



### Submittal Review Response

Project Name: Hilo WWTP Rehabilitation and Replacement Project Phase 1  
Submittal No.: 01460-001.1  
Date: [Publish Date]

Client: County of Hawai'i Carollo Project No.: 203975  
Contractor: Nan, Inc.  
Submittal Name: Contractor Quality Control Plan - Resubmital  
Reviewed By: Gavin Goo

#### SUBMITTAL REVIEW

Review is for general compliance with contract documents. No responsibility is assumed by Carollo for correctness of quantities, dimensions, and details. No deviation or variation is approved unless specifically addressed in these review comments. Refer to Section 01330 for additional requirements. The Contractor shall assume full responsibility for coordination with all other trades and deviations from contract requirements.

Approved	<input type="checkbox"/>	No Exceptions
	<input type="checkbox"/>	Make Corrections Noted - See Comments
	<input checked="" type="checkbox"/>	Make Corrections Noted - Confirm
Not Approved	<input type="checkbox"/>	Correct and Resubmit
	<input type="checkbox"/>	Rejected - See Remarks
Receipt Acknowledged	<input type="checkbox"/>	Filed for Record
	<input type="checkbox"/>	With Comments - Resubmit

#### Review Comments:

1. Include the protection of received material from environmental factors (Section V1. Material and Equipment Tracking)
2. Small grammatical mistake (Section VII. Testing Plan and Log)
3. Clarify the frequency of QC Meetings (Section VIII.D, QC Meeting Minutes)
4. Clarify format of two (2) copies of as-built drawings (Section VIII.E, As-Built Drawings)

## CONTRACTOR SUBMITTAL TRANSMITTAL FORM

<b>Owner:</b>	<b>Date:</b> 4/24/2025
<b>Contractor:</b> Nan, Inc.	<b>Project No.:</b> WW-4705R
<b>Project Name:</b> WWTP	<b>Submittal Number:</b> 01460-001.1
<b>Submittal Title:</b> CONTRACTOR QUALITY CONTROL PLAN	
<b>To:</b> Engineer	
<b>From:</b> Nan, Inc	

Specification No. and Subject of Submittal / Equipment Supplier			
Spec ##:	01460	Subject:	CONTRACTOR QUALITY CONTROL PLAN □
Authorized By:	Stan Kubo	Date Submitted:	4/24/2025

Submittal Certification
<b>Check Either (A) or (B):</b>
<div style="display: flex; align-items: flex-start;"><div style="margin-right: 10px;"><input checked="checked" style="width: 20px; height: 20px; border: 1px solid black;" type="checkbox"/></div><div><div style="display: flex; align-items: center; margin-bottom: 10px;"><div style="margin-right: 10px;">(A)</div><div>We have verified that the equipment or material contained in this submittal meets all the requirements specified in the project manual or shown on the contract drawings with no exceptions.</div></div><div style="display: flex; align-items: center;"><div style="margin-right: 10px;"><input style="width: 20px; height: 20px; border: 1px solid black;" type="checkbox"/></div><div><div style="display: flex; align-items: center; margin-bottom: 10px;"><div style="margin-right: 10px;">(B)</div><div>We have verified that the equipment or material contained in this submittal meets all the requirements specified in the project manual or shown on the contract drawings except for the deviations listed.</div></div></div></div></div></div>
Certification Statement: By this submittal, I hereby represent that I have determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data, and I have checked and coordinated each item with other applicable approved shop drawings and all Contract requirements.
<b>General Contractor's Reviewer's Signature:</b>
<b>Printed Name and Title:</b> Stan Kubo, Quality Control Manager
In the event, Contractor believes the Submittal response does or will cause a change to the requirements of the Contract, Contractor shall immediately give written notice stating that Contractor considers the response to be a Change Order.
<div style="display: flex; justify-content: space-between;"><div><b>Firm:</b></div><div><b>Signature:</b></div><div><b>Date Returned:</b></div></div>

PM/CM Office Use
Date Received GC to PM/CM:
Date Received PM/CM to Reviewer:
Date Received Reviewer to PM/CM:
Date Sent PM/CM to GC:

Nan, Inc

PROJECT: HILO WWTP REHABILITATION  
AND REPLACEMENT PROJECT - PHASE 1

JOB NO. WW-4705R

THIS SUBMITTAL HAS BEEN CHECKED BY  
THIS CONTRACTOR. IT IS CERTIFIED  
CORRECT, COMPLETE, AND IN  
COMPLIANCE WITH CONTRACT  
DRAWINGS AND SPECIFICATIONS. ALL  
AFFECTED CONTRACTORS AND  
SUPPLIERS ARE AWARE OF, AND WILL  
INTEGRATE THIS SUBMITTAL (UPON  
APPROVAL) INTO THEIR OWN WORK.

DATE RECEIVED \_\_\_\_\_ 04/24/2025 \_\_\_\_\_  
SPECIFICATION SECTION # \_\_\_\_\_ 01460 \_\_\_\_\_  
SPECIFICATION \_\_\_\_\_ Contractor Quality Control \_\_\_\_\_  
PARAGRAPH \_\_\_\_\_ n/a \_\_\_\_\_  
DRAWING \_\_\_\_\_ n/a \_\_\_\_\_  
SUBCONTRACTOR \_\_\_\_\_ n/a \_\_\_\_\_  
SUPPLIER \_\_\_\_\_ n/a \_\_\_\_\_  
MANUFACTURER \_\_\_\_\_ n/a \_\_\_\_\_

CERTIFIED BY: \_\_\_\_\_ Nan, Inc \_\_\_\_\_

Note: The Ensuing sheets will contain the Contractor resubmittal response notes as prescribed by the specification 1.06.B

## Review Comments:

1. Missing methods relating to areas that require special testing and procedures as required by the specifications (1.06.C.2).

Incorporated: For clarity special testing describe above is for Laboratory test that is invoked by the Quality assurance. Contractor will be responsible to track via testing log see Section VII Testing Plan.

2. Missing specific instructions defining procedures for observing Work in process and comparing this Work with the Contract requirements (1.06.C.3)

Incorporated – Implementing the three-phase inspection procedure to comprehensively outline Nan Inc.'s methodology for observing ongoing work activities and systematically verifying their compliance with the specified contract requirements.

1. Missing commissioning quality control (1.06.C.6)

Incorporated – Commissioning quality control information has been added to Section XII. The CQC Plan ensures that commissioning is integrated with overall quality control, rather than treated as a separate process, and includes provisions for appropriate owner training.

2. Missing procedures for resolution of differences between the CQC Plan Manager and the production personnel (1.06.C.10)

Incorporated – A new Section XIV has been added to outline the conflict resolution process between the CQC Manager and Production personnel.

3. Minimum requirements missing for Deficient and Non-Conforming work. Especially, detailed procedures for the performance and control of special processes (106.E.1-5)

Incorporated: Added more specifics for special process. See section X A.1.b for the exact insert.

4. No description for documented control/quality records (1.06.G.1,4)

Incorporated – Included Testing Log, As-builts, meeting minutes to add more description to QC records. Please note that electronic and physical binders will be retained at all times.

5. Qualifications missing for identified Quality Control Engineers. (1.06.B.3). Qualifications for CQC Manager in

Incorporated – Resumes of Matthew Chun and Makoa Ng has been appended to attachment I.

6. When is the Contractor's Quality Control Report (CQCR) to be used? Is it in conjunction with the Daily Inspection Report?

Response – Yes, the CQC Report will have at the least daily inspection reports, test reports and deficiency reports attached.

7. Copy of Spec Section 01330 attached at the end of the submittal. Should Spec 01460 be included instead?

Incorporated – replaced spec section with 01460 with check marks on pertinent paragraphs.

Note: The Ensuing sheets will contain the revised CQC  
PLAN

# CONTRACTOR QUALITY CONTROL (CQC) PLAN

JOB NUMBER WW-4705R

HILO WASTEWATER TREATMENT PLANT (WWTP)  
REHABILITATION AND REPLACEMENT PROJECT PHASE 1

DATE PREPARED:

April 24, 2025

SUBMITTED BY:

NAN, INC.  
636 LAUMAKA STREET  
HONOLULU, HAWAII 96819

PHONE: (808) 842-4929 FAX: (808) 841-8281

# HILO WASTEWATER TREATMENT PLANT (WWTP) REHABILITATION AND REPLACEMENT PROJECT PHASE 1

## Contractor Quality Control Plan

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- Attachment 1: CQC Personnel Resumes
- Attachment 2: Test Report
- Attachment 3: Daily Inspection Report
- Attachment 4: Quality Control Daily Report
- Attachment 5: Deficiency Report
- Attachment 6: Testing Log

## I. OBJECTIVE

It is the goal of Nan, Inc. is committed to delivering high-quality construction products on every project we undertake. This goal is achieved through efficient project management utilizing a comprehensive Contractor Quality Control (CQC) Plan with continuous communication between all groups involved in the project. For the duration of the project, the CQC Plan will serve as the guidelines for the proper quality inspections and control testing that will be used in completing this project in a timely and qualitative manner. Nan, Inc. is committed to quality control, as outlined in the following CQC Plan.

I, Jason Tagawa, Project Manager, of Nan, Inc. has designated Stan Kubo, CQC Plan Manager, the authority to direct cessation or removal and replacement of defective work specified per contract documents.

SIGNATURE: 

DATE: 4/24/85

## II. CQC ORGANIZATION

An effective CQC Plan begins with the composition of an organization that includes qualified personnel, in adequate numbers, based on the size and complexity of the project. When the duties and responsibilities of the personnel within the organization are clearly defined and understood, all phases of work, such as submittal review, subcontractor coordination, material and installation inspections, and testing, will be completed efficiently.

Nan, Inc.'s CQC Organization consists of, at a minimum, a CQC System Manager (CQCSM) whose primary responsibility is implementing the CQC Plan. The CQCSM shall be assisted by Nan QC Engineers as needed, CQC Representatives from all major subcontractors, and as well as any required testing agencies.

A specific CQC Organization Chart is provided and indicates the integration of the CQC Organization along with each level of authority. As shown in **Figure 1: Contractor Quality Control Organization Chart**, the structure of the CQC Organization is provided. As other phases of work are expected to be encountered, and additional positions are assigned, this CQC Plan will be revised with additional information, submitted as **Attachment 1**. However, qualifications for those personnel that have been assigned are discussed in the following section.



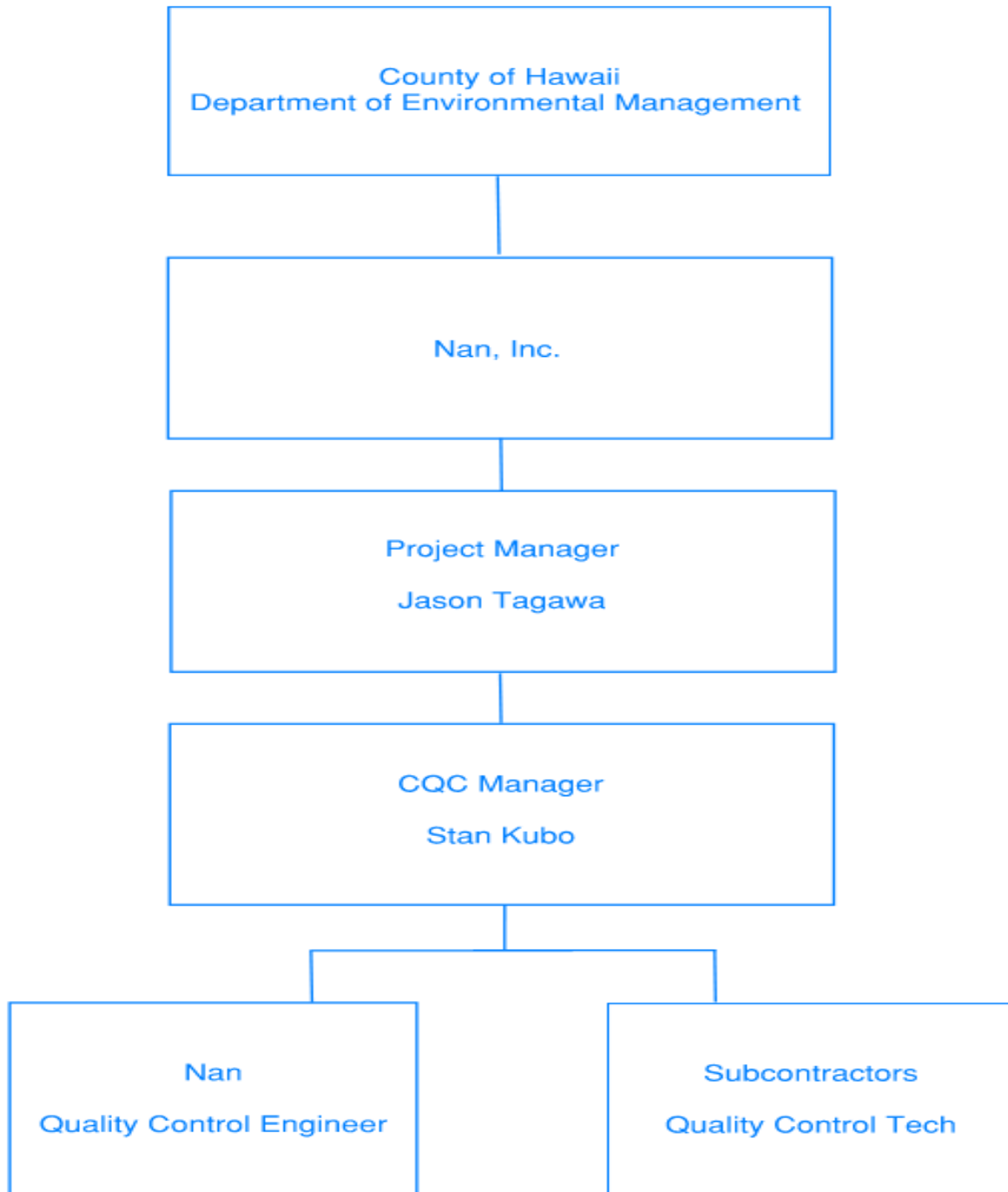


Figure 1: CQC Organization Chart

### **III. NAMES AND QUALIFICATIONS**

For each member of the CQC Organization, as depicted previously in **Figure 1**, a current and comprehensive resume is provided, see **Attachment 1**. It outlines their appropriate experience and qualifications for the duties they are assigned.

The Contractor Quality Control Organization team consists of:

CQCSM – Stan Kubo

Quality Control Engineers – Matthew Chun, Makoa Ng

Subcontract Quality Control Technicians – As applicable by each trade

### **IV. DUTIES, RESPONSIBILITY, AND AUTHORITY OF CQC PERSONNEL**

The duties, responsibilities, and authority of the major CQC Organization personnel include the following:

1. Contractor Quality Control System Manager (CQCSM)
  - a. Implement and manage the CQC Plan
  - b. Attend and document the Coordination and Mutual Understanding meeting
  - c. Perform submittal review and approval
  - d. Verify that materials delivered to site are in compliance with the contract documents and submittals
  - e. Ensure proper test methods are used and observe required CQC testing
  - f. Perform or arrange for inspections for each definable feature of work daily and maintain Daily Inspection Reports, Test Reports
  - g. Has authority to stop/correct deficient work
  - h. Perform Punch-Out Inspection and develop a “punchlist” of corrections needed, prior to Final Inspection
  - i. Attend Pre-Final and Final Inspections

Note: Under the supervision of the CQSM the Quality Control Engineer(s) will assist and perform tasks previously mentioned

2. Quality Control Engineer (CQE), Assistant to CQCSM:
  - a. Assist CQCSM with CQCSM’s responsibilities
  - b. Subcontractors (QC Tech):
    - i. Ensure their work conforms to the plans and specifications
    - ii. Has authority to stop/correct deficient work

## **V. INSPECTION REQUIREMENTS & PROCEDURES**

Inspections shall be performed daily via Daily Inspection Report or equivalent to ensure continuing compliance with contract requirements. Inspections will be performed on all definable features of work. This report shall be submitted to the CQC team on the work day following the day of record and be stamped & signed by CQC personnel or the subcontractor's QC Tech. Not limited to, this report identifies the following:

- a. Technical specification item number and description and location of work performed
- b. Compliance or non-compliance with Contract Documents
- c. If any corrective/remedial actions taken if required
- d. Noted Deficiencies

A three phase Inspection system will be performed to assure that all construction, including work performed by subcontractors and material supplied by vendors, comply with the contract requirements. A three phase inspection system will be used for each definable feature of work. The steps include a Preparatory Phase, Initial Phase, and Follow-up Phase. At the completion of work a final inspection will be held.

### **A. Preparatory Phase**

The preparatory inspection will be held prior to the start of on-site work and after all required plans/documents/materials are approved and/or accepted, and after copies are at the work site. This "Prep" meeting shall be conducted by the QC Manager or designee. Also in attendance will be the Project Superintendent, other QC personnel (i.e. subcontractor, material supplier), and the foreman responsible for the definable feature of work. The inspection will include:

1. Review each paragraph of the applicable specification section.
2. Review the contract requirements and applicable drawings.
3. Verify that the appropriate submittals have been submitted and approved, including shop drawings, manufacturer's data, factory tests, etc.
4. Review the testing plan for required control testing.
5. Examine the work area to ensure all required preliminary work has been completed.
6. Physically examine materials, equipment and sample work for conformance to approved submittals.
7. Review the safety plan and applicable activity hazard analysis to assure that all safety requirements are met and that the appropriate Material Safety Data Sheets (MSDS) are submitted.

8. Review the construction procedures that will be used. Discuss procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for feature of work.
9. Notify the City at least 24 hours in advance of the preparatory inspection.
10. Document the preparatory inspection as a matter of record.

### **B. Initial Inspection**

The Initial Phase Inspection will be held at the start of each definable feature of work after the Preparatory Inspection has been successfully completed. Notify the Contracting Officer at least two work days in advance of each initial phase. The QC personnel will conduct the inspection with the Project Manager, Project Superintendent, applicable QC Specialist, Foreman, and his crew in attendance. The inspection will include:

1. Verify work to ensure that it is in full compliance with contract requirements. Review minutes of the Preparatory Inspection
2. Establish level of acceptable workmanship and verify that it meets the contract requirements.
3. Review QC testing requirements.
4. Resolve all differences see section XIV for procedures
5. Review specific safety issues for that segment of work and discuss the Activity Hazard Analysis (AHA) with all workers involved.
6. The initial phase will be repeated for each new crew to work onsite, or whenever acceptable specified quality standards are not being met.
7. Ensure that testing is performed by the approved laboratory.
8. Check work procedures for compliance with the APP and the appropriate AHA to ensure that applicable safety requirements are met.
9. Document the Initial Inspection as a matter of record.

### **C. Follow-up Inspection**

Follow-up inspections will be held to ensure quality discussed and defined in the Preparatory Inspection and Initial Inspections is continuing. The inspection will include:

1. Check ongoing work daily for continued compliance with the contract requirements.

2. Ensure that testing is performed by the approved laboratory.
3. Ensure that rework items are being corrected.
4. Continue follow-up inspections until the definable feature of work is completed.
5. Correct any deficiencies found during follow-up inspections prior to the start of subsequent work.
6. Record the follow-up inspections on the Daily QC Report.

#### **D. Additional Preparatory and Initial Phase Inspections**

Additional preparatory and initial phase inspections will be conducted on the same definable feature if the quality of on-going work is not acceptable, there are changes in the QC Organization, changes in the on-site production supervision and/or crew, work on a definable feature is resumed after a substantial period of inactivity, or other problems develop.

As noted previously, a report for the various stages of the three-phase inspection will be completed. A separate form for the Preparatory and Initial Phases will be filled out and attached to the QC Report Form as shown in the sample formats provided. The follow-up phase inspection will be documented directly on the Daily QC Report Form.

#### **E. Special Inspections**

Special Inspections or testing shall be performed by a registered deputy inspector or laboratory employed by the owner. Special Inspections Engineer shall be present at the Prep Phase and shall assist the QC manager to ensure all work will be inspected in accordance with this plan.


Per contract drawing has determined the following materials and work shall require special inspections be performed on the following section. Note: refer to section 1455 Quality Assurance for specifics.

1. Concrete
2. Architectural, Mechanical, and Electrical Components
3. Masonry
4. Soils Verification and Inspection
5. Structural Steel Special Inspection
6. Structural Steel Bolting Special Inspection

## 7. Steel Construction - Steel Deck, Open Web Steel Joists and Joist Girders, and Cold Formed Steel Trusses

### VI. MATERIAL AND EQUIPMENT TRACKING

Please note that 'material' and 'equipment' are used interchangeably to align with how our subcontractors and engineers are organized for tracking purposes

1. Receipt and Inspection
  - a. Check items for accuracy and condition.
  - b. Inspect materials for damage or discrepancies.
  - c. Approve suitable items for use or storage.
2. Storage and Identification 
  - a. Keep items in appropriate areas.
  - b. Clearly label and track inventory.
  - c. Follow safety guidelines for hazardous items.
3. Installation
  - a. Confirm items meet requirements.
  - b. Follow proper procedures for usage.
  - c. Record activities and approvals.
4. Testing and Verification
  - a. Perform required tests as per project requirements and applicable standards
  - b. Record and document via Test Report.
  - c. Address any issues or failures by conducting corrective actions.
  - d. Obtain final approval from the Quality Control (QC) manager or designee before commissioning.
5. Documentation and Records
  - a. Maintain records of inspection reports, storage logs, installation checklists, and test results.
  - b. Ensure documentation is available for audits and quality assurance purposes.
6. Compliance and Review
  - a. Conduct regular audits to ensure adherence to procedures.
  - b. Review and update the procedure periodically based on feedback and project needs.

Need to include material protection, ie UV, weather...

### VII. TESTING PLAN AND LOG

A key component of the CQC Plan includes the proper testing of manufactured and installed materials and systems, as required by the contract documents. The types of test may include operation and/or acceptance testing. A testing log will be developed and included in the CQC Plan. It will identify, as a minimum, The type of test required by specification section and item of work affected, who will be performing the test, the location (i.e. onsite or offsite), the date the test is performed, and any applicable remarks. Services will be only obtained from industry recognized laboratories that have the proper facilities and personnel for the required testing, or may establish a testing laboratory at the project site acceptable to the contracting officer. The types of tests required include, but are not limited to, laboratory testing, factory testing, and field testing.. If applicable, it must also include the names and qualifications of personnel who will be conducting field testing.

The QC Manager will ensure that all required testing is performed utilizing proper procedures that comply with the contract requirements. Test results will be obtained and verified for acceptance and compliance, and documented in or attached to the Daily QC Report or submitted under the Submittal Register. A sample testing log format is provided in Attachment 6.

## **VIII. DOCUMENTATION PROCEDURES**

Proper project control includes the complete documentation of work quality. This will be accomplished through proper reporting and logging information. Several report forms will accomplish this, and are described below, as well as a sample attached.

### **A. Test Report**

The applicable party (based on specification) will complete the Test Report form for each occurrence and to be submitted within one (1) week of testing. All test reports will be signed by the applicable party and will be attached to the CQC Daily Report. This report identifies following:

- a. Technical specification item number and description
- b. Test designation
- c. Location
- d. Date of test
- e. Control requirements
- f. Test results
- g. Causes for rejection (if applicable)
- h. Remedial action and retest results (if applicable)

### **C. CQC Daily Report**

The CQC Personnel will complete the Contractor Quality Control (CQC) Daily Report form for each day that work is performed on the project, see Attachment 4. This report shall be submitted on the workday following the day of record and be signed by CQCSM or designee.

This report will also contain the following for the corresponding day as an attachment to the CQC report,

- a. Daily Inspection Reports
- b. Test Reports
- c. Deficiency Reports

### **D. QC Meeting Minutes**

How often will QC meetings be held?

Minutes of all QC Meetings will be documented and distributed to the City no later than two (2) working days following the meeting. It will identify the date and time of the meeting, the attendees, and all topics of discussion.

**E. As-Built Drawings**

A set of project plans will be maintained at the project site and updated continuously to maintain an accurate record of construction. Two (2) copies of as-built drawings will be red-line marked for any existing conditions differing from the contract plans, modifications to the contract plans, or City approved deviations to the original contract drawings. At the completion of the project, the plans will be certified for completeness and one (1) copy submitted to the City for the record.

Recommend one hard copy and one electronic copy during the construction duration

**IX LIST OF DEFINABLE FEATURES OF WORK**

Note: Subject to change based on Baseline schedule

**DIVISION 2 - SITE CONSTRUCTION**

SOILS AND AGGREGATES FOR EARTHWORK

PRECAST CONCRETE VAULTS

SITE CLEARING

ROCK REMOVAL

DEWATERING

FOUNDATION PROBING AND GROUTING

EXCAVATION SUPPORT AND PROTECTION

SUBSURFACE UTILITY ENGINEERING

EARTHWORK

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

LOW DENSITY CELLULAR CONCRETE FILL

TRENCHING

RIPRAP

TEMPORARY BYPASS PUMPING

PRECAST ELECTRICAL HANDHOLES AND ELECTRICAL MANHOLES

CONCRETE MANHOLES

FILTER FABRIC

STABILIZATION FABRIC

HOT TAPPING AND LINE STOPPING

ASPHALTIC CONCRETE PAVING

PAVEMENT MARKINGS

CONCRETE CURBS, GUTTERS, AND SIDEWALKS

FENCES AND GATES

PAVEMENT RESTORATION AND REHABILITATION

**DIVISION 3 – CONCRETE**

ADHESIVE-BONDED REINFORCING BARS AND ALL THREAD RODS IN CONCRETE EPOXIES

EPOXY RESIN/PORTLAND CEMENT BONDING AGENT

CONCRETE FORMWORK

CONCRETE VOID FILL (GEOFOAM)



CONCRETE ACCESSORIES  
HYDROPHILIC RUBBER WATERSTOP  
CONCRETE REINFORCING  
CAST-IN-PLACE-CONCRETE  
TOOLED CONCRETE FINISHING  
BASIN BOTTOM GROUT  
GROUTING  
THERMAL CONTROL OF CONCRETE  
STRUCTURAL CONCRETE REPAIR  
EPOXY INJECTION SYSTEM  
HYDROPHILIC AND HYDROPHOBIC FOAM POLYURETHANE RESIN INJECTION  
SYSTEM

**DIVISION 4 – MASONRY**

ADHESIVE BONDING REINFORCING BARS AND ALL THREAD RODS IN MASONRY  
MASONRY ACCESSORIES  
MORTAR AND MASONRY GROUT  
CONCRETE UNIT MASONRY

**DIVISION 5 – METALS**

STRUCTURAL STEEL FRAMING  
STRUCTURAL ALUMINUM  
MECHANICAL ANCHORING AND FASTENING TO CONCRETE AND MASONRY  
STEEL DECKING  
METAL FABRICATIONS

**DIVISION 6 - WOOD AND PLASTICS**

WOOD TREATMENT  
FINISH CARPENTRY  
ARCHITECTURAL WOODWORK  
FIBERGLASS REINFORCED PLASTIC PANELS  
CLARIFIER LAUNDER COVERS  
FIBERGLASS REINFORCED PLASTIC  
FIBERGLASS REINFORCED PLASTIC FABRICATIONS  
FIBERGLASS REINFORCED PLASTIC HANDRAIL AND GUARDRAIL  
SOLID SURFACE COUNTERTOPS

**DIVISION 7 - THERMAL & MOISTURE PROTECTION**

DAMPPROOFING  
CEMENTITIOUS CRYSTALLINE CONCRETE WATERPROOFING  
WATER REPELLENTS  
BUILDING INSULATION  
WALL INSULATION SYSTEM

ROOF AND DECK INSULATION  
PREFORMED METAL ROOFING AND SIDING  
THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE ROOFING  
ROOF SPECIALTIES  
ROOF HATCHES  
FIRESTOPPING  
JOINT SEALANTS  
J-SEALS  
SEALANT

**DIVISION 8 - DOORS & WINDOWS**

WOOD DOORS  
PRE-ASSEMBLED PLASTIC DOOR ASSEMBLIES  
FLOOR ACCESS DOORS  
OVERHEAD COILING DOORS  
WATERTIGHT DOORS  
VINYL WINDOWS  
DOOR HARDWARE  
GLAZING  
TRANSLUCENT SKYLIGHT SYSTEM

**DIVISION 9 – FINISHES**

NON-LOAD BEARING WALL FRAMING  
ACOUSTICAL CEILING SUSPENSION ASSEMBLIES  
GYPSUM BOARD  
CERAMIC TILING  
ACOUSTICAL CEILING  
ACOUSTICAL PANEL CEILINGS  
ACOUSTICAL PANELS  
RESILIENT FLOORING  
RESILIENT BASE AND ACCESSORIES  
RESILIENT TILE FLOORING  
RESINOUS FLOORING  
PAINTING  
HIGH-PERFORMANCE COATINGS  
CONCRETE REPAIR AND COATING

**DIVISION 10 - SPECIALTIES**

VISUAL DISPLAY SURFACES  
SIGNAGE  
SAFETY EQUIPMENT  
FIRE PROTECTION SPECIALTIES  
TOILET ACCESSORIES

## **DIVISION 11 – EQUIPMEN**

HIGH-PRESSURE WASHERS  
LIQUID CHEMICAL PERISTALTIC TUBE METERING PUMPS  
POLYMER BLENDING AND FEED EQUIPMENT: LIQUID  
HEAVY-DUTY FABRICATED STAINLESS STEEL SLIDE GATES  
HORIZONTAL RECESS IMPELLER CENTRIFUGAL PUMPS  
VERTICAL TURBINE SHORT SETTING CENTRIFUGAL PUMPS  
HORIZONTAL SCREW CENTRIFUGAL PUMPS  
PROGRESSING CAVITY PUMPS  
SUBMERSIBLE PROCESS LIQUID SUMP PUMPS  
SUBMERSIBLE MEDIUM CAPACITY CENTRIFUGAL PUMPS HORIZONTAL ANSI  
CENTRIFUGAL PUMPS  
SINGLE-LOBE ROTARY PUMPS  
SUBMERSIBLE CHOPPER CENTRIFUGAL PUMPS  
PACKAGED SEWER LIFT STATION  
VORTEX GRIT BASIN EQUIPMENT  
GRIT WASHING AND DEWATERING EQUIPMENT  
CHAIN DRIVEN MULTI-RAKE BAR SCREENS  
SCREENINGS WASHER COMPACTOR  
INLINE GRINDER  
HELICAL SCUM SKIMMING EQUIPMENT  
CHLORINE FLASH MIXERS  
CHEMICAL MIXERS  
SLUDGE COLLECTOR FOR RECTANGULAR BASIN: CONVENTIONAL STYLE  
HYDRAULIC SUCTION HEADER CIRCULAR SECONDARY CLARIFIER EQUIPMENT  
THICKENERS  
CENTRIFUGE DEWATERING EQUIPMENT  
DIGESTER APPURTENANCES  
HEADWORKS ODOR CONTROL SYSTEM  
BLEND TANKS ODOR CONTROL SYSTEM  
SOLIDS ODOR CONTROL SYSTEM  
TUBE-IN-TUBE HEAT EXCHANGER  
WASTE GAS BURNER  
TEMPORARY FLARE  
DIGESTER GAS CONDITIONING SYSTEM  
SELF-CLEANING STRAINERS  
AUTOMATIC SAMPLERS

## **DIVISION 13 - SPECIAL CONSTRUCTION**

PRE-ENGINEERED STRUCTURES  
FIBERGLASS REINFORCED PLASTIC ABOVEGROUND STORAGE TANKS  
HYDROPNEUMATIC BLADDER TANK

WELDED STAINLESS STEEL ABOVEGROUND STORAGE TANKS  
ABOVEGROUND FUEL-STORAGE TANK AND APPURTENANCES – STEEL VAULTED TANK  
FUEL SYSTEM ACCESSORIES  
DIGESTER CLEANING  
FIXED STEEL DOME DIGESTER COVERS  
VALVE AND GATE ACTUATORS  
ELECTRIC ACTUATORS  
WET PIPE FIRE EXTINGUISHING SYSTEMS

**DIVISION 14 - CONVEYING SYSTEMS**

SHAFTLESS SCREW CONVEYOR SYSTEM  
SHAFTED SCREW CONVEYORS  
SLUDGE STORAGE BIN  
DAVIT CRANES  
MONORAIL SYSTEM  
TOP RUNNING DOUBLE GIRDER BRIDGE CRANES  
JIB CRANES  
WINCHES

**DIVISION 15 – MECHANICAL**

FUSION BONDED EPOXY LINING  
PIPE SUPPORTS  
PREFORMED CHANNEL PIPE SUPPORT SYSTEM  
NON-METALLIC PIPE SUPPORT SYSTEM  
PIPE IDENTIFICATION  
PIPING INSULATION  
DUCTWORK INSULATION  
COMMON WORK RESULTS FOR VALVES  
BALL VALVES  
BUTTERFLY VALVES  
CHECK VALVES  
GATE, GLOBE, AND ANGLE VALVES  
PLUG VALVES  
SPECIALTY VALVES  
PRESSURE CONTROL VALVES  
AIR AND VACUUM RELIEF VALVES  
PIPING SPECIALTIES  
PIPE COUPLINGS  
FIRE HYDRANTS  
STRAINERS  
DUCTILE IRON PIPE: AWWA C151  
PLASTIC PIPING AND TUBING

POLYETHYLENE (PE) PIPE: ASTM D2513  
HIGH DENSITY POLYETHYLENE (HDPE) PIPE: AWWA C906  
CAST IRON SOIL PIPE: ASTM A74  
STEEL PIPE: GALVANIZED AND BLACK, ASTM A53  
STEEL PIPE  
COPPER WATER TUBE: SEAMLESS, ASTM B88  
STAINLESS STEEL PIPE AND TUBING  
DOUBLE CONTAINMENT PIPING  
PLUMBING SYSTEMS  
EMERGENCY EYE/FACE WASH AND SHOWER EQUIPMENT  
COMMON WORK RESULTS FOR HVAC

HOT WATER SYSTEM COMPONENTS  
HOT WATER BOILER  
AIR CONDITIONING UNITS  
HEAT PUMPS  
METAL DUCTS  
FIBERGLASS REINFORCED PLASTIC DUCTS  
FANS  
ODOR CONTROL FANS  
GRAVITY VENTILATORS  
LOUVERS  
INSTRUMENTATION AND CONTROL DEVICES FOR HVAC  
TESTING, ADJUSTING, AND BALANCING FOR HVAC  
PIPING SYSTEMS TESTING  
MECHANICAL EQUIPMENT TESTING

**DIVISION 16 - ELECTRICAL**

GROUNDING AND BONDING  
HANGERS AND SUPPORTS  
IDENTIFICATION FOR ELECTRICAL SYSTEMS  
600-VOLT OR LESS WIRES AND CABLES  
MEDIUM VOLTAGE CABLES  
FIBER OPTIC CABLE AND APPURTENANCES  
CONDUITS  
DUCT BANKS  
BOXES  
WIRING DEVICES  
LOW VOLTAGE WIRE CONNECTIONS  
MEDIUM VOLTAGE CABLE CONNECTIONS  
UTILITY COORDINATION  
LOW VOLTAGE MOTORS UP TO 500 HORSEPOWER  
SINGLE DIESEL FUELED ENGINE GENERATOR ABOVE 200 KW

GENERATOR CONNECTION CABINET  
GENERATOR CONTROL SYSTEM FOR PARALLEL OPERATION  
VARIABLE FREQUENCY DRIVES 0.50 - 50 HORSEPOWER  
REDUCED HARMONIC VARIABLE FREQUENCY DRIVES  
DRY-TYPE TRANSFORMERS  
LIQUID FILLED PAD MOUNTED TRANSFORMERS  
HARMONIC FILTER  
SURGE PROTECTIVE DEVICES  
ELECTRICAL POWER MONITORING  
ELECTRICAL SYSTEM STUDIES  
MEDIUM VOLTAGE FUSES  
15-KILOVOLT PAD-MOUNTED SWITCHGEAR  
DISCONNECT SWITCHES  
LOW VOLTAGE MOLDED CASE CIRCUIT BREAKERS  
LOW VOLTAGE INSULATED CASE CIRCUIT BREAKERS  
MOTOR STARTERS  
SERVICE ENTRANCE AUTOMATIC TRANSFER EQUIPMENT  
GROUP-MOUNTED CIRCUIT BREAKER SWITCHBOARDS  
INDIVIDUALLY-MOUNTED CIRCUIT BREAKER SWITCHBOARDS  
LOW VOLTAGE MOTOR CONTROL CENTERS  
PANELBOARDS  
PACKAGED POWER SUPPLY CENTER  
TRANSFER SWITCHES  
LIGHTING: LED LUMINAIRES  
LIGHTNING PROTECTION  
FIRE ALARM AND SMOKE DETECTION SYSTEM  
FIELD ELECTRICAL ACCEPTANCE TESTS  
CONDUIT

**DIVISION 17 – ELECTRICAL INSTRUMENTATION AND CONTROLS**

COMMON WORK RESULTS FOR PROCESS CONTROL AND INSTRUMENTATION  
SYSTEMS  
CONTROL STRATEGIES  
SPECIFIC CONTROL STRATEGIES - SEPTAGE RECEIVING  
    SCREENING AND SCREENINGS HANDLING  
    GRIT REMOVAL AND HANDLING  
    INFLUENT SAMPLING  
    HEADWORKS ODOR CONTROL  
    HEADWORKS DRAINAGE  
    PRIMARY SEDIMENTATION TANKS  
    VENTILATION SYSTEM  
    SECONDARY CLARIFIERS  
    BLEND TANKS

BLEND TANKS ODOR CONTROL  
SOLIDS ODOR CONTROL  
DIGESTION  
DIGESTER GAS HANDLING  
DIGESTED SLUDGE TRANSFER  
THICKENING  
DEWATERING  
CAKE LOADING  
DISINFECTION  
UTILITY WATER  
RETURN FLOW PUMP STATION  
WASTE SECONDARY SLUDGE (WSS) PUMP  
GENERATOR  
LEVEL MEASUREMENT  
SWITCHES  
LEVEL MEASUREMENT: ULTRASONIC  
LEVEL MEASUREMENT: RADAR PULSE TIME OF FLIGHT (PTOF)  
FLOW MEASUREMENT: SWITCHES  
FLOW MEASUREMENT: MAGNETIC FLOWMETERS  
FLOW MEASUREMENT: THERMAL MASS  
ULTRASONIC TRANSIT TIME - NON-INTRUSIVE  
ROTAMETERS (VARIABLE AREA FLOWMETERS)  
PRESSURE/VACUUM MEASUREMENT  
DIAPHRAGM AND ANNULAR SEALS  
INSTRUMENT VALVES  
SWITCHES  
GAUGES  
DIRECT  
SUBMERSIBLE  
MANOMETERS  
ANALYZERS  
GAS MONITORS  
RESIDUAL CHLORINE  
TOTAL SUSPENDED SOLIDS (TSS)  
SLUDGE BLANKET  
TEMPERATURE MEASUREMENT: RTD  
WEIGHT MEASUREMENT: PLATFORM SCALE AND LOAD CELLS  
CONTROL SYSTEMS  
PANELS, ENCLOSURES, AND PANEL COMPONENTS  
UNINTERRUPTIBLE POWER SUPPLIES 10 KVA AND BELOW  
COMPUTER CONSOLES  
PROGRAMMABLE LOGIC CONTROLLERS  
LOCAL OPERATOR INTERFACE (LOI)

PCS COMPUTER EQUIPMENT  
NETWORK MATERIALS AND EQUIPMENT  
PCS SOFTWARE  
PROGRAMMING REQUIREMENTS  
SCHEDULES:  
I/O LIST  
COMMISSIONING FOR INSTRUMENTATION AND CONTROLS

## **X. Procedure for Halting Work for Deficiencies and Non-conforming Work**

### **A. Identification of Issue**

1. Detection by QC personnel or workers of a deviation from project contract documents.
  - a. Deficiencies and non-conforming Work are defined as documentation, drawings, material, equipment, or work not conforming to the indicated requirements or procedures.
  - b. For processes that require special process or procedures—such as hydrostatic leak testing, welding, concrete repair, hot weather concrete plan, concrete pour sequencing, and epoxy injection protection—QC personnel will identify nonconforming work by evaluating manufacturer instructions and submittal documents. The subsequent steps in the procedure will follow the standard process.
2. Assessment of whether the deviation would or had adverse conditions to quality shall warrant an immediate halt.

### **B. Initiation of Halt**

1. Immediate pause in work
2. Notification to the QC manager and Project manager.

### **C. Documentation**

1. Issuance of a stop-work notice specifying the deficiency with project specifications.
2. Fill in Deficiency Report see Attachment 5

Issued by whom?

### **D. Assessment and Correction**

1. Review by QC team to confirm the deviation from specifications.
2. QC manager will consult with designer, owner, and superintendent to achieve resolutions of outstanding deficiencies, and is responsible to implement the execution of corrective actions.

### **E. Approval to Proceed**

1. Submit deviation and corrective actions to the Project Manager
2. Proceed after approval
3. QC Engineer to create two copies of the Deficiency report, one attached to CQC Report and one stored in the Deficiency Binder.
4. Log Deficiency report into excel file for tracking and electronic documentation.

## **XI. Procedure for Rejecting Work**

### **1. Inspection and Evaluation**

- a. QC inspection to assess work against project specifications.
- b. Identification of any failure to meet specified requirements.



- c. Fill-in a Deficiency Report outlining the specific deviation from project specifications.
- d. Notification to the responsible party (e.g., contractor) of the rejection.
- e. Determination by QC manager of necessary corrections to meet specifications.
- f. Instruction to the responsible party to address the issue
- g. Correction of work by the responsible party to conform to project specifications.
- h. Reinspection by QC team to confirm compliance
- i. Confirmation that the corrected work adheres to project specifications.
- j. Update of QC documentation and approval for acceptance.

## **XII. Contractual Hold/Inspection Points**

These are inspection or verification points specified in the contract between the client and the contractor. They ensure that critical activities or deliverables meet regulatory, safety, and quality standards before proceeding.

Examples but not limited to:

- a. Regulatory Compliance Inspections: Government-mandated checks (e.g., safety, environmental, and structural integrity).
- b. Client Approval Milestones: Points where the Engineer must review and approve work (e.g., design approval, material selection, and final acceptance tests).
- c. Quality Control Checks: Inspections to verify compliance with industry standards (e.g., weld inspections, pressure testing, and material certification).
- d. Third-Party Inspections: Independent verification for critical components.
- e. Training sessions required per specifications for Owner on new equipment.

## **XIII. Procedures for Completion Inspection**

The commissioning activities will be conducted prior to the generation of the final punch list to verify that all systems and components function in accordance with the contract documents. The QC representative will be responsible for coordinating with the Testing and Start-up Coordinator. QC representative will follow the same inspection protocol as noted in Section V for Commissioning (A. Preparatory Phase, B. Initial Phase, C. Follow-up Phase). Any deficiencies or conflicts identified during commissioning shall be addressed and resolved prior to or in parallel with punch list development. All trainings from the manufacturer as part of the commissioning process will be documented with a formal certificate signed by the CQC manager. For all outstanding commissioning-related issues other than training, if any, may be incorporated into the punch list to ensure full resolution prior to final acceptance. Note that all test in commissioning will be tracked on the test log and reported on the test report. All requirements will be fulfilled and given to owner. Specific inspections will be held, at the completion of the project or major phases of work, by the CQCSM/QCR, who will conduct an inspection to develop a "punchlist" of items that do not conform to the contract requirements.

### **A. Punch-Out Inspection**

1. Conduct sufficiently prior to the contract completion date, allowing for possible work correction

2. Inspect and document all work that does not conform to the contract requirements
  3. Include items noted on the Rework List that have not been corrected prior to the Punch-Out Inspection
  4. Notify appropriate personnel, including subcontractors, responsible for corrective action
  5. Conduct follow-up inspections to verify that all “punchlist” items are corrected in a timely manner
  6. Upon correction of “punchlist” items, schedule Pre-Final Inspection with the government
- B. Pre-Final Inspection
1. Shadow government representative during Pre-Final Inspection and obtain copy of “Pre-Final Punchlist”
  2. Ensure items on “Pre-Final Punchlist” are corrected in a timely manner and prior to the project completion date
  3. Inform government when all “Pre-Final Punchlist” items are corrected and project ready for Final Inspection
- C. Final Inspection
1. Ensure appropriate Contractor personnel are present at Final Inspection, including CQC Organization, Project Superintendent, and Subcontractor Representatives
  2. Obtain “Final Punchlist” from government
  3. Ensure all items on “Final Punchlist” are corrected in a timely manner

#### **XIV. Procedures for Conflict Resolution Between CQC Manager and Production Personnel**

Once a conflict is identified, the CQC Manager will document it in the CQC report. The CQC Manager will then initiate a discussion with the Production personnel to address the issue. If a resolution is reached, the details of the resolution will also be recorded in the CQC report, and work will proceed accordingly. If no resolution is achieved, the CQC Manager will initiate a work stoppage and follow the steps outlined in Step X: *Procedure for Halting Work*.

## **ATTACHMENT**

### **CQC Manager and Engineer Qualifications**

## **Contractor's Quality Control Manager Qualification**

### **1. Scope and Objective**

Stan Kubo possesses over 10 years of experience working on projects of similar type and size, specifically in quality control and assurance for large-scale infrastructure, transportation, and military construction projects. His expertise spans quality assurance, field supervision, and inspection roles, ensuring compliance with federal, state, and military construction standards. His work history includes managing and overseeing projects for the US Army Corps of Engineers, Federal Highways Administration, and County of Hawaii, demonstrating his ability to maintain high standards of construction quality and regulatory compliance.

### **2. Work Experience**

#### **Quality Assurance – Concrete, Aggregate, Asphalt & Paving**

Yamada Enterprise – Hilo, HI  
1980 – 1986

- Ensured quality control for concrete, aggregate, asphalt, and paving operations.
- Conducted inspections and testing to meet industry and regulatory standards.
- Collaborated with project teams to maintain quality compliance.

#### **Field Supervisor – Concrete**

Ameron Hawaii – Honolulu, HI  
1986 – 1989

- Supervised concrete field operations, ensuring project specifications were met.
- Managed field teams and coordinated with contractors and clients.
- Oversaw quality and safety compliance.

#### **Quality Control Manager**

M Sonomura Contracting Company Inc. – Hilo, HI  
1989 – 2000

- Managed quality control for numerous US Army Corps of Engineers, Federal, State, and County of Hawaii projects.
- Key projects:
- Hilo Wastewater Facilities Secondary Facilities, Solids Handling, and Administration Building (1993-1996).
- Construction of Multipurpose range Complex Pohakuloa Training Area, HI
- Wailoa Bridge replacement Project (HDOT)
- Pahoa Bypass Road (HDOT)
- Villiage of Laiopua Phase II Queen of Lili'uokalani Trust

- Mauna Kea Access Road - Summit
- Ensured adherence to stringent regulatory and technical standards.

**Quality Control Manager**

PER HI – Hilo, HI  
2000 – 2001

- Oversaw QC for the construction of Pohakuloa Training Area Barracks and Recreation Facility.
- Ensured compliance with plan and specs.
- Managed contractor performance and material quality inspections.

**Senior Inspector – Hawaii State Department of Transportation Aid Bridge Projects**

Mitsunaga & Associates – Hamakua Coast, HI  
2002 – 2010

- Led inspections for bridge projects seismic retrofit for various bridges along the Hamakua Coast.
- Ensured structural integrity and compliance with federal plan and specs.
- Provided technical oversight and reporting for infrastructure projects.

**QC Supervisor – Federal Highways Project**

Isemoto Construction – Hilo, HI  
2011 – 2017

- Supervised quality control for shoulder improvements, Volcano National Park.
- Managed compliance with plan and specs.
- Coordinated with engineers, contractors, and government agencies.

**Quality Control Manager**

Nan Inc. – Hilo, HI  
Present

- Overseeing quality control operations for Hilo Waste Water Treatment Facility
- Ensuring adherence to plan and specs.
- Coordinating with project teams and regulatory bodies.

## Contractor's Quality Control Engineer Qualification

### 1. Scope and Objective

Matt and Makoa are experienced engineers currently training under the direct supervision of Stan Kubo to transition into Quality Control roles. With a solid foundation in engineering principles, systems, and problem-solving, they are now focused on acquiring hands-on knowledge of quality standards, inspection processes, and documentation practices. Their training includes learning how to identify and report non-conformities, perform root cause analysis, support corrective actions, and ensure product compliance. They bring a practical mindset, technical rigor, and a strong commitment to quality-driven outcomes.

### 1. Work Experience - Matthew Chun

#### **Nan Inc. – Quality Control Engineer**

Hilo, HI

2025 – Present

- Assist and report to the QC manager and may perform production related duties
- Attend the Coordination Meeting and QC meetings and be physically present at the construction site to perform inspections or testing and prepare documentation for each definable feature of work in their area of responsibility.

#### **MK Engineers – Electrical Engineer**

PHNSY&IMF

2023 – 2024

- Extensive knowledge of the **National Electric Code (NEC)**, ensuring compliance in all aspects of electrical system design and installation.
- Applied NEC standards to the design of lighting, electrical distribution systems, and controls for commercial, industrial, and municipal projects.
- Conducted code reviews and inspections to guarantee adherence to safety, performance, and regulatory requirements.

**Shift Test Engineer – Nuclear Maintenance and Testing**  
PHNSY&IMF  
2019 – 2023

- Performed quality control inspections on Naval Nuclear Submarine components to ensure adherence to Navy specifications and safety standards.
- Executed detailed testing procedures and documented results to verify compliance with strict military quality requirements.
- Worked closely with engineering and production teams to identify non-conformities, support corrective actions, and maintain quality assurance throughout project phases.

**2. Work Experience – Makoa Ng**

**Quality Control Engineer – Hilo Wastewater Treatment Plant**  
Nan Inc. - Hilo, Hawaii  
2025 – Present

- Assist and report to the QC manager and may perform production related duties
- Attend the Coordination Meeting and QC meetings and be physically present at the construction site to perform inspections or testing and prepare documentation for each definable feature of work in their area of responsibility.

**Engineering & Technical Operations**  
Malama One - Hilo, Hawaii  
2023 - 2025

- Developing 3D models to serve as investors' first sight and a mechanical maintenance guide for future operations.
- Developing relationships with partners and investors such as Hawaii Pacific University and Hawaii Army National Guard; improving the conceptual image of our company, facility, and goals.
- Managed the handling and storage of equipment by working with engineers, VPs, and co-founders to efficiently prioritize future installation maneuvers.

**Pallet Production & Refabrication Manager**

Waiakea Hawaiian Volcanic - Hilo, Hawaii

2023 - 2025

- Created a cost-effective pallet Production & Refabrication facility which included; ROIs, Safety Training, R&D, Budget Planning, and SOP development.
- Managed day-to-day operations which includes; Inventory management, Property Management, Production Scheduling, Maintenance Scheduling, Quality Control, Safety Compliance, and Vendor/Partner relations.
- Process improvement; Increased our production rate for finished products by up to 250% while only increasing our overall cost by 75%.

**Service Ng LLC.**

3D Model Design - Hilo, Hawaii

2021 - Present

- Develop models for such as Buildings, Rooms, Furniture, and Accessories.
- Develop models that can be Rigged, Rendered, Automated, Colored, and Textured to photo-realistic standards.
- Optimize models and files for the best user experience across multiple devices and platforms.
- Continuous software research to shorten lead times while maintaining high-quality projects.

**UH-60 Blackhawk Repairman (15T)**

Army National Guard - State of Hawaii

2021 - Present

- Experience in Maui Fire and other Emergency Relief Orders for maintenance support.
- High level of experience with technical manuals (IETMS) and Log Books (ULLS\_A) of MIL aircrafts.
- Technical experience with Hydraulic, Pneumatic, Fuel, Drive, Engines, Rotor, and Flight Control Systems.
- Training Technicians on Outer Island Travel, Annual Certifications, and Advanced Troubleshooting Techniques.



## ATTACHMENT 2

### TEST REPORT

Field	Details
Project Name:	HILO WASTEWATER TREATMENT PLANT (WWTP) REHABILITATION AND REPLACEMENT PROJECT PHASE 1
Date of Test:	
Location:	
Technical Specification Item Number:	
Description:	
Test Designation:	
Control Requirements:	
Test Outcome:	
Causes for Rejection (if applicable):	
Remedial Action (if applicable):	
Retest Results (if applicable):	
Test Report Completed by (CQCSM/Manufacturer):	
Signature:	
Notice:	This document is a formal record of quality control testing and must be handled with confidentiality. Please ensure it is completed accurately and submitted within one (1) week of testing. Attach this report to the QC Daily Report.

**ATTACHMENT 3**  
**Daily Inspection Report**

**DAILY INSPECTION REPORT**

Submittal No.	Description and Location [FILL-IN]	Quality Characteristics
		<input type="checkbox"/> In compliance <input type="checkbox"/> Not in compliance <input type="checkbox"/> Discrepancy
		<input type="checkbox"/> In compliance <input type="checkbox"/> Not in compliance <input type="checkbox"/> Discrepancy
		<input type="checkbox"/> In compliance <input type="checkbox"/> Not in compliance <input type="checkbox"/> Discrepancy
		<input type="checkbox"/> In compliance <input type="checkbox"/> Not in compliance <input type="checkbox"/> Discrepancy
		<input type="checkbox"/> In compliance <input type="checkbox"/> Not in compliance <input type="checkbox"/> Discrepancy
		<input type="checkbox"/> In compliance <input type="checkbox"/> Not in compliance <input type="checkbox"/> Discrepancy
		<input type="checkbox"/> In compliance <input type="checkbox"/> Not in compliance <input type="checkbox"/> Discrepancy
		<input type="checkbox"/> In compliance <input type="checkbox"/> Not in compliance <input type="checkbox"/> Discrepancy

Note 1: For any work that is not in compliance or discrepancy, note it below. Clearly identify each item by assigning its corresponding item number to the appropriate corrective or remedial action.

Note 2: Information provided in the daily report shall not be considered a notice of delay or any other formal notice required by the Contract Documents.

## Corrective Action/Remedial action

I, in my capacity as the quality control technician hereby certify that the attached **Daily Inspection Report** has been completed in accordance with established protocols and standard operating procedures.

The inspection was conducted on site, and all findings documented in the report accurately reflect the conditions observed during the inspection. The information provided is true and correct to the best of my knowledge and belief.

This certification is made in compliance with the contract documents governing the inspection process.

Signature: \_\_\_\_\_

(Full Name)

Date: \_\_\_\_\_

## **ATTACHMENT 4**

### **CQC Daily Report**

<b>CONTRACTOR'S QUALITY CONTROL REPORT (CQCR)</b>	Report Number: Page <u>1</u> of <u>2</u>
	Date:
Project Name: HILO WWTP REHABILITATION AND REPLACEMENT PROJECT PHASE 1	Project Number: WW-40705R
	Weather:
List of definable features:	
Activity:	
Activity:	
Activities in process:	
Response:	
Safety Inspection/Safety Meetings (See attachments if provided):	



<b>CONTRACTOR'S QUALITY CONTROL REPORT (CQCR)</b>		Report Number: Page <u>2</u> of <u>2</u>
		Date:
Project Name: HILO WWTP REHABILITATION AND REPLACEMENT PROJECT PHASE 1		Project Number: WW-40705R
Accident Reporting (Describe Accident):		
Additional Comments:		
Contractor Certification	On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract, plans and specifications, to the best of my knowledge, except as noted above.  Name: _____  Sign: _____	

## ATTACHMENT 5

### Deficiency Report

Deficiency Report			
Hilo WWTP Rehabilitation and Replacement Proj. PH1			WW-4705R
Structural <input type="checkbox"/>	Mechanical <input type="checkbox"/>	Electrical <input type="checkbox"/>	Civil <input type="checkbox"/>
Date:	Location:	Spec. Section:	Spec. Paragraph:
Note Deficiency:			
Reported By (Quality Control Representative):			Date:
Disposition:			
Dispositioned By:			Date:
Re-Inspected By (Quality Control Representative):			Date:

Deficiency Report			
Hilo WWTP Rehabilitation and Replacement Proj. PH1			WW-4705R
Structural <input type="checkbox"/>	Mechanical <input type="checkbox"/>	Electrical <input type="checkbox"/>	Civil <input type="checkbox"/>
Date:	Location:	Spec. Section:	Spec. Paragraph:
Accepted By (Quality Control Personel):			Date:

## ATTACHMENT 6

### Testing Log

[illegible]

Page Break to Separate Spec Sheet

## SECTION 01460

### CONTRACTOR QUALITY CONTROL PLAN

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes:
  - 1. Contractor Quality Control Plan.

##### 1.02 SUBMITTALS

- ✓ A. Qualifications of the Contractor's Quality Control (CQC) Plan Manager.
- ✓ B. Contractor's Quality Control Plan:
  - 1. Submit to Engineer no later than 60 days after Notice to Proceed.
- ✓ C. Contractor's Daily Quality Control Report:
  - 1. Submit to Engineer within 1 day of completion of each inspection using the approved form.
- ✓ D. Daily Inspection Report:
  - 1. Submit to Engineer at the end of each working day or no later than prior to the beginning of the next working day using the approved form.

##### 1.03 CONTRACTOR'S INSPECTION OF THE WORK

- ✓ A. Work performed by Contractor shall be inspected by the Contractor's CQC Plan Manager. Non-conforming Work and any safety hazards in the Work area shall be noted and promptly corrected.
- ✓ B. No materials or equipment shall be used in Work without inspection and acceptance by Contractor's CQC Plan Manager.

##### 1.04 QUALIFICATIONS

- ✓ A. Contractor's CQC Plan Manager: Demonstrate having performed similar CQC functions on similar type projects. Submit records of personnel experience, training, and qualifying registrations.
- ✓ B. Minimum qualifications: Candidate must have a minimum of 10 years of experience on projects of similar type and size.

##### 1.05 COVERING WORK

- ✓ A. Whenever Contractor intends to backfill, bury, cast in concrete, or otherwise cover any work, notify Engineer not less than 24 hours in advance to request inspection before beginning any such Work of covering.



- ✓ B. Whenever Contractor intends to backfill, bury, cast in concrete, or otherwise cover any work requiring regulatory inspections, notify the regulatory agency and Engineer in accordance with the regulatory agency's notification procedures but not less than 24 hours in advance, to request inspection before beginning any such work of covering.

## 1.06 CONTRACTOR'S QUALITY CONTROL PROGRAM

- ✓ A. General: Establish and execute a Quality Control (CQC) Plan for Work. The plan shall establish adequate measures for verification and conformance to defined requirements by Contractor personnel and lower-tier Subcontractors (including Fabricators, Suppliers, and Subcontractors). This program shall be described in a Plan responsive to this Section.
- ✓ B. CQC personnel:
  - ✓ 1. Contractor's CQC Plan Manager shall report to a Senior Project Manager of the Contractor and shall have no supervisory or managerial responsibility over the workforce.
  - ✓ 2. The Contractor CQC Plan Manager shall be on-site as often as necessary, but not less than the daily working hours specified in the Contract Documents to remedy and demonstrate that Work is being performed properly and to make multiple observations of Work in progress.
  - ✓ 3. The Contractor is to furnish personnel with assigned CQC functions reporting to the CQC Manager. Persons performing CQC functions shall have sufficient qualifications, authority, and organizational freedom to identify quality problems and to initiate and recommend solutions.
  - ✓ 4. The Owner shall have the right to require the removal and replacement of the CQC Plan Manager if he/she demonstrates disrespect, lack of cooperation, or unprofessional actions during the Contract period.
- ✓ C. CQC Plan:
  - ✓ 1. Contractor's CQC Plan shall include a statement by the Senior Project Manager designating the CQC Plan Manager and specifying the authority delegated to the CQC Plan Manager to direct cessation or removal and replacement of defective Work.
  - ✓ 2. Describe the CQC program and include procedures, work instructions, and records. Describe methods relating to areas that require special testing and procedures as required by the specifications.
  - ✓ 3. Include specific instructions defining procedures for observing Work in process and comparing this Work with the Contract requirements (organized by specifications section).
  - ✓ 4. Describe procedures to ensure that equipment or materials that have been accepted at the Site are properly stored, identified, installed and tested.
  - ✓ 5. Include procedures to verify that procured products and services conform to the requirements of the Specifications. Requirements of these procedures shall be applied, as appropriate, to lower-tier Suppliers and/or Subcontractors.
  - ✓ 6. Commissioning quality control: Include procedures to verify that the commissioning requirements of the Contract Documents are integrated into the Contractor's CQC Plan and conform to the requirements of the Specifications. Requirements of these procedures shall be applied, as

- appropriate, to the Contractor and the lower-tier Suppliers and/or Subcontractors.
- ✓ 7. Include instructions for recording inspections and requirements for demonstrating through the Daily Inspection Reports that Work inspected was in compliance or a deficiency was noted and action to be taken.
  - ✓ 8. Procedures to preclude the covering of deficient or rejected Work.
  - ✓ 9. Procedures for halting or rejecting Work.
  - ✓ 10. Procedures for resolution of differences between the CQC Plan Manager and the production personnel.
  - ✓ 11. Identify contractual hold/inspection points as well as any Contractor-imposed hold/inspection points.
- ✓ D. Daily Inspection Report: Include, at a minimum:
- ✓ 1. Inspection of specific work.
  - ✓ 2. Quality characteristics in compliance.
  - ✓ 3. Quality characteristics not in compliance.
  - ✓ 4. Corrective/remedial actions taken.
  - ✓ 5. Statement of certification.
  - ✓ 6. CQC Manager's signature, electronic signature is acceptable.
  - ✓ 7. Information provided on the daily report shall not constitute notice of delay or any other notice required by the Contract Documents.
- ✓ E. Deficient and Non-conforming Work and Corrective Action: Include procedures for handling deficiencies and non-conforming Work. Deficiencies and non-conforming Work are defined as documentation, drawings, material, equipment, or Work not conforming to the indicated requirements or procedures. The procedure shall prevent non-conformances by identification, documentation, evaluation, separation, disposition, and corrective action to prevent reoccurrence. Conditions having adverse effects on quality shall be promptly identified and reported to the senior level management. The cause of conditions adverse to quality shall be determined and documents and measures implemented to prevent recurrence. In addition, at a minimum, this procedure shall address:
- ✓ 1. Personnel responsible for identifying deficient and non-complying items within Work.
  - ✓ 2. How and by whom deficient and non-compliant items are documented "in the field."
  - ✓ 3. The personnel and process utilized for logging deficient and non-compliant Work at the end of each day onto a deficiency log.
  - ✓ 4. Tracking processes and tracking documentation for deficient and non-conforming Work.
  - ✓ 5. Personnel responsible for achieving resolution of outstanding deficiencies.
  - ✓ 6. Include detailed procedures for the performance and control of special process (e.g., welding, soldering, heat treating, cleaning, plating, nondestructive examination, etc.).
- ✓ F. Audits: The CQC program shall provide for regularly scheduled documented audits to verify that CQC procedures are being fully implemented by Contractor and its Subcontractors. Audit records shall be made available to Engineer upon request.

- ✓ G. Documented control/quality records:
- ✓ 1. Establish methods for control of Contract Documents that describe how Drawings and Specifications are received and distributed to ensure the correct issue of the document being used. Describe how record document/drawing data are documented and furnished to Engineer.
  - ✓ 2. Maintain evidence of activities affecting quality. Including operating logs, records of inspection, audit reports, personnel qualification and certification records, procedures, and document review records.
  - ✓ 3. Maintain quality records in a manner that provides for timely retrieval and traceability. Protect quality records from deterioration, damage and destruction.
  - ✓ 4. Develop a list of specific records as required by the Contract Documents that will be furnished to Engineer at the completion of activities.
- H. Acceptance of CQC Plan: Engineer's acceptance of the CQC Plan shall not relieve Contractor from any of its obligations for performance of Work. Contractor's CQC staffing is subject to Engineer's review and continued acceptance. Owner, at its sole discretion, and without cause, may direct Contractor to remove and replace the CQC Plan Manager.
1. Acceptance of the CQC Plan by the Engineer is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction.
  2. After acceptance of the CQC Plan, notify the Engineer in writing of any proposed change. Proposed changes are subject to acceptance by the Engineer.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION (NOT USED)**

END OF SECTION

**Nan, Inc.**

**Project NO WW-4705R**

**HILO WWTP REHABILITATION AND REPLACEMENT PROJECT PHASE 1**