

OPENING UNCONSTRUCTED ROADS PROCEDURE

1. Scope

The Opening Unconstructed Roads Procedure (this 'Procedure') applies to all unconstructed roads under Council's jurisdiction.

This Procedure does not apply to:

- a) Driveway accesses from the road to the property boundary; or
- b) The road reserve beyond the point adjacent to the nearest property boundary of the applicant's property (construction of a road/driveway beyond the nearest property boundary may be considered).

2. Purpose

This Procedure relates to requests to construct, at the applicant's expense, an unconstructed road reserve that provides access to a dwelling or to a non-profit organisation and:

- a) establishes guidelines to ensure consistent assessment of requests;
- b) ensures construction complies with 'Appendix 1 – Guidelines for the Main Geometric Design Standards for Unsealed Roads'; and
- c) details responsibilities for funding the capital improvements.

3. Related Documents

Primary

Management of Unsealed and Unconstructed Roads Policy

Legislative reference

Local Government Act 2009 ss 60, 75

Transport Operations (Road Use Management) Act 1995 s 72

Work Health and Safety Regulation 2011 s 293

Local Law No. 1 (Administration) 2011

Subordinate Local Law No. 1.16 (Carrying out Works on a Road or Interfering with a Road or its Operation) 2011

Related documents

ARRB Group - Unsealed roads manual – Guidelines to good practice (3rd ed March 2009)

4. Definitions

To assist in interpretation, the following definitions shall apply:

| | |
|------------------------|---|
| As Constructed Plans | Plans showing the dimensions and location of the constructed asset. |
| Community Organisation | As defined in the <i>Local Government Act 2009</i> . |
| Council | Livingstone Shire Council. |

| | |
|-------------------------------|---|
| Dwelling | A building or structure approved for use as a habitable building or structure. |
| Environmental Management Plan | A document that addresses the environmental impacts of a project and determines appropriate strategies to control or avoid environmental harm. |
| LL1 | Local Law No. 1 (Administration) 2011. |
| Non-profit Organisation | A sporting club or community organisation that is not operating for the profit or gain of its individual members, whether these gains would have been direct or indirect. |
| Principal Contractor | Refer to <i>Work Health and Safety Regulation 2011</i> s 293. |
| Road | As defined in Local Law No. 1 (Administration) 2011. |
| SLL1.16 | Subordinate Local Law No. 1.16 (Carrying out Works on a Road or Interfering with a Road or its Operation) 2011. |
| Traffic Management Plan | A document which addresses: a) safe movement of vehicular and pedestrian traffic; b) protection of workers from passing traffic; c) provision of access to properties; d) provision of traffic controllers; e) installation of temporary signs, road markings, lighting and safety barriers; and f) maintenance of the existing road corridor (including the road and road shoulder) that may be used for the temporary diversion of traffic. |
| Unconstructed Road | A completely unformed road or a formed road that does not have gravel paving but is formed using a grader or similar machinery so that stormwater drains off laterally. |

5. Procedure

5.1 Preliminary Application

- 1) Preliminary applications to construct a road are to be submitted in writing and:
 - a) must detail the reasons for the request;
 - b) the extent of the road to be constructed; and
 - c) address the Heads of Consideration in Item 5.1.2.
- 2) Heads of Consideration
 - a) Provision of access to a dwelling or a non-profit organisation - this will be the primary consideration.
 - b) Construction Standards
The standard of road to be constructed must be in accordance with Appendix 1 based on an estimate of six vehicle movements per day/per lot, for all individual lots that the road will pass.
 - c) Alternate Access
Approval is unlikely if:
 - an alternative access is available via another constructed road, whether it is within a road reserve or not; or

- a road could be constructed on the applicant's private land that provides the same access as the proposed road in the road reserve.

For the section of road reserve beyond the nearest boundary of the applicant's property, Council may allow the road to be constructed as a driveway.

This will only be considered in situations where the road is utilised by very few users, and it looks like a private access that does not invite the public to make use of it as a road.

d) Terrain/Vegetation/Environmental/Erosion/Visual Amenity

Approval is unlikely if construction of the road to the appropriate standard will be severely affected by terrain (for example, in very steep country or in areas subject to frequent floodwater inundation).

Applications may also be refused if the removal of protected, significant or marine vegetation is required.

e) Impact on Road Network/Connectivity

In some cases, the opening of a road (particularly a connecting road) may lead to undesirable effects on the road network and may require the proposed road to be constructed to such a high standard that approval is unlikely.

f) Planning Scheme Compliance

g) Future Development Potential/Provisions

h) Legal and Statutory Requirements - including aspects such as native title and cultural heritage.

5.2 Assessment

To determine whether preliminary approval will be granted, the Manager Construction and Maintenance will assess preliminary applications against:

- a) the Heads of Consideration;
- b) LL1 - s 9(1); and
- c) SLL1.16 – sch 1 s 4.

5.3 Preliminary Approval

A preliminary approval does not constitute approval to construct.

If preliminary approval is granted for the applicant to construct the road (at their cost), they will be informed in writing:

- a) that they must lodge an application for a prescribed activity (carrying out works on a road or interfering with a road or its operation) in accordance with Item 5.4;
- b) of the standard to which the road must be designed and constructed; and
- c) of the conditions that must be met prior to an approval being issued.

5.4 Application for Prescribed Activity (Carrying out Works on a Road or Interfering with a Road or its Operation)

An application for a prescribed activity (carrying out works on a road or interfering with a road or its operation) must be made in writing, comply with LL1 - s 8(2) and include the following:

- a) plans showing the proposed road construction that complies with Appendix 1 and contains:
 - a longitudinal section, plan view and typical cross section of the proposed road;

- vertical and horizontal curve radius details;
 - required drainage structures; and
 - appropriate road signage.
- b) a Traffic Management Plan;
- c) an Environmental Management Plan addressing the following issues, if applicable:
- noise;
 - traffic;
 - dust;
 - weed and pest management;
 - vibration;
 - water quality;
 - erosion and sedimentation;
 - acid sulfate soils;
 - flora and fauna;
 - cultural heritage;
 - land contamination;
 - waste and site clean-up;
 - rehabilitation;
 - emergency situation management; and
 - fire management.
- d) an estimate of construction costs; and
- e) copies of relevant State Government approvals, for example permits relating to vegetation clearing.

5.5 Approval to Undertake a Prescribed Activity (Carrying out Works on a Road or Interfering with a Road or its Operation)

1) Approval to Undertake a Prescribed Activity

An approval may be granted in accordance with this section and LL1 – s 10.

2) Approved Plans

A set of the plans outlined in Item 5.4, approved by Council, will be returned to the applicant who is to supply a copy to the principal contractor.

These plans must be retained on site at all times during construction.

3) Conditions of Approval

An approval may be issued subject to the following conditions:

- a) If, after the approval is issued, errors, omissions or insufficient details are noted on the construction plans, such deficiencies are to be made good during construction;
- b) Prior to commencement of construction, the applicant is to:
- organise a pre-start meeting with the principal contractor and Council; and
 - provide to Council a copy of the principal contractor's public liability insurance policy which must not be less than the minimum amount required as per Council's current policies and indemnifies Council against all claims resulting from the construction works.

- c) Pursuant to s 72 of the *Transport Operations (Road Use Management) Act 1995*, the principal contractor and its employees must be prescribed persons for the purposes of installation of official traffic signs;
- d) Timber on road reserves is the property of the Crown.
 - The Department of Agriculture and Fisheries ('DAF') must be contacted prior to commencement of work to ascertain the existence or otherwise of millable timber in the area proposed to be cleared.
 - Remaining vegetation that cannot be mulched on site for use on the works or an approved place of use is to be disposed of at a suitable place.
 - Burning will not be permitted in a residential area.
 - DAF contact – Forest Ranger in Charge (Forest Products) at Duaringa Ph: (07) 4935 7140.
- e) Work must:
 - be undertaken by an approved, suitably qualified contractor experienced in roadwork construction;
 - be conducted in accordance with environmental best practices; and
 - comply with the requirements of the ARRB Group – Unsealed roads manual - Guidelines to good practice (3rd ed March 2009).
- f) A licensed surveyor may be required to certify that the road, as designed, is constructed wholly within the road reserve.

5.6 Inspection Requirements

Joint inspections with the applicant/superintendent, principal contractor and Council are required at the hold points identified in the site-specific inspection/testing plan.

Council's minimum inspection program is as follows:

- a) Roadworks – all roads are subject to the following minimum inspections:
 - subgrade;
 - pavement;
 - on defects liability; and
 - off defects liability.
- b) Drainage Works
 - prior to backfill.

5.7 As Constructed Requirements

As Constructed Plans must be submitted to Council for review a minimum of 48 hours prior to the inspection for placing the construction 'On Defects Liability Period' and must satisfy the Manager Construction and Maintenance.

A Defects Liability Period of 90 days will apply to the works.

5.8 Funding Responsibilities

- 1) Applicant is responsible for:
 - a) payment of associated fees (eg application fee);
 - b) formation and construction of the road;
 - c) installation of drainage structures;
 - d) road furniture;

- e) supply, cartage, spreading and compaction of gravel paving; and
 - f) if part of the road is constructed as a driveway - maintenance of the driveway section.
- 2) Council is responsible for maintenance of the road dictated by current maintenance standards (following completion of the works to the satisfaction of the Manager Construction and Maintenance).

6. Changes to this Procedure

This Procedure is to remain in force until otherwise amended/replaced by the General Manager Infrastructure.

7. Repeals/Amendments

This Procedure repeals Livingstone Shire Council Procedure titled 'Opening Unconstructed Roads Procedure (v4.0)'.

| Version | Date | Action |
|---------|------------|--|
| 1.0 | 08/03/2016 | Approved |
| 1.1 | 30/11/2018 | Administrative Amendments – reflect organisational restructure |
| 2.0 | 21/05/2019 | Amended Procedure Approved - minor updates to definitions and some wording |
| 3.0 | 21/12/2021 | Amended Procedure – full review undertaken and content of former/repealed policy of same name included. Approved by Executive Director and endorsed by Council |
| 4.0 | 12/12/2022 | Amended Procedure Approved – definitions, section 5.2, 5.3, 5.4 and 5.5 updated |
| 5.0 | 15/08/2024 | Amended Procedure Approved – purpose, definitions, sections 5.1, 5.2, 5.5 and Appendix updated |

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| APPENDIX 1 | | | Guidelines for the Main Geometric Design Standards for Unsealed Roads | | | | | | | | | | | | | | | | | (current August 2024) | | | |
|--|--|--|---|---------|--------|---------|---------|--------|--------|---------|--------|-------|---------|--------|-------|---------|--------|------|---------|-----------------------|---|--|--|
| Road Classification (Operational Class) | | | 150 | | | 125 | | | 100 | | | 75 | | | 30 | | | 10 | | | Comments | | |
| Typical Traffic Counts | | | 125-150 | | | 100-125 | | | 75-100 | | | 30-75 | | | 10-30 | | | <10 | | | | | |
| Terrain type ¹ | | | Flat | Rolling | M'tain | Flat | Rolling | M'tain | Flat | Rolling | M'tain | Flat | Rolling | M'tain | Flat | Rolling | M'tain | Flat | Rolling | M'tain | | | |
| Main geometric characteristic (based on safety, cost and environmental considerations) | | | | | | | | | | | | | | | | | | | | | | | |
| Operating speed value km/h | | | 80 | 70 | 50 | 70 | 50 | 30 | 70 | 50 | 30 | 60 | 40 | 20 | 60 | 40 | 20 | n/a | n/a | n/a | based on 85th percentile speed | | |
| Cross-section elements | | | | | | | | | | | | | | | | | | | | | | | |
| number of traffic lanes | | | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | unsealed lanes | | |
| minimum cross fall unsealed road | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | min of 4% to drain rainfall off tracks | | |
| maximum superelevation % ² | | | 6 | 8 | 10 | 6 | 8 | 10 | 6 | 8 | 10 | 6 | 8 | 10 | 6 | 8 | 10 | n/a | n/a | n/a | | | |
| minimum traffic lane width m ³ | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| minimum shoulder width m | | | 0.25 | 0 | 0 | 0 | 0 | 1 | 1.25 | 1 | 0.75 | 1 | 0.75 | 0.5 | 0.5 | 0.25 | 0 | 0 | 0 | 0 | | | |
| minimum carriageway width (lanes+shoulder) m | | | 6.5 | 6 | 6 | 6 | 6 | 5 | 5.5 | 5 | 4.5 | 5 | 4.5 | 4 | 4 | 3.5 | 3 | 3 | 3 | 3 | | | |
| Horizontal geometry | | | | | | | | | | | | | | | | | | | | | | | |
| minimum radius curve m ⁴ | | | 320 | 250 | 140 | 250 | 100 | 35 | 250 | 100 | 35 | 170 | 60 | 15 | 170 | 60 | 15 | n/a | n/a | n/a | | | |
| minimum stopping sight distance m ⁵ | | | 150 | 120 | 70 | 120 | 70 | 30 | 120 | 70 | 30 | 90 | 50 | 30 | 90 | 50 | 30 | n/a | n/a | n/a | | | |
| minimum meeting sights distance m ⁶ | | | 290 | 230 | 130 | 230 | 130 | 60 | 230 | 130 | 60 | 180 | 100 | 60 | 180 | 100 | 60 | n/a | n/a | n/a | | | |
| Vertical geometry | | | | | | | | | | | | | | | | | | | | | | | |
| maximum vertical grade % ⁷ | | | 6 | 8 | 12 | 6 | 8 | 12 | 6 | 8 | 12 | 6 | 8 | 12 | 6 | 8 | 12 | n/a | n/a | n/a | for tracks avoid steep grades to reduce soil erosion | | |
| minimum crest vertical curve K values ⁸ | | | 50 | 30 | 10 | 30 | 10 | 5 | 30 | 10 | 5 | 19 | 8 | 2 | 19 | 8 | 2 | n/a | n/a | n/a | | | |
| minimum sag vertical curve K values ⁹ | | | 11 | 8 | 4 | 8 | 4 | 3 | 8 | 4 | 3 | 6 | 3 | 2 | 6 | 3 | 2 | n/a | n/a | n/a | | | |
| Drainage | | | | | | | | | | | | | | | | | | | | | | | |
| Cross Road Drainage Immunity ¹⁰ | | | Q1 | Q1 | Q1 | Q1 | Q1 | Q1 | Q1 | Q1 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | can be longer at curve widenings, intersections, etc can be wider at curve widenings, intersections, etc | | |
| Longitudinal Drainage Immunity ¹¹ | | | Q1 | Q1 | Q1 | Q1 | Q1 | Q1 | Q1 | Q1 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | |
| RCP & RCBC desirable length | | | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | | | |
| Floodway desirable width | | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | | | |
| Gravel Pavement | | | | | | | | | | | | | | | | | | | | | | | |
| % of road length covered with imported gravel meeting unsealed road guidelines | | | 75% | 75% | 75% | 70% | 70% | 70% | 60% | 60% | 60% | 55% | 55% | 55% | 50% | 50% | 50% | 50% | 50% | 50% | 50% | | |

¹ Flat, rolling or mountainous terrain.

² The maximum superelevation values will need to take into account the use of the road by high loaded heavy vehicles, speed and curve radii.

³ In cases where there are a high percentage of heavy vehicles (>20%) minimum lane widths can be increased by 0.5m.

⁴ Values rounded up. For minimum radius curves widening on the inside of a curve may be necessary to accommodate longer vehicles.

⁵ Based on a reaction time of 2 seconds and surface coefficients relating to unsealed surfaces and values rounded up. Values based on flat grades and allowances will need to be made for up and down grades.

⁶ This is mainly a requirement of single lane two-way roads. Values rounded up.

⁷ In some cases higher grades of up to 20% can be allowed for short sections (about 150m). Keep grades on unsealed roads lower due to ravelling and scouring of surface.

⁸ Calculation of these values is to be based on information contained in Austroads (2003). The lengths of the vertical curve (L) is based on the production of K multiplied by the algebraic difference in grades percentage A (i.e. $L = K \times A$).

⁹ Sag values are based on comfort on control criteria.

¹⁰ Class 10, 30 & 75 roads will require suitable gravel or hard surface treatments at gullies and creek crossings.

¹¹ Class 10, 30 & 75 roads shall have formation 300mm above natural surface or 300mm deep table drains.