

Selected Engineered Fill Placement and Compaction Inspection and Test Plan Template

Reusable baseline for source-controlled selected engineered fill in defined zones, including receipt, layer placement, conditioning, compaction process, specified compliance tests, rework and survey/handover. Excludes bulk cut/fill balancing, ordinary utility trench bedding/surround/backfill, pavement-specific acceptance unless included, stabilisation and ground improvement.

Project	[Enter project / state / parties]
Package	fill-compaction
Document / revision	[Enter controlled number and revision]
Issue purpose	For review - proposed editable baseline
Boundary	Complete against project documents; remove out-of-scope activities.

Read before use

- This is a reusable proposed baseline, not an approved project plan or completed inspection record.
- Enter actual acceptance criteria, source revisions/locators, lot basis, frequency, roles and contractual control points from the project. No numeric limit, test result, qualification, signature or client release has been supplied.
- Confirm scope and remove or mark conditional rows that do not apply. Resolve missing or conflicting decisions with the assigned project authority.
- Complete the matching blank Record Prompts only when actual work occurs; retain source certificates and original specialist reports.

Project inputs to resolve

Project jurisdiction / authority context: [Enter project source / decision] State or territory and any authority or contract scope that governs the work.

Approved civil / services drawings and revisions: [Enter project source / decision] Identify controlled plans, sections, set-out details, levels and applicable drawing items.

Project earthworks specification and adopted standards: [Enter project source / decision] Identify contract clauses, adopted editions, annexures and precedence.

Geotechnical design basis and disposition roles: [Enter project source / decision] Identify the report, design zones and who provides any specified founding or changed-ground disposition.

Material source, classification and use schedule: [Enter project source / decision] Identify approved source, permitted use and project material criteria; do not infer a class.

Project testing, lotting and reporting plan: [Enter project source / decision] Enter nominated methods, test locations, lot definition, rate, acceptance and laboratory role.

Survey control, geometry and closeout requirements: [Enter project source / decision] Identify control, design geometry, tolerances, as-built format and responsible survey role.

Service clearance and permit process: [Enter project source / decision] Identify current service information, locating, protection and permit requirements.

Service and work-package interfaces: [Enter project source / decision] Identify exact trench, building, pavement or service boundaries and owner handover/testing responsibilities.

Performing, reviewing and contractual release roles: [Enter project source / decision] Identify assigned roles, notice period, evidence, and contractual Hold/Witness or release conditions.

Project records and handover requirements: [Enter project source / decision] Identify required registers, reports, photos, dispositions and handover submission.

Inspection and Test Plan

Proposed baseline. Replace prompts with controlled project criteria and references before project review.

SEF-01 • Engineered fill scope and acceptance basis

Inspection / test	Define each selected engineered fill zone, intended function, design elevation, required material class and acceptance evidence.
Method	Review approved drawings, geotechnical/design documents, earthworks specification and test/lot plan; record the governing revision and unresolved decisions.
Acceptance condition	Zone boundaries, use, required material, placement method, acceptance criteria, lotting and responsibility are stated in controlled project documents; no value is inferred. [Enter Approved civil / services drawings and revisions] [Enter Geotechnical design basis and disposition roles] [Enter Project earthworks specification and adopted standards] [Enter Project testing, lotting and reporting plan]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Before sourcing, placement or changes to zone/design basis.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Selected fill zone and criteria register
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

SEF-02 • Fill source and material approval

Inspection / test	Verify source identity and project evidence for each selected engineered fill material before delivery/use.
Method	Compare source proposal, representative material identification and required test/certification reports with project material schedule and nominated approval route.
Acceptance condition	Source, material type and intended zone match the approved project record; required evidence is complete and current for the material/source presented. [Enter Material source, classification and use schedule] [Enter Project testing, lotting and reporting plan] [Enter Project earthworks specification and adopted standards]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Before first use of each source/material and when source or material changes.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Engineered fill source approval register
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

SEF-03 • Receiving formation readiness

Inspection / test	Confirm the prepared receiving surface is identified and accepted for selected engineered fill placement.
Method	Inspect the surface, drainage and boundaries; compare set-out and documented geotechnical/design disposition; confirm required preceding records are available.
Acceptance condition	Receiving surface and any specified treatment/release match project drawings and written dispositions; unresolved water, soft areas or conflicts are referred before covering. [Enter Approved civil / services drawings and revisions] [Enter Geotechnical design basis and disposition roles] [Enter Survey control, geometry and closeout requirements] [Enter Performing, reviewing and contractual release roles]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Before the first fill layer in each zone and after re-preparation.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Receiving formation inspection
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

SEF-04 • Delivery identity and material traceability

Inspection / test	Check each delivery or defined delivery group is linked to the approved source, material and intended zone.
Method	Review docket/load records and observe material identity/condition; reconcile source, material designation and destination with the approval register.
Acceptance condition	Delivery is identifiable and consistent with the accepted material for the intended zone; discrepancies are segregated pending project decision. [Enter Material source, classification and use schedule] [Enter Project records and handover requirements]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Each delivery or project-defined delivery group before placement.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Selected fill delivery register
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

SEF-05 · Layer area, thickness and placement sequence

Inspection / test	Inspect the placed layer and record its area and thickness basis before conditioning/compaction.
Method	Observe spreading, segregation and layer boundaries; measure or obtain the project-required thickness evidence using the specified method.
Acceptance condition	Material is placed in the approved zone and sequence; layer dimensions and continuity meet the project-stated requirements and are recorded against the source criteria. [Enter Approved civil / services drawings and revisions] [Enter Project earthworks specification and adopted standards] [Enter Project testing, lotting and reporting plan]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Each layer/zone and material change before compaction.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Engineered fill layer placement record
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

SEF-06 • Moisture conditioning and compaction method

Inspection / test	Verify the approved conditioning and compaction method is being followed for the identified material and layer.
Method	Observe conditioning and plant/method; compare with approved procedure or project trial where required; log actual observations only where specified.
Acceptance condition	Method and any moisture/plant constraints follow the approved project procedure; no target moisture, equipment, pass count or density is assumed by this baseline. [Enter Project earthworks specification and adopted standards] [Enter Material source, classification and use schedule] [Enter Project testing, lotting and reporting plan]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	During each applicable layer and whenever material, weather or method changes.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Layer conditioning and compaction process log
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

SEF-07 • Compaction operation and layer completion

Inspection / test	Inspect the controlled compaction process and identify completed layer boundaries for testing or next-stage work.
Method	Observe the approved operation across the identified area; map completed and reworked portions to the lot/layer plan without substituting visual observation for specified testing.
Acceptance condition	The specified method covers the recorded area and layer; any omitted, disturbed or visibly deficient area is corrected and identified for required verification before concealment. [Enter Project earthworks specification and adopted standards] [Enter Project testing, lotting and reporting plan]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Per defined layer/lot during placement and before the next layer obscures it.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Compaction activity and layer map
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

SEF-08 • Specified compliance tests and result disposition

Inspection / test	Track project-required samples/tests by material, layer, lot, location, method and report; manage failures to written disposition.
Method	Check test request and report traceability against project test plan; compare reported results only with the cited project acceptance clause and identify retest/rework link.
Acceptance condition	Required tests and reports cover the defined lot under project criteria; results are assessed by the nominated method; failed or missing results remain open until documented disposition and verification. [Enter Project testing, lotting and reporting plan] [Enter Project earthworks specification and adopted standards] [Enter Performing, reviewing and contractual release roles]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	At the project-defined lot/sample trigger and before dependent work; exact rate and method are project inputs.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Selected fill test and disposition register
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

SEF-09 • Finished zone survey, protection and handover

Inspection / test	Verify completed zone geometry, test dossier, protection condition and receiving-trade interface.
Method	Compare survey and test register with project closeout requirements; walk the zone for damage, drainage or disturbance after test/acceptance.
Acceptance condition	Specified geometry and records are submitted against current project criteria; damage or outstanding results are resolved or carried as a documented hold before handover. [Enter Survey control, geometry and closeout requirements] [Enter Project testing, lotting and reporting plan] [Enter Project records and handover requirements]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	At completion of each zone and immediately before handover or concealment.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Selected fill completion and handover index
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

Blank matching record prompts

Complete the actual date, observation, result and responsible roles during the work. Blank cells are intentional; this template contains no completed inspection or approval.

SEF-01 • Engineered fill scope and acceptance basis

Field	Actual entry / evidence
Zone / layer purpose	
Design / geotechnical ref.	
Material / acceptance source locator	
Lot / test plan ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

SEF-02 • Fill source and material approval

Field	Actual entry / evidence
Quarry / source / supplier	
Material ID / description	
Test / certificate ref.	
Approved use zone	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

SEF-03 • Receiving formation readiness

Field	Actual entry / evidence
Zone / area	
Observed level / drawing locator	
Surface / moisture / drainage observation	
Disposition / release ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

SEF-04 • Delivery identity and material traceability

Field	Actual entry / evidence
Docket / load ID	
Approved source ID	
Material ID / description	
Zone / layer reference	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

SEF-05 • Layer area, thickness and placement sequence

Field	Actual entry / evidence
Layer ID / elevation	
Area / lot boundary	
Observed layer thickness / unit	
Material / delivery references	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

SEF-06 • Moisture conditioning and compaction method

Field	Actual entry / evidence
Layer / lot ID	
Plant / method reference	
Observed conditioning / actual reading if required	
Approved method / trial ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

SEF-07 • Compaction operation and layer completion

Field	Actual entry / evidence
Lot / boundary plan ref.	
Layer ID / area	
Method / plant reference	
Rework area / instruction ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

SEF-08 • Specified compliance tests and result disposition

Field	Actual entry / evidence
Test / method / date	
Lot / layer / location	
Actual result / unit	
Project clause / disposition / retest ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

SEF-09 • Finished zone survey, protection and handover

Field	Actual entry / evidence
Zone / design reference	
As-built survey / revision	
Test register / outstanding items	
Receiving party / handover ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

Topic guidance sources and limitations

Queensland Department of Transport and Main Roads, MRTS04 General Earthworks (March 2025)

Inspected official PDF and local searchable extract industry-library/text/tmr-mrts04.txt. Topic locators: 1.1-1.2 scope (printed specification pp. 1-2); 5.2-5.6 procedures, testing/lotting (printed pp. 15-19); 6 geometry (printed pp. 19-20); 8 topsoil (printed pp. 22-24); 9 unsuitable material (printed pp. 25-26); 13 excavation (printed pp. 34-38); 14 Earth Fill (printed pp. 38-47); 15 Compaction (printed pp. 48-53); 19 Backfill (printed pp. 67-74).

<https://www.tmr.qld.gov.au/-/media/busind/techstdpubs/Specifications-and-drawings/Specifications/3-Roadworks-Drainage-Culverts-and-Geotechnical/MRTS04.pdf>

Inspected topic example for Queensland road and bridge earthworks only. Supports identification of process topics, documentary controls, materials, geometry, excavation, fill, compaction, backfill and the fact that lot/test rules are specified. Its technical values, tests, frequencies, lot sizes, control points and roles are not defaults; use only if the project contract adopts this edition and applicable annexures.

Hutchinson Builders, Safety & Quality Planning: 010 Groundworks ITP and Report (EXAMPLE)

Official downloads page lists 010 Groundworks ITP and 010 Groundworks Report; both DOCX files downloaded and text-extracted 2026-10-07 from the linked Toolbox files. ITP table rows 3-11 cover bulk set-out, fill source, excavation, fill operations, bottom/surface preparation, compaction/soil-strength records and final inspection; rows 12-25 cover detailed earthworks, trench/pit bottoms, bedding/blinding, backfill, regulatory records and closeout. Matching report table rows 2-4 capture lot/location/open-close/comments/signature; rows 8-32 carry process, specification, acceptance, pass/fail, CAR, initials and date.

<https://subbies.hutchies.com.au/resources/videos/safety-and-quality-planning>

Builder example marked EXAMPLE; used only to check broad staging and useful lot/report fields. Many acceptance/frequency/role cells are blank. It does not set universal criteria, regulatory steps or release authority. Original DOCX files are not redistributed.

Construction Quality Australia, How to create an Inspection and Test Plan

Official industry guide, sections 1-4, previously inspected and summarized in skills/au-construction-ityp/references/template-writing-guide.md.

<https://www.cqa.org.au/post/guide-how-to-create-an-inspection-and-test-plan-ityp>

Method structure only: sequence checkable activities and specify method, acceptance source, trigger/frequency, responsibility, control and records. Does not substantiate earthworks technical limits or project requirements.

Topic guidance is provided for orientation only. Confirm applicable jurisdictional adoption, approved design and contract requirements. No cited source substitutes for the complete controlled project documents or licensed standards.