

Kempsey - Armidale Road Restoration

Appendix G

Community Project Information Flyers

Kempsey to Armidale Road Recovery Program



*Bullock drays and vehicles
on Kempsey Road
in the 1920's*



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Disclaimer:

Some of the technical information presented in this document is indicative and may be subject to change once design is finalised.

Project abbreviations:

Kempsey-Armidale Road Recovery Program	KARRP
Armidale Regional Council	ARC
Seymour Whyte Constructions	SWC
Early Contractor Involvement	ECI
metres	m
square metres	m ²
cubic metres	m ³
tonnes	t

Kempsey to Armidale Road Recovery

Project information flyer

www.armidaleregionalcouncil.nsw.gov.au/kempseyroad

June 2023



Introduction

The Kempsey-Armidale Road is an important corridor, which links Armidale and the coast. The road also supports agriculture and tourism industries in both the Armidale and Kempsey regions.

The road was severely damaged by bushfires at the end of 2019 and subsequent flooding in 2020 and 2022. The condition of the road has deteriorated due to these natural disasters and several landslips have occurred.

Various emergency works have been undertaken to repair the road and provide essential access for local residents since then.

Project update

Early Contractor Involvement phase (ECI)

- Design, cost and program delivery
- Extended until late in the third quarter of 2023
- Resourcing and design brief revision.

Early Works

- Contract for works that enable main recovery works to commence
- Resource dependent and works could include;
 - Construction of passing bays, vegetation clearing, materials purchase, site facility establishment, upslope scaling and some downslope works for high risk sites.

Main recovery works contract awarded

- Anticipated to occur in fourth quarter 2023.

Initial Activities

- Design commencement
- Management plans
- Potential for early works to occur during this period.

Main works forecasted to commence in 2024.

Road maintenance update

Current maintenance work underway/planned

- Grading (underway)
- Vegetation clearing
- Weed spraying
- Culvert cleaning.



Some of the key needs of the community

The survey conducted by Seymour Whyte Constructions (SWC) was to get context about the access needs and traffic movements of residents to better inform their possible work program. The survey was based on previous feedback from residents provided to Council about the upgrade of the road.

At this stage, Seymour Whyte are still working through all the community feedback to date to look at how they can complete the project in a timely manner, within budget and in a manner that is safe for both residents and workers.

Solutions are being considered to address the following key issues identified:

Cattle sales and livestock welfare

Possible solutions

With appropriate notice from the landowners SWC will be able to facilitate access to saleyards at Kempsey and Armidale. There may, however, be load limitations if portions of the road become unstable.

School children

Possible solutions

Relocation for the project duration
Home-schooling or distance education
Provision of school bus to meet existing bus services.

Traffic windows

Possible solutions

SWC understands this is a major issue for the community. Detailed information on what is proposed is on pages 6-9.

Postal service

Possible solutions

Resumption of mail deliveries until main works commence will be looked at.

Ability to work

Possible solutions

Broad range of individual requirements in terms of travel destinations. Traffic windows being proposed will constrain movements along the project. There will be work opportunities on the project.

Emergency access

Possible solutions

SWC will have a permanent nurse/paramedic on site when works are occurring. There will be construction of helipad locations along the alignment, with consultation with emergency services. The project will also have emergency access "bridges" to allow crossing of culvert construction sites.

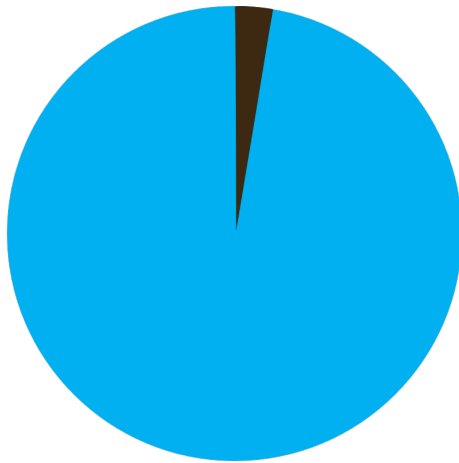
Use of local accommodation

Possible solutions

SWC may need to use local accommodation throughout the project particularly in the startup and wind down phase.

Works completed to date vs works to complete the project (indicative)

Culvert construction

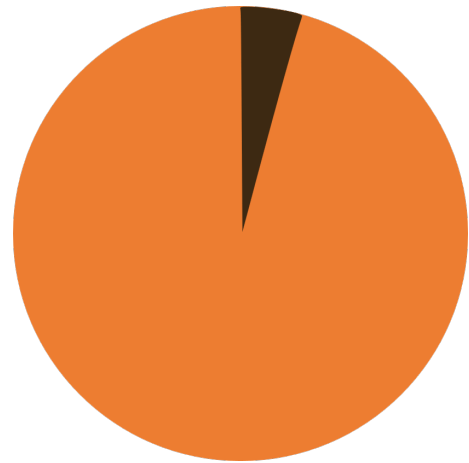


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6

● Culverts to be constructed (no.) ● Culverts to date (no.)

Slope construction *



12,650 square metres

600 square metres

● Slopes to be constructed (m2) ● Soil nail walls to date (m2)

*Slope construction works includes both gravity walls and soil nail walls.

Overall program

The project is divided into 2 main zones. West of Lower Creek Road to Big Hill and east of Lower Creek Road to Blackbird Flat. Each zone accounts for around 50% of the total works.

There are around 85% of all residents on project living in the eastern zone, ie. between Lower Creek Road and Blackbird Flat.

The program is targeted to complete the eastern zone as soon as possible to be able to provide benefits to the majority of residents. In addition to this, there will be multiple works sites open throughout the project at any given time.



Culvert works at the curves

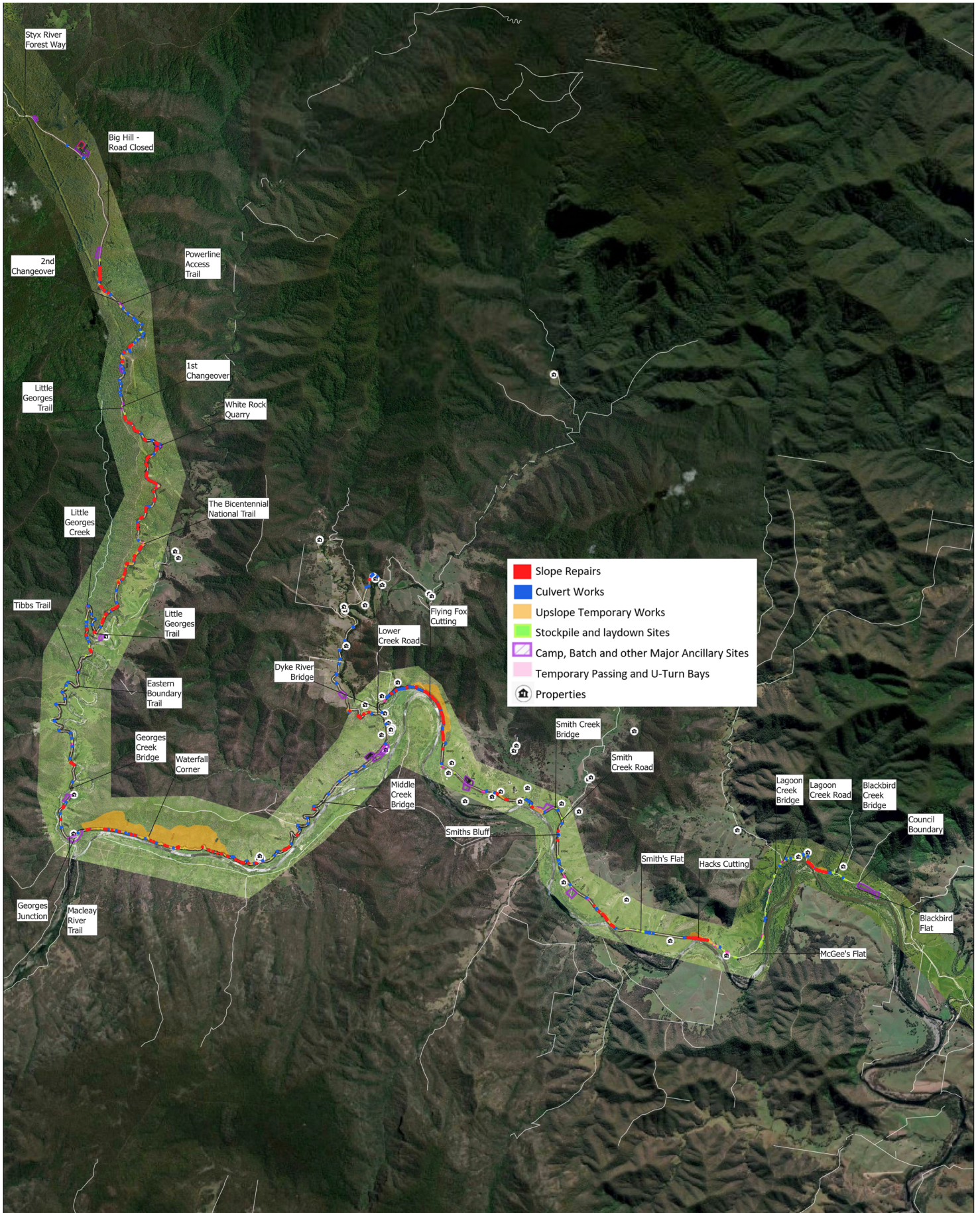


Soil nail wall works at Smith's Bluff

Project constraints

- Community window and opening hours
- Delivering the project quickly and efficiently
- Site safety for workers and road users
- Concrete availability and delivery to sites
- Significant travel times from Kempsey and Armidale
- Narrow access with limited passing and turning locations
- Remote location (needs onsite camp for workers)
- Availability of skilled resources
- Size of plant limited by access
- Upslope risks (inclement weather events)
- Limited parking areas – moving plant and materials in and out daily.
- “Working on top of ourselves” – utilising a 10:4 roster effectively to enable productive work and replenishment = quicker delivery of project.

Project works layout



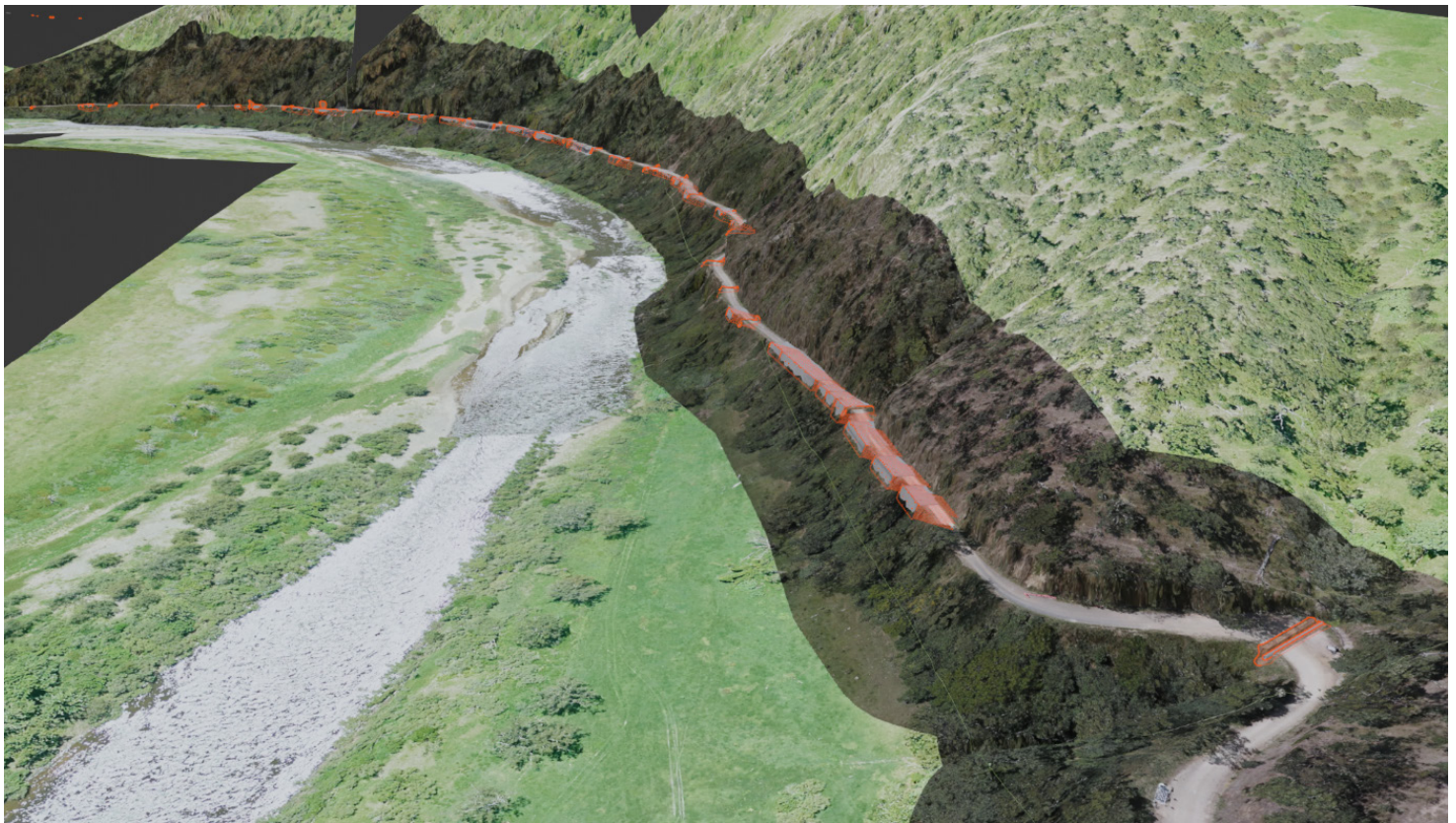
Map of project showing work sites and other proposed facilities

Key work elements

Sequence	Activity	Comments
1	Temporary works	To make site safe for workers and road users
2	Longitudinal drainage & minor cross drainage	To improve drainage through the site and prevent further damage to the road
3	Cross drainage (pipe & box culverts)	Larger culverts to convey larger storms
4	Soil nail walls	Repair road width to pre-disaster condition
5	Scour protection (culverts and bridges)	Prevent future scouring and erosion around drainage paths
6	Unbound pavement construction	Repair damaged sections of the road pavement
7	Spray sealing (as required)	Seal sections of Blackbird Flat (850 m) and Flying Fox (200 m) areas

Key activities which will limit/restrict access

Sequence	Activity	Impact to road users
1	Temporary works	Upslope rock removal. Rocks falling onto roadway below. Road will need to be closed for all access (private and construction) during upslope works
2	Minor cross drainage	Excavator will block road while excavating, trench will be cut across the road. Agitators blocking the road while placing backfill. Road will need to be closed for all access (private and construction)
3	Cross drainage (pipe & box culverts)	Large box culverts will require side track construction. Some are very difficult to construct, with a road closure likely being the only option if a temporary sidetrack cannot be built
4	Soil nail walls	Excavators removing material, trucks removing material, excavators with drills sitting on road and agitators placing concrete. Road will need to be closed for all access (private and construction)
5	Scour protection (culverts and bridges)	Reduced impact to community
6	Pavement reconstruction	Trucks placing material on road, graders grading material, rollers compacting road. Narrow areas will have no room for passing



The sections shown in orange indicate the large number of individual work sites needed along Flying Fox Cutting

Community proposed solution options to address access restrictions

- Use side tracks on local properties - from the Kempsey end at Smiths Flat to any number of properties closer to Flying Fox Cutting
- Utilising network of existing fire trails for 4WD access
- OMPS Road - Georges Creek to Camerons Gully (in collaboration with Oven Mountains).

Further investigations will be undertaken to assess the viability of the above.

Culvert work - typical method (for smaller culverts)

- Remove existing pipe and take to laydown area
- Widen and deepen trench - average depth is around 2m deep and 4m wide
- Install pipes
- Backfill pipes
- Complete inlet and outlet scour protection details
- A temporary crossing (as shown) will be used for midday, night time and emergency traffic openings
- No access for construction vehicles during productive work hours across culvert sites.



Temporary bridge used to cross open culverts

Culvert work - construction with a temporary side track (for larger culverts)

Constraints

- Deep and or wide excavations/embankments (up to 7m deep or 25 m wide)
- Minimum room for side track
- Trench too wide for temporary crossing.

Solution

- Install low flow pipe and construct side track. Approval of work outside boundaries required, including landowner approval
- Switch traffic to side track
- Excavate, lay and backfill new culvert
- Switch traffic back on alignment
- Remove side track
- Complete scour protection.



Typical temporary sidetrack construction

Slope works

Summary of estimated key quantities (indicative only)

- In excess of 160 soil nail walls (5 complete to date, 6 partially complete)
- In excess of 20 gravity walls
- More than 70,000 metres of drilling, installation and grouting of soil nails
- More than 11,000 square metres of retaining wall construction and shotcrete application
- Average area per wall is around 70 square metres.



Manual rock drilling with workers suspended in harnesses

Work productivity

<p>Midday road opening (current proposal)</p> <ul style="list-style-type: none"> Productive hours: 6.5 hours vs Unproductive hours: 5.5 hours. <p>Pros:</p> <ul style="list-style-type: none"> Midday resident access More chance for site deliveries. <p>Cons:</p> <ul style="list-style-type: none"> More disruptive More temp/prep works to open the road at midday More traffic control and escort vehicles A longer overall construction duration – about 25% longer. 	<p>No midday road opening</p> <ul style="list-style-type: none"> Productive hours: 8.25 hrs vs Unproductive hours: 3.45 hours <p>Pros:</p> <ul style="list-style-type: none"> A shorter overall construction duration – potentially 25% quicker No temp/prep works to open the road at midday Safer for public and construction works Less disruptive (8 consecutive hours of work) Staggered breaks (keep working) <p>Cons:</p> <ul style="list-style-type: none"> Less chance of deliveries Significant impact to community
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Roster (proposed)

<p>10 days on</p> <p>Perform scope of works:</p> <ul style="list-style-type: none"> Temporary works Longitudinal drainage Cross drainage (pipe & box culverts) Slope stabilisation including soil nail walls Scour protection (culverts and bridges) Unbound pavement construction. 	<p>4 days off</p> <ul style="list-style-type: none"> Significantly less constraints for access to and from Kempsey/Armidale on the 4 days off Camp still operational Skeleton crew to manage deliveries to laydown areas/ batch plant/camp i.e: truck movements Aggregates, sand and cement Soil nail and drainage components. Camp replenishments Temporary traffic control used as required for “stop/go”.
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Road opening/closing - general proposal

A 10 days on 4 days off roster is proposed. Road openings during the 10 days on will be between 5pm and 7am, with a potential midday opening.

During the 4 days off, there will be deliveries to site that will be managed by localised traffic control (short term closures).

Communication will be provided if road is opened earlier. During construction the road will only be opened to residents and emergency and essential services.

Electronic message boards at each end will display live messages about opening times, closing times and conditions.

Movable road closure signs will be used at any side roads to Kempsey Road.

Vehicles will have to be outside the gates by 7am. Allow adequate time to travel through the site, noting posted construction speed limits.

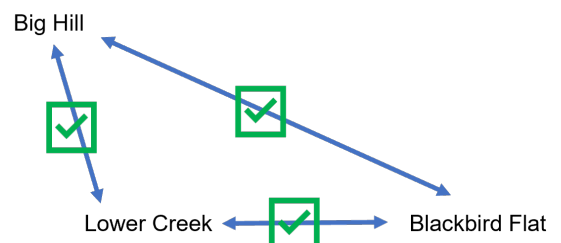
The gates will be opened at the end of shift at 5pm.

Midday escorts through the site (as applicable) will work as a “ferry” process i.e. vehicles are required at the pick up point at the nominated time for departure. Vehicles that miss the departure will not be able to travel.

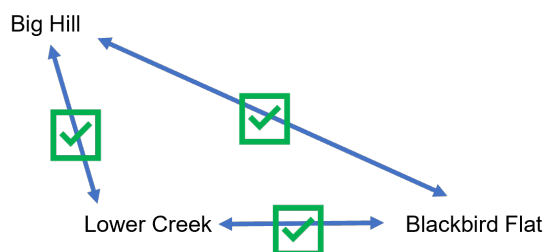
Vehicles along the route will have to wait for the escort vehicle to pass, then join on to the end of the queue.

Travel between the Armidale end and the Kempsey end will not be permitted during the midday opening. Travel will be from either end to Lower Creek in both directions.

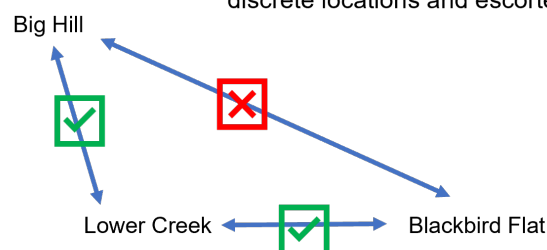
Proposed allowable traffic movements



4 days off roster – (Short term traffic control in discrete locations and escorted heavy vehicles)

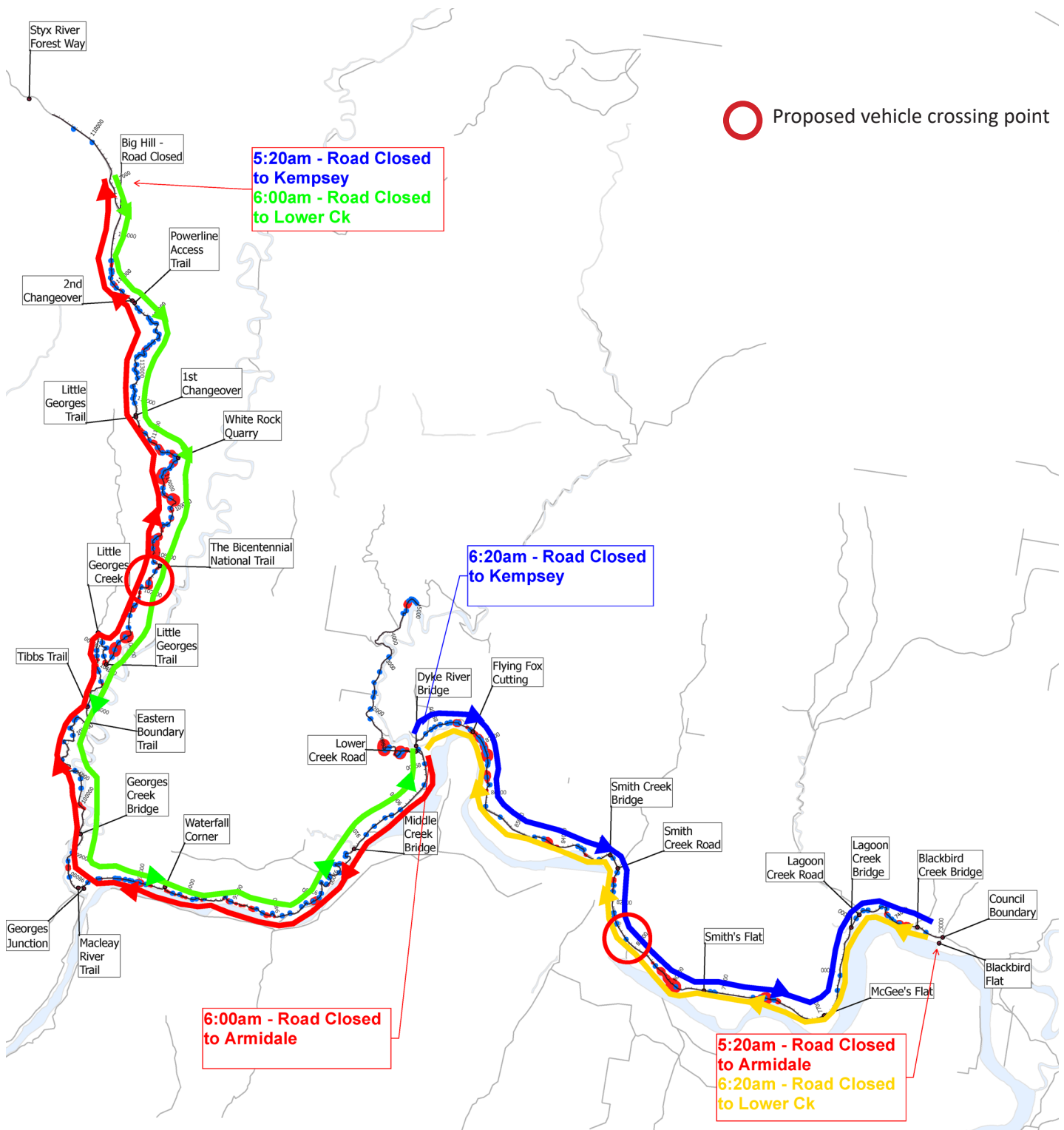


Overnight
5pm – 7am



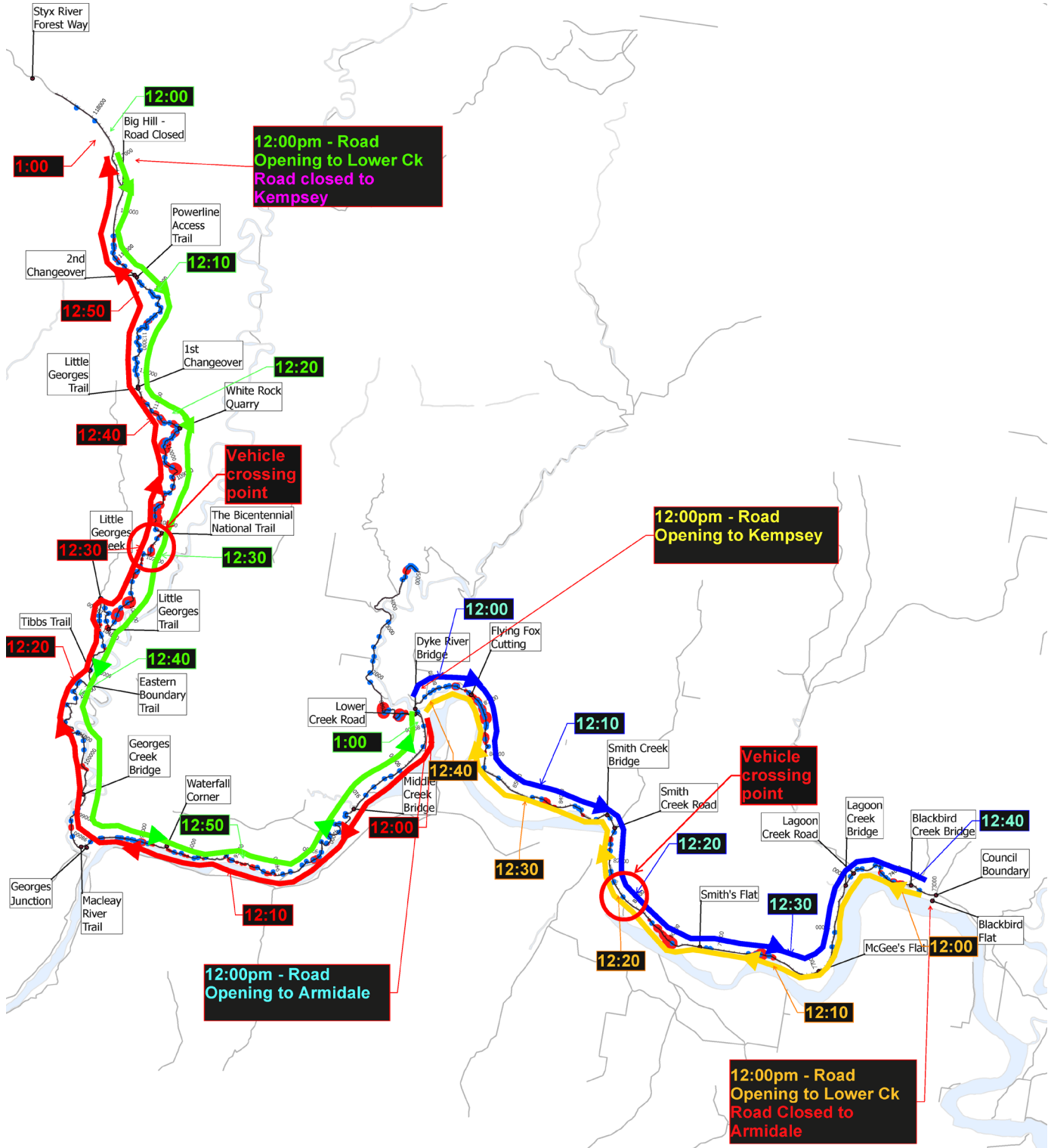
Midday opening

Road closure procedure - mornings (indicative example only)



Time	Closure
5:20am	<ul style="list-style-type: none"> Closure at western end for vehicles travelling to Kempsey Closure at eastern end for vehicles travelling to Armidale
6:00am	<ul style="list-style-type: none"> Closure at western end for people travelling to Lower Creek (approx. 1hr travel) Closure at Lower Creek for people travelling to the western end (approx. 1hr travel) Road closed and signs installed on all side roads
6:20am	<ul style="list-style-type: none"> Closure at eastern end for people travelling to Lower Creek (approx. 40 min travel) Closure at Lower Creek for vehicles travelling to Kempsey (approx. 40 min travel) Road closed signs installed on all side roads
7:00am	<ul style="list-style-type: none"> Work crews commence setting up on sites

Travel times (indicative example only)



	Time	Big Hill to Lower Creek
1	12:00pm	<ul style="list-style-type: none"> Work crews are off the road and having lunch
2	12:00pm	<ul style="list-style-type: none"> Escort crew opens gates at each location and commences leading traffic. Close gates before travelling
3	Approx. 12:30pm	<ul style="list-style-type: none"> Eastbound and westbound traffic cross near the Bicentennial National Trail at ch. 108,000
4	1:00pm	<ul style="list-style-type: none"> Eastbound traffic reaches Lower Creek and the escort driver closes the gate Westbound traffic reaches the Big Hill site boundary and the escort driver closes the gate
5	1:00pm	<ul style="list-style-type: none"> The work crew commence remobilising to their work area, or as soon as both escort crews have passed

	Time	Blackbird Flat to Lower Creek
1	12:00pm	<ul style="list-style-type: none"> Work crews are off the road and having lunch
2	12:00pm	<ul style="list-style-type: none"> Escort crew opens gates at each location and commences leading traffic. Close gates before travelling
3	Approx. 12:20pm	<ul style="list-style-type: none"> Eastbound and westbound traffic cross at ch. 81,000
4	12:40pm	<ul style="list-style-type: none"> Eastbound traffic reaches Lower Creek and the escort driver closes the gate Westbound traffic reaches the Blackbird Flat site boundary and the escort driver closes the gate
5	12:40pm	<ul style="list-style-type: none"> The work crew commence remobilising to their work area, or as soon as both escort crews have passed

Camp and batch plant - locations and benefits

What makes a good site

- Central location to the works (typically the middle of the work areas is about Lower Creek)
- Flat site
- Outside of the major flood level
- Not susceptible to localised cut off during smaller flood events
- Minimal bushfire risk
- Minimal clearing of vegetation
- Adjacent to the project.



Volumetric Mixer used as a fixed batch plant – 20 cubic metre per hour capacity

Benefits of having a site camp

- Significantly reduced project duration
- 450 less vehicle movements per day to and from site
- ½ travel duration at start and end of shift
- Reduced fatigue
- More productive labour force
- Less turnover of staff and labour.



Typical batch plant facility

NEXT STEPS

NOW

Early Contractor Involvement phase - extended to run until late in the third quarter of 2023
Road maintenance - ongoing

NEXT

Early works 2023
Main recovery project works 2024

How to find out more about the project

Further project information, including weekly updates, can be viewed on the Armidale Regional Council website:

www.armidaleregional.nsw.gov.au/kempsey-road

or you can call the project freecall line on:

1300 136 833 and press menu **option 1** to speak to the project's Communications Manager



PROJECT UPDATE DECEMBER 2023

KEMPSEY-ARMIDALE ROAD RESTORATION PROJECT

Midday traffic window survey

The community were recently asked to consider three options for a midday traffic window via a survey administered through Council's Your Say webpage. The survey was conducted from Wednesday 18 October 2023 to midnight on Wednesday 1 November 2023.

The options were all based on a 14-day cycle of a 10-day work-on roster and four-day off-roster. The work on-roster would be carried out from 7am until 5pm each day with a midday shutdown to provide a one hour traffic access window.

During these periods, stakeholders would be able to travel one way on either side of Lower Creek, namely:

- Big Hill to Lower Creek OR Lower Creek to Big Hill, and
- Lower Creek to Blackbird Flat OR Blackbird Flat to Lower Creek

The survey was carried out to determine if residents of the road would consider a reduced midday traffic access window during the 10-day work-on roster which would increase productivity and reduce project duration, but provide fewer access opportunities.

The options:

Three options were presented for consideration and feedback:

A: Current traffic proposal:

A midday traffic window on each of the 10 days work on-roster either side of Lower Creek.

B: Alternative - Option 1:

A midday traffic window on 3 of the 10 days work on-roster WEST of Lower Creek.

A midday traffic window on 5 of the 10 days work on-roster EAST of Lower Creek.

C: Alternative - Option 2:

A traffic window on 2 of the 10 days work on-roster either side of Lower Creek.

For all of the three options shown above, residents would be provided with additional traffic access opportunities as follows:

- General unrestricted access on each of the four days off-roster.
- Unrestricted access between 5pm and 7am each day.

Results of the survey:

- A total of 157 people have registered for project updates via email and were sent out information inviting participation in the survey.
- Of these a total of 27 respondents participated in the survey.
- Two responses were received from each of 5 properties on the project. The remainder consisted of one response from a single property.

Summary of preferences from all respondents:

- 33.3% of stakeholders supported Current traffic proposal (includes 2 living adjacent to project).
- 14.8 % of stakeholders supported Alternative – Option 1.
- 51.9 % of stakeholders supported Alternative - Option 2.

Summary of preferences for those living / leasing / owning property on project:

- 22.2 % of stakeholders supported Current traffic proposal (includes 2 living adjacent to project).
- 14.8 % of stakeholders supported Alternative – Option 1.
- 48.1 % of stakeholders supported Alternative - Option 2.

The results of the survey were submitted to Council for its consideration.

Based on the community feedback provided in the survey, Council have decided to adopt Option 2 as the preferred midday traffic access window arrangement during main construction works.

Private property access for project related activity

Prior to, and during main construction, Council's authorised staff and Contractor's may need to access properties along the project alignment to carry out works which could have an impact on the property. The types of activities will include, but not be limited to:

- Establishment and management of ancillary sites for things like, but not limited to, concrete batching and worker accommodation.
- Temporary stockpiles.
- Upslope treatments and downslope retaining structures.
- Temporary works such as U-turn / passing bays and sidetracks.
- New drainage construction.
- Pavement resurfacing.
- Surveying.

Before any works can be undertaken, affected landowners will be consulted on the planned impacts on their property.

The **Roads Act 1993** sets out requirements which must be met in determining these agreements and also regulates what types of works can be carried out on land adjoining a public road.

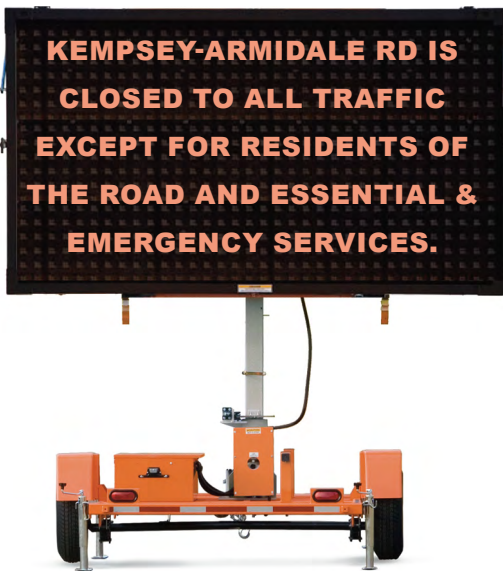
Council will be seeking to agree with landowners on the access needs of the project.

Consultation with affected landowners is important to ensure that they have a full understanding of the property access process and the exact nature of the impacts on the property.

Council will generate / prepare information packs for each property.

Generally, landowners will have an initial meeting to receive an information pack to provide them with detailed information and an opportunity to discuss any aspect of that at the time.

The information pack typically contains, but is not limited to: site plans for each impacted property, nature of the impact - temporary or permanent (life of project), a **Land Access Agreement** deed, reinstatement details and damage repair process and the type and duration of the work to be carried out.



New “Road Closed” signage and information displays

Additional signage is to be installed to advise the general public that the road is closed from Big Hill to Blackbird Flat.

The current locations at the Wollomombi and Kempsey ends of the road are being reviewed to provide better turnaround opportunities and room to safely stop to read the signs.

An additional location back from the Styx River Forest Way and Kempsey Road intersection is also being included as a new location for the “Road closed” signage.



In addition to the above, a broader network of over 40 flyer display locations has been established to improve the reach of key messaging that the **“Kempsey-Armidale Road is closed with the only exceptions being local residents of the road and essential and emergency services”**.

These locations include, but are not limited to, local businesses in Armidale, tourist holiday parks, caravan & camping and associated retail services, tourist information centres and 4WD associations.

The area covered extends from Newcastle north to Tweed Heads along the coast and major inland routes and destinations.

Lower Creek Community Hall

Preparations are progressing for the construction of the Lower Creek Community Hall.

Council has been working with representatives from the Lower Creek Local Area Committee to ensure the hall will serve the needs of the local community.

To date the following tasks have been completed:

- Geotechnical report received.
- Onsite water treatment design report received.
- Statement of Environmental Effects received and comments provided for finalisation.

- Structural drawings for the shed received with comments returned.

Tasks currently underway:

- Procurement of a building structure currently being finalised.
- Procurement of a civil works contractor underway.
- Procurement of building contractor being finalised.
- Development approvals being finalised.



Looking southeast over the proposed building site

Review of Environmental Factors

A new Review of Environment Factors (REF) has been developed for the project. This REF supersedes a previous REF written for Kempsey Road and Lower Creek Road works.

The previous REF was written based on conceptual designs, while the new REF takes into account the design developed during the Early Contractor Involvement (ECI) phase of the project.

The purpose of the REF is to describe the nature of the activities to be undertaken during construction and to document the likely impacts this will have on the environment.

The REF will ensure that a compliant **Environmental Management Plan** can be finalised to ensure that appropriate measures are put into place to protect the environment during construction.

This REF fulfils Council's obligation under section 5.5 of the EP&A Act, including to examine and take into account, to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the project.

The REF is now under review and will be determined by Council in the coming weeks.

What's next

During the Early Contractor Involvement (ECI) phase of the project, Seymour Whyte Constructions have worked collaboratively with Council to advance necessary preparation and investigations to enable final costings and a works program/schedule to be determined.

Seymour Whyte Constructions have submitted their final costs and program for the main construction works and this proposal is now being considered by Council.

Christmas break

The project will shut down over Council's annual Christmas closure from 12 noon on Friday 22 December 2023 until Monday 8 January 2024.



Council's project team wishes everyone a merry Christmas and a happy New Year.



The road will be only open to local residents of the road, and emergency and essential services.

Signs are in place at either end of the project to deter non-residents from using the road.

We recognise that there may be cumulative traffic delay impacts from other roadworks. Kempsey Shire Council provides a weekly works update on its website. Link provided opposite.

The Council also has a community e-newsletter database. Call 02 6566 3200 from 9am to 4:30pm Monday to Friday to be included in the e-newsletter on the database or email: ksc@kempsey.nsw.gov.au

Updates can be found at the links below:
(CTRL + click to follow links)

<https://www.kempsey.nsw.gov.au/Your-Valley/Ongoing-works-in-the-shire/Weekly-Works-Update>

Waterfall Way: Transport for NSW (TfNSW) provides information on its website. <https://roads-waterways.transport.nsw.gov.au/projects/waterfall-way/index.html>

TfNSW also posts regularly on the Waterfall Way Community Facebook page. Link to the Facebook page provided below:

<https://www.facebook.com/groups/waterfallwaycommunity>

Enquiries and more information:

Call **1300 136 833** and **press menu option 1** or email: council@armidale.nsw.gov.au

Updates can be viewed on the Armidale Regional Council website shown below:



www.armidaleregional.nsw.gov.au/kempseyroad

ARMIDALE
Regional Council