Grays Lane Upgrade

Presentation to Council 7th September 2017

E2017/32558





Introduction

Grays Lane Issues

- Existing gravel portion of the road in poor condition, generates high levels of dust (impeding visibility) and has poor flood immunity.
- Road is currently flood-prone, causing access issues to residents and emergency services during flooding, as well as maintenance issues for council.

Upgrade Objectives

- To provide an improved driving surface for residents.
- To reduce flood damage to the road surface.
- To reduce number of days the road is closed due to flooding each year.

Key Findings

Project Scope

- Upgrade 890m of Grays Lane
 - Raise and seal 830m of gravel road
 - Improvements to an additional 60m section of road
 - Alterations to culvert headwalls to allow road levels to be raised.

Project Constraints

- Flooding
- Acid Sulphate Soils
- Koala Habitat and local population
- Vegetation loss (20 trees)



From 'Review of Environmental Factors – Grays Lane Upgrade' 5.1.2 Potential Impacts

- Increased potential for injury to or mortality of native fauna (particularly Koalas) from vehicle collision once sealed and operational due to likely increase of vehicle speeds.
- While Grays Lane has a posted speed limit of 80 km/hr, it is anticipated that vehicles would exceed this speed regularly.
- The majority of vehicle movements along Grays Lane are likely to occur during daytime hours (for beach access) when Koalas are typically inactive, with evening and daytime traffic likely to be significantly lower (i.e. residents only).
- On this basis, risks to Koalas can be managed by targeted signage based on adoption of Koala mitigation strategies used in Tweed Shire (refer to Appendix H).

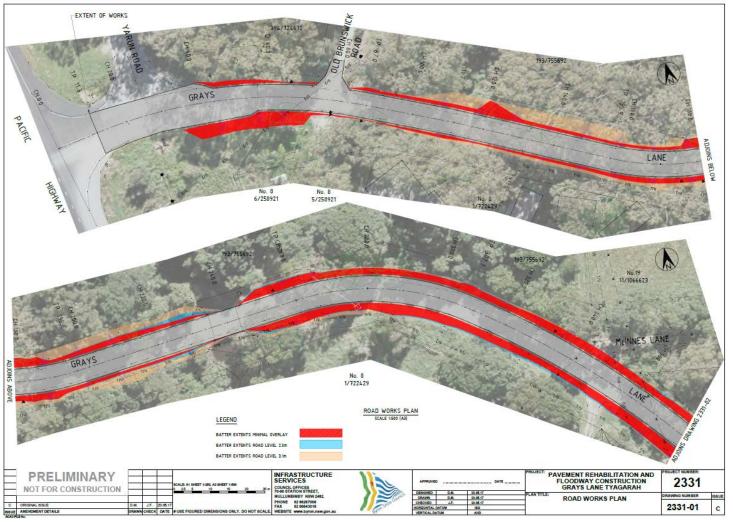


Pavement treatment at Clothiers Creek Road (Source: Tweed Shire Council)

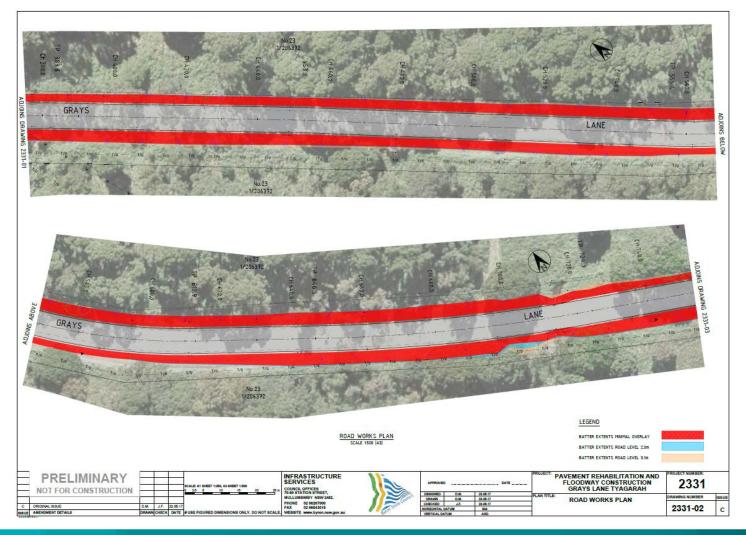


Variable message sign at Clothiers Creek Road (Source: Tweed Shire Council)

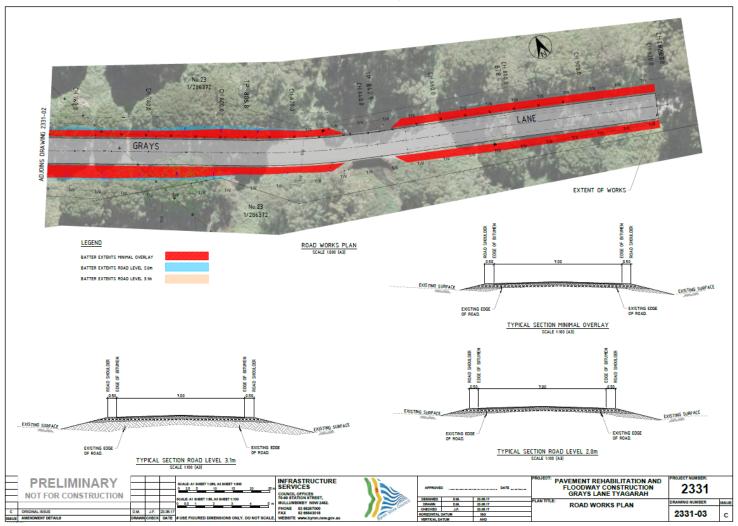
Design



Design



Design



Budget

Gravs Lan	e Upgrade O	ptions Overview
------------------	-------------	-----------------

Grays Lane Opprove Options Overview							
Option No.	Option Name	Total Cost	Cost / m2	Note	Good	Bad	
1	Seal existing	\$663,513	\$101.5	Does not include Koala mitigation	Improved driving surface. Cheapest	Little additional flood immunity. Will be damaged during floods.	
2	Concrete on top of existing	\$1,511,199	\$231.2	Includes Koala mitigation	Will not be damaged by floods	Little additional flood immunity. Most Expensive.	
3	Raise to 3.1 and seal	\$766,084	\$117.2	Includes Koala mitigation	Improved flood immunity near 5 year event. Reduced road damage during floods. Improved driving surface.	Road could be damaged in larger floods.	
4	Raise to 3.1	\$627,343	\$96.0	Includes Koala mitigation	Improved flood immunity near 5 year event. Reduced road damage during floods.	Road could be damaged in larger floods.	
5	Raise to 2.8 and seal	\$700,784	\$107.2	Includes Koala mitigation	Improved flood immunity approxiamtely 2 year event. Reduced road damage during floods. Improved driving surface.	Road could be damaged in larger floods.	
6	Raise to 2.8	\$580,737	\$88.8	Includes Koala mitigation	Improved flood immunity approxiamtely 2 year event. Reduced road damage during floods.	Road will be damaged in larger floods.	
7	Do nothing	\$120,000	\$18.4	Annual Maintenance costs. 3-4 grades per year at \$30k per grade.	No cost to Council.	Will disappoint local residents.	

Funding Options

- Tyagrah Nature Reserve Traffic
 - 2013 NPWS State of the Parks Report estimated 50,000 visitors per year; average 270 traffic movements per day
 - 2012/13 traffic count: 467 traffic movements per day average
 - Therefore 58% of traffic movements may be for National Park
- Special Rate
 - Approx. 56 residential properties use Grays Lane
- Section 94
 - \$260,000 available in Section 94 funds
- General Revenue
- Combination of above options (recommended)

Proposed Path Forward

- Construction of Option 3 next financial year as funds permit
- Possible funding structure for discussion

Funding Source	Cost
Section 94	\$250,000
General Revenue 2018/19	\$250,000
Resident funding via Special Rate (\$4,750pp)	\$266,000
Total	\$766,000

Report to Council to seek resolution for recommended way forward

Questions



