

TWEED SHIRE COUNCIL

DEVELOPMENT CONSTRUCTION SPECIFICATION

C101

GENERAL

VERSION 1.4

SPECIFICATION C101 – GENERAL

CLAUSE	CONTENTS	PAGE
CITATION		3
ORIGIN OF DOCUMENT, COPYRIGHT		3
VERSIONS, C101 GENERAL		3
GENERAL REQUIREMENTS.....		4
C101.01	SCOPE.....	4
C101.02	PRE-REQUISITES FOR CONSTRUCTION CERTIFICATE	4
C101.03	APPOINTMENT OF PRINCIPAL CERTIFYING AUTHORITY	4
C101.04	PRE-REQUISITES, PRIOR TO COMMENCING SUBDIVISION WORKS	5
C101.05	OTHER REQUIREMENTS.....	6
C101.06	STANDARDS AND TESTING	6
C101.07	WORKING AREAS.....	7
C101.08	SMOOTH JUNCTIONS	7
C101.09	SETTING OUT THE WORKS	7
C101.10	RESERVED	7
C101.11	RESERVED	7
C101.12	RESERVED	7
C101.13	RESERVED	8
ENVIRONMENTAL REQUIREMENTS.....		8
C101.14	PROTECTION OF THE ENVIRONMENT	8
C101.15	DRAINAGE OF WORKS	8
C101.16	BLASTING	9
C101.17	LIMITS ON NOISE.....	9
C101.18	LIMITS ON GROUND VIBRATION.....	9
SPECIAL REQUIREMENTS.....		10
C101.19	RESERVED	10
C101.20	RESERVED	10
C101.21	RESERVED	10


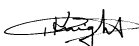
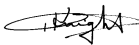

CITATION

This document is named "Tweed Shire Council, Development Construction Specification C101 - General

ORIGIN OF DOCUMENT, COPYRIGHT

This document was originally based on AUS-SPEC - Development Construction Specification C101 - General, March 2001 (Copyright SWR-TM). Substantial parts of the original AUS-SPEC document have been deleted and replaced in the production of this Tweed Shire Council Development Specification. The parts of the AUS-SPEC document that remain are still subject to the original copyright.

VERSIONS, C101 GENERAL

VERSION	AMENDMENT DETAILS	CLAUSES AMENDED	DATE ISSUED (The new version takes effect from this date)	Authorised by the Director of Engineering Services
1.1	Original Version		1 July 2003	
1.2	Public insurance requirements and PCA definitions clarified Substitution of SWAC for CPE on small subdivisions	C101.01-6, C101.04-5, C101.05-4 C101.01-5, C101.04-3	11 April 2007	
1.3	Update SWAC accreditation details	C101.01-4	9 July 2012	
1.4	Replace all references to SWAC with "Certifying Engineer" Update Certifying Engineer accreditation requirements	Various C101.01	5 February 2016	

DEVELOPMENT CONSTRUCTION SPECIFICATION C101

GENERAL

GENERAL REQUIREMENTS

C101.01 SCOPE

1. This specification is for construction of subdivision works. **Subdivision works**
2. A Certifying Engineer must be appointed by the Subdivider to ensure that subdivision works are completed in accordance with the conditions of development consent and issue a “subdivision works compliance certificate”. **Certifying Engineer**
3. An accredited certifier must not be appointed as the Certifying Engineer for a subdivision if **Certifying Engineer cannot have conflict of interest**
 - (a) he or she has a conflict of interest in accordance with section 109ZG of the EP&A Act).
4. A Certifying Engineer shall be an Engineers Australia Chartered Professional Engineer (CPEng) with current National Engineering Register (NER) registration in the Civil Engineering area of practice **Certifying Engineer Accreditation**

A Certifying Engineer shall be required to provide documentary evidence to Council demonstrating current accreditation with NER (Civil Engineering).
5. Deleted
6. In this Specification, where appropriate, the term “Council” is to be substituted for “The Consent Authority” or “Principal Certifying Authority” (PCA), where Council is not the consent, determining authority or PCA for the subdivision. **Consent Authority**

C101.02 PRE-REQUISITES FOR CONSTRUCTION CERTIFICATE

1. A construction certificate for the subdivision works may be issued by Council, the consent authority (if Council is not the consent authority), or an accredited certifier.
2. A construction certificate application for works that involve any of the following
 - (a) connection of a private stormwater drain to a public stormwater drain
 - (b) installation of stormwater quality control devices
 - (c) erosion and sediment control works

will not be approved until prior separate approval to do so has been granted by Council under section 68 of the Local Government Act 1993. Applications for these works must be submitted on Council’s standard s68 stormwater drainage application form accompanied by the required attachments and the prescribed fee.
3. In accordance with s109f(1)(b) of the act, a construction certificate for subdivision works shall not be issued until any long service levy payable under s34 of the Building and Construction Industry Long Service Payments Act, 1986 (or where such levy is payable in instalments, the first instalment of the levy) has been paid. Council is authorised to accept payment.

C101.03 APPOINTMENT OF PRINCIPAL CERTIFYING AUTHORITY

1. The Subdivider must appoint a Principal Certifying Authority for the carrying out of the subdivision
2. In accordance with s109D of the Act and Tweed LEP 2014, Council must be the Principal Certifying Authority for all private subdivisions except where the crown is the consent authority.

3. The Subdivider must make a request in writing for Council (or if applicable a crown consent authority) to be the Principal Certifying Authority.
4. If acceptable, Council (or applicable crown consent authority) will issue a statement that it consents to being appointed as Principal Certifying Authority.

C101.04 PRE-REQUISITES, PRIOR TO COMMENCING SUBDIVISION WORKS

1. In accordance with s81A of the Act, prior to commencement of subdivision works, a construction certificate shall be obtained for the works.
2. Subdivision works must be executed in accordance with
 - (a) the conditions of development consent
 - (b) the construction certificate and
 - (c) the approved design plans and attachments which accompanied the construction certificate application.
3. Subdivision works must not commence until the person having the benefit of the development consent has
 - (a) appointed a Principal Certifying Authority and notified the consent authority and Council (if Council is not the consent authority) of the appointment
 - (b) given notice of the appointment to the consent authority and Council (if Council is not the consent authority):- name and address of the Subdivider (person having the benefit of the development consent), description of the subdivision works, registered numbers and dates of issue of development consent and construction certificate name and address of the Principal Certifying Authority
 - (c) appointed a Certifying Engineer in accordance with section C101.01.
4. Works are not to commence until the Principal Certifying Authority has issued a signed notice to the effect that all conditions of the consent that are required to be satisfied prior to the works commencing have been satisfied.
5. Subdivision works must not commence until the person having the benefit of the development consent has
 - (a) given Council and the Certifying Engineer at least 2 day's notice of intention to commence the subdivision works.
 - (b) The above notice must also include:
 - (i) name and address of the Subdivider (person having the benefit of the development consent),
 - (ii) description of the subdivision works,
 - (iii) registered numbers and dates of issue of development consent and construction certificate, and
 - (iv) the date on which works are intended to commence
 - (v) copies of public liability insurance required in accordance with C101.05.4.
6. A Traffic Control Plan that complies with the provisions of the RTA document "Traffic Control at Work Sites" Version 2 shall be prepared by a person who is qualified, authorised and has passed an RTA approved training course, and submitted to Council, prior to commencement of works. All works are to comply with the Occupational Health and Safety Act and the RTA document and the approval particularly in respect to works on public roads. Safe public access shall be provided at all times.

**Traffic Control
Plan**

GENERAL

7. Prior to commencement of works, a cash bond or bank guarantee (unlimited in time) shall be lodged with Council for an amount based on 1% of the value of the works (minimum \$1,000). The bond may be called up at any time and the funds used to rectify any non-compliance with the conditions of this consent, which are not being addressed to the satisfaction of the Director Planning and Regulation. The bond will be refunded, if not expended, when the final Subdivision Certificate is issued. **Bond**
8. Prior to the commencement of work the applicant shall submit to Council evidence that a Site-Specific Safety Management Plan and Safe Work Methods for the subject site have been prepared in accordance with either:-
 - (a) Occupation Health and Safety and Rehabilitation Management Systems Guidelines, 3rd Edition, NSW Government, or
 - (b) AS4804 Occupation Health and Safety Management Systems - General Guidelines on Principles Systems and Supporting Techniques.
9. Prior to commencement of subdivision works, a sign detailing the project and containing the names and contact phone numbers of the Subdivider, Certifying Engineer and major Contractors shall be erected and maintained in a prominent position on the site to the satisfaction of the Certifying Engineer. The sign is to remain in place until the subdivision certificate is issued.

C101.05 OTHER REQUIREMENTS

1. No soil, sand, gravel clay or other material shall be disposed of off the site.
2. Any damage caused to public infrastructure (roads including pavement damage, landscaping, drains, water supply, sewerage, power, telecommunications etc) or private property, during construction of the subdivision works shall be repaired as soon as practical to the satisfaction of the Certifying Engineer and the asset owner.
3. Where the subdivision works are adjacent to public roads, parks or drainage reserves the Subdivider shall provide and maintain all warning signs, lights, barriers and fences in accordance with AS 1742 (Manual for Uniform Traffic Control Devices). The Subdivider shall be adequately insured against Public Risk Liability and shall be responsible for any claims arising from these works.
4. The Subdivider shall be insured against Public Risk Liability claims for a minimum of \$10 million and shall be responsible for any claims arising from these works. The insurance shall provide be for a minimum \$10 million and cover the period from the commencement of works until the completion of the defects liability period and for run on claims for another 10 years.
5. The surrounding carriageways are to be kept clean of any material carried onto the roadway by construction vehicles. Any work carried out by Council to remove material from the roadway will be debited to the Subdivider and must be paid in full prior to the issue of a subdivision certificate.
6. No retaining walls or similar structures are to be constructed over Council's sewers.

C101.06 STANDARDS AND TESTING

1. Unless otherwise specified, and where applicable, materials and workmanship shall be in accordance with the relevant standard of the Standards Association of Australia. **Australian Standards**
2. A standard applicable to the Works shall be the edition last published 14 days prior to the commencement of subdivision works unless otherwise specified.
3. Overseas standards and other standard documents named in the Specification shall be applicable in the same manner as Australian Standards to relevant materials and workmanship. **Overseas Standards**
4. Copies of any standards quoted or referred to in the Specification shall be kept on the site if so specified. **Copies to be kept on Site**

- | | | |
|----|---|---------------------------|
| 5. | Where no suitable Australian Standard test methods are available, those of the relevant State Road Authority shall be used. These are designated T123 etc. | Other Test Methods |
| 6. | All testing and survey as required by the relevant development construction specifications shall be arranged and carried out by the Subdivider and all test results and survey records made available to the Certifying Engineer and Council. The cost of all such testing and survey shall be borne by the Subdivider. | Subdivider's Cost |
| 7. | The minimum frequency of testing and survey shall be in accordance with relevant development construction specifications or other standards. | Minimum Frequency |

C101.07 WORKING AREAS

- | | | |
|----|---|--------------------------|
| 1. | The Subdivider is responsible for the safe-keeping of any plant, equipment, tools, materials or other property. The Subdivider may provide any security fencing considered necessary around any office, workshop or storage area, subject to the Certifying Engineer's approval. | Security |
| 2. | If existing fencing is cut or altered by the Subdivider or their agents, or if there is no existing site fencing, the Subdivider shall provide and maintain temporary fencing during the subdivision works to prevent unauthorised entry into the property, and shall reinstate the fencing and remove temporary fencing on completion of the work. | Temporary Fencing |
| 3. | The Subdivider shall erect appropriate regulatory, hazard, emergency information and fire signs, in accordance with AS 1319 Safety Signs For The Occupational Environment, at prominent locations around the working areas and temporary site facilities. Signs shall include, but are not limited to: mandatory signs for personal protection such as eye, head and foot protection, and DANGER signs such as "DANGER, Construction Site. No Unauthorised Access". All words on word-message signs shall be approved by the Certifying Engineer prior to sign manufacture or purchase. | Safety Signs |

C101.08 SMOOTH JUNCTIONS

1. Construction work adjacent to or adjoining existing works, shall make smooth junctions with the existing work.

C101.09 SETTING OUT THE WORKS

- | | | |
|----|--|---------------------------|
| 1. | The Subdivider will provide Permanent Marks and establish bench marks related to the level datum as shown on the design plans. Survey control must be established by a registered surveyor. All works must be set out under the supervision of a registered surveyor and to the satisfaction of the Certifying Engineer. | Provision of Marks |
| 2. | The Subdivider is responsible for transfer of survey marks that may be affected by the subdivision works. | Transfer of Marks |
| 3. | The Subdivider shall give the Certifying Engineer 2 full working days notice of intention to establish or relocate survey control or recovery pegs. | |
| 4. | The Subdivider shall arrange to provide and fix adequate recovery pegs in suitable locations adjacent to the elements of work to enable location and construction to be checked. | Recovery Pegs |
| 5. | All pegs and profiles placed by the Subdivider shall be removed on completion of work unless otherwise directed by the Certifying Engineer. | Removal |

C101.10 RESERVED**C101.11 RESERVED****C101.12 RESERVED**

GENERAL

C101.13 RESERVED

ENVIRONMENTAL REQUIREMENTS

C101.14 PROTECTION OF THE ENVIRONMENT

- | | | |
|----|---|--|
| 1. | All work shall be carried out in such a manner as to avoid nuisance and/or damage to the environment. The Subdivider shall comply with the requirements of the conditions of development consent, the Protection of the Environment Operations Act, the Rural Fires Act and other relevant government statutes. | Conformance to Development consent and statutes |
| 2. | The Subdivider shall plan and carry out the Works to avoid erosion, contamination and sedimentation of the site and its surroundings in accordance with the approved (erosion and sediment control plan) ESCP. | Erosion Control |
| 3. | Herbicides and other toxic chemicals shall not be used on the site without the prior written approval of the Principal Certifying Authority. | Herbicides and Toxic Chemicals |
| 4. | No noise or smoke or other nuisance, shall be permitted by the Subdivider in the performance of the subdivision works. Should work outside customary working hours be approved, the Subdivider shall not use, during such period, any plant, machinery or equipment, which in the opinion of the Certifying Engineer is causing or is likely to cause a nuisance to the public. No noisy works and/or works likely to disturb nearby residents shall be undertaken during the hours precluding such activity as specified in the development consent and Government statutes. | Noise, Smoke or Other Nuisances |
| 5. | Suitable covering and protection is to be provided to ensure that no dust or other material is removed from disturbed areas of the subdivision works site by wind, causing nuisance to neighbouring properties. | Dust Control |
| 6. | All battered areas are to be topsoiled and grassed, or other suitable protection provided as soon as filling is placed adjacent to neighbouring properties. | |
| 7. | The subdivision works are to be conducted in a manner that avoids nuisance to residents or disruption to the amenity of the locality from noise, water or air pollution or from the emission of dust fumes or the like. | |
| 8. | Except as expressly provided in a statutory approval, the Subdivider must comply with s120 of the Protection of The Environment Operations Act 1997 prohibiting the pollution of waters. | |
| 9. | Acid sulphate soils shall not be disturbed or exposed in a manner which is likely to generate acid sulphate runoff. | |

C101.15 DRAINAGE OF WORKS

- | | | |
|----|---|-----------------------------|
| 1. | The control and management of stormwater drainage through the site will be important during construction of the Works. | Stormwater Control |
| 2. | The Subdivider shall provide for the effectual diversion of surface water from the Works and provide and ensure proper flushing for storm and subsoil water across and beyond the Works at all times. The flow of stormwater and drainage along existing gutters and water tables shall not be interrupted. | Stormwater Diversion |
| 3. | The Subdivider shall provide efficient pumping equipment on site and shall keep trenches and excavations dewatered at all times during construction. | Pumping |
| 4. | All permanent retention basins, and temporary erosion and sedimentation control shall be completed prior to commencement of earthworks. | |

C101.16 BLASTING

1. Blasting will not be permitted without the specific approval of the Certifying Engineer. If such approval is given then blasting shall be carried out strictly in accordance with the Specification - EARTHWORKS.

C101.17 LIMITS ON NOISE

1. The Subdivider shall only use plant that have effective residential class silencers fitted to all engine exhaust, have engine covers fitted, are maintained in good order, and in addition meet the following requirements. **Plant with Silencers**
 - (a) On purchase have met the NAASRA Specification for Noise levels of plant and equipment, or
 - (b) Have a Maximum Noise level (L_{MAX}) less than 80 dB(A) when measured at a distance of 7 metres.
2. Operational hours of plant, including the entry and/or departure of heavy vehicles, shall be restricted to 7 am to 6pm Monday to Friday, 7am to 1pm on Saturday and at no times on Sundays or public holidays. Work outside of the hours specified shall not be undertaken without the prior approval of the Certifying Engineer and Council. **Working Hours**
3. All reasonable steps shall be taken to muffle and acoustically baffle all plant and equipment. In the event of complaints from neighbours, which Council deems to be reasonable, the noise from the construction site is not to exceed the following: **Maximum Noise Levels**
 - (a) Short Term Period - 4 weeks

L10 noise level measured over a period of not less than 15 minutes when the construction site is in operation, must not exceed the background level by more than 20dB(A) at the boundary of the nearest likely affected residence.
 - (b) Long term period - the duration

L10 noise level measured over a period of not less than 15 minutes when the construction site is in operation, must not exceed the background level by more than 15dB(A) at the boundary of the nearest affected residence.

C101.18 LIMITS ON GROUND VIBRATION

1. It is the intent of this Specification that ground vibration levels, transmitted from operating items of plant in the vicinity of residential premises shall not exceed levels that are close to the lower level of human perception inside the premise nor will cause structural damage to the building. Practices and vibration thresholds acceptable shall be determined in accordance with current Statutory Regulations. Where such regulation is not available, or jurisdiction is disputed, the criteria given in paragraphs 2 and 3 shall apply. **Levels**
2. Vibration (RMS Z-Axis) generated by construction works shall not exceed **Limits**
 - Curve 4 - for the period of 1 month or less
 - Curve 2 - for the period of more than 1 month

as defined in British Standard BS6472 "Evaluation of Human Exposure to Vibration in Buildings (1 HZ to 80 HZ)" when measured inside nearby residential premises.
3. Ground vibrations generated by construction works shall not exceed a peak particle velocity (V_R max) limit of 5 mm/sec when measured within one (1) metre of any residential premise. **Peak Particle Velocity**
4. In any case, the use of vibratory compaction equipment (other than hand held

GENERAL

devices) within 100m of any dwelling house is strictly prohibited.

5. The Subdivider shall be responsible for any damage and compensation payments as a result of non-observance of the above requirements.

**Subdivider's
Responsibility**

SPECIAL REQUIREMENTS

C101.19 RESERVED

C101.20 RESERVED

C101.21 RESERVED