16 TEMPLATES

16.1 CONTRACTORS PROJECT QUALITY PLAN TEMPLATE

Guidance Notes: This is a guideline / template to aid the Contractors preparation of his PQP. The PQP is to be prepared in accordance with the requirements of the QCS and contains additional requirements to those required by ISO 9001 & ISO 10005. Compliance with the ISO9001 requirements does not alleviate the Contractor of his responsibilities to operate a Quality Management System fully meeting the requirements of the QCS.

CONTRACTORS PROJECT QUALITY PLAN

Contract Name:
Contract Number:

YOUR LOGO HERE

Contractors Name:

Consultants Name:
Clients Name:

	Name & Signature	Position	Date
Prepared By:			
Reviewed By:			
Approved By:			

Revision History:

Rev.	Date	Change Description

TABLE OF CONTENTS

1 PROJECT SCOPE, REQUIREMENTS, OBJECTIVES & RISK

1.1 Project Scope

The PQP shall define a project overview and identify the Project Quality Plan's scope, with reference to the contract and summarize the key construction activities to be undertaken under the Contract.

1.2 Quality Requirements

The PQP shall identify the projects quality requirements under the contract and any requirements (required by the contract) omitted with reasons.

1.3 Quality Objectives

The PQP shall identify the Project Quality Plan's objectives and how it will meet the specific project quality needs and owner satisfaction (with reference to the Key Performance Indicators in section 22).

Examples of Quality Objectives:

Objective	Key Performance Measure	How Measured
Quality and Customer satisfaction	• *Conformity of works* • *Trend of occurrence / recurrence of works non-conformances* • *Trend of costs for non-conforming work* • *Trend of occurrence of system non-compliances* • *Commitment* • *Trend of customer complaints*	• *Conformance Reports closed* • *Non-conformance reports* • *Non-conformance reports* • *System non-compliance reports* • *Close out action on non-conformance reports and system non-compliances* • *Documented Issues*
Time	• *Project performance in regard to milestone* • *Productivity*	• *Percentage completed versus percentage programmed*
Cost	• *Project Budget* • *Project Margin* • *Forecast final project costs*	• *Reporting costs against budget* • *Reporting costs against budget* • *Report actual cost and remaining cost to complete*

1.4 Risk Identification

The PQP shall define responsibilities and how Risk will be identified / actioned and eliminated on the Project.

2 QUALITY POLICY & ISO 9001 CERTIFICATE

2.1 Project Quality Policy

If the Contractor already operates a Quality Management System to ISO 9001 their Project Quality Policy can be copied here or included as an Appendix. If the Contractor does not have, then the Contractor shall develop for this specific Contract and include here or as an Appendix.

2.2 ISO 9001 Certificate

If the Contractor already operates a Quality Management System to ISO 9001 the Certificate can be included here or included as an Appendix.

3 CONTROL OF THE PROJECT QUALITY PLAN

3.1 Review

The Contractor shall define responsibilities within his team for preparing, reviewing for adequacy and approving the PQP. On-going reviews of the PQP effectiveness shall be addressed as part of Management Review within section 24.

3.2 Implementation

The Contractor shall define the distribution, training and monitoring of the PQP.

3.3 Feedback & Improvement

Where feedback and improvement suggestions are received on the PQP (e.g. from management review meetings, audit findings, Engineer/Owner feedback) the PQP shall address how these suggestions will incorporated into future revisions.

3.4 Revision

The Contractor shall define responsibilities within his team for preparing, reviewing for adequacy and approving revisions to the PQP.

4 REFERENCE DOCUMENTATION

4.1 Contract Documentation

The PQP shall summarise all contractual documentation defined within the Contract for the project.

4.2 Codes and Standards

The PQP shall summarise all codes and standards applicable to the PQP.
(E.g. ISO 9000, ISO 9001, ISO 10005 etc.)

4.3 Contractors Documentation

The PQP shall cross reference any of the Contractors quality documentation applicable to the PQP. (E.g. Corporate Quality Manual and Procedures if applicable and Project Procedures specifically generated for the Contractors work under this Contract. ***Corporate Procedures or Project Specific Procedures generated as part of the Contractors Project Quality Management System and standard forms shall be cross referenced under the applicable sections of this PQP****).*

5 PROJECT MANAGEMENT, PLANNING & RESOURCES

5.1 Planning and Scheduling

The PQP shall define the process for developing and maintaining the works planning and programming as required under the contract. For example:

- *Baseline programme*
- *Monthly programme forecast*
- *Key equipment programme*
- *Staffing forecast and needs*

- *Labour curve*
- *Programme revisions*

Such programming shall be a basis and input for resource planning, service and supply procurement planning, design planning etc.

5.2 Progress Monitoring and Reporting

The PQP shall define the requirements for:

- *monitoring of actual versus planned progress in design, construction, plant and material and service procurement*
- *external reporting to the Engineer according contract requirements*

5.3 Performance, Budgeting and Cost Control

The PQP shall set out the process for budgeting of the works based on established planning and schedule and for monitoring and reporting performance and actual costs compared against planned cost and budget.

6 MANAGEMENT, ORGANIZATION & RESPONSIBILITIES

6.1 Management, Organization & Responsibilities

The PQP shall with reference to the Quality Organization Plan, required by the QCS, define the responsibilities and authorities of key functions in the organization and how such responsibilities and authorities relate to elements of the Quality Management System.
The PQP shall identify quality related responsibilities of the project team and list specific task-related quality responsibilities, including responsibility for specific acceptance tests and project audits.

Example of table that can be utilized in this section or included as an appendix:

Project Team Role	QA Responsibilities	QC Responsibilities

7 CONTRACT REVIEW

7.1 Contract Review

The PQP shall define the Contractors process for review of the contracts to ensure that:

- *The Contractor has the capability to meet all contract requirements*
- *Ambiguities are clarified*
- *Contract requirements are properly identified and documented*
- *Resources and processes to meet Contract requirements are available*

This applies to the Contract between the Contractor and the Employer and Subcontracts / Supply contacts.

7.2 Variations

The PQP shall define the Contractors process for ensuring that:

- *Variations to the tendered Contract scope are identified*
- *Variations are accurately scoped and priced by the functions concerned*
- *Relevant communication with the Engineer/Employer is initiated*
- *Amendments / variations to the contract formally ordered by the Engineer/Employer.*

8 PROJECT DELIVERABLES

8.1 Contractual Project Deliverables

The PQP shall summarise the project deliverables and delivery dates required under the contract, for example ITP's, Contract Programme / schedule, HSE Plan, O&M Manuals, Monthly Reports and all other such required submittals.

9 COMMUNICATION WITH THE ENGINEER

9.1 Communication with the Engineer

The PQP shall define the authority for and methods of communication with the Engineer in respect of contractual matters, construction time and schedule, payments, any such matters that require Contractor's Representatives signature under the Contract.

10 MANAGEMENT OF DOCUMENTS, DATA & RECORDS

10.1 Document Distribution & Control

The PQP shall define the Contractors process to control, review, approve and distribute documents relating to this PQP to ensure:

- *Appropriate review and approval of project technical documents, quality system documents and data*
- *Controlled distribution of documents and subsequent revision to designated recipients (e.g. master list / distribution matrix)*
- *Obsolete documents are not used for the works*

This applies to hard copy and electronic media.

10.2 Document and Data Changes

The PQP shall define the process for initiation, review and approval of all document changes prior to issuance of these changes.

10.3 Information & Data Control

The PQP shall define the distribution and maintenance of information and data required to achieve project objectives.

10.4 Correspondence & Communication

The PQP shall define the process for controlling and filing of all incoming and outgoing correspondence on any type of media.

10.1 Control of Quality Records

The PQP shall define the identification, collection, indexing, access, filing, storage maintenance and disposition of quality records required to demonstrate conformance to Contractual requirements.

10.1 Filing and Archiving

The PQP shall define the process for filing and archiving documents to ensure readily retrievable documentation in a suitable environment to prevent deterioration.

11 DESIGN (INCLUDING TEMPORARY WORKS)

11.1 Design Control

The PQP shall define the process for procurement, planning and scheduling, controlling, reviewing and verifying the design at the various stages of the permanent and temporary works for the project including the coordination of interface issues with relevant parties in accordance with the requirements of the contract.

12 PROCUREMENT OF SERVICES, EQUIPMENT & MATERIALS

12.1 Procurement Scheduling

The PQP shall define the process to ensure the timely procurement of services, equipment and materials against the Baseline Programme and budget constraints.

12.2 Procurement Process

The PQP shall define the process for procuring of subcontracts, materials, plant and equipment to ensure the requirements of the Contract and Specification are met. This is achieved through:

- *Handing out adequate and complete relevant information to tenderers*
- *Assessing capability of tenderers to satisfy contract requirements in regard to safety performance, quality, capacity and timely supply and service*
- *Reviewing quality plans of tenderers in regard to the particular requirement for the service / supply*
- *Initiate as necessary amendments / adjustments to such plans to satisfy particular requirements*
- *Comparing price proposals to assess most competitive offer*
- *Previous experience with potential subcontractor / supplier.*

13 METHOD STATEMENTS

13.1 Method Statements

The PQP shall define the requirements for preparing Method Statements to ensure construction control is safely and effectively carried out (both permanent and temporary works) and it shall address the topics to be covered within Method Statements (as defined in the QCS).

13.2 Method Statement Register

A Method Statement Register shall be prepared and it shall list all the Method Statements to be prepared for the Works and the target dates for their submission to the Engineer for his approval. The schedule can be included here or as an Appendix.

14 INSPECTION & TEST

14.1 Inspection & Test

The PQP shall define the process for identifying, planning and controlling construction activities (both permanent and temporary works) that have an impact on quality and describe the requirements for inspecting and testing (as defined in the QCS) to ensure construction control is effectively carried out and that the specified requirements under the contract are met.
The PQP shall define the requirements for documenting, verifying and certifying compliance of the works in accordance with the requirements of the contract and applicable specifications.

14.2 Receiving, In-Process and Final Inspection & Testing

The PQP shall define the process to ensure incoming materials or equipment, on-going and completed construction work is verified as conforming / acceptable.

14.3 Inspection & Test Status

The PQP shall define how the inspection and test status of the work shall be identified to indicate conformance or non-conformance of the Works with regard to inspection and tests performed. The system shall utilize a method to identify conforming, nonconforming, downgraded, scrap and rejected work or material etc. and how, if non-conformance is identified, the defect will be rectified before work continues and the defect covered up preventing rectification.

14.4 Inspection & Test Plan Register

An Inspection and Test Plan Register shall be prepared and it shall list all the Inspection and Test Plans to be prepared for the Works and the target dates for their submission to the Engineer for his approval. The schedule can be included here or as an Appendix.

15 PRODUCT INDENTIFICATION & TRACEABILITY

15.1 Identification & Traceability of the Works

The PQP shall define how the Contractor will ensure his works are identifiable and traceable. For example, numbering of concrete pours in a structure, establishing a grid matrix for identifying columns and walls or the labelling of valves and pumps etc. in HVAC systems.

16 OWNER SUPPLIED PRODUCT

16.1 Owner Supplied Materials and Equipment

The PQP shall define the control, verification, storage, and maintenance of owner supplied product provided for incorporation into the works.
The PQP shall define how the Contractor shall record and report to the Engineer, Owner supplied product that is lost damaged or unsuitable for use.

17 HANDLING, STORAGE, PACKAGING & DELIVERY

17.1 Handling, Storage, Packaging & Delivery

The PQP shall define the requirements in regard to control and verification of proper handling, storage, packaging, preservation and delivery of materials, plant, prefabricated works elements etc. to prevent damage and deterioration.

18 NON-CONFORMANCE, CORRECTIVE & PREVENTATIVE ACTION

18.1 Non-conformance, Corrective & Preventative Action

The PQP shall define the procedures, responsibilities, and controls for:
- *The handling of customer complaints and reports of nonconformities*
- *Investigate the cause of nonconformities, and recording the results of any investigation*
- *Determining the corrective action needed to eliminate the nonconformities*
- *Ensuring that corrective action is taken and that it is effective.*
- *Detecting any deterioration in standards.*
- *Elimination any potential cause of nonconformities.*
- *Tracking of the preventive action and ensuring it's is effectiveness.*

19 CONTROL OF INSPECTION, MEASURING AND TEST EQUIPMENT

19.1 Control of Inspection, Measuring and Test Equipment

The PQP shall define the requirements for registering, controlling, calibrating and maintaining equipment which is used to measure and verify compliance of the works and the process to assess / prove the suitability and capability of equipment for the particular use.

20 AUDITS

20.1 Internal Audits

The PQP shall define the requirements for planning, scheduling, carrying out and reporting of findings and follow up / closing out of System and Compliance Audits.

20.2 Subcontractor and Supplier Audits

The PQP shall define the requirements for planning, scheduling, carrying out and reporting of findings and follow up / closing out of quality audits on subcontractors and suppliers with the objective:

- *prior to contract award : to assess capability of potential subcontractors/suppliers to carry out the works according requirements of the contract*
- *after contract award : to review compliance of works processes with agreed quality plan/procedures*

20.3 Audit Schedule

The PQP shall define the requirements for the preparation of a project specific audit schedule. The audits shall be scheduled on the basis of status and importance of the activity to be audited.

20.4 Auditor Qualifications

The PQP shall define the minimum required experience and qualifications of the Contractors auditing personnel.

21 TRAINING

21.1 Training Needs

The PQP shall define how the Contractor will identify his training needs.

21.2 Formal Quality System Training

The PQP shall define the requirements and frequency for quality training, including contract specific induction, pre-work briefings, skills training, tool box talks and formal training of his staff (The schedule can be included as an Appendix).

21.3 Tool Box Talks

The PQP shall define requirements and frequency for regular tool box talks to his labour workforce. Such training shall include as a minimum health and safety issues and construction method best practice (The schedule can be included as an Appendix).

21.4 Training Records

The PQP shall define the records to be kept of all training performed by the Contractor.

22 KEY PERFORMANCE INDICATORS & CONTINUAL IMPROVEMENT

22.1 Key Performance Indicators

The PQP shall define a series of Key Performance Indicators that show in measurable terms that the Project Quality Objectives are being achieved.

Examples of Key Performance Indicators:

Objective	Targets / Measured
Implementation of the Project Specific Quality Management System to achieve Owners expectations.	• *The monetary value of Engineer issued NCR<x% of the actual construction cost.* • *The monetary value of Contractor issued NCR<x% of the actual construction cost.*
Added value to the Auditing process.	• *Audit findings are closed within the agreed period.*
Added value to the Inspection & Test process.	• *Findings raised during Inspection & Test are closed within the agreed period.*
Awareness, acceptance & Implementation of quality requirements on subcontractors & suppliers.	• *Set a minimum target score or number of deficiencies identified during construction / audit activities.*
Minimization of material wastage.	• *Actual material wastage is below original project budget for major materials.*
Minimizing rejection rate of Request for Inspections issued to the Engineer.	• *Set a minimum target percentage for rejected Request for Inspections.*
Minimizing welding failures.	• *Identify minimum target rates for NDT failures.*
Awareness and training of all project staff on the Project Quality Management System.	• *Set minimum targets for staff inductions and tool box talks.*

22.2 Statistical Techniques

The PQP shall define the statistical techniques the Contractor shall utilize as a means of establishing a level of control. (For example concrete cube strength analysis of Compressive test results).

22.3 Continual Improvement

The PQP shall define how it will continually improve the effectiveness of its Quality Management System through the use of the defined quality objectives, audit results, analysis of data, corrective and preventative actions and management review. The aims of continual improvement of the Quality Management System are to increase the probability of enhancing the satisfaction of the owner and/or improve the effectiveness and efficiency of processes. All activities related to Continual Improvement projects shall be documented.

23 MANAGEMENT REVIEW

23.1 Management Review Meetings

The PQP shall define the process for regular review of the Quality Management Systems adequacy, effectiveness, and efficiency by the Contractors top management at defined intervals and the requirements for participation and preparations of such review.

24 QUALITY MEETINGS

24.1 Contractors Internal Quality Meetings

The PQP shall define the frequency of internal Quality Meetings with the Contractors team and a typical agenda for such meetings (The agenda can be included as an Appendix).

24.2 Quality Meetings with the Engineer

The PQP shall define the frequency of Quality Meetings with the Engineer and a typical agenda, agreed by the Engineer, for such meetings (The agenda can be included as an Appendix).

25 MONTHLY QUALITY REPORT

25.1 Contractors Monthly Quality Report Format

The PQP shall define the format and requirements of the Monthly Quality Report as agreed or supplied by the Engineer (The format can be included as an Appendix) and shall include the Key Performance Indicators and statistical techniques identified in section 22.

26 COMMISSIONING

26.1 Commissioning Plan

The PQP shall with reference to a project specific Commissioning Plan address how the Contractor will commission the works and the relevant inspection and tests that will be performed.

27 INTERFACE MANAGEMENT

27.1 Interface Management

The PQP shall define the requirements for coordinating and controlling interfaces with other Contactors and Consultants.

28 PROJECT COMPLETION AND HANDOVER

28.1 Project Completion and Handover

The PQP shall define the process for the handing over of the completed works including pertinent documentation, to the satisfaction of the Engineer, to ensure that all contractual obligations for completion and handover are met.

29 APPENDICES

(Suggested Appendices)

29.1 Definitions

29.2 Quality Policy

29.3 ISO 9001 Certificate

29.4 Organization Chart

29.5 Responsibilities

29.6 List of Procedures

29.7 Method Statement Schedule

29.8 Inspection & Test Plan Schedule

29.9 Training Schedule

29.10 Audit Schedule

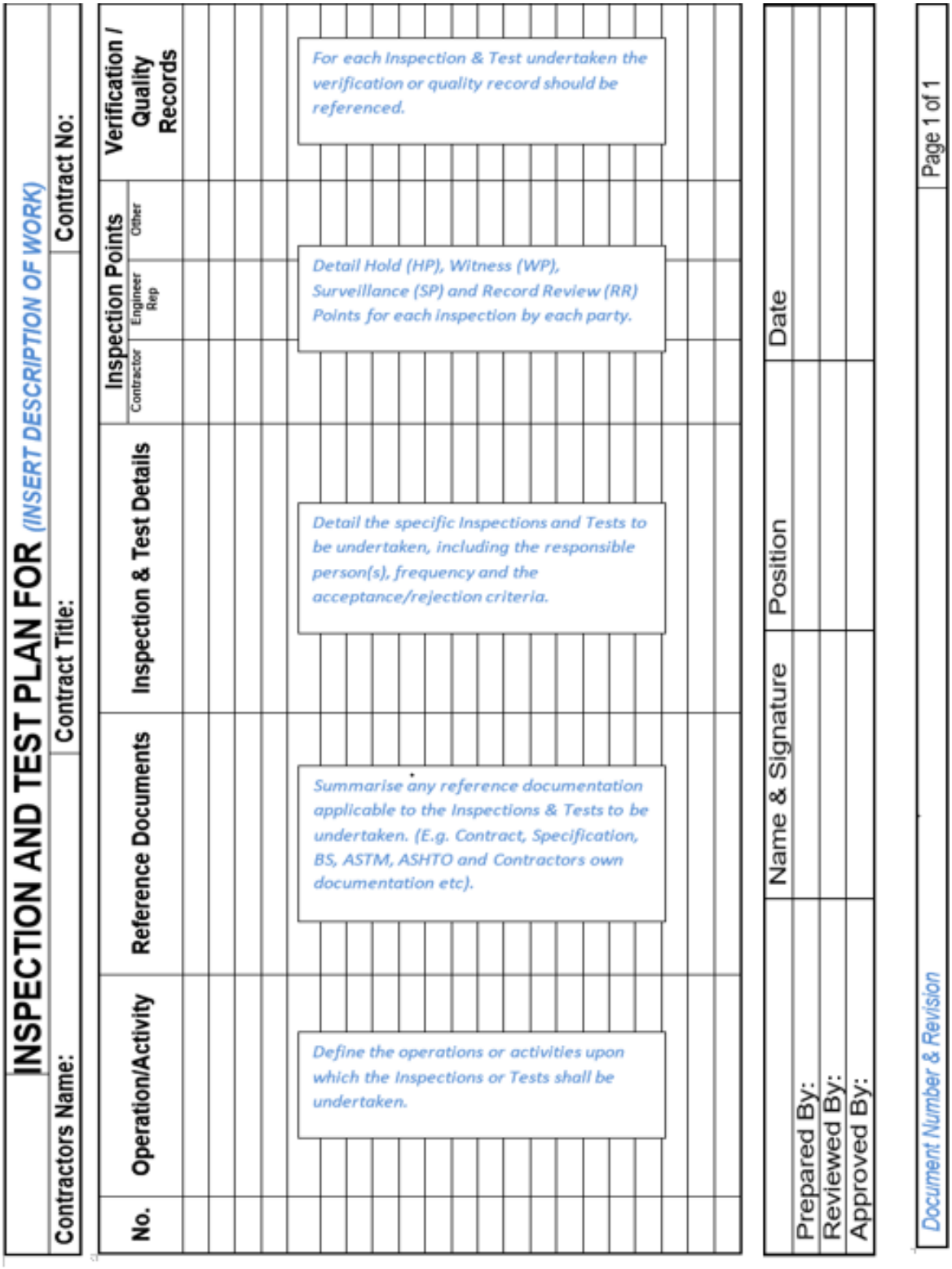
29.11 Agenda for Contractors Internal Quality Meetings

29.12 Agenda for Quality Meetings with the Engineer

29.13 Format for Contractors Monthly Quality Report

29.14 Standard Forms

16.2 CONTRACTORS INSPECTION AND TEST PLAN TEMPLATE



INSPECTION AND TEST PLAN FOR *(INSERT DESCRIPTION OF WORK)*

Contractors Name: | Contract Title: | Contract No:

No.	Operation/Activity	Reference Documents	Inspection & Test Details	Inspection Points: Contractor	Inspection Points: Engineer Rep	Inspection Points: Other	Verification / Quality Records
	Define the operations or activities upon which the Inspections or Tests shall be undertaken.	*Summarise any reference documentation applicable to the Inspections & Tests to be undertaken. (E.g. Contract, Specification, BS, ASTM, ASHTO and Contractors own documentation etc).*	*Detail the specific Inspections and Tests to be undertaken, including the responsible person(s), frequency and the acceptance/rejection criteria.*	*Detail Hold (HP), Witness (WP), Surveillance (SP) and Record Review (RR) Points for each Inspection by each party.*			*For each Inspection & Test undertaken the verification or quality record should be referenced.*

	Name & Signature	Position	Date
Prepared By:			
Reviewed By:			
Approved By:			

Document Number & Revision | Page 1 of 1

16.3 QUALITY NONCONFORMITY TEMPLATE

QUALITY NONCONFORMITY REPORT		
Contract Name:		**Contract Number:**
Contractors Name:		
Nonconformity No:	**Date Opened:**	**Date Closed:**

Work Area / Location:			
CONTRACTOR / ENGINEER* *Delete as applicable	**PART A:** DETAILS OF NONCONFORMITY: Details: Classification of Defect: ☐ Critical ☐ Major ☐ Minor ☐ Unknown Cause of Nonconformity: ☐ Material ☐ Process ☐ Equipment ☐ Documentation Documentation Reference (Specification, ITP, Drawing, Standard etc.):		
	Name & Signature:	Title:	Date:
CONTRACTOR	**PART B:** PROPOSED REMEDIAL / CORRECTIVE ACTION: Details: ☐ Reject/Replace ☐ Re-work ☐ Repair ☐ Use as-is Target Date to Close Nonconformity:		
	Name & Signature:	Title:	Date:
ENGINEER	**PART C:** ENGINEERS ACCEPTANCE OF CONTRACTORS PROPOSALS IN PART B: ☐ - Contractors proposals are acceptable and remedial work may proceed. ☐ - Contractors proposals are unacceptable for the following reasons. (Contractor should revise & resubmit):		
	Name & Signature:	Title:	Date:
CONTRACTOR	**PART D:** REMEDIAL WORKS / CORRECTIVE ACTION PROPOSED IN PART B ARE COMPLETE & READY FOR INSPECTION:		
	Name & Signature:	Title:	Date:
ENGINEER	**PART E:** FOLLOW UP & CLOSE-OUT: ☐ - Remedial Works / Corrective Action have been undertaken and are acceptable. This Nonconformity may be closed out. ☐ - Remedial Works / Corrective Action undertaken by the Contractor are not acceptable for the following reasons and this NCR may not be closed out. (Contractor must address these issues):		
	Name & Signature:	Title:	Date:

NOTES AND ATTACHMENTS (Photographs, Sketches etc.):

END OF PART