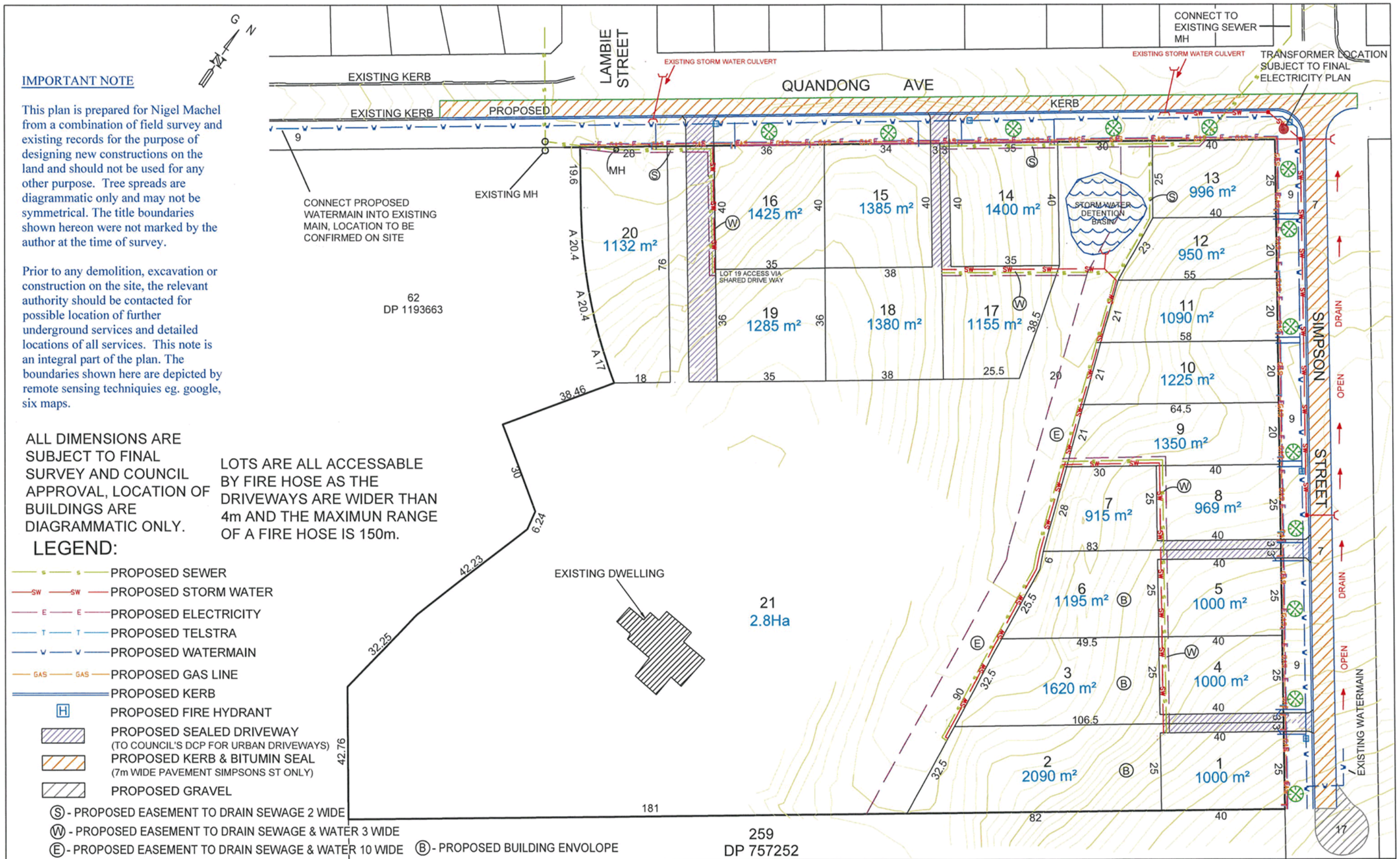


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| ORIGIN OF LEVELS APPROX. AHD | 3 | RE ISSUED FOR DA | CK | CK | 9/09/19 |
| CONTOUR INTERVAL ... MAJOR: 2m MINOR: 0.5m | 2 | ACCESS & STORMWATER LOT 19 | CK | CK | 3/09/19 |
| | 1 | ISSUED FOR DA | DC | JM | 3/07/18 |
| DATUM: MGA 55 | No. | REVISIONS & AMENDMENTS | Drawn | Approved | Date |

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THE FULL SPECTRUM OF DEVELOPMENTS

CLIENT: NIGEL MACHEL
PROJECT: QUANDONG AVE SUBDIVSION
PROPOSED 21 LOT SUBDIVISION
LOCATION: LOT 61 DP 1193663
40 QUANDONG AVENUE, TUMUT NSW

Sheet 1 of 1
Rev 1 Size A3
DATE: 08/08/2018
PLAN No. 18058.dwg

ALLSPEC & PARTNERS
BUILDING - LAND - GUIDANCE

THE FULL SPECTRUM OF DEVELOPMENTS

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# STATEMENT OF ENVIRONMENTAL EFFECTS

## Proposed 21 Lot Residential Subdivision

40 Quandong Avenue, TUMUT NSW 2720

25th October 2018

SNOWY VALLEYS COUNCIL

| | |
|---|---|
| Plan Number: | SEE |
| Date: | 9/9/2019 |
| Revision: | B |

**Allspec & Partners Pty Ltd**

58 Fitzroy Street
TUMUT NSW 2594
Phone: 02 6947 6761
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# 1 INTRODUCTION

In accordance with Schedule 1 of the Environmental Planning and Assessment Regulation 2000, a development application (DA) must be accompanied by a Statement of Environmental Effects. This document has been prepared by Allspec and Partners Pty Ltd for Lot 61 DP 1193663. The document identifies the main environmental effects identified for the DA submission of a proposed 20 lot subdivision in Tumut NSW 2720.

## 1.1 Location

The proposed development site is in the town of Tumut NSW. Tumut is a town in the South West Slopes region of New South Wales, Australia and the largest town in Snowy Valleys Council. At the 2016 census, Tumut had an urban population of over 6,200. Tumut is situated on the Snowy Mountains Highway and is approximately a 2 hour drive from the Canberra area. It is in a valley, with surrounding hills. The name Tumut is derived from a Wiradjuri word which means 'quiet resting place by the river'.

***Table 1-1 Location and Property Description***

| LOCATION AND PROPERTY DESCRIPTION | | | |
|---|---|---|---|
| **Unit No:** | **House No:** | **Street:** | **Suburb:** |
| NA | 40 | Quandong Ave | Tumut |
| **Lot and DP or SP:** | | | **Post Code:** |
| Lot 61 DP 1193663 | | | 2720 |


***Figure 1-1 Location Map Proposed 21 Lot Subdivision of Lot 61, DP 1193663***

## 1.2 Clients Details

Table 1-2 below provides the clients details. The (DA) submission has been submitted on behalf of the client by Allspec and Partners Pty Ltd: 58 Fitzroy Street, Tumut NSW 2720. (Phone: 02 6947 6761).

*Table 1-2: Clients Details*

| CLIENTS DETAILS | |
|---|---|
| **Name or Company:** Nigel Machel | |
| **Address:** 40 Quandong Avenue | **Post Code:** 2720 |
| **Phone:** 0409 073 069 | |
| **Email:** nigel@machelbros.com.au | |

## 1.3 Description of Proposal

Lot 61 DP 1193663 is a recently subdivided residential block located to the South-East of the current residential land. A proposed development application is being submitted to subdivide the existing parcel of 5.507Ha into a 21 lot subdivision, consistent with objectives outlined in the R3-Medium Density Residential land use classification and in agreement with clauses outlined in the minimum subdivision lot sizes associated with the Tumut Local Environmental Plan 2012. Please see attached plans for the existing lot layout.

*Figure 1-2Location Map Proposed 21 Lot Subdivision of Lot 61 DP 1193663*

## 1.4 Site Data

Total Site Area: 5.507 Ha

Min Lot Size: 950 $m^2$

Max Lot Size: 2.7Ha

Total no of Lots: 21

## 1.5 Surrounding Land use

The land use adjacent to Quandong Ave, Tumut NSW is mostly residential land with few bushlands. The proposed new development will not adversely affect the surrounding land use of the area and would provide quality residential lots to fulfil the residential needs of the area.

The land uses adjacent to the lot on Quandong Ave, NSW, 2720 are as follows:

North –Residential

East – Cemetery

West – Residential

South – Residential/ Managed Farm lands

The population of Tumut is growing with an assessed annual growth rate of 0.3% in 2011 as stated in the 2011 Census. Hence, the proposed development work will provide medium density residential facilities for the area.

## 1.6 Proposed Development

The current land parcel is classified as R3-Medium Density Residential zone. The parcel is 5.507Ha and lends itself to further division with the purpose of providing housing needs of the community within a medium density residential environment. The proposed subdivision would result in 21 parcels of land, consisting of a generous medium-density block size of 2090$m^2$ -969$m^2$. The subdivision would result in the addition of 20 new parcels of land suitable for development.

The subdivision is to be constructed in three stages:

Stage 1 – Creation of 8 lots fronting Quandong Ave and associated infrastructure.

Stage 2 – Creation of 13 lots accessed from Simpson St and associated infrastructure.

With new kerbing to Quandong St and Simpson St and associated infrastructure related to providing essential services to the newly created residential blocks.

Battle axe blocks will be created to allow better usage of the rear of the land whilst maintaining future connectivity to the larger lot if in the future the current owners sell and a developer wants to build it out.

Electricity, water, gas, sewer and telecommunications services are readily available to the site. All services including, power, water, gas and communications will be installed via Quandong Avenue. Stormwater will be retained in dam before entering the existing watercourse.

The proposed development will involve the subdivision of lot comprising the following:

i. Subdivision of land into 21 lots
ii. Sewage Management design
iii. Water Supply
iv. Stormwater management design
v. Roads

The redevelopment of the site will comprise the following but not be limited by:

- ➔ Earthworks and Site Preparation;
- ➔ Essential services network management
- ➔ Road design and construction

A full set of plans can be viewed at the end of this report along with any other information to support this statement of environmental effects.

Urban Design Principles: The proposed subdivision fulfils the principles of good design through a layout achieving connectivity while responding to site constraints and opportunities. The Concept Plan of Subdivision is shown in Figure 2 demonstrates the subdivision being designed to create a safe subdivision.

The layout is generally consistent with the plan of subdivision that was considered by Council in conjunction with the rezoning of the lands, and was used to inform the zone boundaries and minimum lot size boundaries for the site. The layout is consistent with the subdivision principles of Council's DCP

Lot Size & Dimensions: The proposed subdivision provides a varied lot range, in terms of type and size. The development will consist of allotments with lot sizes ranging between 950m² to 2.7Ha in size. Allotments generally front relatively straight sections of proposed streets and are regular shaped with similar primary street frontage to rear boundary ratios. All allotments have been designed to provide sufficient access to services, solar access, sitting of buildings, access to each allotment within the constraints of the site.

Lighting: Lighting of public places such as public streets will meet the relevant Australian Standards on street lighting.

Solar Access and Energy Efficiency: The lot orientation and size of the lots of the subdivision will enable effective solar access and energy efficiency of future dwelling.

Crime Prevention through Environmental Design: Effective designs of subdivisions can reduce community fear, as well as opportunities for crime. The proposed subdivision complies with the principles of CPTED and best practice guidelines with design details as described in the following sub-sections.

# 2 ASSESSMENT OF ENVIRONMENTAL EFFECTS

The following is an assessment of the proposed development in accordance with the relevant matters for consideration listed under Section 79C (1) of the EP&A Act. Section 79C (1) of the EP&A Act states the following;

***79C (1) Matters for consideration – general***

*In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:*

*(a) the provisions of:*

*(i) any environmental planning instrument, and*

*(ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the draft instrument has been deferred indefinitely or has not been approved), and*

*(iii) any development control plan, and*

*(iii) any planning agreement that has been entered under section 93F, or any draft planning agreement that a developer has offered to enter under section 93F, and*

*(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), that apply to the land to which the development application relates,*

*(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*

*(c) the suitability of the site for the development,*

*(d) any submissions made in accordance with this Act or the regulations,*

*(e) the public interest.*

## 2.1 Environmental Planning Instruments

The following Environmental Planning instruments apply to the subject site because of the proposed redevelopment:

- ✓ Tumut Local Environmental Plan 2012
- ✓ State Environmental Planning Policy (Infrastructure 2007)

## 2.2 Tumut Local Environmental Plan 2012

The main Environmental Planning Instrument (EPI) which applies to the subject site is the Tumut Local Environment Plan (LEP) 2012. The following sections undertake an assessment of the relevant provisions in the Tumut LEP 2012.

### 2.2.1 Land Use Zones

In accordance with Tumut LEP 2012 Land Zoning map, the subject site is currently zoned R3-Medium Density Residential as shown in the image below.

*Figure 2-1 Land Zoning Map*

**Objectives of zone:**

- To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.

**Permitted without consent:** Roads

**Permitted with consent:** Attached dwellings; Boarding houses; Centre-based child care facilities; Community facilities; Group homes; Multi dwelling housing; Neighbourhood shops; Places of public worship; Respite day care centres; Restaurants or cafes; Seniors housing; Take away food and drink premises; Any other development not specified in item 2 or 4

**Prohibited:** Advertising structures; Agriculture; Commercial premises; Eco-tourist facilities; Freight transport facilities; Heavy industrial storage establishments; Industries; Open cut mining; Passenger transport facilities; Rural industries; Sex services premises; Storage premises; Transport depots; Truck depots; Vehicle repair stations; Waste or resource management facilities

Under R3-Medium Density Residential zoning to provide the housing needs for the community are permitted with consent hence, Allspec believes that the current proposal is therefore permissible within the R3-Medium Density Residential zone. Moreover, it will provide a positive increase in housing choice and diversity in the area.

### 2.2.2 Minimum Lot Size

**4.1 Minimum subdivision lot size**

(1) The objectives of this clause are as follows:
(a) to ensure the protection of natural and environmental values in the locality,
(b) to ensure the efficient use of land resources through appropriate subdivision patterns,
(c) to prevent the fragmentation of agricultural land and ensure viable farm sizes are protected through appropriate subdivision patterns.
(2) This clause applies to a subdivision of any land shown on the *Lot Size Map* that requires development consent and that is carried out after the commencement of this Plan.
(3) The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the *Lot Size Map* in relation to that land.
(4) This clause does not apply in relation to the subdivision of any land:
(a) by the registration of a strata plan or strata plan of subdivision under the *Strata Schemes Development Act 2015*, or
(b) by any kind of subdivision under the *Community Land Development Act 1989*.

As all lots are over the minimum lot size of 225m² and the subdivision is consistent with the objectives of clause 4.1 minimum subdivision lot size Allspec believe the proposal is permissible within a minimum lot size zone of 225m².

### 2.2.3 Land

The objective of the *Clause 3.3 Land* is to maintain soil resources and diversity and stability of landscape including land form, land with high erosion protection soils, soil salinity and steep slopes and shallow soils.

This clause applies to *"Sensitive Land Areas", and the subject lot is on the Natural Resources Sensitivity Land Map*. As this land was rezoned by Council from agricultural land to residential land and it would therefore be considered suitable for this type of development. Please find attached the Preliminary Slope Stability Assessment

### 2.2.4 Water

The objective of the clause 6.4 & 6.5, *Water* is to maintain the hydrological functions of riparian land, waterways and aquifers, including protecting water quality, natural water flows, the stability of the bed and banks of waterways, and groundwater systems.

This clause applies to land identified as "Riparian Corridor" or "Groundwater Vulnerability" on the Natural Resources Sensitivity Water Map and our site is not in "Riparian Corridor" however it has a moderately high Groundwater Vulnerability but this development will not affect the water quality during and once completed.

### 2.2.5 Biodiversity

The objective of *Part 6.3 Terrestrial Biodiversity* is to ensure protection for natural flora and fauna, continued existence of ecological processes, and conservation and recovery of native flora and fauna and their habitats. The development site of the proposed site is not within a Terrestrial Biodiverse area and will not have an impact on terrestrial biodiversity during development or once completed. See Appendix attached.

### 2.2.6 Flood Planning

The objective of *Clause 6.2 Flood Planning* is to maintain the existing flood regime and flow conveyance capacity, to avoid significant adverse impacts on flood behaviour, to limit uses to those compatible with flow conveyance function and flood hazard, and to minimise the risk to human life and damage to property from flooding. The subject site has been identified as not at risk and not within the flood planning area. Hence, the development of the subject site will not affect the flood planning area of the Tumut LEP 2012.

### 2.2.7 Earth Works

The objective of *Clause 6.1 Earthworks* of Tumut LEP 2012 is to ensure that earthworks for which the development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land, and to allow earthworks of a minor nature without requiring separate development consent.

***6.5 Earthworks***

*(1) The objective of this clause is to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.*

*(2) Development consent is required for earthworks unless:*

*a. the earthworks are exempt development under this Plan or another applicable environmental planning instrument, or*

*b. the earthworks are ancillary to development that is permitted without consent under this Plan or to development for which development consent has been given.*

*(3) Before granting development consent for earthworks (or for development involving ancillary earthworks), the consent authority must consider the following matters:*

*a. the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,*

*b. the effect of the development on the likely future use or redevelopment of the land,*

*c. the quality of the fill or the soil to be excavated, or both,*

*d. the effect of the development on the existing and likely amenity of adjoining properties,*

*e. the source of any fill material and the destination of any excavated material,*

*f. the likelihood of disturbing relics,*

*g. the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,*

*h. any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

**Note.** The *National Parks and Wildlife Act 1974*, particularly section 86, deals with harming Aboriginal objects.

Earth works would be required for the road works and essential services network. Along with kerb and gutter. Some lots will have earthworks done on them as part of the construction certificate plans. The earthworks will be compacted to 95% or better for the future erection of buildings. The height of the fill will be determined in the construction certificate. Within this development were the earthworks are intended there will be temporary sediment control used during the times of excavation until the service lines are backfilled. All of this will be done under the supervision of the Councils Engineering staff.

**Service Trench:** The site will require earthworks for the installation of services. A service trench will be installed for the length of the subdivision to accommodate, power, water, gas, sewer, stormwater, and communication lines.

**Cutting and Levelling:** The site will require moderate earthworks for construction of access roads, pavement, kerb and gutter. The intension is to cut, fill and trim the access road to a design level. Details of the excavation will be addressed on the construction certificate.

**Sediment Control:** Sediment and runoff related to earthworks is likely to be minimal. Sediment from stockpiles of exposed excavated surfaces will be contained with appropriate sediment and control barriers.

Temporary sediment and erosion control measures will be used during the times of excavation until service lines are backfilled and the access construction phase is complete.

**Road works:** All new roads will be constructed in compliance with council DCP and RMS requirements, and under direction of Council Engineers.

## 2.3 Site Description

Land Form: The land surface is characterised by a strong sloping from south to north down the ridgeline to water courses on either side with a rise back to Simpson St. There is a water course running through the lot to an existing dam.

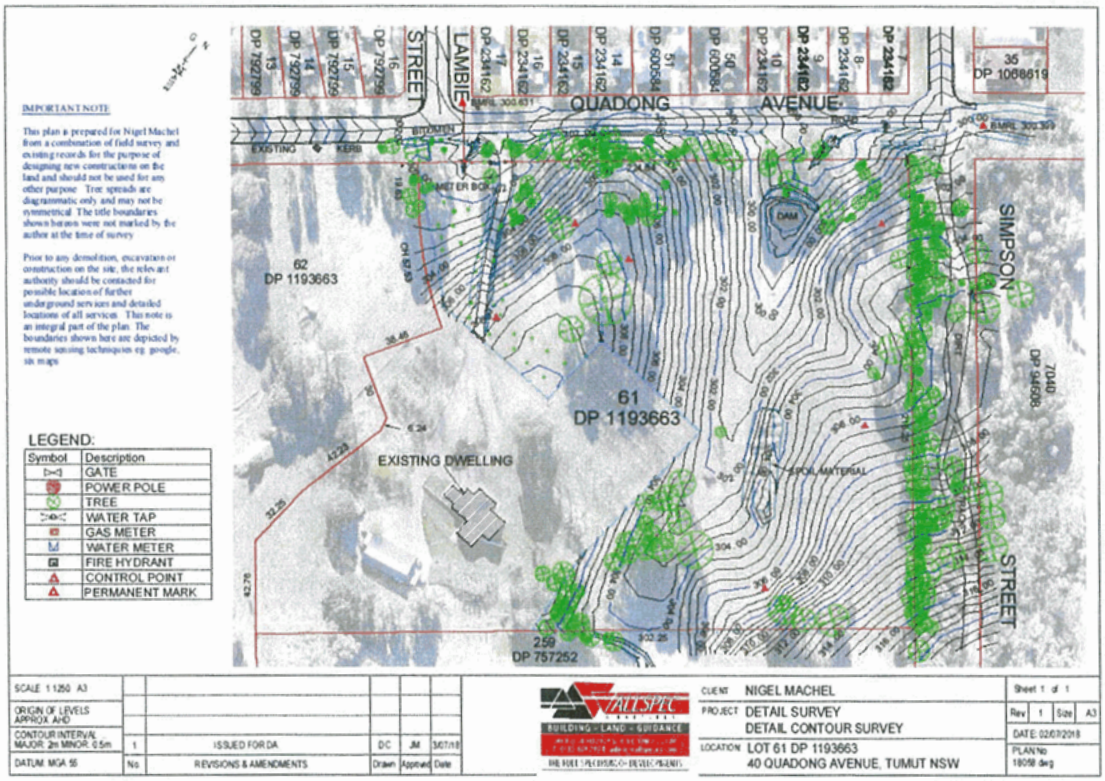



*Figure 2-2 Detail and Contour Plan*

*Table 2-1 Slope Classification*

| Slope Classification | Description | Slope Gradient Limits | |
|---|---|---|---|
| | | Lower | Upper |
| Nearly level | Slightly undulating level | 0 | 3 |
| Gently sloping | Undulating | 1 | 8 |
| Strong sloping | Rolling hill type | 4 | 16 |
| Moderate steep | prominent hills | 10 | 30 |
| Steep | Steep terrain | 20 | 60 |
| Very steep | Very steep to sub vertical | > 45 | |

**Flora and Fauna:** The land parcel is mostly cleared of vegetation and is currently covered by perennial grasses. General landscaping and small trees are located on the north-east. The subdivision would result in minimal environmental impact to vegetation. The development will not result in any significant clearing and is unlikely to impact on any threatened species or native habitats. All trees will be removed between our block and the proposed road and 1 tree per block will be planted I frontage. Future landscaping of the site will offset the clearing.

**Watercourses:** There is a dam located in the north (downstream) of the property to be developed, it has a natural watercourse flowing into it running from the south through the site. This drainage will not be affected by the development and will be protected by a 10m wide easement to drain stormwater.

## 2.4 Site Access

**Light Vehicle:** The site is accessed by Quandong Avenue. Lots 14-20 will be accessible from Quandong Avenue and lots 1-13 will be accessible from the extension of Simpsons street when construction is completed. All construction work will be performed in accordance with Snowy Valleys Councils development control plans (DCP).

**Traffic Movements:** Access to the property is practical to the development and will not have any significant impact on local traffic movements and volumes. Assuming 2 cars per household an additional 40 cars could be turning on and off Quandong Avenue daily. It would not be seen to have an adverse effect and would be consistent with surrounding traffic flows.

## 2.5 Service Provisions

**Services:** Electricity, water, gas, sewer and telecommunications services would be provided via Quandong Avenue. Water will be connected to the water main via Quandong Avenue and looped back around to connect with the main traversing Simpson Street. Electricity will be provided by the existing line running adjacent to Quandong Street.

**Sewer and Stormwater Disposal:** Sewer and stormwater will be installed separately; A retention basin has been proposed to retain all water from subdivision to discharge into existing water course without increasing usual flows on the Simpson St end with the stormwater running into the existing culvert on the western side in line with Lambie St.

## 2.6 Planning Controls

***Table 2-2 Compliance with Planning Controls***

| Compliance with LGA Planning Controls | | | |
|---|---|---|---|
| | Y | N | NA |
| 1. Tumut Local Environmental Plan (LEP) | Y | - | - |
| 2. Development Control Plans (DCP) | Y | - | - |
| | | | |
| **Comments:**<br><br>Proposed subdivision of Lot 61 DP 1193663 into 21 lots. Land is classified as R3-Medium Density Residential with a minimum Lot Size 225m². Allspec believe the subdivision is permissible under the LEP, the subdivision will create an additional 20 medium density residential lots for development, with a minimum land size of 225 m².<br><br>Works will be performed to standards outlined in Councils Development Control Plans (DCP). | | | |

## 2.7 Site Suitability

**Visual Prominence:** The subdivision will result in 20 new blocks serviced by existing adjacent roads. Lots are intended to have separate titles for residential developments. Any future developments will be assessed and regulated by council prior to and during construction. Blocks are visually concealed and are unlikely to have undesirable visual impacts.

**Consistent with Council Planning:** The development would be consistent with Councils growth strategy. Subdividing the land parcel provides additional lots for medium density residential development and will tie into the surroundings.

**Heritage and or other Restrictions:** There are no apparent heritage matters nor other restrictions on the use of land that would deter this type of development.

**Services:** Key services are readily accessible.

**Land surface and Land use:** The land surface is moderate steep and provides fairly easy access for the installation of services; earth work control plans and relevant design plans will be provided during with the submission of the construction certification. The site was a former tree farm and grew single trees of many years. The development will not have any adverse impact on existing land uses.

## 2.8 Air, Dust and Noise Pollution

**Noise:** The subdivision requires moderate earth works. The development may incur some noise during the earthworks and construction phase of servicing the proposed lots although works will be restricted to normal working hours and will regulated by Council upon the future building application.

**Dust:** Dust will be suppressed by wetting down dry surfaces in hot, dry and windy conditions, excavation and vehicle movements will be restricted as required during dry and windy conditions. Land surfaces will remain covered by grasses and will remain undisturbed until works are due to commence.

## 2.9 Social Impacts

The land parcel is not seen as being environmentally or culturally sensitive. The parcel is located adjacent to lots already containing residential housing. The southern and eastern boundaries of the site are fenced. Constructing new residential lots will not significantly impede views or encroach on existing housing adjacent to the land parcel. Subdivision of the land will tie in well with the surrounding use and is unlikely to have any significant social impact. The subdivision is expected to be a very minimal if any social impact at all.

## 2.10 Economic Impacts

The proposal will provide a benefit to the local economy through provision of additional housing that will strengthen and support the existing retail, community and educational infrastructure within Tumut and its surrounding areas.

## 2.11 Natural Hazards

The land is on a low asbestos potential zone further testing can be carried out prior to excavation. The site is unlikely to contain naturally occurring asbestos. Please find attached the Preliminary Slope Stability Assessment.

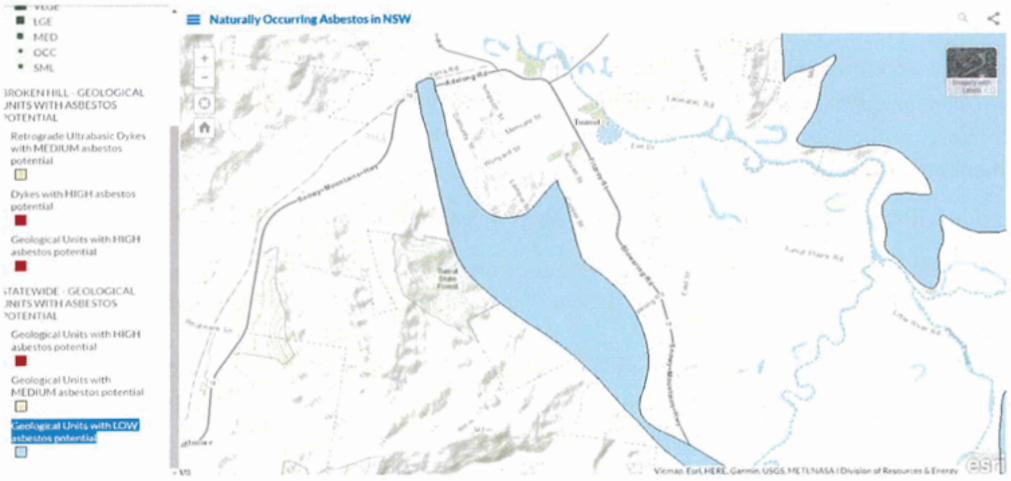



*Figure 2-3 Naturally Occurring Asbestos in NSW- Sourced from Esri*

## 2.12 Bushfire Prone Land

The land area is classified as a bushfire prone. See figure below. Building will have legislative restrictions in regard to fire zoning and as such an appropriate amount of Bushfire Protection Management (BPM) and Asset Protection Zone (APZ) will be provided to minimise the threat of a bushfire entering the proposed residential area. The site will also have appropriate entrance for the RFS and the town brigade. As there is already a development to the west where the bush fire source is coming from and it already has an asset protection zone to the west of it we believe this would satisfy the requirements of the planning for bushfire code. It is foreseen in the future that both the land to the west and south will become small residential lots and they are already managed farm lands which would negate the need for asset management zones.

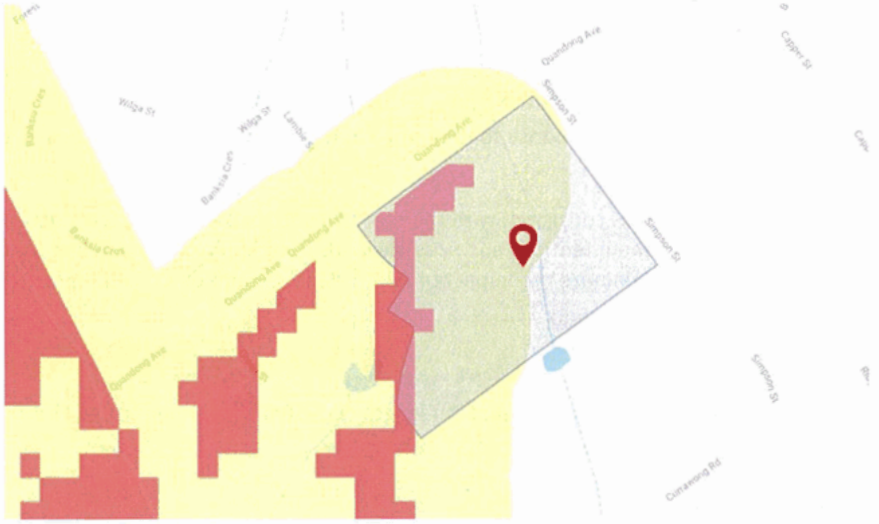



*Figure 2-4Bushfire Prone Land Map- Sourced from Planning Portal NSW*

## 2.13 Waste and Contaminants

The subdivision of land will not create any significant waste, the development of the Lots will yield normal construction waste which is envisaged to be removed from site using waste bins and would be disposed to the council's approved disposal facilities.

The site is not suspected to be subject to contaminants.

## 2.14 State Environmental Planning Policy (Infrastructure 2007)

*State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) aims to provide for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing.

**Consultation with councils—development with impacts on council-related infrastructure or services**

(1) This clause applies to development carried out by or on behalf of a public authority that this Policy provides may be carried out without consent if, in the opinion of the public authority, the development:

- will have a substantial impact on stormwater management services provided by a council, or
- is likely to generate traffic to an extent that will strain the capacity of the road system in a local government area, or
- involves connection to, and a substantial impact on the capacity of, any part of a sewerage system owned by a council, or
- involves connection to, and use of a substantial volume of water from, any part of a water supply system owned by a council, or
- involves the installation of a temporary structure on, or the enclosing of, a public place that is under a council's management or control that is likely to cause a disruption to pedestrian or vehicular traffic that is not minor or inconsequential, or
- involves excavation that is not minor or inconsequential of the surface of, or a footpath adjacent to, a road for which a council is the roads authority under the *Roads Act 1993* (if the public authority that is carrying out the development, or on whose behalf it is being carried out, is not responsible for the maintenance of the road or footpath).

(2) A public authority, or a person acting on behalf of a public authority, must not carry out development to which this clause applies unless the authority or the person has:

- given written notice of the intention to carry out the development (together with a scope of works) to the council for the area in which the land is located, and
- taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.

Allspec believes this development is consistent with the objectives set out in SEPP (Infrastructure 2007) and we have discussed with Council the intentions and possible loads to their infrastructure and through this document detailed how we will minimize the impact of such a development on Councils infrastructure.

## 2.15 Fire

All lots are accessible to by either fire hoses with 80m length with 10m spray radius or by Fire Truck as our driveways are 6m wide and the fire truck has a total 150m range.

## 2.16 Car Parking

The Solution for car parking during development will be in the site compound will be determined in the CC.

## 2.17 Summary and Conclusion

A Development Application is being submitted for a proposed 21 lot subdivision at Lot 61 DP 1193663. Known as 40 Quandong Avenue this recently subdivided parcel of land close to the out skirts of town adjoining existing residential dwellings. The land parcel is classified as R3-Medium Density Residential zone. The parcel is 5.507Ha and lends itself to further subdivision with the purpose of providing housing needs of the community. The proposed subdivision would result in 21 new parcels of land to fulfil the residential needs of the area.

The minimum medium density lots will be from 950m² to 2090m² and leaving a residual lot of 2.7Ha. All services would be provided from direct access from the street. Separate lines will be installed for sewer and storm water. Access to the property is practical to the development and will not have any significant impact on local traffic movements and volumes.

The land surface is moderate steep, the land parcel is mostly cleared of vegetation and is currently covered by perennial grasses. There is a water course cutting through the land from a dam in the north edge. The development will not result in any significant clearing and is unlikely to impact on any threatened species or native habitats. The land is deemed as suitable and will require moderate earthworks. Noise, dust and sediments associated with earth works will be mitigated with appropriate control measures.

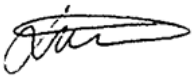
- The land parcel lends itself to further division with the purpose of providing medium density residential housing needs for the community.
- The development would be consistent with Councils growth strategy and would result in 20 new blocks serviced by a public access road and under separate titles for the purpose of residential development.
- Allspec and Partners Pty Ltd believes the subdivision is permissible as it is consistent with the objectives set out under the LEP, the subdivision will create additional 20 medium density residential lots for development, with a minimum land size of 950 m².
- All construction work will be performed in accordance with Councils, development control plans (DCP) and the Tumut Local Environmental Plan (LEP) 2012.
- The land area is classified as a bushfire prone, the proposed development will have legislative restrictions in regard to fire zoning, and the site will apply for an exemption on the requirements for BPMs and an APZ to minimalize the fuel for a fire.
- The land parcel is not seen as being environmentally or culturally sensitive it is unlikely to have any significant social impact and is envisaged to tie in well with the surrounding residential dwellings.

We believe there are minimal environmental impacts that will result from this subdivision as we are creating 20 new residential lots in R3-Medium Density Residential area that is subject to ongoing modernisation and infill developments.

## 3 APPLICANT DECLARATION

I/we declare to the best of my/our knowledge and belief that the particulars stated on this document are correct in every detail and that the information required has been supplied.

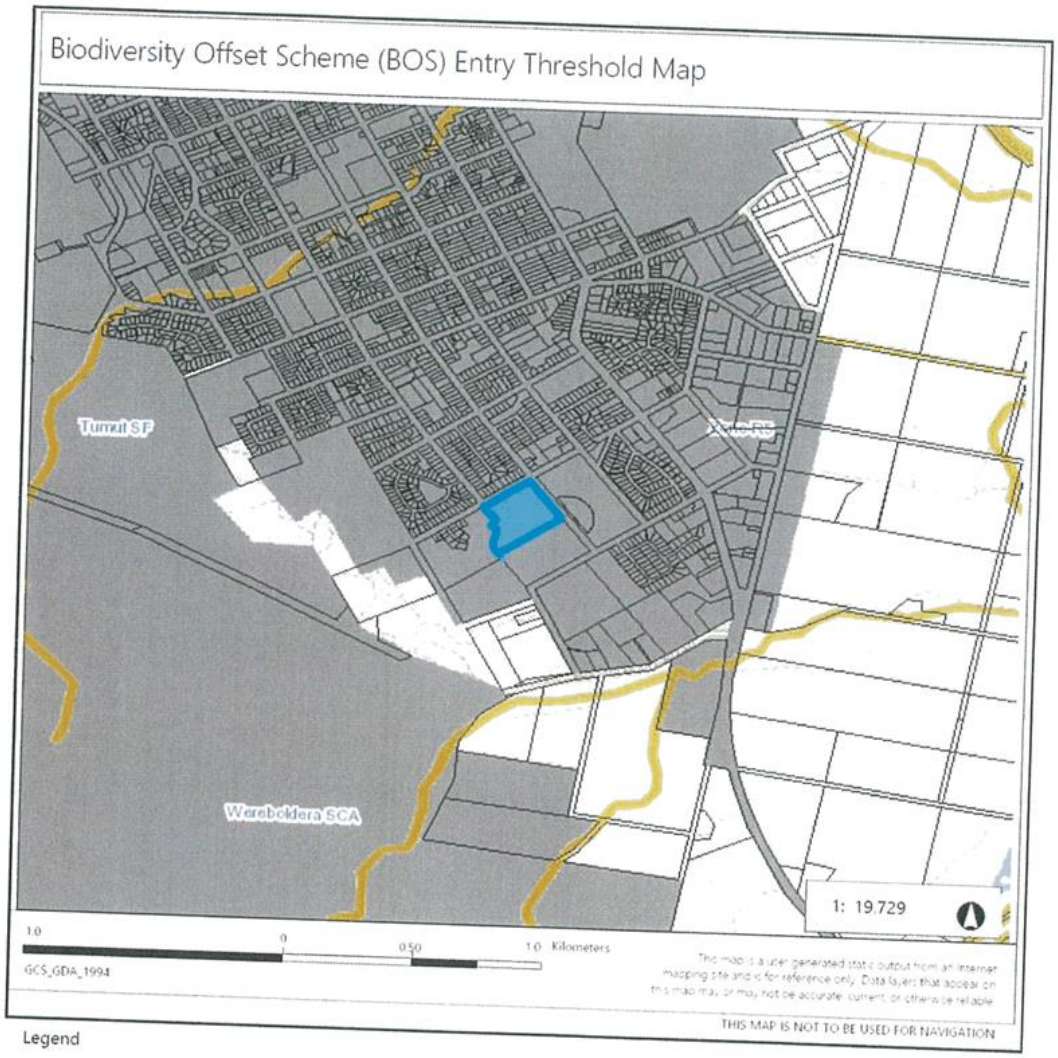
I/we acknowledge that the development application may be returned to me/us if information is found to be missing or inadequate.



Name: James McMahon
Date: 25-10-2018

Appendix 1

NSW GOVERNMENT




Legend

- Biodiversity Values
- Land Excluded from LLS Act

Notes

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October 25, 2018

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NSW GOVERNMENT

# Biodiversity Offset Scheme (BOS) Entry Threshold Report

**Results Summary**

| | | |
|---|---|---|
| **Date of Calculation** | 28/09/2018 8:22 AM | **BAM Required*** |
| **Total Digitised Area** | 5.48 ha | |
| **Minimum Lot Size Method** | LEP | |
| **Minimum Lot Size** | 0.02 ha | |
| **Area Threshold** | 0.25 ha | |
| **Area of native vegetation cleared** | Unknown # | Unknown # |
| **Impact on biodiversity values land map** | no | no |

*If BAM required has:

- at least one 'Yes': you have exceeded the BOS threshold. You are now required to submit a Biodiversity Development Assessment Report with your development application. Go to https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor to access a list of assessors who are accredited to apply the Biodiversity Assessment Method and write a Biodiversity Development Assessment Report
- 'No': you have not exceeded the BOS threshold. You may still require a permit from local council. Review the development control plan and consult with council. You may still be required to assess whether the development is "likely to significantly affect threatened species' as determined under the test in s. 7.3 of the Biodiversity Conservation Act 2016. You may still be required to review the area where no vegetation mapping is available.

# Where the area of impact occurs on land with no vegetation mapping available, the tool cannot determine the area of native vegetation cleared and if this exceeds the Area Threshold. You will need to work out the area of native vegetation cleared – refer to the BOSET user guide for how to do this.

## Disclaimer

This results summary and map can be used as guidance material only. This results summary and map is not guaranteed to be free from error or omission. The State of NSW and Office of Environment and Heritage and its employees disclaim liability for any act done on the information in the results summary or map and any consequences of such acts or omissions. It remains the responsibility of the proponent to ensure that their development application complies will all aspects of the *Biodiversity Conservation Act 2016*.

The mapping provided in this tool has been done with the best available mapping and knowledge of species habitat requirements. This map is valid for a period of 30 days from the date of calculation (above).

## Acknowledgement

I as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development

Signature _____ Date 28/09/2018 08:22 AM

**File No.** 02889-22000000-

28 February 2019

Snowy Valleys Council

www.snowyvalleys.nsw.gov.au

Allspec & Partners
58 Fitzroy Street
TUMUT NSW 2720

Dear Sir,

**Re:** DA2018/0165, 21 Lot Subdivision
**Premises:** Lot 61 DP 1193663, 40 Quandong Avenue TUMUT NSW 2720

Reference is made to your recent application for the proposed works at the above property.

Pursuant to clause 54 of the Environmental Planning and Assessment Regulation 2000, the following details or amendments are required to be submitted to enable Council to further assess your application:

1. Easement to drain sewer and water to be 10m wide and extended to service Lot 259 and protected by easement.
2. Existing road off Quandong Avenue to be 15m wide to allow access for further Sub division – road requirements in DCP
3. To extend the sewer easement currently on Lot 62 DP1193663 (along Quandong Avenue) to the subject Lot 61 requires owner's permission of Lot 62 – please indicate that the owner is in favour of the extended easement.
4. Amend SEE to address:

   Tumut LEP
   - 6.1 Earthworks
   - 6.4 Groundwater – Vulnerability – identified as Moderately High
   - 6.8 Landslide Risk – identified in the South West Tumut Land capability study - Class B1
   - 6.11 Essential Services

   Tumut DCP
   - Chapter 3 Car Parking
   - Chapter 4 Public Notification
   - Chapter 14 Tumut Rural & Urban Subdivision
   - Chapter 20 Electrical Transformer Location?
   - Chapter 30 Stormwater Drainage construction & maintenance
5. Lot 61 DP1193663 is subject to a 'Restriction as to user' – needs to be acknowledged and addressed as keeping with the zone objectives of clauses 4.1 and 6.11 Tumut LEP.
6. 2.2.3 of the SEE talks about Clause 3.3 of the LEP: this clause refers to exempt and complying development?
7. The subject site is affected by naturally occurring asbestos, a report from a suitably qualified geologist shall be submitted to Council addressing the suitability of the proposed development on the site.
8. Identify how Fire Hydrant coverage to proposed Lots 2 and 3 can be achieved.
9. Identify the Registered surveyor that is overseeing the application.
10. Development of Simpson Street Road reserve – need to show trees: which ones are to be removed and retained.

Leading, engaging and supporting strong and vibrant communities

**Tumbarumba Office**: Bridge St (PO Box 61), Tumbarumba NSW 2653 • **P** 02 6948 9100 • tumbaadmin@snowyvalleys.nsw.gov.au

Please submit the required information within thirty (30) days of the above date. Please ensure that at least two copies of all details/amendments are lodged to Council within the required timeframe.

If the required information cannot be submitted to Council within the required timeframe, the applicant may wish to withdraw the application and re-submit at a later date.

Failure to supply the additional information within the required timeframe will result in Council considering refusal of the application.

Should you require any further information regarding this matter, please contact the officer indicated below.

Yours faithfully,

**Signature:** _____

**Name** **Craig Perrin**
**Development assessment Planner**

**Phone:** 02 6941 2515
**Email:** cperrin@snowyvalleys.nsw.gov.au

ALLSPEC & PARTNERS
BUILDING - LAND - GUIDANCE
THE FULL SPECTRUM OF DEVELOPMENTS
02 6947 6761
admin@allspecap.com

3rd July, 2019

General Manager
Snowy Valleys Council
76 Capper Street,
Tumut NSW 2720

Dear Sir,

Re: DA2018/0165, 21 Lot Subdivision

1. Our plan has been amended to include an easement to drain sewer and water that is 10m wide and has been extended to Lot 259.
2. Plans were amended to change the existing road off Quandong Ave to be 15m wide to allow access for further Sub division.
3. Plans were amended so the sewer does not go through Lot 62 DP 1193663 so permission from the owner is not necessary.
4. Groundwater is addressed in the SEE. For landslide risk a Preliminary Slope Stability Assessment was undertake by McMahons Earth Science. Car parking will be stated in the CC. Electrical Transformer Location has been added to the plan.
5. The restriction to user does not affect Lot 61 DP1193663.
6. We have removed reference to it.
7. An asbestos test was undertaken by McMahons Earth Science and it was deemed that the site is unlikely to contain naturally occurring asbestos.
8. Fire Hydrant coverage to lots 2 and 3 can be achieved as the driveways are 6m wide allowing a Fire Truck to travel down them which has a total of 150m radius which allows the fire hydrant to reach the back of the lots.
9. The Registered Surveyor that is overseeing this application is Stephen Hogan of Geomatic Property Services.
10. Trees to be removed as now shown in the SEE which is all trees on the subject lots side of the Simpson St Road reserve.

Regards
**James McMahon**
**0410 659 795**

P: 02 6947 6761

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THE FULL SPECTRUM OF DEVELOPMENTS

02 6947 6761
admin@allspecap.com

# STATEMENT OF ENVIRONMENTAL EFFECTS

## Proposed 21 Lot Residential Subdivision

40 Quandong Avenue, TUMUT NSW 2720

25th October 2018

**Allspec & Partners Pty Ltd**

58 Fitzroy Street
TUMUT NSW 2594
Phone: 02 6947 6761
Email: admin@allspecap.com

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## Tables



## Figures



## Appendices

# 1 INTRODUCTION

In accordance with Schedule 1 of the Environmental Planning and Assessment Regulation 2000, a development application (DA) must be accompanied by a Statement of Environmental Effects. This document has been prepared by Allspec and Partners Pty Ltd for Lot 61 DP 1193663. The document identifies the main environmental effects identified for the DA submission of a proposed 20 lot subdivision in Tumut NSW 2720.

## 1.1 Location

The proposed development site is in the town of Tumut NSW. Tumut is a town in the South West Slopes region of New South Wales, Australia and the largest town in Snowy Valleys Council. At the 2016 census, Tumut had an urban population of over 6,200. Tumut is situated on the Snowy Mountains Highway and is approximately a 2 hour drive from the Canberra area. It is in a valley, with surrounding hills. The name Tumut is derived from a Wiradjuri word which means 'quiet resting place by the river'.

***Table 1-1 Location and Property Description***

| LOCATION AND PROPERTY DESCRIPTION | | | |
|---|---|---|---|
| **Unit No:** | **House No:** | **Street:** | **Suburb:** |
| NA | 40 | Quandong Ave | Tumut |
| **Lot and DP or SP:** | | | **Post Code:** |
| Lot 61 DP 1193663 | | | 2720 |


***Figure 1-1 Location Map Proposed 21 Lot Subdivision of Lot 61, DP 1193663***

## 1.2 Clients Details

Table 1-2 below provides the clients details. The (DA) submission has been submitted on behalf of the client by Allspec and Partners Pty Ltd: 58 Fitzroy Street, Tumut NSW 2720. (Phone: 02 6947 6761).

***Table 1-2: Clients Details***

| CLIENTS DETAILS | |
|---|---|
| **Name or Company:**<br>Nigel Machel | |
| **Address:**<br>40 Quandong Avenue | **Post Code:**<br>2720 |
| **Phone:**<br>0409 073 069 | |
| **Email:**<br>nigel@machelbros.com.au | |

## 1.3 Description of Proposal

Lot 61 DP 1193663 is a recently subdivided residential block located to the South-East of the current residential land. A proposed development application is being submitted to subdivide the existing parcel of 5.507Ha into a 21 lot subdivision, consistent with objectives outlined in the R3-Medium Density Residential land use classification and in agreement with clauses outlined in the minimum subdivision lot sizes associated with the Tumut Local Environmental Plan 2012. Please see attached plans for the existing lot layout.

***Figure 1-2Location Map Proposed 21 Lot Subdivision of Lot 61 DP 1193663***

## 1.4 Site Data

Total Site Area: 5.507 Ha

Min Lot Size: 950 $m^2$

Max Lot Size: 2.7Ha

Total no of Lots: 21

## 1.5 Surrounding Land use

The land use adjacent to Quandong Ave, Tumut NSW is mostly residential land with few bushlands. The proposed new development will not adversely affect the surrounding land use of the area and would provide quality residential lots to fulfil the residential needs of the area.

The land uses adjacent to the lot on Quandong Ave, NSW, 2720 are as follows:

North –Residential

East – Cemetery

West – Residential

South – Residential/ Managed Farm lands

The population of Tumut is growing with an assessed annual growth rate of 0.3% in 2011 as stated in the 2011 Census. Hence, the proposed development work will provide medium density residential facilities for the area.

## 1.6 Proposed Development

The current land parcel is classified as R3-Medium Density Residential zone. The parcel is 5.507Ha and lends itself to further division with the purpose of providing housing needs of the community within a medium density residential environment. The proposed subdivision would result in 21 parcels of land, consisting of a generous medium-density block size of 2090$m^2$-969$m^2$. The subdivision would result in the addition of 20 new parcels of land suitable for development.

The subdivision is to be constructed in three stages:

Stage 1 – Creation of 8 lots fronting Quandong Ave and associated infrastructure.

Stage 2 – Creation of 13 lots accessed from Simpson St and associated infrastructure.

With new kerbing to Quandong St and Simpson St and associated infrastructure related to providing essential services to the newly created residential blocks.

Battle axe blocks will be created to allow better usage of the rear of the land whilst maintaining future connectivity to the larger lot if in the future the current owners sell and a developer wants to build it out.

Electricity, water, gas, sewer and telecommunications services are readily available to the site. All services including, power, water, gas and communications will be installed via Quandong Avenue. Stormwater will be retained in dam before entering the existing watercourse.

The proposed development will involve the subdivision of lot comprising the following:

i. Subdivision of land into 21 lots
ii. Sewage Management design
iii. Water Supply
iv. Stormwater management design
v. Roads

The redevelopment of the site will comprise the following but not be limited by:

- ➔ Earthworks and Site Preparation;
- ➔ Essential services network management
- ➔ Road design and construction

A full set of plans can be viewed at the end of this report along with any other information to support this statement of environmental effects.

Urban Design Principles: The proposed subdivision fulfils the principles of good design through a layout achieving connectivity while responding to site constraints and opportunities. The Concept Plan of Subdivision is shown in Figure 2 demonstrates the subdivision being designed to create a safe subdivision.

The layout is generally consistent with the plan of subdivision that was considered by Council in conjunction with the rezoning of the lands, and was used to inform the zone boundaries and minimum lot size boundaries for the site. The layout is consistent with the subdivision principles of Council's DCP

Lot Size & Dimensions: The proposed subdivision provides a varied lot range, in terms of type and size. The development will consist of allotments with lot sizes ranging between 950m$^2$ to 2.7Ha in size. Allotments generally front relatively straight sections of proposed streets and are regular shaped with similar primary street frontage to rear boundary ratios. All allotments have been designed to provide sufficient access to services, solar access, sitting of buildings, access to each allotment within the constraints of the site.

Lighting: Lighting of public places such as public streets will meet the relevant Australian Standards on street lighting.

Solar Access and Energy Efficiency: The lot orientation and size of the lots of the subdivision will enable effective solar access and energy efficiency of future dwelling.

Crime Prevention through Environmental Design: Effective designs of subdivisions can reduce community fear, as well as opportunities for crime. The proposed subdivision complies with the principles of CPTED and best practice guidelines with design details as described in the following sub-sections.

# 2 ASSESSMENT OF ENVIRONMENTAL EFFECTS

The following is an assessment of the proposed development in accordance with the relevant matters for consideration listed under Section 79C (1) of the EP&A Act. Section 79C (1) of the EP&A Act states the following;

***79C (1) Matters for consideration – general***

*In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:*

*(a) the provisions of:*

*(i) any environmental planning instrument, and*

*(ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the draft instrument has been deferred indefinitely or has not been approved), and*

*(iii) any development control plan, and*

*(iii) any planning agreement that has been entered under section 93F, or any draft planning agreement that a developer has offered to enter under section 93F, and*

*(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), that apply to the land to which the development application relates,*

*(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*

*(c) the suitability of the site for the development,*

*(d) any submissions made in accordance with this Act or the regulations,*

*(e) the public interest.*

## 2.1 Environmental Planning Instruments

The following Environmental Planning instruments apply to the subject site because of the proposed redevelopment:

- ✓ Tumut Local Environmental Plan 2012
- ✓ State Environmental Planning Policy (Infrastructure 2007)

## 2.2 Tumut Local Environmental Plan 2012

The main Environmental Planning Instrument (EPI) which applies to the subject site is the Tumut Local Environment Plan (LEP) 2012. The following sections undertake an assessment of the relevant provisions in the Tumut LEP 2012.

### 2.2.1 Land Use Zones

In accordance with Tumut LEP 2012 Land Zoning map, the subject site is currently zoned R3-Medium Density Residential as shown in the image below.

*Figure 2-1 Land Zoning Map*

**Objectives of zone:**

- To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.

**Permitted without consent:** Roads

**Permitted with consent:** Attached dwellings; Boarding houses; Centre-based child care facilities; Community facilities; Group homes; Multi dwelling housing; Neighbourhood shops; Places of public worship; Respite day care centres; Restaurants or cafes; Seniors housing; Take away food and drink premises; Any other development not specified in item 2 or 4

**Prohibited:** Advertising structures; Agriculture; Commercial premises; Eco-tourist facilities; Freight transport facilities; Heavy industrial storage establishments; Industries; Open cut mining; Passenger transport facilities; Rural industries; Sex services premises; Storage premises; Transport depots; Truck depots; Vehicle repair stations; Waste or resource management facilities

Under R3-Medium Density Residential zoning to provide the housing needs for the community are permitted with consent hence, Allspec believes that the current proposal is therefore permissible within the R3-Medium Density Residential zone. Moreover, it will provide a positive increase in housing choice and diversity in the area.

### 2.2.2 Minimum Lot Size

**4.1 Minimum subdivision lot size**

(1) The objectives of this clause are as follows:
(a) to ensure the protection of natural and environmental values in the locality,
(b) to ensure the efficient use of land resources through appropriate subdivision patterns,
(c) to prevent the fragmentation of agricultural land and ensure viable farm sizes are protected through appropriate subdivision patterns.
(2) This clause applies to a subdivision of any land shown on the *Lot Size Map* that requires development consent and that is carried out after the commencement of this Plan.
(3) The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the *Lot Size Map* in relation to that land.
(4) This clause does not apply in relation to the subdivision of any land:
(a) by the registration of a strata plan or strata plan of subdivision under the *Strata Schemes Development Act 2015*, or
(b) by any kind of subdivision under the *Community Land Development Act 1989*.

As all lots are over the minimum lot size of 225m² and the subdivision is consistent with the objectives of clause 4.1 minimum subdivision lot size Allspec believe the proposal is permissible within a minimum lot size zone of 225m².

### 2.2.3 Land

The objective of the *Clause 3.3 Land* is to maintain soil resources and diversity and stability of landscape including land form, land with high erosion protection soils, soil salinity and steep slopes and shallow soils.

This clause applies to *"Sensitive Land Areas", and the subject lot is on the Natural Resources Sensitivity Land Map*. As this land was rezoned by Council from agricultural land to residential land and it would therefore be considered suitable for this type of development. Please find attached the Preliminary Slope Stability Assessment

### 2.2.4 Water

The objective of the clause 6.4 & 6.5, *Water* is to maintain the hydrological functions of riparian land, waterways and aquifers, including protecting water quality, natural water flows, the stability of the bed and banks of waterways, and groundwater systems.

This clause applies to land identified as "Riparian Corridor" or "Groundwater Vulnerability" on the Natural Resources Sensitivity Water Map and our site is not in "Riparian Corridor" however it has a moderately high Groundwater Vulnerability but this development will not affect the water quality during and once completed.

### 2.2.5 Biodiversity

The objective of *Part 6.3 Terrestrial Biodiversity* is to ensure protection for natural flora and fauna, continued existence of ecological processes, and conservation and recovery of native flora and fauna and their habitats. The development site of the proposed site is not within a Terrestrial Biodiverse area and will not have an impact on terrestrial biodiversity during development or once completed. See Appendix attached.

### 2.2.6 Flood Planning

The objective of *Clause 6.2 Flood Planning* is to maintain the existing flood regime and flow conveyance capacity, to avoid significant adverse impacts on flood behaviour, to limit uses to those compatible with flow conveyance function and flood hazard, and to minimise the risk to human life and damage to property from flooding. The subject site has been identified as not at risk and not within the flood planning area. Hence, the development of the subject site will not affect the flood planning area of the Tumut LEP 2012.

### 2.2.7 Earth Works

The objective of *Clause 6.1 Earthworks* of Tumut LEP 2012 is to ensure that earthworks for which the development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land, and to allow earthworks of a minor nature without requiring separate development consent.

***6.5 Earthworks***

*(1) The objective of this clause is to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.*

*(2) Development consent is required for earthworks unless:*

*a. the earthworks are exempt development under this Plan or another applicable environmental planning instrument, or*

*b. the earthworks are ancillary to development that is permitted without consent under this Plan or to development for which development consent has been given.*

*(3) Before granting development consent for earthworks (or for development involving ancillary earthworks), the consent authority must consider the following matters:*

*a. the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,*

*b. the effect of the development on the likely future use or redevelopment of the land,*

*c. the quality of the fill or the soil to be excavated, or both,*

*d. the effect of the development on the existing and likely amenity of adjoining properties,*

*e. the source of any fill material and the destination of any excavated material,*

*f. the likelihood of disturbing relics,*

*g. the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,*

*h. any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

**Note.** The *National Parks and Wildlife Act 1974*, particularly section 86, deals with harming Aboriginal objects.

Earth works would be required for the road works and essential services network. Along with kerb and gutter. Some lots will have earthworks done on them as part of the construction certificate plans. The earthworks will be compacted to 95% or better for the future erection of buildings. The height of the fill will be determined in the construction certificate. Within this development were the earthworks are intended there will be temporary sediment control used during the times of excavation until the service lines are backfilled. All of this will be done under the supervision of the Councils Engineering staff.

**Service Trench:** The site will require earthworks for the installation of services. A service trench will be installed for the length of the subdivision to accommodate, power, water, gas, sewer, stormwater, and communication lines.

**Cutting and Levelling:** The site will require moderate earthworks for construction of access roads, pavement, kerb and gutter. The intension is to cut, fill and trim the access road to a design level. Details of the excavation will be addressed on the construction certificate.

**Sediment Control:** Sediment and runoff related to earthworks is likely to be minimal. Sediment from stockpiles of exposed excavated surfaces will be contained with appropriate sediment and control barriers.

Temporary sediment and erosion control measures will be used during the times of excavation until service lines are backfilled and the access construction phase is complete.

**Road works:** All new roads will be constructed in compliance with council DCP and RMS requirements, and under direction of Council Engineers.

## 2.3 Site Description

Land Form: The land surface is characterised by a strong sloping from south to north down the ridgeline to water courses on either side with a rise back to Simpson St. There is a water course running through the lot to an existing dam.

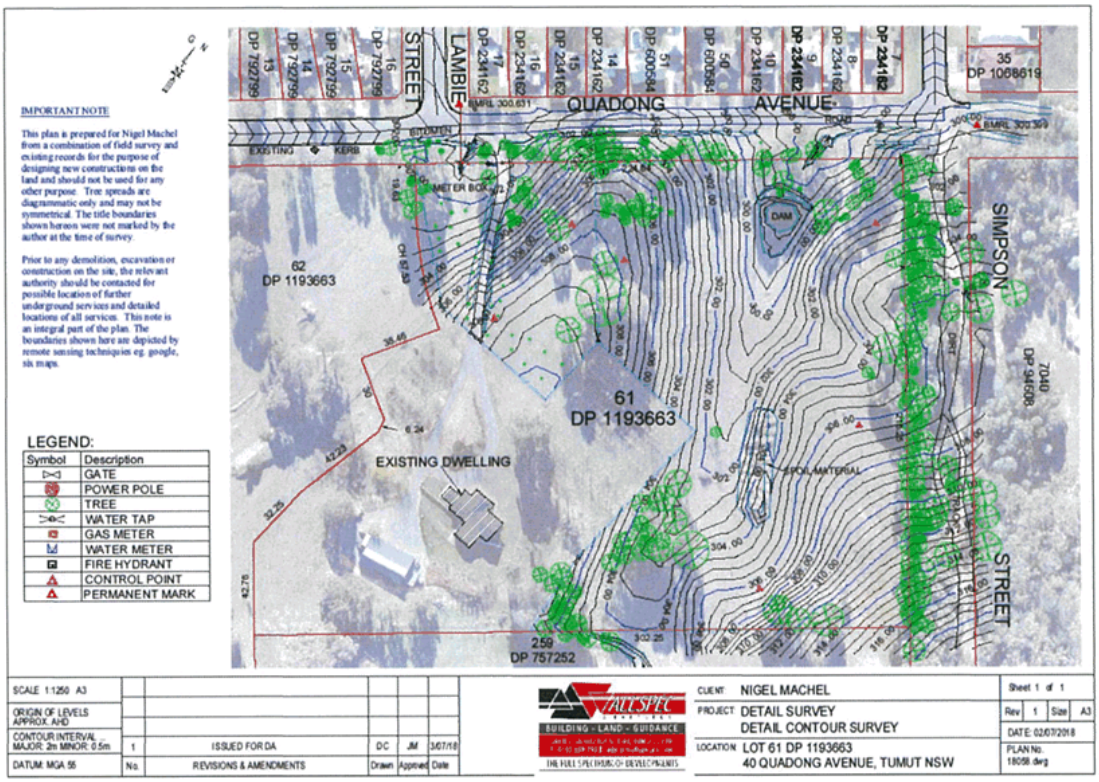



*Figure 2-2 Detail and Contour Plan*

*Table 2-1 Slope Classification*

| Slope Classification | Description | Slope Gradient Limits | |
|---|---|---|---|
| | | Lower | Upper |
| Nearly level | Slightly undulating level | 0 | 3 |
| Gently sloping | Undulating | 1 | 8 |
| Strong sloping | Rolling hill type | 4 | 16 |
| Moderate steep | prominent hills | 10 | 30 |
| Steep | Steep terrain | 20 | 60 |
| Very steep | Very steep to sub vertical | > 45 | |

**Flora and Fauna:** The land parcel is mostly cleared of vegetation and is currently covered by perennial grasses. General landscaping and small trees are located on the north-east. The subdivision would result in minimal environmental impact to vegetation. The development will not result in any significant clearing and is unlikely to impact on any threatened species or native habitats. All trees will be removed between our block and the proposed road and 1 tree per block will be planted I frontage. Future landscaping of the site will offset the clearing.

**Watercourses:** There is a dam located in the north (downstream) of the property to be developed, it has a natural watercourse flowing into it running from the south through the site. This drainage will not be affected by the development and will be protected by a 10m wide easement to drain stormwater.

## 2.4 Site Access

**Light Vehicle:** The site is accessed by Quandong Avenue. Lots 14-20 will be accessible from Quandong Avenue and lots 1-13 will be accessible from the extension of Simpsons street when construction is completed. All construction work will be performed in accordance with Snowy Valleys Councils development control plans (DCP).

**Traffic Movements:** Access to the property is practical to the development and will not have any significant impact on local traffic movements and volumes. Assuming 2 cars per household an additional 40 cars could be turning on and off Quandong Avenue daily. It would not be seen to have an adverse effect and would be consistent with surrounding traffic flows.

## 2.5 Service Provisions

**Services:** Electricity, water, gas, sewer and telecommunications services would be provided via Quandong Avenue. Water will be connected to the water main via Quandong Avenue and looped back around to connect with the main traversing Simpson Street. Electricity will be provided by the existing line running adjacent to Quandong Street.

**Sewer and Stormwater Disposal:** Sewer and stormwater will be installed separately; A retention basin has been proposed to retain all water from subdivision to discharge into existing water course without increasing usual flows on the Simpson St end with the stormwater running into the existing culvert on the western side in line with Lambie St.

## 2.6 Planning Controls

***Table 2-2 Compliance with Planning Controls***

| Compliance with LGA Planning Controls | | | |
|---|---|---|---|
| | **Y** | **N** | **NA** |
| 1. Tumut Local Environmental Plan (LEP) | **Y** | - | - |
| 2. Development Control Plans (DCP) | **Y** | - | - |
| | | | |

**Comments:**

Proposed subdivision of Lot 61 DP 1193663 into 21 lots. Land is classified as R3-Medium Density Residential with a minimum Lot Size 225m². Allspec believe the subdivision is permissible under the LEP, the subdivision will create an additional 20 medium density residential lots for development, with a minimum land size of 225 m².

Works will be performed to standards outlined in Councils Development Control Plans (DCP).

## 2.7 Site Suitability

**Visual Prominence:** The subdivision will result in 20 new blocks serviced by existing adjacent roads. Lots are intended to have separate titles for residential developments. Any future developments will be assessed and regulated by council prior to and during construction. Blocks are visually concealed and are unlikely to have undesirable visual impacts.

**Consistent with Council Planning:** The development would be consistent with Councils growth strategy. Subdividing the land parcel provides additional lots for medium density residential development and will tie into the surroundings.

**Heritage and or other Restrictions:** There are no apparent heritage matters nor other restrictions on the use of land that would deter this type of development.

**Services:** Key services are readily accessible.

**Land surface and Land use:** The land surface is moderate steep and provides fairly easy access for the installation of services; earth work control plans and relevant design plans will be provided during with the submission of the construction certification. The site was a former tree farm and grew single trees of many years. The development will not have any adverse impact on existing land uses.

## 2.8 Air, Dust and Noise Pollution

**Noise:** The subdivision requires moderate earth works. The development may incur some noise during the earthworks and construction phase of servicing the proposed lots although works will be restricted to normal working hours and will regulated by Council upon the future building application.

**Dust:** Dust will be suppressed by wetting down dry surfaces in hot, dry and windy conditions, excavation and vehicle movements will be restricted as required during dry and windy conditions. Land surfaces will remain covered by grasses and will remain undisturbed until works are due to commence.

## 2.9 Social Impacts

The land parcel is not seen as being environmentally or culturally sensitive. The parcel is located adjacent to lots already containing residential housing. The southern and eastern boundaries of the site are fenced. Constructing new residential lots will not significantly impede views or encroach on existing housing adjacent to the land parcel. Subdivision of the land will tie in well with the surrounding use and is unlikely to have any significant social impact. The subdivision is expected to be a very minimal if any social impact at all.

## 2.10 Economic Impacts

The proposal will provide a benefit to the local economy through provision of additional housing that will strengthen and support the existing retail, community and educational infrastructure within Tumut and its surrounding areas.

## 2.11 Natural Hazards

The land is on a low asbestos potential zone further testing can be carried out prior to excavation. The site is unlikely to contain naturally occurring asbestos. Please find attached the Preliminary Slope Stability Assessment.

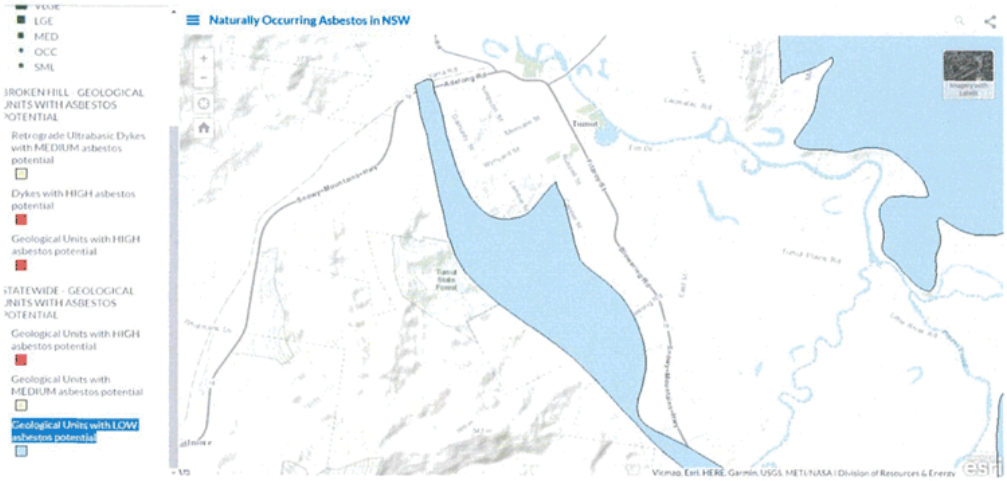



*Figure 2-3 Naturally Occurring Asbestos in NSW- Sourced from Esri*

## 2.12 Bushfire Prone Land

The land area is classified as a bushfire prone. See figure below. Building will have legislative restrictions in regard to fire zoning and as such an appropriate amount of Bushfire Protection Management (BPM) and Asset Protection Zone (APZ) will be provided to minimise the threat of a bushfire entering the proposed residential area. The site will also have appropriate entrance for the RFS and the town brigade. As there is already a development to the west where the bush fire source is coming from and it already has an asset protection zone to the west of it we believe this would satisfy the requirements of the planning for bushfire code. It is foreseen in the future that both the land to the west and south will become small residential lots and they are already managed farm lands which would negate the need for asset management zones.

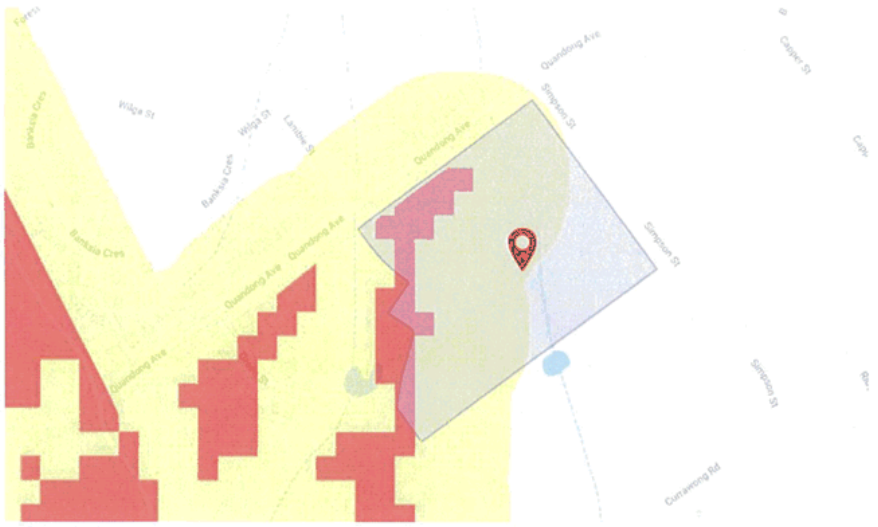



*Figure 2-4Bushfire Prone Land Map- Sourced from Planning Portal NSW*

## 2.13 Waste and Contaminants

The subdivision of land will not create any significant waste, the development of the Lots will yield normal construction waste which is envisaged to be removed from site using waste bins and would be disposed to the council's approved disposal facilities.

The site is not suspected to be subject to contaminants.

## 2.14 State Environmental Planning Policy (Infrastructure 2007)

*State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) aims to provide for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing.

**Consultation with councils—development with impacts on council-related infrastructure or services**

(1) This clause applies to development carried out by or on behalf of a public authority that this Policy provides may be carried out without consent if, in the opinion of the public authority, the development:

- will have a substantial impact on stormwater management services provided by a council, or
- is likely to generate traffic to an extent that will strain the capacity of the road system in a local government area, or
- involves connection to, and a substantial impact on the capacity of, any part of a sewerage system owned by a council, or
- involves connection to, and use of a substantial volume of water from, any part of a water supply system owned by a council, or
- involves the installation of a temporary structure on, or the enclosing of, a public place that is under a council's management or control that is likely to cause a disruption to pedestrian or vehicular traffic that is not minor or inconsequential, or
- involves excavation that is not minor or inconsequential of the surface of, or a footpath adjacent to, a road for which a council is the roads authority under the *Roads Act 1993* (if the public authority that is carrying out the development, or on whose behalf it is being carried out, is not responsible for the maintenance of the road or footpath).

(2) A public authority, or a person acting on behalf of a public authority, must not carry out development to which this clause applies unless the authority or the person has:

- given written notice of the intention to carry out the development (together with a scope of works) to the council for the area in which the land is located, and
- taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.

Allspec believes this development is consistent with the objectives set out in SEPP (Infrastructure 2007) and we have discussed with Council the intentions and possible loads to their infrastructure and through this document detailed how we will minimize the impact of such a development on Councils infrastructure.

## 2.15 Fire

All lots are accessible to by either fire hoses with 80m length with 10m spray radius or by Fire Truck as our driveways are 6m wide and the fire truck has a total 150m range.

## 2.16 Car Parking

The Solution for car parking during development will be in the site compound will be determined in the CC.

## 2.17 Summary and Conclusion

A Development Application is being submitted for a proposed 21 lot subdivision at Lot 61 DP 1193663. Known as 40 Quandong Avenue this recently subdivided parcel of land close to the out skirts of town adjoining existing residential dwellings. The land parcel is classified as R3-Medium Density Residential zone. The parcel is 5.507Ha and lends itself to further subdivision with the purpose of providing housing needs of the community. The proposed subdivision would result in 21 new parcels of land to fulfil the residential needs of the area.

The minimum medium density lots will be from 950m² to 2090m² and leaving a residual lot of 2.7Ha. All services would be provided from direct access from the street. Separate lines will be installed for sewer and storm water. Access to the property is practical to the development and will not have any significant impact on local traffic movements and volumes.

The land surface is moderate steep, the land parcel is mostly cleared of vegetation and is currently covered by perennial grasses. There is a water course cutting through the land from a dam in the north edge. The development will not result in any significant clearing and is unlikely to impact on any threatened species or native habitats. The land is deemed as suitable and will require moderate earthworks. Noise, dust and sediments associated with earth works will be mitigated with appropriate control measures.

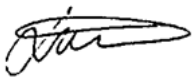
- The land parcel lends itself to further division with the purpose of providing medium density residential housing needs for the community.
- The development would be consistent with Councils growth strategy and would result in 20 new blocks serviced by a public access road and under separate titles for the purpose of residential development.
- Allspec and Partners Pty Ltd believes the subdivision is permissible as it is consistent with the objectives set out under the LEP, the subdivision will create additional 20 medium density residential lots for development, with a minimum land size of 950 m².
- All construction work will be performed in accordance with Councils, development control plans (DCP) and the Tumut Local Environmental Plan (LEP) 2012.
- The land area is classified as a bushfire prone, the proposed development will have legislative restrictions in regard to fire zoning, and the site will apply for an exemption on the requirements for BPMs and an APZ to minimalize the fuel for a fire.
- The land parcel is not seen as being environmentally or culturally sensitive it is unlikely to have any significant social impact and is envisaged to tie in well with the surrounding residential dwellings.

We believe there are minimal environmental impacts that will result from this subdivision as we are creating 20 new residential lots in R3-Medium Density Residential area that is subject to ongoing modernisation and infill developments.

## 3 APPLICANT DECLARATION

I/we declare to the best of my/our knowledge and belief that the particulars stated on this document are correct in every detail and that the information required has been supplied.

I/we acknowledge that the development application may be returned to me/us if information is found to be missing or inadequate.

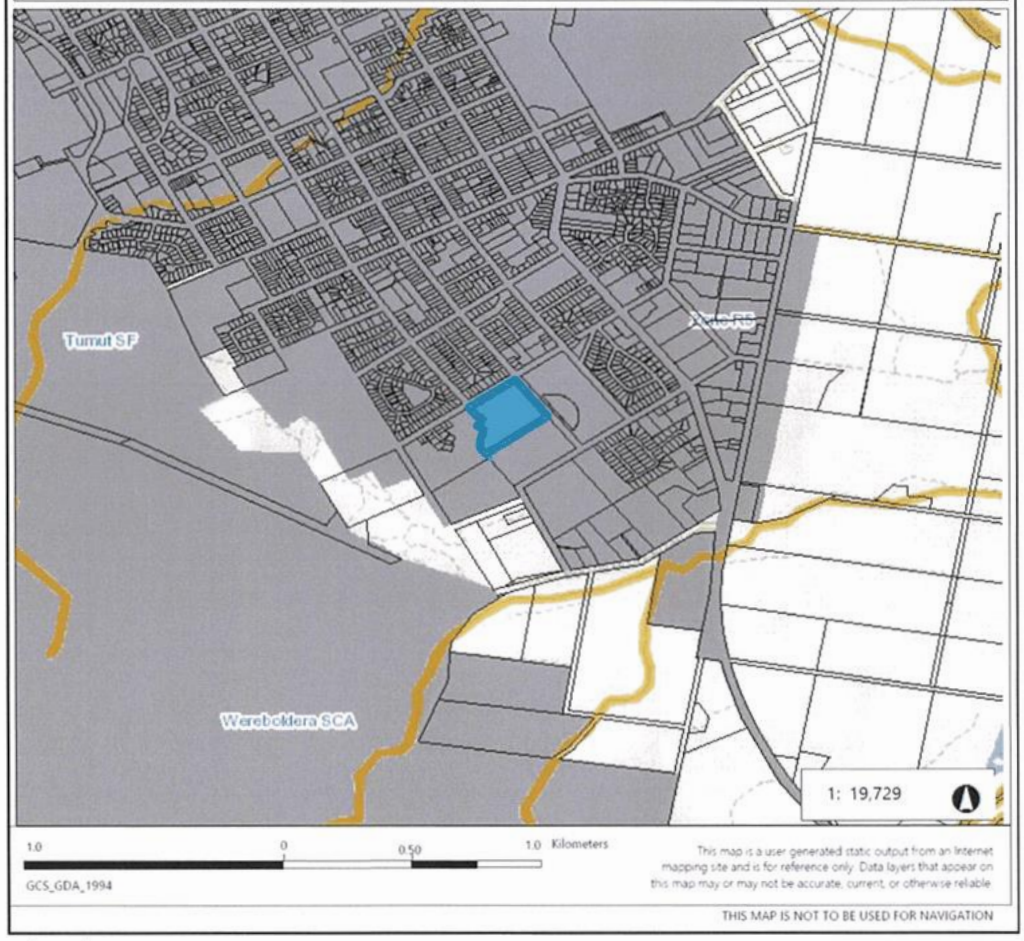


Name: James McMahon
Date: 25-10-2018

Appendix 1

NSW GOVERNMENT

## Biodiversity Offset Scheme (BOS) Entry Threshold Map




Legend

- Biodiversity Values
- Land Excluded from LLS Act

Notes

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October 25, 2018 20

NSW GOVERNMENT

# Biodiversity Offset Scheme (BOS) Entry Threshold Report

**Results Summary**

| | | |
|---|---|---|
| **Date of Calculation** | 28/09/2018 8:22 AM | **BAM Required*** |
| **Total Digitised Area** | 5.48 ha | |
| **Minimum Lot Size Method** | LEP | |
| **Minimum Lot Size** | 0.02 ha | |
| **Area Threshold** | 0.25 ha | |
| **Area of native vegetation cleared** | Unknown # | Unknown # |
| **Impact on biodiversity values land map** | no | no |

*If BAM required has:

- at least one 'Yes': you have exceeded the BOS threshold. You are now required to submit a Biodiversity Development Assessment Report with your development application. Go to https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor to access a list of assessors who are accredited to apply the Biodiversity Assessment Method and write a Biodiversity Development Assessment Report
- 'No': you have not exceeded the BOS threshold. You may still require a permit from local council. Review the development control plan and consult with council. You may still be required to assess whether the development is "likely to significantly affect threatened species' as determined under the test in s. 7.3 of the Biodiversity Conservation Act 2016. You may still be required to review the area where no vegetation mapping is available.

# Where the area of impact occurs on land with no vegetation mapping available, the tool cannot determine the area of native vegetation cleared and if this exceeds the Area Threshold. You will need to work out the area of native vegetation cleared – refer to the BOSET user guide for how to do this.

## Disclaimer

This results summary and map can be used as guidance material only. This results summary and map is not guaranteed to be free from error or omission. The State of NSW and Office of Environment and Heritage and its employees disclaim liability for any act done on the information in the results summary or map and any consequences of such acts or omissions. It remains the responsibility of the proponent to ensure that their development application complies will all aspects of the *Biodiversity Conservation Act 2016*.

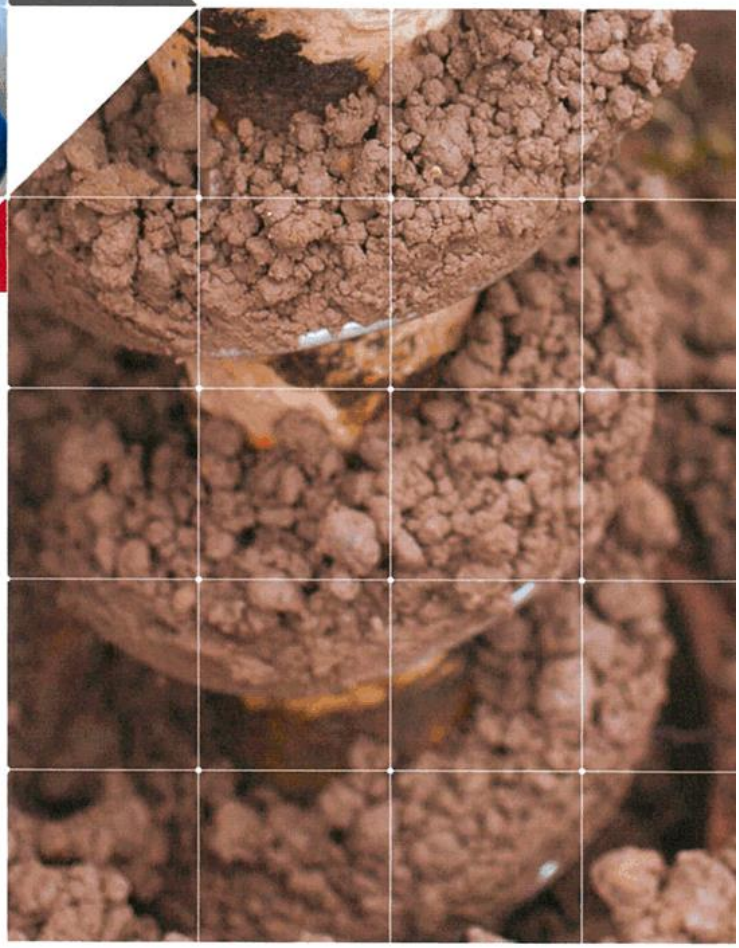
The mapping provided in this tool has been done with the best available mapping and knowledge of species habitat requirements. This map is valid for a period of 30 days from the date of calculation (above).

## Acknowledgement

I as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature_____ Date: 28/09/2018 08:22 AM

McMahon EARTH SCIENCE



# 40 Quandong Avenue Tumut NSW

# Preliminary Slope Stability Assessment

## April 2019

**DM McMahon Pty Ltd**
6 Jones St (PO Box 6118)
Wagga Wagga NSW 2650
t (02) **6931 0510** www.dmmcmahon.com.au

# PRELIMINARY SLOPE STABILITY ASSESSMENT
# 40 QUANDONG AVE TUMUT NSW 2720

April 2019

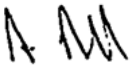
## Project brief

At the request of Michelle Post of Allspec & Partners, a preliminary slope stability assessment, site inspection, analysis and reporting was carried out to assess the site on 4 April 2019. The document provides information about the site conditions from field observations and laboratory analysis.

**Site identification**

**Address:** 40 Quandong Ave, Tumut NSW 2720
**Real property description:** Lot 61 DP 1193663
**Centre co-ordinate:** 611713E 6090738 MGA GDA94 z55
**Property size:** Approx. 5.52ha (Lot 61)
**Owner:** Nigel Machel
**Local Council Area:** Snowy Valleys Council
**Present use:** Vacant Lot
**Development Application Reference:** Unknown
**Report Identification:** 5946

**Certification**

| Name | Signed | Date | Revision Number |
|---|---|---|---|
| **David McMahon**<br>BAppSc SA<br>GradDip WRM<br>MEnvMgmt<br>MALGA MEIANZ MSSA |  | 18/04/2019 | 0 |
| **Alexander Rudd**<br>BSc<br>AGS |  | 18/04/2019 | 0 |

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**t** (02) **6931 0510** **www.dmmcmahon.com.au**

## Introduction

This report presents the results of a geotechnical investigation carried out by DM McMahon Pty Ltd (McMahon) for the proposed 21 lot subdivision of 40 Quandong Avenue Tumut NSW 2720.

The site inspection was undertaken to provide a preliminary assessment of slope stability of the site and to determine the presence of naturally occurring asbestos within local geology. The objectives of the investigation were to:

- Satisfy the general requirements of the local Council;
- Carry out a preliminary slope stability assessment at the proposed site;
- Provide comment on the presence or absence of naturally occurring asbestos in the local geology/lithology on site; and
- Provide recommendations on best construction practices on areas classified as having a landslide risk.

The geotechnical investigation work was commissioned by Allspec & Partners and was undertaken in general accordance with an email from Michelle Post, dated 3 April 2019.

This report should be read in conjunction with '*Guidelines for Hillside Construction'*, Australian Geomechanics Society Journal, Volume 37, No. 2 May 2002.

## 3.0 Characteristics of the site

A desktop review and investigation of the topography, hydrology, soil, lithology, geology and hydrogeology of the site has been undertaken and are as follows:

### *3.1 Topography*

The Tumut 1:25,000 Topographic Map (Sheet 8527-3-N) indicates that the site is located at an elevation of approximately 300-317m AHD. The site landform can be classed as a crest to simple slope to an open depression and the slope class is moderately inclined to gently inclined.

### *3.2 Vegetation*

The site is partially covered with annual grass and broadleaf species with some scattered trees and shrubs concentrated on upper slopes. Blackberry bushes are currently present within stockpiled fill materials and sparsely scattered over the site.

### *3.3 Weather*

The average rainfall is approximately 816.7 mm per annum, with the wettest months being June, July and August. Annual mean evaporation for the region is 1861.5 mm with mean daily evaporation ranges from 1.2mm in July to 10.2mm in January. Tumut is characterised by cold wet winters and hot dry summers with mean maximum temperatures ranging from 12.8 °C in July to 31.6 °C in January and mean minimum temperatures ranging from 2.0 °C in July to 15.6 °C in February. Rainfall data from Tumut (Simpson Street) 072044, temperature data from Gundagai (Ridge Street) 073128, 30km away and evaporation data from Wagga Wagga AMO 072150, 70km away (www.bom.gov.au).

### *3.4 Hydrology*

A first order (Strahler, 1952) tributary runs through the site and is held in a temporary stormwater detention basin. The nearest major waterway is the Tumut River, located approximately 1.7km to the north-north west of the site. Due to the relative incline of the site and relatively permeable soils, rainfall is likely to both run off and infiltrate into soil at the site, before being temporarily stored in the stormwater detention basin, eventually ending up in the Tumut River.

### *3.5 Soil & landform*

The site lies within the mapping unit **Qb7** from the Digital Atlas of Australian Soils (BRS, 1991). The map unit **Qb7** is described as:

***Qb7***

Hilly with some steep hilly to rugged areas, narrow valleys; some small areas of conical hills towards the mountains (compare unit Qb8): chief soils are hard neutral and acidic red soils (Dr2.22, Dr2.42, and Dr2.21), sometimes of very shallow depth, with (Um4.1), (Dy3.4), and shallow (Gn2.15) soils. Associated are some undulating areas of (Dy3.42) soils; narrow valleys of unit Va15; and (Dd3.12), (Ug5.13). (Db3.12). (Dr4.12) soils on steep, sometimes bouldery, slopes of serpentine rock. Data are limited. Occurs on sheet(s): 3

### *3.6 Hydrogeology*

From the Geoscience Australia hydrogeology dataset, the groundwater beneath the site is described as fractured or fissured extensive aquifers of low to moderate productivity.

## 4.0 Geotechnical Investigation Scope of Works

The specification for the geotechnical investigation as proposed by McMahon are as follows:

**Table 1**: *Scope of works*

| Item | Description |
|---|---|
| 1. | Where available, review plans and other general related documents provided to us to gain a comprehensive understanding of the proposed project. |
| 2. | Undertake a desktop study of local landform, geological, lithological & hydrogeological conditions. |
| 3. | Conduct Dial Before You Dig search and utilise a service locator onsite (if necessary). |
| 4. | Carry out field investigations by reference to AS1726:2017 Geotechnical Site Investigations and with general guidance from AGS 2002 - 'Landslide Risk Management Concepts and Guidelines'. |
| 5. | Analyse soils in situ and at our NATA accredited laboratory to AS/RMS methods. |
| 6. | Generate reports and review results. |
| 7. | Compile results in report detailing methodology, desktop study, physical conditions, field work results, in-situ test results and discussion. |
| 8. | Report on desktop study of site characteristics, slope stability and presence of Naturally Occurring Asbestos. |

As follows is an aerial image of the site with concept plan of proposed 21 lot subdivision overlain.


**Figure 1**: *Aerial image of site - Jan 2019.*

## 5.0 Desktop Assessment of Geology

A desktop assessment of the surface geology underlying the investigation area was carried out to ascertain the likelihood of naturally occurring asbestos being present within the local lithology. A review of the Surface Geology of NSW Map and the Tumut 1:100 000 Geological Sheet (8527) showed the following:

**Surface Geology of New South Wales 1:1 500 000 Map**
Ss - Silurian age Sedimentary Rocks
See **Figure 2**.

**Tumut 1:100 000 Geological Sheet 8527**
Sbl - Late Silurian Age Sedimentary Rocks of the Blowering Formation. Volcaniclastic shale, siltstone, and sandstone; very minor quartzite, chert, jasper.
See **Figure 3**.

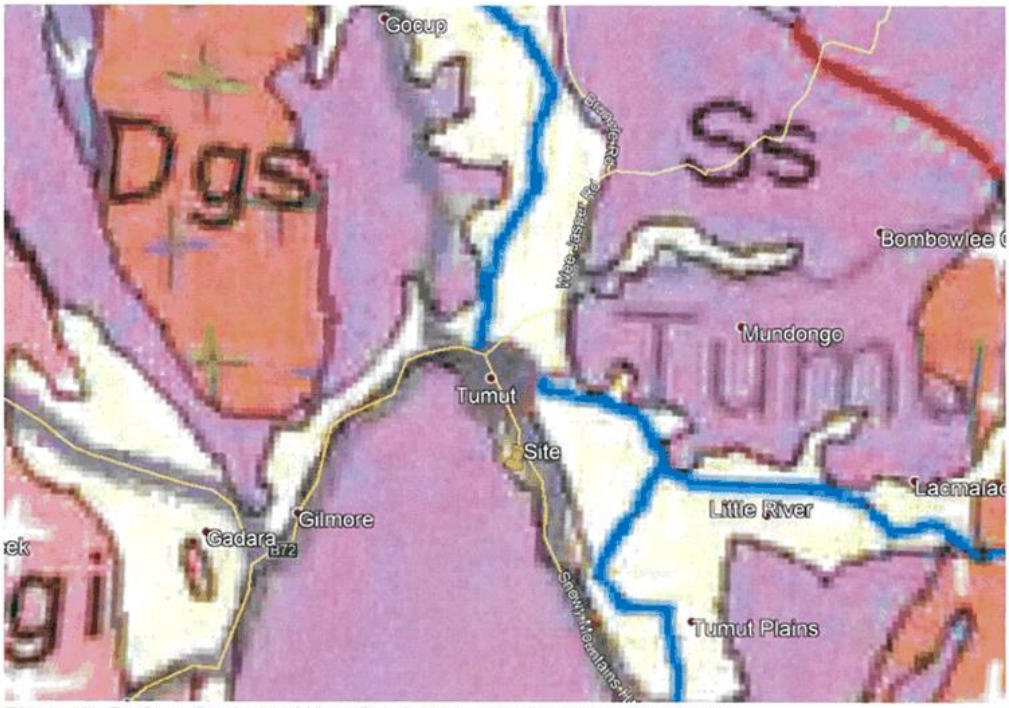


**Figure 2:** *Surface Geology of New South Wales 1:1 500 000 Map overlay*

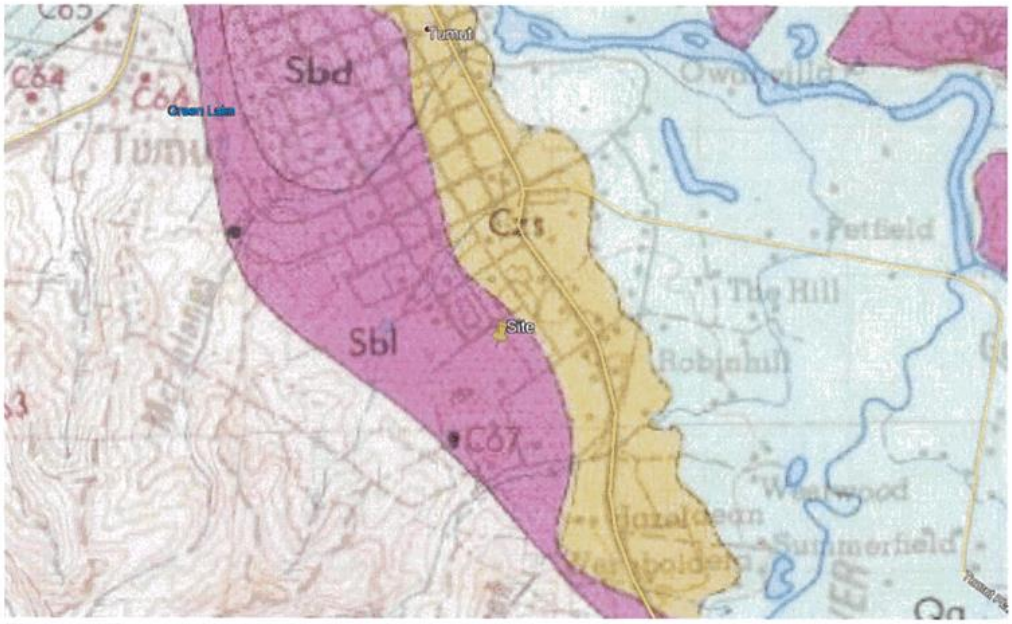


**Figure 3:** *Tumut 1:100 000 Geological Sheet overlay*

## 6.0 Presence of Naturally Occurring Asbestos

The NSW Government Heads of Asbestos Coordination Authorities (HACA) Naturally Occurring Asbestos Mapping indicates that the site has a 'LOW' potential risk of being affected by the presence of naturally occurring asbestos in the underlying soils/bedrock, **Figure 4**. The mapping for the immediate area of the site is indicative of the probability of the occurrence of naturally occurring asbestos in geological formations of the area. A desktop assessment was undertaken to determine likely geological features from both large and small scale geological mapping, followed by a site walkover and inspection of surficial rocks and rock outcrops present on site.

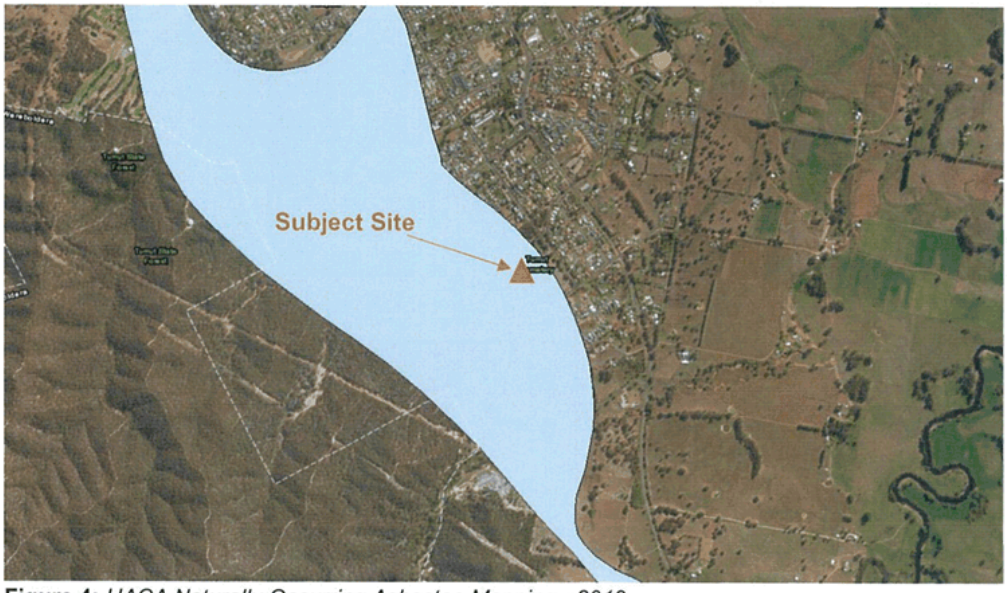


**Figure 4:** *HACA Naturally Occurring Asbestos Mapping - 2019*

The site walk-over confirmed the presence of surficial Silurian age Sedimentary rocks, which are unlikely to contain naturally occurring asbestos. No samples were obtained from the site for laboratory testing.

## 7.0 Landslide Risk Assessment

The property is located within the 'Landslide Risk Land' zone in the Tumut Local Environmental Plan 2012, **Figure 5**.

### *7.1 Subsurface strata*

No field works in the form of drilling were carried out under this preliminary assessment. A site walkover and inspection was carried out, assessing the site for any evidence of historic movement and potential hazard zones from previous landslide activity. Existing slopes showed evidence of a thin rocky soil profile, with evidence of the underlying geology present in the form of rocky outcrops and residual/colluvial materials present on the surface. Slopes showed reasonable stability with minor vegetative cover over the majority of the site. The site appeared to be well drained on the upper slopes of the proposed subdivision with the potential for water aided mass movement minimal. Some evidence of run-off erosion of surficial fine grained materials is apparent but minimal.

For a more detailed assessment of the subsurface strata, it is recommended that inspection of the subsurface conditions by borehole and/or test pits be carried out to provide accurate

information of subsurface conditions. Laboratory testing of recovered samples may also be carried out to determine soil and rock parameters required for installation of engineered retaining walls, footing designs and detailed slope stability analysis.


**Figure 5:** *Tumut LEP 2012, Landslide Risk Map - Sheet LRI_003*

### *7.2 Historical aerial photography*

Desktop review of historical aerial photography of the site was also analysed to aid in determining any historical evidence of mass movement or land slip. Google Earth Pro along with NSW Spatial Information Exchange (SIXMAPS) were utilised for this purpose. The following aerial photographs were interpreted during the analysis, **Table 2**.

**Table 2:** *Summary of historical aerial imagery reviewed*

| Source | Location | Image Date | Physical Evidence |
|---|---|---|---|
| Google Earth Pro | Tumut (Site) | 09/01/2019 | Nil |
| Google Earth Pro | Tumut (Site) | 15/05/2017 | Nil |
| Google Earth Pro | Tumut (Site) | 10/04/2017 | Nil |
| Google Earth Pro | Tumut (Site) | 09/03/2017 | Nil |
| Google Earth Pro | Tumut (Site) | 14/04/2016 | Nil |
| Google Earth Pro | Tumut (Site) | 21/11/2015 | Nil |
| Google Earth Pro | Tumut (Site) | 31/10/2013 | Nil |
| NSW SIXMAPS | Tumut (Site) | 17/10/2008 | Placement of stockpiled fill materials overlying proposed Lots 3, 6 & 7. |
| Google Earth Pro | Tumut (Site) | 09/11/2005 | Nil |

During the above interpretation of historical aerial imagery, no physical evidence was noted across the site to indicate any previous instability.

## 8.0 Comments and Recommendations

### *8.1 Site preparation and earthworks*

New fill for the preparation of pavement subgrade or cut and fill operations should be placed, compacted and tested to an engineering specification in general accordance with recommendations outlined in AS3798-2007, 'Guidelines on Earthworks for Commercial and Residential Developments' or to Council specification.

All soils containing grasses, root materials and residual humic matter are to be stripped and removed from immediate construction sites and access areas prior to construction. Topsoil material is not considered suitable for use as structural fill but may be stockpiled for potential use as landscaping material. Proof rolling of stripped areas and areas of construction should take place prior to the placement of any structural fill materials.

The following general procedure is recommended as a guide for site preparation and the placement of controlled fill:

- Remove existing topsoil, uncontrolled fill, vegetation, root affected or other potentially deleterious materials from proposed fill area;
- Earthworks are ideally carried out in dry weather conditions;
- Provisions are made for effective surface water diversion away from outside the pavement works site;
- It is possible that site preparation could expose wet subgrade material, particularly if excavation is carried out after a prolonged period of rainfall. Trafficability in low to medium plasticity clay material for wheeled vehicles can be expected to be slightly difficult during and following rainfall. If material wets up during construction, it should be scarified, dried and re-compacted;
- The exposed natural soils should then be scarified to a depth of about 200mm, moisture conditioned to within ±2% of Standard Optimum Moisture Content (SOMC) and then re-compacted to a standard maximum dry density (SMDD) of 98% in accordance with AS1289 5.1.1, 5.4.1 or 5.7.1 or to Council specifications;
- Any soft or weak areas identified during the compaction process that do not respond to further compaction should be removed and replaced with suitable site materials in layers not exceeding 250mm thickness and should be compacted to the above criteria.
- If required, the subgrade should be stabilised as recommended; and
- Subsequent layers of fill should be placed in uniform layers as specified, moisture conditioned and compacted to a minimum of 102% SMDD for base and 100% SMDD for sub-base and select fill or to council specification. The compacted layers are to be tested by a relevant NATA accredited facility.

The backfilling of the service trenches should be undertaken carefully. The bedding materials and materials immediately around the services should be placed and compacted as per AS3798 or other relevant standards. The general backfill above the pipe should be compacted to the following criteria:

- When backfilling service trenches with sand or aggregate, compaction to a density index of at least 70% should be used;
- When backfilling service trenches the cohesive materials (e.g. clays, sandy clays) should be moisture conditioned to within ±2% of standard optimum moisture content and then compacted to a minimum dry density of 95% standard in accordance with AS1289 5.1.1, 5.4.1 or 5.7.1;
- The earthworks at the site should be inspected and tested as per the requirements of AS3798-2007 and should be carried out during dry weather conditions; and

- Provision should be made for effective diversion of surface water from outside the site. The surface runoff from the site should be treated to remove sediments before discharge.

***8.2 Batter slopes***

For initial design purposes, the following recommendations should be generally adhered to where bulk earthworks are being undertaken. Shallow excavations undertaken prior to other construction works where all surcharge loads, including plant and stockpiled material are kept well clear of the top of the batters, minimum batter slopes are recommended as 1V:1H for temporary batters and 2V:1H for permanent batters. Where steeper permanent batters are required, slope reinforcement may be considered.

Stormwater runoff should be directed away from the tops of batters by use of berm drains. Where runoff must be directed down the face of a batter, the batter drains/chutes should be lined to prevent erosion. Properly installed silt fence should be used at the base of batter slopes to prevent offsite migration of sediment. Scouring of excavation faces due to runoff should be repaired prior to further works within the excavation(s). All permanent batters should be protected from erosion by vegetation or other measures and designed with adequate surface and subsurface drainage.

The contractor is solely responsible for temporary excavation design and should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench depth, exceed those specified in local, state, and national safety regulations.

***8.3 Drainage and surface protection***

Site clearance and construction must undergo careful consideration to ensure that changes to any groundwater conditions are limited. The attached documents extracted from Australian Geomechanics Society Journals provide further information on good and poor construction practices to help developers and landholders make sound decisions during construction and any alterations of the land mass prior to construction.

A number of groundwater management techniques can be employed to control groundwater flow and maintain unsaturated subsurface conditions. These can include but are not limited to; surface water drains, surface protection, sub-soil drains, deep underground drains and regular maintenance and inspection of drainage works.

## 9.0 Notes relating to results

**Groundwater**

A standing groundwater level or seepage was not observed during fieldwork. A groundwater table or seepage may be present at other times and fluctuations in groundwater levels and seepage could occur due to rainfall, change in temperature and other factors.

## *Notes Relating to Results*

| Log Column | | Symbol | Definition |
|---|---|---|---|
| **Soil Origin** | | TOPSOIL | Mantle of surface and/or near-surface soil often but not always defined by high levels of organic material, both dead and living. Remnant topsoils are topsoils that subsequently been buried by other transported soils. Roots of trees may extend significantly into otherwise unaltered soil and the presence of roots is not a sufficient reason for describing a material as topsoil. |
| | | FILL | Any material which has been placed by anthropogenic processes |
| | | Alluvial | Deposited by streams and rivers |
| | | Colluvial | Soil and rock debris transported down slope by gravity, with or without the assistance of flowing water and generally deposited in gullies or at the base of slopes. Colluvium is often used to refer to thicker deposits such as those formed from landslides, whereas the term 'slopewash' may be used for thinner and more widespread deposits that accumulate gradually over longer geological timeframes. |
| | | Extremely weathered material | Formed directly from in situ weathering of geological formations. Although this material is of soil strength, it retains the structure and/or fabric of the parent rock material. |
| | | Residual | Formed directly from in situ weathering of geological formations. These soils no longer retain any visible structure or fabric of the parent soil or rock material |
| **Class (AS1726-2017)** | Coarse grained soils | **GW** | Gravel and gravel-sand mixtures, little to no fines |
| | | GP | Gravel and gravel-sand mixtures, little to no fines, uniform gravels |
| | | GM | Gravel-silt mixtures and gravel-sand-silt mixtures |
| | | GC | Gravel-clay mixtures and gravel-sand-clay mixtures |
| | | SW | Sand and gravel-sand mixtures, little to no fines |
| | | SP | Sand and gravel-sand mixtures, little to no fines |
| | | SM | Sand-silt mixtures |
| | | SC | Sand-clay mixtures |
| | Fine grained soils | ML | Inorganic silt and very fine sand, rock flour, silty or clayey fine sand or silt with low plasticity |
| | | CL, CI | Inorganic clays of low to medium plasticity, gravelly clay, sandy clay |
| | | OL | Organic silt |
| | | MH | Inorganic silt |
| | | CH | Inorganic clays of high plasticity |
| | | OH | Organic clay of medium to high plasticity, organic silt |
| | | Pt | Peat, highly organic soil |
| **Soil Name/ Description** | | SAND | Coarse grained soil |
| | | SILT | Fine grained soil – low dry strength, low wet toughness and dilatancy |
| | | CLAY | Fine grained soil – high dry strength, high wet toughness and plasticity |
| **Grain Size** | | Coarse | >2mm |
| | | Medium | 0.06 – 2mm |
| | | Fine | <0.06mm |
| **Moisture** | | D | Dry |
| | | T | Moderately Moist |
| | | M | Moist |
| | | W | Wet |
| **Plasticity** | | Non-plastic | Not applicable |
| | | Low | Only slight pressure is required to roll the thread of soil near the plastic limit. The thread and lump are weak and soft. The dry specimen crumbles into powder with some finger pressure. |
| | | Medium | Medium pressure is required to roll the thread of soil to near the plastic limit. The thread and lump have medium stiffness. The dry specimen breaks into pieces or crumbles with considerable finger pressure. |
| | | High | Considerable pressure is required to roll the thread to near the plastic limit. The thread and the lump have very high stiffness. The dry specimen cannot be broken with finger pressure. Specimen will break into pieces between thumb and a hard surface. |
| **Consistency** | | Very Soft (VS) | Exudes between fingers when squeezed in hand |
| | | Soft (S) | Can be moulded by light finger pressure |
| | | Firm (F) | Can be moulded by strong finger pressure |
| | | Stiff (St) | Cannot be moulded by fingers |
| | | Very Stiff (VSt) | Can be indented by thumb nail |
| | | Hard (H) | Can be indented by thumb nail with difficulty |
| | | Friable (Fr) | Can be easily crumbled or broken into small pieces by hand |

## 10.0 Disclaimer

The information contained in this report has been extracted from field and laboratory sources believed to be reliable and accurate. DM McMahon Pty Ltd will not assume any responsibility for the misinterpretation of information supplied in this report. The accuracy and reliability of recommendations identified in this report need to be evaluated with due care according to individual circumstances. It should be noted that the recommendations and findings in this report are based solely upon the said site location and the ground level conditions at the time of testing. The results of the said investigations undertaken are an overall representation of the conditions encountered. The properties of the soil within the location may change due to variations in ground conditions outside of the tested area. The author has no control or liability over site variability that may warrant further investigation that may lead to significant design changes.

**Notice of Copyright**



## 11.0 Reference

AGS (2002). 'Landslide Risk Management Concepts and Guidelines', Australian Geomechanics Society Journal, Volume 37 No. 2, May 2002

AGS (2007e). 'The Australian Geoguides for Slope Management and Maintenance', Australian Geomechanics Society Journal, Volume 42 No. 1, March 2007.

Basden H., 1990, Tumut 1:100 000 Geological Sheet 8527, 1st edition. Geological Survey of New South Wales, Sydney.

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Geological Survey of NSW 2009. Surface Geology of New South Wales - 1:1 500 000 map. Geological Survey of New South Wales, NSW Department of Primary Industries, Maitland, Australia

Geology information: Copyright Commonwealth of Australia (MDBC) 1999

HACA, 2019. Naturally occurring asbestos in NSW mapping. <https://trade.maps.arcgis.com/apps/PublicInformation/index.html?appid=87434b6ec7dd4aba8cb664d8e646fb06> Accessed 12/04/2019

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Roads and Maritime Services (2013), QA Spec. R3071, Selected Materials in Formation

Standards Australia AS 1726 – 2017 Geotechnical Site Investigations

Standards Australia AS 2870 – 2011 Residential Slabs and Footings - Construction

Standards Australia AS 3798 – 1996 Guidelines on earthworks for commercial and residential developments

Strahler, A. N., 1952. 'Hypsometric (area-altitude) analysis of erosional topology', Transactions of the American Geophysical Union, 38 (6): 913-920

## 12.0 Attachments

| Attachment | Details |
|---|---|
| **A. Extract from 'Landslide Risk Management Concepts and Guidelines', Australian Geomechanics Society Journal, Volume 37 No. 2, May 2002, p43.** | 1 page |
| **B. Extract from 'The Australian Geoguides for Slope Management and Maintenance', Australian Geomechanics Society Journal, Volume 42 No. 1, March 2007, p174-175.** | 1 page |
| **C. Supplied 'Concept Plan - 40 Quandong Avenue'** | 1 page |

**Attachment A** : *Extract from 'Lanslide Risk Management Concepts and Guidelines', Australian Geomechanics Society Journal, Volume 37 No. 2, May 2002, p43*

DM McMahon Pty Ltd 6 Jones Street (PO BOX 6118) Wagga Wagga NSW 2650 t (02) 6931 0510 w www.dmmcmahon.com.au

## SOME GUIDELINES FOR HILLSIDE CONSTRUCTION

| | *GOOD ENGINEERING PRACTICE* | *POOR ENGINEERING PRACTICE* |
|---|---|---|
| **ADVICE** | | |
| GEOTECHNICAL ASSESSMENT | Obtain advice from a qualified, experienced geotechnical consultant at early stage of planning and before site works. | Prepare detailed plan and start site works before geotechnical advice. |
| **PLANNING** | | |
| SITE PLANNING | Having obtained geotechnical advice, plan the development with the risk arising from the identified hazards and consequences in mind. | Plan development without regard for the Risk. |
| **DESIGN AND CONSTRUCTION** | | |
| HOUSE DESIGN | Use flexible structures which incorporate properly designed brickwork, timber or steel frames, timber or panel cladding.<br>Consider use of split levels.<br>Use decks for recreational areas where appropriate. | Floor plans which require extensive cutting and filling.<br>Movement intolerant structures. |
| SITE CLEARING | Retain natural vegetation wherever practicable. | Indiscriminately clear the site. |
| ACCESS & DRIVEWAYS | Satisfy requirements below for cuts, fills, retaining walls and drainage.<br>Council specifications for grades may need to be modified.<br>Driveways and parking areas may need to be fully supported on piers. | Excavate and fill for site access before geotechnical advice. |
| EARTHWORKS | Retain natural contours wherever possible. | Indiscriminant bulk earthworks. |
| CUTS | Minimise depth.<br>Support with engineered retaining walls or batter to appropriate slope.<br>Provide drainage measures and erosion control. | Large scale cuts and benching.<br>Unsupported cuts.<br>Ignore drainage requirements |
| FILLS | Minimise height.<br>Strip vegetation and topsoil and key into natural slopes prior to filling.<br>Use clean fill materials and compact to engineering standards.<br>Batter to appropriate slope or support with engineered retaining wall.<br>Provide surface drainage and appropriate subsurface drainage. | Loose or poorly compacted fill, which if it fails, may flow a considerable distance including onto property below.<br>Block natural drainage lines.<br>Fill over existing vegetation and topsoil.<br>Include stumps, trees, vegetation, topsoil, boulders, building rubble etc in fill. |
| ROCK OUTCROPS & BOULDERS | Remove or stabilise boulders which may have unacceptable risk.<br>Support rock faces where necessary. | Disturb or undercut detached blocks or boulders. |
| RETAINING WALLS | Engineer design to resist applied soil and water forces.<br>Found on rock where practicable.<br>Provide subsurface drainage within wall backfill and surface drainage on slope above.<br>Construct wall as soon as possible after cut/fill operation. | Construct a structurally inadequate wall such as sandstone flagging, brick or unreinforced blockwork.<br>Lack of subsurface drains and weepholes. |
| FOOTINGS | Found within rock where practicable.<br>Use rows of piers or strip footings oriented up and down slope.<br>Design for lateral creep pressures if necessary.<br>Backfill footing excavations to exclude ingress of surface water. | Found on topsoil, loose fill, detached boulders or undercut cliffs. |
| SWIMMING POOLS | Engineer designed.<br>Support on piers to rock where practicable.<br>Provide with under-drainage and gravity drain outlet where practicable.<br>Design for high soil pressures which may develop on uphill side whilst there may be little or no lateral support on downhill side. | |
| DRAINAGE | | |
| SURFACE | Provide at tops of cut and fill slopes.<br>Discharge to street drainage or natural water courses.<br>Provide general falls to prevent blockage by siltation and incorporate silt traps.<br>Line to minimise infiltration and make flexible where possible.<br>Special structures to dissipate energy at changes of slope and/or direction. | Discharge at top of fills and cuts.<br>Allow water to pond on bench areas. |
| SUBSURFACE | Provide filter around subsurface drain.<br>Provide drain behind retaining walls.<br>Use flexible pipelines with access for maintenance.<br>Prevent inflow of surface water. | Discharge roof runoff into absorption trenches. |
| SEPTIC & SULLAGE | Usually requires pump-out or mains sewer systems; absorption trenches may be possible in some areas if risk is acceptable.<br>Storage tanks should be water-tight and adequately founded. | Discharge sullage directly onto and into slopes.<br>Use absorption trenches without consideration of landslide risk. |
| EROSION CONTROL & LANDSCAPING | Control erosion as this may lead to instability.<br>Revegetate cleared area. | Failure to observe earthworks and drainage recommendations when landscaping. |
| **DRAWINGS AND SITE VISITS DURING CONSTRUCTION** | | |
| DRAWINGS | Building Application drawings should be viewed by geotechnical consultant | |
| SITE VISITS | Site Visits by consultant may be appropriate during construction/ | |
| **INSPECTION AND MAINTENANCE BY OWNER** | | |
| OWNER'S RESPONSIBILITY | Clean drainage systems; repair broken joints in drains and leaks in supply pipes.<br>Where structural distress is evident see advice.<br>If seepage observed, determine causes or seek advice on consequences. | |

**Attachment B** : *Extract from 'The Australian Geoguides for Slope Management and Maintenance', Australian Geoechanics Society Journal, Volume 42 No.1, March 2007, p174-175*

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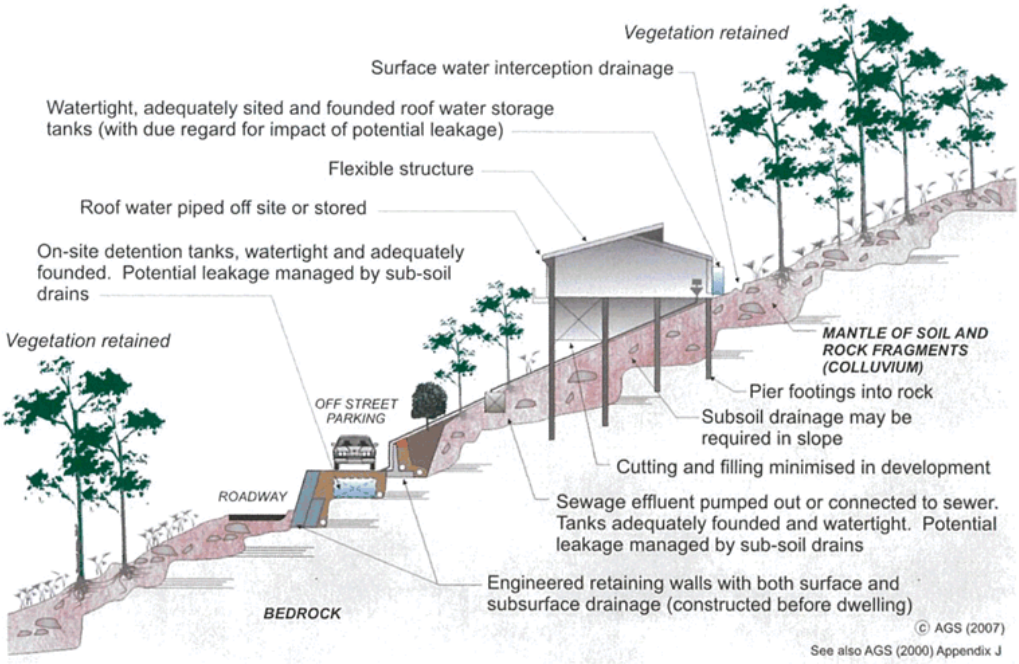
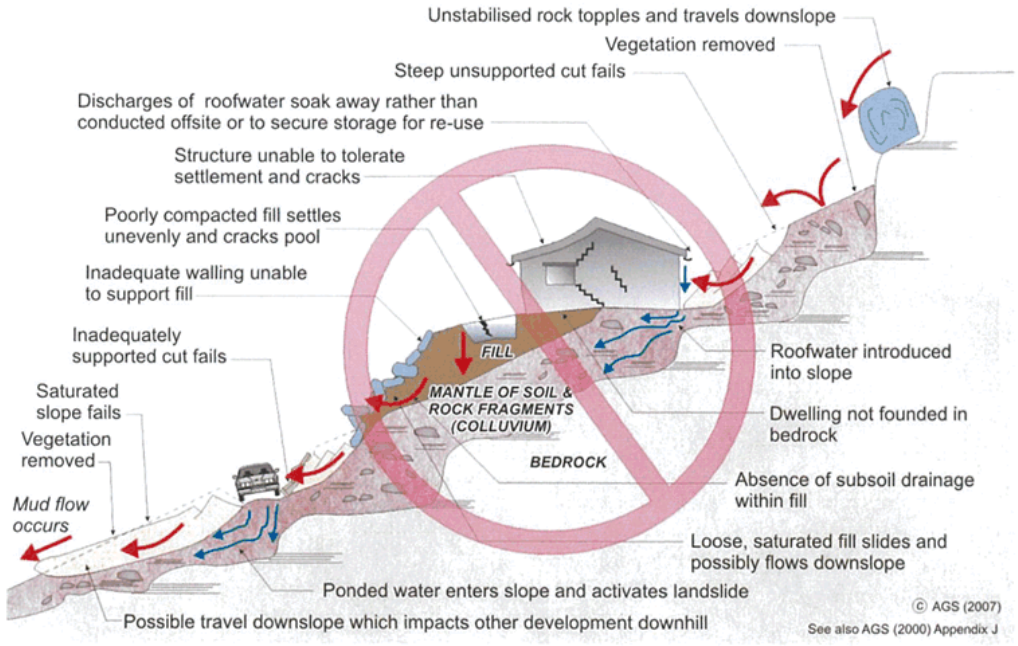
Extract from Australian Geoguide LR8 - *Construction Practice*

## EXAMPLES OF **GOOD** HILLSIDE CONSTRUCTION PRACTICE




## EXAMPLES OF **POOR** HILLSIDE CONSTRUCTION PRACTICE




AGS (2007e). 'The Australian Geoguides for Slope Management and Maintenance', Australian Geomechanics Society Journal, Volume 42 No. 1, March 2007.

**Attachment C** : *Supplied 'Concept Plan - 40 Quandong Avenue'*

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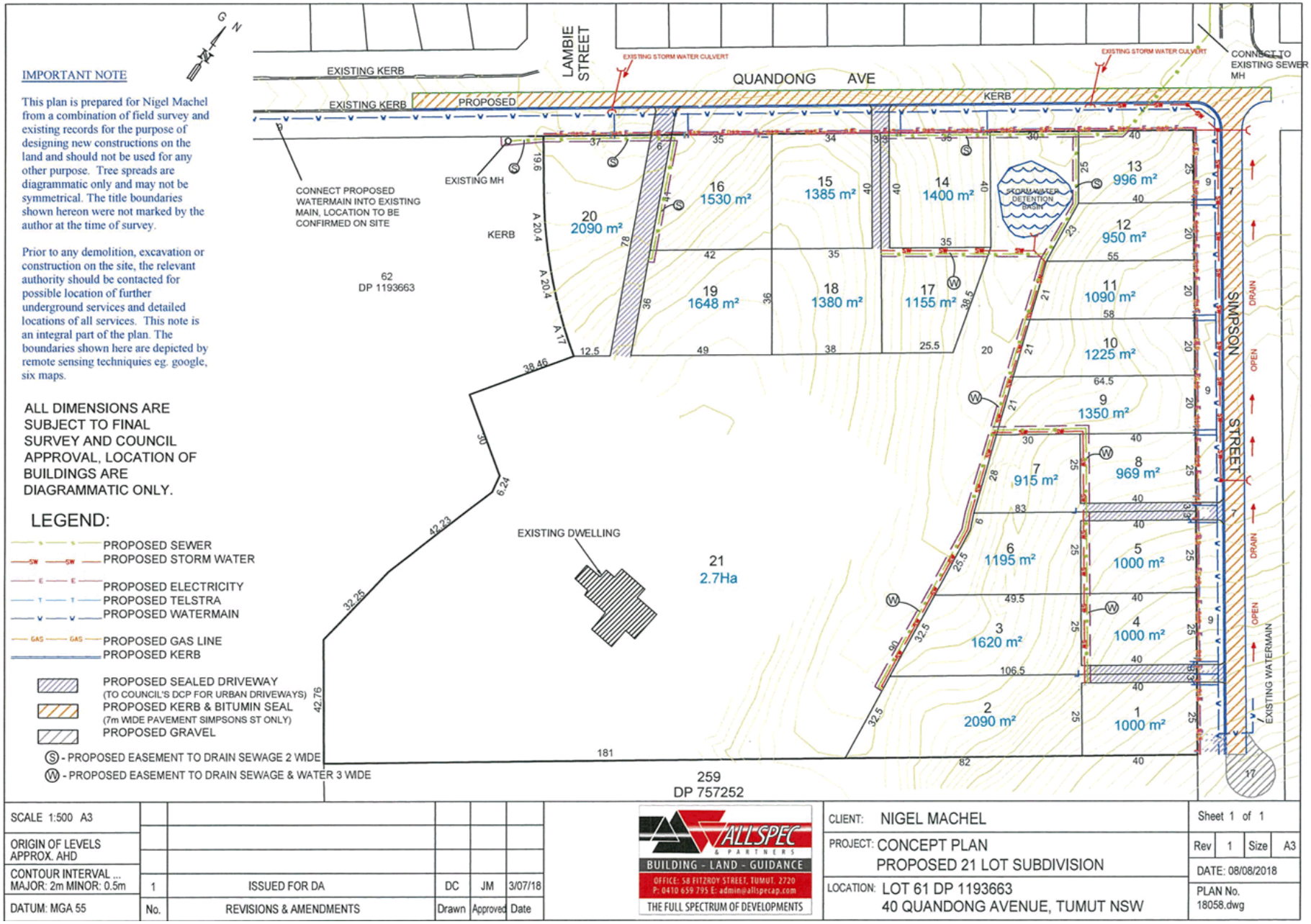

IMPORTANT NOTE
This plan is prepared for Nigel Machel from a combination of field survey and existing records for the purpose of designing new constructions on the land and should not be used for any other purpose. Tree spreads are diagrammatic only and may not be symmetrical. The title boundaries shown hereon were not marked by the author at the time of survey.
Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services. This note is an integral part of the plan. The boundaries shown here are depicted by remote sensing techniquies eg. google, six maps.
ALL DIMENSIONS ARE SUBJECT TO FINAL SURVEY AND COUNCIL APPROVAL, LOCATION OF BUILDINGS ARE DIAGRAMMATIC ONLY.
LEGEND:
PROPOSED SEWER
PROPOSED STORM WATER
PROPOSED ELECTRICITY
PROPOSED TELSTRA
PROPOSED WATERMAIN
PROPOSED GAS LINE
PROPOSED KERB
PROPOSED SEALED DRIVEWAY
(TO COUNCIL'S DCP FOR URBAN DRIVEWAYS)
PROPOSED KERB & BITUMIN SEAL
(7m WIDE PAVEMENT SIMPSONS ST ONLY)
PROPOSED GRAVEL
Ⓢ - PROPOSED EASEMENT TO DRAIN SEWAGE 2 WIDE
Ⓦ - PROPOSED EASEMENT TO DRAIN SEWAGE & WATER 3 WIDE
LAMBIE STREET
QUANDONG AVE
SIMPSON STREET
EXISTING KERB
PROPOSED KERB
EXISTING STORM WATER CULVERT
CONNECT TO EXISTING SEWER MH
CONNECT PROPOSED WATERMAIN INTO EXISTING MAIN, LOCATION TO BE CONFIRMED ON SITE
EXISTING MH
STORMWATER DETENTION BASIN
EXISTING DWELLING
EXISTING WATERMAIN
DRAIN
OPEN
62 DP 1193663
259 DP 757252
1 1000 m²
2 2090 m²
3 1620 m²
4 1000 m²
5 1000 m²
6 1195 m²
7 915 m²
8 969 m²
9 1350 m²
10 1225 m²
11 1090 m²
12 950 m²
13 996 m²
14 1400 m²
15 1385 m²
16 1530 m²
17 1155 m²
18 1380 m²
19 1648 m²
20 2090 m²
21 2.7Ha
SCALE 1:500 A3
ORIGIN OF LEVELS APPROX. AHD
CONTOUR INTERVAL ... MAJOR: 2m MINOR: 0.5m
DATUM: MGA 55
1 ISSUED FOR DA DC JM 3/07/18
No. REVISIONS & AMENDMENTS Drawn Approved Date
ALLSPEC & PARTNERS
BUILDING - LAND - GUIDANCE
OFFICE: 58 FITZROY STREET, TUMUT. 2720
P: 0410 659 795 E: admin@allspecap.com
THE FULL SPECTRUM OF DEVELOPMENTS
CLIENT: NIGEL MACHEL
PROJECT: CONCEPT PLAN
PROPOSED 21 LOT SUBDIVISION
LOCATION: LOT 61 DP 1193663
40 QUANDONG AVENUE, TUMUT NSW
Sheet 1 of 1
Rev 1 Size A3
DATE: 08/08/2018
PLAN No. 18058.dwg

19 November 2018

General Manager
Snowy Valleys Council
76 Capper St
TUMUT NSW 2720

Re: Development Application DA2018/0165 (21 Lot Subdivision – Quandong Avenue)

Enclosed: Political Donations declaration
CD-ROM disk containing photographs relevant to this submission

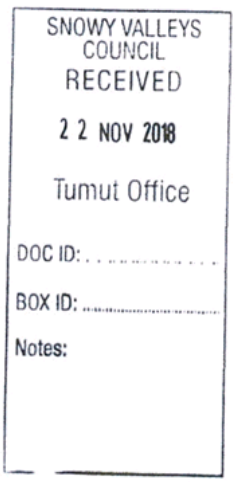
This submission objects to the proposed subdivision under Section 4.15 of the Environmental Planning and Assessment Act 1979, specifically that:

1. The proposed kerb along Quandong Avenue will require the removal of a large, old growth Eucalyptus tree (opposite 31 Quandong Avenue, refer to enclosed photos)

2. The proposed widening of & kerb along Quandong Avenue & Simpson Street will require the removal of a large number of trees, with only 21 being replaced per the requirement of one per lot

3. The proposed lot number 20 is a stormwater channel (refer to enclosed photos)

4. The site is unsuitable requiring significant earthworks




**Political Donations**

**Disclosure of Political Donations and Gifts**

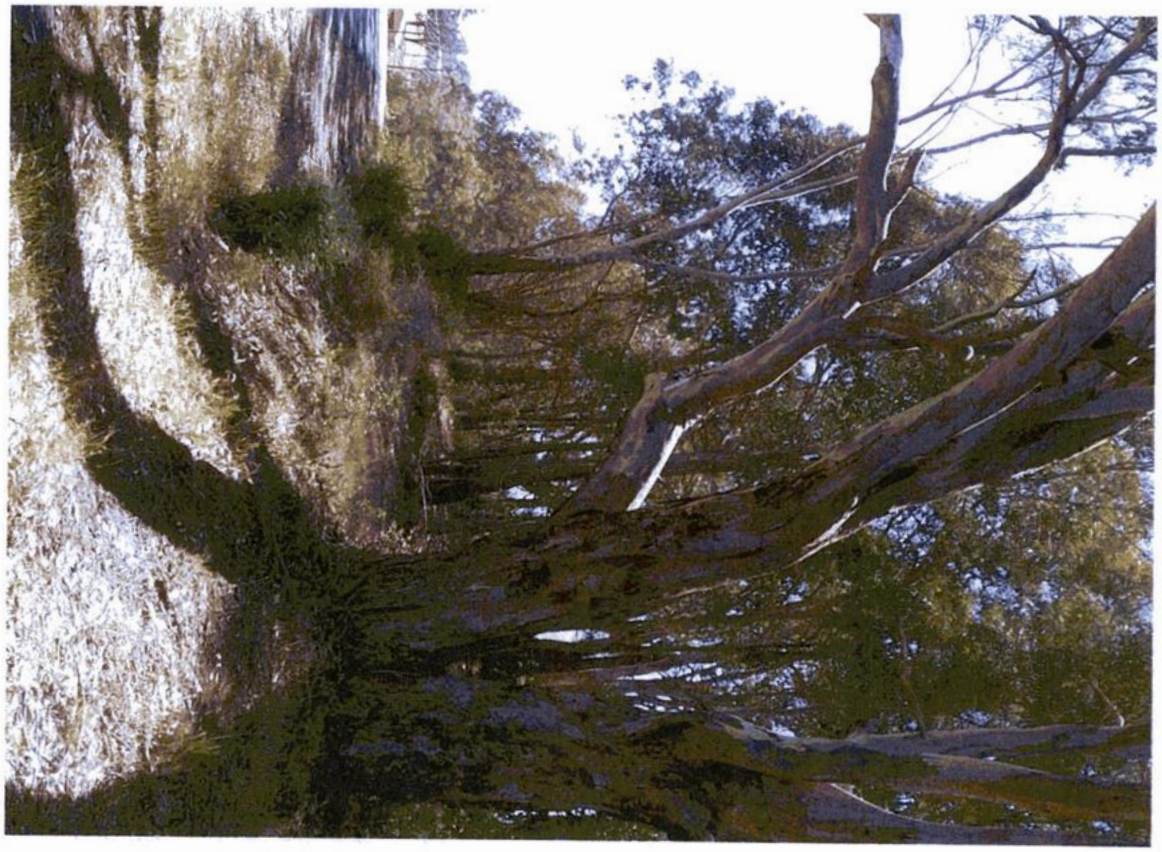
Section 10.4 (5) of the *Environmental Planning & Assessment Act, 1979* requires the disclosure of reportable political donations or gifts made within the past two (2) years to political parties, elected members of NSW Parliament, Local Government elections and elected Council members. This includes disclosure of gifts made to Councilors or Council employees and any donation or gift made when a person was a candidate for Council election.

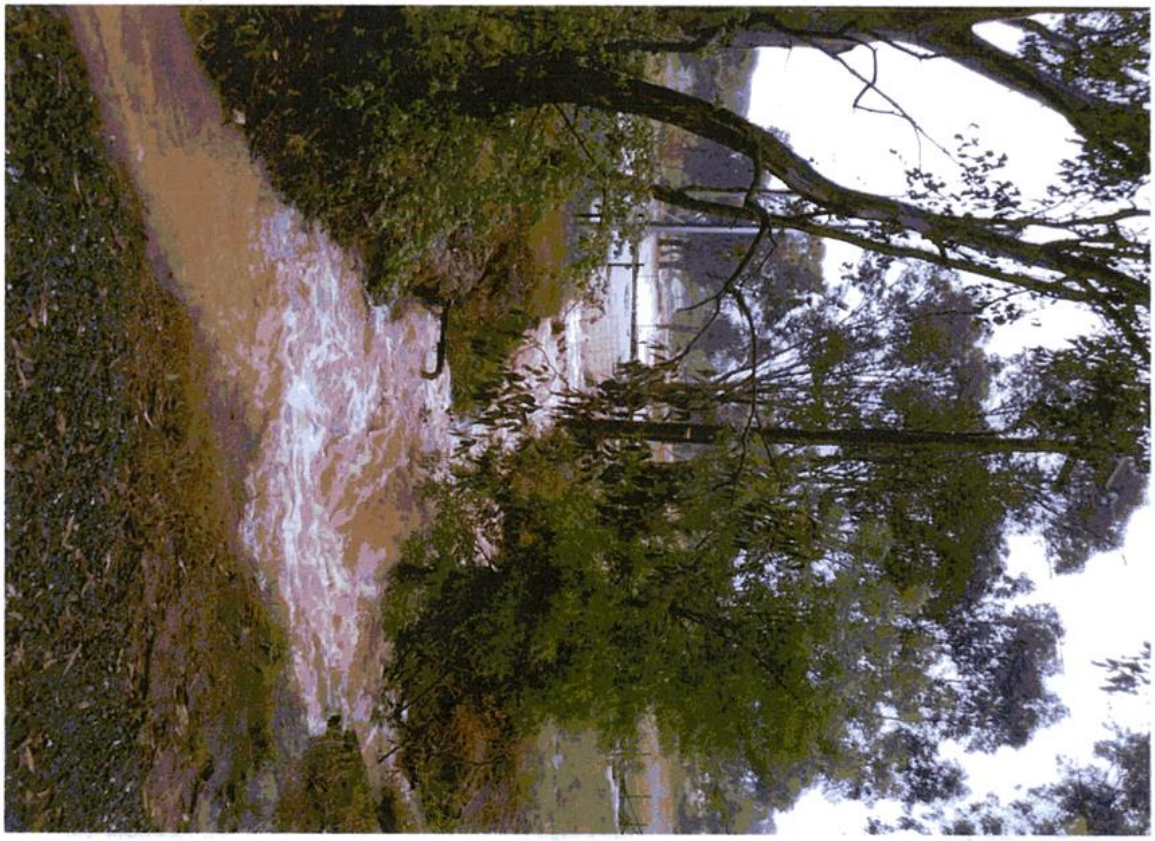
Have you made a Political Donation or Gift? ☐ **Yes** ☑ **No**

*(If yes, a separate disclosure form must be completed. Forms are available at Council or may be downloaded from the Department of Planning's website)*

**Signature of Person/s Making Submission:** **Date:** 19-11-18.

For further information, including a copy of a Disclosure Statement see www.planning.nsw.gov.au/donations.





7 December 2018

The General Manager

Snowy Valleys Council

76 Capper Street

TUMUT 2720

Dear Sir,

**Re Development Application No D A 2018/0165**

Subdivision –lot 61 D P 1193663

40 Quandong Avenue TUMUT 2720

I am writing in response to Council's letter of 13/11/2018 re the above matter.

This land currently has a D A 13-14-101 of 27/05/2014.

It is my understanding that the requirements of that D A are that no development (including a dwelling house)shall be carried out unless in accordance with zone objectives and clauses 4.1 and 6.11 of the Tumut Local Environmental Plan (LEP)2012.

That D A plan of proposal for the future subdivision of Lot61 also required dedication of a proposed road reserve (of 19.0m) extending Lambie Street through to Currawong Road.

These fundamental requirements are not addressed by the concept plan. As there is no logical traffic solution for south bound traffic this will create a 'rat run" through THE Rise. This situation is unacceptable from a long term traffic management point of view and would have a major impact on the amenity of residents of the area.

On this basis I oppose the Application.

Yours Faithfully

SNOWY VALLEYS COUNCIL
RECEIVED
12 DEC 2018
Tumut Office
DOC ID: .....
BOX ID: .....
Notes:
Relates to:
2010630
~~20105~~
20105 79

**Political Donations**

**Disclosure of Political Donations and Gifts**

Section 10.4 (5) of the *Environmental Planning & Assessment Act, 1979* requires the disclosure of reportable political donations or gifts made within the past two (2) years to political parties, elected members of NSW Parliament, Local Government elections and elected Council members. This includes disclosure of gifts made to Councilors or Council employees and any donation or gift made when a person was a candidate for Council election.

Have you made a Political Donation or Gift? ☐ **Yes** ☑ **No**

*(If yes, a separate disclosure form must be completed. Forms are available at Council or may be downloaded from the Department of Planning's website)*

**Signature of Person/s Making Submission: Date:** 7/12/2018

For further information, including a copy of a Disclosure Statement see www.planning.nsw.gov.au/donations.

## Perrin, Craig

**From:**
**Sent:** Friday, 14 December 2018 1:25 PM
**To:** Admin;
**Subject:** 20181214 - Objection - DA2018/0165 Quandong Avenue Tumut -
**Attachments:**

**Importance:** High

Dear Council and Craig,

Please find attached my personal objection response to the proposed development that is currently under review for comment for the proposed subdivision of Lot 61 DP1193663 at Quandong Avenue, Tumut.

If you require any further information to elaborate on the information provided within the attached, please contact me to further discuss.

**14.12.2018**

The General Manager
Snowy Valleys Council
76 Capper Street
Tumut NSW 2720

**Attention: General Manager & Councilors**

Email: tumutadmin@snowyvalleys.nsw.gov.au

**RE: Objection to Development Application for the proposed subdivision of Lot 61 DP1193663**

I hereby object to the current proposal and the reasons why are listed below;

The proposed development is not in keeping with the zone objectives and clauses 4.1 & 6.11 of the Tumut LEP 2012.

- The development having proposed lots, with the smallest lot being 950m2 and the largest being 2.7Ha, does not provide for the housing needs of the community within a medium density environment.

- This proposed development is not an appropriate subdivision pattern and is therefore not the most efficient use of land as there are no internal roads proposed within this development which prevents the further subdivision of proposed lot 21.

- Considering the minimum lot size for the land zoning is 225m2, the further subdivision of these proposed lots would create major traffic congestion issues due to the numerous proposed battle axed shape allotments.

- The disposal of sewage does not obtain the consent from the owner of Lot 62 DP1193663 to discharge over their land.

- The disposal of stormwater into Quandong Avenue from Simpson Street and proposed lots 13-16, & 19-20 shall cause nuisance to those downstream properties as there is no provisions in this application to prevent or to minimise the potential flooding to those properties.

- The existing dam is proposed to be converted to a stormwater detention basin. There is nothing in the statement that indicates how this is to be achieved, nor whether or not the size of this basin is adequate for the catchment. Before Council considers consenting to this application, the applicant should provide such details to ensure that the proposed layout is not affected by the size requirements of this basin.

- The application fails to address the safety issues relating to the proposed water detention basin to keep the general public out. The location of the basin coincides with that of an existing dam and is located on private property, however, this stormwater infrastructure will be an asset owned by Council and that shall in turn allow access to it by the public.

- The proposed use of the unformed Simpson Street should be completely developed in accordance with Auspec requirements, having kerb and guttering on both sides of the road, and adequate stormwater infrastructure to handle the storm events that may cause a nuisance to neighbouring properties. Why should the ratepayers pay for the extra works not constructed in years to come?

- The subject land is in places very steep, gradients from approximate 5% upwards of 25% and having an average well over 12%. The land is classified as being prone to landslip. Land having gradients greater than 22% is generally too steep for development and is costly to further develop. The land that has such gradients, slopes to the west and does not present the opportunity for extravagant vistas. Access to these steeper proposed lots may be unsuitable for 2 wheel drive all weather access as defined within Tumut's DCP.

- Standard hydrant coverage to proposed lot 2 is non-compliant if one builds a dwelling at the rear of the proposed lot. Coverage extend up to 120m only, and beyond this requires other measures to be put in place. This application fails to show the consent authority how it deems to satisfy this requirement.

The application fails to address many facets of planning legislation (as outlined above) and matters within the Tumut DCP. Chapters within the DCP that have not been referred to are 3, 4, 9, 14 & 30. These matters need to be addressed and explained that they within can be deemed satisfied.

The proposed development has been indicated to be staged, however there are no indication of stages and what stages are likely to be initially developed. The proposed plan is a concept plan, so what is actually being approved for subdivision, stage one, all the whole development?

It would appear that hydrant coverage would not extend to the existing dwelling located upon proposed lot 21, as the proposed plans do not propose to extend the water mains beyond Quandong Avenue and Simpson Street. This issue of non-compliance would need to be address if it has not already been addressed in the building application sort to erect the dwelling.

The author of the documents submitted have been prepared by an unregistered land surveyor and does not have the legal right to prepare such a document that shows a land survey pertaining boundary information upon it as defined by the Surveying & Spatial Information Act 2002 and the registration board BOSSI.

Approving this application in its current form would set an unwanted precedent. The application is of low standard and unprofessional as it does not address all matters required by the EP&A Act.

Considering the above matters raised and the proposed subdivision pattern limits further development to the land zonings full potential, I kindly ask that Council refuse this application in that it has not adequately addressed and deemed to satisfy all facets of the EP&A Act.

**Yours Faithfully**