

HASLIN

Inspection Testing Procedure (ITP)

SEQ-PR-063

Document Revision Control

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5	18/2/2020	ISO 45001:2018
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1. Scope

The purpose of an Inspection and Test Plan is to put together a single document that records all inspection and testing requirements relevant to a specific process. On a construction contract the process is likely to be a construction activity, element of work, trade work or providing a product section. An Inspection and Test Plan identifies any materials and work to be inspected and tested, by whom and at what stage or frequency, as well as Hold and Witness Points, references to relevant standards, acceptance criteria and the records to be maintained. Inspection and Test Plans, when properly implemented help ensure that verification of work been undertaken to the required standard and verified requirements, and that records are kept.

2. Application

This procedure applies to all operations of Haslin within the framework of the management system.

3. Definitions

Hold Point	A 'hold' point defines a point beyond which work may not proceed without the authorisation of a designated Haslin Constructions or authority.
Witness Point	A 'witness' point provides a party (such as the client, Haslin Constructions Rep, and a regulatory authority) with the opportunity to witness the inspection or test or aspect of the work, at their discretion.
Surveillance	Intermittent monitoring of any stage of the work in progress (whether by Haslin Constructions Rep or client).
Self-inspection	Where Haslin Constructions performing the work verifies the quality progressively - often with the aid of checklists.
Work area	A discrete section of the whole work, usually defined by location, where any trade work or activity would be completed before it moves onto another area. Examples include a wall, a room, a building, a length of pipeline between manholes and the like. Also referred to as lots.

4. References

ISO 9001:2015 Clause 4.2.4, 7.1, 7.4.3, 7.5.1, 7.5.2, 7.5.3

ISO 45001:2018 Clause 6, 7, 8 & 9

ISO 14001:2015 Clause 4.4.6



5. Legal Requirements

NIL

6. Roles and Responsibilities

Project Managers, Construction Managers and Project Engineers should prepare Inspection and Test Plans. It is appropriate, however, that they receive input from those with a good technical and practical knowledge of, and experience in, the activities involved. The use, understanding and acceptance of ITPs by inspectors and other personnel will generally be greatly enhanced if they are involved in their preparation.

Haslin Constructions is responsible for ensuring that all the required Inspection and Test Plans are prepared, including those covering work or processes to be carried out by its sub-contractors. While it is preferable that Haslin Constructions prepare the ITPs for their own work, in the final analysis some may require the service provider's involvement.

7. Overview

The following steps are involved in documenting Inspection and Test Plans for a construction contract:

Step 1	Read the contract documents (including the technical specifications) and prepare a list of any discrepancies, ambiguities, missing information and standards of materials and/or workmanship that are considered inappropriate.
Step 2	Contact the client and resolve the issues listed as a result of Step 1.
Step 3	Examine the scope of work and divide it into separate areas requiring an Inspection and Test Plan (where not already prescribed in the contract documents). As a general guide it is normally most convenient to document a separate Inspection and Test Plan for each trade or work area/section.
Step 4	Note the Hold and Witness Points required by the client (including as listed in the contract documents).
Step 5	Review the contract documents again and note the requirements that have the most impact on the quality of the finished work. For each, ask the question "What will be the consequences if it is not done correctly?" Be certain to include any references to tests, submitting information to the client, obtaining approvals and Hold and Witness Points (see 9.10 for further information on Hold and Witness Points).
Step 6	Determine from Step 5 which items or aspects of each inspection will need to be recorded on checklist SEQ-CL-034 ITP Checklist and prepare these.
Step 7	Discuss the checklist with those directly involved with the work and obtain their input. This input should particularly be directed at identifying those issues that have caused problems (and involved extra costs) in the past, and therefore warrant checking at the earliest opportunity to avoid unnecessary and costly rectification.
Step 8	Prepare each Inspection and Test Plan to reflect the requirements of the contract documents. Reference the ITP in the Quality Management Plan and cross-reference to the other related ITPs.



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Step 9	Issue each Inspection and Test Plan and/or associated certification to the client for consideration (when instructed) within a reasonable period prior to commencing the work described in the ITP Plan and adjust them to suit any comment received (or act as otherwise required in the contract documents).
Step 10	Decide how best to divide the whole of the work into work areas for control purposes and indicate these locations either on a schedule (with reference to grids and levels) or by marking up drawings.
Step 11	Prepare and issue checklists for each work area and identify them according to location.
Step 12	Train those directly involved with each of the ITP in their use. Formalise a procedure for the notification of Witness and Hold Points to the appropriate person(s).
Step 13	Carry out inspections and tests in accordance with the Inspection and Test Plans, provide notices to the client and/or regulatory authorities for Hold or Witness Points, as designated or applicable, and record the results on checklists.

8. Contract particulars

Record the following contract particulars on each of the Inspection and Test Plans:

- Contract Name
- Contract Number
- Description of process/activities for that particular Inspection and Test Plan.

9. Inspection and Test Plans

9.1. General

9.2 to 9.10 inclusive describe what needs to be considered for each component of an Inspection and Test Plan. They explain the components and how to select the relevant information required for each.

9.2. Description of operation or stage of work for every activity

It is necessary to adopt a testing frequency and sampling process which provides a representative indication of the work to suit the risks involved.

9.2.1. ITP Minimum Requirements

At Haslin Constructions a minimum company standard exists for the preparation and completion of 'Principal' ITP's. 'Principal' ITP's include Concrete Works (AS3600), Bulk Earthworks, Pipe work (Stormwater & Sewer), Roadwork's & Structural Steel. Irrespective of whether a projects specification, drawings or contract stipulate, the following documents, test reports & conformance certificates are mandatory to enable 'close-out' of the respective ITP. Timings for attainment of these documents and the inspection procedure are also specified. **If any of the below items are not specified within the contract documents, specifications and/or drawings, it is the Project Engineers responsibility to consult with the Project Manager and confirm all requirements prior to the commencement of any construction activities.**

Table 1:

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Concrete Works (AS3600)

Minimum items to consider in ITP	Evidence Required	Timing for attainment of document	Inspection Procedure
Foundation material Bearing Capacity Report (only for slabs-on-ground)	Geotechnical Engineer Bearing Capacity Report(s). Evidence Bearing Capacity conforms to specified value	Prior to erection of formwork & installation of reinforcement	HP
Foundation material Compaction Test Report for slabs cast on compacted fill (only for slabs-on-ground)	Geotechnical Engineer Compaction Test Report(s). Evidence Compaction conforms to the specified value	Prior to erection of formwork & installation of reinforcement	HP
Formwork/Falsework Design (required for walls >1m high, columns, headstocks & suspended slabs/beam/stairs)	Structural Engineer Certified Design	Prior to erection of formwork, falsework & installation of reinforcement	HP
Evidence Steel Reinforcement conforms to the Australasian Certification for Reinforcing Steel, AS3600, AS4671, AS5100.5 & AS2780	ARCS Certificate of Steel Compliance	Prior to installation of Steel Reinforcing	HP
Mill Certificate(s) Hold-down bolts 'cast-in'	Mill Certificate as evidence that 'cast-in' bolts are of the specified steel grade	Prior to installation of cast-in hold-down bolts	HP
Galvanising Certificate(s) for 'cast-in' items (hold-down bolts & dowels)	Galvanising Certificate as evidence galvanising conforms to the specified density	Prior to installation of cast-in hold-down bolts & dowels	HP
Conformance Certificate(s) for 'cast-in' items such as pipes	Product Conformance certificates as evidence items are of correct Class and coating	Prior to installation of cast-in items	HP
Haslin pre-pour Verification checklist completed by Haslin Engineer/Site Manager	Haslin Pre-Pour Verification Checklist (SEQ-FM-039). Photos of reinforcement, formwork & falsework should also be attached	Prior to installation of concrete	HP
Structural Engineer pre-pour inspection	Structural Engineer pre-pour inspection report (with any outstanding items 'closed-out')	Prior to installation of concrete	HP
Concrete	Concrete delivery docket(s). Evidence that concrete delivered conforms to the specified mix design, compressive strength, aggregate size, slump & temperature	Prior to installation of concrete	HP

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Minimum items to consider in ITP	Evidence Required	Timing for attainment of document	Inspection Procedure
Concrete sampling	Concrete Field Test Sheet(s) & Laboratory Test Report(s). Visual check that sampling of concrete slump, air content, shrinkage, compressive strength & concrete/air temperature tests have been carried out to the specified regime and are within the specified values/tolerances	During installation of concrete. Testing regime must conform to the specified sampling frequency	VC
Formwork Stripping	Concrete Register. Evidence that formwork is not removed prior to the specified curing time.	Prior to formwork removal	VC
Concrete Curing	Curing compound delivery docket & technical data sheet. Evidence concrete cured by the specified method and duration	Following hardening of concrete and/or removal of formwork	VC
Concrete patching	Patching mortar delivery docket & technical data sheet. Evidence patching mortar is of specified strength & characteristics.	Prior to installation of patching mortar	HP
Concrete Tolerances	WAE Survey Report (by registered surveyor)	Prior to installation of any structure fixed to the concrete	HP

***Haslin's Concrete Register SEQ-FM-015 shall be maintained to ensure traceability of all concrete cast. Pour locations, pour dates, concrete dockets & test results shall be entered into this register as soon as they are made available.**



Table 2:

Bulk Earthworks (from Natural Subgrade to underside of Pavement Layers)

Minimum items to consider in ITP	Evidence Required	Timing for Receipt of Document	Inspection Procedure
Certification of suitability of natural subgrade to receive General Fill	Geotechnical Engineer Conformance Report	Prior to placement of General/Select Fill	HP
General/Select Fill	Delivery Dockets (if sourced off-site)	Prior to placement of General/Select Fill	HP
CBR	Geotechnical CBR Test Report(s) on General/Select Fill. Evidence CBR conforms to specified value	Prior to and during placement of General/Select Fill. Testing regime must conform to the specified sampling frequency	HP
Grading	Geotechnical Particle Size Distribution Test Report(s) on General/Select Fill. Evidence Grading conforms to specification	Prior to and during placement of General/Select Fill. Testing regime must conform to the specified sampling frequency	HP
Atterberg Limits & Linear Shrinkage	Geotechnical Atterberg Limits & Linear Shrinkage Test Report(s) on General/Select Fill. Evidence Atterberg Limits and Linear Shrinkage conform to the specification	Prior to and during placement of General/Select Fill. Testing regime must conform to the specified sampling frequency	HP
Compaction/Density	Geotechnical Compaction/Density Test Report(s) on General/Select Fill. Evidence Fill is compacted to the specified value	At the time of compaction of General/Select Fill. Testing regime must conform to the specified sampling frequency & layer thickness	HP
Proof Roll	Geotechnical Proof Roll report	Top of General/Select Fill layers as stipulated on the drawings and/or in the specification	HP
Conformance Survey	WAE Survey Report	At the time of final trim of General/Select Fill layer(s)	HP

***Haslin's Geotechnical Testing Register SEQ-FM-035 should be maintained to ensure all Geotechnical Testing is carried out to the specified sampling frequencies. Test dates, test locations & test results shall be entered into this register as soon as they are made available.**

The Compaction Density Register SEQ-FM-034 is to be used for big bulk earthworks on a larger scale. The Compaction Density Register should be utilised and modified to suit the specific specifications of the project.



Table 3:

Pipework (Stormwater / Sewer)

Item	Evidence Required	Timing for Receipt of Document	Inspection Procedure
Pipe layer Qualifications	Pipe Layer(s) Qualification records	Prior to installation of any pipework	HP
Pipe, joints, headwalls, wing walls, rock filled mattresses, agg lines & accessories	Delivery Dockets & Conformance Certificates as evidence of compliance with the specifications & drawings	Prior to installation of pipework	HP
Foundation Geotechnical Bearing Capacity	Geotechnical Engineer Bearing Capacity Report(s)	Prior to installation of pipework. Testing regime must conform to the specified sampling frequency	HP
Trench foundation Compaction	Geotechnical Engineer Compaction Test Report(s)	Prior to installation of pipework. Testing regime must conform to the specified sampling frequency	HP
Pipe bedding & backfill material Grading	Geotechnical Particle Size Distribution test Report(s) on bedding and backfill material. Evidence material conforms to the specified grading	Prior to installation of pipework	HP
Pipe bedding & backfill, material compaction	Geotechnical Engineer Compaction Test Report(s). Evidence pipe bedding & backfill are compacted to the specified value	During/after installation of bedding & backfill material. Testing regime must conform to the specified sampling frequency	HP
Pipe Testing	Independent pipe testing report. Test method and 'Pass' criteria are as stipulated in the specification	Prior to placement of overlay backfill	HP
Pipe Tolerances	WAE Survey Report (by registered surveyor)	Prior to placement of overlay backfill	HP
Compaction Test Report on pipe overlay material	Geotechnical Engineer Compaction Test Report(s). Evidence pipe overlay is compacted to the specified value	During/after placement of overlay material. Testing regime must conform to the specified sampling frequency & layer thickness	HP
Survey	WAE Survey Conformance Report	During and after installation of storm water pipe and pits, as required by spec/Dwrg	HP

Haslin's Geotechnical Testing Register SEQ-FM-035 should be maintained to ensure all Geotechnical Testing is carried out to the specified sampling frequencies. Test dates, test locations & test results shall be entered into this register as soon as they are made available.



Table 4:
Roadworks

Item	Evidence Required	Timing for Receipt of Document	Inspection Procedure
Pavement Material	Material Conformance Certificate. Evidence that pavement material conforms with the requirements stipulated in the specification/drawing	Prior to placement of Pavement Material	HP
Pavement Material	Delivery Dockets. Evidence that material delivered conforms to what is specified	Before/During to placement of Pavement Material	HP
CBR	Geotechnical CBR Test Report(s) on Pavement material. Evidence CBR conforms to specified value	Prior to and during placement of Pavement material. Testing regime must conform to the specified sampling frequency	HP
Grading	Geotechnical Particle Size Distribution Test Report(s) on pavement material. Evidence Grading conforms to specification	Prior to and during placement of Pavement material. Testing regime must conform to the specified sampling frequency	HP
Atterberg Limits & Linear Shrinkage	Geotechnical Atterberg Limits & Linear Shrinkage Test Report(s) on Pavement material. Evidence Atterberg Limits and Linear Shrinkage conform to the specification	Prior to and during placement of pavement material. Testing regime must conform to the specified sampling frequency	HP
(Modified) Compaction/Density	Geotechnical Compaction/Density Test Report(s) on Placement material. Evidence Pavement material is compacted to the specified value	At the time of compaction of Pavement material. Testing regime must conform to the specified sampling frequency and layer thickness	HP
Proof Roll	Geotechnical Proof Roll report	Top of Sub-base & Base layers as stipulated on the drawings and/or in the specification.	HP
Conformance Survey	WAE Survey Report (by registered surveyor)	At the time of final trim of the Sub-base & Base Pavement layers	HP
Asphalt / Binder	Material Conformance Certificate. Evidence material conforms to specification/drawing	Prior to placement of Asphalt	HP

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Item	Evidence Required	Timing for Receipt of Document	Inspection Procedure
Asphalt / Binder	Delivery Docket(s). Evidence that material delivered conforms to what is specified	Prior to & during to placement of Asphalt	HP
Kerb / Gutter	Concrete delivery docket(s), testing docket(s) & concrete test report(s). Evidence that concrete is supplied, placed and tested in accordance with the specification	Prior to & during installation of kerbs & gutters	HP
Survey	WAE Survey Conformance Report	During and after place of fill layers as required by spec/Dwrg	HP

***Haslin's Geotechnical Testing Register SEQ-FM-035 should be maintained to ensure all Geotechnical Testing is carried out to the specified sampling frequencies. Test dates, test locations & test results shall be entered into this register as soon as they are made available.**

The Compaction Density Register SEQ-FM-034 is to be used for big bulk earthworks on a larger scale. The Compaction Density Register should be utilised and modified to suit the specific specifications of the project.

Table 5:

Structural Steel

Item	Evidence Required	Timing for Receipt of Document	Inspection Procedure
Drawings	Structural Engineer Approved Shop Drawings	Prior to fabrication of Structural Steel	HP
Steel Material	ARCS Certificate of Steel Compliance	Prior to fabrication of Structural Steel	HP
Steel Material	Delivery docket(s) of all material. Evidence steel grade used for in fabrication conforms to the specification	Prior to fabrication of Structural Steel	HP
Steel Material	Mill Certificate(s) Evidence steel grade used conforms to the specification	Prior to fabrication of Structural Steel	HP
Steel Welding	Weld Procedure Qualification(s). Evidence welds conform the Australian Standards and the specification/drawings	Prior to fabrication of Structural Steel	HP
Steel Welding	Weld inspection report(s). Evidence welds conform the Australian Standards and the specification/drawings	During fabrication of Structural Steel. Inspection reports must be completed in accordance with inspection frequencies specified	HP
Steel Welding	Weld test report(s) Evidence welds conform the Australian Standards and the specification/drawings	During fabrication of Structural Steel. Prior to galvanising. Test reports must be completed in accordance with inspection frequencies specified	HP

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Item	Evidence Required	Timing for Receipt of Document	Inspection Procedure
Steel Galvanising	Galvanising test report(s). Evidence galvanising conforms to specified density	Prior to erection	HP
Bolts, nuts & washers Material	Mill/Material Certificate(s). Evidence bolts, nuts and washers conform to the specified grade and Australian Standards	Prior to fabrication of Structural Steel	HP
Hold-Down bolts, nuts & washers Galvanising	Galvanising test report(s). Evidence galvanising conforms to the specified density	Prior to erection	HP
Grout	Delivery Docket & technical data sheet on grout. Evidence grout strength & characteristics conform to specification	Prior to installation of grout.	HP
Structural Engineer inspection	Structural Engineer inspection report. Evidence of structural adequacy	Prior to installation of materials attached to the structural steel structure and as per section 6.3 of SEQ-PR-009	HP

HASLIN CONSTRUCTIONS HAVE A LIBRARY OF ITP TEMPLATES (Refer C:\Users\jwall\Dropbox (Haslin Constructions)\HSEQ\HSEQ\ITPs, at head office.

Templates will be set out within the site-specific electronic project folder.

Example:



9.3. Characteristics of inspection/test/approval

The characteristics of a work item can be defined as “a distinguishable property of an item, material or process”. Examples of characteristics are colour, texture, size, strength, flatness, alignment, capacity and the like.

The characteristics to be verified will frequently determine the stage at which the inspection or test must take place if the potential for subsequent nonconformities is to **be avoided**. This further work might also cover up or deny access for the purposes of verifying certain characteristics.

Some characteristics can only be considered after one particular operation and before another, such as the inspection of steel reinforcement after installation but prior to the pouring of concrete.

9.4. Stage/frequency

The inspection/test stage/frequency will often be determined by the requirements of the contract documents or by the type of inspection and/or test and the characteristics under consideration, as outlined above. In the latter case however, there is the potential for a considerable range in what constitutes the most appropriate frequency and sampling process. It is suggested that a representative sampling of the work to suit the risks involved be used as a guide initially. Thereafter, frequencies would be increased and processes reviewed for ‘problem’ work activities and decreased where consistent conformity was evidenced.



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9.5. Records

Records are essential to quality management because they provide the documented evidence necessary to verify that a product/service is in accordance with the contract requirements.

The records would be in various forms, and would include the checklists, test certificates, certificates of compliance/conformity, survey data, written approvals and the like. Inspection and Test Plans would help define the records required.

An ITP Lot Register SEQ-CL-037 will be used for each Project for record keeping, quick identification and tracking purposes of the ITP and Lots.

9.6. Identification of Work Lots

Bulk Earthworks, Pavements, Concrete Works and Roadwork's must be subdivided into lots or discrete work areas. A lot must consist of a continuous portion of homogeneous and/or representative material or end product produced under essentially constant conditions. Discrete portions of a lot that are visually non-homogeneous and/or non-representative must be excluded from the lot and must be either treated as separate lots or reworked to achieve conformity to the Specification. Use SEQ-CL-037 Lot Register.

Bulk Earthworks, Pavements, Concrete Works and Roadwork's on a large scale can be broken down again into sublots with one ITP, but the sublots will have specific Inspection Test Checklists (ITC) for example; concrete pours e.g. pillars 1-4, slab, columns, walls etc, use SEQ-FM-038 Formwork & Concrete Pour Checklist in conjunction with the Concrete Register SEQ-FM-015 which identifies pours into lots.

The size of a lot must not exceed one day's output except that this period may be extended by agreement with the Principal where full conformity cannot be achieved in one day for earthworks. In conjunction with the lot register the Geotechnical Testing Register SEQ-FM-035 or SEQ-FM-034 for large scale earthworks, should be maintained to ensure all Geotechnical Testing is carried out to the specified sampling frequencies. Test dates, test locations & test results shall be entered into this register as soon as they are made available.

Determine the bounds of each lot before sampling. Set the bounds of each lot so that each lot is represented by a single tested sample, except where statistical methods (which require several tested samples to represent a lot) are used. Each acceptance criterion may have different lot boundaries. Demonstrate the relationship of the boundaries of all adjacent lots to confirm that the lots represent the total work.

Give each lot a unique lot number. Use this lot number as an identifier on all quality records. The lot numbering system must be compatible with any activity numbering system used for your Contract Program. Record the lot number on an appropriate register that record chainages from start to finish, lateral location and layer location. When the lot number does not indicate the location of the lot, agree the method for identification of the lot with the Principal.

RMS Table: Apply traceability to the following products:

Specification	Product	Requirement
	Concrete batches used in bridge components, cast-in-place box culverts and retaining walls.	The trace must start at the batch plant and finish at the location where the material is incorporated in the Works. Records must be kept of the batch quantities and time, testing details and location of placement.
	Concrete batches used in road pavement sub-base and base.	The trace must start at the batch plant and finish at the location where the material is incorporated in the Works. Records must be kept of the batch quantities and time, testing details and location of placement.
	Stabilised material used in road pavement.	The trace must start at the batch plant and finish at the location where the material is incorporated in the Works. Records must be kept of the batch quantities and time, testing details and location of placement.



Specification	Product	Requirement
	Asphalt used in wearing courses, intermediate courses & drainage layers.	The trace must start at the batch plant and finish at the location where the material is incorporated in the Works. Records must be kept of the batch quantities and time, testing details and location of placement.
	Steel plate in bridge girders and bridge columns.	The trace must start at the steelworks and finish at the location of the plate in the girder or column. Records must be kept of the steel heat number, testing details and location of the plate in the girder or column.

Test results for each lot must be reported in NATA endorsed documentation

9.7. Specification/standard

The standards against which conformity is measured can take various forms. The most common source is usually the contract technical specification. Other standards would often be referenced in this document, and may include any of the following: -

- Contract documents/specification generally
- Contract drawings
- Approved workshop drawings and/or calculations
- Approved technical details/procedures
- Approved samples and/or prototypes
- Regulatory requirements
- Australian Standards
- International Standards
- Standard specifications
- Manufacturers' recommendations
- WHS and Environmental controls
- Plant to be used
- Receiving inspection of incoming goods (dockets or Haslin Receiving Inspection Checklist SEQ-CL-011, refer to section 10 for more specific information)
- NATA test results (or any test results prescribed for that particular ITP) e.g. compaction tests, concrete batch tests etc.
- Calibration records (surveyors equipment, laser levels, measuring equipment etc.)

9.8. Acceptance criteria

Acceptance criteria would normally be defined in the contract documents (either directly or by reference to other standards such as Australian Standards). Where this is not the case it would be necessary to identify them and possibly to agree to them with the client. It is preferable to establish acceptance criteria with the client (where they are not specified or clear) to agree the yardsticks (such as test panels/sections or previous work) against which a product/service is to be declared conforming or nonconforming.

9.9. Inspection/test procedures

For many inspections/tests, the methods employed will be specified or self evident and determined by the characteristics being examined. In other cases, however, the precise manner in which the inspection/test is carried out would need to be identified and described. A clearly described test procedure or (Work Method Statement SEQ-TP-080) will usually be necessary to help achieve consistent and reliable results.

A typical test procedure using statistical techniques might, for example, cover:

- reference to work areas/lots or batches
- frequency of sampling
- method of taking samples
- method of conducting a test (including conditions)



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- qualifications of test personnel and equipment calibration/condition/specification
- method of documenting results
- Special equipment being used
- Detailed description of area of the works being done e.g. Demolition part of structure

In some cases it may be possible to satisfy the requirements simply by referencing the requirements of Australian Standards and the like.

9.10. Hold and Witness Points

It is Haslin Constructions responsibility to identify the Hold and Witness Points (with the people responsible for the inspection/test/endorsement and other requirements) that are required for Haslin Constructions Representatives, Sub-Contractors and employees doing the work. Haslin Constructions would do this to the extent that is necessary to be confident that the work is being carried out to the standards required.

The client usually retains the option to inspect the work at any stage and may identify Hold and Witness Points requiring the client's attendance. When preparing an ITP, the word "Visual Check" would be shown against all selected inspection or test points that are not otherwise covered by Hold or Witness Points.

The client may have amongst there works brief a schedule of 'Hold Point and Witness Points use this as well as Haslins PQMP section 14.7 QA Inspection Checklist.

9.11. Checklists

As noted in 9.2, It is often useful to complete checklists at such stages and with each inspection and test - where they will, in effect, summarise the procedures that have, and should have, taken place up to the particular point in the work process.

The ITP checklist are useful reminders to the person doing the work of all the matters that are to be addressed. They are used to confirm all the matters have been attended to. They are also reminders to the person inspecting the work of all the matters that should be checked.

The checklist also gives an opportunity to record any special or unusual conditions under the contract, and draw these to the attention of the people doing the work. For example, special precautions for protecting existing work, notifications to the public, and other matters that might not normally be required for the particular trade or activity, may be included.

The fact that checklists exist, and that their use and content have been verified, would give a client confidence that the person doing the work is aware of all the important steps, attributes and matters to be addressed, and the standards that should be complied with, and that conformity is being verified. Checklists to be used;

- SEQ-FM-038 Formwork & Concrete Pour Checklist
- SEQ-FM-037 Bulk Earthworks ITC
- SEQ-FM-036 Road Works/Pavement ITC.

10. Receiving Inspection Checklist.

Documented criteria for receiving incoming goods, use the Receiving Inspection Checklist SEQ-CL-011, or other suitable format (e.g. notation of your signature on delivery dockets), dockets are to be given to the Project Manager/Project Engineer. If there is a defect product make note on the docket or receiving inspection checklist and notify the Project Manager/Project Engineer immediately. **DO NOT ACCEPT FAULTY OR DAMAGED PRODUCT.**

Example:



12. Commissioning and Testing Plan

Some projects may require a Commissioning Test Plan, SEQ-TP-071. This document defines the approach to testing and outlines the responsibilities and general guidelines. This document is not a detailed “how to” procedure.

Inspection and Test Plans and associated check sheets will be used to control each testing activity and record data obtained as a result of the activity.

13. Process Review

The Project Manager will review the effectiveness of the process controls to consistently achieve the specified product quality, while each process is in progress.

For new or unproven processes, the Managing Director will also review the effectiveness of the process controls.

Any improvement or corrective/preventive action will be made in accordance with SEQ-PR-065 Non-conformance and Corrective Action Procedure

14. Training

All new employees will be specifically trained into Haslin Constructions ITP Procedure at induction and ongoing training on site by Senior Management

15. Record keeping

All ITPs shall be kept on record for the project for up to seven years.

16. Relevant Forms, Checklist and Templates

SEQ-CL-034	ITP Checklist
SEQ-PR-065	Non-conformance and Corrective Action Procedure
SEQ-TP-071	Commissioning Test Plan
SEQ-CL-011	Receiving Inspection Checklist
SEQ-TP-080	Work Method Statement
SEQ-CL-037	ITP Lot Register
SEQ-FM-015	Concrete Register
SEQ-FM-034	Compaction Density Testing Register
SEQ-FM-035	Geotechnical Testing Register
SEQ-FM-036	Roadwork's Pavement ITC
SEQ-FM-037	Bulk Earthworks ITC
SEQ-FM-038	Formwork & Concrete Pour Checklist



Inspection Testing Procedure (ITP)

HASLIN

SEQ-PR-063

Appendix A - Example of a Haslin ITP

	Project:	TAP 3 - Wahroonga Station	Client:	Transport for New South Wales		
	Work Area:	Wahroonga Station - Under Concourse/Staircase	Lot No.:	001-3	Job No.: 222	
	Specifications:	AS4100 & Wahroonga Station Temporary Design	Date Revised:	18/09/2020	Contract No.:	
	Process:	Structural Steel - Temporary Structure	Date works Start:	17/10/2020	Revision: 3	
AEO Designer Name:	Tom Lemon	Signoff:		Date:	20/11/2020	
SEQ-CL-034						
<small>HP - Health & Safety WP - Witness Point VC - Visual Check T - Test SM - Site Manager PM - Project Manager PE - Project Engineer EL - Electrical MC - Mechanical SR - Surveyor DT - Geo-Test HF - Hydraulic/Drainage CDM - Commonwealth SC - Security R - Risk</small>						
Item	Work Sequence / Acceptance Criteria	Specification/Drawing	Action by	Inspection / Test Procedure	Signature / Date	Evidence of Acceptance / Comments / Correspondence
2.1	Shop Drawings: Present to client the following details: <ul style="list-style-type: none"> Names and Qualifications of those people involved in the manufacture of the steel. Welding procedures. System for identification of components Testing certificates Procedure of shop assembly 	Temporary Works Design Drawings	AEO Engineer PE	HP VC		<input checked="" type="checkbox"/> Approval of Shop Drawings
2.2	Survey: <ul style="list-style-type: none"> Survey setout completed in accordance with the latest construction-issue drawings and design instructions. Set-out has been confirmed by the site manager. 	Temporary Works Design Drawings	SU PE SM	VC VC VC		<ul style="list-style-type: none"> Visual Inspection <input checked="" type="checkbox"/> Survey Drawings
2.3	Welding Procedures: <ul style="list-style-type: none"> Welding plans and procedures to be in accordance with AS 5131. Welding to be conformant to AS 1554 Welding procedures for each joint must be approved and performed in accordance with shop drawings <ul style="list-style-type: none"> Welding procedure WPS AE299 submitted. Provide evidence of welder qualifications to specific weld types. 	AS 1554	AEO Engineer PE	HP VC		<input checked="" type="checkbox"/> Welding Procedures Transmittal and Approval [HP 003] <input checked="" type="checkbox"/> Welder Qualifications
2.4	Design Changes: <ul style="list-style-type: none"> Any design changes incorporated into the final design, i.e. revised drawings, RFI responses. 		PE SM	VC VC		<input checked="" type="checkbox"/> Inspection of Works to Current Drawings <i>Completed</i>
Uncontrolled when printed						
SEQ-CL-034 Rev 4 Prepared by: Jeremy Wallis, HSEQ Manager		Page 2 of 8		Date Issued: 15/09/15 Approved by: Colin Woods, Managing Director		