



*This information sheet explains how lighting will work on and around the Mackays to Peka Peka (M2PP) Expressway, and how the new road has been designed to reduce some of the visual effects as it travels through the Kāpiti landscape.*

## What lighting is there for the Expressway?

Lighting is installed at the interchanges and parts of the shared pathway.

At the interchanges, lighting is there to help motorists clearly identify curves ahead, changes in alignment, road surface markings, kerb locations and to detect obstructions ahead when travelling at speed. It is also needed to make sure the Expressway is safely lit for users transitioning into pedestrian areas.

The **shared pathway** lighting will help people be aware of potential hazards and identify other approaching people. It also helps to discourage crime and loitering.

The Expressway and pathway lights are LED. They're designed to limit potential lighting pollution by reducing glare and light spill.

## Permitted light levels

When it comes to legally permitted light levels from lighting on the new road, the Expressway needs to comply with the Kāpiti Coast District Council's bylaws on possible effects on public health and safety. Lighting for the shared pathway (and for any of M2PP's temporary construction yards) needs to take account of District Plan rules.

However during the consent process it was decided that all Expressway-related lighting (which is measured and monitored in lux) would be designed and constructed using the same criteria. So the project has taken a more conservative approach than

legally required and has followed guidance to the level of both the Kāpiti Coast District Plan rules and the limits set by Australian Standard AS 4282:1997. The District Plan criteria states:

*"Between the hours of 10pm and 7am no artificial lighting may be used in such a manner that it causes:*

- *An added illuminance in excess of 10 lux measured horizontally or vertically at any window of any adjacent habitable building; or*
- *An added illuminance in excess of 20 lux measured horizontally or vertically at any point of any adjacent boundary of any adjacent land, which is zoned residential or used for residential purpose.*

*All exterior lighting is designed, installed and maintained to avoid the spill of light or glare which could create a traffic safety hazard on the state highway and local road network."*

Australian Standard AS 4282:1997 sets the following limit: "An illumination level of 3 lux has been taken as the appropriate cut-off level to determine whether lighting can be deemed obstructive and present a nuisance to residents."

In practice, this means that any light 'spill' levels in relation to nearby residential buildings/property will be monitored and measured in line with the 10 and 20 lux guidelines above, with acknowledgement that any level of 3 lux or more could be considered to be creating a low-level nuisance.

## Visual effects of the Expressway

Planting of dense native vegetation in the Expressway corridor is extensive. Along with bunds and other structures, it is designed to reduce the visual effects of the new road.

In many locations, these structures as well as the natural dunes along the route, will provide screening of views - but not views from every residential property or public location. In particular, where the Expressway is elevated to cross local roads it's not always possible to hide the road from view.

The original assessment of the Expressway's visual effects recognised that complete avoidance of visual and landscape effects would not be possible, even for some residents immediately adjacent to the site. The assessment anticipated that traffic on the Expressway is likely to be visible in places. From many locations, the level of visibility will decrease over time as the trees and shrubs planted as part of the mitigation measures grow.

*Technical Report 7, Assessment of Landscape and Visual Effects* (available on the M2PP website), describes the levels of visibility of the Expressway from adjoining areas.

## Who do I contact if I have concerns about anything Expressway-related, and how?

The M2PP community liaison hotline and email contacts for help or information will remain open for 12 months after the Expressway opens. So the same rules apply - if you want to get in touch you can contact us via the details below.

The community liaison service will be part of monitoring any ongoing issues for the community, the Community Liaison Group (CLG) and Neighbourhood Information Forums (NIFs) will also continue to operate for at least 12 months after opening.

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