



Z/19 Taumata Taiao – Environmental and Sustainability Standard

1 June 2022

Version 4

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More information

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Document management plan

Purpose

This management plan outlines the updating procedures and contact points for the document.

Document information

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Approvals

Document version	Prepared by	Approved by	Date of approval
4	Karolyn Buhring Team Lead Environment and Sustainability	Vanessa Browne National Manager – Programme and Standards	June 2022

Amendments and review strategy

All corrective action/improvement requests (CAIRs) suggesting changes will be acknowledged by the document owner.

	Comments	Frequency
Amendments (minor revisions)	Updates incorporated immediately as they occur.	As required
Review (major revisions)	Amendments fundamentally changing the content or structure of the document will be incorporated as soon as practicable. They may require coordinating with the review team timetable.	Three-yearly
Notification	All users that have registered their interest by email to environment@nzta.govt.nz will be advised by email of amendments and updates.	Immediately

There will be occasions, depending on the subject matter, when amendments will need to be worked through by the review team before the amendment is actioned. This may cause some variations to the above noted timeframes.

Record of amendment

Amendment number	Description of change	Effective date	Updated by
4	A comprehensive revision of previous Z/19 standard, including incorporating new policy and process.	June 2022	Karolyn Buhring

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This document was produced by the Safe and Sustainable Standards team at Waka Kotahi.

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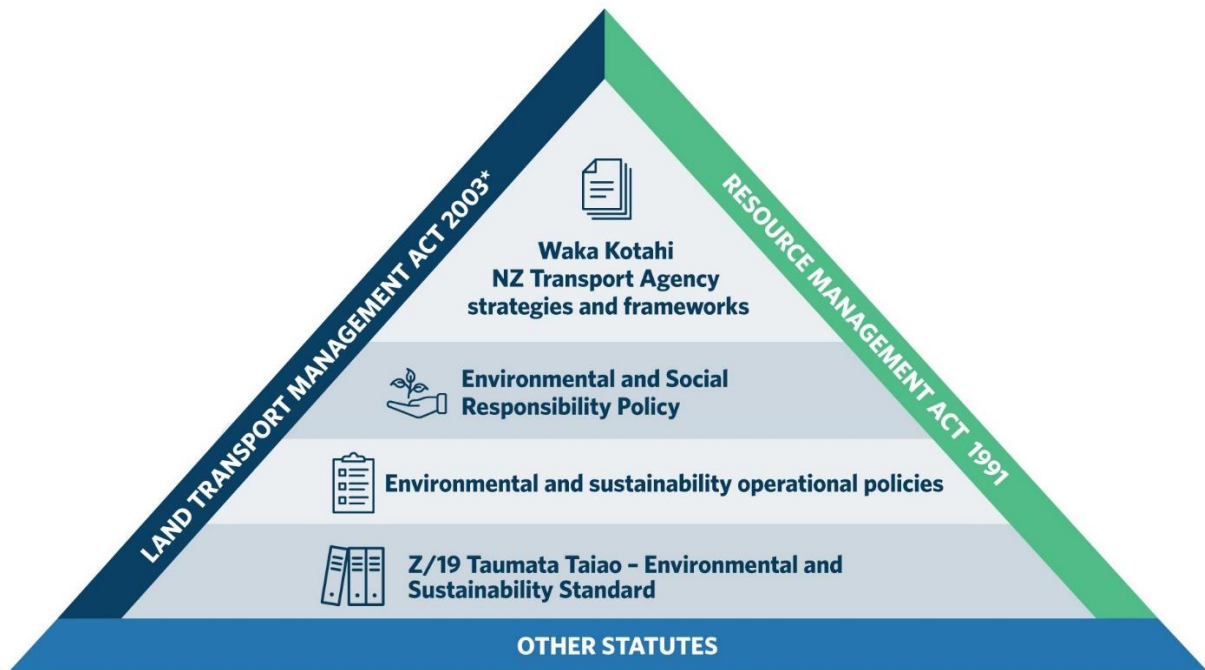
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Introduction

Purpose

The Z/19 Taumata Taiao – Environmental and Sustainability Standard sets out the process and requirements to give effect to the Waka Kotahi NZ Transport Agency environmental and sustainability policies, other relevant strategic objectives, outcomes and legal requirements during the development and management of the land transport system.

The standard is guided by legislation, key external and internal strategies, policy documents, plans and memoranda of understanding (MoUs), as shown in the diagram below.



*Including the Government Policy Statement on land transport 2021–2030.

The scope of the standard is comprehensive and covers the following focus areas/disciplines:



Definitions

Approved organisation (AO): A regional council, territorial authority, or public organisation that has been approved to apply for funding from the National Land Transport Fund (NLTF).

Principal: The person named as such in the special conditions in contract documentation and includes its executors, administrators, and successors.

Quality assurance (QA): The process which demonstrates that compliance with technical requirements has been achieved.

Standard: This minimum standard, *Z/19 Taumata Taiao – Environmental and Sustainability Standard*.

Supplier: A legal entity (consultant and/or contractor, be they a sole proprietorship, partnership, limited liability company or trading trust) engaged to provide the services set out in the contract documents.

Waka Kotahi: Waka Kotahi in this standard means the New Zealand Transport Agency established as defined by section 93 of the Land Transport Management Act 2003, with functions as set out in section 95 of that act.

Note that the following terms have the same meaning as set out in the Business Case Approach guidance:

- point of entry (POE)
- strategic case
- programme business case (PBC)
- single-stage business case (SSBC)
- indicative business case (IBC)
- detailed business case (DBC).

[Business Case Approach guidance](#)

Application

The standard is a requirement for land transport system planning, design, delivery, operation and maintenance activities that are fully funded by the National Land Transport Fund (NLTF) or where Waka Kotahi is the primary entity responsible for the activity (ie where Crown funding is used). The standard applies to land transport activities irrespective of mode (eg it applies to public transport, roading and active modes systems).

The standard applies not only to projects and activities where new or modified statutory approvals and/or designations are sought or proposed, but also to works and activities occurring under existing approvals, such as those authorised by a resource consent or existing designation, or under maintenance and operations contracts.

The supplier is responsible for implementing the standard.

Approved organisations (AOs) are encouraged to implement the standard, its requirements, associated guidelines and specifications for activities that are funded by the NLTF.

Audience

The primary audience for the standard is professional services contract suppliers, project and maintenance contractors who are responsible for delivering land transport system activities. The standard is relevant to Waka Kotahi project teams to manage risk and may be of relevance to AO project teams.

For Waka Kotahi project teams, the process presented in the standard is reflected by the Enterprise Portfolio Management Office (EPMO) transport systems projects tool and *SM011 Project management manual*.

[Enterprise Portfolio Management Office \(EPMO\) transport systems projects tool](#) (on Waka Kotahi intranet)

[SM011 Project management manual](#)

What is the standard?

The standard provides a holistic approach to the land transport system and the environment, and sets out the requirements for how and when to implement Waka Kotahi environmental and sustainability policy, strategy and legislative requirements. The standard is composed of two main parts:

- this document, which sets out the high-level process for assessing and managing environmental and sustainability risks and opportunities and delivering Waka Kotahi requirements
- a series of operational specifications, guidelines and tools, which set out the detailed process and requirements by focus area/discipline.

The figure below shows the standard and its component parts:



Key components of the standard are:

- **Environmental screen** – It includes questions designed to identify whether the option could have significant environmental and/or sustainability risks and to capture opportunities that require further evaluation. The screen informs the multi-criteria analysis (MCA) and optioneering process, project planning, consenting and design by triggering further environmental technical assessment. The screen is a requirement for all Waka Kotahi projects. It can be applied at a project or programme level.
- **Environmental and sustainability guidelines and specifications** – It outlines Waka Kotahi minimum levels of service and consolidates practical experience gained by the organisation and specific specialist knowledge relating to transport system construction, operation and maintenance, so this knowledge can be applied efficiently and consistently across the organisation. Guidelines and specifications apply to all Waka Kotahi projects.

Approvals for any departures from this standard can be obtained from Waka Kotahi. The departures process is described in the quality assurance section of this document.

Waka Kotahi will monitor implementation of the standard through the assurance and approvals process set out in the quality assurance section of this document.

[Environmental screen](#)

[Environmental and sustainability specifications, guidelines and supporting resources](#)

Other relevant standards, guides and manuals

The activities covered in this standard are subject to a number of Waka Kotahi guidelines and standards, including but not limited to:

- **Z series minimum standards**, which set out requirements for professional services contracts, in particular:
 - *Z/1 Quality management plan*
 - *Z/8 Inspection, sampling and testing*
 - *Z/15 Asset owner's manual specification*
 - *Z/44 Risk management practice guide*
- **professional services guides**, which set out additional requirements for professional services contracts
- **Asset Management Data Standard (AMDS)** for land transport
- **State highway professional services contract proforma manual (SM030)**
- **State highway construction contract proforma manual (SM031)**
- **State highway maintenance contract proforma manual (SM032).**

[Z series minimum standards](#)

[Professional services guides](#)

[Asset Management Data Standard](#)

[SM030](#)

[SM031](#)

[SM032](#)

Environmental and sustainability standard process

Environmental and sustainability policy objectives

Toitū te Taiao – Our Sustainability Action plan sets out the commitment of Waka Kotahi to environmental sustainability and public health in the land transport sector. The Waka Kotahi Board *Environmental and social responsibility policy*¹ and *Environmental plan* outline the policy objectives which must guide the implementation of the standard. Specific policy objectives may be incorporated in the environmental and sustainability operational policies. A summary of relevant policy objectives for each focus area can be found in Appendix 1.

[Toitū te Taiao](#)

[Environmental and social responsibility policy](#)

[Environmental plan](#)

[Environmental and sustainability operational policies](#)

Business case and project lifecycle requirements

The Business Case Approach (BCA) is a principles-based approach, developed using the flexible framework, shown in the diagram below. A point of entry phase is mandatory for all business cases that seek funding through the National Land Transport Programme (NLTP). However, the point of entry is the only mandatory phase, and the actual pathway used to develop each business case depends on the specific needs of each investment.

In general terms:

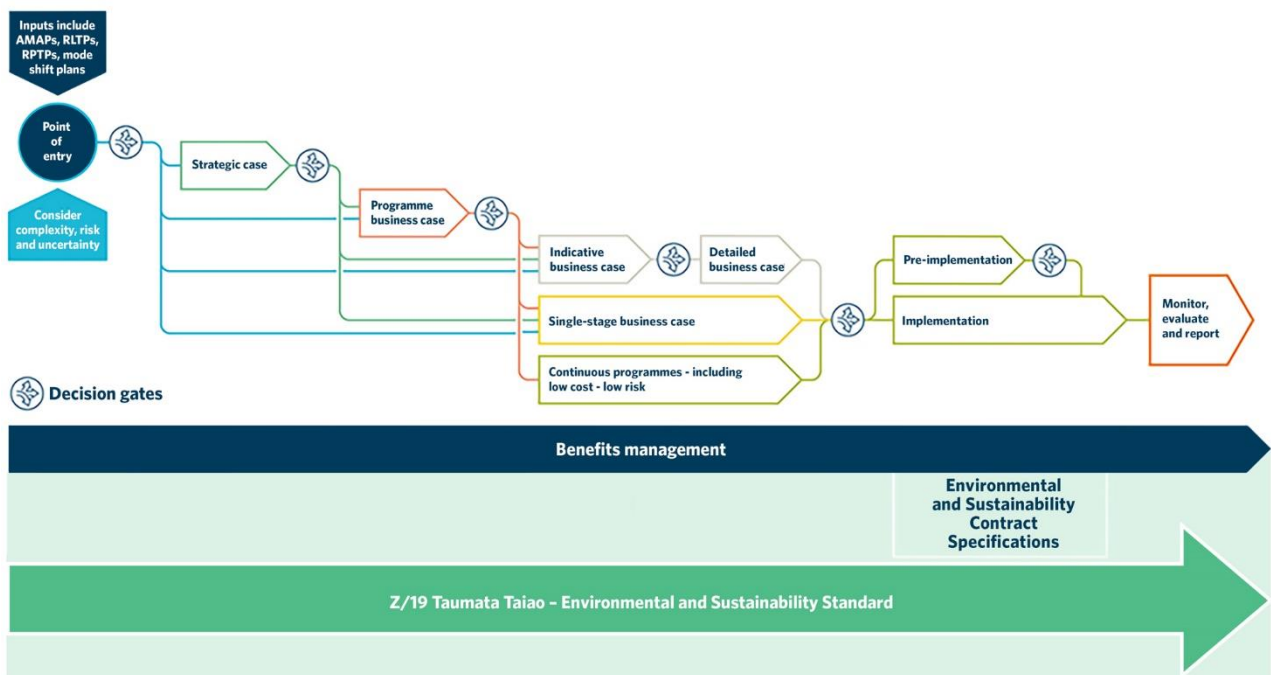
- investments with high levels of complexity, risk and uncertainty should use more of the phases shown
- simple, low-risk and low-complexity investments may only need one or two phases to fully develop the business case.

Specific principles support the development of business cases and their associated activities in a way that is consistent with the purpose of this standard. These are:

1. In developing business cases, appropriate consideration must be given to relevant aspects of the built and natural environment when describing the context for the investment.
2. To the extent relevant, the business case must be developed in a way that is consistent with Waka Kotahi environmental and sustainability policies.
3. Where multi-criteria analysis (MCA) is used to evaluate a range of alternatives or options, this must factor in any relevant environmental risks.
4. Any preferred response or solution must quantify the remaining environmental risks.
5. Application of the standard must be consistent with BCA principles and behaviours, including (but not limited to) the principle of fit-for-purpose effort, and the behaviour of developing the case for investment progressively.

[Business Case Approach guidance](#)

¹ As of 2022, the Waka Kotahi Board *Environment and social responsibility policy* is under review.



Each phase of development follows a decision gate, where the business case is formally assessed by Waka Kotahi before a decision is made on whether to fund the next phase of development. The assessment made at the decision gates will include consideration of whether the standard is being met, alongside other relevant assessment criteria.

The expectations from this standard at each decision gate will reflect the level of understanding about the investment. The business case developer will use this standard to determine which requirements will be addressed in each phase of development.

A number of tools and resources are available to support the identification and assessment of environmental and sustainability risks and outcomes aligned with Waka Kotahi policy. These can be identified and assessed through various project development processes including the environmental screen and MCA process, the Land Transport Benefits Framework, public engagement, Māori partnership, technical assessment, environmental strategies, urban design processes, Infrastructure Sustainability Council (ISC) certification and monitoring.

Table 1 illustrates how the relevant high-level objectives and generic tasks and deliverables should be completed in each phase of the business case lifecycle. Where a business case does not use all phases for development, it is expected that the steps shown, where relevant, will be completed in the most appropriate phase – usually this will be the next phase.

Detailed focus area/technical requirements: detailed objectives, tasks and deliverables specific to each focus area covered in the standard are provided in the form of ratified guidelines and specifications.

Note that the application of objectives, tasks and deliverables follows the key BCA principle of fit-for-purpose effort. Business case developers must match their level of effort to the complexity, risk and uncertainty of the investment they are considering.

[Environmental and sustainability specifications, guidelines and supporting resources.](#)

Table 1: High-level environmental and sustainability requirements

Phase objectives	Tasks and deliverables
Point of entry	
Demonstrate an initial understanding of the built and natural environmental context.	<ul style="list-style-type: none"> Briefly describe the built and natural environmental context (including climate change considerations) of the problem/opportunity in the point of entry.
Strategic case	
Demonstrate a preliminary understanding of the natural, built and social environmental context.	<ul style="list-style-type: none"> Map and establish the natural, built and social environmental context of the problem/opportunity (including climate change considerations) in strategic case. Establish aspirations of project area Māori partners for environmental outcomes.
Programme business case (PBC)	
<p>Demonstrate at a high level how the outcome sought gives effect to Waka Kotahi environmental and sustainability policies.</p> <p>When developing potential alternatives for the longlist, demonstrate understanding of existing environmental and sustainability context, opportunities and constraints for each option.</p>	<ul style="list-style-type: none"> Further describe the natural, built and social environmental context of the project (including climate change considerations) in programme business case. Understand Waka Kotahi environmental and sustainability policy expectations. Identify environmental and sustainability opportunities (including urban design and multimodal integration) and constraints and assess these during the multi-criteria analysis (MCA).
	<p>Key deliverables</p> <p>Initial environmental and sustainability strategy</p>
Indicative business case (IBC)	
<p>Key environmental and sustainability risks and opportunities are incorporated in the MCA assessment of options.</p> <p>Demonstrate how the project will achieve Waka Kotahi environmental, sustainability and policy expectations.</p>	<ul style="list-style-type: none"> Complete the environmental screen and incorporate results into IBC assessment of options. Prepare a schedule of deliverables and determine if technical assessments or any independent peer reviews will be required for the project during the IBC and subsequent phases. Determine whether the project is required to complete a sustainability rating scheme assessment.
	<p>Key deliverables</p> <p>Environmental screen</p> <p>Updated environmental and sustainability strategy</p> <p>Schedule of deliverables and assurance activities</p> <p>High-level public engagement plan</p>

Detailed business case (DBC)

Environmental and sustainability risks and opportunities associated with the preferred option are clearly understood and reflected in the environmental and sustainability strategy and consenting strategy.

Demonstrate how environmental issues and opportunities and sustainability aspects will be incorporated into project design.

- Include relevant environmental and sustainability requirements into the design philosophy statement.
- Identify opportunities for resource efficiency outcomes and sustainability initiatives, including any required for sustainability rating scheme.
- Reassess if independent peer reviews will be required for the project during the DBC or subsequent phases (eg technical assessments, management or mitigation plans).

Key deliverables

Finalised environmental screen

Updated environmental and sustainability strategy

Consenting strategy

Preliminary technical assessments (if required by screen)

Preliminary design framework (eg urban and landscape design frameworks (ULDF) and cultural and environmental design frameworks (CEDF) on preferred option)

Updated schedule of deliverables and assurance activities

Updated public engagement plan

Single-stage business case (SSBC)

As IBC and DBC above.

Tasks and deliverables as those from IBC and DBC above combined.

Pre-implementation stage

Technical assessments are prepared at correct level of detail to support consenting, provide required information to manage environmental and social impacts, reflect Waka Kotahi environmental and sustainability policy objectives as well as consenting and environmental and sustainability strategies developed for the project.

- Implement quality assurance programme for suppliers' deliverables and develop quality assurance requirements for implementation-stage activities.
- Review and confirm process for achieving sustainability outcomes, including resource efficiency, ISC sustainability rating level and sustainability credits sought.
- Establish requirements for environmental management during construction and prepare draft environmental management plans (EMP) as required.
- Establish requirements for operational environmental management and mitigation, and as required prepare draft management and mitigation plans.
- Secure designations and obtain resource consents if applicable.
- Obtain Heritage New Zealand Pouhere Taonga (HNZPT) authorities and Department of Conservation (DOC) approvals if applicable.
- Include all environmental and sustainability requirements into the design philosophy statement.

Key deliverables

Updated environmental and sustainability strategy

Updated consenting strategy

Designation and consent conditions

Assessment of effects on the environment (AEE) technical assessments

Draft design framework (eg ULDF/CEDF)

Pre-implementation procurement

Procurement process successfully captures environmental and sustainability commitments and outcomes sought so they can be implemented throughout subsequent project stages.

- The procurement strategy, request for tender and contract documentation will capture commitments from the consenting process (designation and resource consent conditions, CS-VUE compliance management requirements, stakeholder agreements, public engagement plan requirements, ISC rating and resource efficiency policy requirements, draft tender version of the urban design frameworks (ULDF/CEDF), multimodal requirements, property agreements, the environmental and sustainability strategy (including broader outcomes objectives), and quality assurance requirements, etc.
- Relevant environment and sustainability specifications are included into minimum requirements (MRs) and principal (PRs) requirements.
- Draft design framework (tender/procurement version).
- Key environmental and sustainability expertise is included (as required) in the procurement process.

Implementation – design

Design enables delivery of project-specific environmental and sustainability requirements and outcomes sought (including urban design and multimodal).

- Implement quality assurance programme and ensure design meets consent and designation conditions, environmental and sustainability strategy, urban design frameworks (ULDF/CEDF) and management plans, community and stakeholder commitments, property agreements and environmental and sustainability specifications.
- Implement ISC rating process (design rating) as required.
- Obtain HNZPT authorities once alignment and earthworks design are sufficiently detailed.
- Obtain DOC approvals as required.

Key deliverables

Updated urban design framework (ULDF/CEDF), management plans and master plans, to inform detailed design

Construction environmental management plans

Operational environmental mitigation plans

Implementation – construction

Environmental and sustainability commitments and outcomes are delivered throughout the construction stage (including urban design and multimodal).

- Implement and comply with conditions of designations, resource consents and other statutory approvals.
- Verify contractor is updating/implementing the environmental and sustainability strategy and environmental mitigation is being provided in accordance with the requirements.
- Verify contractor is complying with conditions of designations, consents and other statutory approvals and that CS-VUE is managed and updated.
- Ensure contractor is implementing ISC rating process (as-built rating) if required.

- Ensure environment and sustainability specifications, urban design framework (ULDF/CEDF) master plan/management plan items and multimodal requirements have been met and the management, surveillance and quality assurance (MSQA) carried out.
- Ensure construction EMPs meets Waka Kotahi guidance.
- Ensure contractor is implementing, monitoring and reporting on EMPs.
- Ensure the public engagement plan is being implemented.
- Implement quality assurance programme on contractor's activities.
- Ensure asset handover to owner/manager and the asset management manual includes all environmental, urban design/landscape and multimodal assets.

Maintenance and operations – procurement

Maintenance contracts clearly specify Waka Kotahi commitments and expectations around environmental and sustainability (including urban design and multimodal).

- Environmental and sustainability strategy requirements, CS-VUE compliance management requirements, EMP and subplans requirements and resource efficiency policy requirements are included into contract documentation.
- Ensure environmental and sustainability specifications and requirements are included in procurement documentation (eg environmental outcome performance measures, Waka Kotahi broader outcomes).
- Incorporate all environmental, urban design and multimodal assets into contract for ongoing maintenance and condition assessment.
- Include any independent peer reviews requirements into contract documentation.
- Implement quality assurance programme.

Maintenance and operations – management

Contractors identify, manage, monitor and report on environmental and sustainability (including urban design and multimodal) matters associated with maintenance activities.

- Implement and comply with conditions of designations, resource consents and other statutory approvals and undertakes CS-VUE compliance management.
- Verify contractor is implementing, monitoring and reporting on all environmental and sustainability requirements, including resource efficiency requirements, including any key result areas and performance measures and broader outcomes objectives where applicable.
- Ensure the EMP meets the requirements of Waka Kotahi EMP guidance, and environmental and sustainability specifications.
- Verify that the contractor is implementing the EMP and achieving outcome performance measures by carrying out management surveillance and quality assurance practices.

Key deliverables

Environmental and sustainability strategy

Environmental management plans and sub-management plans

Engagement and consultation

Engagement with partners and stakeholders on environmental and sustainability matters should be initiated **early** and undertaken regularly throughout **all** stages of project development and delivery as well as during maintenance and operations to inform decision making and achieve better environmental and sustainability outcomes. Stakeholders include (but are not limited to) local communities, regional and district councils, utility providers, Department of Conservation (DOC) and Heritage New Zealand Pouhere Taonga (HNZPT). For further guidance use Waka Kotahi *Public engagement guidelines* and stakeholder and partners agreements (MoUs).

[Public engagement guidelines](#)

[Stakeholder and partner agreements](#)

Engaging with our Māori partners

Te Ara Kotahi is the Waka Kotahi Māori strategy, which provides strategic direction on how to work with and respond to Māori as the Crown's Treaty partner. Consultation must include direct participation from relevant iwi representatives in line with *Hononga ki te iwi*, the Waka Kotahi Māori engagement framework, which provides guidance on how and when to engage. In line with this framework and Te Ara Kotahi, the standard requires engagement to begin from the strategic business case phase and throughout the project lifecycle. Waka Kotahi has a commitment to support iwi to exercise their kaitiakitanga over communities and the environment, and recognise and provide for te ao Māori values, tikanga (customs), Te Reo Māori and kawa (protocols), and it values the application of Mātauranga Māori (local knowledge) in the work we do.

Support can also be provided by Te Mātangi Māori Partnerships team at Waka Kotahi. Where appropriate, a Māori consultant can assist with the engagement process. For additional guidance, refer to iwi environmental management plans, MoUs and any other agreements available prior to initiating consultation.

[Te Ara Kotahi](#)

[Hononga ki te iwi](#)

Quality assurance

All deliverables developed under the standard are subject to the supplier's quality management system and activity specific quality management plan, as detailed in the minimum requirements of standard *Z/1 Quality management plan*.

Quality assurance functions in environmental and sustainability should, as a minimum, include:

- detail checking, including verification of data.
- checking against the requirements of the standard.
- confirmation that policy outcomes sought will be achieved.
- independent peer review.

Detailed assurance requirements for each focus area/technical discipline may be provided in the respective guidelines. It is expected that the assurance requirements take the form of a schedule or programme and include supplier and/or independent checks, peer reviews and audits, as well as monitoring and inspection requirements.

In general, when determining the requirement for independent peer review, the supplier should consider the following:

- Whether the deliverable will be submitted to a statutory authority.
- The scale, complexity, profile and risk of the environmental and sustainability aspect and the activity.
- Whether there are specific requirements in the technical guidelines.

[Z/1 Quality management plan](#)

[Environmental and sustainability specifications, guidelines and supporting resources](#)

Independent peer reviews

Independent peer reviews are undertaken by following the guidance in Engineering NZ *Practice note 2: peer review* by a suitably qualified and experienced professional who meets the following criteria:

- A relevant tertiary degree or equivalent.
- At least eight years of relevant experience with the subject being peer reviewed.
- Membership or preferably chartered/certified status with a relevant professional body that includes a requirement to provide evidence of continuing professional development (where relevant).
- Experience with at least three projects, plans and/or activities of a similar nature, scale and complexity.
- No financial interest in the project or activity.

Engineering NZ Practice note 2: peer review

Waka Kotahi reviews

All deliverables are subject to review by Waka Kotahi.

All final draft deliverables are submitted to Waka Kotahi for review prior to submission to a statutory authority, inclusion of a deliverable in a procurement document, or implementation of a deliverable (eg implementation of a management or mitigation plan).

Waka Kotahi may request submission of interim deliverables for review.

The requirements for Waka Kotahi submission include the following:

- Notify Waka Kotahi no less than 30 days in advance of the date of submission.
- Allow Waka Kotahi no less than 10 working days for review.
- Allow time in the supplier's programme for reconciliation of comments after completion of the Waka Kotahi review period.
- All quality assurance functions must be completed before the deliverables are submitted to Waka Kotahi or a statutory authority.
- Documentation of reconciliation of review comments is maintained.
- Documentation of the supplier's assurance is provided to Waka Kotahi on request.

General deliverables are outlined in Table 1, and technical specific deliverables and requirements are identified in the technical guidelines and specifications.

Environmental and sustainability specifications, guidelines and supporting resources

Departures

If a departure from the standard is considered necessary at any point during the transport system lifecycle, a formal request for departure approval must be submitted to Waka Kotahi before the departure is implemented or substantively progressed. Departures include those from the requirements of the standard, such as those in the guidelines, specifications and policy.

To apply for a departure, the following information should be submitted in writing by the supplier to Waka Kotahi:

- project description (including project stage, location)
- description of departure
- justification
- risk management plan.

Appendix 2 provides a template for the request of environmental sustainability technical departures.

Handover requirements

The supplier will provide a robust handover process at every stage of project development, delivery and maintenance and operations.

The handover process must include the following documented information:

- Environmental and sustainability documentation, such as:
 - environmental screen
 - consenting strategy
 - environmental and sustainability strategy (including resource efficiency plans, ISC documentation)
 - technical reports and assessments
 - designation, resource consent and other statutory approval conditions
 - CS-VUE and compliance documentation
 - environmental management plans and sub plans
 - environmental mitigation plans
 - asset management plans
 - monitoring information
 - assurance information
 - design frameworks and design management plans (including any urban, landscape, multimodal design items), sector plans, urban design and landscape review.
- Key performance indicators and targets, including sustainability rating requirements and/or goals, resource efficiency targets, etc.
- Stakeholder agreements with Waka Kotahi.
- Records of any agreed departures.
- Records of all risks and opportunities identified, including all environmental maps, drawings, aspects and impacts.
- Identification of specific actions to be managed.

Where handover information exists in electronic databases, spreadsheets or spatial formats, this should be provided in the original electronic format.

Handover is required at the end of every project stage. However, the two critical handover points are before the start of construction (pre-implementation and procurement), and immediately after construction at handover to the asset owner (operations and maintenance). Handover to the asset owner must be consistent with Waka Kotahi asset owner's manual specification (Z/15) and professional services guidelines PSG/15 and PSF/15, and meet the requirements of the asset management data standard (AMDS) for land transport.

Suppliers should include all relevant handover information in procurement documentation for subsequent business case phases.

[Z/15](#)
[PSG/15 & PSF/15](#)
[AMDS](#)

Qualifications

Suppliers implementing the standard must have appropriate qualifications and experience. In general, this means qualifications and experience relating to the nature, risk, scale and complexity of the functions they undertake in the transport system activity. Detailed qualification requirements for each focus area/technical discipline may be provided in the respective environmental and sustainability guidelines.

Suppliers should be familiar with Waka Kotahi processes, policies, requirements and expectations.

[Environmental and sustainability specifications, guidelines and supporting resources](#)

Appendix 1: Environmental and sustainability operational policy objectives

Environment and sustainability operational policy objectives compiled from Waka Kotahi *Environmental plan, Toitū te Taiao, Te Ara Kotahi* and existing ratified policy/guidelines.

Focus Area	Objectives	Reference/source
Noise	N1 Reduce exposure to high traffic noise levels from the land transport network.	Environmental plan (2008) Toitū te Taiao (2020)
	N2 Determine noise requirements when seeking new or altering existing designations, including when designating existing local roads.	Environmental plan (2008)
	N3 Manage construction noise and maintenance noise to acceptable levels.	Environmental plan (2008)
	N4 Influence activities adjacent to the land transport network to discourage noise-sensitive activities establishing in areas adversely affected, or likely to be adversely affected, by traffic noise.	Environmental plan (2008)
Vibration	V1 Mitigate vibration where levels are unreasonable and exceed national and/or international thresholds.	Environmental plan (2008)
	V2 Reduce exposure to high vibration thresholds along the land transport network.	Environmental plan (2008)
Air quality	A1 Understand the contribution of vehicle traffic to air quality.	Environmental plan (2008)
	A2 Ensure land transport projects do not exceed national environmental standards for air quality.	Environmental plan (2008)
	A2 Contribute to reducing emissions where the land transport system is a significant source of exceedances of national air quality standards.	Environmental plan (2008) Toitū te Taiao (2020)
Water resources	Reduce adverse effects of land transport on water quality.	Toitū te Taiao (2020)
	W1 Ensure run-off from land transport system complies with statutory responsibilities.	Environmental plan (2008)
	W2 Limit the adverse effects of run-off from land transport system on sensitive receiving environments.	Environmental plan (2008)
	W3 Ensure stormwater control systems on the land transport network are effective and protect water resources and their biodiversity.	Environmental plan (2008)
	W3 Manage water discharges through partnership with others where possible.	Environmental plan (2008)

Focus Area	Objectives	Reference/source
Erosion and sediment control	ES1 Ensure construction and maintenance activities avoid, remedy or mitigate effects of soil erosion, sediment run-off and sediment deposition.	Environmental plan (2008)
	ES2 Identify areas susceptible to erosion and sediment deposition and implement erosion and sediment control measures appropriate to each situation with emphasis on high-risk areas.	Environmental plan (2008)
	ES3 Use bio-engineering and low-impact design practices where practicable.	Environmental plan (2008)
Social	SR1 Enhance and contribute to community cohesion.	Environmental plan (2008)
	SR2 Proactively driving improved social outcomes.	Social impact guide (2016)
	SR3 Active and meaningful engagement with our stakeholders and communities for improved social outcomes.	Public engagement guidelines (2016)
Historic heritage	H1 Proactively limit the disturbance of significant cultural and heritage features along the land transport network and, where avoidance is not possible, adequately mitigate adverse effects on historic heritage.	Environmental plan (2008)
	H2 For historic buildings we own, show a respect for them and conserve their integrity.	Environmental plan (2008)
	H3 Provide for the use and adaptive re-use of significant historic heritage places, without detracting from their heritage values.	Historic heritage impact assessment guide for state highway projects (2015)
Tangata whenua	TW1 Ensure early and proactive engagement with tangata whenua on land transport activities.	Te Ara Kotahi (2020)
	TW2 Support tangata whenua to exercise their kaitiakitanga over communities and environments.	Te Ara Kotahi (2020)
	TW3 We will recognise and provide for te ao Māori values, tikanga (customs), Te Reo Māori and kawa (protocols) in the work we do.	Te Ara Kotahi (2020)
Biodiversity	Reduce adverse effects of land transport on biodiversity.	Toitū te Taiao (2020)
	E1 Protect and enhance biodiversity within the land transport network and on adjacent land.	Environmental plan (2008)
	E2 No net loss of native vegetation, wetlands, critical habitat or endangered species.	Environmental plan (2008)
	E3 Limit the spread of pest plants.	Environmental plan (2008)
Spill response and contamination	S1 Design stormwater control and retention devices that can accommodate spills in areas of high environmental risk.	Environmental plan (2008)
	S2 Ensure the removal, placement and disposal of contaminated soil is achieved in accordance with best practices.	Environmental plan (2008)

Focus Area	Objectives	Reference/source
Resource efficiency and waste minimisation	Improve resource efficiency and waste management.	Toitū te Taiao (2020)
	RE1 Manage energy consumption and waste associated with Waka Kotahi business in a cost-effective and sustainable manner.	Environmental plan (2008)
	RE2 Reduce energy and greenhouse gas emissions, increase the uptake of recycled and alternative materials, reuse of virgin and high carbon materials, reduce water consumption, reduce waste.	Resource efficiency policy (2021)
	RE3 Make resource efficiency an integral part of all land transport activities.	Environmental plan (2008)
Natural hazards	NH1 Manage all-natural hazards impacts on land transport infrastructure.	Environmental plan (2008)
Climate change	Reduce land transport greenhouse gas emissions to mitigate climate change.	Toitū te Taiao (2020)
	C1 Manage the increased hazards resulting from climate change impacts on land transport infrastructure, on land and the coastal marine environment.	Environmental plan (2008)
	C2 Greenhouse gas emissions and the impact of climate change on the functioning of the land transport network are appropriately considered to support decision-making.	Environmental plan (2008)
	C3 Mitigate activities associated with the construction, operation and maintenance of land transport network aiming to effect a net reduction of greenhouse emissions from transport.	Environmental plan (2008)
Sustainability	S1 Adoption of sustainability rating tools framework to drive and optimise the environmental, social and economic outcomes of transport infrastructure.	Sustainability rating tools policy 2020
Urban design	UD1 Transport networks fit in sensitively with the landform, built and natural environment and communities through which they pass.	Bridging the gap (2013)
	UD2 All systems of movement along and across the transport corridor are integrated into the design of projects with good connections and access for communities.	Bridging the gap (2013)
	UD3 Design contributes to the quality of the built environment, public spaces and the road user experience.	Environmental plan (2008) Bridging the gap (2013)
Multimodal integration	Enabling more people to safely use active modes.	Toitū te Taiao (2020)
	MM1 Integrate multimodal transport and access along and across the land transport network creating environments for public transport users, pedestrians and cyclists that are safe, accessible and attractive.	Cycling network guidance Pedestrian network guidance Public transport design guidance

Focus Area	Objectives	Reference/source
Landscape	L1 Transport networks, their scale and alignment, recognise the landscape, including the natural and cultural features, patterns and processes, sensory and associated socio-cultural aspects of an area.	NZTA landscape guidelines (2014)
	L2 Landscape design that builds resilience to environmental change while promoting and contributing to human health, the life supporting form and function of soils, water quality, ecosystems, hydrology and biodiversity.	NZTA landscape guidelines (2014)
	L3 The creation of a sense of place for communities, as well as visual quality and quality of the experience for all transport modes.	NZTA landscape guidelines (2014)
	L4 Recognition of whole-of-life value and resource efficiency, in fostering a sense of stewardship and care for all Waka Kotahi landscape assets.	NZTA landscape guidelines (2014)
	L4 Incorporate multipurpose landscaping design as an integral part of all land transport projects.	Environmental plan (2008)

Appendix 2: Request for technical departure template

REQUEST FOR TECHNICAL DEPARTURE

From		Departure no	
To	Waka Kotahi	Date	
Originator name		Project	
Discipline			
Subject			

Background

Standard or works requirement to be departed from

Reason for requested departure (including what is requested and why, and what other options were considered)

1. What is requested
2. Options considered
3. Rationale for request

Benefits of the departure

Safety	
Environmental	
Performance (level of service and resilience)	
Waka Kotahi reputation	
Cost	
Maintenance	

Costs and dis-benefits of departure

Safety	
Environmental	
Performance (level of service and resilience)	
Waka Kotahi reputation	
Cost	
Maintenance	

Risks associated with the departure

Value for money summary

The combination of costs, benefits and risks of the departure provide a value for money outcome to be summarised here.

Attachments

Prepared by	Signed	Date
Reviewed by	Signed	Date
Recommended by	Signed	Date

Recommendation

Waka Kotahi response

Waka Kotahi technical decision	Accepted/rejected
By	Date
Waka Kotahi authorisation to proceed	
By	Date