

**ITEM 10** **TRANSPORTATION PLANNING**  
**TRAFFIC FLOW IN DUNLIN DRIVE, BURLEIGH WATERS - DIVISION 12 - FILE**  
**550/20/14210(P2)**

Refer Attachment 10.1

**INTRODUCTION**

Ex Minute Number C96.0115.048 - That a report be prepared for the next Planning and Development (South) Meeting by the Director Planning Development & Transport in relation to the design and direction of traffic flow in the Dunlin Drive area.

Dunlin Drive is a Residential/Commercial Collector road running south from Christine Avenue for approximately 1.3km. The road is currently proposed to connect through to the intersection West Burleigh Road and Tabilban Street as part of an approved subdivision rezoning.

The Dunlin Drive catchment area is bounded by Christine Avenue to the north, Bermuda Street/Marymount College to the west, Reedy Creek Road/Commercial zoning to the south and West Burleigh Road/Burleigh Shopping Centre and Burleigh Lake to the east.(refer to attached site plan).

**PURPOSE OF REPORT**

The purpose of this report is to consider the traffic implications of the proposed subdivision and to investigate an option to connect the extension of Dunlin Drive to Sunlight Drive.

**DISCUSSION/CONSIDERATION**

Traffic Counts undertaken in Dunlin Drive in 1994 recorded traffic volumes of 2500 vehicles per day near its intersection with Christine Avenue, and 1800 vehicles per day, 600 metres south of Christine Avenue. These traffic volumes are consistent with its hierarchal function and current catchment area.

The existing section of Dunlin Drive is approximately 1.3km long with predominantly straight and level, horizontal and vertical alignments, conducive to higher than appropriate vehicular speeds for a residential street. A search of Council records reveal a significant number of complaints regarding the speed of vehicles using Dunlin Drive.

A Local Area Traffic Management Scheme has been prepared for Dunlin Drive and surrounding streets by Council's Engineering Services- Traffic Section which is currently being displayed for public comment. The aim of the LATM scheme is to reduce traffic speeds to a more acceptable level, increase intersection safety and to deter non-local through traffic.

The proposed subdivision will extend Dunlin Drive south to connect through to the intersection of West Burleigh Road at its intersection with Tabilban Street. The new section of Dunlin Drive is approximately 1.6 km long, with a curvilinear alignment designed to minimise vehicular speeds and to discourage through traffic movements. An entry threshold treatment and three roundabouts have also been included to calm traffic and increase intersection safety.

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The higher density component of the development is located at the south-east corner, closure to the arterial road system and this should limit the use of residential streets for access.

A Traffic Impact Report was undertaken as part of the Town Planning submission, and proposes that the new subdivision will generate an additional 6150 vehicle per day to the existing traffic network. The predicted traffic distributions suggests an increase in traffic volumes of 1200 vehicles per day at the northern end of Dunlin Drive.

The resultant traffic volumes at the northern end of Dunlin Drive would be approximately 3700 vehicle per day. This volume is reaching the higher limits of acceptability for a Residential/Commercial Collector Road. In this regard the introduction of traffic calming measures in the existing and new sections of Dunlin Drive is supported.

The Development has been conditioned with a contribution of funds towards the upgrading of West Burleigh Road to four lane divided road status, and improvements to the signalised intersection of West Burleigh Road/Tabilban Street/Dunlin Drive. The upgrading of West Burleigh road is considered an essential factor in achieving the predicted disbursement of traffic generated from the site.

With regard to the possible connection of Dunlin Drive to Sunlight Drive, preliminary traffic assessment indicates that this proposal may result in at least 33% more traffic on Dunlin Drive than would be the case if only the current proposed connection was constructed. This increase is primarily due to the Sunlight Drive option acting as a far more direct through route than the route which has already been approved.

As Sunlight Drive provides access to a commercially zoned area, a large portion of the additional traffic is expected to be commercial traffic, involving heavy vehicles and non-local traffic, with a resultant increase in noise levels and reduction in residential amenity.

**KEY ISSUES**

A Local Area Traffic Management Scheme has been prepared by Engineering Services to resolve speeding problems currently being experienced in Dunlin Drive.

The approved subdivision will extend Dunlin Drive south to connect through to West Burleigh Road, resulting in increased traffic volumes on the existing section of Dunlin Drive.

The extension of Dunlin Drive has been designed to minimise through traffic movement and regulate vehicular speeds by way of a curvilinear road alignment and provision of roundabouts and an entry treatment at strategic locations.

The connection of Dunlin Drive to Sunlight Drive is likely to increase traffic volumes in Dunlin Drive by encouraging through traffic movements, with a high proportion of commercial traffic.

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**CONCLUSION**

The Dunlin Drive catchment area will become a significant traffic generator, which if not controlled will result in unacceptable traffic volumes in Dunlin Drive. The introduction traffic management devices( in the existing and proposed sections of Dunlin Drive), and the upgrading of West Burleigh Road will play an important role in ensuring the environmental and physical capacity of the road is maintained.

The possible future connection of Sunlight Drive to Dublin Drive is not supported as this will encourage non-local through traffic, resulting in increased traffic volumes and commercial traffic not consistent with the residential environment.

**RECOMMENDATION**

It is recommended that Council resolve:

That there be no connection of Sunlight Drive to the extension of Dunlin Drive and that access between Dunlin Drive and West Burleigh Road be via the intersection of West Burleigh Road and Tabilban Street as approved in the plan of Development.

Author  
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Signed by   
Director Planning Development & Transport