



Acoustic Treatment Measures to be Constructed



Acoustic Treatment to be Constructed when the noise generated by the operation impacts the amenity of the occupant of 1 Thomas Road. (Refer to Letter from owner of 1 Thomas Road submitted with the application)



## Notes:

1. An alternative to the double white line on the offside edge of the right-turn slot is a 1.0 m painted median. The 1.0 m median is particularly useful when the major road is on a tight horizontal curve and oncoming vehicles track across the centreline. Provision of this median will require the dimension 'A' to be increased.

2. A raised concrete median on the minor road may be used with this treatment to minimise 'comer cutting', particularly for higher turning volumes.

3. The dimensions of the treatment are defined below and values of A, D, R and T are shown in Table 7.2:

- W = Nominal through lane width (m) (including widening for curves). For a new intersection on an existing road, the width is to be in accordance with the current link strategy.
- W<sub>T</sub> = Nominal width of turn lane (m), including widening for curves based on the design turning vehicle. Desirable minimum = W, absolute minimum = 3.0 m.
- B = Total length of auxiliary lane including taper, diverge/deceleration and storage (m).
- D = Diverge/deceleration length including taper. Adjust for grade using the 'correction to grade' factor (Section 5)
- T = Physical taper length (m) and is given by:

$$T = \frac{0.33VW_T}{3.6}$$

- S = Storage length (m) should be the greater of:
  - 1. the length of one design turning vehicle or

2. (calculated car spaces –1) x 8 m (Guide to Traffic Management – Part 3: Traffic Studies and Analysis (Austroads 2009h), or use computer program e.g. aaSIDRA).

- V = Design speed of major road approach (km/h)
- X = Distance based on design vehicle turning path, typically 10–15 m

Source: Based on QDMR (2006).

Figure 7.7: Channelised right turn (CHR) on a two-lane rural road

## 7.5.4 Rural Right-Left Staggered T

## Basic two-lane two-way road

This layout should be designed to ensure that:

- the stagger distance between the minor legs is large enough to discourage drivers from 'taking a short-cut on the wrong side of the traffic islands (e.g. at least 15 m to 25 m depending on the site characteristics)
- the island treatments in the minor roads are long enough to also discourage wrong way movements
- sufficient width is provided on the major road within the intersection to enable through vehicles to pass slowly to the left of vehicles waiting to turn right (e.g. 12 m), a similar principle to the BAR treatment.



ndicate movements relevant to the turn type. They do not represent actual pavement markings. If by the Queensland Department of Main Roads or the New Zealand Transport Agency.

Figure 4.6: Urban auxiliary lane (AU) turn treatments

sign details of urban auxiliary turn treatments refer to:

igure 8.10 for an AUL(S) treatment on the major road comprising a shorter turning lane igure 8.11 for an AUL treatment on the major road comprising a full-length lane.

Austroads 2010 --- 41 ---



