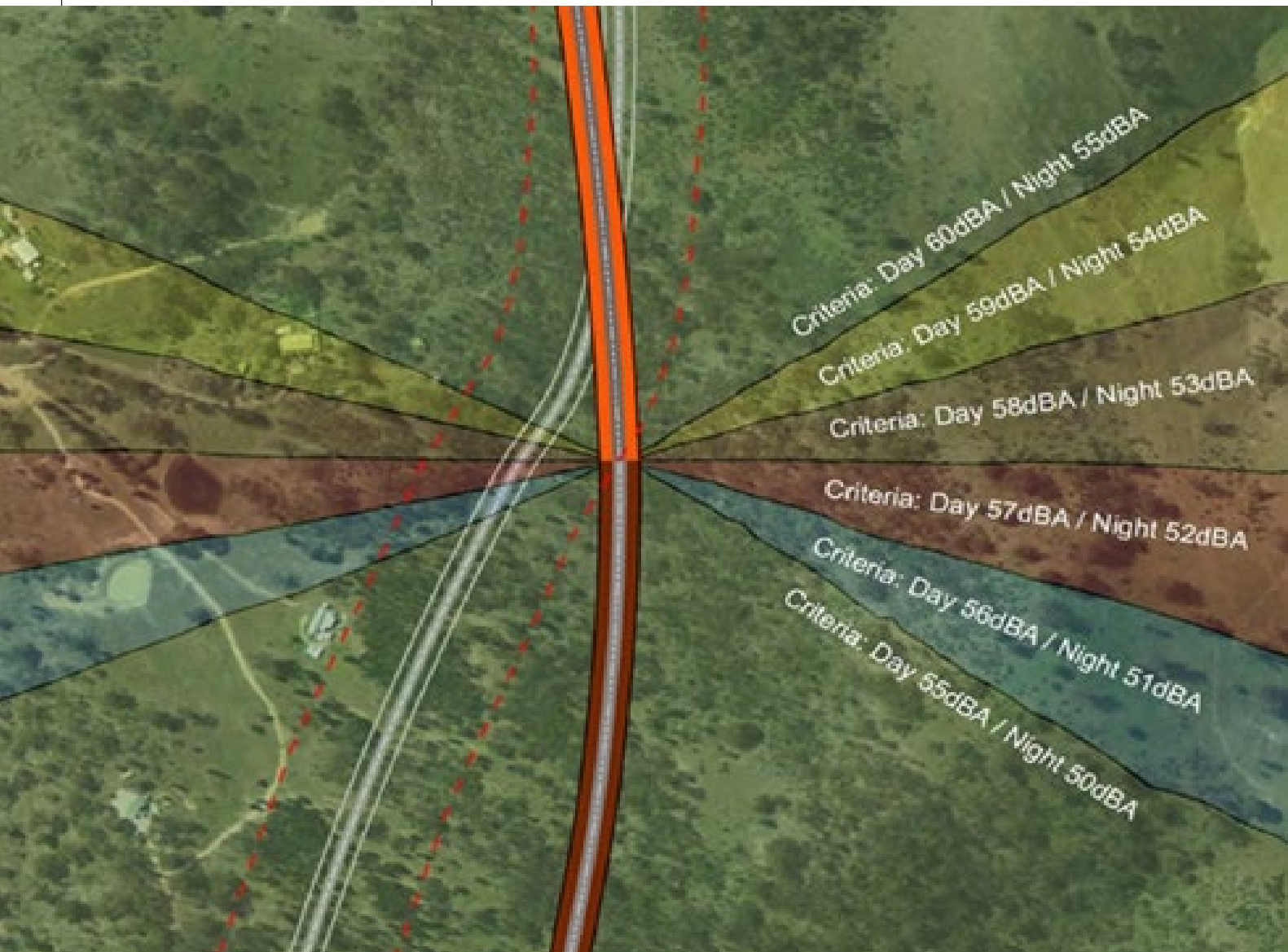


Application notes for the road noise criteria guideline (RNCG)

June 2022



Acknowledgement of Country

Transport for NSW acknowledges the traditional custodians of the land on which we work and live.

We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

Many of the transport routes we use today – from rail lines, to roads, to water crossings – follow the traditional Songlines, trade routes and ceremonial paths in Country that our nation's First Peoples followed for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to the land, waters and seas and their rich contribution to society.



Document control

Document owner	Senior Specialist Noise
Approved by	Executive Director, Environment and Sustainability
Branch / division	Environment and Sustainability / Safety, Environment and Regulation
Review date	April 2024
Parent guideline	EMF-NV-GD-0025 – Road noise criteria guideline
Superseded documents	Roads & Maritime: Application Notes – Noise Criteria Guideline

Contacts and further information



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Internal Transport users: [ESMF noise and vibration \(sharepoint.com\)](#)

Supporting information

Important

This supporting document provides practical guidance to the application of noise criteria for noise sensitive receivers as defined in Sections 5, 6 and 7 of the EMF-NV-GD-0025 - Road noise criteria guideline

Application Note (i) – Palace Street and Crinoline Street intersection upgrade

Application note (i) shows the approach taken to identify road types for the proposed Palace Street and Crinoline Street intersection upgrade in Denham. The proposed project aims to improve safety by improving traffic flow of local and through traffic across the Golden Highway intersection with Palace and Crinoline Street. Improvements include realigning a short section of the Golden Highway to bypass the existing four-way intersection.

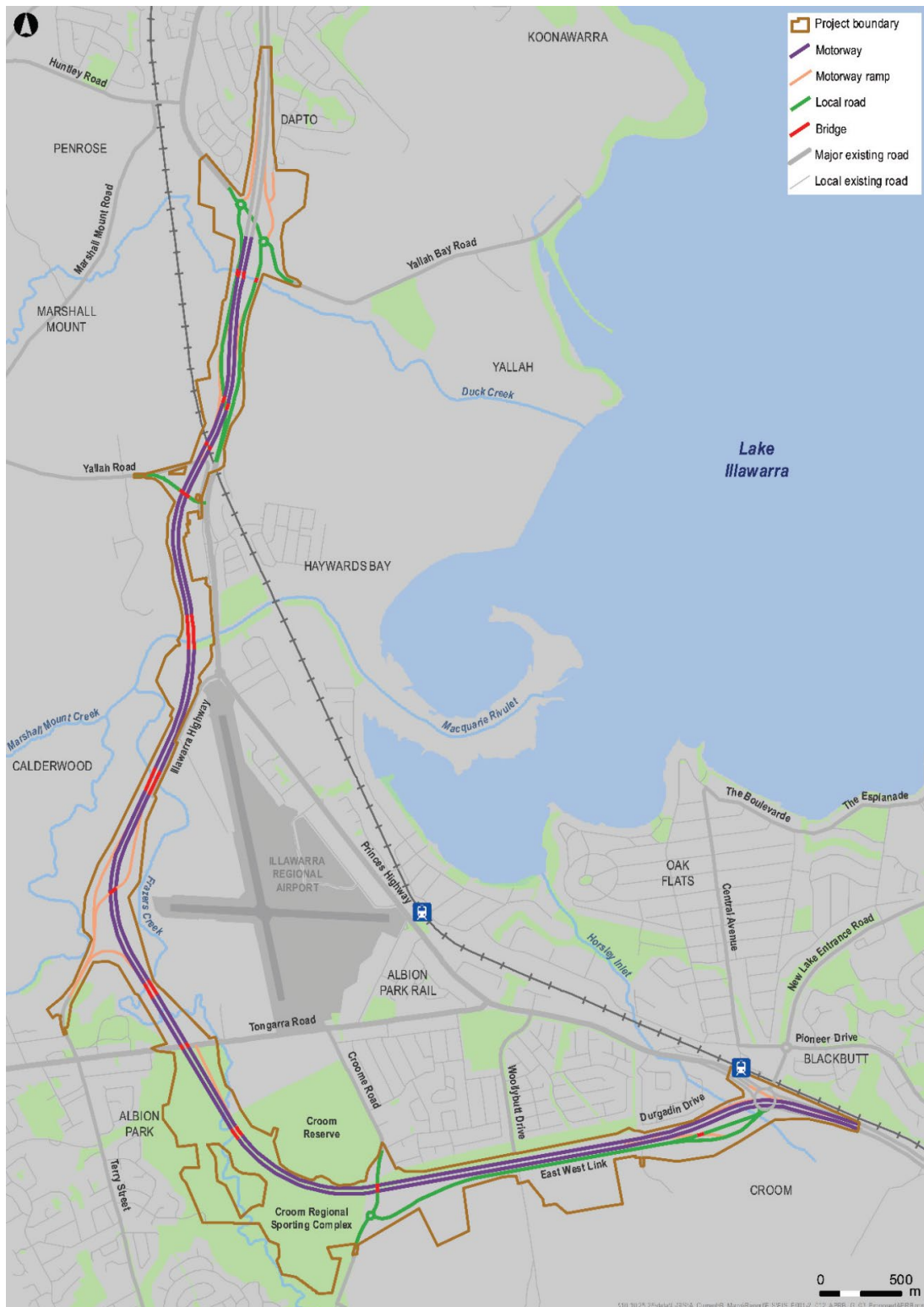


The project is considered as minor works as the outcome is to improve safety and the road has not been substantially realigned.

Note that a road is considered to be substantially realigned when the new carriageway in the road project is more than approximately six times the total existing lane width from the edge of the existing road corridor.

Application Note (ii) – Albion Park Rail Bypass

Application note (ii) shows the approach taken to identify road types for the Albion Park Rail Bypass in the vicinity of the Woollybutt Drive residential area. The proposal features 9.8 kilometres of new motorway bypassing the Albion Park rail township. There are also changes and upgrades to the local road network, including minor realignments, upgrade of an intersection and a new local road to replace the East West Link



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In Application note (ii), the proposed design in the vicinity of Woollybutt Drive / East West Link roundabout consist of a section of the motorway over the existing East West Link footprint to bypass Albion Park Rail and a new local road to replace the East West Link.



The motorway proposed over the footprint of East West Link is new as it is a bypass where the road extends beyond the Princes Highway road corridor.



The proposed link road is a new road as East West Link has ceased to exist.



Application Note (iii) - Werrington Arterial Road

Application note (iii) shows the approach taken to identify road types for the proposed upgrade of Gipps Street and Kent Road between M4 Motorway and the Great Western Highway as part of the Werrington Arterial Road REF. The main features of the proposal include duplicating Kent Road and Gipps Street from a two-lane road to a four-lane road. In addition, two new east facing ramps would be built connecting Kent Road to and from the M4 Motorway.

Currently the functional class of Gipps Street and Kent Road between M4 Motorway and the Great Western Highway is considered to be sub-arterial as it will connect to an arterial road. A road is new where the project changes the functional class of the road. Therefore, 'Gipps Street, Kent Road and its associated ramps are considered to be new.



Application Note (iv) – M4 East WestConnex Concord Road Interchange

Application note (iv) shows the approach taken to identify road types and noise criteria around the Concord Road interchange assessed as part of the EIS for the M4 East WestConnex project, which comprises of an interchange with on-ramps to the eastbound tunnel and off-ramps from the westbound tunnel.



Access from the existing M4 to Concord Road would be maintained via Sydney Street.

A new on-ramp would be provided from Concord Road southbound to the existing M4 westbound, and the existing on-ramp from Concord Road northbound to the existing M4 westbound would be removed.

This area also includes modification of the intersection of the existing Parramatta Road, to remove the left turn movement from Parramatta Road eastbound to the existing M4 westbound.

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Properties are acquired to enable construction of the proposed road project.



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Transport for NSW

A new on-ramp from Concord Road southbound to the existing M4 westbound is new. A viaduct is a new road as it introduces a road at a grade that is considered substantially realigned in the vertical direction.



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On-ramps to the eastbound tunnel and off-ramps from the westbound tunnel are new. Similar to a bypass, a tunnel is a new road where it extends beyond the existing road corridor.



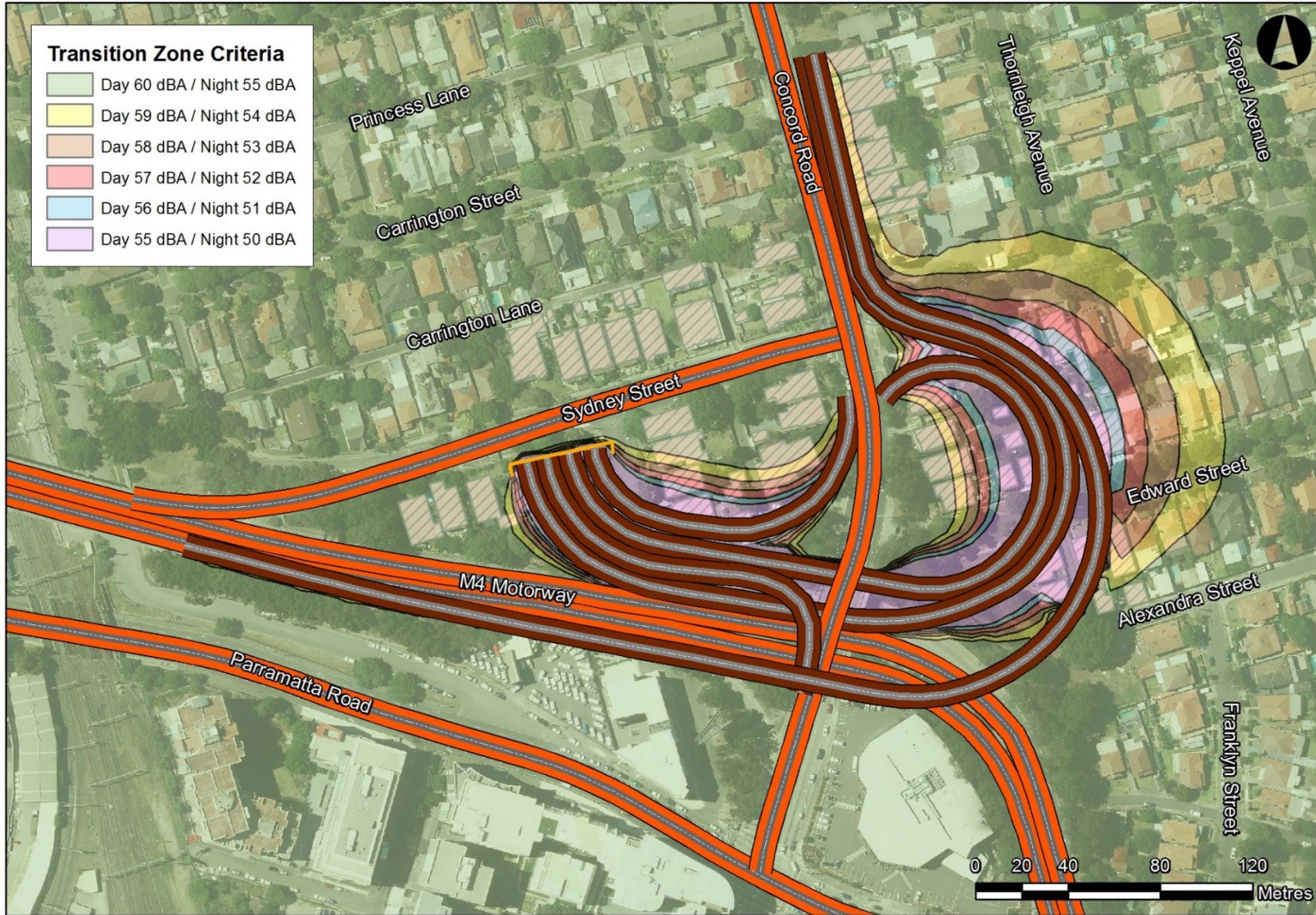
M4 Motorway, Concord Road and Sydney Street are considered redeveloped as the pavement has not been substantially realigned. Parramatta Road is considered as existing road. Parramatta Road is also a project road as traffic noise on Parramatta Road is expected to increase by greater than 2 dBA.



There are transition zones between new and redeveloped roads along Concord Road and the M4 Motorway.

Parramatta Road is counted as redeveloped for the purpose of calculating contribution difference.

There are transition zones between new and redeveloped roads where the new viaduct connects to the M4 Motorway and at various locations where the tunnel dives connects to Concord Road. The transition zone criteria are identified from the contribution difference in noise from each road type. Where the transition zone criteria change across the location of a residence the most stringent of the criteria apply.



Application Note (v) – M4 East WestConnex Parramatta Road Interchange

Application note (v) shows the approach taken to identify road types and noise criteria around the Parramatta Road interchange assessed as part of the EIS for the M4 East WestConnex project, which comprises of an interchange with an on-ramp to the westbound tunnel and an off-ramp from the eastbound tunnel. In addition, the westbound lanes of Parramatta Road would be realigned.

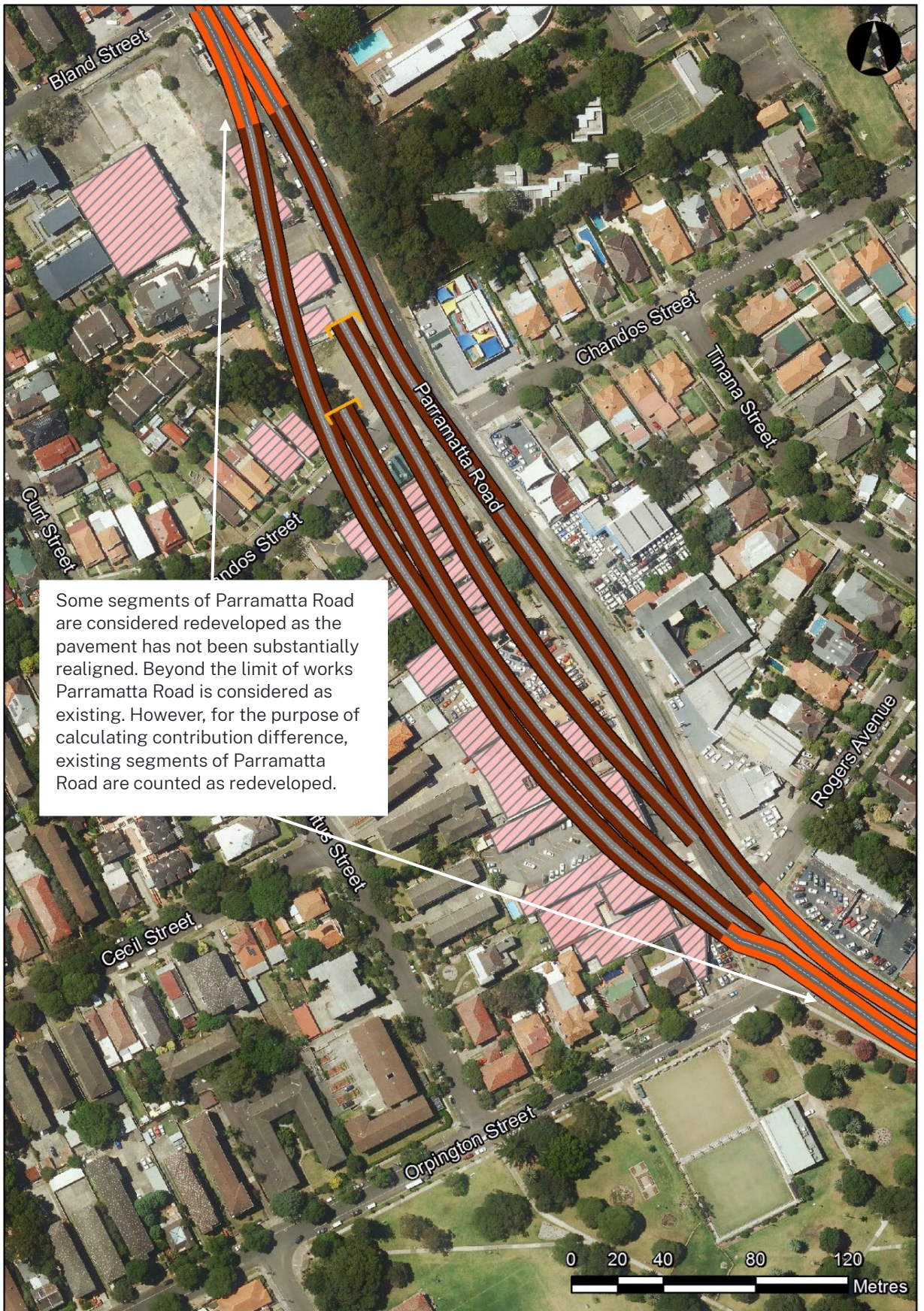


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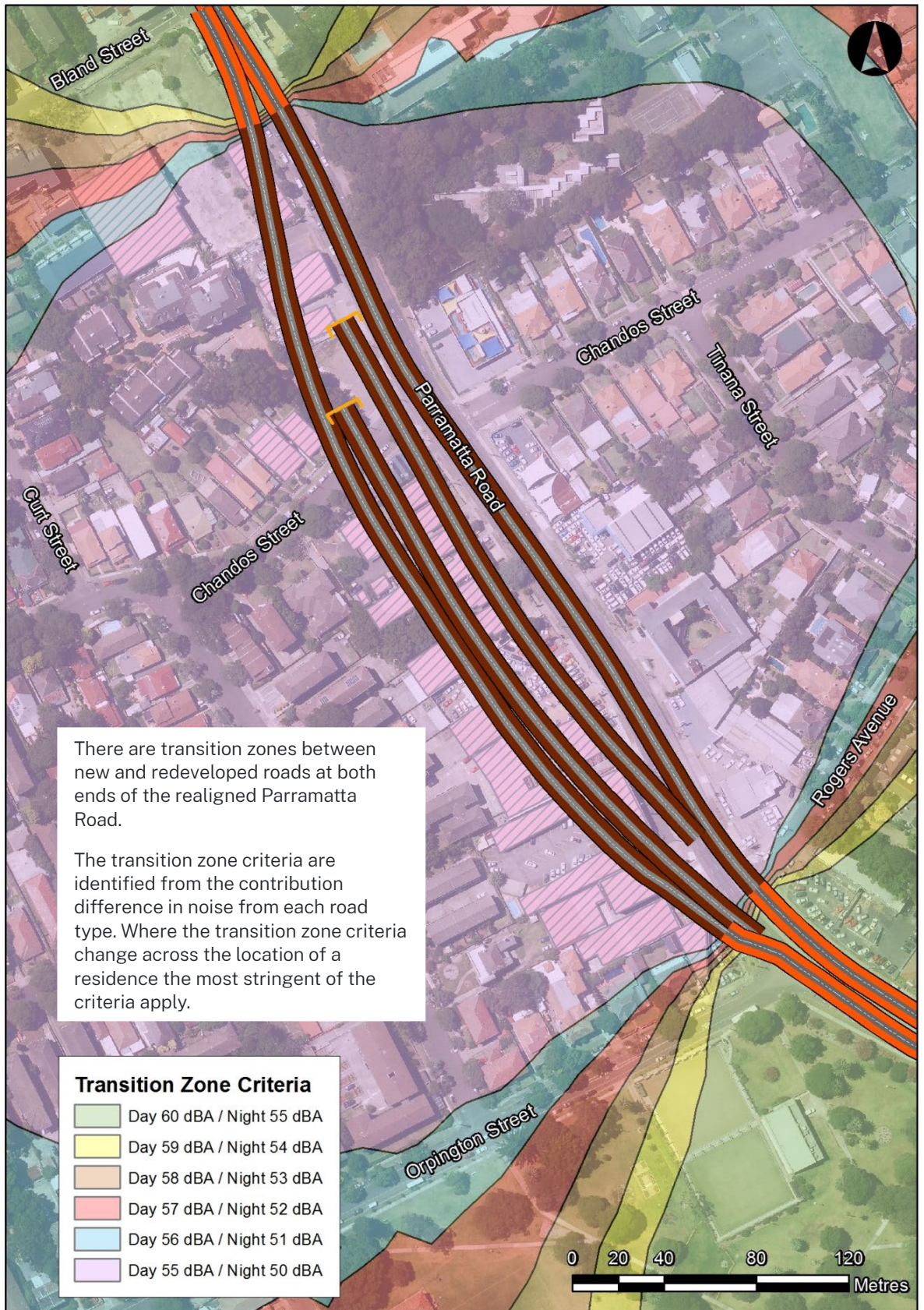


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