TE KAUWHATA

WALKING AND CYCLING - ROUTE ASSESSMENT REPORT

JANUARY 2017

Waikato DISTRICT COUNCIL
Te Kaunihera aa Takiwaa o Waikato

GHD

SUMMARY

This report provides a high level assessment and explores the feasibility of a number of walking and cycling routes within a larger network including Te Kauwhata town centre and the wider region.

The report identifies 7 primary routes that will provide a framework for the development of the wider network. These routes have been assessed to identify which path sections should be developed and in what order to provide the most value as the network develops.

OBJECTIVES

The following opportunities are identified as potential outcomes of the proposed walkway network:

- Improved public access throughout the town centre and surrounds
- Facilitating observation and enjoyment of wildlife habitat
- Encouraging good management of public spaces for the enjoyment of all
- Fostering community pride and ownership of an amenity that is used and shared by the community
- Providing a catalyst for further development of community assets
- Providing alternative options for commuting and recreation

This report has considered the proposed network with the following objectives in mind:

- Provision of a safe walking and cycling network suitable for locals and visitors
- Provision of high quality, accessible recreational networks that integrate with existing public spaces
- Protection and enhancement of environmental and wildlife values
- Provision of a durable walking and cycling network with low life-cycle maintenance cost that offers high quality year round use
- Minimise damage or disturbance to historic, cultural or natural features in the area
- Incorporate public art where opportunities exist

RECOMMENDED DESIGN PARAMETERS

A shared path width of 2.5m is proposed as a consistent standard throughout the network. 2.5m provides sufficient width to allow side by side cycle riding and passing while remaining visually consistent with the scale and grain of the predominantly rural landscape. A 2.5m width also follows previous feasibility work produced for the TKCC shared path.

More detailed assessment during developed/detailed design may identify areas where a shared path width of 3 metres is more appropriate.

In keeping with the rural character, compacted aggregate is proposed as the predominant path surface material for paths outside urban areas. In urban areas an exposed aggregate concrete surface is proposed to better reflect the more urban character.

2.5m wide timber boardwalks are proposed in areas immediately adjacent to or traversing soft ground and wetlands. Given the significantly higher cost of this treatment it is expected that the length of boardwalk installed will be minimised wherever possible and used as a means of highlighting areas of particular interest or value. It is expected this level of detail will be developed in later design stages.

Painted road marking and surfacing is proposed in some areas as a cost effective means of encouraging cycle use in low traffic environments.

It is recommended that provision of walking and cycling infrastructure is carefully considered and built into all future development to ensure connectivity and accessibility are maintained.

Te Kauwhata Main Street

Public toilets

Te Kauwhata library

REGIONAL CONTEXT

The development of a walking/cycling network in and around Te Kauwhata creates an opportunity to connect to a wider regional cycling and walking network.

A future connection to the Te Araroa River trail will provide a link for river trail users to access Te Kauwhata encouraging visitors into the town centre and raising the profile of the area.

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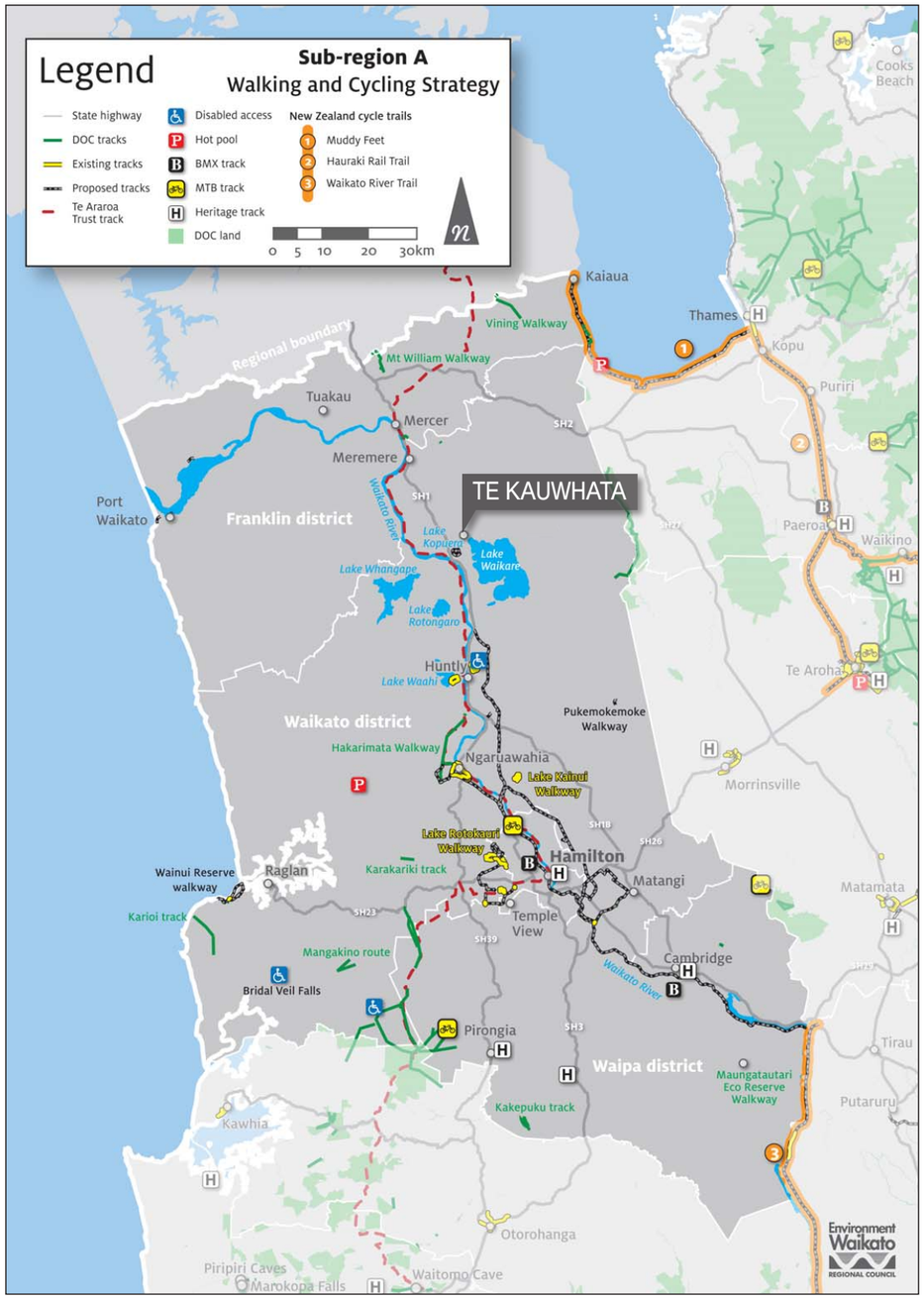
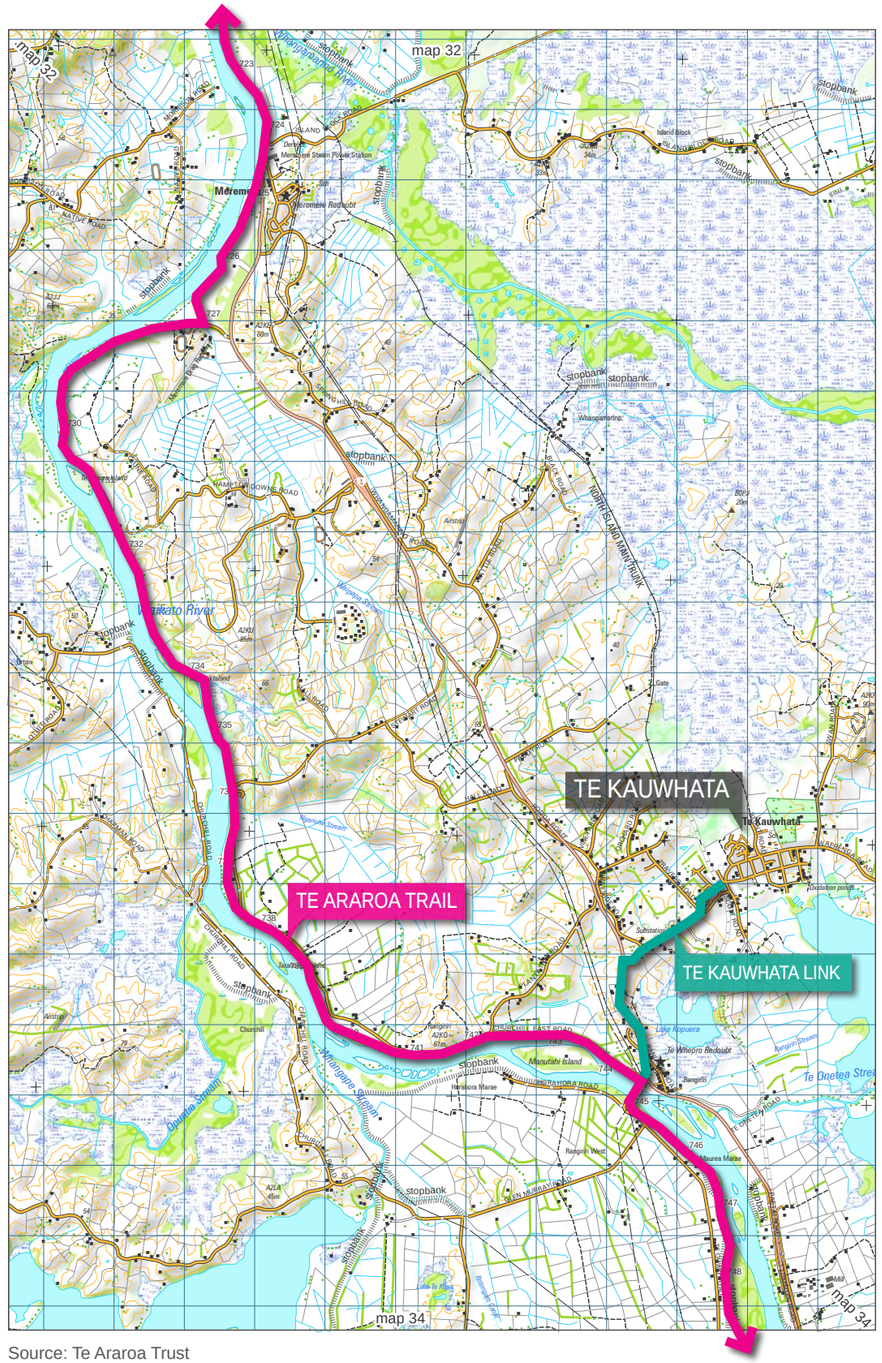


Source: Environment Waikato Walking and Cycling Strategy



Source: Te Araroa Trust

LOCAL CONTEXT

Te Kauwhata is the site of a diverse range of farms, including dairy and dry stock, as well as extensive horticulture. The town is bordered by Whangamarino Swamp - the largest wetland in the Southern Hemisphere.

Te Kauwhata lies at the centre of one of New Zealand's smaller wine-producing regions, stretching from Pukekohe to Thames and Paeoa at the foot of the Coromandel Peninsula. The region is known for its table grapes.

The development of a walking and cycling network will assist in raising the profile of local businesses and attractions through more effective access. Building awareness of the new network can be assisted through provision of information boards and maps that highlight the different walking and cycling trails, attractions, and other information of interest. This information should be centrally located and easily accessible at a logical location within the town centre such as the library, village green or near the toilets. This should be further supported by clear and effective way finding signage throughout the network.

1. Vineyard
2. BMX track
3. Whangamarino Wetland Reserve
4. Future development
5. Waikare Golf Course
6. Waikare Lake
7. Te Kauwhata College
8. Te Kauwhata Community Fitness Centre
9. Memorial Domain/Squash Club
10. Te Kauwhata Bowling Club
11. Te Kauwhata Primary School
12. Aparangi Village
13. Te Kauwhata Library
14. Town Centre/Main Street
15. Invivo Wines (blenders and bottlers of wine)
16. Vineyard
17. Olive Grove Estate

PROPOSED WALKING AND CYCLING NETWORK

The following 7 routes have been identified as key paths in developing a walking and cycling network.

PRIMARY ROUTES

1. Extension of the Te Kauwhata Community Committee(TKCC) shared path from Blunt Road towards the east and connecting with Swan Road.
2. Te Kauwhata Rd, Wayside Road and Travers Road loop and connection to the village.
3. Corner of Rimu Street down Waerenga Road and Main Road terminating at the Village Green.
4. Waerenga Road improvements from Swan Rd to Rimu Street to link routes 1 and 3.
5. Cycling route/grape trail - extending route 2 along Wayside Road to Vineyard Road, bypassing the BMX track along the western side railway line and crossing the railway to connect with the TK Community Committee (TKCC) shared path.
6. Orchard Road cycling route/grape trail connection - as per route 5 but adding a link along Orchard Road between Wayside Road and the railway line track.
7. Rimu Street, Mahi Road loop connection - connecting Te Kauwhata Domain to town centre.

POTENTIAL FUTURE CONNECTIONS

8. Extension of Blunt Road shared path through future residential development to connect to wetland walkway.
9. Potential future connection to Te Araroa River Trail
10. Potential future connection to Te Araroa River Trail via Plantation Road

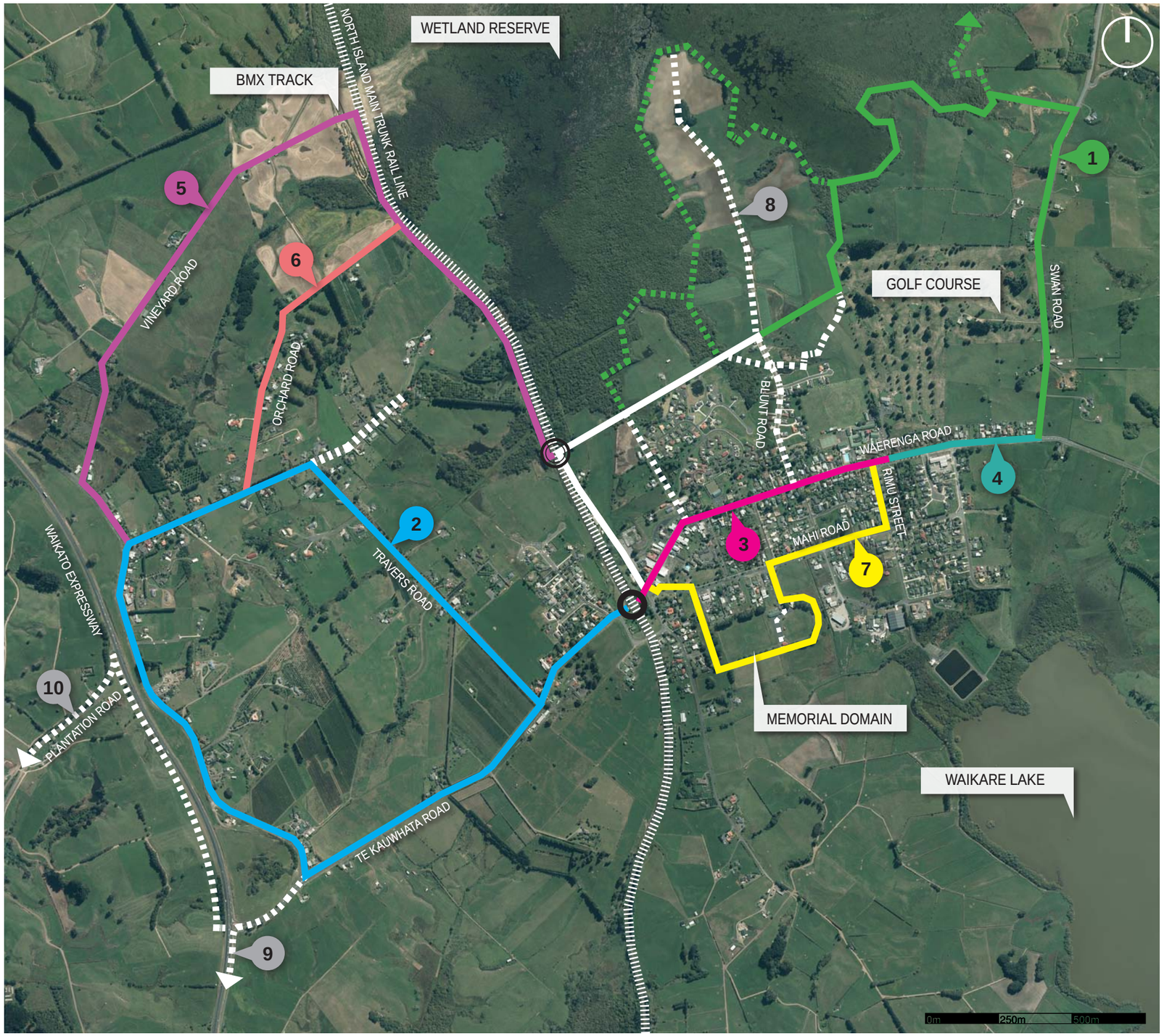
TKCC SHARED PATH

POTENTIAL FUTURE NETWORK CONNECTIONS

POTENTIAL FUTURE WETLAND PATH

EXISTING RAIL CROSSING

POTENTIAL RAIL CROSSING



ROUTE 1 PLAN

APPROX. LENGTH: 3,230M

1 Extension of Blunt Road shared path through future residential development to connect to wetland walkway. Opportunity to strengthen connection from town to wetland via Blunt Road and extending through developing land. Enhancing walking and cycling facilities on sections 1 and 3 and provides a robust axis from town to wetland. This would also create opportunities for additional wetland walkway connections perpendicular to the main spine improving accessibility and connectivity.

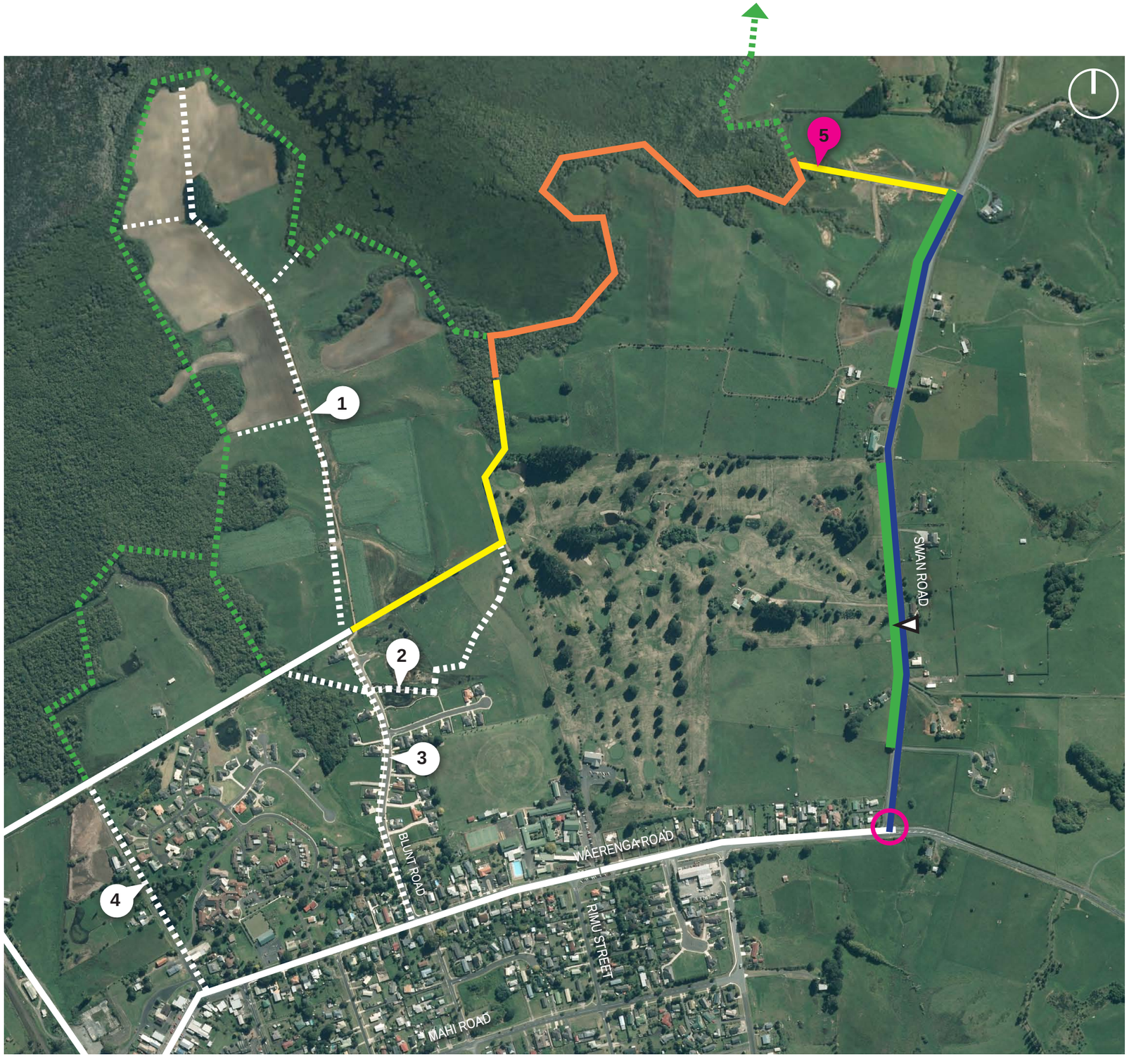
2 Existing suburban wetland walkway - This route is likely to be less used by cyclists given the sharp and abrupt changes in path direction. As a consequence this section provides an opportunity for a more pedestrian focused experience. This should include identifying opportunities to enhance functionality and safety through - particularly through more effective vegetation engagement to improve sight lines across the wetland.

3 Opportunity to enhance Blunt Road through road narrowing and widening of shared path facilities. This treatment could then be extended out into the area of new development as described above.

4 Opportunity for secondary shared path route utilising existing paper road connection.

5 Steep topography in this area will make a cycling connection challenging.

- PROPOSED COMPACTED AGGREGATE PATH - 2.5M WIDE
- TIMBER BOARDWALK - 2.5M WIDE
- COMPACTED AGGREGATE SHARED PATH (ROAD SIDE - WESTERN BERM) - 2.5M WIDE
- INTERSECTION UPGRADE - TRAFFIC CALMING, PEDESTRIAN REFUGES, ETC - DESIGN TO BE CONFIRMED
- POTENTIAL EARTHWORKS (CUT/FILL) AND RETAINING WALLS REQUIRED + STORMWATER DRAINAGE UPGRADES TO SUIT
- RELOCATED LIGHT/TELEPHONE POLE
- NETWORK CONNECTIONS
- POTENTIAL FUTURE CONNECTIONS
- POTENTIAL FUTURE WETLAND PATH



ROUTE 1

APPROX. LENGTH: 3,230M

ROUTE DESCRIPTION:
Extension of the Te Kauwhata Community Committee(TKCC) shared path from Blunt Road eastward to connect to Waerenga Road via Swan Road.

EXPECTED USER GROUPS:
Walkers and Cyclists - local recreation and visitors.

CONSTRAINTS

- Limited space on edges of Swan Road to provide a separated shared path. Traffic on Swan Road also includes a significant amount of heavy vehicles which make a widened shoulder/on-road path a less desirable solution (a fully separated path is preferred).
- The shared path along Swan Road will require retaining structures to provide a level surface and will also require additional works to manage stormwater.
- The shared path connection from Swan Road to the wetland path traverses steep topography which would require dismounting for less physical cyclists (see arrow 5 on previous page).
- A number of sections of this route will require buy-in/support of landowners.
- Geotechnical assessment will be required to determine ultimate feasibility of route.
- Potential removal of telephone/power pole.

OPPORTUNITIES

VIEWS:
- Vantage point from top of the ridge on Swan Road provides 360º views of surrounding rural and wetland landscapes.

HERITAGE AND CULTURE:
- Opportunity to provide interpretive signage in sections of the path adjacent to the wetland - information on wetland ecology and conservation/re-vegetation efforts. This could be further enhanced through interpretive sculptural elements referencing local flora and fauna and or ecological processes.

ENVIRONMENT:
- Construction of new path/boardwalk along edge of wetland provides opportunity to enhance/rehabilitate wetland margins through additional planting and maintenance. Sections of the path that skirt the edges of the wetland also provide an opportunity to improve public awareness of the value and importance of wetland areas.
- Work in the wetland sections of the route provide the opportunity to cost share with DoC.

ESTIMATED CONSTRUCTION COST

2.5m wide compacted aggregate path	2050m	$246,000
2.5m timber boardwalk	1180m	$2,350,000
Contingency 15%		$390,000
TOTAL		**$2,986,000***

***Exclusions apply (refer page 20)**

View north on Swan Road depicting space available for shared path

View to Whangamarino Wetland from end of new access road off Swan Road
(see location as indicated by arrow 5 on previous page)

TYPICAL PATH TREATMENT

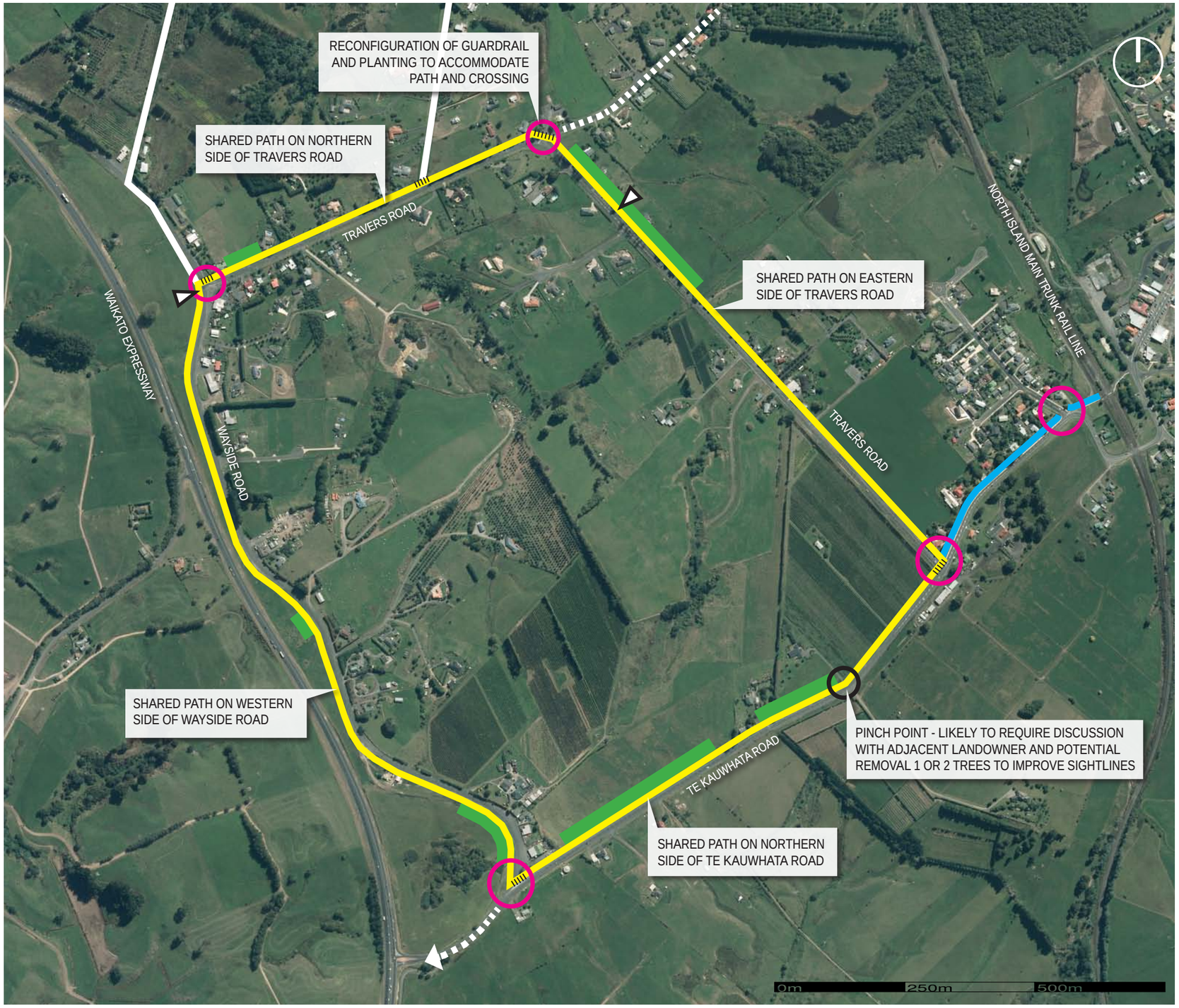
TIMBER BOARDWALK - 2.5M

COMPACTED AGGREGATE PATH (OFF ROAD) - 2.5M

COMPACTED AGGREGATE SHARED PATH (ROAD SIDE) - 2.5M

ROUTE 2 PLAN

APPROX. LENGTH: 4,690M



- PROPOSED COMPACTED AGGREGATE PATH - 2.5M WIDE
- EXISTING CONCRETE PATH WIDENED TO 2.5M
- PEDESTRIAN/CYCLE CROSSING POINT
- INTERSECTION UPGRADE - TRAFFIC CALMING, PEDESTRIAN REFUGES, ETC - DESIGN TO BE CONFIRMED
- POTENTIAL EARTHWORKS (CUT/FILL) AND RETAINING WALLS REQUIRED + STORMWATER DRAINAGE UPGRADES TO SUIT
- RELOCATED LIGHT/TELEPHONE POLE
- NETWORK CONNECTIONS
- POTENTIAL FUTURE CONNECTIONS

ROUTE 2

APPROX. LENGTH: 4,690M

ROUTE DESCRIPTION:
Te Kauwhata Rd, Wayside Road and Travers Road loop and connection to the village.
To minimise conflict between pedestrians/runners/cyclists and vehicles, the proposed path is positioned to reduce driveway crossings while maintaining long continuous sections - pedestrian crossings are located at existing intersections. The preferred alignment has a 2.5m separated shared path located on the northern and eastern sides of Travers Road, western side of Wayside Road, and northern side of Te Kauwhata Road.

EXPECTED USER GROUPS:
Local walkers/runners/cyclists and visitor cyclists.
Due to the steep gradient of some sections of the loop path, it is expected that this will predominantly serve active recreational users rather than less experienced/casual cyclists.

CONSTRAINTS

- A number of sections of the corridor will require earthworks (cut and fill) and retaining structures to provide a level platform for the shared path. Geo-technical and structural assessment will be required to determine the extent of earth works and retaining required.
- The loop circuit will necessitate the need for new/formalised pedestrian crossings at existing intersections. These will require further detailed design to determine cost and construction implications.
- Potential removal of telephone/power poles.
- A narrow section of the route (pinch point - as indicated on plan) will require buy-in/support of landowner to progress and may also require removal of a number of existing trees to improve sightlines on the road corner.
- Large new development will generate increased traffic and turning demand on western side of Travers Road

OPPORTUNITIES

- This route provides a critical connection to a wider future network and particularly to a number of boutique business types - wineries, B+B, orchards, etc - via Routes 5 and 6.
- The development of the network to incorporate these areas provides business enhancement and growth opportunities through increased publicity and marketing opportunities.
- Improve safety for runners already using this route.

VIEWS:

- A number of long open views out to the rural landscape exist throughout the loop circuit. These provide significant opportunities to view the surrounding landscape character without the need for specific viewing areas. Any additional planting should seek to maintain this level of openness.

HERITAGE AND CULTURE:

- Interpretive sculptural elements could be developed to mark regular distance along the running/cycling circuit. This could take the form of treatments in the ground plane such as a change in material or through the use of free standing vertical elements or sculptural planting. These interventions would also provide an opportunity to express historic or cultural narratives.

ENVIRONMENT:

- With a number of areas around the loop requiring retaining structures to provide a level walking/cycling surface, an opportunity exists to rationalise and enhance stormwater runoff from adjacent road surfaces. This could include the use of planting to slow water runoff and improve water quality.
- Distinctive planting on either side of the loop road corridor could provide an opportunity to theme, demarcate, and visually enhance the circuit.

ESTIMATED CONSTRUCTION COST

2.5m wide compacted aggregate path	4240m	$509,000
2.5m exposed aggregate concrete path	460m	$46,000
Contingency 15%		$84,000
TOTAL		**$639,000***

***Exclusions apply (refer page 20)**

View north down Travers Road (path proposed along eastern berm - right side of photo)

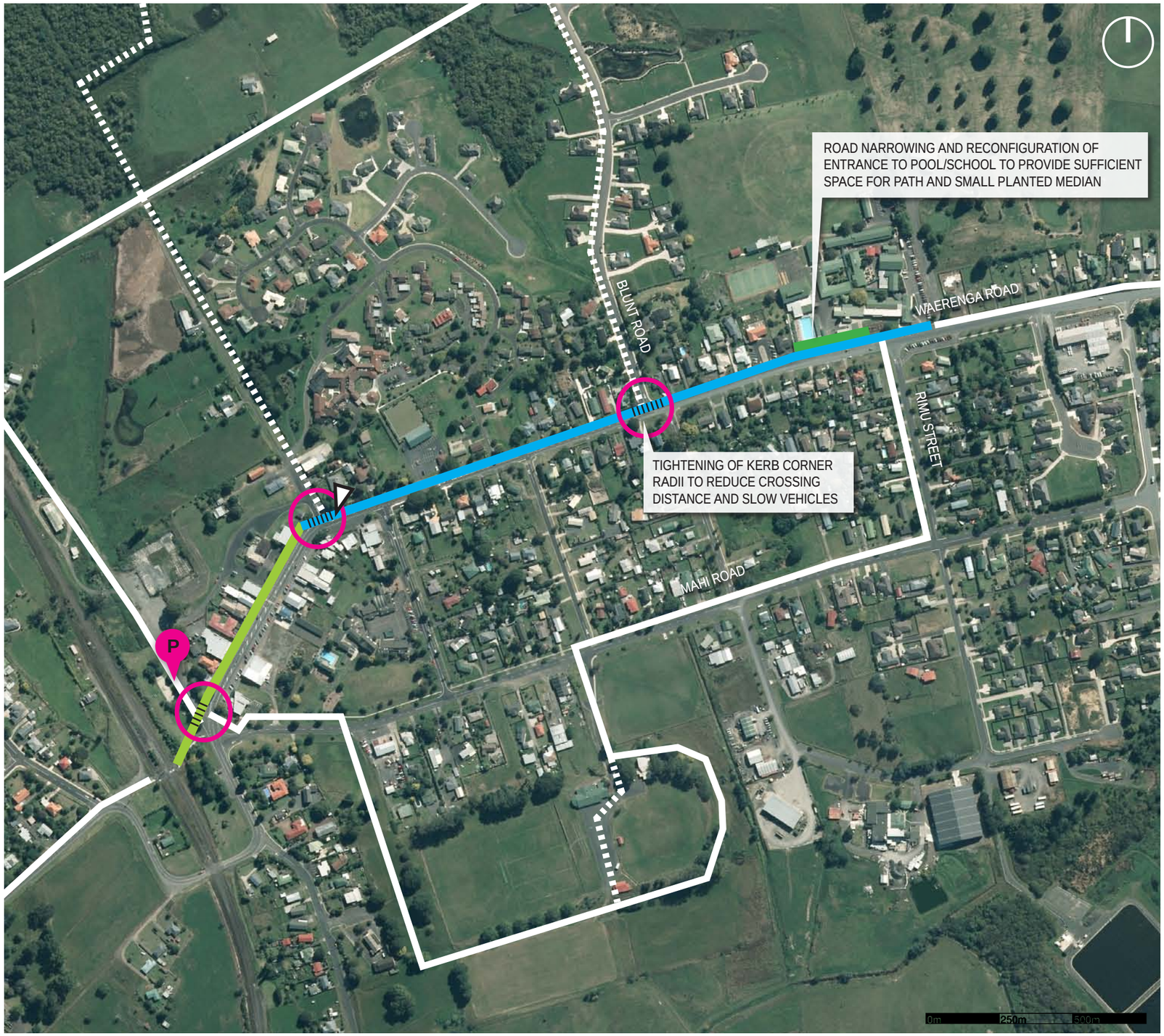
TYPICAL PATH TREATMENT

COMPACTED AGGREGATE SHARED PATH - 2.5M

EXPOSED AGGREGATE CONCRETE PATH - 2.5M

ROUTE 3 PLAN

APPROX. LENGTH: 1,040M



MAIN STREET PEDESTRIAN AREA WIDENING - EXPLORE OPPORTUNITY TO NARROW ROAD WIDTH TO ALLOW FOR WIDER PATH ON AT LEAST ONE SIDE OF MAIN STREET - CONSIDER AS PART OF OVERALL PACKAGE OF MAIN STREET ENHANCEMENTS/UPGRADE

EXPOSED AGGREGATE CONCRETE SHARED PATH - 2.5M

PEDESTRIAN/CYCLE CROSSING POINT

INTERSECTION UPGRADE - TRAFFIC CALMING, PEDESTRIAN REFUGES, ETC - DESIGN TO BE CONFIRMED

POTENTIAL EARTHWORKS (CUT/FILL) AND RETAINING WALLS REQUIRED + STORMWATER DRAINAGE UPGRADES TO SUIT

RELOCATED LIGHT/TELEPHONE POLE

NETWORK CONNECTIONS

POTENTIAL FUTURE CONNECTIONS

POTENTIAL AREA FOR RELOCATION / REINSTATEMENT OF PARKING

ROUTE 3

APPROX. LENGTH: 1,040M

ROUTE DESCRIPTION:
Corner of Rimu Street down Waerenga Road and Main Road terminating at the Village Green.

EXPECTED USER GROUPS:
Mobility impaired, walkers and cyclists - local commuters and visitors. The upgrade of this section of the network aims to enhance the existing pedestrian environment and in particular provide connection between the town centre and Aparangi Village.

CONSTRAINTS

- Proposed path enhancement works should take into consideration the broader streetscape environment and any future plans/ opportunities to redevelop and enhance the main street as a whole.
- Widening of the path through town centre will require removal/ reconfiguration of street parking and provision of alternative parking areas.
- Widening of existing paths outside of town centre will require relocation of light/power poles in some locations.
- Path adjacent to Te Kauwhata Community Fitness Centre and Te Kauwhata College will require significant leveling, retaining and reconfiguration of entrance to Fitness Centre. There is also reduced space available in this area due to the school bus parking zone.

OPPORTUNITIES

- Where parking is removed/reconfigured as part of an overall main street upgrade a replacement parking area could be established in the area leading to the old train station. This would also provide for additional overflow parking during busy periods.

VIEWS:
- Good vantage point at the corner of Main Road and Baird Ave providing view down main street. Opportunity to embrace this view with street seating.

HERITAGE AND CULTURE:
- Opportunity for the path upgrade through the town centre to act as a catalyst for additional main street enhancement works.
- Opportunity to incorporate public art that interprets and references historic development of the town. This could take the form of murals on the blank side walls of buildings.

ENVIRONMENT:
- Currently no street trees through the town centre. New street trees installed as part of a broader main street upgrade would offer the opportunity to enhance the visual quality of the centre while providing shade for pedestrians. Street trees and associated underplanting would also create an opportunity to incorporate low impact stormwater design.
- Additional street tree planting could be extended down Waerenga Road to create a consistent aesthetic theme.

ESTIMATED CONSTRUCTION COST

2.5m exposed aggregate concrete path	730m	$73,000
Main street section (not priced)	310m	$_____ [1.]
Contingency 15%		$11,000
TOTAL		**$84,000***

[1.] Widening of main street pedestrian areas: These works should be considered as part of a larger mainstreet upgrade - opportunity to reduce overall road area and shift angle parking to increase pedestrian areas and create a more pedestrian friendly main street. Approximate costs for these works require further design and detailing.

***Exclusions apply (refer page 20)**

View north east of Te Kauwhata mainstreet

Village Green

TYPICAL PATH TREATMENT

EXPOSED AGGREGATE CONCRETE PATH - 2.5M

ROUTE 4 PLAN

APPROX. LENGTH: 520M

EXPOSED AGGREGATE CONCRETE SHARED PATH - 2.5M

MINOR INTERSECTION UPGRADE - TRAFFIC CALMING, ETC - DESIGN TO BE CONFIRMED

NETWORK CONNECTIONS

POTENTIAL FUTURE CONNECTIONS

ROUTE 4

APPROX. LENGTH: 520M

ROUTE DESCRIPTION:
Waerenga Road improvements from Swan Rd to Rimu Street to link routes 1 and 3.

EXPECTED USER GROUPS:
Walkers and Cyclists - local commuters and visitors.

CONSTRAINTS

- Limited area available on north side of Waerenga Road nearest to town centre due to road side parking and property access lane - some road narrowing may be required.
- The intersection of Waerenga Road and Swan Road provides little opportunity outside the carriage way for provision of a shared path. This intersection will likely require significant adjustment to create enough area to install a path.
- Connection options to Rimu Street limited by parking area at the intersection

OPPORTUNITIES

VIEWS:
- Views to Lake Waikare and wider rural landscape from intersection of Waerenga Road and Swan Road. Additional seating in this area will need to be set back from the intersection (see constraints above).

HERITAGE AND CULTURE:
- Opportunity to collaborate with or encourage Te Kauwhata College to create bold student-led art works at the main entrance to the school or in the medians/verges leading up to the school zone.

ENVIRONMENT:
- Potential removal of street parking where appropriate - increases area available for pedestrians/cyclists and provides opportunity to install additional street trees and planting.
- Any road narrowing reinforces speed reduction; positive action towards improving road safety near TK College

ESTIMATED CONSTRUCTION COST

2.5m exposed aggregate concrete path	520m	$52,000
Contingency 15%		$8,000
TOTAL		**$60,000***

***Exclusions apply (refer page 20)**

Intersection of Waerenga Road and Rimu Street looking west

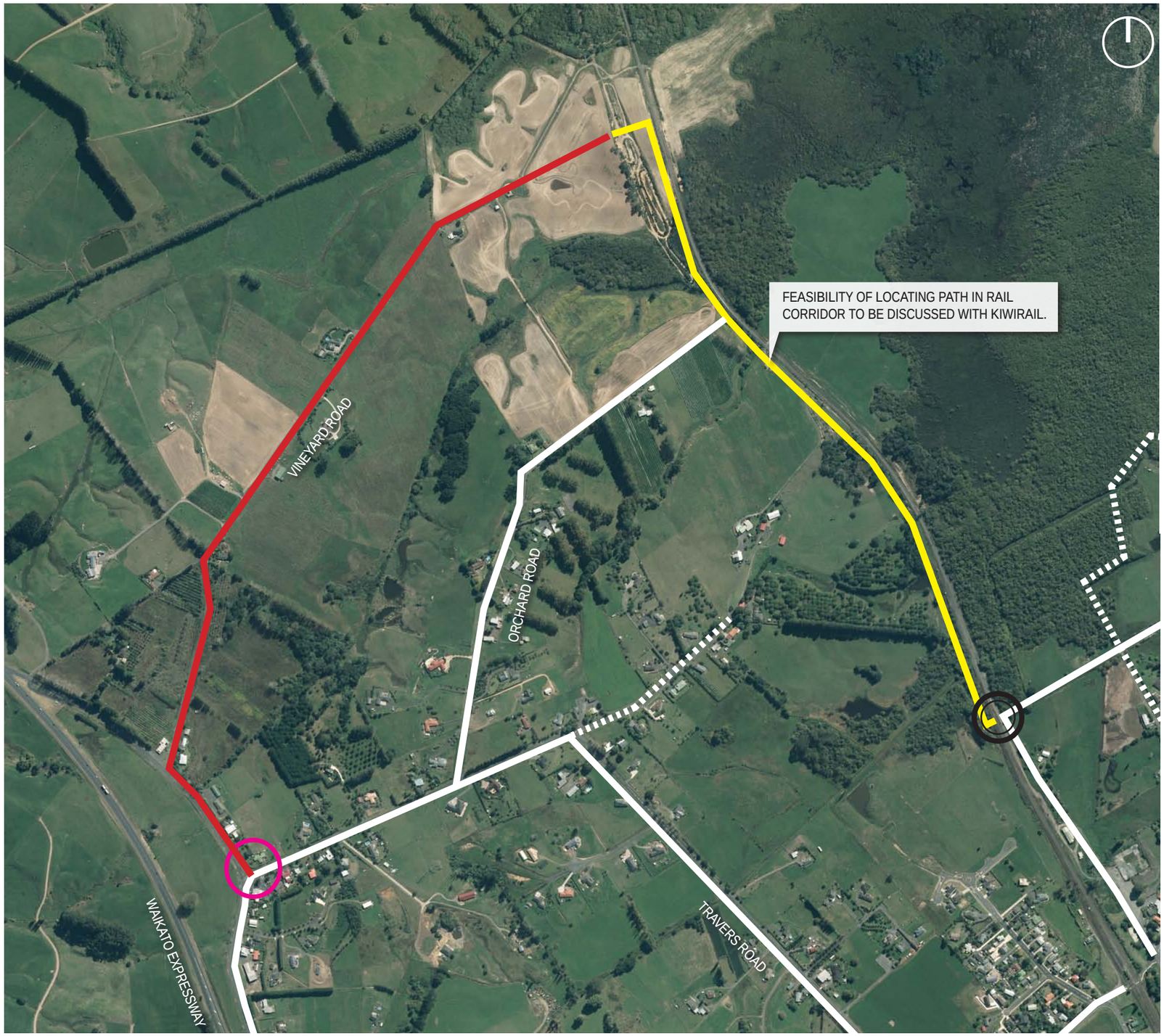

Intersection of Waerenga Road and Swan Road looking west

TYPICAL PATH TREATMENT


EXPOSED AGGREGATE CONCRETE PATH - 2.5M

ROUTE 5 PLAN

APPROX. LENGTH: 3,330M



- PROPOSED COMPACTED AGGREGATE PATH - 2.5M WIDE
- PAINTED ROAD MARKING + CYCLE SIGNAGE
- NEW RAIL PEDESTRIAN/CYCLE RAIL CROSSING
- INTERSECTION UPGRADE - TRAFFIC CALMING, PEDESTRIAN REFUGES, ETC - DESIGN TO BE CONFIRMED
- NETWORK CONNECTIONS
- POTENTIAL FUTURE CONNECTIONS

ROUTE 5

APPROX. LENGTH: 3,330M

ROUTE DESCRIPTION:
Cycling route/wine trail - extending route 2 along Wayside Road to Vineyard Road, bypassing the BMX track along the western side railway line and crossing the railway to connect with the TK Community Committee (TKCC) shared path.

EXPECTED USER GROUPS:
Cyclists - visitors and bmx track users.

CONSTRAINTS

- Formed path section beyond the existing road requires private landowner and buy-in/support.
- Formed path section through rail corridor and rail crossing requires buy-in/support from KiwiRail and geotechnical assessment.

OPPORTUNITIES

- This route provides a key connection into the wider region and particularly to a number of boutique business types and activities - wineries, B+B, orchards, BMX track, etc - via Routes 5 and 6.
- The development of the network to incorporate these areas provides business enhancement and growth opportunities through increased publicity and marketing opportunities.
- Development of BMX track.
- Attractor of visitors looking for cycle trails.

VIEWS:

- Sweeping views from the top of Vineyard Road - development of housing in this area is likely to impact this view over time

HERITAGE AND CULTURE:

- Opportunity to provide increased exposure to boutique businesses and land use - vineyards, orchards, etc

ENVIRONMENT:

- Construction of new path within the rail corridor provides an opportunity to create an ecological corridor through revegetation and habitat creation.

ESTIMATED CONSTRUCTION COST

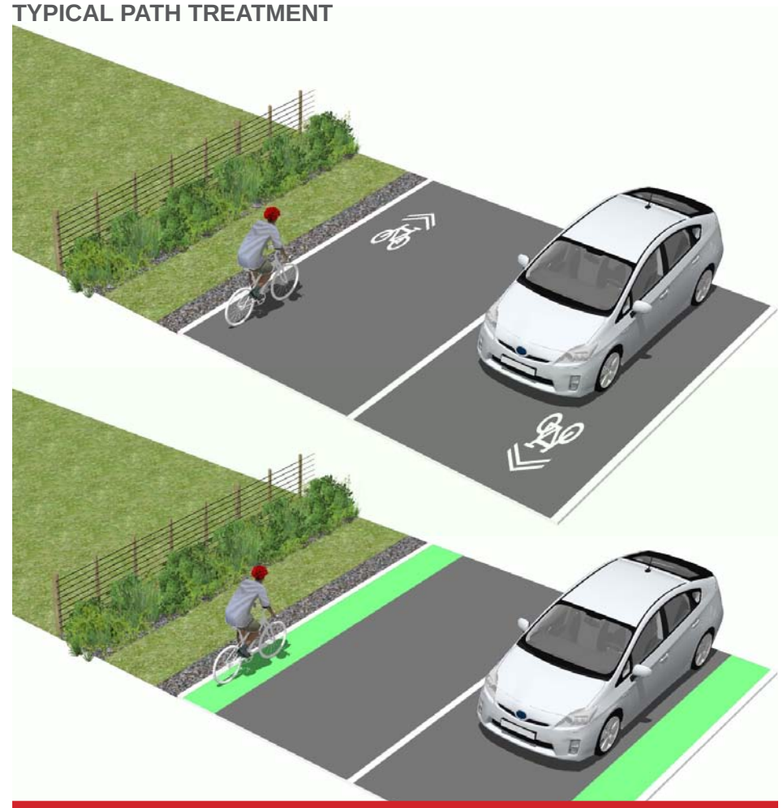
Marking or paint to existing road	1800m	$20,000
2.5m compacted aggregate path	1530m	$183,000
Contingency 15%		$31,000
TOTAL		**$234,000***

***Exclusions apply (refer page 20)**

View north east down Vineyard Road

BMX Track

TYPICAL PATH TREATMENT

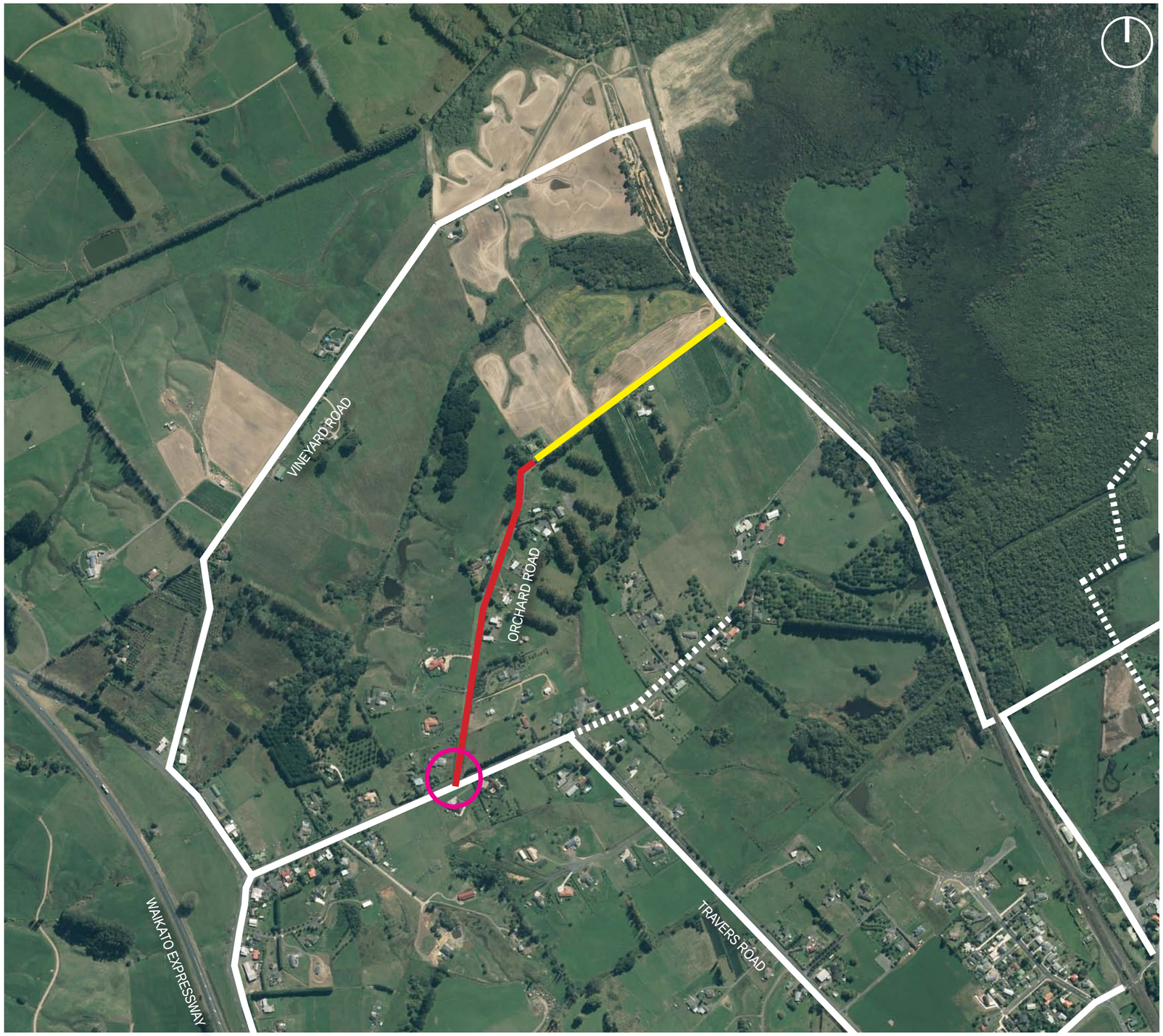


ROAD MARKING OPTIONS

COMPACTED AGGREGATE PATH ALONG RAIL CORRIDOR - 2.5M

ROUTE 6 PLAN

APPROX. LENGTH: 1,120M



PROPOSED COMPACTED AGGREGATE PATH - 2.5M WIDE

PAINTED ROAD MARKING + CYCLE SIGNAGE

INTERSECTION UPGRADE - TRAFFIC CALMING, PEDESTRIAN REFUGES, ETC - DESIGN TO BE CONFIRMED

NETWORK CONNECTIONS

POTENTIAL FUTURE CONNECTIONS

ROUTE 6

APPROX. LENGTH: 1,120M

ROUTE DESCRIPTION:
Orchard Road cycling route/wine trail connection - as per route 5 but adding a link along Orchard Road between Wayside Road and the railway line track

EXPECTED USER GROUPS:
Cyclists - visitor.

CONSTRAINTS

- Formed path section beyond existing road requires private landowner and KiwiRail buy-in/support and structural/geotechnical assessment.

OPPORTUNITIES

- This route provides a key connection into the wider region and particularly to a number of boutique business types - wineries, B+B, orchards, etc - via Routes 5 and 6.
- The development of the network to incorporate these areas provides business enhancement and growth opportunities through increased publicity and marketing opportunities.

VIEWS:

- Sweeping views from the top of Orchard Road - development of housing in neighbouring areas is likely to impact views over time.

HERITAGE AND CULTURE:

- Opportunity to provide increased exposure to boutique businesses and land use - vineyards, orchards, etc.

ENVIRONMENT:

- Construction of new path to connect into the rail corridor path provides opportunity to extend green corridor treatment back up Orchard Road.

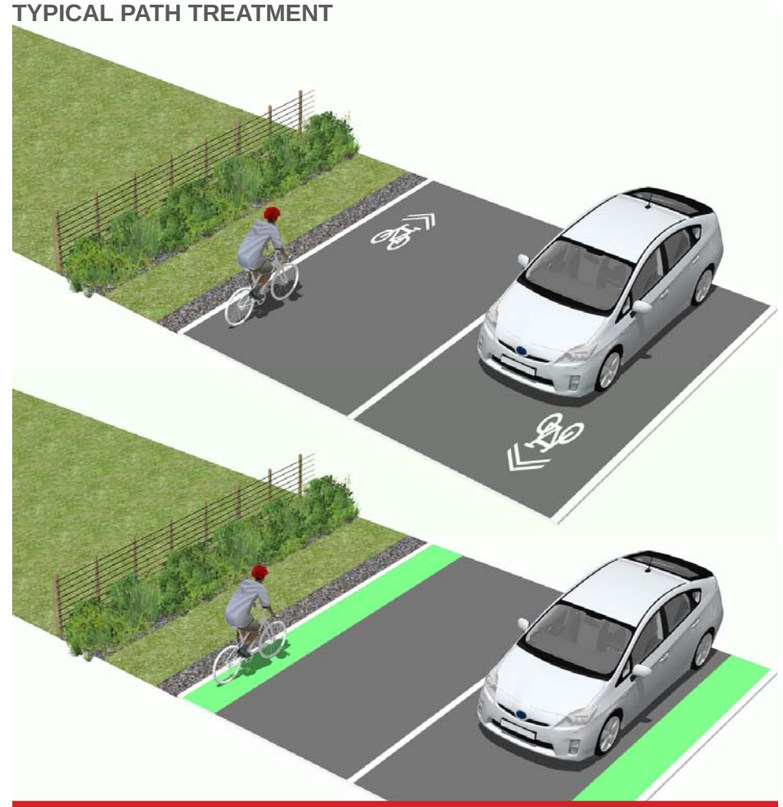
ESTIMATED CONSTRUCTION COST

Marking or paint to existing road	700m	$8,000
2.5m compacted aggregate path	420m	$50,000
Contingency 15%		$9,000
TOTAL		**$67,000***

***Exclusions apply (refer page 20)**

View south on Orchard Road

TYPICAL PATH TREATMENT

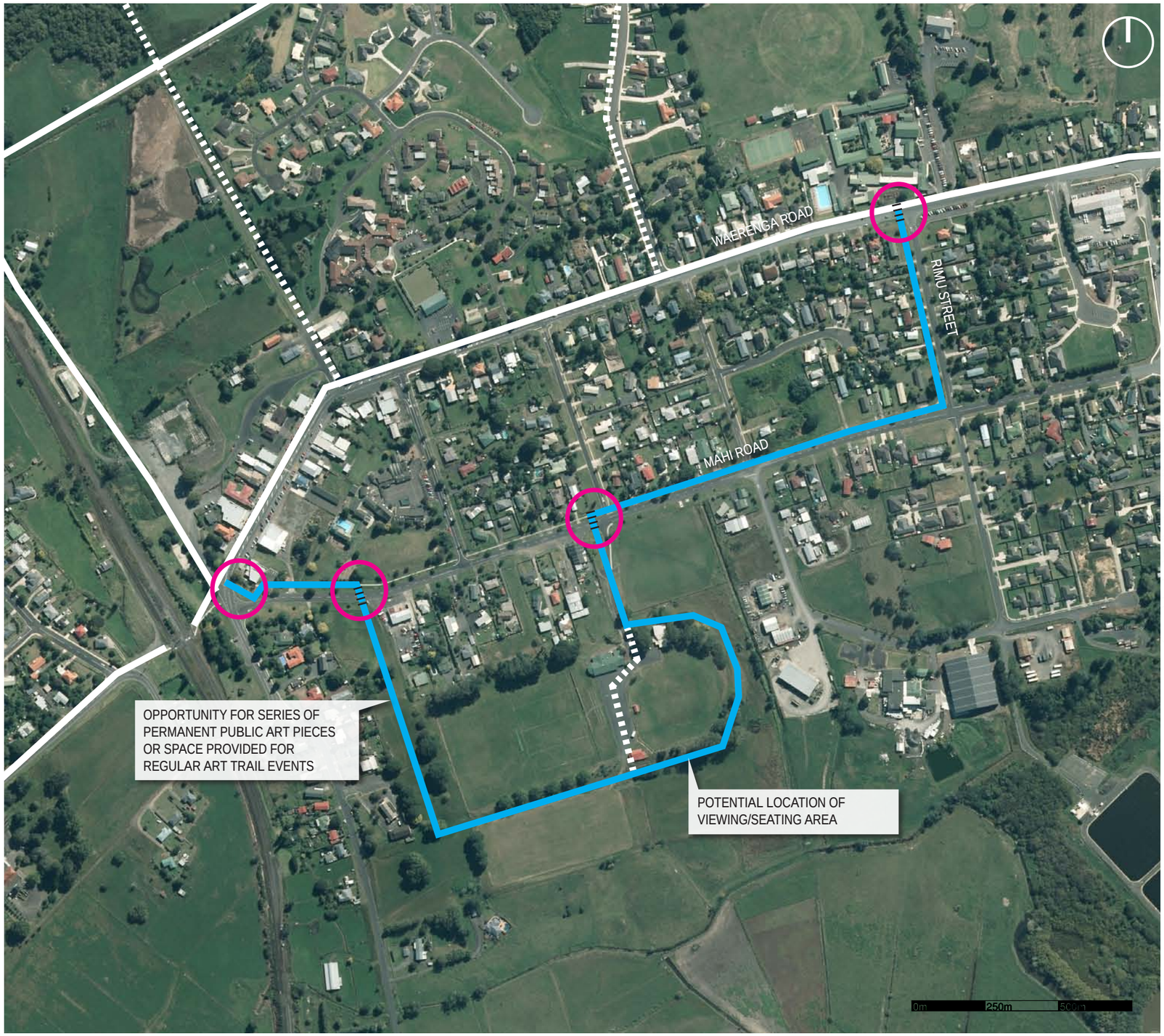


ROAD MARKING OPTIONS

COMPACTED AGGREGATE PATH - 2.5M

ROUTE 7 PLAN

APPROX. LENGTH: 1,830M



EXPOSED AGGREGATE CONCRETE SHARED PATH - 2.5M

INTERSECTION UPGRADE - TRAFFIC CALMING, PEDESTRIAN REFUGES, ETC - DESIGN TO BE CONFIRMED

PEDESTRIAN/CYCLE CROSSING POINT

NETWORK CONNECTIONS

POTENTIAL FUTURE CONNECTIONS

ROUTE 7

APPROX. LENGTH: 1,830M

ROUTE DESCRIPTION:
Rimu Street, Mahi Road loop connection - connecting Te Kauwhata Domain to town centre.

EXPECTED USER GROUPS:
Walkers and cyclists - particularly family groups/locals.

CONSTRAINTS

- Will require support/advice from sport ground managers to locate path such that it does not conflict with use of fields and associated spaces.
- Given traffic volumes and activity on event/game days, the surface treatment of paths needs to be durable and not provide a source of material that can be tracked on to sports fields.
- Geotechnical/structural assessment required for wet areas.

OPPORTUNITIES

VIEWS:
- Good vantage point from edges of upper sports fields with particularly good views out to rural landscapes to the south. Locating the path on the southern edges of these upper terraces will provide good access to views out to the landscape.
- Opportunity to create an viewing/seating area near proposed path at the top of the Memorial Domain.

HERITAGE AND CULTURE:
- Opportunity to provide a series of public art pieces through the reserve leading on to Mahi Road.
- Or alternatively provision of a dedicated space for temporary art installations associated with art trail or event.

ENVIRONMENT:
- Opportunity to enhance edge spaces of sports fields to improve aesthetic and ecological values.

ESTIMATED CONSTRUCTION COST

2.5m exposed aggregate concrete path	1830m	$183,000
Contingency 15%		$28,000
TOTAL		**$211,000***

***Exclusions apply (refer page 20)**

View of Memorial Domain

View south from top of Memorial Domain

TYPICAL PATH TREATMENT

EXPOSED AGGREGATE CONCRETE PATH - 2.5M

CONSTRUCTION PROGRAMME

Consideration of construction timing for routes should focus on areas of high demand and high use in the first instance. This approach ensures best value for money (quick wins) and builds public interest and momentum for future sections of the network (growth and tourist attraction).

The path along Waerenga Road and Main Road, connecting Aparangi Village though to the town centre (part of Route 3), is seen as a key section of the existing network that would benefit from enhancement works to cater for immediate and specific user needs. Path widening and road crossing improvements will facilitate safer movement of Aparangi Village residents in particular, but will benefit all pedestrians. The shared path also has the benefit of providing an off-road option for the novice/ young cyclist and places emphasis on Waerenga Road as one of the most used and public streets within the town.

Enhancing this important public space will raise the profile of the town generally and adds to the investment already made in other key pieces of public infrastructure such as the library and toilet buildings. Path upgrade along Main Road recommends path widening and parking changes that provide a catalyst for discussion around a broader streetscape upgrade of Main Road. This opportunity should be considered in conjunction with the path upgrade to ensure opportunities are explored/embraced. Hence Route 3 development is recommended to be staged with Waerenga Road path construction and Main Road upgrade investigation forming stage one. It is envisaged that stage one would be completed in the short term (1-2 year) period and following stages in the medium (3-5 year) to long term (6-10 year) period.

The running circuit and connection to the town centre (Route 2) is also seen as an important section of the network and will provide immediate amenity to meet the existing demand for this type of path. This is considered to be a priority for short term implementation in order to improve road safety in the face of increased traffic volumes resulting from developmental and tourism growth.

Other quick wins (short term implementation) would be road marking and cycle signage for the on-road sections of Route 5 and Route 6. The consultation and design of the off-road sections of these routes are expected to be undertaken as medium to long term projects which will benefit from engagement with, and involvement of, the local business community as a tourist attraction. It is important that provision for these routes is planned for and incorporated into any new developmental consents and/or network upgrades.

The remaining routes are also considered important to stimulate and maintain interest and growth of Te Kauwhata and should be considered for development over the medium to long term periods. It is considered that this approach balances immediate needs and demand with future aspirations and provides the best opportunity to maintain public interest and engagement. Availability of funding has not been considered in the above recommendations.

COST ESTIMATES

High level rough construction cost estimates are provided below for each route. These are based on the length of path and type of construction material only. No allowance has been included for other costs, such as those outlined below. The complexity and variability of topography, hydrology and spatial constraints of each route requires more detailed assessment and design consideration before a complete estimation can be calculated. Pricing estimates for the following components can be better gauged through scheme and detailed design stages and have been **excluded** from these estimates:

- Geotechnical investigation and topographical survey costs
- Walkway and structures design cost
- Redesign of intersections, pedestrian crossings and medians.
- Stormwater drainage infrastructure
- Fencing, barriers and retaining
- Vegetation removal
- Installation of signage, furniture, planting and viewing areas
- Any sub-consultant, consultation and Historic Places Trust costs
- Preparation of consent applications and consent application fees
- Tender, contract management and site inspections and construction monitoring

The estimated cost of construction for each preferred route is summarised below (note that all estimates exclude GST and include a 15% contingency):

Route 1 : $2,986,000
Extension of the Te Kauwhata Community Committee(TKCC) shared path from Blunt Road eastward to connect to Waerenga Road via Swan Road

Route 2 : $639,000
Te Kauwhata Rd, Wayside Road and Travers Road loop and connection to the village.

Route 3 : $84,000
Corner of Rimu Street down Waerenga Road and Main Road terminating at the Village Green.

Route 4 : $60,000
Waerenga Road improvements from Swan Rd to Rimu Street to link routes 1 and 3.

Route 5 : $234,000
Cycling route/wine trail - extending route 2 along Wayside Road to Vineyard Road, bypassing the BMX track along the western side railway line and crossing the railway to connect with the TK Community Committee (TKCC) shared path.

Route 6 : $67,000
Orchard Road cycling route/wine trail connection - as per route 5 but adding a link along Orchard Road between Wayside Road and the railway line track

Route 7 : $211,000
Rimu Street, Mahi Road loop connection - connecting Te Kauwhata Domain to town centre.

INDICATIVE CONSTRUCTION TIMELINE