well have requirements that shall be followed by all parties.]

**3.** Payment for the Work found by Public Sector Owner to be nonconforming shall be withheld until the NCR issue is resolved.

**10.6 Opportunity for Improvement (OFI)**

**1.** Should a Quality Audit indicate that the Work is at risk of non-conformance, (or is not in conformance but with a variance deemed minor) by Public Sector Owner, he may issue an Opportunity for Improvement (OFI).

**2.** The Contractor shall review the OFI findings and undertake such modifications to the QMS and/or QMP or Work Methods as necessary to address the issue.

**3.** An OFI will not affect payment for Quality Management or for the Work itself.

**10.7 Appeal**

**1.** If the Contractor has not notified Public Sector Owner of a dispute concerning the initiation of an NCR within 5 business days, the Contractor is deemed to have accepted the NCR. If the Contractor disputes the validity of a finding or NCR, the Contractor may file an appeal with Public Sector Owner. Public Sector Owner and the Contractor will use all reasonable efforts to refine the area of dispute and to resolve the dispute in conformance with the Contract.

**2.** If Public Sector Owner and the Contractor cannot come to a mutually agreeable resolution within 5 business days, the Work that is the subject of the NCR shall be re-evaluated by an independent third party, selected by Public Sector Owner in consultation with the Contractor, at a test frequency equivalent to more frequent than that specified in the Contract, or to such other frequencies as may be mutually agreed between Public Sector Ownerand the Contractor.

**3.** If the appeal testing confirms the nonconformity determination, all appeal testing costs will be borne by the Contractor. If the appeal testing shows that the Work does meet the requirements of the Contract, all appeal testing costs will be borne by Public Sector Owner.

**11. Payment**

**11.1** The rates agreed in the Contract shall include the full compensation for all costs related to Quality Management requirements in the Contract.

**11.2** Payment for quality management will be made on a monthly basis, prorated for the percentage of the total Work completed as determined by Public Sector Owner subject to the Contractor being compliant with the requirements of this Section and with Contractor QMS.

**11.3** Public Sector Owner may deduct an amount from any monthly payment so computed for Quality Management work required but not satisfactorily undertaken during that month. Public Sector Owner may also reduce the total Lump Sum payable by the value of any Quality Management work required but not satisfactorily undertaken during the Term of the Contract. The foregoing determinations will be the sole discretion of Public Sector Owner.

**11.4** Inspection and/or testing by Public Sector Owner will be at Public Sector Owner’s cost. However, re-inspection or re-testing by Public Sector Owner for repaired or reworked nonconformities will be at the Contractor's cost. Work that is deemed Unacceptable will not be eligible for payment.

**11.5** The Completion Certificate will not be issued if there are any unresolved Non-Conformity Reports.

**12. Addendum – Quality Manager’s Responsibilities (requirements)**

**12.1** The QMS shall describe how the Quality Management staff are generally allocated to project activities, and how their work will be coordinated.

**12.2** Without limitation, the Contractor Quality Manager shall:

1. implement, maintain and ensure the effective operation of the Contractor Quality Management System (QMS);
2. develop (or delegate responsibility internally for development of) Work Methods, ITPs, and quality control checklists for each element of the Work in sufficient detail to gauge conformance with all contractual requirements;
3. be responsible for measuring conformance with all aspects of the Contract and QMS;
4. verify that all testing equipment is properly calibrated, maintained and kept in good working order;
5. review construction drawings, and shop drawings, and ensure that all affected Contractor’s staff have current versions of documents applicable to their part of the Work;
6. ensure Public Sector Owner is informed of any upcoming hold or witness points identified in the ITP at least 2 business days prior to the event.
7. ensure the requirements for Quality Management (including contractual specifications for the Work, and Work Methods) are known to, understood by, and adhered to by all workers of their organization;
8. organize, schedule in advance, chair, and document Work Method Review (pre-construction) meetings prior to any new activity being conducted on-site (or off-site) with timely notification (as noted per other places in this specification) to the Developer.
9. organize Initial Inspections at the commencement of any new activity being conducted on-site with contractor (or Contractor) parties performing the work and with timely notification and invitation (as per other places in this specification) of Public Sector Owner.
10. ensure that all QC checklists are complete, no blank lines, and signed-off by Contractors’ responsible personnel;
11. review, initial, and be responsible for all inspection and test reports, and other required reports;
12. monitor QC testing and inspection procedures including those of the Contractor and subcontractors, with subcontractors also required to produce their own inspection checklists (and Work Methods) and for inspection and sign-off of those checklists;

13. consult with field inspectors regarding materials and testing issues;

14. receive notification from subs and issue notification to Public Sector Owner regarding non-conformances or deficiencies, follow the rules laid out per NC in section 10, and per the item immediately following this one;

15. initiate the Nonconformity process when materials or products do not meet the required specifications, and immediately (within 24 hours) inform (notify) Public Sector Owner of such non-conformance;

16. consult with Public Sector Owner and provide proposed Resolution (the fix of the physical issue) and Corrective Action (to prevent reoccurrence, the fix of the procedure) on Nonconformities found in the work;

17. respond to each Nonconformity Report (NCR) issued by the Contractor or Public Sector Owner, within the time specified in the NCR;

18. work directly with Public Sector Owner on matters related to Quality Management;

19. keep an organized filing system to ensure that quality records are easily accessible so that auditors can obtain necessary information;

20. notify Public Sector Owner of any changes in survey layout, location, line, grade for approval;

21. organize, chair and document weekly or bi-weekly Quality Management meetings with Public Sector Owner.

21. provide weekly and monthly summary reports on testing and inspection results;

22. prepare and submit a monthly (on the first work day of the month) QMS summary report to Public Sector Owner listing the QC, QA and Audit activities performed, upcoming Work Methods to be initiated, and the status and disposition of NCR’s and Corrective Actions taken. See also items included in 10.4.

**Example Classification of Construction Project Work and Quality Requirements**

To determine construction project quality requirements, Public sector owners should assess the level of quality risks including the potential for nonconforming work to arise and the associated

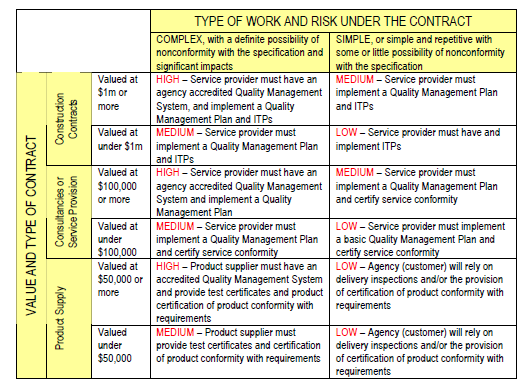
adverse impacts. The outcome of this risk assessment along with the value and type of contract

involved will determine the contract quality management requirements for a Quality Management System, and/or a Quality Management Plan (including any design plan) and Inspection and Test Plans.

Service.

The contract quality management requirements for service providers will be determined using the following table as a guide.

Recommend to adapt/revise as needed.

Add a zero to all the items in the “value of contract” column. For example, first line would read Valued at 10M$ or more.****

Reference: Quality Management Systems Guidelines for Construction,

**New South Wales, Department of Commerce**

Quality management systems guidelines for

construction.

Electronic version is available from

http://www.construction.nsw.gov.au

ISBN 0 7347 4334 8 (electronic version)

**[End of QMP 2.2a-b]**