

# TECHNICAL SPECIFICATION TS7: NON-URBAN

---

Technical specifications are used as a possible solution or to provide certainty for identified aspects of a development proposal. Technical specifications may also be used as a reference or benchmark for technical matters in the preparation and assessment of development proposals.

Where a proposed development complies with a relevant provision in the technical specifications and the Technical Specification comprehensively addresses the Outcome, further assessment regarding those specific provisions will not be required.

The Territory Planning Authority may consider endorsement or written support from an entity or utility service provider to demonstrate compliance with an Outcome that relates to services or utilities.

This Technical Specification comprises specifications under seven categories:

- Development and site controls
- Height, bulk and scale
- Environment & heritage
- Amenity, safety and accessibility
- Transport, parking and movement
- Services and utilities
- Miscellaneous

Each Technical Specification comprises a *control* and a *specification*.

- **Control** refers to the general issue that the specification deals with.
- **Specification** suggests a possible solution that supports compliance with respect to the particular issue or provision

The following technical specifications could be referred to demonstrate compliance with the Territory Plan.

These specifications will primarily be for development within the Non-Urban zones. However, these specifications may be used in other limited circumstances e.g., a proposed mixed-use development with a non-urban component in other zones, or stand-alone developments where permissible in other zones.

# Table of Contents

---

TECHNICAL SPECIFICATION TS7: NON-URBAN .....	1
Table of Contents .....	2
1.1 Development and site controls .....	3
1.2 Height, bulk and scale .....	3
1.3 Environment and heritage .....	3
1.4 Amenity, safety, and accessibility .....	6
1.5 Transport, parking, and movement .....	8
1.6 Services and utilities .....	10
1.7 Miscellaneous .....	12

## **1.1 Development and site controls**

The following specifications provide possible solutions that should be considered in planning, placing and designing buildings and structures for a proposed development:

### **Control: Materials and finishes – visual impact**

#### **Specification:**

1. External walls, cladding, masonry, roof, and structures are of earth tones with low reflectivity.
- 

## **1.2 Height, bulk and scale**

The following specifications provide possible solutions that should be considered in relation to height, bulk and scale of buildings and structures associated with a proposed development:

### **Control: Height of buildings**

#### **Specification:**

2. Buildings are not more than two storeys in height.
- 

## **1.3 Environment and heritage**

The following specifications provide possible solutions that should be considered in relation to the environmental and heritage outcomes associated with a proposed development:

### **Control: Heritage - places or objects registered or provisionally registered on the ACT Heritage Register**

#### **Specification:**

3. Where a development proposed on land containing places or objects registered or provisionally registered on the ACT Heritage Register, endorsement from the ACT Heritage Council is obtained.
- 

### **Control: Landscaping and protecting existing vegetation**

#### **Specification:**

4. Trees are planted in and around car parks that provide shade and softens the visual impact of parking areas
  5. Where a development requires groundwork within the tree protection zone of a protected tree and/or is likely to cause damage to or the removal of any protected trees, endorsement from the Conservator of Flora and Fauna is achieved
  6. Trees on development sites are only removed with the prior agreement in writing of the Territory.
- 

### **Control: Erosion and sediment control**

#### **Specification:**

7. For sites greater than 3000m<sup>2</sup>, development complies with an erosion and sediment control concept plan endorsed by the Environment Protection Authority.
  8. For sites equal or less than 3,000m<sup>2</sup>, the development complies with the Environment Protection Authority, *Environment Protection Guidelines for Construction and Land Development in the ACT*.
-

## CONSULTATION DRAFT FOR COMMENT

### Control: Permeability - sites greater than 2,000m<sup>2</sup>

#### Specification:

9. For development on sites greater than 2,000m<sup>2</sup> involving works that have the potential to alter the stormwater regime of the site; or development within existing urban areas which increases impervious area by 100m<sup>2</sup>, development achieves a minimum of 20% of the site area to be permeable.
- 

### Control: Stormwater detention

#### Specification:

10. For development on sites greater than 2,000m<sup>2</sup> (other than major roads) involving works that have the potential to alter the stormwater regime of the site, a report from a suitably qualified person is provided demonstrating that the development complies with at least one of the following:
  - a) stormwater retention management measures are provided and achieve all of the following:
    - i. Stormwater storage capacity of 1.4kL per 100m<sup>2</sup> of the total impervious area of the site is provided specifically to retain and reuse stormwater generated on site as a whole
    - ii. Retained stormwater is used on site
  - b) development captures, stores and uses the first 15mm of rainfall falling on the site.  
Note: on-site stormwater retention is defined as the storage and use of stormwater on site.
  - c) stormwater detention measures are provided and achieve all of the following:
    - i. capture and direct runoff from the entire site
    - ii. Stormwater storage capacity of 1kL per 100m<sup>2</sup> of impervious area is provided to specifically detain stormwater generated on site
    - iii. The detained stormwater is designed to be released over a period of 6 hours after the storm event. For this rule on-site stormwater detention is defined as the short-term storage and release downstream of stormwater runoff.

Note: Calculating on-site detention can include 50% of the volume of rainwater tanks where stormwater is used on-site

---

### Control: Stormwater management (flooding) – for roads for developments greater than 2000m<sup>2</sup>

#### Specification:

11. For development of roads involving developments greater than 2000m<sup>2</sup>, development meets all of the following:
    - a) The capacity of existing pipe (minor) stormwater connection to the site is not exceeded in the 1 in 10-year storm event
    - b) The capacity of the existing overland (major) stormwater system to the site is not exceeded in the 1 in 100-year storm event.
- 

### Control: Stormwater quality - sites greater than 2,000m<sup>2</sup>

#### Specification:

12. For development on sites greater than 2,000m<sup>2</sup> (other than major roads) involving works that have the potential to alter the stormwater regime of the site, a MUSIC model prepared by a suitably qualified person is provided demonstrating the average annual stormwater pollutant export is reduced when compared with an urban catchment of the same area with no water quality management controls for all of the following:
  - a) gross pollutants by at least 90%
  - b) suspended solids by at least 60%
  - c) total phosphorous by at least 45%
  - d) total nitrogen by at least 40%.

#### Notes:

- If a tool other than the MUSIC model is used then a report by an independent suitably qualified person must be submitted demonstrating and confirming compliance.
-

## CONSULTATION DRAFT FOR COMMENT

- If parameters that are non-compliant are used then a report must also be submitted by an independent suitably qualified person stating how and why the parameters are appropriate.
- 

### Control: Stormwater quality (major roads associated with a proposed development)

#### Specification:

13. For development of major roads, including the duplication of an existing major road in full or in part a MUSIC model prepared by a suitably qualified person is provided demonstrating the average annual stormwater pollutant export is reduced when compared with a road catchment of the same area with no water quality management controls for all of the following:
- a) gross pollutants by at least 90%
  - b) suspended solids by at least 60%
  - c) total phosphorous by at least 45%
  - d) total nitrogen by at least 40%.

#### Notes:

- If a tool other than the MUSIC model is used then a report by an independent suitably qualified person must be submitted demonstrating and confirming compliance.
  - If parameters that are non-compliant are used, then a report must also be submitted by an independent suitably qualified person stating how and why the parameters are appropriate
- 

### Control: Earthworks and disturbance of natural features

#### Specification:

14. A statement is provided detailing how earthworks and any disturbance to natural features associated with the proposed development will be restored to the condition existing before the work commenced – to the satisfaction of the Territory Planning Authority.
- 

### Control: Development adjacent to a potentially polluting source

#### Specification:

15. Where development is proposed on a site adjacent to a potentially polluting source (such as a current or former petrol station or fuel storage tank), an environmental site assessment conducted in accordance with the *ACT Government Strategic Plan – Contaminated Sites Management 1995* and the *Contaminated Sites Environment Protection Policy 2000* is endorsed by the ACT Environment Protection Authority
- 

### Control: Statement of Environmental Effects

#### Specification:

16. Where a development requires a Statement of Environmental Effects, the development proposal is accompanied by an Assessment of Environmental Effects that addresses the following:
- a) appropriate measures to soften the impact of development on the landscape
  - b) impacts on the character and appearance of any building, area of architectural, historic, aesthetic or scientific interest, or other object or place of special cultural or heritage value
  - c) impacts on public health and safety, including crime prevention
  - d) whether public transport services are necessary and, if so, whether they are available and adequate
  - e) impacts on the likely accessibility to facilities and services for users and consumers
  - f) any significant short or long-term effect, that the relevant authority considers the use or development may have on the environment, including social and economic effects and potential cumulative effects
  - g) impacts on the watercourses and drainage characteristics of the area, including water quality
  - h) impacts on the amenity of surrounding land uses, including impacts on air quality, noise, overshadowing, privacy, and the level of wind turbulence generated
- to the satisfaction of the Territory Planning Authority.
-

## CONSULTATION DRAFT FOR COMMENT

**Control:** Natural Environment – sites greater than 1000 m<sup>2</sup>

**Specification:**

17. This Specification applies where developments are located on sites that

- currently contain native species or ecosystems or are intended for rehabilitation or revegetation with native species or ecosystems; or
- contain non-native flora on sites that are part of the urban forest, urban open space, transport or services zones, and waterway corridors.

This Specification does not apply to the following

- site with single dwellings and secondary residences;
- national parks, nature reserves and any other reserved area established under the *Nature Conservation Act 2014*.

When applying this Specification, reference should be made to protected matters, weeds, pests and invasive species as listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and associated legislation and the ACT *Nature Conservation Act 2014* and regulations, and other ACT environmental strategies and policies.

Development is consistent with the ACT Practice Guidelines for Ecologically Sensitive Urban Design (Consultation Note: these guidelines are to be developed to provide detailed guidance and options for compliance with this Specification).

---

### 1.4 Amenity, safety, and accessibility

The following specifications provide possible solutions that should be considered in to enhance the amenity, safety and accessibility for users of a proposed development:

**Control:** Site constraints: Bushfire prone areas

**Specification:**

18. Where a development is located in a bushfire prone area, buildings are designed and constructed to *Australian Standard AS3959 – Construction of buildings in bushfire prone areas* for the specified Bushfire Attack Level and endorsement is achieved from the ACT Emergency Services Agency. Endorsement of the development from the ESA will demonstrate compliance with this specification.

**Control:** Land contamination

**Specification:**

19. A statement is provided that the potential for land contamination has been assessed in accordance with the ACT Government *Strategic Plan – Contaminated Sites Management 1995* and the ACT Environment Protection Authority *Contaminated Sites Environmental Protection Policy 2000*, and endorsement is provided from the ACT Environment Protection Authority demonstrating that the land is suitable for the proposed development.

Note: This does not apply if the Environment Protection Authority has provided written advice that there are no contamination within or adjacent to the development area

**Control:** Demolition

## CONSULTATION DRAFT FOR COMMENT

### Specification:

20. For the demolition of:

- a) commercial/industrial premises for which a certificate of occupancy was issued before 2005, or
- b) multi-unit housing for which a certificate of occupancy was issued before 1985

demolition is undertaken in accordance with hazardous materials survey (including an asbestos survey) prepared by a suitably qualified person and endorsed by the Environment Protection Authority

---

### Control: Accessible path of travel – where relevant

#### Specification:

21. A continuous accessible path of travel is provided that complies with:

- a) *AS 1428.1 – Design for Access and Mobility*;
- b) *AS 1428.4 – Tactile ground surface indicators for the orientation of people with vision impairment to highlight hazards or provide direction*;
- c) *AS 4586 – Slip Resistant Classification of New Pedestrian Surface Materials for external paving and ground surfaces*; and
- d) designed so that the placement of facilities does not intrude into the continuous accessible path of travel.

22. Walkways and glass adjacent to walkways achieve compliance with *AS1428.1* and *AS1428.2*

23. Internal lighting along the whole of the continuous accessible path of travel designed to meet *AS1680.0*.

24. External lighting along the whole of the continuous accessible path of travel meets *AS1158.3.1*

25. Where installed directional signage or other wayfinding methods, e.g., tactile indicators, to be in accordance with *AS1428.1* and *AS1428.4* and must identify the continuous accessible path of travel, accessible parts of buildings and all accessible facilities.

26. Doorways and doors are designed to meet *AS 1428.1- Design for Access and Mobility* for pedestrian entrances and exits; public circulation areas; and any common use areas.

---

### Control: Compliance with standards – general amenities and facilities

#### Specification:

27. Stairways, stairway lifts, passenger lifts, ramps, handrails and grab rails are provided in accordance with appropriate Australian Standards

28. Sanitary facilities and associated signage are designed and provided to meet the purpose of the buildings and appropriate Australian Standards

29. Street furniture (seating, drinking fountains, litterbins and the like) and ATM facilities are designed and provided in accordance with appropriate Australian Standards

30. Seating arrangements for fixed seating venues to meet with appropriate Australian Standards

31. Hearing augmentation facilities, emergency warning systems and public phones are provided according to appropriate Australian Standards

Relevant Australian Standards include:

- *AS1158.3.1 Road lighting – Pedestrian area (Category P) lighting – Performance and installation design requirements*
  - *AS1428.1 Design for Access and Mobility – General Requirements for Access – New Building Work*
  - *AS1428.2 Design for Access and Mobility - Enhanced and Additional Requirements – Buildings and Facilities*
  - *AS1428.3 Design for Access and Mobility - Requirements for Children Adolescents with Physical Disabilities*
  - *AS1428.4 Design for Access Mobility - Tactile Indicators*
  - *AS 1680.0 Interior Lighting – Safe Movement*
  - *AS1735.7 Lifts, Escalators and Moving Walks – Stairway Lifts*
  - *AS1735.12 Lifts, Escalators and Moving Walks – Facilities for Persons With Disabilities*
-

## CONSULTATION DRAFT FOR COMMENT

- AS1735.14 Lifts for people with limited mobility – Restricted use – low rise platforms
  - AS1735.15 Lifts, escalators and moving walks – Low-rise passenger lifts – Non- automatically controlled
  - AS1735.16 Lifts, escalators and moving walks – Lifts for persons with limited mobility – Restricted use- Automatically controlled
  - AS2890.1 Parking Facilities: Part 1 – Off Street Car Parking
  - AS2890.6 Parking facilities: Part 6 – Off-street parking for people with disabilities
  - AS2899 Public Information Symbol Signs - Part 1 General Information Signs
  - AS3769 Automatic Teller Machines – User access
  - AS4299 Adaptable Housing
  - AS4428.4 Fire Detection, warning, control and intercom systems- Control and indicating equipment - Intercommunication systems for emergency purposes
  - AS4586 Slip Resistance Classification of New Pedestrian Surface materials
32. The proposed development is supported by an Access Report prepared by a suitably qualified Access consultant advising the development being suitable for disability access and use.
- 

### Control: External lighting

#### Specification:

33. External lighting is provided to building frontages, to all pathways, roads, laneways and car-parking areas in accordance with *Australian Standard AS1158.3.1 Pedestrian Lighting*
34. All external lighting provided is in accordance with *Australian Standard AS4282 - Control of the Obtrusive Effects of Outdoor Lighting*
- 

## 1.5 Transport, parking, and movement

The following specifications provide possible solutions that should be considered in relation to transport, travel modes, vehicle parking, access and manoeuvring for a proposed development:

### Control: Parking and vehicle manoeuvring

#### Specification:

35. Parking is provided on-site, subject to individual assessment or at a rate similar to comparable development types in other technical specifications, and supported by the Territory Planning Authority.
36. Dimensions of car parking spaces, layout and vehicle manoeuvring meet *AS 2890.1:2004, Australian Standard for Parking Facilities, Part 1: Off-street Car Parking* including manoeuvring to and from and within the development. The B99 vehicle template is used for cars.
37. Endorsement from TCCS is achieved to confirm:
- a) suitability of the verge crossing
  - b) the road network can accommodate additional traffic likely to be generated by the development,
  - c) adequate pedestrian and cycle access is provided to and through the site – where relevant
  - d) pedestrian and cycle access paths to the development feeds into and provides enhanced connections to path networks and on-road cycle routes – where relevant
- 

### Control: Driveways

#### Specification:

38. Driveways that serve 4 or more car parking spaces provide turning spaces to allow vehicles to leave in a forward direction
39. Driveways are not less than 5m wide for not less than the first 7m of its length measured from the relevant block boundary
-



## CONSULTATION DRAFT FOR COMMENT

### Control: Parking for people with disabilities

#### Specification:

40. Australian Standard AS/NZS 2890.6:2009 Parking Facilities – Part 6: Off-street parking is complied with for parking for people with disabilities
  41. Notwithstanding any provision in the *Building Code of Australia* or in *AS2890*, parking spaces for people with disabilities comprise a minimum of 3% (rounded up to the nearest whole number) of the total number of parking spaces required for the proposed development
  42. Designated accessible car parking spaces meet the requirements of *AS2890.1*.
  43. Car parking spaces provided for people with disabilities have vertical clearance for the entire width of the space and the adjacent shared area of not less than 2.5m - as described in *AS2890*.
- 

### Control: Directional signage

#### Specification:

44. A statement is provided by a suitably qualified person that any directional signage will comply with the requirements of *AS1742.10 (1991) Manual of Uniform Traffic Control Devices – Pedestrian Control and Protection*.
- 

### Control: Pedestrian and cyclist access – where relevant

#### Specification:

45. Adequate pedestrian and cycle access is provided to and through the site.
  46. Pedestrian and cycle access paths to the development feeds into and provides enhanced connections to path networks and on-road cycle routes
- 

### Control: Pedestrian and bicycle paths – where relevant

#### Specification:

47. A statement is provided by a suitably qualified person that all pedestrian paths are designed in accordance with *AUSTROADS Guide to Traffic Engineering Practice Part 13. – Pedestrians*
  48. A statement is provided by a suitably qualified person that any Bicycle Paths are designed in accordance with *AUSTROADS Guide to Traffic Engineering Practice Part 14. – Bicycles*
- 

### Control: Bicycle parking rates – where relevant

#### Specification:

49. Bicycle parking for employees and visitors are provided on-site, subject to individual assessment or at a rate similar to comparable development types in other technical specifications, and supported by the Territory Planning Authority.
- 

### Control: Bicycle parking dimensions and design

#### Specification:

50. Bicycle parking is provided in one or more of the following ways:
    - a) storage spaces that are a minimum of 1.8m long, 0.7m wide and 1.1m high, accessible only to the relevant resident
    - b) secure general purpose storage spaces for residents that are a minimum of 1.8m long, 0.7m wide and 1.1m high
    - c) bicycle rails in communal open space areas
  51. Bicycle parking facilities are designed in accordance with *Australian Standard 2890.3 – Bicycle Parking Facilities*.
- 

### Control: Bicycle parking - End-of-trip facilities (development with 5 or more employees)

#### Specification:

---

## CONSULTATION DRAFT FOR COMMENT

52. For new buildings and refurbishment of existing buildings, showers and change rooms are provided at a rate of:

Number of employee bicycle parking spaces required	Number of showers
0 to 4	0
5 to 9	1
10 to 24	2
25 and above	2 PLUS 2 showers per 20 employee bicycle parking spaces after the first 24 spaces, rounded up to the nearest even number*

\*That is, 4 showers for 25-44 employee spaces, 6 showers for 45-64 employee spaces, 8 showers for 65-84 spaces, etc.

53. Shower and change-rooms are provided either as a combined shower and change cubicle; or as one communal change room for each gender, directly accessible from the showers without passing through a public space.
54. Where more than one shower is required, separate shower and change facilities are to be provided for males and females.
55. To count towards minimum shower numbers, it is to dispense both hot and cold water.

### 1.6 Services and utilities

The following specifications provide possible solutions that should be considered in relation to site servicing, including possible requirements by utility service providers, for a proposed development:

#### Control: Post-occupancy waste management

##### Specification:

56. Post occupancy waste management facilities are endorsed by TCCS.  
The endorsement may include a statement that the waste facilities and management associated with the development are in accordance with the current version of the *Development Control Code for Best Practice Waste Management in the ACT*, and the *Design Standards for Urban Infrastructure*.

#### Control: Telecommunications

antenna(e), towers and associated equipment  
(mobile phone) networks and broadband cabling and ducting reticulation

57. Specification:
58. Facilities and equipment are not located on sites of environmental, nature conservation or heritage significance.
59. Roof mounted antenna(e) are:
60. incorporated within an existing building or existing structure; or
61. integrated into building design with a new purpose designed roof feature constructed with the same materials, colours and finishes as the existing building or structure.
62. For flat roof buildings, roof mounted antenna(e), towers and equipment are positioned so as not to be visible from the street view.
63. The antenna(e) are face mounted to the building and are integrated into the building design and do not break the silhouette of the building.
64. Development is co-located on existing telecommunication facilities or other infrastructure
65. Development is located in commercial, industrial or rural areas, or in transport corridors or low use open space locations.
66. Development is capable of being removed from the site within 3 months of decommissioning, and if a facility is removed from a building or structure, the site is repaired with materials, colours and finishes the same as the rest of the building.
67. All weather access is provided to each facility.

## CONSULTATION DRAFT FOR COMMENT

68. All development involving the transmission of radiated signals demonstrate compliance with all the relevant Commonwealth Government requirements for electromagnetic energy emissions by providing the following:
- a) Results and mapping of cumulative electromagnetic radiation investigations for each site
  - b) Evidence of compliance with relevant Australian Communications and Media Authority (ACA) electromagnetic energy standards for cumulative impacts.
69. Signage posted on the site state the planned emissions of the facility and that it complies with relevant standards for exposure to electromagnetic energy.
70. Noise generated by a facility or associated equipment is attenuated to comply with ACT Government Noise standards.
- 

### Control: Utility services endorsement for demolition works

#### Specification:

71. For demolition works, endorsement is achieved from relevant utility providers (electricity, water, gas, sewerage and stormwater) stating that:
- a) All network infrastructure on or immediately adjacent the site has been identified on the plan
  - b) All potentially hazardous substances and conditions (associated with or resulting from the demolition process) that may constitute a risk to utility services have been identified
  - c) All required network disconnections have been identified and the disconnection works comply with utility requirements
  - d) All works associated with the demolition comply with and are in accordance with utility asset access and protection requirements
- 

### Control: Encroachment of easements and rights-of-way

#### Specification:

72. Buildings do not encroach over easements or rights of way, unless the proposed encroachment is approved in writing by the relevant service provider
- 

### Control: Servicing and infrastructure

#### Specification:

73. Proposed development can be sufficiently serviced in terms of infrastructure and utility services.
74. Endorsement is achieved from relevant utility providers (electricity, water, gas, sewerage and stormwater) to confirm that the location and nature of earthworks, utility connections, proposed buildings, pavements and landscape features comply with utility standards, access provisions and asset clearance zones.
- 

### Control: Asset clearance zones

#### Specification:

75. Endorsement is achieved from relevant utility providers (electricity, water, gas, sewerage and stormwater) to confirm that the location and nature of earthworks, utility connections, proposed buildings, pavements and landscape features comply with utility standards, access provisions and asset clearance zones.
- 

### Control: Undergrounding new electricity supply

#### Specification:

76. All new permanent or long-term electricity supply lines are underground.
-

## 1.7 Miscellaneous

The following specifications provide possible solutions in addition to the preceding categories that should be considered in relation to a proposed development:

### **Control: Ancillary structures**

#### **Specification:**

77. Plant installations and service structures are integrated with the building design, set back from the building façade, and screened from public areas
  78. Outdoor storage areas are located behind the building line, screened from view from any road or other public area, and do not encroach on car-parking areas, driveways, or landscape areas.
- 

### **Control: Satellite and microwave dishes**

#### **Specification:**

79. Facilities must not be visible from the street view or unleased territory land.
  80. Multi-tenanted developments and apartments have a single shared facility.
  81. Development is co-located on existing telecommunication facilities or other infrastructure
  82. Development is located in commercial, industrial or rural areas, or in transport corridors or low use open space locations.
  83. Development is capable of being removed from the site within 3 months of decommissioning, and if a facility is removed from a building or structure, the site is repaired with materials, colours and finishes the same as the rest of the building.
  84. All weather access is provided to each facility.
  85. All development involving the transmission of radiated signals demonstrate compliance with all the relevant Commonwealth Government requirements for electromagnetic energy emissions by providing the following:
    - a) Results and mapping of cumulative electromagnetic radiation investigations for each site
    - b) Evidence of compliance with relevant Australian Communications and Media Authority (ACA) electromagnetic energy standards for cumulative impacts.
  86. Signage posted on the site state the planned emissions of the facility and that it complies with relevant standards for exposure to electromagnetic energy.
  87. Noise generated by a facility or associated equipment is attenuated to comply with ACT Government Noise standards.
-