

# Wolgan Road Reconstruction Project



## Project overview

### About the project

In 2022, Wolgan Valley Road was closed to traffic following a major landslide. Lithgow City Council (Council) has since been planning, and seeking funding for, a safe, permanent access solution for the Wolgan Valley community.

The Wolgan Road Reconstruction project aims to:

1. restore road access to the Wolgan Valley as a priority,
2. reduce safety risks for all road users,
3. provide a resilient road that addresses geological challenges, minimises risks from slips and rockfalls, and remains operational during adverse weather conditions,
4. achieve a cost-effective solution that minimises long term maintenance costs.

### Background

In June 2024, Council applied to the NSW Reconstruction Authority for funding to restore road access to the Wolgan Valley. The application included investigations of a 'do nothing' scenario which showed the social and economic implications of not replacing Wolgan Road would be unacceptable, and strategic corridors which demonstrated a southern corridor via Wolgan Gap would have the least impacts compared to alternatives.

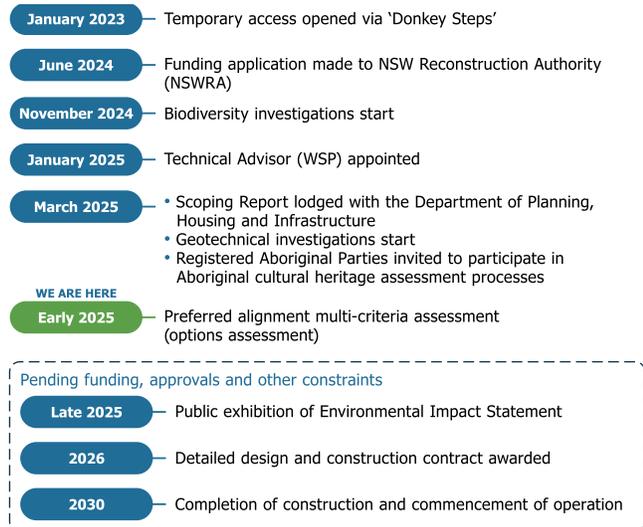
### Current status

Our previous studies suggested that restoring Wolgan Road could be prohibitively expensive and would not address risks of further landslides. However, the community has asked for this option to be explored. Council is therefore separately undertaking a risk assessment on the existing Wolgan Road.

We are progressing alternative road design options in case the independent report concludes that reopening existing Wolgan Road is not feasible. The alternative road design work is being done by our technical advisors WSP, who were appointed in January 2025. WSP will develop a concept design for the preferred option and prepare an Environment Impact Statement (EIS) that will assess the construction and operational impact of the project.

An outcome of our funding application is yet to be determined and construction work cannot commence until funding is secured and the EIS is approved.

### Project timeline



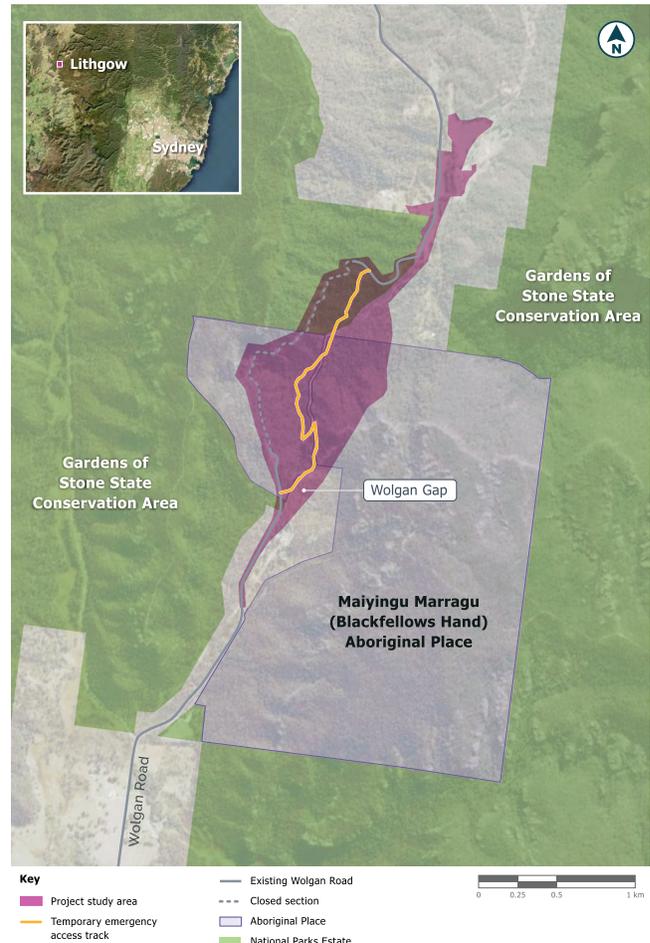
### What we've heard to date

We have heard community concern about:

- the impacts to residents' quality of life due to the absence of reliable, safe access to Wolgan Valley,
- economic impacts to local businesses and tourism operators,
- a perceived 'inactivity' regarding road design standards, approvals and decision-making.

We have also heard the community has a strong preference for:

- the existing Wolgan Road or Donkey Steps to be upgraded,
- a fast-tracked program and a staged approach to opening the road ahead of project completion,
- maintaining road access throughout construction,
- Council to be open to a pragmatic design if that delivers access sooner.



# Wolgan Road Reconstruction Project



## Options assessment process

### Context to the options

The closed section of existing Wolgan Road is situated along the western side of Wolgan Valley. This area is characterised by the steep slopes of a sandstone escarpment which drop 250 metres – about the height of a 62-storey building – and are prone to erosion, landslides and slope failures. There have been numerous slips above and below Wolgan Road and the risk of rock falls continues. Stabilising the slips and rock sections presents challenges to construction and a likely need for extensive rock excavation. Alternative alignment options have been assessed, and the findings suggested that realigning along the eastern side of the valley, where geological conditions are more favourable, would produce a better outcome for project.

### Initial assessment

The initial assessment during the previous design and funding application phase of the project explored ten options. Most options were either too costly to implement, posed significant constructability challenges, or had unacceptable impacts on biodiversity. The re-use of the Donkey Steps was considered in the initial assessment but was deemed too steep for a permanent solution. Flattening the gradients would require months of road closure, forcing the community to access the valley via the Old Coach Road.

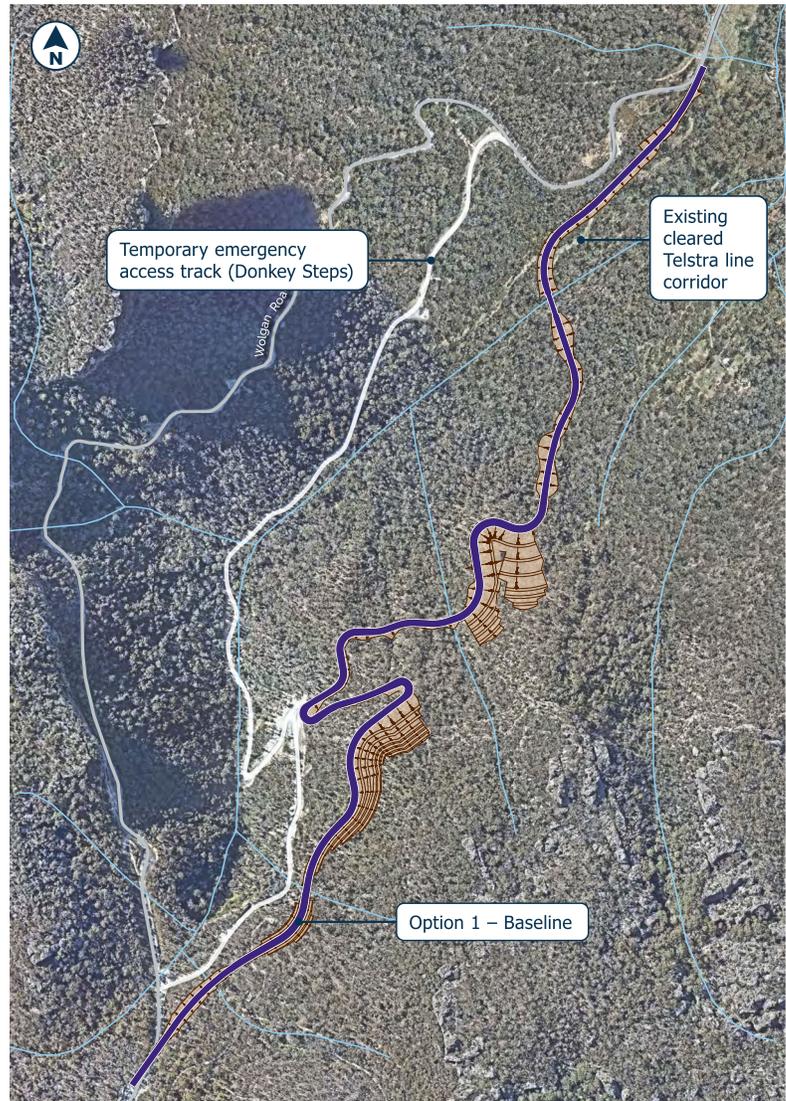
### Baseline option

As a result of this initial assessment, Option 1 (the baseline) was included in the funding submission. While this option was sufficient for the purposes of the funding application, refinements are required to progress to an Environmental Impact Statement.

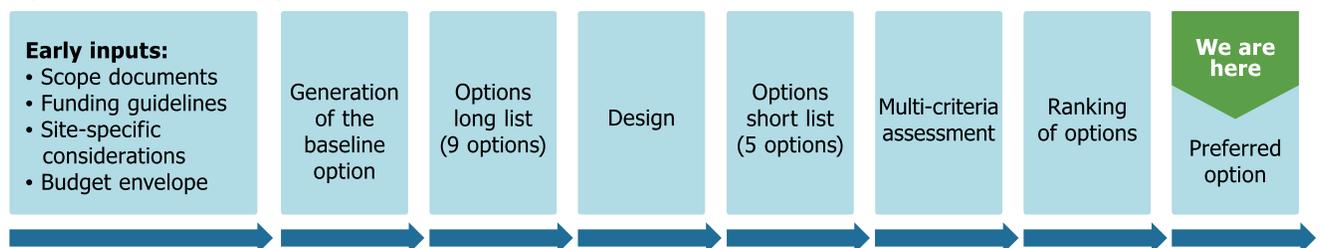
### Recent assessment

Lithgow City Council has assessed nine further options based on a refinement of Option 1. Four were discontinued as they were either located in State Conservation Area, did not allow opening of the access road earlier than project completion, required closure of the Donkey Steps, or had significantly more environmental impact than other options.

The remaining five options have been evaluated against preferred road alignment criteria developed in response to community feedback. We are keen to hear your feedback on the preferred option to support the project's refinement and the next steps in the planning process.



### Options assessment process



# Wolgan Road Reconstruction Project



## Assessment of shortlisted options

### Shortlisted options against key criteria

The five shortlisted design options were assessed against criteria informed by community feedback and technical studies. The criteria include long-term design and operational considerations, as well as construction considerations.

Navigating the 250 metre drop from the escarpment to the valley is a key challenge that all the options try to address.

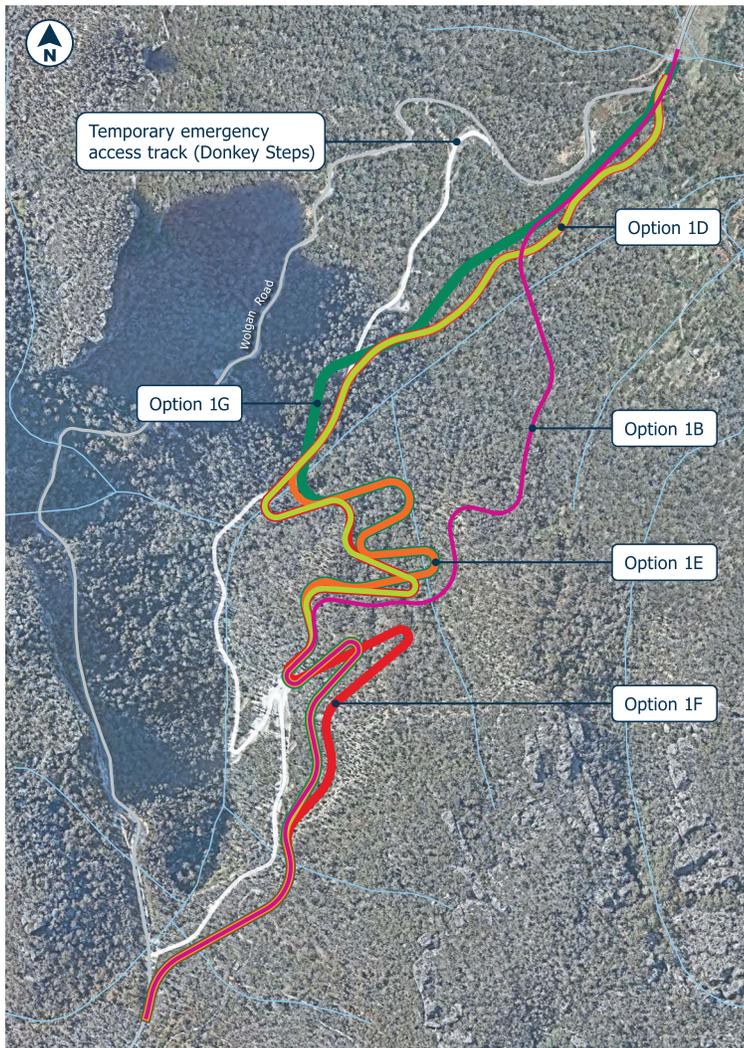
To construct the road on this challenging terrain, we can either excavate into the uphill side of the escarpment (cut retaining walls

or benched cutting) and/or build a retaining wall or fill embankment on the downhill side of the natural terrain (fill retaining walls). Excavated cut material can be used to build fill embankments, so combining the two methods can help to reduce the net surplus material produced, which is a good sustainability outcome.

The options all use varying combinations of cut and fill methods to strike a balance between cost, program and impact.

The options also have different ways of using the Donkey Steps, and the area that has been cleared for the Telstra fibre optic cable, for construction access. Options that run close to either of these two features could be constructed more quickly as crews would be able to access the site from multiple work fronts.

The outcomes of the assessment process are summarised on the next two display boards. The overall ranking of each option against the criteria is shown.



Key  
 Option 1B (purple line)  
 Option 1D (green line)  
 Option 1E (orange line)  
 Option 1F (red line)  
 Option 1G (yellow line)  
 Existing Wolgan Road (grey line)  
 Waterways (blue lines)

Locations on this map are indicative only.

### Criteria



#### Minimises project footprint within Aboriginal Place

Measures the impact of the project footprint on the Aboriginal Place and areas of archaeological significance.



#### Minimises biodiversity impacts

Measures the impact on biodiversity by assessing how much land would be disturbed.



#### Minimises visual impacts

Measures how the design alters the landscape by assessing the height of rock cuttings, the length of retaining walls, and the length of bridges (where applicable).



#### Minimises landowner impacts

Measures the area of private land that would be impacted.



#### Minimises operational cost

Measures the long-term operational costs, including maintenance and depreciation.



#### Minimises the need for temporary structures during construction

Measures the need for additional temporary access roads and retaining walls during construction.



#### Minimises handling of surplus material

Measures the amount of surplus fill needed to be transported to and from the site.



#### Minimises construction time

Measures the duration of the construction timeline.



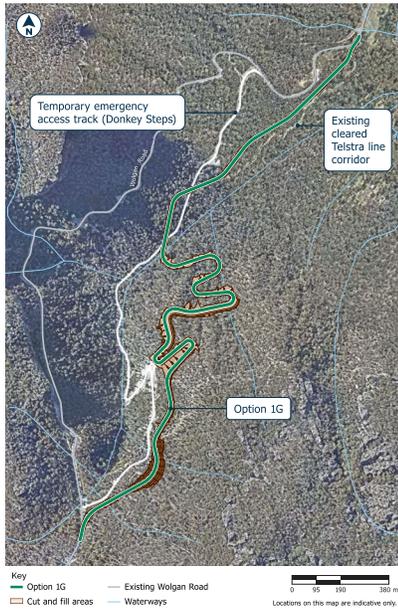
#### Minimises construction costs

Measures total indicative construction costs.

# Wolgan Road Reconstruction Project

## Shortlisted options

### Option 1G (Ranked 2nd)

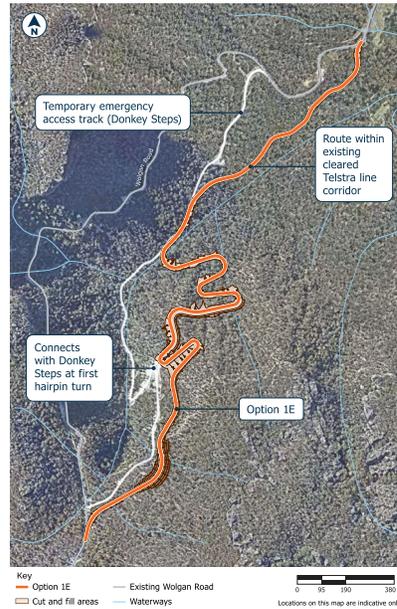


- This option would be similar to Option 1E but would limit property impacts.
- Alignment remains within the gazetted road corridor.
- Requires greater use of fill retaining walls below the escarpment and additional retaining walls along the lower section of the valley.
- Additional clearing of undisturbed land would be required.

**This option performs well for:**

- Landowner impact
- Visual impact
- Temporary structures
- Aboriginal Place impact

### Option 1E (Ranked 3rd)

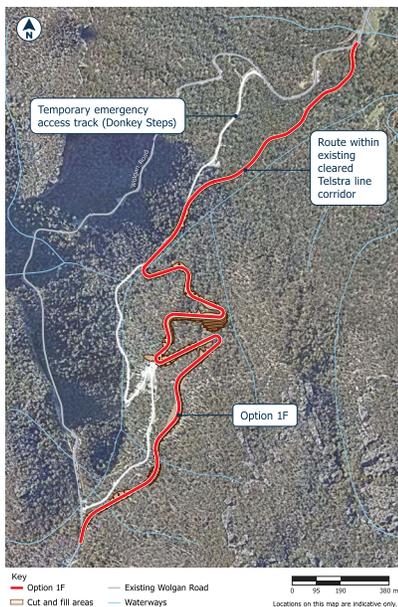


- This option would be similar to Option 1D but would remove rock benching on the lower slopes by flattening the road grade. Due to the flattening of grade, the length of road would be longer than Option 1D.
- Connects with the Donkey Steps at the first hairpin turn, allowing construction access from multiple work fronts and facilitating a staged approach to opening.
- The route would run adjacent to a section of the Donkey Steps which would improve construction access. It would also run through a cleared corridor containing the Telstra fibre optic cable, which improves construction access and minimises vegetation clearing.

**This option performs well for:**

- Visual impact
- Temporary structures
- Surplus material
- Construction cost

### Option 1F (Ranked 4th)

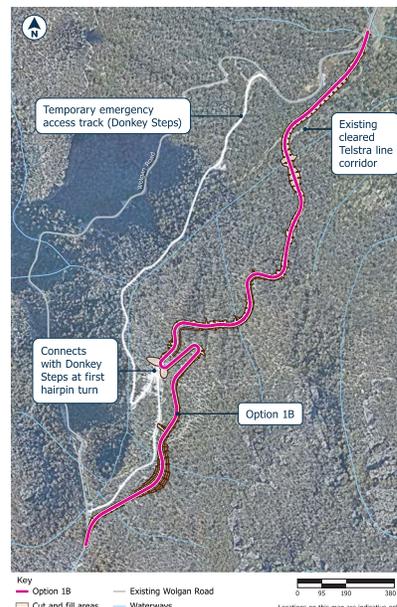


- Option would incorporate reinforced concrete box culverts under the road, as an alternative to complex drainage treatments.
- Greater use of fill retaining walls below the escarpment. Fill retaining walls would require temporary rock benching to stabilise the slope during construction, increasing cost and making construction more challenging.
- Would connect with the Donkey Steps at the first hairpin turn, allowing construction access from multiple work fronts and facilitating a staged approach to opening.
- The route would run adjacent to a section of the Donkey Steps which would improve construction access. It would also run through a cleared corridor containing the Telstra fibre optic cable, which improves construction access and minimises vegetation clearing.

**This option performs well for:**

- Aboriginal Place impact
- Biodiversity
- Surplus material
- Landowner impact

### Option 1B (Ranked 5th)



- This option would be located further into the escarpment by cutting away the rock wall. This would eliminate the need for the construction of retaining walls to level the existing surface for road construction.
- Compared to the baseline option, this approach would reduce excessive clearing of vegetation and visual impacts.
- Connects with the Donkey Steps at the first hairpin turn, allowing construction access from multiple work fronts and facilitating a staged approach to opening.
- Significant private property impacts.

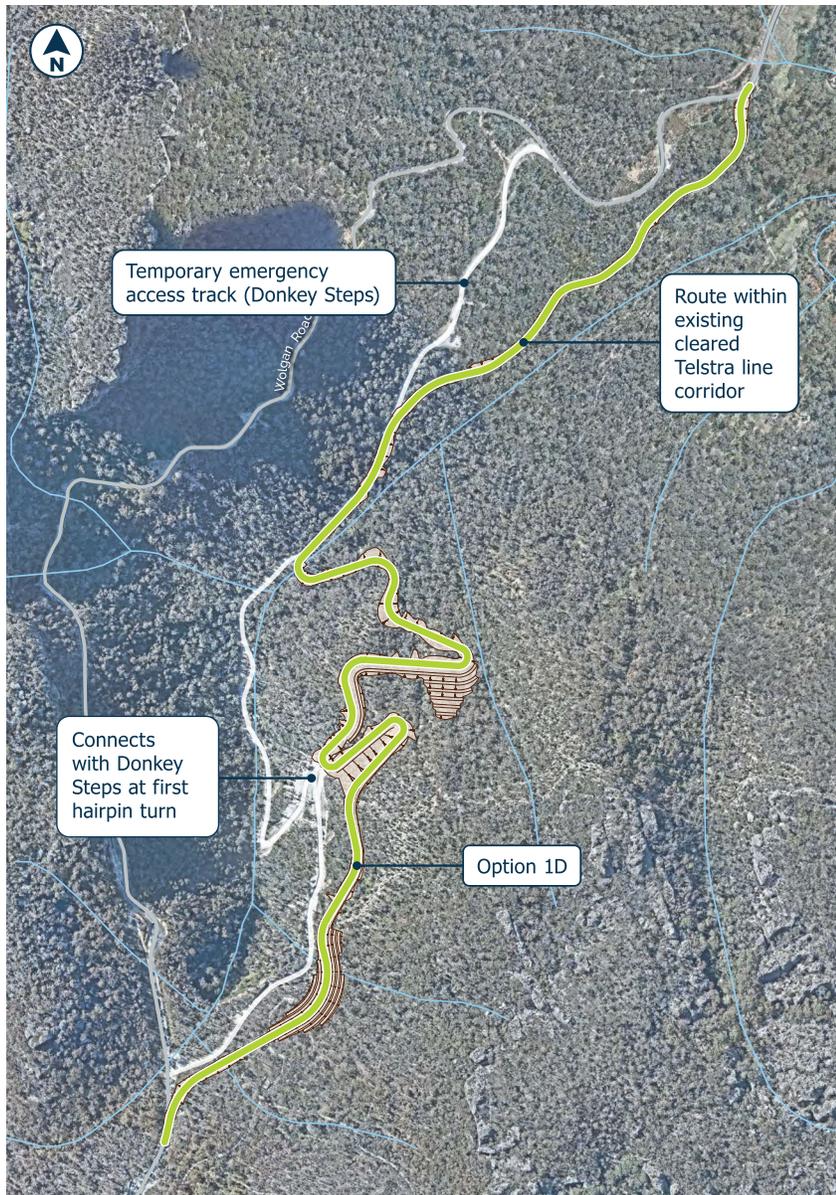
**This option performs well for:**

- Operational costs
- Temporary structures
- Construction time

# Wolgan Road Reconstruction Project

## Preferred option and next steps

A preferred option has been selected which scored the highest against the assessment criteria during the options assessment process.



### Option 1D (Ranked 1st)

- This option would require greater use of cut retaining walls, avoiding the need for more complex fill retaining walls.
- Reduces the amount of benched rock cutting compared to Option 1B. It would require a benched rock cutting along the lower slopes, but only for a 50-metre length of the road.
- Would connect with the Donkey Steps at the first hairpin turn, allowing construction access from multiple work fronts and facilitating a staged approach to opening.
- The route would run adjacent to a section of the Donkey Steps which would improve construction access. It would also run through a cleared corridor containing the Telstra fibre optic cable, which improves construction access and minimises vegetation clearing.

### Next steps

Following the community briefing, Council will:

- Collect community feedback and share an overview of 'what we heard' in a Community Update
- Distribute a survey to seek community feedback on the preferred option, any further considerations for the Environmental Impact Statement (EIS), and community preferences for future engagement
- Progress an updated risk assessment of the existing Wolgan Road to assess possible inclusion in options assessment.
- Progress work to support timely delivery of the Environmental Impact Statement (EIS)
- Progress planning and construction of the permanent access road as quickly as possible.

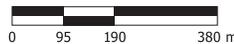
**Community and stakeholder engagement will continue throughout all stages of the Wolgan Road Reconstruction Project.**

To find out more about the project visit the project web page at:  
<https://council.lithgow.com/projects/wolgan-gap>

You can also get in touch directly with the project team at  
[wolgan.reconstruction@lithgow.nsw.gov.au](mailto:wolgan.reconstruction@lithgow.nsw.gov.au)

#### Key

- Option 1D
- Existing Wolgan Road
- Cut and fill areas
- Waterways



Locations on this map are indicative only.

**This option performs well for:**

