

BSBPMG513 MANAGE PROJECT QUALITY

PRACTICAL ASSESSMENT INSTRUCTIONS

- The following practical assessment will require the participant to complete work related activities.
- The assessor will conduct observations of the participant's work to determine whether they display sufficient practical skills and knowledge.
- Please fill in the details below, providing your name, signature and date of assessment.
 - Your signature acknowledges that the assessor provided clear instructions and the participant understood what was required to complete this assessment.
- The assessor may substitute a Practical Task with another task of equal value.
 - Alternate tasks must be fully documented by the assessor.

Participant name Christine Marcek

Participant signature 

Assessor name _____

Assessor signature 

Date 10/08/2020

Number of tasks	Number of tasks completed	Satisfactory?	
		Yes	No
1		☐	☐

ASSESSOR COMMENTS

BSBPMG513 MANAGE PROJECT QUALITY

Practical Task 1	
Description of task: A suitable observer is to verify the participant's ability to manage quality within projects, including: - Determining quality requirements - Implementing quality control and assurance processes - Using review and evaluation to make quality improvements in current and future projects These tasks may be simulated or real. The participant is to gather evidence of how they have completed each component of the Practical Task, which is to be submitted with this Practical Assessment sheet. The observer is to provide detailed comments on the tasks completed by the participant. The assessor is to verify the observer's comments in the Assessor Comments section, and provide the Practical Assessment outcome on the front cover of this document.	
Resources required: Project documentation (including quality criteria, evidence of quality monitoring and improvement practices), Computer and appropriate software.	
Assessment of task	
Name of participant:	Christine Marcek
Name of observer:	Peter Johnston
Role of observer (Confirm suitability to sign)	National Quality Manager, SWC
Email address of observer	peter.johnston@seymourwhyte.com.au
Signature of observer:	
Date:	10/08/2020
When completing the task, did the participant:	Tick if satisfactorily completed. Provide comments if left unticked.
1 Determine quality requirements	
1.1A. Seek input from stakeholders to determine quality objectives and standards.	☒
1.1B. In a quality management plan, document: - Quality metrics for the project and product output - Agreed quality requirements	☒
1.1C. Select established quality management methods, techniques and tools to resolve quality issues.	☒
1.1D. Distribute, discuss and support quality requirements with project team and stakeholders.	☒
1.1E. Implement agreed quality requirements as the basis for performance measurement.	☒
2 Implement quality processes	
1.2A. Undertake a quality assurance audit of project processes for compliance with agreed plans.	☒

1.2B.	Assess quality control of project and product output according to agreed quality specifications.	☒
1.2C.	Identify causes of variance to quality metrics and undertake remedial action.	☒
1.2D.	Maintain a quality management system to enable accurate and timely recording of quality audit data.	☒
3 Implement project quality improvements		
1.3A.	Review processes and implement agreed changes continually throughout the project life cycle to ensure continuous quality improvement.	☒
1.3B.	Review project outcomes against performance requirements to determine the effectiveness of quality-management processes and procedures.	☒
1.3C.	Identify and document lessons learned and recommended improvements.	☒
The participant's performance was: ☒ Satisfactory ☐ Not Satisfactory		

OBSERVER COMMENTS

Christine and I discussed the tasks outlined covering management of project quality. Christine's responses are detailed below and demonstrate an appropriate understanding of quality management. For the purposes of this assessment, Christine referenced a Quality Management Plan for a completed project and identified relevant sections within the plan and the company management system to support and provide evidence of her understanding. Key sections of the plan and company management system that have been referenced in her responses are attached to this submission.

1 Determine quality requirements

1.1A. Seek input from stakeholders to determine quality objectives and standards.

In this scenario, Project Quality objectives are primarily driven by the Client requirements which were set out in the contract, as well as the requirements of the SWC Quality System which is certified to AS/NZS ISO 9001:2016. Client engagement right from EOI / Tender stage is important as developing rapport with the Client / Client Representative/s greatly assists during project delivery and assists in getting mutually beneficial outcomes and dealing with issue resolution.

1.1B. In a quality management plan, document:

- Quality metrics for the project and product output
- Agreed quality requirements

Quality metrics and requirements for product and service provision is broadly covered by business procedure SWC-QP-140 Project Process Controls, which aims to provide a system for ensuring adequate controls exist during the construction phase of a project. The Project Quality Plan (PQP) outlines the general quality objective within section 3.1.2 (refer Att#1). The PQP provides further detail within section 5.5 Product and Service Provision (refer Att#2), within the project specific Inspection and Test Plans (refer Att#3)(note ITP's are written for each work type and are flexible to be amended to meet Client specifications) and also via the Measurable Quality Objectives (refer Att#4).

1.1C. Select established quality management methods, techniques and tools to resolve quality issues.

A key requirement in managing quality issues is early identification of issues e.g. identifying Nonconformances. Nonconformance management is specifically covered by business procedure SWC-QP-030 Control of Nonconforming Product and also identified within the PQP

in section 6.2 (refer Att#5). Rectification is managed via Nonconformance Reports (NCR) form SWC-QP-030.01.

- 1.1D. Distribute, discuss and support quality requirements with project team and stakeholders.
Project communication requirements are covered by business procedure SWC-IC-080 Communication and with section 3.3 of the PQP (refer Att#6). This section strongly highlights the critical need for communication to always be "sufficient, clear and unambiguous" and notes over-communicating is preferred to under communicating.

The Project Quality Representative also plays a key role in the distribution, discussion and support of quality requirements. As they are abreast of all quality issues on the project and attend many formal and informal meetings with all tiers of project management, they can disseminate this information both formally and informally respectively.

- 1.1E. Implement agreed quality requirements as the basis for performance measurement.
The Measurable Quality Objective (refer Att#4) MQO#1 Contractor Performance Score aims to ensure Client and company expectations regarding performance are being met by regular assessment through the Progressive Performance Survey (refer Att#7) which includes review and consultation of performance between the project and Client. This measurable provides the Client with a direct means to express any concerns or identify areas of excellence and is a valuable tool in maintaining Client involvement and open communication to assist in successful project delivery.

2 Implement quality processes

- 1.2A. Undertake a quality assurance audit of project processes for compliance with agreed plans.
Internal auditing requirements are covered by business procedure SWC-IC-050 Internal Audits and section 6.1.2 of the PQP (refer Att#8) and are necessary to identify any deviation from system requirements so the necessary rectification measures can be put in place. Refer also to example Internal Audit Report and Audit Checklist (Att#9).

- 1.2B. Assess quality control of project and product output according to agreed quality specifications.
The example Internal Audit Report (refer Att#9) identifies an issue concerning Sprayed Bituminous Surfacing therefore an Action Request (AR21) (refer ATT#10) was raised to have this addressed. AR21 details the areas of issue where output is not meeting the required specifications i.e. incorrect recording of binder spray temperature and lack of "QA Checked" stamping on some conformance data.

- 1.2C. Identify causes of variance to quality metrics and undertake remedial action.
Both the Measurable Quality Objective MQO#1 (refer Att#4) and the Internal Audit Report (refer Att#9) noted minor issues with Hold Point Management. This was addressed through communication with the project team, during the Site Progress meeting with the Client and formally recorded through the documented closeout process required by the Action Request.

The nonconformance report also requires identification of the causes of variance to quality requirements and the disposition action to both correct the nonconformance and prevent recurrence.

1.2D. Maintain a quality management system to enable accurate and timely recording of quality audit data.

Internal Auditing requirements are outlined in business procedure SWC-IC-050 Internal Audits and a Corporate Audit Program schedule documents all planned and completed audits for all active projects (refer Att#11). Records of Internal Audits undertaken are kept on the company server withing structured folders for easy retrieval/reference.

3 Implement project quality improvements

1.3A. Review processes and implement agreed changes continually throughout the project life cycle to ensure continuous quality improvement.

Monitoring and measurement of processes is covered business procedure SWC-IC-040 Improvements and Customer Satisfaction and is also covered within the PQP in section 6.1.3 (refer Att#12) which details a number of methods used continually during the project such as Nonconformances, audits, client feedback and Project Management Team feedback.

1.3B. Review project outcomes against performance requirements to determine the effectiveness of quality-management processes and procedures.

The quality management system is reviewed in a number of ways both as noted above and also during annual Senior Management Review meetings where the system is holistically reviewed to determine areas requiring improvement and review improvements implemented during the preceding months (refer Att#13).

1.3C. Identify and document lessons learned and recommended improvements.

The requirement for continual improvement is noted within the PQP in section 6.4 (refer Att#14) and further covered in business procedure SWC-IC-040 Improvement and Customer Satisfaction with Lessons Learnt specifically addressed in section 6.1.3 (refer Att#15). Furthermore, Lessons Learnt are communicated within the business via Quality Advisories (refer Att#16) to ensure learning are made available to all.

Att#1: 1.1B - Project Quality Plan Section 3.2.1:

3 MANAGEMENT RESPONSIBILITY

3.1 Management Commitment / Quality Policy and Quality Objectives

3.1.1 Management Commitment / Quality Policy

The commitment of SWC Management to quality is articulated in the SWC Quality Policy. Refer to **Attachment 3 – Quality Policy** for details.

3.1.2 Quality Objectives and Targets

The general quality objective is to provide supplied / fabricated / constructed / installed product which fully complies with the contract drawings, specifications and all other contract documents – within the programmed time and the allowed costs, utilising healthy, safe and environmentally sound practices which are targeted at enhancing customer satisfaction. Such results are to be delivered via appropriate process control throughout, in all respects.

Specific Measureable Quality Objectives for this project will be based on the SWC Quality Policy, the needs of the project and any Quality Objectives and Targets which form part of contract. Measurable Quality Objectives are detailed in **Attachment 4 – Schedule of Measurable Quality Objectives**.

Att#2: 1.1B - Project Quality Plan Section 5.5:

5.5 Product and Service Provision

Reference Procedure:

SWC-PR-140: Project Process Controls

5.5.1 Manufacture

Key manufactured items (e.g. concrete, precast elements, etc) will be covered by the providers own Quality System and ITP's, which will be subject to monitoring and auditing by the project management team.

5.5.2 Construction / Installation

5.5.2.1 Construction Method Statements

Construction Method Statements are also referred to or known as Construction Procedures. Construction Method Statements shall be developed to address the sequence and methods of construction for core, critical and non-standard construction activities and other specified activities.

Construction Method Statements include the specification / work type specific requirements that are required to be included in the Quality Management Plan.

The statements will be provided in advance of the activity starting in accordance with specified requirements. Copies of the Construction Method Statements shall be made available on site at all times.

For details of the proposed Construction Method Statements to be used refer to **Attachment 6 – Schedule of Method Statements**.

5.5.2.2 Verification Checklists

Various standard checklists are referenced in the ITP Checklists for completion at the stage specified in the ITP. These completed checklists form part of the lot conformance documentation.

5.5.3 Ancillary / Administrative Processes

5.5.3.1 Process Method Statements

There are other important administrative processes on the project that are ancillary to or support the principal construction process. Control of these processes is essential for successful product realisation and is achieved through the development of a Process Method Statement for each process.

Typical processes that are controlled by Process Method Statements include but are not limited to:

- Lot Management functions (lot opening, lot closure, NCR raising etc)
- RFI Management
- Incoming Correspondence Management
- Outgoing Correspondence Management
- Material Delivery Management
- Controlled Document Management
- Innovation Register Management

For details of the proposed Process Method Statements to be used refer to **Attachment 6 – Schedule of Method Statements**.

5.5.4 Validation of Processes for Product and Service Provision

The output from the following work processes cannot be verified by subsequent monitoring and measurement:

- Nil

5.5.5 Identification and Traceability

5.5.5.1 Site Work – Lot System

For identification and traceability purposes, each discrete lot or batch of work shall be given a unique lot number. The lot number consists of the lot code and a sequential number. A unique lot code shall be developed for each type of work. For details of the Lot Identification System to be used refer to **Attachment 7 – Lot Identification System**. Lots generally will be described by chainage, offset and level and/or description / drawing reference as appropriate and identified in the field by reference to the standard survey pegging for construction or by description / drawing reference.

Lot management is principally controlled through the SWIFT Process Manager database. For further details on this database refer to clause 5.5.6.

As each lot is commenced, the lot number shall be created and registered on a Lot Register. Each working day a report of all lots opened and work completed on the preceding work day shall be submitted to the Client if requested.

If required, a summary of conforming or guaranteed lots shall be reported monthly. Lot status in respect of being identified, opened, guaranteed, completed or conformed shall be recorded on the Lot Register. A comprehensive Lot Register report filter enables an extensive number of lot register reports to be generated including lot status and completion.

Lot sizes shall be in accordance with Specification and/or Supplementary Specifications.

5.5.5.2 General

The unique lot number can be used to identify and trace all related lot materials, test certificates, NCR's, inspection reports, hold points etc., throughout the various stages of receipt, preparation, installation / construction and use.

Where traceability for specific materials is specified in the contract documents, the trace identifier (batch no, heat no etc.) shall be transferred in process control documentation from start to finish and be finally recorded in the specific lot records.

5.5.5.3 Traceability of Covered Lots

The CQR is responsible for the traceability of all covered lots. As covered lots cannot usually be identified by markings, there are several lot parameters which identify the exact location of the lot within an overall structure for traceability purposes. These include layer numbers, lot chainages, widths and offsets from control lines. This information is all stored within the lot record within the SWIFT database. Where full conformity of a lot cannot be verified before covering, the lot shall remain open until all conforming data is received. If any data is nonconforming, the CQR shall promptly raise a Non-conformance Report as per the requirements of clause 6.2.

5.5.5.4 Materials Register

For materials requiring traceability to lots, the Materials Register module in SWIFT shall be used. This enables the trace identifiers such as delivery docket, batch number or stockpile number to be recorded against the specific lot number. A specific lot report can then be generated to detail all materials used in the lot.

5.5.5.5 Procured Products

Procured products such as concrete production and quarry products will require suitable identification / traceability systems where required by the contract. As an example of this, quarry stockpile numbers are to be recorded on delivery dockets where quarry products are required to be traced back to their stockpile.

Provider systems will be checked for suitability and monitored for effectiveness. If Providers propose inadequate systems, SWC will act to ensure upgrading of their systems.

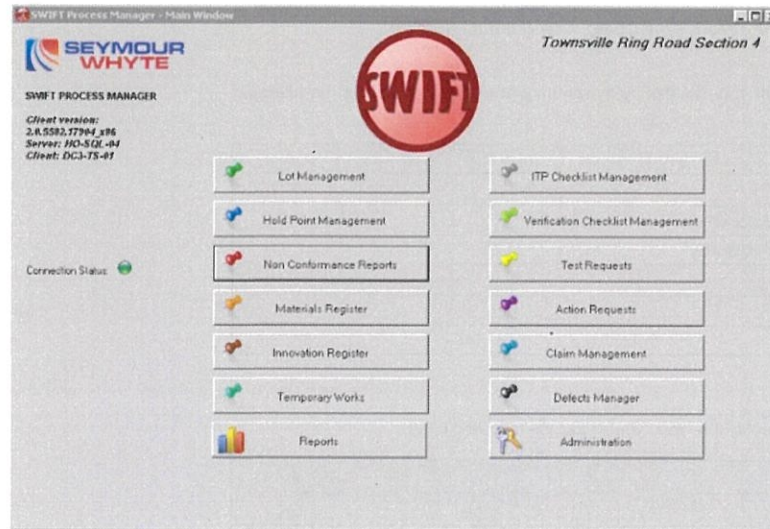
5.5.6 SWIFT Process Manager

Process management at the project level is primarily controlled through SWIFT Process Manager. SWIFT Process Manager is a database that integrates the various lot management functions. This includes the lot register, hold point register, test requests, non-conformance reports, action requests,

claims management, materials register and innovation register. SWIFT Process Manager can generate a raft of reports to improve decision making with respect to process management.

Verification of input data is the responsibility of each project user of the database with general oversight by the CQR. Output data is the responsibility of the NQM. Access permissions controlled by the NQM ensure only project staff can enter data into their assigned project. Inherent control measures built into the thoroughly tested database architecture, ensure that all reports are generated using only the project input data, are auto date stamped and include project specific identifiers.

A screen shot of the main menu is shown following.



5.5.7 Customer Supplied Products or Services

In general, should the Principal choose to supply any goods or materials for incorporation in the Works, then the Principle's supplied products or services shall be controlled by following the reference procedure as stated in clause 5.5. Principal supplied products and services are listed in Contract Schedule C6827.

5.5.8 Receipt, Handling, Storage, Packaging, Preservation and Transport

Materials for construction shall generally be transported by truck to site where they shall be formally received either placed into the works or stored for later use. Incoming inspections shall be conducted on key goods which if defective could have an adverse effect on the project. Off-site inspections may be conducted on key goods to verify product quality before delivery to site. Handling, storage and preservation shall be in accordance with the project procedure for stores.

Providers and suppliers shall be required to meet the shipping and packaging instructions stated in the Purchasing Agreement.

5.5.9 As Constructed / Built Data

As constructed / built data shall be provided in accordance with specified requirements.

Att#3 - 1.1B - Project Quality Plan Attachment 7 (part extract only):

Attachment 7 - Lot Identification System and ITP Schedule

Each lot shall be uniquely identified / numbered using a combination of the:

"Asset / Region Code" + "Work Type Code" + "Sequential Number"

Where

Asset / Region / Zone Code = a 2-4 digit code to identify the primary asset / region as per the following example

**Asset / Region / Zone Code	
Earthworks Zones	
ZE	Zone East– East of Pacific Motorway
ZW	Zone West– West of Pacific Motorway
Structures	
BR10	<i>Foxwell Road Overpass</i>
RW203	<i>Retaining Wall 203</i>

And

Work Type Code = a 2-12 digit code to identify the work type as per the following table:

Code	Detail	ITP No
Administrative Lots		
ADJ	Claim Adjustment Lot	-
PPA	Pre Process Approvals	-
TWD	Temporary Works Design	-
Material Quality Lots		
<i>MQ-DBH</i>	<i>Material Quality Testing – Drainage Bedding Haunch</i>	<i>MQ003.10</i>
<i>MQ-DOZ</i>	<i>Material Quality Testing – Drainage Overlay Zone</i>	<i>MQ003.10</i>
<i>MQ-DSZ</i>	<i>Material Quality Testing – Drainage Side Zone</i>	<i>MQ003.10</i>
<i>MQ-EMBA</i>	<i>Material Quality Testing – Embankment Fill Class A</i>	<i>MQ004.10</i>
<i>MQ-EMBB</i>	<i>Material Quality Testing – Embankment Fill Class B</i>	<i>MQ004.10</i>
<i>MQ-EMBC</i>	<i>Material Quality Testing – Embankment Fill Class C</i>	<i>MQ004.10</i>
<i>MQ-SGA75</i>	<i>Material Quality Testing – Subgrade Material Class A</i>	<i>MQ004.20</i>
<i>MQ-SGB75</i>	<i>Material Quality Testing – Subgrade Material Class B</i>	<i>MQ004.20</i>
<i>MQ-7</i>	<i>Material Quality Testing – 7mm Drainage Aggregate</i>	<i>MQ003.10</i>

Att#4 - 1.1B & 1.1E - Project Quality Plan Attachment 4:

Attachment 4 – Schedule of Measurable Quality Objectives

No	Name	Purpose / Aim / Rationale
MQO#1	Contractor Performance Score	To review our performance in meeting our Clients and our expectations
MQO#2	Accumulative Lot Conformance Rate	To drive Lot conformance in a timely manner
MQO#3	RFI Response Rate	To Drive Timely Response to RFI's from Designers and the Client
MQO#4	NCR Closure Rate	To Ensure Timely Close Out of NCR's to enable Lot Closure
MQO#5	Provider Performance Reporting	To improve the quality and quantity of information contained within the database
MQO#6	Open and Guaranteed Lots > 60 Days	To ensure long term open and guaranteed lots are kept to a minimum

Refer to individual Measurable Quality Objective detail record for specific MQO details.

Att#5 - 1.1C - Project Quality Plan Section 6.2 :

6.2 Control of Nonconforming Product

Reference Procedure:

SWC-PR-030: Control of Nonconforming Product

The following clauses are a brief overview of the core NCR requirements. The specific processes and associated roles and responsibilities associated with NCR Management are further detailed in a Process Method Statement.

6.2.1 Early Identification of Nonconformances

All staff have a responsibility to identify and immediately report any Non-conformance as early as possible to the PM or CQR. NCR's need to be reported to the Client within 24 hours of becoming aware of the NCR to provide the maximum number of options for the Client.

Att#6 - 1.1D - Project Quality Plan Section 3.3:

3.3 Project Communications

Reference Procedure:

SWC-IC-080: Communication

3.3.1 Communication Basics

Substandard communication is often the root cause of many avoidable and undesirable errors.

Therefore, all levels of communication must always be sufficient, clear, and unambiguous.

Always clarify important communications in writing via email, formal correspondence, RFI's or field correspondence books

A good rule to follow is to over communicate if necessary rather than under communicate; telling it twice is far better than not telling at all.

3.3.2 Checking Verbal Communication Comprehension

Many communication errors occur from verbal communications. Therefore, the following simple checks can be used to check for comprehension:

The sender can check for comprehension by simply asking the receiver to verify or repeat the communication back to the sender.

The receiver can clarify the communication by asking the sender to repeat the communication and also repeat the communication back to the sender.

3.3.3 Requests For Information (RFI's)

Formal requests for information to external parties are made via the Request For Information (RFI) form. These are generated and managed via the RFI module of the Correspondence Manager database.

The project specific workflow for the management of project RFI's is documented in Process Method Statement 130 – RFI Management.

Refer also to clause 5.4.4

Att#7 - 1.1E - Progressive Performance Survey Example (MQO#1):

Form: SWC-IC-040.20/F-PS

SEYMOUR WHYTE CONSTRUCTIONS PTY LTD

Rev: 18/07/15



PROGRESSIVE PERFORMANCE SURVEY

Page 1 of 2

Survey No: **9/April 2016**

Project Name: _____ Project No: _____
Project Manager: _____ Client: TMR
Client's Representative: Name: _____ Title: Superintendent's Rep

Seymour Whyte Constructions is continuously reviewing its performance in meeting our Client's and our own expectations. To assist us in this process, could you please complete this survey.

Rate each of the following applicable elements from 1 to 10 or N/A where
1 = very dissatisfied and 10 = very satisfied

No	Element	Score	No	Element	Score
1.	Delivery Progress - Construction	8	2.	Engineering and Methodology Skills	8
3.	Procurement - Timely and Quality Subcontractors	8	4.	Contract Relationships	8
5.	Quality Management - Systems & Product	7	6.	Safety Management - Systems & Performance	10
7.	Environmental Management - Systems & Performance	8	8.	Employee & Industrial Relations	8
9.	Traffic Management	8	10.	Community Liaison Management	8
11.	Project Management	8	12.	Claims and Cost Control	8

Comments on any of the above items (particularly low scores):

5. MINOR SITE ISSUES WITH HOLD POINTS & NCR'S.
6. EXCELLENT RESULT FROM RECENT AUDITS DUE TO
HIGH STANDARD OF SAFETY MANAGEMENT & CULTURE
FROM ALL SITE STAFF.

SWC Review

Project Manager's Comments:

5. Hold Point & NCR's has been addressed with project team & also at the Site Progress TMR meeting.
6. Safety comments are very positive.

Name Signature Date: 21/4/16

Quality Manager's Comments:

Average Score:

Name Signature Date: 1/1

Distribution: CEO, General Manager - Operations, Construction Manager, Human Resources Manager, Safety Manager and Environmental Manager

Att#8 - 1.2A - Project Quality Plan Section 6.1.2:

6.1.2 Internal Audit

Reference Procedure:

SWC-IC-050: Internal Audits

Audits will be carried out for the following purposes:

- a) to monitor the implementation and effectiveness of quality plans;
- b) to monitor and verify conformity with specified requirements;
- c) for surveillance of suppliers to the organization;
- d) to provide independent objective assessment, when required, to meet the needs of the client or other interested parties.

Project Audits for all onsite and offsite works shall be scheduled, conducted, and reported in accordance with SWC-IC-050. Audits shall be scheduled to minimise disruption to construction, and will be performed by SWC Quality Manager.

The proposed internal quality system audit schedule for this project is stated in the Project Management Plan.

Audits of key providers shall also be completed during the course of the project. Frequency and scope of these audits will be risk based and will be adjusted to a higher frequency if low compliance levels are detected.

Refer also to the Project Management Plan for further details on this integrated / common element.

Att#9 – 1.2A - Example Internal Audit Report and Checklist (partial extract only):

Form: SWC-IC-050.30/C

SEYMOUR WHYTE CONSTRUCTIONS PTY LTD

Rev: 01/09/12



INTERNAL AUDIT REPORT

Page: 1 of 2

Audit Ref Number: 004001-Q04

From: [Redacted]

Date: 20/05/16

To: [Redacted]

B/C: [Redacted]

Project / Organisation Name: [Redacted]

Project No.: [Redacted]

Organisation Address: [Redacted]

System/s Audited: ☒ - Quality ☐ - Safety ☐ - Environmental
☐ - Other System >>

Sub-System/s Audited: ☐ - ☐ -

Type of Audit: ☒ - Internal ☐ - Evaluation ☐ - Surveillance

Scope of Audit: ☐ - Full System ☐ - Desktop ☒ - Specific Quality Elements

Date of this Audit: 20/05/16 Date of Previous Audit: 12/04/16

Auditor/s: [Redacted]

Auditee/s: [Redacted]

Reference Documents: Project Management Documents, DTMR Project Specifications

Audit Summary:

This is the 4th internal quality system audit for the project. The overall results were satisfactory with general compliance observed across the elements audited. There were two (2) Action Requests raised as a result of this audit.

A brief summary of the applicable key audit areas is as follows:

Previous Audit Corrective Action

The Action Request from the previous audit concerning crossfall survey remains outstanding as there is a problem with the survey report. Cannot be closed until this is resolved.

Training and Competency

In conjunction with the Enviro Rep, the POM has committed to developing a LTQ Toolbox Talk for a "Landscaping" related topic (eg Hydromulching) for use on the project and for the corporate library.

Lots – Closed – Sprayed Bituminous Surfacing (MRTS11)

Overall conformance records were quite good although there are a few issues to address. AR#21 raised.

Lots – Closed – Supply – Precast Concrete Bridge Parapets (MRTS72 / 70)

The bulk of this lot could not be audited as the conformance data could not be located. AR#22 raised to address this.

Lots – Closed – Supply – Precast Concrete Bridge Girders and Deck Units (MRTS73 / 70)

Conformance records demonstrated a high level of compliance.

Material Quality Testing – Type 2.3 Gravel

Conformance records demonstrated a high level of compliance.

Analysis of Data

Concrete strength analysis spreadsheets for principal mixes checked and up to date.

Form SWC-IC-050.20/D

SEYMOUR WHYTE CONSTRUCTIONS PTY LTD

Rev: 03/08/12



INTERNAL AUDIT CHECKLIST ☒ - Quality ☐ - Safety ☐ - Environmental ☐ -

Audit Ref Number: 004001-Q04

Compiled by: [Redacted]

Date: 10/05/2016

Page: 2 of 9

Issue	Comments / Remarks / Evidence	Action	ARP
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Previous Audit Corrective Action

If Action Requests were raised during previous audits, have these been addressed or being addressed?

AR No	Close Date	Objective Evidence For Closure Verified
20	* not closed	✓ Crossfall survey for working platform not completed ✓ PJ to send through a sample crossfall survey to PM and PM to take up with Surveyor

- ✗ Close out the AR after receipt of crossfall survey for the next final layer CTB lot
- ✓ Crossfall survey has now been completed
- ✗ The report appears to be showing the actual crossfall and not the absolute difference between the design and actual crossfall
- ✗ [Redacted] about getting this corrected on the report

Training and Competency

"Let's Talk Quality" toolbox talks (identified, delivered)?

- ✓ Lorraine to complete a landscaping related LTQ toolbox before project end
- ✗ POM to jointly write this with Dave Woods

Lots – Closed – Sprayed Bituminous Surfacing (MRTS11)

Process Requirements and Testing Compliance met?

Frequency	Standard
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Att#10 - 1.2B - Example Action Request Raised during Audit:

Form: SWC-IC-040.05

Seymour Whyte Constructions Pty Ltd

Rev: 15/12/10



ACTION REQUEST

Page 1 of 2

Number > 21

System Affected > Quality System

Source > Audit - Internal

Driver > Nonconformance

Project Name >

Project No:

Affected Lot No(s) >

1. Details of the Nonconformance / Issue

Internal Audit 021801-Q04 - 10/05/16

1. The ITP does not contain the CRS mix details
2. Binder spray temp of 50deg recorded
3. Some HP's for cover aggregate not located
4. Min pavement temps not being recorded on run sheets
5. Inconsistent units used for the same lot code ZW-SBS
6. Some conformance data not "QA Checked" stamped

Affected Product/Service: Sprayed Bituminous Seal

Root Cause: Process/Methodology - Deviation from Prescribed

2. Proposed Rectification / Resolution >> Other (as follows)

1. Remind provider to record correct binder spray temp
2. Remind provider to record pavement temp to verify min temp requirements
3. Obtain missing HP's
4. Remind LCE's of using consistent units
5. Remind LCE's of using the "QA Checked" stamp on provider conformance data

_____	National Quality Manager	_____	20/05/2016
Name	Title/Role	Signature	Date

3. System Improvement Opportunity

Can action be taken to prevent recurrence of the nonconformance / issue? ☐ Yes see below ☒ No

If needed, copy of Report / Request to ☐ QAM ☐ SEM ☐ Other

4. Close Out

- ☐ This report is closed out, as I am satisfied that effective corrective or preventative action has been taken as applicable and that the opportunity for systems improvement has been evaluated.

Observed Objective Evidence to validate Closure:

Comments:

- ☐ This report is closed out, subject to the generation of a replacement Nonconformance Report / Action Request

[illegible]

6.1.3 Monitoring and Measurement of Processes

- a) Non-conformances
- b) Audits
- c) Client feedback
- d) Project Management Team information and feedback

For significant process improvements issues not involving nonconformances, Action Requests shall be raised by the CQR to drive the corrective / improvement action through to completion. Refer to Procedure SWC-IC-040: Improvements and Customer satisfaction for details on the use of Action Requests.



Agenda

for the

Quality System

Senior Management Review Meeting

to be held

Thursday 7 May 2020

Distribution

Steve Leckard (SL)	Peter Leckard (PL)	Andrew Beck (AD)
V		
S		
Paul Leckard (PL)	William Leckard (WL)	Paul Leckard (PL)

Item Item Description

1 Apologies

2 Business Arising from Previous Minutes – 8 May 2019

- 2.1. Trial of GoTraining - RG (PMI 2.2)
- 2.2. Procurement Procedure Review – SWC-QP-130 – SL / MA (PMI 2.3)
- 2.3. Teambinder – Testing of Bridge Option – SP / PJ (PMI 2.4)
- 2.4. SWIFT Concrete Ordering Module - PJ (PMI 3.1)
- 2.5. Quality Intervention Works with Vic Team – CH (PMI 3.2)
- 2.6. PEs Position Description – PJ (PMI 3.2)
- 2.7. New NCR Costing Report – PJ (PMI 3.4)
- 2.8. Monthly Project NCR Costs – PJ (PMI 3.4)
- 2.9. Replace Project Monthly Comparison Graph with "Aged NCRs" – PJ (PMI 3.6)

3 Looking Back (Past Performance)

(Activities / Information in the Preceding Period since the last meeting)

- 3.1. System Improvements completed
 - 3.1.1. Document Amendment Notices Issued
 - 3.1.2. SWIFT / SWIFT.web / SMA Development Updates
- 3.2. Quality Advisories Issued
- 3.3. Supplier Management System – Executive Summary
- 3.4. Nonconformances
 - 3.4.1. All Active Projects Monthly NCR Costs
 - 3.4.2. Top 5 Annual NCR Costs
- 3.5. Corporate MQO's
 - 3.5.1. Corporate MQO #1 (Contractor Performance) Results
 - 3.5.2. Corporate MQO#2 (Staff Satisfaction) Results
- 3.6. Current Project Comparison Statistics
- 3.7. Temporary Works Training Summary
- 3.8. Results of External Certification Audits
- 3.9. QS Learnings from the Last Year (Open Discussion)

4 Looking Forward

- 4.1. Staff Development, Training and Competencies
- 4.2. Quality Policy Review

5 General Business

- 5.1. Mobile Construction Quality
- 5.2. SWIFT and BIM Requirements

6 Tentative date for next meeting – 6 May 2021

7 Close

Att#14 - 1.3C - Project Quality Plan Section 6.4:

6.4 Continual Improvement

Reference Procedure:

SWC-IC-040: Improvement and Customer Satisfaction

Refer also to the Project Management Plan for further details on this integrated / common element.

6.4.1 Corrective and Preventative Action

There are two stages of corrective action:

1. the immediate corrective action required to resolve the issue; and
2. the corrective action required to prevent recurrence of the issue.

Preventative action is action taken to prevent occurrence of the issue in the first place. That is, by eliminating the potential causes of the issue altogether so that there is no chance of occurrence.

Between corrective and preventive action, the latter is the preferred action because the more preventative action taken, the less corrective action will be needed.

6.4.2 Continual Improvement and Action Requests

All project staff and the NQM shall constantly be looking for ways to improve product or processes. The PM shall provide opportunities to identify preventative action at site forums / meetings. Regular review of project data and other statistical information may also identify process improvement opportunities.

For any significant action required of either type, SWIFT Action Requests shall be raised to ensure action is monitored to closure. Regular review of outstanding Action Requests is required to drive closure. Where appropriate, objective evidence for closure shall be recorded when closing out the Action Request. Less significant action may be requested by email or verbally.

Significant and undesired statistical indicators may become the subject of a focused Measurable Quality Objective for the project to improve the indicator. Refer to clause 3.1.2 for more details on Measurable Quality Objectives.

6.4.2.1 Innovation

All project workers are encouraged to find innovative ways to improve product and processes. To facilitate this, the PM shall ensure the following process or similar is adopted on the project:

1. The Innovation Register – Suggestion Capture Form (Form: SWC-IC-040.70) shall be readily available and distributed on the project so any project worker can submit an idea via a suggestion box;
2. Submitted forms are reviewed promptly and a decision made by review person or team;
3. Regardless of the decision, timely feedback is provided to the idea proposer/s;
4. Data is entered into the SWIFT Innovation Register module to enable the Innovation Register to be generated; and
5. The Innovation Register is printed and posted on a regular basis for viewing to encourage further suggestions

The project specific innovation management process is recorded in a Process Method Statement (PMS).

6.4.3 Principal Issued Corrective Action Requests

Upon the issue of a Corrective Action Request (CAR) or equivalent by the Clients Representative, a **hold point** as detailed in clause 6.1.4.4 applies to the process detailed in the CAR.

A SWC Non-conformance Report or Action Request as appropriate shall be raised to match each Client issued CAR. The management of these is as detailed in the relevant section of this management plan.

SWC shall return the completed CAR within seven days to the Clients Representative detailing the corrective action to be taken to remove the condition which is adverse to quality.

The Clients Representative will advise when the hold point has been released.

Att#15 - 1.3C - SWC-IC-040 Improvement and Customer Satisfaction section 6.1.3:

6.1.3 Lessons Learnt

For each significant corrective action or event resulting in significant learnings for a project, the project shall develop a Lessons Learnt (Form: SWC-IC-040.120). The principle purpose of capturing this information is to share this learning across the organisation so as to prevent recurrence of the issue.

All lessons learnt are entered into the SWIFT Lessons Learnt Register. Lessons learnt can be entered directly without the need to complete the form. Using the form may assist if a 2nd party is required to check the lesson learnt before entry into SWIFT. Ensure several keywords are entered against each lesson learnt entered to maximise the usefulness of the lessons learnt keyword search function in SWIFT. Where relevant, include photos or drawings to assist in reinforcing the learning.

The PM shall be responsible for this process including checking and approving each Lesson Learnt raised by the project.

The lessons learnt report is available from the SWIFT reports menu. The report is filterable by several parameters including category, project and keywords.

Att#16 - 1.3C – Example Quality Advisory showing Lessons Learnt:

Form: SWC-IC-080.20/A

SEYMOUR WHYTE CONSTRUCTIONS PTY LTD

Rev: 30/05/2017



QUALITY ADVISORY

Page 1 of 10

Quality Advisories are issued to reinforce **Quality System Requirements**, share **Innovations**, share **Lessons Learnt**, share **Let's Talk Quality Toolbox Talks**, advise of **Key SWIFT Improvements** and share **Significant NCR learnings**.

Advisory Number: **20-01**

Review Period: **05/04/2019 to 14/02/20**

Issue Date: **21/02/20**

Lessons Learnt Reports				
43 added to SWIFT since Apr 2019				
No	Project	Category	Keywords	Activity
82		Quality	extension, nails, soil, Unauthorised	Soil Nailing activities - Coleman Street Retaining Wall 03
		Issue At retaining wall 03, there are a number of soil nails in the second row of the third shotcrete pour that have been installed at a greater depth than shown on the design. This has resulted in a reduced projection of the soil nail into the shotcrete face.		
		Lesson Learnt "So as to make sure this doesn't happen again, we have now developed a specific R64 Soil Nailing checklist identifying this issue. From now on, this checklist will be used to make sure there is no unauthorised extension of the soil nails."		
No	Project	Category	Keywords	Activity
86		Quality	Cover, Cover, Deck, Insufficient Reinforcement to Units	Manufacturing of Deck Units
		Issue Stapley deck units with insufficient cover to the 12MD10 ligaments. The cover to reinforcement in isolated locations on the deck unit is below 25mm with a minimum cover of 22mm.		
		Lesson Learnt It was not possible to check all the deck units in early May due to the accessibility constraints. To prevent reoccurrence of this non-conformance, all deck units need to be made accessible during the precast inspections. A toolbox meeting was undertaken which highlighted the importance of having to achieve the correct concrete cover.		
No	Project	Category	Keywords	Activity
95		Quality	Barrier, Blockage, Conduit, Kink, Mandrel, Pull, Vibration	Extruded single slope barrier
		Issue "Mandrel proving test of conduits in the single slope barrier MC240 CH130-600 revealed two locations where obstructions in the conduit prevented the passing of the 98mm mandrel. The types of blockages were: - Electrical and communications conduit obstruction. - Failed conduit connection and developed kink."		
		Lesson Learnt Assessment of the above issue led to the conclusion that despite the conduits having been connected properly, the barrier paving operation exerted extreme vibration and forces which resulted in conduits being kinked and pulled apart. Therefore, to avoid this happening again, ongoing checks will be required to ensure that adequate connection and support of conduits are being maintained with future works. It is noted that the vibration utilised has resulted in excellent barrier finish and reducing this vibration level may result in a poorer finish. However, must ensure vibration levels are balanced to optimal for barrier finish and reduced load on embedded conduits.		
No	Project	Category	Keywords	Activity

