

November 2020

Pacific Motorway (M1) Varsity Lakes to Tugun upgrade Construction activities

Frequently Asked Questions

When will construction start and finish?

The Varsity Lakes to Tugun (VL2T) upgrade is an immense program of work, and construction will be carried out in the following packages over the coming years:

- Package A between Varsity Lakes and Burleigh is currently in construction and will continue until mid to late 2022
- Package B between Burleigh and Palm Beach (Nineteenth Avenue) is expected to start construction before the end of 2020 and continue until end 2023
- Package C between Palm Beach (Nineteenth Avenue) and Tugun will start construction in November 2020 and continue until end 2023

An ongoing program of early works is also underway to relocate public service utility relocations and clear vegetation.

How often will work be happening?

A number of roadwork crews will be working along the full 10-kilometre route during day, night and weekend times. All three package contractors have been permitted to work to the following program.

Day time	Night time	Weekend
Monday to Friday 6am to 6pm	Sunday to Thursday 6pm to 6am	Saturday 6am to 6pm

It is important to note that if emergency works are required, such as pothole repairs or damage to road furniture, then work times outside of this program may be permitted.

There may also be occasions when wet weather or site conditions delay a work activity that must be completed within a certain timeframe because of potential safety or damage to infrastructure risks. Work hours or work days may be extended in these instances to ensure the activity is completed as soon as possible.



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Why are night works required?

Constructing the VL2T upgrade presents significant challenges in balancing the traffic flows of 90,000+ motorists against the needs of residents adjacent to the M1.

While the contractors for each package will make every effort to minimise noise and disruptions, aspects of this upgrade will involve a considerable program of night works to shorten the construction timeframe and minimise impacts to peak travel periods on the motorway.

There will also be times when specific work activities must be carried out at night for the safety of road workers and motorists, such as when working close to live traffic lanes or lane closures required on the motorway.

What changes can motorists expect?

To ensure the safety of roadwork crews and road users, new traffic arrangements will be put in place during construction. This means that road conditions will frequently change, including:

- narrow lanes and shoulder closures
- 'switches' between traffic lanes
- altered lane merges
- full lane closures
- reduced speed limits
- short duration traffic stoppages.

Speed limits will be reduced to 80km/h, 60km/h and 40km/h at various locations and times during construction. All road users are reminded that roadwork speed limits are enforceable and that they should continue to obey the roadwork signs and traffic controllers.

Keeping a safe distance between you and other vehicles; and from traffic barriers, construction equipment and roadwork crews is recommended. While there may be times when there are no roadwork crews onsite or near the motorway lanes, reduced speed limits will remain in place because of the narrowed lanes and shoulders. If you cannot see a roadworker, it does not mean you can increase your speed – there may still be hazards.

Roadwork speed limits are in place not only for everyone's safety, but to benefit the community by helping progress construction activities in a timely manner.

How will construction impacts be minimised for residents?

The VL2T upgrade is one of the southern Gold Coast's biggest infrastructure upgrades and is vital to the wider region's economic prosperity.

All efforts will be made to minimise disruption as much as possible to neighbouring communities and the contractors are committed to keeping everyone informed of construction activities. Depending on the impact, advice to residents will be provided in one, or a combination, of the following methods:

- letterbox flyer
- face-to-face meetings
- email traffic alert
- SMS mobile text
- weekly/monthly/quarterly project e-News updates

Timely and accurate information of upcoming construction works will help residents to make plans that best suit their individual circumstances to help them mitigate the impacts of the VL2T upgrade.

When night works are required:

- advance notice will be provided within the immediate vicinity of the work
- activities that generate the loudest noise such as jack-hammering, pile-driving and chain-sawing will be scheduled whenever possible to finish by midnight
- lighting towers will be required during night works but will be directed away from properties wherever possible
- reversing beepers and flashing light beacons on machinery and vehicles are a safety requirement and must be used during all night-time activities.

Residents are urged to register their details at VL2T@tmr.qld.gov.au or call the project team on 1800 799 824, which is a free call from any landline.

Will construction noise be monitored?

The Transport Noise Management Code of Practice

TMR manages operational road traffic and construction noise under the *Transport Noise Management Code of Practice* (the Code). The Code can be found at (<https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Transport-noise-management-code-of-practice.aspx>).

Implementation of the Code is a legislative requirement under the *Transport Infrastructure Act 1994* and by law must be followed when determining appropriate noise mitigation measures.

Volume 1, Nov 2013 guides the direction for assessment, design and management of the impact of road traffic noise. This section of the Code was used during the design of the VL2T to determine what noise mitigation treatments would be required.

Volume 2, Mar 2016 provides a framework for the identification and assessment of noise and vibration impacts from transport infrastructure construction. This section of the Code will be used during construction of the VL2T upgrade to help manage impacts to neighbouring communities.

Noise monitoring during construction

Compliance with the Code is monitored through an approved Noise and Vibration Management Plan (NVMP).

TMR and its contractors will undertake all reasonable and practicable measures to prevent or minimise disturbance from construction noise. However, as the construction of infrastructure is temporary and provides a benefit to the wider community, it is recognised as an essential part of development and should not be restricted by unreasonable mitigation measures.

The appointed contractor for each package of the VL2T upgrade will be required to complete and obtain TMR approval on their NVMP. This plan will outline how they expect to manage and mitigate these construction impacts whenever possible, such as providing intermittent respite from ongoing night time work activities, monitoring radio communication volume levels during night time hours, and carrying out noisy activities such as pile-driving during day time works.

TMR will closely monitor compliance of each contractor's NVMP and ensure regular communications with locally affected neighbours. For this reason, TMR is urging all local residents to register their contact details at VL2T@tmr.qld.gov.au or by calling 1800 799 824 to ensure they are fully informed of upcoming construction activities.

Installation of new noise barriers

Where locations have been identified as requiring noise barriers, these will be installed as soon as possible to help reduce noise from construction activities. However, there are some areas where earthworks need to be completed and public service utilities installed before the noise barrier can be constructed.

Residents immediately adjacent to noise barriers marked for removal will be contacted directly by the construction contractor prior to removal. If an existing noise barrier is to be removed to make way for construction activities, temporary fencing may be installed until the new noise barrier is constructed.

In-house noise treatments (air conditioning and window glazing)

The Code outlines that road traffic noise should be treated once predicted noise levels at residential properties exceed 68dB(A). Generally, noise barriers address this requirement, and are most effective when placed either next to the source of the noise (the motorway) or at the receptor (the property). TMR's preference for treatment is to install noise barriers as this provides maximum noise reduction benefits to a wider number of properties, and so represents best value for money.

However, sometimes installing a noise barrier is not possible due to inconsistent terrain levels, or when only one property in the catchment is predicted to exceed the 68dB(A) criterion because it has upper level living areas. In these cases, TMR may instead propose in-house treatments such as air conditioning or window glazing.

It is important to note that, according to the Code, window glazing can only be considered where properties are predicted to exceed 78dB(A) (refer *Section 3.3 of the Code Criteria for Exceptional Circumstances Treatment*). Ordinarily, if a property is modelled to exceed 78dB(A) then some surrounding properties would be expected to exceed the base-level 68dB(A) criterion as well. On that basis, TMR would consider a noise barrier to be the best treatment as it would benefit a wider range of properties.

There are a small number of properties along the 10-kilometre VL2T route that will require in-house noise treatments. The project team will be contacting those landowners in the first half of 2021 to progress installation of these treatments.

What about vibration impacts to my property?

Causes of vibration

Vibration is caused by the movement of airborne and ground-borne particles that spread in waves and can be described as displacement (distance an element moves from its static position), velocity (instant speed of an element) and acceleration (rate at which the element changes speed).

Human perception of vibration depends on varying factors – some people are more susceptible than others to the frequency range, or the direction of travel may be more significant in a particular area due to ground surface conditions.

Interestingly, the activity of a person at the time of vibration will also play a role in sensitivity to that vibration. If a person is sleeping or sitting, they may feel vibratory movement more so than those who are moving about at the time.

Existing underground conditions will also considerably affect the level of vibration. This is evident for some properties around Palm Beach that already experience low-level vibration from road traffic which may be a result of underlying ground conditions and types of building structures.

During construction, the use of heavy machinery might cause vibration above existing levels. This may be particularly evident when installing guard rail and bridge foundations that require significant ground disturbance.

Locations that can expect vibration

Many aspects of the VL2T upgrade involve construction activities that will create airborne and ground-borne movement. However, the vibration levels will vary depending on the location, the type of work and how a structure is built. The subterranean ground conditions of a particular area will also determine vibratory impacts, for example high water tables and saturated sands can increase vibration.

During construction almost all areas of the 10-kilometre VL2T upgrade can expect some form of vibration from work activities. This will be when:

- rock breaking and blasting activities are occurring around natural hard rock formations
- piling, boring and hammering steel and concrete structures to support retaining walls and bridge foundations
- rolling to compact fill material during road surface works
- fracturing of existing concrete pavements with specialised machinery
- tree felling, chain-sawing and general demolition equipment is being used

Managing vibration during construction

As part of the design of the VL2T upgrade significant soil investigations were undertaken to understand the ground conditions along the route. This data has been provided to the appointed contractors to help them plan, manage and mitigate any potential damage to properties caused by their construction activities.

The contractor will identify properties that require a building condition inspection before starting such work. This inspection will include an internal and external assessment, documented by either photos or videos, of the current condition of structures. Once all construction activities have been completed, the contractor will organise for a post-construction building inspection to be completed.

These inspections are conducted by independent building condition experts at no cost to the landowner, and a copy of both the pre- and post-construction reports will be made available to all landowners on request.

It is important to note that qualified professionals have identified the properties requiring a building condition inspection based on their proximity to the motorway, the type of construction activity required in the vicinity, and the existing ground conditions. Not all properties will be offered a building condition inspection.

As part of the Noise and Vibration Management Plan (NVMP) which is a contractual requirement under the VL2T upgrade, noise and vibration will be frequently monitored and assessed.

How will asbestos and dust be managed?

There are many areas along the VL2T corridor where asbestos material has been identified. This is generally in the form of property boundary fences, used in old public utility services or resulting from illegal dumping within the road corridor and behind noise barriers.

When this asbestos is being removed it will be done by licensed, trained and experienced professionals and conducted in accordance with the Workplace Health and Safety Queensland (WHSQ) requirements as outlined in the *How to Safely Remove Asbestos Code of Practice 2011*.

WHSQ will be notified of these works prior to commencement and a removal control plan will be developed by the contractor to ensure that adequate measures are in place to minimise risk and meet regulatory requirements.

Access to these work areas will be restricted with signage and barricades in place around the site. Safety precautions will be strictly followed, including isolation of the affected area, dust suppression measures, safe decontamination procedures and an independent assessment of the work area by a Licensed Asbestos Assessor (LAA). The LAA's role includes a comprehensive visual clearance inspection, monitoring for potential airborne asbestos fibres and a clearance certificate prior to reopening the work area.

All contractors and subcontractors delivering the VL2T upgrade must adhere to these requirements as part of contract conditions.

During construction, contractors will be required to frequently use water trucks to assist with dust suppression. Dust suppression will be managed as per the contractors' environmental management plans. During periods of long dry spells and windy days, residents may choose to keep doors and windows closed.

One of the primary reasons for the upgrade is to alleviate congestion on the M1. Studies suggest that decreasing congestion on the motorway will help improve air quality emissions to surrounding communities. While this may help address concerns about pollution from future traffic growth, the VL2T upgrade also includes a significant commitment to improving active transport connections for pedestrians and bike-riders.

Can residents be temporarily relocated during works? Can businesses be compensated for lost trade resulting from the works?

As a state government department, TMR is lawfully authorised to carry out roadworks to improve the road network for the benefit of the whole community.

The VL2T upgrade is necessary to improve the efficiency of vital transport routes for the state of Queensland and the national transport freight network. It will improve road safety, reduce traffic congestion and provide additional travel options which will ultimately benefit local residents and businesses.

TMR is mindful of the impacts of roadworks and does everything reasonably practical to minimise inconvenience and impacts on adjacent residences, however the department does not relocate residents during road construction works or compensate businesses for loss of trade. Rather, by providing advanced notice of disruptive works, residents and businesses will be able to make informed decisions on how best to manage circumstances to suit their personal needs and business operations.

Where can I get more information?

Residents and motorists are encouraged to subscribe to the free SMS and email traffic alert service to keep up-to-date on the Pacific Motorway (M1) Varsity Lakes to Tugun upgrade.

To register, contact the project team on the details below:

Phone: 1800 799 824 (free call from any landline (during business hours, 9am–5pm, Monday to Friday))
Email: VL2T@tmr.qld.gov.au
Web: www.tmr.qld.gov.au
Post: Department of Transport and Main Roads
PO Box 442, Nerang QLD 4211

For assisted calls contact:

Interpreter service: 13 14 50
TTY/voice calls: 13 36 77
Speak & Listen: 1300 555 727
SMS relay: 0423 677 767
Email: helpdesk@relayservice.com.au