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***A glossary of abbreviations and terms used in the conditions is included at the end of this document.***

## **MT MESSENGER BYPASS NOTICE OF REQUIREMENT CONDITIONS - FINAL**

### **GENERAL AND ADMINISTRATION**

1. (a) Except as modified by the conditions below, the Project shall be undertaken in general accordance with the information provided by the Requiring Authority in the Notice of Requirement dated December 2017, the Drawing Set provided at the Hearing, and the management plans dated October 2018.  
  
(b) Except for the work required under the Ecological and Landscape Management Plan (ELMP) and the Pest Management Plan (PMP) and in respect of the Ecological Review Panel in Conditions 27 - 33 none of the conditions apply to the on-going operation or maintenance of SH3 once construction is complete and the new road is operational.  
  
(c) Where there is conflict between the documents listed in (a) above and these designation conditions, these conditions shall prevail. Where there is an inconsistency between the information and plans lodged with the Notice of Requirement and information provided subsequently, the most recent plans and information shall prevail.  
  
(d) The Requiring Authority shall provide the Council with an electronic file containing the designation boundaries in a DXF (or ACAD dwg file with version noted) file.
2. As soon as practicable following Completion of Construction Works, the Requiring Authority shall:
  - (a) review the extent of the area designated for the Project;
  - (b) identify any areas of designated land that are no longer necessary for the on-going operation or maintenance of SH3, or the mitigation or offsetting of effects of the Project; and
  - (c) give notice to NPDC in accordance with section 182 of the RMA for the removal of those parts of the designation identified in (b) above.
3. *This condition is intentionally left blank.*

### **Cultural and stewardship protocols**

4. At least three months prior to the Commencement of Construction, the Requiring Authority shall invite mandated representatives of Ngāti Tama along with Mr Tony Pascoe and Mrs Debbie Pascoe to participate in a Kaitiaki and Stewardship Forum Group (KFG).
  - (a) The KFG shall, in addition to Mr and Mrs Pascoe, comprise up to 3 members who have been determined by Te Runanga o Ngāti Tama (TRoNT). From time to time, as appropriate, TRoNT may change their KFG membership (i.e. the 3 members determined by them), and may also invite other iwi, iwi representatives or other Ngāti Tama members to attend KFG meetings. TRoNT may appoint a chairperson to the KFG who would be responsible for confirming any advice from the KFG to the Requiring Authority and who will oversee the implementation of KFG activities.
  - (b) The purpose of the KFG is to facilitate engagement between the Requiring Authority, Ngāti Tama, and the Pascoes as kaitiaki and stewards of their land, in respect of the activities

authorised by this designation and to enable kaitiaki and stewardship inputs to the design and construction of the Project.

(c) The KFG will be invited to hold regular meetings (monthly) throughout the construction period. The KFG shall continue until six months after Completion of Construction.

(d) The Requiring Authority shall record the main points arising from each meeting of the KFG, and shall provide a copy of that record to the meeting invitees within a reasonable time following the meeting.

The Requiring Authority shall, on receipt of itemised invoices, be responsible for paying all reasonable costs associated with the attendance at KFG meetings to provide the kaitiaki inputs described in Condition 4 and Condition 4(a).

*For the avoidance of doubt, while the KFG participants listed in condition 4(a) must be invited to attend each meeting, the non-attendance of any participant does not invalidate the KFG meeting.*

4a. The KFG shall be invited by the Requiring Authority to participate in the following (amongst other things):

(a) The development of the Project designs to incorporate cultural values into elements such as (but not limited to):

- (i) Cultural expression in artwork on road corridor features such as the tunnel, bridge and in landscape works and plantings.
- (ii) Water management principles.
- (iii) Biodiversity mitigation, offset and compensation measures implemented as part of the ELMP required by Condition 27.
- (iv) Signage of local features.
- (v) Naming of the new highway.

(b) Review of the Accidental Discovery Protocol (as required by designation Condition 34) and any updates to this Protocol.

(c) The development and implementation of agreed cultural protocols / tikanga appropriate to stages of the works or activities (for example: blessings, accidental discoveries, vegetation clearance, relocation of animals).

(d) The development of cultural indicators covering matters such as (but not limited to) traditional association, mahinga kai and cultural stream health measures.

(e) The development and implementation of a Cultural Monitoring Plan. The purpose of the Cultural Monitoring Plan is to set out the agreed cultural monitoring requirements and measures to be implemented during construction activities, to acknowledge the historic and living cultural values of the area to Ngāti Tama and Mr and Mrs Pascoe in their kaitiaki role, and to minimise potential adverse effects on these values. The Plan shall be prepared by a person endorsed by the KFG and the Requiring Authority. Where the provisions of the Plan are not agreed by the Requiring Authority, reasons for the disagreement will be provided in writing to TRoNT and added to the agenda for the next KFG meeting.

### **Community Liaison Person**

5. (a) The Requiring Authority shall appoint a Community Liaison Person for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by construction works. An alternative contact shall be provided in the event the liaison person is unavailable, to ensure that a Project contact person is available by telephone 24 hours per day/seven days per week during the construction phase of the Project.  
  
(b) No less than one month prior to the commencement of construction, the Requiring Authority shall advise all key project stakeholders listed in the CEMP of the liaison person's name and contact details.  
  
(c) The Requiring Authority shall keep stakeholders and the wider public informed of the construction works, progress and timing and shall carry out communications in general accordance with the CEMP.

### **Complaints**

6. (a) At all times during the Works, the Requiring Authority shall maintain a register of any complaints received alleging adverse effects from, or related to, the Works. The record shall include:
  - (i) the name and address (where this has been provided) of the complainant;
  - (ii) identification of the nature of the complaint;
  - (iii) the location, date and time of the complaint and of the alleged event;
  - (iv) weather conditions at the time of the complaint (as far as practicable), including wind direction and approximate wind speed if the complaint relates to air discharges;
  - (v) the outcome of the Requiring Authority's investigation into the complaint;
  - (vi) measures taken to respond to the complaint; and
  - (vii) any other activities in the area, unrelated to the Project, which may have contributed to the complaint (such as non-Project construction, fires, or unusually dusty conditions generally).
- (b) When a complaint is received, the Requiring Authority shall:
  - (i) acknowledge the complaint within 2 working days;
  - (ii) promptly investigate, identify the level of urgency in respect of the complaint and communicate that to the complainant; and
  - (iii) take reasonable steps to remedy or mitigate the matters giving rise to the complaint if there are reasonable grounds for the complaint, within 10 working days of receiving the complaint or such sooner time as may be reasonably necessary in the circumstances.

(c) The Requiring Authority shall also maintain a record of its responses and any remedial actions undertaken.

This record shall be maintained on site and shall be made available to the Planning Lead (or Nominee) upon request. The Requiring Authority shall provide the Planning Lead (or Nominee) with a copy of the complaints register every month.

*Advice Note: where for (b) and (c) there are a number of complaints relating to the same incident(s) the Requiring Authority may bundle those complaints together and provide one response (to be provided to all complainants) in accordance with those conditions.*

7. The Requiring Authority shall provide to the Council an Outline Plan (or Outline Plans) in accordance with the provisions of s176A of the RMA for the following elements of the Project, prior to their construction:

- (a) The tunnel control building;
- (b) The tunnel emergency water supply tanks; and
- (c) The bridge over the Mimi swamp forest and the bridge at or about Chainage 2400.

Any other Works carried out in general accordance with Condition 1 shall not be subject to the requirement for an Outline Plan to be submitted to NPDC.

An Outline Plan shall be required under Section 176A of the RMA in respect of matters not in accordance with Condition 1 An Outline Plan shall be required under Section 176A of the RMA in respect of matters not in accordance with Condition 1.

#### **Management Plans – General**

8. All Works shall be carried out in general accordance with Condition 1, the Landscape and Environmental Design Framework and the management plans authorised by these designation conditions, which are the Construction Environmental Management Plan (CEMP) dated October 2018 and the following documents provided as appendices to the CEMP:

- (a) Construction Noise Management Plan (CNMP);
- (b) Construction Traffic Management Plan (CTMP);
- (c) Ecology and Landscape Management Plan (ELMP);
- (d) Accidental Discovery Protocol (ADP);
- (e) Control of a Spill Procedure; and
- (f) Incident Reporting and Investigation.

*Advice Note: In addition to the abovementioned plans, the CEMP shall also include copies of the management plans required under the resource consents but not for the designation, being: the Contaminated Land Management Plan (CLMP), the Construction Water Management Plan (CWMP) and any associated Specific Construction Water Management Plans (SCWMP), and the Construction Dust Management Plan (CDMP). The requirements for*

*these additional plans shall be determined in accordance with the relevant Resource Consent Condition(s).*

9. The management plans:
  - (a) provide the overarching principles, methodologies and procedures for managing the effects of construction of the Project to achieve the environmental outcomes and performance standards required by these conditions; and
  - (b) shall be maintained and implemented by the Requiring Authority during Works, and in the case of the ELMP, those matters that continue beyond the Completion of Construction Works.
10.
  - (a) The Requiring Authority may make minor amendments to the management plans described in Condition 8 at any time. For the purpose of this condition, a 'minor amendment' is either a small change to the content of the Management Plan which has either no or a de minimis adverse environmental effect; or is a change which would result in an improved environmental outcome. Any changes to the management plans shall remain consistent with the objectives and performance standards of the management plan and the designation conditions.
  - (b) The Requiring Authority shall submit, in writing, the minor amendment to the Planning Lead (or Nominee) at least 10 days before Works associated with the amendment are to be implemented. The Requiring Authority shall maintain a record of all minor amendments.
  - (c) If the Planning Lead (or Nominee) considers that the amendment is a material amendment in accordance with Condition 11, then it must notify the Requiring Authority within 5 working days of receipt of the amendment and then consider the amendment in accordance with Condition 11. If the Requiring Authority does not receive notice from the Planning Lead (or Nominee) under Condition 10(c) any Works associated with the minor amendment may proceed.
11.
  - (a) The Requiring Authority may make material amendments to the final management plans at any time subject to the Certification of the Planning Lead (or Nominee). Material amendment is any amendment that is in general accordance with Condition 1, but is not a minor amendment in accordance with Condition 10.
  - (b) Any material amendment to the management plans shall meet the objectives and performance requirements of the management plan and these designation conditions.
  - (c) In the event of an amendment to a management plan under Condition 11(a), the Requiring Authority must submit, in writing, the amendment to the Planning Lead (or Nominee) for Certification 20 working days before the commencement of the relevant Works. Certification shall confirm that the amendment is in accordance with Condition 1 and meets the objectives and performance requirements of the management plan.
  - (d) The Planning Lead (or Nominee) will carry out its best endeavors to consider the material amendment within 10 working days of receipt of the material amendment, noting that expert input, including from the Ecological Review Panel, may be required before Certification can be provided. If the Planning Lead (or Nominee) is unable to consider the

material amendment within 10 working days it shall notify the Requiring Authority and advise a revised timeframe. Regardless, the Planning Lead (or Nominee) will carry out its best endeavors to consider the material amendment within a total of 20 working days of receipt.

(e) Provided that the Requiring Authority has not been advised of a revised timeframe under Condition 11(d) the Planning Lead (or Nominee) shall, no later than 10 working days of receipt of the material amendment, confirm in writing to the Requiring Authority that the material amendment is either certified or declined, or shall request that the Requiring Authority incorporate changes suggested by the Planning Lead (or Nominee). If a revised timeframe has been advised, confirmation shall be made in accordance with that timeframe.

(f) Should the Planning Lead (or Nominee) decline to certify the material amendment or request the incorporation of changes to the material amendment the Requiring Authority may then resubmit a revised material amendment to the management plan. The Certification process for a revised material amendment shall follow the same process described above in Conditions 11 (a) to (e).

(g) Any material amendment involving changes to pest management methodologies and monitoring, kiwi fencing and underpasses, and amendments to the ELMP if the PMA is selected based on Scenario 3 or Scenario 4 shall be reviewed by the Ecological Review Panel.

(h) The resolution process stipulated under Condition 14 shall be followed:

- (i) Where the Requiring Authority and the Planning Lead (or Nominee) are unable to agree on the finalisation of a material amendment to a management plan; or
- (ii) Where the Requiring Authority considers that the Planning Lead (or Nominee) has not acted in accordance with Condition 11(d) to consider the material amendment within a reasonable timeframe.

Works unaffected by the amendment may continue.

12. *This condition is intentionally left blank.*
13. All personnel involved with the construction of the Project shall be made aware of, and have access to, all conditions and management plans applicable to the construction of the Project, including any amendments to the management plans made under Conditions 10 and 11. Copies of these documents shall be kept on site at all times.
14. (a) In the event of any dispute arising about the content of the management plans between NPDC and the Requiring Authority, matters shall be referred in the first instance to the Planning Lead, and to the Requiring Authority's Construction Manager (as described in the CEMP), to determine a process of resolution.  
  
(b) If a resolution cannot be agreed under (a) within 15 working days, the matter shall be referred within 10 working days to an independent appropriately qualified expert, acceptable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.

(c) The expert shall, as soon as possible, issue a recommendation on the matter. The Planning Lead (or Nominee) must notify its decision to the Requiring Authority within 5 working days of receipt of the recommendation from the expert that the management plan is certified, declined, or request that the Requiring Authority incorporate changes suggested by the Council.

15. The Requiring Authority shall undertake an annual review of all management plans. This review shall include, but not necessarily be limited to:

(a) Reviewing compliance with the Project designation conditions, the CEMP and management plans.

(b) Reviewing any significant changes to construction activities or methods, and/or any unanticipated adverse effects resulting from the Construction Works.

(c) Any changes to roles and responsibilities within the Project team.

(d) Reviewing the results of inspections, monitoring and reporting procedures associated with the monitoring of adverse effects during construction.

(e) Reviewing responses to any comments or recommendations from NPDC regarding the CEMP and management plans.

(f) Reviewing responses to any comments or recommendations from KFG, NPDC, DOC or the Ecological Review Panel regarding the ELMP and PMP made in the previous 12 months.

(g) Reviewing any unresolved complaints and any response to complaints and remedial action taken to address the complaint.

The outcome of this review shall be provided to the Planning Lead (or Nominee), and a copy shall be provided to the KFG and the Operations Manager of DOC New Plymouth District Office.

Where either the Requiring Authority proposes, or the Planning Lead (or Nominee) requests changes to management plans as a result of the annual review, any change to a management plan shall be made as soon as practicable and shall be subject to the provisions of Conditions 10, 11 and 14.

Annual review of the management plans shall cease following the Completion of Construction Works, except that review of the ELMP and PMP shall continue to be carried out in accordance with the reporting and review required under Condition 32.

*Advice note: comments or recommendations regarding the CEMP and management plans may also be received from TRC under the resource consent conditions.*

### **Construction Environmental Management Plan**

16. The Requiring Authority shall implement the Construction Environmental Management Plan (CEMP) dated October 2018, which provides the overarching framework to ensure that the Project remains within the limits and standards required by these conditions and that Works appropriately avoid, remedy, mitigate, offset or compensate for adverse effects on the environment. The CEMP shall remain in place until the Completion of Construction Works

with the exception of those matters of the ELMP that continue beyond the Completion of Construction Works.

17. The CEMP includes details of:
  - (a) staff and contractors' responsibilities;
  - (b) training requirements for employees, sub-contractors and visitors;
  - (c) environmental incident and emergency management (including the procedures required under regional consent condition GEN.8);
  - (d) communication and interface procedures;
  - (e) complaints management (in accordance with condition 6);
  - (f) compliance monitoring;
  - (g) environmental reporting;
  - (h) corrective action;
  - (i) environmental auditing;
  - (j) construction lighting;
  - (k) rehabilitation of construction yards;
  - (l) the methods to engage with stakeholders, including:
    - (i) how the community will be kept informed of progress with Works, including proposed hours of operation outside normal working hours and Project construction personnel contact details;
    - (ii) how the Requiring Authority will engage with the community in order to foster good relationships and to provide opportunities for learning about the Project;
    - (iii) providing early information on key Project milestones;
    - (iv) identifying stakeholders such as landowners, road users, local community, iwi, regulatory authorities, industry, network utility operators, road maintenance contractors, emergency services;
    - (v) responding to queries and complaints (in accordance with condition 6);
    - (vi) subject to any necessary health and safety requirements identified by the Requiring Authority, provision for DOC staff (or their nominees) to gain reasonable access to the site during the construction period;
  - (m) CEMP review (in accordance with condition 15); and
  - (n) construction methodologies and construction timeframes, including Staging.
18. The Requiring Authority shall appoint a representative(s) who shall be the Planning Lead's (or Nominee) principal contact person(s) in regard to matters relating to the designation conditions for the Project. The Requiring Authority shall inform the Council of the representative's name and how they can be contacted, prior to the commencement of

construction. Should that person(s) change during the construction of the Project, the Requiring Authority shall immediately inform the Planning Lead (or Nominee) and provide confirmation of the new representative's name and contact details.

- 18A. Subject to any necessary health and safety requirements identified by the Requiring Authority, the Planning Lead (or Nominee) shall have access to all relevant parts of the Project Area at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements and/or to take samples.

### Construction Noise Management Plan

19. Construction noise shall, subject to the exceptions provided for in the Construction Noise Management Plan (**CNMP**) set out in conditions 20 and 21, comply with the following criteria in accordance with NZS6803: 1999:

	Time period	dB LAeq	dB LAFmax
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturday	0630-0730	45	75
	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sunday and Public Holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

*Notes: Measurement and assessment of construction noise shall be undertaken in accordance with NZS6803:1999.*

- 19(a). Should the Requiring Authority not rent or otherwise occupy the dwelling at 2397 Mokau Road during construction:
- (a) operation of the spoil disposal site at 2397 Mokau Road shall be limited to Monday to Saturday 0730 to 1800 (no works are permitted on Sundays, public holidays or between 1800 and 0730 Monday to Saturday); and
- (b) Noise mitigation at this site shall be implemented in accordance with the CNMP.
- 19b. The Requiring Authority shall prior to the commencement of Works, write to the occupiers of the dwelling at 3072 Mokau Road to offer to provide alternative housing from the commencement of Works until the Completion of Construction Works. If that offer is accepted, the Requiring Authority will provide that alternative housing in a form that is as similar as is reasonably practicable to the dwelling at 3072 Mokau Road. The obligation to provide alternative housing under this condition will not apply (or will cease to apply) if the Requiring Authority acquires the dwelling at 3072 Mokau Road.
20. The Requiring Authority shall implement the-CNMP dated October 2018, which identifies how the Requiring Authority will manage effects from construction noise that will exceed the criteria in condition 19. The CNMP shall remain in place until the Completion of Construction Works.

The CNMP shall be in accordance with:

- (a) the requirements of Annex E to NZS 6803:1999; and
- (b) the NZ Transport Agency State highway construction and maintenance noise and vibration guide (2013).

21. The CNMP includes:

- (a) the general hours of work for the Project;
- (b) the details of any activities that may be undertaken outside of the general hours of work for the Project;
- (c) procedures to comply with NZS6803:1999;
- (d) the details of any activities that may not comply with NZS6803:1999 and measures to mitigate construction noise from those activities as far as practicable to ensure the effects are appropriate;
- (e) the necessary setbacks for specific construction plant and equipment in relation to residential dwellings; and
- (f) the management and communication procedures for Works that may not comply with NZS6803:1999.

#### **Construction Traffic Management Plan**

22. The Requiring Authority shall implement the Construction Traffic Management Plan (**CTMP**) dated October 2018, which identifies how the Requiring Authority will manage construction traffic to:

- (a) protect public safety;
- (b) minimise delays to road users;
- (c) minimise disruption to property access; and
- (d) inform the public about any potential impacts on the road network.

The CTMP shall remain in place until the Completion of Construction Works.

23. The CTMP includes:

- (a) details of traffic management activities and sequencing proposed for the Project;
- (b) methods for managing construction related traffic movements;
- (c) provisions to ensure that, as far as practicable, road users will not be held up by construction activities for an unreasonable period of time (such time period to be specified); and
- (d) provisions for emergency services to have access along SH3 24 hours per day, unless construction requires the temporary closure of a road, in which case, prior to any temporary closure, an emergency action plan shall be developed and agreed with emergency services to provide for access for the duration of that closure.

24. The CTMP shall comply with the version of the NZ Transport Agency Code of Practice for Temporary Traffic Management (**COPTTM**) which applies at the date of the CTMP. Where it is not possible to adhere to the COPTTM, the COPTTM's prescribed Engineering Exception Decision process shall be followed.

### **Landscape and Environmental Design Framework**

25. The Requiring Authority shall ensure that detailed design of the Project is in general accordance with the LEDF dated July 2018 including consideration of the following:

*(a) Restoration planting*

Extensive revegetation of riparian margins and areas of pasture, as further detailed in the ELMP. The revegetation is to use indigenous species eco-sourced from the area, and planted to reflect natural patterns. Planting techniques are to use enrichment planting to mimic succession. Revegetation is to be coordinated between ecological restoration experts, landscape experts and Ngāti Tama.

*(b) Naturalisation of Stream Diversions*

Naturalising stream diversions to reflect characteristics of the existing streams at each location.

*(c) Retention of Significant Trees and Vegetation*

Retaining as many significant trees (and other significant vegetation) as possible close to the alignment through such measures as fine-tuning the alignment and earthworks.

*(d) Cut Batters*

Designing cut batters to integrate with the area's landforms, including echoing natural slope angles, avoiding benched cuts, and treatment of rock faces to promote natural revegetation over time.

Minimising the visual impact of the mesh drape by avoiding drape in the lower 8m of cut faces, unless the Requiring Authority determines it is required for engineering or safety purposes, and exploring opportunities to configure the highway cross-section that might obviate the need for the mesh drape.

*(e) Fill Batters*

Treatment of fill batters to minimise footprint or merge with natural contours depending on context, and revegetation of batter slopes.

*(f) Surplus fill disposal*

Selection of sites with low visibility and low natural value for the disposal of surplus fill, contouring such fill to marry with natural contours, and revegetating it with indigenous bush species.

*(g) Bridge Design*

Detail design of the Mimi swamp forest bridge (its form and finish) appropriate to its setting adjacent to a significant natural area and including attention to barrier and rail design to maintain views from the bridge, whilst addressing safety and engineering requirements.

Simplifying the suite and spatial layout of 'highway furniture' (such as barriers and signage poles) to minimise visual clutter.

*(h) Cycling Shoulder*

Detail design of the 1.5m shoulder to ensure its suitability for cycling, noting that this is to be modified in the tunnel to a 1.2m shoulder in conjunction with a painted median.

*(i) Access and stopping places*

Reinstatement of access to the Kiwi Road Track. Consideration of stopping places where acceptable.

*(j) Cultural expression and kaitiakitanga*

Expression by Ngāti Tama of their cultural presence and kaitiakitanga integrated into the detailed design and mitigation through such aspects as involvement in the restoration of natural systems, design and finish of the tunnel portals and bridge, naming of elements (such as tunnel and bridge), and dedicating the large trees to be removed for cultural purposes.

26. Prior to construction of any Stage (or Stages) of the Construction Works, the Requiring Authority shall arrange a peer review by a suitably qualified and experienced landscape architect to verify that the detailed design is in general accordance with the LEDF and the matters listed in Condition 25, and shall provide written confirmation of such verification to the Planning Lead (or Nominee). Upon receipt of the peer review for any Stage (or Stages) of Construction Work the Planning Lead (or Nominee) shall confirm by writing to the Requiring Authority that the requirements of this condition are met.

*Advice note: This Condition does not apply to Establishment Works.*

**Ecology and Landscape Management Plan**

27. The Requiring Authority shall implement the Ecology and Landscape and Management Plan (ELMP) dated October 2018, which identifies how the Project will avoid, remedy, mitigate, offset and compensate for potential adverse effects on the ecological, landscape and biodiversity values of the land within the Project Area and its surrounds, including on:

- (a) vegetation / habitat (including wetlands);
- (b) herpetofauna (lizards and frogs);
- (c) bats;
- (d) avifauna;
- (e) peripatus;
- (f) fish, kōura and kākahi; and
- (g) streams.

28. The matters addressed in the ELMP are set out in Schedule 1 to these Conditions in accordance with a series of sub-management plans:

- (a) Landscape and Vegetation Management Plan;

- (b) Bat Management Plan;
  - (c) Avifauna Management Plan;
  - (d) Herpetofauna Management Plan;
  - (e) Freshwater Management Plan;
  - (f) Pest Management Plan;
  - (g) Peripatus Management Plan; and
  - (h) Biosecurity Management Plan.
- 28A. (a) The Requiring Authority shall provide a complete set of Ecological Constraints Maps covering the entire Project Area, as referred to in the ELMP. The Ecological Constraints Maps shall show the constraints identified in accordance with the ELMP and may be prepared to reflect the Stage or Staging of Works.
- (b) The Ecological Constraints Maps for any Stage (or Stages) of Works shall be submitted to the Planning Lead (or Nominee) for certification in accordance with Conditions 10 or 11. The Ecological Constraints Maps for any Stage (or Stages) of Works shall be submitted to the Planning Lead (or Nominee) for certification in accordance with Conditions 10 or 11.
- (c) Should an amendment be required to the ELMP as a consequence of preparing the Ecological Constraints Maps, the amendment shall be submitted to the Planning Lead (or Nominee) in accordance with Conditions 10 or 11.
- (d) Once finalised in accordance with this condition, the Ecological Constraints Maps for each Stage (or Stages) of Work shall be inserted into Appendix A of the ELMP.
- (e) Works associated with any Stage (or Stages) of the Project shall not commence until the Ecological Constraints Maps have been certified by the Planning Lead (or Nominee) and inserted into the ELMP.
29. The Requiring Authority shall undertake ecological mitigation and biodiversity offset and compensation measures in accordance with the ELMP to address the matters in Schedule 1 and to achieve the following:
- (a) Vegetation:
    - (i) The retention, where possible, of the vegetation with the highest ecological value within the Project area as identified in Figures 4.1 and 4.2 of the ELMP;
    - (ii) Restoration planting as follows:
      - (1) At least 6ha of kahikatea swamp forest; and
      - (2) At least 9ha of mitigation planting using an appropriate mix of plant seedlings.
      - (3) Planting of 200 saplings of the same species for each significant tree that is felled.
- Advice note: significant trees are defined in the ELMP and shown on the Landscape Concept Plans in the LEDF.*

(4) Following the completion of vegetation clearance, the Requiring Authority shall measure the extent of vegetation clearance and shall reassess the extent of restoration planting required under Conditions 29(a)(ii) (2) and (3), using the methodology set out in the ELMP. The Requiring Authority shall prepare and provide a report to the Planning Lead (or Nominee) confirming the restoration planting required. If additional restoration planting is required, the extent of the restoration planting area required shall be identified and the report provided to the Planning Lead (or Nominee) for Certification that the calculation of the additional planting achieves the requirement of Conditions 29(a)(ii) (2) and (3). If the recalculation results in a lesser restoration planting area, the planting area required in Condition 29(a)(ii)(2) and (3) shall be provided.

Advice Note: Certification of the report shall be carried out in accordance with the Certification process set out in Condition 11.

(5) The completion of all restoration planting within three planting seasons of the Completion of Construction Works, unless natural conditions during Construction Works result in poor seed production, or poor seed condition and adversely limits seedling propagation for indigenous plant species, in which case completion would be delayed to reflect the availability of suitable seedlings. The Requiring Authority shall notify the Planning Lead (or Nominee) when the restoration plantings have been completed.

(6) Should there be a delay in the completion of restoration planting due to the availability of suitable seedlings as described in (5) above, the Requiring Authority shall provide the Planning Lead (or Nominee) with an amended timeframe, which shall not exceed three planting seasons, and shall complete the planting as soon as reasonably possible within the agreed timeframe, informing the Planning Lead (or Nominee) when planting is complete.

(7) For the restoration planting required under Condition 29(a)(ii)(1) and (2), the plantings shall achieve 80% canopy cover 6 years following planting in the areas where trees and shrubs are planted. If 80% canopy cover is not achieved at 6 years following planting, any necessary replacement planting and planting maintenance shall continue beyond year 6 until 80% canopy cover is achieved.

(8) For the restoration planting required under Condition 29(a)(ii)(1) the planting shall achieve kahikatea forming 16% of the tree canopy at year 10. Additional kahikatea will be planted in the areas where the kahikatea contribution to the canopy is less than 16%. At year 35, kahikatea shall comprise 65% of the canopy in the kahikatea swamp forest planting required by this condition.

(9) For each significant tree felled, the restoration planting required under Condition 29(a)(ii)(3) shall achieve 90% survival of the 200 planted trees at 6 years following planting. If 90% plant survival has not been achieved within 6 years following planting, any necessary replacement planting and planting maintenance shall continue beyond year 6 until 90% survival is achieved.

(b) Herpetofauna:

- (i) The salvage and relocation of lizards from felled vegetation within the Project Area in accordance with the ELMP.
- (ii) The Requiring Authority shall provide funding of a total of \$200,000 (plus GST, if any) as a contribution to one or more research and / or development projects where the outcomes are intended to benefit herpetofauna in the North Taranaki Ecological District. The project or projects to receive this funding will be nominated by DOC, following discussion by the Requiring Authority with the Operations Manager of DOC New Plymouth District Office and the Planning Lead (or Nominee).
- (iii) DOC will receive, administer and distribute the funding required to be provided pursuant to Condition 29(b)(ii). The Requiring Authority will make the funding available prior to commencing Works, and will provide written notice to the Planning Lead (or Nominee) that it has done so. Within two years of commencing Works, the Requiring Authority will provide a written update to the Planning Lead (or Nominee) setting out progress on how the funding has been allocated and will be utilised.

(c) Bats:

- (i) For vegetation removal within the Project Area, the Vegetation Removal Protocol (VRP) set out in Annex DH of the 'NZ Transport Agency (the Transport Agency) research report 623 'Effects of land transport activities on New Zealand's endemic bat populations: reviews of ecological and regulatory literature' (Smith et al. 2017)' and set out in the ELMP, which includes modification to account for local conditions shall apply to:
  - (1) all trees greater than 80cm Diameter at Breast Height (DBH).
  - (2) all trees between 15cm and 80cm DBH which are considered by a specialist bat ecologist as having features suitable for bat roosting, such features including:
    - i. cracks, crevices, cavities, fractured limbs, or other deformities, large enough to support roosting bat(s);
    - ii. sections of loose flaking bark large enough to support roosting bats;
    - iii. a hollow trunk, stem or branches;
    - iv. deadwood in canopy or stem of sufficient size to support roost cavities or hollows;
    - v. guano, grease marks and/or urine staining around cavity entrances; and
    - vi. selected individual trees with high epiphyte loading (five or more perched nested epiphytes located on horizontal branches).
  - (3) All trees shown through the bat monitoring programme (Condition 30) to be Roosts.
  - (4) The 17 significant trees referred to in condition 29(a)(ii)(3).

*Advice Note: the VRP shall not apply to the removal of any other vegetation.*

(d) Avifauna:

- (i) The tracking and monitoring of kiwi prior to and during construction along the entire length of the road corridor, and the relocation of kiwi where necessary.
- (ii) The design, installation and ongoing maintenance of kiwi exclusion fencing to restrict kiwi accessing the road at locations where:
  - (1) the territories identified by the tracking and monitoring in (i) straddle the road corridor; and
  - (2) the Project ecologist considers there is a high risk of kiwi being able to enter the road corridor at these locations.
- (iii) The placement of appropriate road signage along the new road corridor to warn motorists about the possible presence of kiwi.
- (iv) Monitoring of Australasian bittern using automatic acoustic bird monitors at the Mimi wetland and in the Mangapepeke Valley prior to construction. Should bittern be recorded in the Project Area the Requiring Authority shall advise the Operations Manager of DOC New Plymouth District Office within two days of the data from the automatic acoustic bird monitor being analysed. The Requiring Authority shall design, install and maintain low fencing adjacent to the road corridor at marshland locations where bittern are recorded, prior to operation of the road.
- (v) The DOC Operations Manager New Plymouth District Office, TRoNT and the Planning Lead (or Nominee) shall be notified should nesting kokako or their nests be detected in the construction area. Notification shall be provided within 2 hours of detection. Appropriate response actions shall be implemented immediately to avoid disturbance.

(e) Peripatus

- (i) The salvage and relocation of peripatus contained within suitable selected peripatus habitat from within the Project Area.

(f) Fish, kōura and kākahi

- (i) The recovery and relocation of fish, kōura and kākahi in the sections of waterways affected by instream works, prior to instream works occurring.
- (ii) The rescue and relocation of fish, kōura and kākahi from any spoil.
- (iii) The design and installation of permanent culverts that shall maintain fish passage in all affected waterways (with the exception that maintenance of fish passage is not required at culverts 2, 10 and 13). Culvert design shall be informed by the New Zealand Fish Passage Guidelines for Structures Up to 4 Metres (2018).

(g) Streams

- (i) The design and construction of diverted streams shall be in accordance with the Stream Ecological Design Principles attached to the LEDF. 798m<sup>2</sup> of remediated stream diversions will be restored, through riparian planting, and livestock exclusion. Riparian margins of an average of 10m each side of the stream will be created and planted.
- (ii) The riparian planting and exclusion from livestock of at least 10,738m<sup>2</sup> of existing streambed area. Riparian margins of an average of 10m each side of the stream will be created and planted. Together with (i) this will create 11,536m<sup>2</sup> of stream restoration.
- (iii) Following the completion of stream works, the Requiring Authority shall measure the extent of stream works and shall reassess the extent of riparian planting required under Conditions 29(g)(ii), using the methodology set out in the ELMP. The Requiring Authority shall prepare and provide a report to the Planning Lead (or Nominee) confirming the riparian planting required. If additional riparian planting is required the extent of the riparian planting required shall be identified and the report provided to the Planning Lead (or Nominee) for Certification that the calculation of the additional planting achieves the requirement of Condition 29(g)(ii). If the recalculation results in a figure less than 10,738m<sup>2</sup> of existing streambed area the Requiring Authority shall provide planting to achieve the requirement of Condition 29(g)(ii).

*Advice Note: Certification of the report shall be carried out in accordance with the Certification process set out in Condition 11.*

- (iv) The completion of all riparian planting within three planting seasons of the Completion of Construction Works, unless natural conditions during Construction Works result in poor seed production, or poor seed condition and adversely limits seedling propagation for indigenous plant species, in which case completion would be delayed to reflect the availability of suitable seedlings. The Requiring Authority shall notify the Planning Lead (or Nominee) when the riparian plantings have been completed.
- (v) Should there be a delay in the completion of riparian planting due to the availability of suitable seedlings as described in (iv) above, the Requiring Authority shall provide the Planning Lead (or Nominee) with an amended timeframe, which shall not exceed three planting seasons, and shall complete the planting as soon as reasonably possible within the agreed timeframe, informing the Planning Lead (or Nominee) when planting is complete.
- (vi) For the riparian planting required under Condition 29(g)(ii), the plantings shall achieve 80% canopy cover 6 years following planting in the areas where trees and shrubs are planted. If 80% canopy cover is not achieved at 6 years following planting, any necessary replacement planting and planting maintenance shall continue beyond year 6 until 80% canopy cover is achieved.

(h) Pest management:

- (i) Pest management in perpetuity over the Pest Management Area (PMA) confirmed by Condition 30, being an area of 3,650ha.
- (ii) Pest management in the PMA shall be undertaken in accordance with the Pest Management Plan (PMP) in the ELMP to:
  - (1) reduce and maintain rats, possums, feral cats and mustelids to low levels in perpetuity.
  - (2) reduce and maintain feral goats and pigs to low densities in perpetuity.
  - (3) exclude farm stock in perpetuity.
  - (4) monitor and control wasps along the road corridor only during construction and through to the conclusion of a 6 year plant maintenance period.
- (iii) Implementation of the PMP shall commence as soon as practicable, and no later than one year following the commencement of Works.
- (iv) Pest management shall be undertaken in accordance with the PMP to achieve the following outcome target pest densities in the PMA, measured immediately prior to the breeding season (for bats and birds) and then through the critical stages when young remain in the roost / nest.
  - (1) rat species – ≤5% tracking tunnel index.
  - (2) mustelids – no detections.
  - (3) cats – no detections.

And throughout any year, to achieve the following outcome target pest densities in the PMA.

  - (4) possums – ≤5% chew card index.
  - (5) goats and deer - <1 kill per hunter/day.
  - (6) feral pigs - <1 kill per hunter/day; and
  - (7) farm livestock – zero presence.
- (v) Pest management shall be undertaken in accordance with the PMP to achieve the following outcomes for palatable plant species:
  - (1) The recruitment of vegetation species in the PMA which are currently suffering ungulate induced recruitment failure, with the following species used as indicators of recruitment: mahoe, hangehange, large leaved coprosma spp., pate, wineberry, tawa, hinau, kamahi and pikopiko.
  - (2) Recovery of condition of possum palatable trees in the PMA, with the following species used as indicators of recovery: swamp maire, mahoe, kaikomako, northern rata and thin-barked totara.
- (vi) Pest management shall be undertaken in accordance with the PMP to achieve the following outcome for avifauna:

(1) A statistically significant 20% increase in relative abundance for kiwi, tui, bellbird, kereru, whitehead, long-tailed cuckoo, fernbird, and North Island Robin in the PMA within 12 years of the Completion of Construction Works.

29A. (a) Works shall not commence until the Requiring Authority provides the Planning Lead (or Nominee) with written confirmation that it has in place the legal agreements and/or other authorisations necessary to allow the Requiring Authority to enter onto land outside the boundaries of the designation to carry out, continue and maintain all the measures set out in the ELMP, including the restoration planting, riparian planting and pest management measures. This shall also include appropriate access to such sites, for the purposes of undertaking those measures.

(b) If the final location of the PMA is confirmed through the application of Scenario 4 in Condition 30, Works may commence before the Requiring Authority has in place the relevant agreements and/or other authorisations to carry out, continue and maintain pest management measures, but:

- (i) Implementation of the PMP shall commence in accordance with Condition 29(h)(iii); and
- (ii) The statement confirming legal agreements and/or other authorisations, required under Condition 29A(a), shall be provided to the Planning Lead (or Nominee) prior to implementation of the PMP.

(c) The Requiring Authority will carry out pest management within the PMA in perpetuity, and ensure that the restoration and riparian planting is protected on an ongoing basis.

(d) If, for the pest management measures, the legal agreements or other authorisations under Condition 29A(a) provide for a term that is time-limited, the Requiring Authority shall notify the Planning Lead (or Nominee) at least 2 years prior to the expiry of the term that a new PMA may be required to be confirmed, and shall immediately commence the process for renewing the relevant authorisations, or for confirming a new or amended PMA. Any new or amended PMA shall be confirmed following the process set out in Condition 30, with any amendments deemed necessary to Conditions 30(a) to (f), following consultation with DOC, and with the agreement of the Planning Lead (or Nominee). Any new or amended PMA must be at least 3,650 ha. The location and details for the new or amended PMA, including amendments to the ELMP, shall be certified following the process in Condition 11. The Requiring Authority shall provide written confirmation to the Planning Lead (or Nominee) that it has in place the legal agreements and/or other authorisations to carry out the PMA works.

*Advice note: amendments to the bat monitoring programme may be appropriate in relation to 29A(d) if suitable information is known about long-tailed bat Maternity Roosts to recommend the location of the new PMA.*

30. (a) The Requiring Authority shall implement a programme of long-tailed bat radio tracking (the "Monitoring Programme") to establish the location of long-tailed bat roosts and in particular Maternity Roosts within the Study Area. The purpose of the Monitoring Programme is to identify and define the location of the PMA based on the location of Maternity Roosts, to ensure that the intended outcomes for long-tailed bats are achieved.

***Bat Monitoring Programme***

(b) The Monitoring Programme shall be carried out for one season during the period of peak long-tailed bat activity (1 October to 31 March).

(c) The Monitoring Programme will confirm and map the location of long-tailed bat Maternity Roosts within the Study Area. Knowledge gained from the monitoring programme will be used to confirm the location of the PMA, and to identify the roost trees that will be subject to the VRPs.

(d) The Requiring Authority shall appoint a bat expert (the “bat expert”) who will manage the Monitoring Programme and prepare the Bat Monitoring Report. The Requiring Authority will also appoint Dr Stuart Parsons, or an alternative independent peer reviewer selected by the Planning Lead (or Nominee) in consultation with the Requiring Authority and DOC (the “independent peer reviewer”).

(dd) The bat expert and the bat peer reviewer shall meet the E Class bat competency, as set out in Table D2 of Appendix D: to ‘NZ Transport Agency research report 623 ‘Effects of land transport activities on New Zealand’s endemic bat populations: reviews of ecological and regulatory literature’ (Smith et al. 2017)’. All other personnel involved in implementing the monitoring programme shall meet the bat competency class of D for all personnel involved in bat handling, or C2 for all personnel involved in roost identification, as set out in Table D2 of Appendix D: to NZ Transport Agency research report 623.

(e) The Monitoring Programme shall be undertaken in accordance with the DOC best practice manual of conservation techniques for bats Version 1 (DOCDM-131465), and the methodology as set out in the ELMP.

(f) The Monitoring Programme described in Condition 30(a) shall involve:

- (i) At least 30 nights of bat trapping effort in conditions suitable for bat activity;
- (ii) The use of at least 8 harp traps, as well as mist-net traps and acoustic lures;
- (iii) An additional 10 nights of trapping should fewer than 10 Maternity Roosts have been identified at the conclusion of 30 nights of monitoring;
- (iv) The fitting of bats with radio transmitters, and the subsequent tracking of those bats until the transmitters are no longer transmitting; and
- (v) Bat trapping may cease earlier than provided for in (i) and (iii) above if 30 bats have been fitted with radio transmitters and those bats have been tracked until the transmitters are no longer transmitting.

### ***Bat Monitoring Report***

(g) On completion of the Monitoring Programme a report (the “Bat Monitoring Report”) shall be prepared by the bat expert that:

- (i) Details the methods used and the monitoring effort undertaken;
- (ii) Sets out the findings of the Monitoring Programme;
- (iii) Identifies the location of all identified long-tailed bat roosts, including Maternity Roosts (if found) within the Study Area;

- (iv) Sets out any comments received from the independent peer reviewer and any comments received from DOC's nominated bat expert regarding whether the monitoring programme has been completed in accordance with the requirements of these conditions and on the recommended location of the PMA; and
- (v) Recommends the location of the PMA in accordance with the following Scenarios 1, 2, 3 or 4.

**Scenario 1**

In the event that the Monitoring Programme identifies:

- (1) 10 or more Maternity Roosts within the Intended PMA; or
- (2) 10 or more Maternity Roosts within the Study Area and 70% of these are located within the Intended PMA area shown on Figure 9.1 in the ELMP:

the Intended PMA will be the Confirmed PMA.

**Scenario 2:**

In the event that Scenario 1 above does not apply, but the Monitoring Programme identifies suitable bat roosting habitat that is located in the Wider PMA, the bat expert shall, in consultation with DOC's nominated bat expert, review the monitoring data and consider whether the Wider PMA supports suitable Maternity Roosts for the PMA to be set within the Wider PMA.

In doing so, the bat expert shall take into account the size and nature of the Maternity Roosts and their value to the local long-tailed bat population, along with any other relevant matters that relate to determining the suitability of the Wider PMA for bat habitat.

If after reviewing the monitoring data, the bat expert, in consultation with Mr MacGibbon, Mr Nicholas Singers and Dr John McLennan (or, if Mr MacGibbon, Mr Singers or Dr McLennan are not available, other experts in vegetation and avifauna selected by the Requiring Authority) and DOC's nominated bat expert, considers that the Wider PMA does support suitable Maternity Roosts, the PMA may be recommended to be located within the Wider PMA.

In recommending the boundaries of the PMA the following factors will be considered:

- (a) the ability to utilise Parininihi;
- (b) the location of the identified Maternity Roosts;
- (c) retaining the Project Area and kahikatea-swamp forest plantings in the PMA;
- (d) minimising the overall length of the edge of the PMA;
- (e) minimising the length of the edge of the PMA that adjoins mature forest;
- (f) the practicality of implementing pest management, including access; and
- (g) the effectiveness of the PMA in offsetting or compensating for the effects of the Project on other ecological values, in particular vegetation and avifauna.

**Scenario 3:**

In the event that the majority of Maternity Roosts are discovered in the Study Area but outside of the Wider PMA, the bat expert shall, in consultation with, Mr MacGibbon, Mr Nicholas Singers and Dr John McLennan (or, if Mr MacGibbon, Mr Singers or Dr McLennan are not available, other experts in vegetation and avifauna selected by the Requiring Authority) and DOC's nominated bat expert, review the monitoring data and consider whether the Study Area supports suitable Maternity Roosts for the PMA to be recommended to be within the Study Area.

In doing so, the bat expert shall take into account the size and nature of the Maternity Roosts and their value to the local long-tailed bat population, along with any other relevant matters that relate to considering the suitability of the Study Area for bat habitat.

If after reviewing the monitoring data, the bat expert, in consultation with DOC's nominated bat expert, considers that the Study Area does support suitable Maternity Roosts, the PMA may be recommended to be located within the Study Area.

In that case, the PMA shall be 3,650 ha, and the boundaries shall be recommended by the bat expert in consultation with Mr Roger MacGibbon, Mr Nicholas Singers and Dr John McLennan (or, if Mr MacGibbon, Mr Singers or Dr McLennan are not available, other experts in vegetation and avifauna selected by the Requiring Authority) and DOC's nominated bat expert, considering the following factors:

- (a) the ability to utilise Parinihi;
- (b) the location of the identified Maternity Roosts;
- (c) minimising the overall length of the edge of the PMA;
- (d) minimising the length of the edge of the PMA that adjoins mature forest;
- (e) the practicality of implementing pest management, including access;
- (f) the effectiveness of the PMA in offsetting or compensating for the effects of the Project on other ecological values, in particular vegetation and avifauna; and
- (g) the availability of the land for inclusion in the PMA.

Where the bat expert recommends that land that is both outside the Wider PMA and not administered by DOC should be included in the PMA:

- (a) that land will only be included in the PMA if the Requiring Authority confirms to the bat expert that it is able to acquire the necessary rights over that land in order to carry out the pest control and related activities required in the PMA under the Pest Management Chapter of the ELMP; and

Where the bat expert (having consulted with others as required under this Scenario) considers there is no appropriate alternative for setting the PMA within the Study Area, Scenario 4 below will apply.

#### **Scenario 4**

In the event that the PMA has not been recommended to be confirmed through Scenarios 1, 2 or 3, the PMA shall be located in the Alternative PMA, or some other location agreed with DOC.

In that case, the PMA shall be 3,650 ha, and the boundaries shall be recommended by the bat expert in consultation with Mr Roger MacGibbon, Mr Nicholas Singers and Dr John McLennan (or, if Mr Roger MacGibbon, Mr Singers or Dr McLennan are not available, other experts in vegetation and avifauna selected by the Requiring Authority) and DOC's nominated bat expert, considering the following factors:

- (a) the location of the known short-tailed bat Maternity Roosts, or should the Requiring Authority seek to establish the PMA elsewhere, the location of long-tailed bat Maternity Roosts determined through a further radio-tracking study, the scope of which would be equivalent to the programme described in Condition 30(b) – (f).;
- (b) minimising the overall length of the edge of the PMA;
- (c) minimising the length of the edge of the PMA that adjoins mature forest;
- (d) the practicality of implementing pest management, including access;
- (e) the effectiveness of the PMA in offsetting or compensating for the effects of the Project on other ecological values, in particular vegetation and avifauna;
- (f) the availability of the land for inclusion in the PMA; and
- (g) other pest control undertaken by DOC that may act as a buffer to the PMA.

(h) The Bat Monitoring Report prepared under Condition 30(g) shall be provided to DOC and the KFG for comment. Should DOC and / or the KFG have comments on the report they shall be provided to the Requiring Authority within 15 working days of receipt of the Report.

(i) The Bat Monitoring Report prepared under Condition 30(g), and any comments from DOC and / or the KFG, shall be provided to the independent peer reviewer who shall review the Report and provide an assessment of the findings, including whether:

- (i) The monitoring programme has been completed in accordance with the requirements of these Conditions; and
- (ii) The PMA has been recommended to be located in accordance with the provisions of Condition 30(g).

If the independent peer reviewer is unable to confirm the matters described in Condition 30(i)(i) and 30(i)(ii), the independent peer reviewer shall make recommendations to the Requiring Authority that address any concerns. The Requiring Authority shall provide the peer review assessment to DOC and the KFG for comment. The Requiring Authority must consider any comments on the assessment that are provided by DOC or the KFG within 10 working days of receipt of the report.

(j) The Requiring Authority shall consider the peer review assessment and any comments from DOC and the KFG and shall update the Bat Monitoring Report prepared under Condition 30(g), including identifying how any comments from the peer reviewer, DOC or the KFG have been addressed. If required, the Bat Management Chapter and the Pest Management Chapter of the ELMP shall be updated to reflect the findings of the Bat Monitoring Report.

(k) The Bat Monitoring Report and any amendments to the ELMP shall be provided to the Planning Lead (or Nominee), for Certification that the recommended PMA is the Confirmed

PMA. Certification of the Bat Monitoring Report and any amendment to the ELMP shall be carried out in accordance with the Certification process set out in Condition 11.

(kk) If the PMA has been recommended in accordance with Scenario 3 or Scenario 4, the Planning Lead (or Nominee) shall seek advice or recommendations from the Ecological Review Panel as part of the Certification process under Condition 30(k).

(kkk) If the PMA has been recommended in accordance with Scenario 4, the amendment to the ELMP shall address how the residual ecological effects of the Project are offset or compensated for at the Alternative PMA, including the residual effects on long-tailed bats, avifauna and vegetation.

(l) A copy of the final certified Bat Monitoring Report and any changes to the ELMP shall be provided to DOC and the KFG.

(m) The Requiring Authority shall implement the findings of the final Bat Monitoring Report and Bat Management and Pest Management ELMP Chapters, including the location of the PMA, in accordance with Condition 29(h)(iii).

(n) Works shall not commence until Conditions 30(a) to 30(l) have been met.

(o) For the avoidance of any doubt, the final PMA shall be a single 3,650 ha area, unless otherwise agreed by the Transport Agency.

31. Monitoring of the ecological mitigation and biodiversity offset and compensation measures required in Conditions 29(a) to (h) shall be undertaken by the Requiring Authority in accordance with the details set out in Schedule 1.

32. (a) The Requiring Authority shall prepare an annual monitoring report describing the findings of all monitoring undertaken in the previous 12 months pursuant to Condition 31. The annual monitoring report shall be prepared by a suitably qualified ecologist. This report shall include an assessment of the effectiveness of the ELMP in achieving compliance with the measures required in Condition 29 and Schedule 1, and if necessary, the actions to be undertaken to achieve compliance with Condition 29 and Schedule 1, including identifying any necessary updates required to the ELMP. The Requiring Authority shall provide a copy of the annual report to the KFG and DOC. The report shall be submitted to the Planning Lead (or Nominee).

(b) Annual reporting under Condition 32(a) shall cease one year following Completion of Construction Works other than monitoring to assess the effectiveness of the PMP.

(c) Reporting on the monitoring undertaken pursuant to Condition 31 to assess the effectiveness of the PMP in achieving compliance with Conditions 29(h)(iv) to (vi) shall be undertaken as follows:

- (i) Vegetation reporting – three reports in total, to be prepared following the 1st, 3rd and 5th year after the Completion of Construction Works.
- (ii) Avifauna reporting – four reports in total, to be prepared following the 3rd, 6th, 9th and 12th year after the Completion of Construction Works.
- (iii) Pest management reporting – at the end of every year after the Completion of Construction Works, on an ongoing basis.

(d) If necessary, the report shall identify any actions required to achieve compliance with Condition 29(h)(iv) to (vi), including identifying any updates required to the ELMP. The reporting shall be submitted to the Planning Lead (or Nominee) within 3 months of the completion of the monitoring. A copy of the report shall be provided to TRoNT and DOC.

(e) If the reporting required by Condition 32(a) identifies that actions are required to achieve compliance with Condition 29(h)(iv) to (vi) the Requiring Authority shall update the ELMP in accordance with the recommendations of the monitoring report within 2 months of the completion of the monitoring report. Any amendment to the ELMP shall be dealt with in accordance with Conditions 10 or 11. The Requiring Authority shall implement any amendments to the ELMP made in accordance with this Condition.

### **Ecological Review Panel**

33. (a) As soon as practicable following confirmation of the designation the Requiring Authority shall establish an expert ecological review panel. The expert panel shall:
- (i) Comprise three suitably qualified experts with skills in ecology and pest management. DOC, TRoNT, and the Requiring Authority shall each be invited to provide one member for this panel, whose names shall be agreed with the Planning Lead (or Nominee). From time to time, and if requested by the panel by agreement of all members, the Planning Lead (or Nominee) may appoint an additional expert in any or all of the following areas of ecology: terrestrial vegetation, terrestrial invertebrates, herpetofauna, avifauna, bats, freshwater ecology, or pest management to assist the panel in its functions. Any such additional expert panel members shall not be employees of either DOC, TRoNT or the Requiring Authority.
  - (ii) Provide expert advice and recommendations to the Planning Lead (or nominee) if such advice is required by Condition 11 or otherwise determined to be required by the Planning Lead (or Nominee). This shall include:
    - (1) Reviewing any material amendments to the ELMP under Condition 11.
    - (2) Reviewing the location and design of kiwi exclusion fencing, provided in accordance with Condition 29(d)(i).
    - (3) Reviewing the pest management methods to be employed in the PMA.
    - (4) Reviewing the results of pest monitoring and any changes to the pest management methods in the PMP needed to achieve the pest densities set out in Condition 29(h)(iv).
    - (5) Reviewing the reporting required under Condition 32.
    - (6) Reviewing the Bat Monitoring Report if Scenario 3 in Condition 30(g) is used to recommend the PMA.
    - (7) Reviewing the Bat Monitoring Report, and any necessary amendments to the ELMP, if Scenario 4 in Condition 30(g) is used to recommend the PMA. If the PMA has been recommended in accordance with Scenario 4, the Ecological Review Panel shall consider:

A. Whether the Panel requires additional expertise to assess the Bat Monitoring Report. If the Panel considers additional expertise is required, experts shall be appointed in accordance with Condition 33(a)(i).

B. Whether the residual ecological effects of the Project are offset or compensated for at the Alternative PMA, including the residual effects on long-tailed bats, avifauna and vegetation.

C. Whether the amendments made to the ELMP in relation to the Alternative PMA, and in particular to the Pest Management Plan, will offset or compensate for the Project's residual effects and achieve the objectives stated in Schedule 1 and in the ELMP. The Ecological Review Panel may recommend amendments to the ELMP.

D. Prior to recommending any amendments to the ELMP in accordance with Condition 33(a)(ii)(7)C above, the Ecological Review Panel shall consult with the experts employed by the Requiring Authority to prepare the Bat Monitoring Report and the amendments to the ELMP.

(iii) Before engaging the expert panel the Planning Lead (or Nominee) must notify the Requiring Authority.

(b) On receipt of an itemised invoice the Requiring Authority shall pay all reasonable costs associated with the engagement of the expert panel.

(c) The Ecological Review Panel shall remain in place until all actions under Condition 33(a)(ii) have been completed.

#### **Accidental Discovery Protocol**

34. The Requiring Authority shall rely on P45, the NZ Transport Agency Accidental Discovery Protocol and implement that protocol throughout Works. P45, the Transport Agency Accidental Discovery Protocol, shall be reviewed by the KFG and modified to:

(a) reflect the site specific Project detail; and

(b) be consistent with any archaeological authority issued by Heritage New Zealand under the *Heritage New Zealand Pouhere Taonga Act 2014* applying to the Project.

*Advice Note: The Ministry for Culture and Heritage must also be advised of any artefact finds within 28 days of the discovery in accordance with the Protected Objects Act 1975. The final repatriation of artefacts is a matter for the Ministry of Culture and Heritage in consultation with iwi.*

35. The Accidental Discovery Protocol referred to in condition 34 shall not apply, and need not be implemented, in the event that:

(a) the Project is subject to an archaeological authority granted under section 48 of the Heritage New Zealand Pouhere Taonga Act 2014 (or the corresponding provision in any legislation replacing that Act); and

(b) that authority provides for a protocol to be implemented in the event of discovery of cultural or archaeological artefacts or features during the construction of the Project, including the matters provided in condition 34.

*Advice Note: The purpose of this condition is to ensure consistency between these conditions and the conditions imposed on any archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014.*

*Advice note: Archaeological Authority 2019/057 was granted by Heritage New Zealand Pouhere Taonga on 28<sup>th</sup> August 2018. Implementation of the Authority would meet the requirements of Condition 35(a) and (b).*

#### **Access**

36. The Requiring Authority shall, as far as reasonably practicable, maintain access to the Kiwi Road and Mt Messenger Tracks during construction.
37. The Requiring Authority will ensure that reasonable vehicular access is maintained during the Project to the properties currently served by the section of SH3 that will be bypassed or otherwise affected by the Project.

#### **Network utilities**

38. Works within the designation shall be undertaken in accordance with the National Code of Practice for Utility Operators' Access to Transport Corridors (September 2016), or any approved update to that code.

#### **Construction Lighting**

39. The Requiring Authority shall implement procedures at all times during construction to manage lightspill (if any) to residential properties from any night lighting that is required on the site, in accordance with AS 4282 – 1997 "Control of the Obtrusive Effects of Outdoor Lighting". Construction lighting shall also be managed in a manner which reduces, to the extent that is reasonably practicable, adverse light overspill effects on nocturnal fauna.

#### **Operational Lighting**

40. Lighting installed at the tie-ins points with the existing SH3 and the tunnel shall be designed and screened to minimise the amount of light overspill and illumination received at residential dwellings and to reduce adverse effects on bats and other nocturnal fauna. The Requiring Authority shall:
  - (a) Demonstrate that all lighting designed in accordance with "Road lighting Standard AS/NZS1158"; and
  - (b) Provide written verification to the Planning Lead from an ecologist that the lighting has been designed to reduce adverse effects on nocturnal fauna.

#### **Engineering Review**

41. Prior to construction of any Stage (or Stages) of the Works, the Requiring Authority shall provide written confirmation to the Planning Lead (or Nominee) that peer review of geotechnical and structural detailed design has been carried out by an independent and suitably qualified and experienced engineer(s), with particular emphasis on ensuring that

detailed design manages the significant risks from natural hazards. Upon receipt of the peer review for any Stage (or Stages) of Construction Work the Planning Lead (or Nominee) shall confirm by writing to the Requiring Authority that the requirements of this condition are met.

- 41A. Prior to the Completion of Construction Works, the Requiring Authority shall provide the Planning Lead (or Nominee) with the detailed design and operational details of the tunnel. This shall be accompanied by the results of a safety audit of the tunnel carried out for the Requiring Authority by a suitably qualified, experienced and independent road safety auditor, which includes but is not limited to, consideration of:

(a) the effects of wind on cyclists within the tunnel from both passing vehicles and naturally occurring high winds outside the tunnel;

(b) the position of side protection barriers and the safety tunnel wall correlated to near-side shy line requirements;

(c) the width of the shoulder and other tunnel dimensions; and

(d) the appropriate and safe speed limit for vehicles in the tunnel.

Upon receipt of the detailed design and operational details of the tunnel and the safety audit of the tunnel the Planning Lead (or Nominee) shall confirm by writing to the Requiring Authority that the requirements of this condition are met.

#### **General Monitoring**

42. On receipt of an itemised invoice, the Requiring Authority shall pay to the New Plymouth District Council all the administration, monitoring and supervision costs of these Conditions, fixed in accordance with section 36 of the Resource Management Act, 1991.

#### **Completion of Construction Works**

43. (a) As soon as practicable following Completion of Construction Works, the Requiring Authority shall notify the Planning Lead (or Nominee) that Construction Works are complete. The notification shall include a list of the Construction Works completed, and be accompanied by maps to show the location of the completed works. This shall include the identification of:

(i) areas of landscaping and reinstatement; and

(ii) all areas of restoration and riparian plantings required under Condition 29(a)(ii) and 29(g)(ii) and notice of whether the plantings have been completed.

(b) If Completion of Construction Works is to occur more than six months following the operation of the new State highway commencing, the Requiring Authority shall notify the Planning Lead (or Nominee) of the expected date for Completion and Construction Works. This date shall be no more than 18 months following the operation of the new road.

Upon receipt of the notice of under 43(a) the Planning Lead (or Nominee) shall confirm in writing to the Requiring Authority that the requirements of this condition are met.

#### **Kiwi Road Track Access Parking**

44. Unless otherwise agreed with the Planning Lead (or Nominee), prior to the Completion of Construction Works the Requiring Authority shall construct a carpark area to provide parking for the users of the Kiwi Road Track. This carpark area shall be in accordance with the drawing titled "Indicative Carpark Layout", reference MMA-DES-GEM-E1-FIG-0022 Rev A.

## **SCHEDULE 1: REQUIREMENTS ADDRESSED IN THE ELMP**

### **1. Overarching objectives and matters addressed in the ELMP**

- a) The objectives of the Ecology and Landscape and Management Plan (**ELMP**), dated October 2018, are to:
  - i. identify how the potential adverse effects of the Project on the ecological, landscape and biodiversity values within the Project Area and its surrounds will be avoided, remedied, mitigated, offset and compensated for, including on: vegetation / habitats (including wetlands); herpetofauna (lizards and frogs); bats; avifauna; peripatus; fish, kōura and kākahi; and streams; and
  - ii. achieve a net gain in biodiversity after the residual effects on biodiversity have been offset or compensated for.
- b) The ELMP includes a summary of the ecological and landscape values and effects of the Project.
- c) The ELMP comprises a series of sub-management plans that address the designation and resource consent conditions, including: Landscape and Vegetation Management Plan; Bat Management Plan; Avifauna Management Plan; Herpetofauna Management Plan; Freshwater Management Plan; Pest Management Plan; Peripatus Management Plan; and Biosecurity Management Plan.
- d) The ELMP also describes:
  - i. The physical mechanisms (e.g. fences) to protect the restoration and riparian planting from clearance and / or livestock, on an ongoing basis.
  - ii. The necessary rights to carry out the restoration and riparian planting, and to carry out the required pest management where these activities are to occur on land that is not owned by the Requiring Authority.
  - iii. The measures proposed for biosecurity management, including the management of risk associated with myrtle rust, and the management of pest plants and pest animals.
- e) The ELMP includes maps showing:
  - i. existing vegetation types for all areas of proposed mitigation plantings, to determine if these will result in habitat gain;
  - ii. the location and extent of the stream reaches proposed for restoration works;
  - iii. the location and extent of the Intended PMA.
- f) The ELMP contains details of monitoring and reporting to the Planning Lead (or Nominee) prior to, during and post-construction to determine if the ELMP objectives and the performance measures are being met, including a repeatable monitoring design incorporating adaptive management responses.

- g) The ELMP includes details of the roles and responsibilities of key staff responsible for implementing the ELMP and procedures for training of contractors and other Project staff regarding the ELMP.
- h) ELMP includes details of the process for reviewing and amending the Plan, in accordance with the Conditions of the Designation and Resource Consents.

## **2. Landscape and Vegetation Management Plan**

### **Specific objectives**

The Landscape and Vegetation Management Plan addresses:

- a) Details of the method for a pre-construction survey of wetland vegetation composition and structure to assist planning for the swamp forest restoration planting.
- b) The retention, where possible, of the high value ecological areas identified in Figures 4.1 and 4.2 in the ELMP dated 31 October 2018.
- c) Provisions for the relocation or cultivation of threatened plants found within the Project Area.
- d) Details of how, prior to vegetation removal, the appropriate delineation of vegetation to be cleared will be made.
- e) A programme for vegetation clearance that allows for vegetation to be cleared only prior to Works beginning in any particular Stage (or Stages) of the Project Area in order to reduce habitat effects and reduce the potential for erosion and sediment generation.
- f) The staging of restoration planting and landscape treatments in relation to the construction programme to reduce the potential for erosion and sediment generation. Where practicable restoration planting shall commence after the completion of any Stage of Construction Work.
- g) Provisions for the cultural use of significant trees by Ngāti Tama.
- h) The supervision of vegetation clearance by a suitably qualified person.
- i) Landscaping design and treatments (landform and planting), including rehabilitation of all areas used for temporary work and construction yards.
- j) The location, details and principles for achieving the following restoration planting, including identification (maps) of where the restoration planting will take place:
  - i. At least 6 hectares of kahikatea swamp forest.
  - ii. At least 9ha of mitigation planting using an appropriate mix of plant seedling.
  - iii. Planting of saplings in ecologically appropriate sites at a loss to replacement ratio of 1:200 on a 'like for like' species basis for each significant tree that is felled.
  - iv. All new plantings must be eco-sourced from the North Taranaki Ecological District.
  - v. The Requiring Authority shall complete all restoration planting within three planting seasons of the Completion of Construction Works, unless natural conditions during Construction Works result in poor

seed production, or poor seed condition and adversely limits seedling propagation for indigenous plant species, in which case completion would be delayed to reflect the availability of suitable seedlings.

- vi. Should there be a delay in the completion of restoration planting due to the availability of suitable seedlings as described in v above, the Requiring Authority shall provide the Planning Lead (or Nominee) with an amended timeframe, which shall not exceed three planting seasons, and shall complete the planting as soon as reasonably possible within the agreed timeframe, informing the Planning Lead (or Nominee) when planting is complete.
- k) Provisions to monitor and manage all planting so that plants establish and those that fail to establish are replaced, such that the listed performance measures are met within their specified timeframes.

#### **Performance measures**

- l) The Landscape and Vegetation Management Plan addresses the following performance measures.
  - i. For each significant tree felled, 90% survival of the 200 planted trees required by j)iii at 6 years following planting. If 90% plant survival has not been achieved within 6 years following planting, any necessary replacement planting and planting maintenance shall continue beyond year 6 until 90% survival is achieved.
  - ii. 80% canopy cover 6 years following planting for all restoration planting required by j)i and j)ii, in the areas where trees and shrubs are planted. If 80% canopy cover is not achieved at 6 years following planting, any necessary replacement planting and planting maintenance shall continue beyond year 6 until 80% canopy cover is achieved.
  - iii. For kahikatea swamp forest planting required by j)i, kahikatea forming 16% of the tree canopy at year 10. Additional kahikatea will be planted in the areas where the kahikatea contribution to the canopy is less than 16%.
  - iv. 65% canopy cover at year 35 for kahikatea swamp forest planting required by j)i.

#### **Monitoring**

The Landscape and Vegetation Management Plan includes the following survey and monitoring requirements.

- m) Provision to measure the extent of actual vegetation clearance within 6 months following the completion of Establishment Works and to reassess the extent of restoration planting required under j)ii and j)iii. The Requiring Authority shall prepare and provide a report to the Planning Lead (or Nominee) confirming the restoration planting required to achieve the amount specified under j)ii and j)iii. If additional restoration planting is required, the extent of the restoration planting required shall be identified in the report. If the recalculation results in lesser restoration planting area than that specified

in j)ii and j)iii, the restoration planting shall remain as that required under j)ii and j)iii. The report shall be provided to the Planning Lead (or Nominee) for Certification that the additional planting is in accordance with the restoration planting required under j)ii and j)iii.

- n) Provision to undertaken post-construction monitoring of vegetation condition for all restoration planting to demonstrate that the performance measures for the Landscape and Vegetation Management Plan have been met. The monitoring shall be undertaken, as required, until such time as all of the performance measures have been shown to be achieved.

### **3. Bat Management Plan**

#### **Specific objectives**

The Bat Management Plan addresses the following matters:

- a) Provision for a long-tailed bat radio tracking programme to identify long-tailed bat roost locations and confirm the PMA location.
- b) Vegetation Removal Protocols (VRP) for:
- i. the 17 significant trees.
  - ii. all other trees that are  $\geq 80$  cm Diameter at Breast Height (DBH), and trees between 15cm and 80cm DBH which are considered by a specialist bat ecologist as having features suitable for bat roosting, including:
    - (1) cracks, crevices, cavities, fractured limbs, or other deformities, large enough to support roosting bat(s);
    - (2) sections of loose flaking bark large enough to support roosting bats;
    - (3) a hollow trunk, stem or branches;
    - (4) deadwood in canopy or stem of sufficient size to support roost cavities or hollows;
    - (5) guano, grease marks and/or urine staining around cavity entrances; and
    - (6) selected individual trees with high epiphyte loading (five or more perched nested epiphytes located on horizontal branches).
  - iii. all trees shown through the bat monitoring programme to be Roosts.
- Advice Note: the VRP shall not apply to the removal of any other vegetation.*
- c) When Automatic bat detectors (ABMs) are used to determine the presence of bats around potential roost trees, provision for monitoring to occur for a minimum of three consecutive nights.
- d) Provision for consultation with the DOC Operations Manager New Plymouth District Office to discuss appropriate actions if a bat roost remains occupied for longer than 7 days.

- e) Other than the amendments made through a) to c) above, the VRP shall be in accordance with Annex DH of the 'NZ Transport Agency (the Transport Agency) research report 623 'Effects of land transport activities on New Zealand's endemic bat populations: reviews of ecological and regulatory literature' (Smith et al. 2017)' and set out in the ELMP after modification to account for local conditions.

**Performance outcomes**

- f) The performance outcomes for bats will be achieved by the successful implementation of the VRP and by pest management in the PMA (refer to Pest Management Plan).

**Monitoring**

- g) There are no specific monitoring requirements for bats, other than those associated with the implementation of the VRP and the monitoring for pest management in the PMA.

**4. Avifauna Management Plan**

**Specific objectives**

The Avifauna Management Plan addresses the following matters;

- a) Measures to detect and protect kiwi from the likelihood of direct mortality during the construction and operation of the road, including:
- i. A North Island brown kiwi radio-tracking programme, prior to and during construction, along the entire length of the road corridor, conducted by a suitably qualified ecologist.
  - ii. Provision for the capture and relocation of kiwi and/or their eggs during construction, if deemed appropriate by the kiwi expert, and in accordance with DOC best practice for kiwi (2018).
  - iii. Based on the outcome of radio-tracking and the identification of kiwi territories, details on the design, installation and ongoing maintenance of kiwi exclusion fencing at locations where:
    - (1) the territories identified by the tracking and monitoring in (i) straddle the road corridor; and
    - (2) the Project ecologist considers there is a high risk of kiwi being able to enter the road corridor at these locations.

This will direct kiwi to culvert locations where they can underpass beneath the road during low stream flow conditions. The design and location of these fences shall be discussed with the DOC Operations Manager New Plymouth District.
  - iv. Provision for the placement of appropriate road signage along the new road corridor to warn motorists about the possible presence of kiwi.
- b) Measures to provide for the detection of kōkako in the construction area and to prevent disturbance from construction, along with measures outlining the subsequent actions to be taken that avoid disturbance in the event that any nesting kōkako or their nests be detected within the Project Area. Notification shall be provided to DOC Operations Manager New Plymouth District Office,

TRoNT, and the Planning Lead (or Nominee) within 2 hours of kokako being detected. Appropriate response actions shall be implemented immediately to avoid disturbance.

- c) Monitoring of Australasian bittern using automatic acoustic bird monitors at the Mimi wetland and in the Mangapepeke Valley prior to construction. If bittern are detected, notification must be provided to the DOC Operations Manager New Plymouth District Office within two days of the data from the automatic acoustic bird monitor being analysed. The Requiring Authority shall design, install and maintain low fencing adjacent to the road corridor at marshland locations where bittern are recorded, prior to operation of the road.

**Performance outcomes**

- d) The performance outcomes for avifauna will be achieved by the successful implementation of the measures outlined above under a) to c) for kiwi, kōkako and Australasian bittern and by pest management in the PMA (refer to Pest Management Plan).

**Monitoring**

The Avifauna Management Plan includes the following survey and monitoring requirements:

- e) Details of up to 1 year of post-construction monitoring utilising motion detection cameras deployed at selected locations to assess the effectiveness of the exclusion fences and use of the culvert underpasses by kiwi.
- f) Details of a survey involving the placing of automatic acoustic bird monitors for bittern in the Mimi wetland and Mangapepeke Valley in the spring of 2018.
- g) Additional avifauna monitoring associated with the Pest Management Plan is set out in Section 7 below.

**5. Herpetofauna Management Plan**

**Specific objectives**

The Herpetofauna Management Plan addresses the following matters:

- a) Provision for (limited) salvage effort for lizards that may be located on vegetation cleared within the Project Area, focusing on high value habitat and known lizard locations. The provisions shall also include details on the relocation and release of salvaged striped skink at the Rotokare Scenic Reserve and other lizards into the PMA.
- b) Provision for the development of a management plan for Hochstetter's frog (*Leiopelma aff. hochstetteri*) and Archey's frog (*Leiopelma archeyi*), if they are discovered in the Project Area.

**Performance outcomes**

- c) The performance outcomes for herpetofauna will be achieved by the successful implementation of the salvage measures outlined in a) above.

**Monitoring**

- d) The Herpetofauna Management Plan includes: provision for recording the details of any salvaged lizards, including: species, sex, age class, weight, snout

to vent length, and location of capture and release. All records shall be reported to the BioWeb Herpetofauna database.

## **6. Freshwater Management Plan**

### **Specific objectives**

The Freshwater Management Plan addresses the following matters:

- a) The design and construction of reinstated and diverted streams in accordance with the Stream Ecological Design Principles attached to the LEDF. 798m<sup>2</sup> of remediated stream diversions will be restored, through riparian planting, and livestock exclusion. Riparian margins of an average of 10m each side of the stream will be created and planted.
- b) The measures to maintain fish passage in all affected waterways as a result of permanent culverts (with the exception of culverts 2, 10 and 13), which shall be informed by the New Zealand Fish Passage Guidelines for Structures Up to 4 Metres (2018).
- c) Riparian planting and exclusion from livestock of at least 10,738m<sup>2</sup> of existing stream within the Mimi and Mangapepeke catchments. Riparian margins of an average of 10m each side of the channel shall be created and planted. Together with (a) this will create 11,536m<sup>2</sup> of stream restoration. Should culvert or stream diversion lengths be increased in the detailed design stage of the Project, the length of riparian planting required shall be re-calculated using the same Stream Ecological Valuation (SEV) method used to derive the 10,738m<sup>2</sup> figure (note that provisions are addressed in the Landscape and Vegetation Management Plan).
- d) The Requiring Authority shall complete all riparian planting within three planting seasons of the Completion of Construction Works, unless natural conditions during Construction Works result in poor seed production, or poor seed condition and adversely limits seedling propagation for indigenous plant species, in which case completion would be delayed to reflect the availability of suitable seedlings.
- e) Should there be a delay in the completion of riparian planting due to the availability of suitable seedlings as described in d) above, the Requiring Authority shall provide the Planning Lead (or Nominee) with an amended timeframe, which shall not exceed three planting seasons, and shall complete the planting as soon as reasonably possible within the agreed timeframe, informing the Planning Lead (or Nominee) when planting is complete.
- f) Fish Recovery and Rescue Protocols, including addressing:
  - i. How the recovery and relocation of fish, kōura and kākahi will occur prior to instream works.
  - ii. How the rescue of fish, kōura and kākahi will occur from any spoil.
  - iii. The qualifications and experience required for fish recovery/rescue work.
  - iv. Details of fish recovery, relocation and rescue methods to be used.

*Advice Note: Details of the water quality monitoring, response process and measures to address potential adverse effects of sediment and other contaminant discharges to waterways during construction, including streams and wetlands, are set out in the Construction Water Management Plan and the Construction Water Discharges Monitoring Plan.*

#### **Performance outcomes**

The Freshwater Management Plan includes the following performance measures:

- g) Provision of fish passage through all permanent culverts, except culverts 2, 10 and 13.
- h) Implementation of stream diversions and riparian planting to achieve successful colonisation by aquatic biota, and to match existing habitat types compared with the original stream reach affected.
- i) For the riparian planting required by (c) the plantings shall achieve 80% canopy cover 6 years following planting in the areas where trees and shrubs are planted. If 80% canopy cover is not achieved at 6 years following planting, any necessary replacement planting and planting maintenance shall continue beyond year 6 until 80% canopy cover is achieved.

#### **Monitoring**

The Freshwater Management Plan includes the following survey and monitoring requirements:

- j) Provision for monitoring the fish passage performance after peak upstream migration (August – December) upstream of culverts 9, 15 and 18 annually for two years after construction is completed. The monitoring will be used to determine if recruitment is occurring by assessing if a suitable age structure (juvenile and adult fish) is present within the fish population above culvert 9 and culvert 15. If after 2 years the recruitment of young fish is not occurring then refinements to the culvert fish passage devices will be made.
- k) Provision for monitoring of macroinvertebrates and fish at 3 selected locations in each of the Mangapepeke and Mimi catchments.
  - i. Pre-construction and construction phase fish monitoring will be undertaken during base flow conditions at least two weeks following any large flood event in spring (October to December) and summer (February to April). Fish surveys will use methods consistent with the New Zealand freshwater fish sampling protocols (Joy et al. 2013). Fish will be identified, counted and lengths recorded.
  - ii. Pre-construction and construction phase aquatic macroinvertebrate monitoring will be undertaken during base flow conditions at least two weeks following any large flood event in spring (October to December) and summer (February to April). Aquatic macroinvertebrate surveys will use methods consistent with Protocols for sampling macroinvertebrates in wadeable streams (Stark et al. 2001). For each site the area sampled and type of stable habitat sampled will be recorded. The following metrics will be

calculated from the aquatic macroinvertebrate data: taxa richness, Macroinvertebrate Community Index (MCI), Quantitative Macroinvertebrate Community Index (QMCI), %EPT taxa and %EPT abundance. EPT (Ephemeroptera-Plecoptera-Trichoptera) metrics will exclude the species *Oxyethira* and *Paroxyethira*. Following at least one year of baseline monitoring and one year of construction monitoring, aquatic macroinvertebrate monitoring will be reduced to annual monitoring if there is less than 20% change in QMCI or MCI comparable to baseline sampling.

- l) Provision for pre-construction and construction phase sediment deposition monitoring at a site within the raupo reedland, downstream of the Mimi Stream tributary draining the tunnel portal, located upstream of the Mimi swamp forest. This involves monitoring change in sediment accumulation e.g. artificial astroturf attached to a tray. The purpose of the monitoring is to assess sediment deposition that might extend from the end of the stream to the Mimi swamp forest. The monitoring will follow selected heavy rain events prior to the commencement of construction and in response to specific rainfall events during construction (set out in the Construction Water Discharge Monitoring Programme in Appendix C of the CWMP).

## **7. Pest Management Plan**

### **Specific objectives**

The Pest Management Plan addresses the following matters:

- a) The identification of the confirmed location for the 3,650ha Pest Management Area (PMA).
- b) Within the PMA, to:
  - i. reduce and maintain rats, possums, feral cats and mustelids to low levels in perpetuity.
  - ii. reduce and maintain feral goats and pigs to low densities in perpetuity.
  - iii. exclude farm stock in perpetuity.
  - iv. monitor and control wasps along the road corridor during construction and through to the conclusion of a 6 year plant maintenance period.
- c) To generate biodiversity benefits within the PMA across a wide range of plants and animals.
- d) An adaptive management approach to enable pest management techniques to be modified if target pest densities and the performance outcomes for avifauna identified below are not met.

### **Performance outcomes**

The Pest Management Plan includes the following performance measures:

- e) The following target pest densities in the PMA, measured immediately prior to the breeding season (for bats and birds) and then through the critical stages when young remain in the roost / nest:

- i. rat species – ≤5% tracking tunnel index;
- ii. mustelids – no detections;
- iii. cats – no detections;

And throughout any year, the following target pest densities in the PMA:

- a. possums – ≤5% chew card index;
  - b. goats and deer - <1 kill per hunter/day;
  - c. feral pigs - <1 kill per hunter/day; and
  - d. farm livestock – zero presence.
- f) For palatable plant species:
- i. The recruitment of vegetation species which are currently suffering ungulate induced recruitment failure. Indicator species will include: mahoe, hangehange, large leaved coprosma spp., pate, wineberry, tawa, hinau, kamahi and pikopiko.
  - ii. Recovery of condition of possum palatable trees. Indicator species will focus on measuring changes in foliage density of small trees such as; swamp maire, mahoe, kaikomako, northern rata and thin-barked totara.
- g) A statistically significant 20% increase in relative abundance for kiwi, tui, bellbird, kereru, whitehead, long-tailed cuckoo, fernbird, and North Island Robin in the PMA within 12 years of the Completion of Construction Works.

#### **Monitoring**

The Pest Management Plan includes the following survey and monitoring requirements within the PMA.

- h) Provision for monitoring pest levels to assess performance targets and enable adaptive management processes in the event targets are not met.
- i) Provision for a quantitative assessment of canopy condition and understorey condition to establish pre-pest management and post-pest management vegetation condition knowledge for the PMA, including the composition and abundance of palatable vegetation.
- j) Provision for monitoring avifauna prior to commencement of pest management in the PMA to establish a relevant baseline, including for kiwi, kōkako, forest birds and fernbird.
- k) Provision for outcome monitoring of kiwi, tui, bellbird, kereru, whitehead, long-tailed cuckoo, fernbird, North Island Robin conducted for 12 years, at 3-yearly intervals, following the onset of the pest management measures.

### **8. Peripatus Management Plan**

#### **Specific objectives**

The Peripatus Management Plan addresses the following matters:

- a) The specific procedures to avoid, remedy or mitigate adverse effects associated with the construction and operation of the Project on peripatus species through salvaging peripatus contained within suitable selected peripatus habitat into a suitable relocation site outside of the Project Area.

**Performance outcomes**

The Peripatus Management Plan includes the following performance measures:

- b) To salvage peripatus contained within suitable selected peripatus habitat locate and capture peripatus from the proposed Project Area, and to successfully relocated it at predetermined release sites, immediately adjacent to the Project Area, with minimal stress caused to the animals.

**Monitoring**

- c) There are no specific monitoring requirements for peripatus.

**9. Biosecurity Management Plan**

**Specific objectives**

The Biosecurity Management Plan addresses the following matters:

- a) The biosecurity measures to avoid the likelihood of spread or introduction of invasive pest plants and pest animals as a result of Project-related activities.
- b) Specific provisions for the minimisation of spread of Myrtle Rust onto and along the Project Area;
- c) Measures to avoid the introduction to the Project Area of invasive pest plants and animals with nursery produced seedlings

**Performance outcomes**

- d) Non-detection in the planting areas of pest plants and pest animals.

**Monitoring**

The Biosecurity Management Plan includes the following survey and monitoring requirements within the Project Area:

- e) Provision for pest plant and pest animal surveillance to be carried out by suitably qualified personnel within the Project Area and at restoration planting areas for the first growing season of any new plantings.
- f) Before-delivery inspections by suitably qualified personnel for invertebrate and plant pests at the premises of supplier nurseries of plant material being grown for planting in the Project Area and mitigation sites.
- g) Before construction walk-through survey of the Project Area by suitably qualified personnel to identify plant and animal pests and plant diseases already present.

<b>Glossary of Abbreviations and Terms Used in Conditions</b>	
<b>ADP</b>	Accidental Discovery Protocol
<b>AEE</b>	Assessment of Effects on the Environment Report
<b>CDMP</b>	Construction Dust Management Plan
<b>CEMP</b>	Construction Environmental Management Plan
<b>Certification</b>	The process of the Requiring Authority or Consent Holder submitting to the NPDC or TRC a report or an amendment to a management plan, a design, or a drawing for technical confirmation that it complies with the technical requirements of these designation or resource consent conditions and the management plan to which the design or drawings relate.
<b>CLMP</b>	Contaminated Land Management Plan
<b>Completion of Construction Works</b>	When Construction Works for the Project are complete. Completion of the restoration plantings required under Condition 29(a) and the riparian plantings required under Condition 29(g) may occur after Completion of Construction Works. The Requiring Authority shall advise the Planning Lead (or Nominee) of the Completion of Construction Works in accordance with Condition 43.
<b>Consent Holder</b>	NZ Transport Agency
<b>Construction Work(s)</b>	<p>Main construction works, including:</p> <ul style="list-style-type: none"> <li>• ground improvement works;</li> <li>• temporary and permanent drainage installation;</li> <li>• bulk earthworks (including cut and fill activities);</li> <li>• bridge and tunnel construction;</li> <li>• pavements and surfacing;</li> <li>• site reinstatement;</li> <li>• landscaping; and</li> </ul> <p>installation of permanent road furniture and ancillary works.</p>
<b>CNMP</b>	Construction Noise Management Plan
<b>CTMP</b>	Construction Traffic Management Plan

<b>COPTTM</b>	NZ Transport Agency Code of Practice for Temporary Traffic Management
<b>CTMP</b>	Construction Traffic Management Plan
<b>CWMP</b>	Construction Water Management Plan
<b>dBA</b>	A unit of sound level which has its frequency characteristics modified by a filter (C-weighted) so as to account for the non-linear frequency response of the human ear at high noise level (typically greater than 100 decibels)
<b>DOC</b>	Department of Conservation
<b>ELMP</b>	Ecology and Landscape Management Plan
<b>Establishment Work(s)</b>	Progressively opening up and establishing the site, including: <ul style="list-style-type: none"> <li>• construction and/or widening of roads/tracks to access construction areas and install sediment control measures (e.g. sediment control ponds);</li> <li>• vegetation clearance;</li> <li>• establishment of construction yards;</li> <li>• establishing full width access tracks/haul roads;</li> <li>• installing remaining erosion and sediment controls; and stream diversions.</li> </ul>
<b>Existing Network Utilities</b>	All network utilities existing at the date of notification of the Notice of Requirement. Network utility has the same meaning as in section 166 of the Resource Management Act 1991
<b>KFG</b>	Kaitiaki & Stewardship Forum Group
<b>LEDF</b>	Landscape and Environment Design Framework
<b>NPDC</b>	New Plymouth District Council
<b>Heritage New Zealand</b>	Heritage New Zealand Pouhere Taonga
<b>Maternity roost</b>	A roost occupied by two or more long tailed bats, including at least one parous, pregnant, lactating or post-lactating female long-tailed bat and/or young bat of the year
<b>Pest Management Area (PMA)</b>	The 3,650ha area that will be subject to pest management measures for biodiversity offsetting and compensation purposes.

	<p>For the purpose of Condition 30, the following terms are also defined in relation to the Pest Management Area:</p> <ul style="list-style-type: none"> <li>• <b>Wider PMA:</b> the area shown in Figure 9.2 in the ELMP, that has an area greater than 3,650ha, from which the Confirmed 3,650ha PMA may be selected through the process in Condition 30(g).</li> <li>• <b>Intended PMA:</b> the 3,650ha area shown in Figure 9.1 in the ELMP, that is within the Wider PMA and that may be selected as the Confirmed PMA through the process set out in Condition 30(g).</li> <li>• <b>Confirmed PMA:</b> the 3,650ha area that is selected as the PMA through the process set out in Condition 30(g).</li> <li>• <b>Study Area:</b> the area, including the Project Area, the Intended PMA and land beyond both, over which bats will be tracked, as shown in Figure 9.3 in the ELMP and from which the Confirmed PMA may be selected through the process set out in Condition 30(g).</li> <li>• <b>Alternative PMA:</b> The Waitaanga Valley, as shown in Figure 9.4 in the ELMP, that has an area greater than 3,650ha, from which the Confirmed PMA may be selected through the process set out in Condition 30(g).</li> </ul>
<b>Planning Lead</b>	New Plymouth District Council Planning Lead for the Designation Conditions
<b>PMP</b>	Pest Management Plan
<b>Project</b>	The construction of a new section of SH3 generally between Uruti and Ahititi, north of New Plymouth that is approximately 6km in length and located to the east of the existing SH3 alignment, comprising all associated Work in the area shown as the proposed designation in Figure 1.1 of the AEE
<b>Project Area</b>	The area shown as the proposed designation in Figure 1.1 of the AEE

<b>Requiring Authority</b>	NZ Transport Agency
<b>RMA or 'the Act'</b>	Resource Management Act 1991
<b>SCWMP</b>	Specific Construction Water Management Plan
<b>SH3</b>	State Highway 3
<b>Stabilised Area</b>	An area inherently resistant to erosion such as rock, or rendered resistant by the application of aggregate, geotextile, vegetation or mulch, or as identified in the Construction Water Management Plan. Where vegetation is to be used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once an 80% vegetation cover has been established.
<b>Stabilisation</b>	The activity to achieve a Stabilised Area
<b>Stage or Staging</b>	A stage of the Works to construct the Project as identified in the CEMP, CWMP or SCWMP
<b>TRC</b>	Taranaki Regional Council
<b>TRoNT</b>	Te Runanga o Ngāti Tama
<b>VRP</b>	Vegetation Removal Protocol
<b>Work or Works</b>	Establishment Works and Construction Works associated with the Project
<b>Working Day</b>	Has the same meaning as under section 2 of the Resource Management Act 1991