# Woolgoolga to Ballina Pacific Highway upgrade

Proposed temporary asphalt batch plant between Maclean and Devils Pulpit

**Community Consultation Report** 

Roads and Maritime Services | December 2018



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## **Executive summary**

Roads and Maritime Services, Pacific Complete and our contractor partners are working together to deliver the Woolgoolga to Ballina Pacific Highway upgrade.

Roads and Maritime is proposing to build a temporary batch plant to supply asphalt for the section of the upgrade between Maclean and Devils Pulpit. The need for the temporary asphalt batch plant was identified following a review of the asphalt supply for Woolgoolga to Ballina upgrade which began in July 2018.

This report provides a summary of the consultation carried out by Roads and Maritime to seek community feedback for a temporary asphalt batch plant on three shortlisted sites at Harwood, Mororo and Woombah.

We received feedback from 131 people and organisations, raising 170 individual comments about 26 different topics.

Key matters raised by the community during the consultation include:

- Specific comments about the site at Harwood:
  - Cumulative construction and traffic impact to residents with the construction of the new bridge over the Clarence River at Harwood
  - o Support for Harwood site due to existing construction traffic and access arrangements
  - o Proximity to Harwood Island school
  - Potential flood impacts
  - More residents in proximity than the other shortlisted sites
- Specific comments about the site at Mororo:
  - o Impact to ecologically sensitive area near Mororo
  - Support due to fewer impacted residents than the other shortlisted sites
- Specific comments about the site at Woombah:
  - o Local traffic impact at Woombah
  - o Proximity of the site to local residents
  - Support for the site due to fewer impacted residents then the other shortlisted sites
  - Support for the site due to better flood immunity than the other shortlisted sites
  - o Potential impact to tourism
  - Objection to building a temporary construction access
- General environment matters:
  - Noise from batch plant operation
  - o Air quality dust, odour and impact to health
  - o Impact to flora and fauna
  - Impact to waterways from site runoff
  - o Hazardous materials and emergency management
- General traffic matters:
  - Safety for road users
  - o Damage to local roads
- General support for a temporary asphalt batch plant.

Following consideration of community feedback as well as technical and environment impacts, Roads and Maritime's preferred location for the temporary asphalt batch plant is Mororo.

Environmental assessments have found the Mororo site has adequate flood immunity, temporary fencing is already in place to manage impacts on native fauna and additional measures will be implemented to

manage and monitor noise and air quality while hazardous materials will be stored and managed in line with Australian standards.

The Mororo site has less impacted residents and is generally located in a more sparsely populated area. Additionally, residents in the area can use an alternative access to the Pacific Highway to minimise interactions with project vehicles.

This site also provides direct access to the Pacific Highway and this intersection has acceleration and deceleration lanes and capacity for the required heavy and light vehicle movements.

On balance, the site at Mororo is found to best meet the technical, environment, community and traffic requirements with any potential impacts able to be mitigated.

### Next steps

An assessment of the preferred site will be progressed to the Department of Planning and Environment's independent Environmental Representative for consideration and approval.

We will provide information to local residents before work starts to build the batch plant, including working hours and what to expect during construction.

Roads and Maritime is continuing to identify and assess possible locations between Glenugie and Maclean for a second temporary asphalt batch plant and will update the community in the coming months.

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## 1.Introduction

## 1.1. Background

Roads and Maritime Services, Pacific Complete and our contractor partners are working together to deliver the Woolgoolga to Ballina Pacific Highway upgrade.

Roads and Maritime is proposing to build a temporary batch plant to supply asphalt for the section of the upgrade between Maclean and Devils Pulpit. The need for the temporary asphalt batch plant was identified following a review of the asphalt supply for Woolgoolga to Ballina upgrade which began in July 2018.

Before the review, the project team had invited feedback on a proposed temporary asphalt batch plant near Woombah in June 2018. The proposal was put on hold following extensive feedback received from the local community.

As part of the project team's review of the asphalt supply for the upgrade, three sites have been shortlisted as potential locations for a temporary batch plant to supply asphalt between Maclean and Devils Pulpit. This includes the original site proposed at Woombah as well as two additional sites at Mororo and Harwood.

Roads and Maritime sought feedback from the community in October and November 2018 on the three shortlisted sites. The feedback received will be considered in finalising the proposal for the temporary asphalt batch plant.

Roads and Maritime is continuing to identify and assess possible locations between Glenugie and Maclean for a second temporary asphalt batch plant and will update the community in the coming months.

## 1.2. Purpose of this report

This report outlines the consultation carried out to determine the preferred location for a temporary asphalt batch plant between Maclean and Devils Pulpit.

The report also provides an overview of the earlier consultation from June to July 2018 for the proposed temporary asphalt batch plant near Woombah.

## 2. Proposed temporary asphalt batch plant near Woombah

### 2.1. Consultation overview

Roads and Maritime sought feedback from the community between June and August 2018 about a proposed temporary asphalt batch plant near Woombah.

Feedback was initially invited between 20 June and 4 July 2018, with the feedback period extended three times to 18 July, 26 July and 10 August 2018 following a significant number of submissions and inquiries from the local community.

We have provided a table outlining the activities carried out as part of the consultation.

Date	Activity
20 June 2018	'Have your say' notification (Appendix A) and feedback form (Appendix B) distributed to about 70 properties in Woombah within about one kilometre of the proposed site
22 June 2018	Meeting with Woombah Woods Caravan Park residents
28 June 2018	Email sent to 276 registered stakeholders inviting feedback on the proposal Copies of notification made available at local businesses in Woombah and Iluka
30 June 2018	The project team spoke to 92 community members at the Iluka markets
5 July 2018	Notification (Appendix C), fact sheet (Appendix D) and feedback form distributed to 350 properties notifying of extended feedback period to 18 July 2018 and drop-in community information session  Copies of notification made available at local businesses  Email sent to 309 registered stakeholders
11 July 2018	Drop-in community information session attended by 60 people
12 July 2018	Email sent to 311 registered stakeholders with additional information about the proposed temporary batch plant
14 July 2018	The project team attended a facilitated meeting organised by the Woombah community
19 July 2018	Notification (Appendix E) and feedback form distributed to 1600 properties in Woombah, Iluka and Goodwood Island notifying of an additional extension to the feedback period to 26 July 2018 Copies of notification made available at local businesses Email sent to 306 registered stakeholders Made available on the project web page
23 July 2018	Notification (Appendix F) and feedback form distributed to 1600 properties in Woombah, Iluka and Goodwood Island notifying of the additional extension to the feedback period to 10 August 2018  Copies of notification made available at local businesses  Notification made available on the project web page
30 July 2018	Notification (Appendix G) distributed to 1600 properties in Woombah, Iluka and Goodwood Island advising the proposal is on hold Email sent to 1580 registered stakeholders SMS sent to 1413 registered stakeholders Notification made available on the project web page

## 2.2. Feedback summary

Between June and August 2018, Roads and Maritime received feedback from 206 people and organisations in response to the proposal for a temporary asphalt batch plant near Woombah.

Key matters raised by the community included:

- Traffic:
  - o Construction traffic numbers and routes
  - Safety for road users
  - Intersection performance and capacity
  - Requests for a dedicated construction site access
- Environment:
  - Impact to flora and fauna
  - o Noise and vibration from construction and operation of the temporary batch plant
  - Air quality
  - o Surface water management
- Community impact:
  - Impact to tourism and local economy
  - Impact to residents near the site
- Impact to health
- Consultation process
- Assessment of options and justification of the proposal.

Following the extensive feedback from the community in objection to the proposal, the consultation was put on hold while the project team reviewed the asphalt supply for the Woolgoolga to Ballina upgrade.

Feedback received during this consultation period was a key consideration in Roads and Maritime's review of the asphalt supply strategy.

## 3. Asphalt supply review

In July 2018, following community feedback about the proposed temporary batch plant near Woombah, the project team started to review the supply strategy for the manufacture and delivery of asphalt for the Woolgoolga to Ballina upgrade.

The review to date has involved:

- Assessing how much asphalt will be used for the upgrade and when and where it is needed
- Reviewing the capacity of existing permanent asphalt batch plants and the need for temporary asphalt batch plants
- Identifying potential sites for temporary asphalt batch plants and developing a shortlist of possible sites
- Engaging with directly affected residents to seek their views on the shortlisted sites.

Existing permanent batch plants in Alstonville, near Ballina and Coffs Harbour are already engaged to supply the upgrade north of Devils Pulpit and south of Tucabia respectively. About 40 percent of all the asphalt needed for the upgrade will be supplied by these permanent batch plants.

The project team's assessment determined two temporary batch plants are needed to supply asphalt for the upgrade between Tucabia and Devils Pulpit:

- One temporary batch plant is needed to supply asphalt between Maclean and Devils Pulpit
- One temporary batch plant is needed to supply asphalt between Tucabia and Maclean.

Work to mobilise the preferred site between Maclean and Devils Pulpit will need to start before the end of 2018 with asphalt supply required from January 2019.

A temporary asphalt batch plant between Glenugie and Maclean will need to be mobilised in the first quarter of 2019.

## 3.1. Proposed temporary asphalt batch plant between Maclean and Devils Pulpit

Following the project team's review of the asphalt supply for the upgrade, three sites have been identified as best meeting the assessment criteria to supply asphalt between Maclean and Devils Pulpit.

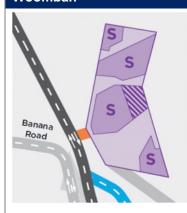
The shortlisted sites are located at Harwood, Mororo and Woombah. The sites were shortlisted because they:

- Satisfied all or most of the technical requirements
- Met all or most of the requirements under the Minister's Conditions of Approval or impacts were able to be mitigated
- Either have existing access to the highway or have capacity for intersections to be upgraded.

All identified sites for temporary asphalt batch plants have been assessed against Minister's Conditions of Approval – B73 Ancillary Facilities which outline strict requirements for managing the project's construction impact.

#### 3.1.1. Overview of shortlisted sites

#### Woombah



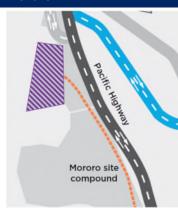
#### Benefits:

- Meets all the criteria in the Minister's Conditions of Approval B73
   Ancillary Facilities with no additional mitigation measures needed
- Out of the flood plain and has a 1 in 100 year flood immunity
- Nearest residence is more than 500 metres from the site boundary
- · Screened by vegetation around the whole site
- · No vegetation removal required
- No direct impacts to environmentally sensitive areas
- Area is within the approved project boundary and Environment Protection Licence boundary.

#### Constraints:

 Dedicated construction access would need to be built to minimise interaction with traffic on local roads to mitigate community concerns.

#### Mororo



#### Benefits:

- Partially meets all the criteria in the Minister's Conditions of Approval –
   B73 Ancillary Facilities, but the impacts can be mitigated through
- · additional measures
- Nearest residence is more than 550 metres from the site boundary and is separated by the existing Pacific Highway
- Access to the highway available through an existing fully functional intersection
- Area is within the approved project boundary and Environment Protection Licence boundary
- No additional vegetation removal required.

#### Constraints:

- Additional requirements for drainage and erosion and sediment controls due to manmade clean water diversion drain within 50 metres of the site
- Site is within 50 metres of sensitive ecological environments including koala and green-thighed frog habitat.

#### Harwood



#### Benefits:

- Partially meets all the criteria in the Minister's Conditions of Approval B73 Ancillary Facilities, but the impacts can be mitigated through additional measures
- Located within the previously established site for construction of the new bridge over the Clarence River at Harwood, which is being demobilised
- Nearest residences are more than 300 metres from the site and are separated by the existing Pacific Highway and local roads
- Area is within the approved project boundary and Environment Protection Licence boundary
- No additional vegetation removal required
- Site already established with a 1 in 20 flooding immunity
- No upgrades to intersections required
- Construction traffic can use dedicated access
- Potential to haul asphalt within the corridor until late 2019 minimising interactions between public and construction vehicles.

## 4. Consultation approach

Follow the review of the asphalt supply for the upgrade, Roads and Maritime invited community feedback between 22 October and 9 November 2018 to inform the proposal for a temporary asphalt batch plant between Maclean and Devils Pulpit. The community was invited to provide feedback on each of the three shortlisted sites.

Roads and Maritime notified the community about the opportunity to provide feedback by:

- Distributing a community update to about 5000 properties near the upgrade between Maclean and Devils Pulpit (Appendix H)
- Doorknocking properties within 750 metres of the shortlisted sites
- Providing an update on Roads and Maritime's website, with a web version of the community update available to download
- Issuing a media release to local media outlets
- Emailing 304 registered stakeholders and sending an SMS to 286 registered stakeholders with a link to the website
- Advertising on the NSW Government's 'Have your say' web page.

Drop-in sessions were held during the display period so the community could ask questions of the project team:

Location	Date	Attendance
Woombah Recreational Reserve Middle Street, Woombah	Saturday 3 November 12 noon to 2pm	35
Mororo site compound Gate 95.1, Pacific Highway, Mororo	Monday 5 November 5pm to 7pm	2
Harwood Community Hall River Street, Harwood	Tuesday 6 November 5pm to 7pm	9

In total, 46 people attended the drop-in information sessions.

Feedback forms were provided in the community updates and at drop-in sessions for respondents to indicate their level of support for each of the shortlisted sites and any specific concerns about construction and operation of the proposed temporary asphalt batch plant.

The existing communication channels for the upgrade were available for people to provide feedback:

Post In person	Woolgoolga to Ballina upgrade, PO Box 546 Grafton NSW 2460  Woolgoolga to Ballina project information centre, 21 Prince Street, Grafton
Email	W2B@pacificcomplete.com.au
Phone 24-hour project information line: 1800 778 900	

## 5. Feedback summary

Between 22 October and 9 November 2018, Roads and Maritime received feedback from 131 people and organisations raising 26 different matters.

Submissions were received from people living in:

- Woombah (53 people)
- Iluka (31 people)
- Harwood (12 people)
- Maclean (12 people)
- Not stated (six people)
- Gulmarrad (five people)
- Goodwood Island (three people)
- Illarwill (two people)
- Ashby (one person)
- Ashby Heights (one person)
- Chatsworth (one person)
- Mororo (one person)
- Warregah Island (one person)
- Woodford Island (one person)
- Outside NSW (one person).

Most respondents provided submissions using the feedback form (129 people) and two people responded via email.

#### 5.1. Sentiment

The feedback form allowed respondents to indicate their level of support of the proposed temporary asphalt batch plant, as well as the sentiment for each of the three shortlisted sites. Roads and Maritime has provided a table showing the sentiment indicated in the submissions.

	Support	Conditional support	Does not support	Not stated
General	76	0	38	17
Harwood	61	4	33	33
Mororo	50	9	37	35
Woombah	50	4	58	19

Of the 53 people who responded from Woombah, 23 indicated support for the proposed site at Harwood. The Woombah site was supported by 17 people and the Mororo site was supported by 14 people.

One response was received from a resident in Mororo which indicated conditional support for the Mororo site and did not provide a sentiment for the other two sites.

Submissions were received from 12 residents in Harwood, with six people supporting the Mororo site. Four Harwood residents supported the Woombah site while only one supported the Harwood site.

## 5.2. Key matters raised

In total, 26 unique topics were raised with 170 individual comments. We've provided a summary below of the topics raised.

#### General feedback

- Environment:
  - Noise from batch plant operation (11 comments)
  - Air quality dust (nine comments)
  - Air quality health (nine comments)
  - Air quality odour (five comments)
  - o Impact to flora and fauna (nine comments)
  - o Impact to waterways from site runoff (five comments)
  - Hazardous materials and emergency management (two comments)
- Traffic:
  - Safety for road users (19 comments)
  - o Potential damage to local roads (three comments)
  - Impact to Pacific Highway traffic (one comment)
- General support for the proposal (11 comments).

#### Harwood site

- Support for the Harwood site due to existing construction traffic and access arrangements (six comments)
- Cumulative construction impact from the new bridge over the Clarence River (six comments)
- Proximity to Harwood Island Public School (four comments)
- Cumulative traffic impact (four comments)
- Potential flood impact (four comments)
- More residents in proximity than the other shortlisted sites (four comments).

#### **Mororo** site

- Impact to ecologically sensitive area near Mororo (13 comments)
- Support due to fewer impacted residents than the other shortlisted sites (six comments).

#### Woombah site

- Local traffic impact (22 comments)
- Proximity of the site to local residents (nine comments)
- Impact to tourism (three comments)
- Support due to fewer impacted residents than the other shortlisted sites (two comments)
- Objection to building a temporary construction access road (two comments)
- Support due to better flood immunity (one comment).

## 5.3. Response to feedback

The table below provides a summary of the key matters raised and Roads and Maritime's responses.

Matter raised	Roads and Maritime's response
Environment	
Noise from batch plant operation (11 comments)	Independent acoustic specialists have been engaged to assess the potential noise and vibration impact from construction and operation of a temporary asphalt batch plant.
(Trissimients)	Initial assessments indicate noise and vibration levels would be within the limits set by the NSW Environment Protection Authority and under the project's Environment Protection Licence (EPL).
	Construction and operation of the temporary asphalt batch plant will be carried out in accordance with the project's Construction Noise and Vibration Management Plan.
	Most activities for the construction and operation of the temporary asphalt batch plant will be done during approved work hours (from 7am to 6pm between Monday and Friday and 8am to 5pm on Saturday).
	Some work will be done outside approved construction hours including:
	Starting operation from 6am to maximise asphalt production
	<ul> <li>Supplying asphalt during night work, such as traffic changes.</li> </ul>
	All activities will be carried out in line with the project's out of hours work procedure and impacted residents will be notified before work starts.
	Noise and vibration monitoring will be carried out to ensure the levels are within the allowable limits.
Air quality:     Dust from batch plant operation and	Temporary asphalt batch plants for the Woolgoolga to Ballina upgrade will be built to stringent standards which are regulated by the NSW Environment Protection Authority.
haulage (nine comments)  • Impact to health (nine comments)	Independent air quality and odour specialists have been engaged to assess the potential impact and will prepare an air quality impact assessment for the preferred site.
Odour (five comments)	To manage air quality impacts at temporary asphalt batch plants, the project team will:
Gudur (IIVE Comments)	Install and maintain particulate extraction equipment
	Maintain bitumen products at the lowest possible temperature
	Ensure machinery meets industry standards
	<ul> <li>Monitor and spray water on aggregate stockpiles to minimise dust.</li> </ul>
	The project team will regularly monitor the air quality around the plant to ensure compliance with legislation, air emission standards and the conditions of the project's EPL.
	Dust monitoring will be carried out during the establishment, operation and decommissioning of the batch plant and results compared to the criteria provided in the project's EPL.

Matter raised	Roads and Maritime's response
<ul> <li>Flora and fauna:</li> <li>General impact to flora and fauna (nine comments)</li> <li>Impact to ecologically sensitive area near Mororo (13 comments)</li> </ul>	All identified sites have undergone a biodiversity assessment by an ecologist to ensure potential impact to flora and fauna can be mitigated.  Construction and operation of a temporary batch plant would be carried out in line with the project's Construction Environment Management Plan to ensure impacts to environmentally sensitive areas are minimised.  Each of the shortlisted sites would be built and operated on a previously established hardstand area with no additional vegetation removal required.
Flooding:  Potential flooding at Harwood site (four comments)  Support for Woombah site due to better flood immunity (one comment)	The project's Minister's Conditions of Approval outline strict requirements for the management and mitigation of a potential flood. Detailed flood modelling has been completed for all identified sites as part of the assessment to ensure the project's flood impact objectives have been met.  The site at Harwood has a 1 in 20 year flood immunity. The site has previously been assessed for flood impacts as part of construction of the new bridge over the Clarence River. The flood modelling shows the potential impact would be within the limits required by the project's Conditions of Approval.
<ul><li>Water management:</li><li>Impact to waterways from site runoff (five comments)</li></ul>	To mitigate the impact of site runoff, groundwater management and erosion and sediment controls would be implemented in accordance with the project's Construction Environment Management Plan.
Traffic	
<ul> <li>Traffic and safety:</li> <li>Local traffic impacts at Woombah (22 comments)</li> <li>Safety for road users (19 comments)</li> <li>Support for the Harwood site due to existing construction traffic and access arrangements (six comments)</li> <li>Cumulative traffic impacts at Harwood (four comments)</li> <li>Potential damage to local roads (three comments)</li> <li>Objection to building a temporary construction access at Woombah (two comments)</li> <li>Impact to Pacific Highway traffic (one comment)</li> </ul>	To ensure access to the temporary batch plant site meets safety requirements, traffic arrangements will be site-specific and will be considered as part of the assessment of the preferred site.  Initiatives to improve safety near construction access roads may include:  • Yellow line marking to replace existing white road markings on the existing Pacific Highway to alert motorists to changed conditions such as reduced speed limits or workers and machinery nearby  • Electronic message signs to deliver information to road users about the area they are travelling through  • Vehicle-activated speed signs to remind motorists of their speed  • Variable speed limit signs which can be changed quickly and easily, reducing delays for motorists and improving safety for workers  • Reduced speed limits near construction accesses.  The shortlisted sites at Harwood and Mororo would use existing construction access roads. To mitigate community concern, a dedicated construction access would be built at the Woombah site to minimise interaction with traffic on local roads.  The project team will monitor and rectify any damage to roads as required to maintain a safe road environment for road users.

Matter raised	Roads and Maritime's response
Community impacts	
<ul> <li>Proximity of local communities to shortlisted sites:</li> <li>Proximity of the Woombah site to local residents (nine comments)</li> <li>Support for Mororo site due to fewer impacted residents than the other shortlisted sites (six comments)</li> <li>Cumulative construction impacts from the new bridge over the Clarence River (six comments)</li> <li>Proximity to Harwood Island Public School (four comments)</li> <li>More residents in proximity to Harwood site (four comments)</li> <li>Impact to tourism at Woombah/Iluka (three comments)</li> <li>Support for Woombah site due to fewer impacted residents (two comments)</li> </ul>	Roads and Maritime appreciates community concern about the potential impact of the proposed temporary batch plant and has considered feedback in its decision-making for the shortlisted sites between Maclean and Devils Pulpit.  To mitigate community concern about road user safety and local traffic impacts at Woombah, a dedicated construction access would be built at the Woombah site to minimise interaction with traffic on local roads. As part of consultation for the proposed temporary asphalt batch plant, Roads and Maritime has doorknocked and met with residents near the three shortlisted sites and will continue to keep them informed as the proposal is finalised. Residents will continue to be kept updated during the construction and operation of the temporary batch plant and will be notified in advance of any activities required outside approved construction work hours. Potential impacts from construction and operation of the batch plant, including traffic, noise and vibration, and air quality, will be assessed and managed in accordance with the project's Conditions of Approval and management plans.  We appreciate concern from local residents about the cumulative impact of construction activities in the Harwood area and will consider this feedback in finalising the proposal.
Other feedback	
Hazardous materials and emergency management:  Contamination (one comment)  Bushfire management (one comment)	<ul> <li>Personal injury</li> <li>Plant and equipment related emergencies</li> <li>Natural events including flood and fire</li> <li>Environmental events including those involving hazardous materials.</li> <li>Roads and Maritime ensures all contractors working on the upgrade have an emergency management plan relating to their work, which is trialled and tested regularly. Fatal and severe risk reviews are also used to proactively plan and manage working environments to avoid emergency situations.</li> <li>All dangerous goods and substances will be stored and used in accordance with the Australian Standard (AS1940).</li> </ul>
General support for the proposal (11 comments)	Roads and Maritime appreciates the support received for the proposed temporary asphalt batch plant.

## 6. Recommendation and next steps

#### 6.1. The decision

Following feedback received from the community and in consideration of this feedback as well as technical and environment impacts, Roads and Maritime's preferred location for the temporary asphalt batch plant is Mororo.

Environmental assessments have found the Mororo site has adequate flood immunity, temporary fencing is already in place to manage impacts on native fauna and additional measures will be implemented to manage and monitor noise and air quality while hazardous materials will be stored and managed in line with Australian standards.

The Mororo site has less impacted residents and is generally located in a more sparsely populated area. Additionally, residents in the area can use an alternative access to the Pacific Highway to minimise interactions with project vehicles.

This site also provides direct access to the Pacific Highway and this intersection has acceleration and deceleration lanes and capacity for the required heavy and light vehicle movements.

On balance, the site at Mororo is found to best meet the technical, environment, community and traffic requirements with any potential impacts able to be mitigated.

## 6.2. Next steps

An assessment of the preferred site will be progressed to the Department of Planning and Environment's independent Environmental Representative for consideration and approval.

Roads and Maritime will provide more information to local residents before work starts to build the batch plant, including working hours and what to expect during construction.

Roads and Maritime is continuing to identify and assess possible locations between Glenugie and Maclean for a second temporary asphalt batch plant and will update the community in the coming months.

## Appendix A – June 2018 'Have your say' notification





June 2018

## Proposed temporary asphalt batch plant at Woombah for the Woolgoolga to Ballina Pacific Highway upgrade

The Australian and NSW governments are jointly funding the Woolgoolga to Ballina Pacific Highway upgrade. Roads and Maritime Services' Pacific Highway Project Office, Pacific Complete and its contractor partners are working together to deliver the upgrade.

To build the upgrade, the project team will be establishing batch plants along the 155 kilometre route. These sites will have different functions and will support the building of the new road.

The project team is proposing to build a temporary asphalt batch plant at Woombah. The batch plant would be located on the eastern side of the existing highway about 700 metres north of the old Iluka Road turnoff. A map has been provided to show the proposed location of the temporary asphalt batch plant.

This facility would make asphalt for the upgrade between Maclean and Devils Pulpit. Batch plants are facilities where raw materials are brought in, mixed together and then loaded into trucks and transported to site for use.

If approved, we would start building this site in July, with the batch plant operational by mid-August 2018. This site is proposed to be operational for about two and a half years with the land to be rehabilitated after completion in line with the project's conditions of approval.

#### What to expect

The batch plant would involve the building and operation of:

- · Temporary offices with amenities for staff
- · Car and truck parking areas
- Storage and stockpiling areas for equipment and materials
- · Temporary batch plant for making asphalt.

#### Key activities:

- Building installing environmental controls, building the site, the parking areas, operating plant and equipment
- Operation staff parking, operating machinery, material and equipment storage, stockpiling, delivery of materials, making asphalt, transporting asphalt for use on the upgrade
- Removal and rehabilitation removal of buildings, car park and stockpiles, reinstating the area, landscaping and rehabilitation.



Temporary batch plant at Avenue Road, Pillar Valley for the Woolgoolga to Ballina Pacific

#### How would the temporary batch plant impact you

Access to the proposed batch plant would be via the new Garretts Lane East diversion road. Traffic would then travel north over Iluka Road onto the Old Pacific Highway and into the site. There would be up to 500 heavy vehicle movements and 100 light vehicle movements per day at peak.





expected vehicle movements (one vehicle travelling in and out of the site is two movements)

During this work, impacts including noise and dust may occur. The project team would use proven environmental management and mitigation methods to minimise these impacts during our work. Some of the measures we use to minimise dust and noise include:

- · Spraying water for dust suppression
- Applying dust binding agents to cover stock piles and mounds during construction
- Monitoring air quality and noise
- Positioning noise generating plant and equipment away from residential properties, where practicable
- · Service and maintain plant and equipment so they are in good working order
- Minimising the number of plant and equipment operating at the same time
- Use natural features and site structures to help mitigate noise.



#### Work hours

Typically work would be carried out during the project's approved construction hours which are:



In areas where residents live more than 200 metres from the work area, extended work hours are allowed between 6am and 7am and 6pm and 7pm from Monday to Friday.

Additionally, work outside or normal construction hours is also allowed where the impact to residents is predicted to be low, including no greater increase in noise levels than 5 decibels above the existing background noise level.

The batch plant would need to be operational whenever asphalting work is required on the road. To minimise the impact on the Pacific Highway and ensure the work sites are safe, some of this work would be carried out at night. The temporary batch plant would need to operate at night to support these activities. Residents would be notified in advance of this taking place.

#### Have your say

We are seeking your feedback on the proposed building and operation of the temporary asphalt batch plant at Woombah. To have your say, please fill out the attached feedback form by **Wednesday 4 July 2018**.

You can return it by:

- Email: W2B@pacificcomplete.com.au
- · Post: Please use the supplied reply paid envelope.

Alternatively, you can provide your feedback over the phone by calling 1800 778 900 (toll free).

#### Next steps

The project team will consider your feedback as part of the assessment of the proposed temporary batch plant at Woombah. This will also assist us to manage any concerns you may have.

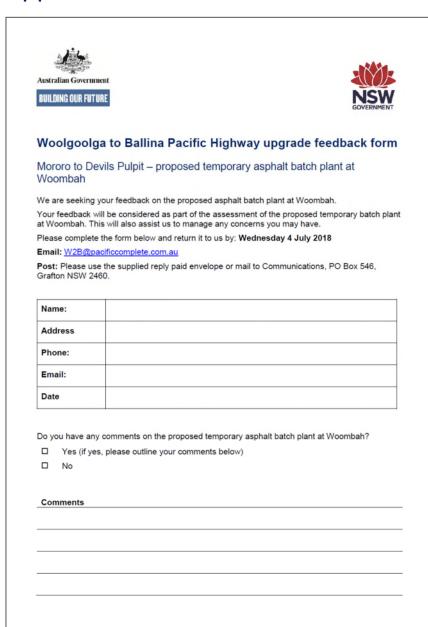
#### More information

For more information about the project, please contact us on 1800 778 900, dial 1, email W2B@pacificcomplete.com.au or visit the project website at rms.nsw.gov.au/W2B.



If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 778 900.

## Appendix B – June 2018 feedback form



		-
Vould you	like the project team to contact you to discuss your feedback?	
Yes 🗆	No	
hank you f	for completing this feedback form.	
you would ommunity in	like more information or have a question about the project, please call the toll free nformation line on 1800 778 900 or email	

## Appendix C – July 2018 notification 'Have your say' extended to 18 July 2018





July 2018

Have your say - extended consultation period for the proposed temporary asphalt batch plant at Woombah for the Woolgoolga to Ballina Pacific Highway upgrade

The Australian and NSW governments are jointly funding the Woolgoolga to Ballina Pacific Highway upgrade. Roads and Maritime Services' Pacific Highway Project Office, Pacific Complete and its contractor partners are working together to deliver the upgrade.

In response to community feedback the Woolgoolga to Ballina Pacific Highway upgrade team has extended the consultation period for the proposed temporary asphalt batch plant at Woombah until **Wednesday 18 July 2018**. We have provided a map to show the location of the proposed batch plant.

#### Have your say

We are seeking your feedback on the proposed building and operation of the temporary asphalt batch plant at Woombah, please see attached notification for further details. To have your say, please fill out the feedback form by **Wednesday 18 July 2018**. You can return it by:

- Email: W2B@pacificcomplete.com.au
- Post; Please use the supplied reply paid envelope or send to Woolgoolga to Ballina Pacific Highway upgrade, Att: Communications, PO Box 546 Grafton NSW 2460.

Alternatively, you can provide your feedback over the phone by calling 1800 778 900 (toll free).

#### Meet with the project team

The project team will be hosting a community information drop in session to discuss the proposal and answer questions. There will be no formal presentation, so please drop in at any time:

5.00pm - 7.00pm

#### Wednesday 11 July

Woolgoolga to Ballina Pacific Highway upgrade – Mororo construction site compound

Gate 95.1, Pacific Highway, Mororo

Access the site from the Pacific Highway via new Lewis Lane and take the first right into the compound

#### Next steps

After the consultation period closes, the project team will consider community and stakeholder feedback as part of the environmental assessment of the proposed temporary batch plant at Woombah.

The assessment of the proposed site will also include, but not be limited to, consideration of environmental and traffic impacts. The site assessment will be provided to the Department of Planning and Environment's independent Environmental Representative for consideration and approval.

#### More information

The project team must comply with the environmental guidelines outlined in the project's Conditions of Approval and Construction Environmental Management Plan. For more information you can find these documents on our website under the project documents.

For more information about the project, please contact us on 1800 778 900, dial 1, email W2B@pacificcomplete.com.au or visit the project website at rms.nsw.gov.au/W2B.





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## Appendix D – July 2018 fact sheet





July 2018

## Proposed temporary asphalt batch plant at Woombah for the Woolgoolga to Ballina Pacific Highway upgrade

The Australian and NSW governments are jointly funding the Woolgoolga to Ballina Pacific Highway upgrade. Roads and Maritime Services' Pacific Highway Project Office, Pacific Complete and its contractor partners are working together to deliver the upgrade.

To build the upgrade, the project team will be establishing batch plants along the 155 kilometre route. These sites will have different functions and will support the building of the new road.

The project team is proposing to build a temporary asphalt batch plant at Woombah. The batch plant would be located on the eastern side of the existing highway about 700 metres north of the old Iluka Road turnoff. A map has been provided to show the proposed location of the temporary asphalt batch plant.

This facility would make asphalt for the upgrade between Maclean and Devils Pulpit. Batch plants are facilities where raw materials are brought in, mixed together and then loaded into trucks and transported to site for use.

If approved, we would start building this site in July, with the batch plant operational by mid-August 2018. This site is proposed to be operational for about two and a half years with the land to be rehabilitated after completion in line with the project's conditions of approval.

#### What to expect

The batch plant would involve the building and operation of:

- · Temporary offices with amenities for staff
- · Car and truck parking areas
- Storage and stockpiling areas for equipment and materials
- · Temporary batch plant for making asphalt.

#### Key activities:

- Building installing environmental controls, building the site, the parking areas, operating plant and equipment
  - Temporary batch plant at Avenue Road, Pillar Valley for the Woolgoolga to Ballina Pacific Highway upgrade
- Operation staff parking, operating machinery, material and equipment storage, stockpilling, delivery of materials, making asphalt, transporting asphalt for use on the upgrade
- Removal and rehabilitation removal of buildings, car park and stockpiles, reinstating the area, landscaping and rehabilitation.

#### How would the temporary batch plant impact you

Access to the proposed batch plant would be via the new Garretts Lane East diversion road. Traffic would then travel north over Iluka Road onto the Old Pacific Highway and into the site. There would be up to 500 heavy vehicle movements and 100 light vehicle movements per day at peak.



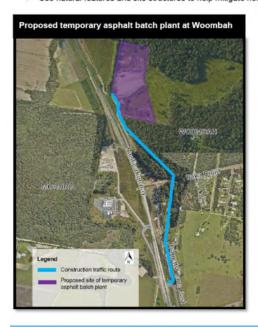


100 expected total staff car and ute movements\*

Expected vehicle movements (one vehicle travelling in and out of the site is two movements

During this work, impacts including noise and dust may occur. The project team would use proven environmental management and mitigation methods to minimise these impacts during our work. Some of the measures we use to minimise dust and noise include:

- · Spraying water for dust suppression
- · Applying dust binding agents to cover stock piles and mounds during construction
- · Monitoring air quality and noise
- Positioning noise generating plant and equipment away from residential properties, where practicable
- · Service and maintain plant and equipment so they are in good working order
- Minimising the number of plant and equipment operating at the same time
- Use natural features and site structures to help mitigate noise.



#### Work hours

Typically work would be carried out during the project's approved construction hours which are:



In areas where residents live more than 200 metres from the work area, extended work hours are allowed between 6am and 7am and 6pm and 7pm from Monday to Friday.

Additionally, work outside or normal construction hours is also allowed where the impact to residents is predicted to be low, including no greater increase in noise levels than 5 decibels above the existing background noise level.

The batch plant would need to be operational whenever asphalting work is required on the road. To minimise the impact on the Pacific Highway and ensure the work sites are safe, some of this work would be carried out at night. The temporary batch plant would need to operate at night to support these activities. Residents would be notified in advance of this taking place.

#### Have your say

We are seeking your feedback on the proposed building and operation of the temporary asphalt batch plant at Woombah. To have your say, please fill out the attached feedback form by **Wednesday 18 July 2018**.

You can return it by:

- Email: W2B@pacificcomplete.com.au
- . Post: Please use the supplied reply paid envelope.

Alternatively, you can provide your feedback over the phone by calling 1800 778 900 (toll free).

#### Next steps

The project team will consider your feedback as part of the assessment of the proposed temporary batch plant at Woombah. This will also assist us to manage any concerns you may have.

#### More information

For more information about the project, please contact us on 1800 778 900, dial 1, email W2B@pacificcomplete.com.au or visit the project website at rms.nsw.gov.au/W2B.



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## Appendix E – July 2018 notification 'Have your say' extended to 26 July 2018





July 2018

Have your say – extended consultation period for the proposed temporary asphalt batch plant near Woombah for the Woolgoolga to Ballina Pacific Highway upgrade

The Australian and NSW governments are jointly funding the Woolgoolga to Ballina Pacific Highway upgrade. Roads and Maritime Services' Pacific Highway Project Office, Pacific Complete and its contractor partners, are working together to deliver the upgrade.

In response to community concerns and feedback about the preferred location at Woombah, the project team is reinvestigating three previous locations – north of the current project compound site at Mororo, west of Woombah and Devils Pulpit. The project team is also doing investigations into other possible locations – including private land on Jackybulbin Road, Mororo and a future rest area north of Mororo – for the proposed temporary asphalt batch plant.

Information from this review and details of the preferred site will be provided to the community for further feedback. The project team will provide detailed information about traffic arrangements and management, expected operation of the proposed batch plant and expected truck movements for the batch plant for the preferred site.

The project team will organise two information sessions in the week commencing 30 July to provide the community with opportunities to speak to project staff. This information will be provided before Friday 26 July 2018.

To allow time for the community to consider any additional information and provide feedback on it, the project team is extending the consultation period until Friday 10 August 2018.

The project team needs up to 50,000 tonnes of asphalt to build the new road between the Maclean interchange and Iluka Road turn off.

#### How temporary asphalt batch plant sites are assessed

In general, sites proposed for temporary asphalt batch plants are assessed in two stages. The first stage includes assessing the sites against a set of criteria. This criteria is based on the project's conditions of approval and includes:

- · Accessibility to construction sites
- · Impacts on local and through traffic
- · Ecological and environmental significance including not removing native vegetation
- Flood immunity
- · Impacts from air quality, dust, odour and noise.

The project team will assess available sites against this criteria and then identifies a preferred location.

Once the preferred location is identified, the project team will carry a more detailed assessment. The detailed assessment is only carried out on the preferred option. This is called a Major Ancillary Facility Assessment. This includes independent noise, odour, air quality, ecology and traffic studies and consultation with the community and stakeholders. These studies and the community feedback are provided to Roads and Maritime Services for a decision. If the decision is to progress the preferred option, it is sent to the Department of Planning and Environment's independent representative for approval.

#### Have your say - extended consultation period

We are extending the period for feedback from the community and stakeholders on the current proposal for a temporary asphalt batch plant at Woombah, for further information please see the website <a href="ms.nsw.gov.au/W2B">ms.nsw.gov.au/W2B</a>. To have your say, please fill out the attached feedback form by 10 August 2018. You can return it by:

- Email: W2B@pacificcomplete.com.au
- Post: Please use the supplied reply paid envelope or send to Woolgoolga to Ballina Pacific Highway upgrade, Att: Communications, PO Box 546 Grafton NSW 2460.

Alternatively, you can provide your feedback over the phone by calling 1800 778 900 (toll free).

#### More information

The project team must comply with the environmental guidelines outlined in the project's Conditions of Approval and Construction Environmental Management Plan. For more information, you can find these documents on our website under the project documents.

For more information about the project, please contact us on 1800 778 900, dial 1, email W2B@pacificcomplete.com.au or visit the project website at rms.nsw.gov.au/W2B.



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## Appendix F – July 2018 notification 'Have your say' extended to 10 August 2018





July 2018

Have your say – extended consultation period for the proposed temporary asphalt batch plant near Woombah for the Woolgoolga to Ballina Pacific Highway upgrade

The Australian and NSW governments are jointly funding the Woolgoolga to Ballina Pacific Highway upgrade. Roads and Maritime Services' Pacific Highway Project Office, Pacific Complete and its contractor partners, are working together to deliver the upgrade.

In response to community concerns and feedback about the preferred location at Woombah, the project team is reinvestigating three previous locations – north of the current project compound site at Mororo, west of Woombah and Devils Pulpit. The project team is also doing investigations into other possible locations – including private land on Jackybulbin Road, Mororo and a future rest area north of Mororo – for the proposed temporary asphalt batch plant.

Information from this review and details of the preferred site will be provided to the community for further feedback. The project team will provide detailed information about traffic arrangements and management, expected operation of the proposed batch plant and expected truck movements for the batch plant for the preferred site.

The project team will organise two information sessions in the week commencing 30 July to provide the community with opportunities to speak to project staff. This information will be provided before Friday 26 July 2018.

To allow time for the community to consider any additional information and provide feedback on it, the project team is extending the consultation period until Friday 10 August 2018.

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#### How temporary asphalt batch plant sites are assessed

In general, sites proposed for temporary asphalt batch plants are assessed in two stages. The first stage includes assessing the sites against a set of criteria. This criteria is based on the project's conditions of approval and includes:

- · Accessibility to construction sites
- · Impacts on local and through traffic
- · Ecological and environmental significance including not removing native vegetation
- Flood immunity
- . Impacts from air quality, dust, odour and noise.

The project team will assess available sites against this criteria and then identifies a preferred location.

Once the preferred location is identified, the project team will carry a more detailed assessment. The detailed assessment is only carried out on the preferred option. This is called a Major Ancillary Facility Assessment. This includes independent noise, odour, air quality, ecology and traffic studies and consultation with the community and stakeholders. These studies and the community feedback are provided to Roads and Maritime Services for a decision. If the decision is to progress the preferred option, it is sent to the Department of Planning and Environment's independent representative for approval.

#### Have your say - extended consultation period

We are extending the period for feedback from the community and stakeholders on the current proposal for a temporary asphalt batch plant at Woombah, for further information please see the website <a href="ms.nsw.gov.au/W2B">ms.nsw.gov.au/W2B</a>. To have your say, please fill out the attached feedback form by 10 August 2018. You can return it by:

- Email: W2B@pacificcomplete.com.au
- Post: Please use the supplied reply paid envelope or send to Woolgoolga to Ballina Pacific Highway upgrade, Att: Communications, PO Box 546 Grafton NSW 2460.

Alternatively, you can provide your feedback over the phone by calling 1800 778 900 (toll free).

#### More information

The project team must comply with the environmental guidelines outlined in the project's Conditions of Approval and Construction Environmental Management Plan. For more information, you can find these documents on our website under the project documents.

For more information about the project, please contact us on 1800 778 900, dial 1, email W2B@pacificcomplete.com.au or visit the project website at <a href="mailto:rms.nsw.gov.au/W2B">rms.nsw.gov.au/W2B</a>.



If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 778 900

## Appendix G – July 2018 update notification





July 2018

Update on proposed temporary asphalt batch plant near Woombah and the asphalt supply strategy for the Woolgoolga to Ballina Pacific Highway upgrade

The Australian and NSW governments are jointly funding the Woolgoolga to Ballina Pacific Highway upgrade. Roads and Maritime Services' Pacific Highway Project Office, Pacific Complete and its contractor partners are working together to deliver the upgrade.

Roads and Maritime has asked the project team to review the asphalt supply strategy for the manufacture and delivery of asphalt for the Woolgoolga to Ballina Pacific Highway upgrade. This review will include how and where asphalt will be manufactured, acknowledging recent community concerns about the proposal for a temporary asphalt batch plant near Woombah.

This means we will need more time to consider the locations for a temporary asphalt batch plant/s and provide more information about asphalt batch plants.

#### Asphalt supply strategy for the upgrade

The project team is at various stages of procurement for the manufacture and delivery of asphalt between Glenugie and Ballina. We are working collaboratively with the paving contractors to identify all possible sites for temporary asphalt batch plants.

During the next two years we will need about 170,000 tonnes of asphalt to build the upgrade between Glenugie and Devils Pulpit. The amount of asphalt needed between Tyndale and Iluka is more than 70 percent of the total asphalt required. This means a number of temporary asphalt batch plants will be required in this area close to the alignment.

Roads and Maritime has asked the project team to investigate all possible locations for temporary asphalt batch plants close to the alignment.

Possible sites will be considered against criteria including traffic, environment and community. This information will be used to update the asphalt supply strategy and will also consider safety, program and economics.

While the project team reviews the asphalt supply strategy, we will meet with potentially impacted residents as possible sites are considered.

Following the review of the strategy, any locations new or already identified for temporary asphalt batch plants will involve community consultation.

#### Work progressing between Maclean interchange and Iluka Road

In the interim while these investigations are undertaken, the project team will progress work up until Christmas 2018 by:

- Procuring about 4,000 tonnes of asphalt and delivery to site from existing asphalt batch plants
- Putting a pugmill north of the current compound site at Mororo (western side of the Pacific Highway) to produce foamed bitumen.

#### Pugmill to produce foamed bitumen

We use a special piece of equipment called a pugmill to mix together the materials that produce foamed bitumen. The pugmill is mounted on a trailer and can be moved to locations where it is required.

Foamed bitumen is a strong and durable gravel material made by mixing hot bitumen, water, foaming agent, lime, air and gravel. A temporary asphalt batch plant is not required to produce foamed bitumen.

While hot bitumen is an ingredient, the foamed bitumen gravel is actually cool when it is placed on the road. Foamed bitumen is mixed with crushed rock to produce a flexible pavement material used in base or subbase pavement layers. For the section between the Maclean interchange and Iluka Road the foamed bitumen layers will be placed below the asphalt layer. Adding a foam bitumen gravel layer will make the final road more durable, flexible and resistant to water, resulting in a smoother and better ride for longer.

#### Have your say and next steps

All feedback received from the community and stakeholders will be considered as part of the review of the asphalt supply strategy.

#### More information

For more information about the project, please contact us on 1800 778 900, dial 1, email W2B@pacificcomplete.com.au or visit the project website at <a href="mailto:rms.nsw.gov.au/W2B">rms.nsw.gov.au/W2B</a>.



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## Appendix H – October 2018 community update





Have your say

## Temporary asphalt batch plant between Maclean and Devils Pulpit

October 2018



New bridge over the Clarence River at Harwood

The Australian and NSW governments are jointly funding the Woolgoolga to Ballina Pacific Highway upgrade. Roads and Maritime Services, Pacific Complete and its contractor partners are working together to deliver the upgrade.

#### In this update

- Background
- · Asphalt supply between Tucabia and Devils Pulpit
- · Identifying potential sites for a temporary asphalt batch plant
- · Map of identified sites
- · Community feedback and mitigation measures
- Have your say
- · Next steps

#### Background

In July 2018, the project team started a review of the supply strategy for the manufacture and delivery of asphalt for the Woolgooiga to Bailina Pacific Highway upgrade,

The review to date has involved:

- · Assessing how much asphalt will be used for the upgrade and when and where it is needed
- Reviewing the capacity of existing permanent asphalt batch plants and the need for temporary asphalt
- Identifying potential sites for temporary asphalt batch plants and developing a shortlist of possible sites
- · Engaging with directly affected residents to seek their views on the shortlisted sites.

This update outlines the outcomes of our review so far, including the shortlisted locations for temporary asphalt batch plants between Maclean and Devils Pulpit. Community members are invited to provide feedback on the shortlisted locations by Friday 9 November 2018.

#### Asphalt supply between Tucabia and Devils Pulpit

More than 240,000 tonnes of asphalt is needed for the upgrade between Glenugie and Ballina.

Existing permanent batch plants in Ballina and Coffs Harbour are already engaged to supply the upgrade north of Devils Pulpit and south of Tucabia respectively. About 40 percent of all the asphalt needed for the upgrade will be supplied by these permanent batch plants.

Between Tucabia and Devils Pulpit, about 170,000 tonnes of asphalt will be needed between 2018 and 2020.

In reviewing the Asphalt Supply Strategy for this section of the upgrade, three options were considered:

- Using existing permanent batch plants only
- 2. Using existing permanent batch plants and on-site temporary asphalt batch plant
- 3. Using two on-site temporary batch plants.

These options were then assessed against a number of technical requirements, including the quantities needed, timeframes for production and capacity of existing permanent batch plants.

Due to peak production requirements and considering safety, program and cost, the project team's assessment determined two temporary batch plants are needed to supply asphalt for the upgrade between Tucabla and Devils Pulpit.

From the review, the project team has identified:

- . One temporary batch plant is needed to supply asphalt between Maclean and Devils Pulpit
- · One temporary batch plant is needed to supply asphalt between Tucabia and Maclean.

Identifying and assessing sites between Maclean and Devils Pulpit is well progressed. Work to mobilise the preferred site will need to start before the end of 2018 with asphalt supply required from January 2019.

A temporary asphalt batch plant between Glenugie and Maclean will need to be mobilised in the first guarter of 2019. We are continuing to identify and assess possible locations and will update the community in the coming months once shortlisted sites are confirmed.



#### How possible sites were identified

Several factors were considered in identifying possible locations.

Sites between Maclean and Devils Pulpit have been assessed against the Minister's Conditions of Approval which outline strict requirements for managing the project's construction impact.

#### Technical requirements

- · Traffic impacts and access arrangements, including access to the highway
- Haulage distances
- · Available land (at least one hectare needed)
- · Available capacity of batch plant and guaranteed supply
- · Proximity to the upgrade.

#### **Environmental factors**

- · Compliance with the project's Conditions of Approval
- · Key environmental considerations including flooding, drainage and air quality
- · Potential impacts to threatened species and endangered ecological communities
- · Ability to mitigate environmental impacts identified.

#### Community impacts

- · Distance to properties
- · Key concerns raised by community members as part of consultation for the proposed temporary asphalt batch plant near Woombah
- · Ability to mitigate impacts to the community.

This information has been used to inform how we will supply asphalt for this section of the upgrade as well as considering safety, program and cost.

#### Fast facts

- · The standard production capacity of a batch plant is about 15,000 tonnes of asphalt per month
- · About 75,000 tonnes of asphalt will be needed between Tucabia and Devils Pulpit during peak demand from May to July 2019
- · Asphalt batch plants emit very low levels of emissions which do not pose a risk to the health or safety or workers or nearby residents
- · The amount of asphalt each temporary batch plant will produce will depend on project requirements and staging of work.

#### Why some sites were shortlisted

All eight locations identified as possible sites were assessed against the Minister's Conditions of Approval.

Following the review, three sites were identified as best meeting the assessment criteria to supply asphalt between Maclean and Devils Pulpit because they:

- · Satisfied all or most of the technical requirements
- Met all or most of the requirements under the Minister's Conditions of Approval or Impacts were able to be mitigated
- Either have existing access to the highway or have capacity for intersections to be upgraded.

We are seeking your feedback on the three possible sites. The preferred site will then be progressed to the Department of Planning and Environment's independent Environmental Representative for consideration and approval.

#### Identified locations for temporary asphalt batch plants



#### Community feedback

Roads and Maritime appreciates community feedback. All feedback received to date has been considered in the review of asphalt supply between Tucabia and Devils Pulpit and has informed our decision-making for the shortlisted sites.

We have provided a table which outlines the key matters raised and the measures we will use to mitigate these concerns.

Summary of community concerns	Mitigation measures
Traffic and safety: Increase in the number of light and heavy vehicles Increasing interaction between construction vehicles and local traffic Safety of intersections where construction vehicles access the highway Intersection capacity and potential	To ensure access to the temporary batch plant site meets safety requirements, traffic arrangements would be site-specific and may include:  Creating a separate construction vehicle only access  Minimising interactions between local and through traffic and construction heavy vehicles  Reducing the speed limits at accesses  Implementing traffic safety initiatives.  We have provided maps to show the proposed traffic arrangements for the shortlisted sites. More information about safety initiatives for
for increased congestion.  Air quality:  Potential emissions from plant	construction access is provided on the next page.  Temporary asphalt batch plants for the Woolgoolga to Ballina upgrade will be built to stringent standards which are regulated by the NSW
Dust from batch plant operation and haulage routes     Potential impacts to health from batch plant operations.	Environment Protection Agency.  Independent air quality and odour specialists have been engaged to assess the potential impacts and will prepare an air quality impact assessment for the chosen site.
	To manage air quality impacts at temporary asphalt batch plants, the project team will:  Install and maintain particulate extraction equipment  Maintain bitumen products at the lowest possible temperature  Ensure that machinery meets industry standards  Monitor and spray water on aggregate stockpiles to minimise dust.
	The project team will regularly monitor the air quality around the plants to ensure compliance with legislation, air emission standards and the conditions of the project's Environment Protection Licence.
Noise and vibration from batch plant operation and vehicle movements	Independent acoustic specialists have been engaged to assess the potential noise and vibration impacts from construction and operation of a temporary batch plant. Initial assessments indicate that noise and vibration levels would be within the limits set out by the NSW Environment Protection Agency and the project's Environment Protection Licence.
	Noise and vibration monitoring would be carried out to ensure they are within the allowable limits.
	Construction and operation of a temporary asphalt batch plant will be carried out in accordance with the project's Construction Noise and Vibration Management Plan.

Summary of community concerns	Mitigation measures		
Water management:	The project's Conditions of Approval outline strict requirements for the management and mitigation of flooding. Detailed flood modelling has been completed for all identified sites as part our assessment to make sure the project's flood impact objectives have been met.		
<ul> <li>Effect of batch plant on the quality of ground water in immediate areas</li> </ul>			
<ul> <li>Ground water being taken for batch plant operations</li> </ul>	Groundwater management and erosion and sediment controls would be implemented in accordance with the project's Construction Environment Management Plan.		
<ul> <li>Disposal of contaminated sediment from erosion control ponds</li> </ul>			
<ul> <li>Management of run off from site into adjacent waterways and flooding.</li> </ul>			
Flora and fauna	All identified sites have undergone a biodiversity assessment by an ecologist to ensure potential impacts to flora and fauna can be mitigated		
	Construction and operation of a temporary batch plant would be carried out in line with the project's Construction Environment Management Plan to ensure that impacts to environmentally sensitive areas are minimised.		
Work outside normal construction hours	Most activities for the construction and operation of temporary asphalt batch plants will be done during normal work hours (from 7am to 6pm between Monday and Friday and 8am to 5pm on Saturday).		
	Some work would be done outside normal hours:  Starting operation from 6am to maximise asphalt production  Supplying asphalt during night work, such as traffic changes.		
	All activities would be carried out in line with the project's out of hours work procedure and impacted residents would be notified before work starts.		
Hazardous materials and emergency management	All dangerous goods and substances will be stored and used In accordance with the Australian Standard (AS1940).		
	Emergency management plans are in place for situations that may include     Personal injury     Plant and equipment related emergencies     Natural events including flood and fire     Environmental events including those involving hazardous materials.		
	The project team ensures that all contractors working on the upgrade have an emergency management plan relating to their work, which is trialled and tested regularly. Fatal and severe risk reviews are also used to proactively plan and manage working environments to avoid emergency situations.		

## Safety initiatives for managing construction access

Yellow line marking may replace existing white road markings on the Pacific Highway to alert motorists to changed conditions such as reduced speed limits or workers and machinery nearby.

**Electronic message signs** will be used to deliver information to road users about the area they are travelling through.

Radar-activated speed signs will be installed to remind motorists of their speed.

Variable speed limit signs will be used so speed limits can be changed quickly and easily, reducing delays for motorists and improving safety for workers

Reduced speed limits where necessary to improve safety near construction access roads.

#### Monitoring road safety

We continually monitor and review the changes we have made to the road. Some of the ways we do this include:

- Auditing road safety before and after we switch traffic onto new or upgraded roads
- Video audits
- · Traffic control queue management
- · Weekly traffic control work site audits
- Traffic management awareness and training workshops for staff and contractors.

#### Shortlisted sites - Maclean to Devils Pulpit

#### Woombah



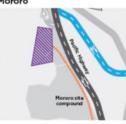
#### Benefits:

- Meets all the criteria in the Minister's Conditions of Approval
   B73 Ancillary Facilities with no additional mitigation measures needed
- Out of the flood plain and has a 1 in 100 year flood immunity
- ☑ Nearest residence is more than 500 metres from the site boundary
- Screened by vegetation around the whole site
- No vegetation removal required
- ☑ No direct impacts to environmentally sensitive areas
- Area is within the approved project boundary and Environment Protection Licence boundary.

#### Constraints:

 Dedicated construction access would need to be built to minimise interaction with traffic on local roads to mitigate community concerns.

#### Mororo



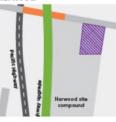
#### Benefits:

- Partially meets all the criteria in the Minister's Conditions of Approval
   B73 Ancillary Facilities, but the impacts can be mittigated through additional measures
- Nearest residence is more than 550 metres from the site boundary and is separated by the existing Pacific Highway
- Access to the highway available through an existing fully functional intersection
- Area is within the approved project boundary and Environment Protection Licence boundary
- No additional vegetation removal required.

#### Constraints:

- Additional requirements for drainage and erosion and sediment controls due to manmade clean water diversion drain within 50 metres of the site
- Site is within 50 metres of sensitive ecological environments including koala and green-thighed frog habitat.

#### Harwood

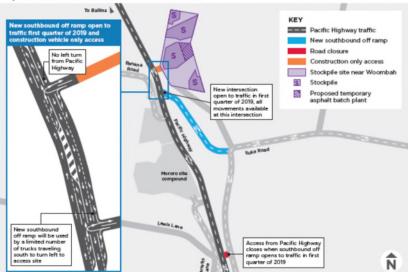


#### Benefits:

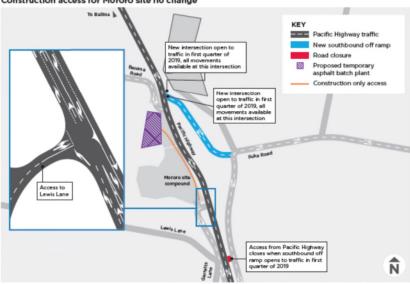
- Partially meets all the criteria in the Minister's Conditions of Approval
   B73 Ancillary Facilities, but the impacts can be mitigated through additional measures
- Located within the previously established site for construction of the new bridge over the Clarence River at Harwood, which is being demobilised
- Nearest residences are more than 300 metres from the site and are separated by the existing Pacific Highway and local roads
- Area is within the approved project boundary and Environment Protection Licence boundary
- No additional vegetation removal required
- Site already established with a 1 in 20 flooding immunity
- No upgrades to intersections required
- ☑ Construction traffic can use dedicated access
- Potential to haul asphalt within the corridor until late 2019 minimising interactions between public and construction vehicles.

#### Traffic and access arrangements for shortlisted sites

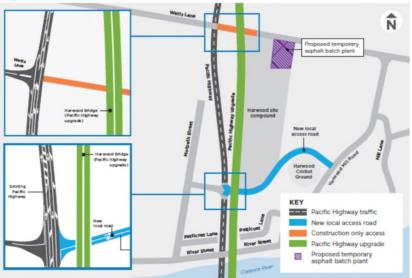




#### Construction access for Mororo site no change



#### Proposed construction access for Harwood site



#### What does an asphalt batch plant look like?



Temporary asphalt batch plant for the Warrell Creek to Nambucca Heads section of the Pacific Highway upgrade

Voolgoolga to Ballina Pacific Highway upgrade ave your say - Shortlisted locations for a temporary asphalt batch plant between Maclean and Devils Pulpit		
Roads and Maritime Services invites you to have your say on the shortlisted locations for temporary asphalt batch plants between Maclean and Devils Pulpit. All contact details will remain confidential and will only be used to keep you informed about the project.		
Name		
Address		
Postcode State		
Phone number Email address		
Would you like to receive project updates? Email: Yes No SMS: Yes No		
After reviewing the information provided (please tick one):	To mail this feedback form fold along the dotted line and sea	I with clear tape.
I do not support a temporary asphalt batch plant in my area	Mail your completed form (no stamp required) to addr	ess below.
I support a temporary asphalt batch plant in my area	Fold here first	
Please provide feedback on the shortlisted locations	Delivery Address:	No stamp require if posted in Austral
Harwood	PO Box 546 GRAFTON NSW 2460	111
I do not support I support If my concerns can be addressed, I support		- 1111
Please explain your concerns:		- 1111
Mororo  I do not support	եկլյորկանկան հետասանվիսներն Woolgoolga to Ballina upgrade Reply Paid 87323	
Please explain your concerns:	GRAFTON NSW 2460	
	Fold here second	
Woombah		
I do not support I support If my concerns can be addressed, I support		
Please explain your concerns:		
.18M1.		
hank you for completing this feedback form.		



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1800 778 900



Woolgoolga to Ballina upgrade Att: Communications PO Box 546 Grafton NSW 2460 November 2018 RMS 18.1134

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