Redoubt Road – Mill Road corridor project

Project overview

• Covers the 8.9km section of the Redoubt Road-Mill Road corridor

• Starting at the State Highway One (SH1) on and off ramps on Redoubt Road running east then south along Redoubt Road to the Redoubt Road-Mill Road intersection

• The corridor continues south along Mill Road, concluding south of Alfriston Road near the intersection of Mill Road and Popes Road

• It also includes a short section along Hollyford Drive to the north of Redoubt Road and a portion of Murphys Road from a new intersection on Redoubt Road to Flat Bush School Road.

Why is the project required?

• Changing land use, population growth and planned housing developments will increase pressure on local infrastructure in south Auckland

• Significant crash hotspots along the route make it necessary to improve the road’s safety

Improvements to the Mill Road corridor between Manukau, Papakura and Drury are identified as a priority in the Auckland Long Term Plan (LTP).
South Auckland is growing

- An estimated 10,000 new houses will be fast tracked in special housing areas under the Housing Accord in southern parts of Auckland, this includes 4470 houses in Flat Bush, and 1770 houses in Takanini.
- A further 12,000 – 14,000 houses are anticipated to be constructed in the Takanini, Opaheke, Drury and Karaka future urban zone as indicated in the Proposed Auckland Unitary Plan.
- New industrial areas in Takanini and Drury south will create 6,000 new jobs.
- Traffic volumes will increase to a level more than the current Redoubt and Mill Roads can cope with.
- Congestion is already affecting parts of Redoubt Road and Mill Road and traffic will almost double in 10 to 15 years.
Features and benefits

• A safer and more efficient route that can support future growth in the area

• More reliable journeys by providing a four lane road with more capacity and upgraded intersections

• Improved public transport infrastructure and services

• More reliable bus journey times, the ability to move more people and remove constraints on the public transport network by creating bus priority lanes through Hollyford Drive and Redoubt Road intersections

• Improved travel time and safety for drivers, pedestrians and cyclists

• New footpaths on both sides of Redoubt and Murphys Road improving pedestrian connectivity

• Safe pedestrian crossing opportunities at all traffic signals

• An alternative north-south corridor in case of major disruption or emergencies on the other southern arterial routes

Safety

• Improves safety and provides for increases in traffic that will come with significantly more people living in the area and using this route

• Significant crash hot spots at a number of dangerous junctions and curves along the route make it necessary to improve the road alignment

• 283 vehicle crashes and four fatalities (2009-2013)

• Without the upgrades there are expected to be further safety issues and more traffic than the existing road can cope with by 2026.
Key project features

Features and benefits

- Redoubt Road widened to four lanes (two in each direction) between SH1 and Murphys Road
- Westbound bus lane along Hollyford Drive and Redoubt Road towards Manukau
- Replacement of the existing Mill Road with a new four lane arterial (two in each direction) between Murphys Road and Popes Road
- New roundabouts at Ranfurly Road and Alfriston Road with pedestrian facilities including safe crossing facilities in the medians
- New and improved signalised intersections at Diorella Drive, Hollyford Drive, Santa Monica Place and Murphys Road. These intersections will have pedestrian crossings and stop boxes for cyclists
- Widening of Murphys Road to four lanes (two in each direction) between Flat Bush School Road and Redoubt Road
- Murphys Road-Redoubt Road intersection realigned and traffic lights added to improve safety
- On road cycle lanes on both sides for the length of the upgrade
- Off-road cycle and foot paths (shared path) for the length of the upgrade
- Widened footpaths on both sides of Redoubt Road, Mill Road and Murphys Road with pedestrian crossings at key intersections
- Improved access to local community services and facilities such as Totara Park and Murphys Bush
- Replacement planting and stream restoration
- Improved stormwater facilities for the entire corridor which includes wetlands areas for stormwater treatment and retention
- Landscaping of the new road corridor
Background and milestones

2009
Consultation on the Northern section began in 2009 with Manukau City Council asking the public for feedback on options for sections of the corridor.

2012
Auckland Transport consulted with directly affected landowners and the wider community in October and November 2012 with six information days. Responses from the public were evaluated and incorporated in planning the project.

October 2014
Northern section: Route identified and Notices of Requirement lodged.

2015
Northern section: Public submissions and hearing on Notices of Requirement.

2015 / 2016
Southern section: Progress work to identify a route alignment.

2015 / 2016
Northern section: Notice of requirement decision to confirm designation.

2020+
Northern section: Phased construction along Redoubt Road, Mill Road and Murphys Road driven by growth.

2025+
Southern section: Finalisation of route and construction dependent on growth.
A large number of routes were investigated and potential effects assessed before the final route was selected. A number of conditions are proposed to reduce or mitigate any long-term impacts:

- Implementing a noise and vibration management plan
- Managing any soil contamination, stormwater runoff and dust
- Replacement planting and stream restoration
- Creating new wetland areas and habitats for local birdlife
- A pest eradication programme
- Monitoring environmental issues during construction
- On-going environmental monitoring after works are completed
- The route was selected at Puhinui Creek to avoid mature forest
- It crosses two areas of native forest via 17m and 23m high viaducts. These will be built at Puhinui Creek gully and South Mill Road gully
- At least 22,000 sq. m of native planting
- Environmental monitoring during and after construction
- Mitigating effects by planting native trees adjoining to existing bush areas
- Monitoring mature trees for bat habitation before felling
- Minimise road lighting and where lights are necessary use downward facing low pressure sodium lamps
- Rescue and relocate native geckos and skinks
- Provide fish passage and appropriate stream restoration where culverts are built
- Retain a habit linkage beneath the Puhinui Creek Gully viaduct during construction of piers which will remain after completion

Stormwater treatment removes contaminants through an environmentally friendly staged design.
Noise and vibration

Construction noise and vibration
• Noise and vibration will be produced from construction activities, laydown areas and worksites.

What will be done about it?
• The team will comply with procedures set out in the New Zealand standards 6803:1999, Acoustics – Construction Noise
• This standard sets out limits and provides methods of predicting and managing noise
• Before commencing any work, Auckland Transport will prepare a detailed plan to show how the project will comply with the standards

Operational noise and vibration
• Once operational, the project will comply with procedures set out in the New Zealand standards 6806:2010, Acoustics – Road Traffic Noise – New and Altered Roads
• This is the accepted method in New Zealand to address road-traffic noise
• It provides performance targets and requires assessment of a number of different options for noise mitigation

Mitigation options include
• Acoustic barriers
• Landscaping
• Use of low noise road surfaces (for example open graded porous asphalt)
• Dwelling modifications including double glazing and insulation
• The mitigation processes will change as the design progresses and decisions are made on detailed design
Cycling and walking improvements

- On road cycle lanes for the length of the upgrade, varying between 1.5 and 2 metres wide
- Off road shared use paths for less confident cyclists and pedestrians on one side of the length of the upgrade
- Advanced stop boxes for cyclists at intersections with traffic lights.
- Two metre wide footpath on both sides of Redoubt Road between SH1 and Hollyford Drive intersections
- A mix of footpaths and the shared use path will be provided for the rest of Redoubt Road, Mill Road and Murphys Road
- Pedestrian crossings on all legs of intersections with traffic lights (Hollyford/Redoubt, Diorella/Redoubt, Murphys/Redoubt)
- Safe crossing refuges in medians at Ranfurly Road and Alfriston Road roundabouts

**Redoubt Road typical cross section**

**Murphy’s Road typical cross section**

**Mill Road typical cross section**
Public transport improvements

- Public transport improvements to the Mill Road Corridor will provide more frequent and more reliable public transport services.
- Bus priority facilities will be provided at the Hollyford Drive/Redoubt Road intersection, including a dedicated right turn lane for buses turning out of Hollyford Drive into Redoubt Road.
- A new westbound bus lane is proposed between Hollyford Drive and SH1 intersection.
- The proposed bus lane will allow buses to travel unimpeded between Hollyford Drive and Diorella Drive, and between Diorella Drive and the motorway.

The frequency of bus services will increase which will provide a better level of service for public transport users.

Improvements to bus priority facilities and frequency will enable a strong integration with connector routes and local services.

Bus priority facilities will be provided at the Hollyford Drive/Redoubt Road intersection, including a dedicated right turn lane for buses turning out of Hollyford Drive into Redoubt Road.

Redoubt Road bus lane cross section

![Redoubt Road bus lane cross section diagram]
• Auckland Transport has lodged three separate Notices of Requirement (NoR) with Auckland Council
• The intention is for Auckland Council to publicly notify the NoRs in April 2015
• The NoR process provides an opportunity for you to provide comment (make a submission)
• If you wish to make a submission on these documents and be involved in the process you will be able to find the notified documents and submission instructions at the following Auckland Council website location: tinyurl.com/o65z5yr

Lodged late 2014
Resource Consent applications and alteration for designation

January 2014
Council asks for further information

April – May
Public notification – 17 April 2015
Submissions close – 19 May 2015

May – June
Submissions received and reviewed

June
Council will ask for further information (if required)

June – July
Resolving of pre-hearing issues

August (to be confirmed)
Council hearing

Murphys Road widening, adjacent to Murphys Bush.