

# Policy

# **Driveway Access to Property - Design** Specification Version 1.45

Adopted by Council at its meeting on 48 July 2013xxx

Minute No: 491xxx

Division: Section: File Reference: Historical Reference: Engineering

V1.0 adopted 15 December 2004, V1.1 adopted 13 November 2007,V1.2 adopted 11 March 2008; Reviewed 21 July 2009 V1.3 adopted 20 June 2013

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# **Driveway Access to Property - Design Specification**

# **Policy Objective**

This Policy will explain the design requirements for those wishing to undertake driveway or other works within the public road reserve.

#### The areas it covers are:

- Who needs to use this Specification??
- What law controls driveways?
- What are the rules generally?
- What are the Detailed Design Requirements??
- Driveway Geometry
- Standard Drawings

#### **Definitions**

#### Not applicable

#### **Access driveway**

Formed vehicular path extending from the edge of the frontage roadway to the property boundary to connect with the first ramp, circulation roadway, parking aisle or domestic driveway encountered.

#### **Driveway layback**

The section of the driveway that connects the roadway to the driveway crossover and includes the driveway wings.

#### **Driveway crossover**

The section of the driveway between the driveway layback and the property boundary. **Domestic driveway** 

A vehicular path accessing a domestic property (three or less domestic units)

# **Policy Background**

Council is the authority for local roads throughout the Shire. Approval is required from Council prior to carrying out works on or occupying a Council road reserve. In order to obtain such approval, design and construction criteria must be <u>followedadhered to</u>, to ensure the ongoing safety of the public and to protect public assets from damage and undue maintenance. This policy describes the design requirements.

# **Policy**

#### 1. Who needs to use this Specification??

The Specification affects any person or organisation that wants to construct or undertake any works within the public road reserve. This includes concrete driveways connecting to the adjacent road, retaining walls, pipes, gardens or organisation that wants to construct or undertake any works within the public road reserve. This includes concrete driveways connecting to the adjacent road, retaining walls, pipes, gardens or organisation that wants to construct or undertake any works within the public road reserve.

This specification specifically deals with access driveways and information regarding other works is available upon request from Council's Engineering and Operations Division or Council's website.

## 2. What law controls driveways??

Section 138 of the Roads Act 1993 requires Council <u>c</u>Consent for works on <u>local public</u> <u>roadsroad reserves</u> (<u>local roads</u>) <u>and this which</u> includes driveways, <u>structures</u>, footpaths/retaining walls & gardens.

A formal application must be made to Council under Section 138 of the Roads Act 1993 and should be made on the appropriate form "Driveway Access to Property application" and the applicable fee paid. Incomplete applications will not be considered until all requested information is provided.

#### 3. What are the rules generally?

#### 3.1 General Requirements

Asphalt or bitumen access driveways are not permitted in urban-built-up areas.

Any landscaping of the Council's nature strip must provide, at the plantings' maturity, an accessible footpath corridor of two metres in width.

#### 3.2 Number of Driveways

One driveway is generally permitted for each property adjoining a public road.

In some circumstances a second driveway may be approved provided the constraints in Development Control Plan Section A , Part A s4.7No 6 regarding garage door presentation to the street and Section 4.2 (on-street parking) are satisfied. Dual road frontage properties will generally not be permitted to access both roads if either is a designated distributor road in Council's road hierarchy plan. (LEP 2000).

Medium Density residential and other larger developments will be assessed based on merit.

#### 3.3 Shared Driveways

Shared driveways are not encouraged and will usually only be permitted where properties are accessed via a right of carriageway, or the terrain prevents alternatives.

#### 3.4 Ownership

As driveways within public road reserve are on Council land, they are under the control of Council. Nevertheless, access driveways within the road reserve are the <u>benefitting</u> property owners' responsibility to initially construct and then maintain. Damage caused

by Council or other public authorities undertaking works will be reinstated by the Authority causing the damage, however, whilst reasonable attempts will be made to match coloured or stencilled concrete finishes – an exact match is not guaranteed. Note that Council accepts no legal responsibility for claims arising from accidents to the public caused by badly constructed or unauthorised driveways.

#### 3.5 Australian Road Rules Garage Set-back

<u>Development Control Plan Section A2 Clause 3.1, C4 requires the garage to be setback 5.5 metres from the property line to allow for off-street parking that does not impede the footpath or naturestrip.</u>

Australian NSW Road Rules adopted in 1999 prohibit the parking of a vehicle on the driveway crossover section footpath area or verge outside the road carriageway. This means that vehicles parked in driveways between the property boundary and the road carriageway are in breach of the Road Rules and can be fined. Your driveway design should allow for standing of vehicles between the property boundary and the garage door, alternatively an open carport shelter may be approved subject to criteria in Development Control Plan Section A2 Clause 3.1, Setbacks.

#### 3.6 Crown Roads and Reserves

Historically some properties were permitted to access via unformed Crown Roads or Reserves when they were under the care and control of Council. The Roads Act 1993 now vests control of all Crown Roads in the Crown. Persons wishing to gain access via an unformed Crown Road must first obtain and submit written approval from the appropriate State Government authority. Council will not under any circumstances approve access to a property via a public reserve or Community land.

#### 3.7 Other Public Authorities

In some instances Council will need to refer applications to other Authorities such as the Roads & Traffic Maritime Authority Services (RMSTA). If the driveway or works is connectingadjacent to the Pacific Highway or some other a classified roads then RMSTA approval is also required.

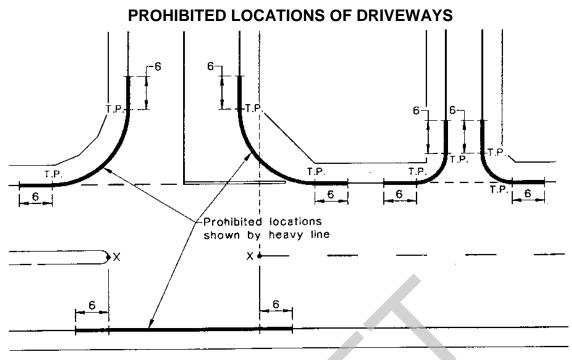
#### 4. What are the Detailed Design Requirements?

#### 4.1 Driveway Locations

#### 4.1.1 Street Corners

Driveways at intersections must be located at least six (6) metres beyond the tangent points of the kerb and gutter returns (where the curved kerb straightens out). The sketch below shows the locations where driveways are prohibited.

"U" shaped access driveways can only be permitted on a corner block where exceptional extreme circumstances can be demonstrated.



T.P. = Tangent Point (Dimensions in metes)

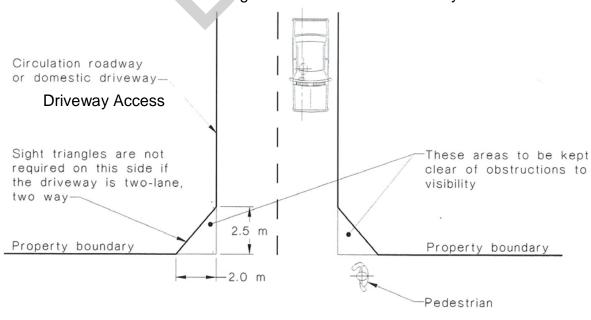
#### NOTES:

- 1. Accesses to domestic driveways are excluded from the prohibition in respect of the kerb section opposite the entering road at any intersection.
- The points marked "x" are either at the median end of a divided road, or at the intersection of the main road centre-line and the prolongation of the side road property on an undivided road.

#### 4.1.2 Sight Lines and Safe Visibility

In urban areas a "sight triangle" as shown on the sketch below must be maintained. This is required to ensure <u>adequate visibility between vehicles leaving the driveway crossover and pedestrians and cyclists</u>. can see vehicles exiting driveways and vice versa.

#### Minimum Sight Lines for Pedestrian Safety



\* 2m for single and dual occupancy dwellings

This requirement is important if "solid" front boundary fences or walls over 600mm high are planned as they must not encroach on the sight line above and will also impact on the location and design of driveway gates. (See Section 4.7).

The following table specifies the sight distance required measured from the driveway to oncoming traffic in both vertical and horizontal alignment. The sight distance is relative to traffic speed (speed zone) of the adjoining road.

For Driveways to Single  Dwellings or Domestic property		Access driveways other than domestic
a	<u>ccess</u> D <del>uplexes</del>	
Speed	Sight Distance <del>Urban</del>	Sight Distance <del>Urban</del>
(k <u>m/h</u> ph)	(m)	(m)
*		
40	30	<u>55</u> 60
50	40	<u>69</u> 80
60	55	<u>83</u> 105
70	<u>70</u>	97
80	<u>95</u>	111
90	<u>125</u>	130
100	<u>139</u>	<u>160</u>

<sup>\*</sup> May be reduced below regulatory limit if speed environment demonstrates lower.

#### 4.1.3 Obstructions

Care should be taken to ensure planned driveways are located clear of stormwater gully pits, light poles and Telstra pits. If any of these or other facilities are affected the owner/applicant will need to meet the costs of relocation.

Sewer manholes and water supply hydrants can be incorporated in driveways but special covers are required. The Council should be contacted regarding any of these issues if in doubt. See also Section 4.7 "Gates".

All existing trees within the road reserve are to be retained where possible and protected during construction. Where this is not possible, street trees are to be replaced with a similar species in a 45L pot in accordance with Council's Development Design Specification D14.08.03C Tree Planting and Location and Standard Drawing 'Tree and Shrub Planting Details' dwg no SD701 to the satisfaction of the General Manager or his delegate.

Access driveways must be formed two metres from trees with root barrier to be installed. These details to be shown on submitted plans in accordance with SD 701.

#### 4.1.4 Adjoining Frontages and Driveways

Driveways are to be <u>at right anglesorthagonal</u> to the <u>frontage roadwayroad carriageway</u> and should therefore not encroach on a neighbouring frontage. In some instances due to steep topography Council may consider a variation to this requirement <u>after consultation with the neighbouring property owner</u>.

Similarly aAbutting driveways are not encouraged and a minimum gap of 6.0 metres between driveways should be provided where possible to facilitate on street parking.

#### 4.2 Additional Driveway Access's

Similarly, iA second driveway can only be approved where the parking space is located behind the building line.

In commercial areas and on sites where a second driveway access is approved driveways must be at least 6.05 metres apart or multiples thereof so as to preserve on street car parking.

#### 4.3 Urban Streets with Kerb Gutter

#### 4.3.1 Roll Top Kerb

Driveways in streets with roll top kerb and gutter should be designed to match the top of the kerb as the kerb profile readily permits access over the kerb.

It should be noted that streets with older style angle back kerb may need to provide a layback kerb section as shown on the <u>S</u>standard <u>drawings</u> in <u>Section 6</u> Drawing S\_D\_017.

Approval will not be given for concrete nibs or timber in the gutter or steel plates as alternatives to the above as they are potential traffic and pedestrian hazards and may impede stormwater flow.

#### 4.3.2 Vertical Faced Kerb

Driveways in streets with this type of kerb will required the removal of the kerb and replaced with a "layback section" as shown on the Setandard drawings in Section 6 Drawing S.D.017.

#### 4.4 Urban Streets with No Kerb & Gutter

Where kerb and guttering has not been provided, but levels for the future kerb and guttering are available, the proposed access must accommodate the future design. Normally, a piped crossing of the table drain is to be provided. (See Section 4.5) for standards. This can be constructed by Council, at the property owner's expense, or privately, to Council's requirements. Concrete driveways may be extended from the property boundary to the kerb line or edge of bitumen and levels will be provided, on request, from the Engineering Services Division.

Refer to Standard Drawing S.D.011 for requirements for driveway access to properties fronting unkerbed roads. A copy of Council's "Vehicular Driveway Access Details with Piped Table Drains" is in Section 6.1 Drawing 1 setting out all relevant requirements.

#### 4.5 Rural Roads

Driveways must include <u>a</u> stormwater culvert within any existing table drain as shown on the Sstandard Ddrawing S.D.011.in Section 6 Drawing 1.

They must be no closer than 1.2 metres to the edge of the traffic travel lane and should have a guide post erected on the "approach" side of the culvert.

It should be noted that keeping the culvert inlet/<u>outlet</u> clear of debris <u>isand</u> repairing erosion at the culvert outlet is the responsibility of the <u>benefitting</u> property owner. <u>serviced by the driveway.</u>

#### 4.6 Existing Concrete Paving

Where a proposed access driveway crosses existing concrete footpaving the footpaving must be sawcut at the extremities of the driveway and removed and reconstructed to the <u>Footpath & Cycleway Details</u> <u>specified access driveway standards in Standard Drawing S.D.013shown in this specification.</u>

The grade and crossfall of the pre-existing footpath must be maintained so in some cases additional footpaving may need to be removed.

Where no footpaving exists and driveways are planned to be cut into the footpath to obtain grades, the nature strip on each side of the driveway must be battered smoothly at a grade no steeper than 7% (1 in 14)—to maintain acceptable stands for pedestrians and enable future provision of concrete footpaving.

Where the paved footpath is immediately behind a vertical face kerb, the footpath will usually need to be deviated toward the property boundary to allow cutting in of the driveway access. The maximum directional deviation of the footpath in this instance should exceed 30 degrees.

### 4.7 Gates Across Driveways

Solid or opaque gates must be kept clear of sight lines specified in Section 4.1.2.

If the gates are of a see-through construction such as weldmesh or grates then they may be constructed up to 2.0 metres behind the property boundary on local roads or minor collector roads for all types of residential construction. For major collectors and distributor roads, gates must be set back 2.0 metres for single dwellings or duplexes and 5 metres for all other residential development behind the property boundary to enable a vehicle to stand clear of the footpath area whilst the gate is opened.

It is a breach of the <u>Australian NSW Road Rules</u> (see Section 3.<u>5</u>4) to obstruct the footpath area and undesirable for safety and traffic efficiency reasons for vehicles to sit on the road carriageway whilst gates are opened.

All gates must be swung into private property.

#### 4.7.1 Manually Operated Gates

If the gates are of a see-through construction such as weldmesh or grates then they may be constructed up to 2.0 metres behind the property boundary on local roads or minor collector roads. For major collectors and distributor roads gates must be set back 5.0 metres behind the property boundary to enable a vehicle to stand clear of the footpath area whilst the gate is opened.

All gates must be swung into private property.

It is a breach of the Australian Road Rules (see Section 3.4) to obstruct the footpath area and undesirable for safety and traffic efficiency reasons for vehicles to sit on the road carriageway whilst gates are opened.

#### 4.7.2 Remote Controlled Electric Gates

The standing requirements applying to manual gates may be waived in this circumstance, but the visibility requirements in Section 4.1.2 must be observed.

#### 5. Driveway Geometry

Different driveway standards apply based on driveway usage and frontage road classification.

#### 5.1 Driveway Widths, Thickness & Reinforcement

The following table specifies the driveway widths for various types of development and also specifies the driveway thickness and steel reinforcement required.

#### **DRIVEWAY WIDTHS**

TYPE OF DRIVEWAY	WIDTH AT BOUNDARY (M) <del>"X"</del>	WIDTH AT KERB (M) "Y"	THICKNESS(mm)/ REINFORCEMENT "T"
SINGLE DWELLING OR	3.00 min.	3.00 min.	100
DUPLEX UNIT	6.00 max.	6.00 max.	F72
UNITS LOCAL STREETS	3.50	6.50	150/F72
* UNITS COLLECTOR ROADS	6.00	9.00	1 <u>75</u> <del>50</del> /F <u>8</u> 72
* COMMERICAL/ INDUSTRIAL	7.00	13.00	200 F82

<sup>\*</sup> These widths are indicative only and different widths may be specified in Section 138 Approvals

#### 5.2 Grades and Crossfalls

#### 5.2.1 Transverse Grades (Crossfall)

The transverse grade on the driveway must be the same as that on the kerb and gutter (or road if no kerb and gutter) and must be carried over to the property boundary, although it may be necessary to rotate slightly to match existing footpath levels.

Once inside the property the transverse levels can be "rotated to match in with internal constraints such as garage ramps.

Edge "coving" and mini-kerbs are a serious pedestrian "trip" hazard and are not permitted on any trafficable footpath.

#### 5.2.2. Driveway Grades and Crossfall

The maximum longitudinal grade on the driveway across the footpath area is 2.5% (1 in 450) (see Standardection 6.1 Drawing S.D.017). For domestic properties (3 or less residences) from the property boundary to the garage or car space the maximum grade is 25% (1 in 4) (see Standardection 6.1 Drawing S.D.017).

For non-domestic driveways a maximum gradient of  $\frac{5\%}{1}$  in 20 is permitted from the property line-or building alignment for at least the first 6m.

#### 5.2.3. Footpath Intersections

Where the driveway intersects on paved or grassed footpath the existing grade of the footpath must be maintained across the driveway with no drainage slots, kerbs or steps to create a pedestrian hazard. Council will not approve driveways extending into the naturestrip or footpath area unless special circumstances can be demonstrated.

#### 5.2.4 Older Subdivisions

Subdivisions approved prior to 1980 may have steep footpath crossfalls that prevent compliance. Proposals should be discussed with Council staff before detailed design commences.

#### 5.3 Surface Finishes

#### 5.3.1 Allowable Surfaces

Plain concrete wood floated or broomed

Paving bricks if laid on 100mm thick concrete slab.

Exposed aggregate provided "angular" non- slip aggregate is used (rounded pebbles not accepted).

Coloured concrete

Stencilled concrete with non-slip surface

#### 5.3.2 Unacceptable Surfaces

Stamped pattern concrete

Paving bricks on sand or gravel bases.

Polished or slippery finishes.

Grass, dirt or gravel.

It must be noted that Council accepts no responsibility to match exact<u>lying</u> any surfaces if they have been removed or damaged as a result of any works undertaken by Council within the Road Reserve.

Failure to observe <u>surface finishthose</u> requirements or failure to properly maintain the driveway surface, resulting in slippery conditions or a trip hazard, will render the property owner legally liable for injury to pedestrians who suffer as a consequence.

Access driveways must be formed two metres from trees with root barrier to be installed. These details to be shown on submitted plans in accordance with SD 701.

#### 6. Standard Drawings

#### 6.1 Tweed Shire Council Standard Drawings

The Tweed Shire Council Standard drawings provide all relevant details for the design and construction of driveway access within the road reserve and these are available on Council's website – www.tweed.nsw.gov.au

#### -Relevant Standard Drawings:

- S.D.011 Driveway Access to Properties Fronting Unkerbed Roads
- S.D.013 Footpath and Cycleway Details
- S.D.017 Driveway Access to Properties Fronting Roads With Kerb and Gutter

#### Notes:

**Domestic** 

A driveway gradient of 1:6 is currently considered to provide suitable access to a level carparking space, carport or garage. Council may be prepared to accept a steeper gradient of 1:4 for houses situated on very steep grades.

However, if the driveway is to be used for carparking, a gradient no more

than 1:10 is most appropriate.

Max driveway gradient 1:20 of (5%) from property line for the first 6m. **Non Domestic** 

Note that Council will not approve driveways with ramps extending into the road reserve footpath zone unless special circumstances can be demonstrated. (e.g. the footpath is already permanently untrafficable for pedestrians.)

\* Transition curves extending 0.8 metres each side of the road boundary are required between steep and level grades to enable vehicles to maintain underbody clearances. These shorten the potential length of maximum gradient available. Designers should check clearances with a vehicle template for Australian family sedan. Transition curves are required when changes in grade exceed 12.5% algebraically (1:8) (eg 1:4 to 2.5%  $\Rightarrow$  + 25% - 2.5% = 22.5% therefore transition required).

Refer to the Standard Drawings SD017 and SD011, which are available on Council's website - www.tweed.nsw.gov.au.

#### 6.2 Applicant's Drawings

The applicant is to prepare and submit the following drawings with their applications:

- AThree (3) copyies of a site plan of the property and adjacent section of public road, drawn to a scale of 1:200 showing - (a) The location and widths of the proposed driveway or modifications from the garage/carpark to the kerb and gutter/edge of bitumen; (b) Proposed restoration of existing surfaces or services that are likely to be damaged; (c) Proposed construction or modification, including levels, of kerb and gutter or footpath paving on a public road.
- Three (3) copies of a longitudinal section from the garage/carport/parking area to the kerb and gutter for edge of sealed roadbitumen showing the natural surface levels and the proposed finished driveway levels drawn to a scale of 1:50.
- On steeper slopes, 3 copies of a cross section showing natural surface and finished levels plus any proposed retaining walls to a scale of 1:50
- Work safety plan

#### 6.3 Traffic and Pedestrian Safety Management

Workplace Health & Safety Occupation Health & Safety, Workcover and Australian Standards require that all work sites be made safe and accessible for pedestrians and, traffic workers.

In respect of all construction work the contractor or person constructing the access must provide and maintain proper fencing, guarding, lighting and care of all works and temporary footways, guards and fences as required for the accommodation and protection of pedestrians, motorists and the public. The signs, lights, barriers and fences are to be in accordance with A.S. 1742 (Traffic Control Devices). The contractor

or property owner shall be adequately insured against Public Risk Liability and shall be responsible for any claims arising from these works.

#### 6.3.1 Work Safety Plan

The following drawings provide examples of traffic and pedestrian controls at driveway construction sites. They are not applicable to all sites and therefore all sites must be considered individually and varied as appropriate to produce a site specific Work Safety Plan.

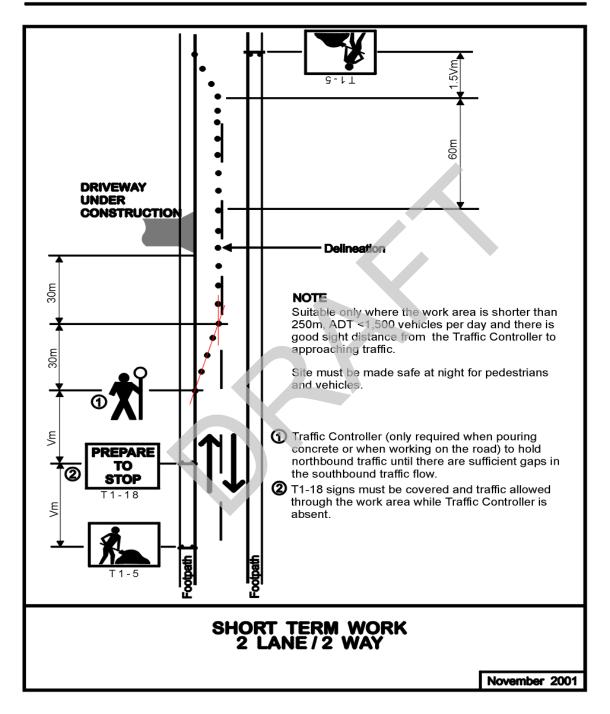




## **DRIVEWAY CONSTRUCTION**

TWEED SHIRE COUNCIL

**Traffic Control at Work Sites** 



TCP 61d

Approved: \_\_\_\_ Date: \_\_\_ Rev. A

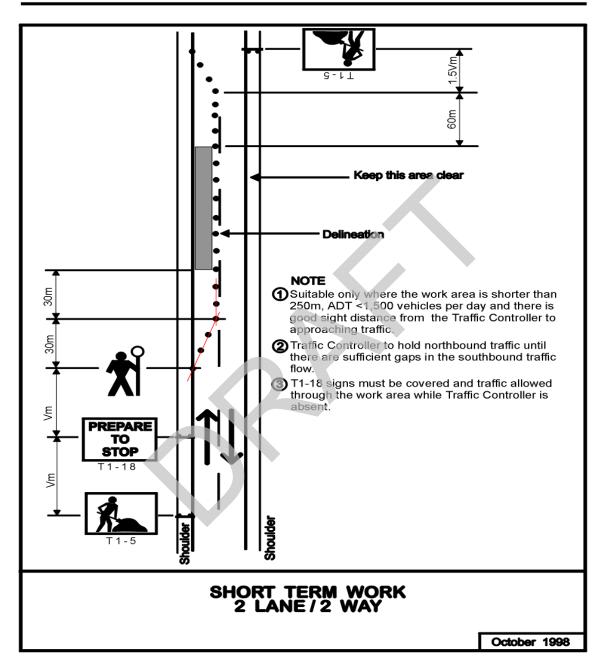


# MAINTENANCE ACTIVITIES

**TWEED** 

SHIRE COUNCIL

**Traffic Control at Work Sites** 



**TCP 108a** 

Approved: \_\_\_\_\_ Date: \_\_\_\_ Rev. A

tcp 108a21.cd

# **Related Legislation**

Roads Act 1993

# **Compliance**

Failure to obtain or act in accordance with an approval under the Roads Act 1993, or failure to maintain structures approved under the Roads Act 1993, may result in the issuing of directions or penalty notices by Council.

#### **Forms**

1. Driveway Access to Property application

#### **Review Period**

This Policy will be reviewed within 12 months of the election of each new Council or more frequently in the event of any legislative changes or change in circumstances.

#### **Useful Links**

**Tweed Shire Council website** 

# **Version Control:**

Version History				
Version #	Summary of changes made	Date changes made		
1.3	Minor amendments made and converted to new Policy template.	20/06/2013		
1.4	Standard drawings SD017 and SD011 deleted.	03/07/2013		
<u>1.5</u>	Various changes.	04/07/2017		