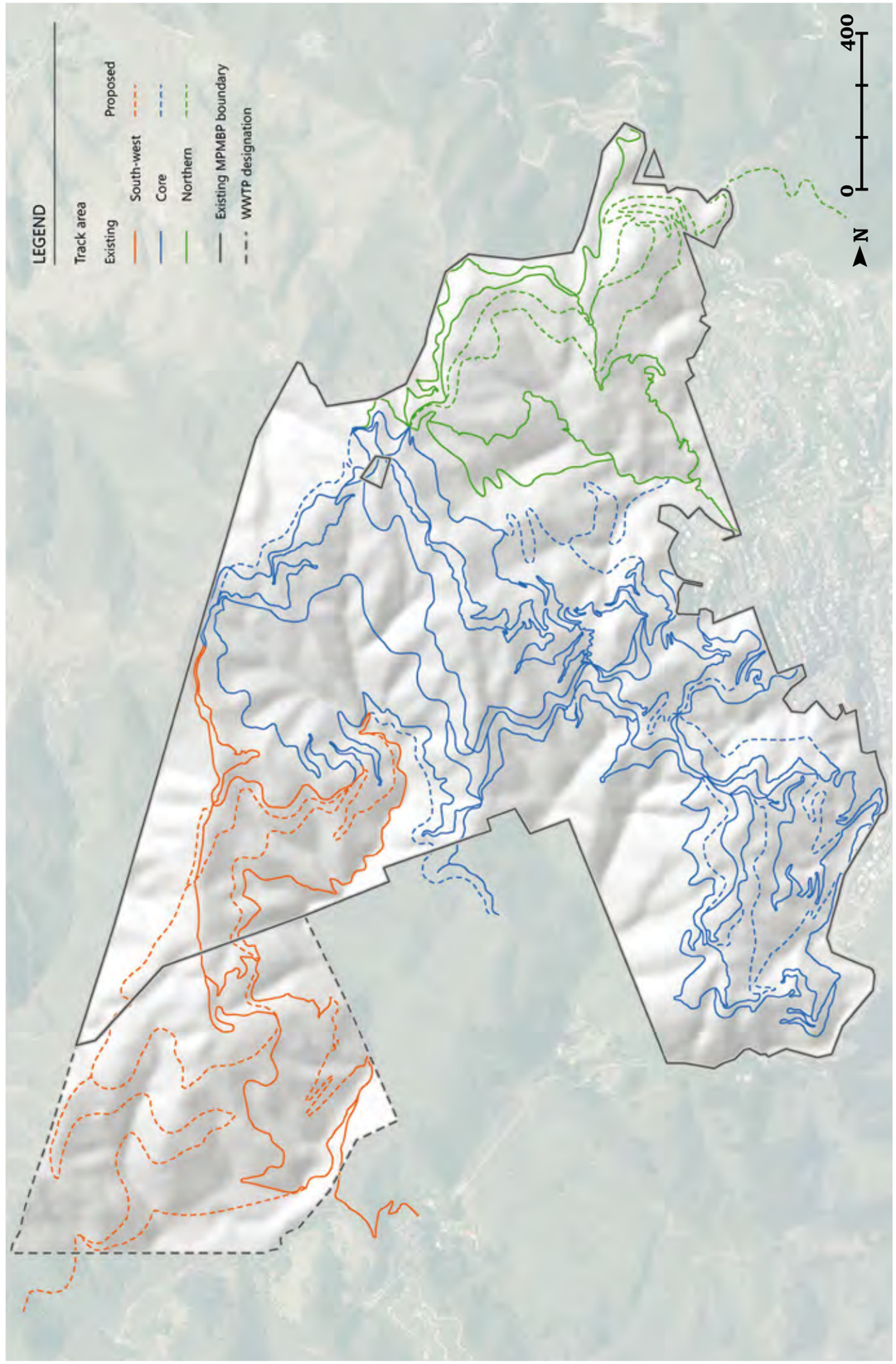
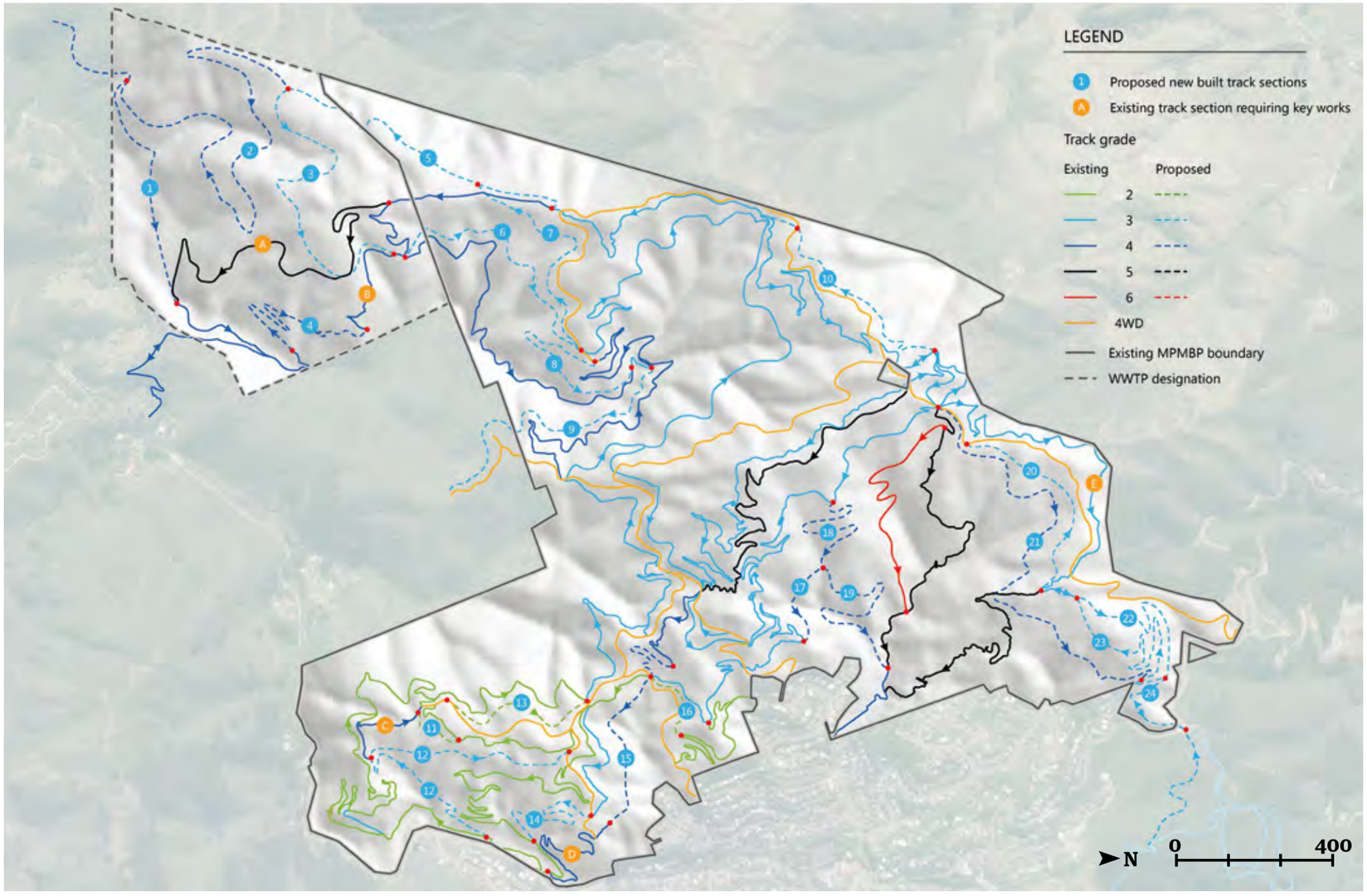
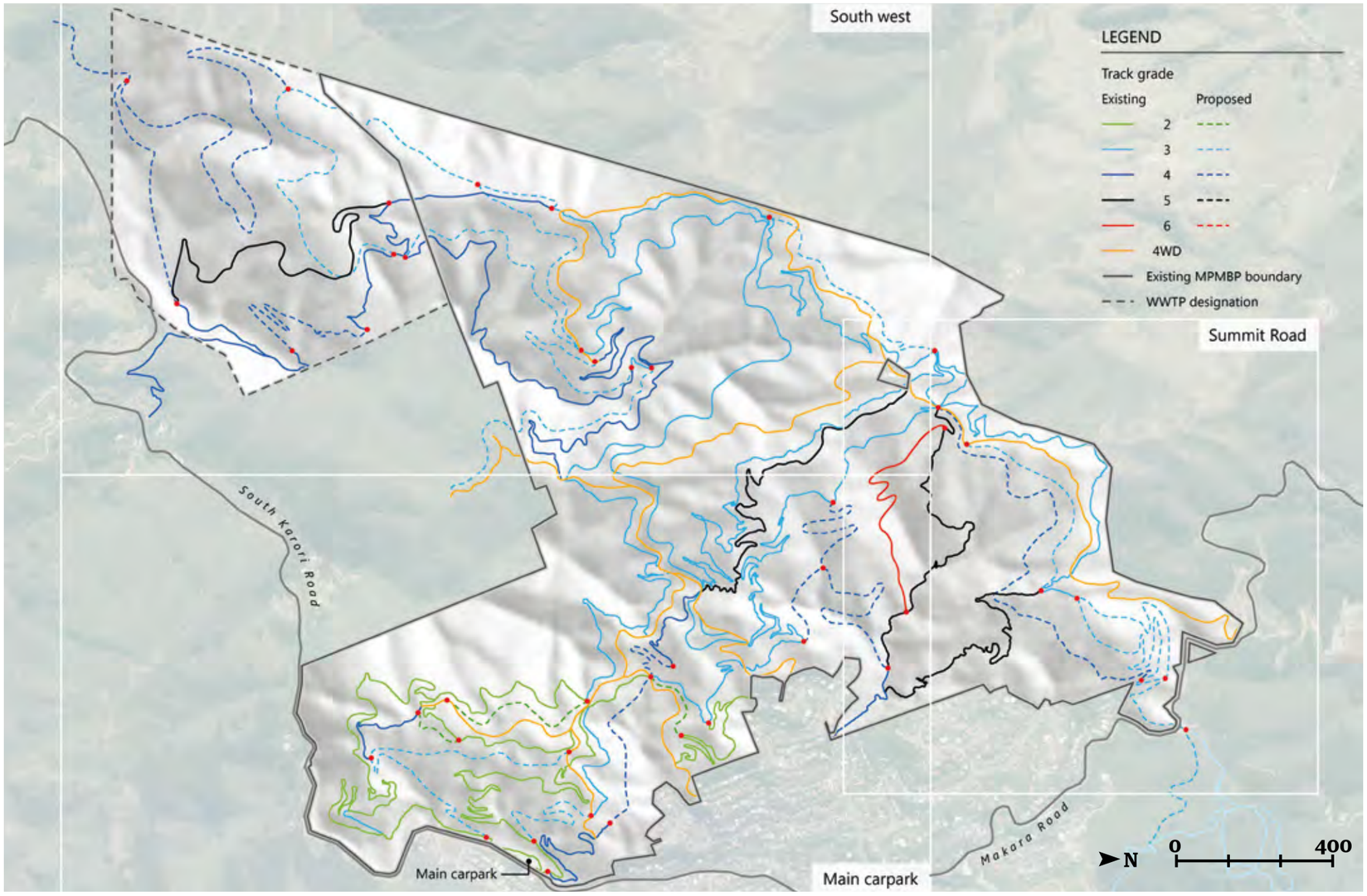
Appendix A – Makara Peak Mapping



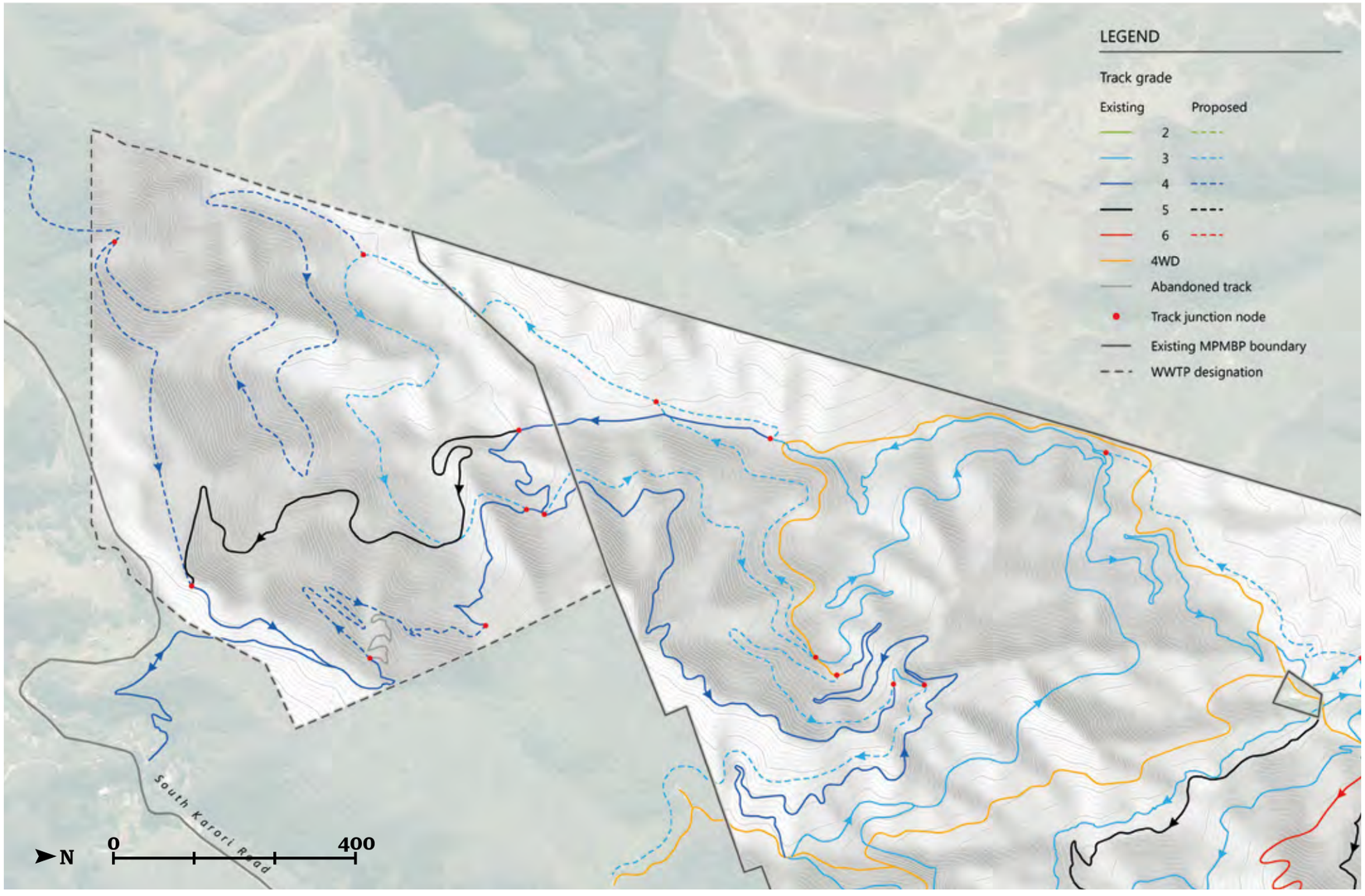
Map 1: Overview of track areas



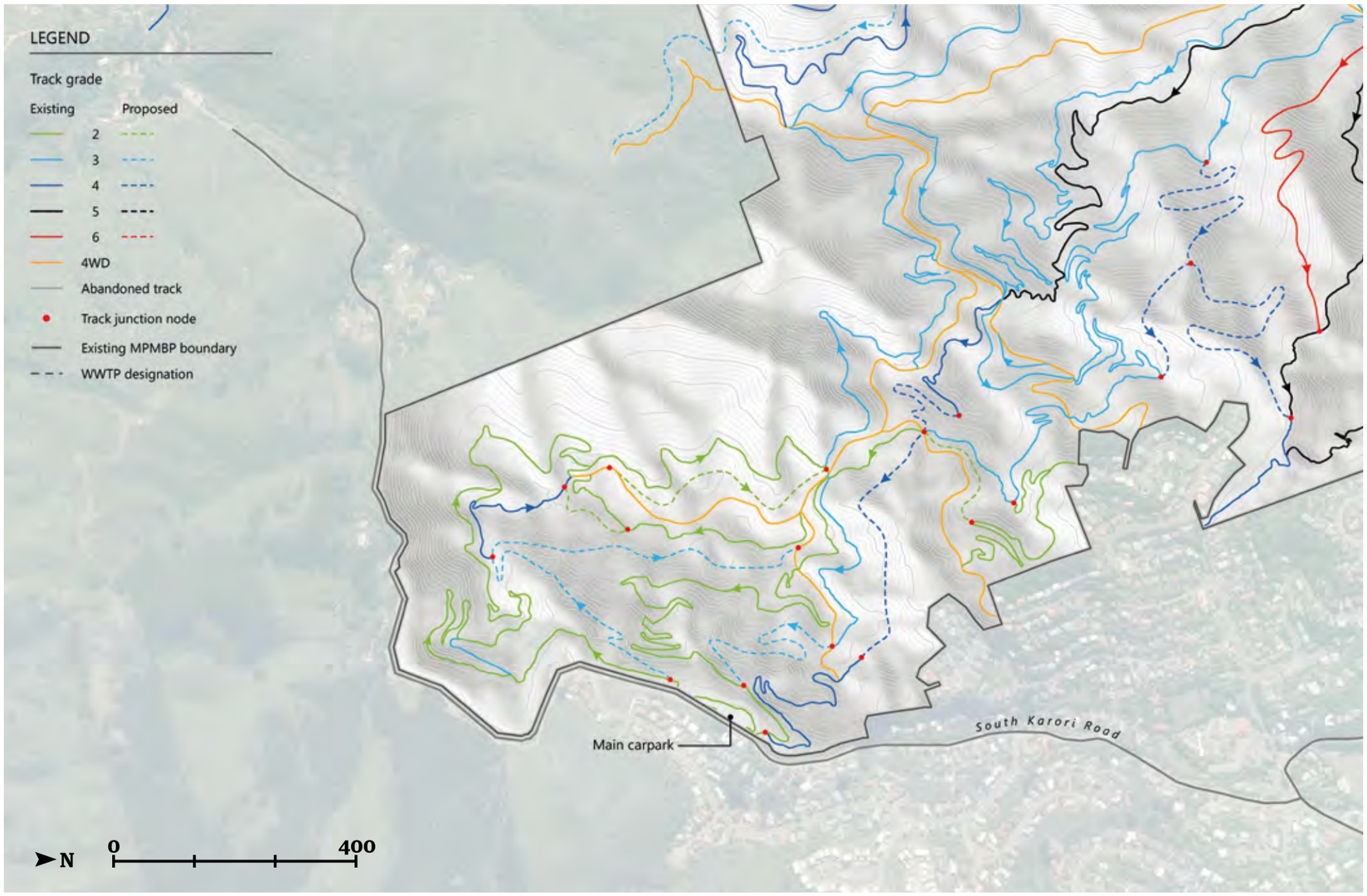
Map 2: Proposed trail sections



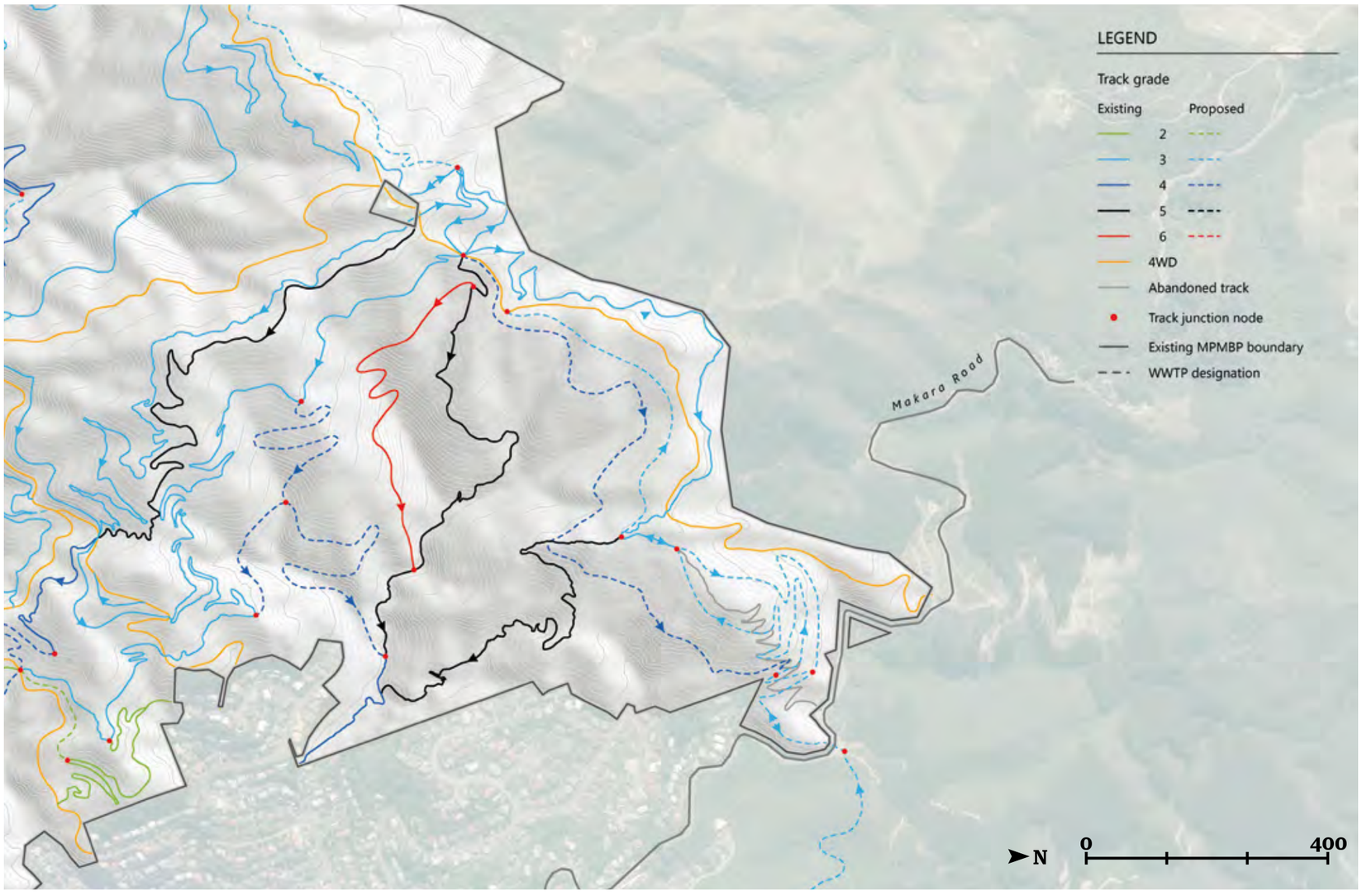
Map 3: Proposed trail map - context



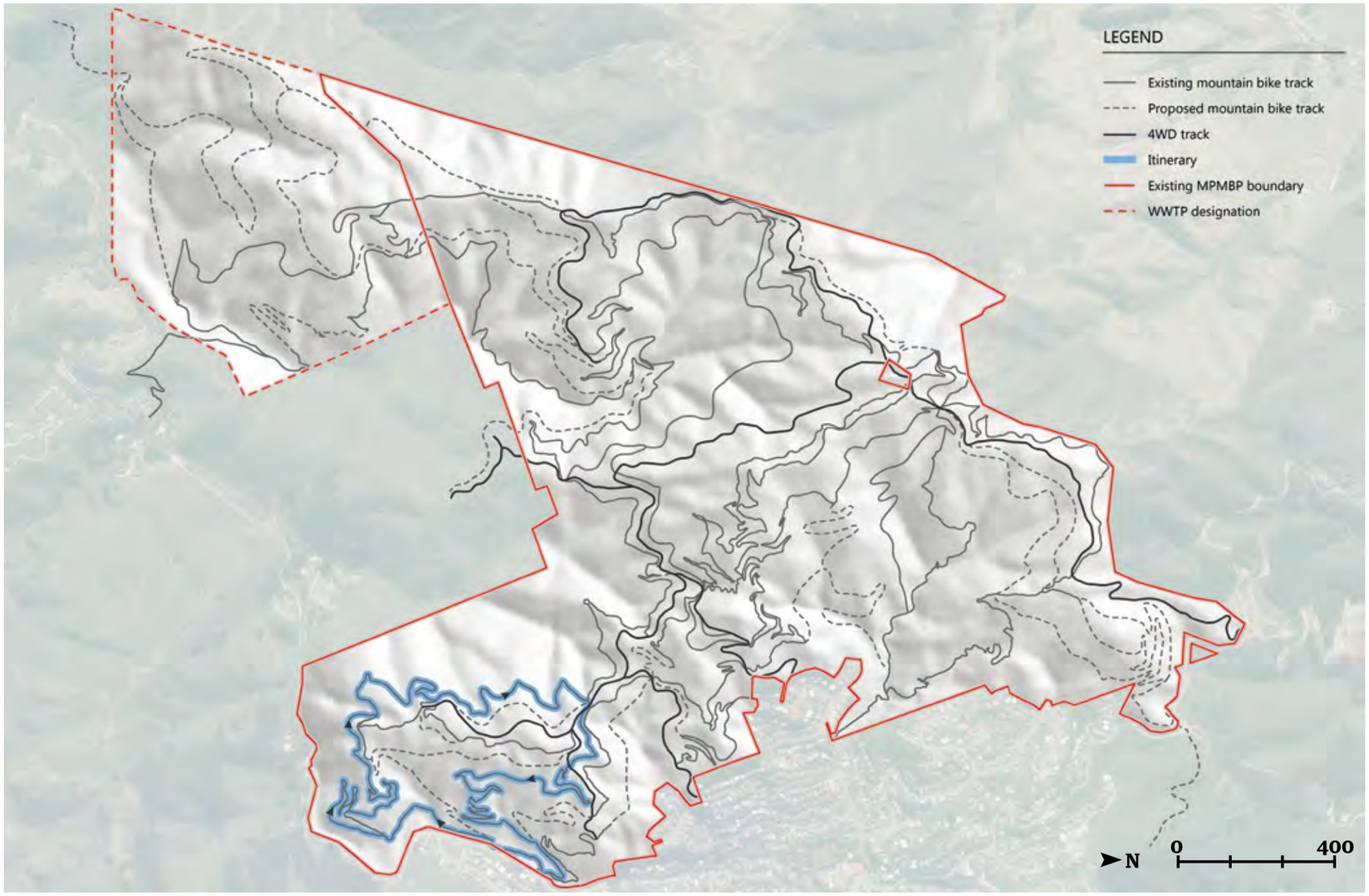
Map 4: Proposed trail map - southwest



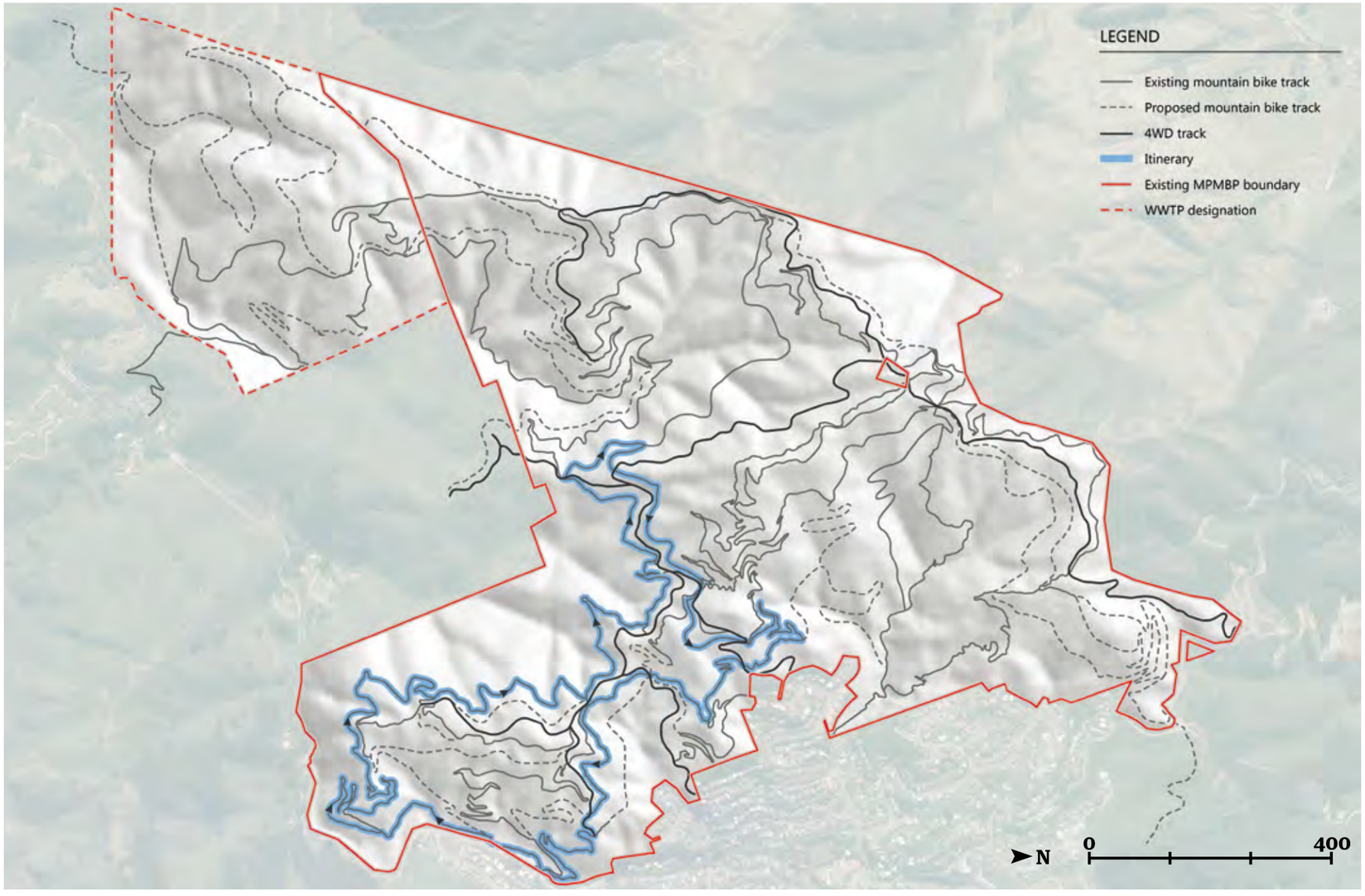
Map 5: Proposed trail map - main car park



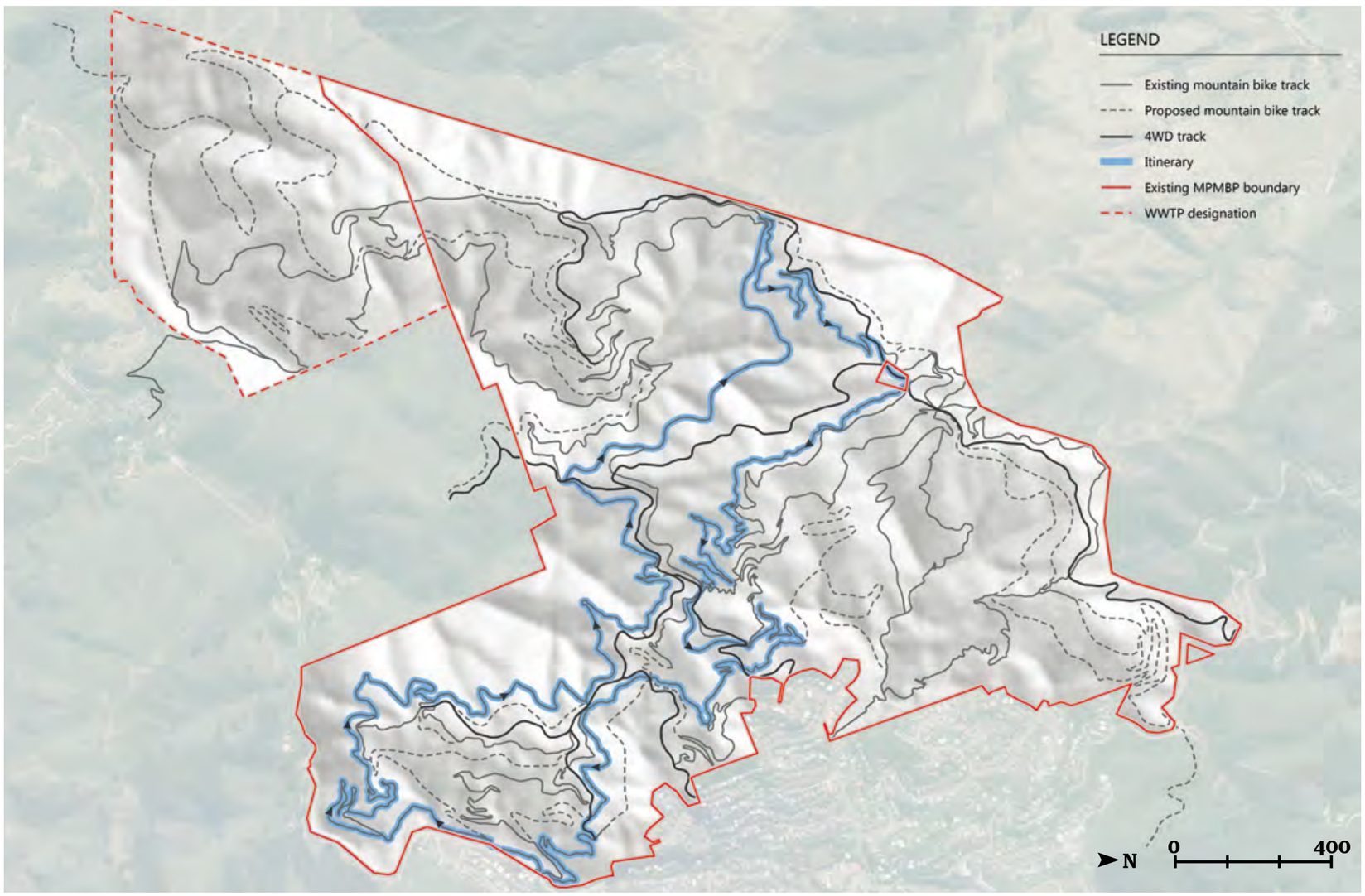
Map 6: Proposed trail map - Summit Road



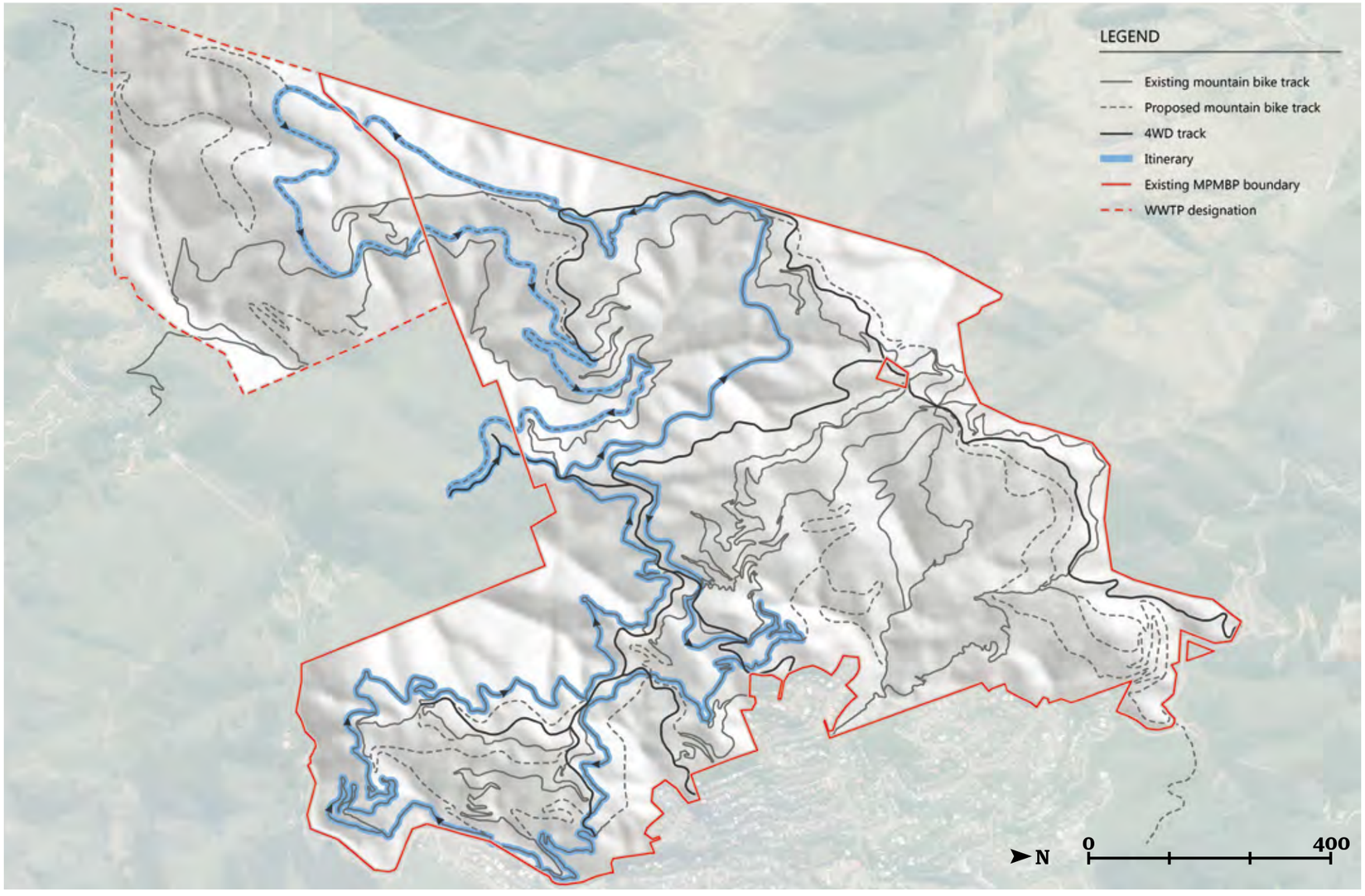
Map 7: Short grade 2 loop



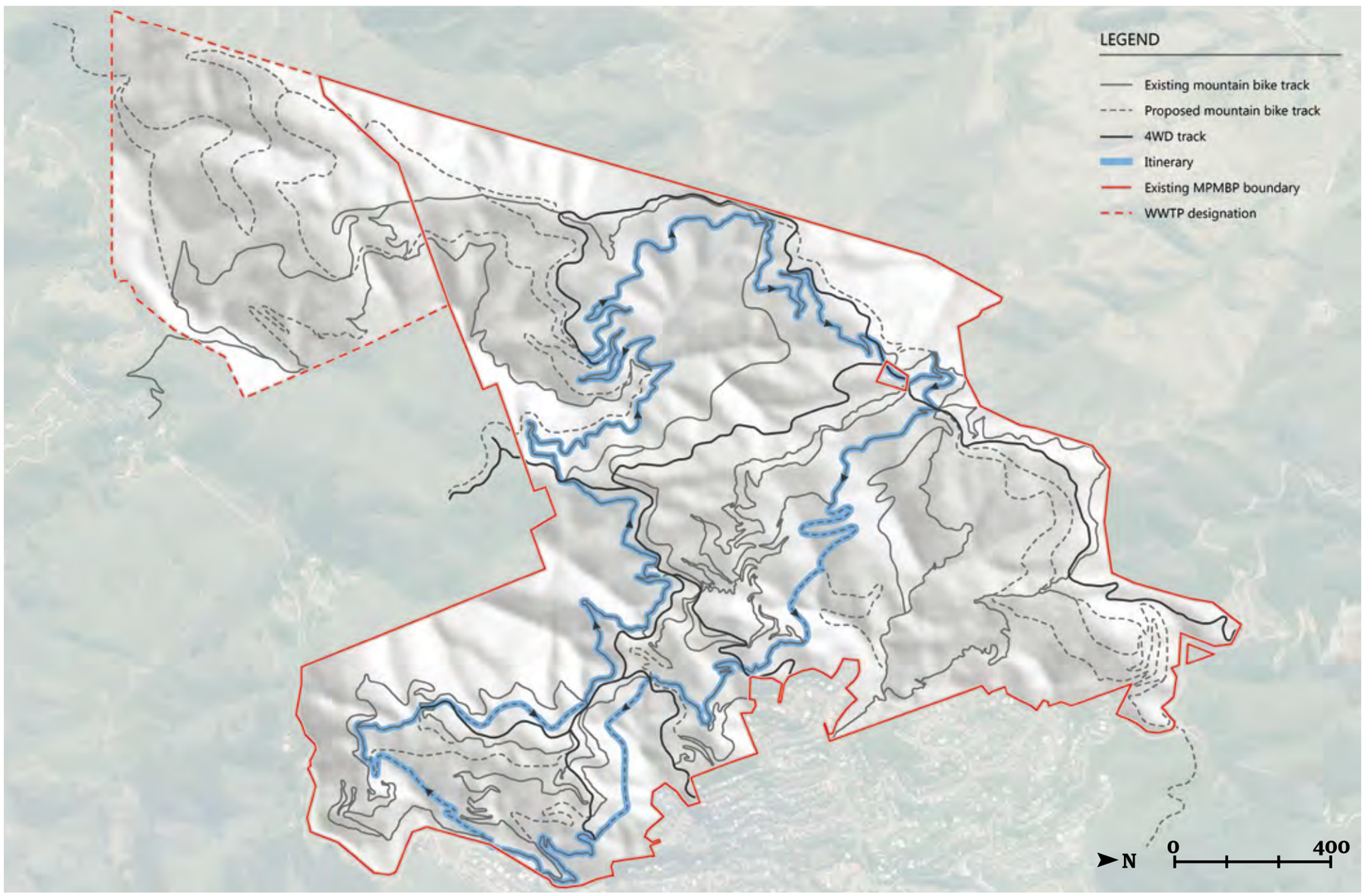
Map 8: Short grade 3 loop



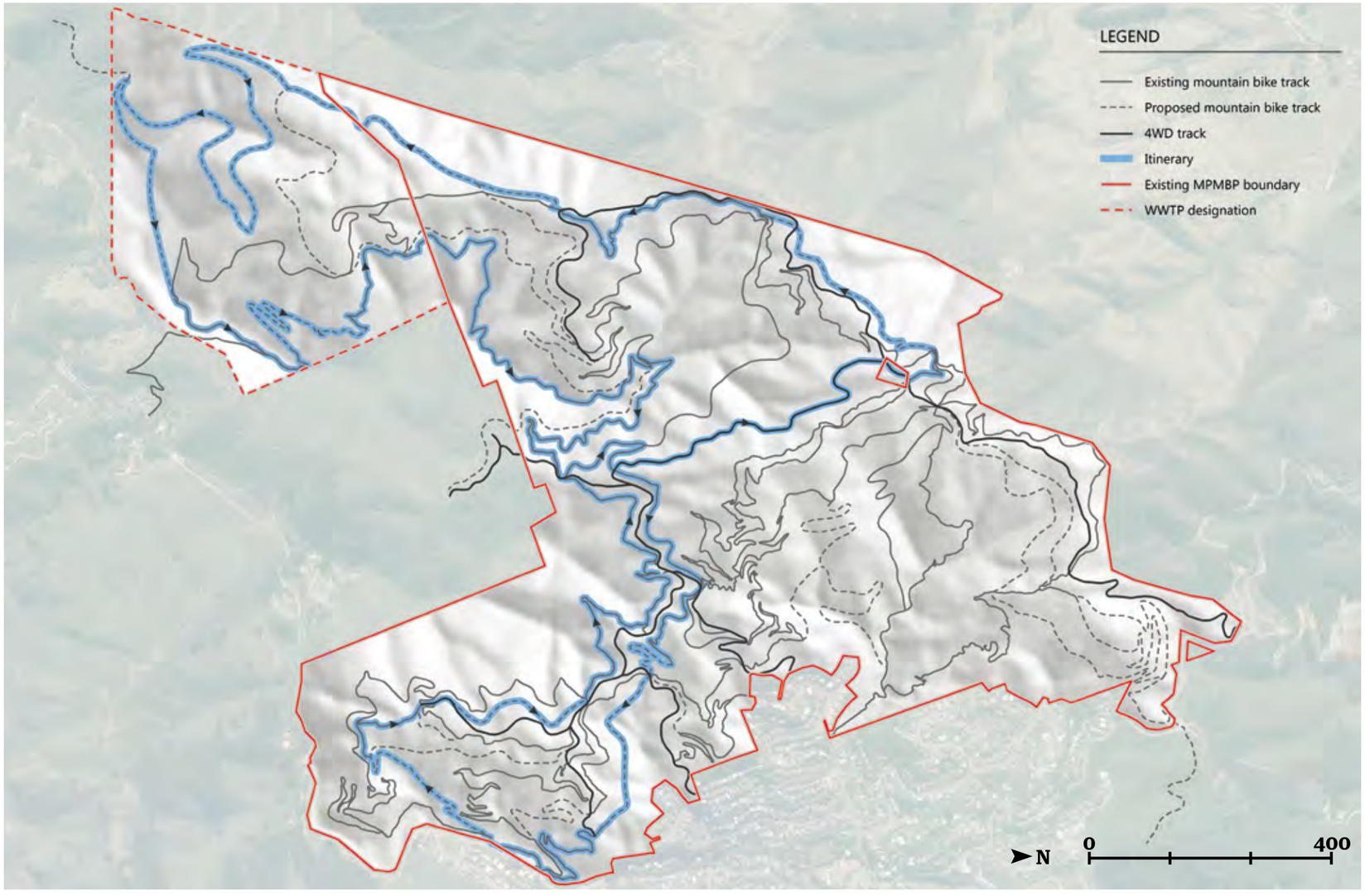
Map 9: Medium grade 3 loop



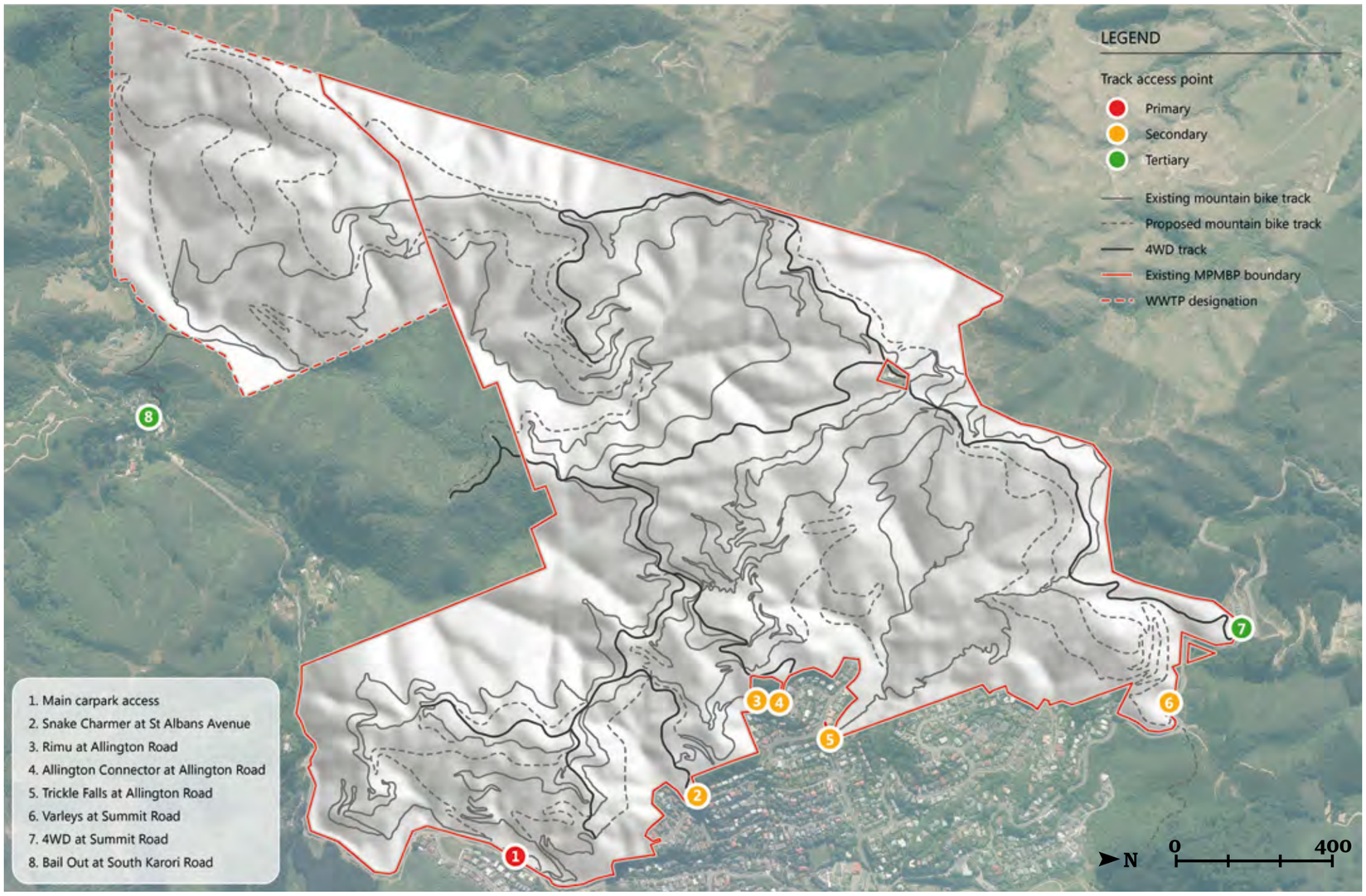
Map 10: Long grade 3 loop



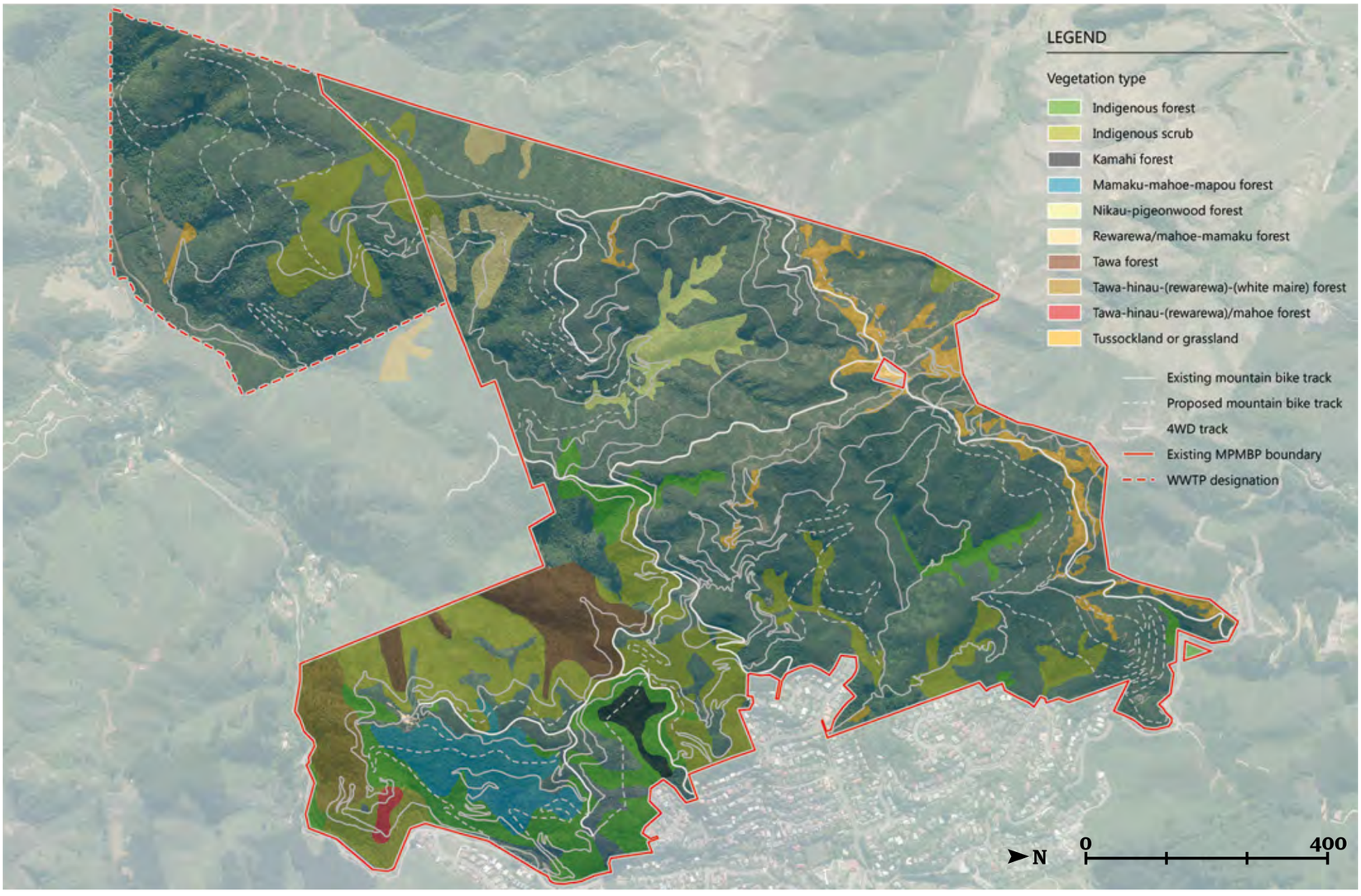
Map 11: Medium grade 4 loop



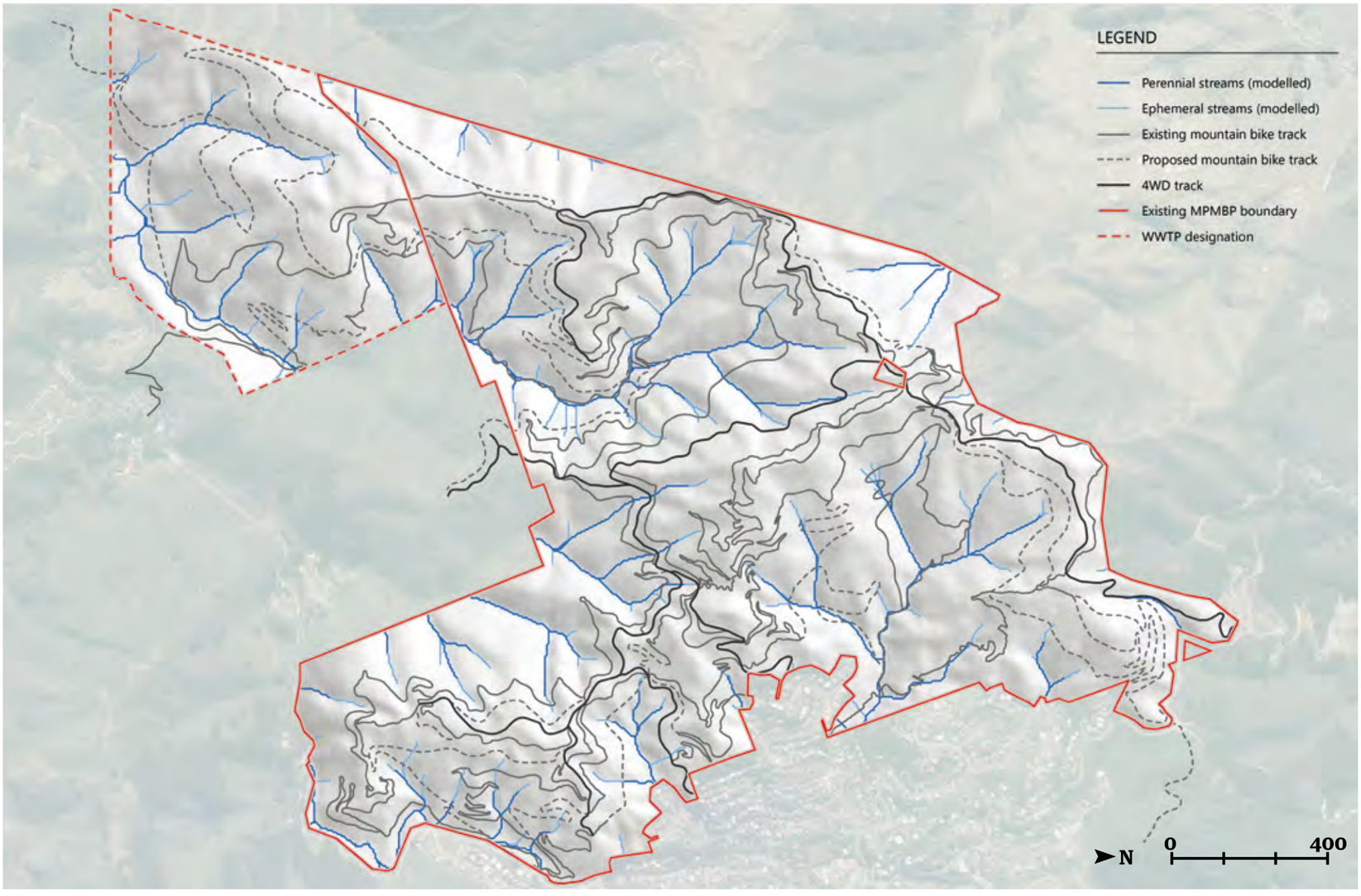
Map 12: Long grade 4 loop



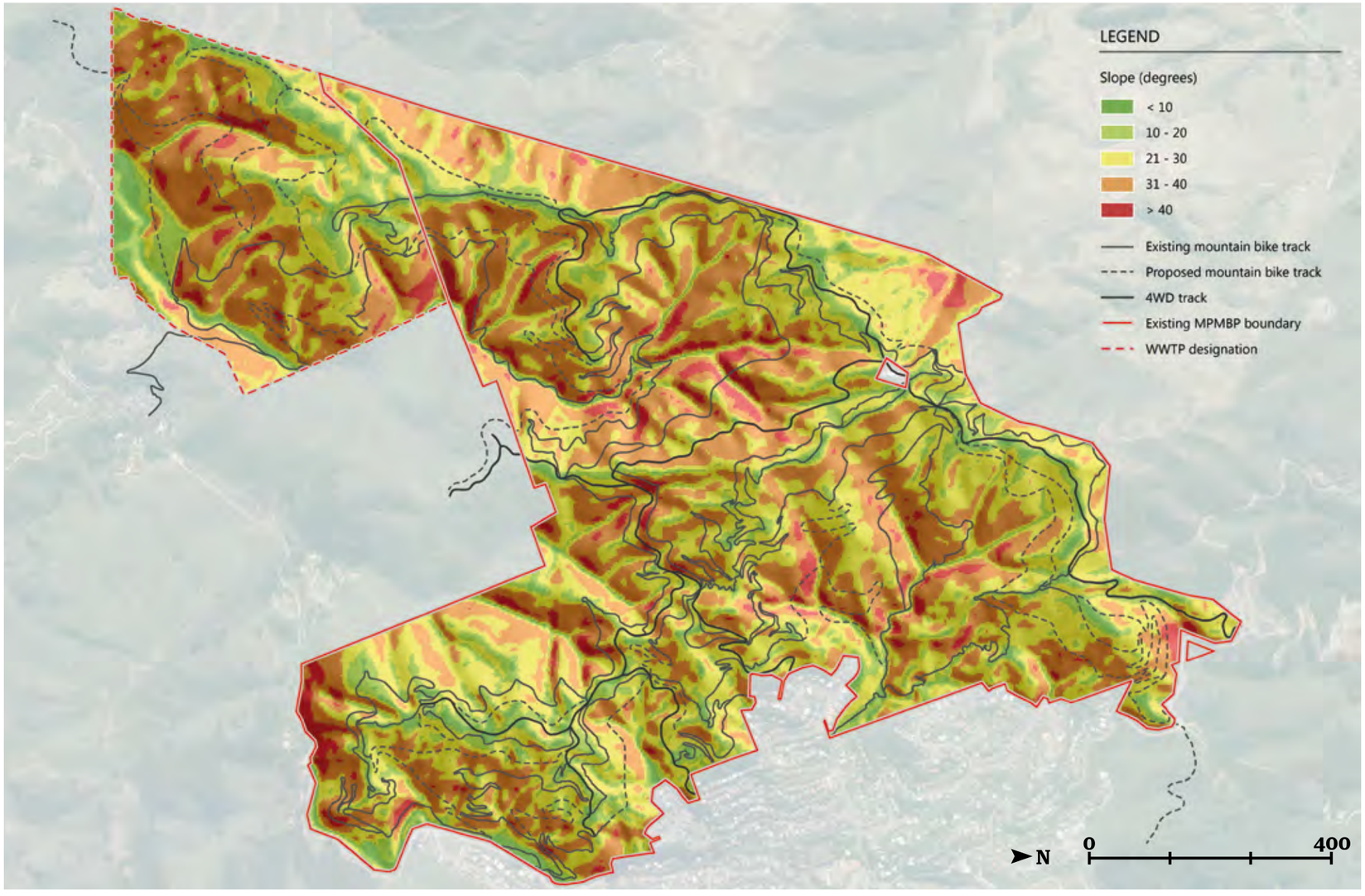
Map 13: Trail access map



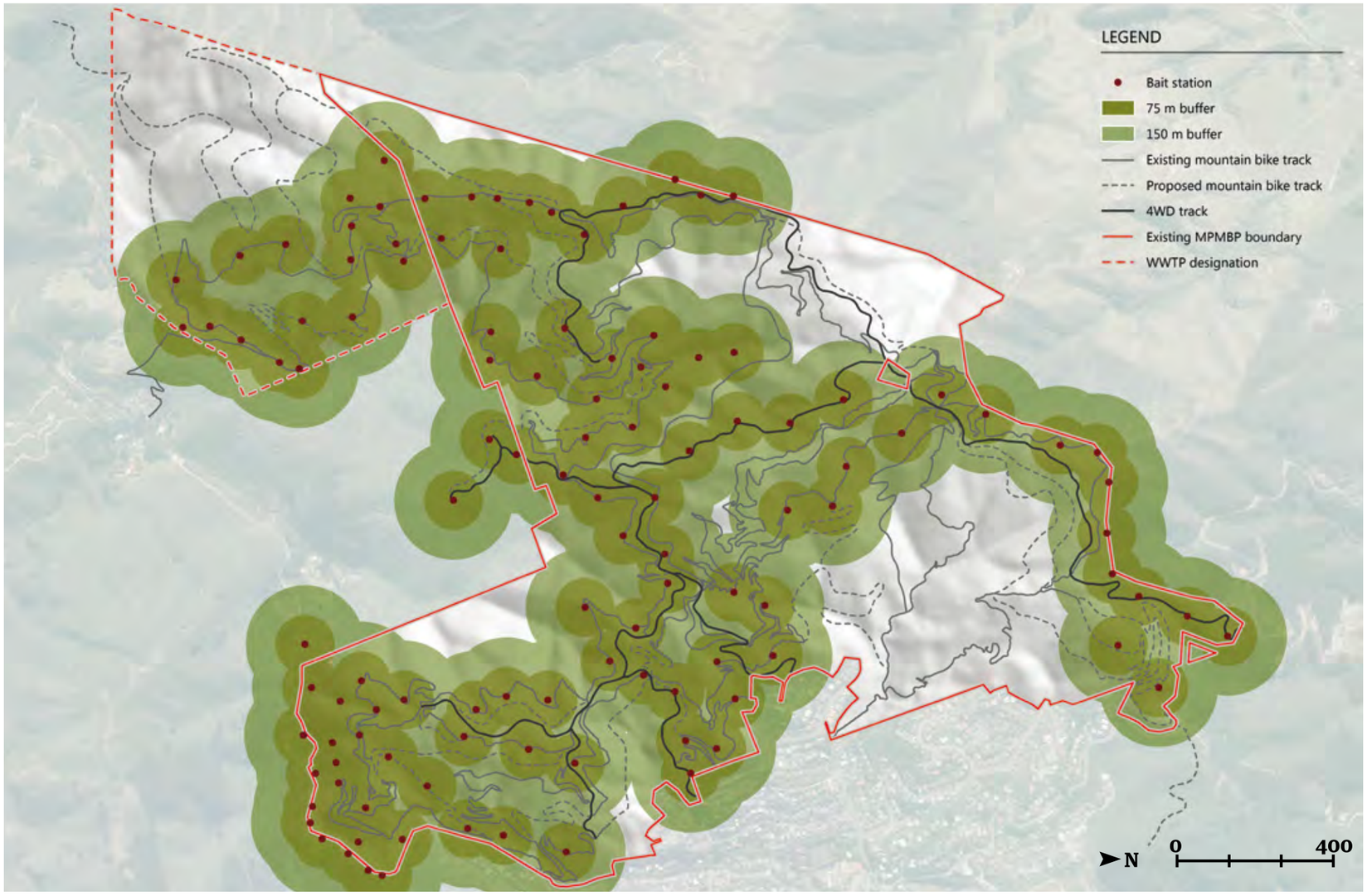
Map 14: Key vegetation types



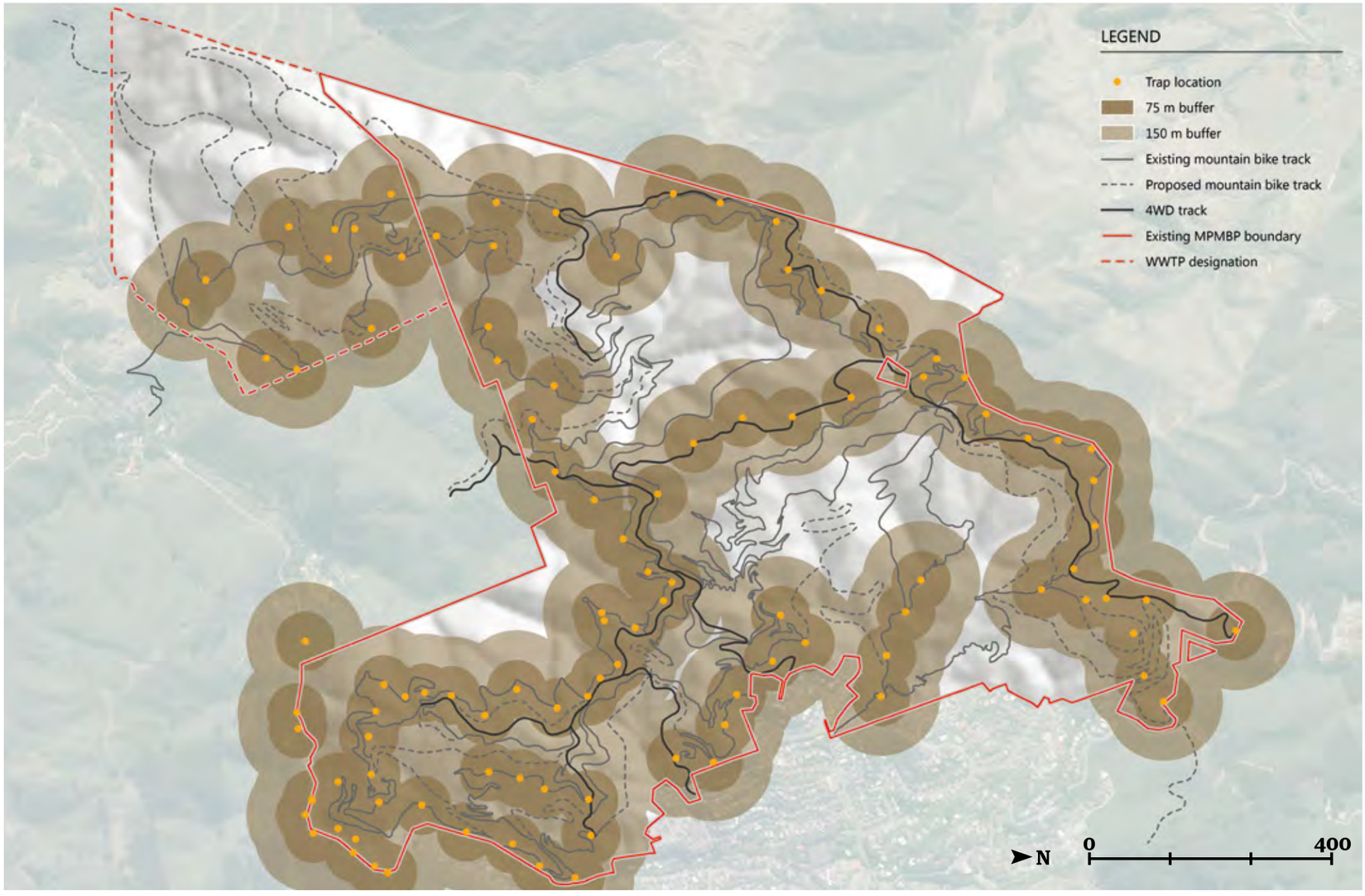
Map 15: Existing site waterways



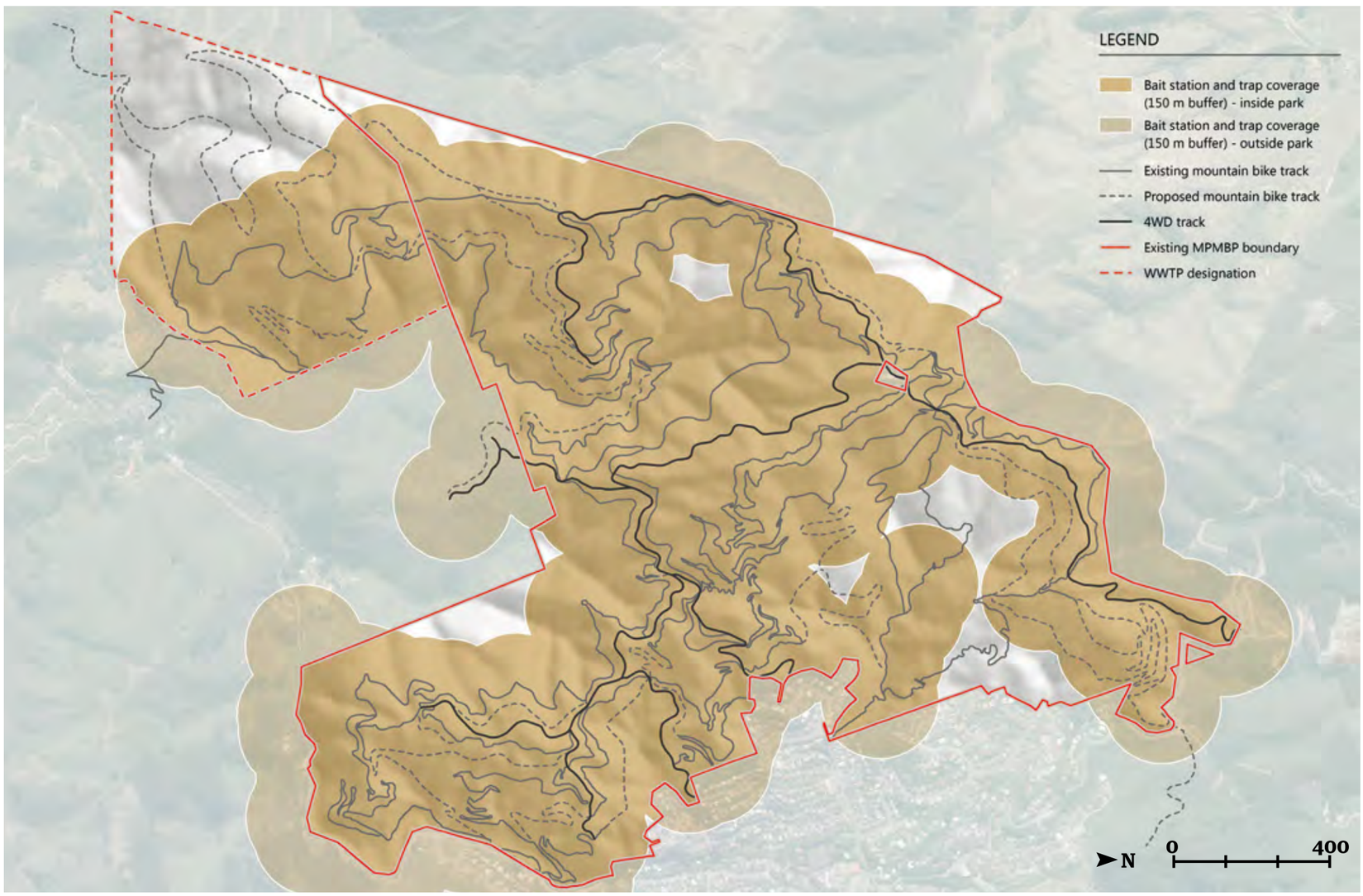
Map 16: Terrain slope



Map 17: Pest control - bait station locations



Map 18: Pest control - trap locations



Map 19: Pest control - bait station and trap coverage

Appendix B – Key track works

1.1 Proposed new build tracks

Twenty-four new track sections are proposed as part of the master plan. The following is a broad assessment of the proposed corridors and is intended to provide sufficient information to allow for effective consultation with stakeholders and partners on the potential alignments. The "New build" section numbers relate to proposed new trail sections (requiring full design development and construction). The "Upgraded track" section letters refer to lengths of existing track that require significant re-working to change overall grade (to integrate with proposed itineraries) or to improve the overall trail model. Map 2 should be referred to for the spatial layout of all new trail sections.

It is noted that the following summary and recommendations are solely based on the high-level site assessment and master planning exercise. Before any detailed design work can be carried out, significant, more detailed work will be required to evaluate each corridor and properly investigate any issues that may influence, constrain or affect the design and construction of the proposed tracks.

1.1.1 Section 1

Estimated Length ..... 632 metres

Track category 4

Purpose

- To create grade 4 link from remote south-west corner to Nikau Valley and/or Bail Out
- To add scope and scale to the wider track product
- To increase the appeal of the track system to more advanced riders
- To enable a potentially iconic grade 4 itinerary to be developed to the south-west.

Strategic value

- Very high - this section is the grand finale to the long descent, which could prove to be one of the highest value parts of the whole track system and supports long grade 4 loop
- It enables a potentially high value itinerary to be added to the overall product and significantly increases its scope and scale
- The development of this section and the itineraries it unlocks significantly increases the facility's stature as a regional mountain biking resource.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 70%
- Initial traverse across steep grade followed by gentle section to Bail Out
- Some ephemeral watercourses within gullies and re-entrants.

Constraints

- Impacts on native plants to be minimised throughout (particularly in gullies)
- Excavations to be minimised
- Visual and physical impacts to be minimised throughout
- Impacts on watercourses to me minimised.

Track requirements

- This should be a fast and technical track with largely even surfaces with scope for flow and variability in response to landforms
- Technical features should reflect landforms and features but could also be purpose built
- The track should have tread profiles that facilitate effective flow throughout.

Notes

- This section should be discreet and within a closed tree canopy wherever possible
- Due to its remote situation and difficult access, design and construction costs are likely to be high
- However, the value that this section adds to the product as a whole potentially justifies this.

1.1.2 Section 2

Estimated Length ..... 1682 metres

Track category 4

Purpose

- To create long and potentially signature grade 4 descent in the south-west area
- To add scope and scale to the wider track product
- To increase the appeal of the track system to more advanced riders
- To enable a potentially iconic grade 4 itinerary to be developed.

Strategic value

- High - this section is very important to the development of a coherent track product built around the provision of waymarked loops
- It enables a potentially high-value itinerary to be added to the overall product and significantly increases its scope and scale
- The development of this section and the itineraries it unlocks significantly increases the facility's stature as a regional mountain biking resource
- Opens access to connect with potential link track to south coast.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 70%
- Numerous large re-entrants and spurs, particularly at lower elevations
- Numerous small landforms such as shallow re-entrants, gullies and low spurs at higher elevations
- Some ephemeral watercourses within gullies and re-entrants.

Constraints

- Impacts on native plants to be minimised throughout (particularly in gullies)
- Excavations to be minimised
- Visual and physical impacts to be minimised throughout
- Impacts on watercourses to be minimised.

Track requirements

- This should be a fast, twisting and technical track with largely even surfaces but also numerous technical features
- Technical features should reflect landforms and features but could also be purpose built
- The track should have tread profiles that facilitate effective flow throughout.

Notes

- This section should be discreet and within a closed tree canopy wherever possible
- Due to its remote situation and difficult access, design and construction costs are likely to be high
- However, the value that this section adds to the product as whole potentially justifies this.

1.1.3 Section 3

Estimated Length ..... 952 metres

Track category 3

Purpose

- To create a high quality grade 3 loop in the south-west area that avoids going to the bottom of the hill and climbing back up.

Strategic value

- High - this section is important in building flexibility and longevity into the track network by increasing its scope and scale, particularly for grade 3 riders
- Provides a return to main tracks from junction with grade 4 (section 2) for unconfident riders.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 30%
- Numerous re-entrants, small spurs, knolls and flat shoulders.

Constraints

- Impacts on native plants and trees to be minimised
- Visual and physical impacts to be minimised throughout.

Track requirements

- This should be a fast, fun and flowing descent that reflects the landforms throughout
- It should twist and turn around in situ trees
- It should have an even consistent surface and tread profiles that facilitate effective flow
- Broadly follows contour supporting flow and fun without need to climb out of valley.

Notes

- This section should be discreet and within a closed tree canopy wherever possible
- Final section enables opt out from grade 5 descent (section A) for riders who are out of their depth.

1.1.4 Section 4

Estimated Length ..... 720 metres

Track category 4

Purpose

- To create a grade 4 climb that enables the south-west tracks to be linked back into the Core Area
- Replaces sections of existing Possum Bait to support climb.

Strategic value

- Very high - this section is very important in integrating the south-west area into the Core Area and the wider track network
- Developing an accessible climb is crucial in making the south-west area attractive to riders accessing the system from the main car park
- Making this section low gradient, accessible and fun should limit the numbers of riders using Bail Out after doing the long descent.

Nature of the corridor

- Regenerating native bush
- Slopes between 25% and 50%
- Numerous small re-entrants, gullies and spurs
- Occasional small rock outcrops and crags
- Occasional ephemeral watercourses

Constraints

- Impacts on native plants to be minimised throughout
- Excavations to be minimised, particularly at switchbacks
- Visual and physical impacts to be minimised throughout
- Impacts on watercourses to be minimised.

Track requirements

- This must be an accessible grade 4 climb with average gradient not in excess of 8% (Maximum gradient up to 10%)
- Turns should be relatively easy to negotiate with rider safety consider due to remoteness
- The tread should be relatively wide with profiles facilitating effective flow and rider control.

Notes

- This section should be discreet and within a closed tree canopy throughout
- All switchbacks should be carefully sited and landscaped to minimise visual and physical impacts
- Existing tight sections of Possum Bait (downhill switchbacks) can be retained for walkers/ runners and conservation access.

1.1.5 Section 5

Estimated Length ..... 808 metres

Track category 3

Purpose

- To create connection from Leaping Lizard to access new south-west area of park
- To add scope and scale to the wider track product
- To increase the appeal of the track system to more advanced riders
- To enable a potentially iconic grade 4 and grade 3 itineraries to be developed.

Strategic value

- High - this section is very important to the development of a coherent track product built around the provision of waymarked loops
- It enables two high value itineraries to be added to the overall product and significantly increases its scope and scale
- The development of this section and the itineraries it unlocks significantly increases the facility's stature as a regional mountain biking resource.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 70%
- Numerous large re-entrants and spurs, particularly at lower elevations
- Relatively gentle grades in upper elevations with good stands of mature mānuka.

Constraints

- Impacts on native plants to be minimised throughout (particularly in gullies and mānuka)
- Excavations to be minimised
- Visual and physical impacts to be minimised throughout
- Impacts on watercourses to be minimised.

Track requirements

- This should be a fast and fun section with flow and numerous technical features
- Technical features should reflect landforms and features but could also be purpose built
- The track should have tread profiles that facilitate effective flow throughout
- Extends character of Leaping Lizard through more vegetated terrain.

Notes

- This section should be discreet and within a closed tree canopy wherever possible.

1.1.6 Section 6

Estimated Length ..... 724 metres

Track category 3

Purpose

- Connects with iconic grade 3 descent (section 3) to provide moderate climb back to Core Area and Aratihi
- This section creates an important link and supports an opt out option for riders descending the grade 4 Leaping Lizard.

Strategic value

- Very high - this section is crucial in enabling the south-west area to be accessed and effectively used as part of the track system by grade 3 riders
- This section unlocks the potential of the south-west area enabling it to add value to the track system as a whole.

Nature of the corridor

- Regenerating native bush
- Slopes between 25% and 50%
- Numerous re-entrants, gullies and small spurs
- Occasional small rock outcrops and crags
- Occasional ephemeral watercourses.

Constraints

- Impacts on native plants to be minimised throughout
- Excavations to be minimised
- Visual and physical impacts to be minimised
- Impacts on watercourses to me minimised.

Track requirements

- This should be a relatively gentle and accessible climb to encourage grade 3 riders to utilise the south-west
- The trail tread should be slightly wider to ensure safe and enjoyable ascent by grade 3 riders who may be fatigued.

Notes

- This section should be discreet and within a closed tree canopy wherever possible.

1.1.7 Section 7

Estimated Length ..... 651 metres

Track category 3

Purpose

- Climbing section parallel to 4WD track to connect back with Leaping Lizard and south-west loops
- Provides an alternative to Aratihi to enable riders to repeat south-west loops without need to climb to high elevations
- Connection for grade 4 riders from Missing Link towards south-west loop.

Strategic value

- High - this section unlocks the potential of the south-west area for grade 4 riders without need to climb high via Aratihi
- Provides a good link for grade 3 and 4 riders to support repeat loops.

Nature of the corridor

- Regenerating native bush
- Slopes between 25% and 50%
- Generally follows 4WD track and downslope landform.

Constraints

- Impacts on native plants to be minimised throughout
- Excavations to be minimised
- Visual and physical impacts to be minimised.

Track requirements

- This should be a relatively gentle and accessible climb to encourage grade 3 riders to utilise the south-west area more as well as the access for grade 4 riders
- The trail tread should be slightly wider to ensure safe and enjoyable ascent by grade 3 riders who may be fatigued.

Notes

- This section should be discreet and within a closed tree canopy wherever possible.

1.1.8 Section 8

Estimated Length ..... 589 metres

Track category 3

Purpose

- Short descent to enable return to core area for riders from south-west grade 3 loop
- Links to pylon at bottom of Aratihi to avoid two-way conflict on Missing Link.

Strategic value

- Very high - this section unlocks the potential of the south-west area for grade 3 riders without need to climb high via Aratihi
- Enables grade 4 riders to complete short loop out from Missing Link.

Nature of the corridor

- Regenerating native bush
- Slopes between 25% and 50%
- Exposed slopes.

Constraints

- Impacts on native plants to be minimised throughout
- Excavations to be minimised
- Visual and physical impacts to be minimised.

Track requirements

- This should be a relatively gentle and accessible climb to encourage grade 3 riders to utilise the south-west area more as well as the access for grade 4 riders
- The trail tread should be slightly wider to ensure safe and enjoyable ascent by grade 3 riders who may be fatigued.

Notes

- This section should be discreet and within a closed tree canopy wherever possible.

1.1.9 Section 9

Estimated Length ..... 815 metres

Track category 3

Purpose

- Climbing section as continuation of Section 8 to enable riders to access Core Area from south-west loops
- Avoids two-way conflict on Missing Link
- Provides connection to 4WD track at pylon for short continuation up to top of Missing Link and Easy Up.

Strategic value

- Very high - this section unlocks the potential of the south-west area for grade 3 riders without need to climb high via Aratihi
- Enables grade 4 riders to complete short loop out from Missing Link.

Nature of the corridor

- Regenerating native bush
- Slopes between 25% and 50%
- Areas of difficult terrain requiring careful design considerations.

Constraints

- Impacts on native plants to be minimised throughout
- Excavations to be minimised
- Visual and physical impacts to be minimised
- Impacts on watercourses to be avoided.

Track requirements

- This should be a relatively gentle and accessible climb to encourage grade 3 riders to utilise the south-west area more as well as the access for grade 4 riders
- The trail tread should be slightly wider to ensure safe and enjoyable ascent by Grade 3 riders who may be fatigued.

Notes

- This section should be discreet and within a closed tree canopy wherever possible
- This section crosses private property to link with pylon 4WD access.

1.1.10 Section 10

Estimated Length ..... 645 metres

Track category 3

Purpose

- To create an effective, high-quality and attractive link between the Summit and the tracks in the south-west area.

Strategic value

- Very high - this section very important in effectively connecting the core area to the south-west area
- This in turn increases the scope and scale of the track system as a whole, making it more effective and giving it greater longevity
- This section also enables a key itinerary to be developed in the south-west area.

Nature of the corridor

- Degraded land with barbary, gorse and some native vegetation
- Slopes between 15% and 40%
- Numerous shallow re-entrants
- Some small spurs and flat shoulders
- Some small rock outcrops.

Constraints

- This is in an exposed position and visual and physical impacts must be kept to a minimum
- Minimal removal of native vegetation and shrubs
- Minimal excavations.

Track requirements

- This should be a fun section and slightly wider because it is exposed to high winds
- Surfaces should be even and compacted
- Tread profiles should facilitate effective flow.

Notes

- This is the first part of a potentially iconic descent in the south-west area and should be fast and flowing whilst still carefully landscaped
- This section potentially adds considerable value to the system as a whole but particularly the tracks in the south-west.

1.1.11 Section 11

Estimated Length ..... 153 metres

Track category 2

Purpose

- Short climbing section linking Magic Carpet with the skills area to avoid existing steep 4WD section
- Increased appeal of skills area to grade 2 riders.

Strategic value

- Moderate - this section supports better access to the skills area and enhances the overall Magic Carpet ride.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 25%.

Constraints

- Impacts on native plants to be minimised throughout
- Excavations to be minimised
- Visual and physical impacts to be minimised.

Track requirements

- This should be a relatively gentle and accessible climb to encourage grade 2 riders to utilise the skills area and connect with upper section of Koru
- The trail tread should be slightly wider to ensure safe and enjoyable accent by grade 2 riders.

Notes

- This section should be discreet and within a closed tree canopy wherever possible.

1.1.12 Section 12

Estimated Length ..... 1044 metres

Track category 3

Purpose

- To create an alternative outward (climb) leg from the main car park for intermediate and above riders
- To alleviate pressure on the adjacent Koru and increase the capacity of the track system within the Core Area
- To build more independence into the system and enable more separate loops to be developed.

Strategic value

- Very high - conflict with Koru was identified through consultation making this section important in enabling the proposed track model to be developed and support the future management of the network as a whole.

Nature of the corridor

- Partly an existing track (Livewires) and partly un-cleared regenerating bush
- Slopes between 20% and 60%, numerous large re-entrants and gullies at lower elevations.

Constraints

- Trail gradient should not exceed 8%
- Minimal removal of native vegetation and trees
- Minimal excavations
- Minimal impacts on watercourses and springs.

Track requirements

- This should be a narrow twisting grade 3 singletrack with an even consistent surface and few if any technical features
- It must be a more attractive option for grade 3 to 4 riders than the adjacent Koru.

Notes

- In part this section is within the track corridor currently occupied by Livewires
- This section is likely to use some parts of the existing track but the majority of it will need to be put beyond use, remediated and landscaped to make this section work effectively.

1.1.13 Section 13

Estimated Length ..... 443 metres

Track category 2

Purpose

- To create an alternative grade 2 outward leg from the main car park
- To alleviate pressure on the adjacent Koru and increase the capacity of the track system within the Core Area for grade 2 riders
- To build more independence into the system and enable more separate loops to be developed.

Strategic value

- Very high - this section is important in enabling the proposed track model to be developed and in the future management of the network as a whole.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 30%
- Numerous small knolls, re-entrants and gullies (highly featured throughout).

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations
- Minimal impacts on watercourses and springs.

Track requirements

- This should be a fun undulating section with good flow and a smooth, even surface
- It should twist and turn and track profiles should encourage effective flow throughout.

Notes

- Very careful track design will be required to make this section work in the right way
- It should have a discreet, intimate feel and be within a closed tree canopy throughout.

1.1.14 Section 14

Estimated Length ..... 500 metres

Track category 3

Purpose

- To provide a continuous grade 3 downhill connection from SWIGG to the main car park (based on Starfish being modified to grade 4)
- Connects from existing SWIGG to lower section of Lazy Fern
- Part of continuous grade 3 descent from summit to car park.

Strategic value

- Very high - this section is important in enabling the proposed track model to be developed and in the future management of the network as a whole.

Nature of the corridor

- Advanced regenerating native bush in full canopy
- Slopes between 15% and 30%
- Numerous small knolls, re-entrants and gullies (highly featured throughout).

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations
- Minimal impacts on watercourses and springs.

Track requirements

- This should be a continuation of SWIGG with maximum flow and features within the forest canopy
- It should twist and turn in response to trees and track profiles should encourage effective flow throughout.

Notes

- Very careful track design will be required to make this section work in the right way without impacting existing vegetation
- It should have a discreet, intimate feel and be within a closed tree canopy throughout.

1.1.15 Section 15

Estimated Length ..... 708 metres

Track category 4

Purpose

- To create the final link in a proposed grade 4 descent between the summit and the main car park
- To alleviate pressure on the existing tracks that descend to the car park
- To build more independence into the system and enable a number of semi-independent itineraries to be developed.

Strategic value

- Very high - this section is crucial in enabling an effective grade 4 descent to be developed and this descent is very important in making the proposed track model function effectively.

Nature of the corridor

- Regenerating native bush
- Slopes between 20% and 50%
- Numerous deep-re-entrants with steep sides
- Numerous small spurs
- Some deep gullies
- Some ephemeral watercourses.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations
- Minimal impacts on watercourses and springs
- Visual impacts and visibility from adjacent road and housing must be minimised
- The siting, configuration, design and construction of switchbacks in particular must centre on minimising impacts.

Track requirements

- This section should be narrow and fast with numerous technical features that reflect the ground conditions
- Tread profiles should allow effective flow throughout.

Notes

- It is very important that this section include technical features but that these be rollable throughout
- It must provide an attractive grade 4 alternative to the adjacent grade 3 tracks and should be consistent with the rest of the proposed descent
- It should have a discreet, intimate feel and be entirely within a closed tree canopy.

1.1.16 Section 16

Estimated Length ..... 218 metres

Track category 2

Purpose

- To provide a grade 2 climbing connection between Rimu and Big Tom's Wheelie
- Supports improved grade 2 access from Allington Road secondary access and avoids reliance on 4WD road for climb
- Provides more interesting connection for more advanced riders entering from Allington Road to Core Area of summit.

Strategic value

- Moderate - this section supports improved uphill connection for grade 2 riders.

Nature of the corridor

- Advanced regenerating native bush in full canopy
- Slopes between 15% and 30%.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations
- Minimal impacts on watercourses and springs.

Track requirements

- This should be a gentle track suitable for a range of grade 2 riders
- It should twist and turn in response to trees, and track profiles should encourage effective flow throughout.

Notes

- It should have a discreet, intimate feel and be within a closed tree canopy throughout.

1.1.17 Section 17

Estimated Length ..... 240 metres

Track category 4

Purpose

- To provide new grade 4 connection with descent off North Face back into JFK towards Main Car Park
- Opens up new, potentially iconic grade 4 sections into northeast valley with options to Trickle Falls or car park.

Strategic value

- High - this section supports the inclusion of the new grade 4 descent off North Face without requiring exit via Trickle Falls.

Nature of the corridor

- Advanced regenerating native bush
- Slopes between 15% and 30%
- Exposed north facing slopes.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations
- Minimal impacts on watercourses and springs.

Track requirements

- This section should be narrow and fast with numerous technical features that reflect the ground conditions and extend riders
- Tread profiles should allow effective flow throughout and provide potential progression for grade 3 riders deviating from North Face.

Notes

- It should have a discreet, intimate feel and be within a closed tree canopy throughout.

1.1.18 Section 18

Estimated Length ..... 531 metres

Track category 4

Purpose

- To provide new grade 4 connection with descent off North Face into northeast valley with options back into JFK towards Main Car Park
- Opens up potentially iconic new grade 4 sections into northeast valley to increase grade 4 extents and support progression of grade 3 riders.

Strategic value

- High - this section supports the inclusion of the new grade 4 descent off North Face with two exit options.

Nature of the corridor

- Advanced regenerating native bush
- Slopes between 15% and 30%
- Exposed north facing slopes.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations
- Minimal impacts on watercourses and springs.

Track requirements

- This section should be narrow and fast with numerous technical features that reflect the ground conditions and extend riders
- Tread profiles should allow effective flow throughout and provide potential progression for grade 3 riders deviating from North Face.

Notes

- It should have a discreet, intimate feel and be within a closed tree canopy throughout.

1.1.19 Section 19

Estimated Length ..... 665 metres

Track category 4

Purpose

- To provide new grade 4 connection with descent off North Face back into Trickle Falls towards Allington Road access
- Opens up new, potentially iconic grade 4 sections into northeast valley with options to Trickle Falls or car park.

Strategic value

- High - this section supports the inclusion of the new grade 4 descent off North Face and exit via Trickle Falls.

Nature of the corridor

- Advanced regenerating native bush
- Slopes between 15% and 30%
- Exposed north facing slopes.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations
- Minimal impacts on watercourses and springs.

Track requirements

- This should be a fast and technical track with largely even surfaces with scope for flow and variability in response to landforms
- Technical features should reflect landforms and features but could also be purpose built
- The track should have tread profiles that facilitate effective flow throughout.

Notes

- It should have a discreet, intimate feel and be within a closed tree canopy throughout.

1.1.20 Section 20

Estimated Length ..... 567 metres

Track category 3

Purpose

- To provide new grade 3 climb from Makara Road saddle towards summit to support either Summit Road loops or alternative access
- Supports enhanced use of north of park.

Strategic value

- Very high - this section supports the reconfiguration of the Summit Road area to enable improved loops or connections with Makara Road and adjacent tracks to Karori Park and/or Skyline.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 30%
- Includes reconfiguration of existing T3 in places and new build sections as required.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations.

Track requirements

- This section should provide a gentle and achievable climb for all grade 3 riders
- The trail tread should be slightly wider to ensure safe and enjoyable accent by grade 3 riders who may be fatigued or have extended themselves.

Notes

- It should have a discreet, intimate feel and be within a closed tree canopy throughout.

1.1.21 Section 21

Estimated Length ..... 1339 metres

Track category 4

Purpose

- To provide new extended grade 4 descent from the summit to Makara Road access
- Potentially iconic track due to length of uninterrupted run
- Supports enhanced use of north of park.

Strategic value

- Very high - this section supports the reconfiguration of the Summit Road area to enable improved loops or connections with Makara Road and adjacent tracks to Karori Park and/or Skyline.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 30%
- Numerous large re-entrants and spurs, particularly at higher elevations.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations
- Visual impacts and visibility from adjacent road and housing must be minimised
- The siting, configuration, design and construction of switchbacks in particular must centre on minimising impacts.

Track requirements

- This section should provide a gentle and achievable climb for all grade 3 riders
- The trail tread should be slightly wider to ensure safe and enjoyable ascent by grade 3 riders who may be fatigued or have extended themselves.

Notes

- It should have a discreet, intimate feel and be within a closed tree canopy throughout.

1.1.22 Section 22

Estimated Length ..... 523 metres

Track category 3

Purpose

- To provide continuation of reconfigured grade 3 descent (section E) to continue on to Makara Road saddle
- Supports enhanced use of north of park and improves descent from existing Varley's.

Strategic value

- Very high - this section supports the reconfiguration of the Summit Road area to enable improved loops or connections with Makara Road and adjacent tracks to Karori Park and/or Skyline.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 30%
- Very exposed.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations
- Requires integration with sections of Varley's to improve switchbacks
- Visual impacts and visibility from adjacent road must be minimised
- The siting, configuration, design and construction of switchbacks in particular must centre on minimising impacts and ensuring longevity.

Track requirements

- This section should provide a fun and fast descent for all grade 3 riders.

1.1.23 Section 23

Estimated Length ..... 752 metres

Track category 3

Purpose

- To provide new grade 3 climb from Makara Road saddle towards summit (section 20) to support either Summit Road loops or alternative access
- Supports enhanced use of north of park and improved use of existing Varley's.

Strategic value

- Very high - this section supports the reconfiguration of the Summit Road area to enable improved loops or connections with Makara Road and adjacent tracks to Karori Park and/or Skyline.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 30%
- Very exposed.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations.

Track requirements

- This section should provide a gentle and achievable climb for all grade 3 riders
- The trail tread should be slightly wider to ensure safe and enjoyable accent by grade 3 riders who may be fatigued or have extended themselves.

1.1.24 Section 24

Estimated Length ..... 385 metres

Track category 3

Purpose

- Final two-way section as link to Makara Road saddle
- Supports enhanced use of north of park and improved use of existing Varley's.

Strategic value

- Very high - this section supports the reconfiguration of the Summit Road area to enable improved loops or connections with Makara Road and adjacent tracks to Karori Park and/or Skyline.

Nature of the corridor

- Regenerating native bush
- Slopes between 15% and 30%
- Very exposed.

Constraints

- Minimal removal of native vegetation and trees
- Minimal excavations.

Track requirements

- This section will require specific design to reduce downhill speeds and provide appropriate sight lines to reduce rider conflict.

1.2 Existing tracks

To implement the proposed track model and alignments, some key works relating to existing tracks are proposed. These are very broadly outlined below, but much more detailed work is required to develop prescriptive construction specifications related to each section.

1.2.1 Section A - Leaping Lizard

Purpose

- To upgrade this section to create new iconic grade 5 descent into south-west and Nikau Valley
- To provide variation in the south-west and support progression in this area.

Strategic value

- High - important to ensure track network caters for range of rider abilities and enables more advanced riders to utilise full scope of park.

Track requirements

- This should be a highly technical but fast track with multiple features and opt-in/out points to foster progression and rider interest.

Proposed works

- Moderate works to improve existing grade 4 track and add well-designed features.

Notes

- Due to the nature of the vegetation cover and the need to prevent damage to the existing track, it is likely that any works will need to be carried out by hand.

1.2.1 Section B - Possum Bait

Purpose

- To improve link between signature south-west descents and support long grade 4 loop
- Minor improvements to existing track to improve experience and encourage more use of south-west area.

Strategic value

- Moderate - whilst not essential, these works would contribute significantly to the development of the proposed track system in the south-west area.

Track requirements

- This should remain a narrow twisting singletrack with limited clearance around in situ trees
- However, its flow should be more effective to make it an integral part of the proposed grade 4 loop.

Proposed works

- Re-profiling tread to improve flow
- Minor revetments where required.

1.2.1 Section C - Livewires

Purpose

- To realign this section away from the lower part of the proposed new outward leg and link it into the upper section
- To prevent riders from using the proposed new outward leg as a descent.

Strategic value

- Moderate - this work is not essential in establishing the proposed track model, but it is important in managing the way people use this area in the future
- It may be more effective to decommission this section completely.

Track requirements

- This should be a short technical grade 4 track that retains its current character and style.

Proposed works

- Minor realignments to link into proposed new outward leg
- Decommissioning remainder of section
- Blocking off with earthworks
- Planting and landscaping.

Notes

- Due to the nature of the vegetation cover and the need to prevent damage to the existing track, it is likely that any works will need to be carried out by hand
- It may be more effective to carry out this work at the same time as construction works on the new outward leg is under way.

1.2.1 Section D - Starfish

Purpose

- To provide a more consistent grade 4 descent from top to bottom
- To make this descent more accessible and therefore of greater value to the track system as a whole.

Strategic value

- High - whilst not essential, this work is important in developing a consistent grade 4 descent.

Track requirements

- This track should be a consistently fast, flowing and twisting track that weaves around in situ trees
- It should have an even and consistent surface throughout and should be at a consistent grade of 4.

Proposed works

- Replacing timber step-down with a stone pitched rollable step-down
- Develop a realignment to provide a flowing grade 4 alternative to a stone built roll-in.

Notes

- All works on this section (including new build) will need to be carried out by hand to prevent damage to the existing track

1.2.1 Section E - Zac's Track

Purpose

- To create a fun and fast relatively easy one-way grade 3 single direction descent that links Makara Road and the summit.

Strategic value

- High - improving this section to create an attractive one-way track is key in the development of the tracks in the northern area
- It enables the northern area to be linked to the summit and thereby the rest of the track network
- Making this a one-way section also enables the development of a coherent loop in the northern area, which significantly increases its value to the system as a whole.

Track requirements

- This should be designed with maximum flow and features to provide an enjoyable grade 3 descent
- It should twist and turn in response to trees, and track profiles should encourage effective flow throughout
- It should have even, consistent surfaces, low levels of technical difficulty, relatively open turns and effective flow.

Proposed works

- Eliminating rocky steps with stone revetments and fill
- Re-profiling tread at key locations
- Re-surfacing where required
- Realigning key turns with either stone or timber revetments and fill.

Notes

- The drawing in of materials should be done using mechanised equipment
- Proximity to the four-wheel drive road potentially facilitate the works.